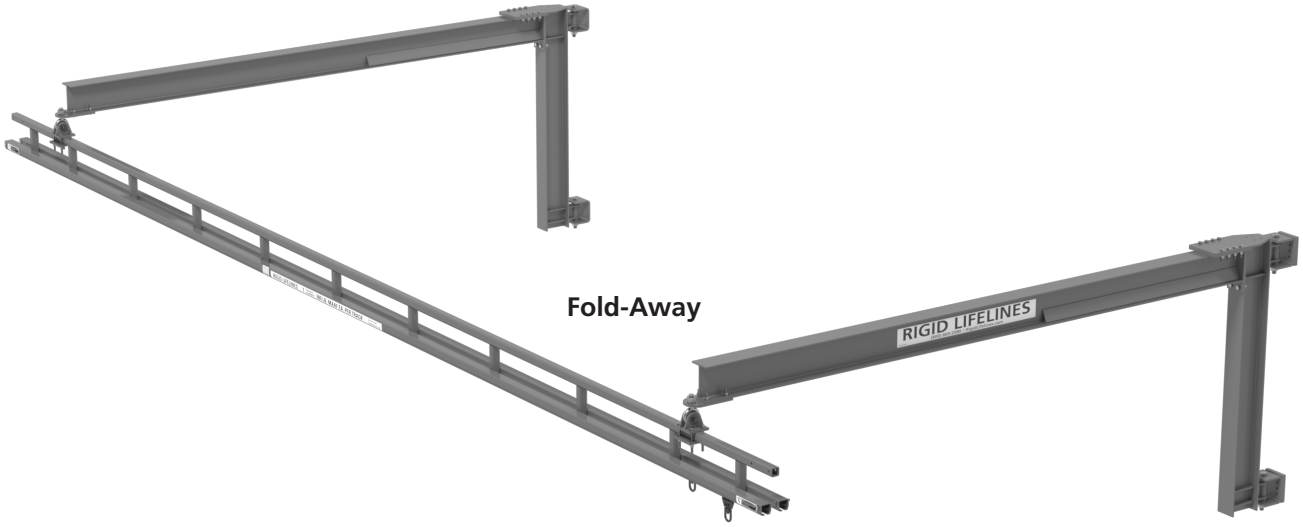
RIGID LIFELINES
Promise to Perform Industries, Inc.

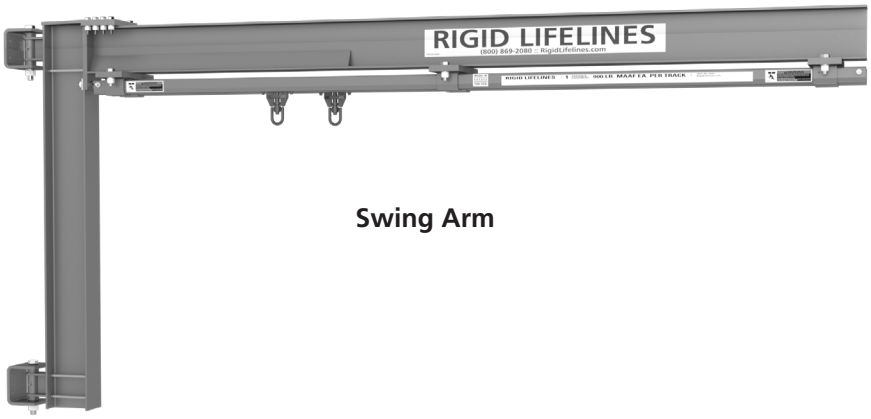
COLUMN-MOUNTED FOLD-AWAY AND SWING ARM

ANCHOR TRACK™ SYSTEMS

Assembly and Operation Instruction Manual



Fold-Away



Swing Arm

ANCHOR TRACK

ISO 9001:2015 Registered

Manual 103-0047

Effective Date: February 2021

WARNING

RIGID LIFELINES CONDITIONS OF USE AND WARNING STATEMENT

1. Read, understand, and follow the manual, assembly drawings, and warnings provided with your system **before** beginning installation.
2. This manual, and any other instructions, must be provided to the users of this equipment. The user must understand the equipment's proper use and limitations.
3. A fall event can result in serious injury or death. This equipment, when used properly, reduces the chances of those outcomes.
4. Always perform a hazard analysis **before use** that will identify impact hazards, swing hazards, or any other hazards that may exist. Address and correct all hazards **before use**.
5. Always have a written rescue plan that defines who will rescue a fallen worker, what equipment will be used, and optimum rescue response time. If the same system will be used for rescue, a minimum of a two-man system must be specified.
6. Follow all current requirements of ANSI Z359 (or CSA Z259 in Canada).
7. Each component and system must be employed and maintained in accordance with all OSHA and ANSI standards.
8. Per OSHA and ANSI (or CSA Z259 in Canada) requirements, designate a competent person who can fulfill obligations of all regulations.
9. Note the maximum number of users and weight capacities are listed on a label on the system. Exceeding the capacities listed on this label can result in serious injury or death.
10. Always check for overhead hazards, such as power lines, trees, overhead structures, or walls, before using or moving system.
11. Any component replacement, addition, or change to any portion of the system must be evaluated by a Qualified Person as defined by OSHA standards.
12. Never use this system for material handling.
13. Never use the system with scaffolding.
14. Never use the system alone without a monitor. Use the buddy system when using fall protection. The monitor, or "buddy," does not need to be attached to the system, but just nearby supervising.
15. Consult with a qualified person for minimum fitness requirements for workers. Determination of minimum fitness levels of workers prior to use of system is by others.
16. For mobile systems—It is the responsibility of the user and their management's Competent Person to determine that the system's base is level, the masts are plumb, and that the entire, leveled system is stable before every use.
17. For movable track systems—Always use the system in work spaces that allow you to move the system's runway as close as possible to the center of the work area.
18. **Before each use**, inspect the system for bent, broken, cracked, or missing components.
19. A competent person must thoroughly inspect the system **annually** and **after each fall event.**
20. There should never be any type of loading past the end stops for any reason.
21. When connecting track sections on runway systems, track splice and truss splice plates are required. For trussed track, splice joint centers must be within maximum 48 inches of the hanger support centers unless otherwise specified. For plain track, splice track centers must be within maximum 18 inches of the hanger support centers unless otherwise specified.
22. Systems with flush clamp hangers do not require sway bracing. However, all systems mounted to the ceiling must be laterally and longitudinally braced with bracing provided by others.

WARNING

RIGID LIFELINES CONDITIONS OF USE AND WARNING STATEMENT

23. If supplied, all drive systems are chain driven, and as a result, will experience some backlash in the drive assembly. Although backlash cannot be fully eliminated, it can be reduced by tightening the drive chain. Torque limiters, if supplied, require special attention. Most drive issues result from improper torque limiter adjustment or installation.
24. It is the customer's responsibility to confirm that the system and components will work in and are acceptable for their specific application and environment.
25. For foundation-mounted systems, bracing is not required for non-seismic applications. However, if any sway is perceived as undesirable, lateral bracing can be installed to the system by others. To achieve desired rigidity for a specific application, Rigid Lifelines® recommends consulting a professional engineer in your area to satisfy all codes and ordinances. For foundation-mounted systems, chemical anchor bolts supplied by others are required and must provide approximately 7000-pound pull-out force. More accurate pull-out forces are available upon request.
26. Engineering of any attachment points must be done by others.
27. Component appearances and dimensions shown are approximate and subject to change without notice. All catalog dimensions are developed using standard components for the spans and capacities. Substitution of optional trolleys or other components will affect certain dimensions.
28. All Rigid Lifelines Anchor Track™ Systems meet or exceed OSHA and ANSI requirements.
29. Never load the track at an angle greater than specified in the system's user manual.
30. Never use the system with the attachment point below the D-Ring of the harness.
31. Only the following self-retracting lanyard (SRL) design specifications are acceptable for use on Rigid Lifelines Anchor Track Systems:
    - **a)** 900-pound maximum average arresting force (MAAF)
    - **b)** 4.5 feet-per-second lock up speed
    - **c)** Disk or drum braking mechanism
    - **d)** Wire rope SRL's can be used for indoor or outdoor applications
    - **e)** Fabric or web SRL's can be used only for indoor applications
32. The following energy-absorbing lanyards are **not** acceptable: rip-stitch packs, shock packs, or stretchable energy.
33. Choose the shortest length SRL that will allow the workers to perform their job function. The shortest length SRL will reduce total fall distance by reducing "cable cinching" on the internal SRL pulley. Fabric lanyards stretch under load. The longer the lanyard, the longer the stretch.
34. Never use metallic cables or metallic SRL's around electrical power sources.
35. Only an ANSI (or CSA in Canada) full-body harness is acceptable for use on Rigid Lifelines Anchor Track Systems.
36. Never use body belts on this system.
37. Never add additional carabiners, D-Rings, shackles, or connecting hardware to this system.
38. On Traveling Bridge Anchor Track Systems, always position the bridge(s) directly overhead of worker(s) at all times.
39. If a boom is provided, never apply a lateral load at the boom tip.
40. Never deviate from the above unless you have written permission and authorization from Rigid Lifelines.

WARNING

Follow the Inspection Checklists in this manual: review the first checklist before each use and the second checklist for after a fall event and annual inspections.

The systems described in this manual are intended for indoor use. Systems used for outdoor service require special consideration.

It is the customer's responsibility to ensure that building columns or walls are adequate to support the system.

NEVER hang a system from existing building structure without first consulting a qualified architect or engineer to determine if the structure fan safely support the loads imposed on the structure. Failure to check this item can result in injury or death.

The installer is responsible for supplying the correct size, length, number, and type of bolts required to attach the system wall brackets to the structure. Rigid Lifelines® recommends that the bolts be *ASTM A325* grade.

FOR FOLD-AWAY SYSTEMS, NEVER EXCEED 30 DEGREES OFF-PLUMB (OFF-CENTER) LOADING.

FOR SWING ARM SYSTEMS, NO OFF-PLUMB LOADING IS ALLOWED. WORKERS MUST REMAIN DIRECTLY UNDERNEATH THE TRACK.

In the design of the Fold-Away and Swing Arm systems, deflection will occur due to the self weight of the system, the structure the systems are mounted to, and forces during a fall event. These factors combined could mean that the fallen worker or workers could glide slowly down the track. Although Rigid Lifelines does design the systems to accommodate for deflection, Rigid Lifelines recommends that the installer adjust the column weldment tip equal to the elevation of *Length in inches/300* above the column weldment center. Shims can be used between the wall columns and wall brackets to make this adjustment. For example, *Length in inches/300* for a 20-foot span is equal to (12X20)/300=0.8 inches, or approximately 3/4 inches. So for a 20-foot span, the column weldment tip must be approximately 3/4 inches higher than the inner most part of the column weldment.

WARNING

This system must be used with an ANSI-rated self-retracting lanyard (SRL).

If the system is used outdoors, it is highly recommended that a steel cable SRL with heavy-duty housing be used for improved durability against UV radiation and moisture.

A web strap ANSI-rated SRL may be acceptable for use as long as a Competent Person has evaluated the situation and determined that there are no factors present that can have an immediate negative impact on the integrity of the SRL's webbing material AND that the Competent Person inspects the condition of the SRL's webbing and housing prior to each use.

WARNING

Completely retracting the SRL after each use (e.g., using a retrieval tagline) is essential: otherwise, the SRL's internal spring remains under tension, and it quickly loses its ability to arrest a freefall properly.

Retrieval taglines must never be used as an anchorage; doing so could result in serious injury or death.

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SYSTEM APPLICATIONS

The Column-Mounted Fold-Away and Swing Arm Anchor Track™ Systems are used for fall protection applications. These fall protection systems are labeled with maximum number of users and maximum arresting force; follow all limitations as noted on system label. Each user must attach to these systems using a personal fall arrest system.

STANDARDS AND COMPLIANCE

Please refer to local, state, and federal (OSHA) requirements governing occupational safety for additional information regarding personal fall arrest systems. The Column-Mounted Fold-Away and Swing Arm Anchor Track Systems meet or exceed the requirements set forth in OSHA 1910, OSHA 1926, and ANSI Z359.

REQUIRED TRAINING

These systems are intended to be used by people who are trained in their correct application and use. It is the responsibility of the users and the users' management to assure that they are familiar with these instructions and are trained in the correct use and care of this equipment. Authorized users must also be aware of the operating characteristics, application limits, and the consequences of improper use, which can result in serious injury or death.

Every application of fall protection must be part of a comprehensive managed fall protection program. Each program must include, but is not limited to:

- Hazard analysis
- Authorized person training
- Competent person implementation
- Rescue procedures
- Rescue training

The above list is not a comprehensive list. Specific applications may need to include additional items, such as administrative controls or engineered controls. A Qualified Fall Protection Engineer or OSHA Qualified Person should review the comprehensive managed fall protection program to ensure that it is adequate for your specific application. For more information on how to set up a proper Fall Protection Program within your facility, follow ANSI Z359.2 *Minimum Requirements for a Comprehensive Managed Fall Protection Program*, which is available at: www.assp.org.

ASSEMBLY INSTRUCTIONS

1. Equipment Needed for Assembly

a) This manual

b) Applicable safety equipment for workers' use during assembly, such as hard hats, safety shoes, etc.

c) Telescoping fork truck or crane (minimum lifting height: 30 feet; minimum capacity: 2,000 pounds)

d) Man lift/cherry picker (minimum height: 30 feet)

e) Measuring tape

f) Torque wrench

g) Lifting straps

h) Plumb bob

i) Two six-inch by six-inch (or larger) wood blocks

j) Long carpenter's level

k) Wrench/Sockets sizes: 3/4 inch, 15/16 inch, 1-1/8 inch, 1-1/2 inch, and 1-7/8 inch

l) A spacious, level area for assembly (e.g., parking lot)

m) A way to mark hanger locations, such as a permanent marker

n) *FA-FA-ASSEMBLY,* hereafter referred to as *Fold-Away Assembly Drawing*, will be included as a separate document.

o) *FA-SWING-ARM-ASSEMBLY,* hereafter referred to as *Swing Arm Assembly Drawing*, will be included as a separate document.

p) *FA-FA-SWING-ARM-LPD*, hereafter referred to as *Fold-Away and Swing Arm Label Placement Drawing*, will be included as a separate document.

q) The Anchor Trolley™ User Instruction Manual (Manual 103-0054), which is packaged with the Anchor Trolley, will be included as a separate document.

2. Inventory

a) Open all bundles and confirm that all components are accounted for: see *Building Materials Description* located in the top right corner of the Fold-Away or Swing Arm Assembly Drawing. Note that the quantity of components in an assembly are multiplied by the number of the assemblies.

b) Check for damage to components that may have occurred during shipping.

