by Jim Wright, *Technical Editor*

Lark WAGONAIRE

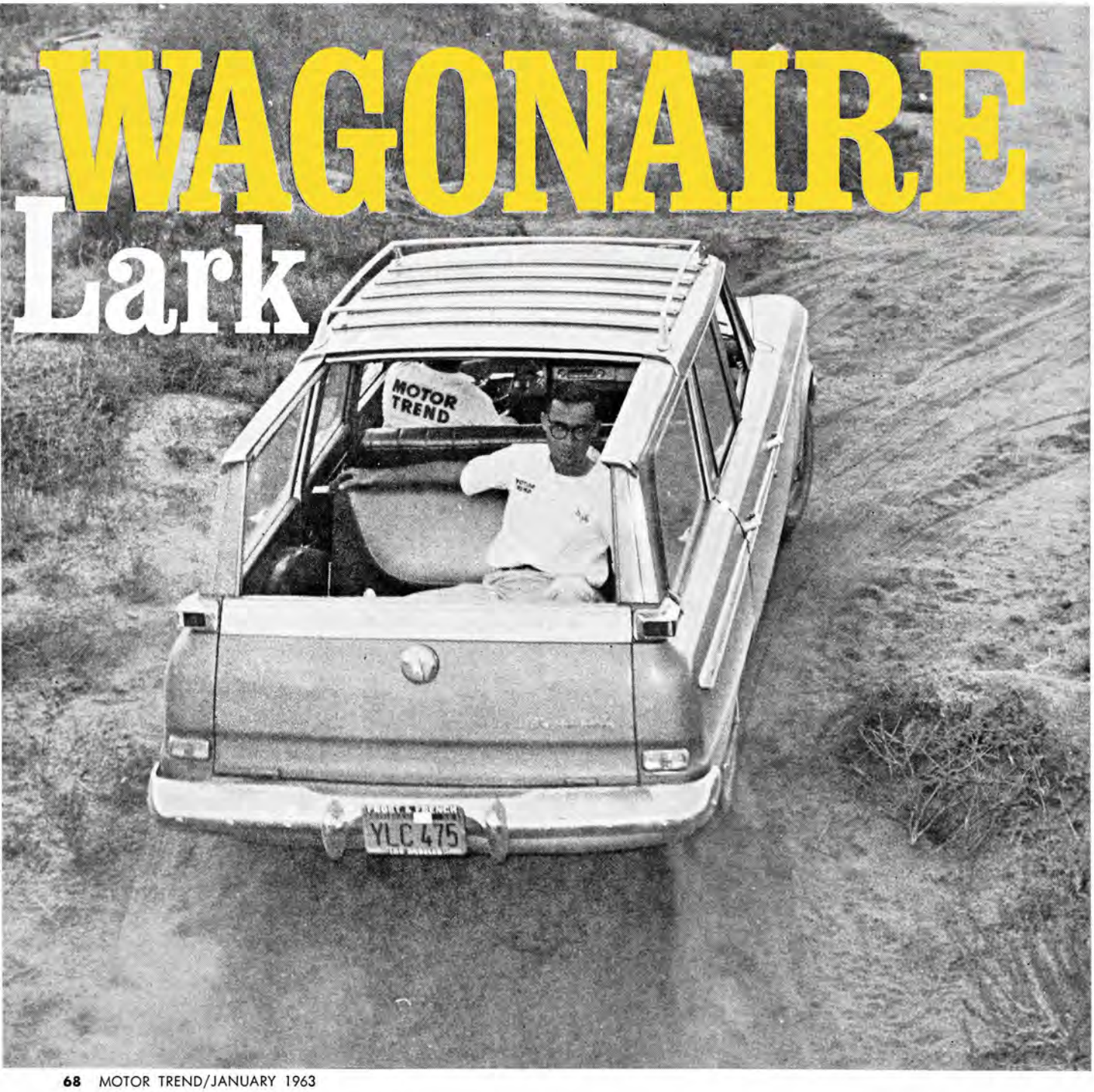
OUR FIRST THOUGHT on seeing the new Wagonaire from Studebaker was, "Why hasn't someone come up with this before?" The idea of allowing the rear portion of a station wagon roof to slide forward is such a natural and adds so much to a wagon's versatility that it's a real wonder the industry didn't try it years ago.

