

# INSTRUCTION SHEET

## (MIKUNI) SOLEX CARBURETOR - MODEL 28 - 32DID EARLY

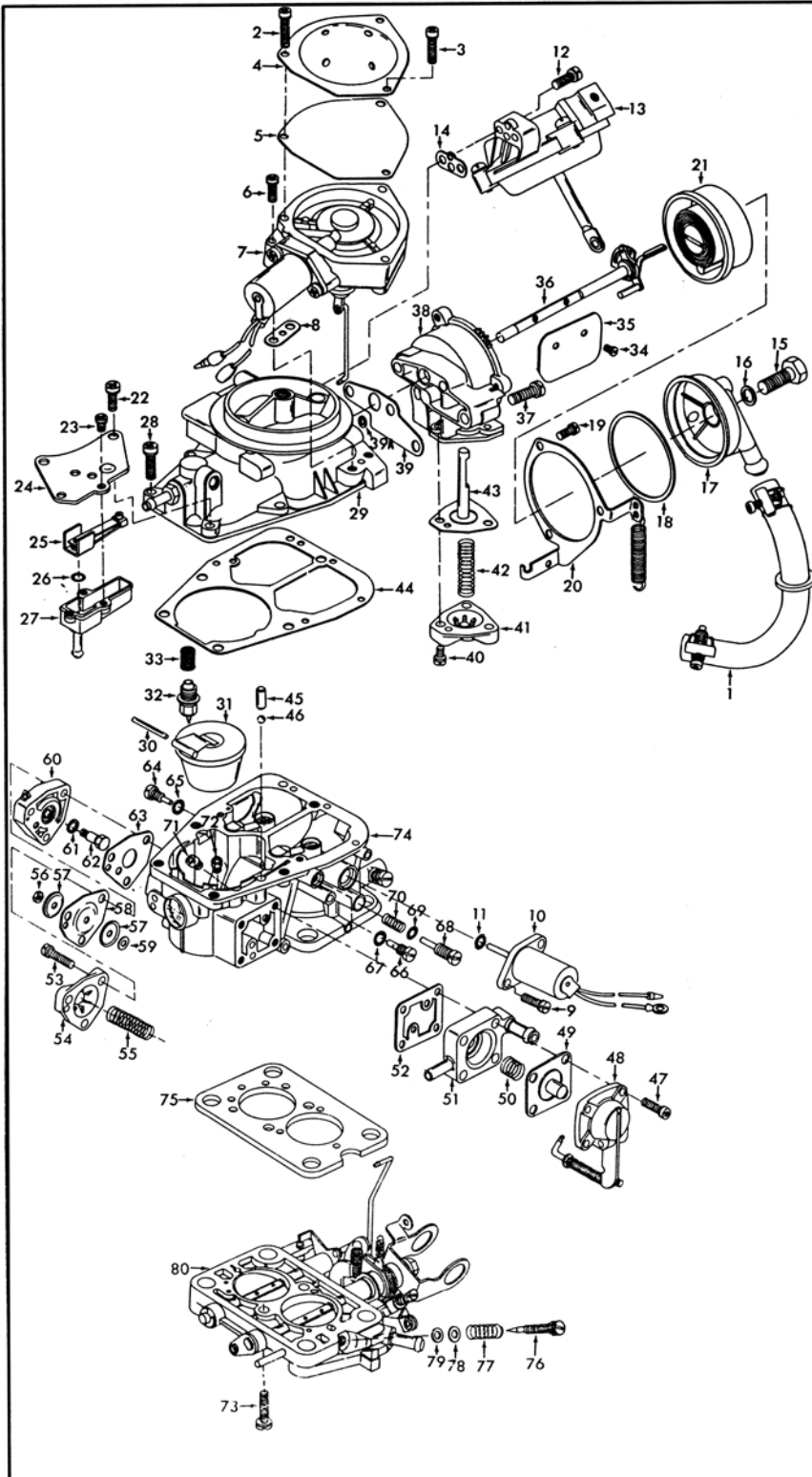
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### DISASSEMBLY

