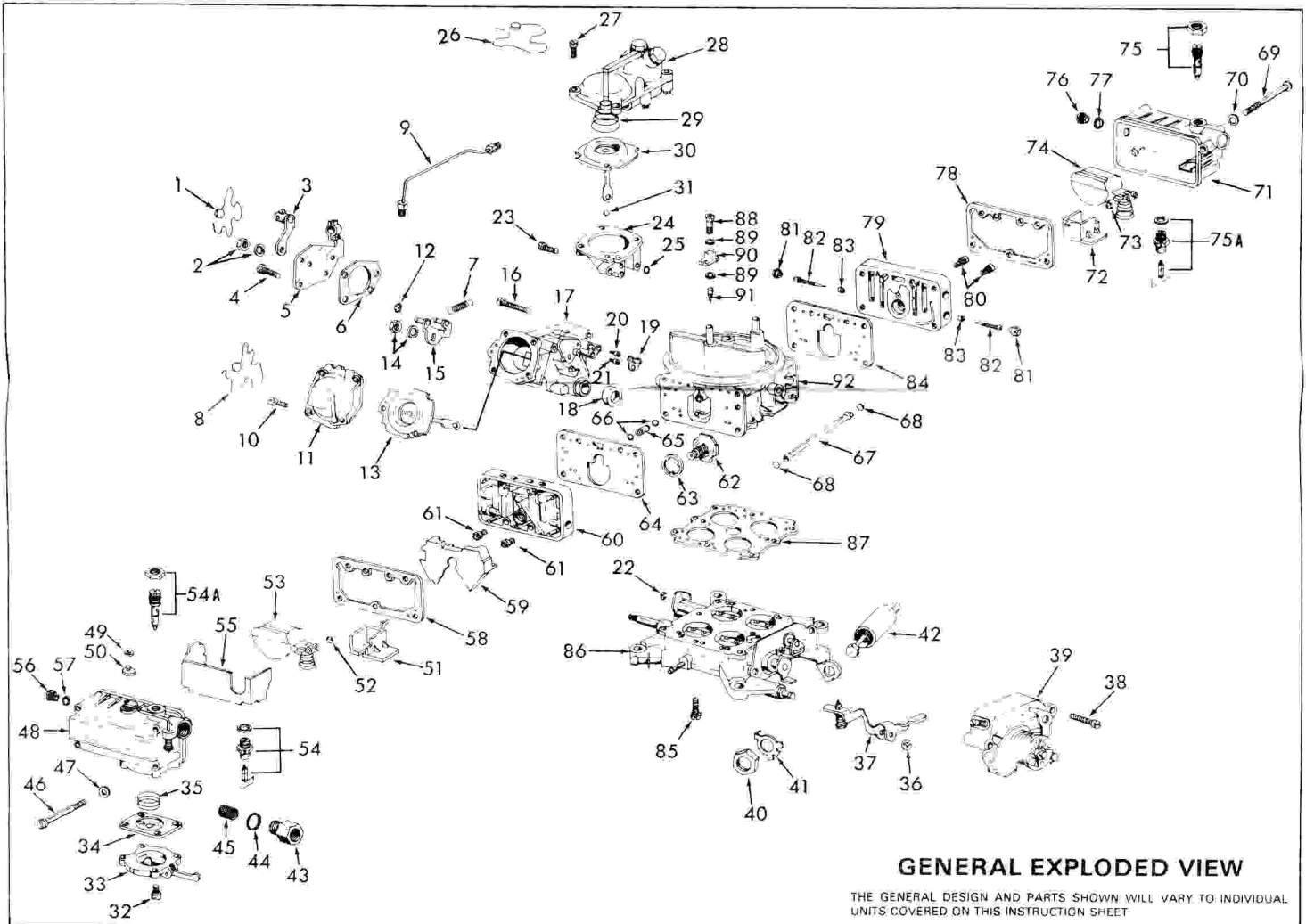


# INSTRUCTION SHEET OFF VEHICLE CARBURETOR SERVICE HOLLEY MODEL - 4150G

50-573-3



### 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:** ON SOME MODELS UNHOOK HEAVY SAFETY SPRING ON THROTTLE LEVER ASSEMBLY (39) FOR EASIER ACCESS TO SCREWS (38) HOLDING ASSEMBLY TO CARBURETOR. RECORD JET SIZES AND THEIR LOCATION FOR REASSEMBLY.

