ZENITH-STROMBERG CD TYPE 1-BARREL

MGB (Federal)
Triumph (Federal)

DESCRIPTION

Stromberg CD type carburetor is a constant depression carburetor, which operates on the principle of varying effective areas of choke and jet openings. This variation depends upon the degree of throttle opening, engine speed and engine load requirements. The MG and Spitfire models have single carburetors, and the TR-7 and TR-8 have twin carburetors. All carburetors feature automatic chokes. MGB and Spitfire models are not available in California in 1980, and all California TR-7 and TR-8 models are equipped with fuel injection.

CARBURETOR IDENTIFICATION

Application	Type No.
MGB	175 CD5T
Triumph	
Spitfire	150 CD4T
TR-7	Two 175 CDFVX
TR-8	Two 175 CDSET

ADJUSTMENTS

HOT (SLOW) IDLE RPM

See appropriate Tune-Up article in TUNE-UP section.

IDLE MIXTURE

See appropriate Tune-Up article in TUNE-UP section.

COLD (FAST) IDLE RPM

See appropriate Tune-Up article in TUNE-UP section.

FLOAT

With float cover removed and carburetor body inverted, measure distance from gasket surface of body to highest point of float. This distance should be .624-.672" (16-17 mm).

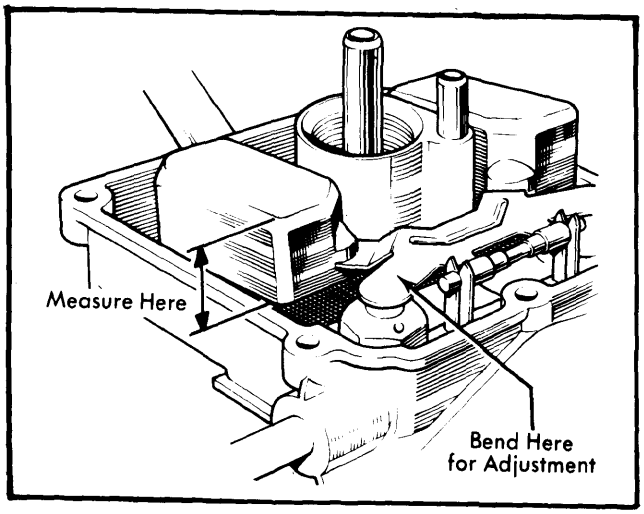

Fig. 1 Float Level Adjustment Points

NOTE – *Use care to prevent misaligning floats when making adjustment. If necessary to adjust, bend float tab that contacts fuel inlet needle. Be sure tab rests on needle valve at a 90° (right) angle. See Fig. 1.*

OVERHAUL

NOTE – *The following overhaul procedure is generally applicable to all Stromberg CD type carburetors, although minor variations may exist from carburetor to carburetor. Internal and external components of some models may vary slightly.*

1) With carburetor removed, unscrew the damper cap. Reach in through air filter side of carburetor bore and with finger, raise piston while carefully lifting oil retainer cap (on damper rod). Pull plug out of bottom of float chamber and drain fuel and oil from carburetor. Remove "O" ring on float bowl plug. Remove screws securing float chamber to bottom of carburetor. Remove float assembly by gently prying float shaft out of clip on carburetor body. Remove needle valve and washer. Remove screws securing top cover to body. Remove top cover, spring and air valve assembly.

2) From air valve assembly, remove screws securing diaphragm and retaining ring. Loosen set screw holding needle in air valve and insert needle removing tool (S353) into stem of air valve. Turn tool counterclockwise two turns, withdrawing needle assembly by pulling straight upward.

