



**TEL: 1-866-XANATOS**

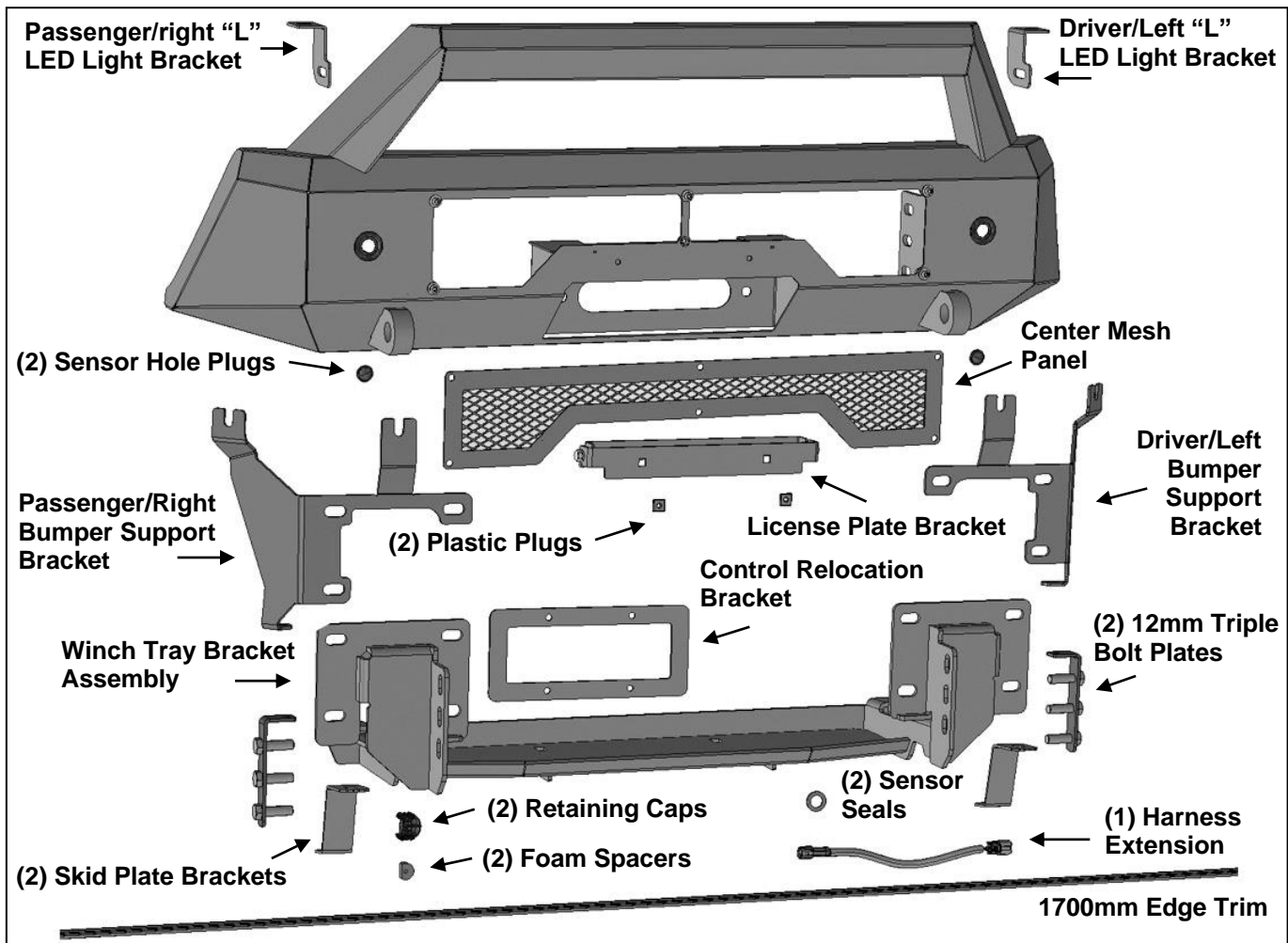
## **INSTALLATION INSTRUCTIONS**

**ARMOUR III HD FRONT WINCH BUMPER  
19-23 FORD RANGER  
PART# AR3HD43NL**

**CS-1 HD WINCH FRONT BUMPER  
2019-23 FORD RANGER**

**PARTS LIST:**

1	Front CS1 Bumper Assembly	4	12-1.75mm x 45mm Hex Bolts
1	Winch Tray Bracket Assembly	2	12-1.75mm x 35mm Hex Bolts
2	Skid Plate Brackets	14	12mm x 32mm x 3mm Large Flat Washers
1	Control Relocation Bracket	12	12mm Lock Washers
1	Driver/Left Bumper Support Bracket	8	12mm Hex Nuts
1	Passenger/Right Bumper Support Bracket	4	8-1.25mm x 25mm Hex Bolts
1	Center Mesh Plate	2	8-1.25mm x 16mm Hex Bolts
1	Driver/Left LED "L" Light Bracket	10	8mm x 24mm x 2mm Flat Washers
1	Passenger/Right LED "L" Light Bracket	6	8mm Lock Washers
1	License Plate Relocation Bracket	4	8mm Hex Nuts
2	Plastic Plugs for license plate mount	6	6mm x 20mm Button Head Combo Bolts
1	1700mm Bumper Edge Trim	2	6mm x 20mm Button Head Bolts
2	Sensor Retaining Caps	4	6mm x 18mm x 1.6 Flat Washers
2	20mm x 10mm Foam Spacers	2	6mm Nylon Lock Nuts
2	15.5mm x 25mm x 2mm Foam Seals	1	4mm Wrench
2	Plastic Sensor Hole Plugs	4	4mm Self Tapping Screws
1	Sensor Wiring Harness Extension	10	Plastic Wire Ties
2	12mm Triple Bolt Plates		



