

# INSTRUCTION SHEET

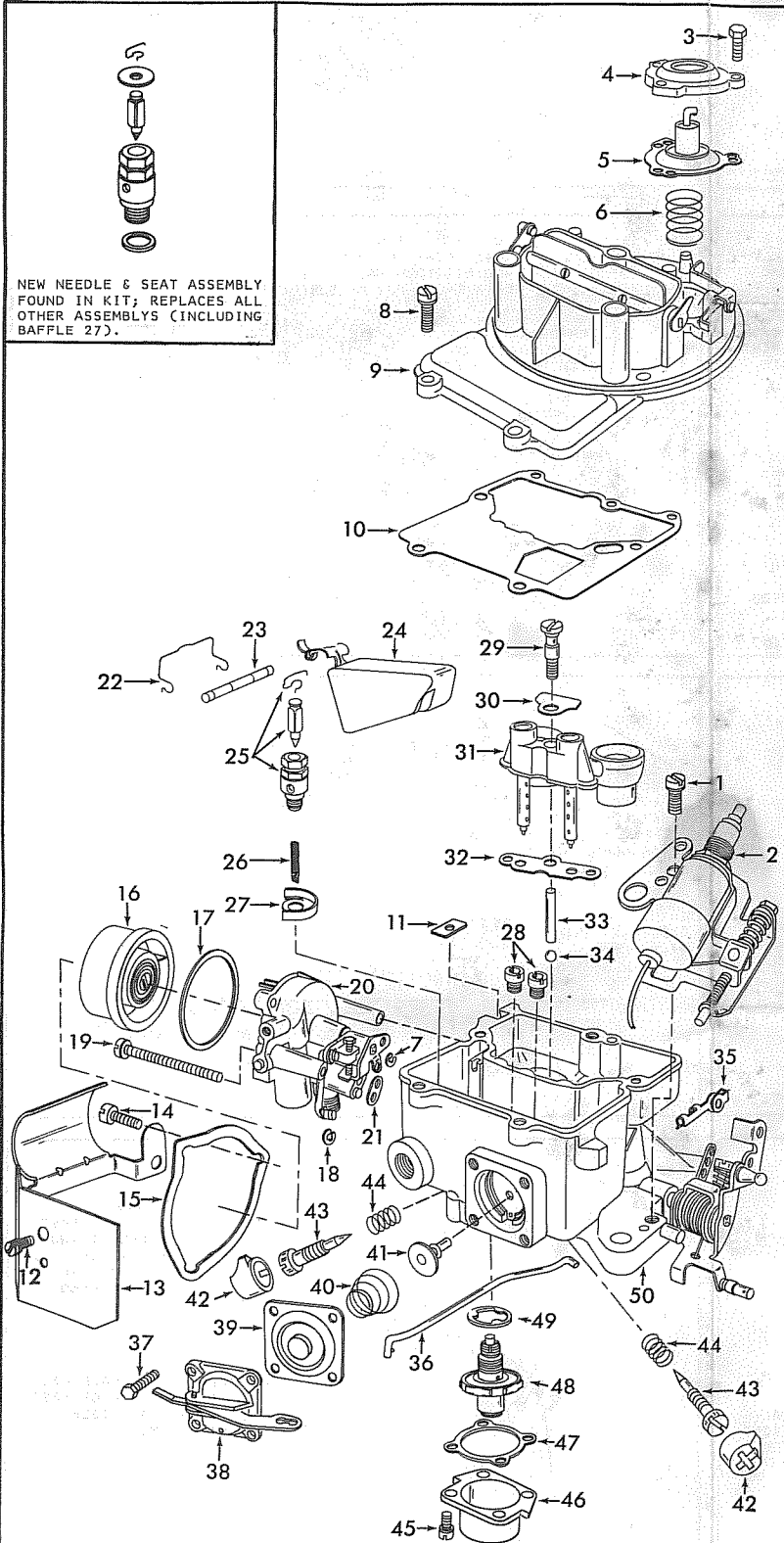
## AMERICAN MOTORS CARBURETOR

### MODEL 2100

50-502-6

#### 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: TO REMOVE IDLE LIMITER CAPS (42) INSTALL A SHEET METAL SCREW IN THE CENTER OF THE CAP AND TURN CLOCKWISE.

#### NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW & LOCKWASHER - THROTTLE POSITIONER	27. BAFFLE - NEEDLE SEAT
2. THROTTLE POSITIONER ASSY.	28. JET (2) - MAIN
3. SCREW (3) - MODULATOR COVER	29. SCREW - PUMP DISCHARGE NOZZLE
4. COVER - MODULATOR	30. PLATE - AIR DISTRIBUTION
5. DIAPHRAGM ASSY. - MODULATOR	31. VENTURI CLUSTER ASSY.
6. SPRING - DIAPHRAGM RETURN	32. GASKET - VENTURI CLUSTER
7. RETAINER - CHOKE ROD	33. WEIGHT - DISC. BALL
8. SCREW & LOCKWASHER (4) - BOWL COVER	34. BALL - DISCHARGE CHECK
9. AIR HORN ASSEMBLY	35. RETAINER - PUMP ROD
10. GASKET - AIR HORN	36. ROD - PUMP
11. SEAL - CHOKE ROD	37. SCREW (4) - PUMP COVER
12. SCREW (2) - CHOKE SHIELD	38. COVER & LEVER ASSY.
13. SHIELD - CHOKE	39. DIAPHRAGM - PUMP
14. SCREW (3) - RETAINER CHOKE COVER	40. SPRING - DIAPHRAGM RETURN
15. RETAINER - CHOKE COVER	41. VALVE - PUMP INLET
16. CHOKE COVER ASSY.	42. CAP (2) - IDLE LIMITER
17. GASKET - CHOKE COVER	43. NEEDLE (2) - IDLE ADJUSTING
18. RETAINER - FAST IDLE ROD	44. SPRING (2) - IDLE ADJ. SPRING
19. SCREW & LOCKWASHER (3) - CHOKE HOUSING ASSY.	45. SCREW & LOCKWASHER (4) - VALVE COVER
20. CHOKE HOUSING ASSY.	46. COVER - POWER VALVE
21. GASKET - CHOKE HOUSING	47. GASKET - COVER
22. RETAINER - FLOAT PIN	48. VALVE - POWER
23. PIN - FLOAT HINGE	49. GASKET - POWER VALVE
24. FLOAT & LEVER ASSY.	50. MAIN BODY ASSY.
25. NEEDLE, SEAT & GASKET ASSY.	
26. SCREEN - NEEDLE SEAT	

#### 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 FLOAT, SOLENOIDS OR ANY PARTS CONTAINING OR COVERED WITH RUBBER OR DIAPHRAGM MATERIALS IN CLEANING SOLVENT.

#### REASSEMBLY

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

#### SPECIAL INSTRUCTIONS

POWER VALVE (48) - USE CARE WHEN TIGHTENING TO PREVENT DISTORTION OF GASKET (49).

POWER VALVE COVER (46) - INSTALL WITH THE IDLE LIMITER STOPS TOWARDS MAIN BODY.

IDLE ADJUSTING NEEDLES (43) - TURN IN UNTIL SEATED, THEN BACK OUT 2 TURNS. (DO NOT INSTALL IDLE LIMITER CAPS AT THIS TIME.)

PUMP INLET CHECK VALVE (41) INSTALLATION - LUBRICATE TIP OF NEW VALVE AND INSERT IN CENTER HOLE OF PUMP CAVITY. USE NEEDLE NOSE PLIERS AND PULL THRU FROM FUEL BOWL SIDE UNTIL FULLY SEATED. CUT OFF VALVE TIP AT RETAINING SHOULDER.

