



INSTALLATION INSTRUCTIONS

LOAD BLOCK REPLACEMENT

POWERTRAK®

⚠ WARNING!

These procedures require that the Electrical Power Sources be used during part of the installation. Use CAUTION when working inside unit with the power ON.

Part Number	Description	Qty
6450-5049	Kit, PT Load Block Replacement	1
6402-5000	Load Block Assembly	1
1048-0105	PIN Cotter, 3/32 x 1.0 Hammerlock	3

Tools Required		
7/16" Socket	3/8" Ratchet and extensions	1/4" Nut Driver
9/16" Socket	Small screwdriver	7/16" Wrench
3/32" Allen wrench	11/32" Allen wrench	Grease gun

SECTION 1: Old Load Block Removal

DESCRIPTION

This kit is provided to replace a worn Load Block Assembly. The kit includes a new load block assembly and three cotter pins.

When the kit is received, check for shipping damage or missing parts.

INSTALLATION

- (1) Disconnect all electrical power from the Power Trak™.
- (2) Open and remove the front access door.

⚠ WARNING!

Do Not Loosen The Curtain Cables From The Load Block While Tension Remains On The Cables. The Sudden Release Of The Cables Under Tension Could Cause Personal Injury And/Or Property Damage.

- (3) Remove tension from the PowerTrak™ load block cables, loosen the cable locking screws, and disconnect the cables from the load block. **Refer to Figure 1.**
- (4) Remove the cables completely from the Power Trak™ unit.

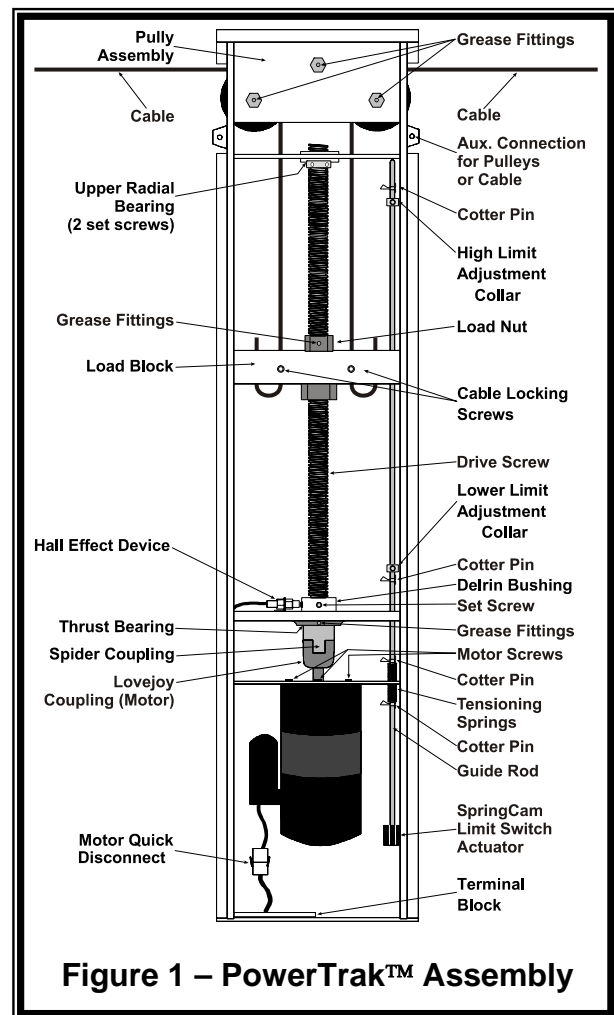


Figure 1 – PowerTrak™ Assembly

- (5) To minimize re-alignment of the limit switches, use a permanent marker to mark the following items position:
- High and low collars on the guide rod. **Refer to Figure 1.**
 - The guide rod entering the cam block in the limit switch housing. **Refer to Figure 2.**
 - The position of the limit switch set screw/cam block relative to the limit switch housing. **Refer to Figure 2.**

