



General Instructions

- Take lots of pictures as you take your carburetor apart. This will give you a reference of where things go.
- Using a cookie sheet with folded up sides will help keep parts from falling on the floor.
- We suggest not removing the throttle shaft, valves, or choke shaft unless they are corroded, or very dirty. These parts can be easily damaged and are difficult to re-assemble.
- Instruction sheets that come with our carburetor kits are somewhat generic. It may not match your parts exactly.
- Do NOT use WD-40 around your carburetor. It reacts with ethanol.
- Using Silicon Spray Lubricant on the gaskets will help with sticking in case you need to take the carburetor apart again.
- Be careful after taking the top of the carburetor off. Turning the carburetor upside down may cause parts to fall out and you won't know where they were.
- Screws and jets that are frozen can often be removed after heating outside the screw or jet.
- Stuck check balls can be removed by heating the outside of where the check ball resides and tapping the carburetor on the work bench.
- Do not discard any parts until complete done. You may have to refer for size, or matching.

Cleaning:

- Clean with carburetor dis-assembled.
- Soak all parts except rubber & electrical in Simple Green for 2 hours. Aluminum parts will get discolored if left longer.
- Wash parts with hot water if available to remove all chemicals.
- Blow out each passage way taking special notice of the smaller ones. Test each passage that air goes through the entire passage.
- Blow out the idle mixture hole.

- Check any hole above the idle mixture hole (inside the bore). This is the idle discharge and often becomes plugged.
- A tooth brush can facilitate cleaning parts.
- Soda blasting, then washing again will make the carburetor look good any will clean any minor deposits.
- Any corrosion, or deposits that are hard to remove may indicate the passages are also corroded and the carburetor should be replaced.
- If your engine has been sitting for 6 months or more, the gas has probably turned, and the gas tank will need to be cleaned as well as the fuel lines. Flushing new gas through the tank will not be enough.

Assembly:

- Do NOT apply any gasket sealant on any of the gaskets. Gas will break sealant part and the particles will clog the small passages.
- Test your float.
 - Brass floats should be immersed into hot water. As the air inside expands any leak will be noticeable with air bubbles.
 - Plastic, or Nitrophyl floats should be weighed. The weight is in grams. Check our technical pages for any weight specification that we may have.
- Most gaskets will fit as expected, but you may have to trim some, especially under the venturis.
- Your kit may include multiple gaskets in order to get better coverage out of the kit. Use the one that fits the best. Look for any opening the gasket may leave allowing air into the carburetor. Some holes may be casting holes that don't lead to anything and do not have to be covered.
- Mounting gaskets for multiple bore carburetors do not have to have matching holes. Example a four-barrel gasket can be open in the middle instead of 4 holes as long as the carburetor has some kind of passage between bores. The passage is between primary, or secondary, not both.
- When adjusting the float be careful not to put any pressure on the needle. The viton tip is easily damaged.
- Most idle mixture screws can be cleaned using a soft wire wheel. Inspect for any scoring, which would indicate over tightening. Screw with scoring should be replaced.

Accelerator Pumps:

- On leather cups run your finger around the inside of the cup to break any manufacturer sealant.
- Apply 2 drops of oil to cups (leather, or rubber) before inserting into carburetor. Do not soak the cup in oil. The swelling of the cup needs to happen inside the carburetor. Allow the 2 drops of oil and the gas to do its job naturally.
- Twist the pump as you are inserting to help keep the cup from curling or folding over.
- Test your accelerator pump circuit before putting the top of the carburetor back on. Our technical pages have instructions on how to do this for most carburetor types.
- Pump wells are usually slight tapered, and the pump will not seal until it gets towards the bottom.

