PONTIAC
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TRI-POWER CARBURETION INFORMATION

"TRI-POWER" CARBURETION AND EXTRA HORSEPOWER ENGINE NOW AVAILABLE

GENERAL DESCRIPTION—TRIPLE CARBURETOR OPTION

For those owners who desire something extra in the power and performance line, a triple two barrel carburetor installation has been released for the 1957 Hydra-Matic equipped Pontiac. Fig. 1 illustrates an engine equipped with triple two barrel carburetors.

This installation is made on a standard Hydra-Matic engine. Because of this and the fact that only one carburetor is used on idle and low speed operation, the unit provides the economy and excellent idling characteristic of a single two barrel carburetor. If needed, however, outstanding power and performance are available.

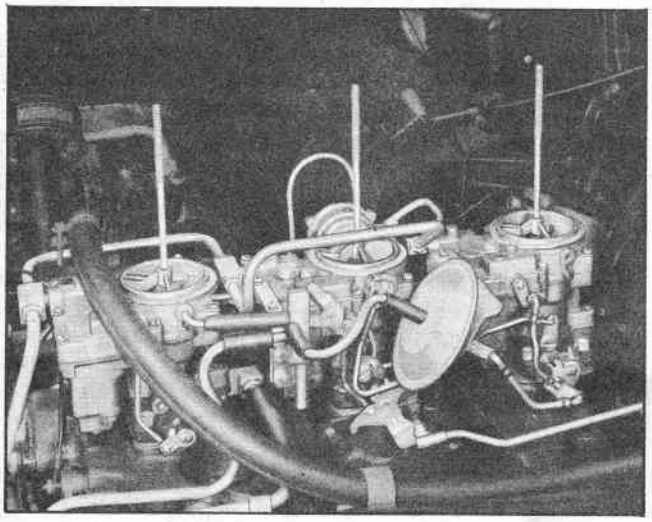

Fig. 1 Triple Two Barrel Carburetors

In this installation three Rochester 2 Jet Carburetors are mounted in tandem. The center carburetor of the trio, called the primary carburetor, contains all the conventional systems of carburetion. These are the float, idle, part throttle, power, pump and choke systems. The front and rear carburetors, called the secondary carburetors, contain only the float, pump and main metering systems.

The primary carburetor is the only one used during idle, warm-up, and part throttle operation. During idle and low speeds the two secondary carburetors are positively locked out by closing springs externally attached to the throttle shafts. The two secondary carburetors are also positively locked out, whenever the choke on the primary is on, by mechanical linkage between the primary and rear secondary carburetors. The linkage connections are shown schematically in Fig. 2.

When the primary throttle valves are opened approximately 60°, a lever on the pump arm actuates a vacuum switch (Fig. 2) which opens a vacuum line to a vacuum diaphragm (Fig. 2) mounted on the rear secondary carburetor. The vacuum diaphragm is connected mechanically by a link to the rear carburetor throttle shaft and when the diaphragm moves the throttle valves open fully. The throttle shaft on the rear carburetor is connected mechanically to the shaft on the front carburetor (Fig. 3). Therefore movement of the rear throttle shaft is transmitted directly to the front carburetor.

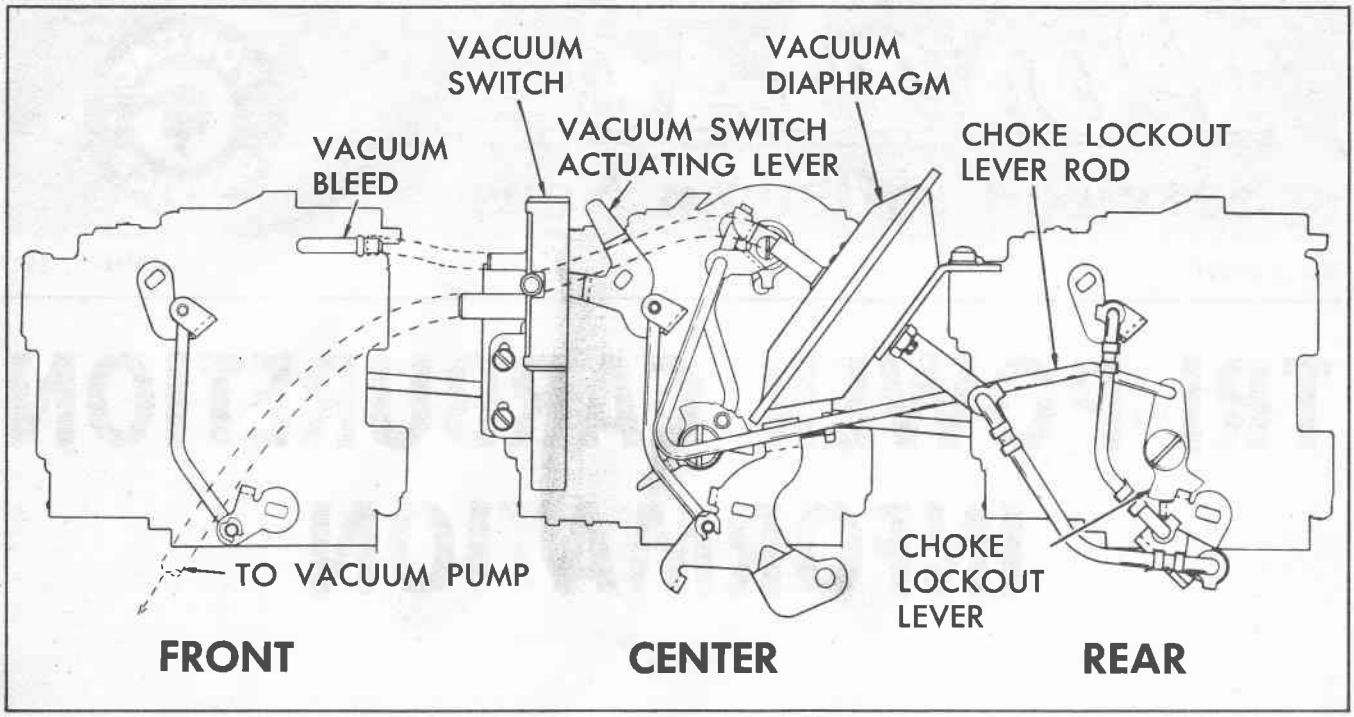

Fig. 2 Triple Two Barrel Carburetion Linkage

The vacuum source for diaphragm operation is the engine manifold and the vacuum section of the combination fuel and vacuum pump.

