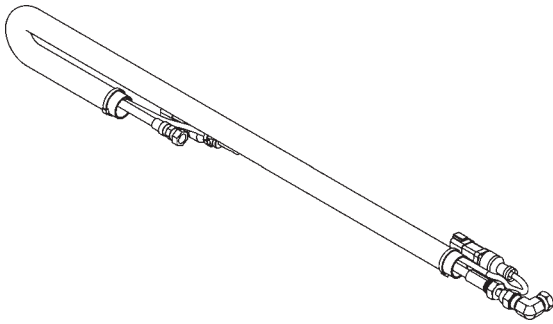


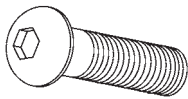
**INSTRUCTIONS, SLEEVED CABLE KITS  
BMRA (INCLUDES BMRA-CS) KIT P/N 289857-100**



**HOSE & CABLE ASSEMBLY  
P/N 289857-01  
QTY. 1**



**PLASTIC TIE, 7" LG  
P/N 205780  
QTY. 3**

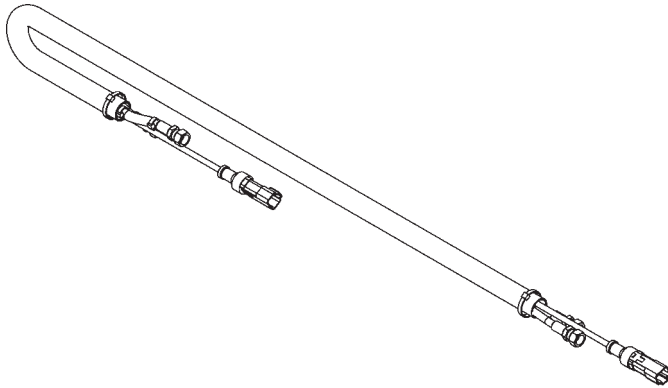


**BUTTON HEAD SCREW  
1/4"-20 X 1" LG  
P/N 900005-4  
QTY. 1**



**LOCK NUT 1/4"-20  
P/N 901000  
QTY. 2**

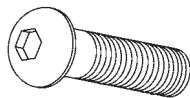
**BMRSD (INCLUDES BMRSD-CS) KIT P/N 288761-100**



**HOSE & CABLE ASSEMBLY**  
**P/N 288761-01**  
**QTY. 1**



**PLASTIC TIE, 7" LG**  
**P/N 205780**  
**QTY. 3**



**BUTTON HEAD SCREW**  
**1/4"-20 X 1" LG**  
**P/N 900005-4**  
**QTY. 1**



**LOCK NUT 1/4"-20**  
**P/N 901000**  
**QTY. 2**

## CAUTION

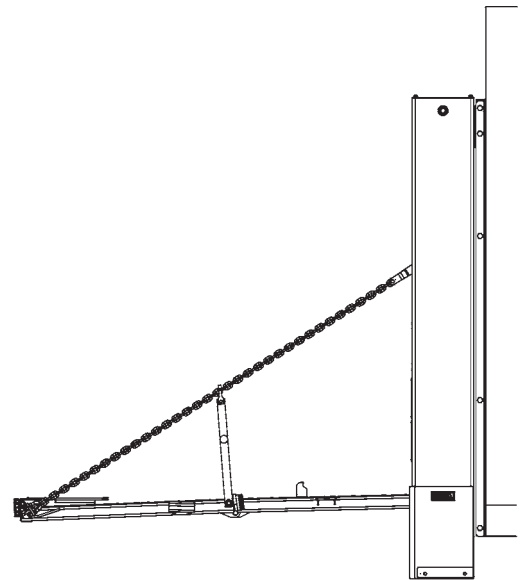
Keep dirt, water and other contaminants from entering the hydraulic system. Before opening the hydraulic fluid reservoir filler cap, drain plug and hydraulic lines, clean up contaminants that can get in the openings. Also, protect the openings from accidental contamination.

**NOTE:** The following procedure contains instructions for replacing a spring guard, carrier, or sleeved hose and cable assembly with this sleeved hose and cable kit.

**NOTE:** Perform this procedure at a place where platform can be lowered to lowest point of travel. Get a helper to operate Liftgate control switch.

