

1974-79 FUEL SYSTEMS

Nikki 2-Barrel Carburetors

1976-79 Opel

DESCRIPTION

Carburetor is a 2-barrel, downdraft type. It is equipped with an electric automatic choke, an anti-dieseling solenoid, a coasting richer system (fuel enrichment) solenoid, and on manual transmission models, a throttle closing dashpot. A double venturi provides for high air flow velocity at the venturi under all operating conditions, resulting in more efficient atomization of fuel for smooth combustion.

ADJUSTMENTS

IDLE SPEED & MIXTURE

See appropriate TUNE-UP PROCEDURES article.

COLD (FAST) IDLE RPM

See appropriate TUNE-UP PROCEDURES article for on vehicle adjustment. For bench adjustment, fabricate angle gauge "A" to dimensions shown. See Fig. 1. Check opening angle of primary throttle valve, when choke is closed. If opening angle is incorrect, adjust angle by turning fast idle screw.

AUTOMATIC CHOKE SETTING

Align the setting mark on the thermostat case with the setting mark on the thermostat housing and then install and tighten the set screws securely.

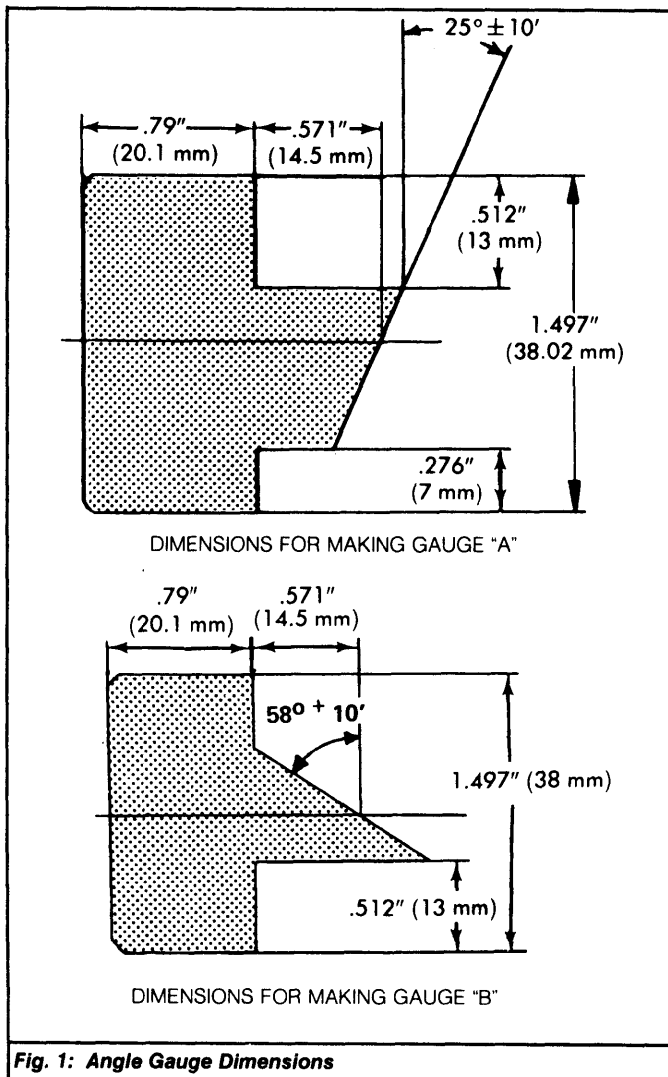


Fig. 1: Angle Gauge Dimensions

CHOKE PISTON STROKE

Hold the bimetal lever against the stopper, then move choke piston link and check that stroke, as measured at clip end, is $3/16$ - $7/32$ " (4.7-5.6 mm). If stroke is incorrect, bend piston link. See Fig. 2.

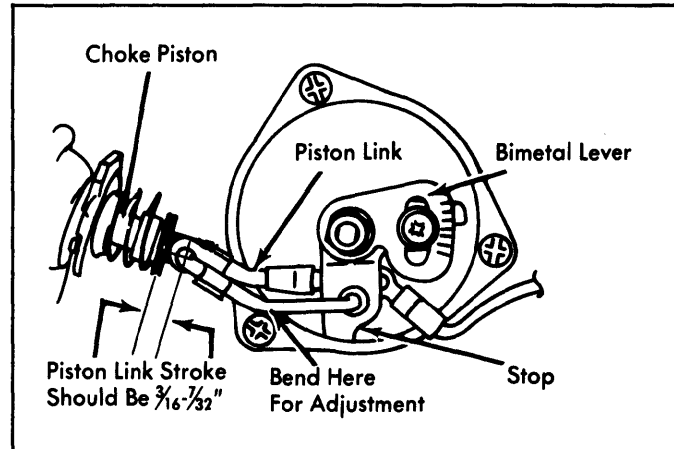


Fig. 2: Choke Piston Stroke Adjustment

PRIMARY & SECONDARY THROTTLE VALVE ANGLES

NOTE: Relative angles between primary and secondary throttle valves should be adjusted or checked only during overhaul or replacement.

