



This document contains the operating instructions and recommended procedures for installing a Hawkeye Industries Series 5000 Emergency Pressure Relief Vent.

Requirements

Ensure that the tank has been fitted with a man way opening and the appropriate flange connection.

Contents

- A.) Installing the Series 5000 EPRV
- B.) Series 5000 EPRV Operating Instruction
- C.) Maintenance

Tools

QTY	Tool
All Models	
▶ 1	Side Cutters
▶ 2	3/4" Open End Box Wrench
▶ 1	3/4: Deep Socket, 1/2" Max Drive
▶ 1	Torque Wrench from 59 to 121 ft-lb
For 20" and 24" API 650 Flange Mount EPRVs	
▶ 2	15/16" Open End Box Wrench
▶ 1	15/16" Socket
For 20" ANSI 150# Flange Mount EPRVs	
▶ 1	1-11/16" Open End Box Wrench
▶ 1	1-11/16" Socket
For 24" ANSI 150 Flange Mount EPRVs	
▶ 1	1-7/8" Open End Box Wrench
▶ 1	1-7/8" Socket

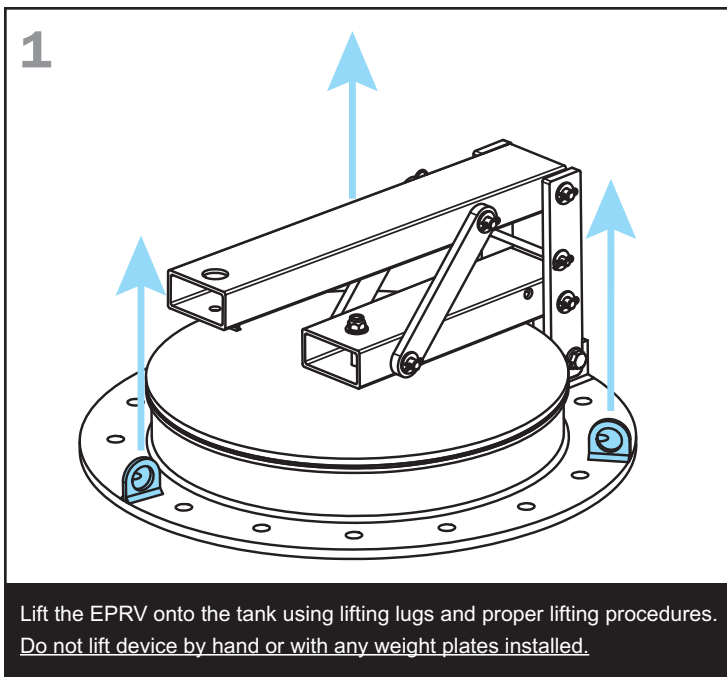
Parts Required

QTY	Part
Installation	
▶ 1	Series 5000 EPRV, c/w
▶ 1	Flange Gasket
▶ varies	Mounting Hardware
▶ varies	Dead Weight set pressure plates
Maintenance	
▶ 1	Replacement Gasket
▶	Dow Corning #4 Electrical Insul. Compound (or eq.)

