

PONTIAC

Service Craftsman News



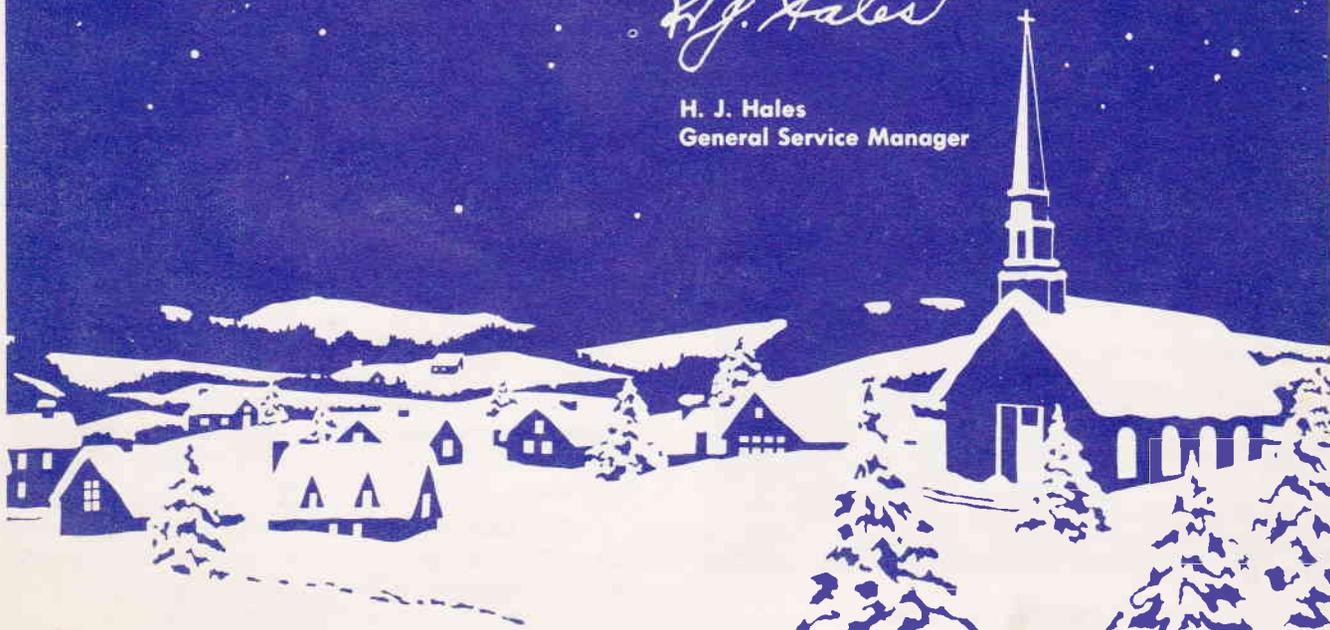
NO. 11 S-300

DECEMBER 1957

Peace on Earth, Good Will to Men

In our daily lives, our work, and our present world, we must strive for that most important of all possessions . . . Good Will. May this Holiday Season bring you Good Will in full measure . . . the merriest of Christmases . . . and a happy and prosperous New Year.

H. J. Hales
General Service Manager



CORRECT REAR SEAT SPEAKER WIRING ON 1958 MODELS

All rear seat speaker assemblies built prior to October 28, 1957 were wired incorrectly. As received by the dealer, only one rear speaker and the front speaker will operate with the selective dial set in the number four position. As is now wired, there is no switch position that will operate both rear speakers.

To correct this condition it is necessary to interchange the white and black speaker leads at the line connector mounted over the right kickpad. The wires can be removed from the connector by using a small screwdriver or other suitable tool to depress the tang retaining the wires in the plastic connector.

This condition may also be noted on early accessory packages. Later packages and all present production have been corrected.

Caution Tag In Trunk Of Air Suspension Cars

A caution tag is located on the inner panel of the deck lid on all air suspension models (the inner floor pan of the spare tire compartment on Safari models) which cautions the owner to put the car in "CAR LIFT" before using the jack (See Fig. 1).

Make sure the owner is informed on this matter at the time of new car delivery.

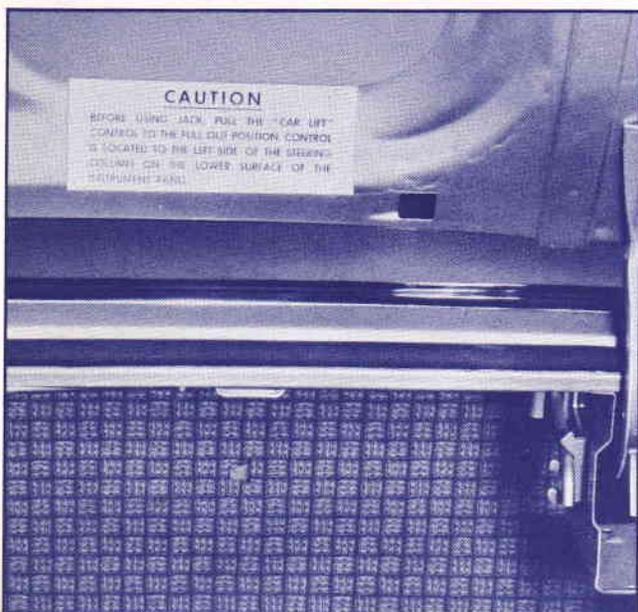


Fig. 1 Caution Tag On Inner Deck Lid Panel



THROTTLE RETURN CHECK ADJUSTMENT

To ensure correct operation of the throttle return check and the carburetor fast idle system the throttle return check adjustment (including fast idle adjustment) should be performed at the 2,000 mile inspection. See page 72 of 1958 Preliminary Service Information Book for procedure.

1958 ROCHESTER FLOAT SPECIFICATION CHANGED

The float level specification on the front and rear carburetors of the 1958 triple two jet installation has been changed to 1-13/32". Tool J-7325 is used to gauge this adjustment. Please correct page 71 of your Preliminary Service Information Book accordingly.

TIGHTEN VAUXHALL OIL PAN BOLTS

It has been found that the engine oil pan attaching bolts on Vauxhall automobiles need tightening after the engine has been run at operating temperature.

In pre-delivery service it is ESSENTIAL that the oil pan attaching bolts be checked before delivering a new car to an owner.

CHANGE IN HEATER OPERATION INSTRUCTIONS

In the November issue of the Service Craftsman News (See Page 77 . . . "Don't Get Caught!") instructions to the owner were given concerning heater operation. These instructions are incomplete. With the new 1958 heater, the owner should be instructed to depress the "TEMP" control to maximum when first entering a cold car. Once the temperature inside the car has risen to a comfortable temperature, the owner should then adjust the "TEMP" lever to the position which will maintain the desired heat level. The above procedure must be repeated each time a cold car is entered.

CHECK VAUXHALL BRAKE PIPE FOR CLEARANCE

Due to production variations, it is possible for the front brake pipes to be in contact with the underbody side members. On all Victors prior to Chassis No. F49346, the pipes should be checked for contacting at front upper A-frames and sheet metal in immediate area, and, if necessary, pulled away to give adequate clearance.

Care must be taken in moving the pipe away from the underbody, to ensure that it is not made to touch the front suspension upper arm.

(See At A Glance, Page 112)

POSITIONING DIRECTIONAL SIGNAL SWITCH

Improper positioning of the directional signal switch has resulted in several cases of inoperative stop lamps. The directional signal switch is mounted in a slotted bracket and must be carefully centered on the steering column to ensure proper stop lamp and signal operation.

To positively position the switch a piece of .090" wire bent as shown in Fig. 2 can be used. The ends of the wire should be inserted in the two holes on the face of the switch (Fig. 3) before the attaching screws are tightened. If the switch is positioned so that the wire enters both holes freely, when in neutral position, it is centered correctly on the steering column.

