

Owner's / User's Manual for Vehicle Restraint
TRUCK LOCK





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1 About these instructions


These instructions are **original operating instructions** which outline procedures that must be followed to install the Hörmann Truck Lock™ Vehicle Restraint. This document is not intended to cover all procedures to ensure a safe installation and trouble free operation.

1.1 Warnings used

	Indicates a danger that can lead to death or injuries .
 DANGER	
	Indicates a danger that immediately leads to death or serious injuries.
 WARNING	
	Indicates a danger that can lead to death or serious injuries.
 CAUTION	
	Indicates a danger that can lead to minor or moderate injuries.
ATTENTION	
	Indicates a danger that can lead to damage or destruction of the product .

2 Safety instructions

 WARNING
Danger of injury in the event of non-observance of these operating instructions
These instructions contain important information on the safe use of the product. Possible dangers are emphasized.
<ul style="list-style-type: none"> ▶ Read through all of the instructions carefully. ▶ Follow all safety instructions provided in this document. ▶ Keep these instructions accessible.

 WARNING
This product can expose you to chemicals including lead, which are known to the State of California to cause cancer or birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

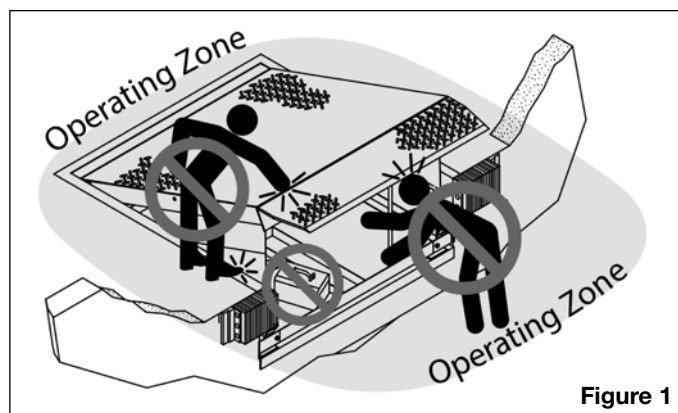
3 General operational precautions



Read and understand the Owner's/User's Manual and become thoroughly familiar with the equipment and its controls before operating the transport vehicle restraint.

Never operate a transport vehicle restraint while a safety device or guard is removed or disconnected.

Never remove DANGER, WARNING, or CAUTION signs, Placards or Decals on the equipment unless replacing them.



Do not start the equipment until all unauthorized personnel in the area have been warned and have moved outside the operating zone (see Figure 1).

Remove any tools or foreign objects from the operating zone before starting.

Keep the operating zone free of obstacles that could cause a person to trip or fall.

PRECAUTIONS

3.1 Operational precautions



Learn the safe way to operate this equipment. Read and understand the manufacturer's instructions. If you have any questions, ask your supervisor.

If the Hörmann Truck Lock™ vehicle restraint does not operate properly using the procedures in this manual, enter HORN OVER-RIDE mode by following the instructions printed on the control box. Contact Hörmann or your local representative for service.

DANGER



Stay clear of dock leveling device and restraint when transport vehicle is entering or leaving area.

Do not move or use the dock leveling device and restraint if anyone is under in front or near it.



Keep hands and feet clear of pinch points. Avoid putting any part of your body near moving parts.



Do not operate any equipment while under the influence of alcohol or drugs.

WARNING

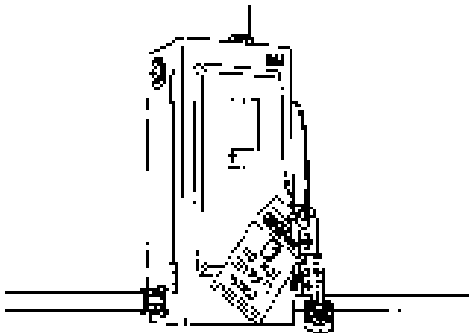


Chock/restrain all transport vehicles. Never remove the wheel chocks until loading or unloading is finished and transport vehicles driver has been given permission to drive away.

Do not use a broken or damaged restraint device. Make sure proper service and maintenance procedures have been performed before using.

3.2 Maintenance precautions

⚠ DANGER



Electrical power must be OFF when servicing the equipment. For maximum protection, use an OSHA* approved locking device to lock out all power sources. Only the person servicing the equipment should have the key to unlock the device.

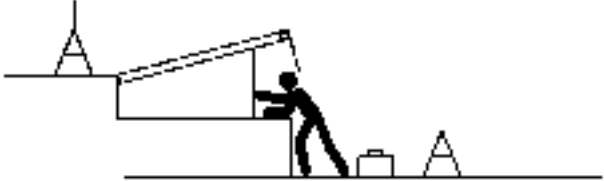
* Refer to OSHA Regulation 1910.146 Confine Space, 1910.147 Lockout/Tagout

3.2.1 Vehicle restraint safety decals

Every 90 days (quarterly) inspect all safety labels, placards and tags to ensure they are present, easily seen and legible. Refer to the Parts section of this publication to identify the location of the safety items listed below. Call Hörmann Technical Service for replacements.

Page#	Item#	Description
49	21	Warning Decal
49	22	Do Not Operate Decal
49	23	Caution Decal
50, 51	8	No Step Decal
52, 53, 54	5	No Step Decal
56	2	Move On Green Sign

⚠ WARNING



Always post safety warnings and barricade the work area at dock level and ground level to prevent unauthorized use of the unit before maintenance is complete.

ALWAYS disconnect electrical power source and ground wire before welding on restraint.

DO NOT ground welding equipment to any electrical components of the restraint. Always ground to the restraint frame.

DO NOT grind or weld if hydraulic fluid or other flammable liquid is present on the surface to be ground or welded.

DO NOT grind or weld if uncontained hydraulic fluid or other flammable liquid is present. Stray sparks can ignite spills or leaks near the work area. Always clean up the oil leaks and spills before proceeding with grinding or welding.

Always keep a fire extinguisher of the proper type nearby when grinding or welding.

4 Owner's / user's responsibilities

1. The manufacturer shall provide to the initial purchaser and make the following information readily available to the owners/users and their agents, all necessary information regarding Safety Information, Operation, Installation and Safety Precautions, Recommended Initial and Periodic Inspections Procedures, Planned Maintenance Schedule, Product Specifications, Troubleshooting Guide, Service Parts Listing, Warranty Information, and Manufacturers Contact Information.
2. The owner/user should recognize the inherent dangers of the interface between the loading dock and the transport vehicle. The owner/ user should, therefore, train and instruct all operators in the safe operation and use of the restraining device in accordance with manufacturer's recommendations and industry standards. Effective operator training should also focus on the owner's/ user's company policies, operating conditions and the manufacturer's specific instructions provided with the restraining device. Maintaining, updating and retraining all operators on safe working habits and operation of the equipment, regardless of previous experience, should be done on a regular basis and should include an understanding and familiarity with all functions of the equipment. Owner's/ user's shall actively maintain, update and retrain all operators on safe working habits and operations of the equipment.
3. When selecting a restraining device, it is important to consider not only present requirements but also future plans and any possible adverse conditions, environmental factors or usage. The owners/ users shall provide application information to the manufacturer to receive recommendations on appropriate equipment specifications.
4. The owner/user must see all nameplates, placards, decals, instructions and posted warnings are in place and legible and shall not be obscured from the view of the operator or maintenance personnel for whom such warnings are intended for. Contact manufacturer for any replacements.
5. Modifications or alterations of restraining devices shall be made only with prior written approval from the original manufacturer. These changes shall be in conformance with all applicable provisions of the MH30.3 standard and shall also satisfy all safety recommendations of the original equipment manufacturer of the particular application.
6. An operator training program should consist of, but not necessarily be limited to, the following:
 - a. Select the operator carefully. Consider the physical qualifications, job attitude and aptitude.
 - b. Assure that the operator reads and fully understands the complete manufacturer's owners/ users manual.
 - c. Emphasize the impact of proper operation upon the operator, other personnel, material being handled, and equipment. Cite all rules and why they are formulated.
 - d. Describe the basic fundamentals of the restraining device and components design as related to safety, e.g., mechanical limitation, stability, functionality, etc.
 - e. Introduce the equipment. Show the control locations and demonstrate functions. Explain how they work when used properly and maintained as well problems when they are used improperly.
 - f. Assure that the operator understands nameplate data, placards and all precautionary information appearing on the restraining device.
 - g. Supervise operator practice of equipment.
 - h. Develop and administer written and practical performance tests. Evaluate progress during and at completion of the course.
 - i. Administer periodic refresher courses. These may be condensed versions of the primary course and include on-the-job operator evaluation.
7. It is recommended that the transport vehicle is positioned as close as practical to the dock leveling device and in contact with both bumpers. When an industrial vehicle is driven on or off a transport vehicle during the loading and unloading operation, the transport vehicle parking brakes shall be applied and wheel chocks or restraining device that provides equal or better protection of wheel chocks shall be engaged. Also, whenever possible, air-ride suspension systems should have the air exhausted prior to performing said loading and unloading operations.
8. When goods are transferred between the loading dock and a trailer resting on its support legs/ landing gear instead of a tractor fifth wheel or converter dolly, it is recommended that an adequate stabilizing device or devices shall be utilized at the front of the trailer.

9. In order to be entitled to the benefits of the standard product warranty, the dock safety equipment must have been properly installed, maintained and operated in accordance with all manufacturer's recommendations and/ or specified design parameters and not otherwise have been subject to abuse, misuse, misapplication, acts of nature, overloading, unauthorized repair or modification, application in a corrosive environment or lack of maintenance. Periodic lubrication, adjustment and inspection in accordance with all manufacturers' recommendations are the sole responsibility of the owner/ user.
10. Manufacturer's recommended maintenance and inspection of all restraining devices shall be performed in conformance with the following practices: A planned Maintenance schedule program must be followed, only trained and authorized personnel shall be permitted to maintain, repair, adjust and inspect restraining devices, and only the use of original equipment manufacturer parts, manuals, maintenance instructions, labels, decals and placards of their equivalent. Written documentation of maintenance, replacement parts or damage should be kept. In the event of damage, notification to the manufacturer is required.
11. Restraining devices that are structurally damaged shall be removed from service, inspected by a manufacturer's authorized representative, and repaired or replaced as needed or recommended by the manufacturer before being placed back in service.

5 Installation instructions

5.1 Typical arrangements

When properly installed and operated, the Hörmann Truck Lock™ Standard Profile offers the user substantially improved dock safety and efficiency. Its design is the result of many years of experience with loading dock operation. It features an easy to read inside light system for the dock attendant, “STOP & GO” outside light system for the truck driver, and a restraining device to discourage premature or unexpected truck departure.

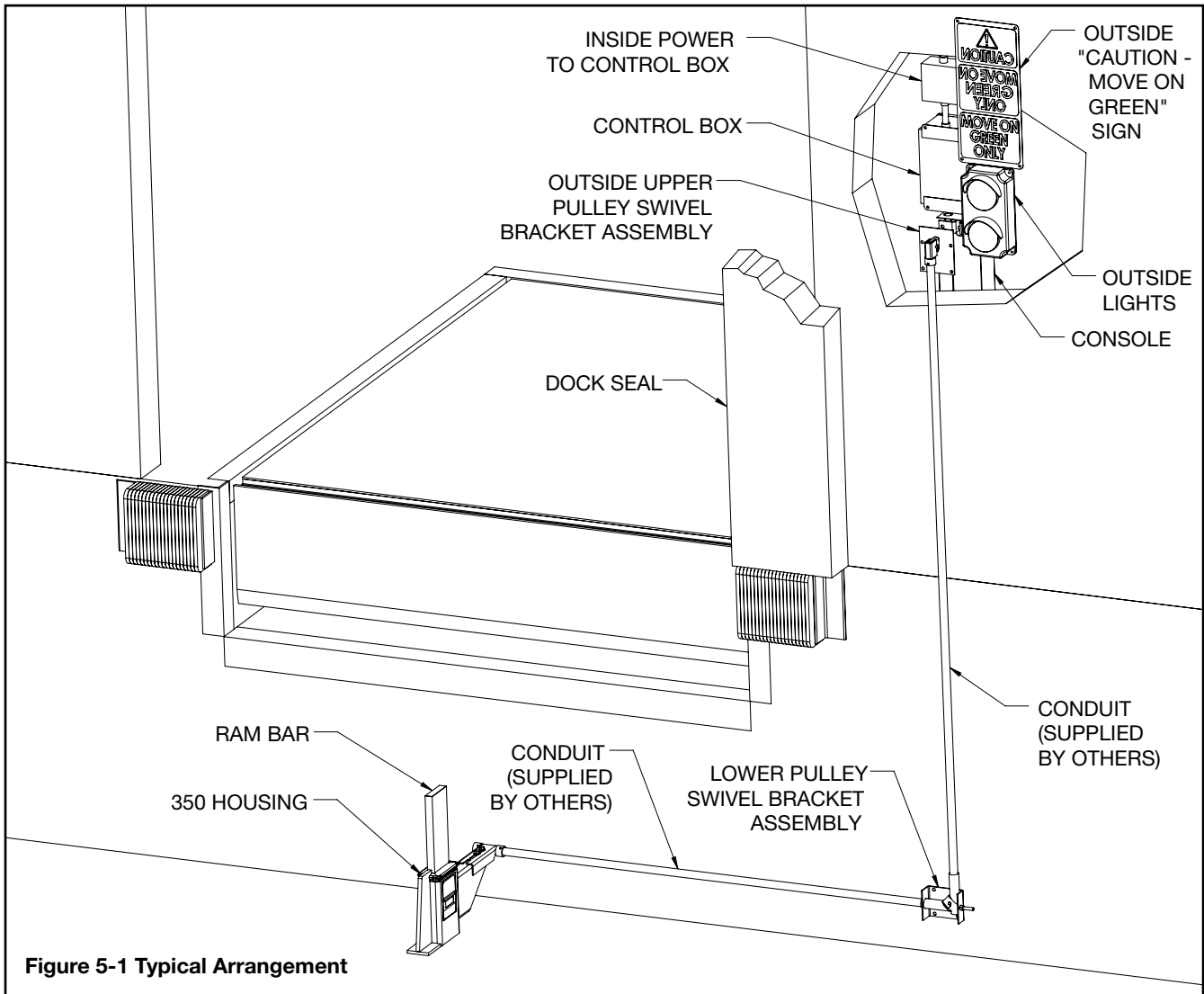


Figure 5-1 Typical Arrangement

Figure above shows typical arrangements and functions of major components for the Hörmann Truck Lock™ Standard Profile.

5.2 Cast-in installation

⚠ DANGER

Post safety warnings and barricade work area, at dock level and at ground level, to prevent unauthorized use of the dock position.

ATTENTION

If sensor kit is purchased, install sensor switch housing prior to pouring concrete. See step 1 in Rear Impact Guard (RIG) Sensor Installation section.

ATTENTION

To ensure successful installation, center of 10" diameter hole MUST BE 12" away from DOCK BUMPER FACE. For decline docks, if 5% decline is present, housing must be moved an additional 1" away from DOCK BUMPER FACE and 1" for every percent thereafter.

Step 1 (Concrete):

Determine exact location of restraint ram housing per Figure 5-2-1. Dimensions are from face of dock bumpers. If bumpers are not yet installed, add thickness of bumpers when measuring from the dock face.

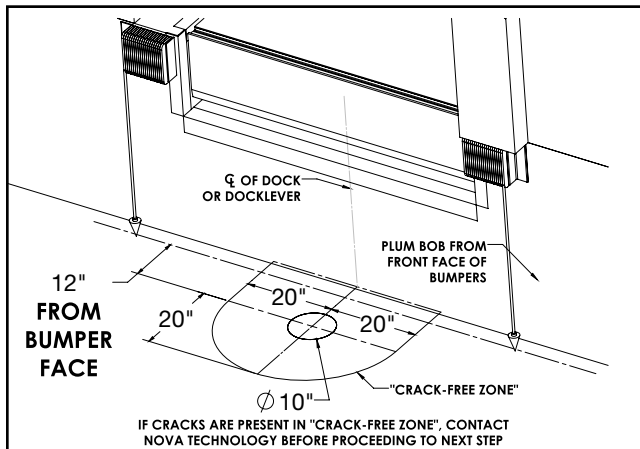


Figure 5-2-1 Ram housing location

Step 2 (Concrete):

Core drill (auger, posthole digger, etc.) a 10 inch diameter hole minimum of 30 inches deep. Excavate hole back to dock wall. The final shape of completed excavation depends on driveway surface. See Figure 5-2-2.

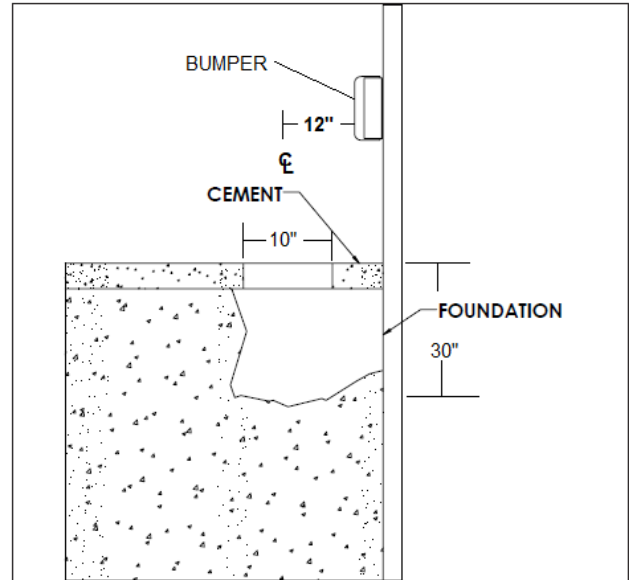


Figure 5-2-2 Completed excavation

Step 2 (Concrete):

For non-concrete driveway surface, an area as shown in Figure 5-2-3 must be cut out. This yields a much more substantial base since asphalt is subject to some movement climatically. See Figure 5-2-3 for placement of rebar when installing in non-concrete drive. Rebar must be bolted to concrete foundation using supplied fasteners. If foundation is not concrete, call Hörmann Technology. The housing may be welded to the middle two rebars to help hold and stabilize housing during concrete pour.

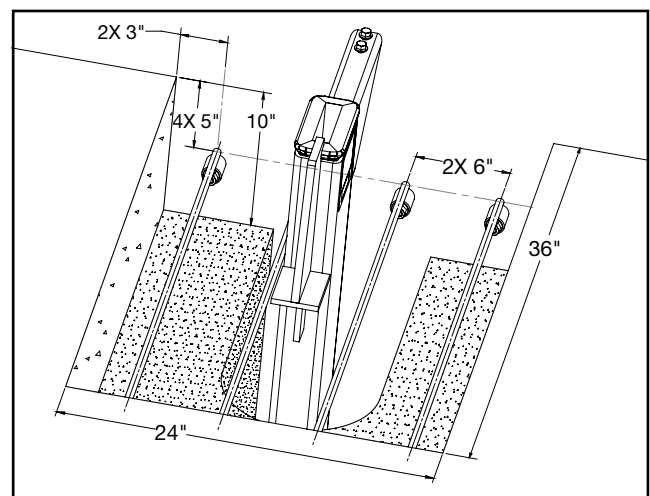


Figure 5-2-3 Rebar placement

ATTENTION

Ram housing must be “plumb” left to right. The bottom of the front support must be flush with top of drive surface. It is very important to verify the distance from bumper face to back edge of ram is 10”. See Figure 5-2-4.

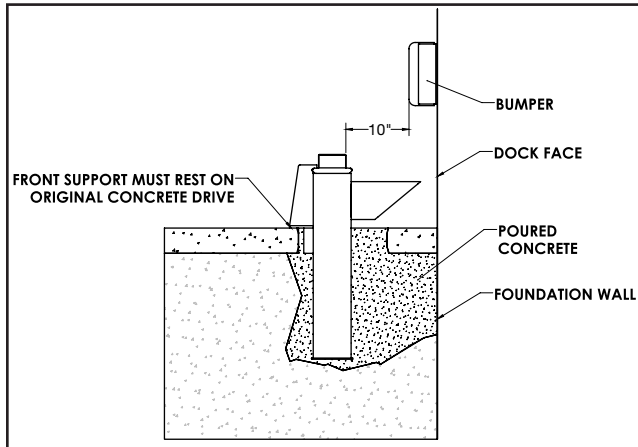


Figure 5-2-4 Ram housing from bumper

Step 3:

Support housing in augured hole and secure with concrete. See Figure 5-2-4.

ATTENTION

Agitate concrete after pouring to prevent air pockets underneath housing.

5.3 Flange mount installation

Step 1 (Concrete):

Determine exact location of restraint ram housing per Figure 5-31-1. Dimensions are from face of dock bumpers. If bumpers are not yet installed, add thickness of bumpers when measuring from the dock face.

