



A SPARTAN MOTORS COMPANY

Fold-Up Shelving

136" Wheelbase

Kit 23003562-2200SK

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Document Part Number: 03104592-N001EN

– Revision C–

Introduction

This document provides instructions for the installation six fold-up shelves built by Utilimaster Corporation into the 136" wheelbase RAM ProMaster cargo van.

NOTICE

Federal Motor Carrier Safety Administration (FMCSA) may require the installation of a bulkhead with the installation of cargo shelving.

This manual contains drawings and photos to aid in servicing the vehicle. It may include maintenance information on some items installed but not manufactured by Utilimaster Corporation. Items such as drivetrain components and certain interior furnishings may be covered by separate manufacturer-supplied information. Information provided here is intended to assist Utilimaster customers and is in no way meant to replace or supersede instructions provided by other suppliers for their products.



Fold-up shelving package

NOTICE

The information in this document is generic. Images and procedures may differ from those for vehicles you are servicing. Because Utilimaster manufactures customized vehicle solutions, this document cannot list and illustrate every possible option for every vehicle. The most common body options are described here. Use this information as a guideline.

Notes, Cautions, and Warnings

As you read through the this document, you will encounter NOTES, CAUTIONS, and WARNINGS. Each has a specific purpose.

WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices **NOT** related to physical injury.

WARNING

Avoid breathing AC refrigerant and lubricant vapor or mist. Utilimaster recommends that a licensed automotive air-conditioning specialist work on the vehicle's air-conditioning (HVAC) system.

Operate the engine only in a well-ventilated area.

Use safety stands and/or wheel blocks whenever you are underneath the vehicle.

CAUTION

Always wear safety glasses and other protective equipment as appropriate to the process.

Become familiar with all warning labels.

Always maintain firm footing and control of tools.

Be sure that the ignition switch is Off unless otherwise required by the procedure.

Put the transmission in Park (if it is an automatic) and set the parking brake before working on the vehicle.

Avoid contact with hot metal parts, such as the radiator or exhaust system.

Do **NOT** smoke while working on the vehicle.

Always remove rings, watches, hanging jewelry, and loose clothing before working on a vehicle. Tie long hair securely behind your head. Keep yourself and your clothing away from the radiator fan, belts, and any moving parts when the engine is running.

Keep hands and other objects clear of the radiator fan blades. The electric fan can start at any time even though the ignition is Off. Disconnect the fan when working under the hood.