**NOTE:** Refer to **Operation Manual** for instructions to operate Liftgate.

**UNFOLD** the platform as shown in **FIG. 3-1**.



**PLATFORM UNFOLDED**  
**FIG. 3-1**

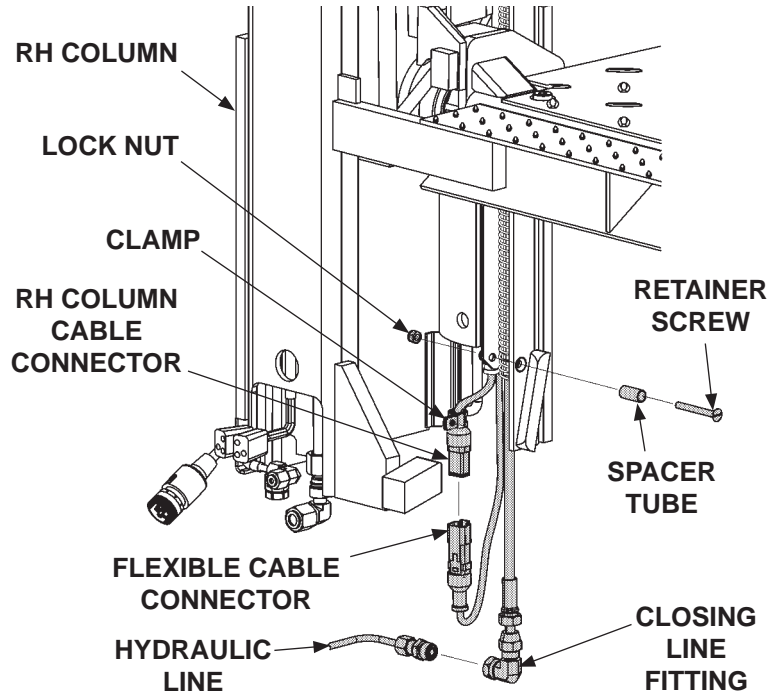
## REMOVE OLD HOSE AND CABLE

1. Remove retainer screw, spacer tube, and lock nut from RH column (FIGS. 4-1 or 4-2). Keep clamp in place on the cable. If necessary, reposition cable and hoses for easier access. Keep the old screw, and spacer tube. Discard the lock nut.

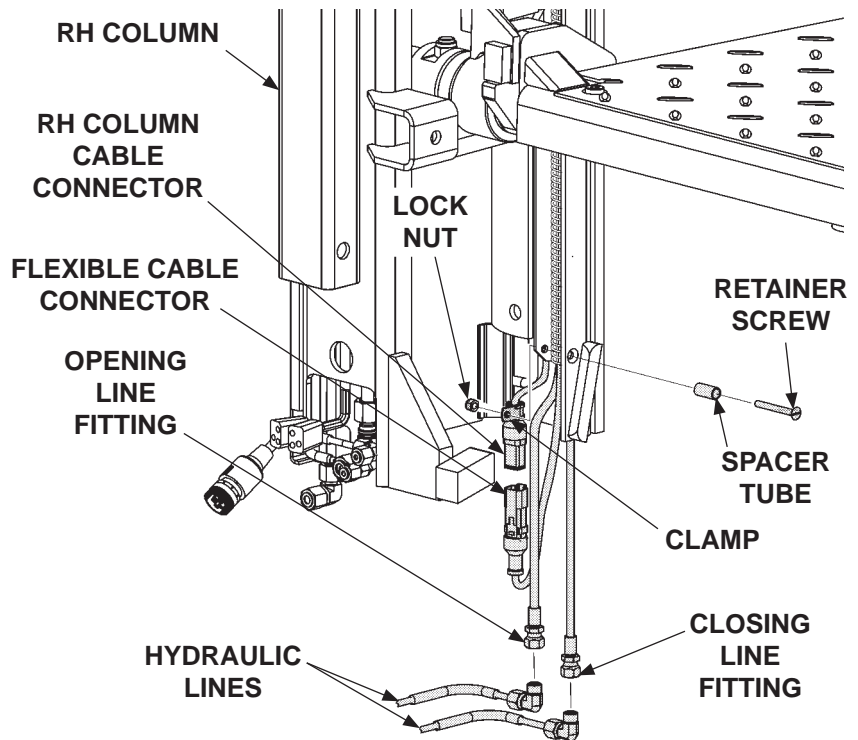
2. For **BMRA**, disconnect the hydraulic hose in the RH column from the closing line fitting (FIG. 4-1). Plug hose to prevent spills.

For **BMRSD**, disconnect the hydraulic hoses in the column from the opening and closing line fittings (FIG. 4-2). Plug hoses to prevent spills.

