

INSTRUCTION SHEET

OFF VEHICLE CARBURETOR SERVICE

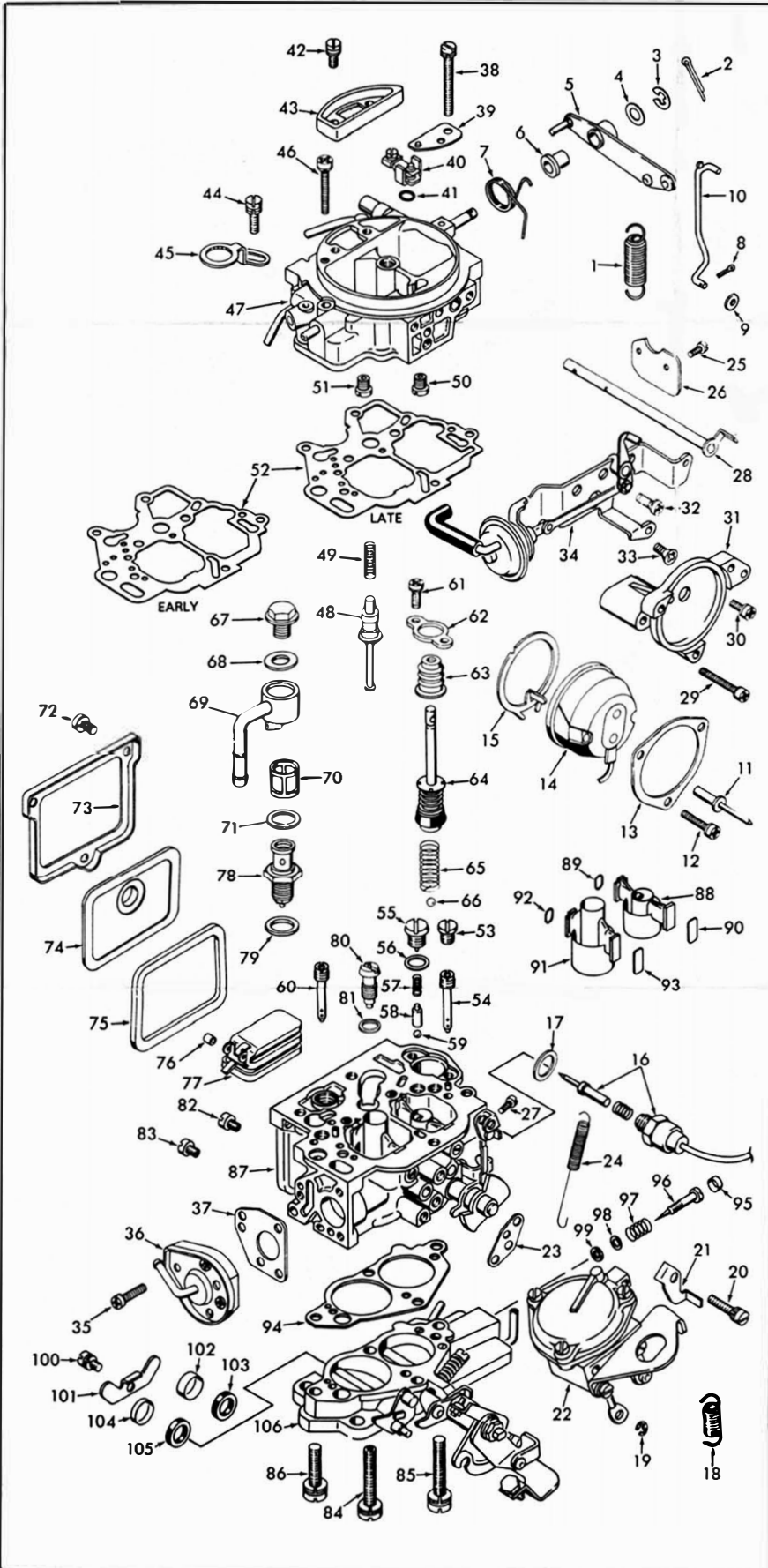
HITACHI-MODEL DCR384

50-677-1

1984-85 Z24 ENGINE

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. CAUTION: ORIGINALLY CHOKE VALVE SCREWS AND SOME OTHERS HAVE LOCK TIGHT APPLIED TO THEM. TAKE EXTRA CARE IN REMOVING THEM. USE PROPER TOOLS. DRILL OR CUT OFF POP RIVET HEADS TO REMOVE CHOKE COVER. ONLY REMOVE 3 LONGEST SCREWS WHEN REMOVING BY PASS AIR CONTROL VALVE ASSEMBLY. REMOVE STAKING FROM AIR HORN FOR EASY REMOVAL OF POWER PISTON ASSEMBLY. NOTE SIGNS OF ALL JETS AND THEIR LOCATION FOR PROPER ASSEMBLY. RECORD SIZES BELOW. CAREFULLY DRILL HOLE IN PLUG COVERING IDLE ADJUSTING NEEDLE. USING A PULLER REMOVE PLUG. BEFORE REMOVING IDLE ADJUSTING NEEDLE, TURN IN COUNTING THE NUMBER OF TURNS IT TAKES TO LIGHTLY SEAT THE NEEDLE. RECORD FOR ASSEMBLY.

NOTE: IF VENTURIS ARE REMOVED TO REPLACE O-RING SEALS, LIGHTLY TAP VENTURI FROM THE BOTTOM SIDE UNTIL IT IS FREE. (REMOVE STAKING ON O-RING SIDE OF VENTURI IF NECESSARY.) INSTALL NEW O-RING AND VENTURI FIRMLY IN PLACE, THEN TAP IN SPRING RETAINER. BE SURE VENTURI IS FIRMLY IN PLACE. LIGHTLY RESTAKE VENTURI ON O-RING SIDE.

CAUTION: DO NOT TURN THE TWO SCREW LIKE PLUGS LOCATED IN THROTTLE BODY HOUSING. (PRIMARY SIDE.)