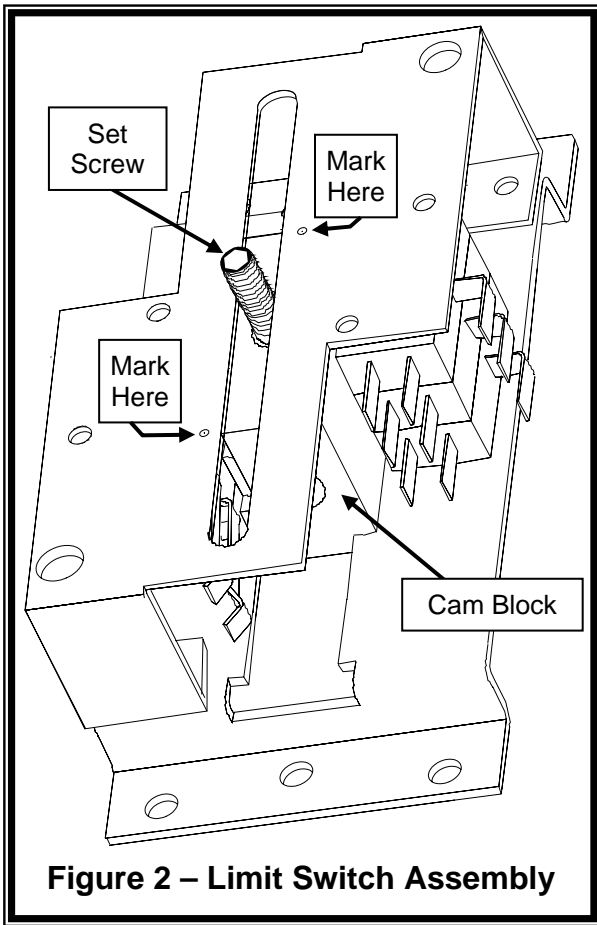


Figure 2 – Limit Switch Assembly

- (6) Loosen the high and lower limit switch collars using a 3/32" allen wrench. **Refer to Figure 1.**
- (7) Remove the three cotter pins or roll pins in the Guide Rod above the tension springs. **Refer to Figure 1.**

CAUTION!

The Guide Rod Can Be Bent During This Process. If The Guide Rod Is Bent, Excessive Rod Wear And/Or Functional Problems May Occur. Ensure Extra Care Is Taken To Prevent Bending The Guide Rod.

- (8) Loosen the set screw on the limit switch assembly with a 3/32" allen wrench. **Refer to Figure 2.**
- (9) Drop the guide rod to the bottom of the enclosure.

NOTE: If the load block is already within 4 inches of the top of the drive screw, skip **Steps 10-12** and continue at **Step 13.**

- (10) Connect Electrical Power to the Power Trak™.

⚠ WARNING!

- Only A Qualified Electrician Should Perform Necessary Electrical Connections.
- Keep Hands And Clothing Away From Rotating And Moving Parts.

FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE, SERIOUS INJURY, OR DEATH.

- (11) Turn the motor on and run the Load Block to within 4 inches of the top of the Drive Screw. If the Load Block is completely stripped, disconnect all electrical power and run Load Block upward by hand.
- (12) Disconnect all Electrical Power from the Power Trak™.
- (13) Unplug the motor quick-disconnect.
- (14) While supporting the motor, remove the three/four motor screws/nuts and set the motor aside. **Refer to Figure 3.**

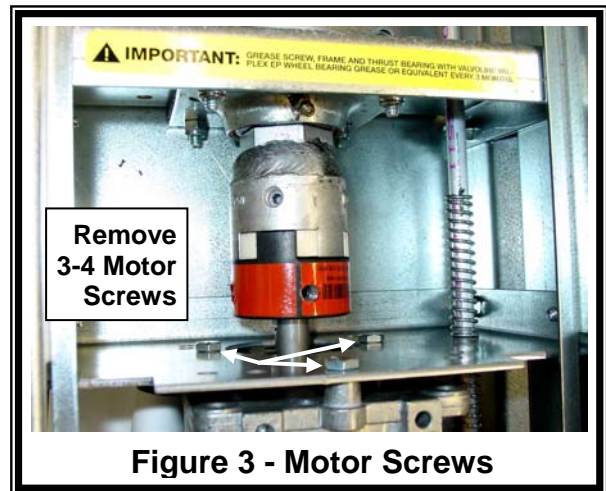


Figure 3 - Motor Screws

- (15) Loosen the delrin bushing set screw using a 3/32" allen wrench. Rotate the delrin bushing upward approximately 6-8 inches. Refer to Figure 4.