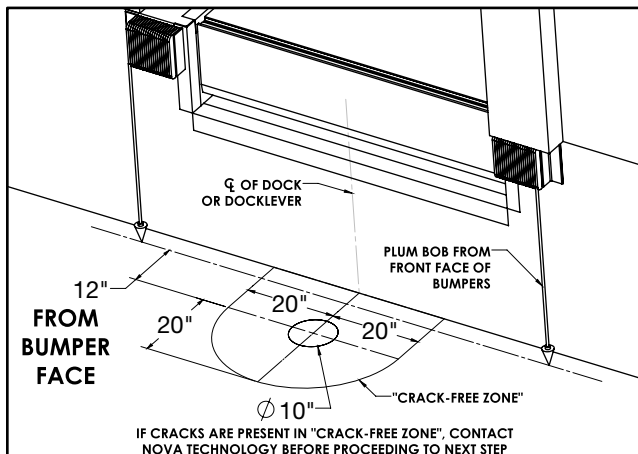


Figure 5-3-1 Ram housing location

Step 2:

Core drill hole (auger, posthole digger, etc.) minimum of 24 inches deep. A 10” diameter hole must be used for flange mount to ensure correct edge spacing.

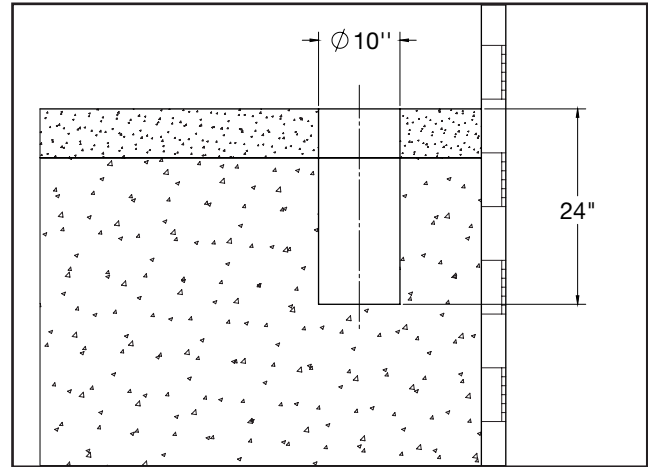


Figure 5-3-2 Flange housing hole depth

Step 3:

Locate Flange housing sheath so Ram bar is 10” back from bumper face. See Figure E. Make sure housing sheath bottom is 24” from top of concrete surface. Backfill with housing sheath and cover in place. See Figure 5-3-2.

ATTENTION

Use (7) 5/8 x 5 inch orange tip wedge bolt (Supplied by Hörmann). Wedge bolt is a heavy duty self-tapping anchor. Meets AISI 1020/1040 carbon steel. Blue tip wedge bolts are not allowed. Refer to Power Fasteners, Inc. Wedge Bolt #7221. Hörmann P/N 40-0-112.

Step 4:

Place housing in sheath and insert orange tip wedge bolts. To insert wedge bolt, drill a 5/8 inch hole through concrete in first location. Clean out hole with compressed air. Drive wedge bolt into prepared holes until clamping the mounting plate to concrete. Do not exceed 75 ft-lbs of torque. DO NOT insert a wedge bolt in any holes in which reinforcing rod is encountered. If rebar is encountered, use a 5/8 inch diameter x 5 inch long Powerbolt. One Powerbolt is included with each restraint. If more than 1 bolt hits rebar consult factory.

5.4 Console installation

ATTENTION

Verify there are no obstructions on outside of building which would interfere with cable run between control console and ram housing. Position control console so that activation cable clears dock bumpers. Also, verify there is adequate clearance for future installation of dock seals or shelters. See Figure 5-4-1.

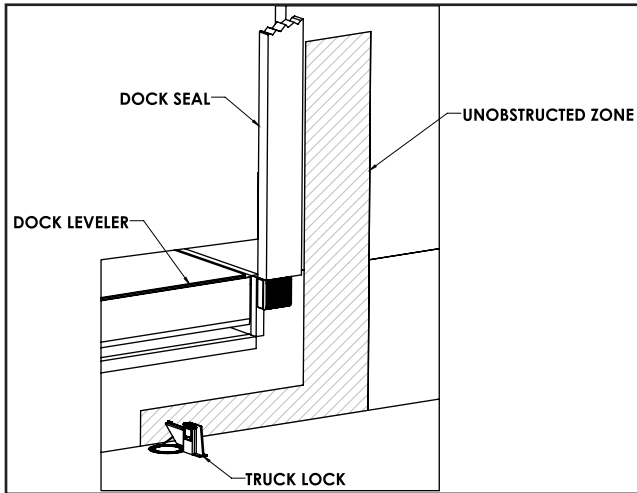


Figure 5-4-1 Clearance for seals and shelters

Step 1:

Remove cover from control console by removing four 3/8" x 1/2" bolts. If metal building support is required as per survey sheet, follow those instructions for correct installation.

Step 2:

Temporarily place control console (with cover removed) against inside wall in desired location. Verify the console is parallel with the wall. Mark the four mounting holes for the console (two on wall and two on floor) as well as the 1" diameter cable exit hole. See Figure 5-4-2.

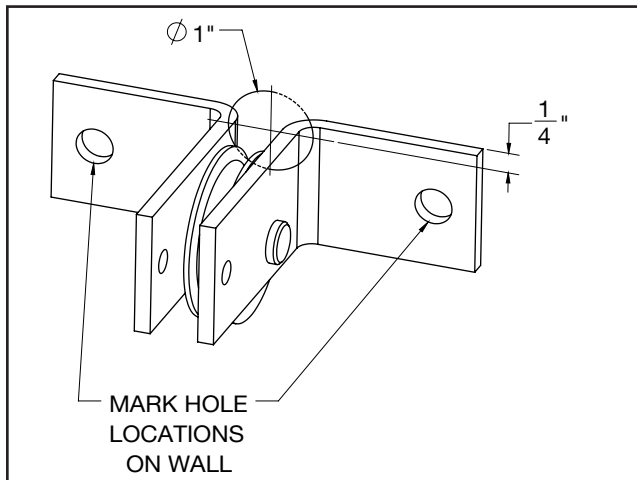


Figure 5-4-2 Pulley bracket hole locations

ATTENTION

Proper alignment of the Inside and Outside pulleys is required to prevent damage to the cable from abrasion with the outside wall. See Figure 5-4-3.

ATTENTION

Use truss head expansion bolts, toggle bolts or through bolts as appropriate. Bolts and fasteners supplied by installer.

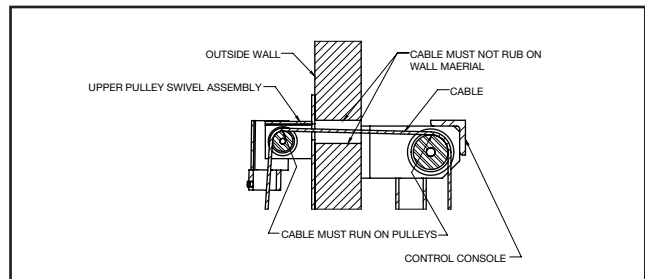


Figure 5-4-3 Inside & Outside pulley tracking

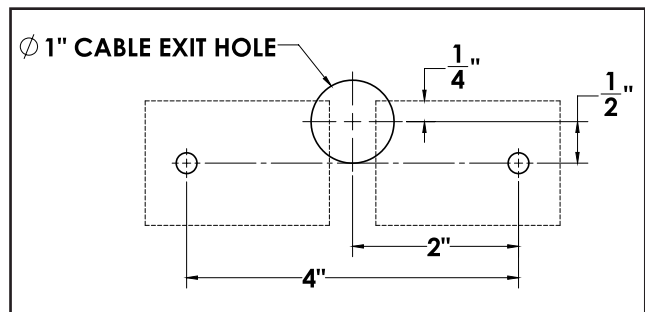


Figure 5-4-4 Cable exit hole location

Step 3:

First, drill the 1" diameter cable exit hole through the wall from the inside at the location marked in Figure I. Replace bracket and check alignment of the 1" hole per Figure 5-4-4, then drill mounting holes.

ATTENTION

To prevent outside concrete wall from chipping, drill a 1/2" pilot hole first. If drilling into a block wall, loose insulation, etc., sleeve the hole with a section of 3/4" conduit.

Step 4:

Replace console pole and confirm alignment. Then drill mounting holes and mount control console on inside of building wall.

INSTALLATION INSTRUCTIONS

Step 5:

Align the top of the pulley with the center of the 1" hole in the wall and mount the upper swivel bracket assembly to the exterior wall. See Figure 5-4-3 & 5-4-5.

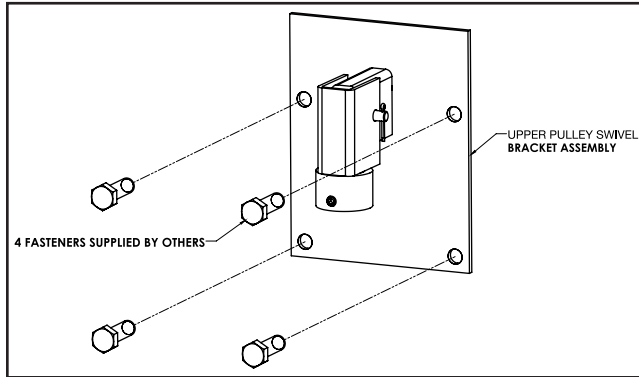


Figure 5-4-5 Fasten upper pulley swivel bracket

Step 6 (Flange mount only):

13x4-1/2" bolt through hole furthest from dock side and the tail section. Place tail section in place up to dock wall. Mark location and pivot up around the 1/2" bolt. Insert 3/8-16x1" flange head bolts and flange nuts in slot to stop travel of the tail section away from the dock. Pivot down and insert other 1/2-13x4-1/2" bolt through hole closer to the dock. Tighten both nylock nuts. See Figure 5-4-6.

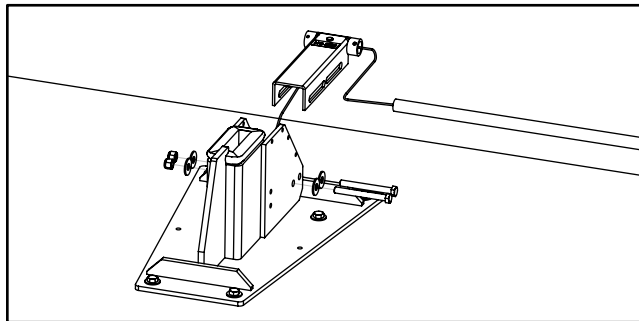
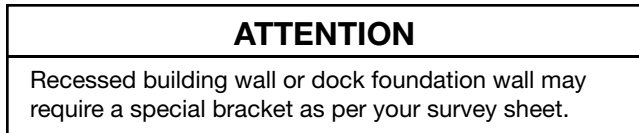


Figure 5-4-6 Securing tail section to housing

Step 6 (Cast-in only):

Bolt E.O.D. extension bracket to dock side of ram housing with supplied bolts. E.O.D. extension bracket should touch dock face when positioned properly.

ATTENTION

Make sure cable is tracking in pulleys, cable should run over pulley on housing.

Step 7:

Mount lower pulley assembly to foundation directly beneath upper pulley assembly. In northern climates, where driveway heaving (freezing) is possible, the lower pulley swivel bracket may be installed 2-3" above the drive. See Figure 5-4-7.

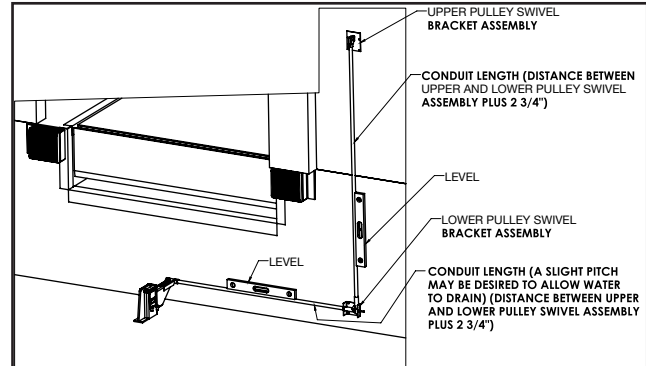


Figure 5-4-7 Lower pulley location

ATTENTION

Leave adjustment nut on lower pulley swivel assembly in the middle during restraint assembly. See Figure 5-4-8.

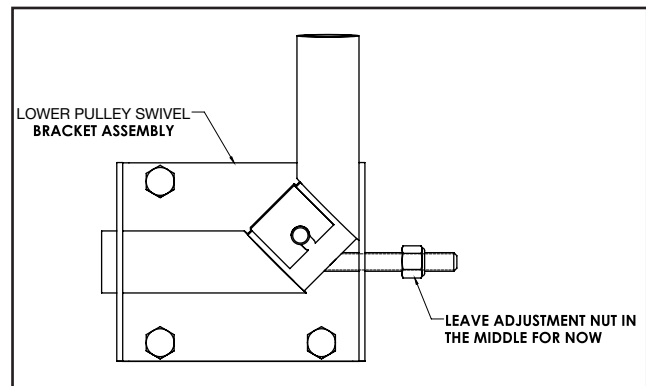


Figure 5-4-8 Adjustment on lower pulley

Step 8:
Remove ram from housing and carefully pour in 2 quarts (8 cups) of Hörmann Juice-E. See Figure 5-4-9.

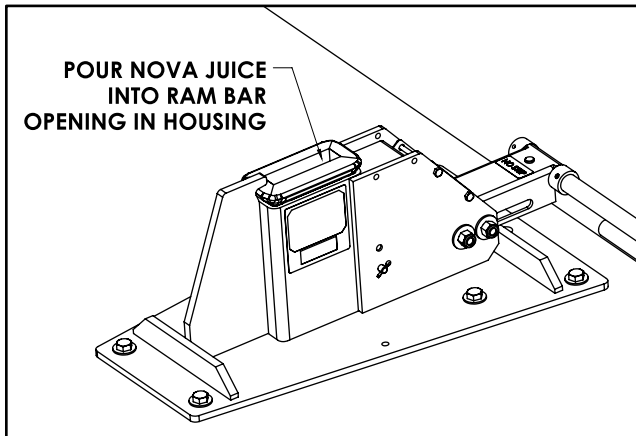


Figure 5-4-9 Location where to pour Hörmann juice

Step 9:
Measure distance between conduit collar on upper pulley bracket and conduit collar on lower pulley swivel bracket and add 2-3/4". Cut a piece of 3/4" thin wall conduit to these lengths. See Figure 5-4-10.

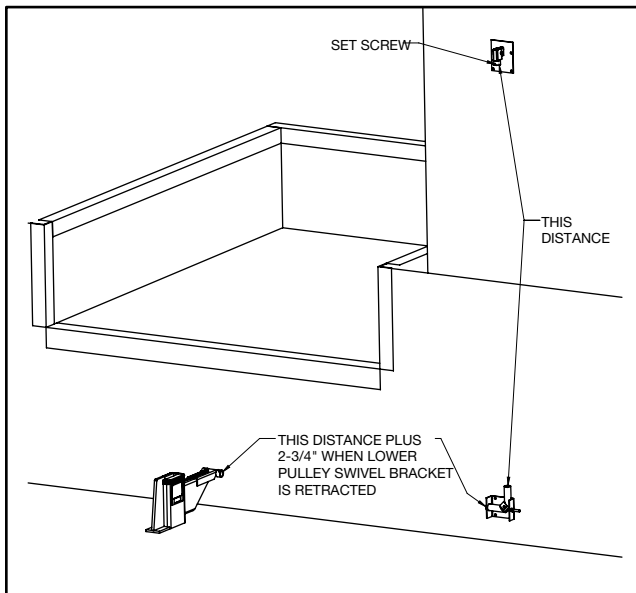


Figure 5-4-10 Distance between pulleys

Step 10:
Measure distance from conduit collar on lower pulley to conduit collar on extension bracket and add 2-3/4". Cut 3/4" thin wall conduit to length as above. Slide end into tube on lower pulley. Thread cable through lower and upper pulley assemblies. Allow free cable end to stick out of conduit at top pulley. Do not attempt to feed through building wall at this time. Slide end of conduit into conduit collar on ram housing and secure with set screw. See Figure 5-4-10.

Step 11:
Route ram cable around top of upper outside pulley, into building through hole in wall, and over the pulley. See Figure 5-4-11.

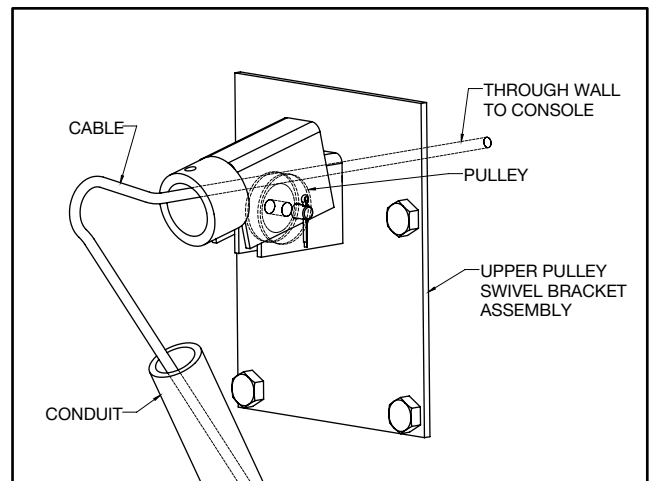


Figure 5-4-11 Cable routed through pulley

Proceed to one of the following Console Installation Instructions:

Manual Console Installation: Page 14

ATTENTION

A step using the manual Truck Lock™ is noted with the letter "M" behind the step number.

Example: 5M.

A step using the pneumatic Truck Lock™ is noted with the letter "P" behind the step number.

Example: 4P.

5.4.1 Manual console installation

Step 12M:

Raise handle to full up position. Make sure upper limit switch lever is contacting Activation Handle Tube. Pull cable tight and attach to spring using cable clamp. Run excess cable down center of spring, exiting on right side of handle. Cut off cable flush with bottom of spring. See Figure 5-4-12.

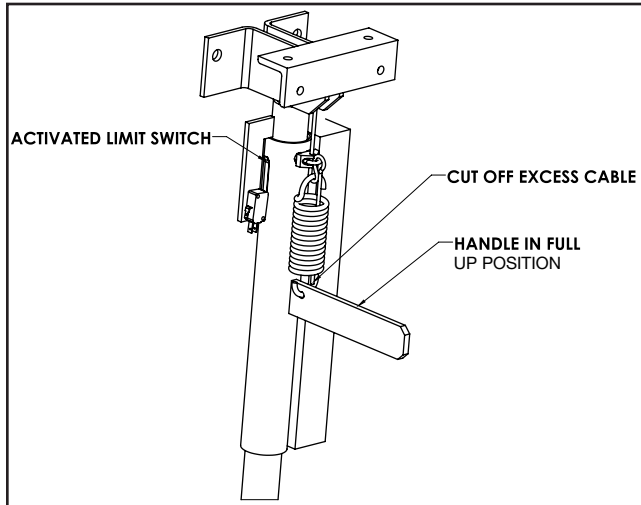


Figure 5-4-12 Setting up manual console

Step 13M:

Determine location of outside light on exterior of building. Light must be on truck driver side of dock door (Right side when facing dock from outside). Verify location of light will not interfere with the future installation of dock shelters or seals. Drill hole through wall at approximate center of light. Feed wire from light through hole in wall and affix light to wall.

Control box

Step 14M:

Mount control box to wall 2" to 3" above console using fasteners supplied by installers. See Figure 5-4-13.

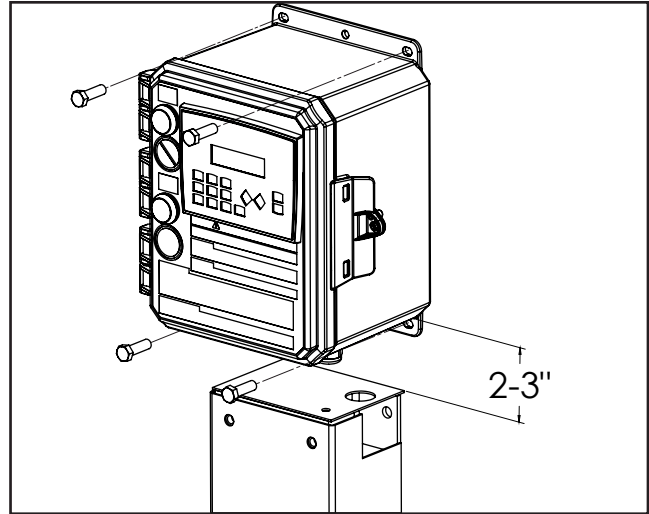


Figure 5-4-13 Mounting control box

Step 15M:

Route wires from outside light to inside control box through the grommets in the bottom of the box. See Figure 5-4-14. Cut to length and connect to terminal strip. See Figure 5-4-15 & 5-4-16.

