

INSTRUCTION SHEET

OFF VEHICLE CARBURETOR SERVICE

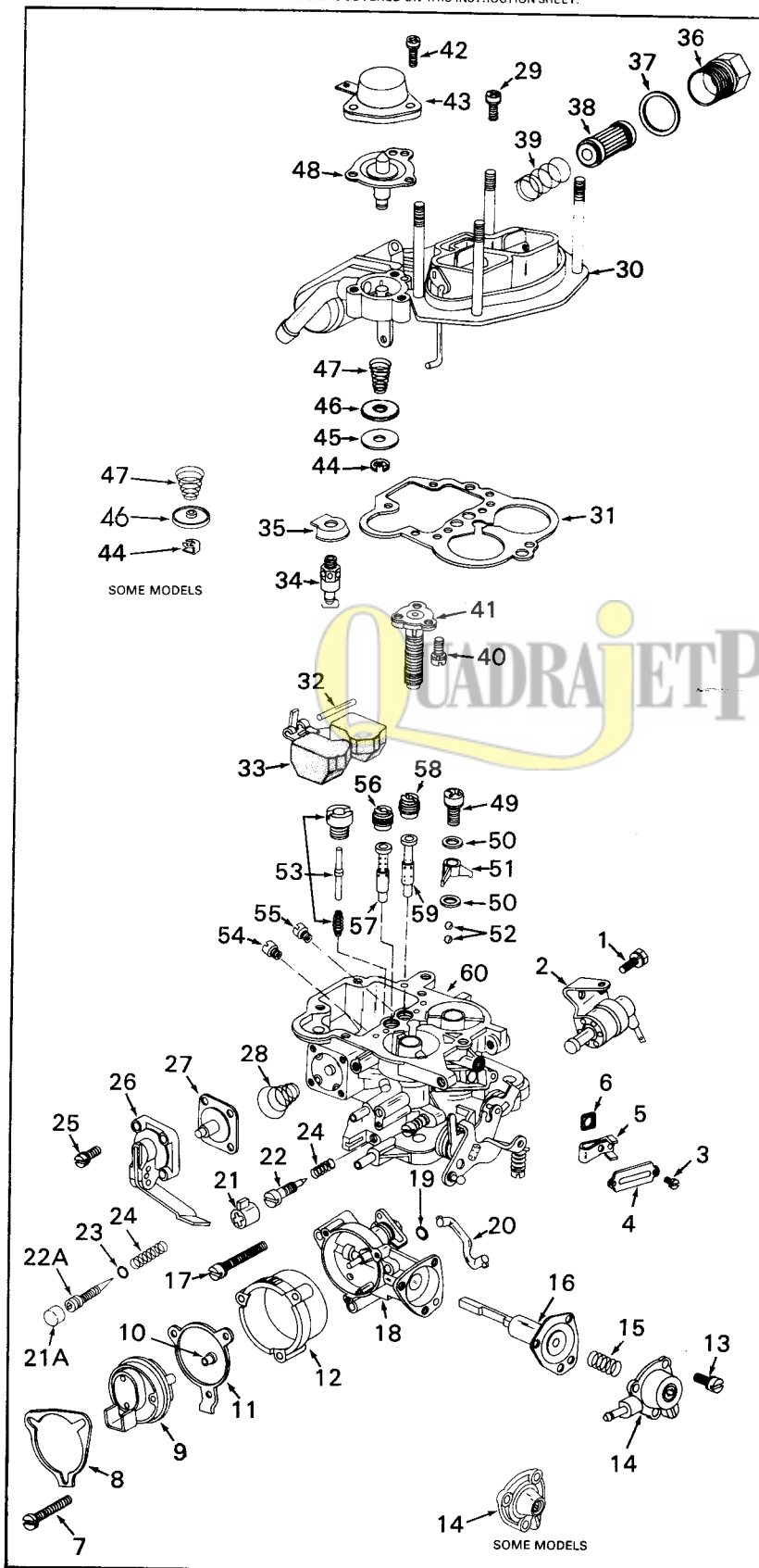
HOLLEY MODEL - 5210C

(GM PRODUCTS)