The MT test wagon was a top-of-the-line Lark Daytona Wagonaire equipped with the rugged 259-cubic-inch, 180-hp V-8, hooked up to an optional three-speed automatic transmission and Twin-Traction 3.31-to-1 rear axle. No power equipment was installed, and the only other extra-cost options consisted of Captive-air tires, radio, heater, extra rear seat, and luggage rack. The wagon is also available in the Regal series, either with a Six or V-8. The sliding roof is standard on all Stude wagons.

There must have been a myriad of design and manufacturing problems connected with the sliding roof, but the finished unit is quite simple, both in design and operation. The sliding portion is 40 inches long and rides on tracks that carry it forward and under the fixed portion of the roof. It locks securely in position with a single hand control located in the moving portion. The action is smooth and easy.

After batting the test wagon around the countryside, we can say that owners will find very few problems in the sliding roof. Open or closed, it doesn't rattle — as long as it's locked in position. Driving through a heavy rain also showed it to be weather-tight in the closed position. We purposely parked the Wagonaire on uneven ground to see if the unit would bind, but it worked perfectly under all conditions.

When the Wagonaire's used as a utility vehicle, its main advantage becomes readily apparent. With the roof open



and the tailgate down, a person can walk right into it, like in a pick-up truck – which simplifies loading procedures. The unique feature also allows objects of greater bulk to be carried. This will probably be a very popular model with people who own small businesses and need a real dual-purpose vehicle.

As nearly as we could tell, there's only one fault in this installation – but it could be a serious one. With the top open and the tailgate window down, there's a tendency for road dust (and worse yet, exhaust fumes) to be sucked into the interior. This is a problem that exists in most wagons, but it's multiplied in this case because of the increased opening area.

We put over 550 miles on the test car before attempting any acceleration runs, but the engine was still slightly on the tight side. If there'd been time to clock another 500 miles, the Wagonaire would've performed slightly better. With a curb weight of 3575 pounds and a test weight of slightly over 4000, the performance couldn't be classed any better than adequate. Our 0-30, 0-45, and 0-60-mph times were 5.2, 9.3, and 15.6 seconds respectively. A top speed of 69 mph was recorded for the standing quarter-mile, with an elapsed time of 21.8 seconds. The best we could get on the top end was 84 mph at 3800 rpm. The engine didn't feel as if it would wind any tighter than this in high.

For a reason we don't quite understand, the automatic transmissions used in Larks are adjusted to shift at rather low engine speeds. The shift from first to second occurs at 3800 rpm (37 mph). This isn't too bad, but the shift from second to high comes at 3600 rpm (58 mph). This leaves second, or passing gear, almost useless above 50 mph.

A four-barrel carburetor is available optionally for the 259-cubic-inch engine. This ups horsepower to 195 at 4500 rpm, and would help the engine breathe a little easier under acceleration. An even better package would be the "Thunder-

continued

Studebaker's new sliding roof marks the most important change in wagons since the all-metal body

MT Road Test

We found the Wagonaire came in handy as a ready-made camera car. Other possibilities are limitless. Big question we usually were asked was, "What happens if the Wagonaire is parked on an uneven surface?" The answer to this is, as shown in bottom picture: it doesn't make the slightest difference.

Lark WAGONAIRE *continued*

bolt" 289-cubic-inch version, with either two-barrel or four-barrel carburetor, putting out either 210 or 225 hp. A three-speed manual transmission is standard on all models, with the excellent Warner Gear four-speed manual available as an extra-cost option.

Also available in the engine department on all models is the 289-cubic-inch "Jet Thrust" V-8. This option comes in either supercharged or unsupercharged versions. Both feature four-barrel carburetors. The supercharged engine runs a 9-to-1 compression ratio, while the unsupercharged has 10.25 to 1. As of this writing, the factory declines to mention any horsepower or torque figures for either engine. (Also mentioned in factory releases, though, in an "R-3 Jet Thrust Avanti" special engine available to qualified buyers. They haven't elaborated on just what a "qualified buyer" is, but we gather it takes more than mere money in this case.)

Fuel consumption figures on the MT test wagon fell in the 13-17-mpg range and kept improving as we logged more miles. With the engine properly broken in, the average owner should be able to expect something in the 14-19-mpg range. The 8.5-to-1 compression ratio in the test car allowed us to buy regular-grade fuel. The dependable "Skybolt" Six engine is also available, and would naturally give better gas mileage than the V-8. A further increase in mileage could be had with the standard 3.07-to-1 rear axle, but this would mean a definite drop in performance. With this heavy wagon, we recommend the optional 3.31 axle such as was installed in the test car.

