

Before performing any service always follow applicable safety precautions. Consult company safety manual or supervisor for questions concerning safety.

## Helicoil Inserts in ST1000 Starters

**Affected Products:** All ST1000 Air Starters

**Affected Date Range:** From Initial Launch

**Related Issue #:** N/A

### Issue Description:

In some cases, when re-installing bolts and heli-coil inserts to the inlet flange of a ST1000 series starter, bolts are not able to be properly seated into the heli-coil inserts.

In the field, we have seen cases where the customers cannot insert the bolts into the heli-coil due to not properly applying oil to the bolts, and/or over-torquing the bolts beyond its' spec.

### Action:

First, the heli-coils need to be installed in the inlet flange. The heli-coils cannot be used with pneumatic impact tools; and they should be started by hand, ran in with a low-impact or hand tool, and torqued with a torque wrench, set to no more than 150-inch-pounds per the spec in Figure 1.

Once the heli-coils are in, the bolts can be inserted; the bolts that attach the inlet flange come from the supplier pre-oiled. It is also important to note that the housing are received by us from the supplier with the heli-coils installed as well. If the bolts are stripped of their oil, a few drops of IR Air Tool Oil would suffice as a replacement.

When re-installing the oiled bolts, they should turn with no more than 150 inch-pounds resistance until just before they bottom out. When installing the flange, as you keep tightening, you should tighten the bolts to 50-55 ft-lb.

Please note, these bolts have to be presented in a cross-pattern to create a good seal between the inlet flange and inlet surface on the housing.

If new heli-coils need to be procured, please see Figure 2 for the specifications on them.

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**Torque Spec on Inlet Flange:**

- Inserts: 150 in-lb max to install new inserts;
- Bolts: 50-55 ft-lb in a cross pattern.

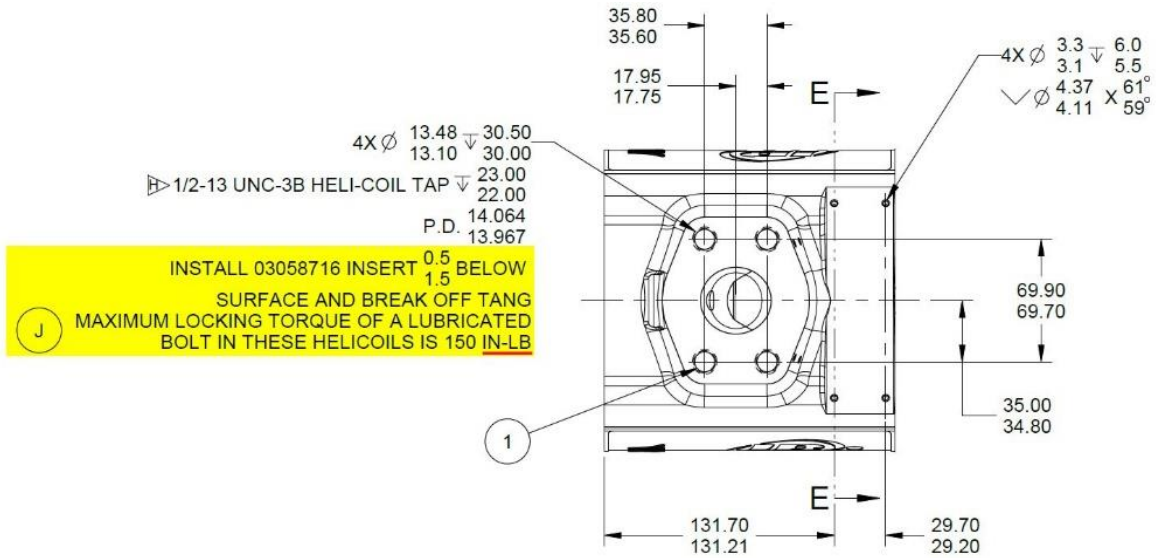


Figure 1

**Heli-Coil Insert Drawing:**

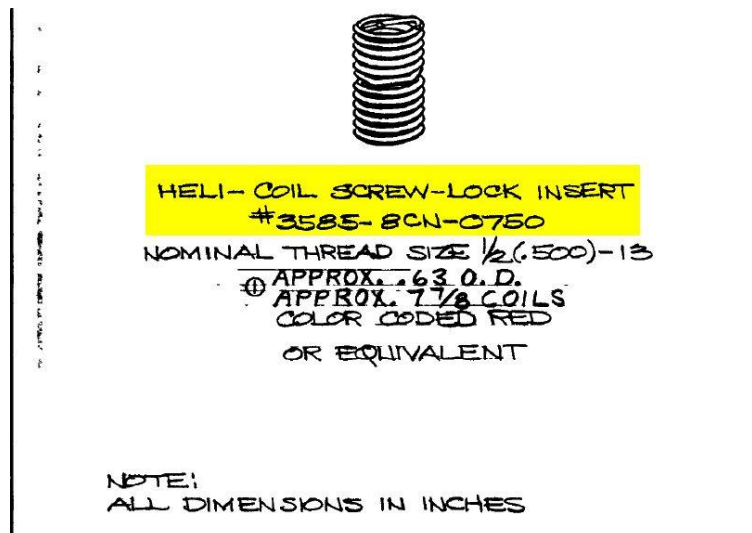


Figure 2

**Material Disposition:**

Hold material 30 days for warrantable repairs, and follow instructions in the Warranty system for material return or discard. If non-warrantable, dispose of parts properly in accordance with local regulations.

**Warranty Strategy:**

N/A

**Additional Comments:**

N/A

**For Additional Information:**

Knowledge Base: [IRToolHelp](#)

Technical/Warranty Support: Contact Ingersoll Rand Technical Support at [irtoolhelp@irco.com](mailto:irtoolhelp@irco.com).

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REVISION	DESCRIPTION	RESP.	DATE
0	Original issue	AJ	28 June 2022