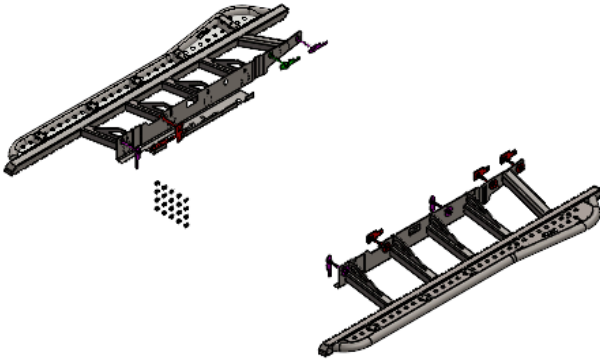


## RCI 23+ TOYOTA SEQUOIA ROCK SLIDER INSTALLATION GUIDE

**\*\*This install guide is applicable to our 22+ Toyota Sequoia Rock Slider ONLY\*\***

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	SM-00845 (P)	23+ Sequoia Slider - Passenger	1
2	SM-00844 (D)	23+ Sequoia Slider - Driver	1
4	SM-00312	.075 MS Bronco Tread Plate Driver R4	1
5	SM-00313	.075 MS Bronco Tread Plate Passenger R4	1
17	HW-00004	3/8 Carriage Bolt Plate	1
18	HW-00005	5/16 Carriage Bolt Plate	4
19	HW-00006	Question Mark Carriage Bolt Plate	4
20	HW-00190	3SEQ Slider Tapped plate	3
21	HK-00154	23 Sequoia Slider Hardware Kit	1
21.1	HW-00030	3/8-16 FIN HEX NUT GR-5 ZINC	1
21.2	HW-00029	3/8 SPLIT LOCK WASHER ZINC	1
21.3	HW-00026	3/8 USS FLAT WASHER THRU HARD	1
21.4	HW-00170	3/8-16 X 5-1/2 CARRIAGE BOLT	1
21.5	HW-00028	Full Moon Spacer	9
21.6	HW-00043	5/16-18 X 5-1/2 CARRIAGE BOLT	4
21.7	HW-00037	5/16 USS FLAT WASHER ZINC	10
21.8	HW-00039	5/16-18 FIN HEX NUT GR-5 ZNC	4
21.9	HW-00040	5/16 SPLIT LOCK WASHER ZNC	4
21.10	HW-00044	7/16 USS FLAT WASHER ZNC	4
21.11	HW-00045	7/16 SPLIT LOCK WASHER ZINC	4
21.12	HW-00047	7/16-14 FIN HEX NUT GR-5 ZINC	4
21.13	HW-00049	7/16-14 X 5-1/2 CARRIAGE BOLT	4
21.14	HW-00025	M8-1.25 X 30MM HEX FLANGE BOLT	6
21.15	HW-00048	5/16 USS FLAT FENDER WASHER THRU HARD	6
21.16	HW-00051	40in Length Guide Wire	1
21.17	HW-00050	40in Length String	9
22	HK-00073	5 Tread Mount Hardware Kit	1
22.1	HW-00017	1/4-20 X 7/8 BUTTON SOC CAP BLACK	20
22.2	HW-00019	1/4 SAE FLAT WASHER	40
22.3	HW-00031	1/4-20 KEPS NUT 18-8 S.S. BLACK	20
24	PT-00003	Pallet 95x25	1

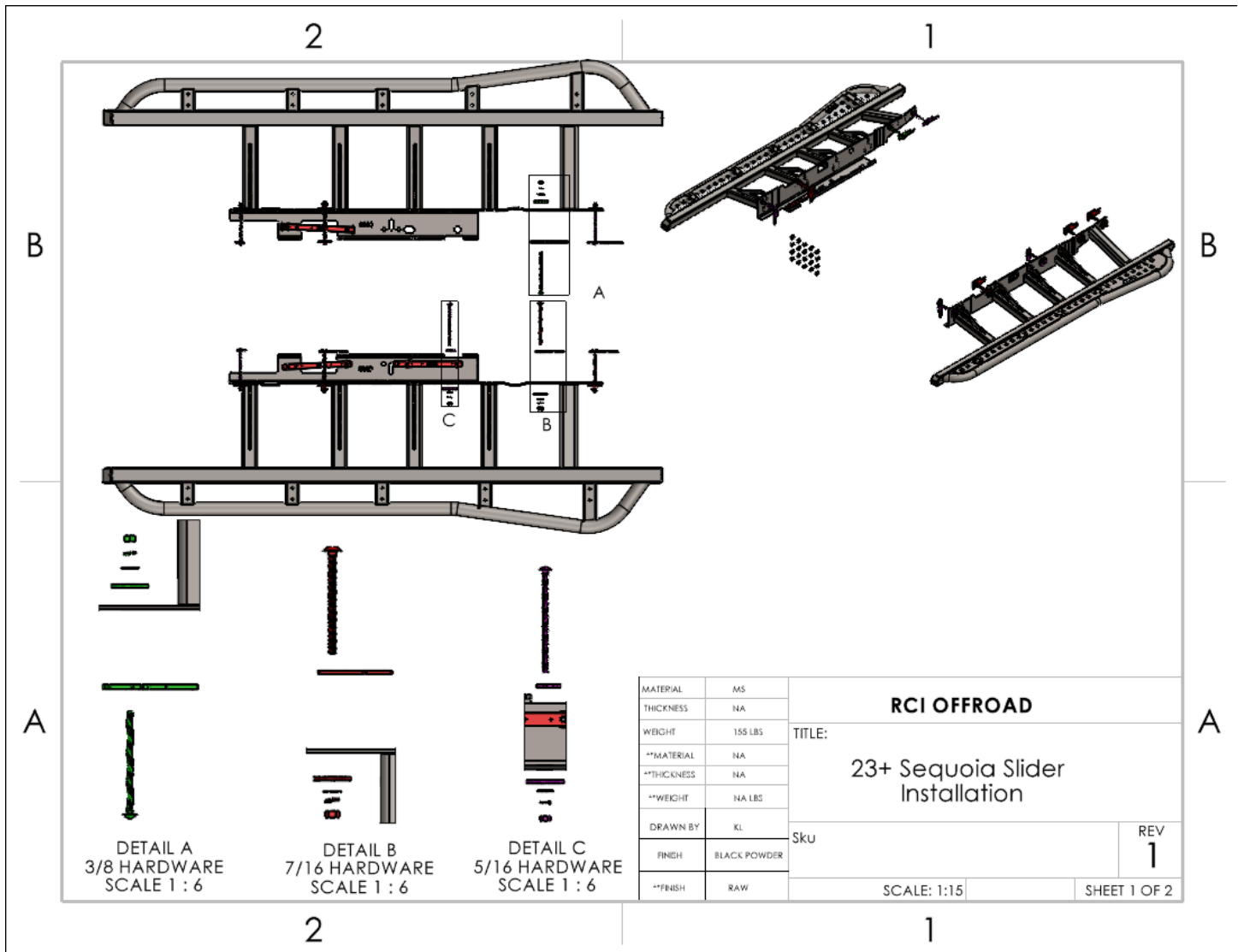


UNLESS OTHERWISE SPECIFIED:	PROPRIETARY AND CONFIDENTIAL	NAME	DATE
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL: ±0.010 ANGULAR: BEND ±0.5 TWO PLACE DECIMAL: ±0.015 THREE PLACE DECIMAL: ±0.010	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF RCI Offroad. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF RCI Offroad IS PROHIBITED.	DRAWN KL	10/07/2024
RCI OFFROAD		Export Date 10/10/2024	
TITLE: 23 Sequoia Slider Assembly - Shipping BOM			
Item Number FG-00511			REV 1
DO NOT SCALE DRAWING		SCALE: 1:25   WEIGHT:	SHEET 1 OF 28

**This installation is physically demanding and time intensive. It is highly recommended to recruit a friend or family member to assist in this installation and plan to spend 2-4 hours installing the sliders.**

**[Also, check out our installation video!](#)**

## HARDWARE SUBASSEMBLIES:



This install guide may refer to various hardware subassemblies. Please refer to the above figure for clarification if necessary.

- Detail A – 3/8" frame plate carriage bolt hardware order:
  - 3/8" x 5.5" bolt > 3/8" carriage bolt plate > vehicle frame > slider frame plate > "full moon" washer > 3/8" flat washer > 3/8" split lock washer > 3/8" nut
- Detail B – 7/16" frame plate carriage bolt hardware order:
  - 7/16" x 5.5" bolt > 7/16" carriage bolt plate > vehicle frame > slider frame plate > "full moon" washer > 7/16" flat washer > 7/16" split lock washer > 7/16" nut
- Detail C – 5/16" frame plate carriage bolt hardware order:
  - 5/16" x 5.5" bolt > 5/16" carriage bolt plate > vehicle frame > slider frame plate > "full moon" washer > 5/16" flat washer > 5/16" split lock washer > 5/16" nut

**Hardware Order**

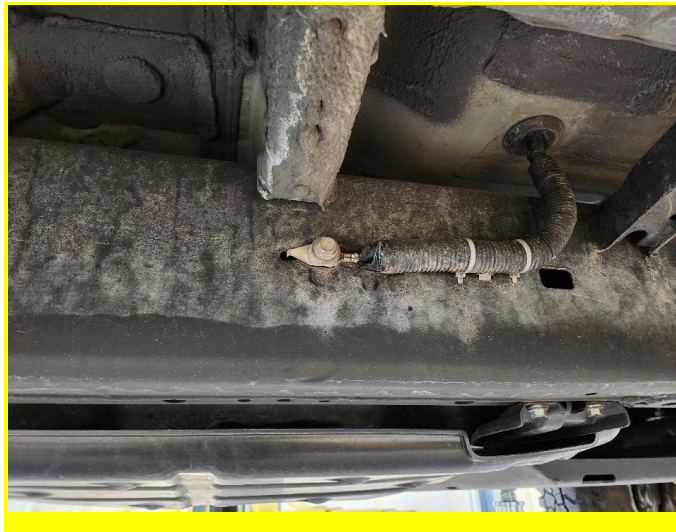
**\*\*Before beginning installation, please take note of hardware order for each side of the slider. The slider hardware is not the same between the two sides and some of the frame plate mounting holes will not be utilized for this install.\*\***

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## INSTALLATION STEPS:

**\*\*Use hand tools, impact wrenches may cause damage if over torqued.**

1. Begin by unpacking and removing all components and hardware. Please verify that all hardware, components, and mounting components are present. Please reference your original order invoice and verify all items are accounted for.
  - a. Before beginning the installation, thread an M8 bolt into each of the tapped holes of the tapped plate. Our zinc process can sometimes tighten up the threads and the upcoming steps will be much easier if the threads are clean and easy to thread.
2. On the passenger side of the vehicle frame, remove all hardware/accessories that may interfere with the slider installation.
  - a. M8 Bolt securing a grounding wire approximately 2/3rd of the way back from the front of the front door on the passenger side of the vehicle.



- b. The plastic caps along the inside and outside of the frame must be removed before starting this installation.
3. Tie the included sections of string to the outermost holes of the M8 bolt plates.

