

383-413-426-440 HOT SETUP

## SWITCHING ON THE WEDGE

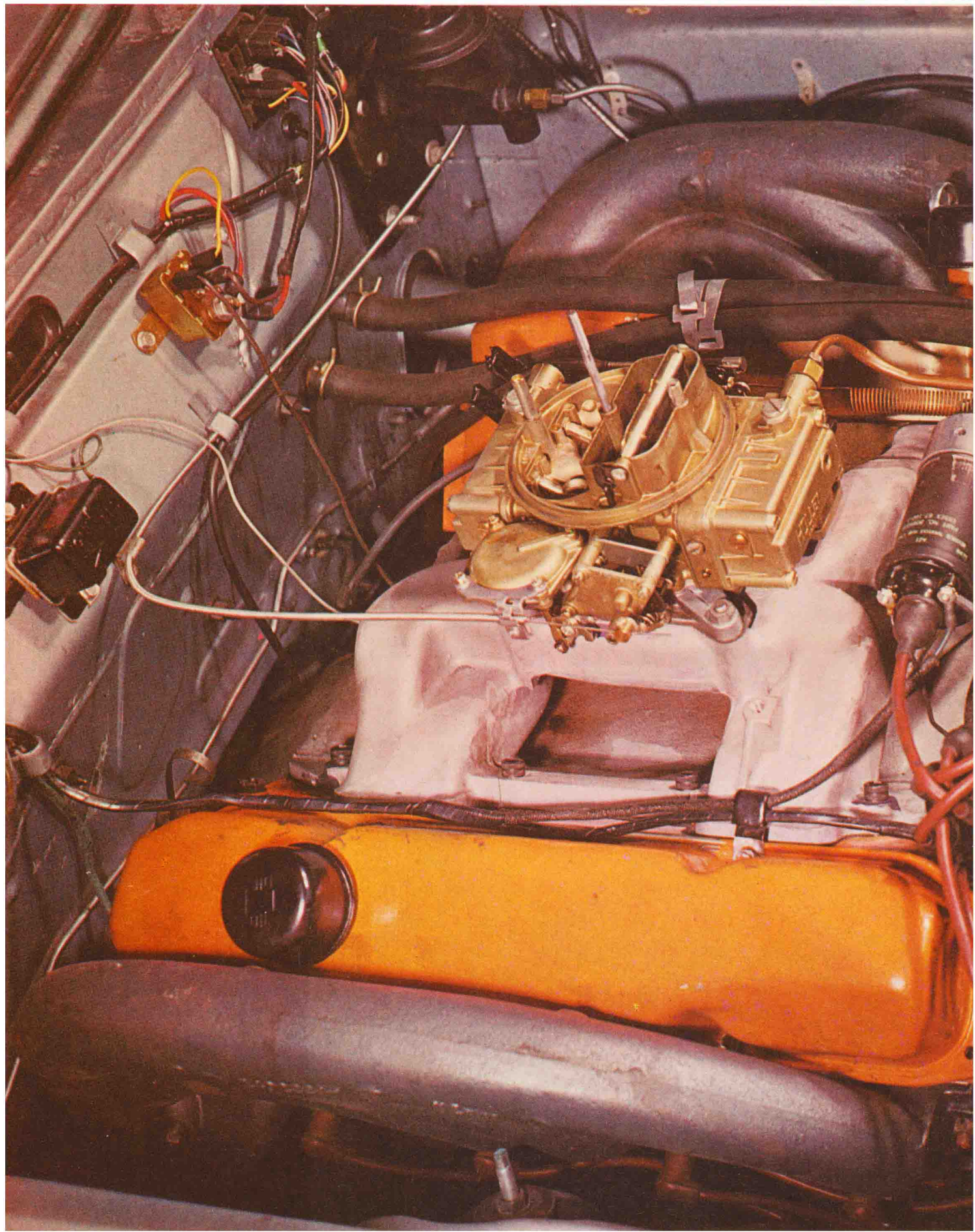
THE LATEST FACTORY POOP ON RAM-CHARGING MOPAR'S OLD-FAITHFUL WEDGIE FOR STREET, FOR STRIP, OR FOR BANZAI TIRE-FRYING

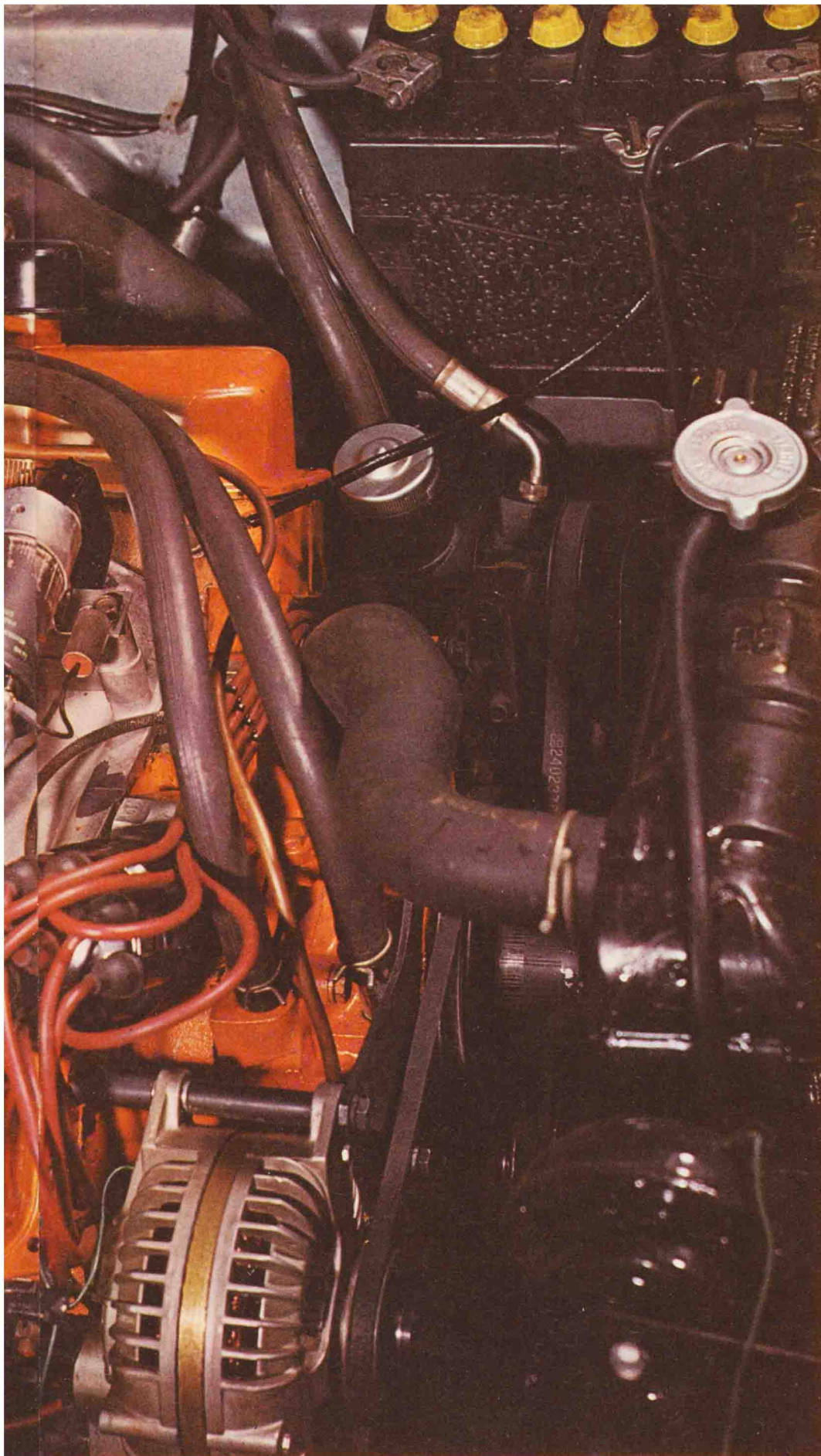
BY MARTYN L. SCHORR

**W**ITH ALL the hullabaloo about hemi heads, overhead cams, and the "semi-hemi" Chevy, rodders are quick to forget about the old-faithful Chrysler Corporation wedge engines which put Dodge and Plymouth where they are today on the competition scene. Soon after the hemi was released for strip service in 1964, the wedge was well on its way to obsolescence. The radical, rampaging 426 Stage III wedge, made famous by the Ramchargers, was put out to pasture by the factory and the jaded rodding set.

