

PONTIAC



Service Craftsman News

No. 7 S-285

July, 1956

NEW STRATO-FLIGHT CONTROL VALVE ASSEMBLY USED

STRATO-FLIGHT CONTROL VALVE ASSEMBLY CHANGED

Several important changes have been made in the shift valve body and the overrun clutch valve body. These changes took effect with transmission serial no. P56-170202.

SHIFT VALVE BODY

A spring has been added in front of the governor boost valve. The spring improves the operation of the valve and assists in preventing delayed 1-2 shifts with cold oil.

OVERRUN CLUTCH VALVE BODY

The coupling valve has been redesigned to further aid in preventing delayed 1-2 shifts with cold oil. The new coupling valve assembly has two springs, and a larger diameter plug.

The overrun clutch valve is now controlled by governor boost pressure on one end working against a spring at the other end. At speeds under approximately 5 MPH the spring holds the valve to the left cutting off reverse oil to the overrun clutch (Fig. 1). Eliminating the overrun clutch application prevents starvation of the reverse clutch when shifting to reverse since it is not necessary to fill the relatively large volume behind the overrun clutch piston. A much firmer reverse clutch application results, which eliminates the grunt which was previously noticed in some transmissions. At speeds above 5 MPH the overrun clutch valve moves to the right to allow application of the overrun clutch (Fig. 2).

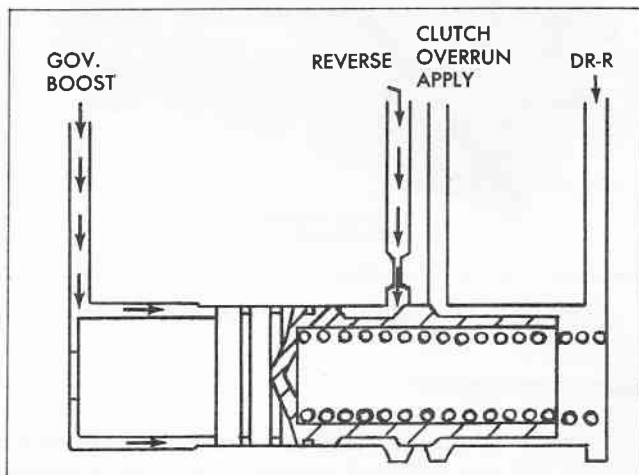


Fig. 1 Overrun Clutch Valve Below 5 MPH

EDITOR'S NOTE: The fourth 1956 Service Craftsman Examination is included in this issue. Remove the examination, complete and return to the Zone Office by Sept. 15, 1956

This issue also contains an index of the January through June 1956 Service Craftsman News Articles. Place this index in the front of your Service Craftsman News Binder.

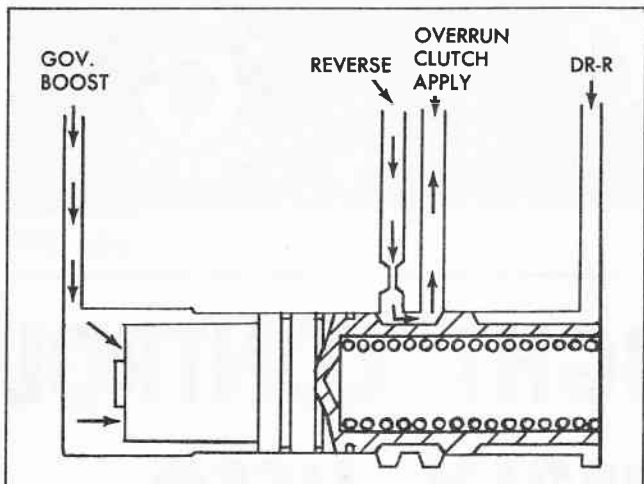


Fig. 2 Overrun Clutch Valve Above 5 MPH

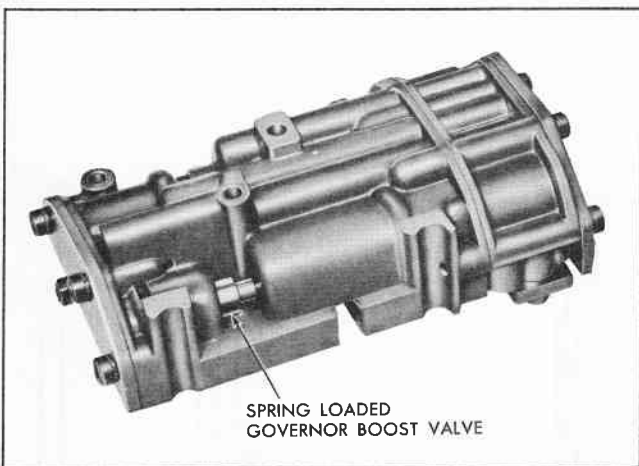


Fig. 3 Second Type Service Shift Valve Body

INTERCHANGEABILITY

There have been two types of service shift valve bodies and two types of service clutch valve bodies used since the beginning of production. The service part numbers of these assemblies:

	1st	2nd
Shift Valve Body Assembly -		
Service Part No.	8616920	8606963
Overrun Clutch Valve Body		
Assembly - Service Part No.	8606901	8606957

The 2nd type service shift valve body has the new governor boost valve with the spring which results in higher governor boost pressure than in the 1st type. If this 2nd type is installed on an assembly having the 1st type overrun clutch valve body, the spring must be removed from the governor boost valve so that it will put out the proper pressure to operate the early type coupling valves.

When the 2nd type service overrun clutch valve body is installed in place of the 1st type, the shift valve body must also be changed to the 2nd type.

IDENTIFICATION

Service parts can be identified by the part numbers listed above. Visual inspection of the shift valve body on the transmission will show whether it is the 2nd type (with spring) or the 1st type (no spring). The valve will appear as shown in Fig. 3 on the 2nd type and the spring tension can be felt. On the 1st type the valve may or may not be visible, but it will be obvious that there is no spring tension.

When it has been determined which type shift valve body is on a control valve assembly, it can be assumed that the overrun clutch valve body is of the same type. If necessary to determine the type of overrun clutch valve body, the only method is by removing the rear plate which compresses the limit valve springs. It can then be determined whether the coupling valve plug is the 2nd type and whether there are one or two coupling valve springs (Fig. 4).