On deceleration the vacuum switch closes shutting off all vacuum at the diaphragm. Air is then bled from inside the carburetor air horn at the front carburetor, through another line through the vacuum switch, allowing the diaphragm to return to its normal position under spring tension. This closes the throttle valves on the front and rear carburetors.

The three Rochester carburetors used in this installation can be overhauled using essentially the same procedure as that followed on a standard Rochester 2GC Carburetor. The operation concerning the choke system would, of course, be omitted on the front and rear carburetors. When replacing jets and other parts use the Master Parts Catalog for correct parts information.

Adjustment procedures are given after the general description of the extra horsepower engine which follows.

GENERAL DESCRIPTION-EXTRA HORSEPOWER ENGINE WITH TRIPLE-CARBURETORS

Primarily for racing enthusiasts Pontiac has released an extra horsepower engine for either Synchro-Mesh or Hydra-Matic equipped cars.

The extra horsepower of this engine is the result of improved volumetric efficiency due to use of three two-barrel carburetors (described above), and camshaft timing which permits both intake and exhaust valves to remain open longer to facilitate engine breathing. A compression ratio of 10:1 (the same as on the standard Hydra-Matic transmission engine) is used on all models. As in 1956, other engine components have been modified to meet operating requirements. These include a harmonic balancer having special tuning and a generator with increased pulley diameter. Valve lifters have special tuning and valve springs have greater load capacity to insure efficient operation at higher engine speeds.

In addition to the above, many other components are different. The fan belt is longer due to the larger generator pulley; and crankcase ventilator inlet and outlet pipes as well as valve rocker arm covers are of special design. See the Master Parts Catalog for complete parts information.

Also, when a Synchro-Mesh transmission is specified, a dual breaker distributor is used. This provides longer dwell for increased voltage at the spark plugs and ignition coil, giving greater secondary output because of an increased secondary-to-primary turns ratio. The ignition coil resistor is of special design and the propeller shaft and yoke assembly is heavier construction.

The specifications found at the close of the article give the necessary electrical adjustment specifications.

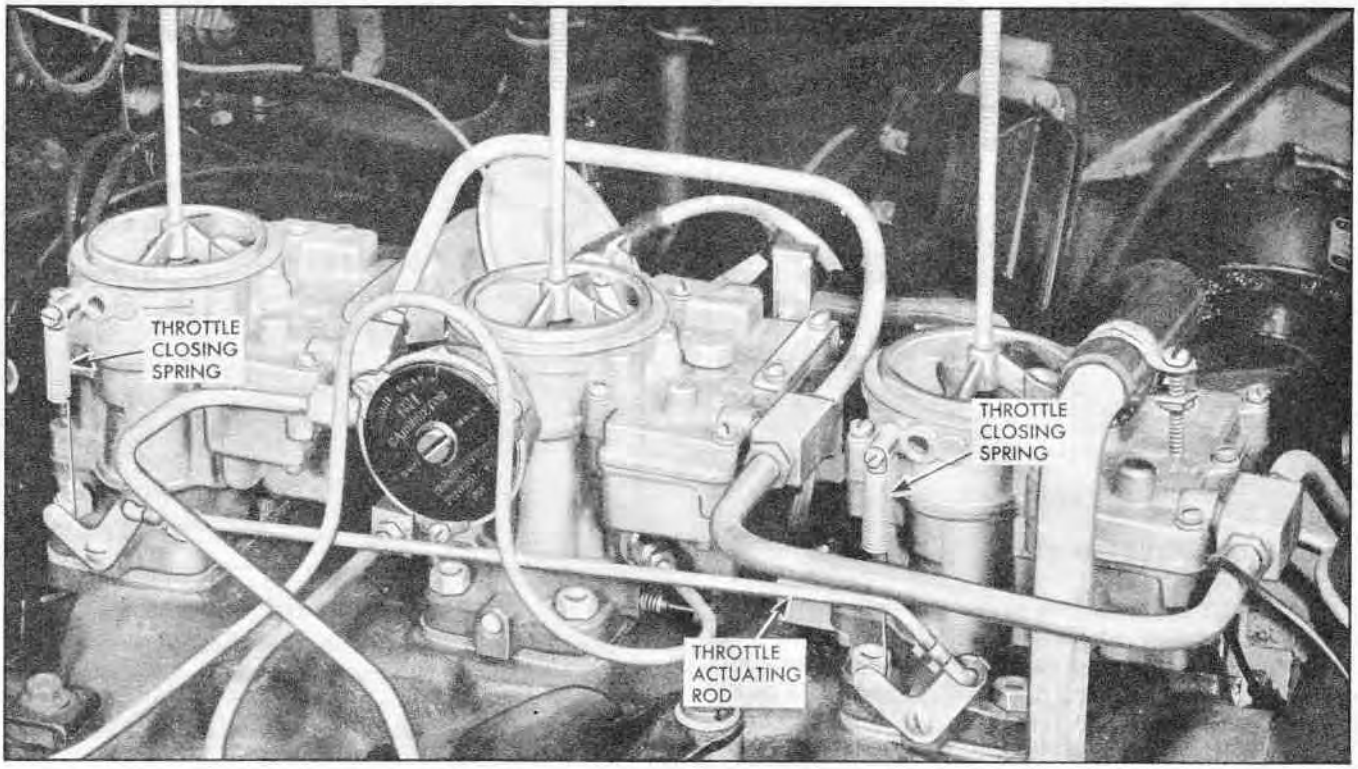

Fig. 3 Throttle Actuating Rod

In addition to the special engine parts mentioned above a number of other chassis and engine components are released primarily for NASCAR and USAC race applications. The Master Parts Catalog carries information on these parts.

CARBURETOR OVERHAUL

The three Rochester Carburetors used in this installation can be overhauled using essentially the same procedure followed on a 1956 Rochester 2GC Carburetor. Operations concerning the choke, idle, and part throttle system would, of course, be omitted on the front and rear carburetors.

CARBURETOR ADJUSTMENTS

The following adjustments are very important and should be performed in the order given.

FLOAT LEVEL ADJUSTMENT

With the air horn inverted and the gasket in place, position correct gauge (see below) over the float as shown in Fig. 4. Bend the float arm until the float just touches the bottom of the gauge.

On the center carburetor use gauge J-6877. On the front and rear carburetors use gauge J-5917. The float level on the center carburetor should be 1 15/64" $\pm$ 1/32" and on the front and rear carburetors 1 5/16" $\pm$ 1/32".

