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Rough Country 51065 Installation Instructions

Hidden Winch Mount for Ford Bronco (2021-2025)

Part number: 51065

trailfortress.com/hidden-winch-mount-ford-bronco-rough-country-51065

Scan for fitment, price and install help

ROUGH COUNTRY
SUSPENSION SYSTEMS®

Bronco Winch Tray and Skid Plate

Thank you for choosing Rough Country for all of your suspension needs.

Rough Country recommends that a certified technician install this system. In addition to these instructions, professional knowledge of disassemble/reassembly procedures as well as post installation checks must be known. Attempts to install this system without this knowledge and expertise may jeopardize the integrity and/or operating safety of the vehicle. Please read all the instructions before beginning the installation. Check the kit hardware against the ''Kit Contents'' list below. If question exist, please call us @1-800-222-7023. We will be happy to answer any questions concerning this product. Check all fasteners for proper torque. Check to ensure for adequate clearance between all components. Check and retighten wheels at 50 miles and again at 500 miles. Periodically check all hardware for tightness. Be sure you have all the needed parts and understand where they go. Also, please review the "Tools Needed" list to be certain you have the necessary tools to complete the installation.

PRODUCT USE INFORMATION

⚠WARNING As a general rule, the taller a vehicle is the easier it will roll. We strongly recommend that seat belts and shoulder harnesses be worn at all times. Braking performance and capabilities are decreased when significantly larger/ heavier tires and wheels are used. Do not add, alter, or fabricate any factory or after-market parts which increase vehicle height over the intended height of the Rough Country product purchased. Rough Country makes no claims regarding lifting devices and excludes any and all implied claims. We will not be responsible for any product that is altered.

NOTICE TO DEALER AND VEHICLE OWNER

⚠NOTICE Any vehicle equipped with any Rough country product must have the "Warning to Driver" decal installed on the sun visor or dash. The decal is to act as a constant reminder for whoever is operating the vehicle of its unique handling characteristics. INSTALLING DEALER—It is your responsibility to install the warning decal and to forward these installation instructions on too the vehicle owner for review and to be kept in the vehicle for its service life.



RC ROUGH COUNTRY

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Bronco Winch and Skid Plate

TOOLS NEEDED:
Jack
Wheel Chocks
Drill
1/4” bit
Hex Wrench set
Cut off tools
Sander / Grinder
Rubber Hose Cutter
Phillips Head Driver
Flat Head Pry Tool
Impact Driver
Locking Pliers or
Rubber Hose Pinch Tool
Pliers
Paint

Metric Wrench/Socket
8mm
10mm
15mm
16mm
18mm
19mm

KIT CONTENTS:
Winch Tray
Driver Mount
Pass Mount
Solenoid Bracket
Coolant Pump Bracket
Oil Cooler Bracket
Winch Skid Plate
Winch Controller Extension
Intercooler Spacer (2)
Intercooler Filler Panel
Bumper Filler Panel
Bumper Spacer (4)
Nut Tab (2)

HARDWARE INCLUDED:
Screw (2)
12mm Black Button Head Bolt (2)
12mm Bolt (12)
12mm Flange Nut (14)
12mm Washer (12)
10mm Bolt (4)
10mm Flange Nut (2)
10mm Washer (4)
6mm Black Button Head Bolt (6)
6mm Nut (6)
7/16” x 1.25” Bolt (2)
7/16” Washer (2)
5/16” Self Threading Bolt
Cable Ties (6)
Bolt Retainer (6)
1” Rubber Coated Clamp (1)



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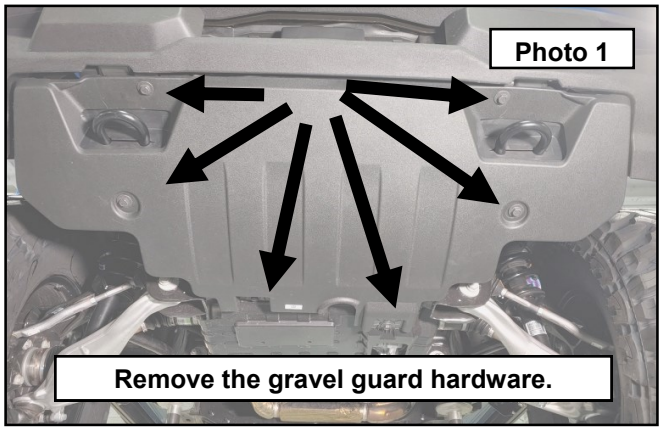
There are THREE different installations based on the factory bumper and engine size on the Bronco. One for the plastic bumper (top picture) and one for the steel bumper (bottom picture) and one for the necessary V6 steps. Follow the steps for the particular bumper that is on your vehicle. Both types of installs you will be replacing your factory front plastic gravel guard or metal skid plate. If you have the Rough Country front fabricated modular bumper installed, you will follow the steps for the plastic bumper installation. The V6 steps will be located in the back of this booklet.

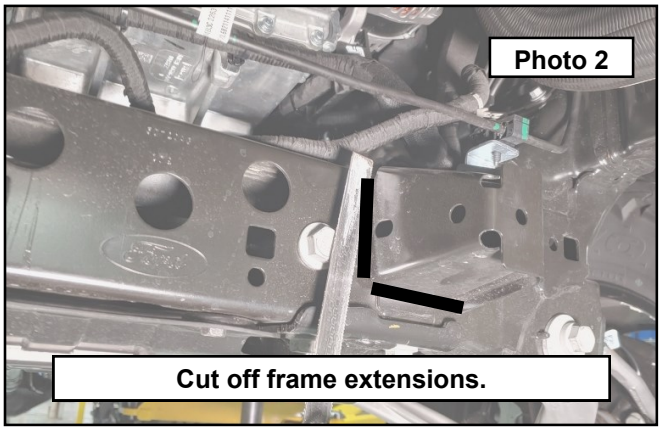




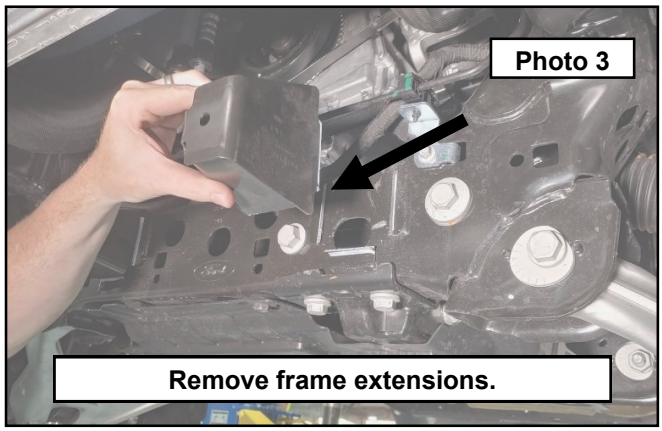
Winch Tray and Skid Plate Installation for Plastic or RC Fabricated Bumper:

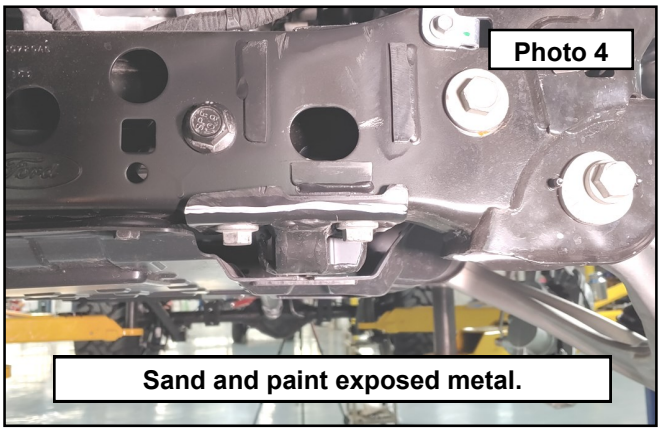
1. Park your vehicle on a clean flat surface, engage the parking brake and block the rear tires.
2. **Save all hardware removed from the vehicle unless otherwise noted.**
3. Open the hood and disconnect the negative terminal on the battery.
4. Remove the gravel guard from the vehicle using a 15mm socket in 6 locations. The two rearmost bolts you only have to loosen to slide the gravel guard off. Once removed, tighten the rearmost bolts back down. **Photo 1**
   **************************V6 Skip to the back of this instruction booklet now for specific steps**************************
5. On the front of the frame you will find extensions that need to be removed to install the winch. Use a suitable cutting tool (Sawzall shown) and remove these even with the frame rail as shown. You will have 4 sides on each extension to cut through. Do not cut through the electrical or brake lines. **Photo 2**



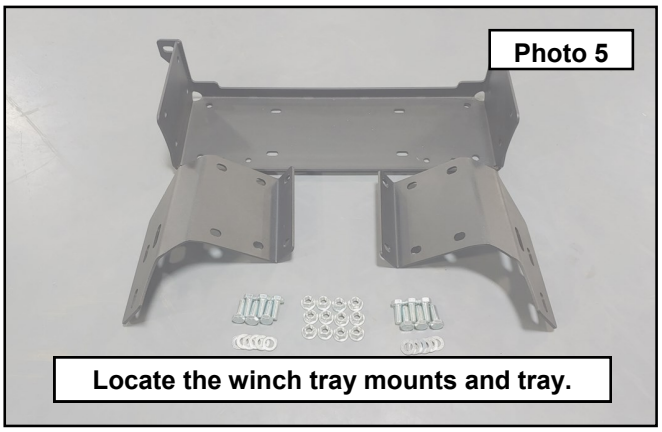


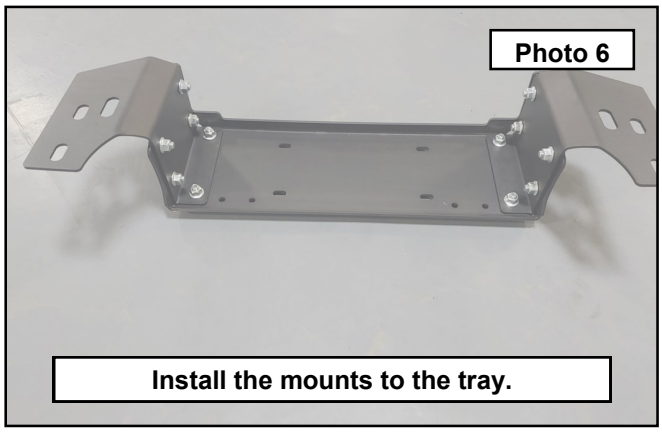
6. Remove the frame extensions. **Photo 3**
7. Sand any burs and sharp edges smooth. Paint the exposed metal with a quality rest preventative paint. **Photo 4**



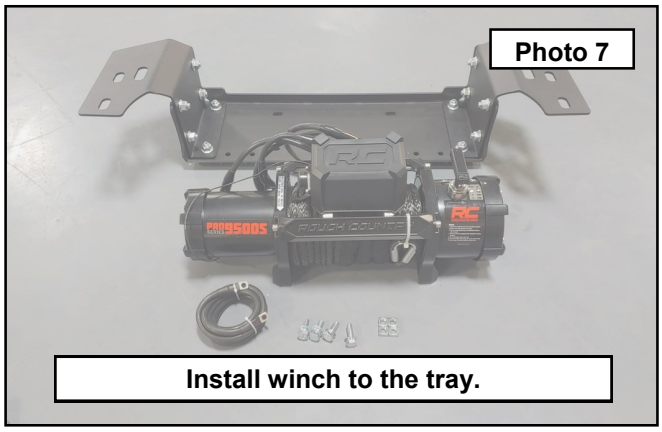


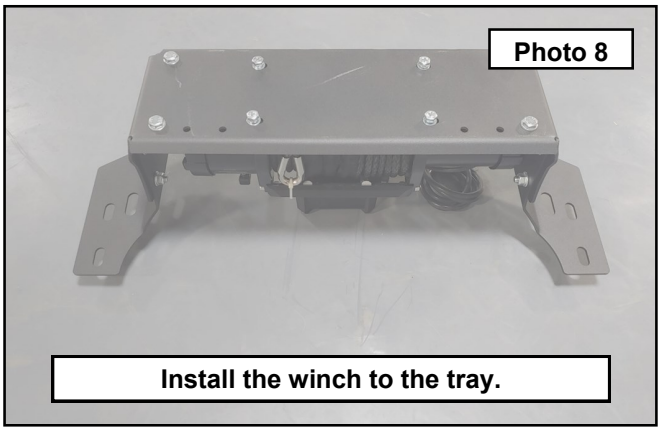
8. Locate the winch tray and the driver and passenger side mounts. **Photo 5**
9. Install the mounts to the tray using the provided 12mm bolts, washers and flange nuts as shown using a 18 and 19mm wrench. **Photo 6**



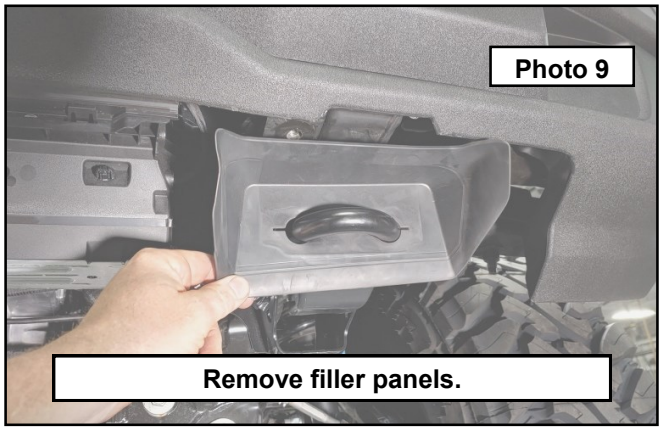


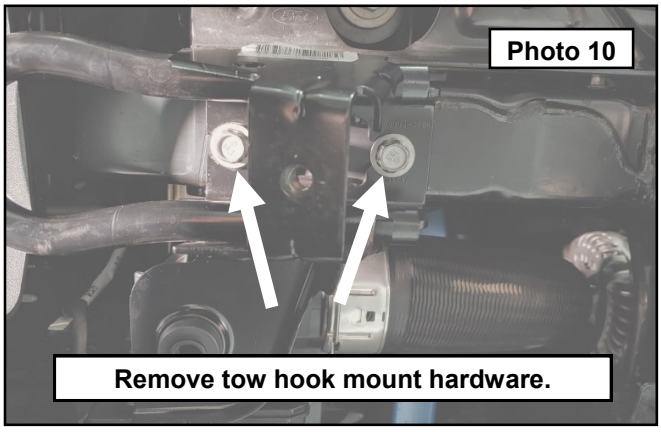
10. Install the winch to the winch tray using the hardware provided with the winch as shown. It is easier to place the winch upside down and then install the tray to the winch. This kit was specifically designed around the RC 9500 and 12000 lb winch with synthetic rope and Hawes fairlead. **Photo 7 / 8**



