

INSTRUCTION SHEET

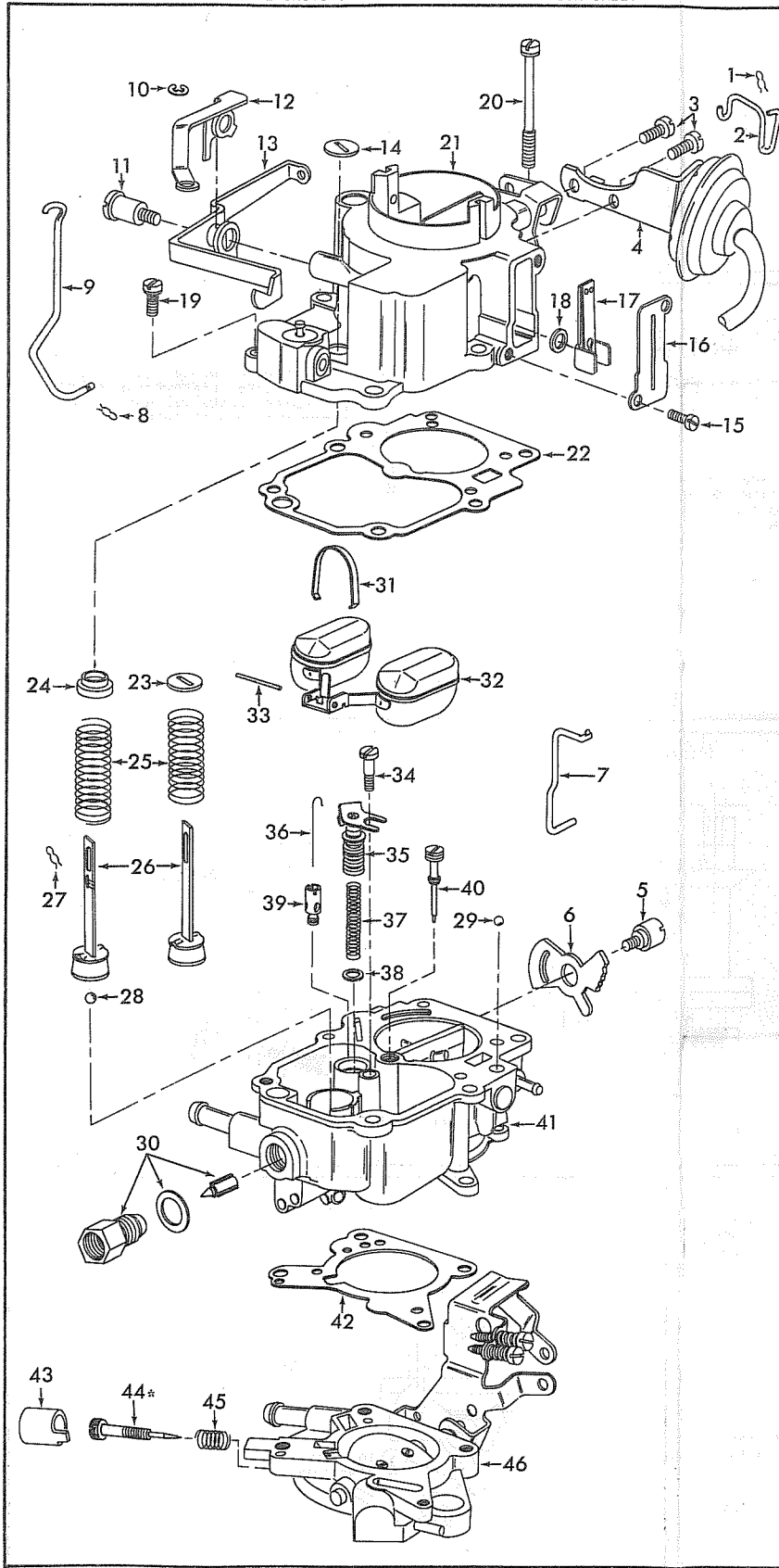
OFF VEHICLE CARBURETOR SERVICE

CARTER MODEL - BBS

50-497-1

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. CAUTION: ON EARLY CLEAN AIR PACKAGE CARBURETORS, IDLE ADJUSTING SCREW (44) CANNOT BE REMOVED. ON LATER MODELS THE IDLE LIMITER CAP (43) CAN BE REMOVED BY INSTALLING A SHEET METAL SCREW IN THE CENTER OF THE CAP AND TURN CLOCKWISE.