#### NOMENCLATURE

REF. NO.	DESCRIPTION	REF. NO.	DESCRIPTION
1	SEAL & WIRE— COVER	28	COVER & VALVE ASSY — SEC DIAPHRAGM
2	NUT & LOCKWASHER—LEVER	29	SPRING— SEC. DIAPHRAGM
3	LEVER— CHOKE	30	DIAPHRAGM— SECONDARY ( SOME MODELS )
4	SCREW & LOCKWASHER	31	BALL— SEC. DIAPHRAGM CHECK ( SOME MODELS )
5	COVER—GOVERNOR HOUSING	32	SCREW & LOCKWASHER (4)—COVER
6	GASKET — GOVERNOR HOUSING	33	COVER ASSY — PUMP
7	SPRING— GOVERNOR	34	DIAPHRAGM— PUMP
8	SEAL & WIRE— DIAPHRAGM COVER	35	SPRING— PUMP DIAPHRAGM
9	PIPE— GOV TO SEC. DIAPHRAGM COVER	36	E-CLIP — LEVER
10	SCREW & LOCKWASHER (4)— DIAPHRAGM COVER	37	LEVER ASSY — PUMP
11	COVER— GOV DIAPHRAGM	38	SCREW & LOCKWASHER (2)— THROTTLE OPERATING SHAFT HOUSING
12	E-CLIP— DIAPHRAGM STEM RETAINER	39	HOUSING ASSY.— THROTTLE OPERATING LEVER
13	DIAPHRAGM ASSEMBLY	40	NUT— SOLENOID
14	NUT & LOCKWASHER— GOV. LEVER	41	LOCKTAB WASHER— SOLENOID
15	LEVER— GOV.	42	SOLENOID— THROTTLE
16	SCREW & LOCKWASHER (3)— GOV HOUSING	43	FITTING— FUEL INLET
17	GOV HOUSING ASSEMBLY	44	GASKET— FITTING
18	SEAL— GOV HOUSING	45	SCREEN— FUEL INLET
19	GASKET— GOV HOUSING	46	SCREW (4)— PRI FUEL BOWL
20	JET "A"— GOV. HOUSING	47	GASKET (4)— PRI FUEL BOWL SCREW
21	JET "B"—GOV HOUSING	48	BOWL— PRI FUEL
22	E-CLIP— SEC DIAPH. STEM	49	RETAINER— VENT VALVE
23	SCREW & LOCKWASHER (3)— SEC DIAPH HOUSING	50	VALVE— VENT (SOME MODELS)
24	SECONDARY DIAPHRAGM HOUSING	51	BAFFLE PLATE
25	GASKET— SEC. DIAPH. HOUSING	52	E-CLIP - FLOAT
26	SEAL & WIRE— COVER		
27	SCREW & LOCKWASHER (4)— COVER		

