6.7.4.5 High-Pressure Hose Assembly Removal and Installation.

Tools, Parts, and Materials.
- Hammer, hand, machinist’s ballpeen, 8 oz.
- O-ring, PN 55622-00
- Punch, pin, 1/8 inch
- Ring, backup, PN 18071-02

a. Removal.
   (1) Remove cylinder assembly IAW paragraph 2.3.2.2.
   (2) Lay backframe and harness assembly on clean work surface with cylinder band clamp facing down.
   (3) Using 1/8 inch pin punch and hammer, tap out two roll pins (2, Figure 6-72) securing high-pressure hose assembly (1) to pressure reducer (3).

   ![Figure 6-72. High-Pressure Hose Assembly Removal.](image)

   (4) Pull high-pressure hose assembly from pressure reducer.

b. Installation.
   (1) Inspect O-ring (1, Figure 6-73) and backup ring (2) on high-pressure hose assembly for nicks, cuts, wear and tear, or foreign debris. If necessary, remove and replace IAW paragraph 4.7.5.

   ![Figure 6-73. High-Pressure Hose Assembly O-ring and Backup Ring.](image)

   (2) Inspect roll pins for cracks, bends, or mushroomed ends. Replace as required.
To prevent equipment damage, ensure high-pressure hose inlet port is free of foreign matter before installing high-pressure hose. Ensure high-pressure hose assembly groove aligns with roll pin holes to prevent damage to equipment.

(3) Insert high-pressure hose assembly into pressure reducer. Ensure high-pressure hose assembly groove (3) aligns with roll pin holes and that roll pin holes are unobstructed.

(4) While holding high-pressure hose assembly firmly in place, insert roll pins and lightly tap in place with hammer until roll pins are flush with pressure reducer.

(5) Replace cylinder assembly IAW paragraph 2.3.2.2.

(6) Perform leak check IAW paragraph 6.6.2.

6.7.4.6 Quick-Charge Assembly Removal and Installation.

a. Removal.
(1) Bleed system IAW paragraph 6.6.1.
(2) Remove quick-charge assembly mounting block IAW paragraph 6.7.4.1.
(3) Remove remote pressure indicator high-pressure hose IAW paragraph 6.7.4.2.
(4) Remove bell alarm high-pressure hose IAW paragraph 6.7.4.3.

b. Installation.
(1) Inspect quick-charge assembly for any visible damage. Replace as required.

NOTE
Perform leak check after all components have been reinstalled.

(2) Install bell alarm high-pressure hose IAW paragraph 6.7.4.3.
(3) Install remote pressure indicator high-pressure hose IAW paragraph 6.7.4.2.
(4) Install quick-charge assembly mounting block IAW paragraph 6.7.4.1.
(5) Perform leak check IAW paragraph 6.6.2.

6.7.4.7 Pressure Reducer Removal and Installation.
Tools, Parts, and Materials.
• Wrench, socket head key (Allen wrench), 5/32 inch
• Wrench, open-end, 5/8 inch

a. Removal.
(1) Remove high-pressure hose assembly IAW paragraph 6.7.4.5.
(2) Using 5/8 inch open-end wrench, remove low-pressure hose (2, Figure 6-74) by rotating low-pressure hose coupling (1) fully CCW.
(3) Remove quick-charge assembly mounting block IAW paragraph 6.7.4.1.

(4) Using 5/32 inch socket head key wrench, remove two mounting screws and sliding washers (1, Figure 6-75) from mounting plate (4) on backframe and harness assembly. Set aside for installation.

(5) Remove pressure reducer from mounting plate.

b. Installation.

(1) Inspect pressure reducer for any visible sign of damage. Replace as required.

(2) Align screw holes in side of pressure reducer (3) with slots (2) and mounting plate (4).

(3) Using 5/32 inch socket head key wrench, install mounting screws and sliding washers (1).

NOTE

Perform leak check after all components have been installed.

(4) Install quick-charge assembly mounting block IAW paragraph 6.7.4.1.

(5) Using 5/8 inch open-end wrench, install low pressure hose (2, Figure 6-74) by rotating low-pressure hose coupling (1) fully CW.

(6) Install high-pressure hose assembly IAW paragraph 6.7.4.5.

(7) Perform leak check IAW paragraph 6.6.2.
6.7.5 Pressure Reducer and Supported Components Corrective Maintenance (Configuration 4).

