



X-10 accessory drive Installation Notes

Though considerable time and effort has been invested in producing a robust, off the shelf solution, some fitment and light fabrication will likely be required to properly fit the X-10 drive accessory drive kit to your engine.

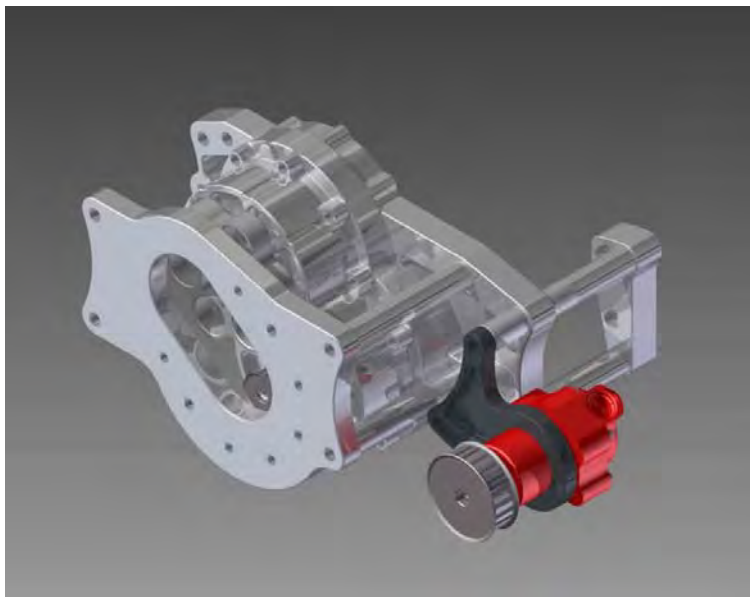


Figure 1 - Aeromotive belt drive pump w/ Gilmer pulley

- Installation: The X-10 accessory drive kit provides a 1" diameter pulley drive featuring an 1/8" keyway. Installation to the drive lower/input shaft will result in pulley speed being the same as the crankshaft. Note, this drive features a LH thread that results in a self-tightening effect. Removal from the drive is accomplished by turning the drive stub clockwise.

Peterson Oil/fuel pump drive:



Peterson fuel/oil pump combo

The Peterson R4 pump series offers a modular design that may be adapted to a variety of applications. This pump is available with an integral fuel pump mount (see photo above). We recommend this setup for users wanting to run a Peterson pump with an Aeromotive Spur Gear fuel pump. This mount may be utilized with 3, 4 or 5 stage pumps.

The Peterson part numbers for the above shown pump are:

04-5080- 5 stage LS FRT/MT AERO F/P and 04-5081-5 stage RS FRT/MT AERO F/P

Peterson also offers pumps that allow fuel or vacuum pumps to be mounted to the rear (see photo below)



Peterson R4 w/ Vacuum pump adapter

Centrifugal Specialties Dual Hex Drive:



Centrifugal Specialties Gen II Dual Hex Drive

Centrifugal Specialties offers a dual hex accessory drive for use on X-10 gear drives. This setup is commonly used with fuel pumps and vacuum pumps and may also be adapted to other accessories. The dual hex drive utilizes a 1" wide 8mm radius tooth drive belt and operates at 50% of crankshaft speed (20t crank pulley and 40t accessory pulley). This drive features Enderle 3-bolt, and 4-bolt patterns. Centrifugal Specialties offers adapters to allow the fitment of Star Products vacuum pumps to this drive (shown on front of photo below).





RCD V-band adapter w/ Enderle Marmon Clamp

[RCD Engineering](#) manufactures a V-band (Marmon clamp) adapter, P/N 300205-0080 that permits the fitment of V-band flange oil pumps by Moroso, Dailey Engineering and others. The adapters may be purchased direct from RCD, or from online retailer [Alkydigger.net](#). Alkydigger also offers Enderle P/N 82-202 quick release Marmon Clamps for use with the adapter flange.