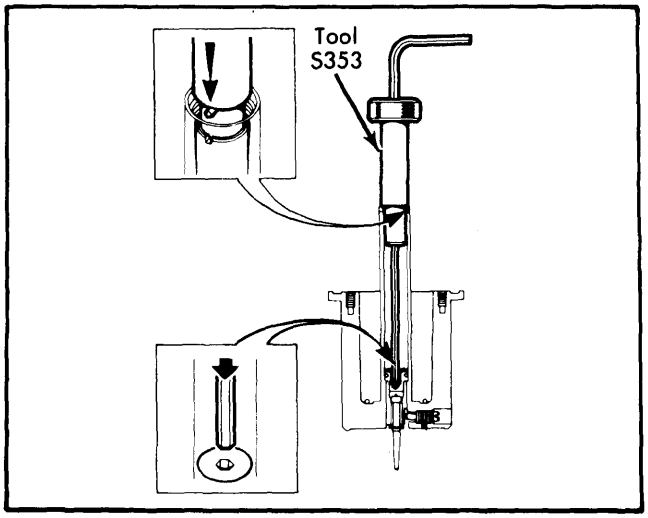

Fig. 2 Removing Needle Valve with Special Tool

3) Remove choke retaining screws and remove choke assembly from side carburetor body. From removed choke assembly, remove EGR air bleed valve, nut and lock washer from choke spindle, choke cable lever, fast idle cam, and choke (starter) disc.

4) Remove screws securing idle air regulator. Remove screws securing deceleration by-pass valve. From deceleration by-pass valve body, remove screws in base plate, spring, valve and gaskets. Remove star washer to release adjustment screw from valve housing. Remove "O" ring seal from adjustment screw and unscrew lock nut. Remove split pin and withdraw clevis pin and washers to disconnect throttle linkage from throttle spindle lever. Remove throttle lever.

ZENITH-STROMBERG CD TYPE 1-BARREL (Cont.)