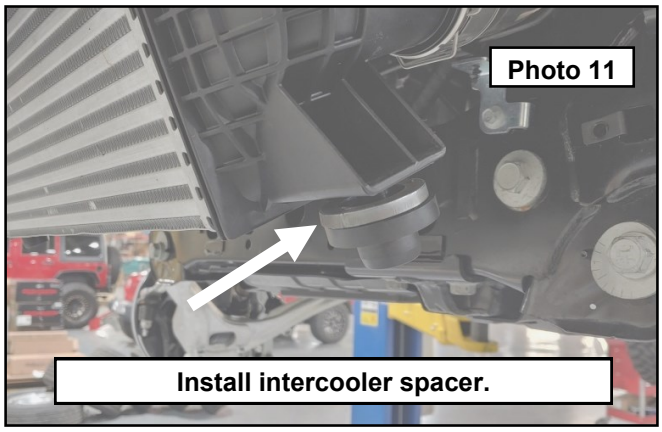


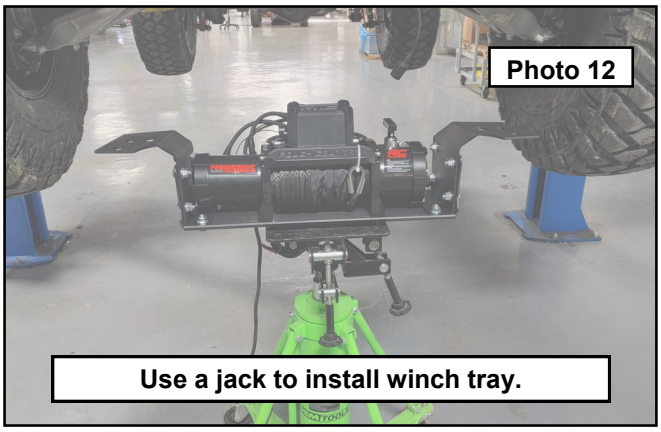
11. If stock tow rings are installed, remove the tow ring filler panel by pulling out and away from the tow rings. **Photo 9**
12. Remove the factory tow rings using a 15mm socket. The intercooler is held in place with these as well and you will need to support it as you remove the tow rings. If you have the Rough Country tow hook brackets installed, remove the same way. **Photo 10**





13. Remove the intercooler rubber isolator by twisting and pulling down away form the intercooler. Install the intercooler washer onto the top of the isolator. Reinstall the rubber isolator onto the intercooler. **Photo 11**
14. Use of an assistant, floor jack, or other jack is recommended. Raise the assembled winch tray up to the frame rails of the vehicle while holding the intercooler out of the way. **Photo 12**





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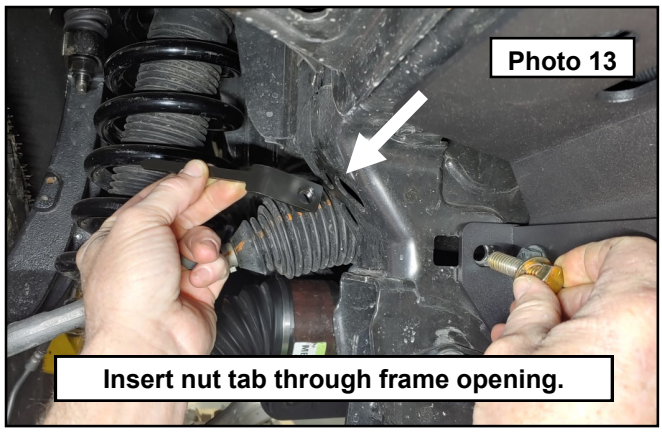
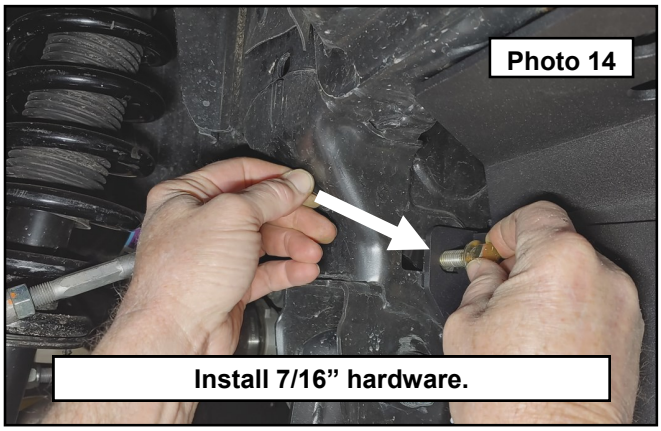
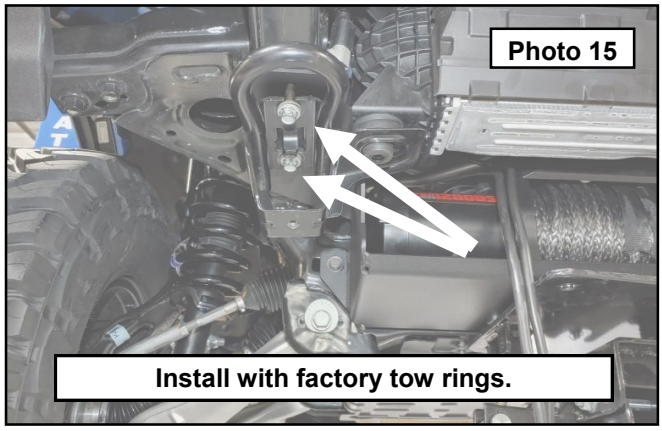
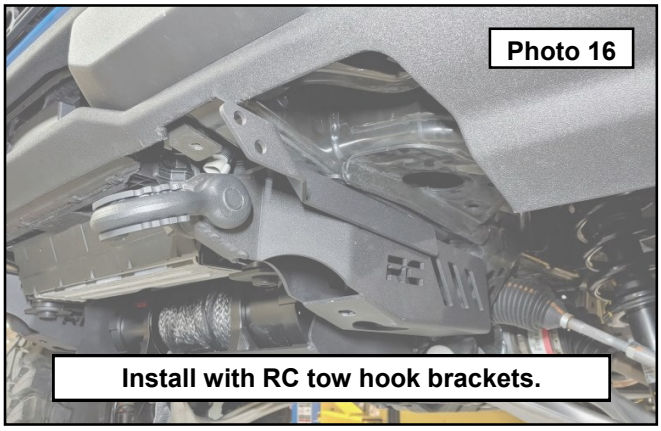
15. Install the provided nut tab through the frame opening until the nut lines up with the round hole in the frame and winch tray. **Photo 13**
16. Install provided 7/16” bolt and washers. Leave loose at this time. **Photo 14**



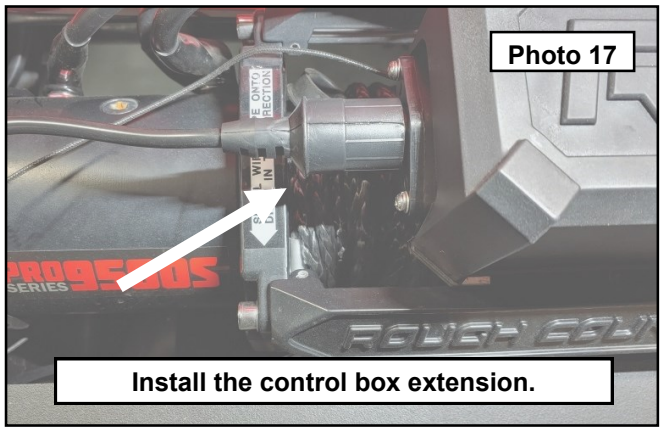


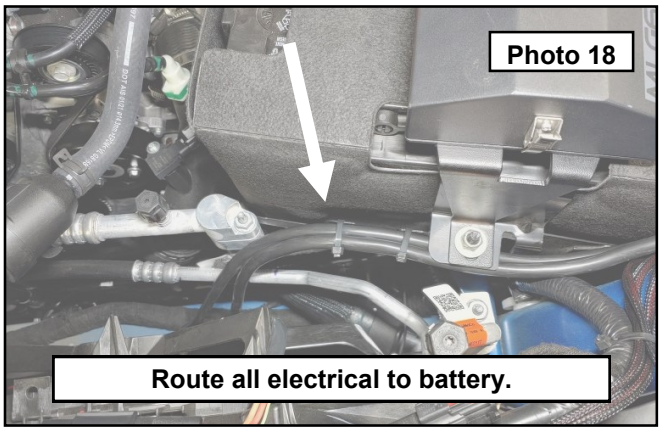
17. If you are installing the factory tow rings back to the vehicle, reuse the factory hardware to sandwich the winch tray to the frame rail while lining up the intercooler mounts. Only snug this hardware up at this time. **Photo 15**
18. If you are installing the Rough Country tow hook brackets, do the same as above with the factory hardware. Once you have both sides in place, torque the back two bolts above the lower control arm cam bolts to 35 ft-lbs, pull the tow hooks as far forward in their slots as possible and torque to 45 ft-lbs. Shown with the Rough Country Bull Bar option brackets from the bull bar kit. **Photo 16**



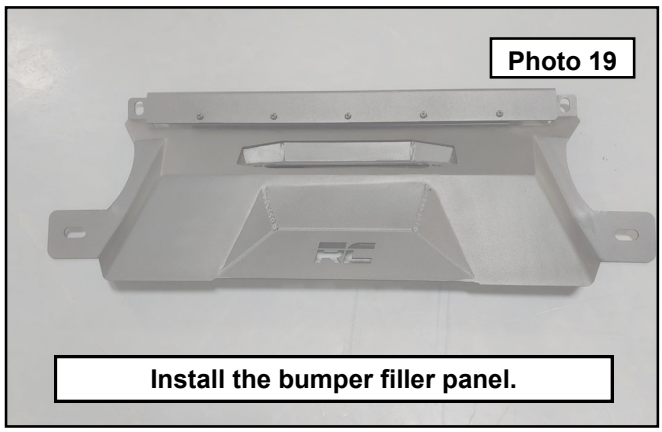


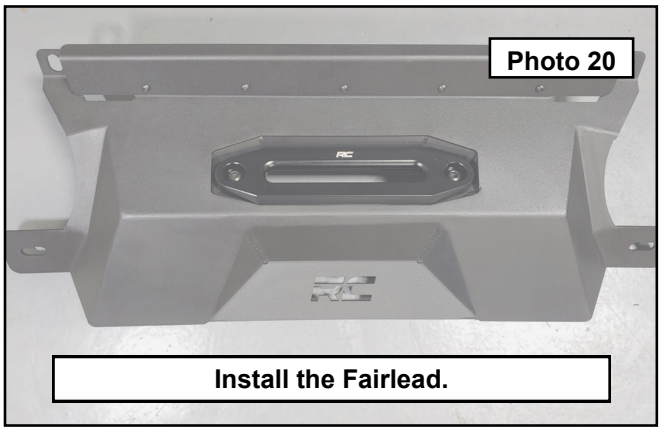
19. Install the provided electrical control box extension to the side of the winch control box. **Photo 17**
20. Route the electrical cables for the winch up through the engine bay to the battery at this time. Cable tie to the battery tray mount and along their route to keep out of harms way from moving components. **Photo 18**



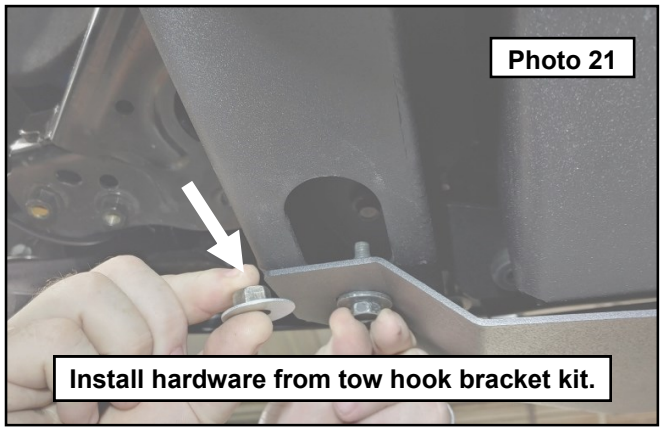


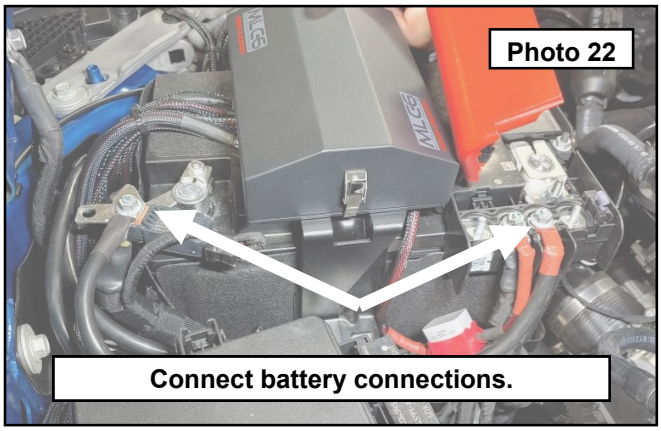
21. Install the bumper filler panel to the winch skid plate using the provided 6mm button head bolts and locking nuts. **Photo 19**
22. Install the Hawes Fairlead to the skid plate using the provided 12mm black button head bolts. **Photo 20**



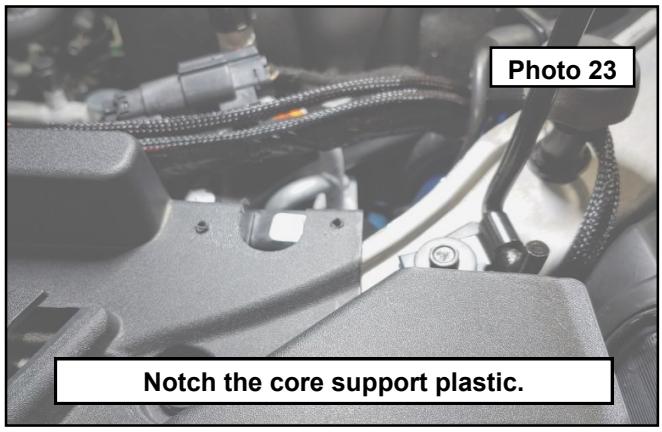


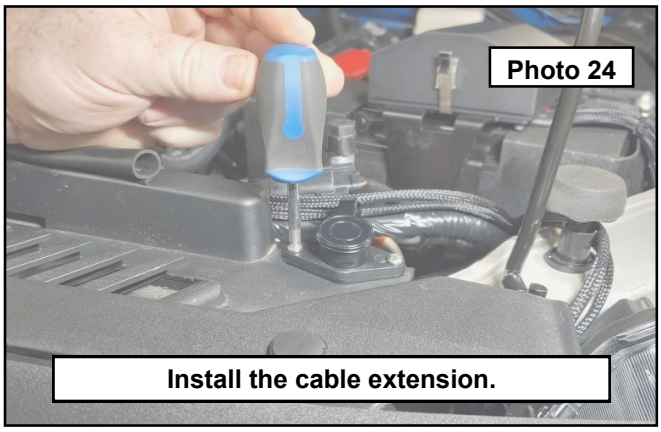
23. Install the winch skid plate to the frame and the factory tow ring brackets using the factory hardware. Torque all to 35 ft-lbs. If you have the Rough Country tow hook brackets, you will need to use the provided 10mm nuts and washers from the tow hook bracket kit and the factory bolts. Slide the nut and washer through the opening in the tow hook bracket. **Photo 21**
24. Under the hood, reconnect the battery negative terminal to the battery. Connect the winch positive and negative cables directly to the connections of the battery. **Photo 22**





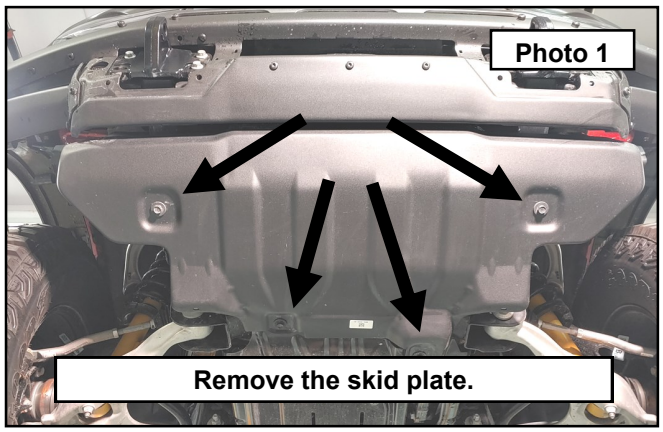
25. Find a suitable place to install the winch control extension to the vehicle. We recommend notching the core support filler panel and screwing in place using the provided screws as shown. **Photo 23**
26. Use a drill and small bit to make a pilot hole. These screws will “self tap” into the plastic. **Photo 24**