3. Attach the Boom Weldments to the Column Weldments

Refer to Fold-Away or Swing Arm Assembly Drawing for Steps A Through G

a) Per **Detail "B,"** align the holes in the top of the boom weldment (2) with the holes in the top of the column weldment (1).

b) Per **Detail "B,"** insert eight bolts (C1) through the aligned holes in the boom weldment (2) and the column weldment (1).

c) Per **Detail "B,"** securely tighten eight split lock washers (C3) and nuts (C2) to the bolts (C1).

d) Per **Detail "B,"** align the holes in the bottom of the boom weldment (2) with the holes in the side of the column weldment (1).

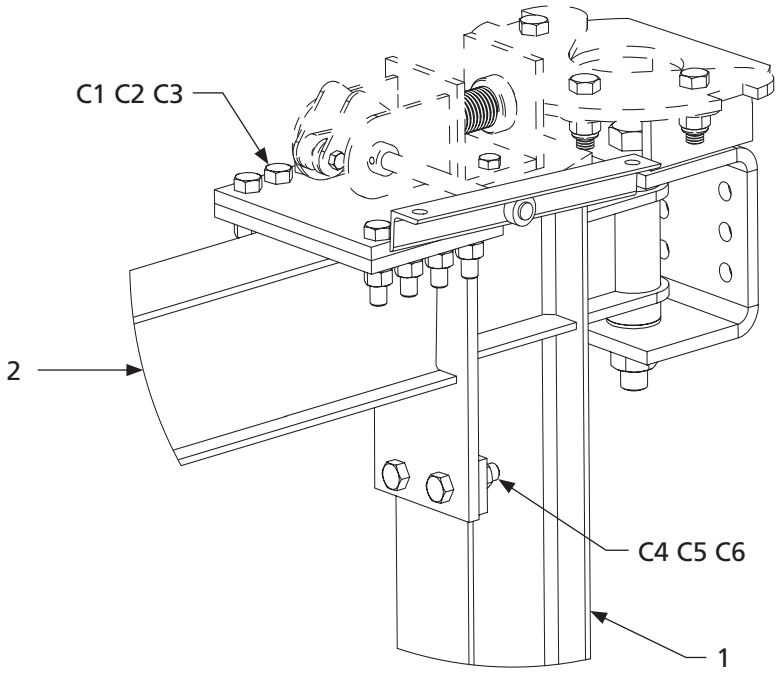
e) Per **Detail "B,"** insert two bolts (C4) through the aligned holes in the boom weldment (2) and the column weldment (1).

f) Per **Detail "B,"** securely tighten two split lock washers (C6) and nuts (C5) to the bolts (C4).

NOTE: For hardware dimensions of parts C1-C6, see the "**Boom Weldment to Column Weldment Hardware**" table at the bottom left of the Fold-Away or Swing Arm Assembly Drawing.

g) Repeat steps **a)** through **f)** to attach the remaining boom weldments (2 in *Building Materials Description*) to the remaining column weldments (1 in *Building Materials Description*).

Detail "B" (Boom Weldments and Boom Lock to Column Weldments)



Item	Description
1	Column Weldment
2	Boom Weldment
C1	Hex Head Bolt
C2	Nut, Hex
C3	Split Lock Washer
C4	Hex Head Bolt
C5	Nut, Hex
C6	Split Lock Washer

4. If Provided, Attach the Boom Lock to the Column Weldment

Refer to Fold-Away or Swing Arm Assembly Drawing for Steps A Through K

NOTE: If you ordered a motorized system, skip this step (**4. Attach the Boom Lock to the Column Weldment**) and go to pages 15-17 for installation instructions of the motorized option. If you did not order a motorized system, only one arm (a column weldment [1 in *Building Materials Description*] and a boom weldment [2 in *Building Materials Description*] bolted together) gets a boom lock (B in *Building Materials Description*). Use the steps below to attach the boom lock (B in *Building Materials Description*) to the column weldment (1 in *Building Materials Description*).

a) Per **Detail "B,"** align the holes in the boom lock weldment (B5 or B9) with the column weldment (1).

b) Per **Detail "B,"** align the washer (B9 or B13) with the bottom hole of the boom lock weldment (B5 or B9).

c) Per **Detail "B,"** insert a bolt (B6 or B10) through the aligned holes in the boom lock weldment (B9), column weldment (1), and washer (B9 or B13).

d) Per **Detail "B,"** securely tighten a split lock washer (B8 or B12) and a nut (B7 or B11) to the bolt (B6 or B10).

e) Per **Detail "B,"** align the holes in the boom lock assembly (B1) with the front holes in the column weldment (1) closest to the boom weldment (2).

f) Per **Detail "B,"** insert two bolts (B2) through the aligned holes in the boom lock assembly (B1) and the column weldment (1).

g) Per **Detail "B,"** securely tighten two split lock washers (B4) and two nuts (B3) to the bolts (B2).

h) Install the rope onto the angle of the boom lock assembly (B1 *Building Materials Description).*

NOTE: Steps **i)** through **k)** are for a **Fold-Away system only.** See the note at the bottom of this page.

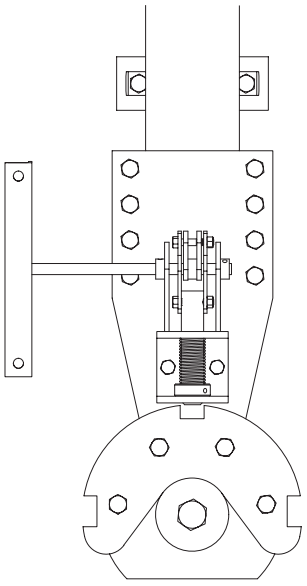
i) Per **Detail "B,"** align the holes in the plate (B5) with the holes in the boom lock weldment (B9). Ensure that the open end of the plate (B5) is facing away from the boom lock assembly (B1).

j) Per **Detail "B,"** insert four bolts (B6) through the aligned holes in the plate (B5) and the boom lock weldment (B9).

k) Per **Detail "B,"** securely tighten four flat washers (B7) and locknuts (B8) to the bolts (B6).

NOTE: The notched locking plate (B5), bolts (B6), flat washers (B7), and locknuts (B8) are used for Fold-Away systems only. See Detail "B" on the Swing Arm Assembly Drawing for an illustration of the Swing Arm boom lock.

Boom Lock Comparison

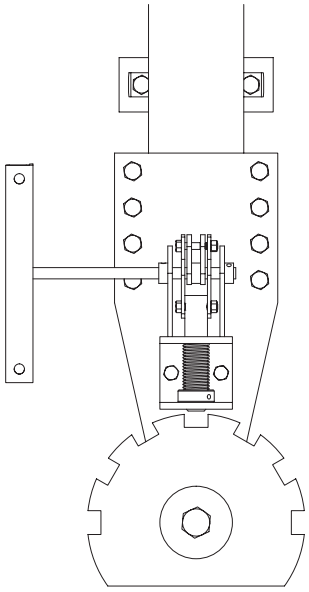


Fold-Away

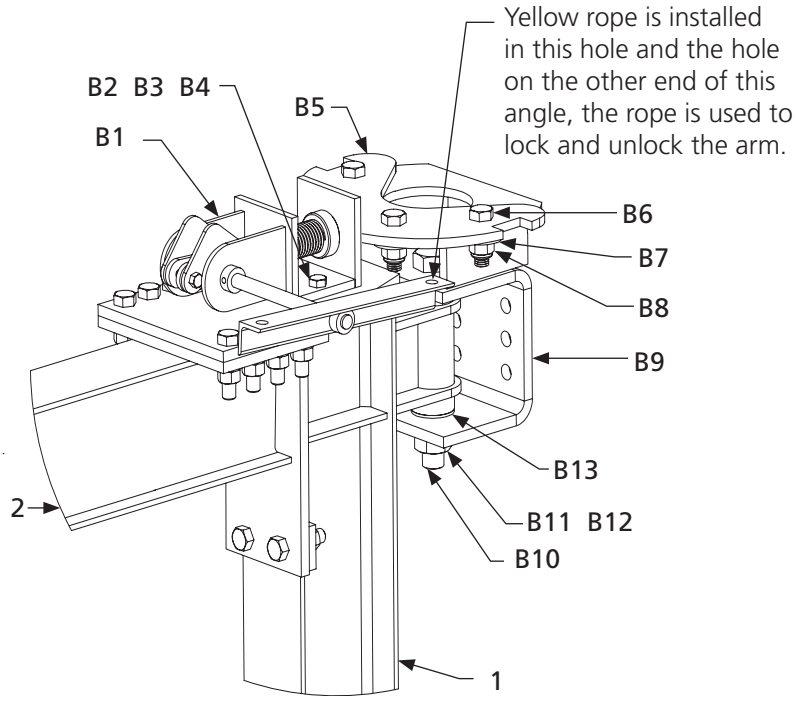
(Three Notches)

Swing Arm

(Seven Notches)



Detail “B” (Boom Weldments and Boom Lock to Column Weldments for Fold-Away)



Item	Description
1	Column Weldment
2	Boom Weldment
B1	Boom Lock Assembly
B2	1/2-Inch by 2-Inch Hex Head Bolt
B3	1/2-Inch Hex Nut
B4	1/2-Inch Split Lock Washer
B5	Notched Locking Plate
B6	5/8-Inch by 2-Inch Hex Head Bolt
B7	5/8-Inch Flat Washer
B8	5/8-Inch Hex Locknut
B9	Boom Lock Weldment
B10	1-Inch by 9-Inch Hex Head Bolt
B11	1-Inch Hex Nut
B12	1-Inch Split Lock Washer
B13	2-Inch OD Thrust Washer

5. Attach the Arms to the Wall Columns

Refer to Fold-Away or Swing Arm Assembly Drawing for Steps A Through G

NOTE: If you ordered a motorized system, a motorized arm (a column weldment [1 in *Building Materials Description*] and a boom weldment [2 in *Building Materials Description*] bolted together) must go on every other wall column. If you did not order a motorized system, it does not matter where the arm with the boom lock goes. However, somewhere near the middle is preferred.

a) Using the images on pages 12-13, mark the hole locations on the wall column.

b) Drill holes at the marked locations. See pages 12-13 for hole sizes.

NOTE: If you plan on using mechanical stops or manual rotation stops, install them now. See pages 16-17 for more information and installation instructions. Longer wall column mounting bolts may be required because of the additional plate(s).

c) Using a crane and lifting straps, lift the arm to the drilled holes in the wall column.

d) Use a man lift or cherry picker to reach the arm.

e) Using bolts supplied by the installer, bolt the wall brackets (A1) to the wall column. If needed or if the system is motorized, use wall bracket shims (22 on page 15) to keep the arms level to the wall columns.

f) Using a plumb bob, check the alignment of the bolts in two planes by selecting a bolt from the top wall bracket (A1) and measuring to the same bolt on the lower wall bracket (A1). The alignment must be within 1/16 inches from top to bottom.

g) Repeat steps **a)** through **f)** to attach the remaining arms to the wall columns.

6. Attaching the Track to the Boom Weldments (Fold-Away Only)

Refer to Fold-Away Assembly Drawing for Steps A Through U

a) Using a measuring tape and a permanent marker, measure and mark 18 inches in from each end of the track (D in *Building Materials Description*) for standard overhang. These locations are where the hanger kits (F in *Building Materials Description*) should be installed on the end boom weldments (2 in *Building Materials Description*).

NOTE: 18-inch overhang is standard. Refer to your Final Fabrication Drawing for correct overhang lengths.

b) Per **Detail "E,"** insert four bolts (F9) through four flat washers (F10).

c) Per **Detail "E,"** place a tube bracket weldment (F7) on the marked spot on the track (D).

d) Per **Detail "E,"** place a tube bracket plate (F8) directly underneath the tube bracket weldment (F7) and underneath the top truss of the track (D).

e) Per **Detail "E,"** align the holes in the tube bracket weldment (F7) with the holes in the tube bracket plate (F8).

f) Per **Detail "E,"** insert the bolts (F9) and flat washers (F10) through the tube bracket plate (F8) so that the flat washers (F10) are between the bolt head and the bottom of the tube bracket plate (F8).

g) Per **Detail "E,"** secure tighten flat washers (F10), split lock washers (F2), and locknuts (F3) to the bolts (F9) so that the split lock washers (F2) are between the flat washers (F10) and locknuts (F3).

NOTE: The Fold-Away plate (G1), eye hook (G2), thrust washer (G3), nut (G4), and roll pin (G5) should come assembled as one piece and labeled as part number *8-0062*. Verify roll pin (G5) is installed in every pivot assembly.

h) Per **Detail "E,"** align the holes in the eye hook (G2) with the holes in the tube bracket weldment (F7).

i) Per **Detail "E,"** insert the load pin (F4) through the aligned holes in the eye hook (G2) and the tube bracket weldment (F7).

j) Per **Detail "E,"** place a washer (F5) on the end of the load pin (F4) with holes for the cotter pin (F6).

k) Per **Detail "E,"** insert the cotter pin (F6) through the holes on the end of the load pin (F4).

l) Repeat steps **b)** through **k)** to attach another hanger kit (F in *Building Materials Description*) to the marked spot on the other end of the track (D in *Building Materials Description*).

m) Using a crane and lifting straps, lift the track (D in *Building Materials Description*) to an end arm (a column weldment [1 in *Building Materials Description*] and a boom weldment [2 in *Building Materials Description*] bolted together).

n) Use a man lift or cherry picker to reach the track (D in *Building Materials Description*) and end arm.

o) Per **Detail "E,"** position the track (D in *Building Materials Description*) and attached components (F2-G5) so that the Fold-Away plate (G1) is directly underneath the boom weldment (2).

NOTE: Track splice joints (E1 in *Building Materials Description*) must be within 48 inches of a boom weldment (2).

p) Per **Detail "E,"** align the holes in the Fold-Away plate (G1) with the holes in the boom weldment (2).

q) Per **Detail "E,"** insert four bolts (F1) through the aligned holes in the Fold-Away plate (G1) and boom weldment (2).