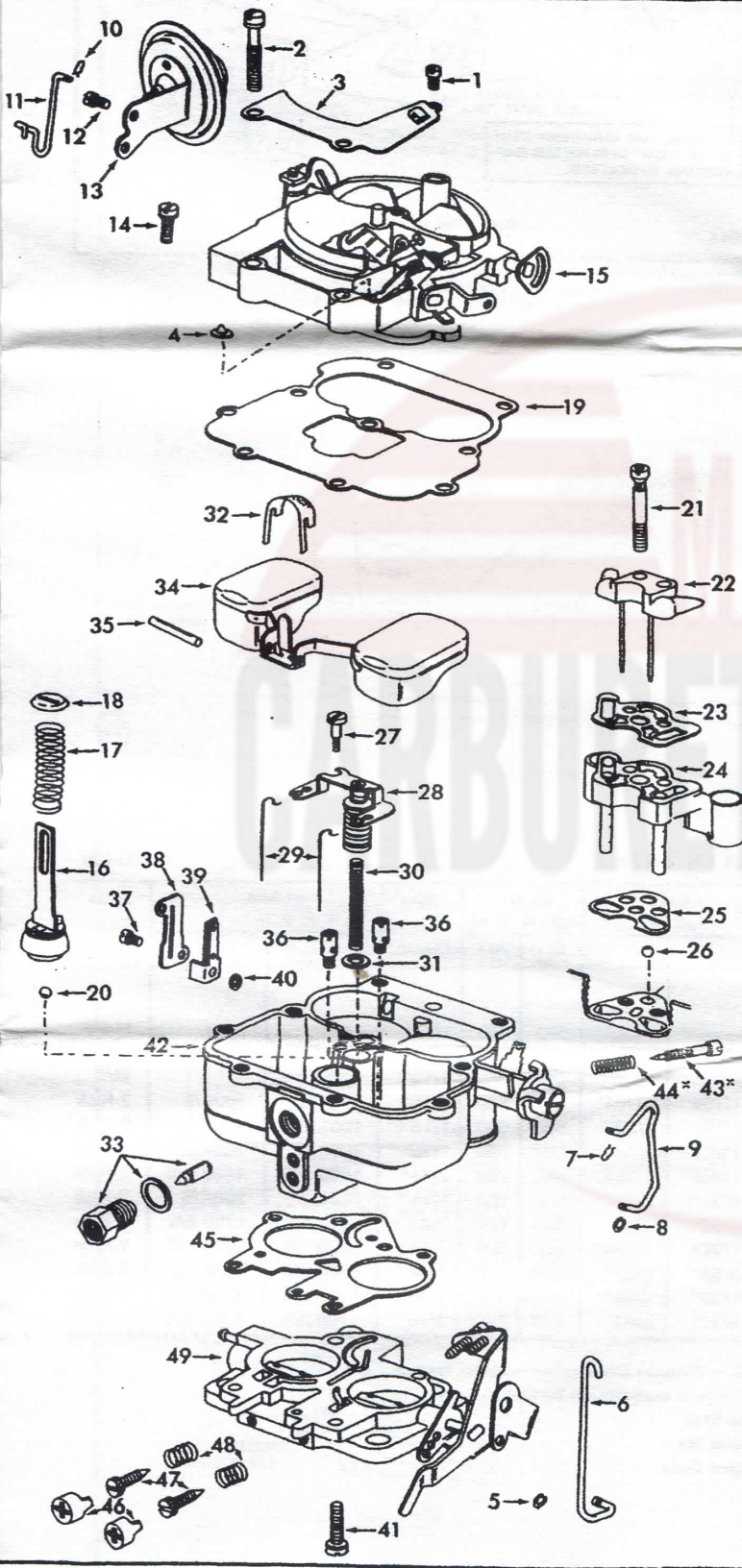
INSTRUCTION SHEET

CARTER CARBURETOR— MODEL BBD 1½

50-737

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: CAREFULLY HOLD VENT ARM WHEN REMOVING VENT VALVE (4). ON EARLY CLEAN AIR PACKAGE CARBURETORS IDLE ADJUSTING SCREWS (47) CANNOT BE REMOVED. 1968 & EARLY 1969 MODELS USE A SINGLE IDLE ADJUSTING SCREW (43) WHICH HAS A LEFT HAND THREAD. ON LATER MODELS THE IDLE LIMITER CAPS (46) 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-COVER PLATE	24. VENTURI CLUSTER ASSY.
2. SCREW & LOCKWASHER(2)-BOWL COVER	25. GASKET-VENTURI CLUSTER
3. PLATE-COVER	26. BALL-PUMP DISC. CHECK(SMALL)
4. VALVE-VENT	27. SCREW-STEP UP PISTON PLATE
5. RETAINER-PUMP ROD	28. STEP UP PISTON PLATE ASSY.
6. ROD-PUMP	29. ROD(2)-STEP UP
7. RETAINER-FAST IDLE ROD (UPPER)	30. SPRING-STEP UP PISTON
8. RETAINER-FAST IDLE ROD (LOWER)	31. GASKET-STEP UP PISTON
9. ROD-FAST IDLE	32. RETAINER-FLOAT PIN
10. RETAINER-CHOKE PULL-OFF LINK	33. NEEDLE & SEAT ASSY.
11. LINK-CHOKE PULL-OFF	34. FLOAT ASSY.
12. SCREW(2)-CHOKE PULL-OFF ASSY.	35. PIN-FLOAT
13. CHOKE PULL-OFF ASSY.	36. JET(2)-MAIN METERING
14. SCREW & LOCKWASHER(6)-BOWL COVER	37. SCREW(2)-VALVE COVER S/M
15. BOWL COVER ASSY.	38. COVER-COMPENSATOR VALVE S/M
16. PUMP ASSY.	39. VALVE-COMPENSATOR S/M
17. SPRING-PUMP	40. GASKET-COMPENSATOR VALVE S/M
18. RETAINER-PUMP SPRING	41. SCREW & LOCKWASHER(4)-THROTTLE BODY
19. GASKET-BOWL COVER	42. BOWL ASSY.
20. BALL-PUMP INTAKE CHECK(LARGE)	43. NEEDLE(1)-IDLE ADJ. #
21. SCREW(2)-VENTURI CLUSTER	44. SPRING-IDLE NEEDLE #
22. COVER-VENTURI	45. GASKET-THROTTLE BODY
23. GASKET-VENTURI COVER	46. CAP(2)-IDLE LIMITER
	47. NEEDLE-IDLE ADJUSTING
	48. SPRING-IDLE ADJUSTING NEEDLE
	49. THROTTLE BODY ASSY.

