

T E C H   S E Z :

I just found out that the 361- and 383-cubic inch engines with 4-barrel carburetors (as well as all ram-induction engines) are being equipped with dual breaker point distributors.

I slipped up on this in the Reference Book and Chart for Session No. 154, "Features of the 1961 Models". When you pull the distributor cap off one of these jobs and think you're seeing double, just heap the blame on my old round noggin.

You can help get me out of the doghouse if you'll be sure and use the following cam dwell specifications for these dual breaker distributors:

27° - 32° FOR EACH SET OF POINTS

34° - 40° TOTAL FOR BOTH SETS OF POINTS

Many thanks,

T E C H

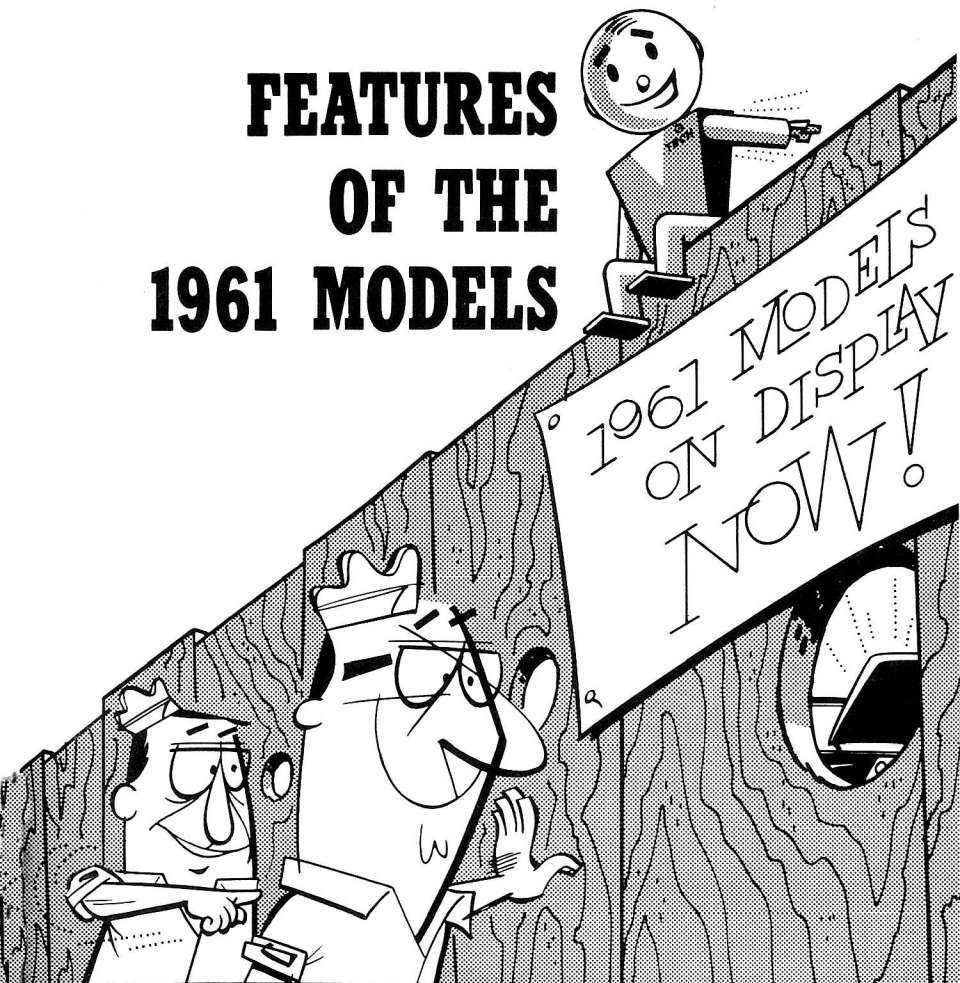
**SERVICE REFERENCE BOOK**

of the **MASTER TECHNICIANS SERVICE CONFERENCE**

session no.

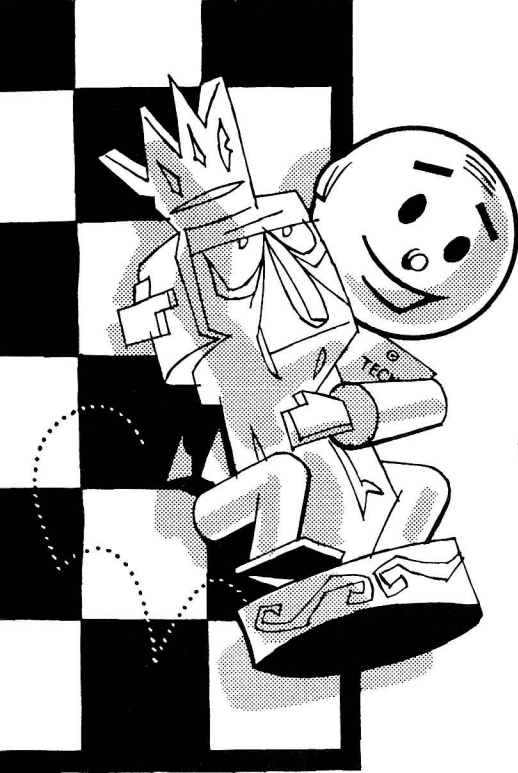
**154**

# **FEATURES OF THE 1961 MODELS**



**PREPARED BY CHRYSLER CORPORATION**

Dodge • Plymouth-De Soto-Valiant • Chrysler and Imperial Divisions



**TECH SEZ:**

"Stay a  
jump ahead  
to service  
1961 cars  
properly!"

Our 1961 models naturally have a lot that's new. And since owners depend on us for good new-car preparation as well as the periodic maintenance every new car requires, we've got to get up-to-the-minute, but fast.

The more we know about what's new, the easier 1961 service becomes. So this reference book gives us a chance to stay a jump ahead by highlighting most of the 1961 features, and some of the service procedures affected.

Here's how this preview information is arranged:

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## **NEW FEATURES OF THE 1961 MODELS**

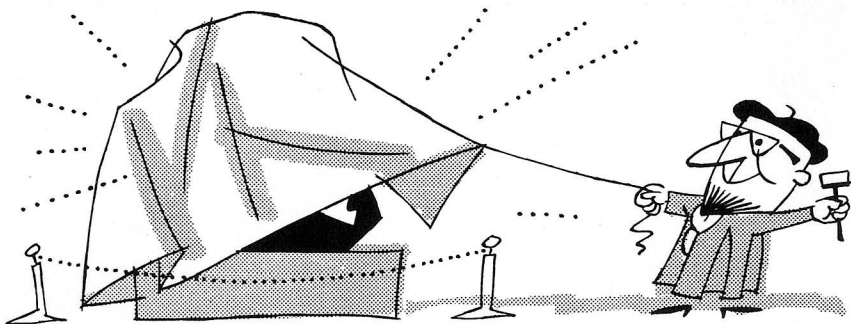
### ***General***

For 1961, all Chrysler Corporation models offer advanced styling and years-ahead engineering improvements. While most of the styling changes do not affect service to a great degree, there is one new body style that calls for a rear quarter glass adjustment that's different. In general, this preview will deal mainly with mechanical features.

### ***New Model—The Dodge Lancer***

Perhaps the biggest news in 1961 is the introduction of a completely new compact car—the Dodge Lancer! This brand-new entry in the

compact car field is about two feet shorter than the Dodge Dart, and will provide much that's different in the way of a fine family automobile.



In the Dodge Lancer line-up, there is a low-priced 170 series consisting of three body styles. There's a four-door sedan . . . a two-door sedan . . . and a four-door, two-seat station wagon.



The Dodge Lancer also introduces a deluxe 770 series featuring three different body styles. It has a four-door sedan . . . a two-door hardtop . . . and a four-door, two-seat station wagon.