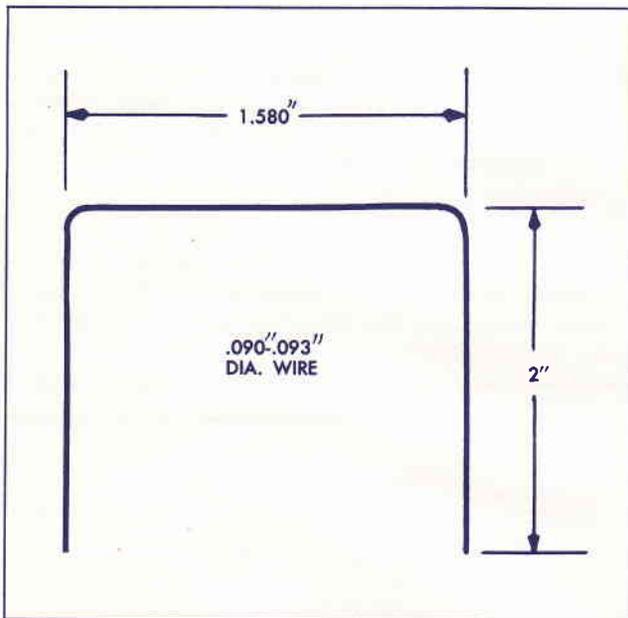


Fig. 2 Wire Gauge For Directional Signal Switch

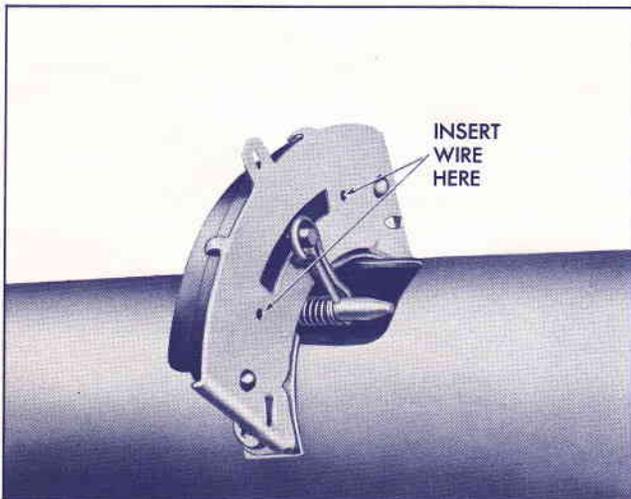


Fig. 3 Holes On Face Of Signal Switch

CLARIFICATION ON SAFE-T-TRACK LUBRICANT

There are two different types of differential lubricant used in production. The hypoid lubricant is used in the standard differential, the multi-purpose lubricant will be used in the Safe-T-Track differential. If, at any time, it is necessary to replace the standard axle lubricant, the multi-purpose oils may be used and be completely satisfactory. The new factory recommended multi-purpose lubricant is now supplied with all ring gear and pinion packages, which is the same for both the Standard and Safe-T-Track differentials.

This lubricant may also be obtained through regular part channels in one quart cans under part number 531536. The lubricant in these cans is recommended for use in either the Standard or Safe-T-Track differentials.

The lubricants can be identified in the following manner. The hypoid lubricant has a very flat odor and a smear test on a piece of white paper will be almost a brownish-black color. The multi-purpose lubricant will have a fishy odor and on the smear test it will show a light yellow-brown cast.

It is important that the new factory recommended lubricant be used in Safe-T-Track differential or severe "chatter" will occur on turns. If the car has the incorrect lubricant, drain the axle, removing all this lubricant, and refill with factory recommended multi-purpose lubricant. The car should be driven approximately 25 miles, drained, and refilled the second time. This will generally eliminate the chattering noise.

MANUAL VALVE ASSEMBLY PROCEDURE

Step 7 of manual valve assembly procedure on page 26 of the 1958 Preliminary Shop Manual should read:

7. While holding retainer firmly in place, insert valve stem through intake port and screw stem CAREFULLY into retainer using Tool J-7085. Stem must be secure in retainer but DO NOT BOTTOM since this will raise a small knob on diaphragm side of retainer which, in turn, may puncture the rubber diaphragm.

Correction Of Throttle Lever Interference

In some cases it may be impossible to secure a forced downshift on Chieftain or Super Chief models which are equipped with a Hydra-Matic transmission and a two-barrel carburetor. This is caused by interference between the throttle lever and the vacuum line from the fuel pump to carburetor.

When such a condition is encountered, the vacuum line should be bent downward toward the carburetor to secure clearance for the throttle lever when it is in its full open position.

DIAGNOSIS PROCEDURE FOR 1958 AIR RIDE MANUAL VALVE

A few early production 1958 Air Ride cars were equipped with a defective manual valve. If the car cannot be raised to normal five passenger load height when CAR LIFT knob is IN or to override height when knob is OUT, the cause may be a ruptured diaphragm or worn or defective sliding valve gaskets.

1. Raise car on drive-on hoist or drive car over open pit. If neither drive-on hoist nor pit is available, raise car and support wheels on blocks high enough to permit mechanic to work safely on creeper under car.
2. Apply soap solution (Part 564255) with brush over manual valve boot. If bubble forms at boot or bolting flange of piston housing, the diaphragm may be ruptured or improperly installed. In such case, remove manual valve and install new diaphragm as outlined in 1958 Preliminary Shop Manual. NOTE: When assembling intake valve stem retainer in manual valve, screw valve stem CAREFULLY into retainer with Tool J-7085. Stem must be secure in retainer but do not bottom since this will raise a small knob on diaphragm side of retainer which, in turn, may puncture the rubber diaphragm.
3. If leak is not detected at diaphragm, disconnect rubber hose from exhaust line on manual valve and apply soap solution at open end of line.

If bubble forms check adjustment of control cable and lever stop screw first by:

- a. Loosen lock nut on lever stop screw.
- b. Adjust stop screw until leak is just indicated by bubble.
- c. Then back screw (turning counterclockwise) one and one half turns and secure with lock nut.
- d. Loosen control cable clamp screw at valve and adjust cable so that stop screw just contacts valve body. When adjusting cable, make sure there is approximately 1/16" clearance between car lift knob and bracket at instrument panel.
- e. Check for leak again at exhaust line with soap solution. When cable and stop screw are properly adjusted, there should not be a leak at exhaust line with car lift knob either in or out.

If leak still exists with car lift knob in the full IN or OUT position, then fault is sliding valve gaskets. In such case replace manual valve with one known to be in good condition as outlined in 1958 Preliminary Shop Manual.

Check Clearance Of Accelerator Control Lever On 1958 Models

The specified accelerator pedal height from top of spherical end of pedal rod to body toe pan (underneath carpet) is 4.86" as shown in Fig. 4. On some early 1958 cars this dimension allows the accelerator control lever to come too close to the intake manifold. If the control lever is adjusted to provide adequate clearance at the manifold, the accelerator pedal will be lowered resulting in loss of pedal travel and making the 4-3 transmission downshift difficult to obtain.

When difficult 4-3 downshift on early 1958 cars is reported, check clearance of accelerator control lever and correct, if necessary, as follows:

1. Make sure accelerator pedal is adjusted to proper 4.86" height.
2. If this proper pedal height brings control lever less than 1/2" from intake manifold, remove control lever from car and rework in vice jaws as indicated in Fig. 4.
3. Reinstall control lever.

EDITORS NOTE: Control valves used in 1958 Hydraulic transmissions bear identification code. For detail see page 111.

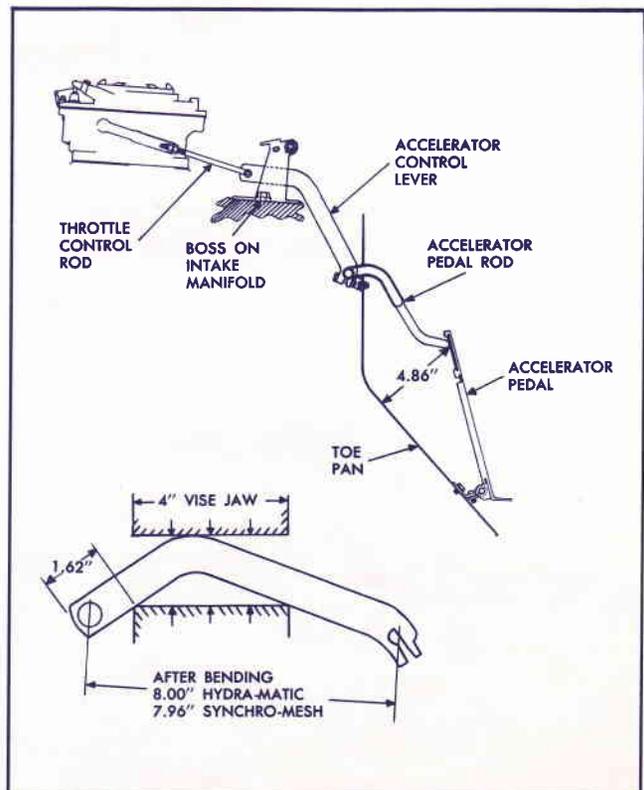


Fig. 4 Correct Position Of Accelerator Linkage

NEW SPECIAL TOOLS NOW AVAILABLE

A second 1958 Tool Program has been released consisting of carburetor gauges, an additional air compressor tool, and tools for the heavy duty Synchro-Mesh transmission.

CARBURETOR TOOLS

One of the outstanding items made available is a new group set of carburetor tool gauges. A separate set, self-contained by means of a key ring type chain, is available for each 1957 and 1958 production carburetor and contains all gauges required for complete adjustment.

The gauge sets (See Fig. 5) are equipped with an application tag and provide a maximum in convenience when hung in a cabinet or on the wall.

