# MASTER TECHNICIANS 66-1 SERVICE CONFERENCE

REFERENCE BOOK





PLYMOUTH · DODGE CHRYSLER · IMPERIAL

# It's always customer courting time

When it comes to selling cars, first impressions are mighty important. When it comes to keeping customers, second impressions are even more important. A new car that lives up to the owner's expectations in overall appearance, operation and performance is bound to make a favorable, lasting second impression.

No doubt about it, new-car announcement and delivery time represents a critical period in your dealership's courtship of new customers. Long after delivery, it's largely up to the service department and you Master Technicians to keep up the customer courtship that leads to satisfied customers and repeat sales.

Experience may be a great teacher, but tackling a service job on a new model without any advance knowledge of what's new or different can be a mighty risky business. So, give this reference book the once-over now and keep it handy for future use. And don't forget to keep your 1966 Service Manuals handy and use them anytime you're in doubt about a specification or procedure. Be prepared! It's always customer courting time in the service department.



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#### **BODY CHANGES AND SERVICE**

One of the most obvious 1966 changes is the curved side glass on the Belvedere and Coronet models. Some of the other body features and changes aren't as readily apparent. Since you service technicians are primarily concerned with changes which affect service procedures and adjustments, the most significant body service highlights are covered in the paragraphs which follow.

#### -BELVEDERE AND CORONET MODELS-

The Coronet and Belvedere bodies are completely new for 1966. The curved side glass on these models means that just about everything inside the door and quarter trim panels is new this year. However, you won't have too many new things to learn about these models since they are similar in many ways to 1966 as well as 1965 Fury and Polara models.

#### FRONT DOOR GLASS

Coronet and Belvedere models use the same type of glass-operating mechanisms as the Fury and Polara models. However, the glass application and operating mechanism on hard-top and convertible doors is new this year. On Coronet and Belvedere models, the two-arm regulator has been replaced by a single-arm

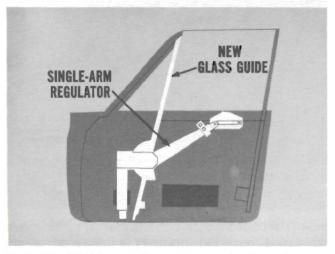


Fig. 1—Belvedere or Coronet 2-door hardtop glass mechanism

regulator. The glass guide and run channel design is also new on these models and quite similar to 1966 Fury and Polara models.

#### FRONT DOOR GLASS GUIDE

With the single-arm regulator, the front edge of the glass must lock into the guide channel so that the glass cannot tip as it is raised and lowered. The new front door glass guide design provides a more stable, rattle-free method of glass attachment and smooth operation of the new curved glass.

The front door glass weatherstrip is attached to the front edge of the glass instead of being attached to the glass channel. In other words, the weatherstrip slides up and down in the front guide channel instead of the glass sliding in the weatherstrip. Dacron-flocked shoes fit into channels formed in the glass guide. One pair of guide shoes is located near the top of the glass and a second pair is located near the bottom of the glass. These shoes virtually lock the glass into the glass guide so that the glass is well supported even when the window is partially lowered.

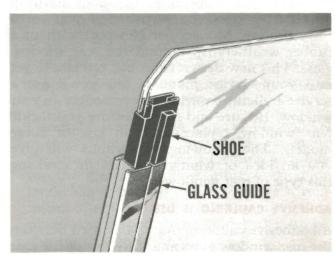


Fig. 2—The weatherstrip is attached to the glass

Both the guide shoes and the weatherstrip are locked in place by a plastic pin that goes through a hole in the front edge of the glass.

This design greatly simplifies servicing and replacement of the weatherstrip and the shoes.

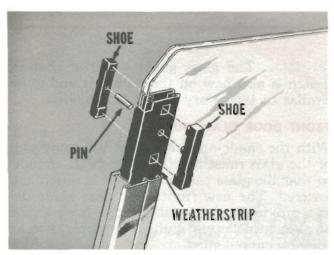


Fig. 3—Plastic pins attach the shoes and weatherstrip

You'll find this new glass guide and shoe design on the bigger models as well as the Belvederes and Coronets. As a matter of fact, the basic design as well as door and quarter glass adjustments on all models with curved side glass, with the exception of Imperial, are now the same or very similar.

#### — CEMENTED-IN-TYPE REAR WINDOW —

Early in 1966 model production, cemented-in rear window glass will be introduced in some of the longer wheelbase, two-door hardtop models. So, don't be surprised if you see a Fury, Polara, Monaco, or Newport without a rubber weatherstrip around the rear window glass. This new design came out too late to get into your service manuals but you'll get a service bulletin covering the cemented-in rear window. Be sure and read it before you tackle rear window replacement on one of these models. The following paragraphs will give you an idea of what's involved in servicing this type of rear window.

