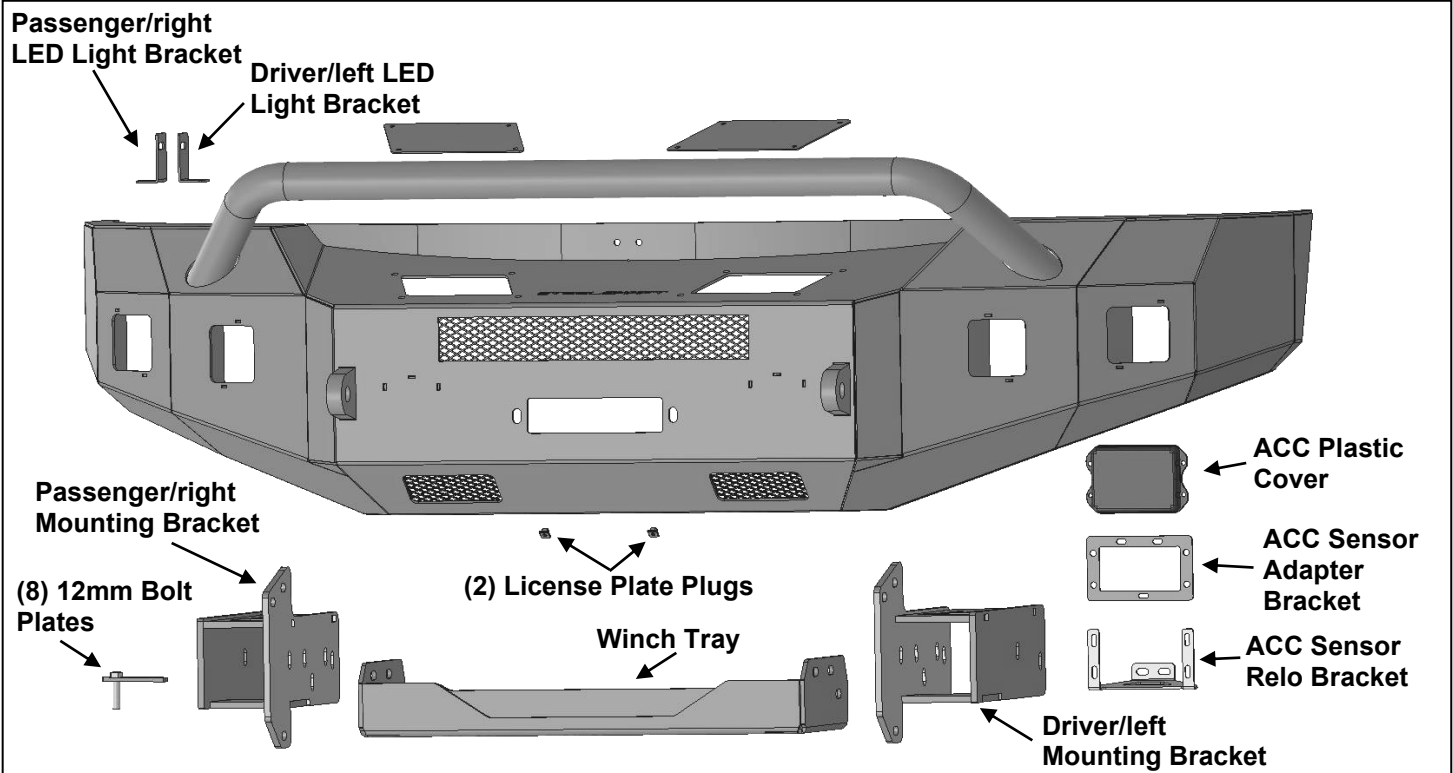


PARTS LIST:

1	Fortis Front Bumper	28	12mm Hex Nuts
1	Winch Tray	28	12mm Lock Washers
1	Driver/left Mounting Bracket	4	8mm Hex Nuts
1	Passenger/right Mounting Bracket	6	8mm Lock Washers
1	Driver/left LED light L-bracket	4	8mm x 25mm Hex Bolts
1	Passenger/right LED light L-bracket	2	8mm x 16mm Hex Bolts
1	ACC Relocation Bracket	10	8mm x 24mm OD x 2mm Flat Washers
1	Adaptive Cruise Control (ACC) Plastic Cover	7	6mm Lock Washers
1	ACC sensor adapter bracket	7	6mm Hex Nuts
2	License Plate Plugs	7	6mm x 25mm Button Head Bolts
8	12mm Bolt Plates	10	6mm x 18mm x 1.6mm Flat Washers
20	12mm x 50mm Hex Bolts	1	4mm Allen Wrench
48	12mm x 32mm x 3mm Flat Washers		



PROCEDURE:

REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. BUMPER IS HEAVY, ASSISTANCE IS HIGHLY RECOMMENDED TO AVOID POSSIBLE INJURY OR DAMAGE TO THE VEHICLE.

