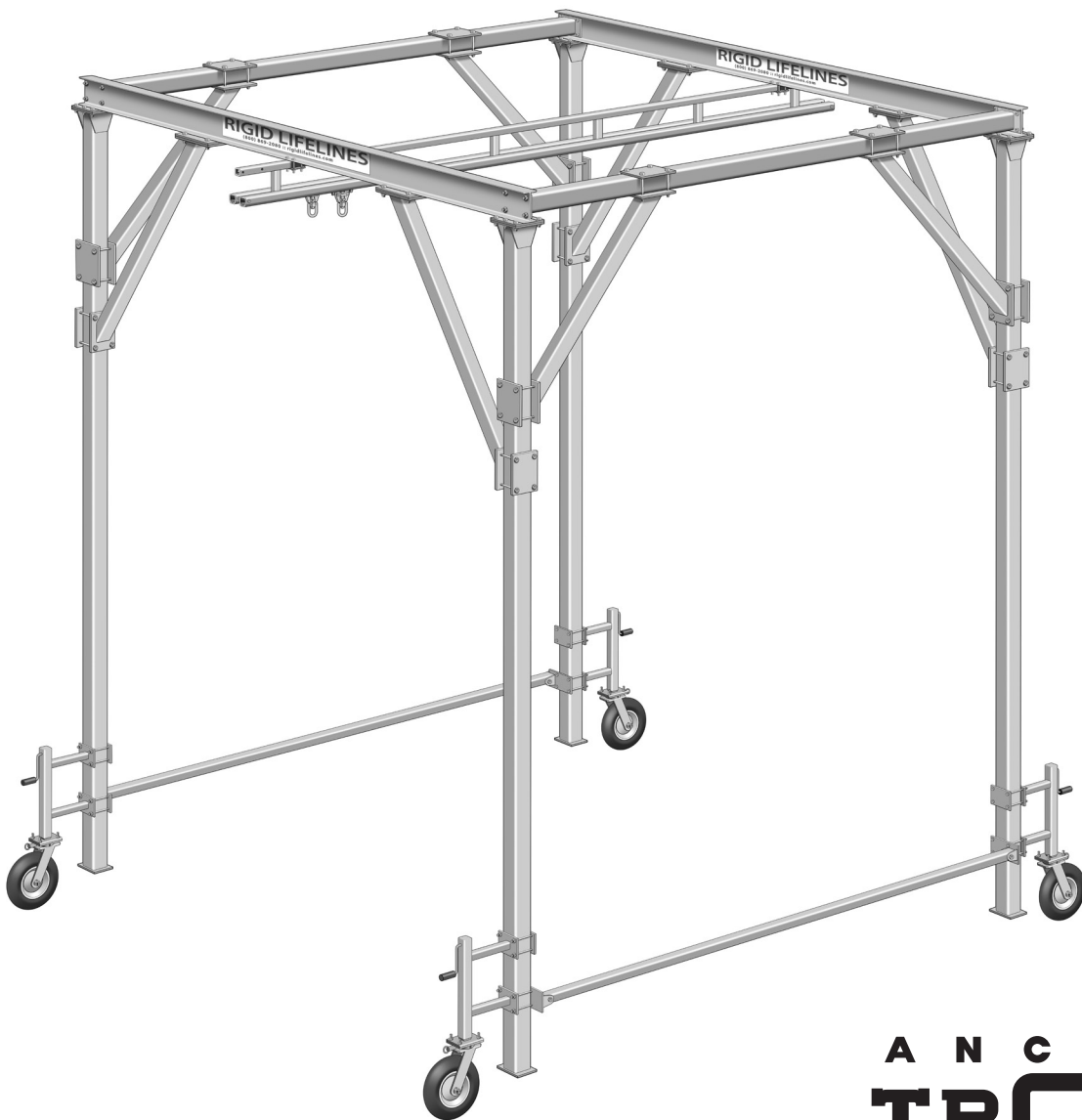




# PORTABLE BOX FRAME

ANCHOR TRACK™ SYSTEM

Assembly and Operation Instruction Manual



A N C H O R  
T R A C K



## 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

Always ensure that all stabilizer pads on all four legs are firmly touching the ground before use.

Do not move the system faster than five MPH. The knee braces must be installed prior to moving the system.

Do not move the system while workers are still connected to it; doing so may result in serious injury or death.

Do not use the system on an incline; only use the system on surfaces that are firm and level. NEVER place the system near a ledge.

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

### **NEVER EXCEED 30 DEGREES OFF-PLUMB (OFF-CENTER) LOADING.**

When the system is in use, place it on the stabilizer pads to prevent the system from rolling.

Push the system legs by hand only. Do not push or pull the system with forklift or other vehicles. Do not pull sideways on system.

Store the system on the stabilizer pads to prevent the system from rolling. Ensure that the wheels are jacked all the way up.



## 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 properly arrest a freefall.**

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



## WARNING

Do not use the system on inclined surfaces; only use the system on surfaces that are firm and level.

**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.

It is the responsibility of the user and their management's Competent Person to determine that the system is level and that the entire, leveled system is stable prior to every use.

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# SYSTEM APPLICATIONS

The Portable Box Frame Anchor Track™ System is used for fall protection applications. This fall protection system is labeled with maximum number of users and maximum arresting force; follow all limitations as noted on system label. Each user must attach to this system 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 Portable Box Frame Anchor Track™ System meets or exceeds the requirements set forth in OSHA 1910, OSHA 1926, and ANSI Z359.

## REQUIRED TRAINING

This system is intended to be used by people who are trained in its 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.asse.org](http://www.asse.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: 35 feet; minimum capacity: 8,000 pounds)
- d) Man lift/cherry picker (minimum height: 30 feet)
- e) Measuring tape
- f) Torque wrench
- g) Lifting straps
- h) Long carpenter's level
- i) Large carpenter's square
- j) Eight six-inch by six-inch (or larger) wood blocks
- k) Wrench/Socket sizes: 7/8 inch, and 11/16 inch, and 1-1/4 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) *FABF-ASSEMBLY SHEET 1 OF 2*, hereafter referred to as *Portable Box Frame Assembly Drawing*, will be included as a separate document.
- o) *FABF-ASSEMBLY SHEET 2 OF 2*, hereafter referred to as *Portable Box Frame Label Placement Drawing*, will be included as a separate document.
- p) 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 *Portable Box Frame 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.

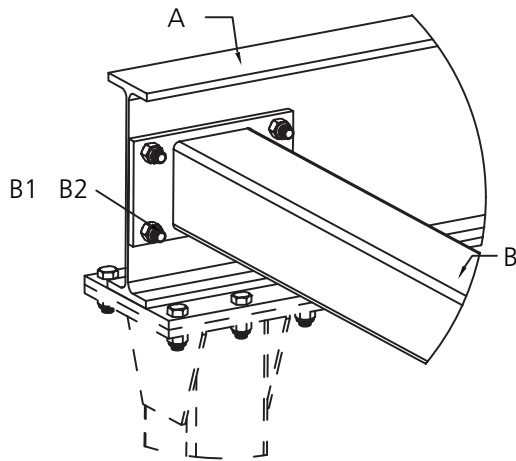


### 3. Attaching Main Cross Braces to Headers

Refer to Portable Box Frame Assembly Drawing for Steps A Through G

- a) Place at least eight six-inch by six-inch (or larger) wooden blocks in a square pattern on the ground, with three blocks on each side. The blocks make assembly easier because the header tab for the knee braces extends down below the headers and main cross braces. (The header tab is located on the bottom of the headers (A), where the long knee brace (E) gets bolted.)
- b) Per **Detail "A,"** place the first header (A) on the blocks on one side of the square, with the tab weldments for the short (D) and long knee braces (E) facing down.
- c) Per **Detail "A,"** place the main cross brace (B) perpendicular to the header (A), creating a corner.
- d) Per **Detail "A,"** fasten the main cross brace (B) to the header (A) using bolts (B1) and nuts (B2). **Securely tighten** all nuts (B2).

