# FUEL SYSTEM

# SERVICE INSTRUCTION WORKSHEET

# TO REPAIR

GF4357-8

HITACHI CARBURETOR

2 BARREL--Models DCH340; DCR342, 384; DFP 384

1. Carefully read the text in the following pages to become familiar with the contents of this worksheet <u>before</u> performing carburetor overhaul.

The exploded view is typical of the model carburetor this kit will service. The view may differ slightly from the actual carburetor being overhauled.

Use the exploded view as a guide. The numerical sequence of the parts list may generally be followed to disassemble the carburetor far enough to permit cleaning and inspection.

Parts list shown DOES NOT reflect the contents of the kit.

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5. Kit may contain extra parts intended for other carburetors within this group. Substitute identical replacement parts for original worn parts found in carburetor.

CLEANING

Cleaning must be done with carburetor disassembled. Use spray cleaner and a stiff bristle brush to remove dirt and carbon deposits. Do not use abrasives and wires to clean parts and passageways. Wash off in suitable solvent, and clear all passageways with compressed air. Caution: When cleaning with solvent do not soak or spray parts containing rubber, leather, plastic and electrical components.

#### PARTS LIST (Fig. 1)

Spring, throttle return Spring, secondary return Spring, throttle return Screw, pump lever Pump lever

Pump lever parts
Screw, compensator cover (2)
Idle compensator valve assembly

Pop rivet, cover retainer (2) Screw, cover retainer

Screw, cover retainer
Thermostatic coll & cover assembly
Screw, choke valve (2)
Choke valve & shaft assembly
Screw, choke housing (2)
Choke housing & thermo. unit
Screw, pull-off bracket

Choke pull-off & bracket assembly

Vacuum dashpot assembly 19.

Retainer, secondary diaphragm 20.

Screw, cam stop Fast idle cam stop

Screw, secondary diaphragm (2) Secondary throttle diaphragm assembly Gasket, secondary diaprhagm

24. 25. Throttle switch assembly

26. Screw & lock bracket

Screw & lock bracket
Screw, air horn (4 different lengths)
Gasket, air horn
Power piston assembly
Jet, slow air bleed
Jet, primary main air bleed
Jet, secondary main air bleed
Air horn assembly
Bolt & washer, banjo fitting
Banjo fitting & washer, fuel inlet
Screen, fuel filter
Screw, retainer (3) 27.

29.

36. 37. 38.

Screw, retainer (3)
Sight window assembly
Float assembly
Needle & seat assembly

Fuel pump assembly Pump discharge ball & weight assembly 42. 43. Pump discharge ball & weight assem Jet, primary slow Jet, secondary slow Power valve assembly Solenoid, air-fuel ratio (some models) Primary main jet assembly Secondary main jet assembly Solenoid, anti-dieselling Screw, by-pass valve (3) By-pass air control valve Boost controlled deceleration valve Screw, throttle body (2) Screw, throttle body (long) Screw, throttle body (hollow) Throttle body assembly

46.

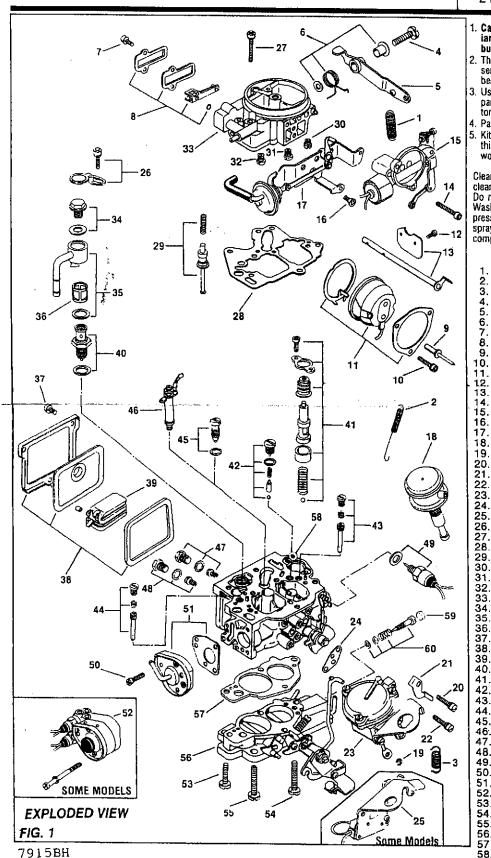
53.

Throttle body assembly Gasket, throttle body

Main body assembly Plug, idle mixture needle 58.