#### ADHESIVE CAULKING IS USED

An adhesive caulking material is used between the rear window glass and the fence of the rear window body opening instead of a rubber weatherstrip. The caulking material actually cures in place to form a very tough, rubberlike adhesive which cements the glass to the body fence.

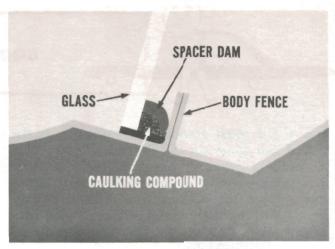


Fig. 4—Caulking forms a rubber-like adhesive

#### **REAR WINDOW GLASS REMOVAL**

To remove a rear window glass you must remove the interior garnish mouldings and the outside chrome mouldings. Since the adhesive caulking material literally vulcanizes itself to the glass and the body metal, the caulking material must be cut through before the glass can be removed. A two-foot length of steel music wire is used to cut the caulking material. One end of the wire is forced through the caulking material between the glass and the fence. Start at one of the lower corners of the rear window and push the wire through from inside the car. A short wooden handle is attached to each end of the music wire . . . a five- or six-inch length of a broom handle works nicely.

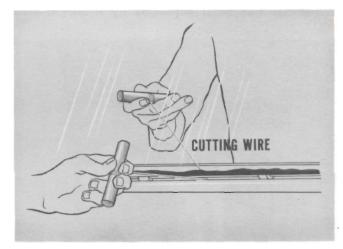


Fig. 5—Steel music wire used to cut caulking

With the aid of a helper, carefully cut through the caulking material by pulling the wire in a sawing motion. Once the caulking is cut all the way around the window, the glass is easily removed. If the original glass is to be reinstalled, remove all of the old caulking material using a razor blade or sharp cutting instrument. Use thinner or a rag dampened in toluene or thinner to remove all traces of caulking material.

CAUTION: Do not use an oil-base solvent. Any trace of oil on the glass will prevent proper adhesion of the caulking material.

#### USE THE CORRECT SIZE GLASS

The rear window glass used in an adhesive-caulked installation is *larger* than the glass used on models having a conventional rubber weatherstrip. The slightly smaller glass used with conventional weatherstrip will not work in the cemented-in application. The larger glass used for cemented-in application cannot be correctly installed using a rubber weatherstrip. Be sure and use the correct size glass.

#### RUBBER SPACERS FOR VERTICAL POSITIONING

A pair of rubber spacers are used to position the glass in the window opening. These spacers support the glass until the adhesive caulking compound cures. The two spacers are installed seventeen inches either side of the center of the glass opening.



Fig. 6-Rubber spacers support the glass

#### THERE'S A SPACER DAM, TOO

Another type of rubber spacer, called a spacer dam, provides a cushion between the glass and the body fence. It's called a dam because it keeps the adhesive caulking from squeezing out over the surface of the glass when the window is first installed.

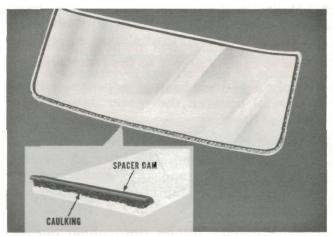


Fig. 7-The spacer dam retains the caulking

#### **GLASS INSTALLATION HIGHLIGHTS**

An installation kit will be available from the Parts Division. It will include two spacers, a length of rubber spacer dam material, a container of adhesive caulking and another of adhesive caulking primer. The following steps should be followed when installing a rear window glass:

- Make sure that all moulding retaining clips are in good condition and properly positioned. Clips must not be more than <sup>1</sup>/<sub>32</sub>-inch away from the body panel. If they are, they should be straightened or replaced before the glass is installed. They cannot be installed without removing the glass.
- Position the two rubber spacers 17 inches from the centerline of the window opening.
- Apply the spacer dam to the inside surface of the glass, <sup>1</sup>/<sub>4</sub>-inch from the edge.
- Carefully position the glass in the window opening. The spacer dam should rest against the fence and fold under, forming a cushion for the glass. The glass must overlap the fence along the top and side edges a minimum of about 5/16-inch. If the glass is low, place waterproof shims under the rubber spacers to bring it up.
- Mark the exact position of the glass by applying a piece of masking tape across the edge of the glass and the body opening at each side of the glass. Then, slit the tape vertically and remove the glass.

- Remove the glass and clean the entire fence area using steel wool.
- Dampen a small pad with adhesive caulking primer and apply to the entire fence.