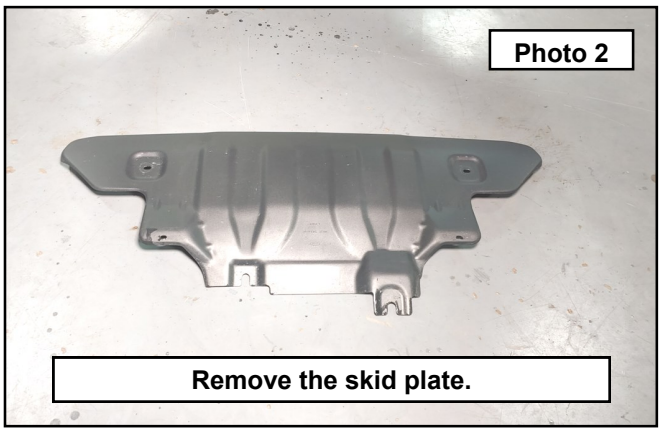




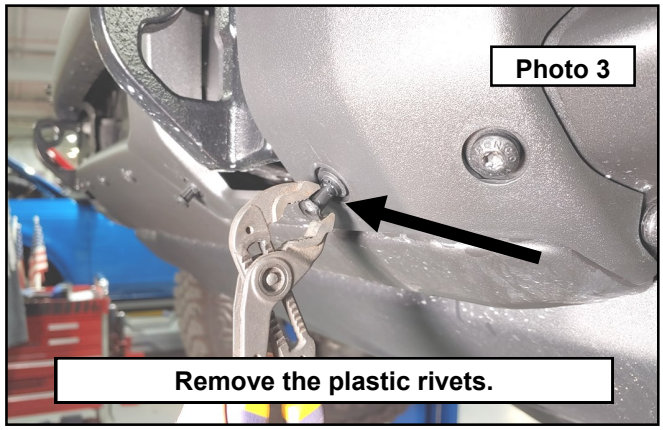
Winch Tray and Skid Plate Installation for Factory Modular Steel Bumper:

1. Park your vehicle on a clean flat surface, engage the parking brake and block the rear tires.
2. **Save all hardware removed from the vehicle unless otherwise noted.**
3. Open the hood and disconnect the negative terminal on the battery.
4. Remove the factory skid plate by loosening the rearmost bolts and completely removing the forward most bolts using a 15mm socket. **Photo 1**
5. Slide the skid plate off the rearmost bolts and set aside. Tighten the rearmost bolts back down. **Photo 2**



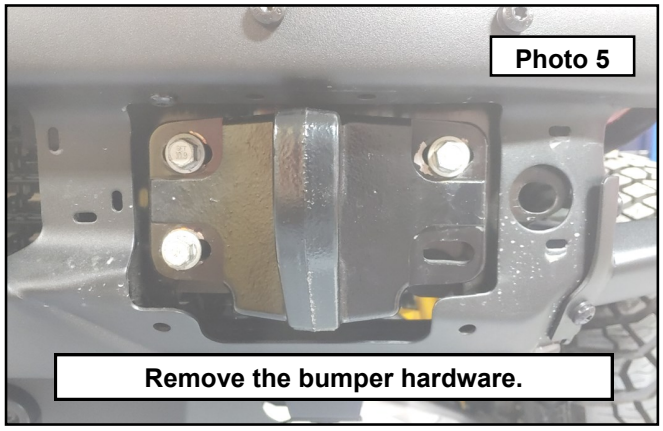


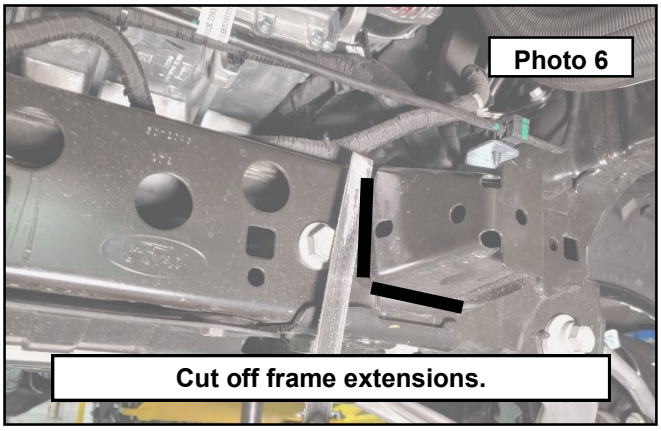
6. Remove the plastic rivets holding the plastic cover in place. Use a pair of pliers or other suitable tool to pull out the middle of the plastic rivet. Remove the rivet body. **Photo 3**
7. Remove the plastic cover and set aside. **Photo 4**



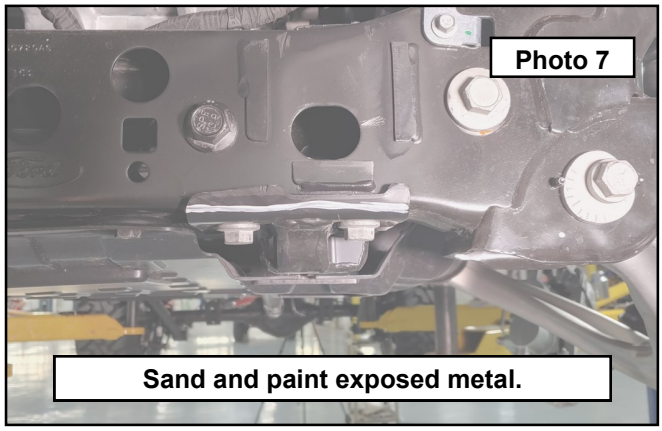


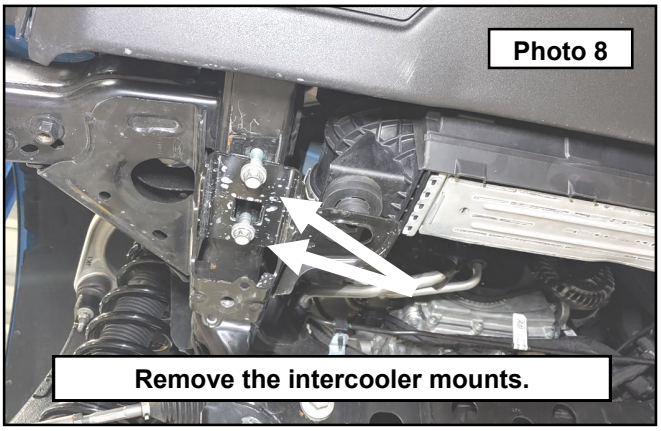
8. If you have proximity sensors in your bumper, disconnect their harness. Behind the plastic cover you will find the main bumper mounting hardware. Have an assistant help hold the bumper and remove the 6 mounting bolts using a 15mm socket. **Photo 5**
   **************************V6 Skip to the back of this instruction booklet now for specific steps**************************
9. On the front of the frame you will find extensions that need to be removed to install the winch. Use a suitable cutting tool (Sawzall shown) and remove these even with the frame rail as shown. You will have 4 sides on each extension to cut through. Do not cut through the electrical or brake lines. **Photo 6**



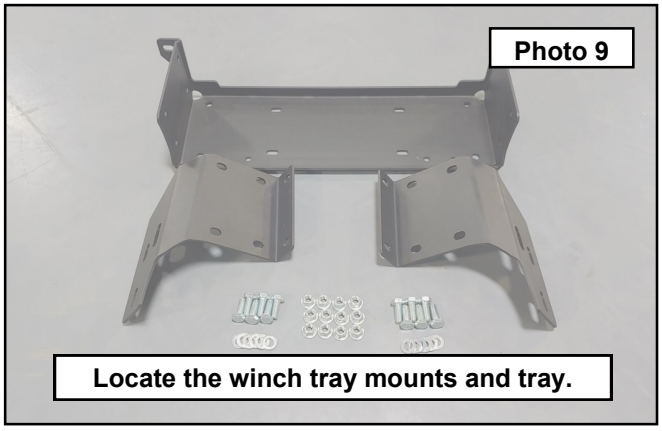


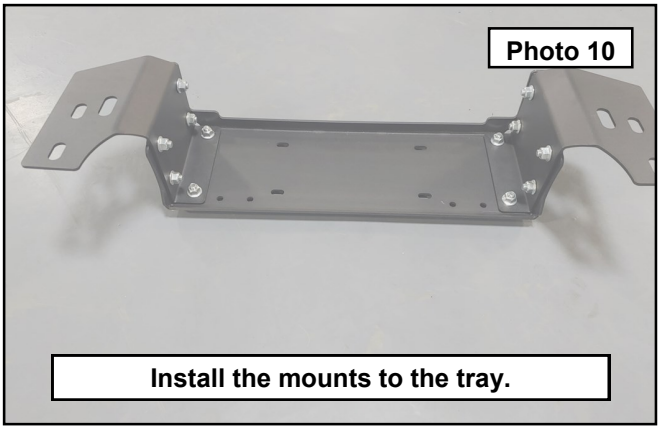
10. Sand any burs and sharp edges smooth. Paint the exposed metal with a quality rest preventative paint. **Photo 7**
11. Remove the factory intercooler mounts using a 15mm socket. Let the intercooler hang out of the way. **Photo 8**



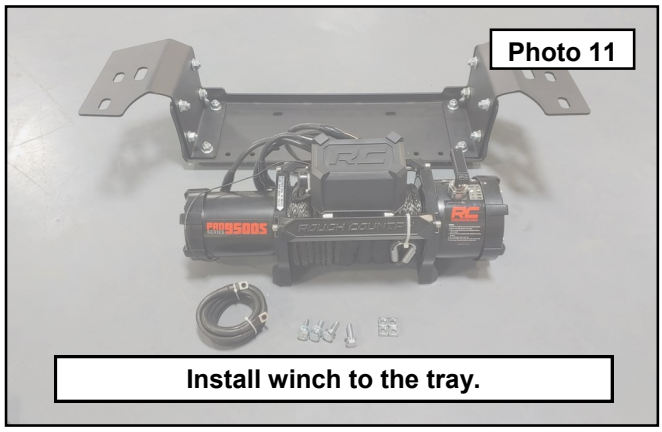


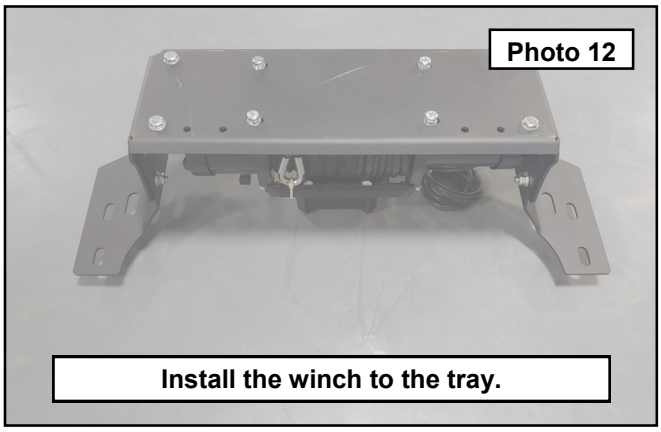
12. Locate the winch tray and the driver and passenger side mounts. **Photo 9**
13. Install the mounts to the tray using the provided 12mm bolts, washers and flange nuts as shown using a 18 and 19mm wrench. **Photo 10**



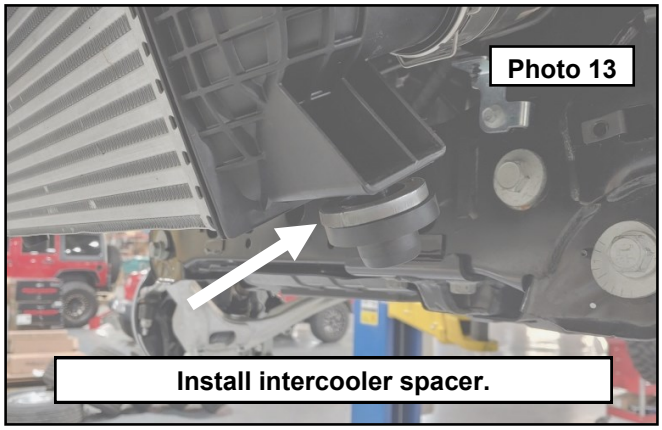


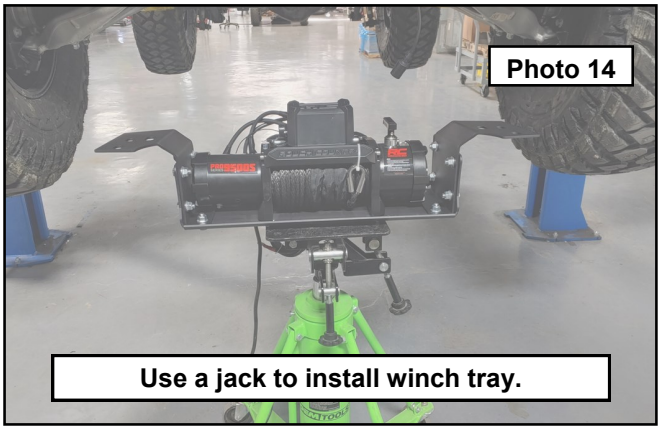
14. Install the winch to the winch tray using the hardware provided with the winch as shown. It is easier to place the winch upside down and then install the tray to the winch. This kit was specifically designed around the RC 9500 and 12000 lb winch with synthetic rope and Hawes fairlead. **Photo 11 / 12**



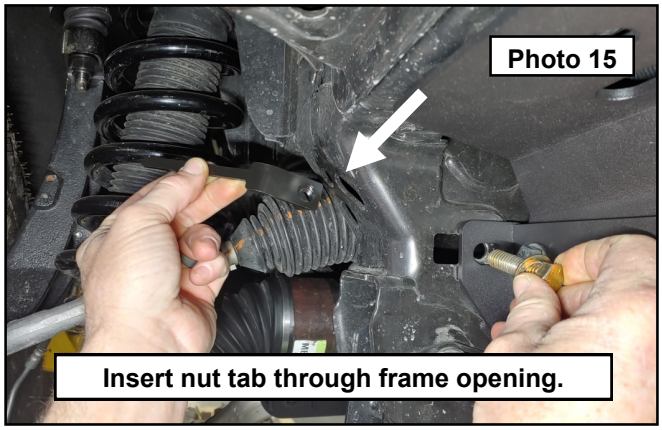


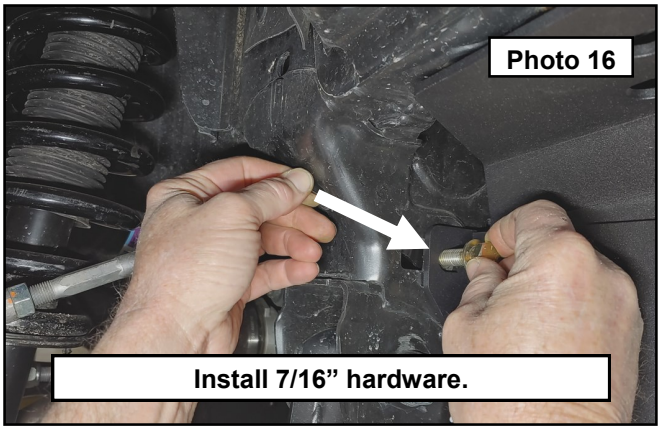
15. Remove the intercooler rubber isolator by twisting and pulling down away form the intercooler. Install the intercooler washer onto the top of the isolator. Reinstall the rubber isolator onto the intercooler. **Photo 13**
16. Use of an assistant, floor jack, or other jack is recommended. Raise the assembled winch tray up to the frame rails of the vehicle while holding the intercooler out of the way. **Photo 14**



