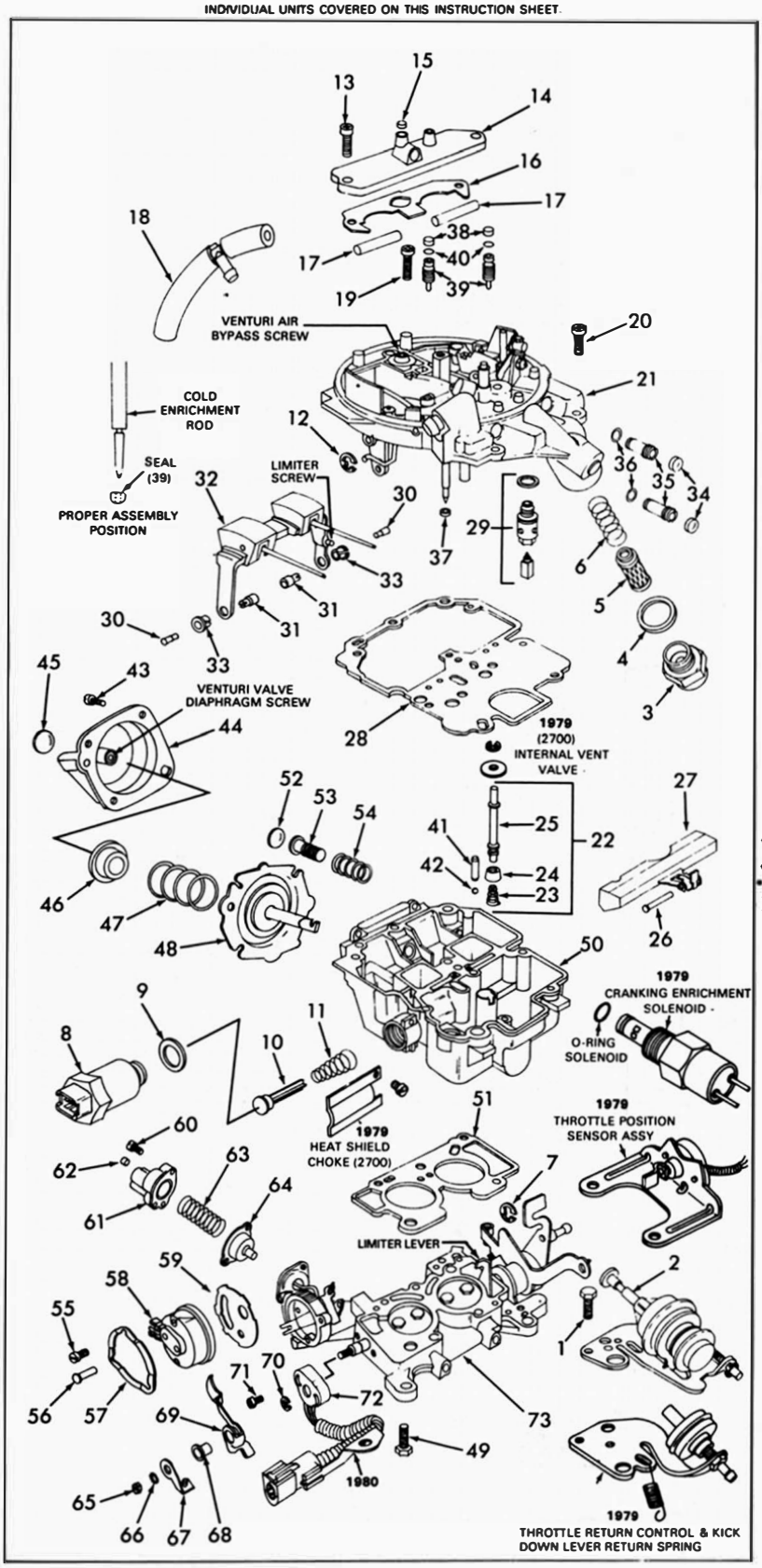
INSTRUCTION SHEET 50-590-2

MOTORCRAFT CARBURETOR - MODEL 2700/ 7200 VV

1979-80

GENERAL EXPLODED VIEW

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



DISASSEMBLY

USE THE 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 THE MAIN METERING JETS. ITEM (35).