#### Detail "A" (Main Cross Braces and Support Legs to Headers)



Item	Description
A	Header
B	Main Cross Brace
B1	5/8-Inch by 2-Inch Hex Head Bolt
B2	5/8-Inch Hex Locknut

- e) Repeat steps **b)** through **d)** to attach the remaining main cross brace (B) and header (A).
- f) After both of the headers (A) and main cross braces (B) have been **securely tightened** together, use a long carpenter's level to ensure that the headers (A) and main cross braces (B) are perfectly level and use a carpenter's square to ensure that each corner forms 90-degree corners.
- g) After the headers (A) and main cross braces (B) are level and form 90-degree corners, torque the nuts (B2) to 93 foot-pounds.

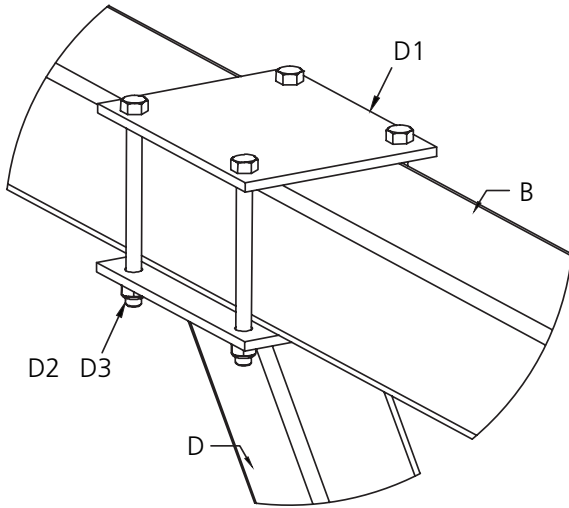


#### 4. Attaching Short and Long Knee Braces to Main Cross Braces and Headers

Refer to Portable Box Frame Assembly Drawing for Steps A Through C

- a) Using a crane, install lifting straps around the main cross braces (B) and lift the assembly high enough to attach the short (D) and long knee braces (E).
- b) Per **Detail "B,"** attach the short knee braces (D) to the main cross braces (B) using bolts (D3), nuts (D2), and knee brace mount plates (D1). Ensure that the short knee braces (D) are facing towards the corners. **Securely tighten** the nuts (D2).

##### Detail "B" (Short Knee Braces to Main Cross Braces)

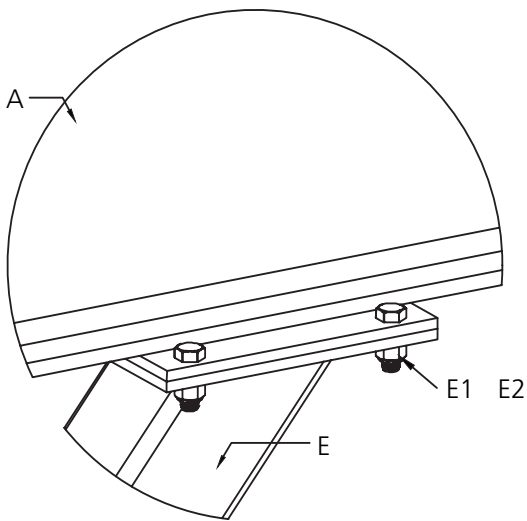


Item	Description
B	Main Cross Brace
D	Short Knee Brace
D1	Knee Brace Mount Plate
D2	1/2-Inch Hex Locknut
D3	1/2-Inch by 6 1/2-Inch Hex Head Bolt

- c) Per **Detail "C,"** attach the long knee braces (E) to the tabs on the headers (A) using nuts (E1) and bolts (E2). Ensure that the long knee braces (E) are facing towards the corners. **Securely tighten** the nuts (E1) for now.

**NOTE:** Both the short (D) and long knee braces (E) will temporarily hang from the headers (A) and main cross braces (B) until they are attached to the support legs (C). Leave the system lifted in the air to attach the runway (H).

##### Detail "C" (Long Knee Braces to Headers)



Item	Description
A	Header
E	Long Knee Brace
E1	1/2-Inch Hex Locknut
E2	1/2-Inch by 1 1/2-Inch Hex Head Bolt

## 5. Attaching Runway to Headers

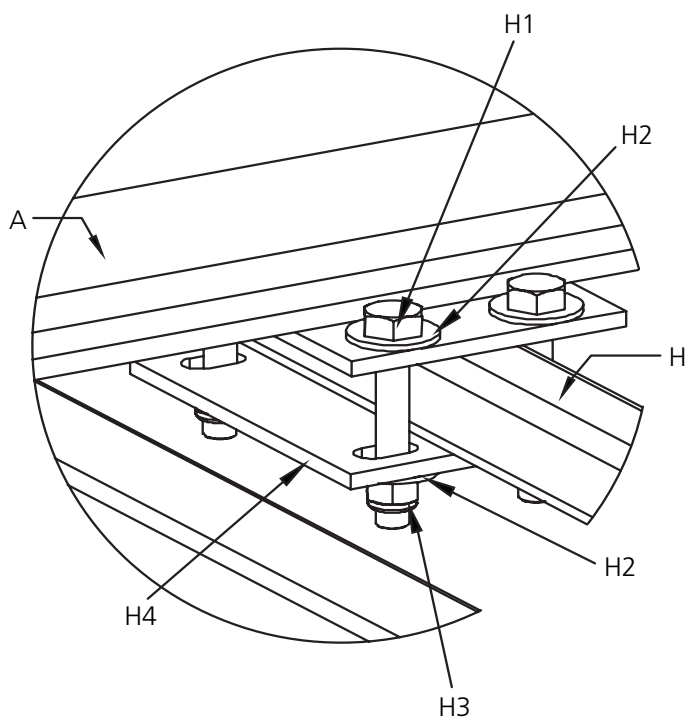
Refer to Portable Box Frame Assembly Drawing for Steps A Through F

- With the assembly still lifted into the air, per **Detail "E,"** attach the runway (H) by inserting the four runway bolts (H1) at the flange holes at the center of each header (A) so that the bolts (H1) hang down from the header (A).
- Per **Detail "E,"** lift the runway (H) into position so it sits between the two sets of bolts (H1) on both headers (A).
- Per **Detail "E,"** slide the track connection plate (H4) through the runway bolts (H1) until it is snug against the runway (H).

**NOTE:** The bolts must be vertical; if they are not vertical, you must remove the bolts (H1) and rotate the track connection plate (H4) 90 degrees before reinstalling the bolts (H1).

- Per **Detail "E,"** after the track connection plate (H4) has been installed, **securely tighten** the four nuts (H3).

### Detail "E" (Runway to Headers)



Item	Description
A	Header
H	Runway
H1	5/8-Inch by 4-Inch Hex Head Bolt
H2	5/8-Inch Flat Washer
H3	5/8-Inch Hex Locknuts
H4	Track Connection Plate

Bolt Diameter	Minimum Hex Locknut Torque
5/8 Inch	93 Foot-Pounds

- Repeat steps **a)** through **e)** to install the other end of the runway (H).
- After both ends of the runway (H) have been **securely tightened** to the headers (A), torque all eight runway hanger bolts (H1) to the specifications above.

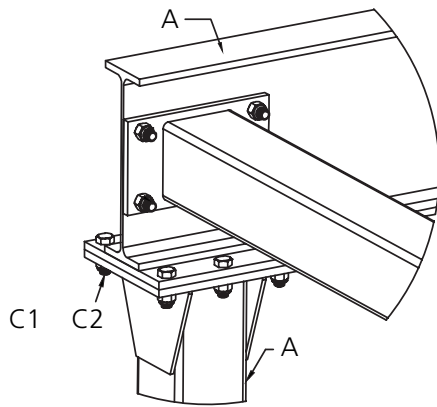
## 6. Attaching Support Legs to Headers and Short and Long Knee Braces

Refer to Portable Box Frame Assembly Drawing for Steps A Through I

- Using a crane, lift the assembly high enough to fit the support legs (C) under the plates found on the bottom corners of both headers (A).
- Per **Detail "A,"** lift a support leg (C) to the bottom corner of a header (A) using a forklift and lifting strap. Align the holes on the bottom of the header (A) with the top of the support leg (C) and bolt the support leg (C) to the header (A) using bolts (C1) and nuts (C2). **Securely tighten** the nuts (C2).