FLOAT DROP ADJUSTMENT

Check distance between air horn and bottom of float with air horn held in upright position. Float drop is correct when distance between air horn with gasket installed, and float, is 1 29/32" $\pm$ 1/8" on all three carburetors.

If adjustment is necessary, bend float tang toward float needle seat to lessen drop and away from seat to increase drop.

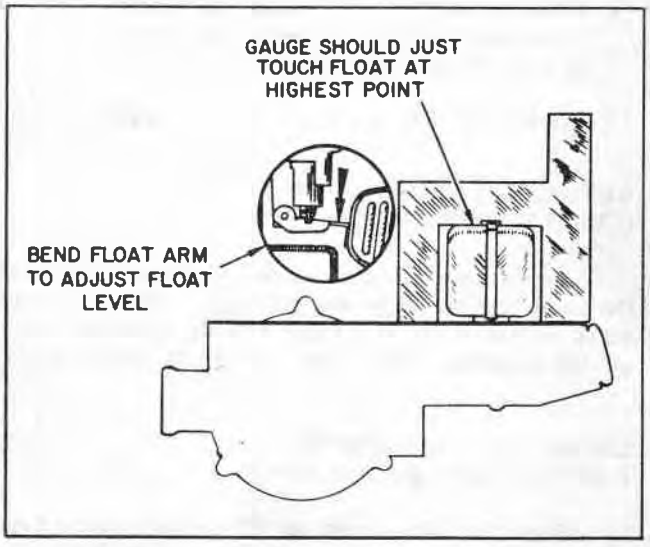

Fig. 4 Float Level Adjustment

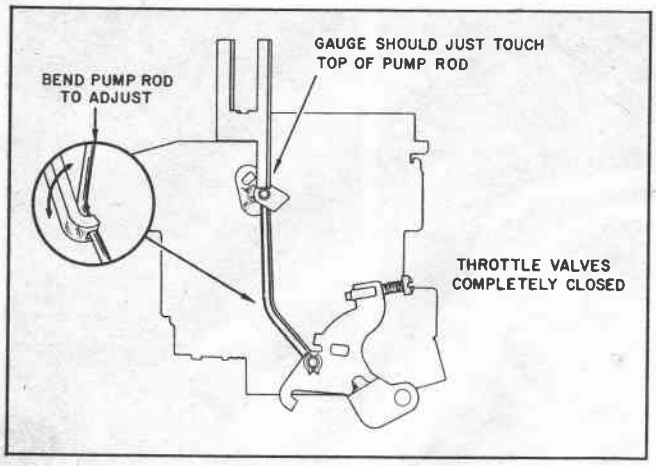

Fig. 5 Pump Rod Adjustment

PUMP ROD ADJUSTMENT

Back off the idle stop screw and hold the throttle valve completely closed. Check the distance from the top of the air horn casting to the top of the pump rod as shown in Fig. 5. Use gauge J-6877 on the center carburetor and J-5917 on the front and rear. The specifications are 15/16" ± 1/64" on the front and rear carburetors and 57/64" ± 1/64" on the center carburetor.

VACUUM SWITCH ADJUSTMENT
(CENTER CARBURETOR ONLY)

1. Loosen two screws which hold vacuum switch to bracket.
2. Make sure throttle valves are tightly closed.
3. Push movable lip on vacuum switch upward to end of travel.
4. Position switch on bracket to obtain a 1/32" clearance between bottom of lip and top surface of lower finger of pump lever (Fig. 6).
5. Holding in this position tighten screws securely.

AUTOMATIC CHOKE ADJUSTMENT
(CENTER CARBURETOR ONLY)

Loosen the three retaining screws and rotate the coil cover counter-clockwise until the index mark on the cover is in line with the specified mark on the housing. The choke setting is center index.

CHOKE ROD ADJUSTMENT
(CENTER CARBURETOR ONLY)

Place the idle screw on the second strip of the fast idle cam and against the shoulder of the high step as shown in Fig. 7. Make sure that choke trip

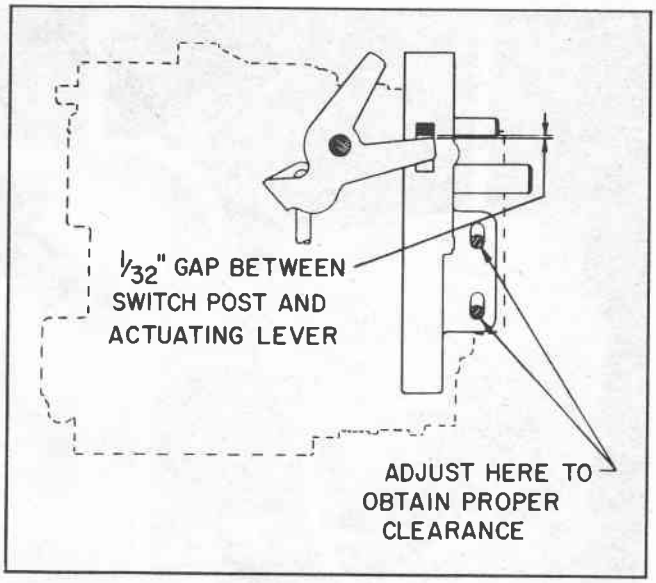

Fig. 6 Vacuum Switch Adjustment

lever is in contact with the choke counterweight lever. Bend counterweight tang so that small end of tool J-6876 just fits between the upper edge of the choke valve and the air horn wall. The adjustment specification is .051"-.071".

UNLOADER ADJUSTMENT
(CENTER CARBURETOR ONLY)

With the throttle valves held wide open (preferably by person sitting in driver's seat and depressing accelerator pedal) the choke valve should be open enough so that large end of tool J-6876 will fit freely between wall of air horn and choke valve (Fig. 8). Bend the unloader tang on the throttle lever to adjust. The adjustment specification is .143"-.183".

