

# INSTRUCTION SHEET

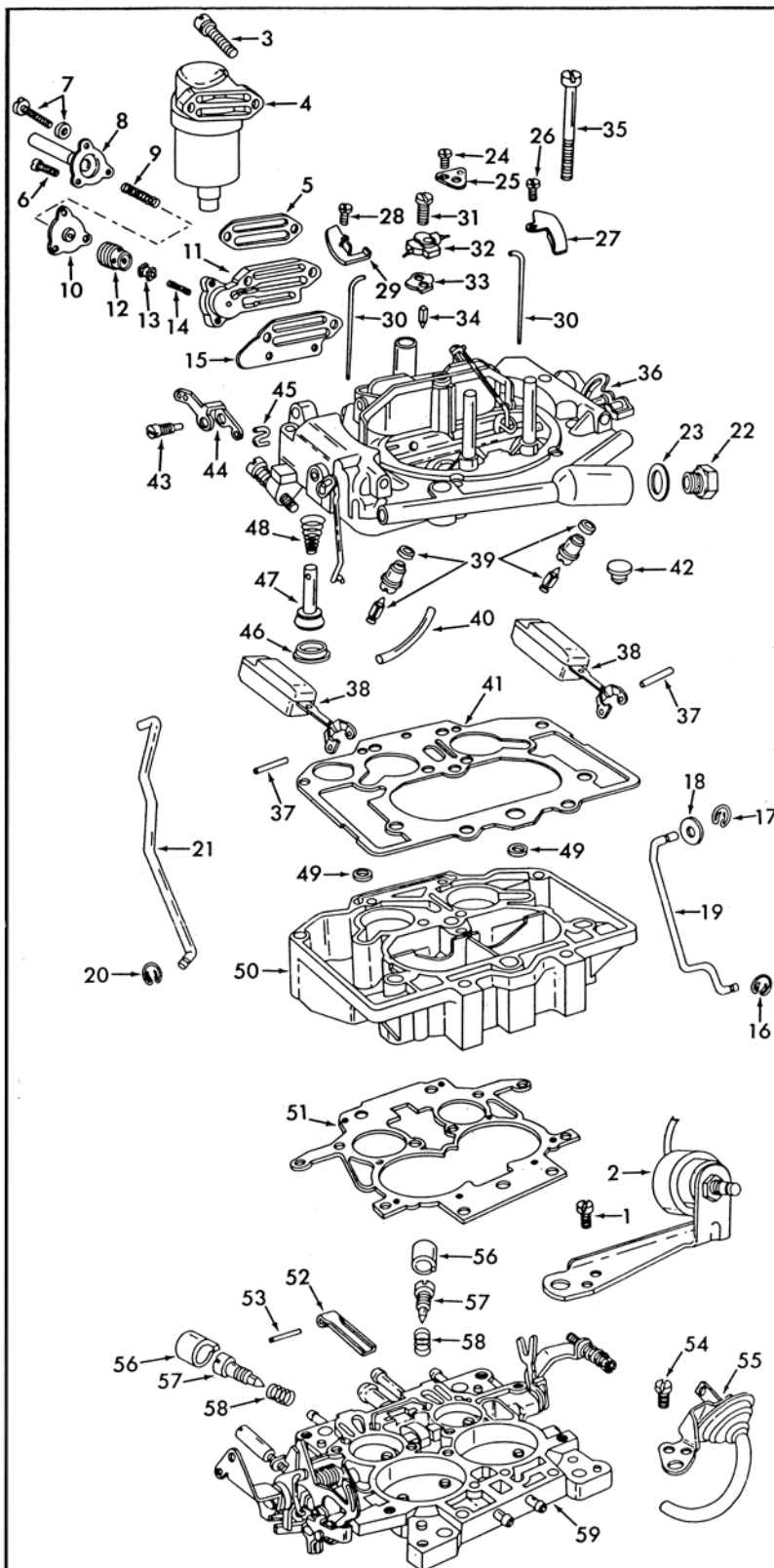
## OFF VEHICLE CARBURETOR SERVICE

### CARTER MODEL - THERMO-QUAD (TQ)

08050-509-3

#### 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. **NOTE:** TWO BOWL COVER SCREWS (35) ARE LOCATED BETWEEN CHOKE VALVE AND WALL OF AIR HORN. WHEN REMOVING BOWL COVER CAREFULLY UNHOOK FAST IDLE ROD FROM FAST IDLE CAM. ROD WILL REMAIN HOOKED TO CHOKE SHAFT. BOWL VENT VALVE (42) CAN EASILY BE REMOVED AND INSTALLED WITHOUT REMOVING LEVER AND ROD. TO REMOVE PUMP PLUNGER (47) USE A SMALL ROD PLACED ON END OF PLUNGER SHAFT AND TAP LIGHTLY DRIVING OUT INTAKE CHECK (46). LIMITER CAPS CAN BE REMOVED BY INSTALLING A SHEET METAL SCREW IN THE CENTER OF THE CAP AND TURN CLOCKWISE.

