

5025 RT. 8, GIBSONIA, PA 15044



Completing the Platform Assembly

PL-400 •

Position th3 Platform #3 inside the Frame #1 sides and fasten with nuts and bolts provided at point "A", Assemble the two braces #8 as with the PL-250. Material Stops #18 may be bolted to the end of the Platform #3 if required.

Mounting the platform on Track

Both models have the cross ties located off center of the rails to allow passage of the platform wheels. Before erecting the track, lay the bottom 16 ft. track section on the ground with the rail flange, (the larger distance, from the cross tie $2 \frac{1}{4}$), up, and the track shoes as shown.

Shoes



Important: Be sure both track shoes are resting firmly on ground. Uneven support will cause track to rack. Before operating read and understand the in ructions furnished with power unit.



The assembled platform will slide onto the rails from the top of the track section (opposite the shoes). The platform bumper should be on the bottom facing 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.

Setting up the Track

The standard sectional platform hoist consists of three sections of track: a 16 ft. bottom section with shoes, an 8 ft., and a 4 ft. section, both with splice plates bolted permanently to their bottom end. These sections may be joined together with their splice plates by sliding the bottom of one action into the top of the lower section and installing hex nuts and bolts pr vided. Tracks of 16 ft., 20 ft., 24 ft., and 28 ft. can be assembled as desired from these three sections. Select a length that will allow the top of the assembled rail to project 2 to 2 1/2 ft. above the cornice or eave of roof.

WARNING: Tighten All Bolts and Nuts Securely. If All Bolts Are Not in Place and Tightened Securely, Track Failure Will Occur under Load.

Mounting the top Bracket

Slide Top Bracket into end of the top track section and bolt securely to the track. The bar loops (PL-250) or hooks (PL-400) on the back of the Top Bracket must face the flanges of the track opposite the flanges the platform rolls on.

Important: The PL-250 Top Bracket may have two sets of mounting holes.

When Bracket is used on a 250 track, use the set of holes that locate the Bracket against the top track rail flanges, (see sketch). If wrong holes are used, cable may cut through top cross tie. The track is now ready to e raised to its operating position.



Caution:

Because of its long length and with the top bracket attached, the track assembly is extremely top heavy and must be kept under control at all times.

Two alternate methods are suggested for raising the track to its operating position.

Procedure A

- 1 Lay the assembled track with platform and top bracket attached parallel to the building wall that is to support the track.
- 2 ~ Use a man on the roof with a rope dropped from the roof and attached to the top bracket to pull up the track while a man on the ground with his feet braced against the track shoes to keep bottom of track from slipping aids in raising by pulling against rails, cross ties or platform.
- 3 Another man on the ground may aid in erecting by "walking" the track up hand over hand on the rails or cross ties.

When track reaches a vertical position, carefully turn the track 90°

with platform away from building. Move bottom of track aw y

from building \sim of height of building where track is to be supported. Allowance must be made for an overhang on building. See page 6

for approximate distances of base of track from building.

Alternate Procedure B

- 1 Place track perpendicular to building with the bottom shoes resting against building to prevent slipping.
- 2 Use a man on the roof with rope dropped from the roof and attached to top bracket to pull up the track. A man on the round may aid in erecting by "walking" up the track hand over ha1d on the rails or cross ties.
- 3 When track reaches a vertical position, carefully turn the track 180^Q with platform away from building % of height where track is supported. Allowance must be made for an overhang on bUil_f'n⁹' See page 6 for approximate distances of bases of track from building. AFTER USING ONE OF THE ABOVE PROCEDURES CO TINUE AS FOIIOWS.
- 4 Securely tie the track to the roof with a rope fastened to a cross tie or top bracket to prevent track from slipping. Platform will not roll on track if rope is fastened around the rails.
- 5. Mount the power unit on the 3rd. and 6th. track cross ties (rein forced on PL400 track) and clamp in place. Fasten or bolt the operating handles on the power hoist. When facing the power unit from the rear or building side of the track, the 250 power unit handles are on your right.

The Power Unit is designed to operate in essentially a vertical position. This is necessary for the proper operation of the brake and clutch levers. They will not work if the unit is in a horizontal position.

When used on platform hoist, place the #6 clamp on the fifth cross tie from the bottom on the underside of the track. Center the unit between the track rails and lock in place by rotating #7 lock to the left. Insert #38 lock pin in hole provided to prevent lock from loosening.