PUMP DIAPHRAGM RETURN SPRING (40) INSTALLATION - INSTALL LARGE OPEN END OF SPRING OVER RUBBER INLET CHECK VALVE (41).

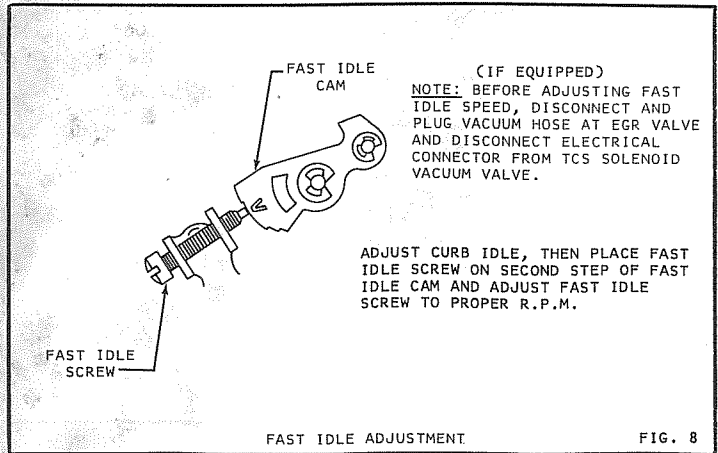
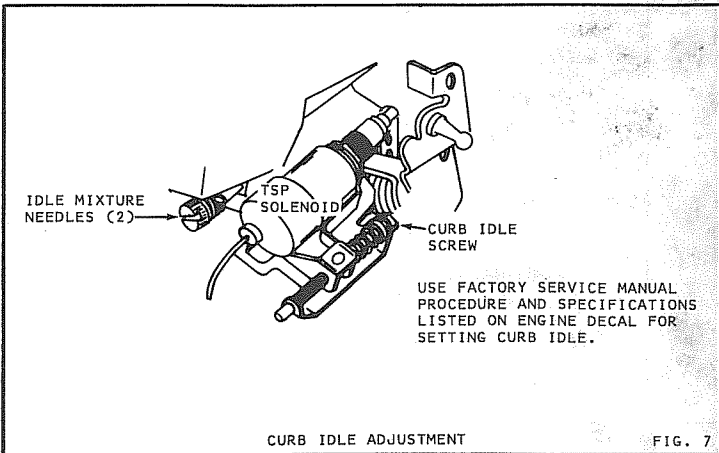
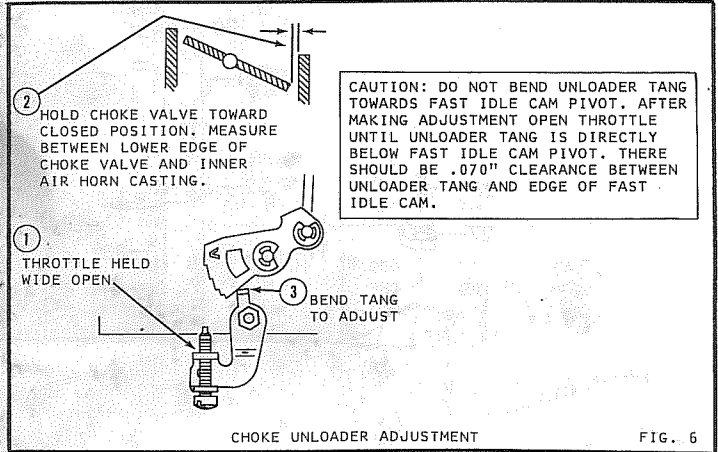