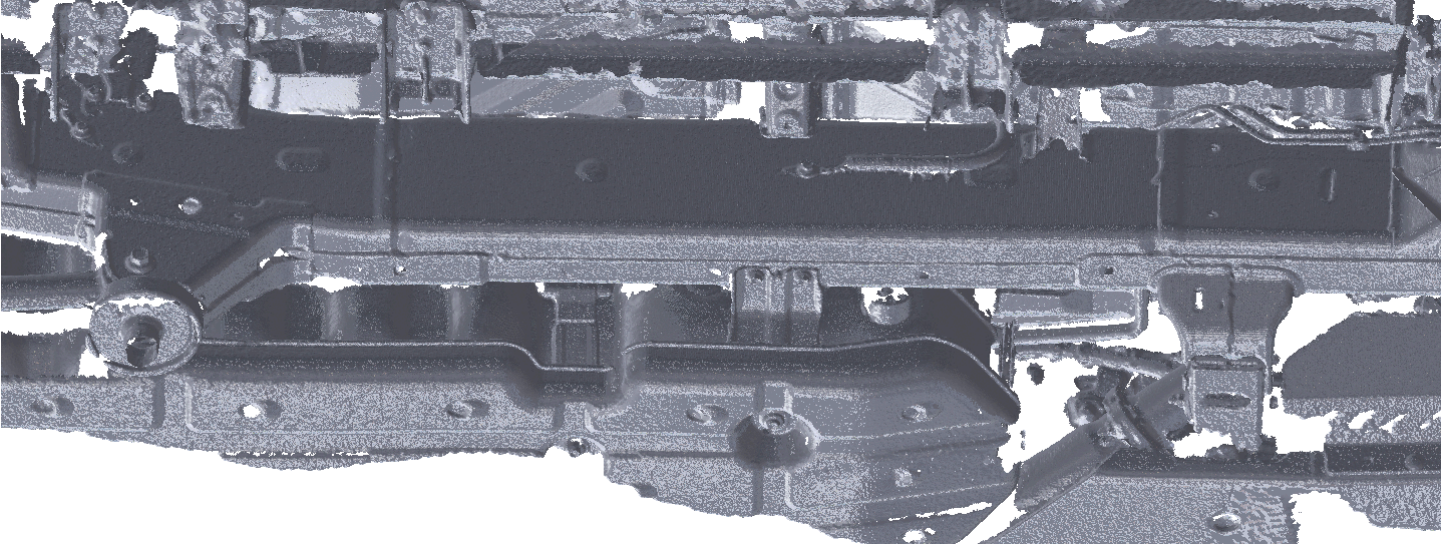


4. Tie an included section of string to this hole of the M8 bolt plate.
  - a. This section of string will be used to retrieve the bolt plate from inside the vehicle frame if the slider is ever uninstalled.

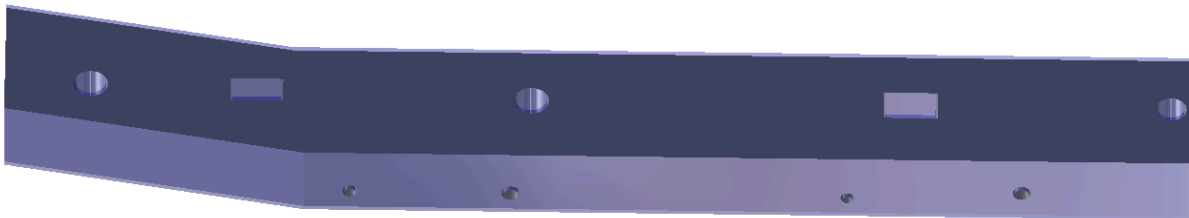
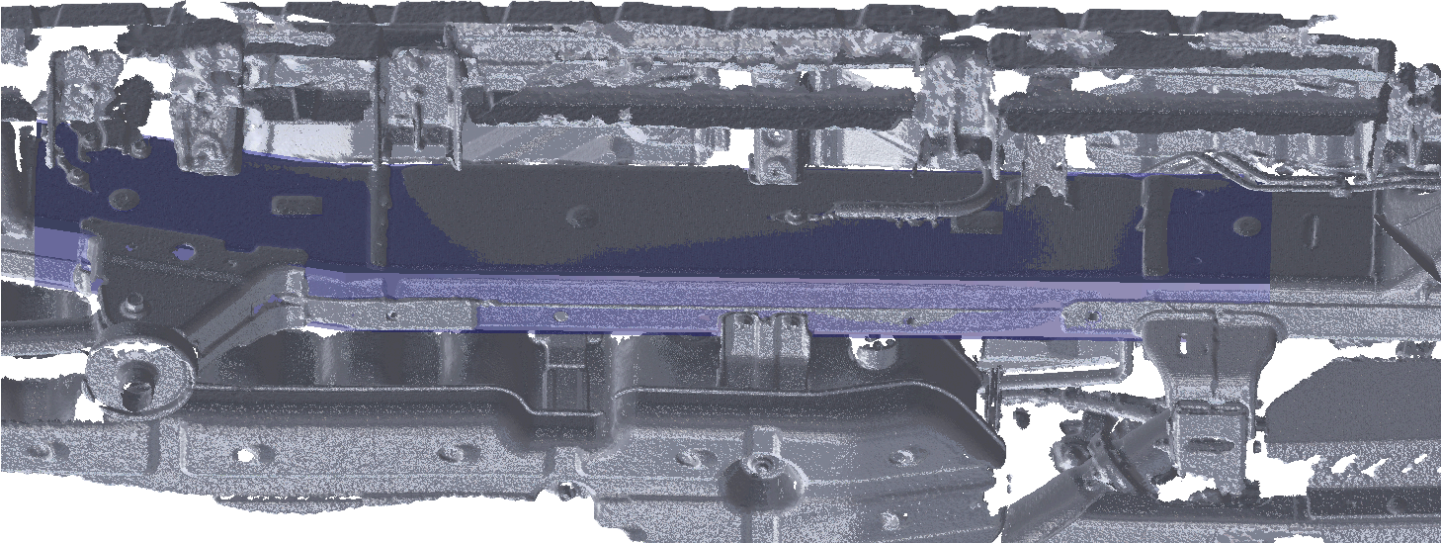




5. Route the strings through the vehicle frame.
  - a. To illustrate the routing of the strings, I will be using a rough recreation of the frame to show the routing. [Also, check out our installation video!](#)
    - i. This is a scan of the passenger side frame.



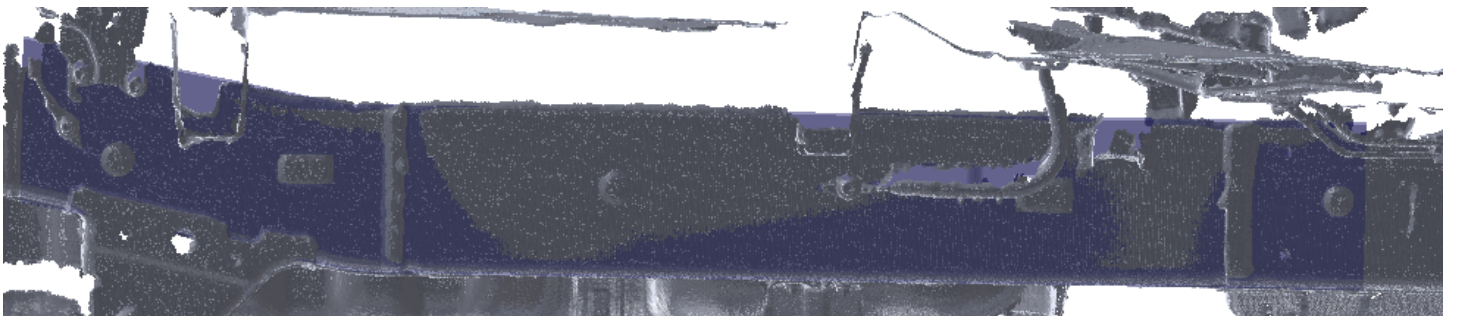
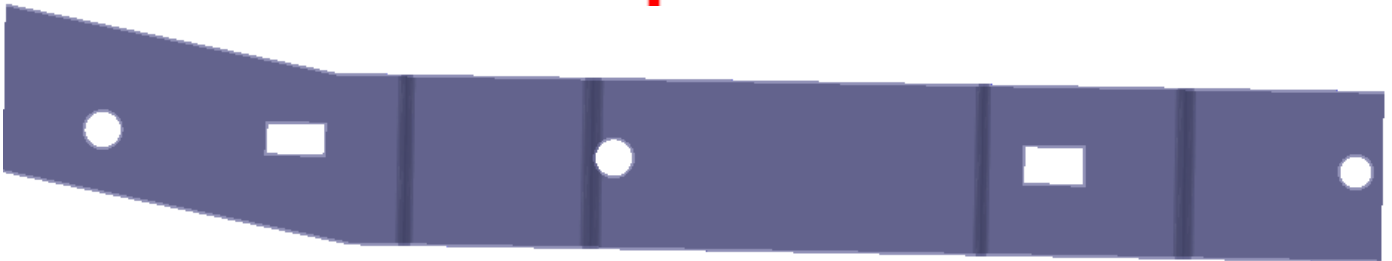
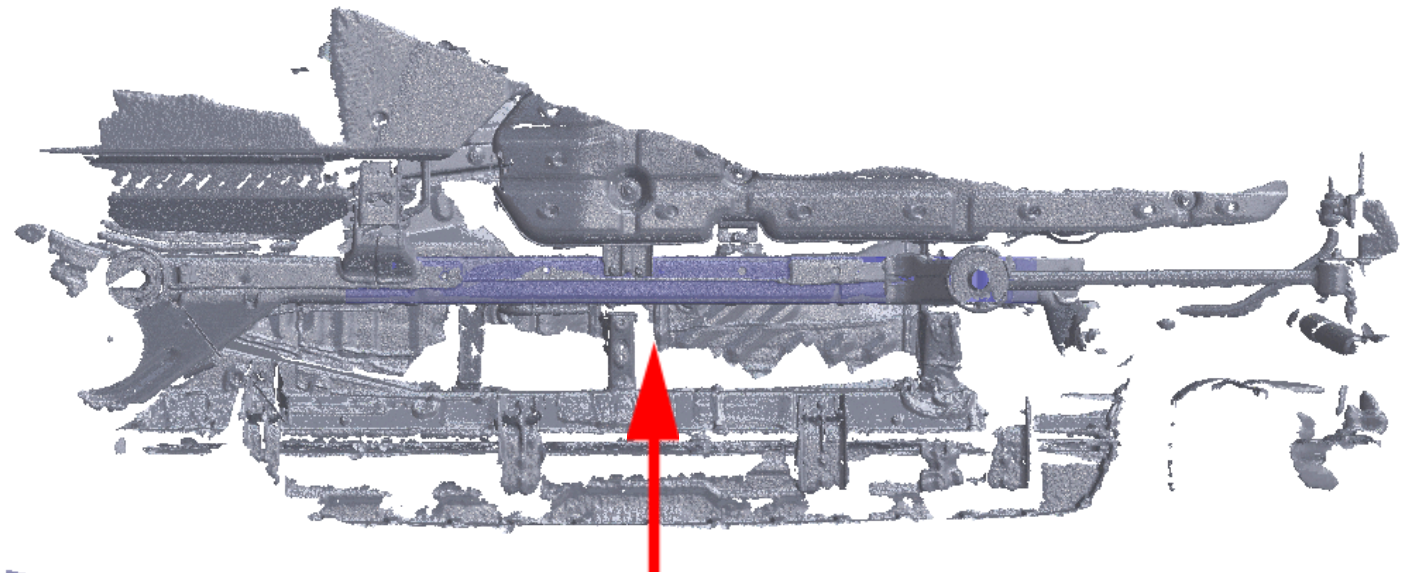
- ii. Recreated vehicle frame.