- 6. Using a rope from the roof, and with brake released, pull the hoist cable to the roof on the underside of 'track and reeve t rough the sheave on the top bracket. Drop the cable to ground (0 platform side of track) and fasten to hook provided on the platform. NOTE: The PL-400 requires two parts of line. After dropping cable end to ground, pass cable through block on PL-400 platform and pull end once more to the roof on platform side of track. Fasten end to hook provided on top bracket.
- 7 _ Remove the tie rope holding platform in position on the track.

8 Make certain that both track shoes or spikes are firmly resting on a levsurface. This prevents track slippage or uneven Loading of track which could cause damage or injury to equipment or personnel. 9 _ Attach accessories to platform as required. Before operating, read

and understand the power hoist operating instruction following this section on page 12. Your platform hoist is now ready for use.

Lowering the Track

WARNING

Before Lowering Track, Check Carefully For Proximity of Electrical Power Lines.

When dismantling and lowering the equipment, reverse the erection procedure.

Platform Raising the and Load

Lowering the Platform and Load

To raise the loaded platform, lift the clutch lever, left. This tightens the clutch belt and automatically releases the brake, permitting the platform to roll up the track. When platform reaches the top of the track, release the clutch lever immediately. This action stops the platform and automatically applies the

brake which holds the load and platform.

The load will now roll automatically off the platform on to the roof or angle

guide, should you be using one. If platform is permitted to jam against the spring stops on the top bracket, the drive belt may jam in the drum sheave, preventing the lowering of the platform to the ground to receive the next load. Should this occur? It will be necessary to shut off gas engine or electric motor and release the jammed belt by inserting screwdriver between n belt and

sheave groove.

Lift the brake lever slowly to lower platform to the ground, LOWERING speed, for SAFE operation, should not exceed 50 feet per minute, Continue to decelerate the platform as it nears the ground to prevent damage to platform or track .

* WARNING

Never Jam on Brake. Broken hoist cables and/or severe injury to personnel or equipment may occur. Make cert, in platform does not strike track shoes on reaching the bottom of the track.



PRO400 PLATFORM HOIST INSTRUCTIONS

REIMANN & GEORGER CORPORATION HOISTING PRODUCTS P/N 6102078

BUFFALO, NY 8/29/03

PRE-HOISTING CHECKLIST

This checklist must be checked prior to each use of the hoist. This checklist is to be used as a guideline in conjunction with the maintenance and inspection procedures outlined in this manual. The hoist and related equipment must be thoroughly inspected prior to each use by a trained person. A trained person is one who has read and thoroughly understands this instruction manual and related equipment manuals and, through training and experience, has shown knowledge regarding the safe operational procedures. If you do not have such a person in your organization, please contact Reimann & Georger Corporation or its distributors and they will assist you in providing such a "trained person". Do not permit any person who is not fully trained to operate this platform hoist. It is recommended that this checklist be maintained as a permanent record.

Discuss work plan, personal protective equipment, and each crew member's responsibility before starting to set-up. Insure OSHA compliant fall protection is in place. Insure hoisting operation will clear all power lines and obstructions. Insure hoisting area is secured from all unauthorized personnel. Insure the track is securely tied to the roof to prevent track from slipping. Insure that both track shoes are resting on a firm level surface and both wheels are 3/8" off surface to prevent track slippage or uneven loading. Insure the load does not exceed the rated load capacity of the hoist model being used. Insure all structural members of the hoist are free of defects and damage that may affect the integrity of the hoist. Insure brake rope is not wet. Inspect wire rope for signs of wear and damage. Replace defective wire rope immediately. Insure that at least three wraps of wire rope are on the winch drum at maximum travel. Insure that the screw securing wire rope end loop to the brake sheave is tight and in good condition. Insure wire rope is reeved properly for two (2) parts of line on the PRO400 hoist. Insure that track support has been properly installed for track lengths over 28 feet. Insure that the bottom of the track is away from the building 1/4 of the supported height plus the building overhang. Insure that all bolts and nuts are tightened securely. Insure all sheaves can rotate freely. Insure safety latch on the hook does not support any load. Insure power drive has been properly maintained. Operate hoist with no load to test hoisting operation, controls, and power drive.

INSPECTOR: _____ DATE: _____

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1 SAFETY

1.1 INTRODUCTION

Your Reimann & Georger Corporation PRO400 Platform Hoist has been engineered to provide lifting performance, long term economics and safety advantages that no other type can match. However, even a well-designed and well-built hoist can malfunction or become hazardous in the hands of an inexperienced and/or untrained user. Therefore, read this manual and related equipment manuals thoroughly before operating your hoist to provide maximum safety for all operating personnel, and to get the maximum benefit from your equipment.