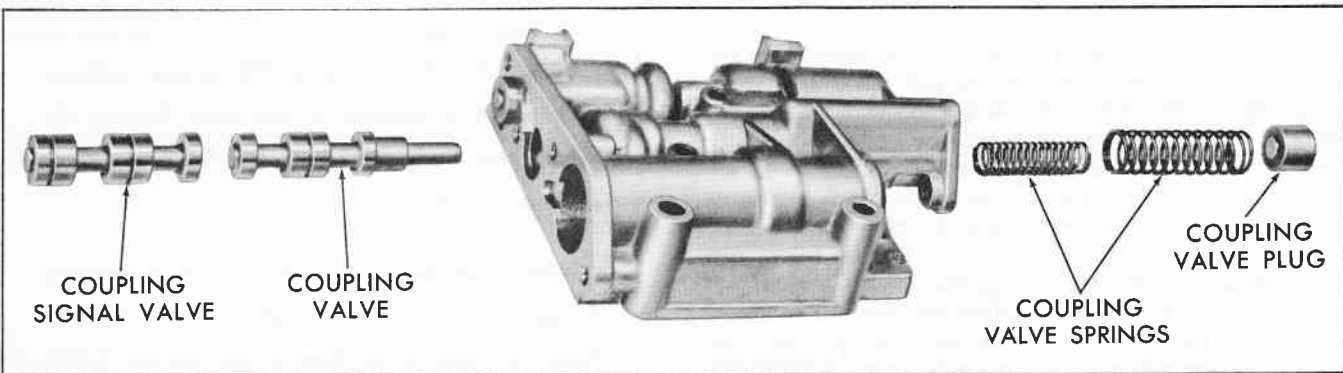


Fig. 4 Second Type Service Overrun Clutch Valve Body

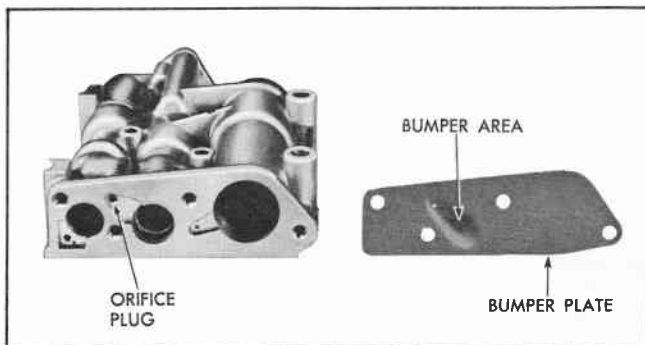


Fig. 5 Overrun Clutch Valve Body

LOW SPEED CLICK IN STRATO-FLIGHT HYDRA-MATIC

A few cases have been encountered where the Strato-Flight transmission will emit a clicking noise when operating at very low speeds. The noise will usually occur just before the transmission shifts from 1st to 2nd, and is made by the coupling valve.

It is caused by variations in G-1 pressure due to the effect of the weight of the G-1 valve when it rotates from top to bottom. These pressure variations are amplified by the governor boost valve and directed to the end of the coupling valve. The coupling valve will be caused to oscillate, striking the overrun clutch valve body front plate and giving out a clicking noise.

This clicking noise can be eliminated by the installation of "Transmission Control Valve Body Repair Kit" Part No. 8616949. The repair kit consists of an orificed plug to reduce the pulsations in governor boost pressure at the coupling valve and a bumper plate to cushion the oscillations of the coupling valve.

The orificed plug should be installed in the governor boost passage in the overrun clutch valve body as shown in Fig. 5.

The bumper plate should be installed under the front plate of the overrun clutch valve body so that the coupling valve will strike it instead of the plate.

LUBRICATION OF ACTUATOR JACK SCREW ON SIX-WAY POWER OPERATED SEAT ADJUSTER

If the actuator jack screw on a six-way power operated seat adjuster requires lubrication, thoroughly wipe off the old lubricant to remove the dirt which may have accumulated on the jack screw. Then apply Lubriplate #630 AA-W (winter grade) lubricant or its equivalent to the jack screw using caution not to soil trim material. Operate the seat adjuster to the limit of all positions. Then wipe off excess lubricant.

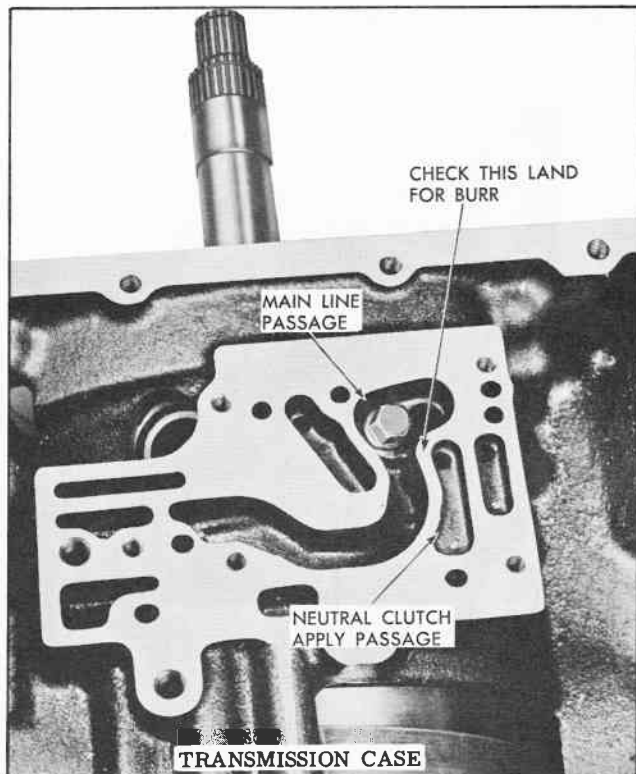


Fig. 6 Transmission Case

LOCK-UP WHEN SHIFTING STRATO-FLIGHT FROM DRIVE TO REVERSE

Several instances have been reported in which Strato-Flight transmissions lock up when shifted from drive or low range to reverse, but shift normally from neutral or park to reverse.

Investigation of this complaint has disclosed a nick or burr on the case land shown in Fig. 6. This nick allows main line pressure to bleed into the neutral clutch apply passage. The effect of this leak is to slow down the release of the neutral clutch causing a momentary lock-up when the transmission is shifted from drive to reverse.

When a complaint of this nature is encountered, remove the control valve assembly and check for damage at the location shown in Fig. 6. If a burr is found, remove it by stoning. Also check the spacer plate and replace it if it has been damaged by the burr.

REAR SPEAKER CONTROL IN NEW POSITION ON CARS WITH AIR CONDITIONING

Originally the rear speaker control was located on top of the instrument panel on cars with air conditioning. Because of many objections to this location, the rear speaker control is now being installed on the underside of the glove compartment on cars equipped with air conditioning.