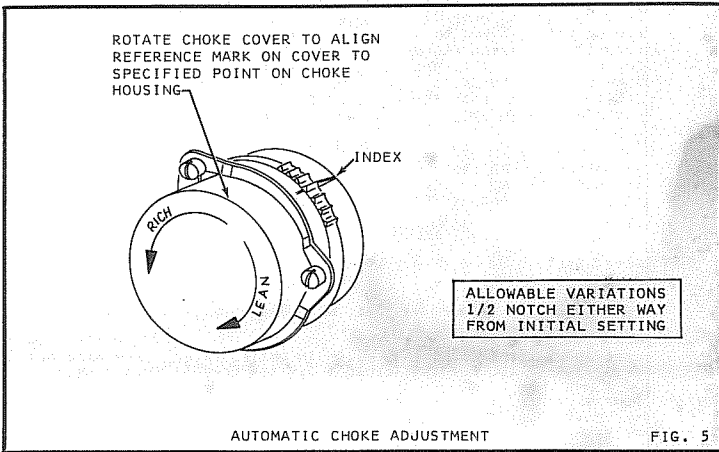
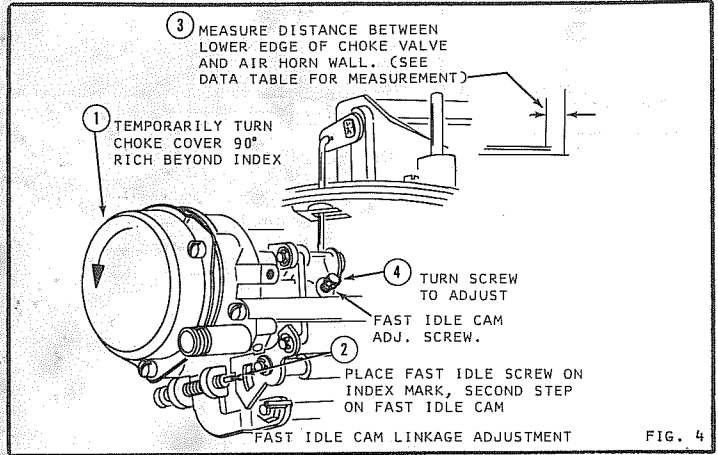
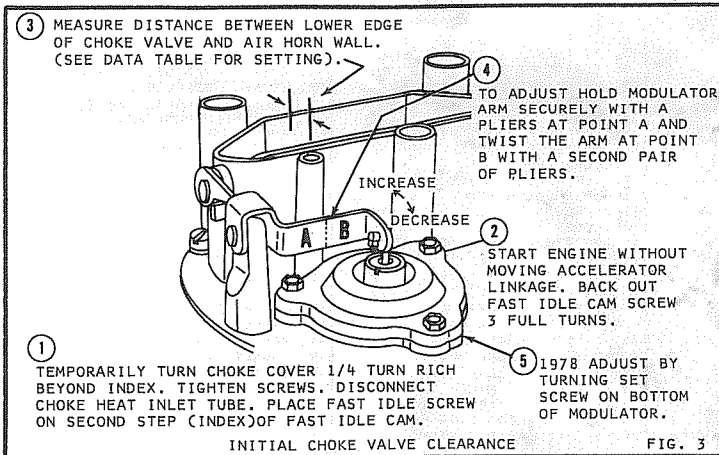
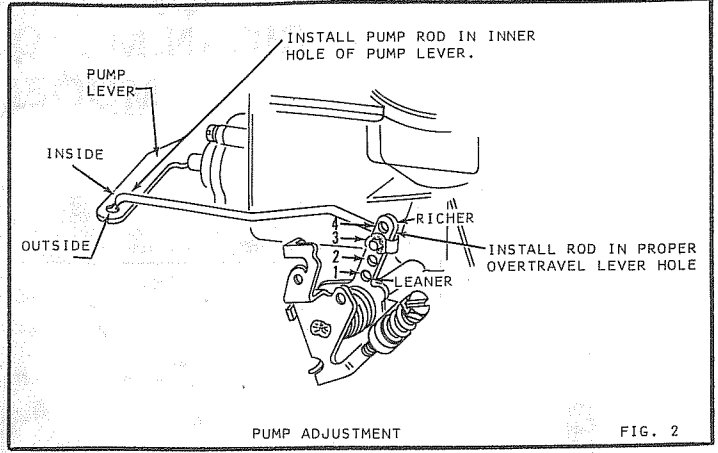
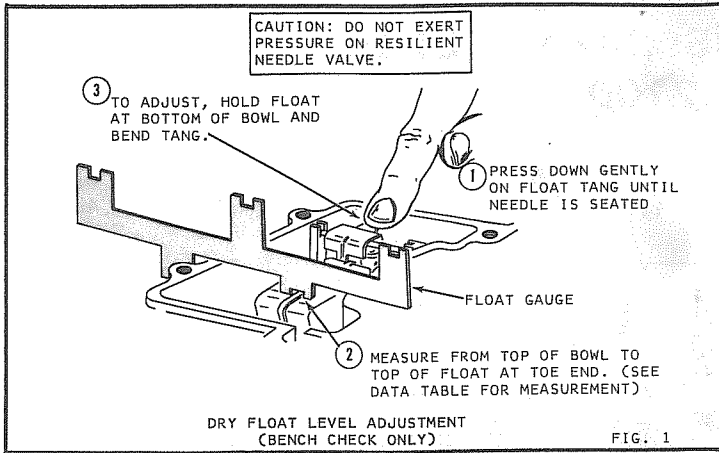
NEEDLE SEAT BAFFLE (27) - WHEN USED NO GASKET IS USED UNDER NEEDLE SEAT.

