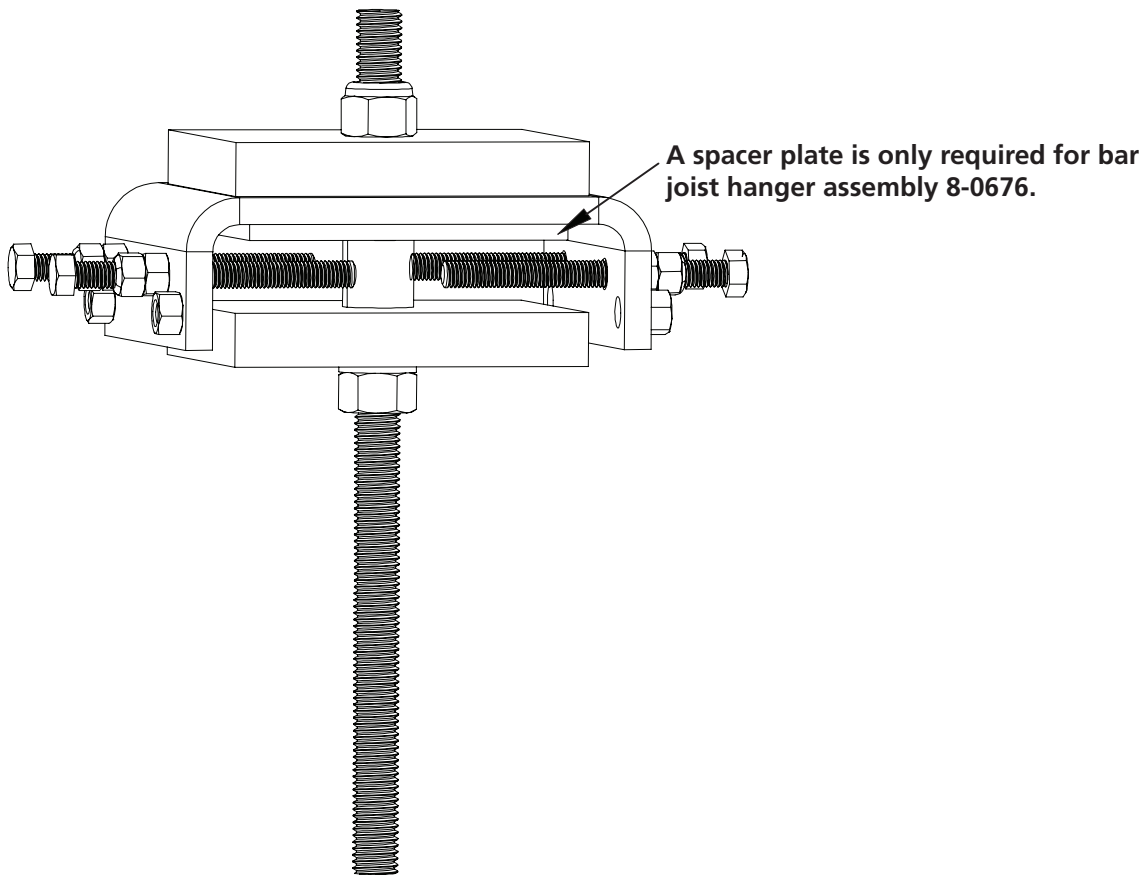


BAR JOIST HANGER

Manual Addendum

Ceiling-Mounted Bar Joist Hanger



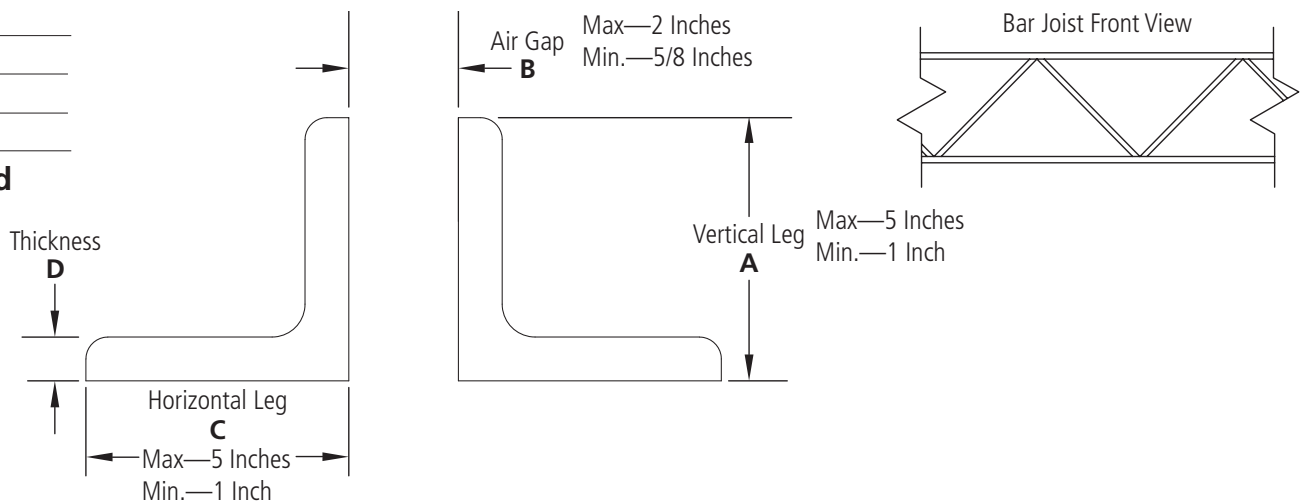
NOTE: This manual addendum must be read first and used in conjunction with manual 103-0075 or 103-0076 and all included drawings, especially drawing number *FA-MT-ASSEMBLY SHEET 1 OF 2* with manual 103-0075 or drawing number *FA-CMT-ASSEMBLY SHEET 1 OF 2* with manual 103-0076. Hereafter, these drawings will be referred to as *Assembly Drawing*.

Rigid Lifelines recommends that the customer have a local professional engineer certify that the strength of the bar joist is both in compliance with local codes and ordinances and can support both the original load and the additional hanger loads from the system. To assist with this certification, Rigid Lifelines provides the Bar Joist Hanger Request for Quote Disclaimer during the selling process. You must take all appropriate steps to make sure that your application meets or will meet all of the requirements on the Bar Joist Hanger Request for Quote Disclaimer before using the system. Rigid Lifelines cannot be held liable for any damage or injury resulting from the incorrect evaluation of the building requirements by the customer. A copy of the Bar Joist Hanger Request for Quote Disclaimer requirements are below. Make sure that the bar joist hanger is installed per the requirements in this addendum and manual 103-0075 or 103-0076.

Requirements for Quote

- The Rigid Lifelines bar joist hanger fits standard profile joists with double angle lower chord (parallel chord, single pitched top chord, or double pitched top chord). Never use the bar joist hanger with sloped lower chord joists.
- The calculations which verify that the customer's support structure is sufficiently strong enough to resist all applied loads are provided by others.
- Rigid Lifelines recommends having a local professional engineer certify that the bar joist and system are in compliance with local codes and ordinances.
- Rigid Lifelines recommends getting a local professional engineer to certify that the bar joist can support both the original load and the additional hanger loads from the system.
- The engineering of any customer-provided custom hanger design, hanger arrangement, and hanger welding, if applicable, is provided by others.
- Rigid Lifelines may not be able to provide a hanger solution. A local professional engineer can provide a suitable hanger that complies with your local codes and ordinances.
- The Rigid Lifelines bar joist hanger is rated for a maximum 10,000-pound applied design load. However, the building's bar joist maximum rating is to be supplied by others.

