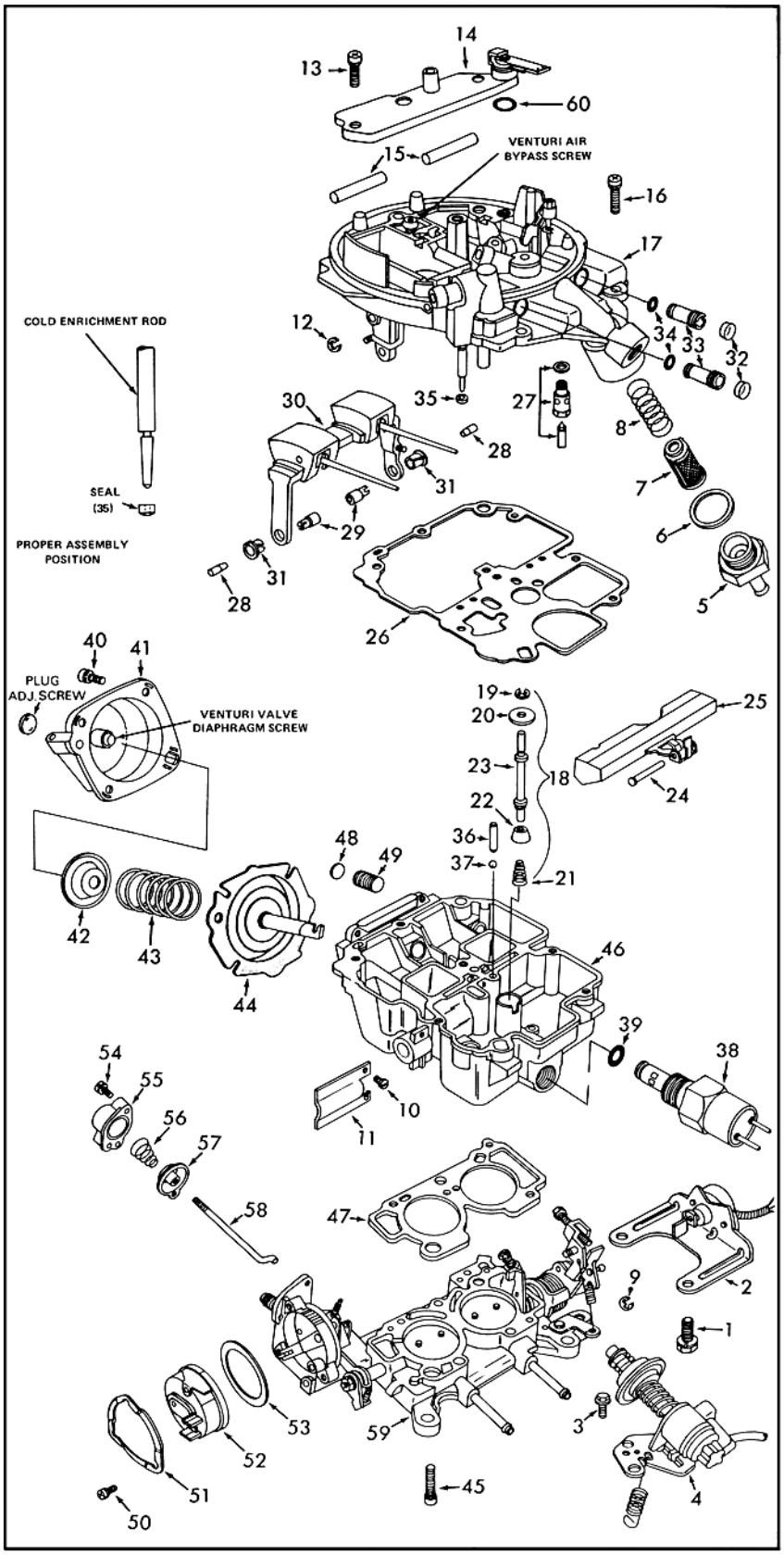
INSTRUCTION SHEET
OFF VEHICLE CARBURETOR SERVICE
MOTORCRAFT-MODEL 2700VV

08050-548-1

GENERAL EXPLODED VIEW
THE GENERAL DESIGN AND PARTS SHOWN WILL VARY TO INDIVIDUAL UNITS COVERED ON THIS INSTRUCTION SHEET.



DISASSEMBLY

USE EXPLODED VIEW AS A GUIDE. THE NUMERICAL SEQUENCE MAY GENERALLY BE FOLLOWED TO DISASSEMBLE UNIT FAR ENOUGH TO PERMIT CLEANING AND INSPECTION.

SPECIAL INSTRUCTIONS

CAUTION: ALWAYS BLOCK THE VENTURI VALVES WIDE OPEN WHEN WORKING ON MAIN METERING JETS. ITEM (33). DO NOT DISTURB VENTURI AIR BYPASS OR VENTURI VALVE DIAPHRAGM ADJUSTING SCREWS DURING DISASSEMBLY.

