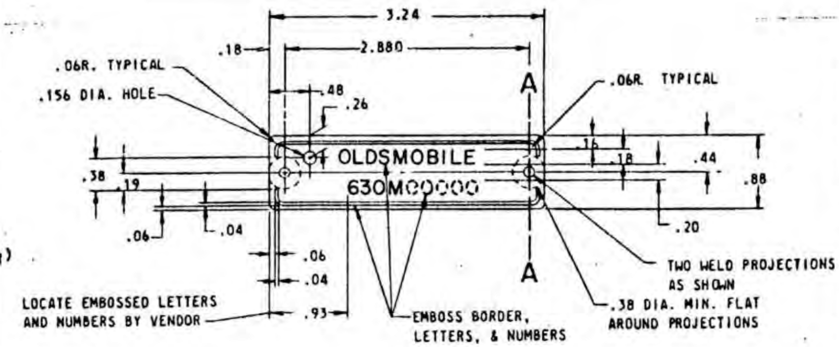
1963
Oldsmobile Cutlass

Assembly Manual

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING, MICHIGAN

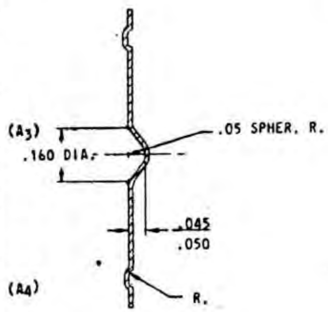
PART NUMBER	PREFIX	USAGE	STARTING SERIAL NO.	
564518	NONE	EXTRAS	BLANK	
587203	630M	LANSING, MICHIGAN	01001	
587204	631M	LANSING, MICHIGAN	01001	
587209	632M	LANSING, MICHIGAN	01001	
587210	635M	LANSING, MICHIGAN	01001	
587211	636M	LANSING, MICHIGAN	01001	
587212	638M	LANSING, MICHIGAN	01001	
587888	639M	LANSING, MICHIGAN	01001	(A_1)
587213	632A	ATLANTA, GEORGIA	01001	
587214	635A	ATLANTA, GEORGIA	01001	
587215	636A	ATLANTA, GEORGIA	01001	
587216	638A	ATLANTA, GEORGIA	01001	
587889	639A	ATLANTA, GEORGIA	01001	(A_2)
587205	630K	KANSAS CITY, KANSAS	01001	
587206	631K	KANSAS CITY, KANSAS	01001	
587217	632K	KANSAS CITY, KANSAS	01001	
587218	635K	KANSAS CITY, KANSAS	01001	
587219	636K	KANSAS CITY, KANSAS	01001	
587220	638K	KANSAS CITY, KANSAS	01001	
587890	639K	KANSAS CITY, KANSAS	01001	(A_3)
587221	632L	LINDEN, NEW JERSEY	01001	
587222	635L	LINDEN, NEW JERSEY	01001	
587223	636L	LINDEN, NEW JERSEY	01001	
587224	638L	LINDEN, NEW JERSEY	01001	
587891	639L	LINDEN, NEW JERSEY	01001	(A_4)
587207	630C	SOUTH GATE, CALIFORNIA	01001	
587208	631C	SOUTH GATE, CALIFORNIA	01001	
587225	632C	SOUTH GATE, CALIFORNIA	01001	
587226	635C	SOUTH GATE, CALIFORNIA	01001	
587227	636C	SOUTH GATE, CALIFORNIA	01001	
587228	638C	SOUTH GATE, CALIFORNIA	01001	
587892	639C	SOUTH GATE, CALIFORNIA	01001	(A_5)
587229	632W	WILMINGTON, DELAWARE	01001	
597230	635W	WILMINGTON, DELAWARE	01001	
587231	636W	WILMINGTON, DELAWARE	01001	
587232	638W	WILMINGTON, DELAWARE	01001	
587893	639W	WILMINGTON, DELAWARE	01001	(A_6)
587233	632T	ARLINGTON, TEXAS	01001	
587234	635T	ARLINGTON, TEXAS	01001	
587235	636T	ARLINGTON, TEXAS	01001	
587236	638T	ARLINGTON, TEXAS	01001	
587894	639T	ARLINGTON, TEXAS	01001	(A_7)



EMBOSS PREFIX NUMBER, LETTER AND CONSECUTIVE FIVE DIGIT SERIAL NUMBER AS INSTRUCTED ON PURCHASE ORDER. PREFIX NUMBERS UP TO 10,000 WITH AN ADDITIONAL "0" TO PROVIDE FIFTH DIGIT.

EXAMPLE:

630M01001, 631C01001, 632A01001, 635L01001, 636W01001, 638K01001,



SECTION A-A
FOUR TIMES SIZE

PREFIX SIGNIFICANCE (B)

YEAR	MODELS	PLANT
63=1963	0=3000	M=LANSING, MICHIGAN
	1=3100	A=ATLANTA, GEORGIA
	2=3200	K=KANSAS CITY, KANSAS
	5=3500	L=LINDEN, NEW JERSEY
	6=3600	C=SOUTH GATE, CALIFORNIA
	8=3800	W=WILMINGTON, DELAWARE
	9=3900	T=ARLINGTON, TEXAS

BLANK - HAS OLDSMOBILE ONLY

(B) MODELS DESIGNATION

ENGINEERING	SALES
3000	F-85
3100	F-85 DELUXE
3200	DYNAMIC 88
3500	SUPER 88
3600	STARFIRE
3800	98
3900	98

SAMPLE TO BE APPROVED BY PRODUCT ENGINEERING DEPT.

DATE	SYM.	REVISION RECORD	AUTHORITY	DR.	CK.
1-30-62	A_7	3900 Series Plates Added		PB	
7-25-62	B_2	MODELS WAS SERIES		CM	
	C				

NO. 587202
LAST CHANGE B_2

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS

ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F_1-.030; F_2-.06; F_3-.09; F_4-.12 ETC.

COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

DO NOT SCALE

DATE DWG. December 1, 1961	DR. A. Harper
SCALE Full	CK. M. H. Barnhart
FIRST USED 1963	APPR.
REFERENCE	APPR.
MATERIAL SPEC. STAINLESS STEEL - S A E #51430 .014 STOCK	
NAME CHART - VEHICLE NUMBER PLATE	
PART NO. 587202	B

NO. 587202
LAST CHANGE B

GENERAL MOTORS CORPORATION
LANSING, MICHIGAN
OLDSMOBILE DIVISION

1963 (A) MODELS 3000 AND 3100 OLDSMOBILES

(1) VEHICLE IDENTIFICATION NUMBER
ON EMBOSSED PLATE LOCATED ON BODY LEFT FRONT DOOR HINGE PILLAR.
ON EXPORT C.K.D. BLANK PLATE 564543 IS SHIPPED AS ORDERED BY EXPORT WITH ATTACHING RIVET NO. 3695654.
SEE CHART 587202 FOR VEHICLE PLATE COMBINATIONS AND STARTING SERIAL NUMBERS.

(2) ENGINE UNIT NUMBER—(FOR MANUFACTURING AND SERVICE USE)
UNIT NUMBER IS STAMPED ON PAD LOCATED AT FRONT OF RIGHT HAND CYLINDER HEAD.
STARTING ENGINE UNIT NUMBERS. (A2)
ALL 215 CU. IN. ENGINES FOR ABOVE MODELS ARE NUMBERED CONSECUTIVELY FROM ONE BLOCK OF SIX DIGIT NUMBERS STARTING WITH 200001, PREFIXED AND SUFFIXED AS FOLLOWS:— (A2)
ADD PREFIX "S" FOR ALL 3000 & 3100 MODEL ENGINES.
ADD SUFFIX "E" FOR EXPORT LOW COMPRESSION OPTION. (2 BBL. CARB.)
SUFFIX "G" FOR 4 BBL. CARB. HIGH COMP. (FOR 3117, 3167 & L74 OPTION)
SUFFIX "H" FOR 4 BBL. CARB. LOW COMP. (EXPORT OPTION FOR 3117 & 3167)
SUFFIX "T" FOR TURBO-ROCKET ENGINE (FOR 3147)
EXAMPLES:-S200001 2 BBL. CARB.— STD. COMPRESSION
S200002E 2 BBL. CARB.—EXPORT LOW COMP. OPTION
S200003G 4 BBL. CARB.—HIGH COMPRESSION (FOR 3117, 3167 & L74 OPTION)
S200004H 4 BBL. CARB.— LOW COMPRESSION (EXPORT OPTION FOR 3117 & 3167)
S200005T TURBO—ROCKET ENGINE (FOR 3147)

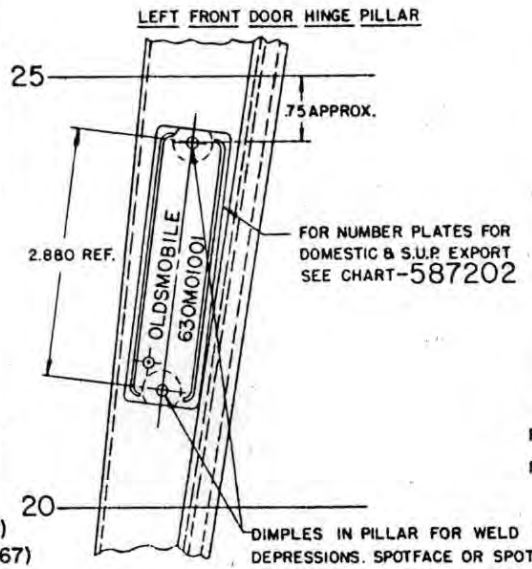
(3) TRANSMISSION SERIAL NUMBER:—
NONE USED ON SYNCROMESH TRANSMISSION (DATE CODE ONLY)
HYDRAMATIC TRANSMISSION SERIAL NUMBER IS STAMPED ON A COLORED PLATE LOCATED AT RIGHT SIDE OF CASE ABOVE FILLER TUBE BOSS.
FOUR DIFFERENT TRANSMISSIONS ARE USED THUS:—
ON 2 BBL. CARB. (STEERING COLUMN SHIFT)-DARK GREEN PLATE WITH STARTING SERIAL NUMBER 0563-1001
ON 4 BBL. CARB. (STEERING COLUMN SHIFT)—RED PLATE WITH STARTING SERIAL NUMBER OD563-1001
ON 4 BBL. CARB. (CONSOLE SHIFT)- PINK PLATE WITH STARTING SERIAL NUMBER OE563-1001
ON TURBO-ROCKET ENGINE (CONSOLE SHIFT)-ALUMINUM PLATE WITH STARTING SERIAL NUMBER OX563-1001

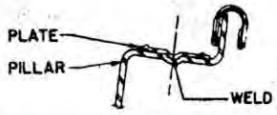
(4) REAR AXLE RATIO CODE AND DATE IS STAMPED ON RIGHT SIDE OF HOUSING COVER FOR FIELD IDENTIFICATION.
CODE "A" = 3.08 RATIO, "B"=3.23 RATIO, "C"=3.36 RATIO.
DATE = DAY OF YEAR
THUS: A-204 =3.08 RATIO AXLE BUILT ON JULY 22.

(5) PROTECTIVE VEHICLE NUMBER:—
A DUPLICATE OF THE VEHICLE NUMBER IS STAMPED AT SEVERAL PLACES ON EVERY CAR. LOCATION OF THIS NUMBER MAY BE OBTAINED BY CONTACTING EITHER OF THE FOLLOWING OFFICES.
PRODUCTION MANAGER

LAST CHANGE NO. 587200

DOMESTIC & S.U.P. EXPORT
WELDED ON CONSTRUCTION

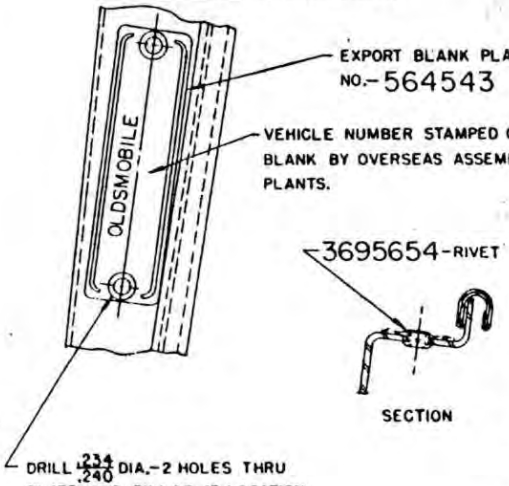




DATE	BY	REVISION RECORD	AUTHORITY	DR.	CK.
7-1962	RS	MODELS WAS SERIES		CM	

NO. 587200
LAST CHANGE A5

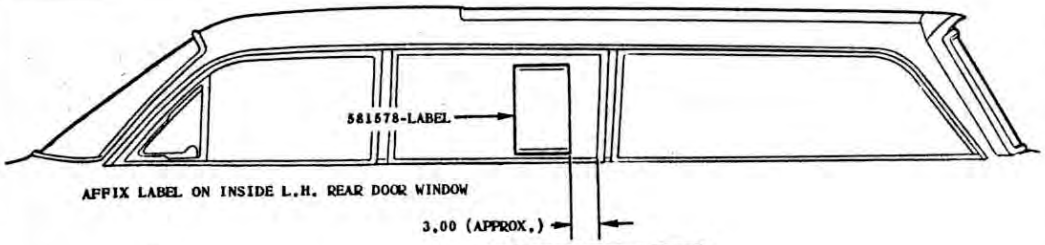
C.K.D. EXPORT
RIVETED ON CONSTRUCTION



TOLERANCES UNLESS OTHERWISE SPECIFIED ± 02 ALLOWED ON TWO PLACE DECIMALS ± 010 ALLOWED ON THREE PLACE DECIMALS
ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS 1, 030 1, 06 1, 09 1, 12 ETC
COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED DRAWN OR EXTRUDED SECTIONS AND STANDARD PARTS
DO NOT SCALE

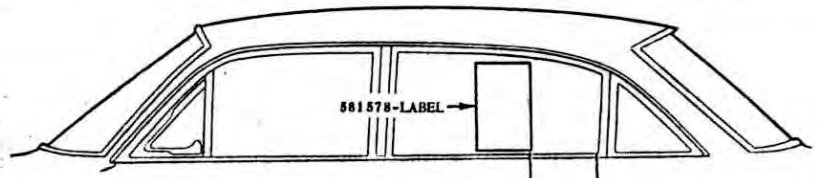
DATE FEB. 27, 1962	DR A. THUMA
SCALE FULL	APPD
FIRST USED 1963	APPD
REFERENCE	APPD
MATERIAL SPEC 3000 & 3100	
NAME LAYOUT—VEHICLE NUMBER PLATE	
PART NO 587200	

B



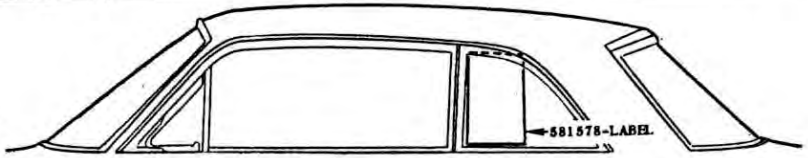
AFFIX LABEL ON INSIDE L.H. REAR DOOR WINDOW

STATION WAGON MODELS



AFFIX LABEL ON INSIDE L.H. REAR DOOR WINDOW

SEDAN MODELS (C)



AFFIX LABEL ON INSIDE L.H. REAR SIDE WINDOW

TWO DOOR COUPE MODELS

TYPING REQUIREMENTS:

KEELOX 41-75 (BLACK) OFFSET SILK RIBBON (FOR TYPEWRITERS)

KEELOX 41-78 (BLACK) OFFSET SILK RIBBON (FOR I.B.M. TYPE TABULATING MACHINES)

RIBBON MUST BE REPLACED AS SOON AS IT STARTS TO LOSE ITS ORIGNIAL DARKNESS.

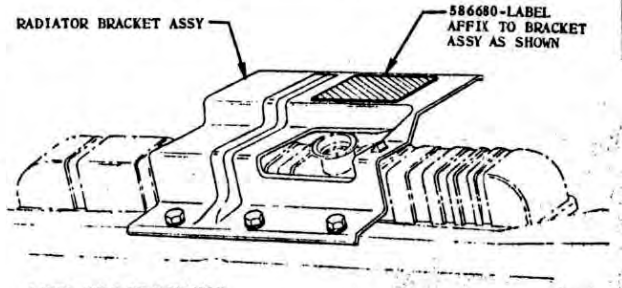
IT IS ESSENTIAL THAT THE TYPING REQUIREMENTS BE STRICTLY ADHERED TO. IF THE "KEELOX" RIBBONS SPECIFIED ARE NOT USED, THERE IS THE POSSIBILTY THAT THE TYPED LETTERS WILL FADE OUT WHEN SUBJECTED TO SUNLIGHT.

METHOD OF APPLICATION:

WET LABEL, USING A POTDEVIN OR SIMILAR MACHINE CONTAINING WATER INSTEAD OF GLUE. THE LABELS ARE TO BE PASSED THROUGH THE MACHINE SO THAT THE FACE (ADHESIVE) SIDE IS MOISTENED AND THE LABEL THEN AFFIXED IN THE SPECIFIED LOCATION ACCORDING TO BODY STYLE.

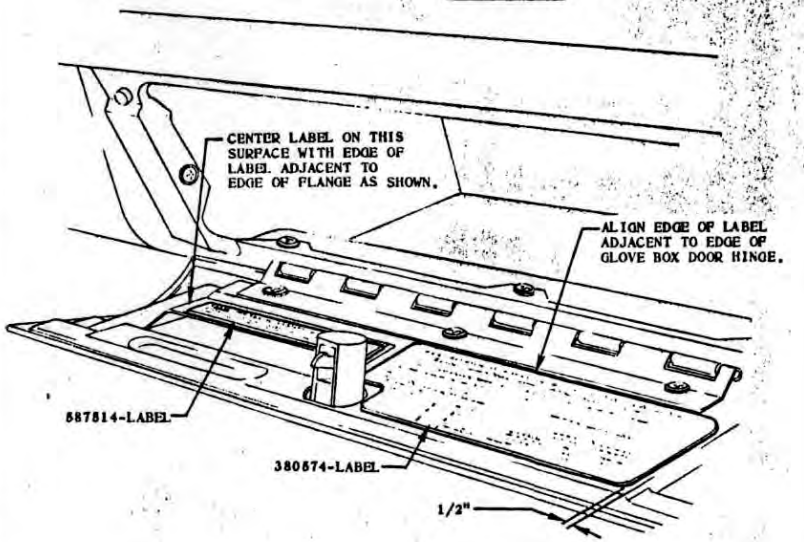
AFTER LABEL IS ATTACHED TO THE INSIDE OF THE GLASS, A SQUEEGE SHOULD BE USED TO REMOVE ALL AIR POCKETS.

RETAIL PRICE LABEL



LABEL MUST BE READABLE WHEN VIEWED FROM FRONT OF CAR

RADIATOR FILL LABEL (A)



OWNER INSTRUCTION LABELS (B)

K 8-20-62	C	DIMENSION RELOCATED	BP	VP
J 6-25-62	B	VIEW ADDED	BP	VP
H 4-3-62	A	VIEW ADDED	JH	VD
DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE JAN 31, 1962 DR. B PARKER
FIRST USED 1963 CK. H.VAN PELT
APPR.
REFERENCE IAZE APPR.
NAME LAYOUT-LABEL LOCATIONS

SERIES 3000 - 3100
SHEET 1 OF 1

PART NO. 587767

587767
SHEET 1 OF 1

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

CHARTS

DRAWINGS INCLUDED IN THIS SECTION ARE:

R. CARROLL, INC. 14791-

IT WILL BE THE FULL RESPONSIBILITY OF THE INDIVIDUAL "PLANT MANAGER" TO DETERMINE THE CONCENTRATION OF WASHER SOLVENT NECESSARY TO INSURE OPERATION OF THE WINDSHIELD WASHER SYSTEM FOR CARS PRODUCED IN HIS PLANT DOWN TC A MINIMUM TEMPERATURE OF 0°F. DURING THE PERIOD OF SEPTEMBER 1 TO MAY 1. NO SOLVENT IS TO BE USED IN THE WASHER SYSTEM BETWEEN MAY 1 AND SEPTEMBER 1.

CLIMATIC CONDITIONS OF THE AREA INTO AND/OR THRU WHICH THE CAR IS BEING SHIPPED WILL CONTROL THE PERCENTAGE OF SOLVENT USED.

AT NO TIME IS THE RATIO OF SOLVENT TO WATER TO EXCEED 1:1.5. THIS MIXTURE WILL FREEZE AT 0°F.

THE AMOUNT OF SOLUTION SHOULD BE REGULATED SO THAT A MINIMUM OF 8 OZ. IS LEFT IN THE JAR WHEN THE CAR IS SHIPPED. IF WATER IS USED IN THE PLANT TO TEST THE SYSTEM, THE JAR MUST BE DRAINED AND THE WASHER CYCLED TWO OR THREE TIMES AFTER THE ADDITION OF THE SOLVENT SOLUTION TO CLEAR THE WATER OUT OF THE NOZZLES, MOTOR AND HOSES. THE FOLLOWING TABLE SHOWS THE RATIO OF SOLVENT TO WATER REQUIRED FOR VARYING DEGREES OF PROTECTION.

FREEZING POINT	MIXTURE SOLVENT TO WATER	AMOUNT OF SOLVENT TO MAKE 55 GAL. OF SOLUTION (ADD WATER)
0°F.	1:1.5	22 GAL.
8°F.	1:2	18.3 GAL.
16°F.	1:3	13.75 GAL.
24°F.	1:6	7.87 GAL.

SOLVENT: NOT LESS THAN 99% BY VOLUME OF ISOPROPYL ALCOHOL (99%) WITH THE BALANCE WATER AND A WETTING AGENT OTHER THAN AN ALKALINE SALT AND AN ANTIFOAMING AGENT.

MUST BE NON-INJURIOUS TO CAR FINISH, METAL, RUBBER OR SEALING MATERIAL WHEN DILUTED 1 PART IN 1 1/2 PARTS WATER AND MUST NOT LEAVE OBJECTIONABLE RESIDUE ON THE WINDSHIELD OR FORM ANY INSOLUBLE MATTER DURING STORAGE.

FLAMMABLE MIXTURE - FLASH POINT IS BELOW 100°F.

COLOR - GREEN

SAMPLE TO BE APPROVED BY PRODUCT ENGINEERING DEPT.

LAST CHANGE	NO. 380221

DATE	SYM.	REVISION RECORD	AUTHORITY	DR.	CK.

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS.

ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F_1=.030; F_2=.06; F_3=.09; F_4=.12; ETC.

COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS AND STANDARD PARTS.

DO NOT SCALE

DWG. DATE January 3, 1962	DR. Phyllis Bengel
SCALE	CK. R. J. Schultz
FIRST USED 1962	APPR.
	APPR.
REFERENCE	APPR.

MATERIAL SPEC. "FACTORY FILL"

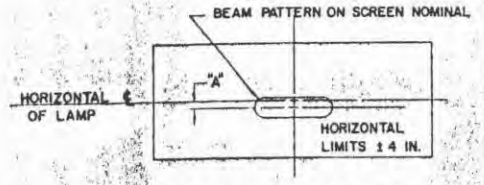
NAME CHART - WINDSHIELD WASHER SOLUTION

45+V1

PART NO. 380221

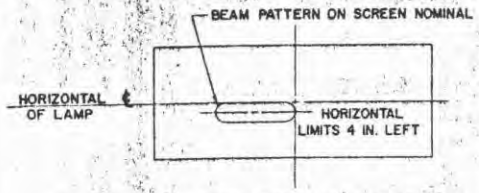
OLDSMOBILE

ELECTRONIC AIMING OF DUAL HEADLAMPS



DIMENSION "A"
- GAS TANK EMPTY - 1.00 TO 3.00 BELOW HORIZ. ℄
- GAS TANK FULL - ON HORIZ. ℄ TO 2.00 BELOW

FOR SINGLE BEAM SINGLE FILAMENT UNIT



GAS TANK EMPTY - TOP OF HOT SPOT 1.00 BELOW HORIZONTAL ℄ TO 1.00 ABOVE.

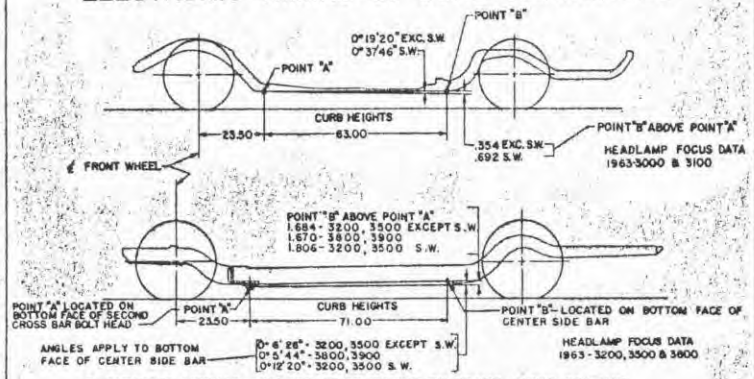
GAS TANK FULL - TOP OF HOT SPOT AT HORIZONTAL ℄ TO 2.00 ABOVE.

FOR LOWER BEAM TWO FILAMENT UNIT

THE ABOVE AIMING INSTRUCTIONS APPLY WITH A 25 FT. DISTANCE BETWEEN THE VEHICLE HEADLIGHTS AND THE AIMING SURFACE.

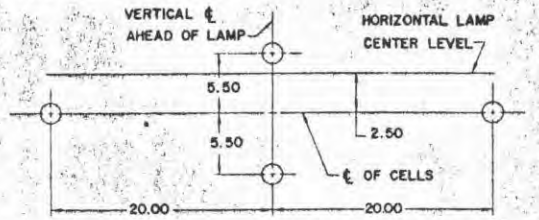
EXPORT

FOR LEFT RULE OF ROAD



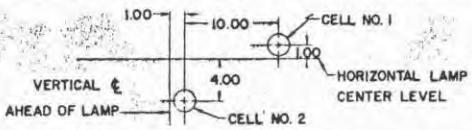
ELECTRONIC METHOD - THE CAR TO BE RAISED ON FRAME JACKS SO THAT THE FRAME IS POSITIONED CORRECTLY. THIS POSITION SHOULD REPRESENT THE NORMAL CURB POSITION AFTER THE CAR HAS BEEN DRIVEN 2,000 MILES.

STEP I - LOCATION OF SENSING CELLS FOR AIMING TYPE 1 UNIT AT 25' DISTANCE.



THE SENSING CELLS SHOULD BE BALANCED WHEN THE BEAM IS PROPERLY AIMED. THE TWO HORIZONTAL CELLS AND THE TWO VERTICAL CELLS WILL MEASURE EQUAL AMOUNTS OF CANDLE POWER. VOLTAGE IS NOT CRITICAL IF ABOVE 9 VOLTS ON AIMING THIS UNIT. SENSITIVITY OF ELECTRONICS SHOULD PROVIDE ACCURACY OF ± 1.00.

STEP II - LOCATION OF SENSING CELLS FOR AIMING THE TYPE 2 UNIT AT 25' DISTANCE.

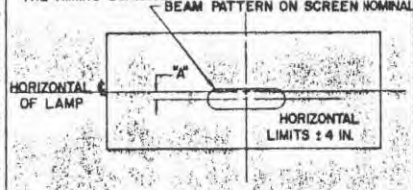


APPLY CONSTANT VOLTAGE OF 12.8 VOLTS ON HEADLAMP UNIT AND WITH THE UNIT PROPERLY AIMED (LEFT HAND CUT OFF AT 1.00 RIGHT), CELL NO. 1 SHOULD CHECK 4,000 CANDLE POWER AND CELL NO. 2 SHOULD CHECK 5,000 CANDLE POWER. THE VOLTAGE MUST BE HELD WITHIN ± 0.4 VOLTS. IF THE CONSTANT VOLTAGE SELECTED IS DIFFERENT THAN 12.8 VOLTS, THE CALIBRATION OF CELLS MUST BE ADJUSTED ACCORDINGLY TO PRODUCE CORRECT AIM. SENSITIVITY OF ELECTRONICS SHOULD PROVIDE ACCURACY OF ± 1.00.

FOR ALL CARS - AIM SINGLE FILAMENT UNITS (INBOARD LAMPS) ℄ OF HOT SPOT AT HORIZONTAL ℄ TO 2.00 BELOW. FOR TWO FILAMENT UNITS (OUTBOARD LAMPS) AIM LOW BEAM TOP OF HOT SPOT AT HORIZONTAL ℄ TO 2.00 ABOVE.

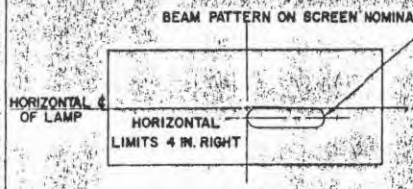
FOR DEALER USE

THE AIMING INSTRUCTIONS BELOW APPLY WITH A 25 FT. DISTANCE BETWEEN THE VEHICLE HEADLIGHTS AND THE AIMING SURFACE.



DIMENSION "A"
- GAS TANK EMPTY - 1.00 TO 3.00 BELOW HORIZONTAL ℄
- GAS TANK FULL - ON HORIZONTAL ℄ TO 2.00 BELOW.

FOR SINGLE BEAM SINGLE FILAMENT UNIT



GAS TANK EMPTY - TOP OF HOT SPOT 1.00 BELOW HORIZONTAL ℄ TO 1.00 ABOVE.

GAS TANK FULL - TOP OF HOT SPOT AT HORIZONTAL ℄ TO 2.00 ABOVE.

FOR LOWER BEAM TWO FILAMENT UNIT

FACTORY INSPECTION TOLERANCES ARE AS FOLLOWS WHEN T3 AIMER IS USED TO SET HEAD LAMPS. CHECK ON SCREEN AT 25 FT.

TYPE 1 LAMP - ℄ HOT SPOT 2" BELOW HORIZONTAL ± 2.00". LATERAL AIM - ℄ HOT SPOT ON VERTICAL ℄ ± 4.00

TYPE 2 LAMP - LOWER BEAM - TOP EDGE OF HOT SPOT AT HOIZONTAL ℄ ± 2.00" LATERAL AIM - LEFT EDGE OF HOT SPOT 2" TO RIGHT OF VERTICAL ℄. LIMITS - VERTICAL TO 4" TO RIGHT

WHEN CHECKING NEW CARS ALLOWANCE SHOULD BE MADE FOR FRAME JACKING ANGLE USED.

DATE	STA.	CHANGE RECORD	AUTHORITY	NO.	BY
3-30-62	A	MIS 3030568			TMP

LAST CHANGE	NO. 381123

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .06 ALLOWED ON TWO PLACE DECIMALS ± .030 ALLOWED ON THREE PLACE DECIMALS

ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS 1/4 - .015 1/2 - .03 1 - .12 ETC.

COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STAMPED PARTS

DO NOT SCALE

DATE	BY
MAR. 19 1962	T. C. JONES
1963	

CHART - HEADLAMP FOCUS

PART NO. 381123

DATE	SYM.	REVISION RECORD	AUTHORITY	DR.	CK.
11-2-61	A_2	3147 QUANTITIES IN QUARTS ADDED	P.C.N.	EN	AHG
	B				

(1) RADIATOR ANTI-FREEZE REQUIREMENTS - G.M. 1899-M * ETHYLENE GLYCOL TYPE ANTI-FREEZE MANDATORY FOR ALL 3000, 3100 SERIES, WINTER AND SUMMER TO PROVIDE AN ADEQUATELY INHIBITED COOLANT IN THE AMOUNTS TABULATED BELOW.

THE FOLLOWING TABLE SHOWS THE AMOUNT OF GM 1899-M (ETHYLENE GLYCOL) ANTI-FREEZE REQUIRED TO GIVE A 44% SOLUTION BY VOLUME.

MODEL 3000, 3100	FREEZING POINT	PERCENT SOLUTION BY VOLUME	QUANTITY OF ANTI-FREEZE WITHOUT HEATER	QUANTITY OF ANTI-FREEZE WITH HEATER
ALL EXC. AIR COND. & 3147 & 35-Q1	-20°F.	44.0	4.66 QTS.	5.37 QTS.
ALL AIR COND. EXC. 3147 (INCL. 35-Q1)	-20°F.	44.0	4.88 QTS.	5.59 QTS.
(A_2) ALL 3147 (INCL. 35-Q1)	-20°F.	44.0	4.32 QTS.	4.97 QTS.

NOTE: METHANOL TYPE ANTI-FREEZE OR WATER ARE NOT TO BE USED UNDER ANY CONDITION. ALL 3000,3100 SERIES MUST BE PROTECTED AS SHOWN ABOVE WITH ETHYLENE GLYCOL TYPE ANTI-FREEZE. NO DEVIATION PERMITTED BY ANY PLANT OR ZONE FOR CLIMATIC CONDITIONS.

(2) GENERAL

CAUTION:

SOLUTION LEVEL MUST BE HELD .80" BELOW CENTER OF FILLER NECK-SEAT TO PREVENT LEAKAGE DURING TRANSPORTATION AND LOSS OF COOLANT DURING OPERATION. THIS .80" LEVEL IS MEASURED WITH COOLANT AT ROOM TEMPERATURE TO ALLOW EXPANSION VOLUME OF COOLANT UNDER OPERATING CONDITIONS.

EXTREME CARE MUST BE TAKEN IN FILLING COOLING SYSTEM TO PREVENT DAMAGE OF CAR FINISH.

NOTE: COOLING SYSTEM OPERATING CAPACITY (COOLANT AT ROOM TEMPERATURE FILLED TO .80" BELOW CENTER OF FILLER NECK SEAT) (TOP TANK COOLANT AT 156°F. - FILLED TO .20" BELOW CENTER OF FILLER NECK SEAT).

MODEL	WITHOUT HEATER	WITH HEATER
3000, 3100 ALL EXC. AIR & 3147 & 35-Q1 CONDITIONING	10.6 QTS.	12.2 QTS.
ALL AIR CONDITIONING EXC. 3147 (INCL. 35-Q1)	11.1 QTS.	12.7 QTS.
(A_2) ALL 3147 (INCL. 35-Q1)	9.8 QTS.	11.3 QTS.

REQUIREMENTS:

A STICKER MUST BE PLACED ON THE INSIDE OF THE WINDSHIELD OF ALL CARS SHOWING ANTI-FREEZE SOLUTION IN THE COOLING SYSTEM TO ADVISE THE DEALER AND CUSTOMER AS TO TYPE OF ANTI-FREEZE (ETHYLENE GLYCOL) AND DEGREES OF PROTECTION WHEN THE CAR WAS SHIPPED FROM THE FACTORY.

THE STICKER SHOULD READ AS FOLLOWS: "THE COOLING SYSTEM OF THIS AUTOMOBILE HAS BEEN PROTECTED TO -20° F. BY THE ADDITION OF GM ANTI-FREEZE (ETHYLENE GLYCOL).

A TAG MUST BE ATTACHED TO THE RADIATOR OVERFLOW TUBE SHOWING TYPE OF ANTI-FREEZE INSTALLED. TAG #1174479 (RED).

* APPROVED SOURCES:
WYANDOTTE CHEMICAL CO. "SINGLE PHASE" (U.2030) # 887-1782
MINERAL INDUSTRIES "PEAK" SINGLE PHASE
HOUSTON CHEMICAL CO. "PEAK" SINGLE PHASE

NO. 586701
LAST CHANGE A_2

NO. 586701
LAST CHANGE A_2

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS & ± .010 ALLOWED ON THREE PLACE DECIMALS

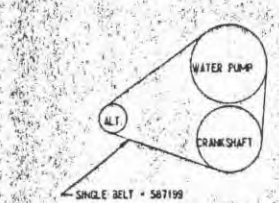
ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F_1=.030; F_2=.06; F_3=.09; F_4=.12 ETC.

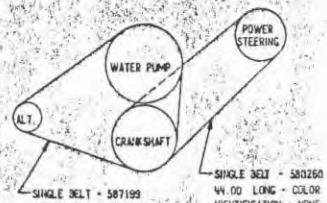
COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

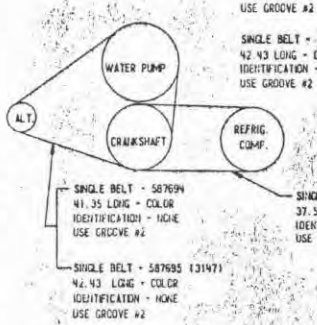
DO NOT SCALE

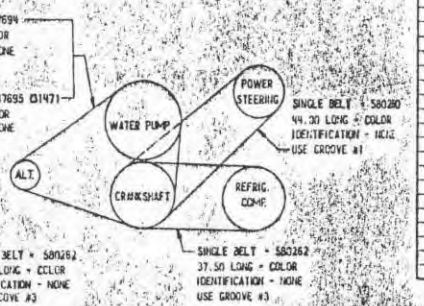
DATE DWG. September 25, 1961	DR. HENRICK
SCALE	CK.
FIRST USED 1962	APPR.
3000 - 3100	APPR. J. CONDON
REFERENCE	APPR.
MATERIAL SPEC. "FACTORY FILL"	
NAME CHART - ANTI - FREEZE	
P.C.N.	PART NO. 586701

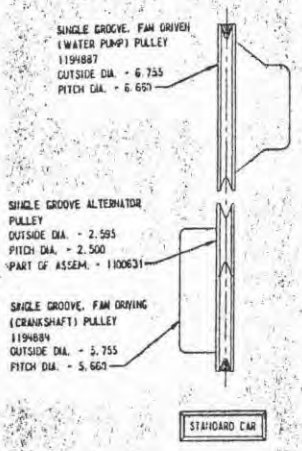
GRP. 0

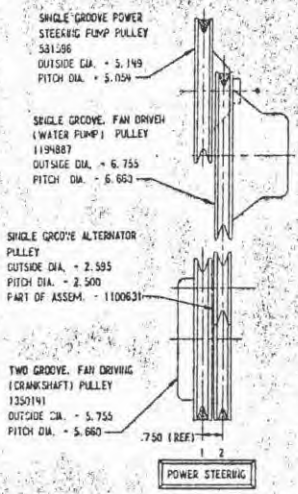


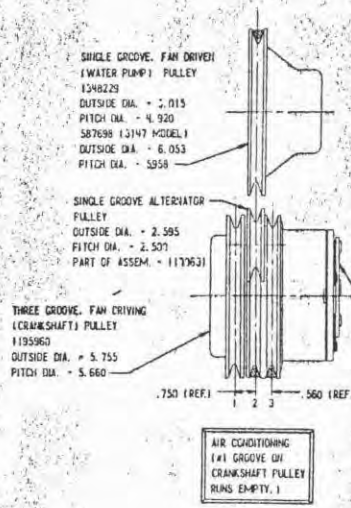


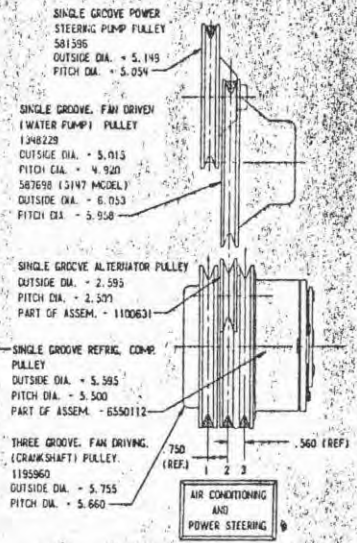












DATE	ENG.	REVISION RECORD	AUTHORITY	BY	NO.

DWG. 380563
LAST CHANGE

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F_1-.030; F_2-.06; F_3-.12 ETC.
COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

DO NOT SCALE

DATE DWG	FEBRUARY 28, 1962	DR.	J. BAKER
SCALE		CK.	HOLT
PRINT DATED	1963	APPR.	C.A. Angus
REFERENCE	30 - 3100	APPR.	
MATERIAL SPEC.			

NAME: CHART - PULLEY AND BELT

P.O. | PART NO. 380563

LAST CHANGE | SHEET | NO. 380563

GPP 10

INITIAL LUBRICATION OF REAR AXLE PINION BEARINGS REQUIRES THAT THE CAR BE DRIVEN FORWARD

SEQUENCE OF ROLL TESTS MUST BE MADE AS FOLLOWS:

1. PART THROTTLE CHECKS FORWARD
2. FULL THROTTLE CHECKS FORWARD
3. CHECK REVERSE

IN TESTING CARS ON THE FINAL ASSEMBLY TEST ROLLS FOR OBSERVATION OF GENERAL CAR OPERATION, THE FOLLOWING SPEEDS AND LOADS SHOULD BE USED BUT NOT EXCEEDED:

CARS WITH HYDRA-MATIC DRIVE TRANSMISSION

GEAR	SPEED	THROTTLE OPENINGS
FIRST - (DR,S,LO)	20 M.P.H.	1/2
SECOND - (DR,S)	40 M.P.H.	1/2
THIRD - (DR)	70 M.P.H.	1/2

PART THROTTLE CHECKS

1. 3-2 PART THROTTLE DOWNSHIFT SHOULD OCCUR AT CAR SPEEDS BELOW 30 M.P.H. WHEN THROTTLE IS OPENED APPROXIMATELY 2/3 OR MORE, BUT WITHOUT REACHING THE DETENT.
2. AT SPEEDS UP TO 35 M.P.H. THE TRANSMISSION WILL SHIFT INTO 1st GEAR WHEN SELECTOR LEVER IS MOVED INTO "LO" POSITION.

FULL THROTTLE CHECKS

FULL THROTTLE IS TO BE USED ONLY ON THE FOLLOWING CHECKS:

1. STALL WARM-UP (CAR HELD WITH BRAKE) NOT TO EXCEED 5 SECONDS.
2. 1-2 UPSHIFT. RELEASE THROTTLE IMMEDIATELY UPON ATTAINING 30 M.P.H. IF SHIFT HAS NOT OCCURRED.
3. 2-3 UPSHIFT. RELEASE THROTTLE IMMEDIATELY UPON ATTAINING.
   A. 2-3 UPSHIFT
   B. 65 M.P.H. IN 2nd. IF 2-3 SHIFT HAS NOT OCCURRED.
4. 2-1 THROTTLE DOWNSHIFT SHOULD OCCUR BETWEEN 11 AND 18 M.P.H. WHEN THROTTLE IS OPENED THRU DETENT IN DR. AND S. RANGES.
5. 3-2 THROTTLE DOWNSHIFT. DO NOT DOWNSHIFT ABOVE 60 M.P.H. RELEASE THROTTLE IMMEDIATELY WHEN DOWNSHIFT OCCURS.

"S" RANGE CHECK

IMMEDIATELY AFTER 3-2 DOWNSHIFT AT 55 M.P.H. HAS BEEN CHECKED, PERMIT TRANSMISSION TO UPSHIFT TO 3rd GEAR & RAISE CAR SPEED TO 65 M.P.H. CLOSE THROTTLE & AT SAME TIME MOVE THE SELECTOR LEVER TO "S" RANGE. THE ENGINE SPEED SHOULD INCREASE AS IN DOWNHILL BRAKING.

REVERSE OPERATION TEST PROCEDURE:

1. CHECK REVERSE BLOCKER SHIFT RESTRICTION WHILE PERMITTING CAR TO COAST DOWN FROM 20 M.P.H. IN LOW RANGE.
   NOTE: DO NOT MAKE A REVERSE ENGAGEMENT BUT DETERMINE IF BLOCKER FUNCTIONS DOWN TO APPROXIMATELY 10 M.P.H.
2. STOP WHEELS, SHIFT TO REVERSE, ACCELERATE IN REVERSE AT APPROXIMATELY 1/2 THROTTLE AND THEN BRAKE TO A STOP.
3. WITH BRAKES SET, MAKE FULL THROTTLE REVERSE STALL AND RETURN TO IDLE.
4. SHIFT TO LOW AND CHECK FOR NORMAL FORWARD OPERATION.

PARK CHECK

WHILE THE WHEELS ARE ROLLING FORWARD OR REVERSE AT 1 TO 2 M.P.H. MOVE THE SELECTOR LEVER TO "P" (PARK) POSITION. LISTEN CAREFULLY FOR NORMAL PARKING LOCK ENGAGEMENT AS THE WHEELS COME TO A STOP.

THE LOCK SHOULD MAKE POSITIVE ENGAGEMENT AND STOP WHEELS ABRUPTLY AFTER SOME AMOUNT OF RACHET NOISE.

IF THE CAR "FAILS TO PARK" THE TRANSMISSION MUST BE REPLACED UNLESS THE LINKAGE ADJUSTMENT IS FOUND TO BE INCORRECT.

CAR WITH SYNCRO-MESH TRANSMISSION

GEAR	SPEED	THROTTLE OPENINGS
FIRST	15 M.P.H.	1/3 TO 1/2
SECOND	30 M.P.H.	1/3 TO 1/2
THIRD	60 M.P.H.	1/3 TO 1/2
REVERSE	13 M.P.H.	1/3 TO 1/2

JETFIRE (A)

DO NOT ROLL TEST WITH FULL BOOST, THIS IS ACCOMPLISHED AUTOMATICALLY WITH THE ANTI-DETONANT TANK EMPTY OR VENTED.

NOTE: WHEN MAKING FULL THROTTLE ACCELERATION WHILE OPERATING UNDER BOOST LIMIT CONDITIONS, BOOST INDICATION ON CONSOLE GAGE MAY MOMENTARILY (1-2 SECONDS) INCREASE TO MAXIMUM AND RAPIDLY FALL OFF TO SMALL AMOUNT.

DATE	STA.	REVISION RECORD	AUTHORITY	DR.	CK.
10-13-61	A	Note Added		RN	HSL
3-14-61	B	Retyped - No Change		PB	R-

NO. 581258
LAST CHANGE B

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS

ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F_1-.030; F_2-.06; F_3-.09; F_4-.12 ETC.

COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

DO NOT SCALE

DATE DWG. March 19, 1962	DR. T.J. Krieg
SCALE	CK. H. Page
FIRST USED 1961 - ALL	APPR. H. L. Howard
REFERENCE	APPR.
MATERIAL SPEC.	

NAME

CHART - ROLL TEST PROCEDURE

PART NO. 581258

OLDSMOBILE

LAST CHANGE B
NO. 581258

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING, MICHIGAN

GROUP	LOCATION		QUANTITY	G.M. SPEC.	LUBRICANT	REMARKS
6	- GENERAL	CRANKCASE-(ENGINE PLANT)	6 QTS.	GM 4745 M (A1)	HEAVY DUTY OIL - SUMMER GRADE - (SAE 20W)	MARCH 1 TO NOV. 1-) IF NECESSARY TO CHANGE) EITHER THE OIL FILTER OR
		CRANKCASE-(ENGINE PLANT)	6 QTS.	GM 4745 M (A2)	HEAVY DUTY OIL - WINTER GRADE - (SAE 10W)	NOV. 1 TO MARCH 1-) ELEMENT, ADD ONE PINT OF OIL
	.. ENGINES AS SHIPPED FROM LANSING ENGINE PLANT ARE TO HAVE AN OIL LEVEL RANGING FROM FULL MARK TO (1) QUART (.86") ABOVE FULL MARK ON OIL LEVEL INDICATOR. RECHECK ON CAR ASSEMBLY LINE.					
6-A-1	- CYL.BLOCK-	CAMSHAFT BEARINGS	*	GM 4745 M (A3)	OIL - (SAE 20W)	APPLIED ON BEARINGS IN BLOCK
		CRANKSHAFT MAIN BEARINGS (1-2-4-5)	*	GM 4745 M	OIL - (SAE 20W)	APPLIED AT ASSEMBLY
		CRANKSHAFT #3 MAIN BEARINGS	*	NONE	STANDARD OIL CO. LUBRICANT - (G-6466)	WIPE ON OUTER THRUST FLANGES - (UPPER & LOWER BEARINGS)
		CYLINDER BORES	*	GM 4745 M	OIL - (SAE 20W)	SPRAYED ON BORES BEFORE PISTON IS ASSEMBLED.
6-C-1	- CRANKSHAFT -	CRANKSHAFT REAR OIL SEAL	*	NONE	STANDARD OIL OF IND. LUBRICANT - (G-6466)	APPLY TO BOTH HALVES OF SEAL
		CRANKSHAFT REAR PILOT BEARING - (SM)	10 OZ.	NONE	HIGH TEMP. GREASE, TEXACO #1999.	APPLY TO I.D. OF BUSHING AND SPACE IN FRONT OF BUSHING.
		CRANKSHAFT THRUST FLANGE	*	NONE	STANDARD OIL OF IND. LUBRICANT - (G-6466)	APPLY TO THRUST FLANGE OF CRANK OR REAR FLANGE OF #3 MAIN BEARING 360°.
6-D	- CONNECT. RODS & PISTONS	CONNECTING ROD BEARINGS	*	GM 4745 M	OIL - (SAE 20W)	APPLIED AT ASSEMBLY
		PISTON PIN	*	GM 4745 M	OIL - (SAE 20W)	APPLY AT ASSEMBLY TO PISTON
		PISTON RINGS - ALL	*	GM 4745 M	OIL - (SAE 20W)	APPLIED TO I.D. AND O.D. BY VENDOR BEFORE ASSEMBLY TO PISTON
6-K-2	- WATER PUMP -	WATER PUMP SEAL SURFACE	*	NONE	STANDARD OIL OF IND. LUBRICANT - (G-6466)	APPLY ON SEAL BEFORE ASSEMBLY OF IMPELLER
6-M-3	- AIR CLEANER STUD	CARBURETOR		GM 4745 M	OIL - (SAE 20 W)	APPLY ON THREADS BEFORE ASSEMBLY OF WING NUT
6-M-4	- FUEL PUMP LEVER		*	NONE	LUBRIPLATE (130A)	SPREAD ON OPERATING LEVER FAC
6-R-2	- CLUTCH CONTROL	THROWOUT YOKE BALL STUD THRUST - (SM)		NONE	HIGH TEMP. GREASE TEXACO #1999	APPLY ON BALL
		CLUTCH RELEASE BEARING -(SM)	.08 OZ.	NONE	HIGH TEMP. GREASE TEXACO #1999	FILL RECESS ON I.D. OF RELEASE BEARING
6-X-1	- VALVES-SPRING & CAMSHAFT	CAMSHAFT THRUST FLANGE	*	NONE	STANDARD OIL OF IND. LUBRICANT - (G-6466)	APPLY TO FLANGE OR AROUND BRG. HOLE IN FRONT OF CYL BLOCK
		CAMSHAFT	*	GM 4745 M	OIL - (SAE 20W)	SPRAY ON CAMSHAFT BEFORE ASSEMBLY IN ENGINE FULL LENGTH, 360°.
		PUSH RODS	*	NONE	FISKE LUBRIPLATE - (130A)	LUBRIPLATE BOTH ENDS
		VALVE STEMS	*		OIL - (LUBRIZOL) - #917)	DIP HALFWAY ON STEM
		VALVE STEMS	*	NONE	FISKE LUBRIPLATE - (130A)	APPLY ON TIP END
6-X-3	- VALVE ROCKER	ROCKER ARM SHAFT	*	GM 4745 M	OIL - (SAE 20W)	WIPE OR SPRAY BEFORE ASSEMBLY OF ARMS
6-Y-3	- DISTRIBUTOR-	DISTRIBUTOR DRIVEN GEAR	*	NONE	LUBRIPLATE (130 A)	APPLY TO GEAR

* QUANTITY TO BE DETERMINED

DATE	SYM.	REVISION RECORD	AUTHORITY	DR.	CK.
5-11-62	A3	GM 4745 WAS GM 4754	F-NT	[illegible]	[illegible]
	B				

NO. 380531
LAST CHANGE A3
SHEET 1 OF 3

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS
ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F_1-.030; F_2-.06; F_3-.09; F_4-.12 ETC.
COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

DO NOT SCALE

DATE DWG. FEB. 26, 1962	DR. J. BAKER
SCALE	CK. HOLT
FIRST USED 1963 - 30 & 31	APPR. C.F. Hagen
REFERENCE	APPR.
MATERIAL SPEC. "ENGINE SECTION"	
NAME CHART - LUBRICANTS	
PART NO. 380531	

NO. 380531 SHEET 1 OF 3 LAST CHANGE A3

SHEET 1 OF 3

GRP. 0

GROUP	LOCATION	QUANTITY	G.M. SPEC. #	LUBRICANT	REMARKS
3 - FRONT SUSPENSION					
	(A) BUSHINGS UPPER CONTROL ARM INNER & LOWER CONTROL ARM [illegible]	[illegible]	[illegible]	[illegible] ESSO #5 [illegible]	APPLY THRU FITTING BY [illegible] ONLY [illegible]
	[illegible] UPPER CONTROL ARM [illegible] & LOWER CONTROL ARM [illegible]	*	[illegible]	HEAVY MACHINE OIL (OIL & GRAPHITE) MIN. 5% GRAPHITE BY WEIGHT	APPLY ON OUTER THREADS AT ASSEMBLY - (BOTH ENDS)
	[illegible] - FRONT WHEEL [illegible]	*	GM-4655 M	[illegible] LUBRICANT	APPLY [illegible] DIAMETER [illegible] FACE OF CONE
	BEARINGS - FRONT WHEEL [illegible]	[illegible]	[illegible]	[illegible] TEMPERATURE GREASE - TEXAS CO. (#1999)	APPLIED BY MACHINE
	OIL SEAL - FRONT [illegible]	*	NONE	HIGH TEMPERATURE GREASE - TEXAS CO. (#1992)	NOT SATURATED BUT SLIGHTLY LUBRICATED APPLIED BY MACHINE
	WHEEL STUDS - FRONT [illegible]	*	GM-4550 M	LUBRIPLATE - (#110) OR DASCO - #5550	APPLY ON THREADS AT ASSEMBLY
		*			
	(C)(A) BALL JOINT ASSEMBLIES - UPPER & LOWER	*	NONE	MOLY [illegible]	PREGREASE AT ASSY. (BY S.S.G.)
	(B) BALL JOINT ASSEMBLIES - UPPER & LOWER		NONE	[illegible] ESSO #5 [illegible]	APPLY THRU FITTINGS BY LANSING ONLY (ONLY [illegible])
	(E) SHOCK ABSORBER	*	NONE	SILICONE LUBRICANT	APPLY ON ROD ABOVE SEAL WITH SHOCK IN EXTENDED POSITION
4 - REAR SUSPENSION					
	OIL SEAL - REAR AXLE SHAFT	*	NONE	SAE #10 OIL WITH RUST INHIBITOR	SEALS SPRAYED BY VENDOR
	SHAFT - REAR AXLE	*	NONE	HYPOID GEAR LUBRICANT (579112)	APPLY ON BEARING SEAL O.D. TO BE COATED LIGHTLY
	(E) SHOCK ABSORBER	*	NONE	SILICONE LUBRICANT	APPLY ON ROD ABOVE SEAL WITH SHOCK IN EXTENDED POSITION
4 - PROPELLER SHAFT					
	UNIVERSAL JOINTS	.22 OZ.	NONE	STANDARD OIL INDUSTRIAL GREASE #[illegible] OR MARFAX MULTI-PURPOSE #2	FURNISHED IN PROPELLER SHAFT ASSEMBLIES - (BY S.S.G.)
	SLIP YOKE POCKET & SPLINES	.50 OZ.	GM-4730 M	STANDARD OIL IND. - (G-6466)	FURNISHED IN PROPELLER SHAFT ASSEMBLIES - (BY S.S.G.)
	CONSTANT VELOCITY JOINT BALL & SEAT	*	NONE	QUAKER STATE WHEEL BEARING LUBRICANT	FURNISHED IN PROPELLER SHAFT ASSEMBLIES - (BY S.S.G.)
	CONSTANT VELOCITY JOINT SEAL	*	NONE	STANDARD OIL ARCTIC #5	FURNISHED IN PROPELLER SHAFT ASSEMBLIES - (BY S.S.G.)
5 - BRAKES					
	BRAKE SYSTEM - (MASTER CYLINDER)	*	GM-4653 M	HYDRAULIC BRAKE FLUID - (11C)	(D) FLUID LEVEL SHOULD BE 1/2 INCH FROM TOP OF RESERVOIR MEASURED AT FRONT EDGE
	BRAKE CONTROL	*	NONE	STANDARD OIL IND. - (G-6466)	APPLY TO PUSH ROD CLEVIS PIN
	BRAKE PEDAL	*	GM-4550 M	LUBRIPLATE (#110) OR DASCO #5550	APPLY TO EACH END OF BRAKE PEDAL PIVOT PIN PRIOR TO ASSEMBLY OF BEARING
	PARKING BRAKE LEVER PULL [illegible]	*	GM-4550 M	LUBRIPLATE (#110)	TO BE APPLIED BY VENDOR
	[illegible] BOLT	*	GM-4737 M	STANDARD OIL IND. (G-6466) OR MORAINE PRODUCTS [illegible] GREASE (M.F. 6878)	APPLY UNDER HEAD OF BOLT
5 - STEERING GEAR					
	STEERING GEAR - (MANUAL)	.694	GM-4673 M	STEERING GEAR	FURNISHED IN STEERING GEAR BY - (SAGINAW STEERING GEAR DIVISION)
	STEERING SHAFT UPPER BEARING	.002 OZ.	GM-4612 M		INSTALLED BY VENDOR - (S.S.G.)
	SHIFT TUBE TO SHIFT BOWL AND ACTUATOR	*		AMERICAN CHAIN & CABLE RA-3747	APPLY AT ASSEMBLY
	WASHER 1195719 TO SHIFT BOWL	*		AMERICAN CHAIN & CABLE RA-3747	APPLY AT ASSEMBLY
	WASHER 3667525 TO ACTUATOR HOUSING	*		AMERICAN CHAIN & CABLE RA-3747	APPLY AT ASSEMBLY
	TURN SIGNAL [illegible] TO ACTUATOR	*		AMERICAN CHAIN & CABLE RA-3747	APPLY AT ASSEMBLY
	LOWER BEARING TO SHIFT TUBE	*		AMERICAN CHAIN & CABLE RA-3747	APPLY AT ASSEMBLY
	SHIFT LEVER WASHERS (SM.)	*		AMERICAN CHAIN & CABLE RA-3747	APPLY AT ASSEMBLY
	LOWER SHIFT LEVER KEYS (SM.)	*		AMERICAN CHAIN & CABLE RA-3747	APPLY AT ASSEMBLY
	LOWER SHIFT LEVER TO RETAINER	*		AMERICAN CHAIN & CABLE RA-3747	APPLY AT ASSEMBLY
	STEERING SHAFT SEAL	*		AMERICAN CHAIN & CABLE RA-3747	APPLY AT ASSEMBLY
	STEERING SHAFT COUPLING	[illegible] OZ.	GM-4731 M		INSTALLED BY VENDOR - (S.S.G.)
	FELT SEAL TO SHIFT TUBE			AMERICAN CHAIN & CABLE RA-3747	APPLY AT ASSEMBLY
	FELT & POLYURETHANE SEALS TO STEEL SHAFT			HIGH TEMP. GREASE - TEXAS CO. #1999 (FRT. WHEEL BRG. GREASE)	APPLY AT ASSEMBLY (STEERING COLUMNS 387165 & 387164)
9 - STEERING LINKAGE					
	STEERING LINKAGE ASSEMBLY				GREASED AT ASSEMBLY BY VENDOR - (S.S.G.)
	TIE ROD SEALS	*	NONE	S.S.G. CODE 9743	GREASED AT ASSEMBLY BY VENDOR - (S.S.G.)
	TIE ROD BEARINGS	*	NONE	S.S.G. CODE 3727	GREASED AT ASSEMBLY BY VENDOR - (S.S.G.)
	PITMAN ARM, IDLER ARM, IDLER SUPPORT	*	NONE	S.S.G. CODE 5767	GREASED AT ASSEMBLY BY VENDOR - (S.S.G.)
12 - CHASSIS WIRING					
	[illegible] CONTACT	*	GM-4550 M	LUBRIPLATE (#110) OR DASCO - #5550	
	TURN SIGNAL SWITCH ACTUATOR ROD	*	GM-4550 M	LUBRIPLATE (#110) OR DASCO - #5550 OR AMERICAN CHAIN & CABLE RA-3747	
35C - POWER STEERING					
	STEERING GEAR PUMP RESERVOIR	.84 PINTS		HYDRA-MATIC FLUID - (579472)	FILL RESERVOIR TO INDICATOR MARK - (APPROXIMATELY 1 INCH FROM TOP)
	STEERING GEAR	*		HYDRA-MATIC FLUID - (579472)	FURNISHED IN GEAR BY - (SAGINAW STEERING GEAR DIVISION)

* (AMOUNT TO BE DETERMINED) * * (OPTIONAL LUBRICANT FOR S.C.F. PLANTS)

LAST CHANGE 3 | SHEET 2 OF 3 | NO. 380531

SHEET 2 OF 3

DO NOT SCALE

1963 - 3000-3130

CHART - LUBRICANTS

CHASSIS

380531

DATE	SYM.	REVISION RECORD	AUTHORITY	DR.	CK.
4-17-62	A	Line Added	P. J. K.	PE	Np
8-6-62	B	380765 has 576800	P.Q.S.	EW	Np

- GROUP -	- LOCATION -	- QUANTITY -	- G.M. SPEC.# -	- LUBRICANTS -	- REMARKS -
4A1	DIFFERENTIAL (STANDARD)	2.10 PINTS	GM-4655 M	E.P. LUBRICANT	
	NOTE: DIFFERENTIAL HYPOID LUBRICANT PURCHASED AS PER THE ABOVE SPECIFICATIONS MUST BE APPROVED FOR ANALYSIS AND RELIABILITY OF SOURCE BY THE CHEMICAL LABORATORY AND PRODUCT ENGINEERING DEPARTMENT.				
6N2	AUXILIARY BELLCRANK TO CARBURETOR LEVER ROD ASSEMBLY	*	NONE	HUMBLE ESSO WS 3794 GREASE	APPLY TO BALL SOCKETS BEFORE ASSEMBLY TO ENGINE. (3147)
6N2	THROTTLE CONTROL	*	GM-4745 M	ENGINE OIL	APPLY TO ALL FRICTION AND BEARING SURFACES
6N2	ACCELERATOR PEDAL HOLES	*	NONE	SILICONE LUBRICANT (HOWARD PROD. CO. HP-LE-41)	APPLY TO ACCELERATOR PEDAL HOLES
6N2	BEARINGS - THROTTLE LEVER	*	NONE	STANDARD OIL IND. (G-6466)	APPLY IN UPPER & LOWER BEARINGS BEFORE ASSEMBLY TO BODY
6N2	AUXILIARY BELLCRANK ASSEMBLY	*	NONE	MEXICAN GRAPHITE GREASE OR DIXON #3 GRAPHITE	APPLY TO AUXILIARY BELLCRANK PIN BEFORE ASSEMBLY IN BEARING
7A	SHIFT RELAY B/C. PIN	*	NONE	HUMBLE ESSO WS 3794 GREASE	PACK GROOVE BEFORE ASSEMBLY IN BEARING (3147 MODEL, 3117, 3167 MODELS WITH "D-55" EQUIPMENT)
7A	TRANSMISSION SHIFT CONTROL	*	NONE	HUMBLE ESSO WS 3794 GREASE	APPLY TO ALL FRICTION AND BEARING SURFACES OF CONTROL LINKAGE
7A	SHIFT LEVER	*	NONE	STANDARD OIL IND. (G-6466)	APPLY TO PORTION OF LEVER AND SPRING IN SHIFT BOWL
7B1	CLUTCH CONTROL	*	NONE	HUMBLE ESSO WS 3794 GREASE	APPLY TO ALL FRICTION AND BEARING SURFACES OF CONTROL LINKAGE
7B1	CLUTCH PEDAL	*	NONE	STANDARD OIL IND. (G-6466)	APPLY TO PIVOT BUSHINGS AND PUSH ROD PIN PRIOR TO ASSEMBLY
7B1	CLUTCH EQUALIZER	*	NONE	HUMBLE ESSO WS3794 GREASE	APPLY AT ASSEMBLY
7B1	TRANSMISSION - (SM.)	2.10 PINTS	GM-4736 M	80-90 GRADE MINERAL OIL	THROUGH FILLER PLUG - (2.10 PINTS)
7B1	TRANSMISSION REAR OIL SEAL (SM.)	*	NONE	STANDARD OIL IND. (G-6466)	APPLY TO INNER AND OUTER LIPS OF REAR OIL SEAL BEFORE ASSEMBLY OF FLANGE
35GBO	DIFFERENTIAL (LOCKING TYPE)	2.10 PINTS		HYPOID GEAR LUBRICANT (574118)	
	NOTE: DIFFERENTIAL HYPHOID LUBRICANT PURCHASED AS PER THE ABOVE SPECIFICATIONS MUST BE APPROVED FOR ANALYSIS AND RELIABILITY OF SOURCE BY THE CHEMICAL LABORATORY AND PRODUCT ENGINEERING DEPARTMENT.				
35M2O	TRANSMISSION - (F.S.)	2.35 PINTS	GM-4736 M	80-90 GRADE MINERAL OIL	THROUGH FILLER PLUG - (2.35 PINTS)
35M35	TRANSMISSION - (HT.)	6 QTS.		(B) HYDRA-MATIC FLUID 380765	THROUGH FILLER TUBE
35M35	DOWNSHIFT LEVER - (HT.)	*	NONE	MEXICAN GRAPHITE GREASE OR DIXON #3 GRAPHITE	APPLY BETWEEN DOWNSHIFT LEVER AND THROTTLE LEVER AT ASSEMBLY
35M35	INDICATOR ASSEMBLY - TRANSMISSION OIL LEVEL - (HT.)	*	NONE	SILICONE LUBRICANT (HOWARD PROD. CO. HP-LE-41)	APPLY AT ASSEMBLY, MUST COVER RUBBER SEAL
35M35	UPPER T.V. ROD	*	NONE	HUMBLE ESSO WS 3794 GREASE	APPLY TO BALL SOCKETS BEFORE ASSEMBLY TO ENGINE.
(A) 35M2O	TRANSMISSION REAR OIL SEAL (FS)	*	NONE	STANDARD OIL IND. (G-6466)	APPLY TO INNER AND OUTER LIPS OF REAR OIL SEAL BEFORE ASSEMBLY OF FLANGE

* AMOUNT TO BE DETERMINED

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING, MICHIGAN

NO. 380531
LAST CHANGE B
SHEET 3 OF 3

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS
ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F_1-.030; F_2-.06; F_3-.09; F_4-.12 ETC.
COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

DO NOT SCALE

DATE DWG. February 17, 1962	DR. Phyllis Bengel
SCALE	CK. W.L. Weiss
FIRST USED 1963 3000 - 3100	APPR. H.R. Howard
REFERENCE	APPR.
MATERIAL SPEC. "TRANSMISSION".	
NAME CHART - LUBRICANTS	
F.C.H.	PART NO. 380531

NO. 380531
LAST CHANGE B
SHEET 3 OF 3

SHEET 3 OF 3

GRP. 0

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING, MICHIGAN

		QUANTITY	ENGINE OIL	DUPONT PASTE (565-4012 OR P.O.B.#7 SEALER)	C.P. #9 SEALER (NAT. MACHINE PROD. CO.)	GASKET CEMENT (P.O.B.#4 SEALER)	REMARKS
6A-CYLINDER BLOCK	* WATER JACKET CORE HOLE PLUG CUP	8			WIPE IN HOLE		BUICK APPLIES P.O.B. #4 (BS-1396)
	CYLINDER BLOCK DRAIN PLUG	2			WIPE IN HOLE		
	* CRANKSHAFT BEARING CAP BOLT	10					BRUSH OR WIPE ANTI-SEIZE COMP. (BUICK SPEC. #1379) ON THDS. (BUICK SAME)
6A2-CYLINDER HEAD	CYL.HEAD BOLT HOLE IN BLOCK (EXC.ROCKER BRACKET)	26					APPLY ANTI-SEIZE COMP. (BUICK SPEC.#1379) ON THDS. IN HOLE WITH METERING DEVICE.
	CYL. HEAD BOLT WASHER (EXC. ROCKER BRKT.)	26	DIP				
	CYL. HEAD BOLT HOLE IN BLOCK (ROCKER BRKT.)	8				APPLY TO THD'S. IN HOLE WITH METERING DEVICE.	
	CYLINDER HEAD TOP CORE HOLE PLUG	4			DIP THREADS		
	CYLINDER HEAD GASKET	2				BOTH SIDES	
	VALVE GUIDE HOLE	8	WIPE IN HOLE				
7G-1A-FLYWHEEL HOUSING	* UPPER FLYWHEEL HOUSING BOLT	8	DIP THREADS				BUICK NONE
	LOWER FLYWHEEL HOUSING TO BLOCK BOLT	2	DIP THREADS				
6E-OIL PAN	* OIL PAN BOLTS	16	DIP THREADS				BUICK NONE
6F1-OIL PUMP	* OIL PUMP COVER BOLTS	6	DIP THREADS				BUICK NONE
	* OIL PRESSURE VALVE CAP	1	DIP THREADS				BUICK NONE
	* OIL SCREEN BOLTS	2	DIP THREADS				BUICK NONE
	* OIL PUMP GEARS	2					APPLY ONE TEASPOON AMBER PETROLATUM G.M. SPEC. #4544M TO GEAR CAVITY. (BUICK SAME)
6G1-OIL DISTRIBUTION SYSTEM	* OIL PASSAGE FRONT PLUG (CUP)	6		WIPE IN HOLE			BUICK APPLIES MINN. MINING EC-961
	* OIL PASSAGE REAR PIPE PLUG 3/8	2		DIP THREADS OR WIPE IN HOLE			BUICK APPLIES MINN. MINING EC-961
6G5-OIL FILTER RELIEF	* OIL FILTER RELIEF CAP	1	DIP THREADS				BUICK NONE
	OIL FILTER PAD COVER	1	WIPE IN HOLE & ON RUBBER GASKET				
	OIL FILTER	1	APPLY TO RUBBER GASKET				
6H-VENTILATION	VENT. HOSE CONNECTOR TO COVER	1					WIPE G-6466 GREASE IN GROMMET.
6J-TIMING CHAIN COVER	* COVER TO BLOCK BOLT	9	DIP THREADS				BUICK NONE
	* CRANKSHAFT OIL SEAL SHEDDER	1		WIPE IN HOLE			BUICK APPLIES MINN. MINING #EC-961
6K2-WATER PUMP & DRIVE	* WATER PUMP SEAL ASSEMBLY	1				WIPE ON HOUSING I.D. OR SEAL O.D.	BUICK SAME
	* WATER PUMP COVER BOLT	5	DIP THREADS				BUICK NONE
	* WATER PUMP BEARING	1					APPLY STANDARD OIL OF INDIANA G-6466 TO BEARING BORE. (BUICK NONE)
6K3-WATER OUTLET	WATER OUTLET TO INTAKE MANIFOLD BOLTS	2	DIP THREADS				
6L-MANIFOLDS	INTAKE MANIFOLD GASKET	1				APPLY TO INTAKE MANIFOLD & CYLINDER HEAD SURFACES OR TO BOTH SIDES OF GASKET.	
	INTAKE MANIFOLD GASKET CLAMP BOLT	2	DIP THREADS				
	INTAKE MANIFOLD TO CYLINDER HEAD BOLT	12	DIP THREADS				
(A)	EXHAUST MANIFOLD TO CYLINDER HEAD STUD	16			DIP THREADS		
	EXHAUST MANIFOLD	2					APPLY DIXON #3 GREASE TO SEALING SURFACE OF EXHAUST MANIFOLD PORT FLANGES
	THROTTLE VACUUM PLUG (4 BBL. ONLY)	1			WIPE IN HOLE		
6M1-CARBURETOR	CARBURETOR TO INTAKE MANIFOLD BOLT	4	DIP THREADS				
	CARBURETOR SUPPORT BRACKET BOLT (3147)	2	DIP THREADS				
	HEAT TUBE AIR INLET PIPE BOLT (EXC. 3147)	1	DIP THREADS				
6M3-AIR CLEANER							
(B)	AIR CLEANER LABELS (4 BBL. ONLY)	-					APPLY GOODYEAR ADHESIVE "PLIOBOND" OR MINN. MINING EC-847 TO AIR CLEANER FOR "CUTLASS 4-BS" & "ULTRA HIGH COMPRESSION" LABELS ONLY

LAST CHANGE B
SHEET 5 OF 6
NO. 380534

* DENOTES PARTS TREATED & ASSEMBLED BY BUICK. (SEE "REMARKS" COLUMN FOR BUICK'S TREATMENT)

NOTE: IF ANY OF THE ABOVE PARTS ARE REMOVED FOR ANY PURPOSE THEY ARE TO BE TREATED AS SHOWN ABOVE BEFORE REINSTALLATION.

DO NOT SCALE

CHART - PROCESS MATERIAL

ENGINE

1963

380534

NO. 380534 SHEET 5 OF 6 LAST CHANGE B

4-10-62	A	PART REMOVED	
4-16-62	B	NOTE REVISED	

3000-3100

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING, MICHIGAN

		QUANTITY	ENGINE OIL	DUPONT PASTE (563-4012 OR P.O.B. #3 SEALER)	C.P. #9 SEALER (NAT. MACHINE PROD. CO.)	GASKET CEMENT (P.O.B. #4 SEALER)	REMARKS
6M4-FUEL PUMP	FUEL PUMP BOLT	2	DIP THREADS				
6M7-TURBOCHARGER	WATER NIPPLE BOLT (3147)	2	DIP THREADS				
	(A1) VACUUM CHECK VALVE (3147)	1	DIP THREADS				
	(A2) TURBO. FLANGE SCREW (3147)	8	DIP THREADS				
6M2-THROTTLE CONTROL	THROTTLE BRACKET TO INT. MANIF. STUD (3147)	2			DIP THREADS		
6O-ENGINE MOUNT	FRONT ENGINE MOUNT BOLT	2	DIP THREADS				
6X1-CAMSHAFT	* REAR CAMSHAFT BEARING STAMPED PLUG	1		WIPE IN HOLE			BUICK APPLIES MINN. MINING EC-961
6X3-ROCKER ARMS	VALVE COVER GASKET	2					DUPONT CEMENT - 5402 ONE SIDE ONLY - MIN. DRYING TIME 10 MINUTES.
6Y1-ALTERNATOR	ALTERNATOR BRACKET BOLT	3	DIP THREADS				
6Y2-STARTER MOTOR	STARTER MOTOR TO BLOCK BOLT	1	DIP THREADS				
6Y3-DISTRIBUTOR	DISTRIBUTOR CLAMP BOLT	1	DIP THREADS				
6Y4-ELECTRICAL	COIL TO INTAKE MANIFOLD BOLT	1	DIP THREADS				
	ENGINE GROUND STRAP BOLT	1	DIP THREADS				
	SPARK PLUGS	8					APPLY ANTI-SEIZE COMP. (BUICK SPEC. 1379) ON THDS. CAUTION: COMP. MUST BE KEPT OFF ELECTRODE & PORTION OF SHELL EXPOSED IN COMB. CHAMBER.
12J-INSTRUMENTS	WATER TEMPERATURE SWITCH	1			WIPE IN HOLE		
35M35-THROTTLE RETURN CK.	CHECK TO INT. MANIF. BOLT (2 BBL. ONLY)	1	DIP THREADS				
35M40-POWER STEERING	FRONT BRACKET TO ENGINE BOLT	3	DIP THREADS				
	REAR BRACKET TO HEAD BOLT	2	DIP THREADS				
35C60-AIR CONDITIONING	FRONT BRACKET TO ENGINE BOLT	3	DIP THREADS				
	FRONT BRACKET & SPACER TO ENGINE BOLT	1	DIP THREADS				
1A2C - HEATER	(A3) HEATER WATER NIPPLE BOLT	2	DIP THREADS				

* DENOTES PARTS TREATED & ASSEMBLED BY BUICK. (SEE "REMARKS" COLUMN FOR BUICK'S TREATMENT)

NOTE: IF ANY OF THE ABOVE PARTS ARE REMOVED FOR ANY PURPOSE THEY ARE TO BE TREATED AS SHOWN ABOVE BEFORE REINSTALLATION.

PAGE E-11.6

LAST CHANGE A
SHEET 6 OF 6
PE5065E

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .01 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS
COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

DO NOT SCALE

DATE February 26, 1962 — DR. Phillis Bassel — CK. J. BAKER — APPR. C.F. ...

FIRST USED 1963

CHART - PROCESS MATERIAL — ENGINE

PART NO. 380534

-3000-3100 E

NO. 380534 — SHEET 6 OF 6 — LAST CHANGE A

A PART ADDED

INTRODUCTION

This specification has been established to cover paint procedure and material requirements at Oldsmobile and its suppliers. Its purpose is to control existing materials and finishes and aid in developing new sources and/or improved materials.

A paint system as referred to in this specification consists of one or more organic paint films applied to a given surface. Where surface treatments, such as zinc phosphating or anodizing, are required this specification will cover this requirement only to the extent that it becomes a part of the total protective film. It will not cover the material or process requirements for these treatments.

If a paint sample submitted by a new vendor meets this specification, it does not constitute acceptance or obligate Oldsmobile in any way. Product Engineering reserves the right to accept or reject any material on requirements other than covered herein. Normally, all paint samples will be compared to present production materials or with other samples submitted for the same purpose. Samples will be judged on performance, cost and reliability of submitting vendor. However, as in the past, Oldsmobile will continue to carry a maximum of two sources for each material used by the Lansing plant. B.O.P. assembly plants may also use all materials approved and specified by Fisher Body. Parts suppliers must obtain Engineering approval for all paint materials other than those covered by this specification.. However, previously established sources will not be required to obtain new approval under this specification.

This specification is divided into six (6) sections identified by Roman numerals: I Exterior Finishes; II Interior Finishes; III Chassis Paint; IV Miscellaneous Finishes and Procedures; V Test Procedures and VI Miscellaneous Paint Supplies. Each section is then subdivided into the various subtitles covered under that section. The subtitles are numbered as follows: 1, 2, 3 etc. and all pages pertaining to one subtitle have the same page number with letters added to identify the individual pages, such as: 1, 1a, 1b etc.

C-12.1

CHART	
PAINT MATERIAL AND PROCEDURE SPECIFICATION	
YEAR: 1963	DWG. BY: E. HOUGHTON
DATE ISSUED: 5-23-62	APPROVED BY: R. STEELE
INTRODUCTION SHEET	PART # 380895

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CHART	
PAINT MATERIAL AND PROCEDURE SPECIFICATION	
YEAR: 1963	DWG. BY: E. HOUGHTON
DATE ISSUED: 5-23-62	APPROVED BY: R. STEELE
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(2470)

SECTION I

EXTERIOR FINISHES

SHEET METAL

Procedure Specifications:

A. Surface Preparation - Clean and zinc phosphate with Parker Rustproof Spra-Bonderite #105-OR equivalent and dry at 390° to 400°F. All solutions and processes are to be controlled by production in accordance with laboratory recommendations.

B. Primer - Dip prime with Forbes gray baking primer #897 reduced to 16 sec. in a #4 Ford cup with Western Solvents or Grow Solvents prime thinner #1088-A and bake at 420° to 425°F for 17 minutes. Equivalent primers, tested and approved by G.M. Research, may be used in either dip or flo-cote systems. These primers are to be reduced and baked in accordance with the paint manufacturers recommendations. Sand primer as required to remove dirt, sags, "etc.". For service parts, flo-cote prime with Forbes #80-485 baking primer or equivalent and bake 35-40 minutes @ 380°-400°F.

C. Sealer - When a subsequent coat of acrylic lacquer is to be used, apply one coat of sheet metal sealer DuPont #881-94184 or equivalent reduced to a viscosity of 33 to 37 sec. in a #1 Zahn cup. Allow to flash dry one to two minutes before applying the acrylic lacquer. Sealer may be omitted for finishes other than acrylic lacquer.

D. Acrylic Lacquer - While the acrylic lacquers specified for 1963 are of the thermo-reflow type, either of the following procedures may be used depending on plant layout and facilities.

1. Standard Procedure - Reduce as recommended by the paint manufacturer and spray three coats in the desired color in accordance with the Paint and Trim Specifications Charts (380893 or 380894). Bake at 200° to 220°F for 20 to 30 minutes. Sand as required with sand paper not coarser than 400 grit to remove dirt, orange peel or other surface defects and polish to develop maximum gloss using compounds as fine as practical.

C12.3

CHART	
PAINT MATERIAL AND PROCEDURE SPECIFICATION	
YEAR: 1963	DWG. BY: E. HOUGHTON
DATE ISSUED: 5-23-62	APPROVED BY: R. STEELE
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For those colors which prove readily susceptible to scaling, bronzing or other defects caused by excessive polishing, a reduced amount of polishing will be acceptable when the general appearance of the finish is improved by such action. However, engineering approval must be obtained.

2. Thermo-Reflow Procedure - Reduce as recommended by the paint manufacturer and spray three coats in the desired color in accordance with the Paint and Trim Specifications Charts (380893 or 380894). A slightly higher film build and somewhat slower thinner, then is used in the above standard procedure is desired to obtain maximum reflow properties. Bake at 210° to 220°F for 10 to 15 minutes. Sand with Oleum Spirits using 400 or 500 grit sandpaper to remove dirt, orange peel and other surface defects. Clean surface thoroughly and rebake at 275° to 285°F for 30 to 40 minutes. Slush polish to develop the desired polished appearance.

E. Underside of Front Fenders - To assure adequate corrosion resistance, the underside of all front fenders are to be painted with one coat of sealer and three coats of acrylic lacquer matching in color either the outside surface or dark gray or black.

Where plant facilities do not lend themselves to the above procedure, one of the following alternate finishes may be used.

1. Rinshed-Mason's Hi-Corrosion Resistant Primer U51A066 or DuPont's Dark Zinc Chromate Primer 63-1871 to be applied after dip prime. Air dry or bake with acrylic lacquer. Baking is preferred.

2. DuPont's Zinc Chromate Primers 63-1871 or 63-1853 may be applied before and baked concurrently with the dip primer.

When either of these alternate procedures are used, overspray on the outside surfaces is to be held to a minimum or removed.

F. Film Thickness -

Primer	.0005 to .0008 inches
Sealer	.0003 to .0005 inches
Acrylic Lacquer	.0018 to .0025 inches
Total	.0028 to .0038 inches

A sufficient amount of the color coat must be applied to develop complete coverage regardless of minimum film thickness requirements.

C-J°.4

CHART	
PAINT MATERIAL AND PROCEDURE SPECIFICATION	
YEAR: 1963	DWG. BY: E. HOUGHTON
DATE ISSUED: 5-23-62	APPROVED BY: R. STEELE
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Material Specifications:

All paint materials used in the finshing of exterior sheet metal parts including primers, sealers, thinners and acrylic lacquers must meet G.M. Research performance specifications and have approval of the Polymers Department.

The underside of front fenders must be able to withstand 336 hr. of neutral salt spray in accordance with test procedures outlined in section V.

Caution - Acrylic lacquers, thinners (except when designated for both acrylic and nitrocellulose lacquer) and sealers must not be mixed or used with nitrocellulose lacquer as these materials are not compatible.

CHART	
PAINT MATERIAL AND PROCEDURE SPECIFICATION	
YEAR: 1963	DWG. BY: E. HOUGHTON
DATE ISSUED: 5-23-62	APPROVED BY: R. STEELE
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SHEET METAL PAINT REPAIR

Procedure Specifications:

A. Surface Preparation - Sand all defects such as file marks, scratches, dirt, etc., to a smooth surface - feathering out all deeply sanded areas. Small pits should be puttied, using DuPont Gray PX putty #228-5076 or equivalent. Wipe surface clean with mineral spirits or other suitable pre-paint cleaner.

B. Primer - When filling is required, such as a deeply sanded and/or puttied area, use DuPont #233-92225 repair - primer - surfacer or equivalent reduced as recommended by the paint manufacturer. Thoroughly air dry or bake as required and sand to a smooth surface. Sandpaper not coarser than 400 should be used.

C. Sealer - When filling is not required but the Lacquer coat has been sanded to the primer, apply one coat of sheet metal sealer DuPont #881-94184 or equivalent. Allow to flash dry one to two minutes before applying acrylic lacquer.

D. Color Coat - Reduce as required and spray sufficient coats to develop complete coverage. Mist coat thinner may be used to wet down dry spray. Bake at 170°F for 6 minutes. Metallic colors must be kept in constant agitation to assure good color matches.

Caution - Do not use retarders for reducing repair materials.

E. Polish - All repair spots are to be polished to develop a gloss equal to the adjacent area.

Material Specification:

All paint materials used to repair acrylic lacquer finishes, including primers, putty, sealers, thinners and acrylic lacquers must meet G.M. Research performance specifications and have approval of the Polymers Department.

C-12.6

CHART	
PAINT MATERIAL AND PROCEDURE SPECIFICATION	
YEAR: 1963	DWG. BY: E. HOUGHTON
DATE ISSUED: 5-23-62	APPROVED BY: R. STEELE
Sec. I Page 2	PART # 380895

WHEELS

Procedure Specifications:

A. Surface Preparation - The wheel assembly is to be alkali washed, forced air dried and primed by the vendor. Recommended primer, Rinshed-Mason Lt. Gray Primer U28A027 or equivalent. Primers must be approved by Oldsmobile Engineering and Process Laboratories.

B. Enamel - Spray paint front surface of wheels with one full coat of synthetic enamel and bake as recommended by the paint manufacturer. Color to be selected in accordance with the Paint & Trim Specification Chart. Back side of wheel, tire mounting surface and within a three (3) inch radius of the wheel centerline are not to be painted, although fogging is permitted.

C. Film Thickness: -

Primer	.0008 to .0010 inches
Enamel	.001 to 0012 inches
Total	0018 to .0022 inches

Material Specifications:

A. Primer - Primers as supplied to the wheel vendors must meet their production requirements regarding viscosity, reduction, application, bake, etc..

When applied to an alkali washed steel panel to a film thickness of .0008 to .0010 inches - baked as recommended and aged 48 hours - the primer must withstand the following test as outlined in section V:

(A) Ninety-Six (96) hour humidity test.
(B) Ninety-Six (96) hour salt spray.
(C) Six (6) hour soap immersion test. Requirements: Dilute American Grease Stick Co., rubber lubricating soap #D15D four (4) to one (1) with water. Max. ph. 9.5. Temperature of bath 150°F.

Results - No blistering or loss of adhesion when checked 15 minutes after removal. A slight color change is permissible.

(D) Gloss holdout - When panels are subsequently coated with enamel, the enamel must exhibit a gloss within 10% of the specified gloss.

B. Enamel - The enamel as supplied by the paint vendor must meet production requirements regarding viscosity, reduction, application, bake, etc.. It will be supplied in colors to match Master Standards designated and issued by Oldsmobile Product Engineering and exhibit a gloss of eighty-three (83) degrees.

When applied over a properly prepared primed panel to a film thickness of .001 to .0012 inches, baked as recommended and aged 48 hours, it must withstand the following tests as outlined in section V:

(A) Color must be approved by Product Engineering.
(B) Ninety-six (96) hour humidity test.
(C) Flexibility test.
(D) 336 hour salt spray.

CHART	
PAINT MATERIAL AND PROCEDURE SPECIFICATION	
YEAR: 1963	DWG. BY: E. HOUGHTON
DATE ISSUED: 5-23-62	APPROVED BY: R. STEELE
Sec. I Page 3a	PART # 380895

ZINC BASE DIE CAST PARTS

Procedure Specifications:

A. Surface Preparation - Surface must be thoroughly cleaned to remove grease, oil, mold release compound or other contaminates. Specific cleaning procedure to be determined by the size and shape of the part and amount and kind of contamination.

B. Chemical Treatment - Surface must be chemically treated with American Chemical Paint Company's "Lithoform Z", a phosphate coating designed for zinc parts. Solutions and processes are to be controlled in production in accordance with manufacturer's recommendations. Chemical treatments, other than covered by this specification, must be approved by G.M. Research.

C. Primer - Prime all surfaces with Rinshed-Mason Red Oxide Primer - surface U28R035 or Forbes Red Oxide Primer - surface 80-336X and bake 30 minutes @ 300°F. Primers other than covered by this specification must be approved by G.M. Research.

D. Color Coat - When possible, sand primer - surfacer as required to develop a smooth surface. Apply the color coat in desired material and bake according to the requirements of the selected finish. When the color coat is specified in Acrylic Lacquer, a coat of sealer DuPont #881-94184 or equivalent must be used. A sufficient amount of the color coat must be applied to develop complete hiding regardless of minimum film thickness requirements.

E. Film Thickness -

Primer *	- 0.001 to 0.0012 inches
Enamel	- 0.001 to 0.0012 inches
Sealer	- 0.0003 to 0.0005 inches
Lacquer	- 0.0018 to 0.0025 inches

* Primer requirements indicate film thickness of primer as prepared for color coat, i.e., if sanding is required specified film thickness is after sanding.

Material Specification:

For exterior parts finished in acrylic lacquer, all materials including primers, sealers, thinners and lacquers must meet G.M. Research performance specifications and have approval of the Polymers Department.

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Parts or panels which have been processed as outlined above must pass the following test to be considered acceptable.

(A) Gloss Holdout - When parts are subsequently finished with lacquer or enamel, the top coat shall exhibit a gloss within 10% of the specified gloss for this material with or without sanding the primer.

(B) Lifting - The top coat of lacquer or enamel shall exhibit no effect upon the primer manifested in the form of lifting, wrinkling, blistering or loss of adhesion when baked according to recommended schedules.

(C) Color - Color obtained must match the master standards supplied by Product Engineering.

(D) Ninety-six (96) hour humidity test as outlined in Section V.

(E) Ninety-six (96) hour salt spray as outlined in Section V.

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SECTION II

INTERIOR FINISHES

STEEL OR DIE CAST PARTS
GENERAL PREPARATION - PRIMER

Procedure Specifications:

A. Surface Preparation -

1. Steel - All steel parts are to be zinc phosphated with Parker Rustproof bonderite #100 or #105 or equivalent. All solutions and processes are to be controlled by Production in accordance with laboratory recommendations.

2. Die Cast Unplated* - All die cast parts, zinc base, aluminum or magnesium are to be chemically treated with a suitable process recommended for the particular base metal.

B. Primer - Generally, all interior parts will require a primer, however, in certain applications to be determined by Oldsmobile Engineering, the primer may be omitted. The selection of a primer depends upon the base metal and subsequent top coat. All primers must be approved by Oldsmobile Engineering.

Recommended Primers:

Rinshed-Mason Dk. Gray Primer U28A037
Forbes Gray Dip Primer #897
DuPont Black Dip Primer #63-1690

When acrylic lacquer is specified as a top coat, a sealer - DuPont S.M. Sealer #881-94184 or equivalent - must be used except when the primer is specified for use under acrylic lacquer without sealer.

NOTE: - The Rinshed-Mason interior acrylic lacquer (L47 line) does not require a sealer when used with the above primers. The DuPont interior acrylic lacquer (877 line) does require a sealer with these primers. Oldsmobile Engineering approval must be obtained for all other acrylic lacquer-primer systems.

C. Film Thickness:

Primer	.0008 to .001 inches
Sealer (if required)	.0003 to .0005 inches

* Plated parts are covered in Section IV.

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Material Specification:

Parts or panel which have been processed as outlined above must pass the following test to be considered acceptable.

(a) Gloss Holdout - when parts are subsequently finished with lacquer or enamel, the top coat shall exhibit a gloss within 10% of the specified gloss for this material.

(b) Lifting - the top coat of lacquer or enamel shall exhibit no effect upon the primer, manifested in the form of lifting, wrinkling, blistering, loss of adhesion, etc..

(c) Twenty-four (24) hour humidity test as outlined in Section V.

STEEL OR DIE CAST PARTS
LACQUER - ENAMEL

Procedure Specification:

A. Surface Preparation - All parts are to be prepared as outlined in Section II, page 1. For parts supplied by the vendor in prime, the surface should be wiped with mineral spirits or other suitable cleaning solvent to remove any accumulation of grease, oil, finger prints, etc., due to handling and shipping.

NOTE: - Occasionally because of construction and assembly operations, it is necessary to enamel parts without primer. These parts should be prepared as outlined in Sec. II, page 1, paragraph A. Engineering approval must be obtained before this deviation can be used.

B. Lacquer - Enamel - Spray paint parts with lacquer or synthetic enamel in the desired color in accordance with the paint and trim specification chart and bake as required. If the top coat is to be acrylic lacquer, a sealer - DuPont's S.M. Sealer #881-94184 or equivalent - must be used except when the primer is specified for use under acrylic lacquer without sealer. (See note Sec. II, page 1, paragraph B.) Sufficient film thickness must be applied to develop full color regardless of minimum requirements.

C. Film Thickness:

Enamel	.001 to .0012 inches
Lacquer	.0018 to .0024 inches
Sealer (if required)	.0003 to .0005 inches

Material Specifications:

The lacquers and enamels covered by this specification will be supplied by the paint vendor packaged to meet production requirements regarding viscosity as packaged, reduction, type of thinner required, application viscosity at recommended reduction, flow properties, solids content at the gun and bake or dry time requirements. It is to be furnished in colors to match master standards supplied by Oldsmobile Engineering and must exhibit a gloss within 10% of the specified gloss when applied over a given primer. They shall have complete hiding at minimum film thickness requirements.

When applied over a previously approved primer to a zinc phosphated steel or chemically treated die cast panel or part to the recommended film thickness and properly cured and aged 48 hours, it must withstand the following test:

(a) Twenty-four hour humidity test as outlined in Sec. V.
(b) Flexibility test as outlined in Sec. V.

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PLASTIC PARTS

Procedure Specifications:

A. General - Because of the large variety of plastics used today, it is very difficult to cover in a limited specification all of the variations required to satisfactorily paint plastic parts. Therefore, only a general outline of paint procedures and materials will be given here. Testing of individual parts to be painted will be necessary to determine the most suitable finish.

When selecting a finish for a given plastic, two important items should be considered:

(a) The effect of various solvent on the plastic. Some plastics are subject to cracking or crazing when certain strong solvents, such as lacquer thinner, comes in contact with the surface. Others may soften or dissolve in the thinner.

(b) The maximum temperature which the plastic may be subjected to before distortion occurs. It is best to select finishes which will cure well below the maximum range to avoid damage to the parts.

B. Surface Preparation - Plastic parts are to be washed or wiped with mineral spirits or an equivalent type cleaning solvent to remove grease, oil, finger prints or soil accumulated during handling and shipping. If the plastic surface has a residue of silicone mold release compound, a stronger solvent such as Rinshed-Mason Pre-Kleano, DuPont Prep-Sol or Ditzler Silicon-Off may be used. When required, sand surface with 400 grit paper and re-solvent clean.

C. Primer - Many plastics do not require primers to develop maximum adhesion of the top coat. This is especially true when lacquers are being used. Therefore, test pieces should be prepared to determine the need for a primer. If a primer is used, care should be exercised in selecting a primer which is compatible with the enamel or lacquer top coat. If the top coat is to be acrylic lacquer, a sealer may be required with or without a primer. If a sealer is used, DuPont's S.M. Sealer #881-94184 or equivalent should be satisfactory.

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D. Color Coat - Spray paint parts with lacquer or enamel in the desired color in accordance with the paint and trim specifications chart and bake or air dry as recommended for these particular products. Sufficient coats must be applied to develop full color regardless of minimum film thickness requirements.

E. Film Thickness

Primer (if required)	.0005 to .0008 inches
Lacquer	.0018 to .0024 inches
Enamel	.001 to .0012 inches
Sealer (if required)	.0003 to .0005 inches

Material Specifications:

Material specifications pertaining to primers, lacquers and enamels used for plastic parts will be the same as those covered on pages 1 and 2 of this section.

When plastic parts have been properly prepared as described herein, they must meet the following test requirements:

(a) Twenty-four (24) hour humidity test as outlined in Sec. V.
(b) The top coat must exhibit a gloss within 10% of the specified gloss of the coating material.

SECTION III
CHASSIS PAINTS

MOTOR ENAMEL

Procedure Specifications:

A. 3000-3100 series motor - carburetor cover, valve cover, oil pan, oil filter, exhaust manifold, pipe assembly - exhaust, pipe assembly - manifold to housing and turbo-charger assembly are to be painted as follows:

1. Carburetor Cover - Clean and zinc phosphate with Parker Rustproof Spra Bonderite 105 or equivalent and dip prime with Forbes Gray baking primer #897 or equivalent. Outside surface to be painted with Red enamel, Rinshed-Mason #E29R007 or equivalent. Letters to be painted aluminum lacquer, Rinshed-Mason #L42Z001 or equivalent.

2. Valve Covers - Clean and zinc phosphate with Parker Rustproof Spra Bonderite 105 or equivalent. Optional preparation, clean in iron phosphate solution, Parker Rustproof Parcolite #524 or equivalent. Paint outside surface only with aluminum enamel, Rinshed-Mason E28Z005 or equivalent. Alternate finish, paint covers while installed on motor with aluminum motor enamel Rinshed-Mason Q51Z013 or equivalent.

3. Oil pan and oil filter - Paint as received with aluminum motor enamel, Rinshed-Mason #Q51Z013 or equivalent.

4. For 3147 motor only, exhaust manifold, pipe assembly exhaust, pipe assembly - manifold to housing and turbo-charged assembly - Paint parts as received with heat resistant aluminum enamel, Product Techniques, Inc. #PT805 or equivalent.

B. 3200,3500,3600,3800-3900 series motor - Outside surfaces of these motors are to be spray painted after assembly without previous surface preparations, with Green motor enamel Rinshed-Mason #Q51G033 or Acme Green motor enamel #508G48 for the 3200 series motor, and Red motor enamel, Rinshed-Mason #Q51R038 for the 3500,3600 3800 & 3900 series motor except as follows:

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1. 3200 series motor - Valve covers are to be cleaned and zinc phosphated with Parker Rustproof Spra Bonderite 105 or equivalent. Optional preparation clean in iron phosphate solution, Parker Rustproof Parcolite #524 or equivalent. Paint covers while installed on motor with Green motor enamel Rinshed-Mason #Q51G033 or Acme Green motor enamel #508G48. Also see item (4) below for list of parts not painted end areas to be left free of paint.

2. 3500 and 3800 series motor - Valve covers are to be cleaned and zinc phosphated with Parker Rustproof Spra Bonderite 105 or equivalent. Optional preparation, clean in iron phosphate solution, Parker Rustproof Parcolite #524 or equivalent. Paint valve covers and air cleaner (paint as received) with aluminum enamel Rinshed-Mason #E28Z005 or equivalent. Also see item (4) below for list of parts not painted and areas to be left free of paint.

3. 3600 and 3900 series motor - The valve covers and air cleaner are to be finished in unpolished chrome plate. Also see item (4) below for list of parts not painted and areas to be left free of paint.

4. The following parts and areas are not painted or left free of paint as indicated.

Parts not painted	Areas free of paint
Crankcase inlet air cleaner assembly	Starter assembly to housing boss
Fan & water pump assembly	Battery cable assembly to block boss
Fan belt idler pulley and arm assembly	Fuel pump face
Carburetor assembly	Around 1/4-20 tapped hole on R.H. bank for Body Ground Strap
Air cleaner assembly exc. as shown above	Rear housing face
Fuel pump assembly	Water pump hub
Generator assembly	Around two holes in throttle bellcrank assembly
Generator drive pulley	
Starter Assembly	

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Distributor Assembly — Front cover water inlet

Coil Assembly

Spark plug assembly

Engine thermo gage

C. Film Thickness

Motor Enamel .0008 to .001 inches

Material Specifications:

The motor enamel will be supplied by the paint vendor, "Ready for use" at a viscosity of 14 to 16 Sec. #4 Ford cup and show a minimum amount of soft sidement which can be easily reincorporated into the mixture after standing 30 days. It must show good adhesion to both clean and oily surfaces and air dry tack free in 2 to 3 minutes when applied at .0008 to .001 inches. The color and gloss are to match a standard panel supplied by Oldsmobile Engineering and must exhibit complete hiding at the specified minimum film thickness. It shall not have an offensive odor when heated to 160°F after it has been applied to the motor for ten minutes.

The heat resistant enamel will be supplied by the paint vendor, "Ready for use" and show a minimum amount of soft sediment which can be easily reincorporated into the mixture after standing 30 days. It must show good adhesion to both clean and oily surfaces and air dry to handle in 5 minutes. It is to have a bright aluminum color or match standard panels supplied by Oldsmobile Engineering.

Material specifications for the aluminum enamel, Rinshed-Mason#E28Z005 and Red enamel Rinshed-Mason E29R007 are the same as specified for wheel enamels Section I.

The motor enamel when applied to a clean, untreated steel panel to a dry film thickness of .0008 to .001 inches and aged 48 hours, must withstand the following test as outlined in Section V.

(a) Twenty-four (24) hour oil immersion.
(b) Ninety-six (96) hour humidity.

The heat resistant enamel when applied to a clean untreated steel panel to a dry film thickness of .0008 to .001 inches and air dried 48 hours must withstand the following test.

When heated to 1400°F. for 1 hour and cooled to room temperature, it shall show no evidence of blistering or loss of film integrity, nor shall it show more than a slight change in color or brightness.

CHASSIS BLACK

Procedure Specification:

No surface preparation or primers are required. The chassis black is to be sprayed in accordance with the chassis paint chart and requirement specifications for other miscellaneous parts.

Film Thickness:

.0012 to .0015 inches.

Material Specification:

Chassis black paints are to be supplied by the paint vendor in accordance with production requirements regarding viscosity as packaged, reduction, thinner to be used, spraying viscosity, etc..

When applied to a clean, steel panel to a film thickness of .0012 to .0015 inches and air dried 48 hours, it must withstand the following test as outlined in Section V.

(a) Ninety-six (96) hour humidity test.
(b) Ninety-six (96) hour salt spray.

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SECTION IV

MISCELLANEOUS FINISHED & PROCEDURES

FINISH FOR CHROME PLATE

General:

This specification covers the painting of all chrome plated or stainless steel parts for interior or exterior use.

Procedure Specification:

A. Surface Preparation - Clean as required (degreasing, alkali wash, etc.) to remove all surface contamination including grease, buffing compound, dirt and fingerprints. A final rinse of hot (180°F) deionized water is to follow this regular cleaning process and just prior to the first coat of paint. The dissolved salt content of this final rinse should not exceed 25 parts per million. An alternate final rinse having .014 oz./gal. of chromic acid in deionized water at 180°F may be used. Provisions to force dry the surface are to be provided.

B. Primer - All areas which are to receive a subsequent color coat of enamel or lacquer must be primed with Rinshed-Mason clear baking primer U26C001 or equivalent. Bake primer 30 min. @250°F. All primers must be approved on Oldsmobile's Engineering Department. Under certain circumstances, the primer requirement may be deleted, however, Oldsmobile Engineering approval must be obtained.

C. Color Coat - Spray on color specified using a baking enamel, allowing sufficient time and temperature to completely cure the film and develop maximum adhesion as recommended by the paint manufacturer. When it is necessary to specify a lacquer top coat, a primer must be used.

Material Specifications:

All primers, enamels and lacquers supplied under this specification must meet production requirements as to viscosity, reduction, etc..

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Parts or panels prepared in accordance with this specification must withstand the following test:

(A) Twenty-four (24) hour humidity for interior parts and ninety-six (96) hours for exterior parts as outlined in Section V.

(B) When the paint has a functional as well as decorative purpose on exterior die cast parts, such as protecting the basis metal in difficult to plate areas, the following test must also be included:

Sixteen (16) hours Cass Salt Spray or 144 hours 5% neutral salt spray. The paint system will have failed if the surface shows a significant deposit of zinc salts caused by the corrosion of the basis metal. Non-significant rough edges of the casting are not to be included.

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PAINT REPAIR OF SILICONE CONTAMINATED SURFACES

Procedure Specifications:

A. If silicone contamination is known, wash area thoroughly by saturating and flooding with a cleaning solvent (see below) using clean cotton batting or rags and wipe dry immediately with fresh clean rags. Repeat two or three times using clean rags each time.

B. If the silicone contamination appears after the paint is applied, wash area immediately with thinner to remove the fresh paint or allow to dry and sand to remove all craters (fish-eyes). Then wash as in Step A.

C. Sand and featheredge area as required and rewash as in Step A.

D. Apply required paint materials using normal paint repair procedures.

NOTE: - Solvents used to wash the surface dissolve the silicone but do not destroy it. As soon as the solvents evaporate, the silicone may be redeposited. Therefore, discard all rags immediately to avoid contamination during subsequent operations. During the washing operation, cloths and rags should be changed frequently.

Recommended cleaning solvents:

Pre-Kleano (Rinshed-Mason)

Prep-Sol 3919 (DuPont)

Silicon-Off (Ditzler)

V.M. & P. Naptha

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MISCELLANEOUS SMALL PARTS

EXTERIOR - INTERIOR

General:

These requirements cover the painting of small parts and the application of miscellaneous finishes not covered under the specific sections of this specification. Such items as hinges, clips, braces, latches, reinforcements, supports and "etc.", which do not require decorative finishes will be covered by these requirements.

Procedure Specifications:

A. Surface Preparation: - parts are to be thoroughly cleaned to remove all surface contamination such as: oil, grease, mold release compound and etc.. Depending on the particular part and its function, some type of chemical treatment, such as, zinc phosphate or di-chromate should be employed to provide an adequate base for subsequent painting. When such a treatment is deemed necessary by Engineering it will be specified on the drawing for the individual parts.

B. Paint Code: - Parts covered under this specification normally will receive only one coat of paint which may be either a primer or enamel. If a 2 coat system is to be used, details will be covered under other sections of this specification or shown on the drawings for the individual parts. No color standards will be issued for these parts, however, the parts must have an acceptable appearance agreed upon by Oldsmobile Engineering and vendor and be within the color category specified that is, Black, Lt. Gray, Red Oxide "etc".. Sufficient material must be applied to obtain complete coverage and baked or dried in accordance with the paint vendors recommendations.

C. Film Thickness: -

Primers	.0005 to .0008 inches
Enamels	.0008 to .001 inches

Material Specifications:

Primers and enamels covered by this specification are to be supplied by the paint vendor packaged to meet production requirements:viscosity as packaged, reduction, type of thinner required, viscosity at recommended reduction, flow properties,solid content and bake or dry time requirements.

When applied to properly prepared parts or panels to the recommended film thickness, baked and aged 48 hours it must withstand the following test, as outlined in Section V, to be considered acceptable.

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A. Ninety six (96) hour humidity test for exterior parts.

B. Twenty four (24) hour humidity test for interior parts.

C. Ninety six (96) hours salt spray test for exterior non-chemical treated parts.

D. One hundred sixty eight (168) hour salt spray for exterior chemical treated parts.

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SECTION V

TEST PROCEDURES

A. General:

This section of the specification covers paint test procedures used at Oldsmobile for control purposes and to determine the suitability of new products. When testing new finishes proposed as an added source or to replace a given source, the original material must be tested simultaneously as a standard, unless the original material fails to meet the requirements of this specification. Major paint items, such as the acrylic lacquer system, must also have approval of G.M. Research Division before receiving final approval.

B. Adhesion Test:

One of the most important properties of a paint system is its adhesion to substrata surfaces consisting of the base metal and the various sub-layers of the system. The following procedures will be used at Oldsmobile to test this property, either before or after specified test as required by the individual materials.

(1) Tape Adhesion Test - This test is performed by scribing two lines (approximately 1 inch long) to the base metal and crossing at 45°. Apply cellulose tape over the lines so that the length of the tape is lengthwise to the lines, leaving enough tail to grasp securely between the tumb and forefinger. Smooth tape tightly in the area of the lines with the finger or a pencil eraser and pull sharply away from the surface in as nearly perpendicular motion as possible. The paint system fails to meet the requirements of this test if the film lifts from the base metal or the sub-layers separate with the tape for more than 1/8" at the point of intersection of the scribed lines, or 1/16" along the length of the lines, or at any other point under the tape regardless of size.

(2) Knife or Fingernail Test - Many times the contour of parts do not lend themselves to the tape test or conditions do not require an accurate determination of the adhesion. In these cases the knife or fingernail method may be used. By using a knife blade or the fingernail, an attempt is made to remove the paint film. The ease with which the paint is removed is compared to a standard of known good adhesion. Often, with experience, one can determine the relative adhesive properties without reference to a standard. When failing production samples or for a more accurate comparison, the tape test must be used.

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C. Humidity Test:

Specimens are to be exposed in an atmosphere of 100% relative humidity at 100°F. temperature. Parts or panels are to be placed so that as much as possible of the significant painted surfaces are approximately 30° from the vertical. Cupped areas that collect water are to be discounted in rating parts. After exposing, in accordance with the prescribed time schedule, the specimens are to be removed, dried and allowed to cool or "recover" 15 minutes. Specimens will then be checked for blistering, adhesion and other properties, such as: discoloration, loss of gloss, etc., as required for the individual materials. General blistering, blistering due to fingerprints, water streaks or improper cleaning; incomplete coverage and failure to meet the adhesion specifications will be cause for rejection of painted parts.

The normal time schedule consists of 24 hour exposure for interior parts and 96 hour exposure for exterior parts. Exterior parts will be examined after 24 hours and again at the completion of the test. Other time schedules may be used when testing the relative value of paint materials or systems.

D. Salt Spray:

Specimens are to be exposed in a salt spray atmosphere conforming to G.M. Specification 4298P (5% Na Cl solution), at 95°F temperature. Specimens are to be placed so that as much as possible of the significant painted surfaces are approximately 15° from the vertical. Cupped areas that collect water are to be discounted in rating parts unless this is normal to the function of the part. After exposing in accordance with the prescribed time schedule, the specimens are to be removed, rinsed with clear water, dried and allowed to cool or "recover" 15 minutes. Specimens will then be checked for blistering, adhesion, corrosion and other properties as prescribed for the individual materials.

When testing paint materials for their relative corrosion and/or blistering resistance on standard test panels the following ratings are to be used.

Face Corrosion and/or Blistering

Excellent	No corrosion or blistering
Good	A few scattered corrosion spots or blisters (up to 1/2 doz. on a 4 x 12 panel)

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Fair	Up to 10% of area showing corrosion and/or blistering.
Poor	More than 10% but less than 50% of area showing corrosion and/or blistering.
Failure	More than 50% of area showing corrosion and/or blistering.

Creepage Along Scribed Line

Excellent	No creepage
Good	Less than 1/8 " creepage
Fair	1/8" to 1/2" creepage
Poor	1/2" to 1" creepage
Failure	More than 1" creepage

To check creepage back from scribed line, spot blow the entire scribed line with an air dusting gun (nozzle diameter - 0.12 inch; air pressure 80 to 90 psi; air consumption 15 cfm). Gun is held lightly against the surface and perpendicular to it. If necessary, disturb corroded areas under the film mechanically in order to insure an opening for the air blast.

Plus and minus ratings may be used to distinguish differences between panels having the same rating, such as fair + or fair - "etc.".

When routine testing parts or materials, a rating of good or excellent will be required to be considered acceptable. For parts or panels having less than 6 sq. in. of surface area the rating will be made on the bases of one corrosion spot or blister per sq. in.. Blistering caused by fingerprints, water streaks or improper cleaning, incomplete coverage and failure to meet the adhesion specification will be cause for rejection.

The normal time schedule consists of 336 hours for exterior ferrous parts and 96 hours for non-ferrous parts. Under hood parts, 168 hr. interior parts are not normally subjected to salt spray test. Other time schedules may be specified for individual parts or when testing the relative value of paint materials or systems.

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E. Flexibility or Brittleness:

Flexibility or brittleness, which go hand in hand, may be checked by either of the two methods outlined below:

1. Test panels (painted side out) are to be bent through 180 degrees over a 1/4 inch mandrel using a steady pressure. If a mandrel is not available, satisfactory results may be obtained by starting the bend over the edge of a table then continuing to bend it through the 180 degrees. Panels are then to be examined for signs of cracking on the radius. Any noticable cracking is cause for rejection. This test primarily tests the flexibility, however, it is also an indication of the films brittleness.

2. Brittleness is primarily determined by scribing a "Furrow" to basis metal with an instrument such as a small coin (dime) held slightly off perpendicular to the surface. Scribe a furrow with a quick stroke using heavy pressure and holding the flat side of the instrument at right angles to the direction of the stroke. A tendency for the paint film to flake beyond width of the furrow is cause for rejection as being too brittle.

F. Oil Immersion Test -

Test panels or specimens prepared in accordance with this specification are to be immerged in motor oil maintained at 160°F. After exposing, in accordance with the prescribed time schedule, the specimens are to be removed, wiped dry and allowed to cool or "recover" 15 minutes. Check for adhesion, blistering, color change and brittleness.

The normal time schedule consists of 24 hour immersion.

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SECTION VI

MISCELLANEOUS PAINT SUPPLIES

LACQUER AND ENAMELS

This section covers those materials not shown on the Paint and Trim Specification Chart.

Item No.	Description	Source	Usage
1	Chassis Black-Uncut Air dry	Suydam M102 Allied Material 6313	Axles & Chassis - Production
2	Black Lacquer	Rinshed-Mason L38K007	Axles & Chassis - Service
3	White Stenciling Lacq. Air dry	Rinshed-Mason L21W017	Identification marks
4	Green Motor Enamel Air dry	Rinshed-Mason Q51G033 Acme 508G48	3200 series motor
5	Red Motor Enamel Air dry	Rinshed-Mason Q51R038	3500-3600-3800 series motor
6	Festival Red Enamel Bake 30 min. @ 250°F	Rinshed-Mason E29R007 DuPont G-94-59428	F-85 Carburetor Cover
7	Aluminum Enamel Bake 20 min. @ 250°F	Rinshed-Mason E28Z005	Valve Covers - Air cleaners Radiator Grille & Tail Lamps
8	Aluminum Lacquer Air dry	Rinshed-Mason L42Z001	Letters - F-85 Carburetor Covers match for item 7
9	Black Enamel - Flat Bake 30 min. @ 250°F	Rinshed-Mason E35K001 DuPont G-97-55455	Interior small parts
10	Black Lacquer - Flat Air dry	Rinshed-Mason L35K001 DuPont 233-90265	Interior small parts Match for item 9
11	Black Enamel Gloss Bake 30 min. @ 250°F	Rinshed-Mason E27K003 DuPont B-94-21090	Interior & Exterior Small Parts
12	Black Enamel - Flat Air dry	Rinshed-Mason Q30K002 DuPont 191-55455	Radiator Drain Cock
13	Dk. Blue Metallic Lac. Air dry	Std. Toch Chem. Co. 150-883-2	Instrument Cluster
14	Black Lacquer Air dry	DuPont 245-2530 Forbes 1409	Instrument Cluster

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CHART	
PAINT MATERIAL AND PROCEDURE SPECIFICATION	
YEAR: 1963	DWG. BY: E. HOUGHTON
DATE ISSUED: 5-23-62	APPROVED BY: R. STEELE
Sec. VI Page 1	PART # 380895

Item No.	Description	Source	Usage
15	White Lacquer Air dry	Roxaline 7408	Instrument Cluster
16	Fire Orange Fluorescent Paint	Lawter Chem. Co. 64B-175A	Instrument Cluster
17	White Lacquer	Irven, Jewel, Vinson 4795	Instrument Cluster
18	Clear Lacquer Anti-Static	AC Spec. #2186	Shift Indicator Dial
19	High Grade Black Enamel Bake 19 min. @ 300°F.	Rinshed-Mason E27K010	ACV Condenser
20	Aluminum Brushing Lac.	DuPont 165-5642	Touch-up Bumpers as required
21	Lt. Blue Lacquer	Forbes 2379	Turn signal cover Buick requirements
22	Aluminum Motor Enamel	Rinshed-Mason Q51Z013	F-85 Motor - Oil pan and filter
23	Orange Red Acrylic Lacquer	DuPont 885-27034	Jetfire emblem
24	Orange Acrylic Lac.	DuPont 885-93606	Jetfire emblem
25	Bright Yellow Acrylic Lacquer	DuPont 885-92875	Jetfire emblem
26	Med. Red Acrylic Lac.	DuPont 885-94819	Jetfire emblem
27	Dk. Red Acrylic Lac.	DuPont 885-94732	Jetfire emblem
28	White Acrylic Lac.	DuPont 885-93774	Jetfire emblem
29	Flat Black Enamel Air dry or bake 20 min. @ 225°F.	Rinshed-Mason Q51K014	Exterior & Interior Small parts
30	Aluminum Heat Resistant enamel	Product Techniques PT 805	3147 Motor Parts
31	Black Motor Enamel	R.M. Q51K039	Tank, Anti-detonant

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YEAR: 1963	DWG. BY: E. HOUGHTON
DATE ISSUED: 5-23-62	APPROVED BY: R. STEELE
Sec. VI Page 1a	PART # 380895

Item No.	Description	Source	Usage
32	Transparent Red 20 min. @ 250°F	DuPont 797-55202	Exterior & Interior Emblems
33	Black Unichrome Coating 5 min. @ 300°F	Metal & Thermit B-65-H-8056	Small Parts - Sheet Metal
34 •	Dk. Gray Lacquer	Rinshed-Mason L47A025	Instrument Panel Moulding
35	Gloss White Enamel Air dry	R.M. Q51W055	Letter Fill - Instrument Panel Moulding 88 script - Fender
36	Flat White Enamel Air dry	R.M. Q51W056	Horn Cap - Match for item 35
37	Dk. Gray Enamel Bake 20 min. @ 250°F	DuPont 752-78223	Rocker Panel Moulding

C-12-61

CHART
PAINT MATERIAL AND PROCEDURE SPECIFICATION

YEAR: 1963	DWG. BY: E. HOUGHTON
DATE ISSUED: 5-23-62	APPROVED BY: R. STEELE
Sec. VI Page 1b	PART # 380895

PRIMERS

Item No.	Description	Source	Usage
1	Gray Baking Primer Bake 17 min. @ 425°F	Forbes 897 DuPont 64-1936	Sheet Metal
2	Gray Baking Primer Bake 17 min. @ 425°F	Forbes 80-485	Flo-Cote Process - Service
3	Clear Enamel Primer Bake 30 min. @ 250°F	Rinshed-Mason U26C001	Chrome Plate or Stainless Steel
4	Oxide Primer-Surfacer	Rinshed-Mason U28A035 Forbes 80-336X or 80-336 XX	Body - Exterior Die Cast
5	Acrylic Sealer	DuPont 881-94184 DuPont 881-1933	Sheet Metal & Repair Bodies
6	Repair Primer-Surfacer	DuPont 233-92225 Rinshed-Mason U21A018	Repair of acrylic finishes
7	Lt. Gray Primer	Rinshed-Mason U28A027	Wheels
8	Black Flash Primer	Rinshed-Mason U51K007	Radio Hole Cover
9	Black Flash Primer	Forbes 600-174B	Bodies
10	Dk. Gray Primer	Rinshed-Mason U28A037	Interior Parts
11	Corrosion resistant Primer	Rinshed-Mason U51A066	Sheet Metal
12	Zinc chromate Primer	DuPont 63-1853 or 63-1871	Sheet Metal

C-7 32

CHART
PAINT MATERIAL AND PROCEDURE SPECIFICATION

YEAR: 1963	DWG. BY: E. HOUGHTON
DATE ISSUED: 5-23-62	APPROVED BY: R. STEELE
Sec. VI Page 2	PART # 380895

SOLVENTS AND THINNERS

Item No.	Description	Source	Usage
1	Primer Solvent	Western Solvents 1088-A Grow Solvents 1088-A	Gray Baking Primer
2	L.D. Naphta	G.M. #2220	Chassis Black Reducer
3	Synthetic Reducer	Rinshed-Mason S30T003 Baker-Collison BC#8	Synthetic Enamels
4	Lacquer Thinner	Grow #3545 or 3546 or 3585	Acrylic Lacquer M.G. Sealer
5	Cleaning Solvent	DuPont 37635	Cleaning Paint Lines
6	Mist Coat Thinner	Grow Solvent 1314	Repair - Acrylic Lacquer
7	Thinner - Cleaner	R.M. S32C001	Solder Pit Filler
8	Primer Solvent	Solvesso 150	Flo-Cote Primer
9	Primer Solvent	Solvesso 100	Unichrome Coating

MISCELLANEOUS ITEMS

Item No.	Description	Source	Usage
1	Gray PX Putty	DuPont 228-5076	Repair Line
2	Dryer-Syn. Enamel	R.M. S34C006	Use as required for synthetic Enamels
3	Gray Putty	DuPont 21-505 Rinshed-Mason XR8860	Knife glazing of Body Joints
4	Flattening Paste-Lacquer	Rinshed-Mason XL2696	Use as required for reducing gloss of lacquer
5	Flattening Paste-Universal	Rinshed-Mason 850	Use as required for reducing gloss of all paint materials
6	Solder Pit Filler	Rinshed-Mason U51A013	To fill solder pits on body joints
7	Zinc Phosphate	Parker Rustproof Bonderite #105	Main plant, Saginaw St. Plant and Warehouse

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING, MICHIGAN

G.M. SPEC. #	QUANTITY	DESCRIPTION	USAGE
NONE	*	ADHESIVE (FISHER STD.) FS-639 OR (MINN. MINING EC-404) EC-1500 OR EQUIV.	1. INSULATOR TO HOOD
			(B) 2. INSULATOR TO INSIDE SURFACE OF COWL SHROUD PANEL (HEATER)
NONE		ADHESIVE (PERCHLORETHYLENE OR METHYLETHYLKETONE)	1. GRILLE TO HEATER DISTRIBUTOR
NONE		ADHESIVE (MINNESOTA MINING EC-1357) OR EQUIV.	2. INSULATION TO HEATER DISTRIBUTOR
(F_1) NONE	*	ADHESIVE EC-1500, EC404, EC-607, OR FS-639	1. INSULATION TO LOWER SHROUD PANEL
NONE	*	ADHESIVE (FISHER STD.) FS-655 OR (MINNESOTA MINING EC-524) OR EQUIV. (OPTIONAL FOR LANSING) (PL10 BOND #20)	1. RETAINER ASSEMBLY - AIR OUTLET - END 2. HOUSING ASSEMBLY - AIR OUTLET - END
(F_2) NONE	*	ADHESIVE (MILLINGTON MFG. X-37) OR EQUIV.	1. LIGHT SHIELD TO UNDERSIDE OF INSTR. PANEL
NONE	*	SEALER (FISHER STD.) FS-621 (FS-664 OR FS-1074 OPTIONAL)	1. WINDSHIELD WIPER MOTOR SCREWS 2. WINDSHIELD WIPER TRANSMISSION SCREWS 3. AROUND & OVER GROMMET - AIR COND. WIRING HARNESS 4. WINDSHIELD WIPER TRANSMISSION SHAFTS
NONE	*	SEALER (FISHER STD.) FS-1041 OR (MINNESOTA MINING) EC-108 OR EQUIV.	1. AROUND MAIN WIRING GROMMET IN DASH 2. RADIATOR SIDE BAFFLE SEAL TO FENDER (E) 3. HEATER CORE & BLOWER HOUSING
NONE	*	SEALER (FISHER STD.) FS-1074 OR (MINNESOTA MINING) EC-1167 OR EQUIV.	1. OVER WIRING GROMMET ON TRUNK FLOOR 2. LICENSE LAMP GROMMETS IN TRUNK 3. STEERING COLUMN COVER TO COLUMN 4. RADIATOR SIDE BAFFLES TO WHEEL HOUSE 5. GAS GAUGE WIRE GROMMET - TRUNK FLOOR 6. AROUND SUCTION PIPE AT GROMMET. (G) 7. SCREWS - DOOR HINGE COVER TO BODY.
NONE	* #	SEALER - (FISHER STD.) - FS-1150 - (MINNESOTA MINING) - EC-1452	1. R.H. COVER TO DUCT - (VENTILATION) 2. L.H. & R.H. VALVE ASSEMBLY TO DUCT- (VENTILATION)
NONE	*	PROTECT-O-FILM - DUPONT VM 1315	1. APPLY TO ALL EXTERIOR SURFACES INCLUDING FRONT WHEEL SPINDLE AND REAR AXLE HUB AND IMMEDIATE AREA, EXCEPT GLASS AND TIRES FOGGING PERMISSABLE. SPRAY NOT TO EXTEND THRU RADIATOR GRILLES. USED ON ALL CARS TO PROTECT FINISH AND CHROME DURING SHIPMENT & STORAGE.
NONE	*	SEALER (MINNESOTA MINING EC-895) OR EQUIV.	1. HEATER COVER PLATE TO DASH 2. BLOWER HOLE COVER PLATE TO DASH 3. HEATER CORE CASE ASSEM. TO DASH 4. BLOWER ASSEM. TO DASH
	1 1/2 IN.	PAPER MASKING TAPE (1/2 IN. WIDE)	** 1. MANIFEST TO INSTRUMENT PANEL
(C1) NONE	4.00 IN.	CLOTH TAPE - BLACK .50 WIDE) PERMACEL #672 OR EQUIV. -	1. INSTRUMENT CLUSTER - REAR FACE, GAS GAGE & SPEEDOMETER HOUSINGS.
(C2) NONE	10.00 IN.	CLOTH TAPE - BLACK .25 WIDE) PERMACEL #672 OR EQUIV.	1. INSTRUMENT CLUSTER - UNDERSIDE -
(D)	12 IN.	PAPER MASKING TAPE (1 1/4 IN. WIDE)	1. FUEL GAUGE WIRE
	1 IN.	CLOTH TAPE (1 IN. WIDE) - "MYSTIK" (BLACK)	1. DASH PANEL HOLES 6 PLACES
NONE	*	SILICONE LUBRICANT (HOWARD PRODUCTS CO.) HP-LE41, LANSING, MICHIGAN	(H) 2. HOOD BUMPERS 3. C/V. SEALS, FRAME & GLASS CONTACTING SURFACES 4. ALL OF RUBBER SEAL AT ROOF SIDE RAIL AND FRONT AND REAR PILLARS ON 67,47,27. 5 ALL OF 579359 SLEEVE-STEERING COLUMN JACKET PRIOR TO ASSM. TO STEERING COLUMN JACKET. 6. ALL OF 578838 FILLER-STEERING COLUMN TO PANEL PRIOR TO ASSM. TO PANEL.

DATE	SYM.	REVISION RECORD	AUTHORITY	DR.	CK.
4-20-62		WAS BC-306738		CM	
5-7-62	A	NOTE REMOVED		JM	
7-16-62	B	NOTE ADDED	1	H	WR
8-2-62	C2	LINE REVISED		MT	
8-2-62	D	8-2-62 TAPE BOMD.	1	MT	
8-17-62	E	LINE ADDED	1	AH	WR
9-4-62	F2	ADHESIVE ADDED		EL	WR
9-4-62	G	USAGE REVISED		EL	WR

NO. 381576
LAST CHANGE G

* QUANTITY TO BE DETERMINED

** EXPENSE MATERIAL - LISTED HERE FOR RECORD PURPOSES ONLY.

\# FS 1150 OPTIONAL FOR ASSEMBLY PLANTS

NO. 381576
LAST CHANGE G

TOLERANCES URLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS

ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F_1-.030; F_2-.06; F_3-.09; F_4-.12 ETC.

COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

DO NOT SCALE

DATE DWG. APRIL 13, 1962	DR. VANDERWIER
SCALE	CK.
FIRST USED 1963-3000-3100	APPR.
REFERENCE	APPR.
MATERIAL SPEC. BODY & SHEET METAL	
NAME CHART - PROCESS MATERIAL	
	PART NO. 381576

C-70

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING, MICHIGAN

DATE	STN.	REVISION RECORD	AUTHORITY	DR.	CK.
8-16-62	A	NOTE REVISED	P.A.N.	EW	

G.M. SPEC. #	GROUP	QUANTITY	DESCRIPTION	REMARKS
(**)-(*****)-	1A1	1	MANIFEST - TO BODY - (COPY)	CLIP #1 - PAPER
	4A4	*	1195507 - BOLT (FRONT PLANGE TO TRANS. OUTPUT SHAFT)	P.O.B. #3 SEALER
	4A5	.01 LB.	AXLE SHAFT OIL SEAL (A)	PERMATEX - SEALING COMPOUND - #2 - OPTIONAL MATERIAL BUICK BS596 APPLIED ADEQUATELY & EVENLY FOR 360° OF SEAL O.D.
	5D	*	PARKING BRAKE ASSEM. - PULL ROD TO DASH	SEALER (FISHER STD.) FS-1041 OR (MINNESOTA MINING EC-188 OR EQUIV.)
	5D	*	PARKING BRAKE ASSEM. - INT. LEVER RT. SPRING	SEALER (FISHER STD.) FS-1041 OR FS-621 APPLY FOR 2" APPROX. TO CENTER OF SPRING.
	8A	0.08 LB.	FUEL TANK - FILLER NECK & VENT PIPE	SOLDER - 5/32 WIRE - (35 TIN - 65 LEAD) - (ROSIN CORED)
				SOURCES: GARDNER ----"ASARCORE" NATIONAL----E3A KESTER ----FLUX #5 ALPHA ----"CEN-TRI-CORE" - (ENERGIZED ROSIN FLUX) ALPHA METAL INC. (NEW JERSEY, N.J.)
		*	FUEL TANK - FILLER NECK & VENT PIPE	SOLDER - 5/32 WIRE - 35 TIN - 65 LEAD - FLUX CORED - (OPTION)
				SOURCES: (KESTER) - CHLOR. "A"
		*	FUEL TANK - FILLER NECK & VENT PIPE-(USE WITH SPRAY FLUX)	(SOLDER - 1/8 WIRE-35 TIN-65 LEAD - SOLID NO FLUX) - (OPTION)
		*	FUEL TANK - FILLER NECK & VENT PIPE-(USE AS SPRAY)	FLUX - (KESTER) - (LIQUID ROSINFLUX) - #1544
1864-M		*	FUEL TANK WELDED SEAM - (REPAIRS)	PASTE FLUX
(***)-		3 IN.	FUEL GAGE HOLE	CLOTH TAPE - (3 IN. WIDE) - (ARNO - C-512)
(*****)-		4 IN.	FUEL TANK FILLER NECK HOLE - (ASSEM. PLANTS)	CLOTH TAPE - (3 IN. WIDE) - (ARNO - C-512)
	8A-12E	12 IN.	FUEL GAGE WIRE TO FUEL TANK	PAPER MASKING TAPE - (1 1/4 IN. WIDE)
4714-M		2 GAL.	FUEL TANK - (INITIAL FILL AT ASSEM. PLANTS)	GASOLINE - (PREM.GRADE) - (THIS QUANTITY MAY BE VARIED TO BEST ASSEM. PLANT REQUIREMENTS)
4714-M		2 GAL.	FUEL TANK - (ADDITIONAL FILL AT ASSEM BLY GATE) PLANTS SHIPPING	GASOLINE - (PREM.GRADE) -(THIS QUANTITY MANDATORY FOR TRUCK TRANSPORTATION) PERMISSIBLE TO EVACUATE RESERVE GASOLINE FROM TANK AT SHIPPING GATE.
	8C	*	EXHAUST SYSTEM - (ALL CLAMPED JOINTS)	SEALER - 253M - (VIBRADAMP CORP., JACKSON, MICHIGAN)
	10B	*	TIRE BEAD AND VALVE STEM	LUBRICANT - RUBBER - (CHEVROLET - 3704876 (DILUTE 1 TO 1 WITH WATER)
(*****)-		12 IN.	WHEEL DISCS AND HUB CAPS	PAPER MASKING TAPE - (5/8 IN. WIDE)
	12G	5 IN.	GASKET - HORN BUTTON	SCOTCH TAPE - (1/2 IN. WIDE)
	13A		RADIATOR DRAIN COCK - (THREADS)	SEALER - CP-9 -(NATIONAL MACH. PRODUCTS)
	13A	*	RAD. ASSEM. (TO RUBBER INSULATORS IN UPPER & LOWER SUPPORTS)	LUBRICANT - RUBBER (CHEVROLET - 3704876 DILUTE 1 TO 1 WITH WATER)
4570-M	13A	.8 OZ.	RADIATOR ASSEMBLY	OIL-EMULSIFYING CORROSION INHIBITING - (SOLUTION .2 GAL. TO 100 GAL. COOLANT)
1899-M - (CA-1)	35V01		RADIATOR ASSEMBLY	"COOLANT" - ETHYLENE GLYCOL - INHIBITED YEAR AROUND CHART #380032
	6M7	1 GAL.	ANTI-DETONANT TANK - (INITIAL FILL 3147 ONLY)	TURBO-ROCKET FLUID PART NO. 585269

* QUANTITY TO BE DETERMINED

(**) LANSING PLANT ONLY

(***) ASSEMBLY PLANTS AND SERVICE

(*****) EXPENSE MATERIAL-(LISTED HERE FOR RECORD PURPOSES)

NO. 380069
LAST CHANGE A

LAST CHANGE A
NO. 380069

3

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS

ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F_1-.030; F_2-.06; F_3-.09; F_4-.12 ETC.

COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

DO NOT SCALE

DATE DWG. MAY 28, 1962	DR. PHYLLIS BENGEL
SCALE	CK. BEDFORD
FIRST USED 1963	APPR.
3000 - 3100	APPR.
REFERENCE	APPR.

MATERIAL SPEC. "CHASSIS"

NAME CHART - PROCESS MATERIAL

P-LM

PART NO. 380069

GRP '0'

R. CARRALL, INC. 10618

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING, MICHIGAN

FRIGIDAIRE SPECIFICATION	DESCRIPTION	USAGE	QUANTITY
# 12	REFRIGERANT 12	FOR CHARGING AIR CONDITIONING SYSTEM. FOR PROCESSING ONLY	2 LBS. 8 OZ. PER CAR, APPROX. 1/2 LB. PER CAR
961-A	FRIGIDAIRE OIL TYPE "A" 525 VISCOSITY PURCHASE IN BULK IN 55 GAL. DRUM.	FOR LOSSES & REPAIR DURING ASSEMBLING AND TESTING	* 1 OZ. PER CAR

* EXACT QUANTITY TO BE DETERMINED AFTER PRODUCTION INSTALLATIONS ARE MADE.

DATE	SYM.	REVISION RECORD	AUTHORITY	DR.	CK.
9-27-62		RETYPED NO CHANGE		PR	
	C				

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS.

ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F_1=.030; F_2=.06; F_3=.09; F_4=.12; ETC.

COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS AND STANDARD PARTS.

DO NOT SCALE

DWG. DATE: APRIL 13, 1962	DR.: VANDERWIER
SCALE	CK.
FIRST USED: 1963 - 3000 - 3100	APPR.
REFERENCE	APPR.
MATERIAL SPEC.	APPR.

NAME: "AIR CONDITIONING"

CHART - PROCESS MATERIALS

BB-30677

PART NO. 381577

OLDSMOBILE

LAST CHANGE: C

NO. 381577

GR. "O"

B

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING, MICHIGAN

GROUP	TORQUE LB. FT.	APPLICATION
6A-1 - CYLINDER BLOCK	HAND TORQUE 65-70 *	CRANKSHAFT BEARING CAP (BOLT) - 1/2
	15-20 *	CYLINDER BLOCK DRAIN PLUG - 1/4 PIPE
6A-2 - CYLINDER HEAD	45-55 *	CYLINDER HEAD TO BLOCK (BOLT) - 7/16
	20-30 *	CORE HOLE PLUG - 1/2 PIPE
6C-2 - CRANKSHAFT BALANCER	140-160	CRANKSHAFT BALANCER ASSEM. TO CRANKSHAFT (BOLT) - 5/8
6B - CONNECTING ROD	HAND TORQUE 30-35	CONNECTING ROD (NUT) - 11/32
6E - OIL PAN	6-15 *	OIL PAN TO BLOCK (SCREW ASSEM.) - 5/16
	30-35	OIL PAN DRAIN PLUG - 18 MM
6F - OIL PUMP	10-15 *	OIL PUMP COVER ASSEM. TO TIMING CHAIN COVER (SCREW ASSEM.) - 1/4
	10-15 *	OIL SCREEN ASSEM. TO CYLINDER BLOCK (BOLT) - 1/4
	30-35 *	OIL PRESSURE VALVE CAP - 3/4
6G-1 - OIL DRAIN PIPE	10-15 (3147)	UPPER OIL DRAIN PIPE ASSEMBLY TO TURBOCHARGER (SCREW ASSEM.) - 1/4
	10-15 (3147)	LOWER OIL DRAIN PIPE ASSEMBLY TO UPPER OIL DRAIN PIPE ASSEMBLY (NUT) - 1/4
6G-4 - OIL LEVEL INDICATOR	14-17 (3147)	OIL LEVEL INDICATOR BRACKET TO CYLINDER HEAD BOLT (BOLT) - 1/4
6G-5 - OIL FILTER PAD COVER	15-20 *	OIL FILTER PAD COVER TO PUMP
	30-35 *	OIL FILTER VALVE CAP - 3/4
6J - TIMING CHAIN COVER	15-20 *	TIMING CHAIN COVER TO CYLINDER BLOCK (BOLT) - 5/16
	25-35 *	"C" WASHER TO TIMING CHAIN COVER (BOLT) - 3/8
6K-1 - FAN DRIVE	15-20	FAN DRIVING PULLEY & REINFORCEMENT TO BALANCER (BOLT) - 5/16
	15-20	FAN & DRIVEN PULLEY TO HUB (BOLT) - 5/16
6K-2 - WATER PUMP	5-8 *	WATER PUMP TO TIMING CHAIN COVER (BOLT) - 1/4
6K-3 - WATER OUTLET	20-25 *	WATER OUTLET TO INTAKE MANIFOLD (BOLT) - 5/16
6M - MANIFOLD	25-30 *	INTAKE MANIFOLD TO CYLINDER HEAD (BOLT) - 3/8
	10-15 *	INTAKE MANIFOLD GASKET CLAMP TO CYL. BLOCK (BOLT ASSEM.) - 5/16
	18-24	EXHAUST MANIFOLD TO CYLINDER HEAD (NUT) - 3/8
	20-25 (3147)	INTAKE MANIFOLD FLANGE TO INTAKE MANIFOLD (NUT) - 3/8
	10-18 (3147)	PIPE ASSEMBLY - R.H. EXHAUST MANIFOLD TO TURBOCHARGER (NUT) - 3/8
	11-15 *	CYLINDER HEAD TO EXHAUST MANIFOLD (STUD) - 3/8
6M-1 - CARBURETOR	14-17	CARBURETOR TO INTAKE MANIFOLD - (BOLT) - 5/16
	20-25 * (3147)	CARBURETOR SUPPORT BRACKET TO INTAKE MANIFOLD (BOLT) 5/16
	25-30 *	HEAT TUBE AIR INLET PIPE CLIP (BOLT) - 3/8
	(A_1) 9-12 (3147)	CARBURETOR TO TURBOCHARGER (NUT) - 3/8
	14-17 (3147)	HEAT TUBE AIR INLET PIPE CLIP (BOLT) - 5/16
6M-3 - CLEANER ASSEM.	17-20 LB. IN.	CLEANER ASSEMBLY TO CARBURETOR WING (NUT) - 1/4
	3-5 (4 BBL.)	AIR CLEANER TO CARBURETOR (STUD) - 1/4
6M-4 - FUEL PUMP	20-25 *	FUEL PUMP TO TIMING CHAIN COVER (BOLT) - 5/16
	10-15 (3147)	FUEL STRAINER TO BRACKET (BOLT ASSEM.) - 5/16
6M-7 - TURBOCHARGER ASSEMBLY	12-18 * (3147)	VACUUM CHECK VALVE ASSEMBLY - 9/16
	25-30 (3147)	TURBOCHARGER TO INTAKE MANIFOLD (NUT) - 3/8
	(A_2) 5-8 * (3147)	TURBOCHARGER FLANGE TO TURBOCHARGER - 1/4 (SCREW)
	(B) 10-15* (3147)	WATER NIPPLE TO MANIFOLD (BOLT) 1/4
6X-1 - CAMSHAFT	40-45	DISTRIBUTOR DRIVE GEAR, ECCENTRIC, & CAMSHAFT GEAR TO CAMSHAFT (BOLT) - 7/16
6X-3 - VALVE COVER	3-5 *	VALVE COVER TO HEAD (BOLT) - 1/4
6Y-1 - ALTERNATOR	25-35	ALTERNATOR TO ALTERNATOR BRKT. (NUT) - 3/8 (PIVOT)
	14-17	ALTERNATOR TO ALTERNATOR BRKT. (BOLT) - 5/16 (ADJ. SLOT)
	20-25*	ALTERNATOR BRACKET TO TIMING CHAIN COVER (BOLT) - 3/8
	2-4	ALTERNATOR TERMINAL NUTS - #12
6Y-2 - STARTING MOTOR	30-38 *	STARTING MOTOR TO CYLINDER BLOCK (BOLT) - 3/8
	6-8	CONNECTOR STRAP TO JUNCTION BLOCK & STARTER NUT - 3/8
	30-35	STARTING MOTOR TO CYLINDER BLOCK (NUT) - 3/8
6Y-3 - DISTRIBUTOR	11-18 *	DISTRIBUTOR CLAMP TO TIMING CHAIN COVER (BOLT) - 3/8
6Y-4 - ELECTRICAL	12-17 *	SPARK PLUG - 14MM
	20-25 *	IGNITION COIL TO INTAKE MANIFOLD (BOLT) - 5/16
	15-20 OZ. INCH	IGNITION COIL TERMINAL (NUT) - #10
	25-30 *	ENGINE GROUND STRAP TO CYLINDER HEAD (BOLT) - 3/8
12-J - SWITCH ASSEMBLY	10-15	OIL PRESSURE SWITCH TO OIL FILTER VALVE CAP - 1/8 PIPE
	20-30 *	WATER TEMPERATURE SWITCH TO INTAKE MANIFOLD - 1/2 PIPE
35-B-6C POWER STEERING	20-25 *	POWER STEERING FRONT BRACKET TO CYLINDER BLOCK (BOLT) - 5/16
	25-35 *	POWER STEERING FRONT BRACKET TO TIMING CHAIN COVER (BOLT) - 3/8
	25-35	POWER STEERING FRONT BRACKET TO PUMP (NUT) - 3/8
	25-35 *	POWER STEERING REAR BRACKET TO CYLINDER HEAD (BOLT) - 3/8
	25-35	POWER STEERING REAR BRACKET TO PUMP (NUT) - 3/8
	25-35	POWER STEERING REAR BRACKET TO CYLINDER BLOCK (NUT) - 3/8
	40-45 TO SLIP PULLEY	PUMP PULLEY (NUT) - 9/16
35-C-6D AIR CONDITIONING	20-25 *	COMPRESSOR FRONT BRACKET TO CYLINDER BLOCK (BOLT) - 5/16
	20-35 *	COMPRESSOR FRONT BRKT. TO TIMING CHAIN COVER (BOLT) - 3/8
	25-35	FRONT YOKE TO FRONT BRKT. (NUT) - 3/8 (ADJ. SLOT)
	25-35	VERTICAL BRACE AND/OR FRONT ADAPTER TO FRT. BRACKET (BOLT) - 3/8
	20-25	COMPRESSOR TO FRONT ADAPTER (BOLT) - 5/16
	25-35 *	COMPRESSOR FRONT BRACKET & SPACER TO CYL. HEAD (BOLT) - 3/8
	25-35	COMPRESSOR & REAR BRACE TO BLOCK (BOLT) - 3/8
	20-35	REAR BRACE TO COMPRESSOR (BOLT) - 3/8
	25-35	FRONT ADAPTER TO YOKE (NUT) - 3/8
35-X-10 - OIL FILTER ASSEM.	10-15 *	OIL FILTER TO PUMP
(C) 1A2C - HEATER	10-15 *	HEATER NIPPLE TO INT. MANIF. (BOLT) 1/4

* USE LUBRICANT OR SEALER - SEE PROCESS MATERIALS CHART

PAGE C-16.1

LAST CHANGE C
SHEET 1 OF 4
380532

DO NOT SCALE
ENGINE
CHART - WRENCH TORQUE SPECIFICATIONS
380532
SHEET 1 OF 4

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING, MICHIGAN

	PART NUMBER	DESCRIPTION	MATERIAL	SPECIFICATION (TORQUE RANGE LB. FT.)	FAILURE RANGE (TORQUE RANGE LB. FT.)	GROUP	APPLICATION
	162386	#8-1, X 1/2	STEEL	1 - 1.5		35M20	SEAL AND RET. TO FLOOR (FS.)
	416194 SCREW	#10-16 X 1/2	STEEL	3 - 5		35M35	NEUTRAL SAFETY SWITCH TO BRACKET (HT.)
	449522 SCREW	#10-24 X 1/2	STEEL	3 - 5		12-C	STOP PLATE TO ACTUATOR ASSEMBLY (HT.)
	456765-B	#10-24 X 1/2	SAE #1010 OR 1020	.75 - 1.00		35M35	FLYWHEEL HOUSING COVER TO HOUSING (HT.)
	558634-B	1/4-14 X 3/4	SAE #1008 OR 1010	6 - 8		35M35	OIL COOLER PIPE CLIP TO FRAME (HT.)
*	558634 SCREW	1/4-14 X 3/4	SAE #1008 OR 1010	6 - 8		35M35	SHIFT LEVER BRACKET TO FLOOR AND SHIFT RELAY BRACKET (HT.)
	187343 CONNECTOR	1/4-18 PIPE THREAD	BRASS STEEL	22 - 28 30 - 40		35M35	OIL COOLER PIPE CONNECTOR TO RADIATOR (HT.)
	187343 CONNECTOR	1/4-18 PIPE THREAD	BRASS	15 - 20		35M35	OIL COOLER PIPE CONNECTOR TO TRANSMISSION (HT.)
	1148346 STUD	1/4-20 SPECIAL	SAE #1112	4 - 7	7.8 - 11.6	6H-2	ACCEL. PEDAL STUD TO PLATE
*	106962-B	1/4-20 X 3/8	G.M. 260-M	4 - 7		35M35	SHIFT RELAY BRACKET TO FLOOR, NEUTRAL SAFETY SWITCH BRACKET TO SHIFT LEVER BRACKET AND NEUTRAL SAFETY SWITCH LEVER TO SHIFT LEVER (HT.)
*	563558 SCREW	1/4-14 X 9/16	SAE #1008 OR 1010	6 - 8		35M35	SHIFT RELAY BRACKET TO FLOOR (HT.)
	106319 SCREW	1/4-20 X 5/8	G.M. 260-M	4 - 7	7.8 - 11.5	12-J, 35M35	LOCK PLATE TO REAR BRG. RETAINER
	9419297	1/4-20 X 5/8	G.M. 260-M	4 - 7		73-1A	FLYWHEEL LOWER HOUSING TO UPPER HOUSING
	113993 SCREW	1/4-20 X 1	SAE #1010 OR 1020	4 - 7		35M35	ACCEL. PEDAL LEVER BEARINGS TO DASH
	100111-B	1/4-20 X 1 1/4	G.M. 260-M	4 - 7	7.8 - 11.6	6H-2	ACCEL. PEDAL LEVER BEARINGS TO DASH
	123308-B	1/4-28 X 7/16	G.M. 260-M	4 - 6	9.9 - 13.8	35M35	THROTTLE RETURN CHECK TO CARBURETOR
	181319-B	1/4-28 X 7/8	G.M. 280-M	4 - 6	7.9 - 13.8	6H-2	INNER ACC. B/C. LEVER (CLAMPING)
	374046 STUD	5/16-18 SPECIAL	SAE #1111, 1112, 1113	14 - 17	16.7 - 27.7	6H-2, 35M35	AUXILIARY B/C. AND DOWNSHIFT LEVER PIVOT TO CARBURETOR
	586475-N	5/16-18	GM 286-M	10 - 15		35M20	SHIFT LEVER KNOB LOCK (FS)
	120375-N	5/16-18	G.M. 286-M	14 - 17		73-13	EQUALIZER BRACKET TO FRAME (SM) & (FS)
	120634-B	5/16-18 X 1/2	G.M. 260-M	14 - 17	18.7 - 27.7	35M35	THROTTLE RETURN CHECK TO MANIFOLD
	120834	5/16-18 X 1/2	G.M. 280-M	20 - 22	24.0 - 33.9	73-1A	FLYWHEEL LOWER HOUSING TO CYLINDER BLOCK (SM.) & (FS.)
	1353547-B	5/16-18 X 9/16		14 - 17	12.7 - 27.7	73-13	CLUTCH COVER TO FLYWHEEL (SM.) & (FS)
	179817-B	5/16-18 X 7/8	G.M.280-M	17 - 22	*	35M35	DAMPENER TO FLYWHEEL (HT.)
	588078	5/16-24	DIE CAST ZINC	3 - 5		7-A	SHIFT KNOB TO SHIFT LEVER
	123332-B	5/16-24 X 3/8	G.M.260-M	20 - 25	24.9 - 37.5	73-13	CLUTCH PEDAL BUMPER BRACKET TO DASH BRACKET
	3781994-B	3/8-16-1	G.M. 260-M	20 - 30 (A)		35M20	BRACKET ASSEMBLY TO TRANSMISSION (FS)
	179843-B	3/8-16 X 1 1/2	G.M.280-M	22 - 25	46.0 - 57.4	35M35	T.V. BRACKET AND MANIFOLD TO HEAD (HT.)
	1155564-B	3/8-16 X 1 1/2	STEEL	30 - 35		73-1A	UPPER FLYWHEEL HOUSING TO CYLINDER BLOCK (SM.) & (FS)
	179843	3/8-16 X 1 1/2	G.M.280-M	30 - 35		35M35	TRANSMISSION TO BLOCK (HT.) UPPER TWO BOLTS
	179845	3/8-16 X 1 3/4	G.M.280-M	20 - 25		35M35	TRANSMISSION TO BLOCK (HT.) LOWER SIX BOLTS WITH RUBBER BUSHINGS
	115809-N	3/8-24 JAM	G.M.286-M	14 - 17	28.9 - 41.7	73-13	STUD TO EQUALIZER BRACKET (SM)&(FS.)
	175458-B	7/16-14 X 1	G.M.280-M	30 - 40	46.0 - 58.8	6-C	REAR MOUNT TO TRANSMISSION
	100148-B	7/16-14 X 1 1/2	G.M.260-M	40 - 45	46.5 - 68.8	73-13	TRANSMISSION TO FLYWHEEL HOUSING (SM.)
	3836314 STUD	7/16-20	SAE #1112, 1113, 1212 OR 1213	35 - 50		73-13	CLUTCH RELEASE BALL STUD (SM)&(FS)
	579528-B	7/16-20 X .820	SAE #1335 OR 3135	85 - 95	98.8 - 114.9	35M35	FLYWHEEL TO CRANKSHAFT (HT.)
	558835-B	7/16-20 X .92 SPECIAL	SAE #1335 OR 3135	85 - 95	98.8 - 114.9	6C-3	FLYWHEEL TO CRANKSHAFT (SM.) & (FS.)
	1394672 STUD	1/2-13	SAE #1112 OR 1113	30 - 35		73-13	CLUTCH EQUALIZER STUD TO BLOCK (SM) & (FS)
	100160-B	1/2-13-1 1/2	G.M.260-M	40 - 45		35M20	TRANSMISSION TO FLYWHEEL HOUSING (FS)
	449587 & 9381158	1/2-14		25 - 40		73-1A	TRANSMISSION FILLER PLUG TRANSMISSION DRAIN PLUG (SM)&(FS)
	579856	1/2-20 NUT	TUBE NUT STEEL	20 - 25		35M35	OIL COOLER PIPES TO TRANSMISSION AND OIL COOLER PIPES AT RADIATOR (HT.)
*	581962 SHIFT KNOB	5/8-32	STEEL S.A.E. #1112	3 - 5		35M35	SHIFT KNOB TO SHIFT LEVER ASSEMBLY (3147)
*	585009 TUBE ASM.-SHIFT LEVER	5/8-32	STEEL TUBING	3 - 5		35M35	TUBE ASSEMBLY TO SHIFT LEVER (HT)
*	583942-N	5/8-32 JAM	G.M. 286-M	20 - 25		35M35	TUBE ASSEMBLY TO SHIFT LEVER (HT)
	SPEEDO CABLE ASSEMBLY	5/8-18 7/8-18	STEEL OR DIE CAST ZINC	FINGERTIGHT 3 - 4		12-J	SPEEDOMETER CABLE TO SPEEDOMETER SPEEDOMETER CABLE TO TRANSMISSION
(B)	1349346 NUT ASSY.	3/8-24	STEEL	10 - 12		7-A	SHIFT ROD SWIVEL AND CLAMP TO SHIFT LEVER

* USED ON 3147 AND 3117, 3167 WITH 055 EQUIPMENT MODELS ONLY.

SHEET 3 OF 4

DO NOT SCALE

CHART - WEIGHT TORQUE

380532

DATE	ETR.	REVISION RECORD	AUTHORITY	DR.	CK.
10-2-62	A	RETYPED & REVISED	P.U.A.	PR	[illegible]

(1) RADIATOR COOLANT REQUIREMENTS: ETHYLENE GLYCOL TWO YEAR COOLANT MEETING SPECIFICATION GM 1899-M MANDATORY IN ALL SERIES YEAR AROUND TO PROVIDE AN ADEQUATELY INHIBITED TWO YEAR COOLANT IN THE AMOUNTS TABULATED BELOW.

THE FOLLOWING TABLE SHOWS THE AMOUNT OF GM 1899-M ETHYLENE GLYCOL INHIBITED TWO YEAR COOLANT REQUIRED TO GIVE A 44% SOLUTION BY VOLUME.

MODEL 3000, 3100	FREEZING POINT	PERCENT SOLUTION BY VOLUME	QUANTITY OF COOLANT SOLUTION WITHOUT HEATER	WITH HEATER
ALL EXC. AIR COND. & 3147 & 35 V 01	-20°F.	44.0	4.66 QTS.	5.37 QTS.
ALL AIR COND. EXC. 3147 (INCL. 35 V 01	-2C°F.	44.0	4.88 QTS.	5.59 QTS.
ALL 3147 (INCL. 3I V 01	-2C°F..	44.C	4.32 QTS.	4.97 QTS.

NOTE: METHANOL TYPE ANTI-FREEZE OR WATER ARE NOT TO BE USED UNDER ANY CONDITION. ALL 3000, 3100 SERIES MUST BE PROTECTED AS SHOWN ABOVE WITH ETHYLENE GLYCOL TYPE COOLANT. NO DEVIATION PERMITTED BY ANY PLANT OR ZONE FOR CLIMATIC CONDITIONS.

(2) GENERAL

CAUTION: SOLUTION MUST BE HELD .80" BELOW CENTER OF FILLER NECK-SEAT TO PREVENT LEAKAGE DURING TRANSPORTATION AND LOSS OF COOLANT DURING OPERATION. * THIS .80" LEVEL IS MEASURED WITH COOLANT AT ROOM TEMPERATURE TO ALLOW EXPANSION VOLUME OF COOLANT UNDER OPERATING CONDITIONS. EXTREME CARE MUST BE TAKEN IN FILLING COOLING SYSTEM TO PREVENT DAMAGE OF CAR FINISH.

NOTE: COOLING SYSTEM OPERATING CAPACITY (COOLANT AT ROOM TEMPERATURE FILLED TO .80" BELOW CENTER OF FILLER NECK SEAT)(TOP TANK COOLANT AT 156°F. - FILLED TO .20" BELOW CENTER OF FILLER NECK SEAT)

MODEL 3000, 3100	WITHOUT HEATER	WITH HEATER
ALL EXC. AIR CONDITIONING EXC. 3147 & 35 V 01	10.6 QTS.	12.2 QTS.
ALL AIR CONDITIONING EXC. 3147 (INCL. 35 V 01)	11.1 QTS.	12.7 QTS.
ALL 3147 (INCL. 35 V 01)	9.8 QTS.	11.3 QTS.