USE EXPLODED VIEW AS A GUIDE. THE NUMERICAL SEQUENCE MAY GENERALLY BE FOLLOWED TO DISASSEMBLE UNIT FAR ENOUGH TO PERMIT CLEANING AND INSPECTION. NOTE: MOST LINK ENDS JUST SNAP IN OR OUT OF A PLASTIC TYPE BUSHING. BEFORE REMOVING CHOKE PLATE SCREWS (34) IT MAY BE NECESSARY TO FILE OFF PEENED END OF SCREWS WHICH WILL BE USED OVER. DISASSEMBLY OF VACUUM DIAPHRAGM UNITS (7)(13) IS NOT NECESSARY UNLESS DIAPHRAGMS ARE BEING REPLACED. RECORD SIZES OF JETS FOR PROPER REASSEMBLY. MARK DIAPHRAGM COVERS (41)(54) BEFORE REMOVING AND IDENTIFY SPRINGS (42)(55).

### GENERAL EXPLODED VIEW

THE GENERAL DESIGN AND PARTS SHOWN WILL VARY TO INDIVIDUAL UNITS COVERED ON THIS INSTRUCTION SHEET.



### NOMENCLATURE

REF. NO.	REF. NO.
1. HOSE & CLAMPS - WATER	39. GASKET - CHOKE HOUSING
2. SCREW & LOCKWASHER (1) - FILTER COVER & MOUNTING	39A. O-RING - CHOKE HOUSING (SOME MODELS)
3. SCREW & LOCKWASHER (2) - FILTER COVER	40. SCREW & LOCKWASHER (3) - COVER VAC. BREAK
4. COVER - FILTER	41. COVER - VACUUM BREAK DIAPH.
5. FILTER	42. SPRING - DIAPHRAGM RETURN
6. SCREW & LOCKWASHER - THROTTLE POSITIONER	43. DIAPHRAGM ASSY. - VACUUM BREAK
7. THROTTLE POSITIONER ASSY.	44. GASKET - BOWL COVER
8. GASKET - THROTTLE POSITIONER	45. WEIGHT - PUMP DISC. BALL
9. SCREW & LOCKWASHER (2) - FUEL CUTOFF SOLENOID	46. BALL - PUMP DISC.
10. SOLENOID ASSY. - FUEL CUTOFF	47. SCREW & LOCKWASHER (4) - PUMP DIAPH. COVER
11. O-RING - SOLENOID ASSY. MOUNTING	48. COVER & LINK ASSY. - PUMP
12. SCREW & LOCKWASHER (2) - SECONDARY VAC. UNIT	49. DIAPHRAGM ASSY. - PUMP
13. SEC. VAC. UNIT ASSY.	50. SPRING - DIAPH. RETURN
14. GASKET - SEC. VAC. UNIT	51. HOUSING - DIAPHRAGM
15. BOLT - WATER CASE	52. GASKET - DIAPHRAGM HOUSING
16. GASKET - BOLT	53. SCREW & LOCKWASHER (3) - VALVE COVER
17. CASE - WATER	54. COVER - ENRICHMENT VALVE
18. GASKET - WATER CASE	55. SPRING - DIAPHRAGM RETURN
19. SCREW & LOCKWASHER (3) - CHOKE COVER RETAINER	56. NUT - VALVE STEM
20. RETAINER & THROTTLE RETURN SPRING	57. CUP WASHER (2) - DIAPH.
21. CHOKE COVER ASSY.	58. DIAPH. - ENRICHMENT VALVE
22. SCREW & LOCKWASHER (2) - IDLE COMPENSATOR	59. WASHER - STEM
23. SCREW & LOCKWASHER (3) - VALVE COVER BRACKET	60. HOUSING - ENRICHMENT VALVE
24. COVER BRACKET - IDLE COMPENSATOR VALVE	61. VALVE (RUBBER) - STEM
25. VALVE - IDLE COMPENSATOR	62. STEM - ENRICHMENT VALVE
26. O-RING - VALVE SEAT	63. GASKET - VALVE MOUNTING
27. HOUSING - VALVE	64. JET - SECONDARY PILOT
28. SCREW & LOCKWASHER (3) - BOWL COVER	65. O-RING - SEC. PILOT JET
29. BOWL COVER ASSY.	66. JET - PRIMARY PILOT
30. PIN - FLOAT LEVER	67. O-RING - PRI. PILOT JET
31. FLOAT & LEVER ASSY.	68. SCREW - BY PASS
32. NEEDLE, SEAT & GASKET ASSY.	69. O-RING - BY PASS SCREW
33. SCREEN - FUEL INLET	70. SPRING - BY PASS SCREW
34. SCREW (2) - CHOKE VALVE	71. JET - SEC. MAIN
35. VALVE - CHOKE	72. JET - PRIMARY MAIN
36. SHAFT ASSY. - CHOKE	73. SCREW & LOCKWASHER (2) - THROTTLE BODY
37. SCREW & LOCKWASHER (2) - CHOKE HOUSING	74. BOWL ASSY. - FLOAT
38. HOUSING ASSY. - CHOKE	75. INSULATOR-THROTTLE BODY (PILOT SCREW)
	76. NEEDLE-IDLE ADJ. (PILOT SCREW)
	77. SPRING-IDLE NEEDLE
	78. WASHER-SEAL
	79. SEAL-IDLE NEEDLE
	80. THROTTLE BODY ASSY.

