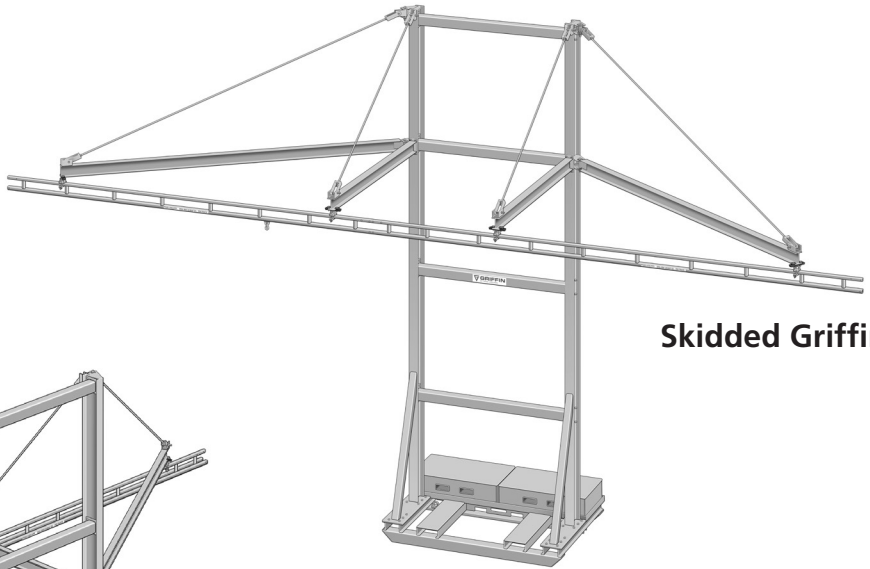




# GRIFFIN™

## ANCHOR TRACK™ SYSTEM

# Assembly and Operation Instruction Manual



Skidded Griffin



Wheeled Griffin



ISO 9001:2008 Registered

Manual 103-0055



## 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 48 inches of the hanger support centers unless otherwise specified. For plain track, splice track centers must be within 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

**DO NOT REMOVE THE COUNTERWEIGHTS FOR ANY REASON AFTER INSTALLATION! A fully assembled system is top-heavy and will tip over if counterweights are removed, resulting in possible serious injury or death.**

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: review the first checklist before each use and the second checklist for after a fall event and annual inspections. The third checklist is an additional before each use checklist for the Wheeled Griffin™ only.

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

### For Wheeled Griffin System

The Wheeled Griffin system does not have brakes. Make sure that you leave room for the system to roll to a stop after moving.

NEVER exceed five miles per hour while moving.

### For Wheeled Griffin System (Continued)

The maximum turning radius is 13 feet.

Only tow the system over paved or concrete surfaces.

While towing system, ensure towing path is clear of overhead hazards, such as trees and power lines.

Never take the system "off road."

Speed bumps and pot holes must be avoided. If small road imperfections must be traversed, do so only at extremely slow speeds with caution.

Always chock the rear wheels, using all four provided chocks, before use.

Always use the system's bottle jack and jack support plate for raising and lowering any corner of the system. After the system's corner is at the appropriate height, use the stabilizing jack to support that corner prior to removing the bottle jack.

Use only the bottle jack to lift or lower the system. Use only the stabilizing jacks to stabilize the system. NEVER use the stabilizing jacks to lift or lower the system. NEVER use the bottle jack to stabilize the system.

After leveling the system and confirming that the masts are plumb, confirm that all four stabilizing jacks are firmly in contact with the ground before use.



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## **SYSTEM APPLICATIONS**

The Griffin™ 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 the Griffin Anchor Track 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 Griffin 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.

Follow ANSI Z359.2 for instructions on how to set up a proper Fall Protection Program within your facility. ANSI Z359.2 *Minimum Requirements for a Comprehensive Managed Fall Protection Program* 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: 20,000 pounds)
- d) Man lift/cherry picker (minimum height: 40 feet)
- e) Torque wrench
- f) Assorted drift pins
- g) Lifting straps
- h) Long carpenter's level
- i) Wrench/Sockets sizes: 3/4 inch, 15/16 inch, 1-5/16 inch, 1-1/8 inch, 1-1/4 inch, and 1-1/2 inch
- j) A spacious, level area for assembly (e.g., parking lot)
- k) A way to mark hanger locations, such as a permanent marker
- l) *FAMTPB-ASSEMBLY SHEET 1 OF 3*, hereafter referred to as *Griffin Assembly Drawing*, will be included as a separate document.
- m) *FAMTPB-ASSEMBLY SHEET 2 OF 3*, hereafter referred to as *Griffin Wheeled Base Assembly Drawing*, will be included as a separate document.
- n) *FAMTPB-ASSEMBLY SHEET 3 OF 3*, hereafter referred to as *Griffin Label Placement Drawing*, will be included as a separate document.
- o) 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

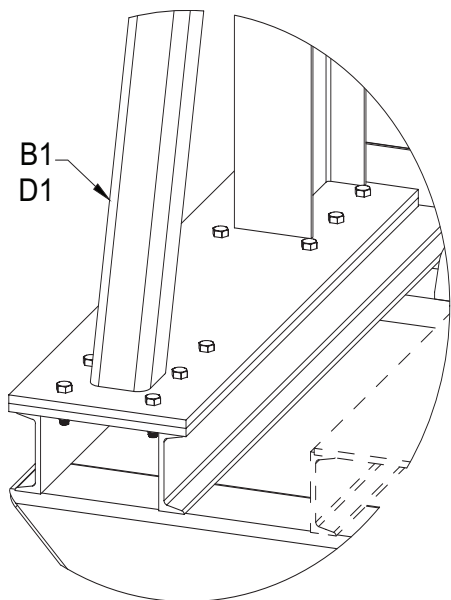
- a) Open all bundles and confirm that all components are accounted for: see *Building Materials Description* located in the top right corner of the Griffin Assembly Drawing. Note that the quantity of components in an assembly are multiplied by the number of the assemblies.
- b) Check for damage to components that may have occurred during shipping.

### 3. Building the Mast Assembly

Refer to Griffin Assembly Drawing for Steps A Through G

- a) As per **Detail "A,"** lay both the right mast (B1) and the left mast (D1) with their angled knee braces facing up and both of their pivot plates facing outward (away from the other mast).

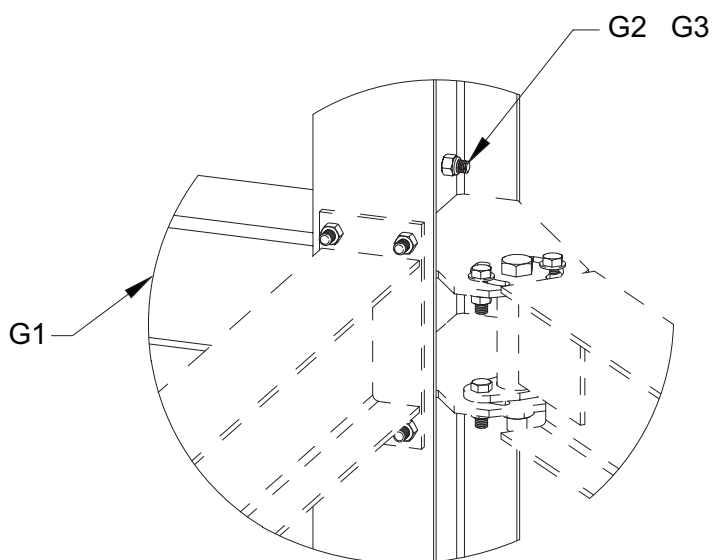
**Detail "A" (Base and Mast Connection)**



Item	Description
B1	Right Mast Weldment
D1	Left Mast Weldment

- b) As per **Detail "B,"** place all cross braces (G1) in between the masts and bolt them together using the 5/8-inch bolts (G2) and hex locknuts (G3). Torque per specification chart below.

**Detail "B" (Mast Connection to Outriggers and Cross Braces)**



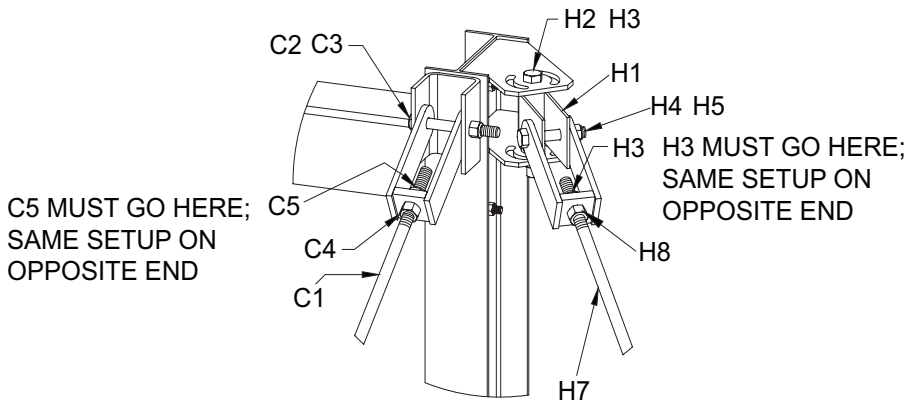
Item	Description
G1	Cross Brace Weldment
G2	5/8-inch by 2-inch Hex Head Bolt
G3	5/8-inch Hex Locknut

Bolt Diameter	Minimum Hex Locknut Torque
5/8 inch	93 foot-pounds

- c) As per **Detail "C,"** center tie rods (C1) are shorter than side tie rods (H7). Install the center tie rods (C1) to the U-brackets that are on the face of each of the masts' top flanges using the 7/8-inch bolts (C2) and hex locknuts (C3). Torque per specification chart below.
- d) As per **Detail "C,"** install side tie rods (H7) to the top of the masts, at the side pivot (H1) using the 7/8-inch bolts (H4) and hex locknuts (H5). Torque per specification chart below.

**As per Detail "C," do not tighten the pivot bolts (H2), hex locknuts (H3), the tie rod nuts (C4, H8), or hex locknuts (C5, H3) at this time.**

**Detail "C" (Mast Connection to Tie Rods)**

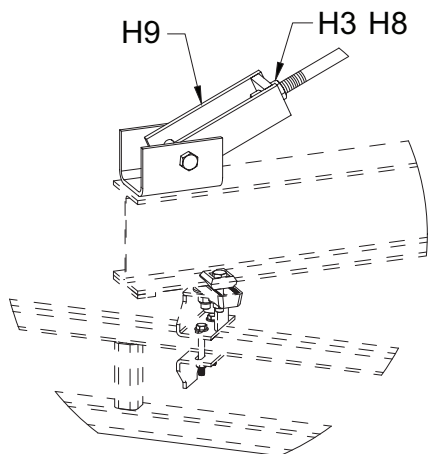


Item	Description
C1, H7	Tie Rod
C2	7/8-inch by 7 1/2-inch Hex Head Bolt
C3, H5	7/8-inch Hex Locknut
C4, H8	1-inch Hex Nut
C5, H3	1-inch Hex Locknut
H1	Tie Rod Pivot Weld
H2	1-inch Bolt
H4	7/8-inch by 5 1/4-inch Bolt

Bolt Diameter	Minimum Hex Locknut Torque
7/8 inch	224 foot-pounds

- e) As per **Detail "D,"** adjust the nuts (H3 and H8) on the tie rods so that approximately three inches of thread show through the clevis (H9) ends, which is roughly their final length. Leave the nuts (H3 and H8) hand tight for now.

**Detail "D" (Outrigger Connection to Runway and Tie Rod)**

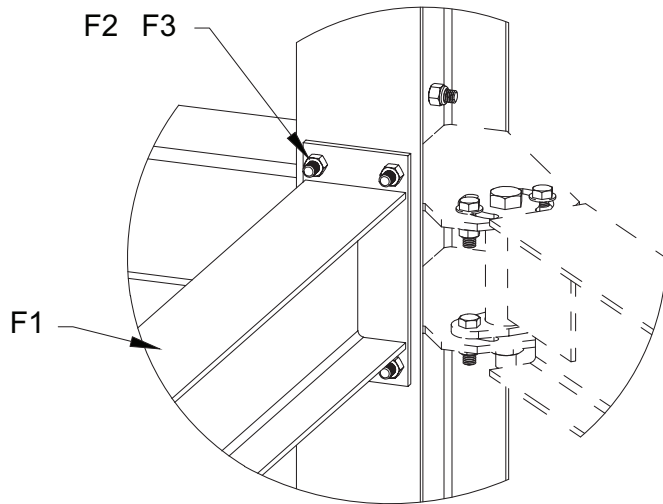


Item	Description
H3	1-inch Hex Locknut
H8	1-inch Hex Nut
H9	Tie Rod Clevis



- f) As per **Detail "B,"** place a center outrigger arm (F1) — with its U-bracket facing up and away from the masts' knee braces — so the arm's mounting flange aligns with the mounting holes on the mast. Secure with the 5/8-inch bolts (F2) and hex locknuts (F3) and torque per specification chart below. Repeat this entire step for the other center outrigger arm.

