



Installation instructions for

Ford Ranger 6 ft. Bed Pickup Truck Rack

MyGlassTruck.com (844) 364-4022

Thank You for Choosing MyGlassTruck | America's Glass Rack Leader

This document's purpose is to provide a qualified installer with the steps necessary to perform a safe and correct installation. Before beginning installation read this guide and all other instructions provided by MyGlassTruck.com, third party component providers and vehicle providers to ensure you are familiar with the installation procedure, rack, and vehicle. If you have questions, please call MyGlassTruck.com at (844) 364-4022. Our qualified personnel will gladly provide answers.

CAUTION



Demountable Concepts, Inc., parent company of MyGlassTruck.com, has provided within this document detailed installation instructions for the installer of the aluminum truck rack provided by MyGlassTruck.com. Failure to follow these instructions or failure to follow safe shop and workplace practices could result in injury or death of the installer or end user of this equipment. PLEASE read this instruction manual thoroughly before beginning the installation process. If you do not understand any step or procedure that is outlined in the manual, immediately call the Demountable Concepts, Inc. engineering department at (844) 364-4022. Hours of operation are 8 am to 5 pm EST, Monday through Friday.

DO NOT PROCEED WITH ANY INSTALLATION PROCEDURE IF YOU ARE NOT CERTAIN OF ITS CONTENT, INTENTION AND DESCRIPTION.



Important

When installed, this glass rack and any other components must not alter or prevent vehicle compliance to existing state or federal standards. The finished rack and vehicle should comply with all vehicle manufacturer guidelines.



Important

Doublecheck that all nuts and bolts are tightened.

Do This Before You Start

Before beginning installation, please review this manual and locate each hardware bag and component of your rack. If anything is missing or you have questions please call (844) 364-4022. We will be happy to assist you.

INCLUDED IN YOUR CRATE | GET TO KNOW YOUR RACK

Before starting locate all your parts and hardware. Here is a list of everything that is included in your crate and tools required for installation:

ITEMS - STANDARD	QTY
Driver's Side Glass Rack	1
Passenger's Side Glass Rack	1
Crossbar with Cluster Lights	1
Additional Aluminum Crossbars	1
Hardware Kit P-2 - Crossbars	1
Hardware Kit P-3 - Bedpans	1
Front Underbody Mounts	2
Rear Underbody Mounts	2
Ranger Hardware Kit - Under Mounts	1
Wiring Kit	1
Exhaust Deflector	1
Hardware Kit - Exhaust Deflector	1
Adjust-A-Poles	6
Hardware and Cleats for Adjust-A-Poles	30

ITEMS - OPTIONAL	QTY
Extra Adjust-A-Poles	Varies
Over-the-Cab Metal Carrier	1
Metal Carrier Hardware Kit	1

TOOLS REQUIRED

• Impact Wrench	• 9/16" Socket
• Drill	• 1/2" Socket
• 1/2" Drill Bit	•21mmSocket
•3/8" Drill Bit	
• C-Clamps	



Note: When planning your pickup rack installation make sure none of the mounting locations interfere with brake lines, fuel tanks, fuel hoses, etc.

GET TO KNOW YOUR RACK



Adjust-A-Poles and Optional Metal Carrier Not Shown

STEP 1: PREPARING DRIVER SIDE RACK



Locate the front of the rack, identified by the holes where the front body stop will be bolted on. Photo above shows the front stop's location to help distinguish driver-side vs. the passenger-side



Place the rack up on the bed rail.



Use clamps to hold the rack in place on the top of the bed rail.



Use jack stands or wooden blocking to support the rack.

STEP 2: PREPARING PASSENGER SIDE RACK



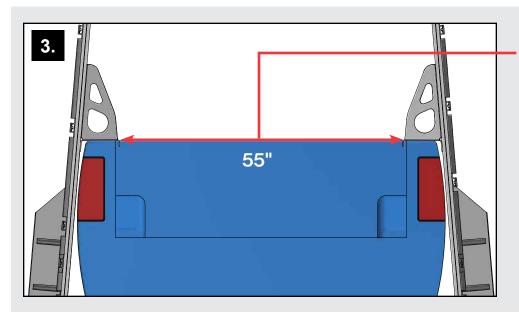
IMPORTANT: When clamping the passenger-side rack onto the truck frame, maintain 55" between the aluminum bed pans and hold this number all the way back to the tailgate to keep the rack parallel.



