



## CARE AND MAINTENANCE OF HYDRAULIC EQUIPMENT

The hydraulic equipment supplied with your Roll Restorer has been completely tested and is of the highest quality. With a small amount of care, it will give you years of service. This equipment is shipped *prefilled* with the proper amount of oil. If the occasion arises that oil needs to be added, remove the filler plug located on the upper right hand corner of the pump and add a Gulf Paramount No. 45 hydraulic oil or equivalent. The pump has an 80 cubic inch capacity reservoir. Fill it to approximately 1/2" from being full.

The ram and ram end of the hose are fitted with a quick disconnect coupling:- These have built-in spring-loaded check valves which allow you to disconnect the two without loss of hydraulic oil. When connecting the hose half-coupler to the ram, make sure to wipe fittings clean. Any dirt introduced into the system can work its way into the pump and cause a malfunction.

Occasionally, a few drops of oil should be introduced into the air fitting on the air pump to lubricate its internal mechanism, especially if your air system has a high moisture content.

## METHOD OF OPERATING BAR LOCK

1. With the expander head secured to the expander bar, insert the bar into **and through** the crushed side of the roll core until the expander head comes into contact with the core 1.0. The opposite end of the bar must protrude at least 18" beyond the end of the core.
2. With the bar lock lever in the **UNLOCK** position, slide the ram housing and bar lock assembly (housing first) along the protruding length of bar until contact is made with roll.
3. Turn the bar lock level to the **LOCK** position and with the palm of the hand, tap the ball handle to ensure that the bar lock has a secure grip on the bar.
4. Using the quick connect fittings, couple the pump to the ram. If the air assisted pump is used, connect this to a 40 p.s.i. minimum air supply.
5. With the pump lever in the PUMP position, activate the pump. The ram piston will push against the bar lock, pulling the expander bar and expander head into and along the core.
6. When the ram piston has traveled a full stroke, move the lever on the pump to the **RELEASE** position and at the **same time**, using the palm of the hand, tap the ball handle on the bar lock lever to the **UNLOCK** position.
7. When the ram piston has completely retracted, repeat the procedure until the expander head has been pulled through and clear of the roll and into the ram adapter housing.

