HITACHI DRJ 340-1 2-BARREL

Chevrolet LUV Pickup (1972-73)

DESCRIPTION & OPERATION

Carburetor is a 2-Barrel downdraft type and is equipped with a piston type accelerator pump and a manually operated choke. Carburetor consists of a low speed (primary) barrel, and a high speed (secondary) barrel integrated into a single unit. The secondary throttle is actuated by a vacuum diaphragm unit. Linkage between the primary and secondary throttles prevents secondary throttle from being opened by the vacuum diaphragm whenever the primary throttle opening is less than 50°. Carburetor is also equipped with an anti-dieseling solenoid and a coasting solenoid valve. The anti-dieseling solenoid cuts off fuel supply when ignition is shut off. The coasting solenoid valve opens, during periods of coasting (deceleration), to meter fuel and air to the lower part of the secondary throttle valve. This maintains a precise air/fuel mixture and minimizes exhaust emissions.

NOTE — For further information on the coasting solenoid valve, see "Chevrolet LUV Coasting Richer System" in EXHAUST EMISSION section.

ADJUSTMENT

FLOAT LEVEL

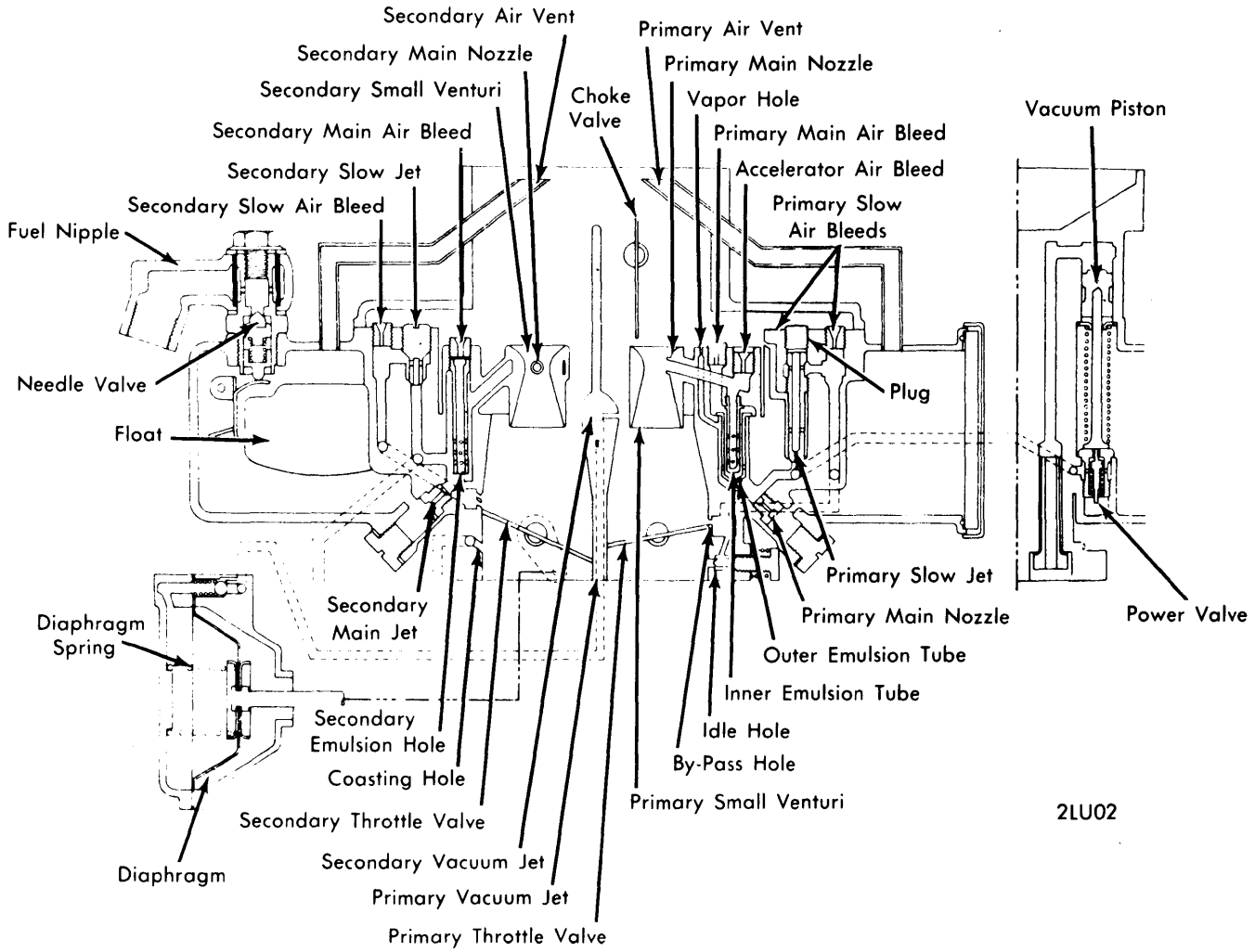
The fuel level is normal if it is within the line on the window glass of the float chamber when the engine is stationary. If fuel level is outside the line, adjust by bending float seat. The needle valve should have an effective stroke of about .06". When necessary, needle valve stroke can be adjusted by bending the float stopper.