Place the other rack on the passenger-side. Use clamps to hold in place on top of the bed rail.



Use jack stands or wooden blocking to support the rack. Again, be sure your supports are strong enough to support the weight of the rack.



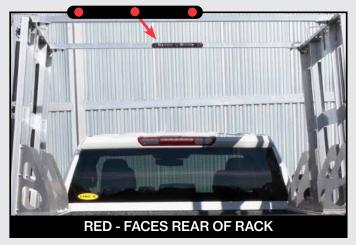
To ensure the racks are parallel, be sure to maintain 55 " between the aluminum bed pans in the front near the cab and in the rear at the tail gate.

STEP 1: BOLTING CROSS BARS

Bolt the top cross bars into place at the front and rear of the glass rack. Make sure you bolt the front cross bar that holds the triple clusters of red and amber lights at the front of the rack. The amber lights should be facing toward the front of the vehicle, and the red lights should be facing toward the rear. (Using P-2 Hardware Kit). Before starting become familiar with the wiring reference diagram on page 16.

P-2 Hardware Bag

ITEM	SIZE	QTY
OD 18.8 USS Flat Washer Stainless	3/8" x 7/8"	16
USS Nylon Insert Locknut Plated	3/8" x 16	8
Hex Cap Screw Stainless	3/8"-16 x 2½"	8



On front cross bar.

The three red lights should be facing the rear.



The three amber lights should be facing forward.

The wire for the lights should come out of the rack on the passenger's side.



View of cross bar from underside bracket. Be sure to use two bolts on each side to bolt the cross bars to the rack.

STEP 2: SETTING PITCH OF GLASS RACK

Make sure no part of the racks on the truck are wider then 102". Racks should be pulled as close as possible to the sides of the bed without touching. The recommended pitch for the racks are 4 to 5 degrees on each side.

Note: Be aware that the fenders of the truck bed may flare out and impede the rack





NOTE: The rack and the vehicle must not exceed the overall legal width of 102".

STEP 1: LOCATE PARTS AND HARDWARE

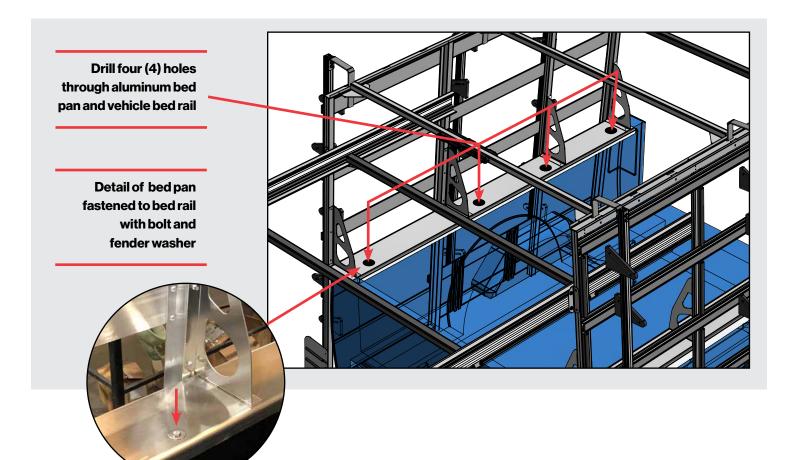
P-3 Hardware Bag for Bed Rail

ITEM	SIZE	QTY
Hex Cap Screw Stainless	3/8" x 1-1/2"	8
USS Flat Washer Stainless	3/8"	8
Nylon Insert Locknut Plated	3/8"	8
Fender Washer - Stainless	3/8"	16

STEP 2: SECURING ALUMINUM BED PAN TO VEHICLE BED RAIL

Drill 4 holes through aluminum bed pan of each rack and the vehicle bed rails. Secure with 1-1/2" x 3/8" bolts, fender washers, and lock nuts.

Double check one more time that the bed pans are still 55" apart from each other all the way down the sides.