### ***Two New Valiant Body Models***

The 1961 Valiant also presents two new body styles. There's a V-100 two-door sedan . . . and a V-200 two-door hardtop. On this and the Dodge Lancer hardtop models, adjustment of the rear quarter drop glass calls for a service procedure that's different from other two-door hardtop models.



For instance . . . the rear run channel for the rear quarter *drop* glass holds the *stationary* quarter glass, and cannot be adjusted. However, the front run channel can be adjusted to improve glass operation, if necessary. The regulator assembly can be repositioned on its mounting to center the glass in the opening.

If the rear quarter drop glass binds at the rear edge of the door glass, do not move the door in its opening. Instead, move the division bar and front vent wing assembly forward. Next, adjust the drop glass rear run channel forward to provide clearance for the rear quarter drop glass. Close the door to check glass fit, and operate the glass to see if the bind at the rear edge of the door glass has been eliminated.

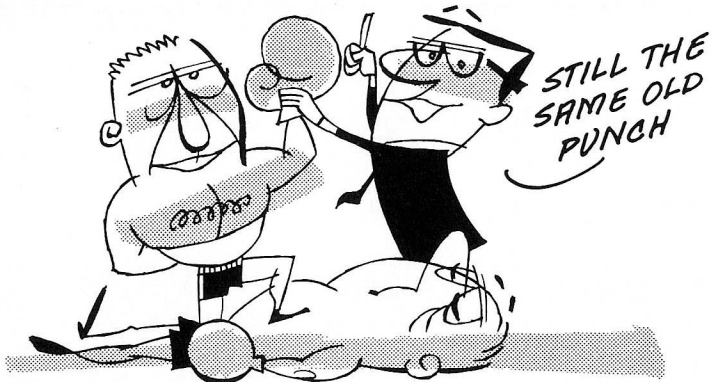


**Mylar Locking Strip.** The use of the Mylar locking strip introduced on Valiant windshields and rear windows is continued, and is extended to the Dodge Lancer models. It is also found at the stationary rear quarter glass on some models. A new special tool (C3840) is available to simplify installation of the Mylar locking strip.

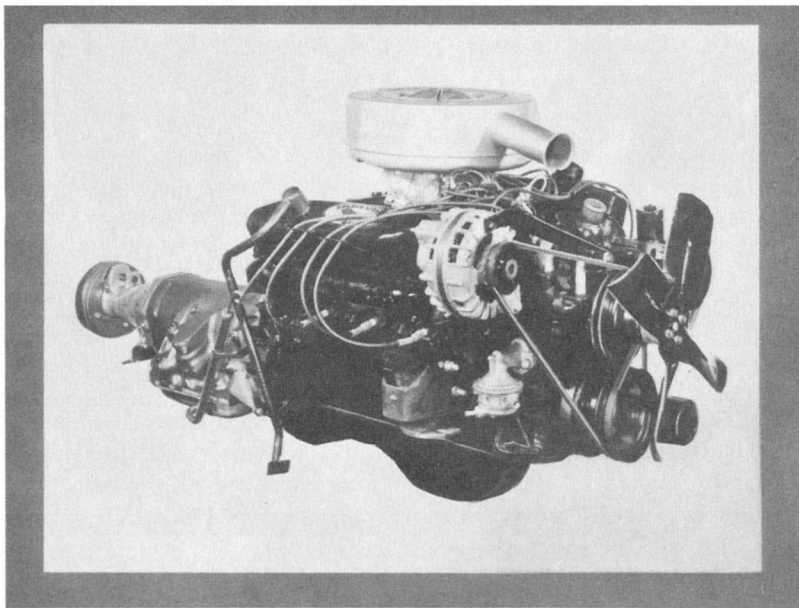


## 1961 MODEL ENGINES

Engines built in the United States and Canada for the 1961 model cars have some variation in specifications. Design features, though, are similar and service procedures are generally the same. Where possible, the differences pertaining to model applications are mentioned in the following engine feature descriptions.



**413 Cubic Inch V-8**  
**Imperial, Chrysler New Yorker**

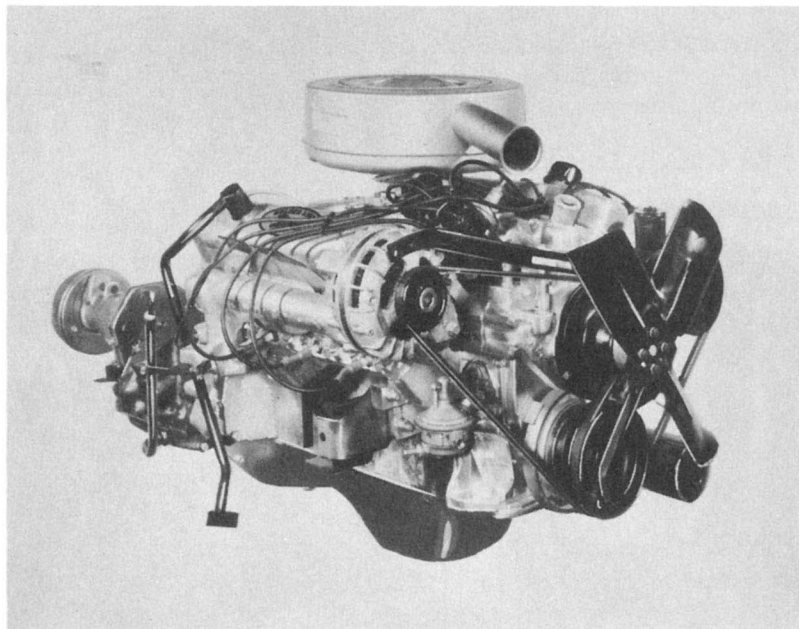


The 413 cubic inch engine that set a record-breaking pace last year is again the big power feature on Imperial and Chrysler New Yorker models. This engine has a Carter AFB-3108S four-barrel carburetor,



and a 10 to 1 compression ratio. This engine is basically the same as last year's power plant, but the carburetor has some improvements and the engine now uses a Chrysler-built distributor.

### **383 Cubic Inch V-8**



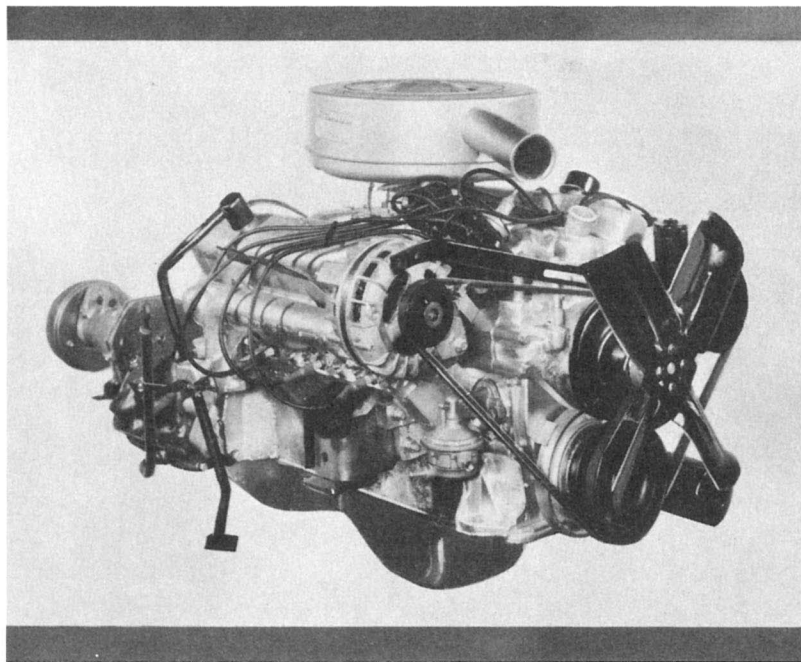
This 383 cubic inch V-8 engine, equipped with a Carter two-barrel carburetor, BBD-2923SA, is standard on the Chrysler Windsor model. Compression ratio is 10 to 1. This same engine, with the same carburetor or with a Carter four-barrel carburetor, AFB-3107S, is used on Canadian Chrysler and De Soto models.