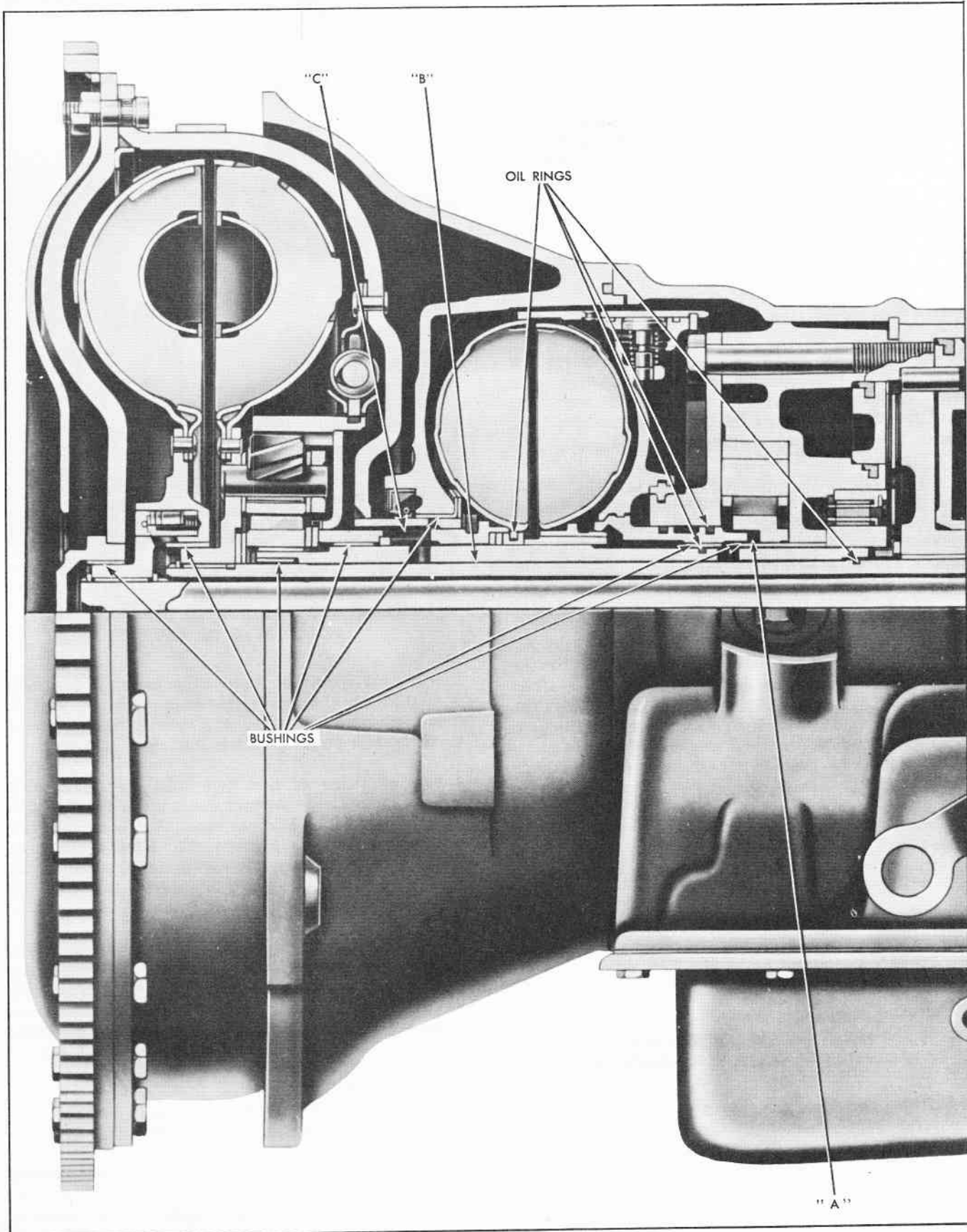


Fig. 7 Cutaway View of Strato-Flight Hydramatic

DIAGNOSIS AND CORRECTION OF STRATO-FLIGHT TORUS DRAIN BACK

Occasionally a Strato-Flight Hydra-Matic transmission is encountered which will not drive the car for several seconds after the engine is started. This condition is usually noticed when the car has been parked for a considerable time, such as overnight.

The momentary failure to drive may be caused by the fact that a large portion of the fluid has drained back from the main fluid coupling. Since the points of leakage which have caused the fluid to drain back will also leak when the coupling is being filled, there will be a delay in refilling the coupling when the engine is started. As soon as the coupling is filled, it will function satisfactorily until it has again been parked for several hours.

To become familiar with the points at which leakage or drain back can occur, it is necessary to understand the flow of oil to the main fluid coupling. Actually the same bushings and oil rings which cause drain back are those which will cause leakage when the coupling is being filled.

TORUS FEED

Torus feed oil which originates at the front pump, passes through the torus feed valve to the oil cooler and then back through the pump cover to emerge into the torus supply line at "A" in Fig. 7. The oil then passes around the rear end of the front unit coupling cover, through holes in the front unit driven torus shaft and into space "B" around the intermediate shaft.

Oil passes forward along the outer diameter of the intermediate shaft to the holes near the front of the front unit coupling driven torus shaft. From there the oil passes up around the front end of the front unit coupling drive torus hub, between the hub of the internal gear and the hub of the torus cover (area "C"), and into the main torus.

When the torus has filled completely and develops a pressure of approximately 30 lbs., the torus check valve opens allowing oil to flow along the mainshaft for lubrication.

POSSIBLE POINTS OF DRAINBACK

Careful study of Fig. 7 will reveal the bushings and oil rings which control the flow of oil from the pump to the torus members. They are as follows:

Area "A"

Oil is sealed from leaking out of area "A" by the rear oil ring on the hub of the front unit coupling

cover and the bushing on the inside of the same hub, the hook type oil ring on the front unit driven torus shaft, and the bushings in the front pump body and rotor.

Area "B"

Area "B" is sealed at the rear by the hook type oil ring on the intermediate shaft just in front of the case center support. At the front it is sealed by the bushing inside the front of the front unit coupling driven torus shaft.

Area "C"

Area "C" is sealed by the bushing inside the front unit internal gear, the bushing in the flywheel rear housing and the oil ring on the front unit coupling driven torus shaft inside the drive torus.

Fluid Coupling

The fluid coupling is sealed (internally) by the pilot bushing inside the hub of the flywheel, by the torus check valve, and by the bushing in the hub of the driven torus member.

Front Pump

Two additional areas of possible trouble which are not shown are the torus feed valve in the front pump and the oil cooler sleeve seals. If the torus feed valve should stick closed, it would cut off the feed to the torus entirely. If it should stick open the torus oil will drain back very rapidly.

