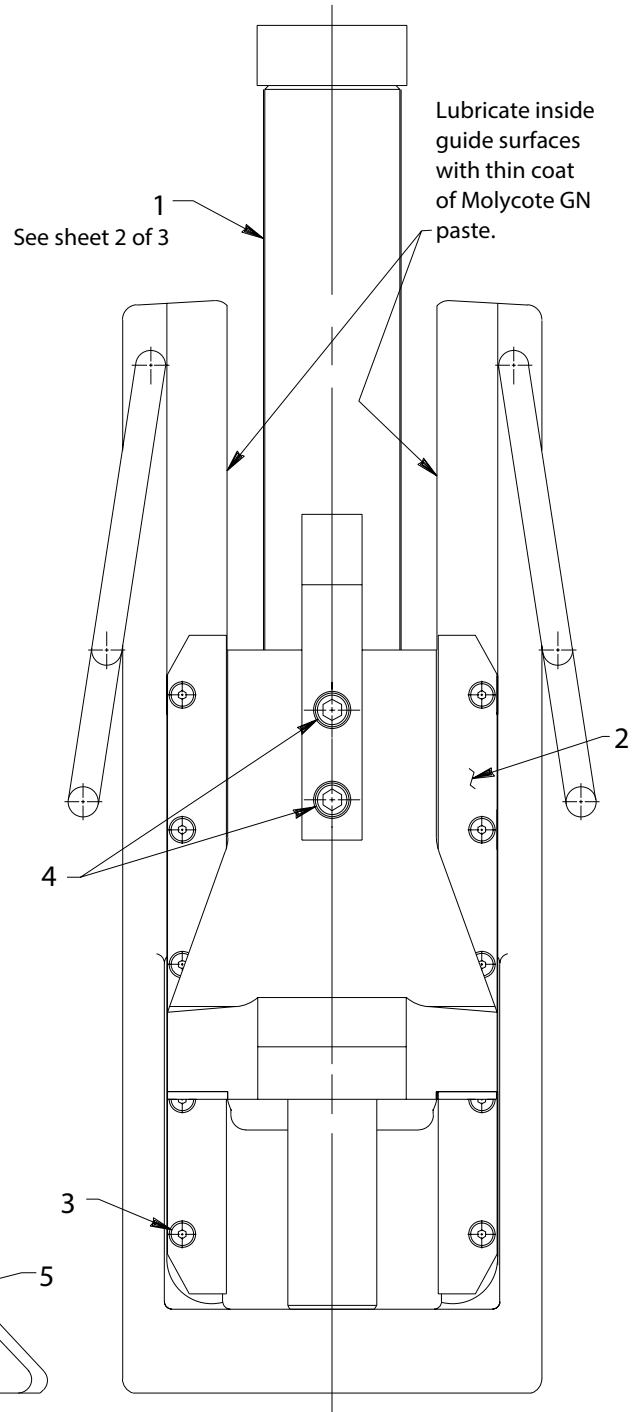