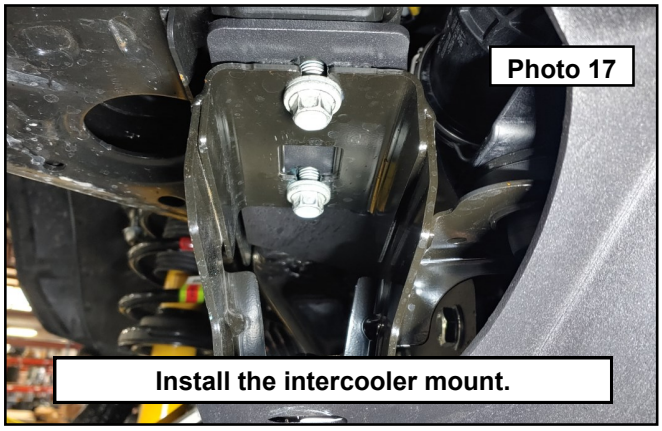


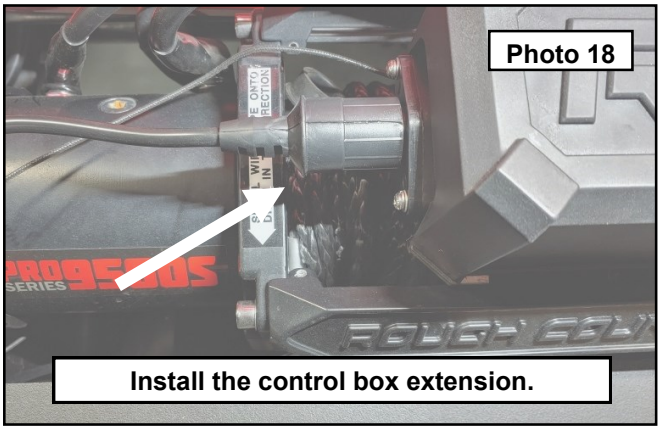
17. Install the provided nut tab through the frame opening until the nut lines up with the round hole in the frame and winch tray. **Photo 15**
18. Install provided 7/16” bolt and washers. Leave loose at this time. **Photo 16**





19. Install the intercooler mounts by reusing the factory hardware to sandwich the winch tray to the frame rail while lining up the intercooler mounts. Snug this hardware up. Torque the 7/16” hardware to 35 ft-lbs and then the intercooler hardware to 45 ft-lbs. **Photo 17**
20. Install the provided electrical control box extension to the side of the winch control box. **Photo 18**





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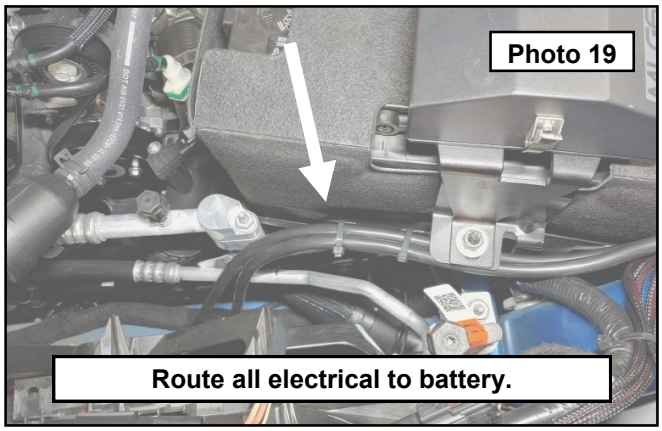
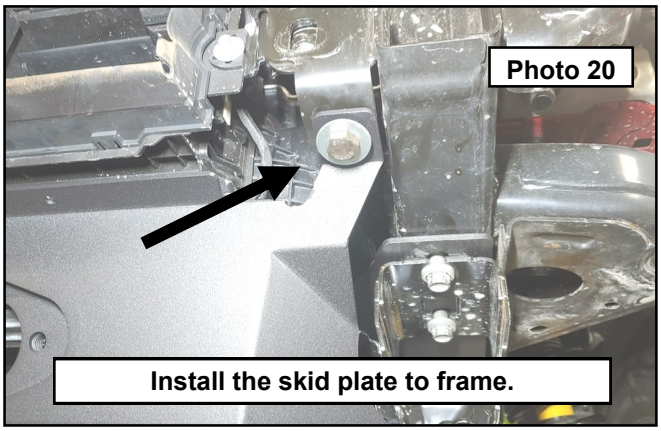
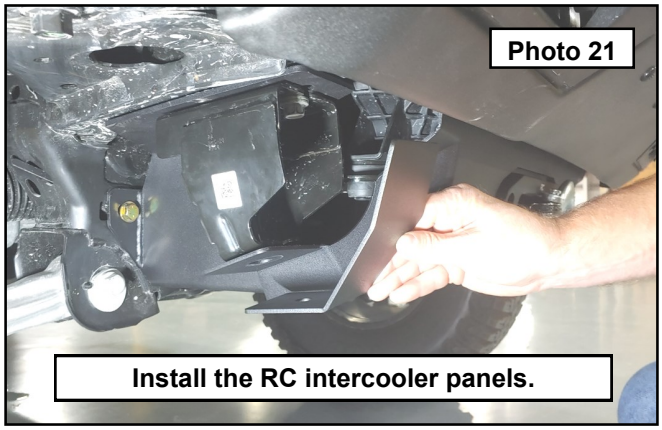
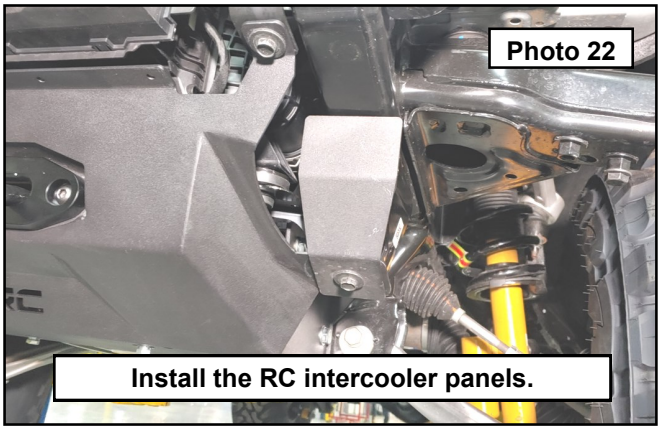
21. Route the electrical cables for the winch up through the engine bay to the battery at this time. Cable tie to the battery tray mount and along their route to keep out of harms way from moving components. **Photo 19**
22. Install the RC skid plate to the frame mounts previously hidden by the bumper using the provided 10mm bolts and washers. Do not fully tighten at this time. **Photo 20**



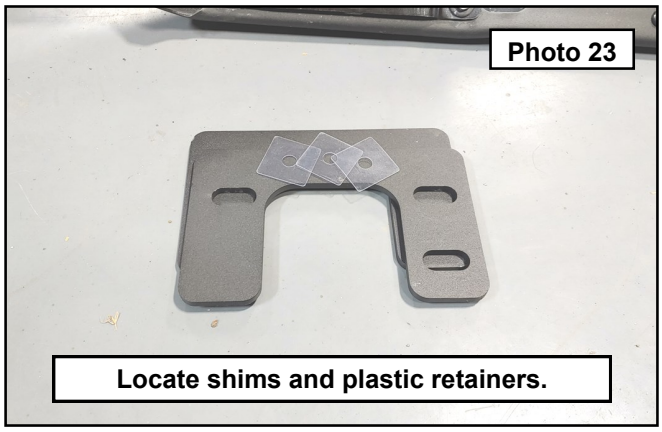


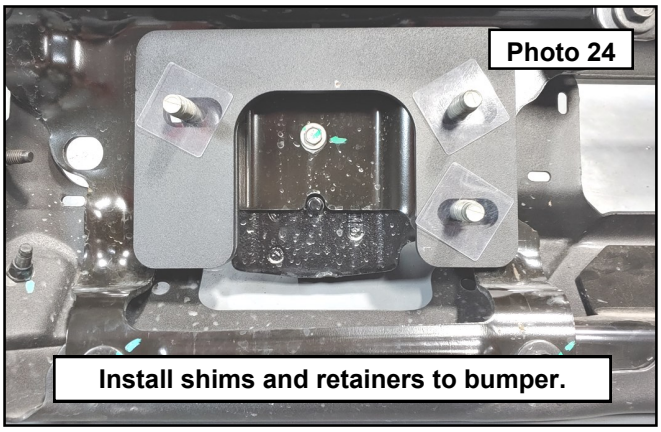
23. Install the RC intercooler filler panels to the skid plate and the intercooler mounts using the factory hardware from the old skid plate. Once all bolts are started, torque all the skid plate mounts to 35 ft-lbs. **Photo 21 / 22**



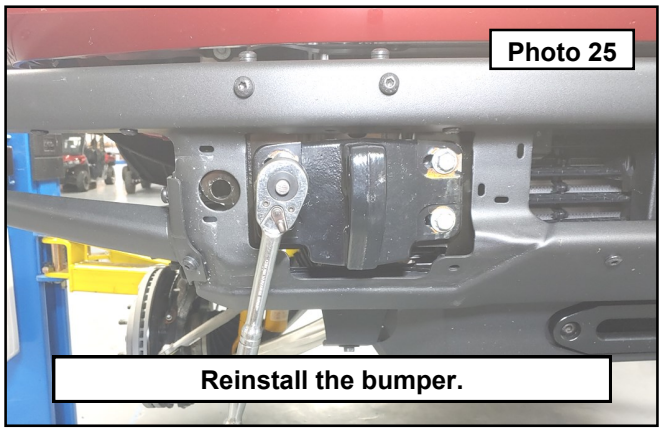


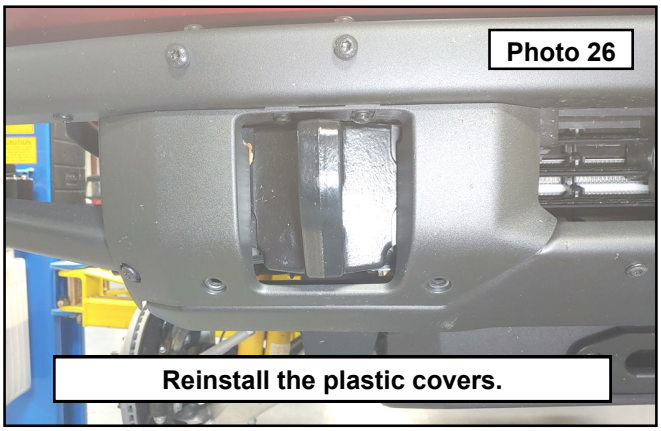
24. Locate your bumper shims (2 per side), and plastic bolt retainers (3 per side). **Photo 23**
25. Run the factory bolts through the bumper mounting holes, install 2 shims per side onto the bolts, and install the plastic bolt retainers onto the threads of the bolts. These are to hold the shims in place while you line the bumper up to the frame rails. **Photo 24**



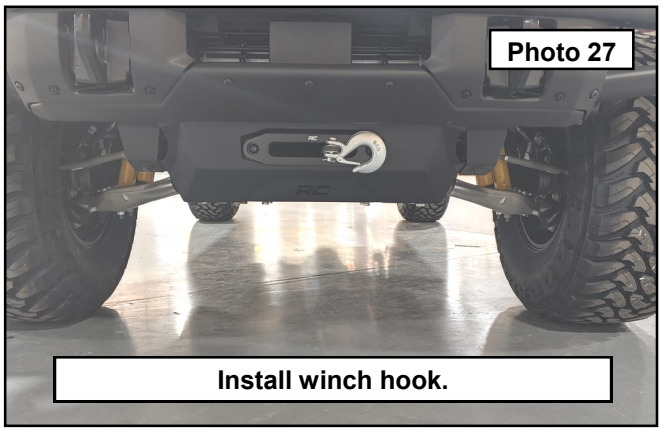


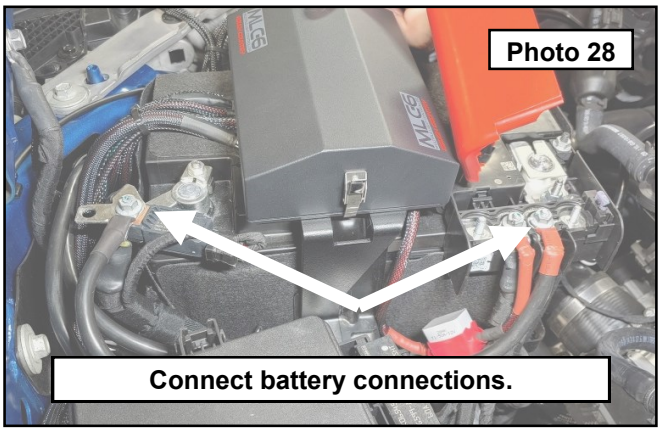
26. Use an assistant to help install the bumper to the frame rails using a 15mm socket. Adjust until the bumper is level and centered on the frame. Torque the hardware to 45 ft-lbs. **Photo 25**
27. Reinstall the plastic bumper covers using the previously removed plastic rivets by inserting the body into the hole and then the head into the body. Push the head in until it seats. **Photo 26**



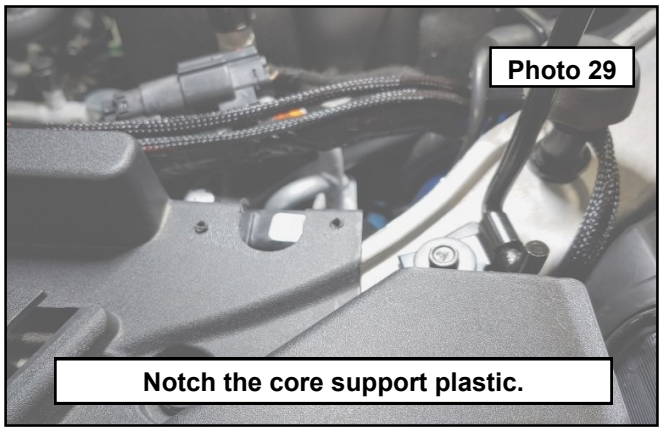


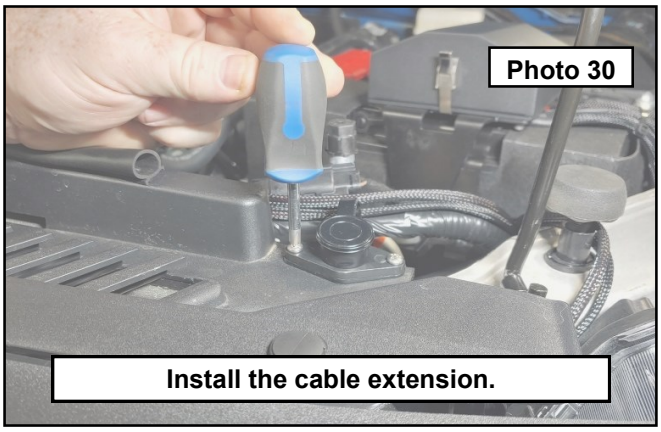
28. Install the winch hook. **Photo 27**
29. Under the hood, reconnect the battery negative terminal to the battery. Connect the winch positive and negative cables directly to the connections of the battery. **Photo 28**





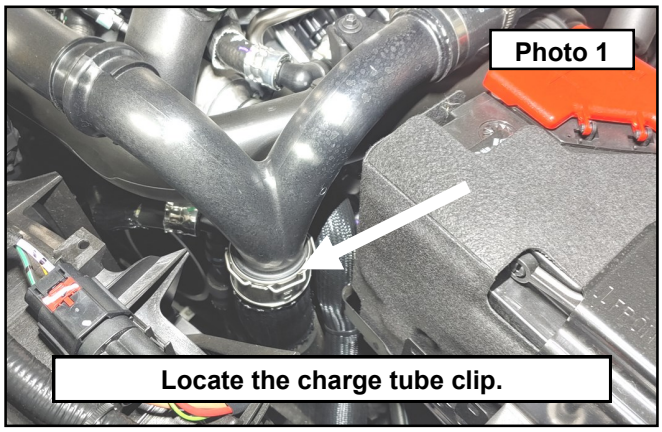
30. Find a suitable place to install the winch control extension to the vehicle. We recommend notching the core support filler panel and screwing in place using the provided screws as shown. **Photo 29**
31. Use a drill and small drill bit to drill a pilot hole. These screws will “self tap” into the plastic. **Photo 30**