1. Remove the license plate and bracket. On models with factory fog lights, unplug wiring harness leading to the front bumper, **(Figure 1)**. Unplug and remove the adaptive cruise control, if equipped.
2. Remove the bumper supports attaching the outer ends of the bumper to the outside of the frame, **(Figure 2)**. Remove the plastic covers from the tow hooks to uncover the bumper bolts, **(Figure 3)**.
3. Place blocks or jack stands under the front bumper to support it during mounting bolt removal. Once the bumper has been safely supported, remove the (8) factory bumper bolts, **(Figure 4)**.

WARNING! Assistance is required to hold the bumper in place during bolt removal to prevent the bumper from falling. Carefully slide the bumper off over the tow hooks.

4. Remove the passenger/right side tow hook from the end of the frame, **(Figure 5)**. Next, remove the (4) factory hex nuts, lower frame extension and double bolt plates from the end of the frame, **(Figures 1 & 5)**. Repeat this **Step** to remove the driver/left side tow hook and lower frame extension. **NOTE:** Tow hooks cannot be reinstalled.
5. Next, select the Driver/left Mounting Bracket. Slide the Bracket over the end of the frame. Line up the slots in the side of the Bracket with the holes in the sides of the frame. Select (4) 12mm Bolt Plates. Insert the Bolt Plates into the open end of the frame and out through each side of the Bracket. Attach the Bracket to the Bolt Plates with (4) 12mm Flat Washers, (4) 12mm Lock Washers and (4) 12mm Hex Nuts, **(Figure 7)**. Leave loose at this time. **NOTE:** {2022 F-350 models: see page 7 for supplemental procedure}
6. Attach the top of the Bracket to the top of the frame at the original tow hook location with the included (4) 12mm x 50mm Hex Bolts, (8) 12mm Flat Washers, (4) 12mm Lock Washers and (4) 12mm Hex Nuts, **(Figure 8)**. Do not fully tighten hardware yet.
7. Repeat **Steps 5 & 6** for Passenger/right side Bracket installation.
8. Next, select the Winch Tray Assembly, **(Figure 9)**. Slide the Winch Tray between the two Brackets. Attach the Winch Tray to the Brackets with (6) 12mm x 50mm Hex Bolts, (12) 12mm Flat Washers, (6) 12mm Lock Washers and (6) 12mm Hex Nuts, **(Figure 9)**. Leave hardware loose.
9. If installing winch, attach winch to Winch Tray at this time. Winch must be installed before Bumper is placed in position against Brackets. Also attach winch cable guide, (not included), to Bumper. Follow manufacturer's instructions to properly wire the winch to the electrical system.
10. **Optional Center LED light installation** (sold separately).
 - a. Select the L/R "L" Brackets. **NOTE:** "L" Brackets are offset for universal fitment for most LED bar style lights. Attach the LED light assembly to the "L" Brackets with the included (2) 8mm x 16mm Hex Bolts, (2) 8mm Lock Washers and (2) 8mm Flat Washers, **(Figure 10)**. Do not fully tighten hardware at this time. **NOTE:** "L" Brackets may require modification for hardware larger than 8mm or use brackets supplied with light if possible.
 - b. Attach the light and brackets to the top of the (2) tabs on the back of the Bumper with the included 8mm x 25mm Hex Bolts, (4) 8mm Flat Washers, (2) 8mm Lock Washers and (2) 8mm Hex Nuts, **(Figure 10)**. Adjust light position and tighten hardware.
 - c. Follow the light manufacturer's instructions to wire the light to the vehicle's electrical system once Bumper has been fully installed.
11. Determine if the vehicle is equipped with an adaptive cruise control, (ACC), and if equipped, note the design of the sensor. **Vehicles without ACC**, skip to **Step 13**.
12. **Vehicles equipped with ACC sensor**, remove the rubber plugs from the top of the Bumper if equipped. Attach the ACC Bracket to the front of the bumper with (2) 8mm x 25mm Hex Bolts, (4) 8mm Flat Washers, (2) 8mm Lock Washers and (2) 8mm Hex Nuts, **(Figure 11)**.
 - a. **NOTE:** On some Bumpers, drilling may be required on front trim of Bumper. Select the ACC Bracket. Hold the Bracket up against the center of the front trim on the Bumper, **(Figure 11)**. Use the ACC Bracket as a guide and mark through the center of the slots on the Bracket and onto the Bumper trim. Use a 5/16" drill bit to drill (2) holes through the Bumper front trim. **NOTE:** Do not drill too close to the edge of the Bumper trim.