BEFORE REMOVING THROTTLE POSITION SENSOR (72) SCRIBE TWO MARKS ON SENSOR AND THROTTLE BODY FOR PROPER REASSEMBLY

NOTE POSITION OF THE TWO LONG BOWL COVER SCREWS FOR PROPER REASSEMBLY ITEM (19)

PIVOT PLUGS (30)- 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 (32) BY SLIDING BACKWARD

CUP PLUGS (34)- CAREFULLY PUNCH OR DRILL HOLE IN CENTER OF PLUG, THEN USING AN EASY OUT TYPE PULLER. TAP PLUG OUT OF BOWL COVER

MAIN JETS (35)-BEFORE REMOVING. USE JET WRENCH OR A PROPER FITTING SCREWDRIVER TO CAREFULLY TURN JETS IN CLOCKWISE. COUNTING THE EXACT NUMBER OF TURNS IT TAKES TO SEAT JET IN CASTING. RECORD NUMBER OF TURNS TO THE NEAREST ¼ TURN.

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

IDLE TRIM SCREWS (39) BEFORE REMOVING, USING AN ALLEN WRENCH. CAREFULLY TURN SCREWS IN CLOCKWISE, COUNTING THE NUMBER OF TURNS IT TAKES TO SEAT SCREW IN CASTING RECORD FOR PROPER REASSEMBLY (2700 ONLY)

WELCH PLUG (45) (52) PUNCH OR DRILL HOLE IN CENTER OF PLUG. USING AN EASY OUT TYPE PULLER TAP PLUG FROM SEAT

CHOKE COVER RIVETS (56) (7200)— REMOVE THE TOP TWO (THROUGH) RIVETS USING A 1/8 INCH DIAMETER DRILL DRILL THROUGH THE RIVET HEAD AND REMOVE THE THIRD (BOTTOM) RIVET IS LOCATED IN A "BLIND" HOLE, AND MUST BE REMOVED BY LIGHTLY TAPPING THE BACKSIDE OF THE RETAINER RING, USING A PUNCH AND HAMMER THE RIVET, RETAINER RING, CHOKE HOUSING AND GASKET, CAN THEN BE REMOVED

CHOKE DIAPHRAGM COVER (61)- DO NOT PUT COVER IN ANY TYPE OF CLEANING FLUID. (FILTER AND CHECK VALVE WILL BE DAMAGED)

NOMENCLATURE

REF NO	
1	SCREW- THROTTLE RETURN CONTROL
2	THROTTLE RETURN CONTROL
3	FITTING- FUEL INLET
4.	GASKET- FITTING
5	FILTER- FUEL
6	SPRING- FILTER
7.	E- CLIP- PUMP ROD
8	FEEDBACK CONTROL MOTOR (7200)
9.	GASKET- CONTROL MOTOR (7200)
10.	VALVE- METERING (7200)
11	SPRING- METERING VALVE (7200)
12	E- CLIP- CHOKE CONTROL ROD
• 13.	SCREW & LOCKWASHER (2)- COVER PLATE
• 14	COVER PLATE- VENTURI VALVE
•• 15.	PLUG- VENTURI AIR BYPASS SCREW
• 16	GASKET- COVER PLATE
• 17	ROLLER BEARINGS (2)
18	HOSE- CHOKE FRESH AIR (7200)
19	SCREW & LOCKWASHER (2)- BOWL COVER (LONG)
20	SCREW & LOCKWASHER (5)- BOWL COVER.
21.	BOWL COVER ASSEMBLY
22	PUMP PLUNGER ASSEMBLY
23.	SPRING- PUMP RETURN
24.	CUP- PUMP
25.	STEM- PUMP
26.	PIN- FLOAT HINGE
27	FLOAT & LEVER ASSEMBLY
28.	GASKET— BOWL COVER
29	NEEDLE, SEAT & GASKET ASSEMBLY
30	PIVOT PLUG (2)- VENTURI VALVE
31.	PIVOT PIN (2)- VENTURI VALVE
32.	VENTURI VALVE AND METERING ROD ASSEMBLY
33.	BUSHING (2)- VENTURI VALVE
34.	CUP PLUG (2)-MAIN JET
35	JET (2)-MAIN METERING
36	O.RING (2)- MAIN JET
37	SEAL- COLD ENRICHMENT ROD
38.	CUP PLUG (2)- IDLE TRIM SCREW (2700).
39	SCREW (2)- IDLE TRIM (2700)
40	O- RING (2)- IDLE TRIM SCREW (2700)
41	WEIGHT- PUMP CHECK BALL
42.	BALL- PUMP CHECK
43.	SCREW & LOCKWASHER (4)- DIAPHRAGM COVER.
44	COVER- DIAPHRAGM
•• 45	PLUG- VENTURI VALVE DIAPHRAGM SCREW
46	GUIDE- SPRING
47	SPRING- DIAPHRAGM
48.	DIAPHRAGM- VENTURI VALVE
49	SCREW & LOCKWASHER (5)- THROTTLE BODY.
50	BOWL ASSEMBLY
51	GASKET- THROTTLE BODY
• 52	PLUG- WIDE OPEN STOP SCREW
• 53	SCREW- WIDE OPEN STOP
• 54	SPRING- WIDE OPEN STOP SCREW
• 55.	SCREW (3)- RETAINER
• 56.	RIVET (3)- RETAINER (7200 CALIF)
• 57.	RETAINER- CHOKE THERMOSTATIC HOUSING.
• 58	CHOKE THERMOSTATIC HOUSING
• 59.	GASKET- THERMOSTATIC HOUSING
• 60.	SCREW & LOCKWASHER (2)- DIAPHRAGM HOUSING
• 61	COVER- DIAPHRAGM
• 62.	LEAD BALL- COVER ADJ SCREW
• 63	SPRING- DIAPHRAGM
64.	DIAPHRAGM ASSEMBLY- CHOKE
65	NUT
66.	LOCKWASHER
67	LEVER & FAST IDLE SCREW
68	BUSHING- FAST IDLE CAM LEVER
69	LEVER- FAST IDLE CAM
70	E-CLIP- THROTTLE SHAFT
71.	SCREW & LOCKWASHER (2)- SENSOR
72.	THROTTLE POSITION SENSOR
73.	THROTTLE BODY ASSEMBLY