REF. NO.	DESCRIPTION	REF. NO.	DESCRIPTION
53	FLOAT & SPRING ASSY - PRI	73	E-CLIP— FLOAT
54	NEEDLE & SEAT ASSY - PRI	74	FLOAT & SPRING ASSY - SEC
54A	NEEDLE & SEAT ASSY.—PRI ADJUSTABLE (SOME MODELS)	75	NEEDLE & SEAT ASSY— SEC. ADJUSTABLE (SOME MODELS)
55	BOWL FILLER— PRI ( SOME MODELS )	75A	NEEDLE & SEAT ASSY — SEC. ADJUSTABLE (SOME MODELS)
56	PLUG— FUEL LEVEL (SOME MODELS)	76	PLUG— FUEL LEVEL (SOME MODELS)
57	GASKET— PLUG ( SOME MODELS )	77	GASKET— PLUG ( SOME MODELS )
58	GASKET— PRI FUEL BOWL	78	GASKET— SEC FUEL BOWL
59	METER BODY FILLER— PRI ( SOME MODELS )	79	METERING BLOCK— SEC
60	METERING BLOCK— PRI	80	JET (2)— MAIN
61	JET (2)— PRI MAIN	81	CAP (2)— IDLE LIMITER
62	VALVE— ENRICHMENT	82	NEEDLE (2)— IDLE ADJUSTING
63	GASKET— ENRICHMENT VALVE	83	GASKET (2)— IDLE ADJ. NEEDLE
64	GASKET— PRI. METERING BLOCK	84	GASKET— SEC. METERING BODY
65	TUBE— PUMP TRANSFER	85	SCREW & LOCKWASHER (8)— THROTTLE BODY
66	O-RING (2)— TRANSFER TUBE	86	THROTTLE BODY ASSY
67	TUBE— FUEL LINE	87	GASKET— THROTTLE BODY
68	O-RING (2)— FUEL LINE TUBE	88	SCREW— PUMP DISCHARGE NOZZLE
69	SCREW (4)— SEC. FUEL BOWL	89	GASKET (2)— PUMP NOZZLE
70	GASKET (4)— SEC. FUEL BOWL SCREW	90	NOZZLE— PUMP DISC
71	BOWL— SEC. FUEL	91	NEEDLE— PUMP DISC
72	BAFFLE PLATE	92	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 SURE 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 FLOATS, SOLENOIDS OR PARTS CONTAINING RUBBER MATERIAL IN CLEANING SOLVENTS.**