**PROCEDURE:**

**REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. ASSISTANCE IS RECOMMENDED. CUTTING IS REQUIRED.**

1. Move to the front of the vehicle. Remove the license plate.
2. Unplug the center wire harness located in the opening in the bumper under the license plate on the right side, if equipped, **(Figure 1)**.
3. Remove the center plastic cover from the front of the bumper, **(Figures 2 & 3)**. Release the wiring harness from the clips attached to the back of the plastic cover.
4. Place blocks or jack stands under the front bumper to support it during hardware removal. Once the bumper has been safely supported remove the large factory hex nuts from the front of the bumper bracket attaching the bumper to the frame, **(Figure 4)**. **WARNING!** Assistance is required to hold the bumper in place during hardware removal to prevent the bumper from falling. With assistance, hold the bumper in position, unplug the outer wiring harness located under the Driver/Left headlight, **(Figure 5)**. Remove bumper and place on a stable, clean surface.
5. Remove the skid plate or splash guard from the bottom of the engine. Also remove the center plastic shroud from the bottom of the radiator if equipped, **(Figure 6)**. Remove the tow hooks if equipped.  
**NOTE:** Plastic radiator shroud and tow hooks cannot be reinstalled.
6. Place the Winch Tray/Bracket Assembly over the factory studs in the frame, **(Figure 7)**. Attach the driver/left side of the Bracket Assembly to the bottom inner hole in the frame with (1) 12mm x 35mm Hex Bolt, (2) 12mm Flat Washers, (1) 12mm Lock Washer and (1) 12mm Hex Nut, **(Figure 8)**. Do not fully tighten hardware. Repeat this **Step** to attach the passenger/right Bracket Assembly to the matching bottom inner mounting hole in the end of the frame.
7. Attach the bottom of the driver/left Winch Tray Bracket Assembly to the forward threaded hole in the bottom of the frame with (1) 12mmx 45mm Hex Bolt, (1) 12mm Lock Washer and (1) 12mm Flat Washer, **(Figure 9)**. Select (1) Skid Plate Bracket. Attach the Bracket to the rear threaded hole in the bottom of the frame and Winch Tray Bracket Assembly with (1) 12mmx 45mm Hex Bolt, (1) 12mm Lock Washer and (1) 12mm Flat Washer, **(Figures 9 & 10)**. Do not tighten hardware at this time. Repeat this **Step** to attach the Winch Tray and Skid Plate Bracket to the passenger/right side of the frame.
8. Carefully unwrap the CS1 Winch Bumper.
9. Determine if winch will be installed. If winch will not be installed, skip to **Step 10**.  
**Cable Guide and Winch installation**, (guide and winch not included).
  - a. Place the winch in position on the winch tray to check for clearance. Adjust or modify vehicle for clearance as necessary.
  - b. Follow the instructions packaged with the winch to remove the controller from the top of the winch if necessary. Attach the included Controller Relocation Bracket to the bottom of the controller, **(Figures 11 & 12)**. Reuse the winch hardware to attach the controller and Relocation Bracket to CS1 Bumper if required.
  - c. Follow instructions packaged with winch to install winch and connect electrical system.
  - d. Attach the cable guide to the front of the CS1 HD Bumper, **(Figure 13)**.
10. Determine if vehicle is equipped with parking sensors.

**Models without bumper sensors:**

- a. From the front of the bumper, push the included Plastic Plugs into sensor holes, **(Figure 14)**.

**Models with bumper mounted parking sensors:**

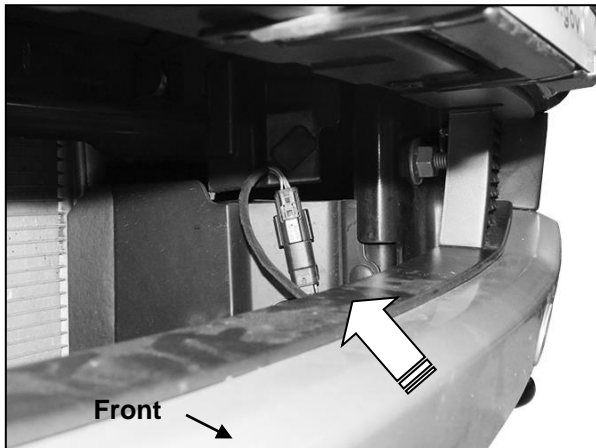
- a. Remove sensors and wiring harness from plastic panel removed in **Step 3**, **(Figure 15)**.
  - b. Select (1) sensor. Remove the silicone seal from the end of the sensor, **(Figure 16)**.
  - c. Slide the included larger Foam Seal over front of sensor, **(Figure 16)**.
  - d. Insert sensor with Seal into sensor mount on CS1 Bumper, **(Figure 17)**.
  - e. Place Thick Foam Spacer over end of sensor. Push Sensor Retaining Cap onto sensor mount and snap into place, **(Figure 17)**.
  - f. Repeat previous **Steps** to install remaining sensor.
  - g. Attach center wiring harness to back of the factory Bumper, **(Figure 18)**. Plug the included Wiring Harness Extension into the center harness to extend the reach to the sensor if needed.
11. Attach the included Edge Trim to the Bumper, **(Figure 18)**.