6.7.5.1 Visualert® Removal and Installation.
Tools, Parts, and Materials.
• O-ring, PN 55810-00
• Pliers, needle-nose
• Pliers, soft-jawed
• Ring, backup, PN 18071-00
• Wrench, socket head key (Allen wrench), 3/32 inch
• Wrench, socket head key (Allen wrench), 5/32 inch

a. Removal.
   (1) Bleed system IAW paragraph 6.6.1.
   (2) Remove cylinder assembly IAW paragraph 2.3.2.2.
   (3) Using 5/32 inch socket head key wrench, remove mounting screws, sliding washers, and spacers (1, Figure 6-76) securing Visualert® bracket (4) to pressure reducer (3) and mounting plate (2). Set aside for installation.

Figure 6-76. Visualert® Removal.

(4) Disconnect HUD electrical cable (1, Figure 6-77) from Visualert® (3) by rotating knurled connector (2) fully CCW by hand. If necessary, use soft-jawed pliers.

Figure 6-77. Visualert® and HUD Electrical Cable.
(5) Using 3/32 inch socket head key wrench, loosen two screws (1, Figure 6-78) from Visualert® mounting block (2).

![Figure 6-78. Visualert® Mounting Block Removal.](image)

(6) Lift Visualert® mounting block from pressure reducer. Set screws aside for installation.

**CAUTION**

To prevent damage to equipment, take care not to drop mounting probe (Figure 6-79) which may stay attached to Visualert® mounting block.

![Figure 6-79. Mounting Probe.](image)

(7) Remove mounting probe (Figure 6-79) from pressure reducer or Visualert® mounting block, as applicable. Ensure cleanliness is maintained IAW paragraph 4.7.1.

(8) If replacing Visualert® or remote pressure indicator, continue with following steps. If not, proceed to installation procedures in step b.

(9) Remove retaining clip (2, Figure 6-80) securing remote pressure indicator high-pressure hose (1) to Visualert® mounting block (3) with needle-nose pliers.
(10) Pull remote pressure indicator high-pressure hose from Visualert® mounting block. Ensure cleanliness is maintained IAW paragraph 4.7.1.

b. **Installation.**

(1) Inspect Visualert® for any visible sign of damage. Replace as required.
(2) If remote pressure indicator has been removed, perform steps (3) through (6). If not proceed to step (7).
(3) Inspect retaining clip for cracks, bends, or mushroomed ends. Replace as required.

**NOTE**

Backup ring is a split ring.

(4) Inspect O-ring (1, Figure 6-81) and backup ring (2) on remote pressure indicator high-pressure hose for nicks, cuts, wear and tear, or foreign debris. As necessary, remove and replace IAW paragraph 4.7.5.

(5) Insert remote pressure indicator high-pressure hose (1, Figure 6-82) fully into Visualert® mounting block (3). Ensure hose groove (3, Figure 6-81) is aligned with retaining clip holes (2, Figure 6-82) and that retaining clip holes are unobstructed.

**CAUTION**

To prevent equipment damage, ensure Visualert® outlet port is free of foreign matter before inserting remote pressure indicator high-pressure hose.
CAUTION

Failure to properly install retaining clip as shown in Figure 6-82 could damage equipment.

(6) Fully insert retaining clip (2, Figure 6-80) into retaining clip holes to secure remote pressure indicator high-pressure hose.

NOTE

Backup rings on mounting probe are split rings.

(7) Inspect O-rings (2, Figure 6-83) and backup rings (1) on mounting probe for nicks, cuts, wear and tear, or foreign debris. As necessary, remove and replace IAW paragraph 4.7.5.

(8) Fully seat mounting probe into pressure reducer.

(9) Carefully place Visualert® mounting block (2, Figure 6-84) over mounting probe (4) and onto pressure reducer (3).

Figure 6-82. Retaining Clip Holes.

Figure 6-83. Mounting Probe O-Rings and Backup Rings.
Figure 6-84. Position Visualert® Mounting Block.

(10) Using 3/32 inch socket head key wrench, install two socket head screws (1, Figure 6-78) to secure Visualert® mounting block (2) to pressure reducer.

CAUTION

Ensure HUD electrical cable connector holes and Visualert® pins are aligned to prevent damage to the equipment.

(11) Align HUD electrical cable connector holes (1, Figure 6-85) with Visualert® pins (2).