### CAUTION: Primer will damage paint and trim so confine primer to the fence area.

- Apply a <sup>3</sup>/<sub>8</sub>-inch bead of adhesive caulking material between the spacer dam and the edge of the glass.
- Carefully install the glass in the body opening. Make sure the glass rests on the rubber spacers and check to make sure the tape on the glass lines up with the tape on the body.

## NOTE: Rubber suction cups, about the size of those used for car-top carriers, will help you hold and position the glass.

Application of the adhesive and positioning of the glass must be accomplished quickly, since the working life of the adhesive is approximately 15 minutes.

- Press the glass lightly but firmly against the body fence to insure good adhesion.
  Then, use a fiber trimstick to level the caulking material and force it into the opening between the glass and the body.
- Use a light spray of cold water to test for water leaks. If leaks are encountered, apply additional caulking material to correct the leak. Water will not interfere with good adhesion, so you won't need to dry it.
- Leave at least one car window open and do not slam any car doors for at least one hour since the pressure could push the window out of its opening.

The foregoing information is intended to acquaint you with the service procedure used to remove or install a rear window glass. Tech suggests that you read your service bulletin on the subject before servicing a rear window.

#### -MISCELLANEOUS BODY ITEMS -

Needless to say there are many other body changes. Most of these affect appearance only and won't require any new service procedures or knowledge. However, there are a couple of items that may give you trouble if you aren't forewarned.

#### **OUTSIDE FINISH MOULDING REMOVING TOOL**

A new type of concealed windshield and rear window moulding retaining clip was introduced on some 1965 models. Removing these mouldings without damaging the moulding, the clips or the car finish could be a bit tricky . . . especially if you didn't understand how the clips worked. In Session No. 65-4, Tech explained how you could use a modified fiber trimstick to release these clips from the moulding. This same kind of moulding retaining clip is now used on all 1966 models except the Imperials, Valiants and Darts, A slick new tool that really simplifies removal of these mouldings has just been released. It's tool C-4009, Windshield and Rear Window Moulding Removing Tool.

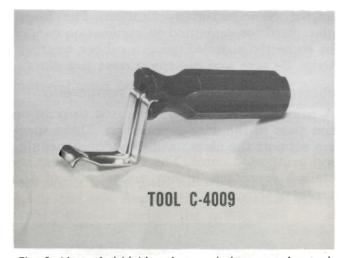


Fig. 8-New windshield and rear window removing tool

#### DOOR WEATHERSTRIP ATTACHMENT

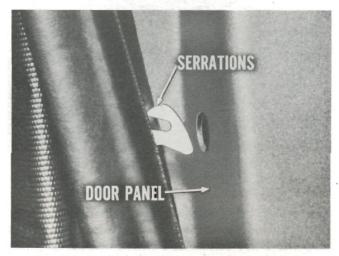


Fig. 9—Plastic clips retain the door weatherstrip

1966 models, except Imperial, Valiant and Dart, have the weatherstripping attached to the door instead of the door opening. Above the beltline the weatherstrip is cemented. Below the beltline the weatherstrip is retained by plastic fasteners spaced approximately 4 inches apart. The plastic clips are springy. When you push them into attachment holes in the door panel they compress and then spring open again. Tiny serrations grip the door panel, holding the weatherstrip securely in place.

#### TO RELEASE THE SPRING CLIPS

Don't try to remove a door weatherstrip without releasing the clips or you'll ruin the weatherstrip, break the clips, or both. All you have to do to release a clip from the door panel is push downward on the clip with a screwdriver or trimstick.

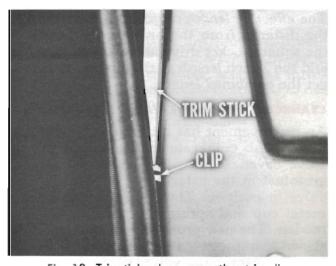


Fig. 10-Trimstick releases weatherstrip clip

Damaged or broken clips are easily replaced provided the clip hasn't been torn out of the weatherstrip. To replace a clip, carefully work the Tee-shaped end of the clip out of the weatherstrip and install a new one in its place.

#### INSIDE DOOR HANDLE REMOTE LINK ATTACHMENT

It's pretty obvious why the new inside door handles are unusually safe. Since you must pull the handle away from the door to open it, there is very little chance that anyone will accidentally open the door. But here's something that isn't quite so obvious. The remotecontrol link is attached to the remote control with a special spring-type retaining clip. The

harder you push on the link to disconnect it, the tighter the clip grasps the link.

Since the link and clip are hidden behind the door inner panel where you can't see them, you'll have trouble figuring out how to release the clip. The accompanying illustration shows how a screwdriver can be used to spread the retaining clip and release the link.