- c) Per **Detail "F,"** move the bottom of the short knee brace (D) so it is flush against the support leg (C). Place a knee brace mount plate (D1) on the opposite side of the flush short knee brace (D) on the support leg (C). Insert bolts (D3) through the knee brace mount plate (D1) and the short knee brace (D) and secure with nut (D2). **Securely tighten** the nuts (D2) to the bolts (D3).

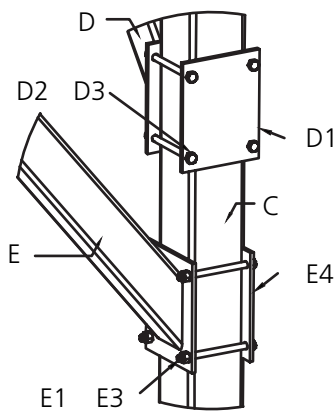
### Detail "A" (Main Cross Braces and Support Legs to Headers)



Item	Description
A	Header
C	Support Leg
C1	5/8-Inch by 2-Inch Hex Head Bolt
C2	5/8-Inch Hex Locknut

- d) Per **Detail "F,"** move the bottom of the long knee brace (E) so it is flush against the support leg (C). Place a knee brace mount plate (E4) on the opposite side of the flush long knee brace (E) on the support leg (C). Insert bolts (E3) through the knee brace mount plate (E4) and the long knee brace (E). **Securely tighten** the nuts (E1) to the bolts (E3)
- e) Repeat steps a) through e) to attach the remaining three support legs (C) to the headers (A) and short (D) and long knee braces (E).
- f) After the support legs (C) have been **securely tightened** to the headers (A) and short (D) and long knee braces (E), lower the system until it rests firmly on the stabilizer pads.

### Detail "F" (Support Legs to Short and Long Knee Braces)



Item	Description
C	Support Leg
D	Short Knee Brace
D1, E4	Knee Brace Mount Plate
D2, E1	1/2-Inch Hex Locknut
D3, E3	1/2-Inch by 6 1/2-Inch Hex Head Bolt
E	Long Knee Brace

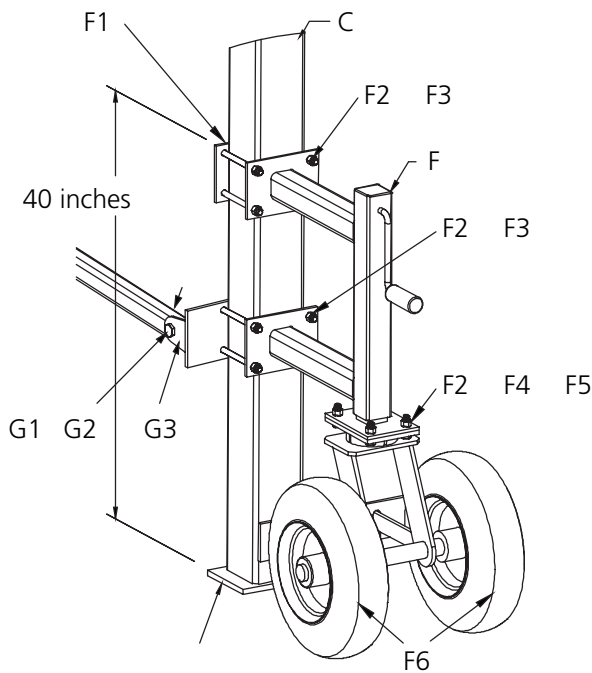
- g) Using a long carpenter's level, ensure that the support leg (C) is plumb. Torque the support leg nuts (C2) to 93 foot-pounds.
- h) After the support leg nuts (C2) have been torqued, torque the short and long knee brace nuts (D2 and E1) to 51 foot-pounds.
- i) Repeat steps g) and h) to secure the remaining support legs (C) to the headers (A) and short (D) and long knee braces (E).

## 7. Attaching Leveling Jack Weldments and Lower Connection Tubes to Support Legs

Refer to Portable Box Frame Assembly Drawing for Steps A through E

- a) Per **Detail "D,"** attach the leveling jack weldment (F) to the support leg (C) using a caster mount plate (F1), nuts (F2), and bolts (F3). The top of the caster mount plate (F1) should be 40 inches from the ground. **Securely tighten** the nuts (F2).
- b) Per **Detail "D,"** attach a wheel assembly (F6) to the leveling jack weldment (F) using nuts (F2), bolts (F4), and flat washers (F5). **Securely tighten** the nuts (F2).
- c) Per **Detail "D,"** attach the support tube mount plate (G3) to the lower connection tube (G) using a bolt (G1) and nut (G2). **Securely tighten** the nut (G2). Now attach the lower connection tube (G) to the support leg (C) using nuts (F2) and bolts (F3). **Securely tighten** the nuts (F2).

### Detail "D" (Leveling Jack Weldments and Lower Connection Tubes to Support Legs)



Item	Description
C	Support Leg
F	Leveling Jack Weldment
F1	Caster Mount Plate
F2	1/2-Inch Hex Locknut
F3	1/2-Inch by 6 1/2-Inch Hex Head Bolt
F4	1/2-Inch by 1 3/4-Inch Hex Head Bolt
F5	1/2-Inch Flat Washer
F6	Wheel Assembly
G	Lower Connection Tube
G1	5/8-Inch by 3 1/2-Inch Hex Head Bolt
G2	5/8-Inch Hex Locknut
G3	Support Tube Mount Plate

- d) Repeat steps **a)** through **(c)** to attach the remaining leveling jack weldments (F) and lower connection tubes (G) to the support legs (C).
- e) After all of the remaining leveling jack weldments (F) and lower connection tubes (G) have been **securely tightened** to the support legs (C), torque the nuts (F2 and G2) to the specifications in step **a)** of **8. FINAL ASSEMBLY** on the following page.

## 8. Final Assembly

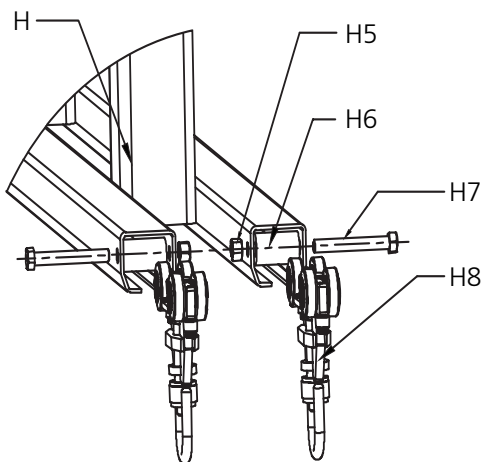
Refer to Portable Box Frame Assembly Drawing for Steps A through E

- a) Confirm that all of the system's nuts are torqued to the required specifications below prior to removing your telescoping fork truck or crane.

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

- b) Per **Detail "G,"** insert your Anchor Trolley™ (H8) into the runway (H). For a multiple track system, install one Anchor Trolley per runway (H).
- c) Per **Detail "G,"** install the runway's end stops by inserting the bolts (H7) through the holes at both ends of the runway (H) and through the rubber sleeves (H6).