NOMENCLATURE

REF. NO.	REF. NO.
1. SPRING-THROTTLE RETURN (PUMP LEVER)	49. SPRING-POWER PISTON
2. COTTER PIN-PUMP LEVER	50. JET-PRI. MAIN AIR BLEED
3. E-CLIP-PUMP LEVER	51. JET-SEC. MAIN AIR BLEED
4. WASHER-PUMP LEVER	52. GASKET-AIR HORN
5. LEVER-PUMP	53. PLUG-PRI. SLOW JET
6. BUSHING-PUMP LEVER	54. JET-PRI. SLOW
7. SPRING-LEVER RETURN	55. PLUG-PUMP CHECK
8. COTTER PIN-PUMP ROD	56. GASKET-PLUG
9. WASHER-PUMP ROD	57. SPRING-PUMP BALL WEIGHT
10. ROD-PUMP	58. WEIGHT-PUMP BALL
11. POP RIVET (2)-CHOKE RETAINER	59. BALL-PUMP DISC CHECK
12. SCREW & LOCKWASHER-CHOKE RETAINER	60. JET-SECONDARY SLOW
13. RETAINER-CHOKE COVER	61. SCREW & LOCKWASHER (2)-PUMP BOOT PLATE
14. CHOKE COVER ASSY. (ELECTRIC)	62. PLATE-BOOT
15. PLATE-STOPPER	63. BOOT-PUMP
16. SOLENOID ASSEMBLY (ANTI-DIESELING)	64. PUMP ASSEMBLY
17. GASKET-SOLENOID	65. SPRING-PUMP RETURN
18. SPRING-THROTTLE RETURN	66. BALL-PUMP INTAKE CHECK
19. E-CLIP-SEC. DIAPHRAGM STEM	67. SCREW-FILTER SET
20. SCREW & LOCKWASHER (3)-SEC. DIAPHRAGM ASSY.	68. GASKET-SCREW
21. STOP PLATE-FAST IDLE CAM	69. NIPPLE-FUEL
22. SECONDARY DIAPHRAGM ASSY.	70. SCREEN-FUEL FILTER
23. GASKET-SEC. DIAPHRAGM ASSY.	71. GASKET-NIPPLE
24. SPRING-SEC. THROTTLE RETURN	72. SCREW (3)-CLAMP
25. SCREW (3)-CHOKE VALVE	73. CLAMP-WINDOW
26. VALVE-CHOKE	74. WINDOW-FUEL BOWL
27. SCREW & LOCKWASHER-FAST IDLE LINK LEVER	75. GASKET-WINDOW
28. CHOKE SHAFT	76. SLEEVE-FLOAT RETAINER
29. SCREW & LOCKWASHER-CHOKE HOUSING	77. FLOAT ASSEMBLY
30. SCREW & LOCKWASHER-CHOKE HOUSING	78. NEEDLE & SEAT ASSEMBLY
31. CHOKE HOUSING	79. GASKET (SERVICE)-NEEDLE SEAT
32. SCREW & LOCKWASHER-CHOKE PULL OFF BRACKET	80. POWER VALVE ASSEMBLY
33. SCREW-CHOKE PULL OFF BRACKET	81. GASKET-POWER VALVE
34. CHOKE PULL OFF & BRACKET ASSY.	82. JET-PRI. MAIN
35. SCREW & LOCKWASHER (3)-BY PASS VALVE	83. JET-SEC. MAIN
36. BY PASS AIR CONTROL VALVE ASSEMBLY	84. SCREW & LOCKWASHER (1) THROTTLE BODY (HOLLOW)
37. GASKET-BY PASS VALVE	85. SCREW & LOCKWASHER (1)-THROTTLE BODY (LONG)
38. SCREW & LOCKWASHER-RETAINER IDLE COMPENSATOR	86. SCREW & LOCKWASHER (2)-THROTTLE BODY
39. RETAINER-IDLE COMPENSATOR	87. BOWL ASSEMBLY
40. IDLE COMPENSATOR VALVE ASSY.	88. VENTURI PRIMARY
41. O-RING-IDLE COMP. SEAL	89. O-RING-PRI. VENTURI SEAL
42. SCREW & LOCKWASHER (2) AIR VENT COVER	90. RETAINER-PRI. VENTURI
43. AIR VENT COVER	91. VENTURI-SECONDARY
44. SCREW & WASHERS-LOCK LEVER	92. O-RING-SEC. VENTURI SEAL
45. LOCK LEVER-FILTER SET SCREW	93. RETAINER-SEC. VENTURI
46. SCREW & LOCKWASHER (3)-AIR HORN ASSY (3 DIFF. LENGTHS)	94. GASKET-THROTTLE BODY
47. AIR HORN ASSEMBLY	95. PLUG-IDLE NEEDLE
48. PISTON-POWER VALVE	96. NEEDLE-IDLE ADJUSTING
	97. SPRING-IDLE NEEDLE
	98. WASHER-NEEDLE SEAL
	99. SEAL-IDLE ADJUSTING NEEDLE
	100. SCREW & LOCKWASHER-RETAINER
	101. RETAINER-THROTTLE SHAFT SEALS
	102. CUP-PRI. SHAFT SEAL
	103. SEAL-PRI. SHAFT
	104. CUP-SEC. SHAFT SEAL
	105. SEAL-SEC. SHAFT
	106. THROTTLE BODY ASSEMBLY

CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. CAUTION: DO NOT EXTEND CLEANING PERIOD OF PARTS WITH ATTACHED PLASTIC COMPONENTS. 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. DO NOT SOAK PARTS SUCH AS 14, 16, 22, 34, 36, 40, 70, 74, 77 OR RUBBER PARTS IN ANY TYPE OF CLEANING SOLVENTS.