WHEN TPS IS USED, REMOVE THROTTLE POSITION SENSOR AND BRACKET AS AN ASSEMBLY. DO NOT LOOSEN SENSOR MOUNTING/ADJUSTING SCREWS. ITEM (2)'

PIVOT PLUGS (28) - SUPPORT BOWL COVER HINGE BRACKET (SMALL SOCKET ETC.) THEN USING A SMALL PUNCH, LIGHTLY TAP PIVOT PLUG FROM PIVOT PIN. REMOVE VENTURI VALVE AND METERING ROD ASSEMBLY (30) BY SLIDING BACKWARD.

CUP PLUGS (32) - CAREFULLY PUNCH OR DRILL HOLE IN CENTER OF PLUG AND USING AN EASY OUT TYPE PULLER TAP PLUG OUT OF BOWL COVER.

MAIN JETS (33) - BEFORE REMOVING, USE A JET WRENCH OR PROPER FITTED SCREWDRIVER TO CAREFULLY TURN JETS IN CLOCKWISE COUNTING THE NUMBER OF TURNS IT TAKES TO SEAT JET IN CASTING. RECORD NUMBER OF TURNS TO THE NEAREST 1/4 TURN.

REMOVE JETS, THEN IDENTIFY THE JETS AND METERING RODS, THROTTLE SIDE OR CHOKE SIDE, FOR PROPER ASSEMBLY.

CRANKING FUEL CONTROL VALVE - LOCATED IN BOTTOM OF FUEL BOWL. THIS VALVE IS NOT REMOVED UNLESS COMPLETE REPLACEMENT OF VALVE IS MADE.

WELCH PLUG (48) - PUNCH OR DRILL HOLE IN CENTER OF PLUG, USIN' AN EASY OUT TYPE PULLER, TAP PLUG FROM SEAT.

NOMENCLATURE

REF. NO.	
1.	SCREW (2) - THROTTLE POSITION SENSOR
2.	THROTTLE POSITION SENSOR ASSEMBLY (SOME MODELS)
* 3.	SCREW - THROTTLE RETURN CONTROL
* 4.	THROTTLE RETURN CONTROL & KICK DOWN LEVER RETURN SPRING
5.	FITTING - FUEL INLET
6.	GASKET - FITTING
7.	FILTER - FUEL
8.	SPRING - FILTER
9.	E CLIP - PUMP ROD
10.	SCREW - CHOKE HEAT SHIELD
11.	HEAT SHIELD - CHOKE
12.	E CLIP - CHOKE CONTROL ROD
*13.	SCREW & LKWSHR. (2) - COVER PLATE
*14.	COVER PLATE - VENTURI VALVE
*15.	ROLLER BEARING (2)
16.	SCREW & LKWSHR. (7) - BOWL COVER
17.	BOWL COVER ASSEMBLY
18.	PUMP PLUNGER ASSEMBLY
19.	E CLIP - INTERNAL VENT VALVE
20.	VALVE - INTERNAL VENT
21.	SPRING - PUMP RETURN
22.	CUP - PUMP
23.	STEM - PUMP
24.	PIN - FLOAT HINGE
25.	FLOAT & LEVER ASSEMBLY
26.	GASKET - BOWL COVER
27.	NEEDLE, SEAT & GASKET ASSY.
28.	PIVOT PLUG (2)
29.	PIVOT PIN (2)
30	VENTURI VALVE AND METERING ROD ASSEMBLY
31.	BUSHING (2) - VENTURI VALVE
32.	CUP PLUG (2) - MAIN JET
33.	JET (2) - MAIN METERING
34.	O-RING (2) - MAIN JET
35.	SEAL - COLD ENRICHMENT ROD
36.	WEIGHT - PUMP CHECK BALL
37.	BALL - PUMP CHECK
38.	SOLENOID - CRANKING ENRICHMENT
39.	O-RING - SOLENOID
40.	SCREW & LKWSHR. (4) - DIAPH. COVER
41.	COVER - DIAPHRAGM
42.	SPRING GUIDE
43.	SPRING - DIAPHRAGM
44.	DIAPHRAGM - VENTURI VALVE
45.	SCREW & LKWSHR (5) - THROTTLE BODY
46.	BOWL ASSEMBLY
47.	GASKET - THROTTLE BODY
*48.	PLUG - WIDE OPEN STOP SCREW
*49.	SCREW - WIDE OPEN STOP
*50.	SCREW (3) - RETAINER
*51.	RETAINER - CHOKE THERMOSTATIC HOUSING
*52.	CHOKE THERMOSTATIC HOUSING
53.	GASKET - THERMOSTATIC HOUSING
54.	SCREW & LKWSHR. (2) - DIAPH. COVER
55.	COVER - DIAPHRAGM
56.	SPRING - DIAPHRAGM
57.	DIAPHRAGM ASSEMBLY - HIGH CAM SPEED POSITIONER
58.	ROD - DIAPHRAGM ASSEMBLY
59.	THROTTLE BODY ASSEMBLY
60.	O-RING - HOT IDLE COMPENSATOR

*DO NOT INSTALL THESE PARTS UNTIL AFTER BENCH ADJUSTMENTS ARE MADE.

CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. USE A CARBURETOR CLEANING SOLVENT. MAKE CERTAIN THE THROTTLE BORES ARE FREE OF ALL CARBON AND VARNISH DEPOSITS. RINSE OFF IN SUITABLE SOLVENT. BLOW OUT ALL PASSAGES IN CASTING WITH COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH CLEANING OF OBSCURE AREAS. CAUTION: DO NOT SOAK PARTS CONTAINING NYLON OR RUBBER MATERIALS SUCH AS (2), (4), (20), (25), (38), (44), (52), (57).

REASSEMBLY

REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE SPECIAL INSTRUCTIONS AND FOLLOW NUMERICAL OUTLINE IN MAKING ADJUSTMENTS NECESSARY FOR CARBURETOR BEING SERVICED.

ADJUSTMENTS

IMPORTANT! THE COLD ENRICHMENT METERING ROD ADJUSTMENT (FIG.7) MUST BE DONE PRIOR TO ANY OTHER CHOKE SYSTEM ADJUSTMENTS.

ADJUSTMENTS

SPECIAL INSTRUCTIONS

CHECK ADJUSTMENTS, SOME ARE MADE AS CARBURETOR IS BEING ASSEMBLED.

O-RINGS-WHEN INSTALLING LIGHTLY LUBRICATE WITH LIGHT OIL.

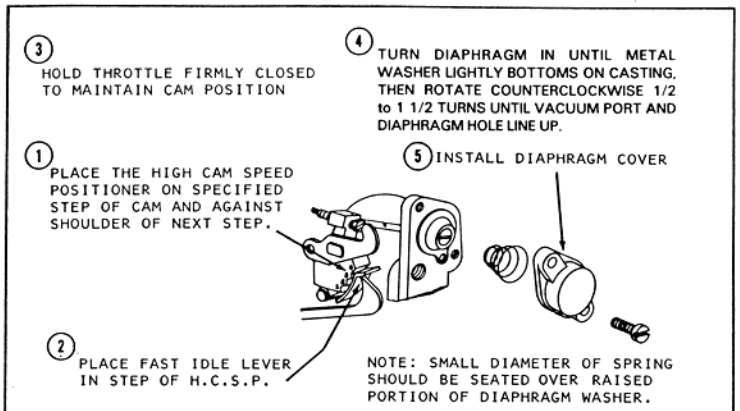
MAIN JETS (33)- TURN EACH MAIN JET IN CLOCKWISE UNTIL IT IS SEATED IN THE CASTING. THEN TURN JET COUNTERCLOCKWISE THE NUMBER OF TURNS RECORDED DURING DISASSEMBLY.

CUP PLUGS (32)- USING 3/8" DRIFT PUNCH, INSERT PLUG IN HOLE & TAP LIGHTLY UNTIL PLUG SEATS IN CASTING.

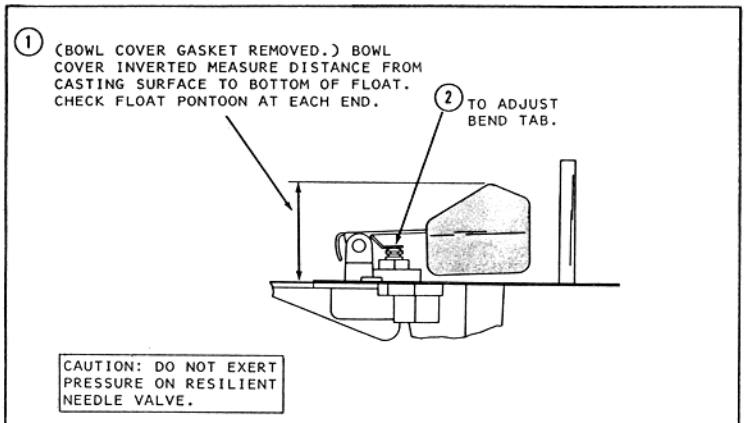
PIVOT PLUG (28)- TAPERED PLUGS CAN BE CAREFULLY PRESSED INTO THE PIVOT PIN USING A PLIERS WITH PARALLEL JAWS IN THE OPEN POSITION.

FLOAT HINGE PIN (24)- INSTALL PIN SO FLAT HEAD OF PIN IS IN THE RECESSED LEG OF FLOAT HANGER.