REQUIREMENTS: A TAG MUST BE ATTACHED TO THE RADIATOR OVERFLOW TUBE SHOWING TYPE OF COOLANT INSTALLED. TAG #382136 (YELLOW)

INHIBITED TWO YEAR COOLANT SPECIFICATIONS

COOLANT MUST PASS GM 1899M PLUS THE FOLLOWING:

1. RADIATOR FLOW CHECK BEFORE AND AFTER 1000 HR. SIMULATED SERVICE TEST MUST SHOW NO LOSS OF FLOW. TEST TO BE PERFORMED UNDER STATIC CONDITIONS WITH A MINIMUM HEAD OF 3 FEET WITH NO RESTRICTION SMALLER THAN THE TOP TANK INLET OR BOTTOM TANK OUTLET. RESERVOIR SHALL HAVE A CAPACITY OF AT LEASE 25 GALLONS. FLOW TIME - 1 MINUTE. (5% ALLOWED FOR EXPERIMENTAL ERROR)
2. COOLANT REMOVED FROM SIMULATED SERVICE TEST FIXTURE AFTER 1000 HRS. MUST PASS GM GLASSWARE CORROSION TEST.
3. COOLANT MUST PASS WATER PUMP CAVITATION EROSION TEST GM 1899-M APPENDIX CA-1 WITH OLDSMOBILE PUMP MOUNTED ON ENGINE BLOCK COMPLETE WITH CYLINDER HEADS. EROSION RATING OF 5 OR BETTER REQUIRED. (MEDIUM ROUGHNESS; VERY ROUGH OVER 50% OF AREA; SOME SMALL PITS OR GROOVES)

* APPROVED SOURCES:
ANDOTTE CHEMICAL CO. "SINGLE PHASE" U-2407-CW
DOW CHEMICAL CO. "SINGLE PHASE" #725

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING, MICHIGAN

NO. 380032
LAST CHANGE A

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS
ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F_1-.030; F_2-.06; F_3-.09; F_4-.12 ETC.
COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

DO NOT SCALE

DATE DWG. MAY 23, 1962	DR. PHYLLIS BENGEL
SCALE	CK. BEDFORD
FIRST USED 1963 3000 -3100	APPR. FERNAND
REFERENCE	APPR. C. ELY
MATERIAL SPEC. "FACTORY FILL"	
NAME CHART - RADIATOR COOLANT	
	PART NO. 380032 C

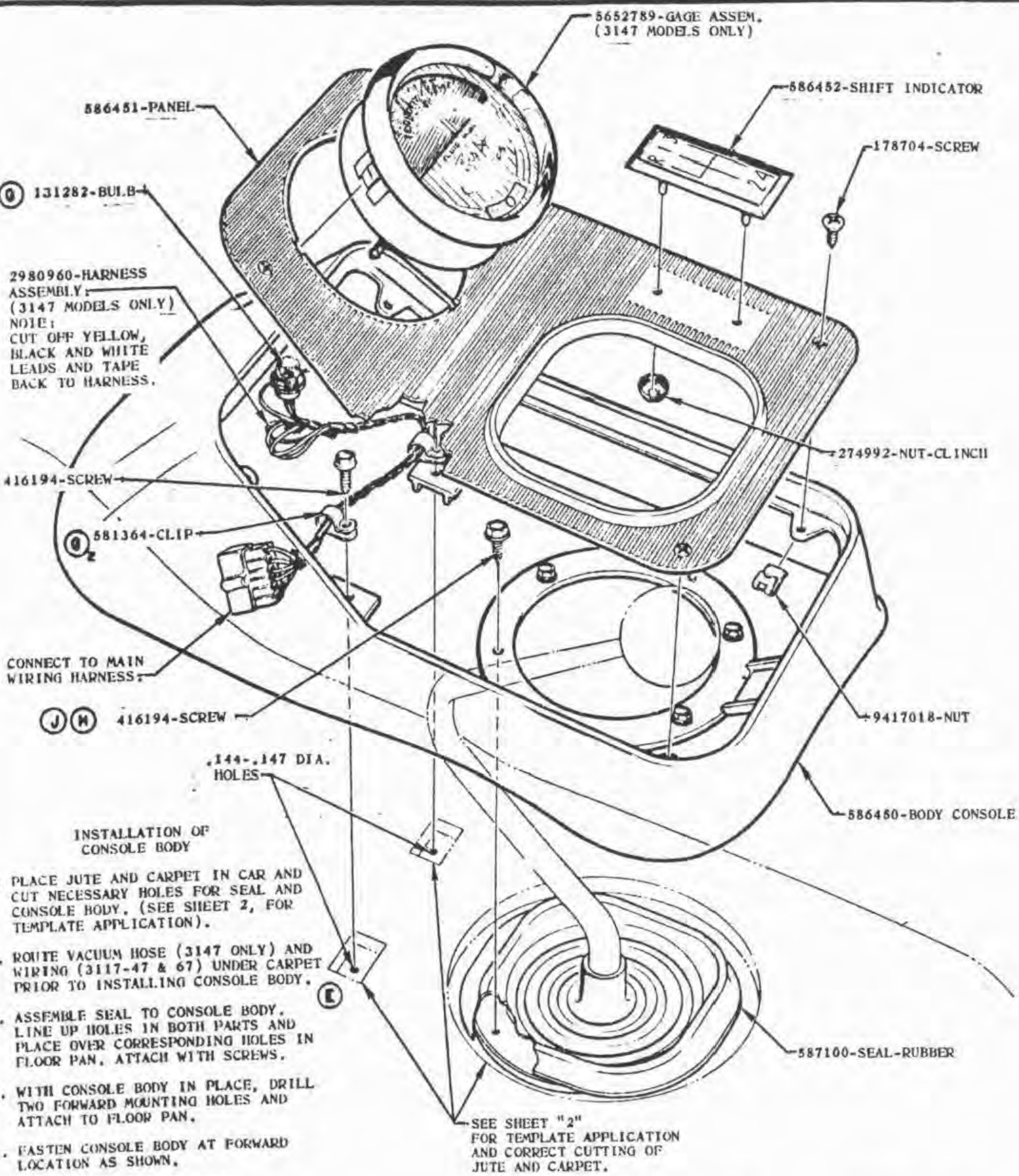
LAST CHANGE A NO. 380032

GRP 0

OLDSMOBILE

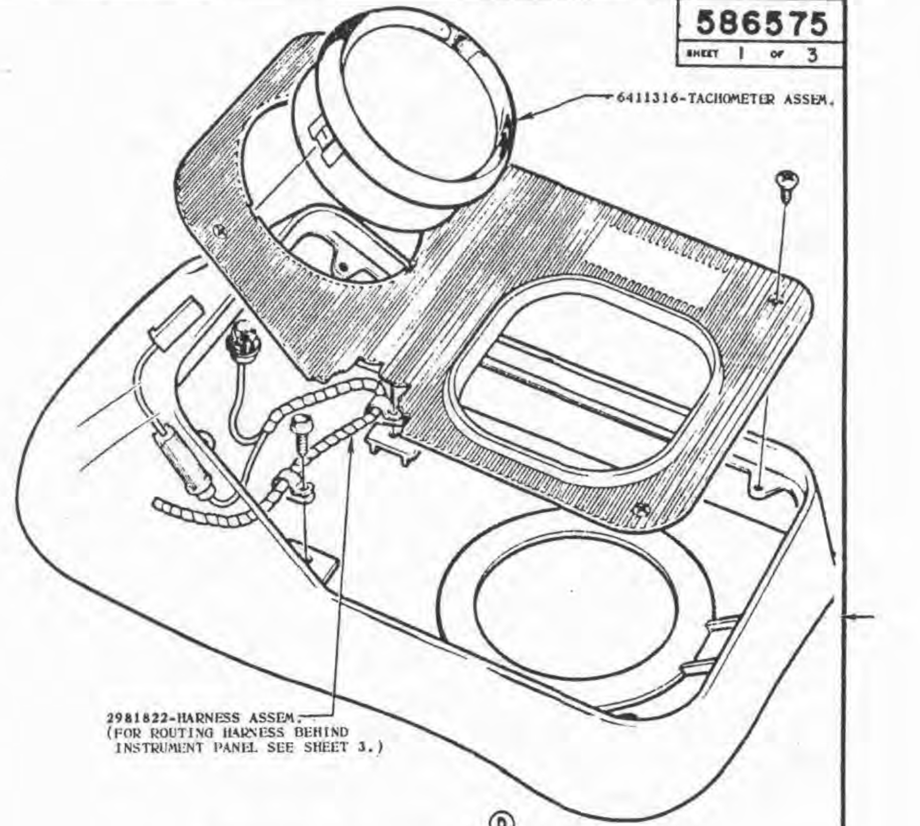
BODY

DRAWINGS INCLUDED IN THIS SECTION ARE:



INSTALLATION OF CONSOLE BODY

1. PLACE JUTE AND CARPET IN CAR AND CUT NECESSARY HOLES FOR SEAL AND CONSOLE BODY. (SEE SHEET 2, FOR TEMPLATE APPLICATION).
2. ROUTE VACUUM HOSE (3147 ONLY) AND WIRING (3117-47 & 67) UNDER CARPET PRIOR TO INSTALLING CONSOLE BODY.
3. ASSEMBLE SEAL TO CONSOLE BODY. LINE UP HOLES IN BOTH PARTS AND PLACE OVER CORRESPONDING HOLES IN FLOOR PAN. ATTACH WITH SCREWS.
4. WITH CONSOLE BODY IN PLACE, DRILL TWO FORWARD MOUNTING HOLES AND ATTACH TO FLOOR PAN.
5. FASTEN CONSOLE BODY AT FORWARD LOCATION AS SHOWN.



INSTALLATION OF TACHOMETER HARNESS TO TACHOMETER

(3117 & 3167 MODELS ONLY)

DATE	SYM.	REVISION RECORD	DR.	CK.
11-5-62	J	WAS 9418205 SCR.	CM	[illegible]
9-28-62	H	WAS 161860 SCREW	WH	[illegible]
2-5-62	G	NOTES ADDED	JvQ	D.T.
2-5-62	F	WAS SHEET 1 OF 2	JvQ	D.T.
2-5-62	E	NOTE REVISED	JvQ	D.T.
2-5-62	D	VIEW REDRAWN & REVISED	JvQ	D.T.

DWG. DATE SEPT 8, 1961 | DR. ROY HEY
FIRST USED 1962 | CK. H. VAN PELT
APPR.
REFERENCE 35A9 · 35J8 | APPR.

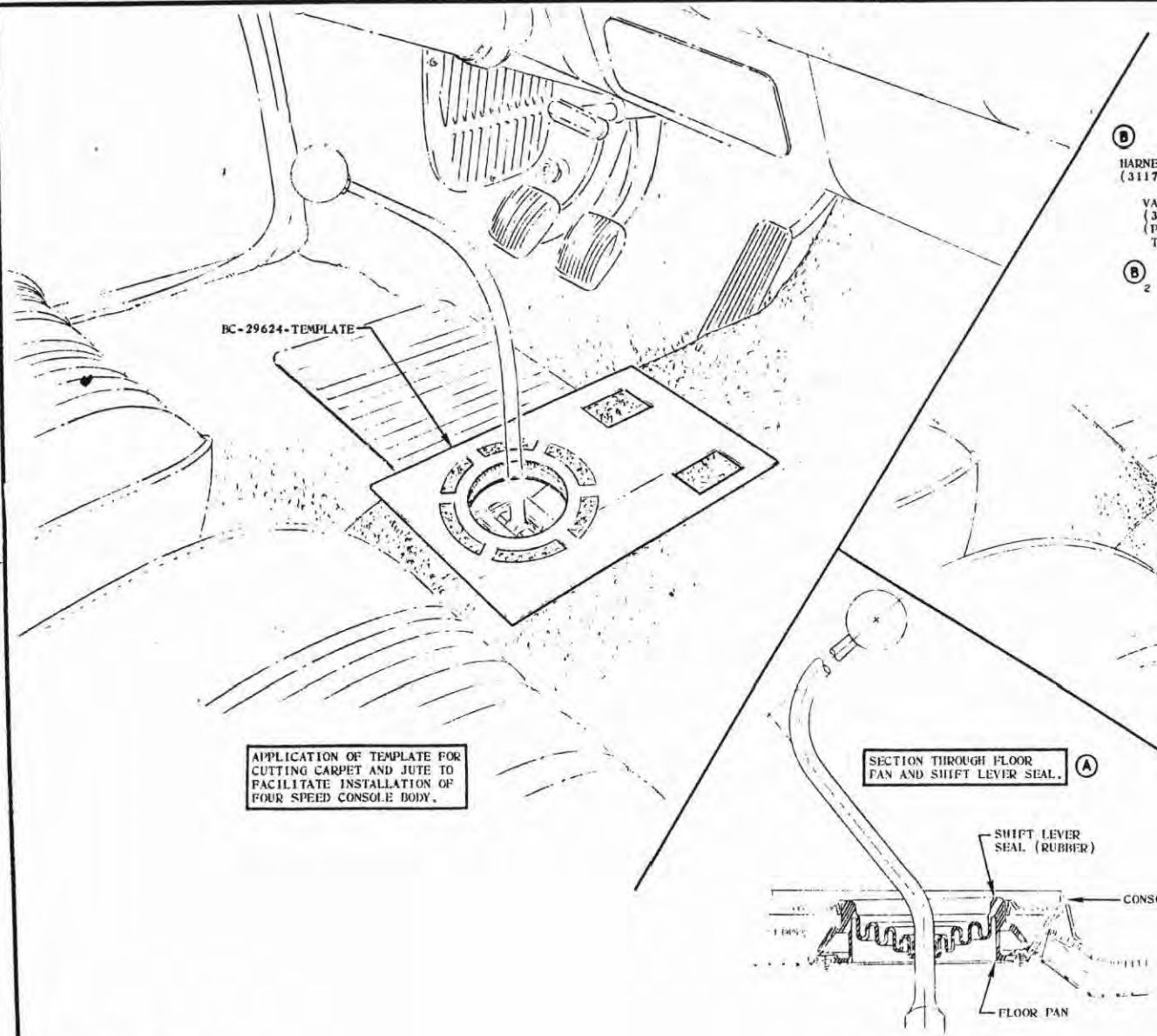
NAME LAYOUT—CONSOLE FOUR SPEED TRANSMISSION

SERIES 3100
SHEET 1 OF 3

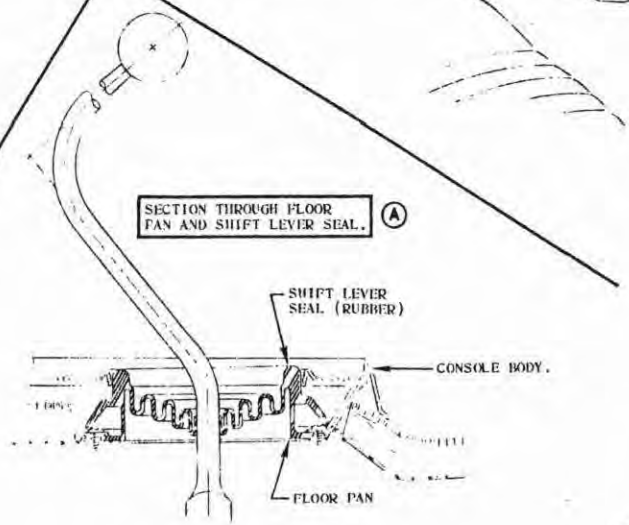
PART NO. 586575

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

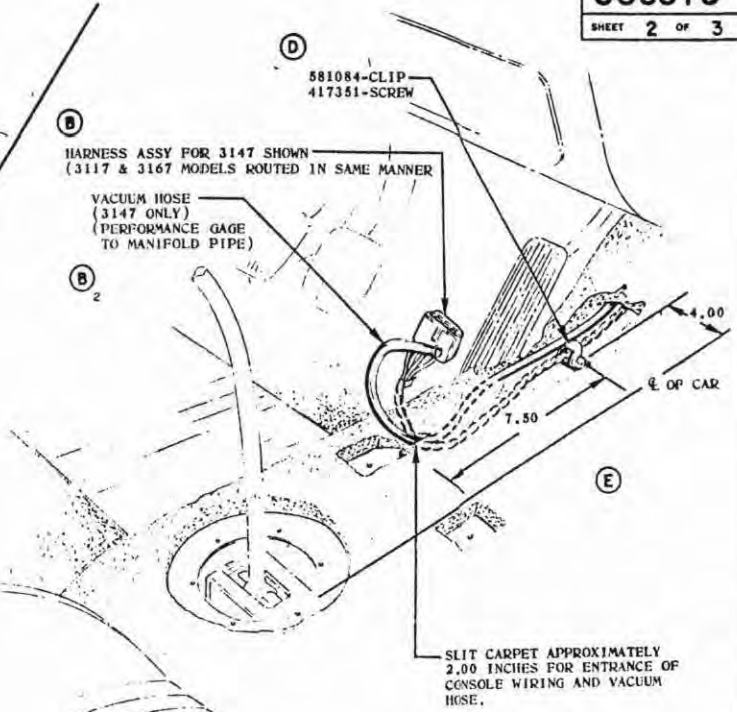
FS TRANSMISSION - CONSOLE



APPLICATION OF TEMPLATE FOR CUTTING CARPET AND JUTE TO FACILITATE INSTALLATION OF FOUR SPEED CONSOLE BODY.



SECTION THROUGH FLOOR PAN AND SHIFT LEVER SEAL. (A)



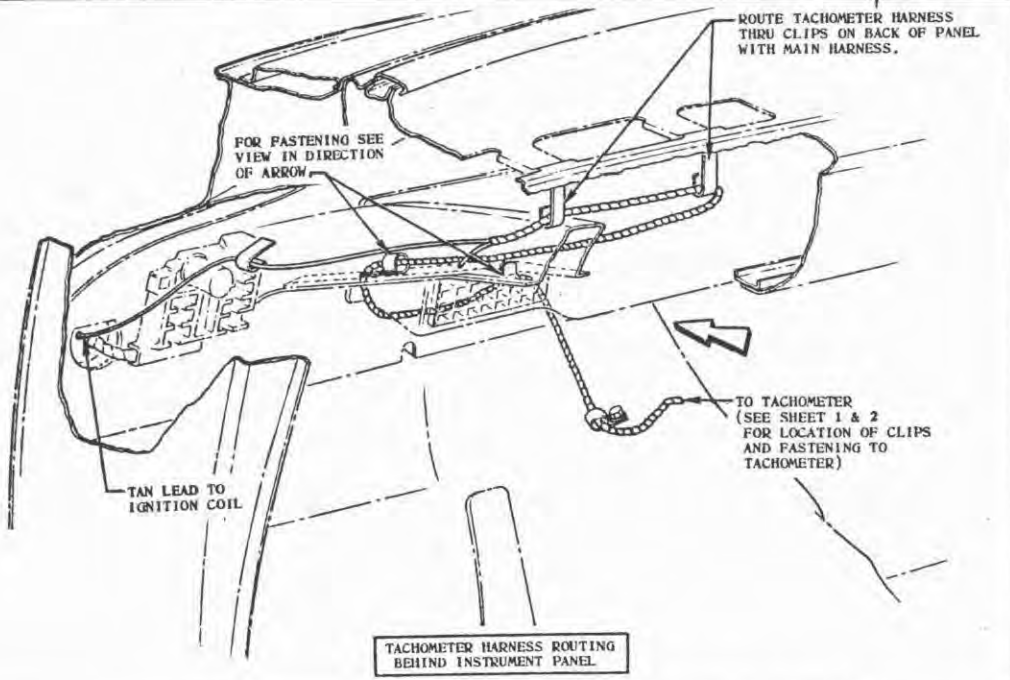
ROUTING OF WIRING (3117-3147-3167) AND 3147 VACUUM HOSE

(B1)

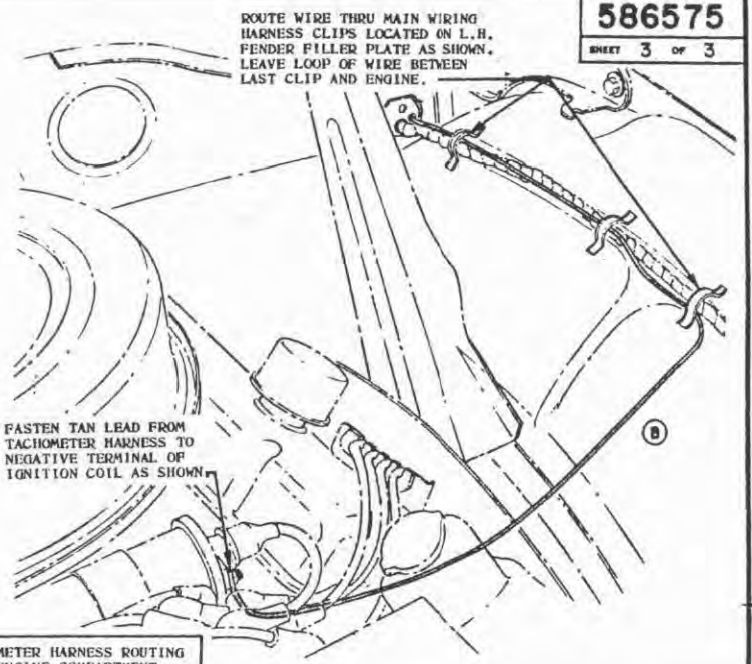
DATE	SYM.	REVISION RECORD	DR.	CK.
9-5-62	G	REVISED DETAIL	WB	VP
8-30-62	D	WAS 582142 CLIP	VM	VP
2-5-62	C	WAS SHEET 2 OF 2	WG	DT
2-5-62	B3	NOTES REVISED	WG	DT
11-29-61	A	SECTION REVISED TO DETAIL	DT	VP

DWG. DATE SEPT. 11, 1961 DR. ROY HEY
FIRST USED 1962 CK. HVAN APPR
REFERENCE APPR.
NAME LAYOUT-CONSOLE FOUR SPEED TRANSMISSION
PART NO. 586575
SERIES 3100
SHEET 2 OF 3

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



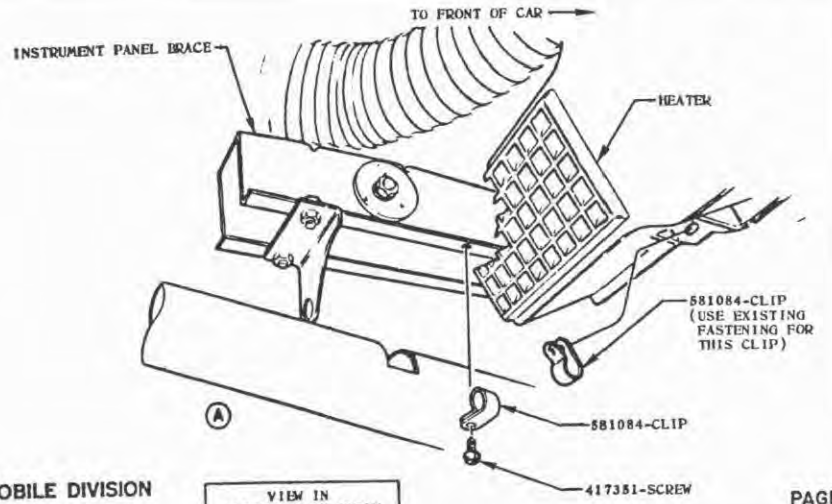
TACHOMETER HARNESS ROUTING BEHIND INSTRUMENT PANEL



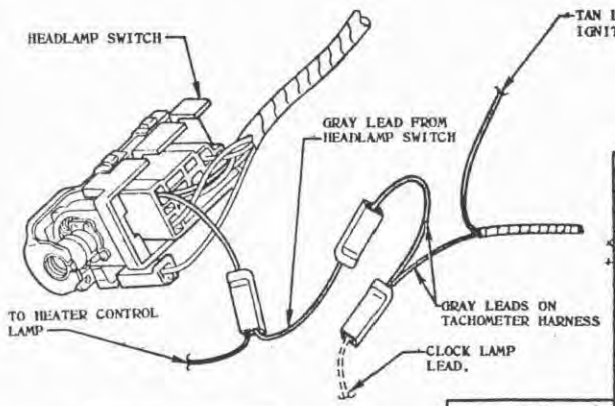
TACHOMETER HARNESS ROUTING IN ENGINE COMPARTMENT

586575

SHEET 3 OF 3



VIEW IN DIRECTION OF ARROW



TACHOMETER HARNESS TO HEADLAMP SWITCH

DATE	SYM.	REVISION RECORD	DR.	CK.
1-29-63	B	WIRE ROUTING REVISED	EJR	DT
11-8-62	A	HOLE DIMS REMOVED	RP	VP

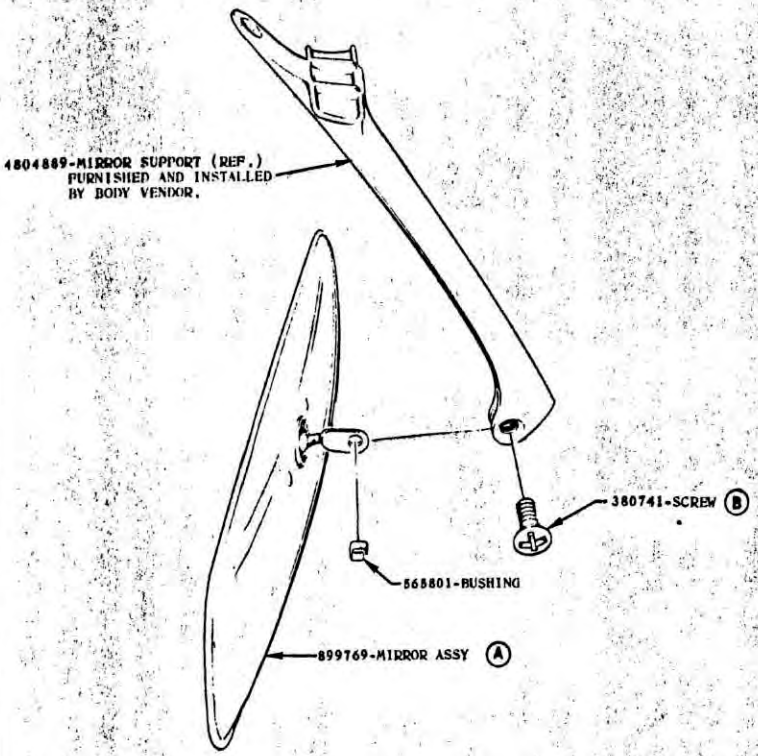
DWG. DATE FEB. 5, 1962 DR. JOSEPH V. GALL
FIRST USED 1962 CK. 77705
APPR.
REFERENCE 3518 APPR.
NAME LAYOUT - CONSOLE FOUR SPEED TRANSMISSION
PART NO. 586575

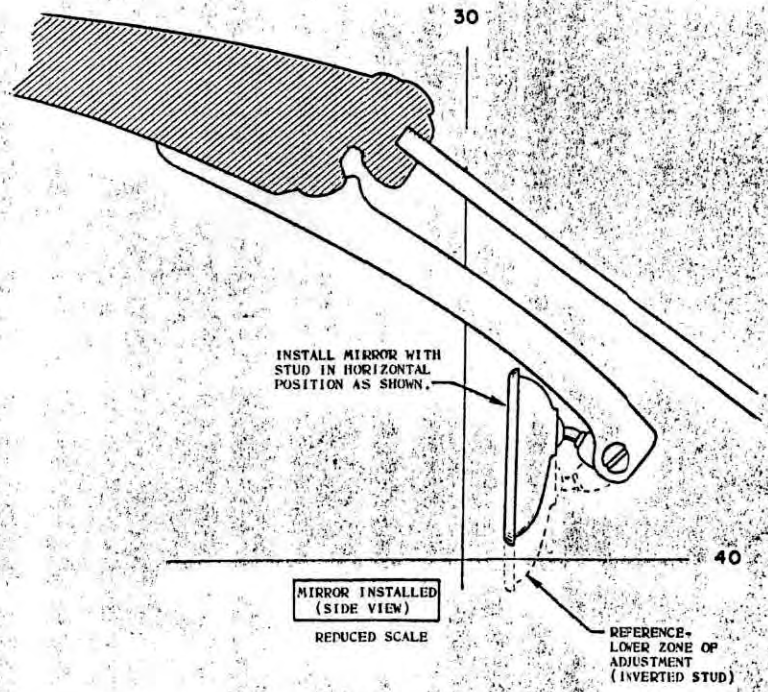
SERIES 3117 - 3167
SHEET 3 OF 3

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

580401

SHEET 1 OF 1





	C			
3-25-60	B	WAS 565-42 SCREW	CM	VD
2-9-60	A	WAS 3770183	FJ	FP
DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE JAN 28, 1960 DR. ROY NEY JR.

FIRST USED 1961 CK. H VAN PELT

APPR. Palmer

REFERENCE 1A2E APPR.

NAME LAYOUT-INSIDE REAR VIEW MIRROR

SERIES 3000-3100

SHEET 1 OF 1

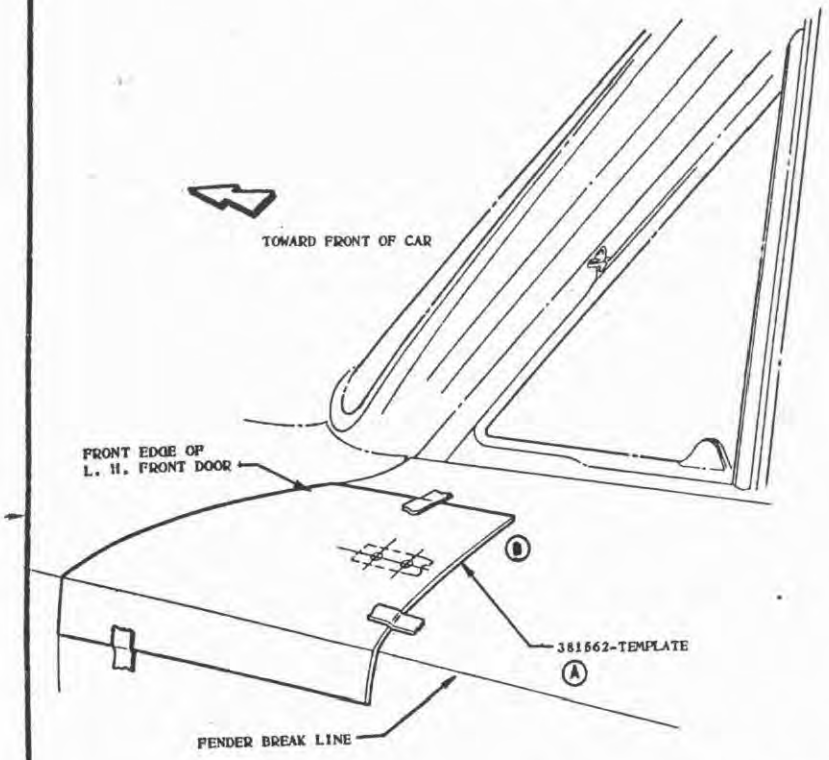
PART NO. 580401

62-63

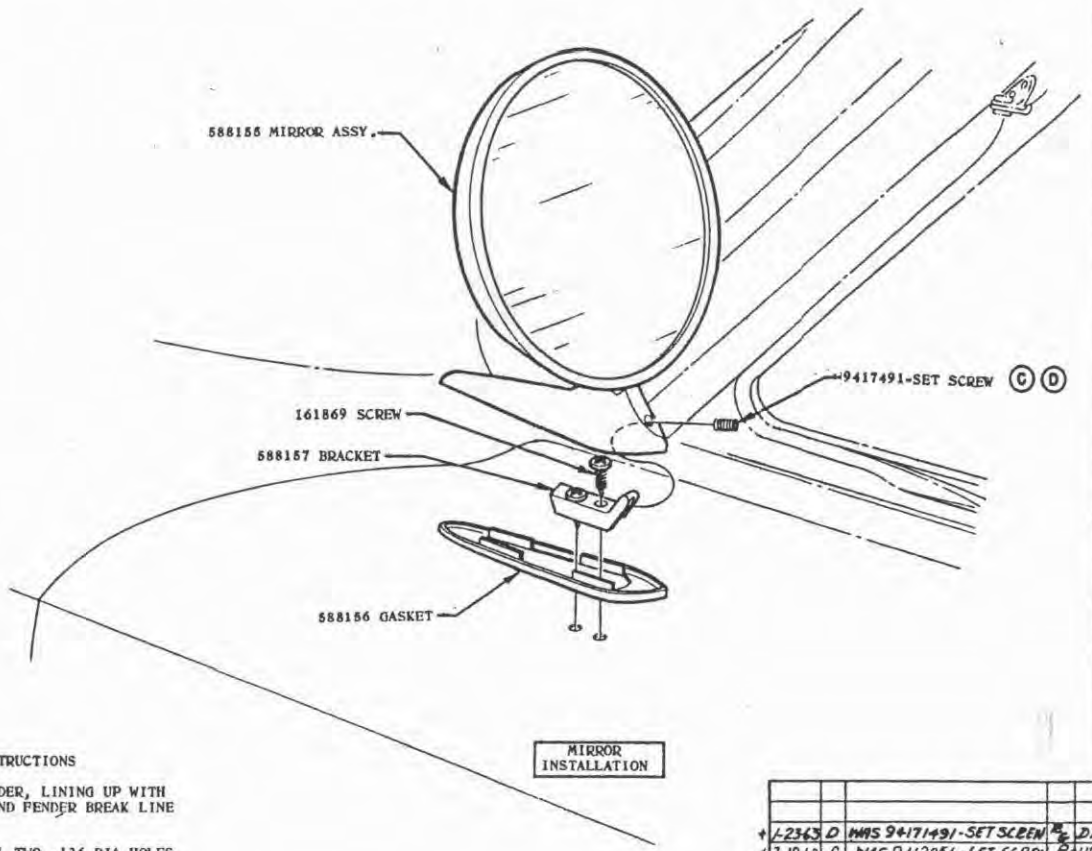
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

INSTALLATION OF OLDSMOBILE OUTSIDE REAR VIEW MIRROR

381087
SHEET 1 OF 1



TEMPLATE APPLICATION



MIRROR INSTALLATION

GENERAL INSTRUCTIONS

TAPE TEMPLATE TO FENDER, LINING UP WITH FRONT EDGE OF DOOR AND FENDER BREAK LINE AS SHOWN.

CENTERPUNCH AND DRILL TWO .136 DIA HOLES AS LOCATED BY TEMPLATE.

FASTEN BRACKET TO DOOR PANEL AS SHOWN.

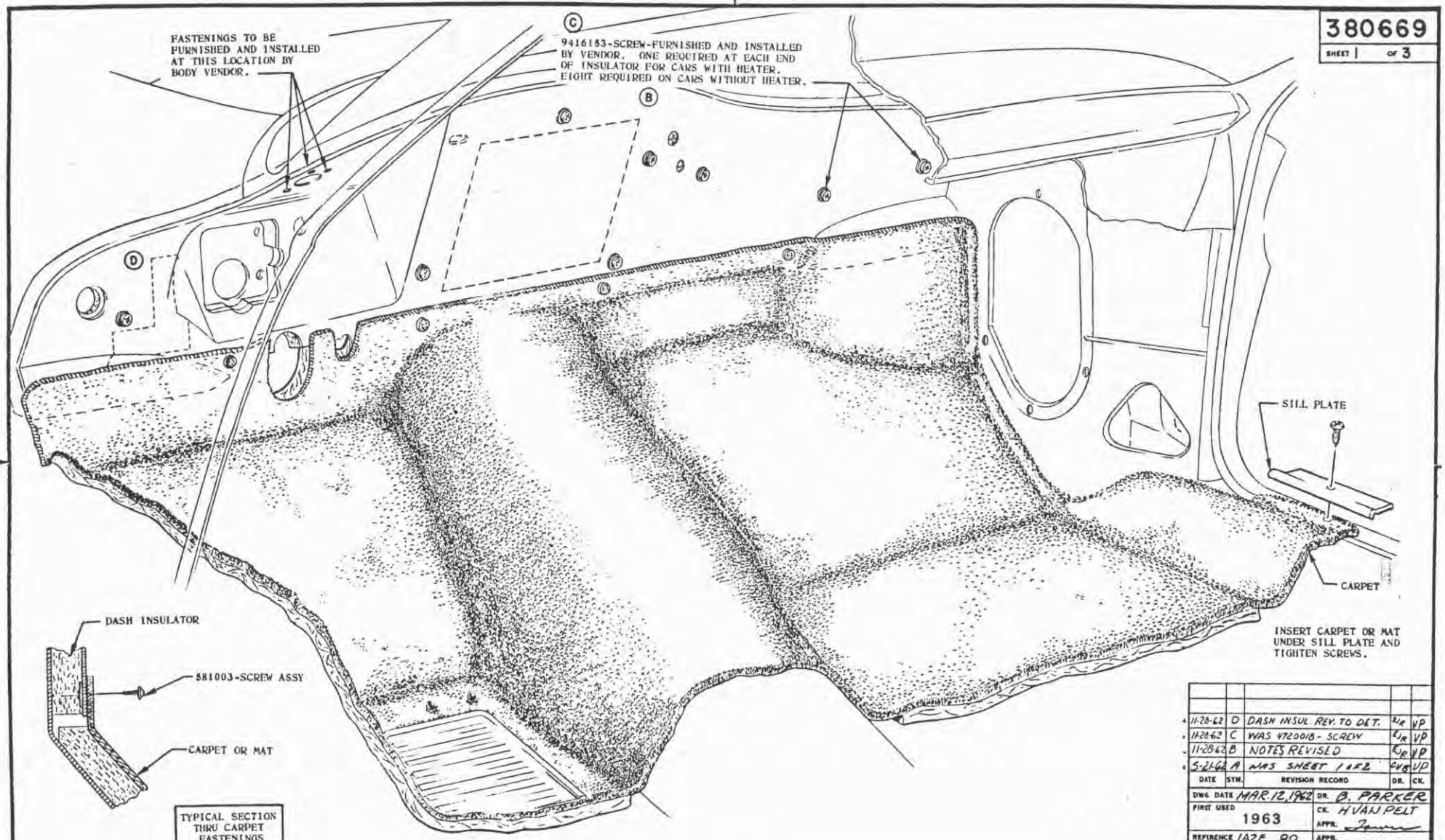
PLACE GASKET AND MIRROR OVER BRACKET AND TIGHTEN SET SCREW AT REAR OF MIRROR BASE.

1-2363	D	WAS 9417491-SET SCREW	EJR	DT
7-19-62	C	WAS 9412056-SET SCRW	EJR	VP
5-3-62	B	VIEW REVISED TO DETAIL	EJR	VP
4-10-62	A	TEMPLATE NO. ADDED	EJR	VP
DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAR. 27 1962 DR. ED J. ROE
FIRST USED 1963 CK. H. VAN PELT APPR.
REFERENCE 35D32 APPR.
NAME LAYOUT - OUTSIDE REAR VIEW MIRROR

SERIES 3000 - 3100
SHEET / OF /
PART NO. 381087

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



380669

SHEET 1 OF 3

	DATE	SYM.	REVISION RECORD	DR.	CK.
4	11-28-62	D	DASH INSUL. REV. TO DET.	L/R	VP
3	11-28-62	C	WAS 4720018 - SCREW	L/R	VP
2	11-28-62	B	NOTES REVISED	L/R	VP
1	5-21-62	A	WAS SHEET 1 OF 2	L/R	VP

DWG. DATE MAR. 12, 1962 DR. B. PARKER

FIRST USED 1963 CK. H VAN PELT

REFERENCE 1A2E 90 APPR.

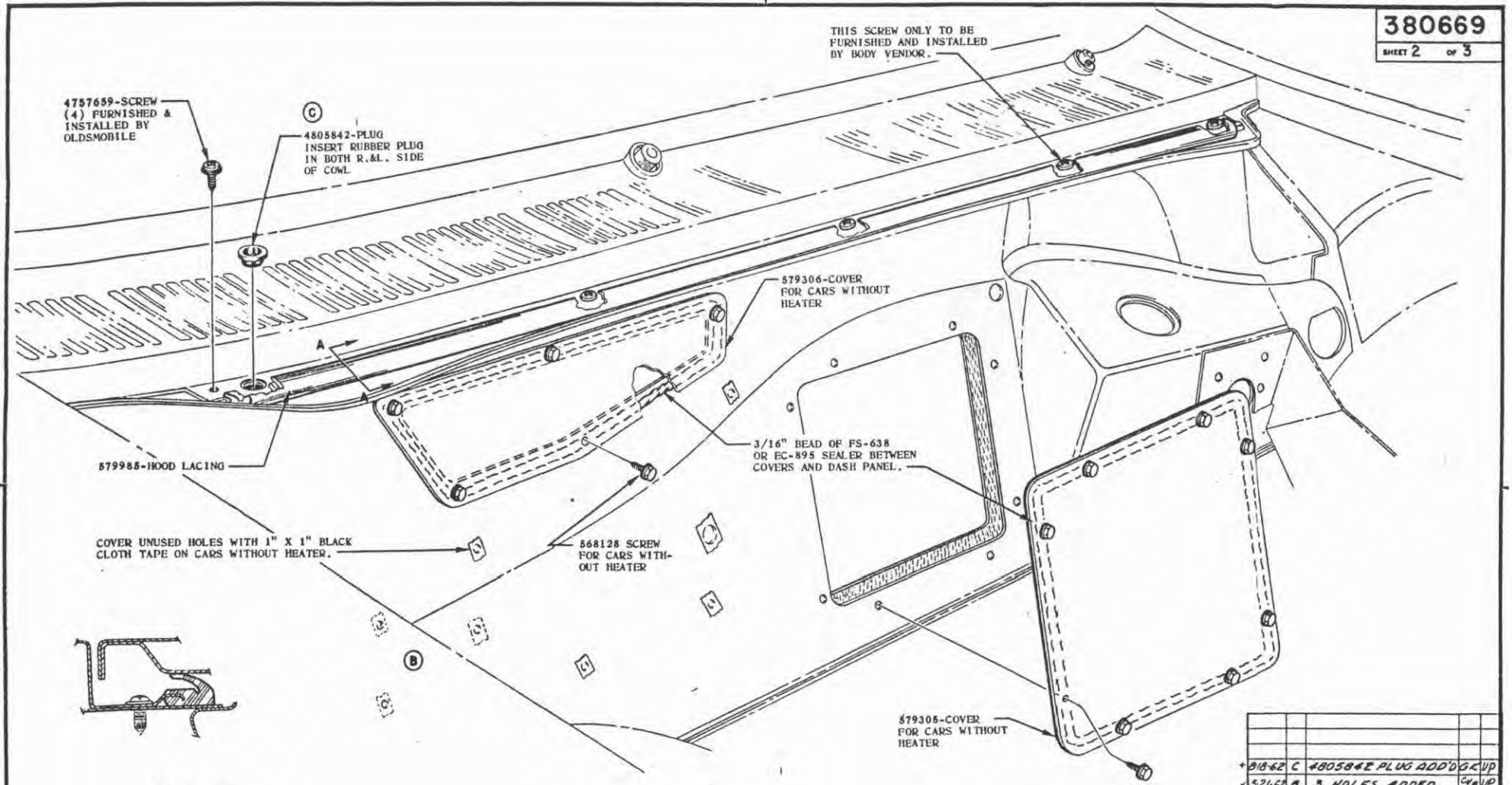
NAME LAYOUT - BODY PARTS

SERIES 3000 - 3100

SHEET 1 OF 3

PART NO. 380669

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



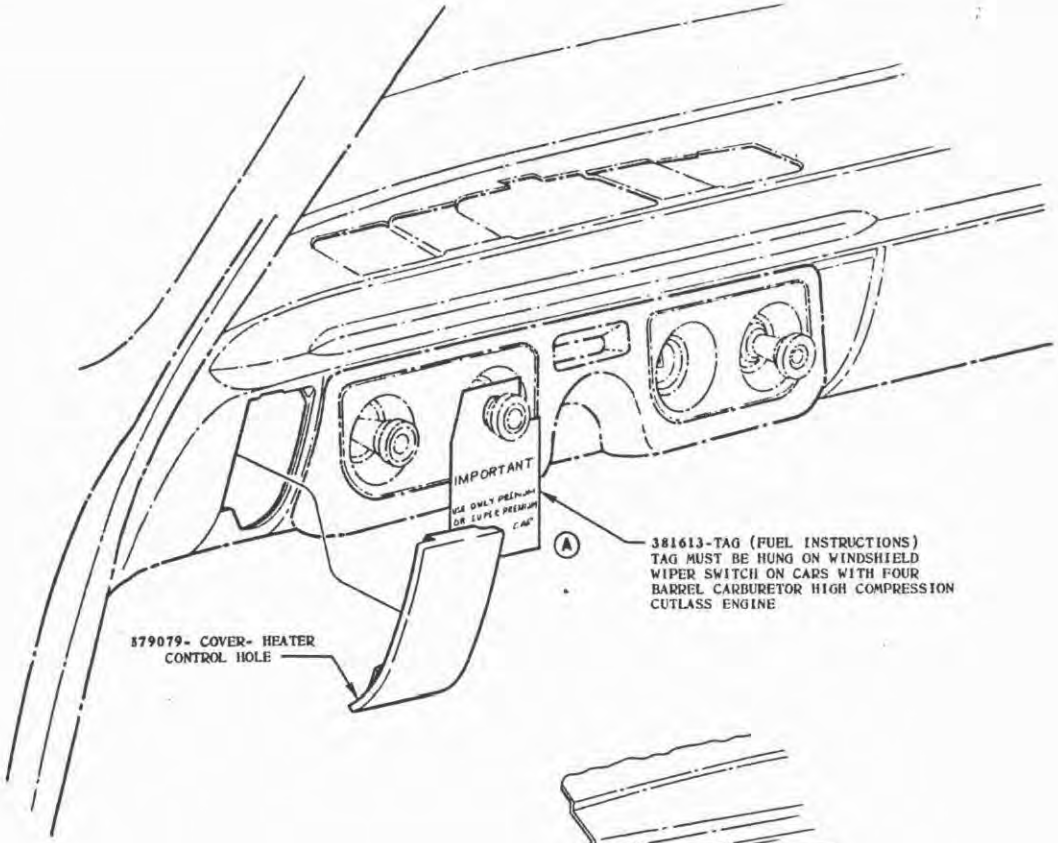
SECTION A-A

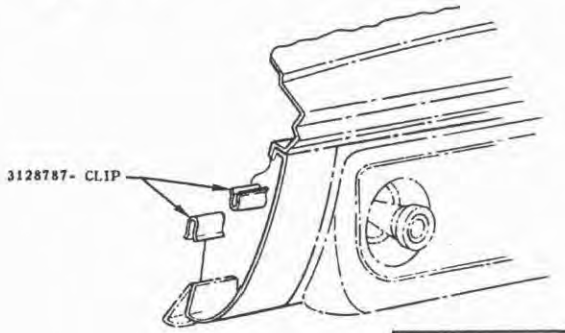
+ 9-18-62	C	4805842 PLUG ADD'D	GL	VP
* 5-21-62	B	3 HOLES ADDED	CH/A	VP
* 5-21-62	A	NAS SHEET 2 OF 2	CH/A	VP
DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAR. 12, 1962	DR. C. BERCHNAU
FIRST USED 1963	CK. H. VAN PELT
	APPR.
REFERENCE IAZE 90	APPR.
NAME LAYOUT - BODY PARTS	

SERIES 3000 - 3100	PART NO. 380669
SHEET 2 OF 3	

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN





HEATER CONTROL HOLE COVER FASTENING

TO BE USED IN CONJUNCTION WITH INSTRUMENT PANEL DRG. 585981, ON CARS WITHOUT HEATER.

DATE	SYM.	REVISION RECORD	DR.	CK.
*6-13-62	A	381613-TAG ADDED	EJR	DT

DWG DATE MAY 21, 1962 DR. C.V. BRACHNAU
FIRST USED 1963 CK. H.VAN DELT APPR.
REFERENCE 1AZE 30 APPR.
NAME LAYOUT-BODY PARTS

SERIES 3000-3100
SHEET 3 OF 3

PART NO. 380669

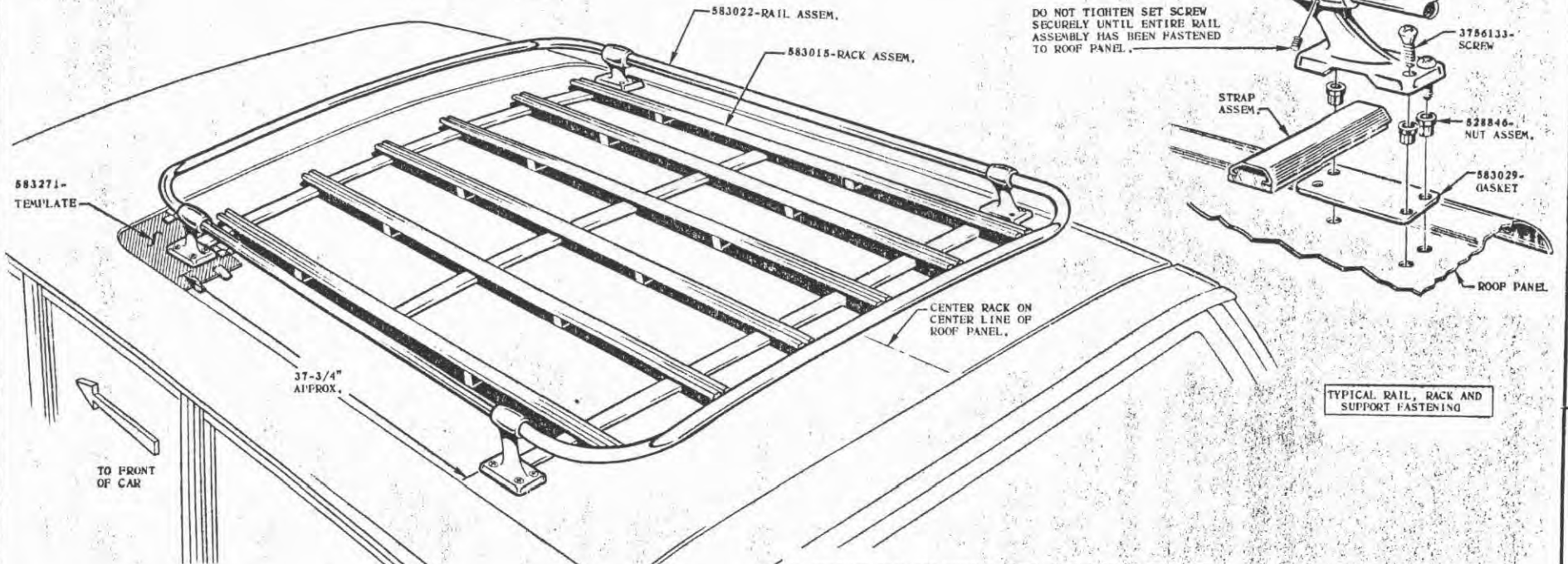
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

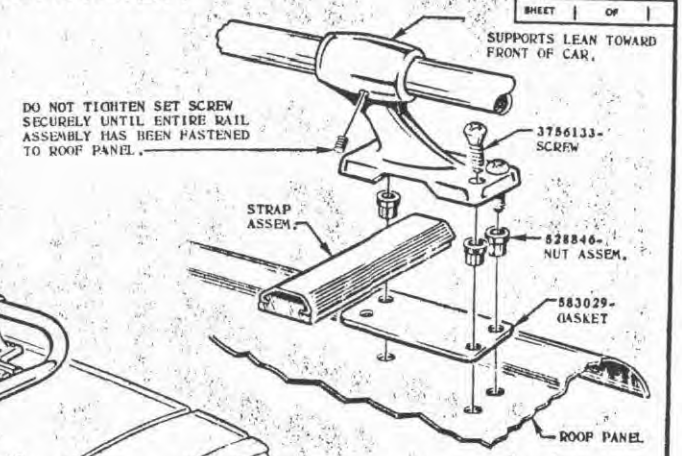
INSTALLATION OF OLDSMOBILE ROOF CARRIER

583255

SHEET 1 OF 1

Ⓐ (FOR STATION WAGONS ONLY)





TYPICAL RAIL, RACK AND SUPPORT FASTENING

GENERAL INSTRUCTIONS

NOTE:
BEFORE FITTING PROCEDURE IS STARTED, MASKING TAPE SHOULD BE APPLIED TO ROOF PANEL IN LOCAL AREAS TO AVOID SCRATCHING ROOF PANEL.

1. TAPE 583271-TEMPLATE TO ROOF IN FORWARD L.H. POSITION AS SHOWN IN ILLUSTRATION. CENTER PUNCH THROUGH TEMPLATE. DRILL 1/8" DIA. PILOT HOLES. REMOVE TEMPLATE AND DRILL 1/2"DIA. HOLES THROUGH THE PILOT HOLES. BE SURE TO USE A STOP ON THE DRILL TO PREVENT PIERCING THE HEADLINING. DE-BURR ALL HOLES.
2. REVERSE TEMPLATE AND PLACE IN FORWARD R.H. POSITION (ON OPPOSITE SIDE OF CAR) AND REPEAT PROCEDURE OUTLINED IN STEP 1.
3. POSITION RACK ASSEMBLY ON ROOF PANEL WITH FRONT STRAP APPROX. 6-1/4" BACK FROM ROOF DEPRESSION LINE AND EQUALLY SPACED ON THE SIDES. INSERT GROMMET NUTS IN THE HOLES JUST DRILLED.
4. POSITION RAIL AND SUPPORT ASSEM. OVER ENDS OF CROSS STRAPS. FASTEN THE FRONT SUPPORTS SEMI-TIGHT AND ADJUST THE REAR SUPPORTS TO FIT THE ROOF CONTOUR AND MEASURE 37 3/4" FROM FRONT SUPPORT TO POSITION REAR SUPPORT. EQUALLY SPACE REAR SUPPORTS FROM SIDE OF ROOF DEPRESSION. COVER THE ENDS OF THE CROSS STRAPS AT THE LOCATIONS SHOWN. THE SET SCREWS IN THE SUPPORTS SHOULD BE SEMI-TIGHT TO PERMIT SOME ROTATION.
5. WITH THE RACK AND SUPPORT PROPERLY POSITIONED; TAPE SECURELY TO ROOF AND USE THE MOUNTING HOLES IN THE REAR SUPPORTS AS A LOCATING FIXTURE. SCRIBE THE HOLE LOCATIONS OF BOTH SUPPORTS.
6. REMOVE RACK AND SUPPORT ASSEM. DRILL 1/8" DIA. HOLE THROUGH EACH SCRIBED HOLE AND ENLARGE THE HOLES TO 1/2" DIA.
7. REMOVE GROMMET NUTS FROM FRONT HOLES, POSITION RUBBER GASKETS OVER ALL HOLES AND INSERT ALL GROMMET NUTS THROUGH HOLES IN GASKETS. POSITION RACK AND RAIL ASSEM. ON ROOF. FASTEN TO ROOF AND TIGHTEN SUPPORT SET SCREWS.

   NOTE: USE LIGHT PRESSURE ON SCREWS UNTIL THREADS ENGAGE IN GROMMET NUT TO AVOID PUSHING NUT THROUGH ROOF PANEL.

DATE	SYM.	REVISION RECORD	DR.	CK.
12-22-60	A	DWG TITLE ADDED	DT	VD

DWG. DATE SEPT 27, 1960 DR. BEAUDOIN
FIRST USED 1961 CK. H. VAN FELT
APPR.
REFERENCE 35X5 & 80 APPR.
NAME LAYOUT-LUGGAGE CARRIER

SERIES 3000-3100
SHEET 1 OF 1

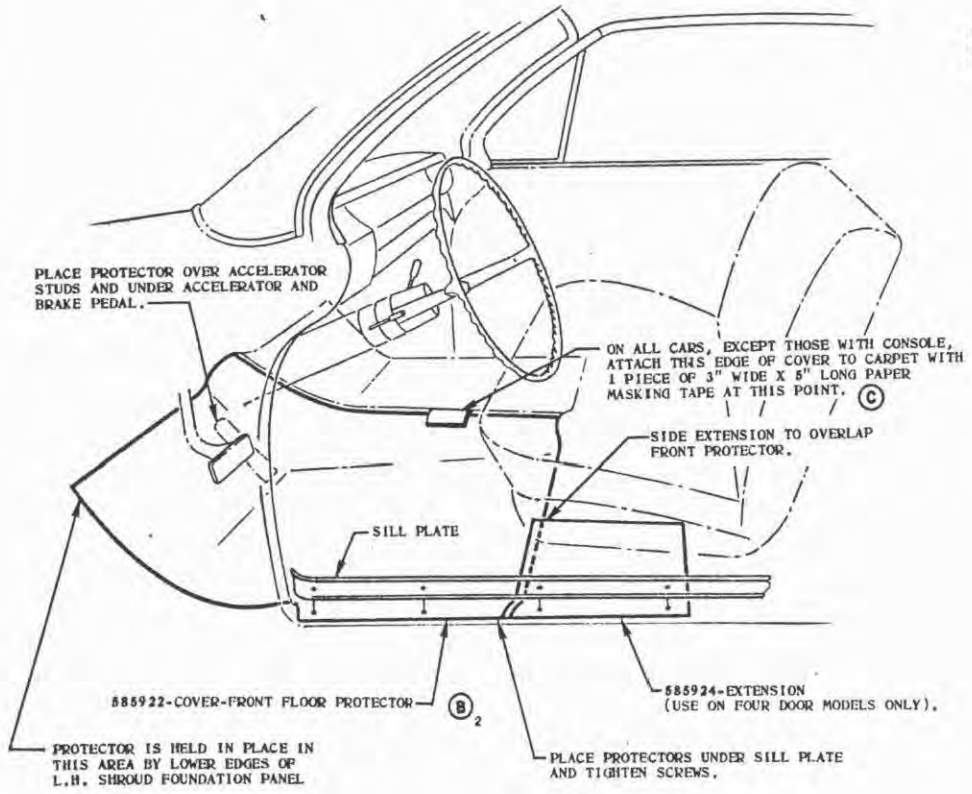
PART NO. 583255

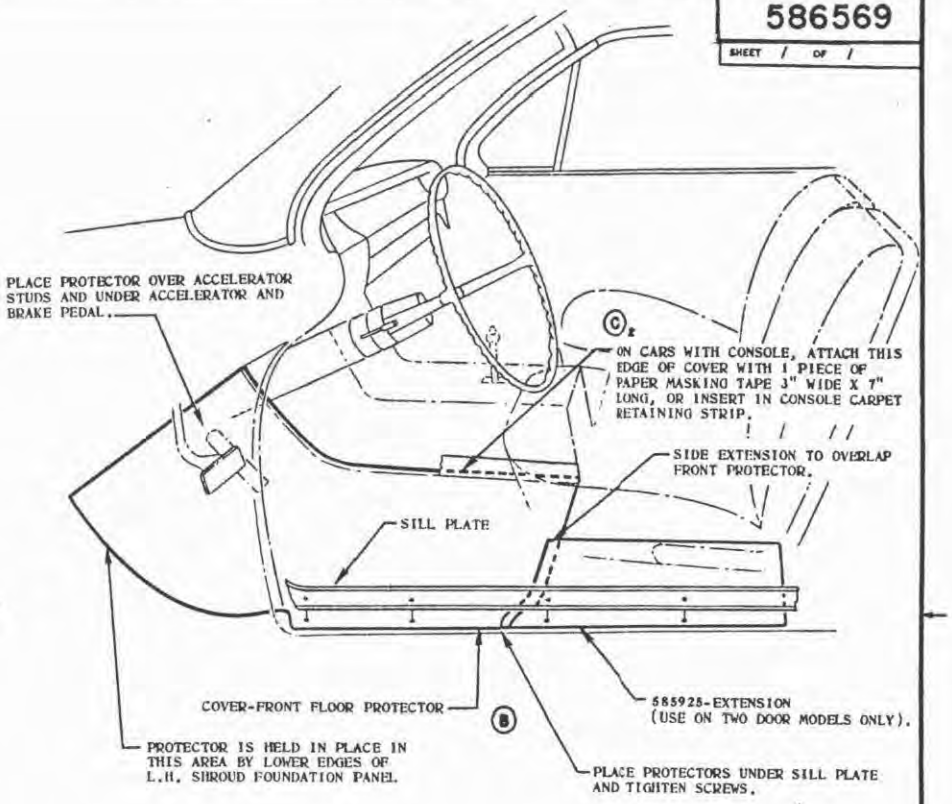
62-63

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

586569

SHEET 1 OF 1





INSTALLATION OF FRONT FLOOR PROTECTOR AND SIDE EXTENSIONS

	DATE	SYM.	REVISION RECORD	DR.	CK.
A	8-30-62	C2	TAPE SIZE ADDED	VP	
*	8-14-62	B2	USAGE REVISED	VP	
*	5-4-62	A2	REVISED TO DETAIL	VP	

DWG. DATE SEPT. 14, 1961 DR. JOSEPH H. GALL

FIRST USED 1962 CK. H. VAN PELT APPR.

REFERENCE 1A2-L APPR.

NAME LAYOUT-FRONT CARPET COVER

PART NO. 586569

SERIES 3000-3100 32-35-36-3800

SHEET 1 OF 1

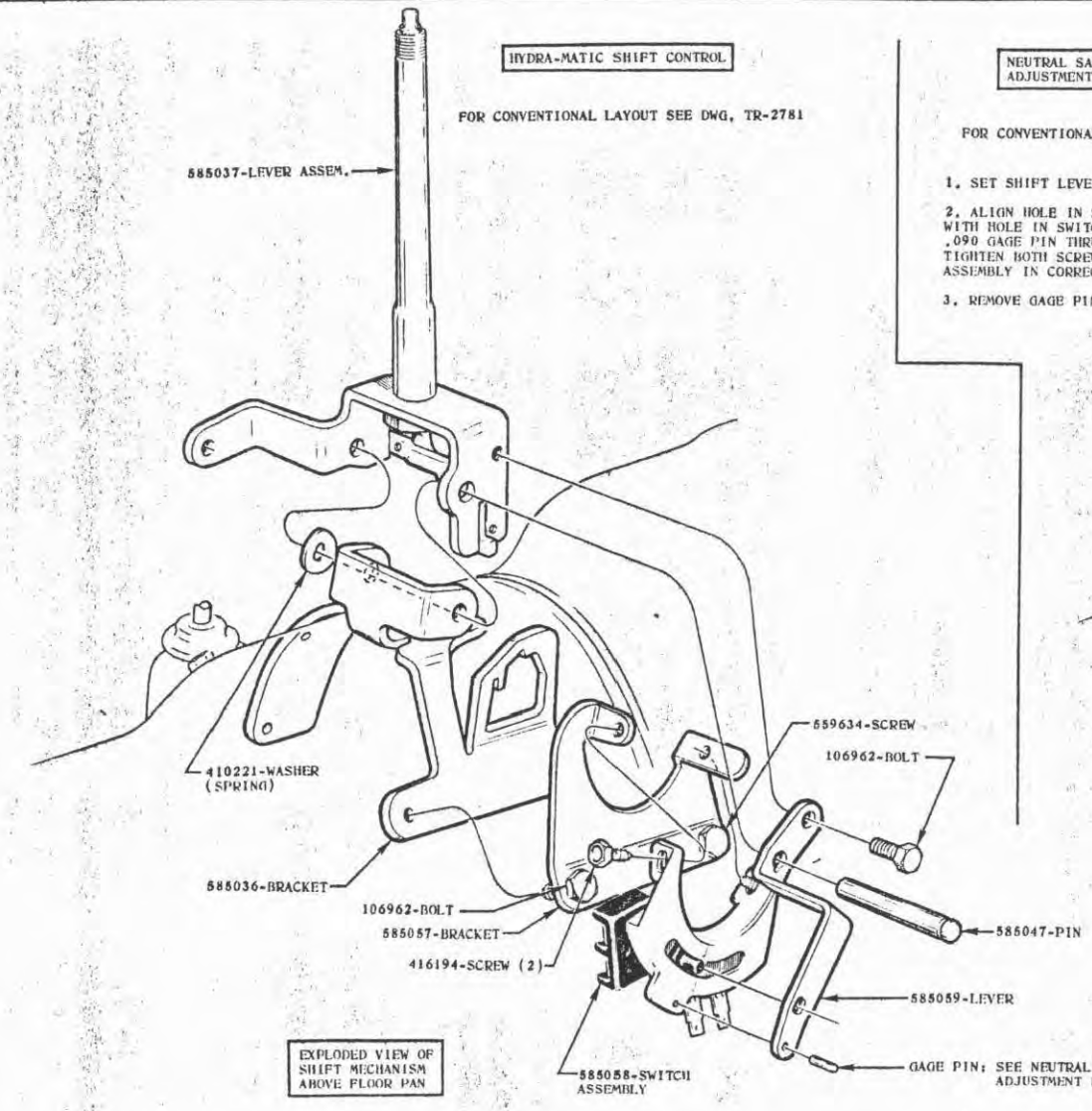
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

381791

SHEET 1 OF 8

HYDRA-MATIC SHIFT CONTROL

FOR CONVENTIONAL LAYOUT SEE DWG. TR-2781

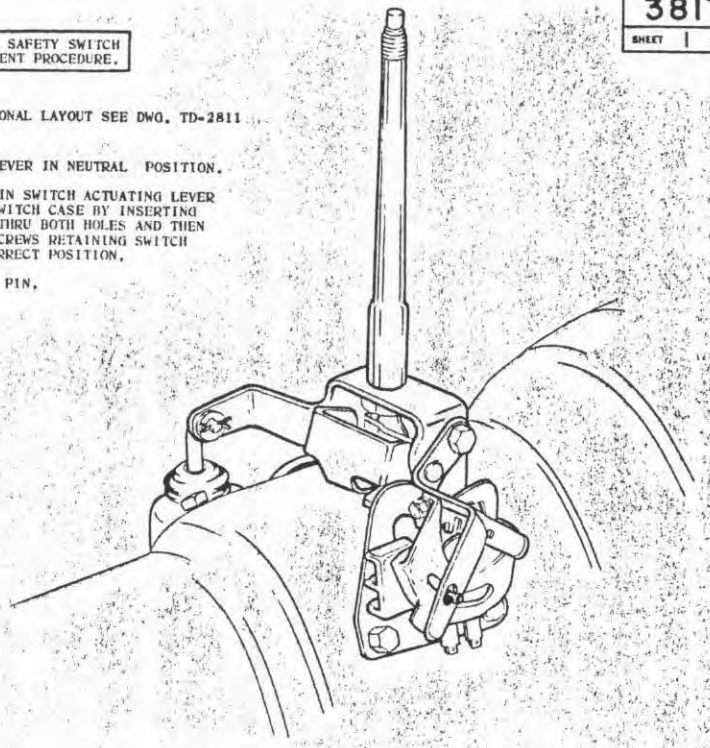


EXPLODED VIEW OF SHIFT MECHANISM ABOVE FLOOR PAN

NEUTRAL SAFETY SWITCH ADJUSTMENT PROCEDURE.

FOR CONVENTIONAL LAYOUT SEE DWG. TD-2811

1. SET SHIFT LEVER IN NEUTRAL POSITION.
2. ALIGN HOLE IN SWITCH ACTUATING LEVER WITH HOLE IN SWITCH CASE BY INSERTING .090 GAGE PIN THRU BOTH HOLES AND THEN TIGHTEN BOTH SCREWS RETAINING SWITCH ASSEMBLY IN CORRECT POSITION.
3. REMOVE GAGE PIN.



ASSEMBLED VIEW OF CONSOLE SHIFT MECHANISM

DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAY 7, 1962 DR. HEY-PARKER
FIRST USED 1963 CK. H.VAN PELT APPR.
REFERENCE 35055-M35 APPR.
NAME LAYOUT - CONSOLE
SERIES 3117-3167-3147
SHEET 1 OF 8
PART NO. 381791

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

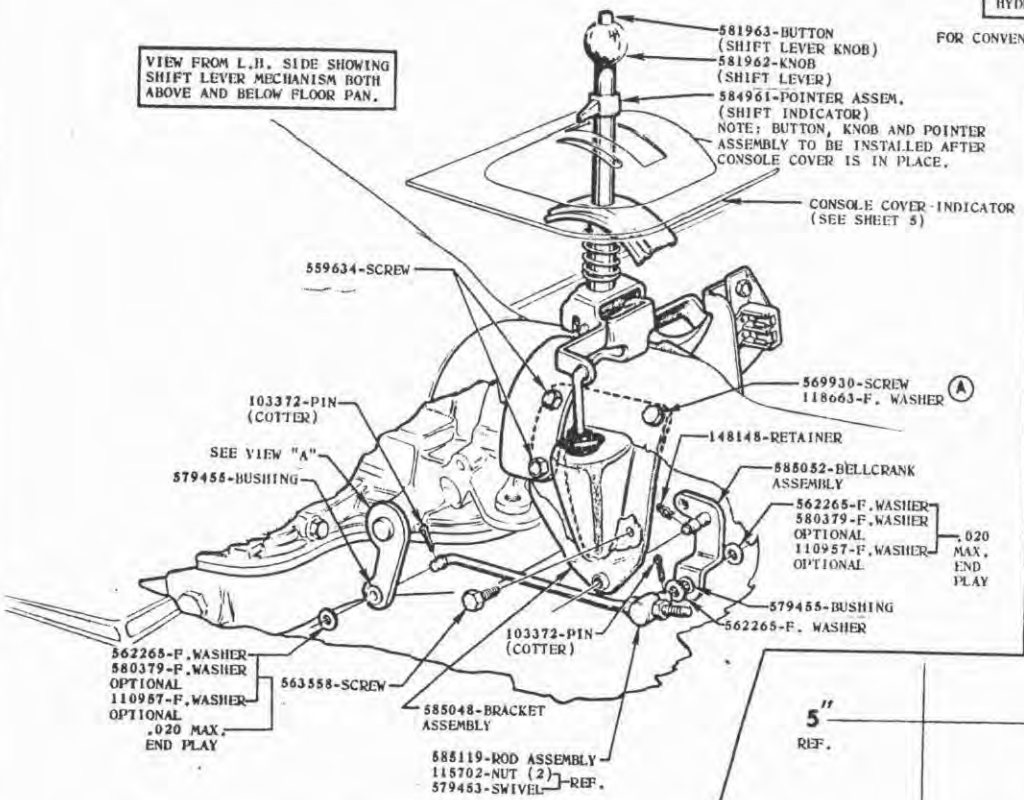
HYDRA-MATIC SHIFT CONTROL

FOR CONVENTIONAL LAYOUT SEE DWG. TR-2781

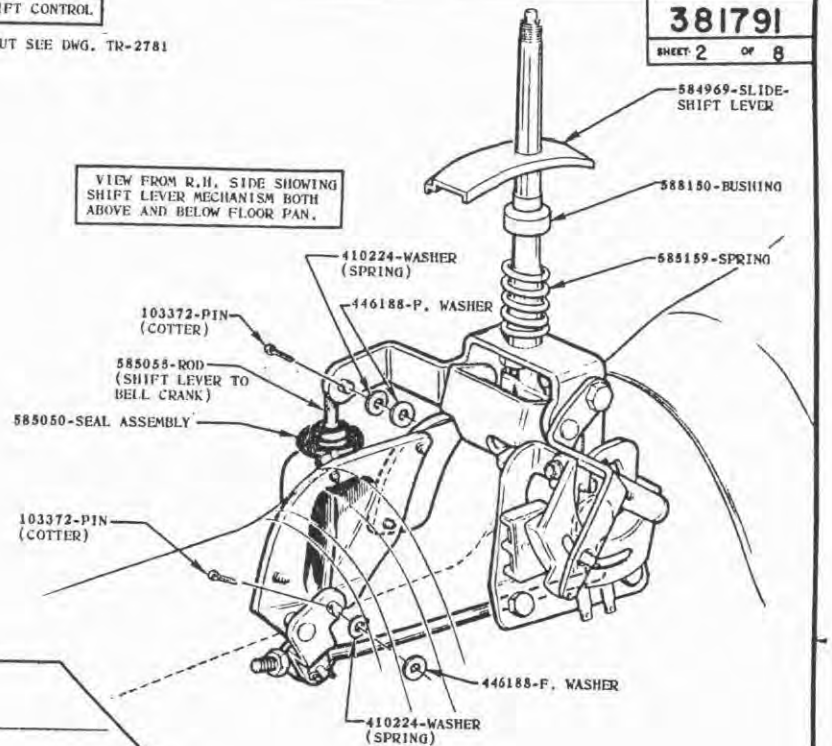
381791

SHEET 2 OF 8

VIEW FROM L.H. SIDE SHOWING SHIFT LEVER MECHANISM BOTH ABOVE AND BELOW FLOOR PAN.

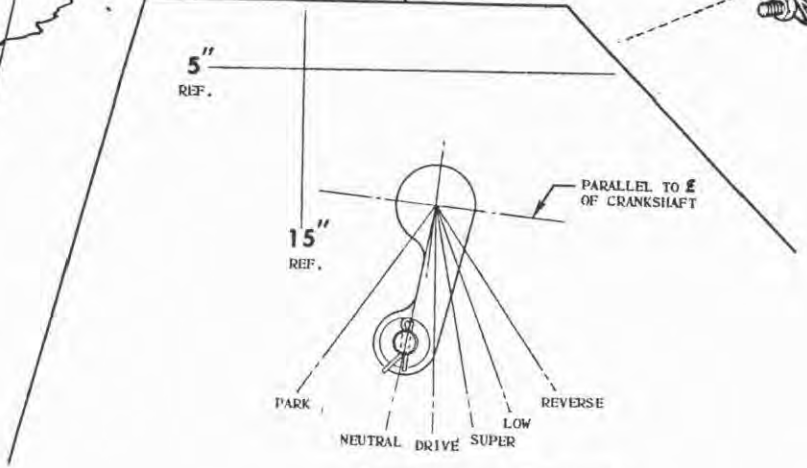


VIEW FROM R.H. SIDE SHOWING SHIFT LEVER MECHANISM BOTH ABOVE AND BELOW FLOOR PAN.



LINKAGE ADJUSTMENT PROCEDURE

1. ASSEMBLE ALL PARTS EXCEPT ROD ASSEMBLY 585119.
2. HOLD SHIFT LEVER ASSEMBLY 585037 IN NEUTRAL STOP POSITION AND SET OUTER TRANSMISSION LEVER IN NEUTRAL DETENT.
3. WITH BOTH NUTS 115702 AND SWIVEL 579453 LOOSE ON ROD ASSEMBLY 585119, ASSEMBLE TO OUTER TRANSMISSION LEVER.
4. INSTALL SWIVEL 579453 IN RELAY BELLCRANK ASSEMBLY 585052 AND TIGHTEN FRONT NUT 115702 FINGER TIGHT AGAINST SWIVEL.
5. ADJUST ROD ASSEMBLY 585119 LONG BY TIGHTENING FRONT NUT 115702 TWO (2) TURNS. LOCK UP ROD ASSEMBLY BY TIGHTENING REAR NUT 115702.

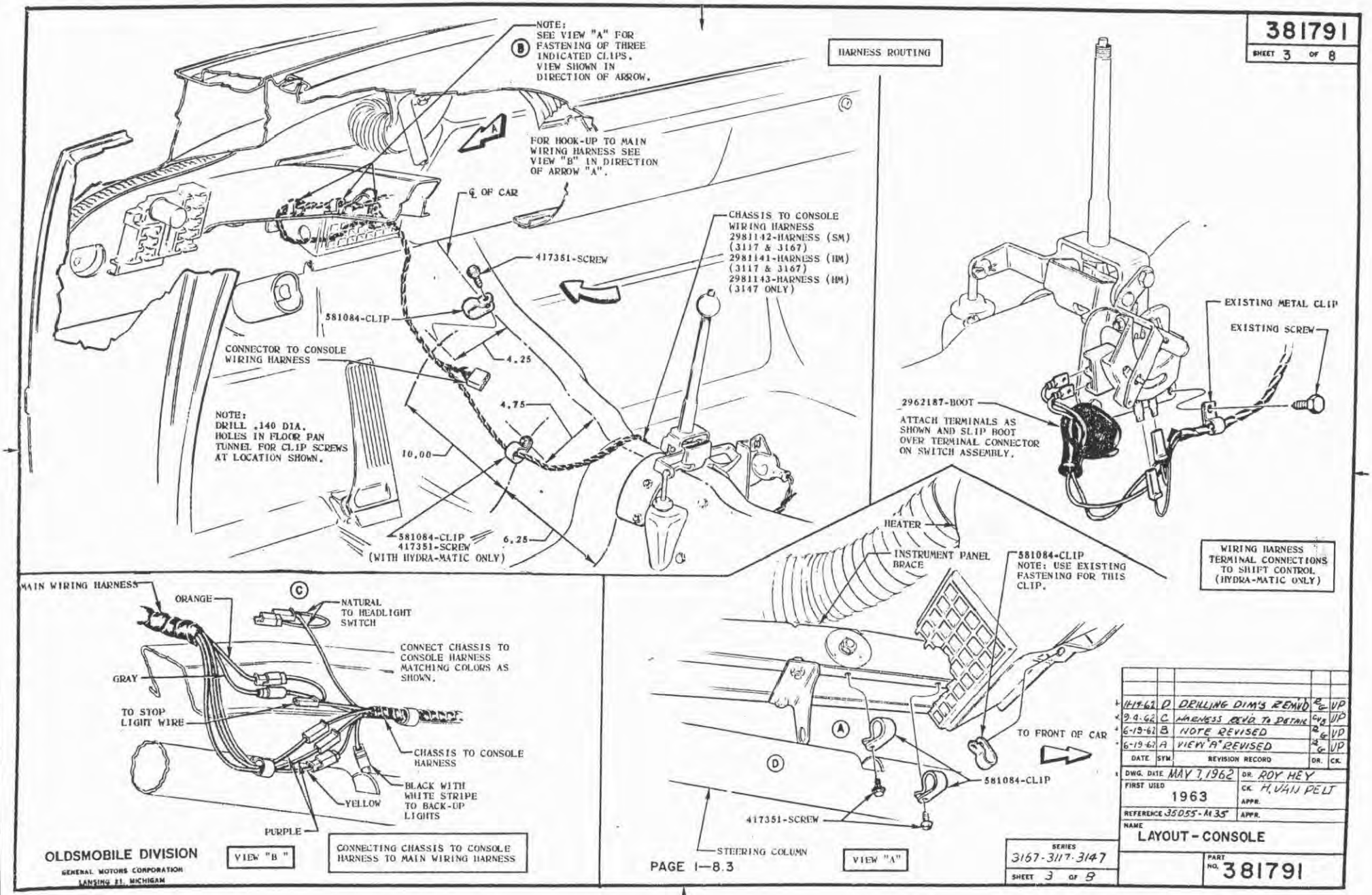


VIEW "A"
ORTHOGRAPHIC SIDE VIEW
INDICATING SHIFT POSITIONS

DATE	SYM.	REVISION RECORD	DR.	CK.
10-11-62	A	WAS 106962 BOLT	AL	VP

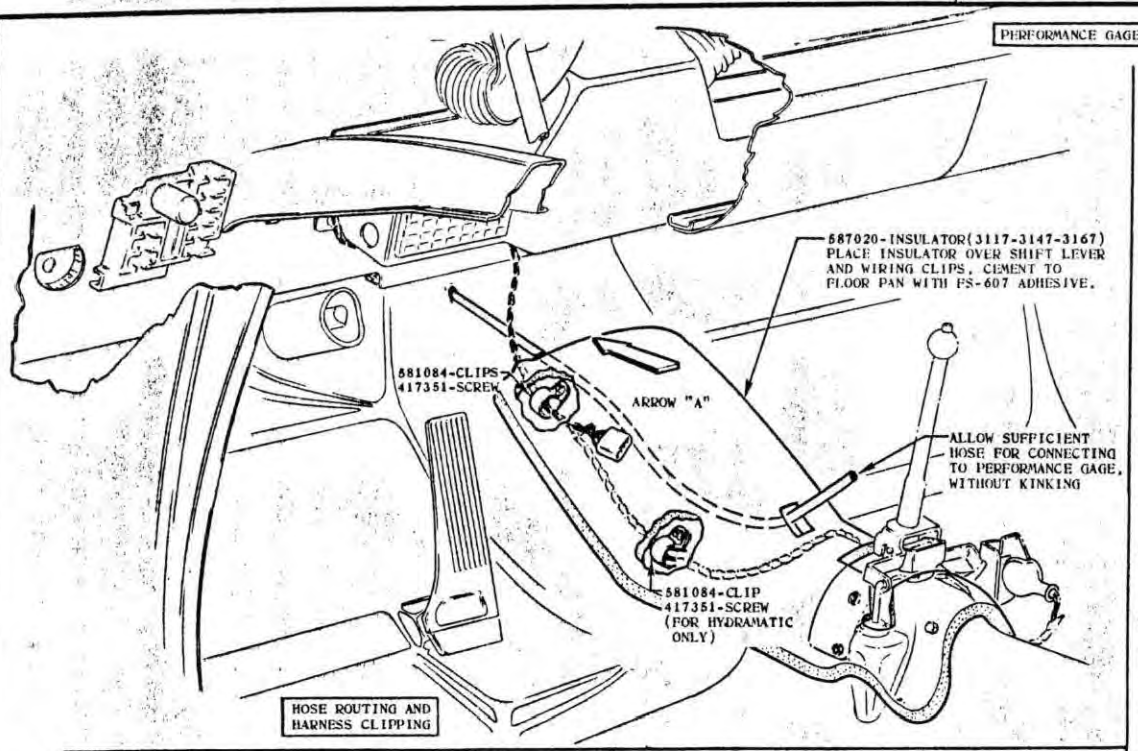
DWG. DATE MAY 7, 1962 DR. ROY HEY
FIRST USED 1963 CK. H. VAN PELT
APPR.
REFERENCE 3505S-M35 APPR.
NAME LAYOUT - CONSOLE
SERIES 3167-3117-3147
SHEET 2 OF 8
PART NO. 381791

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN


381791
SHEET 3 OF 8
HARNESS ROUTING
NOTE:
SEE VIEW "A" FOR FASTENING OF THREE INDICATED CLIPS. VIEW SHOWN IN DIRECTION OF ARROW.
FOR HOOK-UP TO MAIN WIRING HARNESS SEE VIEW "B" IN DIRECTION OF ARROW "A".
℄ OF CAR
417351-SCREW
CHASSIS TO CONSOLE WIRING HARNESS
2981142-HARNESS (SM) (3117 & 3167)
2981141-HARNESS (BM) (3117 & 3167)
2981143-HARNESS (BM) (3147 ONLY)
581084-CLIP
CONNECTOR TO CONSOLE WIRING HARNESS
4.25
4.75
10.00
6.25
NOTE:
DRILL .140 DIA. HOLES IN FLOOR PAN TUNNEL FOR CLIP SCREWS AT LOCATION SHOWN.
581084-CLIP
417351-SCREW
(WITH HYDRA-MATIC ONLY)
EXISTING METAL CLIP
EXISTING SCREW
2962187-BOOT
ATTACH TERMINALS AS SHOWN AND SLIP BOOT OVER TERMINAL CONNECTOR ON SWITCH ASSEMBLY.
WIRING HARNESS TERMINAL CONNECTIONS TO SHIFT CONTROL (HYDRA-MATIC ONLY)
MAIN WIRING HARNESS
ORANGE
NATURAL TO HEADLIGHT SWITCH
CONNECT CHASSIS TO CONSOLE HARNESS MATCHING COLORS AS SHOWN.
GRAY
TO STOP LIGHT WIRE
CHASSIS TO CONSOLE HARNESS
BLACK WITH WHITE STRIPE TO BACK-UP LIGHTS
YELLOW
PURPLE
VIEW "B"
CONNECTING CHASSIS TO CONSOLE HARNESS TO MAIN WIRING HARNESS
HEATER
INSTRUMENT PANEL BRACE
581084-CLIP
NOTE: USE EXISTING FASTENING FOR THIS CLIP.
TO FRONT OF CAR
581084-CLIP
417351-SCREW
STEERING COLUMN
VIEW "A"
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN
PAGE 1—8.3
11-19-62 D DRILLING DIM'S REMVD RG VP
9-4-62 C HARNESS REVD TO DETAIL CWB VP
6-19-62 B NOTE REVISED RG VP
6-19-62 A VIEW "A" REVISED RG VP
DATE SYM. REVISION RECORD DR. CK.
DWG. DATE MAY 7, 1962 DR. ROY HEY
FIRST USED 1963 CK. H. VAN PELT
APPR.
REFERENCE 35055-A1.35 APPR.
NAME LAYOUT - CONSOLE
SERIES 3167-3117-3147
SHEET 3 OF 8
PART NO. 381791

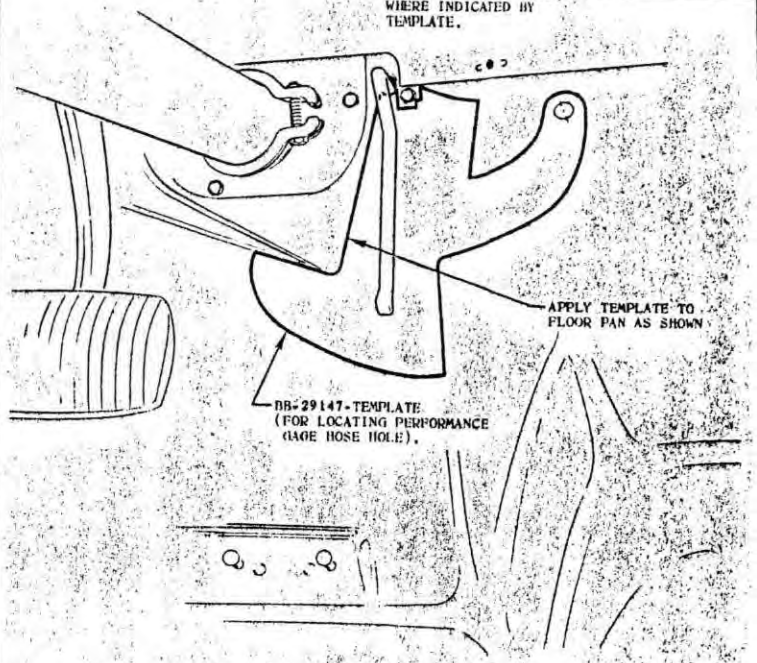
381791
SHEET 4 OF 8

PERFORMANCE GAGE HOSE ROUTING

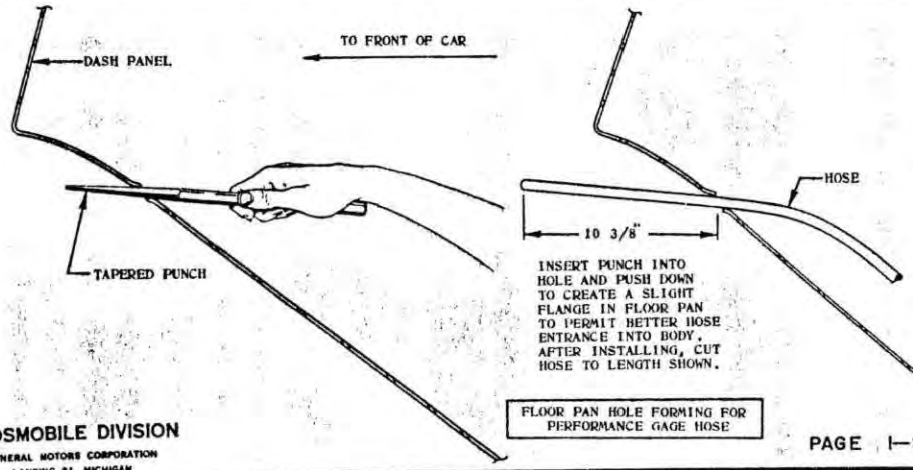


HOSE ROUTING AND HARNESS CLIPPING

LOCATE TEMPLATE IN POSITION SHOWN AND DRILL .437 DIA. HOLE WHERE INDICATED BY TEMPLATE.



VIEW IN DIRECTION OF ARROW "A" TEMPLATE APPLICATION



INSERT PUNCH INTO HOLE AND PUSH DOWN TO CREATE A SLIGHT FLANGE IN FLOOR PAN TO PERMIT BETTER HOSE ENTRANCE INTO BODY. AFTER INSTALLING, CUT HOSE TO LENGTH SHOWN.

FLOOR PAN HOLE FORMING FOR PERFORMANCE GAGE HOSE

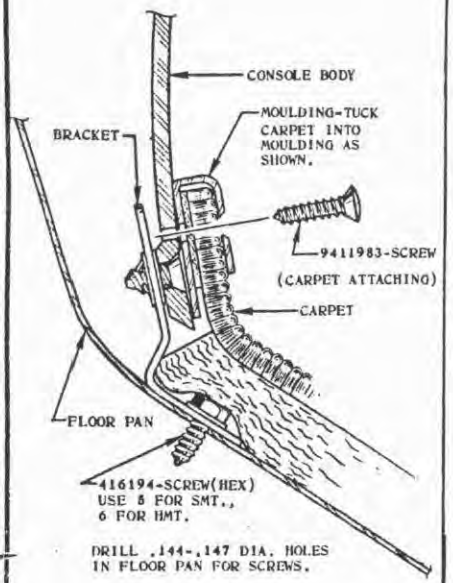
PAGE I-8.4

DATE	SYM.	REVISION RECORD	DR.	CK.

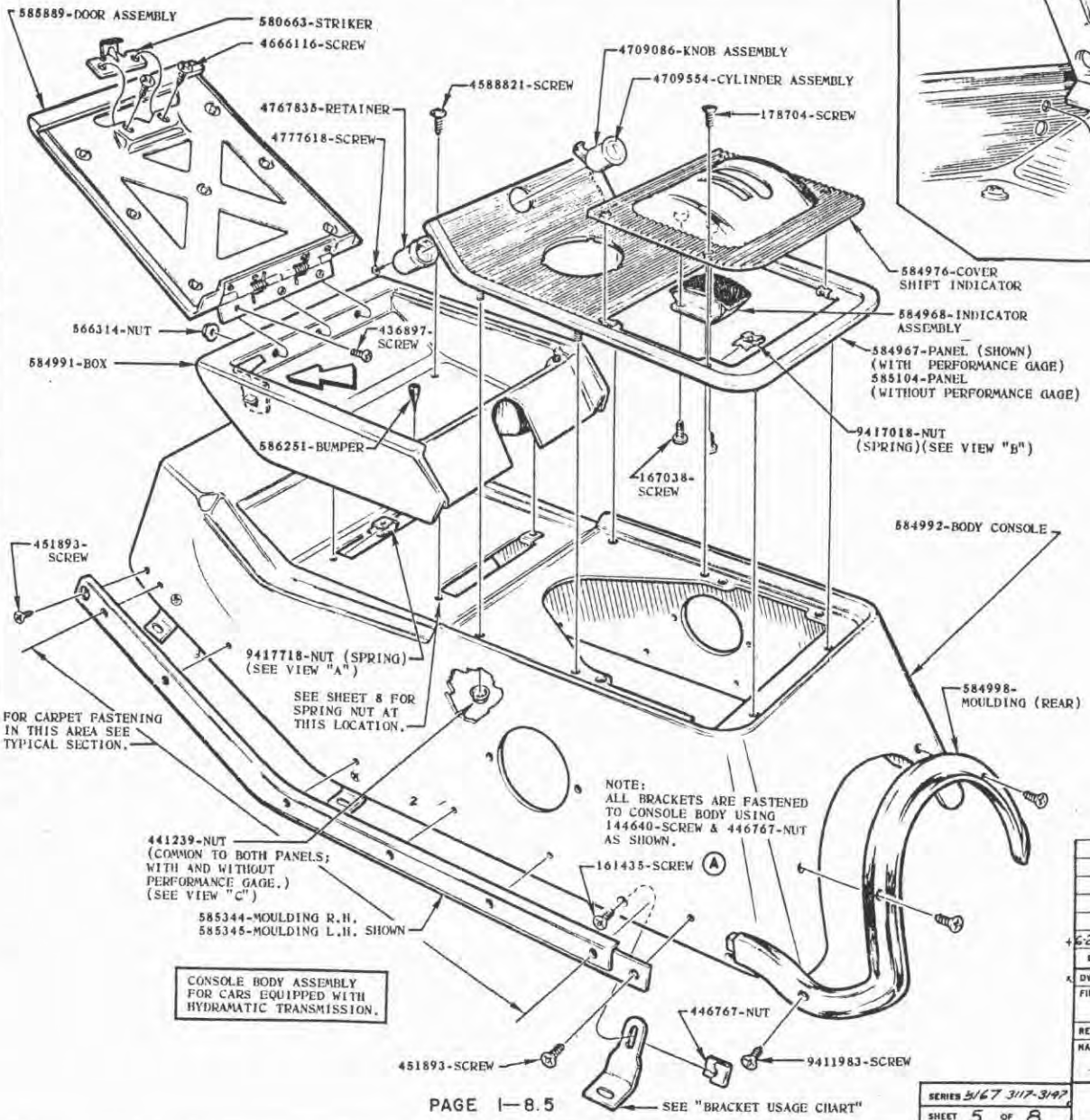
DWG. DATE MAY 7, 1962 DR. ROY HEY
FIRST USED 1963 CK. H VAN PELT
APPR.
REFERENCE 3505S-M35 APPR.
NAME LAYOUT - CONSOLE
PART NO. 381791

SERIES 3117-3167-3147
SHEET 4 OF 8

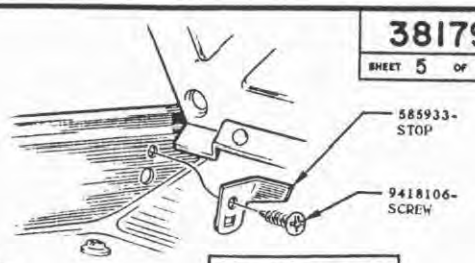
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



TYPICAL SECTION CONSOLE BODY AND BRACKET ATTACHMENTS TO FLOOR PAN.



CONSOLE BODY ASSEMBLY FOR CARS EQUIPPED WITH HYDRAMATIC TRANSMISSION.



VIEW IN DIRECTION OF ARROW

VIEW "A"

VIEW "B"

VIEW "C"

BRACKET USAGE CHART:	
CONSOLE TO FLOOR PAN	
BRACKET NO.	LOCATION:
585108	FRONT R.H. SIDE
585108	FRONT L.H. SIDE
585109	CENTER R.H. SIDE
586247	CENTER L.H. SIDE
585109	REAR R.H. SIDE
585109	REAR L.H. SIDE

DATE	SYM.	REVISION RECORD	DR.	CK.
6-28-62	A	WAS 144640 SCREW	RG	WD

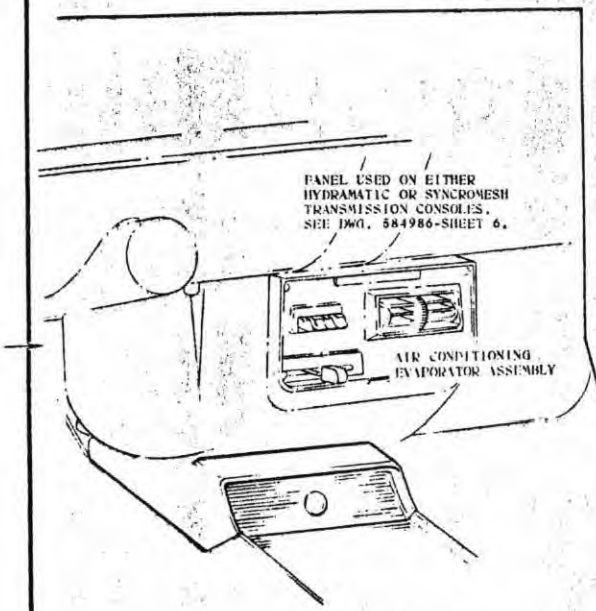
DWG. DATE MAY 7, 1962 DR. ROY HEY
FIRST USED 1963 CK. H. VAN PELT APPR.
REFERENCE 35-D53-M35 APPR.
NAME LAYOUT-CONSOLE
SERIES 3167 3117-3197
SHEET 5 OF 8
PART NO. 381791

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

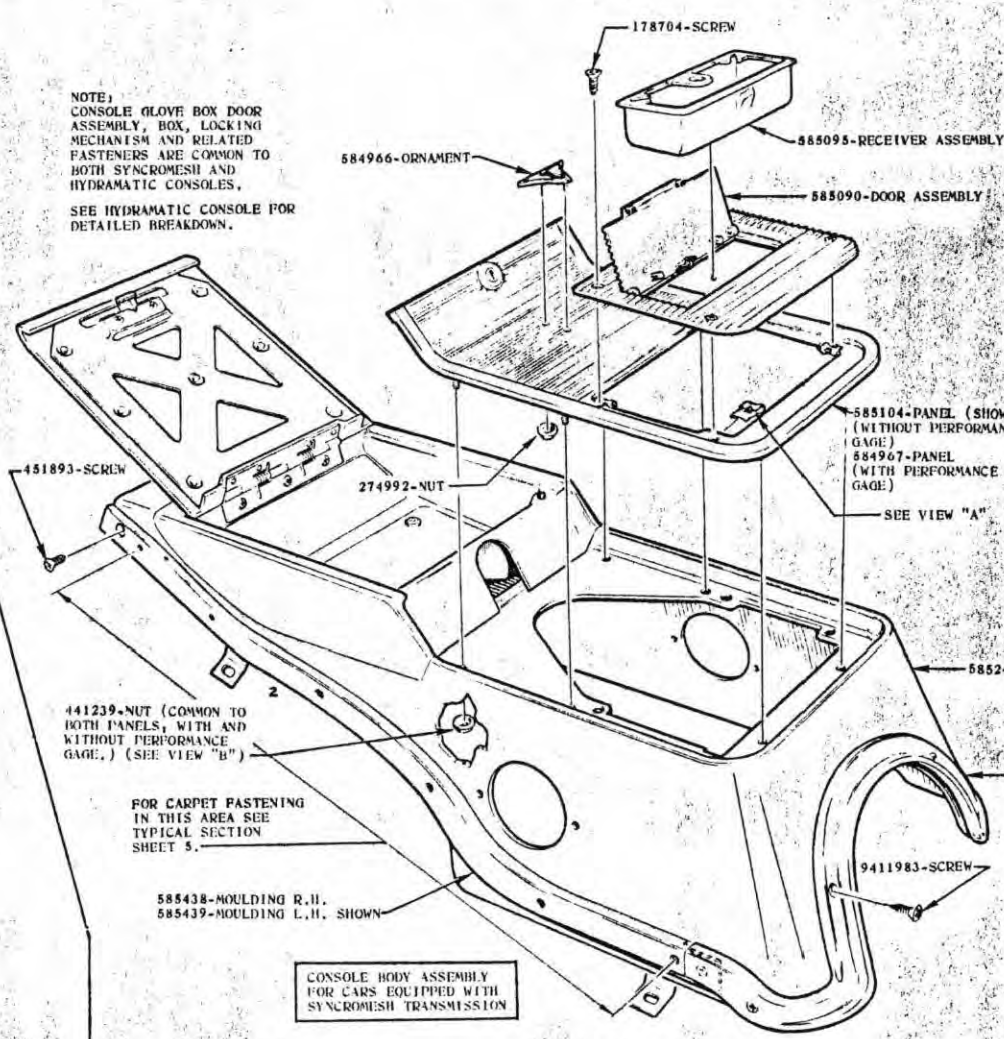
BRACKET USAGE CHART:	
CONSOLE TO FLOOR PAN	
BRACKET NO.	LOCATION:
585108	FRONT R.H. SIDE
585109	CENTER R.H. SIDE
585463	CENTER L.H. SIDE
585109	REAR R.H. SIDE
585109	REAR L.H. SIDE

NOTE;
CONSOLE GLOVE BOX DOOR ASSEMBLY, BOX, LOCKING MECHANISM AND RELATED FASTENERS ARE COMMON TO BOTH SYNCROMESH AND HYDRAMATIC CONSOLES.

SEE HYDRAMATIC CONSOLE FOR DETAILED BREAKDOWN.



INSTALLATION OF PANEL ON CARS WITH AIR CONDITIONING



CONSOLE BODY ASSEMBLY FOR CARS EQUIPPED WITH SYNCROMESH TRANSMISSION

DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAY 2 1962 DR. ROY HFY
FIRST USED 1963 CK. H. VAN PELT
APPR.
REFERENCE 35 055 M35 APPR.
NAME LAYOUT-CONSOLE

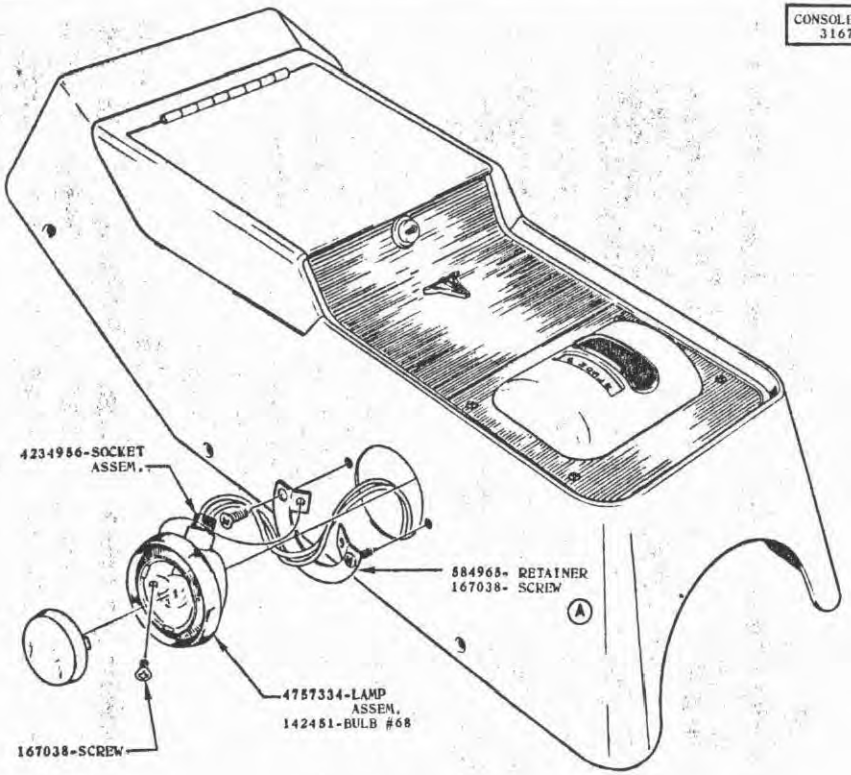
SERIES 3/67-3117-3147
SHEET 6 OF 8

PART NO. 381791

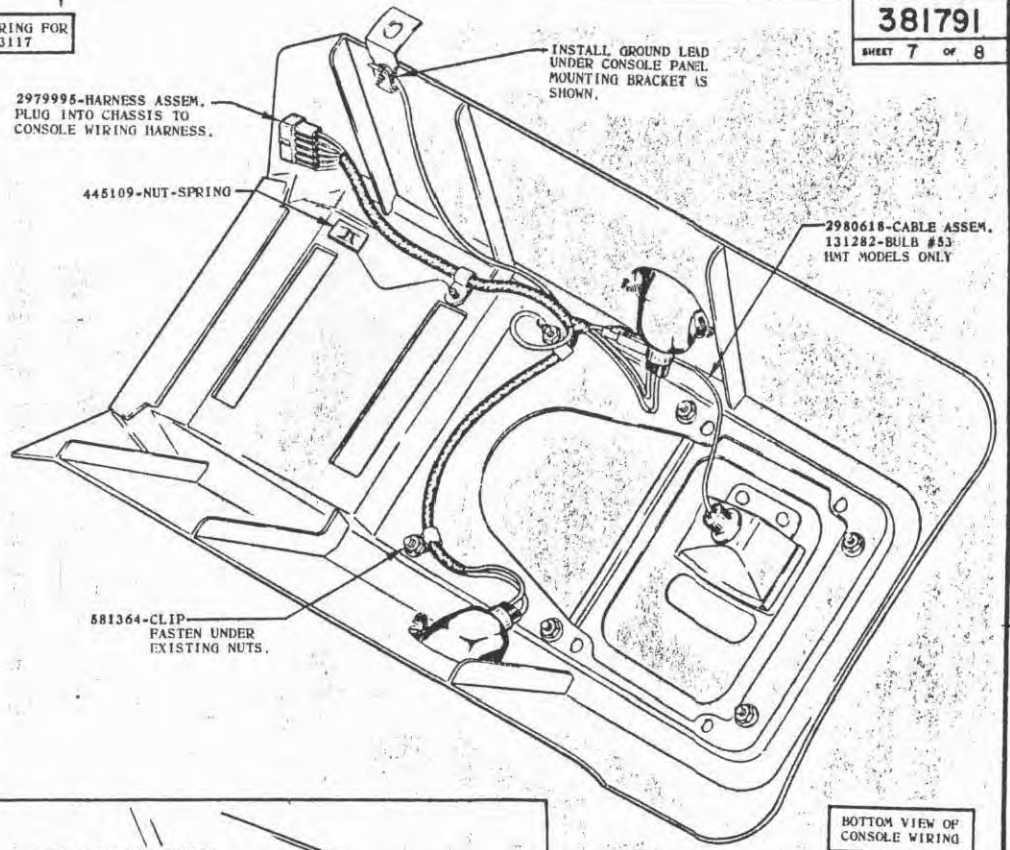
CONSOLE WIRING FOR 3167 & 3117

381791

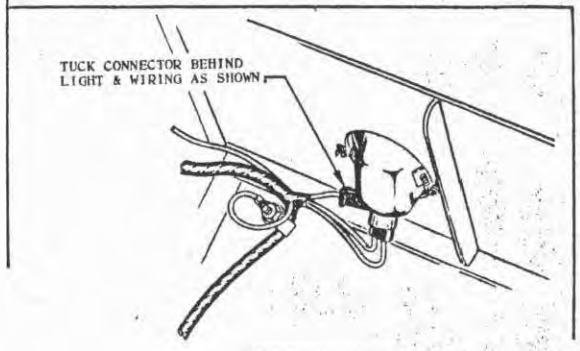
SHEET 7 OF 8



COURTESY LAMPS INSTALLATION



BOTTOM VIEW OF CONSOLE WIRING



WIRING INSTALLATION FOR S.M.T. MODELS

5-23-62	A	NAS 273708 SCREW	C/B	VP
DATE	SYM.	REVISION RECORD	DR.	CK.

DVG. DATE MAY 7, 1962 — DR. G KESTER

FIRST USED 1963 — CK. HVANPELT

APPR. Fred Quant

REFERENCE 35055-M35 — APPR.

NAME LAYOUT-CONSOLE

SERIES 3167-3117

SHEET 7 OF 8

PART NO. 381791

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

INSTALLATION OF OLDSMOBILE SEAT BELTS

381900
SHEET 1 OF 4

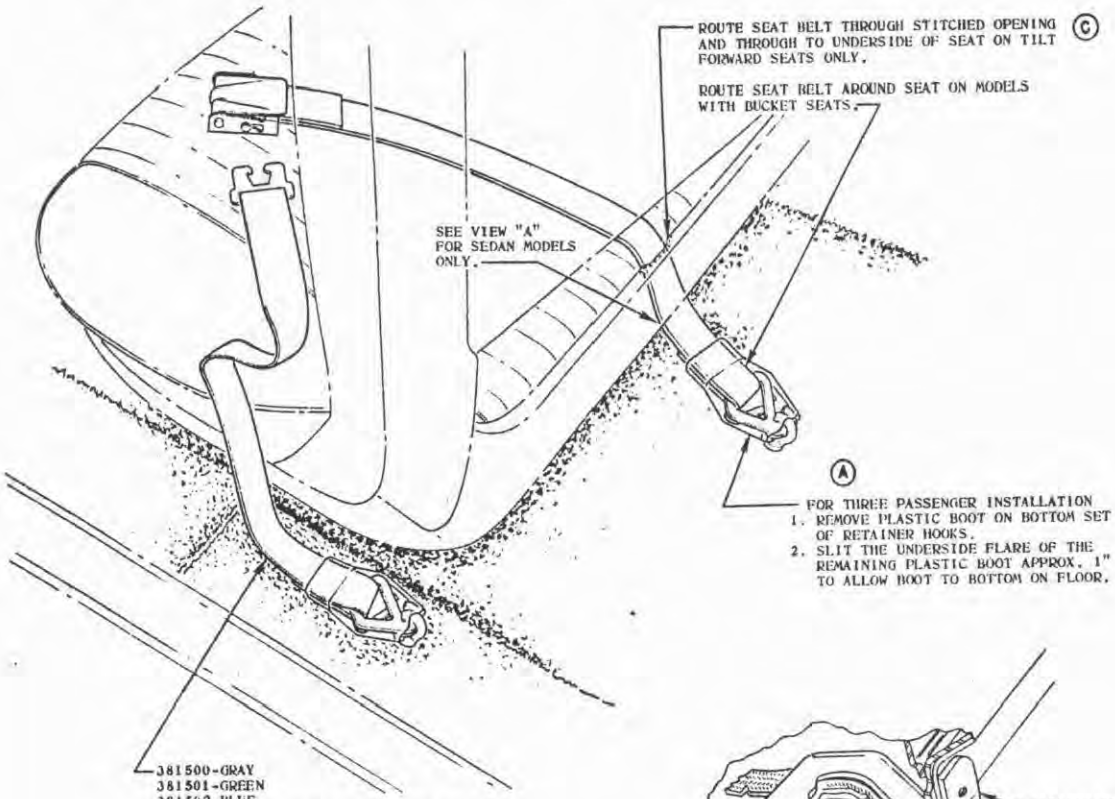
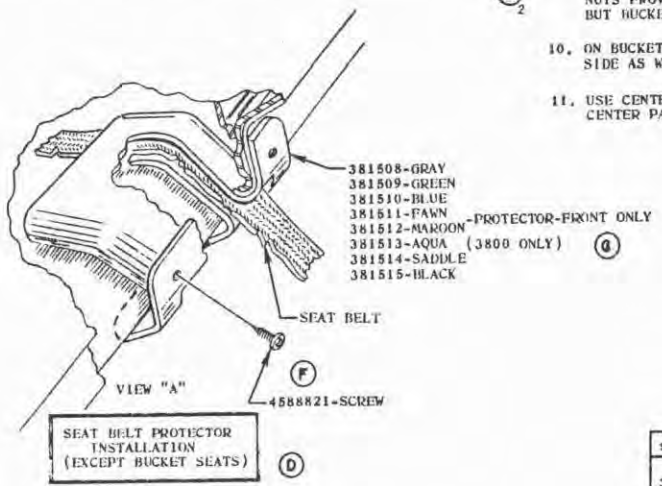


FIG. 1
FRONT SEAT BELT INSTALLATION



SEAT BELT PROTECTOR INSTALLATION (EXCEPT BUCKET SEATS) (D)

GENERAL INSTRUCTIONS- FRONT SEAT
(ALL MODELS)

1. SEE FIGURES 1 & 2 FOR GENERAL ARRANGEMENT.
2. WELD NUTS ARE INCORPORATED IN ALL FLOOR PANS IMMEDIATELY TO THE REAR OF FRONT SEAT FOR MOUNTING EYE BOLTS FOR SEAT BELT INSTALLATION.
3. USING FINGER PRESSURE ON CARPET, LOCATE HOLES IN CARPET JUTE BACKING AT LOCATIONS SHOWN, TO VERIFY LOCATION, RUBBER PLUG IN WELD NUT CAN BE SEEN FROM BELOW THE FLOOR PAN. SEE VIEW "B".
4. CUT 3/4" DIA. HOLE IN CARPET AND USING A BLUNT TOOL REMOVE RUBBER PLUG EXPOSING WELD NUT IN FLOOR PAN. NOTE: ON STARFIRE MODELS CUT A 1-1/2" DIA. HOLE IN INSERT PAD AND 3/4" DIA. HOLE IN CARPET & JUTE AT LOCATION SHOWN. REMOVE RUBBER PLUG FROM INSIDE OF CAR.
5. INSTALL RUBBER WASHER, STEEL WASHER AND EYE BOLT AS SHOWN IN VIEW "C".
6. TO INSTALL BELT ASSY, ENTER RETAINER END OF BELT THRU REAR OF SEAT CUSHION AT SEAT BACK. TO COMPLETE ROUTING THRU SEAT, CUT A SLIT APPROX. 3 INCHES LONG IN SEAT TRIM SKIRT (ON SEAT BACK TRIM). OUTBOARD OR ENGAGEMENT END IS ROUTED AROUND SEAT AS SHOWN.
7. (B) ON ALL MODELS, EXCEPT BUCKET SEATS, INSTALL SEAT BELT PROTECTOR OVER HOOKS ON SEAT BELT AND POSITION AS SHOWN, SEE VIEW "A". HOLES ARE PROVIDED IN SEAT REAR FRAME BAR TO INSTALL PROTECTORS WITH SCREWS IN SEAT FRAME.
8. INSTALL HOOKS ON EYE BOLT AND SECURE WITH NYLON DRIVE RIVET THROUGH HOLES PROVIDED IN HOOK HALVES. SEE VIEW "D".
9. (B)2 ON F85 MODELS, ROUTE BELTS DIRECTLY THROUGH CUSHION AND BACK INDEXING SLOT PROVIDED IN TRIM BOARD UNDER SEAT TRIM SKIRT. CUT SLIT IN TRIM AT THIS LOCATION. NUTS PROVIDED IN SEAT FOR PROTECTOR INSTALLATION ON ALL BUT BUCKET SEATS.
10. ON BUCKET SEATS, ROUTE BELTS AROUND SEATS ON INBOARD SIDE AS WELL AS OUTBOARD.
11. USE CENTER EYE BOLT ANCHORS FOR INSTALLING THIRD OR CENTER PASSENGER INSTALLATION.

DATE	SYM.	REVISION RECORD	DR	CK.
10-30-62	G2	"3800 ONLY" ADDED	BP	VP
8-16-62	F	4588821 WAS 4585328	[illegible]	[illegible]
7-25-62	E	NOTE ADDED	RG	VP
7-12-62	D	USAGE REVISED	RG	VP
7-12-62	C	ROUTING NOTE REV.	RG	VP
7-12-62	B2	INSTRUCTION NOTE REV.	RG	VP
5-22-62	A	NOTE ADDED	EJR	VP

DWG. DATE MAY 15 1962 DR B. HILL
FIRST USED 1963 CK. H. VAN PELT
REFERENCE APPR. [signature]
APPR. [signature]

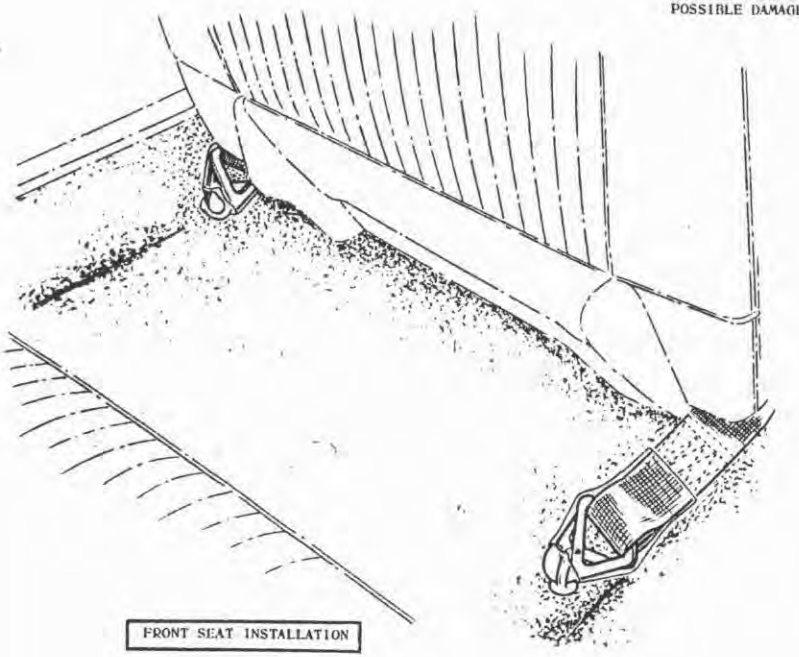
SERIES 3000 - 3100
SERIES 32-35-36-38-3900
SHEET 1 OF 4

NAME LAYOUT - SEAT BELTS
PART NO. 381900

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

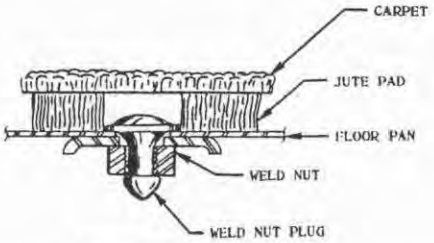
32-35-36-38-3900

NOTE: BUCKLES ALWAYS TO BE ON INBOARD SIDE TO ELIMINATE POSSIBLE DAMAGE FROM DOOR CLOSING.



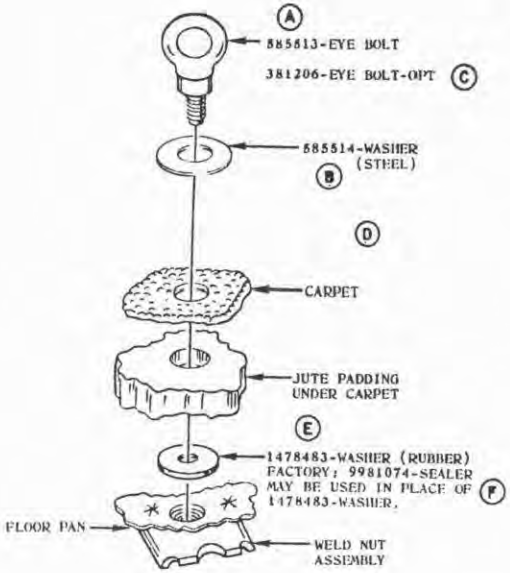
FRONT SEAT INSTALLATION

3000 - 3100



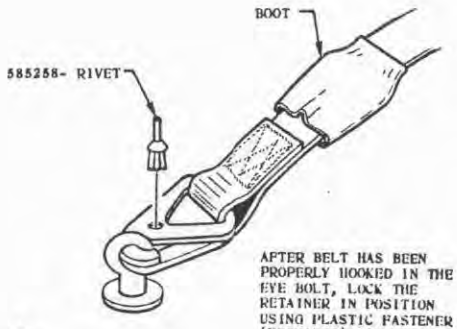
VIEW "B"

TYPICAL SECTION OF WELD PLUG (ALL SERIES)



VIEW "C"

FOR FRONT SEAT BELT INSTALLATION (ALL SERIES)



AFTER BELT HAS BEEN PROPERLY HOOKED IN THE EYE BOLT, LOCK THE RETAINER IN POSITION USING PLASTIC FASTENER (PROVIDED). INSERT THE PRONGS THROUGH THE HOLE AND HIT THE PLASTIC PIN, DRIVING IT BETWEEN THE PRONGS.

VIEW "D"

SEAT BELT TO EYE BOLT INSTALLATION

(ALL SERIES)

x	4-10-63	F	NOTE ADDED	PS	VP
+	1-5-63	E	WAS 565560 WASHER	KE	VP
+	1-9-63	D	CARPET PAD REMOVED	KE	VP
x	8-29-62	C	381206-BOLT ADDED	EJR	VP
+	6-13-62	B	WAS 1478482-WASHER	EJR	D.T.
+	6-13-62	A	WAS 1478481-EYE BOLT	EJR	D.T.
	DATE	SYM.	REVISION RECORD	DR	CK.

x DWG. DATE MAY 15 1962 DR. C.V. BUCHANAN
FIRST USED 1963 CK. H. VAN PELT
APPR. [signature]
REFERENCE APPR. [signature]

SERIES 3000 - 3100
SERIES 32-35-36-38-390C
SHEET 2 OF 4

NAME LAYOUT - SEAT BELTS

PART NO. 381900

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

381900
SHEET 3 OF 4

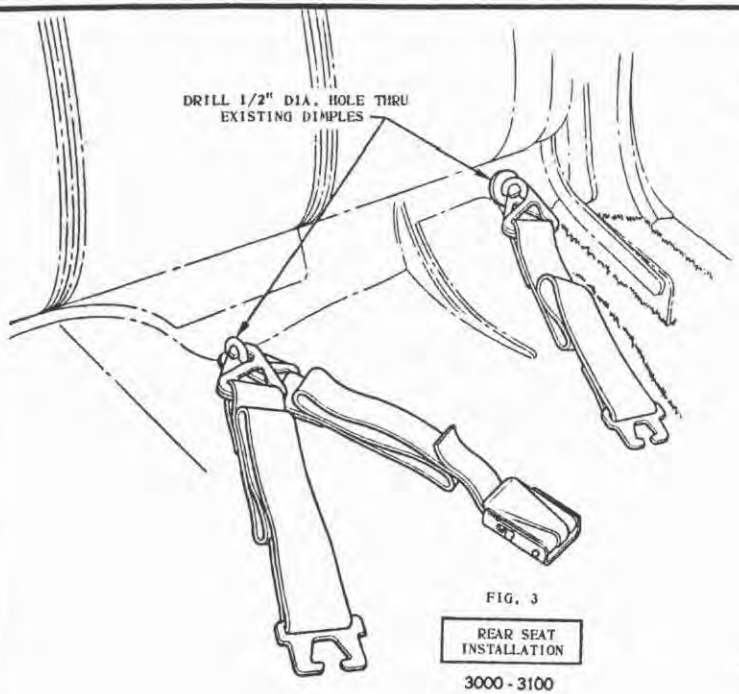


FIG. 3

REAR SEAT INSTALLATION

3000 - 3100

GENERAL INSTRUCTIONS

1. REMOVE REAR SEAT BACK AND CUSHION.
2. LOCATE DIMPLES PROVIDED IN FLOOR PAN AND DRILL 1/2" DIA. HOLES AS REQUIRED.
3. INSTALL EYE BOLT TO FLOOR PAN AS SHOWN IN VIEW "E".
4. FASTEN BELT HOOKS TO EYE BOLT.
5. INSTALL DRIVE RIVET AS SHOWN IN VIEW "D".
6. REINSTALL SEAT BACK AND CUSHION.

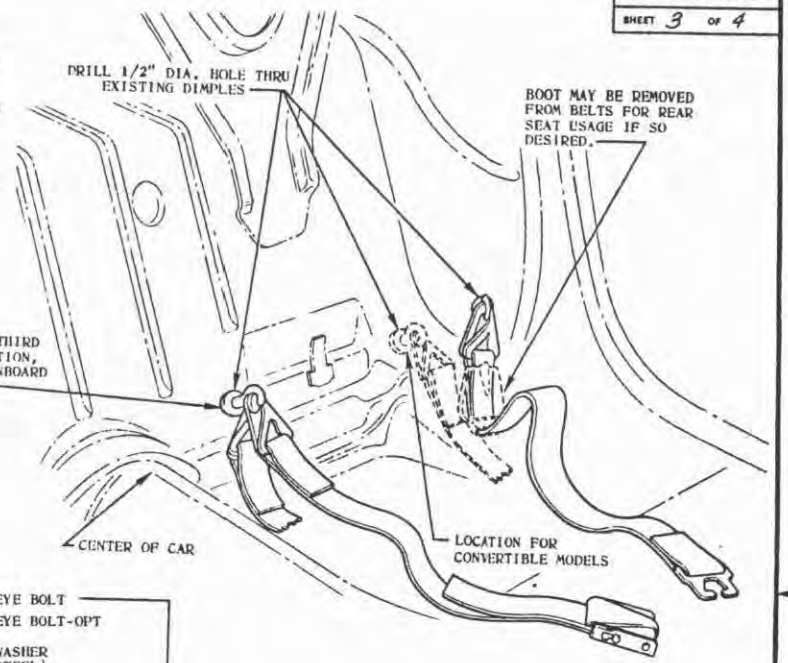
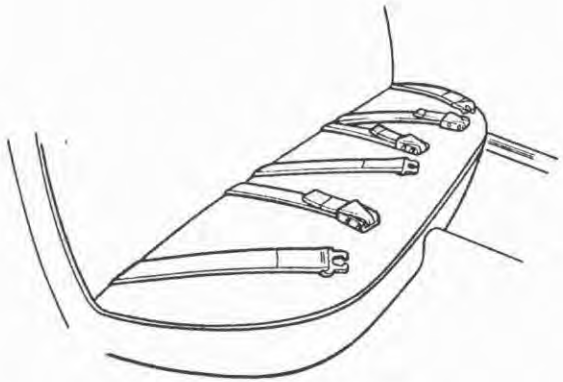


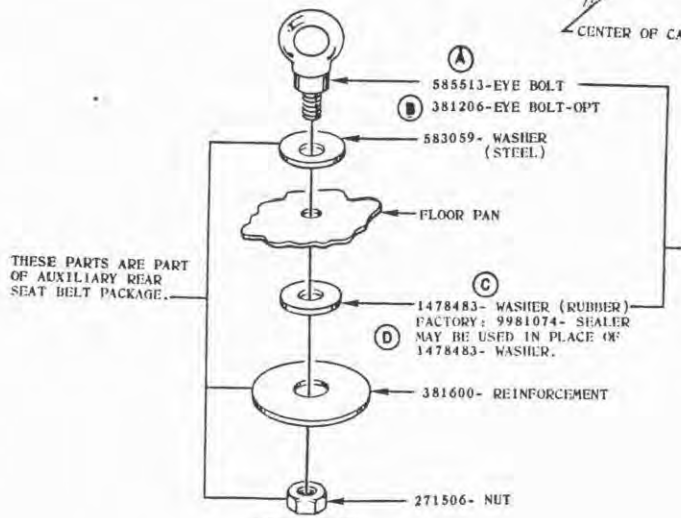
FIG. 4

REAR SEAT INSTALLATION

32-35-36-38-3900



BELT POSITION ON SEAT (ALL SERIES)



TYPICAL FASTENING THRU FLOOR PAN FOR REAR SEAT BELT INSTALLATION (ALL SERIES)

4-10-63	D	NOTE ADDED	JE	VP
4-10-63	C	WAS 565560	PE	VP
8-27-62	B	381206-EYE BOLT ADDED	EJR	VP
6-13-62	A	WAS 1478481-EYE BOLT	EJR	DE
DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAY 15 1962 DR. DON TITUS
FIRST USED 1963 CK. H VAN PELT
APPR. [illegible]
REFERENCE APPR. [illegible]

SERIES 3000 - 3100
SERIES 32-35-36-38-3900
SHEET 3 OF 4

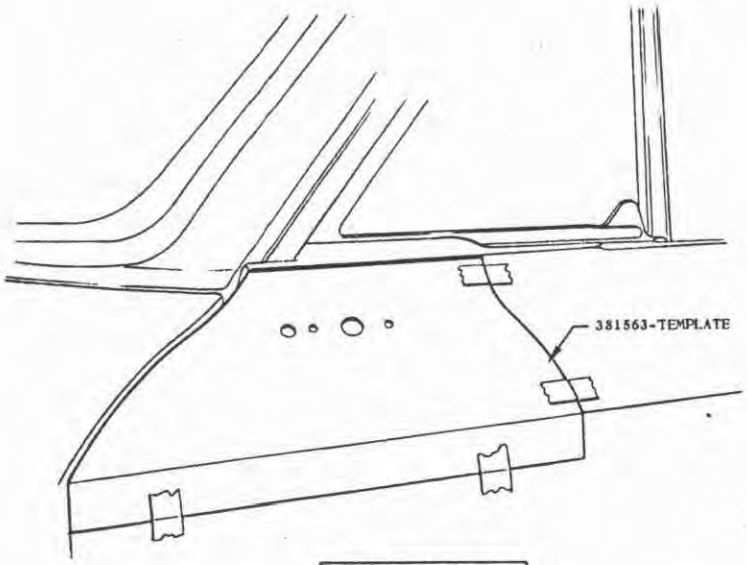
NAME LAYOUT - SEAT BELTS

PART NO. 381900

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

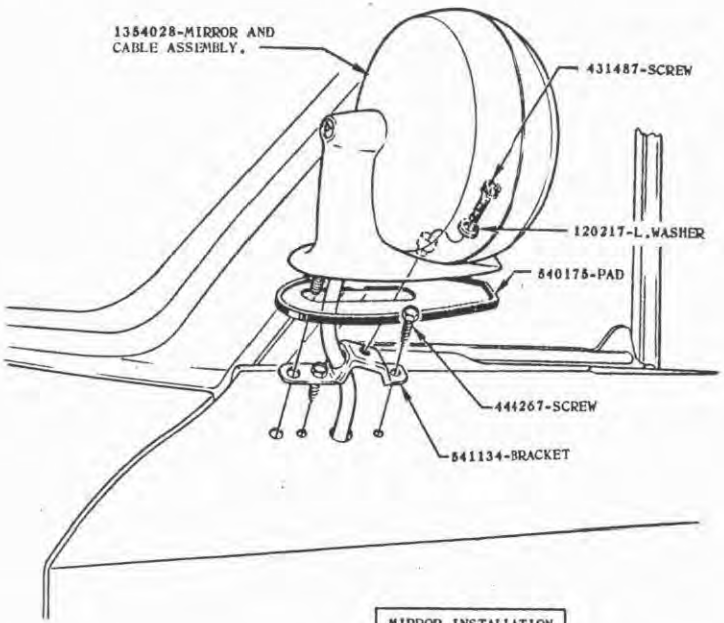
INSTALLATION OF OLDSMOBILE REMOTE CONTROLLED MIRROR

381799
SHEET 1 OF 2



TEMPLATE APPLICATION MIRROR MOUNTING

FIG. 1



MIRROR INSTALLATION TO DOOR PANEL

FIG. 2

GENERAL INSTRUCTIONS

TAPE TEMPLATE-381563 TO L.H. OUTER DOOR PANEL AND DRILL HOLES AS REQUIRED ON TEMPLATE. SEE FIG. 1

TAPE TEMPLATE-381804 TO DOOR TRIM PANEL AND CUT OUT NECESSARY HOLE IN DOOR TRIM. SEE FIG. 5

THREAD CONTROL CABLES THRU MOUNTING BRACKET 541134 AND FASTEN BRACKET TO DOOR PANEL. FASTEN MIRROR ASSEMBLY TO BRACKET. SEE FIG. 2

FISH OUT CONTROL CABLES THRU 1-1/2" DIA. HOLE IN DOOR TRIM PANEL. SEE FIG. 3

ASSEMBLE CABLES TO CONTROL ASSEMBLY USING NEEDLE NOSE PLIERS FOR THIS PURPOSE. BE SURE TO HAVE CONTROL ASSEMBLY IN PROPER POSITION AND MATCH COLOR CODING ON CABLES TO COLOR CODE ON CONTROL. SEE FIG. 4

FASTEN CONTROL ASSEMBLY TO DOOR PANEL AND SNAP ON ESCUTCHEON OVER CONTROL.

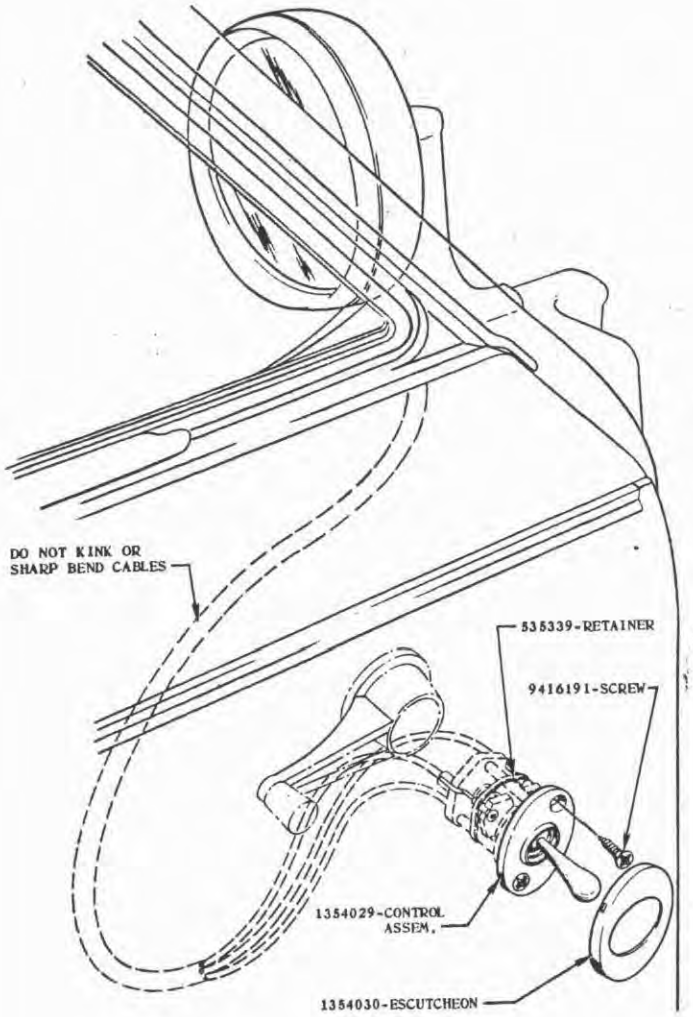
CHECK CONTROL FOR PROPER OPERATION.

DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAY 10, 1962 DR. G KESTER
FIRST USED 1963 CK. H. VAN PELT
REFERENCE 350931 80 APPR.
APPR.
NAME LAYOUT - REMOTE CONTROL REAR VIEW MIRROR
SERIES 3000 - 3100
SHEET 1 OF 2
PART NO. 381799

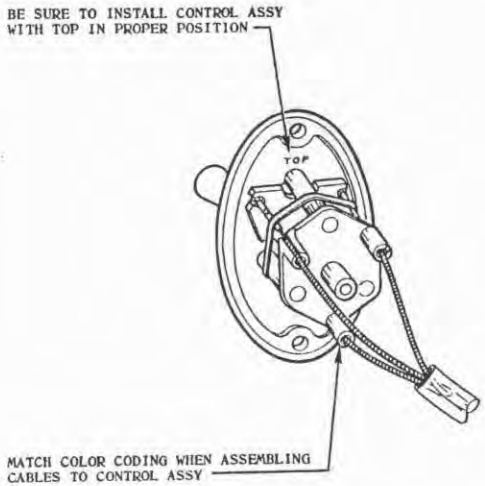
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

381799
SHEET 2 OF 2



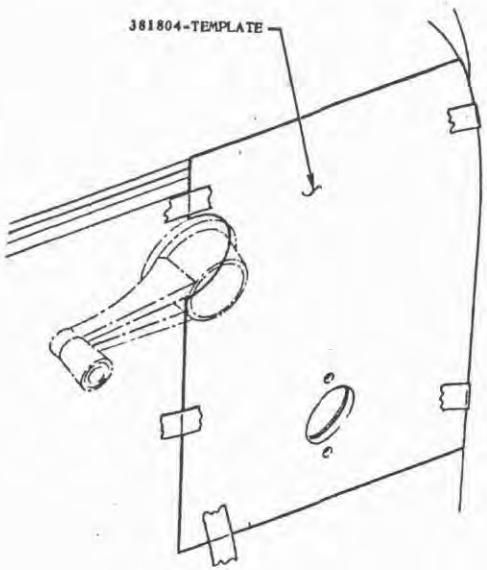
CONTROL INSTALLATION L.H. DOOR PANEL

FIG. 3



CONTROL ASSEMBLY REAR VIEW

FIG. 4



TEMPLATE APPLICATION L.H. DOOR TRIM PANEL CUTOUT

FIG. 5

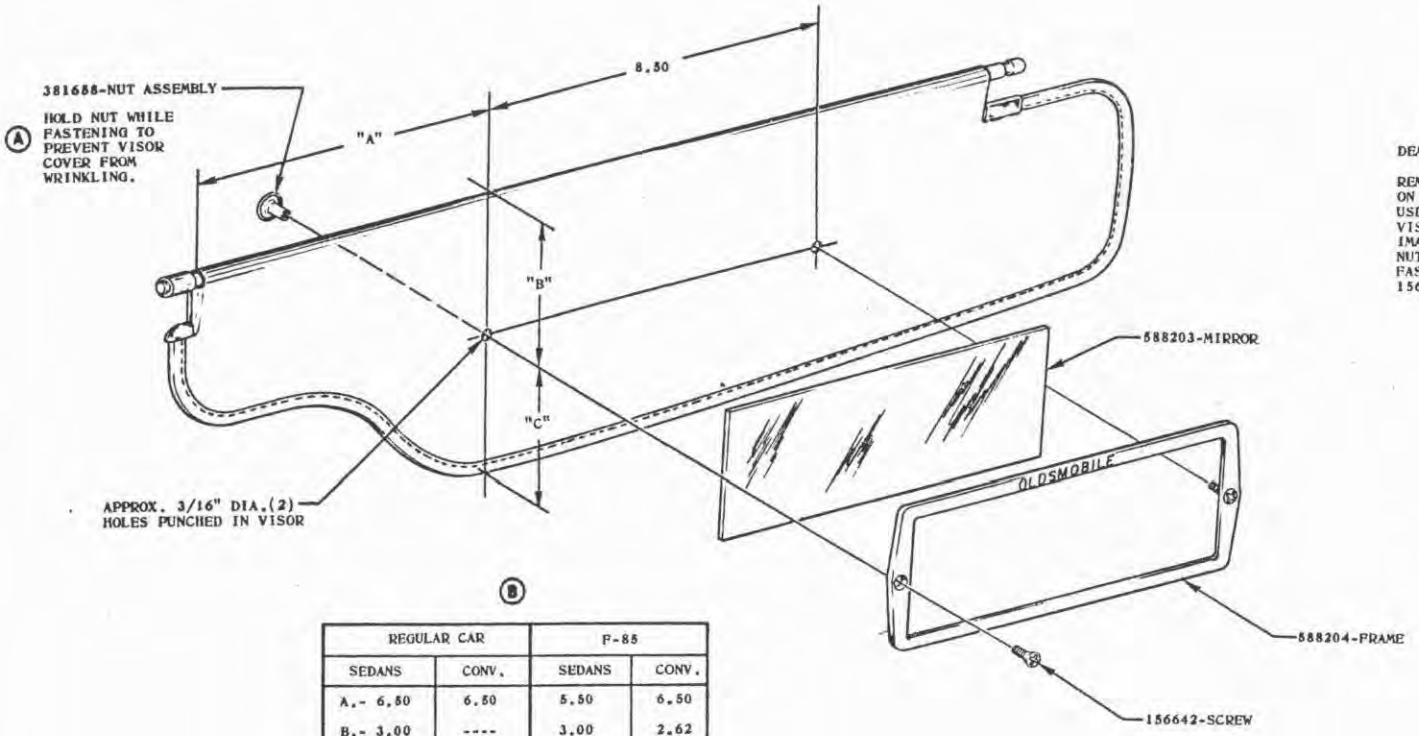
DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAY 31 1962 DR. KESTER-ROE
FIRST USED 1963 CK. H. VAN PELT APPR.
REFERENCE 350336 80 APPR.
NAME LAYOUT-REMOTE CONTROL REAR VIEW MIRROR
SERIES 3000-3100
SHEET 2 OF 2
PART NO. 381799

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

INSTALLATION OF OLDSMOBILE VISOR VANITY MIRROR

380062
SHEET 1 OF 1



Ⓑ

REGULAR CAR		F-85	
SEDANS	CONV.	SEDANS	CONV.
A.- 6.50	6.50	5.50	6.50
B.- 3.00	----	3.00	2.62
C.- ----	2.50	----	----

INSTALLATION INSTRUCTIONS

DEALERS:

REMOVE VISOR FROM CAR AND SUPPORT VISOR ON EDGE OF TABLE FOR EASE OF PIERCING. USE AWL TO PIERCE THE TWO HOLES IN THE VISOR ASSEMBLY. HOLES ARE TO BE APPROXIMATELY 3/16 INCH DIA. TO ACCEPT 381688 NUT. DO NOT DRILL HOLES IN THE VISOR. FASTEN MIRROR AND FRAME TO VISOR WITH 156642 SCREWS.

DATE	SYM.	REVISION RECORD	DR.	CK.
8-9-62	C	USAGE REVISED	GK	VD
8-9-62	B	HOLE LOCATIONS REV.	GK	VD
6-27-62	A	NOTE ADDED	GK	VD

DWG. DATE MAY 30, 1962 — DR. G. KESTER
FIRST USED 1963 — CK. H. VAN PELT — APPR.
REFERENCE 35Y60 #80 — APPR.
NAME LAYOUT - VISOR VANITY MIRROR
PART NO. 380062

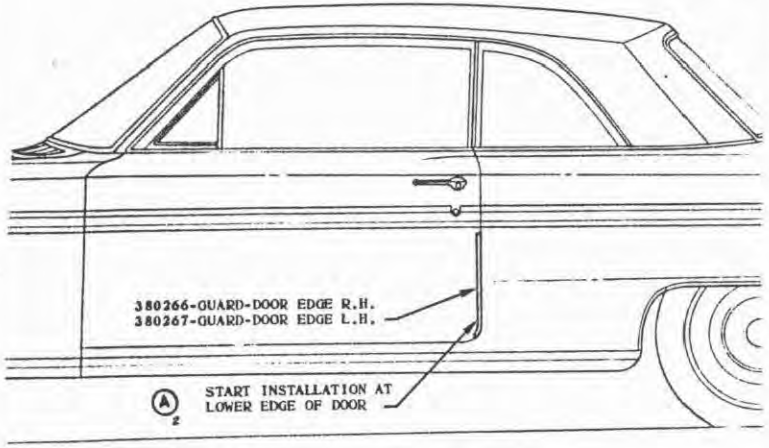
Ⓒ
3000 SERIES 3100
32-35-36-38-3900
SHEET / OF /

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

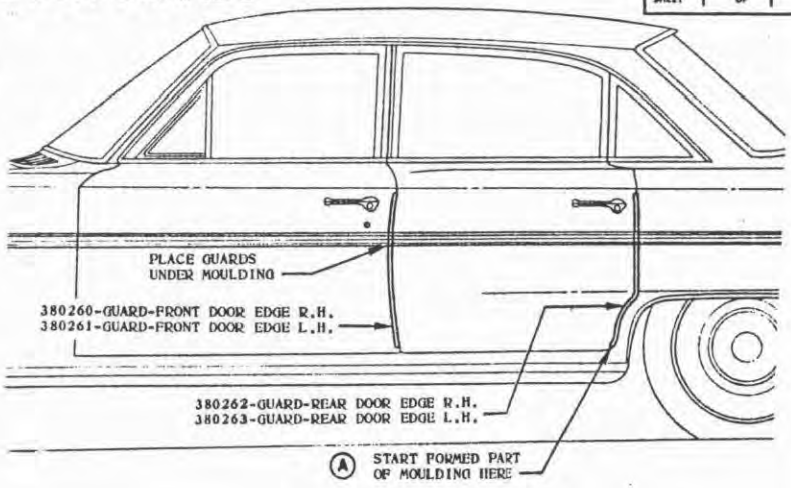
INSTALLATION OF OLDSMOBILE DOOR GUARDS

381803
SHEET 1 OF 1

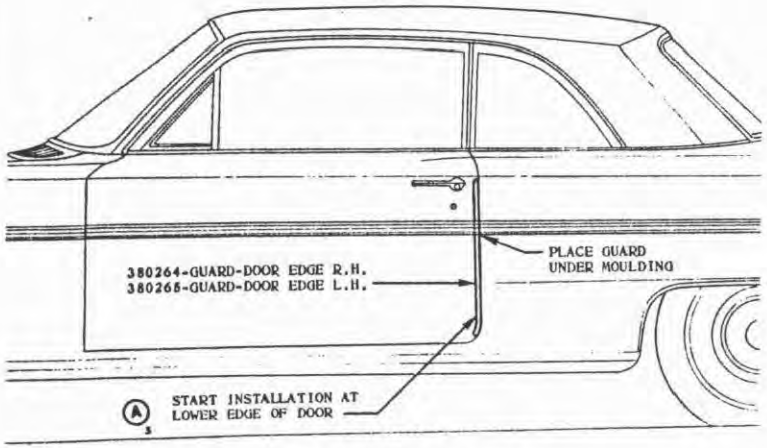
GENERAL INSTRUCTIONS
PLACE GUARD IN POSITION ON REAR EDGE OF DOOR AS SHOWN AND TAP OVER EDGE USING RUBBER MALLET OR BLOCK OF WOOD, UNTIL GUARD IS FIRMLY SEATED ON DOOR EDGE.



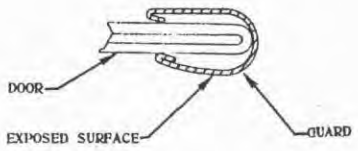
FOR ALL 3147 MODELS



FOR ALL 4DOOR MODELS



FOR ALL 2 DOOR MODELS EXCEPT 3147



TYPICAL SECTION THRU REAR EDGE OF DOOR & GUARD

10-12-62	A3	INSTALLATION NOTES ADDED		
DATE	SYM.	REVISION RECORD	DR.	CK.
DWG DATE JULY 17, 1962			DR. JOE GALL	
FIRST USED 1963			CK. H. VANPELT	
			APPR.	
REFERENCE			APPR.	

NAME
LAYOUT-DOOR GUARDS

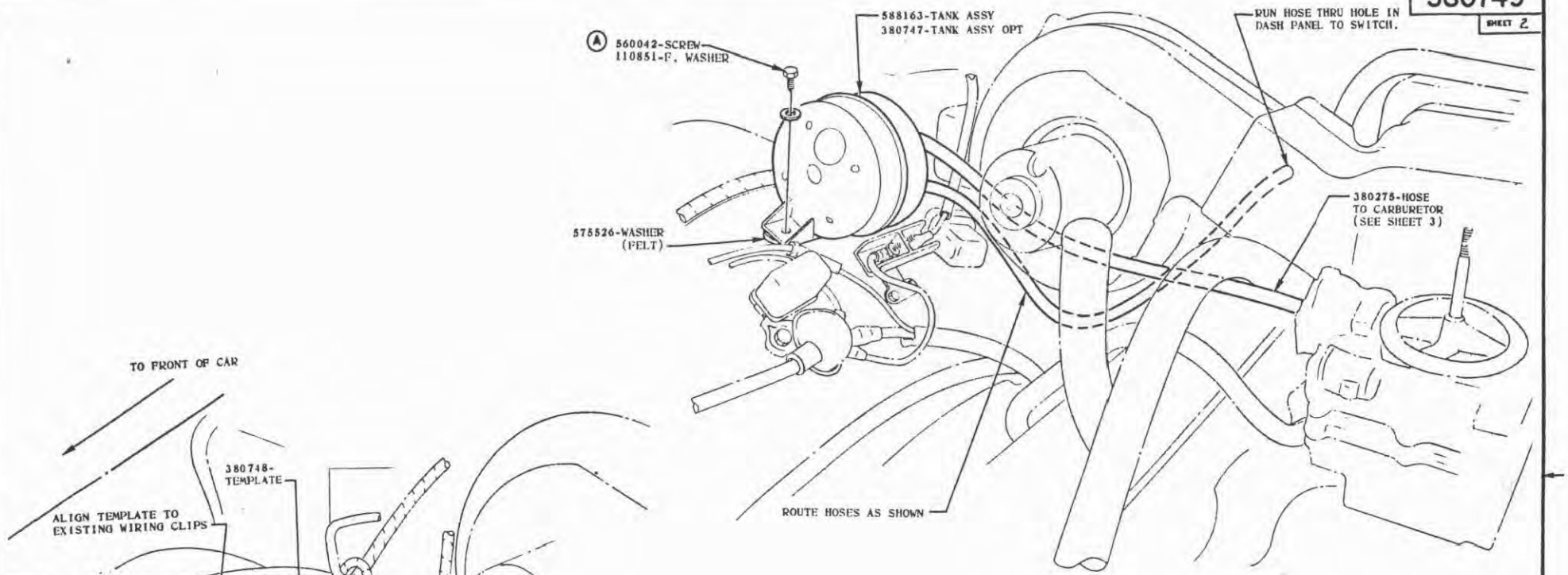
SERIES 3000 - 3100
SHEET 1 OF 1

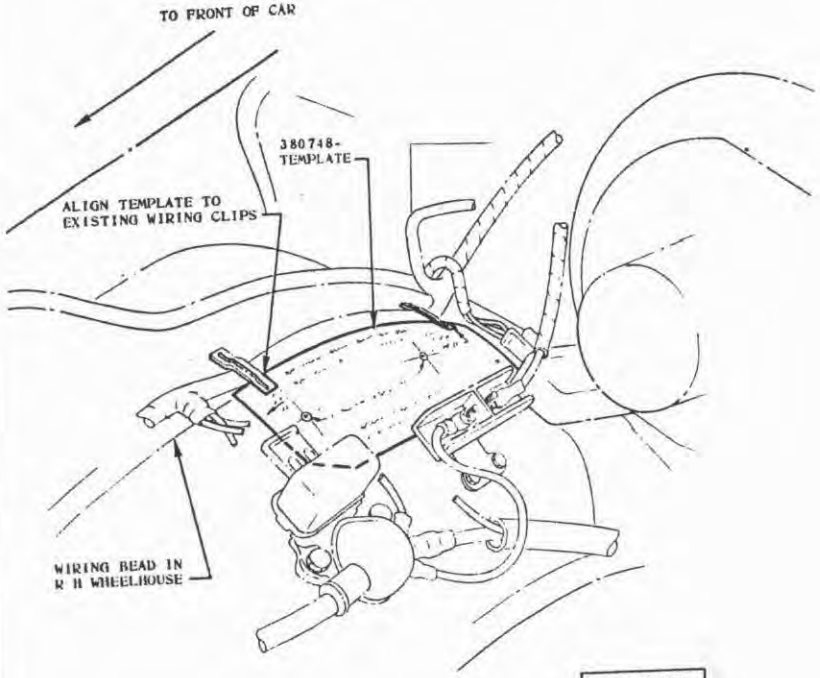
PART NO. 381803

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

380749

SHEET 2





TEMPLATE APPLICATION

VACUUM TANK INSTALLATION IN ENGINE COMPARTMENT FOR ALL CARS EXCEPT CONVERTIBLES

DATE	SYM.	REVISION RECORD	DR	CK.
9-18-62	A	WAS 4/6134 SCREW	& E	VP
DWG. DATE AUGUST 20, 1962			DR ED J. ROE	
FIRST USED 1963			CK H. VAN PELT	
REFERENCE			APPR. G. L. NIHART	

NAME
LAYOUT – VACUUM TRUNK LATCH

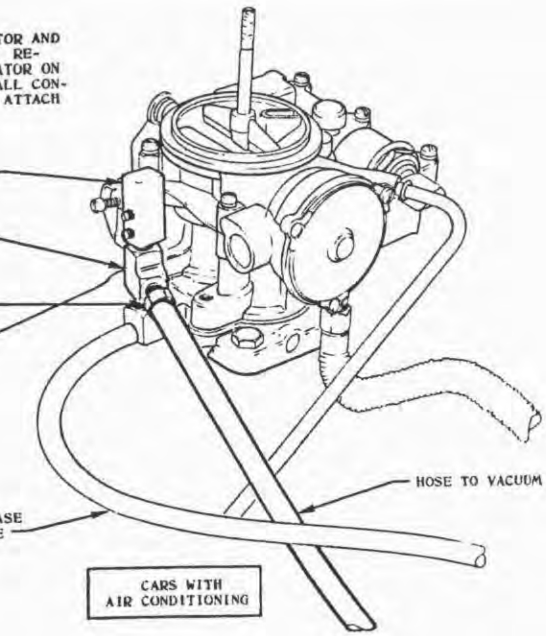
PART NO. 380749

SERIES 3000 - 3100

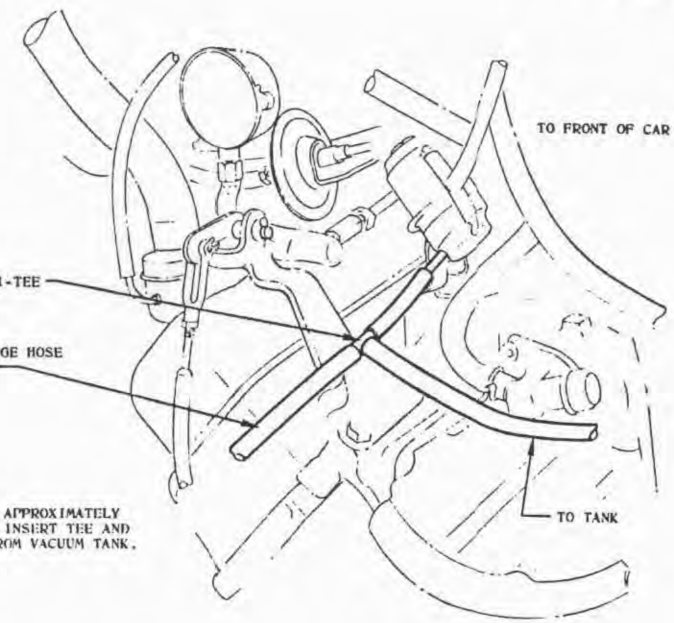
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

380749
SHEET 3

TO INSTALL TEE:
REMOVE CARB AIRIATOR AND REPLACE WITH TEE. RE-INSTALL CARB AIRIATOR ON TOP OF TEE. INSTALL CONNECTOR TO TEE AND ATTACH HOSE AS SHOWN.



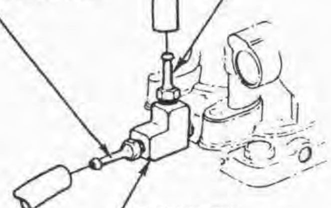
CARS WITH AIR CONDITIONING



CUT GAGE HOSE APPROXIMATELY 2" FROM END. INSERT TEE AND ATTACH HOSE FROM VACUUM TANK.

3147 MODELS (TURBO-CHARGER)

REMOVE CONNECTOR FROM CARBURETOR AND INSTALL TEE. INSTALL CONNECTOR IN TEE. ATTACH CRANKCASE VENTILATION HOSE.



TO GAIN CLEARANCE FOR THREADING TEE INTO CARBURETOR, IT WILL BE NECESSARY TO LOOSEN CARBURETOR MOUNTING BOLTS AND RAISE CARBURETOR AS REQUIRED.

ALL CARS EXCEPT 3147 AND AIR CONDITIONING MODELS

HOSE CONNECTIONS TO CARBURETOR

FACTORY NOTE
FOR STATION WAGONS

INSTALLATION OF HOSE, TANK, AND SWITCH IN AREA OF INSTRUMENT PANEL, ENGINE COMPARTMENT, AND R H SHROUD SAME FOR STATION WAGONS AS SHOWN FOR SEDANS.

DATE	SYM.	REVISION RECORD	DR	CK.

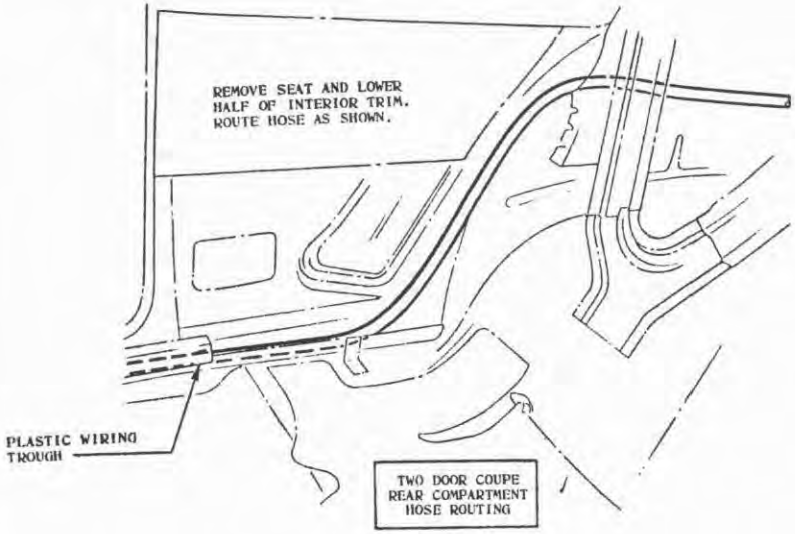
DWG. DATE AUGUST 20, 1962	DR ED J. Ru
FIRST USED 1963	CK H. VAN PEL.T APPR
REFERENCE	APPR G. L. N[illegible]
NAME LAYOUT VACUUM TRUNK LATCH	
	PART NO. 380749

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

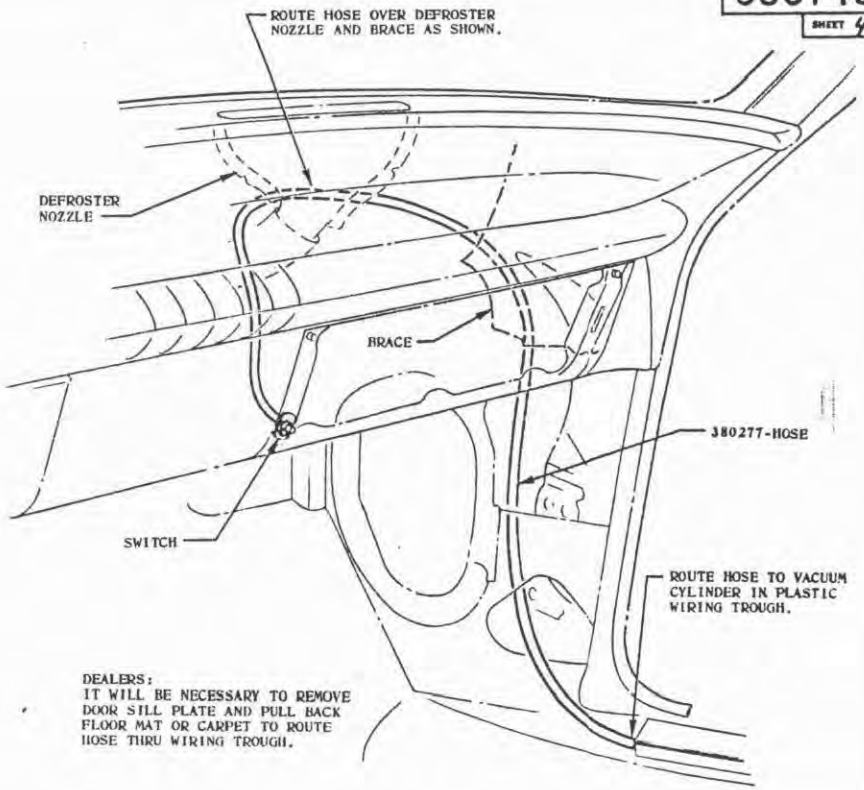
SERIES 3000 - 3100

380749

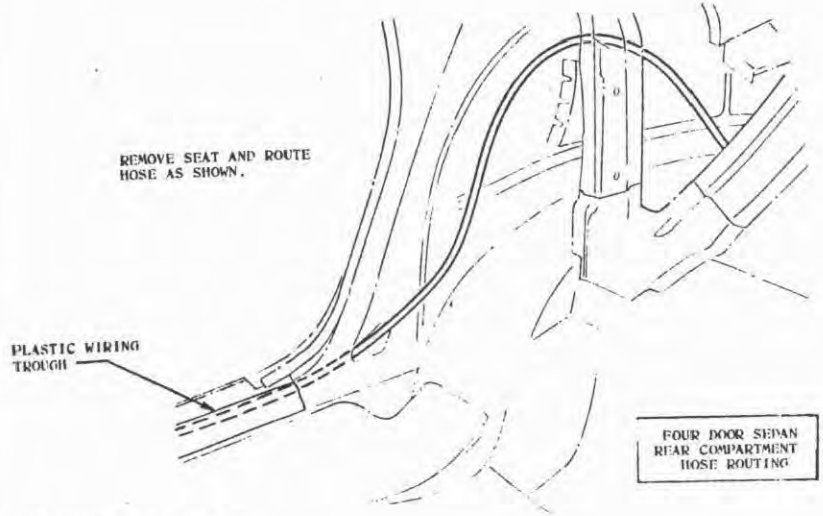
SHEET 4



TWO DOOR COUPE REAR COMPARTMENT HOSE ROUTING



DEALERS:
IT WILL BE NECESSARY TO REMOVE DOOR SILL PLATE AND PULL BACK FLOOR MAT OR CARPET TO ROUTE HOSE THRU WIRING TROUGH.