Slowly open primary throttle valve until secondary throttle arm starts to move. Using angle gauge "B", check angle of primary throttle valve. See Fig. 1 and 3. If adjustment is needed, bend throttle link.

FLOAT LEVEL

Adjust float level by adding or removing copper gaskets to or from the float valve seat. The float level increases with additional gaskets. The fuel level is normal when it is even with the mark on the float bowl glass window when engine is running or stopped.

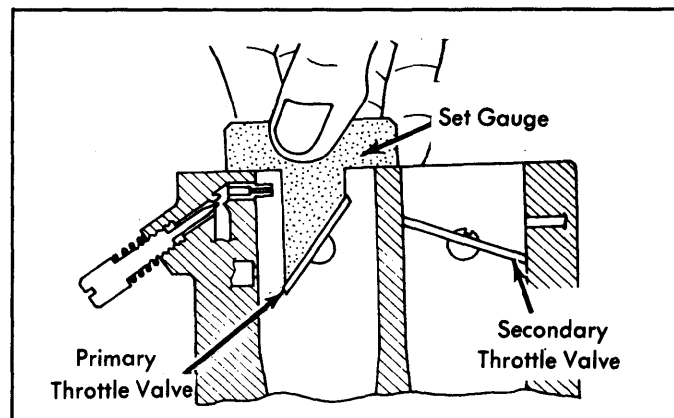


Fig. 3: Primary & Secondary Throttle Valve Angles

CHOKE UNLOADER

- 1) Apply light pressure on choke valve in closing direction. Open throttle valve to wide open position. This will force choke valve open part way.
- 2) Measure distance from lower edge of choke valve to air horn wall. Measurement should be .215" (5.5 mm). To adjust, remove choke heater coil cover. Bend choke unloader tang to obtain correct clearance.

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ACCELERATOR PEDAL HEIGHT

Adjust accelerator pedal height by changing setting of accelerator switch. Distance between accelerator pedal and brake pedal should be held to 2.4" (61 mm). See Fig. 4. Depress accelerator and set pedal stopper so carburetor throttle valve opens fully.

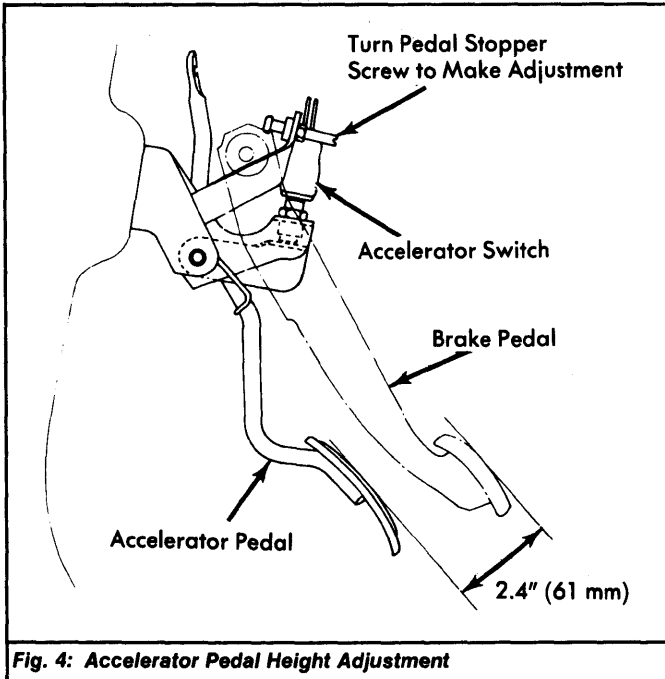


Fig. 4: Accelerator Pedal Height Adjustment

ACCELERATOR CONTROL CABLE

- 1) After completing adjustment of accelerator pedal height, as described above, adjust the control cable setting. Turn the adjusting nut until throttle valve begins to open. See Fig. 5.
- 2) Move control cable about .35" (8.9 mm), or the equivalent of 7-7 1/2 turns of adjusting nut, inward toward the carburetor. Lock control cable in this position with the lock nut.
- 3) Depress the carburetor pedal slowly and check that carburetor throttle valve does not open while accelerator switch plunger is in contact with the accelerator pedal. Readjust control cable setting if required.