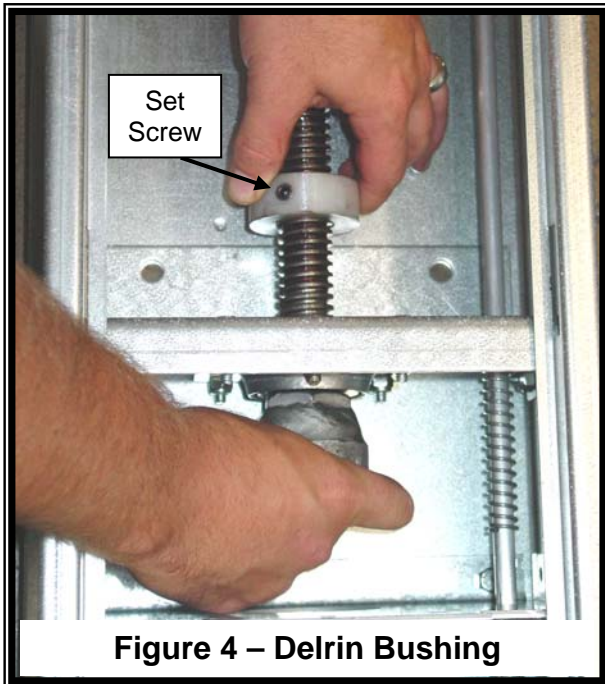


Figure 4 – Delrin Bushing

- (16) While supporting the load block and drive screw, loosen the upper radial bearing two set screws and carefully lower the drive screw to rest on the delrin bushing. Refer to Figure 5.

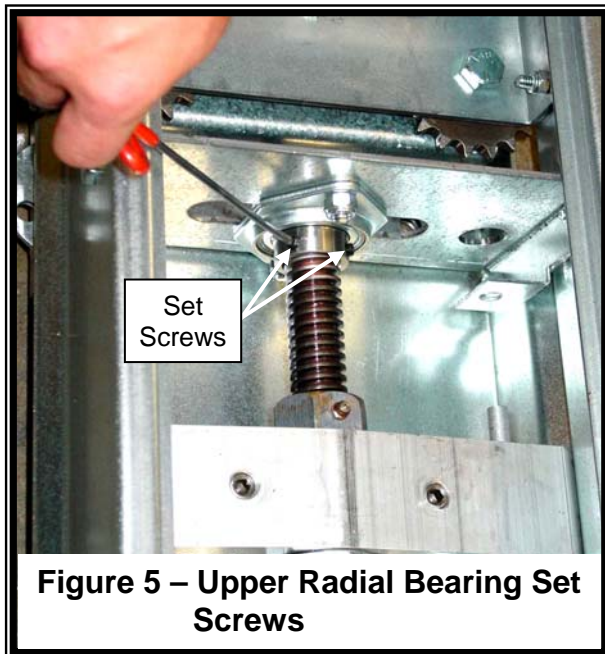


Figure 5 – Upper Radial Bearing Set Screws

- (17) Remove the two bolts holding the upper radial bearing and remove the bearing and housing hardware. Refer to Figure 6.

