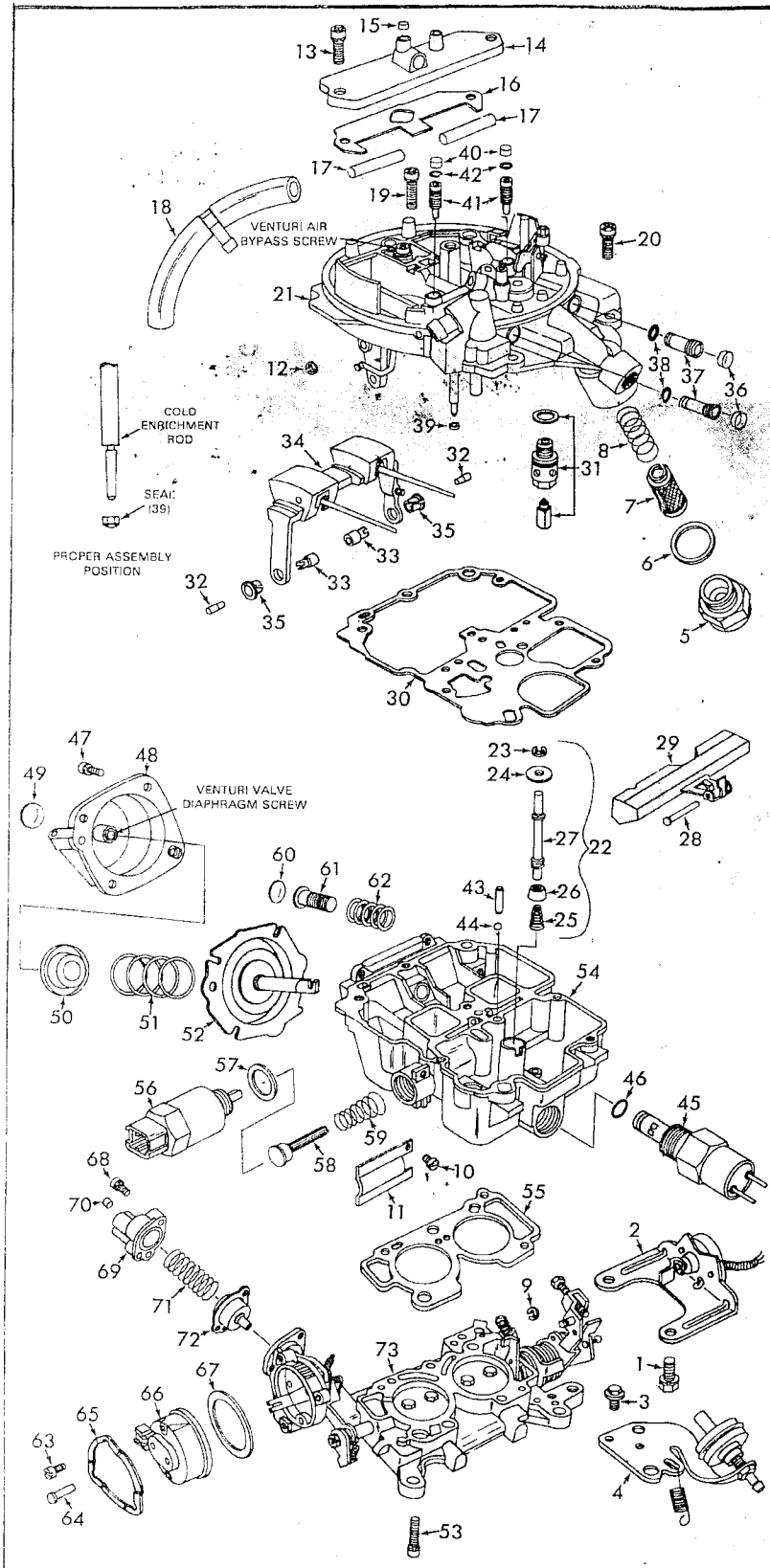


## MOTORCRAFT CARBURETOR - MODELS 2700/7200 VV

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 (37).