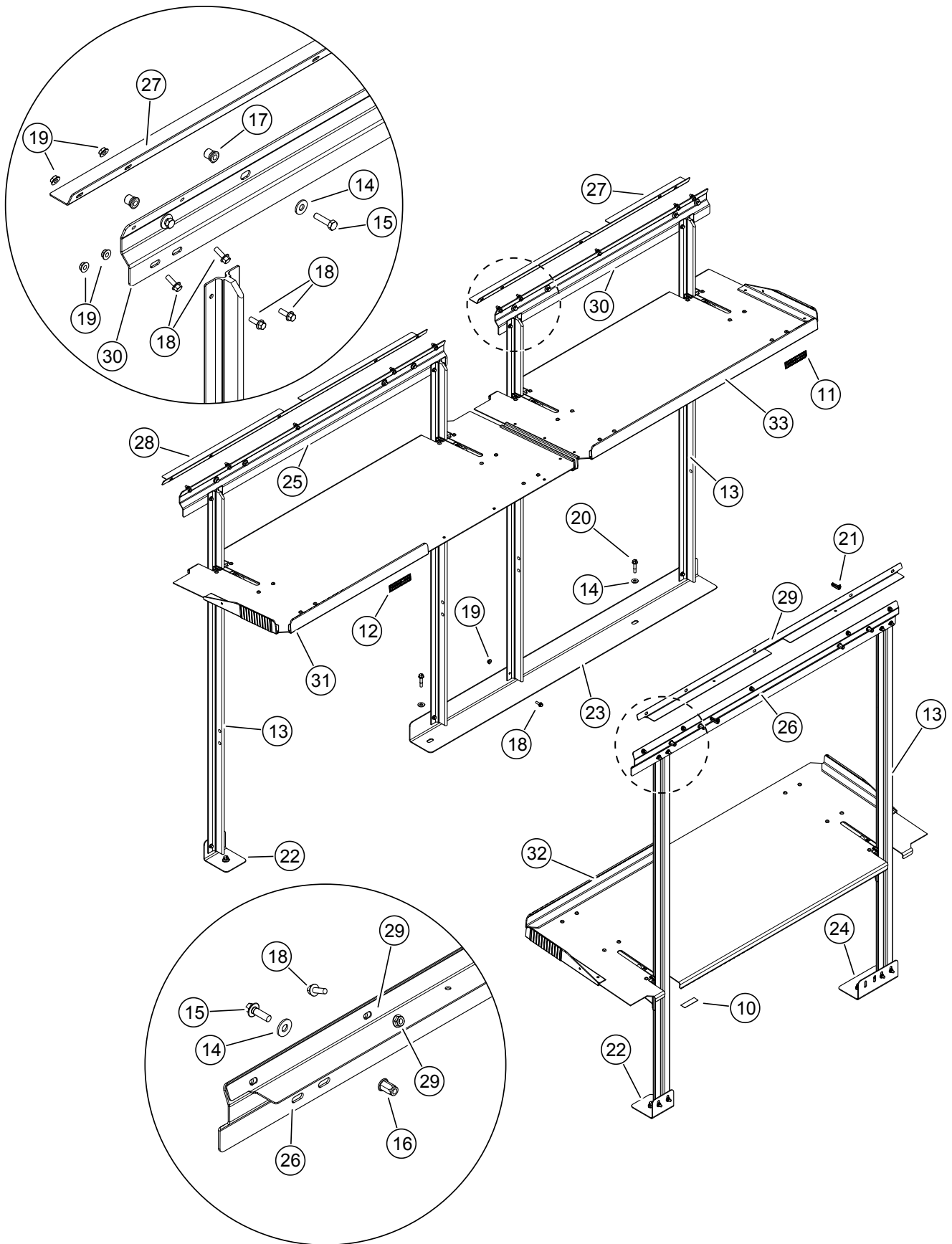
Recommended Tools

Below are some tools that you will need for this process. There may be other commonly used hand tools required but not specifically mentioned.

- T40 Torx bit socket
- Drill with F (or 1/4") and 17/32" bit with drill stop
- C-Clamp
- Avdel® hydro-pneumatic tool 74200 for threaded inserts or equivalent
- 3/16" Allen wrench
- Standard and metric combination and ratchet wrench sets
- Torque wrenches (quality sets with ft•lb increments)

Kit Parts List

23003562-2200SK PROMASTER—SHELF ASSY FOLDING LH & RH 136" WB			
BOM ID	Part Number	Description	Qty.
0	REFERENCE	23003537d SHELF ASSY FOLDUP LH & RH L2 PRMSTR	1
10	03103432	DECAL REG PATENT	6
11	03102455	DECAL MAX LOAD 200 LBS	2
12	03102456	DECAL MAX LOAD 250 LBS	4
13	06935873	T-STUD SHLF PROMASTER 59.00	6
14	11008417	WASHER FLAT 5/16 USS ZN	17
15	UT29-BB1-007	BOLT FLG M8-1.25 x 25 PLK CLS 8.8 BZ	12
16	11602390	INSERT M8 x 1.25 HEXSERT	8
17	11601209	NUTSERT OPEN M8-1.25 RB	4
18	11600651	BOLT FLG 1/4-20 X .75 GR5 ZN	39
19	11600674	NUT FLG 1/4-20 PTLK GRD F ZN	39
20	11602444	BOLT FLG M8-1.25 X 40 TAP CLS 8.8 ZN	5
21	16605698	STRAP WIRE TIE BLACK 8.5" T50R	2
22	22823518	RAIL T-STUD MTG LOWER REAR	2
23	22825913	RAIL T-STUD MTG LWR FRT LH L2 PRMSTR	1
24	22825914	RAIL T-STUD MTG LWR FRT RH L2 PRMST	1
25	22826822	RAIL T-STUD MTG TOP RR LH L2 PRMSTR	1
26	22826823	RAIL T-STUD MTG TOP RR RH L2 PRMSTR	1
27	22826866	BRACE UPPER SHELF PRMSTR LF	1
28	22826977	BRACE UPPER SHELF PRMSTR LR L2	1
29	22826978	BRACE UPPER SHELF PRMSTR RH L2	1
30	22826872	RAIL T-STUD MTG UPPER LH FRNT PRMST	1
31	23003540	SHELF FOLDING ASSY LH REAR L2 PRMSTR	2
32	23003541	SHELF FOLDING ASSY RH REAR L2 PRMSTR	2
33	53238183	SHELF LH FRONT FOLDING ASSY 45.64	1
NS_1	03104592-N001EN	FOLD-UP SHELVING INSTRUCTIONS	1