PRIMARY THROTTLE VALVE

Check that throttle valve is open to an angle of 17° (1972) or 18.5° (1973) when choke valve is completely closed. To check opening angle of primary throttle valve, proceed as follows:

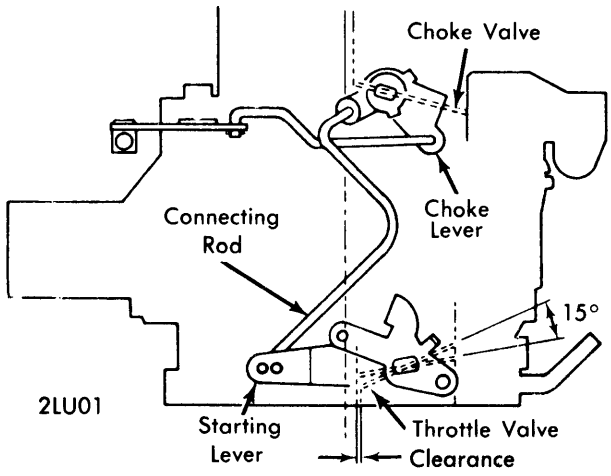
1) Close choke valve completely and measure clearance between throttle valve and wall of throttle valve chamber. *NOTE — Make measurement at center part of throttle valve.* Clearance should be .05-.06" (1972) or .06-.07" (1973).

2) If necessary, adjust throttle valve opening angle by bending connecting rod. Make sure to turn throttle stop screw all the way in before measuring clearance.



CARBURETOR SECTIONAL VIEW

HITACHI DRJ 340-1 2-BARREL (Cont.)



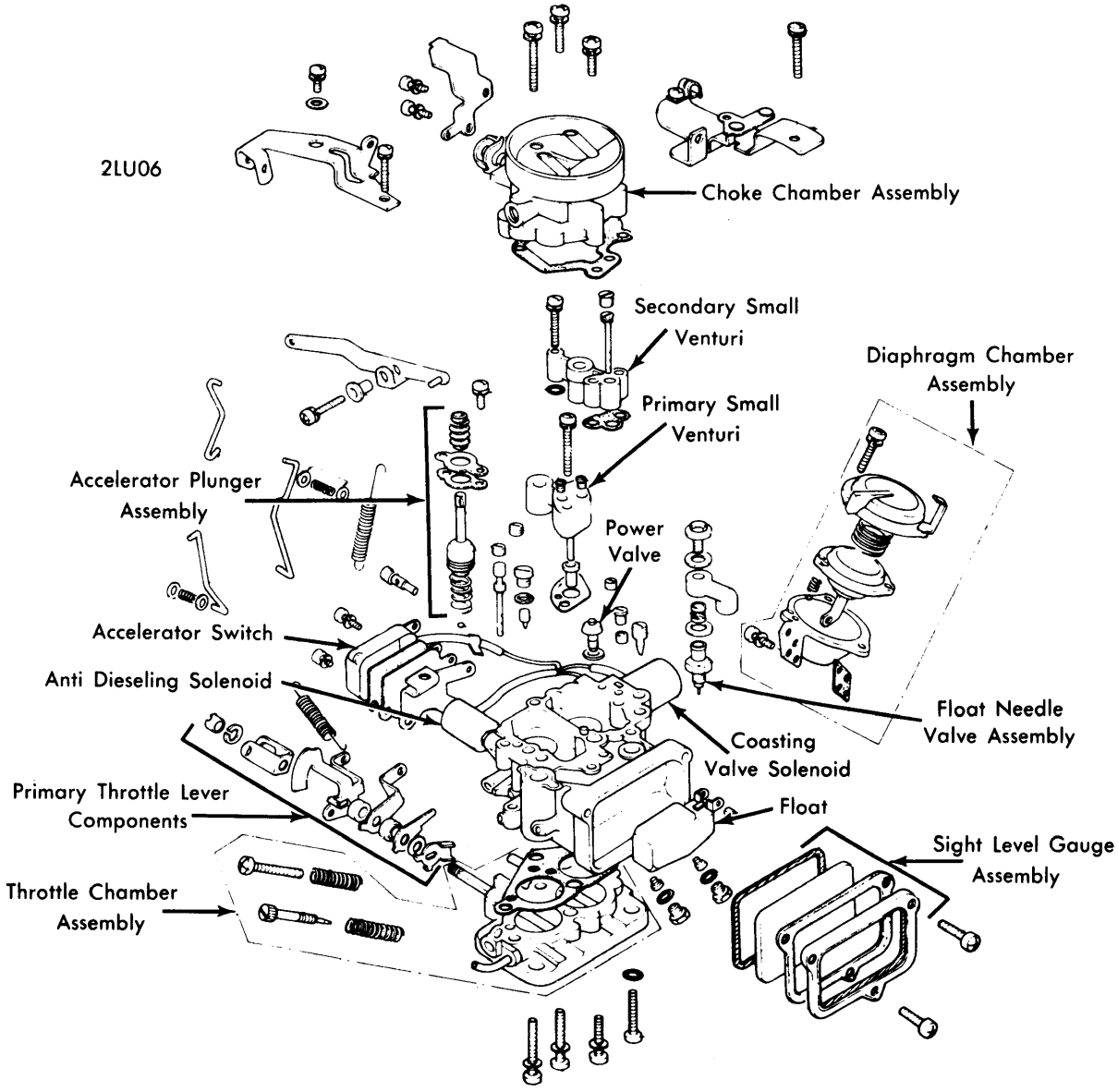
PRIMARY THROTTLE VALVE OPENING ADJUSTMENT

