

BLEEDING PROCEDURES FOR A MD5A ENGINE


Bleeding procedures for the MD5A engine are quite extended.

They are also described in the MD5A owner's manual.

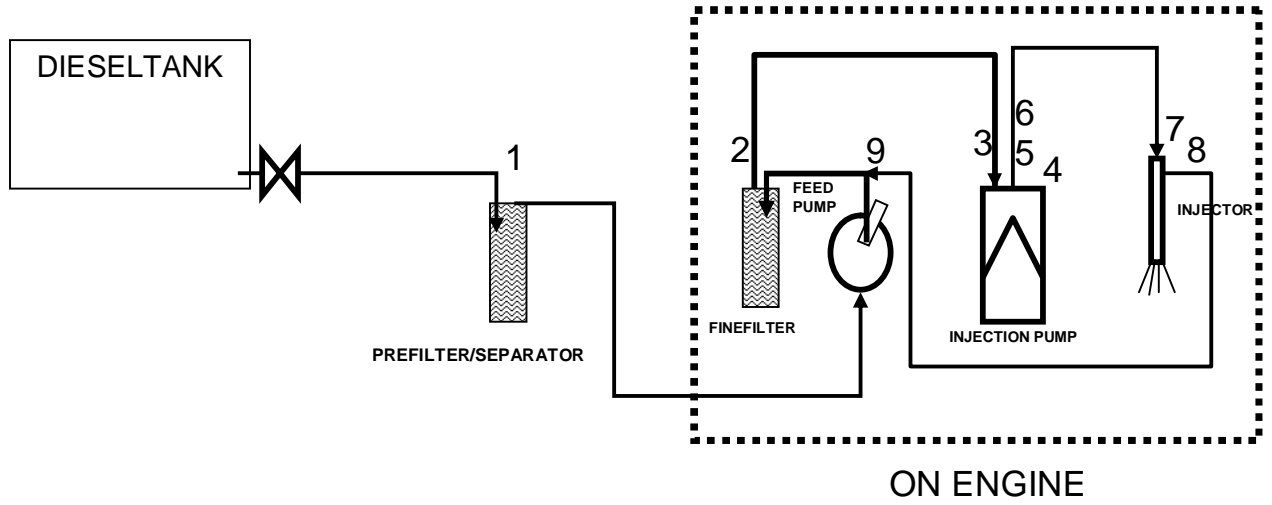
However those descriptions are **not complete!**

Also an extra bleeding point has been added (point 9) to avoid recycling of air back to the feed pump which is caused by the absence of a fuel return line to the dieseltank. Care must be taken to tight connections in the fuel lines to avoid air from being sucked in, especially with a shut off engine and closed fuel valve.

Following is the optimal venting procedure:

1. Open the vent screw (1) on the primary fuel filter.
Att. If the fuel line is not filled and the fuel line connection is on top of the tank: disconnect the fuel outlet from the filter and connect an auxiliary pump like  to pump the fuel from the tank into the filter before starting the venting procedure. If the filter is situated above the tank an (preferably electric) auxiliary pump should be fitted between the tank and the primary filter.
2. If only fuel comes out the vent opening close the vent screw.
3. Open the vent screw(2) on top of the fine filter.
4. Pump forward the fuel with the help of the hand primer until fuel free from air bubbles flows out. Close the vent screw. If the pumping effect is poor, turn over the engine a bit by hand so that the pump drive cam alters its position.
3. If the fuel injection pump has been removed, in case of suspected air in the fuel system or when starting an new or revised engine for the first time, the fuel injection pump must be vented. To do this open the fuel inlet (3) on the pump. Pump with the hand primer until fuel free from air comes out.
4. Do the same procedure as before after by opening the screw (4) on the injection pump housing.(only valid for engines with engine number 3809 or higher). and succesively (5) and (6) .
4. Slacken the injector delivery pipe nut (3) and turn over the engine by means of the starter motor until fuel comes from the delivery pipe. Tighten up the delivery pipe nut.
6. Alternately turn over the engine a few seconds followed by opening the fuel return line connection on the feed pump a bit (9) and repeat until only fuel comes out without air bubbles.

SCHEMATIC FUEL SYSTEM AND BLEEDING POINTS

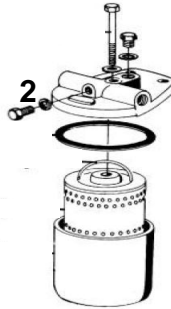


FUEL LINES BLEEDING POINT LOCATIONS

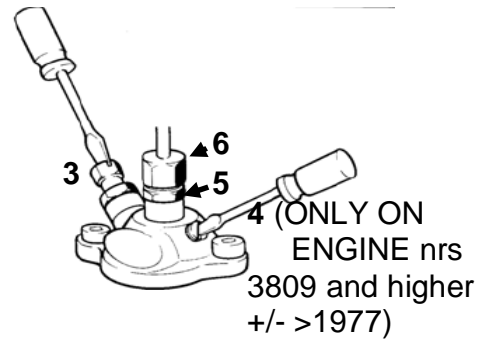
BLEEDING POINT ON FILTER/SEPARATOR



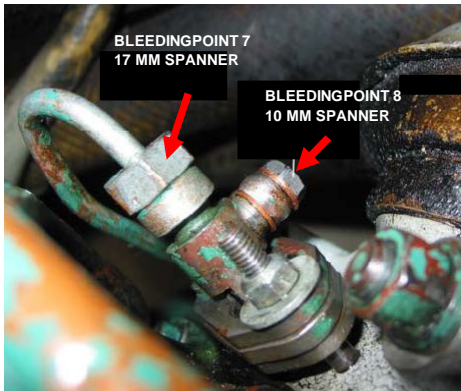
BLEEDING POINT ON FINE FILTER HOUSING



BLEEDING POINTS ON HIGH PRESSURE PUMP



BLEEDING POINTS ON INJECTOR



EXTRA BLEEDING POINT ON RETURN LINE CONNECTION ON FEED PUMP