But is the wedge really dead? Not by a longshot, say most intelligent engine builders and race drivers. Even though the engine cannot breathe as well as its hemi replacement, or make as much horsepower, it still has a place in the sun. Junkyards are starting to fill up with 383 and 413 engines, and they can be had at reasonable prices. And there's still a supply of racing equipment designed for the Ramcharger 426 drag engines (which can be applied to most engines in the 'B' series line) available from dealers and factory outlets. Since the engine has already proven itself on the quarter, the long NASCAR ovals and the street, it certainly shouldn't be overlooked when building a class machine, a modified stocker or a good-running streetster.

Most rodders are already familiar with the wedge's performance record on the quarter, but how many know of its success on the Bonneville Salt Flats? Back in 1960, before the factory started with Super/Stock racing, the Granatelli boys (pre-STP!) tripped the clocks at 184.09 mph in a stock Chrysler 300 running a Paxton-blown 413 wedge. That same year saw Norm Thatcher, the racing grandfather, run 164 mph in a stock-bodied, unblown, 510-cubic-inch Dodge Dart,





383-413-426-440 HOT SETUP

## SWITCHING ON THE WEDGE

THE LATEST FACTORY POOP ON RAM-CHARGING MOPAR'S OLD-FAITHFUL WEDGIE FOR STREET, FOR STRIP, OR FOR BANZAI TIRE-FRYING

BY MARTYN L. SCHORR

**W**ITH ALL the hullabaloo about hemi heads, overhead cams, and the "semi-hemi" Chevy, rodders are quick to forget about the old-faithful Chrysler Corporation wedge engines which put Dodge and Plymouth where they are today on the competition scene. Soon after the hemi was released for strip service in 1964, the wedge was well on its way to obsolescence. The radical, rampaging 426 Stage III wedge, made famous by the Ramchargers, was put out to pasture by the factory and the jaded rodding set.

But is the wedge really dead? Not by a longshot, say most intelligent engine builders and race drivers. Even though the engine cannot breathe as well as its hemi replacement, or make as much horsepower, it still has a place in the sun. Junkyards are starting to fill up with 383 and 413 engines, and they can be had at reasonable prices. And there's still a supply of racing equipment designed for the Ramcharger 426 drag engines (which can be applied to most engines in the 'B' series line) available from dealers and factory outlets. Since the engine has already proven itself on the quarter, the long NASCAR ovals and the street, it certainly shouldn't be overlooked when building a class machine, a modified stocker or a good-running streetster.

Most rodders are already familiar with the wedge's performance record on the quarter, but how many know of its success on the Bonneville Salt Flats? Back in 1960, before the factory started with Super/Stock racing, the Granatelli boys (pre-STP!) tripped the clocks at 184.09 mph in a stock Chrysler 300 running a Paxton-blown 413 wedge. That same year saw Norm Thatcher, the racing grandfather, run 164 mph in a stock-bodied, unblown, 510-cubic-inch Dodge Dart,

back it up with another 164-mph run after switching to an unblown 482-incher, and top it off with a 183-mph run in the same stocker with a blown 450-incher. All this was done on pump gas! In 1962 both Thatcher and the Granatelli boys attained speeds in the 190's with blown wedge machines. As you can see, there's unreal potential locked up in the wedge, and it can be brought out using factory-available equipment. And, of course, if you want to go all the way, the California speed merchants offer complete lines of go-fast goodies ranging from blowers and injectors to 500-plus cubic-inch stroker kits.

Since we are dealing here with bolt-on and factory equipment and stock setups for the Chrysler 'B' series wedge, which includes the 383, 413 and 426, we will not go into the tremendous amount of custom speed equipment available from the Gold Coast. Many of the recommendations made here are also applicable to the new 440 series wedge and have already been adopted by the factory for use on the Plymouth GTX and Coronet R&T 375-hp 440 setups.

There are three routes you can travel when "switching on" the wedge series engine. There are straight bolt-ons, bolt-on plus minor machine

where there's  
a (Mopar) wedge  
there's a way!

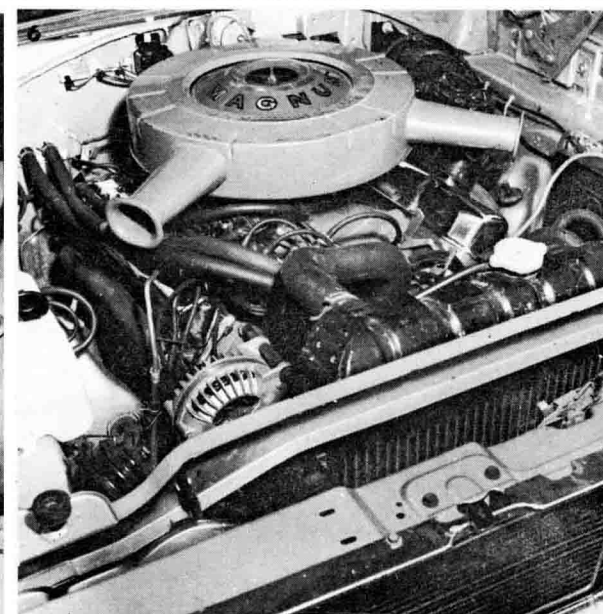
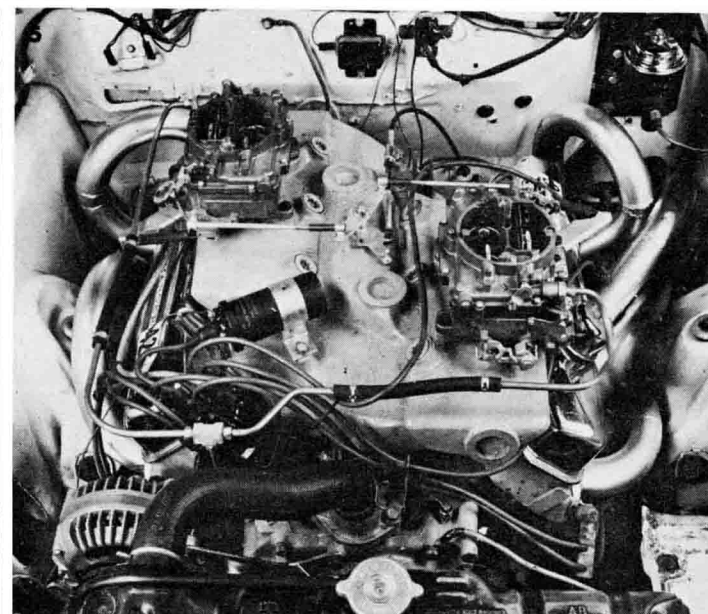
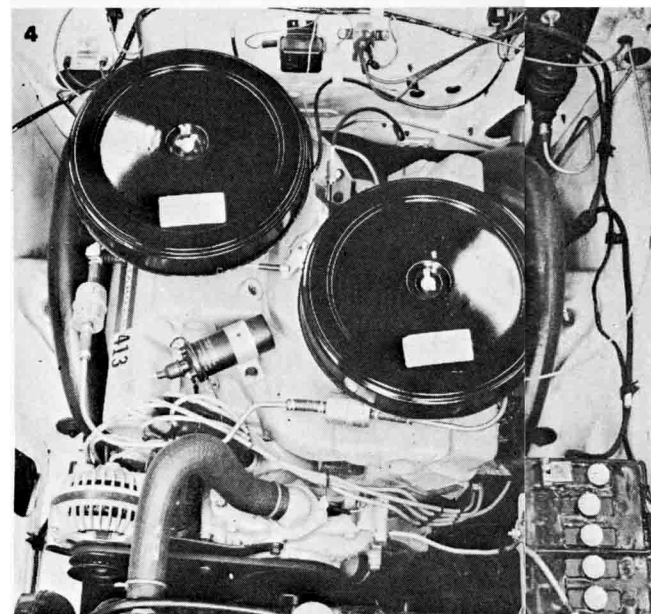
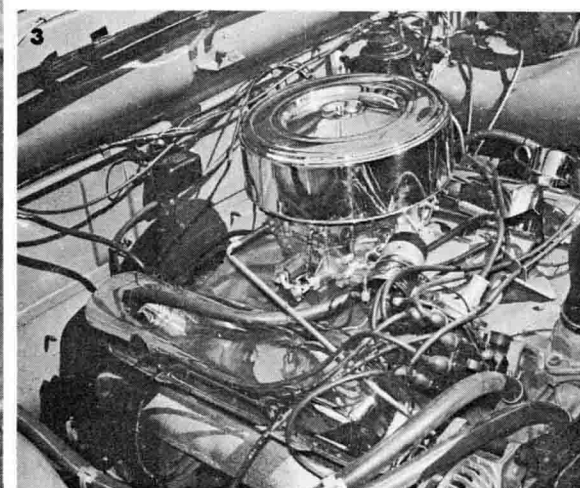
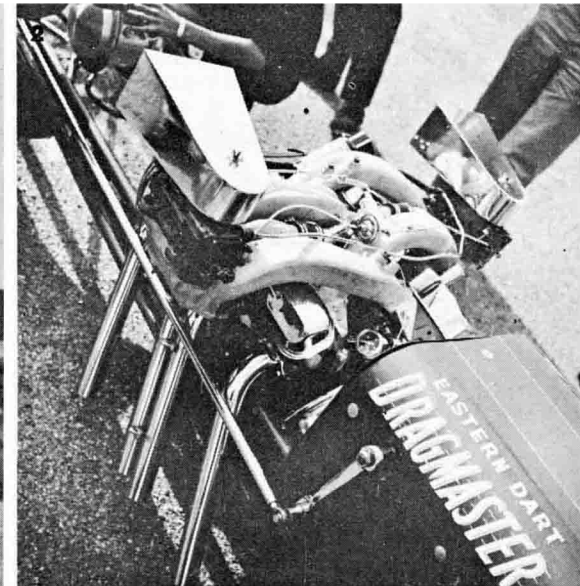
work, and all-out blueprinting. Application and budget are the all-important factors to be considered when planning your hot wedge.

