

NORDDOCK[®]



Safety Gate Model "ASG"

Owner's Manual and Parts List

This manual applies to safety gates manufactured for Sales
Order SO56717, April 2021, with Serial numbers 55350 - 55352

P/N: 56717-OM

NORDDOCK INC.

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Preface

PLEASE READ AND UNDERSTAND THIS MANUAL COMPLETELY

This manual gives detailed information and instruction on how to operate and maintain your equipment correctly. Failure to do so could result in personal injury, and/or equipment damage. Please consider this manual a permanent part of the unit and keep it with the safety gate for reference whenever needed.

If you have any questions about this manual, the safety gate, its components, or our products and services, please call us at 1-866-885-4276 and we will be happy to assist you. With proper care and maintenance, this safety gate is designed to work effectively and efficiently for many years to come.

Problems, Errors and Omissions

This manual has been prepared with the utmost care and attention to detail as to ensure accurate parts and service information should the need arise. Nordock Incorporated believes this manual will provide the operators of this unit all the necessary information required to operate and maintain it for many years. If you believe there is an error, if you have a problem following the guidelines, or if there is information that you feel is missing from this manual, please contact us at the above number so we may attend to the issue immediately.

Product Identification

It is very important that in order to obtain the best possible service from Nordock Inc., please include the model and serial number of the safety gate whenever you contact us. Below is the same serial number decal that will be found on the front of the movable barrier. Please fill in the information from the decal on the safety gate in this area. This will greatly reduce the possibility of improper parts being shipped to you.

NORDOCK®	
DESCRIPTION	
XX XX XX000 LBS	
SERIAL #:	XXXX
866-885-4276 ~ WWW.NORDOCKINC.COM	
MADE IN CANADA	

Copyright

This manual is copyright to Nordock Incorporated. All information, text, drawings, and technical data contained herein are for reference only. No part of this manual may be copied, altered, or stored on electronic media, and cannot be revealed to others for the purpose of competition.

Warranty

Nordock Inc. expressly warrants that all of its manufactured product shall remain free of defects in material and workmanship under normal use for a period of one-year from the date of delivery to the purchaser. The purchaser must maintain and operate the product in accordance with proper procedures. In the event the product proves defective in material or workmanship, Nordock Inc. will at its option either:

1. Replace the product or the defective portion thereof without charge to the purchaser; or,
2. Alter or repair the product on site or elsewhere, as Nordock Inc. may deem advisable, without charge to the purchaser.

The warranty stated herein is that offered by Nordock Inc. and expressly disclaims all implied warranties including those of merchantability and fitness. This warranty does not cover any failure caused by improper installation, misapplication, overloading, abuse, negligence, or failure to maintain and protect the equipment from vehicle impact. Nordock Inc. or its representative assume no responsibility or liability for any incidental or consequential damages of any kind including loss of use of any equipment, damage or failure resulting from the use of unauthorized replacement parts or equipment modification, or damages resulting from the misuse of the equipment.

Nordock Inc. warranties extend only to the product itself. Nordock Inc. disclaims all liability of any kind arising out of the workmanship, methods and materials used by the installer or premature product wear, product failure, property damage or bodily injury arising from improper installation.

These warranties as stated herein are the exclusive remedies for all claims.

Safety

The operators of this unit must read these safety practices before installing, operating or servicing the safety gate. Failure to follow these safety practices may result in bodily injury, property damage or death.



WARNING

Read and follow the operating instructions contained in this manual before operating the safety gate. If you do not understand the instructions, contact your supervisor for explanation and instruction on the safe operation of this unit. The following guidelines are to be used in conjunction with all laws, governances, and codes in effect where the safety gate is installed.

1. Inspect the safety gate to ensure that all parts are undamaged and in good working order. If the safety gate does not appear to function properly, or if it looks damaged, **DO NOT USE THE SAFETY GATE**. Section off the gate area and notify your supervisor and safety representative.
2. Do not sit on the barrier or place objects or equipment on it. The lifting and support system is designed to support the weight of the barrier only. The barrier may suddenly collapse without warning if additional weight is placed upon it.
3. Do not stand under the safety barrier when it is in motion.
4. Do not attempt to ride on the safety barrier.
5. Never use a fork truck or any type of material handling equipment to raise or lower the barrier.
6. Keep hands and all body parts always clear of the barrier. If the safety gate fails to operate using the procedures contained in this manual, do not use the safety gate. Contact Nordock Incorporated or an authorized service representative for service.
7. Whenever any maintenance or repair is to be performed on the safety gate, Barricade the area around the barrier and place clear signage on the perimeter that the unit is not to be operated.
8. If you have any questions, contact your supervisor or your local Nordock Incorporated representative.