Unfortunately there wasn't a Wagonaire available to us with the disc brake option. Since these are one of Studebaker's big features for 1963, we'd wanted to test them out. But that will have to come at a later date. Our test car had the standard hydraulic drum setup, with 11-inch-diameter drums up front and 10-inch units at the rear. They require a lot of pedal pressure to operate and, because of this, we recommend power assist to the owner whose wife will be driving the car.

continued

THE CONCENTRATED WEIGHT ON THE FRONT END DETRACTS FROM THE LARK'S CORNERING ABILITY. LISTEN TO THOSE TIRES!

A 180-degree turn of the control handle locks the sliding top securely in any desired position. Accessory step carried in tailgate allows easy entry to interior. The foldaway seat comes in handy, but with the roof in forward position, most adults can't sit up straight.

PHOTOS BY PAT BROLLIER

Lark WAGONAIRE *continued*

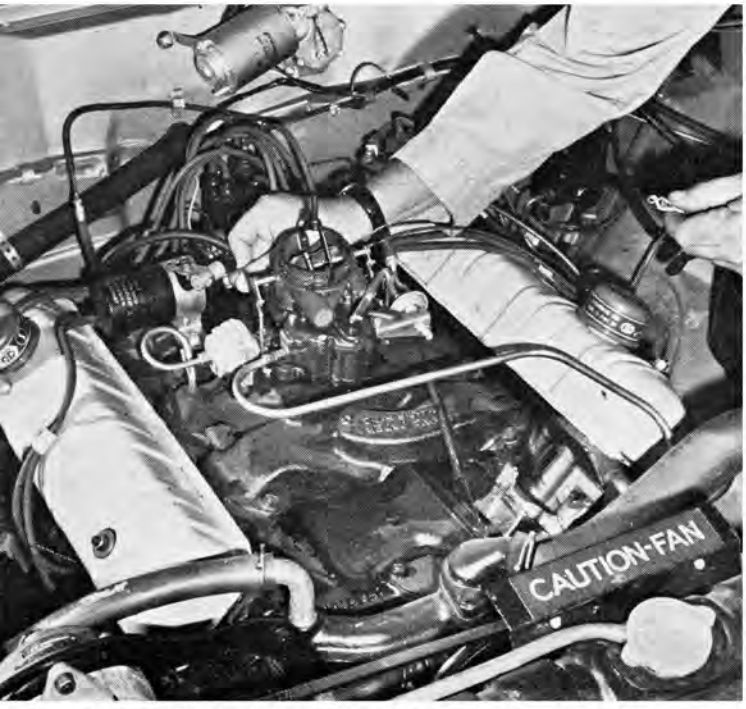
After our high-speed runs, the brakes were completely faded and it took a 15-minute cool-down period to get them to the point where we could make our usual braking tests. The stopping distances from 30 and 60 mph were very quick – at 29 and 150 feet respectively. The stops were of the straight-line, hands-off-wheel variety. Only fault here was what seemed to be excessive nose dive, which tends to make the rear end too light and therefore puts too much braking effort on the front wheels.

Another major feature in the brake department is the adoption of a dual, or split, master cylinder. The cylinder has a separate piston and fluid reservoir for the front and rear brakes. This setup has been in use on some European cars for years, and it's just recently been "discovered" by several Detroit manufacturers. It ensures that if either the front or rear brakes quit working, due to cylinder or line failure, there'd still be one set left to stop the car. This safety feature should be on *all* cars.

For a compact car, the Lark Wagonaire shows several less-than-desirable handling characteristics, the least desirable being the feeling of much too much weight on the front wheels. The amount of understeer is tremendous, and the front end plows on almost all types of corners. Even with slightly more than recommended tire pressures, tire squeal when cornering reaches an almost unbearable level. The steering is very slow, at slightly more than 4.5 turns from lock to lock. Here again, if the car's to be driven much by a woman, we recommend power assist. The factory specifications state that the recommended front wheel caster setting is 2½ degrees negative. This is a lot of negative caster

(LEFT) *Vanity replaces glove box on all Larks (standard equipment). Whether this feature is desirable or not is debatable.*

(BELOW) *Instrument layout is attractive and completely functional, features complete instrumentation and no idiot lights.*



(ABOVE) *Nose-dive tendency was a bit pronounced, but all stops were made in a minimum distance, with everything under control.*

(LEFT) *Engine is uncluttered and easy to service. The big change is the addition of an alternator for more dependable service.*

1963 STUDEBAKER LARK DAYTONA WAGONAIRE

6-8-passenger station wagon

OPTIONS ON CAR TESTED: Automatic transmission, Twin-Traction, radio, heater, rear accessory seat, luggage rack, Captive-air tires