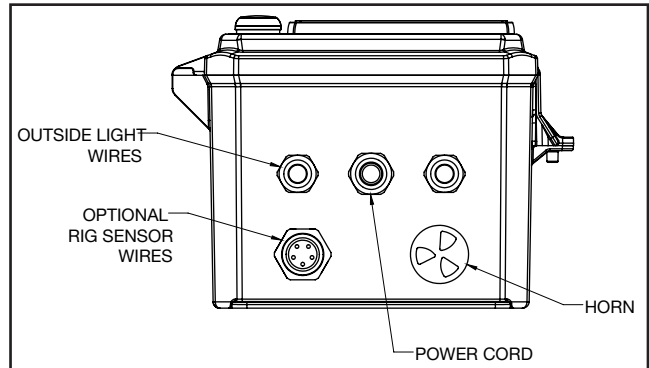


Figure 5-4-14 Route wires through grommets

Outside light

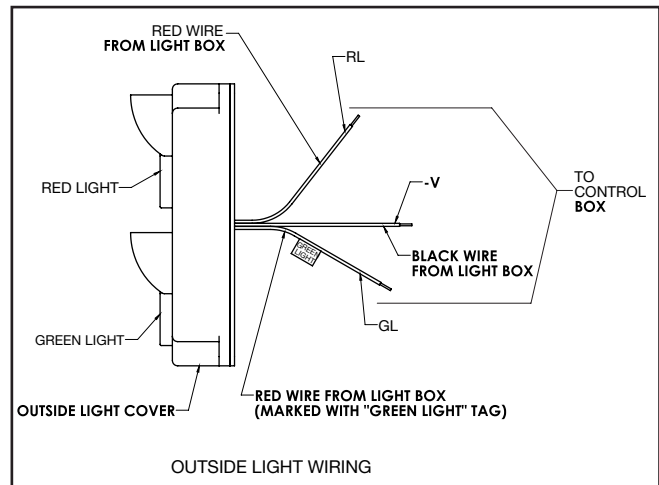


Figure 5-4-15 Outside light wiring

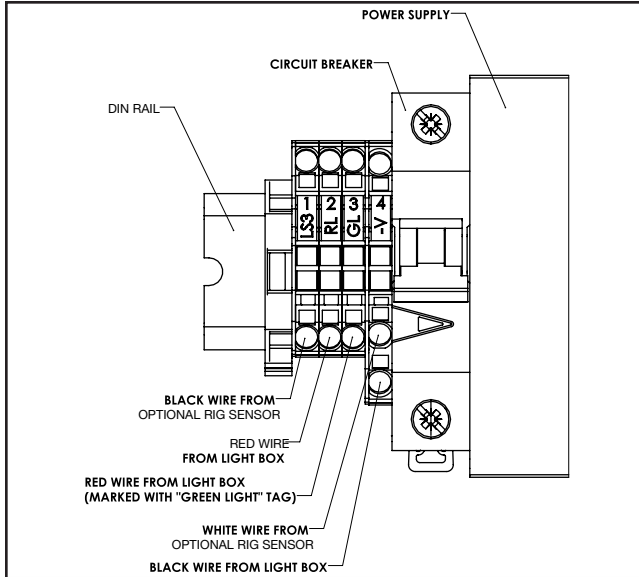


Figure 5-4-16 Wiring CB-12 control box

Step 16M:
Insert plug into wall receptacle or hard wire per local codes.

⚠ CAUTION

All electrical work — including the installation of the disconnect panel, control panel, and final connections to the pit junction box — must be performed by a certified electrician and conform to all local and applicable national codes.

ATTENTION

Fifteen (15) Hörmann Truck Lock™ control boxes can be connected to one (1) 15 amp branch circuit breaker per 1999 National Electric Code, assuming no other loads on circuit.

Step 17M:
Connect the (2) three-wire electrical cables from the control box to the limit switches, one mounted on the cover and the other mounted on the top of the slide pole. See Figure 5-4-17.

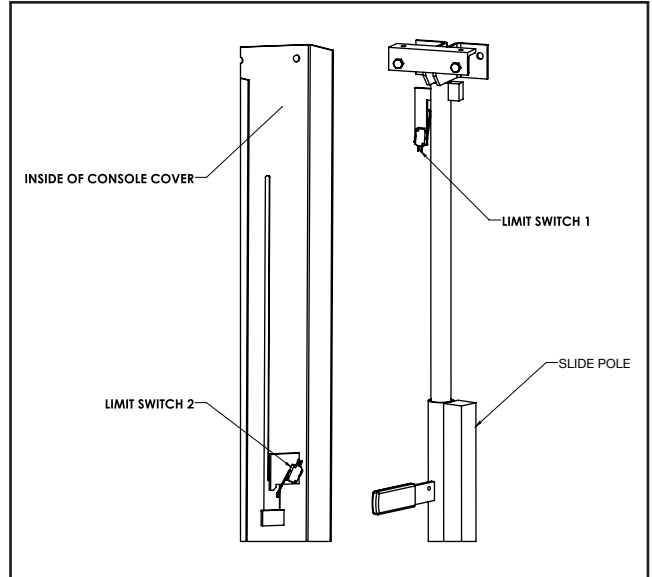


Figure 5-4-17 Wiring CB-12 control box

Step 18M:
Replace cover on control console and secure with (4) 3/8"x1/2" bolts and star lock washers. Slide plastic grip on to activation handle. See Figure 5-4-18.

ATTENTION

Secure wires from the control box out of the way from getting tangled in activation handle, or counterweight assembly once console cover is replaced.

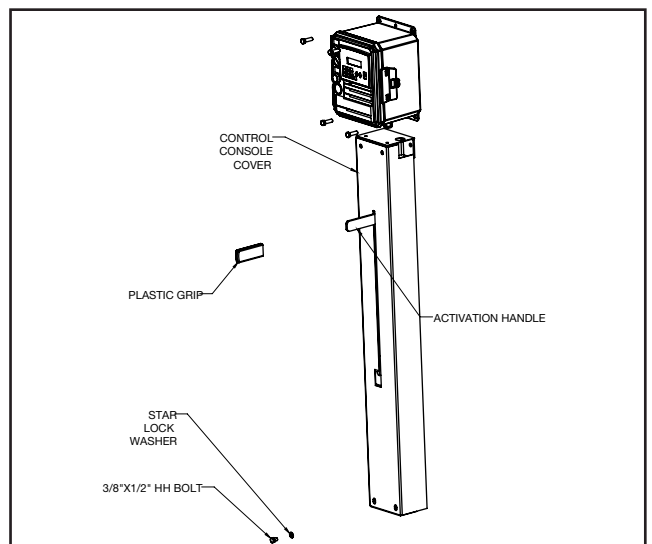


Figure 5-4-18 Replace control console cover

⚠ CAUTION

Concrete must be cured prior to performing Step 19M. If concrete has not cured, the cable tension of Step 19M will cause the Truck Lock™ to move out of position.

Step 19M:

Move activation handle down into “RESTRAIN” position which will raise restraint ram outside. Adjust ram height by turning nut on lower pulley assembly. See Figure 5-4-19.

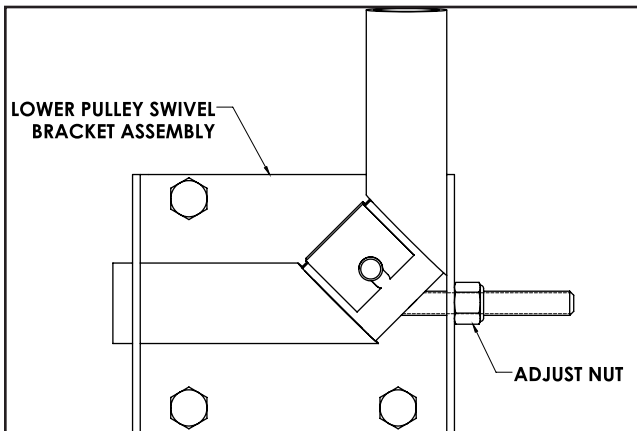


Figure 5-4-19 Adjustment on lower pulley swivel

Step 20M:

Tighten cable until entire guide height hole is showing. See Figure 5-4-20.

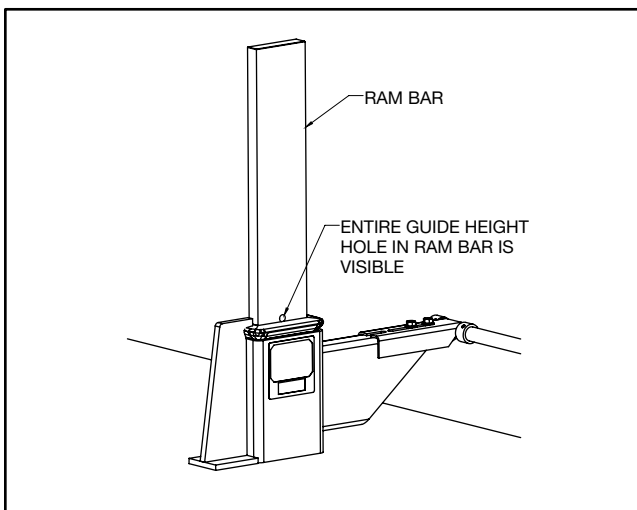


Figure 5-4-20 Guide height hole shown

ATTENTION

Visually check to ensure Ram bar is at correct height after adjustments are made.

5.4.2 Pneumatic console installation
(See page 14 for manual console installation)

Step 12P:

Manually extend air cylinder rod, pull cable tight, and attach end to clevis pin at top on control console frame using cable clamp supplied. Cut off excess cable. See Figure 5-4-21.

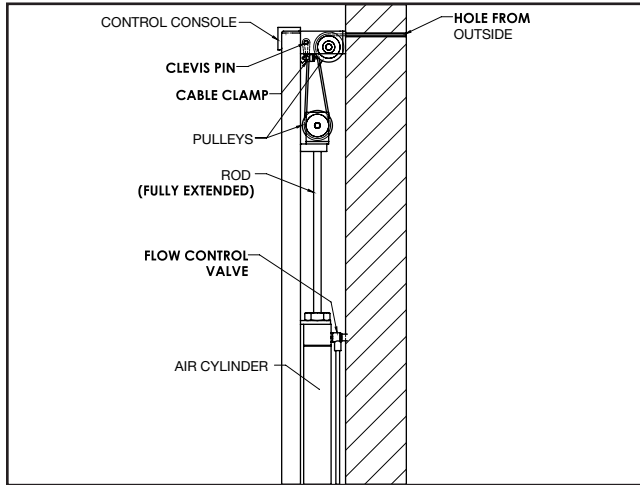


Figure 5-4-21 Setting up pneumatic console

Control box

Step 13P:

Mount control box to wall 2" to 3" above console using fasteners supplied by installers. See Figure 5-4-13.

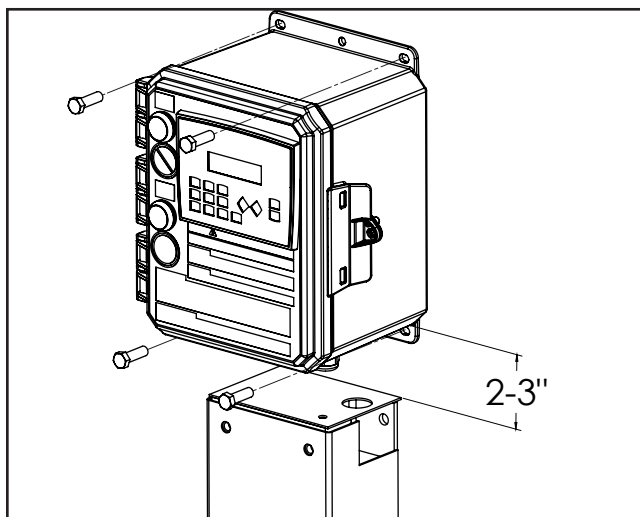


Figure 5-4-22 Mounting control box

Step 14P:

Connect the (2) three-wire electrical cables from the control box to the limit switches located on the console frame. See Figure 5-4-23.

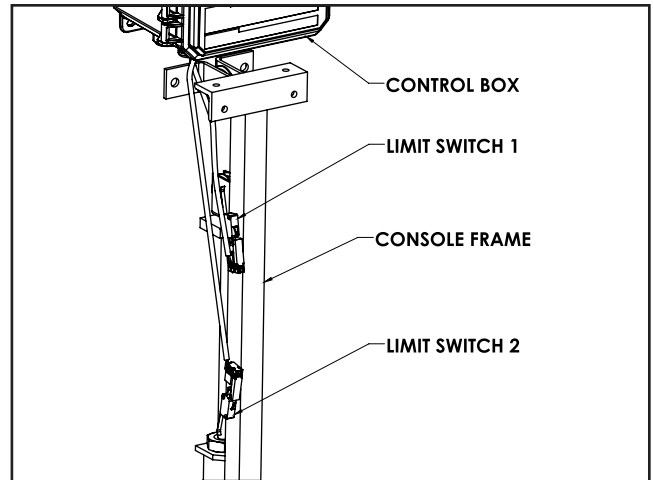


Figure 5-4-23 Connecting limit switches

Outside light

Step 15P:

Route wires from outside light and air solenoid to inside of control box through the grommets in the bottom of the box. See Figure 5-4-24. Cut to length and connect to terminal strip. See Figure 5-4-25.

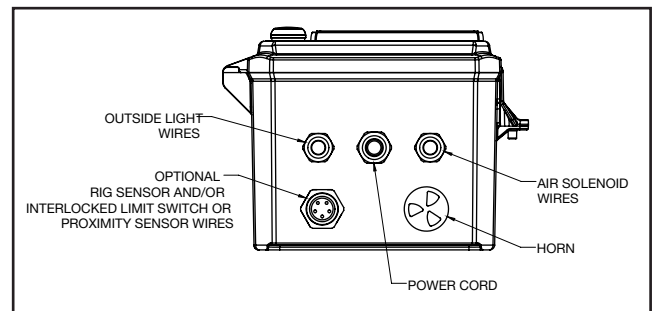


Figure 5-4-24 Route wires through grommets

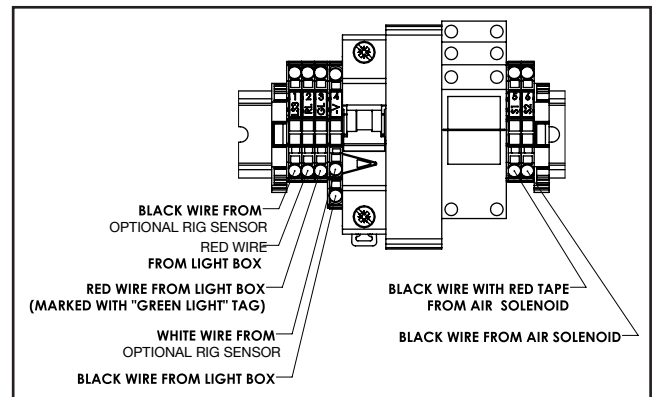


Figure 5-4-25 Wiring CB-10 control box

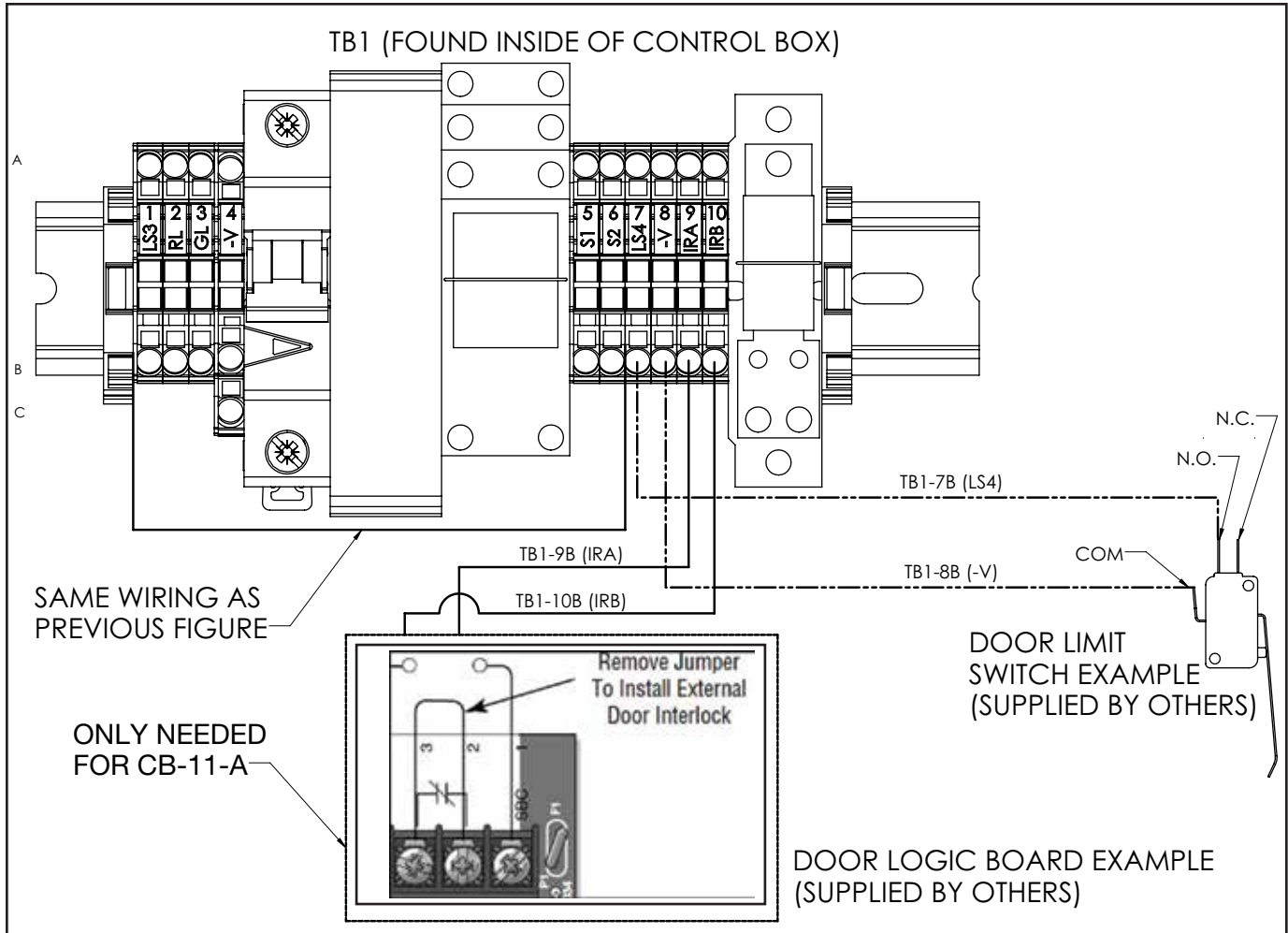


Figure 5-4-26 Control box TB1 interlocked door wiring schematic (CB-11-A & CB-11-B)

Disclosure:

- Door logic board example may vary. Reference door operator owner's manual before installation.
- For example above, remove jumper from 2 and 3, and run wires from IRA to 2 and IRB to 3 on DOOR LOGIC BOARD EXAMPLE.
- Door limit switch example may vary. Limit switch should be installed in door operator electrical box. Do not splice or cut existing limit switch wires. Reference door operator owner's manual before installing.

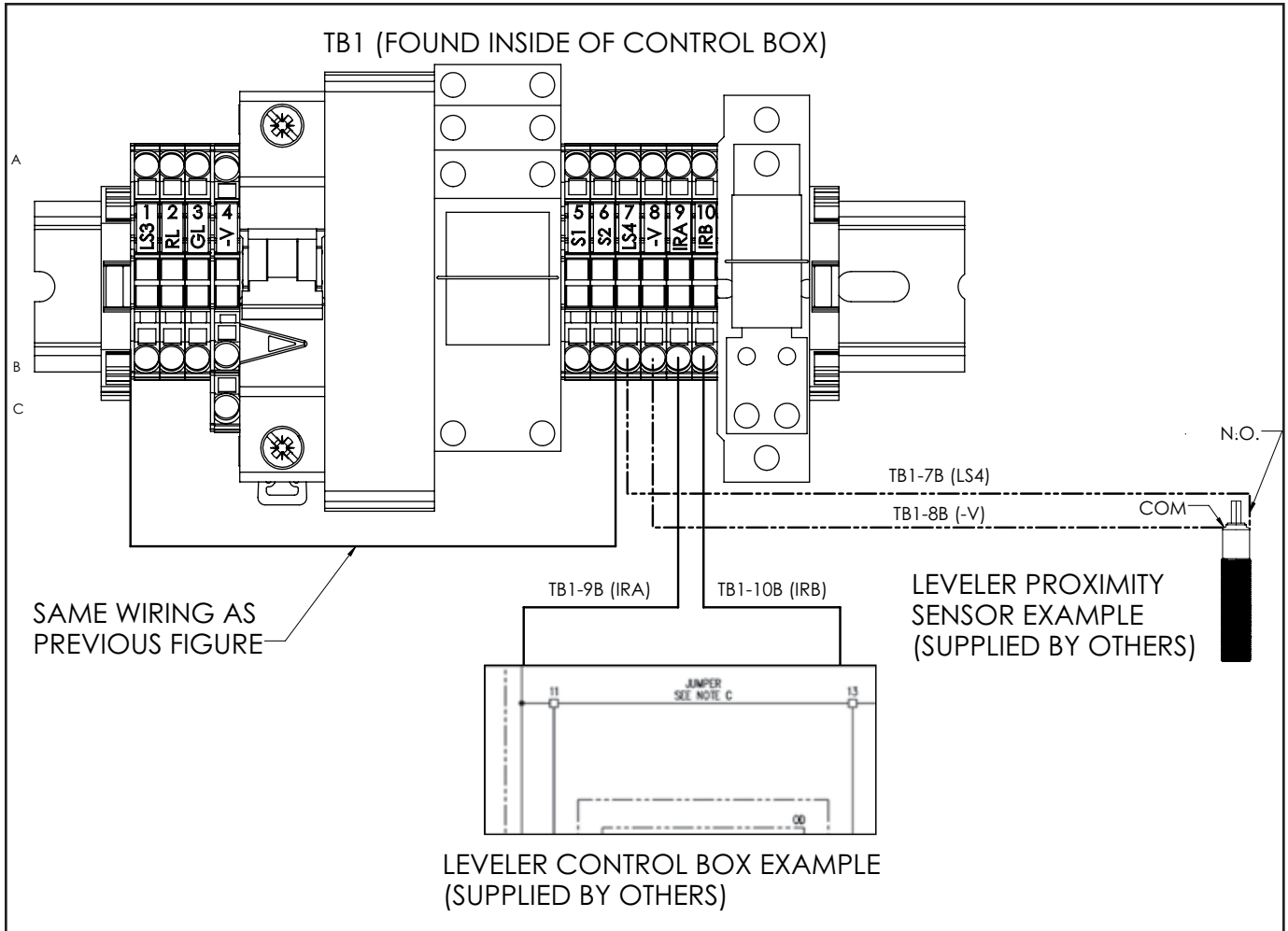


Figure 5-4-27 Control box TB1 interlocked leveler wiring schematic (CB-11-C)

Disclosure:

- Leveler example may vary. Reference leveler owner’s manual before installation.
- For example above, remove jumper from 11 and 13, and run wires from IRA to 11 and IRB to 13 on LEVELER CONTROL BOX EXAMPLE.
- Leveler proximity sensor example may vary. Proximity sensor should be installed with the sensor facing the lip of the leveler. Do not splice or cut existing limit switch wires. Reference leveler owner’s manual before installing.