**CS-1 HD WINCH FRONT BUMPER  
2019-23 FORD RANGER**

12. Move to the factory bumper. Remove the left, center and right bumper supports, **(Figure 19)**. Models with adaptive cruise control sensor, (ACC), unplug and remove sensor and center bumper support, **(Figure 20)**. ACC must be relocated for reinstallation.
13. Use a hacksaw to cut the bottom of the bumper along the outer side of the opening for the tow hook, **(Figure 21)**. **NOTE:** Use removable tape to make a straight guide line, **(Figure 22)**. Repeat this **Step** to cut the passenger/right side of the bumper, **(Figure 23)**.
14. Select the driver/left Bumper Support Bracket. Reuse the factory hardware to attach the top of the Bracket to the back of the bumper, **(Figure 24)**. Use the included (1) 8mm x 25mm Hex Bolt, (2) 8mm Flat Washers, (1) 8mm Lock Washer and (1) 8mm Hex Nut, to attach the bottom of the Bracket to the Bumper. Repeat this **Step** to attach the passenger/right Support Bracket.
15. Reinstall the factory bumper over the bolt plates. Reuse the factory hex nuts to attach the factory bumper to the bolt plates, **(Figures 25 & 26)**. Align the factory bumper to the vehicle and fully tighten all hardware.
16. With assistance, position the mounting tabs on the back of the CS1 Bumper up to the outside of the Winch Tray Bracket Assembly. Temporarily support Bumper. **WARNING:** To avoid possible injury or damage to the vehicle, do not proceed until the bumper is fully and safely supported.
17. Select (1) 12mm Triple Bolt Plate, **(Figure 27)**. Insert the Bolt Plate up from below the Bumper and in through the tab on the Bumper. Guide the Bolt Plate into and through the Bracket Assembly. Attach the Bumper to the Bolt Plate and Bracket with (3) 12mm Flat Washers, (3) 12mm Lock Washers and (3) 12mm Hex Nuts, **(Figures 28 & 29)**. Do not tighten hardware. Repeat this **Step** to attach the passenger/right side of the Bumper to the Mounting Bracket. **NOTE:** Bolt Plate can also be installed through the opening in the front of the CS1 Bumper.
18. Check the CS1 Bumper for level and center it on the vehicle. Adjust the Bumper as necessary and fully tighten all Mounting Bracket hardware. **NOTE:** If additional left-right adjustment is required, temporarily loosen the Winch Tray Bracket Assembly hardware and slide the Brackets left-right as necessary and tighten all hardware.
19. Top mounted LED light installation (optional-light not included).
  - a. Select driver/left LED "L" Light Bracket. Attach the Bracket to the bottom of the top hoop with (1) 8mm x 25mm Hex Bolt, (2) 8mm Flat Washers, (1) 8mm Lock Washer and (1) 8mm Hex Nut, **(Figure 30)**. Do not tighten hardware at this time.
  - b. Repeat previous **Step** to attach the passenger/right Bracket.
  - c. Attach light to Top Brackets with the hardware included with the light or the included (2) 8mm x 16mm Hex Bolts, (2) 8mm Lock Washers and (2) 8mm Flat Washers. Adjust the width of the Brackets to the light. **IMPORTANT:** Top Light Brackets are designed to install most 20" to 24" single and double row bar style LED lights.
  - d. Fully tighten hardware once adjusted.
20. Reinstall splash guard or skid plate. Attach forward end of splash guard or skid plate to Mounting Brackets on bottom of frame, **(Figures 9 & 31)**.
21. Once all hardware has been fully tightened, attach Mesh Fill Panel to the CS1 Bumper with the included (6) 6mm x 20mm Button Head Combo Bolts, **(Figure 32)**. Installation is optional.
22. On vehicles requiring front license plate, select the License Plate Bracket. Attach the Bracket to the front of the Bumper with the included (2) 6mm x 20mm Button Head Bolts, (4) 6mm Flat Washers and (2) 6mm Nylon Lock Nuts, **(Figure 33)**. Push the included (2) Plastic Plugs into the square holes in the Bracket. Reuse the factory hardware to attach the license plate to the Plastic Plugs.
23. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

**To protect your investment,** Do not use any type of polish or wax that may contain abrasives that could damage the finish. Mild soap may be used to clean the Front Bumper assembly.

Driver/left Side Installation Pictured



(Fig 1) Unplug the inner wire harness



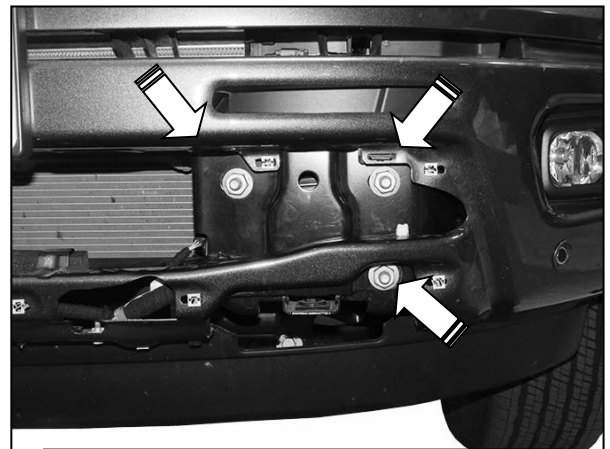
(Fig 3) Center plastic cover removed



(Fig 5) Pull the bumper out slightly and unplug the outer wire harness

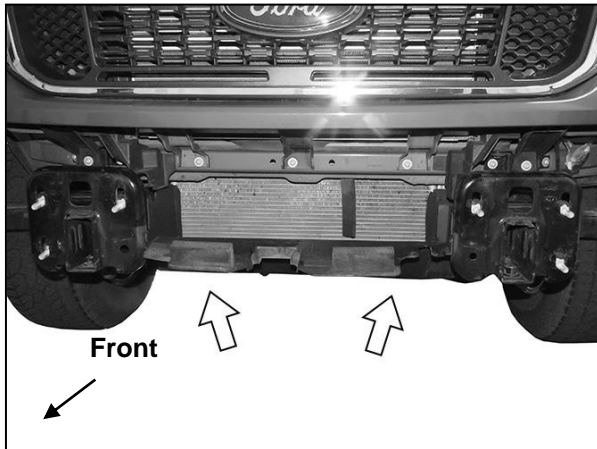


(Fig 2) Remove the center plastic cover from the factory bumper (arrow)