Idle mixture needle assembly

GF4357-8-P1



REMOVAL & INSTALLATION NOTES (All Models)

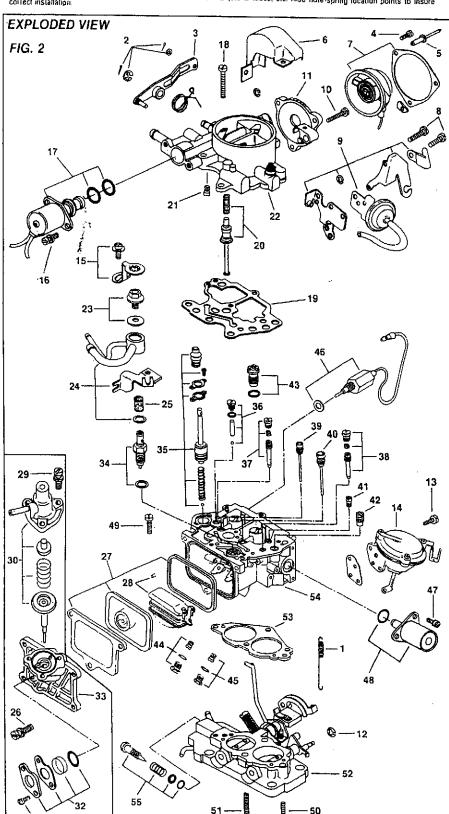
- 1. CAUTION: Original screws have a sealant coating. Exercise care in removing by using a close fitting screwdriver blade. It difficulty is encountered, try carefully turning screw heads using a very small pair of curved teeth vise grip pliers.

  2. Some models have a better street.
- mmended unity as a less resurty.

  models have choke cover assembly fastened with pop rivets (5, 9). To remove, drill off heads and drive out rivets using
- a ont punco.

  3. Remove choke shaft (13) (only if replacement is required) by first removing choke valve screws (12) if staked by grinding or filing. If sealed with luck tight use a solvent. Place shaft on a firm support and using a close fitting screwdriver blade, remove screws releasing choke valve. CAUTION; Do not bend choke shaft. Next, slide shaft from air horn casting. If the above removal method is ineffective, the only alternative is to drill out screws & re-tap theads. NOTE: Apply sealant to screws upon installation. Screws are not supplied as replacements in kits.

- installation. Screws are not supplied as replacements in kits. Measure and record local level settings before dismantling float assembly (28, 39). Remember that the float unit is subject to possible fluel absorption. If in doubt, replace with a new one. To remove power valve piston assembly (20, 29) from air horn, use a sharp tool to remove staking. Restake upon installation workers upon index parts especially where similarities exist such as jets & tubes, etc. Also note spring location points to insure



Policy (Companies)

Policy

and in slot.
Check throttle linkage for freedom of movement before and after installing carburetor on engine.
When installing sight window retainer (27, 38) and acutator (33), tighten screws evenly. Do not over-tighten.

### PARTS LIST (Fig. 2)

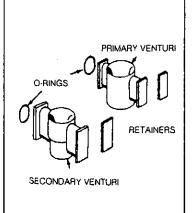
- 1. Spring, secondary return
- Retainer, pump lever
- Pump lever
- Screw, cover retainer
- Pop rivet, cover retainer (2)
- 6. Cover, choke linkage\*
- 7. Thermostatic coil & cover asssembly
- 8. Screw, clamp & bracket
- 9. Choke pull-off & bracket assembly
- Screw, cover housing
- 11. Choke housing assembly
- 12. Retainer, secondary diaphragm
- 13. Screw; secondary diaphragm (3)
- 14. Secondary throttle diaphragm assembly
- 15. Screw & lock bracket
- 16. Screw, bowl vent solenoid
- 17. Solenoid assembly & o-rings, bowl vent
- 18. Screw, air horn (3)
- 19. Gasket, air horn
- 20. Power piston assembly
- 21. Jet, primary slow air bleed
- 22. Air horn assembly
- Bolt & washer, banjo fitting 23.
- 24. Banjo fitting assembly, fuel inlet
- 25. Screen, fuel filter
- 26. Screw, retainer or actuator (3-4)
- 27. Sight window assembly
- 28. Float assembly
- 29. Screw, cover (3)
- 30. Diaphragm assembly, actuator
- 31. Screw, cover (2)
- 32. Gauge, window assembly
- 33. Actuator & level gauge assembly
- 34. Needle & seat assembly
- 35. Fuel pump assembly
- 36. Pump diaphragm ball & weight assembly
- 37. Jet, primary slow
- 38. Jet, secondary slow
- 39. Jet, primary main air bleed
- 40. Jet, secondary main air bleed
- 41. Jet, air bleed
- 42. Jet, coasting
- 43. Power valve assembly
- 44. Primary main jet assembly
- 45. Secondary main jet assembly
- 46. Solenoid, anti-dieseling
- 47. Screw, coasting solenoid
- 48. Coasting solenoid & o-ring assembly
- Screw, throttle body
- 50. Screw, throttle body (2)
- 51. Screw, throttle body (hollow)
- 52. Throttle body assembly
- 53. Gasket, throttle body
- Main body assembly
- Idle mixture needle assembly

Calif. Model

Cover retained by two pop rivets (not shown).