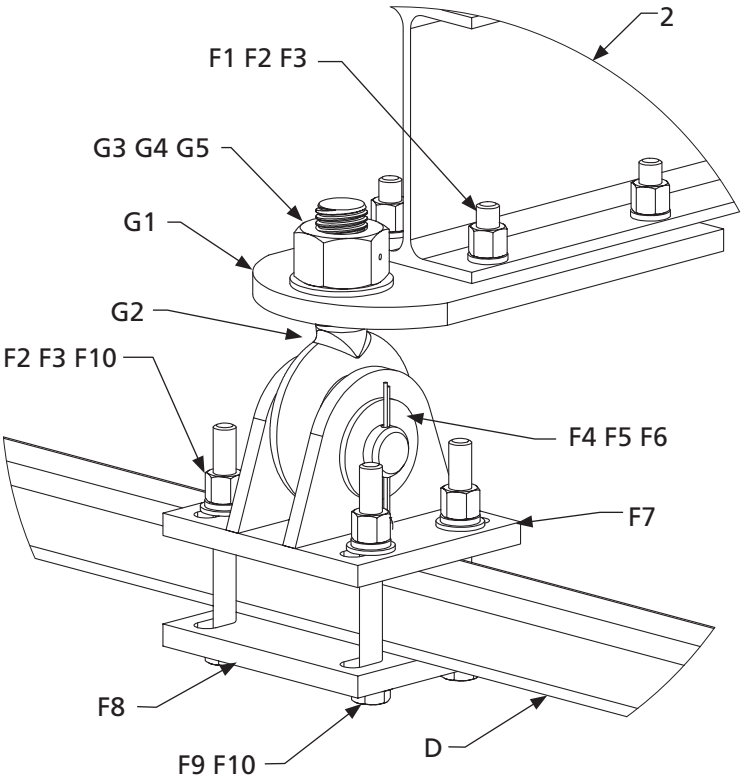
r) Per **Detail "E,"** securely tighten split lock washers (F2) and locknuts (F3) to the bolts (F1) so that the split lock washers (F2) are between the boom weldment (2) and locknuts (F3).

s) Repeat steps **m)** through **r)** to attach the track (D in *Building Materials Description*) to the other end arm (a column weldment [1 in *Building Materials Description*] and a boom weldment [2 in *Building Materials Description*] bolted together).

t) Now that the track (D in *Building Materials Description*) is attached to the end arms, repeat steps **b)** through **k)** and **m)** through **r)** to attach the track (D in *Building Materials Description*) to the remaining arms.

u) After the track (D in *Building Materials Description*) has been securely tightened to all arms, torque all locknuts (F3 in *Building Materials Description*) to 51 foot-pounds.

Detail "E" (Track to Boom Weldments)



Item	Description
2	Boom Weldment
D	Track
F1	1/2-Inch by 2-1/2-Inch Hex Head Bolt
F2	1/2-Inch Split Lock Washer
F3	1/2-Inch Hex Locknut
F4	Load Pin
F5	1-1/8-Inch Washer
F6	5/32-Inch by 3-Inch Cotter Pin
F7	Tube Bracket Weldment
F8	Tube Bracket Plate
F9	1/2-Inch by 5-1/2-Inch Hex Head Bolt
F10	1/2-Inch Flat Washer
G1	Fold-Away Plate
G2	Eye Hook
G3	1-1/8-Inch Washer
G4	1-1/8-Inch Hex Nut Drilled for Pin
G5	1/8-Inch by 1-3/4-Inch Roll Pin

7. If Provided, Attaching the Track Splice to the Track Sections

Refer to Fold-Away or Swing Arm Assembly Drawing for Steps A Through I

a) Track splices are only required for systems containing more than two arms (a column weldment [1 in *Building Materials Description*] and a boom weldment [2 in *Building Materials Description*] bolted together). If you purchased a system with more than two arms, follow the steps below to attach the track splice to the track sections. If your system doesn't require a track splice, proceed to step **8. Final Assembly.**

b) Per **Figure 1**, the track splice joint (E1) comes assembled using a sleeve with a total of eight set screws threaded into the top and both sides.

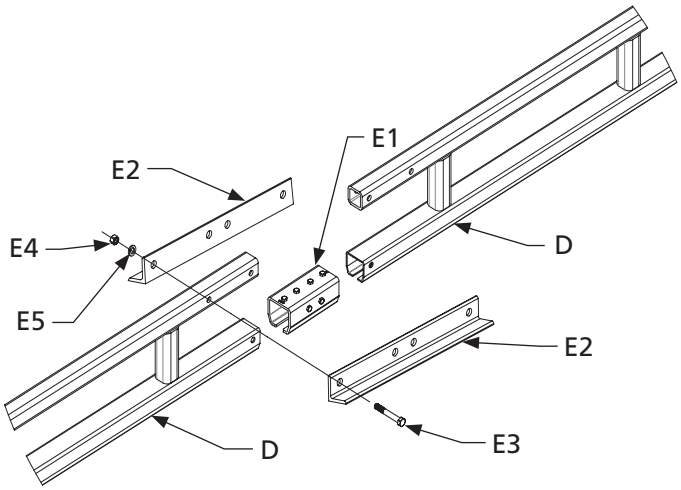
c) Per **Figure 1**, slide the track splice joint (E1) over the end of the first track section, then butt the second track section against the first. Center the track splice joint (E1) over both track section ends.

d) Per **Figure 1**, **hand tighten** the top two center set screws to push the track sections against the base of the track splice joint (E1) until both track section bottom surfaces are aligned. Adjust both sets of side set screws so that the track slots are aligned and there is a smooth transition from one track section to the other.

e) Per **Figure 1**, after you properly align the track sections (see **Figure 2** on page 9), tighten the top set screws first before tightening the side set screws. Do not overtighten set screws.

f) Per **Figure 1**, bolt the track splice angles (E2) to the top of the track sections on both sides using split lock washers (E5), locknuts (E4), and bolts (E3). Torque the locknuts (E4) to 51 foot-pounds.

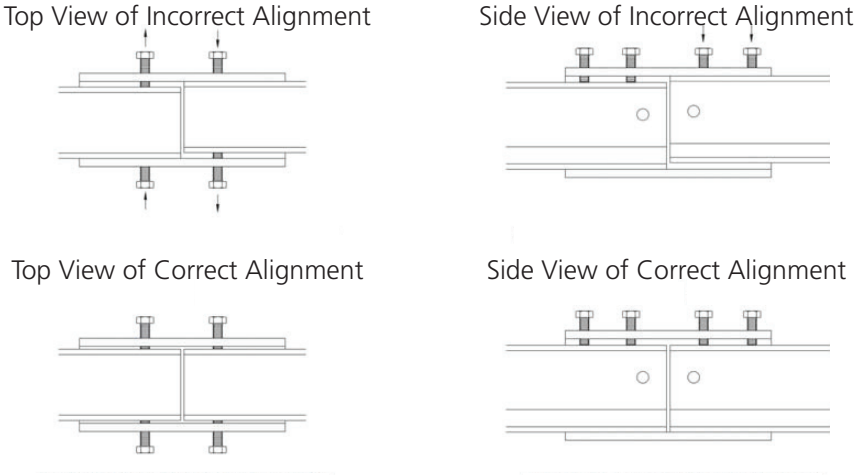
Figure 1



Item	Description
D	Track Section
E1	Track Splice Joint
E2	Track Splice Angle
E3	1/2-Inch by 4-Inch Hex Head Bolt
E4	1/2-Inch Hex Locknut
E5	Split Lock Washer

Per **Figure 2**, the track splice joint must be properly aligned with the track sections.

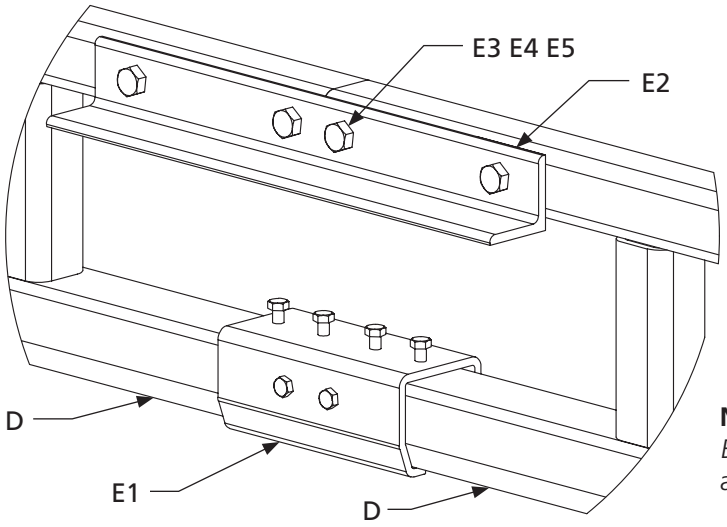
Figure 2



g) If you ordered a multiple track system, repeat steps **b)** through **g)** to attach the remaining track splice(s) to the track sections.

h) Refer to **Detail "D"** for an illustration of the properly attached track splice to the track sections.

Detail "D" (Track Splice to Track Sections)



Item	Description
D	Track Section
E1	Track Splice Joint
E2	Track Splice Angle
E3	1/2-Inch by 4-Inch Hex Head Bolt
E4	1/2-Inch Hex Locknut
E5	Split Lock Washer

NOTE: For a dual track system, the track splice kit (E in *Building Materials Description*) is part number 8-0068-DST and doesn't include a split lock washer (E5).

FINAL ASSEMBLY

Refer to Fold-Away or Swing Arm Assembly Drawing for Steps A Through G

a) Ensure that the track (D in *Building Materials Description*) is secured properly to the boom weldments (2 in *Building Materials Description*) and that the column weldments (1 in *Building Materials Description*) are securely fastened to the wall column.

b) Confirm that all of the system's nuts are torqued to the required specifications below prior to removing support rigging (your telescoping fork truck or crane) from any component.

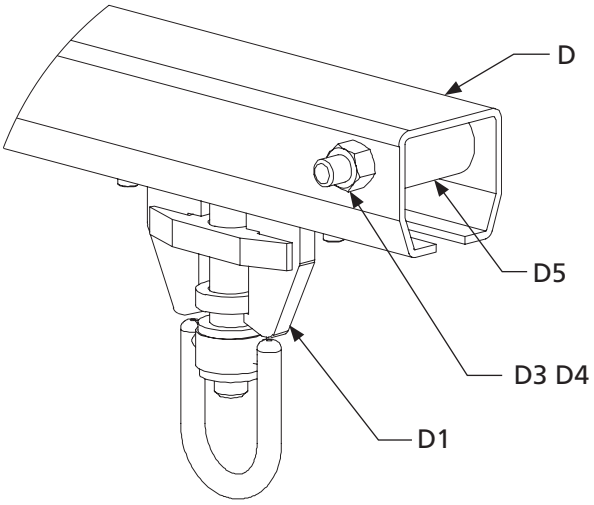
Bolt Diameter	Hex Nut Torque	Minimum Hex Locknut Torque
1/2 Inch	78 Foot-Pounds	51 Foot-Pounds
5/8 Inch	154 Foot-Pounds	93 Foot-Pounds
3/4 Inch	257 Foot-Pounds	151 Foot-Pounds
7/8 Inch	341 Foot-Pounds	224 Foot-Pounds
1 Inch	514 Foot-Pounds	325 Foot-Pounds

NOTE: The pivot pin nuts (A3 and B11 for Fold-Away systems or A3 and B7 for Swing Arm systems) should be torqued to 40 foot-pounds for 1-inch diameter bolts and 75 foot-pounds for 1-1/4-inch diameter bolts**.**

c) Per **Detail "C,"** insert your Anchor Trolley™ (D1) into the track (D). For a multiple track system, install one Anchor Trolley per track.

d) Per **Detail "C,"** install the track's end stops by inserting the bolts (D3) through the holes at both ends of the track (D) and through the rubber sleeves (D5).

Detail "C" (Trolley[s] and End Stops to Track)



Item	Description
D	Track
D1	Swiveling Connector Anchor Trolley
D3	End Stop Bolt
D4	1/2-Inch Hex Locknut
D5	End Stop Rubber Sleeve

NOTE: The 1/2-inch hex locknuts (D4) should be torqued until securely tightened against the track. Be careful not to damage the track in any way.

e) Attach and torque the end stop nuts (D4) until securely tightened against the track.

f) For multiple track systems, repeat steps **a)** through **e)** to insert the remaining Anchor Trolleys (D1) into the remaining tracks (D).

g) **This system must be used with an ANSI-rated self-retracting lanyard (SRL).** Connect your SRL and retrieval tagline in accordance with the manufacturer's specifications and your training.

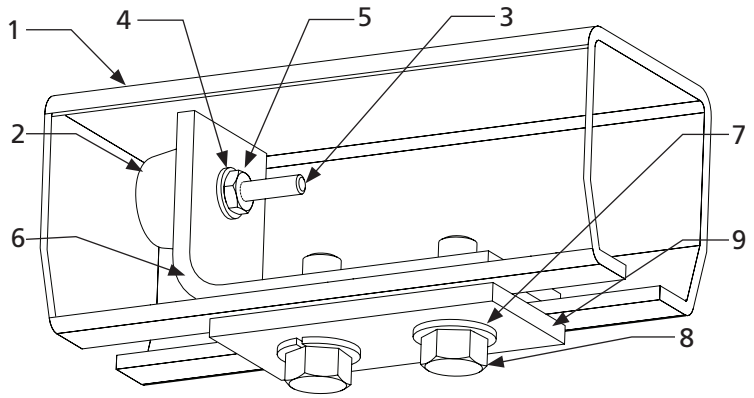
INTERMEDIATE BUMPER INSTALLATION (IF SUPPLIED)

NOTE: Follow the approval drawing, if provided, to prevent overloading of the track and system.

1. Using a man or scissor lift, remove an end stop from the end of the track if end stop is present.
2. Per **Figure 3**, slide the top plate (6) and attached components (2, 3, 4, and 5) into the track (1) and to the desired location in the track. Ensure that the rubber bumper (2) is facing the trolley.
3. Per **Figure 3**, insert two bolts (8) through two split lock washers (7).
4. Per **Figure 3**, align the holes in the bottom plate (9) with the holes in the top plate (6). Ensure that the bottom plate (9) is underneath the track (1).
5. Per **Figure 3**, securely tighten the bolts (8) and attached split lock washers (7) through the aligned holes in the bottom plate (9) and top plate (6) so that the bolt heads are underneath the bottom plate (9). Ensure that the split lock washers (7) are between the bolt head and the bottom of the bottom plate (9).
6. Using a torque wrench, torque 3/8-inch diameter bolts to 33 foot-pounds. Torque 1/2-inch diameter bolts to 78 foot-pounds. See the tables below.
7. Reinsert the end stop that was removed in step 1.

Figure 3

NOTE: Intermediate bumpers should not be used as end stops.



500 Series Track (P/N: 1500IB)

Item	Description
1	Track
2	Rubber Bumper
3	10-32 NC by 1-1/4-Inch Machine Screw
4	#10 Lock Washer
5	10-32 NC Nut
6	Top Plate
7	3/8-Inch Split Lock Washer
8	3/8-Inch by 1-Inch Hex Head Bolt
9	Bottom Plate

NOTE: For part number 1500IB, item 8 requires a 9/16-inch wrench or socket.

600, 700, and 900 Series Track (P/N: 1700IB)

Item	Description
1	Track
2	Rubber Bumper
3	10-32 NC by 1-1/4-Inch Machine Screw
4	#10 Lock Washer
5	10-32 NC Nut
6	Top Plate
7	1/2-Inch Split Lock Washer
8	1/2-Inch by 1-1/2-Inch Hex Head Bolt
9	Bottom Plate

NOTE: For part number 1700IB, item 8 requires a 3/4-inch wrench or socket.