### 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 BODY IS FREE OF ALL CARBON DEPOSITS. WASH 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 BOWL (74) OR THROTTLE BODY (80) FOR A PROLONG PERIOD OF TIME BECAUSE OF PLASTIC & RUBBER COMPONENTS. DO NOT SOAK OR WASH UNITS SUCH AS 1,7,10,13,25,31, IN CLEANING SOLVENTS.

### REASSEMBLY

REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE SPECIAL INSTRUCTIONS AND ADJUSTMENTS.

### SPECIAL INSTRUCTIONS

IDLE MIXTURE NEEDLE (76) - TURN IN UNTIL LIGHTLY SEATED THEN BACK OUT 1 1/4 - 2 TURNS.

BY PASS SCREW (68) - TURN IN UNTIL LIGHTLY SEATED THEN BACK OUT 1 - 1 1/2 TURNS.

CHOKE SHAFT (36) - WHEN INSTALLING BE SURE TO HOOK SPRING TO FAST IDLE CAM.

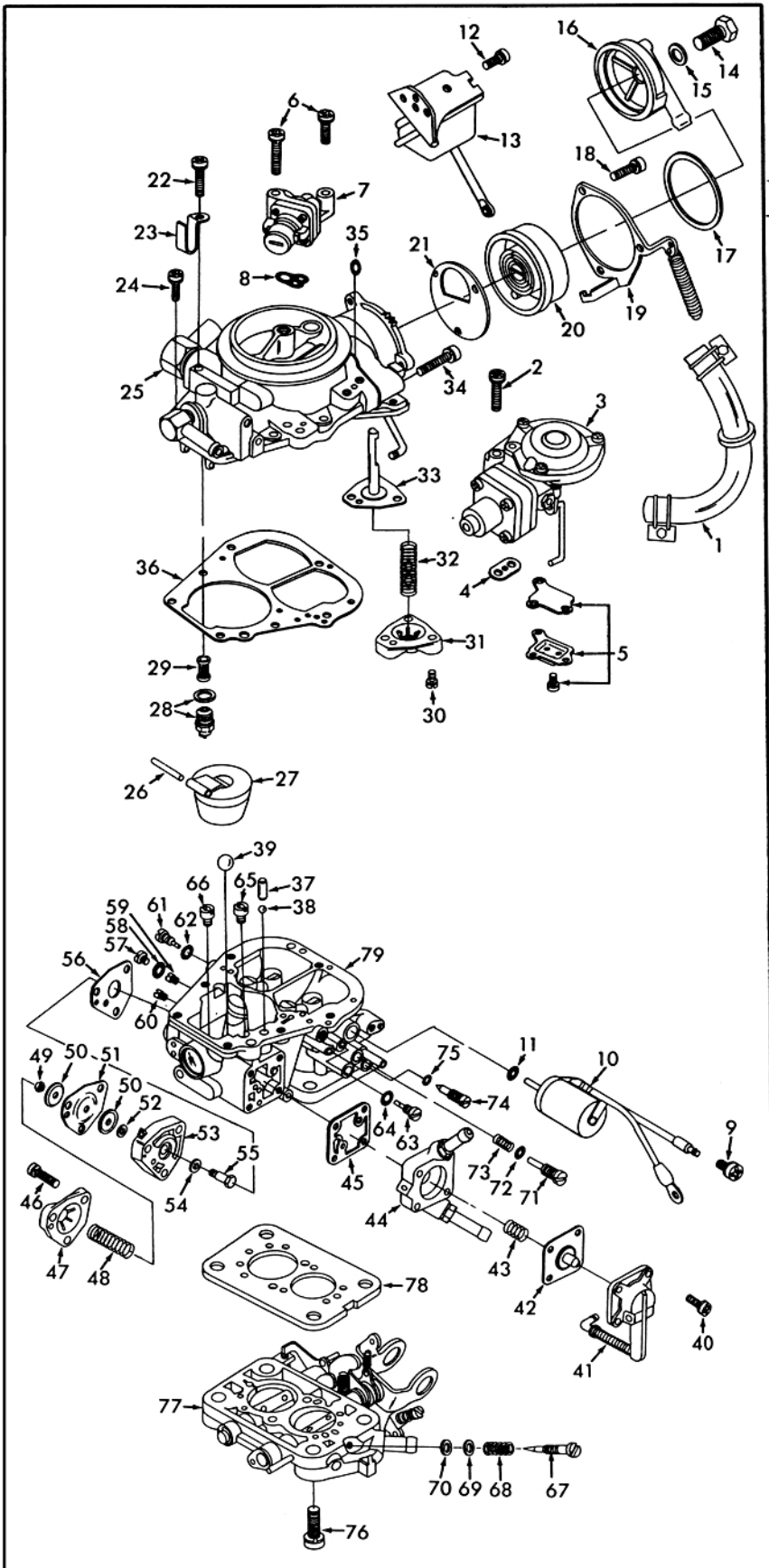
CHOKE PLATE (35) - BEFORE TIGHTING SCREWS, CLOSE VALVE AND TAP TO CENTER VALVE.

CHOKE COVER (21) - MAKE SURE HOOK ON STAT SPRING CONTACTS LEVER ON CHOKE SHAFT. THEN TURN TO ALIGN MARK ON COVER TO INDEX MARK ON HOUSING.

# (MIKUNI) SOLEX CARBURETOR — MODEL 28-32 DIDTA + 30-32 DIDTA LATE

## 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. SNAP LINKS OUT OF PLASTIC BUSHINGS AT LOWER END ONLY. DISASSEMBLY OF VACUUM DIAPHRAGM UNITS (3) (7) (13) IS NOT NECESSARY UNLESS THEY NEED SERVICE. O-RING (35) IN CHOKE VACUUM PASSAGE CAN EASILY BE REMOVED AFTER CHOKE HOUSING SCREWS (34) ARE REMOVED. BEFORE REMOVING ADJUSTING SCREWS (67) (71) OR (74), TURN IN COUNTING THE NUMBER OF TURNS IT TAKES TO SEAT EACH SCREW AND RECORD FOR REASSEMBLY.