### Detail "G" (Trolley[s] and End Stops to Runway)



Item	Description
H	Runway
H5	1/2-Inch Hex Locknut
H6	End Stop Rubber Sleeve
H7	End Stop Bolt
H8	Swiveling Connector Anchor Trolley

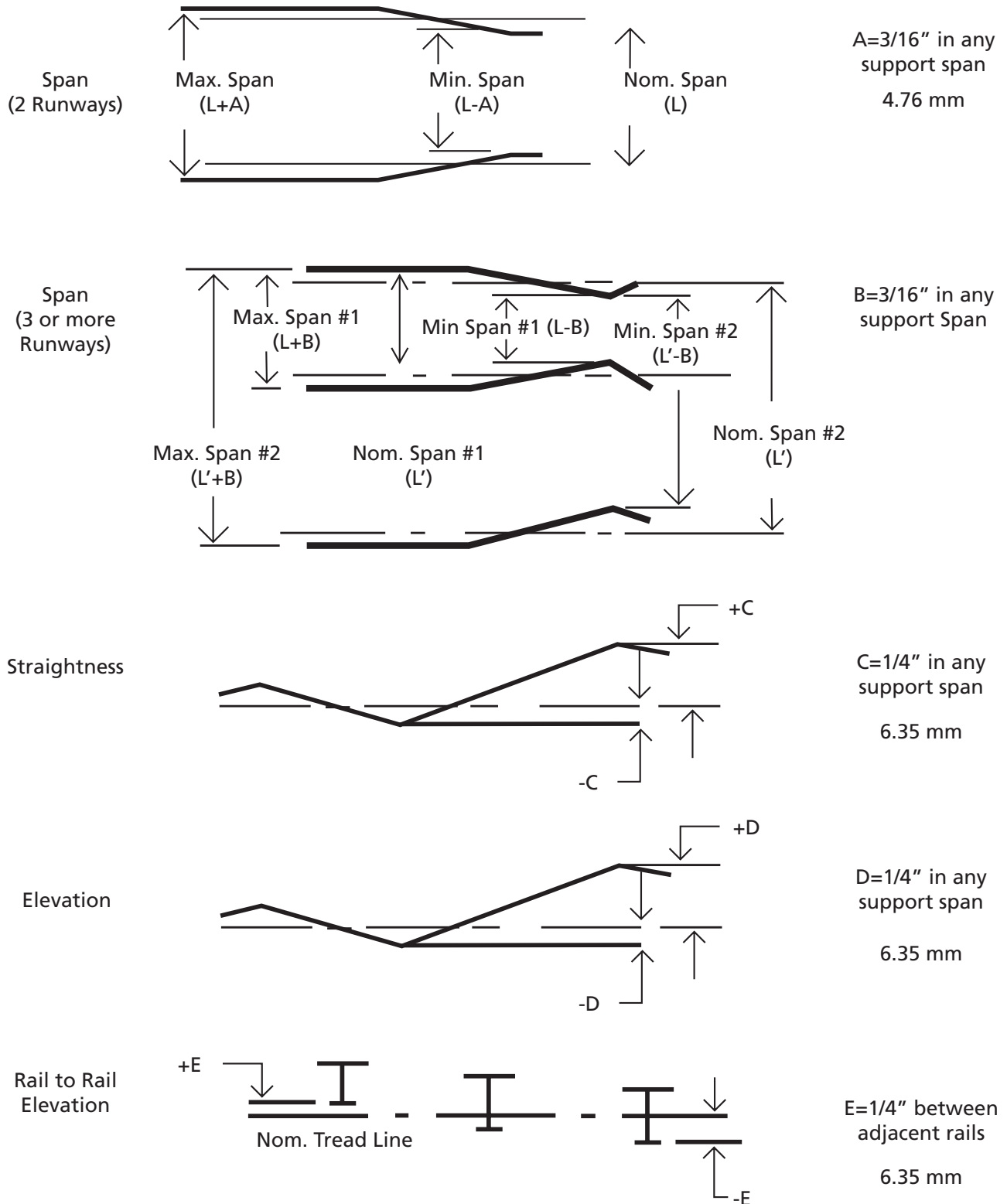
**NOTE:** The 1/2-inch hex locknuts (H5) should be securely tightened against the track. Be careful not to damage the track in any way.

- d) Attach and torque the end stop nuts (H5) until securely tightened against the runway.
- e) **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.

# RUNWAY ALIGNMENT TOLERANCE

Rigid Lifelines recommends runway slope of no more than 1/4 inch per 20 feet of track to prevent drift of the trolley. See **Figure 1** for more information.

**Figure 1**



**NOTE:** Illustrations in **Figure 1** are provided courtesy of MMA MH27.1.

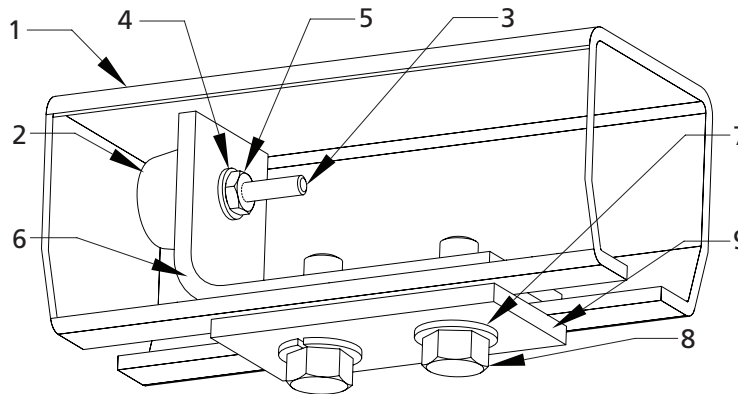
# INTERMEDIATE BUMPER INSTALLATION (IF SUPPLIED)

**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 2**, 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 2**, insert two bolts (8) through two split lock washers (7).
4. Per **Figure 2**, 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 2**, 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 2**

**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.



# OPERATING INSTRUCTIONS

## HOW TO MOVE THE SYSTEM CORRECTLY

1. Only move the system on a smooth, level, paved surface.
2. Four or more people should push the system with at least one person at each corner. Ensure that all swivel locks are disengaged before turning system.
3. Before moving system and if no turns are necessary, ensure that the wheels are facing the desired direction and engage the swivel locks on the wheel assemblies by pulling the ring and spinning it until it fits in the groove.
4. Two people on diagonal corners should crank the leveling jack weldments until the wheel assemblies are firmly on the ground and two to three inches are visible beneath the stabilizer pads. Repeat this step for the remaining wheel assemblies.

## OPERATING REMINDERS

1. Make sure a written fall protection plan is in place.
2. **Confirm that the system's legs are plumb, and the system is being used on a firm, level surface. NEVER place system near a ledge.**
3. Position the system with its Anchor Track™(s) as close as possible to the center of your work area.
4. **NEVER exceed 30 degrees off-plumb (off-center) loading.**
5. When the system is in use, place it on the stabilizer pads to prevent the system from rolling.
6. **This system must be used with an ANSI-rated self-retracting lanyard (SRL),** per your training and the instructions that came with your equipment. If not already connected, attach your SRL to the system's Anchor Trolley™ connector using an approved offset-D locking carabiner. Don your full-body safety harness and then connect the SRL's snaphook to your harness's D-ring.
7. **NEVER** push or pull system with a forklift or other vehicle.

## MAINTENANCE

### WHEEL ASSEMBLY AND WHEEL LOCK MAINTENANCE

1. Grease the caster assemblies' swiveling section and axles to ensure proper lubrication at least monthly with low melting point lithium grease, which can be purchased at any automotive store.
2. Ensure that the wheel locks are making contact with the wheel material for maximum effectiveness.
3. For a full list of caster inspection points, see the *Portable Box Frame Anchor Track™ System* checklist.

### INSPECTION CHECKLISTS

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 *Portable Box Frame 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](http://RigidLifelines.com).

# LABELING

The letters correspond to the letters on the Portable Box Frame Label Placement Drawing. All labeling must be legible and attached to the system. For replacement labels, contact Rigid Lifelines®.