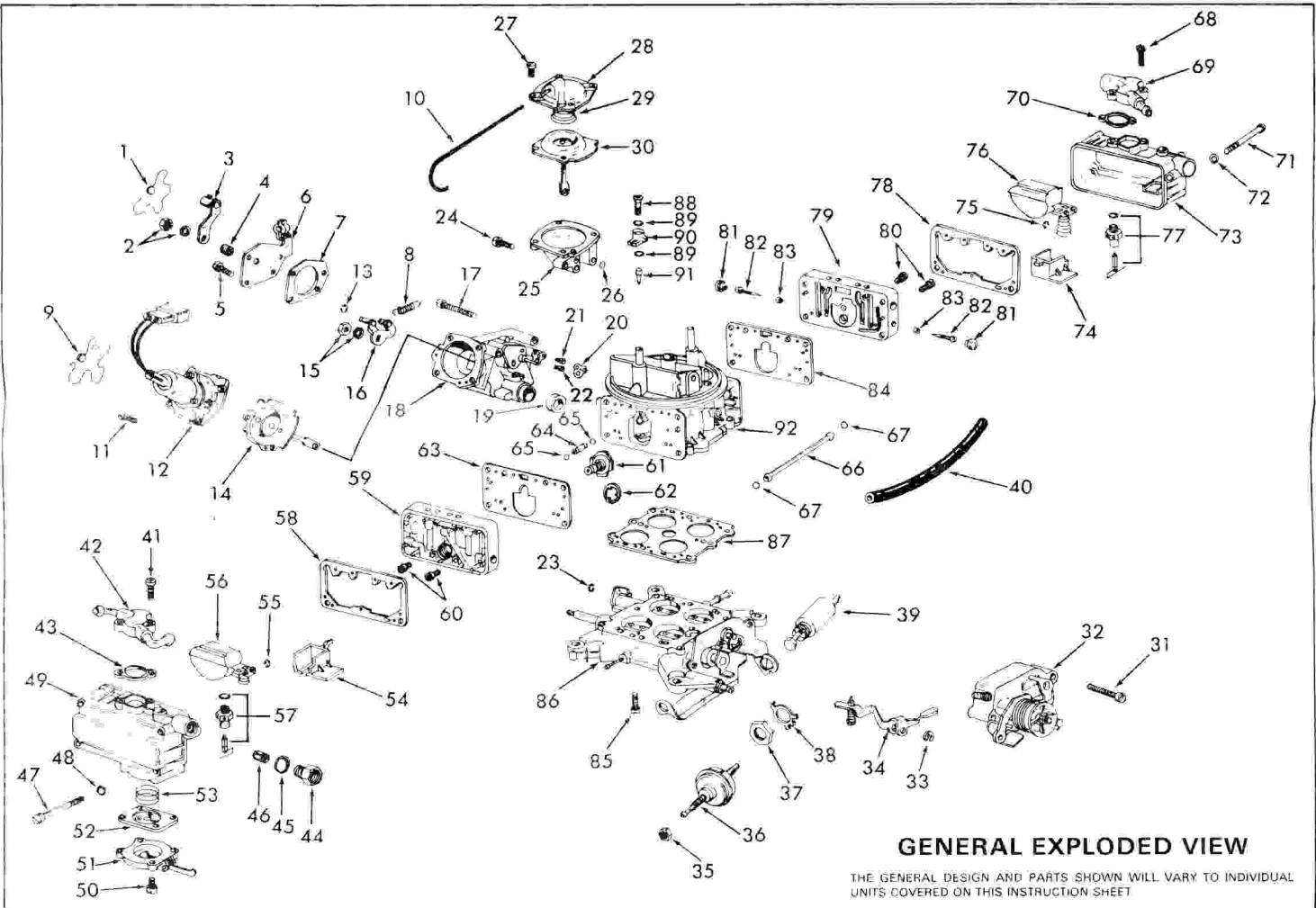
#### REASSEMBLE

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

# INSTRUCTION SHEET

## HOLLEY CARBURETOR MODEL 4150 EG

GM PRODUCTS



### 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: ON SOME MODELS UNHOOK HEAVY SAFETY SPRING ON THROTTLE LEVER ASSEMBLY (32) FOR EASIER ACCESS TO (31) HOLDING ASSEMBLY TO CARBURETOR. RECORD JET SIZES AND LOCATION FOR REASSEMBLY.

#### NOMENCLATURE

REF NO	DESCRIPTION	REF NO	DESCRIPTION
1	SEAL & WIRE—COVER (WHEN USED)	28	COVER—SEC. DIAPHRAGM
2	NUT & LOCKWASHER—LEVER	29	SPRING—SEC. DIAPHRAGM
3	LEVER—CHOKE	30	DIAPHRAGM—SECONDARY
4	SEAL—DUST	31	SCREW & LOCKWASHER (2)—THROTTLE OPERATING SHAFT HOUSING
5	SCREW & LOCKWASHER (4)—COVER	32	HOUSING ASSY—THROTTLE OPERATING LEVER
6	COVER—GOVERNOR HOUSING	33	E-CLIP—LEVER
7	GASKET—GOVERNOR COVER	34	LEVER ASSY—PUMP
8	SPRING—GOVERNOR	35	NUT—MODULATOR
9	SEAL & WIRE—DIAPHRAGM COVER (WHEN USED)	36	MODULATOR—THROTTLE
10	HOSE—GOV TO SEC. DIAPHRAGM COVER	37	NUT—SOLENOID
11	SCREW & LOCKWASHER (4)—DIAPHRAGM & SOLENOID COVER	38	LOCKTAB WASHER—SOLENOID
12	COVER ASSY—DIAPHRAGM & SOLENOID	39	SOLENOID—THROTTLE
13	E-CLIP—DIAPHRAGM STEM RETAINER	40	HOSE—VENT CROSS OVER
14	DIAPHRAGM ASSEMBLY	41	SCREW & LOCKWASHER (2)—PRI. VENT COVER
15	NUT & LOCKWASHER—GOV. LEVER	42	VENT COVER—PRIMARY
16	LEVER—GOVERNOR	43	GASKET—VENT COVER
17	SCREW & LOCKWASHER (3)—GOVERNOR HOUSING	44	FITTING—FUEL INLET
18	GOV. HOUSING ASSEMBLY	45	GASKET—FITTING
19	SEAL—GOV. HOUSING	46	SCREEN—FUEL INLET
20	GASKET—GOV. HOUSING	47	SCREW (4)—PRI. FUEL BOWL
21	JET "A"—GOV. HOUSING	48	GASKET (4)—PRI. FUEL BOWL SCREW
22	JET "B"—GOV. HOUSING	49	BOWL—PRI. FUEL
23	E-CLIP—SEC. DIAPHR. STEM	50	SCREW & LOCKWASHER (4)—COVER
24	SCREW & LOCKWASHER (3)—SEC. DIAPHR. HOUSING	51	COVER ASSY—PUMP DIAPHRAGM
25	SECONDARY DIAPHRAGM HOUSING	52	DIAPHRAGM ASSY—PUMP
26	GASKET—SEC. DIAPHR. HOUSING	53	SPRING—DIAPHRAGM
27	SCREW & LOCKWASHER (4)—COVER	54	BAFFLE PLATE
		55	E-CLIP—FLOAT
		56	FLOAT & SPRING ASSY—PRI.
		57	NEEDLE & SEAT ASSY—PRI.