- *A = _____
- *B = _____
- *C = _____
- *D = _____
- *Required**



A Vertical Leg (Inches)	B Air Gap (Inches)	C Horizontal Leg (Inches)	Part Number	Weight (Pounds)
1"	1"	1"	8-0676	20
2"	1-1/2"	2"	8-0677	20
3-1/2"	2"	3-1/2"	8-0678	21
5"	2"	5"	8-0679	22

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1. Bar Joist Hanger for Plain Track

Refer to Figure 1 on page 5 and the Assembly Drawing FA-MT-ASSEMBLY SHEET 1 OF 2 from Manual 103-0075 or Assembly Drawing FA-CMT-ASSEMBLY SHEET 1 OF 2 from Manual 103-0076 for Steps A Through AG

- a) Ensure that track splices (B in *Assembly Drawing Building Materials Description*), if supplied, have been installed per **ATTACHING THE TRACK SPLICE TO THE TRACK SECTIONS** in manuals 103-0075 or 103-0076.
- b) Using a measuring tape and a permanent marker, measure and mark one-foot in from each end of the track (C in *Assembly Drawing Building Materials Description*) for standard overhang. Also measure and mark your support spacing requirements on the entire track (C in *Assembly Drawing Building Materials Description*). These locations are where the hanger kits (A in *Assembly Drawing Building Materials Description*) should be installed on the track (C in *Assembly Drawing Building Materials Description*).

NOTE: One-foot overhang is standard. Refer to your Final Fabrication Drawing for correct overhang lengths and support spacing for your specific system.

- c) Per **Figure 1**, slide all of the hanger brackets (11) onto the track (C in *Assembly Drawing Building Materials Description*) so that the welded top square on the hanger bracket (11) is facing up away from the track (C in *Assembly Drawing Building Materials Description*).
- d) Per **Figure 1**, slide an end hanger bracket (11) onto the marked spot on the track (C in *Assembly Drawing Building Materials Description*) so that the welded top square on the hanger bracket (11) is facing up away from the track (C in *Assembly Drawing Building Materials Description*).
- e) Per **Figure 1**, **securely tighten** the side set screw to align the track (C in *Assembly Drawing Building Materials Description*) against the side of the hanger bracket (11). Do not overtighten the set screw.

NOTE: The hanger bracket (11) comes with a set screw threaded into the side. It doesn't matter which side. However, ensure that each hanger bracket (11) has the set screw threaded into the same side.

- f) Repeat steps **d)** through **e)** to attach all hanger brackets (11 in *Figure 1*) to the marked spots on the track (C in *Assembly Drawing Building Materials Description*).
- g) Per **Figure 1**, screw a locknut (3) onto a bolt (2).
- h) Per **Figure 1**, **hand tighten** the bolt (2) and attached locknut (3) to a hex nut welded to the side of the bar joist hanger weldment (1).

NOTE: Bar joist hanger assembly 8-0676 uses the top two hex nuts closer together on each side of the bar joist hanger weldment (1). All other bar joist hanger assemblies (8-0677, 8-0678, and 8-0679) use the bottom two hex nuts further away on each side of the bar joist hanger weldment (1). For bar joist hanger assembly dimensions, see page 2 of this manual addendum.

- i) Repeat steps **g)** and **h)** to attach the remaining bolts (2 in *Figure 1*) and locknuts (3 in *Figure 1*) to the bar joist hanger weldment (1 in *Figure 1*).
- j) Per **Figure 1**, place a spacer plate (4), if supplied, underneath the bar joist hanger weldment (1) so that the hole in the spacer plate (4) is aligned with the middle hole in the top of the bar joist hanger weldment (1).

NOTE: A spacer plate (4) is only required for bar joist hanger assembly 8-0676. If a spacer plate (4) was not supplied, proceed to the next step directly below.

- k) Per **Figure 1**, insert the threaded drop rod (5) through the aligned holes in the spacer plate (4), if supplied, and bar joist hanger weldment (1) so that about three inches of drop rod (5) are showing on top of the top plate of the bar joist hanger weldment (1).
- l) Per **Figure 1**, **securely tighten** a locknut (6) to the threaded drop rod (5) so that the locknut (6) is flush against the top plate of the bar joist hanger weldment (1), ensuring that at least one inch of drop rod (5) is showing from the top of the locknut (6).
- m) Use a man lift or cherry picker to reach the bottom chord of the bar joist.

- n) Per **Figure 1**, insert the threaded drop rod (5) through the bottom chord of the bar joist so that the spacer plate (4), if supplied, is flush against the top of the bottom chord of the bar joist.

