

3 INSTALLATION AND SETUP

3.1 PRIOR TO SETUP

1. Ensure all structural members of the hoist are free of defects and damage that may affect the integrity of the unit.
2. Ensure the hoisting area is secured from all unauthorized personnel.



WARNING:

ENSURE THAT OSHA COMPLIANT FALL PROTECTION IS IN PLACE.



WARNING:

PRIOR TO SETTING UP THE HOIST THERE MUST BE A PLAN OF ACTION OUTLINING THE WORK TO BE ACCOMPLISHED, INDIVIDUAL RESPONSIBILITIES, PERSONAL PROTECTIVE EQUIPMENT, AND THE METHOD OF COMMUNICATION. FAILURE TO DO THIS CAN RESULT IN DEATH, SERIOUS PERSONAL INJURY OR EQUIPMENT FAILURE.



WARNING:

ENSURE THAT ALL BOLTS AND NUTS ARE TIGHTENED SECURELY TO PREVENT EQUIPMENT DAMAGE AND/OR SERIOUS INJURY.

3.2 MOUNTING THE PLATFORM ON THE TRACK

1. Refer to Figure 3-1. The track cross ties offset from the center of the rails to allow passage of the platform wheels. Before erecting the track, lay the bottom 8-foot track section on the ground with the track shoes as shown with the greater cross tie offset on top (2-1/4").

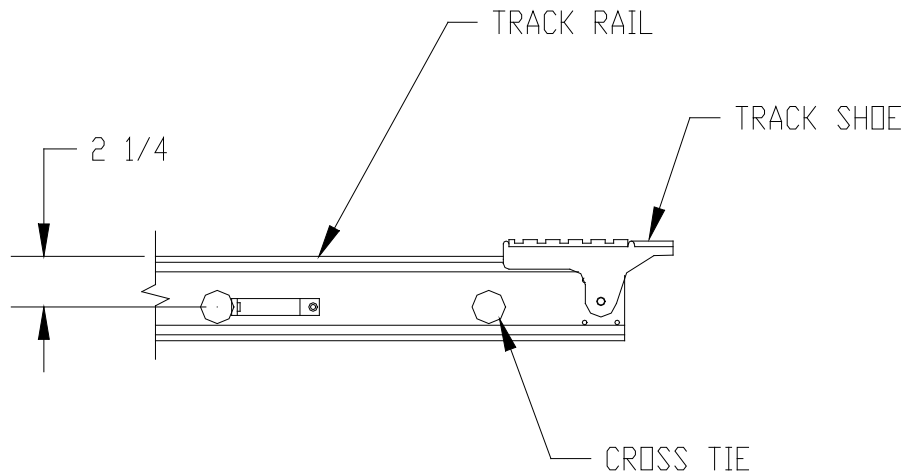


Figure 3-1.
Bottom Track Section

2. The assembled platform slides onto the rails from the end of the track section opposite the shoes. The wire rope block assembly on the platform should face the shoes. Roll the platform down the track without striking the shoes and securely tie it to any cross tie to prevent movement when raising the track.
3. When mounting the platform on the track, the wheels should contact the rails without application of light pressure.

3.3 ASSEMBLING THE TRACK SECTIONS

The standard sectional pivoting platform hoist consists of seven sections of track; One 8 foot bottom section with shoes, Three 8 foot upper sections with splice plates, and Three 4 foot upper sections with splice plates on the bottom ends. These sections may be joined together with their splice plates by sliding the bottom of one section into the top of the lower section and installing the hex nuts and bolts provided. Tracks of 8 feet to 44 feet can be assembled as desired from these seven sections. Select a length that allows the top of the assembled track rail to project 2 to 2-1/2 feet above the edge of roof.

Refer to figure 3-2. The Pivoting platform hoist track section allows the pivoting platform to travel up the roof line. The Pivoting platform hoist has a fixed 20-degree curve and two adjustable joints for 0, 10 or 20-degree additional adjustment. The upper track section(s) along the roof must be at a 15-degree angle from horizontal to allow the platform to roll freely in the downward direction. The track sections along the roof line must be supported every 8 feet, preferably at every track splice.