#### NOMENCLATURE

REF NO	DESCRIPTION	REF NO	DESCRIPTION
58	GASKET—PRI. FUEL BOWL	76	FLOAT & SPRING ASSY—SEC.
59	METERING BLOCK—PRI.	77	NEEDLE & SEAT ASSY—SEC.
60	JET (2)—PRI. MAIN	78	GASKET—SEC. FUEL BOWL
61	VALVE—ENRICHMENT	79	METERING BLOCK—SEC.
62	GASKET—ENRICHMENT VALVE	80	JET (2)—SEC. MAIN
63	GASKET—PRI. METERING BLOCK	81	CAP (2)—IDLE LIMITER
64	TUBE—PUMP TRANSFER	82	NEEDLE (2)—IDLE ADJUSTING
65	O-RING (2)—TRANSFER TUBE	83	GASKET (2)—IDLE ADJUSTING NEEDLE
66	TUBE—FUEL LINE	84	GASKET—SEC. METERING BODY
67	O-RING (2)—FUEL LINE TUBE	85	SCREW & LOCKWASHER (8)—THROTTLE BODY
68	SCREW & LOCKWASHER (2)—SEC. VENT COVER	86	THROTTLE BODY ASSY
69	VENT COVER—SECONDARY	87	GASKET—THROTTLE BODY
70	GASKET—VENT COVER	88	SCREW—PUMP DISC NOZZLE
71	SCREW (4)—SEC. FUEL BOWL	89	GASKET (2)—PUMP NOZZLE
72	GASKET (4)—SEC. FUEL BOWL SCREW	90	NOZZLE—PUMP DISC
73	BOWL—SEC. FUEL	91	NEEDLE—PUMP DISC
74	BAFFLE PLATE	92	MAIN BODY ASSEMBLY
75	E-CLIP—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 SURE 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 FLOATS, SOLENOIDS, OR PARTS CONTAINING RUBBER MATERIAL IN CLEANING SOLVENT.

#### REASSEMBLE

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

# ADJUSTMENTS

## SPECIAL INSTRUCTIONS

SCREWS LISTED BELOW MUST BE TIGHTENED IN THREE STAGES CROSSWISE TO ARRIVE AT THE CORRECT TORQUE

THROTTLE BODY GASKET (87) MAKE SURE HOLES ARE PROPERLY MATCHED TO THROTTLE BODY TORQUE BODY SCREWS TO 60 INCH POUNDS

IDLE ADJUSTING NEEDLES (82) TURN IN UNTIL LIGHTLY SEATED, THEN BACK OUT ONE TURN (DO NOT INSTALL IDLE LIMITER CAPS AT THIS TIME)

