



A SPARTAN MOTORS COMPANY



Adjustable Shelving

159" Wheelbase Ext

Kit 23003886-5200SK

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Customer Service

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Email: Parts@Utilimaster.com

NOTE: 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.

Document Part Number: 03104592-N020EN

– Revision B –

Introduction

This document provides instructions for the installation six adjustable shelves built by Utilimaster Corporation into the RAM ProMaster™ 159" wheelbase extended (L5H2) 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.

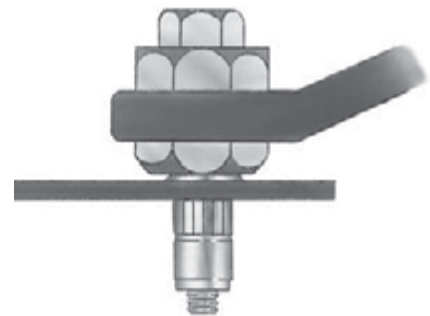
Recommended Tools

!WARNING

Always wear safety glasses and other proper protective equipment (gloves, steel-toed shoes, face shields, knee pads, hearing protection) as appropriate to the process.

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 drill stop
- Electrical tape
- F bit (or 1/4") and 17/32" drill bits (supplied)
- M8 manual threaded insert installation tool (supplied)
- Standard and metric combination and ratchet wrench sets
- Torque wrenches (quality sets with ft•lb increments)



Manual threaded insert tool

Notes, Cautions, and Warnings

Reading through the procedures, you will see NOTES, CAUTIONS, and WARNINGS. Each is there for a specific purpose.

NOTES give additional information that will help you complete the procedure.

CAUTIONS warn against making an error that could damage the vehicle.

WARNINGS remind you to be careful when there is risk of personal injury.



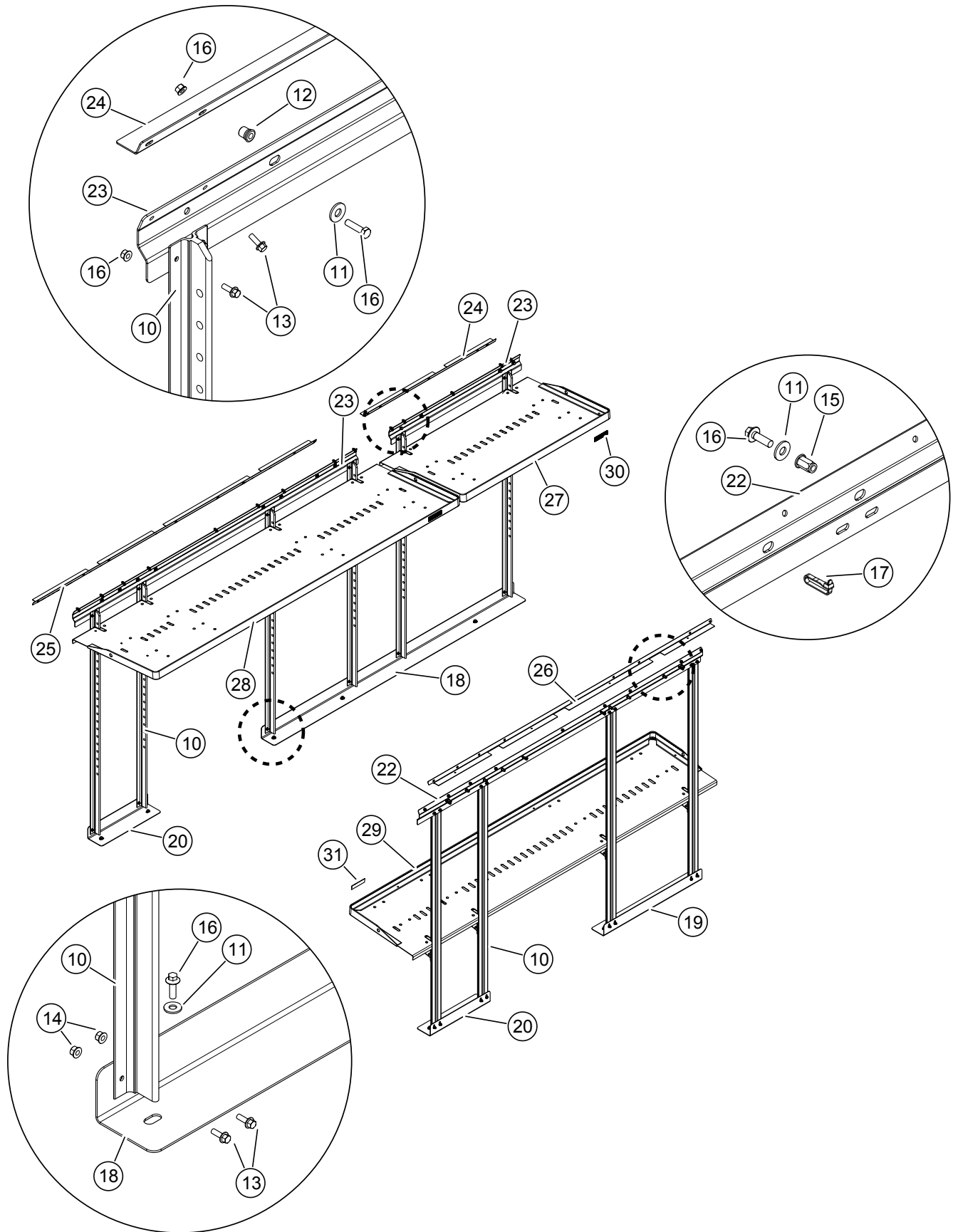
When you see this symbol, read this statement first! This alert highlights information that may reduce the risk of personal injury or vehicle damage.

