



## ALTERNATIVE PLUNGER STYLE OPTION FOR MSI HYBRID PUMPS

MSI Technical Bulletin 059

Subject: Alternative plunger style for use in MSI Hybrid Well Service Pumps

Since the inception of the Hybrid pump, the plunger design has used an integral external Acme thread that engages directly with the internal threads of the power end plunger as shown in figure 1. This style plunger is installed using anti-seize compound and applying 375 ft-lbs of torque.



Figure 1. Original Hybrid Plunger offering.

MSI is now offering a more conventional plunger assembly for the MSI Hybrid pump that uses an internally threaded plunger in conjunction with a pony rod stud as shown in figure 2. The primary advantage of this configuration is that the difficult to replace component now has steel on steel threading rather than stainless steel on steel. Table 1 gives the part numbers for the new style plungers and the pony rod stud. The pony rod stud is installed using Loctite® Threadlocker Blue and applying 360 ft-lbs of torque while this style plunger is installed using anti-seize compound and applying 300 ft-lbs of torque.

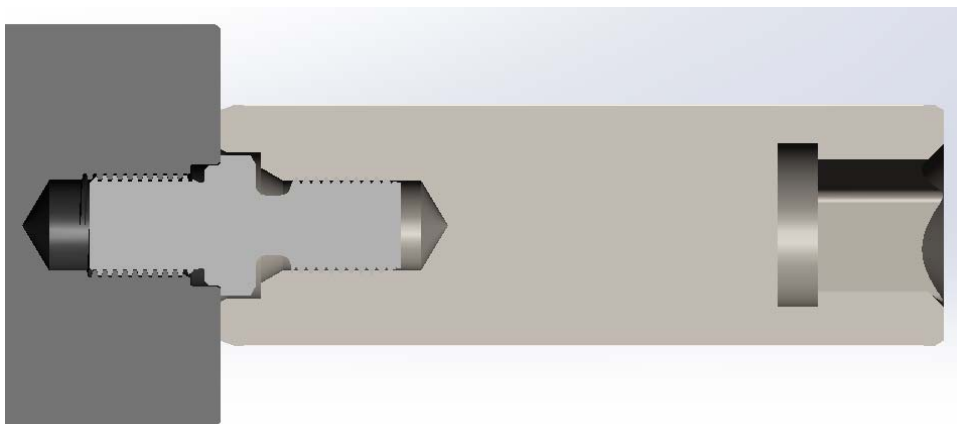


Figure 2. Alternative Hybrid plunger offering.

**Table 1. Part numbers for alternative plunger style offering**

<b>Part Number</b>	<b>Description</b>
FEC0495	PONY ROD STUD, HYBRID, (600/1000HP)
FEC0496	PLUNGER, FLUID END 2.75" (WSP HYBRID) SS FEMALE THD
FEC0497	PLUNGER, FLUID END 3.00" (WSP HYBRID) SS FEMALE THD
FEC0498	PLUNGER, FLUID END 3.25" (WSP HYBRID) SS FEMALE THD
FEC0499	PLUNGER, FLUID END 3.50" (WSP HYBRID) SS FEMALE THD
FEC0500	PLUNGER, FLUID END 4.00" (WSP HYBRID) SS FEMALE THD
FEC0501	PLUNGER, FLUID END 4.50" (WSP HYBRID) SS FEMALE THD

You may contact an MSI representative at [sales@diwmsi.com](mailto:sales@diwmsi.com) or [engineering@diwmsi.com](mailto:engineering@diwmsi.com) if you have any further questions or concerns.

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