BRACKET CENTER DISTANCE AND HOLE LOCATIONS

Refer to Figure 3, Figure 4, and Figure 5 for Steps 1 Through 3

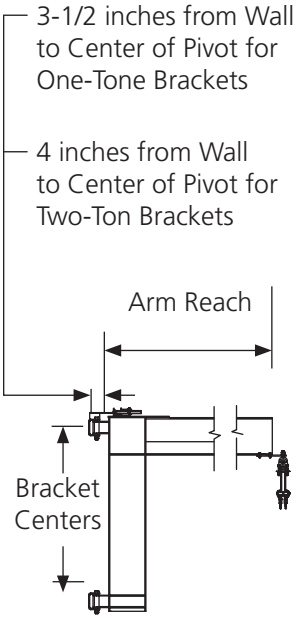
1. Confirm dimensions in **Figure 4** and **Figure 5** with your Final Fabrication Drawing. If the dimensions are different, follow your Final Fabrication Drawing.

2. Use **Figure 4** to determine the bracket center distance and bracket style.

3. Use **Figure 5** or **Figure 6** to determine where to drill the holes for each column weldment (1 in *Building Materials Description*).

4. When marking hole locations, start with the center mark.

Figure 4



Fold-Away	
Arm Reach	**Bracket Center Distance**
4 Feet-8 Feet	4 Feet
9 Feet-14 Feet	5 Feet
15 Feet-20 Feet	6 Feet

Swing Arm	
Arm Reach	**Bracket Center Distance**
6 Feet-8 Feet	4 Feet
9 Feet-14 Feet	5 Feet
15 Feet-30 Feet	6 Feet

Fold-Away	
Arm Reach	**Bracket Style**
4 Feet-20 Feet	One Ton

Swing Arm	
Arm Reach	**Bracket Style**
*6 Feet-22 Feet	One Ton
23 Feet-30 Feet	Two Ton

*A one-person Swing Arm system with a 22-foot arm reach uses one-ton brackets. A two-person Swing Arm system with a 22-foot arm reach uses two-ton brackets.

Figure 5

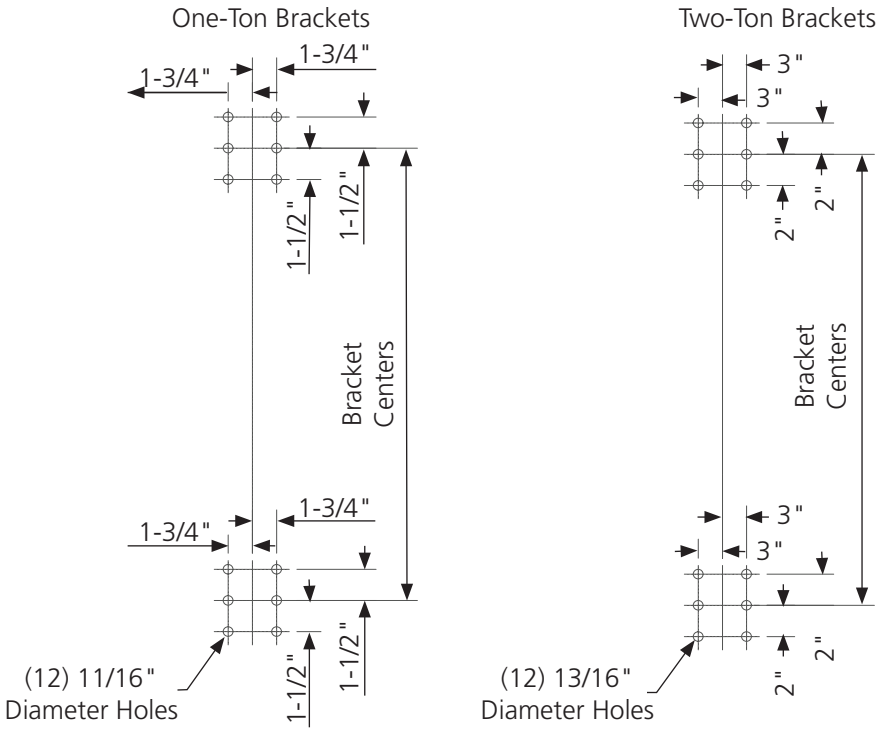
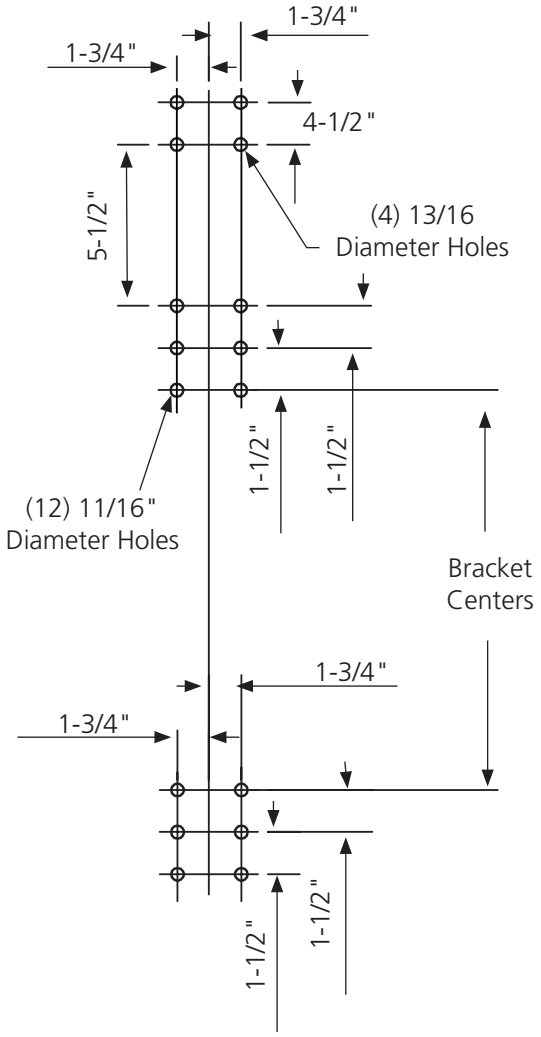
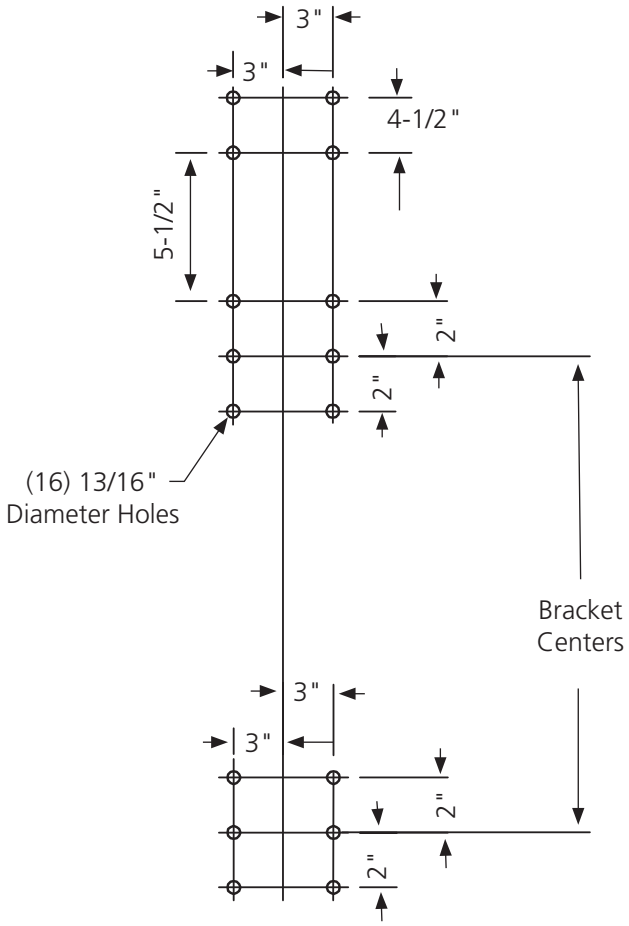


Figure 6

Motorized System with One-Ton Brackets



Motorized System with Two-Ton Brackets



MOTORIZED OPTION ASSEMBLY INSTRUCTIONS

Refer to Figure 7 for Steps 1 Through 21

NOTE: The reducer (4) and motor (5) come assembled.

1. Per **Figure 7,** insert the key (19) into the top of the reducer shaft (4).
2. Per **Figure 7,** slide the sprocket (6) onto the key (19).
3. Use a man lift or cherry picker to reach the top of the boom weldment.
4. Per **Figure 7,** align the holes in the reducer (4) with attached components (6 and 19) with the holes on the top of the boom weldment.
5. Per **Figure 7,** insert four bolts (15) through the aligned holes in the reducer (4) and boom weldment.
6. Per **Figure 7,** securely tighten flat washers (20), split lock washers (17), and nuts (16) to the bolts (15) so that the split lock washers (17) are between the flat washers (20) and nuts (16).
7. Per **Figure 7,** insert two cap screws (11) through two holes in the reducer base.

8. Per **Figure 7,** securely tighten two nuts (12) to each cap screw (11).

   NOTE: The key (18), torque limiter (3), and sprocket (7) come assembled.

9. Per **Figure 7,** insert the key (18) and attached components (3 and 7) into the top of the torque limiter mount weldment (24).

10. Use a man lift or cherry picker to reach the top of the boom weldment.

11. Per **Figure 7,** align the holes in the torque limiter mount weldment (24) with attached components (3, 7, 18) with the top holes drilled in the wall column.

12. Using bolts supplied by the installer, bolt the torque limiter mount weldment (24) with attached components (3, 7, 18) to the wall column.

13. Per **Figure 7,** insert the limit switch lever (2) into the limit switch (9).

14. Per **Figure 7,** securely tighten the limit switch (9) and attached limit switch lever (2) to the limit switch mount (1) using the machine screws (13 and 14).

    NOTE: The limit switch mount (1) has four holes in it. You can bolt the limit switch (9) and attached limit switch lever (2) to the top or bottom of the limit switch mount (1). The longer machine screw (14) should be screwed into the top hole of the limit switch (9).

15. Per **Figure 7,** align the holes in the limit switch mount (1) with the holes in the boom weldment closest to the wall column.

16. Per **Figure 7,** insert two bolts (23) through the aligned holes in the limit switch mount (1) and the holes in the boom weldment closest to the wall column.

17. Per **Figure 7,** securely tighten split lock washers (17) and nuts (16) to the bolts (23) so that the split lock washers (17) are between the boom weldment and nuts (16).

18. Per **Figure 7,** attach the chain (8) to the sprockets (6 and 7).

19. Per **Figure 7,** attach the link (10) to the chain (8).

20. Per **Figure 7,** adjust the chain (8) by loosening the nuts (12) on the cap screws (11). Then tighten the socket head cap screws (11) until the chain (8) has the correct amount of slack. Then tighten the nuts (12) on each cap screw (11) starting with the nut (12) closest to the reducer base to keep the correct amount of slack in the chain (8).

21. Weld the rotation actuation angles (25) using the steps below.

    a) Rotate the arm to where it will be while in use.

    b) Rotate the rotation actuation angle (25) so that the limit switch lever (2) hits the rotation actuation angle (25).

    c) Ensure that the rotation actuation angle (25) is not hitting the arm and that the rotation actuation angle (25) is making contact with the limit switch lever (2). Then weld the rotation actuation angle (25) in place.

    d) Rotate the same arm to where it will be when not in use.

    e) Rotate the other rotation actuation angle (25) so that the limit switch lever (2) hits the rotation actuation angle (25).

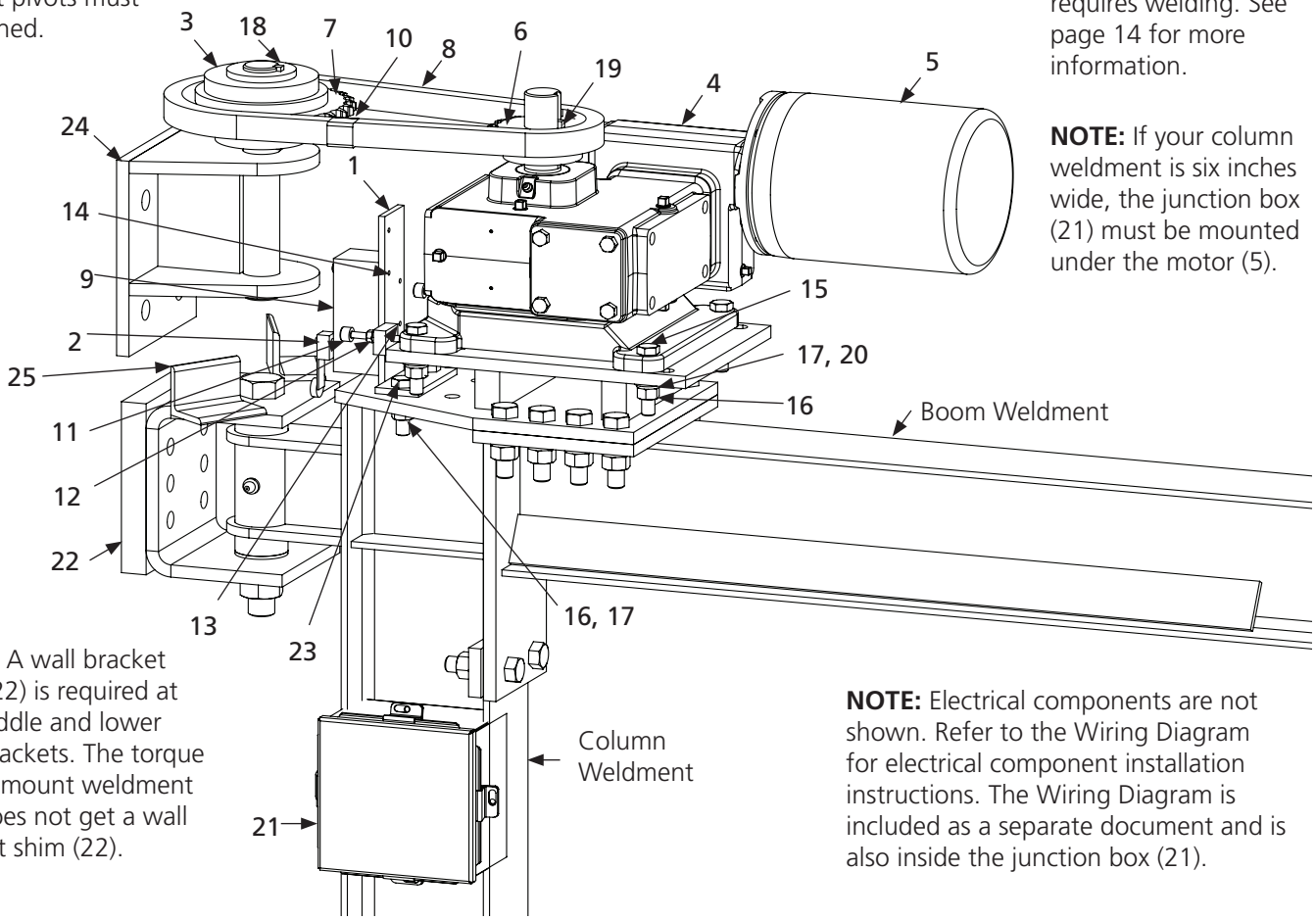
    f) Ensure that the rotation actuation angle (25) is not hitting the arm and that the rotation actuation angle (25) is making contact with the limit switch lever (2). Then weld the rotation actuation angle (25) in place.