• INSTALL THESE PARTS AS BENCH ADJUSTMENTS ARE MADE.
•• INSTALL AFTER FINAL RUNNING ADJUSTMENTS ARE MADE.

CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBELED. 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 A SUITABLE SOLVENT, BLOW OUT ALL PASSAGES IN THE CASTINGS WITH COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH CLEANING OF OBSCURE AREAS. CAUTION: DO NOT SOAK PARTS CONTAINING NYLON OR RUBBER. THESE INCLUDE SOLENOIDS, SWITCHES, OR PARTS SUCH AS (2), (8) .(10),.(19), (27), (58)-(61) (72)

REASSEMBLY

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

SPECIAL INSTRUCTIONS ON PAGE 2

ADJUSTMENTS

SPECIAL INSTRUCTIONS

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

O—RING- WHEN INSTALLING, LIGHTLY LUBRICATE WITH LIGHT OIL.

IDLE TRIM SCREWS (39) - TURN EACH SCREW IN CLOCKWISE UNTIL IT IS SEATED IN THE CASTING, THEN TURN SCREW COUNTERCLOCKWISE THE NUMBER OF TURNS RECORDED DURING DISASSEMBLY.(2700 ONLY).

MAIN JETS (35)- TURN EACH MAIN JET IN CLOCKWISE UNTIL IT IS SEATED IN THE CASTING. THEN TURN JET COUNTERCLOCKWISE THE NUMBER OF TURNS RECORDED DURING DISASSEMBLY.

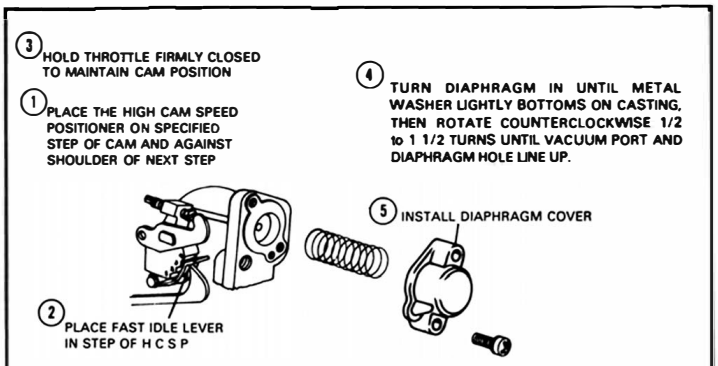
CUP PLUGS (34) - USING A 3/8" DRIFT PUNCH. INSERT PLUG IN HOLE AND TAP LIGHTLY UNTIL PLUG SEATS IN CASTING. (SET PROPER DEPTH WITH GAUGE)- SEE FIG. 2

PIVOT PLUG (30) - TAPERED PLUGS CAN BE CAREFULLY PRESSED INTO THE PIVOT PIN USING PLIERS WITH PARALLEL JAWS IN THE OPEN POSITION.