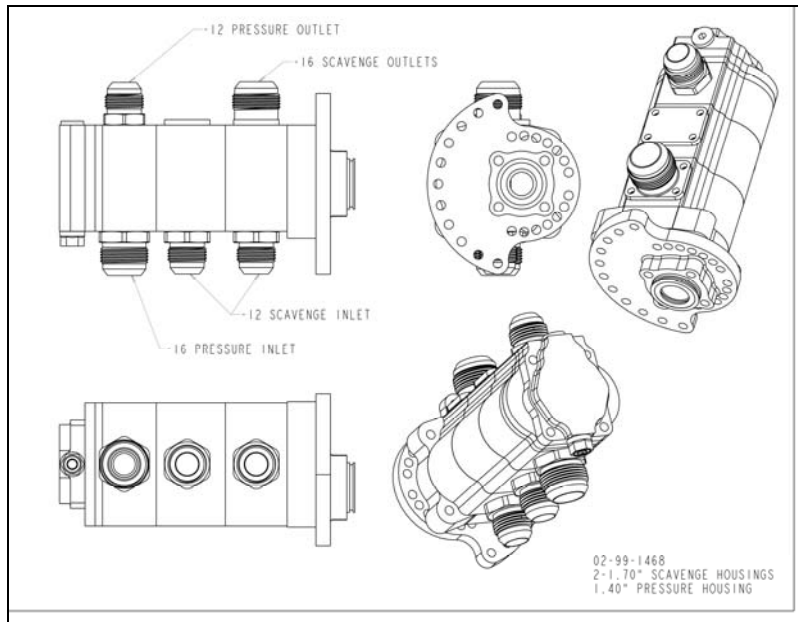
Moroso 22313 V-band mount oil pump



Moroso 22312 V-band mount oil pump



Moroso 62208 Primer/shaft adapter (use w/ 22312 and 22313 pumps)



2 Dailey Engineering - Hex drive mountable pump

Moroso oil pump adapter

Centrifugal Specialties also offers an adapter that permits the direct mounting of a Moroso external oil pump to an X-10 drive (see photo below)



Moroso Pump mount for X-10 (mockup, blower removed, studs not yet trimmed to length)

The above pictured adapter permits a Moroso 22362 or similar pump to be fitted to an X-10 drive



Moroso 22362 pump

LSX Oil pump drive alternative:

LSX Engines may benefit from the addition of a cog drive to the damper hub, this permits the use of external/dry sump oil pumps mounted low on the passenger's side of the engine. This may be achieved by using ATI Racing damper hub P/N 916037.



LSX with cog on damper hub (see [Dragzine](#) BlownZ project for additional photos)



ATI Racing P/N 916037 Cog Hub for LSX Damper

Aeromotive 11105/11115 pump bracket w/Gilmer pulley setup:

A fuel pump bracket for use with Aeromotive 11105 (Red) and 11115 (Black "Atomic") belt drive fuel pumps is available for X-10 drives. This bracket allows the pump to be located to the driver's side of the X-10 gear drive.

This bracket is designed for use with 14-tooth crank and 28-tooth fuel pump pulleys and a 25.5" long x 12" wide gilmer style belt. Pulleys are available from Aeromotive under P/N's 21108 (crank) and 21109 (Fuel Pump). Belts are available from Jones Racing Products under P/N 255-L-050



Figure 3 - Aeromotive belt drive pump bracket

Hex Drive 8mm Cog Drive setup:

Many users elect to use manufacturer provided brackets to install fuel pumps, oil pumps and other accessories to their engine block or motorplate. Use of parts listed below is recommended for such installations.



Figure 4 - Enderle "lollipop" pump adapter

Use of hex drive pumps may be accomplished using Enderle belt drive adapter (P/N E-5016, see photo above). This adapter permits use of 5/8" bore pulleys (available from Jones Racing Products) with most

hex drive fuel pumps. A comparable adapter is also available from Jones Racing Products under P/N XP-7009. Pump installation may also be simplified using one of our universal accessory adapters in conjunction with a Jones or Enderle belt drive pump adapter (see figure 4). Typical installations require the use of 1.75" long spacers between the universal accessory adapter and the X-10 drive and utilize a 680 belt with 20t and 40t 8mm pulleys. Similar installations may also be completed using gilmer pulleys and belts.