    NOTE: Rotation actuation angles (25) are only required on one arm.

MOTORIZED OPTION

NOTE: All three wall bracket pivots must be aligned.

Figure 7



NOTE: The rotation actuation angle (25) requires welding. See page 14 for more information.

NOTE: If your column weldment is six inches wide, the junction box (21) must be mounted under the motor (5).

NOTE: A wall bracket shim (22) is required at the middle and lower wall brackets. The torque limiter mount weldment (24) does not get a wall bracket shim (22).

NOTE: Electrical components are not shown. Refer to the Wiring Diagram for electrical component installation instructions. The Wiring Diagram is included as a separate document and is also inside the junction box (21).

Item	Description
1	Fall Arrest Limit Switch Mount
2	Lever, Limit Switch ADJ P/N 802 T-W2
3	Limiter, Torque
4	Reducer
5	Motor, 10 V 1/3 HP 1725 RPM 56 C, 230/460
6	Sprocket, Type B
7	Limiter, Sprocket
8	Chain, Roller
9	Limit Switch, Weatherized 802 T-NPTP
10	Link, Connection
11	1/4-Inch by 2-Inch Socket Head Cap Screw
12	1/4-Inch Hex Nut (7/32-Inch H)

Item	Description
13	RND HD Machine Screw 10-32 by 5/8-Inch LG
14	RND HD Machine Screw 10-32 by 1-1/4-Inch LG
15	1/2-Inch by 2 1/2-Inch Hex Head Bolt
16	1/2-Inch Hex Nut
17	1/2-Inch Split Lock Washer
18	Key Stock
19	Key Stock
20	1/2-Inch Flat Washer
21	Junction Box
22	Wall Bracket Shim
23	1/2-Inch by 2-Inch Hex Head Bolt
24	Torque Limiter Mount Weldment
25	Rotation Actuation Angle

MECHANICAL STOPS (FOLD-AWAY ONLY)

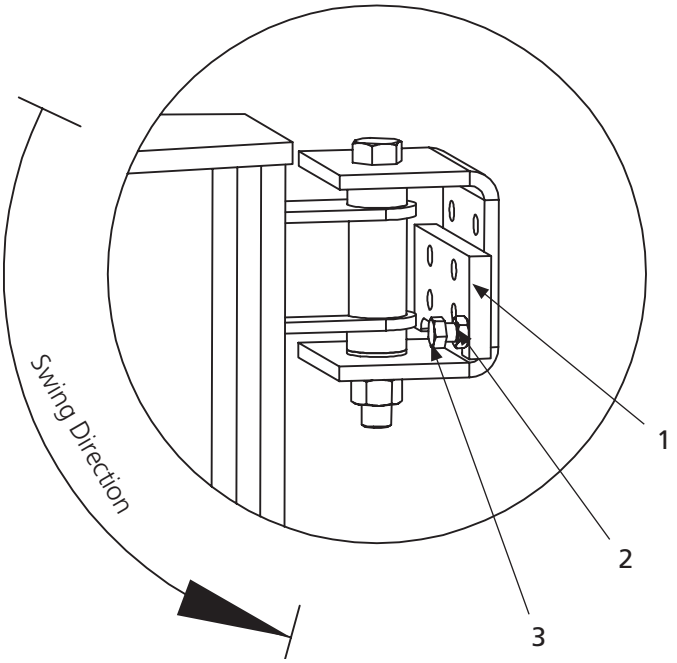
Refer to Figure 8 for Steps 1 Through 8

Use of mechanical stops is not required.

NOTE: Mechanical stops come in kits labeled *FA-BRSK-1*.

1. If over rotation of a Fold-Away system is a concern or to keep the track (D in *Building Materials Description)* from hitting the column weldments (1 in *Building Materials Description)*, use the provided mechanical stops.
2. Mechanical stops should be installed before attaching the arms to the wall columns.
3. The installer should determine if the mechanical stops are required.
4. The mechanical stops are most effective on a non-motorized system with two arms (a column weldment [1 in *Building Materials Description*] and a boom weldment [2 in *Building Materials Description*] bolted together). Typically, a motorized system will not require mechanical stops.
5. Per **Figure 8,** the mechanical stop should be placed on the folding side of the upper wall bracket.
6. Per **Figure 8,** the head of the supplied bolt will hit a portion of the column weldments (1 in *Building Materials Description)* and limit the rotation during operation.
7. Installing a second stop on a different arm will keep the track (D in *Building Materials Description)* from hitting the arm. The installer should also consider other concerns, such as facility obstructions.
8. If retrofitted, properly secure the weight of the system before removing the wall bracket bolts.

Figure 8



NOTE: The mechanical stop plate (1) is held in place with the bolts that hold the wall bracket to the wall column. These bolts are supplied by others. Longer wall column mounting bolts may be required because of the additional plate(s).

Item	Quantity	Part Number	Description
1	1	8-0141	One-Ton Bolt On Mechanical Stop Plate
2	1	12-0052	5/8-Inch Hex Jam Nut (3/8-Inch H)
3	1	10-0311	5/8-Inch by 1-1/2-Inch Hex Head Bolt

MANUAL ROTATION STOPS (SWING ARM ONLY)

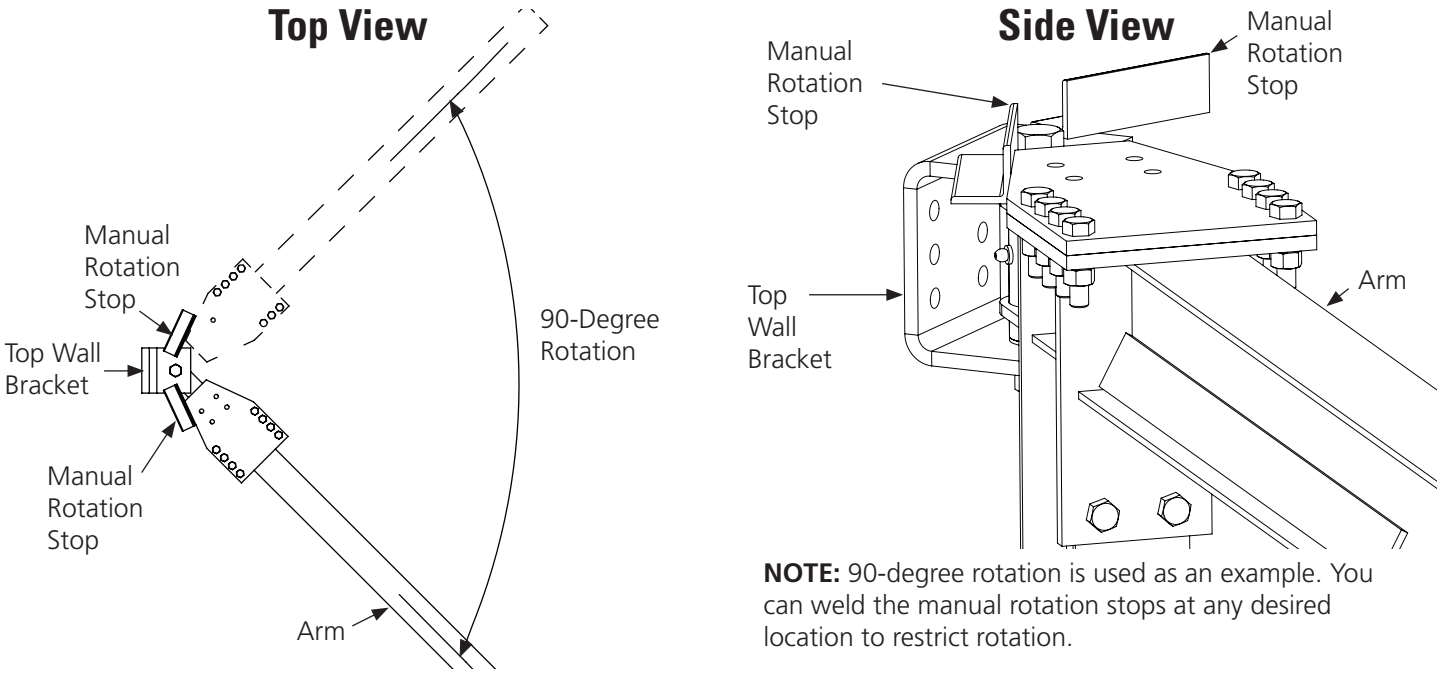
Refer to Figure 9 for Steps 1 Through 11

Use of manual rotation stops is not required.

1. If over-rotation of a Swing Arm system is a concern, use manual rotation stops. Manual rotation stops are not standard and must be purchased separately.
2. To avoid serious injury or death, ensure that users will be able to work directly under the swing arm before installing manual rotation stops. Keeping the worker directly under the swing arm prevents lateral loading of the swing arm, which is not designed for lateral loads.
3. Install manual rotation stops last.
4. Use a man lift or cherry picker to reach the top of the top wall bracket.
5. Per **Figure 9,** rotate the arm to the desired location.
6. Per **Figure 9,** place a manual rotation stop on top of the top wall bracket so that one end of the manual rotation stop is on top of the wall bracket and the other end of the manual rotation stop makes contact with the outside of the arm. Ensure that at least one-third of the manual rotation stop makes contact with the outside of the arm.
7. Using a permanent marker, trace the location of the manual rotation stop on the top wall bracket.
8. Repeat steps **4** through **6** to place the other manual rotation stop correctly.
9. Grind the paint away as required, then per **Figure 9,** place a manual rotation stop on its traced location on top of the top wall bracket.
10. Per **Figure 9,** weld the manual rotation stop in place.
11. Repeat steps **8** and **9** to weld the other manual rotation stop.
12. Test the function of the rotation stops to ensure the strength of the welds.

NOTE: Depending on the arm and wall bracket size of your Swing Arm, you may have to relocate the manual rotation stops to a different part of the top wall bracket.

Figure 9



NOTE: 90-degree rotation is used as an example. You can weld the manual rotation stops at any desired location to restrict rotation.

MANUAL EXTEND/RETRACT ROPE KIT (FOLD-AWAY ONLY)

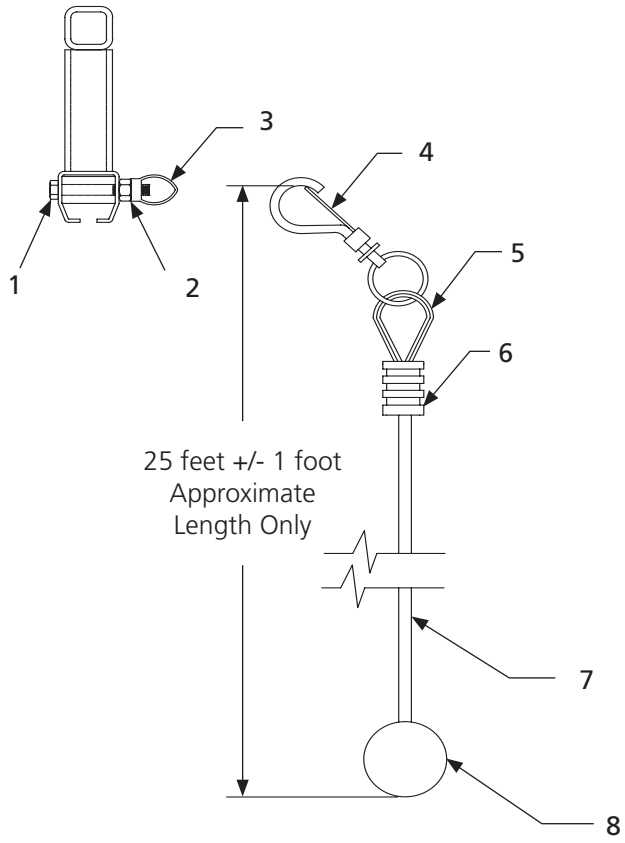
Refer to Figure 10 for Steps 1 Through 3

NOTE: Manual extend/retract ropes come in kits labeled *8-0174*. The swivel eye snap hook (4), thimble (5), aluminum sleeve (6), rope (7), and stop (8) ship assembled.

1. Use a man lift or cherry picker to reach the track.
2. Per **Figure 10,** screw the eye nut (3) onto an end stop bolt (1) at one end of the track. Ensure that the eye nut (3) is securely tightened against the end stop nut (2). If desired, use blue *Loctite* to lock and seal the eye nut (3) to the end stop bolt (1).
3. Per **Figure 10,** hook the swivel eye snap hook (4) to the eye nut (3) so that the swivel eye hangs down.

NOTE: SRL's are not to be used to extend or retract the system or the retract spring in the SRL will become worn, causing the SRL not to retract properly over time. Ensure that the rope (7) is stored out of the way while not in use.

Figure 10



Item	Part Number	Description
1	10-02XX	End Stop Bolt
2	13-0003	1/2-Inch End Stop Locknut
3	8-0180	Eye Nut
4	58-0001	Swivel Eye Snap Hook
5	71-0003	Thimble
6	31-0004	Aluminum Sleeve
7	31-0001-25.00	Rope
8	31-0003	Stop

MAINTENANCE

1. Visually inspect the system before each use and fully inspect the system after a fall event and annually. Refer to the INSPECTION CHECKLISTS in the next section of this manual for checklists for *Fold-Away and Swing Arm Anchor Track™ System* and *Annual Anchor Track™ System*.
2. **If the system fails ANY inspection point on any of the inspection checklists, immediately remove the system from service and call Rigid Lifelines® at 800-869-2080 for instructions.**
3. During the first month after a new installation, a weekly inspection of the system should be performed using the *Annual Anchor Track™ System Inspection Checklist*. It is important to note that every system application and use will be different, meaning some conditions of use will require more frequent inspection. Examples of such conditions include two or three shift operations or working with or near corrosive chemicals or elements.
4. Refer to the Anchor Trolley™ User Instruction Manual (Manual 103-0054), which comes packaged with the Anchor Trolley, for its trolley inspection checklists.
5. Download and print additional blank inspection checklists from the literature tab at RigidLifelines.com.

LABELING

The letters correspond to the letters on the Fold-Away and Swing Arm Label Placement Drawing. All labeling must be legible and attached to the system. For replacement labels, contact Rigid Lifelines®.

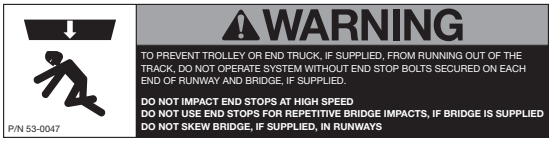
RIGID LIFELINES LABEL PLACEMENT DISCLAIMER

If system is shipped unpainted or without properly secured labels, proper label placement is the sole responsibility of the end user. Follow the Label Placement Drawing shipped with this user manual to place labels correctly. Rigid Lifelines cannot be held liable for any damage or injury resulting from omitted or improper label placement.

