

AVIAID Pulling Tractor Oil Pump Product

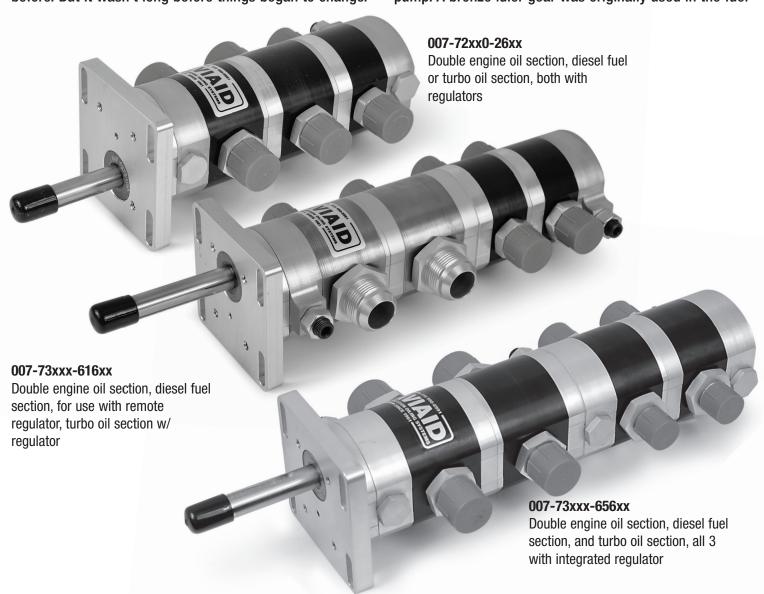
Aviaid has been manufacturing specialized oil pumps for tractor pullers with diesel (and alcohol-burning) engines for nearly 20 years.

In the beginning, most pullers simply wanted pumps that were able to provide an increased volume of oil. Aviaid responded by coupling 2 pump housings together into a single stage, 2-section external wet sump pump for these early customers.

Pressures in those days were fairly conventional, generally 65 to 80 psi. This enabled diesel engine builders to achieve higher levels of performance than before. But It wasn't long before things began to change.

Almost immediately customers asked if an additional section could be added that would pump oil for turbochargers in a completely separate system. This was accomplished by adding a 3rd section as a 2nd stage, separate from the engine oil section. Aviaid created an internal regulator that could be incorporated in the one pump so that both fluids could be controlled independently.

The next request was for a section to pump diesel fuel. Special consideration had to be given to the issue of lubricity and the ability of the fluid to lubricate the pump. A bronze idler gear was originally used in the fuel

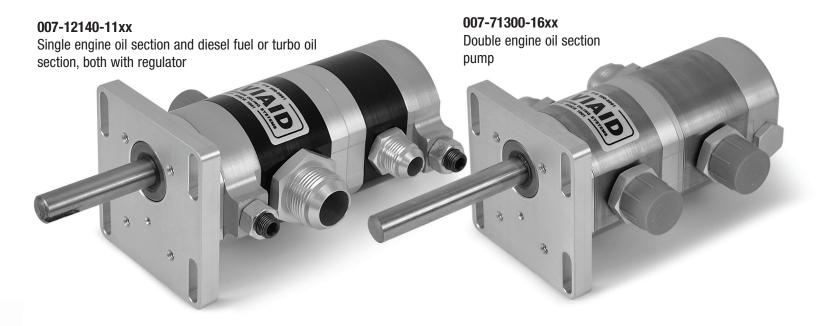


section to provide the needed reliability.

Of course, as engine builders were able to squeeze more and more power from diesels, it resulted in a need for higher performance pumps. Aviaid developed packages for all the most popular applications that incorporated special mounts using standard and reverse rotation pumps. Bearing sections have been added to support shafts internally as pressures began to rise to 100 PSI and beyond. A special seal section was developed to ensure positive separation of diesel fuel from engine oil and turbocharger oil systems. Cast iron housings are available where higher pressure and flow requirements dictate.

Pumps are available in a variety of stock and custom configurations. The most basic pump is a single-stage external wet sump engine oil pump utilizing either 1 or 2

sections to provide the required flow and pressure. Twosection pumps incorporate a bearing section between the 2 engine oil sections. To this single stage pump either a turbocharger oil or diesel fuel section can be added with an independent regulator installed to control that section. The 3rd option is to add both turbocharger oil and diesel fuel sections to the engine oil pump. Delivery capabilities range from 12 to 40 gallons per minute at 3000 pump shaft RPM —depending on housing selection and configuration. Beyond these standard configurations any variety of components available can be combined to create a unique custom pump. Pumps can also be built in a dry sump configuration. Additionally, adapters are available to mount either power steering and/or alcohol fuel pumps on the end of the oil pump.



- Standard (81) or Reverse (66) rotation
- Aluminum or Cast Iron engine oil housings
- 3" standard 5/8" shaft extension, 4" optional
- 3/8" hex drive adapter for fuel and/or power steering pump
- Straight fitting adapters to choice, -16 adapters extra charge
- Engine oil sections available in 1.500" (16 GPM),

- 1.750" (18 GPM) and 2.000" (20 GPM)
- Turbo oil sections available in .840" (6 GPM),
 1.000" (8 GPM) and 1.250" (12 GPM)
- Diesel fuel sections available in (6 GPM), 1.000" (8 GPM) and 1.250" (12 GPM)
- No. 66/81 mount standard. All Aviaid mounts and blades available upon request



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