When shopping for an engine or a short block assembly, you should be careful *not* to choose an older 361 or even an early 383 block. It's wise to start with either a late 383, 413 or 426 street or race engine. The early 383 engine carries LB series markings and sports a 3 $\frac{1}{8}$ -inch stroke. The late 383-413 is known as the RB series engine and has a 3 $\frac{3}{4}$ -inch stroke.

You can tell these engines apart *only* by measuring the area between the top deck of the block on the right rear side of the engine and the top of the flywheel housing bolt circle. The RB engine checks out at 2-1/16 inches, while the LB engine is 1-15/16 inches. Most of the optional Super/Stock racing packages marketed by the factory are for the RB series engine and will not bolt onto the early block. If for no other reason than to take advantage of the cubic-inch displacement, it would be wise to go for either the 413 or the 426 powerplant.

Even though the factory-built race engines were successful in Super/Stock racing, they were not really ready for the track in stock condition. They required blueprinting, which covers a new advance curve for the distributor, a clearanced crank piston assembly and super tuning. They also required deeper oil pans, properly baffled to keep the oil from washing away under rapid acceleration and deceleration, and tuned exhaust systems to extract every available bit of power.

When going the full blueprint and machine route, all efforts must be concentrated on the lower end assembly. The mains must be grooved in order to increase oil flow through them to the rod bearings. Forged aluminum pistons with Dykes-type power-sealing rings should be used for durability and maximum performance reasons. When installing pistons, piston-to-bore clearance can be kept at .003 to .0035 inches for maximum efficiency. Care must also be taken to prevent the piston from dropping below the minimum recommended piston height. On a 383 block, the minimum is .014 inches below the top of the block, while on a 413 it's .038 inches, and on a 426 it's .042 inches.



1. Rick Johnson's hard-charging Dodge Dart has wedged many a mean machine out of lower stock gold. 2. Unique early long-ram quad manifold on 383 block helps this gas dragster turn on. Eastern Dart rail now runs a poked and stroked 426 Dodge wedge. 3. Chromed 413 mill was factory installed in a limited number of super-jazzy Dodge pickup trucks in 1964. A more potent version was available for California Highway Patrol use in 1965 Dodge Polaras. 4. First real Mopar S/S setup was 413 with short-ram manifold and high-rise cast iron headers. It was available in 1962 Dodges and Plymouths. 5. Ultimate Stage III 426 Ramcharger rated at 425 hp makes use of an improved short-ram manifold and tube headers. 6. Latest version of hot wedge is 440 rated at 375 hp, available in Plymouth GTX, Dodge R&T.

back it up with another 164-mph run after switching to an unblown 482-incher, and top it off with a 183-mph run in the same stocker with a blown 450-incher. All this was done on pump gas! In 1962 both Thatcher and the Granatelli boys attained speeds in the 190's with blown wedge machines. As you can see, there's unreal potential locked up in the wedge, and it can be brought out using factory-available equipment. And, of course, if you want to go all the way, the California speed merchants offer complete lines of go-fast goodies ranging from blowers and injectors to 500-plus cubic-inch stroker kits.

Since we are dealing here with bolt-on and factory equipment and stock setups for the Chrysler 'B' series wedge, which includes the 383, 413 and 426, we will not go into the tremendous amount of custom speed equipment available from the Gold Coast. Many of the recommendations made here are also applicable to the new 440 series wedge and have already been adopted by the factory for use on the Plymouth GTX and Coronet R&T 375-hp 440 setups.

There are three routes you can travel when "switching on" the wedge series engine. There are straight bolts, bolt-on plus minor machine

where there's  
a (Mopar) wedge  
there's a way!

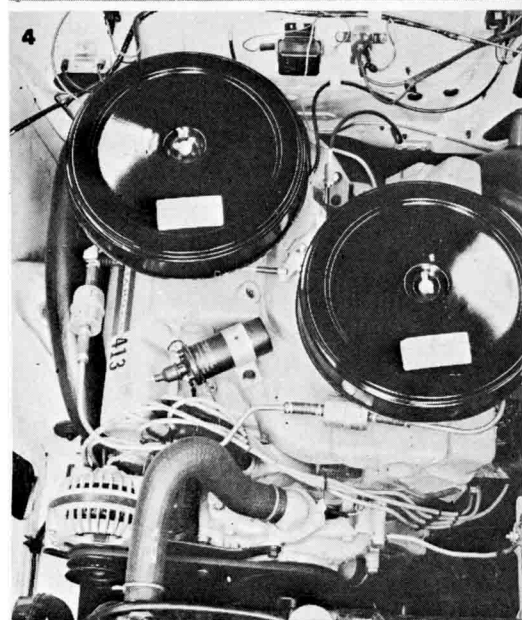
work, and all-out blueprinting. Application and budget are the all-important factors to be considered when planning your hot wedge.