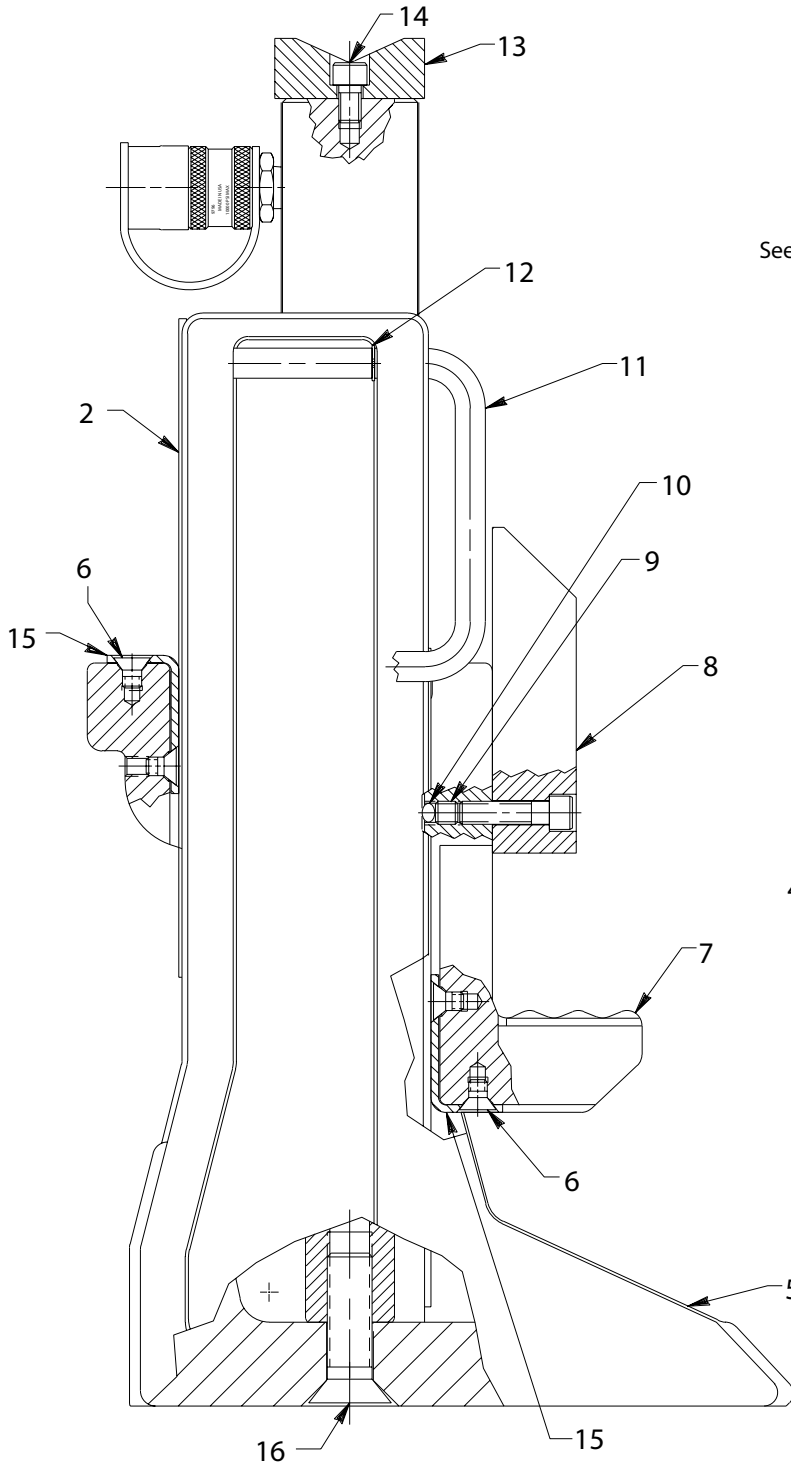