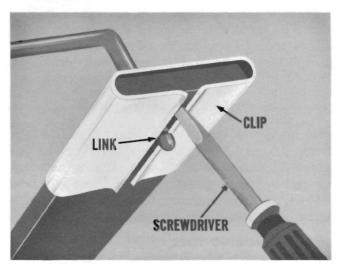


Fig. 11-Screwdriver releases link retaining clip

#### CORONET AND BELVEDERE WINDSHIELD WIPERS

By now you have probably noticed that the Coronets and Belvederes have parallel windshield wipers with the wiper motor in the engine compartment and the drive linkage on the passenger side of the firewall. There isn't much room to get at the linkage from inside the car; however, you can easily remove a motor for service if you know how.

Remove the stud nuts from the motor mounting studs. This will give you room enough to move the motor out and off the mounting studs. You can then easily remove the nut from the motor drive shaft and remove the crank arm and remove the wiper motor from the car.

CAUTION: Don't disconnect the drive from the linkage . . . remove the drive crank from the motor. It's much simpler to remove the crank from the motor than it is to remove the spring washer and clip from the drive assembly without loosening these parts. When you reassemble the crank arm to the motor, be sure the "DOUBLE-D" drive flats match the flats on the shaft and be sure and tighten the nut securely.



#### ENGINE AND CHASSIS HIGHLIGHTS

Although there are a number of important changes and improvements in the power train for 1966, there are no changes which should give you service technicians any problems. As a matter of fact, many of the changes, like simplification of transmission shift linkages, should make servicing chassis units easier.

#### THE ENGINE LINEUP

No major changes have been made in the basic design of our slant-six and V-eight engines. However, a couple of exciting new engines have been added. One of these is a new 440-cubic-inch engine; the other is a 426-cubic-inch hemi-head option.

#### **NEW PISTON RING TOOL**

The new 440 engine has a  $45/1_6$ -inch bore. This calls for a new piston ring installing tool, C-4001. Although you probably won't be doing a ring job on a 440 engine real soon, it's a good idea to have the right tool available when you do need it.

#### TORQUE WRENCH ADAPTER

The Hemi-head engines have eight special stud nuts in the valve chamber. Correct tightening of these nuts is very important. On cast-iron Hemi-head engines the correct torque is 70-75



Fig. 12—You must calculate the correct torque reading

foot-pounds. On aluminum head Hemi-engines the correct torque is 60-65 foot-pounds.

Torque Wrench Adapter, C-4005 makes it easy to tighten these special stud nuts to the specified torque. Of course, the added 2-inch length of the adapter increases the leverage of the torque wrench so you must use a corrective factor to obtain the correct torque value. All you have to do is multiply the recommended torque specification by the effective length of your torque wrench and divide by the combined length of the torque wrench and adapter.

The effective length of your torque wrench is the distance from the pivot in the handle to the square socket drive at the other end. Just add the 2-inch length of the adapter to that to get the combined length.

#### CRANKCASE VENTILATOR VALVE ATTACHMENT

An improvement has been made in attaching the slant-six crankcase ventilation valve to the valve cover. It consists of a special rubber grommet in the valve cover to hold the vent valve in position. The grommet replaces the metal cup and spring clip used on previous models. The new grommet attachment is designed to improve sealing and control oil seepage. To inspect the valve, simply pull it out of the grommet. Do not remove the grommet from the valve cover.

#### **NEW ENGINE MOUNTS**

There has been a change in the design and location of the engine mounts that affects all eight-cylinder models except Valiants, Darts and Imperials. The new 45-degree shear-type front engine mounts are located lower and closer to the centerline of the engine. This change has several desirable effects. Bringing the mounts closer together tends to soften the roll or lateral rocking motion of the engine. Letting the engine roll easily reduces the amount of engine vibration transmitted to the passenger compartment at engine idle speeds.

Perhaps even more important, the new mounts are tuned to absorb objectionable suspension vibrations.

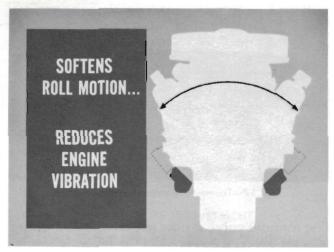


Fig. 13-New shear-type front engine mounts

#### WIDE-BLADE DISTRIBUTOR ROTORS

When the new slant-six distributor cap with wide inserts was introduced a few years back, a new narrow-bladed rotor was also introduced. Eight-cylinder models continued to use a wide-blade distributor rotor. Don't be surprised when you find a wide-blade distributor rotor in a 1966 slant-six. From now on, the wide-blade rotor will be used on both sixes and eights.

#### -TORQUEFLITE TRANSMISSION -

Extensive changes have been made in the TorqueFlite transmissions and the shift linkages. Most of these changes were brought about by the elimination of the rear pump and the addition of the internally actuated parking sprag.