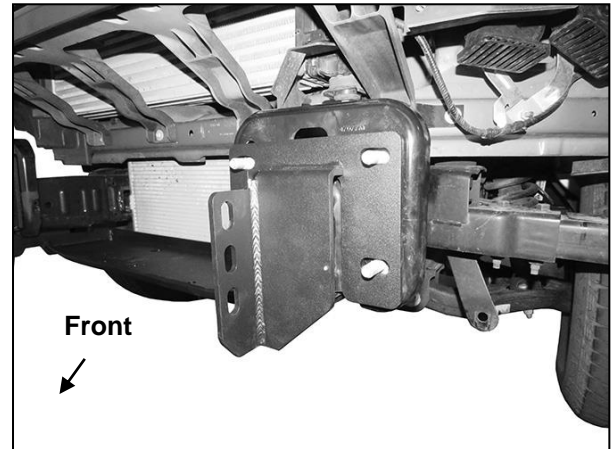


(Fig 4) Remove the hex nuts attaching the bumper to the frame (arrows)

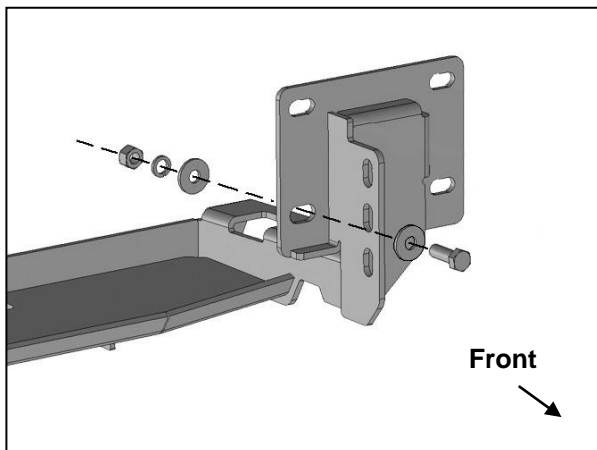
Driver/left Side Installation Pictured



(Fig 6) Remove splash guard or skid plate from bottom of engine. Remove plastic shroud from bottom of radiator, (arrows)

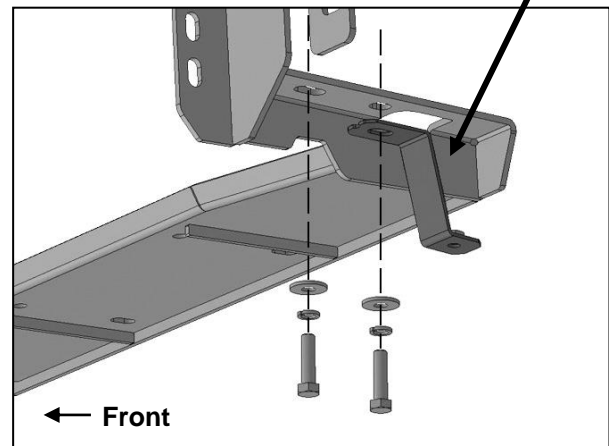


(Fig 7) Slide driver/left side of Tray Bracket Assembly over mounting studs on frame



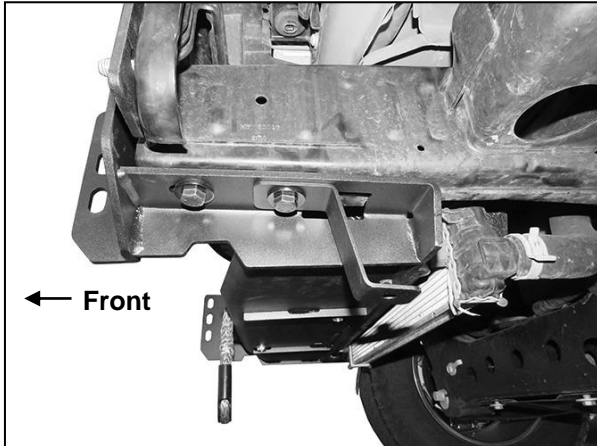
(Fig 8) Attach Winch Tray Bracket Assembly to bottom inner mounting hole in mount on end of frame. Also see Fig 26

- (2) 12mm x 45mm Hex Bolts
- (2) 12mm Lock Washers
- (2) 12mm Flat Washers

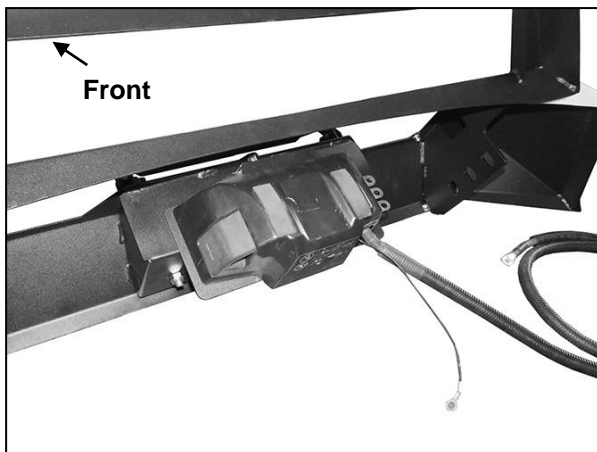


(Fig 9) Attach Winch Tray Bracket Assembly to bottom of frame. Install Skid Plate Bracket over Bracket Assembly