Below are some basic WARNINGS that you should heed when you work on the vehicle's body. They are not all-inclusive and common sense must be used when servicing vehicles.

- Always read and understand all instructions before starting.
- Always wear safety glasses and other appropriate protective equipment (gloves, steel-toed shoes, face shields, knee pads, hearing protection).
- Put the transmission in Park, and set the parking brake before working on the vehicle.
- Be sure that the ignition switch is Off unless otherwise required by the procedure.
- Keep your hair, clothing, and body away from all moving parts such as engine pulleys and power tools.
- Always remove rings, watches, hanging jewelry, and loose clothing before working in tight areas.
- Read and understand all warning labels.
- Always use proper ladders or scaffolding to perform required jobs.
- Always make sure tools are in proper working condition and have guards and safety devices in place.
- Use only the recommended tools for a specific job.
- If at any time you lack confidence in performing a specific repair procedure or in operating the tools safely to perform the repair, STOP! Call your local dealer or a Utilimaster representative.

Kit Parts List

KIT 23003886-5200SK KIT SHELF FIX 2ROW SLT L5 SERVPRO			
BOM ID	Part Number	Description	Qty
	REFERENCE	23003821d SHELF INSTL ADJ RH RR MP SLT L5 PRMSR	
	REFERENCE	23003822e SHELF INSTL ADJ LH MP SLT L5 PRMSR	
10	06941708	T-STUD SHLF MULTIPOSN PMSR 59.00	10
11	11000160	WASHER FLAT 5/16 USS SS	35
12	11601209	NUTSERT OPEN M8-1.25	5
13	11600651	BOLT FLG 1/4-20 X .75	65
14	11600674	NUT FLG 1/4-20	65
15	11602390	INSERT M8 x 1.25 HEXSERT	20
16	UT29-BB1-007	BOLT FLG M8-1.25 x 25	35
17	16605698	STRAP WIRE TIE BLACK 8.5"	5
18	22823519	RAIL T-STUD MTG LOWER LH FRONT	1
19	22823520	RAIL T-STUD MTG LOWER RH FRONT	1
20	22825572	RAIL T-STUD MTG LWR REAR L5 PRMSTR	2
21	22826826	RAIL T-STUD MTG TOP RR LH L5 PRMSTR	1
22	22826827	RAIL T-STUD MTG TOP RR RH L5 PRMSTR	1
23	22826872	RAIL T-STUD MTG UPPER LH FRNT PRMST	1
24	22826866	BRACE UPPER SHELF PRMSTR LF	1
25	22826867	BRACE UPPER SHELF PRMSTR LR L5	1
26	22826868	BRACE UPPER SHELF PRMSTR RH L5	1
27	53240125S	SHELF ASSY ADJ LH FT 28 x 45.63 SRVC	2
28	53240126S	SHELF ASSY ADJ LH RR 28 x 93.75 SRVC	2
29	53240128S	SHELF ASSY ADJ RH RR 22 x 93.75 SRVC	2
30	03102454	DECAL MAX LOAD 150 LBS	2
31	03102457	DECAL MAX LOAD 300 LBS	4
NS_1	03103432	DECAL REG PATENT 7 757 615B2	6
NS_2	21314468	NUTSERT TOOL M8X1.25	1
NS_3	21314469	DRILL BIT #F X 2.75"	1
NS_4	04202207	DRILL BIT 17/32	1
NS_5	03104592-N020EN	PROMASTER ADJUST SHELVING 159" EXT INSTL INSTUC	1



159" WB Ext adjustable shelving kit overview (second row 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

NOTICE

Keep all hardware and fasteners for reuse unless noted otherwise.

