

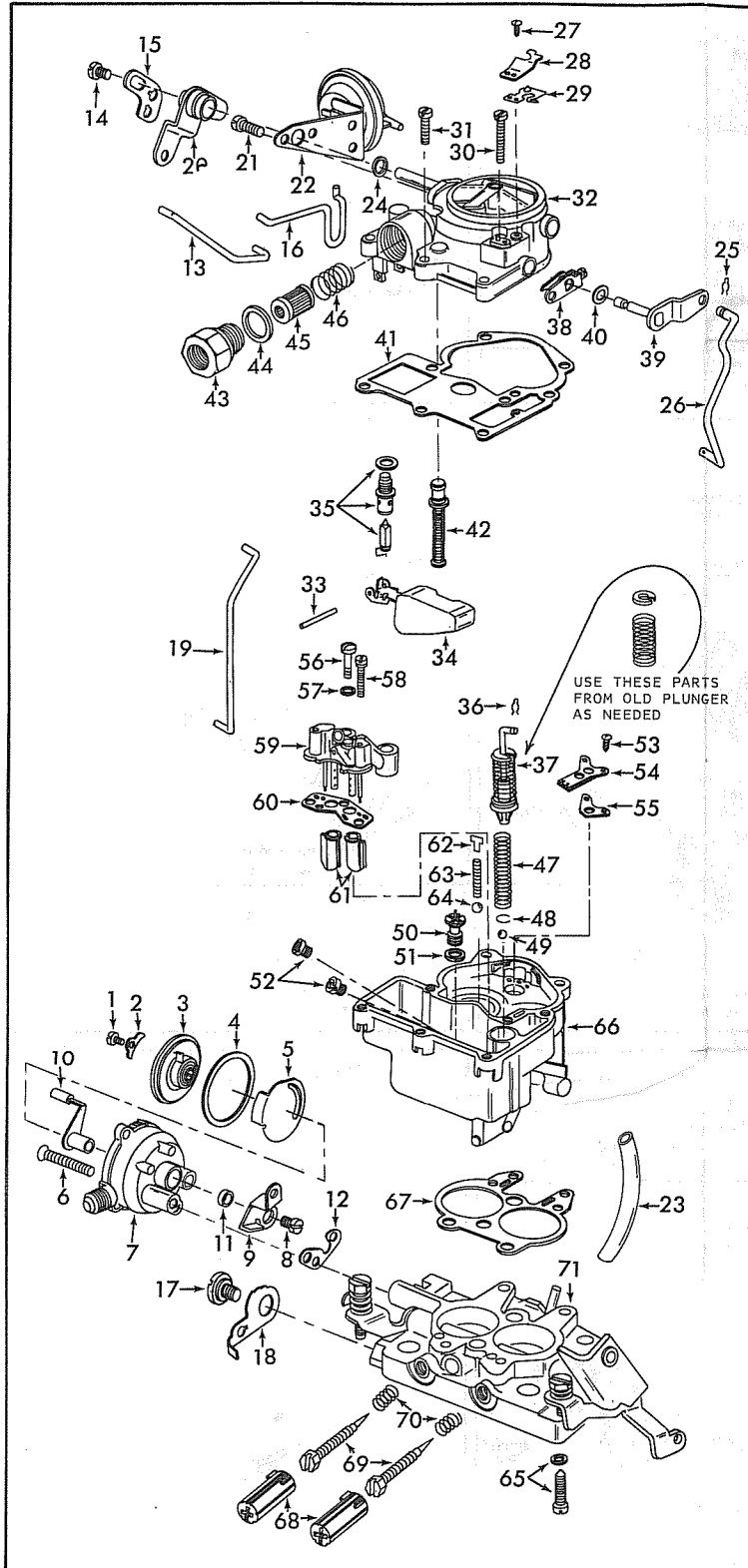
INSTRUCTION SHEET

ROCHESTER CARBURETOR—MODELS 2G-2GC-2GV

50-494-1

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. SOME UNITS WILL NOT HAVE AUTOMATIC CHOKE PARTS. THE NUMERICAL SEQUENCE MAY GENERALLY BE FOLLOWED TO DISASSEMBLE UNIT FAR ENOUGH TO PERMIT CLEANING AND INSPECTION. NOTE: TO REMOVE PUMP (37) ON LATE MODELS TWIST UPSET END WITH SMALL PLIERS UNTIL IT BREAKS. SERVICE PUMP WILL HAVE A RETAINING CLIP. REMOVE STAKING FROM BOWL COVER FOR EASY REMOVAL OF POWER PISTON ASSEMBLY (42).

NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW (3) - CHOKE COVER RETAINER	39. PUMP LEVER SHAFT
2. RETAINER (3) - CHOKE COVER	40. WASHER - PLASTIC (S/M)
3. CHOKE COVER & SPRING ASSY.	41. GASKET - BOWL COVER
4. GASKET - CHOKE COVER	42. POWER PISTON ASSY.
5. PLATE - CHOKE BAFFLE	43. FITTING - FUEL INLET
6. SCREW (2) - CHOKE HOUSING	44. GASKET - FITTING
7. CHOKE HOUSING ASSY.	45. FILTER - FUEL
8. SCREW - LEVER	46. SPRING - FUEL FILTER
9. LEVER - INTERMEDIATE CHOKE	47. SPRING - PUMP RETURN
10. SHAFT ASSY. - INTERMEDIATE CHOKE	48. RETAINER - INTAKE CHECK BALL (S/M)
11. SEAL - INTERMEDIATE CHOKE SHAFT	49. BALL - PUMP INTAKE CHECK
12. GASKET - CHOKE HOUSING	50. POWER VALVE ASSY.
13. ROD - INTERMEDIATE CHOKE	51. GASKET - POWER VALVE
14. SCREW - LEVER	52. JETS (2) - MAIN
15. LEVER - CHOKE	53. SCREW (2) - IDLE COMPENSATOR VALVE
16. LINK - VACUUM BREAK	54. VALVE ASSY. - IDLE COMPENSATOR (S/M)
17. SCREW - FAST IDLE CAM	55. GASKET - IDLE COMPENSATOR VALVE
18. CAM - FAST IDLE	56. SCREW - VENTURI CLUSTER CENTER
19. ROD - CHOKE	57. GASKET - CENTER SCREW
20. LEVER ASSY. - CAM	58. SCREW & LOCKWASHER (2) - VENTURI CLUSTER
21. SCREW (2) - VACUUM BREAK	59. VENTURI CLUSTER ASSY.
22. VACUUM BREAK ASSY.	60. GASKET - VENTURI ASSY.
23. HOSE - VACUUM BREAK	61. INSERT - MAIN WELL (S/M)
24. SEAL - CHOKE SHAFT (S/M)	62. GUIDE - PUMP DISC. SPRING
25. RETAINER - PUMP ROD	63. SPRING - PUMP DISC. BALL
26. ROD - PUMP	64. BALL - PUMP DISC.
27. SCREW - VENT VALVE	65. SCREW & LOCKWASHER - THROTTLE BODY
28. SHIELD - VENT VALVE	66. BOWL ASSY.
29. VALVE - IDLE VENT (S/M)	67. GASKET - THROTTLE BODY
30. SCREW (1) - BOWL COVER LONG	68. CAP (2) - IDLE LIMITER
31. SCREW (7) - BOWL COVER	69. NEEDLE (2) - IDLE ADJUSTING
32. BOWL COVER ASSY.	70. SPRING (2) - IDLE ADJ. NEEDLE
33. PIN - FLOAT HINGE	71. THROTTLE BODY ASSY.
34. FLOAT & LEVER ASSY.	
35. NEEDLE, SEAT & GASKET ASSY.	
36. RETAINER - PUMP (S/M)	
37. PUMP ASSY.	
38. LEVER - INNER PUMP	

(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 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, DIAPHRAGM UNITS, PLASTIC WASHER (40) WHEN USED OR RUBBER PARTS IN CLEANING SOLVENTS. DO NOT SAND, WIRE BRUSH, OR FILE ON TEFLON COATED SHAFTS.