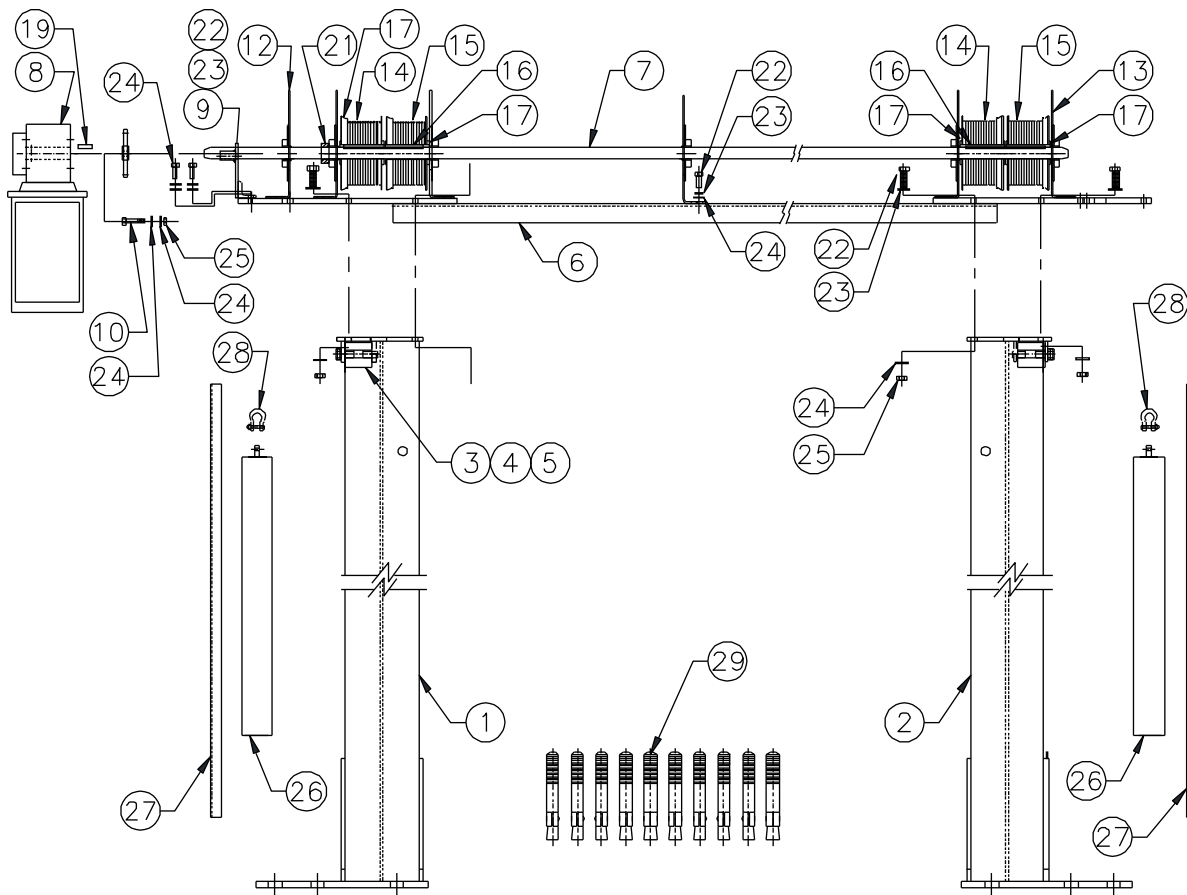
Installation

General Notes

The gate may be assembled and installed in one of two ways:

1. Assemble all stationary gate components together flat on the floor and tilt up to the vertical position.
2. Tilt each column up separately and assemble the components in the upright position.

The order of assembly is the same whether assembling the unit on the floor or in the upright position. Refer to the drawing and parts list below when assembling the unit.

