



Title: **SLIDE VALVE LOCKNUTS**

Number: **C9602A**

Date: **4/16/96**

Supersedes: **C9602**

Date: **1/15/96**

Models Affected: **23XL**

**Purpose:**

To inform the field of a failure mode and a field fix of the slide valve assembly.

**Background:**

Field experience is showing that the locknuts on the slide valve assembly may back off prematurely on frame 4 23XL chillers. When a locknut comes off the shaft the gas delta P across the slide valve drives the slide valve in the loaded direction until it hits the housing. At shutdown the spring returns the slide back to unloaded position.

**Troubleshooting:**

The following symptoms may be experienced:

1. Chiller trips on overload shortly after startup.
2. Chiller constantly recycling
3. Pulling excessive amps shortly after transition
4. Loud sound can be heard shortly after startup and shutdown.

**Correction:**

Remove the slide valve assembly from compressor by removing the socket head screws from the separator plate.

Caution: Do not remove the slide cover while slide valve assembly is attached to the compressor. The assembly contains a coil spring which is compressed to a preload pressure.

Remove the hollow hex plugs slowly to relieve oil and refrigerant pressure and then remove the slide cover.

Note: Do not install the shaft O-Rings item 54 and item 75.

FILE: Compressor

Prepared By:

*NICK CHASHIN*

NICK CHASHIN

Approved By:

*Alan M. Johnson*

ALAN M. JOHNSON

MAIL KEYS: 2.40A, 2.40M, 2.40I, 2.40J, 2.40G, 2.40, 5.25G, 2.33A, 2.33B, 2.33D

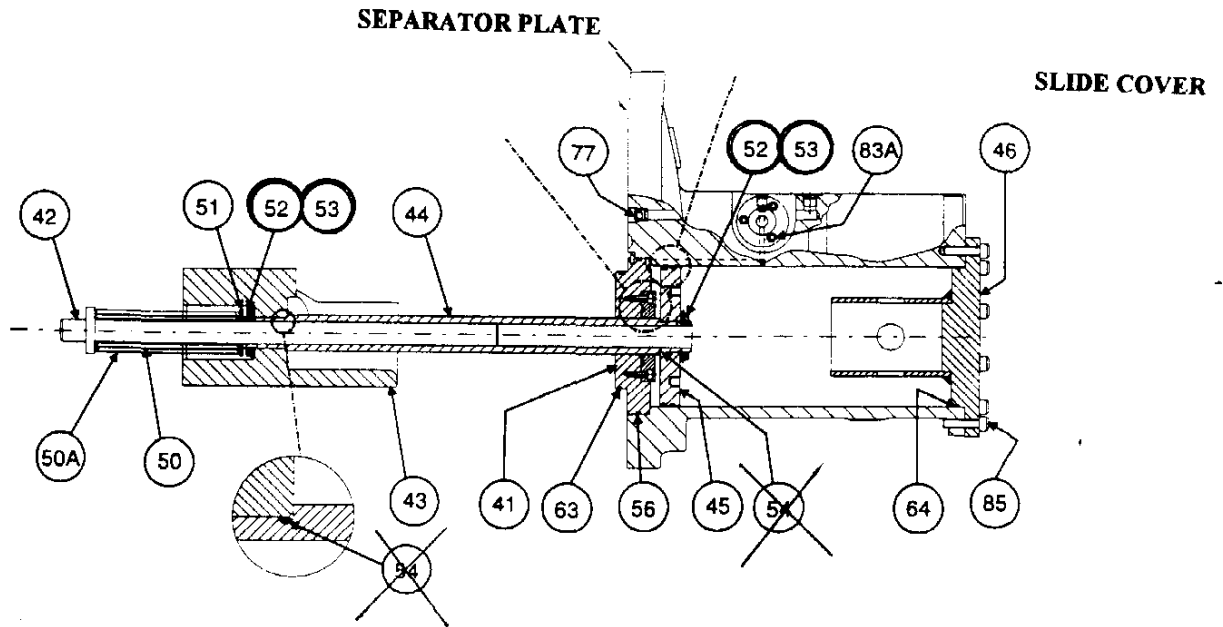
After replacing the damaged parts apply four drops of Loctite 554 on the shaft threads and torque to the specified value using slide valve locknut socket p/n T-144502D.

	Torque	
Locknut (20 mm)	68-75 Nm	50-55 Lb-Ft
Locknut (35 mm)	95-102 Nm	68-75 Lb-Ft

Service Hint:

Use a 3/8"-16 all thread rod approximately 3 ft. (1 meter) long to hold the spring retainer item 42 during reassembly of the fixed V.I. slide valve assy into the compressor.

## SLIDE VALVE ASSY FIXED VOLUME



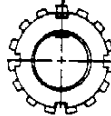
ITEM 52 35 mm LOCKNUT

ITEM 53 35 mm LOCKWASHER

ITEM 72 20 mm LOCKNUT

ITEM 73 20 mm LOCKWASHER

BEND THE (1) TAB ON LOCKWASHER  
THAT MATCHES UP WITH SLOT IN  
LOCKNUT AFTER LOCKNUT HAS BEEN  
TORQUED TO SPECIFICATIONS



## SLIDE VALVE ASSY VARIABLE VOLUME