50-539-5

GENERAL EXPLODED VIEW

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



DISASSEMBLY

USE THE EXPLODED VIEW AS A GUIDE. THE NUMERICAL SEQUENCE MAY GENERALLY BE FOLLOWED TO DISASSEMBLE UNIT FAR ENOUGH TO PERMIT CLEANING AND INSPECTION. TAMPER RESISTANT CHOKE COVER SCREWS CAN BE REMOVED BY USING A FILE OR SUITABLE GRINDER TO REMOVE SCREW HEADS, OR BY CAREFULLY SAWING A SLOT IN SCREW HEAD. BACKING OUT REMAINING PORTION OF SCREW MAY BE HARD. SCREWS ARE COATED WITH A RETAINING COMPOUND. REPLACEMENT SCREWS ARE SUPPLIED IN REPAIR KIT. MODELS WITH SEALED IDLE MIXTURE NEEDLE (22A), REMOVE STAKING FROM AROUND IDLE MIXTURE NEEDLE BRASS CUP PLUG. REMOVE CUP PLUG BY USING A SUITABLE SCREW EXTRACTOR. SOLID TYPE PLUGS ARE REMOVED BY POSITIONING A PUNCH IN LOCATOR POINT OF THE THROTTLE BODY, BENEATH IDLE MIXTURE NEEDLE PLUG (MANIFOLD SIDE). DRIVE OUT HARDENED STEEL PLUG COVERING MIXTURE NEEDLE. NOTE SIZES OF JETS AND MAIN WELL TUBES AND THEIR LOCATION FOR PROPER ASSEMBLY (RECORD SIZES BELOW).

NOMENCLATURE

REF. NO.		REF. NO.	
1	SCREW & LOCKWASHER (2)- SOLENOID	29	SCREW & LOCKWASHER (5)- BOWL COVER
2	SOLENOID- IDLE STOP	30	BOWL COVER ASSEMBLY
3	SCREW & LOCKWASHER (2)- COVER	31	GASKET- BOWL COVER
4	COVER- COMPENSATOR VALVE	32	PIN- FLOAT
5	VALVE ASSY- HOT IDLE COMPENSATOR	33	FLOAT ASSEMBLY
6	GASKET- COMPENSATOR VALVE	34	NEEDLE & SEAT ASSEMBLY
7	SCREW (3)- CHOKE RETAINER	35	BAFFLE- NEEDLE SEAT (SOME MODELS)
8	RETAINER- CHOKE COVER	36	NUT- FUEL INLET
9	CHOKE COVER & COIL ASSY.	37	GASKET- INLET NUT
10	BUSHING- CHOKE SPRING LOOP	38	FILTER- FUEL
11	RING- CHOKE GROUND	39	SPRING- FUEL FILTER
12	HOUSING- CHOKE COIL ASSY.	40	SCREW & LOCKWASHER (3)- DIAPHRAGM ASSEMBLY
13	SCREW & LOCKWASHER (3)- COVER	41	DIAPHRAGM ASSY.- POWER VALVE
14	COVER ASSY.- DIAPHRAGM	42	SCREW & LOCKWASHER (3)- SOLENOID
15	SPRING- DIAPHRAGM	43	SOLENOID ASSY.- BOWL VENT
16	DIAPHRAGM ASSY.- CHOKE	44	E- CLIP- WASHER
17	SCREW & LOCKWASHER (3)- CHOKE HOUSING	45	WASHER- VENT VALVE
18	CHOKE & DIAPHRAGM HOUSING ASSY.	46	VALVE- VENT
19	O-RING- CHOKE HOUSING (SOME MODELS)	47	SPRING- DIAPHRAGM RETURN
20	ROD- FAST IDLE	48	DIAPHRAGM ASSY.- VENT VALVE
21	CAP- IDLE LIMITER	49	SCREW- PUMP DISC. NOZZLE
21A	PLUG- IDLE NEEDLE SEAL (SOME MODELS)	50	GASKET (2)- PUMP NOZZLE
22	NEEDLE- IDLE ADJUSTING	51	NOZZLE- PUMP DISCHARGE
22A	NEEDLE- IDLE ADJUSTING (SOME MODELS)	52	BALL (2)- PUMP DISCHARGE
23	O-RING- IDLE NEEDLE (SOME MODELS)	53	POWER VALVE ASSY
24	SPRING- IDLE ADJUSTING NEEDLE	54	JET- PRI. MAIN
25	SCREW & LOCKWASHER (4)- PUMP COVER	55	JET- SEC. MAIN
26	COVER ASSY.- PUMP	56	JET- PRI. HIGH SPEED BLEED
27	DIAPHRAGM ASSY.- PUMP	57	TUBE- PRI. MAIN WELL
28	SPRING- PUMP RETURN	58	JET- SEC. HIGH SPEED BLEED
		59	TUBE- SEC. MAIN WELL
		60	MAIN BODY ASSEMBLY