NOMENCLATURE

REF. NO.	REF. NO.
1. RETAINER - CHOKE PULL-OFF LINK	23. WASHER - PUMP SPRING GUIDE S/M
2. LINK - CHOKE PULL-OFF	24. BUSHING - PUMP SPRING S/M
3. SCREW (2) - CHOKE PULL-OFF	25. SPRING - PUMP PLUNGER
4. CHOKE PULL-OFF & HOSE ASSY.	26. PUMP PLUNGER ASSY.
5. SCREW - FAST IDLE CAM	27. PIN SPRING - PUMP PLUNGER S/M
6. CAM - FAST IDLE	28. BALL - PUMP INTAKE CHECK
7. LINK - FAST IDLE	29. BALL - PUMP DISC. CHECK
8. RETAINER - PUMP ROD	30. NEEDLE & SEAT ASSY.
9. ROD - PUMP	31. RETAINER - FLOAT PIN
10. RETAINER - VENT VALVE LEVER (SOME MODELS)	32. FLOAT ASSY.
11. SCREW - PUMP & VENT VALVE LEVERS	33. PIN - FLOAT
12. LEVER - VENT VALVE	34. SCREW - STEP-UP PISTON PLATE
13. LEVER - PUMP PLUNGER	35. STEP-UP PISTON ASSY.
14. VALVE - VENT S/M	36. ROD - STEP-UP
15. SCREW (2) - COMPENSATOR VALVE COVER S/M	37. SPRING - STEP-UP PISTON
16. COVER - COMPENSATOR VALVE S/M	38. GASKET - STEP-UP PISTON
17. VALVE - COMPENSATOR S/M	39. JET - MAIN METERING
18. GASKET - COMPENSATOR VALVE S/M	40. JET - IDLE
19. SCREW & LOCKWASHER (2) - BOWL COVER	41. BOWL ASSY.
20. SCREW & LOCKWASHER (4) - BOWL COVER	42. GASKET - THROTTLE BODY
21. BOWL COVER ASSY.	43. CAP - IDLE LIMITER S/M
22. GASKET - BOWL COVER	44. NEEDLE - IDLE ADJUSTING*
	45. SPRING - IDLE ADJ. NEEDLE
	46. THROTTLE BODY ASSY.

S/M = SOME MODELS

* NOT REMOVABLE ON EARLY C.A.P. MODELS

CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. USE A CARBURETOR CLEANING SOLVENT TO SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. MAKE CERTAIN THE THROTTLE BORE IS 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 CHOKE PULL-OFF (4) OR PARTS CONTAINING RUBBER OR LEATHER 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

IDLE ADJUSTING NEEDLE (44) - TURN IN UNTIL LIGHTLY SEATED, THEN BACK OUT 1 1/2 TO 2 TURNS. (DO NOT INSTALL LIMITER CAP AT THIS TIME.)

MAIN METERING JET (39) - LATER MODEL CARBURETORS DO NOT USE A GASKET ON JET SEAT.

STEP UP PISTON GASKET (38) - BE SURE GASKET IS PROPERLY PLACED IN THE BOTTOM OF PISTON CYLINDER.

RETAINER FLOAT PIN (31) - BE SURE RETAINER IS SETTING ON FLOAT PIN AND NOT HUNG UP IN GUIDE SLOTS.

PUMP PLUNGER (26) - FLARE LEATHER CUP OUTWARD SLIGHTLY, THEN SOAK CUP IN GASOLINE OR LIGHT OIL PRIOR TO INSTALLING.

ADJUSTMENTS

CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE.

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.

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

DRY FLOAT LEVEL ADJUSTMENT

FIG. 1

NOTE: PUMP CONNECTOR ROD AND PLUNGER PIN SPRING SHOULD ALWAYS BE IN CORRESPONDING POSITIONS.

2 THROTTLE STOP SCREW BACKED OUT, THROTTLE VALVE FULLY CLOSED.

2A 1970 AND LATER ADJUSTMENT IS MADE WITH THROTTLE SCREW SET AT CURB IDLE.