"A"

P/N 53-0206

"B"



P/N 53-0047

"C"

P/N 53-0359

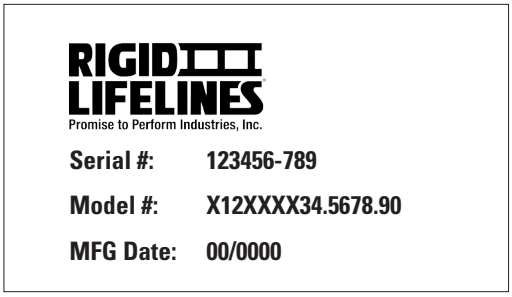
"D"

P/N 53-0023

"E"

P/N 53-0526

"F"



Notes on Label Placement Drawing

- Label **53-0206 "A"** should be centered on the outside of the end boom weldments on Fold-Away systems. Label **"A"** should be centered on the outside of the boom weldment on Swing Arm systems.
- Label **53-0047 "B"** should be placed on both ends of the lower section of trussed track on both sides of each track section.
- Label **53-0359 "C"** should be centered on the track on both sides and is **P/N 53-0535** for **one** person per track systems, **53-0536** for **two** people per track systems, and **53-0359** for **three** to **eight** people per track systems, along with **53-0413** through **53-0418** respectively. Labels **P/N 53-0413** through **53-0418** are the capacity numbers three through eight for the Anchor Track Label and should be placed to the right of the line following "Rigid Lifelines."
- Label **53-0023 "D"** should be placed to the right of label **"C"** on the lower section of trussed track on both sides.
- Label **53-0526 "E"** is only for systems that use a boom lock. The label should be centered on both sides of the column weldment directly below the boom lock.
- Swing Arm systems use plain track, so labels **"B," "C,"** and **"D"** should be centered vertically on the plain track.
- Label **"F"** should be placed on the mast and the boom of Column-Mounted Swing Arm systems.
- Label **"F"** should be placed on ever other lower section of trussed track and column on Column-Mounted Fold-Away systems.

COLUMN-MOUNTED FOLD-AWAY AND SWING ARM ANCHOR TRACK™ SYSTEM INSPECTION CHECKLIST

Before Each Use

RIGID LIFELINES®
Promise to Perform Industries, Inc.

Inspector Name: _____

Date: _____

System Number: _____

Model: _____

Inspect the Column-Mounted Fold-Away or Swing Arm Anchor Track™ System before each use according to this inspection checklist. If the system fails any point on the inspection checklist, remove the system from service and contact Rigid Lifelines.

	Inspection Result (✔)	
INSPECTION POINTS	**PASS**	**FAIL**
1. Test the swiveling connector(s) on each trolley to verify that each trolley rotates and swivels freely.		
2. Verify that the trolley(s) can easily and smoothly roll the full length of the runway track(s).		
3. Check all system welds for cracks.		
4. Check system components for corrosion. Corrosion may not exceed 10 percent of material thickness, including the material thickness (thread height) of bolt threads.		
5. Check system components for bent or damaged areas.		
6. Check support structure for stability.		
7. Visually check all bolted assemblies for proper connections and properly secured bolts and nuts.		
Support Arm Inspection		
1. Test the operation of the support arms and verify that the arms and connector pivots rotate freely.		
2. Check the support arms for excessive bearing wear.		
3. Check the support arms for loose or missing fasteners.		
4. Check the arm connector pivots for bent or broken parts or welds.		
For Fold-Away System		
1. Part number 8-0062 is the pivot assembly containing the Fold-Away plate (G1), eye hook (G2), thrust washer (G3), nut (G4), and roll pin (G5) (*Detail E* on page 8). Verify roll pin (G5) is installed in every pivot assembly.		

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AFTER A FALL EVENT AND ANNUAL ANCHOR TRACK™ SYSTEM INSPECTION CHECKLIST

Inspector Name: _____

Date: _____

System Number: _____

Model: _____

RIGID LIFELINES®
Promise to Perform Industries, Inc.

Inspect the Anchor Track™ System annually and after a fall event according to this inspection checklist. If the system fails any point on the inspection checklist, remove the system from service and contact Rigid Lifelines.

	Inspection Result (✔)	
INSPECTION POINTS	**PASS**	**FAIL**
1. Check that the beam clamps are installed horizontally within + / - five degrees.		
2. Check that end stop bolts are present and have locknuts installed.		
3. Using a torque wrench, check that all bolts are present and torqued to values shown on Assembly Drawing.		
4. Check that splices, if supplied, are centered on track joints.		
5. Verify that capacity labels are present, attached, and legible. See Label Placement Drawing.		
6. Verify that the number of trolleys matches the value on the capacity label.		
7. Verify that the fall arrest system is not being used for material handling.		
8. Check the track for levelness within + / - 1/4 inches per 20 feet of track.		
9. Check the track flanges. Track flanges cannot be bent downward more than five degrees.		
10. Check the track thickness. Track thickness cannot be worn more than 10 percent.		
11. Check all system welds for cracks.		
12. Check system components for corrosion and bent or damaged areas.		
13. Check that all wheel studs, if supplied, are torqued to value shown on Assembly Drawing. Note that these 1/2-inch wheel studs have a different torque value than the system's other 1/2-inch bolts.		
14. Verify trolley can traverse entire length of track without snags.		
15. Inspect the trolley following the *After a Fall Event and Annual Inspection Checklist* in the Rigid Lifelines Anchor Trolley™ User Instruction Manual (103-0054).		
16. Test the operation of the trolley's swiveling connector and verify that it can rotate freely.		
17. Test the operation of the trolley and verify that the wheels rotate freely.		
18. Check system components for loose components.		
19. Check system components for loose or missing fasteners.		
20. Check system support structure for stability.		
21. Verify that hanger assemblies are installed properly and fasteners are torqued to proper values.		
22. Check that the support arms pivot bolts, if supplied, are properly installed and tightened.		
23. Check system for unauthorized modifications. Only Rigid Lifelines can authorize modifications. Remove system from service if it is modified in any way.		

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Notes

PRODUCT WARRANTY COVERAGE

Rigid Lifelines warrants its products to be free from defects in material and workmanship as follows:

- Engineered Track Equipment, Wearable End Truck Wheels, and Anchor Trolley™ Wheels and Teeth: Ten Years
- Motorized Products and Drive Components and Paint and Finishes for Non-Aluminum Components: Two Years
- Soft Goods, Devices, Connectors, and Accessories: One Year

Ten-Year Warranty Coverage:

- Defects in equipment material and workmanship of manual track systems and equipment
- Only applies to the wearable wheels on end trucks and wearable Anchor Trolley wheels and teeth

Rigid Lifelines warrants its manual Anchor Track™ systems and equipment to be free from defects in material and workmanship for a period of ten (10) years or 20,000 hours, commencing on the date of shipment to the first retail purchaser. This warranty extends only to parts that are not subject to normal wear and tear from use (nonwearable), with the exception that it does apply to the wearable wheels supplied on end trucks and wearable Anchor Trolley wheels and teeth.

Two-Year Warranty Coverage:

- Defects in equipment material and workmanship of motorized systems and equipment
- Paint coatings and finishes for non-aluminum components

Rigid Lifelines warrants motorized equipment to be free from defects in material and workmanship for a period of two (2) years or 4,000 hours, commencing on the date of shipment to the first retail purchaser. Rigid Lifelines warrants its paint and finishes for a period of two (2) years. Warranty claims related to coatings must be accompanied by documentation of the product's application and environmental conditions from time of delivery to time of claim.

One-Year Warranty Coverage:

- Defects in soft goods, devices, connectors, and accessories

Rigid Lifelines warrants fall protection soft goods, devices, connectors, and accessories to be free from defects in material and workmanship for a period of one (1) year, commencing on the date of shipment to the first retail purchaser.

WARRANTY TERMS & CONDITIONS

All warranty claims must be approved by Rigid Lifelines before any work is performed. Rigid Lifelines's obligation under this warranty is limited to the replacement or repair of Rigid Lifelines products at the factory or separate location approved by Rigid Lifelines. **Other than the above mentioned warranty, Rigid Lifelines will not honor any other warranties—whether expressed, implied, or statutory—and disclaims any warranties of merchantability or fitness for a particular purpose.** Rigid Lifelines has the right to reject any warranty claim due to harsh and/or inappropriate environmental conditions.

Rigid Lifelines Is Not Liable for:

- Indirect, incidental, or consequential damages including lost profits, operating costs, loss of production, or travel expenses
- Components or accessories not manufactured by Rigid Lifelines (with the exception of soft goods components and accessories sold and warranted by Rigid Lifelines. For such components and accessories, the warranty shall be determined by the terms and conditions of any warranty provided by the manufacturer of such components and accessories.)
- Defective equipment or system failure caused by misuse, negligence, and improper installation or maintenance
- Equipment that has been used in excess of its rated capacity or beyond its service factors
- Rework and modification of any equipment that has been altered without Rigid Lifelines's written authorization
- Freight charges and damage incurred by freight carriers
- Any loss, injury, or damage to persons or property resulting from failure or defective operation of material or equipment
- This warranty is void for any product that is designed to deform or absorb energy during a fall event and needs to be replaced after a fall event has occurred

Reimbursement Disclaimer:

- Written notice of any claimed system defect must be given to Rigid Lifelines within ninety (90) days of shipment.
- All requests for reimbursement must be accompanied by proper documentation.
- Reimbursement is provided in the form of a credit unless otherwise approved by Rigid Lifelines management.
- Reimbursement for labor will be provided at a maximum rate of $75 per hour.
- All reimbursement is subject to approval by Rigid Lifelines management.

ABOUT RIGID LIFELINES®

OUR MISSION:

Rigid Lifelines is driven by passion for providing our customers with quality, user-friendly solutions to keep workers safer and more productive at elevation.

OUR COMMITMENT

Rigid Lifelines professionals are dedicated to designing and manufacturing a variety of fall protection systems that meet or exceed OSHA requirements and ANSI Z359 code. Our team of engineers and safety professionals combine over 30 years of experience in the fall protection industry to manufacture fall protection systems that utilize the most advanced technology and designs.

Rigid Lifelines production facilities are certified under the ISO 9001:2015 Quality Management System to provide superior quality products. And every welder at Rigid Lifelines is certified to handle steel (D1.1) and aluminum (D1.2) in accordance with the rigorous requirements and lab testing established by the American Welders Society (AWS).

Rigid Lifelines engineers are involved with ANSI Z359 Technical Review Committee and the ANSI Z359.19 Rigid Horizontal Rail Standard. We also participate with the Safety & Health Technology Committee of the Association of Iron & Steel Technology. Our involvement allows us to keep a constant pulse on the trends in both industry practice and government regulation.

OUR PRODUCTION:

All of our systems are designed and manufactured in the United States of America. We have production facilities in Las Vegas, Nevada, and at our headquarters in Morgantown, Pennsylvania.

RIGID LIFELINES®
Promise to Perform Industries, Inc.

Morgantown, PA | Las Vegas, NV
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TÜV SÜD ISO 9001

AWS CWF CERTIFIED WELDING FABRICATOR®

ISOFP INTERNATIONAL SOCIETY FOR FALL PROTECTION

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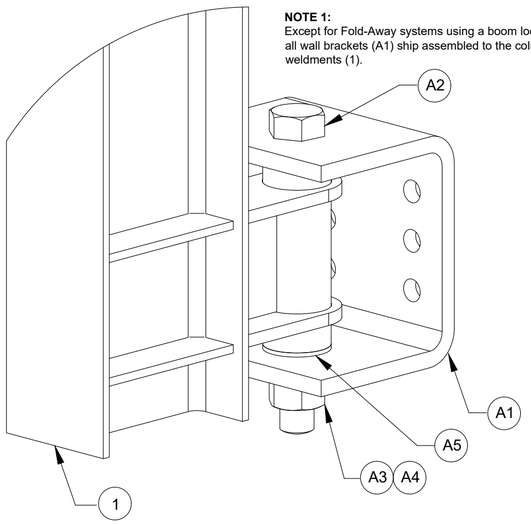
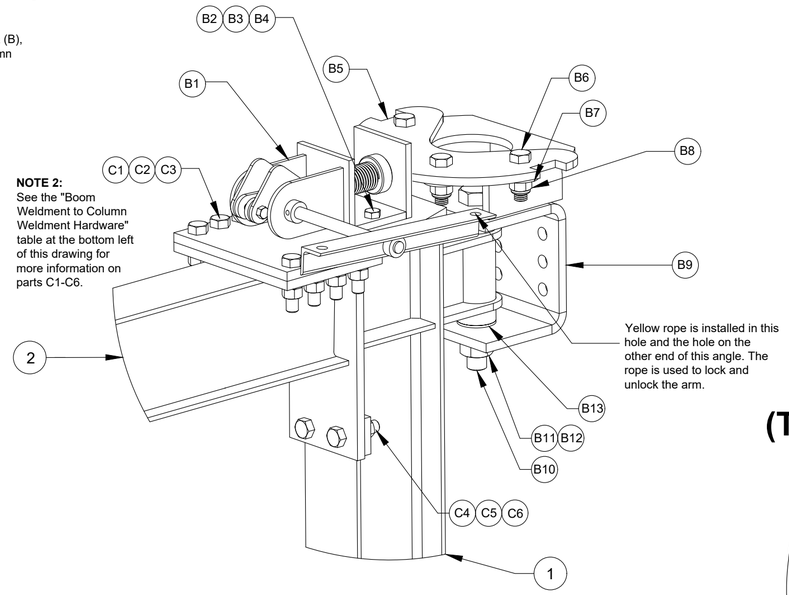
Detail "A"
(Wall Brackets to Column Weldments)



NOTE 1:
Except for Fold-Away systems using a boom lock (B), all wall brackets (A1) ship assembled to the column weldments (1).

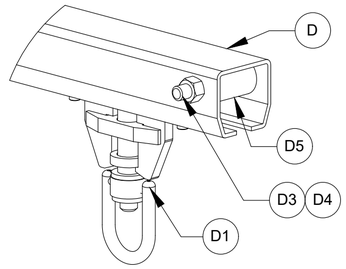
Detail "B"
(Boom Weldments and Boom Lock to Column Weldments)



NOTE 2:
See the "Boom Weldment to Column Weldment Hardware" table at the bottom left of this drawing for more information on parts C1-C6.

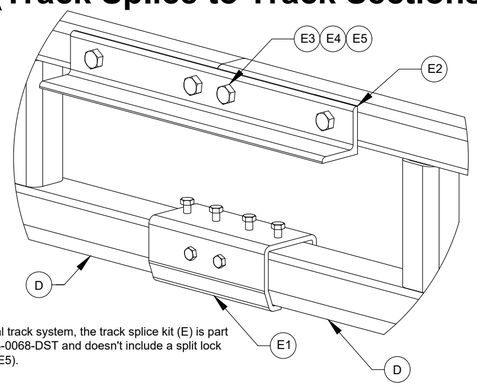
Yellow rope is installed in this hole and the hole on the other end of this angle. The rope is used to lock and unlock the arm.