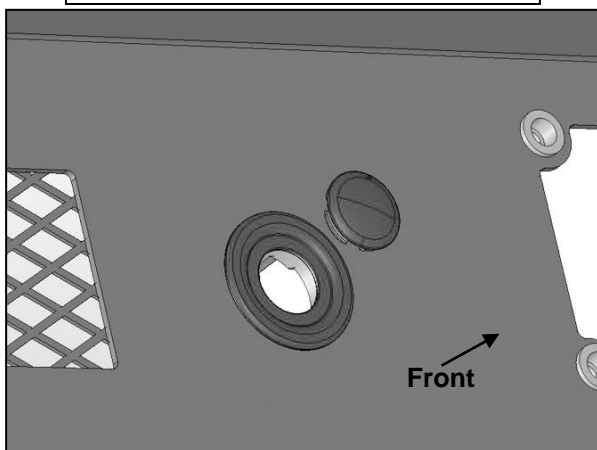
Driver/left Side Installation Pictured



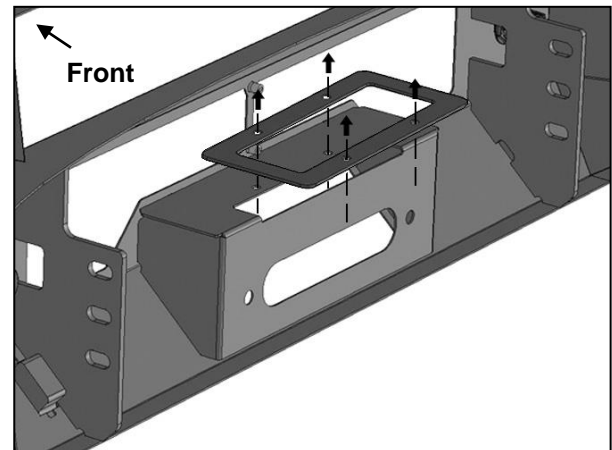
(Fig 10) Attach Skid Plate Bracket over Winch Tray Bracket. Driver/left side of Assembly pictured



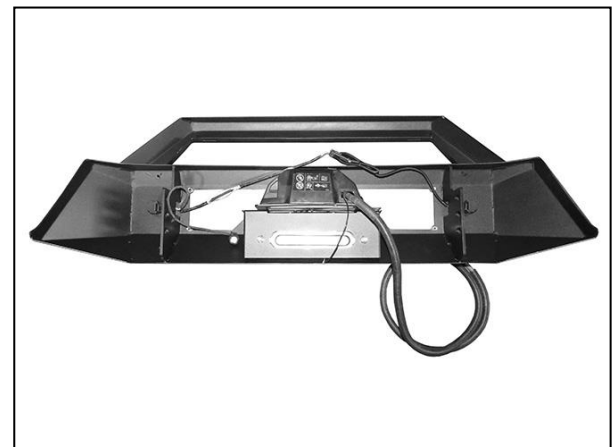
(Fig 12) Control Relocation Bracket and control unit installed



(Fig 14) Models without sensors, push Plugs into sensor mounting holes

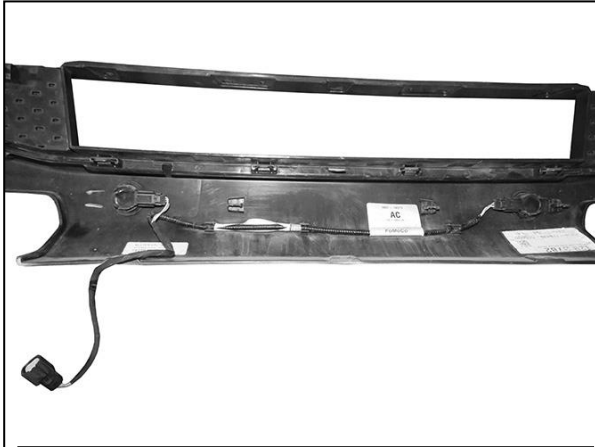


(Fig 11) Reuse the winch hardware to attach Control Relocation Bracket and control unit to back of CS1 Bumper

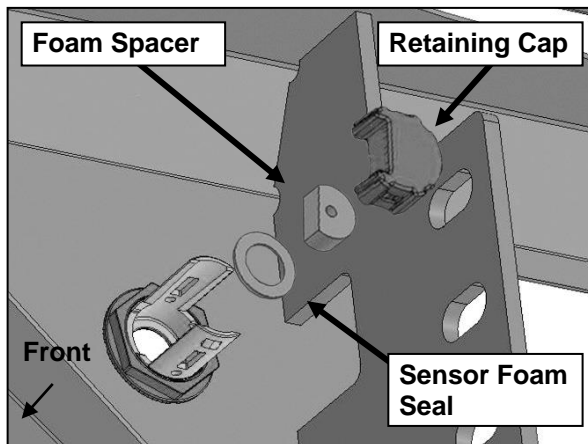


(Fig 13) Control Relocation Bracket, control unit and cable guide, (not included), installed