REMOVE THROTTLE POSITION SENSOR AND BRACKET AS AN ASSEMBLY. DO NOT LOOSEN SENSOR MOUNTING/ADJUSTING SCREWS. ITEM (2).

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

PIVOT PLUGS (32) - 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 (34) BY SLIDING BACKWARD.

CUP PLUGS (36) - CAREFULLY PUNCH OR DRILL HOLE IN CENTER OF PLUG AND USING AN EASY OUT TYPE PULLER, TAP PLUG OUT OF BOWL COVER.

MAIN JETS (37) - 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 (2700). THIS VALVE IS NOT REMOVED UNLESS COMPLETE REPLACEMENT OF VALVE IS MADE.

IDLE TRIM SCREWS (41) - 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.

WELCH PLUG (49), (60) - PUNCH OR DRILL HOLE IN CENTER OF PLUG, USING AN EASY OUT TYPE PULLER. TAP PLUG FROM SEAT.

CHOKE COVER RIVETS (64) - (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 (69) - DO NOT PUT COVER IN ANY TYPE OF CLEANING FLUID. (FILTER & CHECK VALVE WILL BE DAMAGED)

### NOMENCLATURE

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

\*DO NOT INSTALL THESE PARTS UNTIL AFTER BENCH ADJUSTMENTS ARE MADE  
\*\*INSTALL AFTER FINAL RUNNING 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 CASTINGS WITH COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH CLEANING OF OBSCURE AREAS. CAUTION: DO NOT SOAK PARTS CONTAINING NYLON OR RUBBER MATERIALS, SOLENOIDS, SWITCHES OR PARTS SUCH AS (2), (4), (29), (45), (59), (58), (66), (69).

### 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-RINGS - WHEN INSTALLING, LIGHTLY LUBRICATE WITH LIGHT OIL.

IDLE TRIM SCREWS (41) - TURN EACH SCREW IN CLOCKWISE UNTIL IT IS SEATED IN THE CASTING, THEN TURN SCREW COUNTERCLOCKWISE THE NUMBER OF TURNS RECORDED DURING DISASSEMBLY.

MAIN JETS (37) - 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 (36) - USING 3/8" DRIFT PUNCH, INSERT PLUG IN HOLE & TAP LIGHTLY UNTIL PLUG SEATS IN CASTING.

PIVOT PLUG (32) - TAPERED PLUGS CAN BE CAREFULLY PRESSED INTO THE PIVOT PIN USING A PLIERS WITH PARALLEL JAWS IN THE OPEN POSITION.

FLOAT HINGE PIN (28) - INSTALL PIN SO FLAT HEAD OF PIN IS IN THE RECESSED LEG OF FLOAT HANGER.

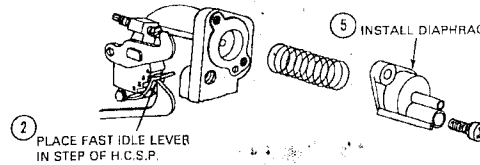
BOWL COVER ASSEMBLY (21) - WHEN INSTALLING ON MAIN BODY, BE SURE LIMITER LEVER IS MOVED FORWARD TO CLEAR VENTURI VALVE ARM AND VENTURI VALVE DIAPHRAGM STEM ENGAGES THE VENTURI VALVE PIN.

1 HOLD THROTTLE FIRMLY CLOSED TO MAINTAIN CAM POSITION.

1 PLACE THE HIGH CAM SPEED POSITIONER ON SPECIFIED STEP OF CAM AND AGAINST SHOULDER OF NEXT STEP.

4 TURN DIAPHRAGM IN UNTIL METAL WASHER LIGHTLY BOTTOMS ON CASTING, THEN ROTATE COUNTERCLOCKWISE UNTIL VACUUM PORT AND DIAPHRAGM HOLE LINE UP

5 INSTALL DIAPHRAGM COVER

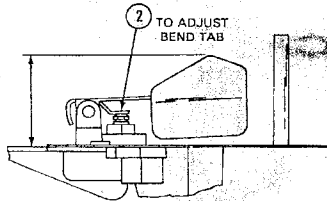


2 PLACE FAST IDLE LEVER IN STEP OF H.C.S.P.

2700  
HIGH CAM SPEED POSITIONER ADJUSTMENT

FIG. 1

1 (BOWL COVER GASKET REMOVED.) BOWL COVER INVERTED MEASURE DISTANCE FROM CASTING SURFACE TO BOTTOM OF FLOAT. CHECK FLOAT PONTOON AT EACH END.