WARNING:

THE PIVOTING PLATFORM HOIST SECTIONS ALONG THE ROOF LINE MUST BE SUPPORTED EVERY 8 FEET OR PREFERABLY AT EVERY SPLICE JOINT. SECURE THE ROOF TOP TRACK SECTIONS TO THE ROOF TO PREVENT TRACK FROM SLIDING.

For longer track lengths, 16 foot center section with splice plates attached is available to reduce assembly / disassembly time. Maximum total track length is 44 feet. Vertical lengths over 28 feet require a vertical Track Support for additional support of long track spans. Installation instructions for the Track Support are in Section 3.6. All bolts and nuts must be tightened securely to prevent track failure under load.

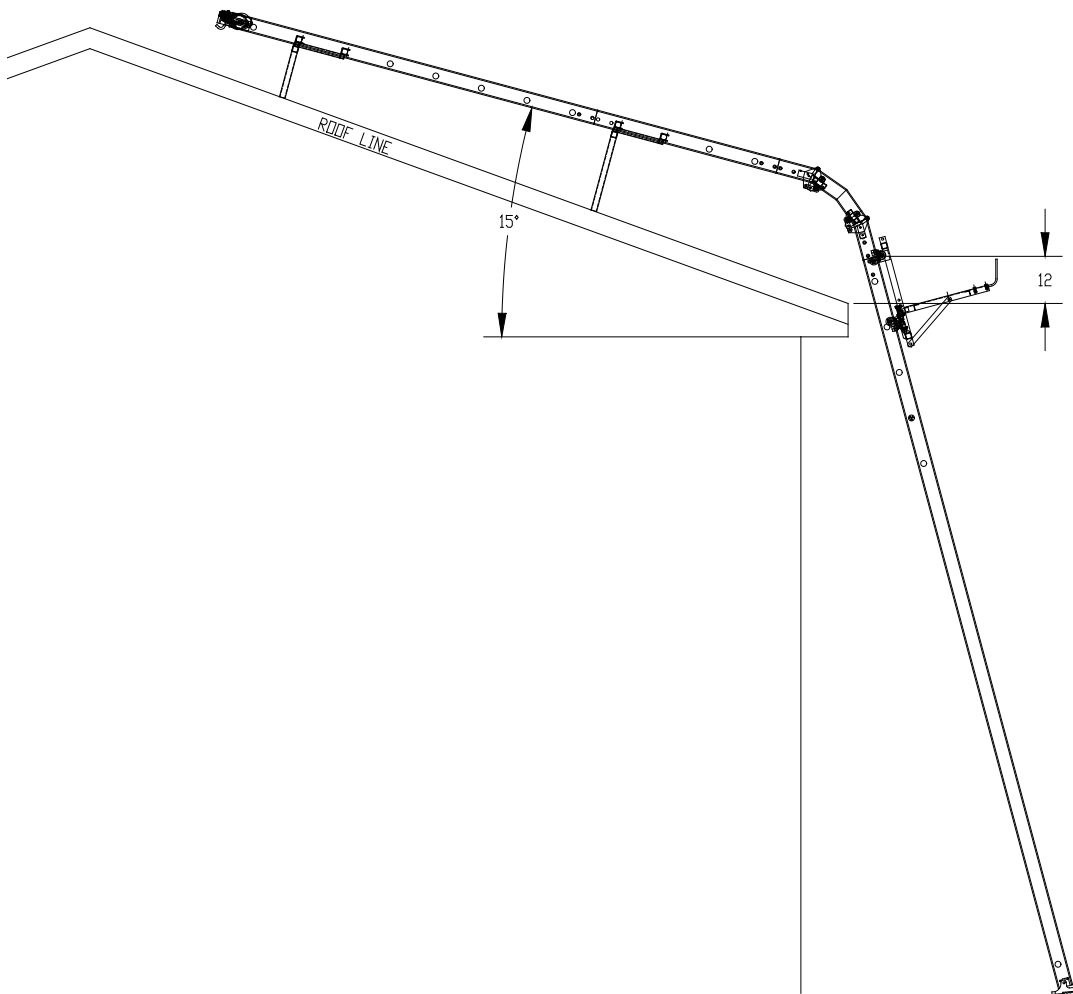


Figure 3-2.
Pivoting platform hoist Assembly & Roof Line

3.4 RAISING THE TRACK



WARNING:

THE HOISTING OPERATION MUST BE CLEAR OF ALL ELECTRICAL LINES AND OBSTRUCTIONS TO PREVENT EQUIPMENT DAMAGE AND/OR SERIOUS PERSONAL INJURY. CONSULT POWER COMPANY BEFORE WORKING NEAR POWER LINES.