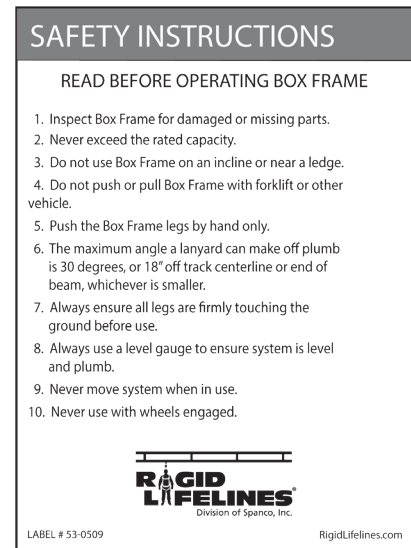
## RIGID LIFELINES LABEL PLACEMENT DISCLAIMER

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.

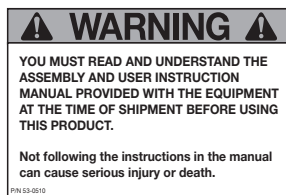
**"A"**



**"B"**



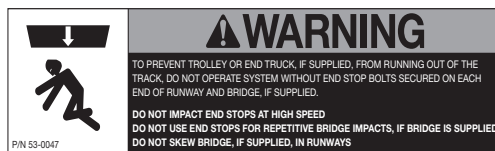
**"C"**



**"D"**



**"E"**



**"F"**



### Notes on Label Placement Drawing

- Label **53-0206 "A"** should be centered on both sides of both headers.
- Label **53-0509 "B"** should be placed on each support leg on each face of the leg.
- Label **53-0510 "C"** should be placed on each support leg on each face of the leg under label **"B."**
- Label **53-0023 "D"** should be placed on each side of one support leg.
- Label **53-0047 "E"** should be placed on both ends of the lower section of trussed track on both sides.
- Label **53-0359 "F"** should be centered on the lower section of trussed track on both sides and is **P/N 53-0535** for one person systems, **P/N 53-0536** for two person systems, **53-0359** for three to eight person systems, along with **53-0413** through **53-0418** respectively. Labels **P/N 53-0413** through **P/N 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."

# PORTABLE BOX FRAME ANCHOR TRACK™ SYSTEM INSPECTION CHECKLIST

## Before Each Use

Inspector Name: \_\_\_\_\_

Date: \_\_\_\_\_

System Number: \_\_\_\_\_

Model: \_\_\_\_\_



INSPECTION POINTS	Inspection Result (✓)	
	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.		
5. Check system components for bent or damaged areas.		
6. Check support structure for stability.		
<b>Caster Inspection</b>		
1. Inspect casters for visible signs of damage or excessive wear.		
2. Check each caster unit for concealed damage.		
3. Visually check that all wheel studs are present and tight.		
4. Ensure that the caster's wheel axles are properly secured.		
5. Ensure that the caster's wheel locks and swivel locks perform properly.		
6. Ensure that the casters' wheel locks are making contact with the wheel material for maximum effectiveness.		

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

Inspector Name: \_\_\_\_\_

Date: \_\_\_\_\_

System Number: \_\_\_\_\_

Model: \_\_\_\_\_



INSPECTION POINTS	Inspection Result (✓)	
	PASS	FAIL
1. Check that the beam clamps are installed horizontal 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. Check trolley for visibly bent swiveling connector, broken welds, or excessive wear or corrosion.		
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 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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# PRODUCT WARRANTY COVERAGE

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

- Engineered Track Equipment: Ten (10) years
- Wearable End Truck Wheels/Anchor Trolley™ Wheels and Teeth: Ten (10) Years
- Soft Goods, Devices, Connectors, and Accessories: One (1) Year
- Motorized Products and Drive Components: One (1) Year
- Paint and Finishes: Two (2) Years

## Ten-Year Warranty Coverage:

- Defects in equipment material and workmanship of manual track systems and equipment
- Wearable parts (End truck wheels and 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 to non-wearable parts only, with the exception of the wheels supplied on end trucks and Anchor Trolley wheels and teeth.

## Two-Year Warranty Coverage:

- Paint coatings and finishes

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 equipment and workmanship of motorized systems and equipment
- Defects in soft goods, devices, connectors, and accessories

Rigid Lifelines warrants motorized equipment to be free from defects in material and workmanship for a period of one (1) year or 2,000 hours, commencing on the date of shipment to the first retail purchaser.

Rigid Lifelines also 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 and Conditions:

Rigid Lifelines' 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) Defective equipment or system failure due to misuse, negligence, improper installation or maintenance
- Equipment that has been used in excess of its rated capacity or beyond its service factors
- Equipment that has been altered without Rigid Lifelines' written authorization
- 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 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

## **SERVICE POLICY**

1. Obtain as much information as possible concerning the problem through personal observation by yourself or other authorized personnel familiar with the job and equipment: include model, serial and/or part numbers, voltages, speeds, and any other special identifying features. Be prepared to discuss the situation in detail.
2. All authorized labor charges will be based on straight time. Hourly rates, estimated man hours, and not to exceed total dollar amount required for corrections are to be agreed upon before authorization is given. There will be no allowances for overtime except in dire emergencies and then only with prior approval.
3. A verbal agreement may be reached immediately on both the method of correction and the approximate cost. A warranty authorization number will be assigned for the specific incident. A confirming written authorization will be forwarded to the distributor.
4. The distributor must send an itemized invoice showing our release number or invoice number and warranty authorization number after authorized corrections have been made. A credit memo will be issued by accounting after the invoice has been received and approved. Warranty charges ARE NOT to be deducted from outstanding open account invoices under any circumstances.
5. Any field corrections made prior to an authorization by Rigid Lifelines will not be accepted as a warranty charge or the responsibility of Rigid Lifelines. Any modification to the equipment made without prior approval of the seller will void all warranties. A verbal authorization for modification may be obtained, in which event a warranty authorization number will be assigned for the specific modification. A confirming written authorization will be forwarded to the distributor.

# 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:

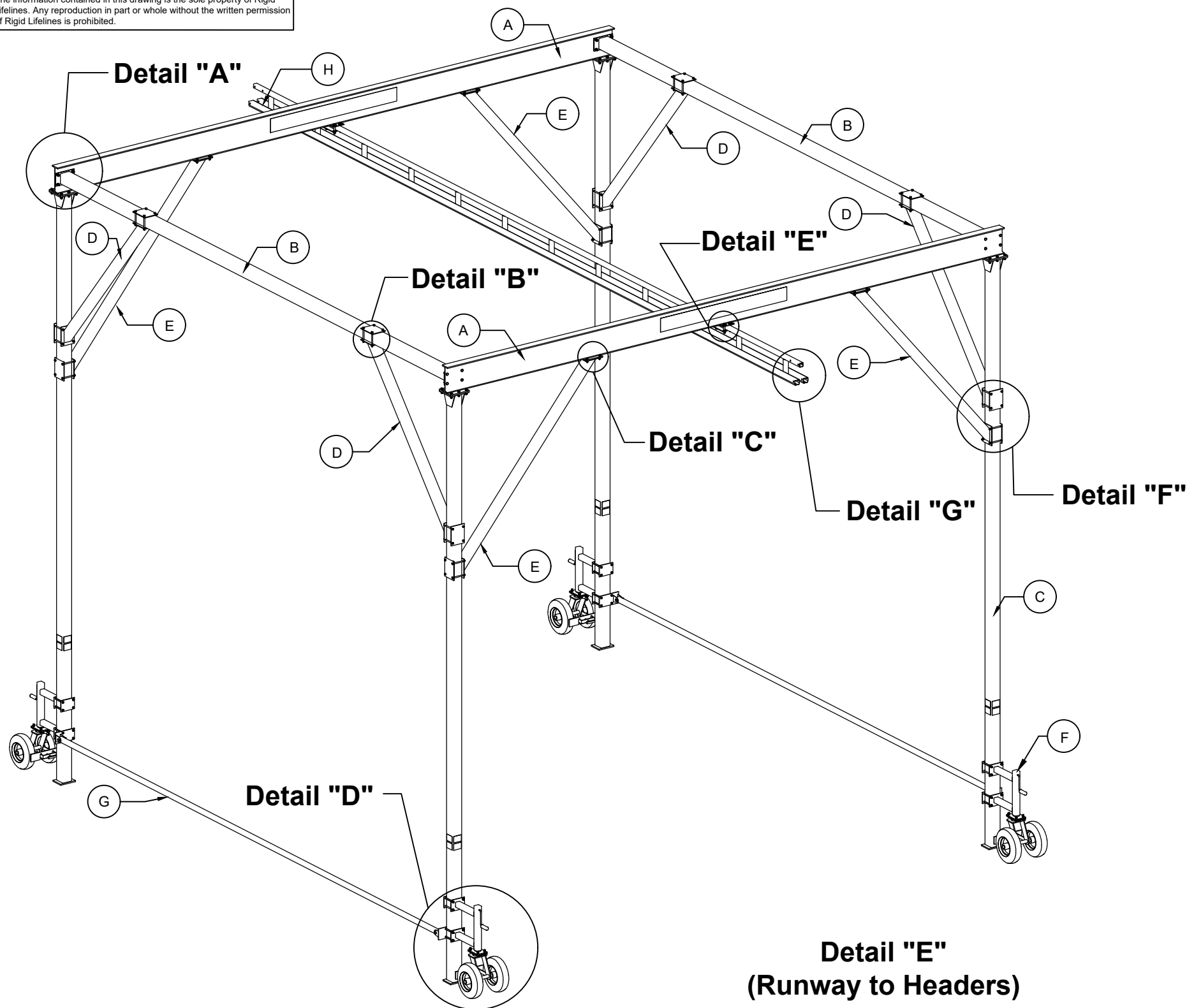
All of our systems are designed and manufactured in the United States of America. We have production facilities in Las Vegas, Nevada, and at our headquarters in Morgantown, Pennsylvania.