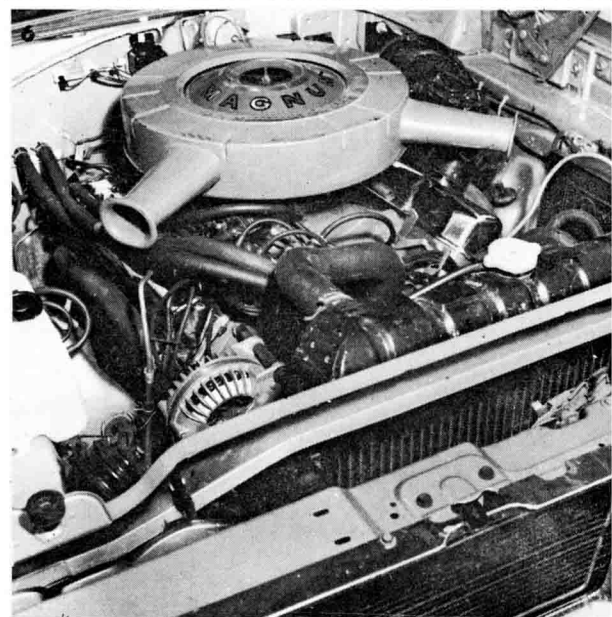
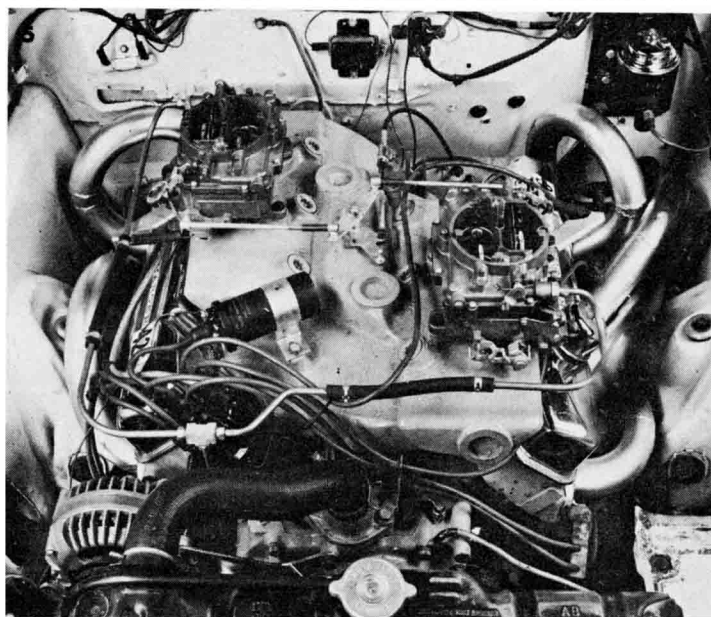
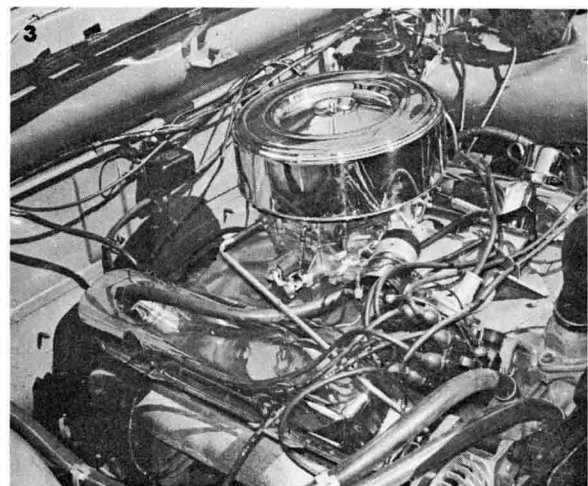
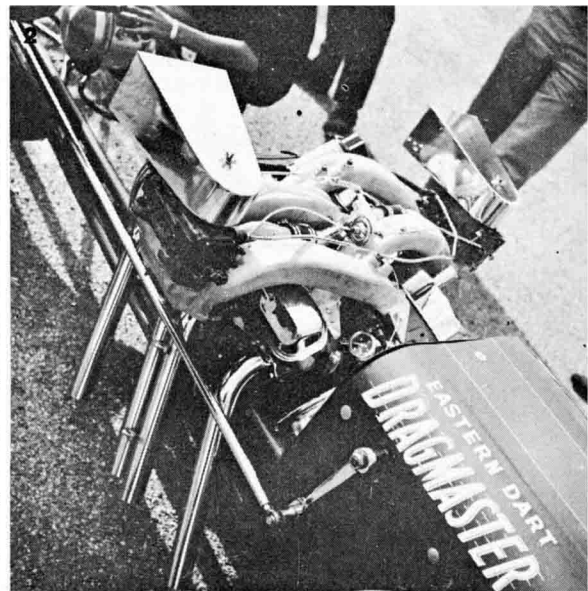
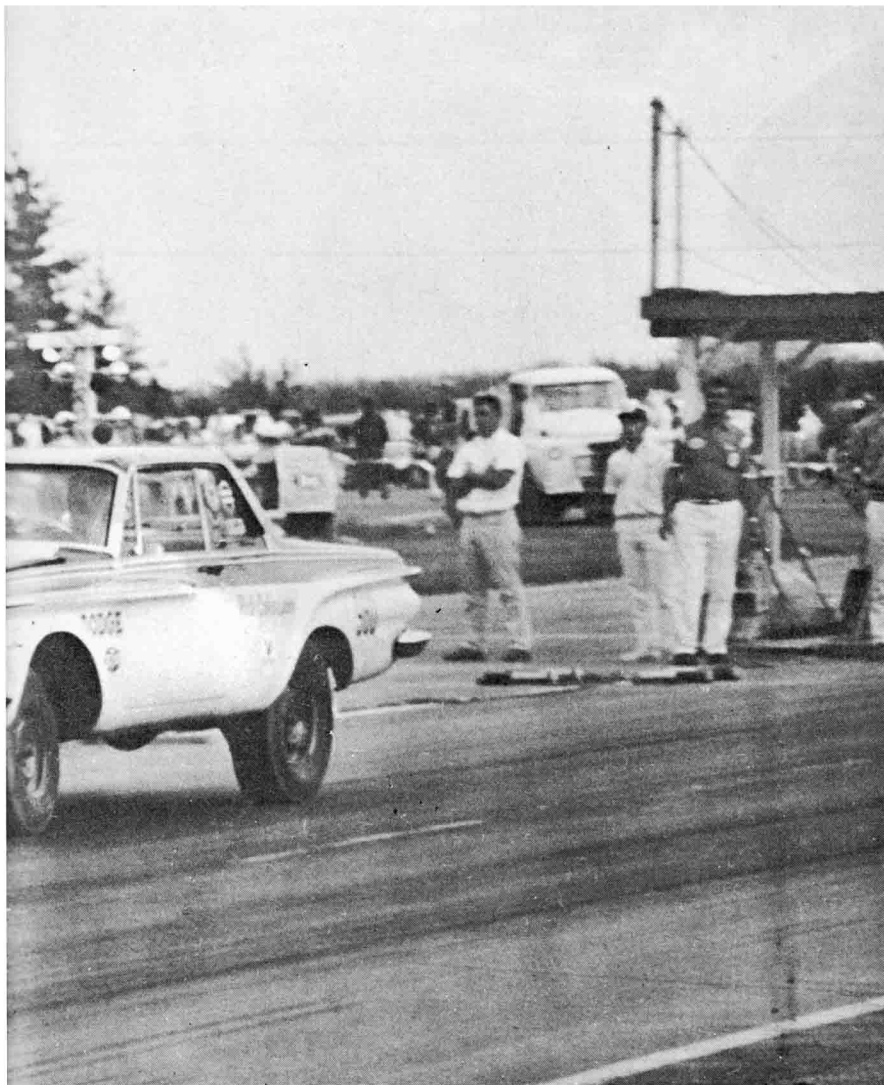
When shopping for an engine or a short block assembly, you should be careful *not* to choose an older 361 or even an early 383 block. It's wise to start with either a late 383, 413 or 426 street or race engine. The early 383 engine carries LB series markings and sports a 3 $\frac{1}{8}$ -inch stroke. The late 383-413 is known as the RB series engine and has a 3 $\frac{3}{4}$ -inch stroke.

You can tell these engines apart *only* by measuring the area between the top deck of the block on the right rear side of the engine and the top of the flywheel housing bolt circle. The RB engine checks out at 2-1/16 inches, while the LB engine is 1-15/16 inches. Most of the optional Super/Stock racing packages marketed by the factory are for the RB series engine and will not bolt onto the early block. If for no other reason than to take advantage of the cubic-inch displacement, it would be wise to go for either the 413 or the 426 powerplant.

Even though the factory-built race engines were successful in Super/Stock racing, they were not really ready for the track in stock condition. They required blueprinting, which covers a new advance curve for the distributor, a clearanced crank piston assembly and super tuning. They also required deeper oil pans, properly baffled to keep the oil from washing away under rapid acceleration and deceleration, and tuned exhaust systems to extract every available bit of power.

When going the full blueprint and machine route, all efforts must be concentrated on the lower end assembly. The mains must be grooved in order to increase oil flow through them to the rod bearings. Forged aluminum pistons with Dykes-type power-sealing rings should be used for durability and maximum performance reasons. When installing pistons, piston-to-bore clearance can be kept at .003 to .0035 inches for maximum efficiency. Care must also be taken to prevent the piston from dropping below the minimum recommended piston height. On a 383 block, the minimum is .014 inches below the top of the block, while on a 413 it's .038 inches, and on a 426 it's .042 inches.





1. Rick Johnson's hard-charging Dodge Dart has wedged many a mean machine out of lower stock gold. 2. Unique early long-ram quad manifold on 383 block helps this gas dragster turn on. Eastern Dart rail now runs a poked and stroked 426 Dodge wedge. 3. Chromed 413 mill was factory installed in a limited number of super-jazzy Dodge pickup trucks in 1964. A more potent version was available for California Highway Patrol use in 1965 Dodge Polaras. 4. First real Mopar S/S setup was 413 with short-ram manifold and high-rise cast iron headers. It was available in 1962 Dodges and Plymouths. 5. Ultimate Stage III 426 Ramcharger rated at 425 hp makes use of an improved short-ram manifold and tube headers. 6. Latest version of hot wedge is 440 rated at 375 hp, available in Plymouth GTX, Dodge R&T.

An oil pan built to the latest hemi specifications complete with a swinging pickup should be utilized for maximum lubrication under high-rpm drag conditions. Generally speaking, when setting up a maximum performance wedge engine, it should be built up around a race model block with the latest Stage III type pistons, crank cam, heads, etc.