NOTE: A spacer plate (4) is only required for bar joist hanger assembly 8-0676. If a spacer plate (4) was not supplied, ensure that the bottom of the top plate of the bar joist hanger weldment (1) is flush against the top of the bottom chord of the bar joist.

- o) Per **Figure 1**, insert and slide the centering tube (7) on the threaded drop rod (5) so that the top of the centering tube (7) is flush against the bottom of the spacer plate (4), if supplied.

NOTE: A spacer plate (4) is only required for bar joist hanger assembly 8-0676. If a spacer plate (4) was not supplied, ensure that the top of the centering tube (7) is flush against the bottom of the top plate of the bar joist hanger weldment (1). The centering tube (7) occupies most of the space between the bottom chord of the bar joist. If more than a 1/4-inch air gap remains, a different hanger assembly must be used. Contact Rigid Lifelines for more information.

- p) Per **Figure 1**, insert the bottom plate (8) on the threaded drop rod (5) and slide the bottom plate (8) so that the top of the bottom plate (8) is flush against the bottom of the centering tube (7).

- q) Per **Figure 1**, slide a lock washer (9) on the threaded drop rod (5) so that the lock washer (9) is flush against the bottom of the bottom plate (8).

- r) Per **Figure 1**, **securely tighten** a locknut (6) to the threaded drop rod (5) so that the top of the locknut (6) is flush against the bottom of the lock washer (9).

NOTE: When tightened, there should be approximately a 1/16-inch air gap between the top of the centering tube (7) and the bottom of the spacer plate (4), if supplied. If a spacer plate (4) was not supplied, the 1/16-inch air gap should be between the top of centering tube (7) and the bottom of the top plate of the bar joist hanger weldment (1).

- s) Per **Figure 1**, screw a nut (10) onto the bottom of the threaded drop rod (5) and adjust so that about three inches of the drop rod (5) are showing from the bottom of the nut (10).

- t) Per **Figure 1**, center the bar joist hanger weldment (1) and attached components (2 through 10) over the bottom chord of the bar joist.

- u) Per **Figure 1**, **securely tighten** the bolts (2) against the bottom chord of the bar joist and the locknuts (3) against the hex nuts welded on the side of the bar joist hanger weldment (1).

- v) Per **Figure 1**, torque the bolts (2) and locknuts (3) to 20 foot-pounds.

- w) Repeat steps g) through v) to attach the remaining bar joist hanger weldments (1 in *Figure 1*) and attached components (2 through 10 in *Figure 1*) to the appropriate places on the bottom chords of the bar joists for this track (C in *Assembly Drawing Building Materials Description*) per the support spacing requirements specified on your Final Fabrication Drawing.

- x) Using a crane and lifting straps, lift the track (C in *Assembly Drawing Building Materials Description*) to the bar joist hanger weldment and attached components (2 through 10 in *Figure 1*).

- y) Use a man lift or cherry picker to reach the track (C in *Assembly Drawing Building Materials Description*) and bottom chord of the bar joist.

- z) Per **Figure 1**, position the track and attached hanger brackets (11) so that an end hanger bracket (11) is near the bar joist hanger weldment (1) and attached components (2 through 10).

NOTE: Track splice joints (B in *Assembly Drawing Building Materials Description*) must be within one-foot from the center of where the bar joist hanger weldments (1 in *Figure 1*) connect to the bottom chord of the bar joist.

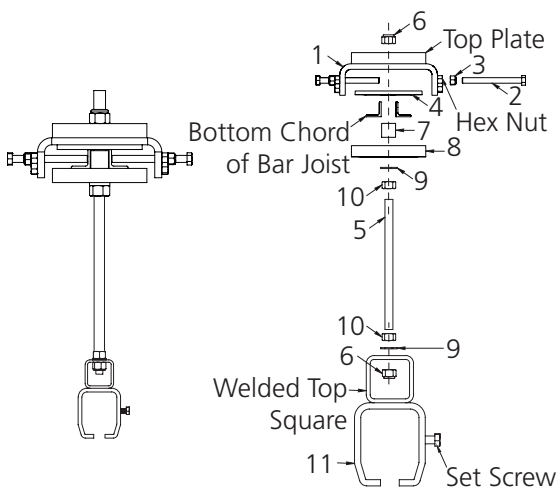
- aa) Per **Figure 1**, slide a lock washer (9) onto the threaded drop rod (5) until the lock washer (9) is flush against the bottom of the nut (10).