* 1968 AND EARLY 1969
S/M=SOME 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 BODIES 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 CHOKE PULL-OFF (13) 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'S (43) OR (47)-TURN IN UNTIL LIGHTLY SEATED, THEN BACK OUT 1 TURN.

MAIN METERING JETS (36)-LATER MODEL CARBURETORS DO NOT USE A GASKET ON JET SEAT.

STEP UP PISTON GASKET (31)-BE SURE GASKET IS PROPERLY PLACED IN THE BOTTOM OF PISTON CYLINDER.

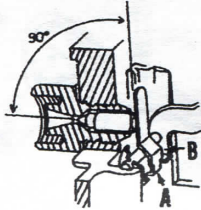
RETAINER FLOAT PIN (32)-BE SURE RETAINER IS SETTING ON FLOAT PIN AND NOT HUNG UP IN GUIDE SLOTS.

PUMP PLUNGER (16) - 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.

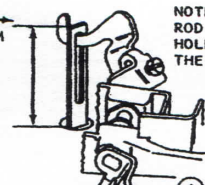


- 1 BOWL ASSY. INVERTED HOLD FLOAT PIN RETAINER IN PLACE AGAINST FLOAT PIN.
- 2 MEASURE BETWEEN CROWN OF EACH FLOAT (AT OUTER END) AND TOP OF FUEL BOWL.
- 3 TO ADJUST REMOVE FLOAT AND BEND LIP AT A OR B OR BOTH

DRY FLOAT LEVEL

FIG. 1

- 1 MEASURE DISTANCE FROM TOP OF BOWL COVER TO TOP OF PUMP PLUNGER.



NOTE: WHEN THROTTLE CONNECTOR ROD IS INSTALLED IN A DIFFERENT HOLE FOR SEASONAL OPERATION, THE BOWL VENT MUST BE READJUSTED.

- 2 THROTTLE STOP SCREW BRACKET OUT. THROTTLE VALVES FULLY CLOSED.

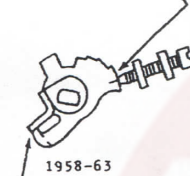
4 TO ADJUST BEND ROD

- 1 THROTTLE CONNECTOR ROD INSTALLED IN PROPER HOLE. (SEE DATA TABLE)

PUMP ADJUSTMENT

FIG. 2

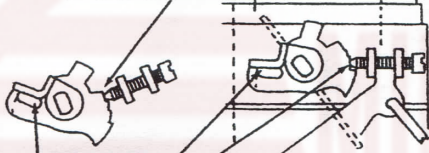
CHOKE VALVE HELD CLOSED. FAST IDLE SCREW SHOULD ALIGN WITH INDEX MARK ON FAST IDLE CAM.



1958-63

TO ADJUST BEND TANG

- 2 HOLD CHOKE VALVE TOWARDS CLOSED POSITION. MEASURE DISTANCE BETWEEN TOP EDGE OF CHOKE VALVE AND AIR HORN WALL.
- 1 PLACE FAST IDLE SCREW ON LOW STEP OF FAST IDLE CAM.