FOUR DOOR SEDAN REAR COMPARTMENT HOSE ROUTING

VACUUM HOSE ROUTING
SWITCH TO TRUNK CYLINDER
(ALL MODELS EXCEPT CONVERTIBLES)

DATE	SYM.	REVISION RECORD	DR	CK

DWG DATE AUG 20 1962	DR ED J. ROE
FIRST USED 1963	CK H. VAN PELT
	APPR
REFERENCE	APPR G. L. NIHART

NAME
LAYOUT-VACUUM TRUNK LATCH

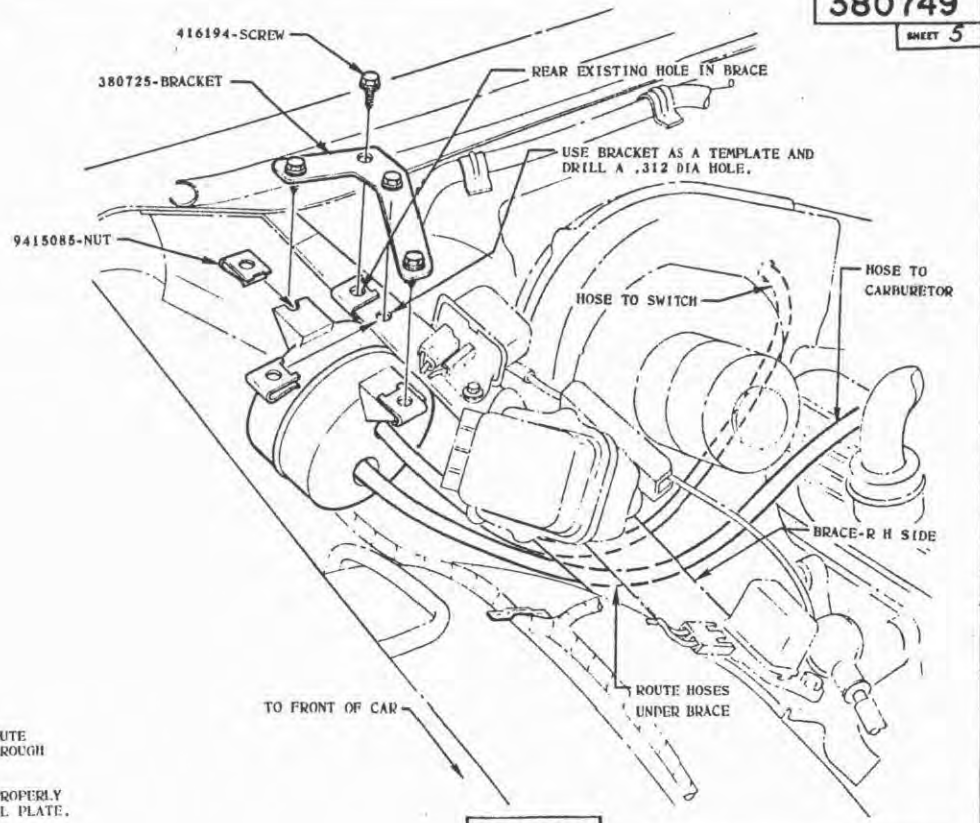
PART NO. 380749

SERIES 3000 - 3100

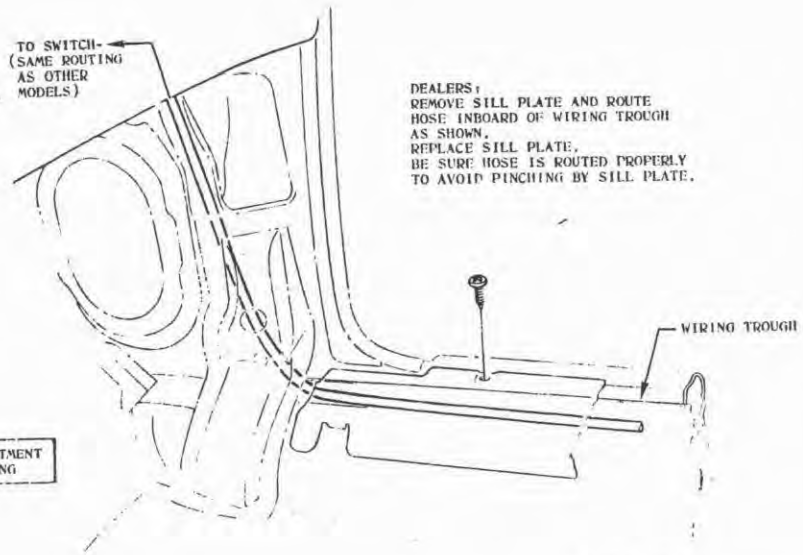
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

380749

SHEET 5



VACUUM TANK INSTALLATION



DEALERS:
REMOVE SILL PLATE AND ROUTE HOSE INBOARD OF WIRING TROUGH AS SHOWN.
REPLACE SILL PLATE.
BE SURE HOSE IS ROUTED PROPERLY TO AVOID PINCHING BY SILL PLATE.

FRONT COMPARTMENT HOSE ROUTING

CONVERTIBLE VACUUM TANK AND HOSE INSTALLATION

(BALANCE OF INFORMATION SAME AS SHOWN FOR OTHER MODELS)

DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE AUGUST 20 1962	DR. ED J. ROE
FIRST USED 1963	CK. H. VAN PELT
REFERENCE	APPR. G. C. NEIMEIER

NAME
LAYOUT-VACUUM TRUNK LATCH

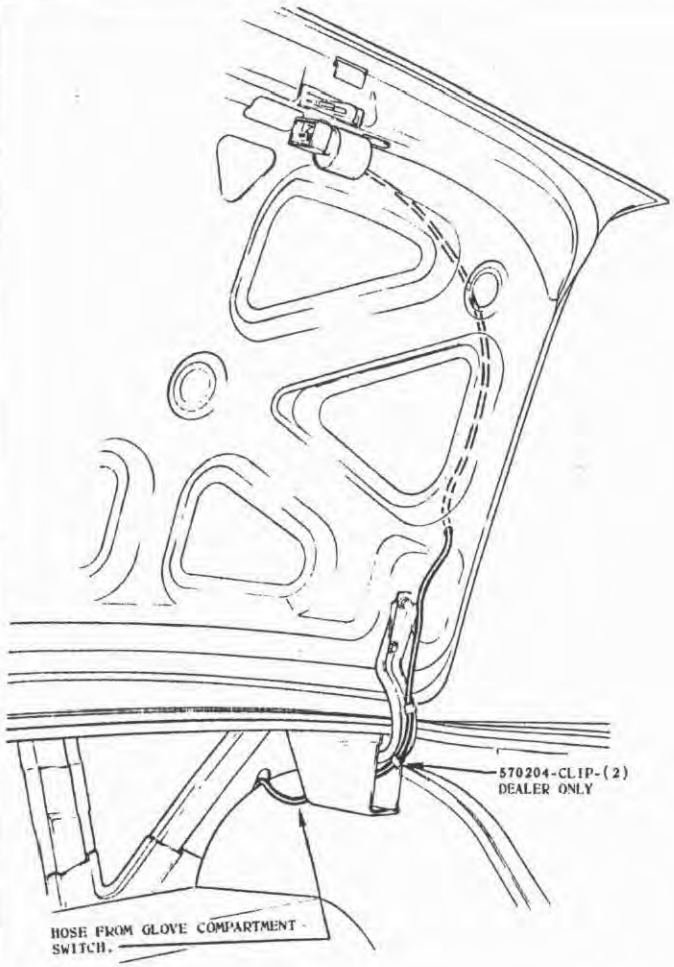
PART NO. 380749

SERIES 3167

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

380749

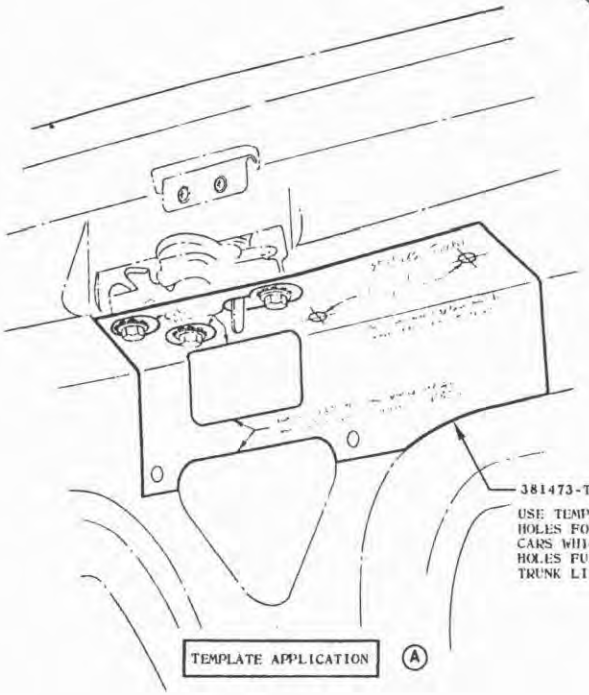
SHEET 6



TRUNK COMPARTMENT HOSE ROUTING

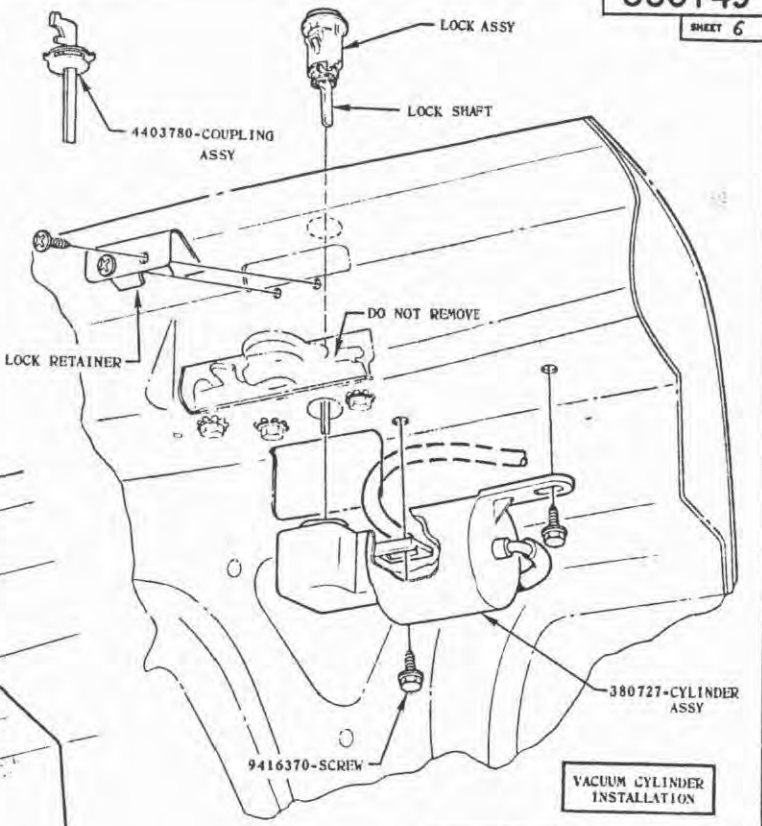
INSTALLATION OF CYLINDER ASSY

REMOVE LOCK RETAINER.
REMOVE LOCK ASSY.
AFTER ROUTING HOSE AS PREVIOUSLY SHOWN, ATTACH TO CYLINDER ASSY.
INSTALL CYLINDER ASSY USING EXISTING HOLES.
REMOVE LOCK SHAFT AND REPLACE WITH COUPLING ASSY.
REINSTALL LOCK ASSY, INSERTING COUPLING ASSY SHAFT INTO SLOT IN CYLINDER ASSY.
REPLACE LOCK RETAINER.



USE TEMPLATE TO LOCATE MOUNTING HOLES FOR VACUUM CYLINDERS ON CARS WHICH DO NOT HAVE PRE-DRILLED HOLES FURNISHED IN THE INNER TRUNK LID PANEL.

TEMPLATE APPLICATION (A)



VACUUM CYLINDER INSTALLATION

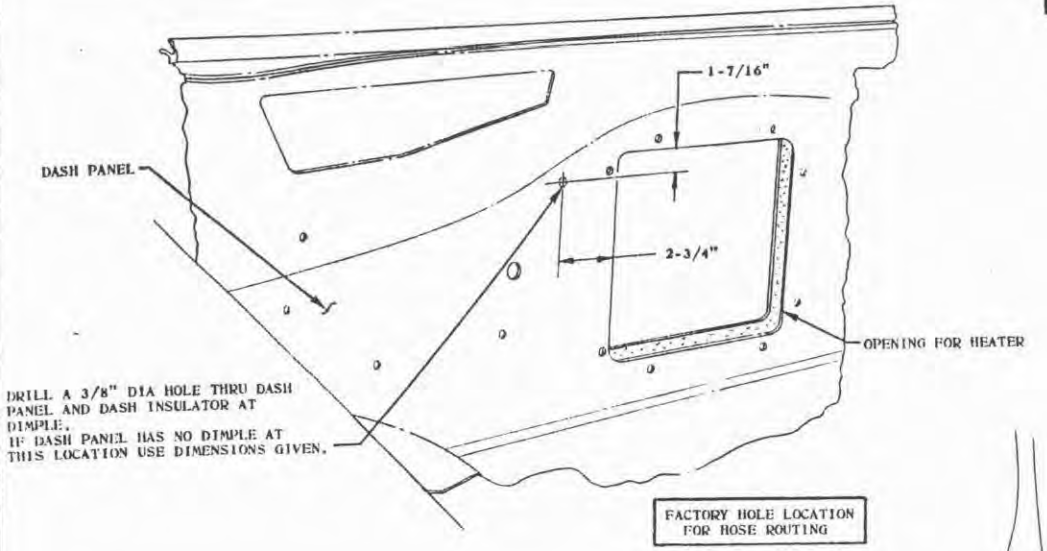
DATE	SYM	REVISION RECORD	DR	CK
9-11-62	A	VIEW ADDED	R	VP

DWG. DATE AUGUST 20, 1962 DR ED J. ROE
FIRST USED 1963 CK H.VAN PELT
APPR
REFERENCE 35A91 APPR G.L. NIHART
NAME LAYOUT-VACUUM TRUNK LATCH
PART NO. 380749
SERIES 3000 - 3100

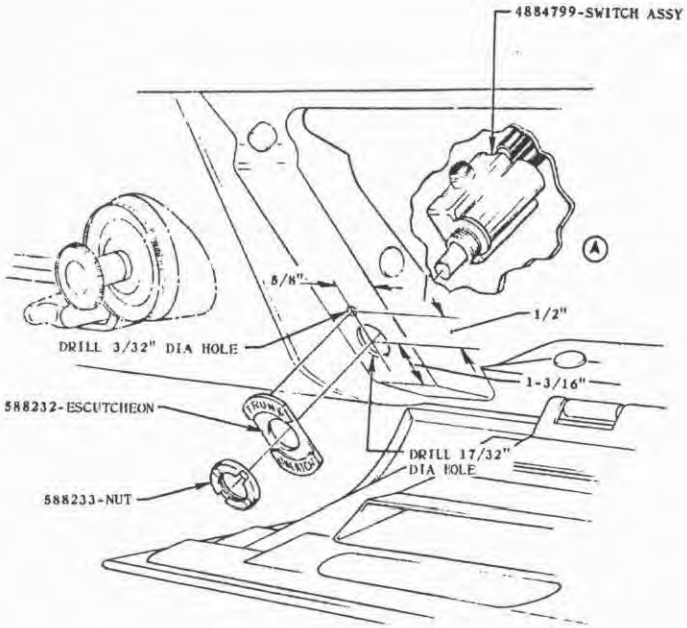
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

INSTALLATION OF OLDSMOBILE REMOTE TRUNK RELEASE

380749
SHEET 1 OF 6

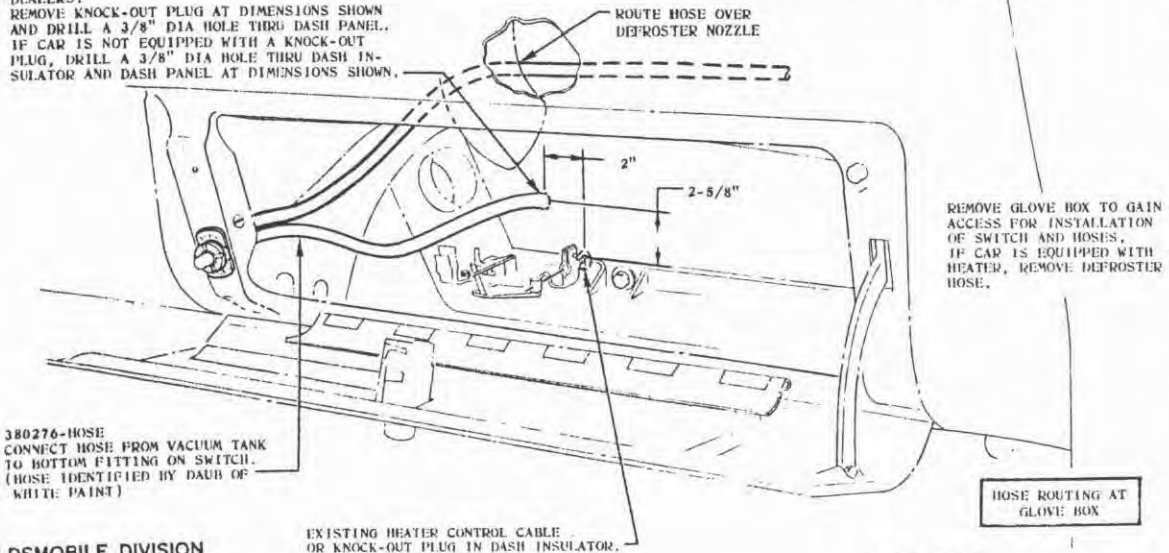


FACTORY HOLE LOCATION FOR HOSE ROUTING



SWITCH INSTALLATION

DEALERS:
REMOVE KNOCK-OUT PLUG AT DIMENSIONS SHOWN AND DRILL A 3/8" DIA HOLE THRU DASH PANEL. IF CAR IS NOT EQUIPPED WITH A KNOCK-OUT PLUG, DRILL A 3/8" DIA HOLE THRU DASH INSULATOR AND DASH PANEL AT DIMENSIONS SHOWN.



REMOVE GLOVE BOX TO GAIN ACCESS FOR INSTALLATION OF SWITCH AND HOSES. IF CAR IS EQUIPPED WITH HEATER, REMOVE DEFROSTER HOSE.

HOSE ROUTING AT GLOVE BOX

DATE	SYM	REVISION RECORD	DR	CK
5-8-63	A	SHIM REMOVED	R.	V.P.

DWG. DATE AUGUST 20, 1962 DR E D J. ROE
FIRST USED 1963 CK H. VAN PELT
APPR
REFERENCE APPR G. L. NIHART
NAME LAYOUT-VACUUM TRUNK LATCH

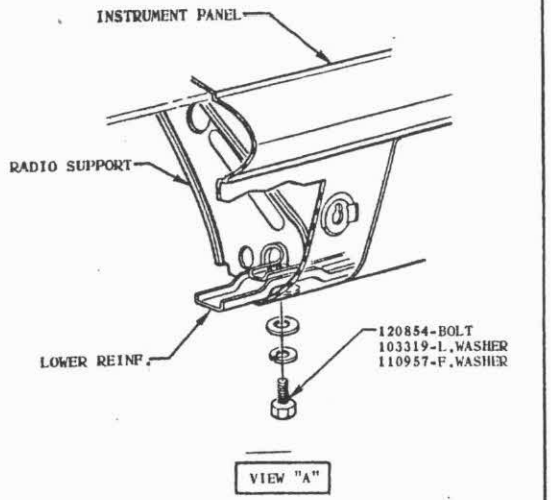
SERIES 3000 - 3100
SHEET 1 OF 6

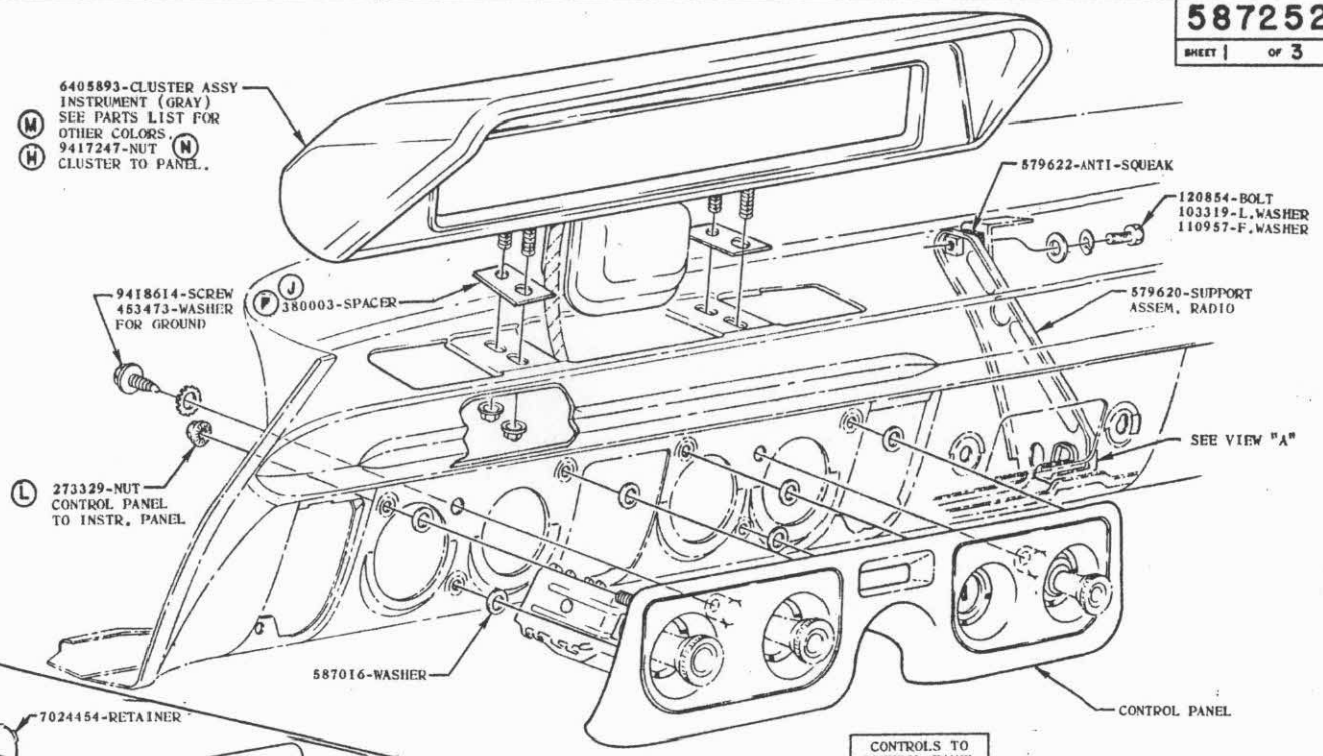
PART NO. 380749

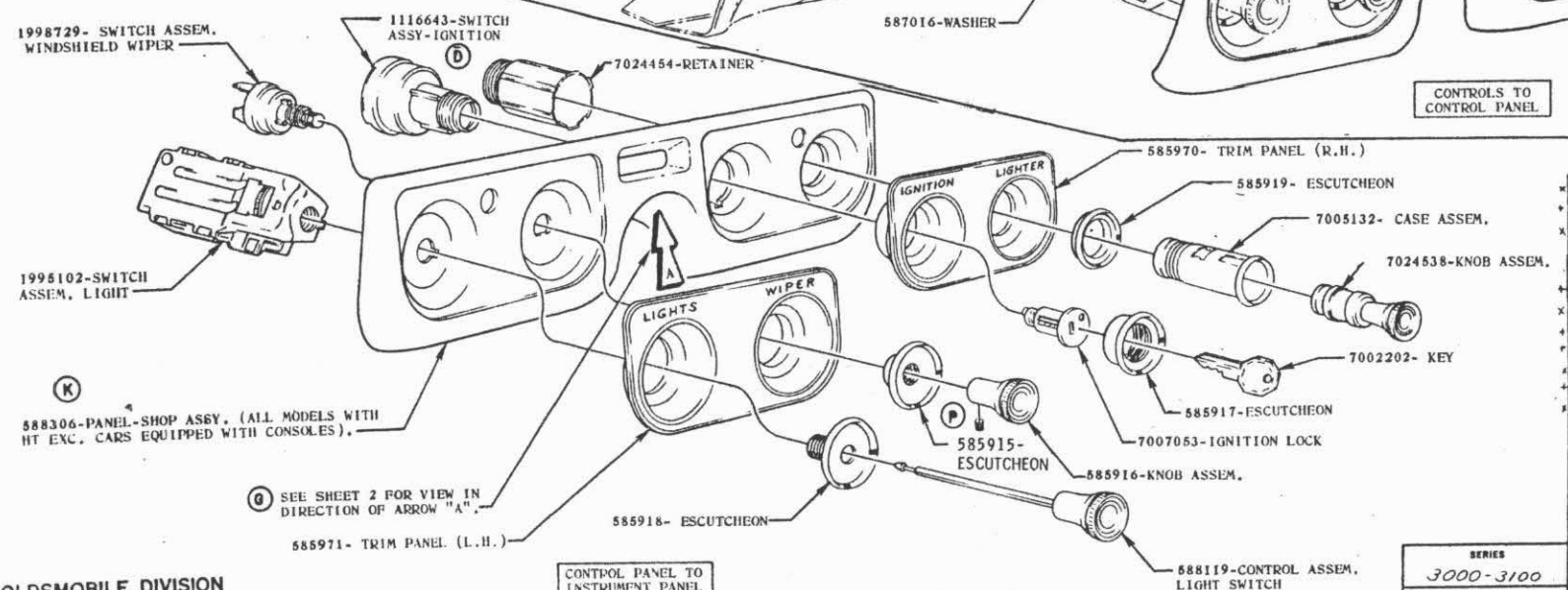
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

I/P PARTS

DRAWINGS INCLUDED IN THIS SECTION ARE:







	DATE	SYM.	REVISION RECORD	DR.	CK.
×	3-16-63	P	WAS 588315 ESCUTCHEON	[illegible]	DT
+	2-9-63	N	WAS 446059-NUT	BP	VP
×	12-13-62	M	WAS 380076 NUT	[illegible]	VP
+	11-6-62	L	WAS 582948 NUT	[illegible]	VP
	10-12-62	K	588305 SHOP ASSY CANCELED	[illegible]	VP
+	8-3-62	J	WAS 580003-SPACER	BP	VP
×	6-27-62	H	WAS 582948 NUT	[illegible]	VP
+	6-8-62	G	NOTE & ARROW ADDED	DT	VP
+	6-5-62	F	380003 SPACER ADDED	BP	VP
+	5-21-62	E	WAS SHEET 1 OF 2	[illegible]	VP
+	5-8-62	D	WAS 1116587 SWITCH	[illegible]	VP
×	4-11-62	C	REDRAWN & REVISED	[illegible]	VP

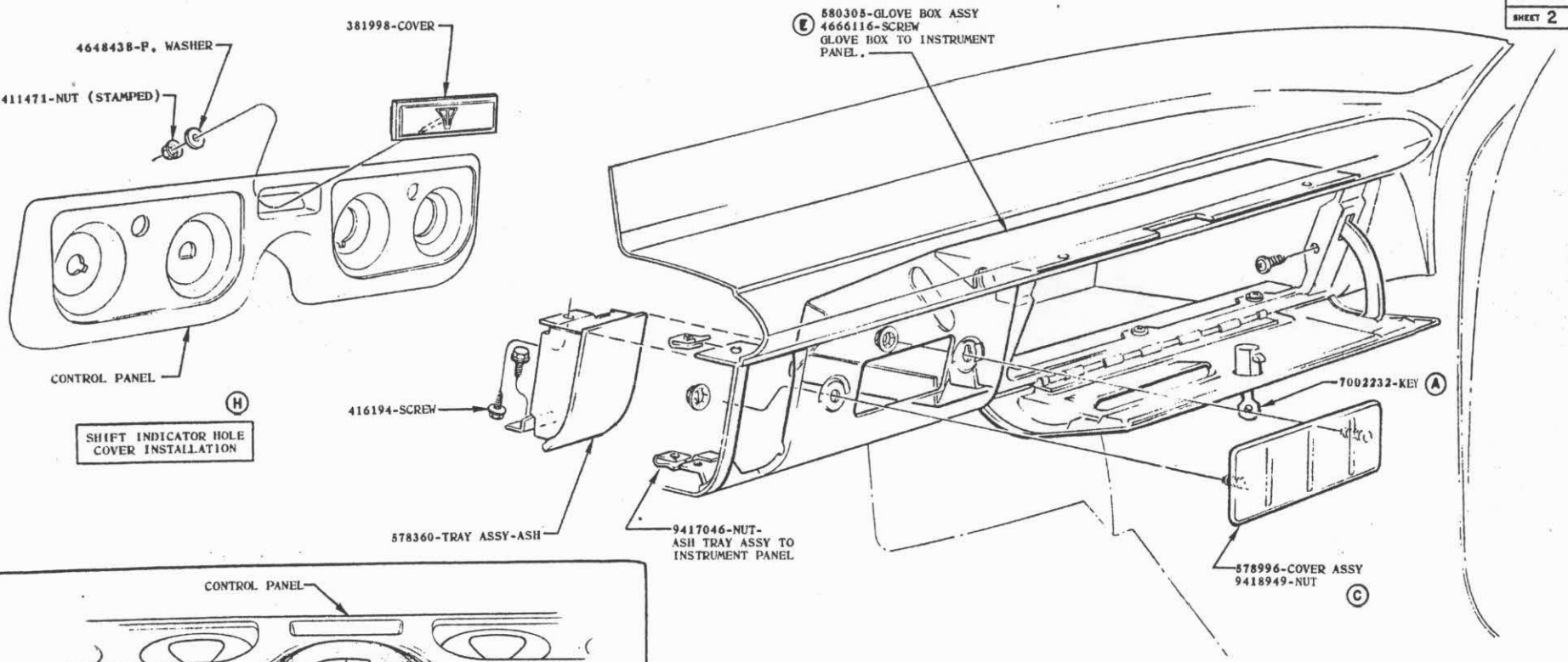
DWG. DATE DEC. 13, 1961 — DR. S.M. DONALD - E. ROE
FIRST USED 1963 — CK. H. VAN PELT — APPR.
REFERENCE 1A2B-D-12H-L — APPR.

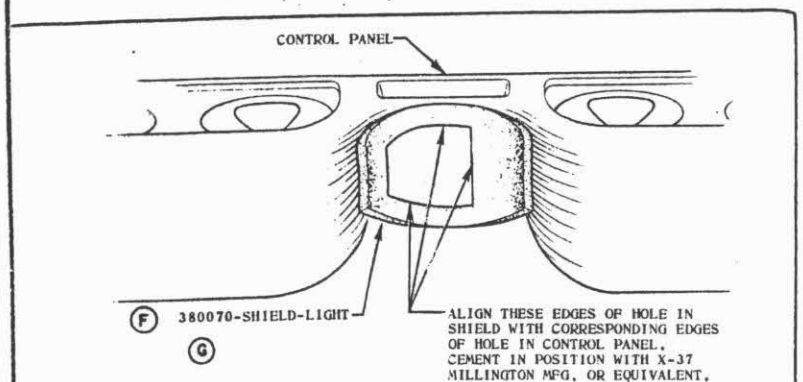
NAME **LAYOUT-INSTRUMENT PANEL**

SERIES 3000-3100
SHEET 1 OF 3

PART NO. **587252**

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN





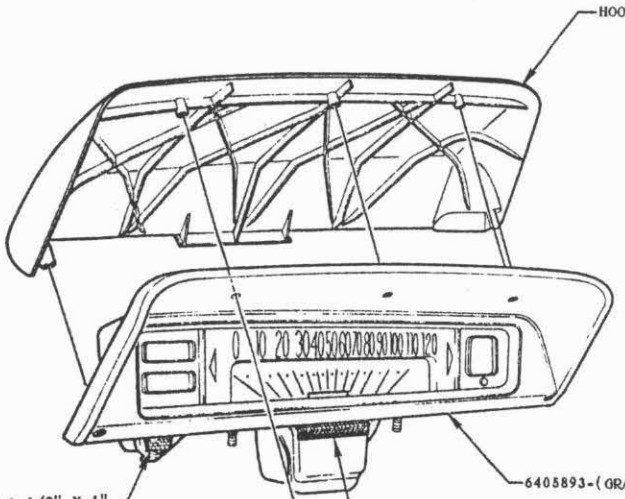
DATE	SYM.	REVISION RECORD	DR.	CK.
10-2-62	H	SHIFT COVER VIEW ADDED	[illegible]	VP
9-24-62	G	WAS 380794 SHIELD	[illegible]	VP
8-15-62	F	WAS 380070 SHIELD	BP	VP
6-11-62	E	WAS 4585528 SCREW	BP	DT
6-8-62	D	VIEW ADDED	DT	VP
5-29-62	C	PART NOS REVISED	[illegible]	VP
5-[illegible]-62	B	WAS SHEET 2 OF 2	[illegible]	VP
5-1-62	A	7002232 KEY ADDED	[illegible]	VP

DWG. DATE DEC. 13-1961 DR. J. MCDONALD-E. ROE
FIRST USED 1963 CK. H. VAN PELT APPR. [illegible]
REFERENCE IA2B APPR.
NAME LAYOUT-INSTRUMENT PANEL

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

SERIES 3000-3100
SHEET 2 OF 3

PART NO. 587252



INSTRUMENT CLUSTER HOOD FASTENING

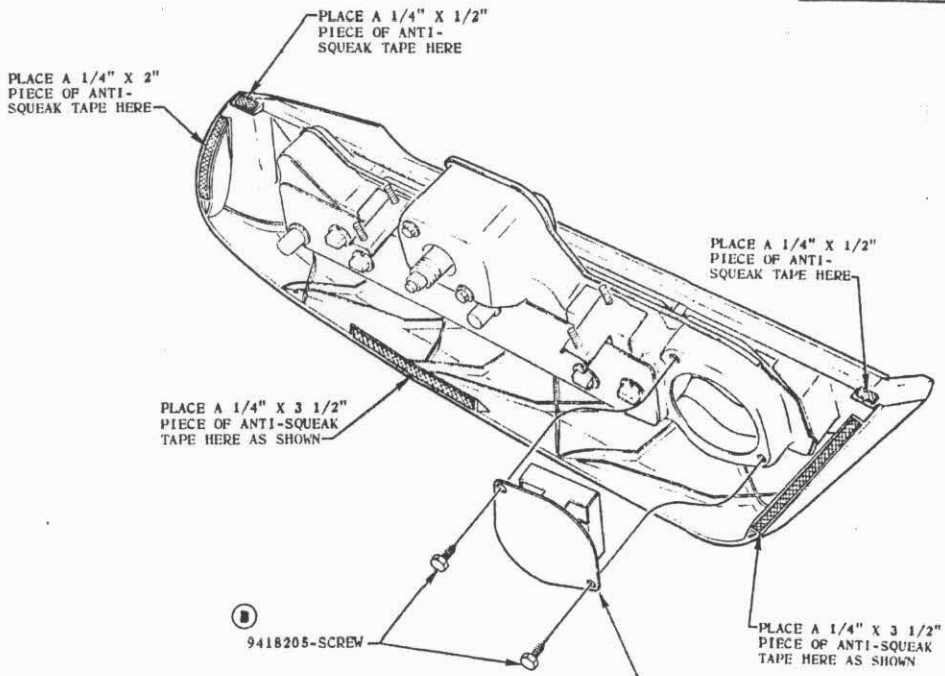
OTHERS COLORS SHOWN IN PARTS LIST

INSTRUMENT CLUSTER ASSY-EXPORT
6405894-GRAY
6405896-GREEN
6405898-BLUE
6405900-RED
6405902-FAWN

(A)

NOTE:
TAPE CLUSTER ONLY ON CARS WITHOUT INSTRUMENT PANEL COVER AS SHOWN,

USE PERMICAL #672 TAPE OR EQUIVALENT



CLOCK HOLE COVER FASTENING

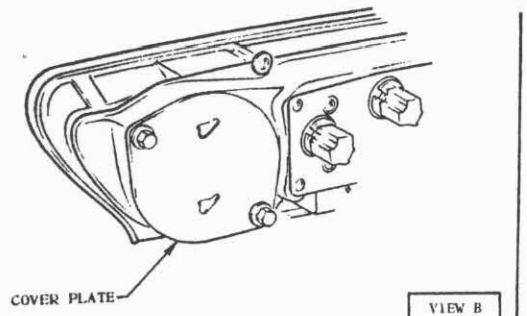
<	9-17-62	B	WAS 956734 SCREW	RVP
†	8-7-62	A	TAPEING INSTRUCT. ADDED	VD
	DATE	STK.	REVISION RECORD	DR. CK.

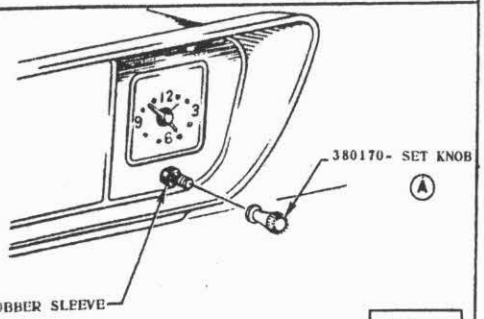
DWG. DATE MAY 21, 1962 DR. J. V. GALL
FIRST USED 1963 CK. H VAN PELT
APPR.
REFERENCE APPR.
NAME LAYOUT-INSTRUMENT PANEL

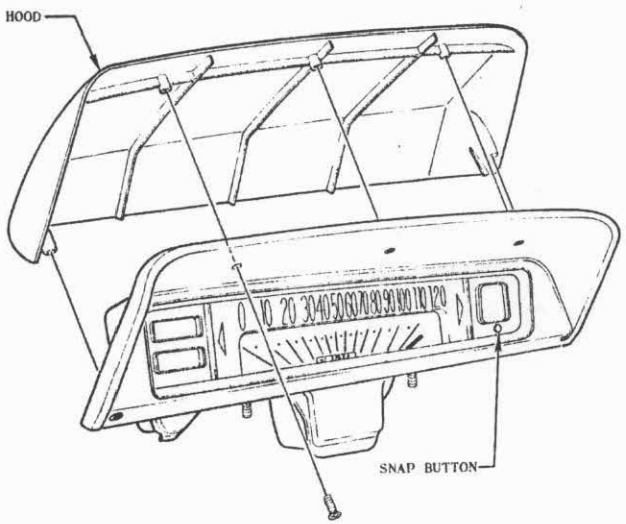
SERIES 3000 - 3100
SHEET 3 OF 3
PART NO. 587252

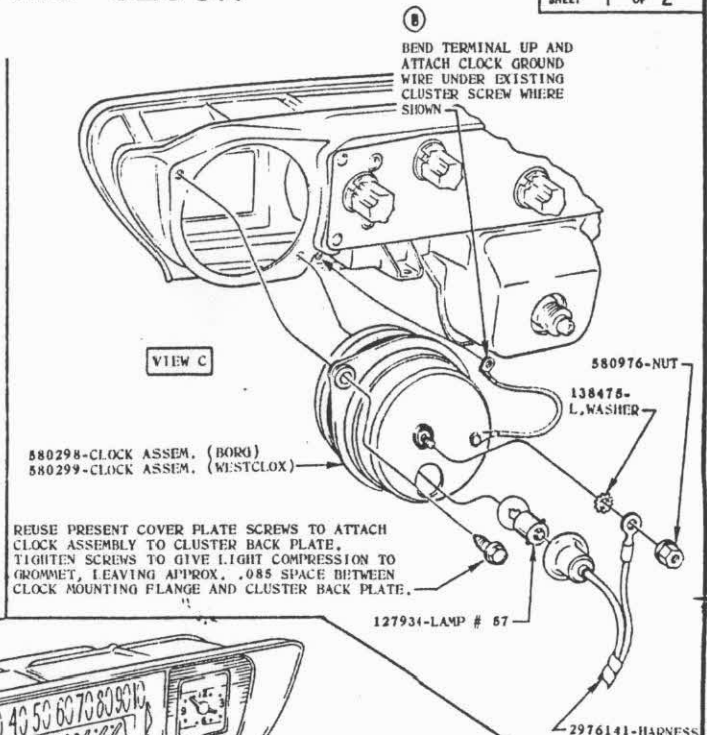
INSTALLATION OF OLDSMOBILE ELECTRIC CLOCK

381661
SHEET 1 OF 2



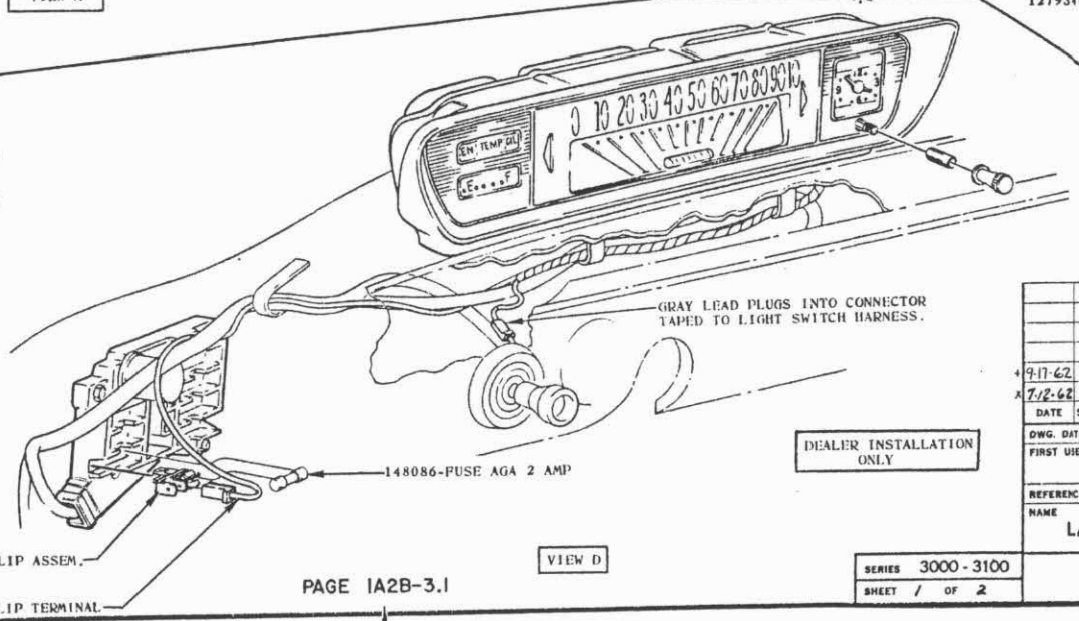






INSTALLATION INSTRUCTIONS

1. TAKE OFF INSTRUMENT CLUSTER HOOD BY REMOVING 5 RETAINING SCREWS. REMOVE AND DISCARD SNAP BUTTON FROM CLOCK WINDOW FACE. (VIEW A)
2. REMOVE AND DISCARD CLOCK HOLE COVER PLATE. SAVE SCREWS. (VIEW B)
3. REMOVE CLOCK SET KNOB AND RUBBER SLEEVE FROM STEM.
4. INSERT CLOCK IN CLUSTER AND FASTEN WITH HOLE COVER SCREWS. ATTACH GROUND WIRE UNDER CLUSTER BACK PLATE SCREW. (VIEW C)
5. INSERT 127934-BULB IN SOCKET AND CONNECT WIRING TO BACK OF CLOCK. (VIEW C)
6. ROUTE WIRING HARNESS THRU OPENING IN TOP OF INSTRUMENT PANEL AND PLACE IN CLIPS PROVIDED. PLUG GRAY LEAD INTO CONNECTOR ON WIRE TAPED TO LIGHT SWITCH HARNESS. INSERT 575747-CLIP IN FUSE PANEL AND PLUG CONNECTOR ON RED LEAD ON CLIP TERMINAL. (VIEW D)
7. PUSH RUBBER SLEEVE ONTO CLOCK SET STEM THRU HOLE IN FACE OF CLUSTER. SCREW KNOB ON STEM AND PULL STEM OUT AS FAR AS POSSIBLE. FORCE RUBBER SLEEVE BACK SO THAT FLAT ON STEM MAY BE HELD WITH NEEDLE NOSE PLIERS WHILE SET KNOB IS TIGHTENED SECURELY. (VIEW E)
8. REPLACE INSTRUMENT CLUSTER HOOD, REUSING SAME FASTENERS.
9. INSERT 148086-FUSE IN FUSE PANEL. (VIEW D)



DEALER INSTALLATION ONLY

	DATE	SYM.	REVISION RECORD	DR.	CK.
+	9-17-62	B	G.C.D WIRE RELOCATED	JWL	VP
X	7-12-62	A	NAS 580891 KNOB	GWA	VP

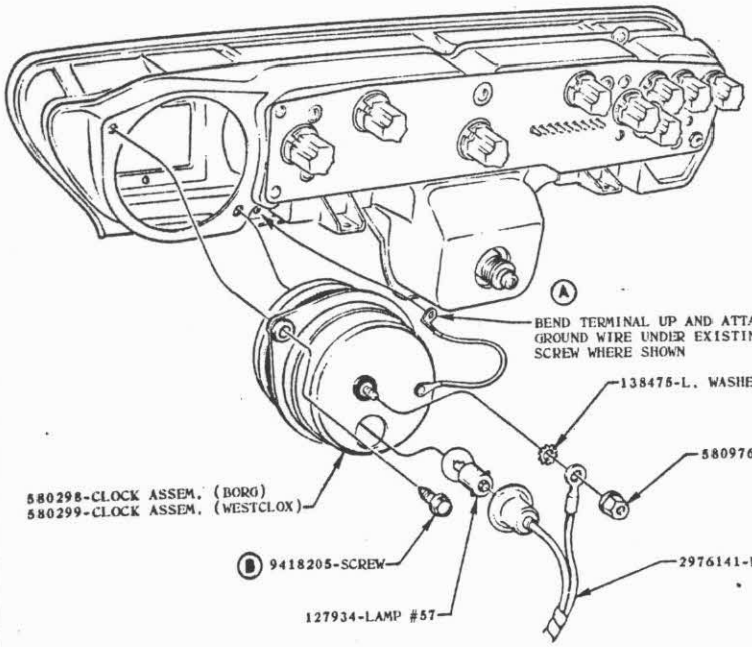
DWG. DATE MAY 3, 1962 DR. J. GALL
FIRST USED 1963 CK. H. VAN PELT
REFERENCE U35 APPR.
APPR.
NAME LAYOUT-ELECTRIC CLOCK

SERIES 3000-3100
SHEET 1 OF 2
PART NO. 381661

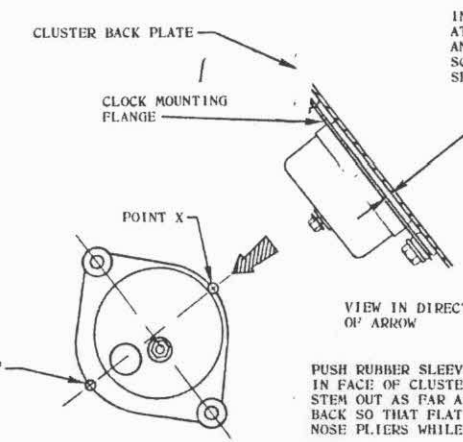
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

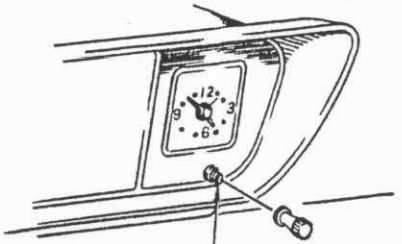
381661

SHEET 2 OF 2

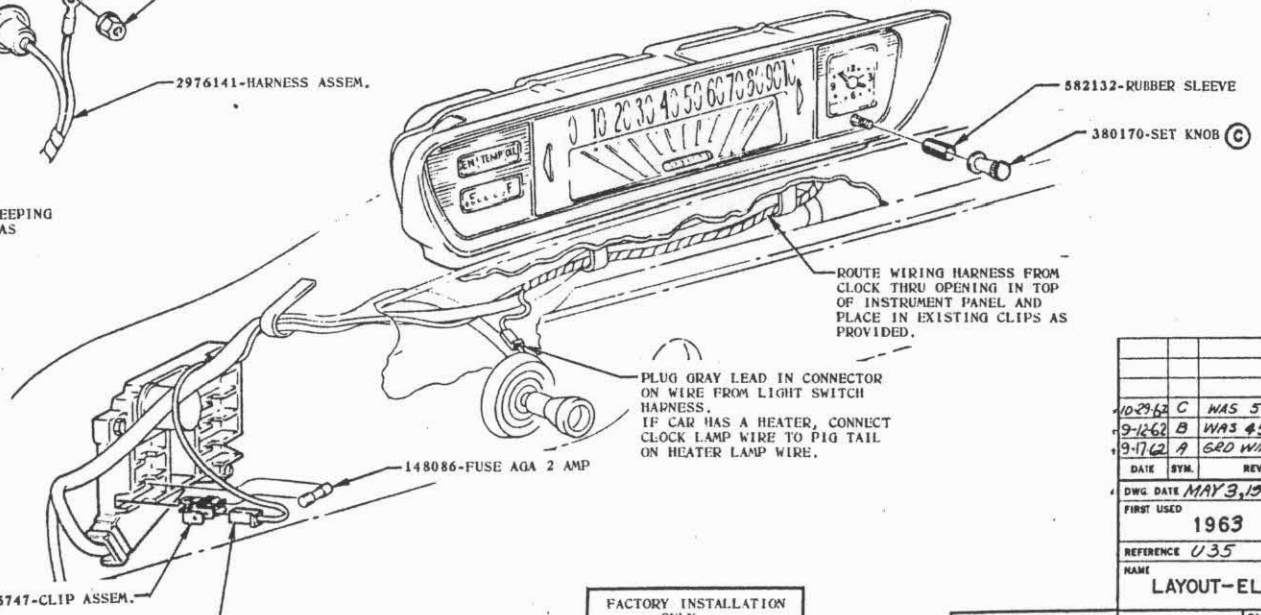


INSERT CLOCK IN THE CLUSTER AND ATTACH WITH SCREWS, KEEPING SPACE BETWEEN CLOCK MOUNTING FLANGE AND CLUSTER BACK AS DIMENSIONED IN VIEW "A".





PUSH RUBBER SLEEVE ONTO CLOCK SET STEM THRU HOLE IN FACE OF CLUSTER. SCREW KNOB ON STEM AND PULL STEM OUT AS FAR AS POSSIBLE. FORCE RUBBER SLEEVE BACK SO THAT FLAT ON STEM MAY BE HELD WITH NEEDLE NOSE PLIERS WHILE SET SCREW IS TIGHTENED SECURELY.



DATE	SYM.	REVISION RECORD	DR.	CK.
10-29-62	C	WAS 580891 SET KNOB	BP	VP
9-12-62	B	WAS 456794 SCREW	BP	VP
9-17-62	A	GRD WIRE RELOCATED	BP	VP

DWG. DATE MAY 3, 1962 DR. J. GALL
FIRST USED 1963 CK. H VAN PELT APPR.
REFERENCE U35 APPR.
NAME LAYOUT-ELECTRIC CLOCK

FACTORY INSTALLATION ONLY

SERIES 3000-3100
SHEET 2 OF 2

PART NO. 381661

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

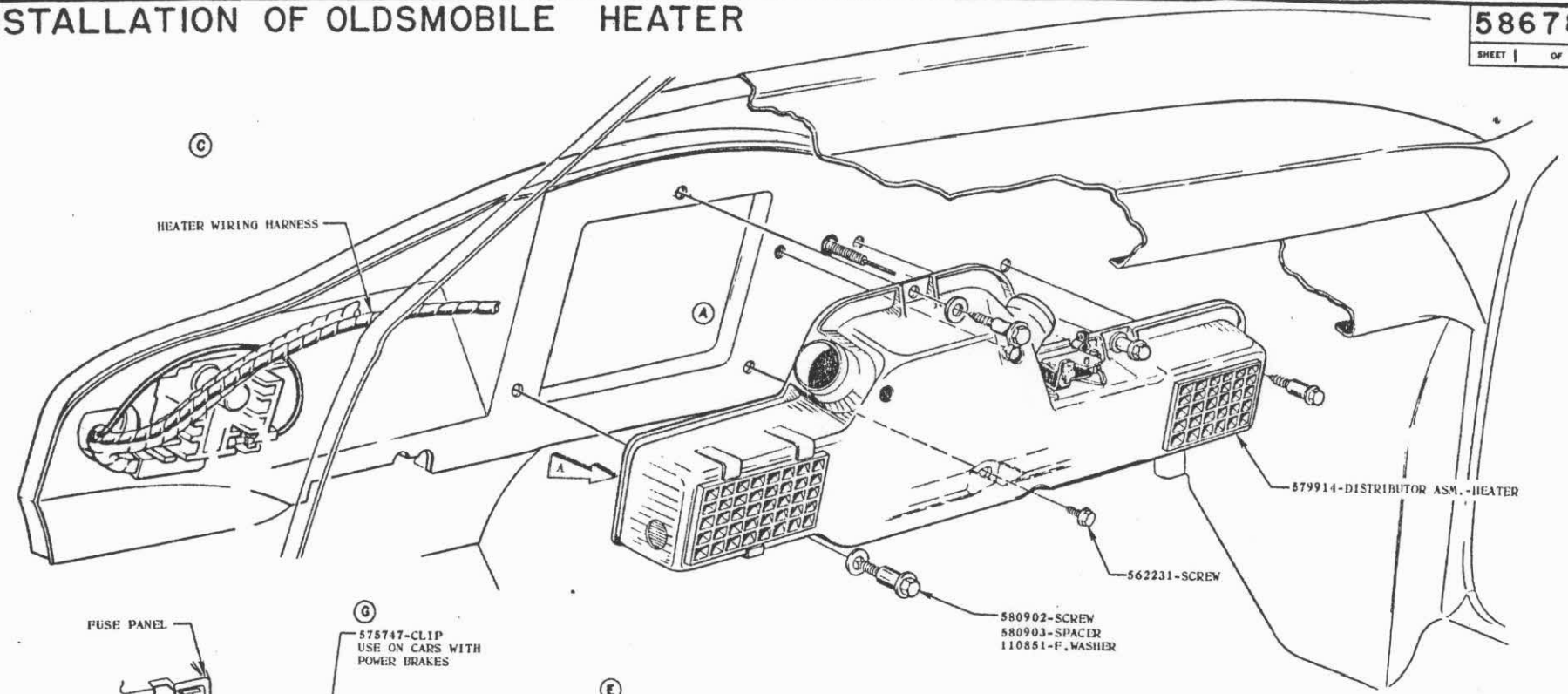
HEATER

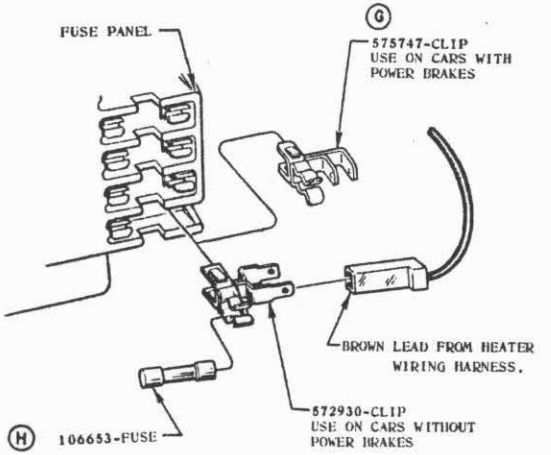
DRAWINGS INCLUDED IN THIS SECTION ARE:

INSTALLATION OF OLDSMOBILE HEATER

586780

SHEET 1 OF 7





FUSE CLIP INSTALLATION

Ⓔ

FACTORY:
INSTALL L.H. AND R.H. VENTILATION IN CONJUNCTION WITH HEATER AS PER DRAWING 380510

Ⓑ

Ⓕ

DEALER INSTRUCTIONS

REMOVE KNOCK-OUT PORTION OF DASH INSULATOR LOCATED ON CENTER LINE OF CAR

REMOVE HEATER HOLE COVERS FROM DASH PANEL

REMOVE HEATER HOLE COVER LOCATED ON EXTREME LEFT HAND SIDE OF INSTRUMENT PANEL

REMOVE AND DISCARD EXISTING SCREWS AROUND KNOCK-OUT HOLE IN DASH INSULATOR. FASTEN DISTRIBUTOR ASSEMBLY TO DASH INSULATOR USING SPECIAL SCREWS PROVIDED IN PACKAGE

INSTALL FUSE CLIP AND FUSE IN BOTTOM LEFT HAND SIDE OF FUSE PANEL

	DATE	SYM.	REVISION RECORD	DR.	CK.
+	10-26-62	H	WAS 432644 FUSE	RG	VP
x	9-4-62	G	575747 CLIP ADDED	RG	VP
+	7-6-62	F	NOTE ADDED	JG	VP
+	3-7-62	E	NOTE ADDED	SM	VP
+	3-6-62	D	WAS 1 OF 8 SHEETS	FJ	VP
+	1-16-62	C	TAPE SPEC. REMOVED	JR	VP
+	11-29-61	B	VIEW REMOVED	ER	VP
+	11-29-61	A	TAPE & NOTES REVISED	FB	VP

DWG. DATE OCT. 18 1961 DR. C. KESTER

FIRST USED 1963 CK. H. VAN PELT

REFERENCE 1A2C APPR.

APPR.

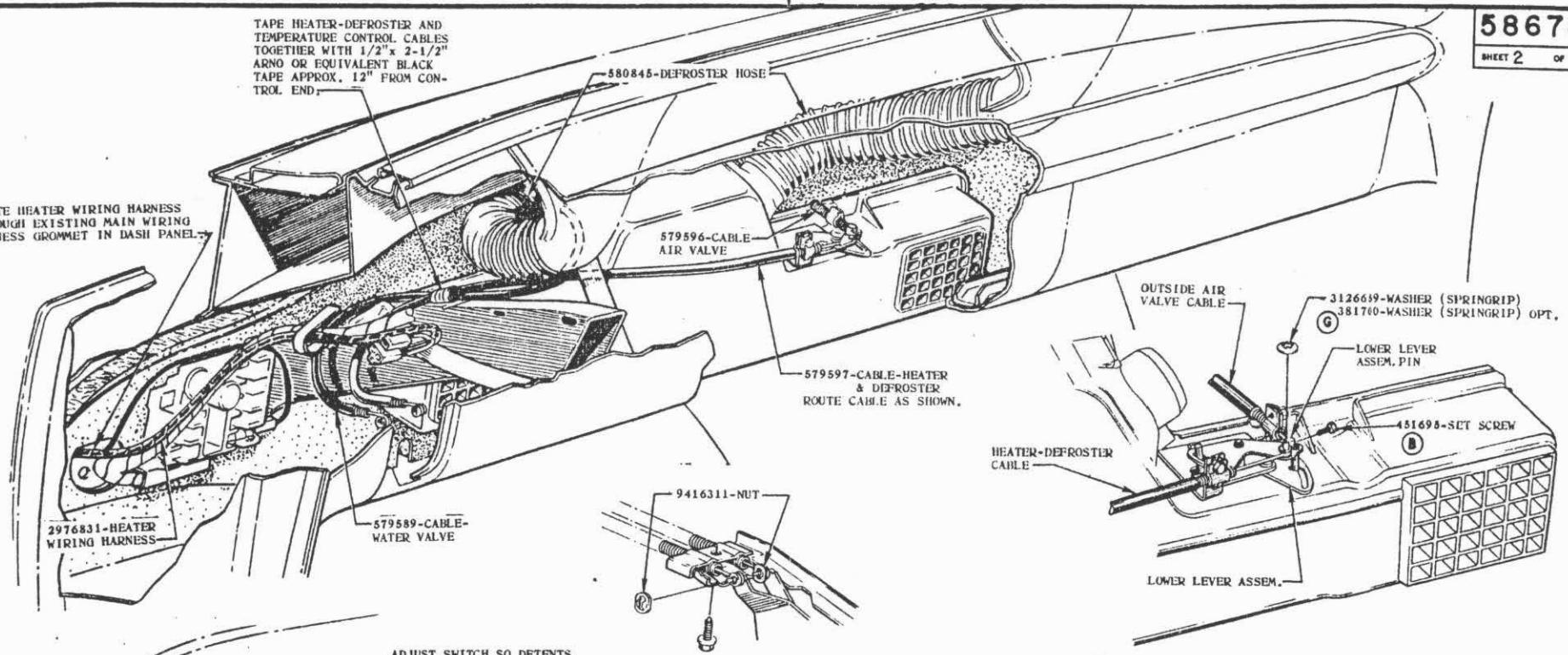
NAME LAYOUT—HEATER

SERIES 3000 - 3100

SHEET 1 OF 7

PART NO. 586780

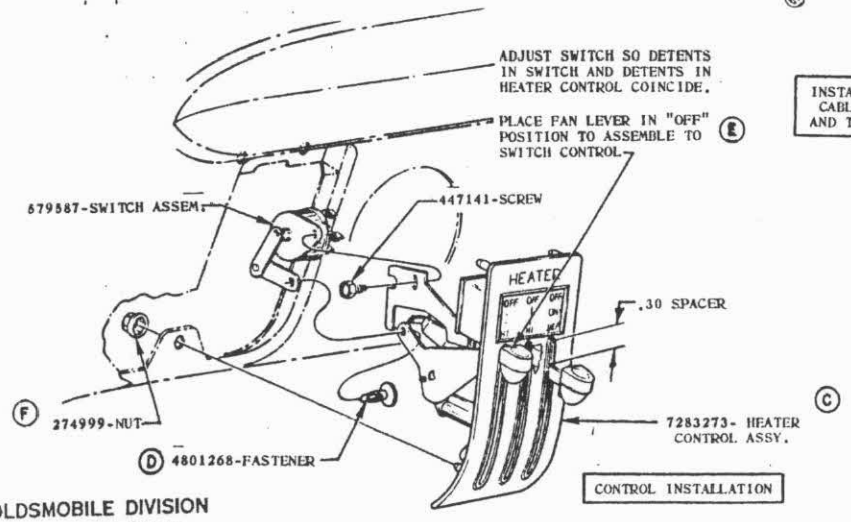
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



INSTALLATION OF CABLES TO AIR AND TEMP. LEVERS

CABLE ATTACHMENT TO HEATER

APPLY DIXON #3 GRAPHITE LUBRICANT SPARINGLY IN LEVER SLOTS AND ON THE ACTUATING PINS.



CONTROL INSTALLATION

ADJUST HEATER CABLE AS FOLLOWS:-

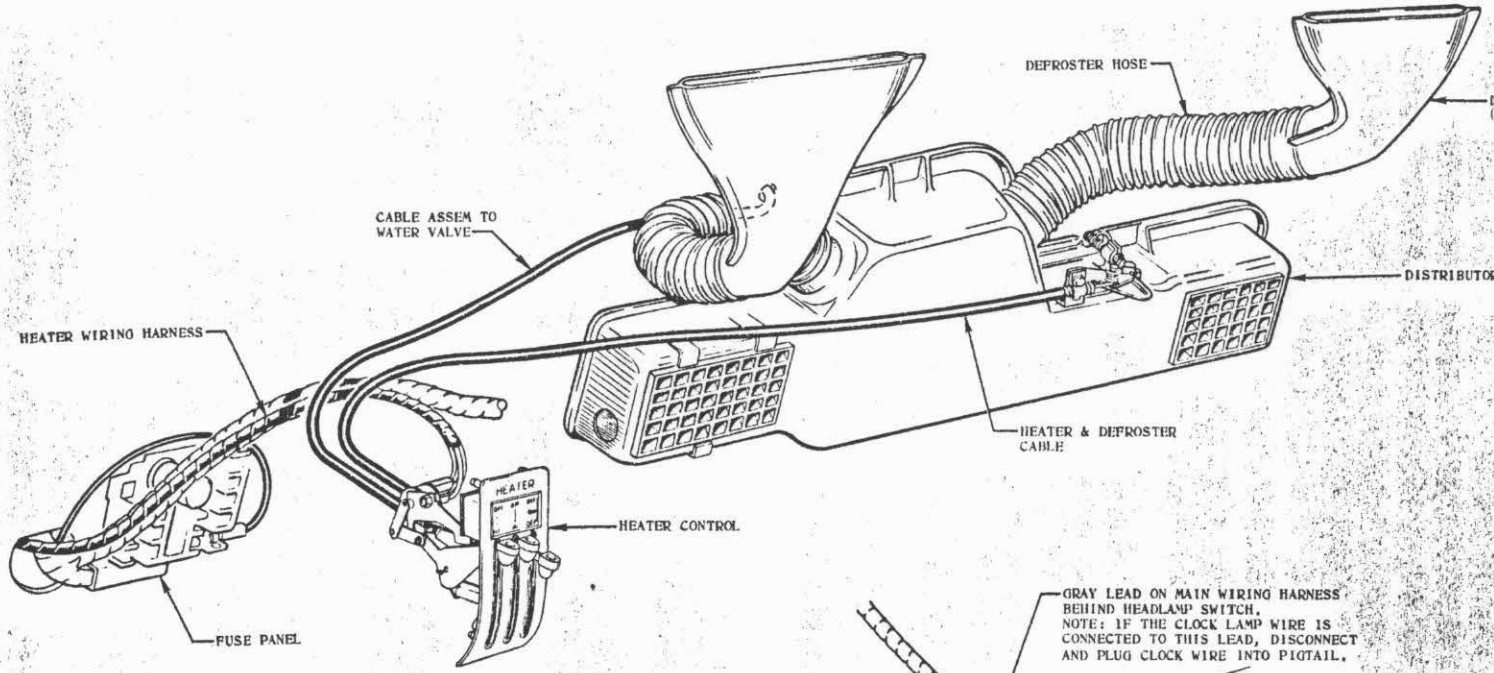
1. USING A .30 SPACER ABOVE AIR CONTROL LEVER, SET AND HOLD LEVER AGAINST SPACER
2. PLACE HEATER-DEFROSTER CABLE LOOSELY IN BRACKET CLAMP AND PLACE CABLE LOOP OVER UPPER LEVER ASSEMBLY PIN
3. WITH AIR VALVE CABLE ASSEMBLY CLAMPED TO BRACKET AND CABLE WIRE THRU HOLE IN PIN, PLACE LOOP OF CABLE ON OPPOSITE END, OVER AIR VALVE CRANK AND HOLD AIR VALVE SHUT WITH A SPRING ATTACHED TO CRANK. (AIR VALVE SHOWN ON SHEET 4)
4. MOVE LOWER LEVER ASSEMBLY TO THE RIGHT UNTIL TIGHT ARAINST STOP. TIGHTEN BRACKET HOLDING HEATER-DEFROSTER CABLE, THEN TIGHTEN SET SCREW AGAINST WIRE IN AIR INLET VALVE CABLE
5. REMOVE SPRING AND .30 SPACER

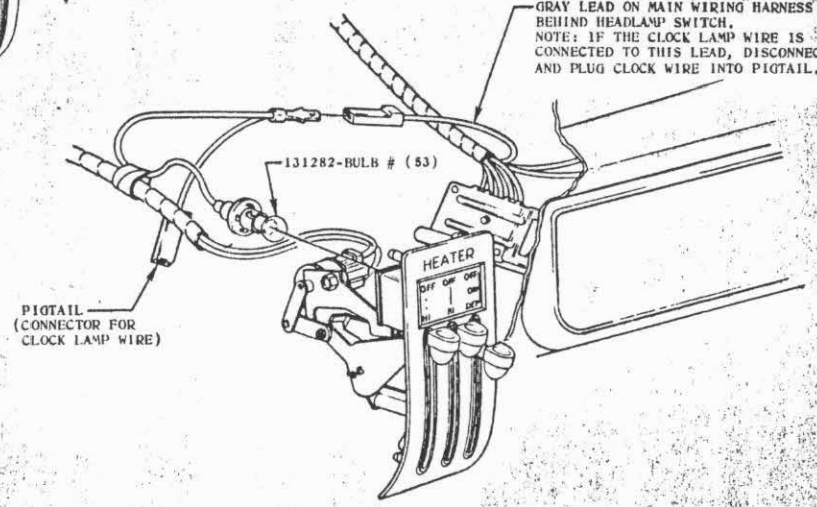
HEATER CONTROL CABLE HOOK-UP

x	10-24-62	G	PART NUMBER ADDED	[illegible]	VP
+	9-12-62	F	274999 WAS 9411618	[illegible]	[illegible]
x	7-6-62	E	NOTE ADDED	[illegible]	VP
+	6-12-62	D	WAS 7271472-RIVET	BP	D.T.
x	4-7-62	C	WAS 7276973 CONT. ASSY	[illegible]	D.T.
x	3-27-62	B	451695 SCR NO ADDD	CM	VP
x	3-6-62	A	WAS 2 OF 8 SHEETS	F.J.	VP
DATE		SYM.	REVISION RECORD	DR.	CK.

DWG. DATE OCT 18, 1961 DR. G KESTER
FIRST USED 1963 CK. H. VAN PELT APPR.
REFERENCE 1A2C APPR.
NAME LAYOUT-HEATER
PART NO. 586780
SERIES 3000 - 3100
SHEET 2 OF 7

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN





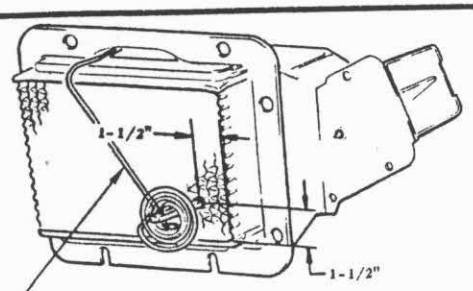
CONTROL LAMP INSTALLATION

DATE	SYM.	REVISION RECORD	DR.	CK.
3-6-62	A	WAS 3 OF 8 SHEETS	F.J.	VP

DWG. DATE OCT. 18 1961 DR. G. KESTER
FIRST USED 1963 CK. H. VAN PELT
APPR.
REFERENCE 1A2C APPR.
NAME LAYOUT-HEATER

SERIES 3000 - 3100
SHEET 3 OF 7

PART NO. 586780



BEND CAPILLARY TUBE BELOW CENTER-LINE OF COIL, STRAIGHT BACK TO & TIGHT AGAINST CORE TO CLEAR DEFROSTER VALVE CABLE. DISTANCE FROM FACE OF CORE TO CAPILLARY TUBE COIL TO BE APPROX. 2-1/2".

HEATER CAPILLARY TUBE INSTALLATION

Ⓒ DEALERS:-REMOVE WINDSHIELD WIPER ARMS AND SHROUD TOP VENT GRILLE. INSTALL 580323-SCREEN UNDER GRILLE. HOLD SCREEN IN PLACE USING SAME GRILLE SCREWS

SHROUD TOP VENT GRILLE

579590- RESISTOR- FASTEN WITH 9418205- SCREW Ⓑ Ⓔ

REMOVE TAPE FROM HOLE IN DASH PANEL AND INSTALL 1347958-GROMMET.

APPLY FS-1041 SEALER AROUND GROMMET AFTER INSTALLATION.

568128-SCREW

568128-SCREW

SEE VIEW "A"

3152077-CORE ASSEM.

APPLY FS-1041 SEALER ALL ALONG SEAM AND AROUND HOSE CONNECTIONS. Ⓓ3

APPLY FS-1041 SEALER AROUND CONNECTION BETWEEN CORE ASSEM. AND BLOWER ASSEM. Ⓓ2

PLACE SHIELD OVER LOWER FLANGE (SEE VIEW "B")

3149488-BLOWER & AIR INLET ASSEM.- APPLY A 3/16" BEAD OF EC-895 SEALER AROUND BACK FACE OF MOUNTING FLANGE.

REMOVE TAPE FROM HOLE ON DASH PANEL AND INSTALL 1347958-GROMMET.

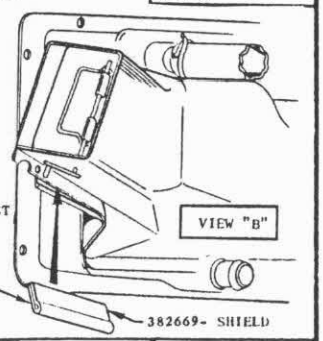
APPLY FS-1041 SEALER AROUND GROMMET AFTER INSTALLATION.

Ⓓ APPLY FS-1041 SEALER AROUND SEAM.

AIR INLET-CORE CASE ASSEMBLY & SCREEN INSTALLATION

APPLY A 3/16" BEAD OF EC-895 SEALER AROUND BACK FACE OF MOUNTING FLANGE.

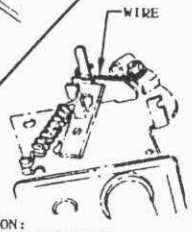
Ⓕ



PLACE SHIELD OVER LOWER FLANGE OF DUCT (IN DIRECTION OF ARROW) TO PROTECT CAR WIRING.

VIEW "B"

382669- SHIELD



CAUTION:
DO NOT REMOVE WIRE WHICH HOLDS WATER VALVE IN FULL OPEN POSITION UNTIL THE CAPILLARY TUBE HAS BEEN PROPERLY LOCATED AND ADJUSTED.

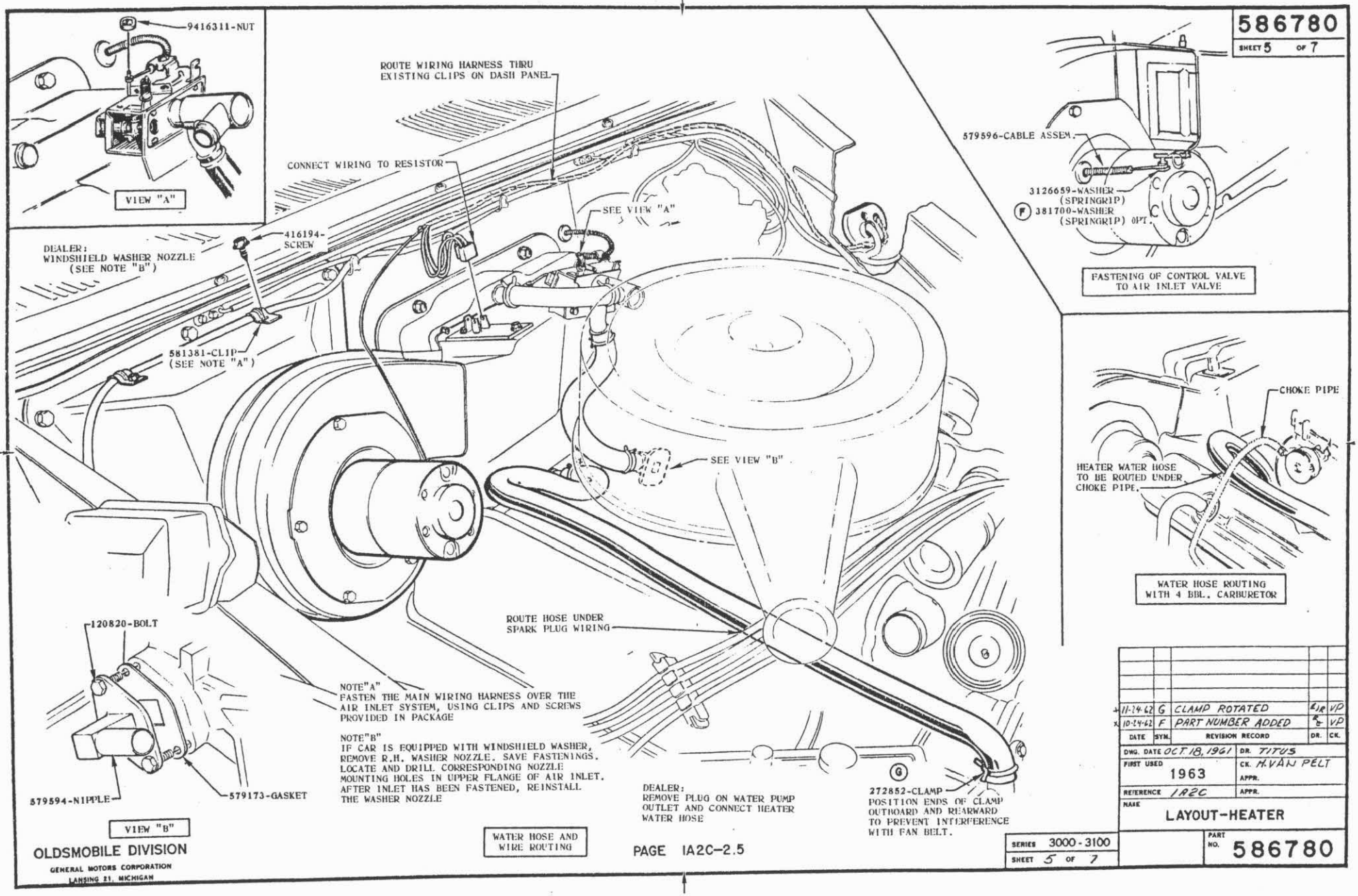
VIEW "A"

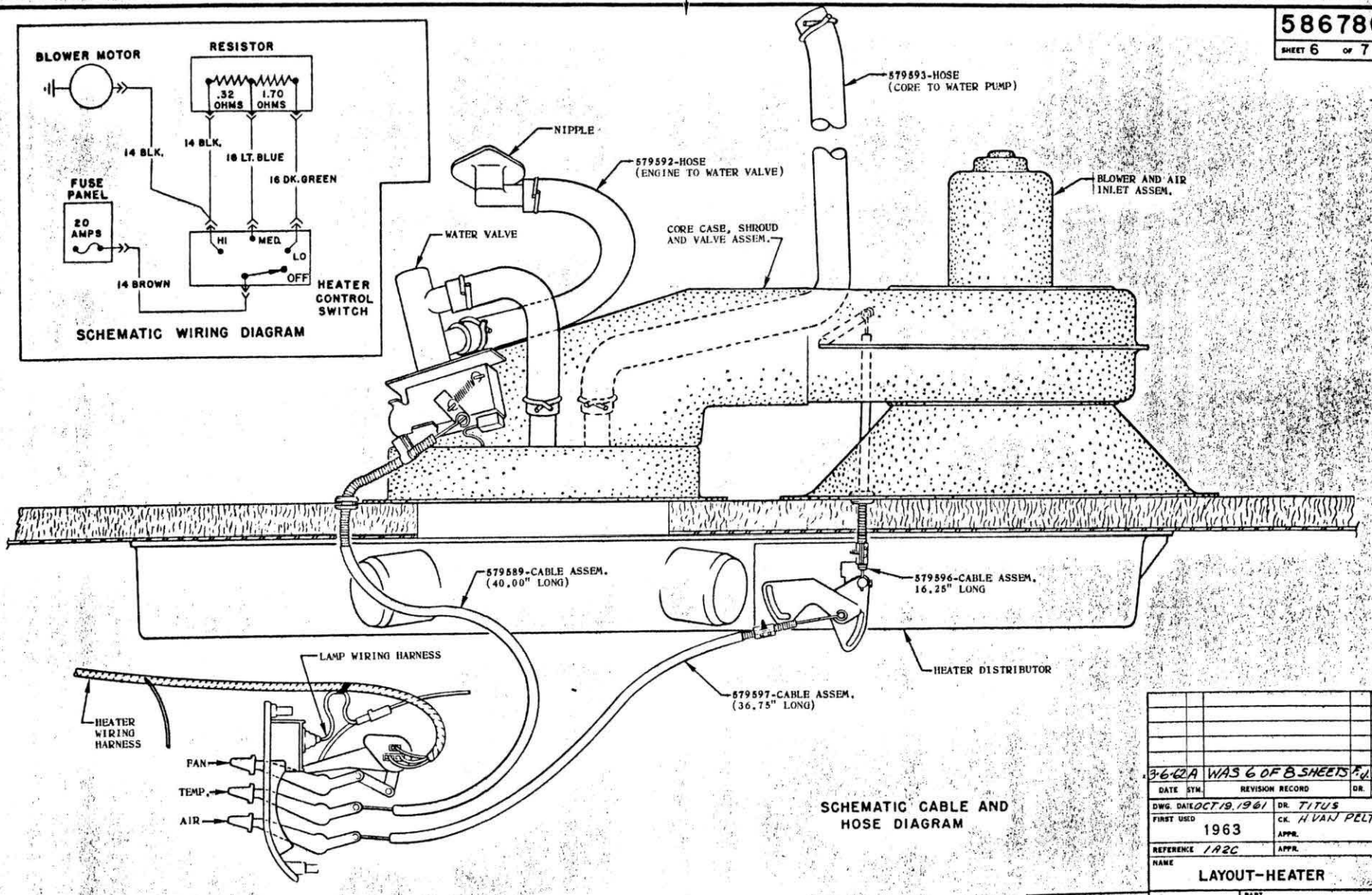
A	11-16-62	E	VIEW B ADDED	C/B	VP
+	9-13-62	E	WAS 560042-SCREW	"/"	"/"
A	8-16-62	D_3	SEALER NOTES ADDED	BP	VP
+	7-6-62	C	NOTE REVISED	"/"	VP
A	3-23-62	B	WAS 416194 SCREW	JM	VP
A	3-6-62	A	WAS 4 OF 8 SHEETS	F.U.	VP
DATE	SYM.	REVISION RECORD		DR.	CK.

DWG. DATE OCT. 18, 1961 DR. TITUS
FIRST USED 1963 CK. H. VAN PELT
REFERENCE 1 A2C APPR.
APPR.
NAME LAYOUT—HEATER

SERIES 3000 - 3100
SHEET 4 OF 7

PART NO. 586780


586780
SHEET 5 OF 7
9416311-NUT
VIEW "A"
ROUTE WIRING HARNESS THRU EXISTING CLIPS ON DASH PANEL
CONNECT WIRING TO RESISTOR
SEE VIEW "A"
DEALER: WINDSHIELD WASHER NOZZLE (SEE NOTE "B")
416194-SCREW
581381-CLIP (SEE NOTE "A")
SEE VIEW "B"
579596-CABLE ASSEM.
3126659-WASHER (SPRINGRIP)
(F) 381700-WASHER (SPRINGRIP) OPT.
FASTENING OF CONTROL VALVE TO AIR INLET VALVE
CHOKE PIPE
HEATER WATER HOSE TO BE ROUTED UNDER CHOKE PIPE.
WATER HOSE ROUTING WITH 4 BBL. CARBURETOR
120820-BOLT
579594-NIPPLE
579173-GASKET
VIEW "B"
ROUTE HOSE UNDER SPARK PLUG WIRING
NOTE"A"
FASTEN THE MAIN WIRING HARNESS OVER THE AIR INLET SYSTEM, USING CLIPS AND SCREWS PROVIDED IN PACKAGE
NOTE"B"
IF CAR IS EQUIPPED WITH WINDSHIELD WASHER, REMOVE R.H. WASHER NOZZLE. SAVE FASTENINGS. LOCATE AND DRILL CORRESPONDING NOZZLE MOUNTING HOLES IN UPPER FLANGE OF AIR INLET. AFTER INLET HAS BEEN FASTENED, REINSTALL THE WASHER NOZZLE
DEALER: REMOVE PLUG ON WATER PUMP OUTLET AND CONNECT HEATER WATER HOSE
(G) 272852-CLAMP POSITION ENDS OF CLAMP OUTBOARD AND REARWARD TO PREVENT INTERFERENCE WITH FAN BELT.
WATER HOSE AND WIRE ROUTING
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN
11-14-62 G CLAMP ROTATED CJR VP
10-24-62 F PART NUMBER ADDED CJR VP
DATE SYM. REVISION RECORD DR. CK.
DWG. DATE OCT. 18, 1961 DR. TITUS
FIRST USED 1963 CK. H.VAN PELT
REFERENCE 1A2C APPR.
NAME LAYOUT-HEATER
SERIES 3000-3100
SHEET 5 OF 7
PART NO. 586780

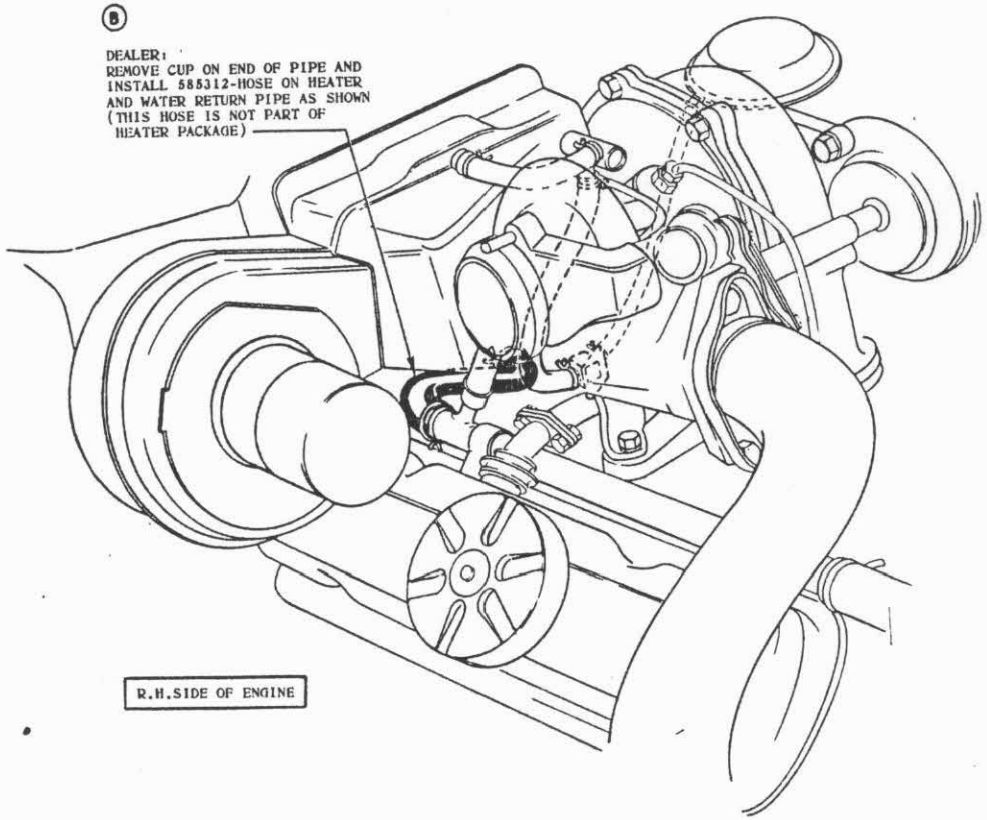


SCHEMATIC CABLE AND HOSE DIAGRAM

3-6-62 A	WAS 6 OF 8 SHEETS F.J.VP		
DATE SYM.	REVISION RECORD	DR.	CK.
DWG. DATE OCT 19, 1961		DR. TITUS	
FIRST USED 1963		CK. H VAN PELT	
		APPR.	
REFERENCE 1A2C		APPR.	
NAME LAYOUT-HEATER			
SERIES 3000-3100		PART NO. 586780	
SHEET 6 OF 7			

586780

SHEET 7 OF 7



INSTALLATION OF WATER INLET AND RETURN HOSES

(FOR CARS WITH TURBO-CHARGER ENGINE)

DATE	SYM.	REVISION RECORD	DR.	CK.
7-62	B	NOTE REVISED	"G	VP
3-62	A	WAS 7 OF 8 SHEETS	K.	VP

DWG. DATE OCT. 18 1961 DR. G. KESTER

FIRST USED 1963 CK. H. VAN PELT APPR.

REFERENCE 1A2C APPR.

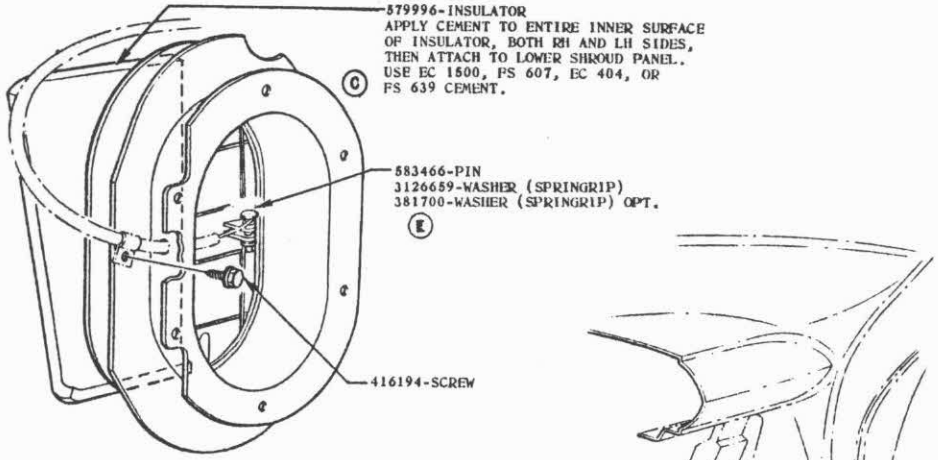
NAME LAYOUT-HEATER

SERIES 3147

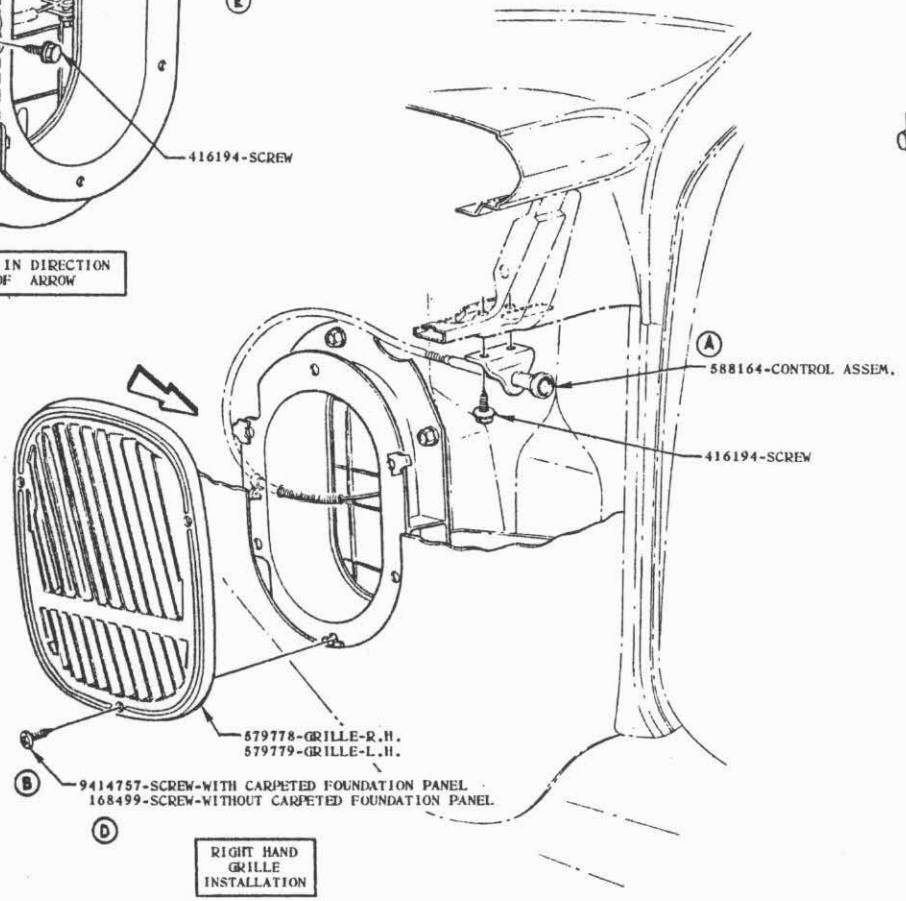
SHEET 7 OF 7

PART NO. 586780

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

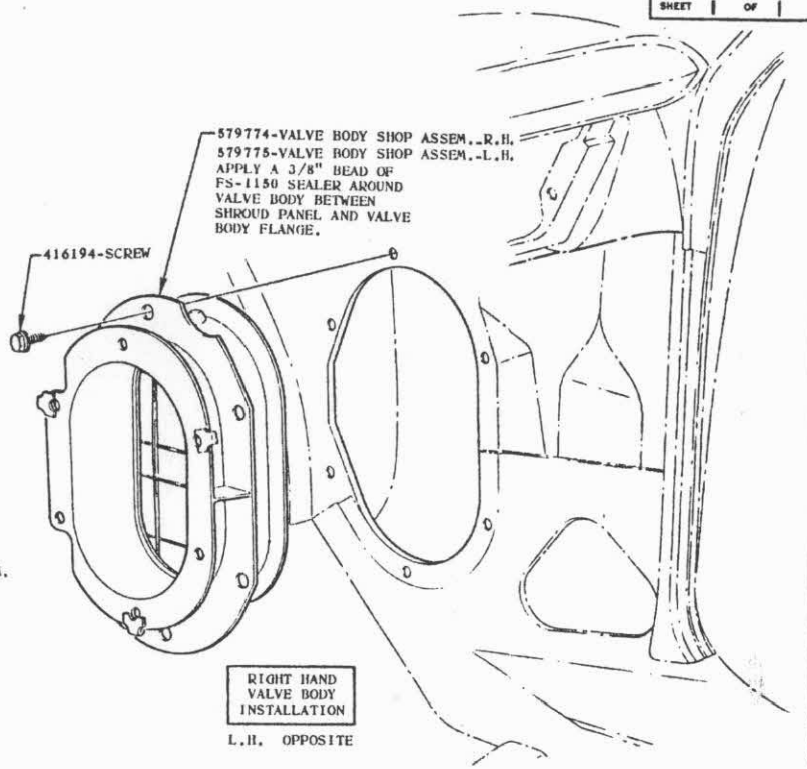


VIEW IN DIRECTION OF ARROW



RIGHT HAND GRILLE INSTALLATION

L.H. OPPOSITE



RIGHT HAND VALVE BODY INSTALLATION

L.H. OPPOSITE

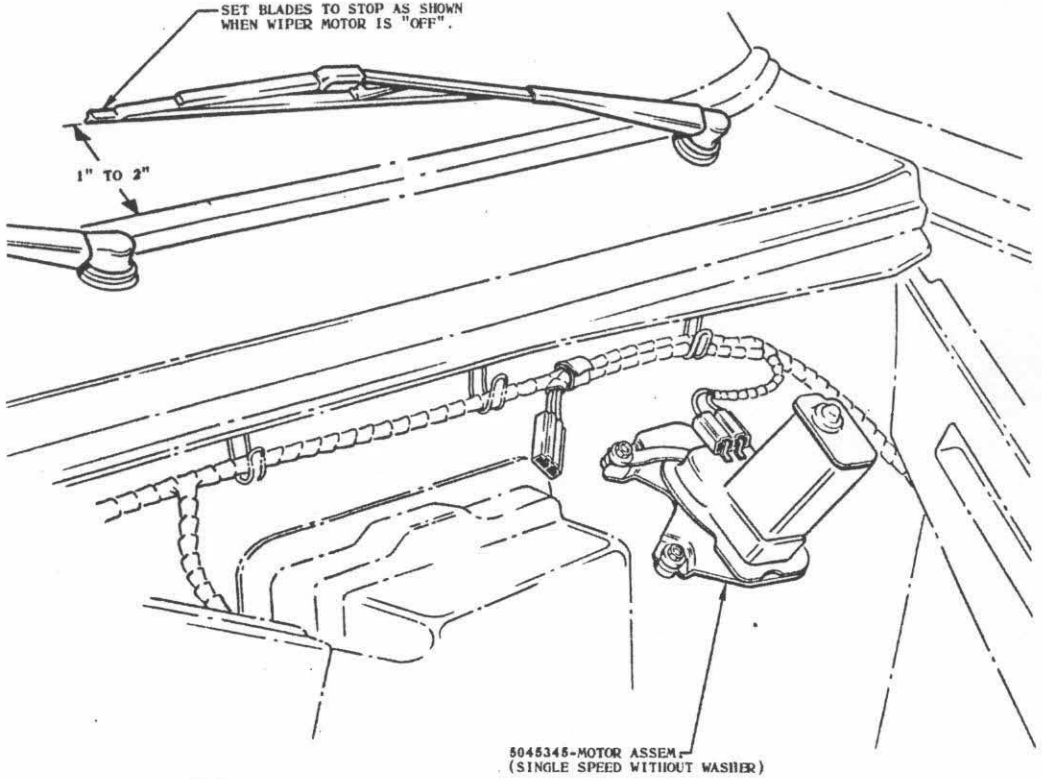
*	10-24-62	E	PART NUMBER ADDED	RG	UP
+	9-18-62	D	SCREW USAGE REVISED	RG	UP
X	9-23-62	C	NOTE REVISED	CMB	UP
+	7-26-62	B	WAS 168499 SCREW	RG	UP
*	3-22-62	A	WAS 583764 CONT. ASSY	JM	UP
	DATE	SYM.	REVISION RECORD	DR.	CK.

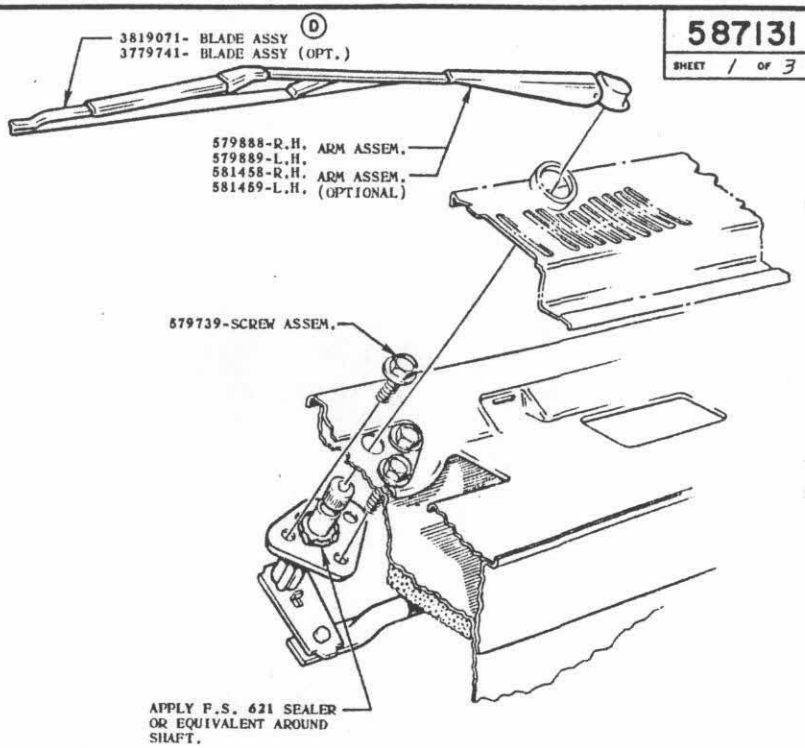
DWG. DATE MAR. 6, 1962 DR. TITUS
FIRST USED 1963 CK. H. VAN PELT
APPR.
REFERENCE IAEC-90 APPR.
NAME LAYOUT-VENTILATION
SERIES 3000 - 3100
SHEET / OF /
PART NO. 380510

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

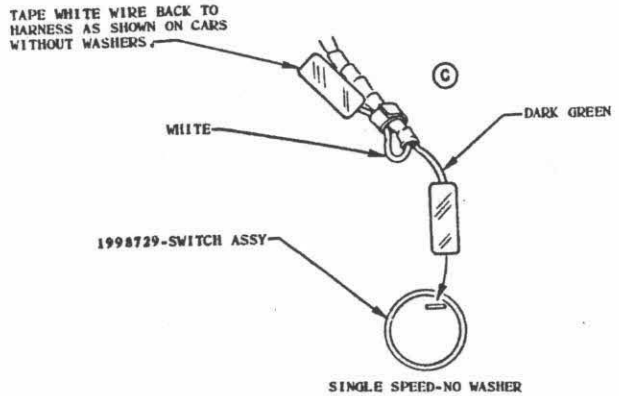
WINDSHIELD WIPER & WASHER

DRAWINGS INCLUDED IN THIS SECTION ARE:





TRANSMISSION ASSEM. & ARM FASTENING



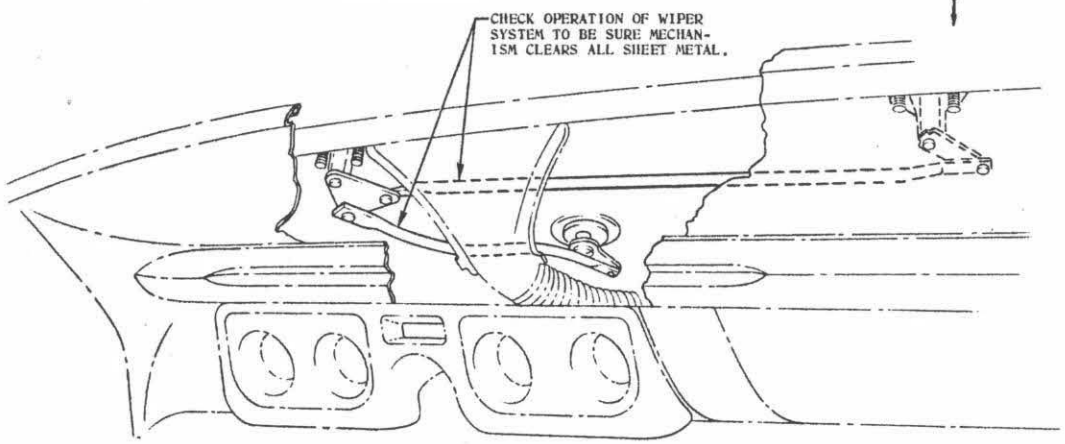
WIPER CONTROL SWITCH CONNECTIONS

X	9-22-66	D	3819071 AND 3779741 OPT	CUR	VP
+	6-13-66	C	VIEW ADDED	DT	DT
+	6-13-66	B	WAS SHEET 2 OF 3	DT	DT
X	6-96	A	WAS SHEET 2 OF 2	VP	VP
	DATE	SYM.	REVISION RECORD	DR.	CK.

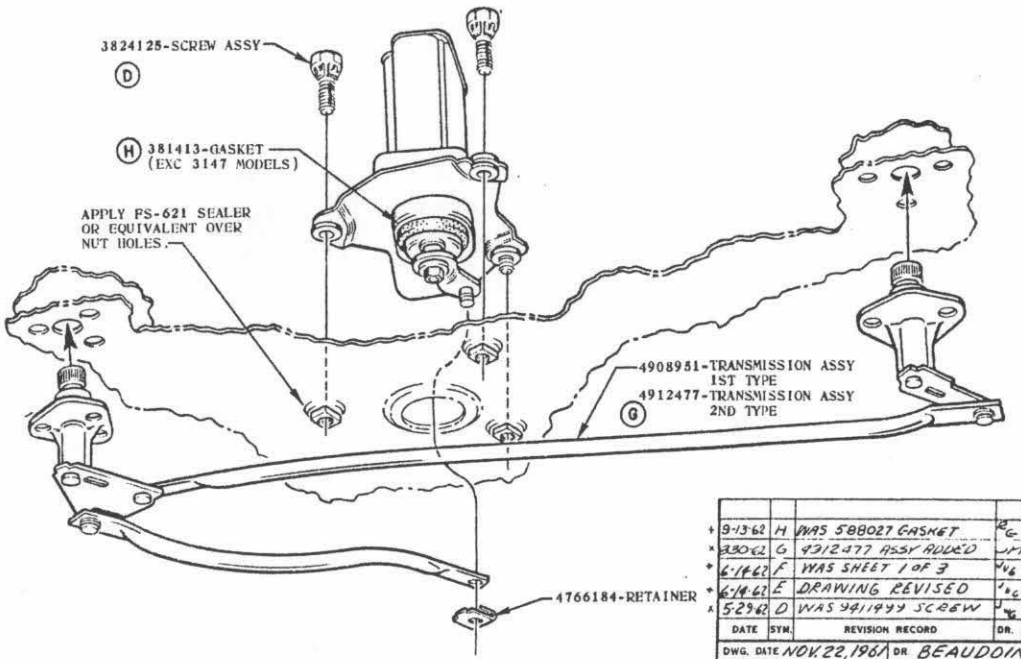
DWG. DATE NOV. 22, 1961 DR. BEAUDOIN
FIRST USED 1963 CK. H. VAN PELT
APPR.
REFERENCE 1A2D APPR.
NAME LAYOUT-WINDSHIELD WIPER
SERIES 3000-3100
SHEET 1 OF 3
PART NO. 587131

587131
SHEET 1 OF 3

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



TRANSMISSION ASSEM. INSTALLED

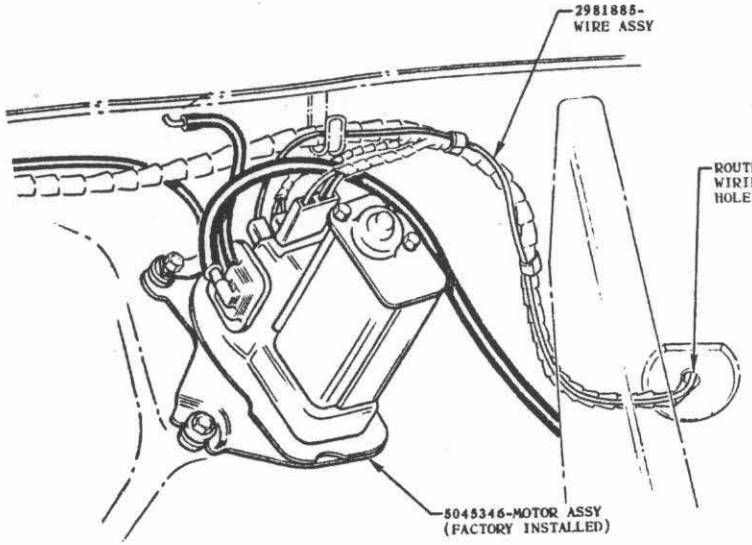


MOTOR AND TRANSMISSION INSTALLATION

	DATE	SYM.	REVISION RECORD	DR.	CK.
+	9-13-62	H	WAS 588027 GASKET	RG	VP
*	8-30-62	G	4912477 ASSY ADDED	VP	VP
*	6-14-62	F	WAS SHEET 1 OF 3	VP	P.T.
*	6-14-62	E	DRAWING REVISED	VP	P.T.
A	5-29-62	D	WAS 9411999 SCREW	VP	VP

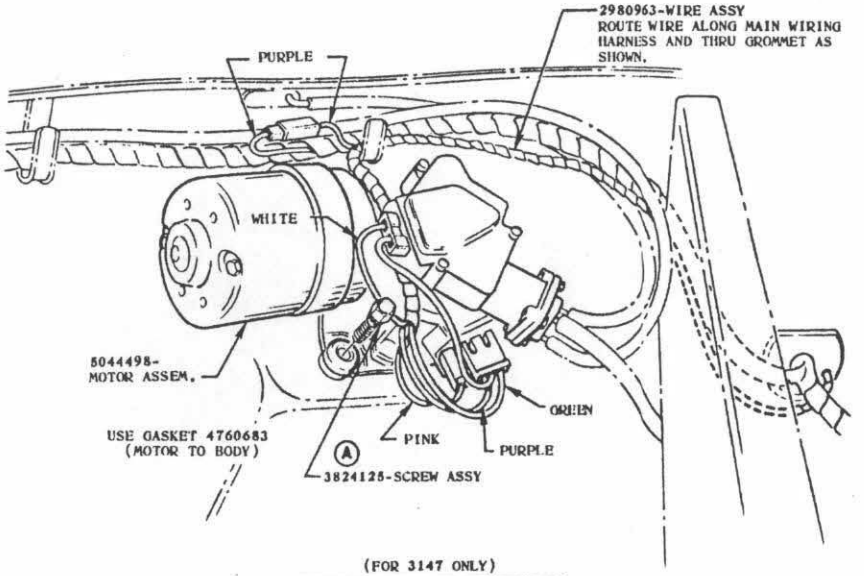
DWG. DATE NOV. 22, 1961 DR. BEAUDOIN
FIRST USED 1963 CK. H. VAN PELT
REFERENCE IA2D-C13 APPR.
NAME LAYOUT-WINDSHIELD WIPER

SERIES 3000-3100
SHEET 2 OF 3
PART NO. 587131



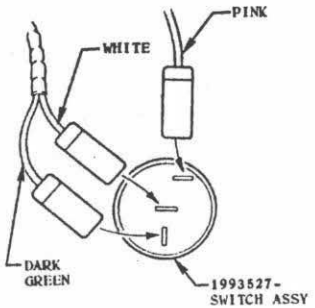
(EXC 3147)

INSTALLATION OF TWO
SPEED MOTOR & PUMP WIRING

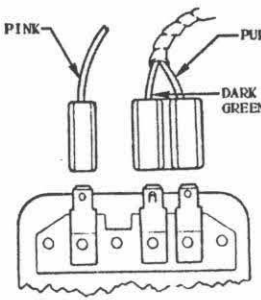


(FOR 3147 ONLY)

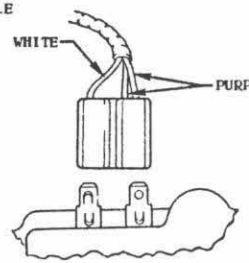
INSTALLATION OF TWO
SPEED MOTOR & PUMP WIRING



SWITCH CONNECTIONS



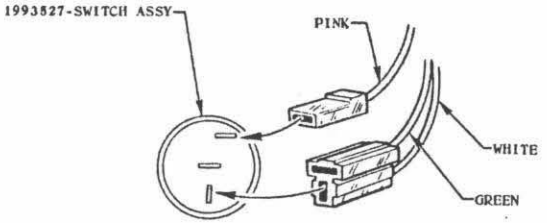
WIPER MOTOR WIRING



PUMP WIRING

(EXC 3147)

SWITCH CONNECTIONS



(FOR 3147 ONLY)

SWITCH CONNECTIONS

TO COMPLETE WINDSHIELD WASHER
INSTALLATION SEE DRAWING 587132

DATE	SYM.	REVISION RECORD	DR.	CK.
6-14-62	B	DRAWING REVISED	DX	DX
5-29-62	A	WAS 941499-SCREW	VD	VD

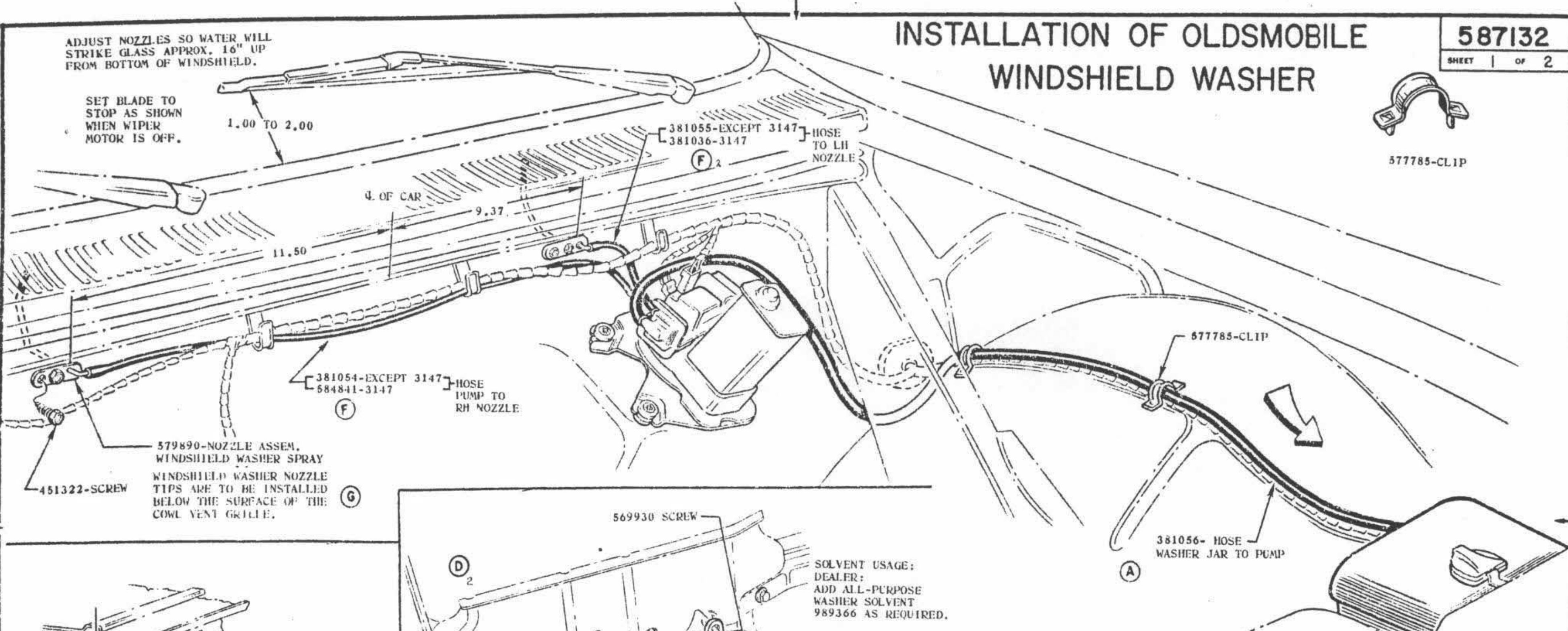
DWG. DATE APRIL 9 1962 DR. BEAUDOIN
FIRST USED 1963. CK. H.VAN PELT
REFERENCE 1A2D APPR.
NAME LAYOUT-WINDSHIELD WIPER
SERIES 3000 - 9100
PART NO. 587131
SHEET 3 OF 3

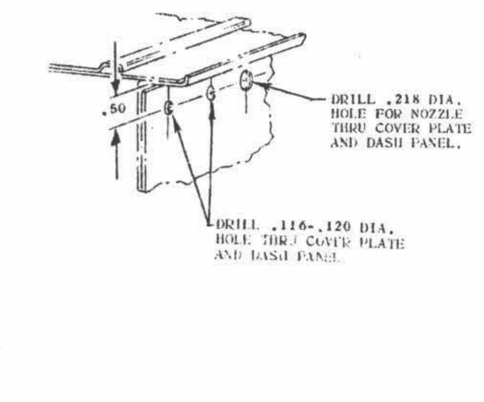
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

INSTALLATION OF OLDSMOBILE WINDSHIELD WASHER

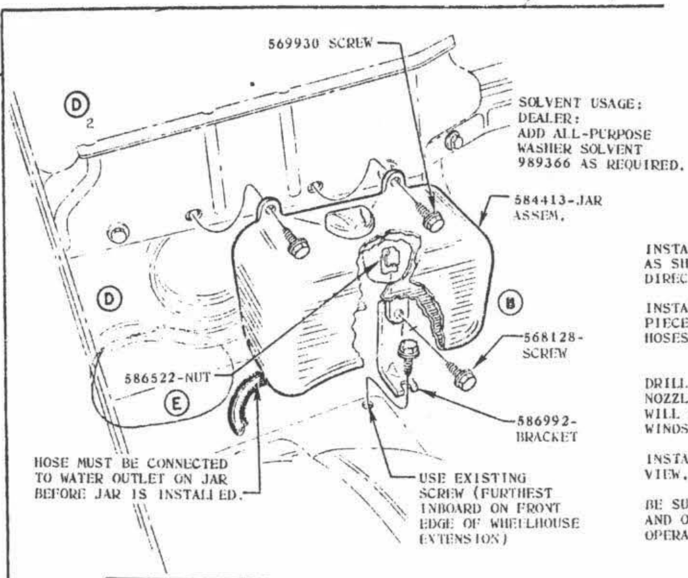
587132

SHEET 1 OF 2





HOLE DRILLING INSTRUCTIONS (FOR NOZZLE MOUNTING)



JAR INSTALLATION

VIEW IN DIRECTION OF ARROW

GENERAL INSTRUCTIONS

INSTALL WATER JAR TO FENDER TIE BAR AND WHEELHOUSE AS SHOWN. PARTICULAR ATTENTION BEING PAYED TO DIRECTION OF SCREWS.

INSTALL HOSE AS SHOWN. BLOW OUT EACH FITTING AND PIECE OF HOSE BEFORE ASSEMBLING TO MAKE SURE ALL HOSES ARE CLEARING MECHANISMS AND ARE FREE OF KINKS.

DRILL HOLES IN DASH AS SHOWN FOR INSTALLATION OF NOZZLE ASSY. NOZZLE TIPS MUST BE ADJUSTED SO WATER WILL STRIKE GLASS APPROX. 16" UP FROM BOTTOM OF WINDSHIELD.

INSTALL PUMP TO WIPER MOTOR AS SHOWN IN INSTALLATION VIEW.

BE SURE TO KEEP THE JET OPENINGS FREE OF DIRT, WAX AND OTHER FOREIGN MATTER. CHECK WASHER & WIPER OPERATION.

DATE	SYM.	REVISION RECORD	DR.	CK.
12-0-62	G	NOTE ADDED	DP	VP
10-2-62	F_2	PART NUMBERS ADDED	RG	VP
7-19-62	E	586522 NUT ADDED	RG	VP
7-13-62	D_2	NOTES REMOVED	RG	VP
6-13-62	C	PART NO. REMOVED	[illegible]	DT
4-18-62	B	JAR INSTALLATION REV.	GB	VP
4-10-62	A	HOSE NUMBERS REVISED	GB	VP

DWG. DATE MAR 5, 1962	DR. BEAUDOIN
FIRST USED 1963	CK. H. VAN PELT
	APPR.
REFERENCE 35-C10	APPR. [signature]

NAME: LAYOUT-WINDSHIELD WASHER

EXCEPT 3147

SERIES 3000 - 3100

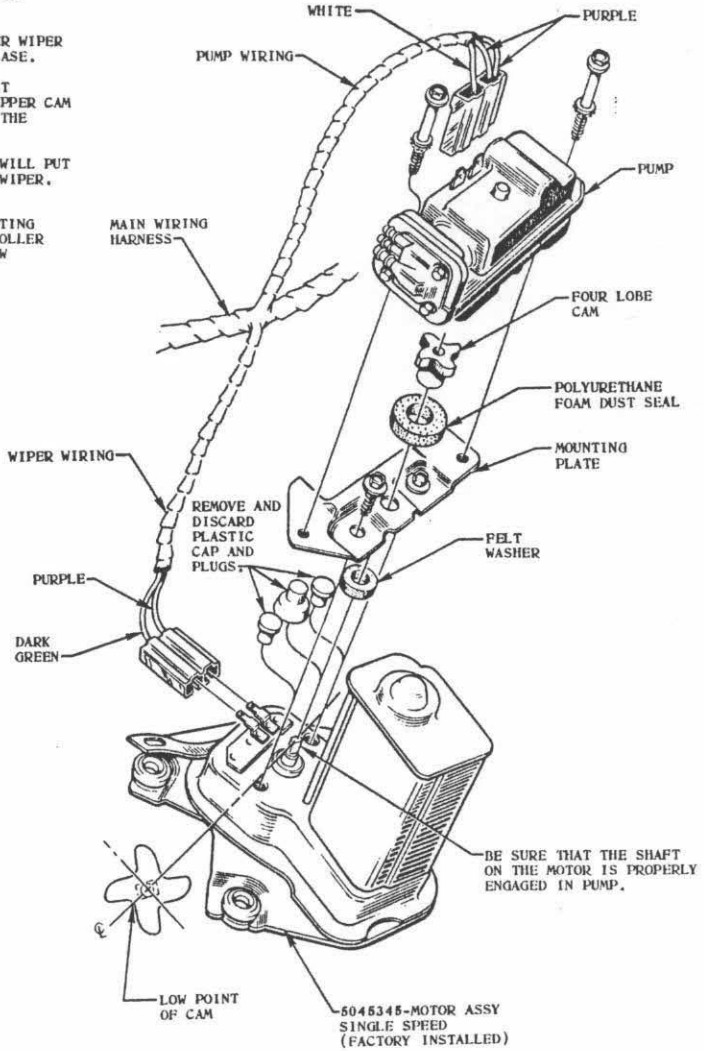
SHEET 1 OF 2

PART NO. 587132

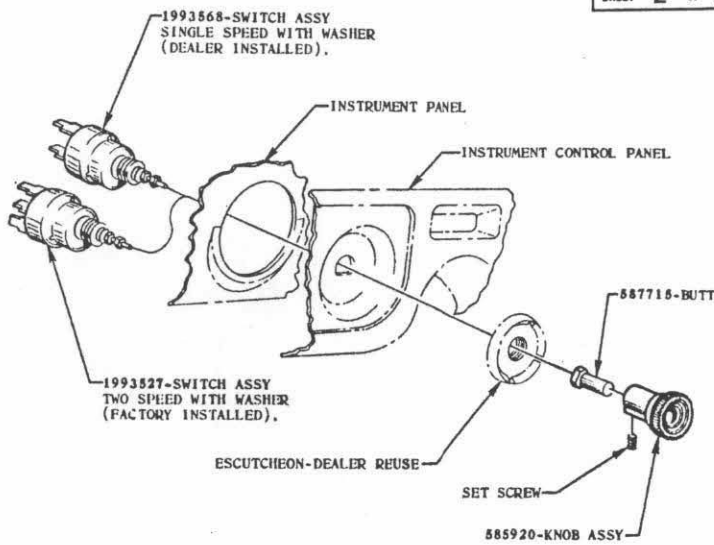
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

GENERAL INSTRUCTIONS

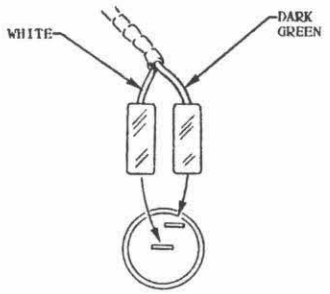
1. ASSEMBLE FELT SEAL OVER WIPER SHAFT AND PUSH DOWN AGAINST WIPER CASE.
2. ASSEMBLE MOUNTING PLATE TO WIPER CASE SECURELY WITH TWO SCREWS PROVIDED.
3. ASSEMBLE POLYURETHANE FOAM SEAL OVER WIPER SHAFT AND PUSH DOWN AGAINST WIPER CASE.
4. ASSEMBLE FOUR LOBE CAM FLUSH AGAINST SHOULDER OF SHAFT BEING SURE THAT UPPER CAM FACE IS PARALLEL TO THE SURFACE OF THE MOUNTING PLATE.
5. STOP WIPER BLADES IN POSITION THAT WILL PUT LOW POINT OF CAM ON CENTER LINE OF WIPER. SEE ILLUSTRATION BELOW.
6. ASSEMBLE WASHER PUMP OVER CAM, SHIFTING THE PUMP BACK AND FORTH UNTIL THE ROLLER IN THE PUMP IS POSITIONED AT THE LOW POINT OF THE CAM.
7. PARTICULAR ATTENTION MUST BE GIVEN TO PROPER MATING OF THE LOWER PORTION OF THE PUMP HOUSING TO UPPER PORTION AT NOZZLE END OF PUMP.
8. WITH WASHER PUMP RESTING FLAT ON MOUNTING PLATE, INSERT TWO SCREWS AND FASTEN SECURELY.



PUMP INSTALLATION FOR DEALERS



CONTROL INSTALLATION



DEALERS
SWITCH CONNECTION

6-14-62	B	DRAWING REVISED	LB	D.T.
4-9-62	A	GEN'L INSTRUCTIONS ADDED	FB	V.D.
DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAR. 5, 1962 DR. BEAUDOIN
FIRST USED 1963 CK. H. VAN PELT
APPR.
REFERENCE 35-C10 APPR. P. F. Jones
NAME LAYOUT - WINDSHIELD WASHER

SERIES 3000 - 3100
SHEET 2 OF 2
PART NO. 587132

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

FRONT SUSPENSION

DRAWINGS INCLUDED IN THIS SECTION ARE:

General Motors Corporation

1963 FRONT SHOCK ABSORBERS

Series	Usage	Part No.	Color Code	Valving Rebound	Valving Compression
30	ALL	3171473	Plain	C6*(57)G6	C2.5
30	ALL (Heavy Duty)	5554955	Purple	C3(27)R8	J2
31	17, 19 & 35	3171473	Plain	C6*(57)G6	C2.5
31	47 & 67	3171476	Gray	C6*(57)L8	D3.5
31	ALL (Heavy Duty)	5554955	Purple	C3(27)R8	J2
32	39, 47, 67 & 69	3171435	Plain	C6*(56)F8	L2
32	35 & 45	3171437	Yellow	C5*(53)M8	J2.75
32	ALL (Heavy Duty)	5554727	Green	C3.5(11)R8	G2
32	ALL (Export Option & Police Cruiser)	5554727	Green	C3.5(11)R8	G2
32	47 & 69 Police Patrol (35B07)	3171498	Brown	C1.5(4)N10	B1.5
35	39, 47 & 69	3171435	Plain	C6*(56)F8	L2
35	35	3171437	Yellow	C5*(53)M8	J2.75
35	ALL (Export Option)	5554727	Green	C3.5(11)R8	G2
36	ALL	3171435	Plain	C6*(56)F8	L2
36	ALL (Export Option)	5554727	Green	C3.5(11)R8	G2
38	ALL	3171439	Blue	C6*(56)J8	L2
38	ALL (Export Option)	5554727	Green	C3.5(11)R8	G2
39	ALL	3171439	Blue	C6*(56)J8	L2
39	ALL (Export Option)	5554727	Green	C3.5(11)R8	G2

Meaning of Codes for Valving.

Code 4
3 .082 Dia. Holes Rebound
3 .082 Dia. Holes Intake

Code 11
5 .089 Dia. Holes Rebound
6 .089 Dia. Holes Intake

Code 27
5 .082 Dia. Holes Rebound
5 .082 Dia. Holes Intake

Code 53
6 .089 Dia. Holes Rebound
8 .089 Dia. Holes Intake

Code 56
8 .089 Dia. Holes Rebound
6 .089 Dia. Holes Intake

Code 57
8 .089 Dia. Holes Rebound
8 .089 Dia. Holes Intake

Engineering Specifications
July 2, 1962

4-20-62		REDRAWN NO CHG		CM	
	M				

TOE - IN, CASTER AND CAMBER

PRODUCTION:
SET FRONT SUSPENSION CROSS BAR TO DIMENSION Y (CURB POSITION)
THIS METOD FOR PRODUCTION SETTING ONLY.

SERVICE:
SET CAR TO NORMAL CARRYING HEIGHT (CURB) USING DIM X AND Y.
THIS METHOD FOR SERVICE SETTING ONLY.

TOE-IN:
STEERING GEAR TO BE OPERATED INTO FULL LOCK TURN EACH DIRECTION PRIOR TO SETTING TOE-IN. DISTANCE FROM ONE TIRE TO THE OTHER AT POINT G SHOULD BE ZERO TO .12 GREATER THAN AT POINT H FOR BOTH PRODUCTION AND SERVICE SETTINGS.

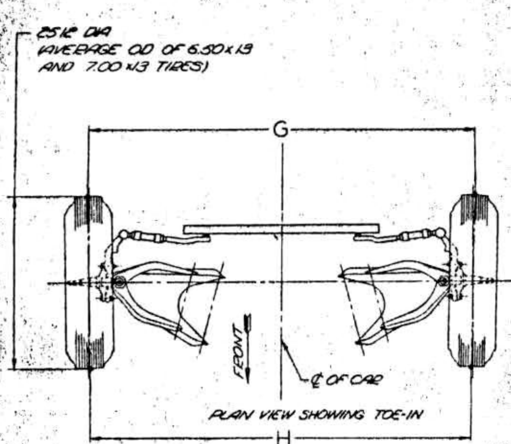
CAMBER:
PRODUCTION AND SERVICE LIMIT - CAMBER ANGLE $\frac{3}{8}°$ NEGATIVE TO $\frac{3}{8}°$ POSITIVE (CURB). EQUIVALENT DISTANCE A IS FROM .09 LESS TO .09 MORE THAN B. MAXIMUM VARIATIONS BETWEEN THE TWO SIDES OF THE CAR SHOULD NOT EXCEED $\frac{1}{2}°$ FOR BOTH PRODUCTION AND SERVICE SETTINGS (CURB POSITION)

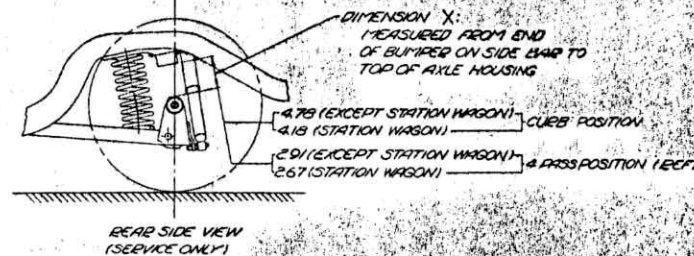
CASTER:
PRODUCTION AND SERVICE LIMIT - CASTER ANGLE TO BE $\frac{3}{4}°$ NEGATIVE TO $1\frac{3}{4}°$ NEGATIVE. (CURB POSITION).

TURNING ANGLE:
INNER WHEEL, ALL MODELS 38° 10'

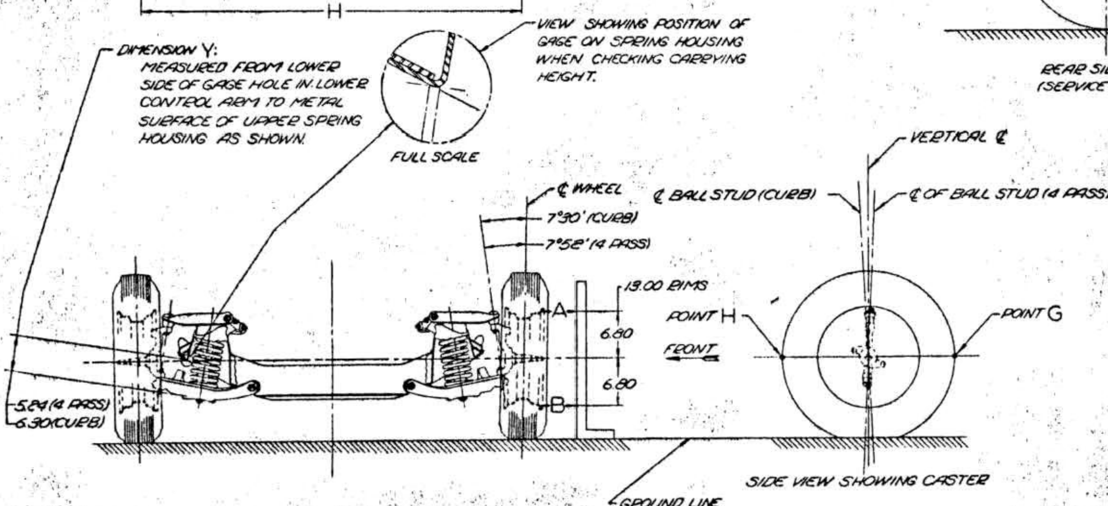
FRONT WHEEL TRACK (AT GROUND)
ALL MODELS 56.00

REAR WHEEL TRACK
ALL MODELS 56.00





NO.	580433
LAST CHANGE	L



LAST CHANGE	SHEET OF	NO. 580433
L		

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS

ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F_1 - .030; F_2 - .06; F_3 - .09; F_4 - .12 ETC.

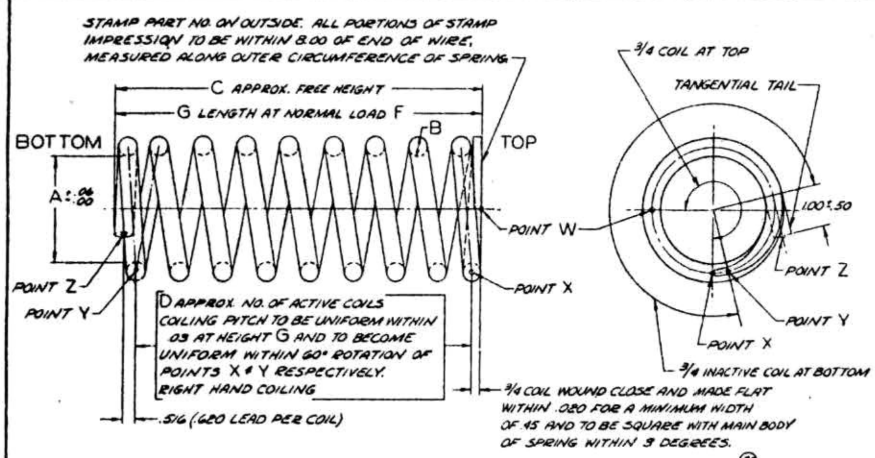
COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

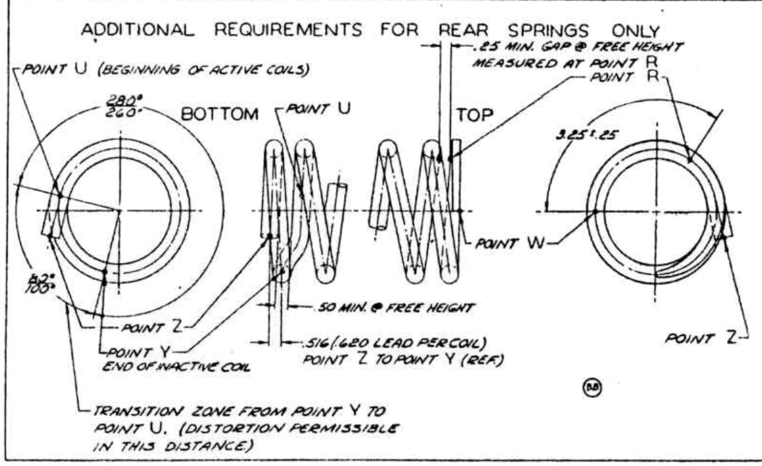
DO NOT SCALE

DATE DWG. DEC. 12, 1959	DR. L. SEWARD
SCALE EIGHTH	CK. BEDFORD
FIRST USED 1961	APPR. FERNAND
	APPR. DIENER
REFERENCE	APPR.
MATERIAL SPEC.	

NAME: LAYOUT - FRONT WHEEL ALIGNMENT

XD-69274 36+V1+H-	PART NO. 580433





DATE	SYM.	REVISION RECORD
6-29-61		REDRAWN WITHOUT CHANGES
6-29-61	BB	REAR SPRING DATA ADDED
8-29-61	BC	167 WAS 172
9-7-61	BD	DIM "K" REDUCED .25
10-30-61	BE	HIGH & LOW RANGE TOLERANCES REV.
1-4-62	BF	PART NO'S. ADDED
2-27-62	BG	LOADS REVISED
5-15-62	BH	522 WAS 531 WIRE
8-1-62	BJ	PART NO. ADDED

PART NUMBER	A	B	C	D	E	LOW RANGE F	HIGH RANGE F	G	H	J	K	COLOR
FRONT SPRINGS												
579354	3.210	.556	15.31	10.28	240	1365-1390	1390-1415	9.60	7.30		139.75	DARK GREEN
582032	3.210	.556	15.48	10.28	240	1405-1430	1430-1455	9.60	7.30		139.75	BROWN
580430	3.210	.562	15.73	10.68	240	1445-1470	1470-1495	9.60	7.30		144.75	LIGHT BLUE
582033	3.210	.562	15.89	10.68	240	1485-1510	1510-1535	9.60	7.30		144.75	WHITE
585499	3.210	.562	16.06	10.68	240	1525-1550	1550-1575	9.60	7.30		144.75	WHITE & DARK BLUE
584273	3.210	.562	16.23	10.68	240	1565-1590	1590-1615	9.60	7.30		144.75	PINK
582116	3.210	.562	14.82	9.50	270	1385-1410	1410-1435	9.60	7.30		129.75	RUST
583359	3.210	.572	15.19	10.11	270	1485-1510	1510-1535	9.60	7.30		137.75	GREY
583161	3.210	.580	14.32	9.28	310	1430-1460	1460-1490	9.60	7.30		126.75	WHITE & BROWN
583162	3.210	.580	14.64	9.28	310	1530-1560	1560-1590	9.60	7.30		126.75	WHITE & DARK GREEN
582995	3.210	562	12.89	7.16	358	1151-1176	1176-1201	9.60	7.30		102.75	LIGHT GREEN
REAR SPRINGS												
585539	3.484	.511	15.84	9.07	163	960-985	985-1010	9.80	6.60		127.75	RED & BROWN
585538	3.484	.522	16.09	9.79	163	1000-1025	1025-1050	9.80	6.60		138.75	RED & LIGHT GREEN
583307	3.484	.511	15.52	8.59	167	960-985	985-1010	9.80	6.60		125.75	RED & ALUMINUM
579355	3.484	.522	15.76	9.27	167	1000-1025	1025-1050	9.80	6.60		134.75	YELLOW
584277	3.484	.531	15.99	9.86	172	1040-1065	1065-1090	9.80	6.60		141.75	RED & YELLOW
582114	3.484	.531	14.93	8.48	200	1000-1025	1025-1050	9.80	6.60		124.75	ORANGE
583247	3.484	531	15.10	8.49	200	1035-1060	1060-1085	9.80	6.60		124.75	RED & DARK BLUE
580459	3.484	.562	15.89	9.68	215	1285-1310	1310-1335	9.80	7.00		140.75	RED
583267	3.484	562	16.08	9.68	215	1325-1350	1350-1375	9.80	7.00		140.75	YELLOW & DARK BLUE
583412	3.484	.572	16.31	10.31	215	1375-1400	1400-1425	9.80	7.00		148.75	RED & WHITE
583279	3.484	.572	15.15	9.05	245	1285-1310	1310-1335	9.80	7.00		133.75	ALUMINUM
583038	3.484	.531	12.81	6.58	258	752-777	777-802	9.80	6.60		100.75	DARK BLUE
587807	3.484	.511	14.87	8.59	172	847-872	872-897	9.80	6.30		125.50	RED & ALUMINUM
587805	3.484	.522	15.10	9.27	172	887-912	912-937	9.80	6.30		134.50	YELLOW
587808	3.484	522	15.56	9.27	172	965-990	990-1015	9.80	6.30		134.50	RED & YELLOW

PART NUMBER	A	B	C	D	E	LOW RANGE F	HIGH RANGE F	G	H	J	K	COLOR
REAR SPRINGS												
587806	3.484	547	15.38	8.77	215	1175-1200	1200-1225	9.80	6.60		129.50	RED
587810	3.484	562	14.70	8.49	245	1175-1200	1200-1225	9.80	6.60		126.25	ALUMINUM
587809	3.484	531	14.30	8.48	200	875-900	900-925	9.80	6.30		128.00	ORANGE
380771	3.484	.572	13.14	6.88	322	1050-1075	1075-1100	9.80	6.30		105.75	WHITE

COLOR IDENTIFICATION — HIGH LOAD RANGE - ONE DAUB; LOW LOAD RANGE - TWO DAUBS

PAINT DAUB TO BE ONE INCH MINIMUM.

SPRING MUST HAVE OVER .03 BOW IN FREE LENGTH OR MUST COMPLETELY ENTER CYLINDER J DIA x (C-.75) LONG.

RATE PER INCH E ±3% WHEN CHECKED 1.50 ABOVE TO .50 BELOW NORMAL LOAD HEIGHT G.

MUST CLOSE TO H WITHOUT TAKING PERMANENT SET.

APPROXIMATE LENGTH OF BAR = K.

STEEL - PRECISION ROLLED ±.004 AND OILED.

OPTIONAL STEEL - CENTERLESS GROUND ±.002 AND OILED.

NORMAL LOAD F LBS. AT G HEIGHT.

SHOT BLAST AFTER HEAT TREAT AND BEFORE PRESETTING AND TESTING USING #P28 ROUND STEEL.

HEAT TREAT TO 1610°F - QUENCH IN OIL. DRAW TO REQUIRED HARDNESS - 900°F RECOMMENDED.

HARDNESS - BRINELL 444-514 (2.90-2.70 M.M. DIA. IMP.)

COAT WITH AIR DRY CHASSIS PAINT. DAUB WITH IDENTIFICATION COLOR AFTER PAINTING.

TEST 1% PRODUCTION SPRINGS FOR RATE.

APPROVED SOURCE:
BUICK MOTOR DIVISION

SAMPLE TO BE TESTED & APPROVED BY PRODUCT ENGINEERING DEPT.

NO. 579353 — SHEET 1 OF 1 — LAST CHANGE BJ

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS

ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F_1-.030; F_2-.06; F_3-.09; F_4-.12 ETC.

COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

DO NOT SCALE

DATE DWG. AUGUST 31, 1959	DR. SEVERANCE
SCALE	CK. HANSEN
FIRST USED 1961 3000-3100	APPD. T.R. FERNAND
REFERENCE	APPD.

MATERIAL SPEC. SPRING STEEL - G.M. #9260-M

NAME: CHART-COIL SPRING

43-V1 — PART NO. 579353

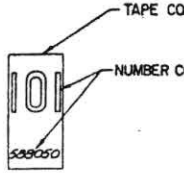
NO. 579353 — LAST CHANGE BJ

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING, MICHIGAN

SUSPENSION ASSEMBLIES WITHOUT SHOCKS	MODEL USAGE 3000 3100	TYPE OF STEERING	AIR COND.	SUSP. IDENTIFICATION TAPE ON RIGHT HAND BRAKE DRUM (SEE VIEW OF TAPE) TAPE COLOR	NO.	NUMBER COLOR	SPRING HIGH LOAD L.H. ONE DAUB	SPRING LOW LOAD R.H. TWO DAUBS	* SHOCK ABSORBERS	STEERING LINKAGE	BRAKE ASSEMBLY	STEERING GEAR	STEERING ARMS	HUB & DRUM SHOP ASSEMBLY	BAR & LOWER ARM SHOP ASSEMBLY	ISOLATION MOUNT ASSEMBLY FRONT	ISOLATION MOUNT ASSEMBLY SIDE
588050	2 & 4 DOORS & S.W. EXC. 3147	MANUAL	——	RED	101	BLACK	DK. GREEN 579359	PLAIN 3171473		5678380	BROWN MARK ON SIDE OF BACKING PLATE 5462350 L. 5462351 R.	5674222	588356 R. 588357 L.	581852 R. 581853 L.	585774	PLAIN 584380	PLAIN 587850
588051		POWER	——	WHITE	102	BLACK	BROWN 582032	"	"	5678381		5689663	588358 R. 588359 L.	"	"	"	"
588052		MANUAL	A/C	BLUE	103	BLACK	LT. BLUE 580430	"	"	5678380		5674222	588356 R. 588357 L.	"	"	YELLOW 585270	YELLOW 587851
588053		POWER	A/C	YELLOW	104	BLACK	WHITE 582033	"	"	5678381		5689663	588358 R. 588359 L.	"	"	"	"
(R) 588054	CONVERTIBLE	MANUAL	——	YELLOW	105	BLUE	LT. BLUE 580430	YELLOW 5549718		5678380		5674222	588356 R. 588357 L.	"	585775	"	"
588055	"	POWER	——	GREEN	106	BLUE	WHITE 582033	"	"	5678381		5689663	588358 R. 588359 L.	"	"	"	"
588056	"	MANUAL	A/C	RED	107	BLUE	WHT. & DK. BLUE 585499	"	"	5678380		5674222	588356 R. 588357 L.	"	"	"	"
588057	"	POWER	A/C	WHITE	108	BLUE	PINK 584273	"	"	5678381		5689663	588358 R. 588359 L.	"	"	"	"
(B) 588058	POLICE	MANUAL	A/C & WITHOUT	——	109	——	LT. GREEN 582935	PURPLE 5554955		5678380		5675727	588356 R. 588357 L.	"	585774	"	"
(E,C) 588059	EXPORT	MANUAL	A/C		110		GRAY 583359	PLAIN 3171473		5678380		5674222	588356 R. 588357 L.	"	"	"	"
(E,C) 588060	EXPORT	POWER	A/C & WITHOUT		111		GRAY 583359	PLAIN 3171473		5678381		5689663	588358 R. 588359 L.	"	"	"	"
(A) 588052	3147	MANUAL	——	BLUE	103	BLACK	LT. BLUE 580430	YELLOW 5549718		5678380		5674222	588356 R. 588357 L.	"	"	"	"
588053	"	POWER	——	YELLOW	104	BLACK	WHITE 582033	"	"	5678381		5689663	588358 R. 588359 L.	"	"	"	"
588061	"	MANUAL	A/C	GREEN	112	BLACK	WHT. & DK. BLUE 585499	"	"	5678380		5674222	588356 R. 588357 L.	"	"	"	"
588062	"	POWER	A/C	ORANGE	113	BLACK	PINK 584273	"	"	5678381		5689663	588358 R. 588359 L.	"	"	"	"
(E) 381207	EXPORT	MANUAL			114		RUST 582716	PLAIN 3171473		5678380		5674222	588356 R. 588357 L.	"	"	"	"

* ASSEMBLED ON CAR LINE

DATE	SYM.	REVISION RECORD	AUTHORITY	ENG.	MFG.
6/28/62	B	5549718 WAS 3171476	A.E.O.	EW	NB
7/20/62	C	LINE REVISED		P3	NB
7/20/62	C	LINE REMOVED		P3	NB
7/27/62	D	5549718 WAS 5549718	P.P.L.	EW	NB
8/22/62	E	LINE ADDED		EW	NB
8/22/62	F	5678380 WAS 5677780		EW	NB
8/22/62	G	5678381 WAS 5677781		EW	NB



TAPE EXAMPLE

NO. 381790
SHEET 1 OF 2
LAST CHANGE D

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING, MICHIGAN

OLDSMOBILE

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS
ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F_1-.030; F_2-.06; F_3-.09; F_4-.12 ETC.
COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

DO NOT SCALE

STYLE DIV. MAY 4, 1962	DR. PHYLLIS BENGEL
SCALE	CK.
FIRST USED 1963	APPR.
REFERENCE	APPR.
SUPERSEDES	

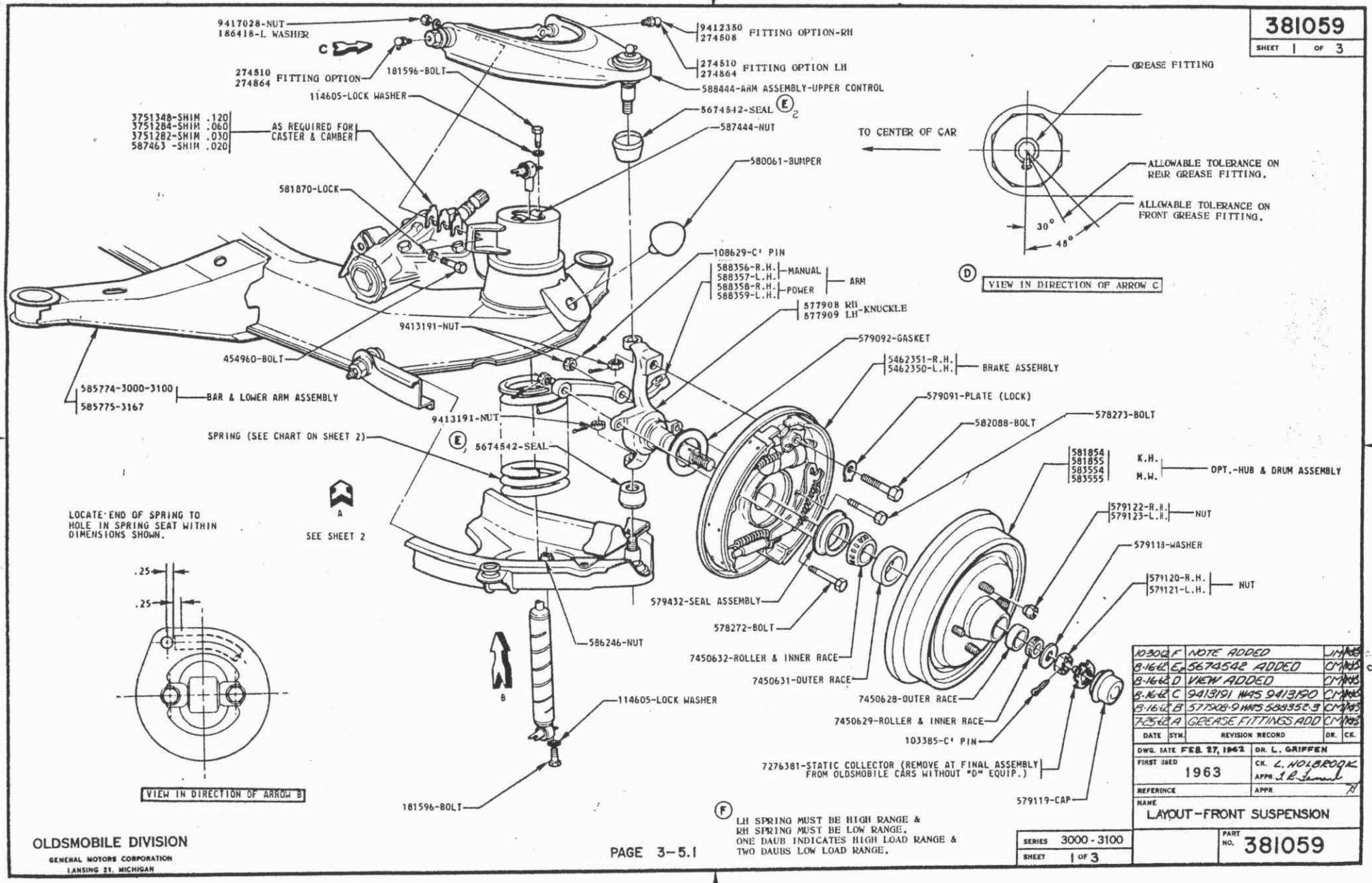
SEE LAYOUT 381059 FOR GENERAL INSTALLATION

SHEET 1 OF 2

CHART - CODE - FRONT SUSPENSION

F.K.B. PART NO. 381790 C

GAP.0



381059
SHEET 1 OF 3

(E)2 5674542-SEAL

(D) VIEW IN DIRECTION OF ARROW C

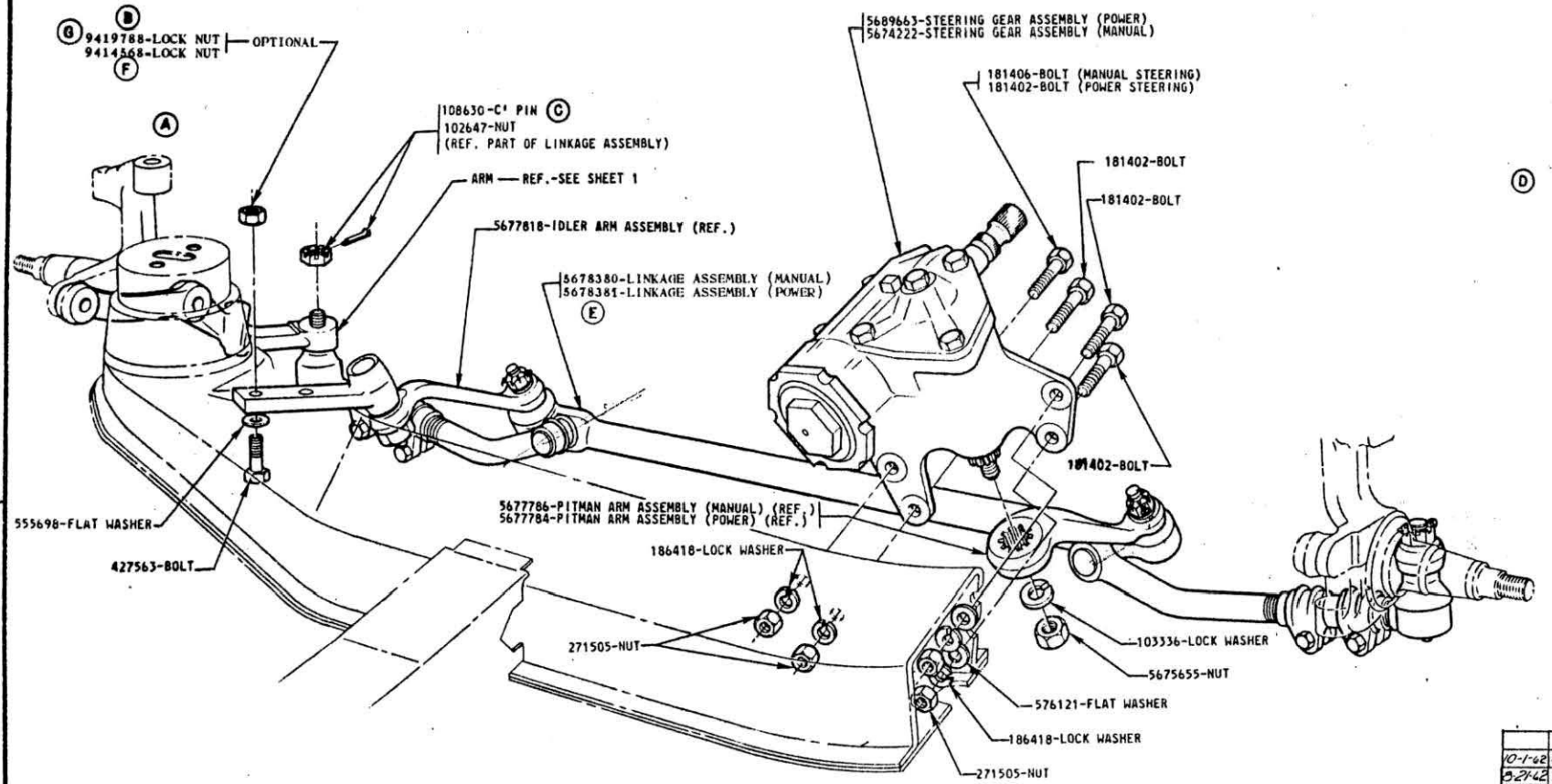
(E) 5674542-SEAL

(F) LH SPRING MUST BE HIGH RANGE & RH SPRING MUST BE LOW RANGE. ONE DAUB INDICATES HIGH LOAD RANGE & TWO DAUBS LOW LOAD RANGE.