When the 383 cubic inch engine is equipped with a Carter four-barrel carburetor, AFB-3152S, it is available as an option on Plymouth, Dodge Polara, and on Dodge Dart police cars.

There's also a 383 cubic inch engine with the ram induction system and two Carter four-barrel carburetors, AFB-2903S. This engine is

optional on the Dodge Polara, Dodge Dart, on the Dodge Dart police special and on the Plymouth Fury. When used on the Plymouth Fury, this engine is known as the SonoRamic Commando engine.

### **361 Cubic Inch V-8**



Outstanding engine news for 1961 is the new 361 cubic inch engine equipped with a Bendix-Stromberg WWC3-188 two-barrel carburetor. This engine has a compression ratio of 9 to 1, and delivers amazing performance on *regular fuel!*

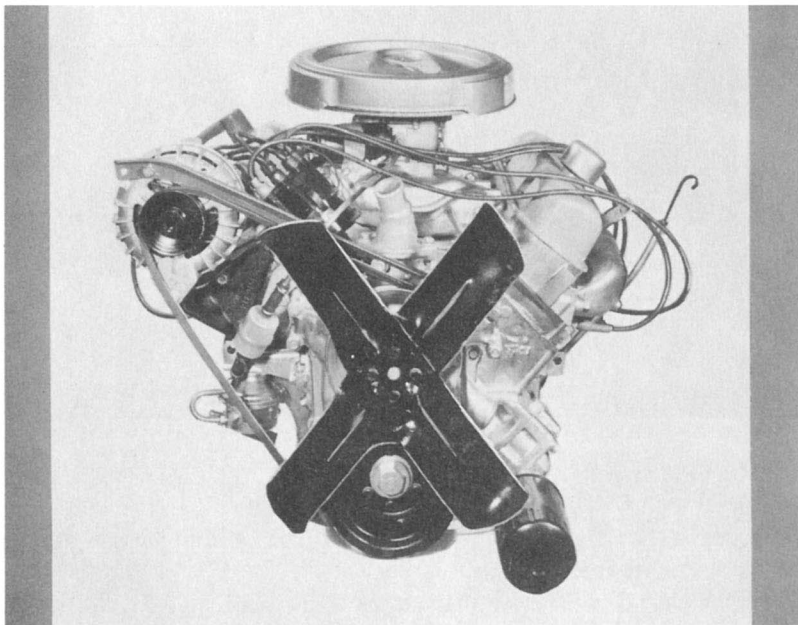
Intake valves are larger than those used in this engine last year, which increases volumetric efficiency and provides better engine breathing. Larger valves were made possible by changes in the cylinder heads. Piston height has been decreased .025", so pistons are not interchangeable with last year's engine.

The regular-fuel 361 cubic inch engine is standard on Dodge Polara, on the De Soto, and on the Chrysler Newport models.

There's also a high-performance version of the 361 cubic inch engine offered as an option on the Plymouth and Dodge Dart. In this case, it's equipped with a Carter four-barrel carburetor, AFB-3105S (manual transmission), or AFB-3106S (automatic transmission). A high-performance camshaft and a different distributor are also used.

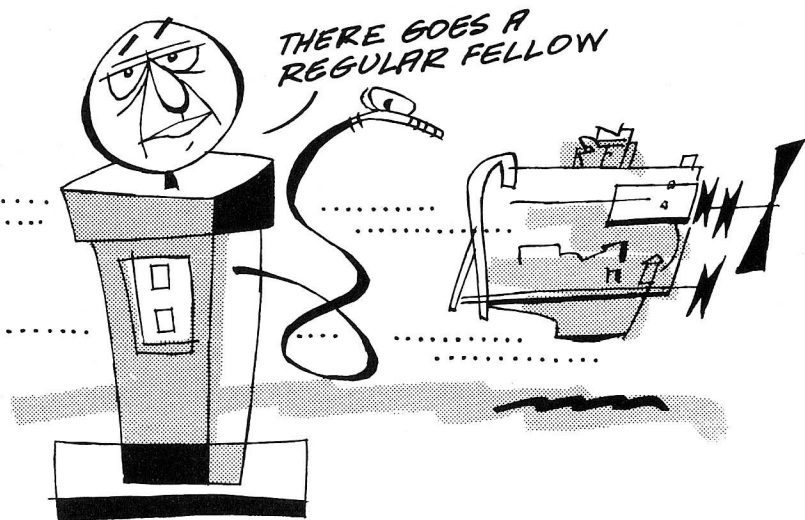
In Canada, either the Bendix-Stromberg two-barrel carburetor, WWC3-188, or the Carter four-barrel carburetor, AFB-3104S, are used. Only the automatic transmission is available.

### ***318 Cubic Inch V-8***



The 318 cubic inch engine is equipped with either a Bendix-Stromberg two-barrel carburetor, WW15-43 (manual or automatic transmission), or a Carter two-barrel carburetor, BBD-2921S (manual trans-

mission), BBD-2922S (automatic transmission). Compression ratio is 9 to 1, and the engine uses regular fuel. This is the standard V-8 engine on Plymouth and Dodge Dart models.

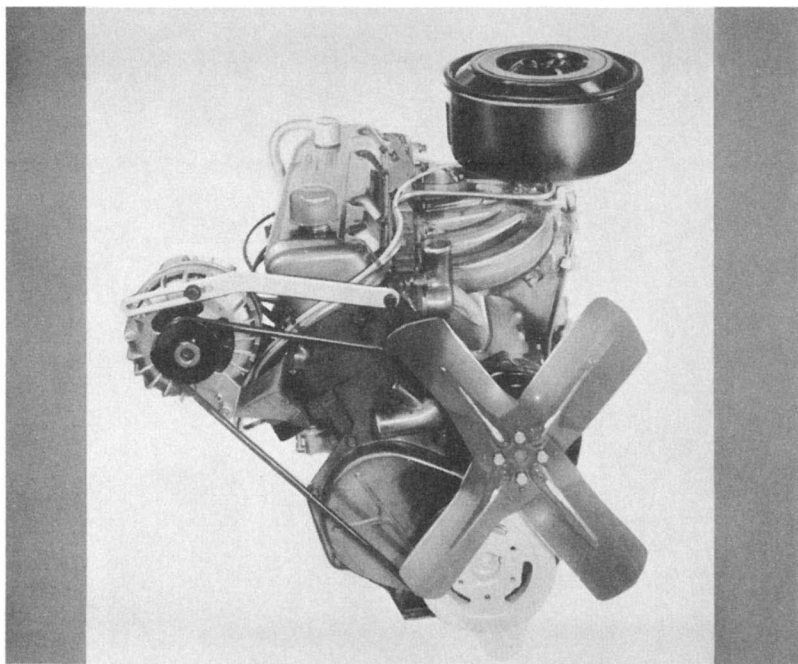


There's also a high-performance version of the 318 cubic inch engine. It uses a Carter four-barrel carburetor, AFB-3103S, and is available only with an automatic transmission. It uses a high-performance camshaft and a different distributor. This powerful V-8 is optional on Plymouth and Dodge Dart models.

### **313 Cubic Inch V-8 (Canada)**

The standard Plymouth and Dodge V-8 engine built in Canada has a 313 cubic inch displacement. It has a slightly different carburetor line-up. The Carter two-barrel carburetor, BBD-2921S is used with the manual transmission, and Carter BBD-2922S is used with the automatic transmission. This engine also is available in a power-pack version only with an automatic transmission. In this latter application, the engine is equipped with a Carter carburetor, AFB-3101S.

