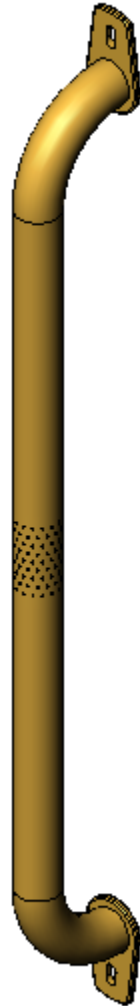
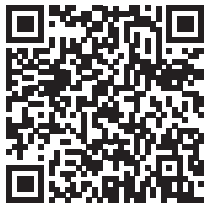


INSTALLATION GUIDE



6093-27 Large Grab Handle

Steel



Scan the QR for the latest
Install-Guide.





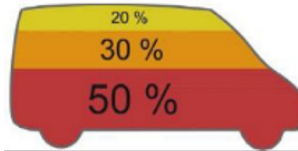
BEFORE YOU BEGIN

READ, UNDERSTAND, AND FOLLOW ALL WARNINGS AND INSTRUCTIONS BEFORE USING THIS PRODUCT. FAILURE TO FOLLOW THESE DIRECTIONS MAY RESULT IN PROPERTY DAMAGE, SERIOUS BODILY INJURY, AND/OR DEATH. RANGER DESIGN IS NOT RESPONSIBLE FOR ANY PROPERTY DAMAGE, PERSONAL INJURY, OR DEATH THAT OCCURRED WHILE USING ANY RANGER DESIGN PRODUCTS.



WARNING

- Failure to use Ranger Design-provided fasteners, brackets, and proper installation guidelines could increase risk of serious personal injury and/or death.
- If drilling is required to complete this installation: improper drilling can cause property damage to vehicles and could lead to electric shock, fire, or even death.
- If drilling is required to complete this installation: Ensure that drilling is only performed on areas of the vehicle allowed by the vehicle's Original Equipment Manufacturer's Body Builders Layout Book (or equivalent document).
- Prior to installation, inspect the vehicle to ensure that installation will not interfere with, or cause obstruction of, any critical components such as electrical wiring, fuel tanks, fuel-cells, locks, latches, etc.
- The installer or manufacturer is responsible for ensuring anchorages are installed onto suitable wall and floor structures; wall and floor strength must meet applicable performance requirements.
- Do not install systems into any weak or unsound materials such as plastics, woods, thin-walled metals, etc. without proper reinforcement.
- Do not install this product where it could interfere with the deployment of airbags. Failure to comply could result in death or serious injury.
- Do not install this product where it could ingress on the Transit Occupant Protection Zone. Failure to comply could result in death or serious injury.
- Incorrect installation could cause water leaks, electric shock or fire.
- Any cargo vehicle with any cargo or equipment should use a certified partition. See Ranger Design website for some partition options. (<https://rangerdesign.com/>)
- Mountings rails are recommended for any attachment to the vehicle walls.
- All items in the cargo area should be properly secured and partition doors closed while the vehicle is in motion.
- Check your vehicle's tare weight and remaining load capacity with all the equipment installed. Never exceed the maximum Gross Vehicle Weight Rating (GVWR), Gross Axle Weight Ratings (GAWRs), or other maximum loads permitted by the vehicle's Original Equipment Manufacturer (OEM) and required by law.
- The heaviest items must be placed towards the bottom of the vehicle, while the lightest ones can be arranged upwards. Vehicle cargo loading weight proportion should follow the following guidelines:



- The final alterer and/ or modifier should review the warning sheet with the customer before the vehicle is released to the customer or for general use. These instructions should remain with the vehicles a all times.
- Any modification or unintended use of this product voids any warranty and could create a hazardous condition.
- Ranger Design provides recommended assembly and installation instructions which should be followed to ensure correct operation. Failure to do so could result in invalidating the product's compliance, warranty and cause injury. Notwithstanding, the final stage vehicle alterer and/or modifier is responsible for the integration, installation, and compliance of the product in its final location to all applicable regulations and standards. Failure to maintain compliance of the vehicle to applicable regulations and standards could be punishable by law. Alterers and/or modifiers should consult with all local authorities prior to commissioning.