DATE	SYM.	REVISION RECORD	DR.	CK.
10-30-62	F	NOTE ADDED	JM	
8-16-62	E	5674542 ADDED	CM	
8-16-62	D	VIEW ADDED	CM	
8-16-62	C	9413191 WAS 9413190	CM	
8-16-62	B	577908-9 WAS 588352-3	CM	
7-25-62	A	GREASE FITTINGS ADD	CM	

DWG. DATE FEB. 27, 1962 — DR. L. GRIFFEN
FIRST USED 1963 — CK. L. HOLBROOK — APPR. J. R. Lamont
REFERENCE — APPR.
NAME LAYOUT-FRONT SUSPENSION
SERIES 3000-3100
SHEET 1 OF 3
PART NO. 381059

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



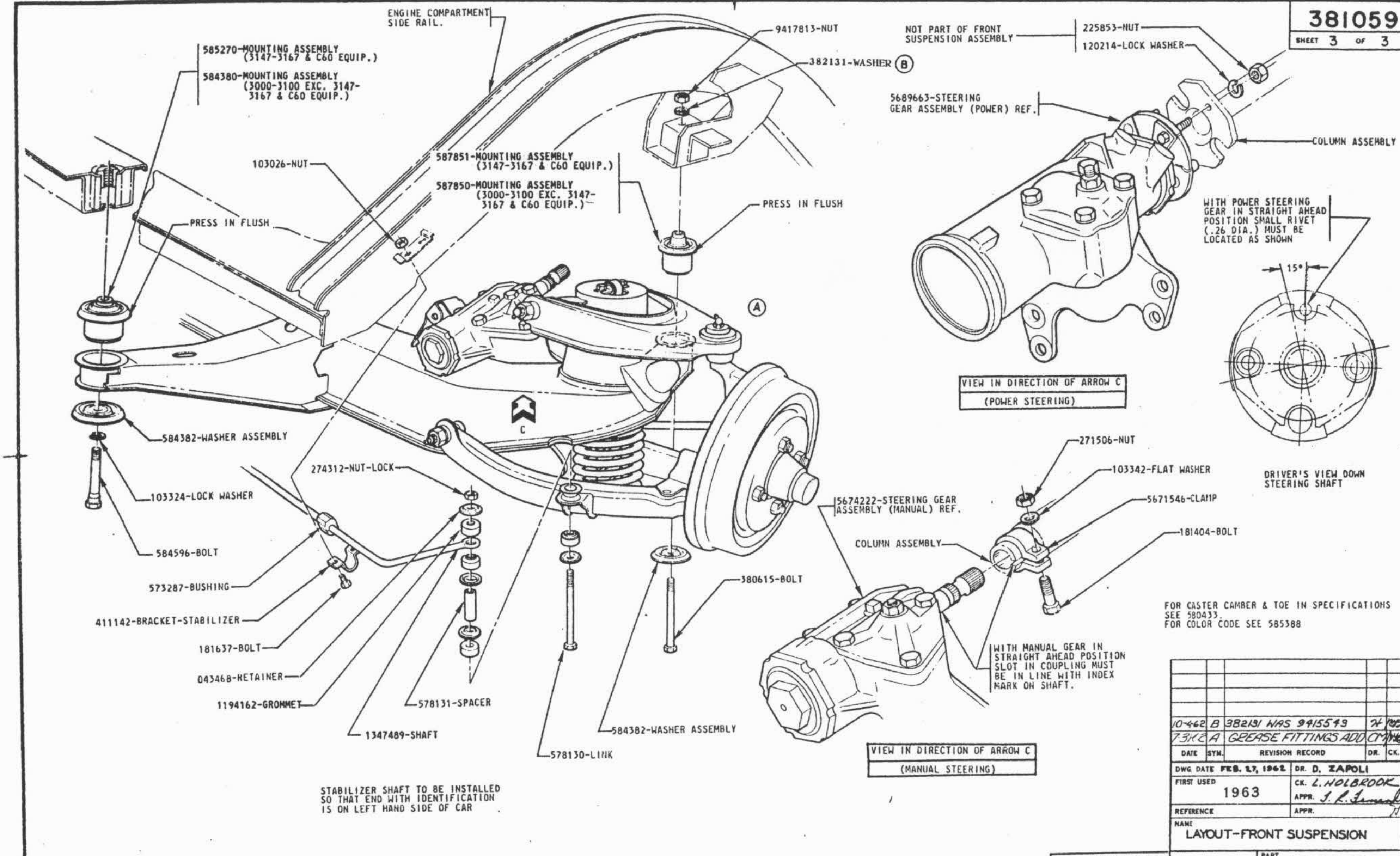
VIEW IN DIRECTION OF ARROW A

DATE	SYM.	REVISION RECORD	DR.	CK.
10-1-62	G	9419788 WAS 9414398	JH	WHS
9-21-62	F	9414568 OPT. ADDED ME	WHS	
8-21-62	E	WAS 5677780-1	ME	WHS
7-31-62	D	CHART REMOVED	CM	WHS
6-24-62	C	108630 WAS 103385	LN	WHS
6-13-62	B	9414398 WAS 120369	CM	WHS
6-13-62	A	10332, REMOVED	CM	WHS

DWG. DATE FEB. 27, 1962 — DR. D. ZAPOLI
FIRST USED 1963 — CK. L. HOLBROOK
REFERENCE — APPR. J. E. [illegible]
NAME: LAYOUT-FRONT SUSPENSION

SERIES 3000 - 3100
SHEET 2 OF 3

PART NO. 381059



381059
SHEET 3 OF 3

FOR CASTER CAMBER & TOE IN SPECIFICATIONS SEE 580433.
FOR COLOR CODE SEE 585388

DATE	SYM.	REVISION RECORD	DR.	CK.
10-4-62	B	382131 WAS 9415543		
7-3-62	A	GREASE FITTINGS ADD	CM	

DWG DATE FEB. 27, 1962 — DR. D. ZAPOLI
FIRST USED 1963 — CK. L. HOLBROOK
APPR.
REFERENCE — APPR.

NAME LAYOUT-FRONT SUSPENSION

SERIES 3000-3100
SHEET 3 OF 3
PART NO. 381059

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

REAR SUSPENSION

DRAWINGS INCLUDED IN THIS SECTION ARE:

General Motors Corporation

1963 REAR SHOCK ABSORBERS

Series	Usage	Part No.	Color Code	Valving Rebound	Valving Compression
30	19 & 27	3171474	Plain	C3.25*(67)F6	B3
30	35	3171475	Blue	4.5*(56)H6	A2.5
30	19 & 27 (Export Option & Police)	3171478	Green & White	C4.5*(56)J6	A2.5
30	ALL (Heavy Duty)	5554956	Brown & White	C2(27)R8	E1
31	17 & 19	3171474	Plain	C3.25*(67)F6	B3
31	35	3171475	Blue	4.5*(56)H6	A2.5
31	47 & 67	3171477	Green	C3.75*(56)G6	Ad2.5
31	17 & 19 (Export Option & Police)	3171478	Green & White	C4.5*(56)J6	A2.5
31	ALL (Heavy Duty)	5554956	Brown & White	C2(27)R8	E1
32	39, 47, 67 & 69	3171436	Brown	C3*(56)F8	Ad1.5
32	35 & 45	3171438	Yellow	C3.75*(56)K8	B2.25
32	ALL (Heavy Duty)	3171499	Blue & Brown	C2(6)N10	C1-67
32	39, 47, 67 & 69 (Export Option & Police Cruiser)	3171442	White	C2(60)R8	C1
32	47 & 69 Police Patrol (35B07)	3171499	Blue & Brown	C2(6)N10	C1-67
35	39, 47 & 69	3171436	Brown	C3*(56)F8	Ad1.5
35	35	3171438	Yellow	C3.75*(56)K8	B2.25
35	39, 47 & 69 (Export Option)	3171442	White	C2(60)R8	C1
36	ALL	3171436	Brown	C3*(56)F8	Ad1.5
36	ALL (Export Option)	3171442	White	C2(60)R8	C1
38	ALL	3171440	Orange	C3.25*(56)J8	Ad1.5
38	ALL (Export Option)	3171442	White	C2(60)R8	C1
39	ALL	3171440	Orange	C3.25*(56)J8	Ad1.5
39	ALL (Export Option)	3171442	White	C2(60)R8	C1

Meaning of Codes for Valving:

Code 6
2 .082 Dia. Holes Rebound
3 .082 Dia. Holes Intake

Code 56
8 .089 Dia. Holes Rebound
6 .089 Dia. Holes Intake

Code 67
8 .089 Dia. Holes Rebound
10 .089 Dia. Holes Intake

Code 27
5 .082 Dia. Holes Rebound
5 .082 Dia. Holes Intake

Code 60
5 .089 Dia. Holes Rebound
5 .089 Dia. Holes Intake

Engineering Specifications
July 2, 1962

1354411
10-5-61

OLDSMOBILE REAR AXLE MARKINGS FOR ASSEMBLY PLANTS

AXLE TYPE	MFG. AXLE CODE Nº	AXLE ASSEMBLY NUMBERS	RATIO	REMARKS	SERIES
STANDARD DIFFERENTAL	21	1194840	3.23	WITHOUT BRAKES (OLDS)	3000-3100
	22	1194865	3.08	WITHOUT BRAKES (OLDS)	3000-3100
	23	1194866	3.36	WITHOUT BRAKES (OLDS)	3000-3100
	24	579736	3.36	WITH BRAKES (BOP)	3000-3100
	25	579737	3.23	WITH BRAKES (BOP)	3000-3100
	26	579738	3.08	WITH BRAKES (BOP)	3000-3100
POSITIVE TRACTION DIFFERENTAL	27	1353916	3.23	WITHOUT BRAKES (OLDS)	3000-3100
	28	1353915	3.08	WITHOUT BRAKES (OLDS)	3000-3100
	29	1353917	3.36	WITHOUT BRAKES (OLDS)	3000-3100
	30	586429	3.36	WITH BRAKES (BOP)	3000-3100
	31	586428	3.23	WITH BRAKES (BOP)	3000-3100
	32	586427	3.08	WITH BRAKES (BOP)	3000-3100

AXLE ASSEMBLY MARKINGS FOR FIELD IDENTIFICATION

	RATIO	CODE LETTER
	3.08	A
	3.23	B
AXLE RATIO CODE LETTER	3.36	C
DATE	NUMBER OF THE DAY IN THE YEAR MANUFACTURED	
⊗	FOR POSITIVE TRACTION AXLES	

DIFF. CARRIER ASSEM. MARKINGS FOR MANUFACTURING INFORMATION ONLY

	COLOR CODE	
GEAR RATIO	STANDARD DIFFERENTIAL	POS. TRACTION DIFFERENTIAL
3.08	WHITE	WHITE—ORANGE
3.23	GREEN	GREEN—ORANGE
3.36	YELLOW	YELLOW-ORANGE

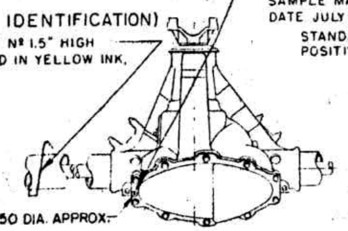
(FIELD IDENTIFICATION)

FOR FIELD IDENTIFICATION ALL AXLE ASSEMBLIES TO BE STAMPED ON RIGHT SIDE OF HOUSING COVER AS PER CHART.

SAMPLE MARKING FOR 3.08 RATIO DATE JULY 22 WOULD BE
STANDARD AXLES— A-203
POSITIVE TRACTION AXLES- ⊗A-203

(ASSEM. PLANT IDENTIFICATION)

MFG. AXLE CODE Nº 1.5" HIGH NUMBER STAMPED IN YELLOW INK.



.50 DIA. APPROX.

1354411
10-5-61

1354411

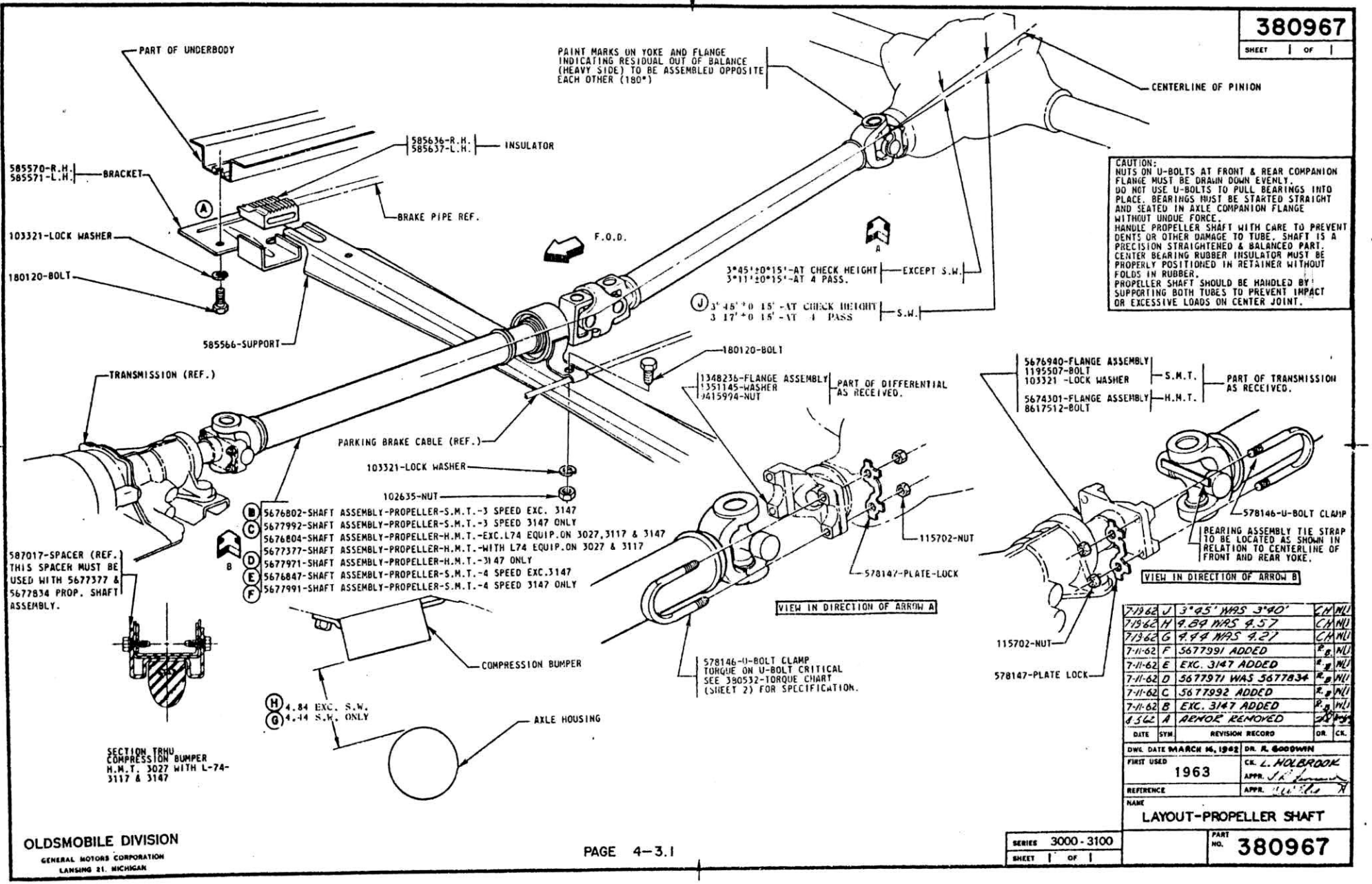
DO NOT SCALE — REPORT ERRORS
TOLERANCES UNLESS OTHERWISE SPECIFIED
± ALLOWED ON TWO PLACE DECIMALS
± .010 ALLOWED ON THREE PLACE DECIMALS
COMMERCIAL TOLERANCES APPLY TO STANDARD PARTS - ROLLED SECTIONS - SHEET METAL GAGES - DRILLED AND PUNCHED HOLES.
BURR ALL DRILLED HOLES. COUNTERSINK ALL TAPPED HOLES .030 X 90°.

DWG. DATE 10-5-61 | SCALE | DR. KRIEGER
FIRST USED 1962 3000-3100 | CK.
REFERENCE | APPR.
MATERIAL SPEC.

NAME: CHART - REAR AXLE ASSEMBLY MARKING

PART NO. 1354411

4

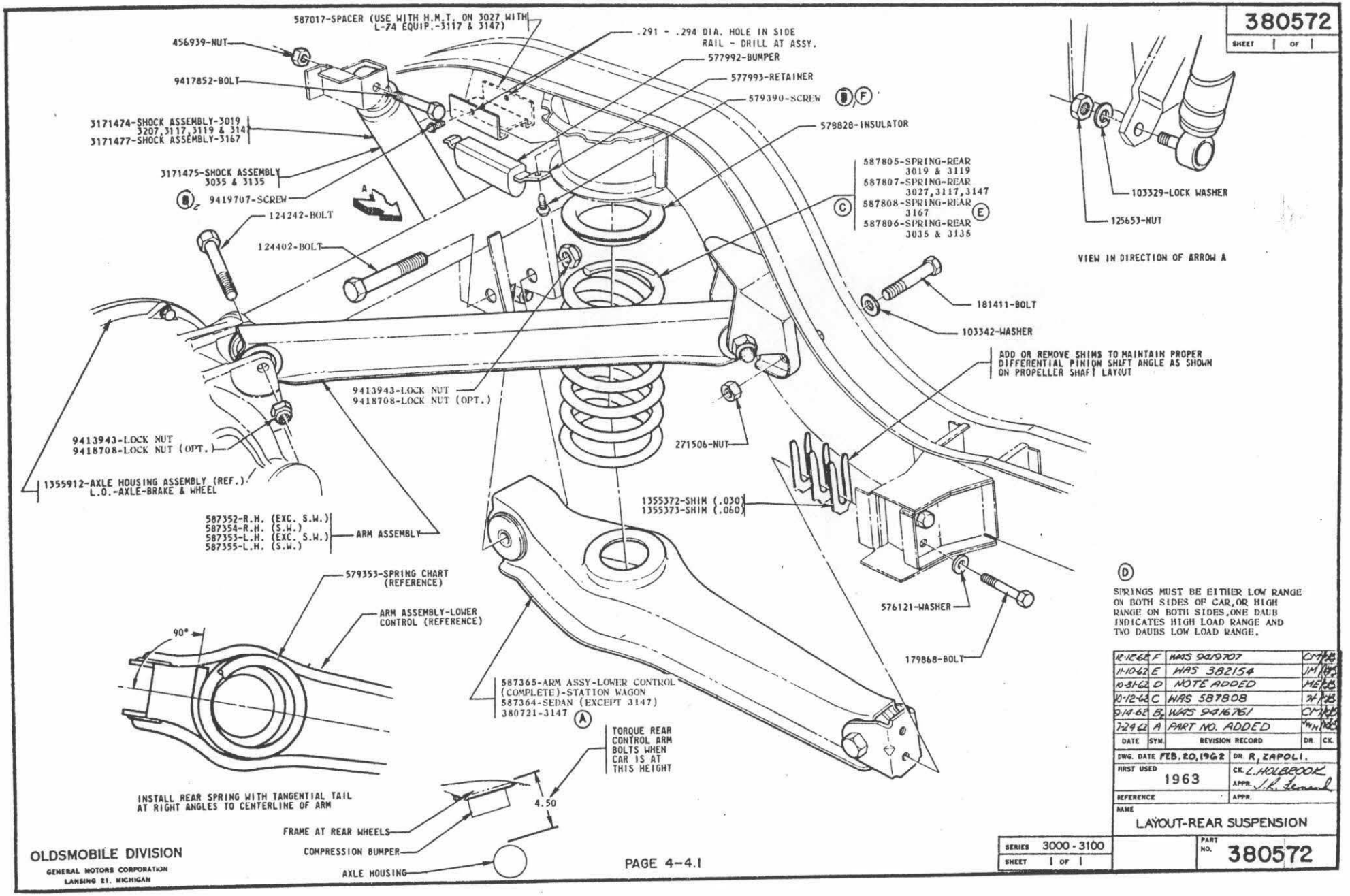


DATE	SYM.	REVISION RECORD	DR.	CK.
7-1962	J	3°45' WAS 3°40'	CH	WLJ
7-1962	H	9.89 WAS 9.57	CH	WLJ
7-1962	G	9.99 WAS 9.27	CH	WLJ
7-11-62	F	5677991 ADDED	R.B.	WLJ
7-11-62	E	EXC. 3147 ADDED	R.B.	WLJ
7-11-62	D	5677971 WAS 5677834	R.B.	WLJ
7-11-62	C	5677992 ADDED	R.B.	WLJ
7-11-62	B	EXC. 3147 ADDED	R.B.	WLJ
8 3 62	A	ARMOR REMOVED	JAB	WLJ

DWG. DATE MARCH 16, 1962 DR. R. GOODWIN
FIRST USED 1963 CK. L. HOLBROOK
APPR. J.K.
REFERENCE APPR.
NAME
LAYOUT-PROPELLER SHAFT

SERIES 3000 - 3100
SHEET 1 OF 1
PART NO. 380967

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



380572

SHEET | OF |

DATE	SYM.	REVISION RECORD	DR.	CK.
12-16-62	F	WAS 9419707	CM	
11-10-62	E	WAS 382154	JM	
10-31-62	D	NOTE ADDED	ME	
10-12-62	C	WAS 587808	JH	
9-14-62	B	WAS 9416761	CM	
7-29-62	A	PART NO. ADDED	WH	

DWG. DATE FEB. 20, 1962 DR. R. ZAPOLI.

FIRST USED 1963 CK. L. HOLBROOK

APPR. J. R. Leonard

REFERENCE APPR.

NAME

LAYOUT-REAR SUSPENSION

SERIES 3000 - 3100

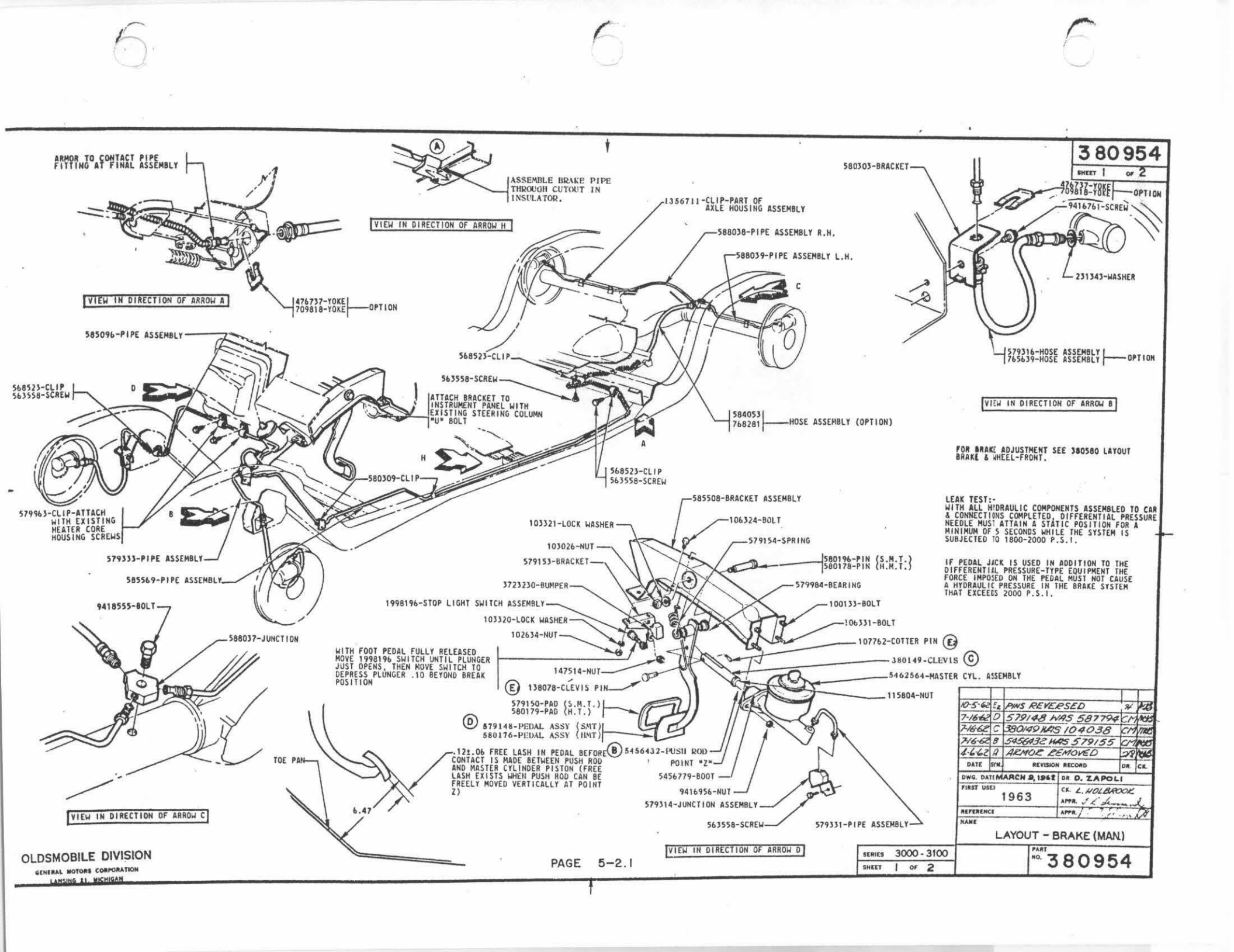
SHEET | OF |

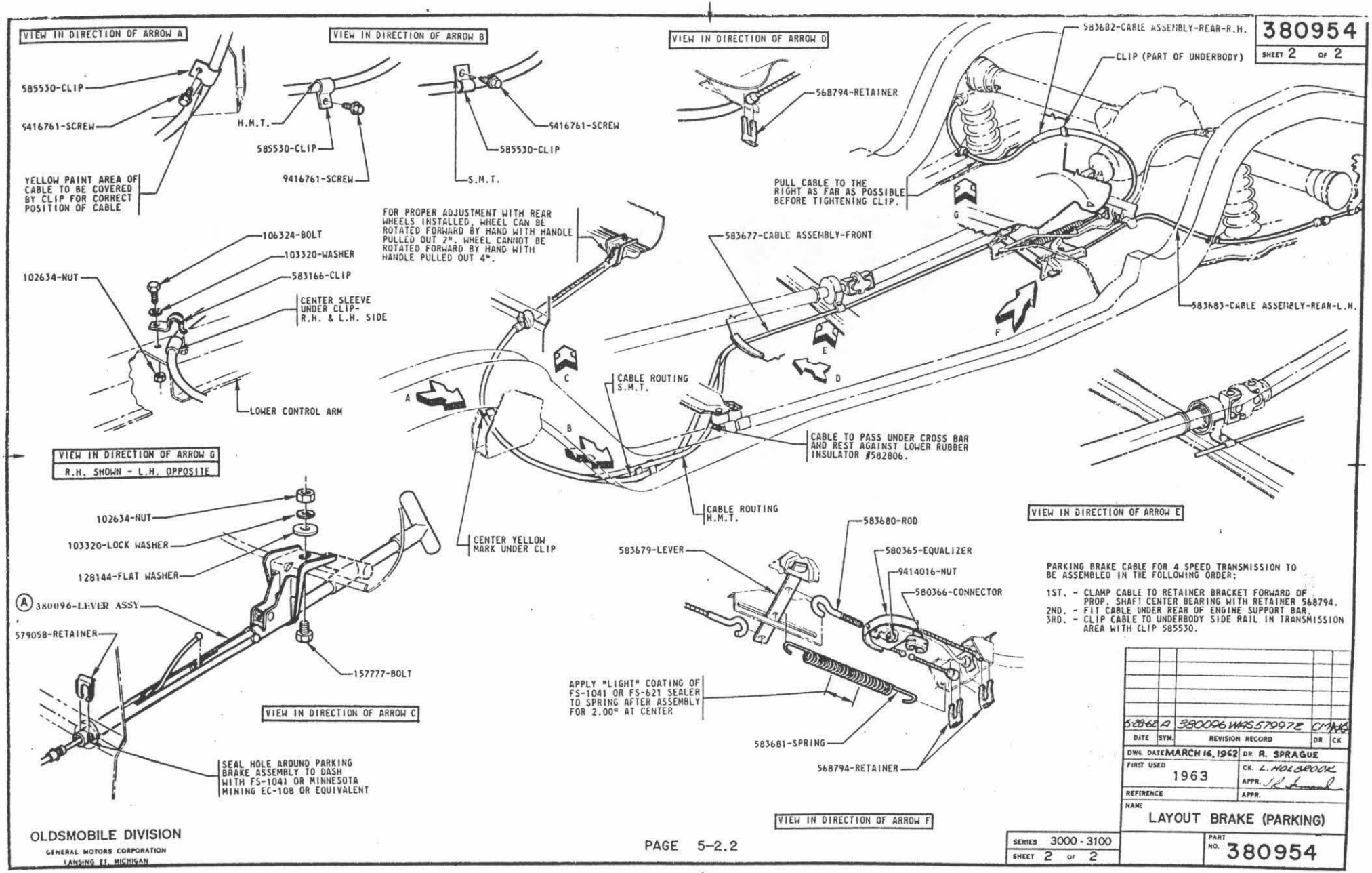
PART NO. 380572

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

BRAKES

DRAWINGS INCLUDED IN THIS SECTION ARE:


380954
SHEET 1 OF 2
ARMOR TO CONTACT PIPE FITTING AT FINAL ASSEMBLY
ASSEMBLE BRAKE PIPE THROUGH CUTOUT IN INSULATOR.
VIEW IN DIRECTION OF ARROW H
VIEW IN DIRECTION OF ARROW A
476737-YOKE
709818-YOKE
OPTION
1356711-CLIP-PART OF AXLE HOUSING ASSEMBLY
588038-PIPE ASSEMBLY R.H.
588039-PIPE ASSEMBLY L.H.
580303-BRACKET
476737-YOKE
709818-YOKE
OPTION
9416761-SCREW
231343-WASHER
579316-HOSE ASSEMBLY
765639-HOSE ASSEMBLY
OPTION
VIEW IN DIRECTION OF ARROW B
585096-PIPE ASSEMBLY
568523-CLIP
563558-SCREW
ATTACH BRACKET TO INSTRUMENT PANEL WITH EXISTING STEERING COLUMN "U" BOLT
584053
768281
HOSE ASSEMBLY (OPTION)
568523-CLIP
563558-SCREW
580309-CLIP
579963-CLIP-ATTACH WITH EXISTING HEATER CORE HOUSING SCREWS
579333-PIPE ASSEMBLY
585569-PIPE ASSEMBLY
FOR BRAKE ADJUSTMENT SEE 380580 LAYOUT BRAKE & WHEEL-FRONT.
LEAK TEST:-
WITH ALL HYDRAULIC COMPONENTS ASSEMBLED TO CAR & CONNECTIONS COMPLETED, DIFFERENTIAL PRESSURE NEEDLE MUST ATTAIN A STATIC POSITION FOR A MINIMUM OF 5 SECONDS WHILE THE SYSTEM IS SUBJECTED TO 1800-2000 P.S.I.
IF PEDAL JACK IS USED IN ADDITION TO THE DIFFERENTIAL PRESSURE-TYPE EQUIPMENT THE FORCE IMPOSED ON THE PEDAL MUST NOT CAUSE A HYDRAULIC PRESSURE IN THE BRAKE SYSTEM THAT EXCEEDS 2000 P.S.I.
585508-BRACKET ASSEMBLY
103321-LOCK WASHER
106324-BOLT
579154-SPRING
103026-NUT
579153-BRACKET
580196-PIN (S.M.T.)
580178-PIN (H.M.T.)
3723230-BUMPER
579984-BEARING
1998196-STOP LIGHT SWITCH ASSEMBLY
100133-BOLT
103320-LOCK WASHER
106331-BOLT
102634-NUT
107762-COTTER PIN E2
380149-CLEVIS C
WITH FOOT PEDAL FULLY RELEASED MOVE 1998196 SWITCH UNTIL PLUNGER JUST OPENS, THEN MOVE SWITCH TO DEPRESS PLUNGER .10 BEYOND BREAK POSITION
147514-NUT
5462564-MASTER CYL. ASSEMBLY
E 138078-CLEVIS PIN
115804-NUT
579150-PAD (S.M.T.)
580179-PAD (H.T.)
D 579148-PEDAL ASSY (SMT)
580176-PEDAL ASSY (HMT)
B 5456432-PUSH ROD
POINT "Z"
5456779-BOOT
9416956-NUT
579314-JUNCTION ASSEMBLY
563558-SCREW
579331-PIPE ASSEMBLY
9418555-BOLT
588037-JUNCTION
TOE PAN
.12±.06 FREE LASH IN PEDAL BEFORE CONTACT IS MADE BETWEEN PUSH ROD AND MASTER CYLINDER PISTON (FREE LASH EXISTS WHEN PUSH ROD CAN BE FREELY MOVED VERTICALLY AT POINT Z)
6.47
VIEW IN DIRECTION OF ARROW C
VIEW IN DIRECTION OF ARROW D
10-5-62 E2 PINS REVERSED
7-16-62 D 579148 WAS 587794
7-16-62 C 380149 WAS 1040338
7-16-62 B 5456432 WAS 579155
4-6-62 A ARMOR REMOVED
DATE S/M REVISION RECORD DR. CK.
DWG. DATE MARCH 9, 1962
DR. D. ZAPOLI
FIRST USED 1963
CK. L. HOLBROOK
APPR.
REFERENCE
APPR.
NAME
LAYOUT - BRAKE (MAN.)
SERIES 3000 - 3100
SHEET 1 OF 2
PART NO. 380954
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN
PAGE 5-2.1



380954

SHEET 2 OF 2

PARKING BRAKE CABLE FOR 4 SPEED TRANSMISSION TO BE ASSEMBLED IN THE FOLLOWING ORDER:

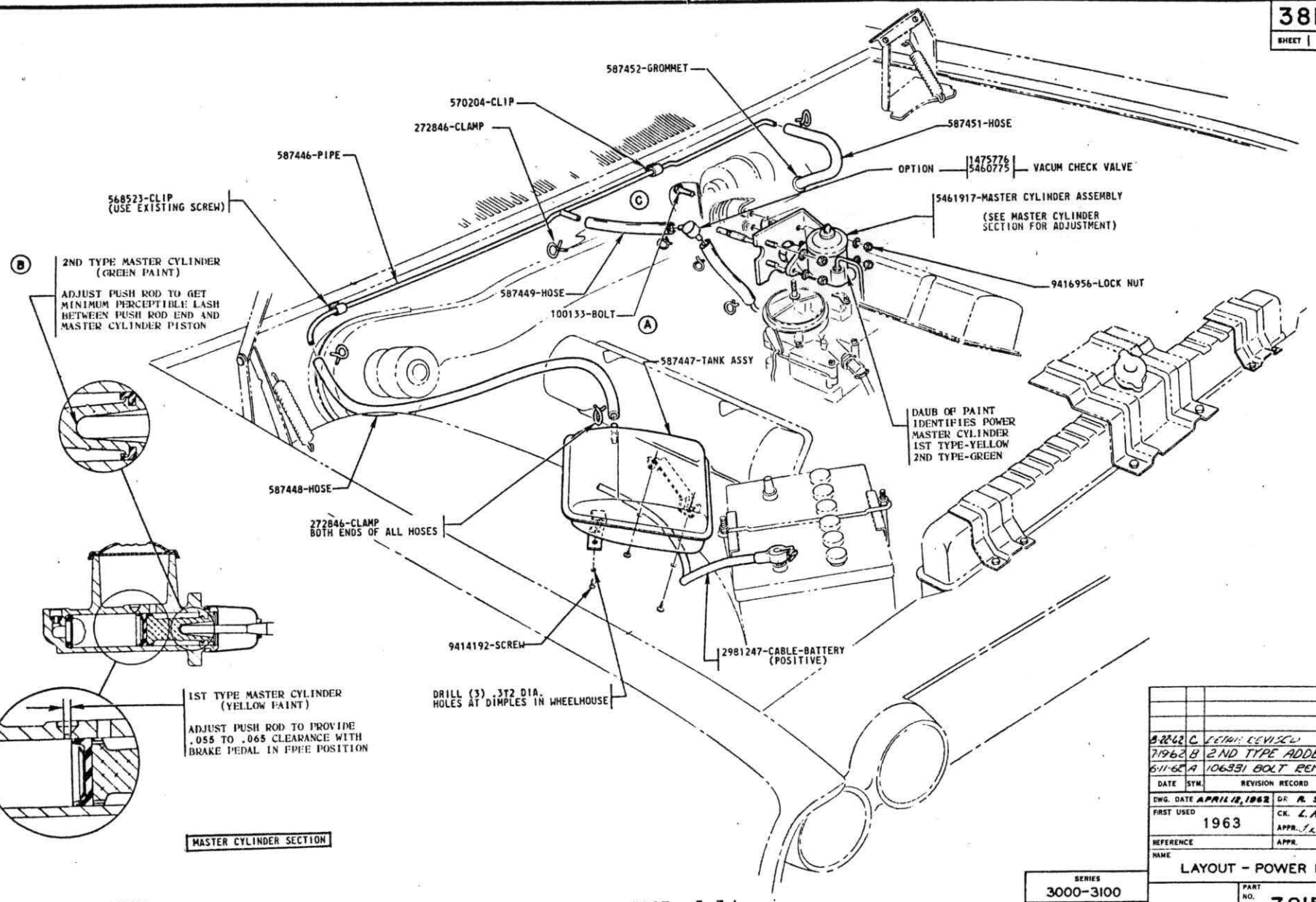
1ST. - CLAMP CABLE TO RETAINER BRACKET FORWARD OF PROP. SHAFT CENTER BEARING WITH RETAINER 568794.
2ND. - FIT CABLE UNDER REAR OF ENGINE SUPPORT BAR.
3RD. - CLIP CABLE TO UNDERBODY SIDE RAIL IN TRANSMISSION AREA WITH CLIP 585530.

DATE	SYM.	REVISION RECORD	DR	CK
5-28-62	A	380096 WAS 579972	CMAG	

DWG. DATE MARCH 16, 1962 DR R. SPRAGUE
FIRST USED 1963 CK. L. HOLBROOK APPR.
REFERENCE APPR.
NAME LAYOUT BRAKE (PARKING)
PART NO. 380954
SERIES 3000 - 3100
SHEET 2 OF 2

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

381536
SHEET 1 OF 2



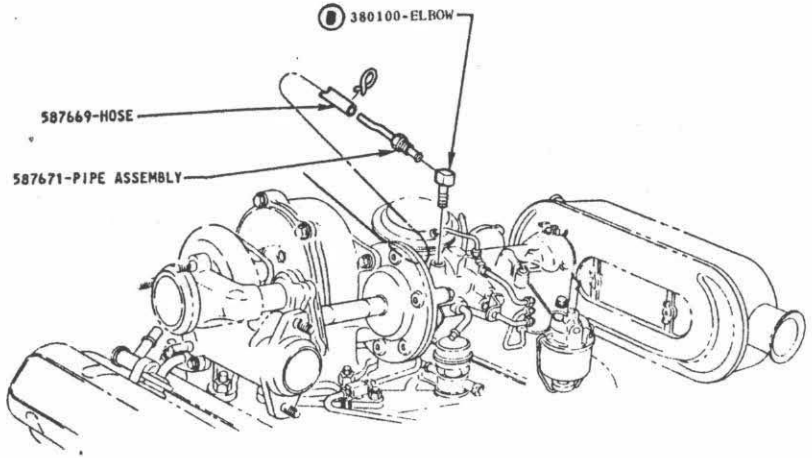
DATE	SYM.	REVISION RECORD	DR	CK.
8-22-62	C	DETAIL REVISED	LVB	LN
7-1962	B	2ND TYPE ADDED	VN	RBS
6-11-62	A	106331 BOLT REM	CM	RBS

DWG. DATE APRIL 12, 1962 DR R. SPRAGUE
FIRST USED 1963 CK. L. HOLBROOK
APPR.
REFERENCE APPR.
NAME LAYOUT - POWER BRAKE

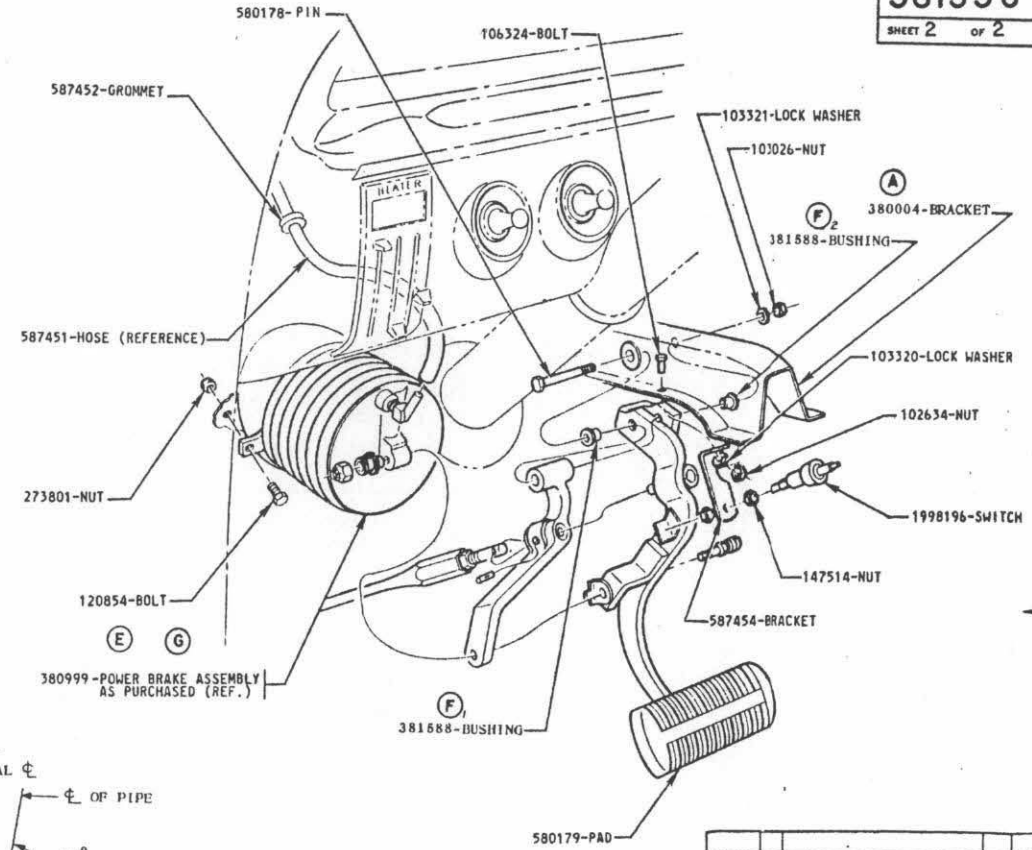
SERIES 3000-3100
SHEET 1 OF 2

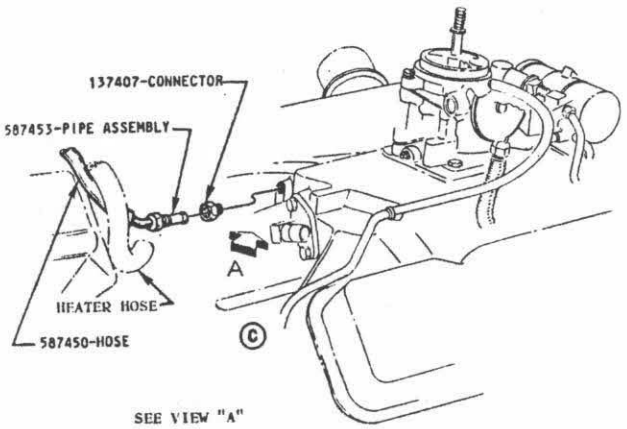
PART NO. 381536

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21 MICHIGAN



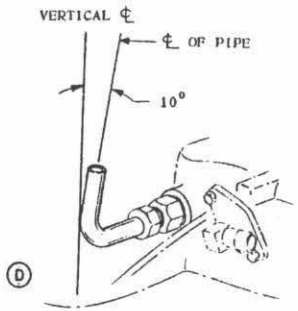
VIEW SHOWING HOOK UP FOR TURBO-CHARGER





SEE VIEW "A"

VIEW SHOWING HOOK UP FOR 2 & 4 BARREL CARBURETOR



VIEW "A"

11-16-62	G	PART NO. REMOVED	JA
11-15-62	F2	BUSHING ADDED	CM
11-1-62	E	PART NO. ADDED	JM
8-22-62	D	VIEW ADDED	CM/LM
8-22-62	C	DETAIL REVISED	CM/LM
6-20-62	B	380100 WAS 387322	CM
6-1-62	A	380004 WAS 385508	CM
DATE	SYM.	REVISION RECORD	DR. CK.

DWG. DATE APRIL 12, 1962 DR. A. SPRAGUE
FIRST USED 1963 CK. L. HOLBROOK APPR. J. L. Howard
REFERENCE APPR.
NAME LAYOUT - POWER BRAKE
PART NO. 381536

SERIES 3000 - 3100
SHEET 2 OF 2

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

ENGINE

DRAWINGS INCLUDED IN THIS SECTION ARE:

1963 F-85 ENGINE ASSEMBLIES

ENGINE PART NO.	ENGINE PLANT SYMBOL	TRANS.	CARB.	COMP. RATIO	SPARK PLUG	AIR COND.	ENGINE SUB-ASSY.	DIST.	CYL. HEAD	PISTON
588370	S3-3	SM3	2	8.75	46FFX	NO@	588330	SM	L.C.	FLAT
588371	H3	HT	2	8.75	46FFX	NO@	577743	**HT	L.C.	FLAT
381156	H3N	HT	2	8.75	46FFX	YES	577743	**HT	L.C.	FLAT
588372	S6-3	SM3	4	10.25	45FF	NO@	588331	SM	H.C.	#
588373	H6	HT	4	10.75	44FF	NO@	582084	**HT	**U.H.C.	*V.C.P
381157	H6N	HT	4	10.75	44FF	YES	582084	**HT	**U.H.C.	*V.C.P
380927	ST	SM3 & 4	TURB.	10.25	45FF	NO@	588332	SPEC.	H.C.	*V.C.P.
380928	HT	HT	TURB.	10.25	45FF	NO@	585273	SPEC.	H.C.	*V.C.P
588393	S3-4	SM4	2	8.75	46FFX	NO@	588330	SM	L.C.	FLAT
588394	S6-4	SM4	4	10.25	45FF	NO@	588331	SM	H.C.	#
				SPECIAL SERIES ENGINES (SPEC. DUTY CLUTCH)						
588374	S3P-3 & 4	SM	2	8.75	46FFX	NO	588330	SM	L.C.	FLAT
588375	S6P-3 & 4	SM	4	10.25	45FF	NO	588331	SM	H.C.	#
381974	H6PS	HT	4	10.75	42FF	NO@		HT	U.H.C.	V.C.P.
381972	S6PS	SM(3 & 4)	4	10.75	42FF	NO@		SM	U.H.C.	V.C.P.
				EXPORT ENGINES (DISH PISTON)						
588376	S3L-3	SM3	2	8.3	47FF	NO@	588333	SM	L.C.	DISH
588377	H3L	HT	2	8.3	47FF	NO@	581124	**HT	L.C.	DISH
588378	S6L-3	SM3	4	8.3	47FF	NO@	588333	SM	L.C.	DISH
588379	H6L	HT	4	8.3	47FF	NO@	581124	**HT	L.C.	DISH
588395	S3L-4	SM4	2	8.3	47FF	NO@	588333	SM	L.C.	DISH
588396	S6L-4	SM4	4	8.3	47FF	NO@	588333	SM	L.C.	DISH

@ If air conditioning is required, the car assembly plants will convert.
* V.C.P. - Valve Clearance Pocket.
** New for 1963.
\# Carryover 1962 Piston 584694.

1963 F-85 ENGINE CONVERSION

Standard engines may be converted to air conditioning by the following:

ITEM	REMOVE	INSTALL	REMARKS
Water Pump	1194444	585114	Dip bolts in engine oil. Retorque bolts to 6-8 ft. lbs.
Bolt, Cylinder Head	583722	585483	Apply Buick anti-sieze 1379 to hole in block, torque bolt to 45-55 ft. lbs.
Bracket, Spark Plug Cable, left	580987	587186	New Part
Guide, oil level indicator	-	587279	3147 part
Bracket, oil level indicator guide	-	585461	3147 part
Bolt, bracket to head	-	121797	3147 part
Nut-spring clip to spark plug cable bracket	-	580497	3147 part
Clip, guide to spark plug cable bracket	-	580268	3147 part
Screw (sheet metal) clip to spark plug cable bracket	-	563558	3147 part
Indicator, oil level	579974	587035	3147 part

ENGINE ASSEMBLIES AS PURCHASED

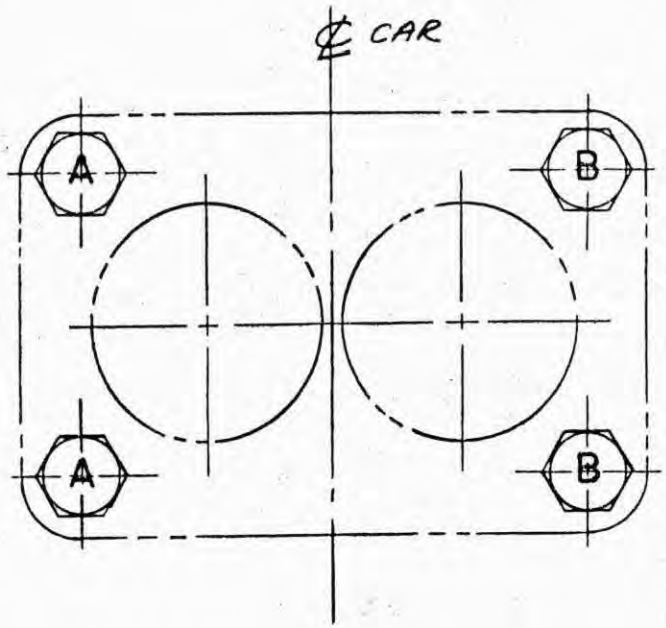
ENGINE PART NO.	ENGINE PLANT SYMBOL	HOUSING	PISTON	BEARING & BEARING CAPS	CAMSHAFT
588330	S3	Comb. 3 & 4 Speed	FLAT	STD.	STD.
577743	H3	Hydramatic Trans.	FLAT	STD.	STD.
588331	S6	Comb. 3 & 4 Speed	EYELET	STD.	STD.
582084	H6	Hydramatic Trans.	EYELET	STD.	STD.
588332	ST	Comb. 3 & 4 Speed	HEAVY DUTY	HEAVY DUTY	SPEC.
585273	HT	Hydramatic Trans.	HEAVY DUTY	HEAVY DUTY	SPEC.

EXPORT ENGINES

588333	S3L-3	Comb. 3 & 4 Speed	DISH	STD.	STD.
581124	H3L	Hydramatic Trans.	DISH	STD.	STD.

6-1.4

FROM 1963 F-85 BOOK



ONE OPERATOR METHOD

1. TIGHTEN BOLTS "A" SNUG TIGHT.
2. TIGHTEN BOLTS "B" COMPLETELY TIGHT.
3. FINISH TIGHTENING BOLTS "A".

PAGE 6-2.1

		LAST CHANGE	A4	NO. 581729
DATE	SYM.	REVISION RECORD	AUTHORITY	DR.	CK.
4-4-62		REDRAWN NO CHG	✓	TJ	
	B				

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS.

ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F_1=.030; F_2=.06; F_3=.09; F_4=.12; ETC.

COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS AND STANDARD PARTS.

DO NOT SCALE

DWG. DATE MAY 14, 1960	DR. A.L. WOOD
SCALE	CK. J. BAKER
FIRST USED 1961	APPR. C.F. HAGEN
	APPR HOLMES
REFERENCE	APPR.
MATERIAL SPEC.	

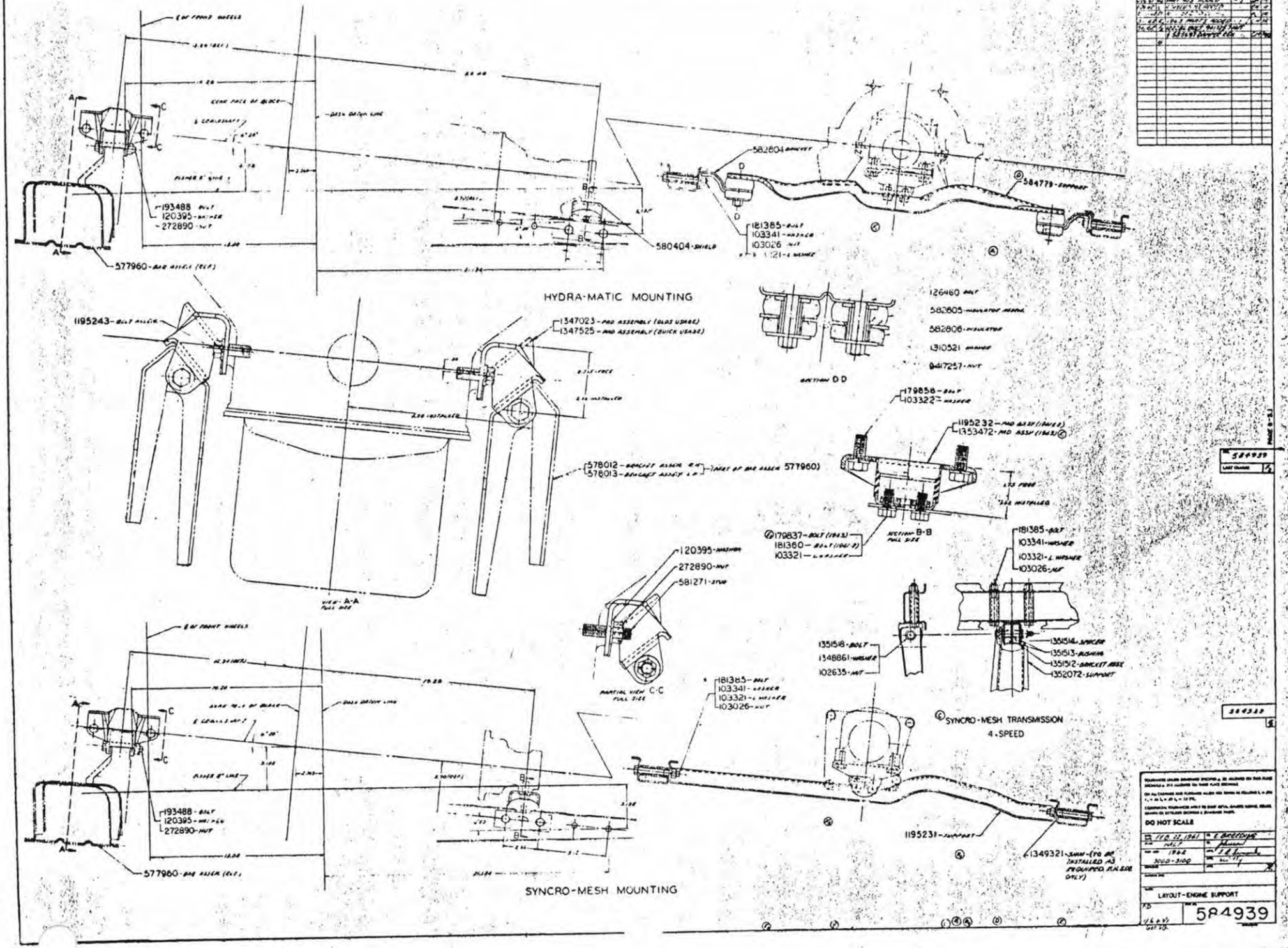
NAME CHART-CARBURETOR BOLT TIGHTENING SEQUENCE

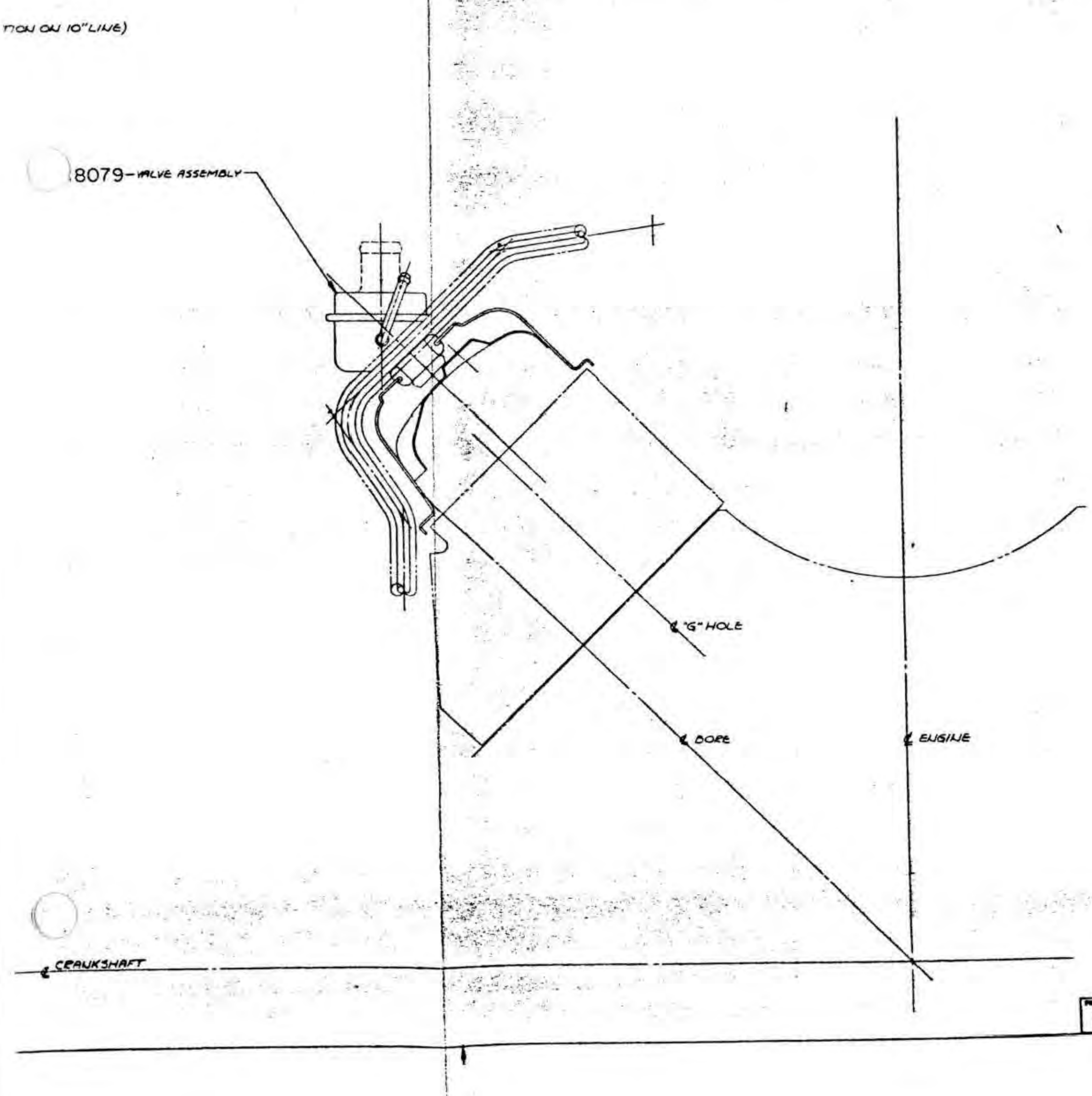
EA-4312

35+V1+*

PART NO. 581729

OLDSM


HYDRA-MATIC MOUNTING
SYNCRO-MESH MOUNTING
SYNCRO-MESH TRANSMISSION
4-SPEED
DO NOT SCALE
LAYOUT - ENGINE SUPPORT
5P4939



DATE	SYM	REVISION RECORD	AUTHORITY	DR.	CK.
3-15-62		WAS ER-7616		HE	RB
	A				

380877
LAST CHANGE

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS.

ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS

COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS.

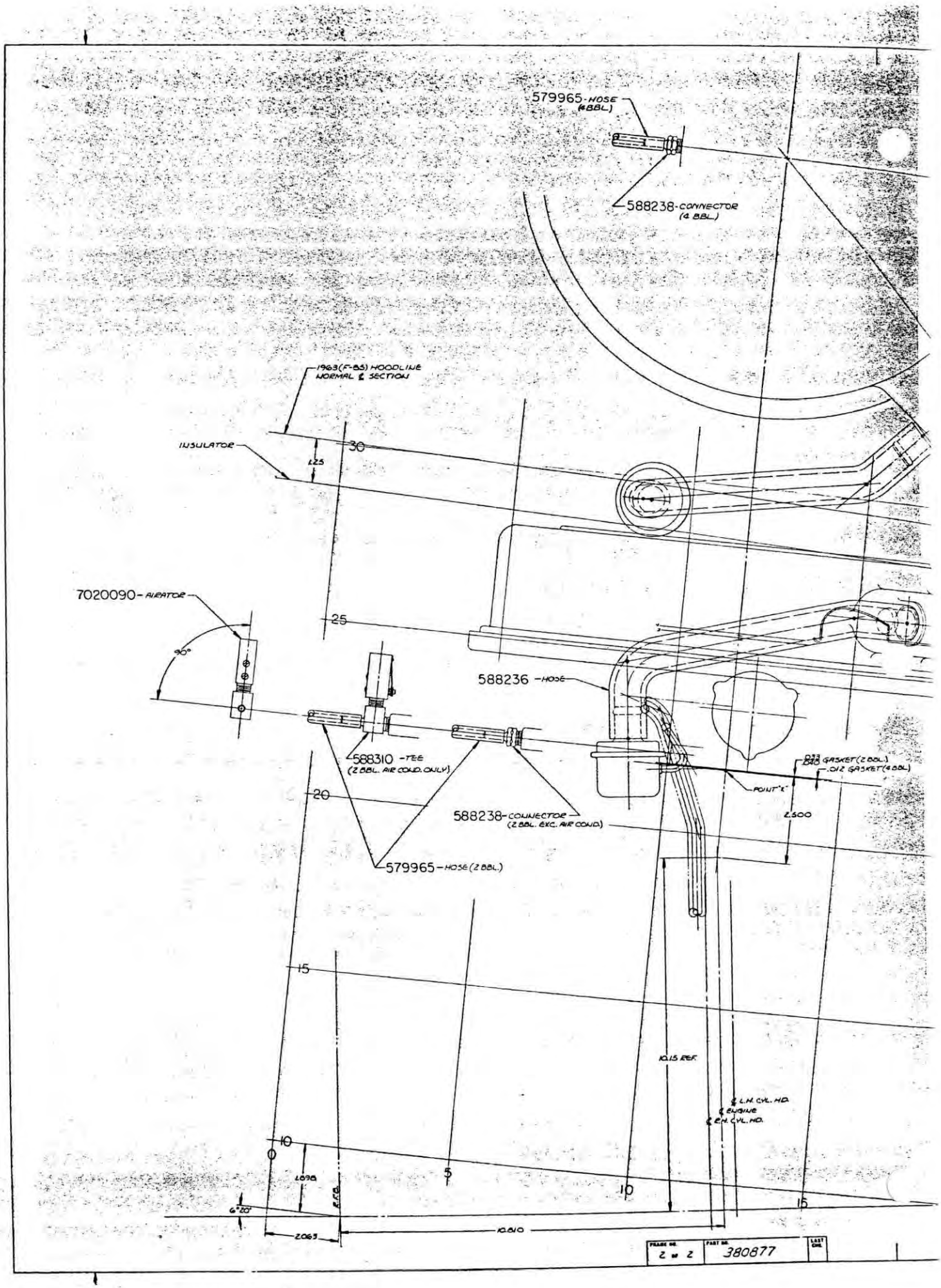
DO NOT SCALE

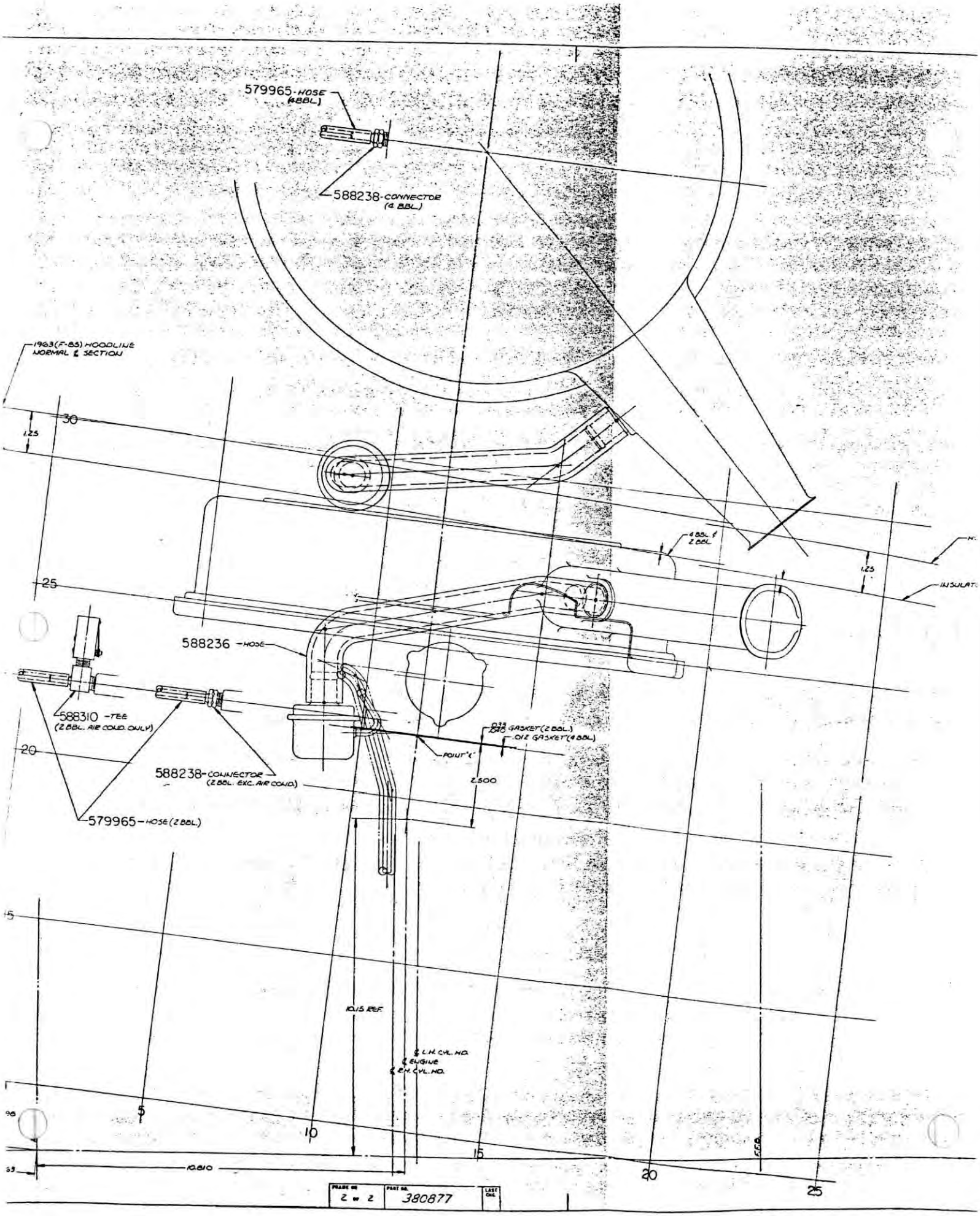
DATE: FEB. 14, 1962	DR. COLBY
SCALE: FULL	CK. J. BAKER
1963 30 & 31	C.F. Hagen
2 & 4 BBL	

LAYOUT - POSITIVE VENTILATION

FRAME NO. 1 of 2 — P.S.L. — 380877

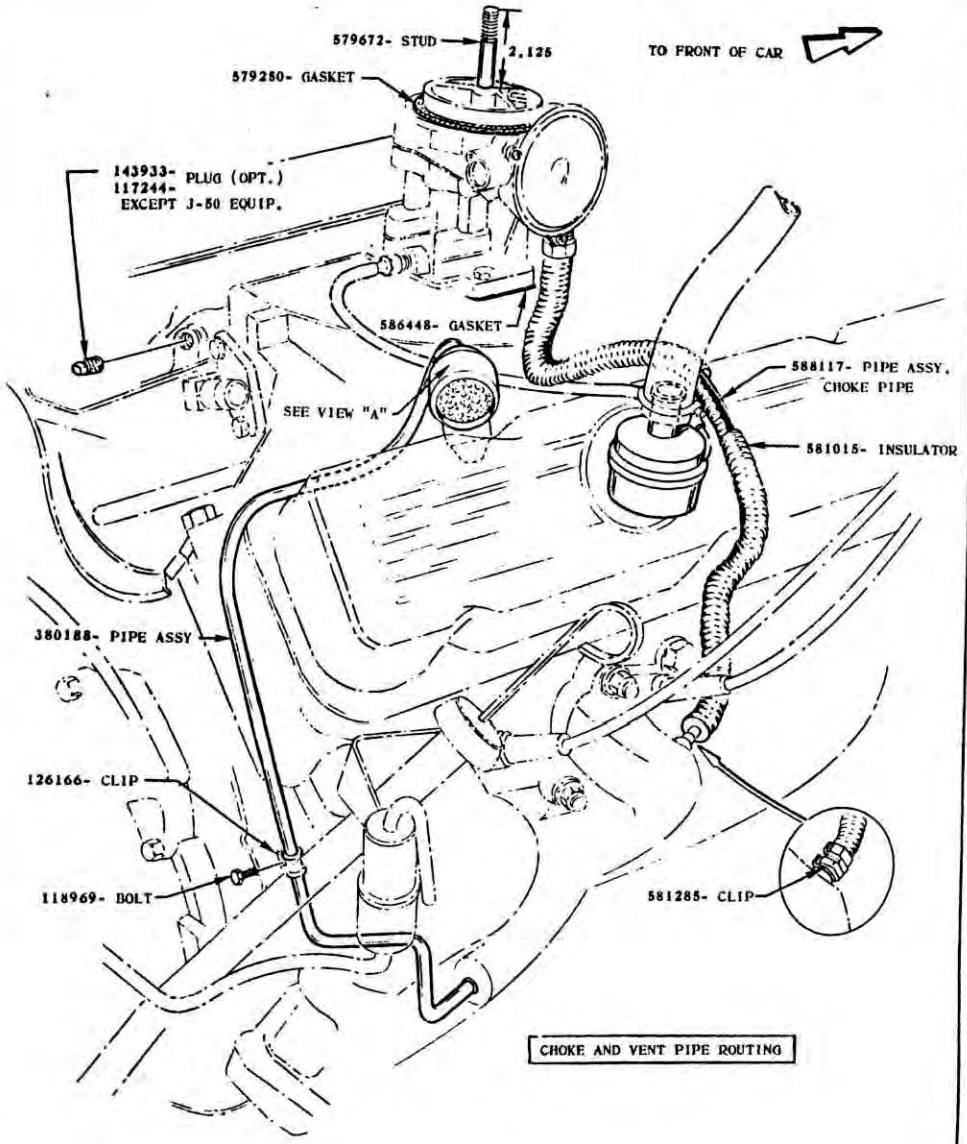
GR. O"


579965-HOSE (4 BBL.)
588238-CONNECTOR (4 BBL.)
1963(F-85) HOODLINE NORMAL ℄ SECTION
INSULATOR
.125
30
7020090-AERATOR
90°
25
588236 -HOSE
588310 -TEE (2 BBL. AIR COND. ONLY)
.833 GASKET (2 BBL.)
.812 GASKET (4 BBL.)
POINT "X"
20
588238-CONNECTOR (2 BBL. EXC. AIR COND.)
2.500
579965-HOSE (2 BBL.)
15
10.15 REF.
℄ L.H. CYL. HD.
℄ ENGINE
℄ R.H. CYL. HD.
10
0
5
10
15
1.098
6°20'
2.063
10.810
PHASE NO. 2 M 2
PART NO. 380877
LAST CHG.

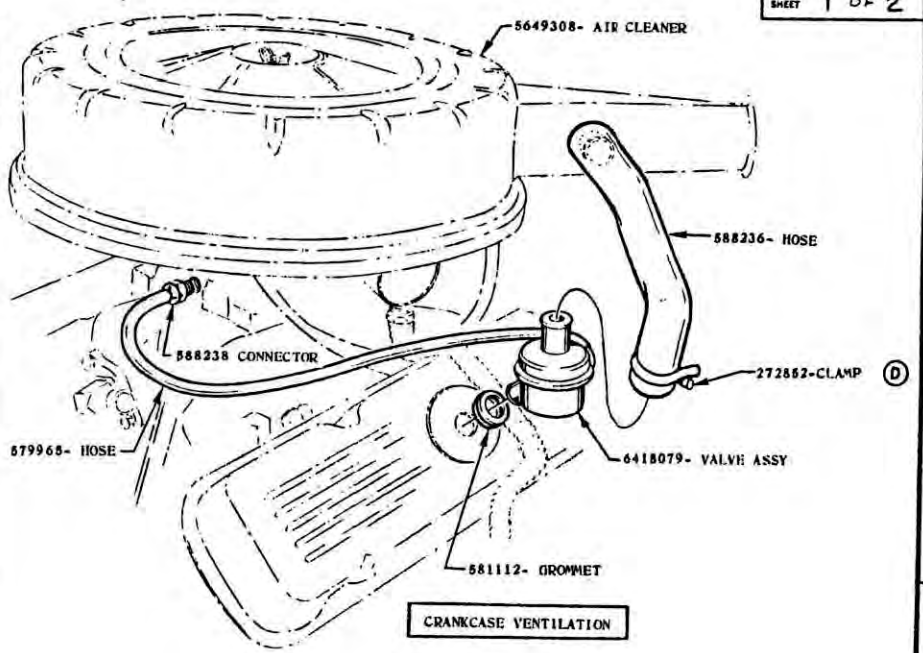


PAGE NO.	PART NO.	LAST CHG.
2 of 2	380877	

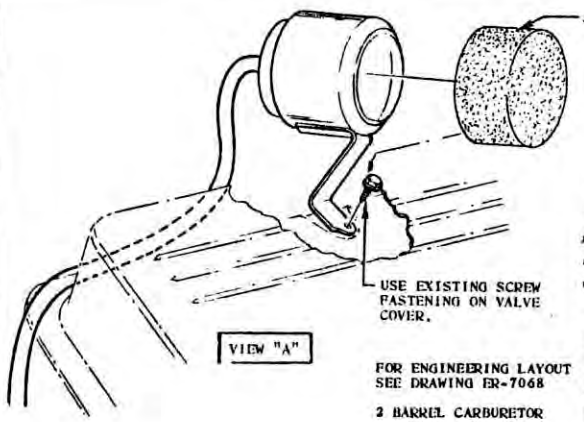
380869
SHEET 1 OF 2



CHOKE AND VENT PIPE ROUTING



CRANKCASE VENTILATION



VIEW "A"

FOR ENGINEERING LAYOUT SEE DRAWING ER-7068

2 BARREL CARBURETOR

	DATE	SYM.	REVISION RECORD	DR.	CK.
1	9-29-62	D	272852-CLAMP ADDED	BP	VP
#	9-6-62	C	PROD. NO ADDED	BP	JF
*	7-6-62	B	REDRAWN PICTORIALLY	GWG	JF

DWG. DATE NOV. 10 1961 DR. J.C. NELSON
FIRST USED 1963 CK. J BAKER
REFERENCE APPR. C.F. HAGEN APPR.

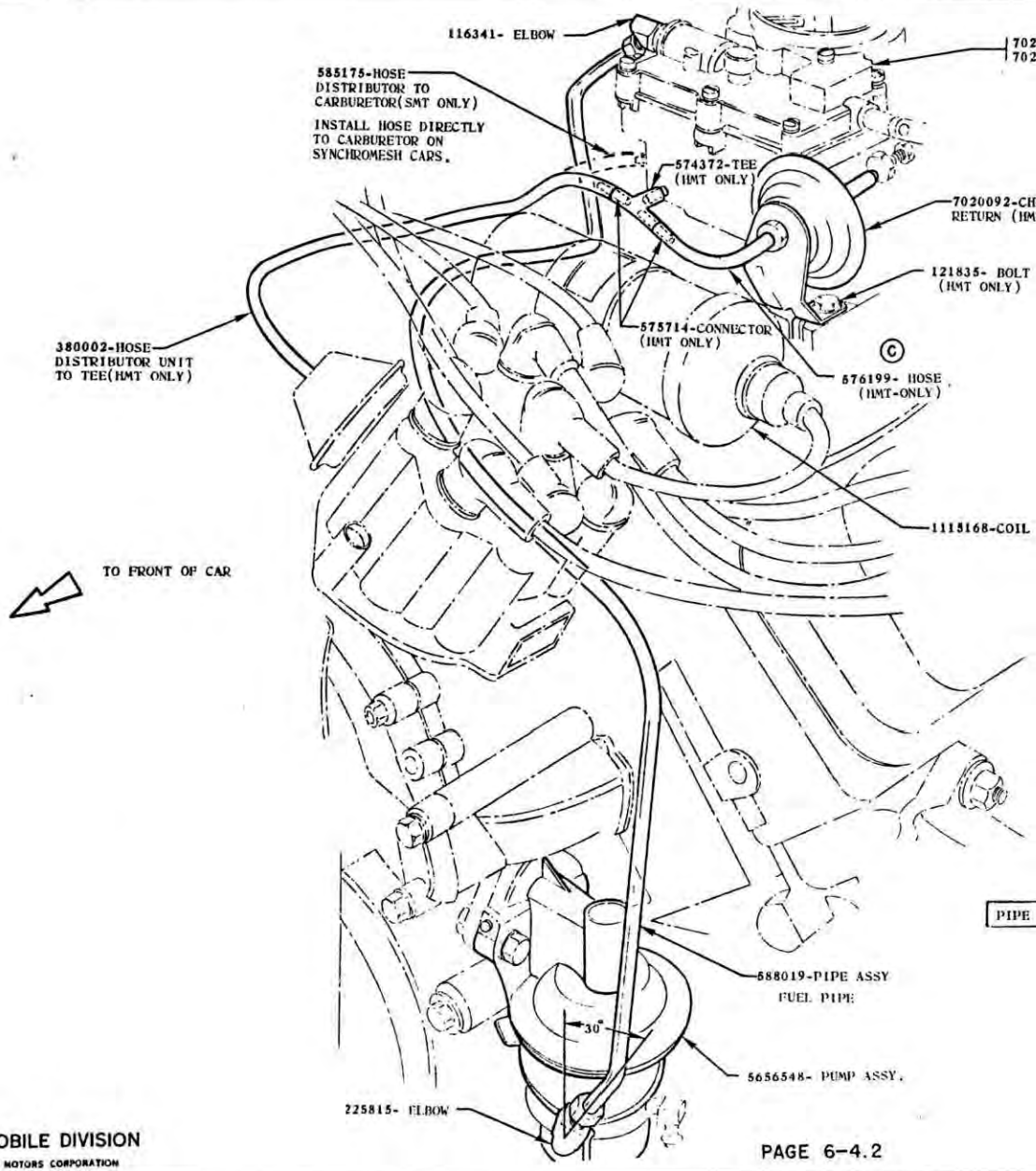
NAME LAYOUT-PIPES, FUEL, CHOKE AND CRANKCASE VENTILATION

SERIES 3000-3100
SHEET 1 OF 2

PART NO. 380869

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

380869
SHEET 2 OF 2



PIPE AND HOSE ROUTING

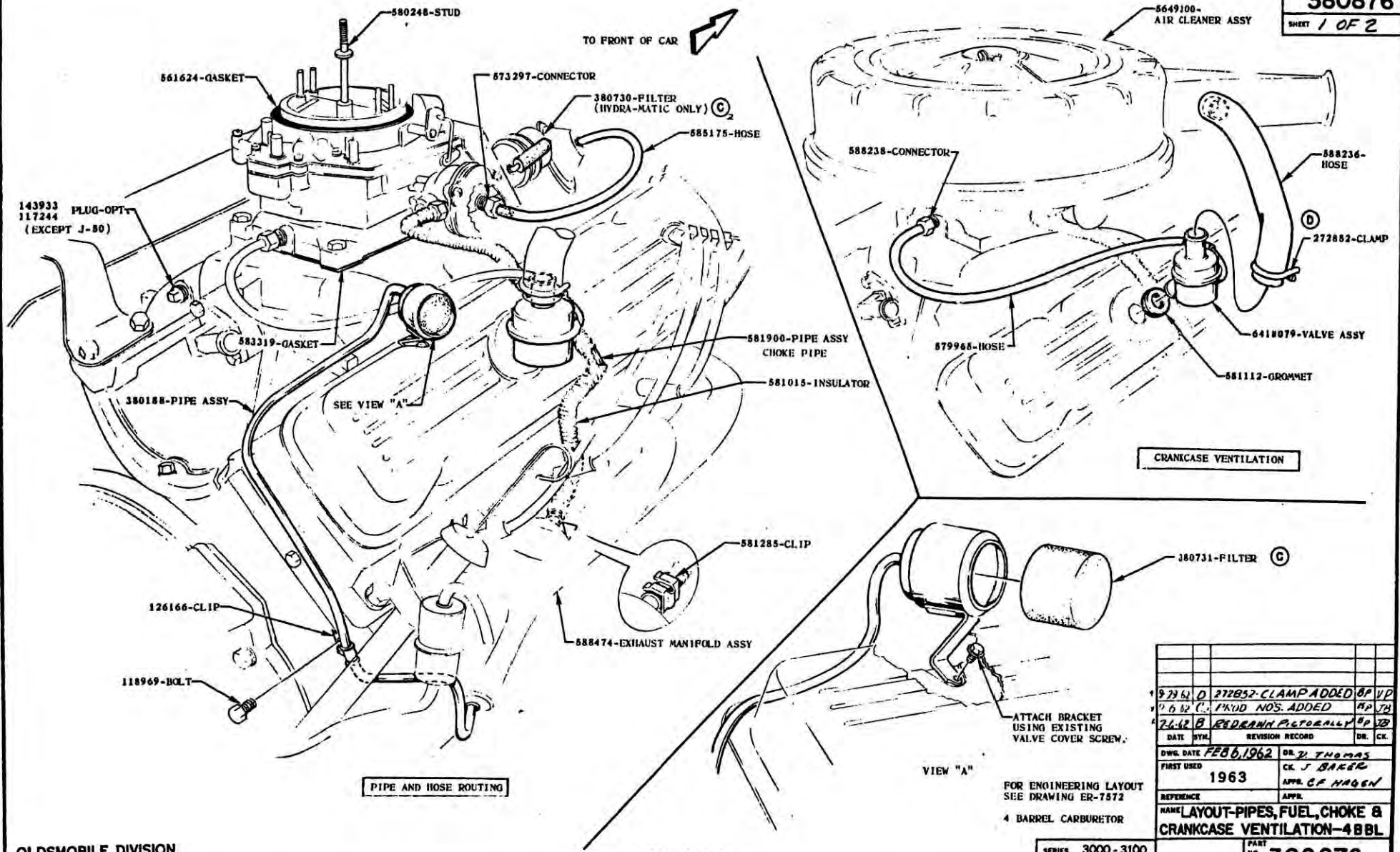
FOR ENGINEERING LAYOUT SEE DRAWING ER-7068

2 BARREL CARBURETOR

DATE	SYM.	REVISION RECORD	DR	CK.
9-9-62	C	ADD 576119 HOSE	CJA	
7-7-62	B	REDRAWN PICTORIALLY	CJA	JB

DWG. DATE MAY 10, 1961 DR. JC NELSON
FIRST USED 1963 CK. J BAKER
REFERENCE APPR. C.A. HAGEN
NAME LAYOUT-PIPES, FUEL, CHOKE AND CRANKCASE VENTILATION
SERIES 3000-3100
SHEET 2 OF 2
PART NO. 380869

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

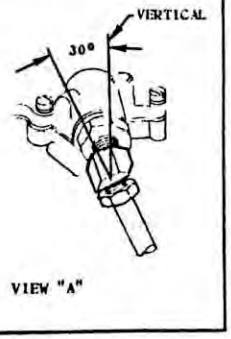


FOR ENGINEERING LAYOUT
SEE DRAWING ER-7572

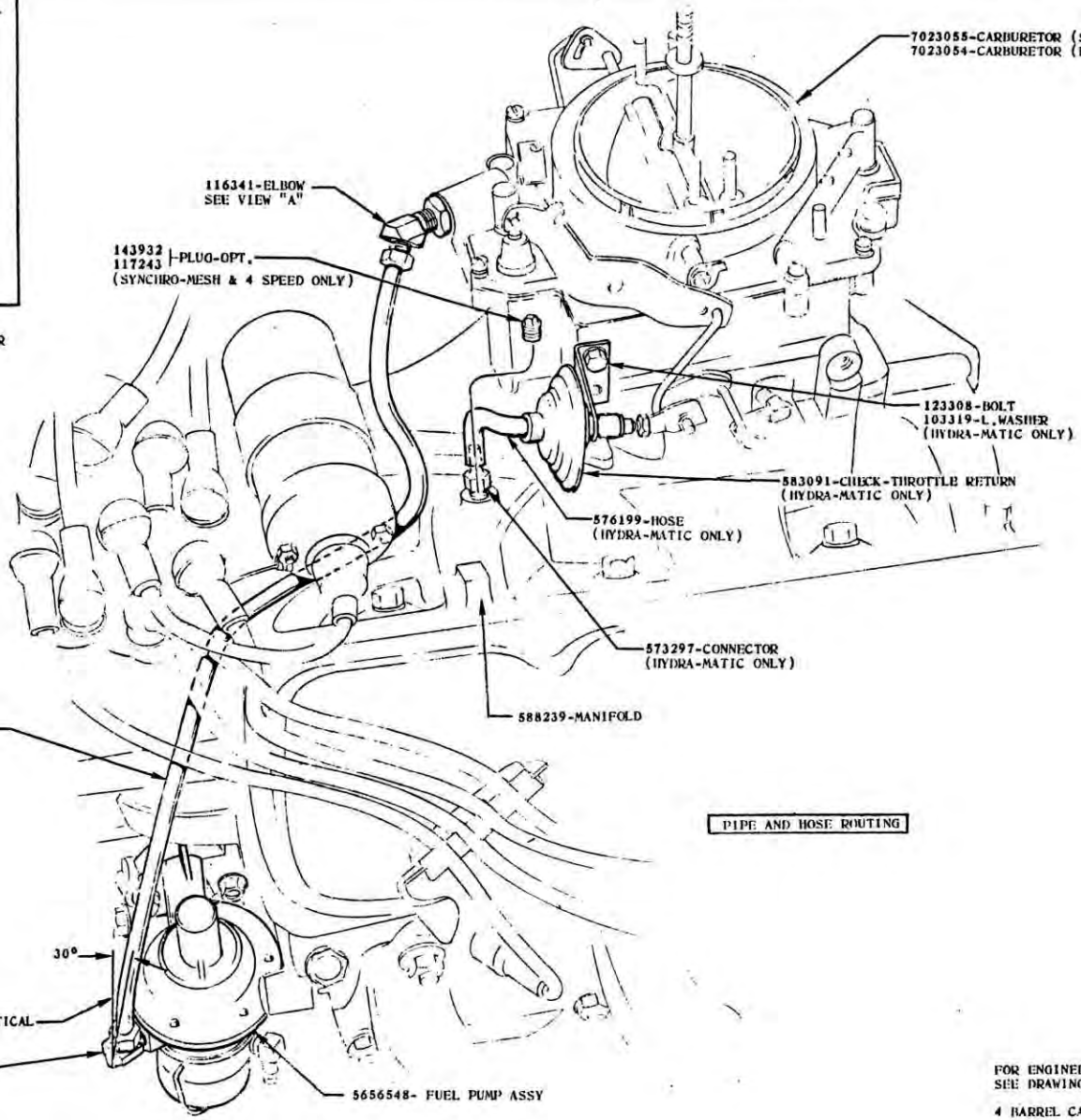
4 BARREL CARBURETOR

9-23-64	D	272852-CLAMP ADDED	BP	VP
9-6-62	C	PROD NOS. ADDED	BP	JH
7-6-62	B	REDRAWN PICTORIALLY	BP	JH
DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE FEB 6, 1962 DR. D. THOMAS
FIRST USED 1963 CK. J. BAKER
REFERENCE APPR. C.F. HAGEN
NAME LAYOUT-PIPES, FUEL, CHOKE & CRANKCASE VENTILATION-4 BBL
SERIES 3000-3100
SHEET 1 OF 2
PART NO. 380876



TO FRONT OF CAR



PIPE AND HOSE ROUTING

FOR ENGINEERING LAYOUT
SEE DRAWING ER-7572

4 BARREL CARBURETOR

DATE	SYM.	REVISION RECORD	DR.	CK.
7.6.62	B	REDRAWN PICTORIALLY	GP	JB

DWG. DATE FEB 6, 1962	DR. D. THOMAS
FIRST USED 1963	CK. J BAKER
	APPR. C.F. HAGEN
REFERENCE	APPR.

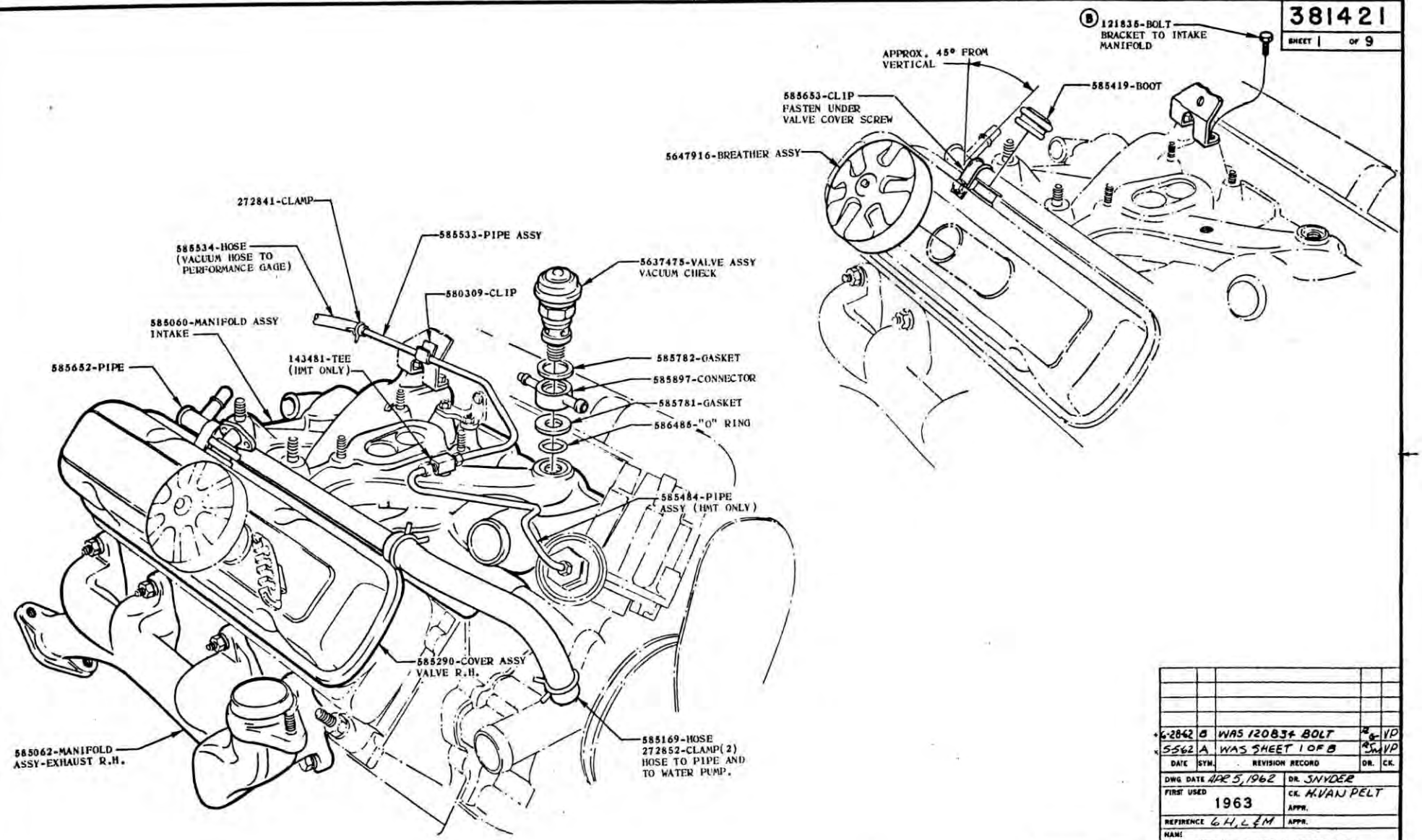
NAME LAYOUT-PIPES, FUEL, CHOKE & CRANKCASE VENTILATION-4 B BL

PART NO. 380876

SERIES 3000 - 3100

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

381421
SHEET 1 OF 9



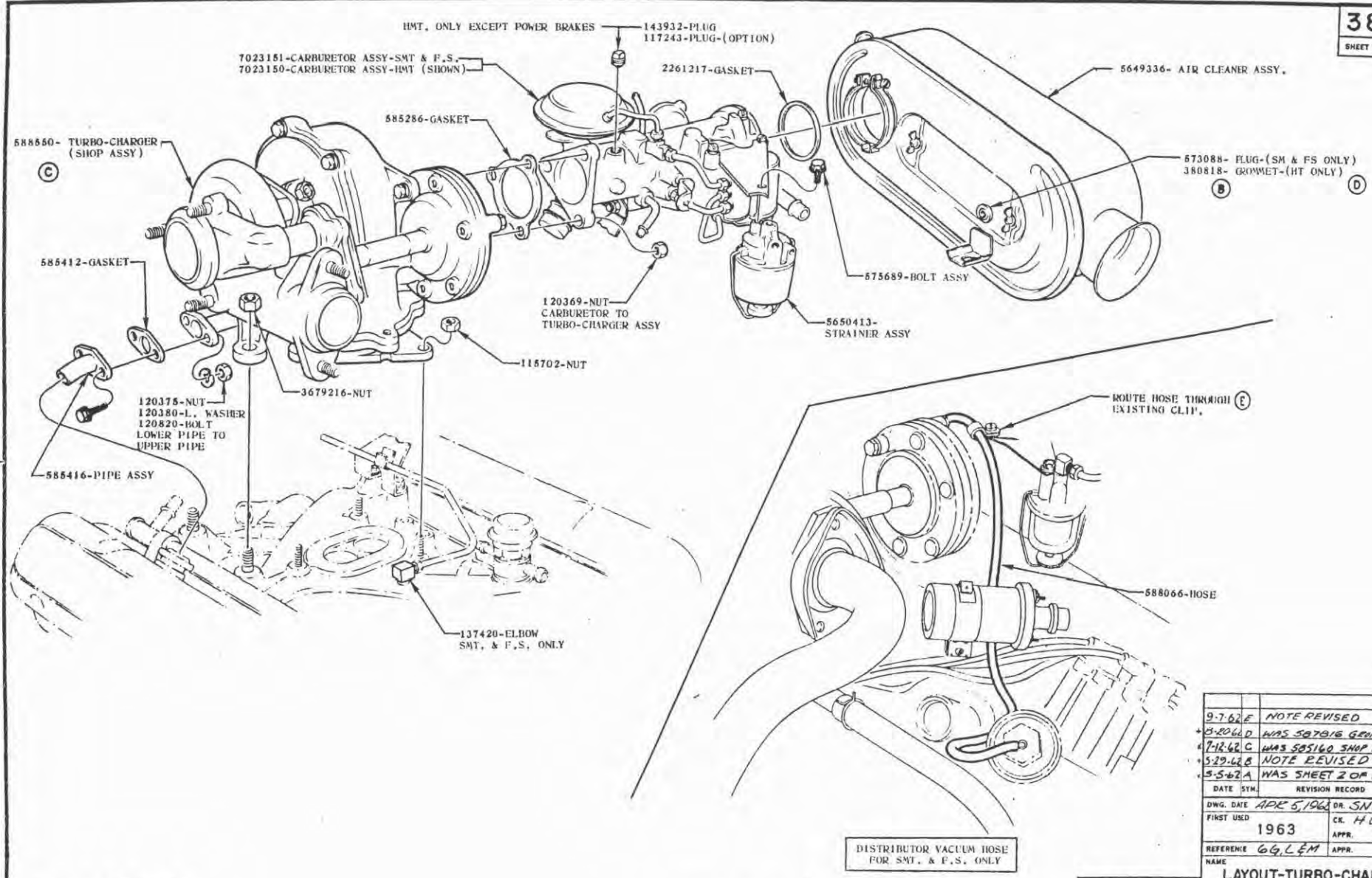
6-2862	B	WAS 120834 BOLT		VP
5562	A	WAS SHEET 1 OF 8		VP
DATE	SYM.	REVISION RECORD	DR.	CK.
DWG DATE APR 5, 1962			DR. SNYDER	
FIRST USED 1963			CK. H.VAN PELT	
			APPR.	
REFERENCE 6H, L&M			APPR.	

NAME
LAYOUT-TURBO-CHARGER

SERIES 3147
SHEET 1 OF 9

PART NO. 381421

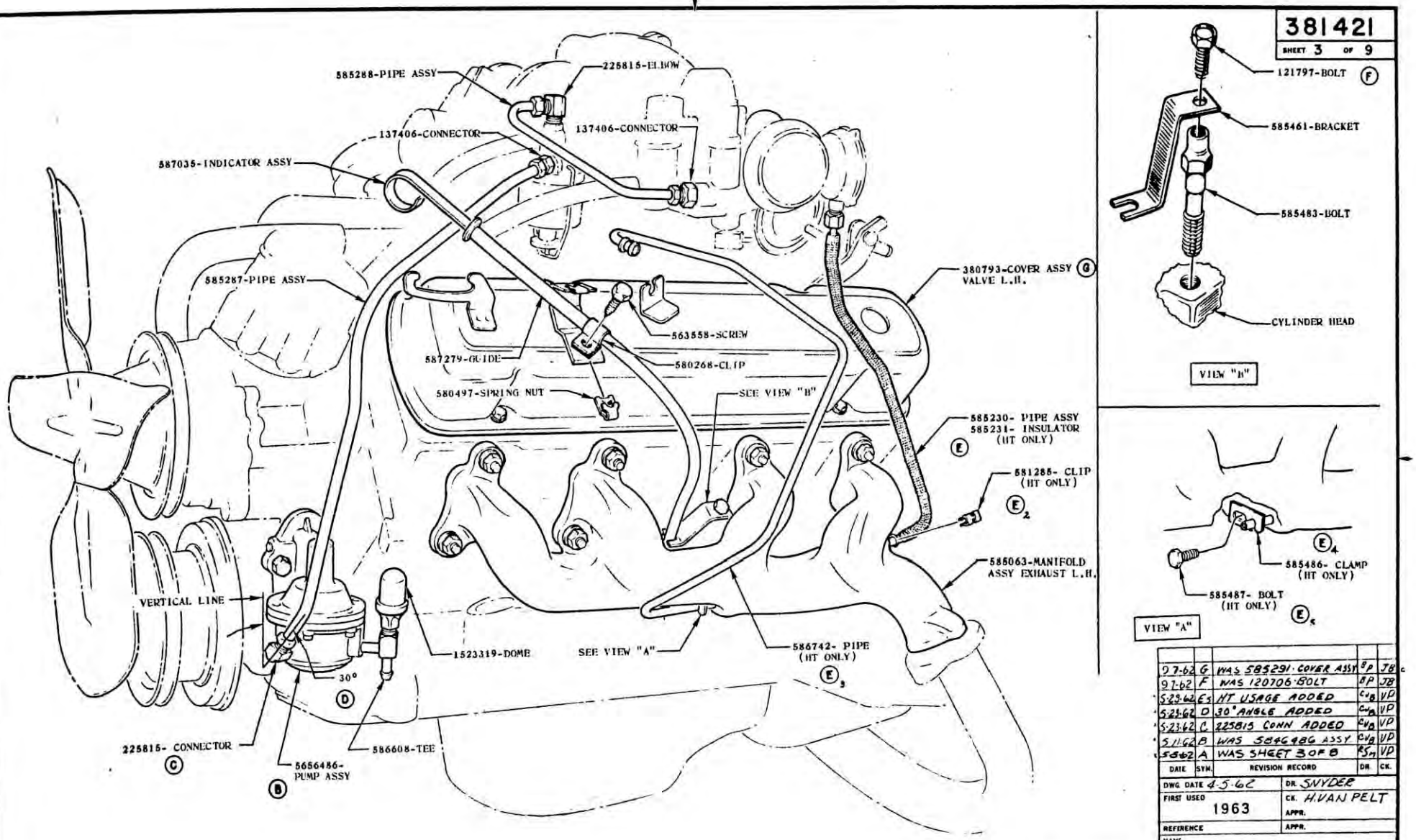
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



DATE	SYM.	REVISION RECORD	DR.	CK.
9-7-62	E	NOTE REVISED	BP	JH
+ 8-20-62	D	WAS 587816 GROMMET	C/B	VP
& 7-12-62	C	WAS 585160 SHOP ASSY	C/B	VP
+ 5-29-62	B	NOTE REVISED	C/B	VP
+ 5-5-62	A	WAS SHEET 2 OF 8	RS	VP

DWG. DATE APR 5, 1962 DR. SNYDER
FIRST USED 1963 CK. HUAN PELT
APPR.
REFERENCE 66, LEM APPR.
NAME LAYOUT-TURBO-CHARGER
PART NO. 381421
SERIES 3147
SHEET 2 OF 9

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



381421

SHEET 3 OF 9

DATE	SYM.	REVISION RECORD	DR.	CK.
9-7-62	G	WAS 585291 COVER ASSY	BP	JB
9-7-62	F	WAS 120706 BOLT	BP	JB
5-29-62	E	HT USAGE ADDED	C-H	VP
5-23-62	D	30° ANGLE ADDED	C-H	VP
5-23-62	C	225815 CONN ADDED	C-H	VP
5-11-62	B	WAS 586488 ASSY	C-H	VP
5-8-62	A	WAS SHEET 3 OF 8	R.S.M.	VP

DWG DATE 4-5-62 DR. SNYDER

FIRST USED 1963 CK. H.VAN PELT

REFERENCE APPR.

APPR.

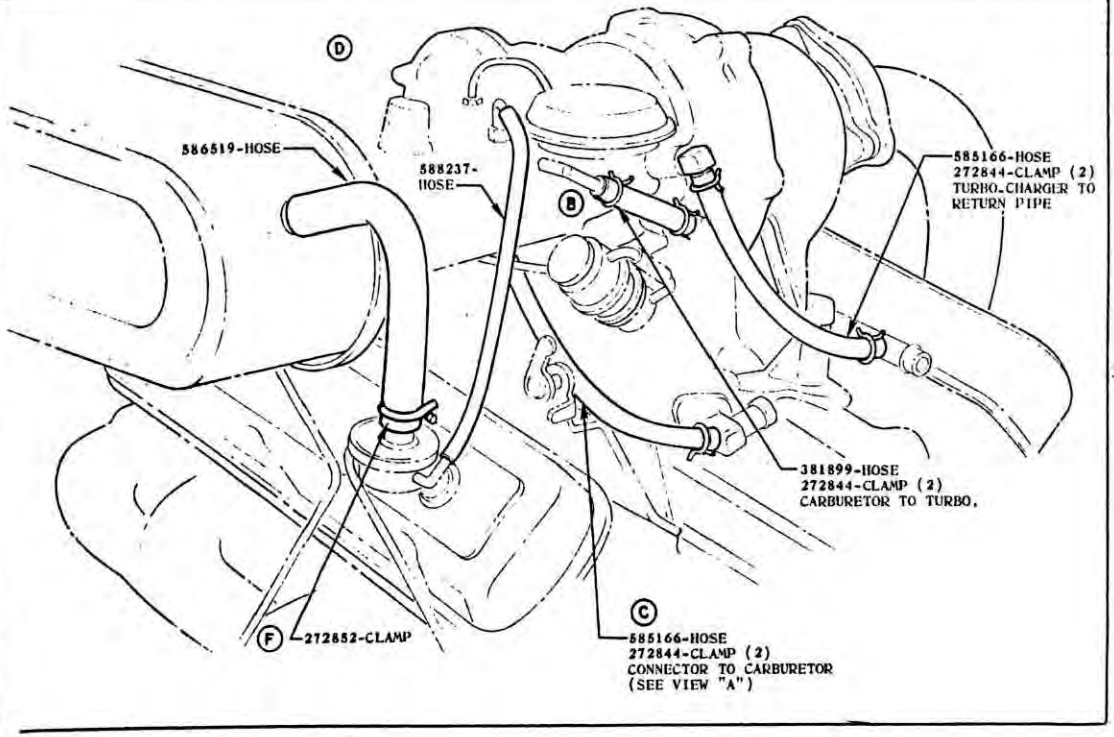
NAME LAYOUT-TURBO-CHARGER

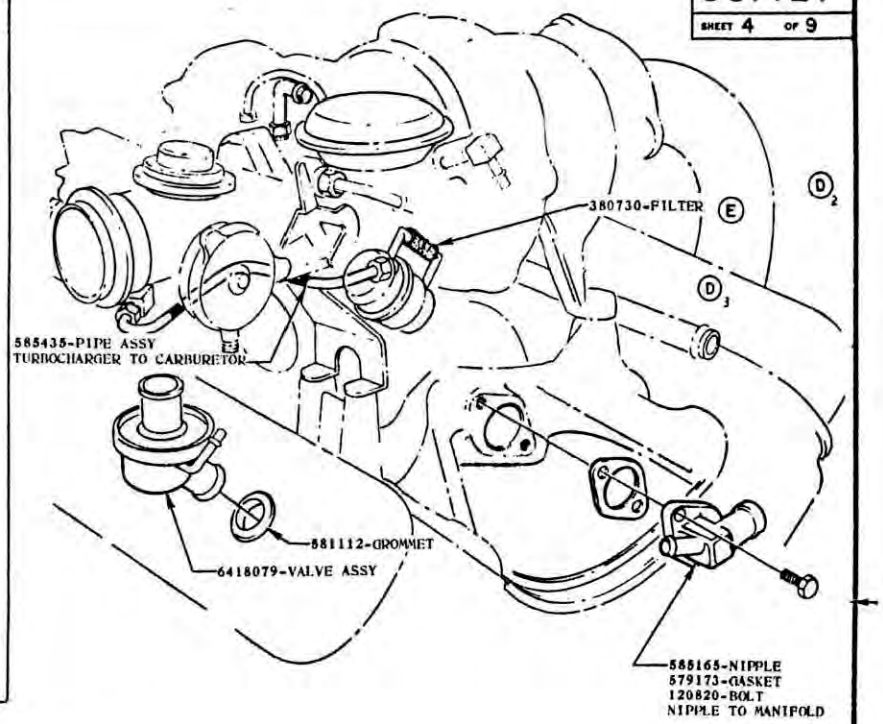
SERIES 3147

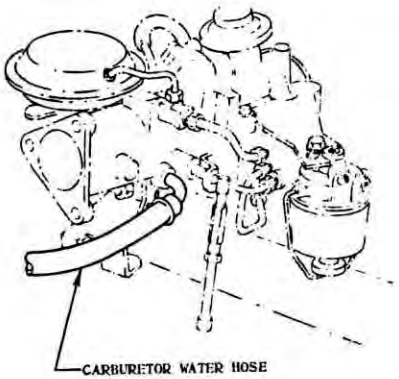
SHEET 3 OF 9

PART NO. 381421

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



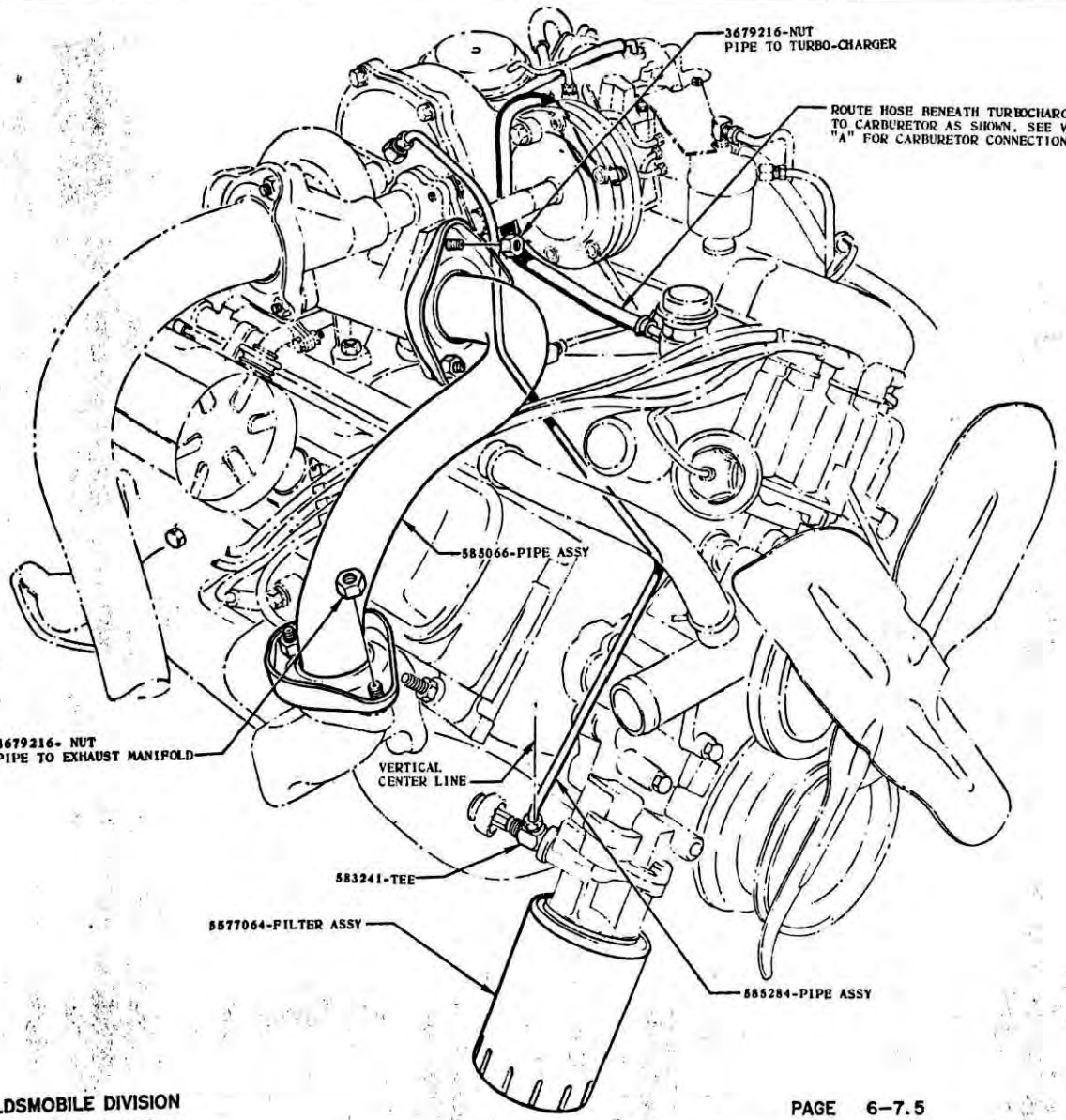


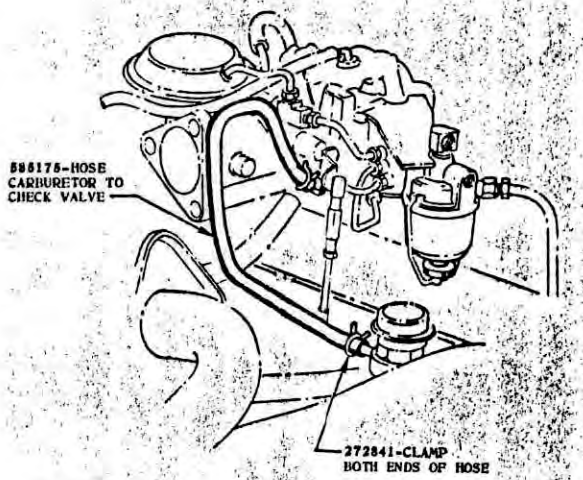


VIEW "A"

	DATE	SYM.	REVISION RECORD	DR.	CK.
*	9-29-62	F	272852-CLAMP ADDED	BH	VP
#	9-7-62	E	380130 FILTER ADDED	BP	JB
*	9-7-62	D_3	PARTS REMOVED	BP	JB
*	5-29-62	C	WAS 588131 - HOSE	BH	VP
*	5-29-62	B	HOSE ROUTINGS REV	BH	VP
*	5-5-62	A	WAS SHEET 4 OF 8	BH	VP

DWG. DATE APR 5, 1962 DR. SNYDER
FIRST USED 1963 CK. [illegible]
APPR.
REFERENCE GHEM-BC APPR.
NAME LAYOUT-TURBO-CHARGER
PART NO. 381421
SERIES 3147
SHEET 4 OF 9





VIEW "A"

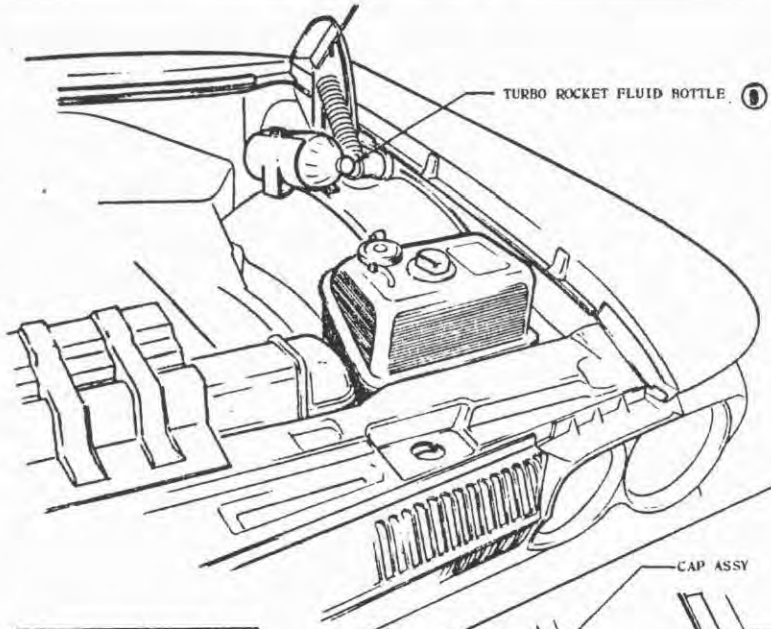
381421

SHEET 5 OF 9

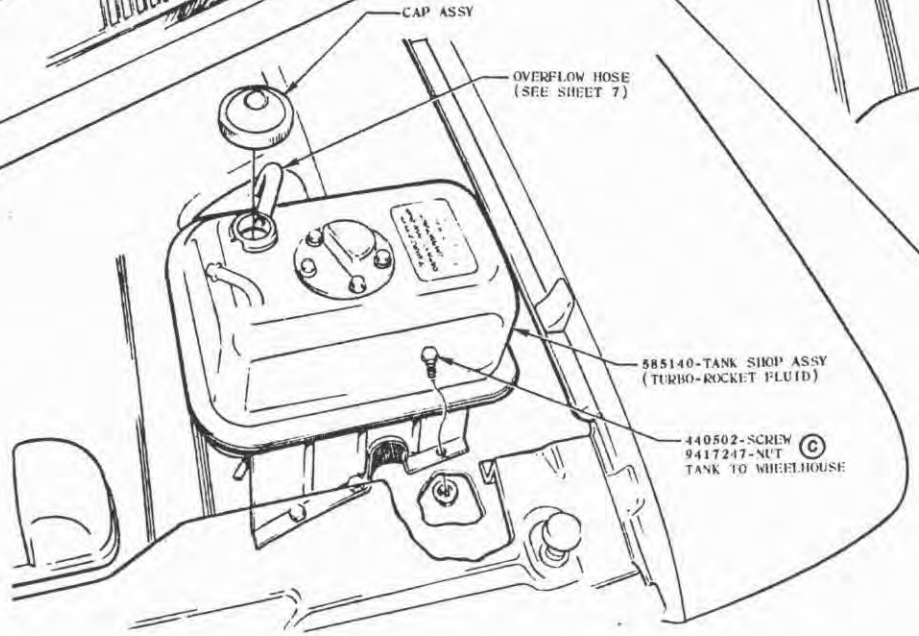
DATE	SYM.	REVISION RECORD	DR	CK.
3-5-62	A	WAS SHEET 5 OF 8	RS	VP

DWG. DATE APR 5, 1962 DR. SNYDER
FIRST USED 1963 CK. H. VAN PELT APPR.
REFERENCE 6L&M-8C APPR.
NAME LAYOUT-TURBO-CHARGER
SERIES 3147
SHEET 5 OF 9
PART NO. 381421

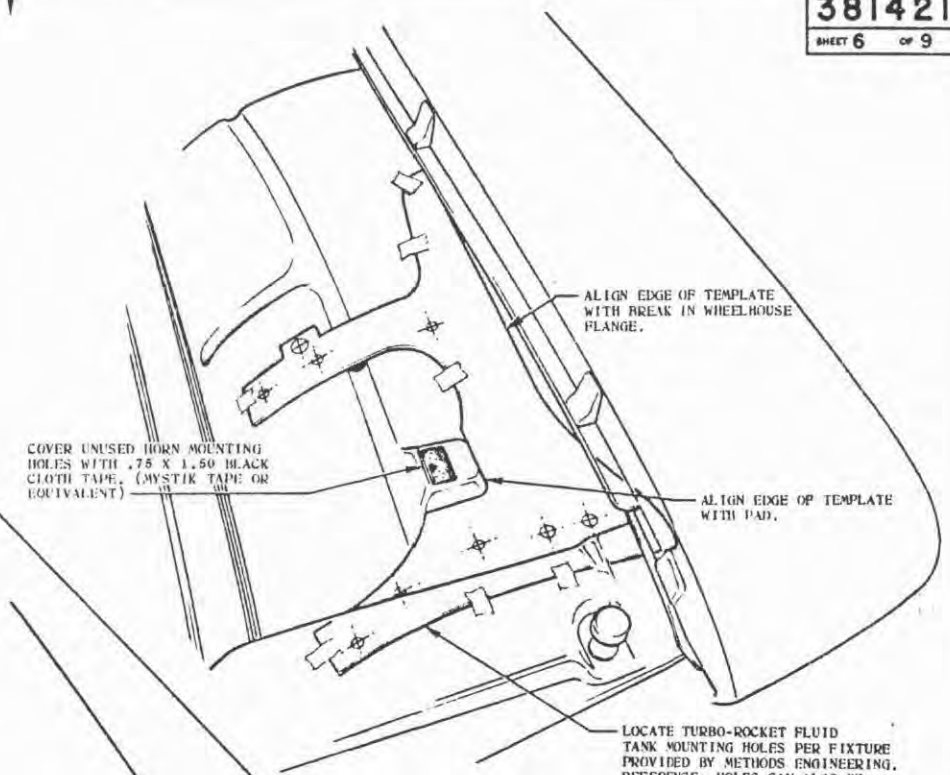
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING [illegible] MICHIGAN



VIEW OF BOTTLE AND TANK INSTALLATION



TANK INSTALLATION

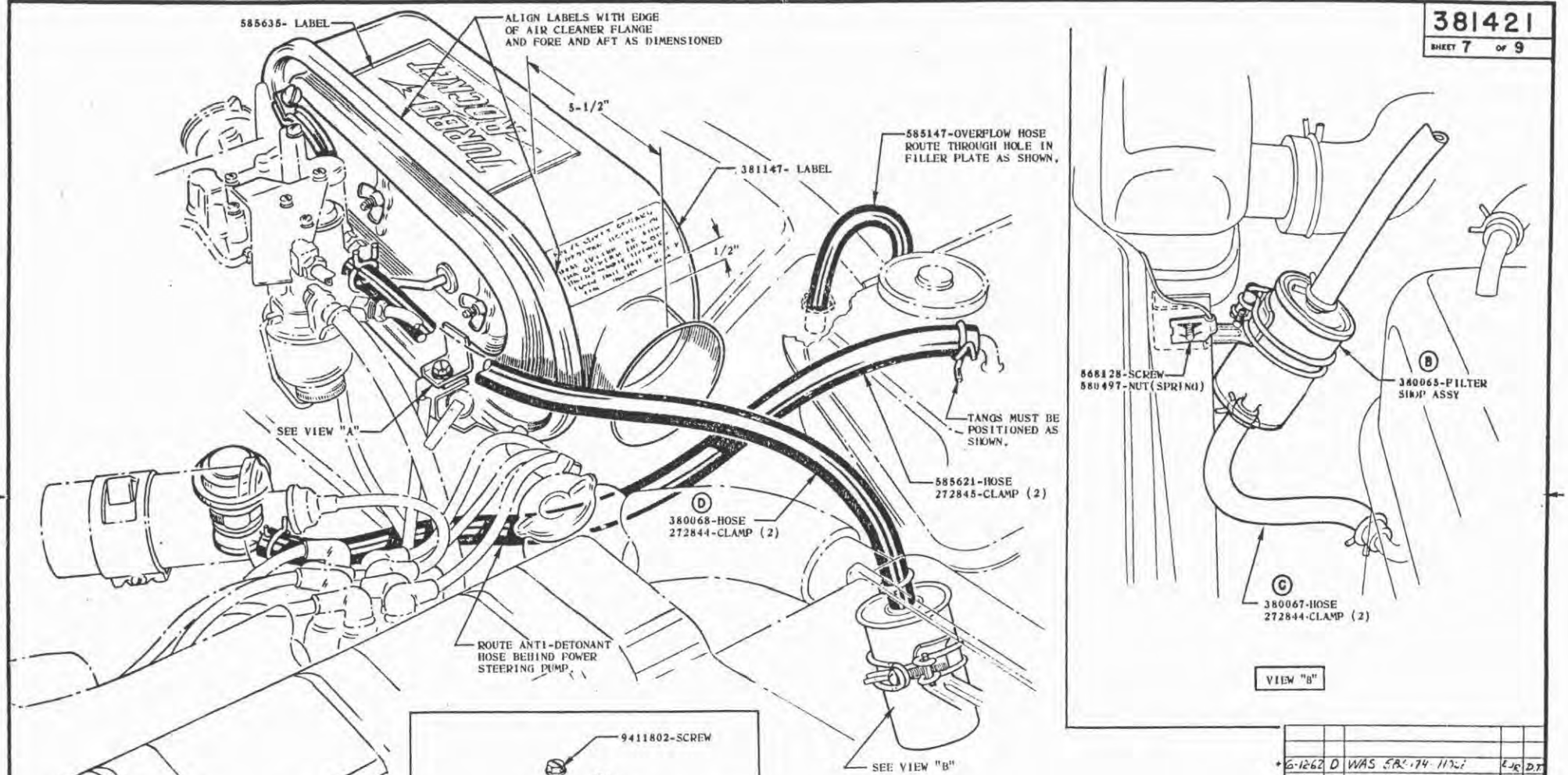


TEMPLATE APPLICATION

DATE	SYM.	REVISION RECORD	DR.	CK.
12-11-63	C	WAS 446059 NUT	MO	VP
6-28-62	B	BOTTLE VIEW REVISED	[illegible]	VP
5-5-62	A	WAS SHEET 6 OF 8	[illegible]	VP

DWG DATE APR 5, 1962 DR. SNYDER
FIRST USED 1963 CK. H VAN PELT APPR.
REFERENCE 6N7 APPR.
NAME LAYOUT-TURBO-CHARGER
PART NO. 381421
SERIES 3147
SHEET 6 OF 9

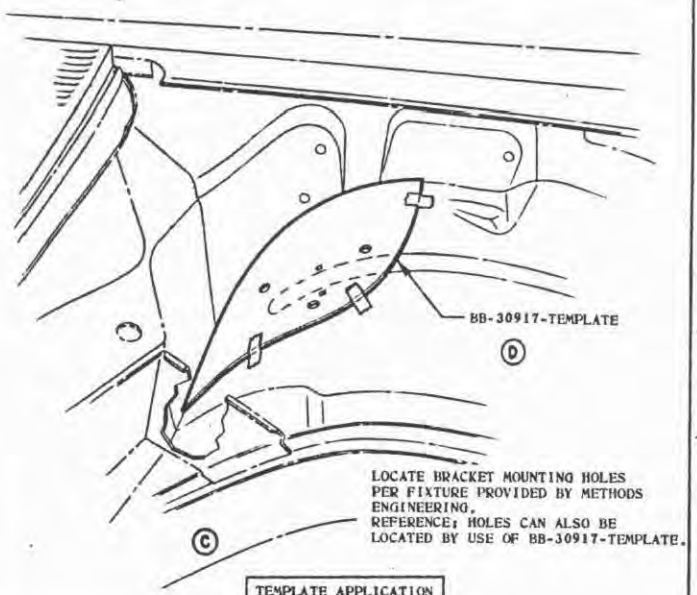
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



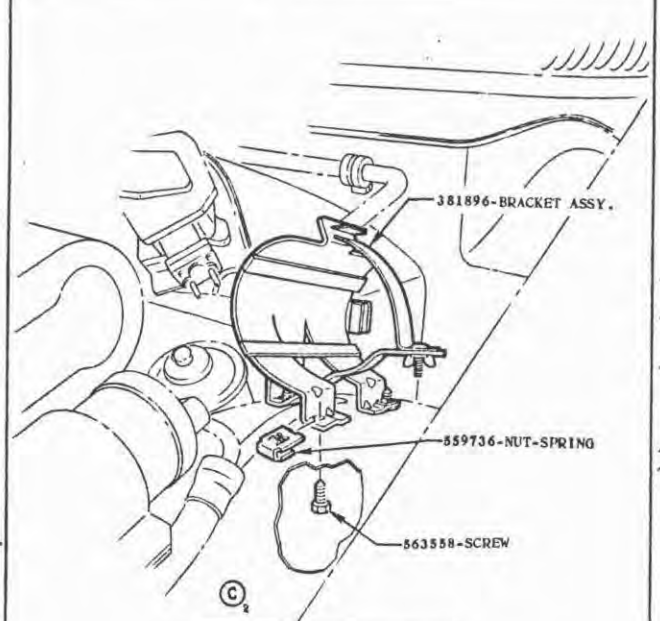
DATE	SYM.	REVISION RECORD	DR.	CK.
6-1262	D	WAS 582174-HOSE	EJR	D.T.
6-1262	C	WAS 385173-HOSE	EJR	D.T.
6-1262	B	WAS 585171-FILTER	EJR	D.T.
5-562	A	WAS SHEET 7 OF 8	RSM	WD

DWG DATE 4-5-62 DR. SNYDER
FIRST USED 1963 CK. HUAN PELT
APPR.
REFERENCE 6N APPR.
NAME LAYOUT-TURBO-CHARGER
SERIES 3147
SHEET 7 OF 9
PART NO. 381421

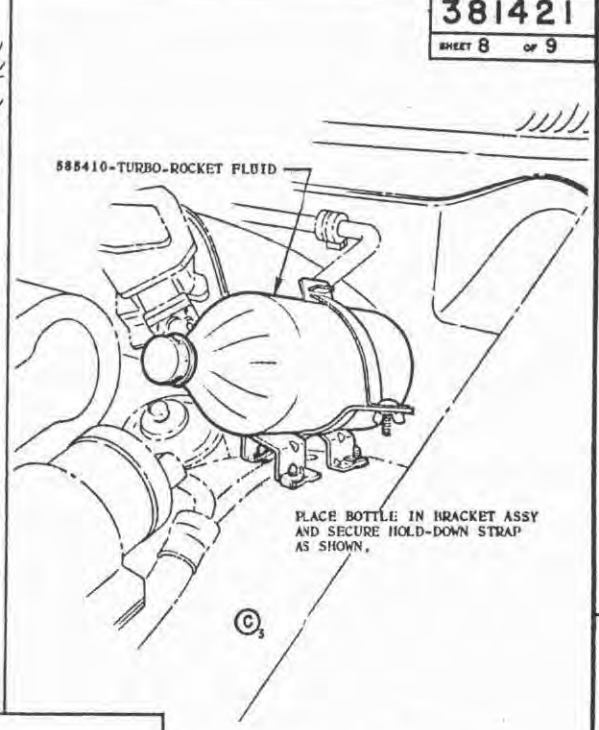
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



TEMPLATE APPLICATION



TURBO-ROCKET FLUID BOTTLE BRACKET INSTALLATION



TURBO-ROCKET FLUID BOTTLE INSTALLATION

LEAK TEST

FINAL ASSEMBLY CONNECTIONS MUST PASS THE FOLLOWING LEAK TEST:

1. INSTALL A TEST GAGE AND SCHRADER VALVE IN THE TANK INLET. NOTE: TEST GAGE MUST BE GRADUATED IN INCREMENTS OF NOT MORE THAN 1 PSI.
2. WITH ENGINE RUNNING AT IDLE, PRESSURIZE TANK TO 5 PSI MINIMUM-6 PSI MAXIMUM.
3. AFTER ALLOWING 10 SECONDS FOR SYSTEM TO STABILIZE, NO PRESSURE DROP MUST OCCUR IN 30 SECONDS. (MINIMUM CHECKING PRESSURE 5 PSI.

CONSOLE GAGE

CHECK OPERATION AS FOLLOWS:

1. WITH IGNITION ON AND TURBO-ROCKET FLUID TANK EMPTY, FLUID INDICATOR LIGHT MUST BE ON. FLUID INDICATOR LIGHT MUST BE OUT AFTER ADDITION OF 1-1/2 PINTS OF FLUID.
2. WITH ENGINE RUNNING AT IDLE, GAGE NEEDLE MUST INDICATE IN THE GREEN BAND.

REPAIR PROCEDURES

IN THE EVENT OF MAL-FUNCTION, THE (1) TURBO-CHARGER ASSY, OR (2) CARBURETOR AND TURBO-ROCKET VALVE ASSY, MUST BE REPLACED WITH UNITS FURNISHED AND TESTED BY THE ENGINE PLANT.

AFTER ANY DISASSEMBLY INVOLVING TURBO-CHARGER COMPONENTS, ALL CONNECTIONS MUST BE LEAK-TESTED AS OUTLINED ABOVE, AND ROLL TESTED AS PER PROCEDURE CHART, DWG. #581258.

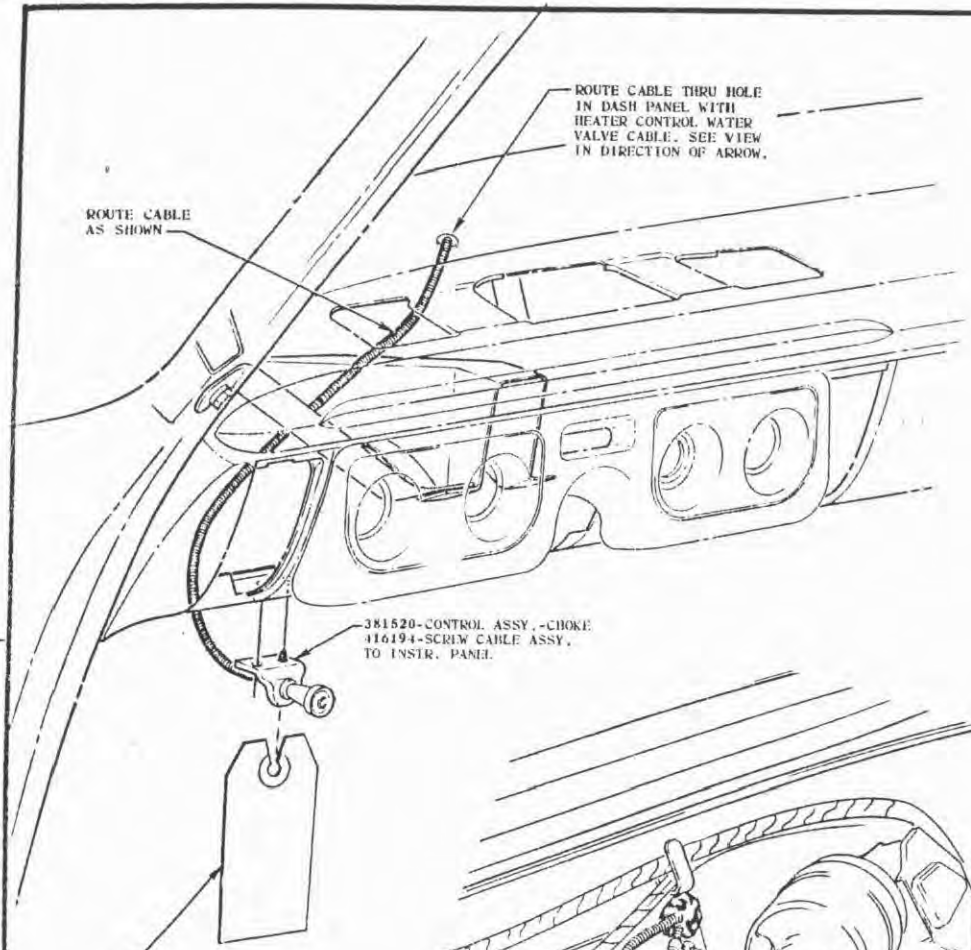
SHIPMENT

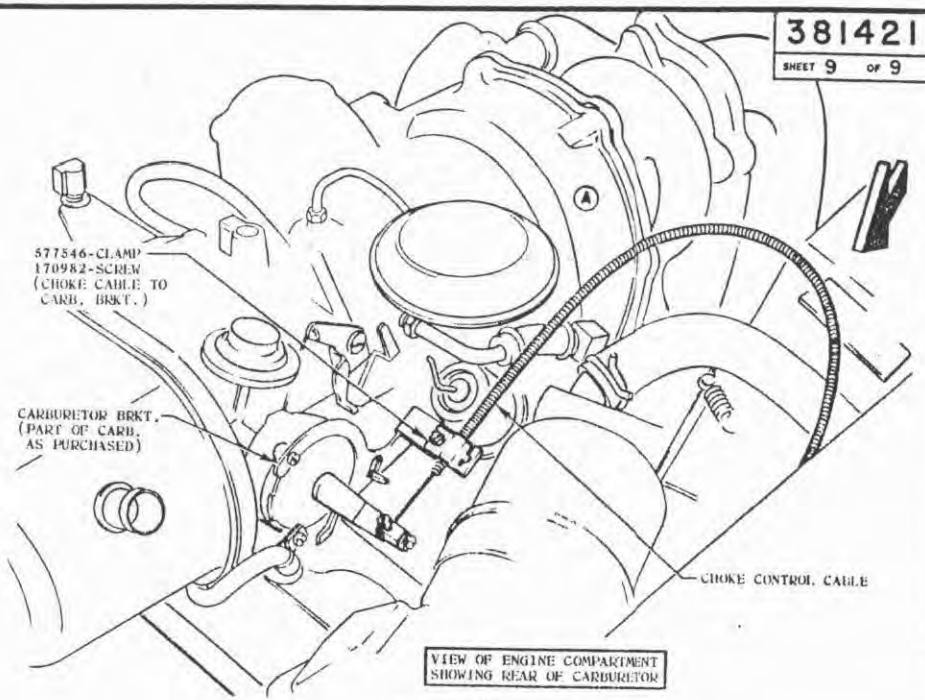
CARS MUST BE SHIPPED WITH TURBO-CHARGER SYSTEM IN OPERATING CONDITION (TANK CAP INSTALLED IN NON-VENTED POSITION) AND WITH A MINIMUM OF 1 GAL. OF TURBO-ROCKET FLUID IN THE TANK.

B

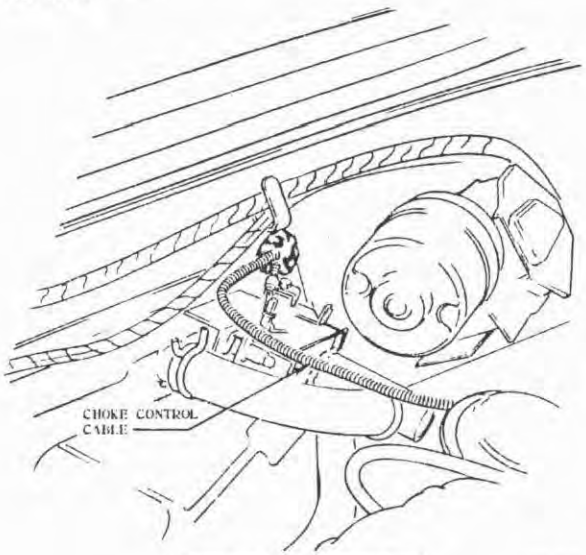
DATE	SYM.	REVISION RECORD	DR.	CK.
7-16-62	D	WAS 380154 TEMPLATE	RE	VP
6-25-62	C2	VIEWS REVISED	RE	VP
6-25-62	B	GAL. WAS QUART	RE	VP
5-5-62	A	WAS SHEET 8 OF 8	RE	VP

DWG. DATE APR 5, 1962 DR. SNYDER
FIRST USED 1963 CK. H. VAN PELT
APPR.
REFERENCE 6M7 APPR.
NAME LAYOUT-TURBO-CHARGER
PART NO. 381421
SERIES 3147
SHEET 8 OF 9

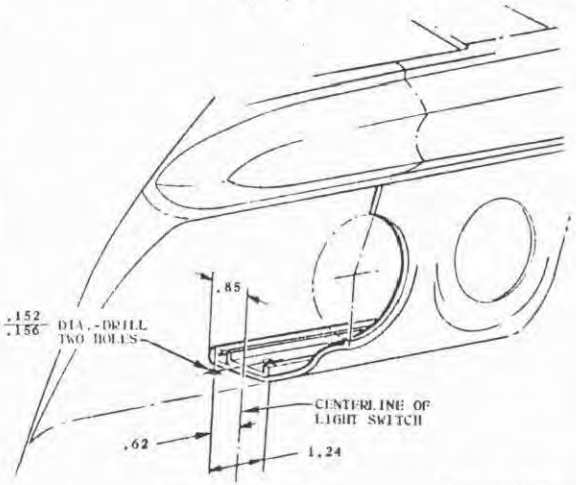




VIEW OF ENGINE COMPARTMENT SHOWING REAR OF CARBURETOR



VIEW IN DIRECTION OF ARROW



HOLE LOCATION FOR CHOKE CONTROL

381421

SHEET 9 OF 9

DATE	SYM	REVISION RECORD	DR.	CK.
7-6-62	A	VIEW REVISED TO DETAIL	BP	JB

DWG. DATE MAY 1, 1962 DR. GALL-MCDONALD

FIRST USED 1963 CK. H. VAN PELT

REFERENCE GM7 APPR.

APPR.

NAME LAYOUT - TURBO - CHARGER

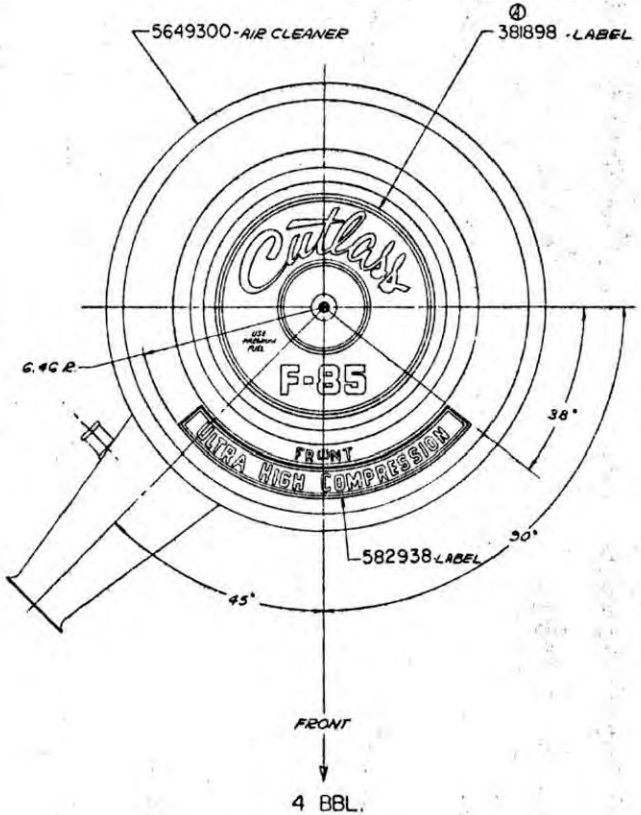
SERIES 3147

SHEET 9 OF 9

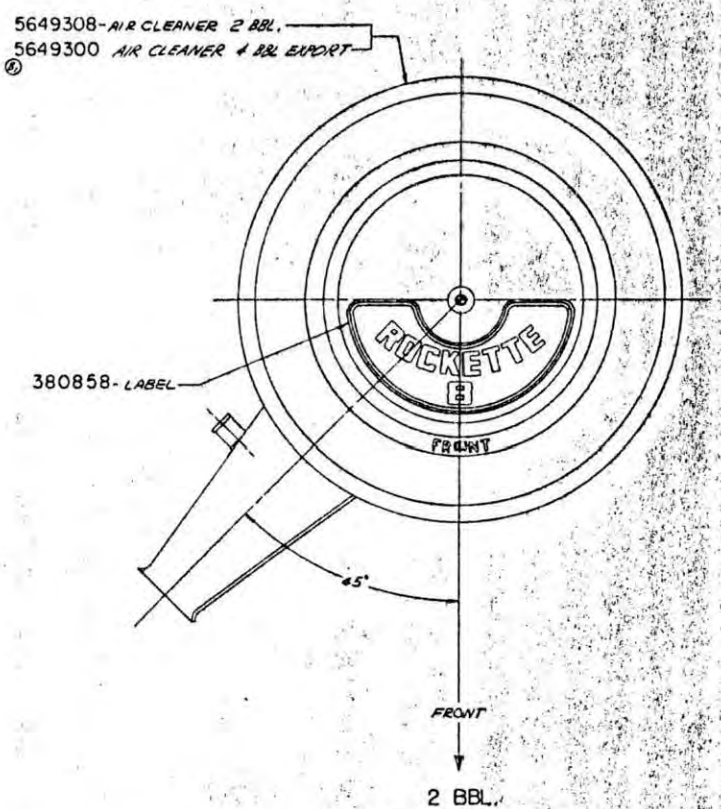
PART NO. 381421

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

DATE	BY	REVISION RECORD	APPROVED	DR.	CK.
3-7-62		WAS ED-7649		CMM	
5-4-62	A	WAS 585945		DS	TB
5-16-62	B	NOTE ADDED	P.A.N.	DS	TB



4 BBL.



2 BBL.,
4 BBL EXPORT
⑥

NO. 380934
LAST CHANGE

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .05 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS
ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F,-.030; F,-.06; F,-.12 ETC.
COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

DO NOT SCALE

DATE FEB. 23, 1962	DR. D. THOMAS
SCALE HALF	CK. J. BAKER
FIRST USED 1963 - 30-31	APPR.
REFERENCE 2 & 4 BBL.	APPR.
MATERIAL SPEC.	APPR.

NAME
LAYOUT - LABEL - AIR CLEANER

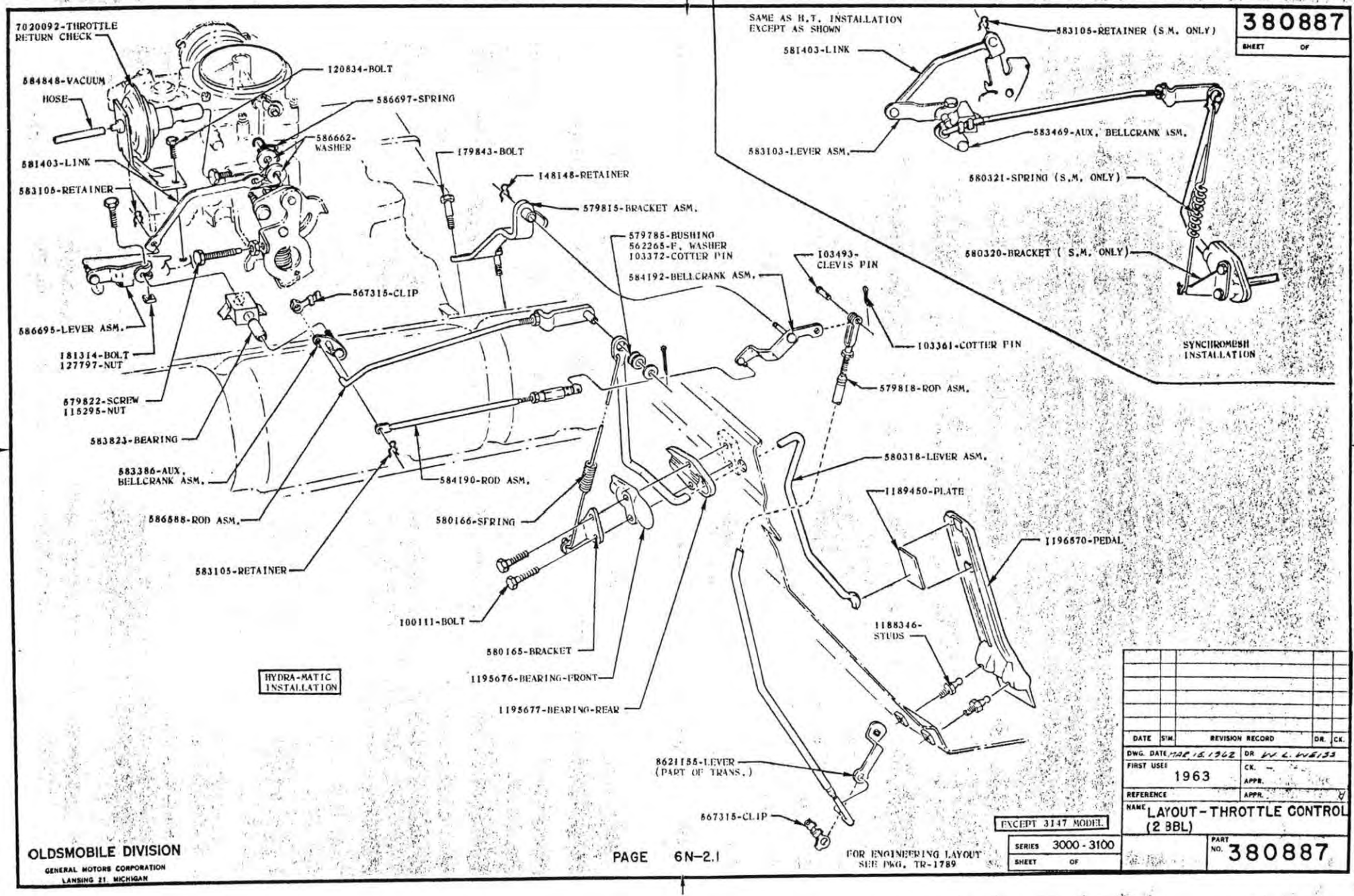
PATTERN | PART NO. 380934

LAST CHANGE | SHEET 1 OF 1 | DWG. NO. 380934

GRP 'CM-1'

THROTTLE CONTROL

DRAWINGS INCLUDED IN THIS SECTION ARE:



380887

SHEET OF

DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAR 15 1962 DR W. L. WILLIS

FIRST USED 1963 CK. — APPR.

REFERENCE APPR.

NAME LAYOUT - THROTTLE CONTROL (2 BBL)

EXCEPT 3147 MODEL

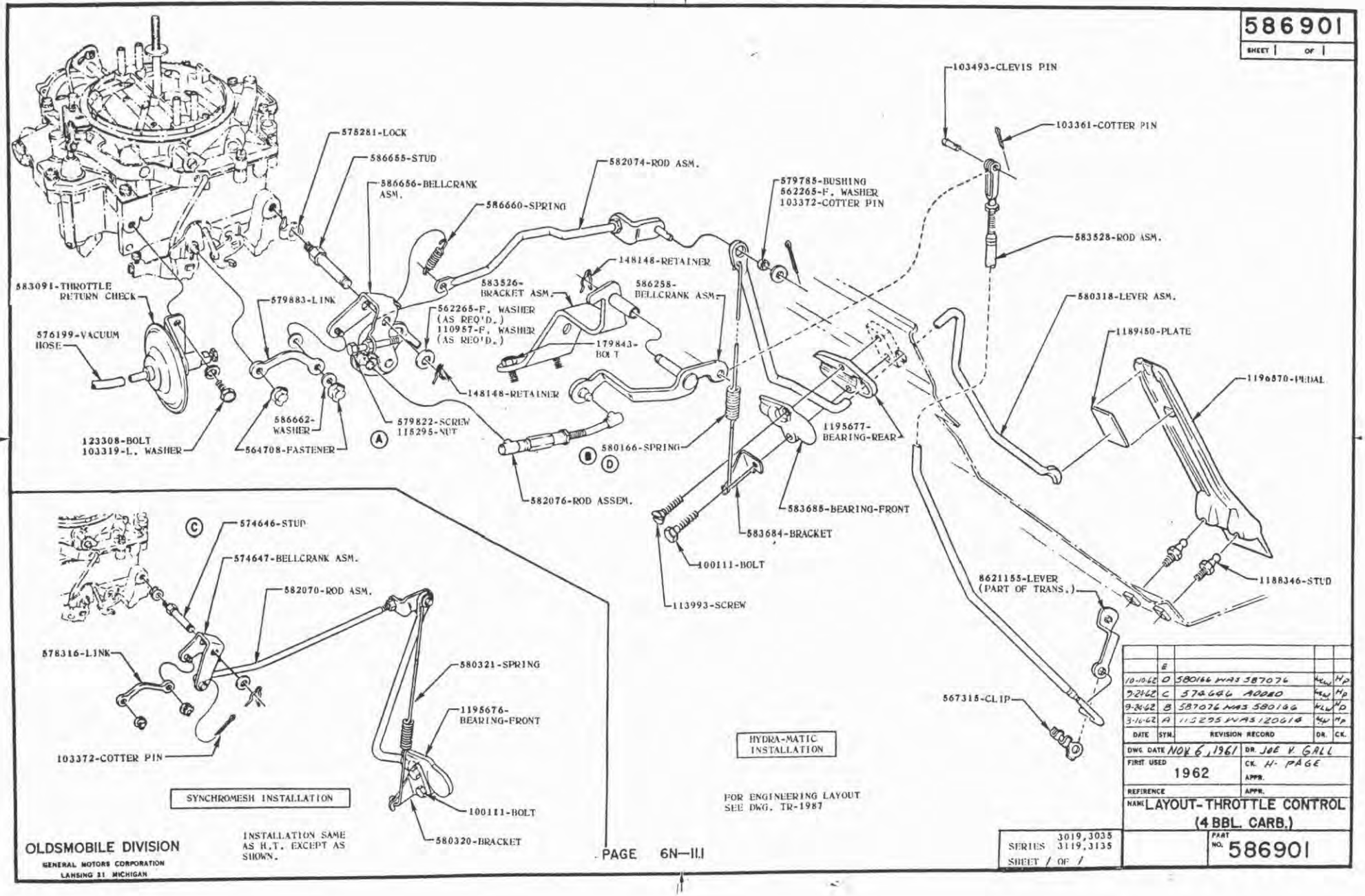
SERIES 3000 - 3100

SHEET OF

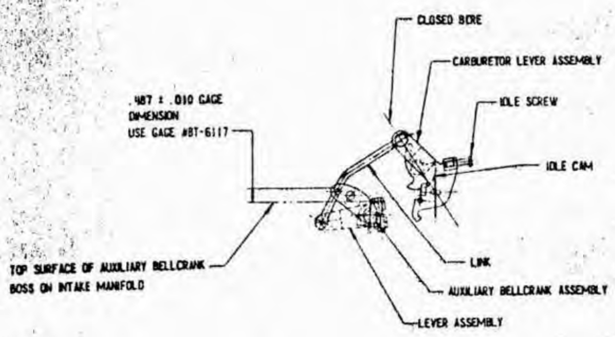
PART NO. 380887

FOR ENGINEERING LAYOUT SEE DWG. TR-1789

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN


586901
SHEET 1 OF 1
578281-LOCK
586655-STUD
586656-BELLCRANK ASM.
586660-SPRING
582074-ROD ASM.
579785-BUSHING
562265-F. WASHER
103372-COTTER PIN
103493-CLEVIS PIN
103361-COTTER PIN
583528-ROD ASM.
583091-THROTTLE RETURN CHECK
576199-VACUUM HOSE
579883-LINK
562265-F. WASHER (AS REQ'D.)
110957-F. WASHER (AS REQ'D.)
583526-BRACKET ASM.
148148-RETAINER
586258-BELLCRANK ASM.
179843-BOLT
580318-LEVER ASM.
1189450-PLATE
1196870-PEDAL
123308-BOLT
103319-L. WASHER
564708-FASTENER
586662-WASHER
579822-SCREW
115295-NUT
148148-RETAINER
580166-SPRING
1195677-BEARING-REAR
582076-ROD ASSEM.
583688-BEARING-FRONT
583684-BRACKET
100111-BOLT
113993-SCREW
8621155-LEVER (PART OF TRANS.)
1188346-STUD
567315-CLIP
574646-STUD
574647-BELLCRANK ASM.
582070-ROD ASM.
578316-LINK
580321-SPRING
1195676-BEARING-FRONT
103372-COTTER PIN
100111-BOLT
580320-BRACKET
SYNCHROMESH INSTALLATION
INSTALLATION SAME AS H.T. EXCEPT AS SHOWN.
HYDRA-MATIC INSTALLATION
FOR ENGINEERING LAYOUT SEE DWG. TR-1987
B
10-10-62 D 580166 WAS 587076 4CYL HP
9-24-62 C 574646 A0080 4CYL HP
9-24-62 B 587076 WAS 580166 4CYL HD
3-16-62 A 115295 WAS 120618 4CYL HP
DATE SYM. REVISION RECORD DR. CK.
DWG. DATE NOV 6, 1961
DR. JOE V. GALL
FIRST USED 1962
CK. H. PAGE
APPR.
REFERENCE
APPR.
NAME LAYOUT-THROTTLE CONTROL (4 BBL. CARB.)
SERIES 3019, 3035 3119, 3135
SHEET 1 OF 1
PART NO. 586901
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21 MICHIGAN
PAGE 6N—11.1

3-20-62		WAS TO 2974		CM	
4-20-62	A	AIR CONDITIONING			
		RPM. AND NOTE			
		ADDED			
	B				



VIEW#1

SYNCHROMESH CARS

I. SLOW IDLE ADJUSTMENT PROCEDURES

A. REQUIRED CONDITIONS:

1. CHOKE FULLY OFF AND FAST IDLE CAM POSITIONED AS SHOWN IN VIEW #1.
2. SLOW IDLE SCREW BACKED OUT AS SHOWN IN VIEW #1. TO PERMIT CARBURETOR THROTTLE VALVE TO BE AT "CLOSED BORE" POSITION.
3. THROTTLE RETURN SPRING LOAD TO BE EFFECTIVELY HOLDING THROTTLE LEVER IN "CLOSED BORE" POSITION. AS SHOWN IN VIEW #1.

B. ADJUSTMENTS:

1. BEND AUXILIARY BELLCRANK TO CARBURETOR LINK AS REQUIRED TO ATTAIN THE .487 ± .010 DIMENSION BETWEEN TOP SURFACE OF AUXILIARY BELLCRANK BOSS ON THE INTAKE MANIFOLD AND THE TOP OF THE ACCELERATOR LEVER ROD HOLE IN THE AUXILIARY BELLCRANK. (PRODUCTION METHOD) FOR SERVICE USE GAGE #BT-6117. AS SHOWN IN VIEW #1.
2. ADJUST THE SLOW IDLE SPEED TO OBTAIN THE FOLLOWING: TRANSMISSION IN NEUTRAL POSITION

	TRANS.	RPM.
WITHOUT AIR CONDITIONING	N.	550
WITH AIR CONDITIONING	N.	550 *

(A) * AIR CONDITIONING "OFF" AND THE COMPENSATOR CARB-AIRATOR VALVE HELD CLOSED.

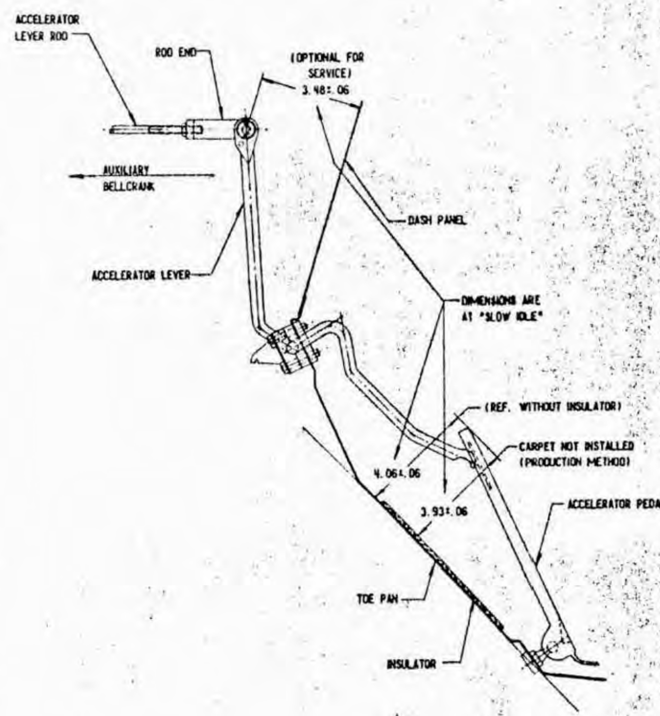
II. ACCELERATOR LINKAGE ADJUSTMENT PROCEDURE

A. REQUIRED CONDITIONS:

1. CHOKE FULLY OFF AND IDLE CAM POSITIONED AS SHOWN IN VIEW #1.
2. THROTTLE RETURN SPRING EFFECTIVELY HOLDING THE CARBURETOR LEVER IN "SLOW IDLE" POSITION.