While it is considered that oil is sealed by the above mentioned bushings and oil rings, actually there are "controlled leaks" at all these points. If the clearances become excessive, however, due to wear or damage, the leaks can become great enough to impair the filling of the torus. The result will be excessive drain back, slow filling, and a delay in drive after starting the engine.

AVAILABLE AIR CONDITIONING TOOLS

J-6587 Spiral Hack Saw Blade (5 foot length)	\$1.00
J-6588 Hack Saw Frame Adapters	\$.50

The spiral hack saw blade saves a great deal of time and enables clean and accurate work when cutting holes in the instrument panel for air conditioning unit installations. The adapters are designed so most types of hack saw frames may be used with the spiral blade.

These tools may be ordered direct from Kent-Moore Organization, 1501 South Jackson Street, Jackson, Michigan.

ZIPPER REPAIR KIT NOW AVAILABLE FOR SERVICE

A new special tool, Zip kit J-6550, has been released to aid service men in performing convertible top zipper repairs. The use of this kit permits on the car repair of zippers in minutes compared to the lengthy repairs, expensive replacements and sub-lets now in practice.

Following is a list of some of the repair operations that can be easily done with this kit.

1. Opening jammed sliders.
2. Replacing defective sliders.
3. Replacing defective or missing zipper teeth.
4. Re-meshing open zipper.
5. Replacing zipper end stops.

The kit provides all tools and spare parts necessary for performing the above operations. Simple and complete illustrated instructions are included in each package. Additional supplies of parts are also available.

The kit should be ordered from Kent-Moore Organization.

HEAVY DUTY AIR CLEANER OIL VISCOSITY

IF THE AVERAGE OUTSIDE AIR TEMPERATURES ARE ABOVE 32°F THE USE OF SAE 50 VISCOSITY OIL IS REQUIRED IN THE OIL BATH AIR CLEANER. Average temperatures of below 32°F require the use of SAE 20W oil.

The use of an oil "lighter" than specified will result in oil being drawn through the cleaner into the engine combustion chamber causing sparkplug fouling and poor performance. Improper oil will also contribute to exhaust smudging of the bumper face bar at the exhaust outlet. The same condition will be experienced if the oil level is too high in the air cleaner. The proper level is indicated on the inside of the reservoir.

These recommendations are covered on Page 38 of the Pontiac Owner's Guide and Page 0-5 of the 1956 Pontiac Shop Manual.

ELIMINATION OF FLUID LEAKS AT STRATO-FLIGHT FILLER TUBE

A new "O" ring seal and a new filler tube sleeve have been released to minimize the possibility of leaks at this location. The new seal is thicker to provide more compression and the new sleeve has a .010" larger inside diameter to make sure the tube will compress the seal evenly all the way around. The new parts are serviced under package no. 8616956.

When a leak is encountered at the point where the filler tube enters the sleeve, the new sleeve and seal should be installed as follows:

1. Drain fluid and remove filler tube from transmission.
2. Remove filler tube sleeve and seal from transmission case.
3. Install new "O" ring seal from package no. 8616956.
4. Install new sleeve from package no. 8616956 and tap into case until it touches "O" ring in case.
5. Insert filler tube into sleeve until flange on tube seats against sleeve.
6. Clamp filler tube securely to cylinder head and replace fluid.

CORRECTION OF COMPRESSOR NOISE ON AIR CONDITIONED CARS

It has been reported that a low siren type noise appears to be coming from the compressor when the air conditioning system is cooling. This noise is only evident when the compressor operates.

Moving the doughnut type rubber spacer which is around the discharge hose (located just behind the radiator to fender upper brace) back towards the fire wall about 9" will prevent the discharge hose from vibrating against the fender skirt, thereby reducing this noise to where it is barely audible.

After repositioning this rubber spacer, make sure that the screws protruding through the fender skirt just behind the radiator to fender upper brace do not chafe the discharge hose. Wrap retaining screws as necessary to protect from chaffing discharge hose.

Corrections have been made in Production and, in the future, cars with air conditioning will have two spacers: one as indicated above and one just behind the radiator to fender upper brace.

DELCO BATTERY WARRANTY AND ADJUSTMENT

The following information (Pages 39, 40, 41) on Delco Battery Warranty and Adjustments is printed for information and aid on matters pertaining to battery adjustments.

The information is as correct as possible at time of publication but is subject to change without notice.

For complete information see the battery section of the parts price schedule.

DELCO BATTERY SPECIFICATION CHART

Delco Group No.	Part No.	Delco Type	Sugg. List Price	W—Wet D—Dry	MONTHS of Warranty	20 Hour Rating in Amp. Hrs.	CAPACITY RATINGS		DIMENSIONS		
							All 6-Volt No. of Min. 300 Amp. at 0° F.	All 6-Volt 5 Sec. Voltage 300 Amp. at 0° F.	Length	Width	Height
							All 12-Volt No. of Min. 150 Amp. at 0° F.	All 12-Volt 5 Sec. Voltage 150 Amp. at 0° F.			
1	1890497	1M70	\$14.45	W	18	70	2.2	3.6	8 ¹ / ₄ "	6 ³ / ₄ "	8 ³ / ₄ "
	1890678	1M72	17.75	D	24	72	2.2	3.8	8 ¹ / ₄ "	6 ³ / ₄ "	7 ¹ / ₂ "
	1890573	1MR105	23.95	D	36	105	3.7	4.4	9 ¹ / ₂ "	7 ¹ / ₂ "	8 ³ / ₄ "
	1890539	1HR115	29.95	D	48	115	4.5	4.5	8 ¹ / ₄ "	6 ³ / ₄ "	8 ⁷ / ₂ "
2L	1890498	2L70	14.45	W	18	70	2.2	3.6	10 ¹ / ₂ "	6 ³ / ₄ "	8"
	1890679	2L72	17.75	D	24	72	2.2	3.8	10 ¹ / ₂ "	6 ³ / ₄ "	7 ¹ / ₂ "
2	1890376	17K	22.95	W	21	115	4.3	4.4	10 ³ / ₄ "	7 ³ / ₂ "	9 ¹ / ₂ "
	1890584	2MR120	26.95	D	36	120	4.5	4.5	10 ³ / ₄ "	7 ¹ / ₂ "	8 ³ / ₄ "
	1890506	2HR130	32.95	W	48	130	5.3	4.5	10 ³ / ₄ "	6 ³ / ₄ "	9 ¹ / ₂ "
2E	1890681	2E92	20.95	D	24	92	2.8	4.1	19 ¹ / ₂ "	3 ⁵ / ₄ "	7 ¹ / ₂ "
	1890576	2ER120	27.95	D	36	120	4.5	4.5	19 ¹ / ₂ "	4 ¹ / ₂ "	8 ⁷ / ₂ "
	1890542	2ER130	34.75	D	48	130	5.3	4.5	19 ¹ / ₂ "	3 ⁵ / ₄ "	8 ⁷ / ₂ "
3EM	1890485	3EM60	27.95	W	21	60	4.4	8.6	19 ¹ / ₂ "	4 ¹ / ₂ "	8 ⁷ / ₂ "
	1890594	3EMR62	32.95	D	36	62	4.4	9.2	19 ¹ / ₂ "	4 ¹ / ₂ "	8 ⁷ / ₂ "
	1890473	3EM70	31.95	W	24	70	5.8	9.0	19 ¹ / ₂ "	4 ¹ / ₂ "	8 ⁷ / ₂ "
	1890609	3EMR70	36.95	D	36	70	5.8	9.4	19 ¹ / ₂ "	4 ¹ / ₂ "	8 ⁷ / ₂ "
3KM	1890481	3KM60	27.95	W	21	60	4.4	8.6	13 ¹ / ₂ "	6 ¹ / ₄ "	8 ⁷ / ₂ "
	1890598	3KMR62	32.95	D	36	62	4.4	9.2	13 ¹ / ₂ "	6 ¹ / ₄ "	8 ⁷ / ₂ "
2SM	1890590	2SMR53	29.95	D	36	53	3.8	8.9	10 ¹ / ₄ "	6 ¹ / ₂ "	8 ⁷ / ₂ "
	1890563	2SMR60	34.95	D	48	60	4.4	9.2	10 ¹ / ₄ "	6 ¹ / ₂ "	7 ¹ / ₂ "
3SM	1890569	3SMR72	38.95	D	48	72	6.0	9.6	12 ¹ / ₂ "	6 ¹ / ₂ "	8 ⁷ / ₂ "