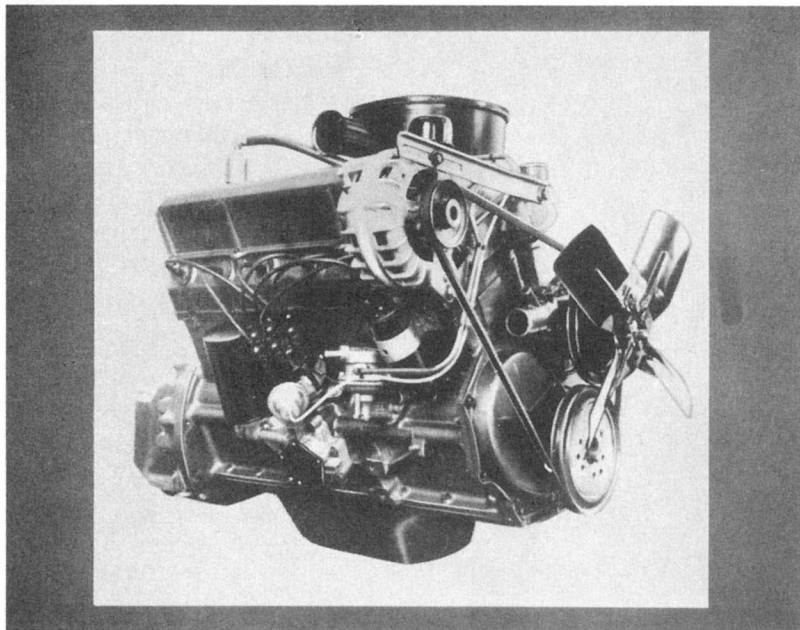
## **225 Cubic Inch 6-Cylinder**



The Slant-Six engine introduced last year is similar, but the compression ratio has been *reduced* from 8.5 to 1 to 8.2 to 1. Reducing the ratio makes the 225 cubic inch engine more adaptable to variation in octane rating of regular fuel. The engine runs smoother, quieter, and there's less chance of detonation. Valve timing on the 1961 six-cylinder engine has been advanced, which results in an improved low-speed torque. The engine uses a Carter single-barrel carburetor, BBS-3098S (manual transmission), BBS-3099S (automatic transmission) and is the standard six-cylinder engine on Plymouth, Dodge Dart, and on some Dodge truck models. It is available as optional equipment on the Dodge Lancer. Taxicabs using this six-cylinder engine are equipped with a Carter single-barrel carburetor, BBS-3097S (manual and automatic transmission).

The intake manifold is cast iron. And the engine has the protection of the full-flow, screw-on, throw-away type of oil filter. Regular fuel powers this engine, of course. Choke and carburetor calibrations have been revised for '61.

### ***170 Cubic Inch 6-Cylinder***

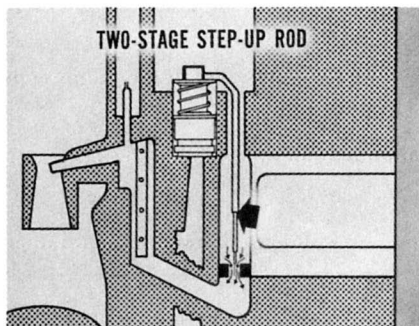


This 170 cubic inch engine is the standard engine for the Valiant and Dodge Lancer models and is also used on the D-100, one-half ton Dodge Dart pick-up truck. It uses a Carter single-barrel carburetor, BBS-3093S (manual transmission), BBS-3094S (automatic transmission), and purrs like a kitten on regular fuel. With a power package, the BBS-3098S carburetor is used on manual transmission cars; the BBS-3099S carburetor is used on cars with the automatic transmission. There's also a BBS-3097S carburetor used with both the manual and automatic transmissions when this engine is installed in special taxicabs.

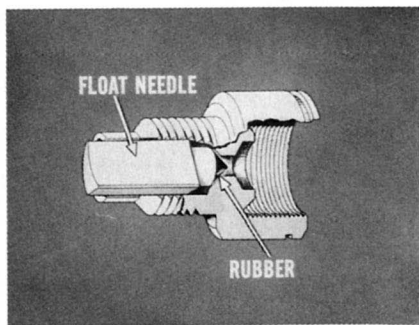
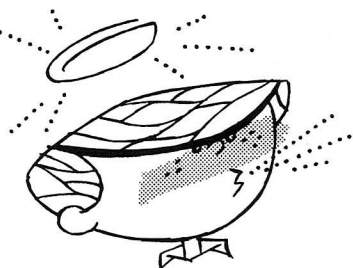
As on the 225 cubic inch six-cylinder engine, compression ratio is 8.2 to 1. Intake manifolds are cast iron, and the engine has the protection of the full-flow, screw-on, throw-away type of oil filter.

## CARBURETOR IMPROVEMENTS

**Two-Stage Step-Up Rod.** A two-stage step-up rod is used in all V-8



Carter carburetors except the AFB model used with Police and Ram Induction packages. This step-up refinement promotes better performance in the intermediate speed range. On Bendix-Stromberg carburetors, this same refinement is accomplished by means of a two-stage power bypass jet.

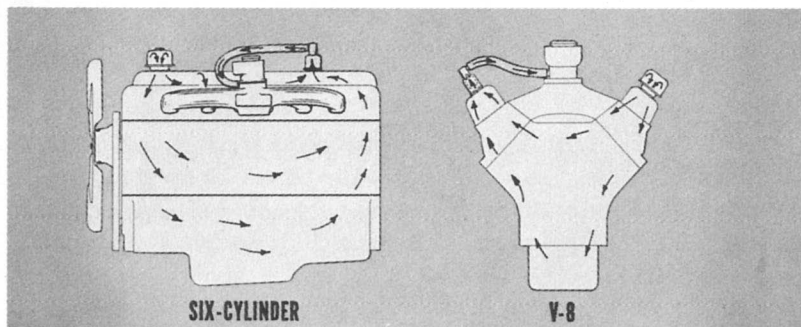


**Rubber-Tipped Float Needle.**

All carburetor float needles are tipped with a high-grade synthetic rubber. This enables the needle to seat better. Possibility of flooding caused by dirt between the float valve and seat is materially reduced.

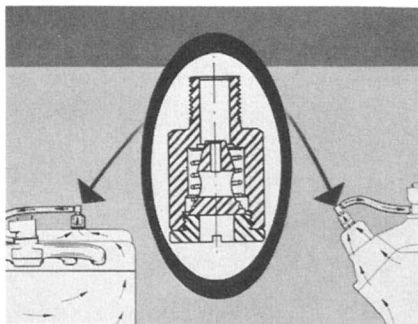
## CLOSED CRANKCASE VENTILATION SYSTEM

There's a new closed crankcase ventilation system that's optional on all new engines. This innovation is especially desirable on taxicabs, package-delivery, and other stop-and-go vehicles, and on cars that operate in extremely cold climates.



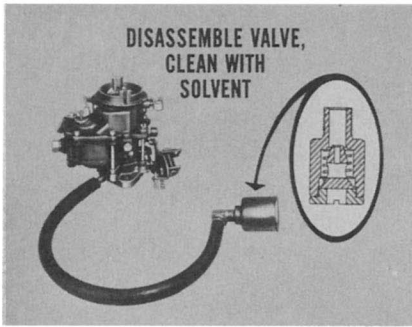
The system provides positive crankcase ventilation. Manifold vacuum pulls crankcase vapors through a flexible connecting tube and into the intake manifold. The crankcase vapors pass into the cylinders and are burned.

There's a spring-loaded valve in a small steel cylinder, mounted on the rocker arm cover, that regulates crankcase vapor flow. At idle, this valve is closed but a small opening permits a small amount of vapor flow. At higher speeds, the valve opens to increase vapor flow.