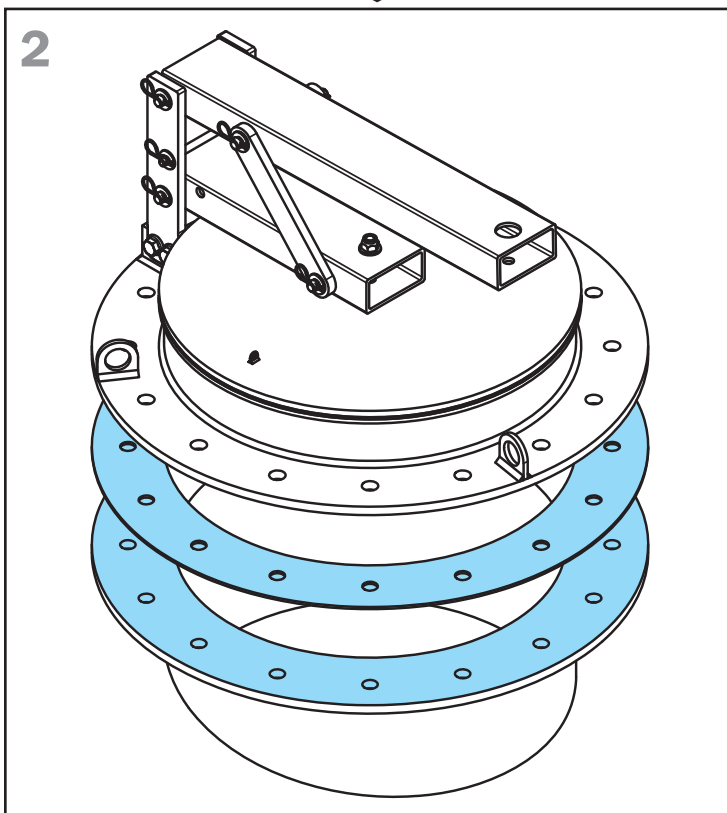
Unladen Weights

SIZE	W/ STEEL BASE	W/ ALUMINUM BASE
20 API	143 lb [64.7 kg]	111 lb [50.2 kg]
20 ANSI	144 lb [65.2 kg]	112 lb [50.7 kg]
24 API	187 lb [84.6 kg]	149 lb [67.4 kg]
24 ANSI	192 lb [86.9 kg]	153 lb [69.2 kg]

A.) Installing the Series 5000 EPRV

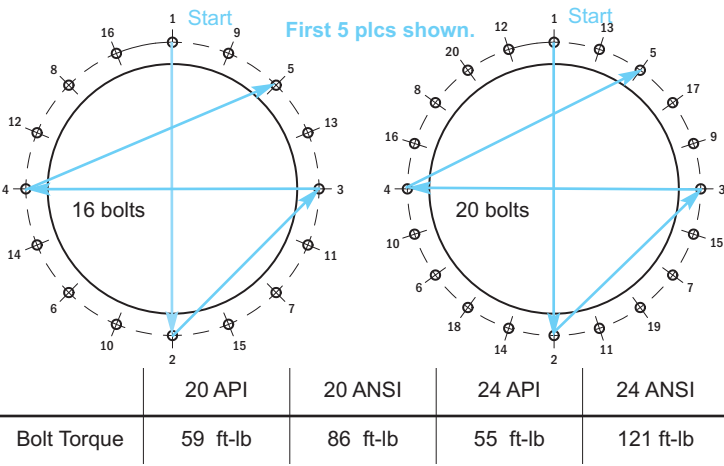
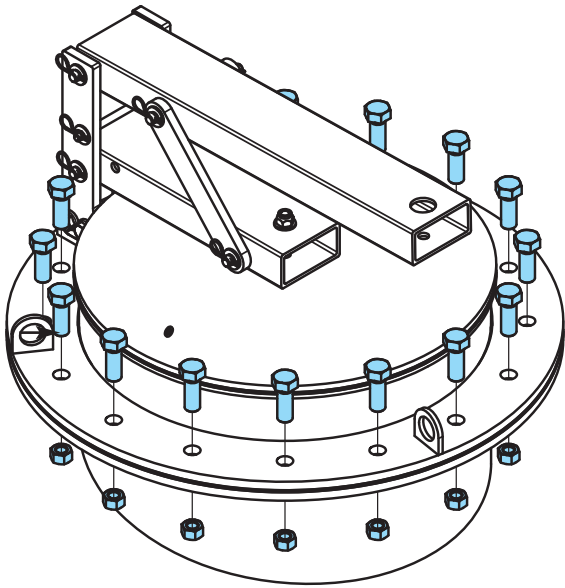


Lift the EPRV onto the tank using lifting lugs and proper lifting procedures. Do not lift device by hand or with any weight plates installed.



Clean all debris and residue from flange gasket and mating surfaces. Set flange gasket on the tank flange and EPRV on the flange gasket, aligning the bolt patterns.

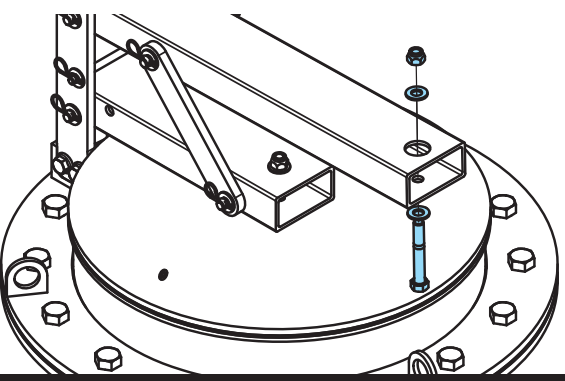
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Secure to the tank with the supplied bolts and nuts by following the Torque Procedure below.