The most popular route to take when building up a hotter-than-stock wedge is to make use of the Ramcharger-developed stock equipment. When doing this, it's wise to start with a 413 or 426 block as most of the 383's built were on the LB series style and require machining before the 426 equipment can be installed. The big-valve ram heads will fit any block, but the top of a pre-426 block must be notched for valve clearance. The ultra-efficient short-ram-tuned manifold will fit most any block as long as it has already been fitted with a good set of 426 heads. Even if the manifold would bolt on a set of early heads, it wouldn't make much sense to install a free-breathing, racing manifold on an engine fitted with small-valve, small-port consumer heads.

Since there are probably more 413 Chrysler blocks in junkyards than RB 383, 426 race and street wedge engines combined, we'll use the 413 as

**stock wedge is good for more than 1-hp-per-cube on pump gas and pots!**

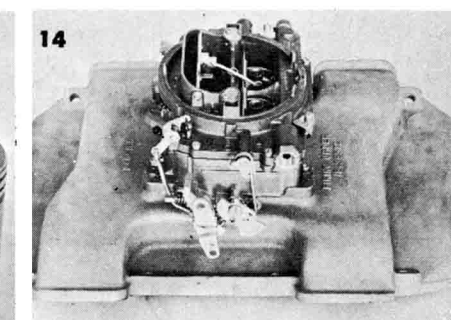
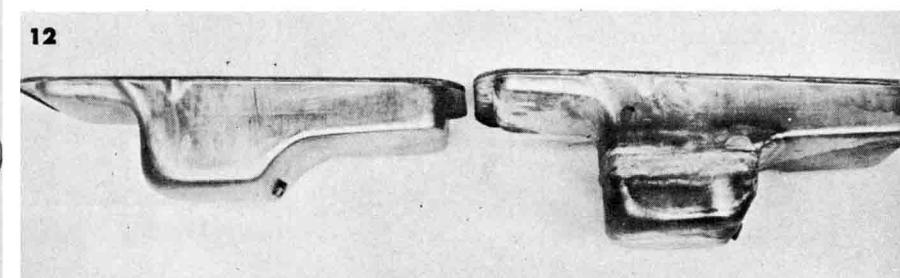
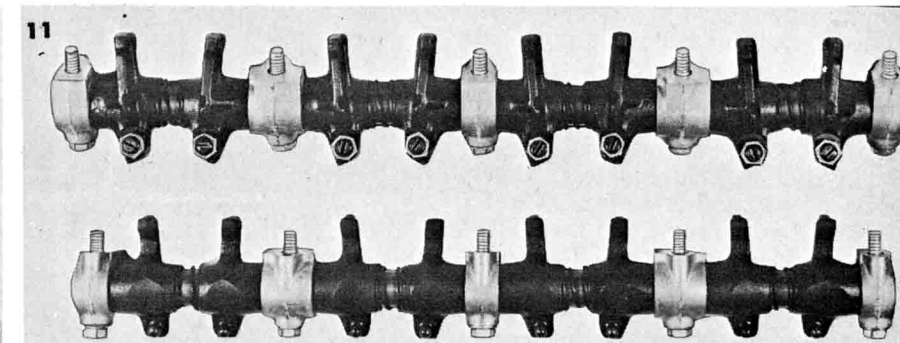
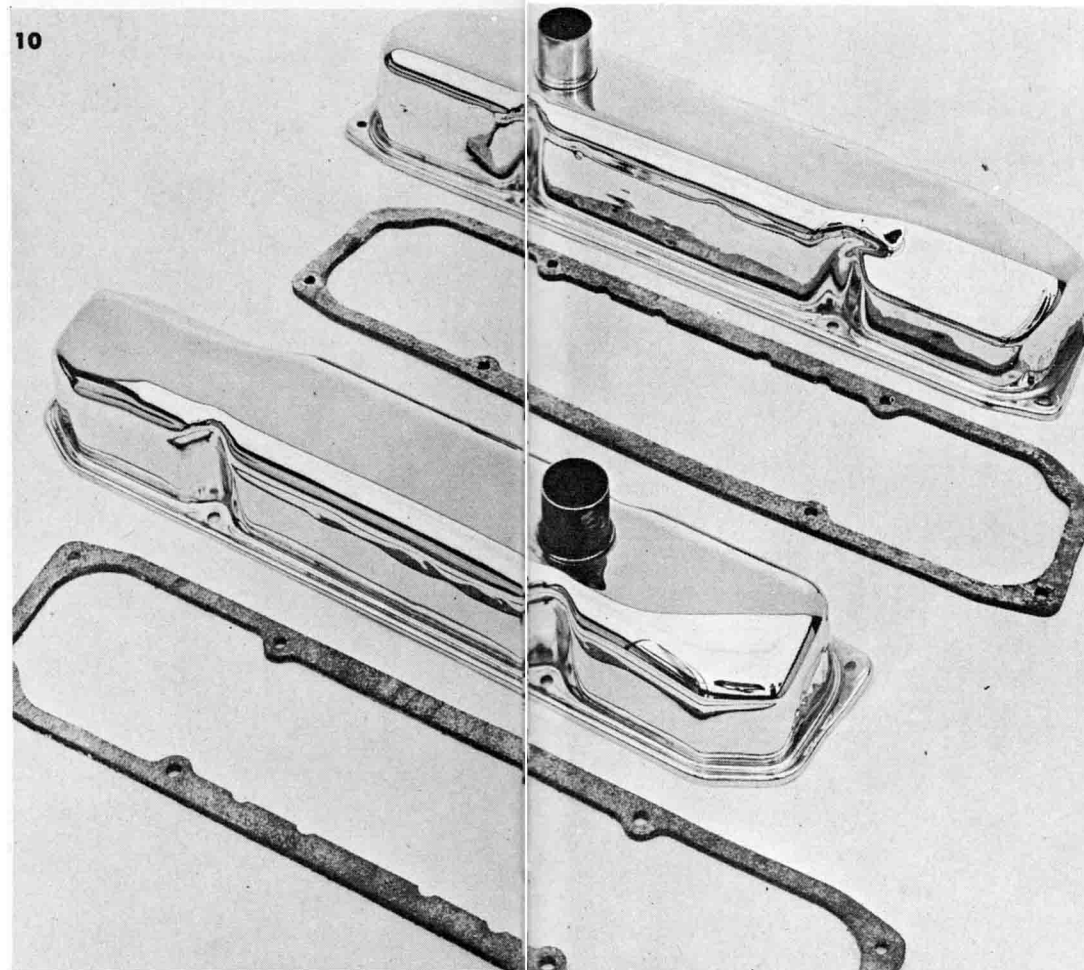
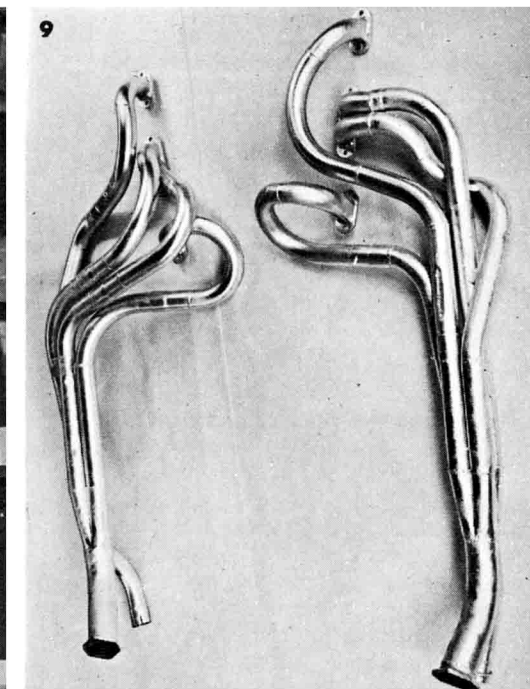
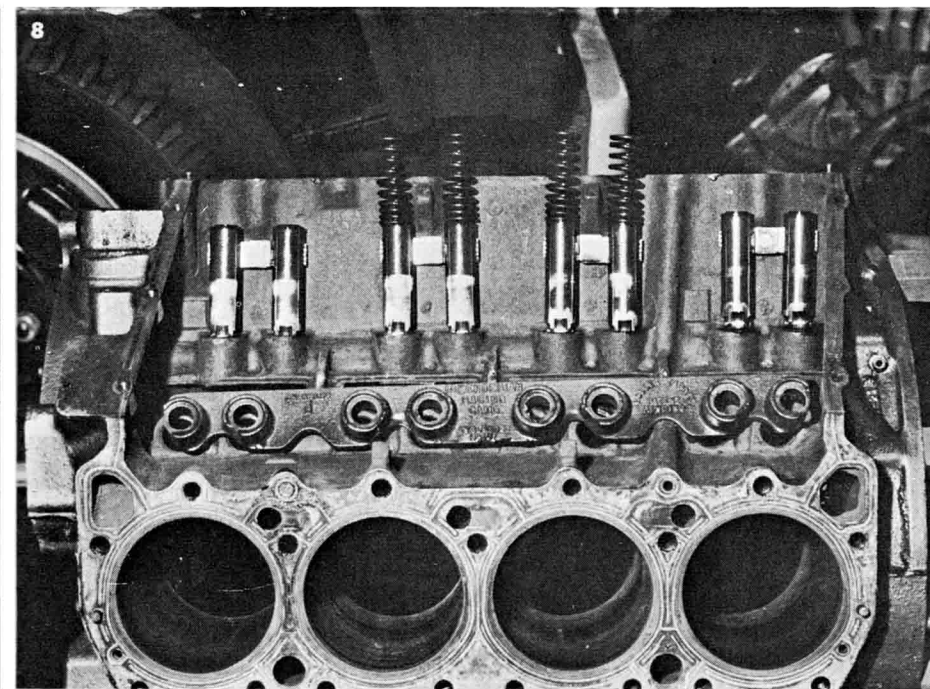
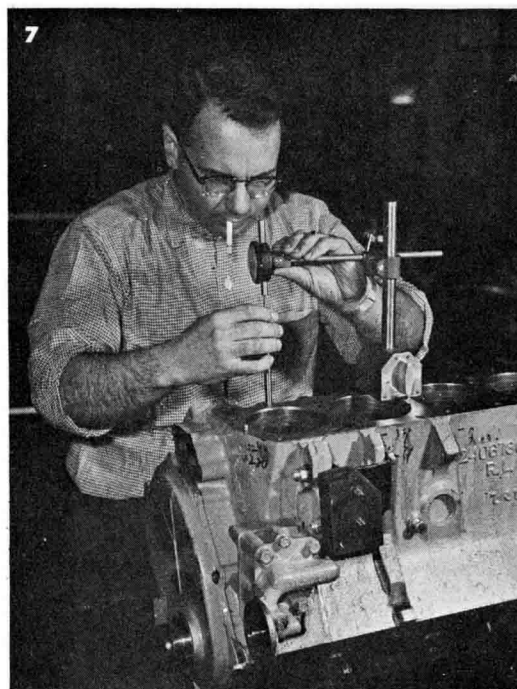
our model souping example. The hot setup factory head package carries part number 2406315 and includes #2402357 special casting heads with 25-percent-bigger-than-stock ports, 1.88-inch exhaust valves and 2.08-inch intake valves, a stainless steel gasket set #1859429 and specially-hardened head bolt washers #2402351 which should be torqued to 75 foot-pounds. These heads do not incorporate any heat riser passages, making them less than desirable for street use during the winter months. If you install these heads you must also install the factory aluminum dual-quad ram manifold package which carries part number 2406316.