3. ADJUSTMENTS:

1. ADJUST ACCELERATOR LEVER ROD TO GIVE THE PROPER PEDAL HEIGHT DIMENSION AS SHOWN IN VIEW #2. (PRODUCTION METHOD) SEE VIEW #2 ALSO FOR OPTIONAL SERVICE METHOD.



VIEW#2

380948
LAST CHANGE A

LUBRICATE BALL SOCKETS OF PEDAL BEFORE ASSEMBLY - SEE PROCESS MATERIALS CHART.

REFER TO THROTTLE CONTROL INSTALLATION LAYOUT - 586900

NO. 380948 SHEET 1 OF 1 LAST CHANGE A

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS

ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F_1-.030: F_2-.06: F_3-.09: F_4-.12 ETC

COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

DO NOT SCALE

DATE DWG APRIL 5, 1961	DR. W. L. WEISS
SCALE HALF	CK. H. PAGE
FIRST USED 1963 SM&FS 3000-3100	APPR. H. L. Howard
	APPR.
REFERENCE	APPR.

MATERIAL SPEC. 2 BARREL

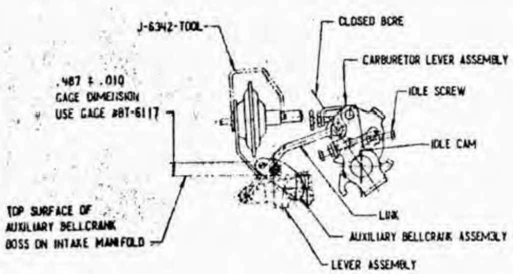
NAME CHART- THROTTLE CONTROL ADJ

P.U.I

PART NO. 380948

GARC

DATE	SYM.	REVISION RECORD	AUTHORITY	DR.	CK.
3-20-6?		WAS TO-2973		CM	
4-21-62	A	AIR-CONDITIONING			
		R.P.M AND NOTE			
		ADDED			
	B				



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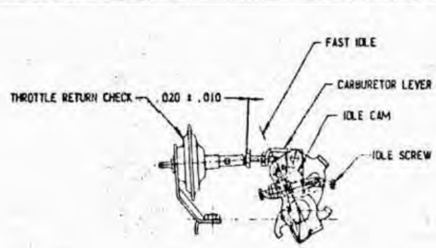

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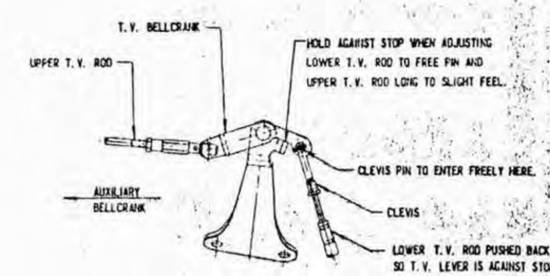


VIEW#3

HYDRA-MATIC CARS

I. SLOW IDLE AND T.V. LINKAGE ADJUSTMENT PROCEDURES

A. REQUIRED CONDITIONS:

1. CHOKE FULLY OFF AND FAST IDLE CAM POSITIONED AS SHOWN IN VIEW #1.
2. THROTTLE RETURN CHECK RETRACTED. (USE HOLDING TOOL #J-6342).
3. SLOW IDLE SCREW BACKED OUT AS SHOWN IN VIEW #1. TO PERMIT THE CARBURETOR THROTTLE VALVE TO BE AT "CLOSED BORE" POSITION.
4. UPPER T.V. ROD DISCONNECTED. (NOTE: THAT IF THIS ROD HAS PREVIOUSLY BEEN ADJUSTED "SHORT" IT WOULD PREVENT THE LINKAGE FROM GOING TO "CLOSED BORE" IF NOT DISCONNECTED).
5. THROTTLE RETURN SPRING LOAD TO BE EFFECTIVELY HOLDING THROTTLE LEVER IN "CLOSED BORE" POSITION AS SHOWN IN VIEW #1.

B. ADJUSTMENTS:

1. DISCONNECT LOWER T.V. ROD AND CHECK THE REAR STOP POSITION OF THE OUTER T.V. LEVER USING GAGE #BT-33-2. BEND LEVER IF NECESSARY TO ATTAIN THE 4.856 ± .060 DIMENSION AS SHOWN IN VIEW #4.
2. HOLD T.V. BELLCRANK AGAINST ITS STOP AND WITH OUTER T.V. LEVER ON TRANSMISSION HELD BACK AGAINST ITS STOP. ADJUST THE LOWER T.V. ROD SO THAT THE CLEVIS PIN ENTERS THE HOLE FREELY. AS SHOWN IN VIEW #3. MAKE THIS ADJUSTMENT WITH A LIGHT PUSH TOWARD THE REAR TO REMOVE LASH.
3. BEND AUXILIARY BELLCRANK TO CARBURETOR LINK AS REQUIRED TO ATTAIN THE .487 ± .010 DIMENSION BETWEEN TOP SURFACE OF AUXILIARY BELLCRANK BOSS ON THE INTAKE MANIFOLD AND THE TOP OF THE ACCELERATOR LEVER ROD HOLE IN THE AUXILIARY BELLCRANK. (PRODUCTION MANIFOLD) FOR SERVICE USE GAGE #BT-6117 AS SHOWN IN VIEW #1.
4. ADJUST THE UPPER T.V. ROD "SLIGHTLY SHORT" AND SNAP IT ON THE BALL STUDS. HOLD THE T.V. BELLCRANK AGAINST ITS STOP AND LENGTHEN THE UPPER T.V. ROD UNTIL THE SWIVEL TURNS FREELY. CONTINUE TO LENGTHEN UNTIL A SLIGHT RESISTANCE IS FELT (VIEW #3)
   NOTE: LIMITS FOR PRODUCTION CHECK OF CARBURETOR OPENING IN DEGREES FROM CLOSED BORE VS. T.V. PRESSURE: 12°=21.0-23.0 P.S.I. 25°=37.0-41.0 P.S.I. TEMPERATURE OF THE TRANSMISSION ASSEMBLY AND OIL USED FOR THE T.V. PRESSURE CHECK MUST BE ABOVE 90° TO ELIMINATE THE VARIABLE EFFECT OF THE BI-METAL T.V. COMPENSATOR AT LOWER TEMP. IF NECESSARY. THE UPPER T.V. ROD MAY BE MALADJUSTED A MAXIMUM OF ±1 TURN TO ACHIEVE READINGS WITHIN THESE LIMITS. IF THIS AMOUNT OF MALADJUSTMENT DOES NOT BRING THE READINGS WITHIN THESE LIMITS. TAG JOB FOR INVESTIGATION AND REPAIR.
5. ADJUST THE SLOW IDLE SPEED TO OBTAIN THE FOLLOWING: TRANSMISSION IN DRIVE POSITION

	TRANS.	RPM.
(A) WITHOUT AIR CONDITIONING	DR.	500
WITH AIR CONDITIONING	DR.	550 *

* AIR CONDITIONING "OFF" AND THE COMPENSATOR CARB-AIRATOR VALVE HELD CLOSED.

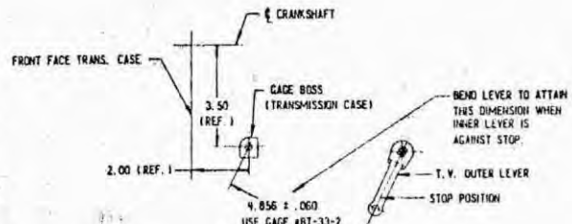
NOTE: FAST IDLE ADJUSTMENT AUTOMATICALLY OBTAINED WHEN "SLOW IDLE" IS ADJUSTED DUE TO SINGLE IDLE SCREW.

6. TURN ENGINE OFF.
7. ROTATE IDLE CAM SO THAT IDLE SCREW IS EFFECTIVELY HELD ON FAST IDLE STEP OF CAM BY THROTTLE RETURN SPRING LOAD (CHOKE FULLY ON).
8. ADJUST GAP BETWEEN CARBURETOR LEVER AND THROTTLE CHECK PLUNGER TO .020 ± .010 INCHES AS SHOWN IN VIEW #2.

II. ACCELERATOR LINKAGE ADJUSTMENT PROCEDURES

A. REQUIRED CONDITIONS:

1. CHOKE FULLY OFF AND FAST IDLE CAM POSITIONED AS SHOW IN VIEW #1.
2. THROTTLE RETURN CHECK RETRACTED.
3. T.V. LINKAGE AND "SLOW IDLE" SPEED PROPERLY ADJUSTED.
4. THROTTLE RETURN SPRING EFFECTIVELY HOLDING THE CARBURETOR LEVER IN "SLOW IDLE" POSITION.



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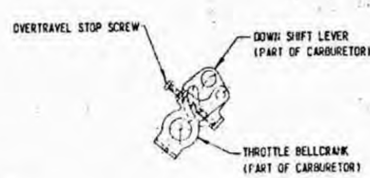


VIEW# 6

B. ADJUSTMENTS:

1. ADJUST ACCELERATOR LEVER ROD TO GIVE THE PROPER PEDAL HEIGHT DIMENSION AS SHOWN IN VIEW #5 (PRODUCTION METHOD), SEE VIEW #5 ALSO, FOR OPTIONAL SERVICE METHOD.

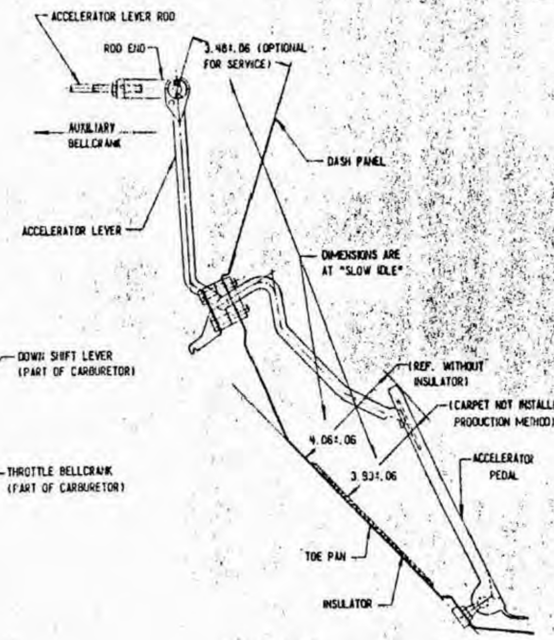
III. OVERTRAVEL LINKAGE ADJUSTMENT PROCEDURES

A. REQUIRED CONDITIONS.

1. OVER TRAVEL STOP SCREW BACKED OUT.

B. ADJUSTMENTS.

1. BY HAND OPERATING THE ACCELERATOR LEVER. OPEN THE CARBURETOR TO "WIDE OPEN". AND OVERTRAVEL THE LINKAGE TO THE POINT OF MAXIMUM TRANSMISSION LEVER TRAVEL. (THIS POINT IS A MATTER OF "FEEL" AND CARE MUST BE TAKEN NOT TO BEND OR STRETCH THE LINKAGE BEYOND THE ACTUAL POINT). WITH THE BELLCRANK IN THIS POSITION, SET THE STOP SCREW TO JUST TOUCH THE TANG OF THE DOWNSHIFT LEVER. AS SHOWN IN VIEW #6. THEN TURN THE STOP SCREW IN ONE AND ONE HALF TO TWO TURNS AND SET LOCK NUT.



VIEW#5

NO.	380949
LAST CHANGE	A

LUBRICATE BALL SOCKETS OF PEDAL BEFORE ASSEMBLY - SEE PROCESS MATERIALS CHART

REFER TO THROTTLE CONTROL INSTALLATION LAYOUT. 586900

NO.	SHEET	LAST CHANGE
380949	1 OF 1	A

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS

ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F_1-.030, F_2-.06, F_3-.08; F_4-.12 ETC.

COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

DO NOT SCALE

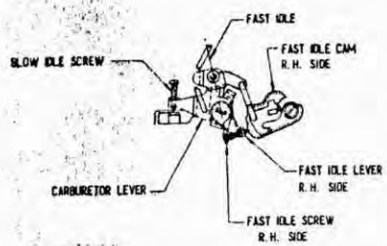
DATE DWG MARCH 23, 1961	DR. W. L. WEISS
SCALE HALF	CK. H. PAGE
FIRST USED 1963 H.T. 3000-3100	APPD. H. R. Howard
	APPD.
REFERENCE	APPD.

MATERIAL SPEC. 2 BARREL

NAME CHART-THROTTLE CONTROL ADJ

PART NO. 380949

DATE	LTR.	REVISION RECORD	AUTHORITY	DR.	CK.
3-20-62		WAS TD 2971		CM	
3-28-62	A	1800 R.P.M. WAS			
		1600 R.P.M.			
4-25-62	B	AIR CONDITIONING			
		RPM AND NOTE			
		ADDED			
	C				



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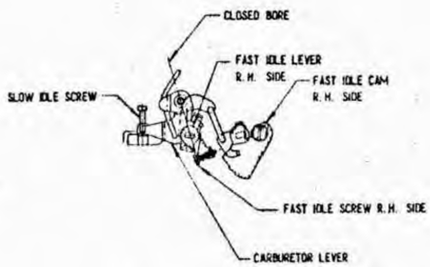

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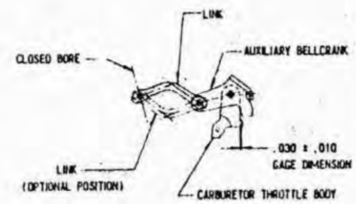

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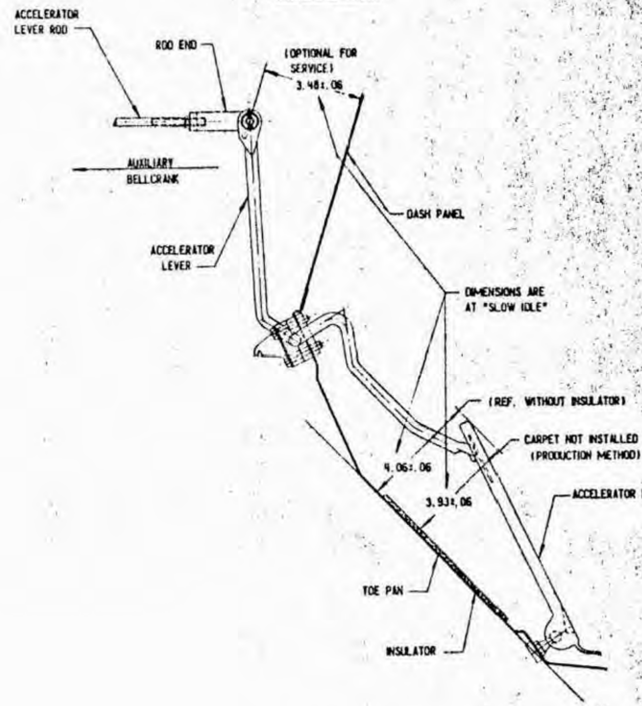


VIEW# 4

SYNCHROMESH CARS

I. FAST IDLE ADJUSTMENT PROCEDURES

A. REQUIRED CONDITIONS.

1. TRANSMISSION IN NEUTRAL.
2. THROTTLE RETURN SPRING LOAD TO BE EFFECTIVELY HOLDING THROTTLE LEVER FAST IDLE SCREW ON FAST IDLE CAM AS SHOWN IN VIEW #1.
3. ENGINE TO BE WARM.

B. ADJUSTMENTS: Ⓐ

1. SET FAST IDLE SCREW TO ATTAIN 1800 R.P.M.
2. TURN ENGINE OFF.

II. SLOW IDLE ADJUSTMENT PROCEDURES

A. REQUIRED CONDITIONS:

1. CHOKE FULLY OFF AND FAST IDLE CAM POSITIONED AS SHOWN IN VIEW #2.
2. SLOW IDLE SCREW BACKED OUT AS SHOWN IN VIEW #2. TO PERMIT CARBURETOR THROTTLE VALVE TO BE AT "CLOSED BORE" POSITION.
3. THROTTLE RETURN SPRING LOAD TO BE EFFECTIVELY HOLDING THE THROTTLE LEVER IN "CLOSED BORE" POSITION. AS SHOWN IN VIEW #2. (NOTE: THE AUXILIARY BELLCRANK MUST HAVE CLEARANCE AT ITS GAGE SURFACE. SEE VIEW #3).

B. ADJUSTMENTS:

1. BEND AUXILIARY BELLCRANK TO CARBURETOR LINK AS REQUIRED TO OBTAIN THE .030 ± .010 CLEARANCE DIMENSION BETWEEN THE AUXILIARY BELLCRANK AND ITS GAGE SURFACE. AS SHOWN IN VIEW #3.
2. ADJUST THE SLOW IDLE SPEED TO OBTAIN THE FOLLOWING: TRANSMISSION IN NEUTRAL POSITION

	TRANS.	RPM.
WITHOUT AIR CONDITIONING	N.	550
Ⓑ WITH AIR CONDITIONING	N.	550*

* AIR CONDITIONING "OFF" AND THE COMPENSATOR CARB-AIRATOR VALVE HELD CLOSED.

III. ACCELERATOR LINKAGE ADJUSTMENT PROCEDURE

A. REQUIRED CONDITIONS:

1. CHOKE FULLY OFF AND FAST IDLE CAM POSITIONED AS SHOWN IN VIEW #2.
2. THROTTLE RETURN SPRING EFFECTIVELY HOLDING THE CARBURETOR LEVER IN "SLOW IDLE" POSITION.

B. ADJUSTMENTS:

1. ADJUST ACCELERATOR LEVER ROD TO GIVE THE PROPER PEDAL HEIGHT DIMENSION AS SHOWN IN VIEW #4 (PRODUCTION METHOD). SEE VIEW #4 ALSO FOR OPTIONAL SERVICE METHOD.

LUBRICATE BALL SOCKETS OF PEDAL BEFORE ASSEMBLY - SEE PROCESS MATERIALS CHART.

REFER TO THROTTLE CONTROL INSTALLATION LAYOUT. 586901

NO. 380950 | SHEET 1 OF 1 | LAST CHANGE B

NO. 380950 — LAST CHANGE

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS

ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F_1-.030; F_2-.06; F_3-.09; F_4-.12 ETC.

COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

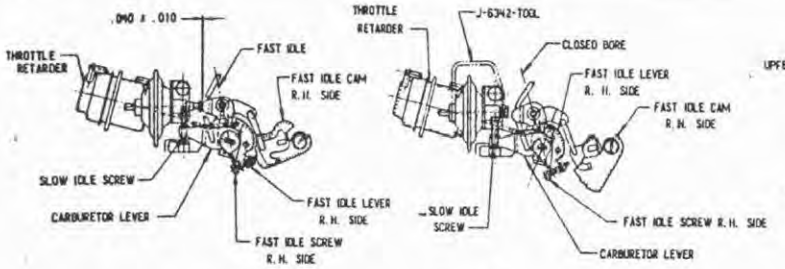
DO NOT SCALE

DATE DRG. MAY 31, 1961	DR. W. L. WEISS
SCALE HALF	CK. H. PAGE
FIRST USED 1963 SM & FS 3000 - 3100	APPR. H. Howard
	APPR.
REFERENCE	APPR.

MATERIAL SPEC. 4 BARREL

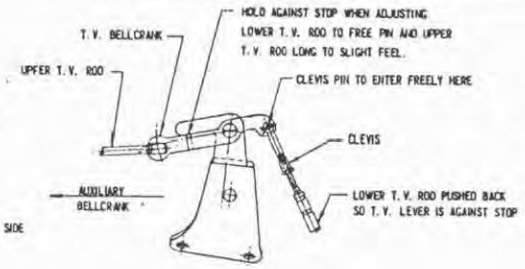
NAME CHART - THROTTLE CONTROL ADJ

1-63 PART NO. 380950



VIEW #1

VIEW #2



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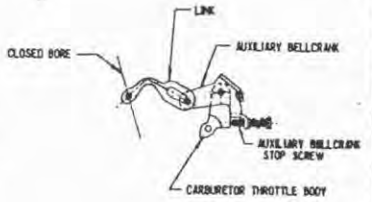


VIEW #4

HYDRA-MATIC CARS

I. FAST IDLE ADJUSTMENT PROCEDURES

A. REQUIRED CONDITIONS:
1. ENGINE TO BE WARM
2. TRANSMISSION IN NEUTRAL
3. THROTTLE RETARDER SPRING LOAD TO BE EFFECTIVELY HOLDING THROTTLE LEVER FAST IDLE SCREW ON FAST IDLE CAM, AS SHOWN IN VIEW #1.

B. ADJUSTMENTS:
1. SET FAST IDLE SCREW TO ATTAIN 1800 R.P.M.
2. TURN ENGINE OFF.
3. ADJUST GAP BETWEEN CARBURETOR LEVER AND THROTTLE CHECK PLUNGER TO .040 ± .010 INCHES AS SHOWN IN VIEW #1.

II. SLOW IDLE AND T.V. LINKAGE ADJUSTMENT PROCEDURES

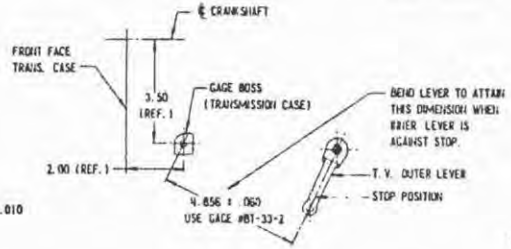
A. REQUIRED CONDITIONS:
1. UPPER T.V. ROD DISCONNECTED. (NOTE: THAT IF THIS ROD HAS PREVIOUSLY BEEN ADJUSTED "SHORT" IT WOULD PREVENT THE LINKAGE FROM GOING TO "CLOSED BORE" IF NOT DISCONNECTED).
2. AUXILIARY BELLCRANK TO CARBURETOR LINK REMOVED.
3. THROTTLE RETURN CHECK RETRACTED. (USE HOLDING TOOL J-6342).
4. CHOKE FULLY OFF AND FAST IDLE CAM POSITIONED AS SHOWN IN VIEW #2.
5. SLOW IDLE SCREW BACKED OUT AS SHOWN IN VIEW #2 TO PERMIT THE CARBURETOR THROTTLE VALVE TO BE HELD AT "CLOSED BORE" POSITION BY THE THROTTLE RETARDER.
6. AUXILIARY BELLCRANK STOP SCREW BACKED OUT TO ALLOW STOP ON AUXILIARY BELLCRANK TO CONTACT CARBURETOR BODY AS SHOWN IN VIEW #4.

B. ADJUSTMENTS:
1. WITH CARBURETOR IN "CLOSED BORE" POSITION AND AUXILIARY BELLCRANK AGAINST STOP, ADJUST AND INSTALL AUXILIARY BELLCRANK TO CARBURETOR LINK, BEND LINK AS SHORT AS POSSIBLE WITHOUT PULLING CARBURETOR OFF "CLOSED BORE" POSITION WHEN IT IS INSTALLED.
2. DISCONNECT LOWER T.V. ROD AND CHECK THE REAR STOP POSITION OF THE OUTER T.V. LEVER USING GAGE ABT-33-2. BEND LEVER IF NECESSARY TO ATTAIN THE 4.856 ± .060 DIMENSION AS SHOWN IN VIEW #5.
3. HOLD T.V. BELLCRANK AGAINST ITS STOP AND WITH OUTER T.V. LEVER ON TRANSMISSION HELD BACK AGAINST ITS STOP, ADJUST THE LOWER T.V. ROD SO THAT THE CLEVIS PIN ENTERS THE HOLE FREELY, AS SHOWN IN VIEW #3. MAKE THIS ADJUSTMENT WITH A LIGHT PUSH TOWARD THE REAR TO REMOVE LASH.
4. ADJUST THE UPPER T.V. ROD "SLIGHTLY SHORT" AND SNAP IT ON THE BALL STUDS. HOLD THE T.V. BELLCRANK AGAINST ITS STOP AND LENGTHEN THE UPPER ROD UNTIL THE SWIVEL TURNS FREELY, CONTINUE TO LENGTHEN UNTIL A SLIGHT RESISTANCE IS FELT (VIEW #3). NOTE: LIMITS FOR PRODUCTION CHILT OF CARBURETOR OPENING IN DEGREES FROM CLOSED BORE V.S. T.V. PRESSURE. 12°+26.0-28.0 P.S.I., 25°+44.0-46.0 P.S.I.
WITH TRANSMISSION ASSEMBLY AT NORMAL OPERATING TEMPERATURE (180-200 °F) TO ELIMINATE THE VARIABLE EFFECT OF THE BI-METAL T.V. COMPENSATOR AT LOWER TEMP. IF NECESSARY, THE UPPER T.V. ROD MAY BE MADE ADJUSTED A MAXIMUM OF 12 TURNS TO ACHIEVE READINGS WITHIN THESE LIMITS. IF THIS AMOUNT OF ADJUSTMENT DOES NOT BRING THE READINGS WITHIN THESE LIMITS, TAG JOB FOR INVESTIGATION AND REPAIR.
5. ADJUST THE SLOW IDLE SPEED TO OBTAIN THE FOLLOWING WITH TRANSMISSION IN DRIVE POSITION.

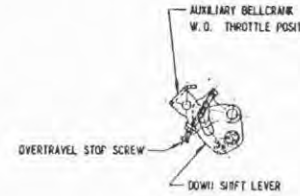
WITHOUT AIR CONDITIONING	500 RPM
WITH AIR CONDITIONING	550 * RPM

* AIR CONDITIONING "OFF" AND THE COMPENSATOR CARBURETOR VALVE CLOSED.

6. ADJUST AUXILIARY BELLCRANK STOP SCREW IN UNTIL IT JUST AFFECTS SLOW IDLE, THEN BACK IT OUT ONE FULL TURN THIS SCREW MUST BE ADJUSTED WHENEVER THE SLOW IDLE IS ADJUSTED.



VIEW #5



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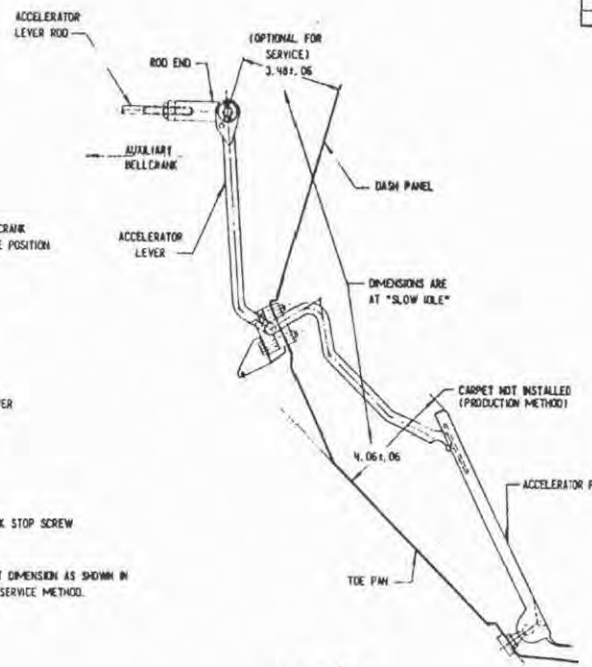


VIEW #7

III. ACCELERATOR LINKAGE ADJUSTMENT PROCEDURES

A. REQUIRED CONDITIONS:
1. AUXILIARY BELLCRANK STOP SCREW PROPERLY ADJUSTED.
2. THROTTLE RETURN SPRING EFFECTIVELY HOLDING AUXILIARY BELLCRANK STOP SCREW AGAINST CARBURETOR THROTTLE BODY.

B. ADJUSTMENTS:
1. ADJUST ACCELERATOR LEVER ROD TO GIVE THE PROPER PEDAL HEIGHT DIMENSION AS SHOWN IN VIEW #7 (PRODUCTION METHOD). SEE VIEW #7 ALSO FOR OPTIONAL SERVICE METHOD.

IV. OVERTRAVEL LINKAGE ADJUSTMENT PROCEDURES

A. REQUIRED CONDITIONS:
1. OVER TRAVEL STOP SCREW BACKED OUT.
2. T.V. LINKAGE PROPERLY ADJUSTED.

B. ADJUSTMENTS:
1. BY HAND OPERATING THE ACCELERATOR LEVER, OPEN THE CARBURETOR TO "WIDE OPEN" AND OVERTRAVEL THE LINKAGE TO THE POINT OF MAXIMUM TRANSMISSION LEVER TRAVEL. (THIS POINT IS A MATTER OF "FEEL" AND CARE MUST BE TAKEN NOT TO BEND OR STRETCH THE LINKAGE BEYOND THE ACTUAL POINT). WITH THE BELLCRANK IN THIS POSITION, SET THE STOP SCREW TO JUST TOUCH THE TANG OF THE DOWNSHIFT LEVER, AS SHOWN IN VIEW #6. THEN TURN THE STOP SCREW IN ONE AND ONE-HALF TO TWO FULL TURNS AND SET LOCK NUT.

LUBRICATE BALL SOCKETS OF PEDAL BEFORE ASSEMBLY - SEE PROCESS MATERIALS CHART.

REFER TO THROTTLE INSTALLATION LAYOUT 381380

DATE	SYM.	REVISION REMARK	DEPARTMENT	NO.	NO.
9-11-62	A	WAS TD-3617			

NO.	381864
SHEET	1 OF 1
LAST CHANGE	

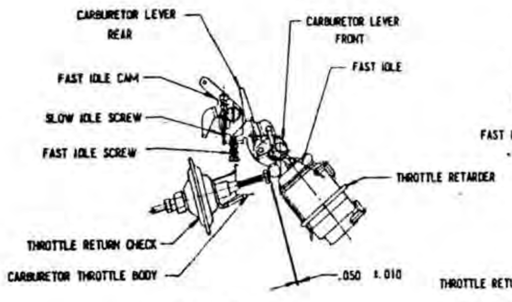
TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F_1-.030, F_2-.06, F_3- OR F_4-.12 ETC. COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

DO NOT SCALE

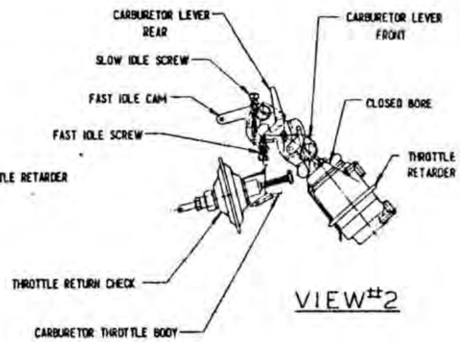
DATE DRG.	MAY 1, 1962
SCALE	HALF
FIRST USED	1963 MT 3000-3100
REFERENCE	
DRAWN	W. L. WEISS
CK.	
APPR.	
APPR.	
APPR.	
MATERIAL SPEC.	4-BARREL WITH RETARDER
NAME	CHART- THROTTLE CONTROL ADJ
P-ST	PART NO. 381864 T

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING, MICHIGAN

DATE	LTR.	REVISION RECORD	AUTHORITY	DR.	CK.
7-9-62		WAS TD-3621			
8-6-62	A	INSULATOR REMO			
8-6-62	B	3.93±.06 DIM.			
		REMOVED			
	C				



VIEW#3



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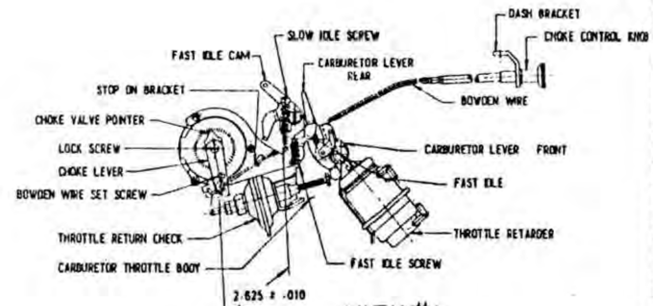


VIEW#1

SYNCHROMESH CARS

I MANUAL CHOKE ADJUSTMENT PROCEDURES

A. REQUIRED CONDITION:

1. FAST IDLE SCREW ON HIGH STEP OF FAST IDLE CAM. AS SHOWN IN VIEW #1

B. ADJUSTMENTS:

1. WITH CHOKE CONTROL KNOB AGAINST DASH BRACKET LOOSEN BOWDEN WIRE SET SCREW. ROTATE CHOKE LEVER CLOCKWISE TO OBTAIN THE 2.625 ± .010 DIM. FROM INSIDE EDGE OF BRACKET TO EDGE OF CHOKE LEVER. TIGHTEN SET SCREW.
2. PULL CHOKE CONTROL KNOB OUT UNTIL CHOKE LEVER CONTACTS STOP ON BRACKET.
3. LOOSEN LOCK SCREW. ROTATE POINTER CLOCKWISE TO OPEN CHOKE VALVE. ROTATE POINTER COUNTERCLOCKWISE UNTIL CHOKE VALVE JUST CLOSES.
4. NOTE POINTER INDEX. ROTATE POINTER COUNTERCLOCKWISE 4 ADDITIONAL NOTCHES AND TIGHTEN LOCK SCREW.
5. PUSH CHOKE CONTROL KNOB IN UNTIL DETENT IS FELT. (NOTE: FAST IDLE SCREW TO BE ON END OF 2ND STEP OF FAST IDLE CAM.) CHOKE LEVER MAY BE BENT IN OR OUT TO PROVIDE PROPER DETENT "FEEL"
6. BEND END OF BOWDEN WIRE UP AT CHOKE LEVER.

II FAST IDLE ADJUSTMENT PROCEDURES

A. REQUIRED CONDITIONS:

1. TRANSMISSION IN NEUTRAL
2. THROTTLE RETARDER SPRING LOAD TO BE EFFECTIVELY HOLDING THROTTLE LEVER FAST IDLE SCREW ON FAST IDLE CAM AS SHOWN IN VIEW #3.
3. ENGINE TO BE WARM.

B. ADJUSTMENTS:

1. SET FAST IDLE SCREW TO ATTAIN 2400 RPM. WITH CARBURETOR ON HIGH STEP OF FAST IDLE CAM.
2. TURN ENGINE OFF.
3. ADJUST GAP BETWEEN CARBURETOR LEVER AND THROTTLE RETURN CHECK PLUNGER TO .050 ± .010 INCHES AS SHOWN IN VIEW #3.

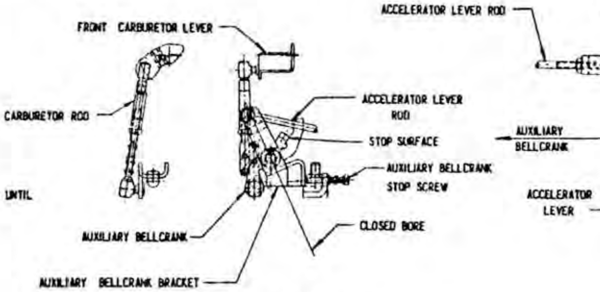
III SLOW IDLE ADJUSTMENT PROCEDURES

A. REQUIRED CONDITIONS:

1. CARBURETOR ROD DISCONNECTED AT UPPER END.
2. CHOKE FULLY OFF AND FAST IDLE CAM POSITIONED AS SHOWN IN VIEW #2.
3. THROTTLE RETURN CHECK RETRACTED.
4. SLOW IDLE SCREW BACKED OUT AS SHOWN IN VIEW #2 TO PERMIT THE CARBURETOR THROTTLE VALVE TO BE AT "CLOSED BORE" POSITION. (MAKE SURE THAT FAST IDLE CAM TAB DOES NOT TOUCH FAST IDLE SCREW) AS SHOWN IN VIEW #2.
5. AUXILIARY BELLCRANK STOP SCREW BACKED OUT, AS REQUIRED TO ALLOW AUXILIARY BELLCRANK TO CONTACT STOP ON BRACKET. VIEW #4.

B. ADJUSTMENTS:

1. ADJUST CARBURETOR ROD SHORT FROM FREE PIN AND SNAP ON CARBURETOR LEVER. WHILE USING REAR CARBURETOR LEVER TO HOLD CARBURETOR AT CLOSED BORE (AND WITH AUXILIARY BELLCRANK AGAINST ITS STOP) LENGTHEN CARBURETOR ROD UNTIL THE FOLDING LINKS HAVE CLOSED AND A SLIGHT LOAD IS FELT ON THE THREADS. FROM THIS POSITION, SHORTEN ROD ONE FULL TURN AND TIGHTEN LOCK NUT



VIEW# 4

2. ADJUST THE SLOW IDLE SPEED TO OBTAIN THE FOLLOWING : TRANSMISSION IN NEUTRAL POSITION.

	TRANS.	RPM.
WITHOUT AIR CONDITIONING	N.	600
WITH AIR CONDITIONING	N.	600 *

* AIR CONDITIONING "OFF"

3. ADJUST STOP SCREW ON AUXILIARY BELLCRANK IN UNTIL IT JUST AFFECTS SLOW IDLE, THEN BACK IT OUT ONE TURN. THIS SCREW MUST BE ADJUSTED WHENEVER THE SLOW IDLE IS ADJUSTED.

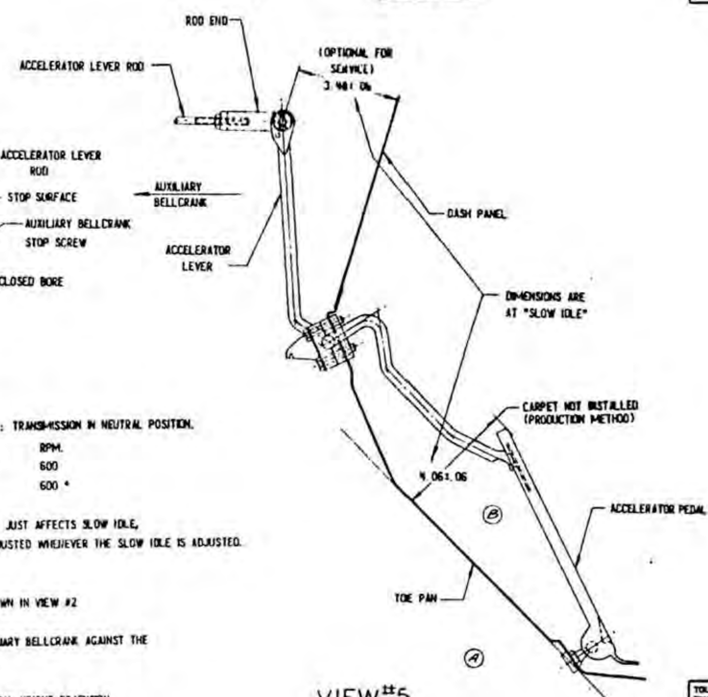
IV ACCELERATOR LINKAGE ADJUSTMENT PROCEDURES

A. REQUIRED CONDITIONS:

1. CHOKE FULLY OFF AND FAST IDLE CAM POSITIONED AS SHOWN IN VIEW #2
2. THROTTLE RETURN CHECK RETRACTED.
3. THROTTLE RETURN SPRING EFFECTIVELY HOLDING THE AUXILIARY BELLCRANK AGAINST THE AUXILIARY BELLCRANK STOP SCREW.

B. ADJUSTMENTS:

1. ADJUST ACCELERATOR LEVER ROD TO GIVE THE PROPER PEDAL HEIGHT DIMENSION AS SHOWN IN VIEW #5(PRODUCTION METHOD) SEE VIEW #5 ALSO FOR OPTIONAL SERVICE METHOD.



VIEW#5

LUBRICATE BALL SOCKETS OF PEDAL BEFORE ASSEMBLY
SEE PROCESS MATERIALS CHART.
REFER TO THROTTLE INSTALLATION LAYOUT 585200
AND TURBO CHARGER LAYOUT 585791

NO. 380177 — SHEET 1 OF 1 — LAST CHANGE B

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .03 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS
ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F1-.030; F2-.06; F3-.09; F4-.12 ETC.
COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

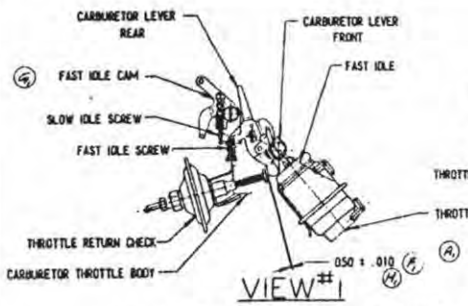
DO NOT SCALE

DATE DWG. MAY 8, 1962	DR. W.L. WEISS
SCALE HALF	CK. H. FRASE
FIRST USED 1962 3147 SM & FS	APPR. [signature]
REFERENCE	APPR.
	APPR.

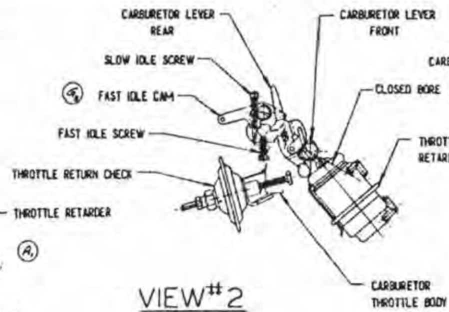
MATERIAL SPEC. WITH MANUAL CHOKE

NAME CHART-THROTTLE CONTROL ADJUSTMENT

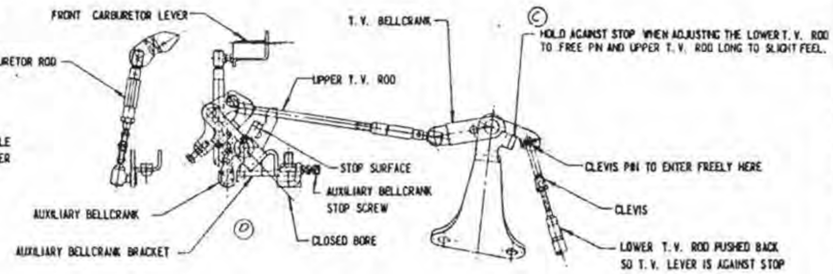
PART NO. 380177



VIEW#1



VIEW#2



VIEW#3

HYDRA-MATIC CARS

I. FAST IDLE ADJUSTMENT PROCEDURES

A. REQUIRED CONDITIONS:

1. TRANSMISSION IN NEUTRAL
2. THROTTLE RETARDER SPRING LOAD TO BE EFFECTIVELY HOLDING THROTTLE LEVER FAST IDLE SCREW ON FAST IDLE CAM. AS SHOWN IN VIEW #1.
3. ENGINE TO BE WARM.

B. ADJUSTMENTS:

1. SET FAST IDLE SCREW TO ATTAIN 1500 R.P.M. WITH CARBURETOR ON 2ND STEP OF FAST IDLE CAM
2. TURN ENGINE OFF.
3. ADJUST GAP BETWEEN CARBURETOR LEVER AND THROTTLE CHECK PLUNGER TO .050 ± .010 INCHES WITH CARBURETOR ON HIGH STEP OF FAST IDLE CAM. AS SHOWN IN VIEW #1.

II. SLOW IDLE AND T.V. LINKAGE ADJUSTMENT PROCEDURES

A. REQUIRED CONDITIONS:

1. CARBURETOR ROD DISCONNECTED AT UPPER END.
2. CHOKE FULLY OFF AND FAST IDLE CAM POSITIONED AS SHOWN IN VIEW #2.
3. THROTTLE RETURN CHECK RETRACTED.
4. SLOW IDLE SCREW BACKED OUT AS SHOWN IN VIEW #2 TO PERMIT THE CARBURETOR THROTTLE VALVE TO BE AT "CLOSED BORE" POSITION. (MAKE SURE THAT FAST IDLE CAM TAB DOES NOT TOUCH FAST IDLE SCREW) AS SHOWN IN VIEW #2.
5. UPPER T.V. ROD DISCONNECTED AND AUXILIARY BELLCRANK STOP SCREW BACKED OUT. AS REQUIRED TO ALLOW AUXILIARY BELLCRANK TO CONTACT STOP ON BRACKET. VIEW #3. (NOTE: THE AUXILIARY BELLCRANK WILL NOT STOP AGAINST BRACKET IF UPPER T.V. ROD HAS PREVIOUSLY BEEN ADJUSTED "SHORT" AND NOT DISCONNECTED)

B. ADJUSTMENTS:

1. DISCONNECT LOWER T.V. ROD AND CHECK THE REAR STOP POSITION OF THE OUTER T.V. LEVER USING GAGE #BT-33-2. BEND LEVER IF NECESSARY TO ATTAIN THE 4.856 ±.060 DIMENSION AS SHOWN IN VIEW #4.
2. HOLD T.V. BELLCRANK AGAINST ITS STOP AND WITH OUTER T.V. LEVER ON TRANSMISSION HELD BACK AGAINST ITS STOP. ADJUST THE LOWER T.V. ROD SO THAT THE CLEVIS PIN ENTERS THE HOLE FREELY. AS SHOWN IN VIEW #3. MAKE THIS ADJUSTMENT WITH A LIGHT PUSH TOWARD THE REAR TO REMOVE LASH.
3. ADJUST CARBURETOR ROD SHORT FROM FREE PIN AND SNAP ON CARBURETOR LEVER. WHILE USING REAR CARBURETOR LEVER TO HOLD CARBURETOR AT CLOSED BORE (AND WITH AUXILIARY BELLCRANK AGAINST ITS STOP) LENGTHEN CARBURETOR ROD UNTIL THE FOLDING LINKS HAVE CLOSED AND A SLIGHT LOAD IS FELT ON THE THREADS. FROM THIS POSITION SHORTEN ROD ONE FULL TURN AND TIGHTEN LOCK NUT.
4. ADJUST THE UPPER T.V. ROD "SLIGHTLY SHORT" AND SNAP IT BALL STUDS. HOLD THE T.V. BELLCRANK AGAINST ITS STOP AND LENGTHEN THE UPPER ROD UNTIL THE SWIVEL TURNS FREELY. CONTINUE TO LENGTHEN UNTIL A SLIGHT RESISTANCE IS FELT. (SEE VIEW #3)

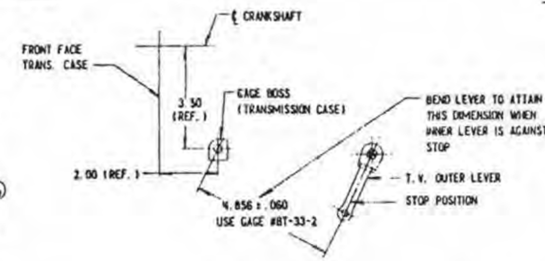
NOTE: LIMITS FOR PRODUCTION CHECK OF CARBURETOR OPENING IN DEGREES FROM CLOSED BORE VERSUS TV PRESSURE 12°=28.0 - 30.0 P.S.I., 25°=44.0 - 48.0 P.S.I. WITH LINKAGE AND CARBURETOR BEING ADVANCED BY PULLING ON ACCELERATOR LEVER ROD. TEMPERATURE OF TRANSMISSION ASSEMBLY AND OIL USED FOR T.V. PRESSURE CHECK MUST BE ABOVE 90° TO ELIMINATE THE VARIABLE EFFECT OF THE BI-METAL T.V. COMPENSATOR AT LOWER TEMPERATURE. IF NECESSARY, THE UPPER T.V. ROD MAY BE MALADJUSTED A MAXIMUM OF ±1 TURN TO ACHIEVE READINGS WITHIN THESE LIMITS. IF THIS AMOUNT OF MALADJUSTMENT DOES NOT BRING THE READINGS WITHIN THESE LIMITS. TAG JOB FOR INVESTIGATION AND REPAIR.

5. ADJUST THE SLOW IDLE SPEED TO OBTAIN THE FOLLOWING: TRANSMISSION IN DRIVE POSITION

	TRANS.	RPM.
WITHOUT AIR CONDITIONING	DR.	550
WITH AIR CONDITIONING	DR.	600 *

* AIR CONDITIONING "OFF"

6. ADJUST STOP SCREW ON AUXILIARY BELLCRANK BRACKET IN UNTIL IT JUST AFFECTS SLOW IDLE. THEN BACK IT OUT ONE TURN THIS SCREW MUST BE ADJUSTED WHENEVER THE SLOW IDLE IS ADJUSTED.



VIEW#4

VIEW#5

III. ACCELERATOR LINKAGE ADJUSTMENT PROCEDURES

A. REQUIRED CONDITIONS:

1. CHOKE FULLY OFF AND FAST IDLE CAM POSITIONED AS SHOWN IN VIEW #2.
2. THROTTLE RETURN CHECK RETRACTED.
3. T.V. LINKAGE. "SLOW IDLE" SPEED. AND AUXILIARY BELLCRANK STOP SCREW PROPERLY ADJUSTED.
4. THROTTLE RETURN SPRING EFFECTIVELY HOLDING AUXILIARY BELLCRANK AGAINST THE AUXILIARY BELLCRANK STOP SCREW.

B. ADJUSTMENTS:

1. ADJUST ACCELERATOR LEVER ROD TO GIVE THE PROPER PEDAL HEIGHT DIMENSION AS SHOWN IN VIEW #6 (PRODUCTION METHOD). SEE VIEW #6 ALSO FOR OPTIONAL SERVICE METHOD.

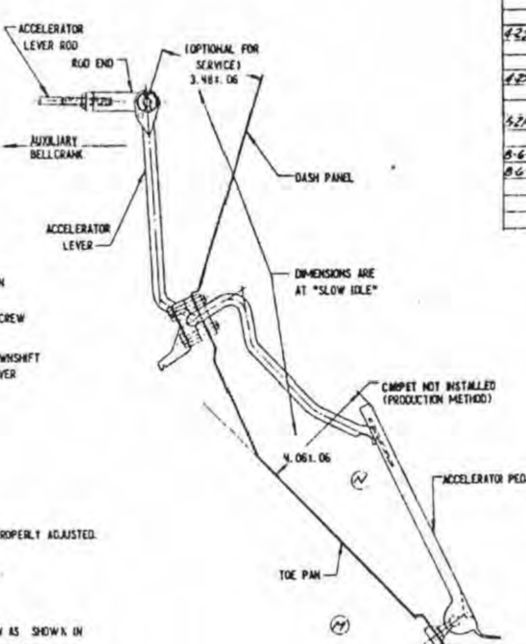
IV. OVERTRAVEL LINKAGE ADJUSTMENT PROCEDURES

A. REQUIRED CONDITIONS:

1. OVERTRAVEL STOP SCREW BACKED OUT.

B. ADJUSTMENTS:

1. BY HAND OPERATING THE ACCELERATOR LEVER. OPEN THE CARBURETOR TO "WIDE OPEN" AND OVERTRAVEL THE LINKAGE TO THE POINT OF MAXIMUM TRANSMISSION LEVER TRAVEL. (THIS POINT IS A MATTER OF "FEEL" AND CARE MUST BE TAKEN NOT TO BEND OR STRETCH THE LINKAGE BEYOND THE ACTUAL POINT). WITH THE BELLCRANK IN THIS POSITION. SET THE STOP SCREW TO JUST TOUCH THE TANG OF THE DOWNSHIFT LEVER. AS SHOWN IN VIEW #5. THEN TURN THE SCREW IN ONE AND ONE-HALF TO TWO FULL TURNS AND SET LOCK NUT.



VIEW#6

LUBRICATE BALL SOCKETS OF PEDAL BEFORE ASSEMBLY SEE PROCESS MATERIALS CHART.

REFER TO THROTTLE CONTROL INSTALLATION LAYOUT 585210.

DATE	SYM.	REVISION RECORD		
5-19-61		WAS TD-2940		
8-6-61	A	.050±.010 WAS .050±.010		
8-6-61	B	LINE II B 6 REVISED		
8-6-61	C	NOTE REVISED		
10-4-61	D	VIEW #3 REVISED TO DETAIL		
11-13-61	E	LINE IA2 REVISED		
11-13-61	E₂	LINE II A1 ADDED		
11-13-61	E₃	PARAGRAPH II A5 REVISED		
11-13-61	E₄	PARAGRAPH II B3 REVISED		
11-13-61	E₅	PARAGRAPH II B4 REVISED		
11-13-61	E₆	PARAGRAPH II B5 REVISED		
11-13-61	E₇	PARAGRAPH II B6 REVISED		
11-16-61	F	.080±.010 WAS .070±.010		
2-20-62	G	FAST IDLE CAM REVISED TO DETAIL		
4-25-62	H	.050±.010 WAS .080±.010 AND NOTE ADDED		
4-25-62	J	1500 RPM WAS 2400 RPM AND NOTE ADDED		
4-25-62	K	AIR CONDITIONING R.P.M. AND NOTE ADDED		
5-21-62	L	CARB ARMOR [illegible] NOTE ADDED		
8-6-62	M	INSULATOR REMOVED		
8-6-62	N	3.99±.06 DIM. REMOVED		
	P			

NO.	585525
LAST CHANGE	N

LAST CHANGE	SHEET	B
N	1 of 1	585525

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .01 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS
ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F₁-.030; F₂-.06; F₃-.09; F₄-.12 ETC.
COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

DO NOT SCALE

DATE	MAY 2, 1961	DR.	W. L. WEBB
SCALE	HALF	CK.	[illegible]
PART USED	1962 H.T. 3147	APPR.	[illegible]
REFERENCE		APPR.	[illegible]

CHART–THROTTLE CONTROL ADJUSTMENT

PART NO. 585525

GENERAL MOTORS CORPORATION LANSING, MICHIGAN

TRANSMISSIONS

DRAWINGS INCLUDED IN THIS SECTION ARE:

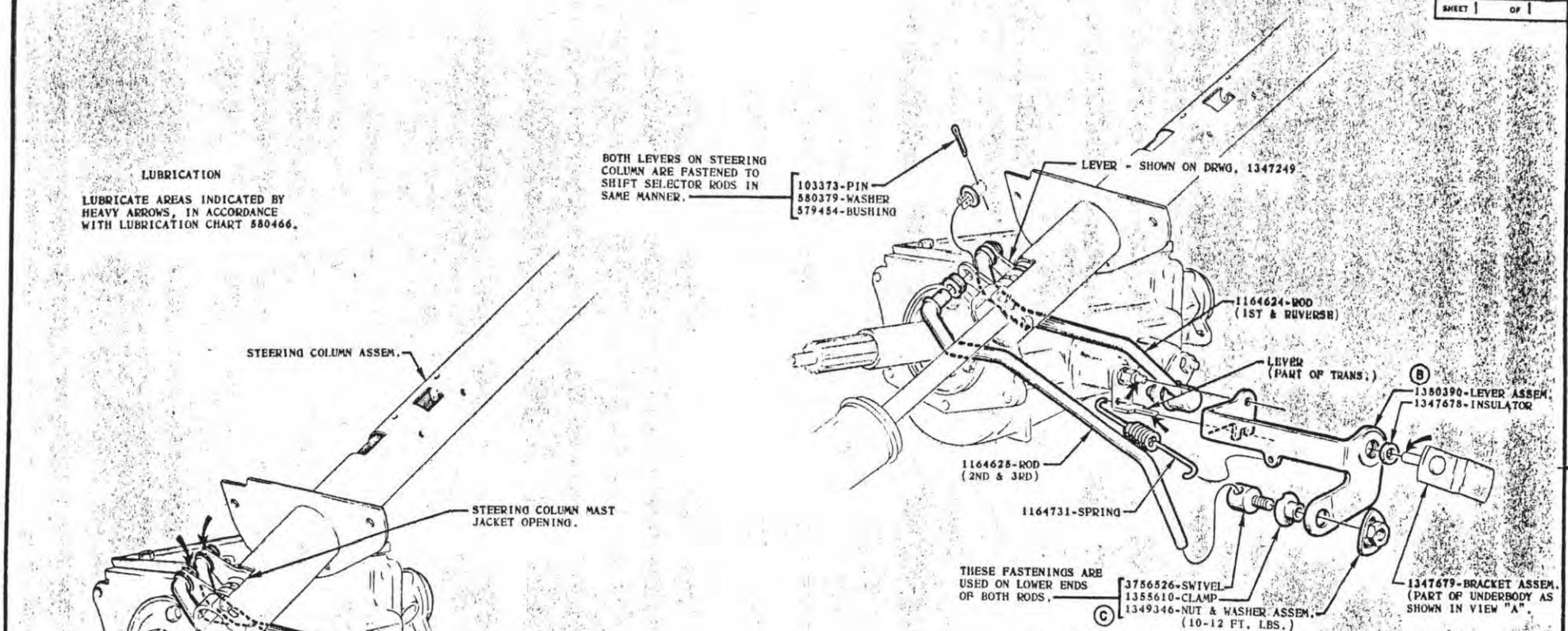
581947

SHEET 1 OF 1

LUBRICATION

LUBRICATE AREAS INDICATED BY HEAVY ARROWS, IN ACCORDANCE WITH LUBRICATION CHART 580466.

BOTH LEVERS ON STEERING COLUMN ARE FASTENED TO SHIFT SELECTOR RODS IN SAME MANNER.
- 103373-PIN
- 580379-WASHER
- 579454-BUSHING



CONTROL ADJUSTMENT

1. POSITION AND RETAIN BOTH SHIFT LEVERS IN NEUTRAL POSITION AND IN THE CENTER OF THE MAST JACKET OPENING.
2. POSITION BOTH SHIFT LEVERS ON TRANSMISSION IN NEUTRAL POSITION.
3. TIGHTEN NUT ASSEM. ON EACH ADJUSTING SWIVEL CLAMP.

DATE	SYM.	REVISION RECORD	DR.	CK.
2-15-62	C	WAS 3756527 CLAMP	RH	WD
7-22-61	B	WAS 1347676 LEVER	RH	WP
12-9-60	A	REVISED & REDRAWN	RH	WP

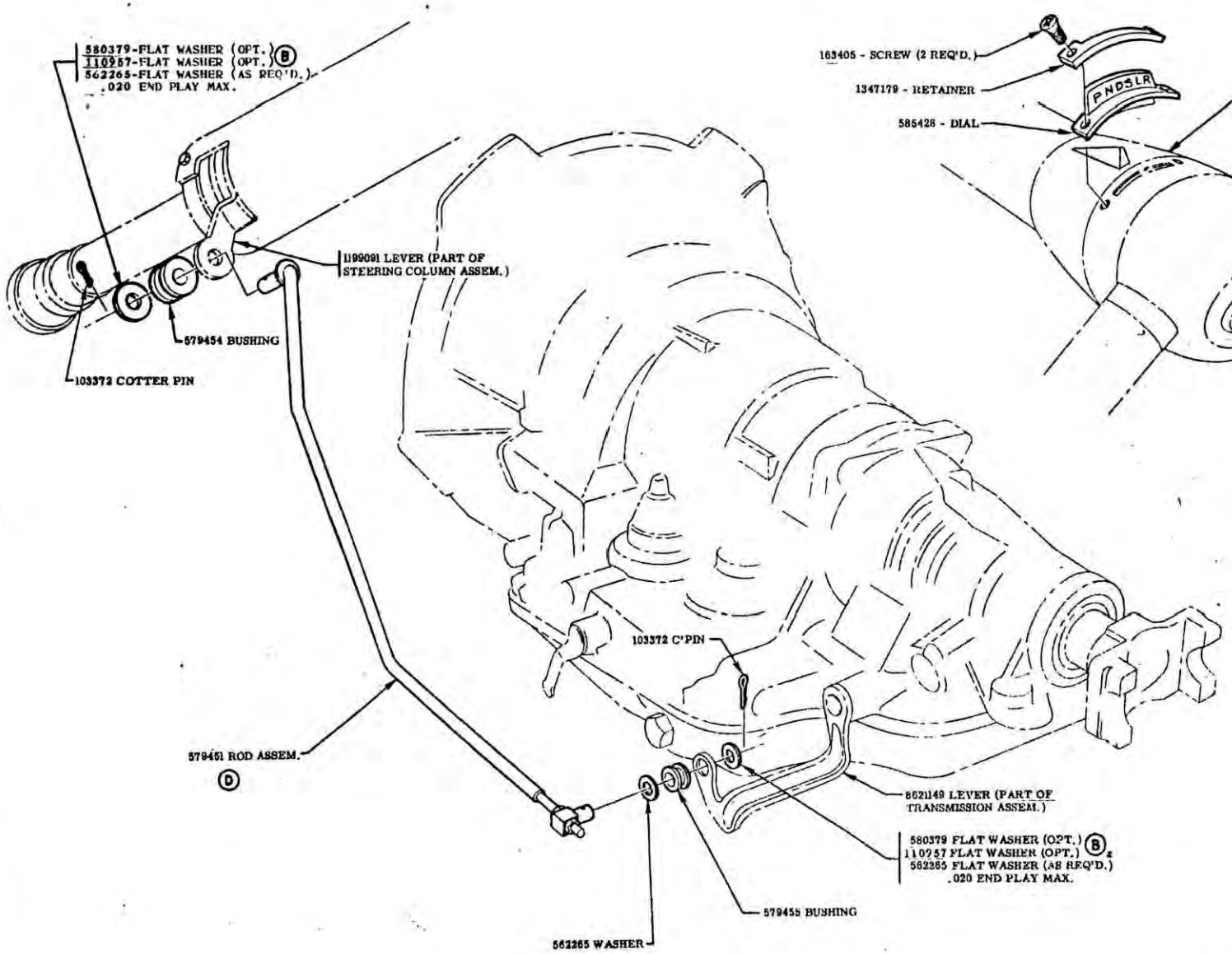
DWG. DATE MAY 21, 1960 — DR. RUSS HALL
FIRST USED 1961 — CK. H. PALMITER
APPR. H. HOWARD
REFERENCE 7B-1 — APPR.
NAME LAYOUT - SHIFT CONTROL

SERIES 3000 - 3100
SHEET / OF /

62

PART NO. 581947

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



1. INSTALL SHIFT ROD ASSEM. TO LOWER SHIFT LEVER.

2. SET TRANSMISSION OUTER SHIFT LEVER IN NEUTRAL POSITION.

3. HOLD UPPER SHIFT LEVER AGAINST NEUTRAL STOP IN UPPER COLUMN. DO NOT RAISE UPPER SHIFT LEVER.

(C) 4. WITH BOTH NUTS 115702 LOOSE ON ROD ASSEM. INSTALL SWIVEL 579453 IN TRANSMISSION OUTER LEVER. TIGHTEN REAR NUT 115702 FINGER TIGHT AGAINST SWIVEL. ADJUST ROD ASSEM. SHORT BY TIGHTENING REAR NUT 115702 TWO (2) TURNS. LOCK UP ROD ASSEM. BY TIGHTENING FRONT NUT 115702.

ADJUSTING THE SHIFT LINKAGE IN THIS MANNER ROTATES THE SHIFT TUBE ASSEM., (APPROX. 1°) AND PROVIDES PROPER CLEARANCE BETWEEN NEUTRAL DETENT IN THE TRANSMISSION AND THE STOP FOR THE MANUAL SHIFT LEVER IN THE UPPER COLUMN.

SHIFT CONTROL ROD ADJUSTMENT CAN BE ZERO (0) TO TWO (2) TURNS SHORTER THAN AS OUTLINED MORE THAN TWO (2) TURNS SHORTER CAN CAUSE THE TRANSMISSION TO RATCHET AT THE NEUTRAL STOP POSITION IF ROD ADJUSTMENT IS LONGER THAN OUTLINED, PARK MAY BE LOST.

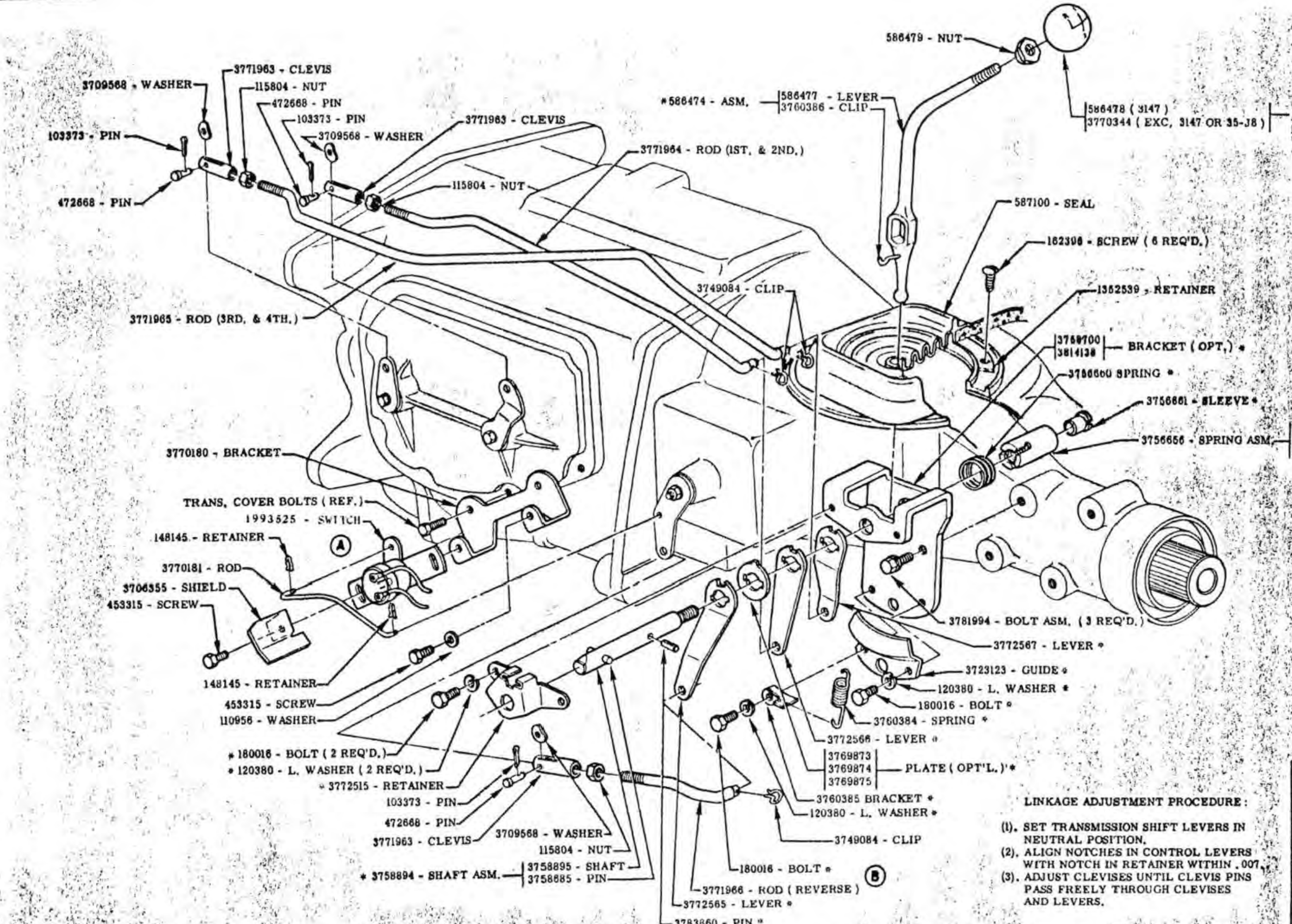
DATE	STN.	REVISION RECORD	DN	CK.
7-11-62	D	REVISED TO DETAIL	GA	
10-13-61	C_4	WAS 120368	AI	
10-13-61	B_2	WAS 120393	AI	
7-17-61	A	REDRAWN PICTORIALLY	C.I.	MD

DWG. DATE APRIL 24, 1959 GR. MAYNARD
FIRST USED 1962 CK. E. COULING
APPR.
REFERENCE APPR. H. L. HOWARD
NAME
LAYOUT-SHIFT CONTROL

SERIES 3000 - 3100
SHEET OF
PART NO. 585600

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

FOR ENGINEERING LAYOUT SEE DRAWING TE-2965



LINKAGE ADJUSTMENT PROCEDURE:

(1). SET TRANSMISSION SHIFT LEVERS IN NEUTRAL POSITION.
(2). ALIGN NOTCHES IN CONTROL LEVERS WITH NOTCH IN RETAINER WITHIN .007.
(3). ADJUST CLEVISES UNTIL CLEVIS PINS PASS FREELY THROUGH CLEVISES AND LEVERS.

ITEMS MARKED THIS * ARE PART OF ASSEMBLY 886173 AS PURCHASED.

DATE	SYM.	REVISION RECORD	DR.	CK.
4-20-62	B	ROD REINDEXED		
1-10-62	A	1993525 WAS 1998728		

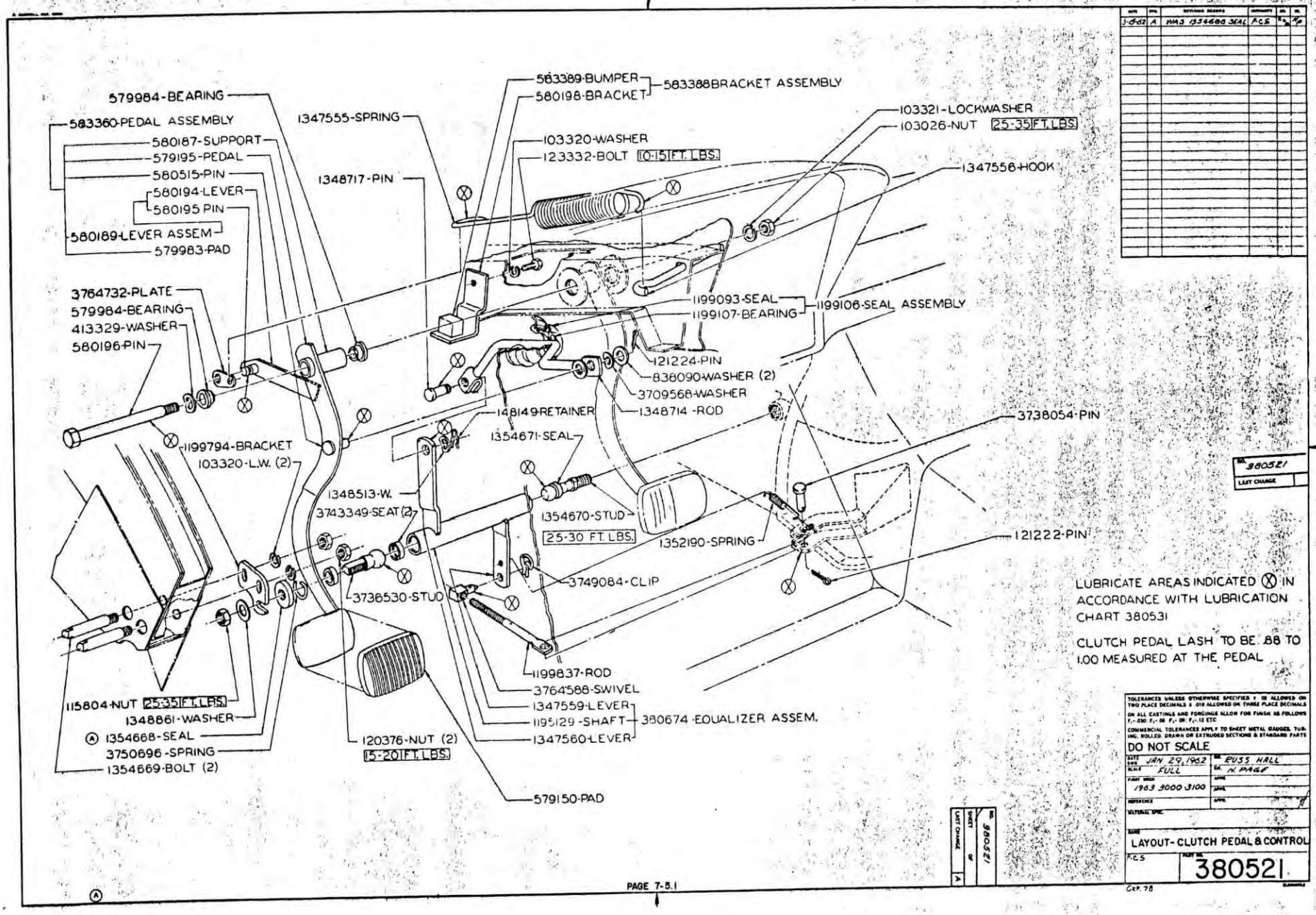
DWG. DATE 11-2-61
FIRST USED 1962
REFERENCE 35A4
NAME L/O-SHIFT CONTROL (4-SPEED)
PART NO. 587282
SHEET 1 OF 1

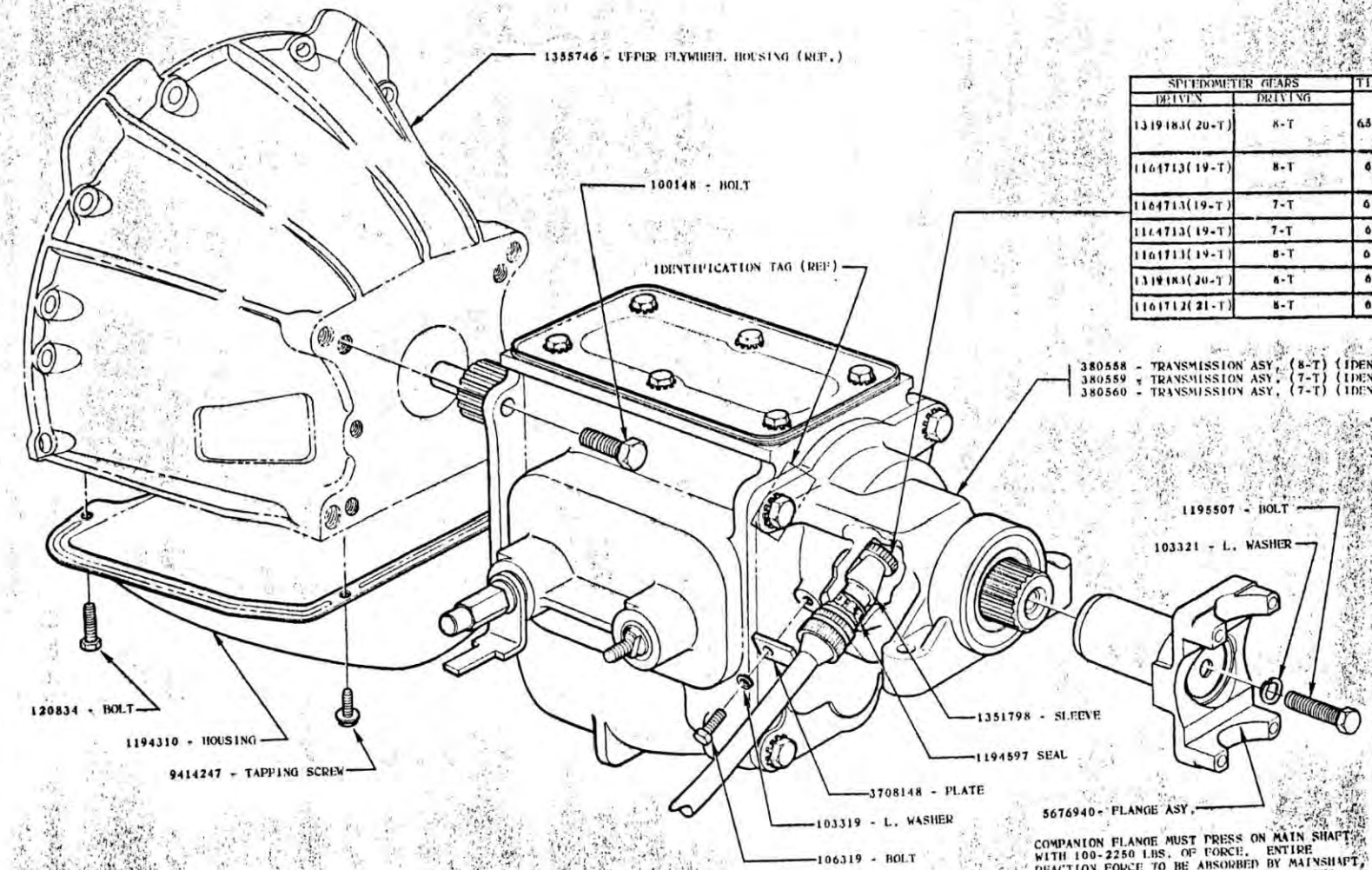
587282

SERIES 3000-3100
SHEET 1 OF 1

FOR ENGINEERING LAYOUT SEE DRAWING BL.-13413

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN


579984-BEARING
583360-PEDAL ASSEMBLY
580187-SUPPORT
579195-PEDAL
580515-PIN
580194-LEVER
580195 PIN
580189-LEVER ASSEM
579983-PAD
3764732-PLATE
579984-BEARING
413329-WASHER
580196-PIN
1199794-BRACKET
103320-L.W. (2)
115804-NUT 25-35 FT. LBS.
134886I-WASHER
A 1354668-SEAL
3750696-SPRING
1354669-BOLT (2)
1347555-SPRING
1348717-PIN
583389-BUMPER
580198-BRACKET
583388BRACKET ASSEMBLY
103320-WASHER
123332-BOLT 10-15 FT. LBS.
103321-LOCKWASHER
103026-NUT 25-35 FT. LBS.
1347556-HOOK
1199093-SEAL
1199107-BEARING
1199106-SEAL ASSEMBLY
121224-PIN
838090-WASHER (2)
3709568-WASHER
1348714 -ROD
148149-RETAINER
1354671-SEAL
1348513-W.
3743349-SEAT (2)
1354670-STUD
25-30 FT. LBS.
1352190-SPRING
3738054-PIN
121222-PIN
3749084-CLIP
3736530-STUD
120376-NUT (2)
15-20 FT. LBS.
1199837-ROD
3764588-SWIVEL
1347559-LEVER
1195129-SHAFT
1347560-LEVER
380674-EQUALIZER ASSEM.
579150-PAD
LUBRICATE AREAS INDICATED ⊗ IN ACCORDANCE WITH LUBRICATION CHART 380531
CLUTCH PEDAL LASH TO BE .88 TO 1.00 MEASURED AT THE PEDAL
DO NOT SCALE
LAYOUT- CLUTCH PEDAL & CONTROL
380521
LAST CHANGE
PAGE 7-5.1



SPEEDOMETER GEARS		TIRE SIZE	AXLE RATIO
DRIVEN	DRIVING		
1319183(20-T)	8-T	650-x13	3.08(40:13)
1164713(19-T)	8-T	6.50 x 13	3.08(40:13)
1164713(19-T)	7-T	6.50 x 13	3.36(37:11)
1164713(19-T)	7-T	6.50 x 13	3.36(37:11)
1164713(19-T)	8-T	6.00 x 13	3.08(40:13)
1319183(20-T)	8-T	6.00 x 13	3.23(42:13)
1164712(21-T)	8-T	6.00 x 13	3.36(37:11)

COMPANION FLANGE MUST PRESS ON MAIN SHAFT WITH 100-2250 LBS. OF FORCE. ENTIRE REACTION FORCE TO BE ABSORBED BY MAINSHAFT. TRANSMISSION BEARING MUST NOT BE LOADED, IMPACTED OR VIBRATED DURING THIS ASSEMBLY PROCEDURE.

DATE	SYM.	REVISION RECORD	DR.	CK.
2-20-62		WAS TC-3396	JS	HF

DWG. DATE JAN 22,1962 DR. RUSS HALL
FIRST USED 1963 M. CK. H. PAGE APPR. R. Howard
REFERENCE APPR.
NAME LAYOUT - TRANSMISSION

SERIES 3000 - 3100
SHEET 1 OF 1

PART NO. 380465

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

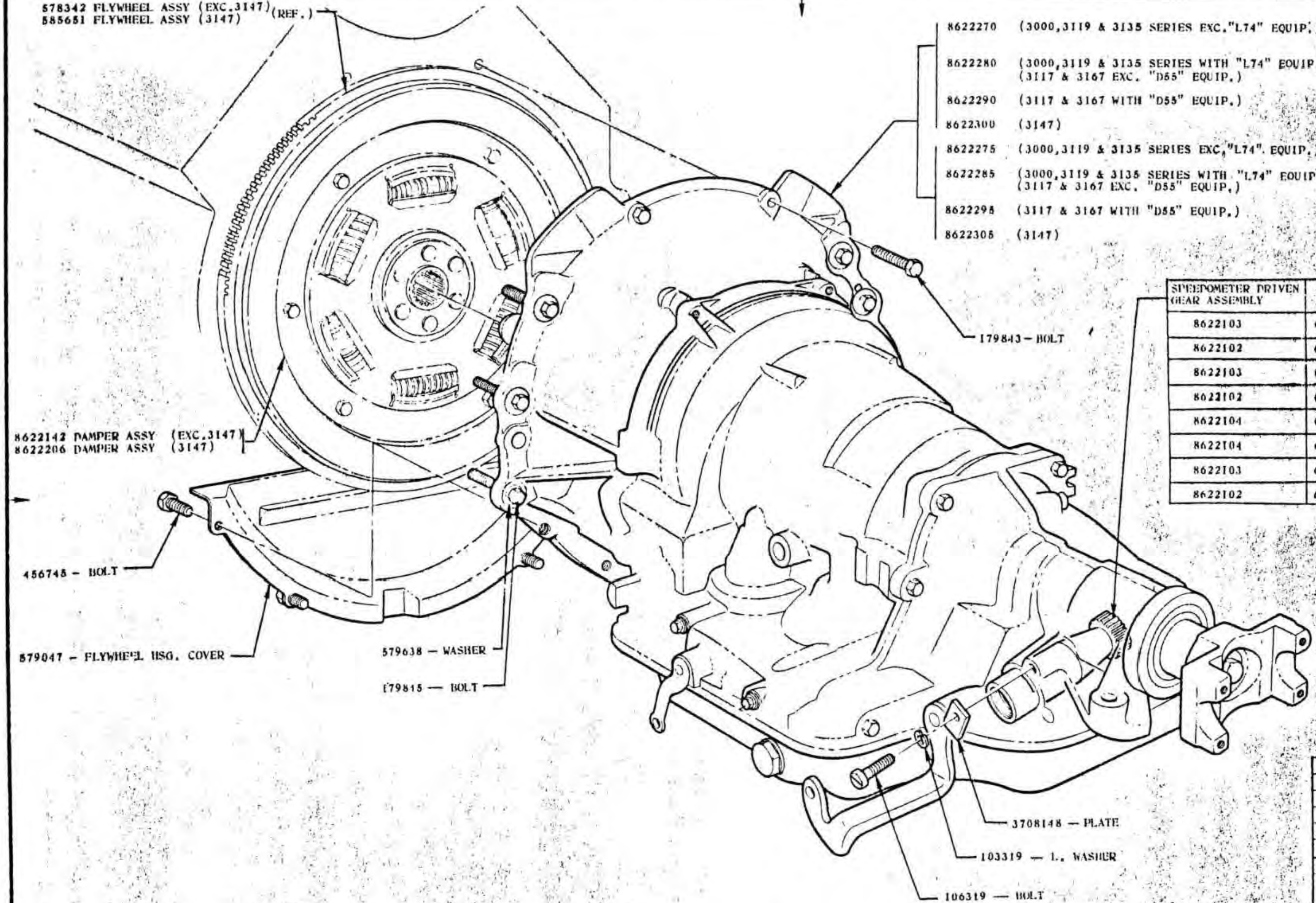
FOR ENGINEERING LAYOUT SEE DRAWING TR-2237

8622270	(3000,3119 & 3135 SERIES EXC."L74" EQUIP.)
8622280	(3000,3119 & 3135 SERIES WITH "L74" EQUIP.) (3117 & 3167 EXC. "D55" EQUIP.)
8622290	(3117 & 3167 WITH "D55" EQUIP.)
8622300	(3147)

1963 TRANS. ASM. COMPLETE.

8622275	(3000,3119 & 3135 SERIES EXC."L74" EQUIP.)
8622285	(3000,3119 & 3135 SERIES WITH "L74" EQUIP.) (3117 & 3167 EXC. "D55" EQUIP.)
8622295	(3117 & 3167 WITH "D55" EQUIP.)
8622305	(3147)

1963 TRANS. ASM. AS PURCHASED LESS DAMPER.



SPEEDOMETER DRIVEN GEAR ASSEMBLY	TIRES	AXLE RATIO
8622103	6.50 x 13	3.23-(42:13)
8622102	6.50 x 13	3.08-(40:13)
8622103	6.50 x 14	3.23-(42:13)
8622102	6.50 x 14	3.08-(40:13)
8622104	6.50 x 13	3.36-(37:11)
8622104	6.50 x 14	3.36-(37:11)
8622103	6.00 x 15	3.36-(37:11)
8622102	6.00 x 15	3.23-(42:12)

FOR ENGINEERING LAYOUT SEE DRAWING TR-3458

380522

SHEET 1 OF 1

DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE FEB 20 1962 DR. W.L.W.

FIRST USED 1963 CK.

REFERENCE APPR.

NAME LO-TRANSMISSION INSTALLATION

SERIES 3000-3100 PART NO. 380522

SHEET 1 OF 1

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

SYNCHROMESH TRANSMISSION (3 SPEED)

SERIES	PART NUMBER	VENDOR NUMBER	SPEEDOMETER DRIVE GEAR	IDENTIFICATION
3000 & 3100 WITH 13" WHEELS & 3.08 AXLE RATIO	380558		8 TOOTH	TAG "G"
3000 & 3100 WITH 15" WHEELS (ALL AXLE RATIOS)	380558		8 TOOTH	TAG "G"
3000 & 3100 WITH 13" WHEELS & 3.36 AXLE RATIO	380559		7 TOOTH	TAG "E"
3147 (TURBO-ROCKET)	380560		7 TOOTH	TAG "F"
3200 & 3500 (ALL)	1196122	1196122	8 TOOTH	NONE

SYNCHROMESH TRANSMISSION (4 SPEED)

3000 & 3100 WITH 13" WHEELS & 3.08 AXLE RATIO	1352185	AS14-T10A	8 TOOTH (28P)	ORANGE PAINT AT SPEEDO. BOSS
3000 & 3100 WITH 15" WHEELS (ALL AXLE RATIOS)	1352185	AS14-T10A	8 TOOTH (28P)	ORANGE PAINT AT SPEEDO. BOSS
3000 & 3100 WITH 13" WHEELS & 3.36 AXLE RATIO	1352186	AS15-T10A	8 TOOTH (30P)	DARK BROWN PAINT AT SPEEDO. BOSS

HYDRA-MATIC TRANSMISSION

3000 & 3100 (2 BBL.) (STR. COLUMN SHIFT)	8622275	63-5-0	9 TOOTH	DK. GREEN 0563 -
3000 & 3100 (4 BBL.) EXC. D55 (STR. COLUMN SHIFT)	8622285	63-5-0D	9 TOOTH	RED 0D563 -
3167 D55 (4 BBL.) (CONSOLE SHIFT)	8622295	63-5-0E	9 TOOTH	PINK 0E563 -
3117 D55 (4 BBL.) (CONSOLE SHIFT)	8622295	63-5-0E	9 TOOTH	PINK 0E563 -
3147 (TURBO-ROCKET) (CONSOLE SHIFT)	8622305	63-5-0X	9 TOOTH	ALUMINUM 0X563 -
3200 WITH L-65 (2 BBL. L.C.) (STR. COLUMN SHIFT)	8622175	63-10-0	14 TOOTH	BLACK 063 -
3200 EXPORT (2 BBL. L. C.) (STR. COLUMN SHIFT)	8622175	63-10-0	14 TOOTH	BLACK 063 -
3200 WITH L-74 (4 BBL.) (STR. COLUMN SHIFT)	8622185	63-10-0A	14 TOOTH	DK. BROWN 0A63 -
3500 & 3800 (4 BBL.) (STR. COLUMN SHIFT)	8622185	63-10-0A	14 TOOTH	DK. BROWN 0A63 -
3600 & 3900 (4 BBL.) (CONSOLE SHIFT)	8622195	63-10-0B	13 TOOTH	YELLOW 0B63 -
3200 EXC. L-74 & L-65 (2 BBL.) (STR. COLUMN SHIFT)	8622205	63-10-0C	14 TOOTH	ALUMINUM 0C63 -
3200 POLICE CAR (SPECIAL DUTY)	8622215	63-10-0CH	14 TOOTH	TAFFY TAN 0CH63 -

DATE	SYM.	REVISION RECORD	AUTHORITY	DR.	CK.
3-12-62		NAS TC-3453		JM	
	A				

NO. 380676
LAST CHANGE

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS

ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F_1-.030; F_2-.06; F_3-.09; F_4-.12 ETC.

COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

DO NOT SCALE

DATE DWG. February 19, 1962	DR. Phyllis Bengel
SCALE	CK. H. PAGE
FIRST USED 1963	APPR. L. L. Howard
REFERENCE	APPR.
MATERIAL SPEC.	

NAME: CHART - TRANSMISSION ASSEMBLY USAGE

F.C.J. | PART NO. 380676

NO. 380676
LAST CHANGE

GRP. 0

DATE	SYM.	REVISION RECORD	AUTHORITY	DR.	CK.
3-12-62		NAS TC-3453		JM	
6-1962	A_1	SPEEDO GEARS REMOVED	D-AIL	R.R	Mp

SYNCHROMESH TRANSMISSION (3 SPEED)

SERIES	PART NUMBER	VENDOR NUMBER	SPEEDOMETER DRIVE GEAR	IDENTIFICATION
3000 & 3100 WITH 13" WHEELS & 3.08 AXLE RATIO	380558		8 TOOTH	TAG "G"
3000 & 3100 WITH 15" WHEELS (ALL AXLE RATIOS)	380558		8 TOOTH	TAG "G"
3000 & 3100 WITH 13" WHEELS & 3.36 AXLE RATIO	380559		7 TOOTH	TAG "E"
3147 (TURBO-ROCKET)	38056C		7 TOOTH	TAG "F"
3200 & 3500 (ALL)	1196122	1196122	(A1)	NONE

SYNCHROMESH TRANSMISSION (4 SPEED)

3000 & 3100 WITH 13" WHEELS & 3.08 AXLE RATIO	1352185	AS14-T10A	8 TOOTH (28P)	ORANGE PAINT AT SPEEDO. BOSS
3000 & 3100 WITH 15" WHEELS (ALL AXLE RATIOS)	1352185	AS14-T10A	8 TOOTH (28P)	ORANGE PAINT AT SPEEDO. BOSS
3000 & 3100 WITH 13" WHEELS & 3.36 AXLE RATIO	1352186	AS15-T10A	8 TOOTH (30P)	DARK BROWN PAINT AT SPEEDO.BOSS

HYDRA-MATIC TRANSMISSION

3000 & 3100 (2 BBL.) (STR. COLUMN SHIFT)	8622275	63-5-0	9 TOOTH	DK. GREEN 0563 -
3000 & 3100 (4 BBL.) EXC. D55 (STR. COLUMN SHIFT)	8622285	63-5-0D	9 TOOTH	RED 0D563 -
3167 D55 (4 BBL.) (CONSOLE SHIFT)	8622295	63-5-0E	9 TOOTH	PINK 0E563 -
3117 D55 (4 BBL.) (CONSOLE SHIFT)	8622295	63-5-0E	9 TOOTH	PINK 0E563 -
3147 (TURBO-ROCKET) (CONSOLE SHIFT)	8622305	63-5-0X	9 TOOTH	ALUMINUM 0X563 -
3200 WITH L-65 (2 BBL. L.C.) (STR. COLUMN SHIFT)	8622175	63-10-0		BLACK 063 -
3200 EXPORT (2 BBL. L. C.) (STR. COLUMN SHIFT)	8622175	63-10-0		BLACK 063 -
3200 WITH L-74 (4 BBL.) (STR. COLUMN SHIFT)	8622185	63-10-0A		DK. BROWN 0A63 -
3500 & 3800 (4 BBL.) (STR. COLUMN SHIFT)	8622185	63-10-0A	(A2)	DK. BROWN 0A63 -
3600 & 3900 (4 BBL.) (CONSOLE SHIFT)	8622195	63-10-0B		YELLOW 0B63 -
3200 EXC. L-74 & L-65 (2 BBL.) (STR. COLUMN SHIFT)	8622205	63-10-0C		ALUMINUM 0C63 -
3200 POLICE CAR (SPECIAL DUTY)	8622215	63-10-0CH		TAFFY TAN 0CH63 -

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING, MICHIGAN

NO. 380676
LAST CHANGE A

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS

ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F_1=.030; F_2=.06; F_3=.09; F_4=.12 ETC.

COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

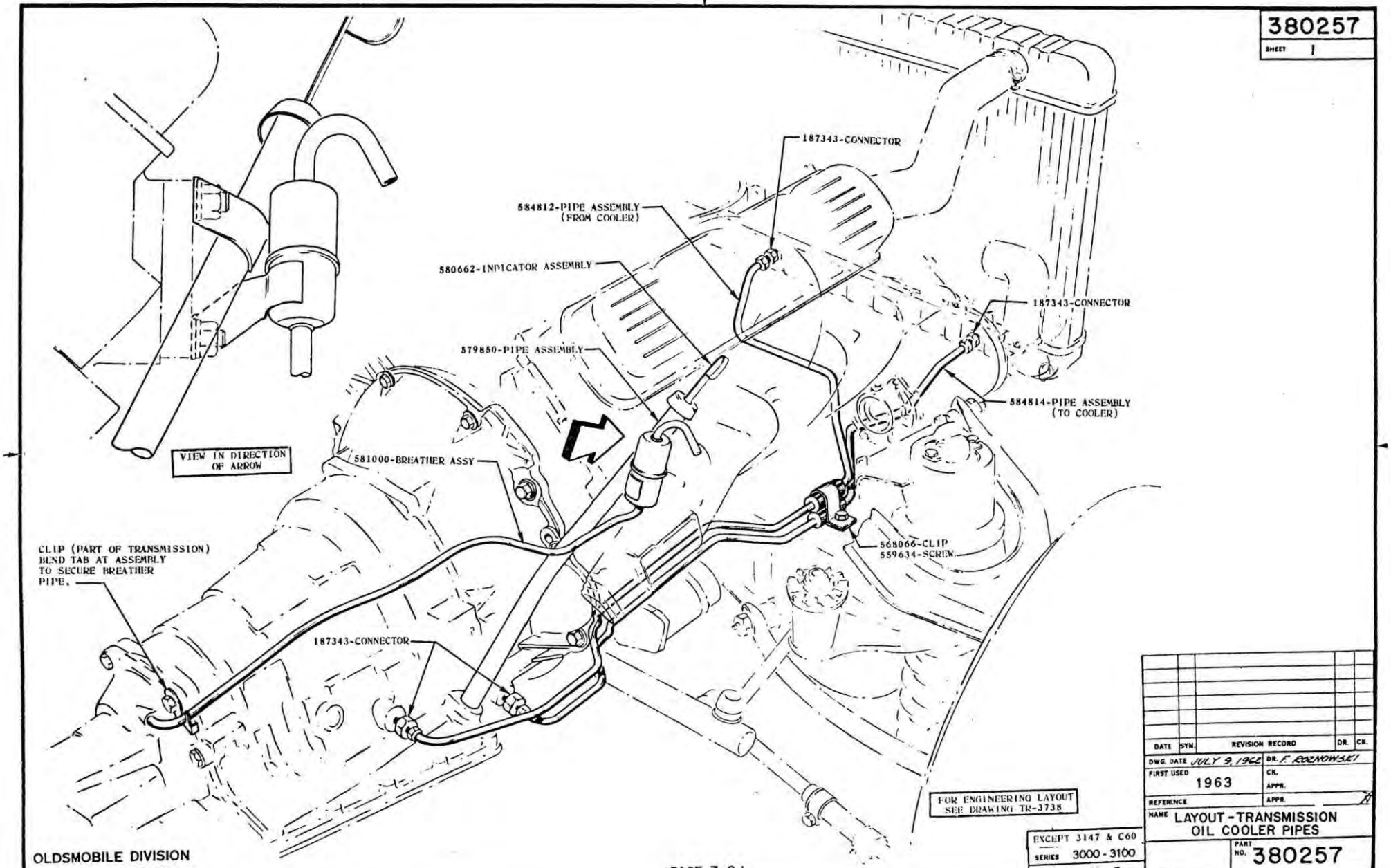
DO NOT SCALE

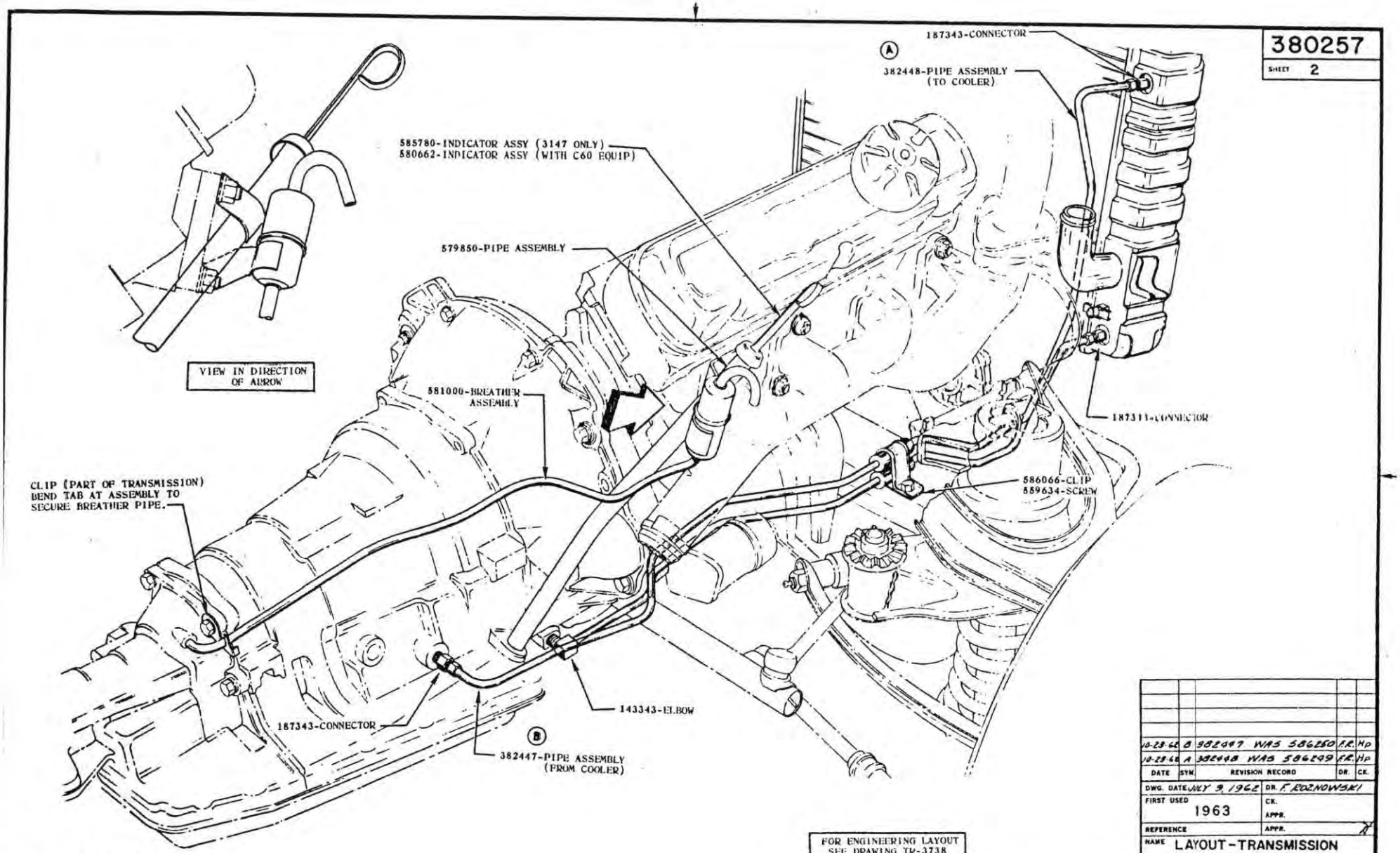
DATE DWG. February 19, 1962	DR. Phyllis Bengel
SCALE	CK. H. PAGE
FIRST USED 1963	APPR. R. R. Howard
REFERENCE	APPR.
MATERIAL SPEC.	

NAME
CHART - TRANSMISSION ASSEMBLY USAGE

P-23 PART NO. 380676

NO. 380676
LAST CHANGE


380257
SHEET 1
187343-CONNECTOR
584812-PIPE ASSEMBLY
(FROM COOLER)
580662-INDICATOR ASSEMBLY
187343-CONNECTOR
579850-PIPE ASSEMBLY
584814-PIPE ASSEMBLY
(TO COOLER)
VIEW IN DIRECTION
OF ARROW
581000-BREATHER ASSY
568066-CLIP
559634-SCREW
CLIP (PART OF TRANSMISSION)
BEND TAB AT ASSEMBLY
TO SECURE BREATHER
PIPE.
187343-CONNECTOR
FOR ENGINEERING LAYOUT
SEE DRAWING TR-3738
DATE SYM. REVISION RECORD DR. CK.
DWG. DATE JULY 9, 1962 DR. F. ROZMOWSKI
FIRST USED 1963 CK.
APPR.
REFERENCE APPR.
NAME LAYOUT - TRANSMISSION
OIL COOLER PIPES
PART NO. 380257
EXCEPT 3147 & C60
SERIES 3000 - 3100
SHEET 1 OF 2
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



380257

SHEET 2

DATE	SYM.	REVISION RECORD	DR.	CK.
10-28-62	B	382447 WAS 586250	F.R.	HD
10-28-62	A	382448 WAS 586249	F.R.	HD

DWG. DATE JULY 9, 1962 DR. F. KOZNOWSKI

FIRST USED 1963 CK.

APPR.

REFERENCE APPR.

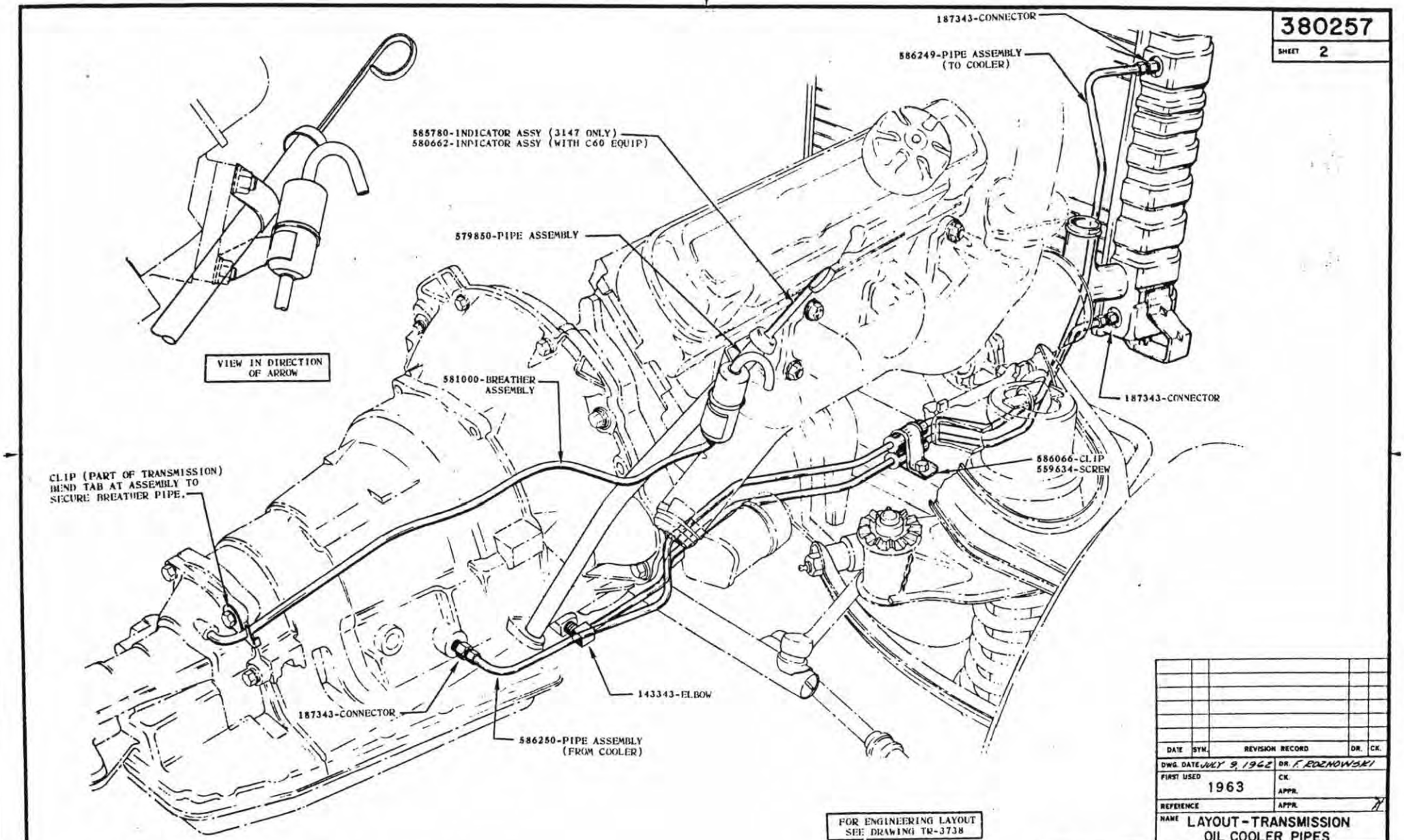
NAME LAYOUT - TRANSMISSION OIL COOLER PIPES

SERIES 3147 & C60

SHEET 2 OF 2

PART NO. 380257

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



380257

SHEET 2

DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE JULY 9, 1962 DR. F. ROZNOWSKI

FIRST USED 1963 CK.

APPR.

REFERENCE APPR.

NAME LAYOUT - TRANSMISSION OIL COOLER PIPES

PART NO. 380257

SERIES 3147 & C60

SHEET 2 OF 2

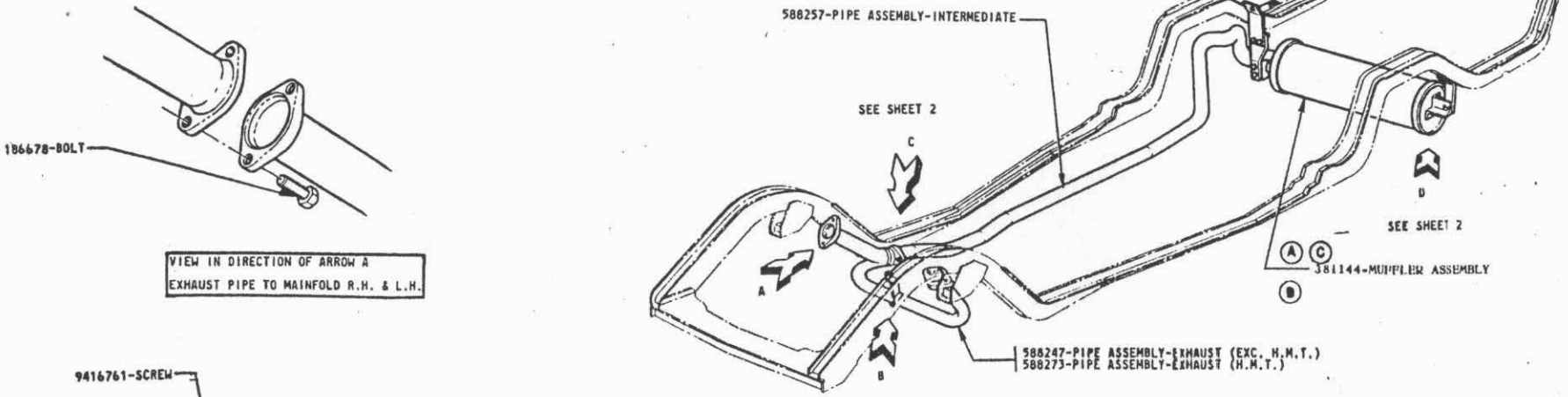
OLDSMOBILE DIVISION

GENERAL MOTORS CORPORATION

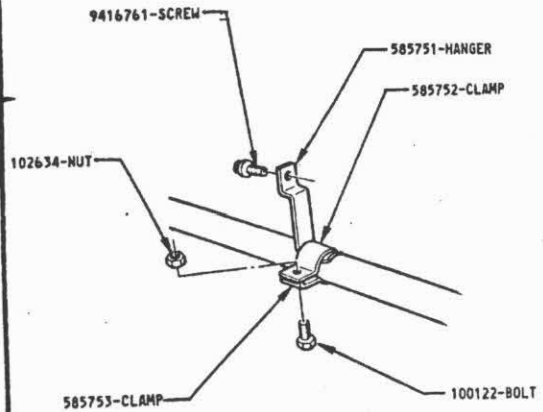
LANSING 21, MICHIGAN

FUEL & EXHAUST

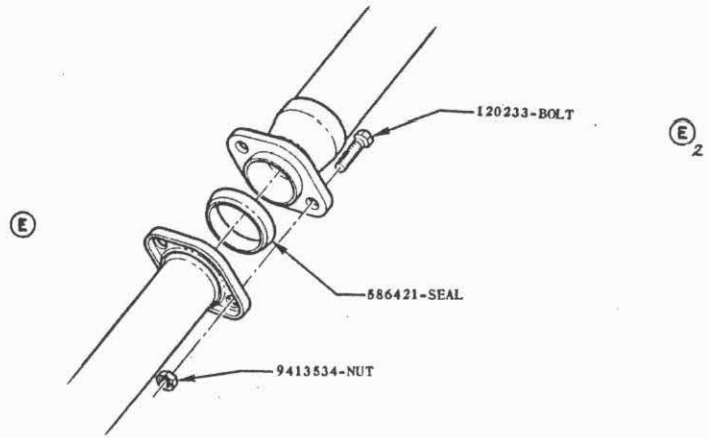
DRAWINGS INCLUDED IN THIS SECTION ARE:



VIEW IN DIRECTION OF ARROW A
EXHAUST PIPE TO MAINFOLD R.H. & L.H.



VIEW IN DIRECTION OF ARROW B
(H.M.T.)



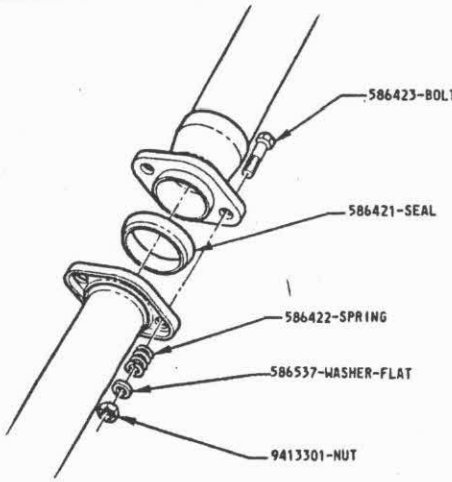
VIEW IN DIRECTION OF ARROW C
SMT ONLY
D

DATE	SYM.	REVISION RECORD	DR.	CK.
8-31-62	E_2	VIEW REMOVED		
8-31-62	D	VIEW ADDED		
5-6-62	C	381144 WAS 381114		
4-10-62	B	381144 WAS 587559		
4-10-62	A	381114 WAS 587558		

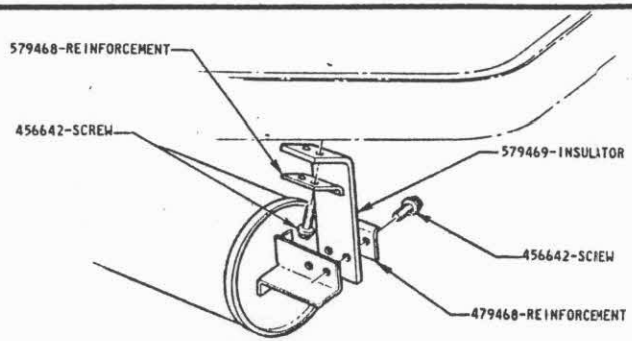
DWG. DATE FEB. 27, 1962 DR. D. GILLEADEAUX
FIRST USED 1963 CK. L. HOLBROOK
APPR. J. R. Lamond
REFERENCE APPR. W. F. Ely
NAME LAYOUT-EXHAUST SYSTEM
PART NO. 380616

SERIES 3000-3100 EXC. 3147
SHEET 1 OF 4

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

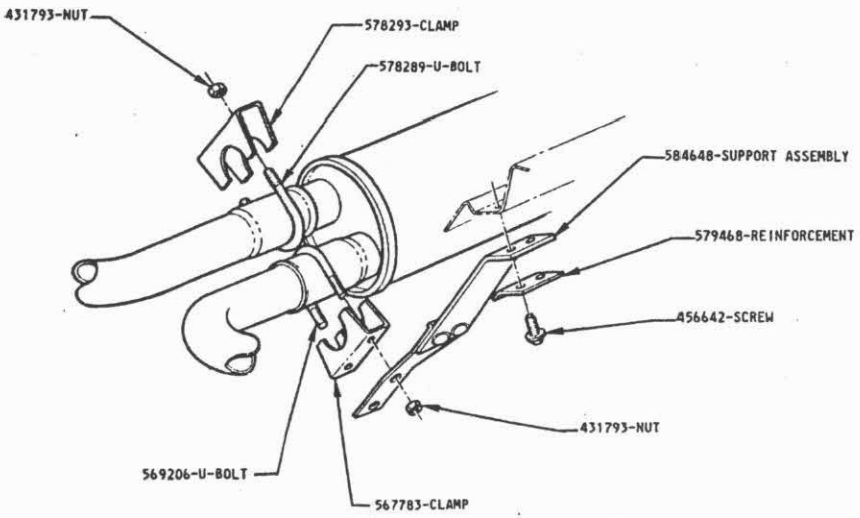


(A) VIEW IN DIRECTION OF ARROW C
HMT ONLY

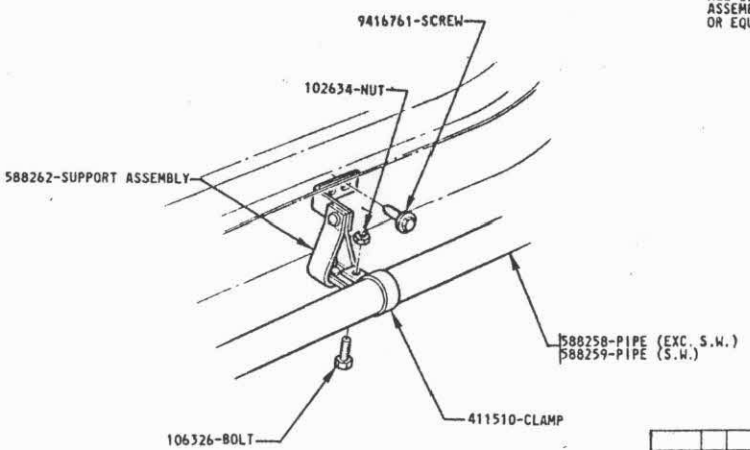


VIEW IN DIRECTION OF ARROW D

NOTE:
ALL SLIP JOINTS MUST BE SEALED AT ASSEMBLY WITH "VIBRADAMP" #253-M OR EQUIVALENT.



VIEW IN DIRECTION OF ARROW E

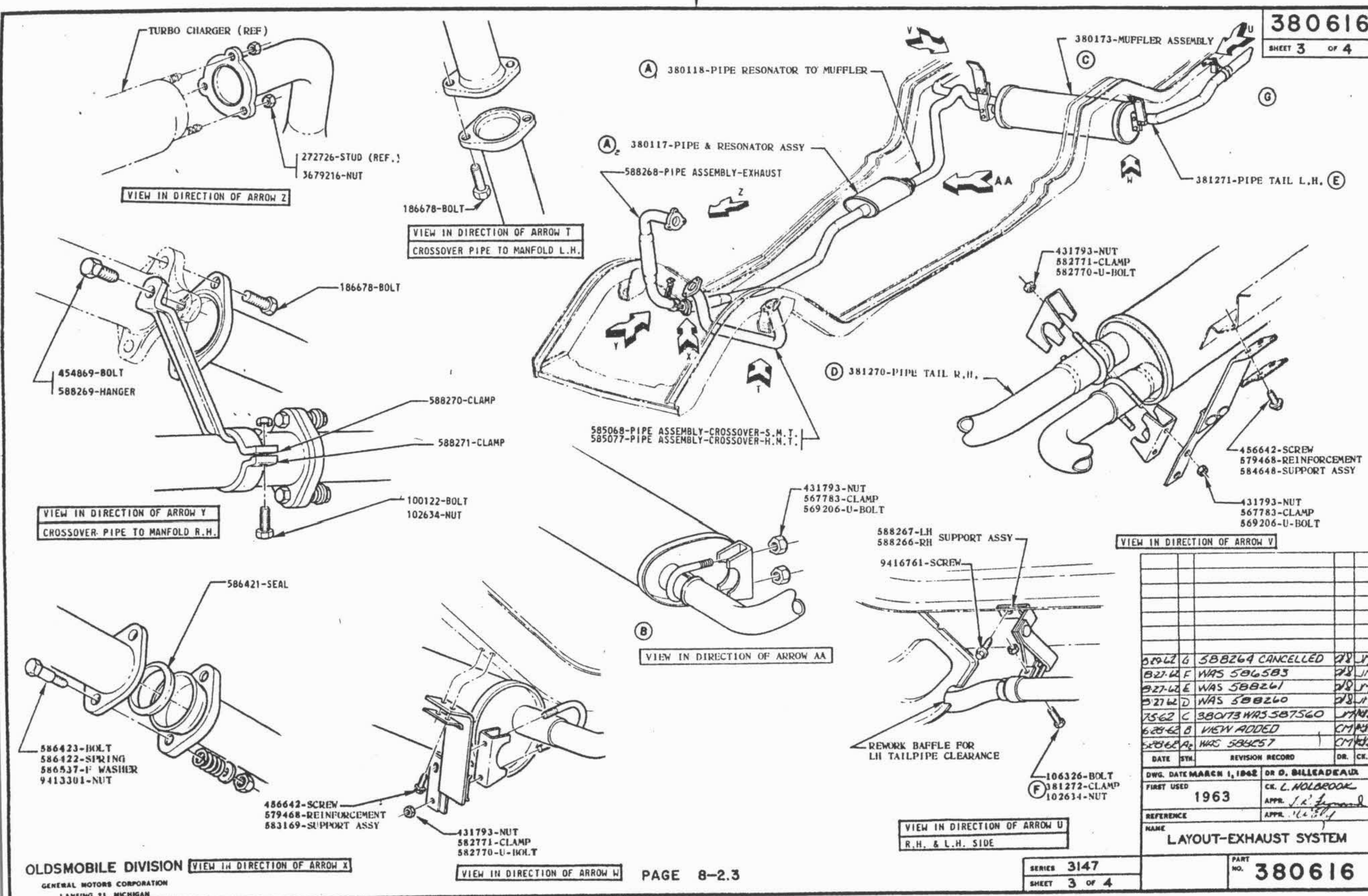


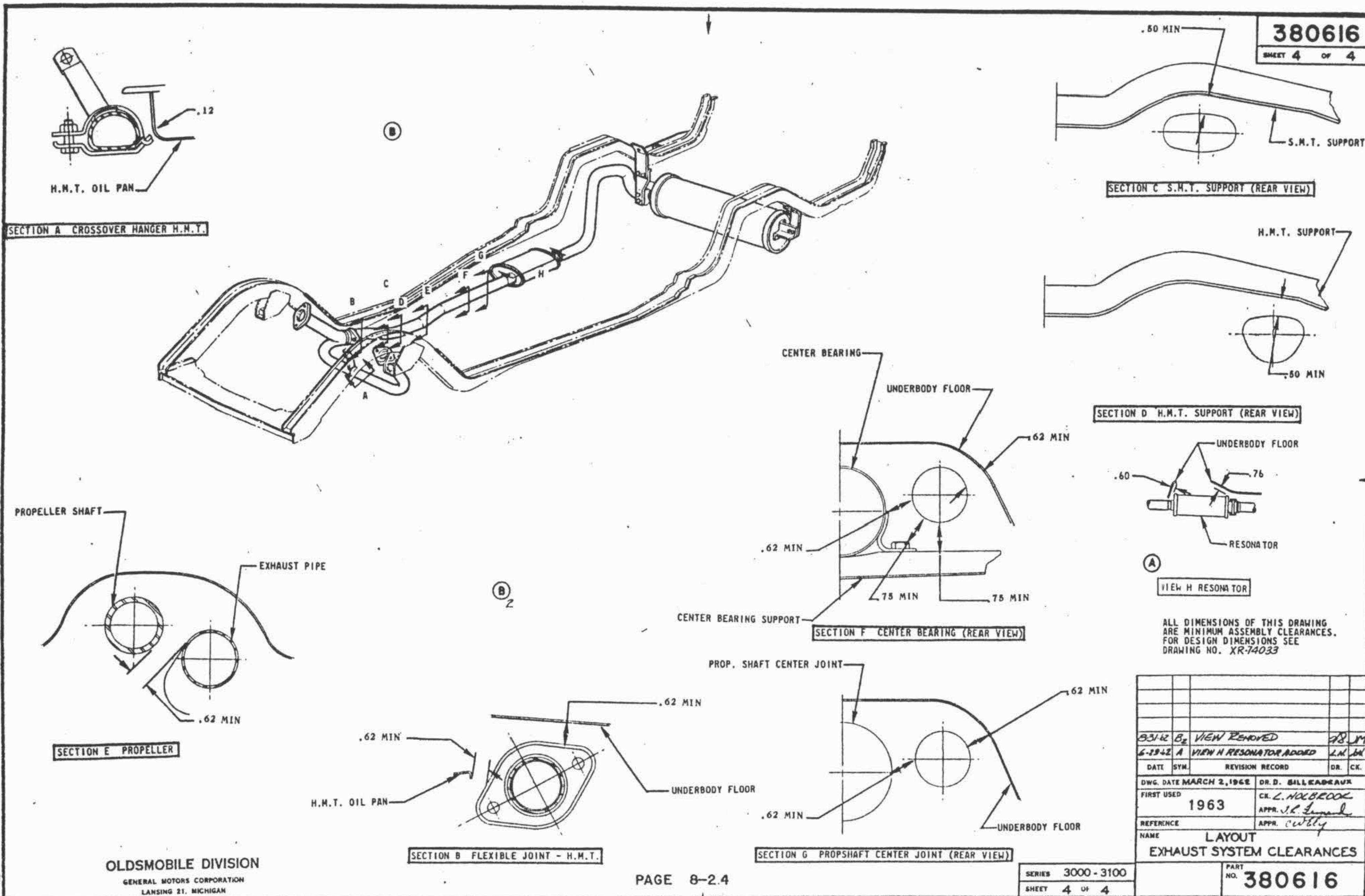
VIEW IN DIRECTION OF ARROW F
3000 & 3100

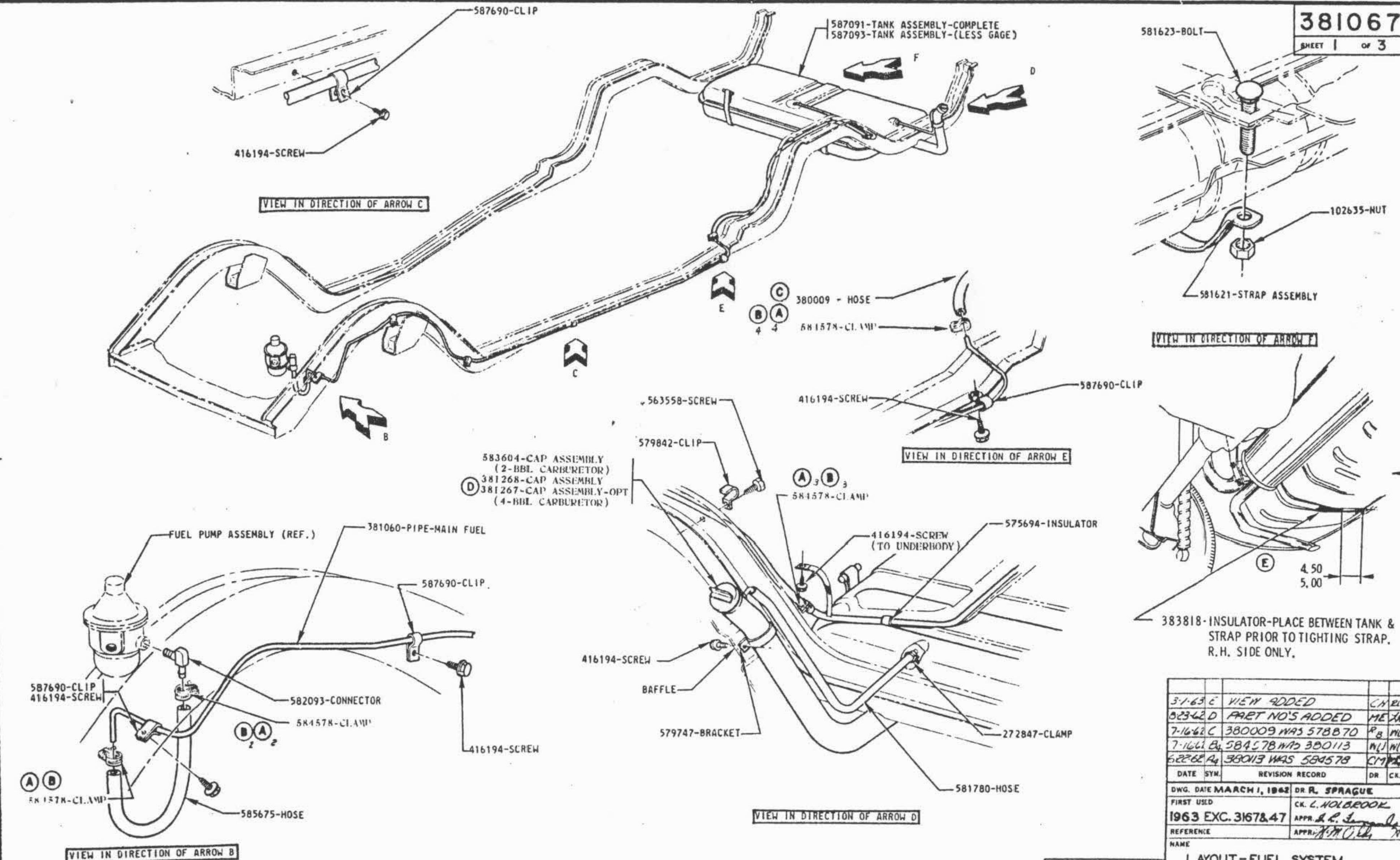
DATE	SYM.	REVISION RECORD	DR.	CK.
93162	A	NOTE REVISED		

DWG. DATE FEB. 27, 1962 — DR. O. BILLEADEAUX
FIRST USED 1963 — CK. C. HOLBROOK
APPR. J. P. Symonds
REFERENCE — APPR. [illegible]
NAME: LAYOUT - EXHAUST SYSTEM
SERIES 3000-3100 EXC.3147
SHEET 2 OF 4
PART NO. 380616

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN


380616
SHEET 3 OF 4
TURBO CHARGER (REF)
272726-STUD (REF.)
3679216-NUT
VIEW IN DIRECTION OF ARROW Z
186678-BOLT
VIEW IN DIRECTION OF ARROW T
CROSSOVER PIPE TO MANFOLD L.H.
(A) 380118-PIPE RESONATOR TO MUFFLER
(A2) 380117-PIPE & RESONATOR ASSY
588268-PIPE ASSEMBLY-EXHAUST
380173-MUFFLER ASSEMBLY
(C)
(G)
381271-PIPE TAIL L.H. (E)
V
U
Z
AA
W
Y
X
T
186678-BOLT
454869-BOLT
588269-HANGER
588270-CLAMP
588271-CLAMP
100122-BOLT
102634-NUT
VIEW IN DIRECTION OF ARROW Y
CROSSOVER PIPE TO MANFOLD R.H.
585068-PIPE ASSEMBLY-CROSSOVER-S.M.T.
585077-PIPE ASSEMBLY-CROSSOVER-H.M.T.
(D) 381270-PIPE TAIL R.H.
431793-NUT
582771-CLAMP
582770-U-BOLT
456642-SCREW
579468-REINFORCEMENT
584648-SUPPORT ASSY
431793-NUT
567783-CLAMP
569206-U-BOLT
VIEW IN DIRECTION OF ARROW V
431793-NUT
567783-CLAMP
569206-U-BOLT
(B)
VIEW IN DIRECTION OF ARROW AA
588267-LH
588266-RH SUPPORT ASSY
9416761-SCREW
REWORK BAFFLE FOR
LH TAILPIPE CLEARANCE
106326-BOLT
(F) 381272-CLAMP
102634-NUT
VIEW IN DIRECTION OF ARROW U
R.H. & L.H. SIDE
586421-SEAL
586423-BOLT
586422-SPRING
586537-F WASHER
9413301-NUT
486642-SCREW
579468-REINFORCEMENT
583169-SUPPORT ASSY
431793-NUT
582771-CLAMP
582770-U-BOLT
VIEW IN DIRECTION OF ARROW X
VIEW IN DIRECTION OF ARROW W
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN
PAGE 8-2.3
8-29-62 G 588264 CANCELLED
8-27-62 F WAS 586583
8-27-62 E WAS 588261
8-27-62 D WAS 588260
7-5-62 C 380173 WAS 587560
6-28-62 B VIEW ADDED
5-28-62 A2 WAS 584257
DATE SYM. REVISION RECORD DR. CK.
DWG. DATE MARCH 1, 1962 DR D. BILLEADEAU
FIRST USED 1963
CK. L. HOLBROOK
REFERENCE
NAME
LAYOUT-EXHAUST SYSTEM
SERIES 3147
SHEET 3 OF 4
PART NO. 380616


380616
SHEET 4 OF 4
.12
H.M.T. OIL PAN
SECTION A CROSSOVER HANGER H.M.T.
B
A
B
C
D
E
F
G
H
.50 MIN
S.M.T. SUPPORT
SECTION C S.M.T. SUPPORT (REAR VIEW)
H.M.T. SUPPORT
.50 MIN
SECTION D H.M.T. SUPPORT (REAR VIEW)
CENTER BEARING
UNDERBODY FLOOR
.62 MIN
.62 MIN
.75 MIN
.75 MIN
CENTER BEARING SUPPORT
SECTION F CENTER BEARING (REAR VIEW)
UNDERBODY FLOOR
.60
.76
RESONATOR
A
VIEW H RESONATOR
PROPELLER SHAFT
EXHAUST PIPE
.62 MIN
SECTION E PROPELLER
B2
.62 MIN
.62 MIN
H.M.T. OIL PAN
UNDERBODY FLOOR
SECTION B FLEXIBLE JOINT - H.M.T.
PROP. SHAFT CENTER JOINT
.62 MIN
.62 MIN
UNDERBODY FLOOR
SECTION G PROPSHAFT CENTER JOINT (REAR VIEW)
ALL DIMENSIONS OF THIS DRAWING ARE MINIMUM ASSEMBLY CLEARANCES. FOR DESIGN DIMENSIONS SEE DRAWING NO. XR-74033
VIEW REMOVED
VIEW H RESONATOR ADDED
DATE
SYM.
REVISION RECORD
DR.
CK.
DWG. DATE MARCH 2, 1962
DR. D. BILLEADEAUX
FIRST USED 1963
CK. L. HOLBROOK
REFERENCE
NAME LAYOUT
EXHAUST SYSTEM CLEARANCES
PART NO. 380616
SERIES 3000 - 3100
SHEET 4 OF 4
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

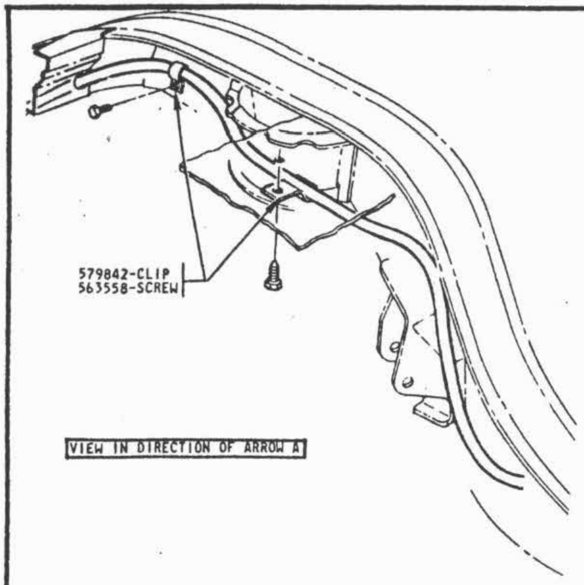


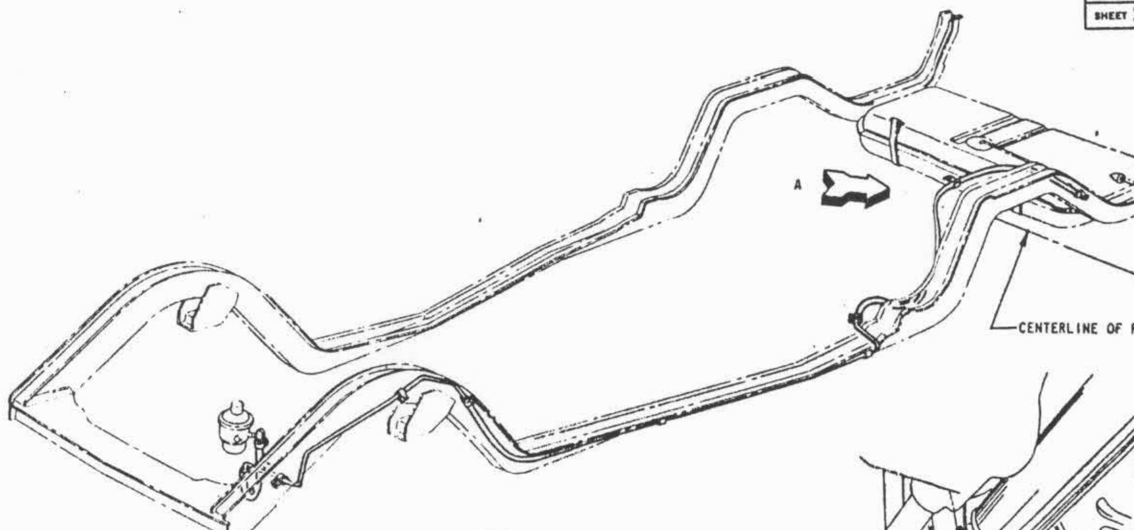
DATE	SYM.	REVISION RECORD	DR	CK.
3-1-63	E	VIEW ADDED	CH	
8-23-62	D	PART NO'S ADDED	ME	
7-16-62	C	380009 WAS 578870		
7-16-62	B_4	584578 WAS 380113		
6-22-62	A_4	380113 WAS 584578	CM	

DWG. DATE MARCH 1, 1962 DR R. SPRAGUE
FIRST USED 1963 EXC. 3167 & 47 CK. C. HOLBROOK
REFERENCE
NAME LAYOUT-FUEL SYSTEM
SERIES 3000-3100
SHEET 1 OF 3
PART NO. 381067

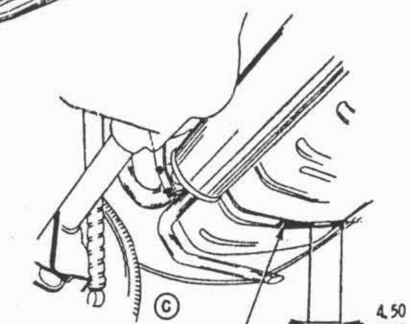
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

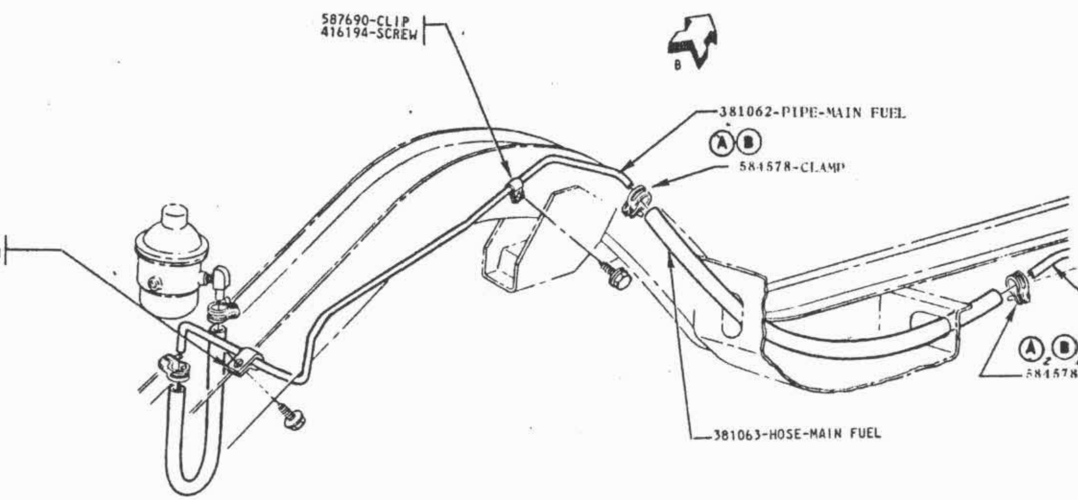
381067
SHEET 2 OF 3





NOTE:
REMAINDER OF FUEL SYSTEM SAME AS PICTORIAL SHEET 1, EXCEPT AS SHOWN.



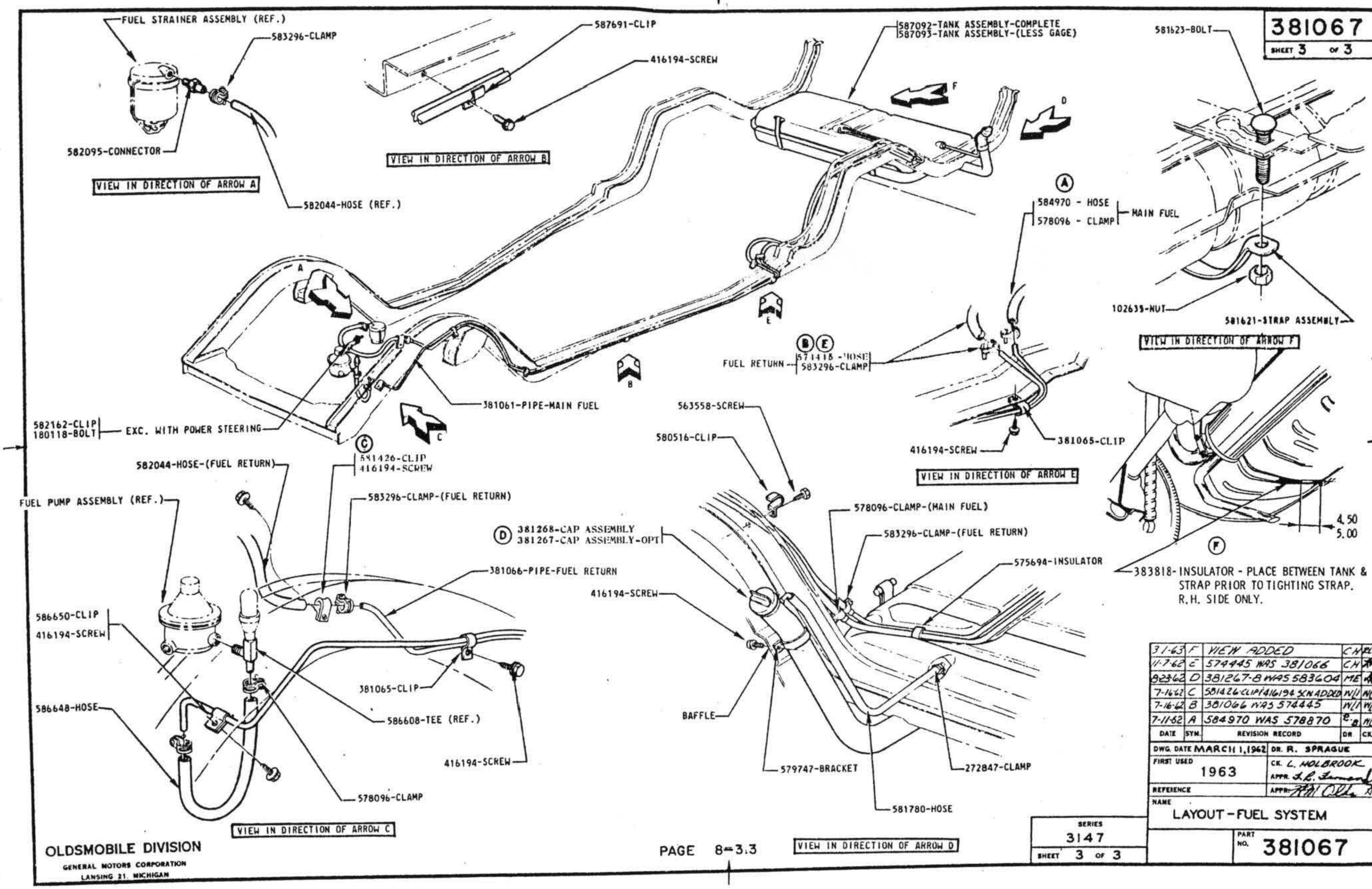


DATE	SYM.	REVISION RECORD	DR.	CK.
1-1-63	C	VIEW ADDED	CH	RLS
7-16-62	B_2	584578 WAS 380113	WJ	WJ
6-22-62	A_2	380113 WAS 584578	CM	[illegible]

DWG. DATE MARCH 2, 1962 — DR. D. ZAPOLI
FIRST USED 1963 3167 — CK. L. HOLBROOK
APPR. [illegible]
REFERENCE — APPR. [illegible]
NAME: LAYOUT-FUEL SYSTEM

SERIES 3167
SHEET 2 OF 3
PART NO. 381067

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

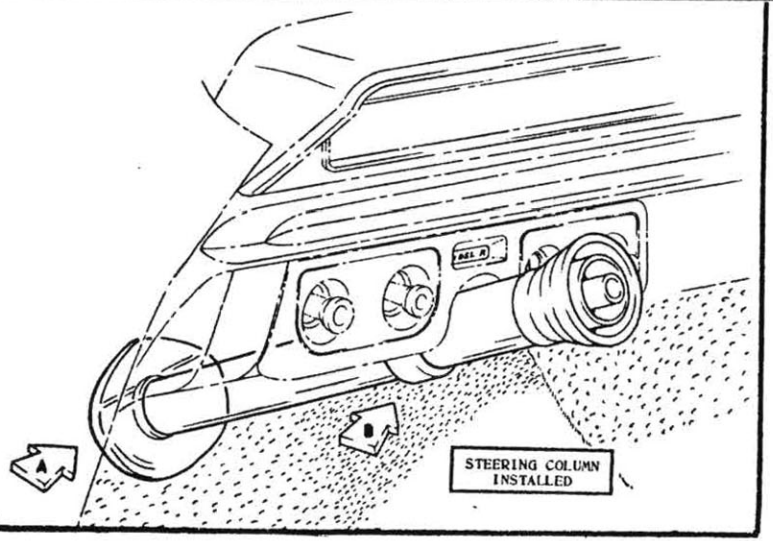

381067
SHEET 3 OF 3
FUEL STRAINER ASSEMBLY (REF.)
583296-CLAMP
582095-CONNECTOR
582044-HOSE (REF.)
VIEW IN DIRECTION OF ARROW A
587691-CLIP
416194-SCREW
VIEW IN DIRECTION OF ARROW B
587092-TANK ASSEMBLY-COMPLETE
587093-TANK ASSEMBLY-(LESS GAGE)
581623-BOLT
102635-NUT
581621-STRAP ASSEMBLY
VIEW IN DIRECTION OF ARROW F
A
584970 - HOSE
578096 - CLAMP
MAIN FUEL
B E
FUEL RETURN
571418 - HOSE
583296-CLAMP
416194-SCREW
381065-CLIP
VIEW IN DIRECTION OF ARROW E
381061-PIPE-MAIN FUEL
582162-CLIP
180118-BOLT
EXC. WITH POWER STEERING
C
581426-CLIP
416194-SCREW
582044-HOSE-(FUEL RETURN)
583296-CLAMP-(FUEL RETURN)
FUEL PUMP ASSEMBLY (REF.)
381066-PIPE-FUEL RETURN
586650-CLIP
416194-SCREW
381065-CLIP
586648-HOSE
586608-TEE (REF.)
416194-SCREW
578096-CLAMP
VIEW IN DIRECTION OF ARROW C
563558-SCREW
580516-CLIP
578096-CLAMP-(MAIN FUEL)
583296-CLAMP-(FUEL RETURN)
D
381268-CAP ASSEMBLY
381267-CAP ASSEMBLY-OPT
575694-INSULATOR
416194-SCREW
BAFFLE
579747-BRACKET
272847-CLAMP
581780-HOSE
VIEW IN DIRECTION OF ARROW D
4.50
5.00
F
383818-INSULATOR - PLACE BETWEEN TANK & STRAP PRIOR TO TIGHTING STRAP. R.H. SIDE ONLY.
3-1-63 F VIEW ADDED
11-7-62 E 574445 WAS 381066
8-23-62 D 381267-8 WAS 583604
7-16-62 C 581426 CLIP & 416194 SCR ADDED
7-16-62 B 381066 WAS 574445
7-11-62 A 584970 WAS 578870
DATE SYM. REVISION RECORD DR. CK.
DWG. DATE MARCH 1, 1962 DR. R. SPRAGUE
FIRST USED 1963
CK. L. HOLBROOK
REFERENCE
NAME LAYOUT - FUEL SYSTEM
SERIES 3147
SHEET 3 OF 3
PART NO. 381067
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN
PAGE 8-3.3

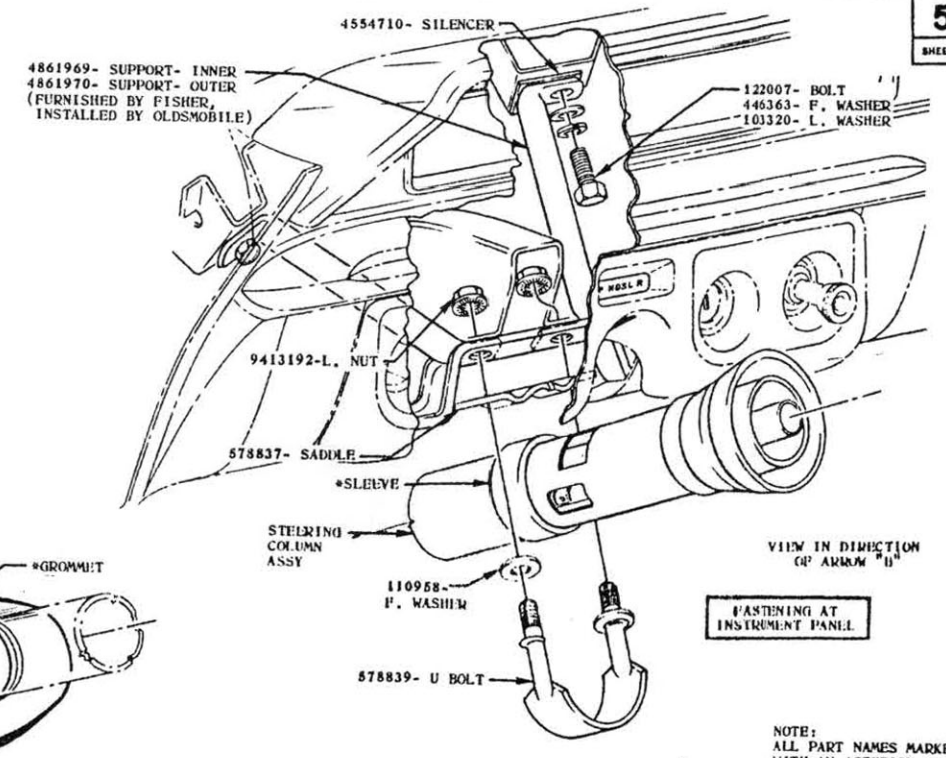
STEERING

DRAWINGS INCLUDED IN THIS SECTION ARE:

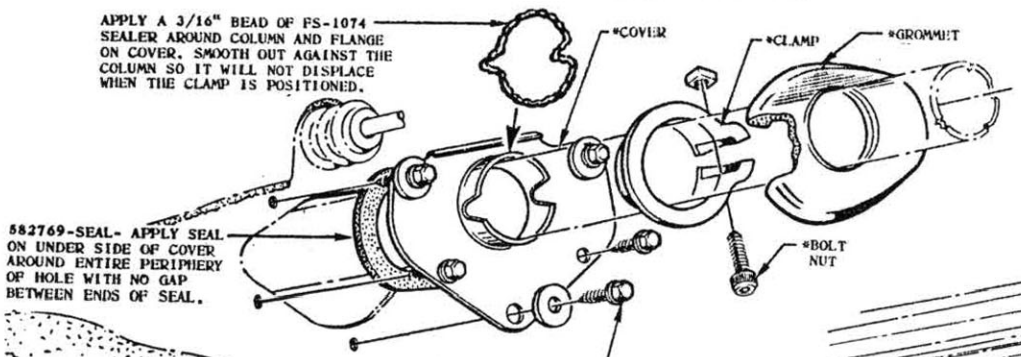
586902

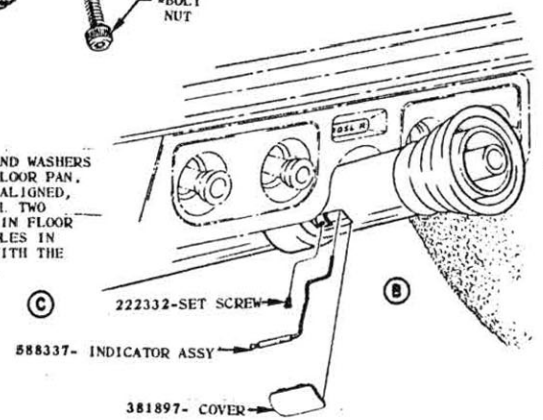
SHEET 1 OF 1

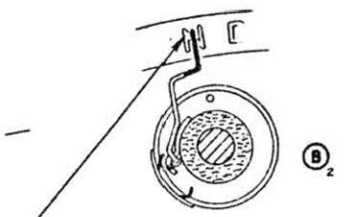




NOTE:
ALL PART NAMES MARKED WITH AN ASTERISK * ARE PART OF STEERING COLUMN ASSY'S







NOTE:
WITH SHIFT ROD INSTALLED IN NEUTRAL POSITION, INSERT INDICATOR IN HOLE IN STEERING COLUMN SO NEEDLE POINTS TO "N" AND TIGHTEN SET SCREW.

SECTION THRU STEERING COLUMN AT INDICATOR

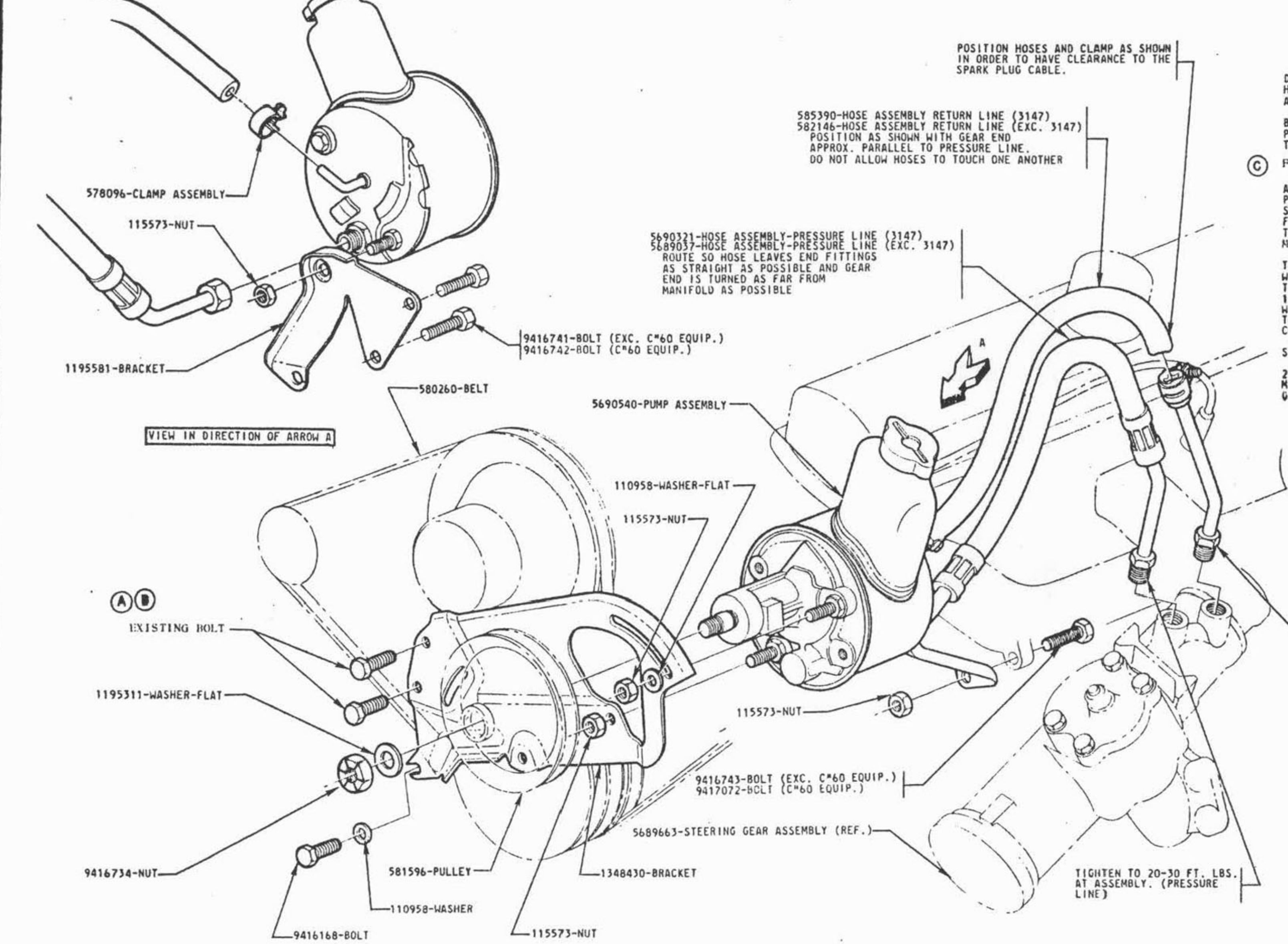
X	1-14-63	C	222332 NUMBER ADDED	BP	VP
+	8-27-62	B2	VIEWS ADDED	EJA	VP
*	4-13-62	A	STEERING COL. REV. TO DET.	JM	VP
	DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE DEC. 6, 1961 — DR. BEAUDOIN
FIRST USED 1963 — CK. H. VAN PELT
REFERENCE 9A-C 35M95 — APPR.
NAME LAYOUT-STEERING COLUMN FASTENINGS

SERIES 3000 - 3100
SHEET 1 OF 1

PART NO. 586902

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



381129

SHEET 1 OF 1

DO NOT REMOVE PLUGS FROM STEERING GEAR HOSE FITTINGS UNTIL IMMEDIATELY BEFORE ASSEMBLING HOSES TO PUMP.

BEFORE STARTING ENGINE, ADD FLUID TO PUMP RESERVOIR TO WITHIN .50 INCHES OF TOP OF CAP RIM.

Ⓒ FOR INFORMATION ON FLUID SEE 380831 SHT 2

AFTER INSTALLATION IS COMPLETED RUN PUMP AT ENGINE IDLE SPEED FOR 15 TO 20 SECONDS-ADD OIL-THEN AT 1550 R.P.M. FOR ONE MINUTE BEFORE ATTEMPTING TO TURN STEERING WHEEL. ADD FLUID TO LEVEL MARK ON RESERVOIR AS REQUIRED.

TEST FOR LEAKS IN SYSTEM:
WITH FRONT WHEELS BESIDE AN OBSTRUCTION TO PREVENT TURNING GEAR TO LIMIT, APPLY 15 TO 25 LB. LOAD AT RIM OF STEERING WHEEL WITH ENGINE RUNNING AT MODERATE SPEED TO OBTAIN MAX. OPERATING PRESSURE. CHECK HOSES AND FITTINGS FOR LEAKS.

STEERING GEAR RATIO 17.5 TO 1.