#### FIG. 3 SPECIAL NOTE:

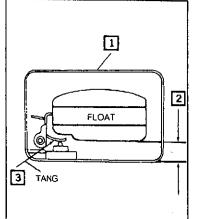
IF ORING SEALS HAVE TO BE REPLACED, LIGHTLY TAP VENTURIES FROM BOTTOM UNTIL THEY ARE FREE. ON SOME MODELS, REMOVE VENTURIES BY LOOSENING LOCK SCREWS. (REMOVE STAKING ON LOCK SCREWS OR ON O'RING SIDE OF VENTURI IF NECESSARY.) INSTALL NEW O-RINGS AND POSITION VENTURIES FIRMLY IN PLACE, THEN TAP IN SPRING RETAINERS MAKE SURE VENTURIES ARE FIRMLY IN PLACE, TIGHTEN SCREWS OR RESTAKE VENTURI ON O-RING



## **ADJUSTMENT DATA**

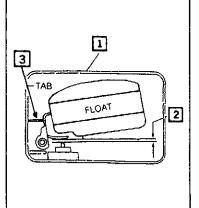
# FIG. 4 FLOAT LEVEL (DRY) ADJUSTMENT

- WITH FUEL BOWL (MAIN BODY) INVERTED, ALLOW FLOAT TANG TO REST LIGHTLY ON NEEDLE CAUTION: DO NOT COMPRESS SPRING LOADED NEEDLE OR FORCE RESILIENT NEEDLE INTO SEAT
- 2. MEASURE SPECIFIED
  CLEARANCE (SEE SPEC. CHART)
  AS SHOWN BETWEEN TOE END
  OF FLOAT & TOP OF FLOAT
  BOWL, OR CHECK THAT FLOAT
  IS PARALLEL WITH TOP OF
  FLOAT BOWL.
- 3 IF ADJUSTMENT IS REQUIRED. BEND FLOAT TANG.



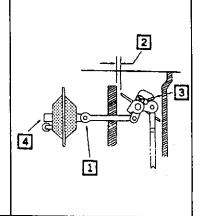
#### FIG. 5 FLOAT DROP ADJUSTMENT

- ). WITH FUEL BOWL (MAIN BODY) INVERTED, RAISE FLOAT UNTIL FLOAT TAB LIGHTLY TOUCHES WALL OF FUEL BOWL.
- 2. MEASURE SPECIFIED CLEARANCE (SEE SPEC. CHART)
  AS SHOWN USING A DRILLE OR
  FILLER GAUGE BETWEEN
  FLOAT TANG AND TOP OF
  NEEDLE
- IF ADJUSTMENT IS REQUIRED, BEND FLOAT TAB.



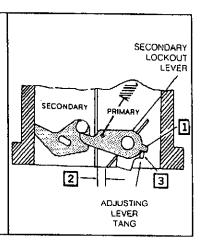
#### FIG. 6 VACUUM BREAK ADJUSTMENT

- PUSH ON PLUNGER ROD UNTIL VACUUM BREAK DIAPHRAGM IS SEATED
- 2 WITH CHOKE VALVE HELD IN CLOSED POSITION, MEASURE SPECIFIED CLEARANCE (SEE SPEC, CHART) BETWEEN AIR HORN WALL & UPPER EDGE OF CHOKE VALVE
- 3. PASSENGER CAR TO ADJUST, BEND TAB
- 4 PICK-UP TRUCK TO ADJUST. REMOVE SEALER & TURN ADJUSTING SCREW, RE-SEAL AFTER ADJUSTMENT.



#### FIG. 7 SECONDARY THROTTLE ADJUSTMENT

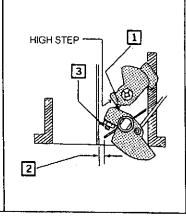
- 1. MOVE PRIMARY THROTTLE VALVE OPEN UNTIL ADJUSTING LEVER TANG JUST TOUCHES SECONDARY LOCKOUT LEVER. AT THIS POINT SECONDARY VALVE WILL START TO OPEN.
- MAINTAIN THROTTLE VALVE IN THIS POSTION & MEASURE CLEARANCE AS SPECIFIED (SEE SPEC. CHART) BETWEIN THROTTLE BORE & PRIMARY THROTTLE VALVE.
- IF ADJUSTMENT IS REQUIRED. BEND ADJUSTING LEVER TANG.