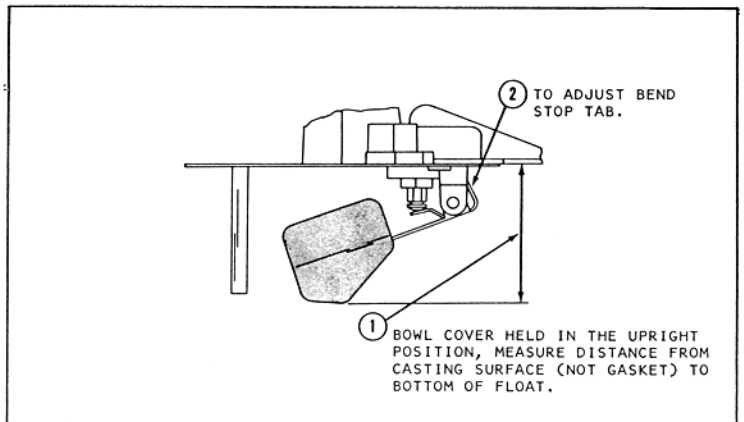
BOWL COVER ASSY. (17)- WHEN INSTALLING ON MAIN BODY BE SURE LIMITER LEVER IS MOVED FORWARD TO CLEAR VENTURI VALVE ARM AND VENTURI VALVE DIAPHRAGM STEM ENGAGES THE VENTURI VALVE PIN.



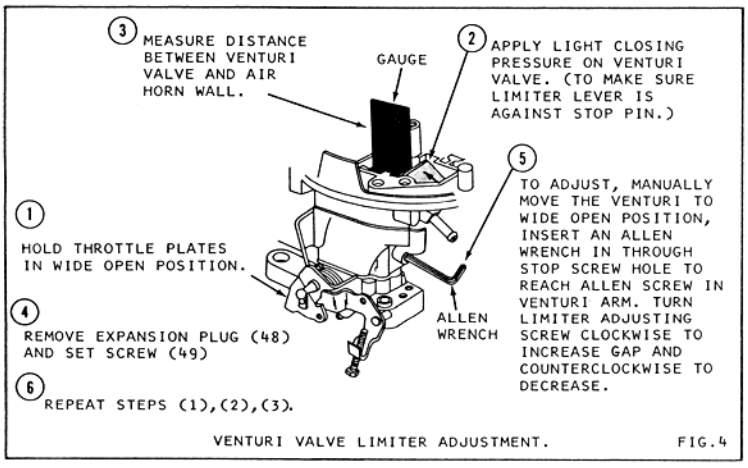
HIGH CAM SPEED POSITIONER ADJUSTMENT FIG. 1