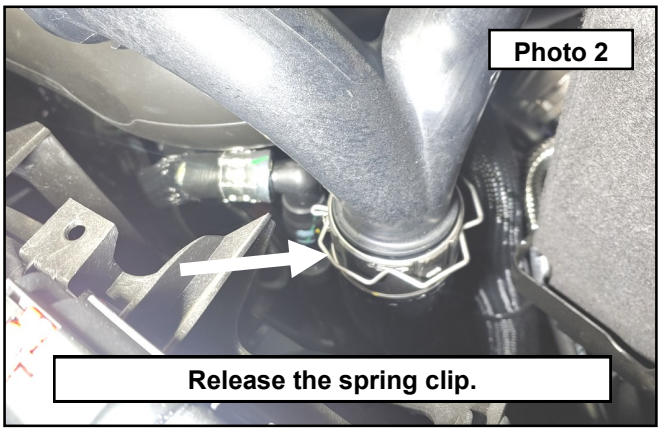




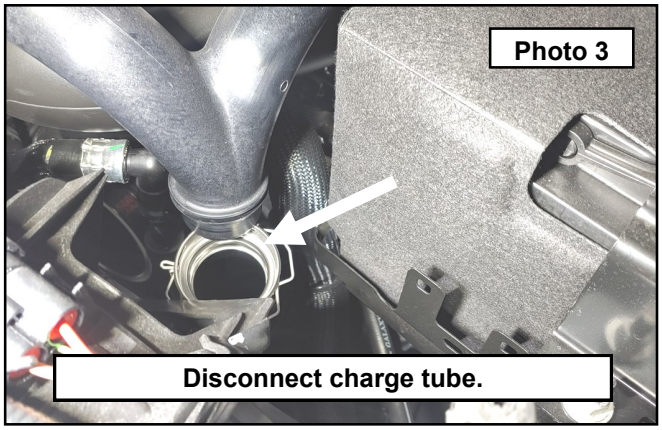
V6 Model Instructions:

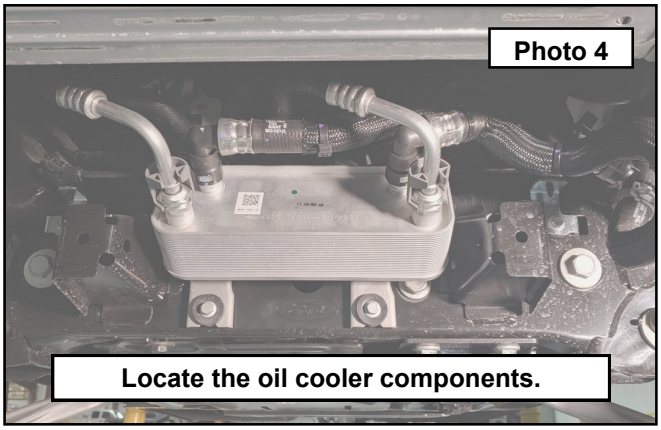
1. Under the hood you will disconnect the driver side charge tube next to the battery by releasing the spring clip. **Photo 1**
2. Pull spring clip back towards the battery until you get the ears to lock into their notches. **Photo 2**



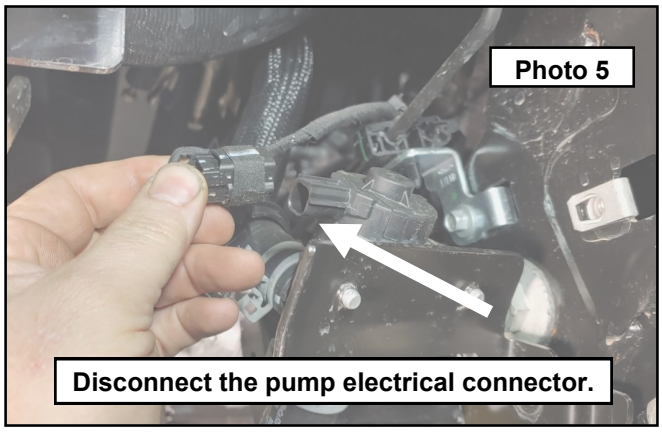


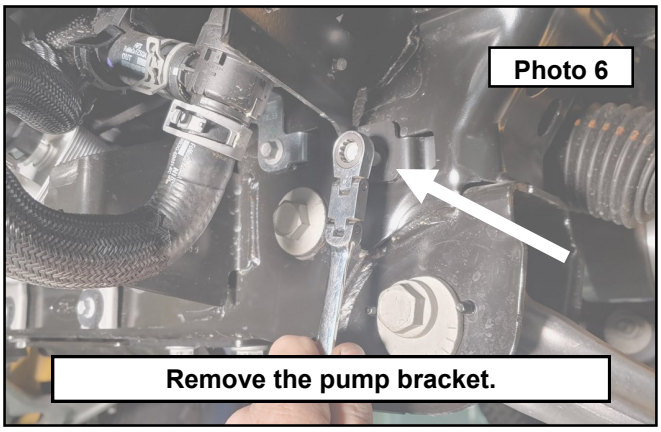
3. Gently push down on the charge tube until it is fully disconnected from the upper plenum. **Photo 3**
4. Move to under the vehicle and locate the transmission cooler and hoses on the front crossmember. You will be removing the coolant pump, coolant hoses and oil cooler. **Photo 4**



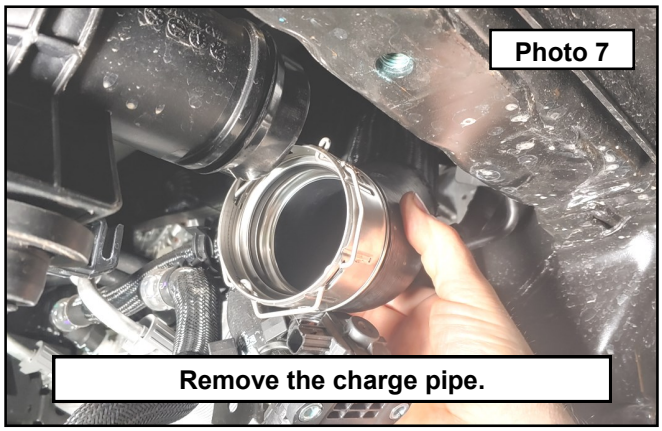


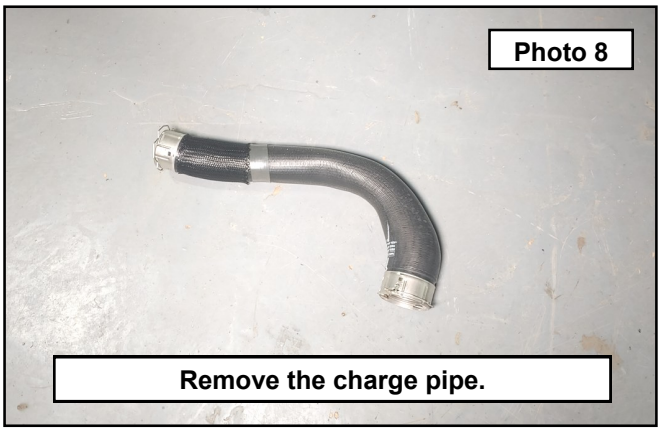
5. Disconnect the coolant boost pump electrical connection. **Photo 5**
6. Remove the coolant boost pump from the frame above the lower control arm mount using a 10mm wrench. Once the bracket is removed from the frame, remove the clip nut from its hole using a pry tool. **Photo 6**



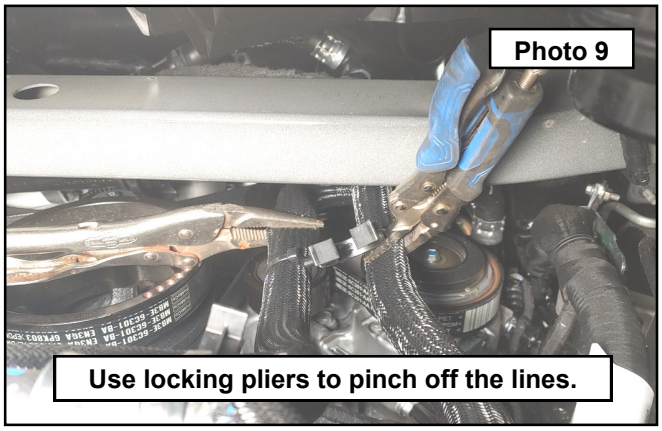


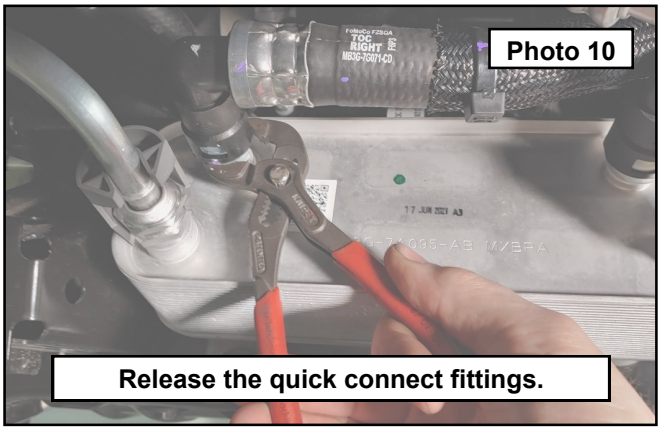
7. With the boost pump out of the way, disconnect the charge pip lower connection in the same fashion as the upper mount. Push towards the engine and then rotate the pipe to remove it from the vehicle. Once removed, unlock the spring clips so that they pop back into place in their mounts. This will allow a positive connection when reinstalled. **Photo 7 / 8**



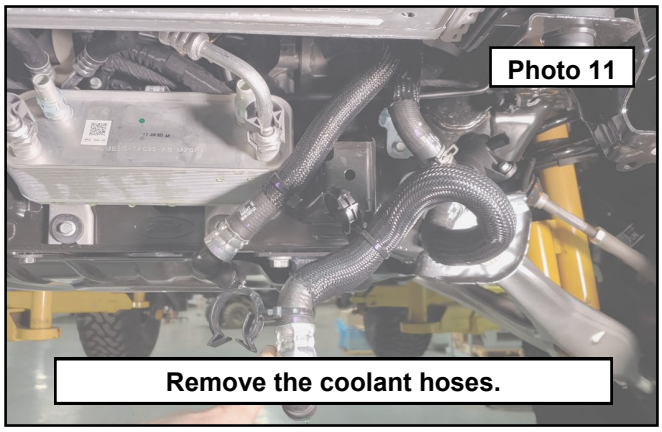


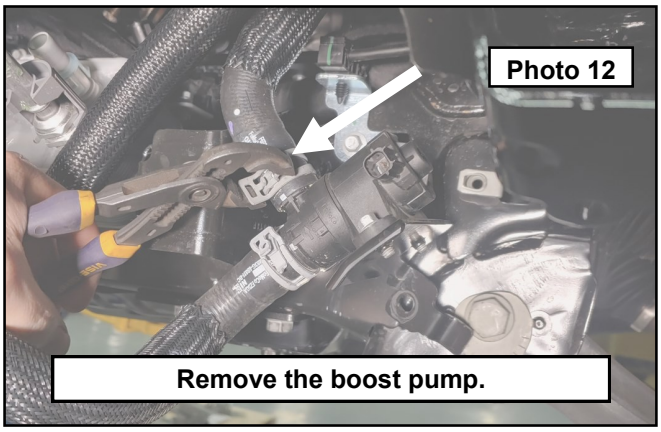
8. Locate both of the feed and return coolant lines and use a pair of locking pliers to pinch off the coolant flow. Do not damage the lines. Clamp the passenger line up above the factory tie clamp so that the piers are out of the way for future installation instructions. **Photo 9**
9. Place a container under the cooler to catch lost coolant. Use a pair of pliers to depress the locking clip under the quick connect of the coolant lines. **Photo 10**



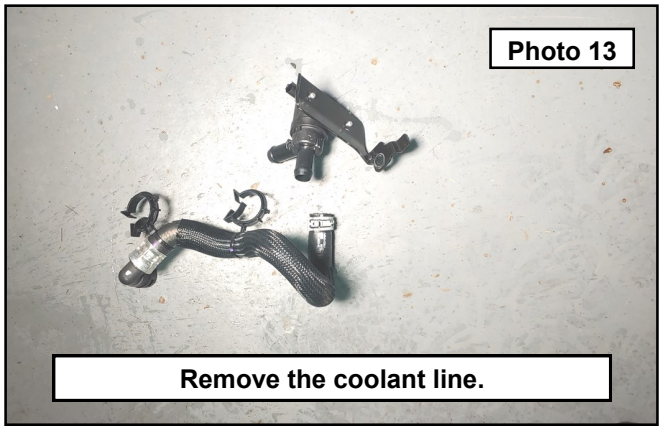


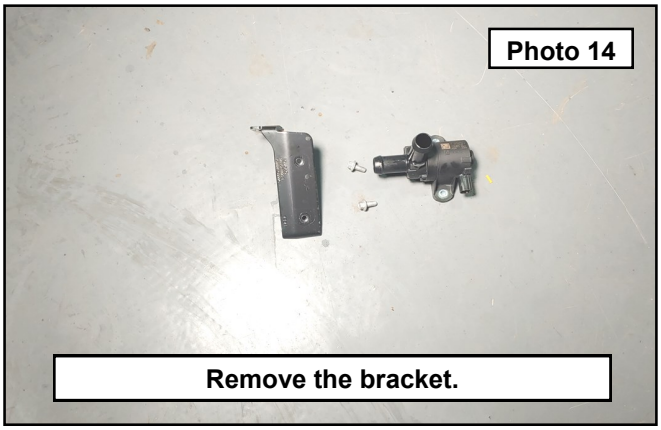
10. Pull the coolant line off the fittings. **Photo 11**
11. Use a pair of pliers to compress the hose clamp on the boost pump. Remove the boost pump from the hose. **Photo 12**



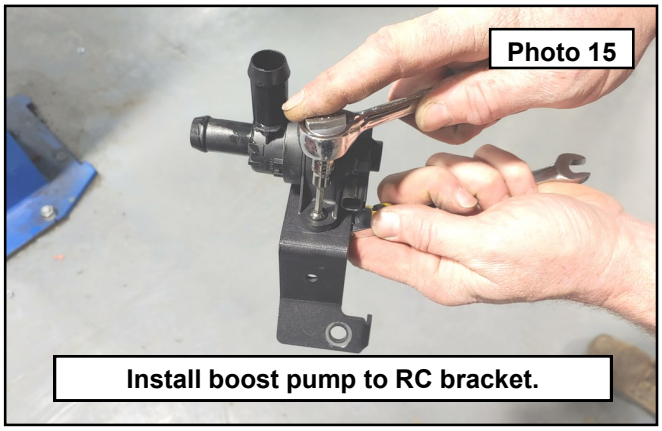


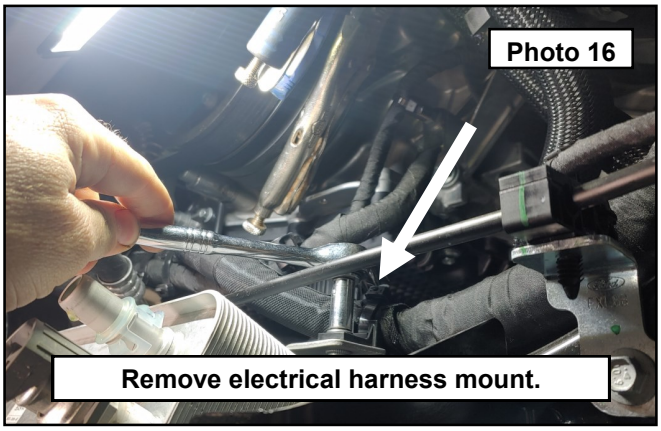
12. Remove the remaining coolant line from the boost pump. **Photo 13**
13. Remove the boost pump from the factory bracket using a 8mm socket. **Photo 14**