STEP 1: REVIEW PARTS AND HARDWARE

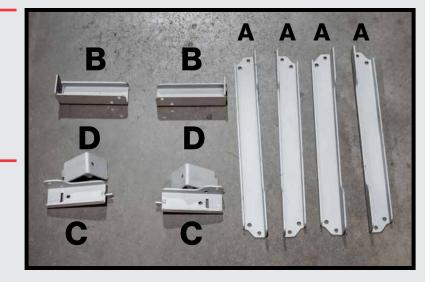
Ranger Undermount Hardware Bag

ITEM	SIZE	QTY
Hex Cap Screw Stainless	3/8" x 1-1/2"	8
Hex Cap Screw Stainless	3/8" x 1"	8
Hex Cap Screw Steel	3/8" x 5"	2
Steel Nylock Nut	3/8"	18
Flat Washer Stainless	3/8"	36

UNDERBODY MOUNTS PARTS

- A. Undermount Arm (4)
- **B. Rear Vertical Bracket (2)**
- C. Front Vertical Bracket (2)
- D. Front Mount Clip (2)
- E. Aluminum Shims (2)

Ranger Undermount Hardware Kit (not shown)



STEP 2: REMOVE FORWARD BOLT FROM HITCH

Use a 21mm socket to remove the forward most bolt from the factory hitch.

Remove this bolt from the rear hitch.



STEP 3: INSTALL REAR VERTICAL BRACKET

Install the rear vertical bracket (**Item B**) using factory hitch bolt removed in the previous step. Ensure the 2 hole flange faces forward.





STEP 4: ATTACH UNDERMOUNT ARM

Attach undermount arm (Item A) to the vertical bracket (Item B) using the 3/8 x 1" bolts.

The undermount arm is attached to the vertical bracket that was installed in the previous step.





STEP 5: ATTACH RACK TO REAR MOUNTS

Drill 3/8" holes through the ledge and flange at the end of each underbody mount's horizontal arm where it supports the rack. Avoid drilling where rubber ledge blocks are located on ledge.



Place the aluminum shim between top of the underbody mount and underside of the ledge. Secure using 3/8" x 1-1/2" bolts, washers and nuts.



View of flange at end of undermount arm and aluminium shim attached to the underside of the rack's ledge.



Important: Doublecheck that all nuts and bolts are tightened.

STEP 6: INSTALL FRONT UNDERBODY MOUNTS



1. Hook front bracket (**Item C**) into 1" hole on truck frame. the 2 hole flange must face the rear of the truck



2. Install 3/8 x 5" bolt in front clip (Item D)

ITEM	QTY	
3/8" x 5" Hex Head Bolts	2	
3/8" Lock Washer	2	
3/8" Flat Washer	2	
3/8" Nylock Nuts	2	_



3. Install clip with bolt onto the vertical bracket. Ensure tab on clip is inserted into the vertical bracket



4. Attach undermount arm (Item A) to vertical bracket.

ITEM	QTY
3/8" Hexhead Bolts	2
3/8" Lock Washer	2
3/8" Flat Washer	2
3/8" Lock Nuts	2

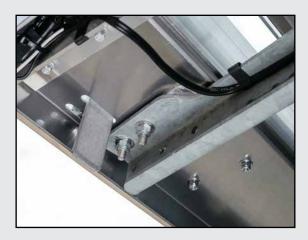
^{*} Quantity is 2 for each side

STEP 7: ATTACH RACK TO FRONT MOUNTS

Drill 3/8" holes through the ledge and flange at the end of each underbody mount's horizontal arm where it supports the rack. Avoid drilling where rubber ledge blocks are located on ledge.



Place the aluminum shim between top of the underbody mount and underside of the ledge. Secure using 3/8" x 1-1/2" bolts, washers and nuts.



View of flange at end of undermount arm and aluminium shim attached to the underside of the rack's ledge.



Important: Doublecheck that all nuts and bolts are tightened.

STEP 1: LOCATE PARTS AND HARDWARE

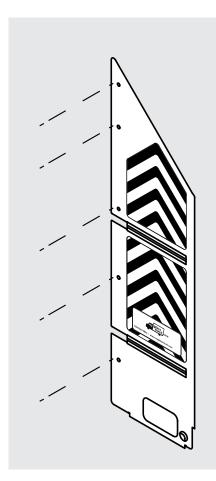
ITEM	QTY
Front Stops	2
V-12 Hardware Bags	2

V-12 Hardware Bag for Under Mounts

ITEM	SIZE	QTY
Hex Cap Screw Stainless	1/4" x 2-1/4"	5
Steel Nylock Nut	1/4"	5
Flat Washer Stainless	1/4"	10