REASSEMBLY

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

SPECIAL INSTRUCTIONS

IDLE ADJUSTING NEEDLE-TURN NEEDLE IN UNTIL LIGHTLY SEATED THEN BACK OUT NUMBER OF TURNS RECORDED ON DISASSEMBLY.

PUMP RETURN SPRING-INSTALL WITH CROSS WIRE TO THE BOTTOM OF PUMP CYLINDER AND IN SLOT.

POWER PISTON-AFTER INSTALLATION LIGHTLY RESTAKE CASTING AROUND WASHER.

INSTRUCTION SHEET

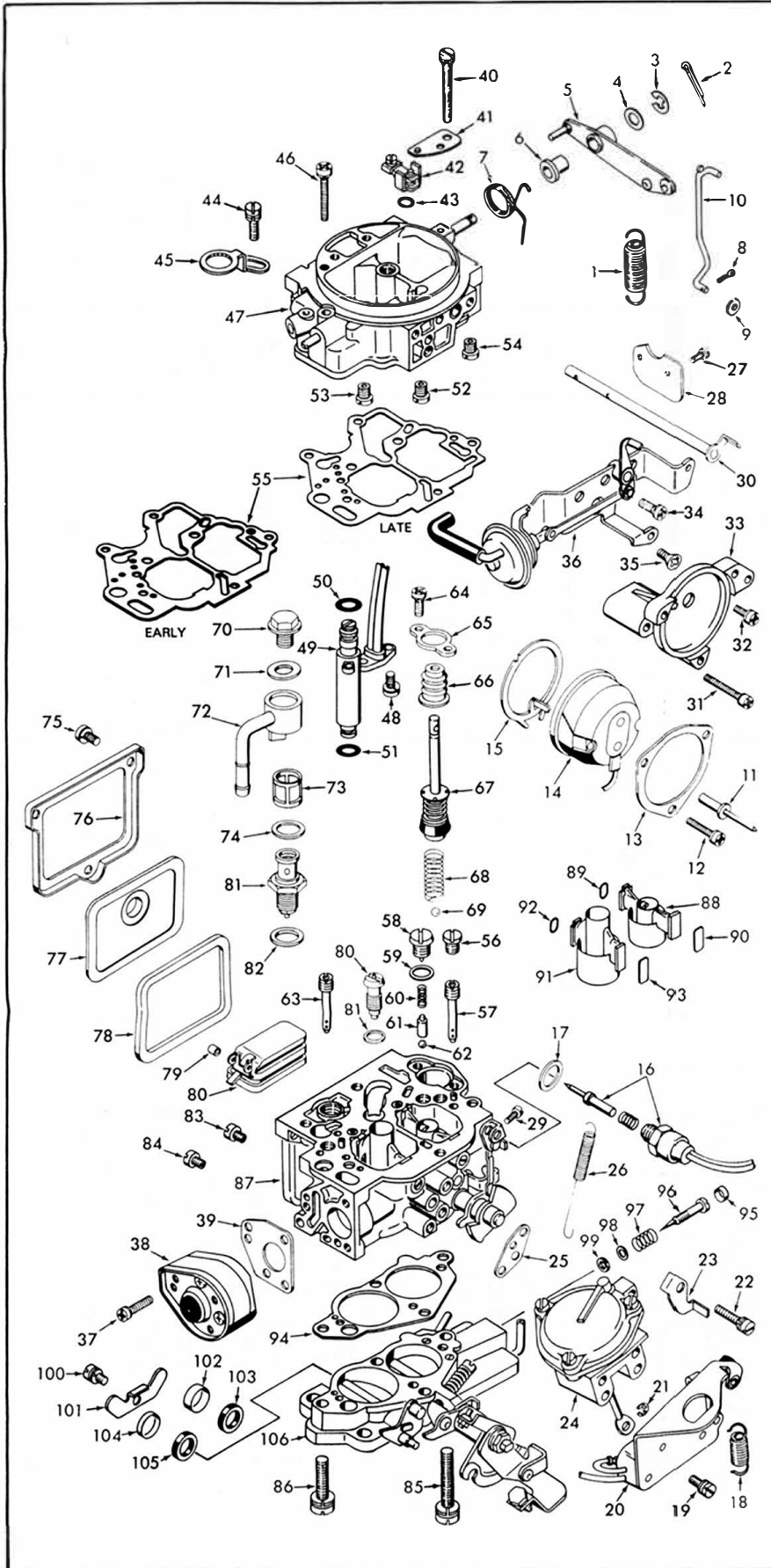
OFF VEHICLE CARBURETOR SERVICE

HITACHI MODEL DFP384

1984-86 Z24 ENGINE
(AIR FUEL RATIO SOLENOID)

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. REMOVE WIRES FROM CARBURETOR HARNESS CONNECTOR WHERE NECESSARY. USING PROPER TOOL AND IDENTIFY WIRE LOCATION FOR PROPER REASSEMBLY. CAUTION: ORIGINALLY CHOKE VALVE SCREWS AND SOME OTHERS HAVE LOCKTIGHT APPLIED TO THEM. TAKE EXTRA CARE IN REMOVING THEM. USE PROPER TOOLS. DRILL