Applications of the gauge sets are as follows:

1958 Rochester 2GC	J-7292
1958 Carter 4 Barrel	J-7293
1958 Rochester Tri-Power	J-7325
1957 Rochester 2GC	J-7326
1957 Rochester 4GC	J-7330
1957 Carter 4 Barrel	J-7324
1957 Rochester Tri-Power	J-7323

AIR SUSPENSION TOOLS

Also available is a gauge J-7153 (See Fig. 6) for correctly positioning the oil pump stator whenever the air ride compressor oil pump has been disassembled. This tool will insure a proper working clearance between the pump rotor and stator.



Fig. 5 Carburetor Tool Gauge Set

HEAVY DUTY SYNCHRO-MESH TOOLS

Tools found necessary when servicing the 1958 heavy duty Synchro-Mesh transmission are a J-4869 used for removing and installing the speedometer drive gear and a J-5589 countershaft needle bearing loader. These can be seen in Fig. 7.

Procurement of Tools

Service tools may be obtained by directing orders to Kent-Moore Organization, 28635 Mound Road, Warren, Michigan.

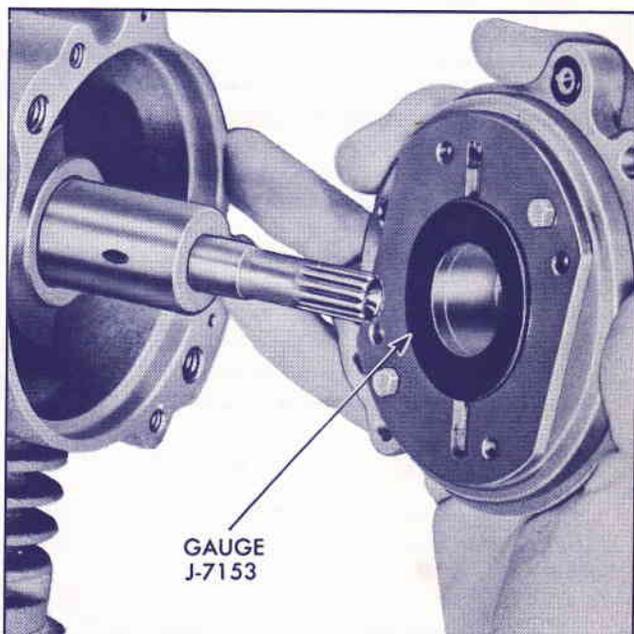


Fig. 6 Gauge For Positioning Oil Pump Stator

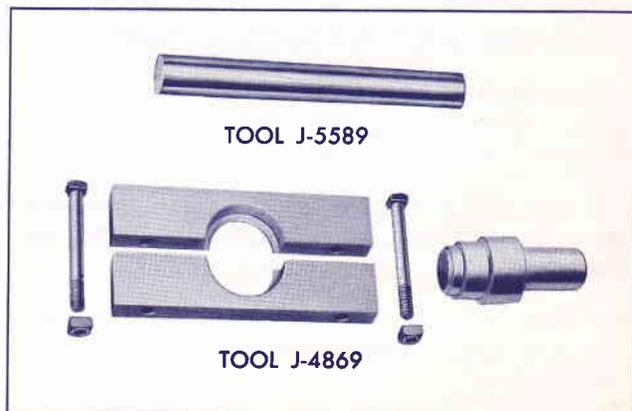


Fig. 7 Heavy Duty Transmission Tools

Correction For Carburetor Stalling Due To Gum

A corrective procedure has been developed which will eliminate rough idle and stalling complaints caused by build-up of gum in the carburetor throttle bores. The correction, outlined below, consists of drilling a 1/8" hole in each primary throttle valve and performing the necessary idle adjustments. Care should be used when drilling to ensure no distortion of the throttle shaft. Center punching of valves before drilling should not be necessary.

This procedure gives equally effective results on the Rochester 4-Jet, the Carter 4-Bbl, and the Rochester 2-Jet carburetor.

1. Remove carburetor. Do not remove gum deposits from throttle bores.
2. Invert carburetor and drill a 1/8" diameter hole in each primary throttle plate as shown in Fig. 8. Do not drill secondary throttle plates.
3. Blow out any loose chips and re-install carburetor using new carburetor to manifold gasket.
4. Reconnect throttle linkage and adjust hot idle speed to 500 rpm in drive range.
5. Adjust carburetor throttle rod setting with gauge pin. It will usually be necessary to shorten throttle rod slightly to get correct adjustment.
6. Adjust mixture screws to give best quality idle.

It is expected that the initial idle adjustment of 500 rpm will eventually drop to 450 or 460 rpm and hold at that setting.

The time allowance for this repair is Operation 6-660 plus .3 hr. straight time.

PROTECTIVE COATING ON 1958 BUMPERS AND RADIATOR GRILLE

All 1958 models shipped from northern assembly plants will have a protective wax film coating applied to front and rear bumpers and radiator grille.

This will provide protection against corrosion of these parts during transportation and during short storage periods.

Continued protection of bright metal parts may be obtained by using Chrome Protector Kit, part number 984918.

For further suggestion on bright metal protection refer to page 47 of the 1958 Owners' Guide.

FAN AND ACCESSORY DRIVE BELT TIGHTENING SPECIFICATIONS

The following are fan and accessory drive belt tightening specifications: Load to be applied midway on span.

Standard Production Fan and Generator Belt (3/8" width). Tighten belt to obtain 1/4" deflection with 7-8 pounds on span of belt between generator and fan pulleys.

Air Conditioning Compressor, Generator and Fan Belt (19/32" width). Tighten belt to obtain 1/4" deflection with 10 pounds on span of belt between generator and fan pulleys.

Power Steering Pump Belt (3/8" width). Tighten belt to obtain 1/4" deflection with 7-8 pounds on span of belt between fan pulley and power steering pump pulley.

Power Steering Pump Belt on Air Conditioned Cars (1/2" width). Tighten belt to obtain 1/4" deflection with 8-9 pounds on span of belt between fan and power steering pump pulleys.

Air Suspension Compressor Belt (1/2" width). Tighten belt to 55-60 pound ft. torque applied to air compressor front support with all pivot bolts loose.

IMPORTANT

Vauxhall T-3 Headlamps are installed at port of entry. Be sure to check headlamp aim during pre-delivery inspection.

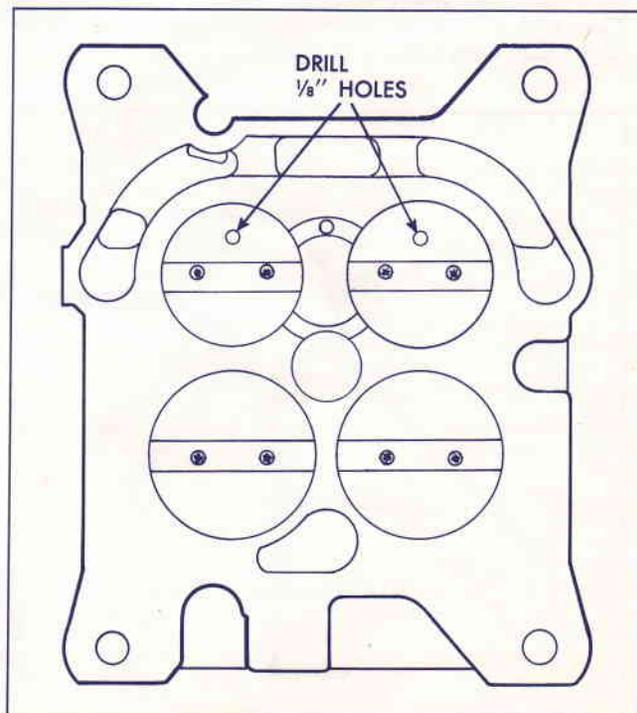


Fig. 8 Drill Holes In Primary Throttle Plates

MODEL F VAUXHALL FLAT RATE OPERATIONS

The following are some flat rate operations for the Model F Vauxhall Victor automobile. For your convenience these have been printed on the middle pages of this News to facilitate removal. This makes it possible for you to remove these flat rate operations as a unit from this issue, for quick and ready reference.