CARBURETOR LINKAGE

When primary throttle valve is opened to angle of 50°, adjust plate is brought into contact with tab on return plate. When primary throttle valve is opened further, return plate is pulled apart from roller. This allows secondary throttle valve to open. To measure secondary throttle valve opening point, proceed as follows:

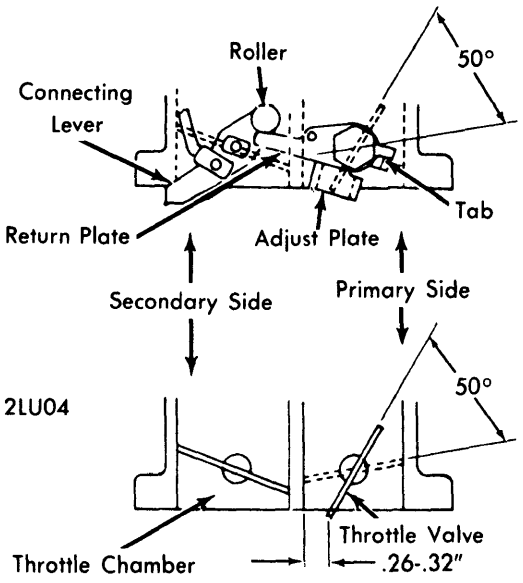
1) Measure clearance between primary throttle valve and wall of throttle chamber, at center of throttle valve, when adjust plate contacts tab of return plate.

2) Clearance should be .26-.32". If necessary, make adjustment by bending the tab of the return plate.



CARBURETOR EXPLODED VIEW

HITACHI DRJ 340-1 2-BARREL (Cont.)



CARBURETOR LINKAGE ADJUSTMENT

CARBURETOR IDLE

1) Turn idle adjustment screw all the way in and then back out 3 ½ turns. Set idle speed to 700 RPM using throttle screw.

2) With idle adjustment screw, turn until point at which engine runs fastest and smoothest at idle. Vacuum at this point should be at maximum.

3) Repeat adjustment procedure until correct adjustment is obtained.

OVERHAUL

DISASSEMBLY

1) With carburetor removed, disconnect accelerator pump lever and remove throttle switch with bracket assembly. Remove throttle return spring, return spring of diaphragm, choke chamber assembly with choke wire bracket and disconnect connecting rod.

2) Separate float chamber assembly from throttle body. Parts are fastened with one bolt on upper part and three bolts on lower part. One of the three bolts is used to take out the negative pressure developed in Venturi and it should be removed carefully.