DELCO BATTERY STANDARD WARRANTY AND ADJUSTMENT POLICY

- 90 DAY WARRANTY.** All Delco batteries are warranted to be free from defects in material and workmanship. Should a defect (not merely discharge) become apparent within the first 90 days of usage, the battery will be repaired or replaced, at the option of the manufacturer, free of charge. This repair or replacement will be made by any authorized dealer of Delco batteries.
- ADJUSTED SERVICE POLICY.** Should a defect become apparent after 90 days in any type of Delco battery, it can be exchanged for a new Delco battery on an adjusted service or pro-rata life basis. Charges to the owner are determined by the actual number of months of service delivered by the Delco battery needing replacement. The Delco Battery Warranty and Adjustment Policy starts from the date of installation of a new Delco battery, or date of delivery of a new vehicle equipped with a Delco battery.
- MONTHS OF SERVICE.** The service received from a Delco Battery is measured in months of service determined by the type of service in which a battery has been used.
- The Delco Battery Standard Warranty and Adjustment Policy Certificate will be issued only to the purchaser of a new Delco Battery or to the purchaser of a new vehicle equipped with a Delco Battery. The battery must be registered and a certificate issued by a Delco Battery Distributor or Dealer immediately.
- Adjustment is authorized on a Delco Battery when the Certificate is presented and delivered at time adjustment is claimed by the customer. In the event a customer has lost his certificate or one was never issued, the Dealer can issue one at time of adjustment. The certificate should be dated as of the date the battery was purchased or as of the date the new vehicle was purchased and completed in the usual manner. All adjustments to be based on user's current buying price.
- Failures in service due to fire, wreckage, freezing, neglect, abuse, failure to have battery inspected and filled with approved water periodically, use of an electrolyte other than recommended by the manufacturer, or the use of a battery of a group size smaller than the battery used by the vehicle manufacturer, are not covered by the Warranty and Adjustment Policy.

DELCO BATTERY WARRANTY AND ADJUSTMENTS

G. M. Part No.	Delco Type	Passenger Cars & Trucks Thru One Ton		Farm & Industrial Tractors With Generators		Highway Vehicles Over One Ton, Taxicabs, Police Cars & All Others	
		Months of Warranty	Users Cost Per Month	Months of Warranty	Users Cost Per Month	Months of Warranty	Users Cost Per Month
1890497	1M70	18	.80	12	1.20	9	1.61
1890498	2L70	18	.80	12	1.20	9	1.61
	2M90	18	.99	12	1.48	9	1.97
	2E90	18	.99	12	1.48	9	1.97
	13AK	18	.89	12	1.33	9	1.77
	15AJ	18	.98	12	1.47	9	1.96
	2L90	18	1.00	12	1.50	9	1.99
	3EM45	18	1.16	12	1.75	9	2.33
	15AA	21	.95	21	.95	11	1.81
	17P	21	1.00	14	1.50	11	1.90
1890376	17K	21	1.09	21	1.09	11	2.09
	15E	21	.95	21	.95	11	1.81
	17E	21	1.14	21	1.14	11	2.18
1890485	3EM60	21	1.33	14	2.00	11	2.54
1890481	3KM60	21	1.33	14	2.00	11	2.54
	2SM50	21	1.26	14	1.89	11	2.41
1890678	1M72	24	.74	16	1.11	12	1.48
1890679	2L72	24	.74	16	1.11	12	1.48
1890680	2M92	24	.87	16	1.31	12	1.75
1890681	2E92	24	.87	16	1.31	12	1.75
1890700	2SM41	24	1.00	16	1.50	12	2.00
1890668	3EM46	24	1.00	16	1.50	12	2.00
1890702	3KM46	24	1.00	16	1.50	12	2.00
	1H13	24	.90	16	1.34	12	1.79
	17Q	24	1.00	16	1.50	12	2.00
	2H15	24	1.00	16	1.51	12	2.01
	19Q	24	1.12	16	1.68	12	2.25
	19E	24	1.12	16	1.68	12	2.25
1890473	3EM70	24	1.33	16	2.00	12	2.66
	3SM70	24	1.44	16	2.16	12	2.88
	17QR	30	.89	20	1.33	15	1.77
	19QR	30	1.00	20	1.50	15	2.00
	19ER	30	1.00	20	1.50	15	2.00
1890573	1MR105	36	.67	24	1.00	18	1.33
	2LR105	36	.69	24	1.04	18	1.39
1890584	2MR120	36	.75	24	1.12	18	1.50
1890576	2ER120	36	.78	24	1.16	18	1.55
1890590	2SMR53	36	.83	24	1.25	18	1.66
1890594	3EMR62	36	.92	24	1.37	18	1.83
1890598	3KMR62	36	.92	24	1.37	18	1.83
1890609	3EMR70	36	1.03	24	1.54	18	2.05
1890539	1HR115	48	.62	32	.94	24	1.25
	2LR115	48	.62	32	.94	24	1.25
1890506	2HR130	48	.69	32	1.03	24	1.37
1890542	2ER130	48	.72	32	1.09	24	1.45
1890563	2SMR60	48	.73	32	1.09	24	1.46
1890569	3SMR72	48	.81	32	1.22	24	1.62
	3KMR72	48	.81	32	1.22	24	1.62

ADJUSTMENT BEYOND 90 DAY WARRANTY PERIOD

To determine the users replacement cost; multiply the months of service consumed (as defined in the standard warranty and adjustment policy), times the users cost per month (from chart above).