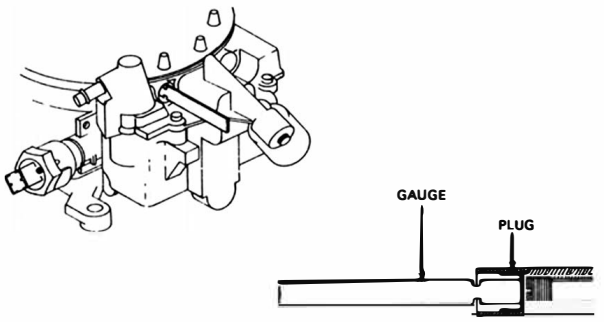
FLOAT HINGE PIN (26) - INSTALL PIN SO FLAT HEAD OF PIN IS IN THE RECESSED LEG OF THE FLOAT HANGER.

BOWL COVER ASSEMBLY (21) 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.

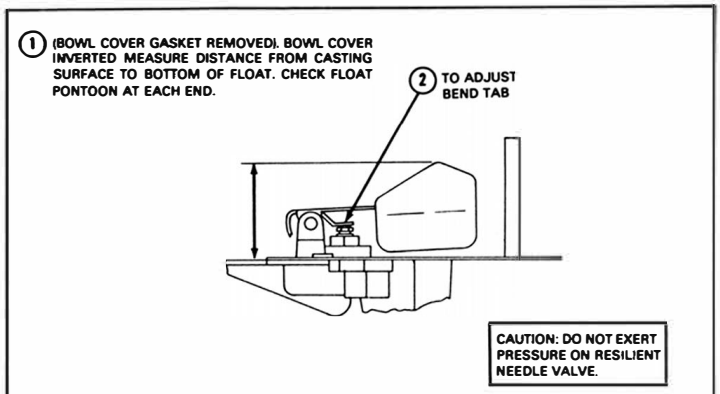
IMPORTANT: SEE FIG. 22 FOR COLD ENRICHMENT METERING ROD ADJUSTMENT NOTE.



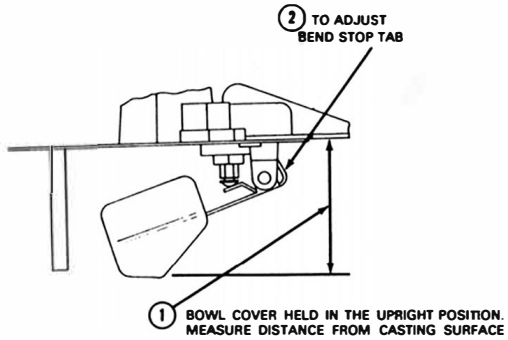
1979 ONLY (2700)
HIGH CAM SPEED POSITIONER ADJUSTMENT — FIG. 1



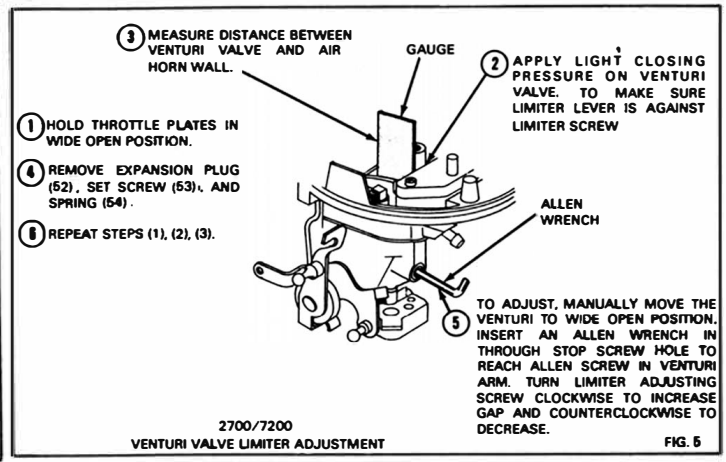
MAIN JET CUP PLUG INSTALLATION — FIG. 2



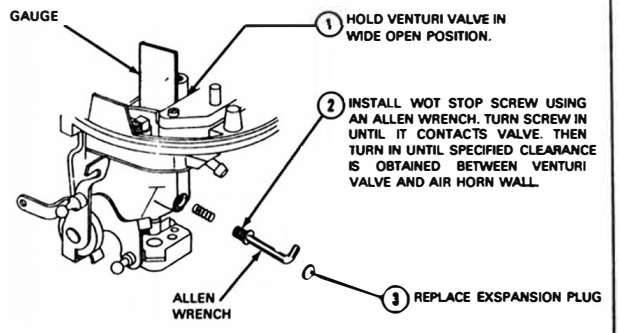
2700/7200
DRY FLOAT LEVEL ADJUSTMENT — FIG. 3