2.061 TURNS OF STEERING WHEEL FOR 42°20' MIN. TRAVEL IN EACH DIRECTION (STEERING GEAR STOPS).

DATE	SYM.	REVISION RECORD	DR.	CK.
10-12-62	C	WAS 576400	[illegible]	[illegible]
7-6-62	B	NOTE ADDED	LN	[illegible]
7-6-62	A	9416158 BOLT REMVD (2)	LN	[illegible]

C

DWG. DATE MARCH 9, 1962 — DR. D. ZAPOLI

FIRST USED 1963 — CK. L. HOLBROOK

APPR. [illegible signature]

REFERENCE — APPR. [illegible signature]

NAME LAYOUT-POWER STEERING GEAR (PUMP AND PUMP DRIVE)

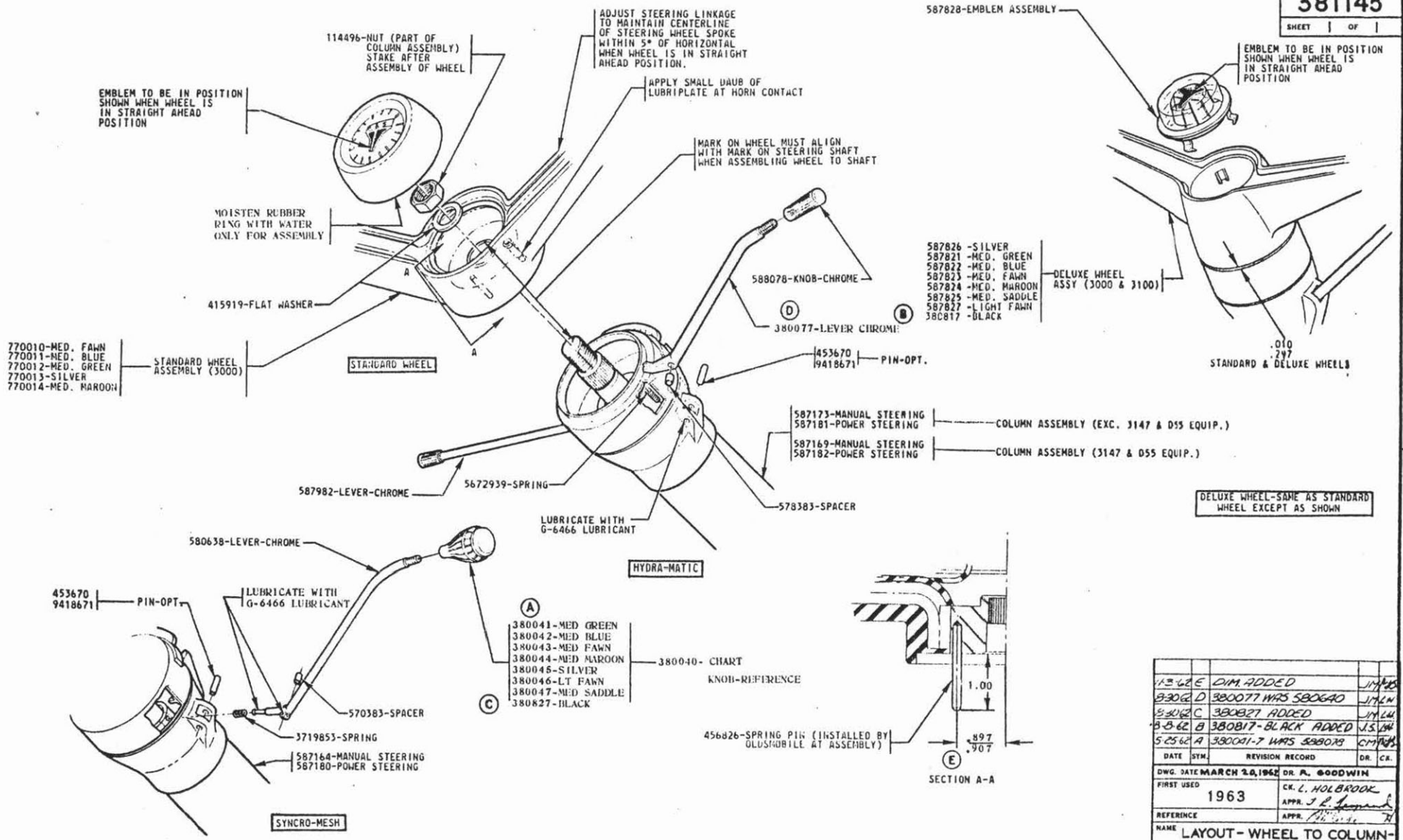
PART NO. 381129

SERIES 3000-3100

SHEET 1 OF 1

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

STANDARD INSTALLATION



DATE	SYM.	REVISION RECORD	DR.	CK.
1-3-62	E	DIM. ADDED	JM	MB
8-30-62	D	380077 WAS 380640	JM	LH
5-21-62	C	380827 ADDED	JM	LH
3-3-62	B	380817-BLACK ADDED	JS	JM
5-25-62	A	380081-7 WAS 380078	CM	MB

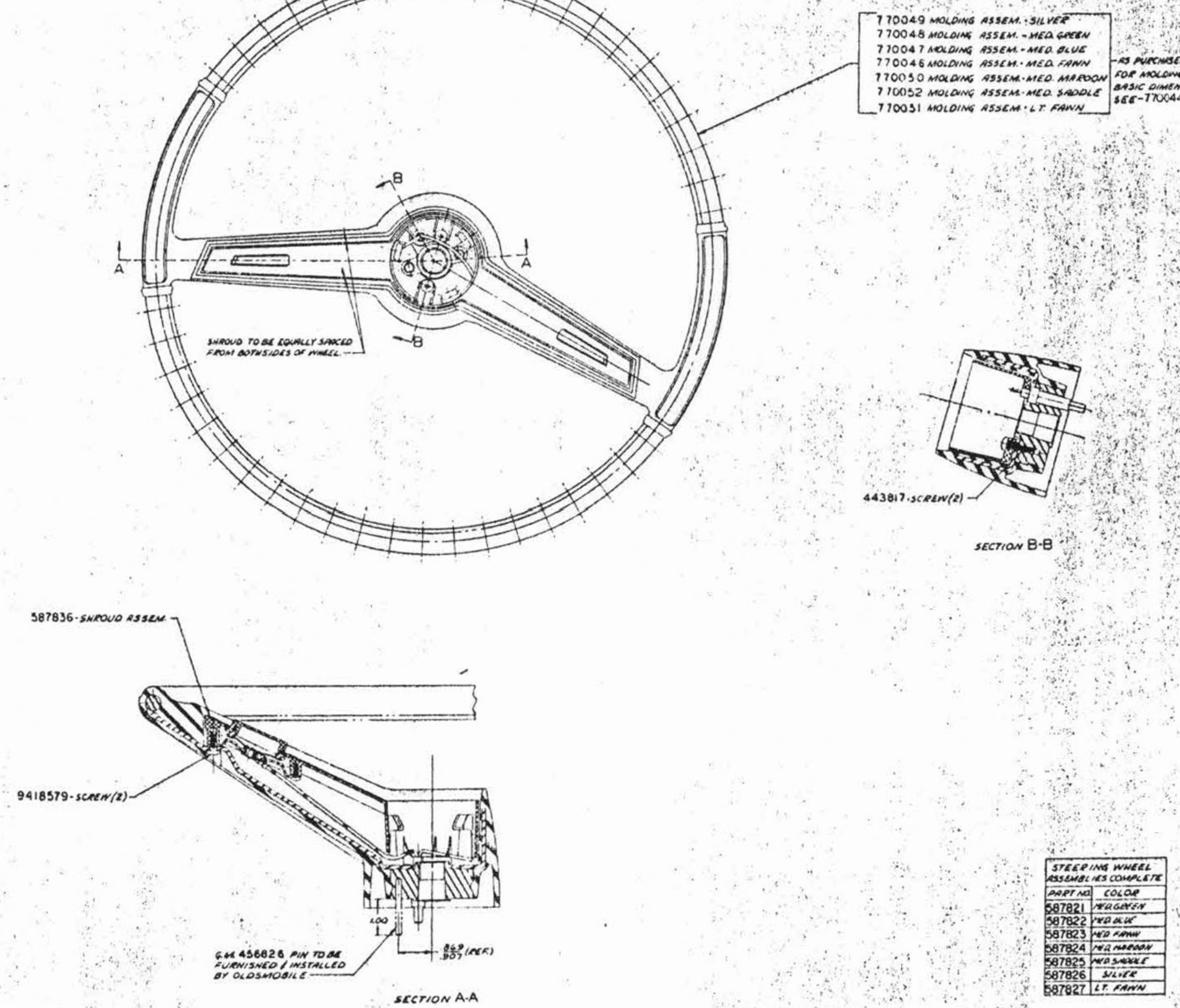
DWG. DATE MARCH 20, 1962 DR. A. GOODWIN
FIRST USED 1963 CK. L. HOLBROOK
APPR. J. R. Leonard
REFERENCE APPR.

NAME LAYOUT - WHEEL TO COLUMN-STEERING

SERIES 3000 - 3100
SHEET | OF |

PART NO. 381145

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



770049 MOLDING ASSEM. - SILVER
770048 MOLDING ASSEM. - MED. GREEN
770047 MOLDING ASSEM. - MED. BLUE
770046 MOLDING ASSEM. - MED. FAWN
770050 MOLDING ASSEM. - MED. MAROON
770052 MOLDING ASSEM. - MED. SADDLE
770051 MOLDING ASSEM. - LT. FAWN
AS PURCHASED FOR MOLDING ASSEM. BASIC DIMENSIONS SEE-770044
SHROUD TO BE EQUALLY SPACED FROM BOTHSIDES OF WHEEL
443817-SCREW(2)
SECTION B-B
587836-SHROUD ASSEM.
9418579-SCREW(2)
G.M. 456828 PIN TO BE FURNISHED & INSTALLED BY OLDSMOBILE
SECTION A-A

STEERING WHEEL ASSEMBLIES COMPLETE	
PART NO.	COLOR
587821	MED. GREEN
587822	MED. BLUE
587823	MED. FAWN
587824	MED. MAROON
587825	MED. SADDLE
587826	SILVER
587827	LT. FAWN

DO NOT SCALE

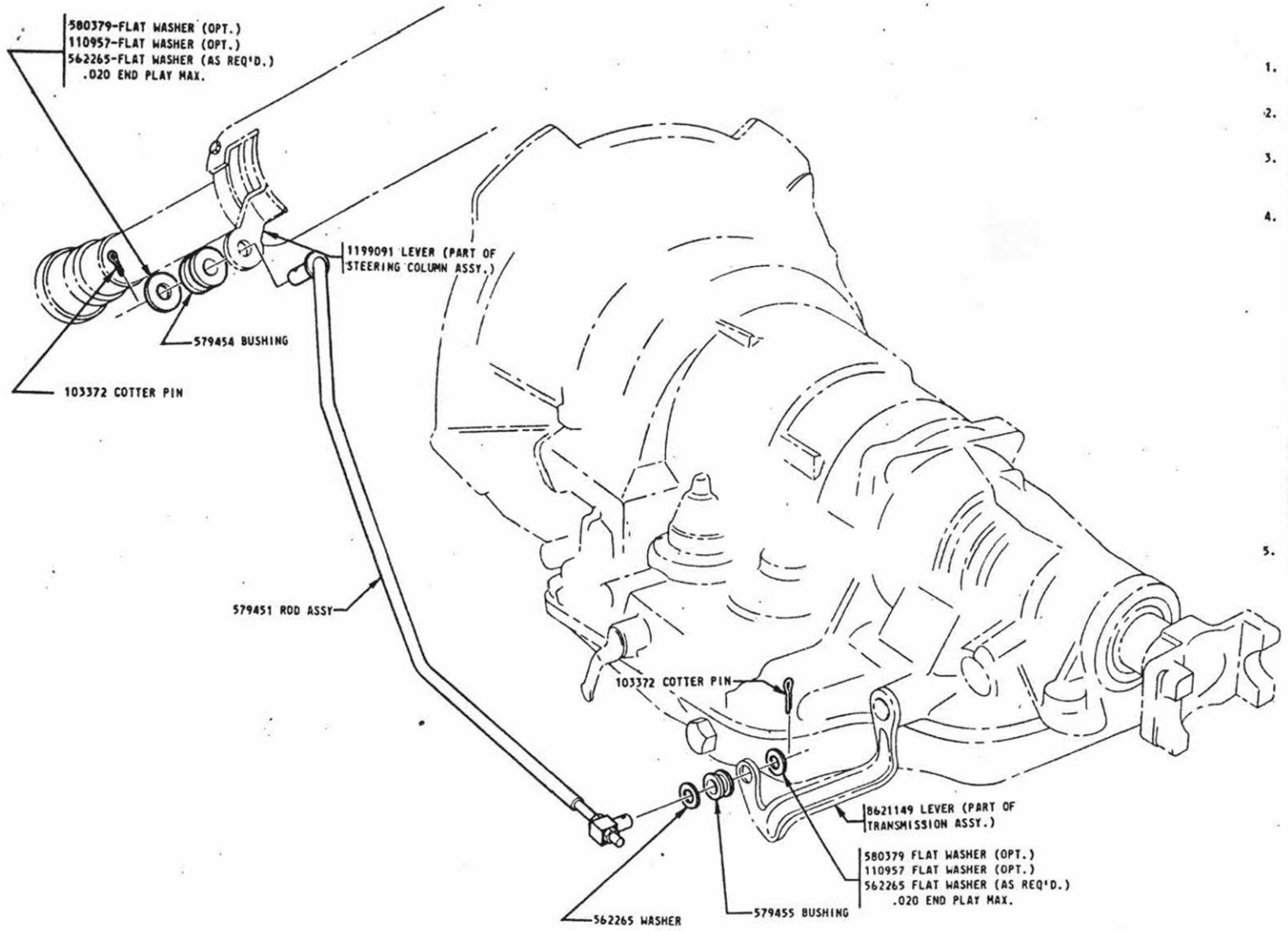
DEC 12, 1963	HAGENBUCH
FULL	BEDFORD
1963 3000-3100	
XP-73331	

CHART - STEERING WHEEL

587820

381275

SHEET 1 OF 1



1. INSTALL SHIFT ROD ASSY. TO LOWER SHIFT LEVER.
2. SET TRANSMISSION OUTER SHIFT LEVER IN NEUTRAL POSITION.
3. HOLD UPPER SHIFT LEVER AGAINST NEUTRAL STOP IN UPPER COLUMN. DO NOT RAISE UPPER SHIFT LEVER.
4. WITH BOTH NUTS 115702 LOOSE ON ROD ASSY, INSTALL SWIVEL 380198 IN TRANSMISSION OUTER LEVER. TIGHTEN REAR NUT 115702 FINGER TIGHT AGAINST SWIVEL. ADJUST ROD ASSY. SHORT BY TIGHTENING REAR NUT 115702 TWO (2) TURNS. LOCK UP ROD ASSY. BY TIGHTENING FRONT NUT 115702.

   ADJUSTING THE SHIFT LINKAGE IN THIS MANNER ROTATES THE SHIFT TUBE ASSY., (APPROX. 1°) AND PROVIDES PROPER CLEARANCE BETWEEN NEUTRAL DETENT IN THE TRANSMISSION AND THE STOP FOR THE MANUAL SHIFT LEVER IN THE UPPER COLUMN.

   SHIFT CONTROL ROD ADJUSTMENT CAN BE ZERO (0) TO TWO (2) TURNS SHORTER THAN AS OUTLINED, MORE THAN TWO(2) TURNS SHORTER CAN CAUSE THE TRANSMISSION TO RATCHET AT THE NEUTRAL STOP POSITION. IF ROD ADJUSTMENT IS LONGER THAN OUTLINED, PARK MAY BE LOST.
5. INSTALL AND ADJUST SHIFT INDICATOR ASSY AS SHOWN ON 586902.

DATE	SYM.	REVISION RECORD	DR	CK

DWG. DATE AUG 29, 1963 DR R. COLLINS
FIRST USED 1963 CK H. PAGE
APPR H. Howard
REFERENCE APPR
NAME LAYOUT-SHIFT CONTROL
PART NO. 381275

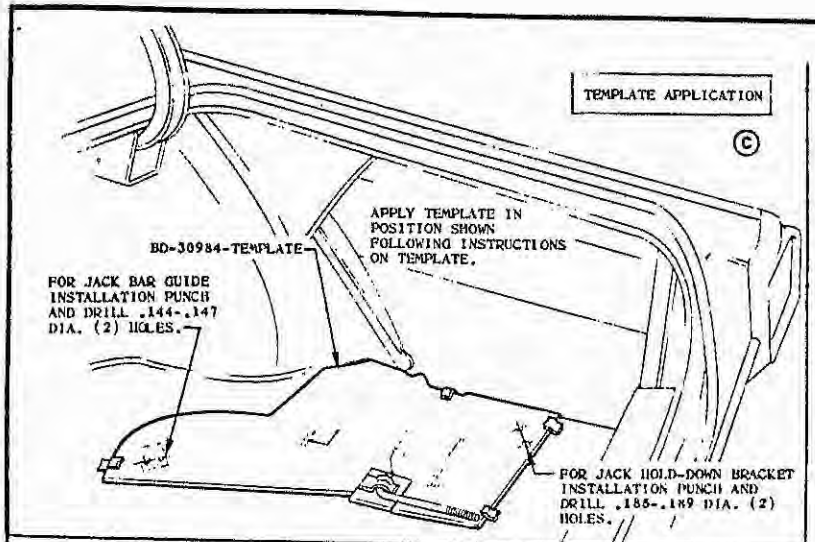
FOR ENGINEERING LAYOUT SEE DRAWING TR-3877

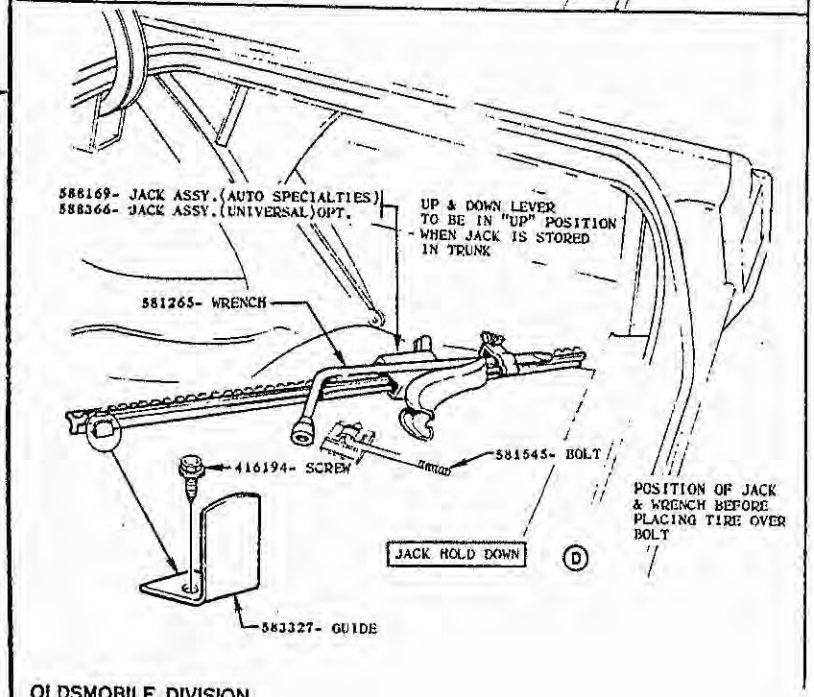
SERIES 3000 - 3100

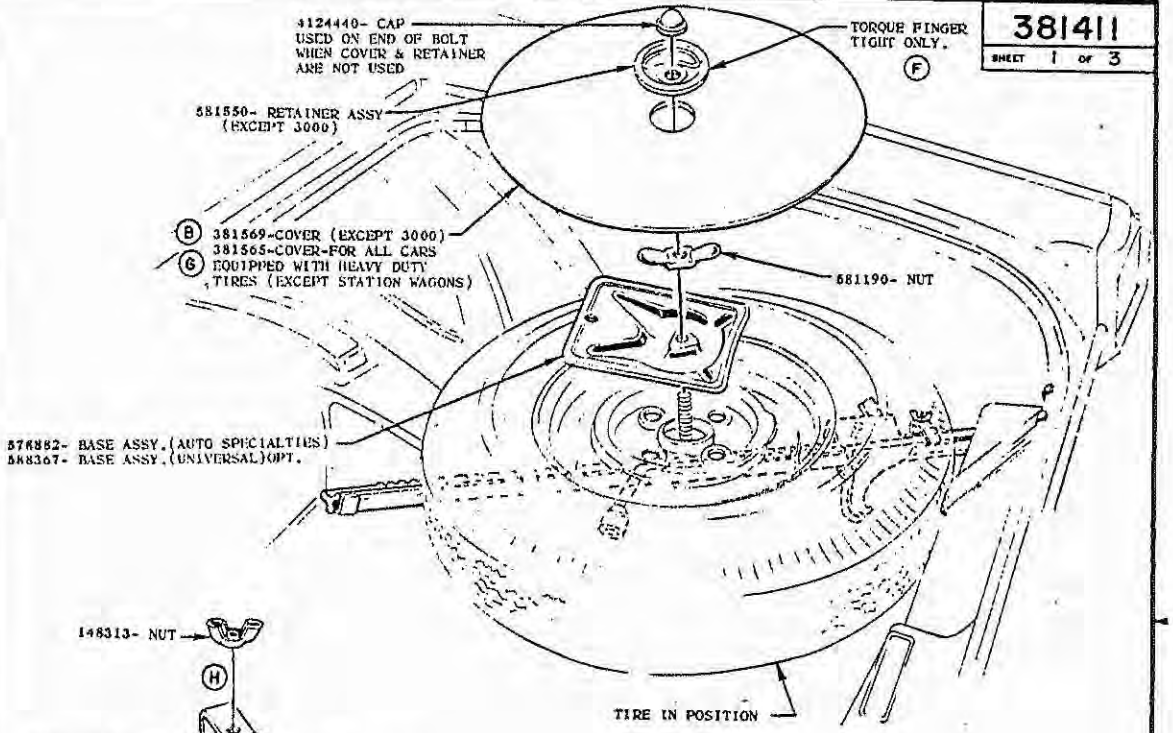
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

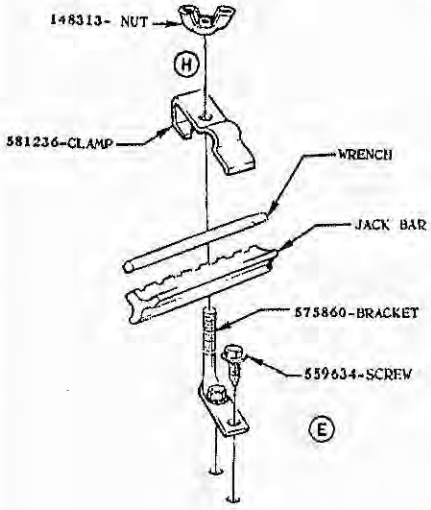
WHEELS & TIRES

DRAWINGS INCLUDED IN THIS SECTION ARE:









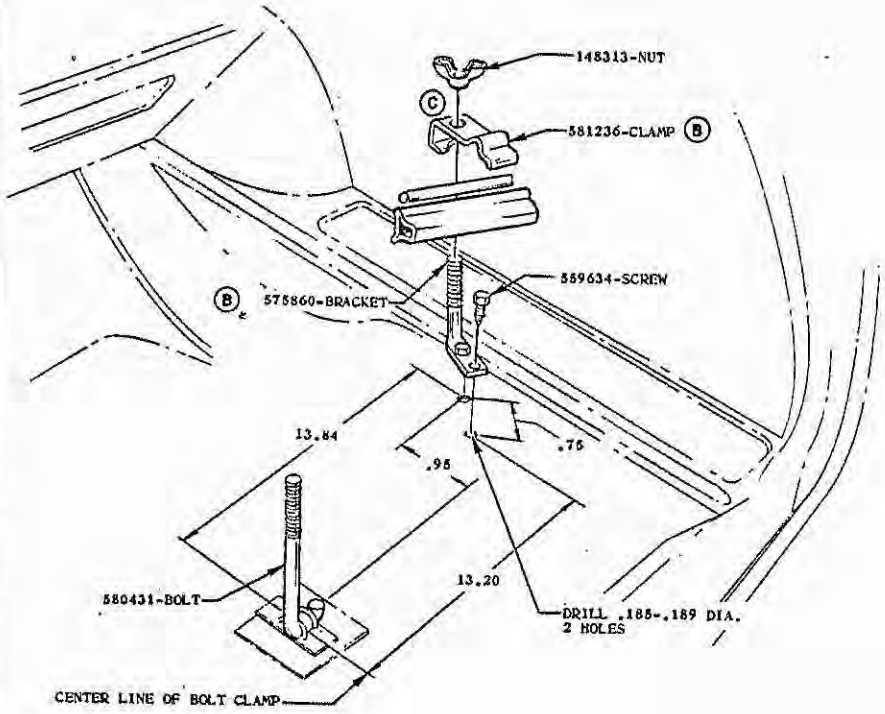
381411
SHEET 1 OF 3

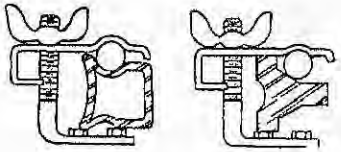
10-30-62	H	FLAT WASHER CANCELED	BP	VP
9-14-62	G	381565-COVER ADDED	BP	VP
9-14-62	F	NOTE ADDED	BP	VP
9-13-62	E	VIEW REVISED	BP	VP
8-6-62	D	VIEW REVISED	BP	VP
8-6-62	C	VIEW ADDED	BP	VP
6-4-62	B	WAS 588493-COVER	BP	VP
6-1-62	A	WAS SHEET 1 OF 1	FJ	VP
DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAR 6 1962 DR. CV BUCHANAN
FIRST USED 1963 CK. H VAN PELT
REFERENCE 14E-10E APPR.
NAME LAYOUT-SPARE WHEEL & JACK HOLD DOWN
SERIES 3000-3100
SHEET 1 OF 3
PART NO. 381411

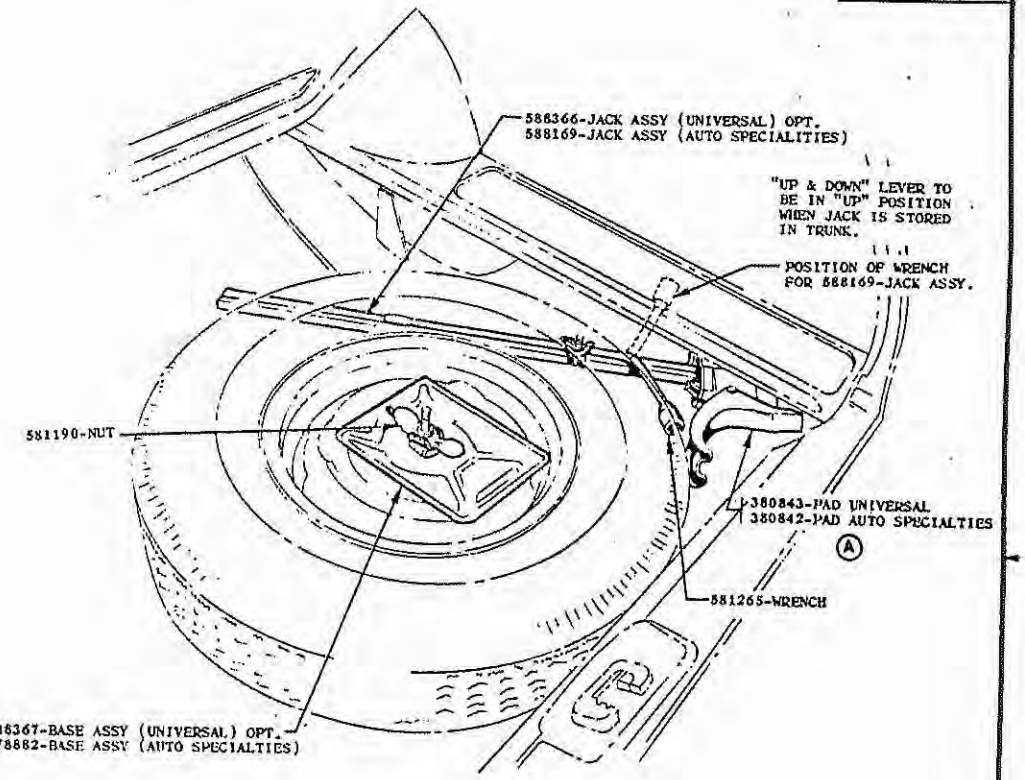
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

381411
SHEET 2 OF 3





TYPICAL SECTION
THRU JACK BAR & WRENCH
AT HOLD DOWN CLAMP



TIRE HOLD DOWN

TWO SEAT STATION WAGON

+	10-30-62	C	FLAT WASHER CANCELED	BP VP
A	9-29-62	B	REVISED TO DETAIL	BP VP
A	8-30-62	A	PAD NOS ADDED	VP VP
	DATE	SYM.	REVISION RECORD	DR. CK.

DWG. DATE MAY 25, 1962	DR. B PARKER
FIRST USED 1963	CK. H. VAN PELT
	APPR.
REFERENCE 14E-10E	APPR.
NAME LAYOUT-SPARE WHEEL & JACK HOLD DOWN	

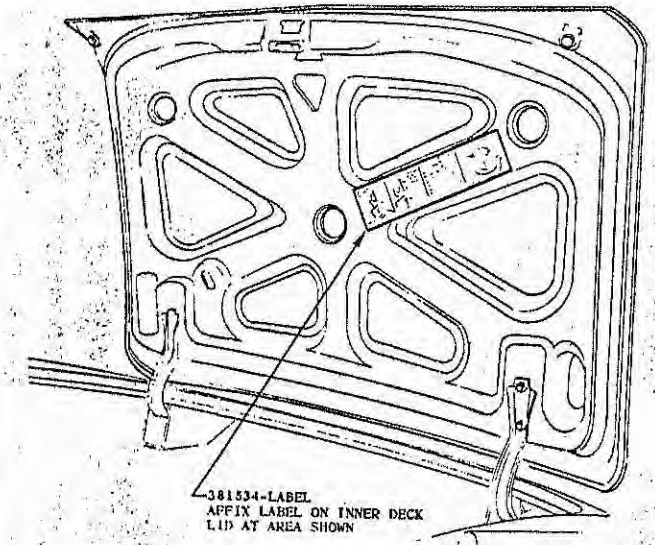
SERIES 3000-3100
SHEET 2 OF 3

PART NO. 381411

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

381411

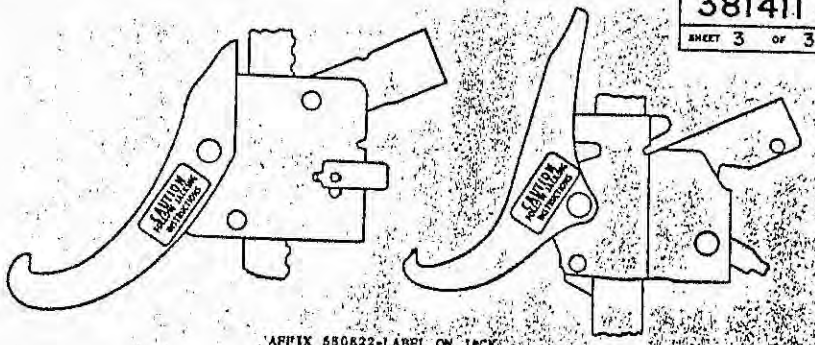
SHEET 3 OF 3



381534-LABEL
AFFIX LABEL ON INNER DECK LID AT AREA SHOWN

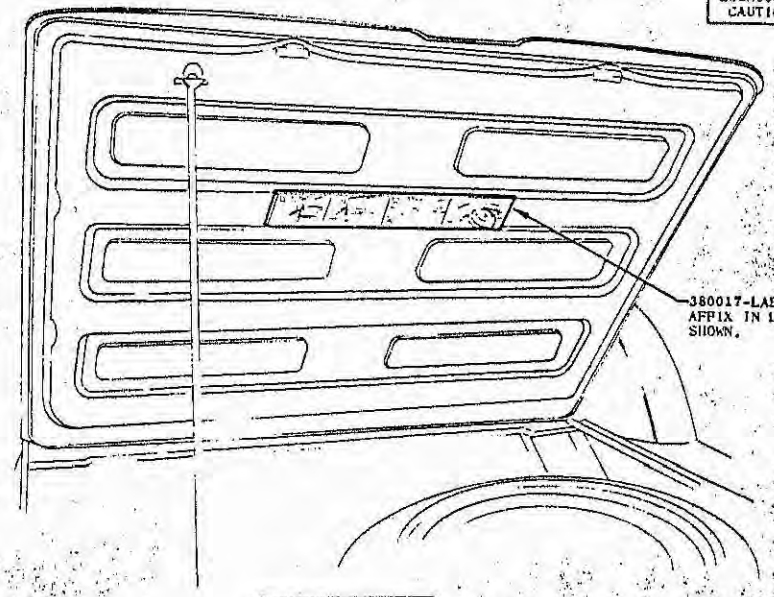
LOCATION OF JACK INSTRUCTION LABEL

FOR ALL MODELS EXCEPT STATION WAGONS



AFFIX 550822-LABEL ON JACK ASSEMBLIES AS SHOWN

LOCATION OF JACK CAUTION LABEL



380017-LABEL
AFFIX IN LOCATION SHOWN.

LOCATION OF JACK INSTRUCTION LABEL

TWO SEAT STATION WAGONS

DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAY 25, 1962 DR. B. PARKER
FIRST USED 1963 CK. H. VAN PELT
APPR.
REFERENCE 1-E-10E APPR.

NAME LAYOUT-SPARE WHEEL & JACK HOLD DOWN

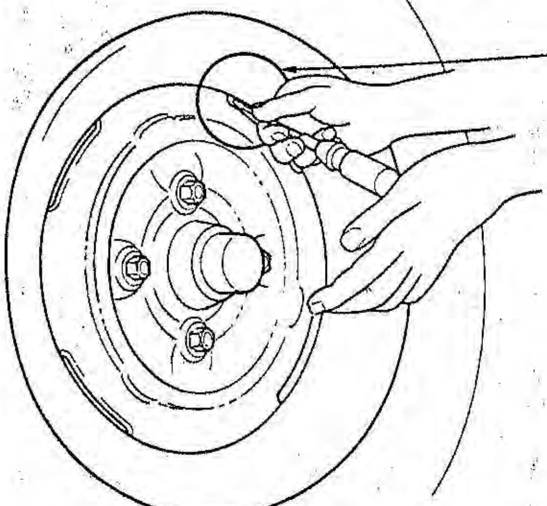
SERIES 3000-3100
SHEET 3 OF 3

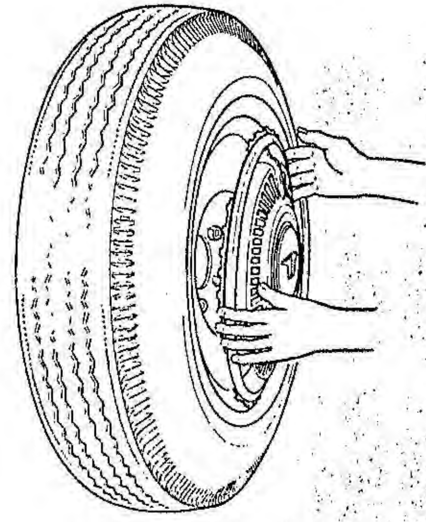
PART NO. 381411

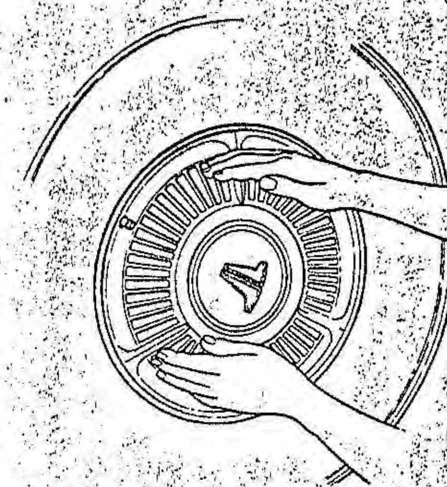
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

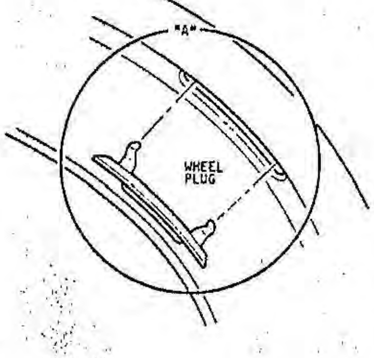
INSTALLATION OF OLDSMOBILE WHEEL DISCS

381041
SHEET 1 OF 1









GENERAL INSTRUCTIONS

1. BEFORE INSTALLING WHEEL DISCS, CLOSE THE FOUR WHEEL OPENINGS WITH SPECIAL WHEEL PLUGS AS SHOWN. NOTE: 20 PLUGS ARE FURNISHED IN EACH PACKAGE- ALL 5 WHEELS SHOULD BE PLUGGED.

2. POSITION WHEEL DISC WITH HOLE CENTERED OVER VALVE STEM AND STRIKE A FEW BLOWS AROUND RIM TO SET IT INTO POSITION. SEAT DISC SECURELY BY TAPPING GENTLY AROUND RIM WITH RUBBER MALLET. AFTER INSTALLATION IS COMPLETE, VALVE STEM SHOULD BE CENTERED FREELY IN THE WHEEL DISC HOLE WITHOUT INTERFERENCE.

3. TO REMOVE DISC, INSERT SCREWDRIVER BETWEEN EDGE OF WHEEL DISC AND RIM OF WHEEL AND PRY OUT. REPEAT IN SEVERAL LOCATIONS UNTIL DISC IS FREE.

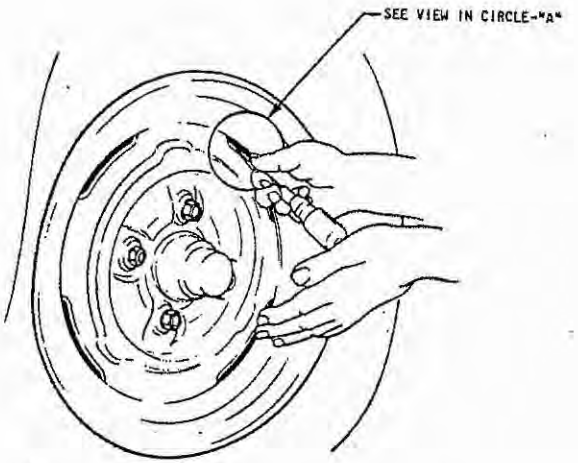
DATE	SYM.	REVISION RECORD	DR.	CK.

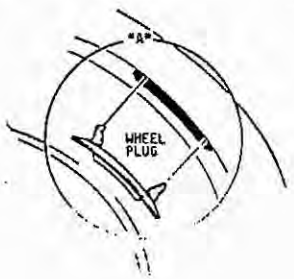
DWG. DATE MARCH 7, 1962	DR. L. GRIFFIN
FIRST USED 1963	CK. L. HOLBROOK
	APPR. J R [illegible]
REFERENCE	APPR. [illegible]
NAME LAYOUT – WHEEL DISC	
SERIES 3000 - 3100 / SHEET 1 OF 1	PART NO. 381041

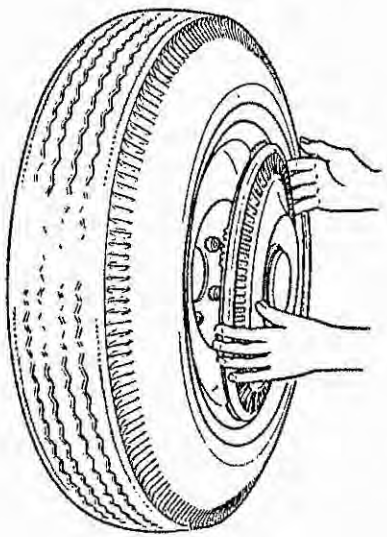
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

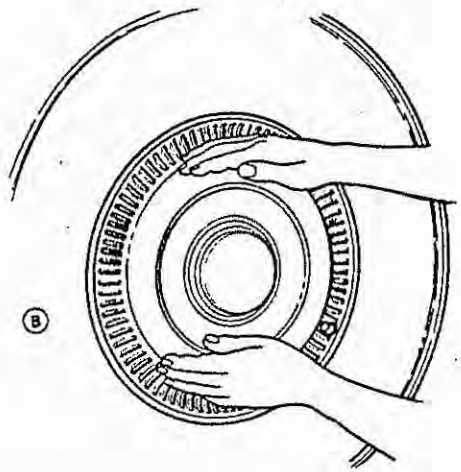
INSTALLATION OF OLDSMOBILE WHEEL DISCS

381042
SHEET 1 OF 1









1. BEFORE INSTALLING WHEEL DISCS, CLOSE THE FOUR WHEEL OPENINGS WITH SPECIAL WHEEL PLUGS AS SHOWN. NOTE: 20 PLUGS ARE FURNISHED IN EACH PACKAGE - ALL 5 WHEELS SHOULD BE PLUGGED.
2. INSTALL EXTENSIONS ON VALVE STEMS. NOTE: 4 VALVE STEM EXTENSIONS ARE FURNISHED IN EACH PACKAGE.
3. POSITION WHEEL DISC WITH HOLE CENTERED OVER VALVE STEM AND STRIKE A FEW BLOWS AROUND RIM TO SET IT INTO POSITION. SEAT DISC SECURELY BY TAPPING GENTLY AROUND RIM WITH RUBBER MALLET. AFTER INSTALLATION IS COMPLETE, VALVE STEM SHOULD BE CENTERED FREELY IN THE WHEEL DISC HOLE WITHOUT INTERFERENCE.
4. TO REMOVE DISC, INSERT SCREWDRIVER BETWEEN EDGE OF WHEEL DISC AND RIM OF WHEEL AND PRY OUT. REPEAT IN SEVERAL LOCATIONS UNTIL DISC IS FREE.

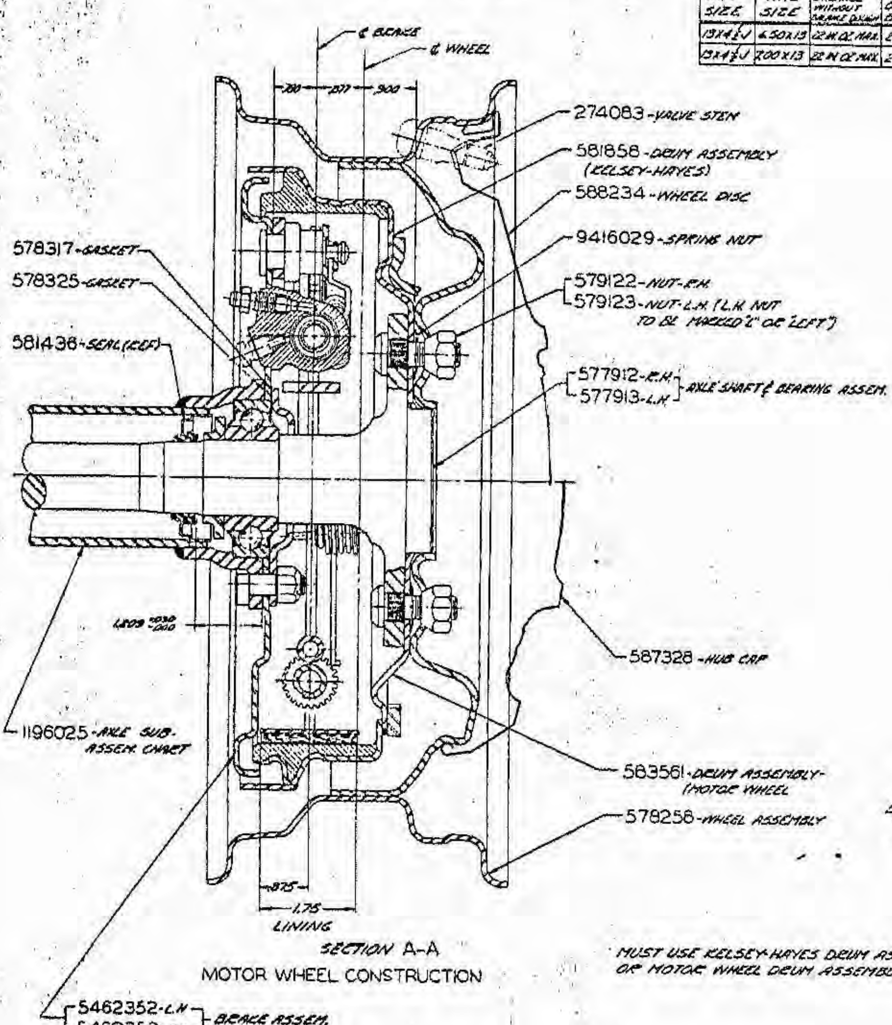
B-6662	B	CREST REMOVED	JMM
B-6662	A	BIG CAR SERIES ADDED	JMM
DATE	SYM.	REVISION RECORD	DR. CK.
DWG. DATE MARCH 21, 1962			DR. L. GRIFFIN
FIRST USED 1963			CK. L. HOLBROOK
REFERENCE			APPR. J. L. [illegible]
NAME LAYOUT - WHEEL DISC			APPR. [illegible]
SERIES 3000 - 3100			
SERIES 32-35-36-38-3900			PART NO. 381042

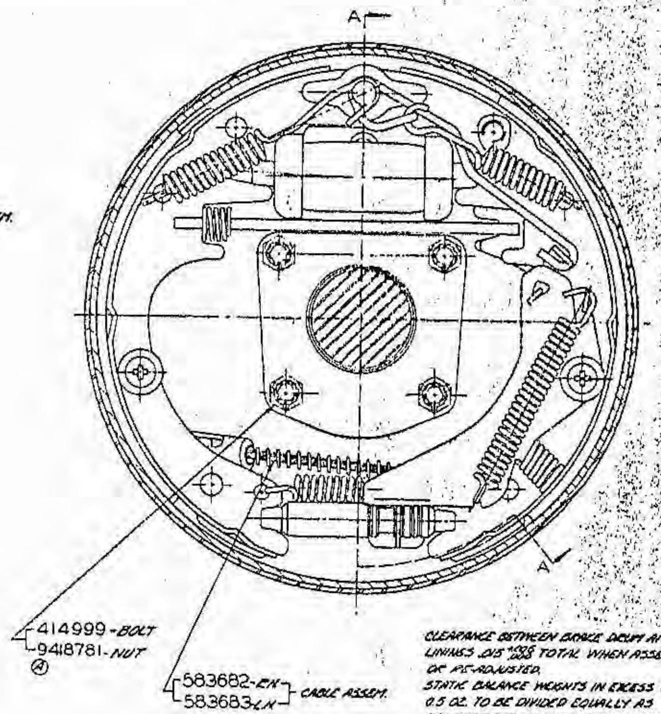
Ⓐ

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

KELSEY-HAYES CONSTRUCTION

RIM SIZE	TIRE SIZE	TIRE OUT OF BALANCE WITHOUT BRAKE DRUM	DRUM OUT OF BALANCE	WHEEL OUT OF BALANCE	WHEEL & TIRE ASSEM. MAX. OUT OF BALANCE	TIRE PRESSURE		RUNOUT OF WHEEL & TIRE ASSEMBLY	
						INITIAL INFLATION AT ASSEM PLANT	RECOMMENDED FOR SERVICE	RADIAL	LATERAL
13X4½J	6.50X13	22 IN OZ MAX.	2 IN OZ	10 IN. OZ.	4 IN. OZ.	30 TO 50 LBS.	22 LBS.	.063 T.I.R.	.081 T.I.R.
13X4½J	7.00X13	22 IN OZ MAX.	2 IN OZ	10 IN. OZ.	4 IN. OZ.	30 TO 50 LBS.	22 LBS.	.063 T.I.R.	.081 T.I.R.
					4½ OZS MAX. WEIGHT PER ASSEMBLY				





MUST USE KELSEY-HAYES DRUM ASSEMBLY ON BOTH SIDES OR MOTOR WHEEL DRUM ASSEMBLIES ON BOTH SIDES.

CLEARANCE BETWEEN BRAKE DRUM AND LININGS .015 TOTAL WHEN ASSEMBLED OR RE-ADJUSTED.

STATIC BALANCE WEIGHTS IN EXCESS OF 0.5 OZ. TO BE DIVIDED EQUALLY AS POSSIBLE BETWEEN INSIDE AND OUTSIDE WHEEL FLANGES.

ALL WHEEL NUTS MUST BE HAND STARTED BEFORE USING POWER WRENCH TO PREVENT GALLING OR CROSS THREADING.

ASSEM. INSTRUCTIONS-TIRE TO WHEEL:

(1) LUBRICATE TIRE BEADS & VALVE STEM ASSEMBLY WITH APPROVED LUBRICANT. SEE PROCESS CHART

(2) IMMEDIATELY ASSEMBLE VALVE STEM AND TIRE TO WHEEL AND INFLATE TO RECOMMENDED PRESSURE (SEE TABLE). INSTALLATION MUST BE MADE BEFORE LUBRICANT IS DRY.

(3) BLACK SIDEWALL TIRES TO BE MOUNTED WITH SERIAL NUMBER, MOLD NUMBER, & OTHER MFG. INFORMATION TOWARD CENTERLINE OF CAR.

DATE	SYM	CHANGE		
3-6-62		WAS XD-74228		
4-12-62	A	9418781 WAS 412...		

NO. 380580 SHEET 2 OF 2 LAST CHANGE A

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS

COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

DO NOT SCALE

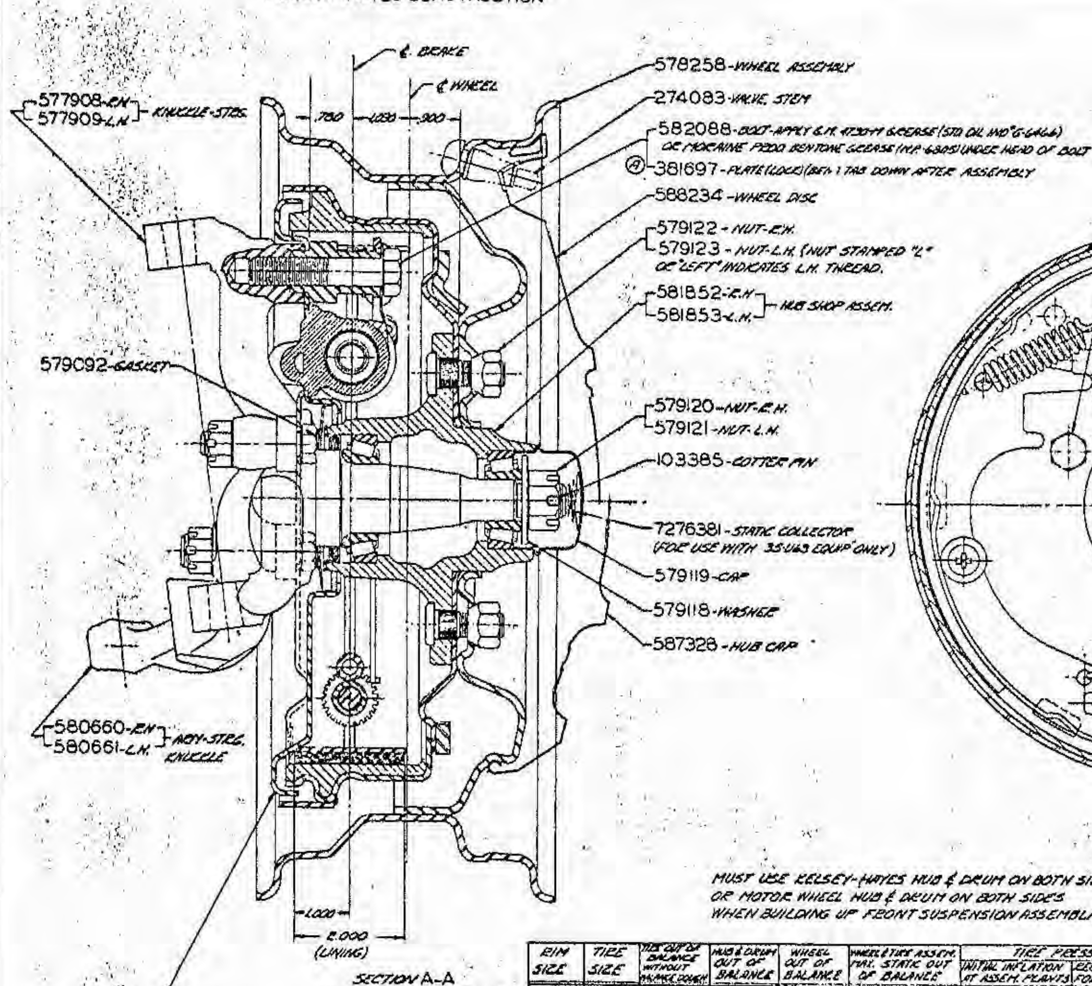
DATE DWG FEB 12, 1962 — F. SANFORD
SCALE FULL
FIRST USED 1963 3000-3100

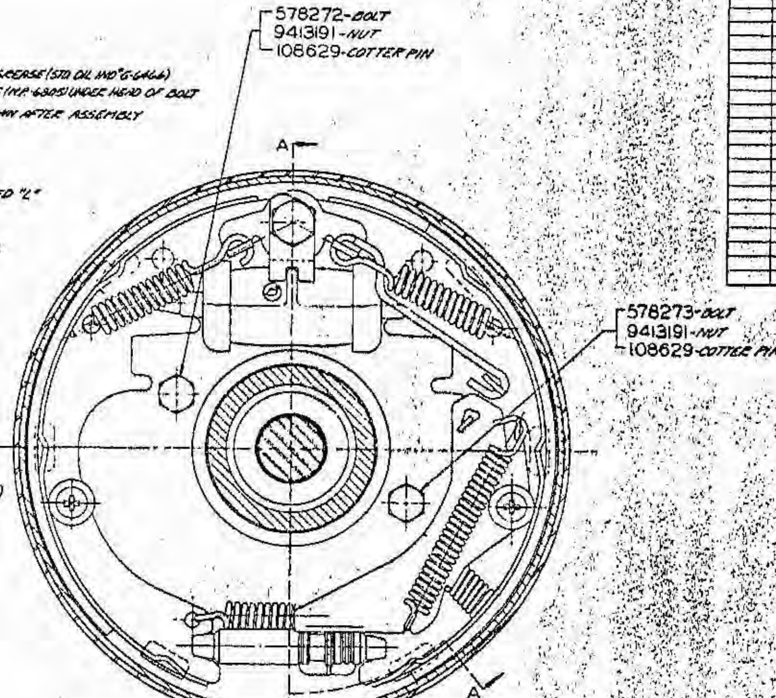
LAYOUT-BRAKE AND WHEEL-REAR

SHEET 2 OF 2

380580

KELSEY-HAYES CONSTRUCTION





MUST USE KELSEY-HAYES HUB & DRUM ON BOTH SIDES OR MOTOR WHEEL HUB & DRUM ON BOTH SIDES WHEN BUILDING UP FRONT SUSPENSION ASSEMBLIES.

RIM SIZE	TIRE SIZE	TIRE OUT OF BALANCE WITHOUT MARKED POINT	HUB & DRUM OUT OF BALANCE	WHEEL OUT OF BALANCE	WHEEL & TIRE ASSEM. MAX. STATIC OUT OF BALANCE	TIRE PRESSURE		RUNOUT OF WHEEL & TIRE ASSEMBLY	
						INITIAL INFLATION AT ASSEM. PLANTS	RECOMMENDED FOR SERVICE	RADIAL	LATERAL
13 X 4½ J	6.50 X 13	12 IN.OZ. MAX.	2 IN. OZ.	10 IN. OZ.	4 IN. OZ.	30 TO 50 LBS.	22 LBS.	.063 T.I.R.	.081 T.I.R.
13 X 4½ J	7.00 X 13	12 IN.OZ. MAX.	2 IN. OZ.	10 IN. OZ.	4 IN. OZ.	30 TO 50 LBS.	22 LBS.	.063 T.I.R.	.081 T.I.R.
					4½ OZ. MAX. WEIGHT PER ASSEMBLY				

CLEARANCE BETWEEN BRAKE DRUM AND LININGS .015 $^{+.005}_{-.000}$ TOTAL WHEN ASSEMBLED OR RE-ADJUSTED.

STATIC BALANCE WEIGHTS IN EXCESS OF 0.5 OZ. TO BE DIVIDED EQUALLY AS POSSIBLE BETWEEN INSIDE AND OUTSIDE WHEEL FLANGES.

ALL WHEEL NUTS MUST BE HAND STARTED BEFORE USING POWER WRENCH TO PREVENT GALLING OR CROSS THREADING.

ASSEM. INSTRUCTIONS-TIRE TO WHEEL:
(1) LUBRICATE TIRE BEADS AND VALVE STEM ASSEMBLY WITH APPROVED LUBRICANT-SEE PROCESS CHART.
(2) IMMEDIATELY ASSEMBLE VALVE STEM AND TIRE TO WHEELS & INFLATE TO RECOMMENDED PRESSURE. INSTALLATION MUST BE MADE BEFORE LUBRICANT IS DRY.
(3) BLACK SIDEWALL TIRES TO BE MOUNTED WITH SERIAL NUMBER, MOLD NUMBERS, AND OTHER MANUFACTURING INFORMATION TOWARD CENTERLINE OF CAR.

MOTOR WHEEL CONSTRUCTION

DATE	CHANGE	REVISION RECORD
3-6-62		W.A.S. 10-74228
	A	391,97 NASS7001
	B	BRAKE CYL. REV.
	C	

No. 380580 — SHEET 1 OF 2 — LAST CHANGE B

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .03 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS
ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS F1-.030, F2-.06, F3-.09, F4-.12 ETC.
COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS
DO NOT SCALE

DATE DWN: FEB. 5, 1962 — DR.: R. SANFORD
SCALE: FULL
FIRST USED: 1963 3000-3100 — APPD.: J.R. [illegible]

LAYOUT-BRAKE AND WHEEL-FRONT

F-BM — PART NO. 380580

380580 — SHEET 1 OF 2 — LAST CHANGE B

SHEET 1 OF 2

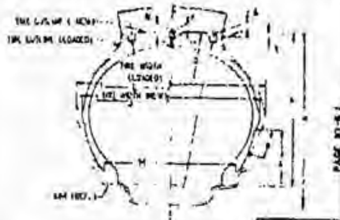
Car Model	Tire Size	Vendor	Ply	Ply Rating	Load Rating Max. 22 PSI	Load Rating 24 PSI	Rim Width and Section	Tire Width (New) *	Loaded Tire Width	Tire Section Height	Max. O.D.	Static Loaded Radius	Color	Band O.D. A	Band Width B	Tread Design No.
[illegible]	[illegible]	U.S. ROYAL	4	4	790	835	4½J	6.50	6.95	5.85	24.70	11.45	BLACKWALL			
		FIRESTONE	4	4	790	835	4½J	6.60	6.86	5.65	24.70	11.50	"			P440
		GOODRICH	4	4	790	835	4½J	6.59	6.82	5.90	24.80	11.59	"			P202T
		GOODYEAR	4	4	750	835	4½	6.50	7.00	5.86	25.07	11.60	"			GRS-8
[illegible]	[illegible]	U.S. ROYAL	4	4	790	835	4½J	6.50	6.35	5.85	24.70	11.45	WHITEWALL	17.70 / 16.50	.54 / .86	
		FIRESTONE	4	4	790	835	4½J	6.60	6.86	5.85	24.70	11.50	"	17.15	.90	P440
		GOODRICH	4	4	790	835	4½J	6.59	6.82	5.50	24.80	11.59	"	17.62 / 17.42	.90 / .80	P202T
		GOODYEAR	4	4	790	835	4½	6.50	7.00	5.86	25.07	11.60	"	17.38	.90	GRS-8
[illegible]	[illegible]	U.S. ROYAL	4	4	875	920	4½J	6.85	7.33	6.15	25.30	11.70	BLACKWALL			
		FIRESTONE	4	4	875	920	4½J	6.94	7.22	6.25	25.50	11.80	"			P440
		GOODRICH	4	4	875	920	4½J	6.83	7.20	6.21	25.42	11.85	"			P202T
		GOODYEAR	4	4	875	920	4½	6.80	7.40	6.22	25.81	11.80	"			GRS-8
[illegible]	[illegible]	U.S. ROYAL	4	4	875	920	4½J	6.85	7.33	6.15	25.30	11.70	WHITEWALL	17.70 / 16.80	.54 / .86	
		FIRESTONE	4	4	875	920	4½J	6.94	7.22	6.25	25.50	11.80	"	17.60	.90	P440
		GOODRICH	4	4	875	920	4½J	6.83	7.28	6.21	25.42	11.85	"	17.50 / 17.3[illegible]	.90 / .80	P202T
		GOODYEAR	4	4	875	920	4½	6.80	7.40	6.22	25.81	11.80	"	17.30	.90	GRS-8
[illegible]	[illegible]	U.S. ROYAL	4	4	835	880	4½K	6.52	7.08	5.81	25.75	12.00	BLACKWALL			
		FIRESTONE	4	4	835	880	4½J	6.64	6.95	5.85	25.70	11.90	"			P440
		GOODRICH	4	4	835	880	4½J						"			P204T
		GOODYEAR	4	4	835	880	4½	6.50	6.90	5.80	25.96	11.90	"			GRS-8
[illegible]	[illegible]	U.S. ROYAL	4	4	835	880	4½K	6.52	7.08	5.81	25.75	12.00	WHITEWALL	18.10 / 16.50	.54 / .86	
		FIRESTONE	4	4	835	880	4½J	6.64	6.90	5.85	25.70	11.90	"	18.30	.90	P440
		GOODRICH	4	4	835	880	4½J						"			P204T
		GOODYEAR	4	4	835	880	4½	6.50	6.50	5.80	25.56	11.90	"	18.38	.90	GRS-8
[illegible]	[illegible]	U.S. ROYAL	4	4	815	855	4½K	6.10	6.34	5.65	26.30	12.13	BLACKWALL			
		FIRESTONE	4	4	815	855	4½K	6.30	6.60	5.65	26.30	12.40	"			P440
		GOODRICH	4	4	815	855	4½J	6.27	6.63	5.64	26.28	12.38	"			P204T
		GOODYEAR	4	4	815	855	4½	6.20	6.70	5.64	26.62	12.20	"			GRS-8
[illegible]	[illegible]	U.S. ROYAL	4	4	815	855	4½K	6.10	6.34	5.65	26.30	12.13	WHITEWALL	20.30 / 19.56		
		FIRESTONE	4	4	815	855	4½K	6.31	6.60	5.65	26.30	12.40	"	19.50		P440
		GOODRICH	4	4	815	855	4½J	6.21	6.65	5.64	26.28	12.38	"	19.87 / 19.67		P204T
		GOODYEAR	4	4	815	855	4½	6.20	6.70	5.64	26.62	12.20	"	19.56		GRS-8
[illegible]	[illegible]	U.S. ROYAL	4	4	1115	1175	6K	8.10	8.72	6.60	27.60	12.58	BLACKWALL			
		FIRESTONE	4	4	1115	1175	6K	8.09	8.40	6.85	27.70	12.80	"			P440
		GOODRICH	4	4	1115	1175	6K	7.77	8.20	6.81	27.62	12.75	"			P204T
		GOODYEAR	4	4	1115	1175	6	8.00	8.40	6.825	28.04	12.70	"			GRS-8
[illegible]	[illegible]	U.S. ROYAL	4	4	1115	1175	6K	8.10	8.15	6.60	27.60	12.58	WHITEWALL	19.83 / 18.03	1.14 / 1.06	
		FIRESTONE	4	4	1115	1175	6K	8.09	8.40	6.85	27.60	12.80	"	19.15	1.10	P440
		GOODRICH	4	4	1115	1175	6K	7.77	8.20	6.81	27.60	12.75	"	19.50 / 18.10	1.10 / 1.00	P204T
		GOODYEAR	4	4	1115	1175	6	8.00	8.40	6.825	27.60	11.70	"	19.13	1.10	GRS-8
[illegible]	[illegible]	U.S. ROYAL	4	4	1205	1265	6K	8.35	8.34	7.05	28.10	12.73	BLACKWALL			
		FIRESTONE	4	4	1205	1265	6K	8.24	8.51	7.20	28.40	13.10	"			P440
		GOODRICH	4	4	1205	1265	6K	8.27	8.60	7.10	28.20	13.04	"			P204T
		GOODYEAR	4	4	1205	1265	6	8.20	8.80	7.15	28.73	13.00	"			GRS-8
[illegible]	[illegible]	U.S. ROYAL	4	4	1205	1265	6K	8.35	8.34	7.05	28.10	12.73	WHITEWALL	19.85 / 18.65	1.14 / 1.06	
		FIRESTONE	4	4	1205	1265	6K	8.24	8.57	7.40	28.40	13.10	"	19.15	1.10	P440
		GOODRICH	4	4	1205	1265	6K	8.23	8.60	7.10	28.20	13.04	"	19.89 / 19.59	1.10 / 1.00	P204T
		GOODYEAR	4	4	1205	1265	5	8.80	8.80	7.15	28.73	13.00	"	19.13	1.10	GRS-8
[illegible]	[illegible]	U.S. ROYAL	4	4	1230	1355	6K	8.53	9.14	7.30	28.60	13.00	BLACKWALL			
		FIRESTONE	4	4	1290	1355	6K	8.49	8.84	7.50	29.06	13.30	"			P440
		GOODRICH	4	4	1290	1355	6K	8.43	8.81	7.36	28.72	13.24	"			P204T
		GOODYEAR	4	4	1290	1355		8.40	9.30	7.45	29.35	13.20	"			GRS-8
[illegible]	[illegible]	U.S. ROYAL	4	4	1250	1355	6K	8.53	9.14	7.30	28.60	13.00	WHITEWALL	19.85 / 18.85	1.14 / 1.06	
		FIRESTONE	4	4	1290	1355	6K	8.49	8.84	7.50	29.00	13.30	"	19.40	1.10	P440
		GOODRICH	4	4	1290	1355	6K	8.43	8.81	7.36	28.72	13.24	"	19.73	1.10 / 1.00	P204T
		GOODYEAR	4	4	1290	1355	6	8.40	9.30	7.45	29.35	13.20	"	19.56	1.10	GRS-8
[illegible]	[illegible]	FIRESTONE	2	4	790	835	4½J	6.60	6.86	5.65	24.70	11.50	BLACKWALL			P440
[illegible]	[illegible]	FIRESTONE	2	4	790	835	4½J	6.60	6.86	5.65	24.70	11.50	WHITEWALL	17.15	.90	P440
[illegible]	[illegible]	FIRESTONE	2	4	875	920	4½J	6.94	7.22	6.25	25.50	11.80	BLACKWALL			P440
[illegible]	[illegible]	FIRESTONE	2	4	875	920	4½J	6.94	7.22	6.25	25.50	11.60	WHITEWALL	17.60	.90	P440
[illegible]	[illegible]	U.S. ROYAL	4	4	815	855	4½K	6.52		5.66	26.26	12.29	WHITEWALL	18.50	1.10	
		FIRESTONE	4	4	815	855	4½K	6.18		5.46	26.60	12.40	"	18.50	1.10	
		GOODRICH	4	4	815	855	4½J	6.15		5.64	26.28	12.33	"	18.50	1.10	
		GOODYEAR	4	4	815	855		6.57		5.48	[illegible]	12.70	"	18.50	1.10	

Vendor	Tread Design No.	Width at Shoulder C	Crown Radius D	Crown Shoulder Radial H	Crown Shoulder Variation	Shoulder Drop E	Tread Depth Base F	Tread Depth Outer G	Tread Stiff Durometer Scale	Cord Material	Denier	Dip Cost	Cord Cycle	Unloaded Max. Lateral	Unloaded Max. Radial	Loaded Max. Total Radial	Max. Variation	Tire Balance	Revs per Mile 30 MPH	50 MPH	70 MPH	Tire Weight
U.S. ROYAL		4.03	8.15				.330			RAYON				.063	.047			18 IN OZ	863			18.4
FIRESTONE	P440	4.38	11.50			.19	.330		55-60	RAYON	1650/2			.063	.045			18 IN OZ	857			
GOODRICH	P202T	4.06	18.00			.11	.325		55-62	RAYON	1100/2			.063	.045	.030 EST		18 IN OZ	845			18.2
GOODYEAR	GRS-8	4.00	9.00			.221	.335		55-61	RAYON	1100/2			.063	.045			18 IN OZ	852			17.4
U.S. ROYAL		4.03	8.15				.330			RAYON				.063	.047			18 IN OZ	863			19.5
FIRESTONE	P440	4.08	11.50			.19	.330		55-60	RAYON	1650/2			.063	.045			18 IN OZ	859			
GOODRICH	P202T	4.06	18.00			.11	.325		55-62	RAYON	1100/2			.063	.045	.030 EST		18 IN OZ	845			18.8
GOODYEAR	GRS-8	4.00	9.00			.221	.335		55-61	RAYON	1100/2			.063	.045			18 IN OZ	852			18.4
U.S. ROYAL		4.34	8.75				.333			RAYON				.063	.047			18 IN OZ	845			19.8
FIRESTONE	P440	4.33	10.80			.20	.330		55-60	RAYON	1650/2			.063	.045			18 IN OZ	843			
GOODRICH	P202T	4.36	21.00			.116	.330		55-62	RAYON	1100/2			.063	.045	.030 EST		18 IN OZ	826			20.3
GOODYEAR	GRS-8	4.306	5.50			.242	.340		59-61	RAYON	1100/2			.063	.045			18 IN OZ	837			19.4
U.S. ROYAL		4.34	8.75				.335			RAYON				.063	.047			18 IN OZ	845			20.5
FIRESTONE	P440	4.33	10.80			.20	.330		55-60	RAYON	1650/2			.063	.045			18 IN OZ	843			
GOODRICH	P202T	4.36	21.00			.116	.330		55-62	RAYON	1100/2			.063	.045	.030 EST		18 IN OZ	826			20.8
GOODYEAR	GRS-8	4.306	5.50			.242	.340		59-61	RAYON	1100/2			.063	.045			18 IN OZ	837			19.9
U.S. ROYAL		4.13	8.75				.330			RAYON				.063	.047			26 IN OZ	824			
FIRESTONE	P440	4.00	11.50			.19	.340		55-60	RAYON	1650/2			.063	.045			26 IN OZ	830			
GOODRICH	P204T									RAYON												
GOODYEAR	GRS-8	4.016	9.00			.221	.335		59-61	RAYON	1100/2			.063	.045			26 IN OZ	830			19.6
U.S. ROYAL		4.13	8.75				.330			RAYON				.063	.047			26 IN OZ	824			
FIRESTONE	P440	4.01	11.50			.19	.340		55-60	RAYON	1650/2			.063	.045			26 IN OZ	830			
GOODRICH	P204T									RAYON												
GOODYEAR	GRS-8	4.016	9.00			.221	.335		59-61	RAYON	1100/2			.063	.045			26 IN OZ	830			19.7
U.S. ROYAL		3.64	8.40				.330			RAYON				.063	.047			26 IN OZ	815			17.7
FIRESTONE	P440	4.01	10.50			.19	.320		55-60	RAYON	1650/2			.063	.045			26 IN OZ	796			
GOODRICH	P204T	3.85	10.25			.16	.340		55-62	RAYON	1100/2			.063	.045	.030 EST		26 IN OZ	791			19.2
GOODYEAR	GRS-8	3.696	9.00			.187	.330		59-61	RAYON	1100/2			.063	.045			26 IN OZ	816			19.0
U.S. ROYAL		3.64	8.40				.330			RAYON				.063	.047			26 IN OZ	815			18.2
FIRESTONE	P440	4.01	10.50			.19	.320		55-60	RAYON	1650/2			.063	.045			26 IN OZ	796			
GOODRICH	P204T	3.85	10.25			.16	.340		55-62	RAYON	1100/2			.063	.045	.030 EST		26 IN OZ	791			19.4
GOODYEAR	GRS-8	3.696	9.00			.187	.330		59-61	RAYON	1100/2			.063	.045			26 IN OZ	810			19.2
U.S. ROYAL		4.71	11.25				.345			RAYON				.063	.047			26 IN OZ	786			21.9
FIRESTONE	P440	4.51	13.00			.20	.340		55-60	RAYON	1650/2			.063	.045			26 IN OZ	771			
GOODRICH	P204T	4.73	11.50			.25	.372		55-62	RAYON	1100/2			.063	.045	.030 EST		26 IN OZ	768			25.1
GOODYEAR	GRS-8	4.772	10.75			.262	.350		59-61	RAYON	1100/2			.063	.045			26 IN OZ	778			23.9
U.S. ROYAL		4.71	11.25				.345			RAYON				.063	.047			26 IN OZ	786			22.7
FIRESTONE	P440	4.59	13.00			.20	.340		55-60	RAYON	1650/2			.063	.045			26 IN OZ	771			
GOODRICH	P204T	4.75	11.50			.25	.372		55-62	RAYON	1100/2			.063	.045	.030 EST		26 IN OZ	768			25.1
GOODYEAR	GRS-8	4.772	10.75			.262	.350		59-61	RAYON	1100/2			.063	.045			26 IN OZ	778			23.9
U.S. ROYAL		4.85	11.50				.350			RAYON				.063	.047			26 IN OZ	776			25.7
FIRESTONE	P440	4.80	13.30			.22	.350		55-60	RAYON	1650/2			.063	.045			26 IN OZ	754			
GOODRICH	P204T	5.04	12.00			.25	.376		55-62	RAYON	1100/2			.063	.045	.030 EST		26 IN OZ	751			27.0
GOODYEAR	GRS-8	4.944	11.00			.276	.353		59-61	RAYON	1650/2			.063	.045			26 IN OZ	760			25.8
U.S. ROYAL		4.85	11.50				.350			RAYON				.063	.047			26 IN OZ	776			26.7
FIRESTONE	P440	4.86	13.30			.22	.350		55-60	RAYON	1650/2			.063	.045			26 IN OZ	754			
GOODRICH	P204T	5.04	12.00			.25	.376		55-62	RAYON	1100/2			.063	.045	.030 EST		26 IN OZ	751			27.5
GOODYEAR	GRS-8	4.944	11.00			.276	.353		59-61	RAYON	1650/2			.063	.045			26 IN OZ	760			26.4
U.S. ROYAL		5.03	11.80				.355			RAYON				.063	.047			26 IN OZ	760			27.1
FIRESTONE	P440	4.98	14.70			.22	.350		55-60	RAYON	1650/2			.063	.045			26 IN OZ	743			
GOODRICH	P204T	5.18	11.50			.29	.380		55-62	RAYON	1650/2			.063	.045	.030 EST		26 IN OZ	739			29.5
GOODYEAR	GRS-8	5.408	11.50			.315	.360		59-61	RAYON	1650/2			.063	.045			26 IN OZ	749			28.7
U.S. ROYAL		5.03	11.80				.355			RAYON				.063	.047			26 IN OZ	760			28.1
FIRESTONE	P440	4.98	14.70			.22	.350		55-60	RAYON	1650/2			.063	.045			26 IN OZ	743			
GOODRICH	P204T	5.18	11.50			.25	.381		55-62	RAYON	1650/2			.063	.045	.030 EST		26 IN OZ	739			30.2
GOODYEAR	GRS-8	5.408	11.30			.315	.360		59-61	RAYON	1650/2			.063	.045			26 IN OZ	749			29.9
FIRESTONE	P440	4.00	11.50			.19	.330		55-60	RAYON	1650/2			.063	.045			15 IN OZ	857			
FIRESTONE	P440	4.08	11.50			.19	.330		55-60	RAYON	1650/2			.063	.045			18 IN OZ	859			
FIRESTONE	P440	4.33	10.80			.20	.330		55-60	RAYON	1650/2			.065	.045			18 IN OZ	848			
FIRESTONE	P440	4.33	10.80			.20	.330		55-60	RAYON	1650/2			.065	.045			18 IN OZ	843			
U.S. ROYAL		3.74	9.00							RAYON				.063	.045			26 IN OZ				
FIRESTONE		4.01	10.50							RAYON				.063	.045			26 IN OZ				
GOODRICH		3.85	10.55							RAYON				.063	.045			26 IN OZ				
GOODYEAR		4.00	10.00							RAYON				.063	.045			26 IN OZ				

* TIRE WIDTH WITH GROWTH

AT RATED LOAD:
TIRE TO BE CAPABLE OF RUNNING 100 MILES AT A SPEED OF 100 MPH AT AN OUTSIDE AIR TEMPERATURE OF NOT [illegible]

CHANGES IN SUPPLIERS TO BE APPROVED



[illegible]		[illegible]
[illegible]	[illegible]	FIRE LINE ADDED
[illegible]	[illegible]	[illegible] WAS [illegible]
[illegible]	[illegible]	13.04 WAS 13.40
[illegible]	[illegible]	SERIES ADDED

381143

DO NOT SCALE

CHART - TIRE

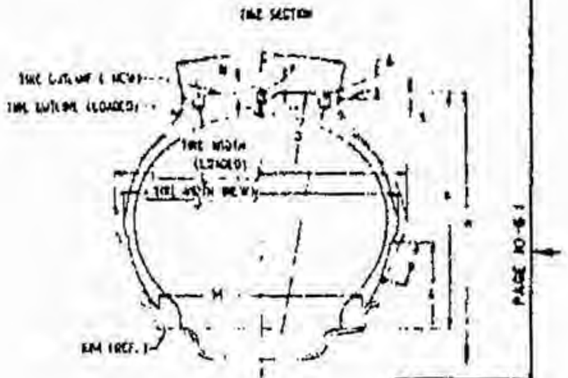
381143

Part Number	Tire Size	Vendor	Ply	Ply Rating	Load Rating Max. 22 PSI	Load Rating 24 PSI	Rim Width and Section K	Tire Width (New)	Loaded Tire Width (New)	Tire Section Height (New)	Max. O.D.	Static Loaded Radius 22 PSI	Color	Sidewall Band O.D. A	Sidewall Band Width B	Tread Design No.	Width at Shoulder C	Crown Radius D	Crown Thickness Normal	Crown Thickness Variation	Shoulder Drop E	Tread Depth Inner F	Tread Depth Outer G	Tread Stiff Durometer Range	Cord Material	Cord Design	Dip Cost	Cord Angle	Unloaded Max. Lateral	Unloaded Max. Radial	Loaded Max. Total Radial	Loaded Radial First Harmonic	Tire Balance (Without Balance)	Revs. per Mile 35 MPH	Revs. per Mile 55 MPH	Revs. per Mile 75 MPH	Tire Weight	
[illegible]	[illegible]	U.S. ROYAL	4	4	790	835	4½J	6.50	6.95	5.85	24.70	11.45	BLACKWALL				4.03	8.15				.330			RAYON				.063	.047			18 IN OZ	863			18.4	(R)
	"	FIRESTONE	4	4	790	835	4½J	6.60	6.86	5.85	24.70	11.50	"			P440	4.08	11.50			.19	.330		55-60	RAYON	1650/2			.063	.045			18 IN OZ	857				(F)
	"	GOODRICH	4	4	790	835	4½J	6.59	6.82	5.90	24.80	11.59	"			P202T	4.00	14.00			.11	.325		55-62	RAYON	1100/2			.063	.045	.030 EST		18 IN OZ	845			18.2	(G)
	"	GOODYEAR	4	4	790	835	4½	6.50	7.00	5.86	25.07	11.60	"			GRS-8	4.00	9.00			.221	.335		59-61	RAYON	1100/2			.063	.045			18 IN OZ	852			17.4	
[illegible]	[illegible]	U.S. ROYAL	4	4	790	835	4½J	6.50	6.95	5.85	24.70	11.45	WHITEWALL	17.70/16.90	.94/.86		4.03	8.15				.330			RAYON				.063	.047			18 IN OZ	863			19.5	(R)
	"	FIRESTONE	4	4	790	835	4½J	6.60	6.86	5.85	24.70	11.50	"	17.15	.90	P440	4.08	11.50			.19	.330		55-60	RAYON	1650/2			.063	.045			18 IN OZ	859				(F)
	"	GOODRICH	4	4	790	835	4½J	6.59	6.82	5.90	24.80	11.59	"	17.62/17.42	.90/.80	P202T	4.06	14.00			.11	.325		55-62	RAYON	1100/2			.063	.045	.030 EST		18 IN OZ	845			18.6	(G)
	"	GOODYEAR	4	4	790	835	4½	6.50	7.00	5.86	25.07	11.60	"	17.38	.90	GRS-8	4.00	9.00			.221	.335		59-61	RAYON	1100/2			.063	.045			18 IN OZ	852			18.4	
[illegible]	[illegible]	U.S. ROYAL	4	4	875	920	4½J	6.85	7.33	6.15	25.30	11.70	BLACKWALL				4.34	8.75				.333			RAYON				.063	.047			18 IN OZ	845			19.8	(R)
	"	FIRESTONE	4	4	875	920	4½J	6.94	7.22	6.25	25.50	11.80	"			P440	4.33	10.80			.20	.330		55-60	RAYON	1650/2			.063	.045			18 IN OZ	843				(F)
	"	GOODRICH	4	4	875	920	4½J	6.83	7.28	6.21	25.42	11.85	"			P202Y	4.36	21.00			.116	.330		55-62	RAYON	1100/2			.063	.045	.030 EST		18 IN OZ	826			20.3	(G)
	"	GOODYEAR	4	4	875	920	4½	6.80	7.40	6.22	25.81	11.80	"			GRS-8	4.306	5.90			.242	.340		59-61	RAYON	1100/2			.063	.045			18 IN OZ	837			19.4	
[illegible]	[illegible]	U.S. ROYAL	4	4	875	920	4½J	6.85	7.33	6.15	25.30	11.70	WHITEWALL	17.70/16.80	.94/.86		4.34	8.75				.335			RAYON				.063	.047			18 IN OZ	845			20.5	(R)
	"	FIRESTONE	4	4	875	920	4½J	6.94	7.22	6.25	25.50	11.80	"	17.60	.90	P440	4.33	10.80			.20	.330		55-60	RAYON	1650/2			.063	.045			18 IN OZ	843				(F)
	"	GOODRICH	4	4	875	920	4½J	6.83	7.28	6.21	25.42	11.85	"	17.52/17.32	.90/.80	P202Y	4.36	21.00			.116	.330		55-62	RAYON	1100/2			.063	.045	.030 EST		18 IN OZ	826			20.6	(G)
	"	GOODYEAR	4	4	875	920	4½	6.80	7.40	6.22	25.81	11.60	"	17.36	.90	GRS-8	4.306	5.90			.242	.340		59-61	RAYON	1100/2			.063	.045			18 IN OZ	837			19.9	
[illegible]	[illegible]	U.S. ROYAL	4	4	835	880	4½K	6.52	7.08	5.81	25.75	12.00	BLACKWALL				4.13	8.75				.330			RAYON				.063	.047			26 IN OZ	824				
	"	FIRESTONE	4	4	835	880	4½J	6.64	6.90	5.85	25.70	11.90	"			P440	4.00	11.50			.19	.340		55-60	RAYON	1650/2			.063	.045			26 IN OZ	830				
	"	GOODRICH	4	4	835	880	4½J						"			P204Y									RAYON													
	"	GOODYEAR	4	4	835	880	4½	6.50	6.90	5.80	25.96	11.90	"			GRS-8	4.016	9.00			.221	.335		59-61	RAYON	1100/2			.063	.045			26 IN OZ	836			19.6	
[illegible]	[illegible]	U.S. ROYAL	4	4	835	880	4½K	6.52	7.08	5.81	25.75	12.00	WHITEWALL	18.10/18.30	.94/.86		4.13	8.75				.330			RAYON				.063	.047			26 IN OZ	824				
	"	FIRESTONE	4	4	835	880	4½J	6.64	6.90	5.85	25.70	11.90	"	18.30	.90	P440	4.05	11.50			.19	.340		55-60	RAYON	1650/2			.063	.045			26 IN OZ	830				
	"	GOODRICH	4	4	835	880	4½J						"			P204T									RAYON													
	"	GOODYEAR	4	4	835	880	4½	6.50	6.90	5.80	25.96	11.90	"	18.38	.90	GRS-8	4.016	9.00			.221	.335		59-61	RAYON	1100/2			.063	.045			26 IN OZ	836			19.7	
[illegible]	[illegible]	U.S. ROYAL	4	4	815	855	4½K	6.10	6.98	5.65	26.30	12.13	BLACKWALL				3.64	8.40				.330			RAYON				.063	.047			26 IN OZ	815			17.7	
	"	FIRESTONE	4	4	815	855	4½K	6.32	6.60	5.65	26.30	12.40	"			P440	4.01	10.90			.19	.320		55-60	RAYON	1650/2			.063	.045			26 IN OZ	796				
	"	GOODRICH	4	4	815	855	4½J	6.27	6.65	5.64	26.28	12.38	"			P204T	3.85	10.25			.16	.340		55-62	RAYON	1100/2			.063	.045	.030 EST		26 IN OZ	791			19.2	
	"	GOODYEAR	4	4	815	855	4½	6.20	6.70	5.64	26.62	12.20	"			GRS-8	3.696	9.00			.187	.330		59-61	RAYON	1100/2			.063	.045			26 IN OZ	816			19.0	
[illegible]	[illegible]	U.S. ROYAL	4	4	815	855	4½K	6.10	6.98	5.65	26.30	12.13	WHITEWALL	20.36/19.54			3.64	8.40				.330			RAYON				.063	.047			26 IN OZ	815			18.2	
	"	FIRESTONE	4	4	815	855	4½K	6.32	6.60	5.65	26.30	12.40	"	19.50		P440	4.01	10.90			.19	.320		55-60	RAYON	1650/2			.063	.045			26 IN OZ	796				
	"	GOODRICH	4	4	815	855	4½J	6.27	6.65	5.64	26.28	12.38	"	19.87/19.67		P204T	3.85	10.25			.16	.340		55-62	RAYON	1100/2			.063	.045	.030 EST		26 IN OZ	791			19.4	
	"	GOODYEAR	4	4	815	855	4½	6.20	6.70	5.64	26.62	12.20	"	19.56		GRS-8	3.696	9.00			.187	.330		59-61	RAYON	1100/2			.063	.045			26 IN OZ	810			19.7	
[illegible]	[illegible]	U.S. ROYAL	4	4	1115	1175	6K	8.10	8.75	6.80	27.60	12.58	BLACKWALL				4.71	11.25				.345			RAYON				.063	.047			26 IN OZ	780			21.8	
	"	FIRESTONE	4	4	1115	1175	6K	8.09	8.40	6.85	27.70	12.80	"			P440	4.57	13.00			.20	.340		55-60	RAYON	1650/2			.063	.045			26 IN OZ	771				
	"	GOODRICH	4	4	1115	1175	6K	7.77	8.20	6.81	27.62	12.75	"			P204T	4.75	11.50			.25	.372		55-62	RAYON	1100/2			.053	.045	.030 EST		26 IN OZ	768			23.1	
	"	GOODYEAR	4	4	1115	1175	6	8.00	8.40	6.825	28.06	12.70	"			GRS-8	4.772	10.75			.262	.350		59-61	RAYON	1100/2			.063	.043			26 IN OZ	778			23.9	
[illegible]	[illegible]	U.S. ROYAL	4	4	1115	1175	6K	8.10	8.75	6.80	27.60	12.58	WHITEWALL	19.83/18.65	1.14/1.06		4.71	11.25				.345			RAYON				.063	.047			26 IN OZ	766			24.7	
	"	FIRESTONE	4	4	1115	1175	6K	8.09	8.40	6.85	27.60	12.80	"	19.15	1.10	P440	4.59	13.00			.20	.340		55-60	RAYON	1650/2			.063	.045			26 IN OZ	771				
	"	GOODRICH	4	4	1115	1175	6K	7.77	8.20	6.81	27.60	12.75	"	19.50/19.30	1.10/1.00	P204T	4.75	11.50			.25	.372		55-62	RAYON	1100/2			.063	.045	.030 EST		26 IN OZ	768			25.1	
	"	GOODYEAR	4	4	1115	1175	6	8.00	8.40	6.825	27.60	12.70	"	19.13	1.10	GRS-8	4.772	10.75			.262	.350		59-61	RAYON	1100/2			.063	.045			26 IN OZ	778			23.9	
[illegible]	[illegible]	U.S. ROYAL	4	4	1205	1265	6K	8.35	8.94	7.05	28.10	12.75	BLACKWALL				4.85	11.50				.350			RAYON				.063	.047			26 IN OZ	776			25.7	
	"	FIRESTONE	4	4	1205	1265	6K	8.24	8.57	7.20	28.40	13.10	"			P440	4.80	13.30			.22	.350		55-60	RAYON	1650/2			.063	.045			26 IN OZ	754				
	"	GOODRICH	4	4	1205	1265	6K	8.27	8.60	7.10	28.20	13.04	"			P204T	5.04	12.00			.25	.376		55-62	RAYON	1100/2			.063	.045	.030 EST		26 IN OZ	751			27.0	
	"	GOODYEAR	4	4	1205	1265	6	8.20	8.80	7.15	28.73	13.00	"			GRS-8	4.944	11.00			.276	.353		59-61	RAYON	1650/2			.063	.045			26 IN OZ	760			25.9	
[illegible]	[illegible]	U.S. ROYAL	4	4	1205	1265	6K	8.35	8.94	7.05	28.10	12.75	WHITEWALL	19.85/18.65	1.14/1.06		4.85	11.50				.350			RAYON				.063	.047			26 IN OZ	776			26.7	
	"	FIRESTONE	4	4	1205	1265	6K	8.24	8.57	7.20	28.40	13.10	"	19.15	1.10	P440	4.86	13.30			.22	.350		55-60	RAYON	1650/2			.063	.045			26 IN OZ	754				
	"	GOODRICH	4	4	1205	1265	6K	8.27	8.60	7.10	28.20	13.04	"	19.89/19.69	1.10/1.00	P204T	5.04	12.00			.25	.376		55-62	RAYON	1100/2			.063	.045	.030 EST		26 IN OZ	751			27.5	
	"	GOODYEAR	4	4	1205	1265	6	8.20	8.80	7.15	28.73	13.00	"	19.13	1.10	GRS-8	4.944	11.00			.276	.353		59-61	RAYON	1650/2			.063	.045			26 IN OZ	760			26.4	
[illegible]	[illegible]	U.S. ROYAL	4	4	1290	1355	6K	8.55	9.14	7.30	28.60	13.00	BLACKWALL				5.03	11.80				.355			RAYON				.063	.047			26 IN OZ	760			27.1	
	"	FIRESTONE	4	4	1290	1355	6K	8.49	8.84	7.50	29.00	13.30	"			P440	4.98	14.70			.22	.350		55-60	RAYON	1650/2			.063	.045			26 IN OZ	743				
	"	GOODRICH	4	4	1290	1355	6K	8.43	8.81	7.36	28.72	13.24	"			P204T	5.18	11.50			.29	.380		55-62	RAYON	1650/2			.063	.045	.030 EST		26 IN OZ	739			29.9	
	"	GOODYEAR	4	4	1290	1355		8.40	9.30	7.45	29.35	13.20	"			GRS-8	5.408	11.50			.315	.360		59-61	RAYON	1650/2			.053	.045			26 IN OZ	749			28.7	
[illegible]	[illegible]	U.S. ROYAL	4	4	1290	1355	6K	8.55	9.14	7.30	28.60	13.00	WHITEWALL	19.85/18.65	1.14/1.06		5.03	11.80				.355			RAYON				.063	.047			26 IN OZ	760			28.1	
	"	FIRESTONE	4	4	1290	1355	6K	8.49	8.84	7.50	29.00	13.30	"	19.40	1.10	P440	4.98	14.70			.22	.350		55-60	RAYON	1650/2			.063	.045			26 IN OZ	743				
	"	GOODRICH	4	4	1290	1355	6K	8.43	8.81	7.36	28.72	13.24	"	19.73	1.10/1.00	P204T	5.18	11.50			.25	.381		55-62	RAYON	1650/2			.063	.045	.030 EST		26 IN OZ	739			30.2	
	"	GOODYEAR	4	4	1290	1355	6	8.40	9.30	7.45	29.35	13.20	"	19.56	1.10	GRS-8	5.408	11.50			.315	.360		59-61	RAYON	1650/2			.063	.045			26 IN OZ	749			29.9	
[illegible]	[illegible]	FIRESTONE	2	4	790	835	4½J	6.60	6.86	5.85	24.70	11.50	BLACKWALL			P440	4.00	11.50			.19	.330		55-60	RAYON	1650/2			.063	.045			18 IN OZ	857				(F)
[illegible]	[illegible]	FIRESTONE	2	4	790	835	4½J	6.60	6.86	5.85	24.70	11.50	WHITEWALL	17.15	.90	P440	4.08	11.50			.19	.330		55-60	RAYON	1650/2			.063	.045			18 IN OZ	859				(F)
[illegible]	[illegible]	FIRESTONE	2	4	875	920	4½J	6.94	7.22	6.25	25.50	11.80	BLACKWALL			P440	4.33	10.80			.20	.330		55-60	RAYON	1650/2			.063	.045			18 IN OZ	843				(F)
[illegible]	[illegible]	FIRESTONE	2	4	875	920	4½J	6.94	7.22	6.25	25.50	11.80	WHITEWALL	17.60	.90	P440	4.33	10.80			.20	.330		55-60	RAYON	1650/2			.063	.045			18 IN OZ	843				(F)
[illegible]	[illegible]	US ROYAL	4	4	815	855	4½K	6.32		5.66	26.86	12.29	WHITEWALL	18.50	1.10		3.74	9.00							RAYON				.063	.046			26 IN OZ					
		FIRESTONE	4	4	815	855	4½K	6.18		5.82	26.60	12.40	"	18.50	1.10		4.01	10.80							RAYON				.063	.045			26 IN OZ					
		GOODRICH	4	4	815	855	4½J	6.15		5.64	26.28	12.35	"	18.50	1.10		3.85	10.25							RAYON				.053	.045			26 IN OZ					
		GOODYEAR	4	4	815	855		6.57		5.88	26.61	12.20	"	18.50	1.10		4.00	10.00							RAYON				.063	.045			26 IN OZ					

* TIRE WIDTH WITH GROWTH

AT RATED LOAD:
TIRE TO BE CAPABLE OF RUNNING 100 MILES AT A SPEED OF 100 MPH AT AN OUTSIDE AIR TEMPERATURE OF 80°F MINIMUM.

CHANGES IN SAMPLES TO BE APPROVED



381143

DO NOT SCALE

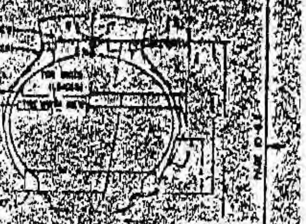
CHART - TIRE

381143

OVERSISZE VERSION - Page 9

Part Number	Mfr. Part	Vendor	Ply	Ply Rating	Load Rating Max. 24 PSI	Load Rating 28 PSI	Rim Width and Section	Tire Width	Loaded Tire Width	Tire Section Height	Max. O.D.	Static Loaded Radius	Sidewall Color	Band O.D. A	Band Width B	Tread Design No.	Width at Shoulder C	Crown Radius D	Crown Thickness Normal	Crown Thickness Variation	Shoulder Drop E	Tread Depth Inner F	Tread Depth Outer G	Tread Stock Durometer Range	Cord Material	Denier	End Count	Cord Angle	Runout Unloaded Max. Lateral	Runout Unloaded Max. Radial	Runout Loaded Max. Total Radial	Max. Radial 1st Harmonic	Tire Balance	Revs per Mile 35 MPH	55 MPH	70 MPH	Tire Weight
[illegible]	[illegible]	U.S. ROYAL	4	4	790	835	4½J	6.50	6.35	5.45	24.70	11.45	BLACKWALL				4.03	8.15				.330			RAYON				.063	.047			18 IN.OZ.	863			18.4
	"	FIRESTONE	4	4	790	835	4½J	6.40	6.84	5.85	24.70	11.50	"			P440	4.08	11.50			.19	.330		55-60	RAYON	1650/2			.063	.045			18 IN.OZ.	857			
	"	GOODRICH	4	4	790	835	4½J	6.58	6.62	5.90	24.80	11.59	"			P202T	4.06	14.00 CONTOURED			.11	.325		55-62	RAYON	1100/2			.063	.045	.030 EST.		18 IN.OZ.	845			18.2
	"	GOODYEAR	4	4	790	835	4½	6.30	7.00	5.86	25.07	11.60	"			GRS-0	4.00	9.00			.221	.335		59-61	RAYON	1100/2			.063	.045			18 IN.OZ.	852			17.4
[illegible]	[illegible]	U.S. ROYAL	4	4	790	835	4½J	6.50	6.35	5.85	24.70	11.45	WHITEWALL	17.70 / 16.80	.94 / .86		4.03	8.15				.330			RAYON				.063	.047			18 IN.OZ.	863			19.5
	"	FIRESTONE	4	4	790	835	4½J	6.60	6.84	5.85	24.70	11.50	"	17.15	.90	P440	4.06	11.50			.19	.330		55-60	RAYON	1650/2			.063	.045			18 IN.OZ.	859			
	"	GOODRICH	4	4	790	835	4½J	6.55	6.82	5.90	24.80	11.59	"	17.62 / 17.41	.90 / .80	P202T	4.06	14.00 CONTOURED			.11	.325		55-62	RAYON	1100/2			.063	.045	.030 EST.		18 IN.OZ.	845			18.6
	"	GOODYEAR	4	4	790	835	4½	6.58	7.00	5.86	25.07	11.60	"	17.38	.90	GR3-0	4.00	9.00			.221	.335		59-61	RAYON	1100/2			.063	.045			18 IN.OZ.	832			18.8
[illegible]	[illegible]	U.S. ROYAL	4	4	875	920	4½J	6.65	7.33	6.15	25.30	11.70	BLACKWALL				4.34	8.75				.333			RAYON				.063	.047			18 IN.OZ.	843			19.8
	"	FIRESTONE	4	4	875	930	4½J	6.94	7.22	6.25	25.50	11.80	"			P440	4.33	10.80			.20	.330		55-60	RAYON	1650/2			.063	.045			18 IN.OZ.	843			
	"	GOODRICH	4	4	875	920	4½J	6.83	7.28	6.21	25.42	11.85	"			PZ02T	4.36	21.00 CONTOURED			.116	.330		55-62	RAYON	1100/2			.063	.045	.030 EST.		18 IN.OZ.	826			20.3
	"	GOODYEAR	4	4	875	920	4½	6.60	7.40	6.22	25.81	11.80	"			GRS-6	4.306	5.90			.242	.340		59-61	RAYON	1100/2			.063	.045			18 IN.OZ.	837			19.4
[illegible]	[illegible]	U.S. ROYAL	4	4	875	920	4½J	6.45	7.33	6.15	25.30	11.70	WHITEWALL	17.78 / 16.80	.94 / .86		4.34	8.75				.335			RAYON				.063	.047			18 IN.OZ.	843			20.3
	"	FIRESTONE	4	4	875	920	4½J	6.94	7.22	6.25	25.50	11.80	"	17.60	.90	P440	4.33	10.80			.20	.330		55-60	RAYON	1650/2			.063	.045			18 IN.OZ.	843			
	"	GOODRICH	4	4	875	920	4½J	6.83	7.20	6.21	25.42	11.85	"	17.32 / 17.32	.90 / .80	P202T	4.36	21.00 CONTOURED			.116	.330		55-62	RAYON	1100/2			.063	.045	.030 EST.		15 IN.OZ.	826			20.8
	"	GOODYEAR	4	4	875	920	4½	6.60	7.40	6.22	25.81	11.60	"	17.38	.90	GRS-6	4.306	5.90			.242	.340		59-61	RAYON	1100/2			.063	.045			18 IN.OZ.	837			19.9
[illegible]	[illegible]	U.S. ROYAL	4	4	835	880	4½K	6.32	7.08	5.81	25.75	12.00	BLACKWALL				4.13	8.75				.330			RAYON				.063	.047			26 IN.OZ.	824			
	"	FIRESTONE	4	4	835	880	4½J	6.64	6.90	5.85	25.30	11.50	"			P440	4.00	11.50			.19	.340		55-60	RAYON	1650/2			.063	.045			26 IN.OZ.	830			
	"	GOODRICH	4	4	835	880	4½J						"			P204T									RAYON												
	"	GOODYEAR	4	4	835	880	4½	6.50	6.90	5.80	25.36	11.80	"			GAS-6	4.016	9.00			.221	.335		59-61	RAYON	1100/2			.063	.045			26 IN.OZ.	830			18.6
[illegible]	[illegible]	U.S. ROYAL	4	4	835	880	4½K	6.32	7.08	5.81	25.75	12.00	WHITEWALL	18.48 / 18.30	.94 / .86		4.13	8.75				.330			RAYON				.063	.047			26 IN.OZ.	824			
	"	FIRESTONE	4	4	835	880	4½J	6.64	6.90	5.85	25.70	11.50	"	18.50	.90	P440	4.00	11.50			.19	.340		55-60	RAYON	1650/2			.063	.045			26 IN.OZ.	830			
	"	GOODRICH	4	4	835	880	4½J						"			P204T									RAYON												
	"	GOODYEAR	4	4	835	880	4½	6.50	6.90	5.80	25.36	11.80	"	18.38	.90	GRS-6	4.016	9.00			.221	.335		59-61	RAYON	1100/2			.063	.045			26 IN.OZ.	830			19.7
[illegible]	[illegible]	U.S. ROYAL	4	4	815	855	4½K	6.10	6.90	5.65	26.30	12.13	BLACKWALL				3.64	8.40				.330			RAYON				.063	.047			26 IN.OZ.	815			17.7
	"	FIRESTONE	4	4	815	855	4½K	6.32	6.60	5.65	26.30	12.40	"			P440	4.01	10.80			.19	.320		55-60	RAYON	1650/2			.063	.045			26 IN.OZ.	796			
	"	GOODRICH	4	4	815	855	4½J	6.27	6.65	5.64	26.28	12.38	"			P204T	3.85	10.25			.16	.340		55-62	RAYON	1100/2			.063	.045	.030 EST.		26 IN.OZ.	791			18.4
	"	GOODYEAR	4	4	815	855	4½	6.20	6.70	5.64	26.62	12.80	"			GRS-8	3.694	9.00			.167	.330		59-61	RAYON	1100/2			.063	.045			26 IN.OZ.	810			18.9
[illegible]	[illegible]	U.S. ROYAL	4	4	815	855	4½K	6.10	6.88	5.65	26.30	12.13	WHITEWALL	20.35 / 19.36			3.64	8.40				.330			RAYON				.063	.047			26 IN.OZ.	815			18.2
	"	FIRESTONE	4	4	815	855	4½K	6.32	6.60	5.65	26.30	12.40	"	19.50		P440	4.01	10.90			.19	.320		55-60	RAYON	1650/2			.063	.045			26 IN.OZ.	796			
	"	GOODRICH	4	4	815	835	4½J	6.27	6.65	5.64	26.28	12.38	"	19.87 / 19.67		P204T	3.85	10.25			.16	.340		55-62	RAYON	1100/2			.063	.045	.030 EST.		26 IN.OZ.	791			18.6
	"	GOODYEAR	4	4	815	855	4½	6.30	6.70	5.69	26.42	12.20	"	19.56		GRS-8	3.694	9.00			.167	.330		59-61	RAYON	1100/2			.063	.045			26 IN.OZ.	810			19.2
[illegible]	[illegible]	U.S. ROYAL	4	4	1115	1175	6K	8.10	8.75	6.00	27.60	12.54	BLACKWALL				4.71	11.25				.345			RAYON				.063	.047			26 IN.OZ.	784			21.9
	"	FIRESTONE	4	4	1115	1175	6K	8.05	8.40	6.65	27.70	12.80	"			P440	4.67	13.00			.20	.340		55-60	RAYON	1650/2			.063	.045			26 IN.OZ.	771			
	"	GOODRICH	4	4	1115	1175	6K	7.77	8.20	6.81	27.62	12.75	"			P204T	4.75	11.50			.25	.372		55-62	RAYON	1100/2			.063	.045	.030 EST.		26 IN.OZ.	768			21.2
	"	GOODYEAR	4	4	1115	1175	6	8.06	8.40	6.875	28.06	12.70	"			GRS-8	4.772	10.75			.262	.330		59-61	RAYON	1100/2			.063	.045			26 IN.OZ.	778			21.6
[illegible]	[illegible]	U.S. ROYAL	4	4	1115	1175	6K	8.10	8.35	6.80	27.60	12.54	WHITEWALL	19.83 / 18.65	1.14 / 1.06		4.71	11.25				.345			RAYON				.063	.047			26 IN.OZ.	786			21.9
	"	FIRESTONE	4	4	1115	1175	6K	8.09	8.40	6.85	27.60	12.80	"	19.15	1.10	P440	4.58	13.00			.20	.340		55-60	RAYON	1650/2			.063	.045			26 IN.OZ.	771			
	"	GOODRICH	4	4	1115	1175	6K	7.77	8.40	6.81	27.60	12.75	"	19.50 / 19.37	1.20 / 1.00	P204T	4.75	11.50			.25	.372		55-62	RAYON	1100/2			.063	.045	.030 EST.		26 IN.OZ.	768			[illegible]
	"	GOODYEAR	4	4	1115	1175	6	8.00	8.40	6.825	27.60	12.70	"	19.13	1.10	GRS-8	4.772	10.75			.262	.330		59-61	RAYON	1100/2			.063	.045			26 IN.OZ.	770			23.5
[illegible]	[illegible]	U.S. ROYAL	4	4	1205	1265	6K	8.35	8.94	7.05	28.10	12.75	BLACKWALL				4.85	11.50				.350			RAYON				.063	.047			26 IN.OZ.	776			21.7
	"	FIRESTONE	4	4	1205	1265	6K	8.24	8.57	7.20	28.40	13.10	"			P440	4.80	13.30			.22	.350		55-60	RAYON	1650/2			.063	.045			26 IN.OZ.	754			
	"	GOODRICH	4	4	1205	1265	6K	8.27	8.60	7.10	28.20	13.04	"			P204T	5.04	11.00			.25	.376		55-62	RAYON	1100/2			.063	.045	.030 EST.		26 IN.OZ.	751			27.0
	"	GOODYEAR	4	4	1205	1265	6	8.20	8.80	7.15	28.73	13.00	"			GRS-8	4.544	11.00			.274	.353		59-61	RAYON	1650/2			.063	.045			26 IN.OZ.	760			23.9
[illegible]	[illegible]	U.S. ROYAL	4	4	1205	1265	6K	8.35	8.94	7.05	28.10	12.75	WHITEWALL	19.85 / 18.65	1.14 / 1.06		4.85	11.50				.350			RAYON				.063	.047			26 IN.OZ.	776			21.7
	"	FIRESTONE	4	4	1205	1265	6K	8.24	8.57	7.20	28.40	13.16	"	19.15	1.10	P440	4.80	13.50			.22	.350		55-60	RAYON	1650/2			.063	.045			26 IN.OZ.	754			
	"	GOODRICH	4	4	1205	1265	6K	8.27	8.60	7.10	28.20	13.04	"	19.89 / 19.62	1.10 / 1.00	P204T	5.04	12.00			.25	.376		55-62	RAYON	1100/2			.063	.045	.030 EST.		26 IN.OZ.	751			27.5
	"	GOODYEAR	4	4	1205	1265	6	8.20	8.80	7.15	28.73	13.00	"	19.13	1.10	GRS-8	4.544	11.00			.276	.353		59-61	RAYON	1650/2			.063	.045			26 IN.OZ.	760			26.4
[illegible]	[illegible]	U.S. ROYAL	4	4	1290	1355	6K	8.55	9.14	7.30	28.60	13.00	BLACKWALL				5.03	11.80				.355			RAYON				.063	.047			26 IN.OZ.	760			27.1
	"	FIRESTONE	4	4	1290	1355	6K	8.49	8.84	7.50	29.00	13.30	"			P440	4.58	14.70			.22	.350		55-60	RAYON	1650/2			.063	.045			26 IN.OZ.	743			
	"	GOODRICH	4	4	1290	1355	6K	8.43	8.81	7.36	28.72	13.24	"			P204T	5.18	11.50			.29	.380		55-62	RAYON	1650/2			.063	.045	.030 EST.		26 IN.OZ.	735			29.3
	"	GOODYEAR	4	4	1290	1355		8.40	9.30	7.45	29.35	13.20	"			GRS-8	5.408	11.50			.315	.360		59-61	RAYON	1650/2			.063	.045			26 IN.OZ.	749			28.7
[illegible]	[illegible]	U.S. ROYAL	4	4	1290	1355	6K	8.55	9.14	7.30	28.60	13.00	WHITEWALL	19.35 / 18.65	1.14 / 1.06		5.03	11.80				.355			RAYON				.063	.047			26 IN.OZ.	760			28.1
	"	FIRESTONE	4	4	1290	1355	6K	8.48	8.84	7.50	29.00	13.30	"	19.40	1.10	P440	4.58	14.30			.22	.350		55-60	RAYON	1650/2			.063	.045			26 IN.OZ.	743			
	"	GOODRICH	4	4	1290	1355	6K	8.48	8.81	7.36	28.72	13.24	"	19.73	1.10 / 1.00	P204T	5.18	11.50			.25	.381		55-62	RAYON	1650/2			.063	.045	.030 EST.		26 IN.OZ.	735			30.2
	"	GOODYEAR	4	4	1290	1356	6	8.40	9.30	7.45	29.35	13.20	"	19.56	1.10	GRS-8	5.408	11.50			.315	.360		59-61	RAYON	1650/2			.063	.045			26 IN.OZ.	749			23.3
[illegible]	[illegible]	FIRESTONE	Z	4	790	835	4½J	6.60	6.06	5.85	24.70	11.50	BLACKWALL			P440	4.06	11.50			.19	.330		55-60	RAYON	1650/2			.063	.045			18 IN.OZ.	857			
[illegible]	[illegible]	FIRESTONE	Z	4	760	855	4½J	6.60	6.06	5.85	24.70	11.50	WHITEWALL	17.15	.90	P440	4.05	11.50			.19	.330		55-60	RAYON	1650/2			.063	.045			18 IN.OZ.	859			
[illegible]	[illegible]	FIRESTONE	Z	4	875	920	4½J	6.94	7.22	6.25	25.50	11.60	BLACKWALL			P440	4.33	10.80			.20	.330		55-60	RAYON	1650/2			.063	.045			18 IN.OZ.	843			
[illegible]	[illegible]	FIRESTONE	Z	4	875	920	4½J	6.94	7.22	6.25	25.50	11.60	WHITEWALL	17.60	.90	P440	4.33	10.80			.20	.330		55-60	RAYON	1650/2			.063	.045			18 IN.OZ.	843			
[illegible]	[illegible]	U.S. ROYAL	4	4	815	855	4½K	6.22		5.66	26.26	12.29	WHITEWALL	18.50	1.10		3.76	9.00							RAYON				.063	.045			26 IN.OZ.				
	"	FIRESTONE	4	4	815	855	4½K	6.10		5.82	26.60	12.40	"	18.50	1.10		4.01	10.60							RAYON				.063	.045			26 IN.OZ.				
	"	GOODRICH	4	4	815	855	4½J	6.15		5.66	26.22	12.38	"	18.50	1.10		3.85	10.25							RAYON				.063	.045			26 IN.OZ.				
	"	GOODYEAR	4	4	815	855		6.57		5.88	26.41	12.70	"	18.50	1.10		4.00	10.00							RAYON				.063	.045			26 IN.OZ.				

* TIRE WIDTH (NEW) GROWTH



AT RATED LOAD—
TIRE TO BE CAPABLE OF RUNNING 100 MILES AT A SPEED OF 100 MPH AT AN OUTSIDE AIR TEMPERATURE OF 100°F MINIMUM.

CHANGES IN DESIGN TO BE APPROVED

DO NOT SCALE

DATE: OCTOBER 12, 1961 | SCALE: HALF

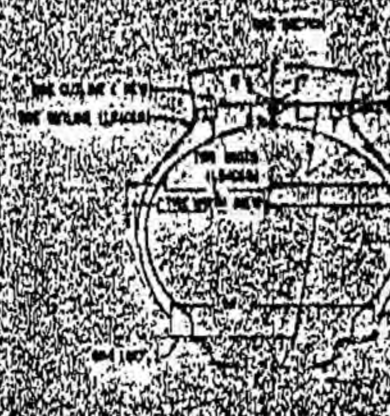
CHART – TIRE

381143

Part Number	Mfr. Size	Vendor	Ply	Ply Rating	Load Rating Max. @24 PSI	Load Rating @28 PSI	Rim Width and Section	Tire Width *	Loaded Tire Width	Tire Section Height	Max. O.D.	Static Loaded Radius	Color	Band O.D. A	Band Width B
376361	6.50-13	U.S. Royal	4	4	790	835	4-1/2 J	6.50	6.95	5.65	24.70	11.45	Blackwall		
	"	Firestone	4	4	790	835	4-1/2 J	6.60	6.86	5.85	24.70	11.50	"		
	"	Goodrich	4	4	790	835	4-1/2 J	6.58	6.62	5.90	24.80	11.59	"		
	"	Goodyear	4	4	790	835	4-1/2	6.50	7.00	5.86	25.07	11.60	"		
349176	6.50-13	U.S. Royal	4	4	790	835	4-1/2 J	6.50	6.95	5.85	24.70	11.45	Whitewall	17.20/16.80	.34/.86
	"	Firestone	4	4	790	835	4-1/2 J	6.60	6.86	5.85	24.70	11.50	"	17.15	.90
	"	Goodrich	4	4	790	835	4-1/2 J	6.39	6.82	5.90	24.80	11.59	"	17.62/17.42	.30/.80
	"	Goodyear	4	4	790	835	4-1/2	6.50	7.00	5.86	25.07	11.60	"	17.38	.90
[illegible]	7.00-13	U.S. Royal	4	4	875	920	4-1/2 J	6.65	7.33	6.15	25.30	11.70	Blackwall		
	"	Firestone	4	4	875	920	4-1/2 J	6.94	7.22	6.25	25.50	11.80	"		
	"	Goodrich	4	4	875	920	4-1/2 J	6.83	7.28	6.21	25.42	11.85	"		
	"	Goodyear	4	4	875	920	4-1/2	6.60	7.40	6.22	25.81	11.80	"		
[illegible]	7.00-13	U.S. Royal	4	4	875	920	4-1/2 J	6.65	7.33	6.15	25.30	11.70	Whitewall	17.70/16.80	.34/.86
	"	Firestone	4	4	875	920	4-1/2 J	6.94	7.22	6.25	25.50	11.80	"	17.60	.90
	"	Goodrich	4	4	875	920	4-1/2 J	6.83	7.28	6.21	25.42	11.85	"	17.52/17.32	.30/.80
	"	Goodyear	4	4	875	920	4-1/2	6.60	7.40	6.22	25.81	11.80	"	17.38	.90
[illegible]	[illegible]	U.S. Royal	4	4	835	880	4-1/2 K	6.52	7.08	5.61	25.75	12.00	Blackwall		
	"	Firestone	4	4	835	880	4-1/2 J	6.64	6.90	5.85	25.30	11.50	"		
	"	Goodrich	4	4	835	880	4-1/2 J						"		
	"	Goodyear	4	4	835	880	4-1/2	6.50	6.90	5.80	25.34	11.80	"		
[illegible]	[illegible]	U.S. Royal	4	4	835	880	4-1/2 K	6.52	7.04	5.61	25.75	12.00	Whitewall	18.20/16.50	.34/.86
	"	Firestone	4	4	835	880	4-1/2 J	6.64	6.90	5.85	25.70	11.50	"	18.50	.90
	"	Goodrich	4	4	835	880	4-1/2 J						"		
	"	Goodyear	4	4	835	880	4-1/2	6.50	6.90	5.80	25.96	11.90	"	18.38	.90
[illegible]	[illegible]	U.S. Royal	4	4	815	855	4-1/2 K	6.10	6.80	5.65	26.30	12.13	Blackwall		
	"	Firestone	4	4	815	855	4-1/2 K	6.32	6.60	5.65	26.30	12.40	"		
	"	Goodrich	4	4	815	855	4-1/2 J	6.27	6.65	5.64	26.28	12.38	"		
	"	Goodyear	4	4	815	855	4-1/2	6.20	6.70	5.64	26.42	12.20	"		
[illegible]	[illegible]	U.S. Royal	4	4	815	855	4-1/2 K	6.10	6.80	5.65	26.30	12.13	Whitewall	20.35/19.36	
	"	Firestone	4	4	815	855	4-1/2 K	6.32	6.60	5.65	26.30	12.40	"	19.50	
	"	Goodrich	4	4	815	855	4-1/2 J	6.27	6.65	5.64	26.28	12.38	"	19.87/19.67	
	"	Goodyear	4	4	815	855	4-1/2	6.20	6.70	5.64	26.42	12.20	"	19.56	
[illegible]	[illegible]	U.S. Royal	4	4	1115	1175	6K	8.10	8.75	6.80	27.60	12.56	Blackwall		
	"	Firestone	4	4	1115	1175	6K	8.09	8.40	6.85	27.70	12.60	"		
	"	Goodrich	4	4	1115	1175	6K	7.77	8.70	6.81	27.62	12.75	"		
	"	Goodyear	4	4	1115	1175	6	8.06	8.40	6.825	28.06	12.70	"		
[illegible]	[illegible]	U.S. Royal	4	4	1115	1175	6K	8.10	8.75	6.80	27.60	12.56	Whitewall	19.65/18.65	1.14/1.06
	"	Firestone	4	4	1115	1175	6K	8.09	8.40	6.85	27.60	12.80	"	19.15	1.14
	"	Goodrich	4	4	1115	1175	6K	7.77	8.20	6.81	27.60	12.75	"	18.50/19.30	1.20/1.00
	"	Goodyear	4	4	1115	1175	6	8.00	8.40	6.825	27.60	12.70	"	19.13	1.10
[illegible]	[illegible]	U.S. Royal	4	4	1205	1265	6K	8.35	8.94	7.05	28.10	12.75	Blackwall		
	"	Firestone	4	4	1205	1265	6K	8.24	8.57	7.20	28.40	13.10	"		
	"	Goodrich	4	4	1205	1265	6K	8.27	8.60	7.10	28.20	13.04	"		
	"	Goodyear	4	4	1205	1265	6	8.20	8.80	7.15	28.73	13.00	"		
[illegible]	[illegible]	U.S. Royal	4	4	1205	1265	6K	8.35	8.94	7.05	28.10	12.75	Whitewall	19.85/18.85	1.14/1.06
	"	Firestone	4	4	1205	1265	6K	8.24	8.57	7.20	28.40	13.10	"	19.45	1.10
	"	Goodrich	4	4	1205	1265	6K	8.27	8.60	7.10	28.20	13.04	"	19.89/19.88	1.10/1.00
	"	Goodyear	4	4	1205	1265	6	8.20	8.80	7.15	28.73	13.00	"	19.13	1.10
[illegible]	[illegible]	U.S. Royal	4	4	1230	1355	6K	8.55	9.14	7.30	28.60	13.00	Blackwall		
	"	Firestone	4	4	1230	1355	6K	8.49	8.84	7.50	29.00	13.30	"		
	"	Goodrich	4	4	1230	1355	6K	8.43	8.81	7.36	28.72	13.24	"		
	"	Goodyear	4	4	1230	1355		8.40	9.30	7.43	29.35	13.20	"		
[illegible]	[illegible]	U.S. Royal	4	4	1230	1355	6K	8.55	9.14	7.30	28.60	13.00	Whitewall	19.35/18.45	1.14/1.06
	"	Firestone	4	4	1230	1355	6K	8.49	8.84	7.50	29.00	13.30	"	19.40	1.10
	"	Goodrich	4	4	1230	1355	6K	8.43	8.81	7.36	28.72	13.24	"	19.73	1.10/1.00
	"	Goodyear	4	4	1230	1355	6	8.40	9.30	7.45	29.35	13.20	"	19.56	1.10
(A) 381376	6.50-13	Firestone	2	4	790	835	4-1/2 J	6.60	6.86	5.85	24.70	11.50	Blackwall		
(A) 381079	6.50-13	Firestone	2	4	790	835	4-1/2 J	6.60	6.86	5.85	24.70	11.50	Whitewall	17.15	.90
(B) 381077	7.00-13	Firestone	2	4	875	920	4-1/2 J	6.94	7.22	6.25	25.50	11.80	Blackwall		
(B) 381078	7.00-13	Firestone	2	4	875	920	4-1/2 J	6.94	7.22	6.25	25.50	11.80	Whitewall	17.60	.90
(C) 135-380	[illegible]	U.S. Royal	4	4	815	855	4-1/2 K	6.22		5.66	26.76	12.29	Whitewall	18.50	1.10
	"	Firestone	4	4	815	855	4-1/2 K	6.10		5.82	26.60	12.40	"	18.50	1.10
	"	Goodrich	4	4	815	855	4-1/2 J	6.15		5.66	26.28	12.38	"	18.50	1.10
	"	Goodyear	4	4	815	855		6.57		5.82	26.41	12.70	"	18.50	1.10

Vendor	Tread Design No.	Width at Shoulder C	Crown Radius D	Crown Thickness Normal	Crown Thickness Variation	Shoulder Drop	Tread Depth Inner F	Tread Depth Outer G	Tread Stock Durometer Range	Cord Material	Denier	End Count	Cord Gauge	Unloaded Max. Lateral	Unloaded Max. Radial	Loaded Max. Total Radial	Max. Radial 1st Harmonic	Tire Balance	Revs. per Mile 30 MPH	55 MPH	70 MPH	Tire Weight	
U.S. Royal		4.03	8.15				.330			RAYON				.063	.047			18 IN.OZ.	863			18.4	(A)
Firestone	P440	4.08	11.50			.19	.330		55-60	RAYON	1650/2			.063	.045			18 IN.OZ.	857				(A)
Goodrich	P202T	4.06	14.00			.11	.325		55-62	RAYON	1100/2			.063	.045	.030 EST.		18 IN.OZ.	845			18.2	(A)
Goodyear	GRS-D	4.00	5.00			.221	.335		59-61	RAYON	1100/2			.063	.045			18 IN.OZ.	852			17.4	
U.S. Royal		4.03	8.15				.330			RAYON				.063	.047			18 IN.OZ.	863			19.5	(A)
Firestone	P440	4.08	11.50			.19	.330		55-60	RAYON	1650/2			.063	.045			18 IN.OZ.	859				(A)
Goodrich	P202T	4.06	14.00			.11	.325		55-62	RAYON	1100/2			.063	.045	.030 EST.		18 IN.OZ.	845			18.6	(A)
Goodyear	GRS-D	4.00	9.00			.221	.335		59-61	RAYON	1100/2			.063	.045			18 IN.OZ.	852			18.6	
U.S. Royal		4.34	8.75				.335			RAYON				.063	.047			18 IN.OZ.	845			19.4	(A)
Firestone	P440	4.33	10.80			.20	.330		55-60	RAYON	1650/2			.063	.045			18 IN.OZ.	843				(A)
Goodrich	P202T	4.36	21.00			.116	.330		55-62	RAYON	1100/2			.063	.045	.030 EST.		18 IN.OZ.	826			20.3	(A)
Goodyear	GRS-8	4.306	5.90			.242	.340		59-61	RAYON	1100/2			.063	.045			18 IN.OZ.	837			19.4	
U.S. Royal		4.34	8.75				.335			RAYON				.063	.047			18 IN.OZ.	843			20.3	(A)
Firestone	P440	4.33	10.80			.20	.330		55-60	RAYON	1650/2			.063	.045			18 IN.OZ.	843				(A)
Goodrich	P202T	4.36	21.00			.116	.330		55-62	RAYON	1100/2			.063	.045	.030 EST.		18 IN.OZ.	826			20.8	(A)
Goodyear	GRS-8	4.306	5.90			.242	.340		59-61	RAYON	1100/2			.063	.045			18 IN.OZ.	837			19.9	
U.S. Royal		4.13	8.75				.330			RAYON				.063	.047			26 IN.OZ.	824				
Firestone	P440	4.00	11.50			.19	.340		55-60	RAYON	1650/2			.063	.045			26 IN.OZ.	830				
Goodrich	P204T									RAYON													
Goodyear	GRS-8	4.016	9.00			.221	.335		59-61	RAYON	1100/2			.063	.045			26 IN.OZ.	830			19.6	
U.S. Royal		4.13	8.75				.330			RAYON				.063	.047			26 IN.OZ.	824				
Firestone	P440	4.00	11.50			.19	.340		55-60	RAYON	1650/2			.063	.045			26 IN.OZ.	830				
Goodrich	P204T									RAYON													
Goodyear	GRS-8	4.016	9.00			.221	.335		59-61	RAYON	1100/2			.063	.045			26 IN.OZ.	830			19.7	
U.S. Royal		3.64	8.40				.330			RAYON				.063	.047			26 IN.OZ.	815			17.7	
Firestone	P440	4.01	10.90			.19	.320		55-60	RAYON	1650/2			.063	.045			26 IN.OZ.	796				
Goodrich	P204T	3.85	10.25			.16	.340		55-62	RAYON	1100/2			.063	.045	.030 EST.		26 IN.OZ.	791			[illegible]	
Goodyear	GRS-8	3.694	9.00			.187	.330		59-61	RAYON	1100/2			.063	.045			26 IN.OZ.	810			19.8	
U.S. Royal		3.64	8.40				.330			RAYON				.063	.047			26 IN.OZ.	815			[illegible]	
Firestone	P440	4.01	10.90			.19	.320		55-60	RAYON	1650/2			.063	.045			26 IN.OZ.	796				
Goodrich	P204T	3.85	10.25			.16	.340		55-62	RAYON	1100/2			.063	.045	.030 EST.		26 IN.OZ.	791			19.8	
Goodyear	GRS-8	3.694	9.00			.187	.330		59-61	RAYON	1100/2			.063	.043			26 IN.OZ.	810			19.2	
U.S. Royal		4.71	11.25				.345			RAYON				.063	.047			26 IN.OZ.	786			22.9	
Firestone	P440	4.67	13.00			.20	.340		55-60	RAYON	1650/2			.063	.045			26 IN.OZ.	771				
Goodrich	P204T	4.75	11.50			.25	.372		55-62	RAYON	1100/2			.063	.045	.030 EST.		26 IN.OZ.	768			[illegible]	
Goodyear	GRS-8	4.772	10.75			.262	.350		59-61	RAYON	1100/2			.063	.043			26 IN.OZ.	778			23.8	
U.S. Royal		4.71	11.25				.345			RAYON				.063	.047			26 IN.OZ.	786			24.7	
Firestone	P440	4.58	13.00			.20	.340		55-60	RAYON	1650/2			.063	.045			26 IN.OZ.	771				
Goodrich	P204T	4.75	11.50			.25	.372		55-62	RAYON	1100/2			.063	.045	.030 EST.		26 IN.OZ.	768			25.[illegible]	
Goodyear	GRS-8	4.772	10.75			.262	.350		59-61	RAYON	1100/2			.063	.045			26 IN.OZ.	778			23.9	
U.S. Royal		4.85	11.50				.350			RAYON				.063	.047			26 IN.OZ.	776			24.7	
Firestone	P440	4.80	13.30			.22	.350		55-60	RAYON	1650/2			.063	.045			26 IN.OZ.	754				
Goodrich	P204T	5.04	12.00			.25	.376		55-62	RAYON	1100/2			.063	.045	.030 EST.		26 IN.OZ.	751			27.0	
Goodyear	GRS-8	4.944	11.00			.276	.355		59-61	RAYON	1650/2			.063	.045			26 IN.OZ.	760			25.4	
U.S. Royal		4.85	11.50				.350			RAYON				.063	.047			26 IN.OZ.	776			26.7	
Firestone	P440	4.80	13.30			.22	.350		55-60	RAYON	1650/2			.063	.045			26 IN.OZ.	754				
Goodrich	P204T	5.04	12.00			.25	.376		55-62	RAYON	1100/2			.063	.045	.030 EST.		26 IN.OZ.	751			27.5	
Goodyear	GRS-8	4.944	11.00			.276	.355		59-61	RAYON	1650/2			.063	.045			26 IN.OZ.	760			26.4	
U.S. Royal		5.03	11.80				.355			RAYON				.063	.047			26 IN.OZ.	760			27.1	
Firestone	P440	4.58	14.70			.22	.350		55-60	RAYON	1650/2			.063	.045			26 IN.OZ.	743				
Goodrich	P204T	5.18	11.50			.25	.340		55-62	RAYON	1650/2			.063	.045	.030 EST.		26 IN.OZ.	733			29.9	
Goodyear	GRS-8	5.408	11.50			.315	.360		59-61	RAYON	1650/2			.063	.045			26 IN.OZ.	743			28.7	
U.S. Royal		5.03	11.80				.355			RAYON				.063	.047			26 IN.OZ.	760			28.1	
Firestone	P440	4.58	14.70			.22	.350		55-60	RAYON	1650/2			.063	.045			26 IN.OZ.	743				
Goodrich	P204T	5.18	11.50			.25	.381		55-62	RAYON	1650/2			.063	.045	.030 EST.		26 IN.OZ.	733			30.2	
Goodyear	GRS-8	5.408	11.50			.315	.360		59-61	RAYON	1650/2			.063	.045			26 IN.OZ.	743			29.9	
Firestone (381376)	P440	4.00	11.50			.19	.330		55-60	RAYON	1650/2			.063	.045			18 IN.OZ.	857				(A)
Firestone (381079)	P440	4.08	11.50			.19	.330		55-60	RAYON	1650/2			.063	.045			18 IN.OZ.	859				(A)
Firestone (381077)	P440	4.33	10.80			.20	.330		55-60	RAYON	1650/2			.063	.045			18 IN.OZ.	843				(B)
Firestone (381078)	P440	4.33	10.80			.20	.330		55-60	RAYON	1650/2			.063	.045			18 IN.OZ.	848				(B)
U.S. Royal (135-380)		3.74	9.00							RAYON				.063	.045			26 IN.OZ.					
Firestone		4.01	10.84							RAYON				.063	.045			26 IN.OZ.					
Goodrich		3.85	10.15							RAYON				.063	.045			26 IN.OZ.					
Goodyear		4.00	10.00							RAYON				.063	.045			26 IN.OZ.					

* TIRE WIDTH WITH GROWTH



AT RATED LOAD— TIRE TO BE CAPABLE OF RUNNING 100 MILES AT A SPEED OF 100 MPH AT AN OUTSIDE AIR TEMPERATURE OF 80°F MINIMUM.

CHANGES IN SUPPLIERS TO BE APPROVED

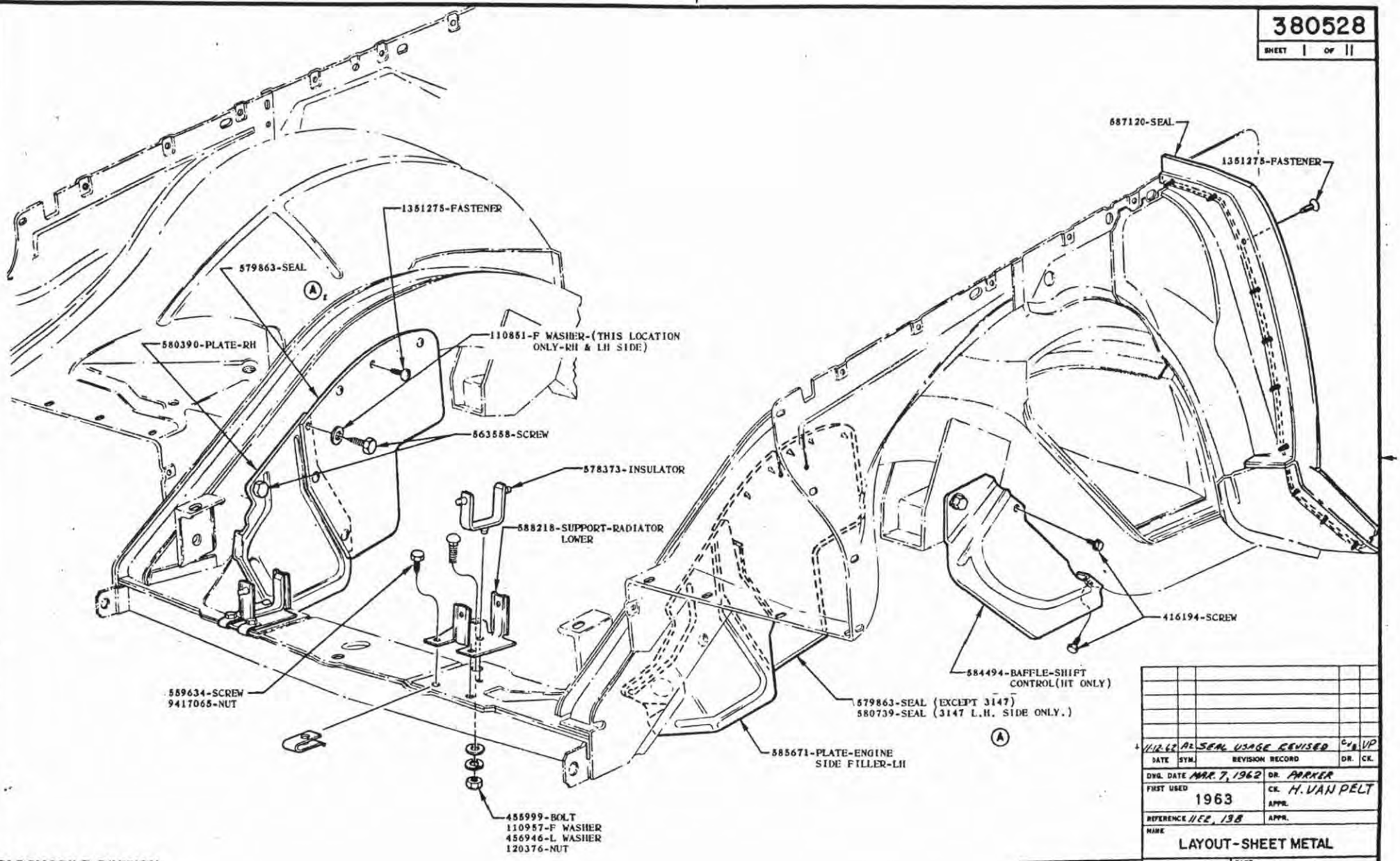
DO NOT SCALE

OCTOBER 12, 1961

381143

SHEET METAL

DRAWINGS INCLUDED IN THIS SECTION ARE:



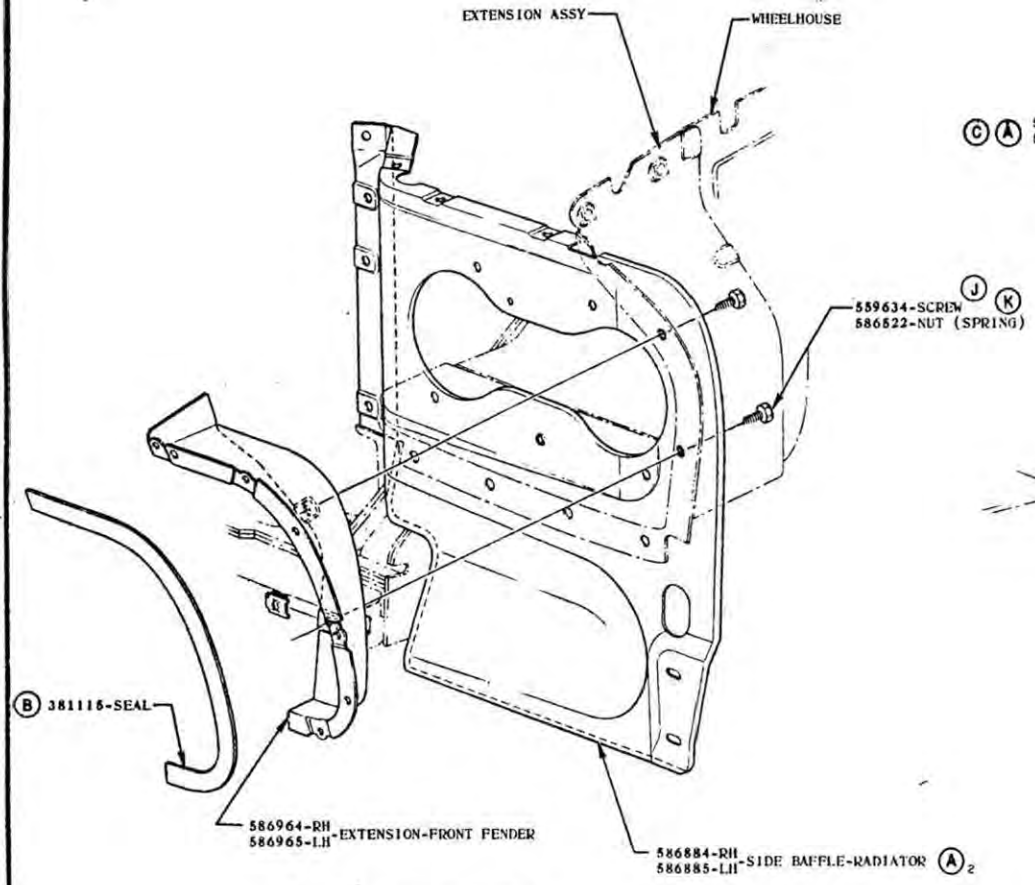
DATE	SYM.	REVISION RECORD	DR.	CK.
1/12/62	A2	SEAL USAGE REVISED	C.H.	VP

DWG. DATE MAR. 7, 1962 DR. PARKER
FIRST USED 1963 CK. H. VAN PELT APPR.
REFERENCE 11EE, 19B APPR.
NAME
LAYOUT-SHEET METAL

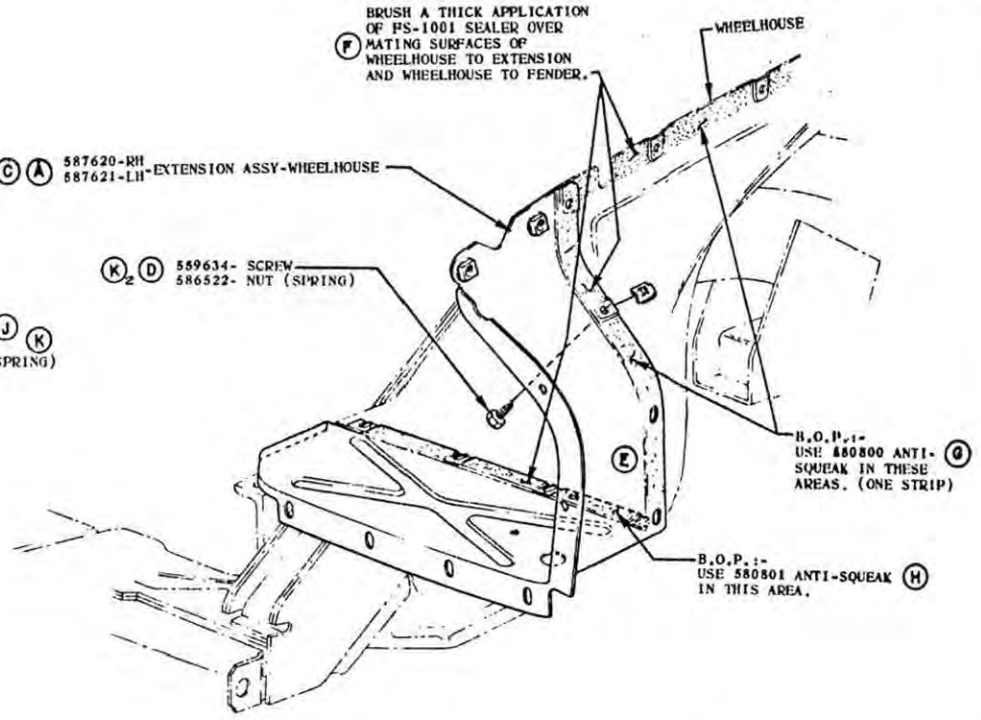
SERIES 3000 - 3100
SHEET 1 OF 11

PART NO. 380528

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



RADIATOR SIDE BAFFLE & FENDER EXTENSION INSTALLATION



WHEELHOUSE EXTENSION ASSEMBLY TO WHEELHOUSE

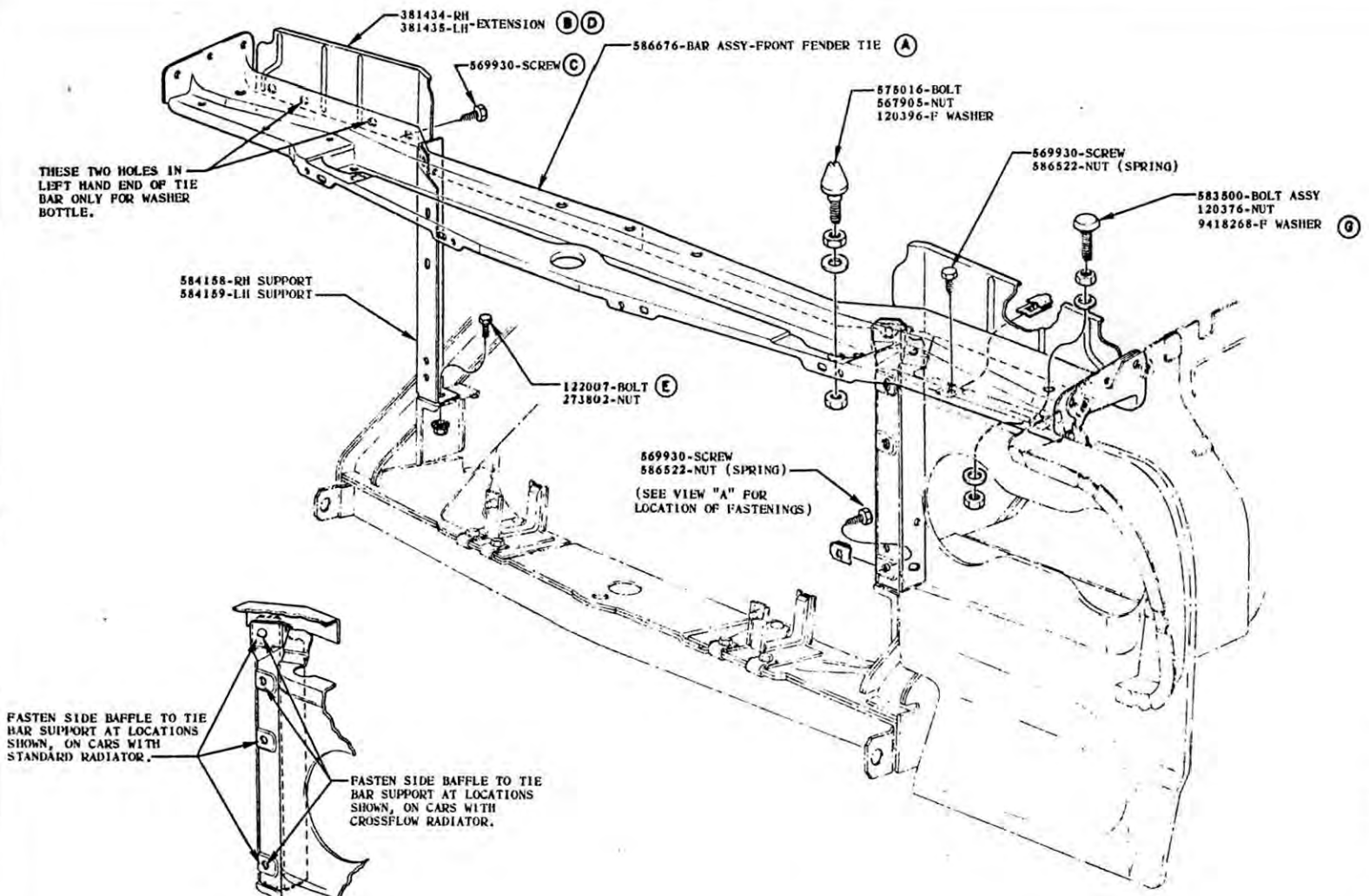
DATE	SYM.	REVISION RECORD	DR.	CK.
4-13-63	K2	WAS 568128-SCREW	DT	VP
10-24-62	J	WAS 563558 SCREW	DT	VP
8-30-62	H	ANTI-SQUEAK ADDED	DT	VP
8-10-62	G	BOP NOTE ADDED	DT	VP
7-19-62	F	SEALER NOTE ADDED	DT	VP
7-19-62	E	WAS TWO HOLES	DT	VP
5-22-62	D	WAS 563558-SCREW	DT	VP
5-7-62	C	REVISED TO DETAIL	DT	VP
4-10-62	B	381115 SEAL ADDED	DT	VP
4-10-62	A2	REVISED TO DETAIL	DT	VP

DWG. DATE MAR. 7, 1962	DR. TITUS
FIRST USED 1963	CK. H. VAN PELT
REFERENCE 11A	APPR.
NAME LAYOUT-SHEET METAL	

SERIES 3000 - 3100
SHEET 2 OF 11

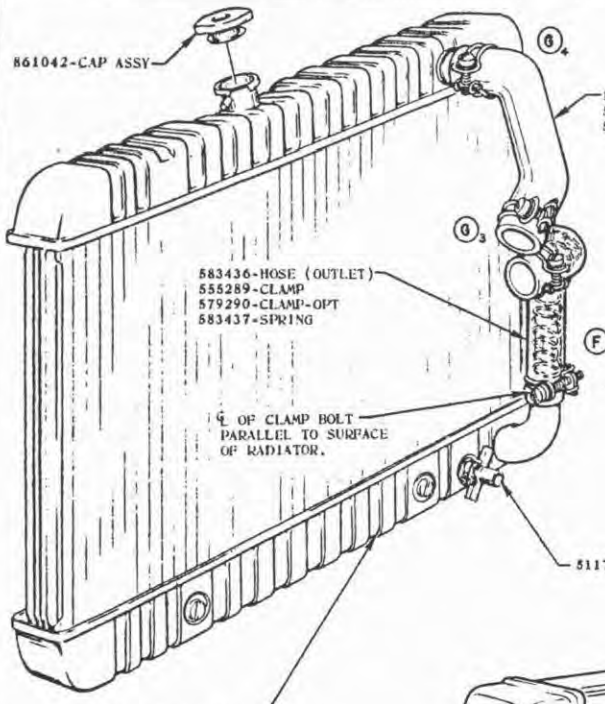
PART NO. 380528

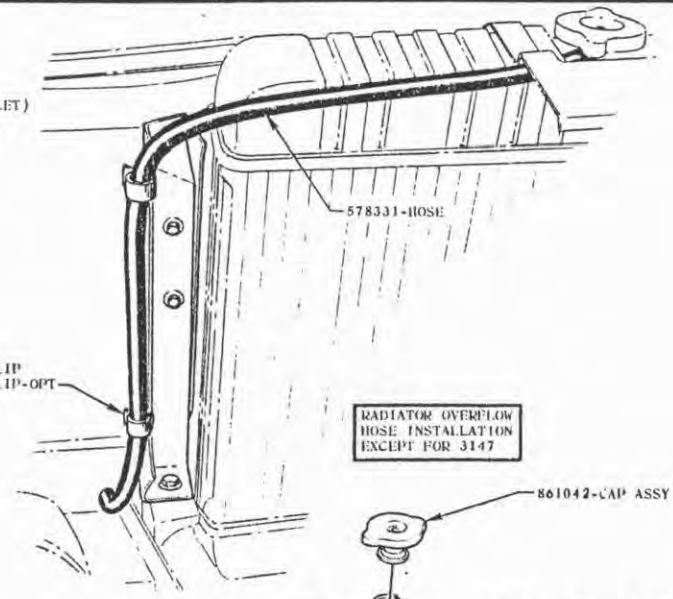
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

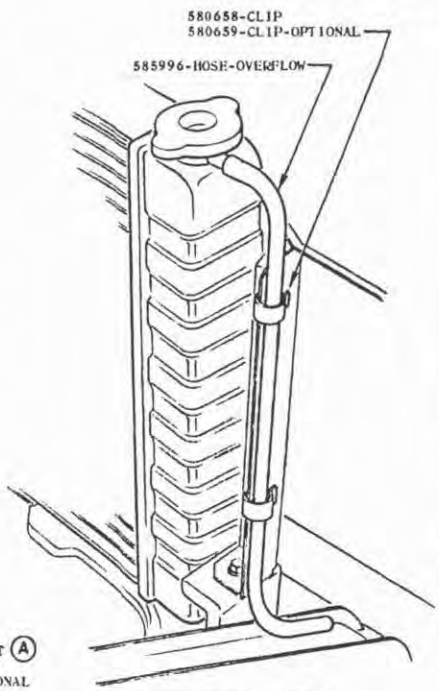


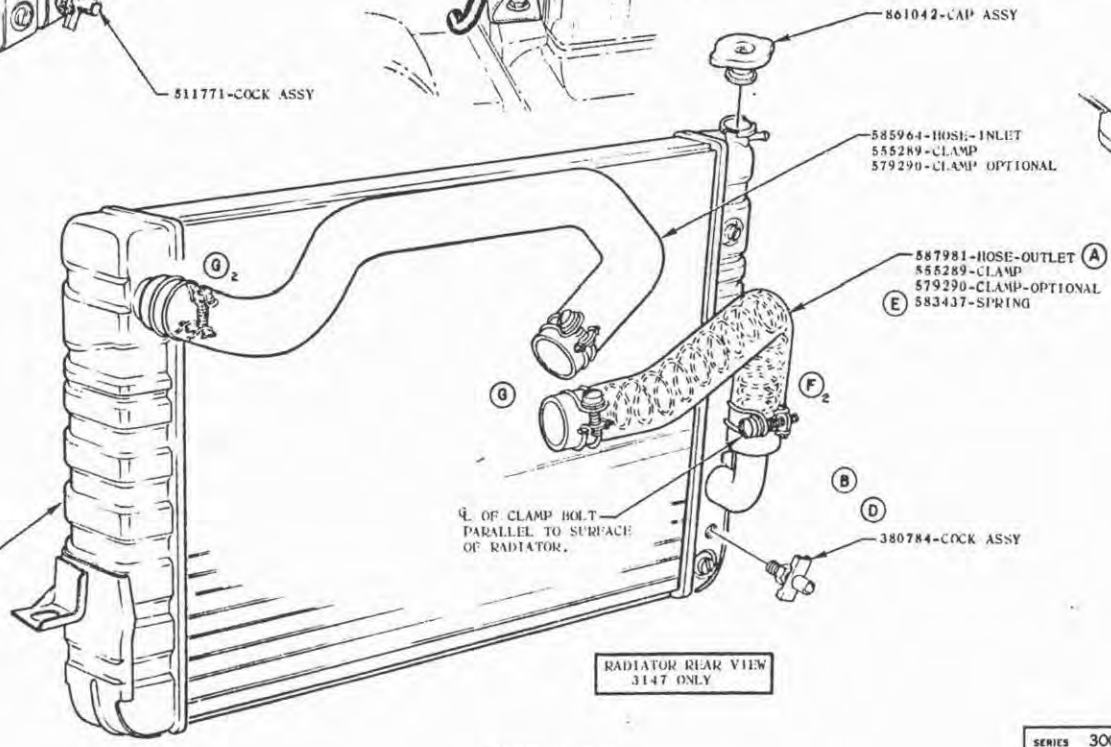
A	9-26-62	G	WAS 496363 WASHER	T.	VP
*	8-7-62	F	VIEW ADDED	T.	VP
*	6-11-62	E	WAS 120229 BOLT	T.	VP
A	7-11-62	D	EXTENSION REVISED	CM	VP
*	5-1-62	C	569930 SCREW ADDED	T.	VP
*	5-7-62	B	381434-5 EXTEN. ADDED	T.	VP
A	4-18-62	A	REVISED TO DETAIL	T.	VP
	DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAR. 7, 1962	DR. TITUS
FIRST USED 1963	CK. H. VAN PELT
REFERENCE 11 A	APPR.
NAME LAYOUT - SHEET METAL	
SERIES 3000 - 3100	PART NO. 380528
SHEET 3 OF 11	







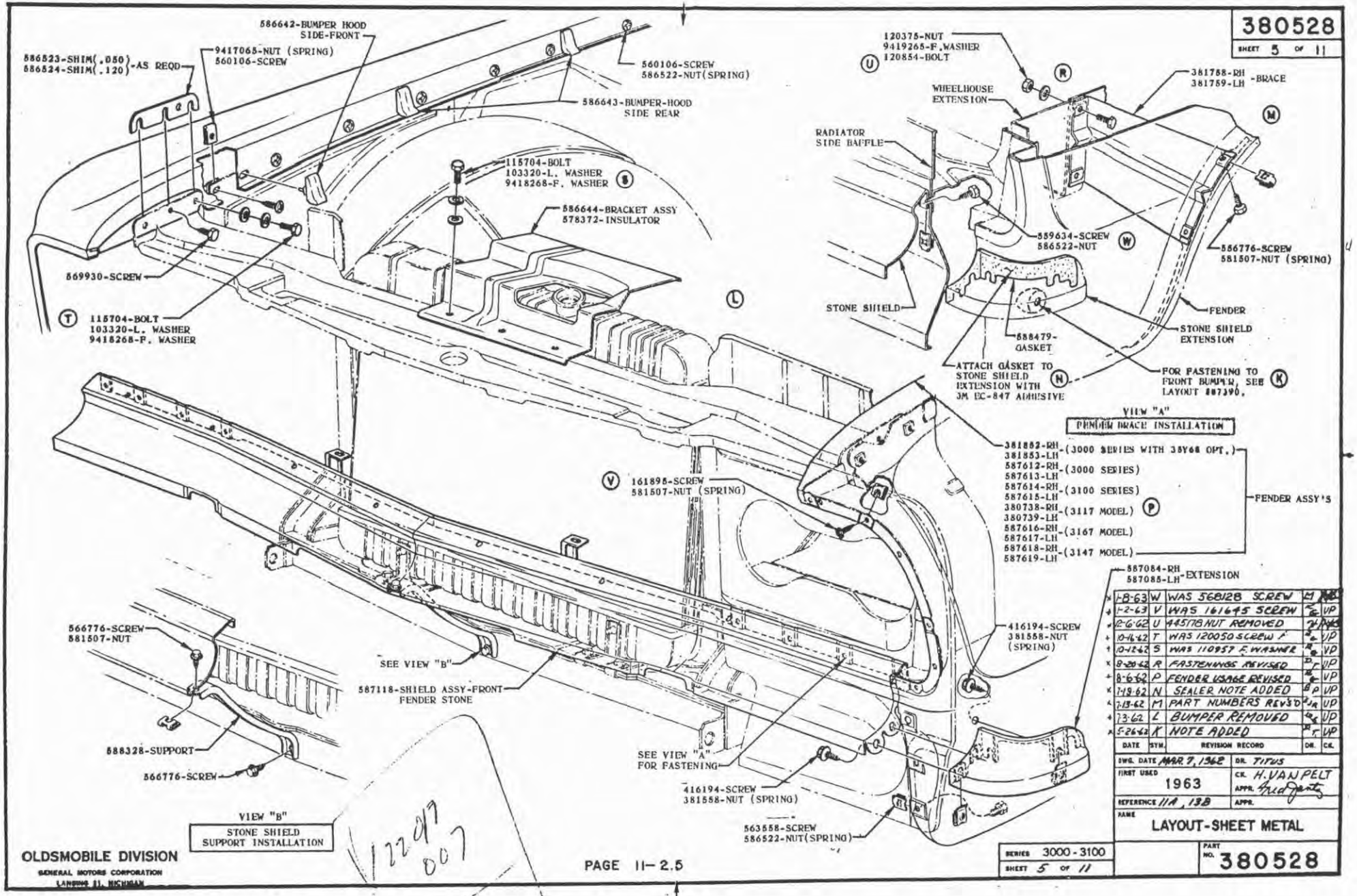


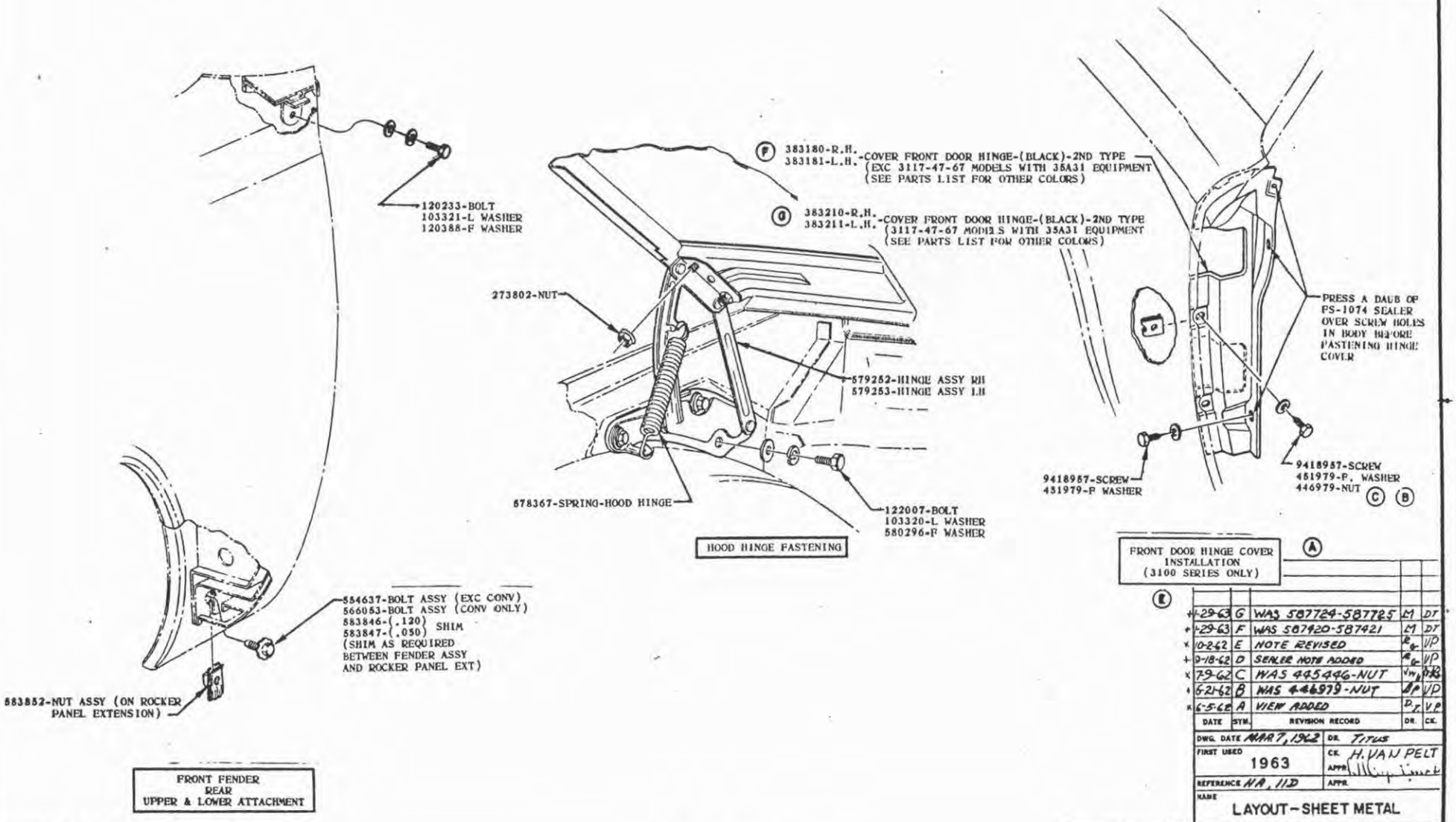
*	11-28-62	G4	CLAMP POSITIONS REVISED	DT	VP
+	11-12-62	F2	CLAMP REVOLVED	CHD	VP
*	8-24-62	E	WAS 583473-SPRING	DT	VP
+	5-10-62	D	380784 WAS 511771	JM	VP
*	5-21-62	C	WAS 3155149/148 HAR ASSYS	DT	VP
+	5-1-62	B	REVISED TO DETAIL	MH	VP
*	4-10-62	A	WAS 585966-HOSE	DT	VP
	DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAR. 7, 1962 DR. TITUS
FIRST USED 1963 CK. H. VAN PELT
APPR. Jones
REFERENCE 13A APPR.
NAME LAYOUT-SHEET METAL
PART NO. 380528