*136" wheelbase shelving kit overview
(bottom shelves not shown for clarity)*

Installation Instructions

1. Read and understand all instructions before starting work.
2. Validate the packing slip with the list of parts in the instructions.

NOTICE

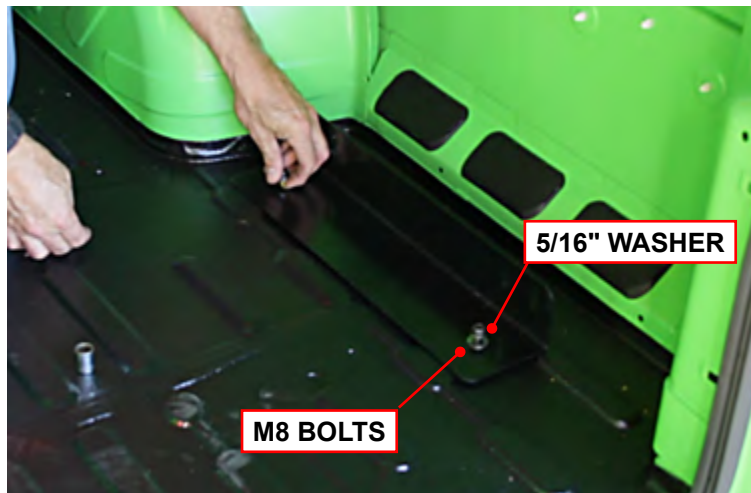
Install sidewall liners before installing fold-up shelving kit.

T-Stud and Rail Assembly

1. Use a T40 Torx bit to remove cargo floor D-rings and discard.
2. Secure floor mounting rails using M8 bolts and 5/16" washers.