DELCO BATTERY APPLICATIONS

PASSENGER CARS

MAKE OF CAR	YEAR	MODELS	DELCO GROUP No.	MAKE OF CAR	YEAR	MODELS	DELCO GROUP No.				
Buick	1938-52	All	2E	Kaiser	1947-55	All	1				
	1953	Series 40	2E								
	1953	Series 50 and 70	3EM	Mercury	1947-53	All	2L				
	1954	All	3EM	Nash	1936-55	All	1				
1955-56	All	3KM	2SM								
Cadillac	1940-52	All	2	Oldsmobile	1938-48	All	2E				
	1953-56	All	3EM					1			
Chevrolet	1937-39	All	2L					1949-50	6-Cyl.	2	
	1940-54	All	1					1949-52	8-Cyl.	3EM	
	1955-56	All	2SM	1953	All	3KM					
Chrysler	1949-55	All Exc. Crown Imperials	2	Packard	1941-47	Clipper	2E				
	1953-56	Imperials	3SM					1948-50	All	2E	
	1956	C-71	2SM					1951-53	200, 250, 300	2L	
Crosley	1939-52	All	1					1954	Clipper and Cavalier	2L	
	DeSoto	1936-55	All	2	1955-56	All	3KM				
Dodge		1936-53	All	1	Plymouth	1936-55	All Exc. 6-Cyl. with Powerflite	1			
	1954-55	All Exc. 6-Cyl. witt. Powerflite	1	1954-55					6-Cyl. with Powerflite	2	
1954-55	6-Cyl. with Powerflite	2	1956	All					2SM		
1956	All	2SM	Pontiac	1935-37					6-Cyl.	1	
Ford	1947-53	All		2L	1935-37	8-Cyl.	2				
	Frazer	1947-52		All	1	1938-54	All	2E			
1951-54		All		1	1955-56	All — Original Equipment All — Heavy Duty	2SM				
Henry "J"	1950-54	All Exc. Jet	2L	Rambler	1955	All	1				
	1953-54	Jet	1					1956	All	2SM	
Hudson	1955	All	1					Studebaker	1939-55	All	1
	1956	All	2SM								
					Willys	1937-56	All	1			

WET CHARGED BATTERY CODE SYMBOLS

	JAN.	FEB.	MAR.	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1953	3AX	3BX	3CX	3DX	3EX	3FX	3GX	3HX	3JX	3KX	3LX	3MX
	3AT	3BT	3CT	3DT	3ET	3FT	3GT	3HT	3JT	3KT	3LT	3MT
1954	4AX	4BX	4CX	4DX	4EX	4FX	4GX	4HX	4JX	4KX	4LX	4MX
	4AT	4BT	4CT	4DT	4ET	4FT	4GT	4HT	4JT	4KT	4LT	4MT
	4AS	4BS	4CS	4DS	4ES	4FS	4GS	4HS	4JS	4KS	4LS	4MS
1955	5AX	5BX	5CX	5DX	5EX	5FX	5GX	5HX	5JX	5KX	5LX	5MX
	5AT	5BT	5CT	5DT	5ET	5FT	5GT	5HT	5JT	5KT	5LT	5MT
	5AS	5BS	5CS	5DS	5ES	5FS	5GS	5HS	5JS	5KS	5LS	5MS
1956	6AX	6BX	6CX	6DX	6EX	6FX	6GX	6HX	6JX	6KX	6LX	6MX
	6AT	6BT	6CT	6DT	6ET	6FT	6GT	6HT	6JT	6KT	6LT	6MT
	6AS	6BS	6CS	6DS	6ES	6FS	6GS	6HS	6JS	6KS	6LS	6MS

NOTE: The letters X, T, and S suffixed to the code dates indicate the plant in which the battery originated. X is symbol for New Brunswick plant. T is symbol for Muncie plant. S is symbol for Anaheim, California, plant. The complete code must be shown on all warranty adjustment claim forms.

DRY CHARGED BATTERY CODE SYMBOLS

Date Codes are to be stamped on the top of the NEGATIVE post when electrolyte is added to Dry Charged Batteries. Use date code symbols as above, omitting manufacturing plant symbols. This code must be shown on all Warranty Adjustment Claim Forms.