FLOAT PIN RETAINER (22) - BE SURE TO LOCK IN GROOVE ON NEEDLE SEAT BEFORE CHECKING FLOAT LEVEL.

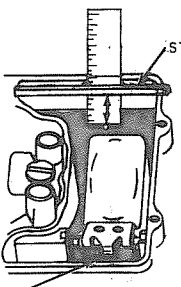
CHOKE COVER (16) INSTALLATION - BE SURE TO INSTALL BI-METAL SPRING HOOK IN SLOT OF LEVER.

CARBURETOR HOLD DOWN NUTS - TORQUE TO 14 FT. LBS. AIR CLEANER STUD - TORQUE TO 10 FT. LBS.

# ADJUSTMENTS



# ADJUSTMENTS



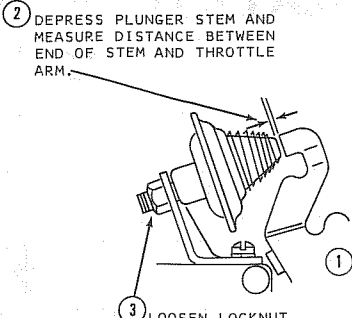
STRAIGHTEDGE

1. VEHICLE ON A LEVEL SURFACE AND ENGINE AT NORMAL OPERATING TEMPERATURE.
2. REMOVE AIR HORN ATTACHING SCREWS. START AND LET ENGINE IDLE FOR A FEW MINUTES, THEN ROTATE AIR HORN OUT OF WAY AND REMOVE AIR HORN GASKET.
3. WHILE ENGINE IS IDLING, USE A T-SCALE TO MEASURE THE VERTICAL DISTANCE FROM THE TOP MACHINED SURFACE OF THE CARBURETOR MAIN BODY TO THE LEVEL OF THE FUEL IN THE BOWL. CAUTION: MEASUREMENT MUST BE MADE AT LEAST 1/4" AWAY FROM ANY VERTICAL SURFACE TO ASSURE AN ACCURATE READING. (SEE DATA TABLE FOR SETTING.)
4. TO ADJUST. STOP ENGINE. BEND FLOAT TAB UPWARD TO RAISE FUEL LEVEL, AND DOWNWARD TO LOWER IT. TO RECHECK LEVEL ENGINE MUST BE STARTED AND ALLOWED TO IDLE A FEW MINUTES TO STABILIZE FUEL LEVEL.
5. RECHECK CARBURETOR IDLE ADJUSTMENT.