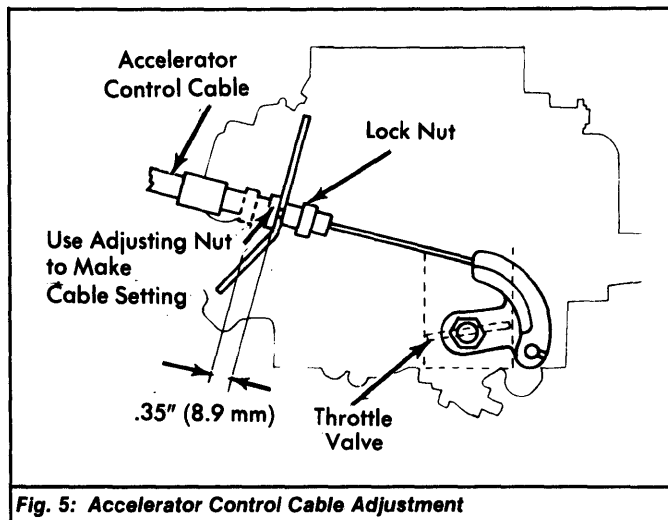


Fig. 5: Accelerator Control Cable Adjustment

OVERHAUL

DISASSEMBLY

- 1) To disassemble air horn, remove pump arm return spring, then take out snap ring and remove pump arm and pump link. See Fig. 6. Remove fuel pipe union cap nut, then remove union and strainer.
- 2) Disconnect automatic choke lead wire from its connector. Remove snap ring from select lever rod, disconnect select rod from select lever, then detach rod at choke piston assembly.

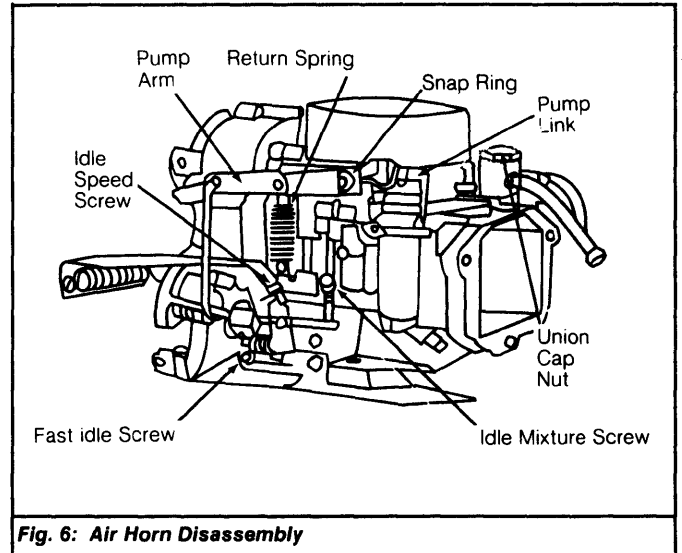


Fig. 6: Air Horn Disassembly

- 3) Remove six air horn mounting screws and detach air horn assembly. Disconnect automatic choke vacuum hose from choke diaphragm cover. Raise the automatic choke lead wire clip and remove lead wire from clip.
- 4) Remove 3 thermostat case cover attaching screws and remove case cover. Remove four choke diaphragm cover attaching screws and remove diaphragm cover.
- 5) Remove link holder from choke diaphragm rod and remove choke diaphragm. See Fig. 7. Remove nut retaining select lever and disconnect select lever and select arm.

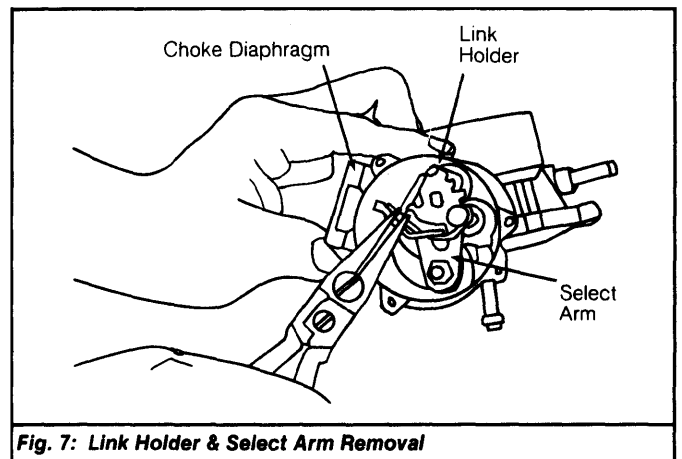


Fig. 7: Link Holder & Select Arm Removal

- 6) To disassemble float bowl and throttle body, remove 2 screws attaching secondary throttle link and remove link. Raise solenoid valve lead wire clip and remove lead wire from clip.
- 7) Remove clip from secondary throttle arm and remove secondary diaphragm rod from secondary throttle arm. Remove secondary throttle arm. Remove 3 diaphragm chamber attaching screws and remove the secondary diaphragm chamber.