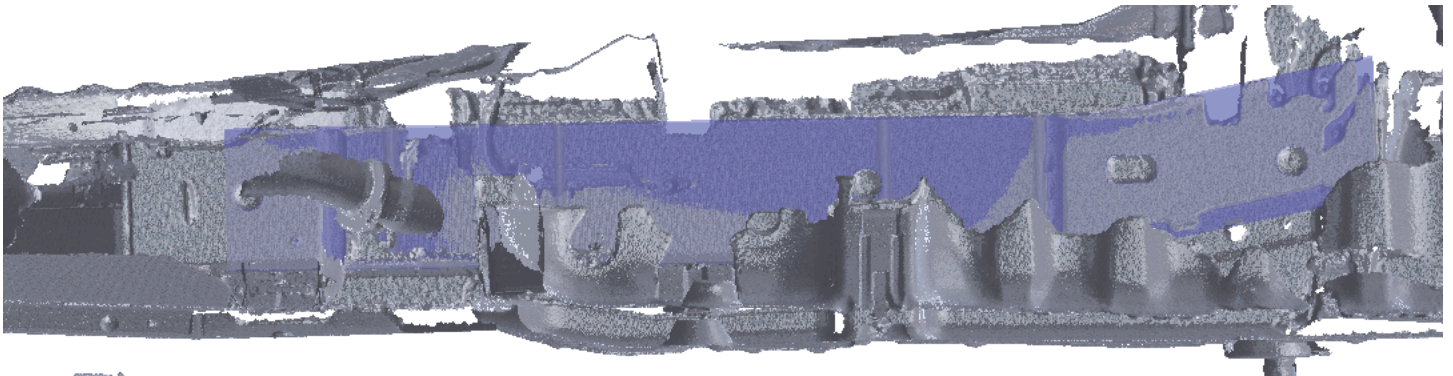
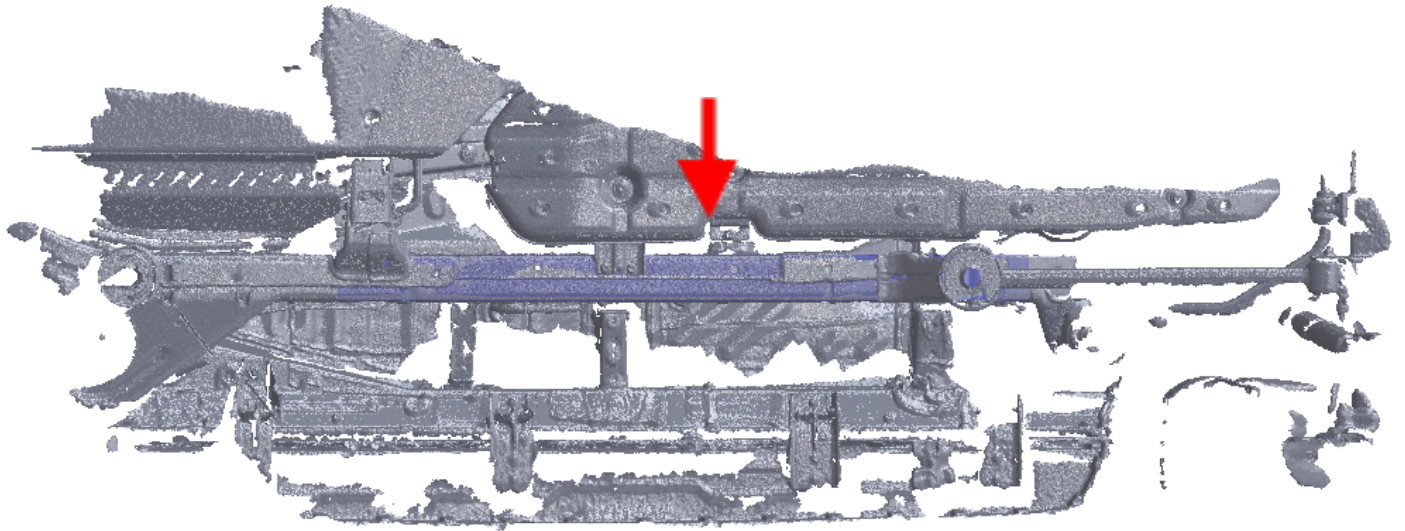
- iii. For the rest of this demonstration, the frame will primarily be shown in just one of two views.



1. Looking into the vehicle from the outside of the vehicle frame.



2. Looking out from the inside of the vehicle frame.

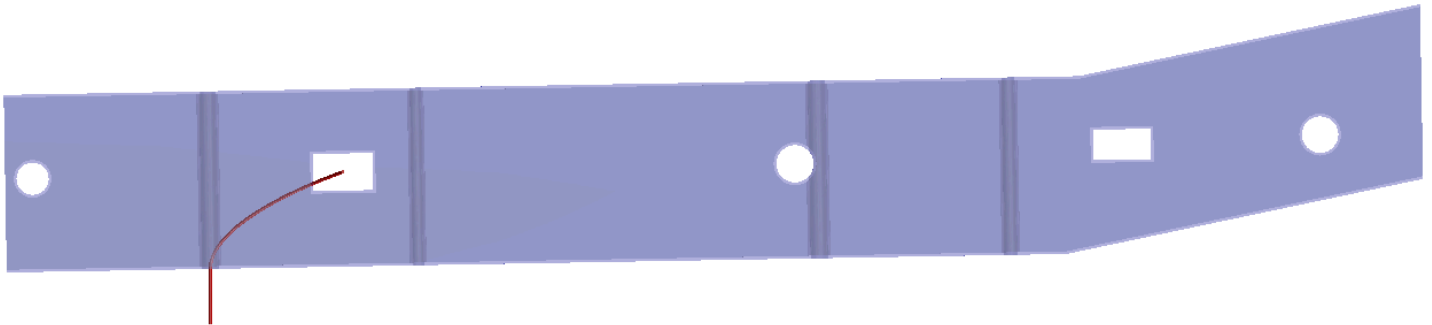


- b. Straighten out the included length of wire and wrap one end around the nose of a pair of pliers to produce a hook or loop that the included string can be tied to.

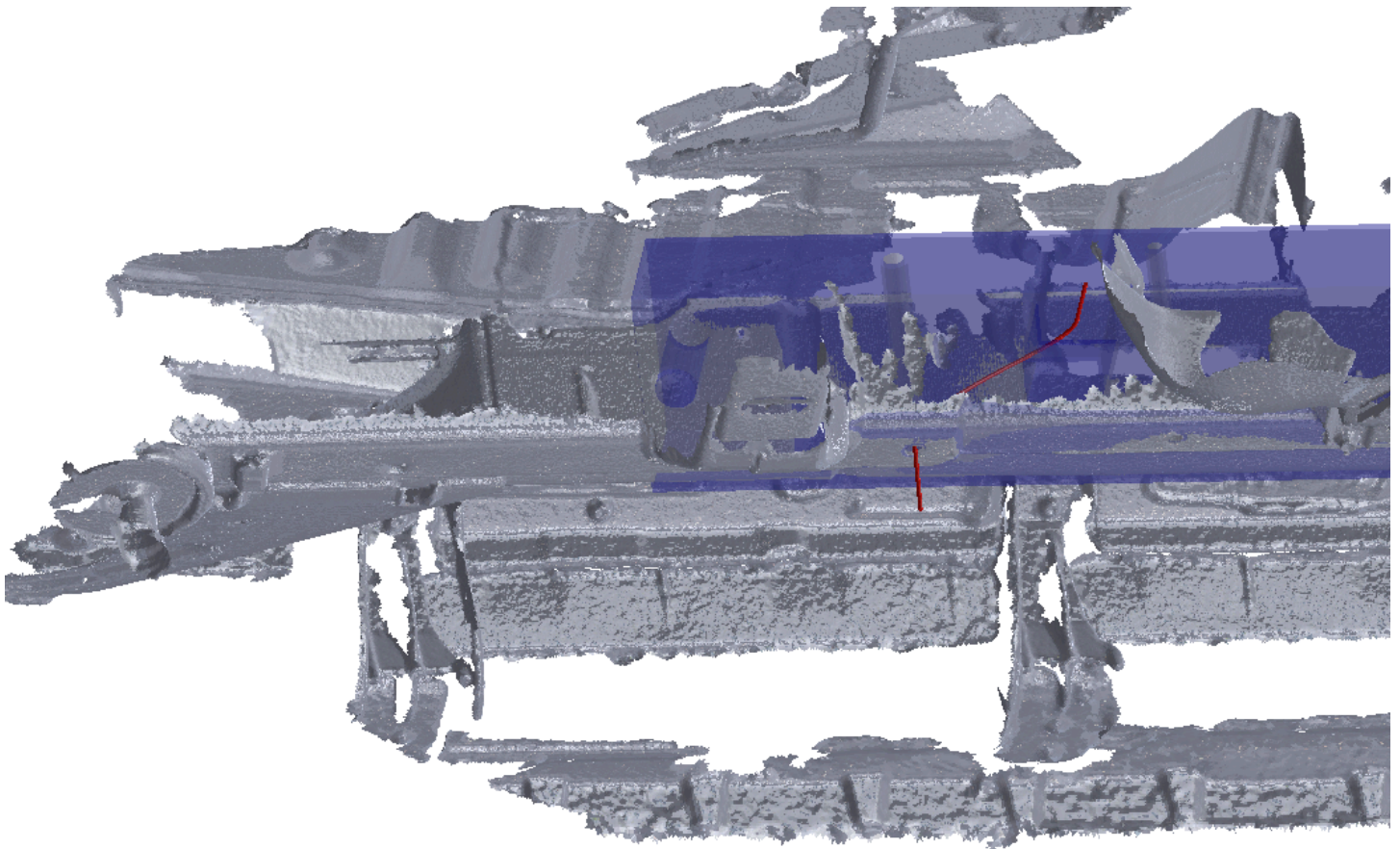




- c. Route the looped end of the wire from the first hole in the bottom of the passenger side frame to the square slot on the inner face of the frame between the crossmember and fuel tank. Tie the string tied to the front of the tapped plate to the looped end and pull the string back through the frame and out the hole in the bottom of the frame.

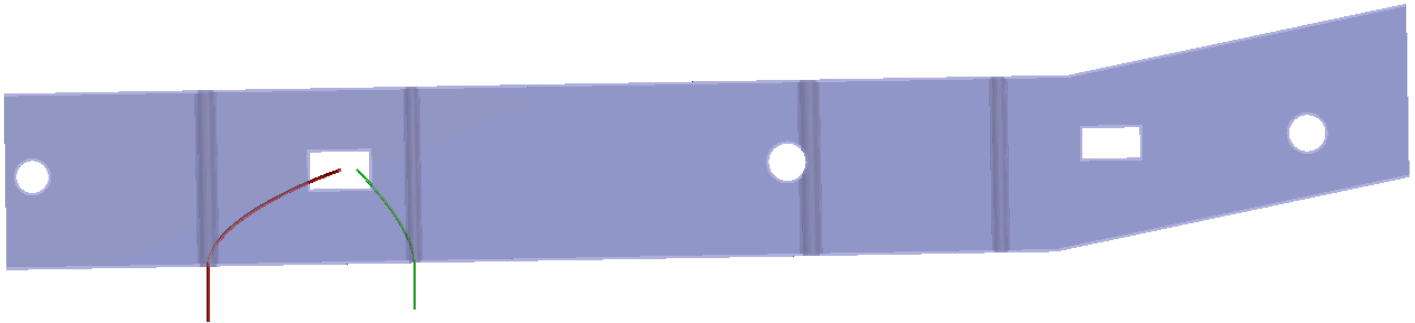


- i. Here's a view with the vehicle scan shown:

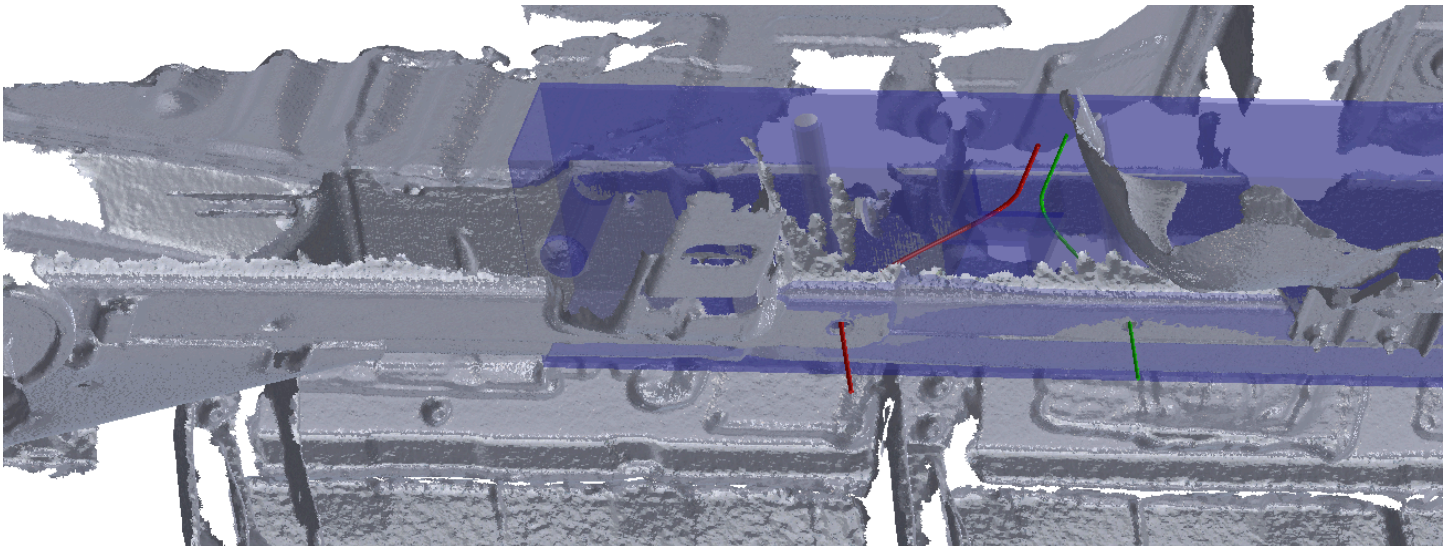


- d. Cut the string from the length of wire or otherwise separate the wire and string so that the wire can be used again.