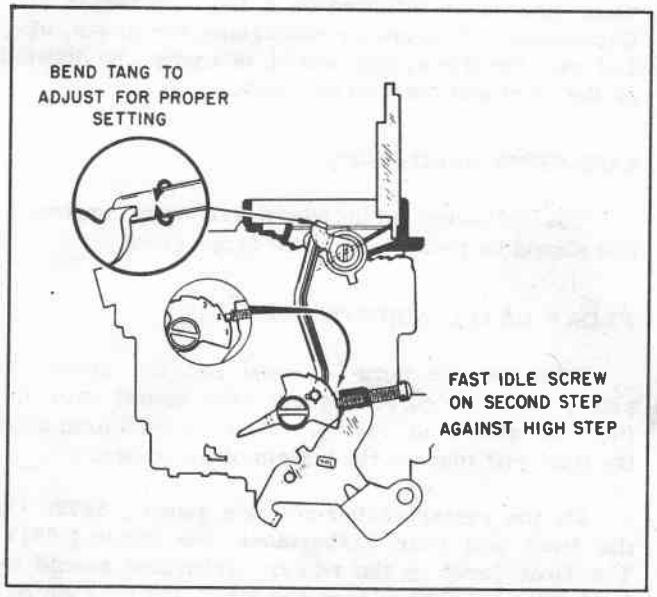

Fig. 7 Choke Rod Adjustment

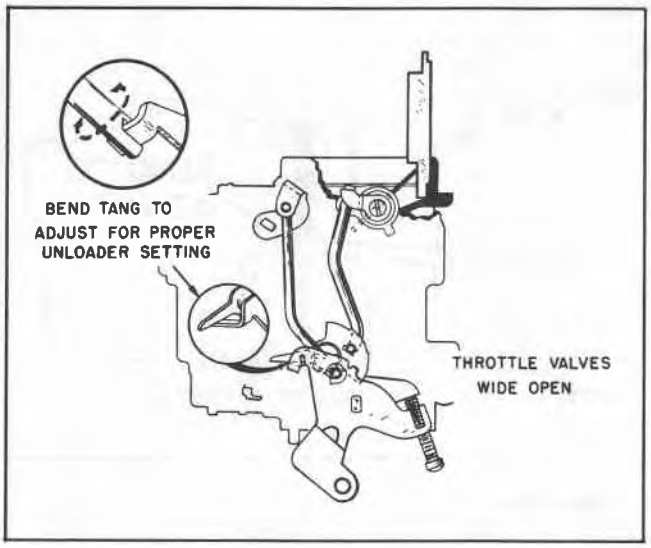

Fig. 8 Unloader Adjustment

CHOKE LOCKOUT ADJUSTMENT (REAR CARBURETOR ONLY)

This adjustment is necessary to locate the lockout lever on the rear carburetor in the proper position so that only the center carburetor will operate during choke operation. This adjustment must be made with the carburetor installed on the engine and the lockout linkage installed.

To adjust, hold the choke valve (center carburetor) in the wide open position. With the throttle valves on the rear carburetor held slightly open, (it may be necessary to remove throttle return spring to open throttle valves) there should be a clearance of .030" to .060" between the lockout lever and the throttle lever tang on the rear carburetor. Measure clearance with a feeler gauge as shown in Fig. 9 and bend the lockout rod to adjust.

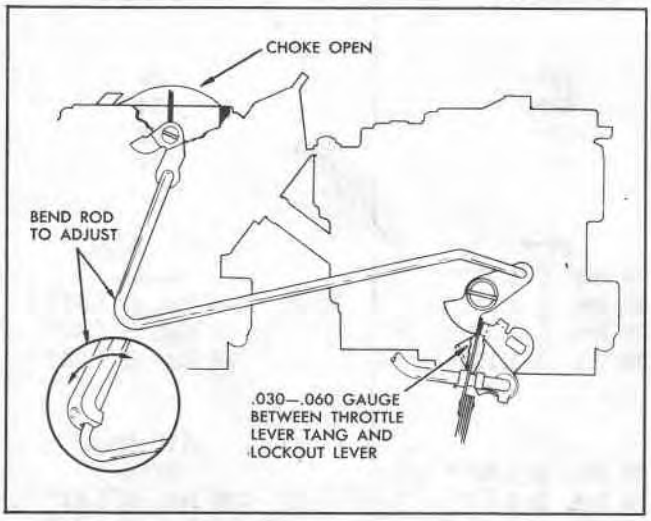

Fig. 9 Choke Lockout Adjustment

CHOKE LOCKOUT LEVER CONTOUR ADJUSTMENT

With the choke valve on the center carburetor in the closed position and the choke lockout lever rod connected, bend the lockout tang on the rear carburetor throttle lever to obtain a .015" clearance between the tang and the contour portion of the lockout lever as shown in Fig. 10.

THROTTLE ACTUATING ROD ADJUSTMENT

Disconnect the end of throttle actuating rod which connects the throttle levers on the front and rear carburetors together. With both throttle valves closed on the front and rear carburetors the rod should center in the slot in the throttle lever (Fig. 11). Bend the throttle rod to adjust. Connect throttle rod after adjustment.

IDLE SPEED AND MIXTURE ADJUSTMENT

With the engine at operating temperature adjust the idle speed on the center carburetor only to the following specification.

Triple Two Barrel	H-M	430 - 450 RPM in drive range
Extra Horsepower	H-M	430 - 450 RPM in drive range
	S-M	630 - 670 RPM

Adjust mixture on center carburetor to give smoothest possible idle at specified idle speed.