3) Remove accelerator pump plunger assembly attaching screws and invert float chamber to remove plunger assembly. Remove fuel pipe nipple joint, strainer and float needle valve assembly. Carefully remove strainer to avoid distorting it. Remove fuel level sight gauge cover, float and float collar.

4) Remove coasting valve assembly, throttle switch and solenoid valve assembly. Avoid bending coasting valve shaft and solenoid valve. Remove diaphragm chamber and cover. Separate diaphragm cover, spring and diaphragm being careful not to lose ball and spring.

5) Remove jets from upper part of float chamber. Remove small Venturis from primary and secondary Venturi chambers. Remove accelerator pump plug, invert float chamber and remove balance weight. Remove power jet, main jet plugs, main jets and primary vacuum jet. Do not remove throttle valves unless valves or shafts need replacing. *NOTE — Securing screws on choke and throttle valves are sealed with an adhesive compound to prevent air leaks. If valves are removed, reseal screws with a suitable sealer.*

CLEANING

Clean all disassembled parts in gasoline and blow out passageways with compressed air.

INSPECTION

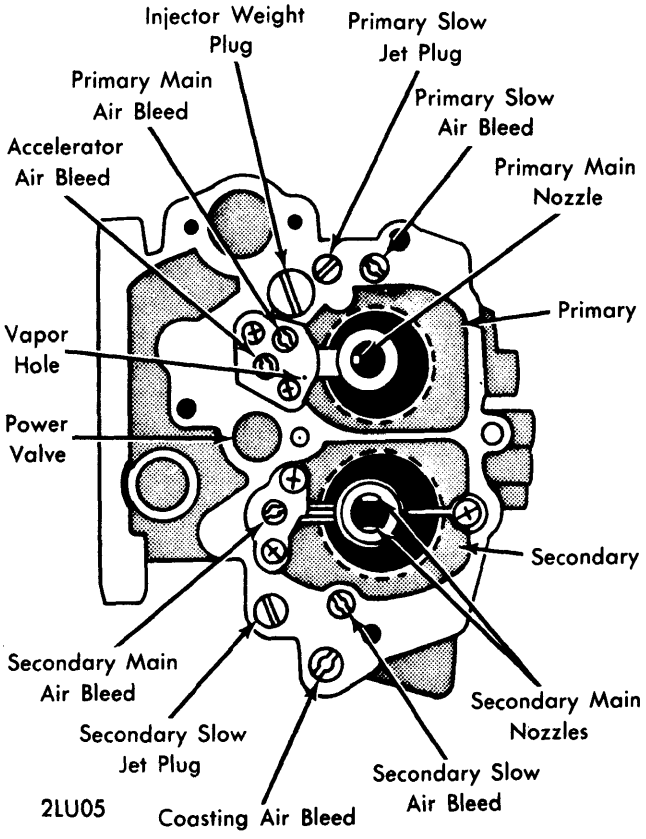
Choke Chamber — Inspect choke shaft holes for wear, vacuum piston and choke valve for smoothness of operation.

Float Chamber — Inspect body for cracks, jointing surfaces and threaded holes for damage. Check power valve for leaks and smoothness of operation. Inspect float needle valve and float pin hole for wear. Check accelerator pump plunger for damage, wear and smoothness of operation.

Throttle Chamber — Check throttle valves and shafts for wear, slow and idle ports for clogging. Inspect mixture screw seating and mixture screw for step wear.

REASSEMBLY

Reverse disassembly procedures and note following: Make sure jets are installed in correct positions. If choke and throttle valves have been removed, install valves making necessary adjustments and seal screws with a suitable sealer. Check accelerator pump operation by filling cylinder with gasoline and operating plunger by hand.



COMPONENT LOCATION

HITACHI DRJ 340-1 2-BARREL (Cont.)

CARBURETOR SPECIFICATIONS

Application	1972	1973
Main Jet		
Primary	.043"	.045"
Secondary	.061"	.061"
Slow Jet		
Primary	.020"	.020"
Secondary	.032"	.032"
Power Jet	.016"	.016"
Main Air Bleed		
Primary	.022"	.026"
Secondary	.020"	.022"
Slow Air Bleed		
Primary	.063"	.059"
Secondary	.039"	.039"
Coasting Jet	.017"	.017"
Coasting Air Bleed	.098"	.098"
Accel. Pump Delivery (1 Stroke)	.43cc	.43cc