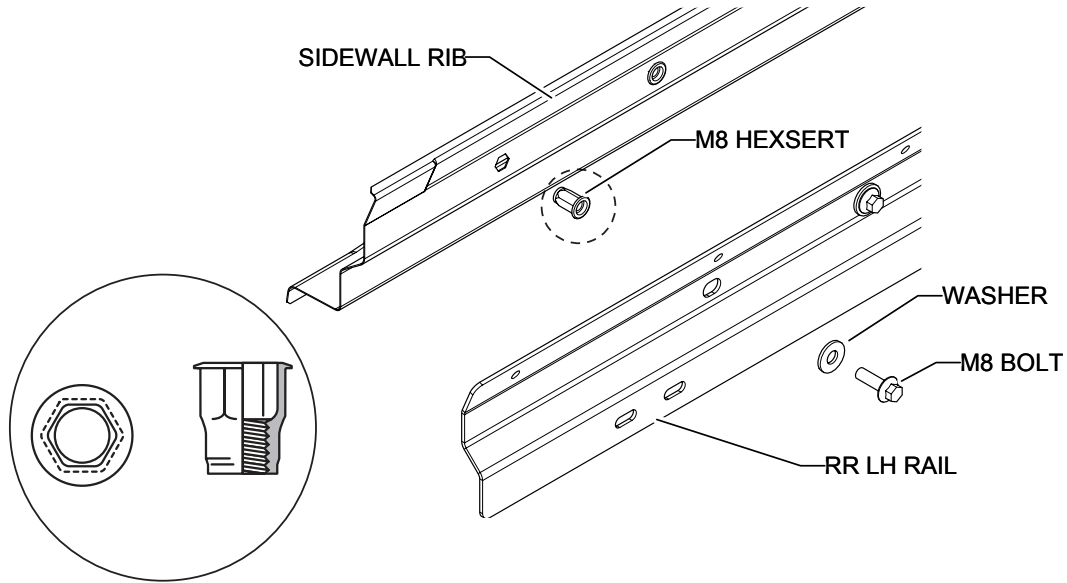


Remove cargo floor d-ring



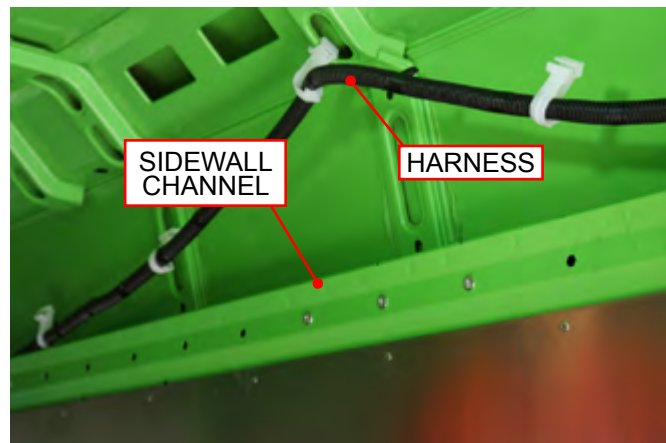
Floor mounting rail

Rear Rails Installation



Overview of LH and RH rear rail mounting (LH side shown)

1. Relocate RH cargo area harness out of the sidewall channel.
2. Align the holes in the sidewall rib to the RH and LH rear rails. Mark the matching holes.



Relocate RH harness

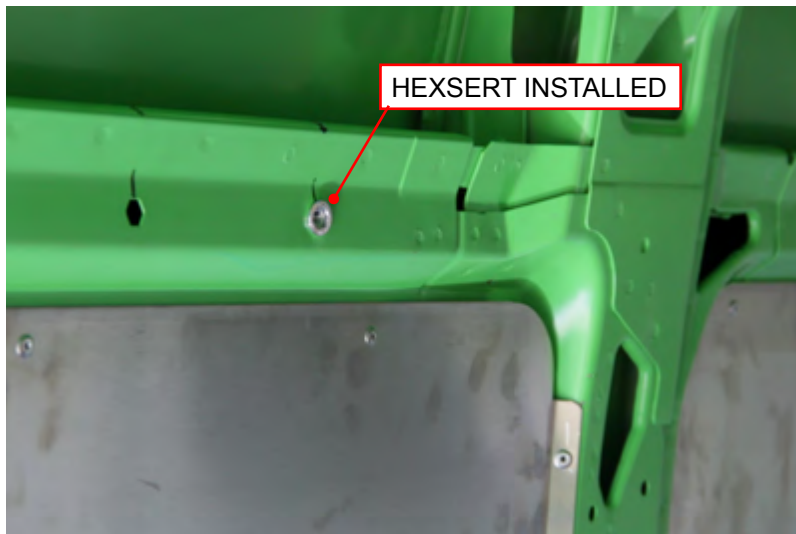


Align sidewall hex holes with rail holes

⚠ CAUTION

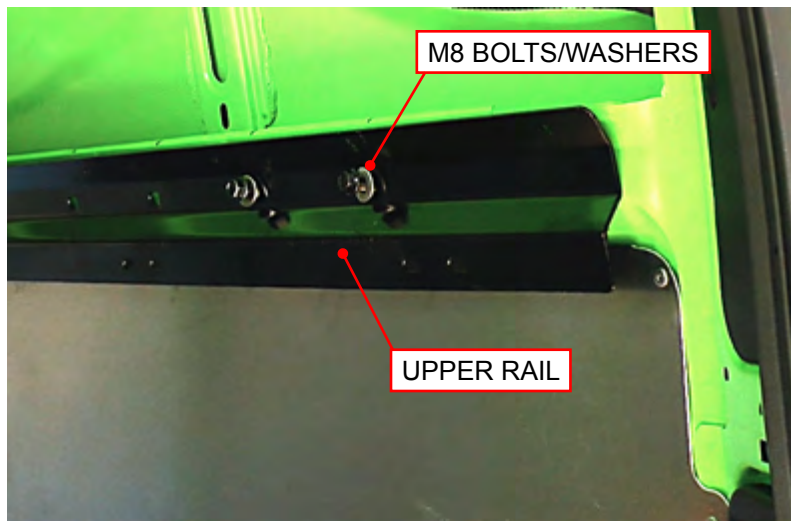
Do NOT use thread lock on the threads of a hexsert or nutsert.