ATTENTION

Purge line prior to hooking up system. Air may be supplied from plant system or by small compressor. Air must be a minimum of 80 PSI and a maximum of 130PSI. Air must be dry and clean. Air usage is approximately .020 cubic feet per operation.

Step 16P:

Connect airline from air supply to solenoid and verify airline is connected from solenoid to air cylinder. See Figure 5-4-28.

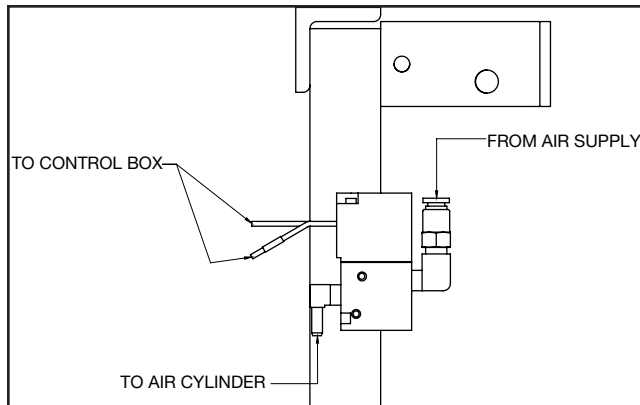


Figure 5-4-28 Connecting airline

Step 17P:

Insert plug into wall receptacle and turn on control box.

Step 18P:

Turn air supply on.

CAUTION

Concrete must be cured prior to performing Step 19P. If concrete has not cured the cable tension of Step 19P will cause the Hörmann Truck Lock™ to move out of position.

WARNING

Keep hands clear of air cylinder, pulley assembly and cable when retracting.

Step 19P:

To adjust rising speed, turn knob on flow control valve attached to the air cylinder. Turning valve out results in faster speeds, turning valve in results in slower speeds. Lowering speed cannot be changed.

ATTENTION

When properly adjusted, the ram should fully rise in 1 to 2 seconds. There should be less than 1/2" "hop" by the Ram bar at the end of the rise stroke.

Step 20P:

After each adjustment, cycle unit using restrain and release buttons until desired speed is obtained.

CAUTION

Adjusting flow control valve so that the Ram bar raises too fast can cause unnecessary stress on the unit and may present a hazard to personnel or equipment.

5.5 Test operation

This test operation is specifically for the installation instructions to verify the Hörmann Truck Lock™ is working properly. If the Hörmann Truck Lock™ does not work properly, contact Hörmann.

5.5.1 Power-up sequence

- a. Unlatch plastic clip on the right side of the control box holding the cover on.
- b. Open the cover of the control box.
- c. Turn on the circuit breaker by flipping switch upward.

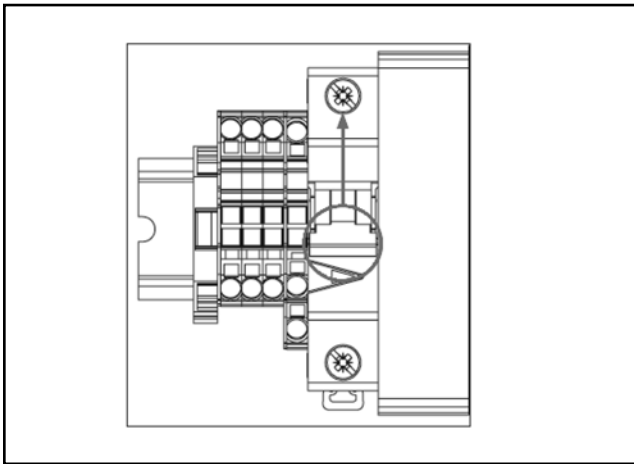


Figure 5-5-1 Circuit breaker

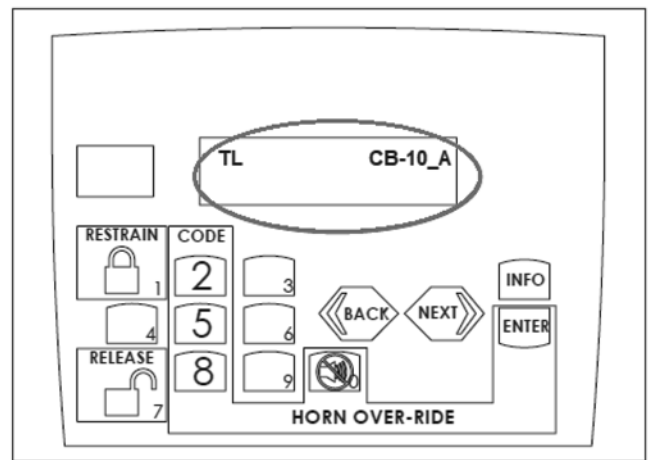


Figure 5-5-2 Verify screen

- d. Close the control box door.
- e. Re-latch the plastic clip to secure the door.
- f. Remove protective film from PLC display.
- g. Verify PLC screen shows “Truck Lock” as shown in figure AN. (If it does not show “Truck Lock” call Hörmann)
- h. Verify the RED light on the control box is flashing.
- i. Verify the outside GREEN light is flashing.



Figure 5-5-3 RELEASED position / no vehicle present

Note: Flange model restraint is shown for representation in Test Operation. Actual restraint may differ.

See below before proceeding to the next step:

Product	Page
Manual Truck Lock™ with no RIG sensor	23 - 24
Manual Truck Lock™ with RIG sensor.....	25 - 26

If unsure which product is installed, use graphics below to verify which test operation to follow.

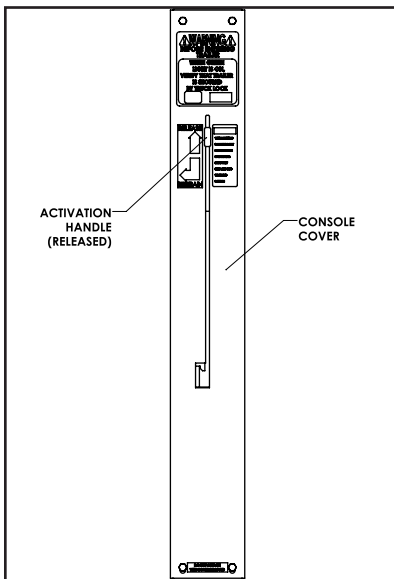


Figure 5-5-4 Manual Truck Lock™

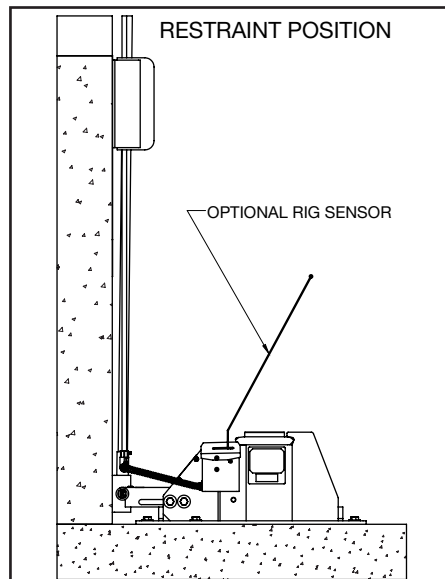


Figure 5-5-5 Optional rig sensor

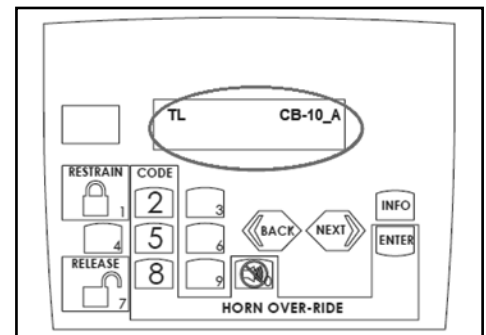


Figure 5-5-6 Pneumatic Truck Lock™

5.6.2 Test RESTRAIN function (no RIG sensor)

- a. Move activation handle to RESTRAIN position.

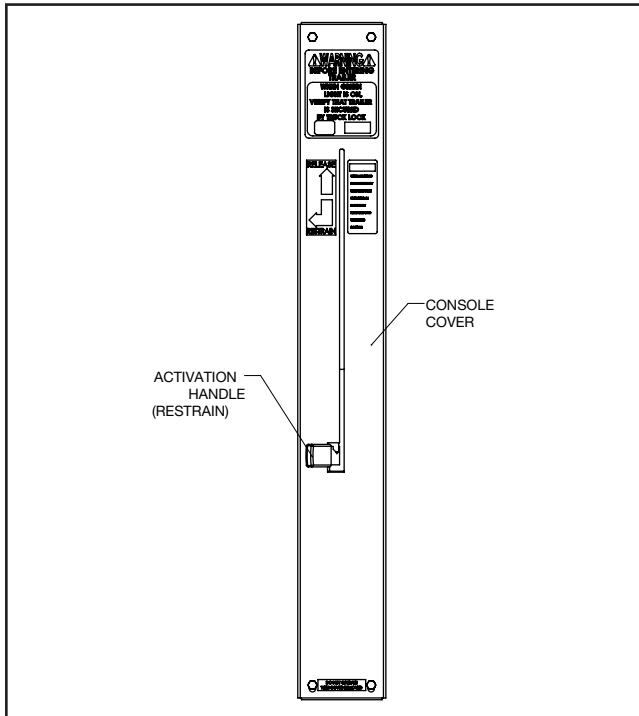


Figure 5-5-7 Activation handle in RESTRAIN position

- b. HORN will sound for 3 seconds once activation handle has moved from RELEASE position.
- c. After activation handle is in RESTRAIN position, verify the vertical barrier has risen.
- d. Verify the GREEN light on the control box is flashing.
- e. Verify the outside RED light is flashing.



Figure 5-5-8 RESTRAIN position

5.5.3 Test RELEASE function (no RIG sensor)

- a. Verify the GREEN light on the control box is flashing.
- b. Move activation handle to the RELEASE position.



Figure 5-5-9 Control box light indication and activation handle in RELEASE position

- c. HORN will sound for 3 seconds once activation handle has moved from RESTRAIN position.
- d. After activation handle is in RELEASE position, verify the vertical barrier has lowered.
- e. Verify the RED light on the control box is flashing.
- f. Verify the outside GREEN light is flashing.



Figure 5-5-10 Restraint RELEASED

5.5.4 Test RESTRAIN function (with RIG sensor)

- a. There should be no object holding back the RIG sensor.

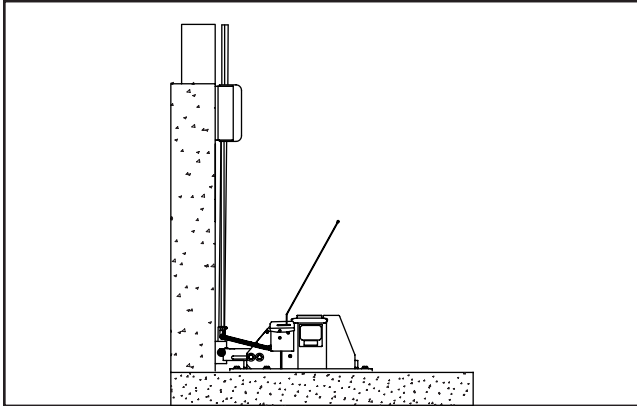


Figure 5-5-11 Rig sensor in forward position

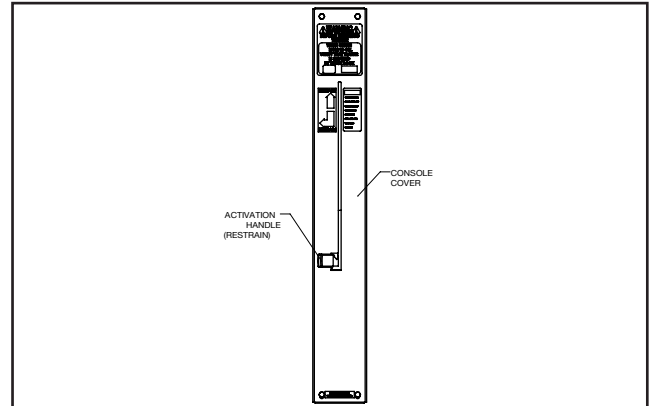


Figure 5-5-12 Activation handle in RESTRAIN position

- b. Move activation handle to the RESTRAIN position.
- c. HORN will sound for 3 seconds once activation handle has moved from RELEASE position.
- d. After activation handle is in RESTRAIN position, verify the vertical barrier has risen.
- e. Verify the RED light on the control box is flashing.
- f. Verify the HORN is sounding at 1 second intervals.



Figure 5-5-13 RESTRAIN position, horn sounding

- g. Verify the outside RED light is flashing.
- h. Temporarily activate RIG sensor until the end of this test.

5.5.5 Test RELEASE function (with RIG sensor)

- a. Verify the GREEN light on the control box is flashing.
- b. Move activation handle to the RELEASE position.

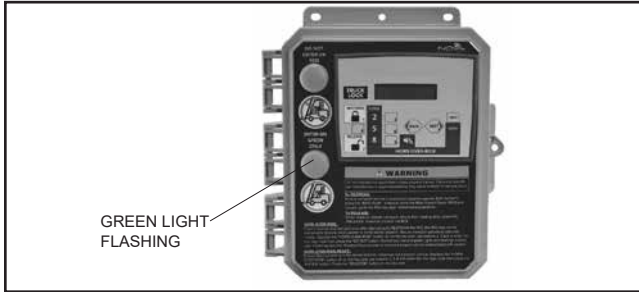


Figure 5-5-14 Control box light indication

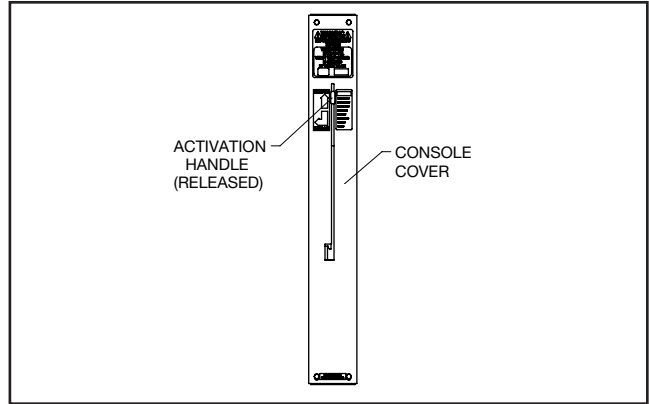


Figure 5-5-15 Activation in RELEASE position

- c. HORN will sound for 3 seconds once activation handle has moved from RESTRAIN position.
- d. After activation handle is in RELEASE position, verify the vertical barrier has lowered.
- e. Verify the RED light on the control box is constant.
- f. Verify the outside GREEN light is flashing.



Figure 5-5-16 Restraint released, RIG sensor activated

- g. Release RIG sensor.
- h. Verify the RED light on the control box is flashing.

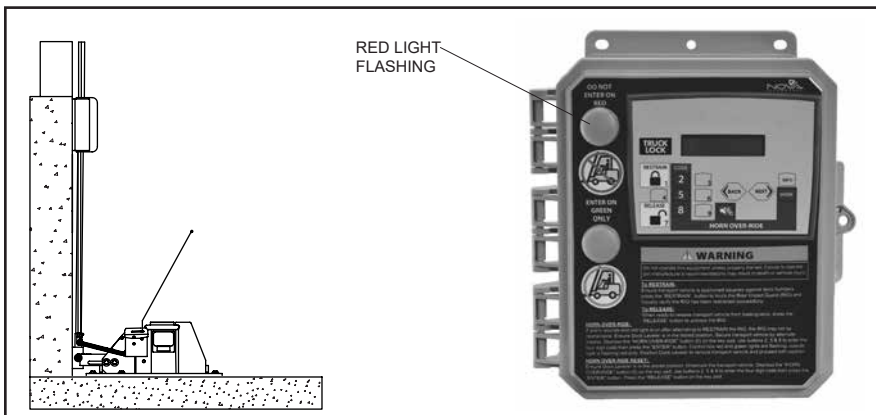


Figure 5-5-17 Released position

6 Operating procedures

6.1 MANUAL (no RIG sensor)

6.1.1 No transport vehicle present (no RIG sensor)

⚠ WARNING

Before loading or unloading a vehicle at your loading dock while using a Hörmann Truck Lock™ vehicle restraint, always visually inspect to be sure that the restraint is captured with the Rear Impact Guard (RIG). If the restraint is still not captured after backing the trailer firmly against the dock bumpers, secure the trailer by other means.

Be sure that the area around the RIG assembly is clear of obstructions.

Always operate the Hörmann Truck Lock™ vehicle restraint from the top of the dock.

Inspect all restraint lights daily to make certain they work properly.

Perform maintenance on restraints in accordance with Maintenance on Page 38 of this manual.

Hörmann Truck Lock™ vehicle restraints should be operated only by authorized personnel who have read and understand the Owner's/User's Manual.

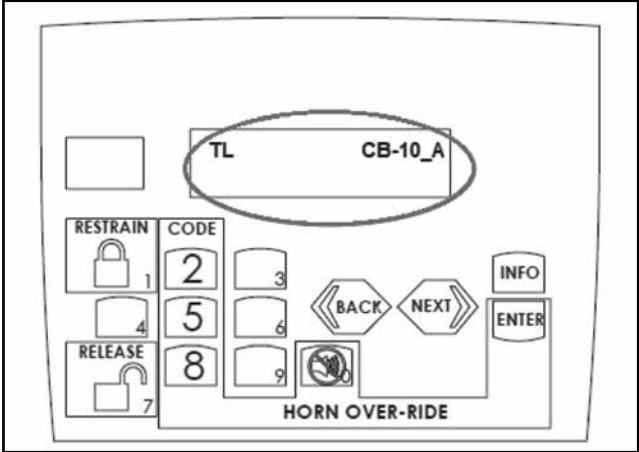


Figure 6-1-1 Verify PLC display

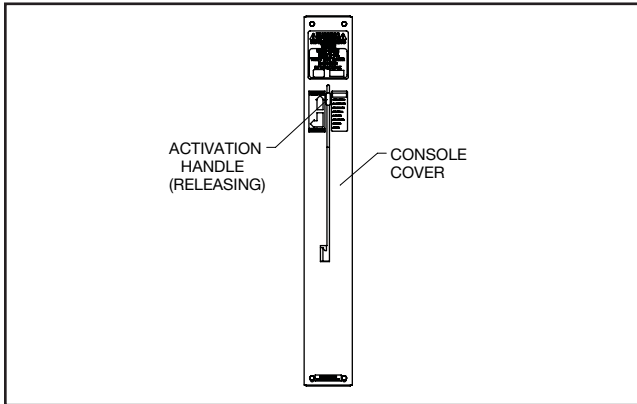
- a. Ram bar is in RELEASED position.
- b. The RED light on the control box is flashing, alerting fork truck driver an unsafe condition exists.
- c. The outside GREEN light is flashing, alerting transport vehicle driver it is safe to back in. Refer to Figure BO.



Figure 6-1-2 Released position / no vehicle present

6.1.2 Restraining (no RIG sensor)

- a. Transport vehicle has backed into loading dock and is parked firmly against dock bumpers.
- b. Move activation handle to RESTRAIN position.



⚠ CAUTION

If trailer can not be captured due to a lift gate or other obstruction that could become damaged, proceed to HORN OVER-RIDE state.