REASSEMBLY

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

SPECIAL INSTRUCTIONS

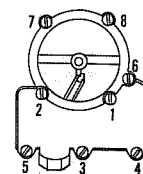
IDLE ADJUSTING NEEDLES (69) - TURN EACH NEEDLE IN LIGHTLY UNTIL SEATED THEN BACK OUT 2 TURNS. (DO NOT INSTALL IDLE LIMITER CAPS AT THIS TIME.)

POWER PISTON INSTALLATION (42) - LIGHTLY STAKE CASTING AROUND WASHER.

PUMP (37) - INSTALL SPRING & RETAINER FROM OLD PUMP IF NEEDED.

NEEDLE & SEAT GASKET SELECTION (35) - WHEN TWO NEEDLE SEAT GASKETS ARE SUPPLIED, USE THIN GASKET FIRST, IF FLOAT MEASUREMENT IS EXTREMELY LOW, THEN REPLACE WITH THICKER GASKET.

DUST SEALS (24)(11) - INSTALL SEAL WITH LIP FACING OUT.



AIR HORN TIGHTENING SEQUENCE

VACUUM BREAK ASSY. - WHERE TWO ARE USED AS (BUICK) ADJ. PRIMARY FIRST THEN SECONDARY FOLLOWING PROCEDURE IN FIG. 5 & 6

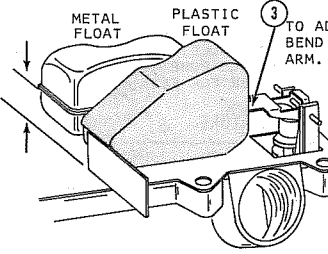
ADJUSTMENTS

SEE DATA TABLE FOR MEASUREMENTS

① BOWL GASKET IN PLACE, INVERT BOWL COVER.

CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE.

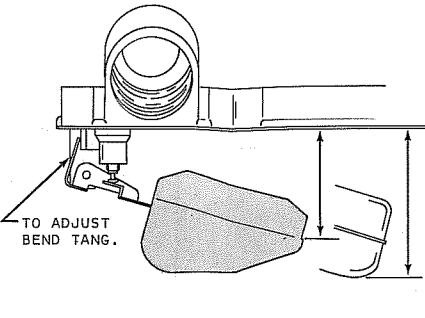
② PLASTIC FLOAT MEASURE DISTANCE FROM GASKET TO LIP ON FREE END OF FLOAT.



③ TO ADJUST BEND FLOAT ARM.

②A METAL FLOAT MEASURE DISTANCE FROM GASKET TO SHARP EDGE OF FLOAT SEAM AT FREE END OF FLOAT.

DRY FLOAT LEVEL ADJUSTMENT FIG. 1

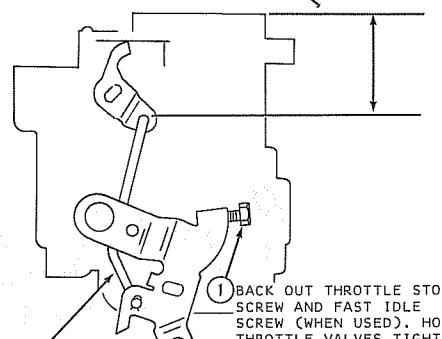


TO ADJUST BEND TANG.

WITH FLOAT HANGING FREELY, MEASURE FROM GASKET SURFACE TO LIP OF PLASTIC FLOAT OR BOTTOM OF METAL FLOAT.

FLOAT DROP ADJUSTMENT FIG. 2

② MEASURE DISTANCE FROM TOP OF AIR HORN TO TOP OF PUMP ROD.

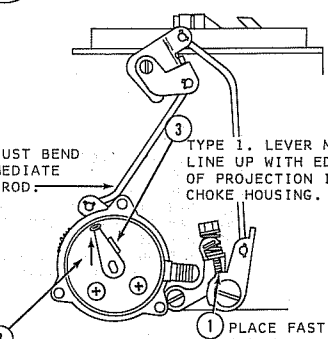


① BACK OUT THROTTLE STOP SCREW AND FAST IDLE SCREW (WHEN USED). HOLD THROTTLE VALVES TIGHTLY CLOSED.

③ TO ADJUST BEND PUMP ROD.

