

FUEL SYSTEM

DESCRIPTION

The engine fuel system, Fig. 11-1, consists of the fuel injectors, fuel pump, engine mounted fuel filters, and fuel supply and return manifolds.

Components external to the engine such as the fuel tank, fuel suction strainer, and connecting lines complete the fuel system.

In operation, fuel from the fuel tank is drawn up by the fuel pump through a suction strainer and is delivered to the engine mounted duplex filter. It then passes through the filter elements to the fuel manifold supply line and injector inlet filter at each cylinder into the injector. A small portion

of this fuel supplied to each injector is pumped into the cylinder at a very high pressure, through the needle valve and spray tip of the injector. The quantity of fuel injected depends upon the rotative position of the plunger as set by the injector rack and governor. The excess fuel not used by the injector, flows through the injector, serving to lubricate and cool the working parts.

The excess fuel leaves the injector through the return fuel filter. This filter protects the injector in the event of a backward flow of fuel into the injector from the return fuel line. From the return fuel filter in the injector, the excess fuel passes through the fuel return line in the manifold.

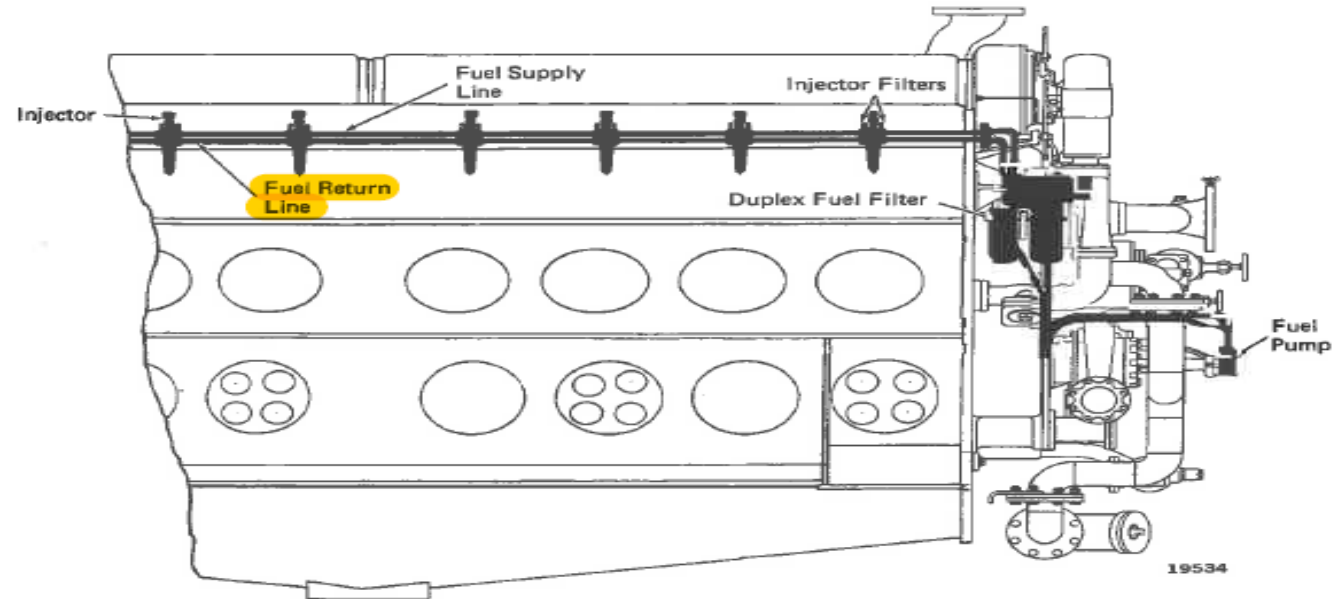


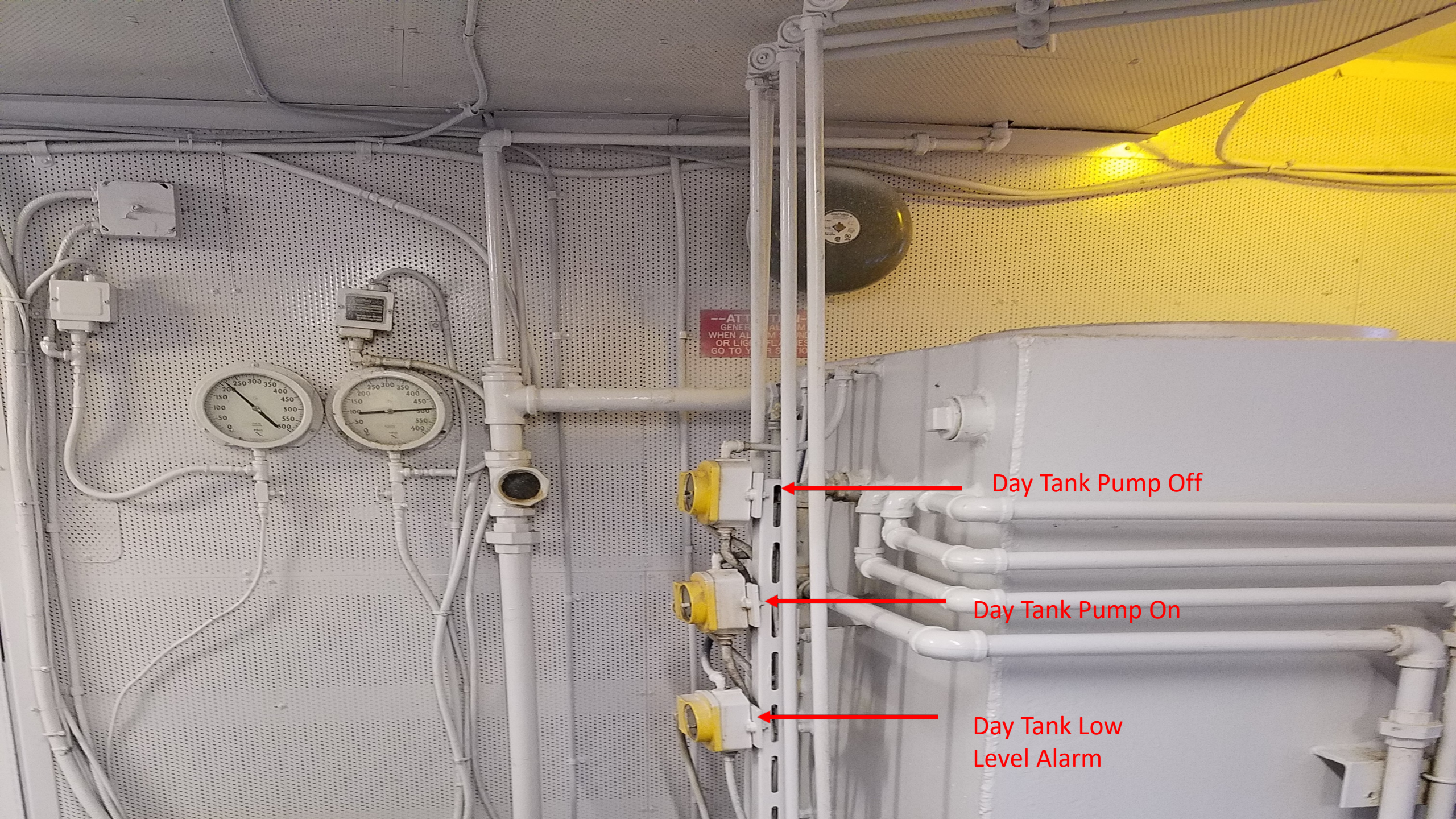
Fig. 11-1 - Typical Fuel System



Fuel
Transfer
Pump

STBD Main
Engine Fuel
Filters

Fuel Day
Tank Service
Pumps



--ATTENTION
WHEN ALARM
OR LIGHTS
GO TO YELLOW
STOP

Day Tank Pump Off

Day Tank Pump On

Day Tank Low
Level Alarm