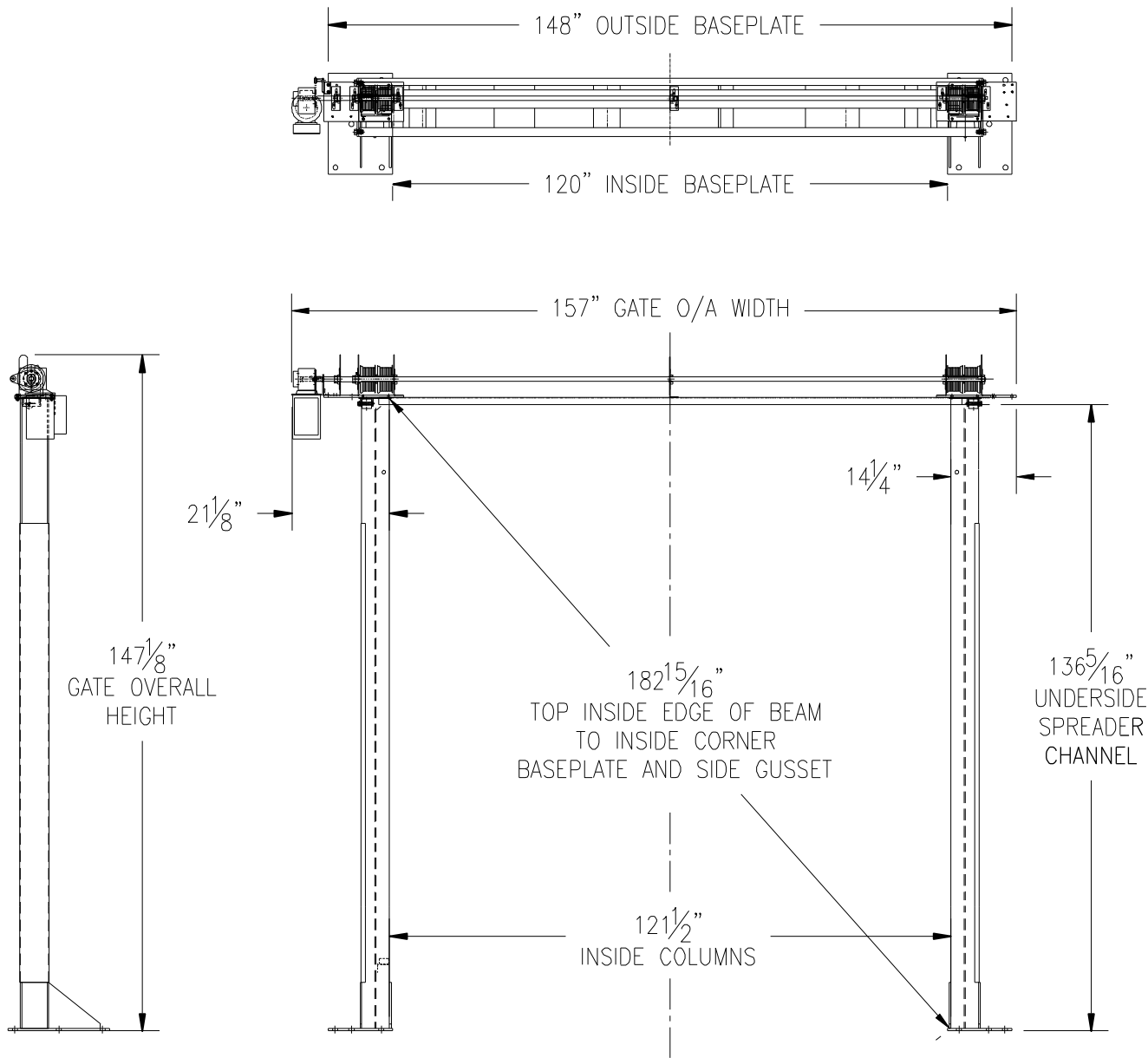


ITEM	DESCRIPTION	QTY	ITEM	DESCRIPTION	QTY	ITEM	DESCRIPTION	QTY
1	COLUMN, LEFT	1	11			21	COLLAR	2
2	COLUMN, RIGHT	1	12	SHAFT PIVOT, L	3	22	BOLT, 3/8" x 1-1/2"	24
3	CABLE ROLLER	2	13	SHAFT PIVOT, R	3	23	LOCKWASHER, 3/8"	12
4	BUSHING	4	14	DRUM, LEFT	2	24	FLATWASHER, 3/8"	36
5	ROLLER PIN	2	15	DRUM, RIGHT	2	25	NYLOCK, 3/8"	12
6	SPREADER CHANNEL	1	16	KEY, 6"	2	26	COUNTERWEIGHT	2
7	TORQUE SHAFT	1	17	DRUM SPACER	A/R	27	CTRWGHT COVER PLATE(S)	2
8	OPERATOR c/wTARM	1	18			28	SHACKLE, 1/4"	2
9	T.ARM MTG BRKT	1	19	KEY, 2 3/8"	1	29	ANCHOR, 3/4" x 6" (By others)	10
10	BOLT, 3/8"x 2-1/2"	3	20					

NOTE: Barrier and Cables are not shown in drawing above.

To ensure correct operation of the safety gate, it is critical that the two vertical side columns (1 & 2) are installed plumb and parallel to one another in both vertical planes. The drawing below shows several reference dimensions, which will aid during the installation process.

DIMENSIONS – 10’ (120”) WIDE x 10’ (120”) HIGH GATE:



Note:
Left hand (LH) gate shown.

Assembly Instructions

NOTE

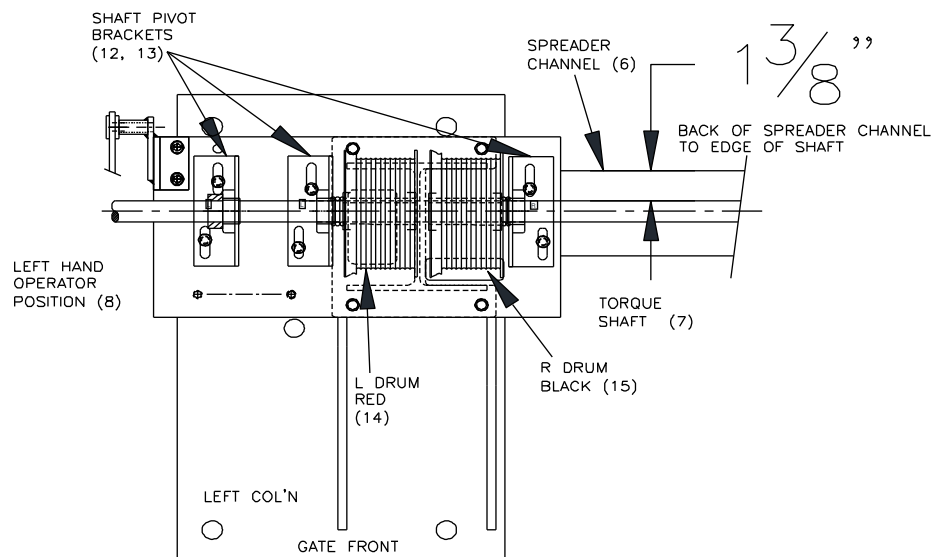
For ease of installation, the spreader channel assembly has all components except the cables shipped factory assembled. Refer to the installation parts diagram and table starting on page 5 as needed.

Numbers in parenthesis refer to Items listed in chart on page 5.

1. Place the left and right vertical upright columns (1&2) parallel to one another at the Inside Column dimension as shown in the diagrams on the preceding page(s).
2. Determine the correct operator handing for the gate being built. Place the torque shaft (7) end with the operator on the side of the gate to suit the handing required. See also gate dimension drawings starting on page 6.
3. Check over the spreader channel (6) and components (7 to 21) for no obvious signs of movement or damage during shipping. Brackets, operator, torque arm and shaft should be square and parallel to the bottom plate and cross-channel.
4. The torque shaft (7) requires a dimension of 1-3/8" be maintained over the length of the cross-channel. The shaft will need to be realigned if this dimension has changed. See diagram below.