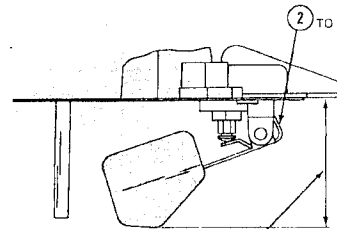


CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE.

2700/7200  
DRY FLOAT LEVEL ADJUSTMENT

FIG. 2

2 TO ADJUST BEND STOP TAB.



1 BOWL COVER HELD IN THE UPRIGHT POSITION, MEASURE DISTANCE FROM CASTING SURFACE (NOT GASKET) TO BOTTOM OF FLOAT.

2700/7200  
FLOAT DROP ADJUSTMENT

FIG. 3

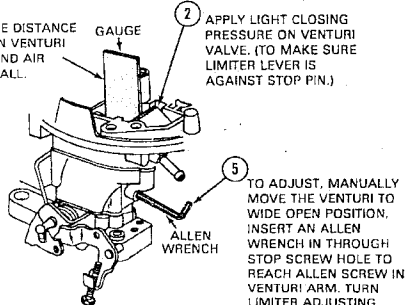
3 MEASURE DISTANCE BETWEEN VENTURI VALVE AND AIR HORN WALL.

2 APPLY LIGHT CLOSING PRESSURE ON VENTURI VALVE. (TO MAKE SURE LIMITER LEVER IS AGAINST STOP PIN.)

1 HOLD THROTTLE PLATES IN WIDE OPEN POSITION.

4 REMOVE EXPANSION PLUG (60), SET SCREW (61), AND SPRING (62)

6 REPEAT STEPS (1), (2), (3).



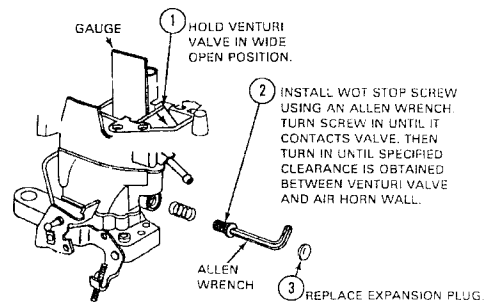
2700/7200  
VENTURI VALVE LIMITER ADJUSTMENT

FIG. 4

1 HOLD VENTURI VALVE IN WIDE OPEN POSITION.

2 INSTALL WOT STOP SCREW USING AN ALLEN WRENCH. TURN SCREW IN UNTIL IT CONTACTS VALVE, THEN TURN IN UNTIL SPECIFIED CLEARANCE IS OBTAINED BETWEEN VENTURI VALVE AND AIR HORN WALL.

3 REPLACE EXPANSION PLUG



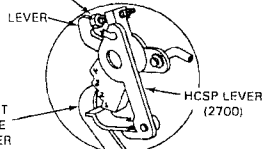
2700/7200  
VENTURI VALVE WIDE OPEN STOP ADJUSTMENT

FIG. 5

2 INSTALL GAUGE AND ROTATE CLOCKWISE UNTIL LEVER CONTACTS THE ADJUSTING SCREW.

3 NOTCH ON GAUGE SHOULD LINE UP WITH SPECIFIED MARK ON CHOKE CASTING.

4 TO ADJUST TURN FAST IDLE CAM ADJUSTING SCREW.



1 PLACE FAST IDLE LEVER ON SPECIFIED STEP OF CAM AND AGAINST SHOULDER OF NEXT STEP. HOLD THROTTLE LIGHTLY CLOSED TO MAINTAIN CAM POSITION. MODEL 2700 HIGH CAM SPEED POSITIONER RETRACTED.