**Detail "B" (Mast Connection to Outriggers and Cross Braces)**

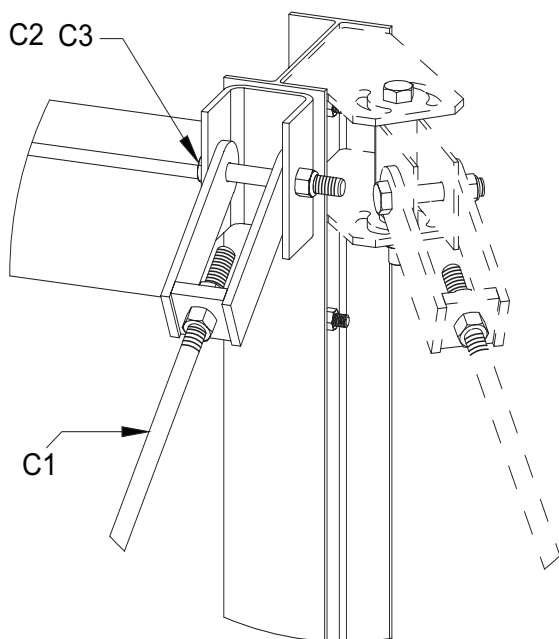


Item	Description
F1	Center Outrigger Arm
F2	5/8-inch by 2-inch Hex Head Bolt
F3	5/8-inch Hex Locknut

Bolt Diameter	Minimum Hex Locknut Torque
5/8 inch	93 foot-pounds

- g) As per **Detail "C,"** bolt the bottom end of the center tie rod (C1) into the U-bracket on a center outrigger arm using the 7/8-inch bolt (C2) and hex locknut (C3). Torque per specification chart below. Approximately three inches of thread should show through the clevis on the top and bottom end of the tie rod; if not, adjust the tie rod nuts, leaving the nuts hand tight for now. Repeat this entire step for the other center outrigger arm.

**Detail "C" (Mast Connection to Tie Rods)**



Item	Description
C1	Tie Rod
C2	7/8-inch by 7 1/2-inch Hex Head Bolt
C3	7/8-inch Hex Locknut

Bolt Diameter	Minimum Hex Locknut Torque
7/8 inch	224 foot-pounds

## 4. Wheeled System Only: the Chassis

Refer to Griffin Wheeled Base Assembly Drawing for Steps A Through D

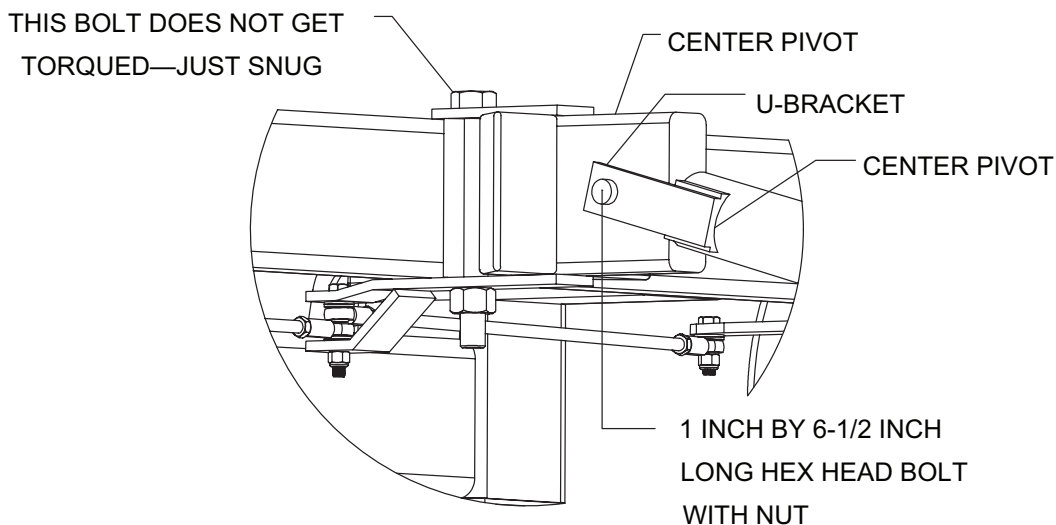
### a) Attaching the Wheels

The chassis comes with the wheel hubs already attached to their axles.

### b) Attaching and Lowering the Tow Bar

**Attaching:** The tow bar comes attached to the chassis and preassembled with a lunette ring. However, if you need to attach or remove the tow bar, follow these instructions. To attach the tow bar to the chassis as per **Detail "P" (Tie Rods and Center Pivot)**, first disassemble the one-inch bolt and nut at the chassis end of the tow bar. Fit the arm's U-bracket around the center pivot of the attachment point in the center of the chassis frame. Insert the one-inch bolt through the U-bracket and the center pivot on the chassis. Install the nut and hand tighten the bolt until it is snug. If you need to attach/remove the lunette ring, unhinge the spring pin attached to the bottom of the lunette ring and slide it out of the holes located on the towing end of the tow bar.

#### Detail "P" (Tie Rods and Center Pivot)



**Lowering:** To lower the tow bar, pull the spring pin located at the bottom of the tow bar.



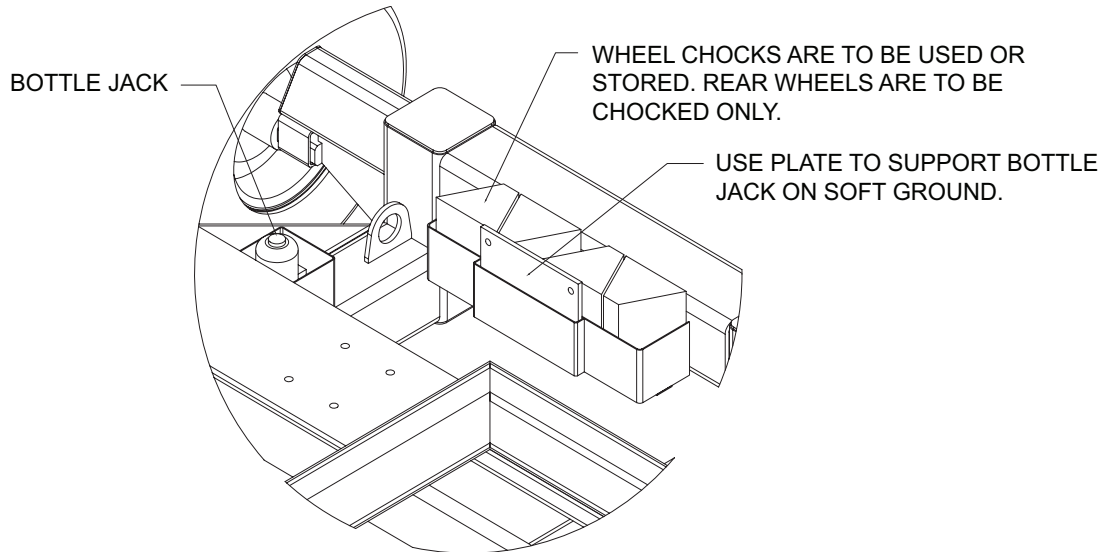
#### WARNING

Before towing system, pull the spring pin and lower tow bar. Failure to comply may result in damage to the system.

### c) Stowing the Wheel Chocks, Jack Plate, and Bottle Jack

As per **Detail "N,"** place the four chocks, one jack plate, and one bottle jack in their respective storage areas in the back of the chassis.

#### Detail "N" (Wheel Chocks and Jack)

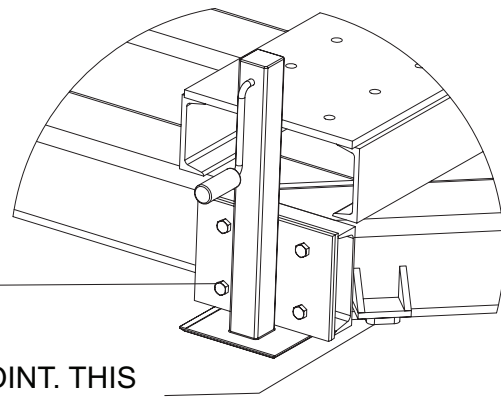


### d) Attaching the Stabilizer Jacks

The system's four stabilizing jacks are shipped separately. As per **Detail "M,"** install a stabilizing jack onto each of the chassis' four corners using the provided 5/8-inch bolts and hex locknuts. Torque all 16 nuts (four per stabilizing jack) per specification chart located toward the middle of the Griffin Wheeled Base Assembly Drawing.

#### Detail "M" (Stabilizing Jacks)

10-0301 (16) BOLT, 5/8-11NC x 2 GR5 ZP  
13-0001 (16) NUT, HEX LOCK 5/8-11NC



INSERT TOP OF BOTTLE JACK AT LIFT POINT. THIS LIFT POINT IS ON ALL FOUR CORNERS OF THE BASE. USE BOTTLE JACK TO LEVEL SYSTEM. AFTER BASE IS LEVEL, EXTEND STABILIZER JACK TO LIFT SYSTEM. AFTER A CORNER IS STABLE, LOWER BOTTLE JACK AND MOVE TO NEXT POSITION. REPEAT THIS PROCESS UNTIL SYSTEM IS LEVEL.

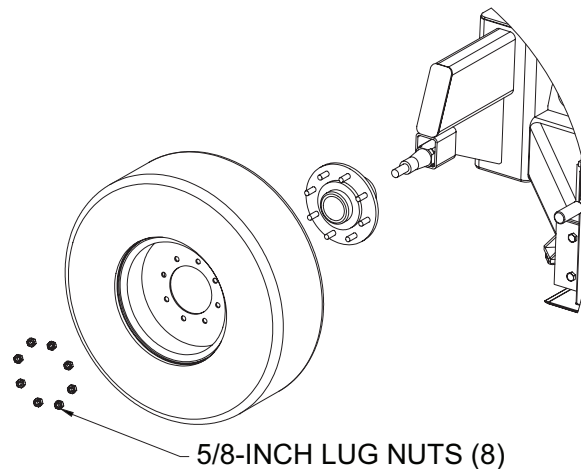
**NOTE:** The bottle jack is used to raise and lower the chassis' four corners to make the chassis level. The jack plate is used as an additional support under the bottle jack if the ground is not completely firm. The stabilizing jacks are used to take the weight off the system after each corner has been leveled.

**NEVER use the stabilizing jacks to raise or lower the system and NEVER use the bottle jack as a stabilizing jack. See the LEVELING AND OPERATING INSTRUCTIONS section of this manual for complete directions prior to using the bottle jacks or the stabilizing jacks.**

**e) To Attach/Remove Wheels:**

As per **Detail "O,"** install one wheel onto its hubs and then hand tighten the eight provided lug nuts. Partially torque each lug nut so the wheel settles evenly onto the hub. Then, tighten the lug nuts again in a star pattern and torque per specification chart on the Griffin Wheeled Base Assembly Drawing. Repeat the above step for the remaining three wheels.

**Detail "O" (Wheel)**



## 5. Attaching the Counterweights

Refer to Griffin Assembly Drawing for Steps A Through C

- Position the base (either the skid unit or the wheeled chassis) on a flat surface where there is enough room to work around it with your telescoping fork truck (or crane) and man lift/cherry picker.
- Install both counterweights (J) to the base so they are fully seated into their frames.



### **WARNING**

**DO NOT REMOVE THE COUNTERWEIGHTS FOR ANY REASON AFTER INSTALLATION! After final assembly, the system is top-heavy and will tip over if the counterweights are removed.** The system is designed to be moved as a complete unit with counterweights installed. Removal of the counterweights on a fully-assembled system can result in serious injury or death.