OR CUT OFF POP RIVET HEADS TO REMOVE CHOKE COVER. ONLY REMOVE 3 LONGEST SCREWS WHEN REMOVING BY PASS AIR CONTROL VALVE ASSEMBLY. NOTE SIZES OF ALL JETS AND THEIR LOCATION FOR PROPER ASSEMBLY. RECORD SIZES BELOW. CAREFULLY DRILL HOLE IN PLUG COVERING IDLE ADJUSTING NEEDLE. USING A PULLER REMOVE PLUG. BEFORE REMOVING IDLE ADJUSTING NEEDLE, TURN IN COUNTING THE NUMBER OF TURNS IT TAKES TO LIGHTLY SEAT THE NEEDLE. RECORD FOR ASSEMBLY.

NOTE: IF VENTURIS ARE REMOVED TO REPLACE O-RING SEALS, LIGHTLY TAP VENTURI FROM THE BOTTOM SIDE UNTIL IT IS FREE. (REMOVE STAKING ON O-RING SIDE OF VENTURI IF NECESSARY.) INSTALL NEW O-RING AND VENTURI FIRMLY IN PLACE, THEN TAP IN SPRING RETAINER. BE SURE VENTURI IS FIRMLY IN PLACE. LIGHTLY RESTAKE VENTURI ON O-RING SIDE.

CAUTION: DO NOT TURN THE TWO SCREW LIKE PLUGS LOCATED IN THROTTLE BODY HOUSING. (PRIMARY SIDE.)