Two methods are suggested for raising the track to its operating position. Refer to either Section 3.4.1 or 3.4.2.

3.4.1 Procedure A

1. Ensure a tie rope is holding the platform in position at the base of the track. Lay the assembled track with platform attached parallel to the building wall that is to support the track.
2. Use a person on the roof to lower a tether rope from the roof. Attach the tether rope to the top crosstie to pull up the track. A person on the ground has their feet braced against the track shoes. This keeps the bottom of the track from slipping. The person on the ground also aids in raising the track by pulling against the rails, cross ties, or platform.
3. Another person on the ground may aid in erecting by “walking” the track up hand over hand on the rails or cross ties. When the track reaches a vertical position, carefully turn the track 90° with the platform away from the building. Move the bottom of the track away from the building 1/4 of the height of the building where the track is to be supported. Allowance must be made for an overhang on the building. See Table 3-1 in Section 3.6 for approximate distances of base of track from building.
4. Securely tie the track to the roof with a rope fastened to a cross tie to prevent track from slipping.
5. Assemble the Pivoting platform hoist section to the end of the vertical section of track.
6. Assemble the roof top section of the track to the Pivoting platform hoist section and support the roof top section with timber or supports.



WARNING:

NEVER CLIMB ON THE TRACK. THIS CAN CAUSE SERIOUS PERSONAL INJURY OR DEATH. USE A LADDER.

7. Position the PRO Drive on the 1st, 2nd and 3rd cross ties from the bottom with the clamp on the 3rd cross tie. Note that the 2nd and 3rd cross ties are reinforced. The PRO Drive should be on the underside of the track. Center the PRO Drive between the track rails and lock in place by rotating the cross tie lock to the left. Insert the lock pin in the hole provided to prevent cross tie lock from loosening. Fasten the operator handle to the PRO Drive lever. When facing the PRO Drive from the rear or building side of the track, the PRO Drive handle is on your left. Refer to PRO Drive instruction manual for startup and operating information. The top of the PRO Drive should be level, with a 3/8” clearance under both wheels when set up properly. The engine may not operate correctly if it is not level.
8. Remove the tie rope holding platform in position on the track.



WARNING:

MAKE SURE THAT BOTH TRACK SHOES ARE RESTING ON A FIRM, LEVEL SURFACE. THIS PREVENTS TRACK SLIPPAGE OR UNEVEN LOADING OF TRACK WHICH CAN CAUSE EQUIPMENT DAMAGE OR PERSONAL INJURY.

3.4.2 Procedure B

1. Ensure a tie rope is holding the platform in position at the base of the track. Place track perpendicular to the building with the bottom of the shoes resting against the building to prevent slipping.
2. Use a person on the roof to lower a tether rope from the roof. Attach the tether rope to the top crosstie to pull up the track, with a person on the ground to aid in erecting by “walking” up the track hand over hand on the rails or cross ties.
3. When the track reaches a vertical position, carefully turn the track 180° with platform away from building. Move the bottom of the track away from the building 1/4 of the height of the building where the track is to be supported.

Allowance must be made for an overhang on building. See Table 3-1 in Section 3.6 for approximate distances of base of track from building.

4. Perform Steps 4 through 8 described in Section 3.4.1, Procedure A.

3.5 MOUNTING THE TOP BRACKET

Slide the top bracket into the end of the top track section, aligning the mounting holes on the top bracket with those on the track. Bolt securely to the track using the four 3/8 x 3/4" carriage bolts and four 3/8" wing nuts provided. The track is now ready to be raised to its operating position.

3.6 INSTALLING TRACK SUPPORT

Vertical track lengths over 28 feet require the use of the track support. Table 3-1 provides the information for the track length, the distance from the bottom of the track to the building, and the location of the track support for various building heights. The base of track to building distance must be increased by the amount of any overhang on the building on which the hoist is being used.