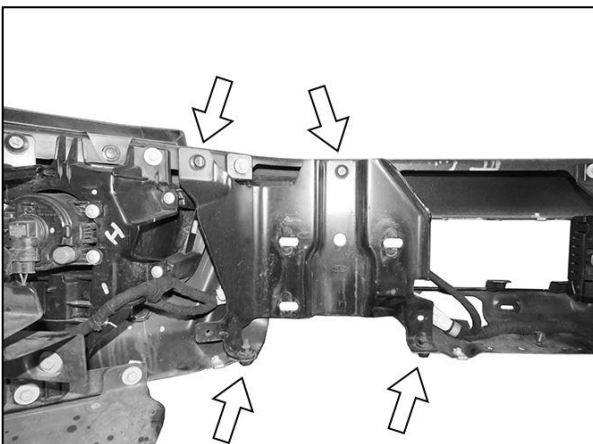
Driver/left Side Installation Pictured



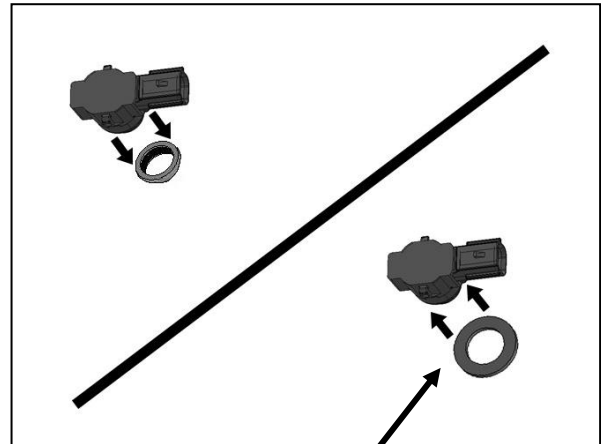
(Fig 15) Models with sensors, remove sensors and harness from plastic panel



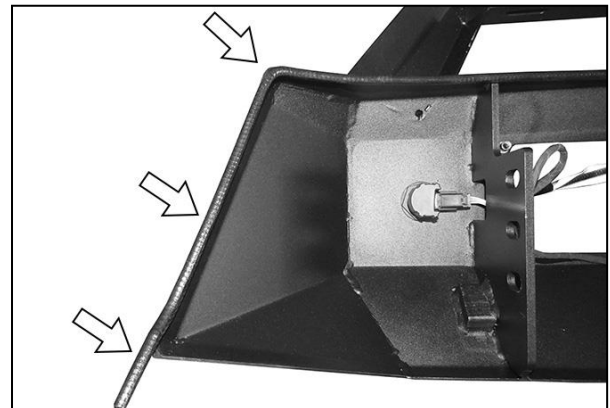
(Fig 17) Insert sensor with Foam Seal into sensor Mount. Place Foam Spacer onto sensor. Snap Cap onto sensor and Mount



(Fig 19) Remove bumper brackets from back of factory bumper (driver/left side pictured)



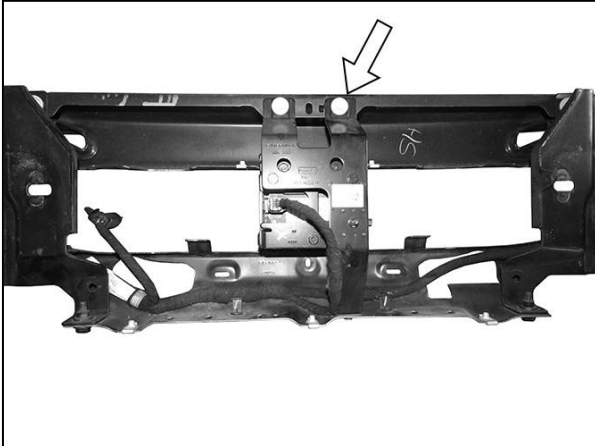
(Fig 16) Remove silicone seal from sensor. Slide large Seal over end of sensor (arrow)



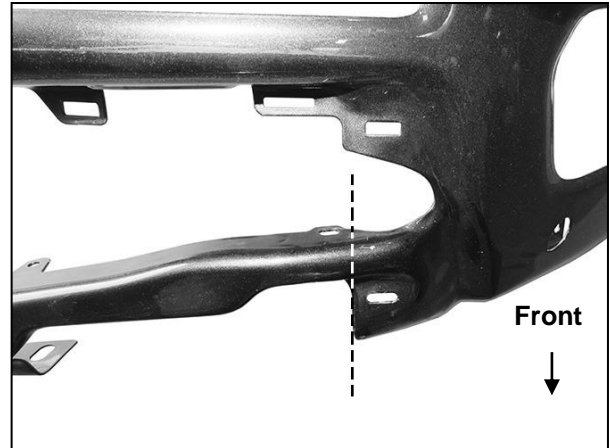
(Fig 18) Push Edge Trim onto both ends of Bumper. Cut Edge Trim to fit. Note sensors and harness also installed