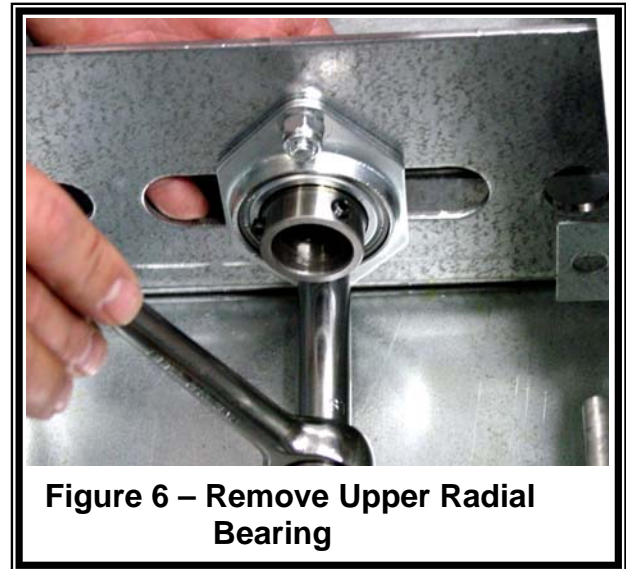


Figure 6 – Remove Upper Radial Bearing

- (18) Turn the drive screw by hand and run the load block off the top of the drive screw.

CAUTION!

The Guide Rod Can Be Bent During This Process. If The Guide Rod Is Bent, Excessive Rod Wear And/Or Functional Problems May Occur. Ensure Extra Care Is Taken To Prevent Bending The Guide Rod.

- (19) Slide the load block over the top of the drive screw and the guide rod.

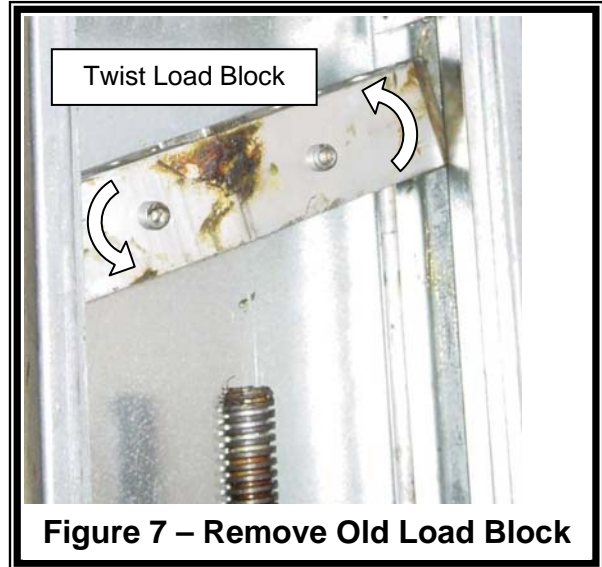
⚠ WARNING!

The PowerTrak Enclosure Contains Sharp Metal Edges. Wear Gloves During This Next Step And Ensure That Extra Care Is Taken To Prevent Personnel Injury Or Equipment Damage.

- (20) Twist the load block out of the side tracks. Refer to Figure 7.

NOTE: Do Not Pry Or Use Tools To Remove The Load Block Assembly From The Side Tracks. The Side Tracks Can Be Damaged If Tools Are Used.

- (21) Inspect the side tracks for denting or burrs which may interfere with smooth Load Block operation.



SECTION 2: New Load Block Installation

NOTE: Ensure the new load block assembly is placed in the correct orientation: The grease fitting and cable locking set screws must point outward. The nut with the grease fitting should be on the top side toward the pulley assembly.

- (1) Rotate the new load block into the side tracks above the drive screw and the guide rod while observing correct orientation.
- (2) Slide the load block over the top of the drive screw and the guide rod. Turn the drive screw by hand and run the load block down the drive screw approximately 4 inches. Refer to Figure 8.



Figure 8 – Install New Load Block

- (3) To reinstall the Upper Radial Bearing, first assemble the bearing between the two metal housings. Notice that the two bearing housings are placed in opposite directions. Refer to Figures 9 & 10.



Figure 9 – Top Half of Bearing Housing



Figure 10 – Housing Bottom Half

- (4) Place the upper radial bearing assembly in the PowerTrak™ from the bottom side of the mounting plate as shown below. Install the carriage bolts from the top side of the plate. While keeping the bearing flush and straight with one hand on the top side, tighten the lock-nuts from the bottom side. It is important to ensure that the bearing is aligned with the drive shaft when the shaft is installed in a later step. Refer to Figure 11.



Figure 11 – Housing Bottom Half

- (5) Push the drive screw upward into the upper radial bearing and ensure the bottom of the drive screw is flush against the thrust bearing. Tighten the two set screws. Refer to Figures 12 & 13.