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8) Remove 3 bolts connecting float bowl to throttle body and separate the two. One of the 3 bolts is installed from the lower side of throttle body. Remove this bolt carefully, as it also serves as the vacuum outlet for the power circuit.

9) Remove 3 float chamber cover attaching screws and remove glass, float pin collar, float and float valve. Remove float valve body, float chamber, ventilation valve, accelerator pump plunger and solenoid valves. Carefully remove carburetor jets. See Fig. 8.

10) Remove plugs, primary, and secondary main jets. Remove screws attaching the small venturi and remove primary and secondary small venturi. Remove secondary diaphragm cover attaching screws, cover, spring and diaphragm.

CLEANING & INSPECTION

Wash parts in carburetor cleaner (solvent). DO NOT soak any components containing rubber, leather, or plastic. Soak components long enough to thoroughly clean all surfaces and passages of foreign matter. Remove any residue after cleaning components in solvent. Blow out all fuel passages dry with compressed air. Inspect all parts for wear or damage and replace as necessary.

REASSEMBLY

To reassemble, reverse disassembly procedures. Ensure carburetor jets are installed in correct positions. All jets in the secondary side are plated with the exception of the coasting richer jet. Securely tighten jets, bolts and screws to prevent leakage of fuel and air.

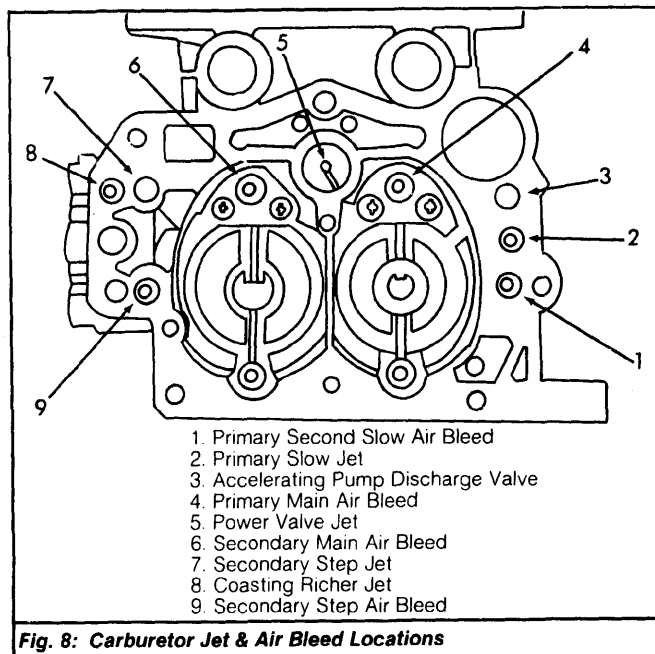


Fig. 8: Carburetor Jet & Air Bleed Locations

1977 CARBURETOR ADJUSTMENT SPECIFICATIONS

Application	Idle Speed (Engine RPM)		Float Level Setting	Unloader Setting	Throttle Valve Closing Angle		Choke Valve Closing Angle	Sec. Throttle Valve Opening Angle
	Hot	Fast			Primary	Secondary		
Opel	900	2800 ^①	②	.215"	7°	20°	20°	③51°

① — With vacuum lines plugged. Specification given is for all Man. Trans. models. Set Auto. Trans. to 3000 RPM.

② — Fuel level must be even with sight bowl line.

③ — Primary Throttle Valve Opening Angle is 58°.

1978 CARBURETOR ADJUSTMENT SPECIFICATIONS

Application	Idle Speed (Engine RPM)		Float Level Setting	Unloader Setting	Throttle Valve Closing Angle		Choke Valve Closing Angle	Sec. Throttle Valve Opening Angle
	Hot	Fast			Primary	Secondary		
Opel	900	3400 ①	②	.215"	7°	20°	20°	51°

① — With vacuum lines plugged. Specification given is for all Man. Trans. models. Set Federal Auto. Trans. to 3200 RPM and Calif. Auto. Trans. to 3000 RPM.

