for the rotor and vanes can be reduced by using fewer cover gaskets.

In event of excessive temperature, check the oil consumption to be certain the pump is being properly lubricated. If oil consumption is low, probe the oil passages with a wire to be certain they are not blocked or restricted by foreign matter. Check the clearance between the metering pin (1) and collar (3) figure 82. Replace either or both parts if clearance is unsatisfactory. Be certain that the metering pin fits tightly in the end plate.

OIL SEPARATOR (Pesco Model 218T)

Refer to figure 84.

The Pesco oil separators (figure 84) are used on B-24 airplanes prior to Serial No. 42-40724. The separators are made of either sheet brass or aluminum alloy sheeting, and have tube connections for inlet, discharge, and oil outlet. No moving parts are contained in the separator.

Location

The Pesco oil separators are located, one in the accessory section of engine No. 1 and one in the accessory section of engine No. 2.

Function

The purpose of the oil separator is to remove oil from the air which is discharged from the vacuum pump and to return the oil through tubing to the engine oil system.

Operation

Refer to figure 85.

Air forced through the inlet by the vacuum pump, strikes against an aluminum baffle (2) and then passes along the several vanes which surround the baffle. The vanes give the air a whirling motion; this motion causes the oil to be thrown to the sides of the separator so that it will run down and out of the oil drain back to the engine crank case. Most of the air passes out through the air outlet to the pressure relief valve.

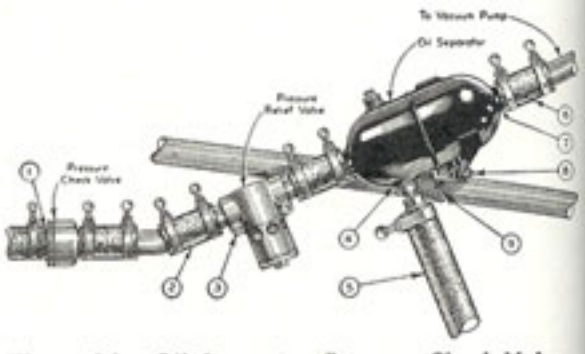

Figure 84. Oil Separator, Pressure Check Valve, and Pressure Relief Valve

Inspection and Maintenance

At the 50-hour inspection period the oil outlet fitting should be unscrewed, removed and the strainer cleaned with a suitable solvent.

During each major engine overhaul period, wash the separator in a suitable solvent and dry with compressed air.

Removal

Refer to figure 84.

1. Release the Dzus fasteners and remove the right hand side accessory cowling.

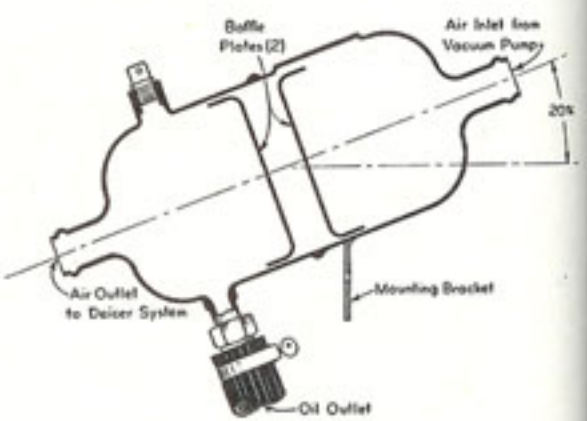

Figure 85. Oil Separator (Cross Section)