#### NOMENCLATURE

| REF. NO.                                      | REF. NO.                           |
|-----------------------------------------------|------------------------------------|
| 1. SCREW-TPS ASSY.                            | 28. SCREW-METERING ROD COVER       |
| 2. THROTTLE POSITION SOLENOID ASSY.           | 29. PLATE-METERING ROD COVER       |
| 3. SCREW & LOCKWASHER(2)-ALTITUDE COMPENSATOR | 30. ROD(2)-METERING                |
| 4. ALTITUDE COMPENSATOR ASSY.                 | 31. SCREW-PUMP JET HOUSING         |
| 5. GASKET-ALTITUDE COMP. ASSY.                | 32. HOUSING-PUMP JET               |
| 6. SCREW(2)-DIAPHRAGM COVER                   | 33. GASKET-PUMP JET HOUSING        |
| 7. SCREW & SEAL WASHER(1)                     | 34. NEEDLE-PUMP DISCHARGE CHECK    |
| 8. COVER-DIAPHRAGM                            | 35. SCREW(10)-BOWL COVER           |
| 9. SPRING-DIAPHRAGM                           | 36. BOWL COVER ASSY.               |
| 10. DIAPHRAGM ASSY.-ENRICHMENT VALVE          | 37. PIN(2)-FLOAT LEVER             |
| 11. HOUSING-IDLE ENRICHMENT VALVE             | 38. FLOAT ASSY.(2)                 |
| 12. VALVE SEAT-ENRICHMENT                     | 39. NEEDLE, SEAT & GASKET ASSY.(2) |
| 13. VALVE-ENRICHMENT SEAT                     | 40. TUBE-PUMP PASSAGE              |
| 14. SPRING-ENRICHMENT VALVE                   | 41. GASKET-BOWL COVER              |
| 15. GASKET-ENRICHMENT VALVE HOUSING           | 42. VALVE-BOWL VENT                |
| 16. RETAINER-CHOKE PULL-OFF ROD               | 43. SCREW-PUMP ARM                 |
| 17. RETAINER-CHOKE PULL-OFF ROD               | 44. PUMP ARM                       |
| 18. WASHER-CHOKE PULL-OFF ROD                 | 45. LINK-PUMP S                    |
| 19. ROD-CHOKE PULL-OFF                        | 46. CHECK VALVE-PUMP INTAKE        |
| 20. RETAINER-PUMP ROD                         | 47. PUMP ASSY.                     |
| 21. ROD-PUMP ARM CONNECTOR                    | 48. SPRING-PUMP                    |
| 22. FITTING-FUEL INLET                        | 49. O-RING(2)-MAIN WELL SEAL       |
| 23. GASKET-INLET FITTING                      | 50. BOWL ASSY.-FUEL                |
| 24. SCREW-STEP UP PISTON COVER PLATE          | 51. GASKET-THROTTLE BODY           |
| 25. PLATE-STEP UP PISTON COVER                | 52. LEVER-STEP UP PISTON           |
| 26. SCREW-METERING ROD COVER PLATE            | 53. PIN-LEVER                      |
| 27. PLATE-METERING ROD COVER                  | 54. SCREW-CHOKE PULL-OFF BRACKET   |
|                                               | 55. DIAPHRAGM PULL-OFF ASSY.-CHOKE |
|                                               | 56. CAP(2)-IDLE LIMITER            |
|                                               | 57. NEEDLE(2)-IDLE ADJUSTING       |
|                                               | 58. SPRING(2)-IDLE ADJ. NEEDLE     |
|                                               | 59. THROTTLE BODY ASSY.            |

#### CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL USING 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 IMMERSE MAIN PLASTIC BODY (50) IN CLEANING SOLVENTS FOR A PROLONGED PERIOD OF TIME. DO NOT SOAK DIAPHRAGM ASSEMBLIES, SOLENOID OR RUBBER PARTS IN CLEANING SOLVENTS.

#### REASSEMBLY

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

#### SPECIAL INSTRUCTIONS

VACUUM DIAPHRAGM ASSEMBLY (55) - LEAK TEST BEFORE INSTALLING ON THE THROTTLE BODY.