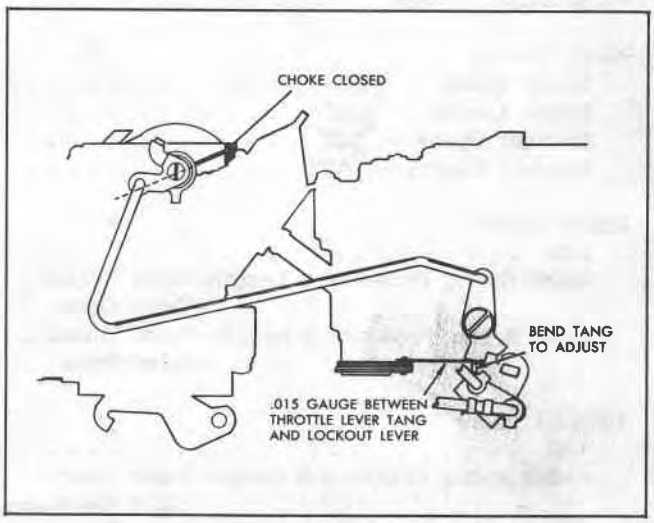

Fig. 10 Choke Lockout Lever Contour Adjustment

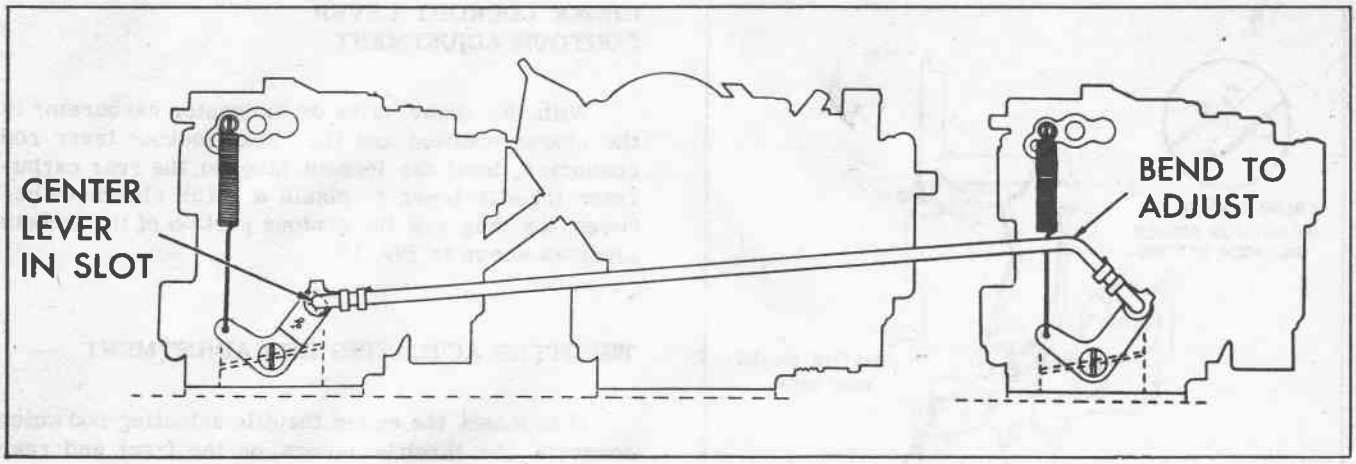

Fig. 11 Throttle Actuating Rod Adjustment

SPECIFICATIONS

	Standard Engine With Triple Carburetor Option	Extra Horsepower Engine With Triple Carburetors
Maximum BHP Engine RPM	290 @ 5000	317 @ 5200
Maximum Torque @ Engine RPM	365 @ 3200	359 @ 3600
Engine Type & No. of Cylinders	90^{o} V8*	Same
Valve Arrangement	In Head*	Same
Bore & Stroke	3.94" x 3.56"*	Same
Displacement	347 cu. in.*	Same
Compression Ratio	10.0:1	Same
Fuel Required	Premium*	Same
Valve Lifter - Type	Hydraulic*	Same
Valve Timing		
Intake Opens - ^{o}BTC	22*	29
Intake Closes - ^{o}ABC	67*	74
Exhaust Opens - ^{o}BBC	69*	82
Exhaust Closes - ^{o}ATC	31*	31
Intake Valve		
Lift	.37"*	.411" Max.
Outer Spring Pressure & Length-Valve Closed	60 lbs. @ 1.52"*	Same
-Valve Open	109 lbs. @ 1.15"*	128 lbs. @ 1.11"
Inner Spring Pressure & Length-Valve Closed	26 lbs. @ 1.48"*	32 lbs. @ 1.48"
-Valve Open	60 lbs. @ 1.12"*	96 lbs. @ 1.08"
Exhaust Valve		
Lift	.40"*	.411" Max.
Outer Spring Pressure & Length-Valve Closed	60 lbs. @ 1.52"*	Same
-Valve Open	114 lbs. @ 1.11"	128 lbs. @ 1.11"
Inner Spring Pressure & Length-Valve Closed	26 lbs. @ 1.48"*	32 lbs. @ 1.48"
-Valve Open	64 lbs. @ 1.08"	96 lbs. @ 1.08"

	Standard Engine With Triple Carburetor Option	Extra Horsepower Engine With Triple Carburetors
Carburetor		
Make	Rochester	Same
Model No. H-M Front	7011351	Same
Center	7011350	Same
Rear	7011352	Same
Model No. S-M Front	Not Used	7011351
Center	Not Used	7011500
Rear	Not Used	7011352
Upper Radiator Hose - Inside Diameter & Length	1.75" x 9.7"	Same
Engine Fan Drive Belt - Outside Diameter	56.8"	57.5"
Generator Drive Ratio (to Crankshaft)	2.47:1*	2.01:1
Engine Timing - C-S degrees @ RPM	6^{o} BTC @ 430-450	10^{o} BTC @ 630-670
Generator H-M		
Model	1100304*	Same
Generator S-M	Not Used	
Model	Not Used	1100333 (Serial No. 1100313)
Brush Spring Tension	Not Used	24 - 32 oz.
Cold Output	Not Used	25 amp @ 14 Volts, 2750 RPM
Field Current Draw	Not Used	1.5-1.62 amps @ 12 Volts 80^{o}F.
Regulator	1119000	Same
Distributor H-M †		
Model	1110871*	Same
Cent. Advance - Start (engine degrees and RPM)	0^{o} -2^{o} @ 650 RPM*	Same
Cent. Advance - Max. (engine degrees and RPM)	24^{o} -28^{o} @ 4250 RPM*	Same
Vacuum Advance - Start	6-8 in. Mercury	Same
Vacuum Advance - Max.	14-15 3/4 in. Mercury	Same
Max. Advance (engine degrees)	$22^{o} \pm 2^{o}$	Same
Distributor S-M †		
Model	Not Used	1110897
Cent. Advance - Start	Not Used	0^{o} -2^{o} @ 800 RPM
Cent. Advance - Max.	Not Used	18^{o} -22^{o} @ 3600 RPM
Vacuum Advance	Not Used	None
Dwell Angle - One Set Breakers	Not Used	$29^{o} \pm 1^{o}$
Dwell Angle - Both sets breakers	Not Used	$34^{o} \pm 1^{o}$
Breaker Lever Tension	Not Used	19-23 oz.
Condenser Capacity	Not Used	.18-.23 Mfd.
Point Opening	Not Used	.0125-.0175 in.
Ignition Coil H-M - Model	1115085*	Same
Ignition Coil S-M - Model	Not Used	1115099
Primary Resistance 75^{o}F	Not Used	1.00 - 1.16 ohms
Secondary Resistance 75^{o}F	Not Used	7500 - 10500 ohms
Amps. Engine Stopped	Not Used	4.0
Amps. Engine Idling	Not Used	1.8

All specifications marked with an asterisk (*) are the same as standard and are given for general reference only.

† On all cars equipped with triple carburetors the distributor is assembled in a position rotated one camshaft tooth counterclockwise from the standard production distributor position.

TRIPLE TWO BARREL FLAT RATE TIMES

The following are 1957 Flat Rate Times which apply to triple two barrel carburetor service. The "3" after each operation number signifies that it is to be used only for triple two barrel carburetor service.