3. Disconnect the flexible cable connector from the cable connector in the RH column (FIGS. 4-1 or 4-2).

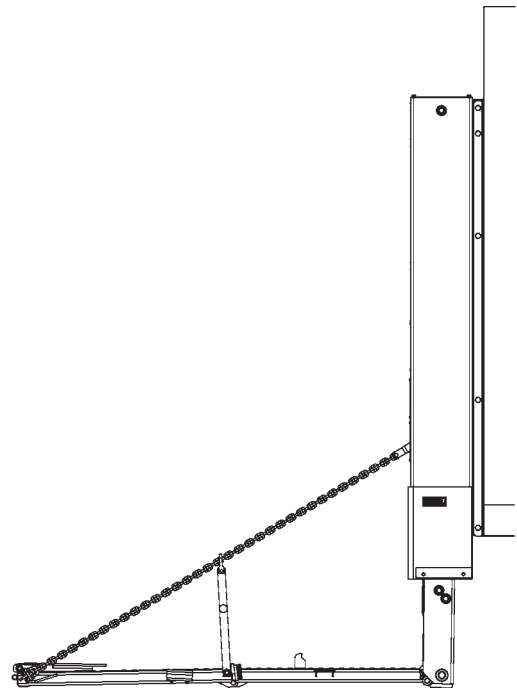


**DISCONNECTING HOSE & CABLE FROM RH COLUMN - BMRA**  
FIG. 4-1



**DISCONNECTING HOSE & CABLE FROM RH COLUMN - BMRSD**  
FIG. 4-2

4. Lower the platform (**DOWN**) to the ground (**FIG. 5-1**).



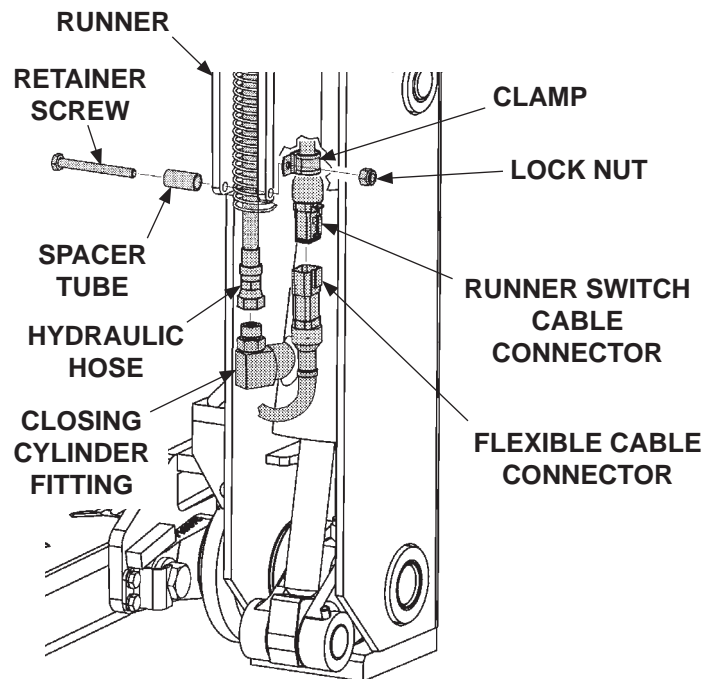
**PLATFORM LOWERED TO GROUND**  
**FIG. 5-1**

5. Remove retainer screw, spacer tube, nut, and lock nut from RH runner (FIGS. 6-1 or 6-2). Keep clamp in place on the cable. If necessary, reposition cable and hoses for easier access. Discard the old screw, spacer tube, and lock nut.

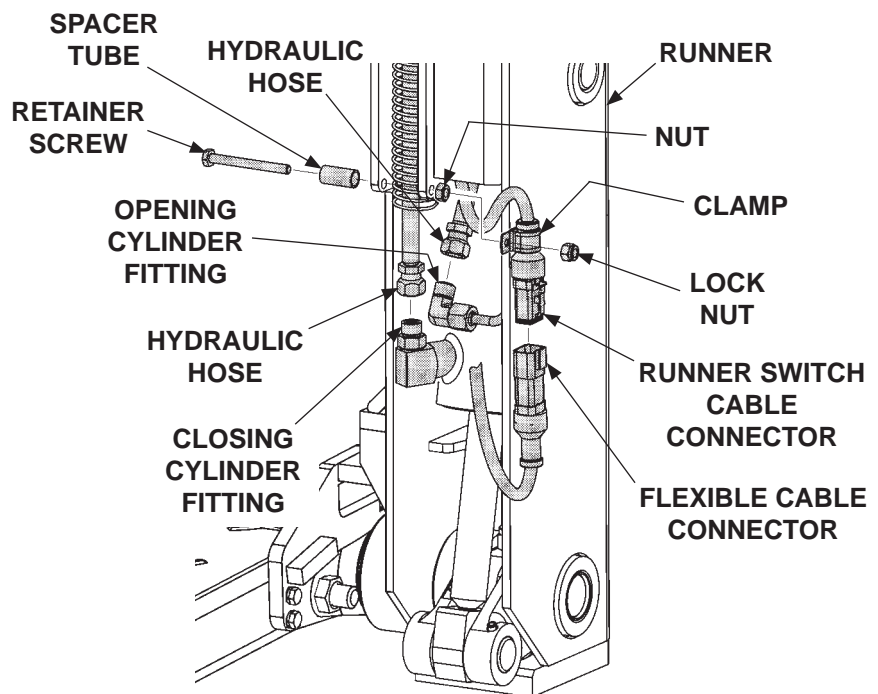
6. For **BMRA**, disconnect the hydraulic hose in the runner from the closing cylinder fitting (FIG. 6-1). Plug hose to prevent spills.