This aluminum ram-induction manifold is the granddaddy of the present crop of outboard-styled ram-tuned dual-quad manifolds which are being marketed by Gold Coast speed merchants. The throne is void of exhaust heat passages, as it was designed for racing applications only. Warm up is slow, but intake efficiency is unreal! This manifold can be used only in conjunction with the good heads.

The factory short-ram manifold differs from the early long-ram setup which had to be removed for valve lash settings, and the early short-ram setup which featured separate valley covers. The rams are 15 inches long and tuned to produce power throughout the rpm range with maximum boost coming in over the 4000 marker.

Factory recommended carburetion for this manifold are Carter AFB quads which carry a package part number of 2402359. The pots are actually Carter number AFB-3447S units and are similar to the carbs used on the early 1960-1961 long ram-tuned manifolds. When purchased through Chrysler, they are jetted and flow-tested for maximum drag performance when fitted with low-restriction air filters. This setup should not be disturbed in an attempt to get more power. The non-silenced flat cleaners may not be attractive, but they work.

At the other end of the breathing situation are the exhaust headers. The factory hot setup in this department is the exhaust header package carrying part number 2406317. The headers in this package are of free-flow design and (Continued on page 66)



7. Bill Jenkins sets up a dial indicator to check height of 13.5-to-1 pistons in an all-out 426 Ramcharger mill. 8. Isky roller cam and kit for 413 Dodge engine. A wide variety of flat and roller tappet sticks are available for 'B' series powerplants. 9. Tuned-length tube headers marketed by Ramchargers fit 426 Stage III heads and are for track use only. 10. Chromed covers for wedges carry part number 2406319 and list for \$20.75. 11. Stage III rockers and shafts should be used with good cam and heads. 12. Deepened pan, right, is a must for maximum performance applications. 13. Forged 13.5-to-1 Stage III piston should be used in drag race engines only. 14. Rare Dragmaster single-quad manifold with Carter AFB 3559S pot carries part number 2406185. This is just about the top street setup.

An oil pan built to the latest hemi specifications complete with a swinging pickup should be utilized for maximum lubrication under high-rpm drag conditions. Generally speaking, when setting up a maximum performance wedge engine, it should be built up around a race model block with the latest Stage III type pistons, crank cam, heads, etc.

The most popular route to take when building up a hotter-than-stock wedge is to make use of the Ram-charger-developed stock equipment. When doing this, it's wise to start with a 413 or 426 block as most of the 383's built were on the LB series style and require machining before the 426 equipment can be installed. The big-valve ram heads will fit any block, but the top of a pre-426 block must be notched for valve clearance. The ultra-efficient short-ram-tuned manifold will fit most any block as long as it has already been fitted with a good set of 426 heads. Even if the manifold would bolt on a set of early heads, it wouldn't make much sense to install a free-breathing, racing manifold on an engine fitted with small-valve, small-port consumer heads.

Since there are probably more 413 Chrysler blocks in junkyards than RB 383, 426 race and street wedge engines combined, we'll use the 413 as

**stock wedge is  
good for more than  
1-hp-per-cube  
on pump gas  
and pots!**

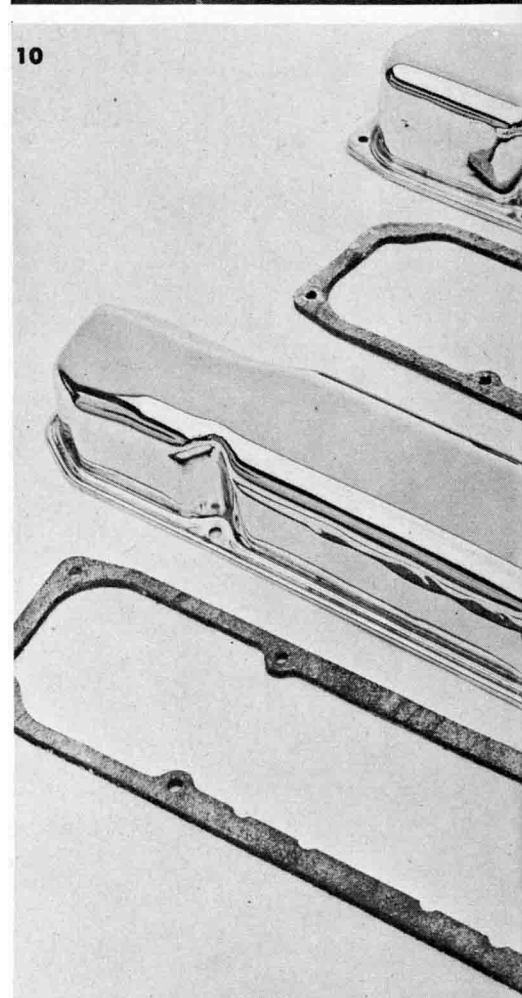
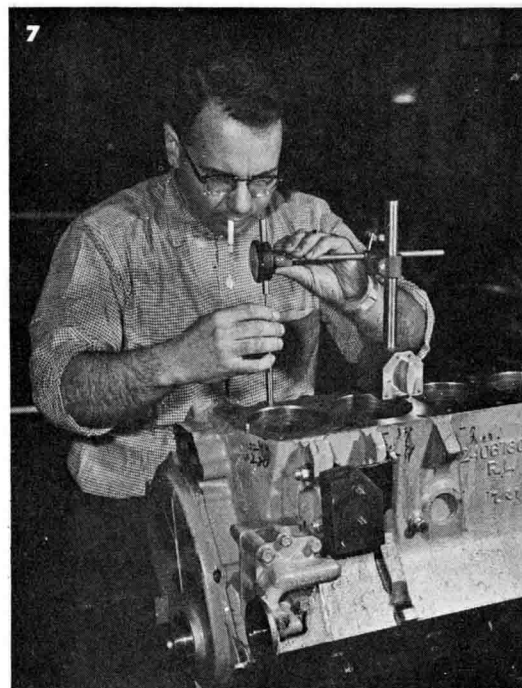
our model souping example. The hot setup factory head package carries part number 2406315 and includes #2402357 special casting heads with 25-percent-bigger-than-stock ports, 1.88-inch exhaust valves and 2.08-inch intake valves, a stainless steel gasket set #1859429 and specially-hardened head bolt washers #2402351 which should be torqued to 75 foot-pounds. These heads do not incorporate any heat riser passages, making them less than desirable for street use during the winter months. If you install these heads you must also install the factory aluminum dual-quad ram manifold package which carries part number 2406316.