SERIES 3000 - 3100
SHEET 4 OF 11

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

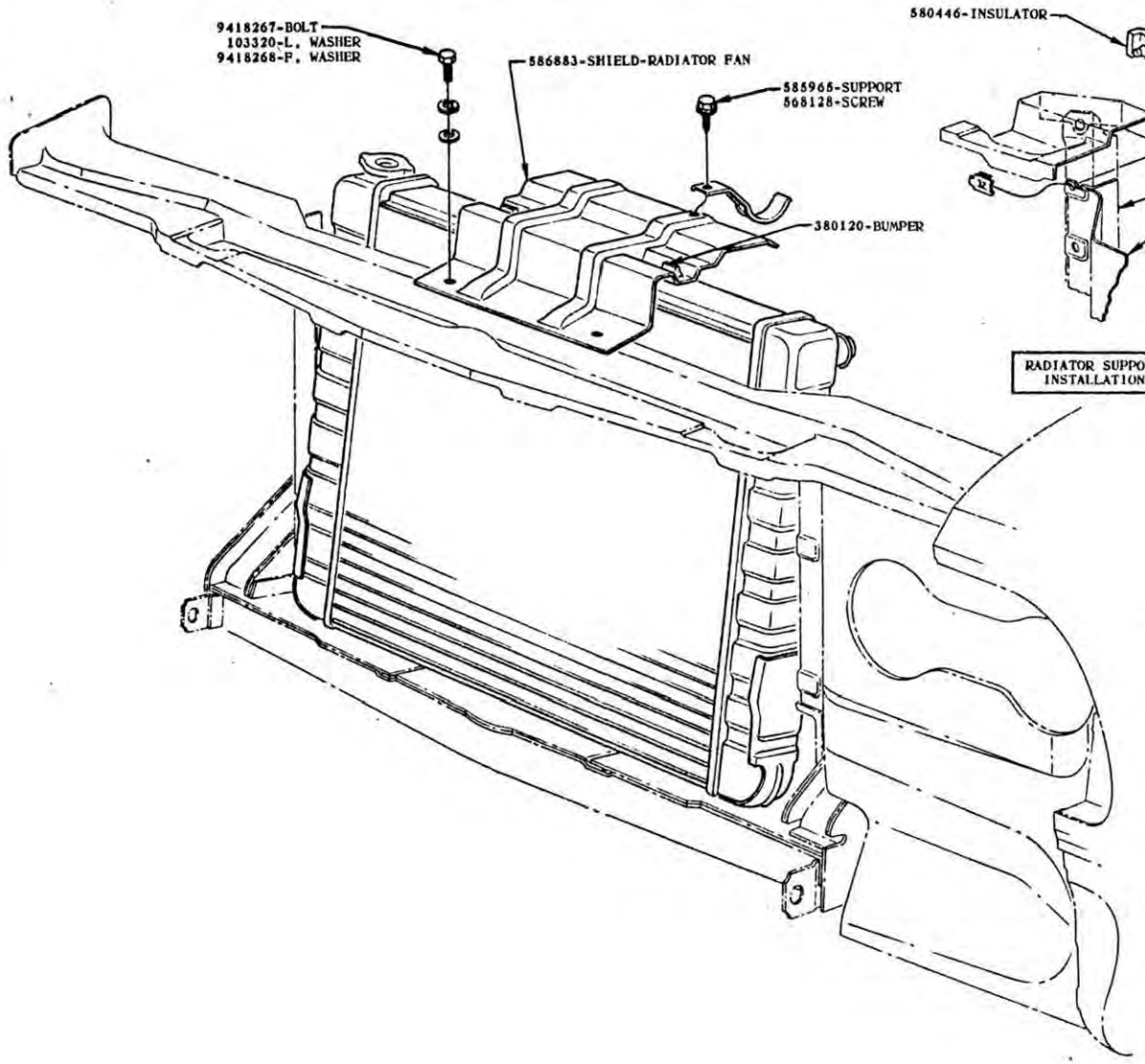

380528
SHEET 5 OF 11
586642-BUMPER HOOD SIDE-FRONT
586523-SHIM(.050)
586524-SHIM(.120) -AS REQD
9417065-NUT (SPRING)
560106-SCREW
560106-SCREW
586522-NUT(SPRING)
586643-BUMPER-HOOD SIDE REAR
115704-BOLT
103320-L. WASHER
9418268-F. WASHER
586644-BRACKET ASSY
578372-INSULATOR
869930-SCREW
115704-BOLT
103320-L. WASHER
9418268-F. WASHER
120375-NUT
9419268-F. WASHER
120854-BOLT
WHEELHOUSE EXTENSION
381788-RH
381789-LH -BRACE
RADIATOR SIDE BAFFLE
559634-SCREW
586522-NUT
586776-SCREW
581507-NUT (SPRING)
STONE SHIELD
FENDER
STONE SHIELD EXTENSION
588479-GASKET
ATTACH GASKET TO STONE SHIELD EXTENSION WITH 3M EC-847 ADHESIVE
FOR FASTENING TO FRONT BUMPER, SEE LAYOUT 887390.
VIEW "A"
FENDER BRACE INSTALLATION
381882-RH
381883-LH -(3000 SERIES WITH 35Y68 OPT.)
587612-RH
587613-LH -(3000 SERIES)
587614-RH
587615-LH -(3100 SERIES)
380738-RH
380739-LH -(3117 MODEL)
587616-RH
587617-LH -(3167 MODEL)
587618-RH
587619-LH -(3147 MODEL)
FENDER ASSY'S
587084-RH
587085-LH -EXTENSION
161895-SCREW
581507-NUT (SPRING)
416194-SCREW
381558-NUT (SPRING)
566776-SCREW
581507-NUT
SEE VIEW "B"
587118-SHIELD ASSY-FRONT FENDER STONE
SEE VIEW "A" FOR FASTENING
888328-SUPPORT
566776-SCREW
416194-SCREW
381558-NUT (SPRING)
563558-SCREW
586522-NUT(SPRING)
VIEW "B"
STONE SHIELD SUPPORT INSTALLATION
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN
PAGE 11-2.5
SERIES 3000-3100
SHEET 5 OF 11
1-8-63 W WAS 566128 SCREW
1-2-63 V WAS 161645 SCREW
12-6-62 U 445178 NUT REMOVED
10-16-62 T WAS 120050 SCREW
10-12-62 S WAS 110957 F. WASHER
8-20-62 R FASTENINGS REVISED
8-6-62 P FENDER USAGE REVISED
7-19-62 N SEALER NOTE ADDED
7-13-62 M PART NUMBERS REV'D
7-3-62 L BUMPER REMOVED
5-26-62 K NOTE ADDED
DATE SYM. REVISION RECORD DR. CK.
DWG. DATE MAR 7, 1962 DR. TITUS
FIRST USED 1963 CK. H. VANPELT
REFERENCE 11A, 13B APPR.
NAME LAYOUT-SHEET METAL
PART NO. 380528



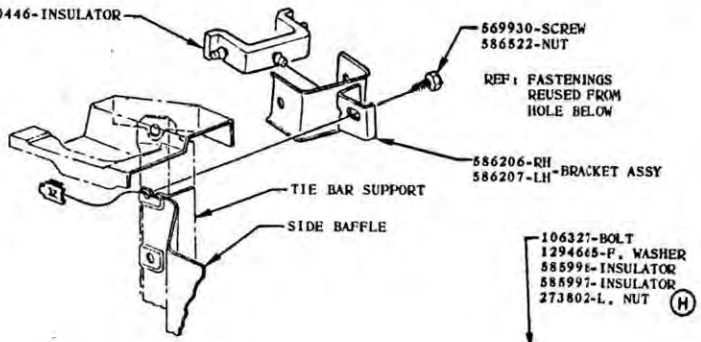
SYM.	DATE	REVISION RECORD	DR.	CK.
H	4-29-63	G WAS 587724-587725	M	DT
H	4-29-63	F WAS 587920-587921	M	DT
K	10-2-62	E NOTE REVISED	RC	VP
H	9-18-62	D SEALER NOTE ADDED	RC	VP
K	7-9-62	C WAS 445446-NUT	VM	VP
H	6-21-62	B WAS 446979-NUT	AP	VP
K	6-5-62	A VIEW ADDED	DT	VP

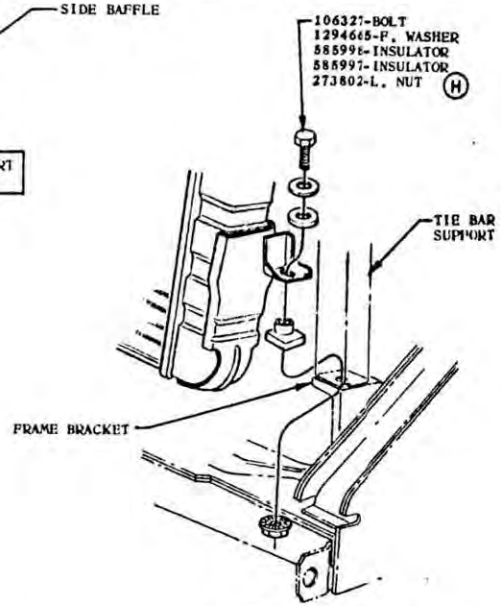
DWG. DATE MAR 7, 1962 DR. TITUS
FIRST USED 1963 CK. H. VAN PELT APPR.
REFERENCE NA, 11D APPR.
NAME LAYOUT - SHEET METAL
SERIES 3000 - 3100
SHEET 6 OF 11
PART NO. 380528

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 11, MICHIGAN



RADIATOR SUPPORT INSTALLATION



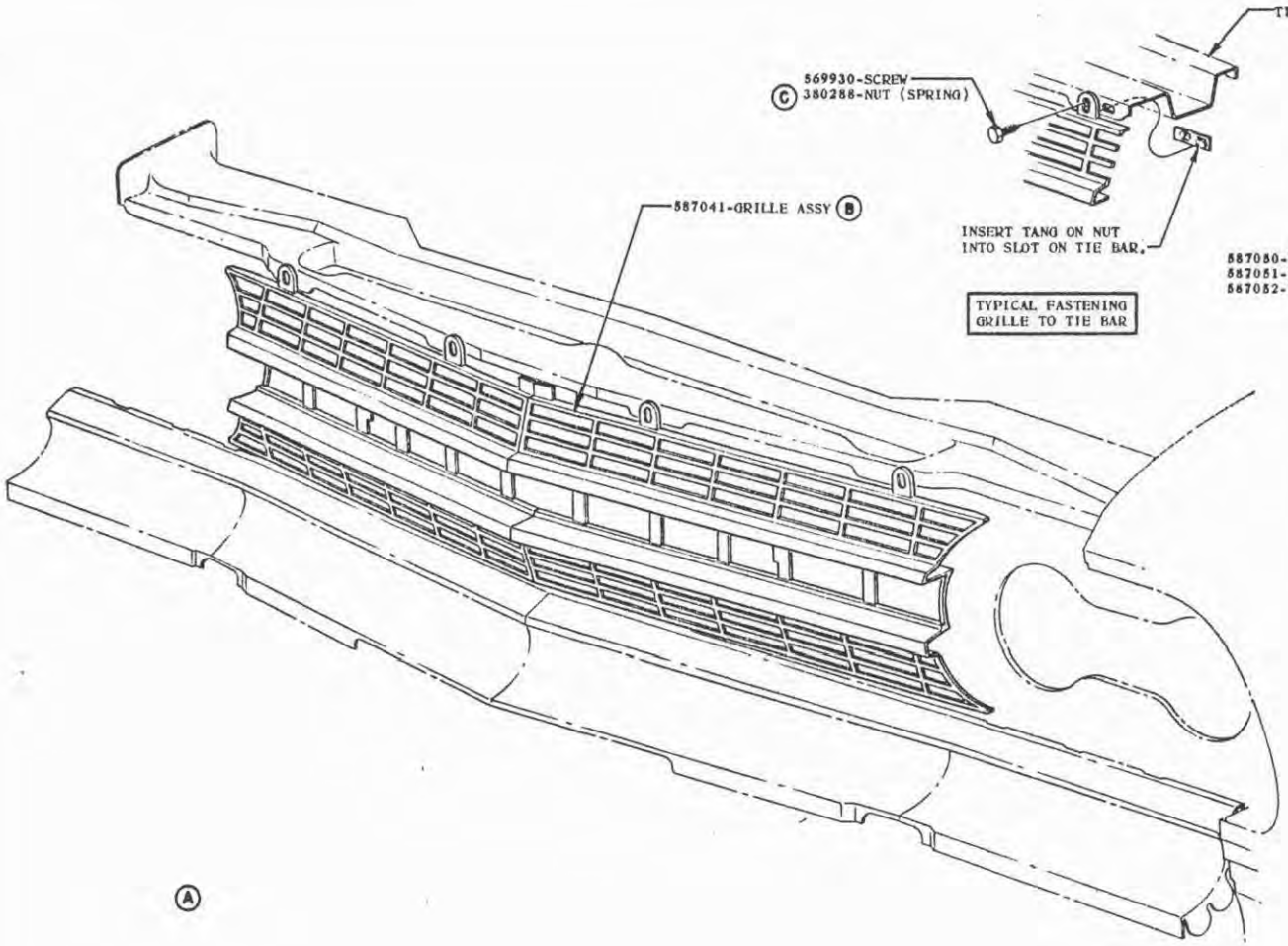


RADIATOR LOWER MOUNTING INSTALLATION

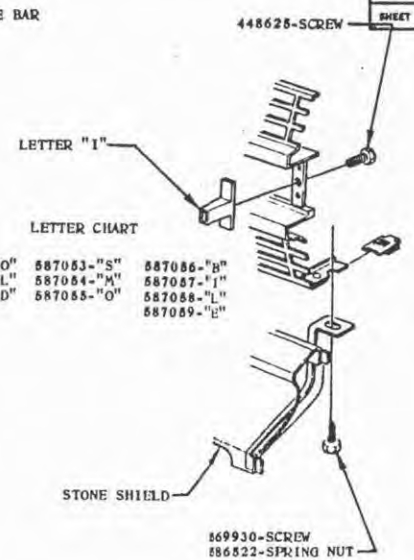
DATE	SYM.	REVISION RECORD	DR.	CK.
11-1-62	H	PART NOS REVISED	RB	VP

DWG. DATE MAR. 7, 1968 — DR. B.F. HILL JR.
FIRST USED 1963 — CK. H. VAN PELT
REFERENCE 138, 6K2 — APPR.
APPR.
NAME LAYOUT-SHEET METAL
PART NO. 380528

SERIES 3147
SHEET 7 OF 11



TYPICAL FASTENING
GRILLE TO TIE BAR



TYPICAL SECTION FASTENING AT
LETTERS & STONE SHIELD REINF

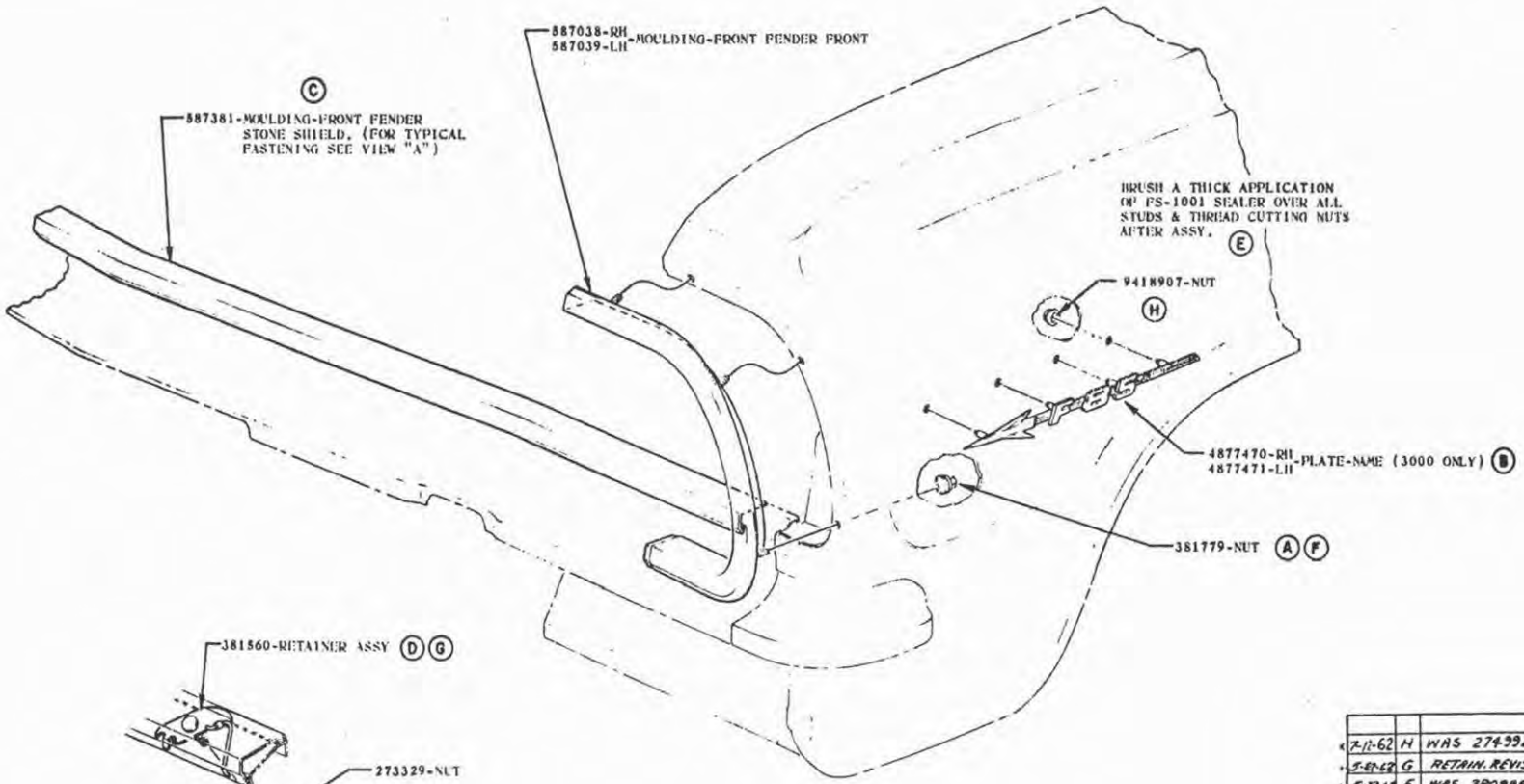
7-30-62	C	MAS 445305 NUT	D. T.	VP
4-10-62	B	MAS 508874-S GRILLE ASSY	D. T.	VP
4-10-62	A	VIEW REMOVED	D. T.	VP
DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAR. 7, 1962 — DR. B.F. NILL JR.
FIRST USED 1963 — CK. H. VAN PELT — APPR.
REFERENCE 13C — APPR.
NAME: LAYOUT-SHEET METAL

SERIES 3000 - 3100
SHEET 8 OF 11

PART NO. 380528

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



VIEW "A"

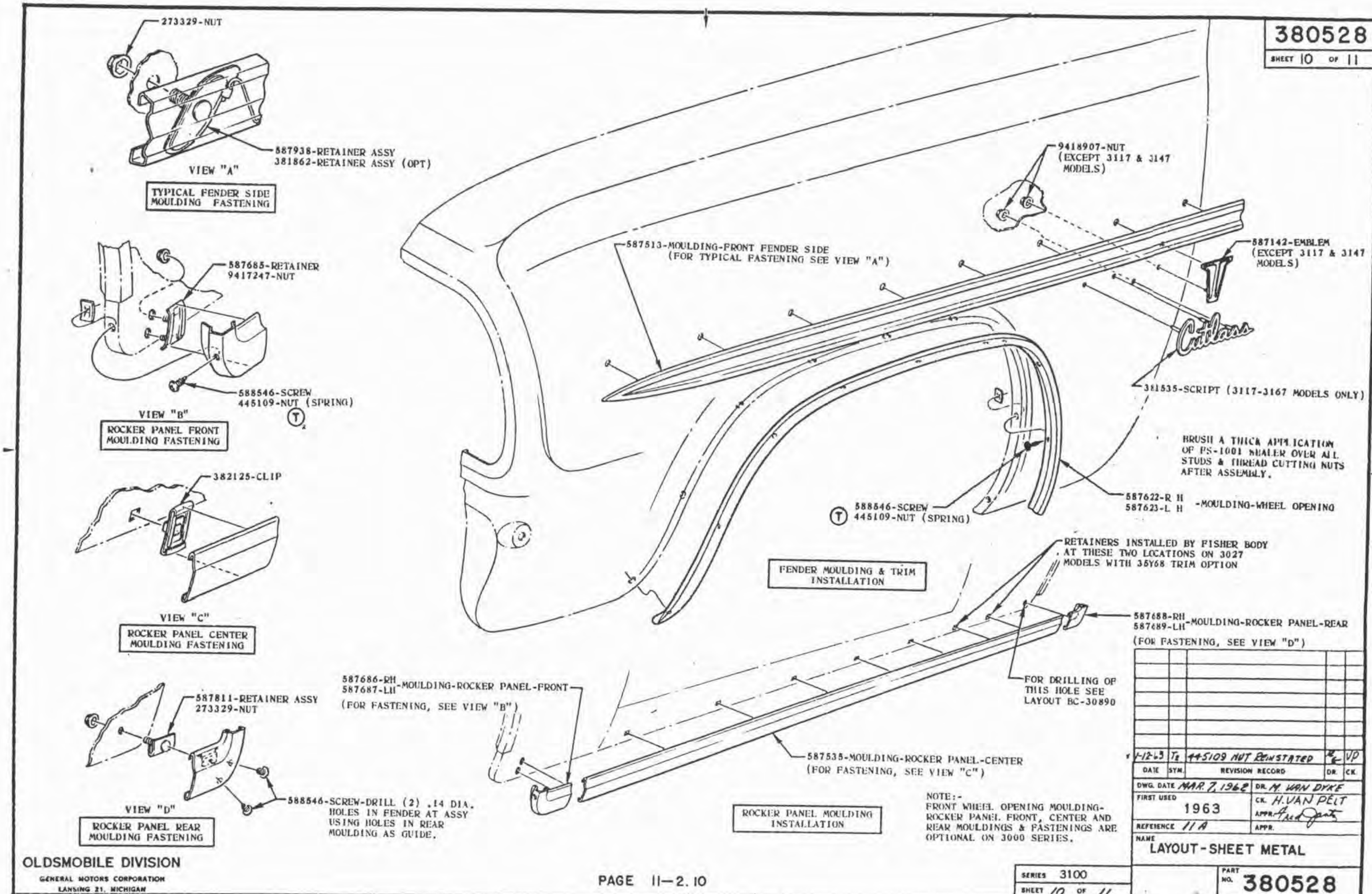
TYPICAL FASTENING OF MOULDING TO STONE SHIELD ASSY

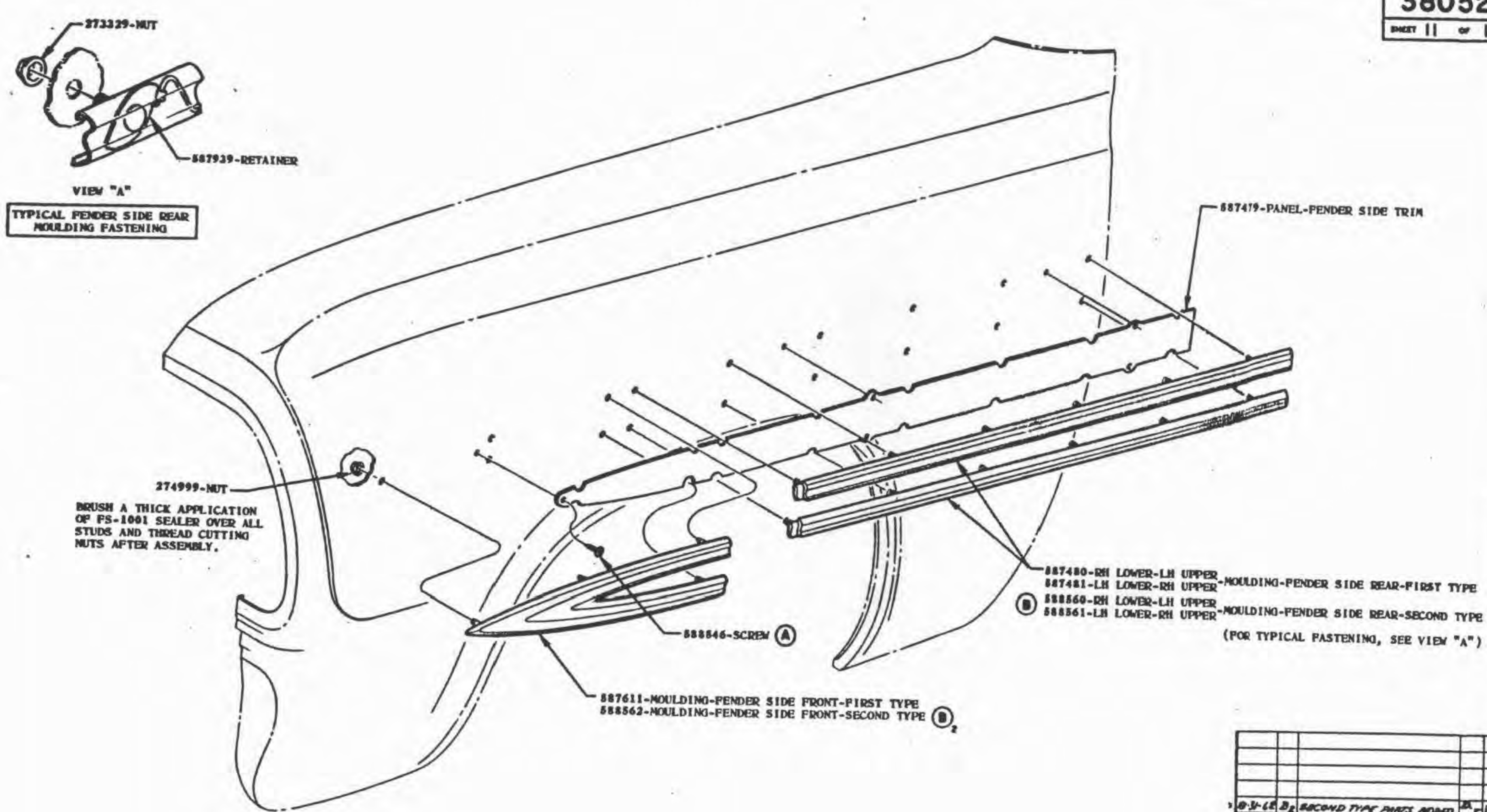
DATE	SYM.	REVISION RECORD	DR	CK.
7-11-62	H	WAS 274992 NUT	D.G.	VP
5-29-62	G	RETAIN. REVISED TO DETAIL	D.E.	VP
5-17-62	F	WAS 380398 NUT	D.E.	VP
5-3-62	E	SEALER NOTE ADDED	D.E.	VP
4-19-62	D	381560-RETAINER ASSY ADDED	D.E.	VP
4-19-62	C	WAS MOULDING ASSY.	D.E.	VP
4-10-62	B	NAMEPLATE & NUT ADDED	D.E.	VP
4-4-62	A	WAS A993565-NUT	D.E.	VP

DWG DATE MAR. 7, 1962 DR. J. V. GALL
FIRST USED 1963 CK. H. VAN PELT
APPR. H. VanPelt
REFERENCE 11A APPR.
NAME LAYOUT-SHEET METAL

SERIES 3000 - 3100
SHEET 9 OF 11
PART NO. 380528

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN


380528
SHEET 10 OF 11
273329-NUT
587938-RETAINER ASSY
381862-RETAINER ASSY (OPT)
VIEW "A"
TYPICAL FENDER SIDE MOULDING FASTENING
587685-RETAINER
9417247-NUT
588546-SCREW
445109-NUT (SPRING)
VIEW "B"
ROCKER PANEL FRONT MOULDING FASTENING
382125-CLIP
VIEW "C"
ROCKER PANEL CENTER MOULDING FASTENING
587811-RETAINER ASSY
273329-NUT
588546-SCREW-DRILL (2) .14 DIA. HOLES IN FENDER AT ASSY USING HOLES IN REAR MOULDING AS GUIDE.
VIEW "D"
ROCKER PANEL REAR MOULDING FASTENING
9418907-NUT (EXCEPT 3117 & 3147 MODELS)
587513-MOULDING-FRONT FENDER SIDE (FOR TYPICAL FASTENING SEE VIEW "A")
587142-EMBLEM (EXCEPT 3117 & 3147 MODELS)
Cutlass
381535-SCRIPT (3117-3167 MODELS ONLY)
BRUSH A THICK APPLICATION OF PS-1001 SEALER OVER ALL STUDS & THREAD CUTTING NUTS AFTER ASSEMBLY.
587622-R H
587623-L H -MOULDING-WHEEL OPENING
588546-SCREW
445109-NUT (SPRING)
FENDER MOULDING & TRIM INSTALLATION
RETAINERS INSTALLED BY FISHER BODY AT THESE TWO LOCATIONS ON 3027 MODELS WITH 38Y68 TRIM OPTION
587688-RH
587689-LH -MOULDING-ROCKER PANEL-REAR
(FOR FASTENING, SEE VIEW "D")
587686-RH
587687-LH -MOULDING-ROCKER PANEL-FRONT
(FOR FASTENING, SEE VIEW "B")
FOR DRILLING OF THIS HOLE SEE LAYOUT BC-30890
587535-MOULDING-ROCKER PANEL-CENTER
(FOR FASTENING, SEE VIEW "C")
ROCKER PANEL MOULDING INSTALLATION
NOTE:- FRONT WHEEL OPENING MOULDING-ROCKER PANEL FRONT, CENTER AND REAR MOULDINGS & FASTENINGS ARE OPTIONAL ON 3000 SERIES.
1-12-63 T 445109 NUT REINSTATED VP
DATE SYM. REVISION RECORD DR. CK.
DWG. DATE MAR. 7, 1962 DR. M. VAN DYKE
FIRST USED 1963 CK. H. VAN PELT
REFERENCE 11 A APPR.
NAME LAYOUT-SHEET METAL
PART NO. 380528
SERIES 3100
SHEET 10 OF 11
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



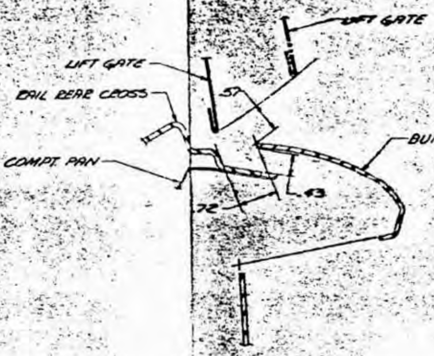
DATE	SYM.	REVISION RECORD	DR.	CK.
8-31-62	B2	SECOND TYPE PARTS ADDED		VP
8-14-62	A	WAS [illegible]-SCREW		VP

DWG. DATE MAR. 7, 1962 — DR. M. VAN DYKE
FIRST USED 1963 — CK. H. VAN PELT
REFERENCE 11A — APPR.
NAME LAYOUT-SHEET METAL

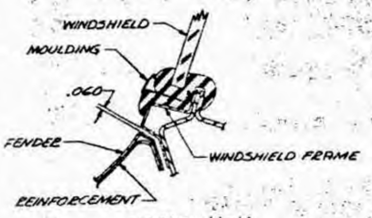
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

SERIES 3147
SHEET 11 OF 11
PART NO. 380528

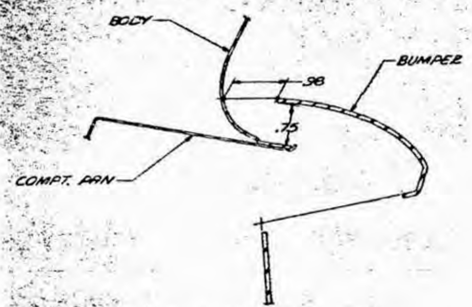
4-5-62	A	WAS BR-30443			



℄ SECTION
REAR BUMPER (STATION WAGON)
FULL SIZE



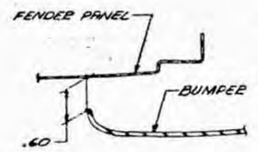
SECTION H-H
FULL SIZE



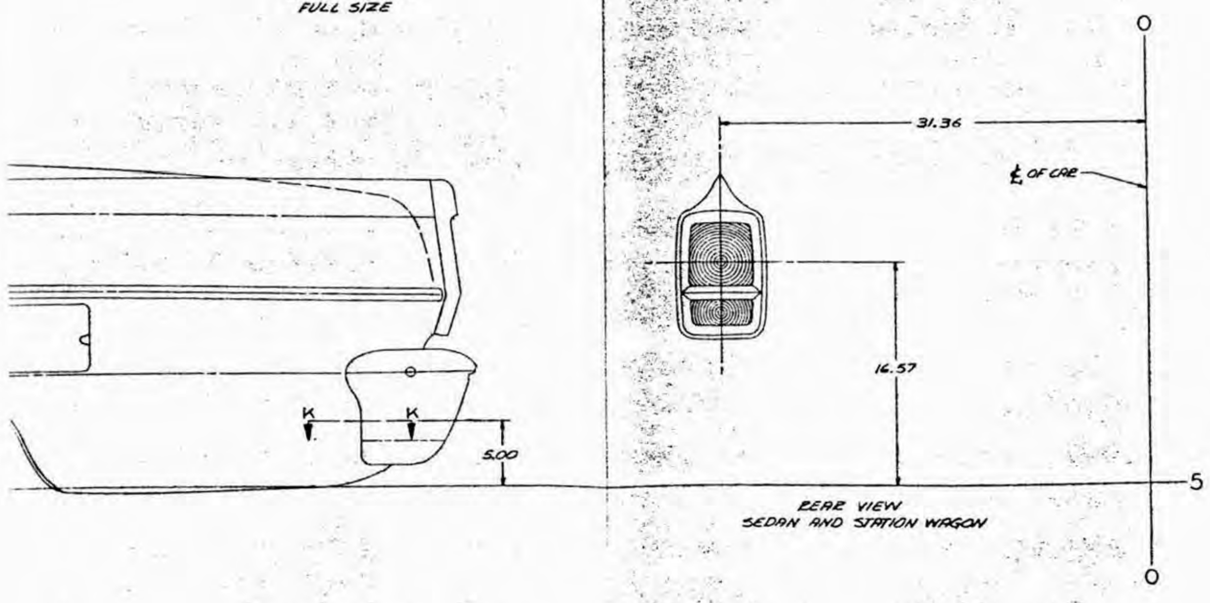
℄ SECTION
REAR BUMPER (SEDAN)
FULL SIZE

PAGE II-3.1

381389
LAST CHANGE



SECTION K-K
FULL SIZE



REAR VIEW
SEDAN AND STATION WAGON

381389
LAST CHANGE

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .03 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS.

ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS

COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES TUBING, ROLLED, DRAWN OR "EXTRUDED SECTIONS & STANDARD PARTS.

DO NOT SCALE

FEB. 23, 1962	SEVERANCE
QUARTER	H. REED
1963 - 3000 / 3100	[signature]

LAYOUT-SHEET METAL-CLEARANCE

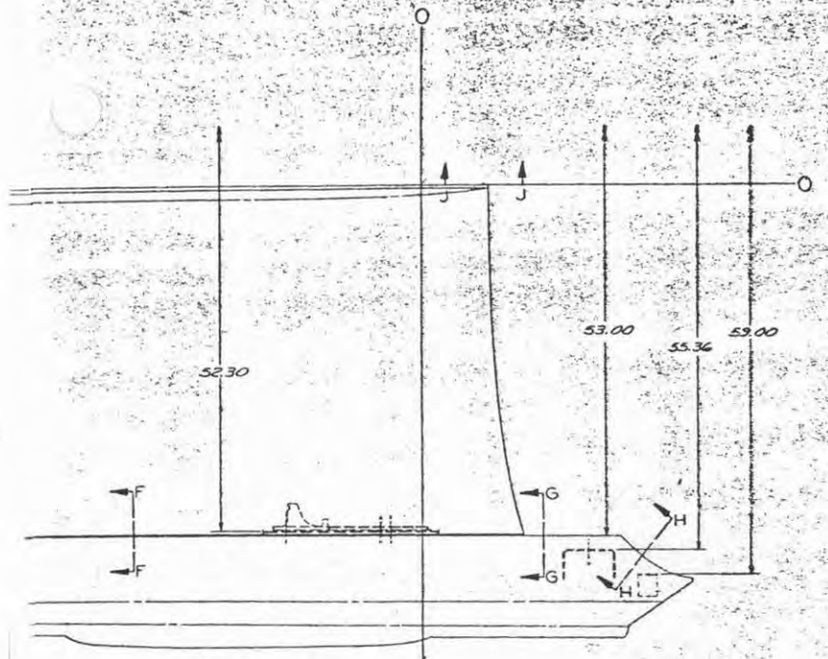
ALL DIMENSIONS TO OUTSIDE OF METAL UNLESS OTHERWISE SPECIFIED.

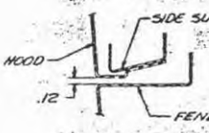
FRAME NO. 1 OF 3

RFI

381389

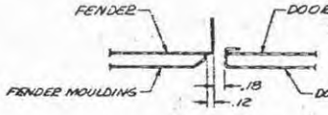
Gr. "D"



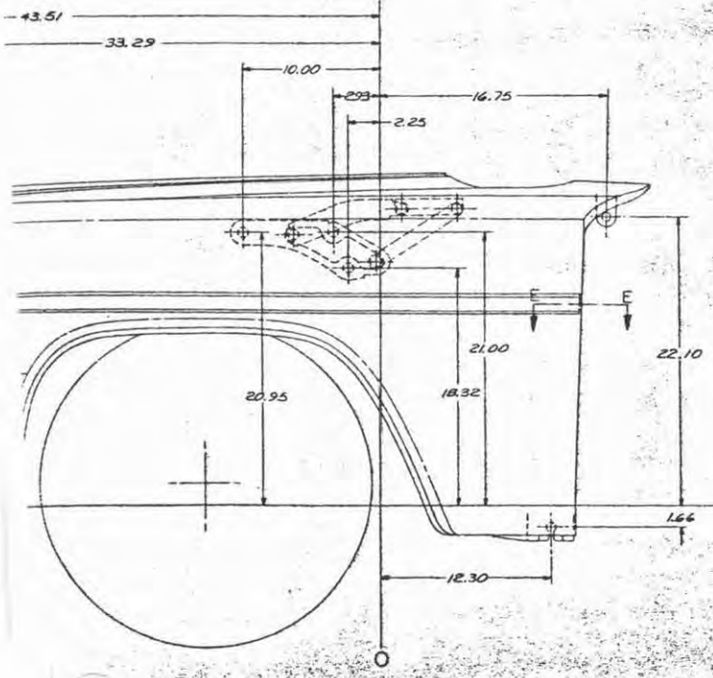


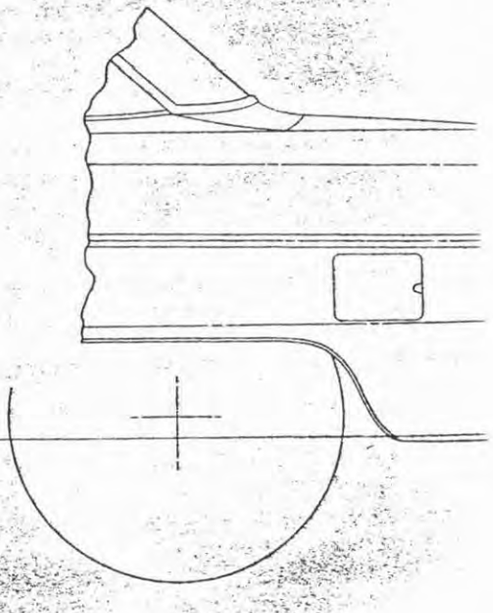
SECTION F-F
FULL SIZE

SECTION G-G
FULL SIZE

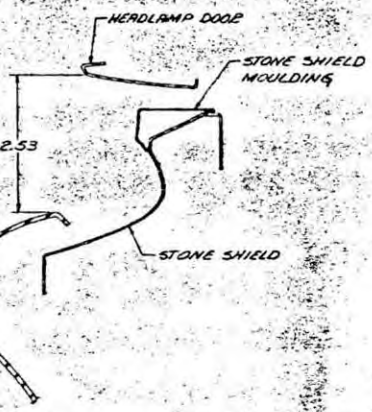


SECTION E-E
FULL SIZE

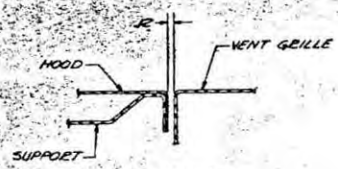




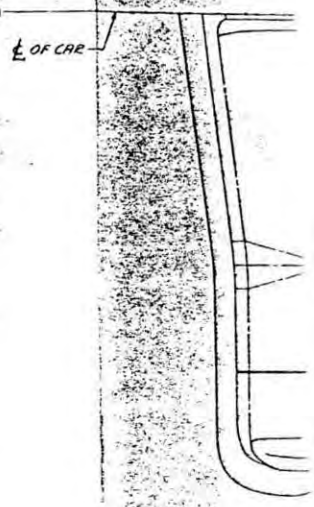
SHEET NO.	PART NO.	LAST CHG.
2 OF 3	381389	

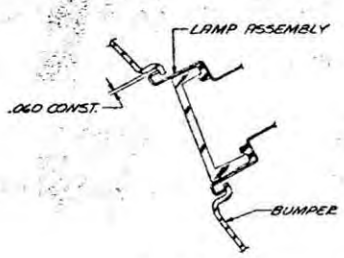


SECTION C-C
FULL SIZE

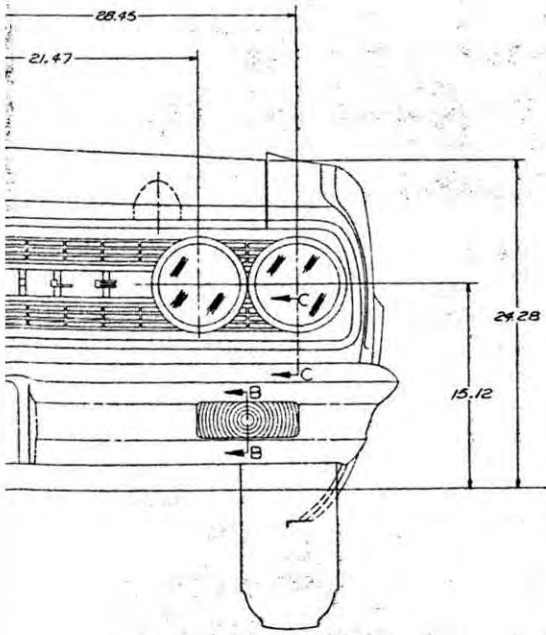


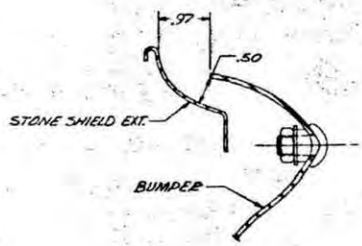
SECTION J-J
FULL SIZE



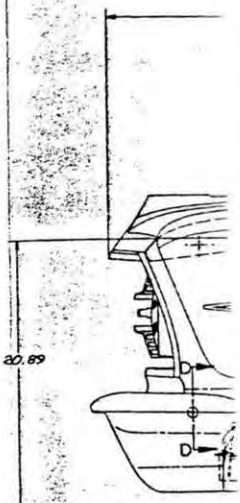


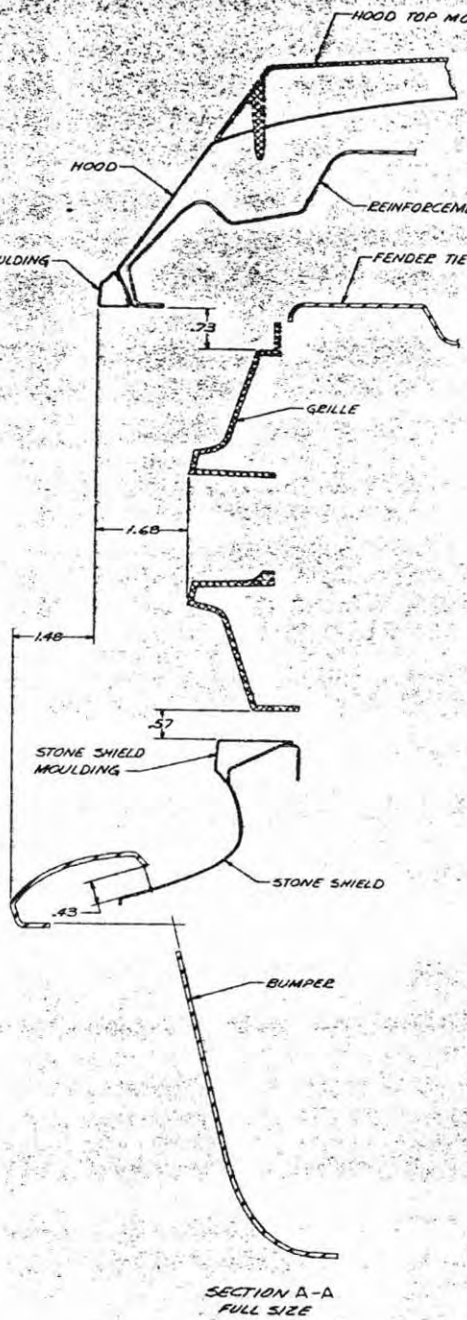
SECTION B-B
FULL SIZE



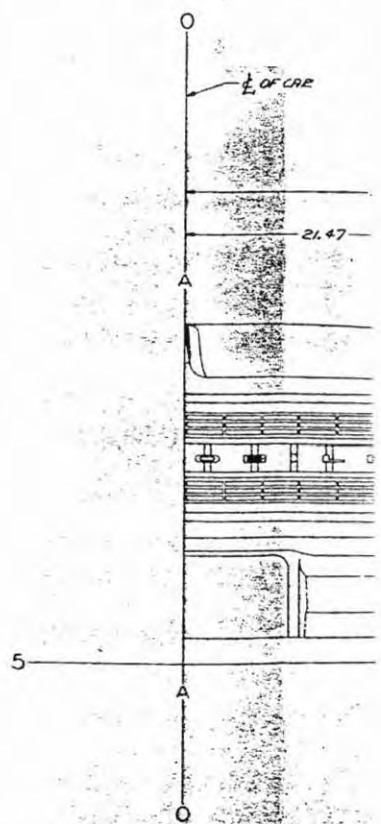


SECTION D-D
FULL SIZE





SECTION A-A
FULL SIZE

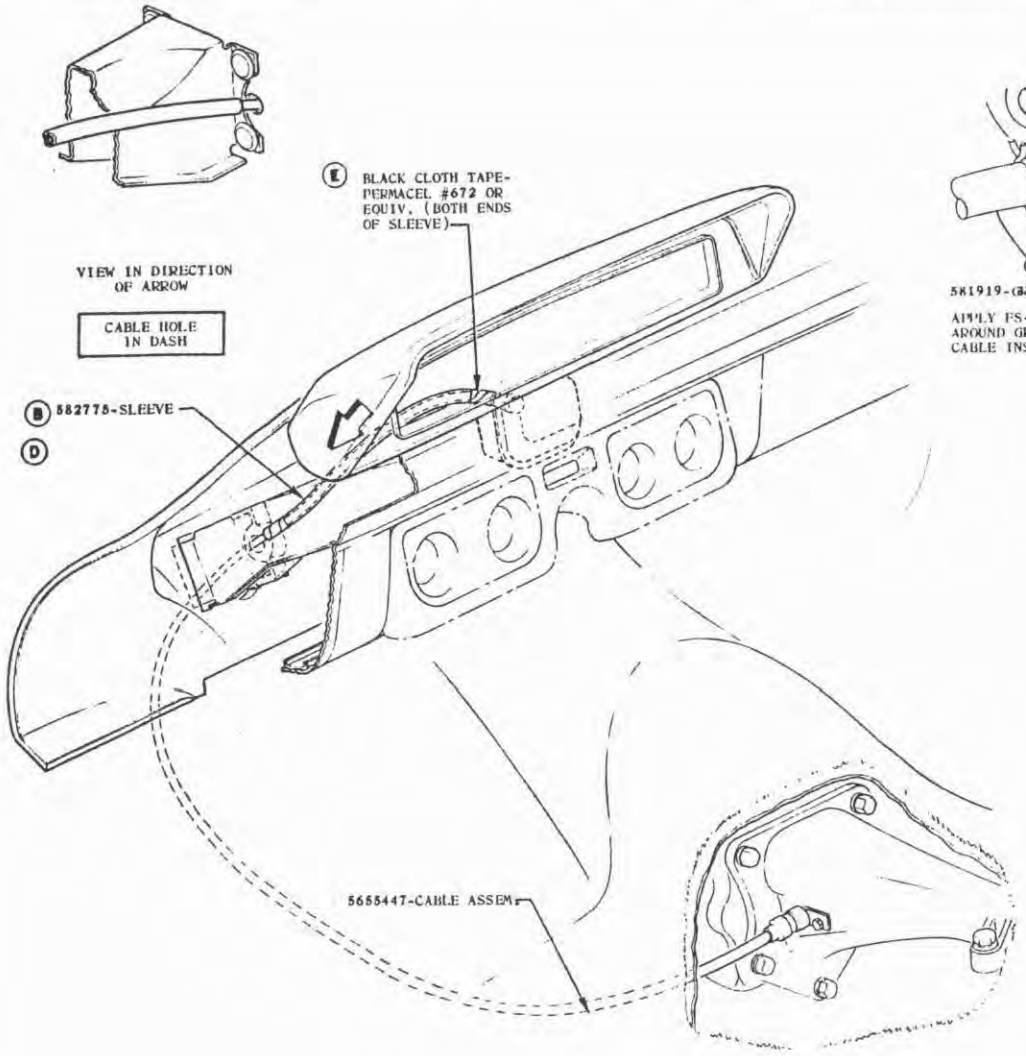


FRAME NO.	PART NO.	USED ON
3 OF 3	381389	

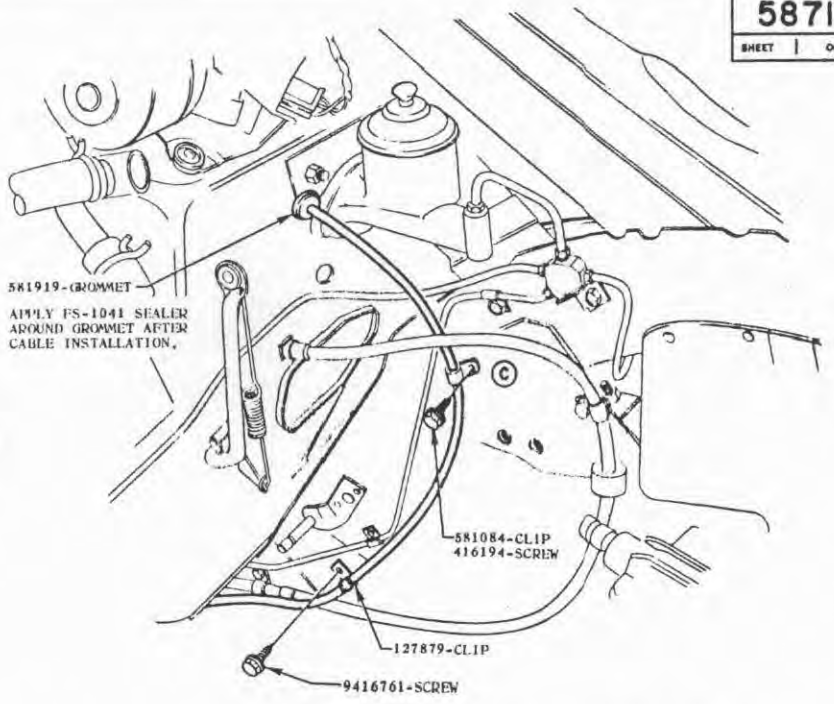

HOOD TOP MOULDING
HOOD
REINFORCEMENT
HOOD MOULDING
FENDER TIE BAR
GRILLE
STONE SHIELD MOULDING
STONE SHIELD
BUMPER
SECTION A-A FULL SIZE
HEADLAMP DOOR
STONE SHIELD MOULDING
BUMPER
STONE SHIELD
SECTION C-C FULL SIZE
HOOD
VENT GRILLE
SUPPORT
SECTION J-J FULL SIZE
LAMP ASSEMBLY
.060 CONST.
BUMPER
SECTION B-B FULL SIZE
STONE SHIELD EXT.
BUMPER
SECTION D-D FULL SIZE
℄ OF CAR
DASH DATUM LINE
FENDER
DOOR
FENDER MOULDING
DOOR MOULDING
SECTION E-E FULL SIZE
SIDE SUPPORT
HOOD
FENDER
SECTION F-F FULL SIZE
SHROUD VENT GRILLE
FRONT FENDER
SECTION G-G FULL SIZE
WINDSHIELD MOULDING
FENDER
WINDSHIELD FRAME
REINFORCEMENT
SECTION H-H FULL SIZE
FENDER PANEL
BUMPER
SECTION K-K FULL SIZE
LIFT GATE
TAIL BAR CROSS
COMPT. PAN
BUMPER
℄ SECTION REAR BUMPER (STATION WAGON) FULL SIZE
BODY
BUMPER
COMPT. PAN
℄ SECTION REAR BUMPER (SEDAN) FULL SIZE
REAR VIEW SEDAN AND STATION WAGON
ALL DIMENSIONS TO OUTSIDE OF METAL UNLESS OTHERWISE SPECIFIED.
DO NOT SCALE
FEB. 23, 1962
SEVERANCE
QUARTER
H. REGO
1963 - 3000 3100
LAYOUT - SHEET METAL - CLEARANCE
FRAME NO. 1 OF 3
FRAME NO. 2 OF 3
FRAME NO. 3 OF 3
381389

ELECTRICAL

DRAWINGS INCLUDED IN THIS SECTION ARE :



CABLE INSTALLATION



VIEW FROM INSIDE ENGINE COMPARTMENT

4-23-63	E	TAPE NOTE ADDED	RG	VP
7-3-62	D	WAS 582774 SLEEVE	RG	VP
5-11-62	C	CABLE RE-ROUTED	RG	VP
3-11-62	B	WAS 582775 SLEEVE	DR	VP
1-30-62	A	WAS SHEET 1 OF 2	DR	VP
DATE	SYM.	REVISION RECORD	DR	CK.

DWG DATE NOV 30, 1961 DR. J. K. GALL
FIRST USED 1963 CK. H. VAN PELT
REFERENCE 12J APPR.
APPR.
NAME LAYOUT - SPEEDOMETER CABLE

SPEEDOMETER CABLE INSTALLATION WITH SYNCHROMESH TRANSMISSION

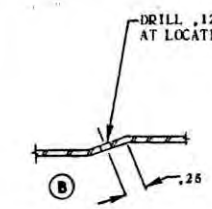
(A)

SERIES 3000 - 3100
SHEET 1 OF 3

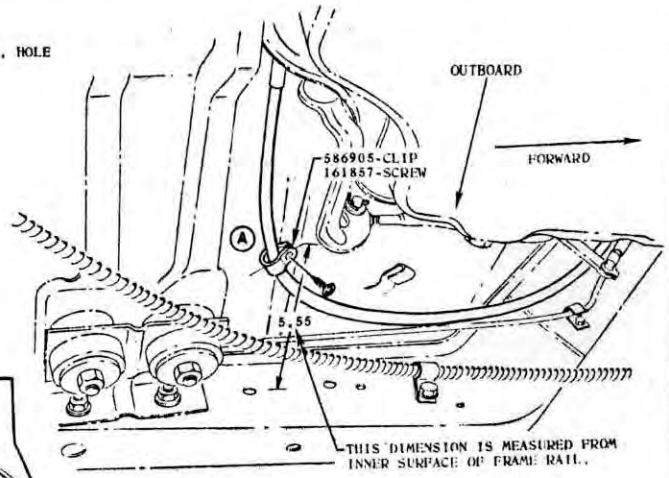
PART NO. 587130

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

587130
SHEET 2 OF 3

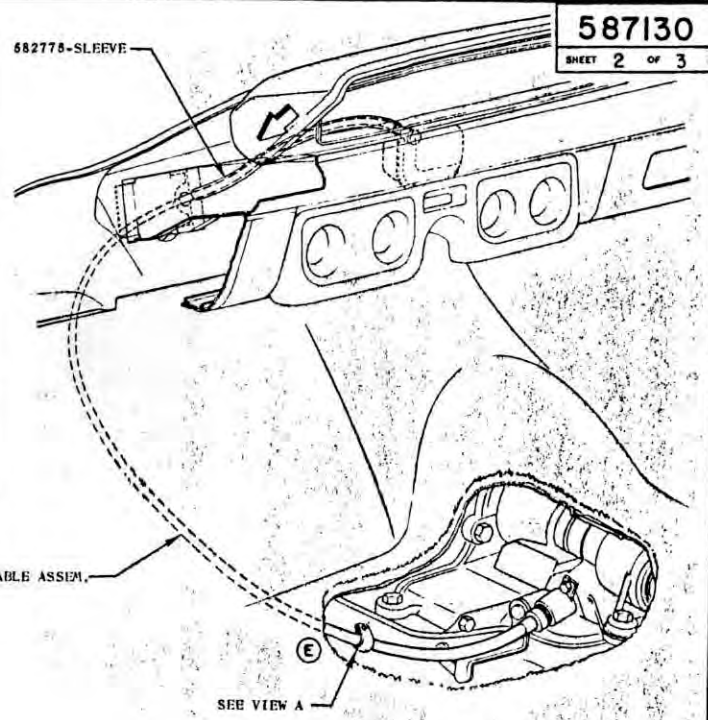


SECTION THROUGH FLOOR PAN AT CLIP

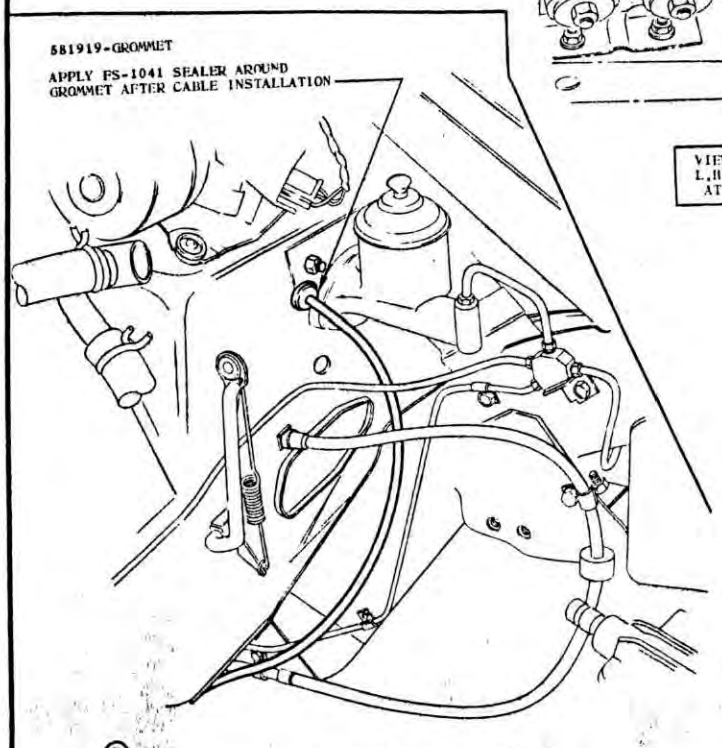


VIEW A

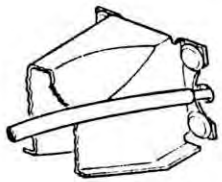
VIEW LOOKING AT BOTTOM L.H. SIDE OF FLOOR PAN AT SPEEDOMETER CABLE



CABLE INSTALLATION



VIEW FROM INSIDE ENGINE COMPARTMENT



VIEW IN DIRECTION OF ARROW

CABLE HOLE IN DASH

+	5-8-62	E	CLIP REVISED	C/A JD
*	2-15-62	D	PART NO'S REMOVED	C.G. DT
*	1-30-62	C	WAS SHEET 2 OF 2	BP JD
*	1-30-62	B	SECTIONAL VIEW ADDED	BP JD
*	1-30-62	A	VIEW REVISED	BP VP
	DATE	SYM.	REVISION RECORD	DR. CK.

DWG. DATE NOV. 30, 1961 DR. J. V. GALL
FIRST USED 1963 CK. H. VAN PELT APPR.
REFERENCE 35 M-35 APPR.

SPEEDOMETER CABLE INSTALLATION WITH HYDRAMATIC TRANSMISSION

C

NAME LAYOUT-SPEEDOMETER CABLE

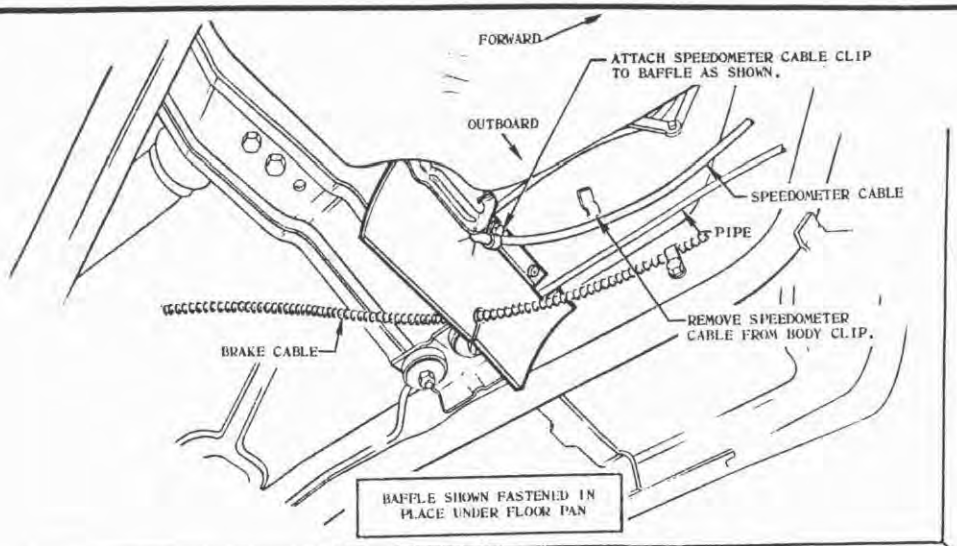
SERIES 3000 - 3100
SHEET 2 OF 3

PART NO. 587130

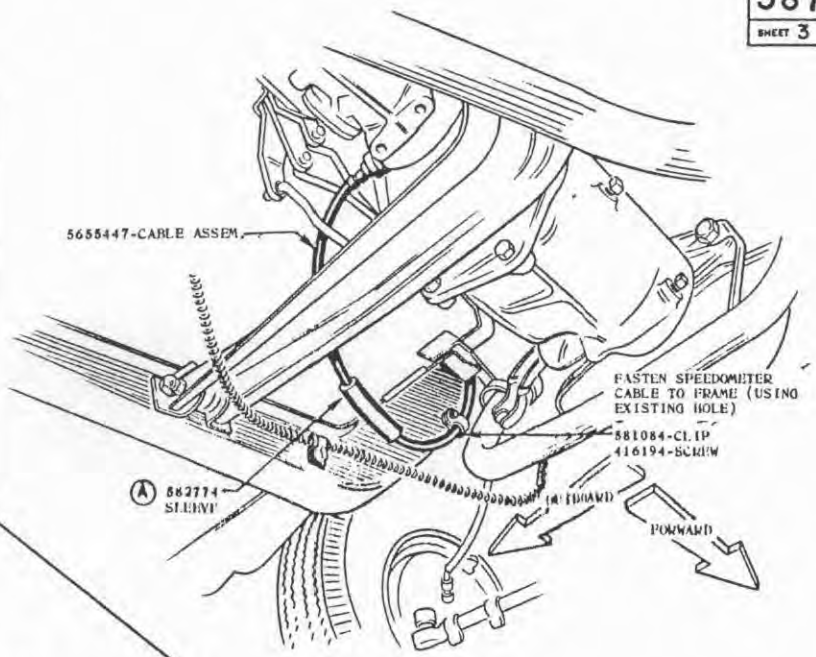
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

587130

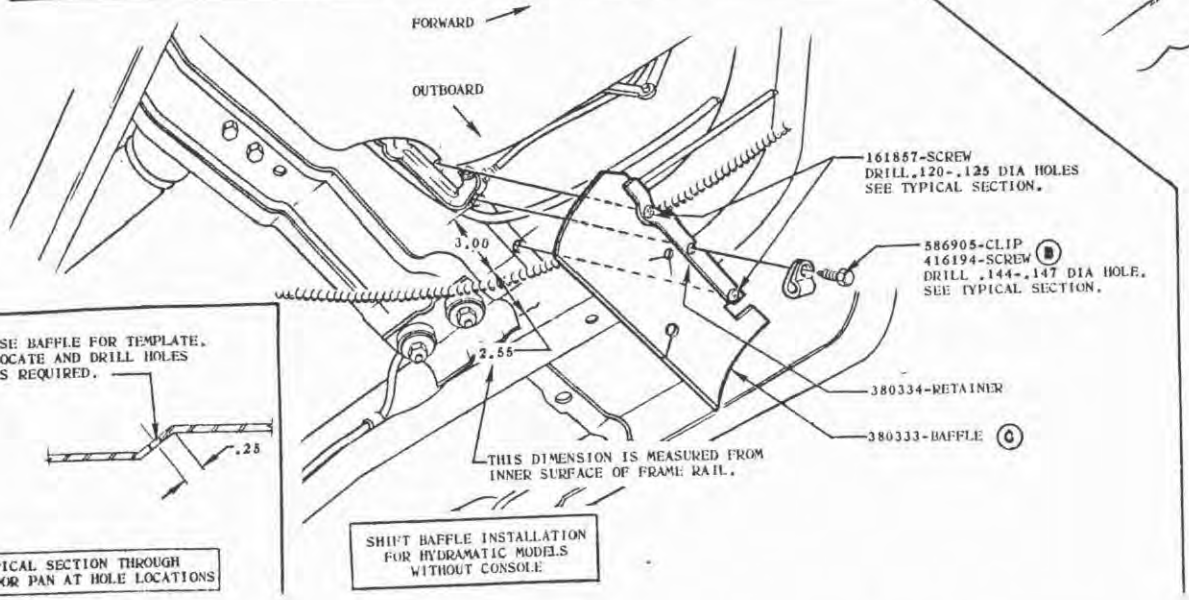
SHEET 3 OF 3



BAFFLE SHOWN FASTENED IN PLACE UNDER FLOOR PAN



CABLE ROUTING FOR 4 SPEED SM TRANSMISSION



SHIFT BAFFLE INSTALLATION FOR HYDRAMATIC MODELS WITHOUT CONSOLE

TYPICAL SECTION THROUGH FLOOR PAN AT HOLE LOCATIONS

DATE	SYM.	REVISION RECORD	DR.	CK.
1-19-62	C	WAS 380322 ASST	JW	VP
1-16-62	B	WAS 161857 SCREW	JW	VP
9-31-61	A	582774 SLEEVE ADD'D	CM	VP

EWG. DATE JAN. 30, 1962 — DR. BEAUDOIN-PARKER

FIRST USED 1963 — CK. N VAN PELT — APPR.

REFERENCE 12-J — APPR.

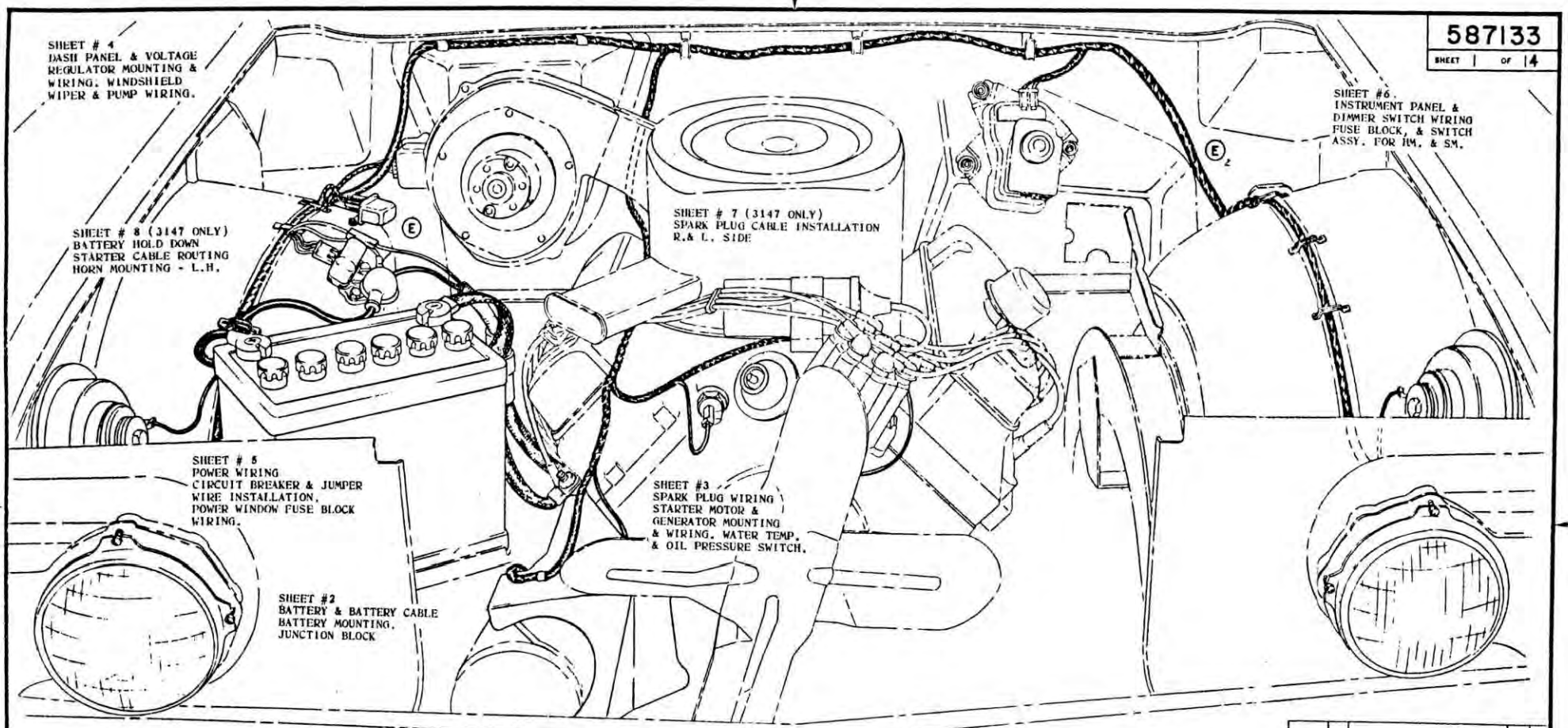
NAME: LAYOUT-SPEEDOMETER CABLE

SERIES 3000-3100

SHEET 3 OF 3

PART NO. 587130

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



FRONT VIEW OF ENGINE COMPARTMENT WIRING

HARNESS	COLOR CODE	USAGE
Q_3 2981211	YELLOW	SM. INCLUDING P.S. (EXCEPT 3147)
Q_2 2981212	LIGHT GREEN	HT. (EXCEPT 3147)
G 2981140	ORANGE	3147 ONLY

DATE	SYM.	REVISION RECORD	DR.	CK.
6-28-62	N	WAS SHEET 1 OF 12	C_{JA}	VP
5-9-62	G_3	COLOR CODE REV.	Z_{JA}	VP
4-30-62	F	USAGE REVISED	GK	VP
4-30-62	E	BRACES REMOVED	GK	VP

DWG. DATE NOV. 28, 1961 DR G. KESTER
FIRST USED 1963 CK. H. VAN PELT APPR.
REFERENCE 6Y1 APPR.
NAME LAYOUT-ELECTRICAL

SERIES 3000 - 3100
SHEET 1 OF 14

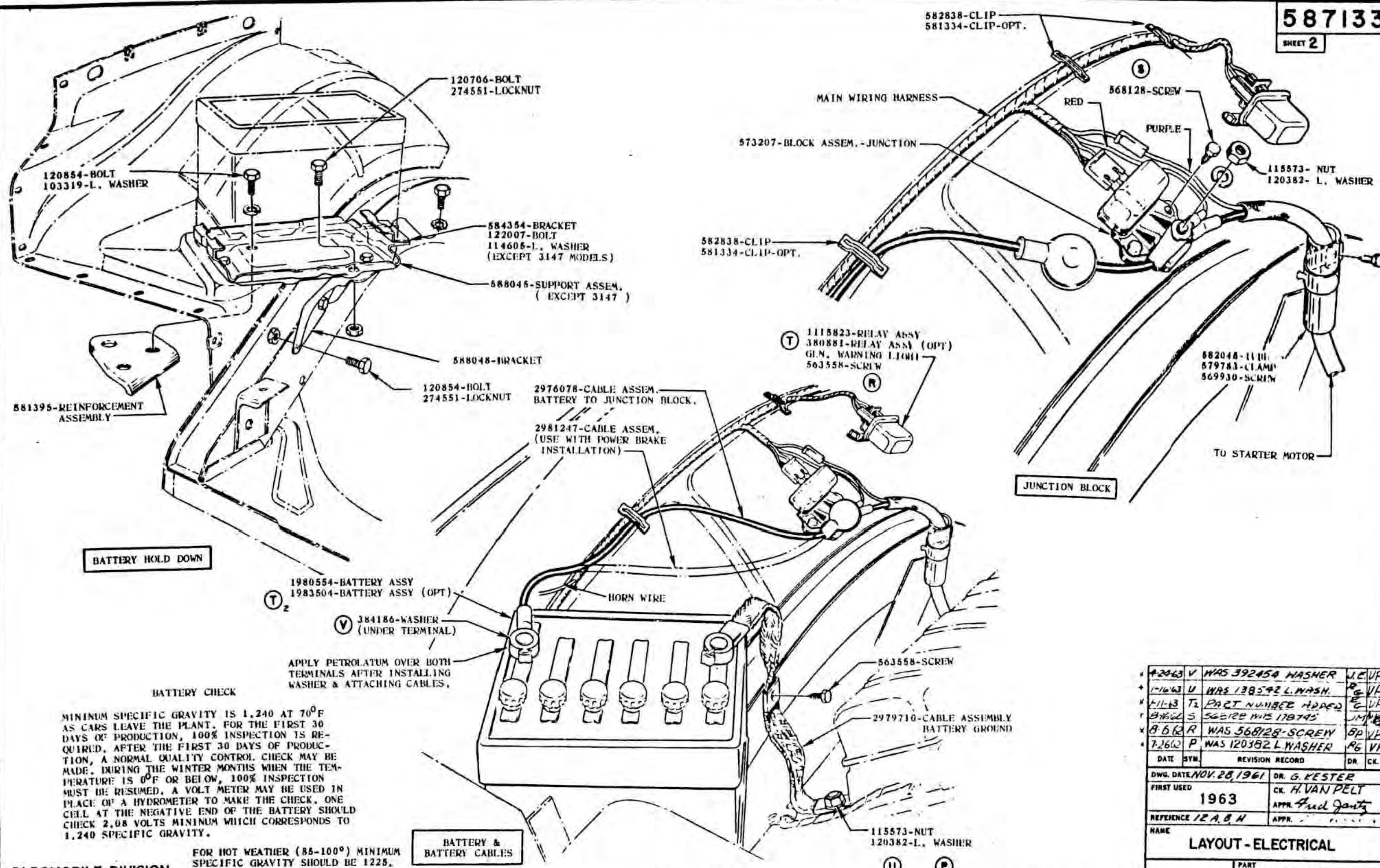
PART NO. 587133

587133
SHEET 1 OF 14

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

587133

SHEET 2



BATTERY CHECK

MINIMUM SPECIFIC GRAVITY IS 1.240 AT 70°F AS CARS LEAVE THE PLANT. FOR THE FIRST 30 DAYS OF PRODUCTION, 100% INSPECTION IS REQUIRED. AFTER THE FIRST 30 DAYS OF PRODUCTION, A NORMAL QUALITY CONTROL CHECK MAY BE MADE. DURING THE WINTER MONTHS WHEN THE TEMPERATURE IS 0°F OR BELOW, 100% INSPECTION MUST BE RESUMED. A VOLT METER MAY BE USED IN PLACE OF A HYDROMETER TO MAKE THE CHECK. ONE CELL AT THE NEGATIVE END OF THE BATTERY SHOULD CHECK 2.08 VOLTS MINIMUM WHICH CORRESPONDS TO 1.240 SPECIFIC GRAVITY.

FOR HOT WEATHER (85-100°) MINIMUM SPECIFIC GRAVITY SHOULD BE 1225.

DATE	SYM.	REVISION RECORD	DR.	CK.
4-24-63	V	WAS 392454 WASHER	J.E.	VP
1-16-63	U	WAS 138542 L. WASH.	RG	VP
1-11-63	T_2	PART NUMBER ADDED	EG	VP
8-16-62	S	568128 WAS 178745	JM	PB
8-6-62	R	WAS 568128-SCREW	BP	VP
7-26-62	P	WAS 120382 L. WASHER	RG	VP

DWG. DATE NOV. 28, 1961 — DR. G. KESTER

FIRST USED 1963 — CK. H. VAN PELT

APPR. Fred Jantz

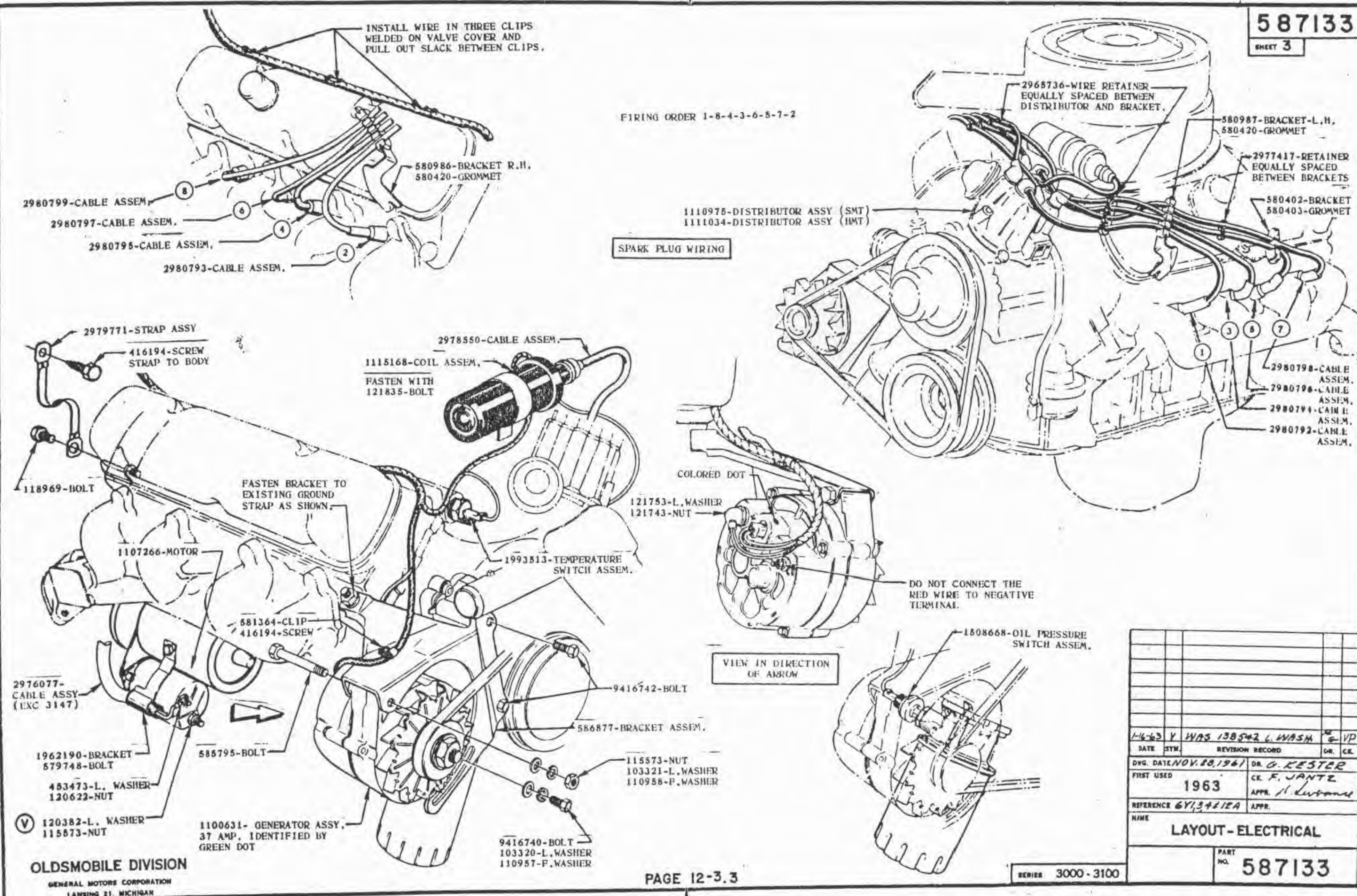
REFERENCE 12 A, B, H — APPR.

NAME LAYOUT - ELECTRICAL

PART NO. 587133

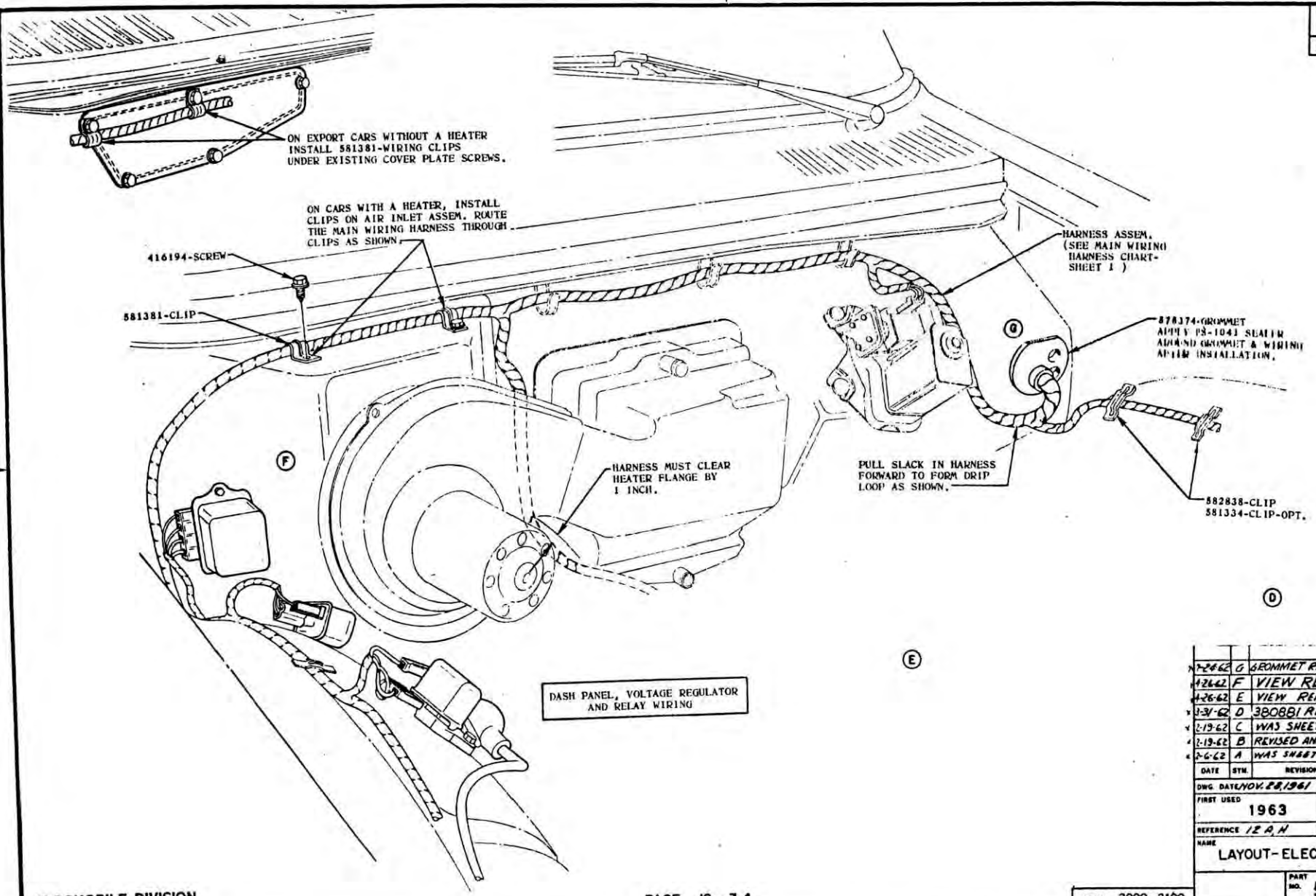
SERIES 3000 - 3100

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN


587133
SHEET 3
INSTALL WIRE IN THREE CLIPS WELDED ON VALVE COVER AND PULL OUT SLACK BETWEEN CLIPS.
FIRING ORDER 1-8-4-3-6-5-7-2
580986-BRACKET R.H.
580420-GROMMET
2980799-CABLE ASSEM.
2980797-CABLE ASSEM.
2980795-CABLE ASSEM.
2980793-CABLE ASSEM.
8
6
4
2
SPARK PLUG WIRING
2968736-WIRE RETAINER EQUALLY SPACED BETWEEN DISTRIBUTOR AND BRACKET.
580987-BRACKET-L.H.
580420-GROMMET
2977417-RETAINER EQUALLY SPACED BETWEEN BRACKETS
580402-BRACKET
580403-GROMMET
1110975-DISTRIBUTOR ASSY (SMT)
1111034-DISTRIBUTOR ASSY (HMT)
1
3
5
7
2980798-CABLE ASSEM.
2980796-CABLE ASSEM.
2980794-CABLE ASSEM.
2980792-CABLE ASSEM.
2979771-STRAP ASSY
416194-SCREW STRAP TO BODY
2978550-CABLE ASSEM.
1115168-COIL ASSEM.
FASTEN WITH 121835-BOLT
118969-BOLT
FASTEN BRACKET TO EXISTING GROUND STRAP AS SHOWN.
1107266-MOTOR
1993813-TEMPERATURE SWITCH ASSEM.
581364-CLIP
416194-SCREW
2976077-CABLE ASSY (EXC 3147)
9416742-BOLT
586877-BRACKET ASSEM.
1962190-BRACKET
579748-BOLT
585795-BOLT
483473-L. WASHER
120622-NUT
V
120382-L. WASHER
115873-NUT
1100631- GENERATOR ASSY. 37 AMP. IDENTIFIED BY GREEN DOT
115573-NUT
103321-L.WASHER
110958-F.WASHER
9416740-BOLT
103320-L.WASHER
110957-F.WASHER
COLORED DOT
121753-L.WASHER
121743-NUT
DO NOT CONNECT THE RED WIRE TO NEGATIVE TERMINAL
VIEW IN DIRECTION OF ARROW
1508668-OIL PRESSURE SWITCH ASSEM.
1-16-63 Y WAS 138542 L.WASH G VP
DATE SYM. REVISION RECORD DR. CK.
DWG. DATE NOV. 28, 1961 DR. G. KESTER
FIRST USED 1963
CK. F. JANTZ
APPR.
REFERENCE 6Y1,3,4,12A APPR.
NAME LAYOUT-ELECTRICAL
PART NO. 587133
SERIES 3000-3100
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

587133

SHEET 4



DATE	STN.	REVISION RECORD	DR.	CK.
7-24-62	G	GROMMET REV. TO DETAIL	GK	VP
4-26-62	F	VIEW REVISED	GK	VP
4-26-62	E	VIEW REMOVED	GK	VP
3-31-62	D	380881 RELAY ASSY ADD	JH	VP
2-19-62	C	WAS SHEET 4 OF 9	GK	VP
2-19-62	B	REVISED AND REDRAWN	GK	VP
2-6-62	A	WAS SHEET 4 OF 8	JG	VP

DWG. DATE NOV. 28, 1961 — DR. G. KESTER

FIRST USED 1963 — CK. H. VAN PELT — APPR.

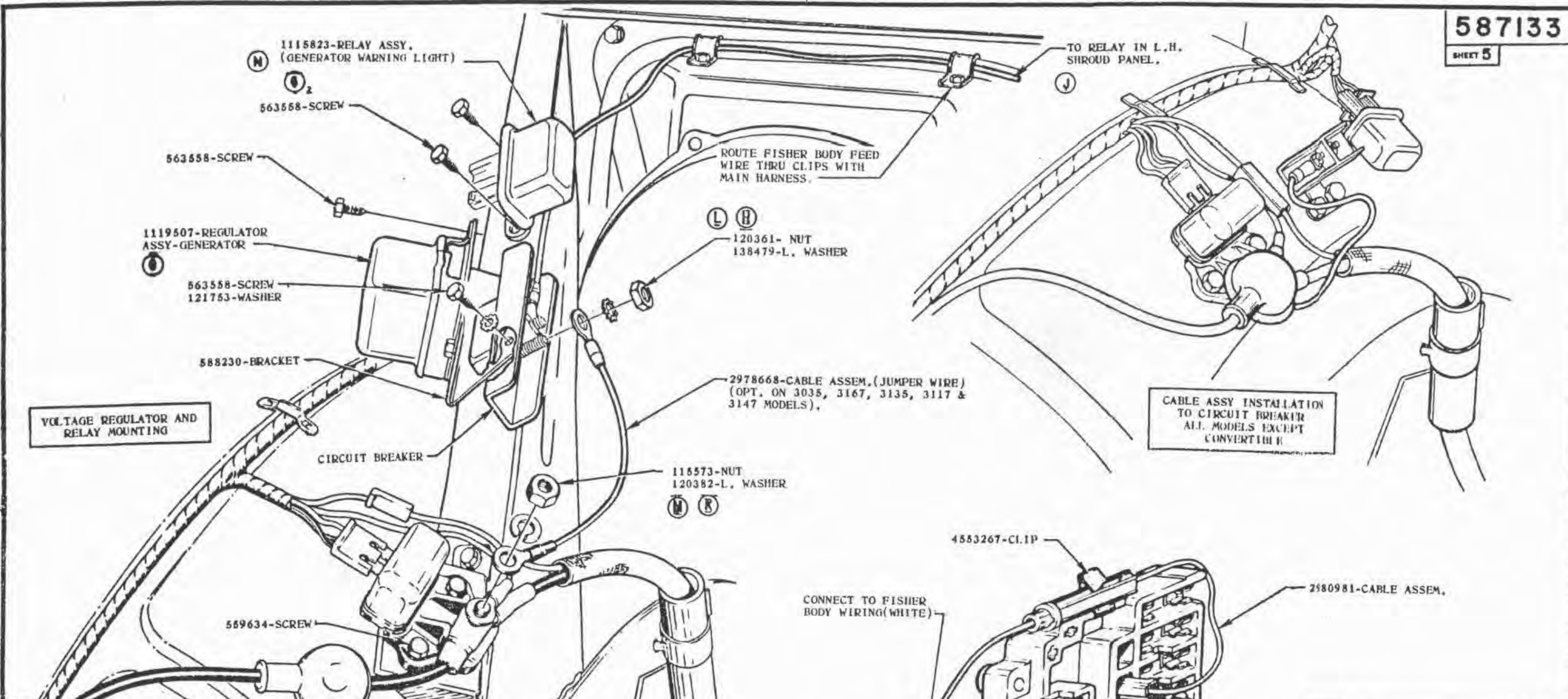
REFERENCE 12 A H — APPR.

NAME LAYOUT - ELECTRICAL

PART NO. 587133

SERIES 3000 - 3100

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN


587133
SHEET 5
1115823-RELAY ASSY. (GENERATOR WARNING LIGHT)
N
G2
563558-SCREW
563558-SCREW
1119507-REGULATOR ASSY-GENERATOR
G
563558-SCREW
121753-WASHER
588230-BRACKET
VOLTAGE REGULATOR AND RELAY MOUNTING
CIRCUIT BREAKER
559634-SCREW
580779-BRACKET
563558-SCREW
ROUTE FISHER BODY FEED WIRE THRU CLIPS WITH MAIN HARNESS.
L H
120361- NUT
138479-L. WASHER
2978668-CABLE ASSEM.(JUMPER WIRE) (OPT. ON 3035, 3167, 3135, 3117 & 3147 MODELS).
115573-NUT
120382-L. WASHER
M K
TO RELAY IN L.H. SHROUD PANEL.
J
CABLE ASSY INSTALLATION TO CIRCUIT BREAKER ALL MODELS EXCEPT CONVERTIBLE
4553267-CLIP
2980981-CABLE ASSEM.
CONNECT TO FISHER BODY WIRING(WHITE)
J2
CONNECTOR FROM FISHER HARNESS
PLUG INTO CENTER HOLE MARKED "POWER WINDOW".
POWER WIRING
CABLE ASSY INSTALLATION TO CIRCUIT BREAKER (CONVERTIBLES ONLY)
CLIP & HARNESS INSTALLATION TO FUSE BLOCK

DATE	SYM.	REVISION RECORD	DR.	CK.
1-29-62	N	380881-RELAY ASSY F.. NO	L.	DT
1-16-63	M	WAS 138542 L. WASHER	R	VP
11-10-62	L	WAS 115295 NUT	GB	VP
7-26-62	K	FASTENINGS ADDED		VP
7-20-62	J2	NOTES ADDED		VP
6-15-62	H	115295 WAS 120614 NUT	R	VP
6-15-62	G2	GENERATOR WAS ALTERNATOR	R	VP

DWG. DATE NOV. 28, 1961	DR. G. KESTER
FIRST USED 1963	CK. H. VAN PELT
	APPR. Fred Jantz
REFERENCE 12 A, N	APPR.

NAME
LAYOUT-ELECTRICAL

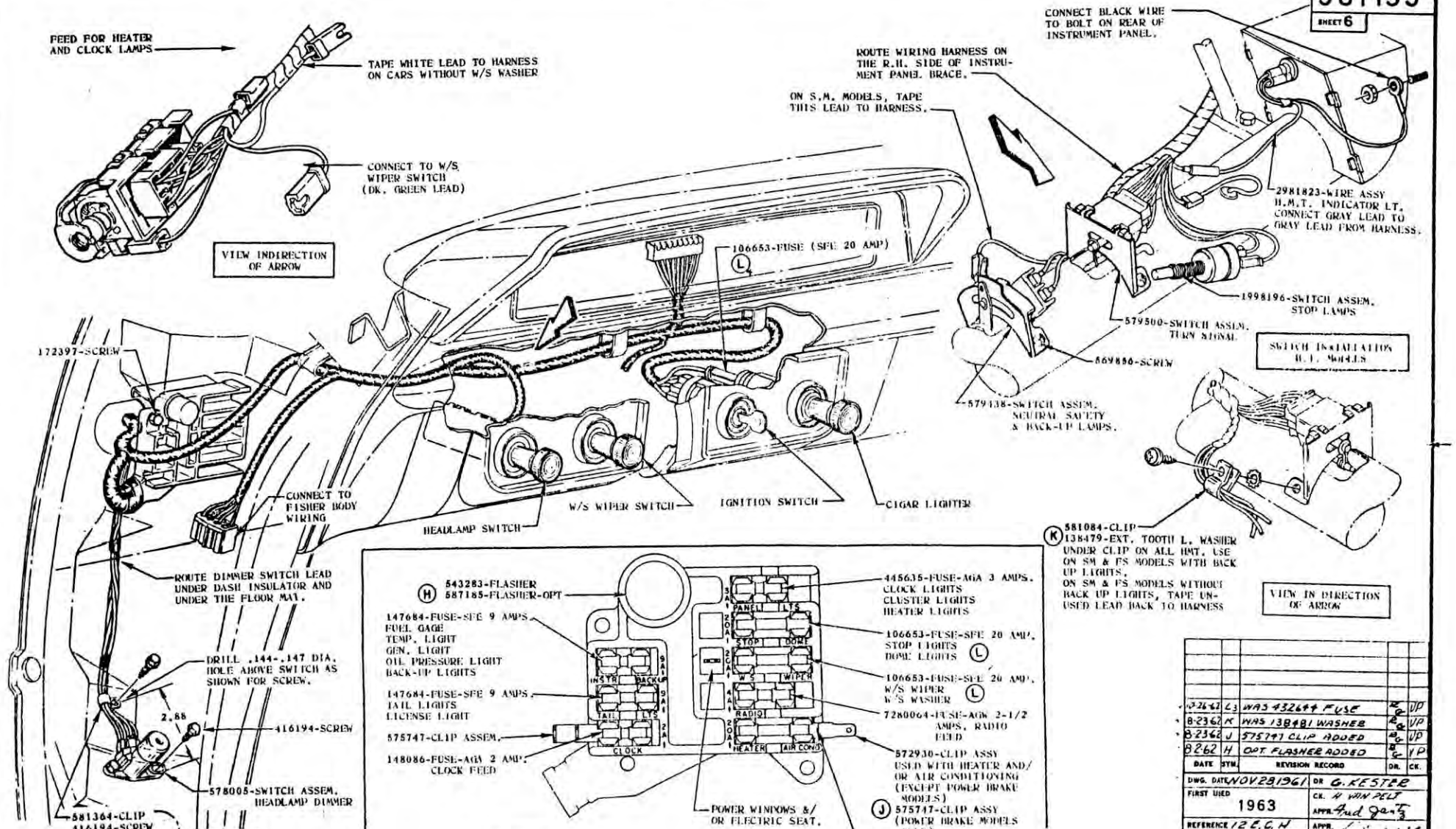
PART NO. 587133

SERIES 3000-3100

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

587133

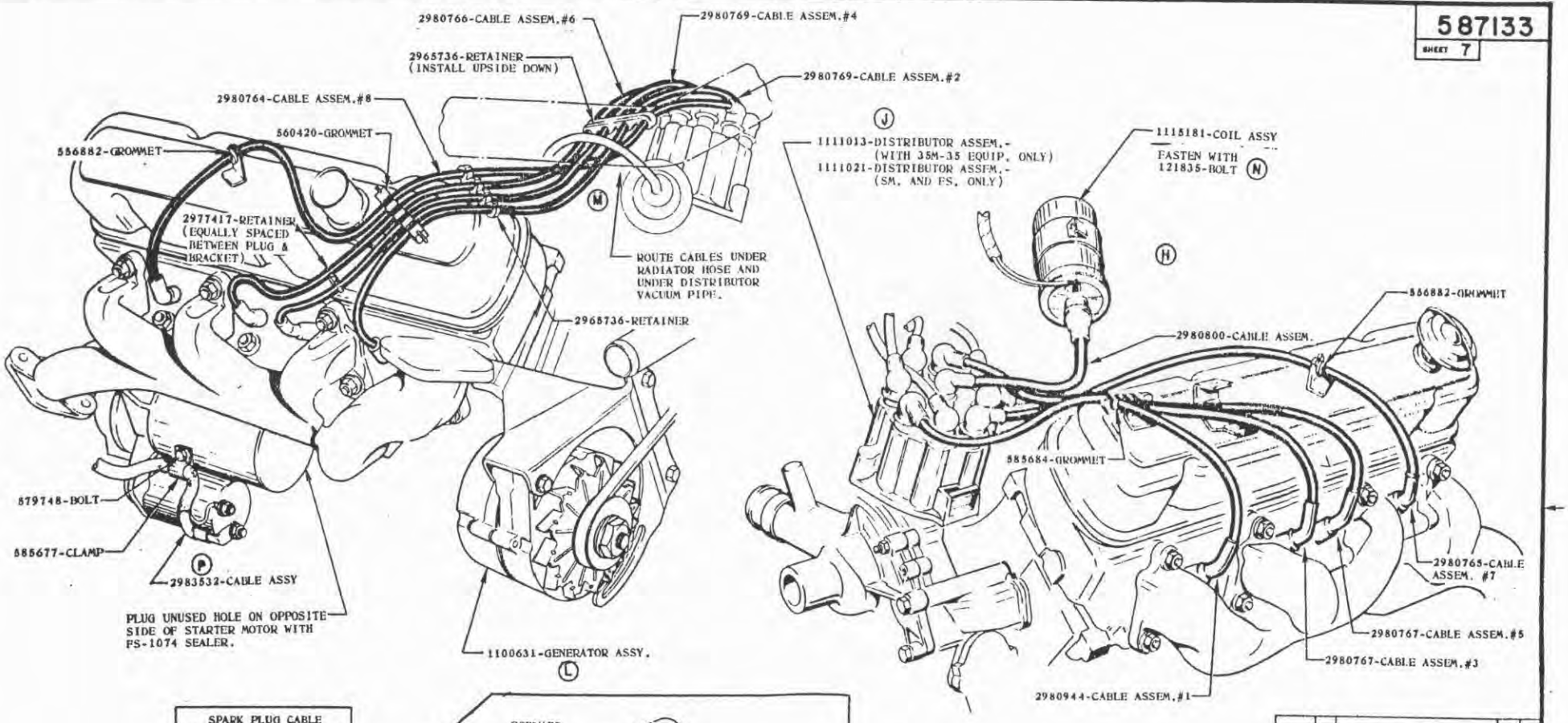
SHEET 6



DATE	SYM.	REVISION RECORD	DR.	CK.
8-2362	L3	WAS 432644 FUSE	R.G.	VP
8-2362	K	WAS 138481 WASHER	R.G.	VP
8-2362	J	575747 CLIP ADDED	R.G.	VP
8-2-62	H	OPT. FLASHER ADDED	R.G.	VP

DWG. DATE NOV 28 1961 DR G. KESTER
FIRST USED 1963 CK. H VAN PELT
REFERENCE 12 E.C.N APPR. Fred Jantz
NAME LAYOUT- ELECTRICAL
PART NO. 587133
SERIES 3000-3100

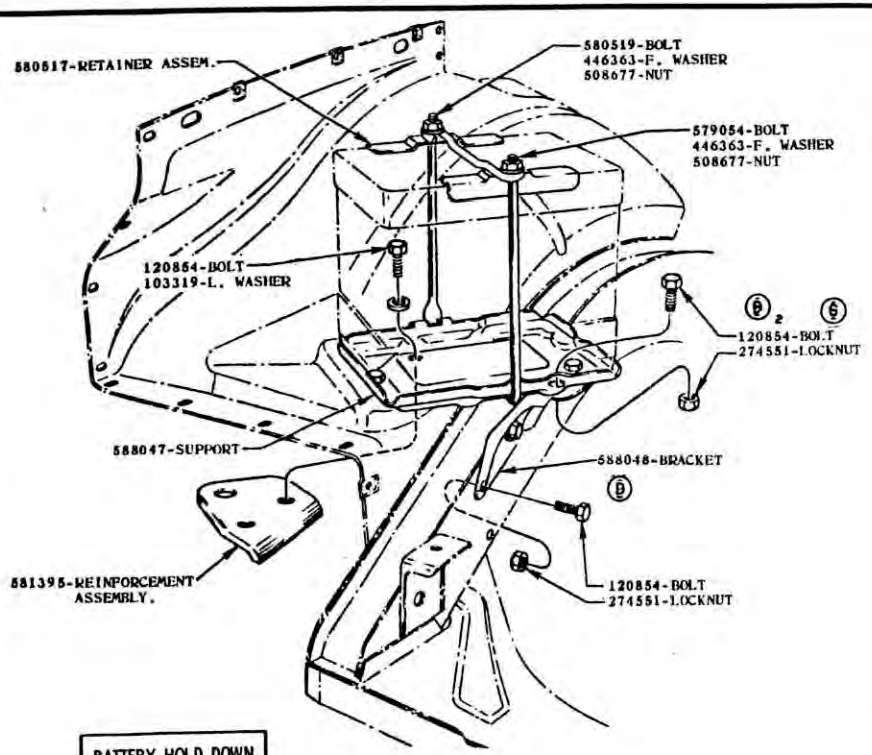
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



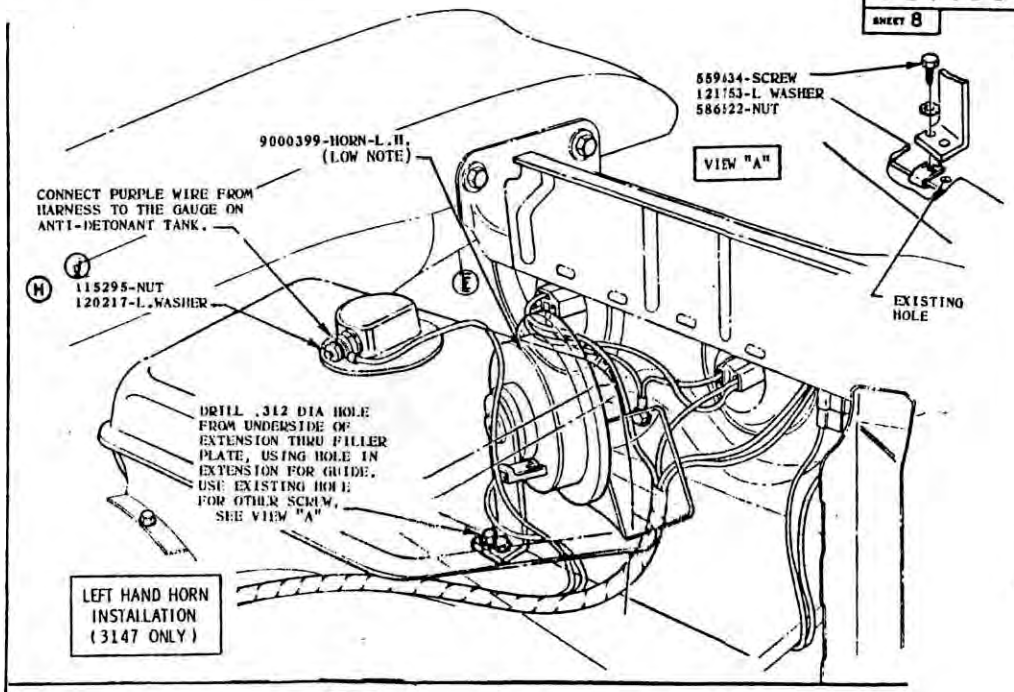
4	11-7-62	P	CABLE ASSY ADDED	VP
X	6-15-62	N	121835 BOLT NO. ADD'D	VP
4	6-12-62	M	CABLES RE-ROUTED	DT
4	6-11-62	L	WAS "ALTERNATOR"	DT
3	5-7-62	K	VIEW "A" ADDED	VP
2	5-1-62	J	WAS 1115170-COIL ASSY	VP
1	5-1-62	H	RESISTOR ASSY REMVD	VP
DATE	SYM.		REVISION RECORD	DR. CK.

DWG. DATE NOV. 28, 1961	DR. G. KESTER
FIRST USED 1963	CK. H. VAN PELT
	APPR.
REFERENCE 6 Y 8	APPR.
NAME LAYOUT-ELECTRICAL	
SERIES 3147	PART NO. 587133

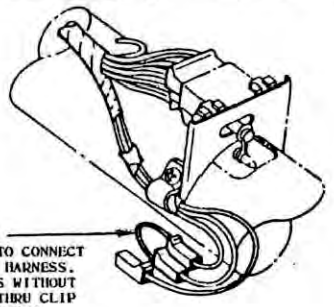
587133
SHEET 8

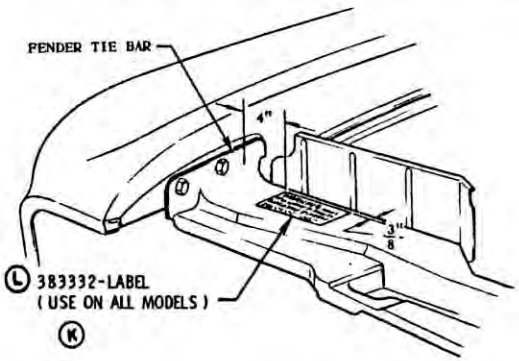


BATTERY HOLD DOWN (3147 ONLY)



LEFT HAND HORN INSTALLATION (3147 ONLY)





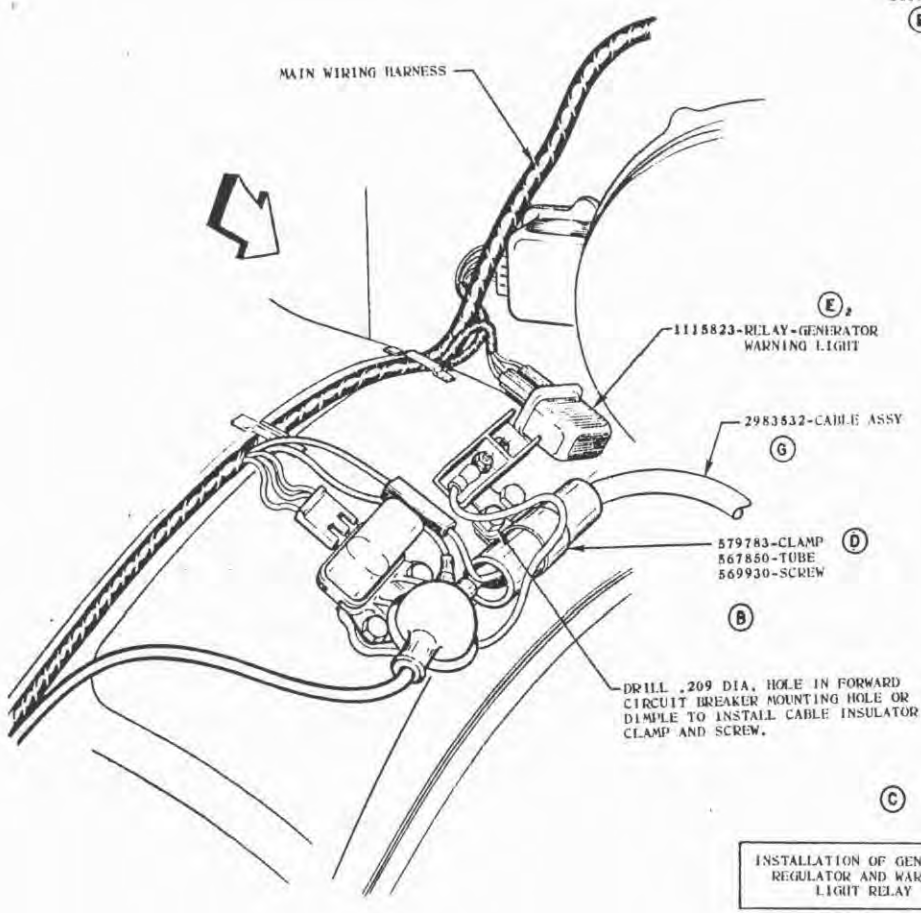
BATTERY WARNING LABEL INSTALLATION

BACK UP LIGHTS JUMPER WIRE INSTALLATION (3147 ONLY)

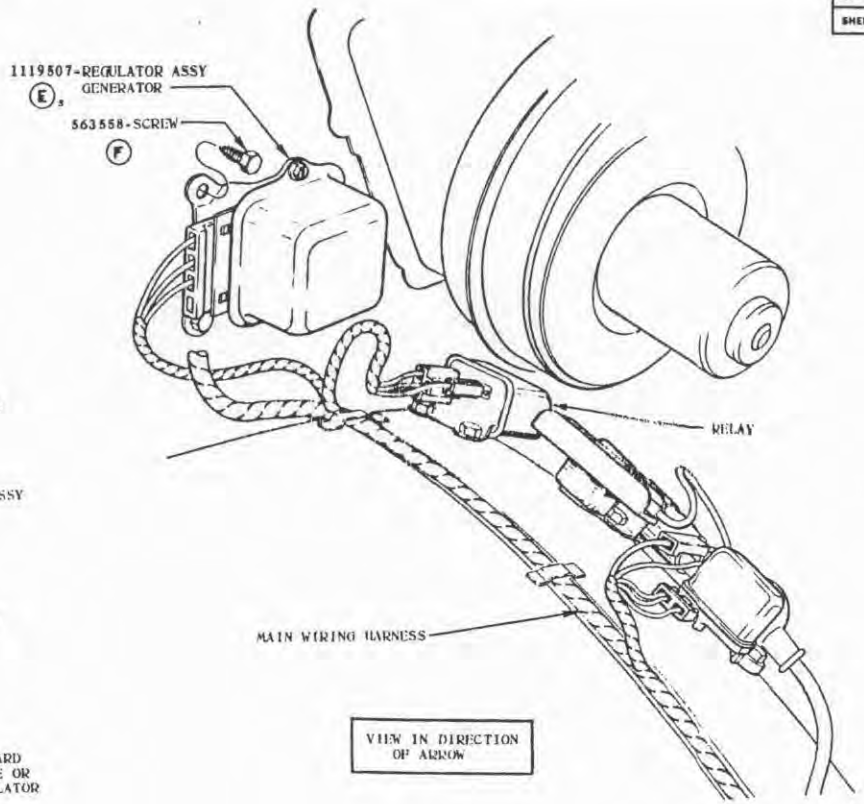
	DATE	SYM.	REVISION RECORD	DR.	CK
X	1-25-62	L	WAS 9771164-LABEL	C.R	DT
+	12-6-62	K	VIEW/PART NO. ADDED	G.K	VP
Y	9-26-62	J	WAS 120614 NUT	M	VP
+	8-23-62	H	NUT/WASHER ADDED	E.R	VP
+	8-23-62	G	WAS 120704 BOLT	G	VP
X	5-16-62	F	VIEW REVISED	G.K	VP
+	5-1-62	E	VIEW REVISED	E.R	VP
*	2-1-62	D2	BATTERY SUPPORT BRKT. FASTENINGS REV.	G.K	VP
*	2-1-62	C	WAS SHEET 8 OF 9	G.K	VP
*	2-6-62	B	WAS SHEET 8 of 8	T.C	D.T.
Y	1-30-62	A	NOTE REVISED	B.P	VP

DWG. DATE NOV. 20, 1961 DR. G. KESTER
FIRST USED 1963 CK. H. VAN PELT
APPR. Fred Quarg
REFERENCE 12A-B-H APPR.
NAME LAYOUT-ELECTRICAL
PART NO. 587133
SERIES 3000-3100

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



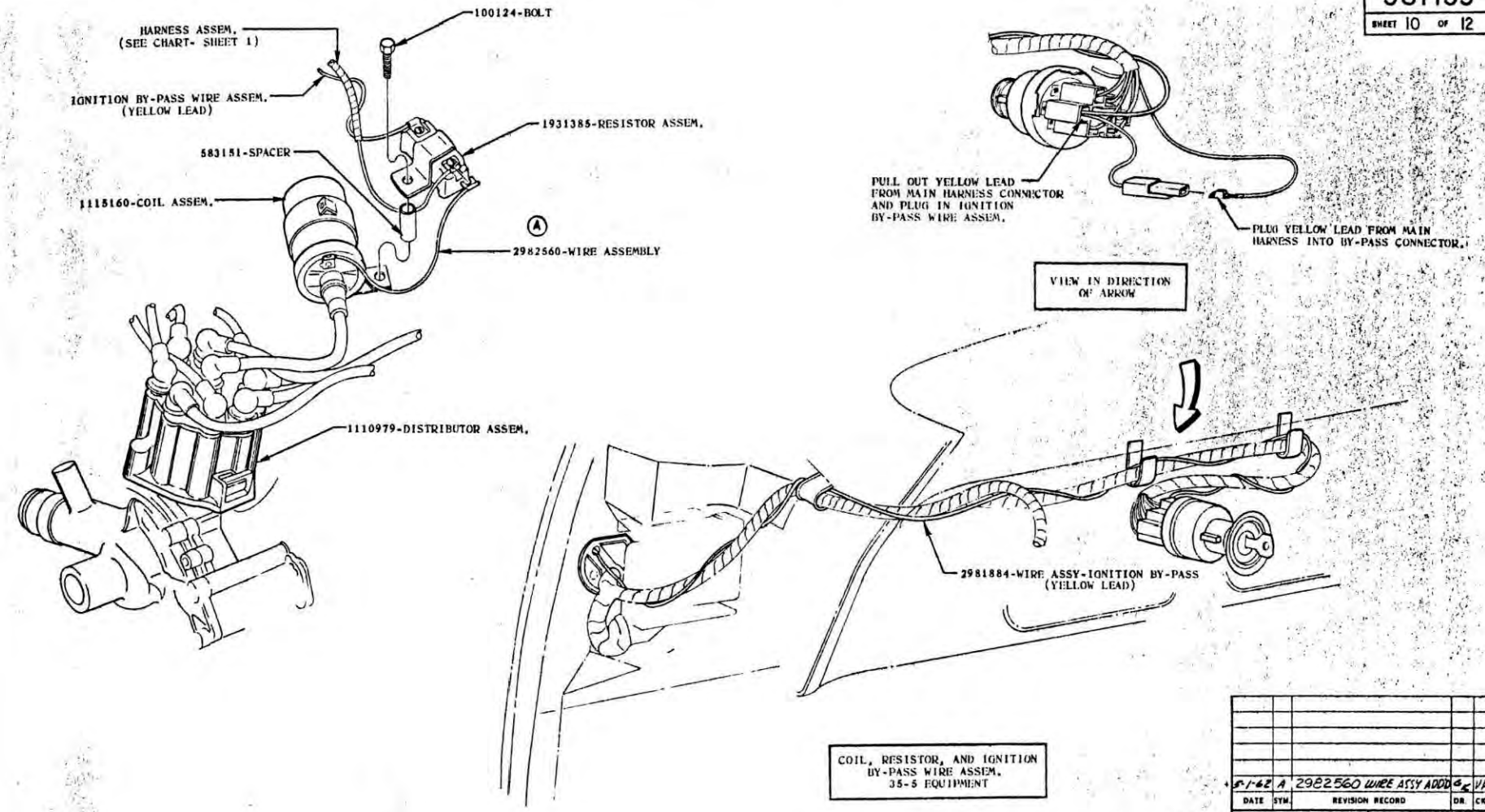
INSTALLATION OF GENERATOR REGULATOR AND WARNING LIGHT RELAY (E)1



VIEW IN DIRECTION OF ARROW

DATE	SYM.	REVISION RECORD	DR	CK.
10-24-62	G	CABLE ASSY ADDED	RG	VP
7-26-62	F	WAS 559634 SCREW	RG	VP
6-12-62	E	GENERATOR WAS ALTERNATOR	GK	DT
5-16-62	D	PART NO'S ADDED	GK	VP
5-3-62	C	VIEWS REV PER DETAILS	GK	VP
2-19-62	B	WAS 580766 BRK'T	EJR	VP
2-19-62	A	WAS SHEET 3 OF 3	EJR	VP

DWG. DATE FEB. 2 1962 DR. ED J. ROE
FIRST USED 1963 CK. D. TITUS
APPR. [signature]
REFERENCE 6Y-1412H APPR. [signature]
NAME LAYOUT - ELECTRICAL
SERIES 3147
PART NO. 587133



COIL, RESISTOR, AND IGNITION
BY-PASS WIRE ASSEM.
35-5 EQUIPMENT

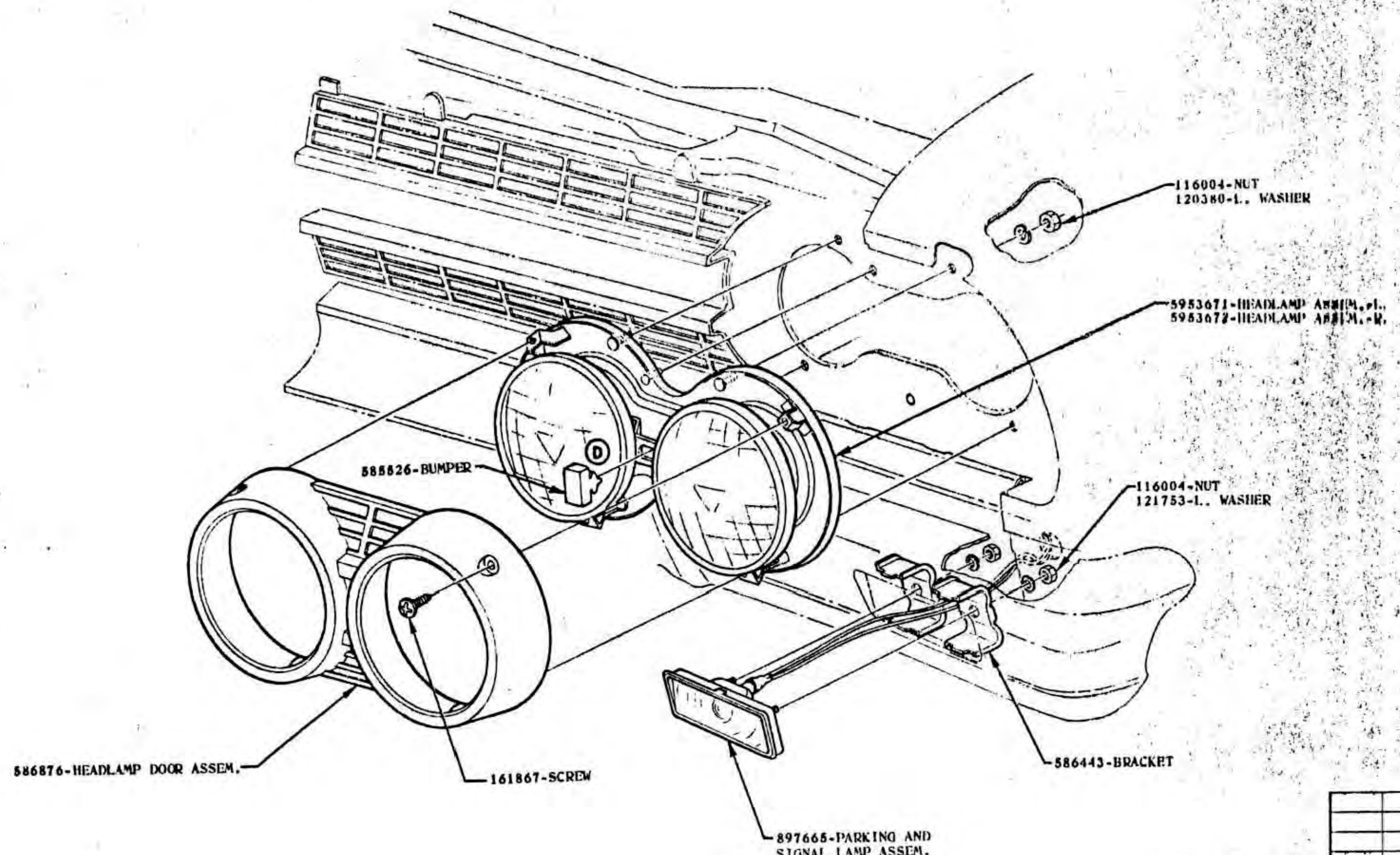
DATE	SYM.	REVISION RECORD	DR.	CK.
5-1-62	A	2982560 WIRE ASSY ADDED	G.L.	V.P.

DWG. DATE FEB. 19, 1962 DR. E.D. J. ROE
FIRST USED 1963 CK. H. VAN PELT
APPR.
REFERENCE 35-5 APPR.
NAME LAYOUT - ELECTRICAL

SERIES 3000 - 3100
SHEET 10 OF 12

PART NO. 587133

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE FEB. [illegible] 62 | DR. E.C. J. [illegible]

FIRST USED 1963 | CK. H. VAN PELT

APPR.

REFERENCE 12 - C | APPR.

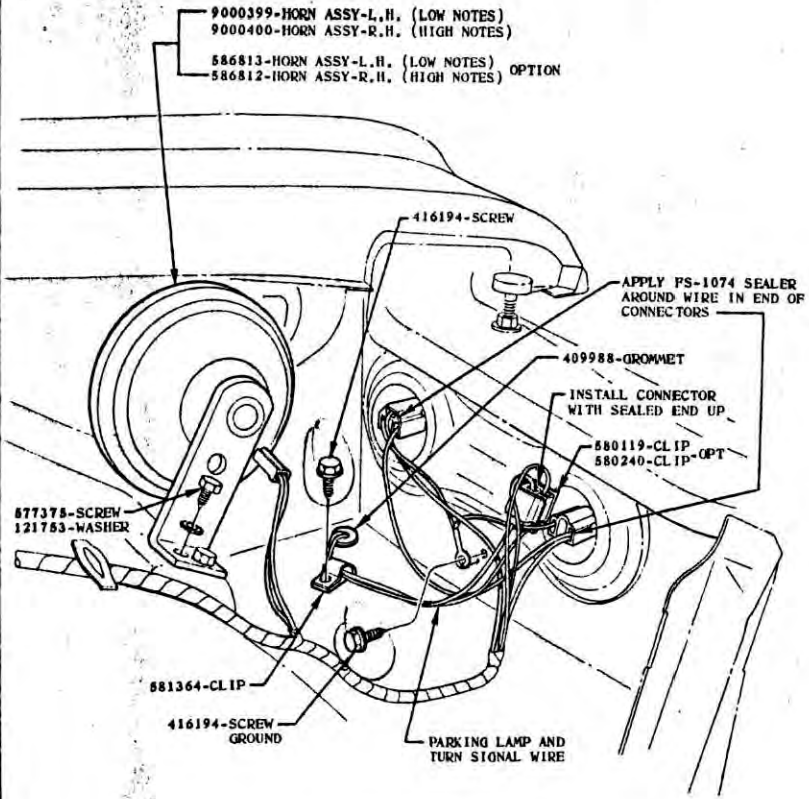
NAME LAYOUT - ELECTRICAL

SERIES 3000 - 3100

SHEET 11 OF 12

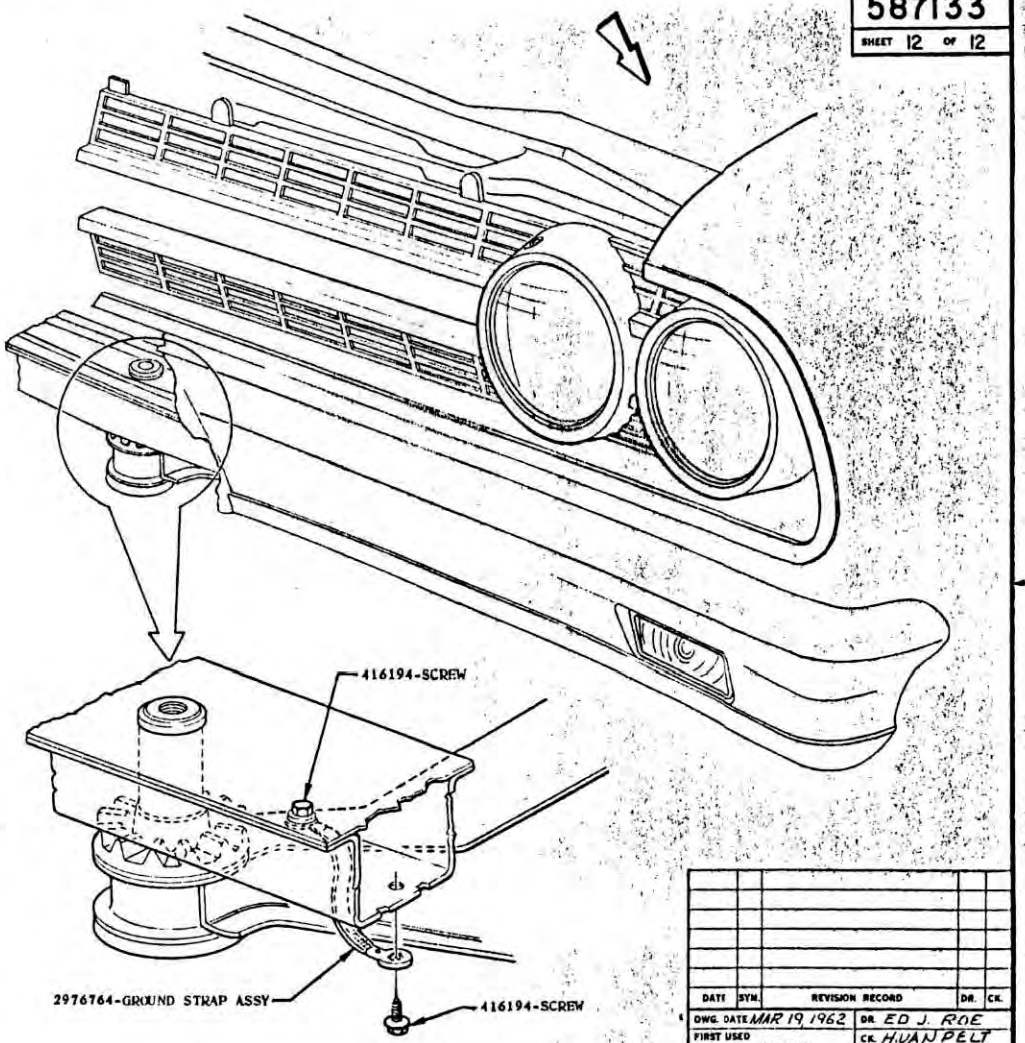
PART NO. 587133

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



VIEW IN DIRECTION OF ARROW

L.H. HORN, HEADLAMP AND TURN SIGNAL WIRING



GROUND STRAP INSTALLATION FOR ALL MODELS EXCEPT 3147 WITH AIR CONDITIONING

DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAR 19 1962 — DR. ED J. ROE
FIRST USED 1963 — CK. H.VANPELT
REFERENCE 12G — APPR.
APPR.

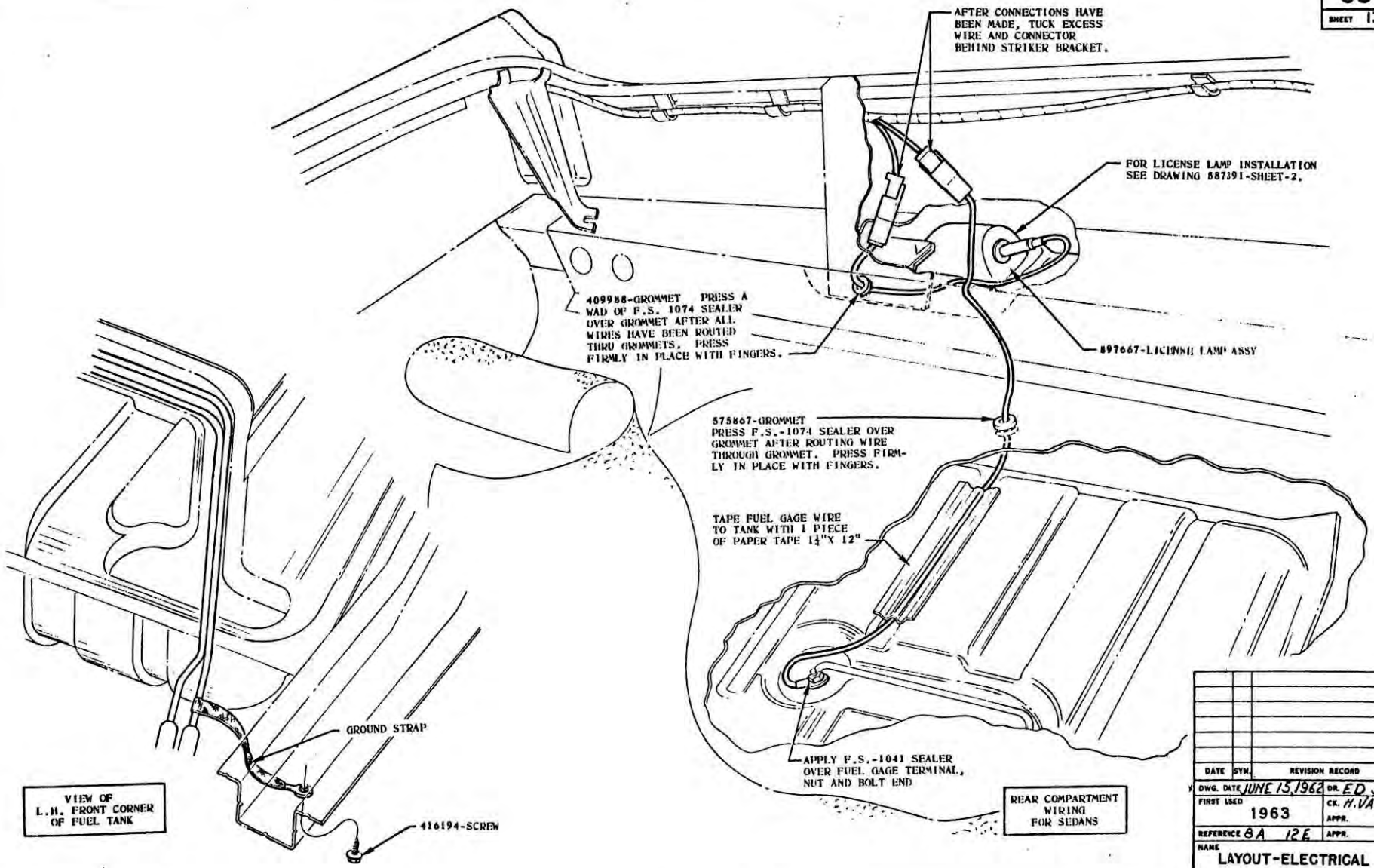
NAME: LAYOUT- ELECTRICAL

SERIES 3000 - 3100
SHEET 12 OF 12

PART NO. 587133

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

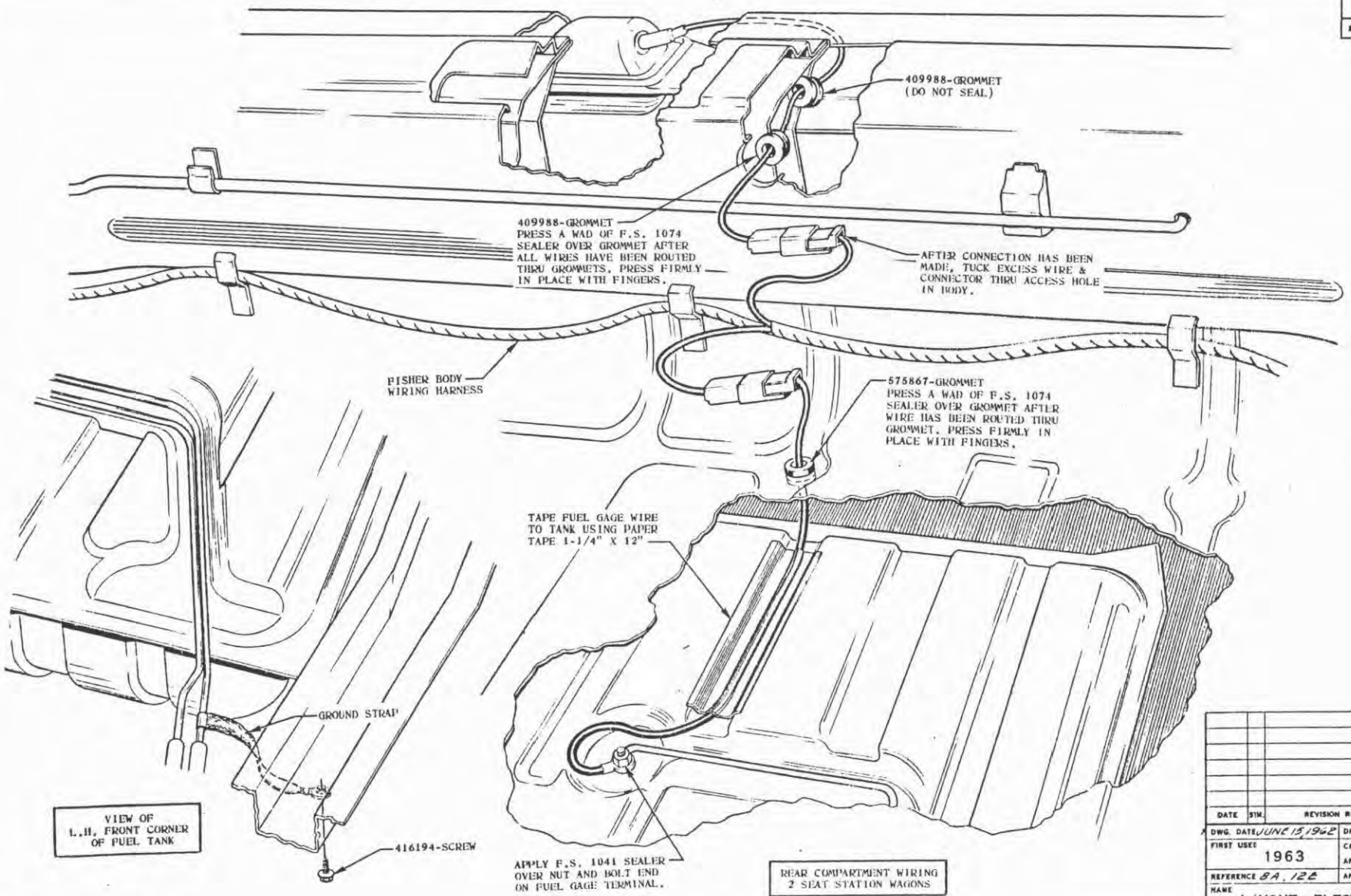
587133
SHEET 13



DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE JUNE 15, 1962 DR. ED J. ROE
FIRST USED 1963 CK. H. VAN PELT
REFERENCE 8A 12E APPR.
APPR.
NAME LAYOUT-ELECTRICAL
PART NO. 587133
SERIES 3000-3100

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



DATE	SYM.	REVISION RECORD	DR.	CK.
DWG. DATE JUNE 15, 1962			DR G. KESTER	
FIRST USED 1963			CK. H VAN PELT	
REFERENCE BA, 12B			APPR.	
NAME LAYOUT - ELECTRICAL			APPR.	
			PART NO. 587133	

SERIES 3000 - 3100

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

INSTALLATION OF OLDSMOBILE COURTESY LAMPS

587373
SHEET 1 OF 2

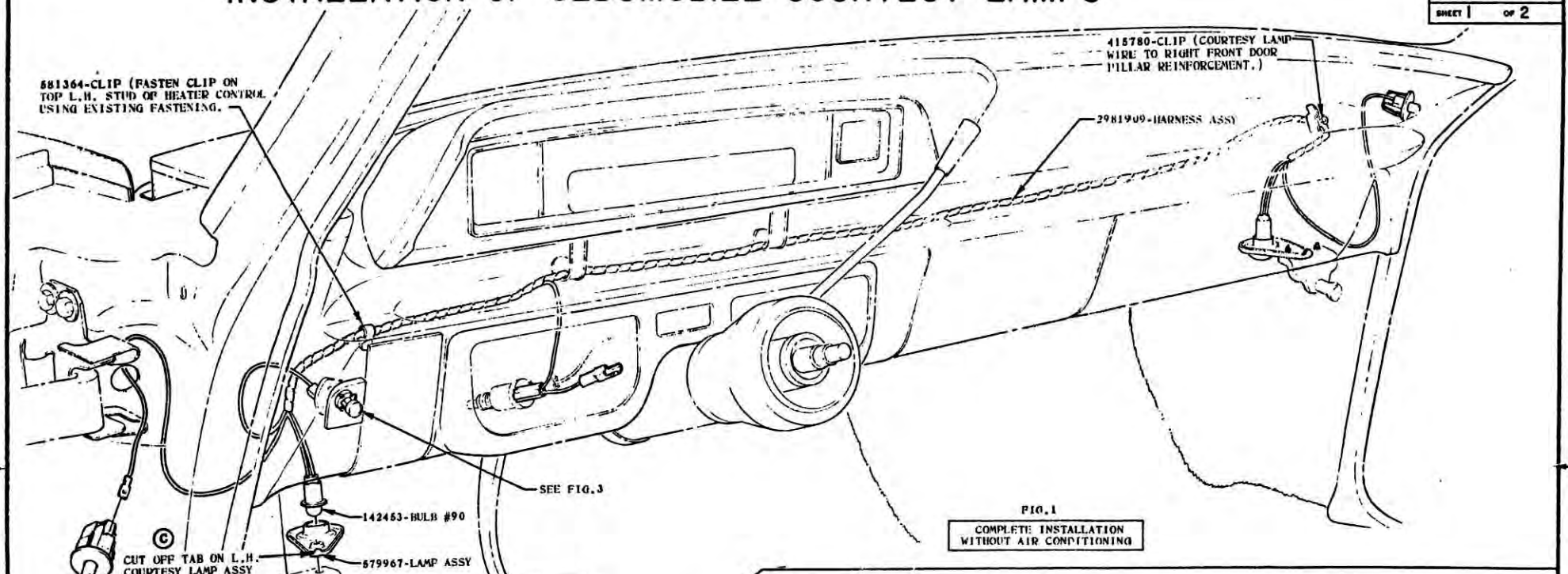


FIG.1
COMPLETE INSTALLATION WITHOUT AIR CONDITIONING

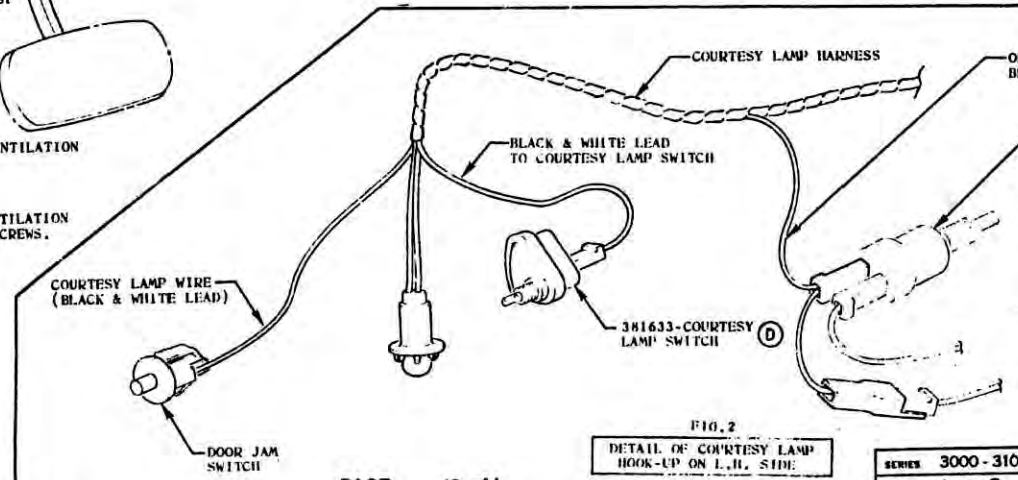


FIG.2
DETAIL OF COURTESY LAMP HOOK-UP ON L.H. SIDE

+ 10-6-62	D	SWITCH NO. ADDED	EJA	VP
x 8-10-62	C	NOTE ADDED	EJA	VP
+ 5-22-62	B	REDRAWN AND REVISED TO DETAIL	JWG	VP
+ 5-22-62	A	WAS SHEET 1 OF 1	JWG	VP
DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE DEC. 14, 1961 DR. VAN DYKE-NOE
FIRST USED 1963 CK. H. VAN PELT
REFERENCE 12L 39029 APPR.
NAME LAYOUT - COURTESY LAMPS

SERIES 3000 - 3100
SHEET 1 OF 2

PART NO. 587373

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

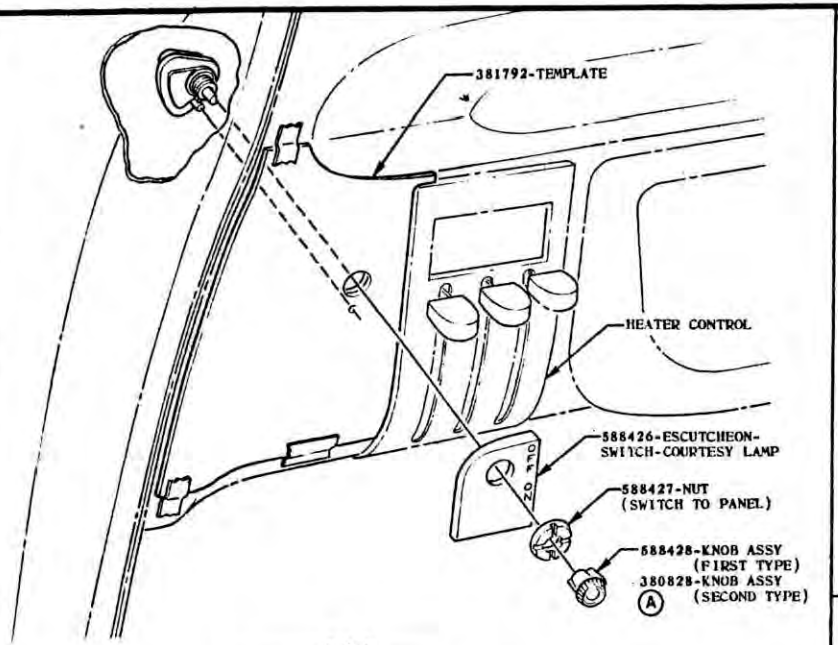


FIG.3

TEMPLATE APPLICATION AND SWITCH INSTALLATION

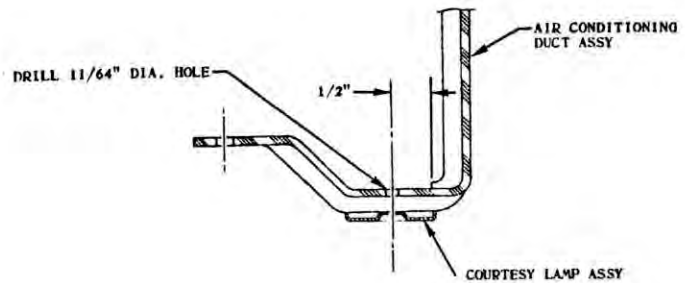


FIG.6

DRILLING LOCATION ON CENTER LINE OF MOUNTING BRACE FOR R.H. COURTESY LAMP

NOTE:
ON CARS WITH AIR CONDITIONING, ROUTE COURTESY LAMP HARNESS THRU 581364-CLIP ON TOP L.H. STUD OF HEATER CONTROL. THEN ROUTE HARNESS TO LAMP ASSEMBLY AS SHOWN. KEEP WIRING CLEAR OF HEATER CONTROL..

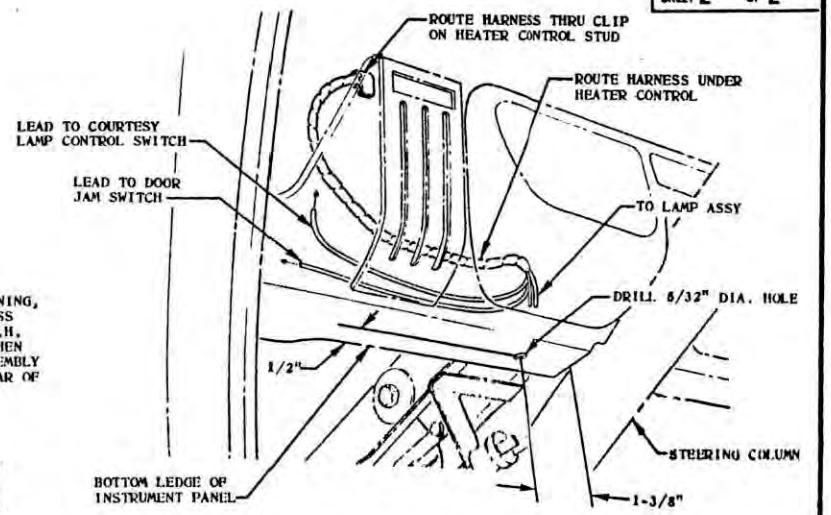


FIG.4

DRILLING LOCATION FOR L.H. COURTESY LAMP ON CARS WITH AIR CONDITIONING

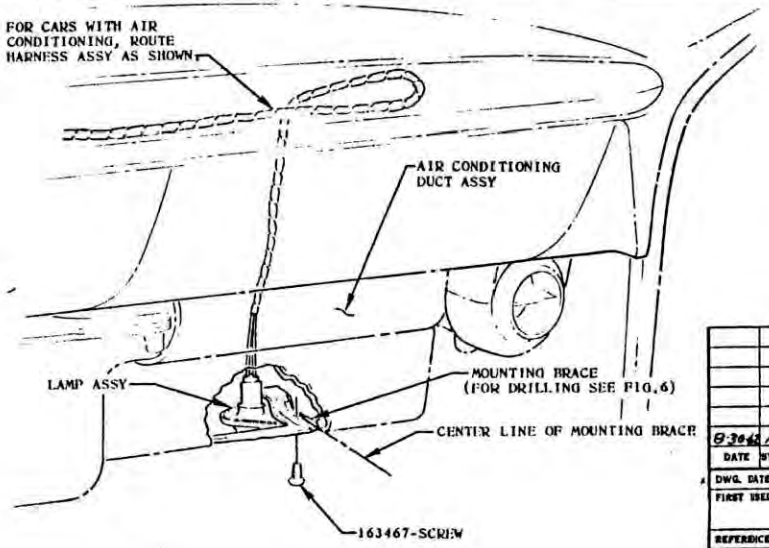


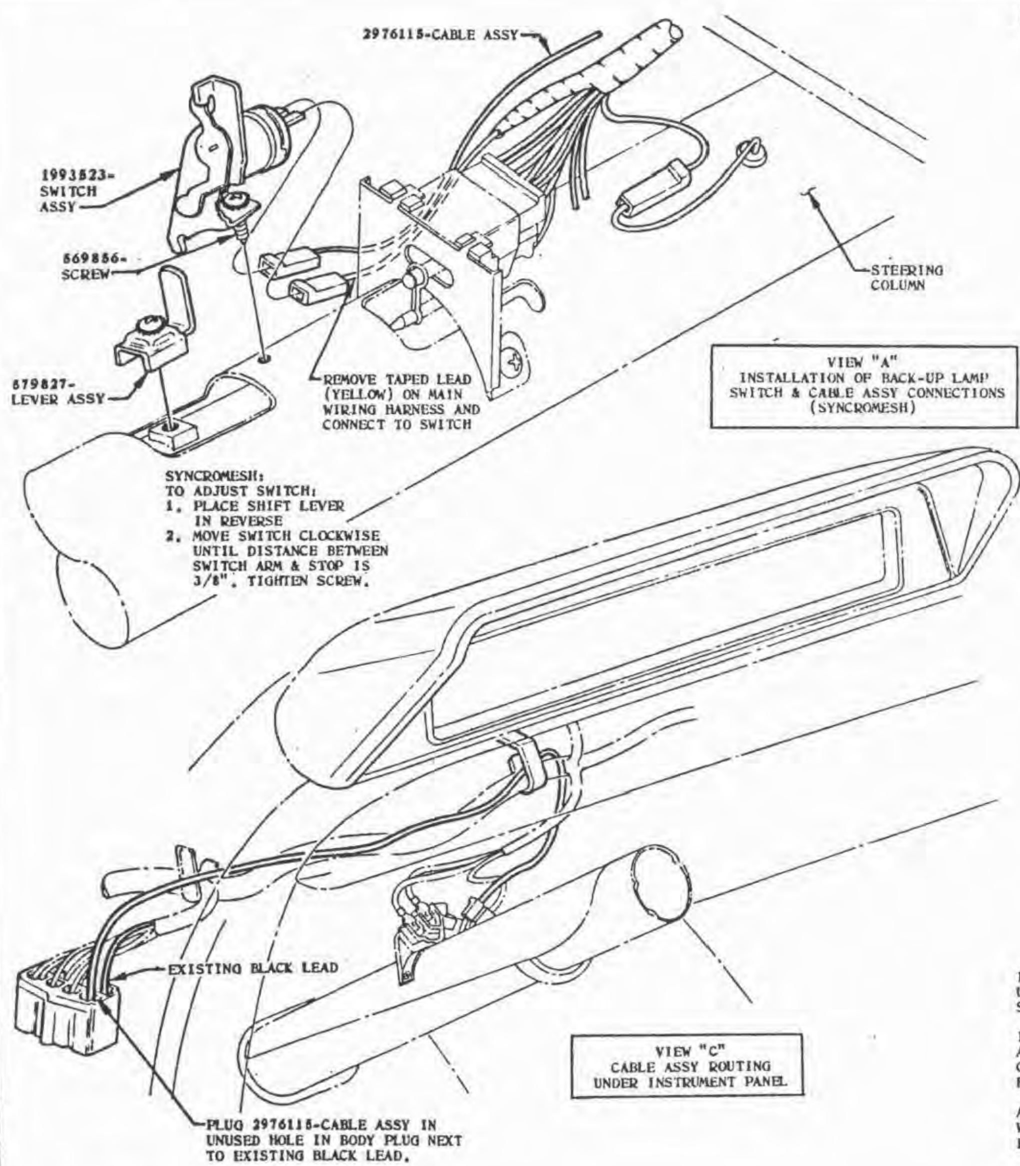
FIG.5

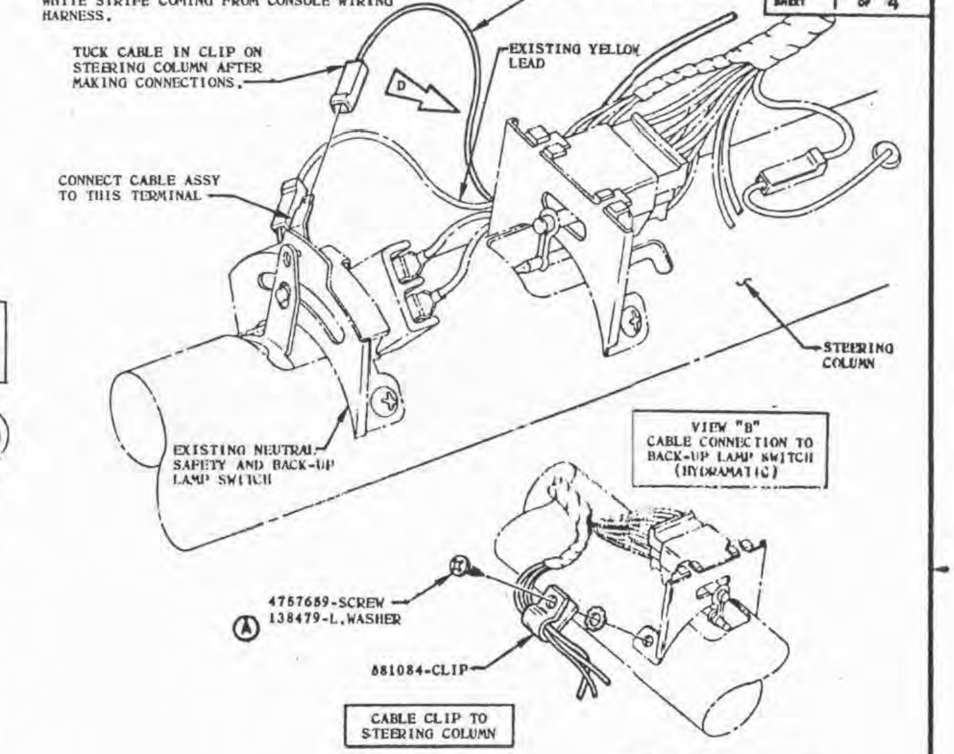
INSTALLATION OF R.H. COURTESY LAMP FOR CARS WITH AIR CONDITIONING

8-3062	A	380828 KNOB ASSY ADDED	PK	VP
DATE	SYM.	REVISION RECORD	DR.	CK.
DWG. DATE MAY 18 1962			DR. J.V. GALL	
FIRST USED 1963			CK. H.VAN PELT	
REFERENCE 12L 35029			APPR. Fred Dantz	
NAME LAYOUT-COURTESY LAMPS				
SERIES 3000-3100			PART NO. 587373	
SHEET 2 OF 2				

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

NOTE:
(B) ON CARS WITH CONSOLE, CONNECT BLACK LEAD ON STEERING COLUMN TO BLACK WIRE WITH WHITE STRIPE COMING FROM CONSOLE WIRING HARNESS.