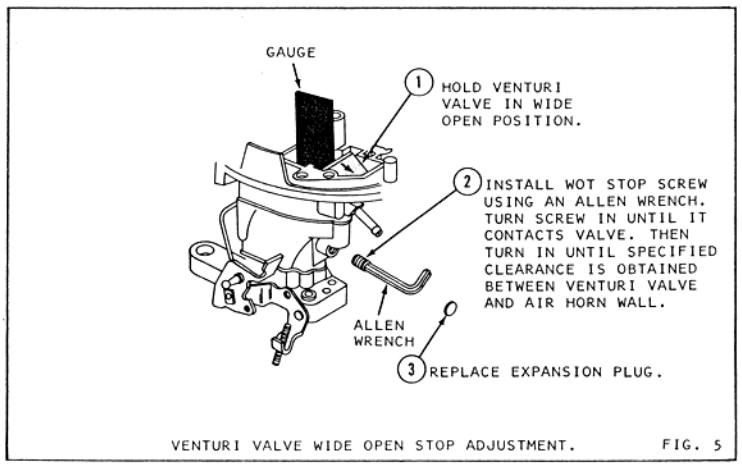
DRY FLOAT LEVEL ADJUSTMENT FIG. 2



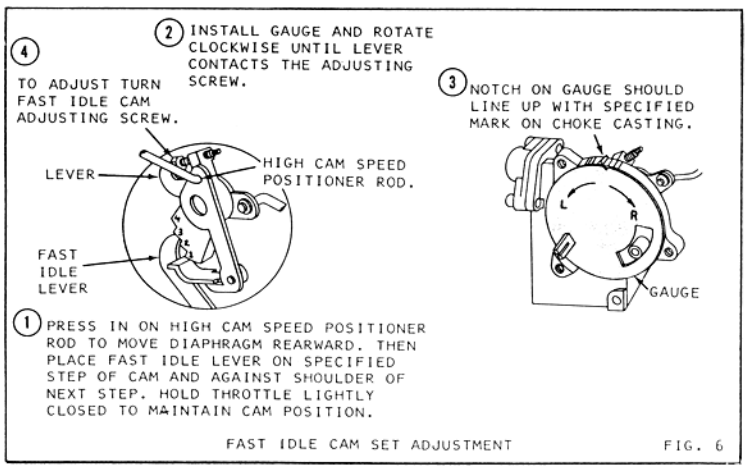
FLOAT DROP ADJUSTMENT FIG. 3



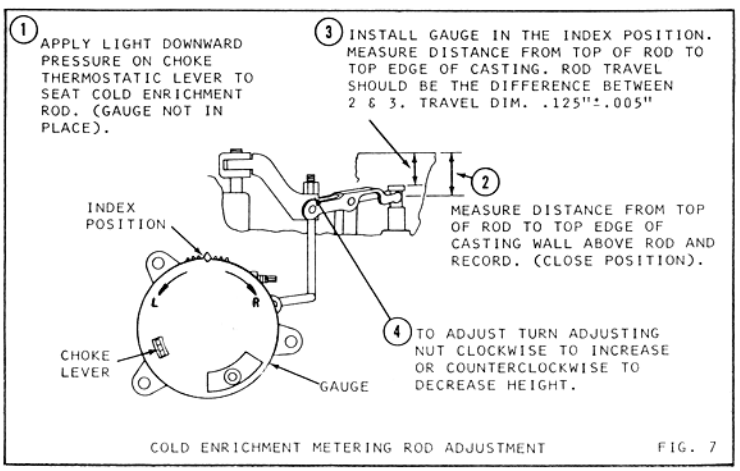
VENTURI VALVE LIMITER ADJUSTMENT. FIG.4



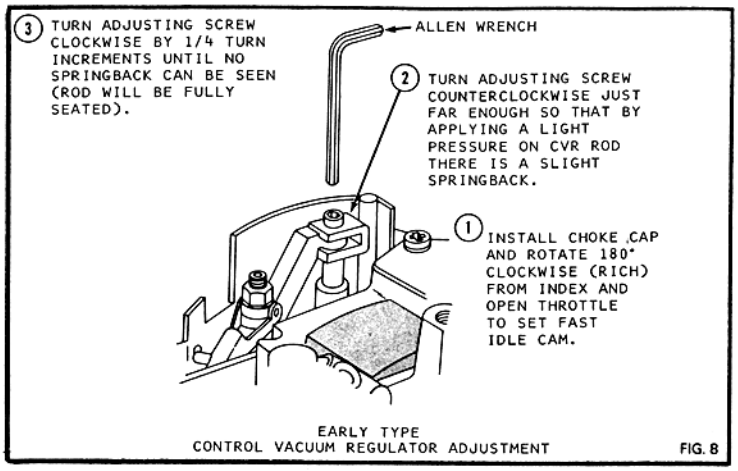
VENTURI VALVE WIDE OPEN STOP ADJUSTMENT. FIG. 5



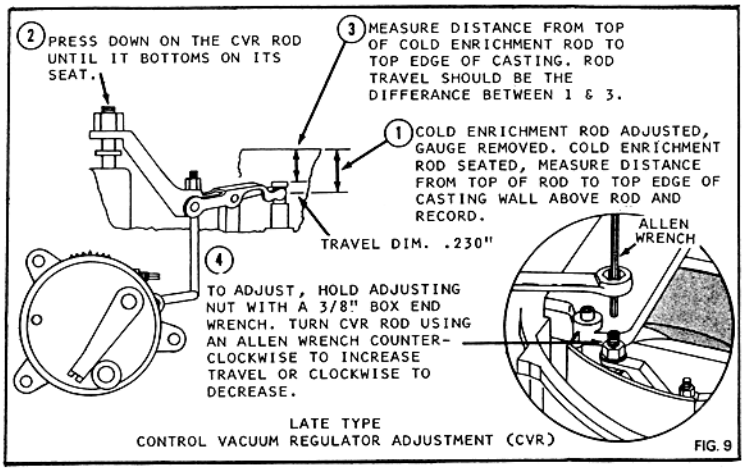
FAST IDLE CAM SET ADJUSTMENT FIG. 6



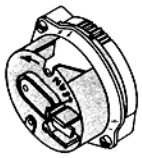
COLD ENRICHMENT METERING ROD ADJUSTMENT FIG. 7



EARLY TYPE
CONTROL VACUUM REGULATOR ADJUSTMENT FIG. 8



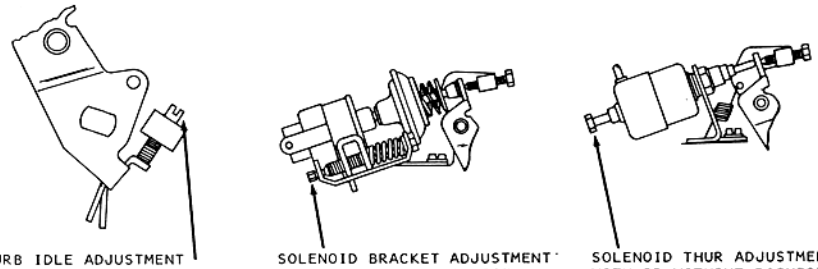
LATE TYPE
CONTROL VACUUM REGULATOR ADJUSTMENT (CVR) FIG. 9



ROTATE CHOKE COVER TO ALIGN REFERENCE MARK ON COVER TO SPECIFIED POINT ON CHOKE HOUSING.

AUTOMATIC CHOKE CAP ADJUSTMENT FIG. 10

FOLLOW IDLE ADJUSTMENT PROCEDURE FOUND ON ENGINE DECAL.