To re-align shaft and components:

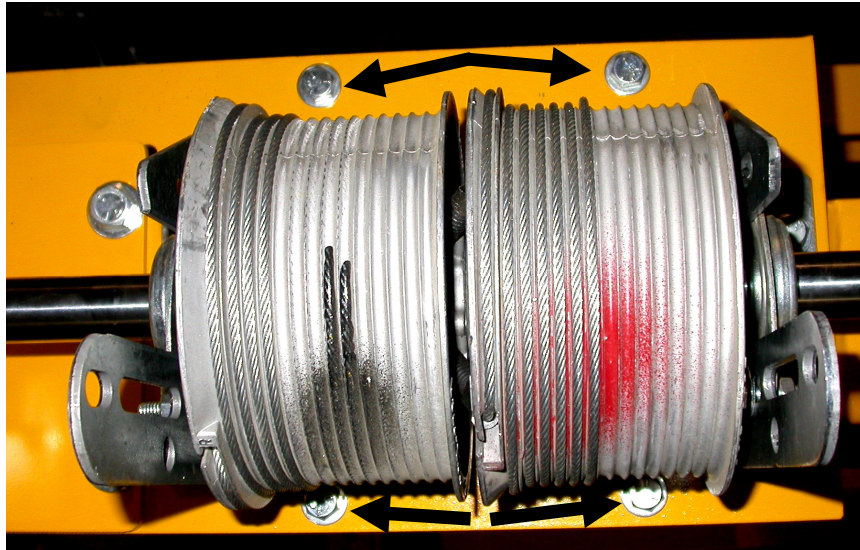
- a. Loosen the pivot bracket bolts (22) and shift the brackets (12 & 13) forward or back to obtain 1-3/8".
- b. Securely re-tighten the pivot bracket bolts across the spreader channel.
- c. Check that the operator (8) is aligned vertically.
- d. Verify that the shaft is straight.



NOTE

The end of the spreader channel with the operator goes to the left-hand side of the gate (as viewed standing on the dock looking out the door) for a left-hand operated gate.

5. Bolt the spreader channel/torque shaft assembly to the top of the upright columns, using the eight 3/8" x 1-1/2" long bolts (22) and fasteners (23, 24 & 25) provided. Each connection should have a 3/8" washer (24) on the top and a 3/8" washer (24) with a nylock nut (25) on the bottom. See picture.



6. Finish tightening the bolts that hold the spreader channel to the columns.
7. The partially assembled gate is now ready to be raised to the vertical position if steps 1 to 6 have been completed with the gate on the floor.

NOTE

Cables are not installed on the drums for shipping purposes. For installation ease it may be convenient to attach them now to the corresponding drum. The drums in line with the inner I beam are used for the barrier gate. The drums in line with the outer I beam are used for the counterweights. Cables are marked accordingly.

Column Mounting Instructions

If the gate was partially assembled flat on the ground, it must now be tilted to the vertical upright position.

NOTE

Columns (1&2) are shipped with the roller (3 to 5) for the counterweight cable factory assembled.



WARNING

When tilting the gate, do not use the torque shaft or the spreader channel as a lifting point. They are not designed for this purpose and will bend. Any lifting must be done at the top of the columns.

1. The gate is to be centred in the door opening and positioned far enough away from the door to allow adequate clearance between the movable barrier and the door.
2. Before setting any anchors (29), ensure both columns are square and plumb. Refer to the drawing starting on page 6 for reference dimensions.

NOTE

Floors must be a minimum of 6" thick concrete to use the supplied anchors. The minimum embedment depth for a 1" wedge anchor is 4-1/2" (a customer using 3/4" epoxy set anchors, depth by manufacturer specification).

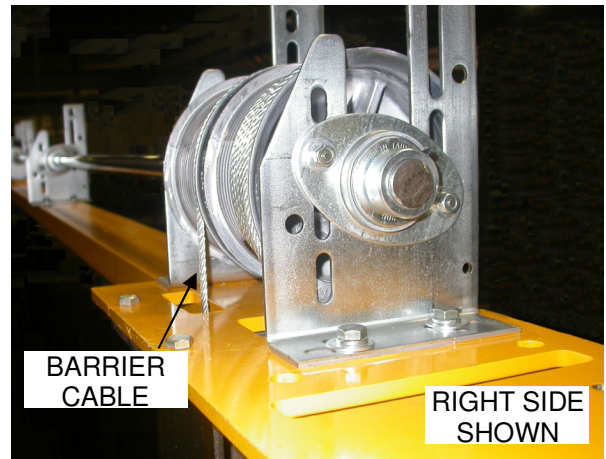
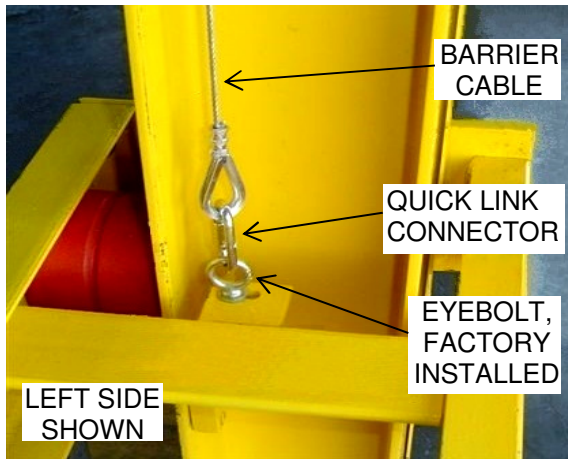
3. Drill and set one anchor (29) in the base plate of each column, but do not tighten.
4. Check to ensure the columns are square and plumb again and adjust if necessary. Drill and set the remaining four anchors in each plate and torque all anchors to manufacturer specification to achieve maximum holding strength.

Barrier Mounting Instructions

1. Remove the counterweights access cover plates (27) from each side of columns.
2. Remove the end plates from both ends of the barrier assembly. Tilt the barrier at an angle and position it between the columns.

NOTE

There is a left and right end to the gate assembly. The eyebolt at each end should be pointing up and will be in line with the barrier cable, once installed. The eyebolt goes in the outer of the two holes in the mounting angle as shown below.