2700/7200  
FAST IDLE CAM SET ADJUSTMENT

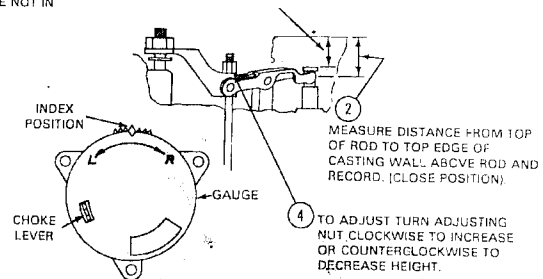
FIG. 6

1 APPLY LIGHT DOWNWARD PRESSURE ON CHOKE THERMOSTATIC LEVER TO SEAT COLD ENRICHMENT ROD. (GAUGE NOT IN PLACE).

3 INSTALL GAUGE IN THE INDEX POSITION, MEASURE DISTANCE FROM TOP OF ROD TO TOP EDGE OF CASTING. ROD TRAVEL SHOULD BE THE DIFFERENCE BETWEEN 2 & 3. TRAVEL DIM.  $125'' \pm .005''$

2 MEASURE DISTANCE FROM TOP OF ROD TO TOP EDGE OF CASTING WALL ABOVE ROD AND RECORD. (CLOSE POSITION)

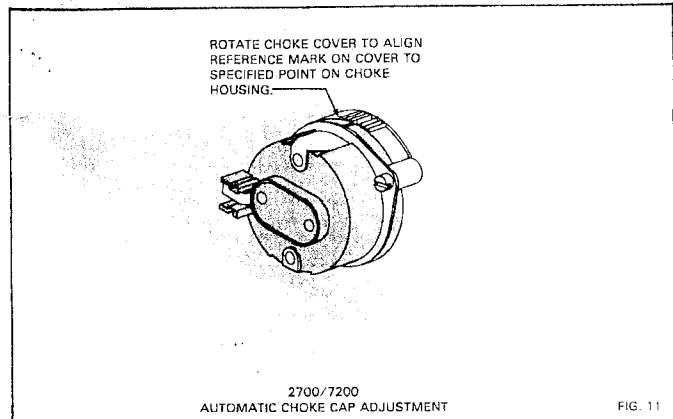
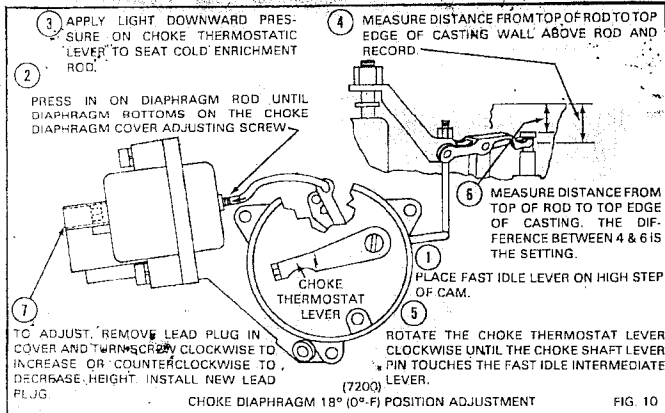
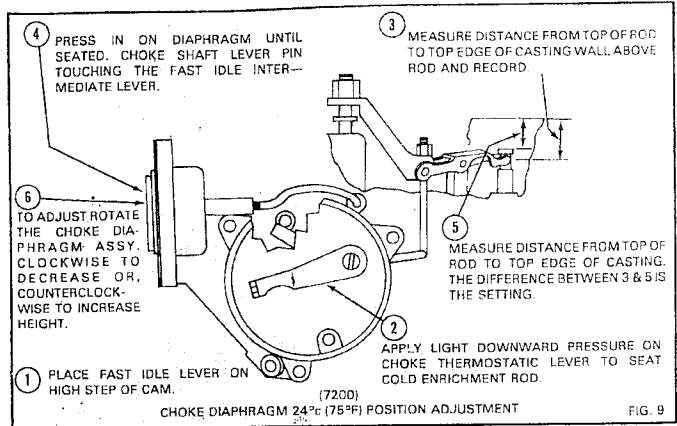
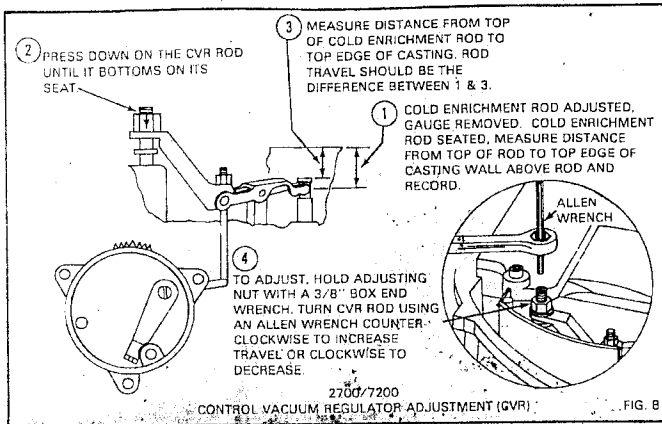
4 TO ADJUST TURN ADJUSTING NUT CLOCKWISE TO INCREASE OR COUNTERCLOCKWISE TO DECREASE HEIGHT.