NOMENCLATURE

REF. NO.	REF. NO.
1. SPRING-THROTTLE RETURN (PUMP LEVER)	48. SCREW & LOCKWASHER (3)-SOLENOID
2. COTTER PIN-PUMP LEVER	49. SOLENOID ASSY.-AIR FUEL RATIO
3. E-CLIP-PUMP LEVER	50. O-RING (UPPER)-SOLENOID
4. WASHER-PUMP LEVER	51. O-RING (LOWER)-SOLENOID
5. LEVER-PUMP	52. JET-PRI. MAIN AIR BLEED
6. BUSHING-PUMP LEVER	53. JET-SEC. MAIN AIR BLEED
7. SPRING-LEVER RETURN	54. JET-IDLE AIR BLEED
8. COTTER PIN-PUMP ROD	55. GASKET-AIR HORN
9. WASHER-PUMP ROD	56. PLUG-PRI. SLOW JET
10. ROD-PUMP	57. JET-PRI. SLOW
11. POP RIVET (2)-CHOKE RETAINER	58. PLUG-PUMP CHECK
12. SCREW & LOCKWASHER -CHOKE RETAINER	59. GASKET-PLUG
13. RETAINER-CHOKE COVER	60. SPRING-PUMP BALL WEIGHT
14. CHOKE COVER ASSY. (ELECTRIC)	61. WEIGHT-PUMP BALL
15. PLATE-STOPPER	62. BALL-PUMP DISC CHECK
16. SOLENOID ASSEMBLY (ANTI-DIESELING)	63. JET-SECONDARY SLOW
17. GASKET-SOLENOID	64. SCREW & LOCKWASHER (2)-PUMP BOOT PLATE
18. SPRING-THROTTLE RETURN	65. PLATE-BOOT
19. SCREW & LOCKWASHER (2)-SWITCH BRACKET	66. BOOT-PUMP
20. BRACKET & SWITCH ASSEMBLY	67. PUMP ASSEMBLY
21. E-CLIP-SEC. DIAPHRAGM STEM	68. SPRING-PUMP RETURN
22. SCREW & LOCKWASHER (3)-SEC. DIAPHRAGM ASSEMBLY	69. BALL-PUMP INTAKE CHECK
23. STOP PLATE-FAST IDLE CAM	70. SCREW-FILTER SET
24. SECONDARY DIAPHRAGM ASSEMBLY	71. GASKET-SCREW
25. GASKET-SEC. DIAPHRAGM ASSEMBLY	72. NIPPLE-FUEL
26. SPRING-SEC. THROTTLE RETURN	73. SCREEN-FUEL FILTER
27. SCREW (2)-CHOKE VALVE	74. GASKET-NIPPLE
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38. BY PASS AIR CONTROL VALVE ASSEMBLY	85. SCREW & LOCKWASHER (2)-THROTTLE BODY (LONG)
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41. RETAINER-IDLE COMPENSATOR	88. VENTURI-PRIMARY
42. IDLE COMPENSATOR VALVE ASSEMBLY	89. O-RING-PRI VENTURI SEAL
43. O-RING-IDLE COMPENSATOR SEAL	90. RETAINER-PRI VENTURI
44. SCREW & WASHERS-LOCK LEVER	91. VENTURI-SECONDARY
45. LOCK LEVER-FILTER SET SCREW	92. O-RING-SEC. VENTURI SEAL
46. SCREW & LOCKWASHER (3)-AIR HORN ASSY. (3 DIFF. LENGTHS)	93. RETAINER-SEC. VENTURI
47. AIR HORN ASSEMBLY	94. GASKET-THROTTLE BODY
	95. PLUG-IDLE NEEDLE
	96. NEEDLE-IDLE ADJUSTING
	97. SPRING-IDLE NEEDLE
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REASSEMBLY

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

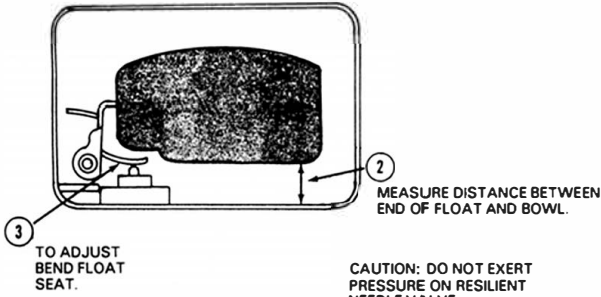
SPECIAL INSTRUCTIONS

IDLE ADJUSTING NEEDLE-TURN NEEDLE IN UNTIL LIGHTLY SEATED THEN BACK OUT NUMBER OF TURNS RECORDED ON DISASSEMBLY.

PUMP RETURN SPRING-INSTALL WITH CROSS WIRE TO THE BOTTOM OF PUMP CYLINDER AND IN SLOT.

