READ THESE INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION

PRECISION PULLEY & IDLER

OPERATION & MAINTENANCE

TAKE-UP FRAME

INSTALLATION

It is recommended that take-up frames bearings be greased before installation or storage and at regular service intervals. Check the grease condition for excessive contamination and adjust greasing frequency accordingly. For conditions and/or temperature outside of this range, consult a reputable lubricant supplier.

SUGGESTED GREASING INTERVALS

Conditions	up to 120°F (up to 50°C)	120° to 200°F (50° to 90° C)
Clean	2 to 6 months	1 to 2 months
Moderate	Monthly	1 to 4 weeks
Dirty	Weekly	1 to 7 days
Extremely Dirty	Daily	Every Shift

GREASE APPLICATION

Greasing the threaded rod will lubricate the components, reducing friction and providing protection against corrosion. For frames with exposed threaded rod, it is suggested that one person turns the rod while another person applies the grease using a paintbrush. For take-up frames that contain grease fittings, fill until you see grease purge from the openings. (First shot, need to word this section better

CORROSION

To eliminate corrosion, some customers request stainless steel rods and nuts for their application. PPI has determined through years of experience this is not recommended. Instead, PPI suggests one of the following to deter corrosion:

1. Use mild steel rod and nuts and use grease (standard).
2. Use stainless steel rod with mild steel nuts and grease.
3. Use stainless steel rod with brass nuts and grease.

Please note the nuts that are fixed to the rod are always mild steel.

While stainless steel will not corrode, it can gall. If any galling starts, it will continue if both the rod and nut are stainless steel. When combined with the work hardening properties of stainless steel, it will seize and the two parts will lock together. After years in the field, having only one part stainless, will result in better service.

OPERATION

Some pillow block bearings used with take-up frames are self-aligning, many are not. The ones that are self-aligning have limits of 1 to 3 degrees. Therefore, both take-up frames should be tightened at the same time. This means that one screw should not turn more than one turn ahead of the other. If one person is tightening both frames, they will need to turn one screw a turn, then the other, and so on, until proper tensioning is achieved.

TRACKING THE BELT

Take-up frames are not designed for tracking purposes, they are used to adjust the pulley positioning in regards to squaring with the belt. To do this, one will need to tighten one frame, while loosening the other frame equally. The frames already have proper tensioning; therefore you are adjusting the pulley to run square to the belt.

HYDRAULIC FRAMES

PHYD frames are designed for series 2HD Head Trunion mount cylinders – NFPA #MT1. The design was set-up for a double action cylinder with lip seals. If the system is set up as a double action, the cylinder may be powered with a hydraulic pump with a 5 gallon reservoir that can achieve a pressure of 2500 psi. Please refer to the TUF catalog for sizes and dimensions of PHYD frames and the rod and cylinder bore that these frames are built to handle.

If the order does not specify, the frame will be set up for a pull application. This means that the single stop nut on the screw should be on the side opposite the cylinder. For the frame to be used in push mode, the stop nut will need to be between the cylinder and the saddle.

To switch the frame from pull to push mode or vice versa, the user will need to remove the pin from the nut on the end of the frame nearest to the stop nut. Then turn the frame over and slide the rod out as it is turned until the stop nut is loose from the rod. Pull the rod out and slide it in from the other end of the frame and through the square tube on the saddle and into the stop nut. Turn the rod into the stop nut, until the rod can stick through the end for the nut to be re-attached. Re-install the end nut making sure that the hole in the nut lines up with the hole in the threaded rod. If it doesn't, remove the nut and turn it around and try it again. Drive the pin into the nut and through the threaded rod.

OPERATION OF PHYD – HYDRAULIC FRAMES

To tighten or loosen the belt, first run the hydraulic cylinder up to pressure to release the load on the take-up frame screw. This should be done to both cylinders at the same time. Once the load is off of the screw, turn the screws to increase the room between the stop nut and the saddle.

Use the cylinder to adjust the pressure. Either up or down, making sure that there is sufficient clearance between the stop nut and the saddle for a full range of motion. Once the correct position of the saddle or cylinder pressure has been achieved, then turn the screw to bring the stop nut up to hold the saddle in place. Slowly release the pressure in the cylinder.

CORPORATE OFFICE • P.O. Box 287 • Pella, IA 50219
800.247.1228 • 641.628.3115 • 641.628.3658 FAX

Contact your sales representative for more information