Detail "C"
(Trolley[s] and End Stops to Track)



NOTE 3:
End stop bolts (D3), end stop locknuts (D4), and end stop rubber sleeves (D5) come in packs labeled "FA-X00ES" (D2).

Detail "D"
(Track Splice to Track Sections)



NOTE 4:
For a dual track system, the track splice kit (E) is part number 8-0068-DST and doesn't include a split lock washer (E5).

Detail "E"
(Track to Boom Weldments)

NOTE 5:
Split lock washers (F2) go between the locknuts (F3) and flat washers (F10).

*The pivot pin nuts (A3 and B11) should be torqued to 40 foot-pounds for 1-inch diameter bolts and 75 foot-pounds for 1-1/4-inch diameter bolts.

Component Assembly Schedule

1. Bolt Wall Brackets to Column Weldments **(Detail "A")**
2. Bolt Boom Weldments to Column Weldments **(Detail "B")**
3. If Provided, Bolt Boom Lock to Column Weldments **(Detail "B")**
4. Bolt Arms to Wall Columns
5. If Provided, Bolt Track Splice to Track Sections **(Detail "D")**
6. Bolt Track to Boom Weldments **(Detail "E")**
7. Install Trolley(s) and End Stops to Track **(Detail "C")**

Torque Specifications

Bolt Diameter	Hex Nut Torque	Minimum Hex Locknut Torque
1/2 Inch	78 Foot-Pounds	51 Foot-Pounds
5/8 Inch	154 Foot-Pounds	93 Foot-Pounds
3/4 Inch	257 Foot-Pounds	151 Foot-Pounds
7/8 Inch	341 Foot-Pounds	224 Foot-Pounds
*1 Inch	514 Foot-Pounds	325 Foot-Pounds

Boom Weldment to Column Weldment Hardware

FA-K-H-300-6-8-10-12				FA-K-H-300-14				FA-K-H-300-16-18			
Item	Quantity	Part Number	Description	Item	Quantity	Part Number	Description	Item	Quantity	Part Number	Description
C1	10	10-0302	5/8" Diameter X 2-1/2" Bolt	C1	8	10-0402	3/4" Diameter X 2-1/2" Bolt	C1	8	10-0608	1" Diameter X 3-1/2" Bolt
C2	10	11-0040	5/8" Diameter Hex Nut (9/16" H.)	C2	10	11-0060	3/4" Diameter Hex Nut (5/8" H.)	C2	8	11-0080	1" Diameter Hex Nut (7/8" H.)
C3	10	14-0004	5/8" Diameter Split Lock Washer	C3	10	14-0005	3/4" Diameter Split Lock Washer	C3	8	14-0007	1" Diameter Split Lock Washer
C4	N/A	N/A	Same as C1	C4	2	10-0416	3/4" Diameter X 3" Bolt	C4	2	10-0416	3/4" Diameter X 3" Bolt
C5	N/A	N/A	Same as C2	C5	N/A	N/A	Same as C2	C5	2	11-0060	3/4" Diameter Hex Nut (5/8" H.)
C6	N/A	N/A	Same as C3	C6	N/A	N/A	Same as C3	C6	2	14-0005	3/4" Diameter Split Lock Washer

NOTE 6:
If you ordered a system with the motorization option, see pages 15-17 of the manual for installation instructions.

NOTE 7:
Quantities shown are for a system containing three column weldments (1), three boom weldments (2), two single track runways (D), and one track splice joint (E).

Item	Quantity	Part Number	Building Materials Description
1	3	8-05XX--XX.XX	FA, Weldment, 300, X' Bracket Centers, WXX
2	3	8-05XX--XX.XX	FA, Boom Weldment, 300, XX' Span, WXX
-A-	2	8-0070	C-Bracket, 1/2 and 1 Ton, 300 and 301
A1	5	06-0521	Bracket, Wall 1/2 and 1 Ton
A2	5	10-0604	Bolt, Hex Head 1"-8 NC X 9" GR 5
A3	5	11-0080	Nut, Hex 1"-8 NC
A4	5	14-0007	1" Split Lock Washer
A5	5	36-0008	Washer, Thrust 1.016 " ID X 2" OD
-B-	1	8-0149	FA, Kit, 1 Ton Wall Bracket with Boom Lock
B1	1	06-0459-3	Boom Lock Assembly 10", 12", 15" I-Beam
B2	2	10-0203	Hex Bolt 1/2"-13 NC X 2"
B3	2	11-0030	Nut, Hex 1/2"-13 NC
B4	2	14-0003	Washer, Lock Split 1/2" Zinc Plated
B5	1	8-0256	FA, Plate, Notched Locking, 1 Ton Bracket
B6	4	10-0301	Bolt, 5/8"-11 NC X 2" GR5 ZP
B7	4	15-0004	Flat Washer 5/8" Plated
B8	4	13-0001	Hex Locknut, 5/8"-11 NC(3/4" H)
B9	1	8-0147	FA, Fold-Away, Boom Lock Weldment, Adjustable
B10	1	10-0604	Bolt, Hex Head 1"-8 NC X 9" GR5
B11	1	11-0080	Nut, Hex 1"-8 NC
B12	1	14-0007	1" Split Lock Washer
B13	1	36-0008	Washer, Thrust 1.016 ID X 2" OD
-C-	3	FA-K-H-300-X-X-XX-XX	FA Hardware Kit, Boom/Mast
C1	24	10-0XXX	Hex Bolt
C2	24	11-00XX	Nut, Hex
C3	24	14-000X	Split Lock Washer
C4	6	10-0XXX	Hex Bolt
C5	6	11-00XX	Nut, Hex
C6	6	14-000X	Split Lock Washer
-D-	2	Runway	Fall Arrest Track
D1	1	FA-XXX-AT	FA, Swiveling Connector Anchor Trolley
D2	2	FA-X00ES	Fall Arrest End Stop Kit
D3	2	10-02XX	End Stop Bolt
D4	2	13-0003	Nut, Hex Lock 1/2"-13
D5	2	RR1.25-X	End Stop Rubber Sleeve
-E-	1	8-0067	FA, Kit, 300, Single Track Splice
E1	1	FA-1X03	Fall Arrest Track Splice, X00 with Bolts
E2	2	FAFAW-SP-1	Splice Angle, Fold-Away TT, Fall Arrest
E3	4	10-0232	Bolt, 1/2"-13 X 4" GR 5 Full Thread
E4	4	13-0011	Nut, Hex Lock 1/2"-13, GR 8 (5/8" H)
E5	4	14-0003	Washer, Lock Split 1/2" Zinc Plated
-F-	X	8-0066	FA, Kit, 300, Beam/Track Connection
F1	12	10-0205FT	Bolt, 1/2"-13 X 2-1/2" GR5 FU Thread
F2	24	14-0003	Washer, Lock Split 1/2" Zinc Plated
F3	24	13-0011	Nut, Hex Lock 1/2"-13, GR 8 (5/8" H)
F4	3	9-1948	Load Pin, 700 Trolley (Not for Helm)
F5	3	15-0023	Washer, Hardened 1-1/8" Diameter SAE
F6	3	23-0003	Cotter Pin 5/32" X 3"
F7	3	8-0064	FA, Weld, Tube Bracket, Track Connect
F8	3	8-0063K	FA, PLT, Tube Bracket, Track Connect
F9	12	10-0226	Bolt, Hex Head 1/2"-13 NC X 5 1/2" FUL
F10	24	15-0003	Flat Washer 1/2" Plated
-G-	3	8-0062	FA, Kit, 300, Beam to Track, Bolt Assembly
G1	3	8-0092	Plate, Beam to Track Connection
G2	3	9-1931	Eye Hook, 724RI Trolley, 2" ID
G3	3	26-0016	Thrust Washer, 1-1/8" ID Composite
G4	3	9-1984	Hex Nut, 1-1/8"-7 NC Drilled for Pin
G5	3	17-0060	Pin, Roll 1/8" Diameter X 1-3/4" Long

REV.	DATE	NAME	REVISION DESCRIPTION

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APPROVALS	DATE
DRAWN: DAP	11/22/10
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APPVD: JRG	02/16/21
PLOT DATE:	WT:
PROJECT NO.: INSTRUCTIONS	SCALE: NTS

RIGID LIFELINES — Promise to Perform Industries, Inc.

FALL ARREST
FOLD-AWAY
ASSEMBLY DRAWING

SIZE	DWG. NO.	REV.
C	FA-FA-ASSEMBLY	-
CAD FILE:		SHEET 1 OF 1

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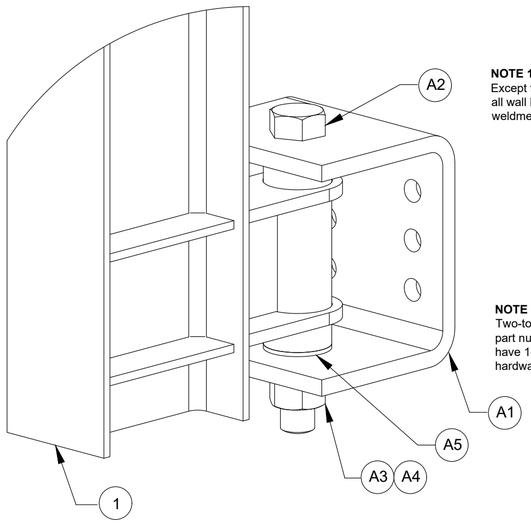
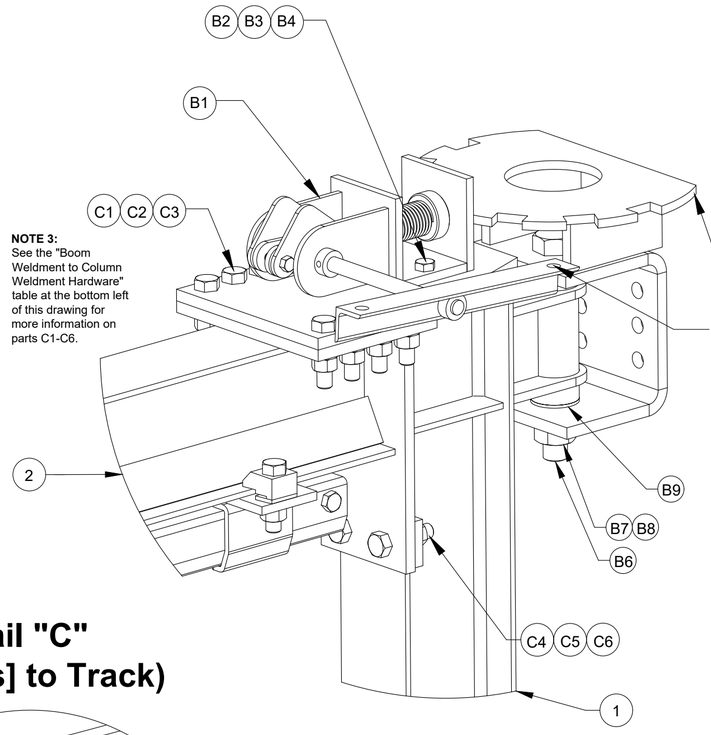
Detail "A"
(Wall Brackets to Column Weldment)



NOTE 1:
Except for Swing Arm systems using a boom lock (B), all wall brackets (A1) ship assembled to the column weldments (1).

NOTE 2:
Two-ton wall brackets are part number 06-0522 and have 1-1/4-inch diameter hardware.

Detail "B"
(Boom Weldment and Boom Lock to Column Weldment)

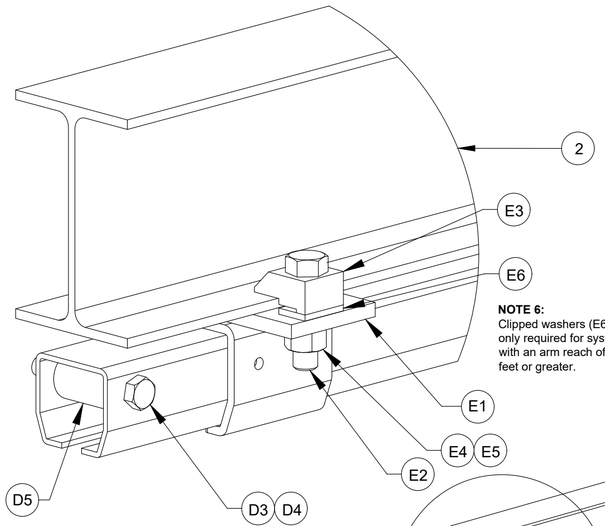


NOTE 3:
See the "Boom Weldment to Column Weldment Hardware" table at the bottom left of this drawing for more information on parts C1-C6.

NOTE 4:
For systems with two-ton wall brackets, the boom lock wall bracket weldment (B5) is part number 6-3729.

Yellow rope is installed in this hole and the hole on the other end of this angle. The rope is used to lock and unlock the arm.

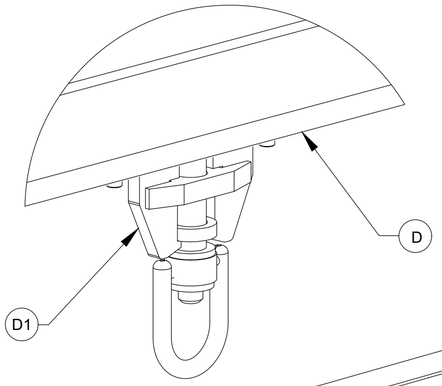
Detail "D"
(Track to Boom Weldment and End Stops to Track)



NOTE 5:
End stop bolts (D3), end stop locknuts (D4), and end stop rubber sleeves (D5) come in packs labeled "FA-X00ES" (D2).

NOTE 6:
Clipped washers (E6) are only required for systems with an arm reach of 18 feet or greater.

Detail "C"
(Trolley[s] to Track)



NOTE 8:
Quantities shown are for a system containing one column weldment (1), one boom weldment (2), one single plain track runway (D), and three hanger kits (E).

Note 7: The boom lock shown in Detail "B" is an option and not required.