ADJUSTMENTS

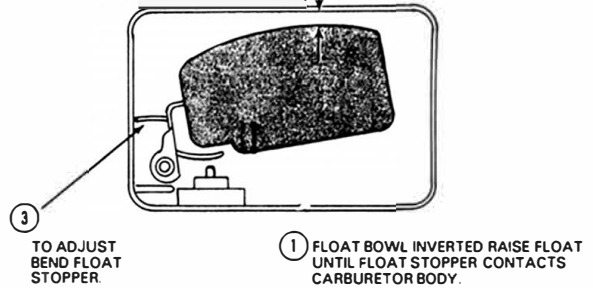
- ① FLOAT BOWL INVERTED, RAISE FLOAT AND THEN LOWER IT SLOWLY UNTIL FLOAT SEAT MAKES CONTACT WITH STEM OF NEEDLE VALVE (DO NOT COMPRESS SPRING LOADED NEEDLE)



DRY FLOAT LEVEL ADJUSTMENT

FIG. 1

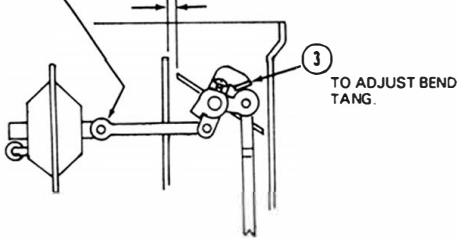
- ② MEASURE DISTANCE BETWEEN FLOAT AND CARBURETOR BODY



FLOAT DROP ADJUSTMENT

FIG. 2

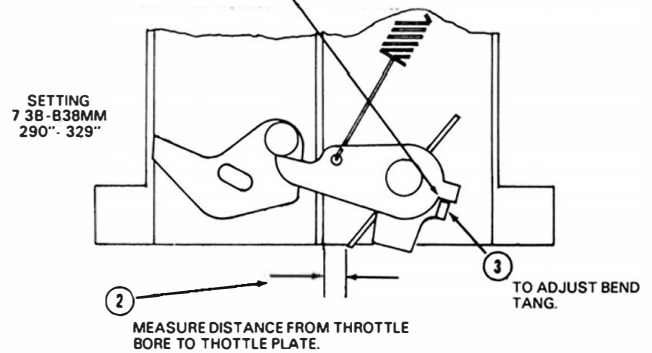
- ① PRESS IN ON END OF PLUNGER STEM UNTIL DIAPHRAGM IS SEATED.
- ② CHOKE HELD TOWARD CLOSED POSITION. MEASURE DISTANCE BETWEEN UPPER EDGE OF CHOKE VALVE AND AIR HORN WALL.



VACUUM BREAK ADJUSTMENT

FIG. 3

- ① OPEN PRIMARY THROTTLE LEVER UNTIL KICK LEVER JUST MAKES CONTACT WITH SECONDARY RETURN LEVER

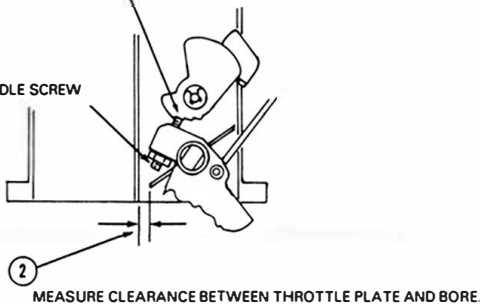


SECONDARY THROTTLE START TO OPEN ADJUSTMENT

FIG. 4

- ① PLACE FAST IDLE SCREW ON 2ND. STEP OF CAM.