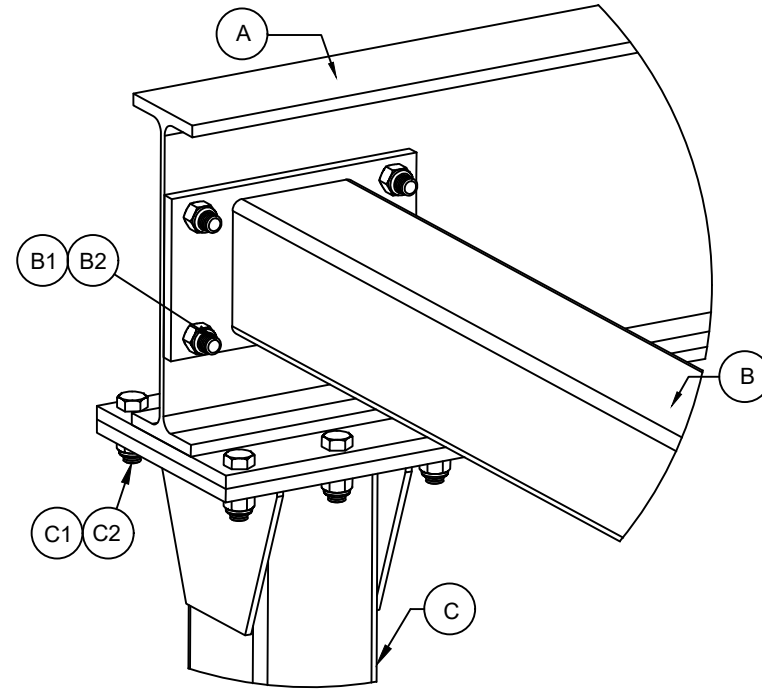
Morgantown, PA | Las Vegas, NV  
Toll Free: (800) 869-2080 | Local: (610) 286-7200 | Outside US: 1-610-286-7200 | Fax: (610) 286-0085  
[RigidLifelines.com](http://RigidLifelines.com) | [info@RigidLifelines.com](mailto:info@RigidLifelines.com)



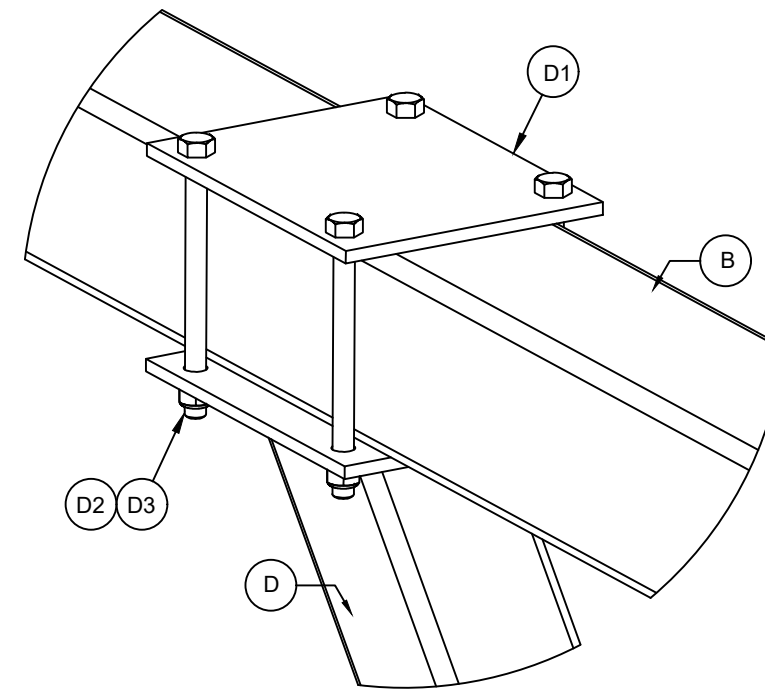
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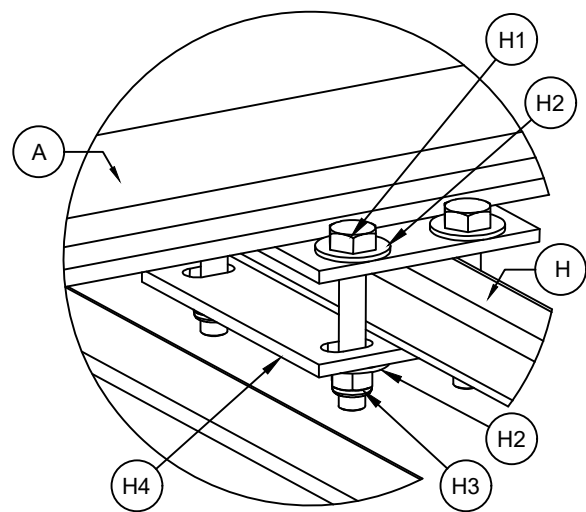
**Detail "A"**  
(Main Cross Braces and Support Legs to Headers)



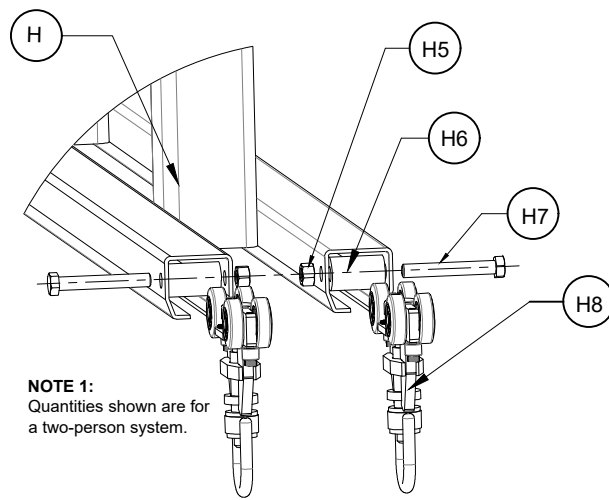
**Detail "B"**  
(Short Knee Braces to Main Cross Braces)