3. Install (4) M8 hexserts into holes in the LH sidewall rib and (4) M8 hexserts in RH sidewall.



Hexsert installed in LH sidewall rib

4. Install LH and RH rails with (8) M8 bolts and washers.



RH upper rail and fasteners

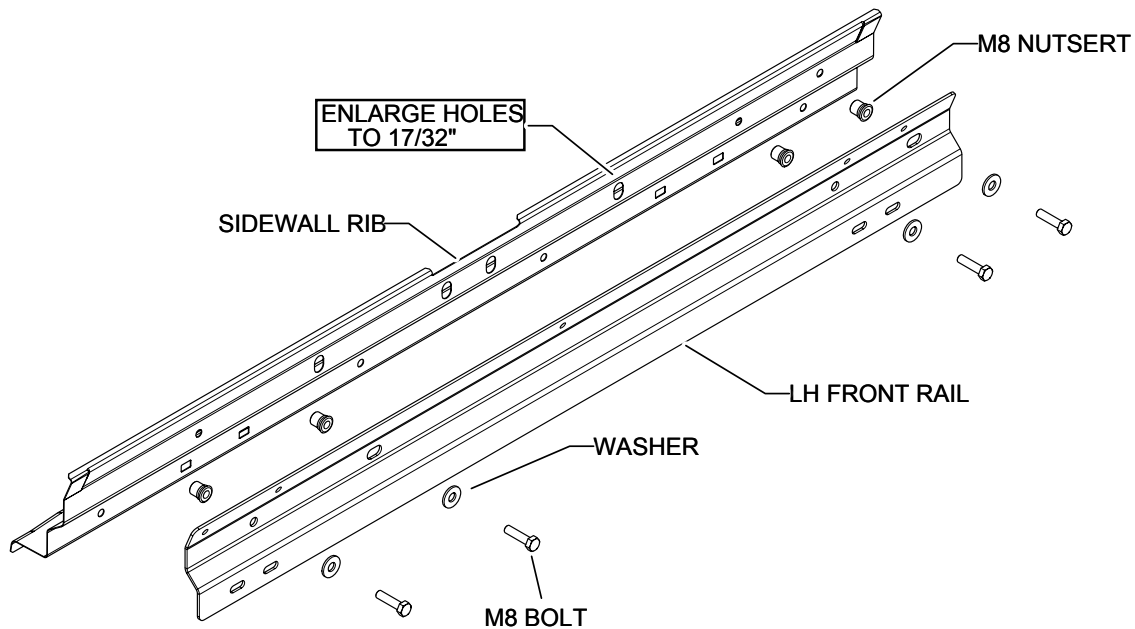
LH Front Rail Installation

CAUTION

Always use a drill stop to avoid drilling through exterior sidewall.

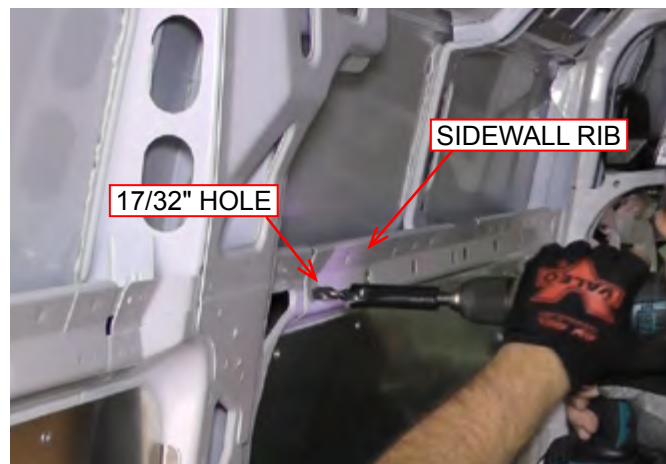
NOTICE

The LH upper front mounting rail is shorter than the LH and RH rear rails.