PUMP ROD ADJUSTMENT FIG. 3

③A TYPE 2. LEVER MUST CONTACT .120" GAUGE INSERTED IN HOLE OF CHOKE HOUSING.



④ TO ADJUST BEND INTERMEDIATE CHOKE ROD.

③ TYPE 1. LEVER MUST LINE UP WITH EDGE OF PROJECTION INSIDE CHOKE HOUSING.

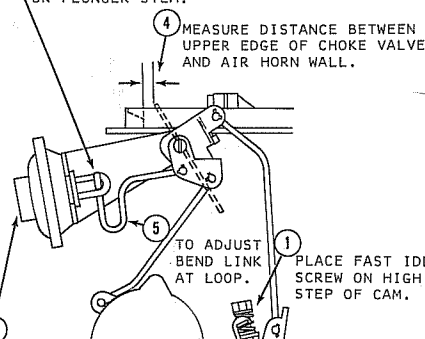
① PLACE FAST IDLE SCREW ON HIGHEST STEP OF CAM.

② CLOSE CHOKE VALVE BY PUSHING UP ON CHOKE COIL LEVER.

INTERMEDIATE CHOKE ROD ADJUSTMENT FIG. 4

③ CHOKE VALVE HELD TOWARD CLOSED POSITION LINK IN END OF SLOTTED CHOKE SHAFT ARM OR PLUNGER STEM.

④ MEASURE DISTANCE BETWEEN UPPER EDGE OF CHOKE VALVE AND AIR HORN WALL.



⑤ TO ADJUST BEND LINK AT LOOP.

① PLACE FAST IDLE SCREW ON HIGH STEP OF CAM.

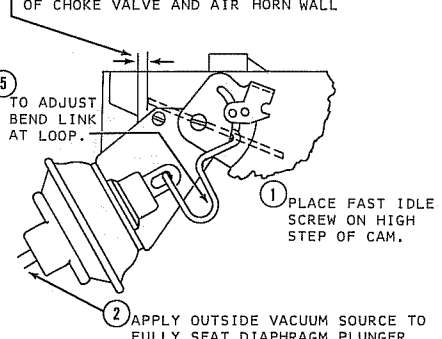
② APPLY OUTSIDE VACUUM SOURCE TO FULLY SEAT DIAPHRAGM PLUNGER.

NOTE: UNITS WITH PURGE BLEED HOLE OR PURGE FILTER REMOVE RUBBER COVER AND TAPE SMALL BLEED HOLE IN END COVER OR IN VACUUM TUBE BEFORE ADJUSTING.

VACUUM BREAK ADJUSTMENT (SOLID PLUNGER STEM) FIG. 5

③ PUSH CHOKE VALVE TOWARDS THE CLOSED POSITION UNTIL THE SPRING LOADED PLUNGER STEM IS FULLY EXTENDED. (BE CAREFUL NOT TO PULL DIAPHRAGM OFF ITS SEAT.)

④ MEASURE DISTANCE BETWEEN UPPER EDGE OF CHOKE VALVE AND AIR HORN WALL.



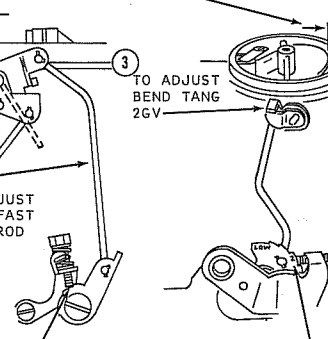
⑤ TO ADJUST BEND LINK AT LOOP.

① PLACE FAST IDLE SCREW ON HIGH STEP OF CAM.

② APPLY OUTSIDE VACUUM SOURCE TO FULLY SEAT DIAPHRAGM PLUNGER.

VACUUM BREAK ADJUSTMENT (SPRING LOADED PLUNGER STEM) FIG. 6

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



③ TO ADJUST BEND TANG 2GV.