	Time		Time
0-1 Car - Lubricate complete . . . . .	.5	1-127 Windshield Wiper Control - Replace . . . . .	.1
Includes: Lubricate in accordance with the "Lubrication Chart".		1-128 Windshield Wiper Arm and/or Blade - Replace	.1
0-5 Engine Oil - Change	N.C.	Glove Compartment	
(material extra)		1-130 Glove Compartment Door - Replace . . . . .	.2
0-8 Oil Filter Element - Replace . . . . .	.2	1-132 Glove Compartment Box - Replace . . . . .	.3
0-35 Speedometer Cable - Lubricate . . . . .	.2	1-136 Glove Compartment Door Lock - Replace . .	.1
0-100 New Car Inspection	2.0 ←	Cowl	
1-100 Windshield Glass and/or Rubber Channel and/or Reveal Molding	2.0	1-140 Cowl Trim Pad, Right or Left - Replace . . .	.1
Includes: R & R reveal and garnish moldings, Rear View Mirror, Rubber Channel, Glass, Align, Reseal and extra man's assistance.		1-143 Cowl Top Ventilator Louver - Replace . . . . .	.1
1-104 Windshield Reveal Molding, Lower Corner Right or Left - Replace . . . . .	.1	Back Window	
1-108 Windshield Garnish Moldings Complete Replace	.4	1-200 Back Window Glass and/or Rubber Channel and/or Reveal Moldings - Replace	1.6
1-110 Windshield Garnish Pillar Moldings - Right or Left . . . . .	.1	Includes: R & R Side Trim, corner reveal moldings sealing, clean up, extra man's assistance.	
1-111 Windshield Garnish Molding Upper or Lower - Right or Left . . . . .	.1	1-205 Back Window Side Corner Reveal Molding . .	.2
1-112 Rear View Mirror and Bracket - Replace . . .	.2	Headlining	
1-114 Sunshade Assembly - Right or Left - Replace .	.1	1-220 Headlining Assembly - Replace	4.9
1-122 Windshield Wiper Transmission (Replace)-Left .	.2	Center Body Pillar Assy.	
-Right .	.5	1-300 Center Body Pillar Trim - Right or Left - Replace .	.3
1-124 Windshield Wiper Motor - Replace . . . . .	.3	1-310 Center Body Reveal Molding - Right or Left - Replace . . . . .	.1
		Sill	
		1-350 Sill Plate, Front Door, Right or Left - Replace	.1

	Time		Time
1-352 Sill Plate, Rear Door - Right or Left - Replace .	.1	Front Door Hardware and Trim	
Floor Mats		1-519 Front Door Outside Handle - Right or Left - Replace . . . . .	.4
1-360 Front Floor Mat . . . . .	.2	Includes: Garnish Molding, Trim and Access Door	
1-365 Rear Floor Mat . . . . .	.3		
Weathercord		1-520 Front Door Outside Lock Cylinder - Right or Left - Replace . . . . .	.6
1-424 Weathercord and/or weatherstrip around front door opening - Right or Left - Replace . . .	.7	1-522 Front Door Inside Handle - Right or Left - Replace . . . . .	.1
1-426 Weathercord and/or weatherstrip around rear door opening - Right or Left - Replace . . .	.6	1-524 Front Door Lock Assembly - Right or Left - Replace . . . . .	.5
Rear Quarter Molding		1-526 Front Door Lock Remote Control - Right or Left - Replace . . . . .	.4
1-462 Rear Quarter Fender Side Molding - Right or Left - Replace . . . . .	.1	1-528 Front Door Lock Striker Plate - Right or Left - Replace . . . . .	.1
1-494 Gas Tank Filler Door Assembly - Replace . .	.1	1-530 Front Door Arm Rest - Right or Left - Replace . . . . .	.1
Front Door Assembly		1-532 Front Door Trim Pad - Right or Left - Replace . . . . .	.3
1-500 Front Door Assembly - Right or Left - Replace.	.3		
1-502 Front Door Hinge, Upper or Lower - Right or Left - Replace . . . . .	.6	Front Door Window	
1-506 Front Door Weatherstrip - Right or Left - Replace . . . . .	.3	1-541 Front Door Channel Weatherstrip - Right or Left - Replace . . . . .	.1
Front Door Moldings		1-543 Front Door Glass - Right or Left - Replace. .	.9
1-512 Front Door Garnish Molding - Right or Left - Replace . . . . .	.1	1-544 Front Door Glass Regulator . . . . .	.4
1-513 Front Door Reveal or Scalp Moldings - Right or Left - Replace		1-548 Front Door Glass Lower Outer Weatherstrip - Right or Left - Replace . . . . .	.1
Front . . . . .	.1		
Rear . . . . .	.1	Front Door Vent	
Both . . . . .	.2	1-562 Front Door Vent Assembly - Right or Left - Replace . . . . .	.8
1-517 Front Door Outer Panel Molding			
Includes: R & R Garnish Molding, Trim and Loading Hole - Right or Left - Replace . . .	.4		

	Time		Time
1-568 Front Door Vent Glass - Right or Left - Replace . . . . .	.5	1-638 Rear Door Lock Striker Plate - Right or Left - Replace . . . . .	.1
Rear Door Assembly		Rear Door Window	
1-600 Rear Door Assembly - Right or Left - Replace	.4	1-643 Rear Door Glass - Right or Left - Replace .	.5
1-602 Rear Door Hinge - Upper or Lower - Right or Left - Replace . . . . .	.7	1-644 Rear Door Regulator - Right or Left - Replace . . . . .	.4
1-608 Rear Door Weatherstrip - Right or Left . . . .	.2	1-648 Rear Door Glass Weatherstrip - Upper or Lower - Right or Left - Replace . . . . .	.1
Rear Door Moldings		Rear Lid	
1-610 Rear Door Reveal or Scalp Moldings		1-700 Rear Compartment Lid - Replace . . . . .	.4
	Rear1	Includes: R & R from Hinge	
	Front1	1-704 Rear Compartment Lid Weatherstrip . . . . .	.7
	Both2	Rear Compartment Hardware	
1-612 Rear Door Garnish Molding - Right or Left - Replace . . . . .	.1	1-712 Rear Compartment Lid Lock Assembly - Replace . . . . .	.1
1-614 Rear Door Outer Panel Molding (Includes - Trim) Right or Left - Replace . . . . .	.4	1-716 Rear Compartment Striker Plate . . . . .	.1
1-615 Rear Door Nameplate Molding - Right or Left - Replace . . . . .	.4	1-722 Rear Compartment Lid Emblem - Replace . .	.1
1-616 Rear Door Outside Handle - Right or Left - Replace . . . . .	.4	Rear Compartment Trim	
1-618 Rear Door Inside Handles - Right or Left - Replace . . . . .	.1	1-740 Rear Compartment Floor Covering - Replace .	.1
1-620 Rear Door Arm Rest - Right or Left - Replace	.1	Front and Rear Seat Assembly	
1-622 Rear Door Trim Pad - Right or Left - Replace . . . . .	.3	1-800 Front Seat Assembly - Replace . . . . .	.4
1-632 Rear Door Lock Assembly - Right or Left - Replace . . . . .	.5	1-810 Front Seat Side Panels - Right or Left - Replace	.1
1-634 Rear Door Lock Remote Control and/or Rod - Right or Left - Replace . . . . .	.4		

	Time		Time
1-811 Front Seat Back Side Panel - Right or Left - Replace . . . . .	.1	12-122 Speedometer Cable - Lubricate . . . . .	.2
1-822 Front Seat Back Rest Assembly - Replace . .	.4	12-125 Light Switch - Replace . . . . .	.1
1-840 Front Seat Cushion Trim - Replace	1.5	12-130 Dimmer (passing) Switch - Replace . . . . .	.3
1-842 Front Seat Cushion Pad or Spring - Replace or Repair	2.0	12-131 Dome Light Switch on Door Pillar - Replace . .	.1
1-850 Front Seat Back Rest Pad and/or Back Rest Springs - Repair or Replace	1.4	12-132 Cigar Lighter Assembly - Replace . . . . .	.2
Rear Seat			
1-860 Rear Seat Assembly - Replace . . . . .	.2	Horn	
1-862 Rear Seat Cushion Trim Assembly - Replace .	1.0	12-140 Horn - Each - Clean and/or Adjust . . . . .	.2
1-864 Rear Seat Cushion Pad - Replace	1.3	(with bumper off)	
1-870 Rear Seat Back Trim Assembly - Replace . . .	1.2	12-145 Horn Assembly - Right or Left - Replace . . . .	.7
1-872 Rear Seat Back Rest Pad - Replace	1.4	12-146 Horn Assembly - Both - Replace	8
Hood Assembly			
11-23 Hood - Replace . . . . .	.6	Accessories	
Includes transfer all chrome moldings - Doesn't include time for painting.		14-29 Cigar Lighter - Install . . . . .	.2
11-60 Hood Moldings - Replace . . . . .	.1	14-200 Glove Box Light and/or Switch and/or Wire - Replace . . . . .	.2
11-65 Hood Ornament - Replace . . . . .	.1	14-202 Glove Box Light - Install . . . . .	.2
Hood Hinges, Springs and Supports			
11-80 Hood Hinge Spring, Right or Left - Replace .	.1	14-210 Mirror-Vanity Visor - Install or Replace . . .	N.C.
11-85 Hood Hinge - Right or Left - Replace . . . .	.3	14-212 Mirror Outside Rear View - Install . . . . .	.3
Includes: Hood Alignment Time.		14-213 Mirror Outside Rear View - Replace . . . . .	.2
11-96 Hood Latch and Safety Hook Assembly - Replace	.2	14-300 Radio Assembly - Install	1.0
12-100 Fuel Gauge - Dash Unit - Replace . . . . .	.4	Includes: Bench Test	
12-108 Thermo-gauge Dash Unit - Replace . . . . .	.4	14-325 Radio Assembly - Remove and Replace . . . .	.5
12-109 Thermo-gauge Block Unit - Replace . . . . .	.3	14-329 Radio Less Speaker - Remove and Replace . .	.3
12-120 Speedometer Head - Replace . . . . .	.4	14-335 Radio Speaker - Remove and Replace . . . . .	.2
		14-340 Antenna Trimmer - Adjust . . . . .	.1
		14-350 Radio Antenna Assembly - Install . . . . .	.6
		14-355 Radio Antenna Assembly - Replace . . . . .	.3
		14-415 Rear Compartment Light - Install . . . . .	.2
		14-416 Rear Compartment Light - Replace . . . . .	.2
		14-470 Wheel Disc-All-Install or Replace . . . . .	.1
		14-482 Windshield Washer - Install	1.2