This aluminum ram-induction manifold is the granddaddy of the present crop of outboard-styled ram-tuned dual-quad manifolds which are being marketed by Gold Coast speed merchants. The throne is void of exhaust heat passages, as it was designed for racing applications only. Warm up is slow, but intake efficiency is unreal! This manifold can be used only in conjunction with the good heads.

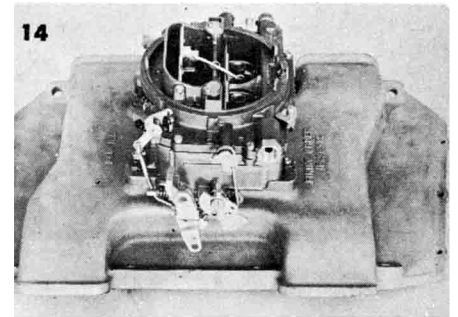
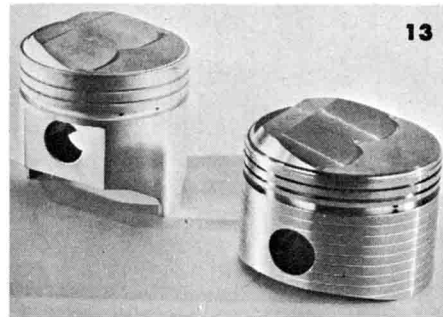
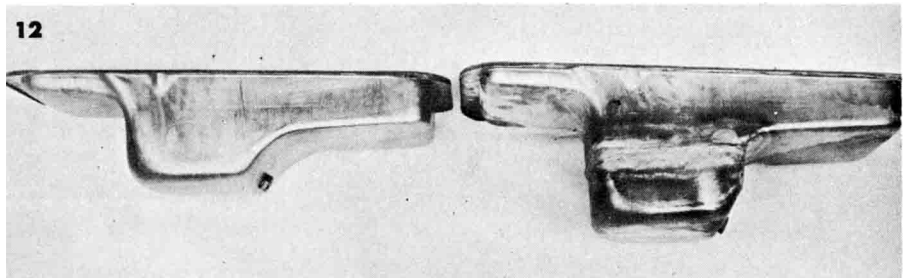
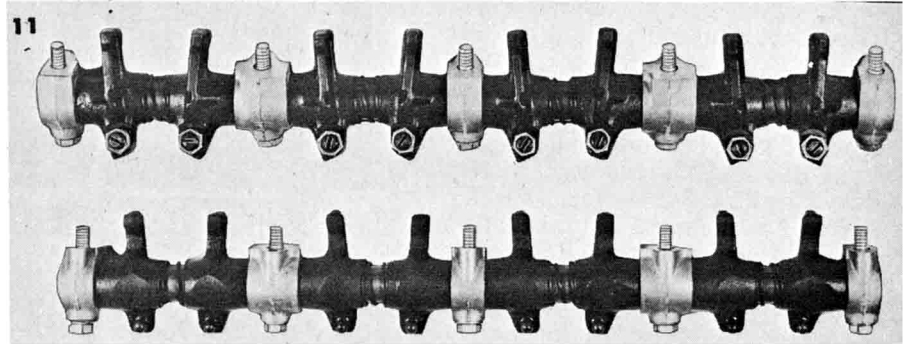
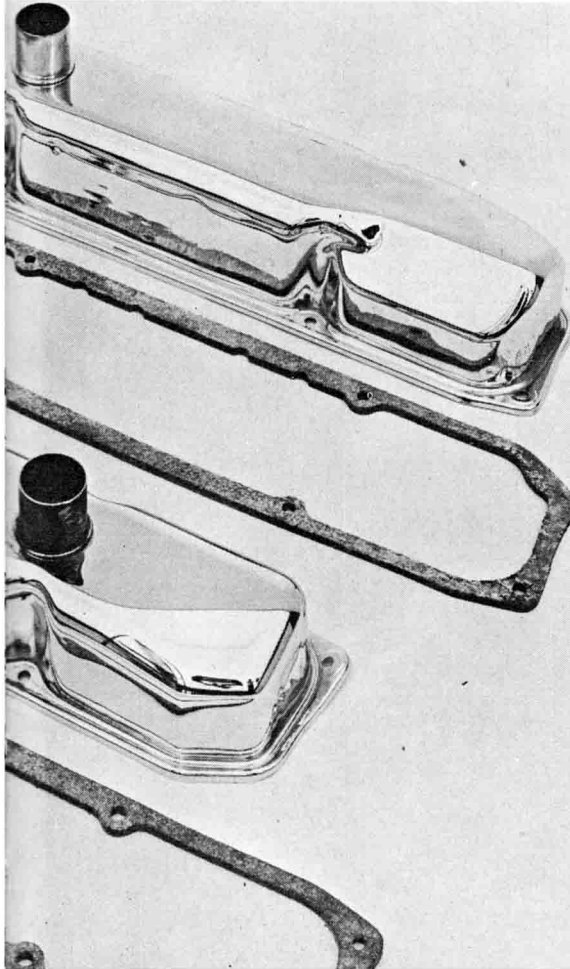
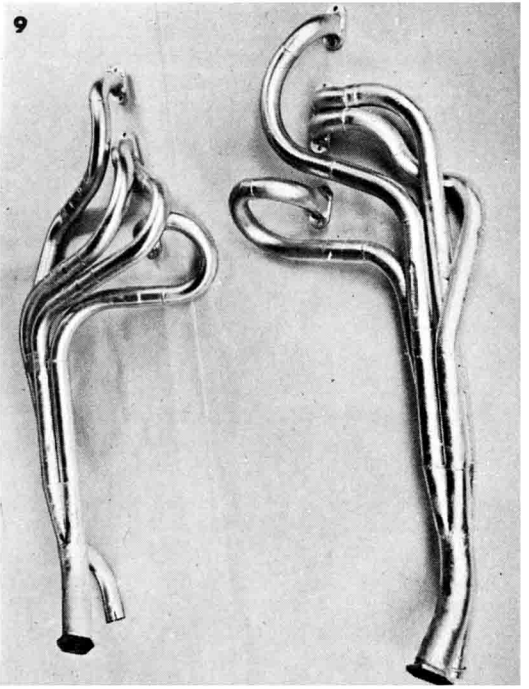
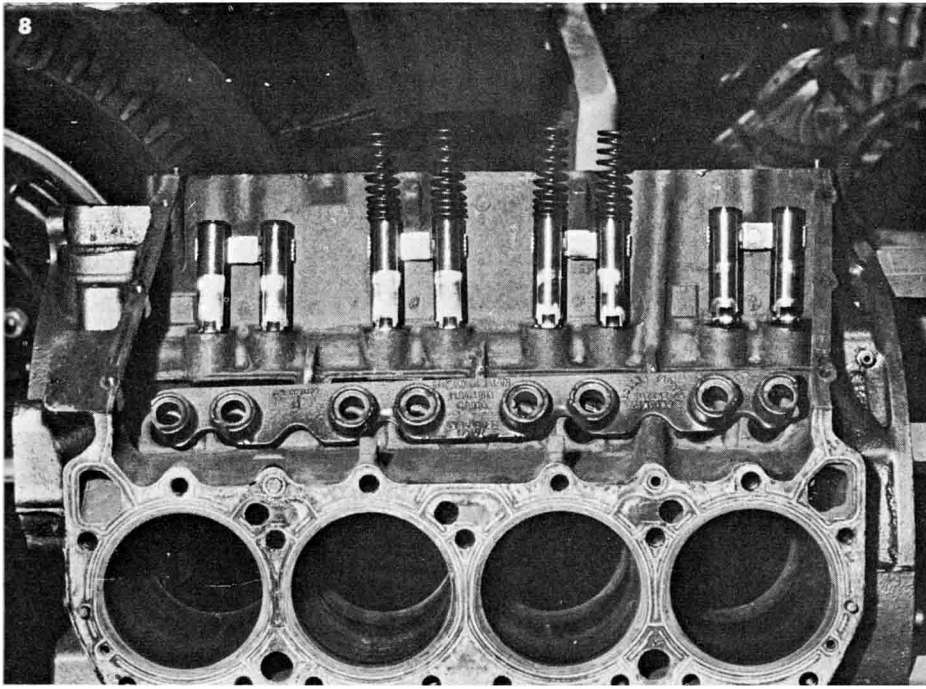
The factory short-ram manifold differs from the early long-ram setup which had to be removed for valve lash settings, and the early short-ram setup which featured separate valley covers. The rams are 15 inches long and tuned to produce power throughout the rpm range with maximum boost coming in over the 4000 marker.