## NOMENCLATURE

REF. NO.	REF. NO.
1. HOSE & CLAMPS- WATER	36. GASKET- BOWL COVER
2. SCREW & LKWSHR.- DASHPOT ASSY.	37. WEIGHT- PUMP DISC BALL
3. DASHPOT & LINK ASSY.	38. BALL- PUMP DISCHARGE
4. GASKET- DASHPOT ASSY.	39. BALL- ROLL OVER
5. SCREW & LKWSHR. (2)- COVER AND FILTER- DASHPOT	40. SCREW & LKWSHR. (4)- PUMP DIAPHRAGM COVER
6. SCREW & LKWSHR. (2)- ALTITUDE VALVE	41. COVER & LINK ASSY.- PUMP DIAPHRAGM
7. ALTITUDE COMPENSATOR VALVE (HIGH ALTITUDE CARS ONLY)	42. DIAPHRAGM ASSY.- PUMP
8. GASKET- ALT. VALVE MOUNTING (O-RING TYPE)	43. SPRING- PUMP DIAPHRAGM
9. SCREW & LKWSHR.- FUEL CUT OFF SOLENOID	44. HOUSING- DIAPHRAGM
10. SOLENOID ASSY.- FUEL CUT OFF	45. GASKET- DIAPHRAGM HOUSING
11. O-RING- SOLENOID ASSY.	46. SCREW & LKWSHR. (3)-VALVE COVER
12. SCREW & LKWSHR. (2). SEC. VAC. UNIT	47. COVER- ENRICHMENT VALVE
13. SECONDARY VACUUM & HOSE ASSY.	48. SPRING- PUMP DIAPHRAGM RETURN
14. BOLT- WATER CASE	49. NUT- VALVE STEM
15. GASKET- BOLT	50. CUP WASHER (2)- DIAPHRAGM
16. CASE- WATER	51. DIAPHRAGM- ENRICHMENT VALVE
17. GASKET- WATER CASE	52. WASHER- STEM
18. SCREW & LKWSHR. (3)- CHOKE COVER RETAINER	53. HOUSING- ENRICHMENT VALVE
19. RETAINER & THROTTLE RETURN SPRING ASSY.	54. VALVE (RUBBER)- STEM
20. CHOKE COVER ASSY.	55. STEM- ENRICHMENT VALVE
21. INSULATOR SPACER- CHOKE COVER	56. GASKET- VALVE MOUNTING
22. SCREW & LKWSHR- BRACKET	57. PLUG- ENRICHMENT JET
23. BRACKET- CLAMP	58. GASKET- PLUG
24. SCREW & LKWSHR. (4)- BOWL COVER	59. JET- ENRICHMENT
25. BOWL COVER ASSY.	60. JET- ENRICHMENT
26. PIN- FLOAT	61. JET- SECONDARY PILOT
27. FLOAT & LEVER ASSY.	62. O-RING- SECONDARY PILOT JET
28. NEEDLE, SEAT & GASKET ASSY.	63. JET- PRIMARY PILOT
29. SCREEN- FUEL INLET	64. O-RING- PRIMARY PILOT JET
30. SCREW & LKWSHR. (3)-COVER VACUUM BREAK	65. JET- PRIMARY MAIN
31. COVER ASSY.- VAC. BREAK DIAPHRAGM	66. JET- PRIMARY MAIN
32. SPRING- DIAPHRAGM	67. NEEDLE- IDLE ADJUSTING
33. DIAPHRAGM ASSY.- VACUUM BREAK	68. SPRING- IDLE ADJUSTING NEEDLE
34. SCREW & LKWSHR. (2)- CHOKE HOUSING	69. WASHER- NEEDLE SEAL
35. O-RING- VAC. PASSAGE CHOKE HOUSING	70. SEAL- IDLE NEEDLE
	71. BYPASS SCREW- IDLE CIRCUIT
	72. O-RING- BYPASS SCREW
	73. SPRING- BYPASS SCREW
	74. NEEDLE- ADJ.
	75. O-RING- ADJ. NEEDLE
	76. SCREW & LKWSHR. (2)- THROTTLE BODY ASSY.
	77. THROTTLE BODY ASSY.
	78. GASKET- THROTTLE BODY
	79. BOWL ASSY.- FLOAT

## 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 BODY IS FREE OF ALL CARBON DEPOSITS. WASH 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 BOWL (79) OR THROTTLE BODY (77) FOR A PROLONG PERIOD OF TIME BECAUSE OF PLASTIC AND RUBBER COMPONENTS. DO NOT SOAK OR WASH UNITS SUCH AS (1), (3), (10), (13), (20), (27), (33), (42) IN CLEANING SOLVENTS.