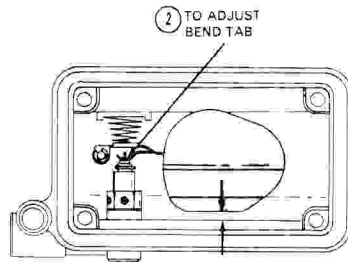
PRIMARY & SECONDARY FUEL BOWL (48)-(71) OR (49)-(73) BEFORE INSTALLING MAKE DRY FLOAT LEVEL ADJUSTMENT

BOWL SCREW INSTALLATION (46)-(69) OR (47)-(71) INSTALL GASKETS (47)-(70) OR (48)-(72) ON SCREWS BEFORE INSTALLING THEN TORQUE EVENLY IN STAGES TO 40 INCH POUNDS

FUEL LINE TUBE (67) OR (66) INSTALL O-RINGS (68) OR (67) ON THE EXTREME ENDS OF THE TUBE. THEY WILL ROLL ON THE TUBE WHEN INSTALLING THE FUEL BOWL

ENRICHMENT VALVE (51)-(62) INSTALLATION TORQUE TO 100 INCH POUNDS

GOVERNOR DIAPHRAGM (13) OR (14) - INSTALLATION SEE FIGURE 7

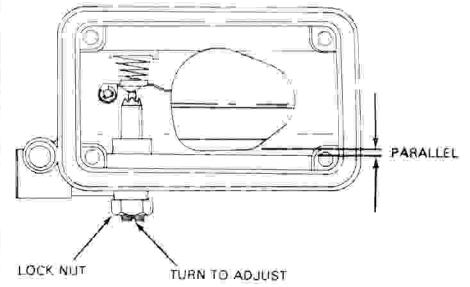


- 1 FUEL BOWL INVERTED. WEIGHT OF FLOAT RESTING ON SEATED NEEDLE. MEASURE DISTANCE BETWEEN FLOAT AND INSIDE SURFACE OF FUEL BOWL.
- 2 TO ADJUST BEND TAB

PRIMARY & SECONDARY  
FLOAT LEVEL  
INTERNAL NEEDLE & SEAT

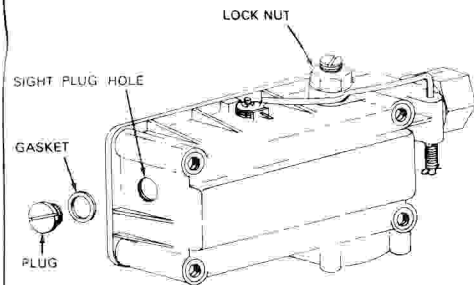
FIG 1

FLOAT BOWL INVERTED. TURN NEEDLE SEAT ASSEMBLY UNTIL FLOAT SURFACE IS PARALLEL WITH THE SURFACE DIRECTLY BELOW THE FLOAT. TIGHTEN LOCK NUT



PRIMARY & SECONDARY  
DRY FLOAT LEVEL  
ADJUSTABLE NEEDLE & SEAT

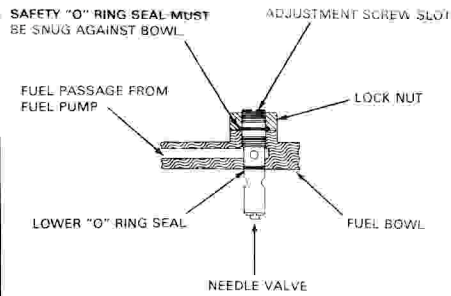
FIG 2



- 1 VEHICLE SITTING ON LEVEL SURFACE AND ENGINE RUNNING
- 2 REMOVE SIGHT LEVEL PLUG FROM HOLE
- 3 ADJUST NEEDLE SEAT ASSEMBLY SO FUEL WILL BE AT BOTTOM EDGE OF SIGHT PLUG HOLE (1/32" TOLERANCE)
- 4 TIGHTEN LOCK NUT