- ab) Per **Figure 1**, insert the bottom of the drop rod (5) into the hole on the welded top square of the hanger bracket (11) so that the lock washer (9) is between the top of the welded top square of the hanger bracket (11) and nut (10).

- ac) Per **Figure 1**, **securely tighten** a locknut (6) to the bottom of the threaded drop rod (5) and adjust so that at least an inch of drop rod (5) is showing underneath the locknut (6).

- ad) Repeat steps y) through ac) to attach the other hanger brackets (11 in Figure 1) on the track (C in Assembly Drawing Building Materials Description) to the bar joist hanger weldments (1 in Figure 1) and attached components (2 through 10 in Figure 1).
- ae) Repeat steps a) through ad) to attach the remaining tracks (C in Assembly Drawing Building Materials Description) to the bottom chord of the bar joist.
- af) After all track (C in Assembly Drawing Building Materials Description) has been **securely tightened** to the bottom chord of the bar joists, torque all 5/8-inch diameter locknuts (6 in Figure 1) to 93 foot-pounds.
- ag) Proceed to **FINAL ASSEMBLY** instructions in manual 103-0075 or in manual 103-0076.

Figure 1



NOTE: The spacer plate (4) is only required for bar joist hanger assembly 8-0676. 700 Series Plain Track uses 3/4-inch diameter hardware. Torque 3/4-inch diameter hardware to 151 foot-pounds.

Item	Description
1	Bar Joist Hanger Weldment
2	3/8-Inch Dia. by 4-Inch Hex Head Bolt
3	3/8-Inch Dia. Hex Locknut
4	Spacer Plate
5	5/8-Inch Dia. Drop Rod
6	5/8-Inch Dia. Hex Locknut
7	Centering Tube
8	Bottom Plate
9	5/8-Inch Dia. Lock Washer
10	5/8-Inch Dia. Hex Nut
11	Hanger Bracket

2. Bar Joist Hanger for Trussed Track

Refer to Figure 2 on page 7 and the Assembly Drawing FA-MT-ASSEMBLY SHEET 1 OF 2 from Manual 103-0075 or Assembly Drawing FA-CMT-ASSEMBLY SHEET 1 OF 2 from Manual 103-0076 for Steps A Through AG

- a) Ensure that track splices (B in Assembly Drawing Building Materials Description), if supplied, have been installed per **ATTACHING THE TRACK SPLICE TO THE TRACK SECTIONS** in manuals 103-0075 or 103-0076.
- b) Using a measuring tape and a permanent marker, measure and mark one-foot in from each end of the track (C in Assembly Drawing Building Materials Description) for standard overhang. Also measure and mark your support spacing requirements on the entire track (C in Assembly Drawing Building Materials Description). These locations are where the hanger kits (A in Assembly Drawing Building Materials Description) should be installed on the track (C in Assembly Drawing Building Materials Description).

NOTE: One-foot overhang is standard. Refer to your Final Fabrication Drawing for correct overhang lengths and support spacing for your specific system.

- c) Per Figure 2, insert two bolts (12) through two flat washers (14) and the bottom slots of the hanger truss bracket (11) so that the flat washers (14) are between the bolt heads and the bottom of the hanger truss bracket (11).
- d) Per Figure 2, place the hanger truss bracket (11) on the marked spot on the end of the track so that the bolts (12) hang down on both sides of the track.
- e) Per Figure 2, **securely tighten** the angle truss clamps (13) to the bolts (12) using flat washers (14) and locknuts (15) so that the flat washers (14) are between the angle truss clamps (13) and locknuts (15). Ensure that the angle truss clamps (13) form *inverted-L's*.
- f) Repeat steps c) through e) to attach all hanger truss brackets (11 in Figure 2) to the marked spots on the track (C in Assembly Drawing Building Materials Description).