Along with this ventilation system, specially calibrated carburetors are used. They feature an adapter below the throttle valves to which





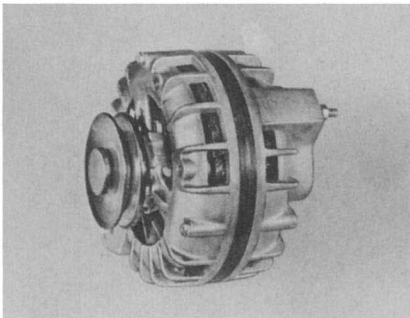
the tube is connected. Service consists of periodic cleaning, for the most part. Under normal driving conditions, clean the valve and tube every 10,000 miles. During cold weather when more sludge and carbon tend to form, clean the system more frequently

Disassemble the valve carefully, and use a good solvent to clean the parts. Use compressed air to dry the parts. When reassembling the valve, be sure to attach the spring by pushing the end coil over the tapered end of the valve, over the ridge, and into the machined groove just under the valve head. That assures good square contact between the valve and seat.

**NOTE:** Do not stretch the spring. If a valve spring is distorted, bent, or etched, replace the entire valve assembly.

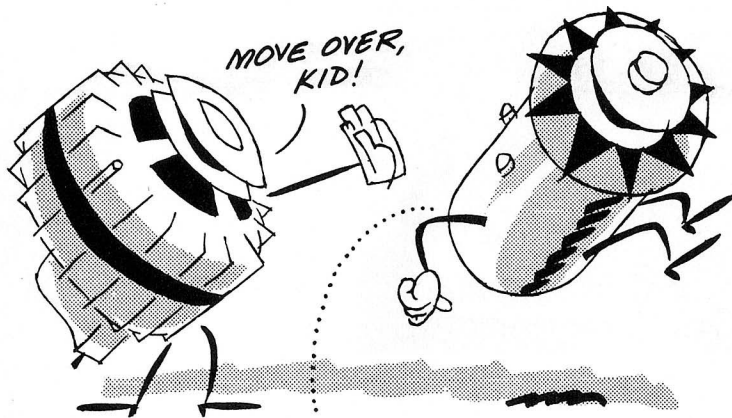
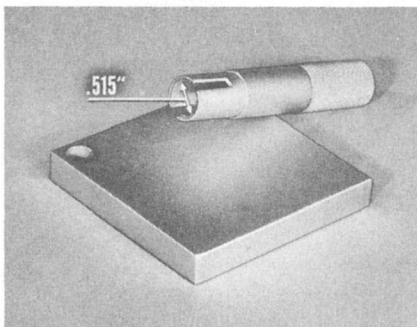
## ENGINE ELECTRICAL FEATURES

**Alternators For All Cars.** Instead of a conventional DC generator, all

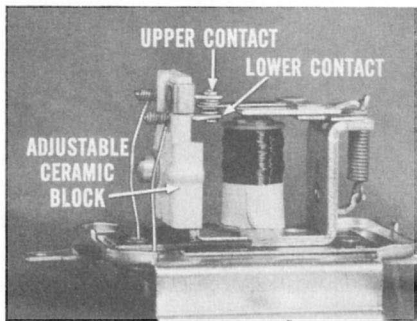


cars built in the United States have a 35-ampere alternator. A 40-ampere alternator is available as special equipment on both U.S.- and Canadian-built cars. There's also a 40-ampere alternator with a double pulley used on cars equipped with air conditioning.

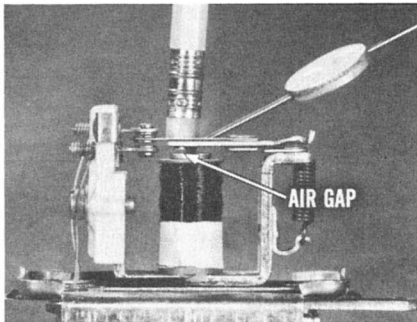
Last year's diode rectifier installing tool (C-3772) can be modified to handle the larger diodes used in the new alternators. When modified, it will still handle the 1960 rectifiers. The inside diameter of last year's tool was  $\frac{3}{8}$ ". Use a lathe to bore out the inside diameter to .515", or .015" larger than  $\frac{1}{2}$ ". If the 1960 tool, not modified, is used on the 1961 models, the new rectifier shells may be damaged.



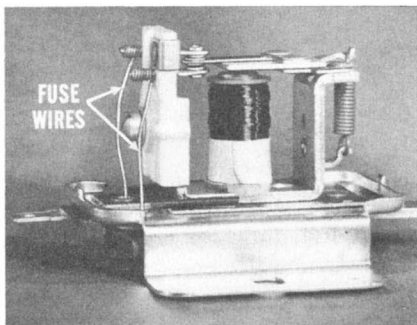
**New Voltage Regulator.** A new yoke-type voltage regulator is used in connection with the alternators. The stationary upper and lower contacts are mounted on an adjustable ceramic block. In this setup, point and air-gap adjustments are easier to make.



The space between the two stationary contacts is pre-set. Usually,



adjusting the ceramic block to get the proper air-gap setting will provide the correct lower contact spacing. But it's always a good idea to check and make sure the lower contact spacing's correct. If it isn't, bend the lower contact bracket to get the correct spacing.



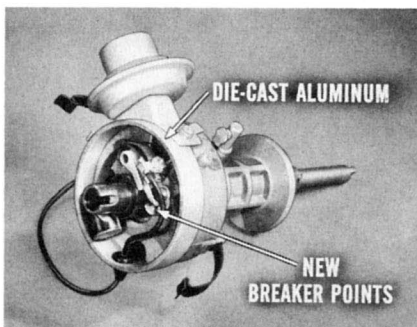
A fuse wire for each contact replaces the external in-line fuse used with former voltage regulators. These fuse wires can be replaced when necessary, but be sure to follow this procedure:

Cut the blown-out fuse wire above the soldered connection at the lower end, and unwind it at the top. Tin one end of the new fuse wire (Part No. 2275242).

Hold the tinned end of the new fuse wire in the recessed rivet and against the stub of the old fuse remaining in the recess. Cause a drop of rosin-core solder to flow from the soldering iron onto these parts. Hold the fuse wire steady until the solder cools. When the solder has hardened, pull the fuse upward to remove the slack, and then wrap it around the upper bracket. Solder the fuse to the bracket and cut off the unused portion.

**NOTE:** The new yoke-type voltage regulator can be installed on 1960 models after you remove the in-line fuse holder and splice the wire.

**Chrysler-Built Distributor.** Three new Chrysler-built distributors are used on all United States-built six-cylinder engines, and on V-8 engines of 318 and 413 cubic inch displacement. These new distributors feature die-cast aluminum housings and self-aligned breaker points. The bushing at the upper end of the shaft is new, and extends slightly above the housing. Installation procedure is slightly different from last year.

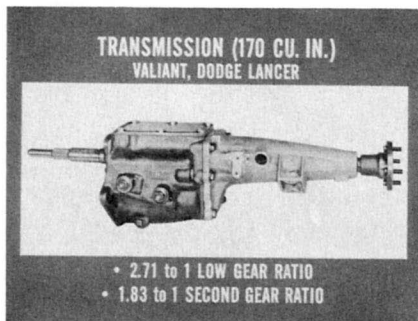


**Solenoid Shift Starter.** V-8 engines in all United States cars feature the solenoid shift starter. Built by Chrysler Corporation, the solenoid shift starter is known for positive engagement and quiet operation.

## NEW MANUAL TRANSMISSIONS

For United States cars, there will be a family of four, three-speed manual transmissions. All are similar in basic design.

**Valiant, Dodge Lancer Transmission (170 Cubic Inch Engine).** There's a manual transmission used with the 170 cubic inch engine on Valiant and Dodge Lancer models. It has a 2.71 to 1 gear ratio in low, and a 1.83 to 1 gear ratio in second.