# FIG. 8 FAST IDLE (BENCH) ADJUSTMENT

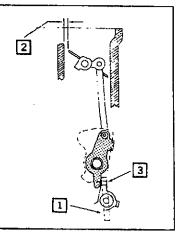
- 1 POSITION FAST IDLE SCREW ON 2nd STEP OF CAM\* . TURN CARBURETOR UPSIDE DOWN & CLOSE CHOKE VALVE
- 2 MEASURE CLEARANCE AS SPECIFIED (SEE SPEC CHART) BETWEEN THROTTLE VALVE & THROTTLE BORE. (SOME MODELS. MEASURE OPENING ANGLE)
- IF ADJUSTMENT IS REQUIRED. TURN FAST IDLE SCREW.

\* DCH MODELS— PLACE FAST IDLE, SCREW ON HIGH STEP OF CAM



#### FIG. 9 UNLOADER ADJUSTMENT

- 1 MAINTAIN THROTTLE VALVE IN A WIDE OPEN POSITION.
- 2. MEASURE CLEARANCE AS SPECIFIED (SEE SPEC. CHART) BETWEEN WALL OF AIR HORN & UPPER EDGE OF CHOKE VALVE.
- IF ADJUSTMENT IS REQUIRED BEND UNLOADER TANG



### SPECIFICATION CHARTS

Year	Application	Float Level Fig. 4	Float Drop Fig. 5	Vacuum Break Fig. 6	Secondary Throttle Opening Fig. 7	Fast Idle (Bench) Fig. 8	Unioader Fig. 9
NISS	SANTRUCKS — SPECIFICA	TION I.E	)A				
1985-83	2.0L Eng. (Z20)	7.5	1:.5	2.9	7.9	.80	2.45
NISS	SANTRUCKS — SPECIFICA	TION I.E	)B		<u> </u>	·	
1985	Z24 EngU.S. -Canada -2W/D -4W/D & H/D	7.5 7.5 7.5	1.5 1.5 1.5	3.4 2.6 2.8	7.4 - 8.4 7.4 - 8.4 7.4 - 8.4	.78 <sup>7</sup> .78 <sup>7</sup>	2.45 2.45 2.45
1984-83	Z24 EngFed. -Cal. -Canada -2W/D -4W/D	7.5 7.5 7.5 7.5	1.5 1.5 1.5 1.5	2.5 · 3.1 3.1 · 3.7 2.3 · 2.9 2.5 · 3.1	7.4 - 8.4 7.4 - 8.4 7.4 - 8.4 7.4 - 8.4	.7085° .7085° .7085 .7085	2.1 - 2.9 2.1 - 2.9 2.1 - 2.9 2.1 - 2.9
GM	TRUCKS, ISUZU — SPECIF	ICATION	I.DC		<u> </u>		
1985	1.9L Eng\$10, 15 -AII/T	2	1.5	_	6.1 - 7.6	16°	
1984-83	1.9L Eng\$10, 15; 1.8L, 2.0L EngA/T -M/T	2	1.5 1.5	-	6.1 - 7.6 6.1 - 7.6	18° 16°	<del>-</del>
1982-81	1.9L EngS10, 15; LUV; 1.8L EngA/T -M/T	2 2	1.5 1.5	1.5 - 1.7 1.3 - 1.5	6.1 - 7.6 6.1 <sub>5.</sub> 7.6	18° 16°	_
NISS	SAN CARS & TRUCKS — SF	PECIFICA	ATION I.	DD			
1985-82	Pick-Up & Stanza	7.2	1.5	3.1 - 3.73	7.4 - 8.4	.81954	2.1 - 2.9
1981	Model 510 & Pick-Up	7.2	1.5	2.6 - 3.2	7.4 - 8.4	.76904	2.1 - 2.9
1980	Model 510 Pick-Up	7.2 7.2	1.5 1.5	2.6 - 3.2 <sup>5</sup> 2.8	6.8 - 7.8 7.4	.8195 <sup>6</sup>	2.1 - 2.9 2.5
ISUZ	ZU TRUCKS — SPECIFICAT	ION I.D	E		•	<u> </u>	
1984	2.0L EngCal.	2	1.5		6.1 - 7.6	15° - 17°°	

### **FOOTNOTES**

- 1 Dimensions are given in millimeters.
- <sup>2</sup> Float parallel with top of bowl.
- 3 Federal models set 2.6 3.2mm.
- 4 Pick-up & 510 models with A/T set .97 1.1mm. Stanza with M/T set .66 - .80mm.
- <sup>5</sup> California models set 3.1 3.7mm,
- 6 Models with A/T set 1.0 1.2mm.
- <sup>1</sup> Models with A/T set .94mm.
- \* Models with A/T set .87 1.0mm.
- 9 Models with A/T set 17° 19°

#### **ABBREVIATIONS**

All/T All Transmissions

A/T Automatic Transmission

M/T Manual Transmission

Cal. California

Fed. Federal (49 States) H/D Heavy Duty

W/D Wheel Drive