Overview of LH front rail installation

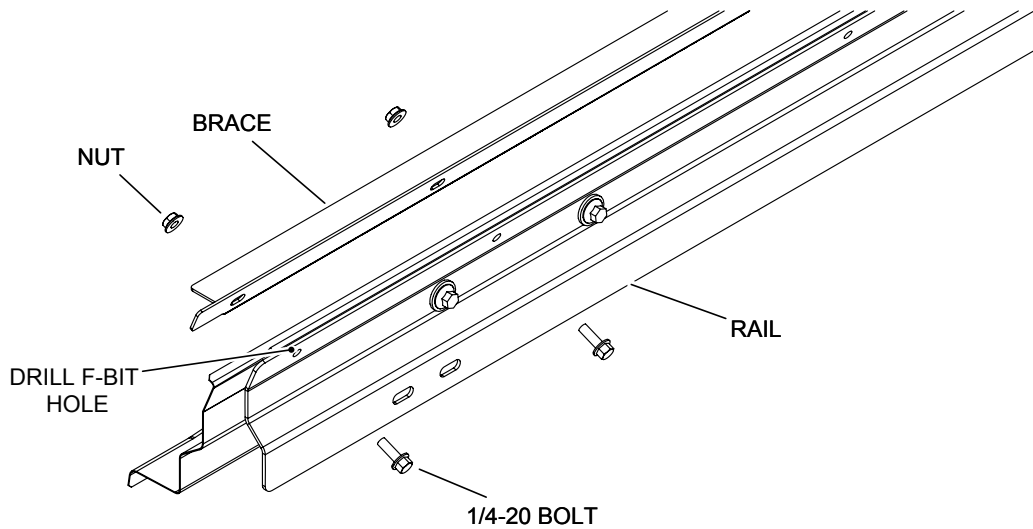
1. Align the holes in the sidewall rib to the LH front rail. Mark the matching holes.
2. Use 17/32" bit with drill stop to transfer drill holes in sidewall rib.



Enlarge holes in LH front sidewall ribs

3. Install (4) M8 round nutserts in the sidewall rib.
4. Install LH top T-stud rail with (4) M8 bolts and 5/16" washers.

Brace Installation



Brace installation overview

1. Insert braces in LH and RH sidewall channels.
2. Use an F-bit (or 1/4") and the LH rear rail as a guide to transfer drill (5) holes in the LH sidewall rib.
3. Repeat process for RH sidewalls.
4. Use LH front rail as a guide to transfer drill (5) holes in the LH sidewall rib.



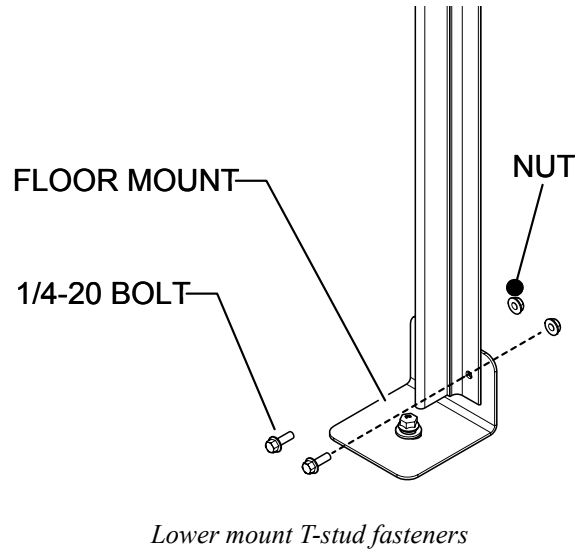
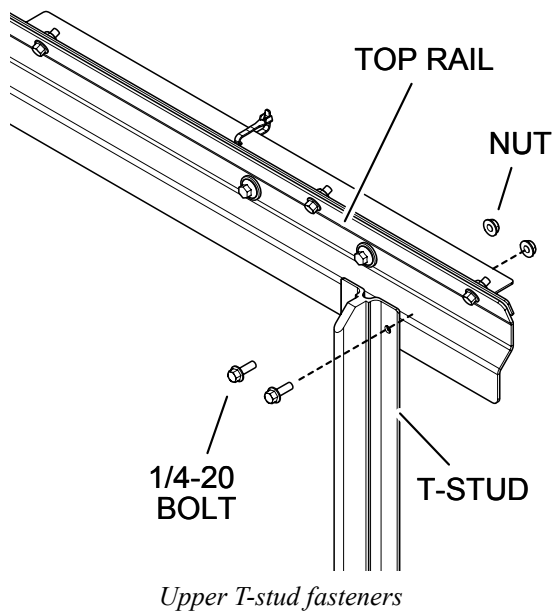
Drilled holes in sidewall and brace