1.2 SAFETY DEFINITIONS

A safety message alerts you to potential hazards that could injure you or others or cause property damage. The safety messages or signal words for product safety signs are **DANGER**, **WARNING**, and **CAUTION**. Each safety message is preceded by a safety alert symbol and is defined as follows:

DANGER: Indicates an imminently hazardous situation which, if not avoided, **will** cause death or serious injury. This safety message is limited to the most extreme situations.

WARNING: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION: Indicates a potentially hazardous situation which, if not avoided, **may** result in minor or moderate injury. It may also be used to alert against unsafe practices and property-damage-only accidents.

1.3 PRO400 PLATFORM HOIST SAFETY LABELS

These labels warn you of potential hazards that could cause injury. Read them carefully. If a label comes off or becomes illegible, contact Reimann & Georger Corporation for a free replacement.

1.4 PRO400 HOIST SAFETY RULES

- 1. Operators must be trained before operating this hoist. A trained person is one who has read and thoroughly understands this instruction manual and related equipment manuals and, through training and experience, has shown knowledge regarding the safe operational procedures.
- 2. 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 method of communication.
- 3. All personnel shall be protected by OSHA compliant fall protection where applicable.
- 4. Never use the hoist structure to anchor life lines, worker's harnesses or other attachments.
- 5. Always use safety footwear, safety glasses, and head protection devices.
- 6. A good line of communication must be maintained between the hoist operator and the roof crew.
- 7. Hoisting area is to be kept clear of unauthorized personnel at all times. Place barricades or secure the area in such a manner that if there were an equipment failure, no personnel would be injured.
- 8. Hoisting area is to be clear of power lines. Consult power company before you work near power lines.
- 9. Follow the Pre-Hoisting Checklist before operating.
- 10. Wear heavy leather gloves when handling wire rope.
- 11. Secure load before lifting.

- 12. Do not remove material from the platform until it has stopped completely.
- 13. Keep out from under a raised load.
- 14. Never stand in-line with the raising or lowering of the platform at either the top or bottom of the hoist track.
- 15. Never hoist over an open doorway.
- 16. Never exceed the Rated Load Capacity of 400 pounds for the PRO400 hoist. The Rated Load Capacity is the maximum load that should ever be applied to the hoist.
- 17. Avoid sudden stops and shock loads.
- 18. No person shall be allowed to ride on the hoist.
- 19. NEVER climb the track; use a ladder.
- 20. Check the hoist periodically during operation. Know how to stop the power drive quickly in case of emergency.
- 21. Do not attempt to make adjustments while the hoist is being operated.
- 22. If the engine or motor fails during operation, release control levers to prevent load from falling.
- 23. Keep all body parts clear of moving parts.
- 24. Do not operate hoist when brake rope is wet.
- 25. Do not operate hoist when under the influence of drugs, alcohol, or medication.
- 26. At end of operation, the hoist should be secured to prevent unauthorized use. Never assume you will find the hoist in the same condition in which you left it.
- 27. Do not weld or otherwise modify the hoist. Such alterations may weaken the structural integrity of the hoist.
- 28. Only trained personnel are authorized to do repairs.

2 SPECIFICATIONS

2.1 HOIST SPECIFICATIONS

	MODEL PRO400
Load capacity	400 lbs.
Lift speed	110 fpm
Platform size	24 in. x 28 in.
Track (3 3/4" side rail)	24 in. width
Wire rope	5/32-in. diameter, 7 x 19 galvanized aircraft wire rope

Note that platform speeds and capacities are average and are based on 5/32 inch wire rope diameter. As wire rope builds up on drum, lifting speed increases and lifting capacity decreases in direct proportion to drum diameter.

2.2 COMPLETE SYSTEM SPECIFICATIONS

16 foot: Includes PRO Drive, Platform assembly, 16-foot aluminum Track with shoes.

- 28 foot: Includes PRO Drive, Platform assembly, 16-foot aluminum Track with shoes, additional 8 foot and 4 foot Track sections with splice plates.
- 44 foot: Includes PRO Drive, Platform assembly, 16 foot aluminum Track with shoes, additional 16 foot, 8 foot, and 4 foot track sections with splice plates, Telescoping track support.

2.3 NAMEPLATE AND SERIAL NUMBER TAG

It is important to identify your hoist completely and accurately whenever ordering spare parts or requesting assistance in service. The platform hoist nameplate is located on the platform main frame. The label shows the model number, serial number and the capacity rating. The platform hoist label should appear as the sample nameplate shown in Figure 2-1. Record the model and serial numbers, and capacity rating for future reference.



