

INSTRUCTION SHEET

OFF VEHICLE CARBURETOR SERVICE

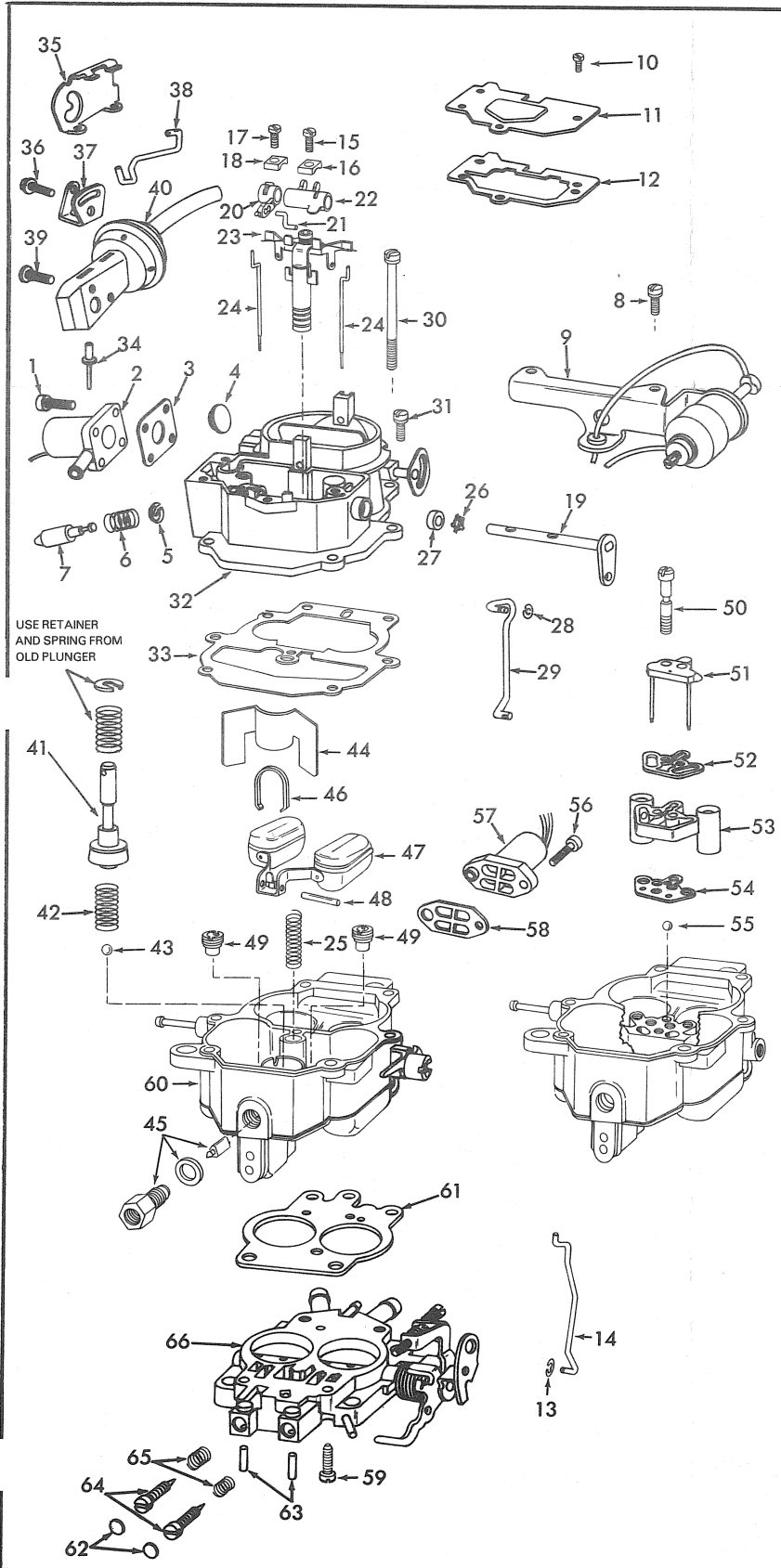
CARTER - MODEL BBD

50-612-2

WITH DUTY CYCLE SOLENOID

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. DRILL POP RIVET HEADS OFF TO REMOVE CHOKE PULL OFF LINK COVER. TO REMOVE IDLE ADJUSTING NEEDLE PLUGS & PINS, DRILL A SMALL HOLE IN THE CENTER OF EACH PLUG. USING A SUITABLE PULLER REMOVE PLUGS. USING A SHARP PUNCH HELD AT AN ANGLE DRIVE ROLL PINS OUT FAR ENOUGH TO REMOVE IDLE ADJUSTING NEEDLES. BEFORE REMOVING TURN IDLE ADJUSTING NEEDLES IN COUNTING THE NUMBER OF TURNS IT TAKES TO LIGHTLY SEAT NEEDLE. RECORD FOR REASSEMBLY.

NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW (4) - BOWL VENT SOLENOID	33. GASKET - BOWL COVER
2. BOWL VENT SOLENOID ASSEMBLY	34. RIVET (2) - COVER - (DRILL OUT)
3. GASKET - BOWL VENT SOLENOID	35. COVER - CHOKE PULLOFF LINK
4. VALVE - VENT	36. SCREW - LEVER
5. RETAINER - SPRING	37. LEVER - CHOKE PULLOFF LINK
6. SPRING - PLUNGER	38. LINK - CHOKE PULLOFF
7. PLUNGER - SOLENOID	39. SCREW (2) - CHOKE PULLOFF
8. SCREW & LOCKWASHER (2) - SOLENOID BRACKETS	40. CHOKE PULLOFF ASSEMBLY
9. SOLENOID & BRACKET ASSEMBLY	41. PUMP ASSEMBLY
10. SCREW (4) - COVER	42. SPRING - PUMP RETURN
11. COVER - DUST	43. BALL - PUMP CHECK (LARGE)
12. GASKET - DUST COVER	44. BAFFLE - FUEL BOWL