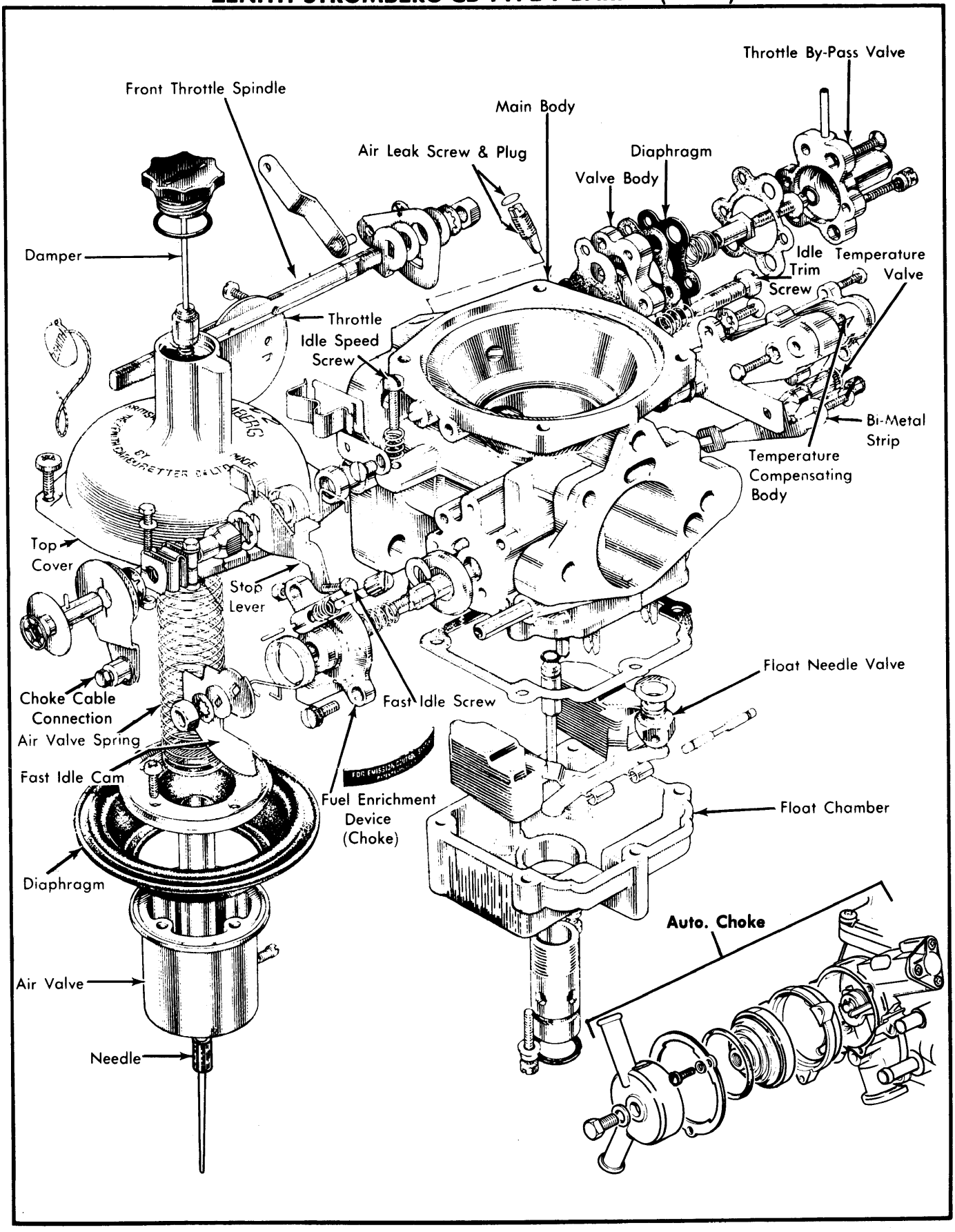

Fig. 3 Exploded View of Stromberg 175 CDFVX Carburetor

ZENITH-STROMBERG CD TYPE 1-BARREL (Cont.)