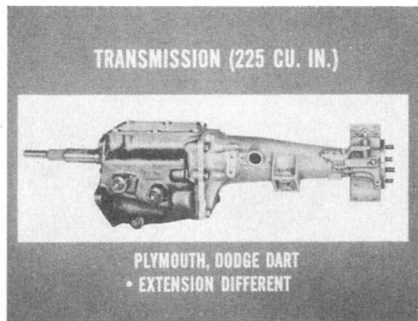


**Plymouth, Dodge Dart Transmission (225 Cubic Inch Engine).**

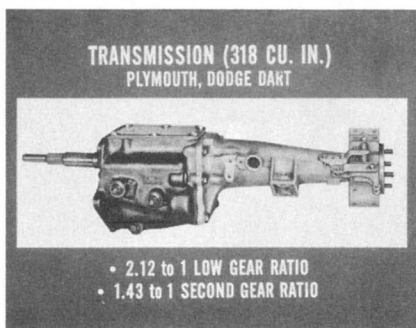
Plymouth and Dodge Dart models with the 225 cubic inch engine both use a transmission similar to the Valiant and Dodge Lancer gearbox. The extension is different, however, because in this applica-

tion it carries the parking brake.

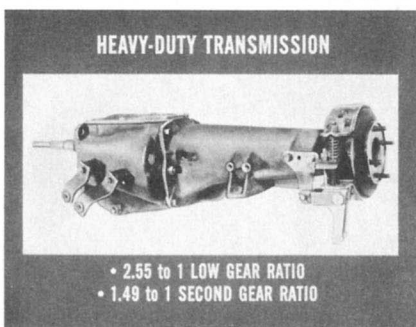
The Plymouth and Dodge Dart transmission also has the low gear ratio of 2.71 to 1, and the second gear ratio of 1.83 to 1. These ratios, higher than these models had last year, provide excellent breakaway acceleration.



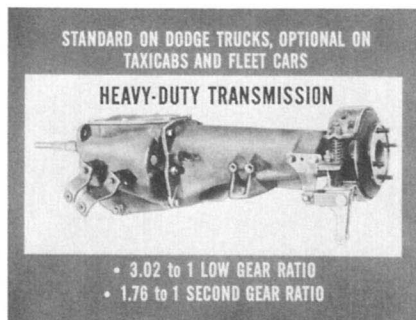
**Plymouth, Dodge Dart Transmission (318 Cubic Inch Engine).** The third manual transmission is used with Plymouth and Dodge Dart cars equipped with the 318 cubic inch V-8 engine. Gear ratios in this case, though, are 2.12 to 1 in low, and 1.43 to 1 in second—the same ratios provided last year.



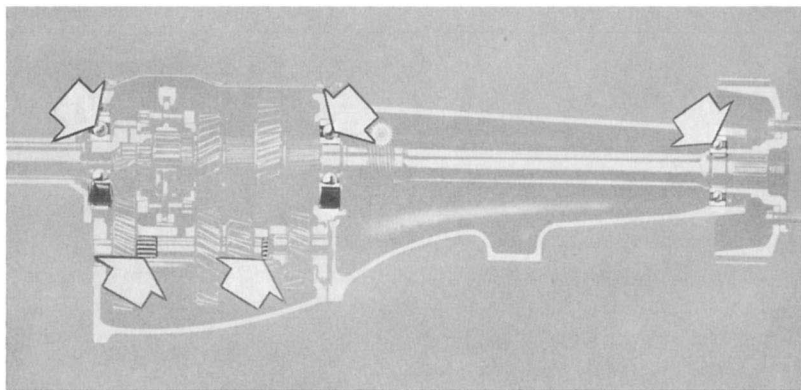
**Heavy-Duty Transmission (361 Cubic Inch Engine).** The fourth manual transmission is the entirely new heavy-duty member of the family. It is standard on models using the 361 cubic inch V-8 engine: Dodge Polara, De Soto, and Chrysler Newport. It has a 2.55 to 1 low gear ratio, and a 1.49 to 1 second gear ratio. When used on the Chrysler Newport, the heavy-duty manual transmission has a sporty tunnel shift. Other models use the steering column shift.



This heavy-duty transmission is also used on Dodge Trucks, and is optional on taxicabs and fleet cars. When it is used on Dodge Trucks and heavy-duty passenger cars, gear ratios are 3.02 to 1 in low, and 1.76 to 1 in second.



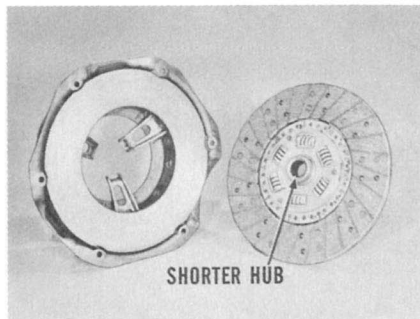
Heavy-duty features of this transmission consist of heavy-duty ball bearings at the main drive gear and mainshaft. There's also a ball bearing at the rear end of the mainshaft. The countershaft has two sets of double-row roller bearings. The reverse idler gear also has roller bearings. Heavy-duty straddle-type shift forks are used.



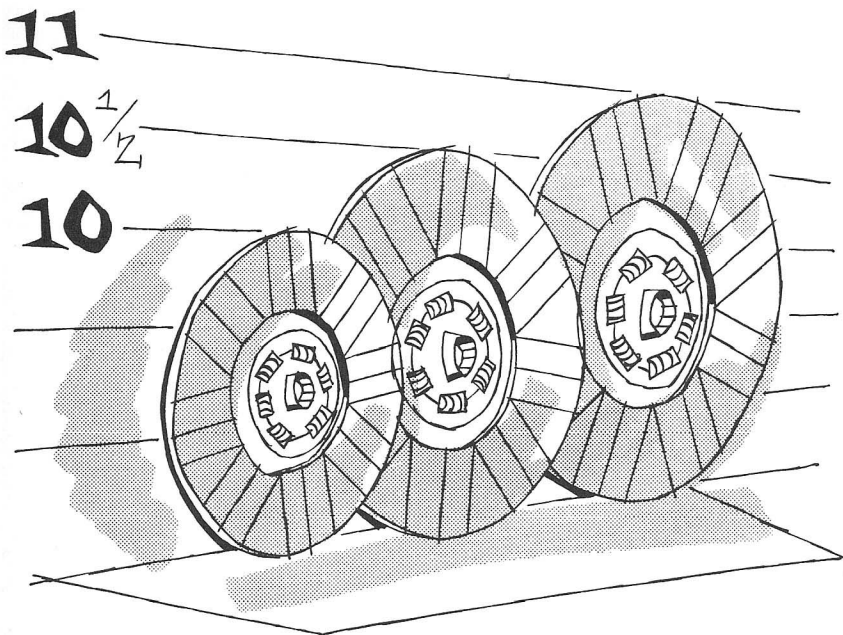
**Automatic Transmission.** The same automatic transmissions that performed so well last year will again be available on 1961 cars.

## NEW CLUTCH LINE-UP

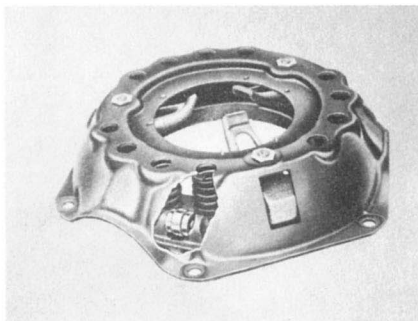
There's a 10" clutch with a new disc used when the heavy-duty trans-



mission is coupled with six-cylinder engine taxicabs. The new clutch disc has a slightly shorter hub than last year's disc. However, the new disc can be used on last year's cars. But the 1960 clutch disc can't be used on 1961 taxicabs because of its longer hub.



The same 10" semi-centrifugal clutch featured last year is again on cars equipped with the 318 cubic inch engine and manual transmission.



Then there is a special application of a 10½" semi-centrifugal clutch. This is used when the heavy-duty transmission is coupled to the 361 cubic inch engine with a two-barrel carburetor for Dodge Polara, De Soto, and Chrysler Newport models. Clutch size goes up to 11" when the heavy-duty transmission is used on a four-barrel 361 cubic inch engine. For all 1961 clutch model applications, refer to the chart on Page 24.