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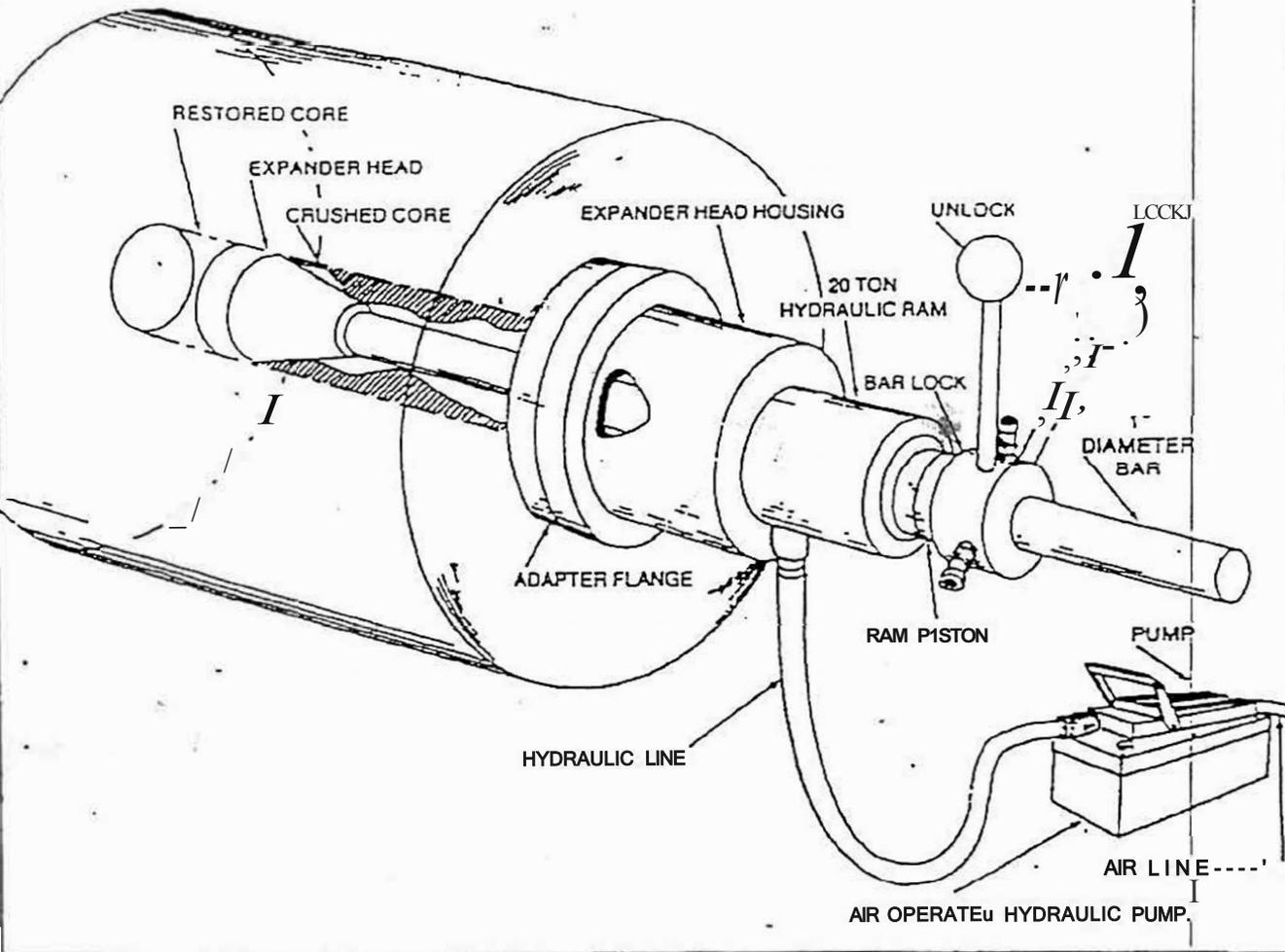
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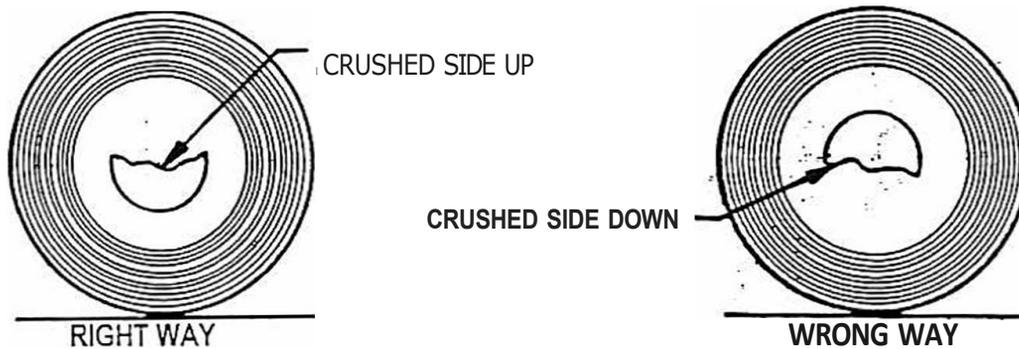
## NIM-COR ROLL RESTORER



Operation is simple:

1. Position the cart against the end of the roll face and adjust the expander head housing assembly to line up with the center of the core.
2. Insert the 1" diameter bar (threaded end first) through the entire assembly and the full length of the roll with the threaded end of the rod protruding 2-3".
3. Screw the expander head on to the threaded section of the bar.
4. Place the bar-lock lever into the "lock" position.
5. Attach an air line to the air operated hydraulic pump. *Note: Full air line pressure is recommended (50 p.s.i. min.)*
6. Step on the foot pedal (pump side) to activate the pump. The ram piston will push against the bar-lock pulling the bar and expander head with it.
7. When the ram has traveled a full stroke (approx. 3"), swing the bar-lock handle to "unlock" position. Step on the foot pedal (release side). This will allow the ram and bar-lock to return to its original position.
8. When the ram has fully retracted, place the bar-lock handle back into the "lock" position. Repeat steps 6 & 7 until the expander head has been pulled through the roll and into the expander head housing.

When the Roll Restorer is used in conjunction with a cart, roll alignment is very important.



Before the Roll Restorer is engaged in the crushed roll, the roll should be positioned with the crushed side UP as shown above. Also, when aligning the housing and ram assembly with the center of the roll, care should be taken to align the two as close as possible to the same centerline.

If the roll is crushed so badly that it is hard to determine its true center, the housing and ram assembly should then be aligned slightly lower than the approximate roll center. Failure to do the above may cause damage to the rod.