

ENG FORM P014

Process Specification P1205 Revision A April 30, 2007

# **REVISION STATUS**

Sheet	Rev.	Date	Written By	Approved By	Description
1 - 4	Α	4/30/07	M. Faust	A. Schweitzer	Initial Release.

### 1.0 SCOPE

The scope of this document is to describe the MultiSeal replacement and reuse procedures for 3000-psi Lee Standard Solenoid Valves.

## 2.0 APPLICABLE DOCUMENTS

PS P1186 Lee Solenoid Valve Installation Guide SDBB2130108A Lee MultiSeal drawing

### 3.0 MULTISEAL OVERVIEW

The Lee Company solenoid valves utilize a MultiSeal to isolate the individual ports and isolate the hydraulic system from atmosphere. The MultiSeal is the only maintainable part on the solenoid valve. It is designed to be reusable about five times after it has been inserted into and removed from the valve installation hole. The MultiSeal is made from polyamide-imide and is nominally .34 inches long by .216 inch diameter.

### 4.0 MULTISEAL USAGE

#### 4.1 Installation Onto Valve Body

The MultiSeal has 180° rotational symmetry about the axis of insertion. The cross-holes of the MultiSeal need to align with the ports of the valve body. The MultiSeal has tabs that snap onto slots on the valve body to aid in orientation and extraction. The MultiSeal is tapered on the inside and will only fit onto the valve body starting with the large inside diameter.

Align the tabs of the MultiSeal with the slots on the valve body. Press the MultiSeal onto the valve body until the tabs snap into the slots. The MultiSeal should be free to slide within the length of the slots on the valve, but should not pull off of the valve body. Also, the MultiSeal should not be pressed onto the valve body. This will pre-expand the MultiSeal and lead to installation problems. Care should be used near the screen on the P-port because it is fragile and easily dented. Follow PS P1186 for explanation of valve installation.

#### 4.2 MultiSeal Reuse In Hole

The MultiSeal may remain in the installation hole after extraction. There are two options if this occurs. The first option is to leave the MultiSeal in the hole and install the solenoid valve into the MultiSeal. The MultiSeal should first be inspected to be sure there is no damage or debris on the seal. Also be sure the ports of the MultiSeal are aligned with the ports of the manifold and valve body. The solenoid valve can then be inserted into the MultiSeal being sure the location pin is aligned with the manifold hole it is inserted into. Then follow P.S. P1186 for valve installation.

#### 4.3 Removing the MultiSeal from Hole

The second option is to remove the MultiSeal using a special tool, part number CUTA2180121B. The tabs on the tool should be aligned to the ports on the MultiSeal. Press on the cap to expand the tool capturing the MultiSeal. Pull the tool to remove the MultiSeal from the hole. Pull on the cap of the tool to release the MultiSeal from the tool. The MultiSeal may be inspected and reused if it is in good condition. It can be placed onto the valve body following Section 4.1. Alternately, the MultiSeal can be placed into the manifold hole with the large end of the taper facing out. Section 4.2 should then be followed to install the valve. Follow P.S. P1186 for valve installation.