#### THE CASE OF THE MISSING REAR PUMP

Some customers are bound to ask you about the elimination of the rear pump, so let's think about its purpose for a minute. As you know, when a car is pushed or towed, the rear pump is driven by the rear wheels instead of the engine. That means a rear pump supplies hydraulic pressure for push-starting and lubrication for towing with the rear wheels turning.

Greatly improved engine reliability and startability have minimized the importance of push-starting. Besides, very few owners care to have their cars damaged by pushing. In other words, the push-start feature is no longer very important to most owners. Here's something that is important. If you are going to tow a 1966 car equipped with TorqueFlite, pick up the rear of the car or disconnect the drive shaft.

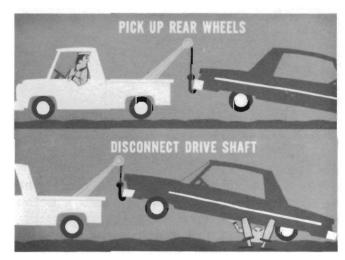


Fig. 14-1966 TorqueFlite towing precautions

#### TORQUEFLITE TOOLS AND SERVICE

Eliminating the rear pump brought about several related changes. Because of the hydraulic circuit changes, the new TorqueFlites have a new hydraulic system and a new valve body. As a result of these and other changes, new service procedures and new special tools are required. For example, new adapters are needed for installing the front pump bushing to the correct depth. Adapter SP-5118 is needed for the A-727 and Adapter SP-5117 for the A-904. Replacing the rear pump with an output shaft support calls for a new Adapter, SP-5124, to install the overrunning clutch cam on an A-727. In other words, be sure and refer to your 1966 service manuals and familiarize yourself with the new essential service tools before you start overhauling a '66 model TorqueFlite.

#### THE NEW PARK-LOCK MECHANISM

The locking sprag is now actuated by an internal sprag rod. The sprag rod is connected to the manual valve lever through an overtravel spring device . . . we'll explain why the overtravel spring is needed in a minute.

There is a bullet-shaped cam device at the rear end of the sprag rod. When it's pulled

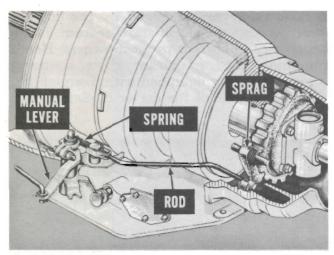


Fig. 15—Parking lock actuating mechanism

into position between the locking lever and the reaction plug, the cam action moves the locking lever into engagement with a notch in the park-lock gear. If the locking lever doesn't line up with a notch in the park-lock gear, the overtravel spring is simply compressed. This keeps spring pressure on the sprag rod until the locking lever does line up with notch in the gear.

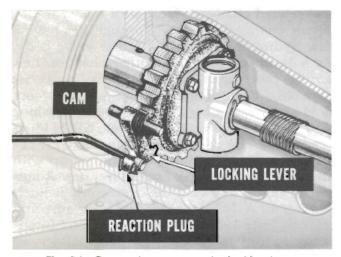


Fig. 16—Cam action actuates the locking lever

#### TORQUEFLITE COLUMN SHIFT

The column shift linkage has been greatly simplified. The detenting at the lower end of the steering column has been eliminated. To compensate for the elimination of this detenting, a much stiffer detent spring is used in the new valve body. So, watch it when you disassemble a new valve body or you may find the detent ball zooming into orbit.

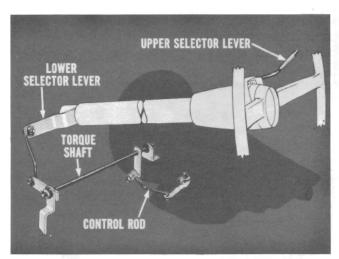


Fig. 17-TorqueFlite column shift linkage

The manual valve is now actuated by an upper selector lever, a lower selector lever, a torque shaft and a single control rod which replaces the two shift cables used on last year's models. Gating to prevent accidental shifting into RE-VERSE or PARK is still retained at the upper end of the steering column. Incidentally, this gating arrangement made it practical to eliminate the reverse blocker valve. The reverse blocker was necessitated by the push-button control which had no external gating.

#### TORQUEFLITE CONTROL ROD ADJUSTMENT

Control rod adjustment is simplicity itself! Loosen the control rod swivel clamp screw until the control rod is loose in the swivel. Put the gearshift selector lever in PARK. Move the manual control lever into the PARK detent. That's the last detent when you move

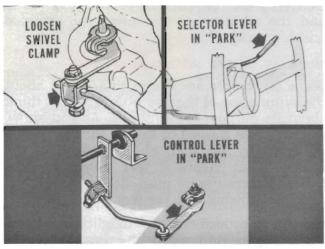


Fig. 18—TorqueFlite control rod adjustment

the lever rearward. Then, tighten the swivel clamp screw and that's all there is to shift linkage adjustment!