1. Use a T40 Torx bit to remove cargo floor D-rings and discard.
2. Secure floor lower rails using M8 fasteners.



LH floor rear mounting rail

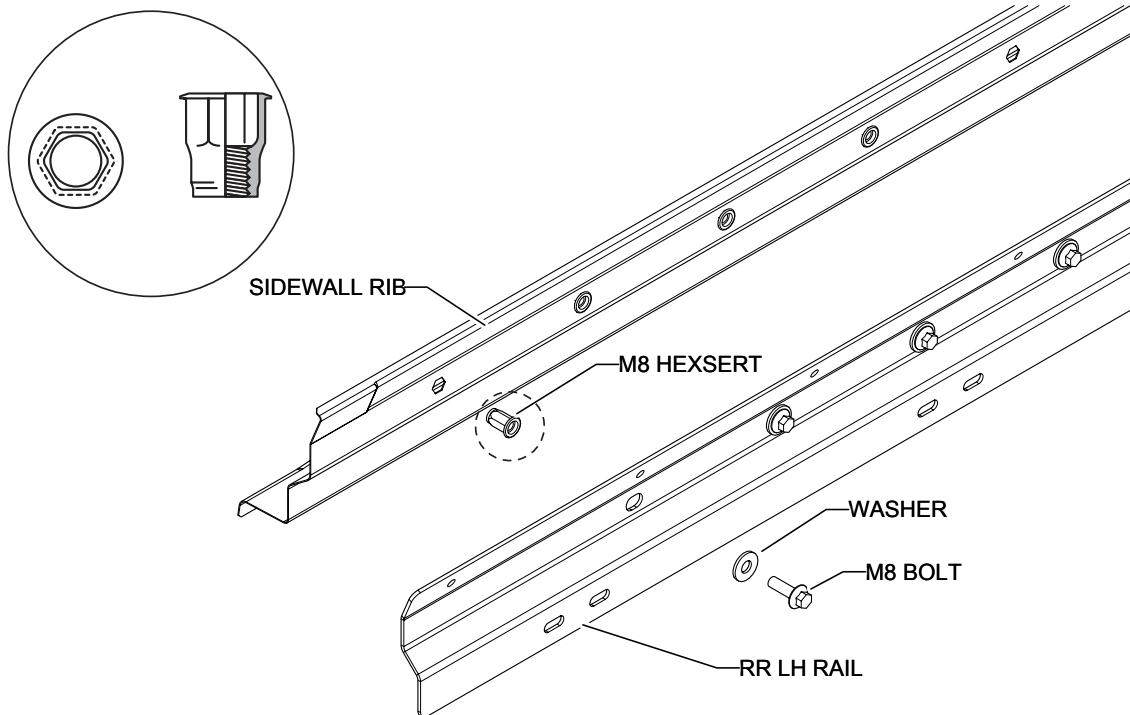


LH floor front mounting rail

Rear Rails Installation

NOTICE

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



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

1. Align the holes in the sidewall rib to the RH and LH rear rails and LH front rail. Mark the matching holes.
2. Remove wire ties securing the harness in the RH sidewall channel.

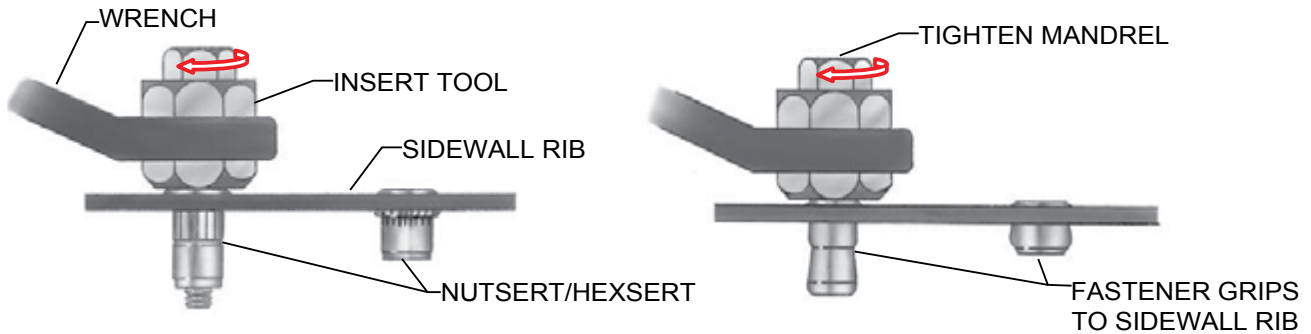


Align sidewall hex holes with rail holes

⚠ CAUTION

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

3. Thread the insert onto the tool mandrel. Hold the tool with a 15mm box wrench and turn the mandrel with a 13mm ratchet wrench until the fastener is installed.