Vehicles with early style ACC with mounting tabs on ends.

 - a. Insert (3) 6mm x 25mm Button Head Bolts through the (3) holes in the ACC Plastic Cover, the ACC Bracket and out through the adaptive cruise control sensor, **(Figure 12)**. Secure with (3) 6mm Flat Washers, (3) 6mm Lock Washers and (3) 6mm Hex Nuts, **(Figure 13)**.
 - b. Tighten all ACC hardware and continue to **Step 13**.

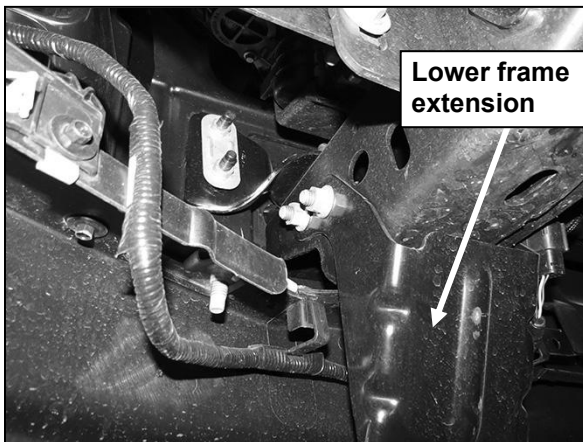
Vehicles with "late" style ACC with tabs on top and bottom.

 - a. Select the ACC Adapter Plate, **(Figure 14)**.
 - b. Attach the ACC sensor to the back of the Plate with the included (3) 6mm x 25mm Button Head Bolts, (6) 6mm Flat Washers, (3) 6mm Lock Washers and (3) 6mm Hex Nuts, **(Figure 14)**.
 - c. Insert (3) 6mm x 25mm Button Head Bolts through the (3) holes in the ACC Plastic Cover, the ACC Bracket and out through the Adapter Plate. Secure with (3) 6mm Flat Washers, (3) 6mm Lock Washers and (3) 6mm Hex Nuts, **(Figure 15)**.

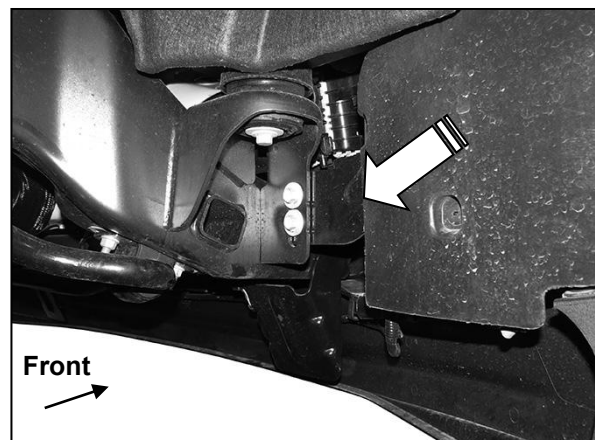
- 13. LED light installation at ends of bumper** (sold separately).
 - a. Insert light into opening and up to mounting slots.
 - b. Follow light manufacturer's instructions to attach each light to slot in the top of the light opening. On two light systems, attach flood light to outer slot and spot light to inner slot.
 - c. Repeat the above steps for driver side light installation.
 - d. Follow light manufacturer's instructions to properly wire the light to the vehicle electrical system.
- 14.** With assistance, carefully position the Bumper Assembly up to the inside of the Mounting Brackets, **(Figure 16)**. Temporarily support the weight of the Bumper. **WARNING:** To avoid possible injury or damage to the vehicle, do not proceed until the bumper is fully and safely supported. Models with LED light, check for clearance before fully installing Bumper assembly.
- 15.** Attach the Bumper to the inside of the Mounting Brackets with the included (6) 12mm Hex Bolts, (12) 12mm Flat Washers, (6) 12mm Lock Washers and (6) 12mm Hex Nuts, **(Figure 16)**. Do not tighten.
- 16.** Insert (2) Plastic Plugs into the square holes in the front of the Bumper if front license plate is required. Reuse the factory screws to attach the license plate to the plastic plugs, **(Figure 17)**.
- 17.** Level and adjust the bumper and fully tighten all hardware.
- 18.** 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.