- e. Repeat the process of fishing the wire through the second hole in the bottom of the frame through the same rectangular slot in the inside of the frame. Tie the string tied to the rear of the tapped plate to the looped end of the wire and pull the string and wire through the frame. Cut the string from the wire once the string is pulled through the assembly.



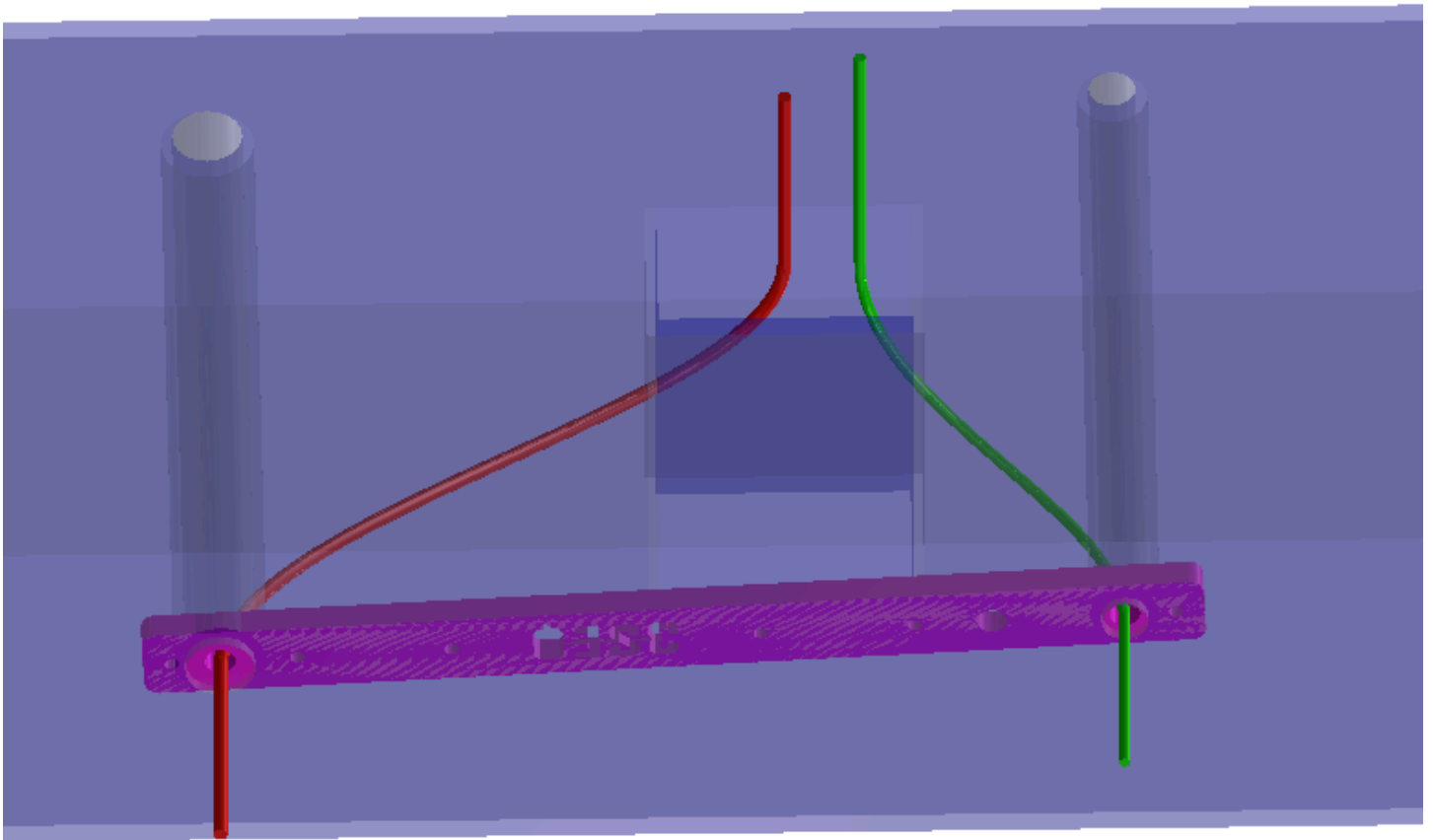
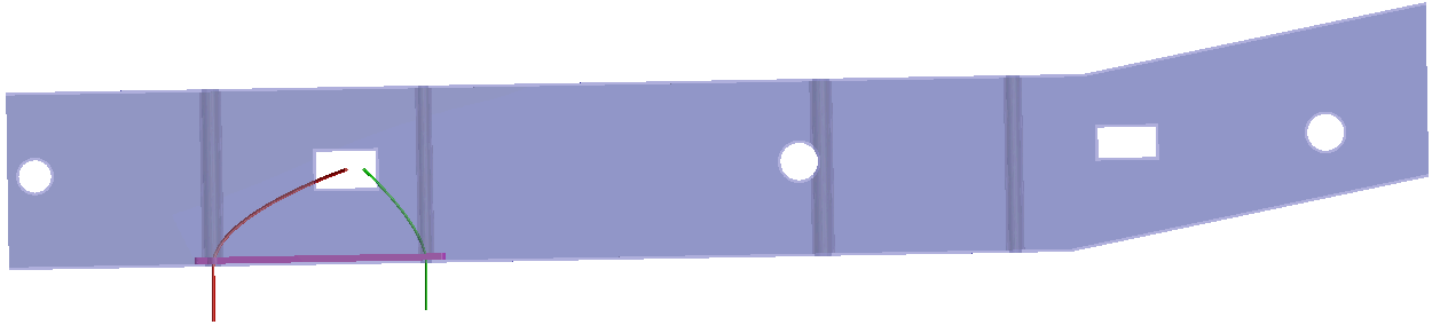
- i. Here's another view of the frame with the vehicle frame scan shown. Moving forward I will be trusting that you understand the frame approximation and will only be displaying the vehicle frame scan as necessary. [Also, check out our installation video!](#)



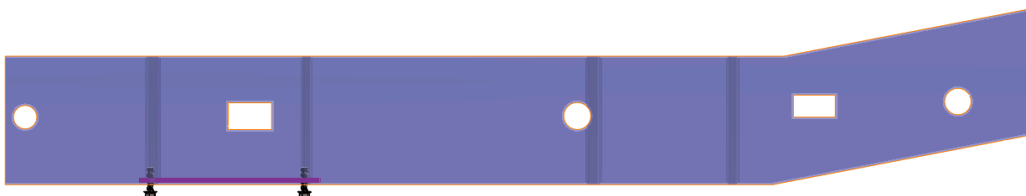
- f. Temporarily fix the recovery string tied to one of the central holes of the tapped plate to the vehicle frame.
  - i. You can use tape(I did to temporarily secure the string to the fuel tank skid plate), tie it to some part of the frame, or whatever other method works best for your installation setup.
- g. Slide the tapped plate into the frame of the vehicle from the first rectangular slot on the inside of the frame(between the crossmember and fuel tank. Same slot that your string should be coming out of.).
  - i. Ensure that the recovery string is secured somewhere outside of the frame. If either of the other two strings pull through the frame, it's relatively straightforward to re-route the wire and string back through the frame. If the recovery string pulls into the vehicle frame and the tapped plate is

inserted, the tapped plate will be lost within the frame with no way to remove it.

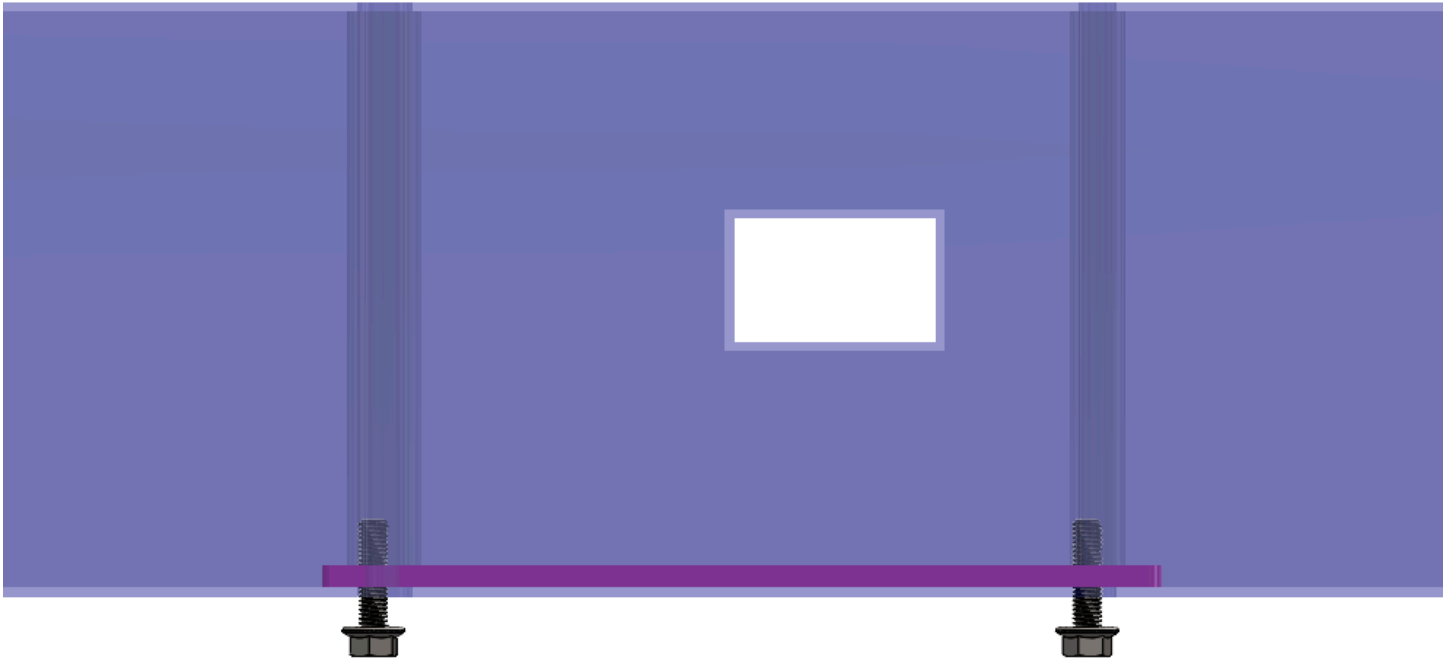
- h. Use the strings and optionally, a small screwdriver, to move the holes of the tapped plate into alignment with the holes in the bottom of the vehicle frame.



- i. Loosely thread two M8 bolts into the tapped plate.
  - i. Just getting the threads started is fine here. The goal is to keep the plate aligned with the holes in the frame, not to secure it.