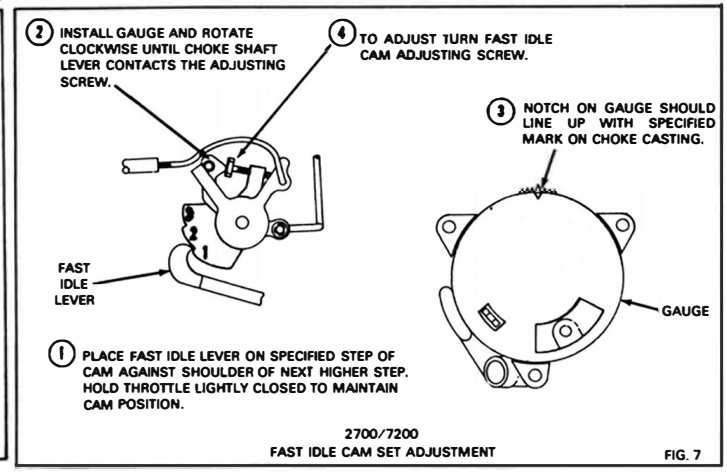
2700/7200
FLOAT DROP ADJUSTMENT — FIG. 4



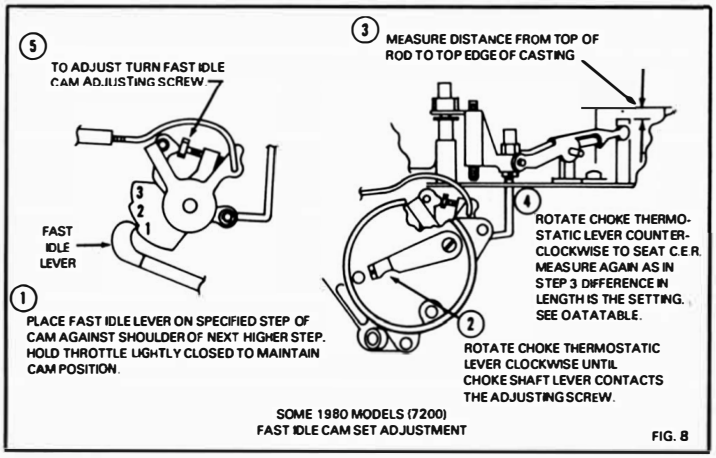
2700/7200
VENTURI VALVE LIMITER ADJUSTMENT — FIG. 5



2700/7200
VENTURI VALVE WIDE OPEN STOP ADJUSTMENT — FIG. 6

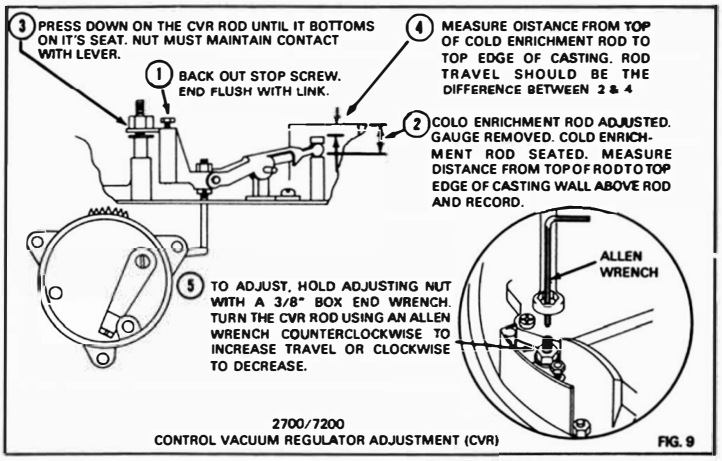


2700/7200
FAST IDLE CAM SET ADJUSTMENT — FIG. 7



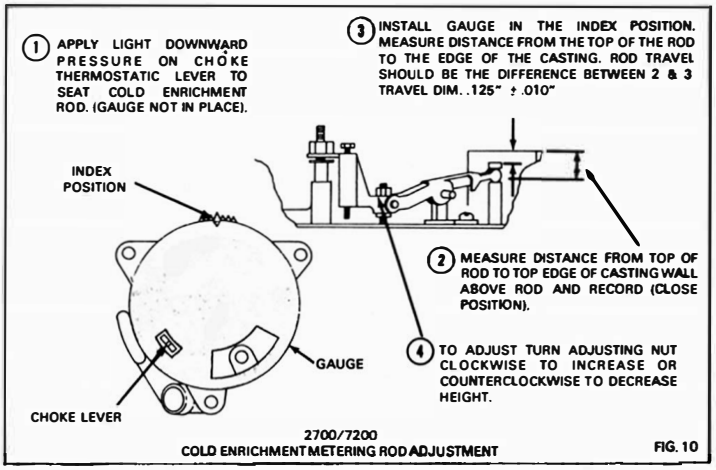
SOME 1980 MODELS (7200)
FAST IDLE CAM SET ADJUSTMENT