IDLE ADJUSTING NEEDLES (57) - TURN IN UNTIL LIGHTLY SEATED, THEN BACK OUT 1 1/2 TURNS. (DO NOT INSTALL IDLE LIMITER CAPS AT THIS TIME.)

O-RINGS (49) - BE SURE THEY ARE CENTERED OVER HOLES IN MAIN WELL CAVITIES OF PLASTIC BOWL BEFORE INSTALLING BOWL COVER.

PUMP PLUNGER (47) INSTALLATION - INSTALL PUMP SPRING (48) LARGE END IN FIRST THEN INSTALL PUMP. HOLD IN PLACE BY INSTALLING "S" LINK (45) WITH LOWER OPEN END TOWARDS CHOKE. THEN INSTALL NEW INTAKE CHECK ASSEMBLY (46) AND TAP LIGHTLY INTO PLACE.

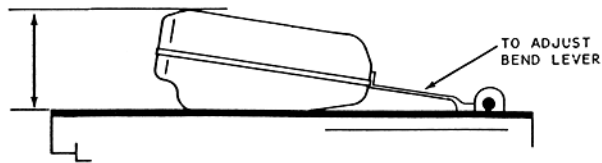
PUMP PASSAGE TUBE (40) - WHEN INSTALLING AVOID KINKING OF TUBE.

BOWL COVER SCREWS (35) - INSTALL THEN TIGHTEN TO 50 INCH LBS. IN TWO OPERATIONS.

TPS ASSEMBLY (2) - DO NOT MOUNT ON CARBURETOR UNTIL ALL BENCH ADJUSTMENTS HAVE BEEN MADE.

# ADJUSTMENTS

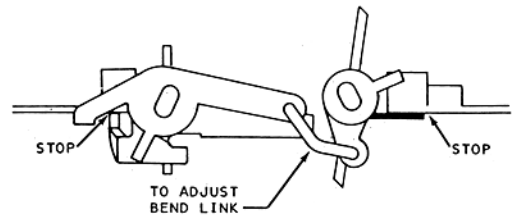
CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE.



BOWL COVER GASKET IN PLACE, COVER INVERTED MEASURE FROM GASKET TO BOTTOM OF EACH FLOAT AT TOE END.

DRY FLOAT LEVEL ADJUSTMENT

FIG. 1



OPEN THROTTLE VALVES TO WIDE OPEN POSITION. BOTH PRIMARY & SECONDARY THROTTLE SHAFTS SHOULD CONTACT THE STOPS ON THE THROTTLE BODY HOUSING AT THE SAME TIME.

(SECONDARY THROTTLE PLATES WILL BE APPROXIMATELY 80° FROM THE CLOSED POSITION. DO NOT ATTEMPT TO ADJUST TO THE WIDE OPEN POSITION.)

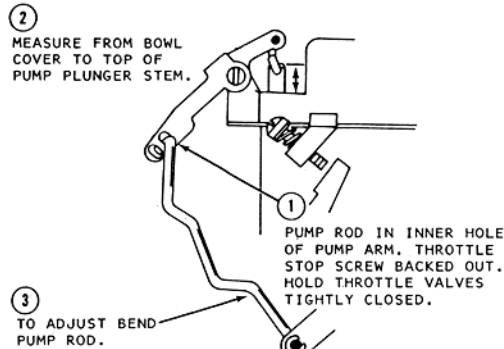
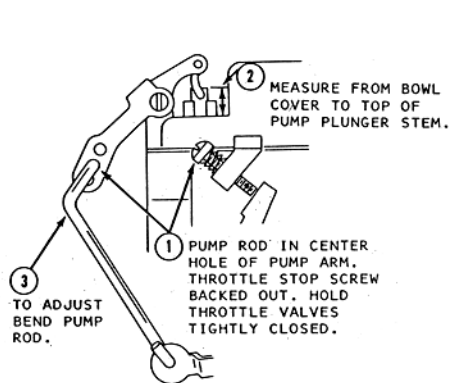
SECONDARY THROTTLE LINKAGE ADJUSTMENT

FIG. 2

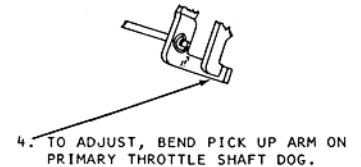
EARLY

LATE

STAGE 2 M/T

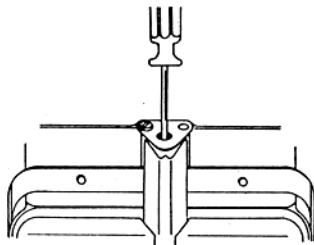


- STAGE 2
1. OPEN THROTTLE SLOWLY UNTIL THE SECONDARY THROTTLE SHAFT BEGINS TO MOVE.
  2. HOLD IN THIS POSITION.
  3. MEASURE FROM TOP OF PLUNGER SHAFT TO BOWL COVER.