CAUTION

- Drilling is required to complete this installation. Before drilling, ensure that you will not hit any critical parts of the vehicle like the gas tank, wiring harness, or hose. Consult the vehicle OEM documentation as necessary. When drilling, use a drill collar to reduce the risk of damage to the vehicle.
- Any materials, padding, or glazing installed in the vehicle must comply with FMVSS/CMVSS 201/205/302, as applicable.
- In the event of a motor vehicle accident or collision where a Ranger system has been installed, especially ones where the vehicle structure is damaged and/or the air bags deploy and/or the vehicle has been towed, the system must be inspected to ensure continued soundness and safety before returning the vehicle to service. Damaged components should be replaced as necessary.
- All system components should be regularly inspected, cleaned, and maintained pursuant to Ranger guidelines.

QUICK START GUIDE

Phase 1 - Assembly

- 1.1 Setup..... 4
- 1.2 Tips How to Install Plusnut..... 6

Phase 2 - Installation

- 2.1 OEM Installation..... 7
- 2.2 Ranger Design Installation..... 8

REQUIRED ITEMS

- Cordless Drill
- Torque Gun or Ratchet
- Plusnut Tools (5/16")
- 3/8" Drill Bit
- Marker
- 1/2" Socket

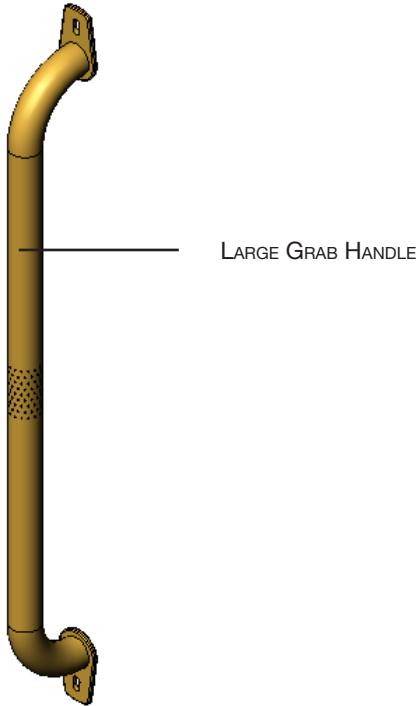


1
PERSONS

PHASE 1 – ASSEMBLY

1.1 SETUP

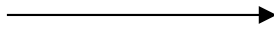
1.1.1 Unpack components; compare with the bill of materials.



1.1.2 Verify all parts are present.

Item No.	Description	Qty.
Large Grab Handle	Large Grab Handle	1


Fastener Kit



Fastener Assembly

OEM FASTENER


2x  # 90-208 Hex Bolt
5/16"-18 x 1"
GR-5 ZINC

2x  # 94-132 Plusnut
5/16"


2x  # 98-122 Lock Washer
5/16"
ZINC

2x  # 98-110 Flat Washer
5/16"
ZINC

2x

	#90-208 Hex Bolt 5/16" x 1"
	#98-122 Lock Washer
	#98-110 Flat Washer
	#94-132 Plus nut

RANGER DESIGN FASTENER





2x  # 94-116 Serrated Nut
5/16"-18
ZINC

2x  # 90-486 Carriage Bolt
5/16"-18 x 3/4"
ZINC

2x  # 98-108 Flat Washer
3/8" ZINC

2x  # 98-114 Flat Washer
3/8"
ZINC

2x

	#90-486 Carriage Bolt 5/16" x 3/4"
	#98-114 Flat Washer Zinc
	#98-108 Flat Washer Zinc
	#94-116 Serrated Nut

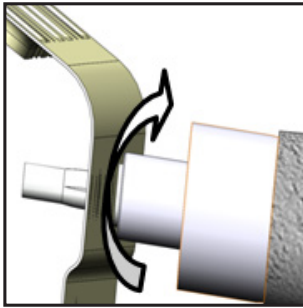
PHASE 1 – INSTALLATION

1.2 TIPS HOW TO INSTALL PLUSNUT

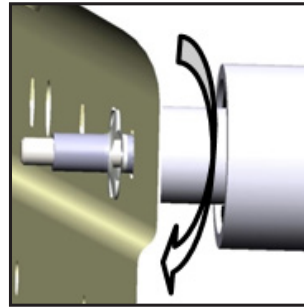
1.2.1 How to attach plus nut.