For **BMRSD**, disconnect the hydraulic hoses in the runner from the opening line fitting and closing cylinder fitting (FIG. 6-2). Plug hoses to prevent spills.

7. Disconnect the runner switch cable from the flexible cable connector (FIGS. 6-1 or 6-2).



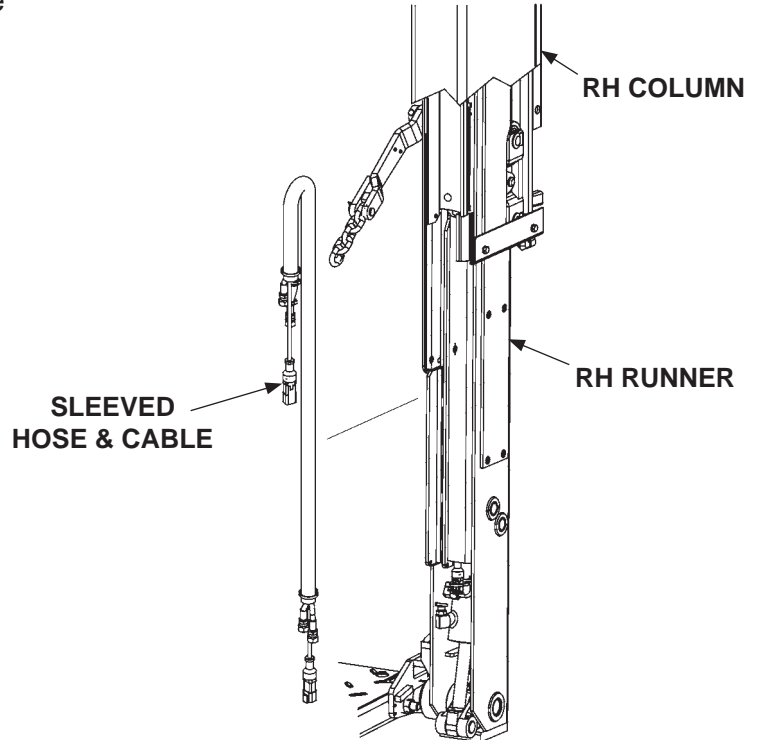
**DISCONNECTING HOSE & CABLE FROM RH RUNNER - BMRA**  
FIG. 6-1



**RUNNER HOSES & CABLE FROM RH RUNNER - BMRSD**  
FIG. 6-2

## INSTALL SLEEVED HOSE & CABLE

1. Insert sleeved hose and cable in the RH runner as shown in **FIG. 7-1**.

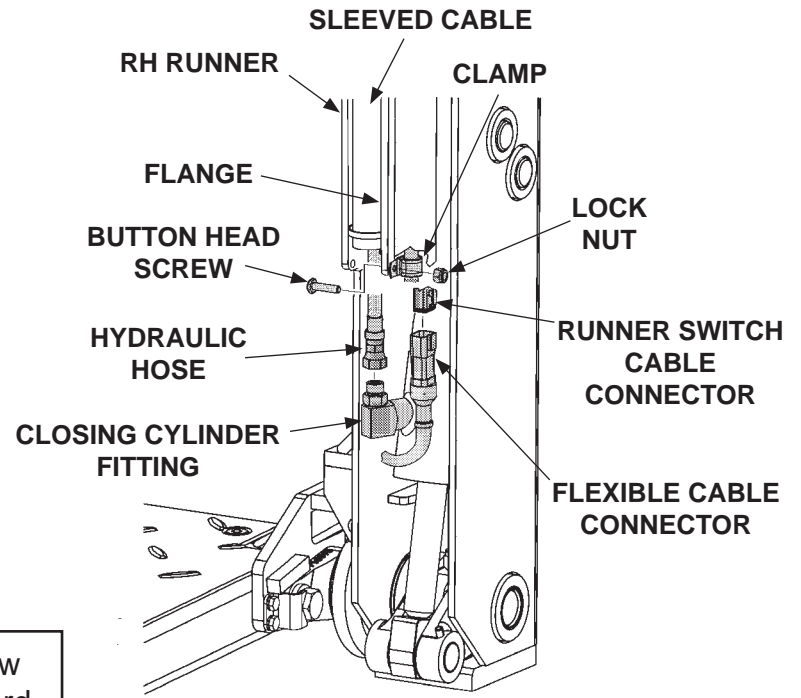


**INSTALLING SLEEVED HOSE & CABLE  
(BMRSD SHOWN)  
FIG. 7-1**

2. Connect the runner switch cable connector to the flexible cable connector (FIGS. 8-1 or 8-2).
3. For **BMRA**, unplug hydraulic hose. Then connect the hose in the runner to the closing cylinder fitting (FIG. 8-1).