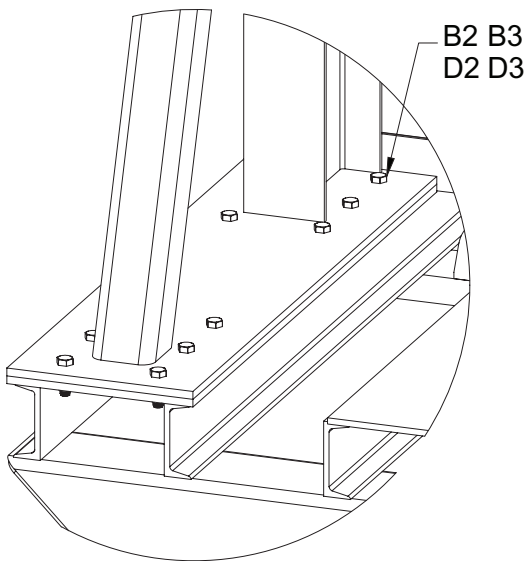
- Level the base: see the LEVELING AND OPERATING instructions section of this manual.

## 6. Attaching the Mast Assembly to Its Base

Refer to Griffin Assembly Drawing for Steps A and B

- a) Using a telescoping forklift or crane, lift the mast assembly until the masts are hanging vertically.
- b) As per **Detail "A,"** move the mast assembly to the base and then position the masts so that their knee braces and outrigger arms are facing away from the counterweights. Using drift pins, align the holes in the mast assembly plates with the holes in the base plates on each side of the system and lower the mast assembly to the base. Secure the base plate to the base with 3/4-inch bolts (B3, D3) and hex locknuts (B2, D2). Torque per specification chart below.

**Detail "A" (Base and Mast Connection)**



Item	Description
B2, D2	3/4-inch Hex Locknut
B3, D3	3/4-inch by 2 1/2-inch Hex Head Bolt

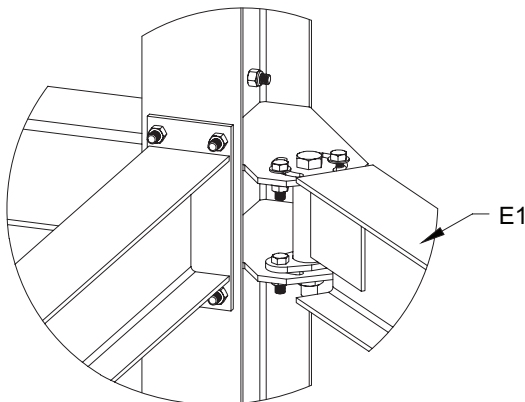
Bolt Diameter	Minimum Hex Locknut Torque
3/4 inch	151 foot-pounds

## 7. Attaching the Side Outrigger Arms

Refer to Griffin Assembly Drawing for Steps A Through F

- a) As per **Detail "B,"** lift one of the side outrigger arms (E1) using your telescoping fork truck or crane into position in the mast's side pivot slots.

**Detail "B" (Mast Connection to Outriggers and Cross Braces)**

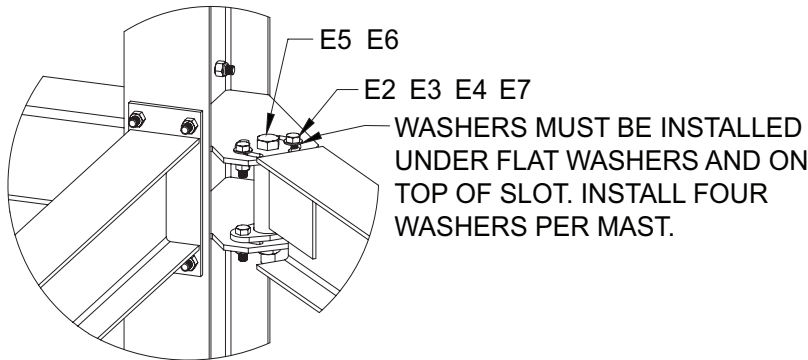


Item	Description
E1	Side Outrigger Arm



- b) As per **Detail "B,"** insert the one-inch bolt (E5) in the center pivot hole and **hand tighten** its hex locknut (E6). Note: no washer is used on this bolt.
- c) As per **Detail "B,"** insert the four 5/8-inch bolts (E2) that go into the slots on both sides of the one-inch bolt. The star lock washer (E7) needs to make contact with the pivot plate, then add the flat washer (E4) and secure with the hex locknut (E3). **Only hand tighten these nuts for now.**

**Detail "B" (Mast Connection to Outriggers and Cross Braces)**

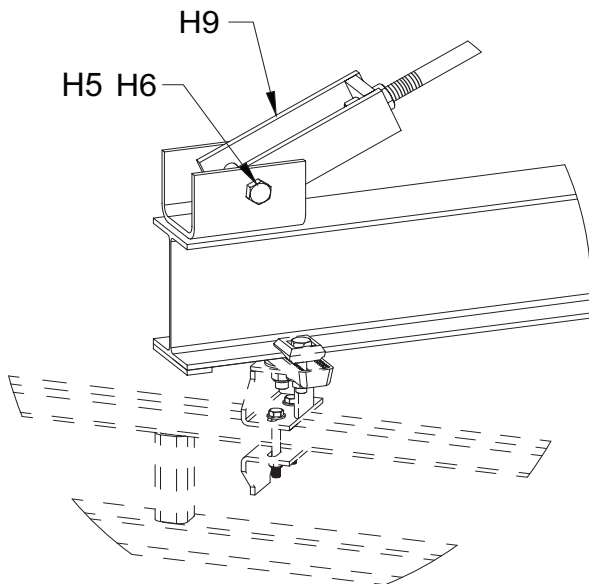


Item	Description
E2	5/8-inch by 2-inch Hex Head Bolt
E3	5/8-inch Hex Locknut
E4	5/8-inch Flat Washer
E5	1-inch by 8 1/2-inch Bolt
E6	1-inch Hex Locknut
E7	5/8-inch Star Lock Washer

**NOTE:** Temporarily secure arms so they do not rotate.

As per **Detail "D,"** install the bottom tie-rod clevis (H9) into the end of the arm's U-bracket with the side outrigger arm still supported with the telescoping fork truck or crane. Secure with the 7/8-inch bolt (H6) and hex locknut (H5). Torque per specification chart below. There should be approximately three inches of tie rod protruding from the end of the clevis; if not, adjust the tie-rod nuts, **keeping them just hand tight for now.**

**Detail "D" (Outrigger Connection to Runway and Tie Rod)**



Item	Description
H5	7/8-inch Hex Locknut
H6	7/8-inch by 7 1/2-inch Bolt
H9	Tie Rod Clevis

Bolt Diameter	Minimum Hex Locknut Torque
7/8 inch	224 foot-pounds

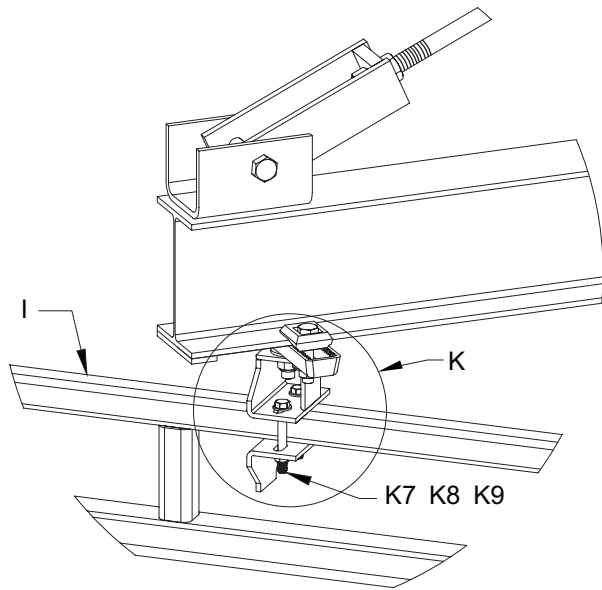
- d) Repeat steps A through D for the outrigger arm on the opposite side of the system.

## 8. Attaching the Anchor Track™

Refer to Griffin Assembly Drawing for Steps A Through H (Pages 7-9)

- a) If you ordered a custom, non-standard system you will receive a Fabrication Drawing. Use the drawing's dimensions for the placement of the four runway hangers. As per **Detail "D"** and the "Building Materials Description," while the runway (I) is on the ground, **hand tighten** the hangers (K) onto the top tube of the runway (I) using the 1/2-inch bolt (K7), flat washer (K9), and hex locknut (K8) beginning with the two center hangers. Then proceed to step "d )" below.

### Detail "D" (Outrigger Connection to Runway and Tie Rod)



Item	Description
I	Runway
K	Hanger
K7	1/2-inch by 3 1/2-inch Hex Head Bolt
K8	1/2-inch Hex Locknut
K9	1/2-inch Flat Washer

If you ordered a standard system, complete all of the following steps on pages 7-9

- b) Placement of the Two Center Runway Hangers

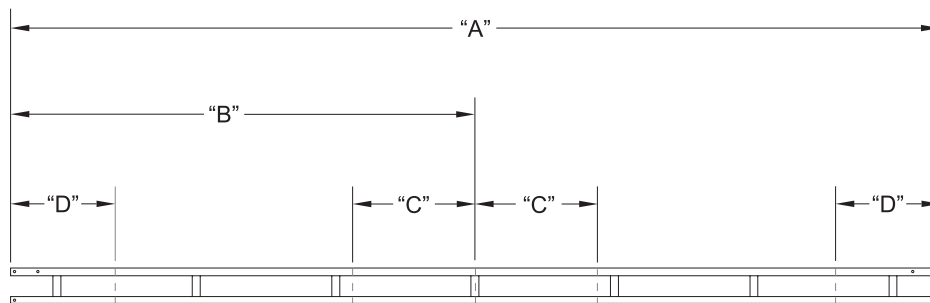


Diagram A

**On the Skidded Griffin System:**

As per **Detail "D,"** measure the length of the runway (Distance "A" on Diagram A) and then divide that number by two to find the exact center point of the runway's top tube (Distance "B" on Diagram A). Mark the center point. From the center point, measure four feet 10 inches to the left and four feet 10 inches to the right (Distances "C" on Diagram A). **Hand tighten** a runway hanger (K2) to each of these two points using the 1/2-inch bolt (K7), flat washer (K9), and hex locknut (K8).

**On the Wheeled Griffin System:**

As per **Detail "D,"** measure the length of the runway (Distance "A" on Diagram A) and then divide that number by two to find the exact center point of the runway's top tube (Distance "B" on Diagram A). Mark the center point. From the center point, measure five feet nine inches to the left and five feet nine inches to the right (Distances "C" on Diagram A). **Hand tighten** a runway hanger (K2) to each of these two points using the 1/2-inch bolt (K7), flat washer (K9), and hex locknut (K8).

**NOTE:** If two runways are provided, assemble and attach both runways before measuring.

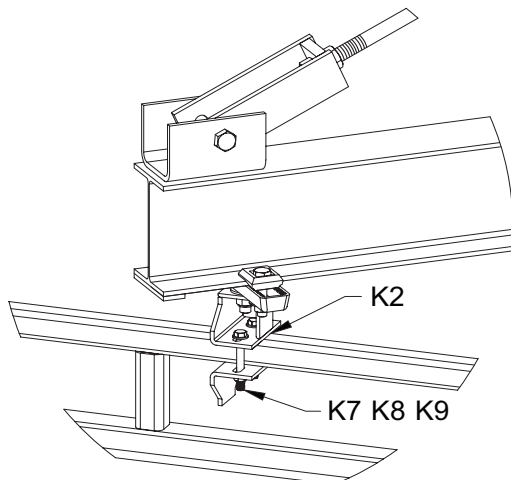
**c) Placement of the Two Outer Runway Hangers**

Use the table below to find the length of your runway and Distance D. As per **"Diagram A"** on page 7, measure Distance "D" from each end of the runway's top tube. As per **Detail "D,"** **hand tighten** a runway hanger (K2) to each of these two points on the top tube using the 1/2-inch bolt (K7), flat washer (K9), and hex locknut (K8).