WET FLOAT LEVEL  
ADJUSTABLE NEEDLE & SEAT

FIG 3



SAFETY "O" RING SEAL MUST BE SNUG AGAINST BOWL

ADJUSTMENT SCREW SLOT

FUEL PASSAGE FROM FUEL PUMP

LOWER "O" RING SEAL

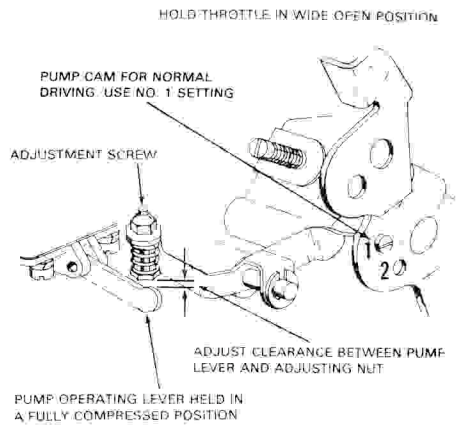
NEEDLE VALVE

FUEL BOWL

LOCK NUT

SAFETY SEAL ADJUSTABLE FUEL VALVE

FIG 4



HOLD THROTTLE IN WIDE OPEN POSITION

PUMP CAM FOR NORMAL DRIVING. USE NO. 1 SETTING

ADJUSTMENT SCREW

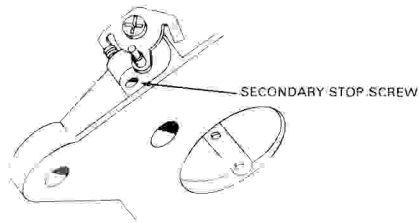
ADJUST CLEARANCE BETWEEN PUMP LEVER AND ADJUSTING NUT

PUMP OPERATING LEVER HELD IN A FULLY COMPRESSED POSITION

PUMP ADJUSTMENT

FIG 5

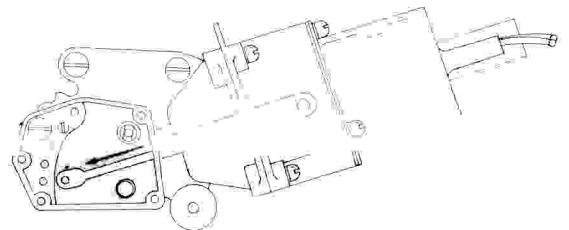
SECONDARY THROTTLE STOP SCREW, BACK OUT UNTIL SECONDARY PLATES ARE CLOSED. TURN SCREW IN UNTIL IT CONTACTS STOP. THEN TURN SCREW IN 1/2 TURN MORE



SECONDARY THROTTLE STOP ADJUSTMENT

FIG 6

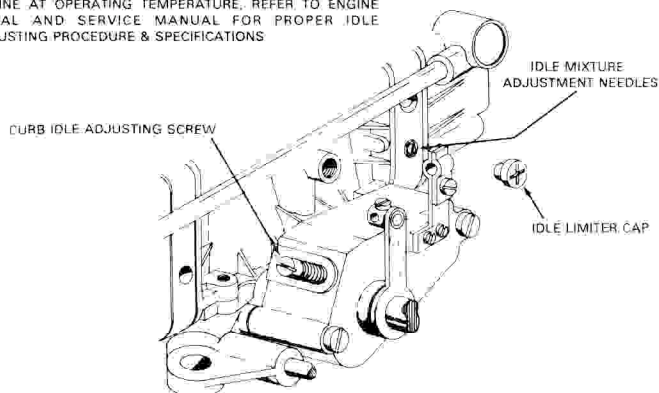
INSTALL COVER WITH THE SCREWS FINGER TIGHT. PULL THE DIAPHRAGM ROD AS FAR AS IT WILL GO AND THEN TIGHTEN SCREWS EVENLY WHILE MAINTAINING DIAPHRAGM STRETCHED IN THIS POSITION.