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 A SUITABLE SOLVENT. BLOW OUT ALL PASSAGES IN CASTINGS WITH COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH CLEANING OF ALL OBSCURE AREAS. CAUTION: DO NOT SOAK PLASTIC FLOAT, SOLENOIDS, OR PARTS CONTAINING RUBBER IN CARBURETOR CLEANING SOLVENT.

REASSEMBLY

REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE SPECIAL INSTRUCTIONS AND FOLLOW NUMERICAL OUTLINE IN MAKING ADJUSTMENTS.

SPECIAL INSTRUCTIONS

POWER VALVE ASSY. (53)- INSTALL STEM OF VALVE WITH TAPERED SEAT FACING VALVE SEAT.

CHECK BALL (52)- 2 BALLS ARE USED, ONE IS USED AS A WEIGHT.

ECONOMIZER DIAPHRAGM ASSY. (41)- CAREFULLY ALIGN HOLES IN DIAPHRAGM AND COVER TO PREVENT DAMAGE WHILE INSTALLING SCREWS.

FUEL FILTER (38)- INSTALL FILTER WITH SOLID END AGAINST SPRING (39).

PUMP RETURN SPRING (28)- INSTALL WITH SMALL DIAMETER AGAINST CARBURETOR BOWL.

IDLE ADJUSTING NEEDLE (22)- TURN IN UNTIL SEATED, THEN BACK OUT 2 1/2 TURNS. (DO NOT INSTALL IDLE LIMITER CAP OR PLUG AT THIS TIME).

CHOKE COVER (9)- INSTALL STATE SPRING LOOP ON PIN OF LEVER. (USE NO GASKET ON ELECTRIC CHOKE COVER, IT MUST BE GROUNDED).

CARBURETOR ATTACHING NUTS- TIGHTEN EVENLY TO 145 IN. LBS. TORQUE.

FUEL INLET NUT (36)- TIGHTEN TO 300 IN. LBS. TORQUE.

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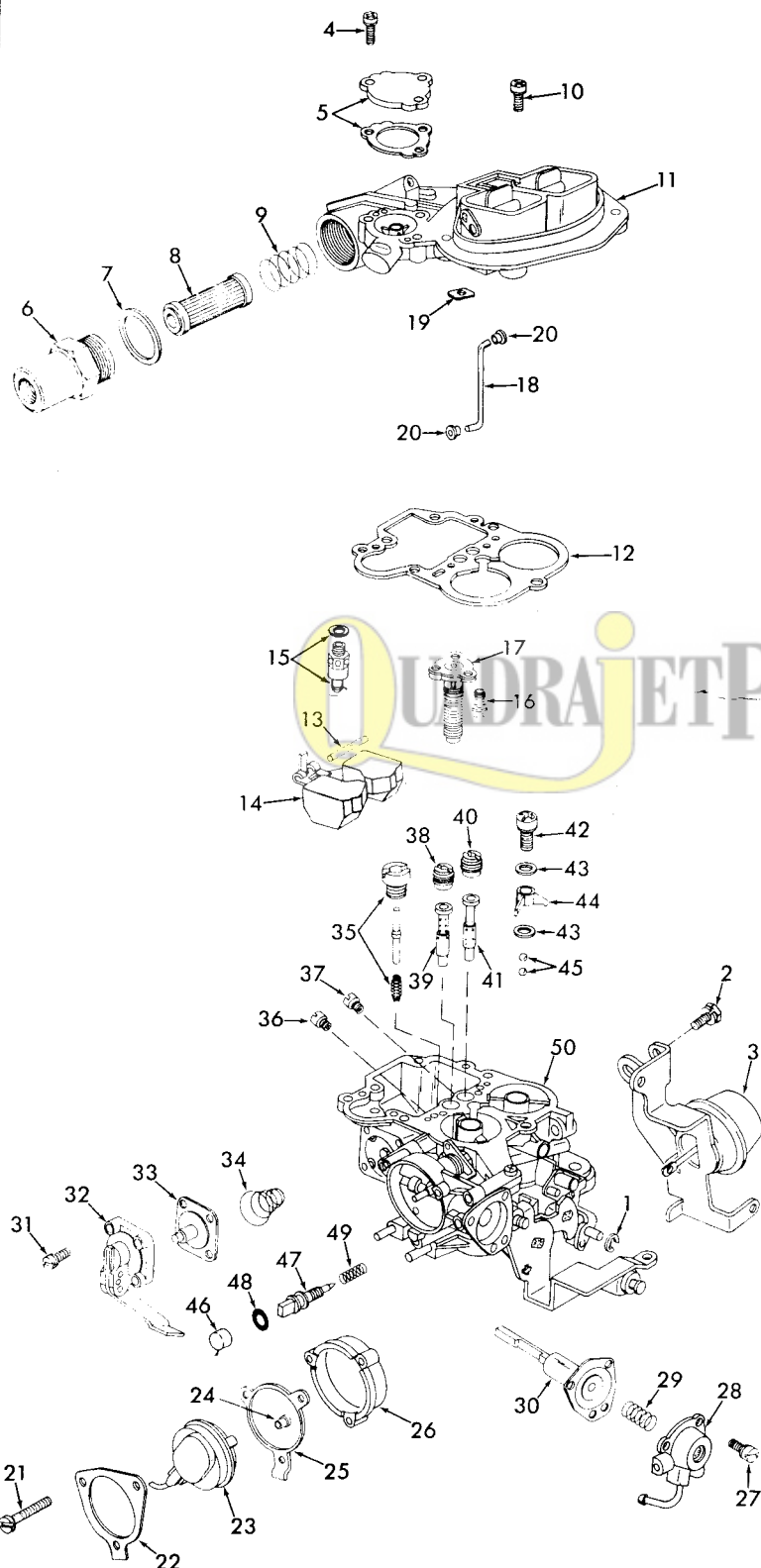
OFF VEHICLE CARBURETOR SERVICE