FIG. 8



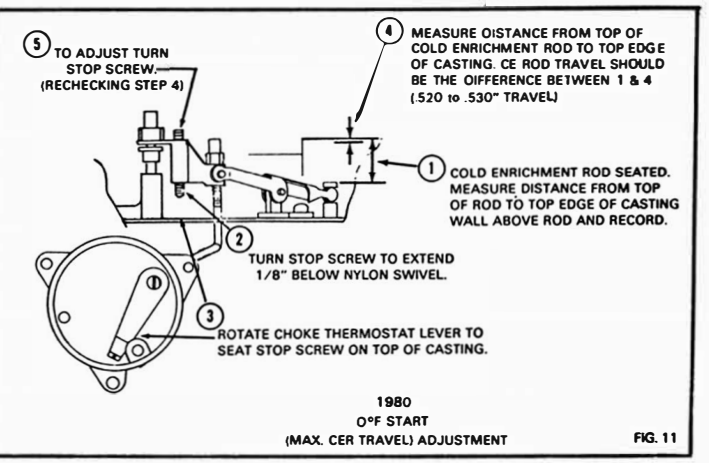
2700/7200
CONTROL VACUUM REGULATOR ADJUSTMENT (CVR)

FIG. 9



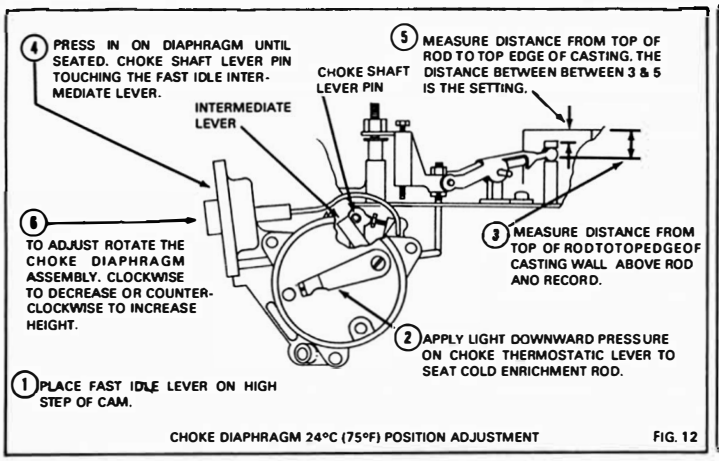
2700/7200
COLD ENRICHMENT METERING ROD ADJUSTMENT

FIG. 10



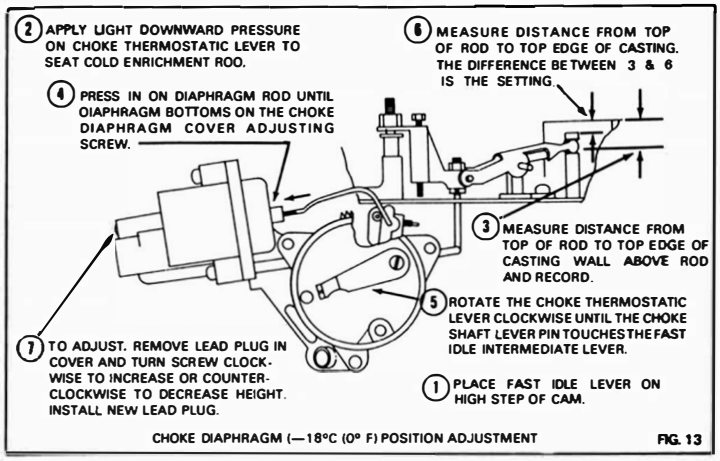
1980
O°F START
(MAX. CER TRAVEL) ADJUSTMENT

FIG. 11



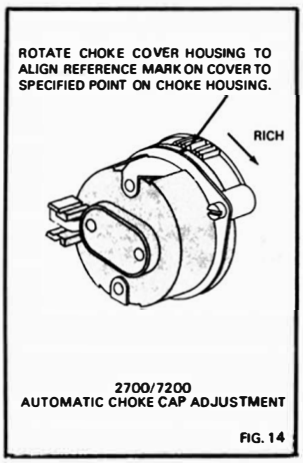
CHOKE DIAPHRAGM 24°C (75°F) POSITION ADJUSTMENT