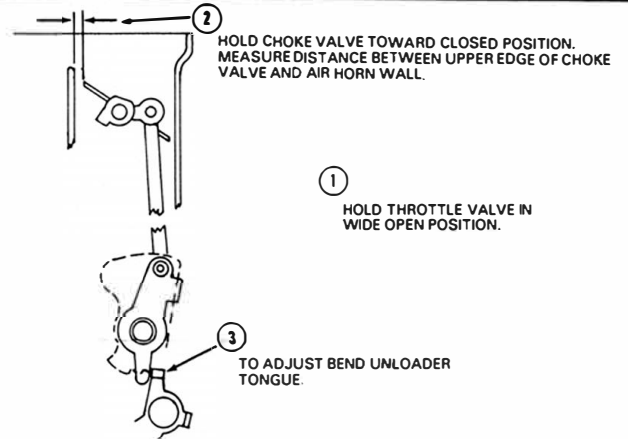
- ③ TO ADJUST TURN FAST IDLE SCREW



FAST IDLE ADJUSTMENT (BENCH)

FIG. 5

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



UNLOADER ADJUSTMENT

FIG. 6

ADJUSTMENT DATA TABLE

APPLICATION	FLOAT LEVEL	FLOAT DROP	VACUUM BREAK	FAST IDLE BENCH	UNLOADER ADJUSTING	
1984 NISSAN Z24 ENG 49 STATES	M/T	7.5MM .295"	2.3-2.7MM .093"-1.09"	2.45-3.05MM .096"-1.20"	71-85MM 028"-033"	2.05-2.85MM 081"-112"
	A/T	7.5MM .295"	2.3-2.7MM .093"-1.09"	2.45-3.05MM .096"-1.20"	87-1.01MM 034"-039"	2.05-2.85MM 081"-112"
		7.5MM .295"	2.3-2.7MM .093"-1.09"	3.10-3.70MM 122"-145"	71-85MM 028"-033"	2.05-2.85MM 081"-112"
CALIFORNIA	M/T	7.5MM .295"	2.3-2.7MM .093"-1.09"	3.10-3.70MM 122"-145"	71-85MM 028"-033"	2.05-2.85MM 081"-112"
	A/T	7.5MM .295"	2.3-2.7MM .093"-1.09"	3.10-3.70MM 122"-145"	87-1.01MM 034"-039"	2.05-2.85MM 081"-112"
CANADA	2WD	7.5MM .295"	2.3-2.7MM .093"-1.09"	2.32-2.92MM 091"-1.15"	71-85MM 028"-033"	2.05-2.85MM 081"-112"
CANADA	4WD & H/D	7.5MM .295"	2.3-2.7MM .093"-1.09"	2.45-3.05MM .096"-1.20"	71-85MM 028"-033"	2.05-2.85MM 081"-112"

APPLICATION	FLOAT LEVEL	FLOAT DROP	VACUUM BREAK	FAST IDLE BENCH	UNLOADER ADJUSTING	
1985 NISSAN Z24 ENG. U.S.A.	M/T	7.5MM .295"	2.3-2.7MM .093"-1.09"	3.40+/- .30MM .134"+/- .012"	.78MM .030"	2.45MM .100"
	A/T	7.5MM .295"	2.3-2.7MM .093"-1.09"	3.40+/- .30MM .134"+/- .012"	.94MM .037"	2.45MM .100"
		7.5MM .295"	2.3-2.7MM .093"-1.09"	2.62+/- .30MM .103"+/- .012"	.78MM .030"	2.45MM .100"
CANADA 2WD	M/T	7.5MM .295"	2.3-2.7MM .093"-1.09"	2.62+/- .30MM .103"+/- .012"	.78MM .030"	2.45MM .100"
	A/T	7.5MM .295"	2.3-2.7MM .093"-1.09"	2.62+/- .30MM .103"+/- .012"	.94MM .037"	2.45MM .100"
CANADA	4WD	7.5MM .295"	2.3-2.7MM .093"-1.09"	2.75+/- .30MM 108"+/- .012"	.78MM .030"	2.45MM .100"
	& H/D	7.5MM .295"	2.3-2.7MM .093"-1.09"	2.75+/- .30MM 108"+/- .012"	.78MM .030"	2.45MM .100"