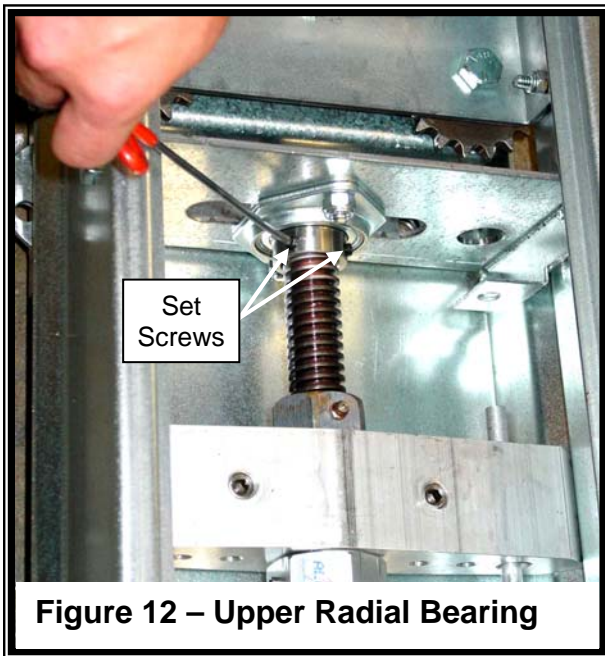


Figure 12 – Upper Radial Bearing

- (6) Rotate the delrin bushing downward by hand. Hand-tighten the set screw. Refer to Figure 13. DO NOT OVERTIGHTEN THE SET SCREW.



Figure 13 – Delrin Bushing

- (7) Install the motor with the three/four motor screws/nuts. Ensure the drive screw, spider coupling, and lovejoy motor coupling are correctly installed as shown. Refer to Figures 1 & 14.

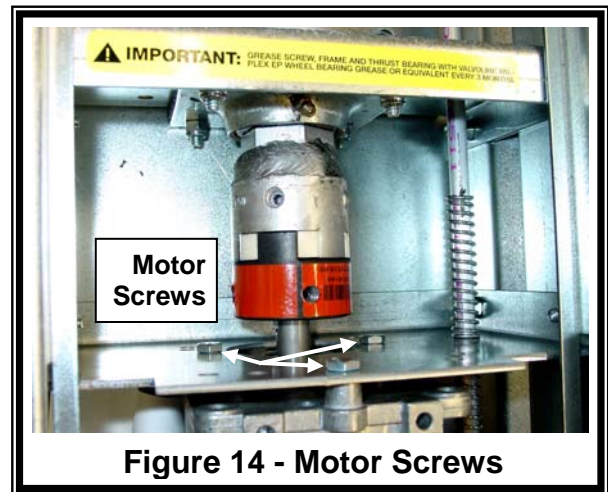


Figure 14 - Motor Screws

- (8) Connect the motor quick-disconnect connector.
 (9) Align the guide rod based upon the markings from Step (5) and Figure 2 on Page 2. Tighten the set screw on the Limit Switch with a 3/32" allen wrench.
 (10) Ensure the Limit Switch Collars are near the marked positions and install the Cotter pins in the Guide Rod.

- (11) Set the upper and lower limit switch collar positions based upon the markings from **Step (5)** and **Figure 2** on **Page 2**. Tighten the limit switch collars using a 3/32" allen wrench.
- (12) Run ends of cables through the pulley assembly to the load block. On the load block you will find 4 small holes on the top surface. Run the cables down the small holes toward the center of the block, loop around and come up through the small holes toward the outside of the block. **Refer to Figure 15**. Tighten the set screws securely on the face of the load block with an 11/32" allen wrench.
- (13) Reconnect power to the PowerTrak™.

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- (14) Connect a grease gun to the grease fitting on the load block nut. Use the manual setting on the controller to move the load nut from one end of the screw to the other while applying grease. This ensures that the full range of the load nut is well lubricated.
- (15) Refer to the **PowerTrak™ manual (4801-0154)** for additional information on setting the upper and lower limits.
- (16) Verify proper PowerTrak™ operation at the open and closed positions.
- (17) Install the door to protect the machine from the elements.