- g)** Per **Figure 2**, screw a locknut (3) onto a bolt (2).
- h)** Per **Figure 2**, **hand tighten** the bolt (2) and attached locknut (3) to a hex nut welded to the side of the bar joist hanger weldment (1).

NOTE: Bar joist hanger assembly 8-0676 uses the top two hex nuts closer together on each side of the bar joist hanger weldment (1). All other bar joist hanger assemblies (8-0677, 8-0678, and 8-0679) use the bottom two hex nuts further away on each side of the bar joist hanger weldment (1). For bar joist hanger assembly dimensions, see page 2 of this manual addendum.

- i)** Repeat steps **g)** and **h)** to attach the remaining bolts (2 in *Figure 2*) and locknuts (3 in *Figure 2*) to the bar joist hanger weldment (1 in *Figure 2*).
- j)** Per **Figure 2**, place a spacer plate (4), if supplied, underneath the bar joist hanger weldment (1) so that the hole in the spacer plate (4) is aligned with the middle hole in the top of the bar joist hanger weldment (1).

NOTE: A spacer plate (4) is only required for bar joist hanger assembly 8-0676. If a spacer plate (4) was not supplied, proceed to the next step directly below.

- k)** Per **Figure 2**, insert the threaded drop rod (5) through the aligned holes in the spacer plate (4), if supplied, and bar joist hanger weldment (1) so that about three inches of drop rod (5) are showing on top of the top plate of the bar joist hanger weldment (1).
- l)** Per **Figure 2**, **securely tighten** a locknut (6) to the threaded drop rod (5) so that the locknut (6) is flush against the top plate of the bar joist hanger weldment (1), ensuring that at least one inch of drop rod (5) is showing from the top of the locknut (6).

m) Use a man lift or cherry picker to reach the bottom chord of the bar joist.

- n)** Per **Figure 2**, insert the threaded drop rod (5) through the bottom chord of the bar joist so that the spacer plate (4), if supplied, is flush against the top of the bottom chord of the bar joist.

NOTE: A spacer plate (4) is only required for bar joist hanger assembly 8-0676. If a spacer plate (4) was not supplied, ensure that the bottom of the top plate of the bar joist hanger weldment (1) is flush against the top of the bottom chord of the bar joist.

- o)** Per **Figure 2**, insert and slide the centering tube (7) on the threaded drop rod (5) so that the top of the centering tube (7) is flush against the bottom of the spacer plate (4), if supplied.

NOTE: A spacer plate (4) is only required for bar joist hanger assembly 8-0676. If a spacer plate (4) was not supplied, ensure that the top of the centering tube (7) is flush against the bottom of the top plate of the bar joist hanger weldment (1). The centering tube (7) occupies most of the space between the bottom chord of the bar joist. If more than a 1/4-inch air gap remains, a different hanger assembly must be used. Contact Rigid Lifelines for more information.

- p)** Per **Figure 2**, insert the bottom plate (8) on the threaded drop rod (5) and slide the bottom plate (8) so that the top of the bottom plate (8) is flush against the bottom of the centering tube (7).

- q)** Per **Figure 2**, slide a lock washer (9) on the threaded drop rod (5) so that the lock washer (9) is flush against the bottom of the bottom plate (8).

- r)** Per **Figure 2**, **securely tighten** a locknut (6) to the threaded drop rod (5) so that the top of the locknut (6) is flush against the bottom of the lock washer (9).

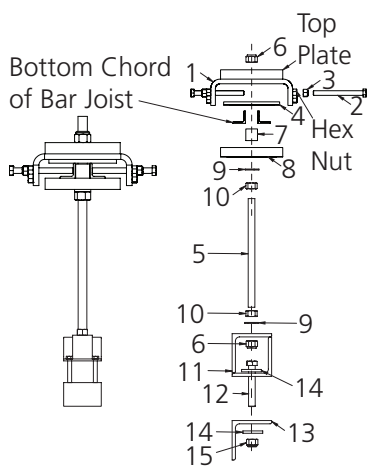
NOTE: When tightened, there should be approximately a 1/16-inch air gap between the top of the centering tube (7) and the bottom of the spacer plate (4), if supplied. If a spacer plate (4) was not supplied, the 1/16-inch air gap should be between the top of centering tube (7) and the bottom of the top plate of the bar joist hanger weldment (1).