## REASSEMBLY

REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE SPECIAL INSTRUCTIONS AND ADJUSTMENT.

## SPECIAL INSTRUCTIONS

ADJUSTING SCREWS (74) (71) (67)- TURN IN UNTIL LIGHTLY SEATED THEN BACK OUT NUMBER OF TURNS RECORDED ON DISASSEMBLY.

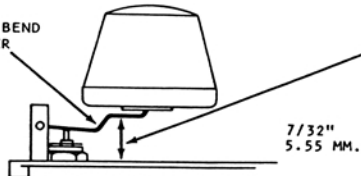
LINK INSTALLATION- INSTALL LINK END INTO LARGE OPENING OF PLASTIC BUSHING, SNAP IN PLACE.

# ADJUSTMENTS

**CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE.**

- ① BOWL COVER INVERTED. FLOAT RESTING ON NEEDLE OF ITS OWN WEIGHT. MEASURE DISTANCE BETWEEN FLOAT LEVER BRACKET AND BOWL COVER GASKET SURFACE.

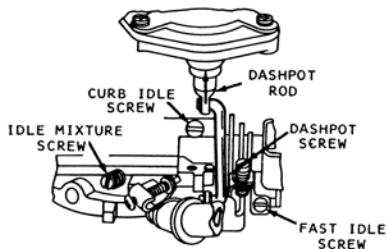
- ② TO ADJUST BEND FLOAT LEVER



WET FUEL LEVEL, FUEL SHOULD BE WITHIN THE LEVEL MARK ON SIGHT GLASS.

DRY FLOAT LEVEL ADJUSTMENT

FIG. 1



## SLOW (CURB) IDLE ADJUSTMENT

- ENGINE AT NORMAL OPERATING TEMPERATURE, AIR CLEANER IN PLACE IGNITION TIMING CHECKED, TRANSMISSION IN NEUTRAL & A/C OFF.
- REMOVE AIR HOSE, BETWEEN REED VALVE AND AIR CLEANER AT THE REED VALVE SIDE, THEN PLUG THE AIR INLET OF THE REED VALVE.
- SET THE ENGINE SPEED TO THE SPECIFIED SETTING BY ADJUSTING THE CURB IDLE ADJUSTING SCREW AND THE IDLE MIXTURE ADJUSTING SCREW. (SET THE IDLE CARBON MONOXIDE CONCENTRATION TO THE LEANEST POSSIBLE, WITHOUT ANY MISFIRING, WITHIN THE RANGE OF .5 TO 2.0%).
- INSTALL AIR HOSE BACK ON REED VALVE. READJUST IDLE SPEED IF NECESSARY.
- RUN ENGINE UP TO 2500 R.P.M. 2 OR 3 TIMES AND MAKE SURE THE ADJUSTMENTS HAVE BEEN PROPERLY DONE. (INSTALL IDLE LIMITER CAP).  
M/T 950 ± 50 R.P.M.  
A/T 850 ± 50 R.P.M.

## DASHPOT ADJUSTMENT

- CURB IDLE ADJUSTMENT COMPLETED. (ENGINE RUNNING).
- PUSH UP ON DASHPOT ROD UNTIL IT STOPS.
- CHECK ENGINE R.P.M. ADJUST TO SPECIFICATIONS USING DASHPOT ADJUSTING SCREW.  
1600CC ENG. CALIF. & HIGH ALTITUDE 1900 ± 100 R.P.M.  
2000CC ENG. CALIF. 1500 ± 100 R.P.M.  
1600/2000CC ENG. FED. & CAN. CARS 2000 ± 100 R.P.M.