PUMP ROD ADJUSTMENT

FIG. 3

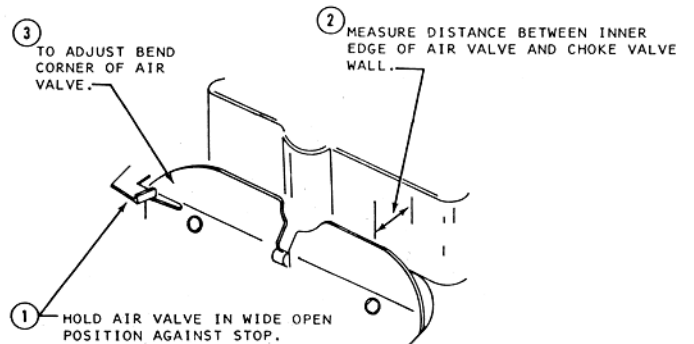


1. THROTTLE VALVES TIGHTLY CLOSED.
2. PRESS DOWN ON STEP UP PISTON. TURN ADJUSTMENT SCREW IN CENTER OF PISTON COUNTERCLOCKWISE, UNTIL PISTON IS IN THE FULL DOWN POSITION. TURN SCREW CLOCKWISE UNTIL PISTON STARTS TO MOVE UPWARD. TURN 1 1/2 ADDITIONAL TURNS.
3. TO OBTAIN BEST DRIVEABILITY, TURN SCREW CLOCKWISE (RICHER METERING) COUNTERCLOCKWISE (LEANER METERING).

(AT WIDE OPEN THROTTLE BE SURE PISTON DOES NOT BIND AGAINST PISTON COVER.)

METERING ROD ADJUSTMENT

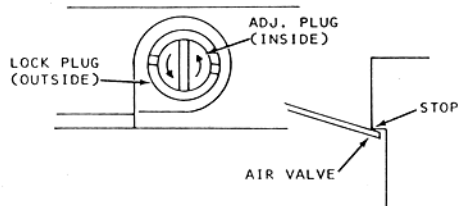
FIG. 4



SECONDARY AIR VALVE OPENING ADJUSTMENT

FIG. 5

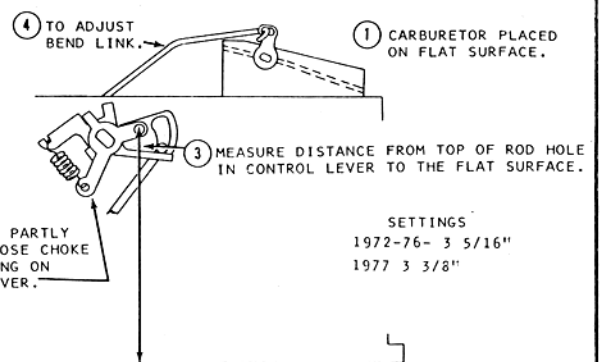
2. TURN ADJUSTMENT PLUG COUNTERCLOCKWISE UNTIL AIR VALVE JUST CONTACTS STOP. THEN TURN 1 1/4 ADDITIONAL TURNS. HOLD IN THIS POSITION AND TIGHTEN LOCK PLUG.