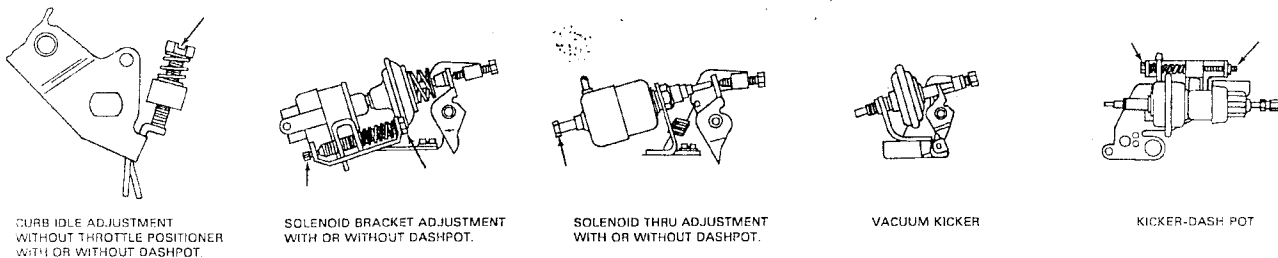
2700/7200  
COLD ENRICHMENT METERING ROD ADJUSTMENT

FIG. 7

# ADJUSTMENTS



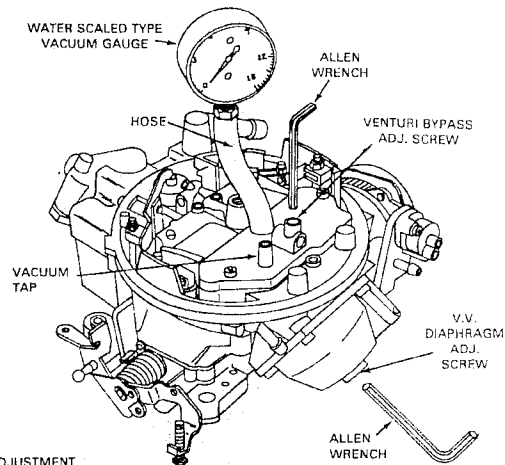
FOLLOW IDLE ADJUSTMENT PROCEDURE FOUND ON ENGINE DECAL.