Figure 6-1-3 Activation handle in restraining transition

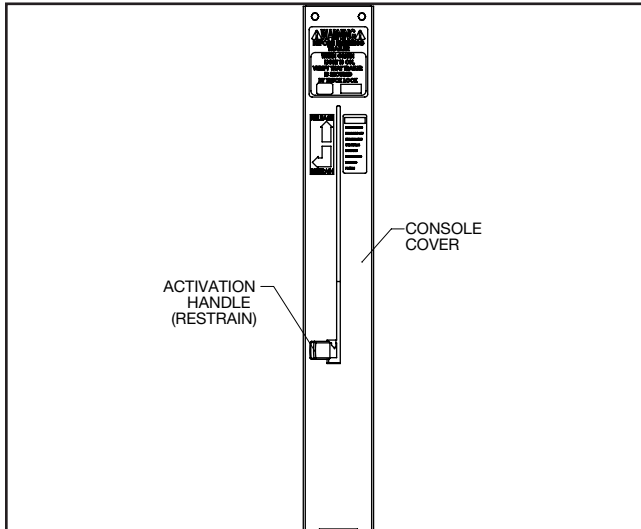
- c. The RED light on the control box is flashing, alerting fork truck driver an unsafe condition exists.
- d. The outside RED light is flashing, alerting transport vehicle driver not to move.
- e. If unable to move activation handle into restrain position proceed to HORN OVER-RIDE.



Figure 6-1-4 Restraining

6.1.3 RESTRAIN Position (No RIG Sensor)

- a. Activation handle is in RESTRAIN position.
- b. RIG is securely captured by the Ram bar.



⚠ WARNING
Visually inspect to ensure that the Hörmann Truck Lock™ vehicle restraint Ram bar captures the RIG of the trailer before operating the dock leveler.

Figure 6-1-5 Activation handle in restrained position

- c. The GREEN light on the control box is flashing, alerting the fork lift operator a safe condition exists.
- d. The outside RED light is flashing, alerting transport vehicle driver not to move.



Figure 6-1-6 Restrained position

6.1.4 Releasing (No RIG Sensor)

- a. Move activation handle to RELEASE position.
- b. Ram bar will transition from LOCKED position to the UNLOCKED position.

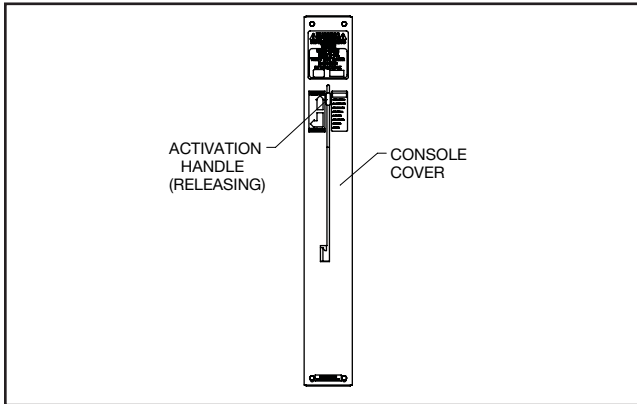


Figure 6-1-7 Activation handle in releasing transition

- c. The RED light on the control box is flashing, alerting fork truck driver an unsafe condition exists.
- d. The outside RED light is flashing, alerting transport vehicle driver not to move.
- e. When the process is complete, the Ram Bar is in the RELEASED position shown in Figure 6-1-2, Page 27.



Figure 6-1-8 Releasing restraint

6.2 FAULT from restraining state (manual)

Ram bar cannot block the RIG. This could be due to a RIG that is located too far toward the rear axle, bent, obstructed or missing. Activation handle is unable to move into RESTRAIN position. Inside light is flashing RED and HORN is pulsing, alerting the forklift operator that the trailer is not captured. Outside light is flashing RED alerting the truck driver not to move. See Figure 6-2-1.

If the trailer is parked firmly against the dock bumpers proceed to HORN OVER-RIDE. If not, return activation handle to RELEASE position to clear the fault, have trailer back up and repeat Restraint LOCKING procedure.



Figure 6-2-1 FAULT state

6.3 HORN OVER-RIDE (manual)

If HORN sounds and RED light is on after attempting to RESTRAIN the RIG, the trailer may not be serviceable. Ensure dock leveler is in the stored position. Secure trailer by alternate means. Depress the “HORN OVER-RIDE” button (0) on the key pad, enter default over-ride code 5528 then press the “ENTER” button. Inside RED and GREEN lights are flashing; outside light is flashing RED only. Position dock leveler to service trailer and proceed with caution.

⚠ DANGER

Before activating “HORN OVER-RIDE”, ensure that dock leveler is in stored position and secure trailer by other means.

6.4 HORN OVER-RIDE reset

Ensure dock leveler is in the stored position. Unsecure the trailer. Depress the “HORN OVERRIDE” button (0) on the key pad, enter default override code 5528 then press the “ENTER” button.

5528 = Default over-ride code. The default over-ride code can be changed.



Figure 6-2-2 HORN OVER-RIDE state

6.5 MANUAL (with RIG sensor)

6.5.1 No transport vehicle present (with RIG sensor)

⚠ WARNING

Before loading or unloading a vehicle at your loading dock while using a Hörmann Truck Lock™ vehicle restraint, always visually inspect to be sure that the restraint is captured with the Rear Impact Guard (RIG). If the restraint is still not captured after backing the trailer firmly against the dock bumpers, secure the trailer by other means.

Be sure that the area around the RIG assembly is clear of obstructions.

Always operate the Hörmann Truck Lock™ vehicle restraint from the top of the dock.

Inspect all restraint lights daily to make certain they work properly.

Perform maintenance on restraints in accordance with Maintenance on Page 38 of this manual.

Hörmann Truck Lock™ vehicle restraints should be operated only by authorized personnel who have read and understand the Owner's/User's Manual.

⚠ WARNING

Verify the text "Truck Lock™" is present in the display of the PLC as illustrated in Figure 6-5-1.

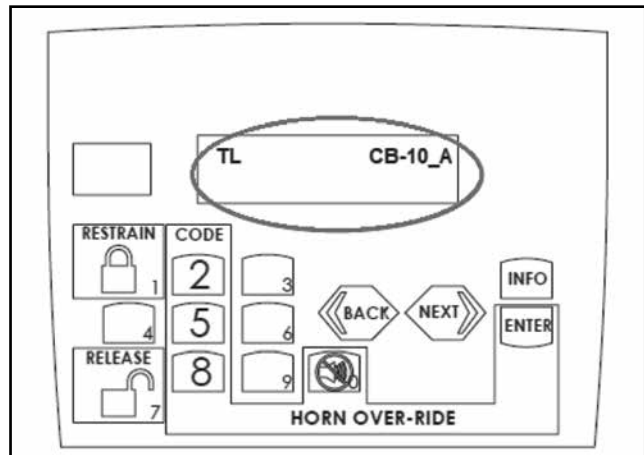


Figure 6-5-1 Verify PLC screen

- a. Ram bar is in RELEASED position.
 - b. The RED light on the control box is flashing, alerting fork truck driver an unsafe condition exists.
 - c. The outside GREEN light is flashing, alerting transport vehicle driver it is safe to back in.
- Refer to Figure 6-5-2.



Figure 6-5-2 RELEASED position / no vehicle present

6.5.2 Transport vehicle present (with RIG sensor)

- a. Transport vehicle has backed into loading dock and is parked firmly against dock bumpers, verify RIG sensor is activated.

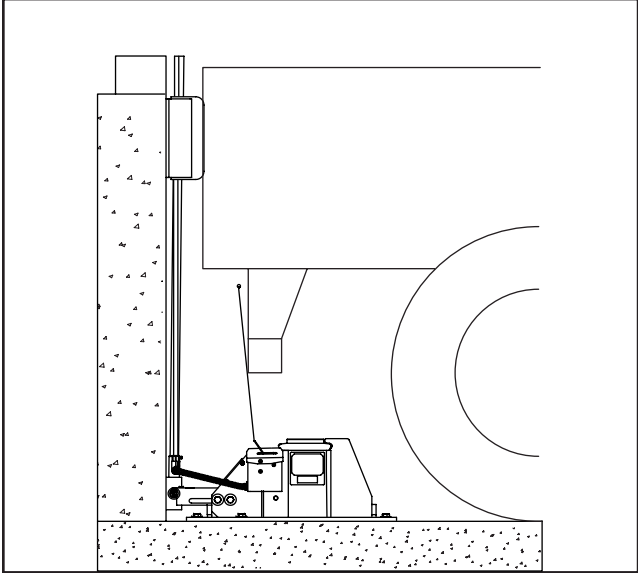


Figure 6-5-3 RIG sensor activated

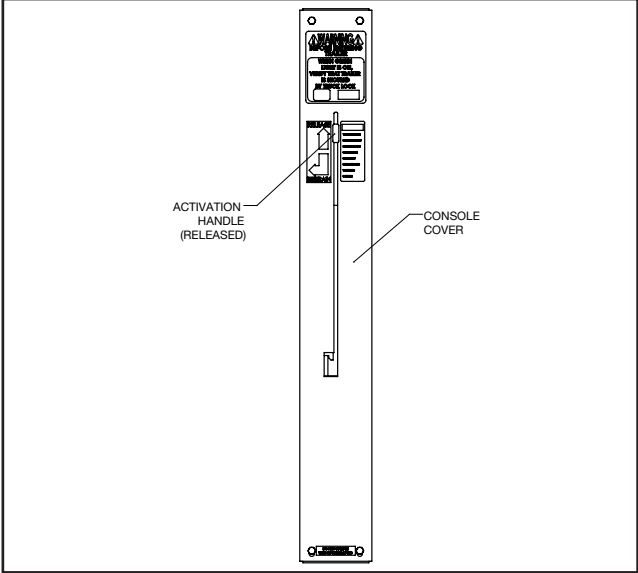


Figure 6-5-4 Activation handle in release position

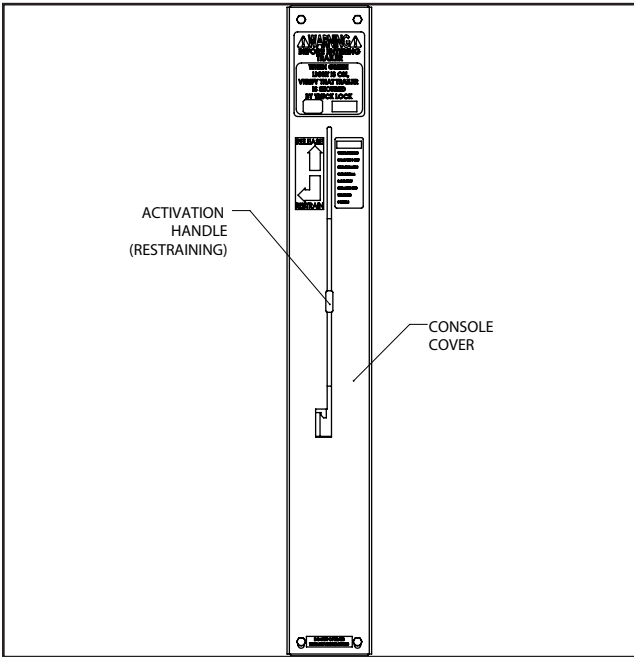
- b. Activation handle is in the RELEASE position.
- c. Ram bar is in RELEASED position.
- d. The RED light on control box is constant, alerting the fork lift operator a transport vehicle is present.
- e. The outside GREEN light is flashing, alerting transport vehicle driver it is safe to back in.



Figure 6-5-5 RIG sensor activated

6.5.3 Restraining (with optional RIG sensor)

- a. Move activation handle to RESTRAIN position.



⚠ CAUTION

If trailer can not be restrained due to a lift gate or other obstruction that could become damaged, proceed to HORN OVER-RIDE state.

Figure 6-5-6 Activation handle in releasing transition

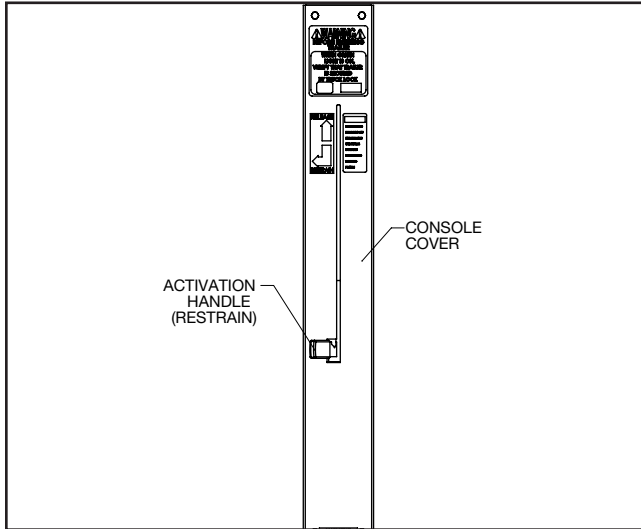
- b. The RED light on the control box is flashing, alerting fork truck driver an unsafe condition exists.
- c. The outside RED light is flashing, alerting transport vehicle driver not to move.
- d. If unable to move activation handle to RESTRAIN position, proceed to HORN OVER-RIDE.



Figure 6-5-7 Restraining

6.5.4 RESTRAIN position (with RIG sensor)

- a. Move activation handle to RESTRAIN position.
- b. RIG is securely captured by the Ram bar.



⚠ WARNING

Visually inspect to ensure that the Hörmann Truck Lock™ vehicle restraint Ram bar captures the RIG of the trailer before operating the dock leveler.

Figure 6-5-8 Activation handle in release position

- c. The GREEN light on the control box is flashing, alerting the fork lift operator a safe condition exists.
- d. The outside RED light is flashing, alerting transport vehicle driver not to move.



Figure 6-5-9 RESTRAIN position

6.5.5 Releasing (with RIG sensor)

- a. Move activation handle to RELEASE position.
- b. Ram bar will transition from the RESTRAIN position to the RELEASE position.

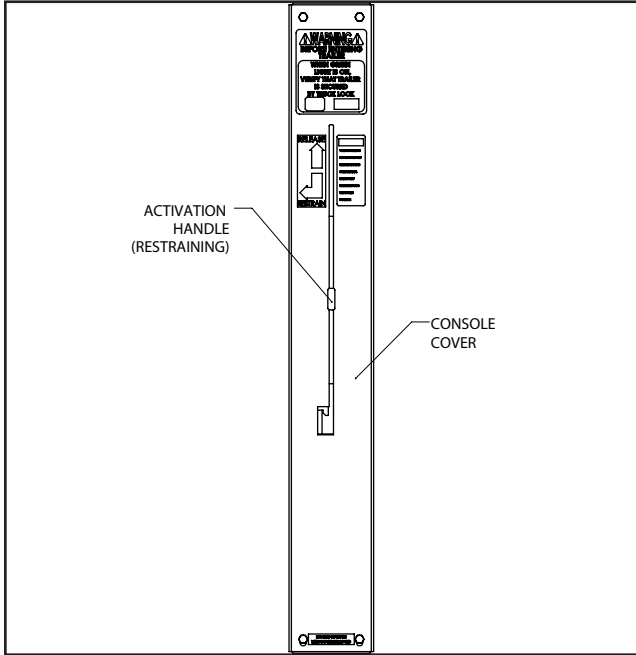


Figure 6-5-10 Activation handle in releasing transition

- c. The RED light on the control box is flashing, alerting fork truck driver an unsafe condition exists.
- d. The outside RED light is flashing, alerting transport vehicle driver not to move.
- e. When the process is complete, the Ram bar is in the RELEASED position shown in Figure 6-5-2, Page 32.



Figure 6-5-11 Releasing RESTRAIN

6.6 FAULT from restraining state (manual)

Ram bar cannot capture the RIG. This could be due to a RIG that is located too far toward the rear axle, bent, obstructed or missing. Activation handle is unable to move into RESTRAIN position. Inside light is flashing RED and HORN is pulsing, alerting the forklift operator that the trailer is not captured. Outside light is flashing RED alerting the truck driver not to move. See Figure 6-6-1.

If the trailer is parked firmly against the dock bumpers proceed to HORN OVER-RIDE. If not, return activation handle to RELEASE position to clear the fault, have trailer back up and repeat RESTRAINING procedure.



Figure 6-6-1 FAULT state

6.7 HORN OVER-RIDE (manual)

If HORN sounds and RED light is on after attempting to RESTRAIN the RIG, the trailer may not be serviceable. Ensure dock leveler is in the stored position. Secure trailer by alternate means. Depress the “HORN OVER-RIDE” button (0) on the key pad, enter default over-ride code 5528 then press the “ENTER” button. Inside RED and GREEN lights are flashing; outside light is flashing RED only. Position dock leveler to service trailer and proceed with caution.

⚠ DANGER

Before activating “HORN OVER-RIDE”, ensure that dock leveler is in stored position and secure trailer by other means.

6.8 HORN OVER-RIDE reset

Ensure dock leveler is in the stored position. Unsecure the trailer. Depress the “HORN OVERRIDE” button (0) on the key pad, enter default override code 5528 then press the “ENTER” button.

5528 = Default over-ride code. The default over-ride code can be changed.



Figure 6-6-2 HORN OVER-RIDE state

7 Routine maintenance

DANGER

When working with electrical or electronic controls, make sure that the power source has been locked out and tagged according to OSHA* regulations and approved local electrical codes.

Post safety warnings and barricade work area, at dock level and at ground level, to prevent unauthorized use of the dock.

WARNING

Safe operation of the Hörmann Truck Lock™ truck restraint requires all lights and the HORN to be working properly. DO NOT use Hörmann Truck Lock™ vehicle restraint if parts are broken or missing

WARNING



Always post safety warnings and barricade the work area at dock level and ground level to prevent unauthorized use of the unit before maintenance is complete.

ATTENTION

Maintenance may be required more frequently at loading docks exposed to harsh environments (extreme climates, corrosive chemicals, frequency of usage, etc.). If these conditions exist, consult Hörmann for accelerated maintenance requirements.

Daily

- Remove debris around Hörmann Truck Lock™ Vehicle restraint.
- Verify that restraint operates smoothly and inside, outside lights and HORN are working.
- Replace damaged or missing LED light modules and lenses.
- Repair, remount, or replace outside and inside signs, labels and decals as required.
- Inspect dock bumpers. Missing bumpers must be replaced.
- Verify Hörmann Juice-E is cranberry color before freezing temperatures. If Hörmann Juice-E is clear, Truck Lock™ is not protected from freezing temperatures. Hörmann Juice-E must be siphoned out of ram housing and replaced with new Hörmann Juice-E

180 days

- Perform all Daily maintenance.
- Check that all concrete anchor bolts are torqued to 75 ft-lbs (For Flange Mount ONLY).
- Perform operational test after all maintenance repairs and adjustments are complete.

360 days

- Perform all Daily and 180 Day maintenance.
- For best performance, remove old, used Hörmann Juice-E (siphon, drill pump, shop vac and replace).
- Check Hörmann Juice-E fluid level (half gallon).

ATTENTION

In addition, it is recommended and good safety practice to use an additional means to support the dock platform and lip anytime when physically working in front of or under the dock leveler. This additional means may include, but not limited to a boom truck, fork truck, stabilizing bar or equivalent.

8 Troubleshooting

8.1 MANUAL

Problem	Probable cause	Solution
Cannot fully raise Ram bar in 3 seconds.	<ul style="list-style-type: none">- Pulleys are off center.- Cable is not centered on pulleys.- Conduit is dented and is pinching the cable.	<ul style="list-style-type: none">- Realign pulleys.- Place cable onto center of pulleys.- Remove dent if possible, if not replace conduit.
Cannot fully lower Ram bar in 3 seconds.	<ul style="list-style-type: none">- Slide pole is not greased.- Coating on cable is damaged.	<ul style="list-style-type: none">- Grease slide pole.- Replace cable.

8.2 Limit switch test procedure

1. Entering Maintenance Mode on the Control Box

Key Point: This step can be done on any display or operation except when in HORN OVER-RIDE.

- a. Depress the “HORN OVER-RIDE” button (#0 button).
- b. The RED light, on the control box, will start flashing if the GREEN light was flashing or remain a constant RED. This is normal to notify the end user that they are about to enter a new mode.
- c. Enter the Maintenance code, 28252, and then press “ENTER”.
 - i. If the wrong code was entered, the “Wrong PW: Reenter Or wait” display will appear. On this display, repeat steps 1a through 1c to enter maintenance mode.
 - ii. Or if no further input is completed within 30 seconds, the “Wrong PW: Reenter Or wait” display will clear and the screen will return to the previous display.