Runway Length "A"	Distance "D"
30 feet	2 feet-6 inches
35 feet	3 feet-6 inches
40 feet	3 feet
45 feet	3 feet-6 inches
50 feet	3 feet-6 inches
55 feet	3 feet-6 inches
60 feet	3 feet-6 inches

**NOTE:** The measurements in the table to the left only apply to standardized systems. If you have a customized system, please refer to the provided custom fabrication drawing.

**Detail "D" (Outrigger Connection to Runway and Tie Rod)**



Item	Description
K2	Runway Hanger
K7	1/2-inch by 3 1/2-inch Hex Head Bolt
K8	1/2-inch Hex Locknut
K9	1/2-inch Flat Washer

#### d) Attaching the Runway to the Center Outrigger Arms

After all of the hangers have been hand tightened to the runway, use the forklift or crane to hoist the runway assembly up to the center outrigger arms. Use a scissor lift or aerial lift to reach one of the center runway hangers.

As per **Detail "D,"** install the adjustable beam clamps (K1) on the center outrigger arms by first making sure that the clamps' clips are open all the way. Place the clips so they are holding onto the bottom flange of the outrigger arm (aka beam); position the centerline of the clips (i.e., the center of their top plate as it sits on the beam's flange) so that the clamp fits against the end stop plate on the center outrigger arms. This positioning will allow you to achieve your specified span.

As per **Detail "D," hand tighten** the clips' 3/4-inch bolts (K5), flat washers (K3), and hex locknuts (K4), ensuring the clips are even on both sides. Ensure the beam clamps are installed horizontally and level within plus or minus five degrees.

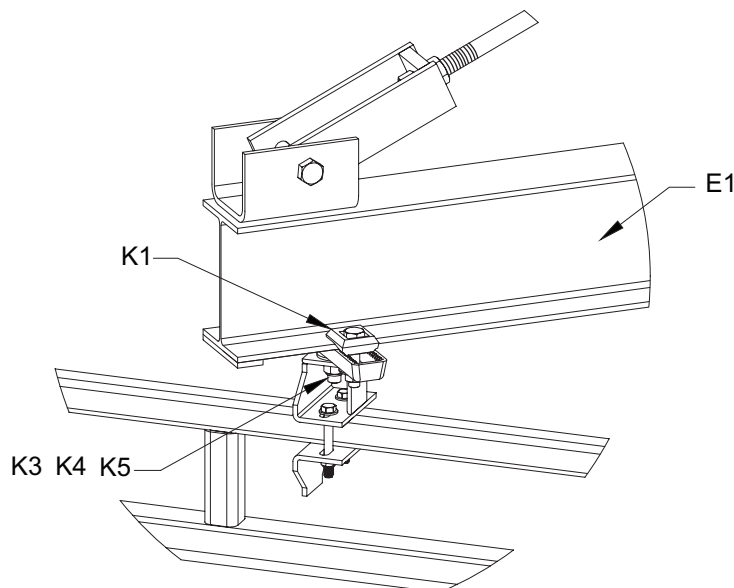
Repeat this entire step for the beam clamp on the other center outrigger arm.

#### e) Attaching the Runway to the Outer Outrigger Arms

As per **Detail "D,"** pivot one side outrigger arm (E1) into position above the runway with the runway assembly still attached to your telescoping fork truck or crane. Place the clips so they are holding onto the bottom flange of the outrigger arm (aka beam); position the centerline of the clips (i.e., the center of their top plate as it sits on the beam's flange) so that the clamp fits against the end stop plate on the center outrigger arms.

As per **Detail "D,"** hand tighten the clips' 3/4-inch bolts (K5), flat washers (K3), and hex locknuts (K4) making sure the clips are even on both sides. Check that the beam clamps are installed horizontally and level within plus or minus five degrees.

#### Detail "D" (Outrigger Connection to Runway and Tie Rod)



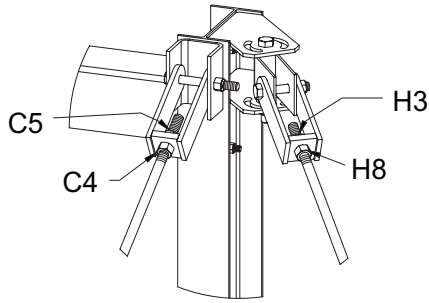
Item	Description
E1	Side Outrigger Arm
K1	Adjustable Beam Clamp
K3	3/4-inch Flat Washer
K4	3/4-inch Hex Locknut
K5	3/4-inch by 2-inch Hex Head Bolt

Repeat this entire step on the other side outrigger arm. All four outriggers should be in position after this step.

### f) Level the Outrigger Arms

As per **Detail "C,"** you must level all the outrigger arms by adjusting the tie-rod nuts (aka jam nuts: C4, C5, H3, H8) after the runway is supported by all four outrigger arms. **First, using the base's bubble levels, confirm that the base is level.** Using a long carpenter's level, confirm that the masts are plumb. If the base is not level or the masts are not plumb, see the *LEVELING AND OPERATING INSTRUCTIONS* section of this manual.

**Detail "C" (Mast Connection to Tie Rods)**



Item	Description
C4, H8	1-inch Hex Nut
C5, H3	1-inch Hex Locknut

Bolt Diameter	Minimum Hex Locknut Torque
1 inch	325 foot-pounds

Use a long carpenter's level and the tie rods to adjust the outrigger arms up or down. Once level, torque all of the inner and outer tie-rod nuts in opposition to one another per specification chart above. Repeat this step with the other three outrigger arms.

### g) Beam Clamps: Final Adjustments and Torquing

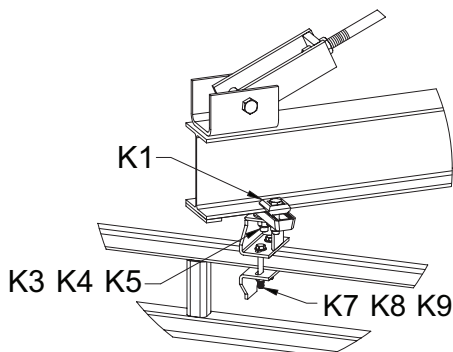
If adjusting the outrigger arm's tie-rod nuts causes the hand-tight beam clamps to move along the beam, please reestablish their two-inch distance from the end of the outrigger to the centerline of the clip on the beam clamp.

As per **Detail "D,"** confirm that you installed the flat washers (K3), hex locknuts (K4), and 3/4-inch bolts (K5) prior to torquing the adjustable beam clamps (K1). Torque the hex locknuts (K4) per chart below. If you cannot use a torque wrench due to insufficient space, use a box-end wrench or a crow's foot socket to torque the nuts.

### h) Runway Hangers: Final Torquing

As per **Detail "D,"** please confirm that you installed the flat washers (K9), hex locknuts (K8), and 1/2-inch bolts (K7). Torque the nuts per chart below.

**Detail "D" (Outrigger Connection to Runway and Tie Rod)**



Item	Description
K1	Adjustable Beam Clamp
K3	3/4-inch Flat Washer
K4	3/4-inch Hex Locknut
K5	3/4-inch by 2-inch Hex Head Bolt
K7	1/2-inch by 3 1/2-inch Hex Head Bolt
K8	1/2-inch Hex Locknut
K9	1/2-inch Flat Washer

Bolt Diameter	Minimum Hex Locknut Torque
1/2 inch	51 foot-pounds
3/4 inch	151 foot-pounds

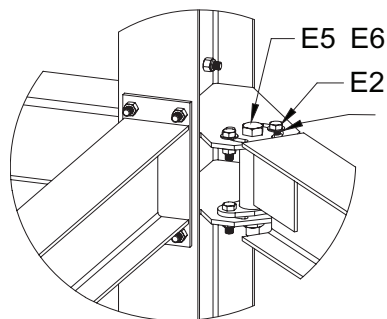


## 9. Final Assembly

Refer to Griffin Assembly Drawing for Steps A Through D

- a) Make sure that the runway assembly is securely fastened to the outrigger arms. Then as per **Detail "B,"** torque the side outrigger arms' 5/8-inch bolts (E2), hex locknuts (E3), flat washers (E4), star lock washer (E7), one-inch pivot bolts (E5), and hex locknuts (E6) per chart located below.

### Detail "B" (Mast Connection to Outriggers and Cross Braces)



WASHERS MUST BE INSTALLED UNDER FLAT WASHERS AND ON TOP OF SLOT. INSTALL FOUR WASHERS PER MAST.

Item	Description
E2	5/8-inch by 2-inch Hex Head Bolt
E3	5/8-inch Hex Locknut
E4	5/8-inch Flat Washer
E5	1-inch by 8 1/2-inch Bolt
E6	1-inch Hex Locknut
E7	5/8-inch Star Lock Washer

- b) 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

- c) Insert your trolley (L) into the track and then install the track's end stops on both ends. For dual track system, install one trolley per track.
- d) **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.

### 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.

# LEVELING AND OPERATING INSTRUCTIONS

For All Systems



## 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's base is level, the masts are plumb, and that the entire, leveled system is stable prior to every use.

## SKID-MOUNTED SYSTEM: LEVELING AND OPERATION

Refer to Griffin Assembly Drawing for Steps 1 and 2

1. Position the Griffin system over your work area. Using a long carpenter's level, confirm that the skid base is level and that both masts are plumb. If the skid base is not level and/or the masts are not plumb, do the following:  
  
Insert one of your forklift's forks into the skid's pocket that is on the "low" corner, per your bubble level readings. Slowly lift the skid corner until it is level. Place sturdy (e.g., metal, heavy wooden) shims under the skid's runners; **never** place your hands underneath any part of the skid. Lower the forklift and recheck the bubble levels. Repeat as necessary until the skid is level. Confirm that the base is solidly resting on your shims and that it will not move during system operation.
2. **This system must be used with an ANSI-rated self-retracting lanyard (SRL).** 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 harness and then connect the SRL's snaphook to your harness's D-ring.

## WHEELED SYSTEM: LEVELING AND OPERATION

Refer to Griffin Wheeled Base Assembly Drawing for Steps 1 Through 9



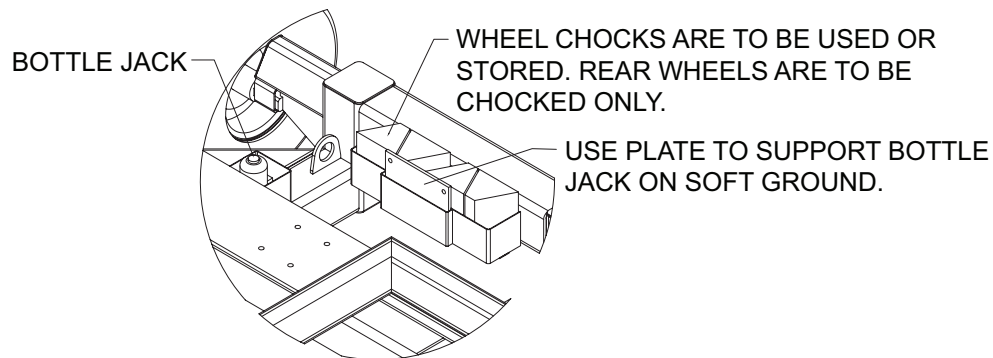
### WARNING

Use only the bottle jack to lift or lower the system. NEVER use the stabilizing jacks to lift or lower the system.

Use only the stabilizing jacks to stabilize the system. NEVER use the bottle jack to stabilize the system.

1. Position the Griffin™ system over your work area.
2. As per **Detail "N,"** you'll find four chocks in the rear of the chassis base. Only chock the rear wheels, using two chocks per wheel.
3. As per **Detail "N,"** you'll find the jack support plate and the bottle jack near the chocks. Remove them from the chassis.

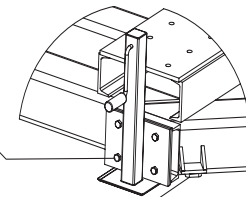
### Detail "N" (Wheel Chocks and Jack)



4. As per **Detail "M,"** place the support plate and then the bottle jack underneath one of the four lift points. Insert the top of the bottle jack at the lift point.
5. Using the system's built-in bubble levels, raise the bottle jack until that corner of the base is level.
6. As per **Detail "M,"** crank the handle of the stabilizing jack until its bottom plate is firmly contacting the ground and the corner is stabilized. Then lower the bottle jack to remove it and its support plate.