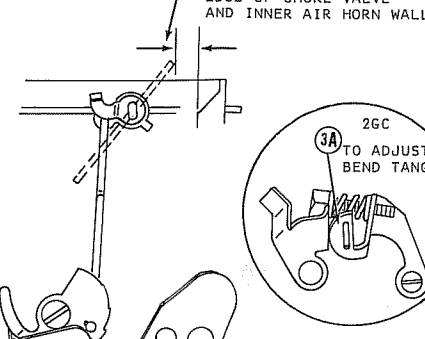
③A TO ADJUST BEND FAST IDLE ROD 2GC.

① PLACE IDLE STOP SCREW OR FAST IDLE SCREW ON SECOND STEP OF FAST IDLE CAM AGAINST SHOULDER OF HIGH STEP.

(FAST IDLE CAM) CHOKE ROD ADJUSTMENT FIG. 7

① THROTTLE HELD IN WIDE OPEN POSITION.

② HOLD CHOKE VALVE TOWARD CLOSED POSITION, THEN MEASURE BETWEEN UPPER EDGE OF CHOKE VALVE AND INNER AIR HORN WALL.

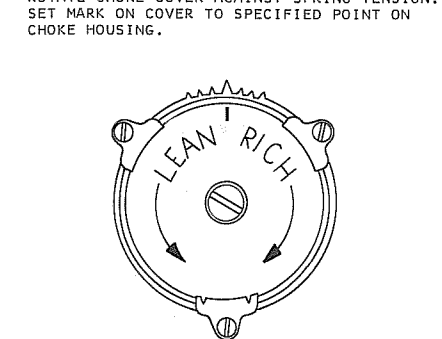


③ TO ADJUST BEND TANG

③A TO ADJUST BEND TANG

CHOKE UNLOADER ADJUSTMENT FIG. 8

ROTATE CHOKE COVER AGAINST SPRING TENSION. SET MARK ON COVER TO SPECIFIED POINT ON CHOKE HOUSING.



AUTOMATIC CHOKE ADJUSTMENT 2GC FIG. 9

ADJUSTMENTS

SEE DATA TABLE FOR MEASUREMENTS

③ TO ADJUST BEND ROD AT EXISTING BEND.

BUICK

PONTIAC

- ① CHOKE VALVE HELD CLOSED.
- ② PULL UP ON CHOKE ROD. END OF ROD SHOULD FIT GAUGE NOTCH ON SIDE OF CHOKE LEVER. (1971 CHRYSLER CORP. ROD END SHOULD BE EVEN WITH TOP OF HOLE IN CHOKE LEVER.)

BUICK-JEEP-PONTIAC (CHRYSLER CORP.)

1970 TOP OF ROD SHOULD BE EVEN WITH BOTTOM OF HOLE.

1971 1 1/4 MODELS TOP OF ROD SHOULD BE EVEN WITH CENTER OF HOLE.

1971 1 1/2 MODELS TOP OF ROD SHOULD FIT NOTCH IN LEVER

1972 & LATER ROD SHOULD FIT IN BOTTOM OF SLOT IN LEVER.

- ① CHOKE VALVE HELD IN WIDE OPEN POSITION
- ② PUSH DOWN ON CHOKE ROD TO LIMIT TRAVEL.

NOTE: VEGA-TOP EDGE OF PIN SHOULD BE EVEN WITH BOTTOM OF HOLE IN LEVER. TO ADJUST ROTATE SWIVEL ON ROD.

ON CAR CHOKE COIL ROD ADJUSTMENTS

③ TO ADJUST BEND ROD AT EXISTING BEND.