Operation	
6-651-3	Air Cleaner Filter Element - Replace (.2) . .
6-652-3	External Linkage, Complete - Adjust (.7) . .
6-653-3	Vacuum Diaphram - Replace (.3) . . . . .
6-654-3	Vacuum Switch - Replace (.3) . . . . . Includes: Adjust
6-657-3	Carburetor Assembly, Complete - Adjust Includes: Clean Bowl, Set Float and Clean Filter Primary (1.2) . . . . . . All (1.8) . . . . .
6-660-3	Carburetor Assembly - Replace & Adjust Idle Primary (1.1) . . . . . . Front (.7) . . . . . . Rear (.6) . . . . . . All (1.5) . . . . .
6-666-3	Carburetor Assembly, Complete - Overhaul Primary (2.6) . . . . . . All (3.4) . . . . .
8-110	Intake Manifold - Replace Combination B. With Triple Carburetion Add (.7)

NOTCH INLET PIPE TO ELIMINATE FRONT PUMP STARVATION

A buzzing sound may result from Hydra-Matic front pump "starvation" when the selector lever is in drive positions, car standing, and up to speeds of 8 miles per hour. "Starvation" is usually due to the front pump intake pipe inlet being too close to the base of the screen in the oil pan. After approximately 8 miles per hour, the rear pump comes into action and the buzzing will no longer be heard.

The "starvation" can be corrected by adding a notch in the inlet end of the pipe within the screen in three or four places approximately 1/8" square. The pipe should be free of burrs and loose metal and cleaned thoroughly. Use a new "O" ring seal when performing this service. Production corrections have been made.

SEALING ROCKER ARM COVER GASKETS

Engines now being produced have rocker arm cover gaskets cemented on both the cover and cylinder head sides to provide a more complete seal against oil leakage.

This practice should also be followed in dealerships, especially when handling oil leakage complaints.

NEW TOOL FOR REMOVING STRATO-FLIGHT REAR PUMP

Removal of the Strato-Flight rear pump with the transmission in the car is very simple when using Remover J-6123. The procedure for removing the pump is as follows:

1. Raise car on hoist and drain fluid from oil pan.
2. Remove propeller shaft.
3. Remove speedometer driven gear and rear extension housing.
4. Remove breather pipe.
5. Assemble Rear Pump Remover J-6123 to rear pump and output shaft as illustrated in Fig. 12. NOTE: The remover studs thread into two pump cover screw holes.
6. Remove pump locating screw and attaching screw.
7. Turn remover screw against output shaft to pull pump out of transmission.

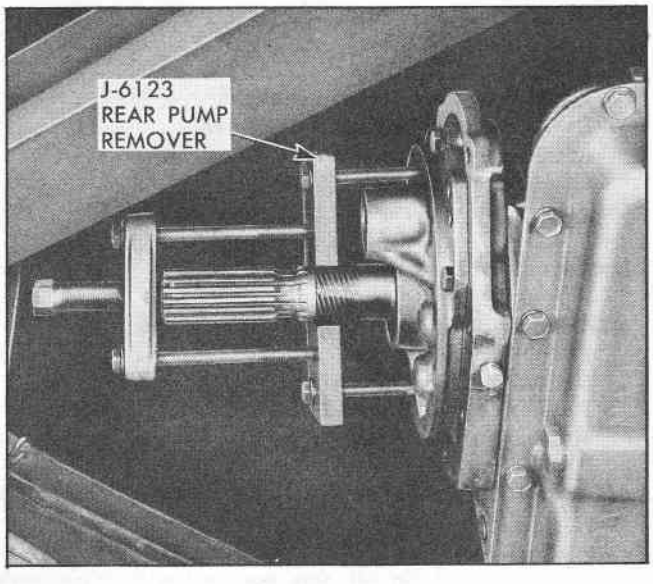

Fig. 12 Rear Pump Remover J-6123

ADVISE OWNERS OF CORRECT HEATER OPERATION

The operation of the Pontiac heater under normal conditions is as automatic as the modern home heating system. Many owners are not receiving proper performance from the heater because they do not know of the automatic control and they do not use it properly. Numerous complaints have been received that "when I move the temperature control from full-on back to normal after the car gets warm, the heater blows cold air". This condition is normal. The owner dissatisfaction is the result of improper understanding and use of the heater. The reason the heater operates this way should be clear after studying the following:

1. The heater temperature control valve is an automatic thermostat. It will regulate the temperature in the car automatically according to the position in which it is set. It functions just as automatically as the thermostat on the wall of your living room except that it is marked "LOW", "MED", and "HIGH" instead of being calibrated in degrees Fahrenheit.

The temperature of the car is controlled by regulating the flow of hot water through the heater core. Air flow remains constant regardless of water temperature. When the car is cold, the thermostat (if the "TEMP" lever is not set in the full-off position) opens the water valve allowing very close to full flow of water through the heater core (The thermostat and the water valve are both part of the temperature control valve). As the water becomes hot, thereby warming the air passing over the core, the temperature in the car will rise. When the temperature of the car reaches the temperature which the driver has pre-set by means of the temperature control lever (LOW - MED - HIGH), the thermostat will automatically partially close the water valve so that the temperature will go no higher. When the temperature control valve throttles water flow, as dictated by the temperature of the air in the car, then water flow and air flow will reach a balance where a relatively constant temperature air will leave the heater to maintain the pre-set temperature in the car.

2. When the "AIR" lever is placed in any position other than "OFF", there is a relatively constant flow of outside air through the heater. This feature provides continuous fresh air ventilation.

As the "AIR" control is moved from the "OFF" position, the valve controlling air flow through the heater is opened fully and remains this way even when the control is on "DE-ICE". The temperature of the air which is discharged from the heater is dependent upon the thermostat setting as explained in section "1".

The "AIR" control lever, when moved from "OFF" to "NORMAL" allows an increasing amount of unheated air to be discharged through the defroster nozzles. As the control is moved from "NORMAL" to "DE-ICE", heated air is mixed with unheated air in increasing amounts until at "DE-ICE" all air discharged by the defroster nozzles is heated. (In extremely cold weather it may be more comfortable to operate the heater with the air control in the "DE-ICE" position to eliminate cold air drafts from the defroster nozzles.)

The temperature of the defroster air at "DE-ICE" will, of course, vary with the thermostat setting.