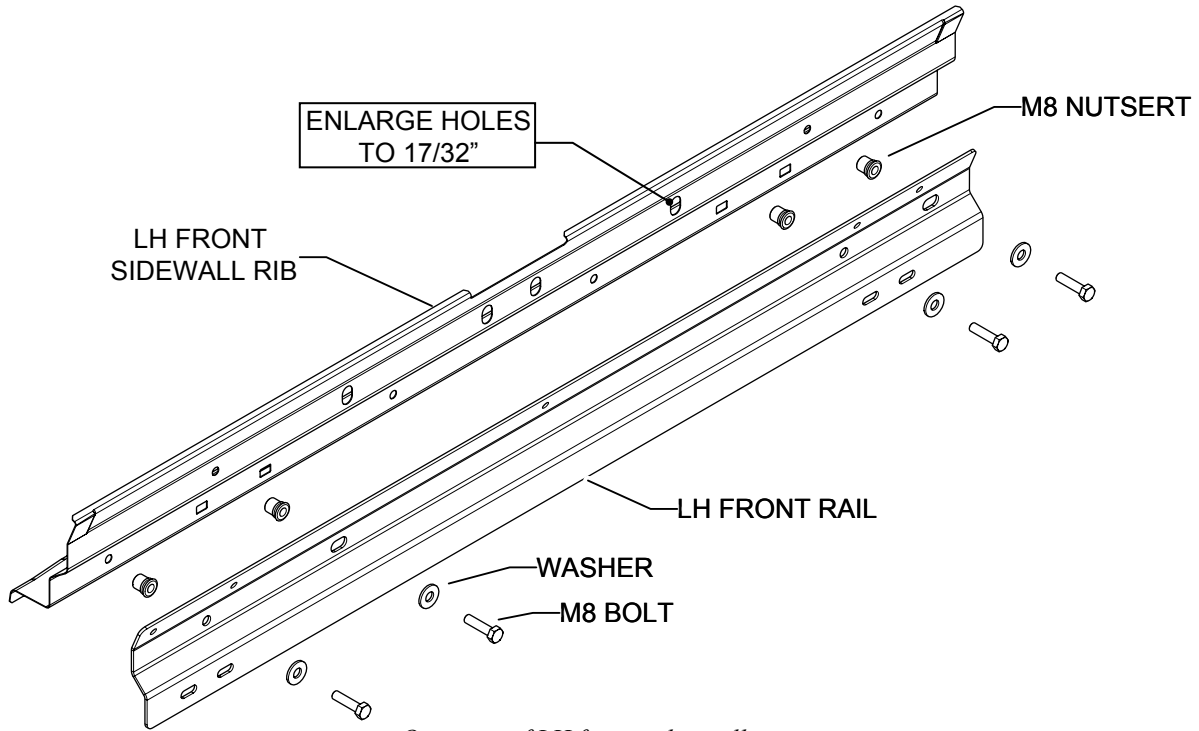
Hexsert installation

4. Torque mandrel bolt to 21-23 ft•lbs to secure hexsert.
5. Repeat process to install (8) M8 hexsert into LH rear holes.
6. Repeat process on (8) RH sidewall holes.
7. Install rear rails using (16) M8 bolts and washers.



Rail installed with M8 fastener

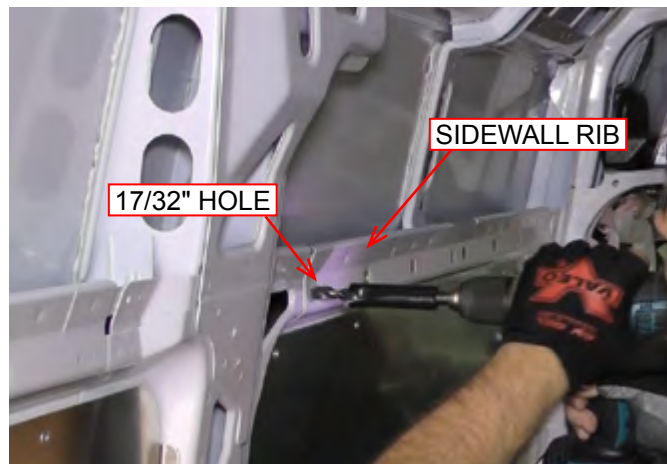
LH Front Rail Installation



CAUTION

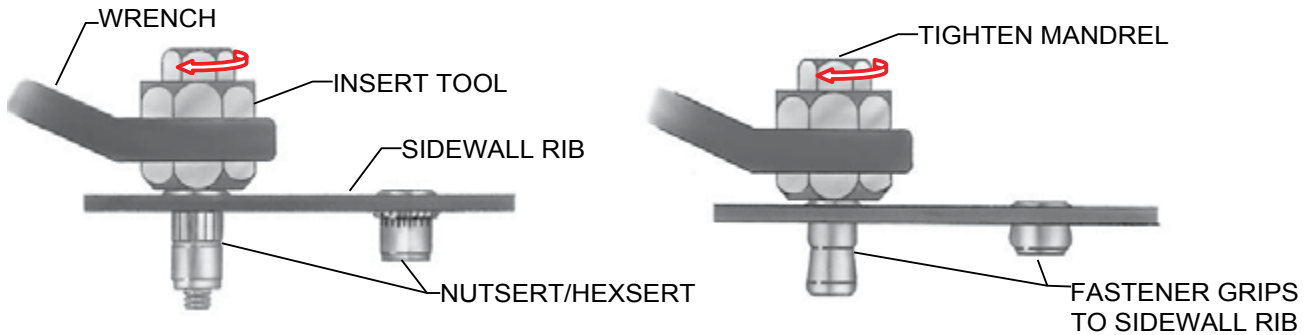
Set drill stop no deeper than 1-1/2" to avoid drilling through exterior sidewall. If drill stop is unavailable, apply multiple layers of electrical tape to bit 1-1/2" from tip.