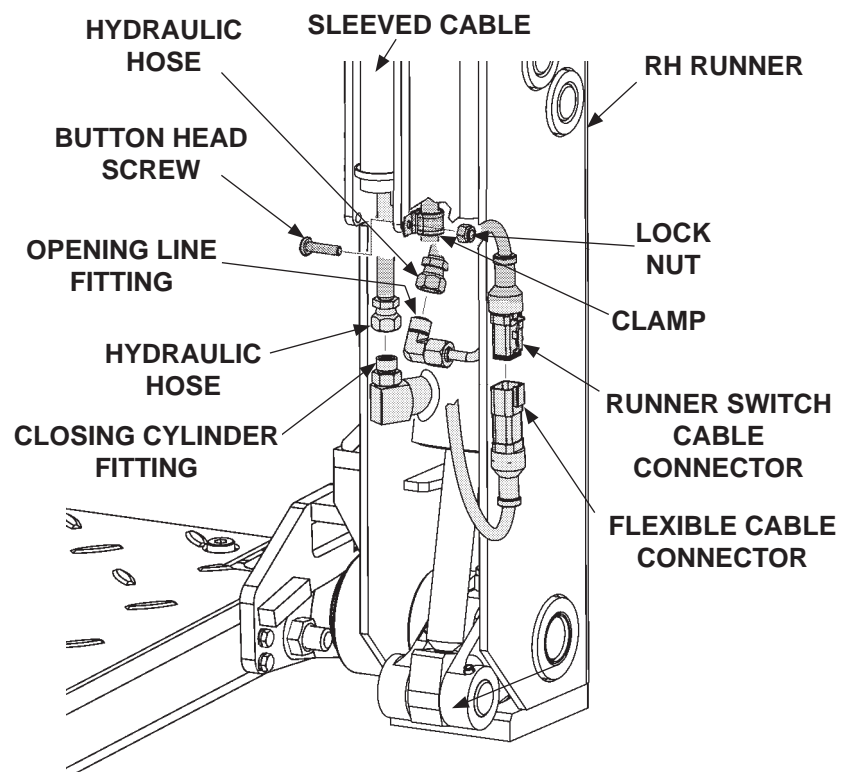
For **BMRSD**, unplug hydraulic hoses. Then connect the hoses in the runner to the opening line fitting and closing cylinder fitting (FIG. 8-2).