WARNING:

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Building Height	Length of Track	Base of Track to Building	Track Support Location —Cross Tie Number From Base of Track
40	44	10' 0"	20 th
36	40	9' 0"	18 th
32	36	8' 0"	15 th
28	32	7' 0"	13 th
24	28	6' 0"	Not Required
20	24	5' 0"	Not Required
16	20	4' 0"	Not Required
12	16	3' 0"	Not Required
8	12	3' 0"	Not Required

**Table 3-1.
Track Support Location Requirements**

1. Refer to Figure 3-3. Using the four 3/8 x 3/4" hex head cap screws, four 3/8" nuts, and four external tooth lock washers, securely fasten both the flanges and the knuckles of the support. Align the outermost pairs of mounting holes to make the knuckles flush with the end of the corresponding flange.
2. See Figure 3-3, & refer to Table 3-1 to determine the cross tie on which to mount the support. With the track installed in its operating position against the building, use a ladder to raise the track support and knuckle assembly to the selected track cross tie. Fasten the track support knuckles to the cross tie using the provided lock pins.
3. Loosen the front and side lock screws at the top and/or bottom of the track support column to telescope the support to the ground, depending on how much support length is needed. Re-tighten the lock screws.



WARNING:

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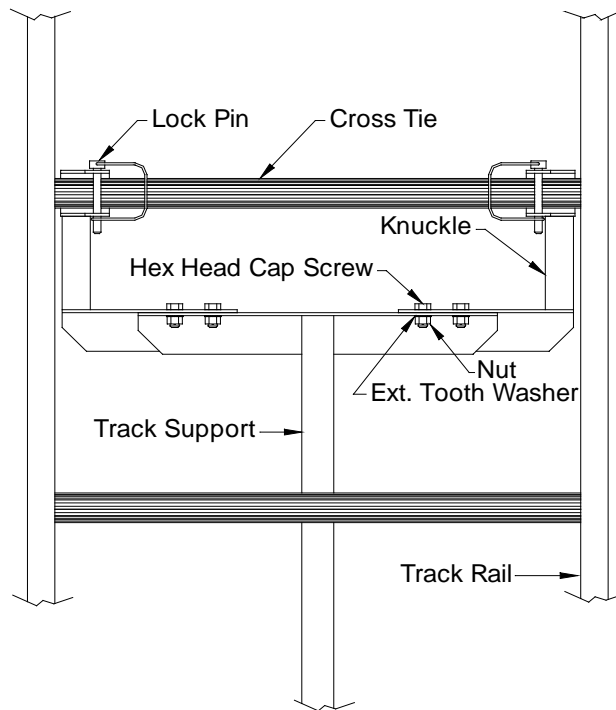


Figure 3-3.
Track Support Assembly

3.7 REEVING THE POWER DRIVE & PIVOTING PLATFORM ASSEMBLY

1. Before reeving the hoist, inspect the wire rope for wear and damage. Detailed inspection procedures are in Chapter 6.



WARNING:

WEAR HEAVY LEATHER GLOVES WHEN HANDLING WIRE ROPE. INSUFFICIENT HAND PROTECTION WHEN HANDLING WIRE ROPE CAN CAUSE SERIOUS PERSONAL INJURY.



WARNING:

USING DEFECTIVE WIRE ROPE CAN CAUSE EQUIPMENT DAMAGE, SERIOUS PERSONAL INJURY, OR DEATH.

2. Refer to figure 3-4. To reeve the hoist, tie a tether rope, lowered from the roof, to the wire rope end, and with the brake released, pull the hoist wire rope to the roof on the underside of the track.
3. Remove the tether rope. Reeve wire rope over both rollers on back (under) side of pivoting track section then through back of sheave on the top bracket and out the front (top) side.
4. Re-attach tether rope and pull the wire rope ovetop both rollers that are above wire rope under track and continue down to the ground. Remove the tether rope.
5. Reeve wire rope through the sheave on the platform from left to right, when facing platform.
6. Re-attach tether rope and pull the wire rope to the roof, over both remaining rollers on the platform side of the pivoting track section, and up to the top bracket.

7. Remove the tether rope and fasten wire rope end to the hook provided on the top bracket. This is double line operation.

The winding drum must not have less than three turns of wire rope when the platform is at the lowest point of travel. Ensure that the wire rope is contacting all six rollers of pivoting track section and all eight sheaves rotate freely.