Front Bumpers

		Time
2-20 (7.831)	Bumper Assembly, Front - Adjust and/or Align	.3
	Combination	
	A. Tighten All Mounting Bolts . . . . .	.2
2-22 (7.831)	Bumper and Grille Assembly, Complete, Front - Replace	1.1
	Includes: R & R Assembly and Align	
	Combination	
	A. Bumper and Grille Assembly - Overhaul . . . . .	.6
	B. Grille - Replace . . . . .	.2
	C. Bumper to Frame Bar, Inner and/or Outer Right or Left - Replace . . . . .	.2
	D. Bumper to Frame Brace, Right or Left - Replace . . . . .	.1
2-24 (7.828)	Bumper Guard, Right or Left - Front - Replace	.2
2-26 (7.831)	Bumper Impact Bar Assembly, Lower, Front - Replace . . . . .	.9
	Does Not Include: R & R Bumper Assembly	
	Combination	
	A. Bumper Guard, Each - Replace . . . . .	.1
	B. Bumper Impact Bar, Upper, Each - Replace	.1
2-28 (7.831)	Bumper Impact Bar Assembly, Upper, Right or Left, Front - Replace . . . . .	.6
	Combination	
	A. Parking Lamp Assembly - Replace . . . . .	.1
	Rear Bumper	
2-40 (7.831)	Bumper Assembly, Rear - Tighten . . . . .	.2
2-42 (7.831)	Bumper Assembly, Complete, Rear - Replace	.4
	Includes: R & R Assembly Without Other Work	
	Combination	
	A. Bumper Assembly - Overhaul . . . . .	.4
	B. Bumper to Frame Bar, Inner or Outer, Right or Left, Each - Replace . . . . .	.1
	C. Bumper Apron Filler (Rubber) - Replace	.2
2-44 (7.828)	Bumper Guard, Inner, Rear, Right or Left - Replace . . . . .	.3
	Combination	
	A. Bumper Finish Plate, One or Both - Replace . . . . .	.1
2-46 (7.828)	Bumper Guard, Outer, Rear, Right or Left - Replace . . . . .	.2

SYNCHRO-MESH TRANSMISSION

Unless noted otherwise the Synchro-Mesh Transmission operations apply to both the Standard (Std.) and the Heavy Duty (H.D.) Transmissions.

		Time
7-2 (4.003)	Transmission Assembly - SM - Replace	1.8
	Includes: Adjust Linkage, Drain and Refill	
	Combination	
	A. Transmission Assembly - Overhaul	2.0
	Does Not Include: Overhaul Side Cover Assembly or R & R Extension Bushing. Add (.1) for R & R Bushing	
	B. Transmission Case Only - Replace	1.2
	C. Case Extension Gasket Only - Replace . . . . .	.8
	D. Clutch Gear Bearing Retainer and/or Gasket Only - Replace . . . . .	.1
	E. Clutch Gear or Bearing Only - Replace Std.	1.4
	H.D.	1.0
	F. Rear Bearing or Mainshaft Only - Replace Std. . . . .	.8
	H.D.	1.2
7-4 (4.318)	Transmission Rear Extension Oil Seal - SM - Replace	1.0
	Does Not Include: R & R Transmission	
	Combination	
	A. With Transmission Removed . . . . .	.4
7-6 (7.105)	Transmission Side Cover and/or Gasket - SM - Replace . . . . .	.5
	Does Not Include: R & R Transmission	
	Combination	
	A. With Transmission Removed and Drained	.1
	B. Side Cover Assembly-Overhaul (Removed)	.2
7-8 (4.337)	Speedometer Driven Gear and/or Oil Seal - Replace . . . . .	.3
	Combination	
	A. With Transmission Removed . . . . .	.1
7-10 (4.343)	Speedometer Drive Gear - SM - Replace Standard (Includes: R & R Transmission)	2.5
	Heavy Duty	1.0
	Shift Levers and Linkage	
7-20 (4.006)	Gear Shift Lever - SM - Adjust . . . . .	.4

STRATO-FLIGHT HYDRA-MATIC TRANSMISSION

7-300 (4.019)	Strato-Flight Linkage, Adjust	
	Includes: Check & adjust engine idle speed before setting throttle linkage.	
	1. Throttle and TV Linkage . . . . .	.4
	2. Manual Linkage . . . . .	.3

	Time		Time
7-302 (4.265)	Initial TV Pressure - Check . . . . .	.3	
	Combination		
	A. Initial TV Pressure - Adjust . . . . .	.5	
	Includes: R & R Oil Pan and set TV Plunger with Gauge		
7-304 (4.216)	Main Line Oil Pressure - Check . . . . .	.3	
	Does Not Include: Road Test		
	Combination		
	A. Pressure Regulator Valve - Replace and/or Overhaul . . . . .	.1	
7-306 (4.132)	Oil Filler Pipe - Replace . . . . .	.4	
	Includes: All sections and fittings		
7-308 (4.195)	Transmission Oil Pan and/or Gasket - Replace	.6	
	Includes: Clean Oil Pan and Screen		
	Combination		
	A. With Transmission Removed and Drained	.2	
	B. Valve Body - Replace (Includes R & R Accumulator) . . . . .	.2	
	C. Manual Valve Body - Overhaul (Removed)	.3	
	D. Shift Valve Body - Overhaul (Removed)	.3	
	E. Coupling Valve Body - Overhaul (Removed)	.3	
	F. Reverse Blocker Body - Overhaul (Removed)	.1	
	G. Accumulator and Servo-Assembly - Replace	.1	
	H. Accumulator and Servo-Assembly - Over- haul (Removed) . . . . .	.3	
	I. Throttle and Control Shaft and Seals - Replace . . . . .	.2	
7-310 (4.256)	Extension Housing Assembly and/or Gover- nor - Replace	1.1	
	Includes: R & R Prop Shaft Assembly		
	Combination		
	A. With Transmission Removed and Drained	.3	
	B. Extension Housing or Oil Seal - Replace	.2	
	C. Governor Assembly - Overhaul (Removed)	.3	
7-312 (4.343)	Speedometer Driven Gear - Replace . . . . .	.3	
7-314 (4.128)	Oil Cooler Lines - Replace		
	1. One . . . . .	.9	
	2. Both	1.4	
7-316 (4.003)	Transmission Assembly - Replace	3.4	
	Includes: Check and Adjust Linkage and Oil Pressure		
	Combinations		
	A. Flex Plate - Replace . . . . .	.2	
	B. Flywheel and Torus Cover Seal - Replace	.2	
	C. Torus Members and/or Check Valve - Replace . . . . .	.4	
	Includes: Comb. B		
	D. Torus Cover and Front Unit Gears - Replace . . . . .	.5	
	Includes: Comb. B and C		
	E. Rear Flywheel Housing Assembly - Replace	.7	
	Includes: Comb. B through D		
	F. Flywheel Housing Oil Seal - Replace (Housing Removed) . . . . .	.2	
	G. Front Coupling Assembly - Replace and Check End Play . . . . .	.9	
	Includes: Comb. B through E		
	H. Front Coupling Assembly - Overhaul (Removed) . . . . .	.7	
7-318 (4.226)	Transmission Front Pump Assembly - Replace	5.3	
	Includes: R & R Transmission, Torus Members, Rear Flywheel Housing and Valve Body		
	Combinations		
	A. With Transmission Removed and Drained	1.9	
	B. Front Pump - Overhaul (Removed) . . .	.4	
	C. Overrun Clutch - Overhaul (Removed) .	.2	
	D. Front Sprag - Replace (Pump Removed)	.1	
7-320 (4.200)	Rear Pump, Reverse Clutch Assembly and Rear Bearing - Replace	4.1	
	Includes: R & R Transmission & Extension Housing		
	Combinations		
	A. With Transmission Removed and Drained	.7	
	B. Rear Bearing - Replace . . . . .	.1	
	C. Rear Pump - Overhaul . . . . .	.2	
	D. Reverse Clutch - Overhaul . . . . .	.2	
	E. Reverse Stationary Cone and Carrier - Replace . . . . .	.1	
	F. Parking Pawl - Replace . . . . .	.5	
	Includes: R & R Valve Body		
7-322 (4.177)	Transmission Center Case Support, Neutral Clutch, and rear Planetary Assembly - Replace	6.2	
	Includes: R & R Transmission, Front Pump, Rear Pump and Valve Body		
	Combinations		
	A. With Transmission Removed and Drained	2.8	
	B. Neutral Clutch - Overhaul . . . . .	.4	
	C. Neutral Clutch and Rear Unit - Overhaul	1.0	
	D. Rear Unit - Overhaul . . . . .	.9	
	E. Rear Sprag - Only - Replace . . . . .	.2	
	F. Transmission Case - Replace . . . . .	.5	
	G. Low Band - Replace . . . . .	.1	
	WHEELS - TIRES		
10-1 (5.803)	Tire and Wheel Assembly - One - Replace	.2	