**NOTE:** Ensure button head screw is inserted from the inboard side of the runner flange.



**CONNECTING RUNNER HOSE & CABLE - BMRA**  
**FIG. 8-1**

4. Install button head screw and lock nut (**Kit Items**) to fasten clamp and cable on runner (FIGS. 8-1 or 8-2).

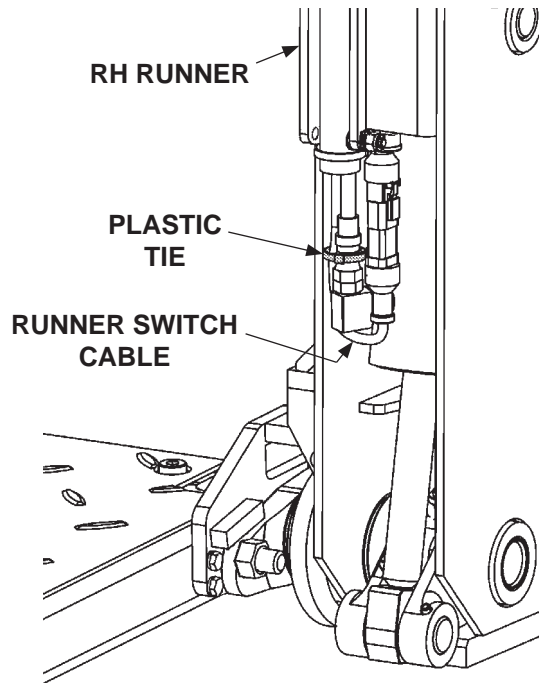


**CONNECTING RUNNER HOSE & CABLE - BMRSD**  
**FIG. 8-2**

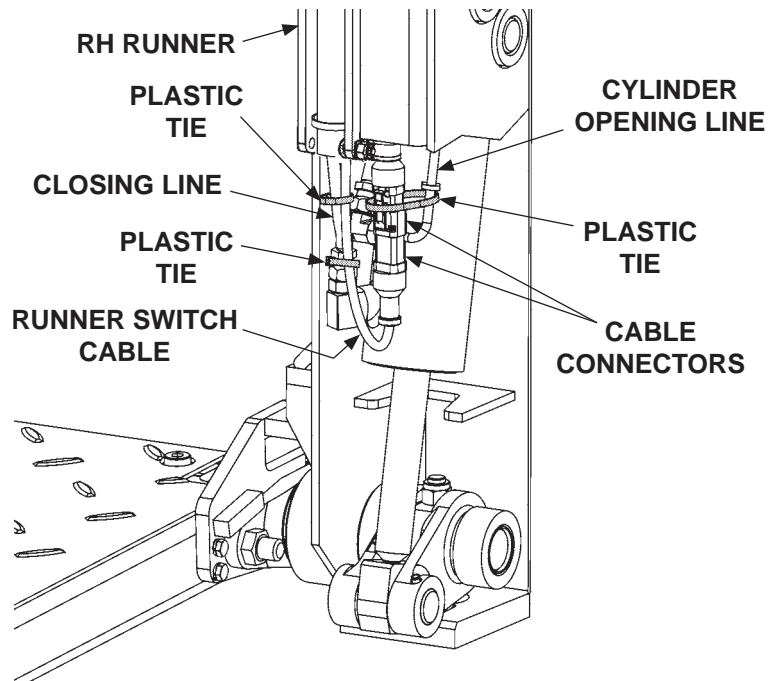


5. For **BMRA**, tie runner switch cable to cylinder closing line as shown in **FIG. 9-1**.

For **BMRSD**, tie cable connectors to cylinder opening line (**FIG. 9-2**). Then, tie runner switch cable to the closing line as shown in **FIG. 9-2**.