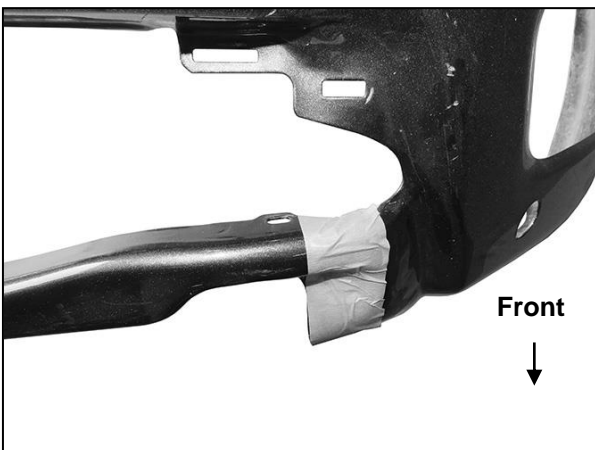
Driver/left Side Installation Pictured



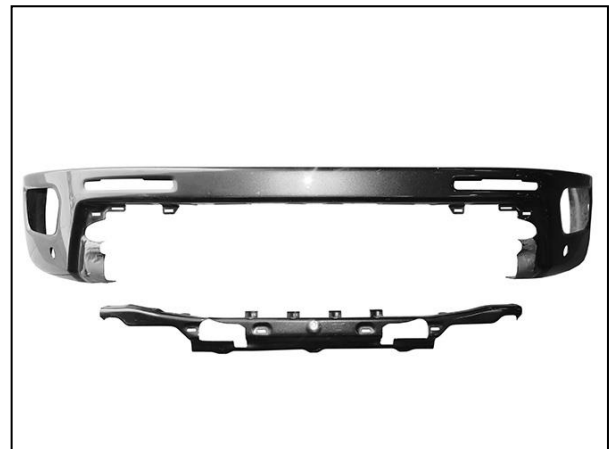
(Fig 20) Remove center bumper support and ACC sensor if equipped from factory bumper



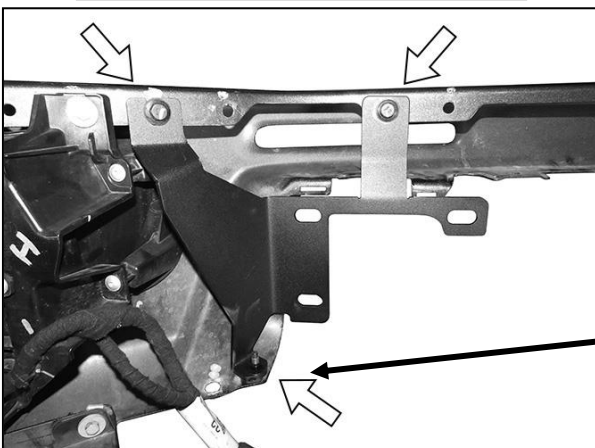
(Fig 21) Driver/left side of factory bumper



(Fig 22) Masking tape used to make a straight, vertical cut line



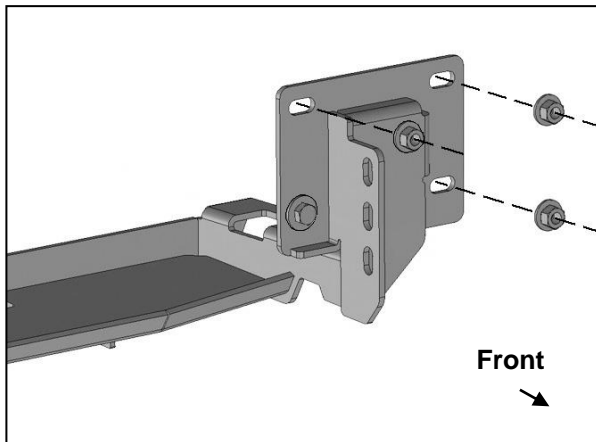
(Fig 23) Bottom section cut from bumper



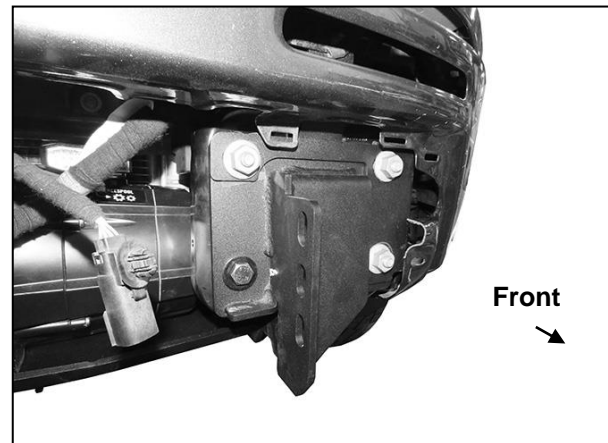
(Fig 24) Reuse the factory hardware to attach the top of the CS1 Bumper Brackets to the back of the factory bumper (arrows-also see Fig 19)

Use the included  
8mm x 25mm Hex Bolt  
(2) 8mm Flat Washers  
8mm Lock Washer  
8mm Hex Nut  
To attach bottom of Brackets

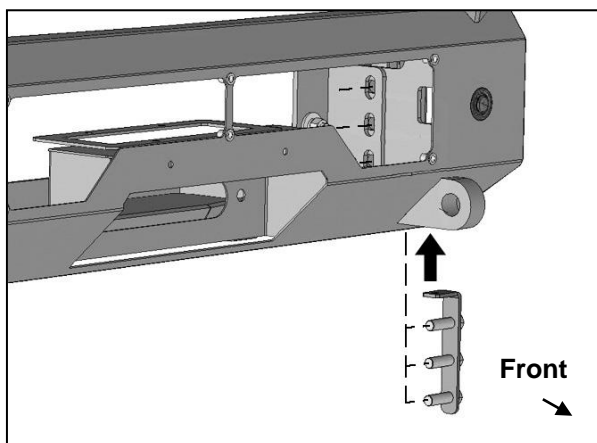
Driver/left Side Installation Pictured



(Fig 25) Reuse factory hex nuts to reinstall factory bumper over Winch Tray Bracket Assembly. Driver/left side illustrated