Figure 6-85. HUD Electrical Cable Connection.

(12) Rotate knurled connector (5, Figure 6-86) CW by hand to tighten.
Figure 6-86. Visualert® Placement.

(13) Position Visualert® mounting bracket (4) between pressure reducer (3) and mounting plate (2).

(14) Using 5/32 inch socket head key wrench, install mounting screws, sliding washers, and spacers (1) securing Visualert® bracket to pressure reducer and mounting plate.

(15) Replace cylinder assembly IAW paragraph 2.3.2.2.

(16) Perform leak check IAW paragraph 6.6.2. Ensure HUD initiates. If HUD does not initiate, repeat steps (11) and (12) and retest.

6.7.5.2 Remote Pressure Indicator Removal and Installation.

a. Removal.

(1) Bleed system IAW paragraph 6.6.1.

(2) Remove cylinder assembly IAW paragraph 2.3.2.2.

(3) Remove Visualert® and remote pressure indicator IAW paragraph 6.7.5.1.

(4) Carefully remove remote pressure indicator high-pressure hose (3, Figure 6-87) from right shoulder strap (1) and rubber retaining strap (2).

Figure 6-87. Remove Remote Pressure Indicator High-Pressure Hose.

b. Installation.
NOTE
Ensure remote pressure indicator high-pressure hose is threaded between the Kevlar® straps within the right shoulder strap, as worn.

1. Guide end of remote pressure indicator high-pressure hose (3) through rubber retaining strap (2) and right shoulder strap (1) from the bottom and out the top, as worn.
2. Install remote pressure indicator and Visualert® IAW paragraph 6.7.5.1.
3. Install cylinder assembly IAW paragraph 2.3.2.2.
4. Perform leak check IAW paragraph 6.6.2.

6.7.5.3 RIC UAC Assembly Nipple Seal Gasket Removal and Installation.

Tools, Parts, and Materials.
- Gasket, Nipple Seal, PN 57264-00
- Wrench, socket head key (Allen wrench), 1/8 inch
- Wrench, open-end, 7/16 inch

a. Removal.
1. Bleed system IAW paragraph 6.6.1.
2. Rotate hand coupling (1, Figure 6-88) CCW and remove RIC UAC assembly from cylinder valve.

b. Installation.
1. Inspect new nipple seal gasket for any damage. Replace as required.
2. Install nipple seal gasket (3) onto center of nipple seal shaft (2).
3. Hold nipple seal shaft under hand coupling with 7/16 inch open-end wrench and use 1/8 inch socket head key wrench to install retaining screw (4) into center of nipple seal shaft.
4. Rotate hand coupling (1) CW to reconnect RIC UAC assembly to cylinder valve.

Figure 6-88. RIC UAC Assembly.

NOTE
Do not remove hand coupling from RIC UAC assembly when replacing nipple seal gasket. Only remove retaining screw and nipple seal gasket.

3. Hold nipple seal shaft under hand coupling with 7/16 inch open-end wrench while using 1/8 inch socket head key wrench to remove retaining screw (4) from center of nipple seal shaft (2) and set aside for installation.
4. Remove nipple seal gasket (3) and discard.
(5) Perform leak check IAW paragraph 6.6.2.

6.7.5.4 **RIC UAC Assembly Removal and Installation.**

Tools, Parts, and Materials.
- Hammer, hand, machinist’s ballpeen, 8 oz.
- O-ring, PN 55622-00
- Punch, pin 1/8 inch
- Ring, backup, PN 18071-02

a. **Removal.**

(1) Remove cylinder assembly IAW paragraph 2.3.2.2.
(2) Lay backframe and harness assembly on clean work surface with cylinder band clamp facing down.
(3) Using punch pin and hammer, tap out two roll pins (2, Figure 6-89) securing RIC UAC assembly (1) to pressure reducer (3).

![Figure 6-89. RIC UAC Assembly Removal.](image)

(4) Pull RIC UAC assembly from pressure reducer.

b. **Installation.**

(1) Inspect O-ring (1, Figure 6-90) and backup ring (2) on RIC UAC assembly for nicks, cuts, wear and tear, or foreign debris. If necessary, remove and replace IAW paragraph 4.7.5.

![Figure 6-90. RIC UAC Assembly O-ring, and Backup Ring.](image)

(2) Inspect roll pins for cracks, bends, or mushroomed ends. Replace as required.