THROTTLE LEVER HOLE POSITIONS

3 MEASURE DISTANCE BETWEEN VENT VALVE AND VALVE SEAT.

PIN SPRING POSITIONS

1 PLUNGER PIN SPRING IN GROOVE OF PUMP STEM AND PUMP CONNECTOR ROD IN THROTTLE LEVER HOLE LISTED IN ADJ. DATA TABLE.

4 TO ADJUST BEND ROD

PUMP/BOWL VENT ADJUSTMENT TYPE 1

FIG. 2

2 PUMP ADJ. MEASURE DISTANCE FROM TOP FLAT SURFACE OF BOWL COVER TO TOP OF PUMP SHAFT.

4 BOWL VENT ADJ. MEASURE DISTANCE FROM TOP OF VENT HOUSING TO TOP OF VENT VALVE STEM

5 TO ADJUST VENT VALVE BEND TANG

1 PUMP CONNECTOR ROD IN THROTTLE LEVER HOLE LISTED IN ADJ. DATA TABLE. ADJUST THROTTLE STOP SCREW TO CURB IDLE R.P.M.

3 TO ADJUST PUMP BEND ROD.

PUMP/BOWL VENT ADJUSTMENT TYPE 2

FIG. 3

1 CHOKE VALVE HELD CLOSED.

2 PUSH UP ON HUB LEVER THEN MEASURE CLEARANCE BETWEEN SHAFT LEVER AND HUB LEVER. (.010-.040 CLEARANCE.)

3 TO ADJUST BEND HUB LEVER TANG.

SPRING STAGE CHOKE ADJUSTMENT

FIG. 4

2 INDEX SETTING. CHOKE VALVE SHOULD BE COMPLETELY CLOSED WITH ROD IN END OF SLOT IN CAM.

2A LOW STEP & SECOND STEP. HOLD CHOKE VALVE TOWARDS CLOSED POSITION THEN MEASURE DISTANCE BETWEEN UPPER EDGE OF CHOKE VALVE AND AIR HORN WALL.

1 PLACE FAST IDLE SCREW ON STEP OF FAST IDLE CAM LISTED IN ADJ. DATA TABLE.

3 TO ADJUST BEND ROD

INDEX

LOW STEP

SECOND STEP

FAST IDLE LINK/CAM ADJUSTMENT

FIG. 5

3 MEASURE DISTANCE BETWEEN UPPER EDGE OF CHOKE VALVE AND AIR HORN WALL.

2 APPLY LIGHT CLOSING PRESSURE TO CHOKE VALVE UNTIL ALL SLACK IS TAKEN UP (INNER STEM EXTENDED)

1 PRESS IN ON DIAPHRAGM STEM (OUTER) UNTIL DIAPHRAGM IS SEATED. (OR APPLY OUTSIDE VACUUM TO RETRACT DIAPHRAGM.)

INNER STEM

APPLY VACUUM

4 TO ADJUST BEND ("U") OF LINK.

CHOKE VACUUM PULL-OFF ADJUSTMENT (VACUUM KICK)

FIG. 6

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

3/16" CLEARANCE ALL MODELS

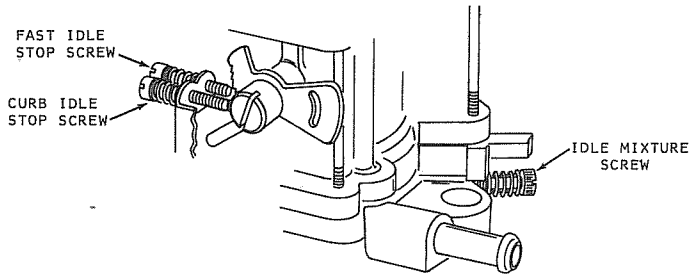
1 THROTTLE VALVE HELD IN WIDE OPEN POSITION.

3 TO ADJUST BEND TANG

UNLOADER ADJUSTMENT

FIG. 7

ADJUSTMENTS



USE FACTORY CAR MANUAL PROCEDURE FOR SETTING SLOW IDLE IF AVAILABLE AND SPECIFICATIONS LISTED ON ENGINE COMPARTMENT DECAL.