3. Using a forklift or other suitable lifting device, lift the gate up between the columns. Insert 1/2" rods (by others), through the 13/16" diameter holes provided near the top of both left and right column beam flanges. This will support the gate while the cables are being attached.
4. Install the barrier gate cables:
 - a. Hook cable stop into drum and wind snug until matching the barrier.
 - b. Maintain tension on the cable and clamp it to the frame with light spring clamp to hold it snug on drum.
 - c. Connect the cable and eyebolt with 1/4" diameter quick link provided.
 - d. Repeat on opposite end.
 - e. Use 3/8" drive in fan end of operator to take up any cable slack as spring clamps are removed.
 - f. Now cables are taught with barrier at raised position.

⚠ WARNING

Do not attempt to use operator alone to raise or support the barrier. Personal injury may result. Counterweights must first be installed.

5. Check all connections before proceeding to next step.

⚠ WARNING

When connecting the barrier, always make sure there are several threads on the eyebolt protruding past the nuts on the bottom side of the angle. A nylock nut or a lock washer must be used under the nut on the eyebolts to prevent them from loosening.

Counterweight Installation Instructions

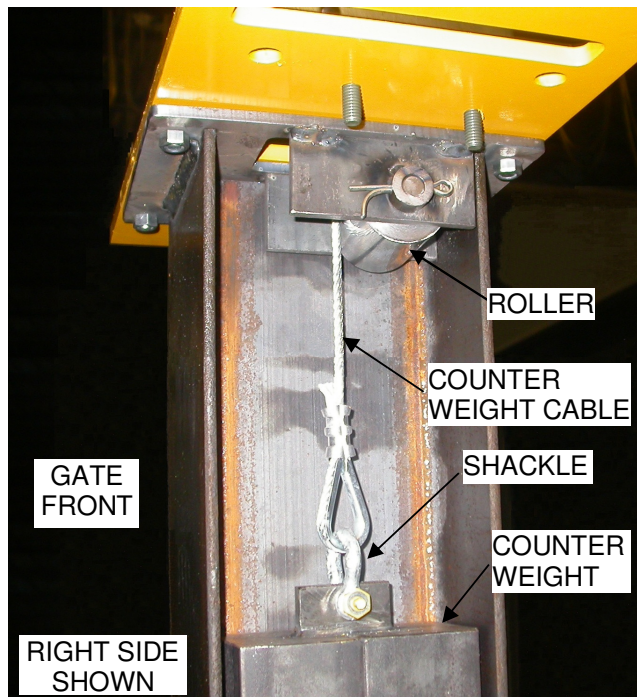
1. 1/2" support rods are still holding barrier in raised position.
2. Place a temporary spacer block, by others, (approx. 2" high) in bottom pocket of each beam. This block is used to raise the counterweight up high enough to allow the cable to be attached.



WARNING

Each counterweight weighs at least 106lbs. Exercise appropriate caution when handling so as not to pinch, crush or strain any part of the body.

3. Place a counterweight (26) so that it fits inside the column, with the cable connection bracket pointing up.
4. Hook cable stop into drum and wind cable snug until matching counterweight when wrapped over roller and centered with column.
5. Maintain tension on cable to keep aligned in the drum grooves and connect cable to weight with shackle.
6. Tilt the counterweight outwards to take up the slack in cable.
7. Remove spacer block and allow weight to swing into place.
8. Repeat Step 3 for the other side of the gate.



NOTES

- **The number of cable wraps on the drum will vary with gate height and width.**
 - **After temporary blocks are removed, the counterweight should not bottom out before barrier is to the top of its travel.**
 - **It is very important that the torque shaft not be rotated until after all four cables are connected to the gate and counterweights.**
9. Ensure free movement of the cable at both rollers (3) and shackle ends (28).
 10. Check all 4 drums (14, 15) to verify that the cables are all seated properly in the drum grooves. Correct, as necessary.
 11. Use 3/8" drive in the operator to raise the barrier gate and remove the 1/2" rods used to support the barrier prior to all cables and counterweights being installed.
 12. Re-install the two barrier end plates with 3/4" bolt provided (4 on each side).
 13. Check the barrier for level in both directions and adjust the eyebolts if necessary.
 14. Install the access counterweight cover plates (27) that were previously removed.

Underside of Barrier to Finished Floor dimensions:

GATE HEIGHT	RAISED	LOWERED
8'	98"	27"
8.5'	104"	
9'	110"	
9.5'	116"	
10'	122"	
10.5'	128"	

The mechanical install is now complete. Proceed with the electrical installation in the next section.

Electrical Installation

- a. Mount the push button station in a convenient location with an unobstructed view of the gate and the area around it.
- b. Wire the incoming power and all connections into the appropriate terminals at the gate mounted operator. See separate wiring diagram or back page of this manual.
- c. Test gate function by operating gate up and down. The gate should stop automatically at the upper travel limit.
- d. The gate has been tested at Nordock. However, the bottom limit may need recalibration for any drum/cable changes. See setup procedure below.

Smart Gate Setup Procedure

1. Turn power on.
2. If vehicle restraint is not fully released, press RELEASE button first.
3. Engage vehicle restraint first by pressing LOCK button.
4. Press BYPASS button to silence the alarm and override the restraint.
5. Press and hold "OK" button located on door control board (bottom board inside the panel). Wait until the message 'Setup Menu' appears, then release the button.
6. Push button labeled OPEN on front panel. If you observe the gate moving up (opening), wait until the gate fully opens and it stops by itself. If the gate is closing when you press OPEN button, turn the power off and interchange M1 and M2 gate motor wires.



WARNING

Please note that the STOP push button does not work during the setup procedure. You must turn the power off to stop the door. Repeat sequence from Step 1.

7. Press and hold CLOSE button until the gate reaches the lowest point. If you go to low, you can use the OPEN button to raise the gate. When you reach optimum closing position press STOP button.
8. The setup is complete.
9. Push OPEN button to open the gate fast. The gate will slow down just before reaching the fully open position and will stop when fully open. If STOP button is depressed, the gate will stop but the dock will not operate unless is fully open.
10. Push and hold CLOSE button to close gate. The gate will close at approximately half of opening speed and slow down just before closing limit. The gate must be fully closed to enable vehicle restraint.