1. For the LH front rail, use supplied 17/32" bit with drill stop to transfer drill holes in sidewall rib.



Enlarge holes in LH front sidewall ribs

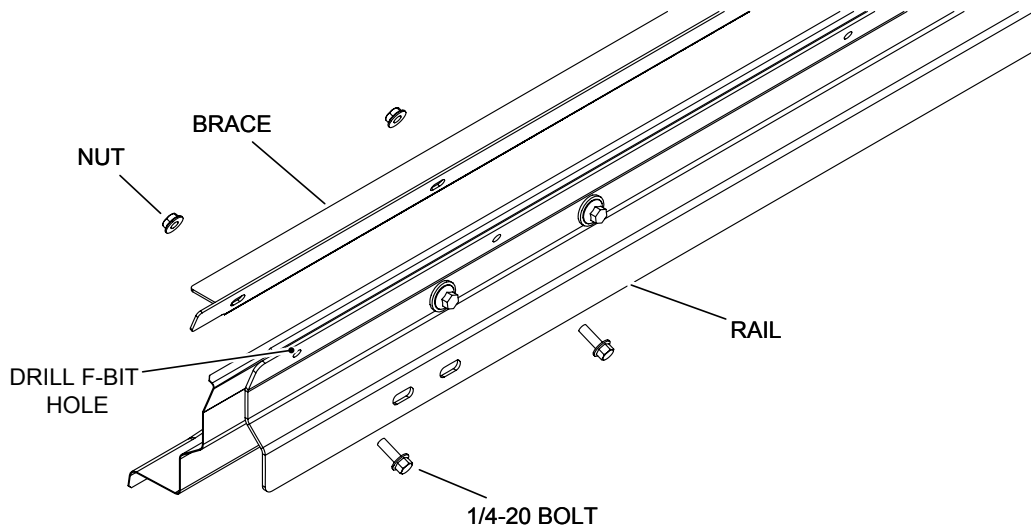
2. Thread the insert onto the tool mandrel. Hold the insert tool with a 15mm box wrench and turn the mandrel with a 13mm ratchet wrench to install.
3. Torque mandrel bolt to 21-23 ft•lbs to secure nutsert.
4. Repeat process to install (4) M8 threaded insert for LH front rail.