HOLLEY MODEL - 5210C

(GM PRODUCTS CANADA)

GENERAL EXPLODED VIEW

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DISASSEMBLY

USE THE EXPLODED VIEW AS A GUIDE. THE NUMERICAL SEQUENCE MAY GENERALLY BE FOLLOWED TO DISASSEMBLE UNIT FAR ENOUGH TO PERMIT CLEANING AND INSPECTION. TAMPER RESISTANT CHOKE COVER SCREWS CAN BE REMOVED BY USING A FILE OR BY CAREFULLY SAWING A SLOT IN SCREW HEAD. BACKING OUT REMAINING PORTION OF SCREW MAY BE HARD. SCREWS ARE COATED WITH A RETAINING COMPOUND. TO REMOVE IDLE MIXTURE NEEDLE PLUG POSITION A PUNCH IN LOCATOR POINT OF THE THROTTLE BODY BENEATH IDLE MIXTURE PLUG. DRIVE OUT HARDENED STEEL PLUG COVERING MIXTURE NEEDLE. NOTE SIZES OF JETS AND MAIN WELL TUBES AND THEIR LOCATION FOR PROPER ASSEMBLY. (RECORD SIZES BELOW)

NOMENCLATURE

REF. NO.	REF. NO.
1. E-CLIP SEC. DIAPHRAGM ROD	25. RING - CHOKE GROUND
2. SCREW & LOCKWASHER (3) - SEC. DIAPHRAGM ASSY.	26. HOUSING - CHOKE COIL ASSY.
3. SECONDARY DIAPHRAGM ASSY.	27. SCREW & LOCKWASHER (3) - COVER
4. SCREW & LOCKWASHER (3) - COVER	28. COVER ASSY. - DIAPHRAGM
5. COVER & GASKET	29. SPRING - DIAPHRAGM
6. NUT - FUEL INLET	30. DIAPHRAGM ASSY. - CHOKE
7. GASKET - INLET NUT	31. SCREW & LOCKWASHER (4) - PUMP COVER
8. FILTER - FUEL	32. COVER ASSY. - PUMP
9. SPRING - FUEL FILTER	33. DIAPHRAGM ASSY. - PUMP
10. SCREW & LOCKWASHER (5) - BOWL COVER	34. SPRING - PUMP RETURN
11. BOWL COVER ASSY.	35. POWER VALVE ASSY.
12. GASKET - BOWL COVER	36. JET - PRI. MAIN
13. PIN - FLOAT	37. JET - SEC. MAIN
14. FLOAT ASSEMBLY	38. JET - PRI. HIGH SPEED BLEED
15. NEEDLE & SEAT ASSY.	39. TUBE - PRI. MAIN WELL
16. SCREW & LOCKWASHER (3) - DIAPHRAGM ASSY.	40. JET - SEC. HIGH SPEED BLEED
17. DIAPHRAGM ASSY. - POWER VALVE	41. TUBE - SEC. MAIN WELL
18. ROD - CHOKE OPERATING	42. SCREW - PUMP DISC NOZZLE
19. SEAL - CHOKE ROD	43. GASKET (2) - PUMP NOZZLE