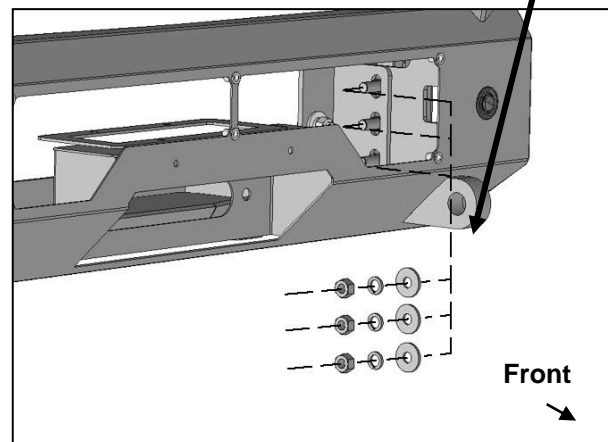


(Fig 26) Reinstall factory bumper over Bracket Assembly. Driver/left side pictured



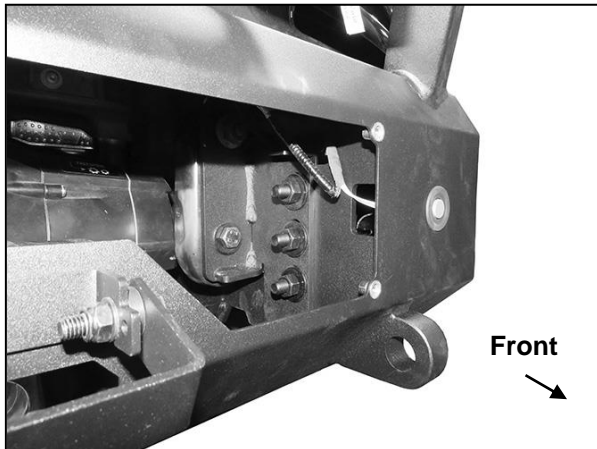
(Fig 27) Insert Triple Bolt Plate up and through CS1 Bumper and Bracket assembly. NOTE: Bolt Plate can also be installed through front of Bumper. Driver/left side illustrated

(3) 12mm Flat Washers  
(3) 12mm Lock Washers  
(3) 12mm Hex Nuts



(Fig 28) Attach Bumper to outside of Bracket with Bolt Plate and included hardware

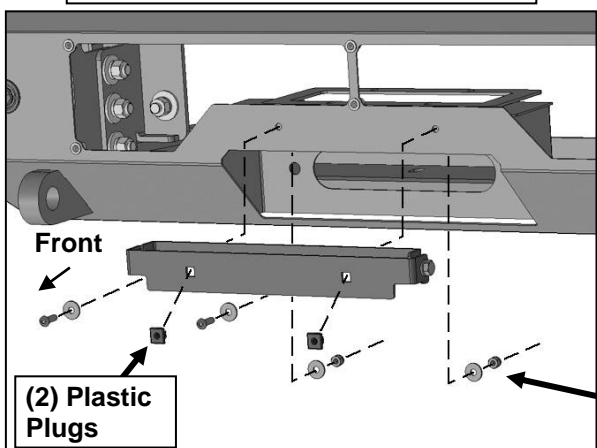
Driver/left Side Installation Pictured



(Fig 29) Driver/left side of Bumper attached to Triple Bolt Plate



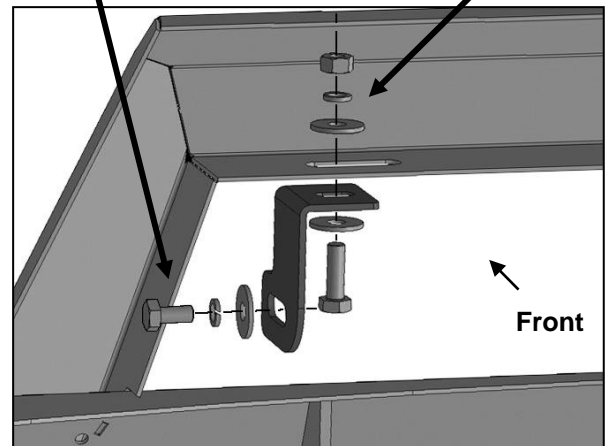
(Fig 31) Reuse factory hardware to reinstall skid plate or splash guard



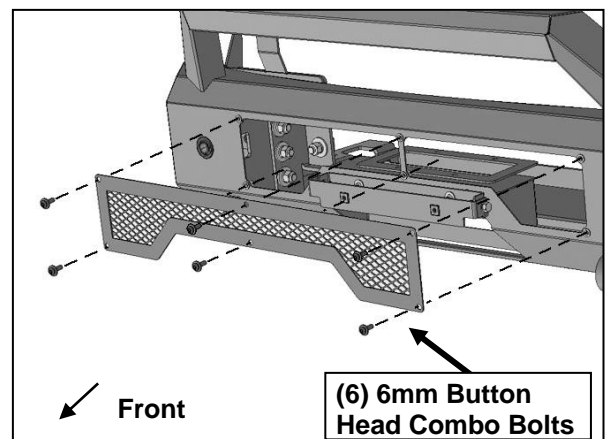
(Fig 33) Attach License plate Bracket to the front of the Bumper

8mm x 16mm Hex Bolt  
8mm Lock Washer  
8mm Flat Washer

8mm x 25mm Hex Bolt  
(2) 8mm Flat Washers  
8mm Lock Washer  
8mm Hex Nut



(Fig 30) Attach LED "L" Brackets to bottom of loop



(Fig 32) Attach Mesh Fill Panel after Bumper has been adjusted and all mounting hardware tightened. Installation optional

(2) 6mm x 20mm Button Head Bolts  
(4) 6mm Flat Washers  
(2) 6mm Nylon Lock Nuts