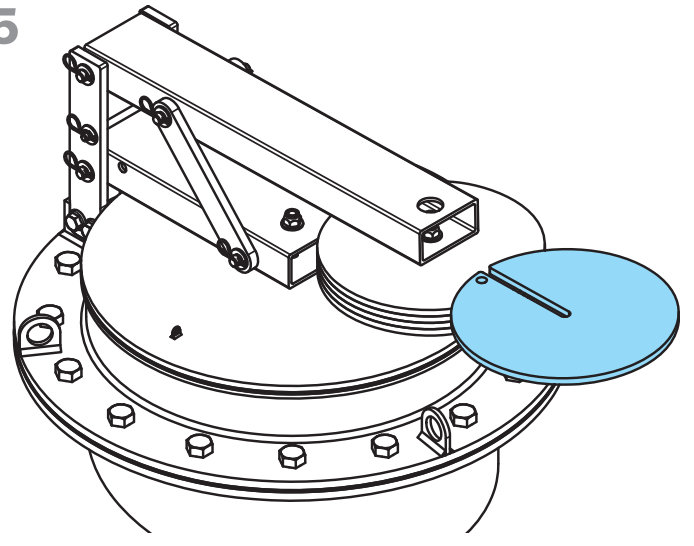
- 1.) Locate the appropriate torque value and tightening pattern in the figures above. Follow this pattern for each of the following steps.
- 2.) Install all fasteners hand tight. Some EPRV bolt patterns have threaded holes in the flange that do not require a nut. These bolts must be installed from the underside of the tank connection.
- 3.) Tighten all fasteners to half of the specified torque. Ensure the flange is sitting correctly and the gasket is being compressed evenly.
- 4.) Fully tighten all fasteners to the specified torque value.
- 5.) Repeat the pattern at the specified torque until no additional movement of the fasteners is observed.

4



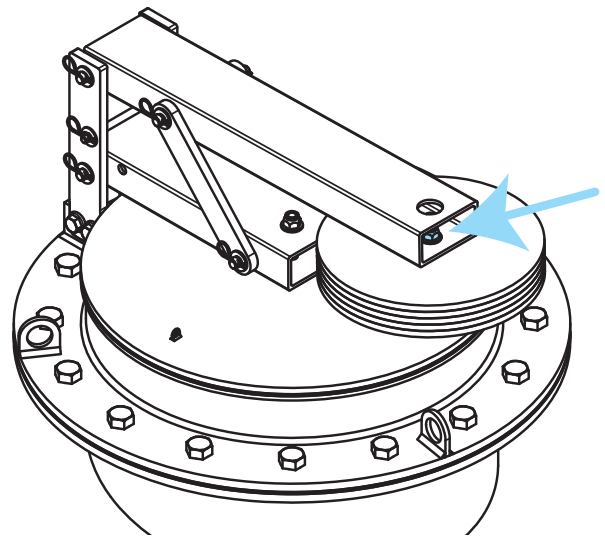
Install weight hanger bolt hand tight (until the nylon lock engages).

5



Install weight plates to achieve desired opening pressure. Stagger the slot position of each plate. The base set pressure with no weight plates is 4 ozsi. Each weight plate increases the set pressure by the amount stamped on the plate.