### Detail "M" (Stabilizing Jacks)

10-0301 (16) BOLT, 5/8-11NC x 2 GR5 ZP  
13-0001 (16) NUT, HEX LOCK 5/8-11NC



INSERT TOP OF BOTTLE JACK AT LIFT POINT. THIS LIFT POINT IS ON ALL FOUR CORNERS OF THE BASE. USE BOTTLE JACK TO LEVEL SYSTEM. AFTER BASE IS LEVEL, EXTEND STABILIZER JACK TO LIFT SYSTEM. AFTER A CORNER IS STABLE, LOWER BOTTLE JACK AND MOVE TO NEXT POSITION. REPEAT THIS PROCESS UNTIL SYSTEM IS LEVEL.

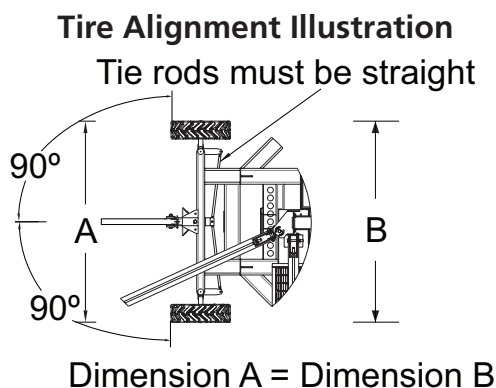
7. Repeat steps 4 through 6 on all four corners until system is level and the masts are plumb.
8. **This system must be used with an ANSI-rated self-retracting lanyard (SRL).** If not already connected, attach your SRL to the system's Anchor Trolley™ connector using an approved offset-D locking carabiner. Don your full-body harness and then connect the SRL's snaphook to your harness's D-ring.
9. Before moving the system, reverse the leveling process, using the bottle jack to hold up each corner of the system while cranking up the stabilizing jacks for transport.

## 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 *Griffin™ Anchor Track™ System*, *Annual Anchor Track™ System*, and *Wheeled Griffin™ 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 844-467-4443 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).

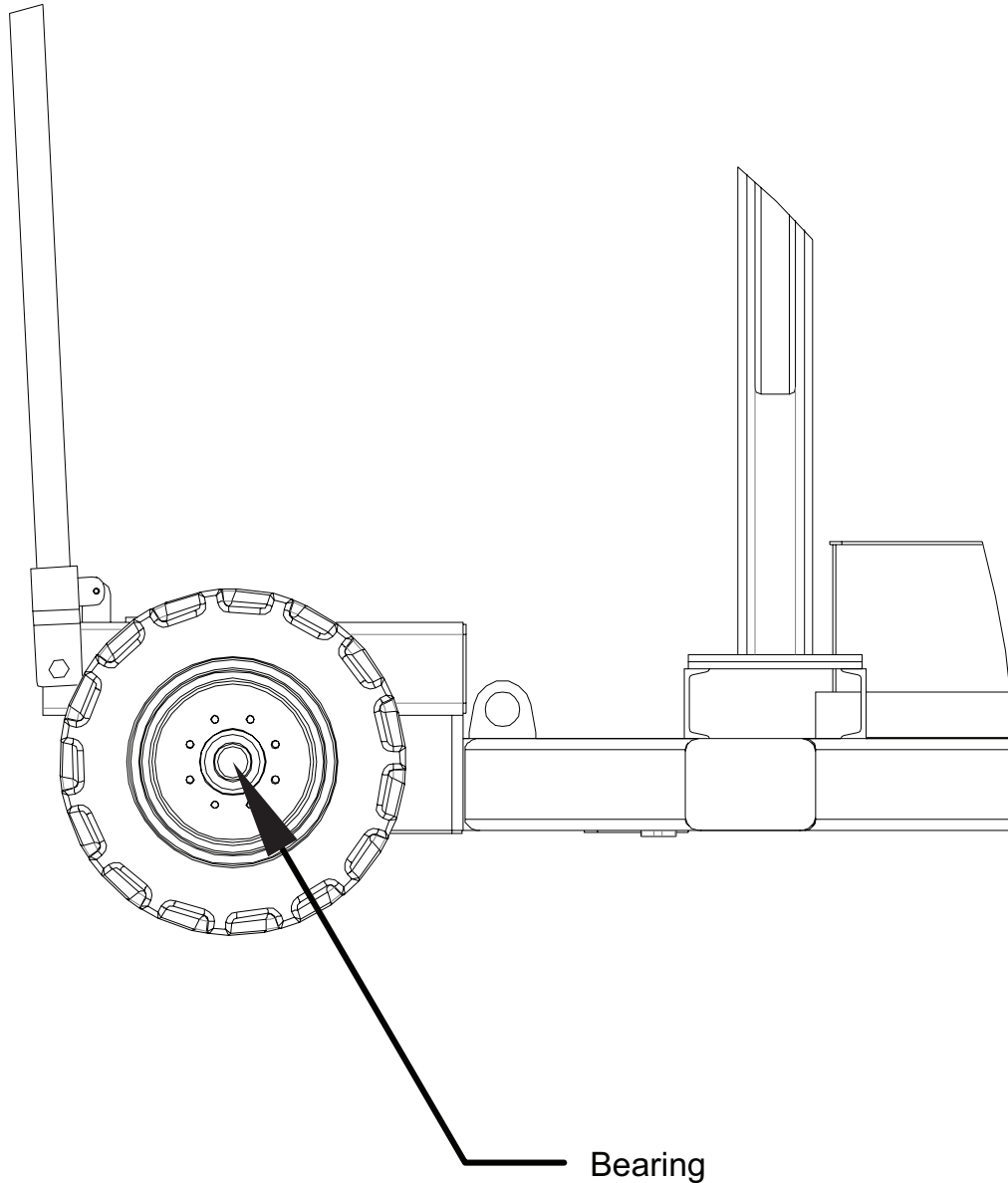
### For Wheeled System only

6. As per the Griffin Wheeled Base Assembly Drawing, there are three grease points on the steering system: one on the center pivot and one at each spindle. Grease these points as needed during use.
7. Using a tape measure, before each use, check tire alignment. The tow bar must be at 90 degrees with wheels aligned. Dimension A below is the span from the outside of one front tire to the outside of the other. Dimension B below is the span from the outside of one back tire to the outside of the other. Dimension B should be measured from the underside of the chassis. Ensure Dimension A and B are equal. Keeping Dimension A and B equal prevent side loading of the wheel hubs. If Dimension A and B are not equal, adjust the chassis' tie rods until they are equal.



8. Before each use, check wheel bearings for tightness. To check bearing tightness, preload bearing, tighten bearing nut until snug, and then loosen bearing nut a quarter-turn to ensure bearing is centered and the wheel rotates freely.
9. Before each use, check wheel bearings for play. To check for bearing play, shake each wheel. If bearing play is present, then the bearing will need to be replaced.

### Bearing Illustration








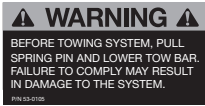







# LABELING

The letters correspond to the letters on the Griffin Label Placement Drawing. All labeling must be legible and attached to the Griffin 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.

### Wheeled Griffin Labels (A-E)

<p><b>"A"</b></p>  <p>P/N 53-0426</p>	<p><b>"B"</b></p>  <p>P/N 53-0528</p>	<p><b>"C"</b></p>  <p>P/N 53-0427</p>	<p><b>"D"</b></p>  <p>P/N 53-0105</p>	<p><b>"E"</b></p>  <p>P/N 53-0515</p>
<p><b>"F"</b></p>  <p>P/N 53-0206</p>	<p><b>"I"</b></p>  <p>P/N 53-0023</p>	<p><b>"J"</b></p>  <p>P/N 53-0047</p>	<p><b>"K"</b></p>  <p>P/N 53-0420</p>	
<p><b>"G"</b></p>  <p>P/N 53-0431</p>	<p><b>"H"</b></p>  <p>P/N 53-0359</p>			

### Notes on Label Placement Drawing

- Labels "A" through "E" are for the Wheeled Griffin only. Skidded Griffin label placement begins with label "F."
- Label **53-0426 "A"** should be five feet from the base plate on the outside of the mast.
- Label **53-0528 "B"** is only used on the dual steer wheeled Griffin. It should be placed on the two per side on the outside of the chassis in between the wheels.
- Label **53-0427 "C"** should be placed on the upper support brace on each corner near the leveling jack plates.
- Label **53-0420 "D"** should be placed in the middle of the tow bar on both sides. should be centered on the counterweights.
- Label **53-0515 "E"** should be placed on the lower support brace on each corner near the leveling jack plates..
- Label **53-0206 "F"** should be centered on the outside of the mast in between the two center cross braces.
- Label **53-0431 "G"** should be centered on the lowest cross brace facing the track.
- Label **53-0359 "H"** 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."
- Label **53-0023 "I"** should be placed two feet-six inches from the base plate on the outside of the mast.
- Label **53-0047 "J"** should be placed on both ends of the lower section of trussed track on both sides.
- Label **53-0105 "K"** should be centered on the counterweights.

# GRIFFIN™ ANCHOR TRACK™ SYSTEM INSPECTION CHECKLIST

## Before Each Use

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

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

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

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



INSPECTION POINTS	Inspection Result (✓)	
	PASS	FAIL
<b>For Skidded and Wheeled Griffin</b>		
1. Using the system's bubble levels, confirm that the base is level. Using a long carpenter's level, confirm that the masts are plumb. If the system is not level or plumb, refer to the LEVELING AND OPERATING INSTRUCTIONS of the Griffin user manual.		
2. Test the swiveling connector(s) on each trolley to verify that each trolley rotates and swivels freely.		
3. Verify that the trolley(s) can easily and smoothly roll the full length of the runway track(s).		
4. Check all system welds for cracks.		
5. Check system components for corrosion.		
6. Check system components for bent or damaged areas.		
7. Check support structure for stability.		
8. Visually check all bolted assemblies for proper connections and properly secured bolts and nuts.		
<b>For Wheeled Griffin System</b>		
1. Verify that the rear wheels ONLY are chocked, using the provided chocks, with two chocks per wheel.		

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# WHEELED GRIFFIN™ ANCHOR TRACK™ SYSTEM INSPECTION CHECKLIST

## Before Each Use

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

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

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

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



INSPECTION POINTS	Inspection Result (✓)	
	PASS	FAIL
<b>For Wheeled Griffin™ System</b>		
1. Test the bottle jack to confirm that it moves smoothly without catching. Check that no fluid is leaking from the jack.		
2. Stabilizing jacks: pull dust caps off of jacks and grease gears. Verify that there is free vertical movement by cranking the handles to raise and lower the jacks.		
3. Inspect the wheel hubs for proper lubrication by removing dust caps and inspecting for dryness. Add grease if needed.		
4. Check that each wheel spins freely without making any noise. Then, grab wheel at top and bottom (12 o'clock and 6 o'clock) and jiggle for end play. If wheel wiggles, check bearing tightness and examine for wear. See "9." on page 20 of the Griffin Manual.		
5. Examine all four wheels for abnormal or excessive wear and tear.		
6. Check wheel bearings for tightness. See "8." on page 20 of the Griffin Manual.		
<b>Steering Checklist</b>		
1. Examine the steering arm's four Heim joints (aka: spherical rod joints) by moving the tow arm from left to right. If the arm wiggles, the Heim joints may need to be replaced. Inspect Heim joints and replace if they appear loose or damaged. Make sure that the tow arm moves freely.		
2. Visually check that the bolts connecting the tie rod and spindle and the tie rod to the center pivot are present and tight.		
3. Visually check that the inner and outer jam nuts on the spherical rod ends are present and tight on all four rod ends.		
4. Visually check that all three bolts that connect the spherical rod ends to the chassis are present and tight.		
5. Check tire alignment. See "7." in the maintenance section on page 19 of the Griffin Manual.		

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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 endstop 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 anyway.		