• USING PLUSNUT GUN

STEP: Put the plusnut on the plusnut gun, then attach the plus nut in the hole by turning the gun forward until the plus nut locks, then remove the gun by turning in reverse.



FORWARD

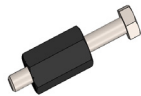


REVERSE



• USING PLUSNUT TOOL

NOTE: The hardware used for the plusnut tool is not included in the fastener bag. The plusnut tool can be ordered separately upon demand at no charge.

PLUSNUT TOOL



HARDWARE USED

-  Flat washer 5/16"
-  Flat washer 5/16" BS × 7/8" OD

TOOLS

- Cordless Impact
- 1/2" Socket
- 9/16" Wrench

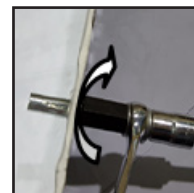
STEP 1:

Assemble the plusnut tool with the hardware needed, plus nut and the 9/16" wrench as shown.



STEP 2:

Attach the plus nut in the hole by turning the bolt forward using an impact with a 1/2" socket until the plusnut locks, then remove the bolt by turning the impact in reverse.



FORWARD

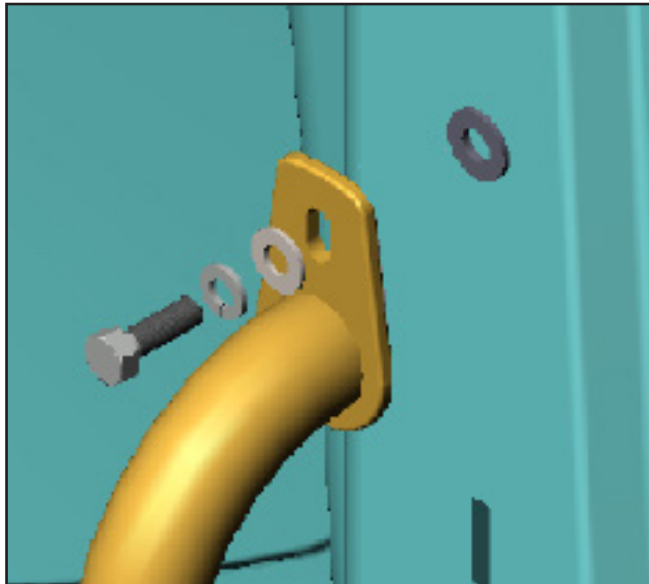
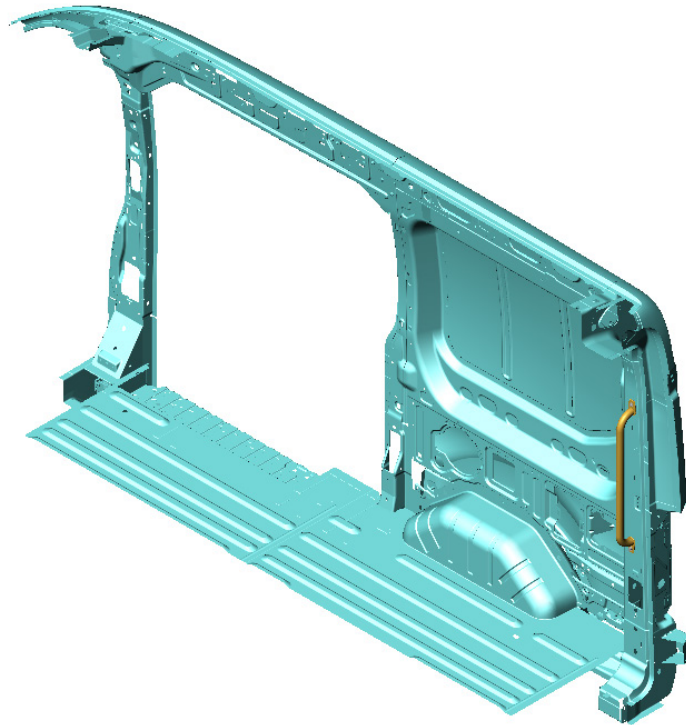


REVERSE

PHASE 2 – INSTALLATION

2.1 OEM INSTALLATION

- 2.1.1
- Place the grab handle against a flat surface.
 - Mark the holes of the grab handle, then drill the mark using 1/2" drill bit.
 - Install the plusnut to the holes.
 - Install the grab handle to the plusnut using OEM fastener kit.







