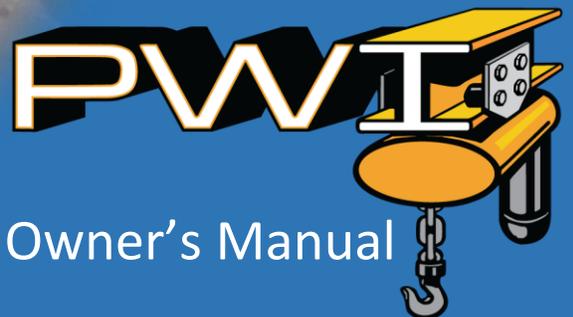


PWI Frame Rotator



1. GENERAL

The PWI 4K72R Frame Rotator is a powered manipulator designed to safely lift and rotate frames for Recreational Vehicles during the manufacturing process.

The PWI Frame Rotator is designed to rotate the frame in a controlled manner. Having the frame completely captured and controlled with custom fabricated frame attachments through the entire rotation cycle. The bumper attachment must be designed and approved by PWI. Any alterations to this unit must be completed or approved by PWI.

This unit model is designed to lift a maximum of 4,000 lbs. (8,000 lbs. total frame weight.)

2. SAFETY

The most important reason for the PWI Frame Rotator is the safety of the operator, but as with all equipment improper use can result in increased risk of injury.

During the lifting and rotation cycle the operator should alert others in the immediate area and make sure that no one is near or under the frame.

Keep the machine properly maintained: keep free of debris, check controls functions, visually inspect operation of chain and lift components.

Do not operate if there are any missing or broken parts

Do not service Frame Rotator without having the supply power locked/tagged out. Relieve pressure in hydraulic lines prior to repair, adjusting, or disconnecting.

Ensure that all hydraulic connections are tight. Use a piece of cardboard or wood when checking for leaks. Never use your hand. If ANY fluid is injected into the skin it must be attended to by a doctor immediately.

Where replacement parts are necessary contact PWI for specification to insure original equipment specifications.

3. OPERATION

The PWI Frame Rotator is designed to rotate the frame for a Recreational Vehicle in a controlled manner. Make sure the attachment features fit properly and properly capture the frame prior to rotation.

The rotator sits on v-groove caster and rides on two v-tracks a Drive wheel engages the grip track moving the rotator along the track. This allows the rotator to be safely moved in and out of the production line allowing the frame to bypass when needed.

Rear or Bumper attachments should capture the frame and limit its movement within the attachment while being rotated in either direction. Make sure pins and hitch pin clips (retainer) are securely in place. The Optional Darko Dispenser bolts to the top of rotator mast. Make sure pins and hitch pin clips (retainer) are securely in place.

Operation – *continued*

Two front rotation units are currently available: A Fifth Wheel front rotation unit which should securely attach to the king pin with a positive locking mechanism. A Travel Trailer front rotation unit which secures to the travel trailer receiver with a pintle style hitch. This travel trailer front rotation unit is designed to be placed to the side that is to rotate upward during the rotation cycle. (i.e. place the travel trailer front rotation unit to the left side if the left side is to move upward during rotation)

After securing the bumper attachment and front rotation unit to the frame the frame is then lifted with the hydraulic cylinder and rotated hydraulically

4. INSTALLATION

After identifying the location for the PWI Frame Rotator install the v-tracks and grip track. The rotator itself is then set on the tracks. A qualified electrician should make the final connection between the power supply and the rotator.

The hydraulic fluid levels should be checked and adjusted to make sure proper fluid levels.

Start the hydraulic pump verifying the proper rotation, and cycle the rotator through its travel movements as well as the lift and rotation movements

5. MAINTENANCE

The PWI Frame Rotator should power supply turned off and should be locked out and tagged out prior to any service work. Even with the power off the hydraulic lines may contain fluid under high pressure. Prior to any repair, adjustment or disconnection relieve the line pressure by moving each of the control levers back and forth.

Where replacement parts are necessary contact PWI for specification to insure original equipment specifications.

Service Schedules

Maintenance item	Frequency
Grease Sprocket	Monthly
Grease Carriage Rollers	Monthly
Oil Chain (spray lubricant)	Monthly
Inspect Chain for Wear	Monthly
Grease Casters	Biannually
Replace Oil Filter	Annually
Change Oil	Every 3 yrs.
Grease Rotation Unit (Cascade)	Biannually
Rotation Unit (Nachi) requires no maintenance	



Sprocket
Grease Monthly

Chain
Oil and Inspect Monthly



Carriage Rollers
Grease Monthly



Casters
Grease Biannually



Oil Filter
Change Annually

Hydraulic Oil
Change Every 3 yrs.

Hydraulic Pump
Check for proper rotation



Hydraulic Pump
Shown with optional guard



Cascade Rotation Unit
Grease Biannually



Nachi Rotation Unit
No Maintenance required