TO ADJUST BEND TAB

WET FLOAT LEVEL ADJUSTMENT

FIG. 9

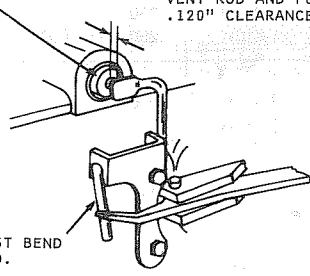


- 2 DEPRESS PLUNGER STEM AND MEASURE DISTANCE BETWEEN END OF STEM AND THROTTLE ARM.
- 3 LOOSEN LOCKNUT AND TURN UNIT TO ADJUST. TIGHTEN NUT.
- 1 ADJUST CURB IDLE

(DASHPOT)  
SLOW CLOSING THROTTLE ADJ.

FIG. 10

- 1 CURB IDLE SPEED ADJUSTED DEPRESS VENT VALVE UNTIL IT IS SEATED.
- 2 MEASURE CLEARANCE BETWEEN FLAT OF VENT ROD AND FULLY SEATED VALVE. .120" CLEARANCE.
- 3 TO ADJUST BEND VENT ROD.



NOT ALL CARBURETORS  
BOWL VENT VALVE ADJUSTMENT

FIG. 11

# ADJUSTMENT DATA TABLE

Year	Application	Float Level (Dry)	Fuel Level (Wet)*	Pump Lever Hole	Choke Initial Clearance	Fast Idle Cam	Auto Choke	Unloader	Curb Idle	Fast Idle R.P.M.	Dash Pot
1974	All Vehicles										
	304"-360" Eng. A/T	13/32"	.780	No. 3	1/8"	1/8"	1-RICH	1/4"	E/D	1600	---
	304" Eng. M/T	13/32"	.780	No. 3	9/64"	1/8"	2-RICH	1/4"	E/D	1600	9/64"
	Carb. No. 4RDH2	3/8"	.750	No. 3	---	---	2-RICH	1/4"	E/D	1600	---
1975	Pass. Cars										
	360" Eng. A/T	13/32"	.780	No. 3	.136	.126	1-RICH	1/4"	E/D	1600	---
	304" Eng. A/T	13/32"	.780	No. 3	.136	.126	1-RICH	1/4"	E/D	1600	---
	304" Eng. M/T	13/32"	.780	No. 3	.132	.120	2-RICH	1/4"	E/D	1600	3/32"
1975	Jeep & Jeep Truck										
	360" Eng. A/T	13/32"	.930**	No. 3	.136	.115	2-RICH	1/4"	E/D	1600	---
	360" Eng. M/T	13/32"	.930**	No. 3	.136	.115	2-RICH	1/4"	E/D	1600	---
	304" Eng. M/T	13/32"	.930**	No. 3	.132	.120	2-RICH	1/4"	E/D	1600	3/32"
1976	Pass. Cars										
	304" Eng. M/T	13/32"	.930**	No. 3	.132	.120	2-RICH	.250	E/D	1600	.093
	304" Eng. A/T	13/32"	.780	No. 3	.136	.126	1-RICH	.250	E/D	1600	---
	360" Eng. A/T	13/32"	.780	No. 3	.136	.126	1-RICH	.250	E/D	1600	---
1976	Jeep										
	304" Eng. M/T	13/32"	.930**	No. 3	.132	.120	2-RICH	.250	E/D	1600	.093
	304" Eng. Calif. M/T	13/32"	.930**	No. 2	.132	.120	1-RICH	.250	E/D	1600	.093
	304" Eng. A/T	13/32"	.930**	No. 3	.136	.126	1-RICH	.250	E/D	1600	---
	360" Eng. H.D. M/T	13/32"	.930**	No. 3	.136	.115	2-RICH	.250	E/D	1600	---
	360" Eng. H.D. A/T	13/32"	.930**	No. 3	.136	.115	2-RICH	.250	E/D	1600	---
1977	Pass. Cars										
	304" Eng. A/T	13/32"	.780	No. 3	.136	.126	INDEX	.250	E/D	1600	---