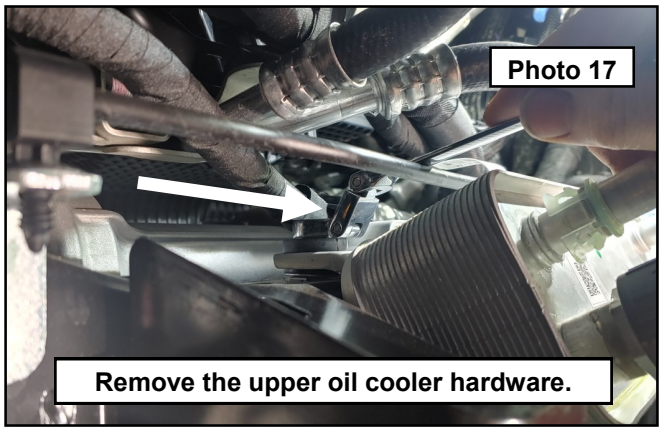


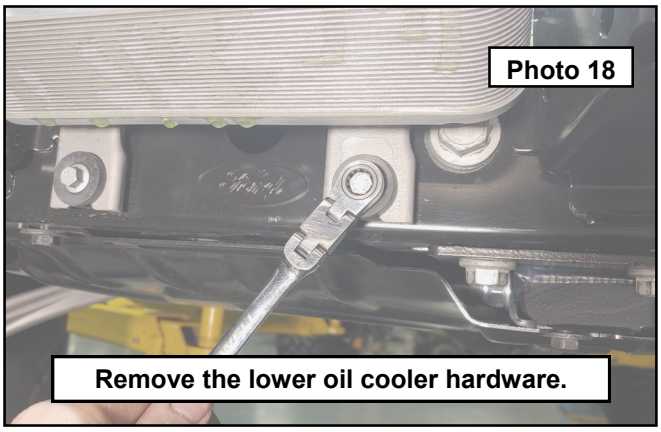
14. Install the boost pump to the Rough Country bracket as shown using the provided 6mm button head bolts and nuts. **Photo 15**
15. On top of the oil cooler, remove the wire harness mount using a 8mm socket. **Photo 16**





16. Remove the two oil cooler mounts on the top of the frame using a 10mm wrench. **Photo 17**
17. Remove the two oil cooler mounts on the front of the frame using a 10mm wrench. **Photo 18**





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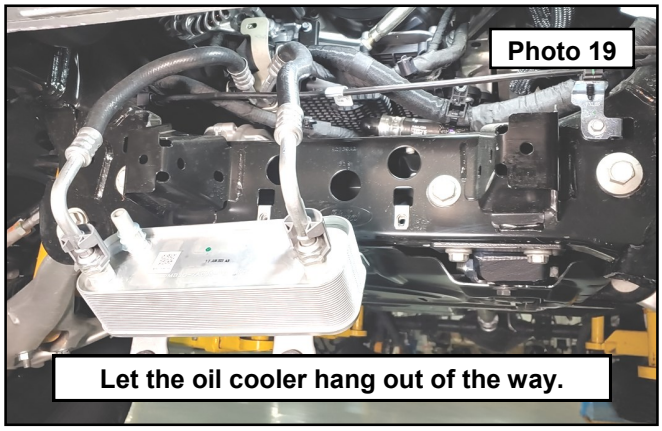
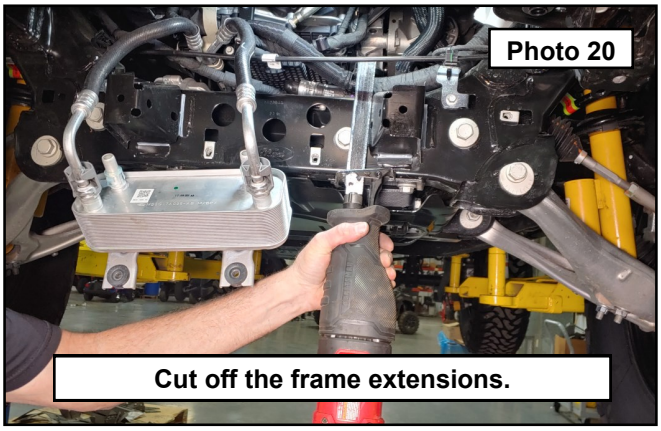
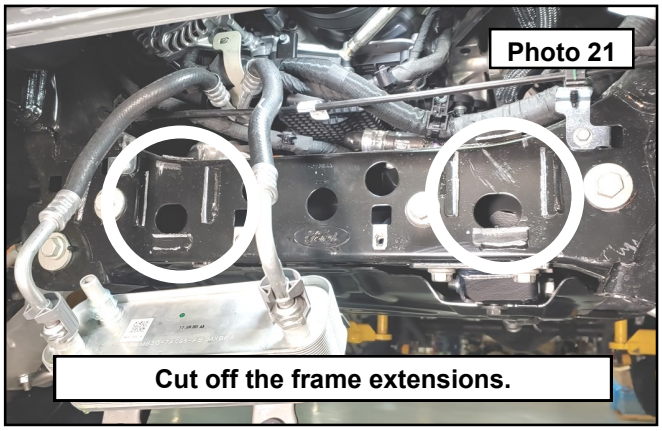
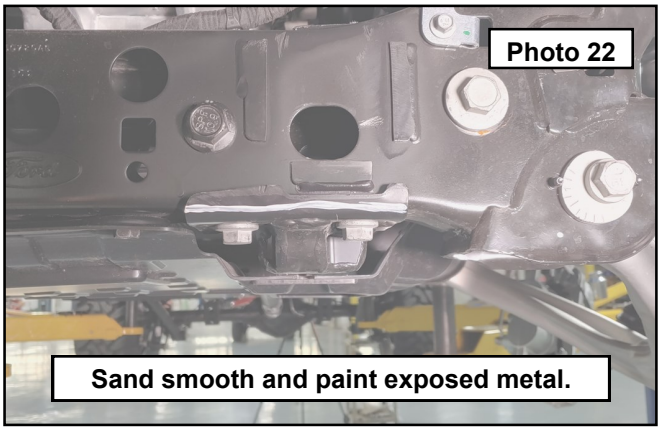
18. Let the oil cooler hang out of the way. **Photo 19**
19. On the front of the frame you will find extensions that need to be removed to install the winch. Use a suitable cutting tool (Sawzall shown) and remove these even with the frame rail as shown. You will have 4 sides on each extension to cut through. Do not cut through the electrical or brake lines. **Photo 20**



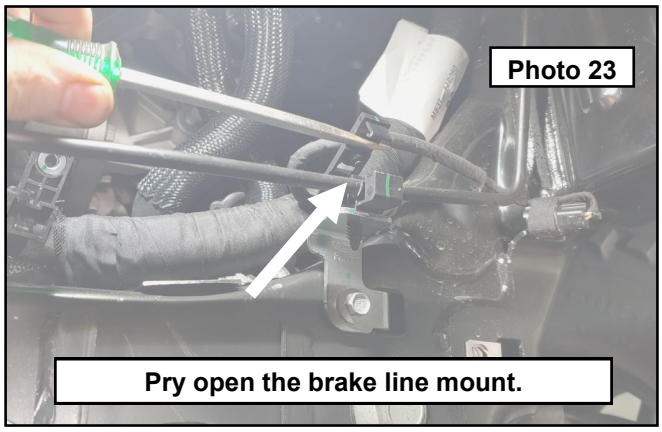


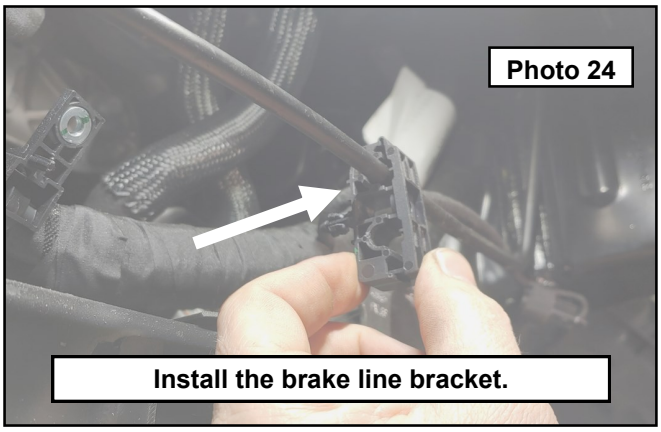
20. Repeat the process for both frame extensions. **Photo 21**
21. Sand any burs and sharp edges smooth. Paint the exposed metal with a quality rest preventative paint. **Photo 22**



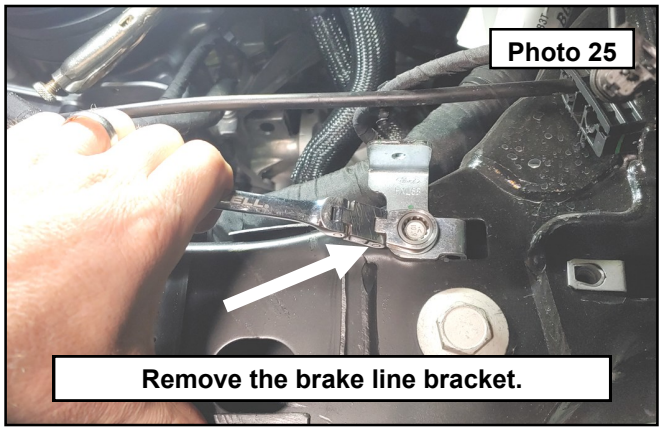


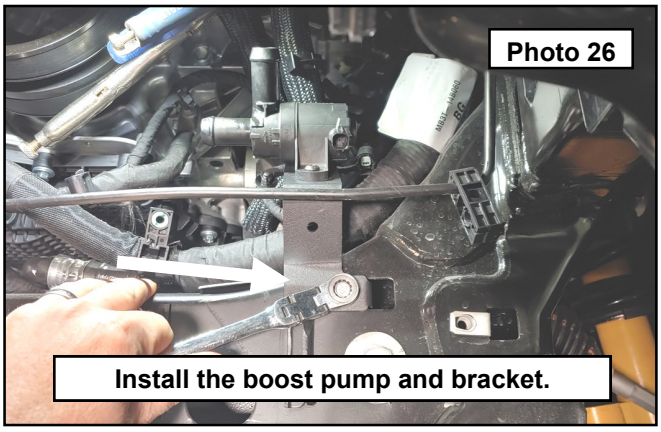
22. Use a flat head pry tool to open up the clamp holding the hard brake line to the frame. **Photo 23**
23. Remove the plastic mount from the metal bracket. Relocate the metal brake line into the rearmost recess on the plastic mount. Close the mount until it locks. **Photo 24**



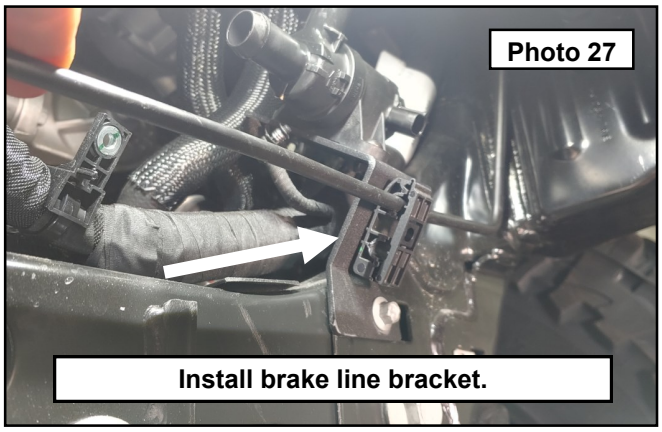


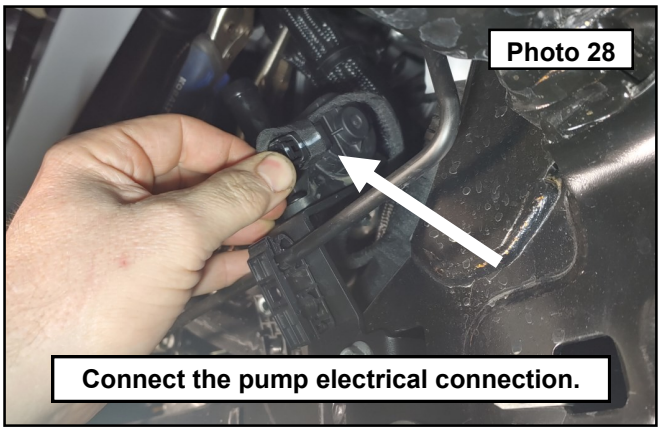
24. Remove the brake line metal bracket using a 10mm wrench. Save the bracket as you will reuse it later. **Photo 25**
25. Install the assembled boost pump and bracket to the frame in the place of the brake line bracket using the factory hardware. Set the assembly straight up and tighten the hardware. **Photo 26**



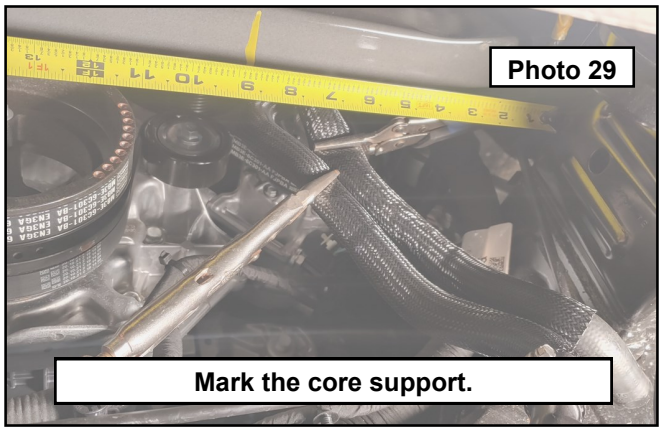


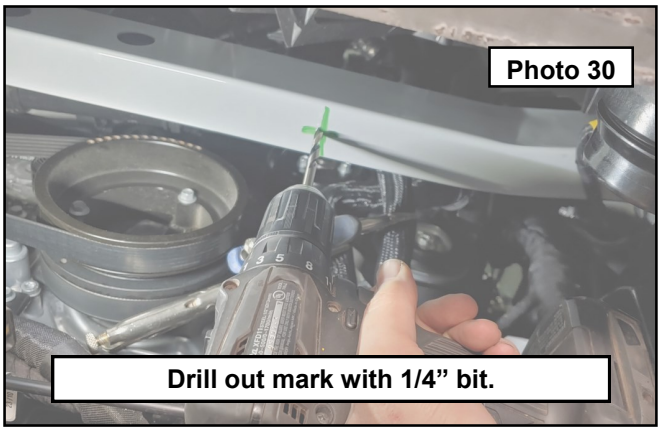
26. Install the brake line plastic mount to the boost pump bracket. **Photo 27**
27. Connect the boost pump electrical connecter. **Photo 28**