**HYDRAULIC TRACK JACK**  
Max. Capacity: 10,000 PSI



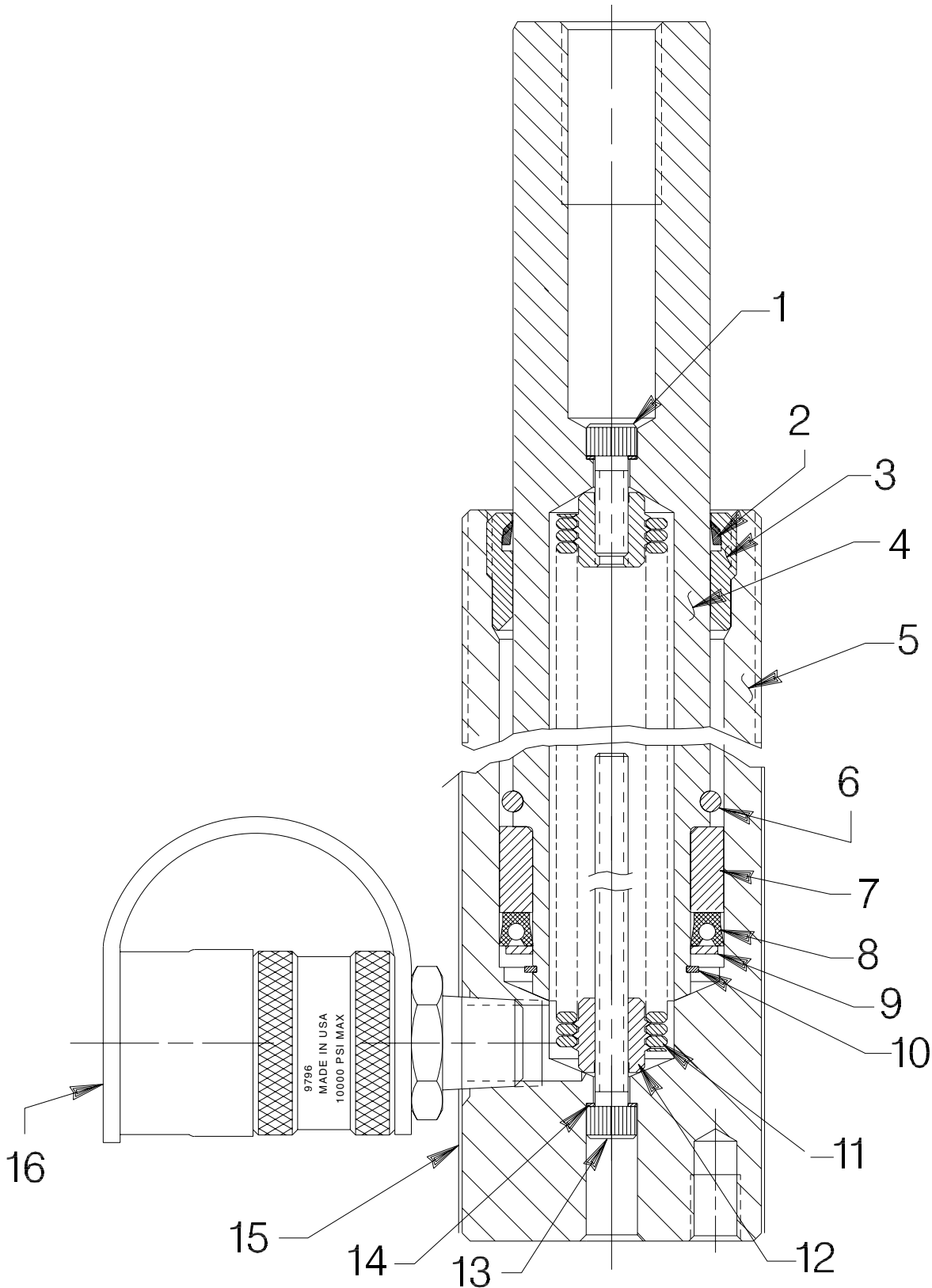
<b>Item No.</b>	<b>Part No.</b>	<b>No. Req'd</b>	<b>Description</b>
1	420784	1	Cylinder Assembly (10 Ton; Model A built before 8-1-95; Model B built after 8-1-95; See sheet 2 of 3)
2	350808	4	Wear Strip (Lubricate wear strip with thin coat of molykote GN paste.)
3	251430	20	Cap Screw (10-24 UNC x 3/8 Lg.; Torque to 70/80 in. lbs.)
4	10984	2	Cap Screw (3/8-16 UNC x 1-1/2 Lg.; Torque to 200/250 in. lbs.)
5	64474	1	Base
6	251429	8	Cap Screw (5/16-18 UNC x 1/2 Lg.; Torque to 140/160 in. lbs.)
7	64489	1	Toe
8	350830	1	Toe Block
9	251450	1	Set Screw (Thread cylinder assembly into toe until bottomed out. Back out cylinder until coupler is aligned with rear of jack before assembling set screw and ball as shown. Torque set screw to 200/250 in. lbs.)
10	214512	1	Non-metallic Ball (5/16 dia.)
11	251425	2	Handle
12	12108	2	Retaining Ring
13	350889	1	Vee Block
14	15187	2	Cap Screw (3/8-16 UNC X 5/8 Lg.; Torque to 200/250 in. lbs.)
15	251427	4	Wear Strip
16	251428	1	Cap Screw (3/4-10 UNC x 2-1/2 Lg.; Torque to 350/400 in. lbs.)