Operation



WARNING

Before operating or maintaining the safety gate, read and follow the safety practices contained in this manual. Failure to follow the guidelines in this manual and those in effect in the workplace can result in serious bodily harm and equipment damage.

Standard Operation

A three button (“OPEN-CLOSE-STOP”) pushbutton station is supplied standard with the safety gate.

1. Hitch truck using the procedures on the control panel.
2. **TO RAISE THE GATE: Press and release** the “OPEN” pushbutton. The gate will raise and stop automatically when it reaches the upper limit. The gate may be stopped at any point in its upward travel by pressing and releasing the “STOP” pushbutton.
3. **TO LOWER THE GATE: Press and hold** the “CLOSE” pushbutton. The gate will lower until it reaches the lower limit. The gate will also stop its downward travel if the “CLOSE” pushbutton is released prior to the gate reaching its lower limit.

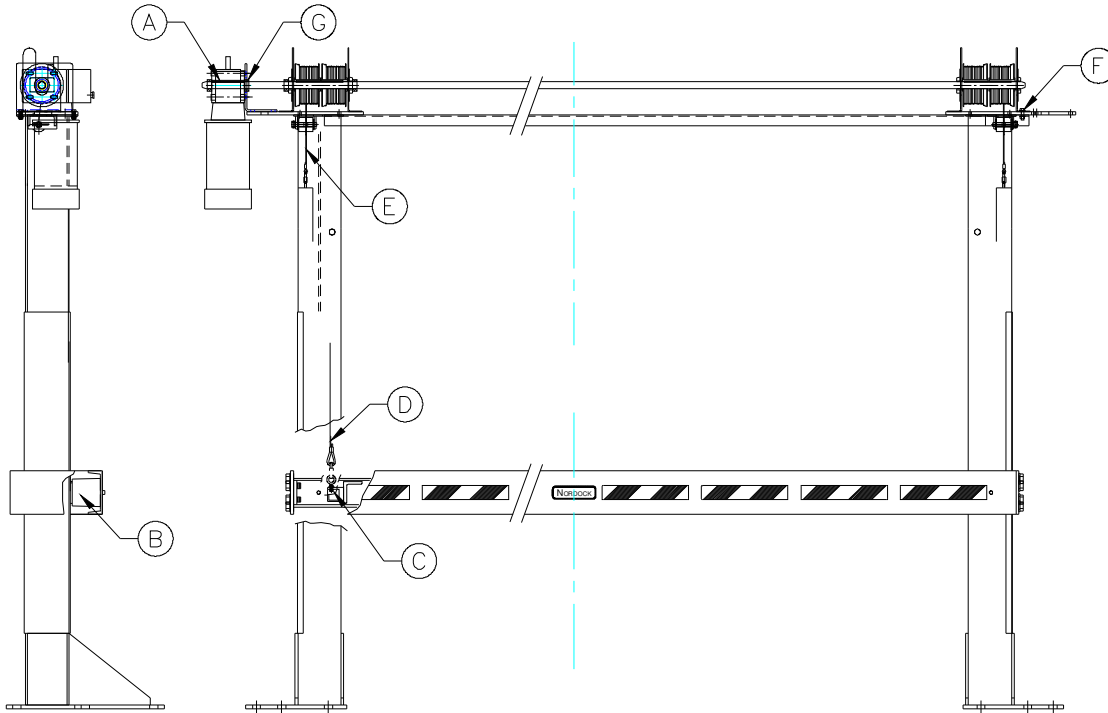
Maintenance and Lubrication



WARNING

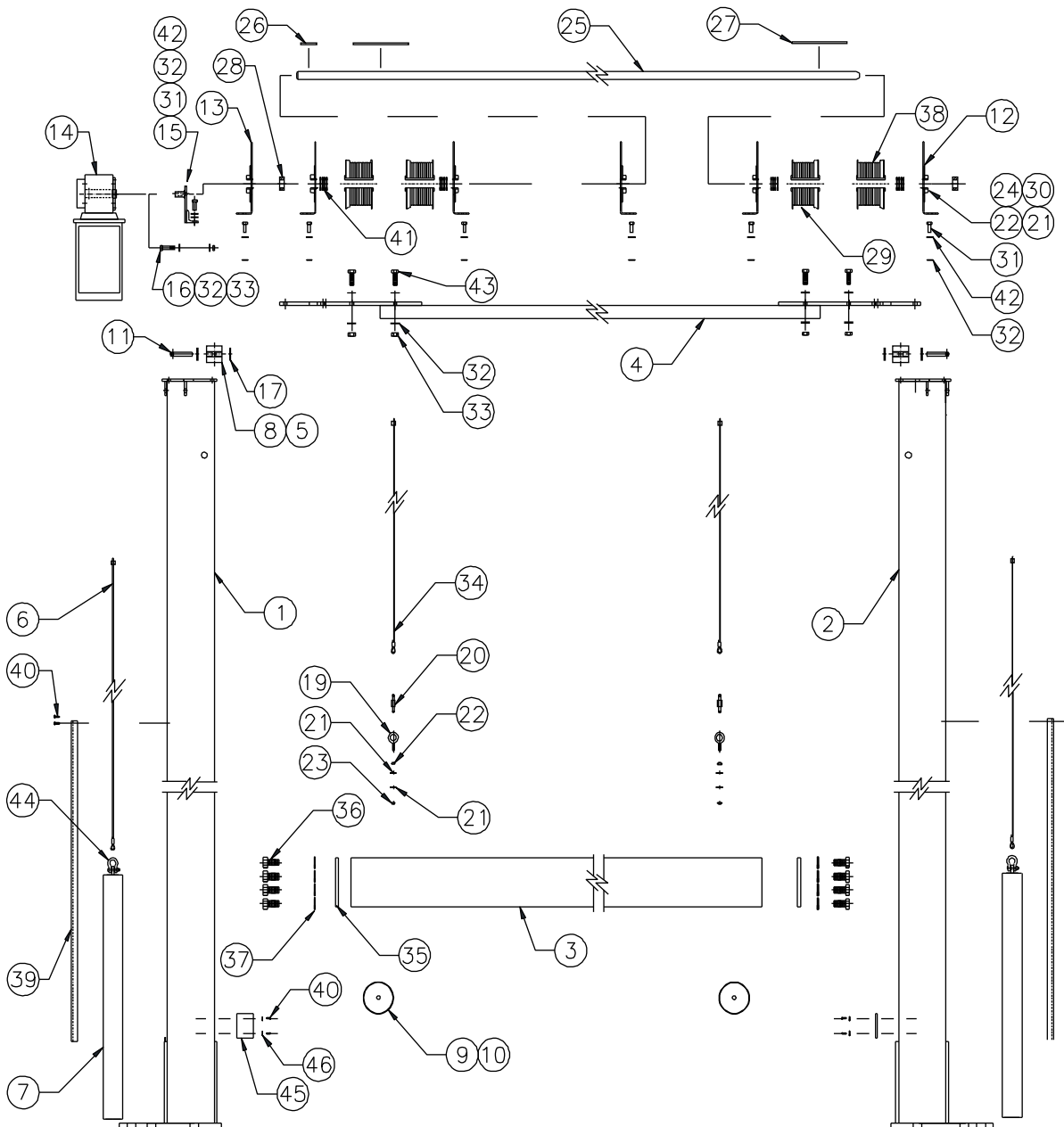
Before operating or maintaining the safety gate, read and follow the safety practices contained in this manual. Failure to follow the guidelines in this manual and those in effect in the workplace can result in serious bodily harm and equipment damage.