Figure 2-1.
PRO400 Platform Hoist Product Nameplate

MODEL	

SERIAL N	NUMBER	 	

CAPACITY	RATING	
CAPACITY	' RATING	

3 INSTALLATION AND SETUP

3.1 PRIOR TO SETUP

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



WARNING:

INSURE 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:

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

3.2 COMPLETING THE PLATFORM ASSEMBLY

- 1. Your PRO400 Platform Lift has an optional unload feature that can be easily added by the installation of the sixteen 2" diameter wheels (#19) using the mounting hardware included in P/N 0401450 Platform Wheel Bag Of Bolts.
- 2. Refer to Figure 3-1 (Wheel placement Guide) for correct placement of wheels on platform frame (#17) and pivot bracket (#7).
- 3. Making sure that all locknuts are facing the inside of the frame members, securely tighten all sixteen $1/4 \ge 1-1/2$ " long hex head bolts.
- 4. FAILURE TO FOLLOW WHEEL PLACEMENT GUIDE MAY CAUSE DAMAGE TO THE MATERIAL BEING LIFTED.
- 5. If the optional equipment PRO400 Roller Angle Guide is to be used then the platform wheels MUST be installed to allow for proper operation of Roller Angle Guide and automatic off load feature of your PRO400 Platform Lift.



Figure 3-1. Platform Wheel Placement Guide

6. Refer to Figure 3-2. Fasten the two support braces #16 onto the platform #17 at point "A" & onto the main frame #9 at point "B" with the 1/2 X 1" bolts and nuts. Platform stops #18 can be bolted to the end of the Platform #17 if required. Tighten all bolts securely.



Figure 3-2. Platform Assembly

3.3 MOUNTING THE PLATFORM ON THE TRACK

1. Refer to Figure 3-3. Both models have 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 16-foot track section on the ground with the track shoes as shown with the greater cross tie offset on top (2-1/4").



- 2. The assembled platform slides onto the rails from the end of the track section opposite the shoes. The wooden platform bumper 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, check the following:
 - A) The upper and middle wheels should contact the rails without application of light pressure. With light pressure on the PRO400 models, the middle and lower wheels should contact the rails.
 - B) Make sure the wooden bumper is not split. Do **NOT** remove the bumper.

3.4 ASSEMBLING THE TRACK SECTIONS

The standard sectional platform hoist consists of three sections of track: a 16 foot bottom section with shoes, an 8 foot and a 4 foot section, both with splice plates bolted permanently to their bottom end. 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 16 feet, 20 feet, 24 feet, and 28 feet can be assembled as desired from these three sections. Select a length that allows the top of the assembled rail to project 2 to 2-1/2 feet above the edge of roof.

For longer track lengths, a 16 foot center section with splice plates attached is available to provide tracks up to 44 feet. Lengths over 28 feet require a Track Support for additional support for these long tracks. Installation instructions for the Track Support are in Section 3.7. All bolts and nuts must be tightened securely to prevent track failure under load.

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 $3/8 \times 3/4$ " carriage bolts and four 3/8" wing nuts provided. The track is now ready to be raised to its operating position.

3.6 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 3.6.1 or 3.6.2.

3.6.1 Procedure A

- 1. Insure a tie rope is holding the platform in position at the base of the track. Lay the assembled track with platform and top bracket 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 bracket to pull up the track with a person on the ground with 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 3.7 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 or top bracket to prevent track from slipping.



WARNING:

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

- 5. 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.
- 6. 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.

- 7. 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. Remove the tether rope. Reeve wire rope through the sheave on the top bracket. Reattach tether rope and pull the wire rope to the ground. Remove the tether rope. Reeve wire rope through the sheave on the platform. Reattach tether rope and pull the wire rope to the roof on the platform side of the track. 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 rope when the platform is at the lowest point of travel. Insure that the sheaves rotate freely.
- 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.

3.6.2 Procedure B

- 1. Insure 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 bracket to pull up the track with a person on the ground with their feet braced against the track shoes. A person on the ground may 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 3.7 for approximate distances of base of track from building.
- 4. Perform Steps 4 through 8 described in Section 3.6.1, Procedure A.

3.7 INSTALLING TRACK SUPPORT

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.