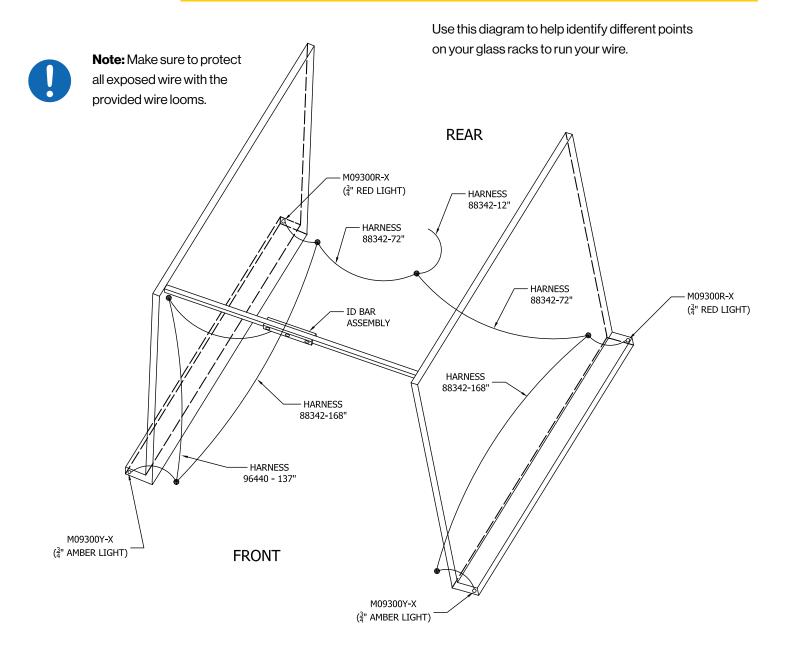
STEP 2: INSTALL FRONT STOP

The glass rack front stop is shipped detached from the rack. To attach, bolt the stop directly to the front of the glass rack through the pre-drilled holes using the 1/4"-20" x 2-1/4" bolts provided.





STEP 1: REVIEW REFERENCE DIAGRAM



STEP 2: TOP CROSS BAR WIRING

The front crossbar should be bolted in place with the amber lights facing forward and red lights facing the rear of the vehicle. The wire for the lights should come out of the cross bar on the passenger's side.

Drill a 1/2" hole on the forward most post of the glass rack and fish the black wire down the post to the lower corner of the glass rack.





Plug the male end of the crossbar wire into one of the ports on the double connector of the 14' wire harness. Be sure to plug into the black wire. The crossbar wires are grounded into the crossbar.



STEP 3: DRIVER'S SIDE WIRING

Install front-facing amber light into the other port on the 14' harness, along with the crossbar light harness by plugging in the black to black and white to white. Run this harness to the rear of the vehicle, either OVER the wheel well or back along the frame. Be sure the wire does not interfere with any moving parts.





Run the 14' wire harness to the rear driver's side corner, near the red corner LED light. Plug the male end of the 14' and the Red LED connectors into a 72" wire harness. Run the 72" wire harness back along the rear undermount to the center of the vehicle near the bumper. Secure all the wires with wire ties or wire clips.



STEP 4: PASSENGERS SIDE WIRING

Install front amber light along with the black wire from the top crossbar into the 14' harness by plugging in black to black and white to white. Run this harness to the rear of the vehicle, either OVER the wheel well or back along the frame. Be sure the wire does not interfere with any moving parts. Secure with wire ties.

Run the 14' wire to the rear passenger's side corner, near the red corner LED light. Plug the male end of the 14' and the Red LED connectors into a 72" wire harness. Run the 72" wire back along the rear undermount to the center of the vehicle near the bumper. Secure all the wires with wire ties or wire clips.

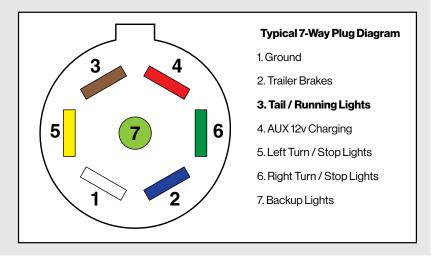
STEP 5: FINAL CONNECTION

Behind the bumper, locate wires that go to the 7-way trailer plug in the bumper. This is where you tap into the trucks power. Find an easily accessible section and remove any loom or tape to expose the individual wires. We have supplied blue weatherproof scotch locks. **Following scotch lock instructions on page 27**, connect the brown wire to the factory running light wire (pin 3, see diagram below) and the white wire to the ground wire (pin 1, see diagram below). Test that your lights turn on and off with the headlights. Retape the wires and secure any loose wire.