13. RETAINER - PUMP ROD	45. NEEDLE & SEAT ASSEMBLY
14. ROD - PUMP	46. RETAINER - FLOAT PIN
15. SCREW - METERING ROD ARM WASHER	47. FLOAT ASSEMBLY
16. WASHER - METERING ROD ARM	48. PIN - FLOAT
17. SCREW - PUMP ARM WASHER	49. JET (2) - MAIN
18. WASHER - PUMP ARM	50. SCREW (2) - VENTURI CLUSTER
19. SHAFT - PUMP	51. COVER - VENTURI
20. ARM - PUMP LINK	52. GASKET - VENTURI COVER
21. LINK - PUMP	53. CLUSTER ASSEMBLY - VENTURI
22. ARM - METERING ROD	54. GASKET - VENTURI CLUSTER
23. PISTON ASSEMBLY - VACUUM	55. BALL - PUMP CHECK (SMALL)
24. ROD (2) METERING	56. SCREW (2) - SOLENOID
25. SPRING - VACUUM PISTON	57. DUTY CYCLE SOLENOID ASSEMBLY
26. RETAINER - SHAFT SEAL	58. GASKET - SOLENOID
27. SEAL - PUMP SHAFT	59. SCREW & LOCKWASHER (2) - THROTTLE BODY
28. RETAINER - ROD	60. BOWL ASSEMBLY
29. ROD - FAST IDLE	61. GASKET - THROTTLE BODY
30. SCREW & LOCKWASHER (2) - BOWL COVER	62. PLUG - IDLE NEEDLE
31. SCREW & LOCKWASHER (2) - BOWL COVER	63. PIN - IDLE NEEDLE
32. BOWL COVER ASSEMBLY	64. NEEDLE (2) - IDLE ADJUSTING
	65. SPRING (2) - IDLE ADJUSTING NEEDLE
	66. THROTTLE BODY ASSEMBLY

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 PLASTIC PARTS FOR A LONG PERIOD OF TIME. DO NOT SOAK PARTS CONTAINING DIAPHRAGMS, SOLENOIDS SUCH AS (2), (9), (40), (57) IN ANY TYPE OF CLEANING SOLVENTS.