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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 9001:2008 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:

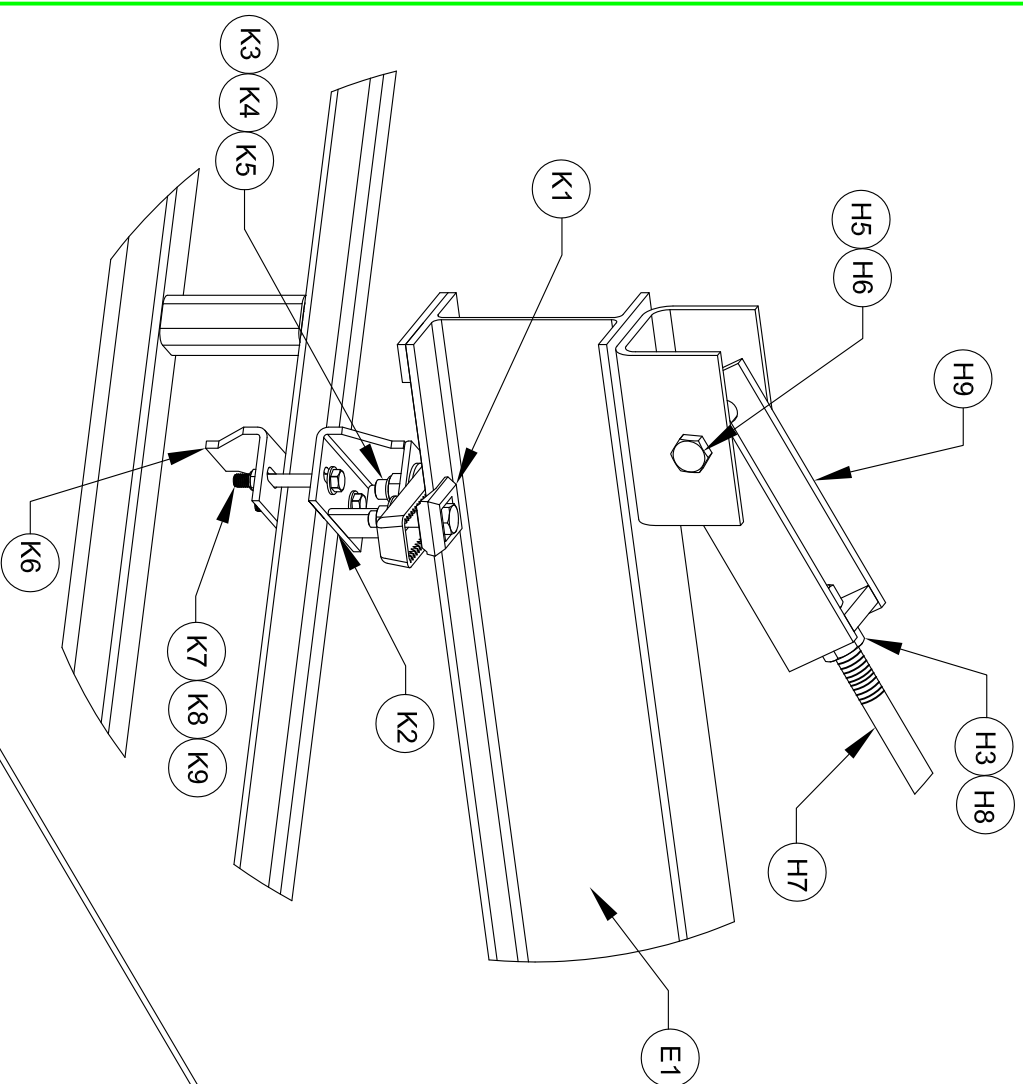
All of our systems are designed and manufactured in the United States of America. We have production facilities in Las Vegas, Nevada, and at our headquarters in Morgantown, Pennsylvania.



730 Hemlock Road, Suite 104 | Morgantown, PA 19543  
Toll Free: (844) 467-4443 | Local: (610) 286-8030 | Fax: (610) 286-6408  
[RigidLifelines.com](http://RigidLifelines.com) | [info@RigidLifelines.com](mailto:info@RigidLifelines.com)

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## DETAIL "D" (OUTRIGGER CONNECTION TO RUNWAY AND TIE ROD)

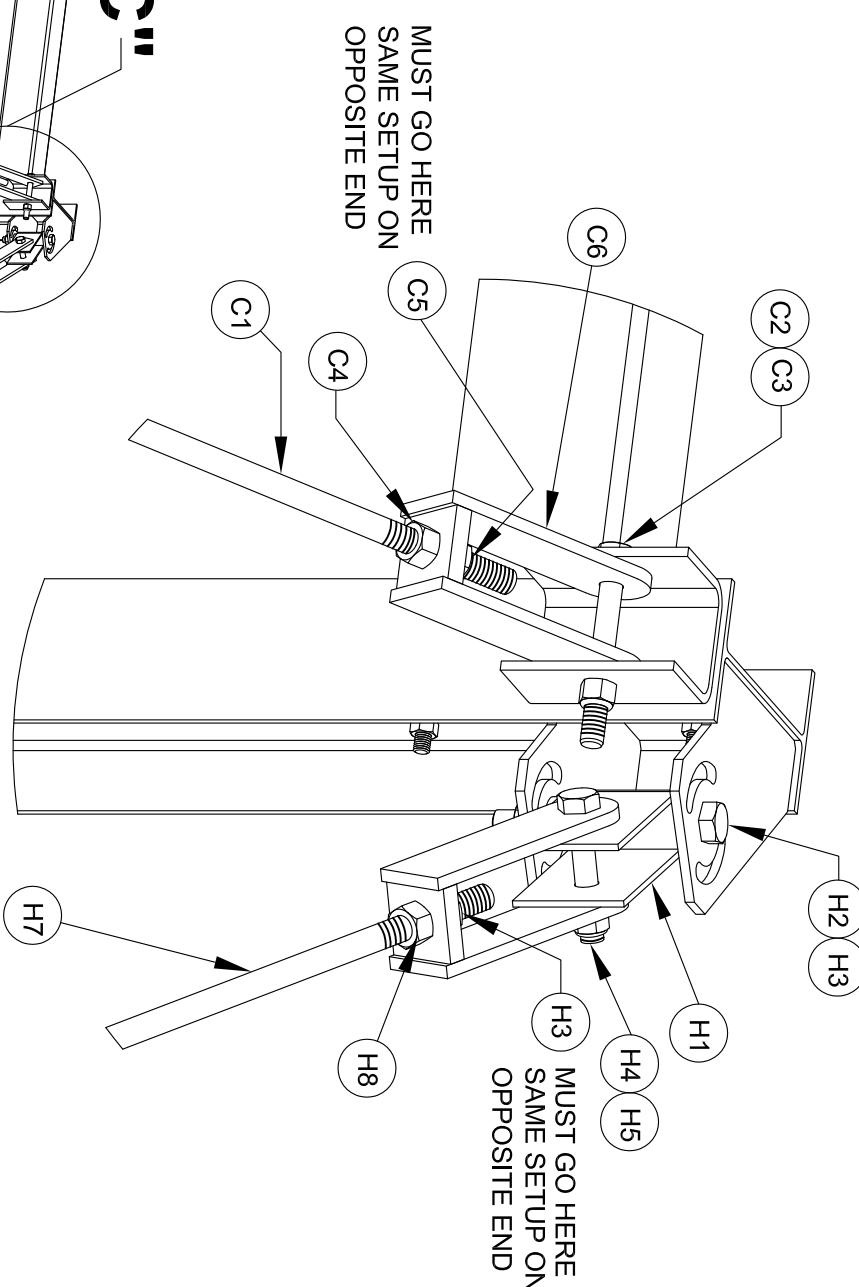


**WARNING**

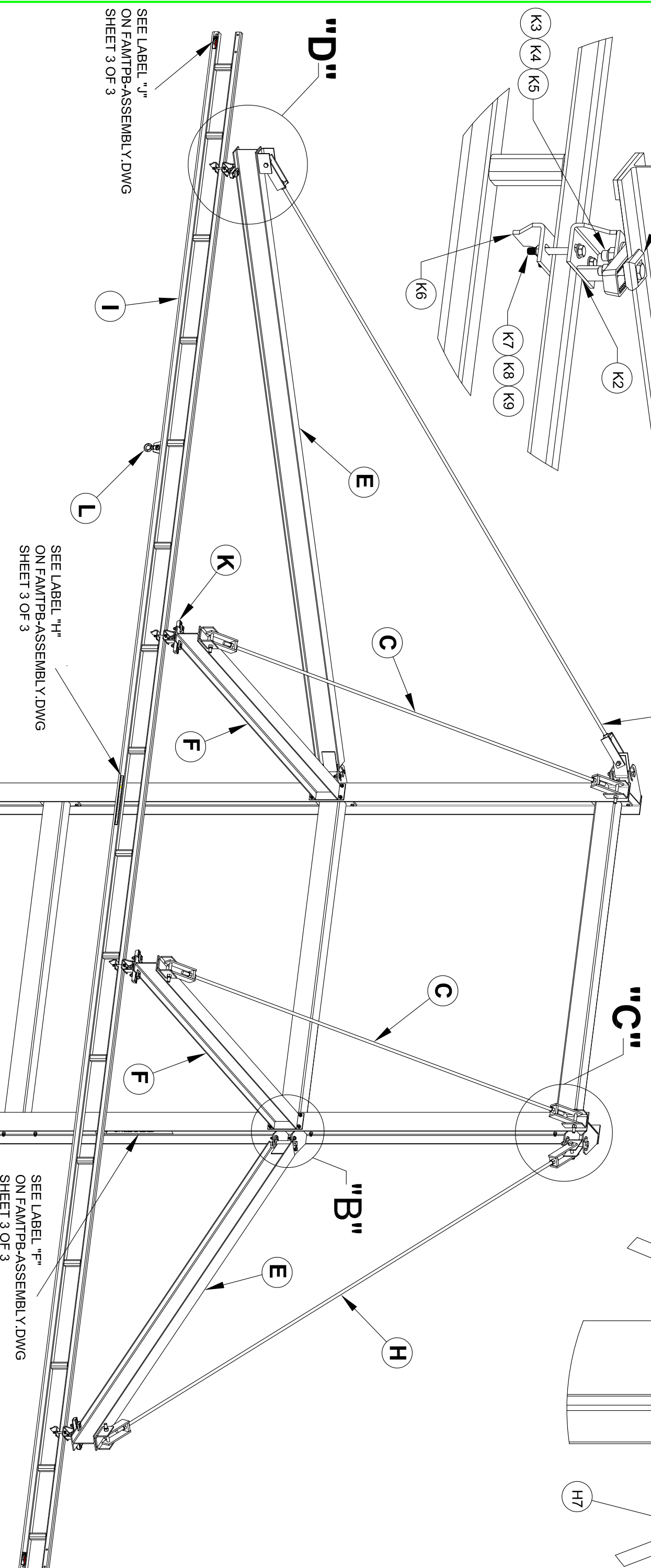
- NEVER REMOVE COUNTERWEIGHTS TO TRANSPORT SYSTEM.
- SYSTEM IS TOP HEAVY. REMOVAL OF COUNTERWEIGHTS WILL CAUSE UNIT TO TOPPLE OVER.
- SYSTEM MUST BE LEVEL AND PLUMB PRIOR TO USE.