Note: In some cases wire colors may differ from the diagram below. We recommend using a tester to determine the correct wire for the rack's lights.





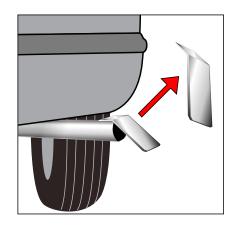


Important: LED lights are polarity sensitive. This means that if the blacks and whites get mixed up the lights will not work.

SECTION 9

Installing Exhaust Deflector

1: INSTALL EXHAUST DEFLECTOR



On some model pickup trucks hot exhaust is discharged directly onto the under mount that carries the marker light wires. To avoid damage, use the exhaust deflector provided to deflect exhaust downward under the mount.

Provided in your hardware kit, you will find three (3) 3/4" self-tapping screws that can secure this deflector onto your exhaust pipe. (If welding is an option, this deflector can be welded onto the exhaust pipe.)

STEP 1: LOCATE PARTS AND HARDWARE

Standard 5-Cleat Poles

ITEM	QTY
Poles with Bolt-on Hook and Tab	6
Rubber Cleats	30

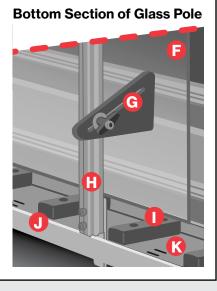
V-5 Hardware Bag for Pole Assembly (x2)

ITEM	QTY	
Nylock Nut	15	
Plastic Wing Nut	15	
Stainless Steel Flat Washer	15	
Black Rubber Glide Washer	15	
Small Nylon Washer	15	
Stainless Steel Bolt	15	



Note: If you purchased additional poles, you will receive additional hardware.

Top Section of Glass Pole

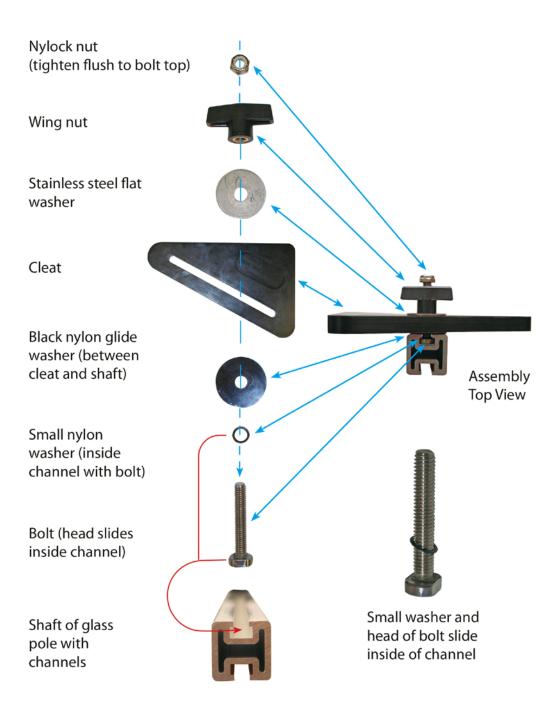


Glass Pole Parts

- A. Pole Top Section
- **B.** Top Slots Along top of rack header rail
- C. Rubber Padding
- **D.** Pole
- E. Cleat
- F. Glass
- **G.** Wing-Nut
- H. Pole Bottom Section
- I. Bottom Pad
- J. Glass Rack Ledge
- K. Bottom Slots

STEP 2: ASSEMBLE POLES

Slide the head of a stainless steel bolt down the pole's channel. Assemble hardware and cleat as shown. Slide three cleats onto one side of the pole and two onto the other side.