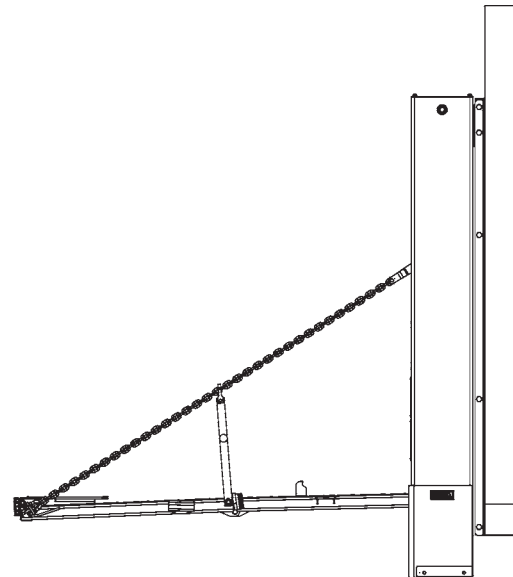


**ATTACHING CABLE TO CLOSING LINE - BMRA**  
**FIG. 9-1**



**ATTACHING CABLE TO CLOSING LINE - BMRSD**  
**FIG. 9-2**

6. Raise platform (**UP**) as shown in (**FIG. 10-1**).



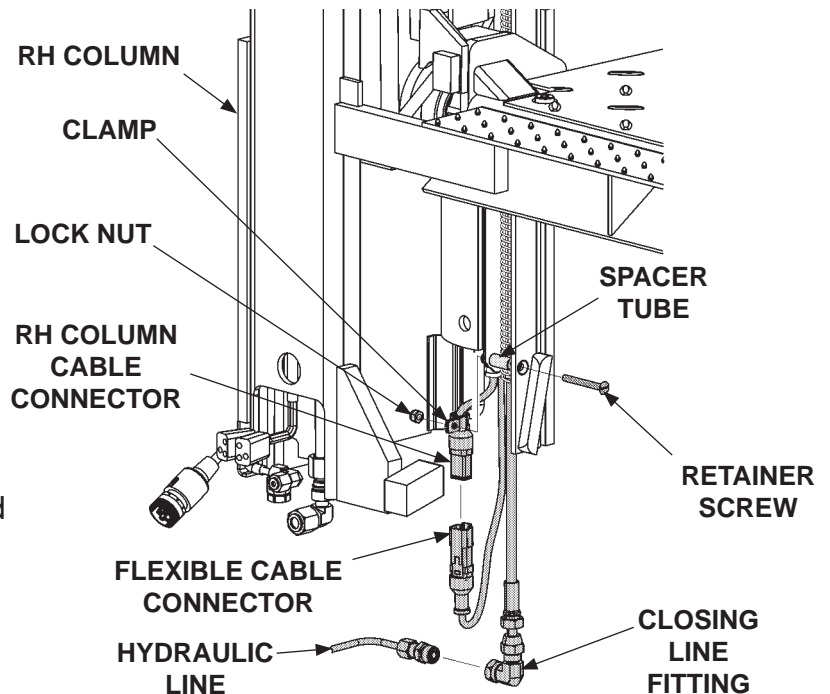
**PLATFORM RAISED UP**  
**FIG. 10-1**

7. Connect the RH column cable connector to the flexible cable connector (FIGS. 11-1 or 11-2).

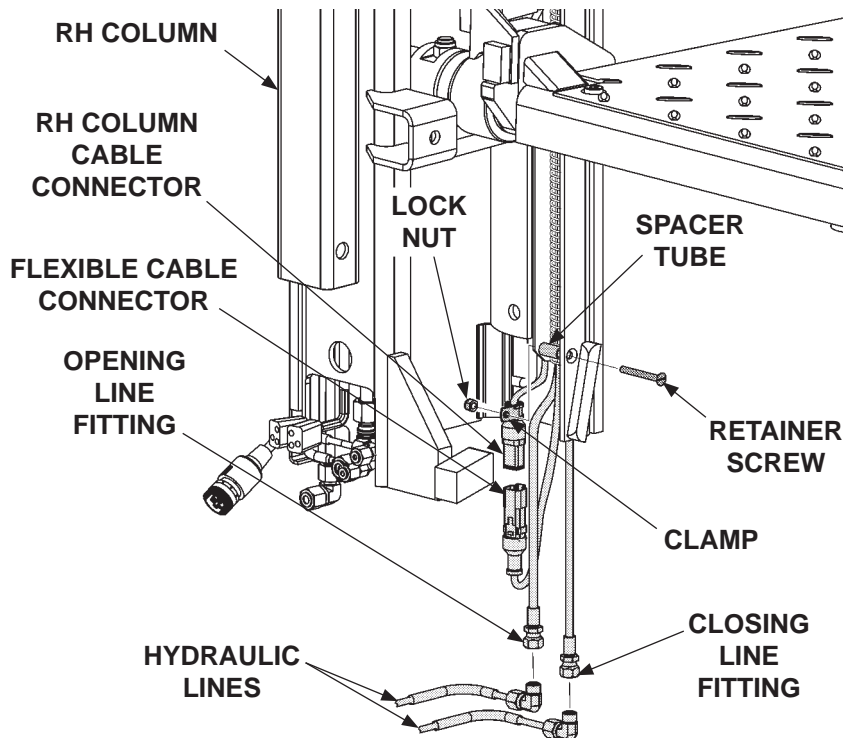
8. For **BMRA**, unplug hydraulic hose. Then connect the hose in the column to the closing line fitting (FIGS. 11-1 or 11-2).

For **BMRSD**, unplug hydraulic hoses. Then connect the hoses in the column to the opening and closing line fittings (FIGS. 11-1 or 11-2).

9. Install old retainer screw, spacer tube, and nut (FIGS. 11-1 or 11-2). Then, use new lock nut (Kit Item) to fasten clamp and cable to column.



**CONNECTING HOSE & SLEEVE CABLE  
IN RH COLUMN - BMRA  
FIG. 11-1**



**CONNECTING HOSE & SLEEVE CABLE  
IN RH COLUMN - BMRSD  
FIG. 11-2**

## CAUTION

Keep dirt, water and other contaminants from entering the hydraulic system. Before opening the hydraulic fluid reservoir filler cap, drain plug and hydraulic lines, clean up contaminants that can get in the openings. Also, protect the openings from accidental contamination.

Never mix synthetic fluids with conventional hydraulic fluids. Hydraulic system must be purged if the fluids are mixed.

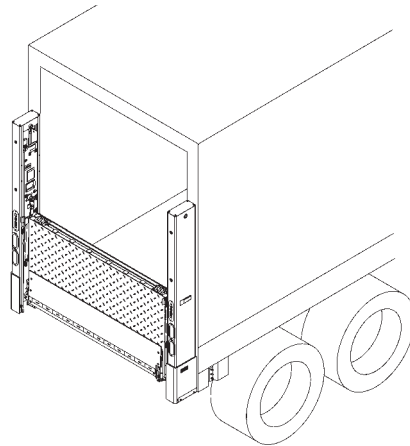
**NOTE:** Exxon Unavis HVI-13 hydraulic fluid is recommended for operating temperatures of **-40 to +120° F**. Refer to decal in pump box. The **ISO-15** fluids in **TABLE 13-1** may be used if the recommended fluids are unavailable. If necessary, the **ISO-32** fluids in **TABLE 13-2** may be used where ordinary seasonal temperatures are near **+100° F** or higher.

**NOTE:** If the hydraulic fluid in the reservoir is contaminated, do the **CHANGING HYDRAULIC FLUID** procedure in the Maintenance Manual.

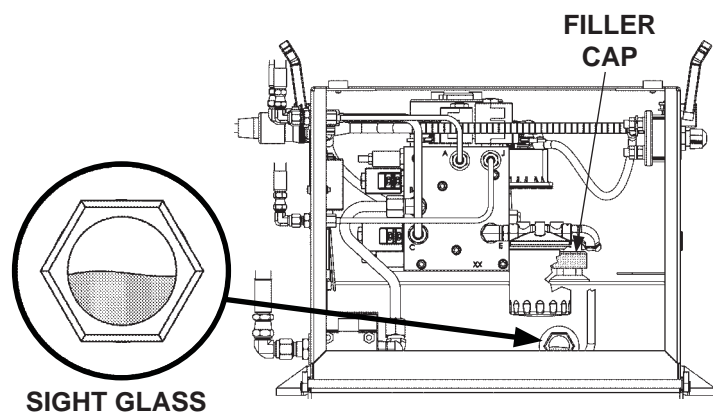
1. Stow the platform in the up position (**FIG. 12-1**).
2. Open the pump box cover to gain access to the sight glass and filler cap (**FIG. 12-2**).