CURB IDLE ADJUSTMENT TYPE SCREWS

FIG. 12

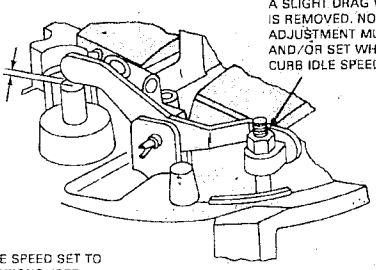
- CARBURETOR INSTALLED ON ENGINE AND ALL VACUUM AND ELECTRICAL CONNECTIONS MADE.
  - TURN THE IGNITION SWITCH ON MOMENTARILY (MINIMUM TIME 5 SECONDS) TO POSITION THE ELECTRONIC STEPPER MOTOR (7200).
  - UNPLUG THE CONNECTOR TO THE STEPPER MOTOR. START THE ENGINE AND BRING TO NORMAL OPERATING TEMPERATURE. CHECK THE IDLE SPEED TO ENGINE DECAL SPECIFICATIONS.
  - USING A 5/32 INCH ALLEN WRENCH, TURN THE VENTURI VALVE DIAPHRAGM ADJUSTING SCREW CLOCKWISE UNTIL THE DIAPHRAGM VALVE IS FIRMLY SEATED.
  - CONNECT A VACUUM GAUGE, ROTUNDA #T77L-9510-A OR EQUIVALENT TO THE VACUUM TAP ON THE VENTURI VALVE COVER.
  - WITH THE ENGINE AT CURB IDLE, USE A 5/32" ALLEN WRENCH TO TURN THE VENTURI BYPASS ADJUSTING SCREW AND SET THE BYPASS VACUUM TO THE PROPER H<sub>2</sub>O. (SEE DATA TABLE FOR SETTING)
- NOTE: IT MAY BE NECESSARY TO RESET THE IDLE SPEED WHILE MAKING THE ADJUSTMENT.
- TURN THE VENTURI VALVE DIAPHRAGM ADJUSTING SCREW COUNTERCLOCKWISE UNTIL THE VACUUM DROPS TO SPECIFIED H<sub>2</sub>O. (SEE DATA TABLE).
- NOTE: IT IS NECESSARY TO CYCLE THE THROTTLE DURING THIS ADJUSTMENT TO GET THE VACUUM TO DROP.
- CHECK AND/OR RESET THE CURB IDLE. INSTALL THE NEW VENTURI VALVE BYPASS AND DIAPHRAGM ADJUSTMENT SCREW PLUGS.



# ADJUSTMENTS

2 PLACE A FEELER GAUGE BETWEEN PUMP STEM AND THE PUMP OPERATING LEVER.

3 TURN THE NYLON ADJUSTING NUT UNTIL THERE IS JUST A SLIGHT DRAG WHEN GAUGE IS REMOVED. NOTE: THIS ADJUSTMENT MUST BE CHECKED AND/OR SET WHENEVER THE CURB IDLE SPEED IS ADJUSTED.



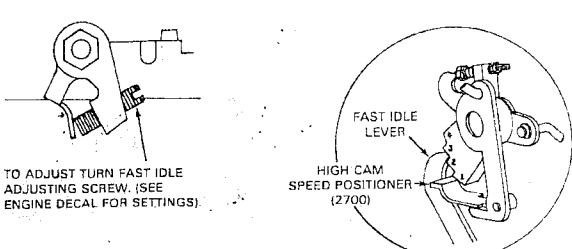
1 CURB IDLE SPEED SET TO SPECIFICATIONS. (SEE ENGINE DECAL).

INTERNAL VENT ADJUSTMENT (2700)  
PUMP STEM CLEARANCE (7200)

FIG. 14

1 EGR VACUUM LINE DISCONNECTED & PLUGGED.

2 ENGINE IDLING AT NORMAL OPERATING TEMPERATURE. PLACE FAST IDLE LEVER ON SPECIFIED STEP OF FAST IDLE CAM. (NOTE: BE SURE HIGH SPEED POSITIONER LEVER IS DISENGAGED). ON 2700



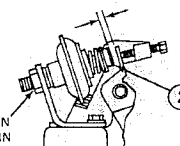
3 TO ADJUST TURN FAST IDLE ADJUSTING SCREW. (SEE ENGINE DECAL FOR SETTINGS).

