

CHANDLER-GROVES (FORD) CARBURETORS

body and valve assembly if distances not within gauging limits.

Accelerating Pump—Remove brass retainer and pump rod felt from main body before cleaning casting in cleaning solution (solution will damage felt). If main body has shoulder around accelerating pump rod hole, remove this shoulder with a file (shoulder limits pump stroke) and if no vent provided between float bowl and pump head clearance chamber (larger section at top of pump cylinder), provide a vent by cutting a slot with a hacksaw or small file. Use driver 9513-C to install felt and brass retainer in pump rod hole. Seat check ball in bottom of pump cylinder by tapping lightly with a brass drift rod, then use $\frac{5}{8}$ " wood or fibre dowel to press retainer down in place. When installing brass pump discharge needle, tap needle lightly with brass drift to insure that it seats properly. When installing pump plunger and rod assembly, make certain that correct link used (Ford '85' & Mercury marked 'C', Ford '60' and Lincoln marked '6'—use marked links). Check pump action when completely assembled, a good stream should be apparent at each pump jet when throttle opened several times (fill bowl with fuel to make this test).

Economizer Power Jet Assembly—When installing valve assembly, use new gasket and tighten securely to 15 lb. ft. torque.

Carburetor Body Castings—Clean castings thoroughly in cleaning solution, clean ports and channels with correct drill in hand chuck 9518-E as follows: Lower Idle Port (nearest throttle valve)—9518-H (.037") drill, Upper Idle Port—9518-E (.0395") drill, Idle Adjustment Screw Holes—9518-F (.046") drill, Idle Adjustment Screw Threads—9541-A Tap (use care not to remove any metal or enlarge holes), Idle Adjusting Needle Seat—9541-C refacer and 9541-D guide bushing, Accelerating Pump Rod Hole—9513-B reamer, also clean out felt retainer groove.

TROUBLE SHOOTING:—Poor Idling Performance. Make certain that entire engine tuned up, check idle setting. If idle is lean, check for air leaks at manifold, check gaskets between carburetor throttle valve body and bowl casting. Remove idle adjusting needle and Idle Tubes, blow out channels with air, clean idle tubes with air. If idle is rich, check Vacuum Economizer valve, see that valve is seating properly, and that diaphragm is not leaking. Check gasket between throttle valve body and bowl casting (vacuum chamber must be airtight).

Poor Running Performance. Check carburetor body gaskets, see that all carburetor body bolts are tight. Check metering jets for size. Blow out metering jet channel and main nozzle channels with compressed air. Check fuel level.

Poor Acceleration Performance. Check pump cylinder and channels for dirt which will prevent check-valves seating. See that piston leather is in good condition, check piston driving spring. To dismantle pump for cleaning (with air horn casting off carburetor), disconnect pump link, remove pump rod and piston assembly, inlet ball retaining spring and ball, discharge nozzle, and outlet check needle. Blow out all channels with compressed air. If pump is working properly, a fine, solid, steady stream should be discharged from each nozzle port at instant throttle is snapped open.

Poor High Speed Performance. Check engine compression, breaker contacts and gap, spark plug gaps first. Check vacuum economizer valve, remove economizer and blow out economizer channels and restrictions with compressed air. Check fuel level and float travel. Check fuel pump pressure.

Poor Economy or Gasoline Mileage. Check all parts of car which may cause this complaint (engine, valves, dragging brakes, etc.). Check fuel level and fuel pump pressure. Check metering jets for size. Manufacturer does not recommend use of leaner metering jets to secure fuel economy.