# CLUTCH MODEL APPLICATION CHART

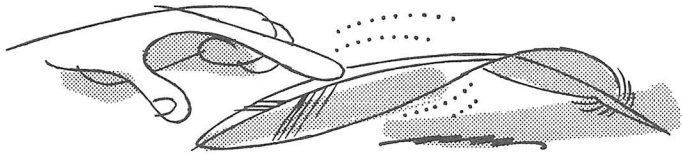
MODEL	ENGINE	CLUTCH	
		STANDARD	EXTRA EQUIPMENT
VALIANT and LANCER	170 CU. IN.	9 $\frac{1}{8}$ "	10"
PLYMOUTH and DODGE DART TAXI PKG.	225 CU. IN. 225 CU. IN.	9 $\frac{1}{4}$ " —	10" 10"
PLYMOUTH and DODGE DART	318 CU. IN.	10" SEMI-CENTRIFUGAL	10 $\frac{1}{2}$ " SEMI-CENTRIFUGAL
PLYMOUTH	361 CU. IN. 2-BBL. CARB.	11" SEMI-CENTRIFUGAL	—
DODGE POLARA DE SOTO CHRYSLER NEWPORT	361 CU. IN. 2-BBL. CARB.	10 $\frac{1}{2}$ " SEMI-CENTRIFUGAL	—
PLYMOUTH DODGE POLARA DE SOTO CHRYSLER WINDSOR	303 CU. IN.	11" SEMI-CENTRIFUGAL	—
CHRYSLER NEW YORKER	413 CU. IN.	11" SEMI-CENTRIFUGAL	—

# CLUTCH MODEL APPLICATION CHART

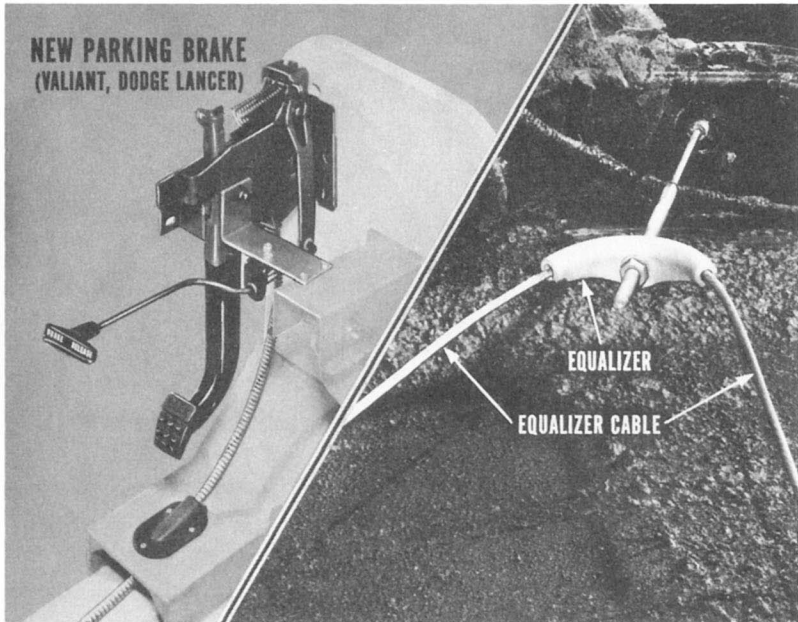
MODEL	ENGINE	CLUTCH	
		STANDARD	EXTRA EQUIPMENT
VALIANT and LANCER	170 CU. IN.	9 $\frac{1}{8}$ "	10"
PLYMOUTH and DODGE DART TAXI PKG.	225 CU. IN.	9 $\frac{1}{4}$ "	10"
	225 CU. IN.	—	10"
PLYMOUTH and DODGE DART	318 CU. IN.	10" SEMI-CENTRIFUGAL	10 $\frac{1}{2}$ " SEMI-CENTRIFUGAL
PLYMOUTH	361 CU. IN. 2-BBL. CARB.	11" SEMI-CENTRIFUGAL	—
DODGE POLARA DE SOTO CHRYSLER NEWPORT	361 CU. IN. 2-BBL. CARB.	10 $\frac{1}{2}$ " SEMI-CENTRIFUGAL	—
PLYMOUTH DODGE POLARA DE SOTO CHRYSLER WINDSOR	383 CU. IN.	11" SEMI-CENTRIFUGAL	—
CHRYSLER NEW YORKER	413 CU. IN.	11" SEMI-CENTRIFUGAL	—

# BRAKES

Brakes are basically the same for 1961. But on the Valiant and Dodge Lancer, there is a new parking brake. The lever and release are entirely new. The lever and cable operating mechanism has been redesigned for easier application and release.



The cable is routed directly to a cable equalizer and doesn't enter the engine compartment. Also, the ratio bar has been eliminated. Right and left parking brake cables attach directly to the equalizer cable. The parking brake adjustment is made at the equalizer.

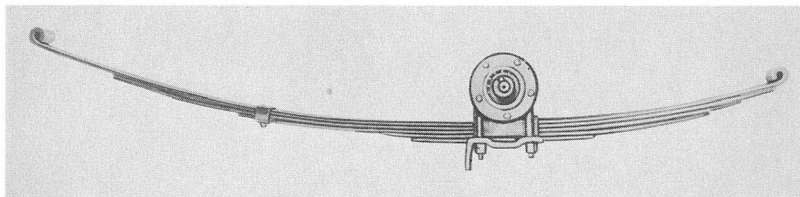


## FRONT AND REAR SUSPENSION

Camber has been increased  $\frac{1}{8}^\circ$ , but the adjustment procedure remains the same. Here are camber and caster specifications for 1961:

		MANUAL STEERING	POWER STEERING
CAMBER:	Right	$+\frac{1}{4}^\circ$ to $\pm\frac{1}{4}^\circ$ ( $+\frac{1}{4}^\circ$ Preferred)	Same
	Left	$+\frac{1}{2}^\circ$ to $\pm\frac{1}{4}^\circ$ ( $+\frac{1}{2}^\circ$ Preferred)	Same
CASTER:	Right	$-\frac{1}{2}^\circ$ to $\pm\frac{1}{2}^\circ$	$+\frac{3}{4}^\circ$ to $\pm\frac{1}{2}^\circ$
	Left	$-\frac{1}{2}^\circ$ to $\pm\frac{1}{2}^\circ$	$+\frac{3}{4}^\circ$ to $\pm\frac{1}{2}^\circ$

**New Rear Spring (Plymouth, Dodge Dart).** Each rear spring on Plymouth and Dodge Dart six-cylinder models will have one more leaf—a total of five, instead of four. The additional leaf increases spring life and still retains the desirable ride qualities.



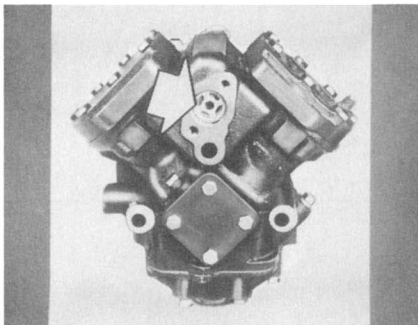
**Oriflow Shock Absorber.** Oriflow shock absorbers have some valving refinements. The seat of the base valve has been narrowed, and valve grooves have been made more shallower. As a result, less hydraulic force is needed to open the valve and so it opens smoothly and quietly.

**Tires.** There are some minor changes in tire and wheel sizes and pressures. Check the specifications for the model being serviced.