3. With the Pontiac heater it is not necessary nor is it desirable to place the temperature control in the full-on position unless maximum heat is required for de-icing. This position locks the temperature control valve open, eliminating thermostatic control. FOR NORMAL OPERATION THE DRIVER SHOULD LEAVE THE CONTROL LEVER SET AT THE POINT HE HAS FOUND TO PROVIDE COMFORTABLE CAR TEMPERATURE. Very close to maximum water flow (and heat) will then be obtained until the car reaches the pre-set temperature at which time the temperature control valve will begin to regulate to maintain the set temperature. Warm-up of the car interior is almost as fast as in the full-on position.

4. If the "TEMP" control lever is set in "HIGH" position until car has warmed up and then moved back to low or medium, it is, in effect, setting the thermostat for maximum heat, say 85° or 90°, then moving it back to low heat, say 65° or 70°. Moving the lever back to the lower position cuts off the water flow entirely until the car temperature drops to the new setting, (unless the lever is moved very slowly, in small steps, over a period of five or ten minutes). THUS THE AIR BLOWING THROUGH THE HEATER WILL BE APPROXIMATELY THE SAME TEMPERATURE AS THE OUTSIDE AIR AND THE FEET MAY BECOME COLD. Eventually the car will cool down to the temperature the driver has set and water will again be regulated through the heater.

Be sure to read the article on page 16 of January, 1957, Service Craftsman News entitled "Temperature Control Valve Now Adjusted at 85°F". Early production temperature control valves may not provide a warm enough temperature, unless they are fully on, if this adjustment is not corrected. Adjustment is made through access hole in the RIGHT SIDE of the temperature control valve case, not in bottom as stated in the last issue.

NEW VENTURI CLUSTER CORRECTS SURGE CONDITION

Several reports of rough idle and/or a surge condition on the Rochester 2GC carburetor have been received. These conditions have been found to be caused by excessive leanness and can be corrected by changing the venturi cluster assembly as outlined below.

On Synchro-Mesh equipped cars the 7010603 venturi cluster has been replaced by the 7011561 cluster. On Hydra-Matic equipped cars the 7010575 venturi cluster has been modified to correct the condition. The venturi cluster assembly shipped from GMPD since January 15, 1957 is the late type. The new Hydra-Matic cluster will carry the same part number.

The late type clusters are now being used in production. The letter "A" on the carburetor tag of the 2GC equipped Hydra-Matic cars signifies that the late type cluster is used. On Synchro-Mesh equipped cars the letter "D" is used for the same purpose.

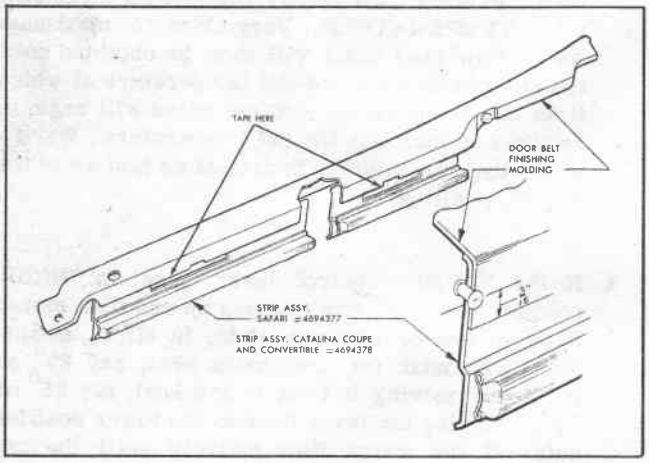

Fig. 13 Tape Notches in Door Glass Run Channel Strip

TAPE NOTCHES IN DOOR GLASS RUN CHANNEL STRIP

In the June 1956 issue of the Service Craftsman News, a story was published concerning the elimination of air and dust leaks around the door windows of convertible and safari models. At that time, a new door window glass run channel strip was released for production and service which minimized such leaks.

In order to improve the seal, it is now suggested that the notches in the run channel strip be taped (see Fig. 13). A piece of 1 inch tape should be placed on the back side of the garnish molding and strip to cover these openings.

ELIMINATION OF EXHAUST STAINS ON REAR BUMPER

Product Information Reports state that the tail pipe on standard exhaust systems may be positioned in such a manner, to direct exhaust fumes against the back face of the bumper bar. This position is incorrect. If experienced, reposition the tail pipe support bracket lower to obtain approximately 1/4" measurement below the lower flange of the face bar. This can be done by removing the rear tail pipe support bracket bolt and inserting it in one of the lower drilled frame holes and securing.

SHIFT CONTROL ADJUSTMENT PROCEDURE 1957 HYDRA-MATIC TRANSMISSION

It is suggested that every 1957 car equipped with a Hydra-Matic transmission be observed when on the lubrication rack, in the mechanic's stall, or in a dealership for service, to determine if the interlock plate shown in Fig. 14 has sufficient travel in the slot. If a car owner complains of bind or drag during Reverse operation, this car should be checked immediately.

A Neutral Clutch failure is possible, if there is not sufficient overtravel of the steering column lower shift lever beyond the Reverse detent position. If overtravel capacity is lacking and the car is operated at full throttle in Reverse range, rocking of the engine and transmission due to torque reaction can cause the transmission outer shift lever to move forward out of the Reverse detent. This can block the Neutral Clutch exhaust line, preventing release; and, with sufficient throttle opening to move the car in Reverse, can burn the Neutral Clutch plates. Also, this can happen if the full shift lever travel to the Reverse detent is not normally attained.

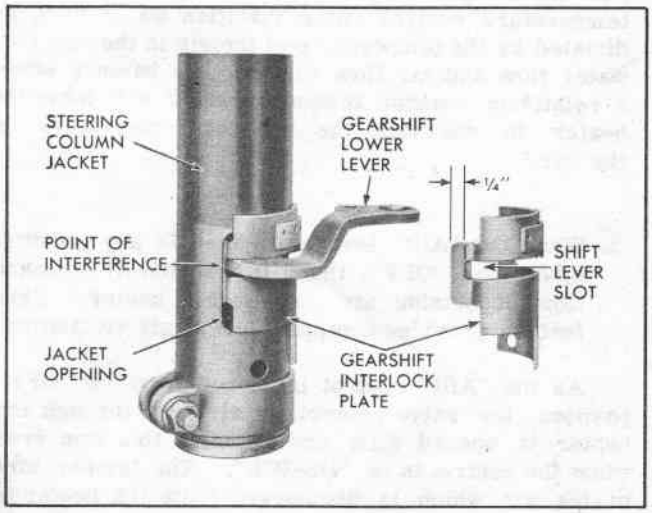

Fig. 14 Gearshift Interlock Plate

The procedure to follow in determining if the interlock plate has sufficient travel is as follows:

1. Examine interlock plate for length of shift lever slot on Reverse end of travel. Slot in plate should extend inside of jacket opening, i.e., the jacket opening should limit the travel (Fig. 14).