STEP 1: REVIEW PARTS AND HARDWARE

P-10 Pickup Metal Carrier Hardware Kit

ITEM	SIZE	QTY
T-Nut	5/16"	16
Button Head Bolt	5/16" x 5/8"	16
Lock Washer	5/16"	16
Hex Bolt	3/8" x 3/4"	12
Nylock Flange Nut	3/8"	20
Hex Bolt	3/8" x 2-1/2"	8
Washer	3/8"	8
Socket Head Bolts	5/16" x 1"	8
Washer	5/16"	8
Nylock Nut	5/16"	8
Sheet Metal Screws	#14 x 3/4"	4
Hinge Pins		2

TOOLS REQUIRED

Safety Glasses	• 1/2" Socket
• 5/16" Drill Bit	• 1/2" Wrench
• 9/16" Drill Bit	 C-Clamps
• 3/8" Drill Bit	• Drill



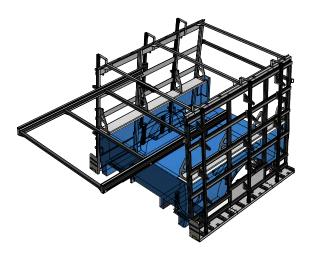
Optional 5 ft. Metal Carrier

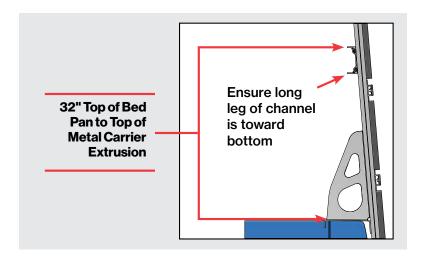
STEP 2: ORIENTATION

Position metal carrier so that it clears the roof of the cab. Make sure carrier is at the same height on each side of the rack.



Note: DO NOT use the truck's roof as a reference point to level the metal carrier. Some cab roofs are not perfectly level and this can provide an inaccurate measurement.





STEP 3: SECURE METAL CARRIER TO RACK



1. Place the outside of the main beams up against the existing rack. Clamp the beams in place and check to be sure the beams are parallel with slats of the glass rack and at the same height.



2. Remove vertical rubber on outside post and ensure post is clear of wires from crossbar. Drill two 5/16" holes through the carrier into the post. Make sure the holes pass through the main beam of the metal carrier.



3. Secure the main beam of the metal carrier to the existing rack using the supplied 5/16" socket head bolts with bolt head in the channel of post.



4. Repeat this procedure for the remaining mounting locations.



5. Locate and align rack mounting brackets to the main beams of the metal carrier. Measure and drill 3/8" holes through post of glass rack only. The bracket is secured to the post with 3/8" x 2 -/2" bolts.



6. Slide a T-Nut in both the upper and lower channel of the metal carrier extrusion. Fasten bracket to the T-Nuts using 5/16" button bolts and lock washers. Check to ensure all fasteners are tight.

STEP 4: ATTACH CROSSBAR MOUNTING BRACKETS

- Slide 6 T-nuts into the bottom channels on each of the main beams.
- Loosely attach all crossbar brackets using 5/16" button head bolts and lock washers..

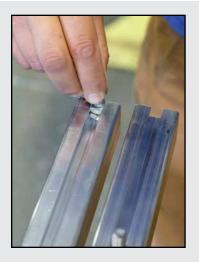




STEP 5: ATTACH CROSSBARS TO CARRIER

- Slide four 3/8" x 1" bolts into the channel of the crossbars.
- We recommend spacing the crossbars evenly throughout the metal carier. However the distance can be adjusted to suit your needs.
- Secure the crossbars to the main beams via the crossbar bracket by sliding the 3/8" bolt into the holes on the brackets and securing with 3/8" flange nuts.

Insert hardware into crossbars before attaching them to the main beams.

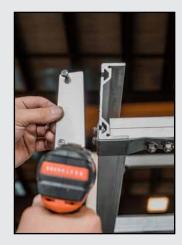




Tighten crossbars to brackets using the supplied hardware.

STEP 6: ATTACH MAIN BEAM CAP AND COVERS

- Attach covers to the ends of the main beams using the supplied #14 self-tapping screws.
- Attach plastic covers to crossbar.







STEP 7: INSTALL REAR CROSSBAR

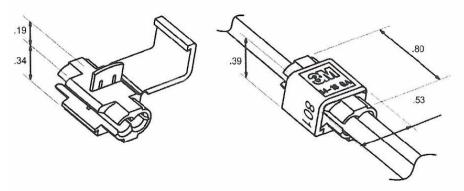
- Clamp rear bar bracket in place on rear post.
- Please note that there is a left and right bracket to match the pitch of the racks.
- Be sure the rear crossbar is at the same elevation as the front metal carrier and level from side to side. Drill two 3/8" holes as shown per bracket.
- Secure bracket with 3/8" x 2-1/2" bolts.
- Place Crossbar into mounting brackets. Drill a 3/8" hole through the brackets and crossbar. Secure with locking pins.