	Time		Time
10-5 (5.803) Tire and Wheel Assemblies - Set of Five - Replace or Change Wheel Positions as Illus- trated Below . . . . .	.6	(8.866) Heater Temperature Control Valve - Replace	.4
10-10 (5.803) Tire or Wheel - One - Replace . . . . .	.5	(10.275) Glove Box Light and/or Switch and/or Wire - Install or Replace . . . . .	.3
10-15 (5.803) New Wheel - One - Refinish . . . . .	.4	(9.777) License Plate Frame - Each - Install . . . . .	.2
Does Not Include: R & R Wheel or Tire (1/4 qt. Paint Material)		(10.185) Mirror-Vanity Visor - Install or Replace (N.C.)	
10-20 (5.803) Wheel - One - Refinish	1.0	(10.185) Mirror Outside Rear View - Install . . . . .	.3
Includes: Remove and Install Wheel and Tire and Preparing Wheel for Paint (1/4 qt. Paint Material)		(10.185) Mirror and/or Bracket - Outside Rear View - Replace . . . . .	.2
Accessories		(10.185) Mirror, Non-Glare - Install or Replace . . . . .	.2
(10.275) Courtesy Lamps - Install . . . . .	.5	(4.589) Parking Brake Signal - Install . . . . .	.5
(10.275) Courtesy Lamp Switch and/or Trim Plate - Replace . . . . .	.2	(4.589) Parking Brake Signal Flasher - Replace . . . . .	.2
(9.500) Compass - Install (or Replace) . . . . .	.3	(4.589) Parking Brake, Signal Switch - Replace . . . . .	.2
Includes: Allowance for Compensating		Includes: Adjust Switch	
(2.697) Back-Up Lamps - Install . . . . .	.5	(9.650) Radio Assembly - Install Deluxe	1.4
(2.697) Back-Up Lamp Assembly - Replace Right Side . . . . .	.1	Includes: Install Condensers and Ground Straps	
Left Side . . . . .	.2	(9.650) Radio Tuner Assembly (Receiver) - Remove and Replace for Repair (Warranty Allowance) Deluxe . . . . .	.4
(2.697) Back-Up Lamp Lens and/or Bulb - Replace	.1	Radio Antenna Assembly - Standard - Install	1.2
(10.352) Door Edge Guards - Install (or Replace) Two Door . . . . .	.3	Includes: R & R Rear Seat Cushion and Door Sill Plates	
Four Door . . . . .	.5	(9.988) Luggage and Utility Lamp - Install or Replace	.2
(12.895) Direction Signal Control Assembly - Replace	.6	(8.798) Windshield Washer - Install	1.7
Includes: R & R Steering Wheel and Loosen Switch Assembly		(10.201) Inside Sliding Sun Visor - Install . . . . .	.3
(2.895) Direction Signal Handle - Replace . . . . .	.1	(9.500) Tissue Dispenser - Install . . . . .	.3
(2.895) Direction Signal Switch Assembly - Replace	.2	(9.500) Curb Feeler, Pair - Install . . . . .	.2
(12.009) Lighted Ash Tray - Install Two Lamps Only . . . . .	.3	(4.898) Power Brakes - Install	3.4
Two Lamps Plus Right Hand Tray	1.1	Includes: Bleed Brakes and Fill Fluid Res- ervoir.	
(8.845) Heater-Defroster Assembly - Install	8.1		

REMOVE WAX IN VAUXHALL PAINT REPAIR

As many Vauxhalls are leaving the factory waxed or polished using materials formulated with silicone polishes, it will be necessary to remove the wax when making paint repairs.

Touch Up Repair

For touch up repair work (area about the size of a quarter or less) the procedure listed below should be followed.

1. Remove wax with suitable silicone remover such as DuPont 3980 or T3919 thinner or equivalent.
2. Flush area with warm water.
3. Wet sand area to be repaired with 320 wet-or-dry paper.
4. Area of repair must be thoroughly dry. This can be expedited by wiping with naphtha or white gasoline.
5. If area has been sanded to white metal, treat with Deoxidine or Metal-Prep before applying primer-surfacer. Area should then be flushed with warm water and dried.
6. Small area (about size of quarter or less) use PX Primer-Surfacer.
7. Thirty (30) minutes after air-dry, primer-surfacer should be dry scuffed.

NOTE: Sanding of primer-surfacer should extend beyond area of application to color coat by feathering edges.

8. Apply repair lacquer in DuPont 269 line or equivalent match to original Vauxhall color. In

application of lacquer, color should extend slightly beyond area of undercoat repair.

9. Rich mist coat thinner, preferably with a little color added, should be sprayed on repair area so that overspray will melt in. Also, better leveling of repair is possible.
10. Air-dry at least four (4) hours before compounding and polishing. If infra-red lamp is available equivalent heat of 180° F. for 20 minutes is satisfactory.

Large Areas of Repair

Where areas of repair are much larger than size of a quarter, it is recommended that a primer-surfacer of the type furnished by DuPont (65-3012) or equivalent be used. Proceed as follows:

1. If area has been sanded to white metal, it should be treated with Deoxidine or equivalent, followed by warm water flush. Area should then be dried before Primer-Surfacer application.
2. Primer-Surfacer should be applied to thickness of about .0015". Production lacquer should be washed back far enough from edge of spot or area so that repair Primer-Surfacer will cover a minimum portion of the original lacquer.
3. Air-dry for at least six (6) hours. If lamps are available, equivalent heat of 180° F. at 45 minutes is satisfactory.
4. Sand area to smooth finish and wipe off all dust and sanding residue.
5. Apply .0025" thickness of 269-line lacquer or equivalent in color matched to Vauxhall lacquer.
6. Rich mist coat thinner, preferably with a little color added, should be sprayed on repair so that overspray will melt in. Also, better leveling of repair is possible.
7. Allow to air-dry for at least four (4) hours before compounding or polishing. If infra-red lamps are available, heat equivalent of 180° F. for 20 minutes is satisfactory.

VAUXHALL COLORS AND CODE NUMBERS RELEASED

The following colors and Code Numbers have been released for the Vauxhall car. These colors may be obtained by Code Number through your DuPont or Rinshed-Mason paint distributors.

Vauxhall	DuPont Code	Rinshed-Mason Code
1. Gypsy Red	91809	U5559
2. Laurel Green	91835	U3479
3. Empress Blue	90966	U2318
4. Horizon Blue	91834	U2328
5. Harvest Yellow	91836	U7942
6. Shantung Beige	91833	U8818
7. Charcoal Gray	91837	U1180
8. Black	Stock No. 44	400

Puttying

If imperfections show after Primer-Surfacer application and dry sanding, a putty of the PX type may be used. However, it should be used rather sparingly. Putty should be knifed on in light coat applications. Dry for at least sixty (60) minutes before dry sanding. Apply color coats as per previous procedure and instructions.

New Carter Carburetor Released For Production

A new Carter 4-Barrel Carburetor incorporating an air by-pass type idle system is now being used in production.

Service Procedures and adjustment specifications remain the same on the new carburetor with the exception of those involving the idle circuit and fast idle setting.

In the new system idle air no longer flows past the throttle valves but is directed through a separate passage around the throttle valves and metered by the position of the by-pass air screw (See Fig. 9). The throttle valves are completely closed on hot idle.

The conventional idle speed screw has been eliminated and hot idle speed is controlled by the air screw. Under no circumstances should an idle speed screw be installed on this carburetor.

Following is the idle speed and mixture adjustment procedure.