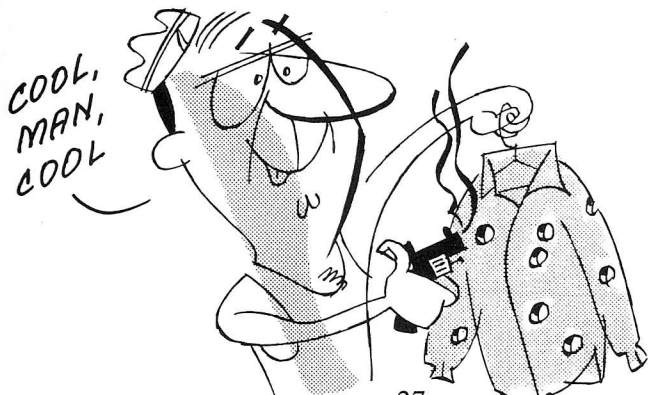
# ACCESSORIES

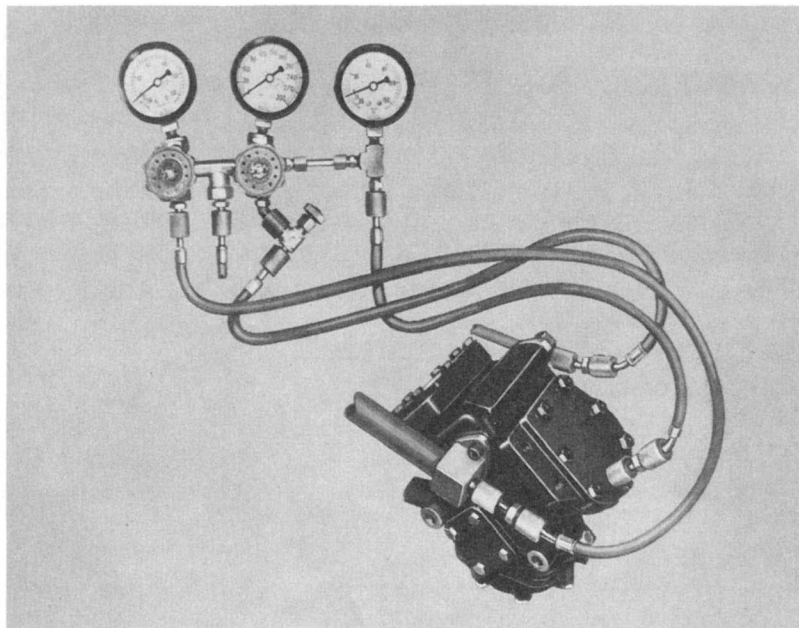
## ***Air Conditioning***

Operation, air flow, electrical circuits and service procedures on the 1961 units are basically the same as those on the 1960 models. Test procedures are the same except that there is a change in the suction and discharge gauge pressures of the expansion valve test. Also, a new compressor is used. It has the Evaporator Pressure Regulator Valve (EPR) installed internally. It also incorporates an internal oil return passage. The EPR valve is calibrated when installed to provide maximum cooling, and is not adjustable. It functions as it did before except that the service port valves are in different locations. There is also a revision in the valve plate assemblies.



**Testing The Expansion Valve.** Before connecting the suction or discharge hose to the compressor, remove the Dill valve fittings from the service ports. Also remove the special adapters from both hoses. Connect the suction and discharge hoses directly to the service ports.



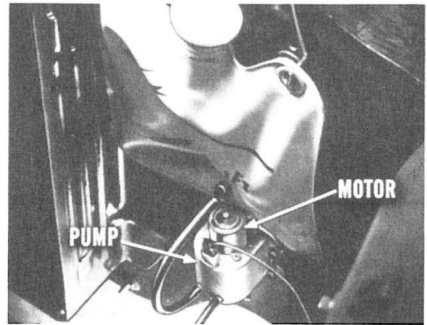


Pressure readings on the right-hand (discharge) gauge change from 70 psi to 75 psi for both the maximum and minimum flow test. The suction gauge pressure for the maximum flow test changes from 43-53 psi to 60-70 psi for both the front and trunk units. The roof unit readings, however, should be 65-75 psi. The minimum flow-test suction pressure remains 21-24 psi as before.

### ***Motor-driven Windshield Washer***

This new, electrically operated windshield washer is available for Chrysler and Imperial models. It is located on the right lower engine side of the radiator support. Its small motor is coupled to a plastic gear pump that supplies fluid through rubber tubing to dual nozzle jets mounted in the fresh-air intake grille of the cowl ventilator next to the wiper pivot.

The motor, a permanently lubricated and sealed unit, needs no servicing. A circuit breaker in the unit protects the motor from overheating during continuous operation.



MoPar or Chryco washer solution sprays the windshield as the button in the wiper knob is depressed. The wipers operate independently of the windshield washer motor.

You can aim the nozzles by inserting a screwdriver in the nozzle slots. Just rotate the slots to raise or lower the spray as desired.

## CONCLUSION

Good service on the 1961 models is a vital factor in customer acceptance. That's one big reason why highlights of the new features have been presented in this book. The more knowledge gained about what's new, the easier it will be to develop and maintain enthusiastic customer satisfaction with the new cars.



# 1961 ENGINE TUNE-UP SPECIFICATIONS

ENGINE SIZE	SPARK PLUG TYPE	SPARK PLUG GAP	IGNITION POINT GAP	IGNITION TIMING BTC	IDLE SETTING R.P.M.	CAM DWELL	TAPPET SETTING (HOT)
170 CU. IN.	AG-52 AG-82 (Taxi)	.035"	.017-.023"	2.5°	550 (M) 500 (A)	40-45°	.010" IN. .020" EX.
225 CU. IN.	AG-52 AG-82 (Taxi)	.035"	.017-.023"	2.5°	550 (M) 500 (A)	40-45°	.010" IN. .020" EX.
313 CU. IN. (C)	A-42	.035"	.015-.018"	5° (M) 10° (A)	500	29-32°	.010" IN. .020" EX.
318 CU. IN. 2-bbl.	A-42	.035"	.014-.019"	5° (M) 10° (A)	500	27-32°	.010" IN. .020" EX.
4-bbl.	A-42	.035"	.014-.019"	10°	500	27-32°	.010" IN. .020" EX.
361 CU. IN. 2-bbl.	A-42	.035"	.014-.019"	10°	500	27-32°	
4-bbl.	A-32	.035"	.014-.019"	10°	500	27-32°	
383 CU. IN. 2-bbl.	A-42	.035"	.014-.019"	10°	500	27-32°	
4-bbl.	A-32	.035"	.014-.019"	7.5°	500	27-32°	
Two 4-bbl. Ram Ind.	A-32	.035"	.014-.019"	7.5°	725-750	27-32° (1 Set) 34-40° (Both Sets)	
413 CU. IN. 4-bbl.	A-42	.035"	.014-.019"	10°	500	27-32°	

Distributor Rotation clockwise on 170, 225, 313, 318 cu. in. engines.  
Distributor Rotation counterclockwise on 361, 383, 413 cu. in. engines.  
(C) Canadian (M) Manual Transmission (A) Automatic Transmission



## RECORD YOUR ANSWERS TO THESE QUESTIONS ON QUESTIONNAIRE NO. 154

The 361 cubic inch engine with a two-barrel carburetor requires premium fuel.  1

RIGHT

WRONG

Compression ratio on the 170 and 225 cubic inch six-cylinder engines is now 8.2 to 1.  2

RIGHT

WRONG

A lower compression ratio on our 1961 six-cylinder engine makes it more adaptable to variations in octane rating of regular fuel and reduces the chance of detonation.  3

RIGHT

WRONG

All 1961 V-8 carburetor float needles are tipped with high-grade synthetic rubber.  4

RIGHT

WRONG

The new alternator regulator has built-in fuse protection.  5

RIGHT

WRONG

When used on 1960 models, the new alternator regulator does not need the in-line fuse.  6

RIGHT

WRONG

Last year's diode rectifier installing tool (C-3772) can be modified so it will handle rectifiers used in 1961 as well as prior model alternators.  7

RIGHT

WRONG

The manual transmissions used with the 170 and 225 cubic inch engines are the same except for the extension.  8

RIGHT

WRONG

The new 10" clutch disc for the six-cylinder engine has a slightly shorter hub, but it can be installed in the 1960 model.  9

RIGHT

WRONG

There's been an increase in camber of one-eighth of a degree on all 1961 models.  10

RIGHT

WRONG