Boom Weldment to Column Weldment Hardware

FA-K-H-300-6-8-10-12				FA-K-H-300-14				FA-K-H-300-16-18			
Item	Quantity	Part Number	Description	Item	Quantity	Part Number	Description	Item	Quantity	Part Number	Description
C1	10	10-0302	5/8" Diameter X 2-1/2" Bolt	C1	8	10-0402	3/4" Diameter X 2-1/2" Bolt	C1	8	10-0608	1" Diameter X 3-1/2" Bolt
C2	10	11-0040	5/8" Diameter Hex Nut (9/16" H.)	C2	10	11-0060	3/4" Diameter Hex Nut (5/8" H.)	C2	8	11-0080	1" Diameter Hex Nut (7/8" H.)
C3	10	14-0004	5/8" Diameter Split Lock Washer	C3	10	14-0005	3/4" Diameter Split Lock Washer	C3	8	14-0007	1" Diameter Split Lock Washer
C4	N/A	N/A	Same as C1	C4	2	10-0416	3/4" Diameter X 3" Bolt	C4	2	10-0416	3/4" Diameter X 3" Bolt
C5	N/A	N/A	Same as C2	C5	N/A	N/A	Same as C2	C5	2	11-0060	3/4" Diameter Hex Nut (5/8" H.)
C6	N/A	N/A	Same as C3	C6	N/A	N/A	Same as C3	C6	2	14-0005	3/4" Diameter Split Lock Washer

Item	Quantity	Part Number	Building Materials Description
1	1	8-05XX--XX.XX	FA, Weldment, 300, X' Bracket Centers, WXX
2	1	8-05XX--XX.XX	FA, Boom Weldment, 300, XX' Span, WXX
-A-	1	8-0070	C-Bracket, 1/2 and 1 Ton, 300 and 301
A1	1	06-0521	Bracket, Wall 1/2 and 1 Ton
A2	1	10-0604	Bolt, Hex Head 1"-8 NC X 9" GR 5
A3	1	11-0080	Nut, Hex 1"-8 NC
A4	1	14-0007	1" Split Lock Washer
A5	1	36-0008	Washer, Thrust 1.016 " ID X 2" OD
-B-	1	8-00XX	FA, Kit, X Ton Wall Bracket with Boom Lock
B1	1	06-0459-3	Boom Lock Assembly 10", 12", 15" I-Beam
B2	2	10-0203	Hex Bolt 1/2"-13 NC X 2"
B3	2	11-0030	Nut, Hex 1/2"-13 NC
B4	2	14-0003	Washer, Lock Split 1/2" Zinc Plated
B5	1	6-3728	Boom Lock Wall Bracket Weldment
B6	1	10-0604	Bolt, Hex Head 1"-8 NC X 9" GR5
B7	1	11-0080	Nut, Hex 1"-8 NC
B8	1	14-0007	1" Split Lock Washer
B9	1	36-0008	Washer, Thrust 1.016 ID X 2" OD
-C-	1	FA-K-H-300-X-X-XX-XX	FA Hardware Kit, Boom/Mast
C1	8	10-0XXX	Hex Bolt
C2	8	11-00XX	Nut, Hex
C3	8	14-000X	Split Lock Washer
C4	2	10-0XXX	Hex Bolt
C5	2	11-00XX	Nut, Hex
C6	2	14-000X	Split Lock Washer
-D-	1	PT5XX	Fall Arrest Plain Track
D1	1	FA-XXX-AT	FA, Swiveling Connector Anchor Trolley
D2	2	FA-X00ES	Fall Arrest End Stop Kit
D3	2	10-02XX	End Stop Bolt
D4	2	13-0003	Nut, Hex Lock 1/2"-13
D5	2	RR1.25-X	End Stop Rubber Sleeve
-E-	3	8-00XX	Fall Arrest, 300, X Man, X' SP, X Track
E1	3	505P-XX.XX	Flush-Parallel Mount Hanger Bracket
E2	6	10-0303	Bolt, 5/8"-11 NC X 3" GR 5
E3	6	18-0021F	Beam Clip Forged, 5/8" W/SH Tail, 1/4" TH
E4	6	14-0004	Washer, Lock Split 5/8" Zinc Plated
E5	6	13-0001	Nut, Lock Hex 5/8"-11 NC (3/4" H)
E6	6	18-0007	Washer 5/8" Clipped 1/8" TH

Component Assembly Schedule

1. Bolt Wall Brackets to Column Weldment **(Detail "A")**
2. Bolt Boom Weldment to Column Weldment **(Detail "B")**
3. If Provided, Bolt Boom Lock to Column Weldment **(Detail "B")**
4. Bolt Arm to Wall Column
5. Bolt Track to Boom Weldment and End Stops to Track **(Detail "D")**
6. Install Trolley(s) to Track **(Detail "C")**

Torque Specifications

Bolt Diameter	Hex Nut Torque	Minimum Hex Locknut Torque
1/2 Inch	78 Foot-Pounds	51 Foot-Pounds
5/8 Inch	154 Foot-Pounds	93 Foot-Pounds
3/4 Inch	257 Foot-Pounds	151 Foot-Pounds
7/8 Inch	341 Foot-Pounds	224 Foot-Pounds
*1 Inch	514 Foot-Pounds	325 Foot-Pounds

*The pivot pin nuts (A3 and B7) should be torqued to 40 foot-pounds for 1-inch diameter bolts and 75 foot-pounds for 1-1/4-inch diameter bolts.

Beam Clip (E3) Torque Specifications

Bolt Diameter	Minimum Torque
5/8 Inch	108 Foot-Pounds
3/4 Inch	210 Foot-Pounds

REV.	DATE	NAME	REVISION DESCRIPTION

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APPROVALS	DATE
DRAWN: DAP	11/22/10
CHECKED: TJB	11/22/10
APPVD: JRG	02/16/21
PLOT DATE:	WT.
PROJECT NO.: INSTRUCTIONS	SCALE: NTS

RIGID LIFELINES
Pioneers in Perform Industries, Inc.

FALL ARREST
SWING ARM
ASSEMBLY DRAWING

SIZE	DWG. NO.	REV.
C	FA-SWING-ARM-ASSEMBLY	-

CAD FILE: SHEET 1 OF 1

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"A"

RIGID LIFELINES
P/N 53-0206
(800) 869-2080 :: RigidLifelines.com

See Note 1 for More Info 53-0206

"B"

⚠WARNING

TO PREVENT TROLLEY OR END TRUCK, IF SUPPLIED, FROM RUNNING OUT OF THE TRACK, DO NOT OPERATE SYSTEM WITHOUT END STOP BOLTS SECURED ON EACH END OF RUNWAY AND BRIDGE, IF SUPPLIED.

DO NOT IMPACT END STOPS AT HIGH SPEED
DO NOT USE END STOPS FOR REPETITIVE BRIDGE IMPACTS, IF BRIDGE IS SUPPLIED
DO NOT SKEW BRIDGE, IF SUPPLIED, IN RUNWAYS

P/N 53-0047

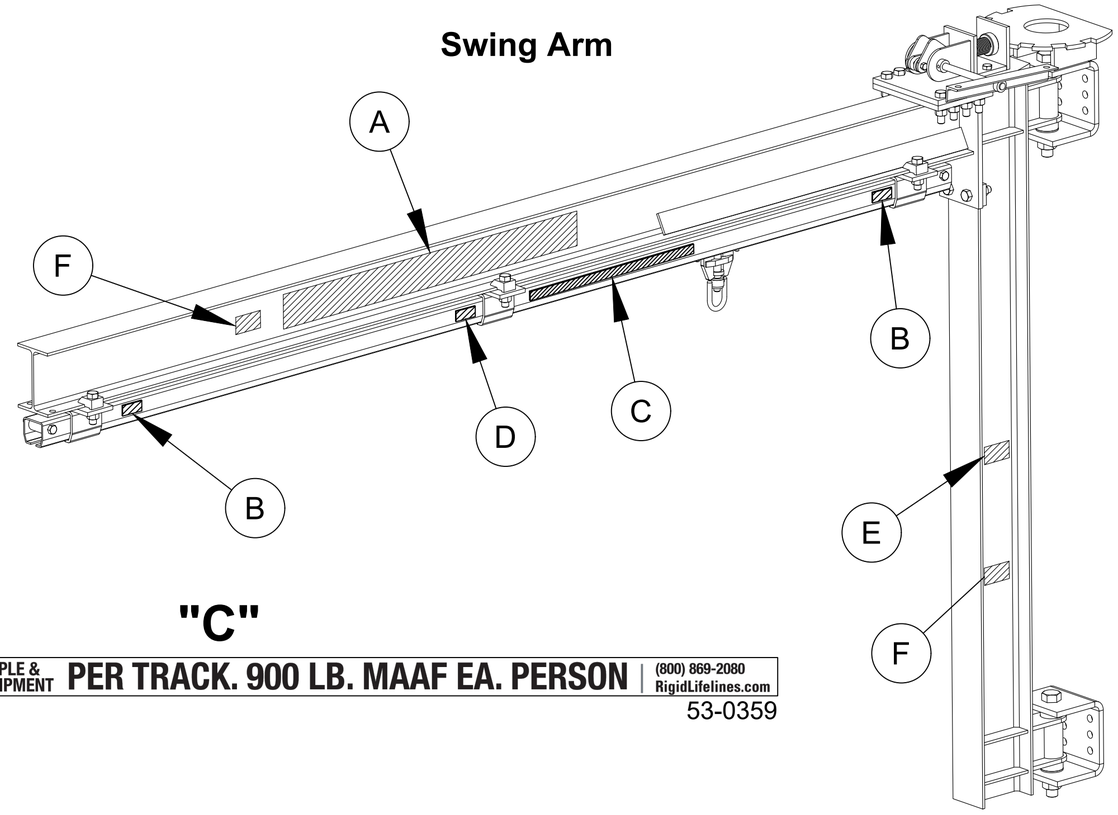
See Note 1 for More Info 53-0047

"D"

MADE IN ★★★★★★ THE USA
P/N 53-0023

53-0023
See Note 1 for More Info

Swing Arm



"C"

RIGID LIFELINES | PEOPLE & EQUIPMENT PER TRACK. 900 LB. MAAF EA. PERSON | (800) 869-2080 RigidLifelines.com

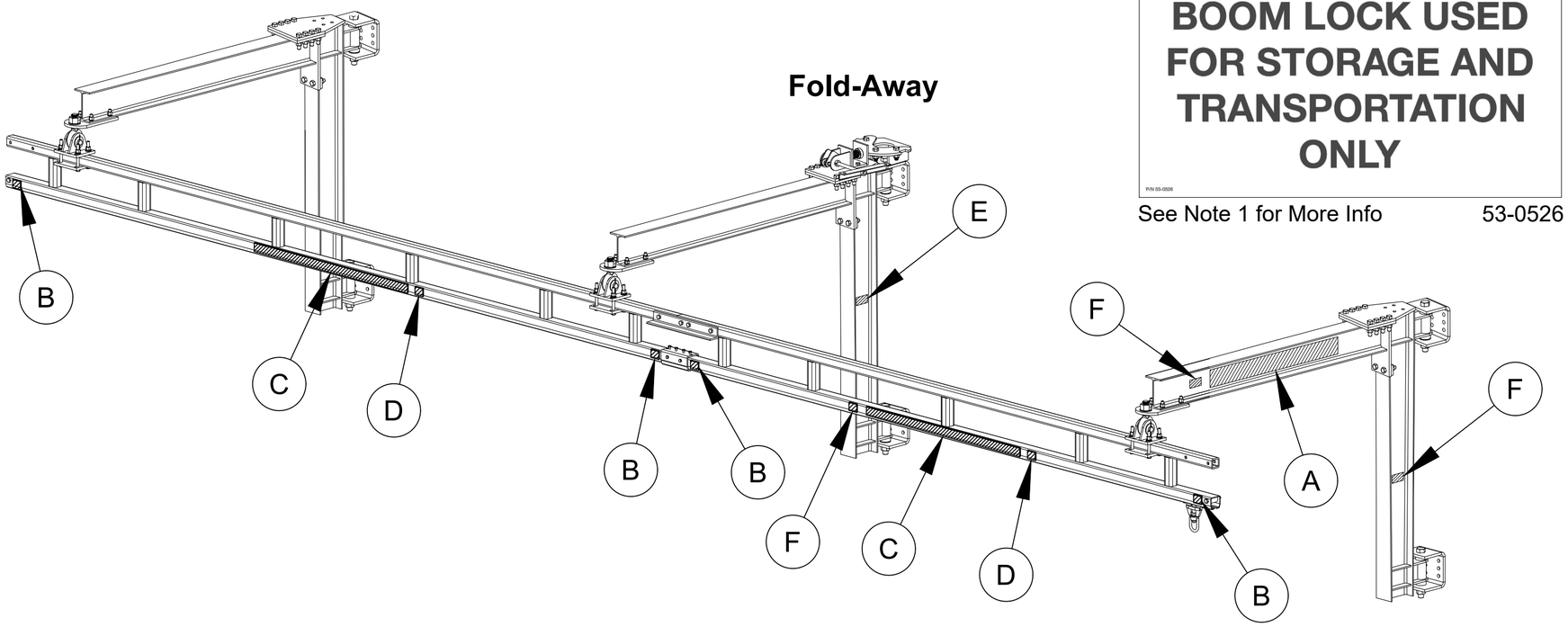
See Note 2 for More Info 53-0359

NOTE 1:
Label **53-0206 "A"** should be centered on the outside of the end boom weldments on Fold-Away systems**.** Label **"A"** should be centered on the outside of the boom weldment on Swing Arm systems.
Label **53-0047 "B"** should be placed on both ends of the lower section of trussed track on both sides of each track section.
Label **53-0023 "D"** should be placed to the right of label **"C"** on the lower section of trussed track on both sides.
Label **53-0526 "E"** is only for systems that use a boom lock. The label should be centered on both sides of the column weldment directly below the boom lock.
Label **"F"** should be placed on the mast and the boom of Column-Mounted Swing Arm Systems. Label **"F"** should be placed on every other column, boom, and lower section of trussed track on Column-Mounted Fold-Away Systems.

NOTE 2:
Label **"C"** should be centered on the lower section of trussed track on both sides of each track section and is **P/N 53-0535** for one person per track systems, **53-0536** for two people per track systems, and **53-0359** for **three** to **eight** people per track systems, along with **53-0413** through **53-0418** respectively. Labels **P/N 53-0413** through **53-0418** are the capacity numbers three through eight for the Anchor Track label and should be placed to the right of the line following "Rigid Lifelines."

NOTE 3:
Swing Arm systems use plain track, so labels **"B," "C,"** and **"D"** should be centered vertically on the plain track.

Fold-Away



"E"

BOOM LOCK USED FOR STORAGE AND TRANSPORTATION ONLY
P/N 53-0526

See Note 1 for More Info 53-0526

"F"

RIGID LIFELINES
Promise to Perform Industries, Inc.
Serial #: 123456-789
Model #: X12XXXX34.5678.90
MFG Date: 00/0000

See Note 1 for More Info

Sheet 3 of 3

REV.	DATE	NAME	REVISION DESCRIPTION
CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE, DO NOT SCALE DRAWING			
APPROVALS	DATE		
DRAWN: JRG	01/14/15		
CHECKED:			
APPVD: JRG	02/16/21		
PLOT DATE:	WT.		
PROJECT NO.: INSTRUCTIONS	SCALE: NTS		

RIGID LIFELINES Promise to Perform Industries, Inc.

FALL ARREST
FOLD-AWAY AND SWING ARM
LABEL PLACEMENT DRAWING

SIZE C | DWG. NO. FA-FA-SWING-ARM-LPD | REV. -
CAD FILE: | SHEET 1 OF 1