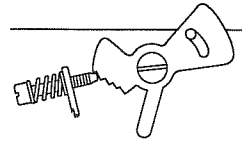
SUPPLEMENT PROCEDURE

1. SET IGNITION TIMING PER CAR FACTORY SPECIFICATIONS
2. ENGINE AT OPERATING TEMPERATURE, CHOKE FULLY OPEN.
TRANSMISSION IN NEUTRAL (NOT PARK)
AIR CLEANER INSTALLED
A/C OFF
HEADLIGHTS ON HIGH BEAM
3. SET THROTTLE CURB IDLE SPEED AS LISTED ON ENGINE COMPARTMENT DECAL.
4. ADJUST IDLE MIXTURE NEEDLE TO OBTAIN THE HIGHEST R.P.M. AT THE LEANEST BEST IDLE SETTING.
5. READJUST IDLE SPEED IF NECESSARY.
6. AFTER COMPLETING THE ABOVE, INSTALL THE IDLE LIMITER CAP ON THE IDLE MIXTURE NEEDLE. **NOTE:** TO AID INSTALLATION IT MAY BE NECESSARY TO SOAK CAP IN BOILING WATER FOR A FEW MINUTES.
 - A. PLACE THE CAP ON THE MIXTURE NEEDLE HEAD WITH THE TAB IN THE EXTREME COUNTERCLOCKWISE POSITION AGAINST THE LIMITER STOP.
 - B. SEAT THE LIMITER CAP ON THE MIXTURE NEEDLE HEAD BY PRESSING FIRMLY ON THE CAP.

SLOW IDLE ADJUSTMENT

FIG. 8

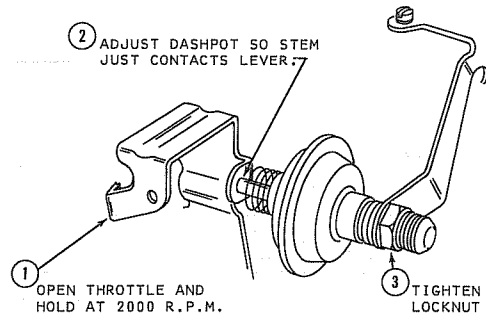
1. PLACE FAST IDLE SCREW ON PROPER STEP OF FAST IDLE CAM. (SEE DATA TABLE) CAM LOCATION POINT. FIG. 5