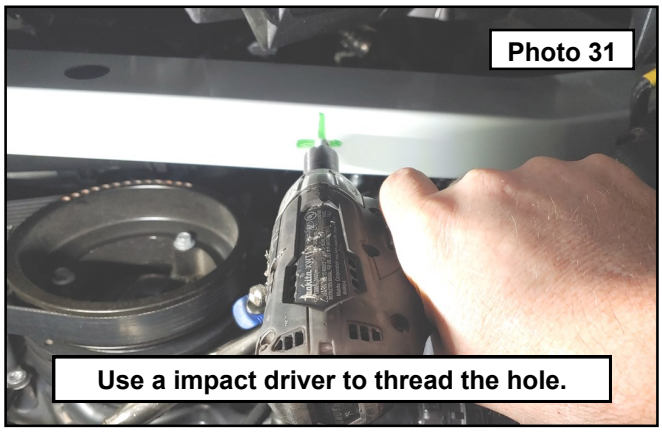


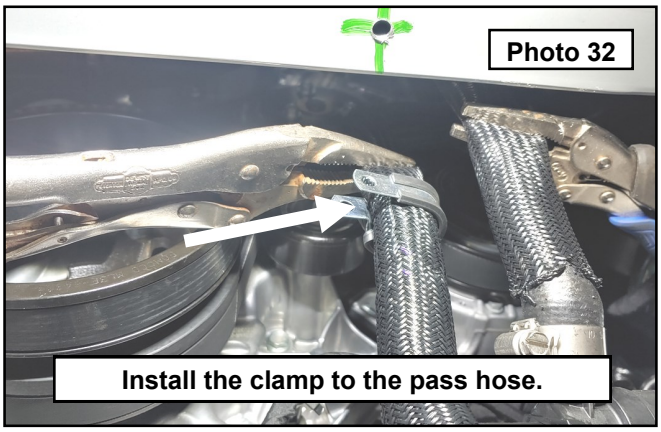
28. Make a mark on the core support 9” from the driver side frame rail. **Photo 29**
29. In the center of the made mark, drill out a hole in the core support using a 1/4” drill bit in preparation for a self threading bolt. **Photo 30**



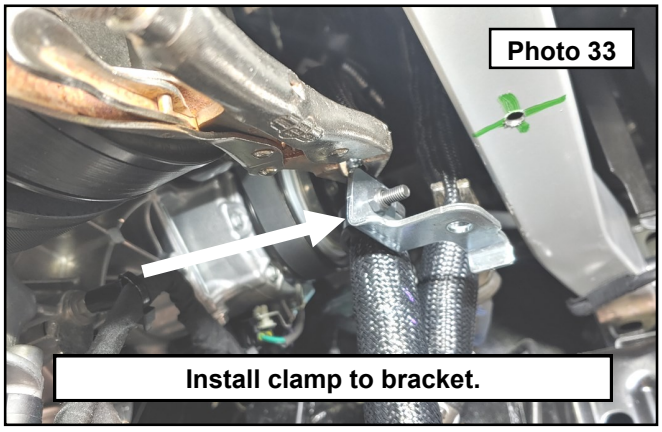


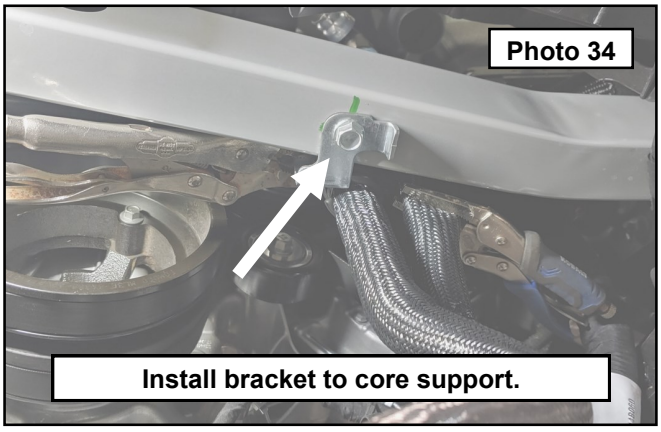
30. Locate the 5/16” self threading bolt in your hardware bag and use a impact driver to drive this bolt into the core support. Do not overtighten and strip the core support out. Remove the bolt after you have completed the threading process. Paint the exposed metal. **Photo 31**
31. Install the provided rubber isolated clamp to the passenger side coolant hose. You will need this clamp to sit above the core support when installed correctly. **Photo 32**



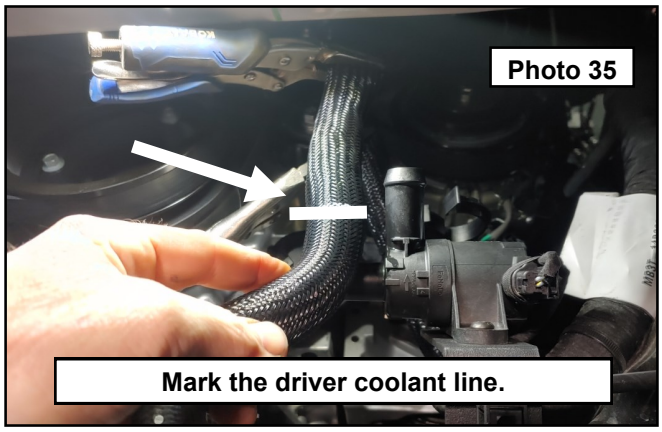


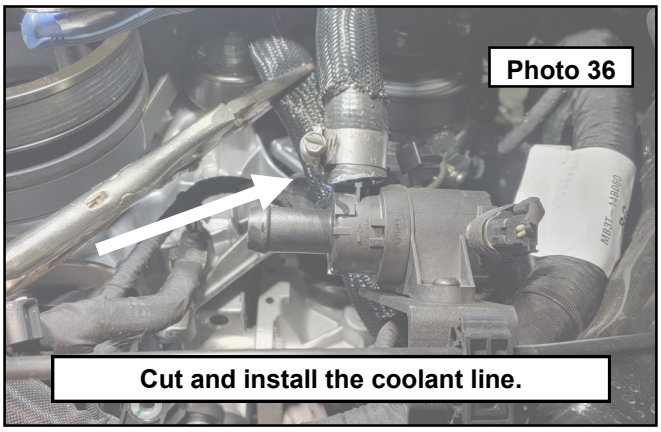
32. Install the previously removed brake line bracket to the clamp using the provided 6mm button head bolt and nut as shown. Make sure to use the small hole at the clamp leaving the large hole open. **Photo 33.**
33. Install the bracket to the core support using the self threading 5/16” bolt from the previous step. Look up into the engine bay following this coolant line. Make sure that it is not sitting on any moving components of the engine. Adjust the hose in the clamp as necessary to keep it clear of all components. **Photo 34**



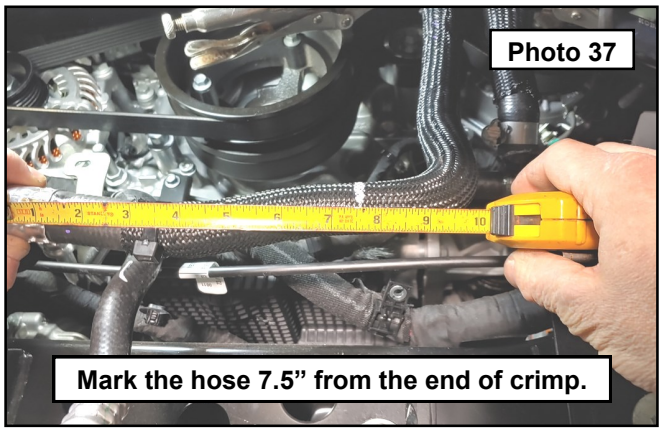


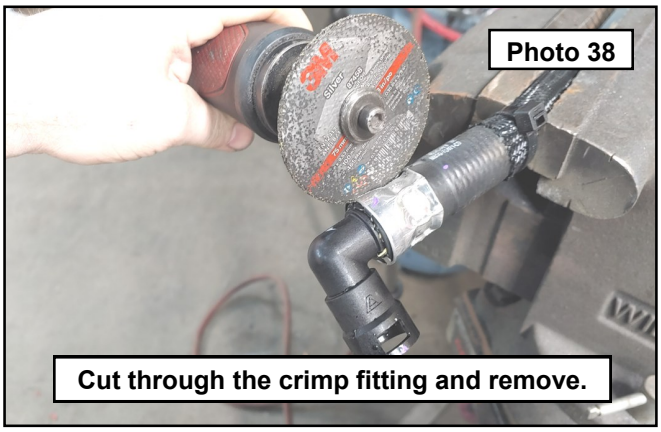
34. Pull the driver side coolant line down to the boost pump and make a mark even with the lowest position of the nipple. **Photo 35**
35. Use a suitable cutting tool to cut the hose at the mark. Cut back the plastic anti-wear sleeve to expose the rubber line. Use a lighter or micro torch to singe the sleeve to keep it from unraveling. Install the coolant line to the boost pump using the provided hose clamp. **Photo 36**



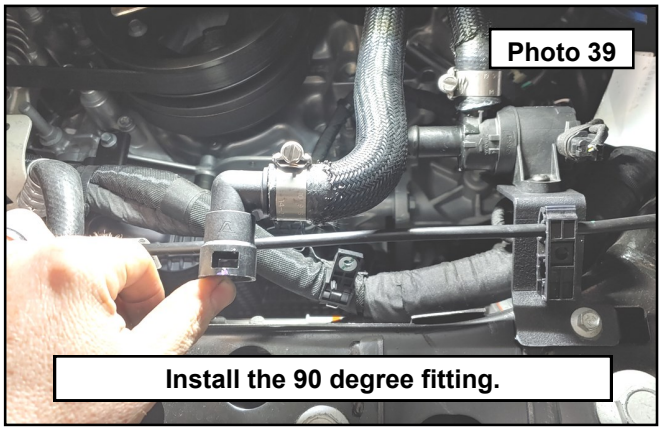


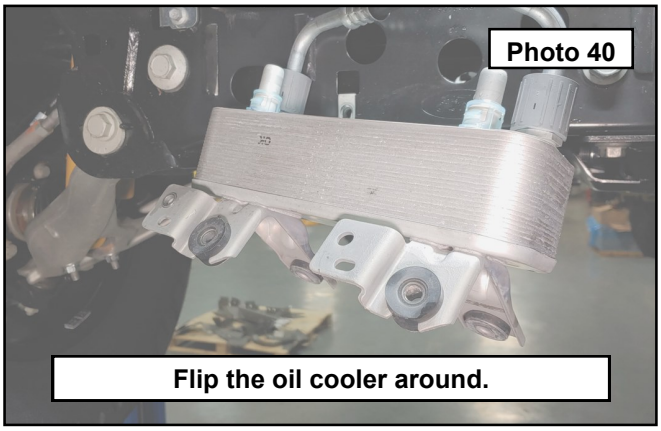
36. Mark a line on the passenger side coolant line 7.5” from the end of the crimp connection closest to the 90 degree fitting. Cut the line at the mark and do the same as before with the anti-wear sleeve. **Photo 37**
37. Place the cut off hose into a vice and use a suitable cutting tool (cut off disc shown) to cut through the crimp fitting. Make sure to not cut into the plastic fitting. Do this on two sides of the fitting. Pry the crimp fitting off the hose and pull the 90 degree fitting out of the hose. **Photo 38**



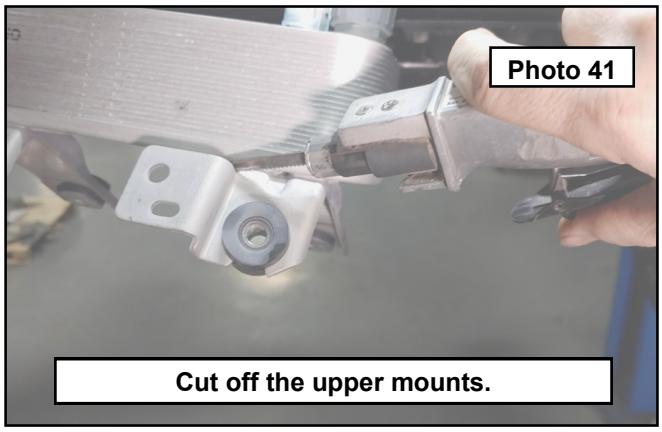


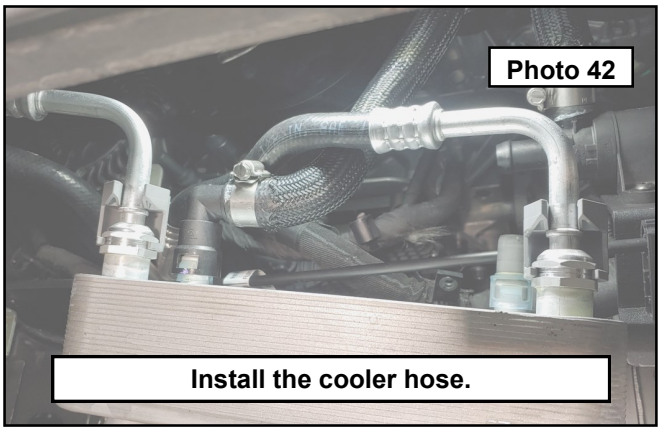
38. Install the 90 degree fitting into the cut hose using the provided hose clamp facing as shown. **Photo 39**
39. Rotate the oil cooler 180 degrees to get to the back mounts. You will be removing these from the cooler. **Photo 40**



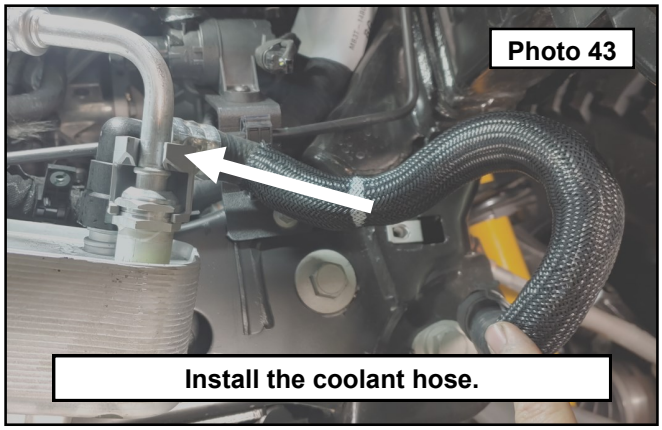


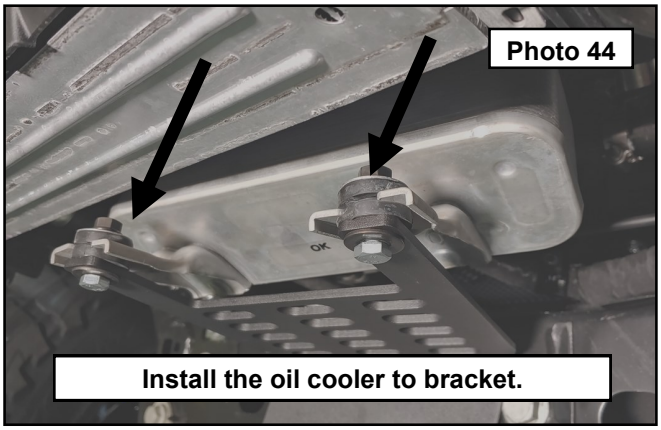
40. Use a suitable cutting tool (air body saw shown) to cut off both the upper mounts from the cooler. Do not cut into the cooler body. Sand any burrs smooth. **Photo 41**
41. Flip the cooer back around. Connect the passenger coolant line back to its original location while making sure to route the hose under the transmission line. **Photo 42**