② — Fuel level must be even with sight bowl line.

1979 CARBURETOR ADJUSTMENT SPECIFICATIONS

Application	Idle Speed (Engine RPM)		Float Level Setting	Unloader Setting	Throttle Valve Closing Angle		Choke Valve Closing Angle	Sec. Throttle Valve Opening Angle
	Hot	Fast			Primary	Secondary		
Opel	900	2850-3150 ^①	②	.215"	7°	20°	20°	51°

① — Auto. Trans.; Man. Trans. is 3050-3350 RPM

② — Fuel level must be even with sight bowl line

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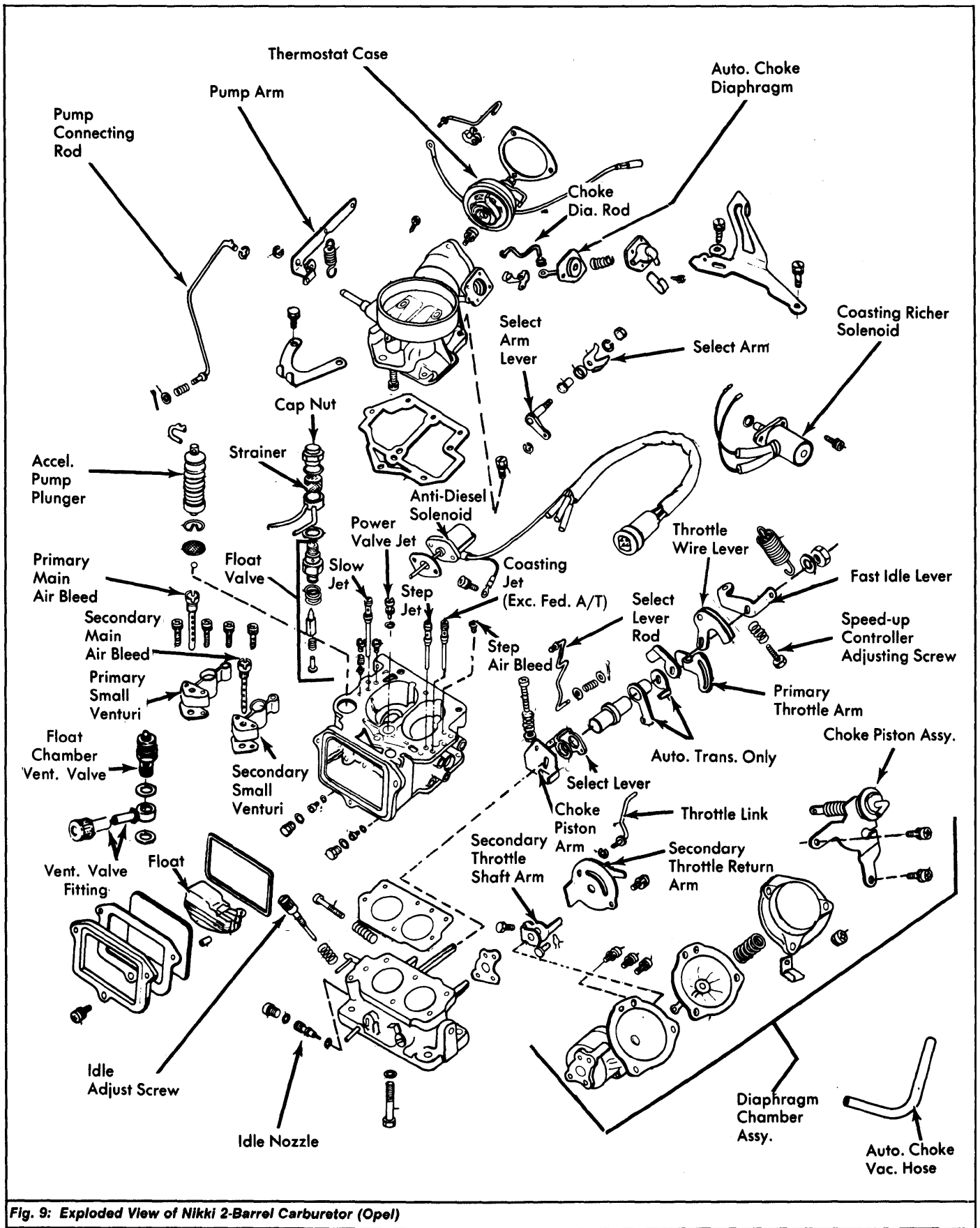


Fig. 9: Exploded View of Nikki 2-Barrel Carburetor (Opel)