**NOTE:** Information for checking hydraulic fluid level is also shown on a decal inside the pump box cover.

3. Check the hydraulic fluid level in sight glass (**FIG. 12-2**). Hydraulic fluid level should be at the center of sight glass. If fluid is below the center, add fluid to the reservoir as follows. Remove filler cap (**FIG. 12-2**). Add the correct grade of hydraulic fluid to reservoir until the level is at the center of the sight glass (**FIG. 12-2**).
4. Reinstall filler cap (**FIG. 12-2**) and close the pump box cover.



**STOWING PLATFORM**  
**FIG. 12-1**



**CHECKING HYDRAULIC FLUID LEVEL**  
**FIG. 12-2**

<b>ISO-15 OR MIL-H-5606 TYPE HYDRAULIC OIL</b>	
<b>BRAND</b>	<b>PART NUMBER</b>
CHEVRON	FLUID A, AW-MV-15
KENDALL	GLACIAL BLU
SHELL	TELLUS S2 VX 15
MOBIL	DTE-11M
ROSEMEAD	THS FLUID 17111

**TABLE 13-1**

<b>ISO-32 HYDRAULIC OIL</b>	
<b>BRAND</b>	<b>PART NUMBER</b>
CHEVRON	HIPERSYN 32
KENDALL	GOLDEN MV
SHELL	TELLUS S2 VX 32
EXXON	UNIVIS N-32
MOBIL	DTE-13M, DTE-24, HYDRAULIC OIL-13

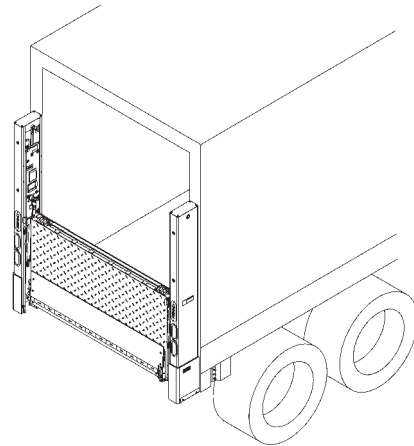
**TABLE 13-2**

5. Bleed the air from BMRA closing cylinder or BMRSD opening/closing cylinders as follows.

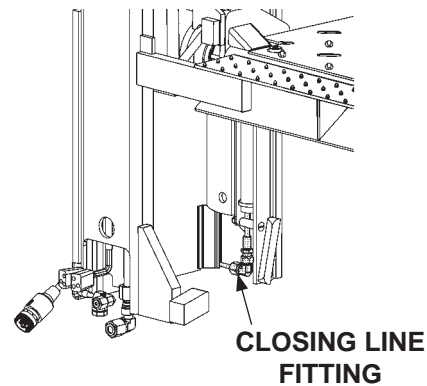
With platform folded **FIG. 14-1**, bleed closing line by loosening closing line fitting (**FIGS. 14-2 and 14-3**) and pushing the **FOLD** switch until air is bled from line. Then, tighten closing line fitting.

For bleeding opening line (BMRSD only), **UNFOLD** the platform (**FIG. 14-1**). Next, loosen opening line fitting (**FIG. 14-3**) and push the **UNFOLD** switch until air is bled from line. Then, tighten opening line fitting.

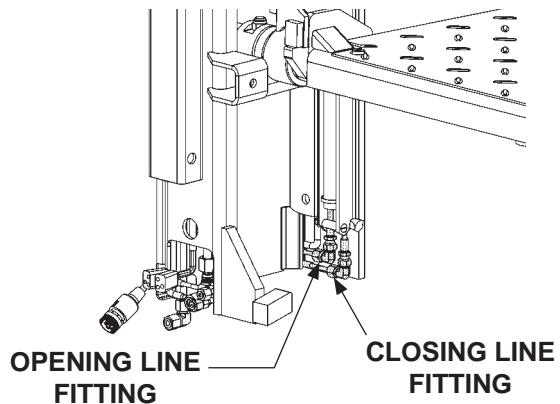
6. Repeat the **CHECKING HYDRAULIC FLUID** procedure again to ensure hydraulic fluid is at the correct level.



**PLATFORM FOLDED (STOWED)**  
**FIG. 14-1**



**CLOSING LINE - BMRA**  
**FIG. 14-2**



**OPENING AND CLOSING LINE - BMRSD**  
**FIG. 14-3**