WARNING:

ENSURE THAT WIRE ROPE REMAINS ON TOP OF PIVOTING TRACK GUIDE ROLLERS AT ALL TIMES DURING OPERATION. FAILURE TO DO SO CAN CAUSE EQUIPMENT DAMAGE, SERIOUS PERSONAL INJURY, OR DEATH.

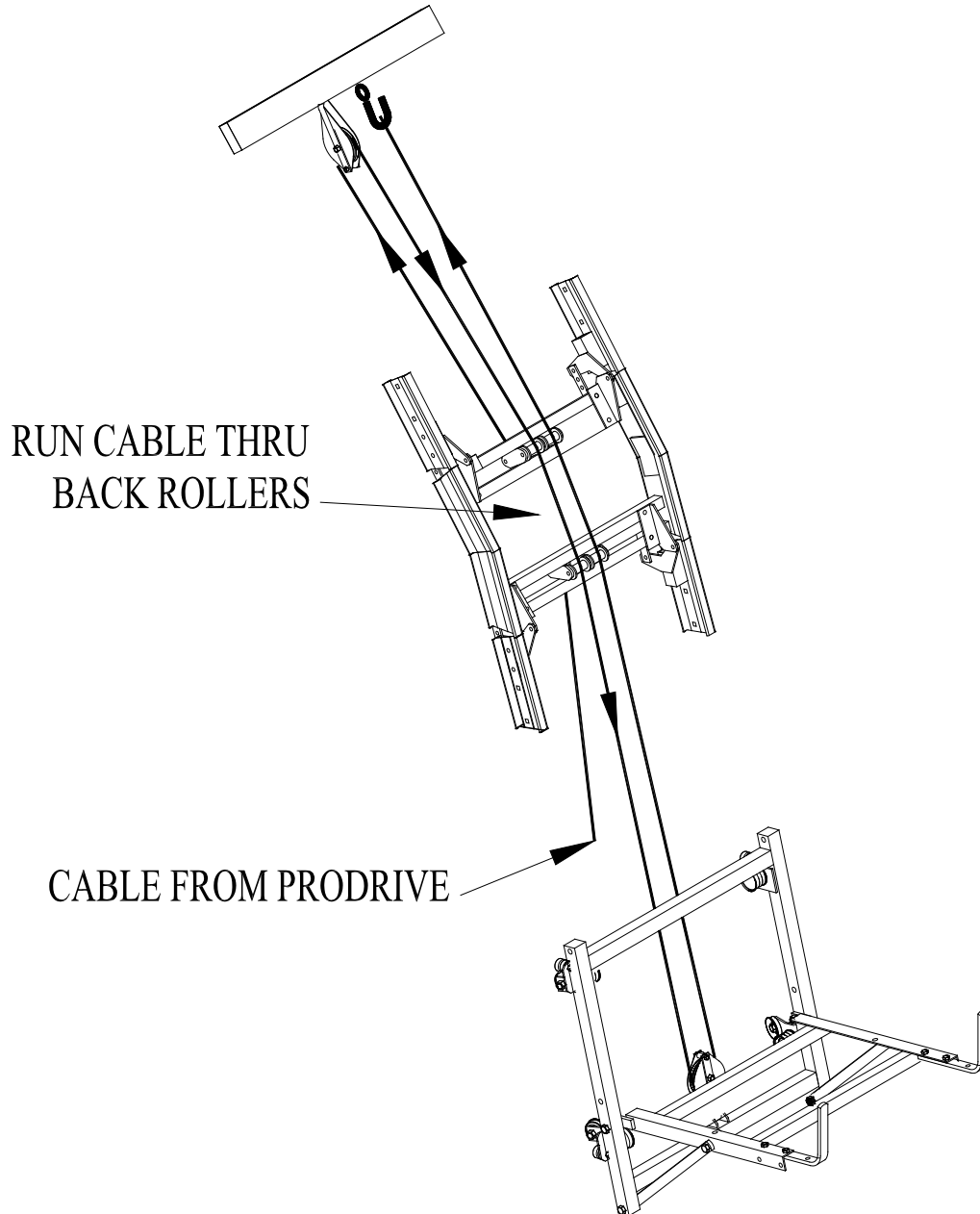


Figure 3-4.
Reeving Power Drive & Pivoting Platform Assembly