1. LOOSEN LOCK PLUG SO AIR VALVE FALLS OPEN FREELY.

SECONDARY AIR VALVE SPRING ADJUSTMENT

FIG. 6

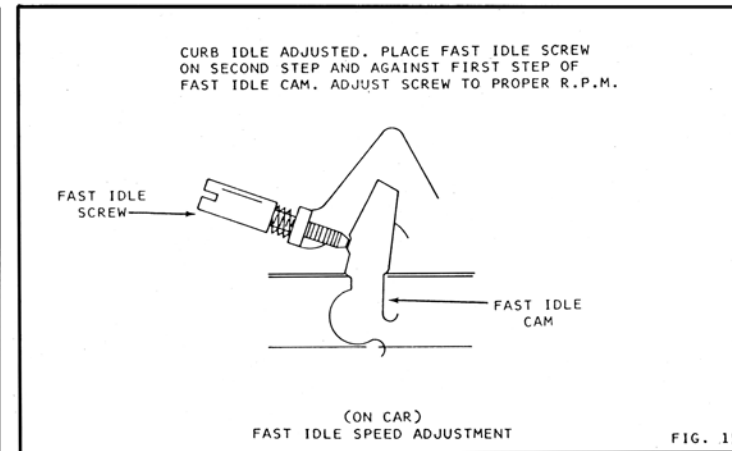
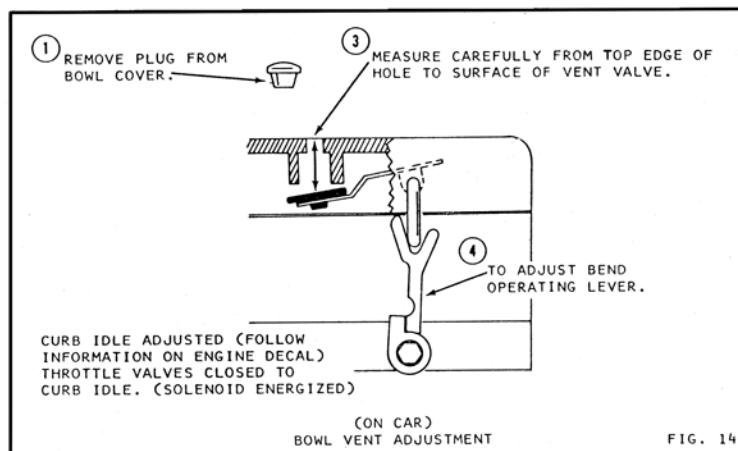
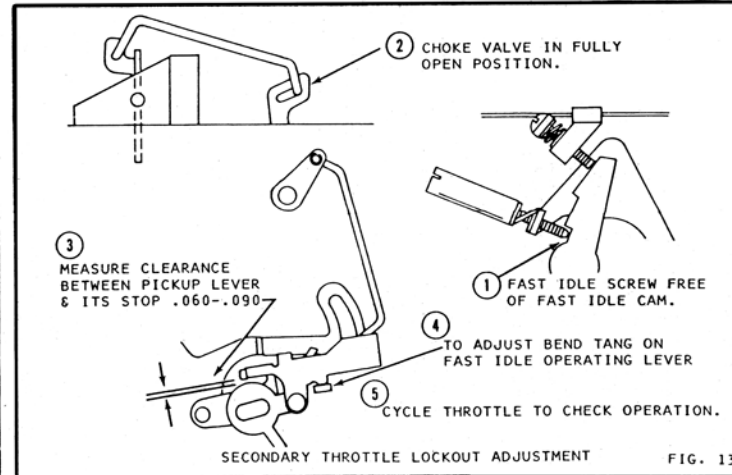