	360" Eng. A/T	13/32"	.780	No. 3	.136	.126	1-RICH	.250	E/D	1600	---
	304", 360" Calif. A/T	13/32"	.780	No. 3	.130	.120	1-RICH	.250	E/D	1600	---
1977	Jeep CJ-5, 7										
	304" Eng. M/T	13/32"	.930**	No. 3	.132	.120	2-RICH	.250	E/D	1600	.093
	304" Eng. Calif. M/T	13/32"	.930**	No. 2	.132	.120	1-RICH	.250	E/D	1600	.093
	304" Eng. All A/T	13/32"	.930**	No. 3	.136	.126	1-RICH	.250	E/D	1600	---
1977	Cherokee, Wagoneer, Truck										
	360" Eng. M/T	13/32"	.930**	No. 3	.136	.115	2-RICH	.250	E/D	1600	---
	360" Eng. A/T	13/32"	.930**	No. 3	.136	.115	2-RICH	.250	E/D	1600	---
1978	Pass. Cars										
	304" Eng. Fed. A/T	9/16"	.780	No. 3	.136	.126	INDEX	.250	E/D	1600	---
	360" Eng. Fed. A/T	9/16"	.780	No. 3	.136	.126	1-RICH	.250	E/D	1600	---
	304", 360" Eng. Calif. A/T	9/16"	.780	No. 3	.136	.126	1-RICH	.250	E/D	1800	---
1978	Jeep										
	304" Eng. M/T	9/16"	.930**	No. 3	.132	.120	2-RICH	.250	E/D	1500	---
	304" Eng. A/T	9/16"	.930**	No. 3	.136	.126	1-RICH	.250	E/D	1600	---
	360" Eng. All/T	9/16"	.930**	No. 3	.136	.115	2-RICH	.250	E/D	1600	---
1979	Pass. Cars										
	304" Eng. Fed. A/T	5/16"	.780	No. 3	.125	.113	1-RICH	.300	E/D	1600	---
	304" Eng. Fed. M/T	5/16"	.780	No. 3	.125	.113	1-RICH	.300	E/D	1500	---
1979	Jeep										
	304" Eng. Fed. M/T	9/16"	.930**	No. 3	.125	.120	2-RICH	.300	E/D	1500	---
	304" Eng. Calif. M/T	9/16"	.930**	No. 3	.132	.120	1-RICH	.250	E/D	1500	---
	Carb. No. 9DM2H M/T	9/16"	.930**	No. 3	.128	.113	1-RICH	.300	E/D	1600	---
	304" Eng. Fed. A/T	9/16"	.930**	No. 3	.140	.125	INDEX	.360	E/D	1500	---
1980	Jeep 304" Eng.										
	Fed. Carb. No. ODM2J M/T	3/8"	.930**	No. 3	.125"	.113"	2-RICH	.300"	E/D	1500	---
	Fed. Carb. No. ODA2J A/T	3/8"	.930**	No. 3	.128"	.113"	1-RICH	.300"	E/D	1600	---
	Calif. Carb. No. ODM2JC M/T	3/8"	.930**	No. 3	.120"	.106"	2-RICH	.300"	E/D	1500	---
	Calif. Carb. No. ODA2JC A/T	3/8"	.930**	No. 3	.120"	.106"	2-RICH	.300"	E/D	1600	---
	Alt. Carb. No. ODM2A M/T	3/8"	.930**	No. 3	.128"	.113"	1-RICH	.300"	E/D	1500	---

\* - Refer to car service manual.  
 \*\* - With Float damper spring.

E/D - Engine Decal      M/T - Manual Transmission  
 A/T - Automatic Transmission