GOVERNOR DIAPHRAGM INSTALLATION

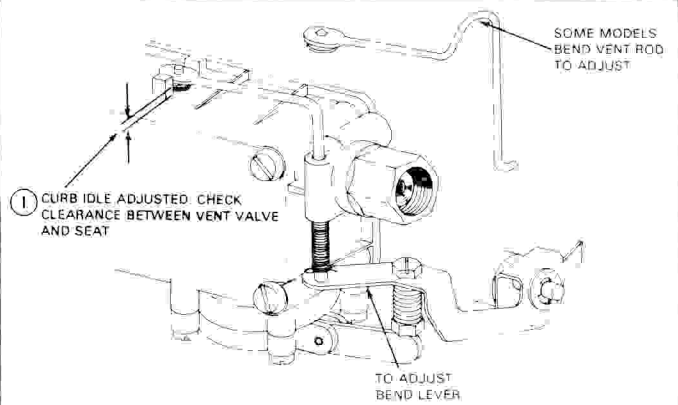
FIG 7

ENGINE AT OPERATING TEMPERATURE. REFER TO ENGINE DECAL AND SERVICE MANUAL FOR PROPER IDLE ADJUSTING PROCEDURE & SPECIFICATIONS



SLOW IDLE ADJUSTMENT

FIG 8



(ON TRUCK)  
VENT VALVE ADJUSTMENT

FIG 9

### ADJUSTMENT DATA TABLE

YEAR	APPLICATION	PRIMARY FLOAT LEVEL	SECONDARY FLOAT LEVEL	PUMP CAM POSITION	VENT VALVE AT ENG. IDLE	GOVERNOR SPRING POST
1975	G.M. PRODUCTS 366", 427" ENG. Carb. No. R6928A, R6929A	3/16" 3/16"	5/32" 5/32"	No. 1 No. 1	.045-.075 .045-.075	2 3
1976-77	G.M. PRODUCTS 366", 427" ENG. CALIF. 427" ENG.	3/16" 3/16"	7/32" 7/32"	No. 1 No. 2	.045-.075 ---	2 2
1978-85	CHEV. & GMC TRUCK 366", 427" ENG. Carb. No. R7923A, R7924A, R7925A, R7926A, R7927A, R7928A	*	*	No. 1	.045-.075	No. 4
1979	CHEVROLET & GMC TRUCK 366", 427" ENG. Carb. No. R8278A, R8279A, R8280A, R8281A, R8282A, R8283A	3/16"	7/32"	No. 1	.045-.075	---
1979	GMC TRUCK 454" ENG. Carb. No. R8443A, R8444A	3/16"	7/32"	No. 1	.045-.075	---
1980-85	GMC TRUCK 366" ENG. Carb. No. R8848A, R8849A, R8850A, R8851A 427" ENG. Carb. No. R8852A, R8853A, R8854A, R8855A, R8894A 454" ENG. R8856A, R8857A	* * *	* * *	--- --- ---	--- --- ---	--- --- ---
1982-85	CHEVROLET & GMC TRUCK 366", 427" ENG. R-9714A, R-9715A, R-9716A, R-9717A	3/16"	7/32"	No. 1	---	No.4
1969-80	IHC TRUCK 392" ENG. Carb. No. R4323A, -1A, -2A, -3A, -4A Carb. No. R4323-5A, 6A Carb. No. R4324A, -1A, -2A, -3A, -4A, -5A Carb. No. R4324-6A, -7A Carb. No. R6803A, 1A, 2A, 3A Carb. No. R7028A, R7579A Carb. No. R8105A, R8737A Carb. No. R8233A, 1A, R8243A, R9021A 404" ENG. Carb. No. R7215A Carb. No. R8246A, 8922A 446" ENG. Carb. No. R7251A Carb. No. R7997A, R8247A Carb. No. R8740A, R8923A 537" ENG. Carb. No. R-6974A Carb. No. R8139A, R8924A	* *	* *	2 2 2 2 2 2 --- 2 2 2 2 --- 2 2 2 2 --- 2 2 2 2 2 2 2	--- ---	2 1 2 1 1 3 --- 2 2 3 2 --- 3 2 --- 3 2 3 3

\* ADJUST FLOAT SO IT IS PARALLEL WITH SURFACE OF BOWL.

REV. 10/85