ALL MODELS OF CHEV., CHEV. & GMC TRK. FIG. 10

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

SUPPLEMENT

SLOW IDLE ADJUSTMENT WITH IDLE STOP SOLENOID

1. SET IGNITION TIMING PER CAR FACTORY SPECIFICATIONS AND PROCEDURE.
2. ENGINE AT OPERATING TEMPERATURE, CHOKE FULLY OPEN.
 - A. DISCONNECT DISTRIBUTOR VACUUM HOSE AND PLUG.
 - B. DISCONNECT FUEL TANK HOSE FROM VAPOR CANISTER
 - C. AUTOMATIC TRANSMISSION IN DRIVE, (WHEELS BLOCKED) A/C OFF.
3. CHECK ENGINE COMPARTMENT DECAL FOR SPECIFICATIONS USING A TACHOMETER ADJUST IDLE SPEED R.P.M.
4. ADJUST IDLE R.P.M. BY TURNING ADJUSTING SCREW OF IDLE SOLENOID. (SOLENOID LEAD MUST BE CONNECTED SO SOLENOID IS ENERGIZED.)
5. AIR CLEANER INSTALLED.
6. ADJUST IDLE MIXTURE NEEDLES TO OBTAIN THE HIGHEST R.P.M. AT THE LEANEST BEST IDLE SETTING. READJUST IDLE SPEED IF NECESSARY.
7. TRANSMISSION IN NEUTRAL, DISCONNECT ELECTRICAL CONNECTION OF SOLENOID. THEN ADJUST SLOW IDLE R.P.M. WITH THROTTLE STOP SCREW. RECONNECT ALL CONNECTIONS.
8. INSTALL IDLE LIMITER CAPS. ON SOME MODELS CAP FITS ON ONLY ONE WAY, LOCKS IDLE NEEDLE WHEN INSTALLED. ON OTHER MODELS PLACE CAP ON IDLE NEEDLE HEAD WITH TAB IN THE EXTREME COUNTERCLOCKWISE POSITION AGAINST THE LIMITER STOP. SEAT THE LIMITER CAP ON THE MIXTURE NEEDLE HEAD BY PRESSING FIRMLY ON THE CAP.

SUPPLEMENT

SLOW IDLE ADJUSTMENT WITH IDLE COMBINED EMISSION CONTROL VALVE.

1. SET IGNITION TIMING PER CAR FACTORY SPECIFICATIONS AND PROCEDURE.
2. ENGINE AT OPERATING TEMPERATURE, CHOKE FULLY OPEN.
 - A. DISCONNECT DISTRIBUTOR VACUUM HOSE AND PLUG.
 - B. DISCONNECT FUEL TANK HOSE FROM VAPOR CANISTER.
 - C. AUTOMATIC TRANSMISSION IN DRIVE. (WHEELS BLOCKED.)
 - D. AIR CONDITION OFF
3. CHECK ENGINE COMPARTMENT DECAL FOR SPECIFICATIONS ADJUST THROTTLE STOP SCREW TO THE PROPER R.P.M. USING A TACHOMETER.
4. ADJUST IDLE MIXTURE NEEDLES TO OBTAIN THE HIGHEST R.P.M. AT THE LEANEST BEST IDLE SETTING. READJUST IDLE SPEED IF NECESSARY
5. MANUALLY PULL OUT PLUNGER STEM TO THE LIMIT OF ITS TRAVEL THEN ADJUST PLUNGER LENGTH TO OBTAIN SPECIFIED ENGINE R.P.M.
 - A/T 650 IN DRIVE
 - S/T 900 IN NEUTRAL
6. INSTALL IDLE LIMITER CAPS.

SLOW IDLE ADJUSTMENT FIG. 11

- ① SLOW IDLE ADJUSTMENT COMPLETED.
- ② OLDSMOBILE PLACE FAST IDLE SCREW ON LOW STEP OF FAST IDLE CAM AND ADJUST TO 1000 R.P.M. S/T IN NEUTRAL A/T IN PARK

- ③ CHRYSLER CORP. PLACE FAST IDLE SCREW ON SECOND STEP OF FAST IDLE CAM AND ADJUST TO 1800 R.P.M.

FAST IDLE ADJUSTMENT FIG. 12

- ② TO ADJUST BEND ACTUATING TANG ON PUMP LEVER.

- ① CHEV. IDLE SPEED ADJUSTED. (IDLE STOP SOLENOID ENERGIZED) MEASURE DISTANCE BETWEEN WIDEST OPENING POINT OF VALVE & SEAT. SHOULD HAVE .025" CLEARANCE.
- ① CHRYSLER CORP. AFTER FAST IDLE ADJUSTMENT IS MADE. PLACE FAST IDLE SCREW ON SECOND STEP OF THE FAST IDLE CAM. PLASTIC VALVE SHOULD JUST BE SEATED.
- ② TO ADJUST TURN SCREW IN PLASTIC VALVE.

IDLE VENT ADJUSTMENT FIG. 13