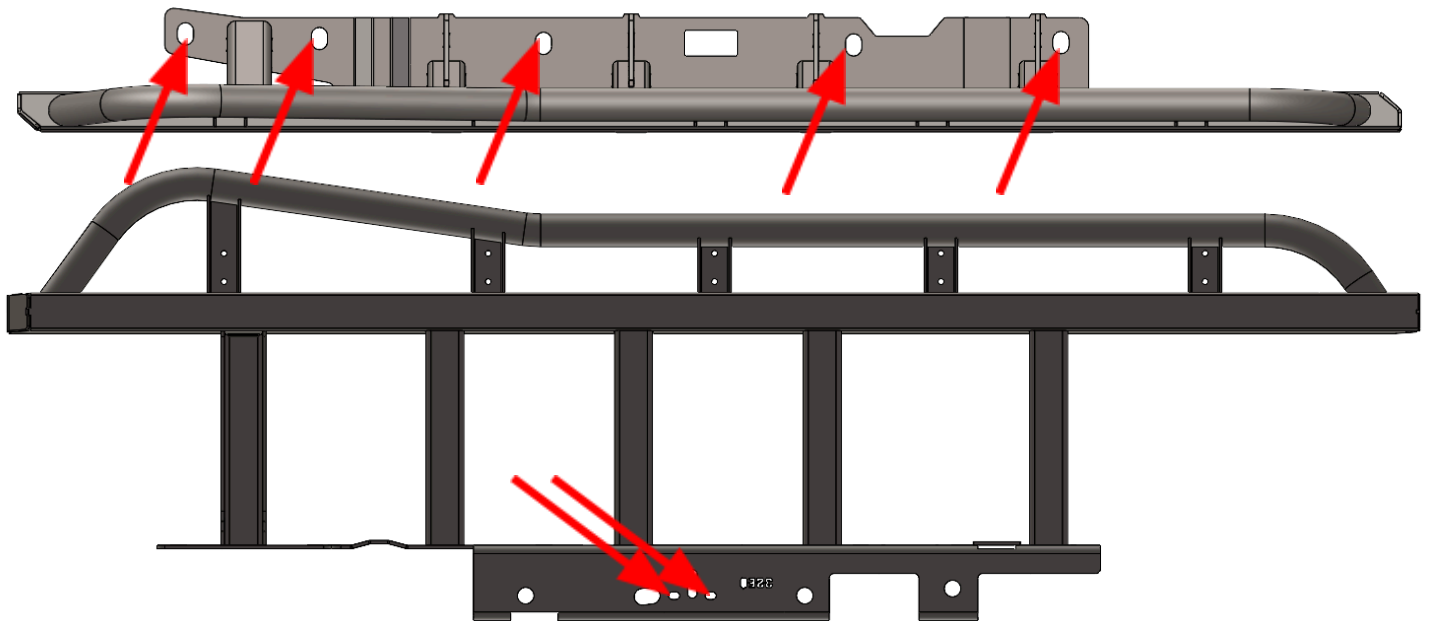
- j. With the two M8 bolts threaded into the tapped plate, the two strings hanging out of the bottom of the frame can be cut.
  - i. **NOT THE RECOVERY STRING! DON'T CUT THAT!**



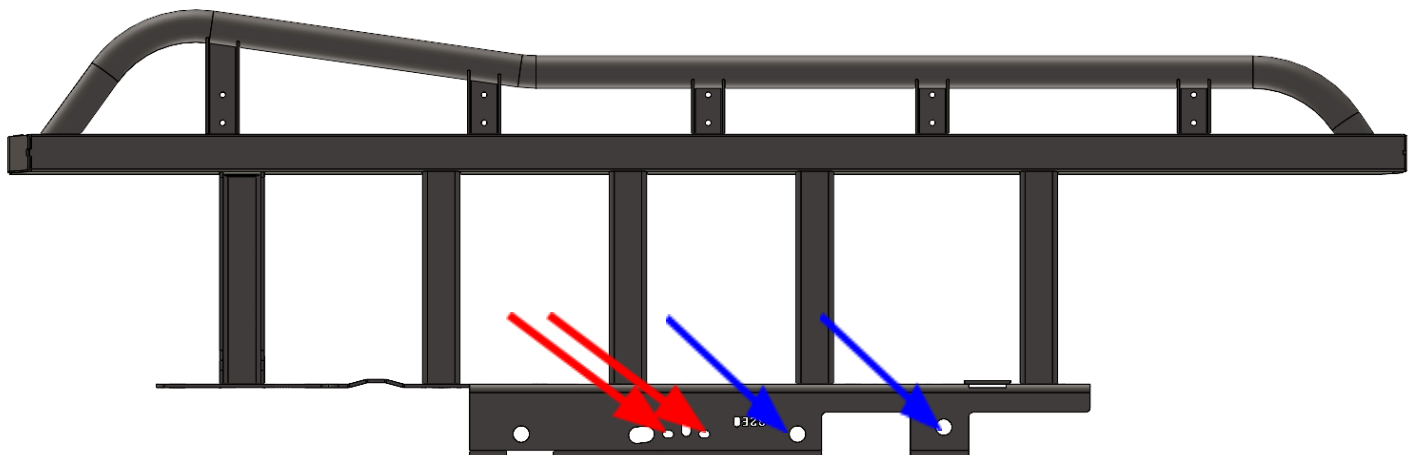
- 6. Identify the passenger side slider and lift it up to the frame on the passenger side of the vehicle.
  - a. Use of a floor jack or similar equipment will make this process significantly easier.
  - b. The holes in the bottom of the slider frame plate are large enough to clear the heads of the M8 bolts. You should not remove the M8 bolts installed in the previous step.

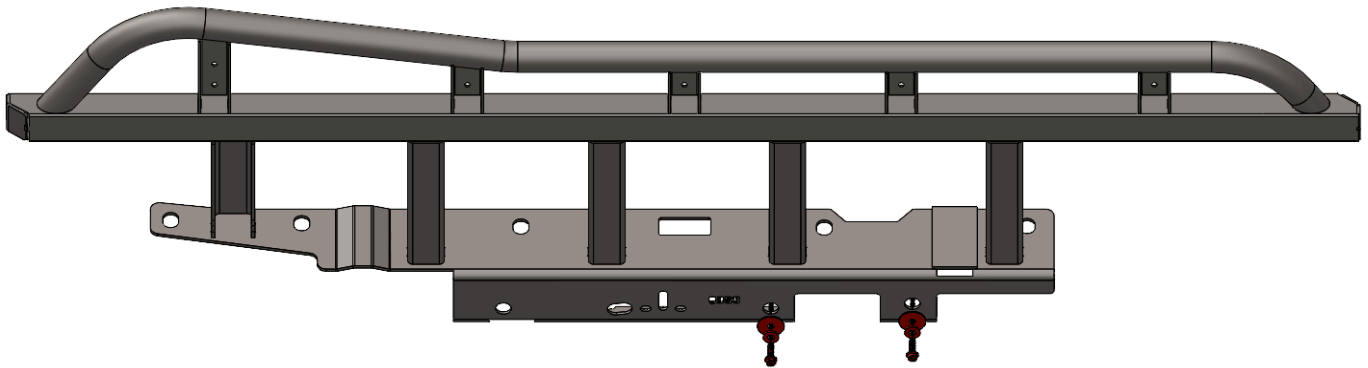
- c. Take special care to avoid pinching the grounding wire, its mounting clip, the plastic wire harness mount, and/or any other frame-mounted wires and lines.

- 7. Align the holes in the slider frame plate with the holes in the vehicle frame. For the passenger side, we are primarily concerned with these holes aligning with those on the vehicle. Secure the slider frame plate to the vehicle frame with the help of a friend, a jack, jack stand, or some combination of the three.

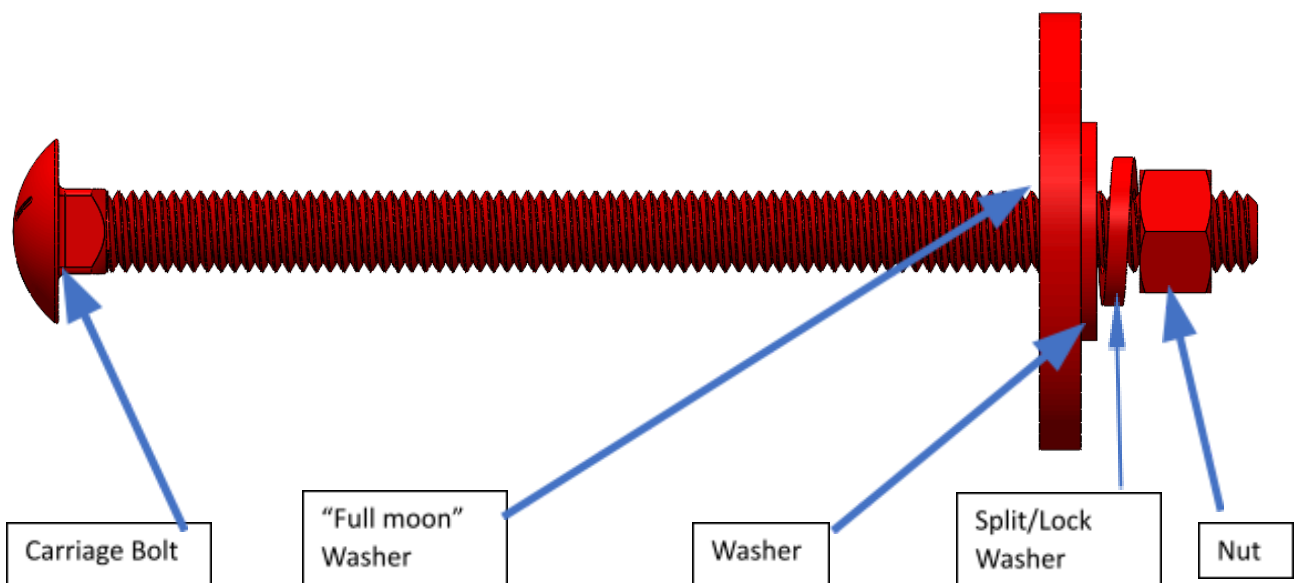


- 8. With the holes aligned, reinstall the fuel tank front bracket with the OEM M8 hardware. Then, remove an M8 bolt from the tapped plate within the frame, taking care not to disturb the plate (Marked with blue arrows). Reinstall the M8 bolt with a 5/16" flat washer and 5/16" fender washer. Repeat the process with the remaining M8 bolt.





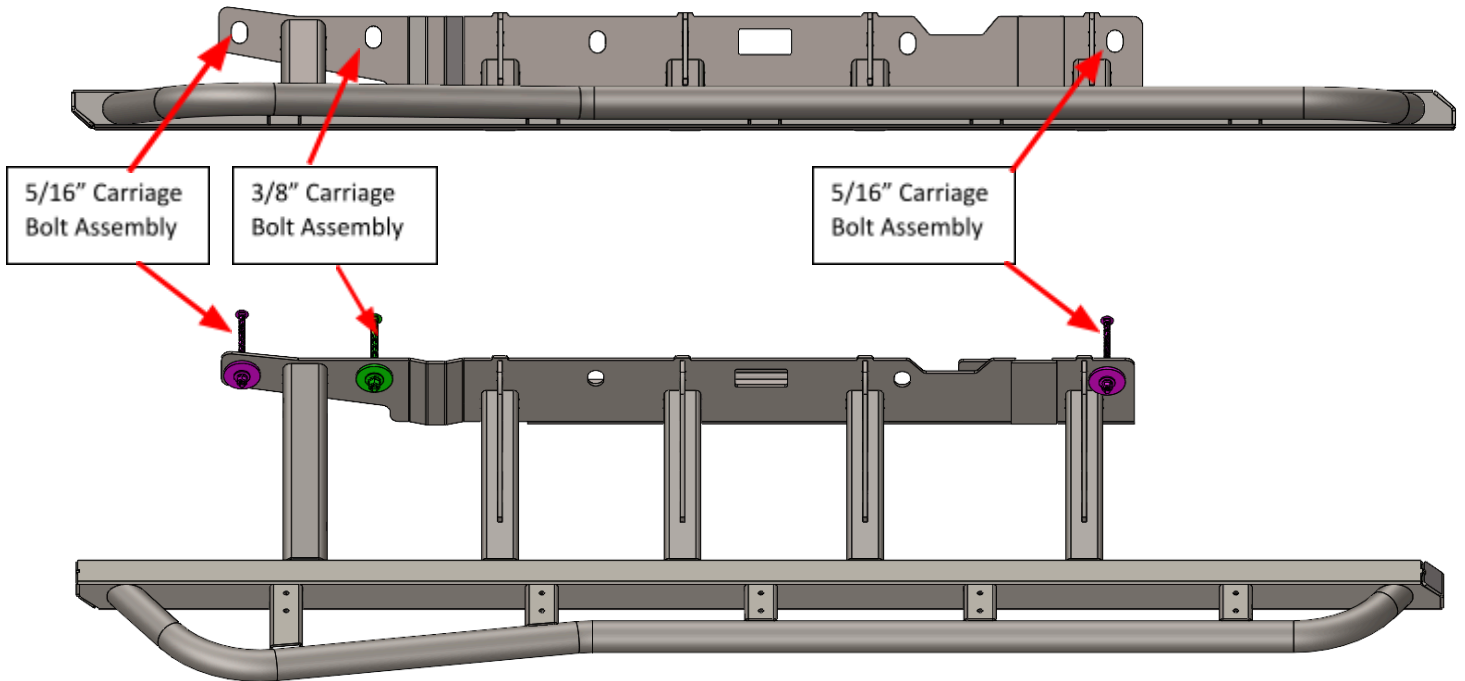
9. Collect the listed hardware and create the following assemblies:



- a. (2) 5/16" x 5.5" carriage bolt
- b. (2) 5/16" flat washer
- c. (2) 5/16" split lock washer
- d. (2) 5/16" nut
- e. (1) 3/8" x 5.5" carriage bolt
- f. (1) 3/8" flat washer
- g. (1) 3/8" split lock washer
- h. (1) 3/8" nut
- i. (3) "Full Moon" washer

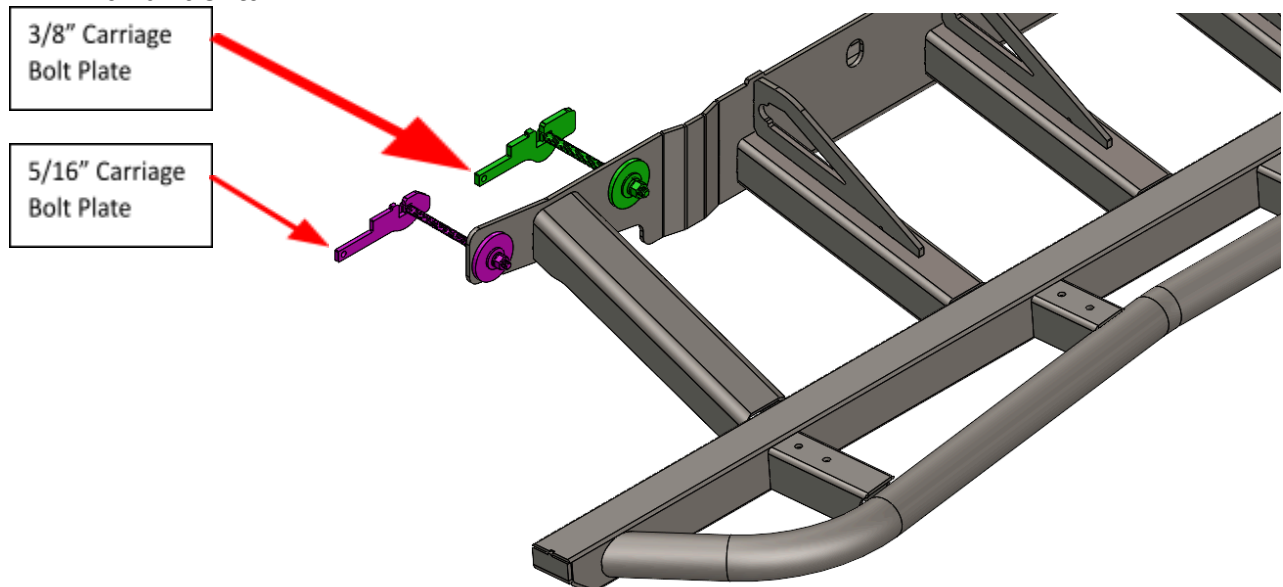
**10. Feed the carriage bolt assemblies through the large holes at the top of the frame plate with the head of the bolt facing towards the center of the vehicle.**

- a. If needed, adjust the hex nut so that the carriage bolt head is visibly protruding from the inner surface of the vehicle frame.

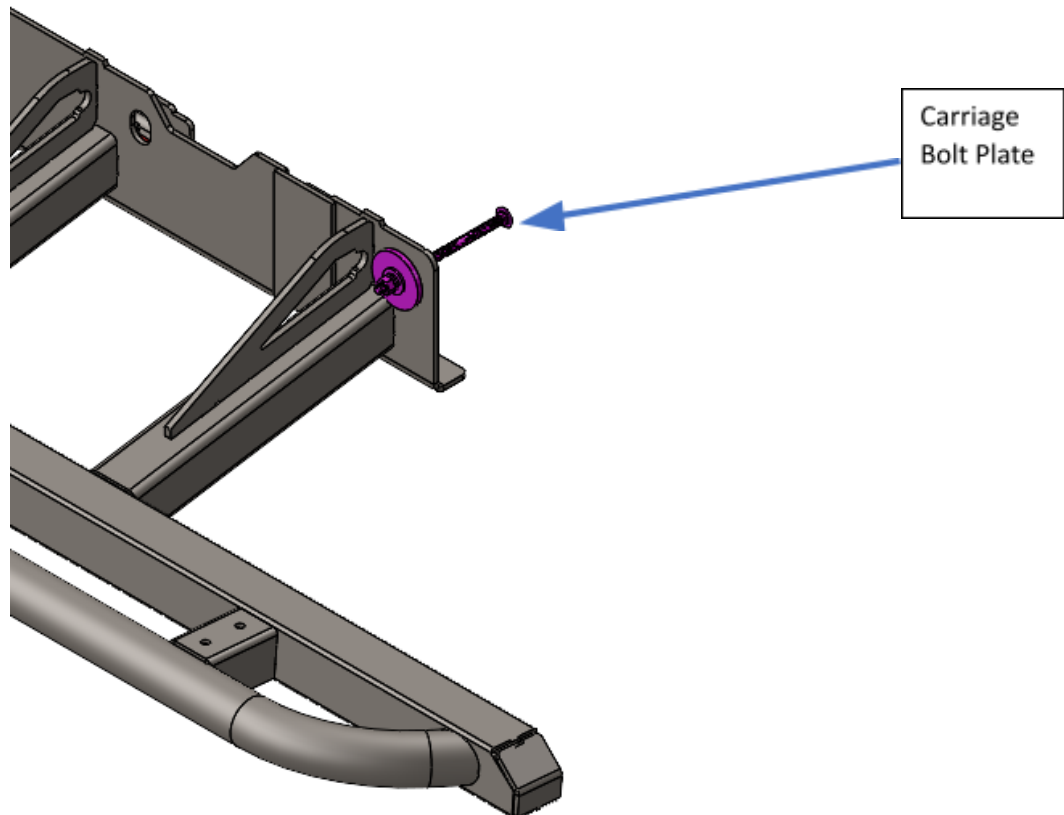


**11. Collect a 3/8" and two 5/16" carriage bolt plates and hook it over the protruding square head of the carriage bolts. These plates will secure the carriage bolts when tightening the nut to secure the slider frame plate. Hand tighten the hex nuts until the carriage bolt plate is snug against the frame.**

- a. The two plates at the rear of the vehicle are positioned between the vehicle frame and fuel tank.



- b. The front 5/16" carriage bolt plate is inserted into the vehicle crossmember, pressed up against the vehicle frame, and hooked on the head of the 5/16" carriage bolt. See [installation video](#) for further clarification(around 11:44)

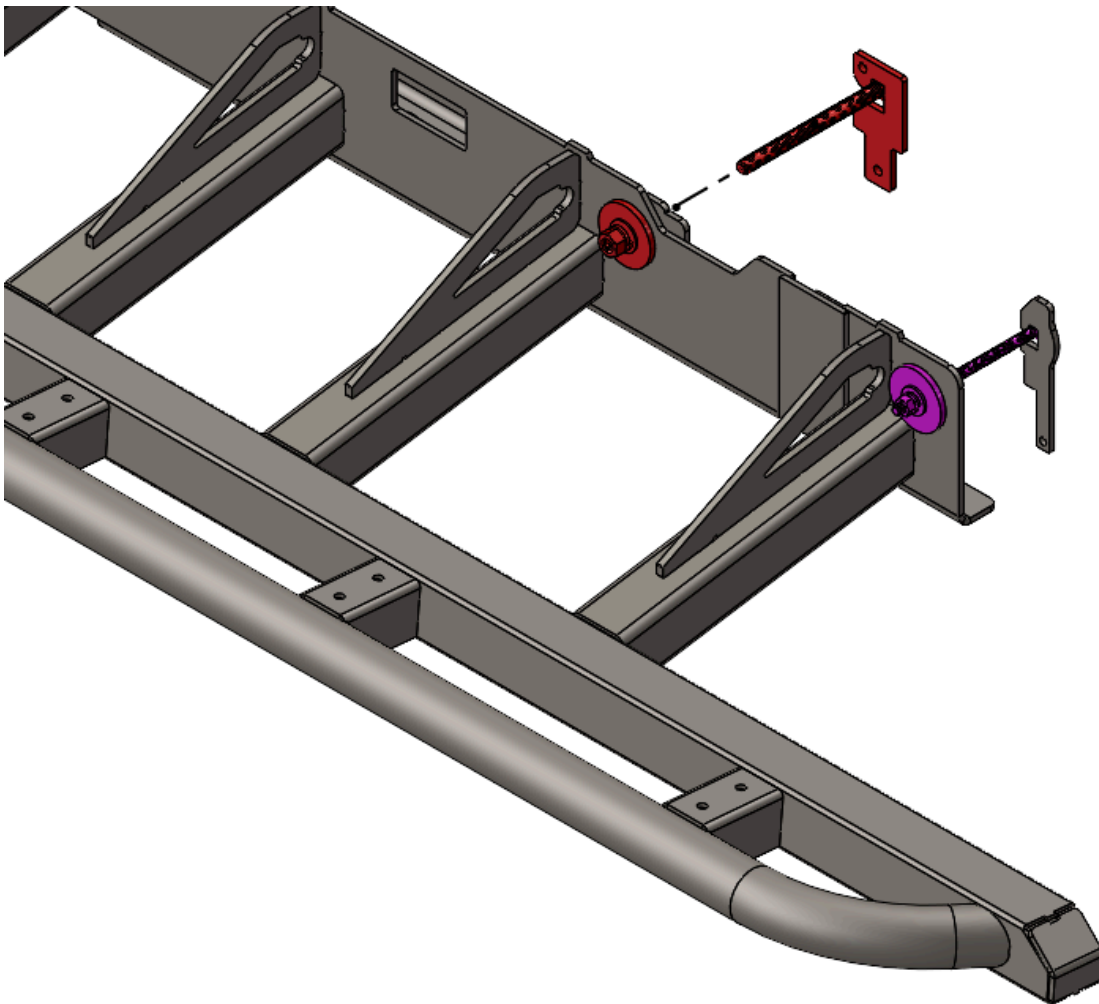


- c. See page 2 and 3 to verify hardware order.

**12. Collect the following hardware but do not assemble:**

- a. Collect one (1) of each:
  - i. 7/16" x 5.5" carriage bolt
  - ii. 7/16" flat washer
  - iii. 7/16" split lock washer
  - iv. 7/16" nut
- b. 7/16" carriage bolt plate

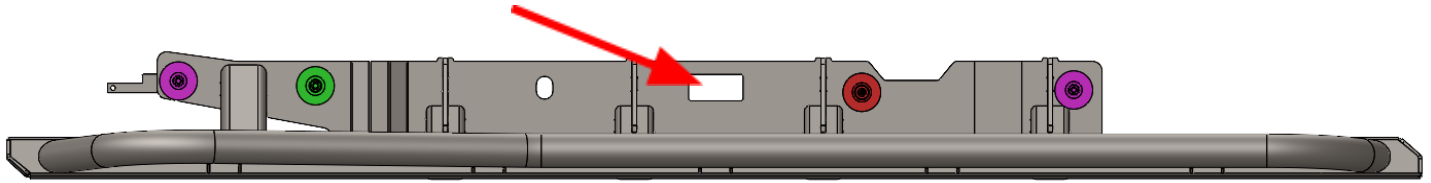
**13. From the inside of the vehicle frame between the fuel tank and transfer case, insert a 7/16" x 5.5" carriage bolt through the frame and slider frame plate. Hook the 7/16" carriage bolt plate on the head of the carriage bolt before installing the remaining 7/16" hardware.**



- a. This step uses the 7/16" hardware collected in step 7.
- b. See page 2 to verify hardware order.



**14. Reinstall the vehicle wire harness and grounding wire from step 2a.**



- a. Reinstall the grounding wire using the factory hardware.
  - i. It is recommended at this point to clip the zipties securing the grounding wire to the frame and resecure the wire to the frame in a position that relieves the tension caused by the slider leg gusset. Or secure the grounding wire to the nearest slider leg gusset; The choice is yours!