TOOLS

- Cordless Drill
- Marker
- 1/2" Drill Bit
- Torque Gun
- 1/2" Socket

HARDWARE USED

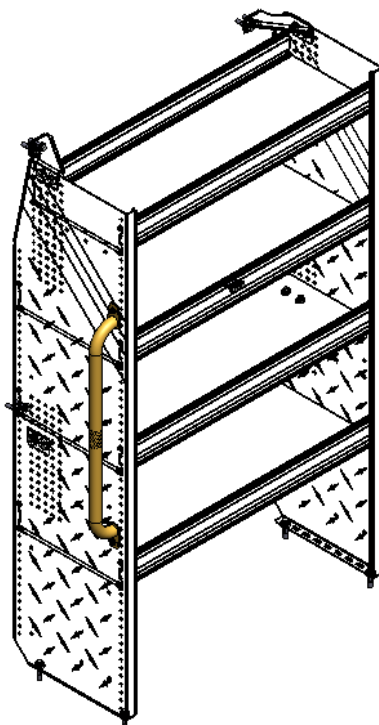
2x (17 ft • lbs)

- | | |
|---|-----------------------------|
|  | #90-208 Hex Bolt 5/16" x 1" |
|  | #98-122 Lock Washer |
|  | #98-110 Flat Washer |
|  | #94-132 Plus nut |

PHASE 2 – INSTALLATION

2.2 RANGER DESIGN INSTALLATION

- 2.2.2**
- Place the grab handle to Ranger Design unit or panel.
 - Mark the holes of the grab handle, then drill the mark using 3/8" drill bit.
 - Install the grab handle to the Ranger Design unit or panel using Ranger Design fastener kit.



3/4"





NOTE: If you are installing the grab handle to Ranger design unit, always place the grab handle 3/4" from the bend of the panel.

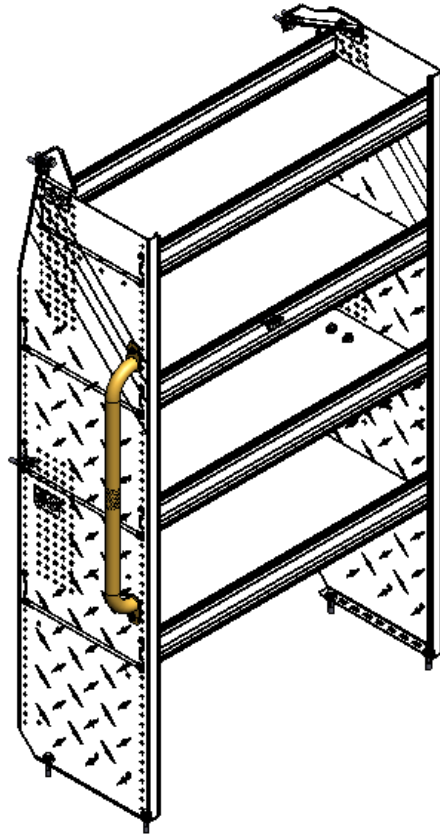
TOOLS

- Cordless Drill
- Marker
- 3/8" Drill Bit
- Torque Gun
- 1/2" Socket

HARDWARE USED

2x (17 ft • lbs)

	#90-486 Carriage Bolt	5/16" x 3/4"
	#98-114 Flat Washer Zinc	
	#98-108 Flat Washer Zinc	
	#94-116 Serrated Nut	



**“You have successfully installed your
Large Grab Handle**

Thank you for doing business with us.”

For any feedback or suggestions you may have, please contact: cs@rangerdesign.com