CURB IDLE ADJUSTMENT WITHOUT THROTTLE POSITIONER WITH OR WITHOUT DASHPOT

SOLENOID BRACKET ADJUSTMENT WITH OR WITHOUT DASHPOT

SOLENOID THUR ADJUSTMENT WITH OR WITHOUT DASHPOT

CURB IDLE ADJUSTMENT TYPE SCREWS FIG. 11

EARLY 1977 VACUUM TAP PROCEDURE

SOME EARLY 1977 VV CARBURETORS WERE BUILT WITHOUT A VACUUM TAP NECESSARY TO MAKE THE BYPASS AND CONTROL VACUUM ADJUSTMENTS. CHECK VENTURI VALVE COVER FOR THE VACUUM TAP IF NOT PRESENT PROCEED AS FOLLOWS:

1. DRILL OUT LEAD PLUG ON TOP OF VENTURI VALVE DIAPHRAGM COVER WITH A 1/8" DRILL. (DIP THE DRILL IN HEAVY GREASE TO PREVENT CHIPS FROM FALLING INTO THE DIAPHRAGM COVER.)
2. CUT A PIECE OF 3/16" TUBING 1" LONG AND SCRIBE A LINE 9/64" FROM ONE END OF TUBE.
3. TAP TUBE INTO COVER TO SCRIBED LINE. (NOTE: USE AN EPOXY TUBE GLUE TO SEAL AND RETAIN THE TUBE.

CAUTION: IF THE TUBE IS DRIVEN DEEPER THAN 9/64" IT COULD BLOCK AN INTERNAL VACUUM PASSAGE AND PREVENT NORMAL OPERATION OF THE VENTURI VALVE.

4. AFTER COMPLETING THE ADJUSTMENT, (SEE FIG. 13.) CAP TUBE WITH RUBBER CAP SUPPLIED IN KIT. (NOTE: A PROPER FITTING CAP IS ESSENTIAL BECAUSE A VACUUM LEAK IN THIS AREA WILL CAUSE A MALFUNCTION OF THE VENTURI VALVE.

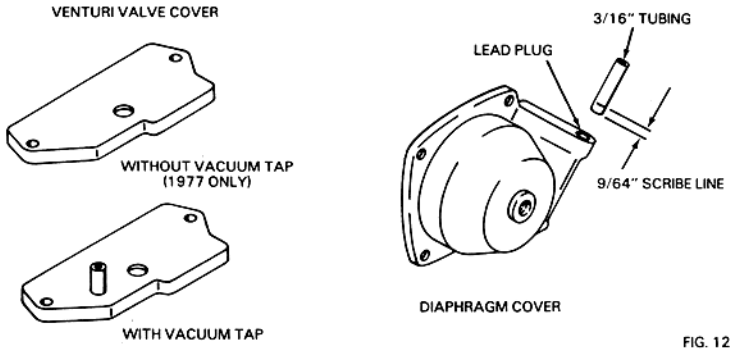


FIG. 12

ONE CAR ADJUSTMENT
BYPASS AND CONTROL VACUUM ADJUSTMENT

NOTE: THIS IS A CLOSE TOLERANCE SETTING WHICH IS CALIBRATED ON A PRECISION FLOW STAND DURING THE MANUFACTURING PROCESS. THE ADJUSTMENTS ARE SET AND DO NOT NORMALLY LOOSE THE ADJUSTMENTS. IF ALL ATTEMPTS TO CURE A PROBLEM THROUGH NORMAL DIAGNOSTIC TECHNIQUES ARE UNSUCCESSFUL PERFORM THIS ADJUSTMENT.

1. BEFORE INSTALLING CARBURETOR REMOVE VENTURI VALVE ADJUSTING SCREW PLUG. (CENTER PUNCH UNTIL LOOSE).
2. INSTALL CARBURETOR ON ENGINE AND ATTACH VACUUM AND ELECTRICAL CONNECTIONS.
3. START THE ENGINE AND BRING IT TO NORMAL OPERATING TEMPERATURE.
4. CONNECT VACUUM GAUGE (T77L-9510-A OR EQUIVALENT) TO VACUUM TAP ON VENTURI VALVE COVER.

NOTE: THE SPECIFIED VACUUM GAUGE INDICATES VACUUM IN INCHES OF WATER. AN INTAKE MANIFOLD VACUUM GAUGE INDICATES VACUUM IN INCHES OF MERCURY AND CANNOT BE USED TO PERFORM THIS ADJUSTMENT.

5. SET IDLE SPEED TO 500 RPM WITH TRANSMISSION IN DRIVE; RETURN TRANSMISSION TO "PARK".
6. USING FINGERS, PUSH VENTURI VALVE UNTIL VALVE IS SEATED AGAINST CASTING FACE. WHILE HOLDING CLOSED, ADJUST BYPASS SCREW TO OBTAIN A VACUUM READING OF SPECIFIED INCHES OF WATER ON GAUGE.
7. RELEASE VENTURI VALVE AND CYCLE THROTTLE.