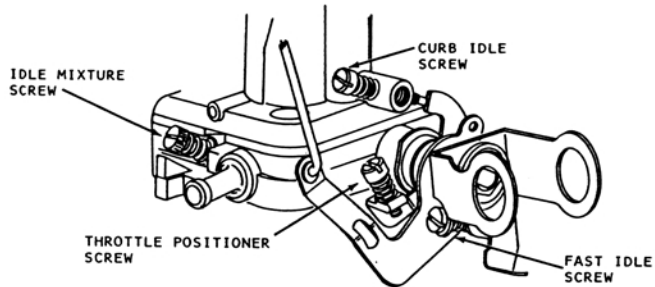
## FAST IDLE ADJUSTMENT

- ENGINE OFF. OPEN THROTTLE VALVE, CLOSE CHOKE VALVE BY HAND THEN RELEASE THROTTLE VALVE TO SET FAST IDLE ON HIGH STEP OF CAM.
- START ENGINE DO NOT TOUCH THROTTLE. SET TO SPECIFIED R.P.M. USING THE FAST IDLE SCREW.  
1976-77 2000 R.P.M.

LATE MODEL IDLE ADJUSTMENTS

FIG. 3

USE FACTORY CAR MANUAL PROCEDURE FOR SETTING SLOW (CURB) IDLE IF AVAILABLE.



## SLOW (CURB) IDLE ADJUSTMENT

WITH ENGINE AT NORMAL OPERATING TEMPERATURE, AIR CLEANER IN PLACE. RUN THE ENGINE UP TO 2500 R.P.M. 2 OR 3 TIMES. ADJUST CURB IDLE SCREW TO PROPER R.P.M. THEN ADJUST IDLE MIXTURE SCREW TO OBTAIN THE LEANEST BEST IDLE SETTING. RESET CURB IDLE IF NECESSARY.

## THROTTLE POSITIONER ADJUSTMENT

- REMOVE VACUUM PIPE BETWEEN AIR CLEANER AND INTAKE MANIFOLD AT THE INTAKE MANIFOLD AND PLUG HOLE.
- DISCONNECT NEGATIVE (GREEN) WIRE FROM TERMINAL OF SOLENOID.
- RAISE ENGINE SPEED TO 2500 R.P.M.
- GROUND NEGATIVE WIRE TO CARBURETOR TO SET SOLENOID ON, ACTIVATING THROTTLE POSITIONER DIAPHRAGM.
- RELEASE THROTTLE LEVER. MAKE SURE THROTTLE POSITIONER IS SET TO PROPER R.P.M.
- TO ADJUST TURN ADJUSTING SCREW. (SOME MODELS USE ADJUSTING NUT ON THROTTLE POSITIONER.)

## FAST IDLE ADJUSTMENT

ENGAGE FAST IDLE CAM IN THIRD STAGE & SET TO PROPER R.P.M.

CURB IDLE	1971 700-750 R.P.M.
	1972-74 800-850 R.P.M.
	1975 800-900 R.P.M.

THROTTLE POSITIONER	1350-1450 R.P.M.
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FAST IDLE	71-74 1700-1750 R.P.M.
	1975 2000 R.P.M.

## EARLY MODEL IDLE ADJUSTMENTS

FIG. 2

HIGH ALT. POSITION

LOW ALT. POSITION



ABOVE 4000 FT.

BELOW 4000 FT.

CHECK CAR SERVICE MANUAL FOR PROPER HIGH ALTITUDE TIMING. ADJUST CURB IDLE. (NOTE ADJUSTMENTS MUST BE DONE AT A HIGH ALTITUDE LOCATION.)

MANUAL ALTITUDE COMPENSATOR KNOB SETTING

FIG. 4