Note: Use only the lubricant grades specified in this manual. Failure to use the materials listed may lead to premature failure and will void any warranty claims for the safety gate.



Item	Lubrication	Adjustment	Cleaning	Inspection
- A - Door Operator	None	None	None Required	To check for notice on screen annually
- B - Shock Absorber	None	None	None Required	Every 6 months check for damaged or missing rubber
- C - Barrier Cable	None	None	None Required	Every 30 days, check both cables for fraying
- D - Shock Absorber	None	None	None Required	Every 6 months check for damaged or missing rubber
-E- Counterweight Cable	None	None	None Required	Every 30 days, check both cables for fraying
-F- All Fasteners	None	None	None Required	Every 6 months, check & tighten as required
-G- Sprockets & Collars	None	None	None Required	Every 3 months, check set screw tightness

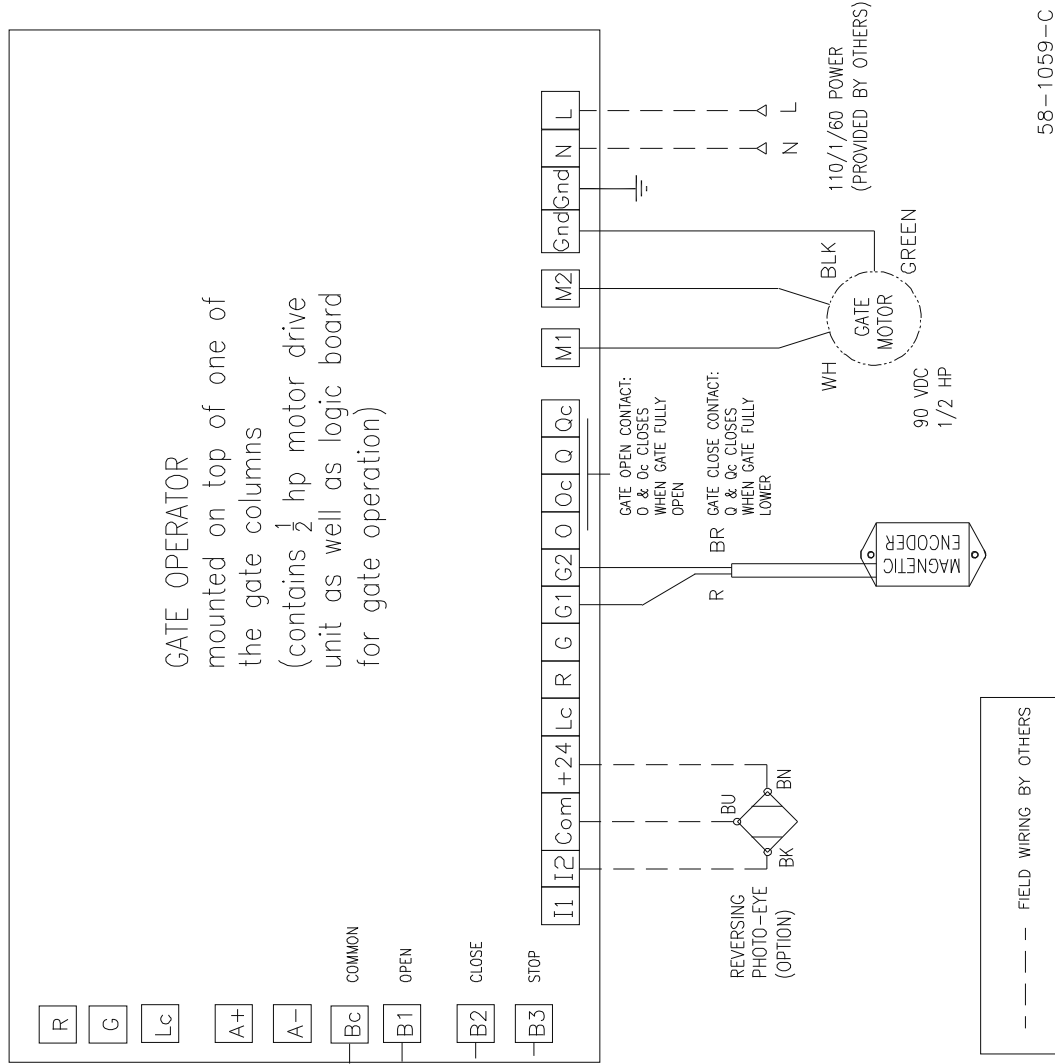
Parts List



Item	Qty.	Description / Model		P/N	Note
1	1	UPRIGHT COLUMN, LEFT, Special	10' HIGH	52-0510	
2	1	UPRIGHT COLUMN, RIGHT, Special	10' HIGH	520513	
3	1	BARRIER ASSEMBLY	10' WIDE	52-0519	
4	1	SPREADER CHANNEL, SPECIAL	10' WIDE	52-0546	
5	2	ROLLER, CABLE COUNTERWEIGHT		53-0516	
6	2	CABLE ASSEMBLY, COUNTERWEIGHT	10'(120") x 10'(120")	52-0531-10-10	
		Gate Width & Height must be specified when ordering			
7	2	COUNTERWEIGHT	120" WIDE	52-0532	
		Gate Width & Height must be specified when ordering			

Item	Qty.	Description / Model	P/N	Note
8	4	BUSHING, OILITE, 1/2"ID x 5/8"OD x 1"LG.	13-0434	
9	2	SHOCK ABSORBER	13-0743	
10	2	NUT	(c/w 9)	
11	2	PIN ASSEMBLY, COUNTERWEIGHT PULLEY	52-0526	
12	3	SHAFT PIVOT BRACKET, LEFT	13-0892-L	
13	3	SHAFT PIVOT BRACKET, RIGHT	13-0892-R	
14	1	DOOR OPERATOR c/w TORQUE ARM, 110V/1/60	13-4127	
15	1	TORQUE ARM MOUNTING BRACKET	52-0540	
16	1	BOLT, HEX, 3/8"-16 x 2-1/2", ZP	13-2864	
17	2	FLATWASHER, 1/2" STD, ZP	13-0267	
18				
19	2	EYEBOLT, 1/4"-20	13-0753	