Building Height	Length of Track	Base of Track to	Track Support Location —Cross Tie
		Building	Number From Base of Track
40	44	10' 0"	20 th
36	40	9' 0''	$18^{ m th}$
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

Table 3-1.Track Support Location Requirements

- 1. Refer to Figure 3-4. 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 3-4, & 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 you need. Retighten the lock screws.



Figure 3-4. Track Support Assembly

3.8 OPTIONAL EQUIPMENT FOR THE PRO400

The following options can customize your hoist for your particular operation.

- 1. PRO400 Plywood Carrier Attachment
- 2. PRO400 Gravel Hopper
- 3. PRO400 Roller Angle Guide

3.8.1 Plywood Carrier Attachment

- 1. Remove the #18 platform stops.
- 2. Remove the two #16 platform braces to allow the platform to drop down into a vertical position.
- 3. Refer to Figure 3-5. Attach the two plywood carrier brackets using the existing platform stop holes and platform stop hardware.
- 4. For extra load thickness capability, remove the wheels from the platform. Loads can be secured with bolts using holes provided in the carrier.
- 5. Sheets of plywood can be placed on the carrier with either the 4 foot or 8 foot dimension "up". If the 8 foot dimension is up (vertical), the weight of the sheets will automatically tilt the stack when the carrier reaches the top of the track. If the 4 foot dimension is up, more care must be taken to balance the stack left to right. The person unloading must tilt the stack into the horizontal plane to slide it out of the carrier.
- 6. Material should be held against the track with a rope fastened to the carrier as shown in Figure 3-9. The person at the top of the track holds the loose end. Keep the rope taut as the load is raised. Raise material slowly when nearing the top of the track.



3.8.2 Gravel Hopper Attachment

- 1. Place the #16 braces in the inner holes of the #17 platform. These holes are shown in Figure 3-10.
- 2. The hinged brackets on the base of the hopper opposite the front legs are mounted to the platform using the loose bolts provided. Before tightening these bolts, be sure that both front legs of the hopper are resting solidly on the platform. If this is not done, excessive load will be placed on the #19 wheels, causing undue wear. The brackets are slotted for this adjustment. When the hopper is properly placed, the discharge gate will be slightly open as shown in Figure 3-6.
- 3. In operation, when the platform reaches the top, the #7 pivot bracket goes over the top of the rails. The discharge gate on the hopper opens and dumps the load into the waiting wheelbarrow or spreader.



Figure 3-6. Gravel Hopper Assembly

3.8.3 Roller Angle Guide

Refer to Figure 3-7. The roller angle guide fits onto hooks provided on the #1 top bracket. It is equipped with conveyor wheels to carry and store material away from the platform discharge on shallow inclines.



Figure 3-7. Roller Angle Guide Assembly

4 OPERATION

4.1 BEFORE OPERATING THE HOIST



WARNING: A GOOD LINE OF COMMUNICATION MUST BE MAINTAINED BETWEEN THE HOIST OPERATOR AND THE ROOF CREW.

- 1. Only trained personnel shall operate this equipment. A trained person is one who has read and thoroughly understands this instruction manual and related equipment manuals and, through training and experience, has shown knowledge regarding the safe operational procedures.
- 2. Obey all safety labels provided on your platform hoist and related equipment. These labels warn you of potential hazards that can cause serious injury. If a label comes off or becomes hard to read, contact Reimann & Georger Corporation for a replacement.
- 3. Follow the Pre-hoisting Checklist in the front of this manual before operating.
- 4. Never use the hoist structure to anchor lifelines, worker harnesses, or other attachments.
- 5. Always use safety footwear, safety glasses, and head protection devices.
- 6. Before lifting, insure the safety latch on the hook is not supporting any load. Never hoist over an open doorway.



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.

- 7. Hoisting area is to be kept clear of unauthorized personnel. Place barricades or secure the area in such a manner that if there were an equipment failure, no personnel would be injured.
- 8. Inspect wire rope for damage, wear, or unraveling. Replace as necessary.
- 9. Check all hooks and sheaves. Replace as necessary.

4.2 RAISING AND LOWERING THE LOAD



WARNING:

NEVER EXCEED THE RATED LOAD CAPACITY OF 400 POUNDS FOR THE PRO400 HOIST. THE RATED LOAD CAPACITY IS THE MAXIMUM LOAD THAT SHOULD EVER BE APPLIED TO THE HOIST.



WARNING:

SECURE THE LOAD BEFORE LIFTING.



WARNING:

NEVER STAND IN-LINE WITH THE RAISING OR LOWERING OF THE PLATFORM AT EITHER THE TOP OR BOTTOM OF THE HOIST TRACK.