Factory recommended carburetion for this manifold are Carter AFB quads which carry a package part number of 2402359. The pots are actually Carter number AFB-3447S units and are similar to the carbs used on the early 1960-1961 long ram-tuned manifolds. When purchased through Chrysler, they are jetted and flow-tested for maximum drag performance when fitted with low-restriction air filters. This setup should not be disturbed in an attempt to get more power. The non-silenced flat cleaners may not be attractive, but they work.

At the other end of the breathing situation are the exhaust headers. The factory hot setup in this department is the exhaust header package carrying part number 2406317. The headers in this package are of free-flow design and (Continued on page 66)







**7.** Bill Jenkins sets up a dial indicator to check height of 13.5-to-1 pistons in an all-out 426 Ramcharger mill. **8.** Isky roller cam and kit for 413 Dodge engine. A wide variety of flat and roller tappet sticks are available for 'B' series powerplants. **9.** Tuned-length tube headers marketed by Ramchargers fit 426 Stage III heads and are for track use only. **10.** Chromed covers for wedges carry part number 2406319 and list for \$20.75. **11.** Stage III rockers and shafts should be used with good cam and heads. **12.** Deepened pan, right, is a must for maximum performance applications. **13.** Forged 13.5-to-1 Stage III piston should be used in drag race engines only. **14.** Rare Dragmaster single-quad manifold with Carter AFB 3559S pot carries part number 2406185. This is just about the top street setup.

cast-iron construction. They're heavy, but are quite efficient for the street. However, lighter tube, steel headers, with tuned-length collectors as marketed by most exhaust plumbers, are far more efficient for competition. The cast-iron headers are quieter because of the natural silencing qualities of cast iron, and will fit any "B" heads installed on either an LB or RB block. They were, however, designed for installation on 1962-1963 Plymouths and Dodges without power steering or power brakes. Custom installations will require some chassis modifications. A separate pipe package carrying part number 2406318 is available for mating the headers via pipes and a crossover to a street-stock exhaust system.

From time to time, the factory has offered various cam and valve train packages for its racing wedge engines. There are also, of course, a wide choice of non-factory cams available for this engine on the speed equipment market, both in flat-tappet and roller form. The cam that stands out is the one included in the valve gear package carrying part number 2406313. It is for 383 and 413 RB engines and includes a #2402293 stick rated at .509 inches lift, 300 degrees duration and 75 degrees overlap. It's a bit hairy for the street, but it sure does come on upstairs! Recommended valve settings (cold) with this stick are .028 inches on the intakes and .032 inches on the exhausts. Rounding off the cam deal are #2402288 solid lifters, #2402326 heavy-duty pushrods with hardened inserts, #2402521-522 adjustable malleable cast-iron rockers, #2202546 heavy-duty spring retainers, and #2402265 double high-load valve springs, which should be installed along with the special camshaft.

In the spark department, you can get away with a stock dual-point, full - centrifugal - advance distributor which carries part number 2098582 instead of going for an exotic, expensive setup. This stock item has no vacuum advance mechanism and should be set up on a good machine for full advance to come in between 1000 and 1300 rpm. Full metallic-coated orange wires as used on the

hemi race cars (Autolite silicone) should be installed along with this sparker.

As mentioned previously, the stock lower end should be modified to withstand the stresses and strains of competition. If you want to use a 413 crank in a 383 engine, the mains will have to be turned 1/8-inch under and finished with a 5/32-inch radii. Stay away from early 413 cranks which have a large rear seal and no flywheel pilot. Newer cranks have narrow seals for better support and are quite a bit beefier. On a 413 crank, the pins can be ground .001-inch under to accommodate F-77 Clevite Tri-Metal bearings. Forged aluminum competition pistons are available from the factory in 11-to-1 (#2421336) to 13.5-to-1 (#2421340) ratings. The higher compression pistons are not recommended for the street as their lifespan is limited to short bursts lasting not over 15 seconds!

Many of the above mentioned goodies can also be installed on the 426 street wedge engine which never really came into its own because of the use of 383 heads and camming on the bigger cube block. There are some excellent high-riser single-quad manifolds, including a rare unit originally marketed by Dragmaster in California which can handle the largest series Holley pots, and do a creditable job on the street. Performance of this engine can be parked up by aligning the intake and exhaust ports of the heads with the manifolds, replacing the mild cam with a stick rated in the neighborhood of .480 inches lift and 298 degrees duration, installing an ignition system with a good curve, J-12Y plugs for the strip and J-10Y's for the street, headers with muffler takeoffs and a deep pan with a swinging pickup.

Between the factory parts still available, used racing parts listed in the classifieds of drag racing newspapers, and bolt-on goodies available from the Gold Coast, the Mopar wedge is still very much alive!

**PLYMOUTH GTX** continued

tires (fronts pumped to 35 psi, rears to 27 psi) and a completely showroom stock engine with closed exhausts. It would be safe to estimate that a super-tuned and prepared GTX with good gears, open pipes, cheater slicks and the usual "weekend warrior" equipment would be good for 105 to 108 mph in the 13.20's.

What impressed us most about our GTX's quarter-mile performance was the way the suspension cooperated

with the power-making team. Stock suspension on the GTX includes heavy-duty ball joints, oversize .92-inch diameter torsion bars (.88-inches are stock), heavy-duty stabilizer bar, shocks and springs. The right rear bank of leaf springs sports one extra leaf for proper preloading of the suspension when the stops are pulled out on the quarter. The ride is obviously firmer and there is a little more than normal transmission of road shock. However, the resultant handling and traction plus-features more than make up for any road discomforts. We experienced zero wheel hop, chatter, and spring windup under full acceleration conditions which speaks favorably for the tuned package. The Torqueflite carries a first gear ratio of 2.45-to-1 while the optional four-speed carries 2.65 first gearing. Torque multiplication is superb with the automatic and we saw very little reason to try and beat the dial-a-win box by shifting manually. In fact, we managed to catch rubber in each gear, even when the transmission was shifting through the gears automatically!

On the road we were delighted with the car's handling ability, as all standard GTX's are factory-equipped with the street hemi suspension and a 440 engine. Since the 440 tips the scales at approximately 85 pounds less than the hemi, steering control, braking, and front end dip are improved over last year's street hemi Satellite. The wider-than-stock Goodyear tires mounted on 5.5 K wheels were partially responsible for the car's superior adhesion on the open road and the drag strip.

We tried a few panic stops from 75 and 80 mph, but they had little or no effect on the 11-inch rear drum binders (2 1/2-inch wide linings) and front power disc brakes. Even though the car was fitted with discs it did not seem to stop any faster than comparable models fitted with drums all around. However, the fade-free characteristics of the discs are noteworthy and should be considered as a must-option by anyone who plans on doing a lot of high speed touring or mountain driving. Standard with either setup is the new dual master cylinder and independent front-rear brake systems. Also standard across the board is the new safety steering column which collapses on impact.

Although just about every performance goodie is offered as standard on the GTX, there are some extras that the dealers aren't pushing. While at the Chelsea proving grounds, we noticed that four-speed 426 Street Hemi GTX honkers were equipped with the

(Continued on page 68)

**SCOOT'R-BIKE**  
BUILT FROM BICYCLE FRAME

**SAVE \$50 TO \$100**

BIGGER, BETTER THAN A MINI-BIKE  
Convert old bicycle frame for \$5.75, plus small weld job. Step-by-step Plans, photos show you how. PLANS, \$2.00. Wheels, engines, clutches, kits, also Mini-Bike kits, at Factory Discount Prices. Order plans today!



GILLIOM MFG. CO.: Dept. C-2 St. Charles, Mo.