5. Secure sidewall braces with (15) 1/4-20 fasteners.
6. Secure cargo wire harness to brace existing harness clips and strap wire ties.

NOTICE

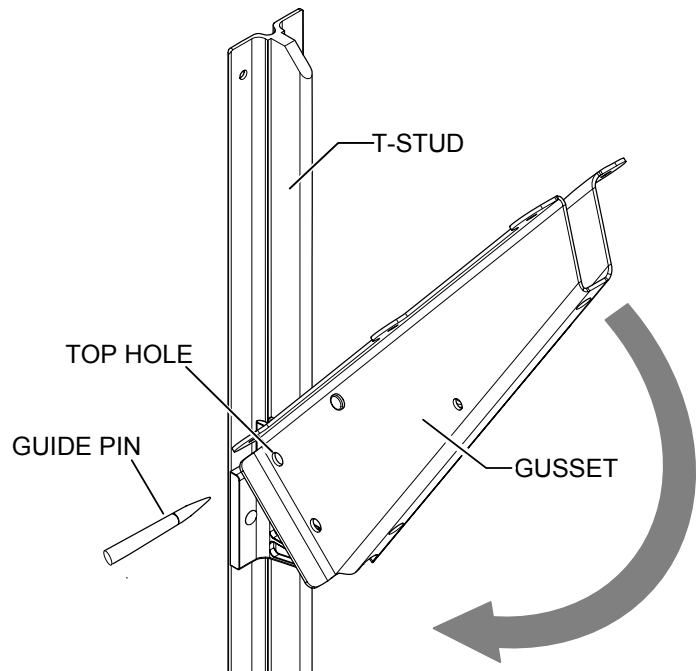
Do not tighten T-stud fasteners until shelving has been installed.