2. ADJUST FAST IDLE SCREW TO PROPER R.P.M.

FAST IDLE ADJUSTMENT

FIG. 9



DASHPOT ADJUSTMENT S/T

FIG. 10

ADJUSTMENT DATA TABLE

Year	Application	Float Level	Pump/Bowl Vent Adj.				Late Bowl Vent	Fast Idle Link Adj.		Choke Pull-Off Dimen.	Curb. Idle R.P.M.	Fast Idle R.P.M.	Auto Choke Setting
			Type	Lever Hole	Pin Spring Position	Pump/Bowl Vent		Cam Step	Dimen.				
6 CYL. CHRYSLER CORP. PASS. CARS													
1960-63	170",225"	7/32"	1	2	2	1/16"	---	INDEX	---	---	550	1500 2/S	Note 1
1960-63	170",225" Taxi	9/32"	1	1	1	1/16"	---	INDEX	---	---	550	1500 2/S	Note 1
	Carb. No. 3590	7/32"	1	2	2	1/16"	---	INDEX	---	---	550	1500 2/S	4 Rich
1960-65	Repl. Carbs. 4196, 4197, 4198	1/4"	1	2	2	1/16"	---	2/S	5/64"	9/64"	550	700 L/S	2 Rich
1964	170",225"	1/4"	1	2	2	1/16"	---	L/S	15/64"	5/32"	550	700 L/S	2 Rich
	Carb. No. 3678, 3680	1/4"	1	2	2	1/16"	---	2/S	3/16"	1/8"	550	700 L/S	2 Rich
1964	170",225" Taxi	5/16"	1	1	1	1/16"	---	L/S	15/64"	5/32"	550	700 L/S	2 Rich
1965	170", 225" S/T	1/4"	1	2	2	1/16"	---	2/S	5/64"	5/32"	550	700 L/S	2 Rich
	A/T	1/4"	1	2	2	1/16"	---	2/S	5/64"	3/32"	550	700 L/S	2 Rich
1965-67	225" Taxi	5/16"	1	1	1	1/16"	---	2/S	5/64"	9/64"	550	700 L/S	2 Rich
1966-67	170", 225" S/T	1/4"	1	3	3	1/16"	---	2/S	5/64"	5/32"	550	700 L/S	2 Rich
	wo/C.A.P. A/T	1/4"	1	2	2	1/16"	---	2/S	5/64"	7/64"	550	700 L/S	2 Rich
1966-67	170" W/C.A.P.	1/4"	1	3	3	1/16"	---	2/S	5/64"	5/32"	700	1500 2/S	2 Rich
1967-69	225"	1/4"	1	3	3	1/16"	---	2/S	5/64"	9/64"	E/D	1800 2/S	2 Rich
1968-69	170"	1/4"	1	3	3	1/16"	---	2/S	5/64"	7/64"	E/D	1800 2/S	2 Rich
	198" wo/E.C.S. S/T	1/4"	1	3	3	1/32"*	---	2/S	5/64"	7/64"	E/D	1800 2/S	2 Rich
1970-71	A/T	1/4"	1	3	3	1/32"*	---	2/S	5/64"	5/64"	E/D	1800 2/S	2 Rich
	198" w/E. C. S. S/T	1/4"	2	3	---	5/16"*	17/64"*	2/S	5/64"	7/64"	E/D	1800 2/S	2 Rich
1970-71	A/T	1/4"	2	3	---	5/16"*	17/64"*	2/S	5/64"	5/64"	E/D	1800 2/S	2 Rich
	6 CYL. DODGE TRUCK												
1961-63	170",225"	7/32"	1	2	2	1/16"	---	Index	---	---	500	1400 2/S	Index
1961-72	251" M/C	7/32"	1	2	2	1/16"	---	---	---	---	500	---	---
1961-65	225" Carb. no. 4199	1/4"	1	2	2	1/16"	---	2/S	5/64"	7/64"	500	700 L/S	2 Rich
1964-65	170", 225"	1/4"	1	2	2	1/16"	---	L/S	7/32"	5/32"	500	700 L/S	2 Rich
1966-68	225" wo/C.A.P. S/T	1/4"	1	2	2	1/16"	---	Index	5/32"	---	500	700 L/S	---
	A/T	1/4"	1	3	3	1/16"	---	2/S	5/64"	7/64"	500	700 L/S	2 Rich
1966-68	225" w/C.A.P. S/T	7/32"	1	3	3	1/16"	---	Index	5/32"	---	550	700 L/S	---
	A/T	1/4"	1	3	3	1/16"	---	2/S	5/64"	7/64"	550	1550 2/S	2 Rich
1969	225" All S/T	1/4"	1	3	3	1/16"	---	Index	5/32"	---	E/D	1550 2/S	---
	A/T	1/4"	1	3	3	1/16"	---	2/S	5/64"	7/64"	E/D	700 2/S	2 Rich
1970-71	225" wo/E.C.S. S/T	1/4"	1	3	3	1/32"*	---	Index	5/32"	---	E/D	---	---
	A/T	1/4"	1	3	3	1/32"*	---	2/S	5/64"	7/64"	E/D	1800 2/S	2 Rich
1970-71	225" w/E.C.S. S/T	1/4"	2	3	---	5/16"*	17/64"*	2/S	5/32"	---	E/D	---	---
	A/T	1/4"	2	3	---	5/16"*	17/64"*	2/S	5/64"	5/64"	E/D	1800 2/S	2 - Rich
1972-73	225"	1/4"	1	3	3	1/32"*	---	2/S	5/64"	7/64"	E/D	1900 2/S	---
1973	225" w/E.C.S.	1/4"	2	3	---	5/16"*	17/64"*	2/S	5/64"	7/64"	E/D	1900 2/S	---
1974	225"	1/4"	2	3	---	5/16"*	---	2/S	5/64"	7/64"	E/D	1900 2/S	---

S/T = Standard Transmission
 A/T = Automatic Transmission
 M/C = Manual Choke
 wo/C.A.P. = Without Cleaner Air Package
 w/C.A.P. = With Cleaner Air Package
 wo/E.C.S. = Without Evaporation Control System

w/E.C.S. = With Evaporation Control System
 2/S = Second Step
 L/S = Low Step
 E/D = Engine Decal
 *Make adjustment after curb idle has been set.

Note 1, 60-61 Index
 62-63 2 Rich