GENERAL INSTRUCTIONS
(DEALERS)

IF CAR HAS HYDRAMATIC TRANSMISSION, CONNECT CABLE ASSY TO UNUSED TERMINAL ON EXISTING NEUTRAL SAFETY AND BACK-UP LAMP SWITCH. SEE VIEW "B"

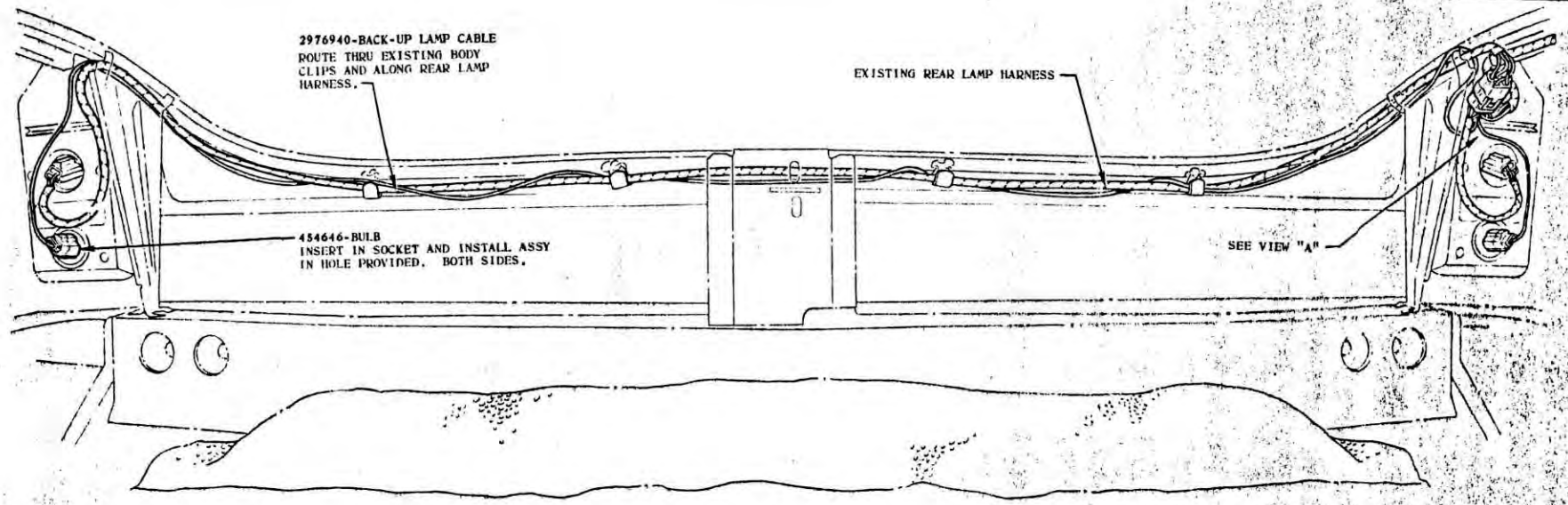
IF CAR HAS SYNCROMESH TRANSMISSION, INSTALL SWITCH AND LEVER ASSY, REMOVE TAPED LEAD ON MAIN HARNESS & CONNECT TO SWITCH. CONNECT CABLE ASSY TO OTHER TERMINAL ON SWITCH. SEE VIEW "A" FOR PROPER LOCATION OF THESE CONNECTIONS.

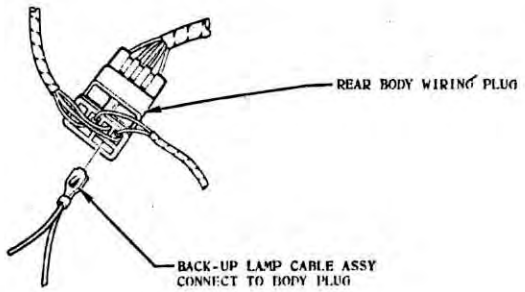
ALL MODELS: ROUTE CABLE ASSY UNDER INSTRUMENT PANEL, THROUGH WIRING CLIP BEHIND PANEL AND CONNECT TO UNUSED HOLE ON FRONT BODY PLUG. SEE VIEW "C".

DATE	SYM.	REVISION RECORD	DR.	CK.
1-2565	B	NOTE ADDED	G	DT
8-2362	A	WAS 138481-L.WASH.	GK	VP

DWG. DATE MAY 4 1962	DR. ED J. ROE
FIRST USED 1963	CK. H. VAN PELT APPR.
REFERENCE 35 T86	APPR.
NAME LAYOUT-BACK-UP LAMP	
SERIES 3000 - 3100 SHEET 1 OF 4	PART NO. 381662

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN





VIEW "A"

BACK-UP LAMP INSTALLATION DEALER

DATE	SYM.	REVISION RECORD	DR.	CK.

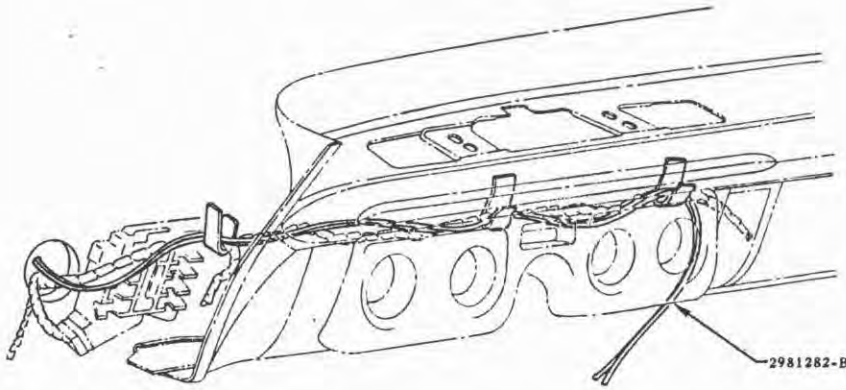
DWG. DATE MAY 7, 1962 DR ED J. ROE
FIRST USED 1963 CK H VAN PELT
APPR
REFERENCE 35 T 86 APPR.
NAME LAYOUT-BACK-UP LAMPS

SERIES 3000 - 3100
SHEET 2 OF 4

PART NO. 381662

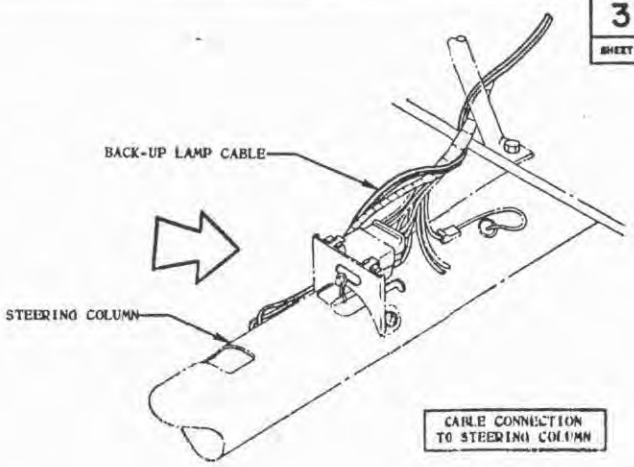
INSTALLATION OF WIRING AND BACK-UP LAMP SWITCH FOR CARS WITH 4 SPEED TRANSMISSION

381662
SHEET 3 OF 4



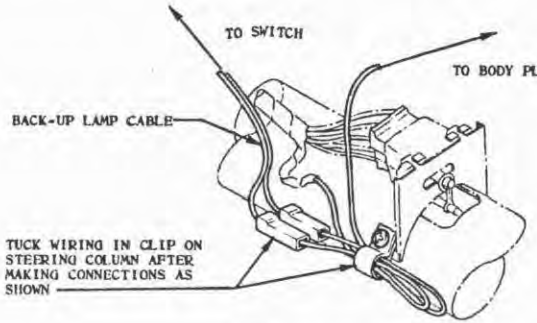
CABLE ROUTING UNDER INSTRUMENT PANEL

FIGURE 1



CABLE CONNECTION TO STEERING COLUMN

FIGURE 2



VIEW IN DIRECTION OF ARROW

GENERAL INSTRUCTIONS:

1. ROUTE BACK-UP LAMP CABLE UNDER INSTRUMENT PANEL, THROUGH BODY WIRING CLIPS BEHIND PANEL. (FIGURE 1)
2. CONNECT CABLE TO STEERING COLUMN (FIGURE 2) AND CONNECT TO UNUSED HOLE ON FRONT BODY PLUG.
3. ROUTE CABLE THROUGH EXISTING MAIN WIRING HARNESS GROMMET. (FIGURE 3)
4. CLIP BACK-UP LAMP CABLE TO SPEEDOMETER CABLE WITH 3 CLIPS AND CONNECT TO SWITCH. (FIGURE 3 & 4)

4	8-30-62	A	HRS 2980938 B.U. CABLE	DR. I. VP
	DATE	SYM.	REVISION RECORD	DR. CK.
3	DWG. DATE MAY 4 1962			DR. ED J. ROE
	FIRST USED 1963			CK. H. VAN PELT
	REFERENCE 35 T86			APPR.
	NAME LAYOUT-BACK-UP LAMP			APPR.

SERIES 3000 - 3100
SHEET 3 OF 4

PART NO. 381662

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

INSTALLATION OF WIRING AND BACK-UP LAMP SWITCH FOR CARS WITH 4 SPEED TRANSMISSION

381662
SHEET 4 OF 4

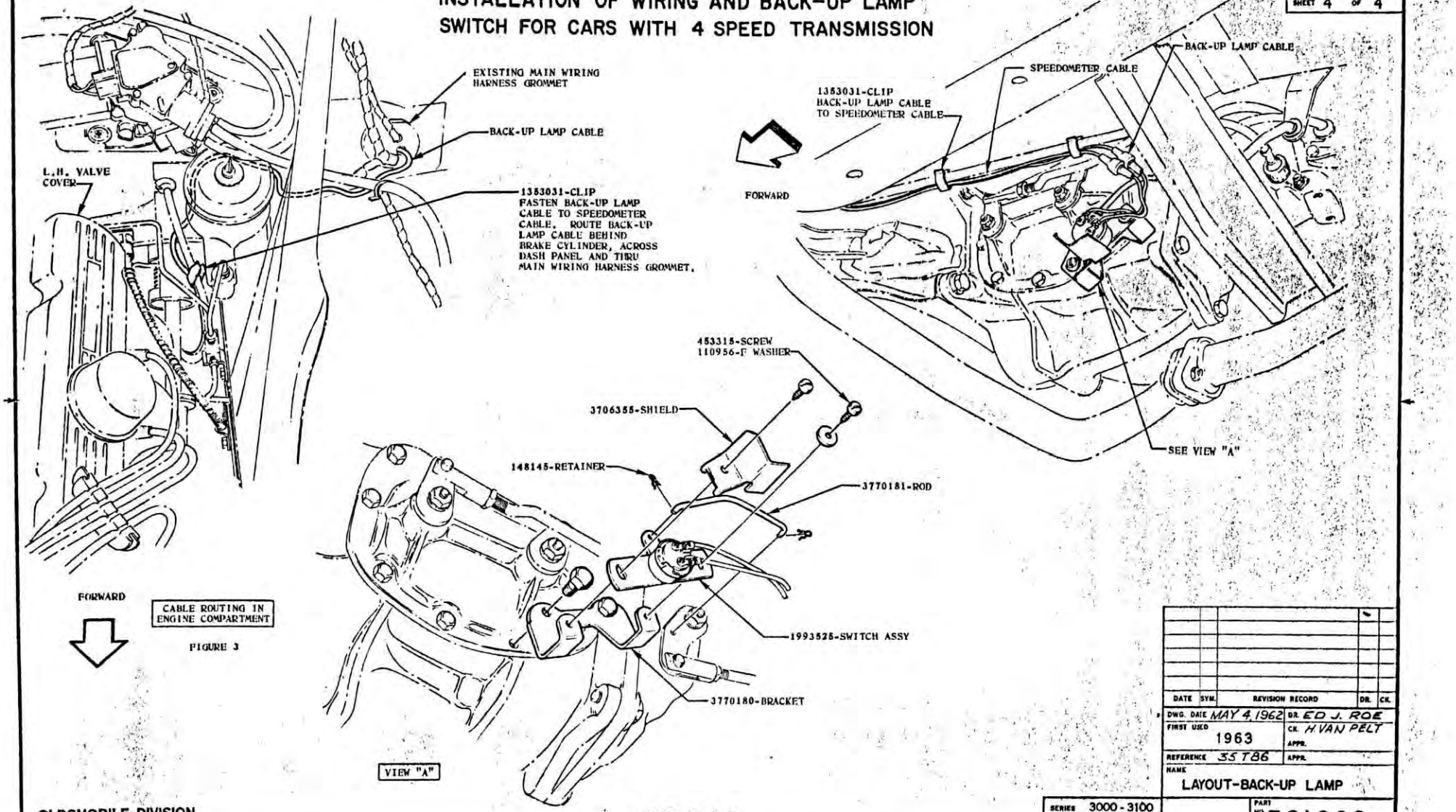


FIGURE 3

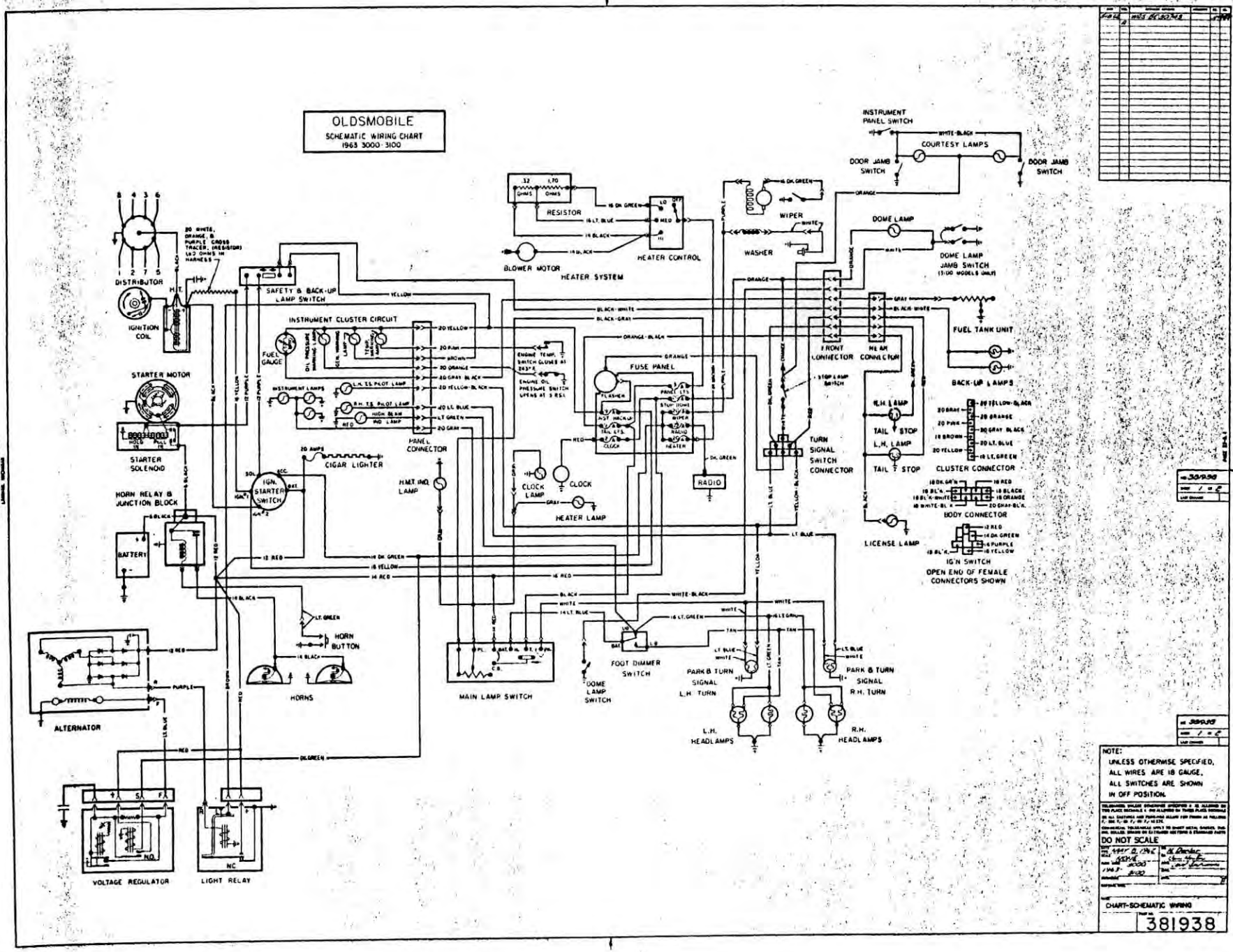
DATE	SYM.	REVISION RECORD	DR.	CK.

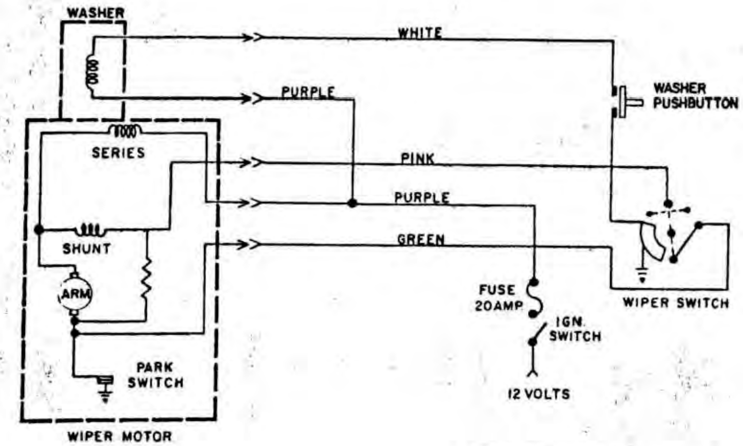
DWG. DATE MAY 4, 1962 DR. ED J. ROE
FIRST USED 1963 CK. H VAN PELT
APPR.
REFERENCE 35T86 APPR.
NAME LAYOUT-BACK-UP LAMP

SERIES 3000 - 3100
SHEET 4 OF 4

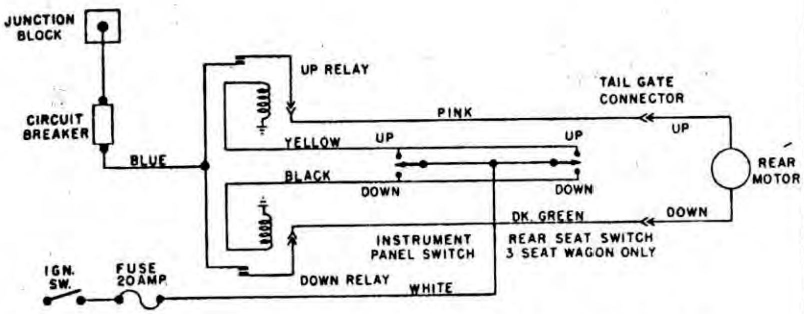
PART NO. 381662

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

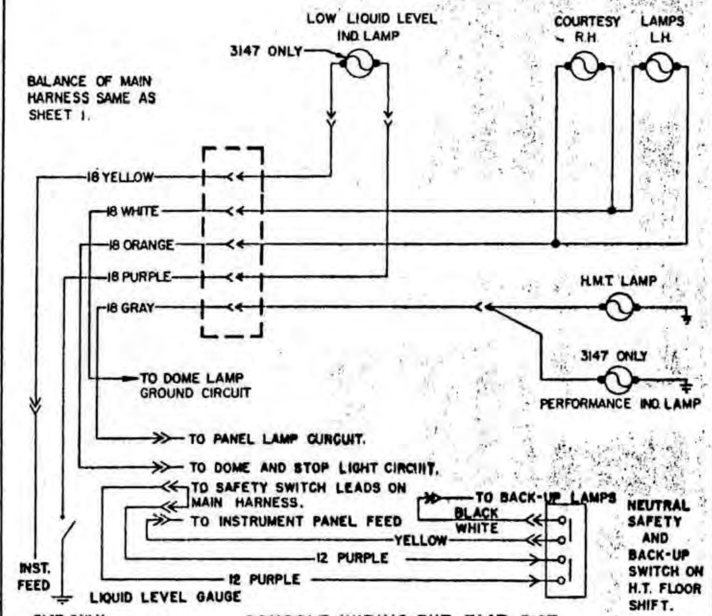

OLDSMOBILE
SCHEMATIC WIRING CHART
1963 3000-3100
OLDSMOBILE DIVISION
INSTRUMENT PANEL SWITCH
COURTESY LAMPS
DOOR JAMB SWITCH
DOOR JAMB SWITCH
WHITE-BLACK
DOME LAMP
DOME LAMP JAMB SWITCH
(3100 MODELS ONLY)
WIPER
WASHER
RESISTOR
BLOWER MOTOR
HEATER SYSTEM
HEATER CONTROL
DISTRIBUTOR
IGNITION COIL
SAFETY & BACK-UP LAMP SWITCH
INSTRUMENT CLUSTER CIRCUIT
FUEL GAUGE
STARTER MOTOR
STARTER SOLENOID
IGN. STARTER SWITCH
CIGAR LIGHTER
HORN RELAY & JUNCTION BLOCK
BATTERY
HORN BUTTON
HORNS
ALTERNATOR
VOLTAGE REGULATOR
LIGHT RELAY
PANEL CONNECTOR
FUSE PANEL
FLASHER
HEATER LAMP
CLOCK LAMP
CLOCK
RADIO
MAIN LAMP SWITCH
FOOT DIMMER SWITCH
DOME LAMP SWITCH
PARK & TURN SIGNAL L.H. TURN
PARK & TURN SIGNAL R.H. TURN
L.H. HEADLAMPS
R.H. HEADLAMPS
FRONT CONNECTOR
REAR CONNECTOR
TURN SIGNAL SWITCH CONNECTOR
FUEL TANK UNIT
BACK-UP LAMPS
R.H. LAMP
TAIL & STOP
L.H. LAMP
TAIL & STOP
LICENSE LAMP
CLUSTER CONNECTOR
BODY CONNECTOR
IGN SWITCH
OPEN END OF FEMALE CONNECTORS SHOWN
NOTE:
UNLESS OTHERWISE SPECIFIED,
ALL WIRES ARE 18 GAUGE,
ALL SWITCHES ARE SHOWN
IN OFF POSITION.
DO NOT SCALE
CHART-SCHEMATIC WIRING
381938



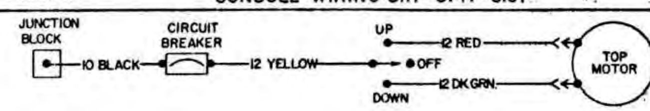
2 SPEED WIPER



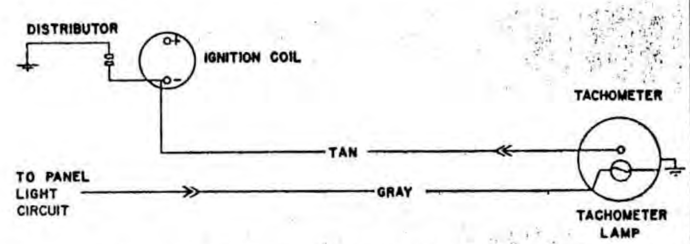
POWER TAIL GATE WINDOW



CONSOLE WIRING-3117-3147-3167



POWER TOP



CONSOLE WIRING FOUR SPEED TRANSMISSION

NO. 381938 SHEET 2 OF 2 LAST CHANGE

6-1-62 A WAS BD-30723

NO. 381938
SHEET 2 OF 2
LAST CHANGE

TOLERANCES UNLESS OTHERWISE SPECIFIED ± .02 ALLOWED ON TWO PLACE DECIMALS ± .010 ALLOWED ON THREE PLACE DECIMALS
ON ALL CASTINGS AND FORGINGS ALLOW FOR FINISH AS FOLLOWS
COMMERCIAL TOLERANCES APPLY TO SHEET METAL GAUGES, TUBING, ROLLED, DRAWN OR EXTRUDED SECTIONS & STANDARD PARTS

DO NOT SCALE

DATE MAY 28, 1962

1963- 3000 3100

CHART - SCHEMATIC WIRING

381938

INSTALLATION OF OLDSMOBILE BRAKE SIGNAL LAMP

380270
SHEET 1 OF 2

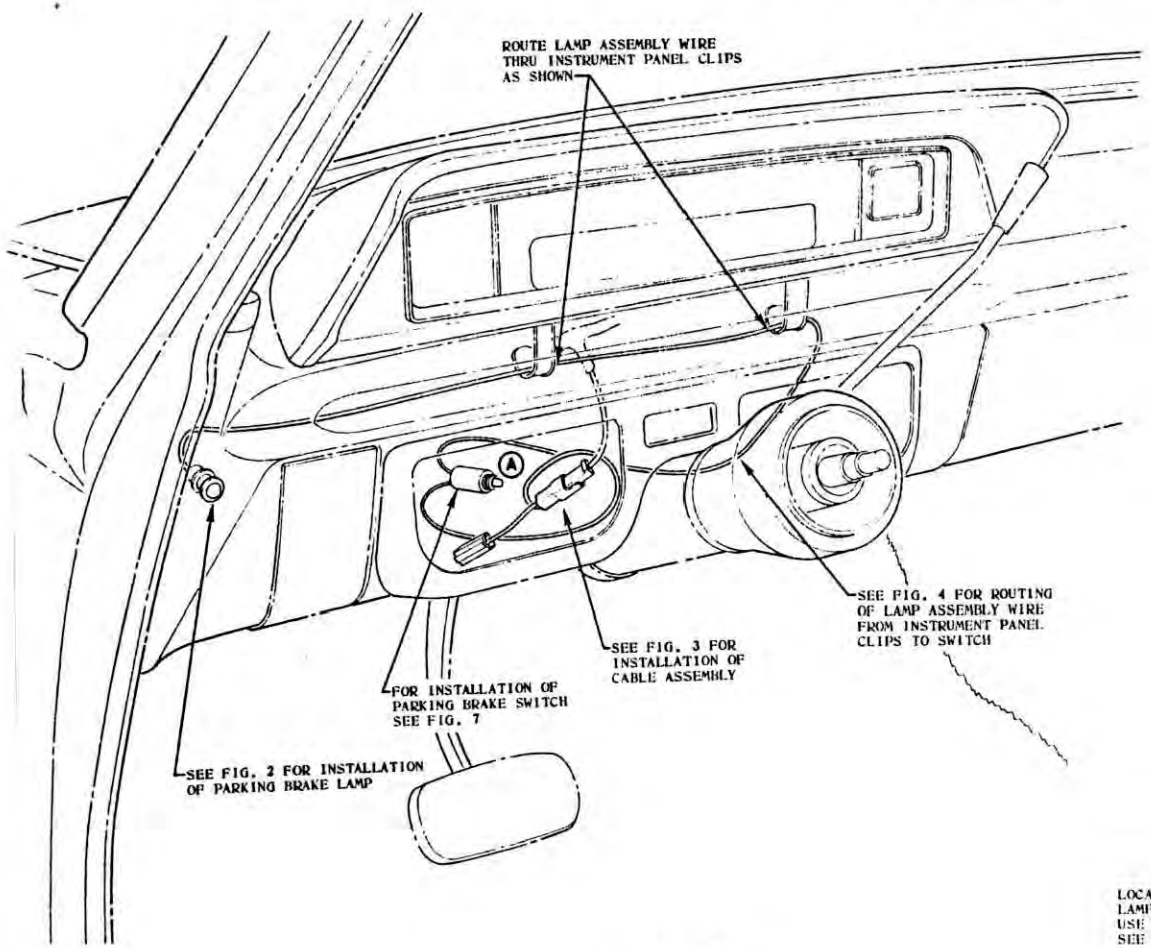


FIG. 1
CABLE ROUTING

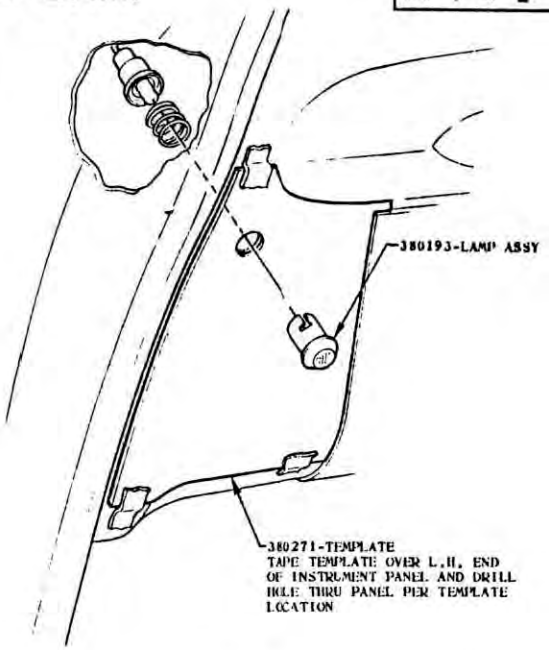


FIG. 2
TEMPLATE APPLICATION

INSTRUCTIONS

LOCATE AND DRILL HOLE FOR INDICATOR LAMP IN L.H. END OF INSTRUMENT PANEL USE TEMPLATE 380271 TO LOCATE HOLE. SEE FIG. 2

DATE	SYM.	REVISION RECORD	DR.	CK.
2-20-63	A	WIRE ROUTING REV.	JV6	VP

DWG. DATE JULY 30, 1962	DR. JOSEPH V. GALE
FIRST USED 1963	CK. H. VANPELT
	APPR.
REFERENCE	APPR.

NAME
LAYOUT PARKING BRAKE LAMP

SERIES 3000 - 3100
SHEET 1 OF 2

PART NO. 380270

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

380270
SHEET 2

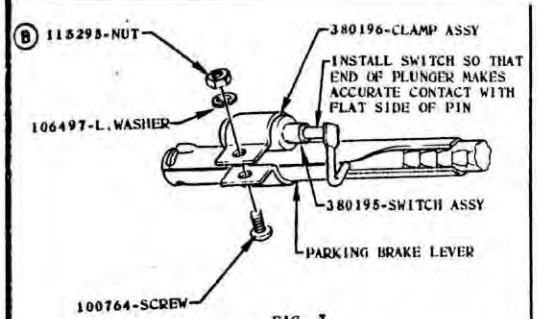
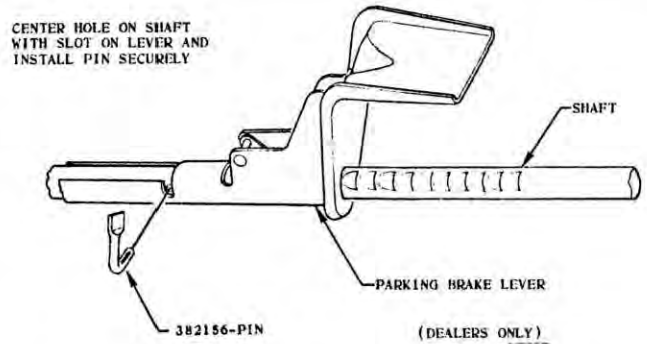


FIG. 7

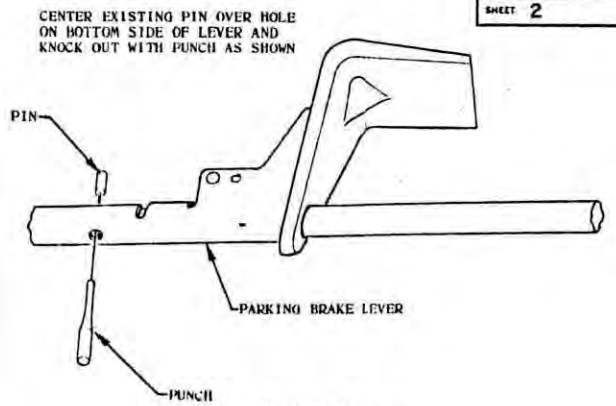
INSTALLATION OF SWITCH



(DEALERS ONLY)

FIG. 6

PIN INSTALLATION



(DEALERS ONLY)

FIG. 8

PIN REMOVAL

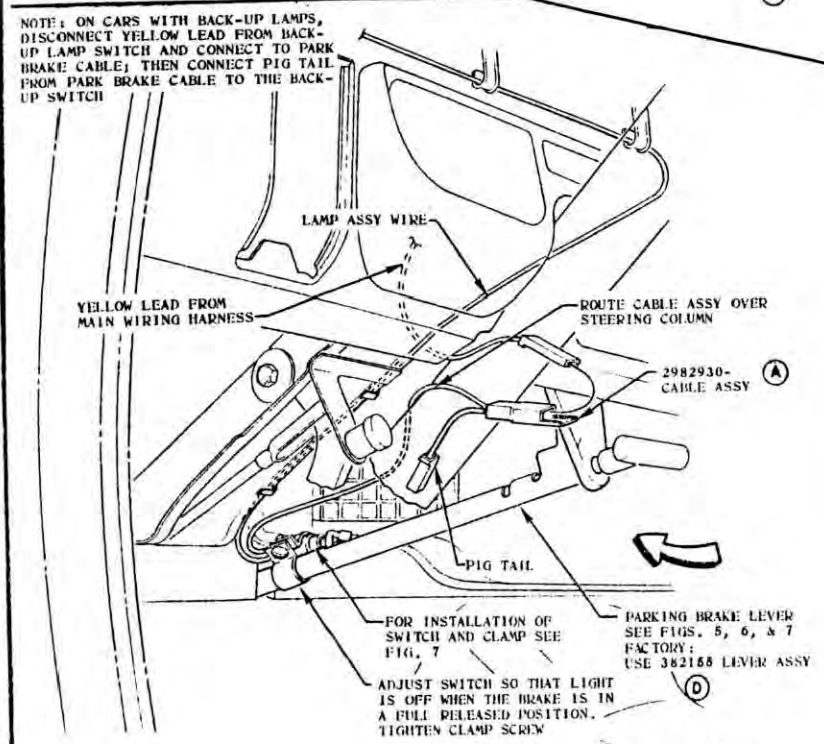


FIG. 3

HOOK-UP OF PARKING BRAKE WIRING TO MAIN WIRING HARNESS

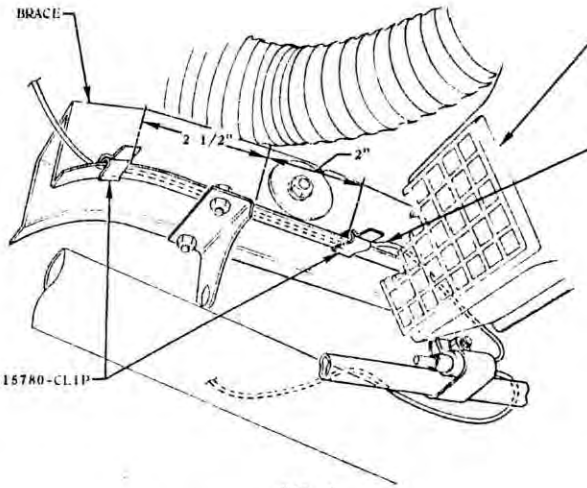


FIG. 4

VIEW IN DIRECTION OF ARROW

2-20-63	E	WIRE ROUTING REVISED	JG	VP
10-9-62	D	WAS PT. NO. 380726	GL	VP
10-9-62	C	WAS PT. NO. 380197	GL	VP
9-4-62	B	WAS 1206-12	GL	VP
8-29-62	A	2982930-CABLE ADDED	JG	VP
DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE JULY 30, 1962 — DR. JOSEPH Y. GALL
FIRST USED 1963 — CK. H VAN PELT
REFERENCE — APPR.
NAME L.O. PARKING BRAKE LAMP
PART NO 380270

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

SERIES 3000-3100

INSTALLATION OF OLDSMOBILE GLOVE BOX LAMP

380729
SHEET 1 OF 1

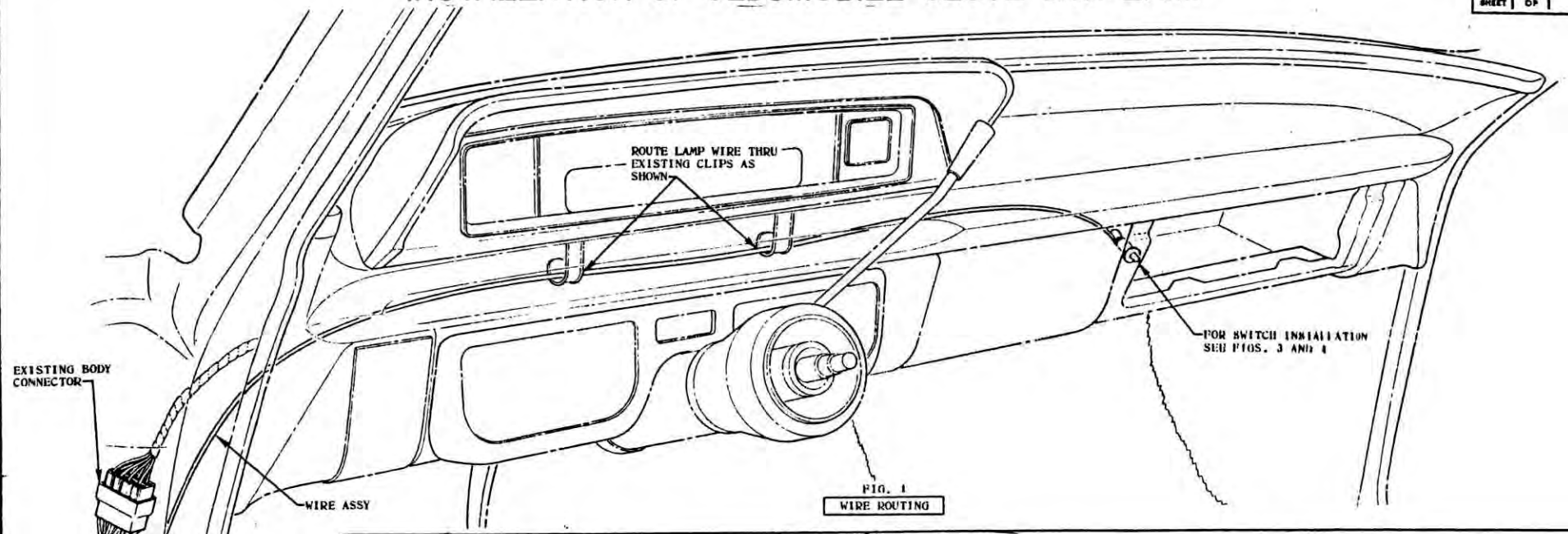


FIG. 1
WIRE ROUTING

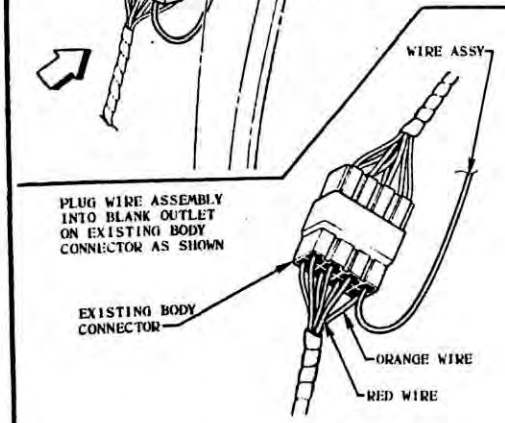


FIG. 2
VIEW IN DIRECTION OF ARROW

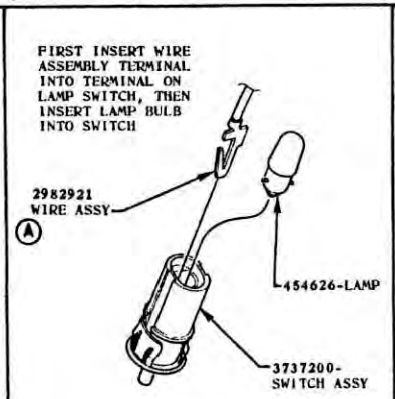


FIG. 3
WIRE AND LAMP INSTALLATION

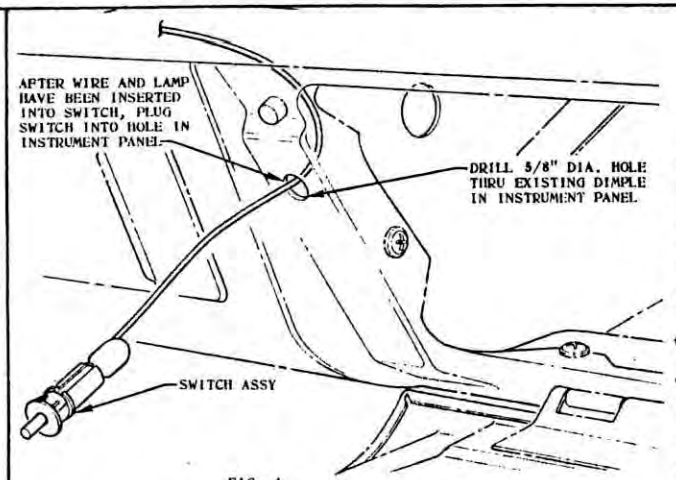


FIG. 4
SWITCH INSTALLATION

9-26-62	A	2982921 NO. ADDED	JH	VP
DATE	SYM.	REVISION RECORD	DR.	CK.
DWG. DATE JULY 30, 1962			DR. JOSEPH V. GALL	
FIRST USED 1963			CK. H VAN PELT	
REFERENCE			APPR.	
NAME LAYOUT-GLOVE BOX LAMP				
SERIES 3000-3100			PART NO. 380729	
SHEET / OF /				

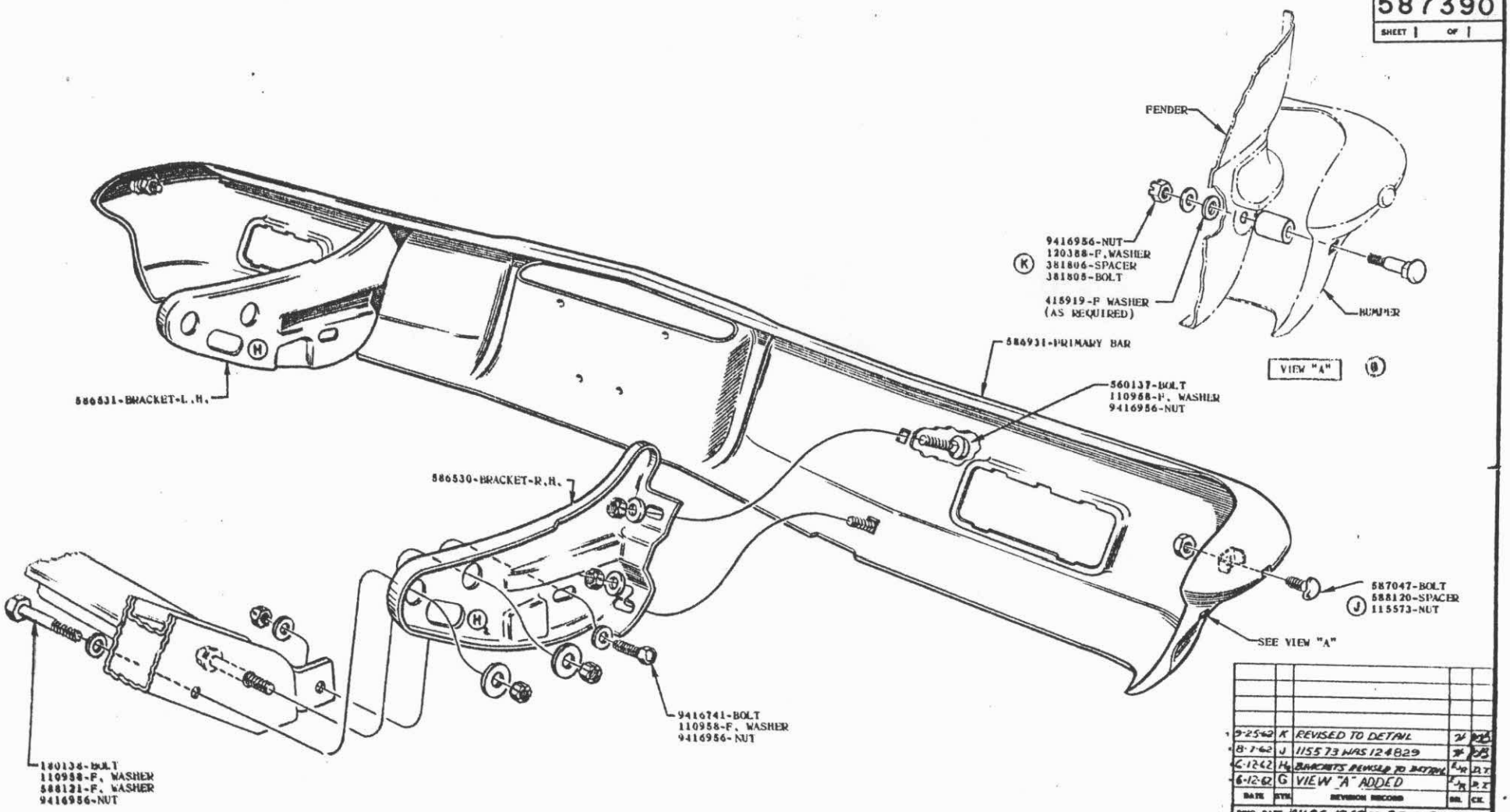
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

BUMPERS

DRAWINGS INCLUDED IN THIS SECTION ARE:

587390

SHEET 1 OF 1



DATE	SYM.	REVISION RECORD	DR.	CK.
9-25-62	K	REVISED TO DETAIL	JH	WB
8-7-62	J	115573 WAS 124829	JH	WB
6-12-62	H	BRACKETS REVISED TO DETAIL	RH	DT
6-12-62	G	VIEW "A" ADDED	RH	DT

DWG. DATE JAN. 26, 1962 DR. BEAUDOIN

FIRST USED 1963 CK. H. VAN PELT

APPD. [signature]

REFERENCE 14A APPR.

NAME LAYOUT-FRONT BUMPER

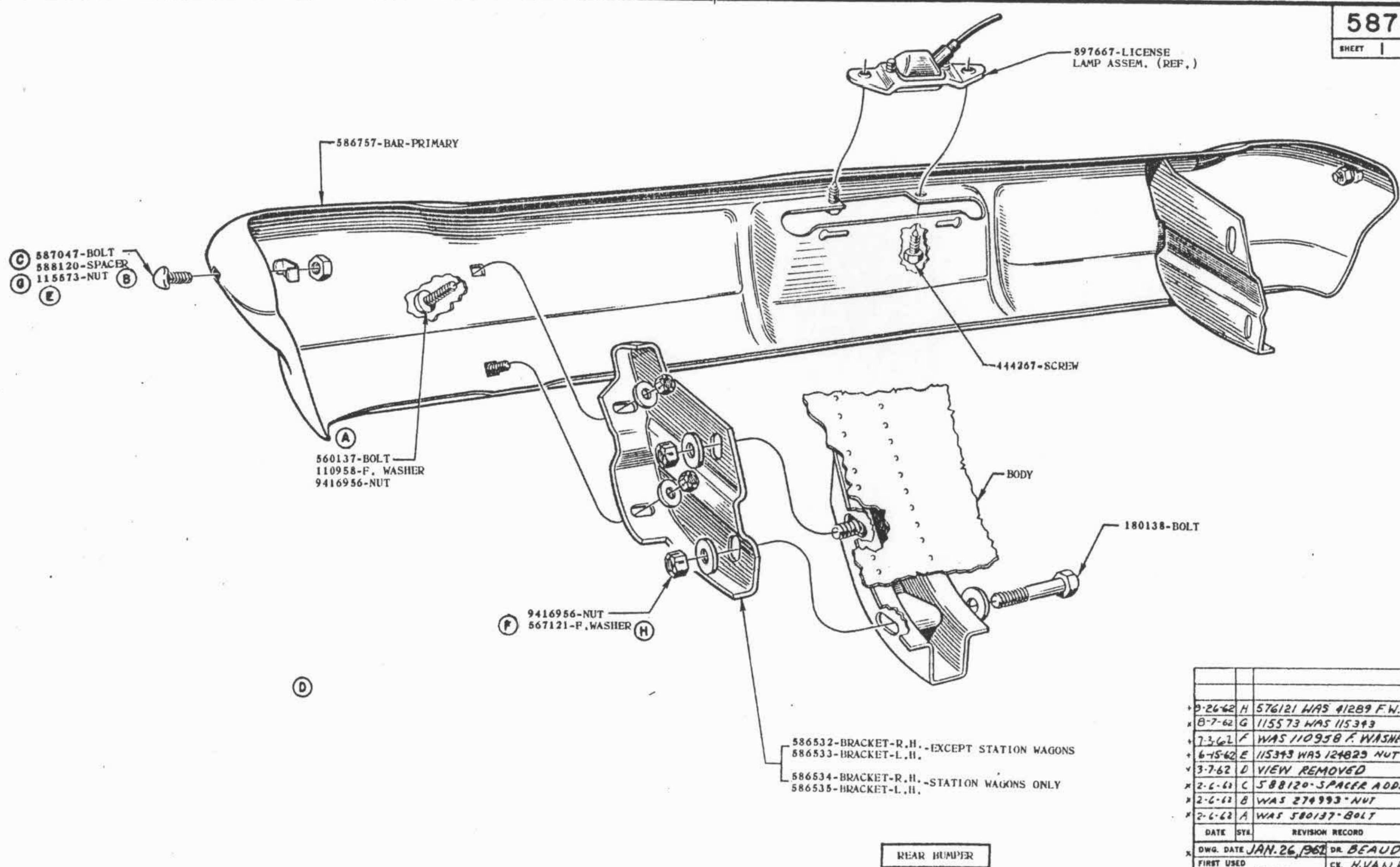
SERIES 3000-3100

SHEET 1 OF 1

PART NO. 587390

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

587391
SHEET 1 OF 1



DATE	SYM.	REVISION RECORD	DR.	CK.
9-26-62	H	576121 WAS 41289 F.W.		VP
8-7-62	G	115573 WAS 115343		
7-3-62	F	WAS 110958 F. WASHER		VP
6-15-62	E	115343 WAS 124829 NUT		D.T.
3-7-62	D	VIEW REMOVED	F.B.	VP
2-6-62	C	588120-SPACER ADD.		D.T.
2-6-62	B	WAS 274993-NUT		D.T.
2-6-62	A	WAS 580137-BOLT		D.T.

DWG. DATE JAN. 26, 1962 — DR. BEAUDOIN

FIRST USED 1963 — CK. H. VAN PELT

APPR. [illegible]

REFERENCE 14A-12E — APPR.

NAME LAYOUT-REAR BUMPER

SERIES 3000-3100 — SHEET 1 OF 1 — PART NO. 587391

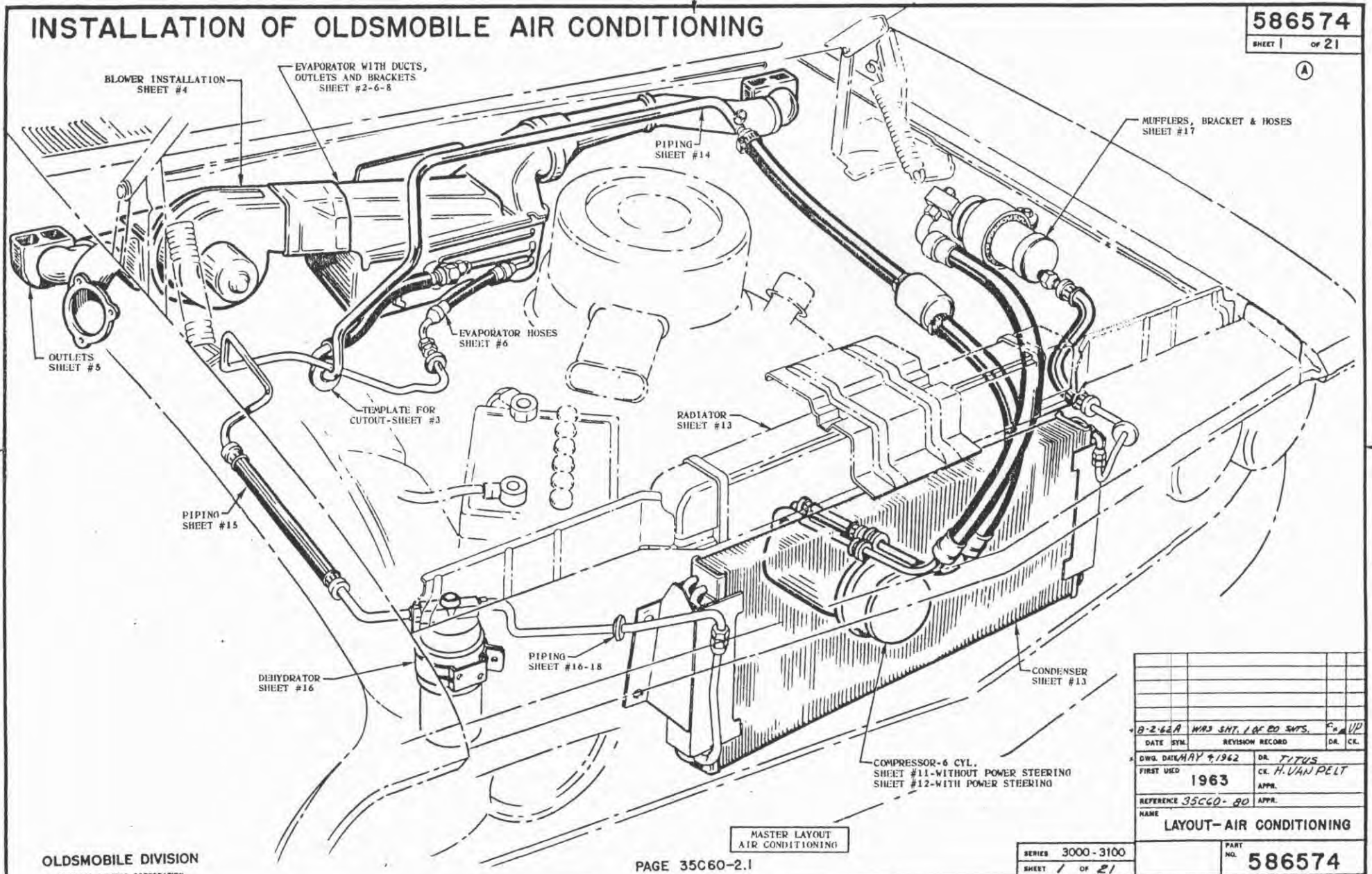
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

AIR CONDITIONING

DRAWINGS INCLUDED IN THIS SECTION ARE:

INSTALLATION OF OLDSMOBILE AIR CONDITIONING

586574
SHEET 1 OF 21
(A)



DATE	SYM.	REVISION RECORD	DR.	CK.
8-2-62	A	WAS SHT. 1 OF 20 SHTS.		VP

DWG. DATE MAY 9, 1962	DR. TITUS
FIRST USED 1963	CK. H. VAN PELT
	APPR.
REFERENCE 35C60-80	APPR.

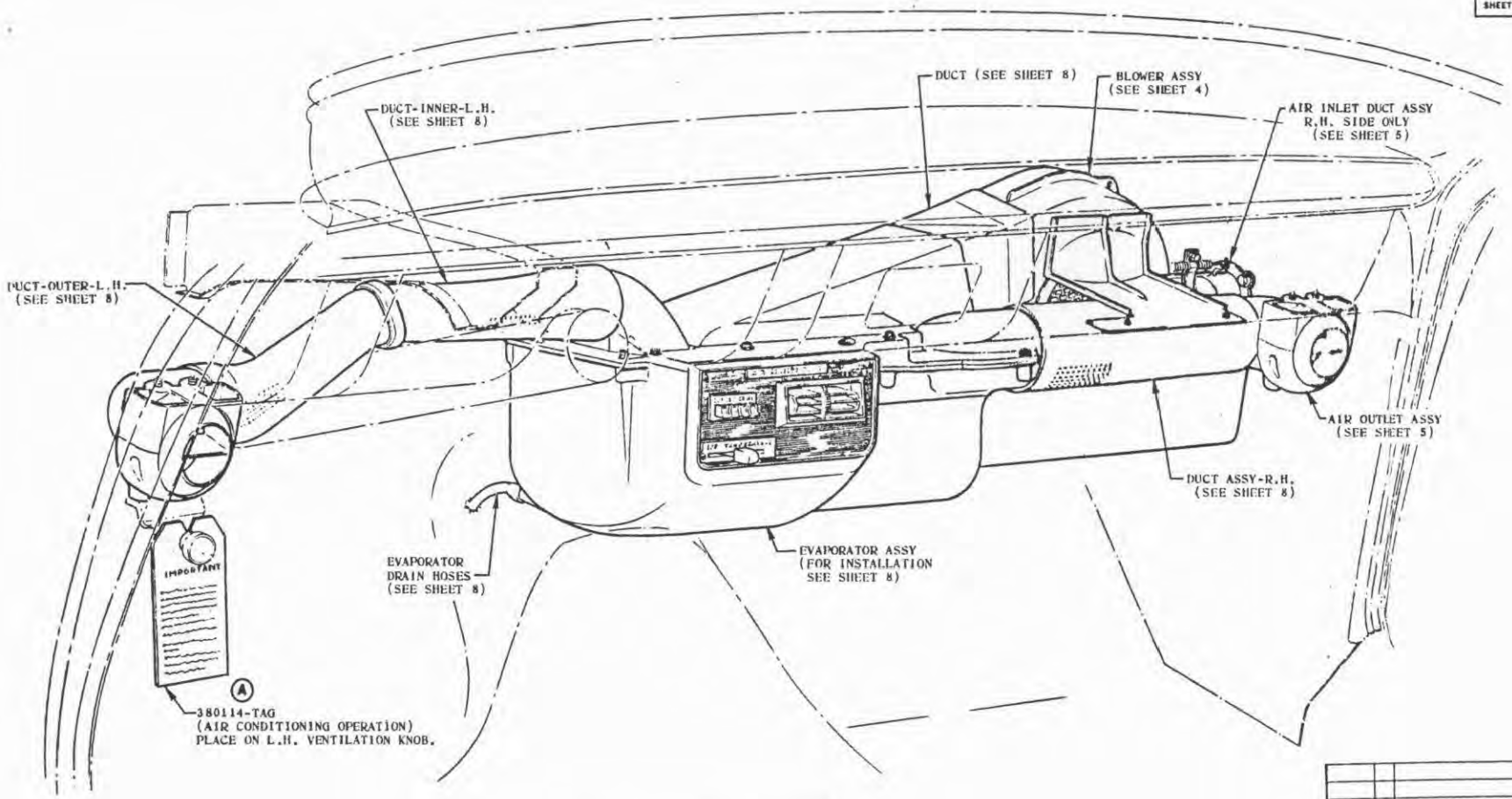
NAME
LAYOUT-AIR CONDITIONING

MASTER LAYOUT
AIR CONDITIONING

SERIES 3000-3100
SHEET 1 OF 21

PART NO. 586574

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21 MICHIGAN

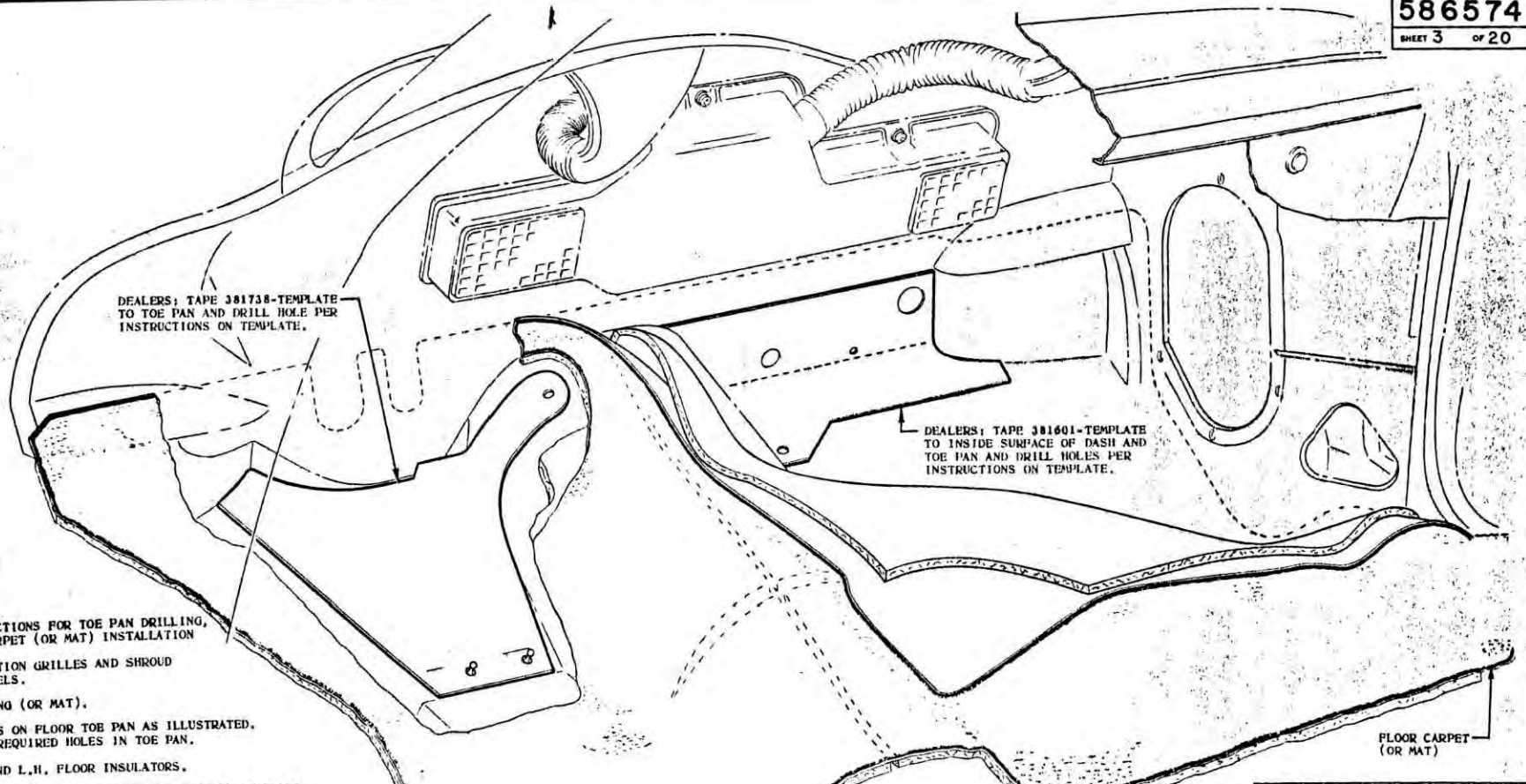


INSIDE INSTALLATION COMPLETE (UNDER INSTRUMENT PANEL.)

6-18-62	H	380114 TAG ADDED	XG	VP
DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAY 4 1962 DR. TITUS
FIRST USED 1963 CK. H VAN PELT APPR.
REFERENCE 35C60 - 80 APPR.
NAME LAYOUT-AIR CONDITIONING

SERIES 3000 - 3100
SHEET 2 OF 20
PART NO. 586574



CARPET & INSULATOR INSTALLATION
TEMPLATE APPLICATION

DEALER INSTRUCTIONS FOR TOE PAN DRILLING, CUTOUT AND CARPET (OR MAT) INSTALLATION

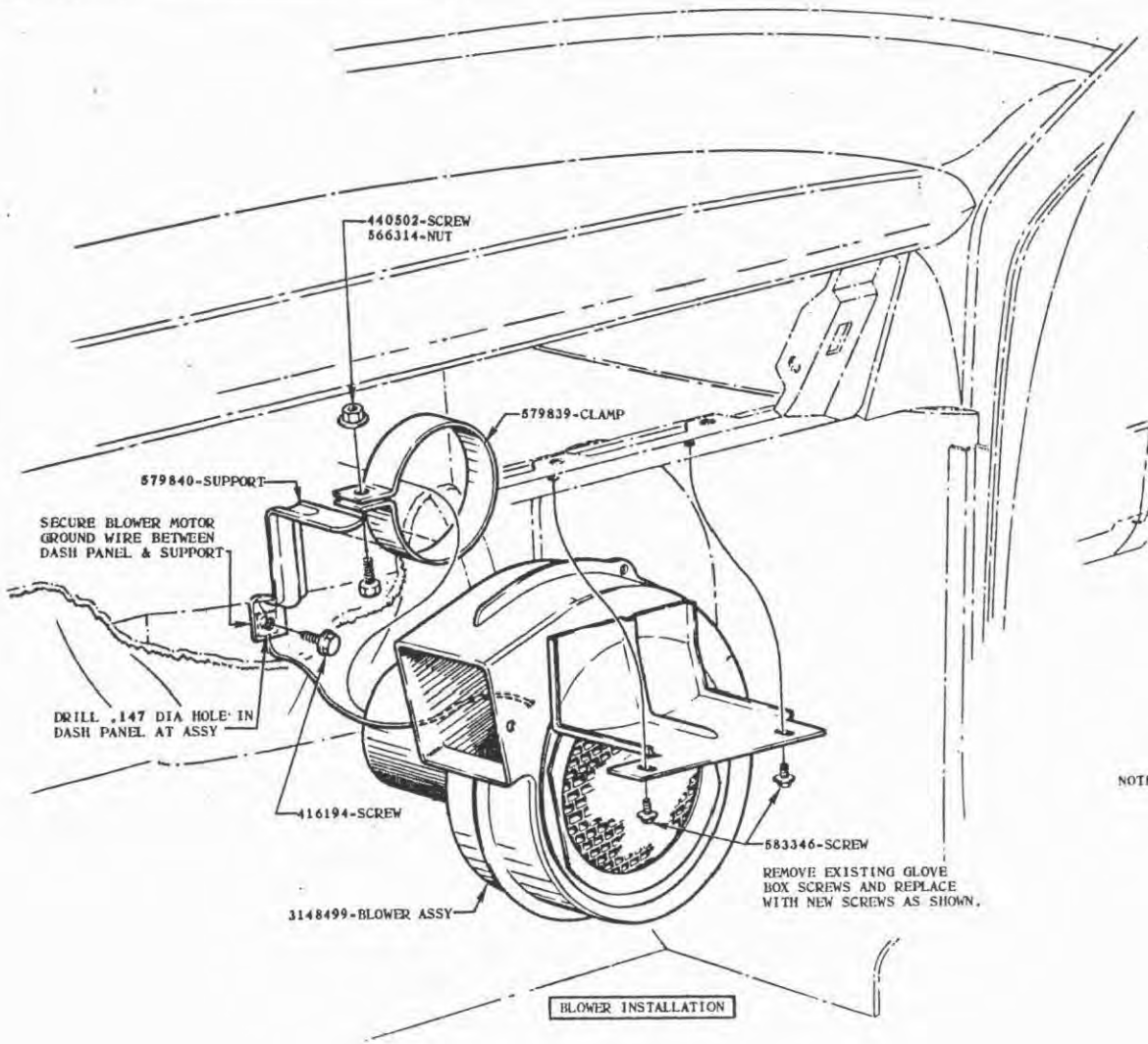
1. REMOVE VENTILATION GRILLES AND SHROUD FOUNDATION PANELS.
2. REMOVE CARPETING (OR MAT).
3. APPLY TEMPLATES ON FLOOR TOE PAN AS ILLUSTRATED. DRILL AND CUT REQUIRED HOLES IN TOE PAN.
4. INSTALL R.H. AND L.H. FLOOR INSULATORS.
5. RE-INSTALL CARPET (OR MAT) IN PROPER POSITION ON FRONT FLOOR. DO NOT FASTEN CARPET TO DASH INSULATOR ON R.H. SIDE.
6. PULL BACK CARPET AND INSULATOR AND ROUTE PIPE ASSEMBLIES, WITH GROMET IN POSITION, INTO BODY.
7. PUSH SHARP POINTED TOOL THROUGH HOLES IN TOE PAN TUNNEL (FROM BOTTOM) TO LOCATE EVAPORATOR DRAIN HOLES IN CARPETING. CUT CORRESPONDING HOLES IN FLOOR INSULATOR AND CARPET.
8. AFTER EVAPORATOR HAS BEEN INSTALLED, ROUTE THE DRAIN HOSES THROUGH THE CARPET AND CONNECT TO THE DRAIN NOZZLES AT THE REAR OF THE EVAPORATOR.
9. CUT A CLEARANCE HOLE IN THE CARPET AND INSULATOR (NEAR TOP R.H. SIDE) TO CLEAR PIPE ASSEMBLIES. FASTEN CARPET TO DASH INSULATOR ON R.H. SIDE.

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

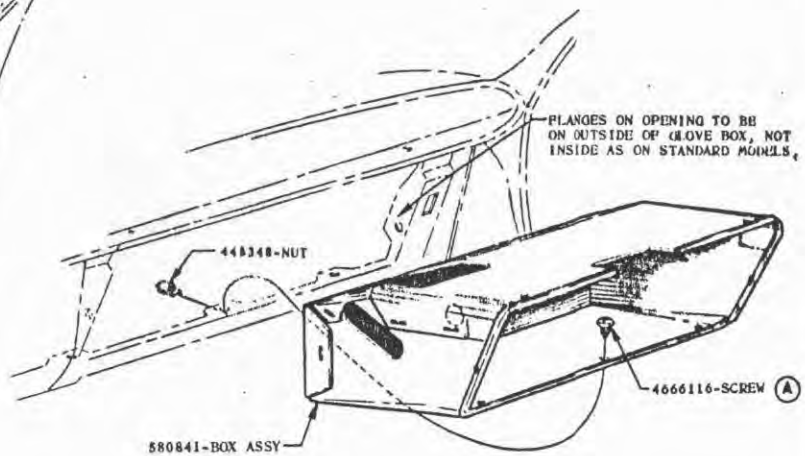
6-1-62	A	380034/5 INSULATORS ADDED	D. T.	VP
DATE	SYM	REVISION RECORD	DR.	CK.

DWG. DATE MAY 4, 1962 DR GOODWIN
FIRST USED 1963 CK. H. VAN PELT
APPR.
REFERENCE 35C60 - 80 APPR.
NAME
LAYOUT-AIR CONDITIONING

SERIES 3000-3100
SHEET 3 OF 20
PART NO. 586574



BLOWER INSTALLATION



GLOVE BOX INSTALLATION

NOTE: GLOVE BOX TO BE INSTALLED BY INSERTING THROUGH OPENING FROM FRONT OF INSTRUMENT PANEL.

DATE	SYM.	REVISION RECORD	DR.	CK.
6-11-62	A	WAS 458552B-SCREW	BP	D.T.

DWG. DATE MAY 9, 1962 DR. GOODWIN
FIRST USED 1963 CK. H. VANPELT
APPR.
REFERENCE 35C60-80 APPR.
NAME LAYOUT-AIR CONDITIONING
SERIES 3000-3100
SHEET 4 OF 20
PART NO. 586574

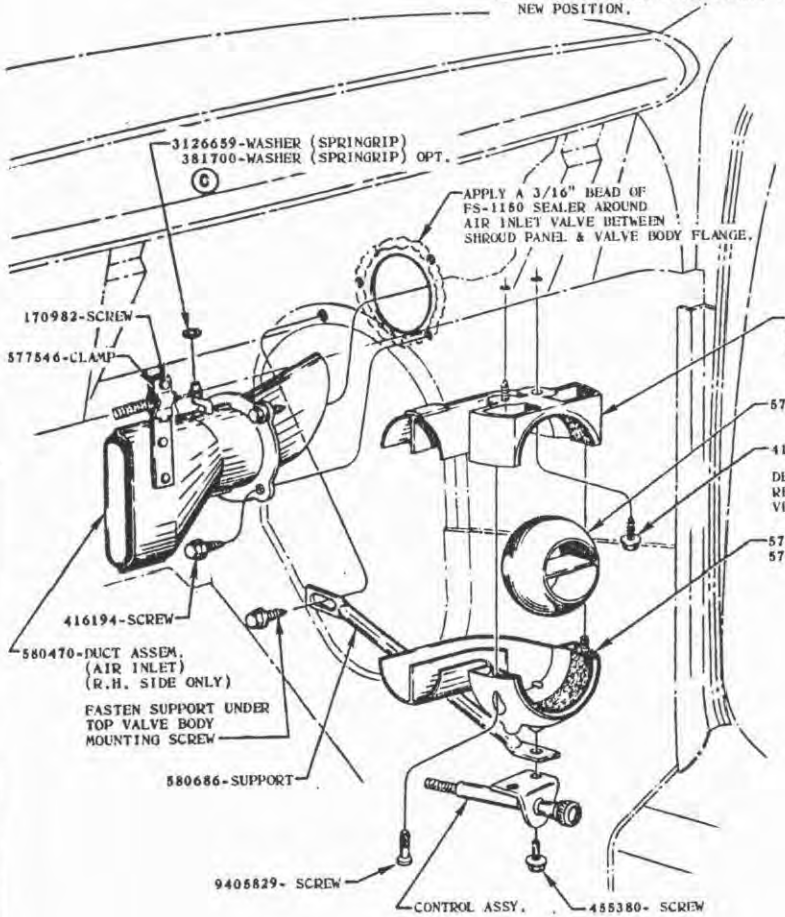
586574

SHEET 5

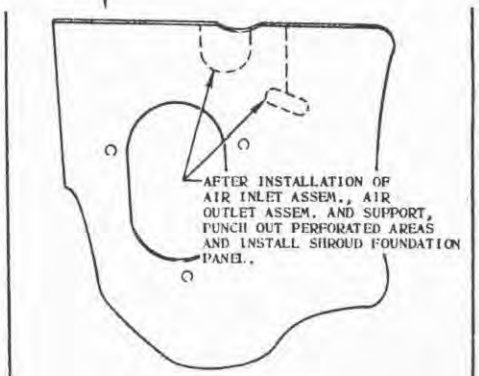
NOTE "A"
LOCATION OF UPPER RETAINER ASSEM. FOR CONVERTIBLES

ON CONVERTIBLE MODELS, IT WILL NOT BE POSSIBLE TO FASTEN THE UPPER RETAINER ASSEM. IN THE HOLES PROVIDED IN THE LOWER FLANGE OF THE INSTRUMENT PANEL. THEREFORE, TO INSTALL THE UPPER RETAINER IT IS NECESSARY TO-

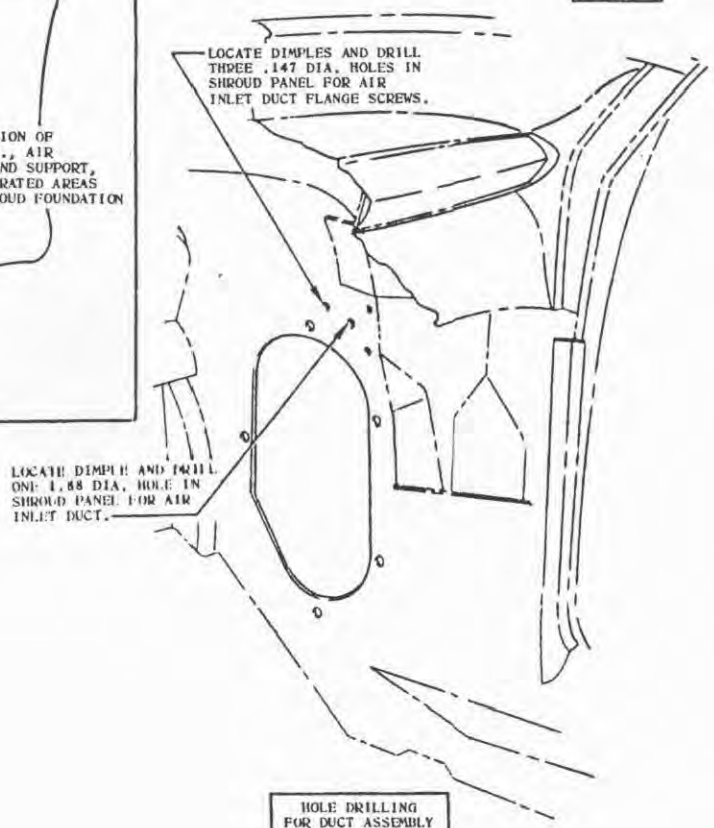
1. INSTALL EVAPORATOR AND BLOWER ASSEM.
2. INSTALL ALL DUCTS.
3. INSERT UPPER RETAINER ASSEM. INTO DUCT AND PUSH TOWARD EVAPORATOR.
4. PRESS UPPER RETAINER ASSEM. AGAINST BOTTOM FLANGE OF INSTRUMENT PANEL AND USING RETAINER AS DRILL FIXTURE, DRILL .144-.147 DIA. 2 HOLES THRU BOTTOM OF INSTRUMENT PANEL FLANGE.
5. FASTEN UPPER RETAINER ASSEM. IN THIS NEW POSITION.



INSTALLATION OF AIR OUTLET & AIR INLET VALVE DUCT



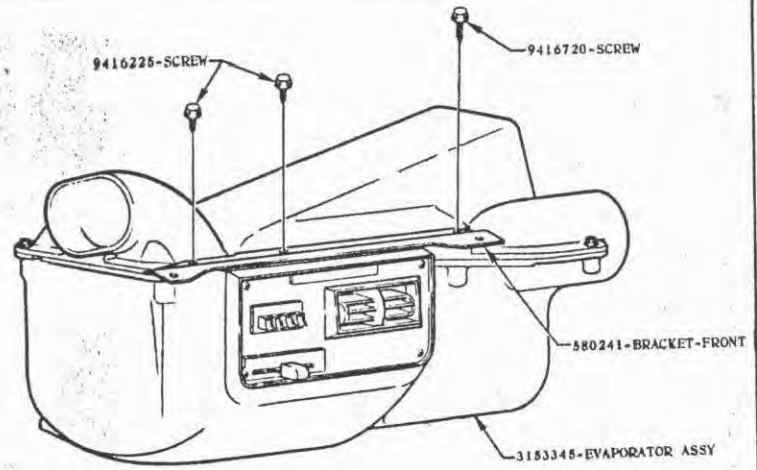
DETAIL OF SHROUD FOUNDATION PANEL



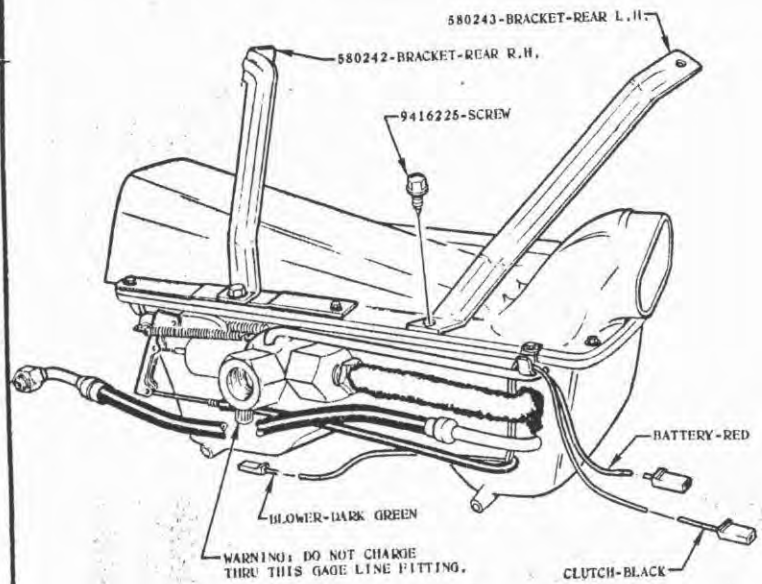
HOLE DRILLING FOR DUCT ASSEMBLY FASTENING

10-24-62	C	PART NUMBER ADD.	KS	VP
9-21-62	B	CONT. INSTALL. RELOC'D.	KS	VP
6-28-62	A	NOTE ADDED	KS	VP
DATE	SYM.	REVISION RECORD	DR.	CK.

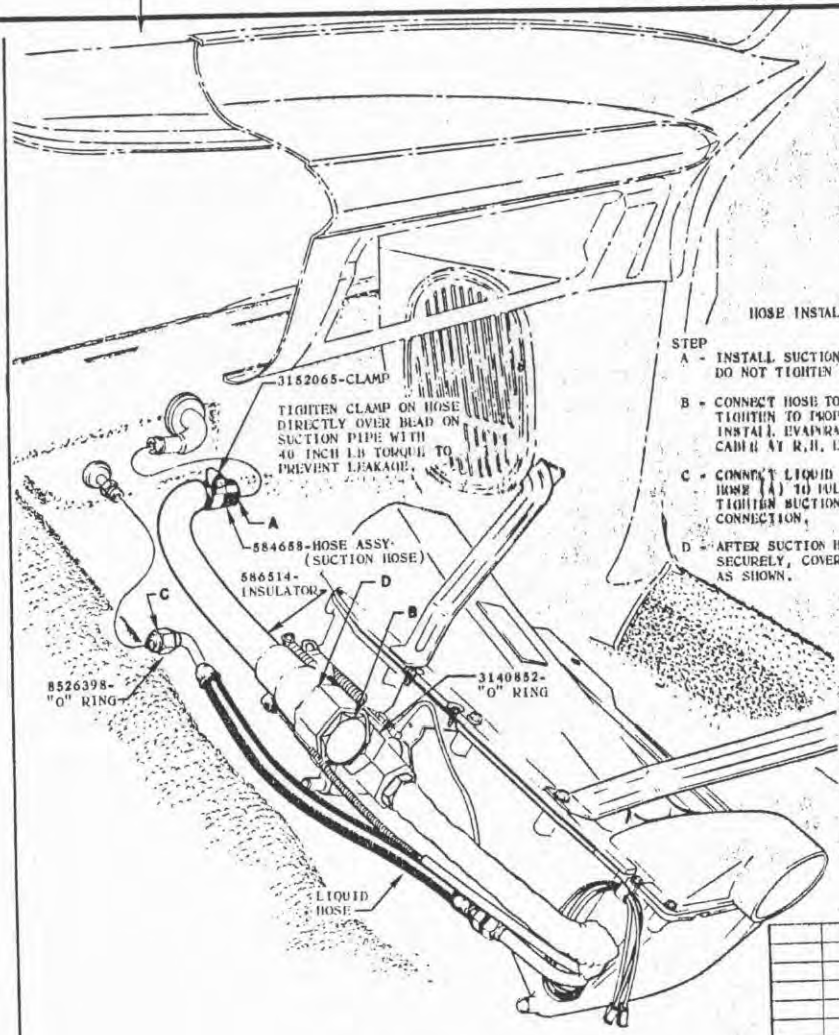
DWG. DATE MAY 9, 1962 DR. GOODWIN
FIRST USED 1963 CK. H VAN PELT
APPR.
REFERENCE 35C60 - 80 APPR.
NAME
LAYOUT-AIR CONDITIONING
PART NO. 586574
SERIES 3000 - 3100



FRONT VIEW OF EVAPORATOR



REAR VIEW OF EVAPORATOR



HOSE INSTALLATION TO EVAPORATOR

HOSE INSTALLATION INSTRUCTIONS

STEP

A - INSTALL SUCTION HOSE & CLAMP TO PIPE. DO NOT TIGHTEN CLAMP.

B - CONNECT HOSE TO SUCTION THROTTLING VALVE. TIGHTEN TO PROPER TORQUE. INSTALL EVAPORATOR. DO NOT KINK BOWDEN CABLE AT R.H. END OF EVAPORATOR.

C - CONNECT LIQUID HOSE AND PUSH SUCTION HOSE (A) TO FULLY INSTALLED POSITION. TIGHTEN SUCTION HOSE CLAMP. RECHECK CONNECTION.

D - AFTER SUCTION HOSE HAS BEEN FASTENED SECURELY, COVER WITH 586514-INSULATOR AS SHOWN.

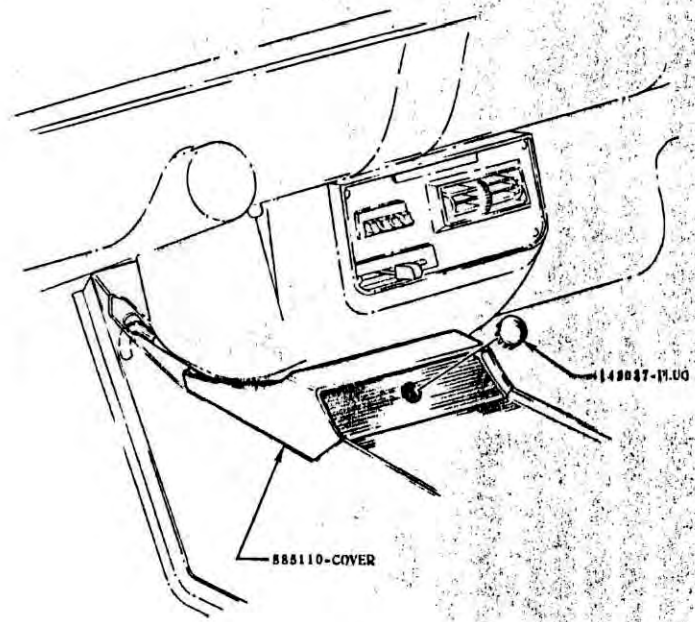
DISCARD "O" RINGS ON PLUGGED ENDS OF HOSE ASSEMBLIES AS RECEIVED. REPLACE WITH NEW "O" RINGS. LUBRICATE RINGS WITH COMPRESSOR OIL BEFORE INSTALLING.

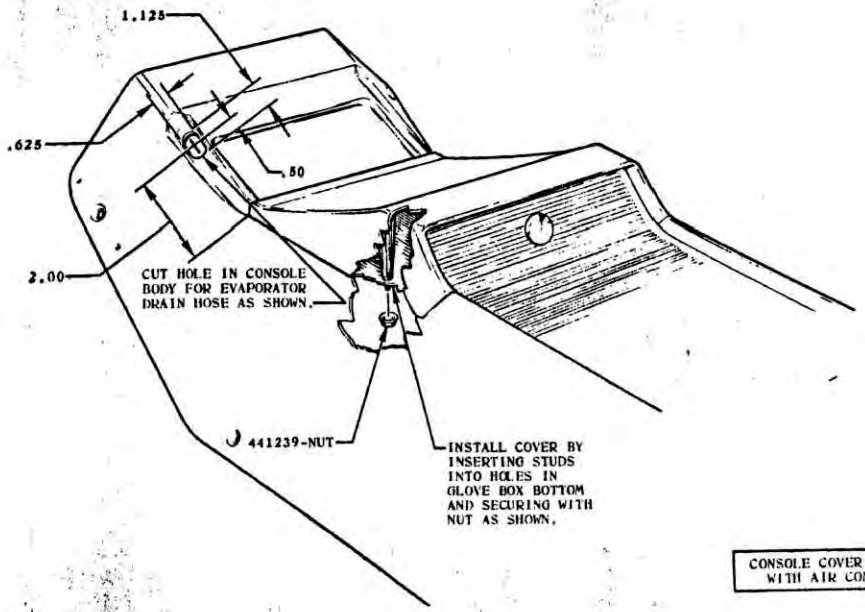
DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAY 4 1962 — DR. GOODWIN
FIRST USED 1963 — CK. V. VAN PELT — APPR.
REFERENCE 35C60 - 80 — APPR.
NAME LAYOUT-AIR CONDITIONING

SERIES 3000 - 3100
SHEET 6 OF 20
PART NO. 586574

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN





DEALER:
IF CAR HAS CONSOLE REMOVE CONSOLE AND INSTALL EVAPORATER. REMOVE GLOVE BOX ASSY FROM CONSOLE AND INSTALL GLOVE BOX COVER. TO REINSTALL CONSOLE, REMOVE L.H. FRONT SEAT.

CONSOLE COVER INSTALLATION WITH AIR CONDITIONING

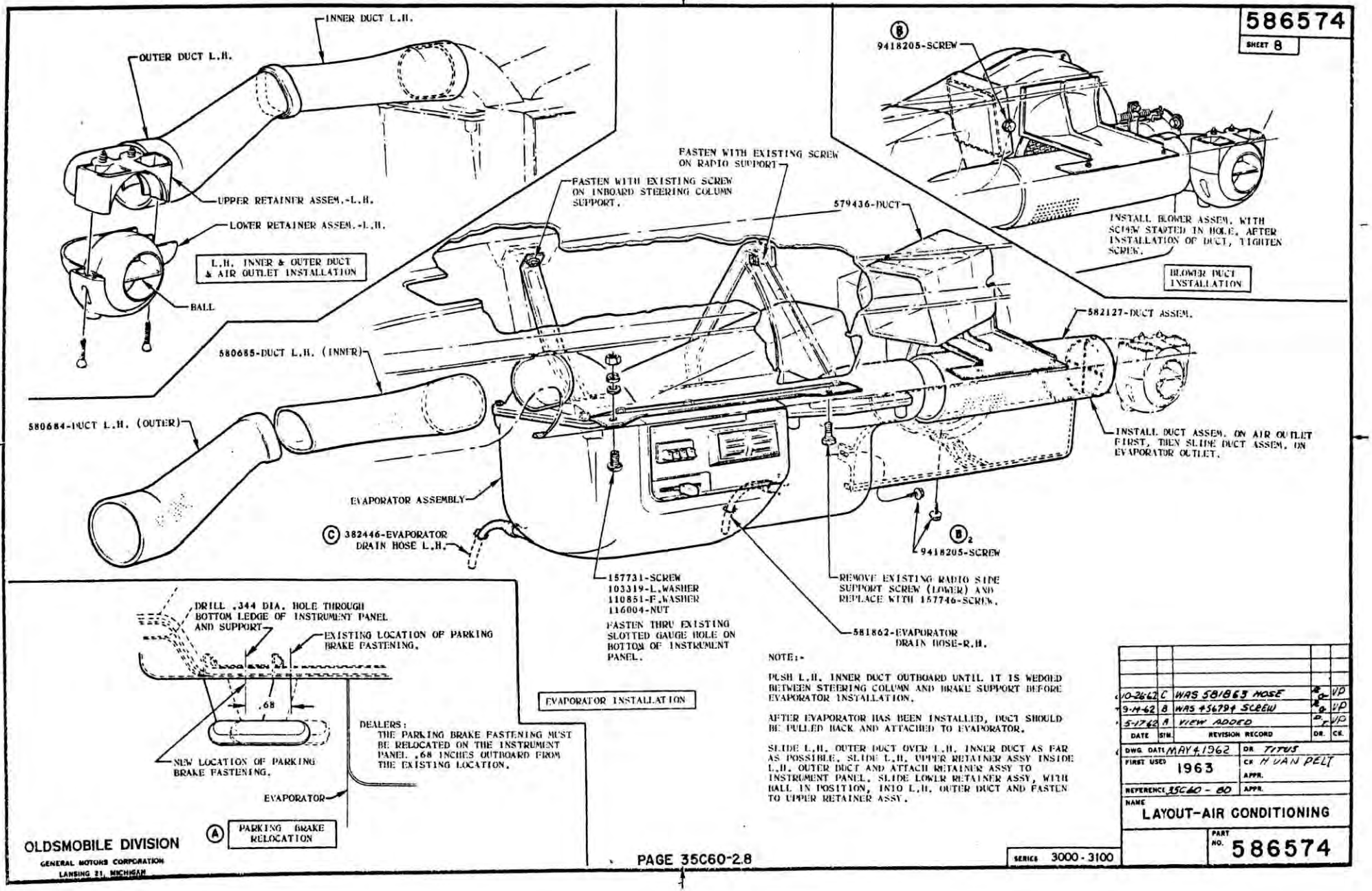
DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAY 4, 1962 — DR. TITUS
FIRST USED 1963 — CK. H. VAN PELT
REFERENCE 35C60 -80 — APPR.
NAME LAYOUT-AIR CONDITIONING

SERIES 3117-3147-3167
SHEET 7 OF 20

PART NO. 586574

586574
SHEET 8



NOTE:-

PUSH L.H. INNER DUCT OUTBOARD UNTIL IT IS WEDGED BETWEEN STEERING COLUMN AND BRAKE SUPPORT BEFORE EVAPORATOR INSTALLATION.

AFTER EVAPORATOR HAS BEEN INSTALLED, DUCT SHOULD BE PULLED BACK AND ATTACHED TO EVAPORATOR.

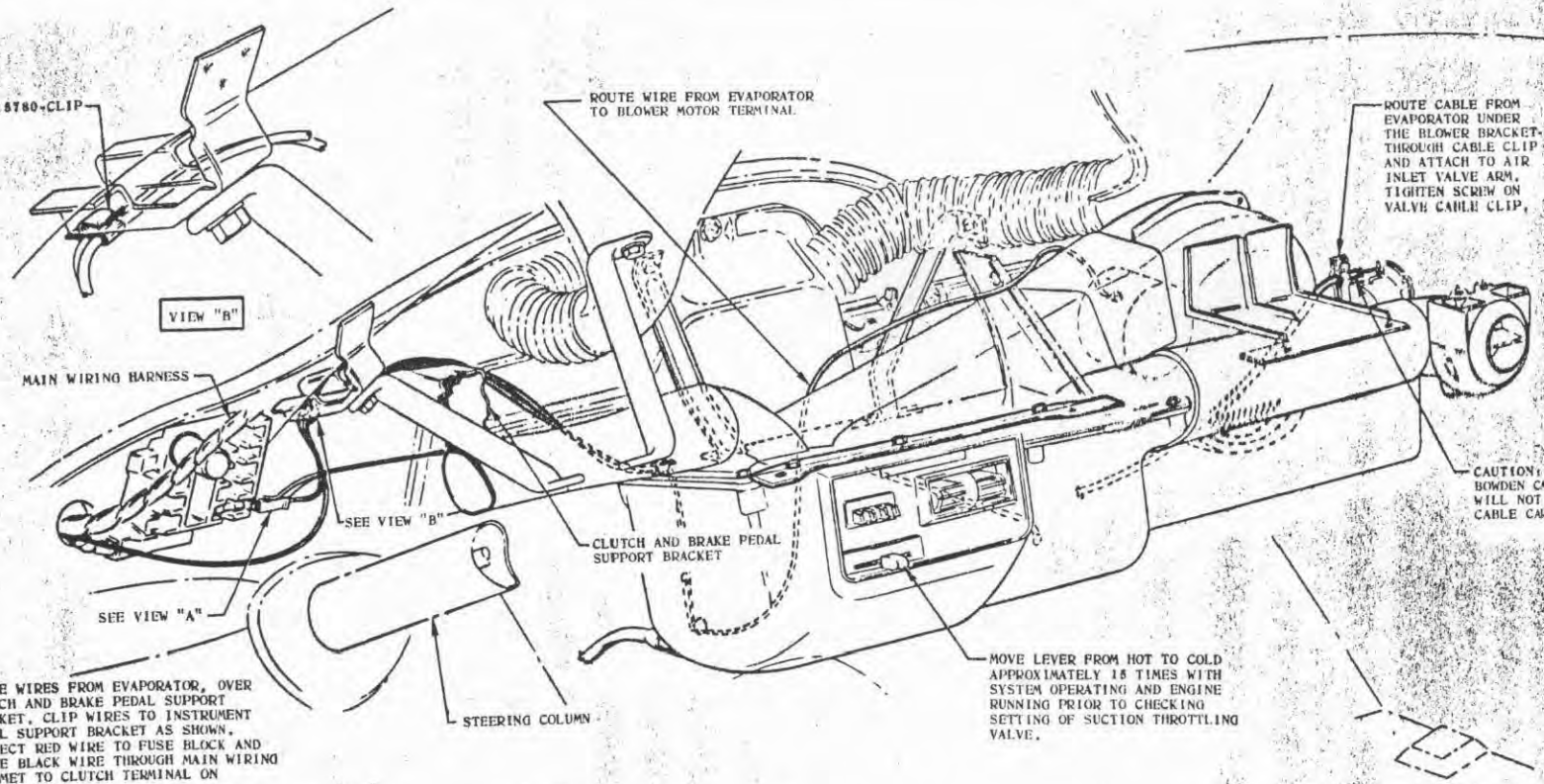
SLIDE L.H. OUTER DUCT OVER L.H. INNER DUCT AS FAR AS POSSIBLE. SLIDE L.H. UPPER RETAINER ASSY INSIDE L.H. OUTER DUCT AND ATTACH RETAINER ASSY TO INSTRUMENT PANEL. SLIDE LOWER RETAINER ASSY, WITH BALL IN POSITION, INTO L.H. OUTER DUCT AND FASTEN TO UPPER RETAINER ASSY.

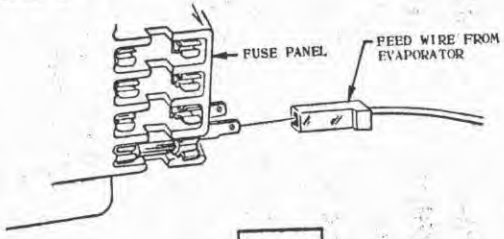
DATE	STN.	REVISION RECORD	DR.	CK.
10-26-62	C	WAS 581863 HOSE		VP
9-14-62	B	WAS 456794 SCREW		VP
5-17-62	A	VIEW ADDED		VP

DWG. DATE MAY 4, 1962 DR. TITUS
FIRST USED 1963 CK. HUAN PELT
REFERENCE 35C60 - 80 APPR.
NAME LAYOUT-AIR CONDITIONING
PART NO. 586574

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

SERIES 3000 - 3100





CABLE AND WIRING INSTALLATION

NOTE:
FOR INSTALLATION OF L.H. COURTESY LAMP ON CONVERTIBLES SEE LAYOUT 587373.

DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAY 4, 1962	DR. TITUS
FIRST USED 1963	CK. H VAN PELT
	APPR.
REFERENCE 35C60 - 80	APPR.

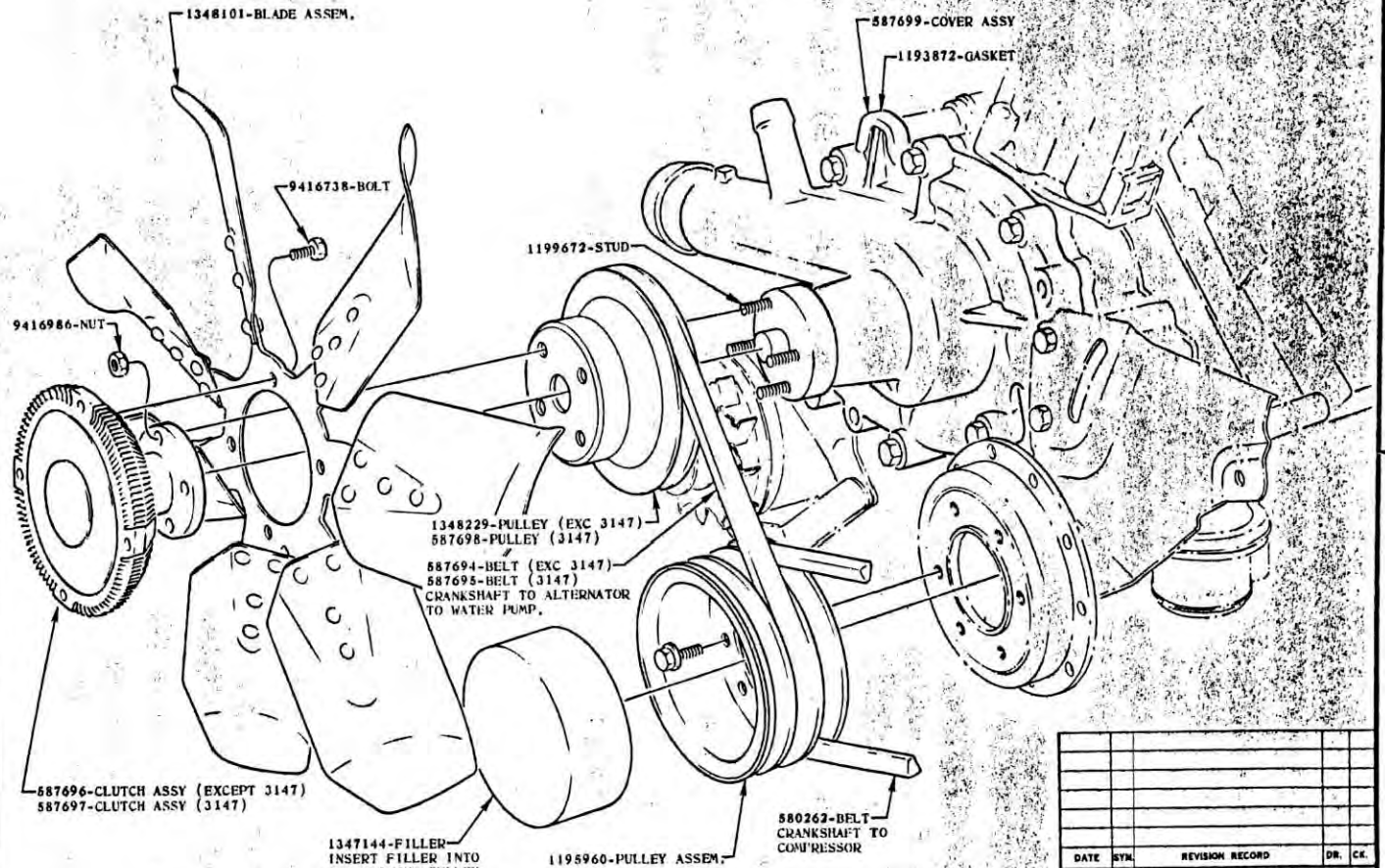
NAME
LAYOUT-AIR CONDITIONING

SERIES 3000 - 3100
SHEET 9 OF 20

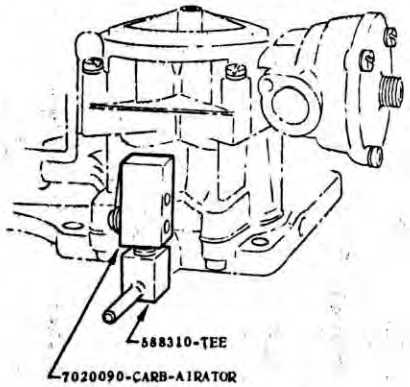
PART NO. 586574

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

586574
SHEET 10 OF 20



NOTE: INSTALL CARB-AIRATOR IN VERTICAL POSITION.



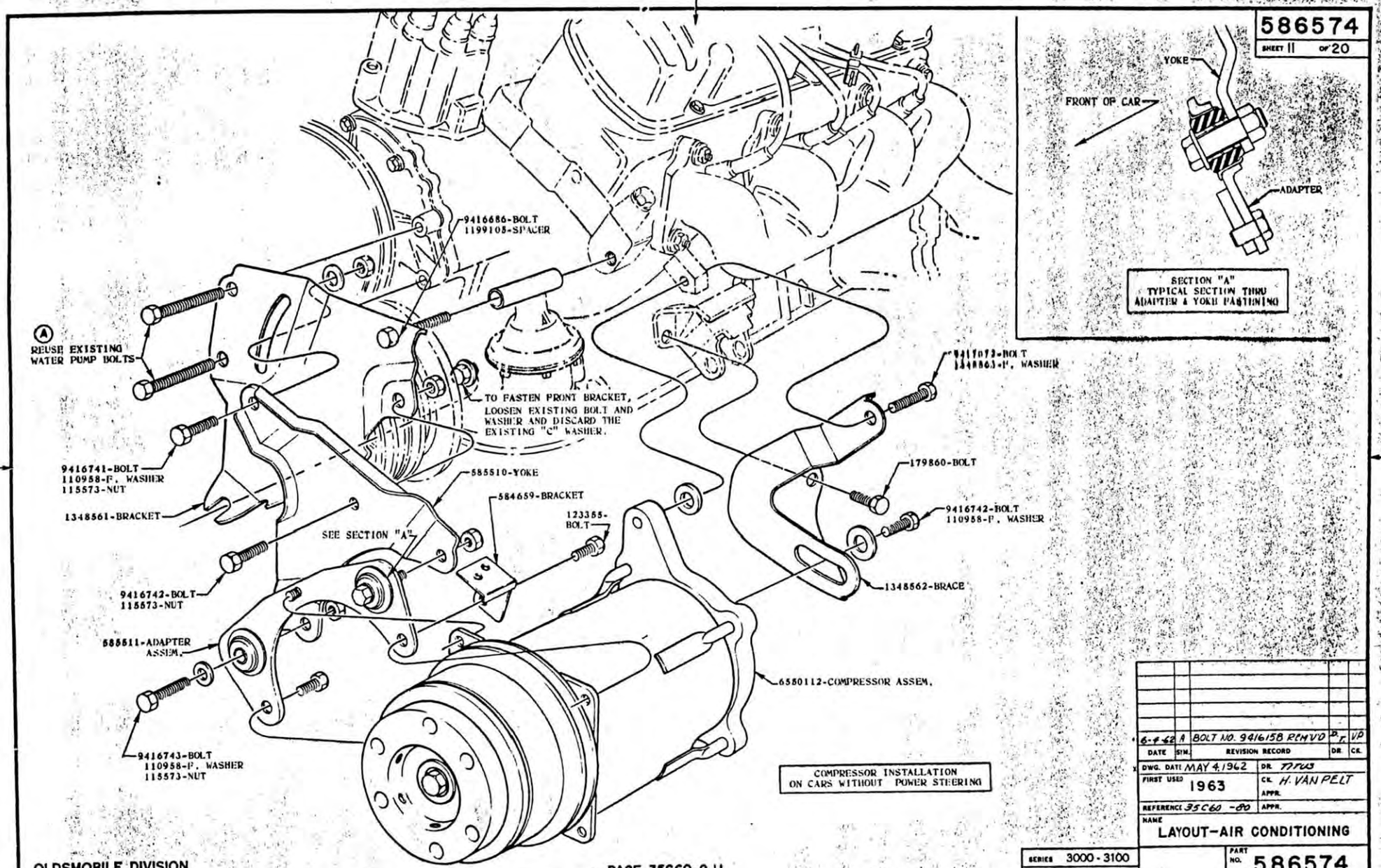
INSTALLATION OF CARB-AIRATOR

2 BARREL CARBURETOR

DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAY 4 1962 DR. GOODWIN
FIRST USED 1963 CK. H. VAN PELT
APPR.
REFERENCE 35C60-80 APPR.
NAME LAYOUT-AIR CONDITIONING
SERIES 3000-3100
SHEET 10 OF 20
PART NO. 586574

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



586574

SHEET 11 OF 20

DATE	SIM.	REVISION RECORD	DR.	CK.
6-4-62	A	BOLT NO. 9416158 REMVD	D.T.	V.P.

DWG. DATE MAY 4, 1962 DR. TITUS

FIRST USED 1963 CK. H. VAN PELT

APPR.

REFERENCE 35C60 -80 APPR.

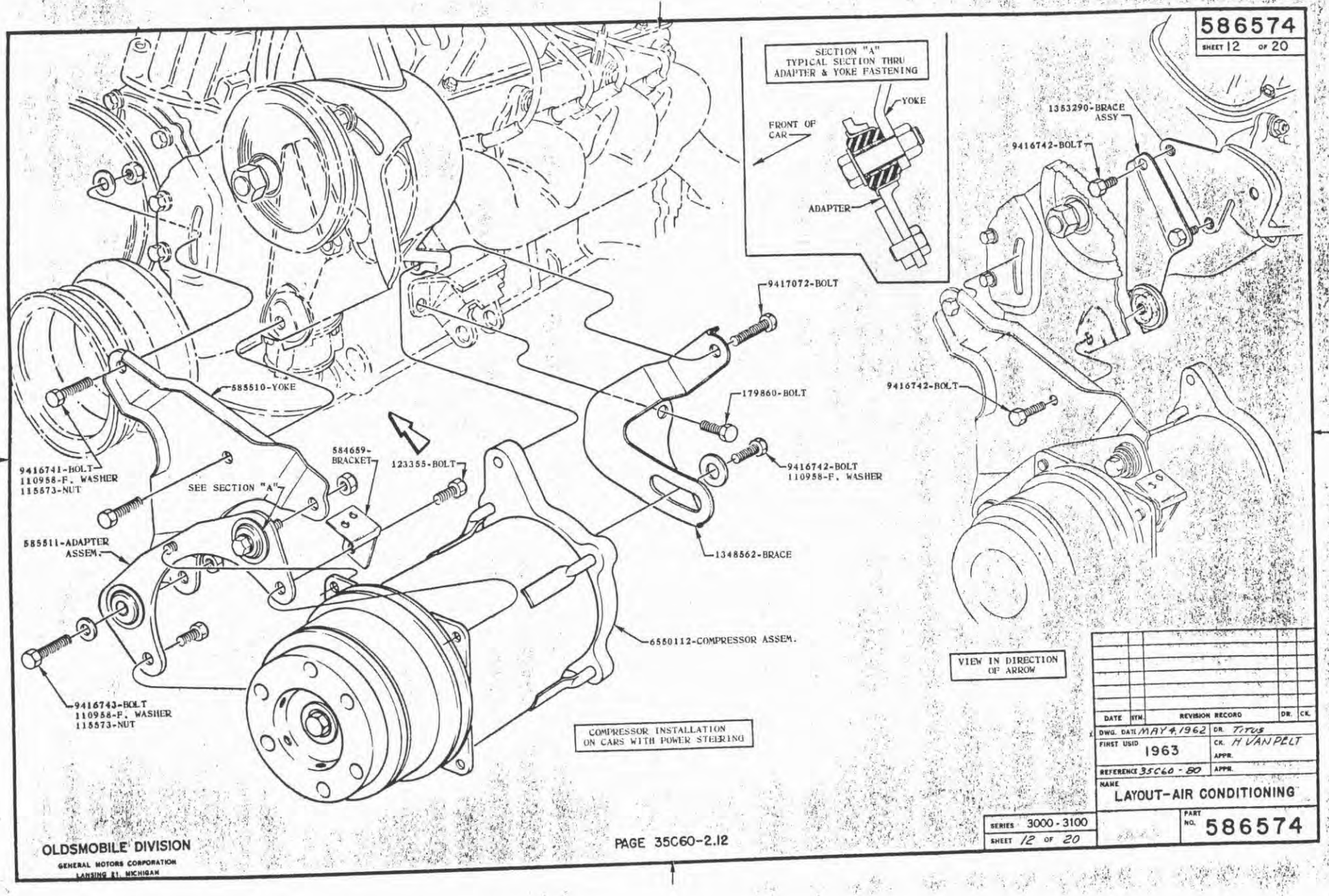
NAME
LAYOUT-AIR CONDITIONING

SERIES 3000 - 3100

SHEET 11 OF 20

PART NO. 586574

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN


586574
SHEET 12 OF 20
SECTION "A"
TYPICAL SECTION THRU
ADAPTER & YOKE FASTENING
YOKE
FRONT OF CAR
ADAPTER
1353290-BRACE ASSY
9416742-BOLT
9417072-BOLT
585510-YOKE
179860-BOLT
9416742-BOLT
9416741-BOLT
110958-F. WASHER
115573-NUT
584659-BRACKET
123355-BOLT
SEE SECTION "A"
9416742-BOLT
110958-F. WASHER
585511-ADAPTER ASSEM.
1348562-BRACE
6550112-COMPRESSOR ASSEM.
9416743-BOLT
110958-F. WASHER
115573-NUT
COMPRESSOR INSTALLATION
ON CARS WITH POWER STEERING
VIEW IN DIRECTION
OF ARROW
DATE
SYM.
REVISION RECORD
DR.
CK.
DWG. DATE MAY 4 1962
DR. TITUS
FIRST USID 1963
CK. H VAN PELT
APPR.
REFERENCE 35C60 - 80
APPR.
NAME
LAYOUT-AIR CONDITIONING
SERIES 3000 - 3100
SHEET 12 OF 20
PART NO. 586574
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN
PAGE 35C60-2.12

DEALER:
REUSE EXISTING OVERFLOW HOSE.
CUT TO 21.00".

585964-HOSE-INLET
(REUSE EXISTING CLAMP)

587981-HOSE-OUTLET
(REUSE EXISTING CLAMP)
583437-SPRING

FACTORY:
9418267-BOLT
103320-L. WASHER
9418268-F. WASHER
DEALER:
REUSE EXISTING
FASTENINGS

DEALER:
REUSE CAP ASSY

586883-SHIELD-
RADIATOR FAN

380120-BUMPER

585965-SUPPORT
568128-SCREW

3155542-HT-(DEALER & FACTORY)
3155545-SMT-(FACTORY ONLY) -RADIATOR ASSY(EXCEPT 3147)

DEALER:
380784-COCK ASSY
(APPLY CP-9 SEALER
OVER THREADS BEFORE
INSTALLING)

RADIATOR
INSTALLATION

580446-INSULATOR

569930-SCREW
586522-NUT

586206-R.H.
586207-L.H. -BRACKET ASSY

REF. REUSE FASTENINGS FROM THIS
LOCATION IN LOCATION AS
SHOWN ABOVE.

TIE BAR SUPPORT

SIDE BAFFLE

RADIATOR SUPPORT
INSTALLATION

(K) 106127-BOLT
1294668-F. WASHER
585998-INSULATOR
585997-INSULATOR ASSY
(J) 273802-L. NUT

TIE BAR
SUPPORT

FRAME BRACKET

RADIATOR LOWER MOUNTING
INSTALLATION

RADIATOR TIE
BAR SUPPORT

3186453-CONDENSER
ASSEMBLY

RADIATOR
SIDE BAFFLE

586458-SPACER

1351122-INSULATOR

CONDENSER BRACKET

1185086-SHIM

1283465-F. WASHER

559736-NUT
(SPRING)

TIE BAR
SUPPORT

575365-SCREW

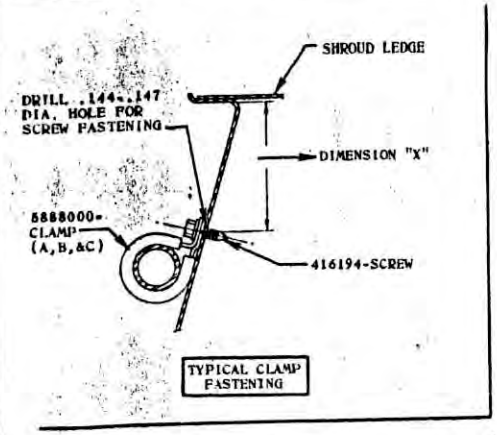
SECTION A-A
(TYPICAL) (L)

CONDENSER ASSY UPPER
AND LOWER MOUNTING
INSTALLATION

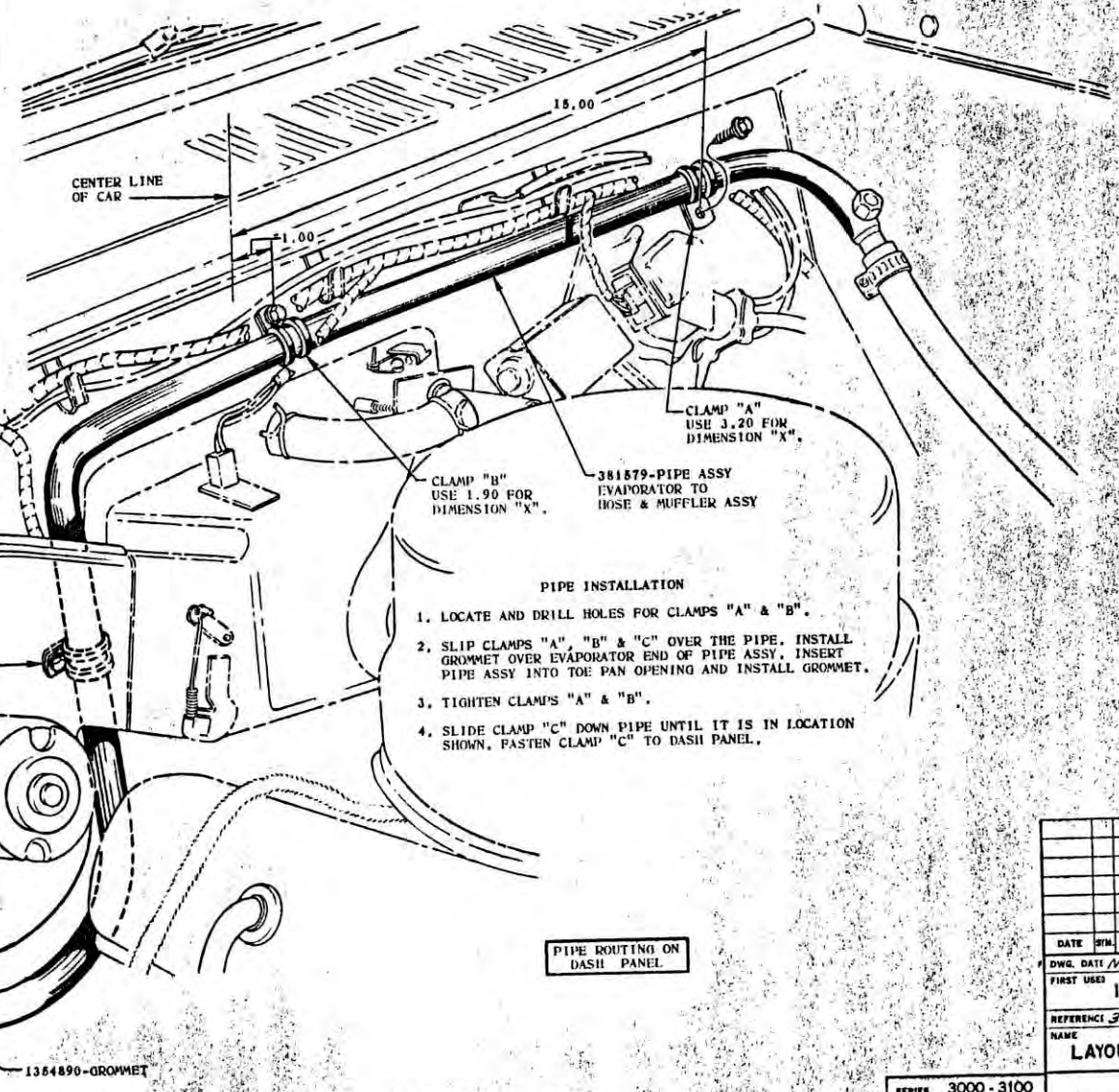
DATE	SYM.	REVISION RECORD	DR.	CK.
+1-12-62	L	SECT. A-A WAS VIEW "A"	RG	VP
+11-8-62	K	WAS 106326 BOLT	RG	VP
+11-6-62	J	PART NO'S REVISED	RG	VP

DWG. DATE MAY 4, 1962 DR. GOODWIN
FIRST USED 1963 CK. H. VAN PELT
APPR.
REFERENCE 35C60-80 APPR.
NAME
LAYOUT-AIR CONDITIONING
PART NO. 586574
SERIES 3000 - 3100

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



TYPICAL CLAMP FASTENING



PIPE INSTALLATION

1. LOCATE AND DRILL HOLES FOR CLAMPS "A" & "B".
2. SLIP CLAMPS "A", "B" & "C" OVER THE PIPE. INSTALL GROMMET OVER EVAPORATOR END OF PIPE ASSY. INSERT PIPE ASSY INTO TOE PAN OPENING AND INSTALL GROMMET.
3. TIGHTEN CLAMPS "A" & "B".
4. SLIDE CLAMP "C" DOWN PIPE UNTIL IT IS IN LOCATION SHOWN. FASTEN CLAMP "C" TO DASH PANEL.

PIPE ROUTING ON DASH PANEL

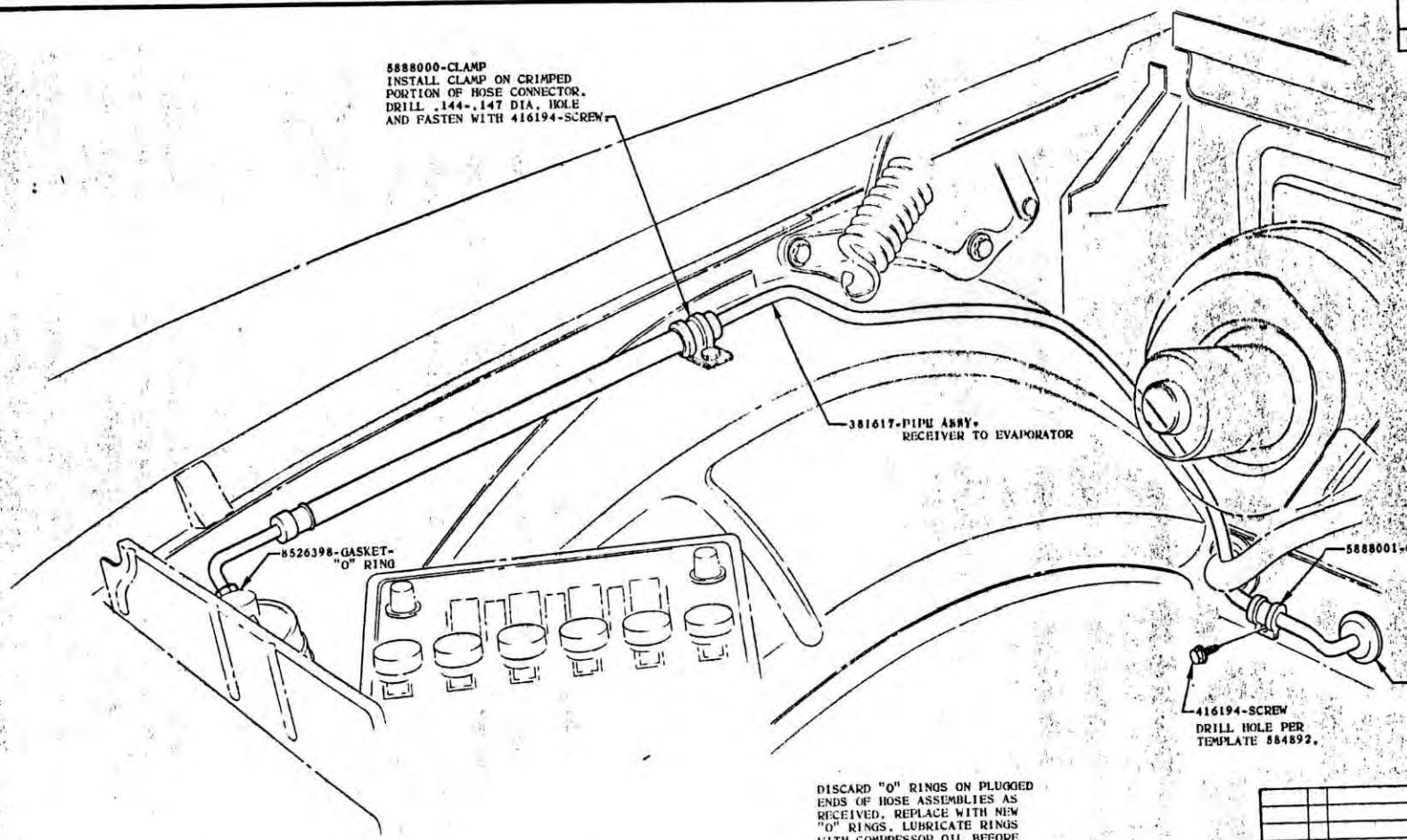
DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAY 4, 1962 — DR. GOODWIN
FIRST USED 1963 — CK. H. VAN PELT — APPR.
REFERENCE 35C60 - 80 — APPR.
NAME LAYOUT-AIR CONDITIONING

SERIES 3000 - 3100
SHEET 14 OF 20

PART NO. 586574

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN

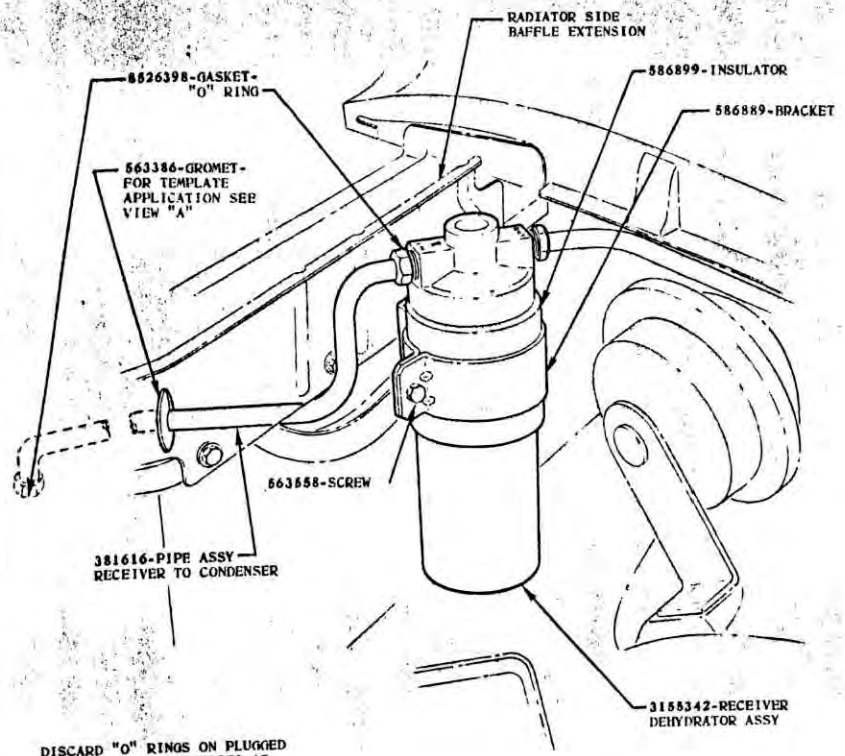


DISCARD "O" RINGS ON PLUGGED ENDS OF HOSE ASSEMBLIES AS RECEIVED. REPLACE WITH NEW "O" RINGS. LUBRICATE RINGS WITH COMPRESSOR OIL BEFORE INSTALLING.

INSTALLATION OF PIPE ASSY FROM RECEIVER TO EVAPORATOR

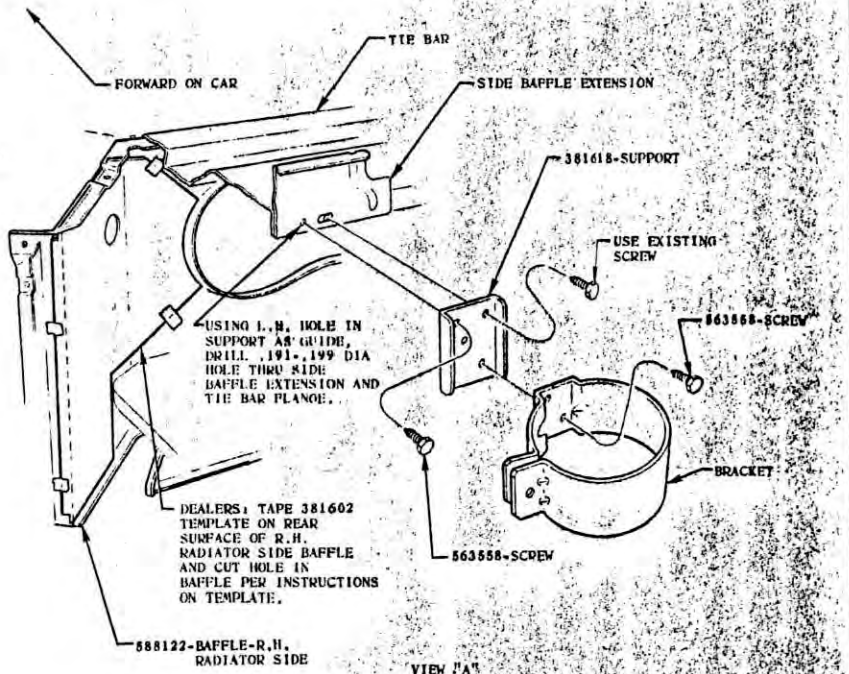
DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAY 4 1962	DR. GOODWIN
FIRST USED 1963	CK. H. VAN PELT
	APPR.
REFERENCE 35C60-80	APPR.
NAME LAYOUT-AIR CONDITIONING	
SERIES 3000-3100	PART NO. 586574
SHEET 15 OF 20	



DISCARD "O" RINGS ON PLUGGED ENDS OF HOSE ASSEMBLIES AS RECEIVED. REPLACE WITH NEW "O" RINGS. LUBRICATE RINGS WITH COMPRESSOR OIL BEFORE INSTALLING.

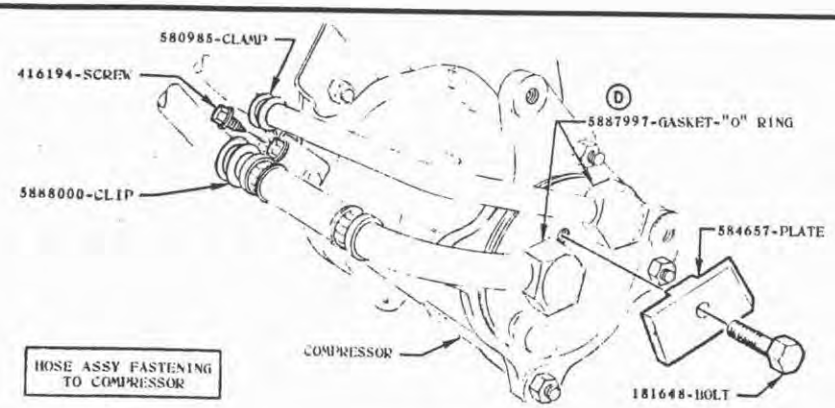
RECEIVER DEHYDRATOR INSTALLATION



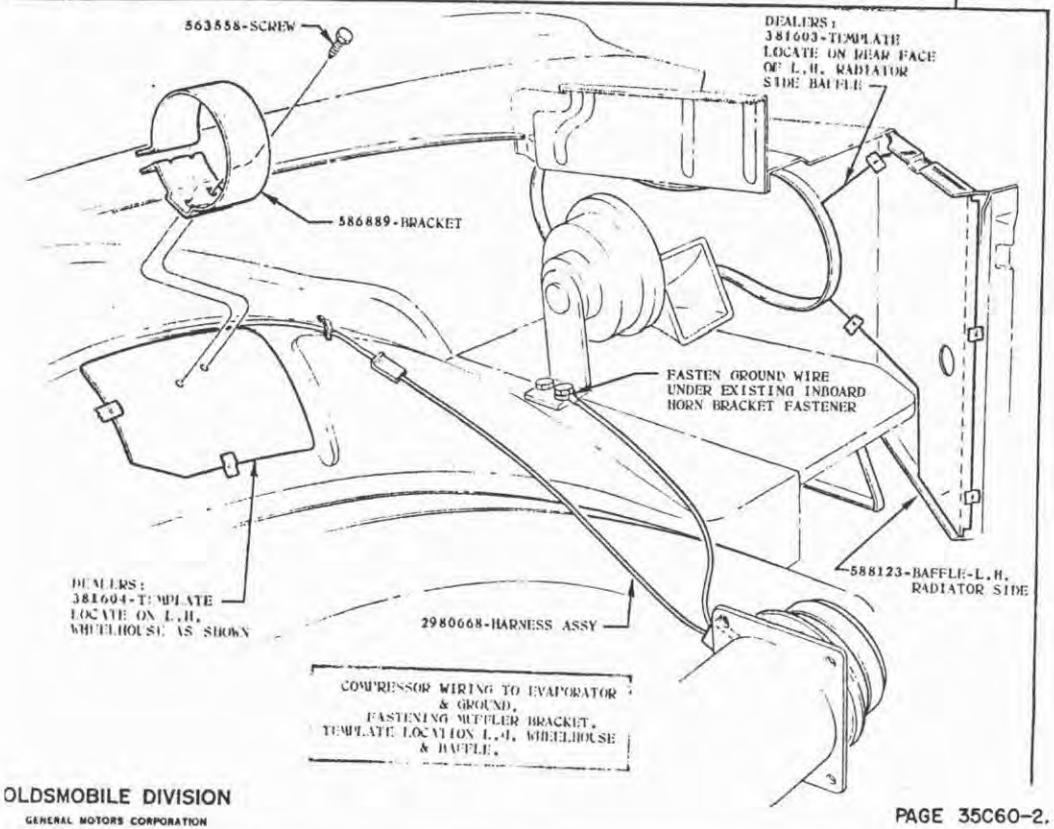
RECEIVER DEHYDRATOR SUPPORT & BRACKET INSTALLATION

DATE	SYM.	REVISION RECORD	DR.	CK.

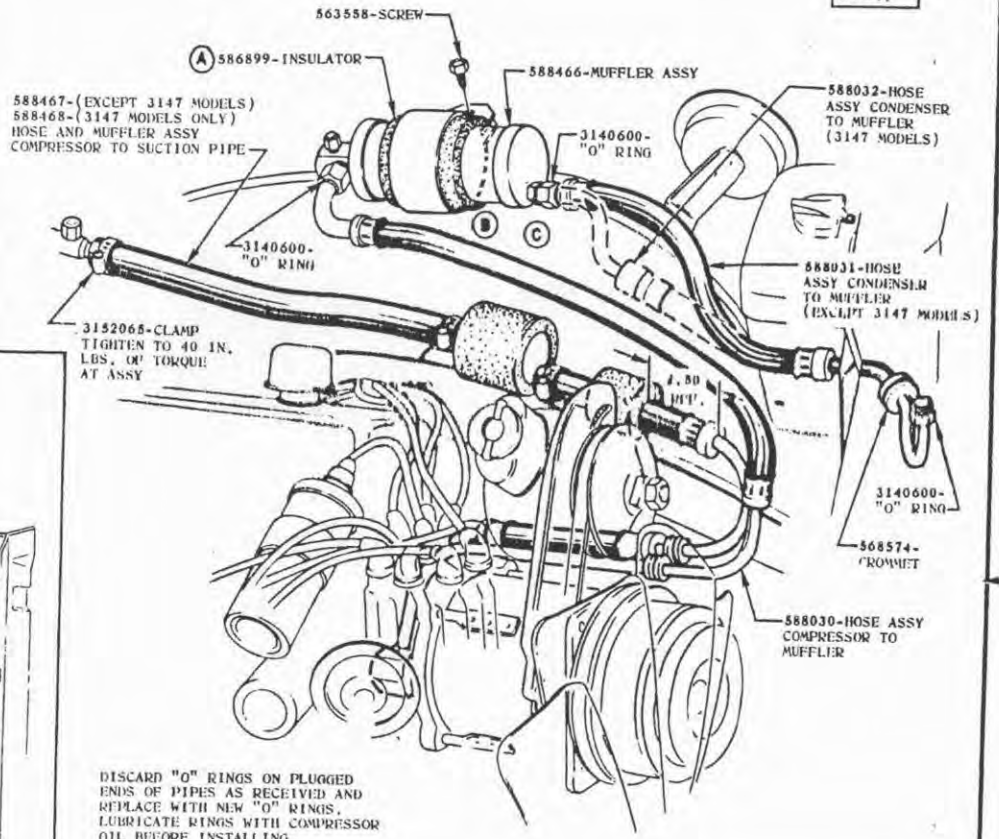
DWG. DATE MAY 4 1962 — DR. GOODWIN
FIRST USED 1963 — CK. H. VAN PELT — APPR.
REFERENCE 35C60-80 — APPR.
NAME LAYOUT-AIR CONDITIONING
SERIES 3000-3100
SHEET 16 OF 20
PART NO. 586574



HOSE ASSY FASTENING TO COMPRESSOR



COMPRESSOR WIRING TO EVAPORATOR & GROUND, FASTENING MUFFLER BRACKET, TEMPLATE LOCATION L.H. WHEELHOUSE & BAFFLE.

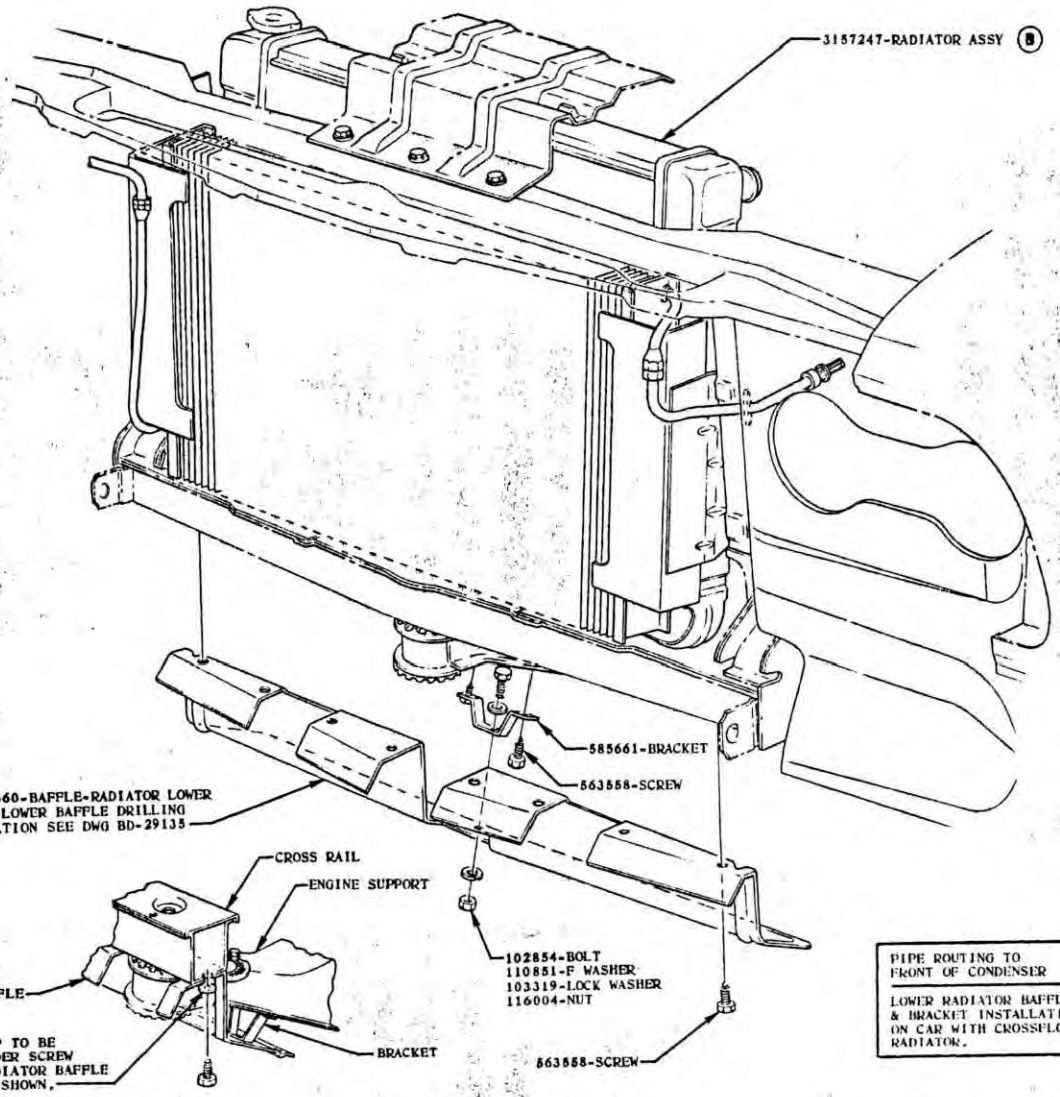


DISCARD "O" RINGS ON PLUGGED ENDS OF PIPES AS RECEIVED AND REPLACE WITH NEW "O" RINGS. LUBRICATE RINGS WITH COMPRESSOR OIL BEFORE INSTALLING.

SUCTION & DISCHARGE HOSE ROUTING & MUFFLER INSTALLATION

*	10-1-62	D	PART NUMBER ADDED	RG	VP
+	7-31-62	C	SPACER PART NO. REMOVED	RG	VP
*	7-24-62	B	542944 SPACER ADDED	DT	VP
+	6-4-62	A	WAS 586875-INSULATOR	DT	VP
	DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAY 4 1962 — DR. GOODWIN
FIRST USED 1963 — CK. [illegible] — APPR.
REFERENCE 35C60-80 — APPR.
NAME LAYOUT-AIR CONDITIONING
PART NO. 586574
SERIES 3000 - 3100



PIPE ROUTING TO FRONT OF CONDENSER

LOWER RADIATOR BAFFLE & BRACKET INSTALLATION ON CAR WITH CROSSFLOW RADIATOR.

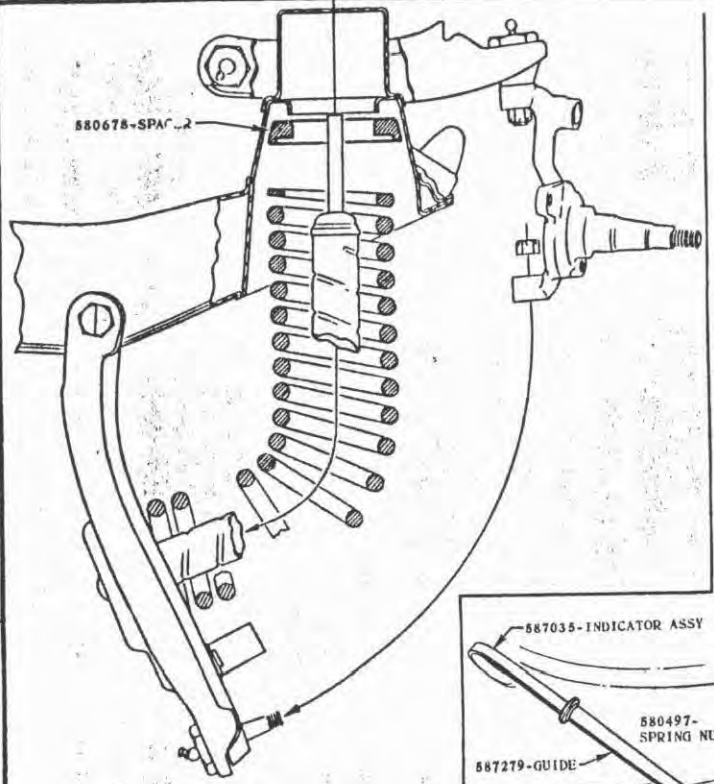
5-21-62	B	WAS 3155147 RAD ASSY	DT	LV
5-15-62	A	WAS 3000-3100 MODELS	RT	VP
DATE	SYM	REVISION RECORD	DR.	CK.

DWG. DATE MAY 4, 1962 DR. GOODWIN
FIRST USED 1963 CK. H VAN PELT
APPR.
REFERENCE 35 C60-80 APPR.
NAME LAYOUT-AIR CONDITIONING

(A)
SERIES 3147
SHEET 18 OF 20

PART NO. 586574

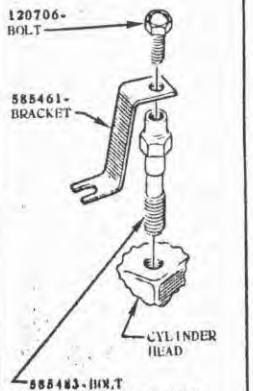
OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



SEE SHOP MANUAL
FOR SPRING REMOVAL.

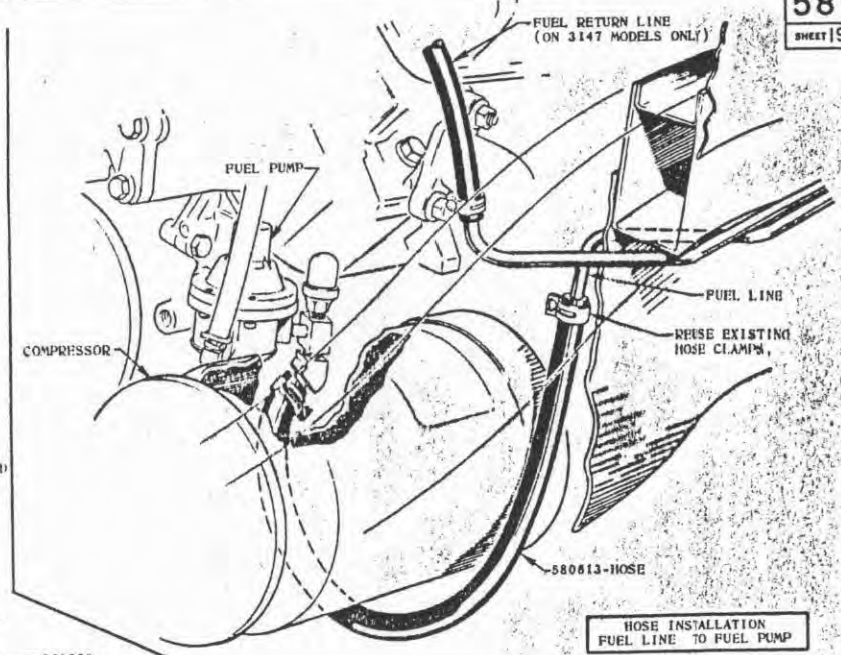
SPACER MUST BE INSTALLED
ON BOTH R H & L H FRONT
SPRINGS AS SHOWN.

FRONT SPRING
SPACER INSTALLATION

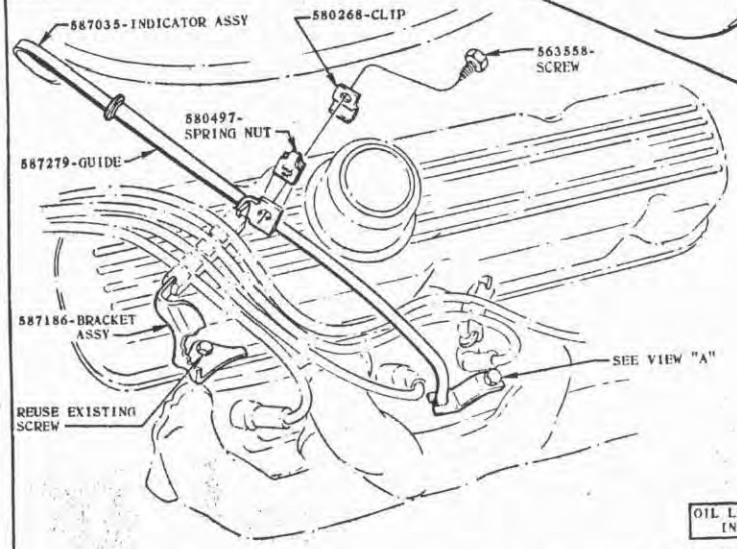


WHEN INSTALLING BOLT,
APPLY ANTI-SEIZE COMPOUND
BUICK SPEC. #1379 AND
TORQUE TO 48-55 FT. LBS.

VIEW "A"



HOSE INSTALLATION
FUEL LINE TO FUEL PUMP



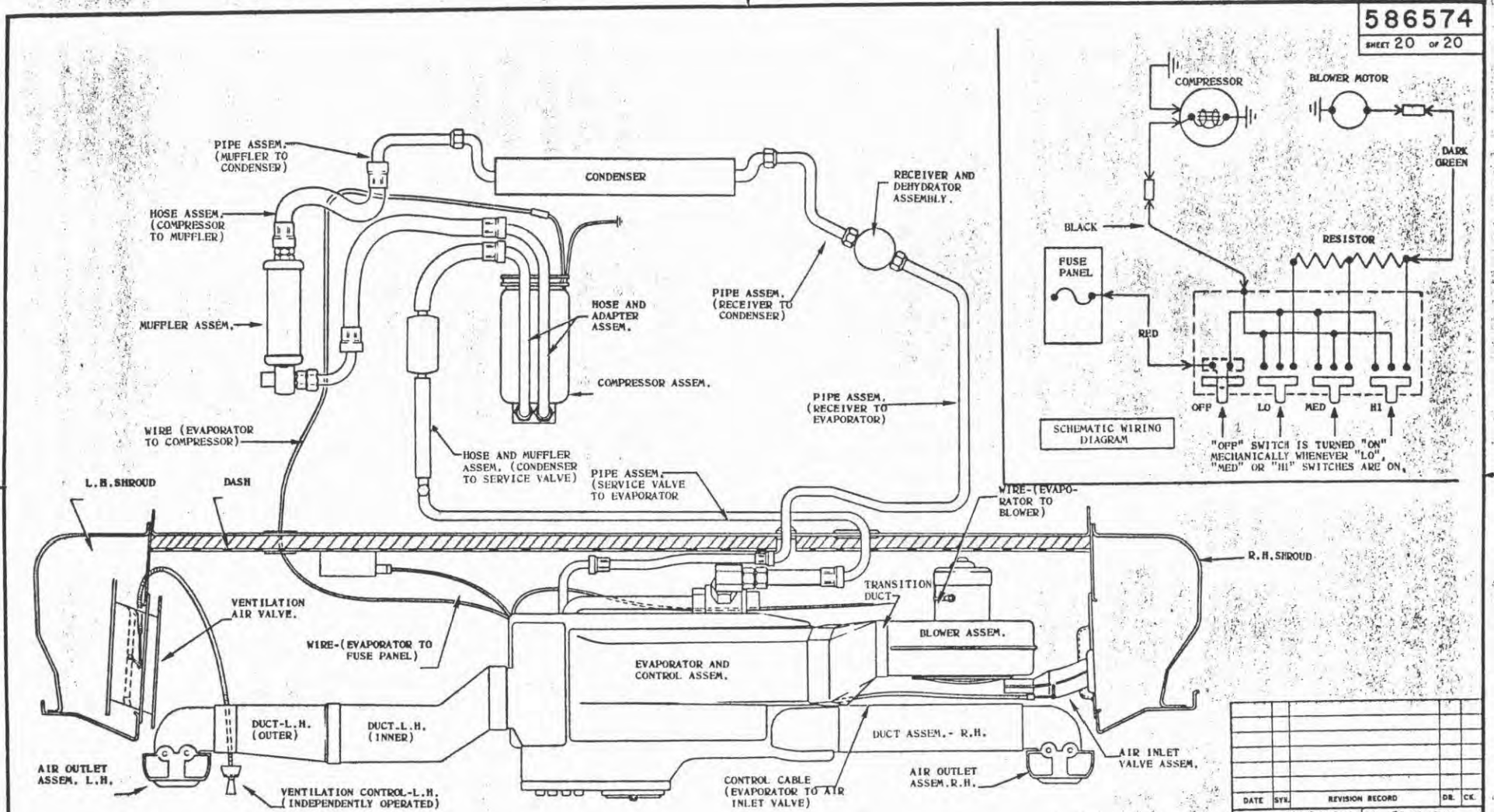
OIL LEVEL INDICATOR
INSTALLATION

EXCEPT 3147 MODELS

DATE	SYM.	REVISION RECORD	DR.	CK.

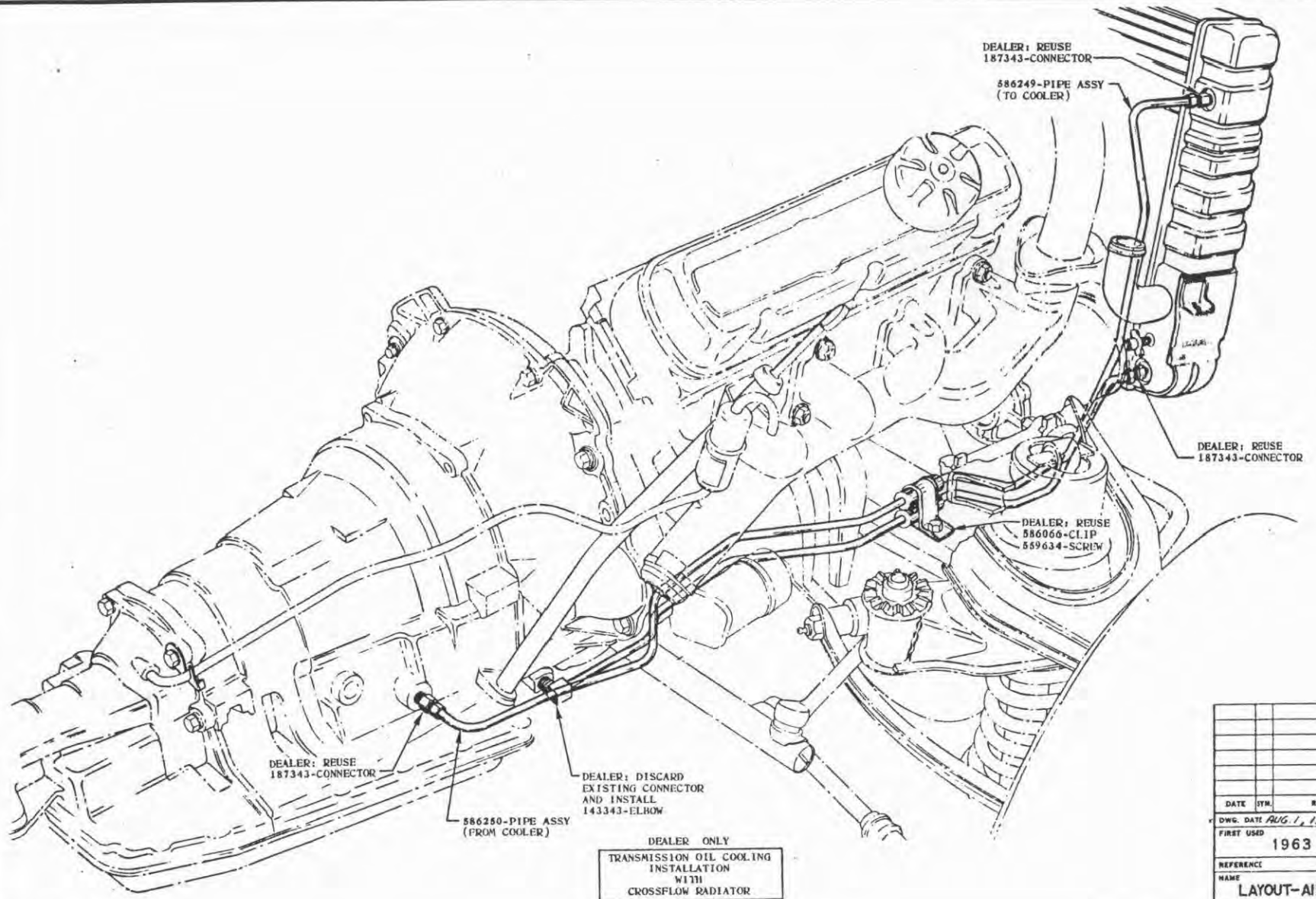
DWG. DATE MAY 4, 1962 DR. VAN DYKE
FIRST USED 1963 CK. H. VAN PELT
APPR.
REFERENCE 35C60 - 80 APPR.
NAME LAYOUT-AIR CONDITIONING
SERIES 3000 - 3100
SHEET 19 OF 20
PART NO. 586574

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN



DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE MAY 4 1962 — DR. GOODWIN
FIRST USED 1963 — CK. H. VAN PELT — APPR.
REFERENCE 35C60 -80 — APPR.
NAME LAYOUT—AIR CONDITIONING
SERIES 3000 - 3100
SHEET 20 OF 20
PART NO. 586574



586574

SHEET 21

DEALER ONLY

TRANSMISSION OIL COOLING
INSTALLATION
WITH
CROSSFLOW RADIATOR

DATE	SYM.	REVISION RECORD	DR.	CK.

DWG. DATE AUG. 1, 1962 DR. BEACHNAU

FIRST USED 1963 CK. H. VAN PELT

REFERENCE APPR.

APPR.

NAME
LAYOUT-AIR CONDITIONING

PART NO. 586574

SERIES 3000 - 3100

OLDSMOBILE DIVISION
GENERAL MOTORS CORPORATION
LANSING 21, MICHIGAN