Nutsert installation

5. Install LH front T-stud rail with (4) M8 bolts and washers.

Brace Installation



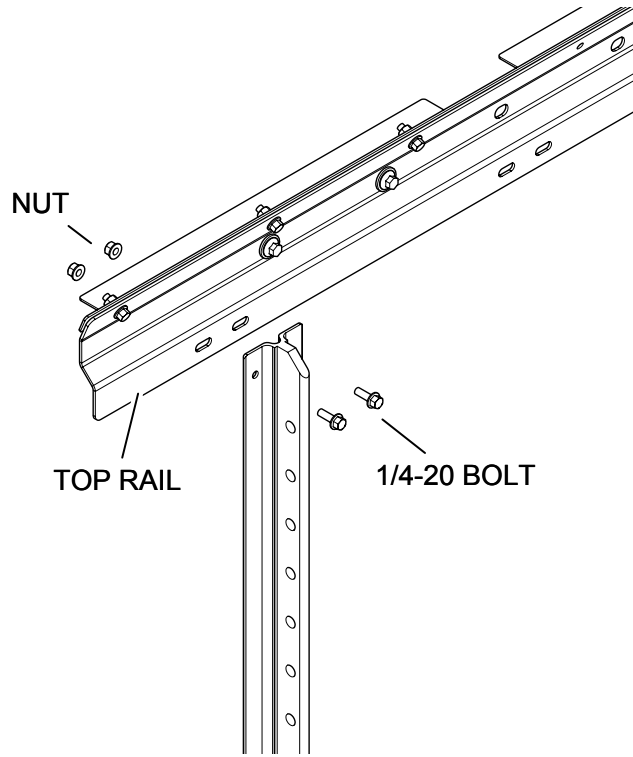
Brace installation overview

1. Use an supplied F-bit (or 1/4") and the LH rear rail as a guide to transfer drill (9) holes in the LH sidewall rib.
2. Repeat process for RH sidewalls.
3. Use an F-bit and the LH front rail as a guide to transfer drill (5) holes in the LH sidewall rib.
4. Secure sidewall braces with 1/4-20 fasteners.
5. Secure cargo wire harness to brace using strap wire ties.