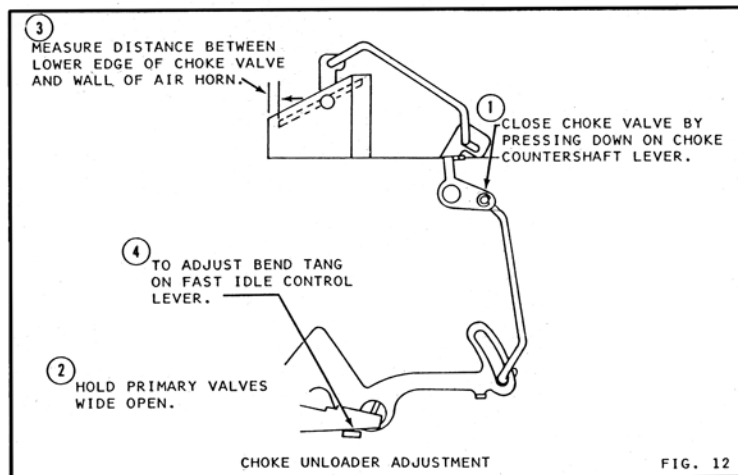
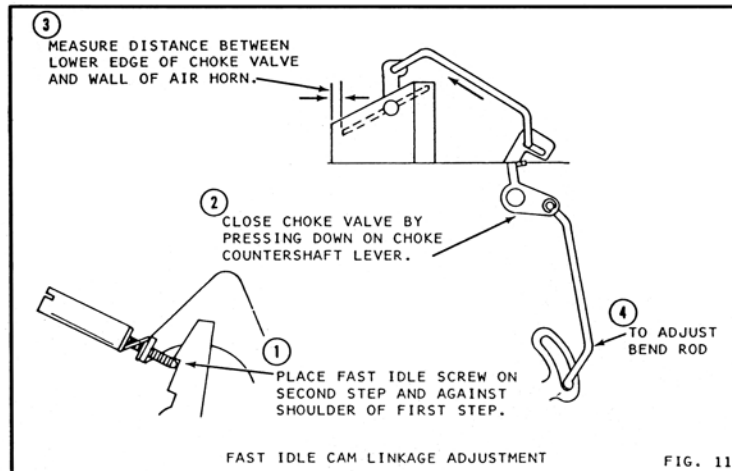
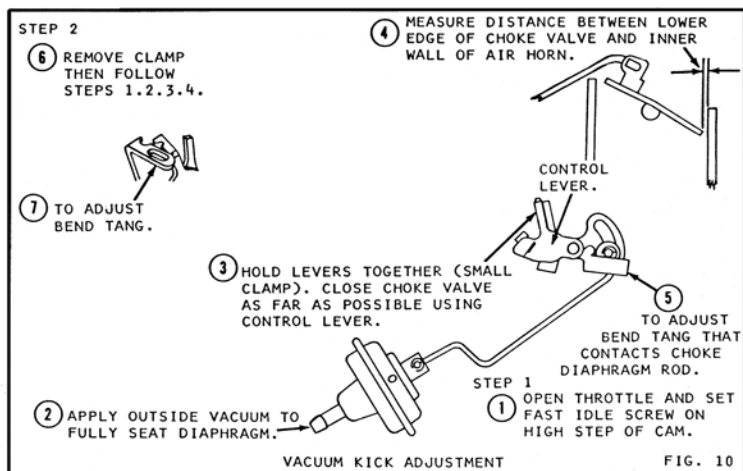
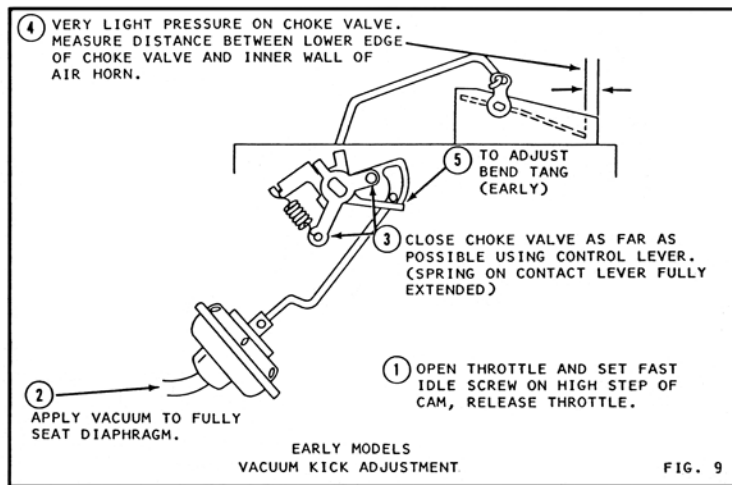
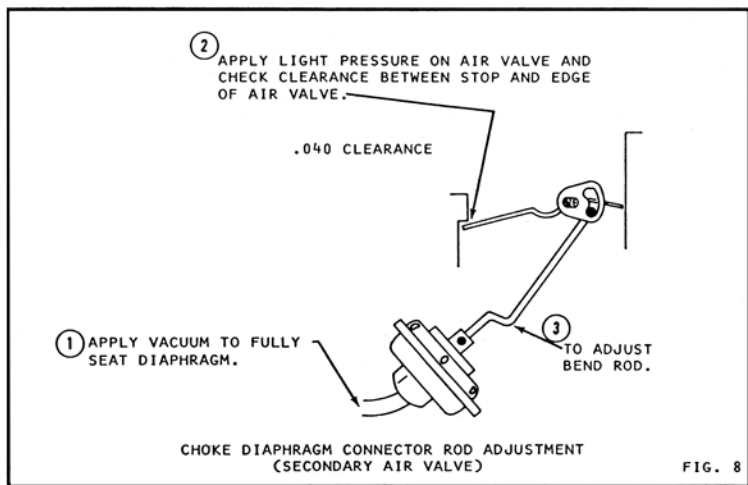