#### CONSOLE SHIFT LINKAGE

On TorqueFlite models with console shift, there's no gating between neutral and drive. However, you must push the release button in the top of the shift knob to get into "1", "2", "REVERSE", or "PARK". You must also push the release button in the shift knob to get out of reverse. This is a good safety arrangement because it prevents accidental shifts into "REVERSE" or "PARK". It also prevents you from accidentally bumping the shift lever out of "PARK".

#### CONSOLE SHIFT LINKAGE ADJUSTMENT

On the console as well as the column-shift models, the linkage adjustment is made with the gearshift selector lever and the manual valve control lever in "PARK". On Valiant and Dart models, the control rod is adjusted by loosening the adjusting lever at the lower end of the torque shaft. On other models, the adjustment is made at the swivel clamp located at the manual valve lever.

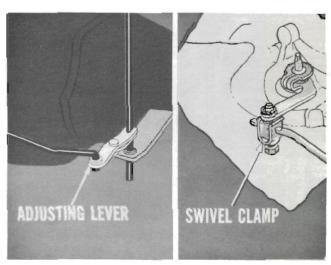


Fig. 19-Adjusting lever and swivel clamp detail

#### CONSOLE SHIFT RELEASE BUTTON ADJUSTMENT

When the console shift release button is assembled it should be adjusted so that it extends about  $\frac{1}{32}$ -inch above the shift knob. This adjustment is made by loosening the set screw in the knob. Then, with the shift lever in neutral, turn the release button clockwise until the serrated surface of the button is ap-

proximately  $\frac{1}{32}$ -inch above the shift knob. Tighten the set screw. If the button is not threaded far enough onto the shift cable, it may be difficult or impossible to shift out of the NEUTRAL-DRIVE range.



Fig. 20-Console shift release button adjustment

#### FOUR-SPEED MANUAL TRANSMISSION—

The four-speed manual transmission was covered in MTSC Session 65-11 and no major changes have been made since that Tech Kit was released. One change should be called to your attention.

#### SELECTIVE-FIT SHIFTER SHAFTS

The one-two shifter is a selective fit. You will recall that if an "A" shifter does not provide a good fit between the one-two shifter and the reverse shifter, a "B" or perhaps a "C" shifter should be tried. In other words, three dimensionally different one-two shifters were available. In 1966 only two one-two shifters will be serviced . . . an "A" and a "B".

#### FOUR-SPEED TRANSMISSION SHIFT MECHANISM

A completely new four-speed manual transmission shift mechanism is offered in 1966. This new mechanism has a positive reverse lockout device that is released manually by lifting the Tee-handle below the shift knob. Lifting the Tee-handle releases a lockout pin and lets you move the shift lever sideways to get into reverse.

You can easily make a simple alignment tool which will help you adjust the shift control rods correctly. The alignment tool is used to

lock the new gearshift mechanism in neutral while you adjust the three control rods. The alignment tool can be made from any metal stock. It is  $\frac{1}{16}$ -inch thick,  $\frac{5}{8}$ -inch wide and about  $\frac{23}{8}$  inches long.

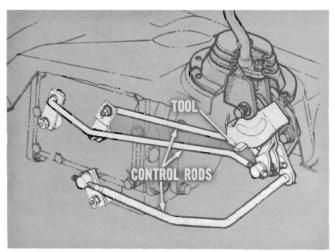


Fig. 21-Tool locks shift mechanism in neutral

Shift the transmission into "NEUTRAL" and then disconnect all three control rods from the transmission shift levers. Insert the alignment tool, as shown, to lock the shift mechanism in neutral. Adjust each of the three control rods to obtain a "rattling good fit". When rod length is exactly right, the end of the rod may rub the hole in the lever as it is assembled. However, if the rod length is correct it will be loose in the lever hole after it is installed. This is what Tech calls, "a rattling good fit". The retaining clips and washers will eliminate the rattle when they're installed.

#### - MISCELLANEOUS DRIVE-LINE ITEMS-

Several new bushing and seal tools will be required to service the drive-line components of the 1966 models. Also, a unique new high-accuracy speedometer drive has been introduced this year. You'll find the service details in your service manuals but here are some of the highlights.

#### EXTENSION HOUSING BUSHING TOOL

You'll need the new Extension Housing Bushing Remover and Installer, C-3996, to service TorqueFlite and manual transmissions which have the sliding spline output shaft with small U-joint yoke. This new tool will remove the bushing easily without danger of damaging

the extension housing. Perhaps even more important, this same tool will install the new bushing to the correct depth in the housing.