BASIC PRICE: $2835
PRICE AS TESTED: $3683 (plus tax and license)
ODOMETER READING AT START OF TEST: 229 miles
RECOMMENDED ENGINE RED LINE: 5000 rpm

PERFORMANCE

ACCELERATION (2 aboard)
0-30 mph..... 5.2 secs.
0-45 mph..... 9.3
0-60 mph.....15.6
Standing start ¼-mile 21.8 secs. and 69 mph
Speeds in gears @ shift points
1st .....37 mph @ 3800 rpm 2nd .....58 mph @ 3600 rpm
High .....84 mph (top speed) @ 3800 rpm
Speedometer Error on Test Car

Car's speedometer reading	28	42	48	58	68	78
Weston electric speedometer ...	30	45	50	60	70	80

Observed miles per hour per 1000 rpm in top gear .....22 mph
Stopping Distances — from 30 mph, 29 ft.; from 60 mph, 150 ft.

SPECIFICATIONS FROM MANUFACTURER

Engine
Ohv V-8
Bore: 3.56 ins.
Stroke: 3.25 ins.
Displacement: 259.2 cubic inches
Compression ratio: 8.5:1
Horsepower: 180 @ 4500 rpm
Torque: 260 lbs.-ft. @ 2800 rpm
Horsepower per cubic inch: 0.69
Ignition: 12-volt coil

Gearbox
3-speed automatic

Driveshaft
One-piece — open tube

Differential
Hypoid — semi-floating
Standard ratio: 3.07:1 (Optional 3.31:1 on test car)

Suspension
Front: Independent; coil springs with upper and lower control arms; direct-acting telescopic shocks with link-type stabilizer
Rear: Rigid axle; 5-leaf semi-elliptic springs, with direct-acting telescopic shocks

Steering
Recirculating ball
Turning diameter: 39 ft.
Turns: 4½ lock to lock

Wheels and Tires
5-lug steel disc wheels
6.70 x 15 Captive-air tires

Brakes
Hydraulic drums
Front: 11-in. dia. x 2¼ in. wide
Rear: 10-in. dia. x 2 in. wide
Effective lining area: 144.9 sq. ins.

Body and Frame
Separate body and ladder-type frame (4 crossmembers)
Wheelbase: 113 ins.
Track: front, 57⅜ ins.; rear, 56 9/16 ins.
Overall length: 190.2 ins.
Curb weight: 3575 lbs.

even by Detroit standards, but without it the non-power steering would be even more truck-like. This excessively negative caster setting is also the main reason the tires protest so loudly when cornering.

The car's boulevard ride is comfortable, with most normal bumps being smoothed out effectively by the not-soft, not-quite-firm suspension. At highway speeds, under normal conditions, ride is smooth and steady, with a fairly low noise level. Cross-wind side loading makes the Wagonaire wander a bit, but not excessively. On rough roads, the front suspension has a tendency to bottom easily, but rebound is controlled nicely by the shocks, and recovery is quick.

Exterior finish was good, with most panels and trim in good alignment. The interior, with the exception of the vanity case door, was nicely detailed. This vanity case is standard on all models and replaces what used to be known as a glove box. A fold-out mirror that doubles as a lid for a storage space takes up half the vanity, with the other half devoted to straight storage space. This is also covered by a flat lid, which can double as a resting place for cups or bottles of your favorite beverage at a drive-in or the movies.

The bench front seat features coil inner springs, is padded with sponge rubber, and will accommodate three good-sized adults. The rear seat will also take three adults and offers plenty of leg room. Our test car was equipped with an accessory third seat. When not in use, this seat folds down into a well in the rear section. This is the area that's usually occupied by the spare tire, but all Wagonaires with the extra seat option are equipped with Captive-air tires, and theoretically you don't need a spare with these. Personally, we prefer the conventional tires with a spare. Sometimes it's a long way between filling stations, and on today's high-speed expressways anybody limping along on a half-flat tire is a definite hazard. The extra seat will carry two children comfortably (if they like to ride backwards) with the sliding top closed, or two adults with the top open.

The instruments (real instruments for everything) are located in two large, round clusters in front of the driver. These are easy to read without dropping the eyes too far from the road.

The engine compartment is uncluttered and offers plenty of room for servicing. It's interesting to note that the oil filler cap carries a reminder to add an additive with every oil change. Studebaker is the only manufacturer that recommends this — but then they own the company that makes the additive! /MT