FIG. 12



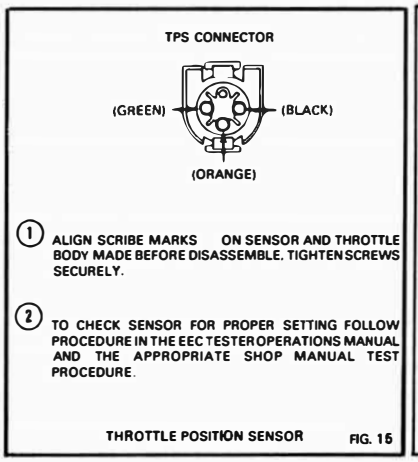
CHOKE DIAPHRAGM (—18°C (0° F) POSITION ADJUSTMENT

FIG. 13



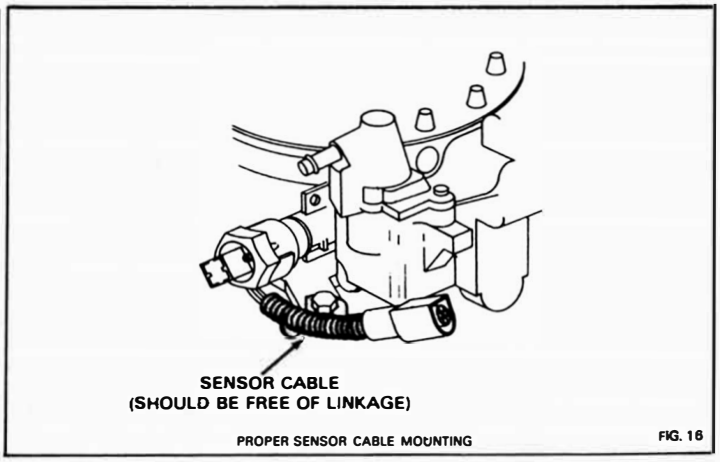
2700/7200
AUTOMATIC CHOKE CAP ADJUSTMENT

FIG. 14



THROTTLE POSITION SENSOR

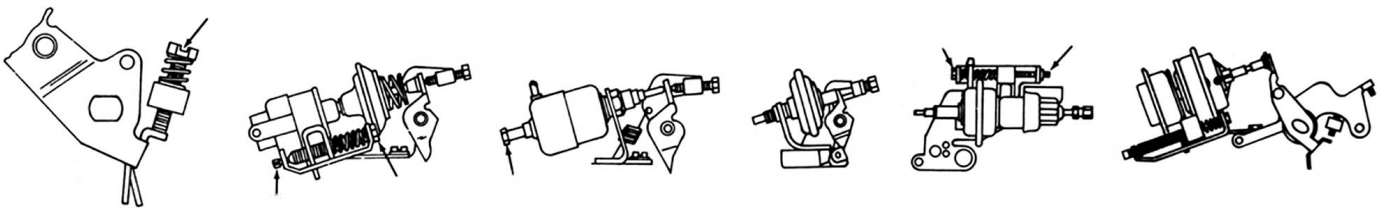
FIG. 15



PROPER SENSOR CABLE MOUNTING

FIG. 16

FOLLOW IDLE ADJUSTMENT PROCEDURE FOUND ON ENGINE DECAL (OR IN SERVICE MANUAL).



CURB IDLE ADJUSTMENT WITHOUT THROTTLE POSITIONER WITH OR WITHOUT DASHPOT

SOLENOID BRACKET ADJUSTMENT WITH OR WITHOUT DASHPOT

SOLENOID THRU ADJUSTMENT WITH OR WITHOUT DASHPOT

VACUUM KICKER

KICKER-DASH POT

SOL-A-VAC

CURB IDLE ADJUSTMENT TYPE SCREWS

FIG. 17

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) ALSO REMOVE VENTURI BYPASS SCREW PLUG, (IF SO EQUIPPED).
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.