#### **EXTENSION HOUSING SEAL TOOLS**

You'll also need Seal Installer, C-3995, to service the transmission extension housing oil seal of six-cylinder models with TorqueFlite. This tool also services the seal used on manual transmissions with sliding spline and small U-joint yoke. To remove the seal on these same models, you'll need Seal Remover C-3994. As we said earlier, get acquainted with your 1966 service manuals and your 1966 essential service tools and make it easy on yourself in the coming year!

#### HIGH-ACCURACY SPEEDOMETER DRIVE

The new high-accuracy speedometer drive is entirely new for 1966. The number of teeth on both the output shaft worm gear and the pinion gear has been almost doubled. Also, a larger selection of pinion sizes is now available. The new pinions come in three different basic diameters.

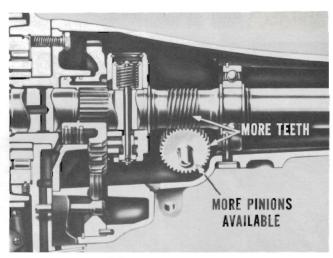


Fig. 22—High-accuracy speedometer gears

To simplify servicing or changing the new pinions, a new pinion adapter has been developed. The adapter adjusts the center-tocenter distance between the output shaft worm gear and the pinion gear.

The new pinion drive adapter has an off-center bearing hole. This allows you to install the correct size pinion without installing a new adapter or changing any other parts. You simply put the proper pinion in place and turn

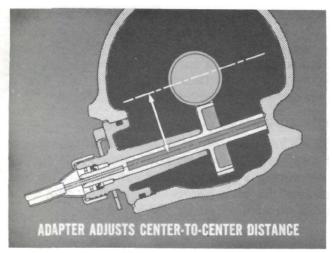


Fig. 23—The new adapter adjusts for different pinion diameters

the adapter so that the range of teeth numbers at the bottom of the adapter match the number of pinion teeth.

#### BRAKES, REAR AXLE AND STEERING

You'll find some changes and additions in the brake, rear axle and steering departments, too. In addition, all cars except Imperial will use a cross-and-roller universal joint at both the front and rear. The Imperial will retain the two-piece shaft and center bearing. Some models will be equipped with an inertia yoke



Fig. 24-Adjustable pinion adapter

at the front while others will have a rubberisolated propeller shaft at the rear. Universal joint angularity specifications have been modified slightly, so follow the latest service manual and bulletin information.

Needless to say we can't cover every change in one reference book. Besides, the information will be easier to digest if Tech feeds it to you session-by-session in the remaining eleven issues of the Master Technicians Service Conference. He plans an early release on disc brakes and several other interesting subjects, so be on the lookout for them.



#### **HEATERS AND ACCESSORIES**

Several changes have been made in the heaters for the 1966 models. New power seat mechanisms have been introduced and reclining seats will be offered. You probably won't run into these accessory changes and additions every day, but this serviceman's preview wouldn't be complete without at least mentioning them.

#### BELVEDERE AND CORONET HEATER

These models now have a ram-type, freshair vent on the driver's side of the car. This left-side ventilator is independent of the heater and has its own separate cable control.

The right-side fresh-air ventilator is part of

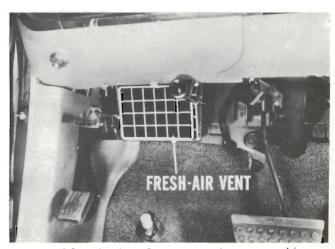


Fig. 25-Belvedere-Coronet vent for driver's side

the heater assembly. The vent control door directs fresh air into the car when it's open. When the vent is closed, it feeds fresh air into the heater.

The new Coronet-Belvedere heater is the blend-air type. The heater core is always hot. Outlet air temperature is controlled by the position of the temperature control door. Correct heater-defroster position is very important because the three door positions, "HEAT", "DEFROST" and "OFF", are covered in only about 90 degrees of door movement.

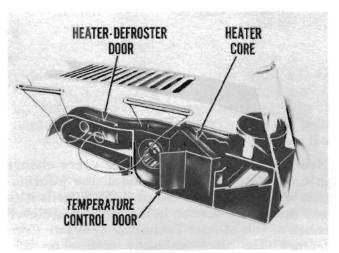


Fig. 26-Belvedere-Coronet heater control doors

Correct adjustment of the heater-defroster door is easy if you use Bowden Cable Locator Tool SP-5163. This special tool holds the heater-defroster crank arm in the correct position while you clip the control cable to its bracket. Incidentally, you'll find the Bowden

cable clip removing and installing tool, SP-5162, is worth its weight in time and tempers saved when adjusting control cables that are held in place by a spring clip. Be sure and get acquainted with this handy little tool. You'll wonder how you ever got along without it!