7. Align the T-studs with the upper rails and the floor mounts. Loosely install (4) 1/4-20 fasteners for each T-stud.

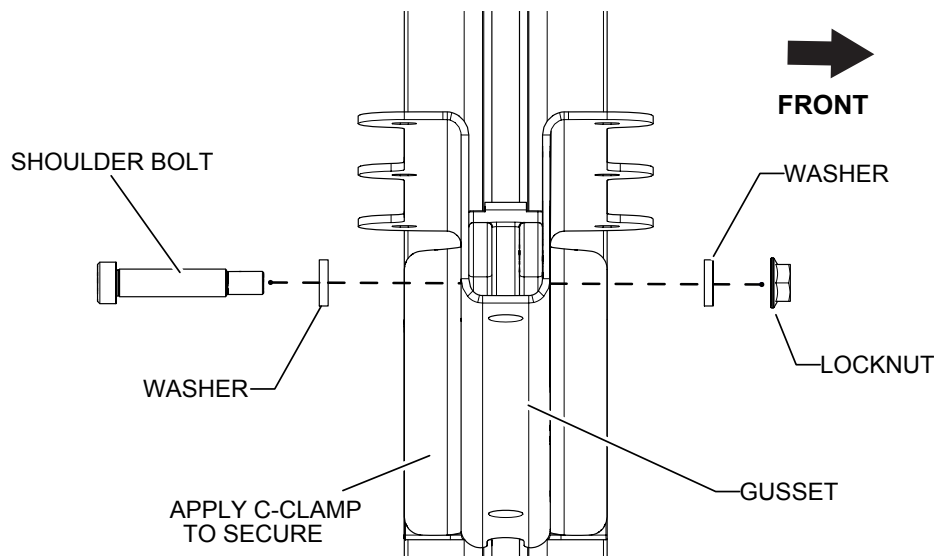


Shelf Installation

1. Remove the Allen head shoulder bolts and washers from the shelf gussets and set aside.
2. Align shelf gusset assembly on T-studs. Place shelves in the upright position and insert a guide pin through the top gusset hole to align with T-stud holes.
3. Lower shelves into the down position and using a C-clamp secure the gusset to the back of the T-stud.
4. Remove guide pin from top gusset hole. Insert the shoulder bolt with nylon washers on BOTH sides of the gussets and the holes in the T-stud.



Gusset installation (shelves omitted for clarity)

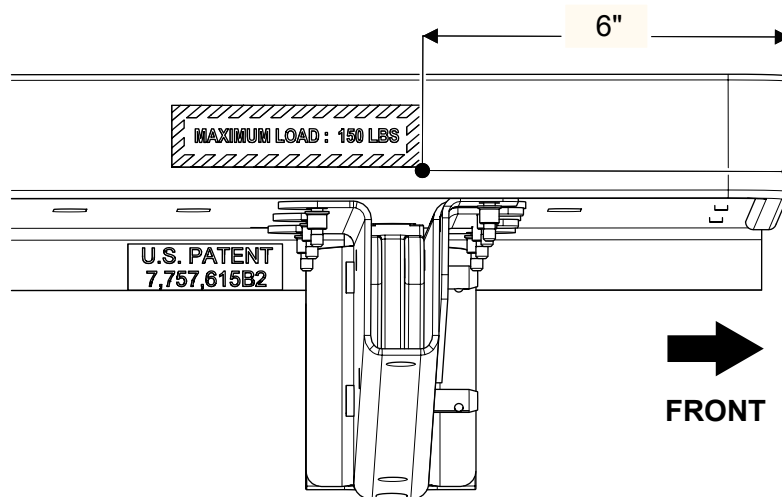


Apply c-clamp and insert fasteners (shelf omitted for clarity)

5. Torque the shoulder bolt nuts to 4–6 ft•lbs.
6. Cycle the shelf up and down to check for binding and adjust the T-studs on the mounts as needed.
7. Torque 1/4-20 fasteners in T-studs to 9-11 ft•lb.

Load Carrying Modification Label

1. For LH front shelves, apply (2) 150 lbs. Maximum Load decals about 6" from shelving front lip.
2. For LH and RH rear shelves, apply (4) 300 lbs. maximum load decals about 6" from shelving front lip.
3. Install U.S. Patent decals under shelves.



Maximum load decal (LH front shown)

4. Fill out and apply the Load Carrying Modification Label as required.

NOTICE

Load Carrying Modification Label may be required to satisfy the statutory requirements for labeling contained in Title 49 of the United States Code, Chapter 5 (Motor Vehicle Safety) and regulatory requirements contained in 49 CFR Parts 567 (Certification) and 568 (Vehicles Manufactured in Two or More Stages). A person who alters a vehicle that previously has been certified in accordance with 49 CFR 571.110 may require an altered certification obligation. Altered certification regulations cover all manufacturing performed after the vehicle has been certified in the final stage and before the first purchase of the vehicle in good faith for purpose other than resale.

If you have any questions regarding labeling requirements or need to order labels, call NTEA at 1-800-441-6832.

Revision Control

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December 2016

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February 2015

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March 2014

Important Notices

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Title: *ProMaster—Fold-Up Shelving 136" WB*

Utilimaster Corporation attempts to provide information that is accurate, complete, and useful. All information contained in this manual is based on the latest product information available at the time of publication. However, because of the Utilimaster policy of continual product improvement, Utilimaster reserves the right to amend the information in this document at any time without prior notice.

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