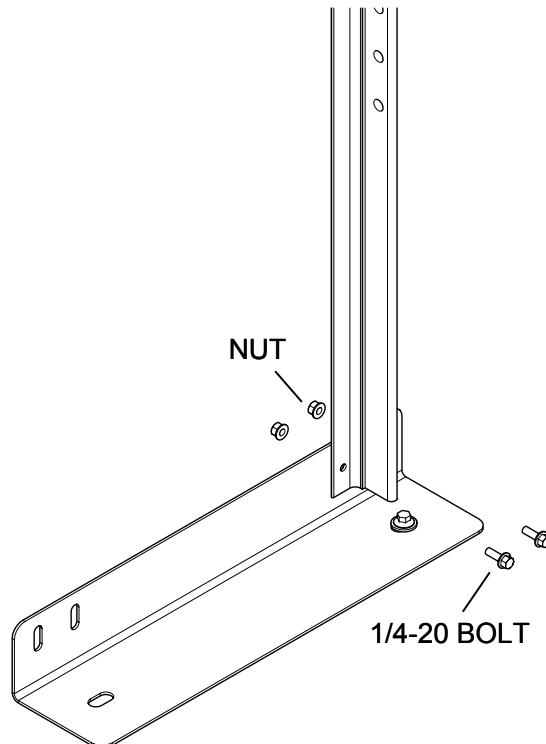
NOTICE

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

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

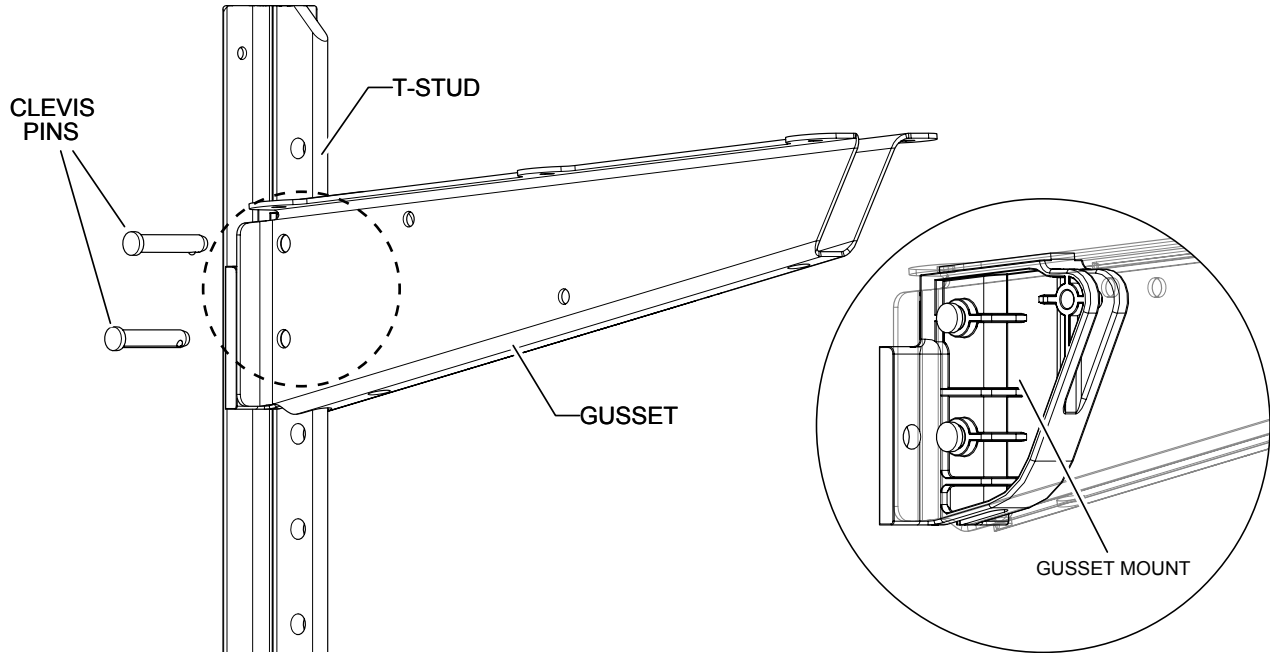


Upper T-stud fasteners



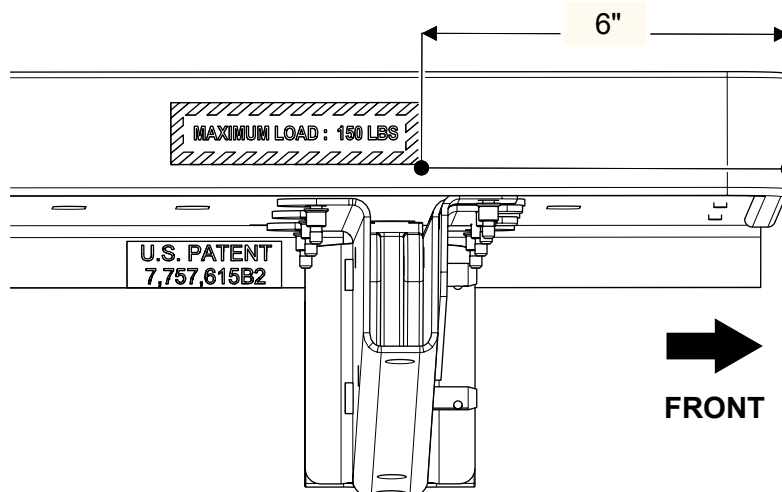
Lower mount T-stud fasteners

Shelf Installation



Gusset installation (shelves not shown for clarity)

1. Remove (2) 3/8 clevis pin from each shelf gusset and set aside. Do NOT remove plastic gusset mount.
2. Align shelf assembly holes with the T-studs.
3. Secure (2) clevis pin through the gussets and the holes in the T-stud.
4. Torque 1/4-20 fasteners in T-studs to 9-11 ft•lb.
5. For LH front shelves, apply (2) 150 lbs. maximum load decals about 6" from shelving front lip.
6. For LH and RH rear shelves, apply (4) 300 lbs. maximum load decals about 6" from shelving front lip.
7. Install U.S. Patent decals under shelves.



Maximum load decal (LH front shown)

Load Carrying Modification Label

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.

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

Revision Control

Document Part Number: 03104592-N020EN

Revision: B
Revision: A

September 2016
September 2016

Important Notices

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Title: *ProMaster—Adjustable Shelving 159" WB Ext*

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