#### CHRYSLER REAR-SEAT HEATER

The Chrysler rear-seat heater is a combination heater, defroster, and defogger. It's a recirculating system having its own two-speed blower, its own heater core and its own vacuum-controlled water flow valve.

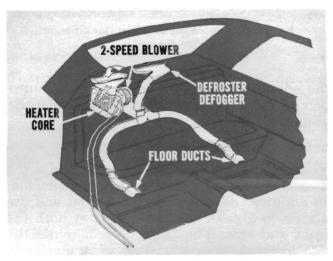


Fig. 28-Chrysler rear-seat heater

The rear-seat heater is entirely independent of the front compartment heater and has its own controls. One of the controls is an electric switch which controls the blower. Blower positions are . . . OFF . . . LOW . . . HIGH.

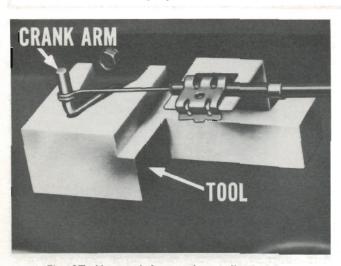


Fig. 27—Heater-defroster door adjusting tool

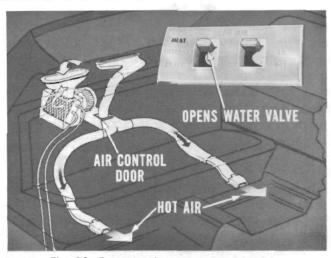


Fig. 29—Rear-seat heater, heating air flow

The other control is a vacuum switch. It controls both the water valve in the engine compartment and the air control door at the heater assembly.

When the vacuum switch is on HEAT, a vacuum actuator opens the water valve and sends hot water to the heater core. A second vacuum actuator moves the air control door so that heated air is directed downward and out through floor-level discharge ducts on either side of the rear seat.

When the vacuum switch is set for DE-FROST, the water valve actuator opens the water valve, sending hot water to the heater core. The air door actuator directs hot air upward and out through the package shelf duct to defrost the rear window.

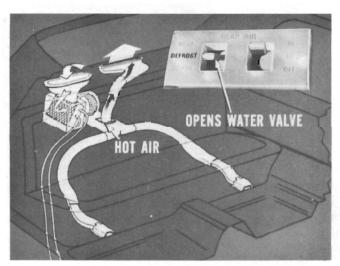


Fig. 30—Rear-seat heater, defrosting air flow

In warm weather you may want defogging without heat. When the vacuum switch is flipped to DEFOG, the vacuum actuator in the engine compartment closes the water flow valve. The actuator at the air control door directs unheated air upward and out through the defroster outlet.

#### SIX-WAY POWER SEATS

A new six-way power seat adjuster is offered this year. Horizontal movement of the seat is controlled by a rack-and-pinion mechanism. New gearing in the rack and pinion is designed to provide quieter operation. Screw jacks at the front and rear provide the up-anddown, as well as the tilt adjustment of the seat. This design reduces the free-play in the adjuster mechanism and minimizes chucking motion of the seat.

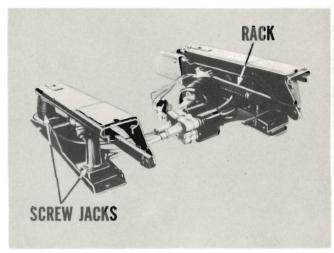


Fig. 31—New six-way power seat mechanism

#### **RECLINING SEATS**

Two new reclining seats are offered this year. They both operate something like cylinder-type storm-door closers. This design permits the front-seat passenger to adjust the seat-back through an angle of approximately 45 degrees. It also allows rear-seat passengers in two-door hardtop models to unlock the mechanism by pushing the rear seat-back forward. This, of course, makes it easy for rear-seat passengers to get out of the car. One of the reclining seat options has an adjustable headrest, the other does not.

#### IMPERIAL AUTOMATIC BEAM CHANGER

The automatic beam changer is completely new for 1966. The phototube is mounted on top of the instrument panel. The knob located at the rear of the unit permits the driver to adjust the dimming distance . . . within reasonable limits. Special tool C-4008 is required to obtain proper aiming of the phototube unit.

#### A PARTING WORD FROM TECH

This preview of the 1966 models doesn't begin to cover every new feature and all the changes in service procedures. However, it should give you a better idea of what to look for in the new models.

We'll be back with additional information in coming Master Tech sessions. In the meantime, give your customers and the sixty-six models the best of care again this year.