REASSEMBLY

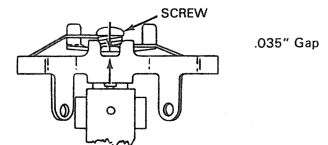
REASSEMBLE IN REVERSE ORDER OF DIASSEMBLY. NOTE SPECIAL INSTRUCTIONS AND FOLLOW NUMERICAL OUTLINE IN MAKING ADJUSTMENTS NECESSARY FOR CARBURETOR BEING SERVICED.

SPECIAL INSTRUCTIONS

IDLE ADJUSTING NEEDLES (64) - TURN IN UNTIL LIGHTLY SEATED THEN BACK OUT NUMBER OF TURNS RECORDED ON DIASSEMBLY. (DO NOT INSTALL IDLE LIMITER PINS OR PLUGS AT THIS TIME.)

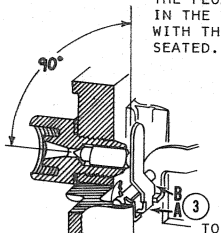
RETAINER FLOAT PIN (46) BE SURE RETAINER IS SEATING ON FLOAT PIN AND NOT HUNG UP IN GUIDE SLOTS.

STEP UP PISTON QUALIFYING ADJUSTMENT BEFORE INSTALLING. ADJUST THE GAP (AS ILLUSTRATED) BY TURNING ALLEN HEAD SCREW ON TOP OF PISTON. (RECORD NUMBER OF TURNS AND DIRECTION TO OBTAIN THIS DIMENSION FOR THIS MUST BE RESET TO ITS ORIGINAL POSITION AFTER THE VACUUM STEP UP PISTON ADJUSTMENT HAS BEEN MADE.)



ADJUSTMENTS

AFTER FLOAT ADJUSTMENT THE FLOAT LIP MUST BE IN THE VERTICAL POSITION WITH THE NEEDLE LIGHTLY SEATED.



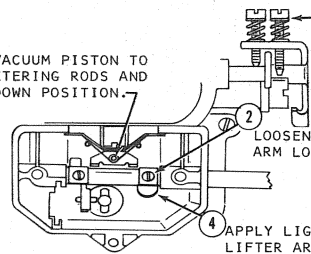
- 1 BOWL ASSY. INVERTED HOLD FLOAT PIN RETAINER IN PLACE AGAINST FLOAT PIN.
- 2 MEASURE BETWEEN CROWN OF EACH FLOAT (AT CENTER) AND TOP OF FUEL BOWL.

TO ADJUST REMOVE FLOAT AND BEND LIP AT A OR B OR BOTH.

CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE.

DRY FLOAT LEVEL ADJUSTMENT FIG. 1

- 1 CURB IDLE STOP SCREW BACKED OUT. THROTTLE VALVES COMPLETELY CLOSED.
- 3 DEPRESS VACUUM PISTON TO BOTTOM METERING RODS AND HOLD IN DOWN POSITION.

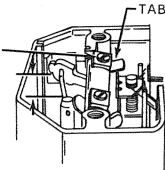


- 2 LOOSEN METERING ROD LIFTER ARM LOCK SCREW.
- 4 APPLY LIGHT DOWNWARD PRESSURE ON LIFTER ARM TAB UNTIL LIFTER ARM CONTACTS PISTON PLATE THEN TIGHTEN LOCK SCREW.

(REQUALIFY STEP UP PISTON)

METERING ROD SETTING FIG. 2

- 2 LOOSEN PUMP ARM LOCK SCREW.