6

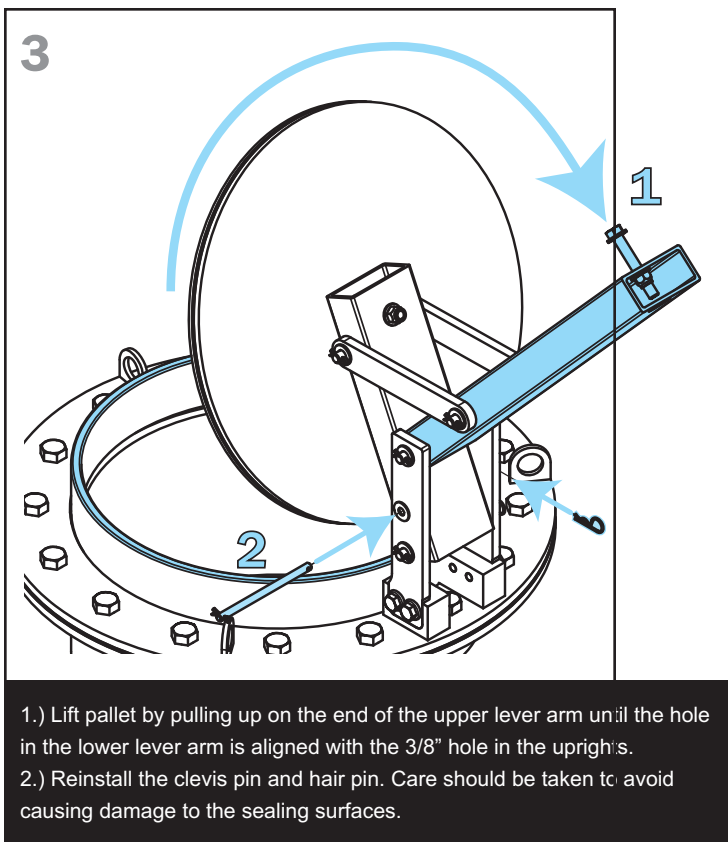
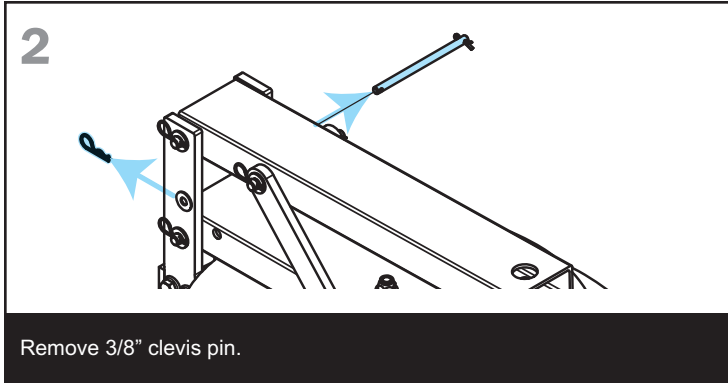
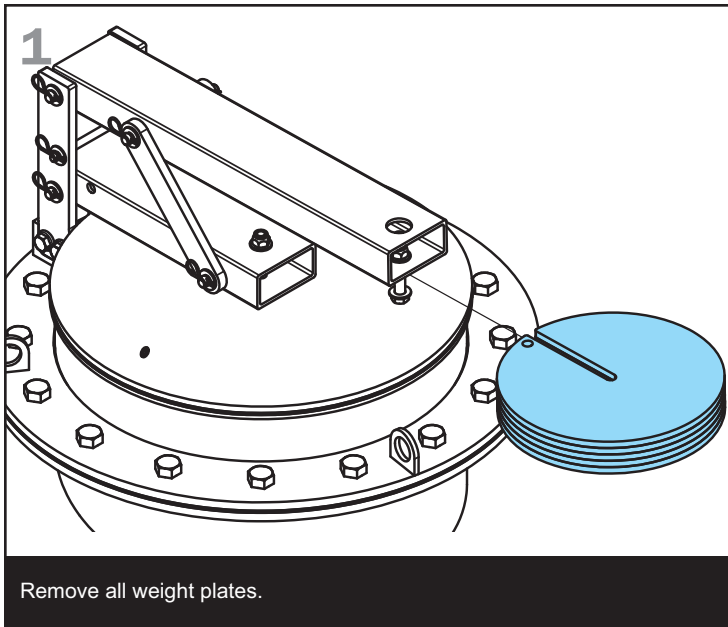


Tighten the weight hanger bolt to 68 ft-lbs to secure plates in place with the 3/4 Socket and wrench.