20	2	QUICK LINK	13-0754	
21	28	FLATWASHER, 1/4" STD, ZP	13-0272	
22	14	NUT, HEX, 1/4", ZP	13-0334	
23	2	NUT, 1/4"-20, NYLOCK, ZP	13-0270	
24	12	BOLT, HEX, 1/4"-20 x 3/4", ZP	13-0888	
25	1	TORQUE SHAFT	120" WIDE	53-0565
26	1	KEY, 1/4" x 1/4" x 2-3/8"	13-0752	
27	2	KEY, 1/4" x 1/4" x 6-1/2"	13-0752	
28	2	COLLAR	13-0751	
29	2	CABLE DRUM, LEFT	13-0889	
30	6	SHAFT PIVOT BEARING	13-0891	
31	16	BOLT, HEX, 3/8" x 1", ZP	13-0887	
32	29	FLATWASHER, 3/8", SAE, ZP	13-0203	
33	11	NUT, 3/8", NYLOCK, ZP	13-0707	
34	2	CABLE ASSEMBLY, BARRIER	10' HIGH	52-0530-10
		Gate Height must be specified when ordering		
35	2	GATE END PLATE, BARRIER	53-0536	
36	8	BOLT, HEX, 3/4"-10 x 1-1/2", ZP	13-0648	
37	8	FLATWASHER, 3/4", SAE, ZP	13-0649	
38	2	CABLE DRUM, RIGHT	13-0890	
39	2	COUNTERWEIGHT ACCESS PANEL	10' HIGH	53-0510
40	8	MACHINE SCREW, 10-24 x 1/2", ZP	13-0124	
41	A/R	DRUM SPACER	13-2094	
42	14	LOCKWASHER, 3/8" PLATED	13-1061	
43	16	BOLT, HEX, 3/8" x 1-1/2", ZP	13-0888	
44	2	SHACKLE, 1/4" (counterweight to cable)	13-0540	
45	1	PHOTO EYE, REFLEX c/w BRACKET, REFLECTOR	13-4144	
46	4	WASHER, LOCK, #10	13-0948	
47	10	ANCHOR, 1" x 6", Wedge Type	13-1733	

Electrical Schematic



58-1059-C

SET UP SEQUENCE:

OPEN THE OPERATOR'S COVER.

PRESS AND HOLD "ESC" BUTTON ON CIRCUIT BOARD UNTIL THE SCREEN SHOWS "LEFT" OR "RIGHT" MESSAGE ON SCREEN.

CONFIRM THE OPERATOR IS SET TO "LEFT". IF THE OPERATOR IS SET TO "RIGHT", USE ↓ OR ↑ BUTTON ON CIRCUIT BOARD TO SET OPERATOR POSITION TO "LEFT".

PRESS "ESC" BUTTON AGAIN TO EXIST POSITION SETUP.

PRESS AND HOLD "OK" BUTTON ON CIRCUIT BOARD UNTIL THE SCREEN SHOWS "SETUP MODE READY".

PRESS AND RELEASE "OPEN" BUTTON ON PUSHBUTTON STATION TO RAISE BARRIER.

WHEN THE BARRIER STOPS RISING, PRESS AND HOLD THE "CLOSE" BUTTON TO LOWER THE BARRIER.

WHEN THE BARRIER REACH DESIRED LOWER POSITION, RELEASE "CLOSE" BUTTON AND PRESS "STOP" BUTTON TO SET LOWER LIMIT POSITION.

GATE IS READY.