20. RETAINERS (2) - CHOKE ROD	44. NOZZLE - PUMP DISCHARGE
21. BREAKAWAY SCREW (3) - CHOKE RETAINER	45. BALL (2) - PUMP DISCHARGE
22. RETAINER - CHOKE COVER	46. PLUG - IDLE NEEDLE
23. CHOKE COVER & COIL ASSY.	47. NEEDLE - IDLE ADJUSTING
24. BUSHING - CHOKE SPRING LOOP	48. O-RING - IDLE NEEDLE
	49. SPRING - IDLE ADJ. NEEDLE
	50. MAIN BODY ASSY.

CLEANING

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REASSEMBLY

REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE SPECIAL INSTRUCTIONS AND FOLLOW NUMERICAL OUTLINE IN MAKING ADJUSTMENTS.

SPECIAL INSTRUCTIONS

POWER VALVE ASSY. (35) - INSTALL STEM OF VALVE WITH TAPERED SEAT FACING VALVE SEAT.

CHECK BALL (45) - 2 BALLS ARE USED, ONE IS USED AS A WEIGHT.

POWER VALVE DIAPHRAGM ASSY. (17) - CAREFULLY ALIGN HOLES IN DIAPHRAGM AND COVER TO PREVENT DAMAGE WHILE INSTALLING SCREWS.

FUEL FILTER (8) - INSTALL FILTER WITH SOLID END AGAINST SPRING (9).

PUMP RETURN SPRING (34) - INSTALL WITH SMALL DIAMETER AGAINST CARBURETOR BOWL.

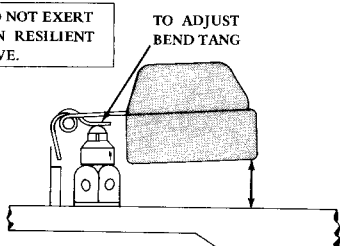
IDLE ADJUSTING NEEDLE (47) - TURN IN UNTIL SEATED, THEN BACK OUT 2 1/2 TURNS (DO NOT INSTALL IDLE LIMITER CAP OR PLUG AT THIS TIME.)

CHOKE COVER (23) - INSTALL STAT. SPRING LOOP ON PIN OF LEVER (BE SURE CHOKE SPRING LOOP BUSHING IS IN PLACE)

FUEL INLET NUT (6) - TIGHTEN TO 300 IN. LBS. TORQUE (25 FT. LBS.).

ADJUSTMENTS

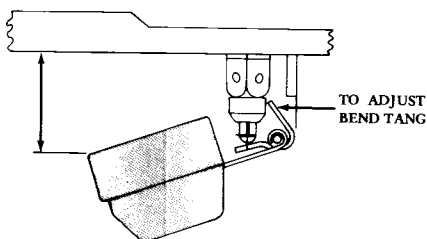
CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE.



BOWL COVER INVERTED (BOWL COVER GASKET REMOVED). FLOAT RESTING ON NEEDLE VALVE OF ITS OWN WEIGHT. (DO NOT COMPRESS SPRING). MEASURE DISTANCE FROM FLOAT AT TOE END TO CASTING SURFACE. (CHECK BOTH FLOATS)

DRY FLOAT LEVEL ADJUSTMENT

Fig. 1

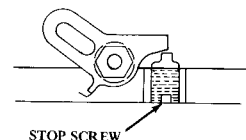


BOWL COVER HELD IN NORMAL POSITION WITH FLOAT HANGING FREELY. MEASURE DISTANCE FROM BOWL COVER GASKET SURFACE TO TOP TOE OF FLOAT.