NOTE: CYCLE THE THROTTLE AFTER EACH ADJUSTMENT.

8. WITH ENGINE AT CURB IDLE AND TRANSMISSION IN PARK, ADJUST VENTURI VALVE DIAPHRAGM SCREW UNTIL CONTROL VACUUM SPECIFICATION IS OBTAINED.
9. SET CURB IDLE SPEEDS TO SPECIFICATION IN DRIVE. (INSTALL VENTURI VALVE DIAPHRAGM SCREW PLUG.)

NOTE: THIS ADJUSTMENT SHOULD BE DONE AS A LAST STEP AND VARIATIONS TO THE ABOVE READING MAY OCCUR, DEPENDING ON ENGINE CONDITION. HOWEVER, AS LONG AS THE ENGINE FUNCTIONS PROPERLY, THESE VARIATIONS ARE ACCEPTABLE.

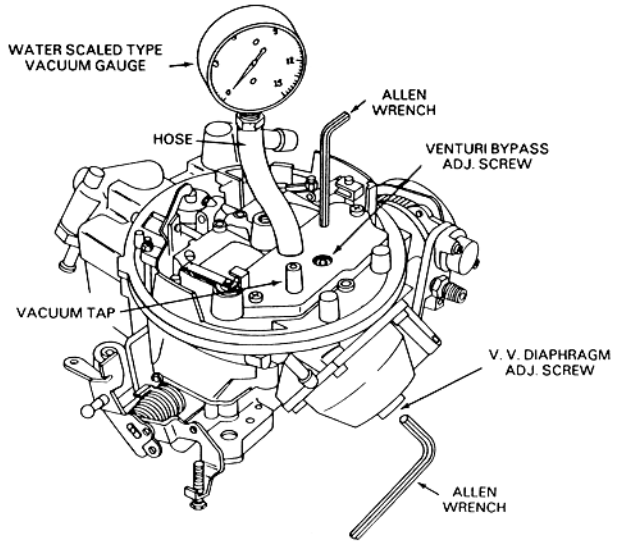
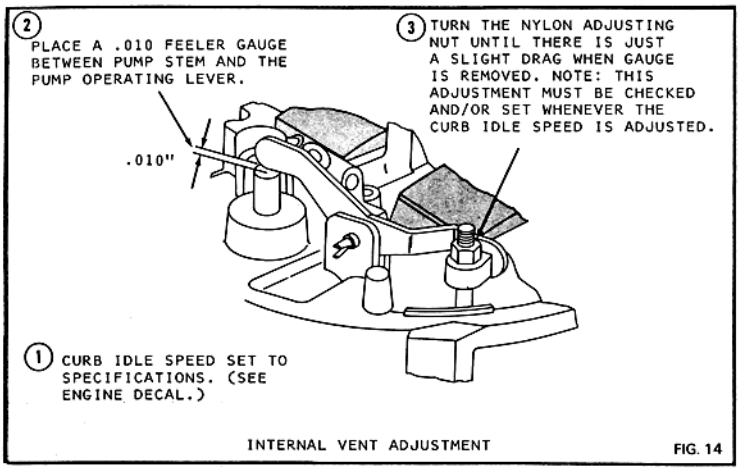
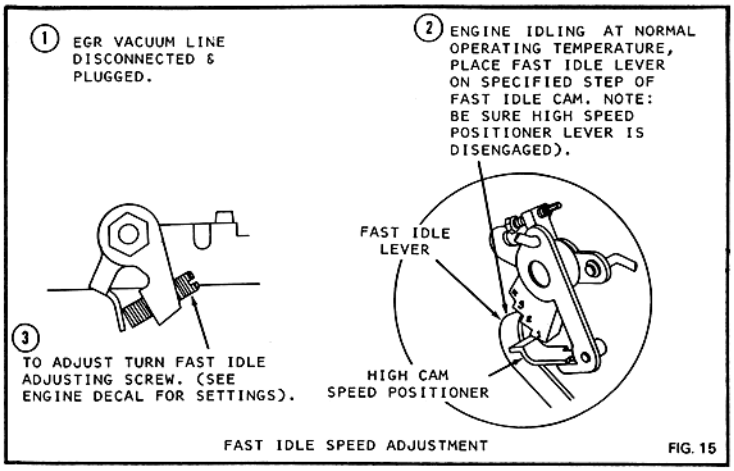