1964

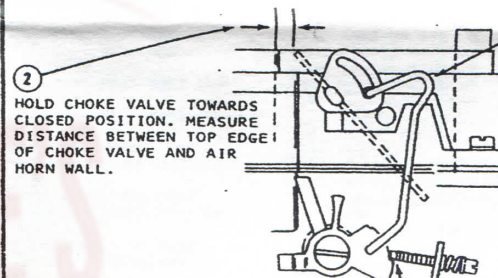
1965-69

TO ADJUST BEND TANG

TO ADJUST BEND TANG

FAST IDLE LINK ADJUSTMENT

FIG. 3



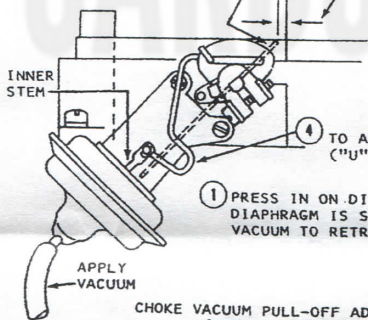
- 2 HOLD CHOKE VALVE TOWARDS CLOSED POSITION. MEASURE DISTANCE BETWEEN TOP EDGE OF CHOKE VALVE AND AIR HORN WALL.

3 TO ADJUST BEND CHOKE LINK.

1970-71

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



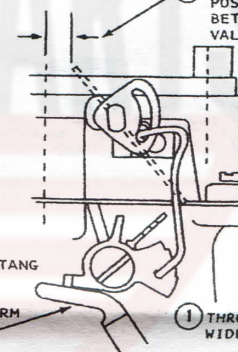
INNER STEM

APPLY VACUUM

CHOKE VACUUM PULL-OFF ADJUSTMENT (VACUUM KICK)

FIG. 5

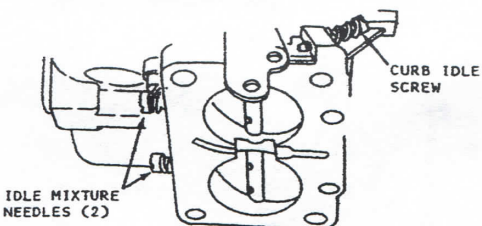
- 2 HOLD CHOKE VALVE TOWARD CLOSED POSITION. MEASURE DISTANCE BETWEEN UPPER EDGE OF CHOKE VALVE & AIR HORN WALL.
- 3 TO ADJUST EARLY MODELS BEND TANG ON FAST IDLE ARM. LATE MODELS BEND ARM ON THROTTLE LEVER.
- 1 THROTTLE VALVES HELD IN THE WIDE OPEN POSITION.



UNLOADER ADJUSTMENT

FIG. 6

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



IDLE MIXTURE NEEDLES (2)

CURB IDLE SCREW

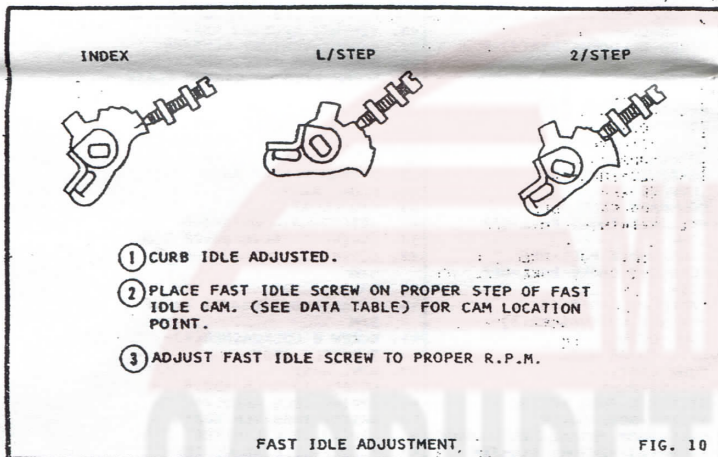
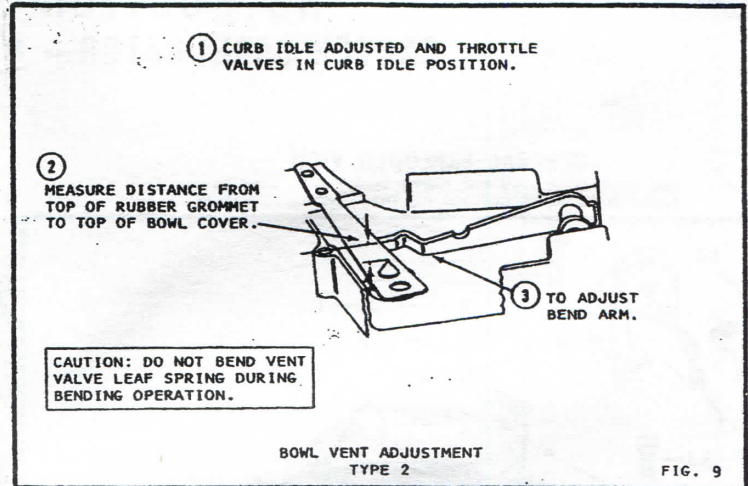
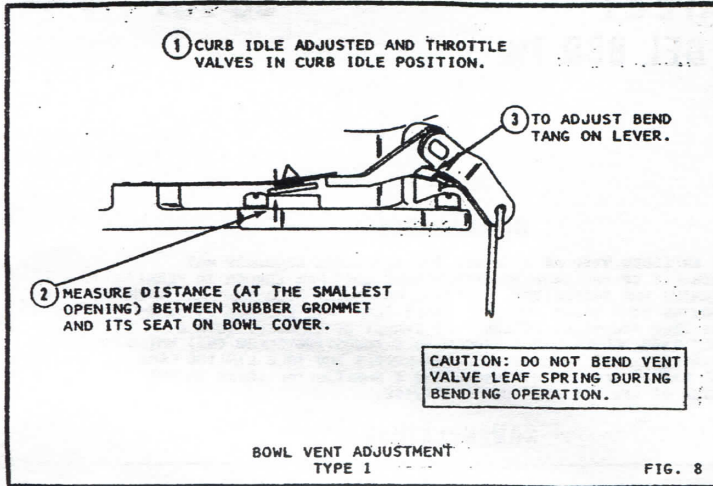
CURB IDLE ADJUSTMENT