**Detail "E"**  
(Runway to Headers)

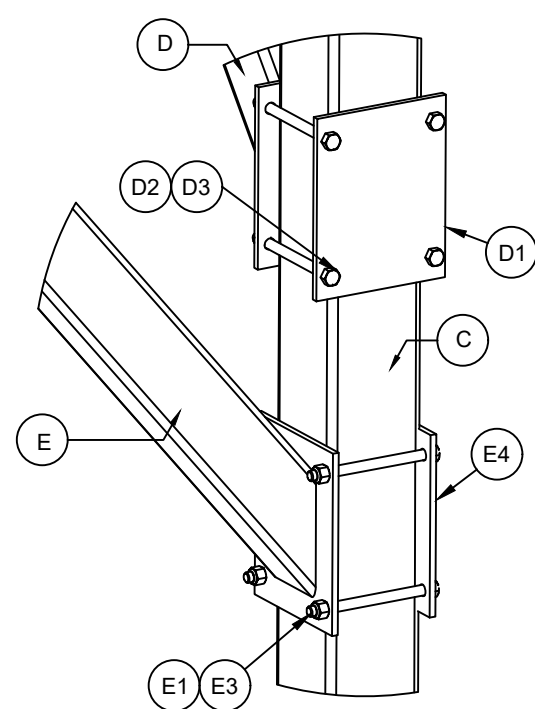


**Detail "G"**  
(Trolley[s] and End Stops to Runway)

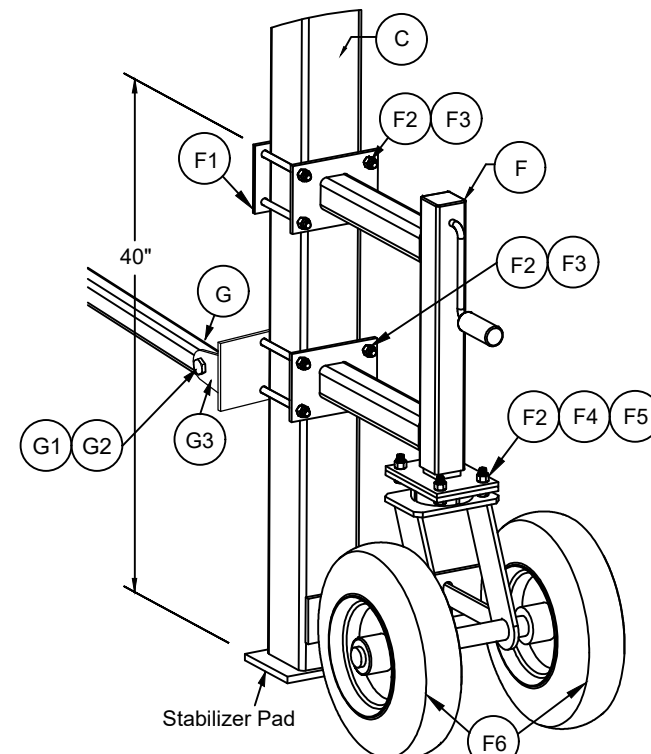


**NOTE 1:**  
Quantities shown are for a two-person system.

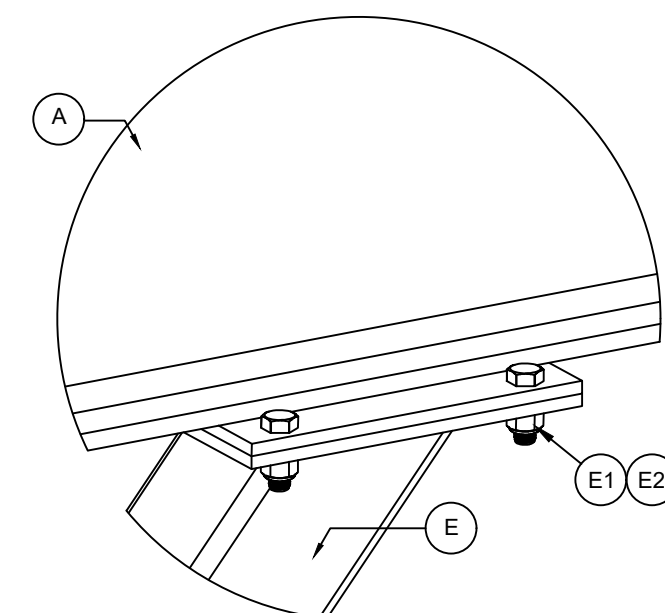
**Detail "F"**  
(Support Legs to Short and Long Knee Braces)



**Detail "D"**  
(Leveling Jack Weldments and Lower Connection Tubes to Support Legs)



**Detail "C"**  
(Long Knee Braces to Headers)



Item	Quantity	Part Number	Building Materials Description
-A-	2	8-4080-XX-XX.XX	Header
-B-	2	8-4086-XX.XX	Main Cross Brace
B1	16	10-0301	Bolt, 5/8"-11NC X 2" GR5 ZP
B2	16	13-0001	Hex Lock Nut, 5/8"-11NC
-C-	4	8-4085-XX.XX	Support Leg
C1	24	10-0301	Bolt, 5/8"-11NC X 2" GR5 ZP
C2	24	13-0001	Hex Lock Nut, 5/8"-11NC
-D-	4	8-4095-XX.XX	Short Knee Brace
D1	8	8-4084P	FABF-Knee Brace Mnt Plate-Painted
D2	32	13-0003	Nut, Hex Lock 1/2-13, GR 2 (5/8" H)
D3	32	10-0225	Hex Bolt 1/2-13NC X 6 1/2"
-E-	4	8-4098-XX.XX	Long Knee Brace
E1	32	13-0003	Nut, Hex Lock 1/2-13, GR 2 (5/8" H)
E2	16	10-0202	Bolt, Hex Head 1/2-13NC x 1 1/2"
E3	16	10-0225	Hex Bolt 1/2-13NC X 6 1/2"
E4	4	8-4084P	FABF-Knee Brace Mnt Plate-Painted
-F-	4	8-4091	Leveling Jack Weldment
F1	4	8-4090P	FA, BF, Caster Mount Plate Painted
F2	48	13-0003	Nut, Hex Lock 1/2-13, GR 2 (5/8" H)
F3	32	10-0225	Hex Bolt 1/2-13NC X 6 1/2"
F4	16	10-0213	Bolt, 1/2-13NC X 1 3/4" GR5
F5	16	15-0003	Flat Washer, 1/2"
F6	4	32-0002BPNE-FF	Wheel Assembly
-G-	2	8-4094-XX.XX	Lower Connection Tube
G1	4	10-0304	Bolt, 5/8-11NC X 3 1/2" GR5
G2	4	13-0001	Hex Lock Nut, 5/8"-11NC
G3	4	8-4087	FA, BF, Support Tube Pivot Mt Plate
-H-	1	Runway	Fall Arrest Track
H1	8	10-0305	Hex Head Bolt, 5/8-11NC x 4" Long
H2	16	15-0004	5/8" Flat Washer
H3	8	13-0001	Hex Lock Nut, 5/8"-11NC
H4	2	8-4092P	FA, BF-Track Connection Plate 2"-3" TT-Painted
H5	X	13-0003	Nut, Hex Lock 1/2-13, GR 2 (5/8" H)
H6	X	RR1.25-X	End Stop Rubber Sleeve
H7	X	10-02XX	End Stop Bolt
H8	X	FA-XXX-AT	FA, Swiveling Connector Anchor Trolley

**Component Assembly Schedule**

1. Attach Main Cross Braces to Headers (**Detail "A"**)
2. Attach Short and Long Knee Braces to Main Cross Braces and Headers (**Detail "B" and Detail "C"**)
3. Attach Runway to Headers (**Detail "E"**)
4. Attach Support Legs to Headers (**Detail "A"**)
5. Attach Support Legs to Short and Long Knee Braces(**Detail "F"**)
6. Attach Leveling Jack Weldments and Lower Connection Tubes to Support Legs (**Detail "D"**)
7. Attach Trolley(s) and End Stops to Runway (**Detail "G"**)