2. THROTTLE PARTLY OPEN. CLOSE CHOKE BY PUSHING ON CHOKE LEVER.

SETTINGS  
1972-76- 3 5/16"  
1977 3 3/8"

CHOKE CONTROL LEVER ADJUSTMENT

FIG. 7



## ADJUSTMENT DATA TABLE

| YEAR    | MAKE                                                                                                                                                                                                                  | DRY<br>FLOAT<br>LEVEL                                                    | PUMP ADJUSTMENT<br>STAGE<br>1                                      | PUMP ADJUSTMENT<br>STAGE<br>2                                 | FAST IDLE<br>CAM<br>LINKAGE                                 | UNLOADER<br>ADJ.                                            | AIR VALVE<br>OPENING                                             | VACUUM<br>BREAK<br>STEP 1<br>HIGH             | STEP 2<br>LOW                                               | BOWL<br>VENT<br>VALVE                                              | CURB. IDLE<br>R.P.M.<br>NOTE 1                     | FAST<br>R.P.M.<br>NOTE 1                                     |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------|
| 1972    | CHRYSLER CORP.<br>340" ENG.<br>400" ENG.<br>W/AIR PUMP<br>W/AIR PUMP                                                                                                                                                  | 1"<br>1"<br>1"<br>1"<br>1"                                               | 1/2"<br>9/16"<br>1/2"<br>9/16"<br>1/2"                             | ---<br>---<br>---<br>---<br>---                               | 7/64"<br>7/64"<br>7/64"<br>7/64"<br>7/64"                   | 3/16"<br>3/16"<br>3/16"<br>3/16"<br>3/16"                   | 29/64"<br>29/64"<br>31/64"<br>31/64"<br>31/64"                   | ---<br>---<br>---<br>---<br>---               | 9/64"<br>5/32"<br>9/64"<br>5/32"<br>5/32"                   | 13/16"<br>13/16"<br>13/16"<br>13/16"<br>13/16"                     | 900<br>750<br>900<br>900<br>750<br>800             | 1900<br>1900<br>1900<br>1900<br>2100<br>2000                 |
| 1973    | CHRYSLER CORP.<br>340" ENG.<br>400" ENG.<br>440" ENG.<br>440" ENG. MOTOR HOME                                                                                                                                         | 1"<br>1"<br>1"<br>1"<br>1"                                               | 1/2"<br>9/16"<br>1/2"<br>9/16"<br>1/2"                             | ---<br>11/32"<br>---<br>11/32"<br>---                         | 7/64"<br>7/64"<br>7/64"<br>7/64"<br>7/64"                   | 3/16"<br>3/16"<br>3/16"<br>3/16"<br>3/16"                   | 15/32"<br>15/32"<br>15/32"<br>15/32"<br>15/32"                   | ---<br>---<br>---<br>---<br>---               | 5/32"<br>5/32"<br>5/32"<br>5/32"<br>5/32"                   | 13/16"<br>13/16"<br>13/16"<br>13/16"<br>13/16"                     | 750<br>900<br>1800<br>1300<br>1700<br>1700<br>1800 | 1800<br>1300<br>1800<br>2000<br>1700<br>1700<br>2000         |
| 1974    | CHRYSLER CORP.<br>360" ENG.<br>CARB. NO. 6488S (CALIF.)<br>CARB. NO. 9022S TRUCK<br>400" ENG.<br>440" ENG.<br>440" ENG.<br>CARB. NO. 6545S TRUCK                                                                      | 1"<br>1"<br>1"<br>1"<br>1"<br>1"<br>1"                                   | 1/2"<br>9/16"<br>9/16"<br>9/16"<br>9/16"<br>1/2"<br>1/2"<br>9/16"  | ---<br>11/32"<br>---<br>---<br>11/32"<br>---<br>---<br>11/32" | 3/32"<br>3/32"<br>3/32"<br>3/32"<br>3/32"<br>3/32"<br>3/32" | 5/16"<br>5/16"<br>5/16"<br>5/16"<br>5/16"<br>5/16"<br>5/16" | 1/2"<br>1/2"<br>1/2"<br>1/2"<br>1/2"<br>1/2"<br>1/2"             | ---<br>---<br>---<br>---<br>---<br>---<br>--- | 5/32"<br>7/32"<br>5/32"<br>7/32"<br>5/32"<br>5/32"<br>5/32" | 13/16"<br>---<br>---<br>---<br>13/16"<br>---<br>13/16"<br>13/16"   | E/D<br>E/D<br>E/D<br>E/D<br>E/D<br>E/D<br>E/D      | 1900<br>1900<br>1800<br>2000<br>1700<br>1700<br>2000         |
| 1975    | CHRYSLER CORP.<br>360" ENG.<br>360" ENG. CALIF.<br>400" ENG.<br>400" ENG. CALIF.<br>440" ENG. FED. & CALIF.<br>440" ENG. W/CARB. NO.<br>9012S, 9052S, 9073S<br>CARB. NO. 6545S TRUCK                                  | 29/32"<br>31/32"<br>29/32"<br>31/32"<br>29/32"<br>29/32"<br>29/32"<br>1" | 35/64"<br>35/64"<br>29/32"<br>35/64"<br>35/64"<br>35/64"<br>35/64" | ---<br>---<br>---<br>---<br>---<br>---<br>---                 | 3/32"<br>3/32"<br>3/32"<br>3/32"<br>3/32"<br>3/32"<br>3/32" | 5/16"<br>5/16"<br>5/16"<br>5/16"<br>5/16"<br>5/16"<br>5/16" | 1/2"<br>1/2"<br>1/2"<br>1/2"<br>1/2"<br>1/2"<br>1/2"             | ---<br>---<br>---<br>---<br>---<br>---<br>--- | 3/32"<br>5/32"<br>5/32"<br>5/32"<br>5/32"<br>5/32"<br>5/32" | 13/16"<br>13/16"<br>13/16"<br>13/16"<br>13/16"<br>13/16"<br>13/16" | E/D<br>E/D<br>E/D<br>E/D<br>E/D<br>E/D<br>E/D      | 1600<br>1700<br>1800<br>1800<br>1600<br>1800<br>2000         |