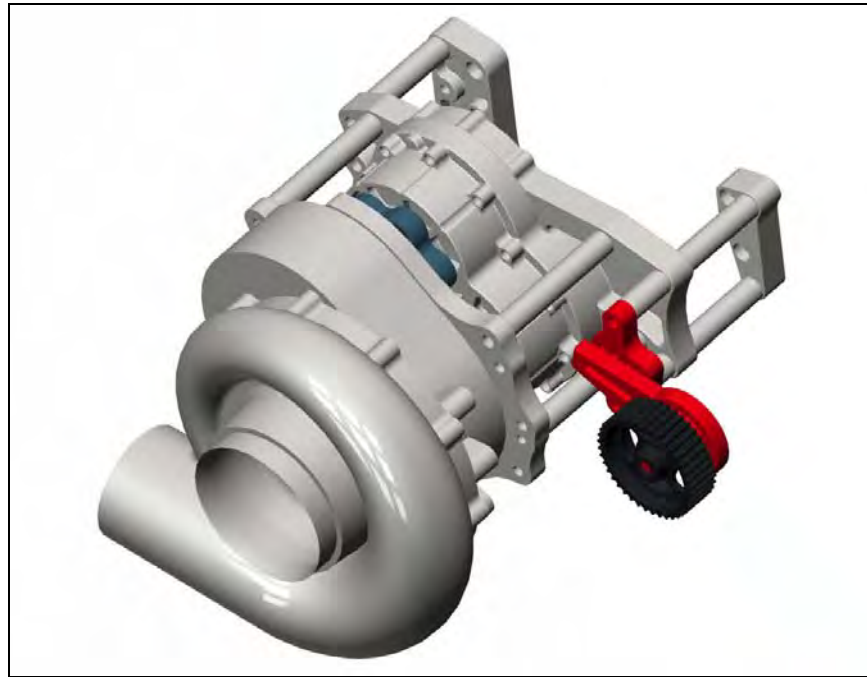


Figure 5 - typical X-10 single hex pump drive arrangement

8mm Pulleys:

Use of 8mm HTD (radius tooth) style pulleys and belts from Jones Racing Products

<http://www.jonesracingproducts.com/> is recommended

- Recommended Crank Pulley: Jones Racing Products P/N CS-6102-B-20, 20 teeth, 1" ID
- Recommended accessory pulley: Jones Racing Products P/N FP-6103-40-1", 40 teeth, 1" Wide (for use with accessories having a 5/8" shaft and 3/16" keyway.
- Recommended Belt Guide: Jones Racing Products P/N BG-6108-40S, for 40 Tooth HTD (prevents belt from walking off of accessory pulley, use of flange on crank or accessory is required)
- Recommended 1/8" replacement key for crank/drive pulley: Jones Racing Products KS-2109-C (3/4" Long)

- Recommended 3/16" replacement key for accessory/driven pulley: Jones Racing Products KS-2109-A (1" Long)
- For a complete listing of components available from Jones Racing Products, a catalog may be downloaded here: <http://www.jonesracingproducts.com/cat.pdf>

8mm Belts

Use of 20mm wide accessory belts is recommended. Many belt lengths are available from Jones Racing products and other suppliers. See catalog at link above for available belt widths. Refer to the chart below for belt length recommendations. This chart shows belt lengths for applications using a 20t crank pulley, a 40t accessory pulley and a standard belt length (in millimeters). The "MAX C.D." column indicates the calculated distance between the centers of the two pulleys.

Crank	Accessory	Max C.D.	Belt
20	40	7.02	600
20	40	7.81	640
20	40	8.60	680
20	40	9.40	720
20	40	10.19	760
20	40	10.98	800
20	40	11.77	840
20	40	12.57	880
20	40	13.36	920
20	40	14.15	960
20	40	15.74	1040
20	40	17.32	1120

If use of other pulley combinations is desired, you may contact us at sales@mtpturbo.com for assistance with belt length and center distance calculations.

Cable drive and other installations

In addition to the above, many pump accessories and mounts are available from Waterman Racing, more info may be found here: <https://www.watermanracing.com/08-Belt-Drive,%20Chassis.html>