2. See table below for what display inputs are found on:

Display information	Control box display number
	CB-12
12345678 Inputs	7

Display Information — 12345678 Inputs

This display shows all inputs going to the control box. The number zero (0) means the input is off. The number one (1) means the input is on. The list of all the inputs are listed below:

- 1. LS1
- 2. LS2
- 3. LS3 (OPTIONAL)
- 5. N/A
- 6. N/A
- 7. N/A

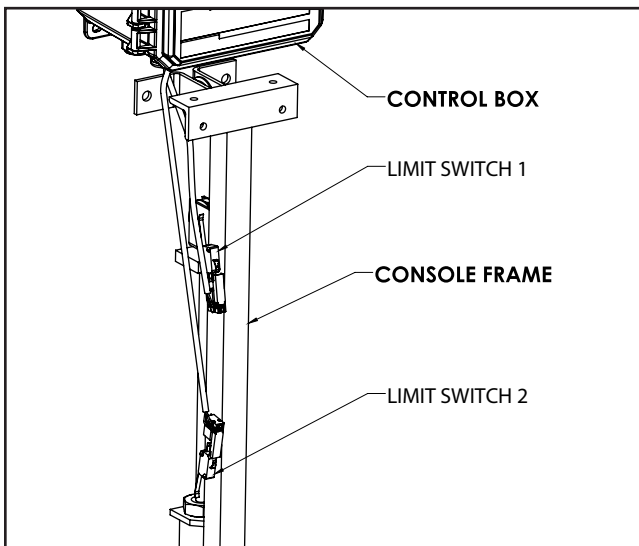


Figure 8-2-1 PNEUMATIC Truck Lock™ limit switch locations

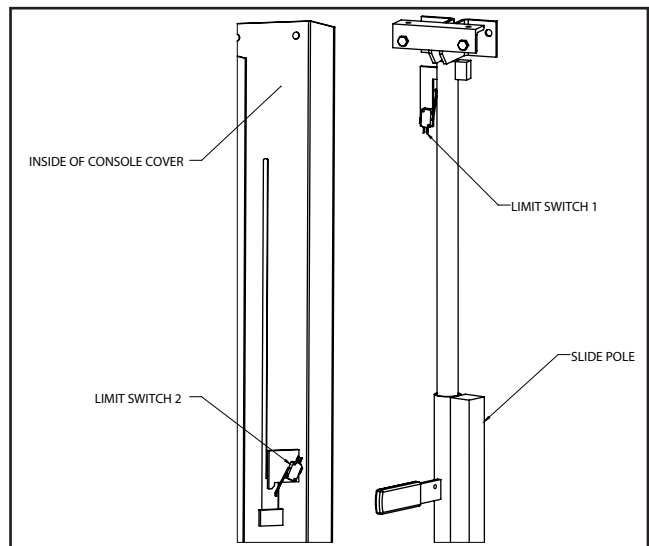


Figure 8-2-2 MANUAL Truck Lock™ limit switch locations

8.2 Limit switch test procedure

3. Ensure restraint is in the unlocked position.
4. Remove console cover from console.
5. Test Limit Switch 1.

- a. Verify (1) is shown below input 1.
- b. Remove connector from limit switch.
 - i. Control box will alarm.
- c. Verify (0) is shown below input 1.
- d. Reconnect connector to limit switch.
 - i. Control box will stop alarming.
- e. Verify (1) is shown below input 1.

If limit switch did not respond accordingly as stated above, replace limit switch. Part Number: 06-0-013.

6. Test Limit Switch 2.

- a. Verify (1) is shown below input 2.
- b. Depress limit switch 2.
 - i. Control box will alarm.
- c. Verify (1) is shown below input 2.
- d. Release limit switch 2.
- e. Verify (0) is shown below input 2.

If limit switch did not respond accordingly as stated above, replace limit switch. Part Number: 06-0-013.

7. Reinstall console cover to console.
8. Exiting Maintenance Mode on the Control Box.

Key Point: This procedure can be done on any maintenance display.

- a. Depress the "HORN OVER-RIDE" button (#0 button).
- b. The RED light, on the control box, will start flashing if the GREEN light was flashing or remain a constant RED. This is normal to notify the end user that they are about to enter a new mode.
- c. Enter the Maintenance code, 28252, and then press "ENTER".
 - i. If the wrong code was entered, the "Wrong PW: Reenter Or wait" display will appear. On this display, repeat steps 3a through 3c to enter maintenance mode.
 - ii. Or if no further input is completed within 30 seconds, the "Wrong PW: Reenter Or wait" display will clear, the screen will return to last display prior to entering maintenance mode.

8.3 Maintenance mode procedure

1. Entering Maintenance Mode on the Control Box

Key Point: This step can be done on any display or operation except when in HORN OVER-RIDE.

- a. Depress the “HORN OVER-RIDE” button (#0 button).
- b. The RED light, on the control box, will start flashing if the GREEN light was flashing or remain a constant RED. This is normal to notify the end user that they are about to enter a new mode.
- c. Enter the Maintenance code, 28252, and then press “ENTER”.
 - i. If the wrong code was entered, the “Wrong PW: Reenter Or wait” display will appear. On this display, repeat steps 1a through 1c to enter maintenance mode.
 - ii. Or if no further input is completed within 30 seconds, the “Wrong PW: Reenter Or wait” display will clear and the screen will return to the previous display.

2. Navigating Through Maintenance Mode

- a. Use the “NEXT” and “BACK” buttons to navigate through Maintenance Mode.

Display information	Control box display number	Page Number
	CB-12	
Faults	1	42
No LS1 No LS2 (Counter)	2	43
Both LS1 & LS2 On (Counter)	3	43
No RIG Present (Counter)	4	44
Horn Over-Ride Count	5	44
Total Cycles	6	45
12345678 Inputs	7	45
1234678 Outputs	8	45
Enter New Override Password	9	45

Display Information – Faults

This display shows the most current fault status. There may be more than one fault occurring at a given time, but only the most recent one can be displayed. See chart above to locate more fault information. Also, check display “12345678” Inputs” for proper inputs.

Key Point: Counters listed on chart above can be reset by following the instructions listed below.

Once on the display with the counter that needs to be reset:

- Press and hold “ENTER” for five seconds.
- After five seconds, the counter display will begin to flash, release “ENTER”.
- Next, press the “HORN OVER-RIDE” button (#0 button) to set counter back to zero.
- This is the only acceptable entry to reset the counters.
- Once the counter is back to zero, press “ENTER” to successfully reset counter.

8.3 Maintenance mode procedure

Display Information — No LS1 No LS2

This display shows the number of times Limit Switch 1 (LS1) and Limit Switch 2 (LS2) are off at the same time. LS1 and LS2 are found inside the console. See Figure 8-2-1 or 8-2-2 on Page 40.

This fault can occur if	Resolution
The Ram bar is unable to restrain or release fully.	Ensure no obstruction is blocking the Ram bar from restraining or releasing. If obstruction cannot be moved, enter HORN OVER-RIDE mode by following the instructions printed on the control box.
LS1 malfunctioned when the Ram bar is released.	Ensure LS1 is secured and working properly. Inputs can be verified on Page 45.
LS2 malfunctioned when the Ram bar is restrained.	Ensure LS2 is secured and working properly. Inputs can be verified on Page 45.

If the slide pole or rod end assembly is positioned correctly (See Figure 8-2-1 or 8-2-2 on Page 40) against the corresponding limit switch but cannot read the position of the Ram bar, replace limit switch.
(Part Number: 06-0-013)

Display Information — Both LS1 & LS2 On

This display shows the number of times, LS1 and LS2 are on at the same time. LS1 and LS2 are found inside the console. See Figure 8-2-1 or 8-2-2 on Page 40.

This fault can occur if	Resolution
LS1 malfunctioned when the Ram bar is restrained.	Ensure LS1 is secured and working properly. Inputs can be verified on Page 45.
LS2 malfunctioned when the Ram bar is released.	Ensure LS2 is secured and working properly. Inputs can be verified on Page 45.

If the slide pole or rod end assembly is positioned correctly (See Figure 8-2-1 or 8-2-2 on Page 40) against the corresponding limit switch but cannot read the position of the Ram bar, replace limit switch.
(Part Number: 06-0-013)

8.3 Maintenance mode procedure

Display Information — No RIG Present (RIG Sensor is Optional)

This display shows the number of times, Limit Switch 3 (LS3) or RIG sensor has been off while the Ram bar is locked. LS3 is found attached to Ram Housing.

This fault can occur if	Resolution
RIG sensor wand is bent and cannot locate the RIG properly.	If applicable, bend RIG sensor wand back to proper orientation or order a replacement wand. (Part Number: 06-0-065).
The RIG sensor is not depressed when the Ram bar is locked.	Realign trailer so RIG depresses RIG sensor. If RIG sensor cannot be depressed when the Ram bar is locked, enter HORN OVER-RIDE mode by following the instructions printed on the control box.
LS3 malfunctioned when the Ram bar is locked.	Ensure LS3 is secured and working properly. Inputs can be verified on Page 45.

If the RIG sensor wand is position correctly against a RIG and is activating LS3, and the LS3 is wire correctly but cannot read the position of the RIG, replace sensor switch assembly. (Part Number: LS3: 06-3-925)

Display Information — Door not closed/Ramp not stored (This fault is only for the Interlock Door A OR Interlock Leveler)

This display shows the number of times the door or ramp comes off of Limit Switch 4 (LS4) when the Ram bar is not locked and the control box is not in HORN OVER-RIDE.

8.3 Maintenance mode procedure

Display Information — Total Cycle

This display shows the number of complete cycles the product has gone through. One cycle is defined as the Ram bar moving from the unlocked position to the locked position and back to the unlocked position.

Display Information — Cycles 2 Service

This display shows how many cycles the Truck Lock™ can go through before service is needed for the items on the list below:

Display Information — 12345678 Inputs

This display shows all inputs going to the control box. The number zero (0) means the input is off. The number one (1) means the input is on. The list of all the inputs are listed below:

- | | |
|-------------------|--------|
| 1. LS1 | 5. N/A |
| 2. LS2 | 6. N/A |
| 3. LS3 (OPTIONAL) | 7. N/A |
| 4. - | 8. N/A |

Display Information — 12345678 Outputs

This display shows all outputs coming from the control box. The number zero (0) means the output is off. The number one (1) means the output is on. All outputs are listed below:

- | | |
|------------------------------|---|
| 1. Control Box — Red Light | 5. Solenoid 1 — Lock |
| 2. Control Box — Green Light | 6. Solenoid 2 — Unlock |
| 3. Outside — Red Light | 7. Alarm Horn |
| 4. Outside — Green Light | 8. Interlocked equipment active
(CB-11 ONLY) |

Display Information — 1Enter New Over-Ride Password:

This display is for changing the password to get into HORN OVER-RIDE. Once on this screen, press “ENTER” to change current password. Then enter new password. The new password can range from 1 to 9999. Once new password has been typed, press “ENTER” to successful change the password. Any leading zeros will be eliminated. Provide the new over-ride password to authorize dock attendant(s).

3. Exiting Maintenance Mode On The Control Box

Key Point: This procedure can be done on any maintenance display.

- a. Depress the “HORN OVER-RIDE” button (#0 button).
- b. The RED light, on the control box, will start flashing if the GREEN light was flashing or remain a constant RED. This is normal to notify the end user that they are about to enter a new mode.
- c. Enter the Maintenance code, 28252, and then press “ENTER”.

Key Point: The current HORN OVER-RIDE code will also work for exiting Maintenance Mode.

- i. If the wrong code was entered, the “Wrong PW: Reenter Or wait” display will appear. On this display, repeat steps 3a through 3c to enter maintenance mode.
- ii. Or if no further input is completed within 30 seconds, the “Wrong PW: Reenter Or wait” display will clear and the screen will return to last display prior to entering maintenance mode.

9 Parts

9.1 Standard profile cast-in assembly drawing

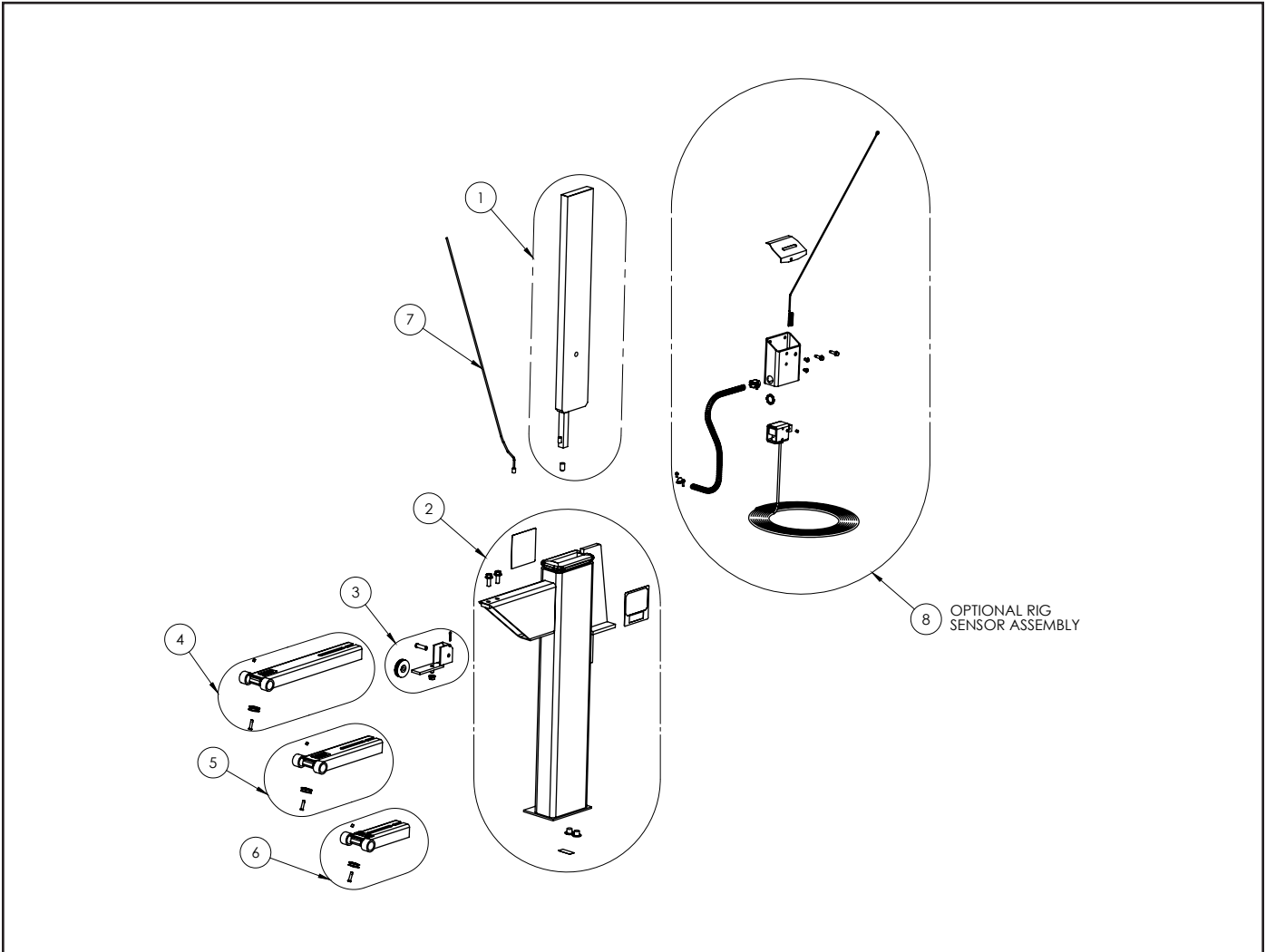


Figure 9-1-1 Standard profile cast-in

Standard profile cast-in parts list

Item No.	Part Number	Description	Qty.
1	31-3-900	ASSEMBLY, RAM BAR	1
2	35-3-901	ASSEMBLY, 350 HOUSING	1
3	35-3-925	350 HOUSING PULLEY MOUNT ASSEMBLY	1
4	40-3-902	WELDMENT, LONG E.O.D. CHANNEL	1
5	40-3-906	WELDMENT, MEDIUM E.O.D. CHANNEL	1
6	40-3-901	WELDMENT, SHORT E.O.D. CHANNEL	1
7	03-0-001	25' CABLE	1
8	15-3-101	SENSOR SWITCH KIT	1

9.2 Standard profile flange mount assembly drawing

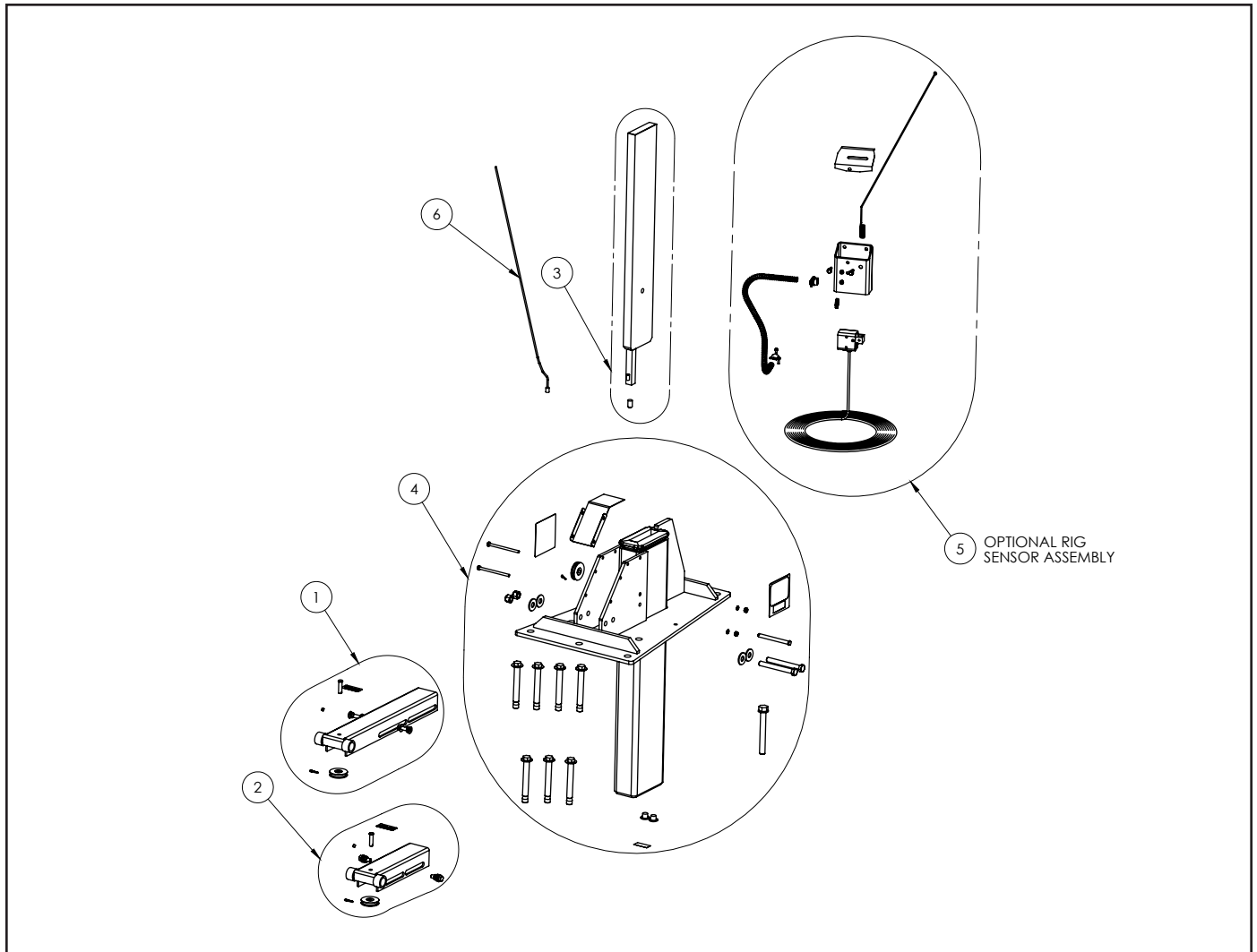


Figure 9-2-1 Standard profile flange mount

Standard profile flange mount parts list

Item No.	Part Number	Description	Qty.
1	46-3-016	ASSEMBLY, TAIL EXTENSION LONG	1
2	46-3-017	ASSEMBLY, TAIL EXTENSION SHORT	1
3	31-3-900	ASSEMBLY, RAM BAR	1
4	46-3-911	ASSEMBLY, RAM HOUSING	1
5	15-3-101	SENSOR SWITCH KIT	1
6	03-0-001	25' CABLE	1