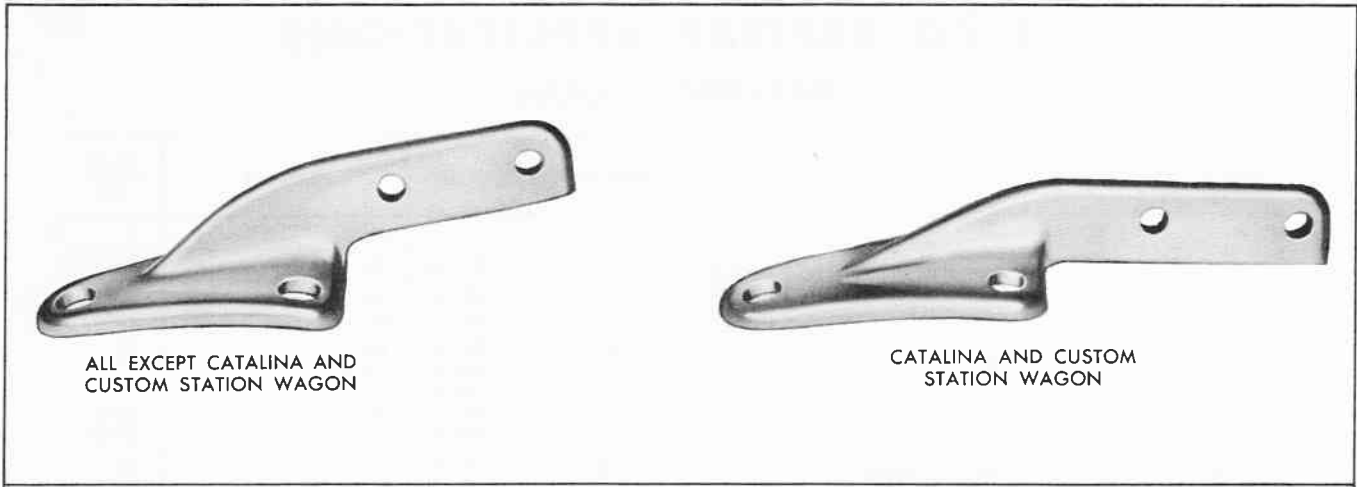


Fig. 8 Sun Visor Center Bracket Comparison

SUN VISOR NOISE CORRECTION

Reports of noisy outside sun visors have been received. Our investigation of these reports show that visor location is very critical with respect to wind noise and that noise will be eliminated if the visor is installed to the correct dimensions. Another cause of dissatisfaction can be eliminated if care is taken that the correct sun visor center bracket is used. Two brackets are available -- one for Catalina and Custom Station Wagon Models and one for all other models (Fig. 8). It is impossible to get a quiet satisfactory installation if the wrong bracket is used.

To aid in correct installation, it is necessary that a wooden gauge, as shown in Fig. 9, be used. Quiet visor installation cannot be made without this gauge. The gauge can also be used to check existing installations for correct dimensioning. Note that the gauge is so designed that it can be used on all models by merely changing sides. Fig. 10 shows the gauge position for measuring the height of leading edge of the visor on a four-door sedan. On a Catalina or Custom Station Wagon the other notch would be used.

Fig. 11 shows the gauge being used to measure the clearance between the roof panel and the visor

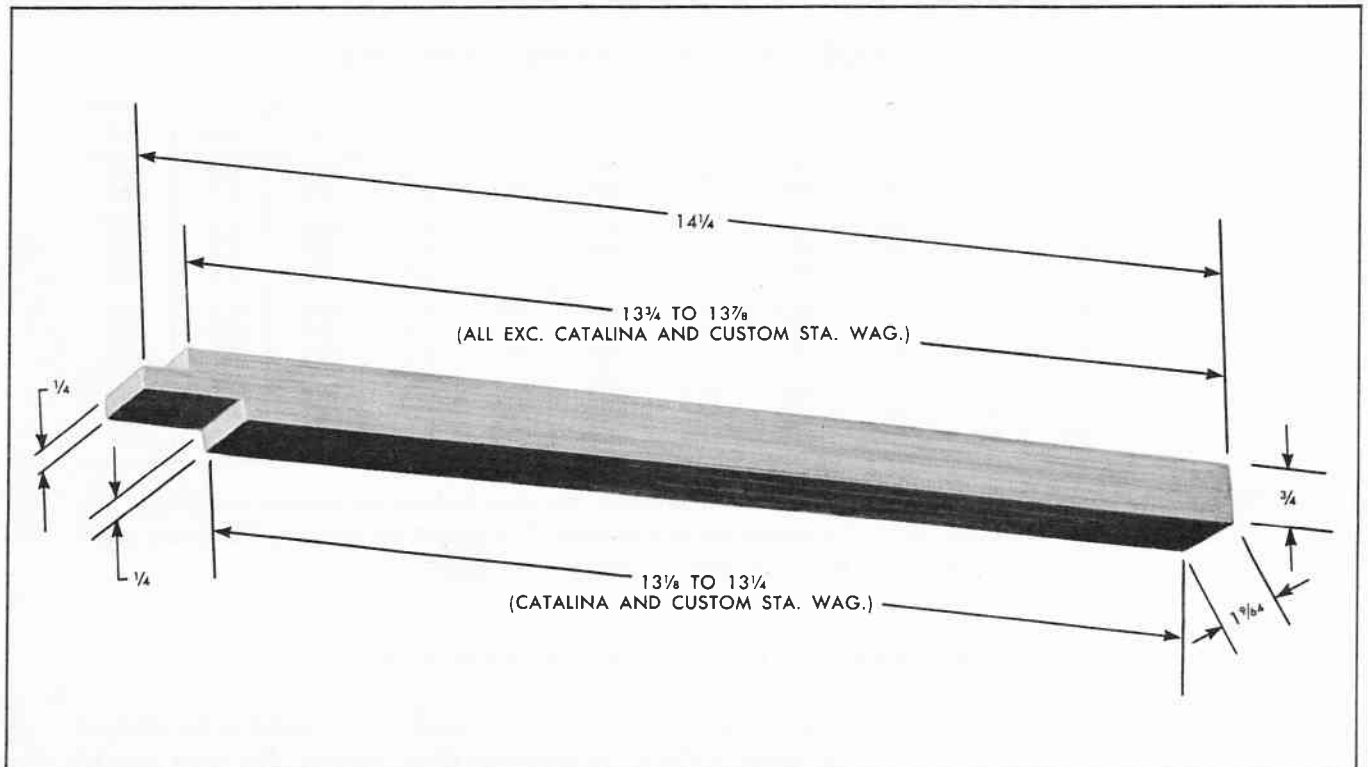


Fig. 9 Visor Installation Gauge

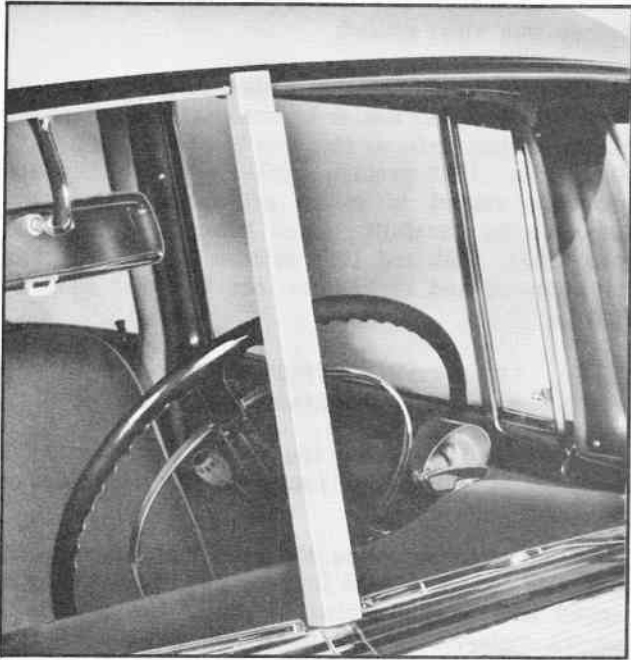


Fig. 10 Gauge Position on 4 Door Sedan

at the rear center. In this instance the gauge should not enter between the roof and visor.

Proper use of this gauge will eliminate visor noise complaints. Visor installation instructions are being re-written to include the use of this gauge.