1. As a preliminary setting turn air screw out 2-1/2 turns from lightly seated position and mixture screws out 1 turn.
2. Set hand brake securely, place transmission in neutral and connect tachometer to engine.
3. Start engine and warm up thoroughly. Make sure choke is fully open and carburetor is completely off fast idle.
4. Put transmission in "drive" and adjust the air screw to obtain a reading of 480-500 rpm.
5. Turn mixture screws to best quality (highest rpm) idle.
6. Reset air screw to 480-500 rpm if mixture adjustment changed setting.
7. Re-check mixture adjustment to insure smoothest possible idle.

NOTE: Always re-check idle mixture setting after making idle rpm adjustment with air screw.

The fast idle setting must be made after the idle speed and mixture adjustment. With the engine completely warmed up and the fast idle screw on the highest step of the fast idle cam, set the fast idle screw to give an engine speed of 2200 rpm.

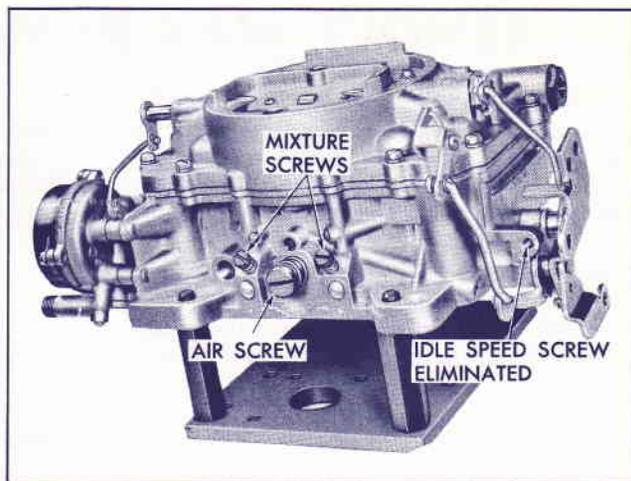


Fig. 9 New Carter Carburetor

WASH NEEDLE THRUST BEARINGS IN 1958 HYDRA-MATIC TRANSMISSION

Whenever a 1958 Hydra-Matic transmission is disassembled for repair or reconditioning, wash the front and rear unit needle bearings and their adjacent thrust washers in clean solvent and inspect before reusing.

The needle bearing cage must not be deformed and rollers must neither bind nor be loose enough to become dislodged from cage. If rollers or thrust washers are nicked or otherwise damaged (to the extent of interfering with the normal free rolling of rollers) replace parts.

THROTTLE LINKAGE-COIL WIRE INTERFERENCE ON 1958 MODELS

Several cases of interference between the distributor to coil primary wire and the carburetor throttle linkage have been noted when the accelerator pedal is depressed to open the carburetor throttle valves. This condition can result in the holding open of the carburetor throttle linkage and/or a fraying of the coil wire insulation.

In some instances the condition can be corrected by rotating the coil in its bracket until adequate clearance exists. If clearance cannot be obtained in this manner it will be necessary to splice an extra 5" section in the coil primary wire and retain it to the coil secondary wire with a grommet (part #494104) as used in 1957.

Use care when splicing to achieve a good soldered connection and insulate the splice thoroughly.

This condition has been corrected in production.

So You Think You Know Your Nomenclature!



Have you looked under any bonnets lately?

Be sure the de-mister is working properly on cars now. Winter is here you know.

Do all your owners know how to use their dippers? Better instruct them if they don't.

If the above has left you confused it only goes to show one thing . . . your nomenclature needs some brushing up.

This is not really your fault. The terms above are British terms which must be translated to American. We recently printed the glossary for the Vauxhall Motors, Ltd. Owner's Guide. We are repeating it in this issue of the News to help acquaint you with "their" service terms.

GLOSSARY

anti clockwise	counter clockwise
ball runners	ball bearings
birthday	clean up
bonnet	hood
bobbing.	moving up and down
bushes	bushings
carburettor	carburetor
casing	housing
centre	center
chamois leather	chamois skin
colour	color
debar.	prevent
de-mist	defrost
de-mister	defroster
earth.	ground
emulsion block.	jet cluster
ensure	insure
fellows.	adjoining parts
following wind	tail wind
French chalk.	marking chalk
fresh air.	outside air
hard on.	tight
headlight beam dipper.	dimmer switch
horn push	horn button
kerb	curb
laden.	loaded
link mats.	type of floor mat
luggage boot	trunk
luggage boot lid	rear deck lid

minimise	minimize
monetary exchange	
pound	\$2.80 present rate of exchange
shilling	20 shillings to the pound
pence	12 pence to the shilling
mutton cloth	similar to cheese cloth
nipples	"zerk" fittings
overleaf	next page
paraffin	methane hydro carbon (solvent)
petrol	gasoline
pinking.	pinging
programme	program
reversing lights	backup lights
right home.	all the way in
scotches	blocks
scuttle	air intake vent
side lights	parking lights
spanner	wrench
specialised.	specialized
sump.	oil pan
taps	drain cocks
"tick over".	idle
tommy bar	"T" handle
top (referring to transmission)	high gear
top up	fill up
tyre	tire
tyre stopping.	tire patch
under bonnet light	underhood light
wheel rim embellishers.	wheel trim rings
windscreen.	windshield
wing	fender
works	factory
young.	new
vapour	vapor
capacities	
10.5 Pints (Imp.)	12.6 Pints (U.S.)
8.5 Pints (Imp.)	10.2 Pints (U.S.)
7.0 Pints (Imp.)	8.4 Pints (U.S.)
2.0 Pints (Imp.)	2.4 Pints (U.S.)
2.5 Pints (imp.)	3.0 Pints (U.S.)

NON-GLARE INSTRUMENT PANEL PAINT DISCONTINUED

Factory application of special non-glare instrument panel paint on 1958 models has been discontinued due to production problems. In the future, instrument panels will be finished with regular lacquer minus any polishing. This type of finish will result in a gloss reduction of approximately 25 per cent and should be adequate in all instances.

If any individual cases arise in which additional gloss reduction is desired, the panel may be re-finished with special flat paint as outlined on page 54 of the July, 1957 Service Craftsman News. This type of service should be considered owner maintenance. Before applying non-glare finish, the radio speaker grille should be masked for protection.

Location of Hold-down Straps Changed On Rail Shipped Cars

The location of the hold-down strap for 1958 Hydra-Matic equipped cars shipped by rail has been changed from that indicated in the November issue of the Service Craftsman News (Page 78). It has been removed from the front splash apron area to the area of the rear splash apron. Therefore, the front apron attaching screw is no longer removed.

Production is now removing the rear splash apron in order to attach hold-down straps. This apron and the attaching screw are placed in the glove box.

The splash apron must be re-installed on the left frame side rail below the Hydra-Matic transmission linkage before delivery of a car. The slotted end of the apron fits under the parking brake cable retaining screw (See Fig. 11). The front end of the apron is held to the frame by a metal screw.

INSTALL H.M. SNAP RINGS WITH CONVEX SIDE AGAINST PART RETAINED

The September-October issue of the Service Craftsman News had an article entitled "Replace Snap Ring When Removing Drive Torus". This article is on page 70 of that issue.

An additional piece of important information concerning the above subject was recently brought to our attention which is: snap rings used in Hydra-Matic transmissions have slight convex and concave sides and should be installed with the CONVEX side against the part being retained (See Fig. 10).

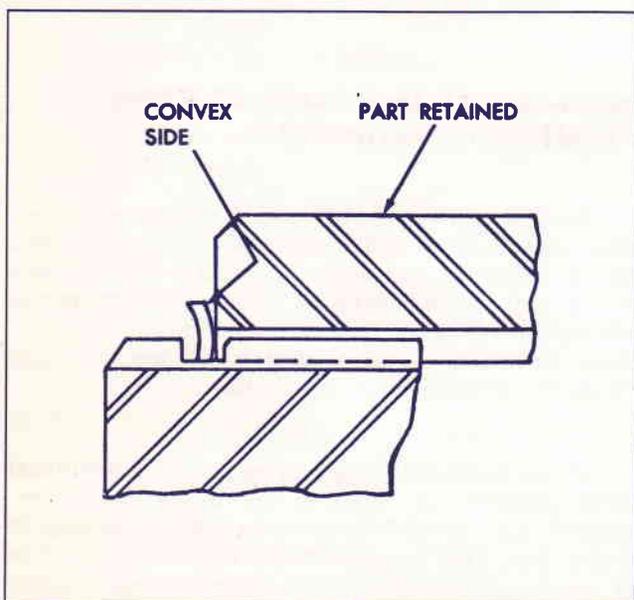


Fig. 10 Snap Ring Against Part Retained

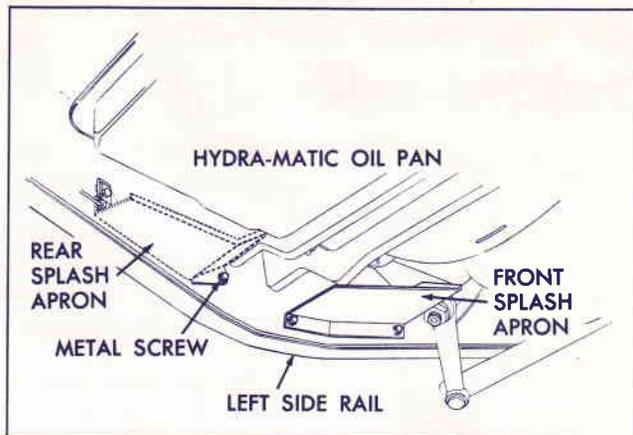


Fig. 11 Rear Splash Apron Location

INSTALL CLIP TO POSITION PARKING BRAKE CABLE

On all 1958 Pontiac models built prior to November 5, 1957, there is a possibility of contact between the parking brake cable and the solenoid junction block terminals. This is the junction block mounted on the firewall level with and to the left of the steering column. Contact is most likely to occur as the brake is applied suddenly as this produces a "whipping" action of the cable.