9.3 Standard profile cast-in housing drawing

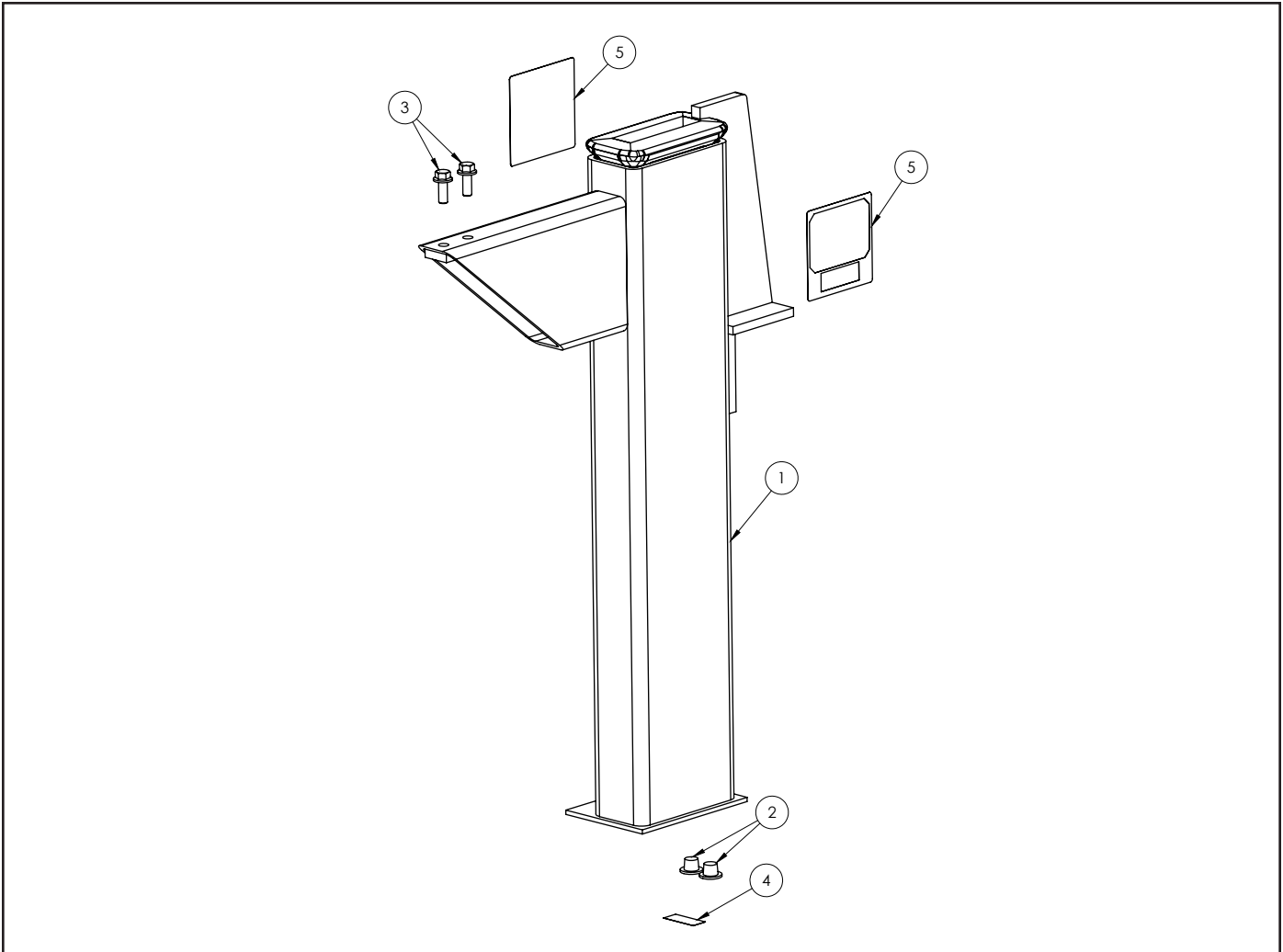


Figure 9-3-1 Standard profile cast-in housing

Standard profile cast-in parts list

Item No.	Part Number	Description	Qty.
1	35-1-901	HOUSING, RAM ASSEMBLY	1
2	01-0-160	HOUSING PLUG	2
3	01-0-122	3/8"-16 X 1" LONG FLANGE BOLT	2
4	NT-0-118	DECAL, DO NOT REMOVE PLUG	1
5	NT-0-101	DECAL, TRUCK LOCK	2

9.4 Standard profile flange mount housing drawing

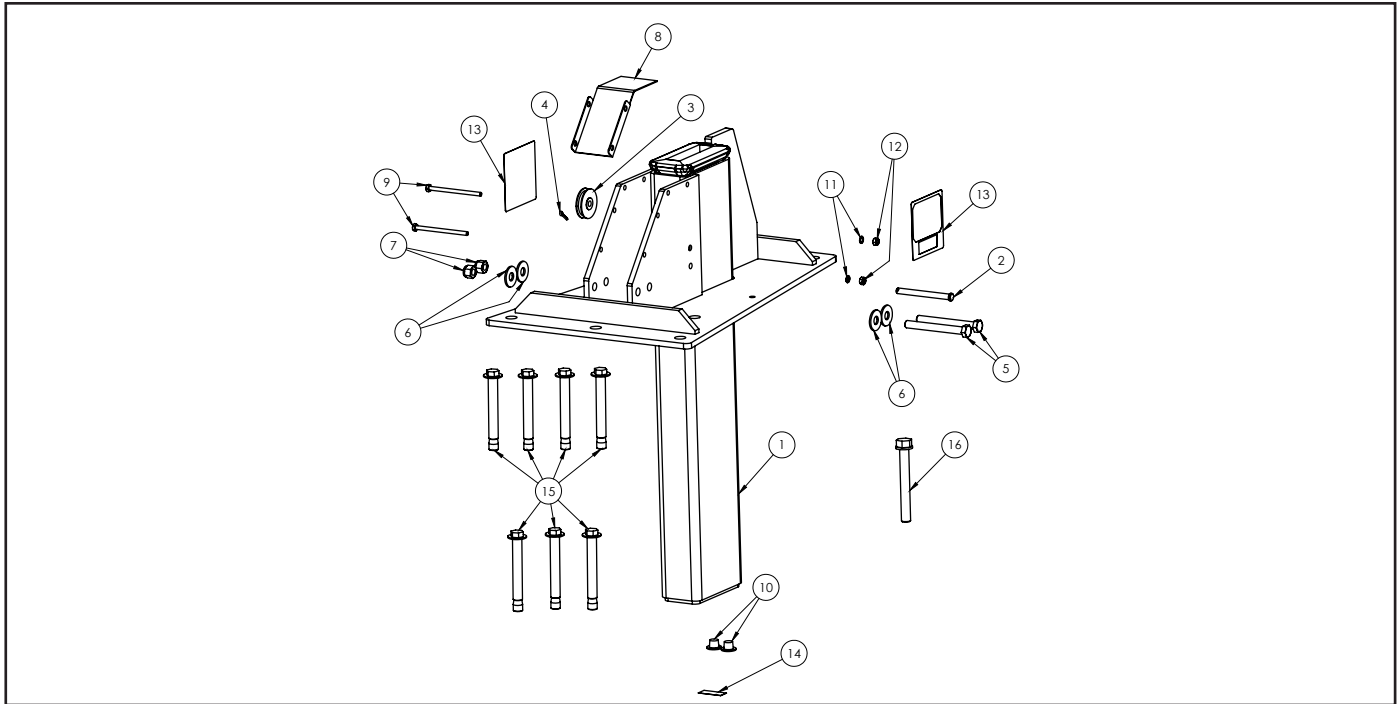


Figure 9-4-1 Standard profile flange mount housing

Standard profile cast-in parts list

Item No.	Part Number	Description	Qty.
1	46-1-911	350 FLANGE HOUSING WELDMENT	1
2	01-0-021	PIN, CLEVIS, Ø 3/8" X 4" LONG	1
3	03-0-004	PULLEY 2"	1
4	01-0-012	COTTER PIN, ZINC	1
5	02-0-031	SCREW, HEX HEAD, 1/2-13 X 4 1/2"	2
6	02-0-032	WASHER, FLAT Ø 1/2"	4
7	02-0-033	NUT, LOCK, 1/2"-13	2
8	46-0-035	COVER, HOUSING 350FL	1
9	01-0-145	SCREW, HEX HEAD, 1/4-20 X4" LONG	2
10	01-0-160	HOUSING PLUG	2
11	01-0-143	WASHER, STAR LOCK	2
12	01-0-142	NUT, HEX, 1/4-20	2
13	NT-0-101	DECAL, TRUCK LOCK	2
14	NT-0-118	DECAL, DO NOT REMOVE PLUG	1
15	40-0-112	BOLT, POWER	7
16	40-0-113	BOLT, WEDGE	1

9.5 Tail section (long) drawing

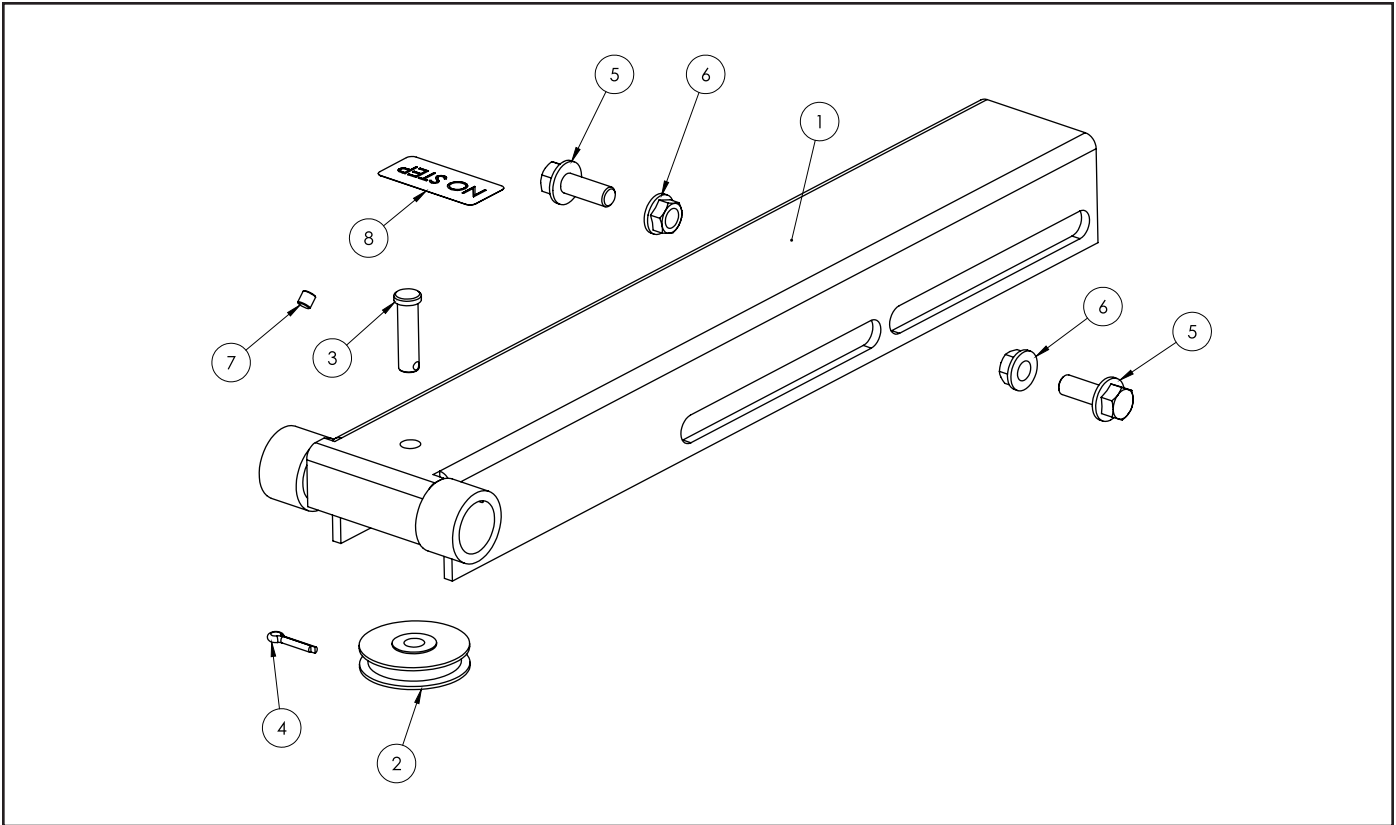


Figure 9-5-1 Tail extension (long) - 46-3-016

Tail section (long) parts list

Item No.	Part Number	Description	Qty.
1	02-1-018-18-75	WELDMENT, 2" ANCHOR TAIL-LONG	1
2	03-0-004	PULLEY 2"	1
3	02-0-017	Ø 3/8" X 1-3/8" LONG CLEVIS PIN	1
4	01-0-012	COTTER PIN, ZINC	1
5	01-0-122	3/8"-16 X 1" LONG FLANGE BOLT	2
6	01-0-144	3/8"-16 FLANGE NUT	2
7	01-0-007	1/4"-20 X 1/4" SOCKET SET SCREW	1
8	NT-0-108	DECAL, NO STEP	1

9.6 Tail section (short) drawing

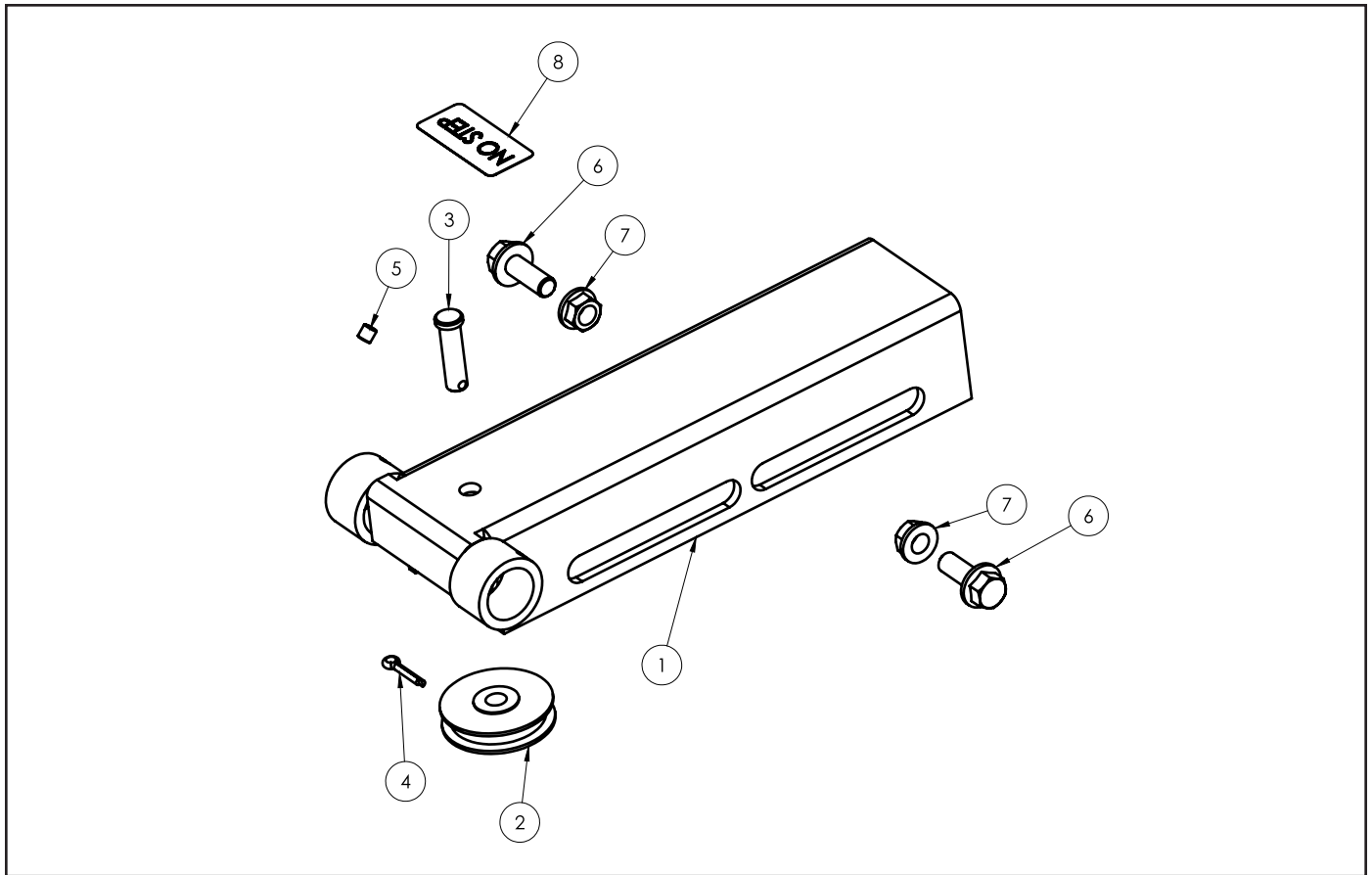


Figure 9-6-1 Tail extension (short) - 46-3-017

Tail section (long) parts list

Item No.	Part Number	Description	Qty.
1	02-1-017P	WELDMENT, 2" ANCHOR TAIL-SHORT	1
2	03-0-004	PULLEY 2"	1
3	02-0-017	Ø 3/8" X 1-3/8" LONG CLEVIS PIN	1
4	01-0-012	COTTER PIN, ZINC	1
5	01-0-007	1/4"-20 X 1/4" SOCKET SET SCREW	1
6	01-0-122	3/8"-16 X 1" LONG FLANGE BOLT	2
7	01-0-144	3/8"-16 FLANGE NUT	2
8	NT-0-108	DECAL, NO STEP	1

9.7 Short E.O.D. channel weldment

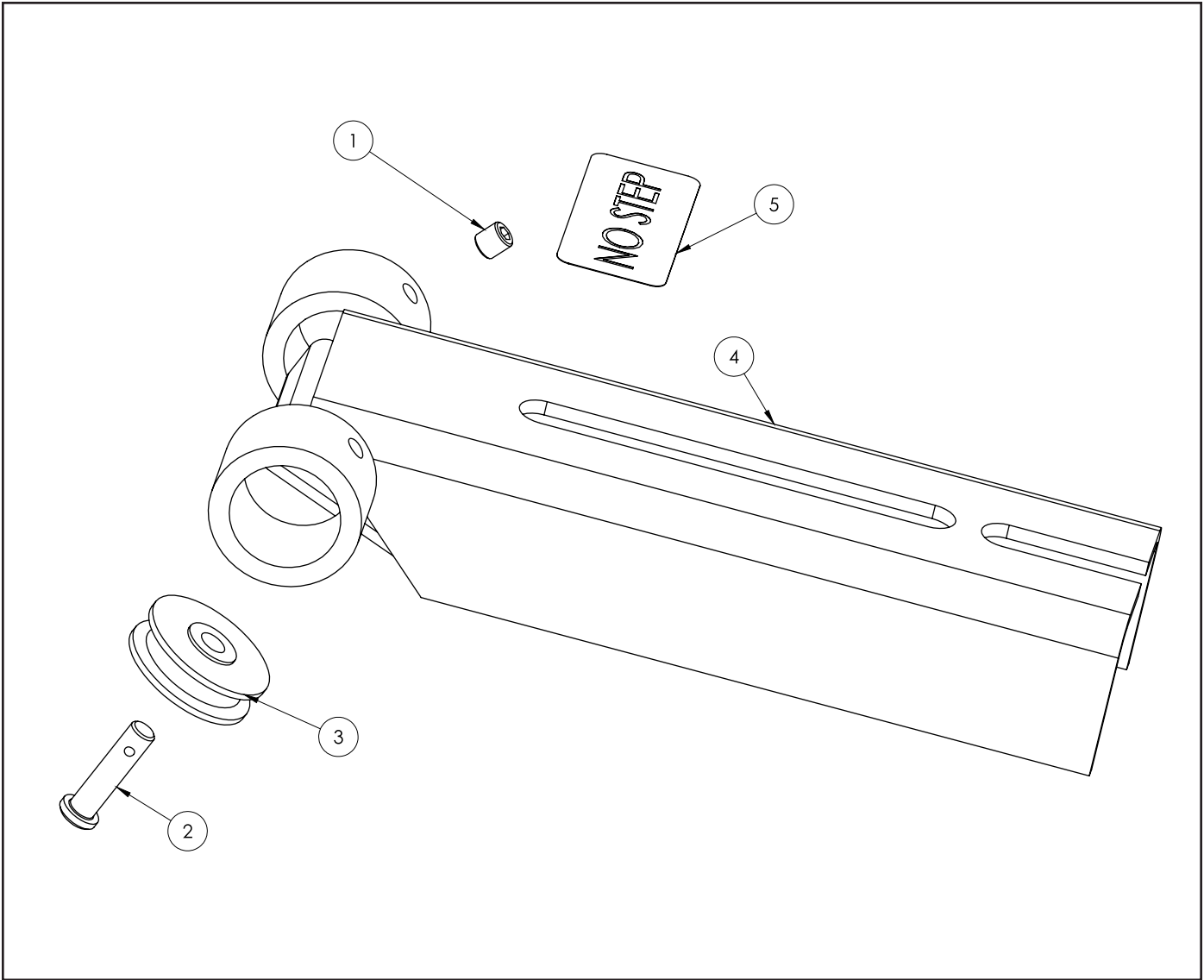


Figure 9-7-1 Short E.O.D. channel weldment - 40-3-901

Short E.O.D. channel weldment parts list

Item No.	Part Number	Description	Qty.
1	01-0-007	1/4"-20 X 1/4" SOCKET SET SCREW	1
2	01-0-018	Ø 1/4" X 1" LONG CLEVIS PIN W/DETENT	1
3	03-0-002	PULLEY 1 1/4"	1
4	40-1-901	SHORT E.O.D. CHANNEL WELDMENT	1
5	NT-0-108	DECAL, NO STEP	1