**NOTE: Shaded areas reflect last revision(s) made to this form.**

**SINGLE-ACTING, SPRING RETURN  
CYLINDER ASSEMBLY**

Max. Capacity: 11.2 Ton at 10,000 PSI



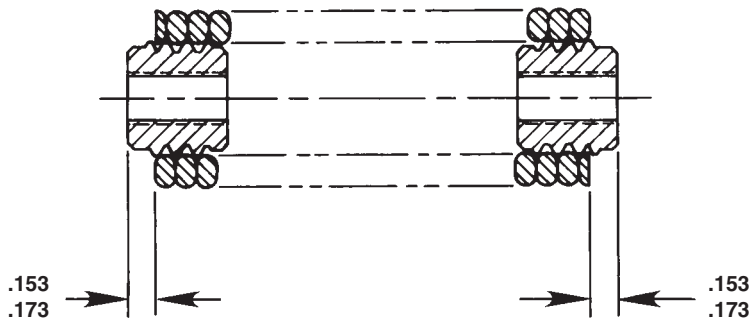
Item No.	Part No.	No. Req'd	Description
1	10006	1	Cap Screw (1/4-20 UNC X 5/8 Lg.; Torque to 90/110 in. lbs.)
2	*201429	1	Special Washer
3	201366	1	Retainer Nut (Before 8-1-95; Torque to 90/100 in. lbs.)
	351051	1	Retainer Nut (After 8-1-95; Torque to 90/100 in. lbs.)
4	420786	1	Piston Rod (Before 8-1-95)
	421132	1	Piston Rod (After 8-1-95)
5	420825	1	Cylinder Body
6	201433	1	Ring
7	201364	1	Piston Head (Assemble with groove toward shoulder.)
8	*213660	1	U-cup
9	213659	1	U-cup Retainer Washer
10	*16076	1	Retaining Ring
11	201432	1	Extension Spring (See detail below)
12	201360	2	Spring Retainer
13	16064	1	Cap Screw (1/4-20 UNC x 3-1/2 Lg.; Torque to 90/110 in. lbs.)
14	*10442	2	Washer (3/8 X 1/4 X 1/32)
15	420788	1	Full Coverage Decal
16	9796	1	Ram Half Coupler w/ Plastic Dust Cap

Part numbers marked with an asterisk (\*) are contained in Repair Kit No. 300660.



### SPRING & RETAINER ASSEMBLY

The spring must not extend beyond the threads of the spring retainer on either end. Stretch, clean and lubricate the spring before assembly.



Note: Shaded areas reflect last revision(s) made to this form.

## SAFETY PRECAUTIONS

Note: These safety guidelines cannot cover every situation, so always do the job with **SAFETY FIRST!**

