

**FUEL OIL FILTER
TYPE PCC1****DESCRIPTION**

Clean fuel is essential to insure proper fuel injector operation and efficient engine performance. Exceedingly small fuel passages and close clearances of the injector will not tolerate dirt or foreign material in the fuel. Filters are installed in the fuel system to remove any foreign material in the fuel. One design of filter used which provides high capacity and efficient filtering is shown in Fig. 1. This is a type PCC1 filter which is installed in the fuel discharge line between the fuel pump and the engine.

The PCC1 fuel filter, Fig. 2, consists of three cylindrical cotton wound hollow center elements within a rectangular cast iron housing. A removable top cover held to the housing by studs and nuts permits element replacement. The elements seat on individual seat plate assemblies in a common fuel outlet header which is integrally cast in the bottom of the housing. Bosses in the filter cover hold the elements upright and provide the proper compression for sealing the top and bottom of the elements. Openings are provided in the housing for fuel inlet and outlet. A drain is located at the bottom of the housing while a vent screw in the cover permits air entrance to facilitate draining and purging of air when fuel is admitted to the housing.

OPERATION

Fuel discharged from the fuel pump enters the housing, shown in Fig. 2, and

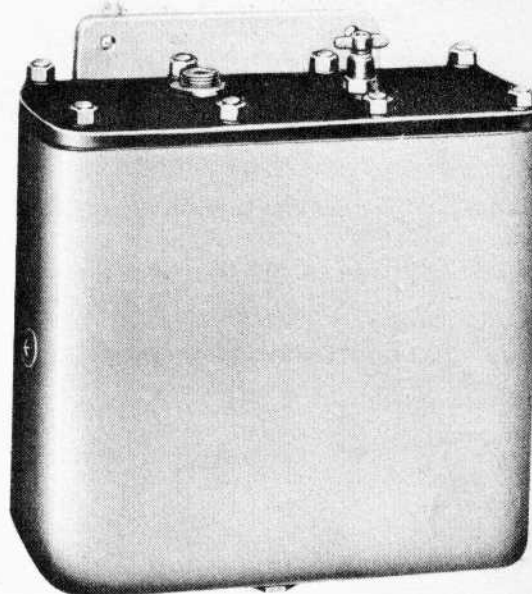


Fig. 1 - PCC1 Fuel Filter

completely fills the housing. Fuel then enters each element at its outer surface and seeps through to a central hollow core. Fuel flows down the element core into a common outlet header at the bottom of the housing. A single fuel discharge outlet is used from the header to permit the fuel flow to continue to the engine mounted fuel filters.

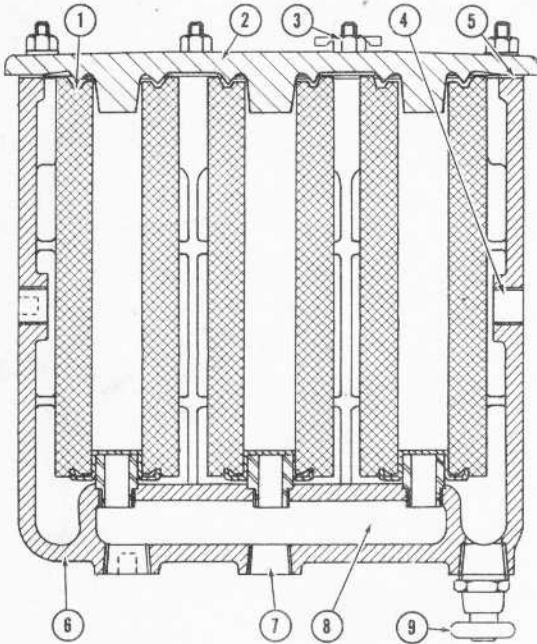
MAINTENANCE

The filter elements 8059961 of the PCC1 filter 8132295 should be removed and new elements installed and the filter cleaned at intervals given in the Scheduled Maintenance Program. To replace

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the elements the engine must be shut down and the fuel pump stopped. Elements are replaced as follows:

1. Open the drain valve at bottom of the housing. Opening the vent screw in the cover will facilitate draining of the housing.



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|-----------------------|------------------------|
| 1. Element | 6. Housing |
| 2. Cover | 7. Fuel Outlet Opening |
| 3. Housing Vent Screw | 8. Fuel Outlet Header |
| 4. Fuel Inlet | 9. Housing Drain |
| 5. Gasket | |

2. Remove the nuts holding the cover to the housing and remove the cover.
3. After cover removal, the three elements may be removed. Discard the used elements.

4. Using fuel oil, flush out the inside of the housing and close the drain. Then using lint free towels wipe out and clean the housing interior. Be sure that the housing gasket surface is smooth and clean.

5. Clean cover, being sure cover gasket surface is smooth and clean.

6. After cleaning the housing and cover, install new filter elements 8059961.

7. Place new gasket 8059975 over the housing studs on the housing.

8. Insert the cover bosses in the element center cores and bring the cover down on top of the housing.

9. Apply the cover hold down nuts. Tighten the cover nuts alternately so as to not cock the cover, but allow it to be applied evenly.

10. Leaving the top cover vent open, permit fuel to enter the housing. When entrapped air is expelled and fuel discharges from the vent, close the vent tightly.

Fig. 2 - PCC1 Fuel Filter Cross-Section