FAST IDLE SPEED ADJUSTMENT

FIG. 15

1 CURB IDLE ADJUSTED.

(.060. CLEARANCE)



3 TO ADJUST LOOSEN LOCKNUT AND TURN UNIT. TIGHTEN NUT.

2 DEPRESS DASHPOT PLUNGER STEM FULLY. MEASURE DISTANCE BETWEEN STEM AND THROTTLE LEVER.

DASHPOT ADJUSTMENT

FIG. 16

## ADJUSTMENT DATA TABLE

| Year                       | Application                                  | High Cam Speed | Dry Float Level | Float Drop | Venturi Valve Limiter | Venturi Valve Wide Open | Fast Idle Cam Set Gauge | Cold Enrichment Red | CVR   | Choke Set 75° | Choke Set 0° | Auto Choke | Venturi Bypass Screw | Venturi Valve Diaph. Screw | Pump (Vent) |         |      |
|----------------------------|--|----------------|-----------------|------------|-----------------------|-------------------------|-------------------------|---------------------|-------|---------------|--------------|------------|----------------------|----------------------------|-------------|---------|------|
| 1979                       | Bobcat, Mustang, Pinto 2.8L Eng.             | A/T            | Step 2          | 1 3/64"    | 1 15/32"              | 13/32"                  | 3/4"                    | 2nd                 | 1NR   | .125"         | .230"        | ---        | ---                  | INDEX                      | 8.8/7.3     | 4.6/5.1 | .010 |
|                            | Capri, Mustang 302" Eng.                     | A/T            | Step 3          | 1 3/64"    | 1 15/32"              | 61/64"                  | 1"                      | 2nd                 | 5NR   | .125"         | .230"        | ---        | ---                  | INDEX                      | 4.9/5.6     | 4.6/5.1 | .010 |
|                            | Fairmont, Granada, Monarch, Zephyr 302" Eng. | A/T            | Step 3          | 1 3/64"    | 1 15/32"              | 61/64"                  | 1"                      | 2nd                 | 5NR   | .125"         | .230"        | ---        | ---                  | INDEX                      | 4.9/5.6     | 4.6/5.1 | .010 |
|                            | Ford, Mercury 302" Eng.                      | A/T            | Step 4          | 1 3/64"    | 1 15/32"              | 61/64"                  | 1"                      | 3rd                 | 1NR   | .125"         | .090         | ---        | ---                  | INDEX                      | 8.8/7.3     | 4.6/5.1 | .010 |
|                            | Carb. No. D9AE-JB, YB                        |                | Step 3          | 1 3/64"    | 1 15/32"              | 61/64"                  | 1"                      | 2nd                 | 5NR   | .125"         | .230"        | ---        | ---                  | INDEX                      | 6.8/7.3     | 4.6/5.1 | .010 |
|                            | Carb. No. D9AE-CB, ZB                        |                | Step 3          | 1 3/64"    | 1 15/32"              | 61/64"                  | 1"                      | 2nd                 | 5NR   | .125"         | .230"        | ---        | ---                  | INDEX                      | 4.9/5.6     | 4.6/5.1 | .010 |
| Versailles 302" Eng.       | A/T  | Step 3         | 1 3/64"         | 1 15/32"   | 61/64"                | 1"                      | 2nd                     | 5NR                 | .125" | .230"         | ---          | ---        | INDEX                | 6.8/7.3                    | 4.6/5.1     | .010    |      |
| Carb. No. D94E-EB, GA      |  | Step 3         | 1 3/64"         | 1 15/32"   | 61/64"                | 1"                      | 2nd                     | 5NR                 | .125" | .230"         | ---          | ---        | INDEX                | 4.9/5.6                    | 4.6/5.1     | .010    |      |
| Carb. No. D94E-HB, D94E-JA |  | Step 3         | 1 3/64"         | 1 15/32"   | 61/64"                | 1"                      | 2nd                     | 5NR                 | .125" | .230"         | ---          | ---        | INDEX                | 4.9/5.6                    | 4.6/5.1     | .010    |      |
| Ford, Mercury 351" w Eng.  | A/T  | ---            | 1 3/64"         | 1 15/32"   | 3/4"                  | 1"                      | 3rd                     | 1NR                 | .125" | .250"         | .240"        | .350"      | INDEX                | 7.3/7.8                    | 4.6/5.1     | .020    |      |

\*INCHES H<sub>2</sub>O (USE WATER SCALED TYPE VACUUM GAUGE)