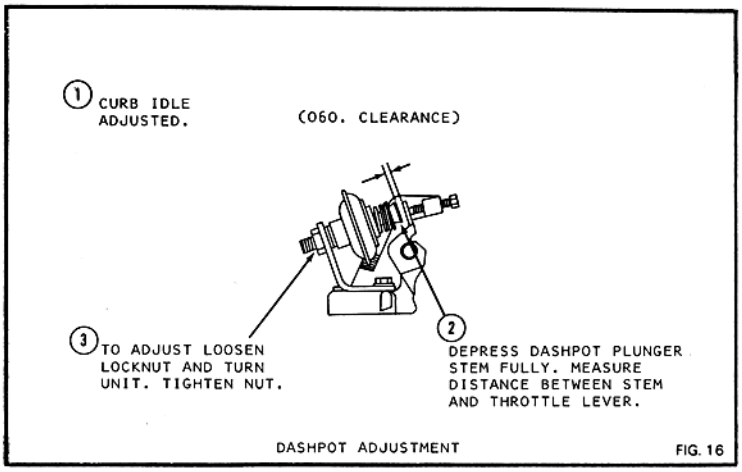
FIG. 13



INTERNAL VENT ADJUSTMENT FIG. 14



FAST IDLE SPEED ADJUSTMENT FIG. 15



DASHPOT ADJUSTMENT FIG. 16

ADJUSTMENT DATA TABLE

1977-78 CARBURETOR NUMBERS	HIGH CAM SPEED	DRY FLOAT LEVEL	FLOAT DROP	VENTURI VALVE LIMITER	VENTURI VALVE WIDE OPEN	FAST IDLE CAM SET		COLD ENRICHMENT ROD	AUTO CHOKE	BYPASS VACUUM IN. H_2O	CONTROL VACUUM IN. H_2O
						STEP	GAUGE				
D7ZE-AC	STEP-2	1 3/64"	1 15/32"	13/32"	3/4"	2 ND.	4 NR.	.125"	INDEX	4.9-5.1	4.6-4.8
D7ZE-BD	STEP-2	1 3/64"	1 15/32"	13/32"	3/4"	2 ND.	4 NR.	.125"	INDEX	4.9-5.1	4.6-4.8
D7ZE-BE	STEP-2	1 3/64"	1 15/32"	13/32"	3/4"	2 ND.	4 NR.	.125"	INDEX	4.9-5.1	4.6-4.8
D7ZE-GD	STEP-3	1 3/64"	1 15/32"	61/64"	1"	3 ND.	1 NR.	.125"	INDEX	4.9-5.1	4.6-4.8
D7ZE-GE	STEP-3	1 3/64"	1 15/32"	61/64"	1"	3 ND.	1 NR.	.125"	INDEX	4.9-5.1	4.6-4.8
77TE-MA	STEP-2	1 3/64"	1 15/32"	13/32"	3/4"	2 ND.	4 NR.	.125"	INDEX	4.9-5.1	4.6-4.8
77TE-NA	STEP-2	1 3/64"	1 15/32"	13/32"	3/4"	2 ND.	4 NR.	.125"	INDEX	4.9-5.1	4.6-4.8
D84E-DB	STEP-3	1 3/64"	1 15/32"	61/64"	1"	3 ND.	1 NR.	.125"	INDEX	4.9-5.6	4.6-5.1
D8BE-EB	STEP-3	1 3/64"	1 15/32"	61/64"	1"	3 ND.	1 NR.	.125"	INDEX	4.9-5.6	4.6-5.1
D8ZE-HB	STEP-3	1 3/64"	1 15/32"	61/64"	1"	3 ND.	1 NR.	.125"	INDEX	4.9-5.6	4.6-5.1
D84E-KA	STEP-3	1 3/64"	1 15/32"	61/64"	1"	3 ND.	1 NR.	.125"	INDEX	4.9-5.6	4.6-5.1
D8ZE-VB	STEP-2	1 3/64"	1 15/32"	13/32"	3/4"	2 ND.	4 NR.	.125"	INDEX	4.9-5.6	4.6-5.1
D8ZE-YB	STEP-2	1 3/64"	1 15/32"	13/32"	3/4"	2 ND.	3 NR.	.125"	INDEX	4.9-5.6	4.6-5.1
D8PE-CYA	STEP-3	1 3/64"	1 15/32"	61/64"	1"	3 ND.	1 NR.	.125"	INDEX	4.9-5.6	4.6-5.1
D8PE-CZA	STEP-2	1 3/64"	1 15/32"	13/32"	3/4"	3 ND.	3 NR.	.125"	INDEX	4.9-5.6	4.6-5.1
D8PE-CZE	STEP-2	1 3/64"	1 15/32"	13/32"	3/4"	2 ND.	3 NR.	.125"	INDEX	4.9-5.6	4.6-5.1
D8PE-DAA	STEP-3	1 3/64"	1 15/32"	61/64"	1"	3 ND.	1 NR.	.125"	INDEX	4.9-5.6	4.6-5.1
D8PE-DBA	STEP-2	1 3/64"	1 15/32"	13/32"	3/4"	2 ND.	4 NR.	.125"	INDEX	4.9-5.6	4.6-5.1
D8PE-DCA	STEP-2	1 3/64"	1 15/32"	13/32"	3/4"	2 ND.	4 NR.	.125"	INDEX	4.9-5.6	4.6-5.1
D8PE-DLA	STEP-2	1 3/64"	1 15/32"	13/32"	3/4"	2 ND.	4 NR.	.125"	INDEX	4.9-5.6	4.6-5.1