FLOAT DROP ADJUSTMENT

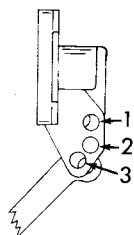
Fig. 2

BACK OUT STOP SCREW UNTIL SECONDARY THROTTLE VALVE SEATS IN BORE. TURN SCREW IN UNTIL IT TOUCHES SECONDARY THROTTLE LEVER, THEN TURN IN AN ADDITIONAL 1/4 TURN.



SECONDARY THROTTLE STOP ADJUSTMENT

Fig. 3

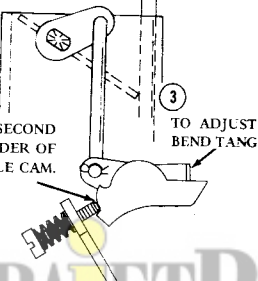


PUMP PIN POSITION HOLES

Fig. 4

2 HOLD CHOKE VALVE TOWARD CLOSED POSITION AND MEASURE DISTANCE BETWEEN LOWER EDGE OF CHOKE PLATE AND AIR HORN WALL.

1 HOLD FAST IDLE SCREW ON SECOND STEP AND AGAINST THE SHOULDER OF THE FIRST STEP OF FAST IDLE CAM.

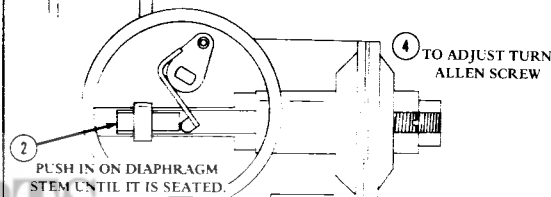


FAST IDLE CAM INDEX ADJUSTMENT

Fig. 5

3 HOLD CHOKE VALVE TOWARD CLOSED POSITION AND MEASURE DISTANCE BETWEEN LOWER EDGE OF CHOKE PLATE AND WALL OF AIR HORN.

1 PLACE FAST IDLE SCREW ON HIGH STEP OF CAM.



2 PUSH IN ON DIAPHRAGM STEM UNTIL IT IS SEATED.

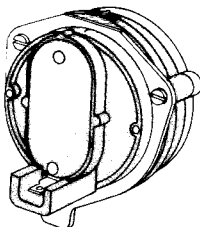
2A

APPLY OUTSIDE VACUUM SOURCE TO SEAT DIAPHRAGM ON UNITS WITH VACUUM PICK UP ON DIAPHRAGM COVER.

CHOKE PULLDOWN ADJUSTMENT

Fig. 6

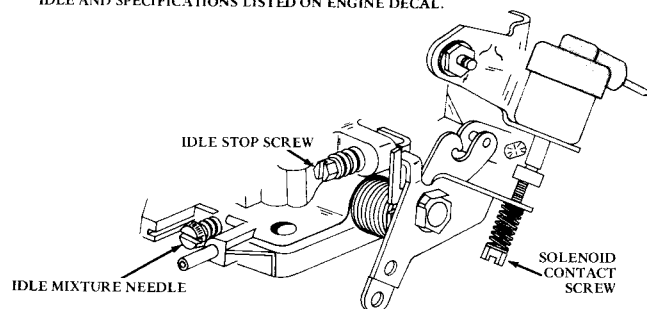
ROTATE CHOKE COVER AGAINST SPRING TENSION. SET MARK ON COVER TO SPECIFIED POINT ON CHOKE HOUSING. SEE DATA TABLE FOR SETTING.



AUTOMATIC CHOKE ADJUSTMENT

Fig. 7

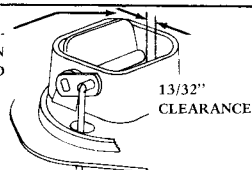
USE FACTORY CAR MANUAL PROCEDURE FOR SETTING SLOW IDLE AND SPECIFICATIONS LISTED ON ENGINE DECAL.



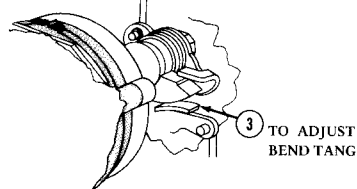
IDLE ADJUSTMENT

Fig. 9

2 CHOKE HELD TOWARD CLOSED POSITION. MEASURE DISTANCE BETWEEN LOWER EDGE OF CHOKE VALVE AND AIR HORN WALL.



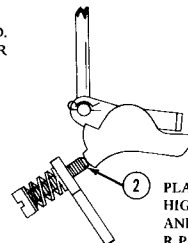
1 THROTTLE HELD IN WIDE OPEN POSITION.