**15. Tighten passenger slider hardware.**

- a. Torque the 7/16" carriage bolts to 20 lb-ft.
- b. Torque the 3/8" carriage bolts to 20 lb-ft.
- c. Torque the 5/16" carriage bolts to 12 lb-ft.
- d. Torque the M8 bolts to 19 lb-ft.

**16. Congrats, the passenger side slider is now fully secured to the vehicle! Feel free to continue to the next page to start the driver-side install; Or, take a moment to appreciate your success before continuing on.**

17. Tie the included sections of string and wire to the outermost holes of the M8 bolt plates.

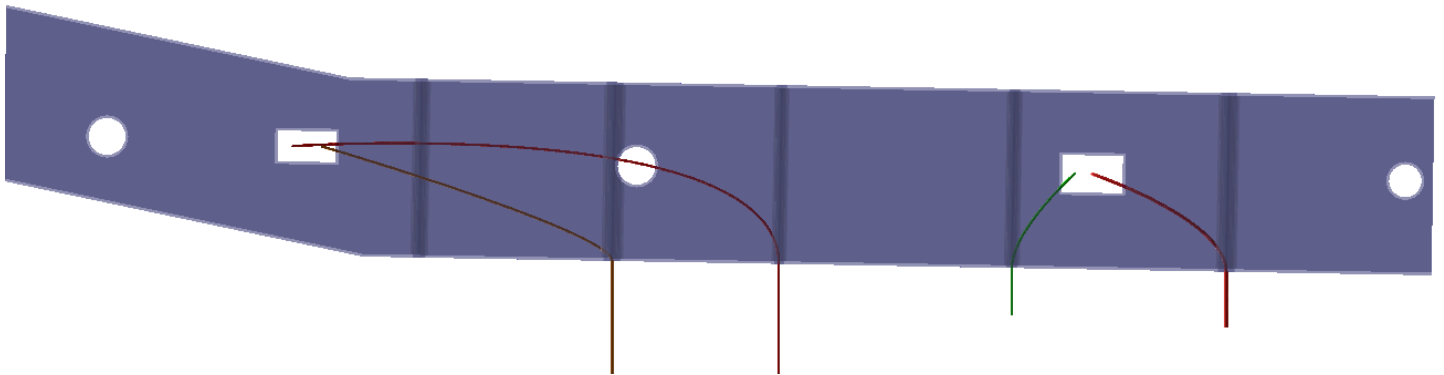


18. Tie an included section of string to this hole of the M8 bolt plate.

- a. This section of string will be used to retrieve the bolt plate from inside the vehicle frame if the slider is ever uninstalled.



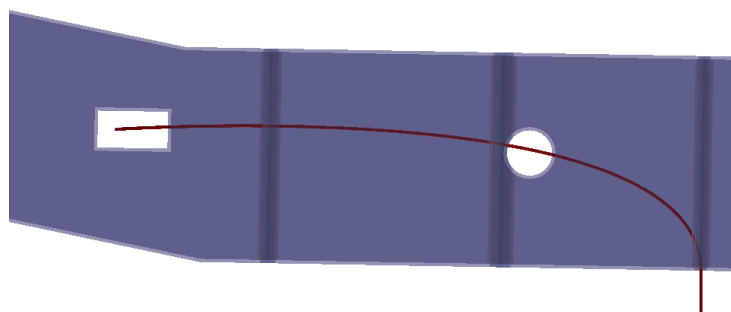
19. Carefully feed the ends of the wire through the holes in the inner driver side of the vehicle frame.



- a. Repeat the steps performed for the passenger side plate to get the string routed through the frame and out of the first two holes in the underside of the frame behind the crossmember. Insert the tapped plate into the vehicle frame, align the threaded holes with the first and second holes on the underside of the frame, and loosely thread another pair of M8 bolts into the plate.

i. **DON'T FORGET TO SECURE THE RECOVERY STRING.**

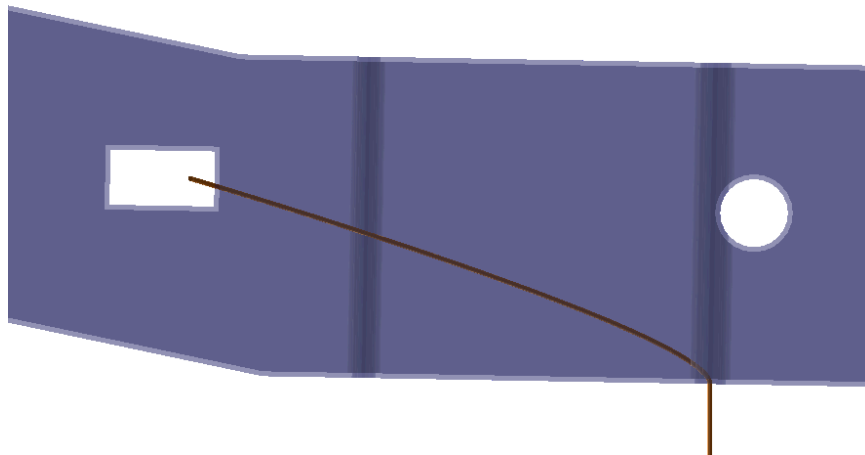
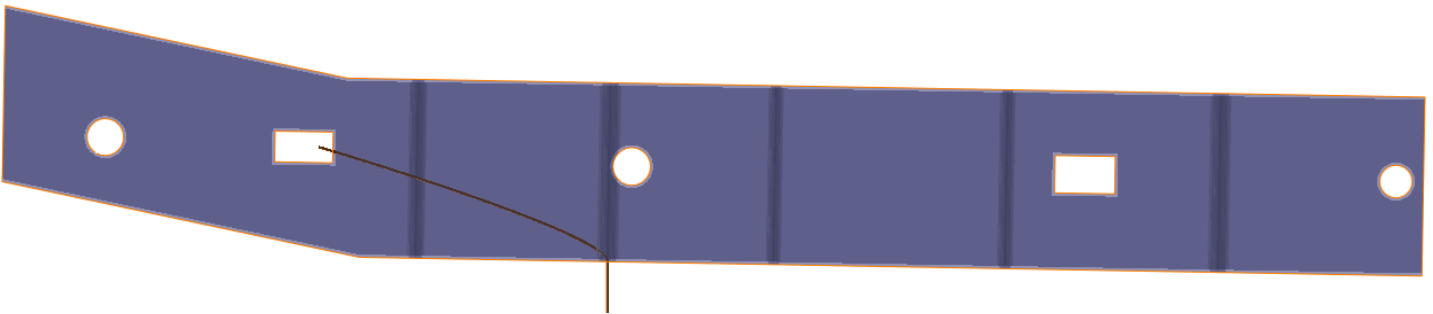
- b. Pass the wire through the 3rd hole in the underside of the frame and back to the rectangular slot on the inside of the frame. This slot will be near the muffler.



- c. Tie the string to the wire and pull it through as you did with the other strings.



- d. Repeat the process of passing the wire through the 4th hole on the underside of the frame, tie the string to the loop on the end of the wire, and pull the string through.





- e. Insert the tapped plate, use the strings to align the thread holes with the third and fourth holes in the underside of the driver frame, and loosely thread another pair of M8 bolts into the plate.

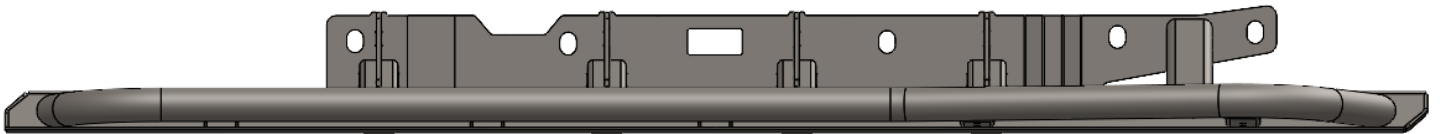
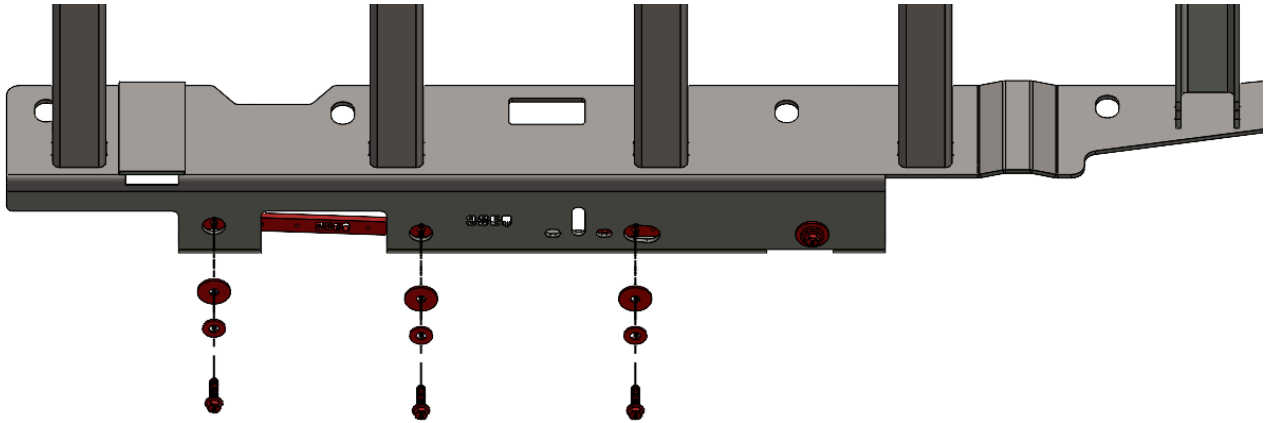




- f. With all the M8 bolts threaded into the plates, trim the excess string hanging down through the bottom of the frame.
  - i. **DON'T TRIM THE RECOVERY STRINGS!**

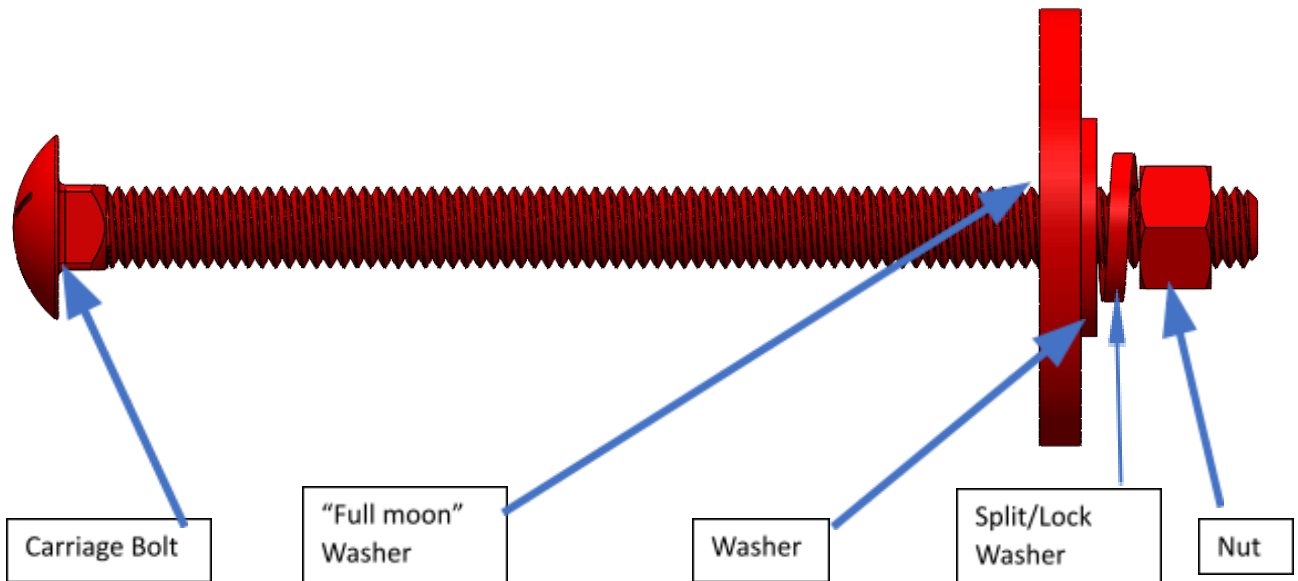
- 20. Identify the driver side slider and lift it up to the frame on the driver side of the vehicle.
  - a. Use of a floor jack or similar equipment will make this process significantly easier.
  - b. The m8 bolts will have enough clearance to fit within the holes in the lower face of the slider. Take your time and lift the slider up while feeding the bolts through the slider frame plate.

