



## Hale Products, Inc. Service Bulletins

Bulletin#: SB-81

Revision#: A

Date: 2/17/2005

Product Type Covered: Hale Pump

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Hurst Tool

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Lukas Tool

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Product Covered:

Use of Loctite® Thread Locker on Fasteners

### Problem Statement:

Replacement of 360<sup>O</sup> Nylon Locking Fasteners used during assembly with plain fasteners and Loctite® 242 or Loctite® Product 246 Threadlocker

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### Body of the Bulletin

Hale Products, Inc. is constantly striving to improve their products with the end user in mind. During production of Hale pumps and components fasteners with 360<sup>O</sup> nylon locking patches (patchlock) have been used. In most instances it was necessary to apply an additional thread locking compound to augment the locking patch. This made it difficult for service as considerable effort is often required to remove the compound from tapped holes for re-assembly. Accurate torque values for field repair personnel were also difficult to attain with this arrangement.

Recently in an effort to ease service we have switched to using plain fasteners and applying Loctite® brand Removable Threadlocker. For fasteners being installed in pumps and other accessories Hale uses Loctite® 242 Removable Thread Locker as we have for many years. On equipment where high operating temperatures are possible, where the old nylon locking material was an advantage, such as the gearbox and drive line components, Hale now uses Loctite® 246 High Temperature Removable Thread Locker on all gearbox fasteners. The high temperature performance capability of Product 246 provides for better performance on the higher temperature components w/o resorting to the nylon coating.

All fasteners installed with Loctite® 242 or Loctite® 246 can be removed with standard hand tools during service or repair. When replacing fasteners use of Loctite® 242 or Loctite® Product 246 (or equal) is recommended dependent on the application.

**NOTE: Use Loctite® 246 High Temperature Thread Locker on Gearbox fasteners and Loctite® 242 Thread Locker anywhere else on the pump.**

In parts kits where fasteners are provided Hale will begin to supply appropriate non-patchlock fasteners for use during repairs. Hale will continue providing a 0.5 ml (0.017 oz) tube of Loctite® 242 thread locker in the repair kits to use during replacement of pump fasteners. Since Loctite® 246 is not available in small quantity packaging Hale will not be able to provide this product in repair kits. Loctite® 246 is readily available in 10 ml (0.34 oz) and larger containers from industrial supply vendors such as McMaster-Carr or Grainger.

As reference when replacing patchlock fasteners the following substitutions are recommended:

If Patchlock Fastener Part Number is:	Use Fastener Part Number:
018-XXXX-07-0 (Zinc Plated Steel Grade 5)	018-XXXX-02-0
018-XXXX-09-0 (Bronze)	018-XXXX-05-0
018-XXXX-01-0 (Zinc Plated Steel Grade 8)	018-XXXX-25-0
018-XXXX-19-0 (Hex Socket Head Zinc Plated)	018-XXXX-08-0
018-XXXX-17-0 (304 Stainless Steel)	018-XXXX-12-0

NOTE: -XXXX- in the above part numbers indicate thread size and fastener length.