**Torque Specifications**

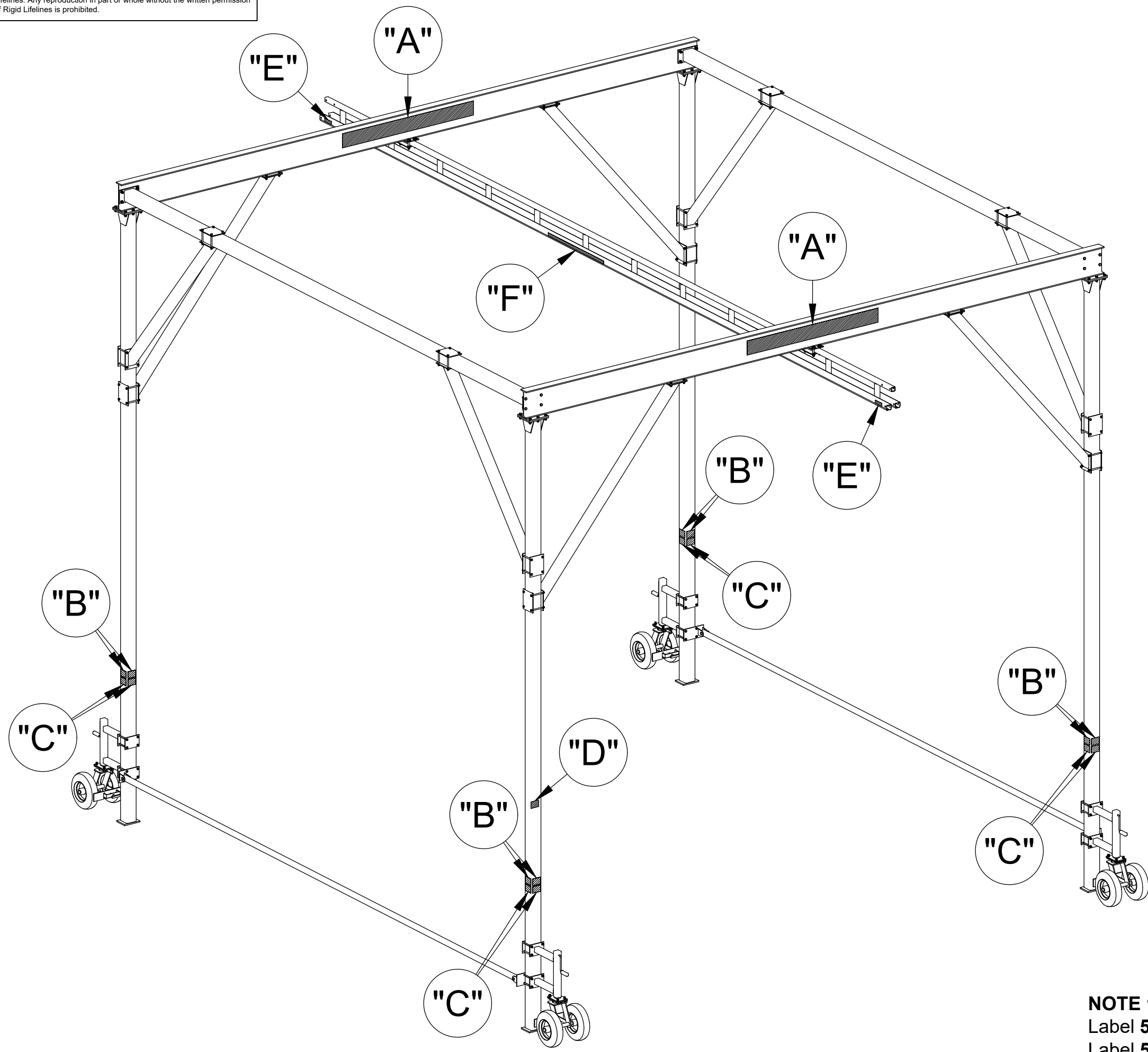
Bolt Diameter	Hex Nut Torque	Minimum Hex Locknut Torque
1/2 inch	78 foot-pounds	51 foot-pounds
5/8 inch	154 foot-pounds	93 foot-pounds
3/4 inch	257 foot-pounds	151 foot-pounds
7/8 inch	341 foot-pounds	224 foot-pounds
1 inch	514 foot-pounds	325 foot-pounds

**Sheet 1 of 2**

REV.	DATE	NAME	REVISION DESCRIPTION
CAD GENERATED DRAWING. DO NOT MANUALLY UPDATE. DO NOT SCALE DRAWING.			
APPROVALS:	DATE:	<p><b>FALL ARREST</b> Portable Box Frame Assembly Drawing</p>	
DRAWN: EEE	12/21/15		
CHECKED:			
APPROV: JRG	2/3/16		
PLOT DATE:	WT:	SIZE (DWG. NO.):	REV:
PROJECT NO:	SCALE:	C	FABF-ASSEMBLY
INSTRUCTIONS:	NTS	CAD FILE:	FABF-ASSEMBLY SHEET 1 OF 2



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# "A"

## RIGID LIFELINES

(800) 869-2080 :: RigidLifelines.com

See Note 1 for More Info

53-0206

# "B"

### SAFETY INSTRUCTIONS

#### READ BEFORE OPERATING BOX FRAME

1. Inspect Box Frame for damaged or missing parts.
2. Never exceed the rated capacity.
3. Do not use Box Frame on an incline or near a ledge.
4. Do not push or pull Box Frame with forklift or other vehicle.
5. Push the Box Frame legs by hand only.
6. The maximum angle a lanyard can make off plumb is 30 degrees, or 18" off track centerline or end of beam, whichever is smaller.
7. Always ensure all legs are firmly touching the ground before use.
8. Always use a level gauge to ensure system is level and plumb.
9. Never move system when in use.
10. Never use with wheels engaged.



LABEL # 53-0509

RigidLifelines.com

See Note 1 for More Info

53-0509

# "C"

## ⚠ WARNING ⚠

**YOU MUST READ AND UNDERSTAND THE ASSEMBLY AND USER INSTRUCTION MANUAL PROVIDED WITH THE EQUIPMENT AT THE TIME OF SHIPMENT BEFORE USING THIS PRODUCT.**

**Not following the instructions in the manual can cause serious injury or death.**

P/N 53-0510

See Note 1 for More Info

53-0510

# "D"

## MADE IN



## THE USA

P/N 53-0023

See Note 1 for More Info

53-0023

#### NOTE 1:

Label **53-0206 "A"** should be centered on both sides of both headers.  
 Label **53-0509 "B"** should be placed on each support leg on each face of the leg.  
 Label **53-0510 "C"** should be placed on each support leg on each face of the leg under label "B."  
 Label **53-0023 "D"** should be placed on each side of one support leg.  
 Label **53-0047 "E"** should be placed on both ends of the lower section of trussed track on both sides.

#### NOTE 2:

Label **"F"** should be centered on the lower section of trussed track on both sides and is **P/N 53-0535** for one person systems, **53-0536** for two person systems, and **53-0359** for **three to eight** person 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."

# "E"

### ⚠ 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

# "F"

RIGID LIFELINES

PEOPLE & EQUIPMENT

900 LB. MAAF EA. PER TRACK

(800) 869-2080  
RigidLifelines.com

See Note 2 for More Info

53-0359

#### Sheet 2 of 2

REV.	DATE	NAME	REVISION DESCRIPTION
CAD GENERATED DRAWING. DO NOT MANUALLY UPDATE. DO NOT SCALE DRAWING.			
APPROVALS	DATE	 <b>FALL ARREST</b> Portable Box Frame Label Placement Drawing	
DRAWN: EEE	12/30/15		
CHECKED:			
APPROV: JRG	2/3/16		
PLOT DATE:	WT:	SIZE (DWG. NO.)	REV.
PROJECT NO:	SCALE:	C	FABF-ASSEMBLY
INSTRUCTIONS:	NTS	CAD FILE:	FABF-LABEL