FIG. 7

SUPPLEMENTARY 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
3. SET CURB IDLE SPEED AS LISTED ON ENGINE COMPARTMENT DECAL. (OR DATA TABLE)
4. ADJUST IDLE MIXTURE NEEDLES TO OBTAIN THE HIGHEST R.P.M. AT THE LEANEST BEST IDLE SETTING.
5. READJUST IDLE SPEED IF NECESSARY.

ADJUSTMENTS



ADJUSTMENT DATA TABLE

50-499

Year	Application	Float Level	Pump Adjustment		Fast Idle Link Adj.		Choke Pull-Off		Curb Idle R. P. M.		Bowl Vent Dimen.	Fast Idle R. P. M.		Auto Choke Setting	
			Lever Hole	Dimen.	Cam Step	Dimen.	S/T	A/T	S/T	A/T		S/T	A/T		
CHRYSLER CORP. PASS. CARS															
DODGE TRUCK															
1958-59	361", 413" Truck S/T	5/16"	2	1"	Index	—	—	—	500	500	1/16"	1400	1400	Index	
1960-63		9/32"	2	1"	Index	—	—	—	500	500	1/16"	1400	1400	Index	
1960-67		9/32"	—	1 1/32"	—	—	—	—	500	—	1/16"	—	—	M/C	
1964		5/16"	2	1"	L/S	15/64"	11/64"	11/64"	500	500	1/16"	700L/S	700L/S	2-Rich	
1965		5/16"	2	1"	2/S	7/64"	3/16"	5/32"	500	500	1/16"	700L/S	700L/S	2-Rich	
1966		wo/C. A. P.	5/16"	2	1"	2/S	1/8"	11/64"	9/64"	500	500	1/16"	700L/S	700L/S	2-Rich
1966		w/C. A. P.	5/16"	3	1"	2/S	1/8"	11/64"	11/64"	650	600	3/64"	1400 2/S	1600 2/S	2-Rich
1967		wo/C. A. P.	5/16"	2	29/32"	2/S	3/32"	5/32"	3/32"	500	500	1/16"	700L/S	700L/S	2-Rich
1967		w/C. A. P.	5/16"	3	1"	2/S	3/32"	5/32"	1/8"	650	600	3/64"	1400 2/S	1700 2/S	2-Rich
1968			5/16"	3	1"	2/S	1/8"	15/64"	11/64"	650	600	3/64"	1600 2/S	1600 2/S	2-Rich
1969		5/16"	3	1"	2/S	1/8"	5/32"	5/32"	E/D	E/D	3/64"	1600 2/S	1600 2/S	2-Rich	
1970-71	w/C. A. P.	5/16"	3	1"	2/S	9/64"	5/32"	9/64"	E/D	E/D	1/32"	1700 2/S	1700 2/S	2-Rich	
1970-71	w/E. C. S.	5/16"	3	1"	2/S	9/64"	5/32"	9/64"	E/D	E/D	3/16"	1700 2/S	1700 2/S	2-Rich	

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

L/S — Low Step

2/S — Second Step

E/D — Engine Decal