UNLOADER ADJUSTMENT

Fig. 8

1 CURB IDLE SPEED ADJUSTED. DISCONNECT AND PLUG EGR PORT.



FAST IDLE ADJUSTMENT

Fig. 10

2 PLACE FAST IDLE SCREW ON HIGH STEP OF FAST IDLE CAM AND ADJUST TO SPECIFIED R.P.M.

ADJUSTMENT DATA TABLE

Year	Make		Dry Float Setting	Float Drop Setting	Fast Idle Cam Index Setting	Choke Pulldown Setting	Auto Choke Setting	Unloader Setting	Slow Idle	Fast Idle R.P.M.
1978	Chevrolet (Monza, Nova) 151" Eng. Federal	A/T	17/32"	1"	5/32"	.300"	2 - RICH	23/64"	E/D	2500
		M/T	17/32"	1"	5/32"	.325"	1 - RICH	23/64"	E/D	2500
1978	Oldsmobile (Omega, Starfire) 151" Eng.	A/T	17/32"	1"	5/32"	.300"	2 - RICH	23/64"	E/D	2400
		M/T	17/32"	1"	5/32"	.325"	1 - RICH	23/64"	E/D	2200
1977	Pontiac (Astre) 151" Eng. Federal	A/T	17/32"	1"	5/32"	.275"	4 - RICH	13/32"	E/D	2400
		M/T	17/32"	1"	5/32"	.300"	4 - RICH	13/32"	E/D	2400
		All/T	17/32"	1"	5/32"	.275"	2 - RICH	13/32"	E/D	2400
1978	Pontiac (Phoenix, Sunbird) 151" Eng.	A/T	17/32"	1"	5/32"	.300"	2 - RICH	23/64"	E/D	2400
		M/T	17/32"	1"	5/32"	.325"	1 - RICH	23/64"	E/D	2200
1979	Chevrolet (Chevette) 97.6" Eng. 4 Cyl.									
		Federal A/T	1/2"	--	.110"	.250"	2 - RICH	.350"	E/D	2500
		Federal M/T	1/2"	--	.110"	.245"	2 - RICH	.350"	E/D	2500
		California All/T	1/2"	--	.130"	.300"	1 - RICH	.350"	E/D	2500
1980	Chevrolet (Chevette 1.6 Liter Eng. (49 States)	All/T	1/2"	--	.110"	.120"	N/A	.350"	E/D	2500
1981	Chevrolet (Chevette) 1.6 Liter Eng. (Can.)	All/T	1/2"	--	.110"	.300"	INDEX	.275"	E/D	E/D
1982	Chevrolet (Chevette) 1.6 Liter Eng. (Can.)	All/T	1/2"	--	.080"	.270"	N/A	.350"	E/D	E/D
1982	Pontiac (T-1000) 1.6 Liter Eng. (Can.)	All/T	1/2"	--	.080"	.270"	N/A	.350"	E/D	E/D
1983	Chevrolet, Pontiac, Canada 1.6L Eng. Carb. Nos. R60008A, R60009A Carb. Nos. R-60047A Carb. Nos. R60098A, R6099A		1/2"	--	.090"	.280"	N/A	.275"	E/D	E/D
			1/2"	--	.120"	N/A	N/A	.350"	E/D	E/D
			1/2"	--	.080"	N/A	N/A	.275"	E/D	E/D
1984	Chevrolet, Pontiac, Canada 1.6L Eng. Carb. No. R60056A Carb. No. R60057A Carb. No. R60059A		1/2"	--	.110"	N/A	N/A	.300"	E/D	E/D
			1/2"	--	.110"	N/A	N/A	.350"	E/D	E/D
			1/2"	--	.120"	N/A	N/A	.350"	E/D	E/D
1984-85	Chevrolet, Pontiac, Canada 1.6L Eng. Carb. No. R60104A Carb. No. R60105A									
			1/2"	--	.090"	N/A	N/A	.275"	E/D	E/D
			1/2"	--	.100"	N/A	N/A	.350"	E/D	E/D

E/D = Engine Decal

N/A = Non Adjustable