**WARNING**

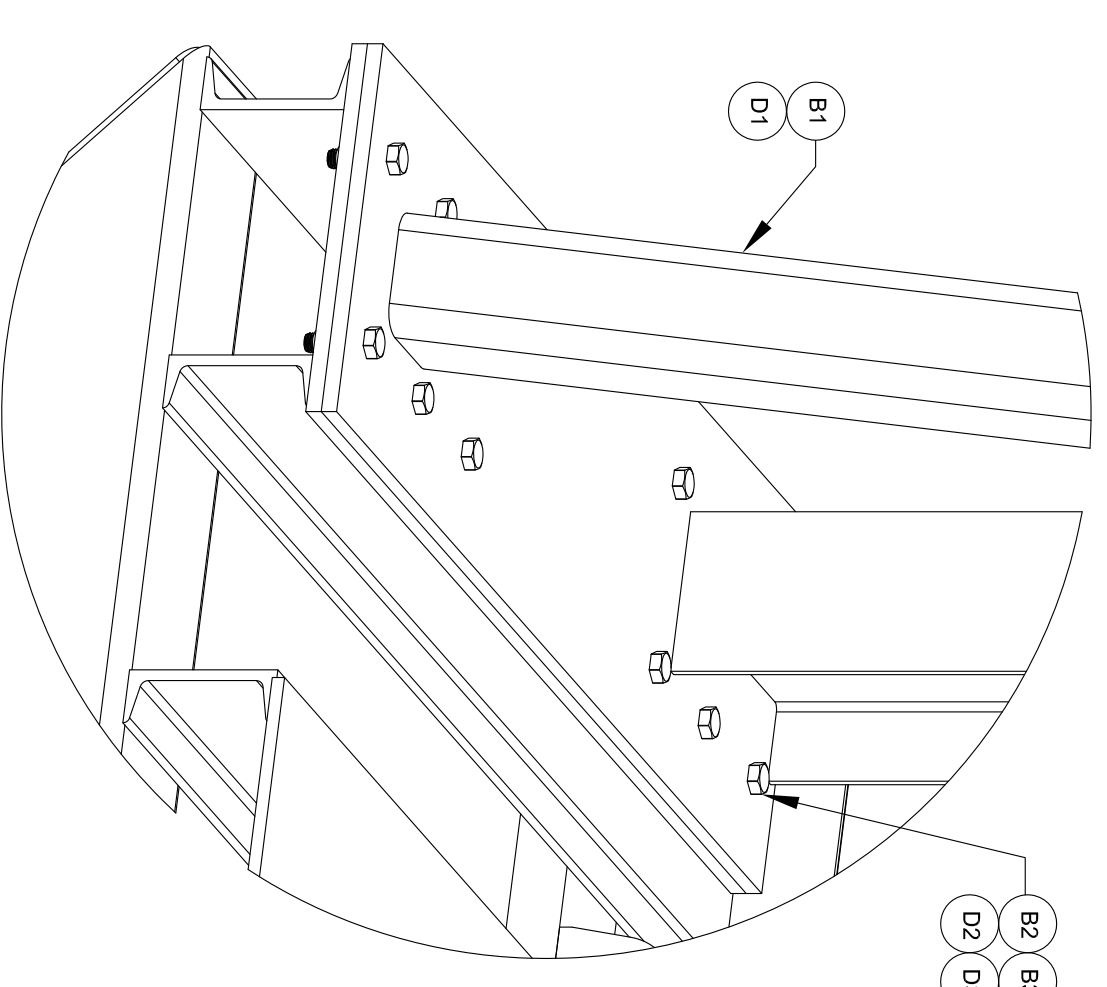
## DETAIL "C" (MAST CONNECTION TO THE RODS)



## DETAIL "B" (MAST CONNECTION TO OUTRIGGERS AND CROSS BRACES)



## DETAIL "A" (BASE AND MAST CONNECTION)



WASHERS MUST BE INSTALLED UNDER FLAT WASHERS AND ON TOP OF SLOT. INSTALL FOUR WASHERS PER MAST.

SEE LABEL "G" ON FAMTPB-ASSEMBLY.DWG SHEET 3 OF 3

SEE LABEL "F" ON FAMTPB-ASSEMBLY.DWG SHEET 3 OF 3

SEE LABEL "U" ON FAMTPB-ASSEMBLY.DWG SHEET 3 OF 3

ITEM	QTY	PART NO.	BUILDING MATERIALS DESCRIPTION
-A-	1	8-0118	FA-PB-BASE SKID WELDMENT
-B-	1	FAPB-R-W12-MT-XX-XX	FA-PB-MAST-LEFT-ASSEMBLY-XX-XX"
B1	1	8-0291-R-W12-XX-XX	FA-PB-MAST-RIGHT-WELDMENT-XX-XX"
B2	12	13-0010	NUT, HEX LOCK 3/4"-10UNC
B3	12	10-0402	BOLT, HEX HEAD 3/4"-10 X 2 1/2"
-C-	2	FAPB-CT-TR-XX-XX	FA-PB-CENTER-TIE-ROD ASSEM XX-XX"
C1	1	06-0900-XX-XX	TIE ROD, 1" DIA. X XX-XX"
C2	2	10-0509	BOLT, 7/8-9NC X 7-1/2 GR5
C3	2	13-0020	NUT, HEX LOCK 7/8-9 PLATD GR2(1"H)
C4	2	11-0080	NUT, HEX 1-8NC
C5	2	13-0030	1-8NC HEX LOCK NUT
C6	2	06-0530	TIE-ROD CLEVIS (1/2- 1 TON)
-D-	1	FAPB-L-W12-MT-XX-XX	FA-PB-MAST-LEFT-ASSEMBLY-XX-XX"
D1	1	8-0291-L-W12-XX-XX	FA-PB-MAST-LEFT-WELDMENT XX-XX"
D2	12	13-0010	NUT, HEX LOCK 3/4"-10UNC
D3	12	10-0402	BOLT, HEX HEAD 3/4"-10 X 2 1/2"
-E-	2	FAPB-SD-OTR-W8-XX-XX	FA-PB-SIDE OUTRIGGER-XX-XX"
E1	1	8-0255-W8-XX-XX	FA-PB-SIDE OUTRIGGER-XX-XX-WELD
E2	4	10-0301	BOLT, HEX HEAD 3/4"-10 X 2 1/2"
E3	4	13-0001	NUT, HEX LOCK 5/8"-11 NC
E4	6	15-0004	5/8" FLAT WASHER
E5	1	10-0613	BOLT, 1-8NC X8.5 GR5 PLAIN
E6	1	13-0030	NUT, HEX LOCK 1-8NC
E7	8	14-0020-SS	WASHER, STAR, 5/8" STAINLESS STEEL
-F-	2	FAPB-CT-OTR-W8-XX-XX	FA-PB-CENTER OUTRIGGER-XX-XX"
F1	1	8-0254-W8-XX-XX	FA-PB-CENTER OUTRIGGER-XX-XX-WELD
F2	4	10-0301	BOLT, HEX HEAD 5/8"-11UNC X 2"
F3	4	13-0001	NUT, HEX LOCK 5/8"-11 NC
-G-			FA-PB-X-BRACE
G1	1	8-0129-XX-XX	FA-PB-CROSS BRACE WELDMENT
G2	8	10-0301	5/8"-11UNC X 2" HEX HEAD BOLT
G3	8	13-0001	NUT, HEX LOCK 5/8"-11 NC
-H-	2	FAPB-SD-TR-XX-XX	FA-PB-SIDE-TIE ROD ASSEMBLY XX-XX"
H1	1	8-0112	FA STAND ALONE TIE ROD UPPER PIVOT WELD
H2	1	10-0613	BOLT, 1-8NC X8.5 GR5 PLAIN
H3	3	13-0030	NUT, HEX LOCK 1-8NC
H4	1	6-3132	10-0504 X CUT DOWN TO 5 1/4"
H5	2	13-0020	NUT, HEX LOCK 7/8-9 PLATD GR2(1"H)
H6	1	10-0509	BOLT, 7/8-9NC X 7-1/2 GR5
H7	1	06-0900-XX-XX	TIE ROD, 1" DIA. X XX-XX"
H8	2	11-0080	NUT, HEX 1-8NC
H9	2	06-0530	TIE-ROD CLEVIS (1/2- 1 TON)
-I-			FA-PB-ARREST RUNWAY
-J-	2	FAPB-3250	FA-PB-COUNTER WEIGHT 3250LBS
-K-	4	FAPB-K-HANGER	FAPB-KIT HNGR 2"TT, 500-530(3/4"BLT)
K1	1	8-A-C-480	FALL ARREST BEAM CLAMP ASY
K2	1	8-0034	FA.SA.2"-3" HANG BRK, W/ 13/16" HOLE
K3	1	15-0005	FLAT WASHER, 3/4"
K4	1	13-0010	NUT, HEX LOCK 3/4"-10UNC
K5	1	10-0401	BOLT, HEX HEAD 3/4"-10UNC X 2"
K6	1	8-0193	FA-PB CLAMP ANGLE 2"-3"TT, BENT
K7	2	10-0208	BOLT, HEX HEAD 1/2"-13 NC X 3 1/2"
K8	2	13-0003	NUT, HEX LOCK 1/2" X 13NC
K9	4	15-0003	FLAT WASHER 1/2" PLATED
-L-			FALL ARREST ROTATING EYEBOLT TROLLEY

### COMPONENT ASSEMBLY SCHEDULE

1. BOLT CROSS BRACES TO MAST
2. ANCHOR ALL TIE RODS TO MASTS
3. SECURE CENTER OUTRIGGERS TO MASTS
4. FASTEN CENTER TIE RODS TO CENTER OUTRIGGERS
5. BOLT ASSEMBLY TO BASE
6. ANCHOR SIDE OUTRIGGERS TO MAST
7. SECURE SIDE TIE RODS TO OUTRIGGERS
8. FASTEN HANGERS TO RUNWAYS
9. BOLT RUNWAYS TO OUTRIGGERS

### 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 3

REV. DATE NAME REVISION DESCRIPTION

COO GENERATED DRAWING  
DATE: 11/22/10  
DWP NOT FOR CONSTRUCTION  
DATE: 11/22/10

APPROVALS: \_\_\_\_\_ DATE: \_\_\_\_\_

DRAWING: DAP 11/22/10

CHECKED: TJB 11/22/10

APP'D: JRG 12/14/15

PLOT DATE: \_\_\_\_\_

PROJECT NO.: \_\_\_\_\_

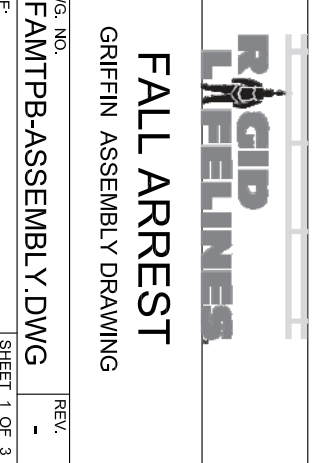
SCALE: \_\_\_\_\_

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FILE: FAMTPB-ASSEMBLY.DWG

REV. \_\_\_\_\_

SHEET 1 OF 3

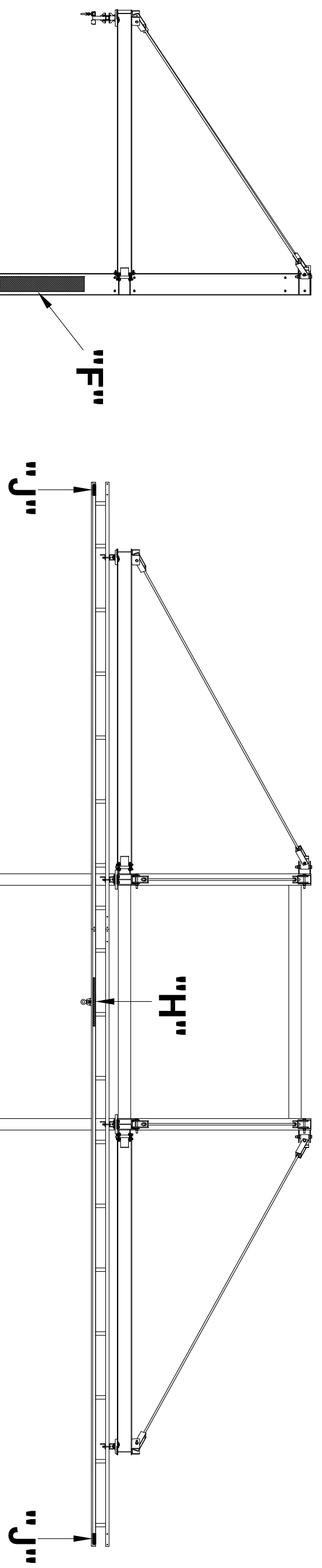








# WHEELED GRIFFIN LABELS



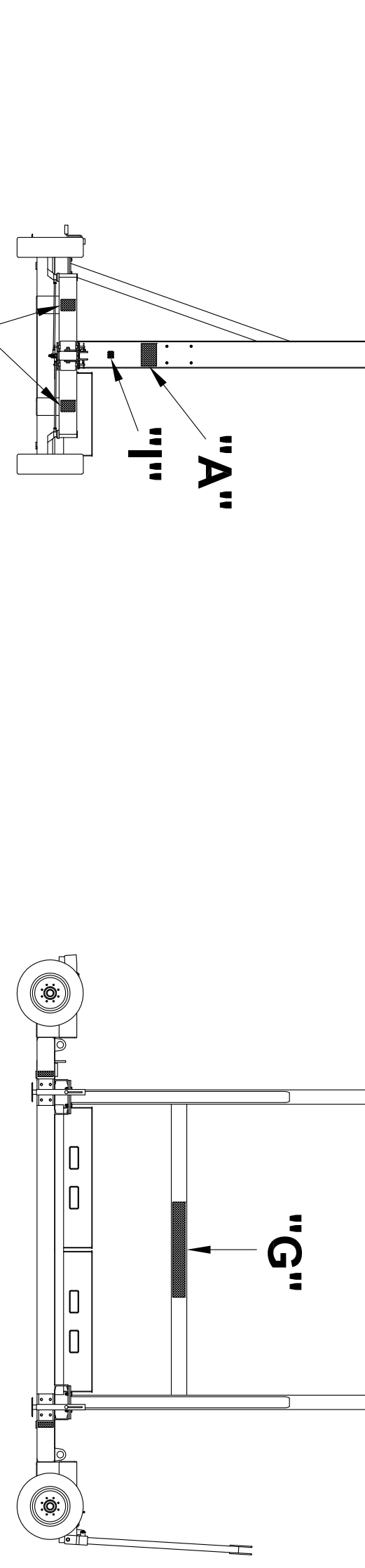
**WARNING**

- NEVER MOVE SYSTEM WHEN IN USE
- NEVER USE WITHOUT WHEELS CHOCKED
- NEVER USE UNLESS LEVELING JACKS ARE ENGAGED AND SYSTEM IS LEVEL

**DO NOT EXCEED 5-MPH**

**WARNING**

SEE NOTE 2 FOR MORE INFO. P/N 53-0426



**NOTE 1:**  
LABELS "A" THROUGH "E" ARE FOR THE WHEELED GRIFFIN ONLY. SKIDDED GRIFFIN LABEL PLACEMENT BEGINS WITH LABEL "F."