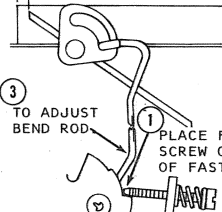


PRESS DOWN ON TAB OF PUMP ARM UNTIL TOP OF PUMP SHAFT IS SPECIFIED DISTANCE BELOW DUST COVER GASKET SURFACE OF BOWL COVER. TIGHTEN LOCK SCREW.

- 1 BACK OUT CURB IDLE STOP SCREW. THROTTLE VALVES COMPLETELY CLOSED. TURN STOP SCREW IN 2 FULL TURNS AFTER INITIAL CONTACT WITH STOP.

PUMP ADJUSTMENT FIG. 3

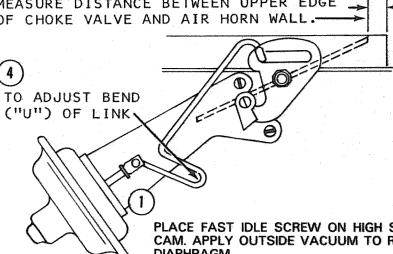
- 2 HOLD CHOKE TOWARDS CLOSE POSITION THEN MEASURE DISTANCE BETWEEN UPPER EDGE OF CHOKE VALVE AND AIR HORN WALL.



- 3 TO ADJUST BEND ROD
- 1 PLACE FAST IDLE SPEED SCREW ON SECOND STEP OF FAST IDLE CAM.

FAST IDLE LINKAGE ADJUSTMENT FIG. 4

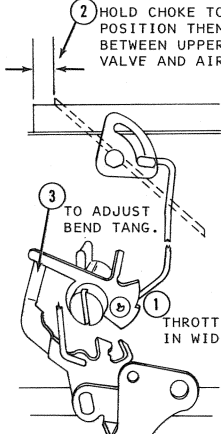
- 2 APPLY LIGHT CLOSING PRESSURE TO CHOKE VALVE UNTIL ALL SLACK IS TAKEN UP. (INNER STEM EXTENDED.)
- 3 MEASURE DISTANCE BETWEEN UPPER EDGE OF CHOKE VALVE AND AIR HORN WALL.



- 4 TO ADJUST BEND ("U") OF LINK
- 1 PLACE FAST IDLE SCREW ON HIGH STOP OF CAM. APPLY OUTSIDE VACUUM TO RETRACT DIAPHRAGM.

VACUUM BREAK ADJUSTMENT FIG. 5

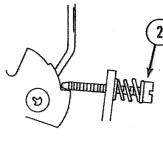
- 2 HOLD CHOKE TOWARDS CLOSED POSITION THEN MEASURE DISTANCE BETWEEN UPPER EDGE OF CHOKE VALVE AND AIR HORN WALL.



- 3 TO ADJUST BEND TANG.
- 1 THROTTLE VALVES HELD IN WIDE OPEN POSITION.

UNLOADER ADJUSTMENT FIG. 6

- 1 PLACE FAST IDLE SCREW ON SECOND HIGHEST STEP OF FAST IDLE CAM.



- 2 ADJUST SCREW TO SPECIFICATIONS.

PASS. CAR
1400 R.P.M.
TRUCK
1600 R.P.M.

FAST IDLE ADJUSTMENT FIG. 7

CHRYSLER PRODUCTS ADJUSTMENT DATA TABLE

YEAR	CARB. NO.	FLOAT LEVEL	PUMP ADJ.	FAST IDLE LINKAGE ADJ.	VACUUM BREAK	UNLOADER
1981-83	8291	1/4"	1/2"	.070"	.130"	.280"
1983	8381	1/4"	15/32"	5/64"	1/8"	9/32"
	8382	1/4"	15/32"	5/64"	1/8"	9/32"
1984	8385	1/4"	15/32"	5/64"	1/8"	9/32"
TRUCK						
1982	8348	1/4"	1/2"	.070"	.130"	.310"
1983-84	8358	1/4"	15/32"	.070"	.130"	.280"
	8359	1/4"	15/32"	.070"	.130"	.280"
	8374	1/4"	15/32"	.070"	.130"	.280"