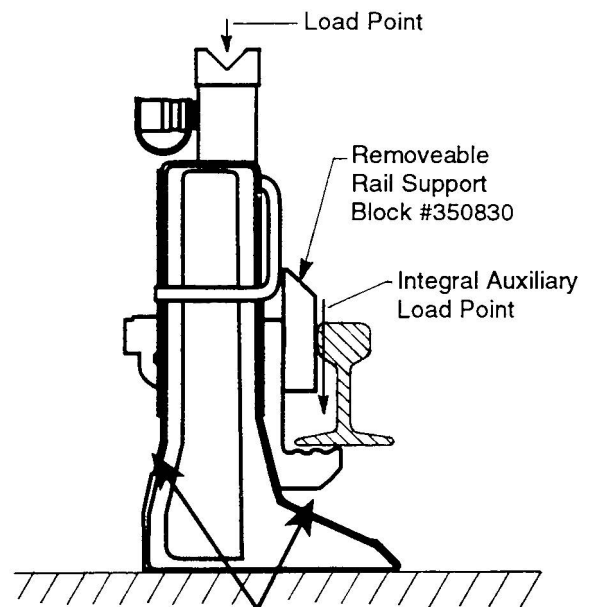


**WARNING: TO HELP PREVENT PERSONAL INJURY OR DAMAGE TO EQUIPMENT,**

- All **WARNING** statements must be carefully observed

### Jack

- The user must be familiar with the correct operation, maintenance, and use of the cylinder and jack. Lack of knowledge in any of these areas can lead to personal injury.
- The total load, lifted or supported by the jack, must never exceed the rated capacity of the jack. Excess pressure can result in personal injury. Use a jack with sufficient capacity to lift the load. Keep clear of lifted loads.
- Inspect each cylinder before each shift or usage to prevent unsafe conditions from developing.
- Properly support the jack. Use a friction material under the base and between the jack and load if required.
- Do not set poorly-balanced or off-center loads on a cylinder or jack. The load can tip and cause personal injury. Do not use in unstable or hazardous positions.
- Jack must be used on flat surfaces able to carry the load. Base must be completely supported. Do not push or lift at the sharp end of the base or toe.
- Do not lift people or loads with people on them.
- As the load is lifted, use blocking and cribbing to guard against a falling load.
- To help prevent personal injury, do not allow personnel to go under or work on a load before it is properly cribbed or blocked. All personnel must be clear of the load before lowering.
- Lift only dead weight loads. Do not add additional load to a lifted load.
- Do not use jack(s) if damaged, altered or in poor condition.
- Supply pump must have sufficient fluid to fully stroke jack(s). Use only approved Power Team hydraulic fluid.
- Read operating instructions and A.N.S.I. B30.1 safety code for jacks.
- User must insure that all safety related decals are maintained and replaced as lack of readability becomes evident.
- Never use extreme heat to disassemble a hydraulic ram or cylinder. Metal fatigue can lead to unsafe conditions.
- Be aware of the possible pinch points of the jack as shown in Figure 1. Stay clear to avoid personal injury.
- When lifting by the toe, wedge the top of the toe on the load to avoid bending the column. Refer to Figure 2.
- Do not carry the jack by the hose or coupler.



**WARNING!  
Pinch Points**

Figure 1

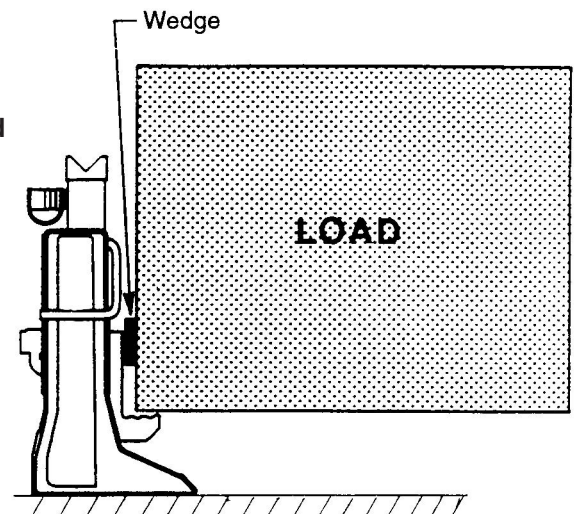


Figure 2

Sheet No. 3 of 4

Rev. Date: 20 July 1995

## **SAFETY PRECAUTIONS (continued)**

### **Hydraulic Hoses**

- Before operating the pump, all hose connections must be tightened with the proper tools. Do not overtighten. Connections should only be tightened securely and leak-free. Overtightening can cause premature thread failure or high pressure fittings to split at pressures lower than their rated capacities.
- Should a hydraulic hose ever rupture, burst, or need to be disconnected, immediately shut off the pump and shift the control valve twice to release all pressure. Never attempt to grasp a leaking pressurized hose with your hands. The force of escaping hydraulic fluid could cause serious injury. Seek medical help immediately if injury occurs.
- Do not subject the hose to potential hazard such as fire, sharp surfaces, extreme heat or cold, or heavy impact. Do not allow the hose to kink, twist, curl, or bend so tightly that the oil flow within the hose is blocked or reduced. Periodically inspect the hose for wear, because any of these conditions can damage the hose and possibly result in personal injury.
- Do not use the hose to move attached equipment. Stress can damage the hose and possibly cause personal injury.
- Hose material and coupler seals must be compatible with the hydraulic fluid used. Hoses also must not come in contact with corrosive materials such as CREOSOTE-IMPREGNATED objects and some paints. Consult the manufacturer before painting a hose. Never paint the couplers. Hose deterioration due to corrosive materials can result in personal injury.