- 1. To raise the load, lift the operator handle slowly with a smooth upward motion. This automatically tightens the drive belt and releases the brake, permitting the platform to roll up the track.
- 2. When the platform reaches the top of the track, release the operator lever. This action stops the platform and automatically applies the brake, which holds the load and platform. The load will now roll automatically off the platform (if the optional wheel package is installed) onto the optional roller angle guide if you are using one.



WARNING: KEEP OUT FROM UNDER A RAISED LOAD.



WARNING:

IF THE ENGINE OR MOTOR FAILS DURING OPERATION, RELEASE THE OPERATOR HANDLE TO PREVENT LOAD FROM FALLING.

3. Do not allow the platform to jam against the spring stops on the top bracket. The drive belt may jam in the drum sheave, preventing the lowering of the platform.



WARNING: DO NOT REMOVE MATERIAL FROM THE HOIST UNTIL IT HAS STOPPED COMPLETELY.

4. Depress the operator handle to lower platform to the ground. Lowering speed for SAFE operation should not exceed 50 feet/minute. Continue to decelerate the platform as it nears the ground to prevent damage to platform or track. Do not allow the platform to strike the track shoes on reaching the bottom of the track.



WARNING: Avoid sudden braking when handling a load.

5. Check the hoist periodically during operation. Do not attempt to make adjustments during operation.



WARNING: KEEP ALL BODY PARTS CLEAR OF MOVING PARTS.

4.3 PREPARING HOIST FOR SHUTDOWN

At the end of operation, secure the equipment to prevent unauthorized use. **Never** assume you will find the equipment in the same condition that you left it. Proceed as follows:

- 1. Insure that all lifting tension has been removed from the wire rope.
- 2. Shut off PRO Drive and take necessary action to prevent its unauthorized use.
- 3. If the hoist is being permanently disassembled, at the end of a project for example, follow the detailed disassembly procedures in Chapter 5.

5 DISASSEMBLY

5.1 PRIOR TO DISASSEMBLY

- 1. Before disassembling the hoist, read and follow all the safety rules of this manual. Failure to do this can lead to equipment damage and/or serious personal injury.
- 2. Insure that the platform is not supporting any load before proceeding.
- 3. Before dismantling, attach a tie rope to hold the platform in position at the base of the track.
- 4. Insure the track is securely tied to the roof with a rope fastened to a cross tie or top bracket to prevent track from slipping.
- 5. Check carefully for proximity of power lines or other overhead obstructions.
- 6. Remove the roller angle guide, if installed. The plywood carrier and gravel hopper options, if used, do not have to be removed.

5.2 REMOVING TRACK SUPPORT

1. Using a ladder, loosen the front and side lock screws at the top and/or bottom of the track support column to telescope the support into the flange. Re-tighten the lock screws.



WARNING: NEVER CLIMB ON THE TRACK FOR ANY REASON. THIS CAN CAUSE SERIOUS PERSONAL INJURY OR DEATH.

- 2. Remove the track support from the cross tie by unfastening the lock pins.
- 3. If the track support will be used on the same hoist model in future applications, the knuckles do not have to be removed from the mounting flanges.

5.3 LOWERING THE TRACK

1. Unfasten the hoist wire rope from the hook on the top bracket and attach a tether rope to the wire rope, then lower the wire rope to the ground. Remove tether rope. Unreeve the bottom sheave. Reattach tether rope and pull the wire rope end once more to the top bracket. Remove tether rope, unreeve the top sheave and reattach tether rope to the wire rope and lower it to the ground.



WARNING:

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

- 2. Attach a tether rope to the top bracket. Then untie the rope that fastens the track to the roof.
- 3. A person on the roof must lift up on the top bracket with the tether rope while a person on the ground moves the bottom of the track towards the building. When the track reaches a vertical position, the person on the ground may either:
 - (a) turn the track 90° and have the roof person lower the track with the ground person bracing their feet against the track shoes, or;
 - (b) turn the track 180°, move the bottom of the track against the building and have the roof person lower the track with the track shoes braced against the building.

In either case, the track must be turned to make the platform point upwards when the lowering operation is completed.

4. When the track has reached the ground, remove the tie rope holding the platform in position on the track.

5.4 DISASSEMBLING THE TRACK SECTIONS

- 1. Remove the top bracket from the end of the top track section.
- 2. Remove the installed hex nuts and bolts to separate each track section from the adjoining sections. Then roll the platform down and off the track in the direction opposite the track shoes.