9.8 Long E.O.D. channel weldment

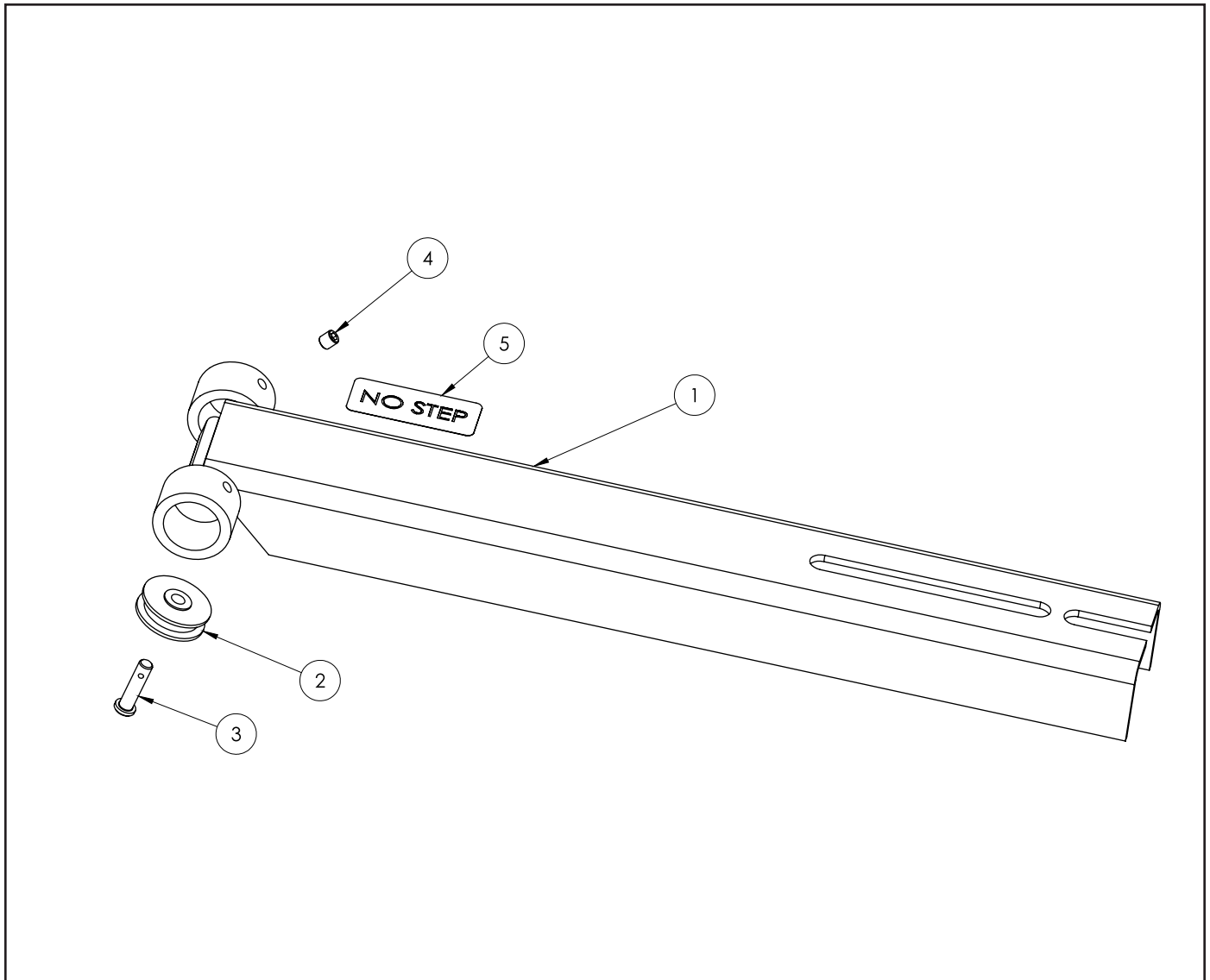


Figure 9-8-1 Long E.O.D. channel weldment - 40-3-902

Long E.O.D. channel weldment parts list

Item No.	Part Number	Description	Qty.
1	40-1-902	LONG E.O.D. CHANNEL WELDMENT	1
2	03-0-002	PULLEY 1 1/4"	1
3	01-0-018	Ø 1/4" X 1" LONG CLEVIS PIN W/DETENT	1
4	01-0-007	1/4"-20 X 1/4" SOCKET SET SCREW	1
5	NT-0-108	DECAL, NO STEP	1

9.9 Medium E.O.D. channel weldment

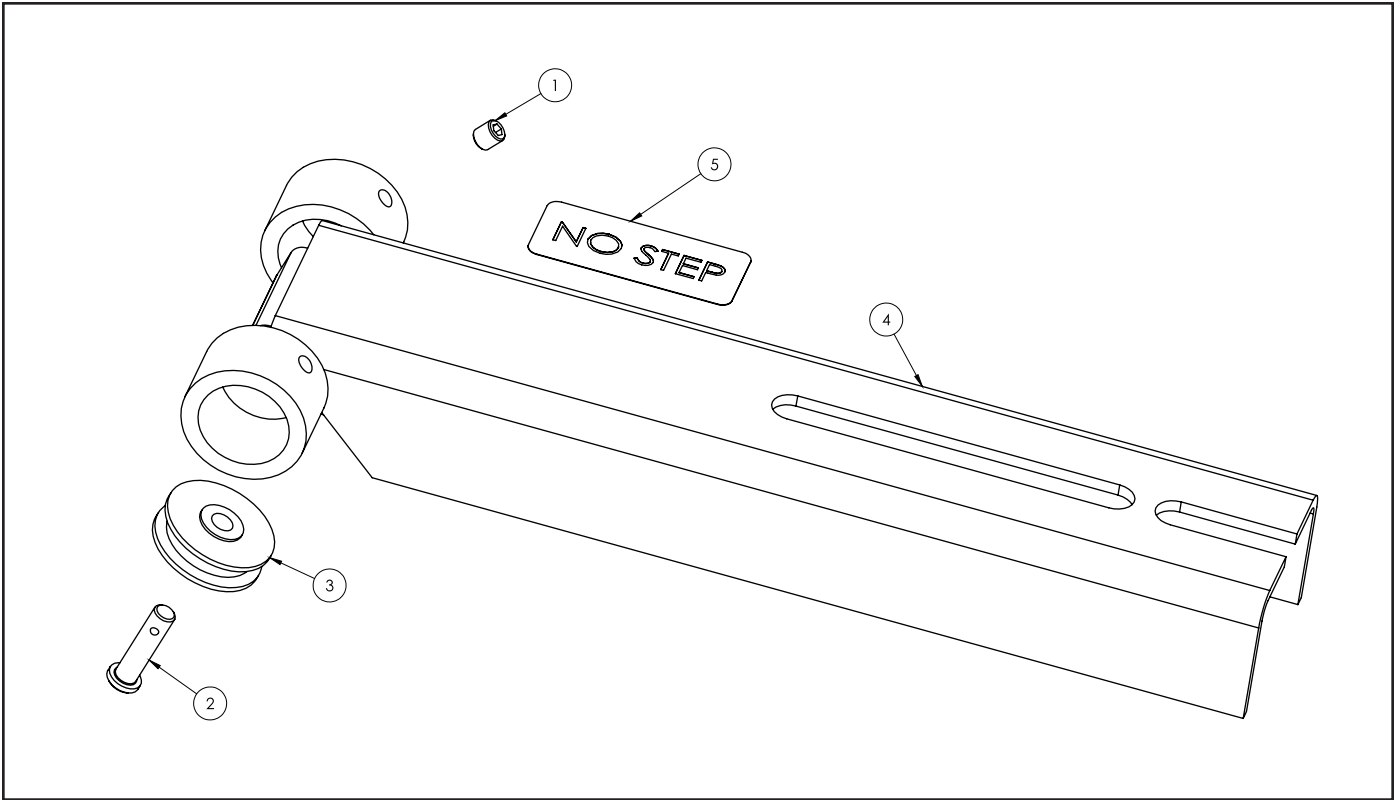


Figure 9-9-1 Medium E.O.D. channel weldment - 40-3-906

Medium E.O.D. channel weldment parts list

Item No.	Part Number	Description	Qty.
1	01-0-007	1/4"-20 X 1/4" SOCKET SET SCREW	1
2	01-0-018	Ø 1/4" X 1" LONG CLEVIS PIN W/DETENT	1
3	03-0-002	PULLEY 1 1/4"	1
4	40-1-906	MEDIUM E.O.D. CHANNEL WELDMENT	1
5	NT-0-108	DECAL, NO STEP	1

9.10 RAM assembly drawing

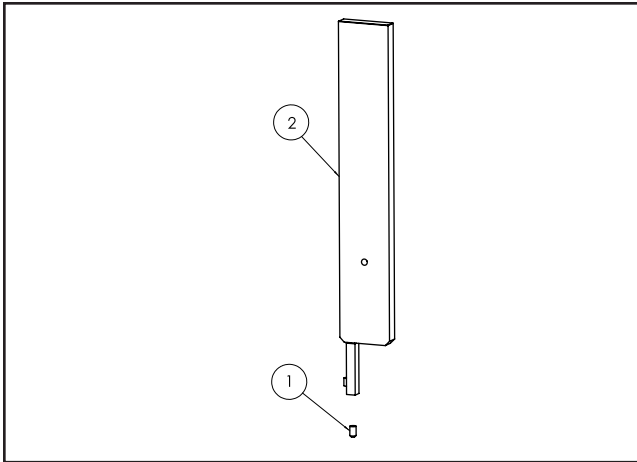


Figure 9-10-1 RAM assembly - 31-3-900

RAM assembly parts list

Item No.	Part Number	Description	Qty.
1	31-1-031	RAM DAMPENER	1
2	31-1-900	ASSEMBLY, RAM	1

9.11 Standard profile cast-in housing pulley mount assembly drawing

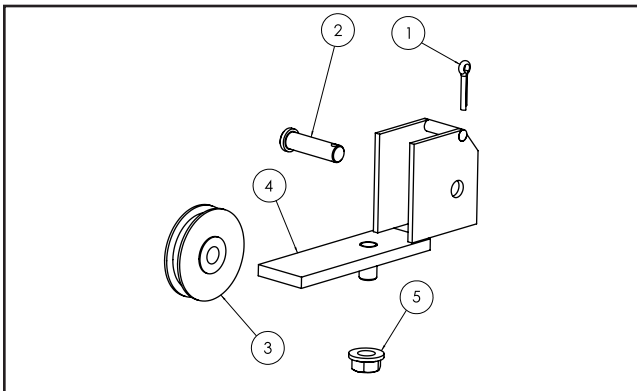


Figure 9-11-1 Housing pulley mount assembly

Housing pulley mount assembly parts list

Item No.	Part Number	Description	Qty.
1	01-0-012	COTTER PIN, ZINC	1
2	02-0-017	Ø 3/8" X 1-3/8" LONG CLEVIS PIN	1
3	03-0-004	PULLEY 2"	1
4	35-1-925P	350 HOUSING PULLEY WELDMENT	1
5	01-0-144	3/8"-16 FLANGE NUT	1

9.12 Miscellaneous parts

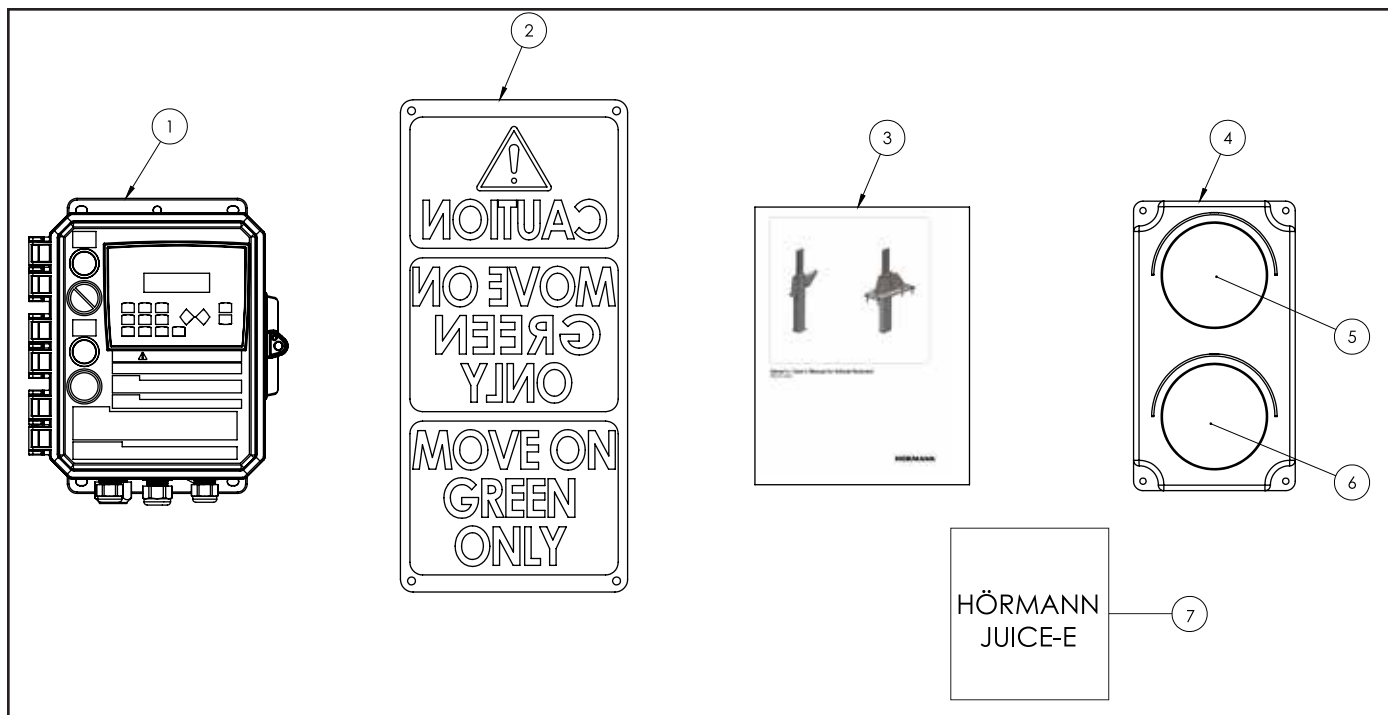


Figure 9-12-1 Miscellaneous parts

Miscellaneous parts list

Item No.	Part Number	Description	Qty.
1	CB-12	CONTROL BOX	1
2	NT-0-130	SIGN, CAUTION - MOVE ON GREEN	1
3	NT-0-350	HÖRMANN TRUCK LOCK STANDARD PROFILE MANUAL	1
4	MF4-183-000	OUTSIDE TRUCK LIGHT ASSEMBLY	1
5	MF4-183-001	OUTSIDE RED LED LIGHT MODULE	1
6	MF4-183-002	OUTSIDE GREEN LED LIGHT MODULE	1
7	04-0-003	HÖRMANN JUICE-E, 1/2 GALLON	1

9.13 CB-12 control box parts (manual Truck Lock™)

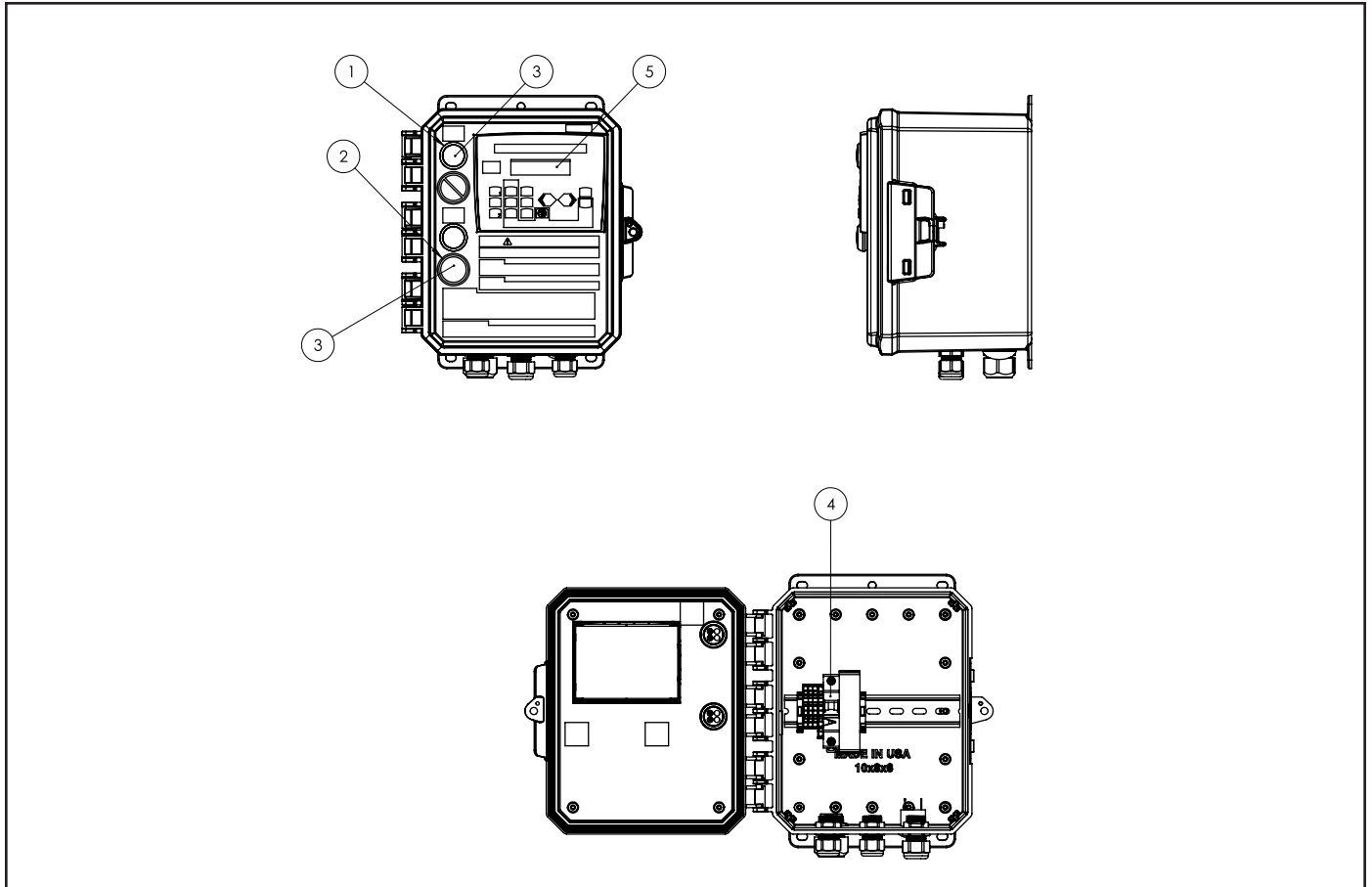


Figure 9-13-1 CB-12 control box parts

CB-12 control box parts list

Item No.	Part Number	Description	Qty.
1	CB-1000	RED PILOT LIGHT 24VDC LED	1
2	CB-1001	GREEN PILOT LIGHT 24VDC LED	1
3	CB-1002	WHITE LED COVER	2
4	CB-1006	BREAKER, CIRCUIT	1
5	CB-PLC-01	PLC-STANDARD	1

10 Hörmann Truck Lock™ warranty

HÖRMANN NORTH AMERICA warrants that its products will be free from defects in design, materials and workmanship under normal use for a period of one (1) year from the date of shipment, provided that the owner maintains and operates the Truck Lock™ in accordance with the Owner's Manual. All claims for breach of this warranty must be made within 30 days after the defect is or can with reasonable care, be detected. In no event shall any claim be made more than 30 days after this warranty has expired. In order to be entitled to the benefits of this warranty, the product must have been properly installed, maintained and operated in accordance with all manufacturer's recommendations and/or specified design parameters and not otherwise have been subject to abuse, misuse, misapplication, acts of nature, overloading, unauthorized repair or modification, application in a corrosive environment or lack of maintenance. Periodic lubrication, adjustment and inspection in accordance with all manufacturers' recommendations are the sole responsibility of the Owner/User.

In the event of a defect, as determined by HÖRMANN NORTH AMERICA, covered by this warranty, HÖRMANN NORTH AMERICA shall remedy such defect by repairing or replacing any defective equipment or parts, bearing the cost for the parts, labor and transportation. This shall be exclusive remedy for all claims whether based on contract, negligence or strict liability.

PRODUCT SPECIFIC WARRANTY TRUCK LOCK™ VEHICLE RESTRAINT

In addition to the "Standard Product Warranty" provided with all Hörmann Products, HÖRMANN NORTH AMERICA expressly warrants materials, components and workmanship to be free of defects for the following extended periods provided the purchaser maintains and operates the Truck Lock™ in accordance with the Owner's Manual:

- **Extended 5-Year General Warranty**—for a period of five (5) years from date of shipment, this warranty specifically applies to; the control box only.
- **Extended Limited Lifetime General Warranty**—the lifetime warranty applies for the duration of time in which the original purchaser of the Truck Lock™ owns the building or structure at which the Truck Lock™ is installed in its original location; this warranty specifically applies to; the ram housing assembly, ram bar, housing cover, console assembly, pulleys, cable, and brackets only.

NOT COVERED UNDER WARRANTY

- Routine maintenance, lubrication, adjustments, including initial field set-up.
- Repairs required as a result of failure to follow routine maintenance procedures specified in the owner's manual, abuse, accident, willful damage, negligence, improper installation, submersion, improper operation, vehicle impact, or shipping damage.
- This warranty shall not apply to the finish of any portion of the product, such as surface, cosmetic, and/or weathering, as this is considered normal wear and tear.

WARRANTY LIMITATIONS

THE ABOVE WARRANTIES IS HÖRMANN'S SOLE AND EXCLUSIVE WARRANTY WITH RESPECT TO THE TRUCK LOCK™ AND ARE IN LIEU OF ANY OTHER WARRANTIES OR GUARANTEES, WHETHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. HÖRMANN NORTH AMERICA AND ITS SUBSIDIARIES SHALL NOT IN ANY EVENT BE LIABLE TO ANYONE, INCLUDING THIRD PARTIES, FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY KIND INCLUDING BUT NOT LIMITED TO, BREACH OF WARRANTY, LOSS OF USE, LOSS OF PROFIT, INTERRUPTION OF BUSINESS OR LOSS OF GOODWILL.

HÖRMANN NORTH AMERICA



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