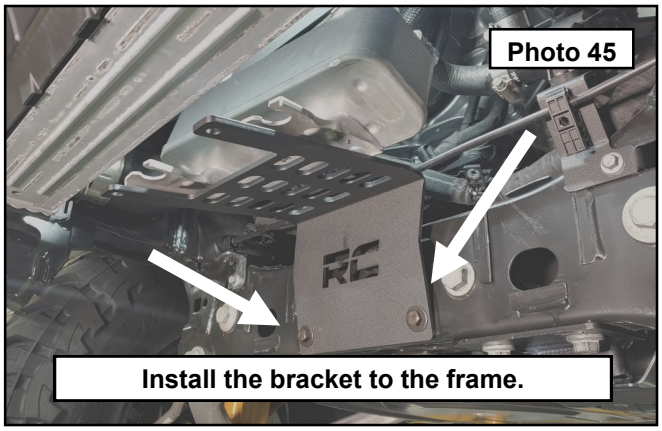


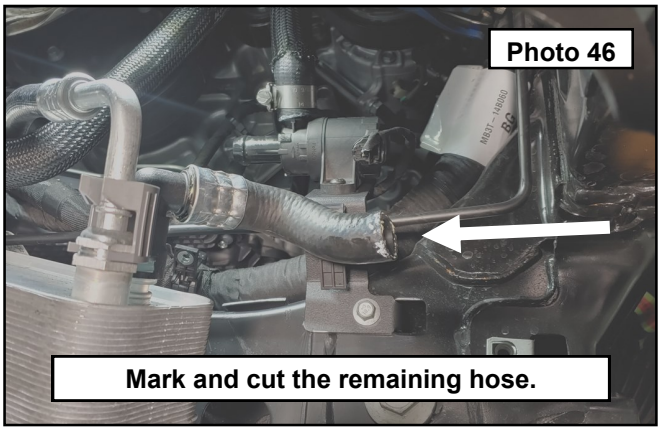
42. Install the original driver side coolant hose to the cooler. **Photo 43**
43. On the remaining cooler mounts, remove the metal crush sleeve and flip to the opposite side. Install the Rough Country oil cooler bracket to the cooler using the provided 8mm x 35mm bolts, washer and flange nut. **Photo 44**



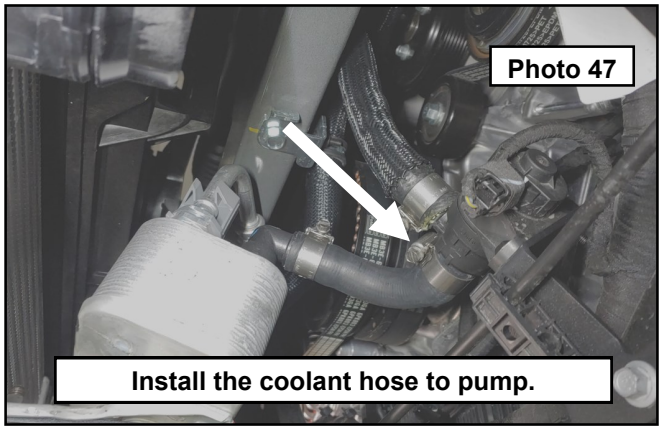


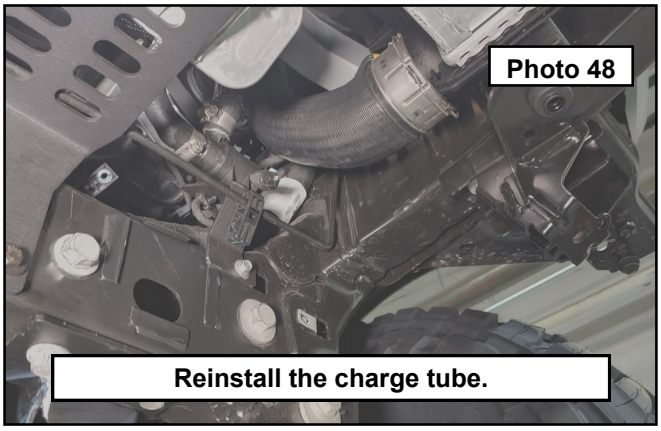
44. Install the Rough Country oil cooler bracket to the frame rail using the provided 8mm x 25mm black bolts and washers. **Photo 45**
45. Once the oil cooler is in position, route the remaining hose to the boost pump and mark it. Cut at the mark and remove the remaining anti-wear sleeving. **Photo 46**





46. Install the hose to the boost pump using the provided hose clamp. Remove the locking pliers from the coolant hoses. Top off the coolant reservoir. Start the vehicle and check for leaks and for all hose clearances. Photo 47
47. Install the charge pipe back to the intake and intercooler. Make sure the spring clips lock into place. Photo 48





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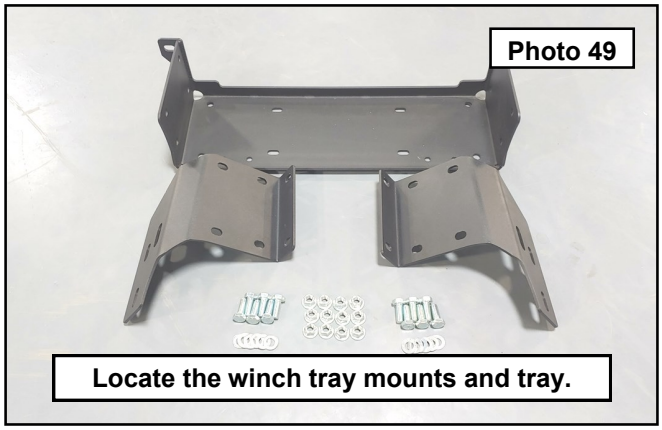
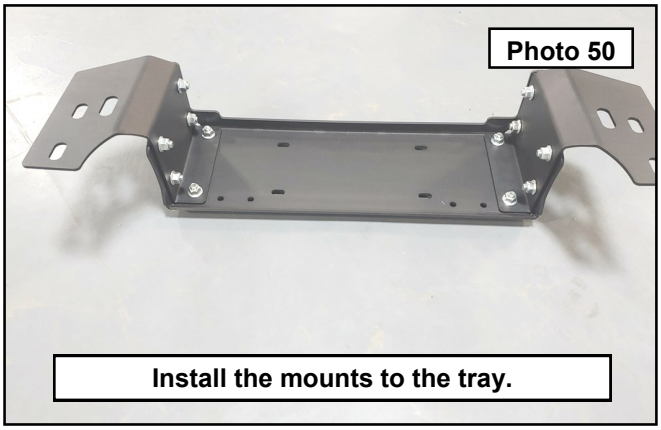
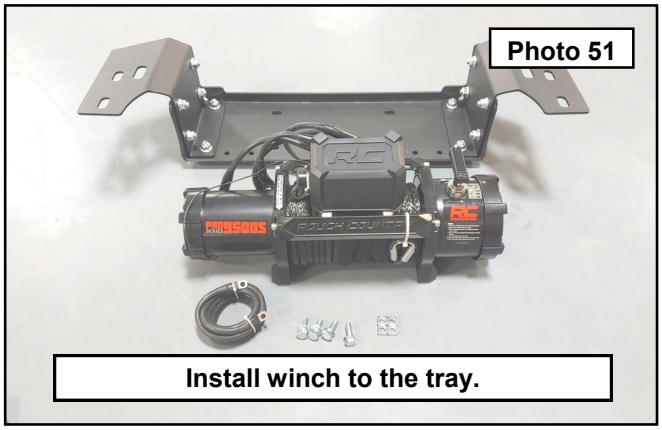
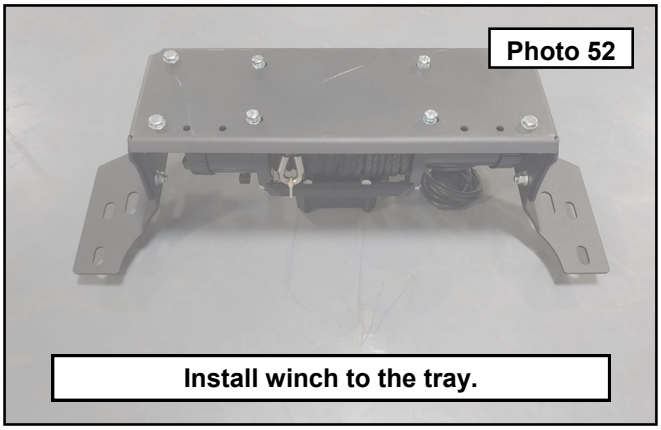
48. Locate the winch tray and the driver and passenger side mounts. **Photo 49**
49. Install the mounts to the tray using the provided 12mm bolts, washers and flange nuts as shown using a 18 and 19mm wrench. **Photo 50**





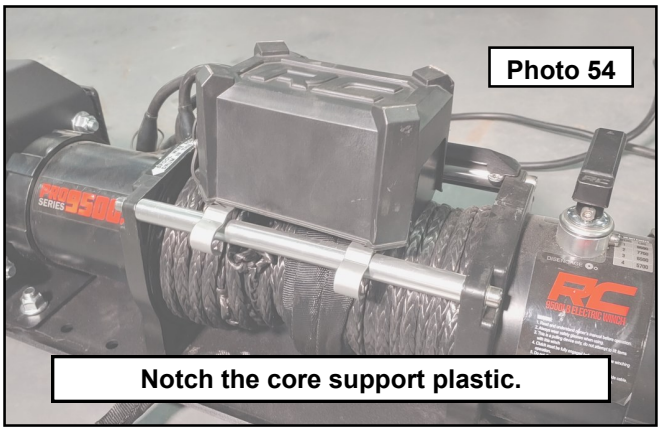
50. Install the winch to the winch tray using the hardware provided with the winch as shown. Leave the mounting hardware loose so that you can adjust later. It is easier to place the winch upside down and then install the tray to the winch. This kit was specifically designed around the RC 9500 and 12000 lb winch with synthetic rope and Hawes fairlead. **Photo 51 / 52**



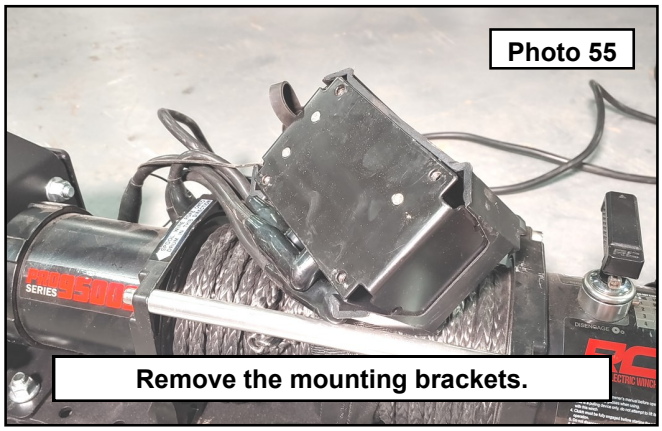


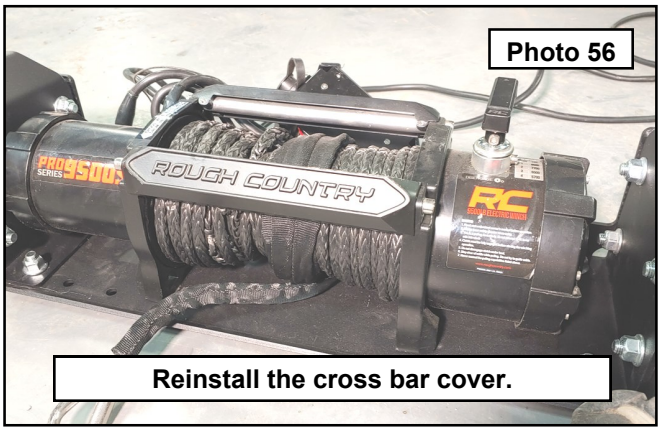
51. Flip the assembled winch tray over. The winch controller box needs to be relocated. Use a 2mm hex wrench to remove the set screws for the cross bar cover at the front of the winch. **Photo 53**
52. Once the cover is removed, slide the controller box forward to release the mounting brackets from the cross bars. **Photo 54**



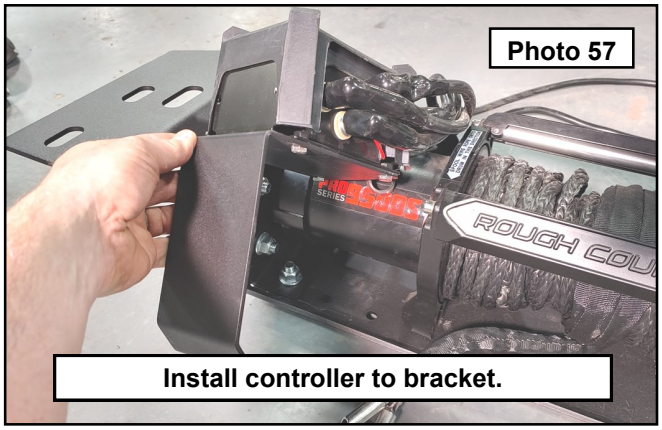


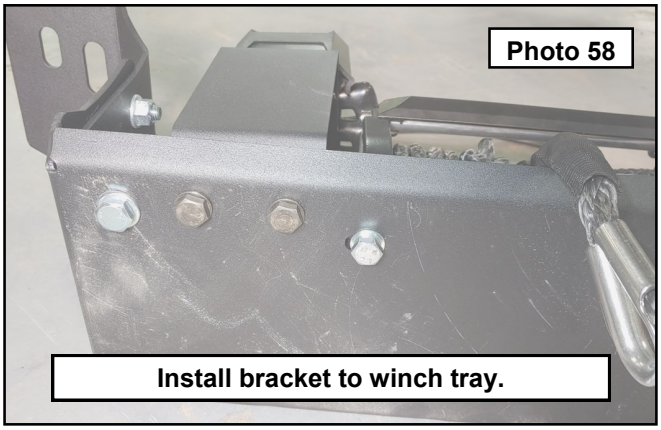
53. Flip the controller box over and remove the mounting brackets using a 10mm socket. **Photo 55**
54. Reinstall the cross bar cover. **Photo 56**





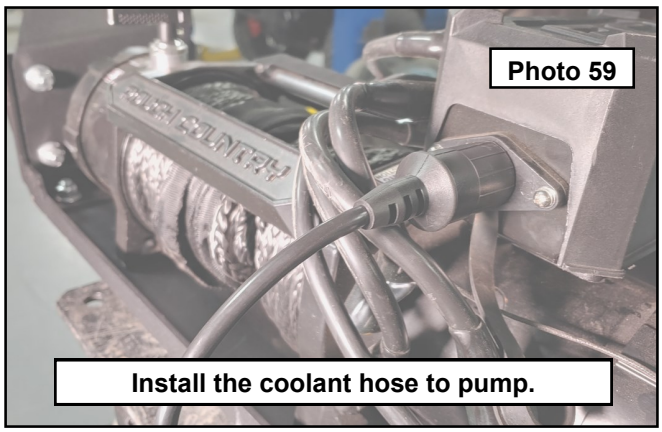
55. Install the winch controller to the Rough Country bracket as shown using the previously removed hardware. **Photo 57**
56. Install the assembled controller and bracket to the winch tray using the provided 10mm bolts, washers and flange nuts. Leave loose so that you can adjust at a later step. **Photo 58**

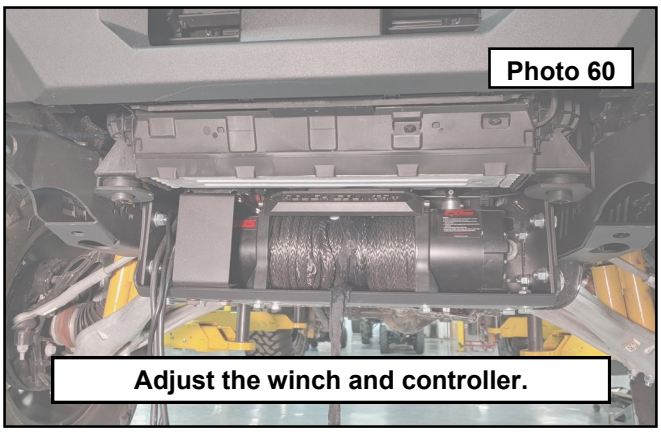




57. Install the winch controller extension to the control box. **Photo 59**
58. When installing the winch tray, pay close attention to the control box and winch handle when raising into place. Adjust the winch and the controller box bracket in their slotted holes to clear the oil cooler if needed. Fully tighten the hardware. **Photo 60**

Plastic bumper and Rough country fabricated bumper: Skip back to page 5, step 11 to finish your installation.
Factory Modular bumper: Skip back to page 10, step 15





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