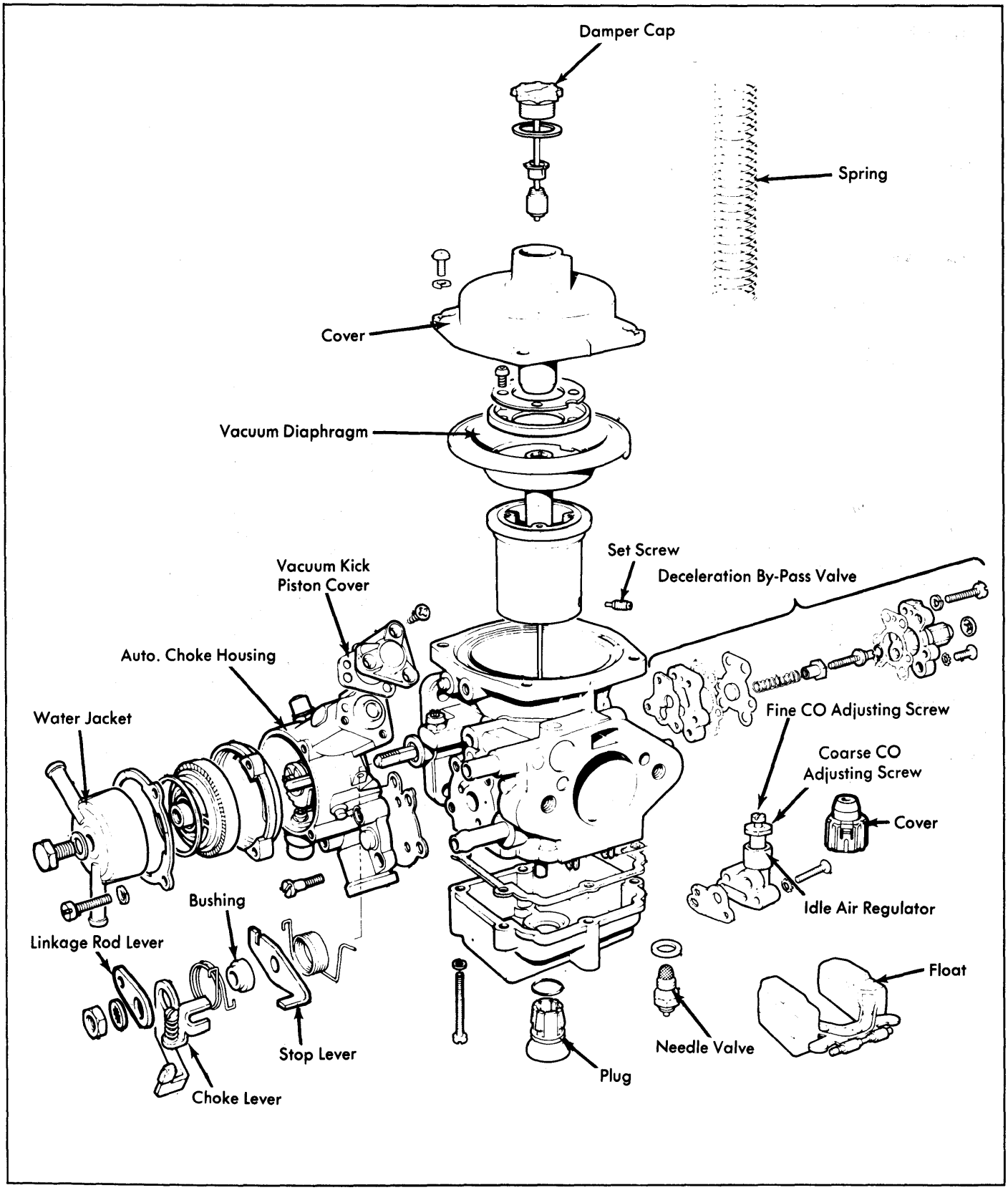

Fig. 4 Exploded View of CD4T Carburetor Assembly

ZENITH-STROMBERG CD TYPE 1-BARREL (Cont.)

CLEANING & INSPECTION

Wash all components in clean fuel or suitable carburetor solvent and blow dry with compressed air. Examine all parts for wear, paying particular attention to needle and seat, air valve and diaphragm.

NOTE – *The parts previously mentioned should be replaced, unless all are in excellent condition.*

REASSEMBLY

Reverse disassembly procedures and note the following:

1) When fitting deceleration valve, ensure that register for the spring is toward the valve body.

2) Refit disc assembly to choke body, ensuring that lug with detent ball is between slot of disc and largest series of holes. Refit cam lever and choke cable lever (to choke body) ensuring that cam lever is located on detent ball.

3) When installing air valve needle assembly with tool S353, make sure tool is turned clockwise to engage threads of needle valve assembly with adjusting screw. Continue to turn until slot in needle housing is aligned with set screw. Tighten set screw carefully.

4) When fitting diaphragm to air valve, locate inner tag of diaphragm into recess of air valve. Now fit diaphragm retaining ring and secure with screws. Fit air valve assembly to carburetor body, by locating outer tag and rim of diaphragm with complimentary recesses of body. Fit carburetor top cover with bulge on housing neck toward air intake.

5) Fill carburetor damper dashpot with lightweight engine oil or Dexron automatic transmission fluid. Fill until resistance is felt to insertion of damper piston when screw cap of damper piston is about .25" (6 mm) above top cover.

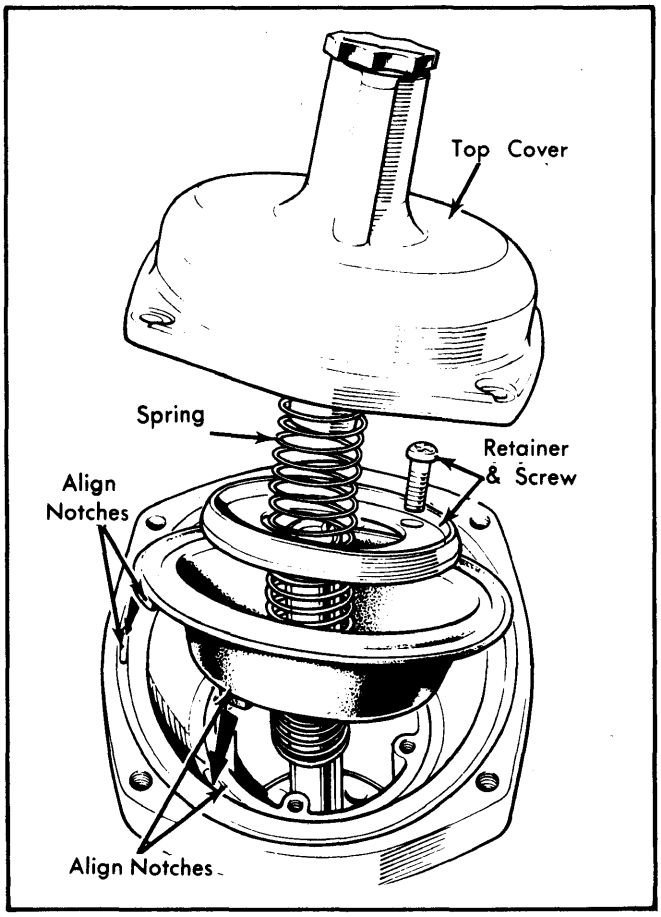

Fig. 5 Expanded View of Vacuum Piston and Diaphragm