Contact of cable with block will result in burning of the cable conduit and failure of the parking brake. To avoid any possibility of this occurrence a clip (part #530235), must be installed on all cars built prior to November 5. This clip is mounted on the outboard junction block screw as shown in Fig. 12. Replace present retaining screw with longer screw (part #3651216) or comparable screw. The end of the clip must be bent securely around the cable; however, no retaining screw is necessary.

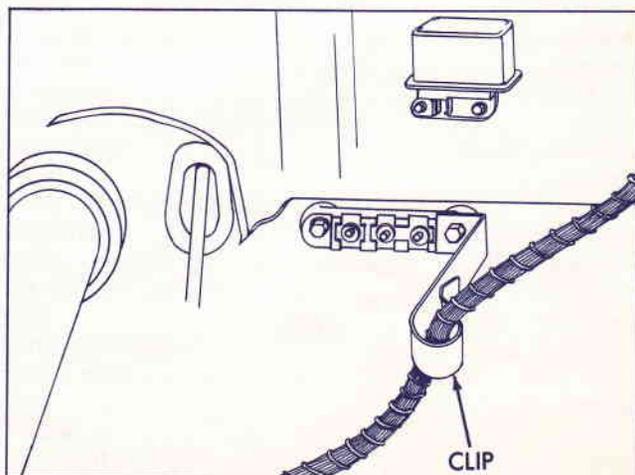


Fig. 12 Clip to Position Parking Brake Cable

News About Your TRAINING CENTER



DEDHAM, MASS. -- The Boston Zone recently combined a one day training program with the presentation of Service Craftsman Awards at the General Motors Training Center in Dedham, Mass. The training consisted of a review of the 1957 Products and a presentation of Pontiac's Fuel Injection System.

The Craftsmen winning the Awards are pictured below.



Standing, left to right are: Albert DeCoste, Ward Pontiac, Weymouth, Mass., Richard LaQuinn, Balch Motor Sales, Warehouse Pt., Conn., Fred Lewis, Balch Motor Sales, Warehouse Pt., Conn., Joseph Parves, Senn Motor Company, Woonsocket, R.I., George Blake, R. B. Fraser Co., Amesbury, Mass. Seated are: Alfonso Sarso, White Pontiac Co., Providence, R.I., Stanley Slowich, Senn Motor Co., Woonsocket, R.I., George Vanier, A.C. Hine Co., Hartford Conn., Robert Gould, A.C. Hine Co., Hartford Conn.

1958 HYDRA-MATIC CONTROL VALVE IDENTIFICATION

An identification code consisting of letter P or letters PA followed by a number 1, 2, or 3, etc., is die stamped on shift, clutch, and manual valve bodies used in production.

The letter (P) designates valve is for a Pontiac transmission and (PA) for cars equipped with fuel injection. The suffix number will change whenever a design change affecting interchangeability is made.

Therefore, check identification code to ensure installation of correct replacement parts.

BROKEN CHOKE HEAT TUBE MAY BE REPLACED

If the choke heat tube in the intake manifold (See Fig. 13) is damaged and requires replacement, it is not necessary to replace the entire manifold.

The choke heat tube and its baffle are serviced separately (part numbers 518256 and 518220 respectively) and can be replaced in the following manner: (1) remove intake manifold, (2) remove 1/8" pipe plug and (3) using a square faced punch drive the tube from each end into exhaust chamber of manifold and remove.

To install new tube (1) press tube into manifold until tube clears vertical passage (to choke pipe), (2) install baffle, (3) install 1/8" pipe plug and (4) re-install manifold.

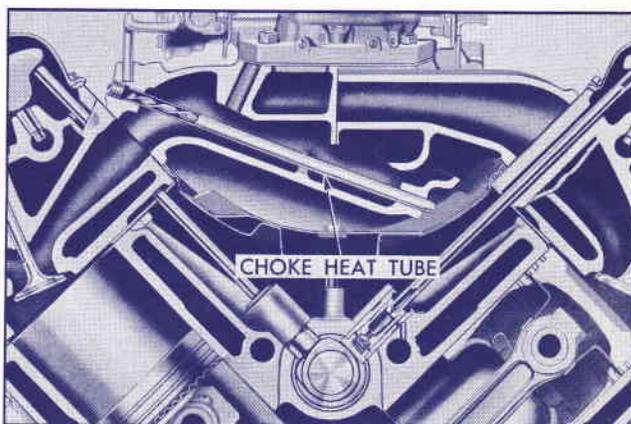


Fig 13 Choke Heat Tube In Intake Manifold

Heavy Duty Transmission Specifications Correction

The following heavy duty transmission specifications supersede those found on page 92 of the November Service Craftsman News.

Specifications

Type	Synchro-Mesh
Gear Ratios:	
Low	2.49 to 1.00
Second	1.59 to 1.00
Third	1.00 to 1.00
Reverse	3.15 to 1.00
Lubricant Capacity	2-3/4 pints

At a Glance

(Continued From Page 94)

CHECK HEATER HOSE ON 1958 CARS

On some early 1958 production cars manufactured in Pontiac, the hose connecting the heater and heater pipe has been installed in reverse position. This would result in the heater hose contacting the left hood hinge and permitting a chafing condition to take place. This condition will eventually result in the hinge rubbing through the hose permitting loss of the coolant. All cars should be checked for this condition.

SAFARI #2 SEAT INSTRUCTIONS

The following instructions are for lowering and raising the #2 Safari seat. To fold the seat, it is necessary to move the front seat forward. The #2 seat cushion then should be raised approximately 1" at the front and at the same time pull the seat-back at the top forward until the two cushions have reached the folded position. To raise the #2 seat, being sure first that the front seat assembly is forward, raise the #2 seat-back until it has reached the upright position.

A section of the floor is attached to the seat-back with a hinge. When the seat-back is in the upright position, this floor section folds against the seat-back and is held in place by bayonet fasteners.

OIL LEAKAGE AT POWER STEERING PUMP—AIR COMPRESSOR ASSEMBLY

Several cases of oil leakage at the reservoir cover bolt of the power steering pump - air suspension compressor assembly have been reported.

The corrective procedure on cases of this nature is to remove and discard the hose clip mounted under the bolt head and install a soft copper washer, part number 5685606, in place of the clip.

BRAKE LINE INTERFERENCE ON 1958 CARS

On some early production 1958 cars, it has been noted that the brake line leading to the rear left wheel was installed in a position so that the shock absorber could strike the tube and cause chafing or damage. This brake line should be installed so as to lay against the axle housing directly above the support brackets that are welded to the axle housing. It may be necessary to slightly bend the tube in order to position so that there will be no interference.

The location of the right front brake tube, where it passes the left front wheel upper support arm, should be examined to see if there is sufficient clearance to prevent the arm from chafing the tube. These inspections should be made on all early production cars.

CHECKING FOR WEAR IN 1958 FRONT SUSPENSION

At the 1958 Service Convention it was pointed out that slight looseness in the lower ball joint is normal when the weight of the car is taken off the wheels.

To determine if looseness is normal or excessive do the following: (1) Place a lift or car jack under the lower control arm and raise the wheel just off the floor. (2) Grip the wheel at the top and bottom and rock to determine the amount of movement.

Movement in excess of 1/4" at the outer circumference of the tire indicates excessive wear in wheel bearing, ball joints or both. Corrections should be based upon observations during the rocking test. Removal of the dust cap on the outer end of the hub will facilitate examination of wheel bearing adjustment.

STOP LAMP FUSE CHANGED

The stop lamp fuse on 1958 model cars has been changed from a 7-1/2 ampere fuse to a 14 ampere fuse. This change will be made in the second edition of the Owner's Guide. Inform the owner of this fuse change.

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.