- s)** Per **Figure 2**, screw a nut (10) onto the bottom of the threaded drop rod (5) and adjust so that about three inches of the drop rod (5) are showing from the bottom of the nut (10).

- t)** Per **Figure 2**, center the bar joist hanger weldment (1) and attached components (2 through 10) over the bottom chord of the bar joist.

- u) Per **Figure 2**, **securely tighten** the bolts (2) against the bottom chord of the bar joist and the locknuts (3) against the hex nuts welded on the side of the bar joist hanger weldment (1).
 - v) Per **Figure 2**, torque the bolts (2) and locknuts (3) to 20 foot-pounds.
 - w) Repeat steps g) through v) to attach the remaining bar joist hanger weldments (1 in *Figure 2*) and attached components (2 through 10 in *Figure 2*) to the appropriate places on the bottom chords of the bar joists for this track (C in *Assembly Drawing Building Materials Description*) per the support spacing requirements specified on your Final Fabrication Drawing.
 - x) Using a crane and lifting straps, lift the track (C in *Assembly Drawing Building Materials Description*) to the bar joist hanger weldment and attached components (2 through 10 in *Figure 2*).
 - y) Use a man lift or cherry picker to reach the track (C in *Assembly Drawing Building Materials Description*) and bottom chord of the bar joist.
 - z) Per **Figure 2**, position the track and attached components (11 through 15) so that an end hanger truss bracket (11) is near the bar joist hanger weldment (1) and attached components (2 through 10).
- NOTE:** Track splice joints (B in *Assembly Drawing Building Materials Description*) must be within four feet from the center of where the bar joist hanger weldments (1 in *Figure 2*) connect to the bottom chord of the bar joist.
- aa) Per **Figure 2**, slide a lock washer (9) onto the threaded drop rod (5) until the lock washer (9) is flush against the bottom of the nut (10).
 - ab) Per **Figure 2**, insert the bottom of the threaded drop rod (5) into the top hole on the hanger truss bracket (11) so that the lock washer (9) is between the top of the hanger truss bracket (11) and the nut (10).
 - ac) Per **Figure 2**, **securely tighten** a locknut (6) to the bottom of the threaded drop rod (5) and adjust so that at least an inch of drop rod (5) is showing underneath the locknut (6).
 - ad) Repeat steps y) through ac) to attach the other hanger truss brackets (11 in *Figure 2*) and attached components (11 through 15 in *Figure 2*) on the track (C in *Assembly Drawing Building Materials Description*) to the bar joist hanger weldments (1 in *Figure 2*) and attached components (2 through 10 in *Figure 2*).
 - ae) Repeat steps a) through ad) to attach the remaining tracks (C in *Assembly Drawing Building Materials Description*) to the bottom chord of the bar joist.
 - af) After all track (C in *Assembly Drawing Building Materials Description*) has been **securely tightened** to the bottom chord of the bar joists, torque all 5/8-inch diameter locknuts (6 in *Figure 2*) to 93 foot-pounds.
 - ag) Proceed to **FINAL ASSEMBLY** instructions in manual 103-0075 or in manual 103-0076.

Figure 2



Item	Description
1	Bar Joist Hanger Weldment
2	3/8-Inch Dia. by 4-Inch Hex Head Bolt
3	3/8-Inch Dia. Hex Locknut
4	Spacer Plate
5	5/8-Inch Dia. Drop Rod
6	5/8-Inch Dia. Hex Locknut
7	Centering Tube
8	Bottom Plate
9	5/8-Inch Dia. Lock Washer
10	5/8-Inch Dia. Hex Nut

Item	Description
11	Hanger Truss Bracket
12	1/2-Inch Dia. Hex Head Bolt
13	Angle Truss Clamp
14	1/2-Inch Dia. Flat Washer
15	1/2-Inch Dia. Hex Locknut

NOTE: The spacer plate (4) is only required for bar joist hanger assembly 8-0676. 700 Series Plain Track uses 3/4-inch diameter hardware. Torque 3/4-inch diameter hardware to 151 foot-pounds.

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.



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