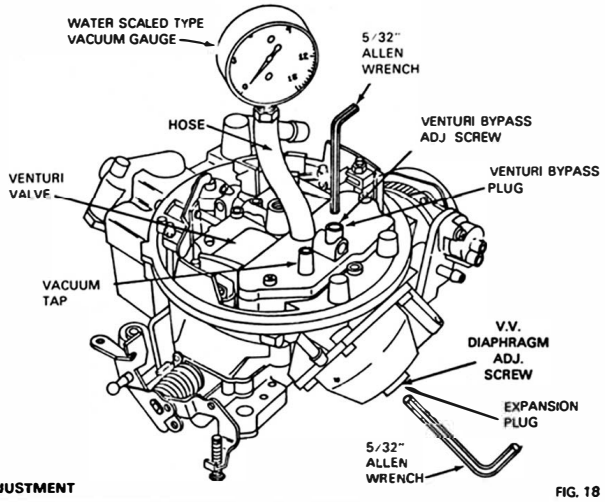
5 SET IDLE SPEED TO 500 RPM WITH TRANSMISSION IN DRIVE, RETURN TRANSMISSION TO "PARK"
6 USING FINGERS, PUSH VENTURI VALVE UNTIL VALVE IS SEATED AGAINST CASTING FACE WHILE HOLDING CLOSED, ADJUST BYPASS SCREW TO OBTAIN A VACUUM READING OF SPECIFIED INCHES OF WATER ON GAUGE
7 RELEASE VENTURI VALVE AND CYCLE 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 SPECIFICATIONS IS OBTAINED
9 SET CURB IDLE SPEEDS TO SPECIFICATION IN DRIVE (INSTALL VENTURI VALVE DIAPHRAGM SCREW PLUG)

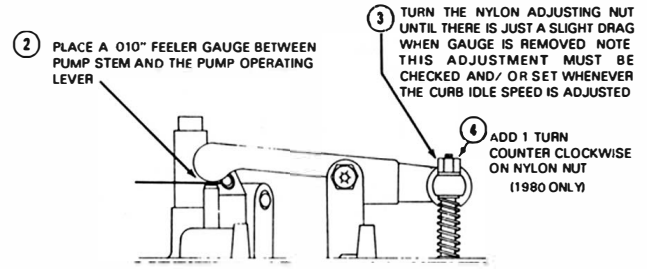
NOTE THIS ADJUSTMENT SHOULD BE DONE AS A LAST STEP AND VARIATIONS TO THE ABOVE READING MAY OCCUR, DEPENDING ON ENGINE CONDITION HOWEVER, AS LONG AS THE ENGINE FUNCTIONS PROPERLY, THESE VARIATIONS ARE ACCEPTABLE

NOTE: 1980 5.8L CALIFORNIA 7200 FEEDBACK CARBURETORS DON'T HAVE AN ADJUSTMENT SCREW. YOU CANNOT ADJUST CONTROL VACUUM ON THESE CARBURETORS.



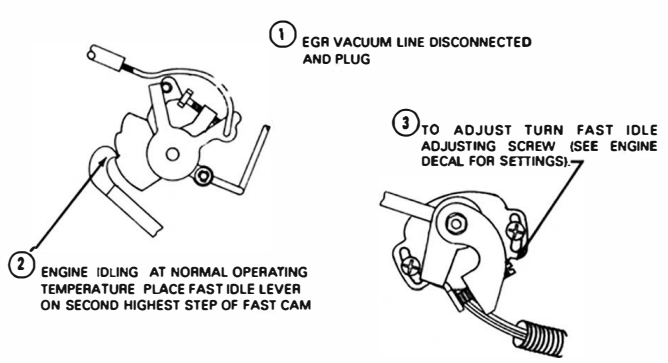
ON CAR ADJUSTMENT
BYPASS AND CONTROL VACUUM ADJUSTMENT

FIG. 18



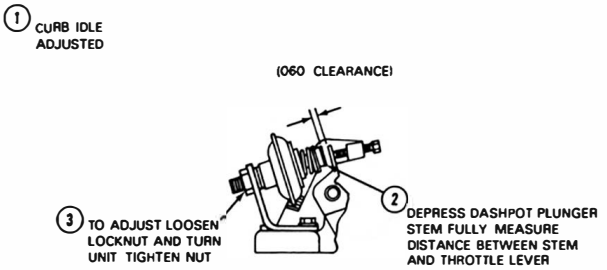
PUMP STEM CLEARANCE

FIG. 19



FAST IDLE SPEED ADJUSTMENT

FIG. 20



DASHPOT ADJUSTMENT

FIG. 21

AJUSTMENTS

IMPORTANT! THE COLD ENRICHMENT METERING ROD ADJUSTMENT (FIG. 10) MUST BE DONE PRIOR TO ANY OTHER CHOKE SYSTEM ADJUSTMENTS.

FIG. 22