

**ENGINE OIL FILTER APPLICATION DATA
FOR LARGE DIESEL ENGINE (SEMI TRACTOR)**

MOUNTING INSTRUCTIONS

The Fil878 filter vessel is normally mounted on the passenger side frame rail (similar to shown picture). However, you can mount the filter vessel in other preferred locations if desired.

Identify proper mounting location on the vertical portion of the frame rail and drill two holes for the filter vessel bracket. Ensure that no electrical wires or other installed items are behind or within the frame prior to drilling. Do not drill on the top or bottom flanges, as this may affect the integrity of the frame. Be sure to allow enough clearance above the housing to enable the filter cartridge to be changed easily.

The blue filter mounting bracket is then attached to the frame. Secure bracket with the 3/8" bolts, nuts and washers.



Install the filter vessel to the bracket and ensure that the mount is solid.

FITTING INSTALLATION

Use an oil drain pan to prevent spillage of oil.

Remove the designated pressure plug from the engine block, filter housing or oil cooler and replace with the appropriate #4JIC fitting. **The Engine side of Fitting must be coated with thread sealant or thread tape.** This will connect to the **IN** port on the filter.

You may wish to drain the oil from the sump prior to the next step to prevent spillage of oil. If oil is not drained, place a cap on or tape the end of the JIC fitting prior to assembly. This will keep the oil from draining before hoses are attached.

Use caution to prevent contact with hot motor oil. Remove the spare plug on the side of the oil sump

pan (or alternate return port) and replace with the supplied #4 JIC fitting. **The oil sump side of Fitting must be coated with thread sealant or Teflon tape**

This is the oil return, and will connect to the **OUT** port on the filter.

HOSE INSTALLATION

Beginning with the newly installed engine fittings, determine the proper end (90° or straight) to ensure the best possible routing. Push hose fittings into hose ends. If needed, use an oil based lubricant to ease with installation of the hose fittings - **clamps are not necessary**- and tighten onto fittings in engine block and oil sump. **Do not over tighten**, as the fittings may crack when over tightened. Route hoses to filter while taking precautions to avoid routing which would cause damage to hoses by rubbing, pinching, cutting etc. Secure hoses with cable ties, beginning at the engine, and working towards filter unit. Hoses can be cut to proper length after proper routing is assured. After determining the proper length, cut hoses. Install JIC fittings onto hoses and connect to the bottom of the filter unit. Take special note to ensure that the port labeled **IN** is connected to the **pressure** hose, and the port labeled **OUT** connects to the **return**. Complete the installation by securing hoses with cable ties.

Start the engine and check for oil leaks. Allow the engine oil to get warm. The filter vessel should be warm to the touch, this is a good indication of proper engine oil flow.

Install the supplied service stickers and note vehicle miles or hours.

The addition of this filter to your engine will increase the capacity of your oil sump, and therefore you should **check oil level and add makeup oil as needed**.

NOTE: The oil in the filter vessel will drain to the oil pan when the engine is off, therefore your oil dipstick should show a slight overfill when the engine is cold.

Please view individual installation sheets for specific installation details.