## **PREVENTIVE MAINTENANCE**

### **IMPORTANT:**

- Keep the cylinder clean at all times.
- When the cylinder is not in use, keep the piston rod fully retracted.
- All external moving parts on rams, cylinders or jacks should be lubricated on a regular basis.
- Any exposed threads (male or female) must be cleaned and lubricated regularly.
- If a ram or cylinder has been exposed to rain, snow, sand or grit-laden air, it must be cleaned before it is used.
- Use an approved, high-grade pipe thread sealant (such as Power Team HT6) to seal all hydraulic connections. Teflon tape *can* be used if only one layer of tape is used and it is applied carefully (two threads back) to prevent the tape from being pinched by the coupler and broken off inside the pipe end. Any loose pieces of tape could travel through the system and obstruct the flow of oil or cause jamming of precision-fit parts.

## **BLEEDING AIR FROM THE SYSTEM**

Air can accumulate in the hydraulic system during the initial set-up or after prolonged use, causing the cylinder to respond slowly or in an unstable manner. To remove the air:

1. Position the jack at a lower level than the pump. Loosen the filler cap on the pump.
2. Extend and retract the cylinder several times without putting a load on the system. Air will be released through the pump reservoir.

## LUBRICATION

Apply lubricant regularly to all pivot and rubbing points. Do not use dry lubricants. Use a thin coat of molykote GN paste or lithium-based grease on the jack wear strips as shown in Figure 3.

## PERIODIC CLEANING

A routine should be established to keep the pump and jack as free from dirt as possible. All unused couplers must be sealed with dust covers. All hose connections must be free of grit and grime. Any equipment attached to the cylinder must also be kept clean. Use only an approved, clean hydraulic oil and change as recommended (every 300 hours). Clean old grease, dust and dirt from the wear strips and relubricate as necessary.

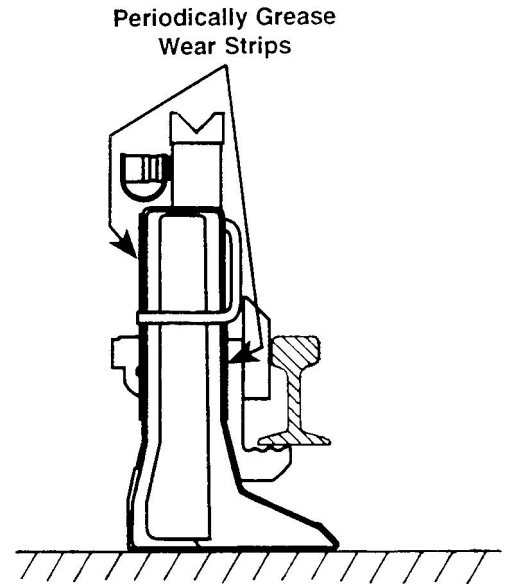


Figure 3

## STORAGE

Single-acting hydraulic rams and cylinders should be stored in a vertical position with the rod end down in a **dry**, well-protected area where they will not be exposed to corrosive vapors, dust or other harmful elements.

When a single-acting ram or cylinder has not been used for a period of six (6) months it should be connected to a pump and be fully extended and then retracted. This cycle will lubricate the cylinder walls.

If a ram or cylinder has been stored for a year or more it must be thoroughly inspected before it is used.

Many hydraulic service problems are caused by dirt or metallic particles in the hydraulic system. To avoid these problems, proper maintenance, including rust prevention and cleanliness, will help extend the life of your hydraulic system. Change the filter in the system if one is used.