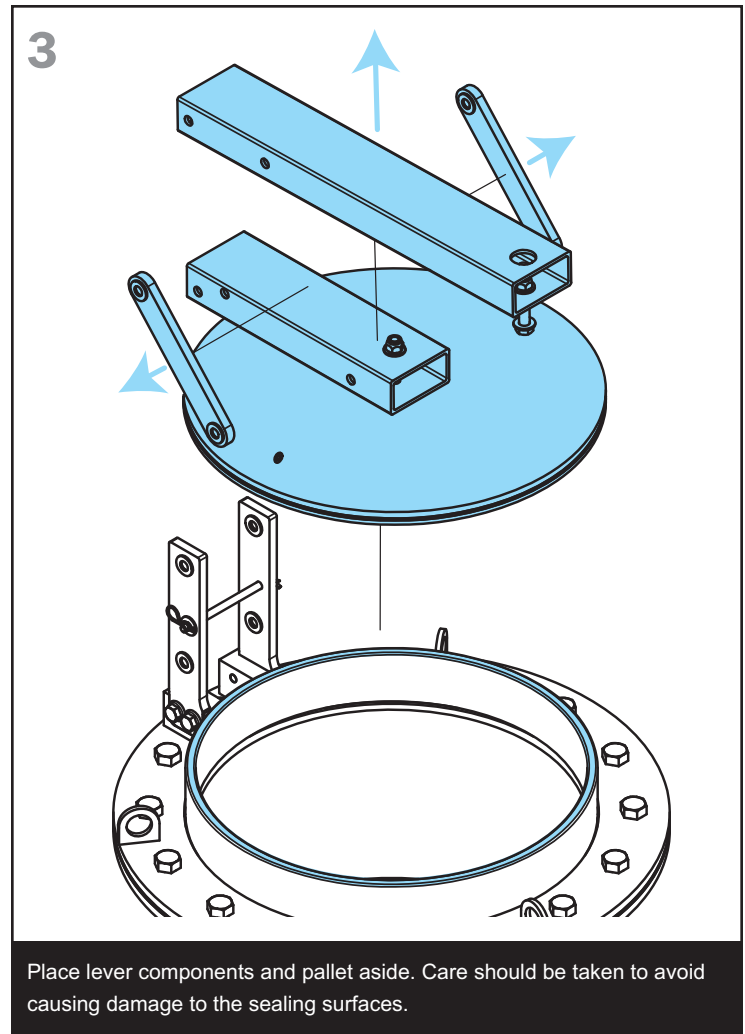
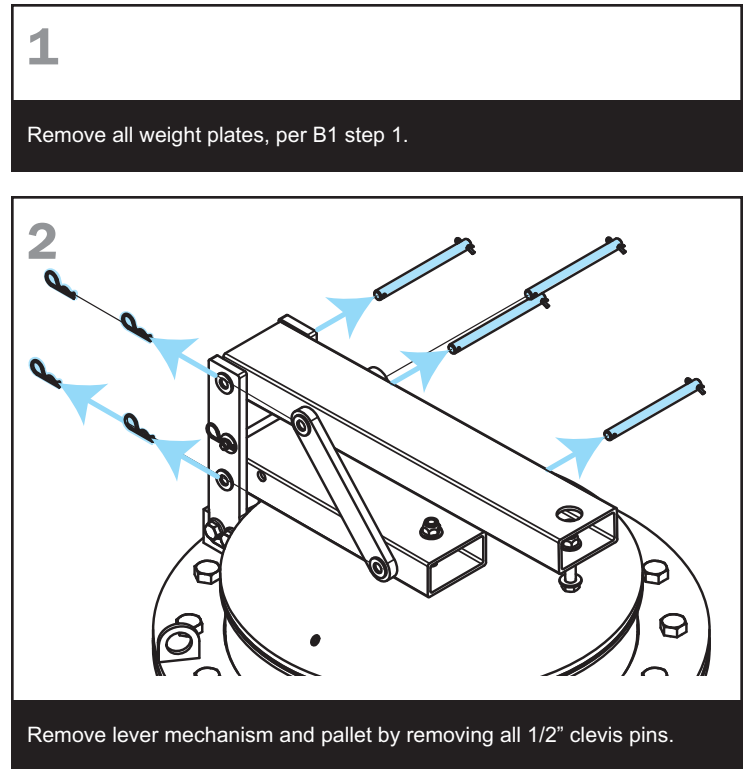
Installation Complete.

B.) Series 5000 EPRV Operating Instructions

B1.) Man Way Access



B2.) Full Throat Man Way Access



Operations Complete

C.) Series 5000 EPRV Maintenance

Generally, an emergency vent will not need lubrication as often as a normal venting hatch. However, the device should be inspected after any emergency venting occurrences. Relubrication and inspection shall be performed at least once per year to ensure the continued performance of the vent.

