After the dismantled parts have remained in the solvent long enough to dissolve the coatings, remove and rinse in petroleum base cleaning solution. Dry all parts with compressed air, blowing through all jets and channels in both directions to assure that they are clear and clean.

CAUTION: Do not use drills or wires to clean calibrated openings; any slight enlargement of these jet openings will affect the operation. Use only gum solvent and compressed air for cleaning.

Throttle Body and Fuel Bowl

The castings should be inspected for damage or broken flanges. Check mating surfaces for warpage. Where such warpage does not exceed 0.010 inch, the surface involved may be lapped on a flat surface using "00" sandpaper. Clean thoroughly after the sanding operation.

Normal clearance between the choke shaft and bowl casting bore is 0.002 to 0.005 inch. Where use of a new shaft will still result in a shaft clearance of 0.007 inch or more, the bowl casting should be replaced. Excessive wear at this point makes it impossible to seal out dirt at the seals.

The normal clearance between the throttle shaft and throttle body bore is .001 to .002 inch. Where the use of a new throttle shaft will not hold the clearance below 0.005 inch, the throttle body assembly should be replaced. Excessive wear of this throttle shaft bore will result in dirt and air leakage past seals and poor alignment of the throttle plate, affecting engine idling and governor action.

Throttle Plate

The throttle plate should be inspected for burrs or damaged edges which would prevent good contact with the throttle body bore when fully closed. Never use a buffing wheel or wire brush to clean this plate, its sharp edges must not be deformed.

When installing the throttle plate, insert it into the shaft from the top of the throttle body with the short end of the plate down (measured from the holes). Insert screws from the top, but do not tighten until the throttle plate is centered in the body bore.

Unscrew the throttle stop screw until the plate is allowed to close fully. Holding the shaft lightly in the closed position, tap lightly on the face of the throttle plate with a brass rod to jar it into a centered position. The screws may then be tightened. The throttle plate must fit the bore closely with a minimum of light showing around its edges. The throttle shaft must be perfectly free to turn without binding at any point.

Clinch over the exposed end of the throttle plate screws to lock them in place. This can be done by using special plier FES 36-4. This must be done with care to prevent distortion of throttle shaft or plate.