READ THESE INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION

PPI®
Precision Pulley & Idler

OPERATION & MAINTENANCE

TAKE-UP FRAME
INSTALLATION INSTRUCTIONS

INSTALLATION

It is recommended that a paintbrush is used to coat the threaded rod with grease before installation. This will lubricate the rod reducing friction and provide protection against corrosion. To do this it is suggested that one person turn the rod as another person applies the grease to the rod. Check the grease condition for excessive contamination and adjust greasing frequency accordingly. For conditions and/or temperatures 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

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 fixed nuts, which are pinned 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.

TAKE-UP FRAME REPLACEMENT TRAVEL ROD ASSEMBLY PART NUMBERS

Frame	12	18	24	30	36	48	60
PHD200	56760	56761	56762	56763	56764	56765	58840
PHD208	56770	56771	56772	56773	56774	56775	58841
PHD300	56780	56781	56782	56783	56784	56785	58842
PHD308	56790	56791	56792	56793	56794	56795	58843
PHD400	56800	56801	56802	56803	56804	56805	58844
PHD500	56810	56811	56812	56813	56814	56815	58845
PHD600	56820	56821	56822	56823	56824	56825	58847
PHD800	56570	56571	56572	56573	56574	56575	
PHD1000	56580	56581	56582	56583	56584	56585	
Frame	**12**	**18**	**24**	**30**	**36**	**48**	**60**
PHYD300	56490	56491	56492	56493	56494	56495	
PHYD308	56496	56497	56498	56499	56500	56501	
PHYD400	56502	56503	56504	56505	56506	56507	
PHYD500	56508	56509	56510	56511	56512	56513	
PHYD600	56514	56515	56516	56517	56518	56519	
PHYD800	57150	57151	57152	57153	57154	57155	
PHYD1000	57160	57161	57162	57163	57164	57165	
Frame	**12**	**18**	**24**	**30**	**36**	**42**	**48**
PTA200	55930	55931	55932				
PTA203	55933	55934	55935				
PTA208	55936	55937	55938	55939	55940		
PTA300	55943	55944	55945	55946	55947		
PTA308	55948	55949	55950	55951	55952	55953	55954
PTA400	55955	55956	55957	55958	55959	55960	55961
Frame	**12**	**18**	**24**	**30**	**36**	**42**	**48**
PPA200	55930	55931	55932				
PPA203	55933	55934	55935				
PPA208	58500	58501	58502				
PPA300	55943	55944	55945	55946	55947		
PPA308	58507	58508	58509	58510	58511	58512	58513
PPA400	55955	55956	55957	55958	55959	55960	55961
PPA408	55955	55956	55957	55958	55959	55960	55961

TAKE-UP FRAME REPLACEMENT TRAVEL ROD ASSEMBLY PART NUMBERS

Frame	1.5	3	6	9	12	18	24	30
PWS100	58160	58161	58162	58163	58164			
PWS108		58165	58166	58167	58168	58169		
PWS200		58170	58171	58172	58173	58174	58175	
PWS208		58176	58177	58178	58179	58181	58182	58183
PWS300				58184	58185	58186	58187	58188
PWS308				58184	58185	58186	58187	58188
Frame	**3**	**6**	**9**	**12**	**18**	**24**	**36**	**48**
PST100	55270	55271	55272					
PST250	56060	56061	56062	56063				
PST300		56064	56065	56066	56067			
PST350		56068	56069	56070	56071	56072		
PST400		56073	56074	56075	56076	56077	56078	56079
PST500					56080	56081	56082	

Frame	6	9	12	18	24	30	36	42	48
PLD100	56330	56331	56332	56333					
PLD108	56330	56331	56332	56333	56334				
PLD200	56335		56336	56337	56338	56339			
PLD208	56340		56341	56342	56343	56344	56345		
PLD300			56346	56347	56348	56349	56350	56351	56352
PLD308			56346	56347	56348	56349	56350	56351	56352
Frame	**6**	**9**	**12**	**18**	**24**	**30**	**36**	**42**	**48**
PMD100	91214	91215	91216	91217					
PMD108	91214	91215	91216	91217	91222				
PMD200	91223		91224	91225	91226	91227			
PMD208	91228		91229	91230	91231	91232	91233		
PMD300			91234	91235	91236	91237	91238	91239	91240
PMD308			91234	91235	91236	91237	91238	91239	91240

Frame	12	18	24	30	36
PCP108	57720	57721	57722	57723	57724
PCP200	57725	57726	57727	57728	57729
PCP203	57730	57731	57732	57733	57734
PCP208	57735	57736	57737	57738	57739
PCP300	57740	57741	57742	57743	57744
PCP308	57745	57746	57747	57748	57749
PCP400	57750	57751	57752	57753	57754
PCP408	57755	57756	57757	57758	57759
PCP500	57760	57761	57762	57763	57764