2. If the slot length is deficient as determined in paragraph (1), check the linkage for reserve travel of steering column lower shift lever by:

   a. Put upper shift control lever and the transmission lever in Park "P" position and, with the outer transmission shift lever trunnion nuts (Fig. 15) backed off clear of the trunnion, pull the shift rod down toward the transmission as far as possible; and, while holding in this position, run the trunnion upper nut down to just contact the trunnion.

   b. Holding shift rod, shift transmission into Reverse "R" using upper shift lever, and observe the position of upper trunnion nut.

   c. If the upper nut is short of trunnion, proceed as outlined in paragraphs (3), (4), and (5).

   d. If the upper nut is contacting trunnion, count the number of turns the upper nut can be backed off and still contact the trunnion. If less than two turns, proceed as outlined in paragraphs (3), (4), and (5). If more than two turns, screw nut down from the "just contact" position to original or starting position and tighten lower nut. The linkage will then be satisfactory.

3. If the linkage is deficient in travel at reverse position, as determined in paragraph (2), remove the interlock plate (Fig. 14) from steering column jacket and lengthen slot to within at least 1/4" (3/16" allowable) from end of plate (Fig. 14). Reinstall interlock plate.

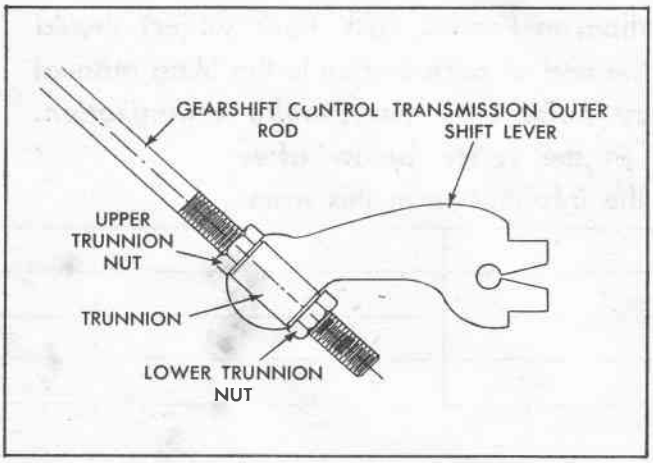

Fig. 15 Outer Shift Lever Trunnion Assembly

4. Put upper shift control lever and the transmission lever in Park position; and, with the outer transmission shift lever trunnion nuts backed clear of trunnion, pull the shift rod down toward the transmission as far as possible; and, while holding in this position, run the upper trunnion nut down to just contact the trunnion.

5. Holding the shift rod, shift transmission into Reverse "R", and observe the position of upper trunnion nut. This is important.

   If the upper nut is short of trunnion, then the transmission will be short of full travel to Reverse detent by that amount. Screw the upper nut down to just contact the trunnion and then down two additional turns to assure necessary reserve. Tighten lower nut.

   If the upper nut is contacting the trunnion, count the number of turns nut can be backed off and still contact the trunnion. If less than two turns, turn nut down two turns against the trunnion from the "just contact" position and lock the lower nut. If more than two turns, turn upper nut down against the trunnion from the "just contact" position to the original or starting position and lock lower nut.

6. After completing above adjustments, check transmission parking lock with car on ramp or grade for positive lock.

7. The shift indicator must not be off index more than .080" after linkage adjustment is completed.

Lower gearshift lever interlock plates in dealer stock can be reworked for service by increasing slot as shown in Fig. 14.

If it is necessary to rework the interlock plate and adjust linkage, the suggested straight time for performing this operation is 1.0 hour.

1957 AIR CONDITIONING AIR FILTER HOUSING ASSEMBLY

Product Information Reports have indicated a poor fit along the left side of the air filter housing assembly to the dash shroud on some cars built in production. This may also result when making field installations.

Whenever this condition is noted, body sealer or sponge rubber may be used to fill the unsealed area.

Your Product Information Reports have prompted an immediate Engineering and Production change and all cars currently manufactured have this condition corrected.

AIR CONDITIONING FILTER COATING MATERIAL APPROVED

A new adhesive oil has been approved for coating the air conditioning filter. This material "RP" handi-koter" oil is available in a "standard" or "de-orderized" oil. It is made by Research Products Corporation, Madison 10, Wisconsin. If this oil can not be procured locally, it may be obtained direct from the manufacturer.

HIGHER "WINDSPLIT" ADDS STRENGTH TO HOOD

The height of the "windsplit" down the center of the hood has been increased. This adds to the rigidity of the panel and enhances appearance. Service personnel should be warned that careless use of polishing equipment over the "windsplit" will remove paint and cause unsightly appearance.

INSPECT CARS DELIVERED BY CARRIERS

When accepting new cars from the carrier, an inspection should be made of the underside for damage that could have occurred during loading or unloading.

It has been determined that some of the ramps used by transport vehicles have high trough or guide rails. It is possible to scrape the fuel line on the forward part of the frame and cause damage. The underseat heater pipes and hose also may be damaged.

Please note this information on the carrier receipt before signing for the car if this condition occurs and inform the zone office of the truck transport trailer name and number immediately.

CORRECTION OF SAFARI MODEL WATER AND DUST LEAKS

One source of water and dust leaks in the rear quarter section of the 1957 Safari models is due to improper welding of the rear quarter side inner panel, wheel housing panel, and floor pan.

Water leaking into the car at this point will soak the wind cord, floor carpet and in some cases the seat cushion.

A very satisfactory correction for this condition is to form the panels together at the flange in the wheel housing then install self-tapping screws and finish off by sealing.

ALUMINUM SCREEN ADDED IN OIL PAN OF STRATO-FLIGHT

An aluminum screen has been installed in the bottom pan of 1957 Hydra-Matic transmissions numbers P57-128240 through 129190 to act as another baffle in addition to the regular oil screen to control foreign matter.

In case of failure of one of these transmissions, inspect the aluminum screen to determine its effectiveness in eliminating the circulation of foreign matter through the transmission and forward findings on Product Information Report.

This special aluminum screen will not be available as a service part.

SERVICE MANAGER—IMPORTANT

This News contains important service information on Pontiac cars. Each subject should be cross-referenced in the space provided at the end of each section in the Shop Manual or its Supplement. ***Be sure and cover every point with your entire organization.***

Each service man should sign in the space below after he has read and understands the information in this issue.