21. With the slider up on the vehicle frame and the mounting holes aligned, carefully remove one of the bolts from the bolt plate and reinstall with one (1) of the included 5/16" x 1.25" flat washers. Repeat this process until all the lower m8 bolts have been reinstalled with washers.





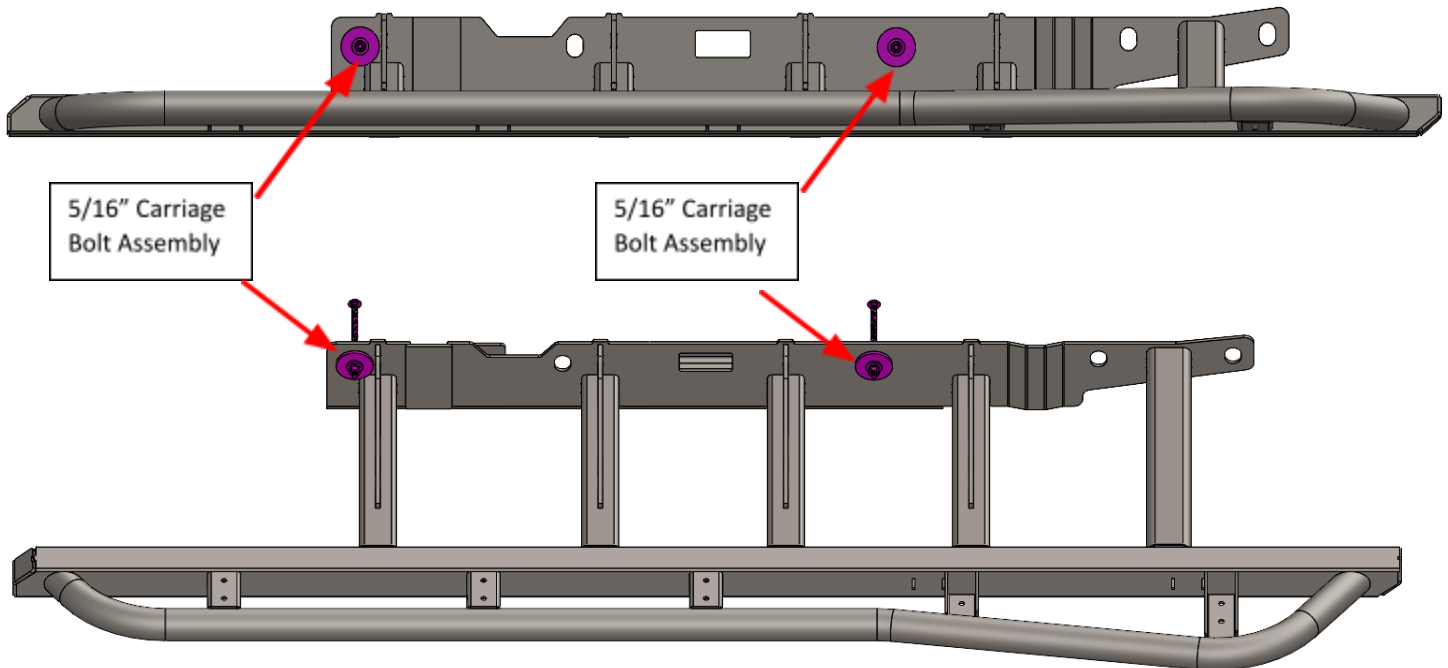
22. Collect the listed hardware and create the following assemblies:



- a. Collect Two(2) of each:
  - i. 5/16" x 5.5" carriage bolt
  - ii. 5/16" flat washer
  - iii. 5/16" split lock washer
  - iv. 5/16" nut
- b. Collect five (5) of each:
  - i. "Full Moon" washer

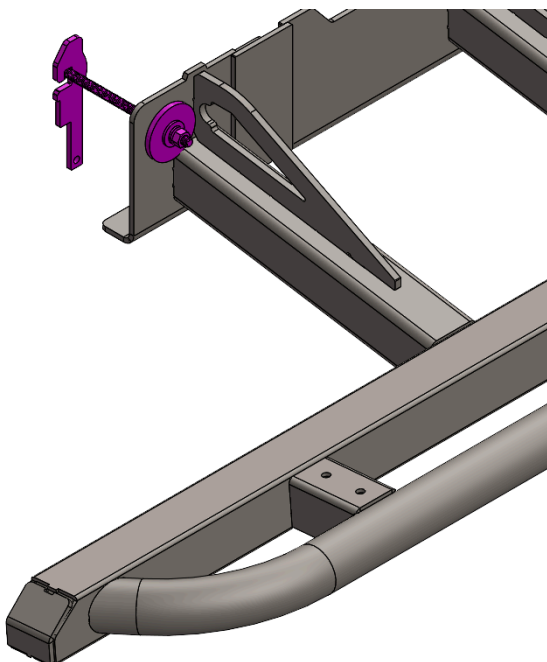
23. Feed the carriage bolt assemblies through the large holes at the top of the frame plate with the head of the bolt facing towards the center of the vehicle.

- a. If needed, adjust the hex nut so that the carriage bolt head is visibly protruding from the inner surface of the vehicle frame.

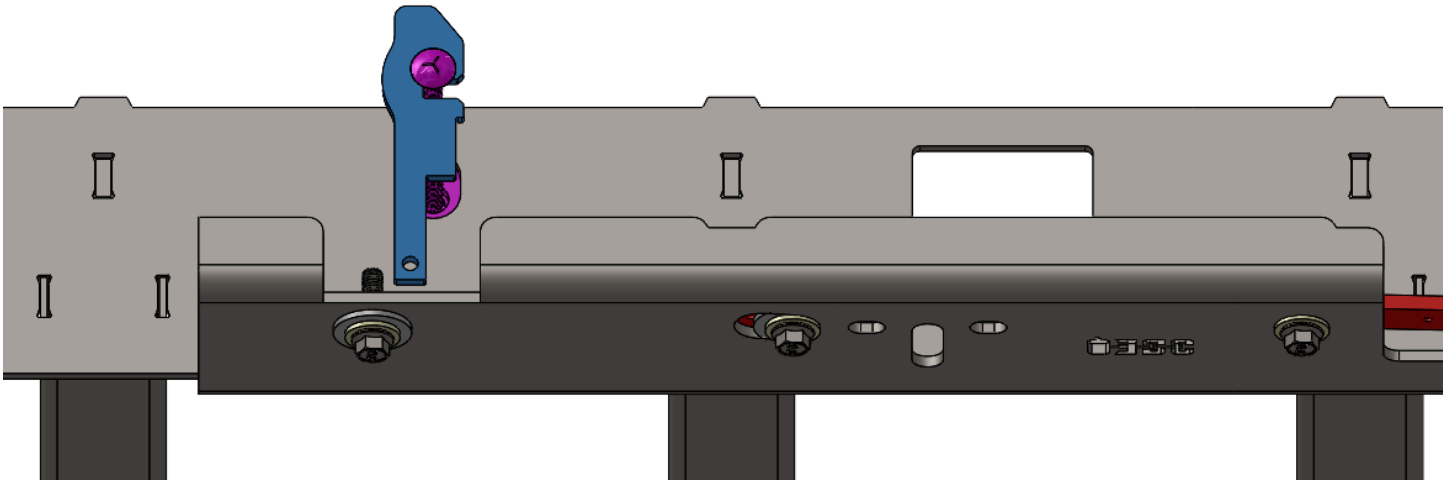
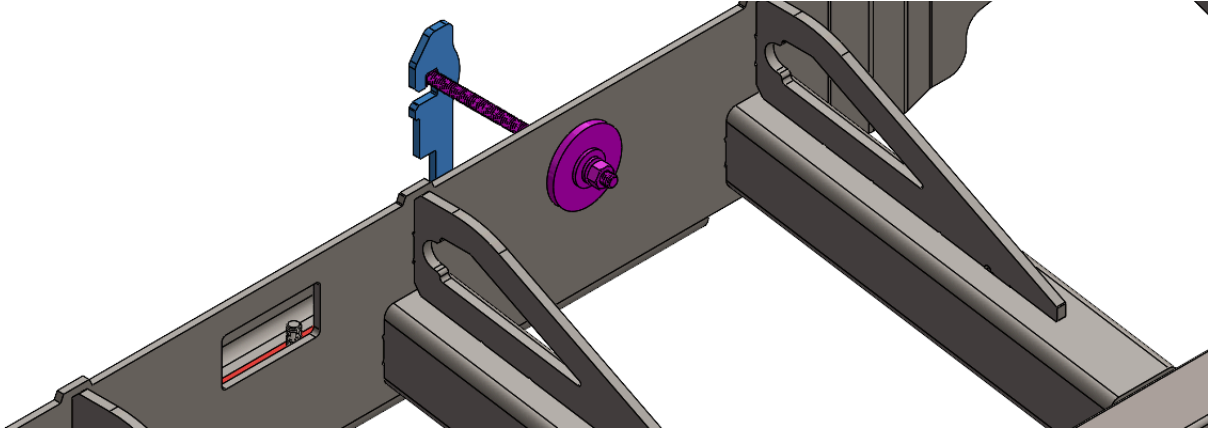


24. Collect a pair of 5/16" carriage bolt plates and proceed to hook the heads of the carriage bolts like you did on the passenger side.

- a. The front 5/16" carriage bolt plate is inserted into the vehicle crossmember, pressed up against the vehicle frame, and hooked on the head of the 5/16" carriage bolt. See [installation video](#) for further clarification(around 11:44)



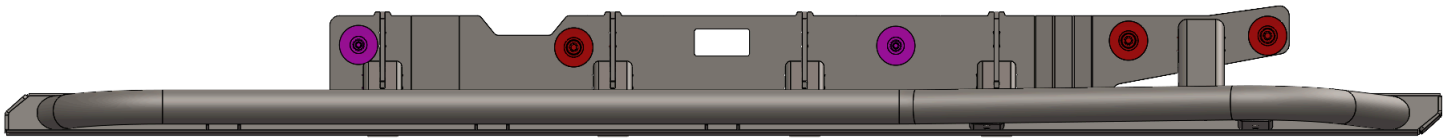
- b. The middle 5/16" carriage bolt plate is inserted between the vehicle crossmember and the vehicle frame. See [installation video](#) for further clarification(around 17:37)



**25. Collect the following hardware but do not assemble:**

- a. Collect three (3) of each:
  - ii. 7/16" x 5.5" carriage bolt
  - iii. 7/16" flat washer
  - iv. 7/16" split lock washer
  - v. 7/16" nut
  - vi. 7/16" carriage bolt plate

**26. From the inside of the vehicle frame, insert a 7/16" x 5.5" carriage bolt through each of the remaining mounting locations (shown in red below). Hook the 7/16" carriage bolt plate on the head of the carriage bolts before installing the remaining 7/16" hardware.**



- a. We found that the best place to tie off the tapped plate's recovery strings were to the bottom of the 7/16" carriage bolt plates. It's much easier to thread the string through the hole in the carriage bolt plate now than when the final installation is completed.



- b. The first 7/16" carriage bolt is placed within the rectangular slot behind the crossmember.



- c. The remaining two 7/16" carriage bolts are inserted into the two holes at the rear of the frame, just above the mount for the lower trailing arm.
  - i. Installation is a little tricky, but not difficult. Lift the carriage bolt above the muffler and lower it down into the mounting locations at an angle to clear the muffler.
    - 1. Take your time to ensure that you don't lose a carriage bolt in your frame. It may be worthwhile to tie some of the trimmed string to the carriage bolt for the added peace of mind of being able to recover the carriage bolt if it does slip.
    - 2. Check out our install video for further clarification!(Around 18:00)



- 27. Tighten passenger slider hardware.**
- a. Torque the 7/16" carriage bolts to 20 lb-ft.
  - b. Torque the 3/8" carriage bolts to 20 lb-ft.
  - c. Torque the 5/16" carriage bolts to 12 lb-ft.
  - d. Torque the M8 bolts to 19 lb-ft.





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