| 1976    | CHRYSLER CORP.<br>360" ENG.<br>360" ENG. CALIF.<br>400" ENG. FED. & CAN.<br>400" ENG. CALIF.<br>400" ENG. CARB. NO. 9097S<br>440" ENG.<br>CARB. NO. 9058S, 9059S,<br>CARB. NO. 9095S, CALIF.<br>CARB. NO. 6545S TRUCK | 29/32"<br>29/32"<br>29/32"<br>29/32"<br>29/32"<br>29/32"<br>29/32"<br>1" | 33/64"<br>33/64"<br>33/64"<br>33/64"<br>33/64"<br>33/64"<br>33/64" | 5/16"<br>5/16"<br>5/16"<br>5/16"<br>5/16"<br>5/16"<br>5/16"   | 3/32"<br>7/64"<br>3/32"<br>7/64"<br>7/64"<br>3/32"<br>3/32" | 5/16"<br>5/16"<br>5/16"<br>5/16"<br>5/16"<br>5/16"<br>5/16" | 1/2"<br>33/64"<br>33/64"<br>33/64"<br>33/64"<br>33/64"<br>33/64" | ---<br>---<br>---<br>---<br>---<br>---<br>--- | 3/32"<br>3/32"<br>3/32"<br>3/32"<br>3/32"<br>3/32"<br>3/32" | 13/16"<br>13/16"<br>13/16"<br>13/16"<br>13/16"<br>13/16"<br>13/16" | E/D<br>E/D<br>E/D<br>E/D<br>E/D<br>E/D<br>E/D      | 1700<br>1700<br>1800<br>1600<br>1600<br>1600<br>1800<br>2000 |
| 1977    | CHRYSLER CORP.<br>360" ENG. CARB. NO. 9076S<br>9093S<br>400" ENG.<br>440" ENG.                                                                                                                                        | 13/16"<br>13/16"<br>13/16"<br>13/16"                                     | 1/2"<br>1/2"<br>1/2"<br>1/2"                                       | 5/16"<br>23/32"<br>5/16"<br>5/16"                             | 3/32"<br>3/32"<br>3/32"<br>3/32"                            | 5/16"<br>5/16"<br>5/16"<br>5/16"                            | 1/2"<br>1/2"<br>1/2"<br>1/2"                                     | 19/32"<br>19/32"<br>19/32"<br>19/32"          | 5/32"<br>5/32"<br>5/32"<br>5/32"                            | 13/16"<br>13/16"<br>13/16"<br>13/16"                               | E/D<br>E/D<br>E/D<br>E/D                           | ---                                                          |
| 1977    | DODGE TRUCK<br>440-1" ENG.                                                                                                                                                                                            | 27/32"                                                                   | 1/2"                                                               | 23/32"                                                        | 3/32"                                                       | 5/16"                                                       | 1/2"                                                             | 19/32"                                        | 3/32"                                                       | ---                                                                | E/D                                                | ---                                                          |
| 1974-76 | INTERNATIONAL<br>345" 392" ENG.<br>CARB NOS. 6551, 6590, 6592<br>CARB NOS. 9027, 9028                                                                                                                                 | 1-1/16"<br>1-1/16"                                                       | 11/32"<br>11/32"                                                   | 1/8"<br>9/64"                                                 | 3/32"<br>3/32"                                              | 5/16"<br>5/16"                                              | 1/2"<br>1/2"                                                     | 11/32"<br>11/32"                              | 9/32"<br>9/32"                                              | 13/16"<br>13/16"                                                   | E/D<br>E/D                                         | 1575<br>1575                                                 |

NOTE: 1 - SOLENOID ENERGIZED  
E/D = ENGINE DECAL

ALL ORIGINAL METAL FLOAT SETTINGS OF 1" OR 1-1/16" USE 29/32" WHEN PLASTIC FLOATS ARE USED.

**ALL OTHER FLOAT SETTINGS ARE FOR PLASTIC FLOATS.**

**AFTERMARKET REPLACEMENT METAL FLOATS USE PLASTIC FLOAT SETTINGS.**