Note: Be sure to secure with locking pins!

3M™ Scotchlok™ Insulation Displacement Electrical Tap Connector 801 - Data Sheet



Shelf-Life: Scotchlok™ Insulation Displacement Electrical Tap Connector 801 has a five-year shelf life (from date of manufacture) when stored in a humidity controlled storage (10°C/50°F to 27°C/80°F and < 75% relative humidity). Good stock rotation is recommended.

3M and Scotchlok are trademarks of 3M Company.

Important Notice

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Application

Use 3M™ Scotchlok™ Tap Connector 801 to electrically connect a (tap) wire end to a through (run) wire, join parallel run wires, and insulate the connection.

Wire Range

18 -14 AWG (0,75-1,5 mm2) solid or stranded, tinned or untinned copper conductors. For use with thermoplastic insulated wires such as: T, TW, TFF, TFN, TFFN, AWN, TEW, SAE-GPT, with a maximum insulation diameter of .145 inches (3,7 mm).

Maximum recommended current for general purpose applications: 18 AWG - 7 Amps, 16 AWG -10 Amps, 14 AWG - 15 Amps

Construction

U-Contact - Tin plated brass, .03 in. thick (0,8 mm)

Insulator - Polypropylene

Color - Blue

Weight - .0032 lb. (1,45 gm)

Recommended Installation Tools

3M™ Crimping Tool No. E-9BM 9" Linemans Pliers

3M Electrical Markets Division 6801 River Place Blvd. Austin, TX 78726-9000 800-626-8381 www.3M.com/electrical

Installation Instructions

⚠ WARNING

Turn power off before installing or removing terminal. All electrical work should be done according to appropriate electrical codes.

- 1. Place unstripped run wire inside run channel.
- 2. Insert unstripped tap wire completely.
- 3. Hold tool perpendicular to the wire and make the connection by crimping the u-contact down flush with the top of the plastic insulator.
- 4. Close top hinged cover until latched.



Tap / Run Connection



Parallel Connection

Engineering Specification

3M Scotchlok Insulation Displacement Connector (as manufactured by 3M, part No. 801) capable of connecting a tap wire to a run wire in the range of 18-14 AWG (0,75-1,5 mm2) solid or stranded, tinned or untinned copper conductors. The connector shall be UL Listed for 600 Volts maximum building wire: 1000 Volts maximum, signs, fixtures and luminaires, and have a maximum insulating temperature of 105°C (221°F).

Regulatory Agencies

UL Listed as a Pressure Cable Connector Tested per UL Standard 486C UL File No. E23438 Operating Temperature: 105°C (221°F) Voltage Rating: 600 volts max. building wire; 1000 volts max. signs and fixtures

Flammability Rating: UL94 V-2

Federal Specification A-A-59213 A

"Commercial package only"

Class Style Kind CU

☑ Final Inspection Checklist for Glass Rack

Be sure to check the following before using:

☐ Glass rack bed rail bolts are tight.

☐ Crossbar bolts are tight

☐ Wheel skirt is bolted on properly

☐ Front stops are securely bolted in place

☐ Cleats are attached properly to all poles

⚠ WARNING

Shifting cargo due to improper loading can result in sudden loss of control of vehicle, cargo or glass coming off of rack, or glass breakage. This can lead to death or serious injury. You must:

- Make certain weight of load plus rack weight does not exceed vans weight capacity (GVWR - Gross Vehicle Weight Rating)
- Evenly distribute load on the driver and passenger side of vehicle (if equipped with two racks)
- Always center the load on the rack.
- Consider adjusting the contents inside the vehicle to account for the weight on the rack.

- Properly secure load to rack and tie down all loads with proper sized fasteners, chains, straps, etc. Inspect and test all load securement equipment before use.
- If rack is E-Track equipped, only use load securement products compatible with E-Track.
- Do not use damaged or loose tie down rings, straps or track.
 They can fail or break, allowing cargo to become loose resulting in death or serious injury.

Refer to www.fmcsa.dot.gov for regulations regarding cargo securement rules

For Service, Parts and Troubleshooting:

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Web: MyGlassTruck.com

To preview, or order parts online please visit **dcixpress.com**