TRANSITION VALVE BALL CHECK VALVE

The 1/8" check ball used in the 2-3 oil passage at the transition valve has been replaced in production with a 5/32" ball. This change was made to simplify production handling and does not affect the operation of the transmission. The 1/8" ball listed in group 8.899 of the Master Parts Catalog should continue to be used for service.

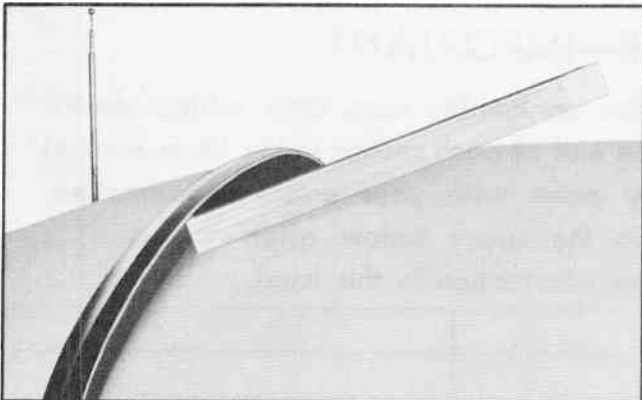


Fig. 11 Measuring Clearance Between Roof Panel and Visor

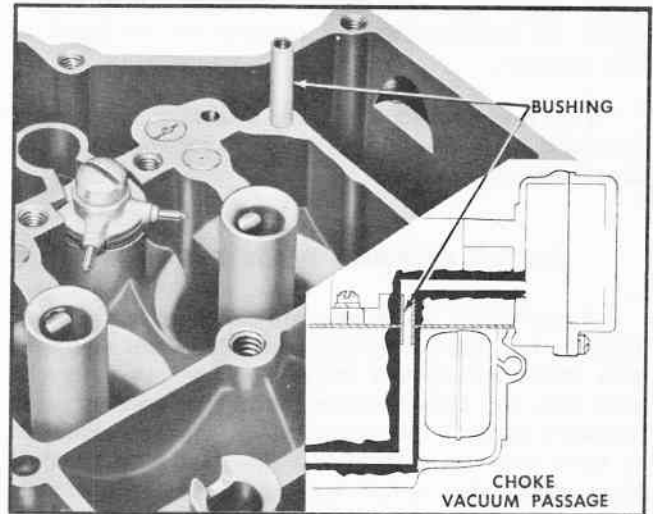


Fig. 12 Bushing Installed in Carter 4-Barrel Carburetor

CORRECTION OF CARTER FOUR-BARREL LEFT TURN "CUT-OUT"

Product Information Reports have been received stating that some Carter four-barrel carburetors have a tendency to "cut-out" on sharp left turns. Investigation of this condition showed the primary cause to be a leakage of fuel from the carburetor bowl to the choke vacuum passage shown in Fig. 12.

In some instances it is only necessary to tighten the bowl cover attaching screws to eliminate this condition. If this does not correct the complaint, it may be necessary to install a bushing (or standpipe), as shown in Fig. 12. Installation of this bushing assures a more positive seal and prevents fuel leaking into the vacuum passage on left turns. This bushing is released for service under part no. 3732788, and should be ordered through regular channels.

To install the bushing, remove the bowl cover and lightly tap bushing into place in the vacuum passage shown in Fig. 12. Inspect sealing surfaces of bowl cover and bowl for nicked or dented gasket surfaces and in all instances use a new bowl cover gasket. Reinstall bowl cover, tightening the inner attaching screws alternately and securely before tightening the outer screws.

1956 SHOCK ABSORBER NOISE

When rear shock absorber noise is encountered, remove the self locking nut from the upper anchor bolt. In its place use a plain washer and nut and tighten to 50-55 lb. ft. torque. This will ensure proper compression of the upper grommets, eliminating metal to metal contact at the shock absorber eye.

To test for internal noise, remove the lower anchor bolt and operate the shock absorber several

times manually. Noise or improper valve action either on compression or rebound can be found in this manner.

The lower shock absorber attaching bolts must also be tightened to 50-55 lb. torque to properly compress the grommets.

CLUTCH PRESSURE PLATE PACKAGE

A new clutch pressure plate package, part number 988650, has been released for 1956 cars equipped with extra horsepower engines. The new pressure plate has coil thrust springs which provide greater pressure against the driven plate. It is designed to be used with the standard flywheel and clutch driven plate when extra clutch holding power is necessary as in racing.

The new pressure plate is not used in production. The cost of the new pressure plate package is to be charged to the owner since it is only necessary for extreme service.

USE OF LEATHER SEALER ON GENUINE LEATHER TRIM

On May 2, 1956 a letter, over the signature of J. H. Otis the Accessory Sales Manager, was sent to all Dealers concerning the use of Leather Touch Up Paint, Part Number 988639, Leather Cleaner, Part Number 4259128 and Leather Sealer Part Number 4259129.

These products are highly recommended for use on genuine leather trim as a means of maintaining and/or restoring appearance.

The letter stated that the Leather Sealer could only be used on genuine leather with a vinyl finish and stated that before applying sealer to trim "apply a drop or two in an inconspicuous spot and rub with finger tips". If the material is pyroxylin and not vinyl it will feel sticky and the color will come off.

It was incorrectly stated that all Pontiac genuine leather was vinyl coated.

This is to advise that under no circumstances should the Leather Sealer be used on 1952 or earlier Pontiac leather trim as this was coated with a pyroxylin finish. 1953 genuine leather was both vinyl and pyroxylin coated in mixed production and should therefore be carefully tested before the sealer is used. 1954, 1955 and 1956 genuine leather trim was vinyl coated and the sealer can be used on these models.

1956 POWER STEERING GEAR BALL NUT RETAINING SCREW

When disassembling the rack-piston and worm assembly, the ball nut retaining screw should be discarded.

Before reassembling the rack-piston and worm assembly, use a 5/8-18 UNF tap and run through the tapped hole in the piston to purge the threads of foreign material and straighten out the threads that were burred from staking.

Install a new ball nut retaining screw, part no. 5683582, and tighten to 35 lb. ft. torque. Stake screw securely in two places.

CONVERTIBLE TOP BACK WINDOW CURTAIN

Many dealers are replacing the complete convertible back curtain assembly when only the window or the zipper is damaged. The rear window and the zipper are serviced separately and only the damaged part should be replaced. The required sewing operations can be sublet if facilities are not available in the dealership.

The convertible rear window is listed under group 11.204 in the Master Parts Catalog while the zipper is listed under group 13.392.

Also see article on zipper repair kit elsewhere in this issue.

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.