Hawkeye factory-applies Dow Corning 4 Electrical Insulating Compound to the vacuum and pressure gasket, and recommends the same compound for any field relubrication.

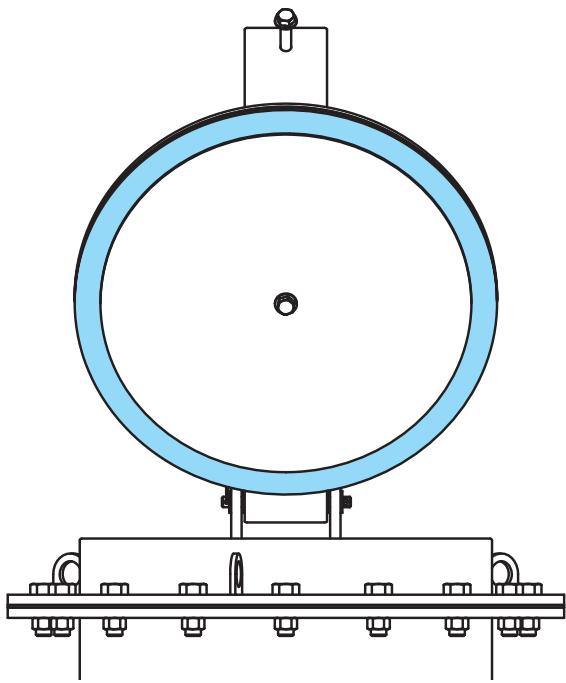
- ▶ Excellent seal and release properties
- ▶ -57°C to 204°C
- ▶ Moisture Resistant
- ▶ 4.5% Bleed, 24 hr/200°C
- ▶ 1.4% Evaporation, 24 hr/200°C
- ▶ Non-toxic and odorless

C1.) Inspect and Relubricate Sealing Gasket

1

Follow steps 1 to 3 of Section B1, Man Way Access

2



Inspect sealing gasket. Check for tears or debris. Compression setting (indentation) in the sponge gasket is normal.

3

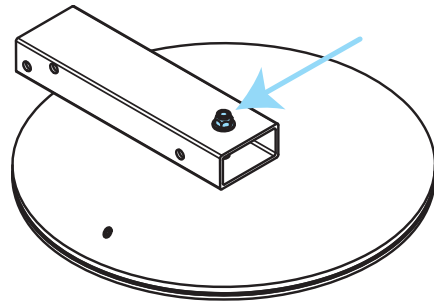
Relubricate the sealing gasket with Dow Corning 4 Electrical Insulating Compound or equivalent and return the vent to the operating position by following these steps in reverse order and tightening the weight plate bolt to 68 ft-lbs.

C2.) Sealing Gasket Replacement

1

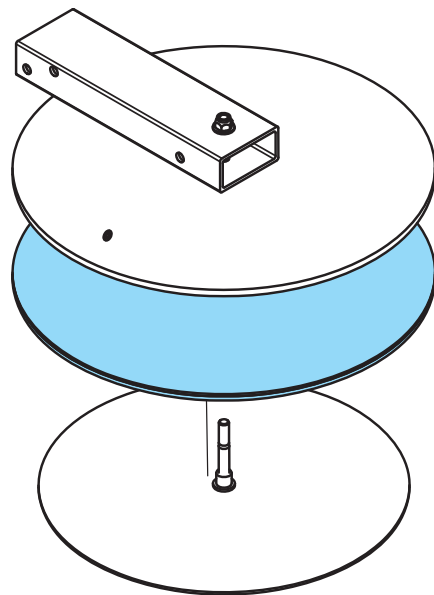
Follow steps 1 to 3 of Section B2, Full Throat Man Way Access

2



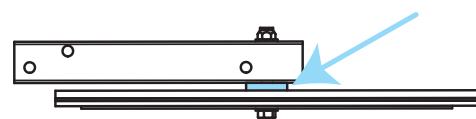
Remove gasket retaining bolt on pallet.

3



Replace composite sealing gasket.

4



Tighten the gasket retaining bolt to until the rubber mount has been compressed from 1/2" thick to 3/8" thick. Return the vent to the operating position by following these steps in reverse order. Tighten the weight plate bolt to 68 ft-lbs.

5

Lubricate the sealing gasket by following the relubrication instructions above.

Seal Maintenance Complete.

Seal Replacement Complete.

Hawkeye Industries Inc.