**NOTE 2:**  
LABEL 53-0426 "A" SHOULD BE FIVE FEET FROM THE BASE PLATE ON THE OUTSIDE OF THE MAST. LABEL 53-0528 "B" IS ONLY USED ON THE DUAL STEER WHEELED GRIFFIN. IT SHOULD BE PLACED TWO PER SIDE ON THE OUTSIDE OF THE CHASSIS IN BETWEEN THE WHEELS. LABEL 53-0427 "C" SHOULD BE PLACED ON THE UPPER SUPPORT BRACE ON EACH CORNER NEAR THE LEVELING JACK PLATES. LABEL 53-0105 "D" SHOULD BE PLACED IN THE MIDDLE OF THE TOW BAR ON BOTH SIDES. LABEL 53-0515 "E" SHOULD BE PLACED ON THE LOWER SUPPORT BRACE ON EACH CORNER NEAR THE LEVELING JACK PLATES. LABEL 53-0206 "F" SHOULD BE CENTERED ON THE OUTSIDE OF THE MAST IN BETWEEN THE TWO CENTER CROSS BRACES. LABEL 53-0431 "G" SHOULD BE CENTERED ON THE LOWEST CROSS BRACE FACING THE TRACK. LABEL 53-0023 "I" SHOULD BE PLACED TWO FEET-SIX INCHES FROM THE BASE PLATE ON THE OUTSIDE OF THE MAST. LABEL 53-0047 "J" SHOULD BE PLACED ON BOTH ENDS OF THE LOWER SECTION OF TRUSSED TRACK ON BOTH SIDES. LABEL 53-0420 "K" SHOULD BE CENTERED ON THE COUNTERWEIGHTS.

**WARNING**

NEVER MOVE SYSTEM WITHOUT INSTALLING ALL THREE LOCKING PINS (2 STEERING LOCKING PINS AND 1 TOW ARM) INTO THE END THAT IS NOT ATTACHED TO THE TOW VEHICLE. FAILURE TO INSTALL THESE PINS WILL RESULT IN LOSS OF CONTROL WHILE TOWING AND COULD CAUSE SERIOUS SYSTEM AND PROPERTY DAMAGE, BODILY INJURY, OR DEATH.

**WARNING**

SEE NOTE 2 FOR MORE INFO. P/N 53-0528

"I"

"J"

"K"



P/N 53-0023  
SEE NOTE 2 FOR MORE INFO.  
P/N 53-0023

**WARNING**

TOP RIGID TRUCKS OR END TRUCKS IF SUPPLIED FROM RUNNING OUT OF THE END OF RUMWAY AND BRIDGE. END STOP BOLTS SECURED ON EACH DO NOT USE END STOPS FOR REPETITIVE BRIDGE IMPACTS. IF BRIDGE IS SUPPLIED DO NOT SKEW BRIDGE. IF SUPPLIED IN RUMWAYS

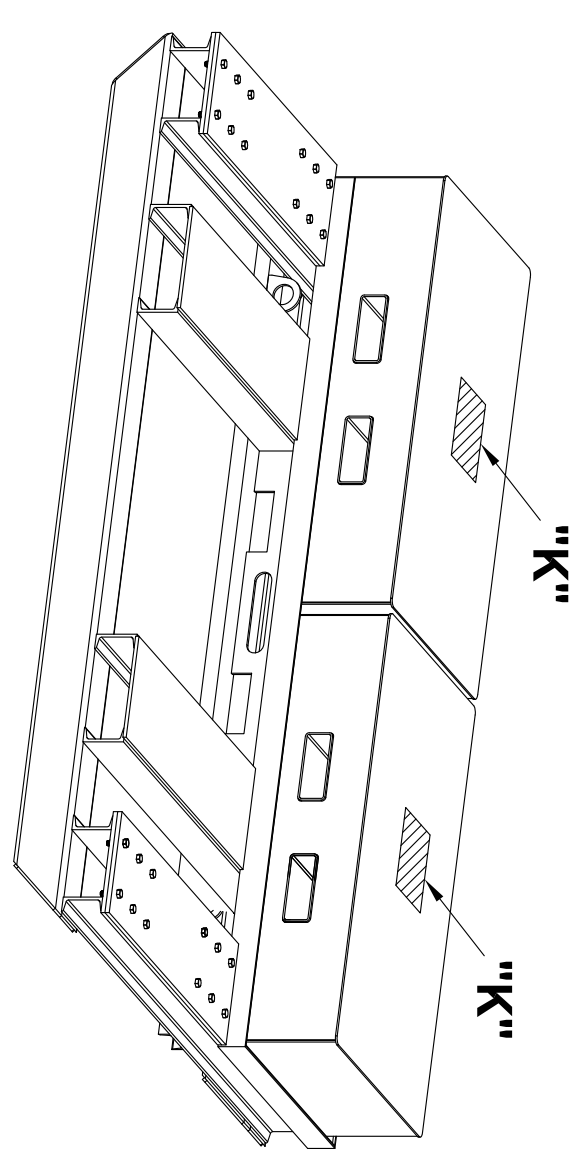
P/N 53-0047  
SEE NOTE 2 FOR MORE INFO.

**WARNING**

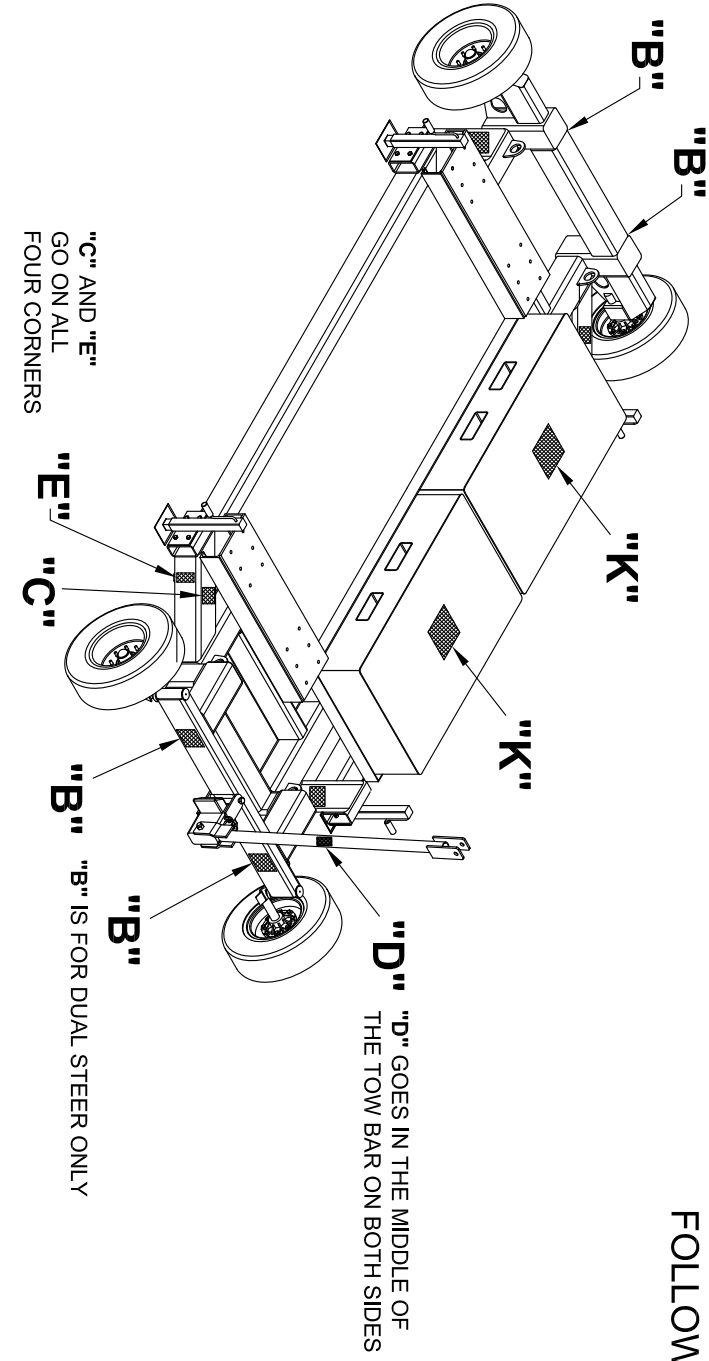
- NEVER REMOVE COUNTERWEIGHTS TO TRANSPORT SYSTEM.
- SYSTEM IS TOP HEAVY. REMOVAL OF COUNTERWEIGHTS WILL CAUSE UNIT TO TOPPLE OVER.
- SYSTEM MUST BE LEVEL AND PLUMB PRIOR TO USE.

**WARNING**

SEE NOTE 2 FOR MORE INFO. P/N 53-0420



**NOTE 3:**  
LABEL "H" 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."



"C" AND "E" GO ON ALL FOUR CORNERS  
"D" GOES IN THE MIDDLE OF THE TOW BAR ON BOTH SIDES  
"B" IS FOR DUAL STEER ONLY



P/N 53-0431  
SEE NOTE 2 FOR MORE INFO.

**RIGID LIFELINES**  
(844) 467-4443 :: [Rigidlifelines.com](http://Rigidlifelines.com)  
P/N 53-0206  
SEE NOTE 2 FOR MORE INFO.

"F"  
"G"  
"H"  
"I"  
"J"  
"K"

**RIGID LIFELINES** PEOPLE & EQUIPMENT **900 LB. MAWF EA. PER TRACK** ANCHOR TRACK P/N 53-0389  
SEE NOTE 3 FOR MORE INFO.

**WARNING**

- ALWAYS ENGAGE LEVELING JACKS BEFORE USING SYSTEM.
- ALWAYS MAKE SURE PLATFORM IS LEVEL AND PLUMB BEFORE USE.
- USE LEVEL GAUGES TO ENSURE SYSTEM IS LEVEL AND PLUMB.
- SYSTEM MUST BE CHECKED AT THE REAR WHEELS BEFORE USE.

**WARNING**

SEE NOTE 2 FOR MORE INFO. P/N 53-0427

**WARNING**

BEFORE TOWING SYSTEM, PULL SPRING PIN AND LOWER TOW BAR. FAIL URE TO COMPLY MAY RESULT IN DAMAGE TO THE SYSTEM.

P/N 53-0016  
SEE NOTE 2 FOR MORE INFO. P/N 53-0105

**JACK**

SEE NOTE 2 FOR MORE INFO.

**SHEET 3 OF 3**

REV.	DATE	NAME	REVISION DESCRIPTION

**RIGID LIFELINES**  
FALL ARREST  
GRIFFIN LABEL  
PLACEMENT DRAWING

PROJECT NO.:	SCALE:	SIZE (DWG. NO.):	REV.:
C		FAM1PB-ASSEMBLY.DWG	
CAD FILE: P/ASYSYEM.ASSEMBLY.DWG			