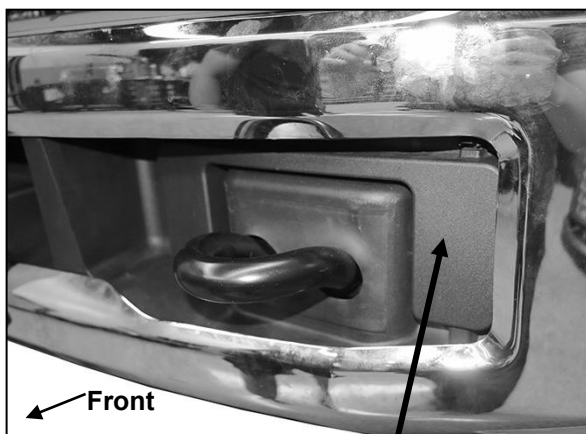
Driver/left Side Installation Pictured



(Fig 1) Unplug wire harness from behind bumper (driver side pictured)



(Fig 2) Remove outer bumper support brackets between frame and bumper (arrow)



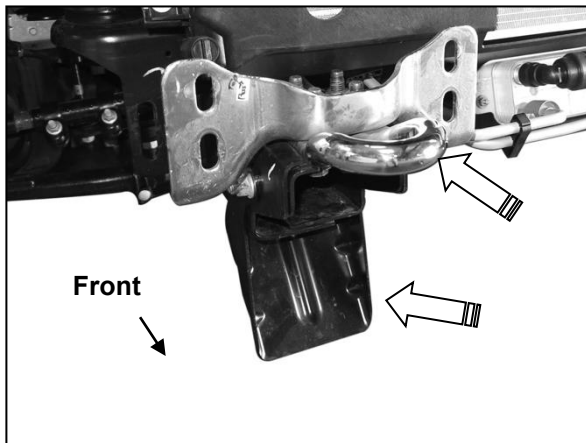
(Fig 3) Remove plastic cover around tow hook



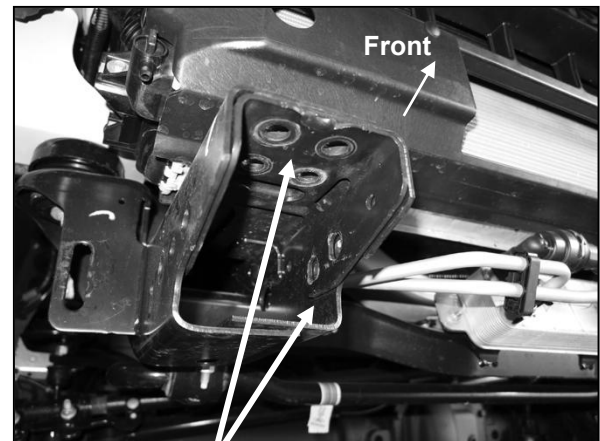
(Fig 4) Remove bumper bolts (driver/left side pictured)

Driver/left Side Installation Pictured

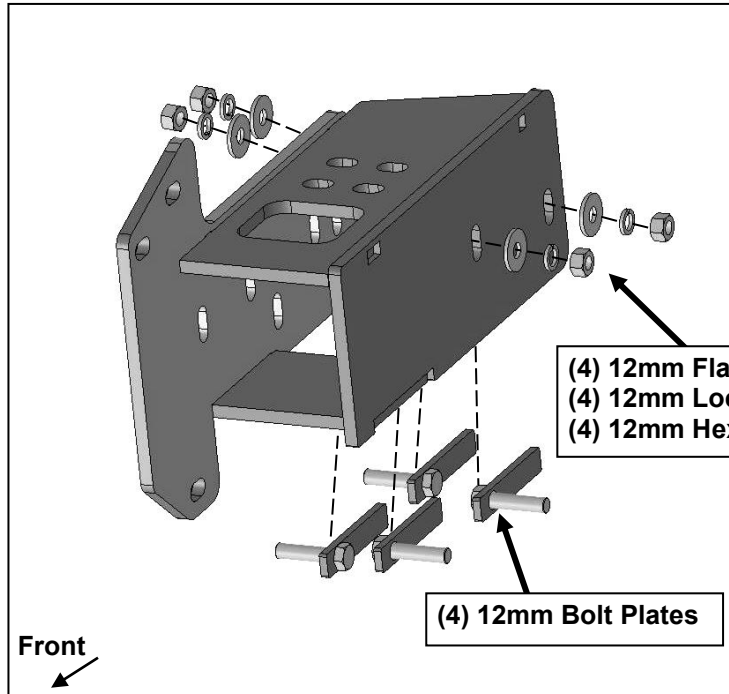
WARNING! Do not remove bumper bolts unless the bumper is properly supported on blocks or stands or it may fall.



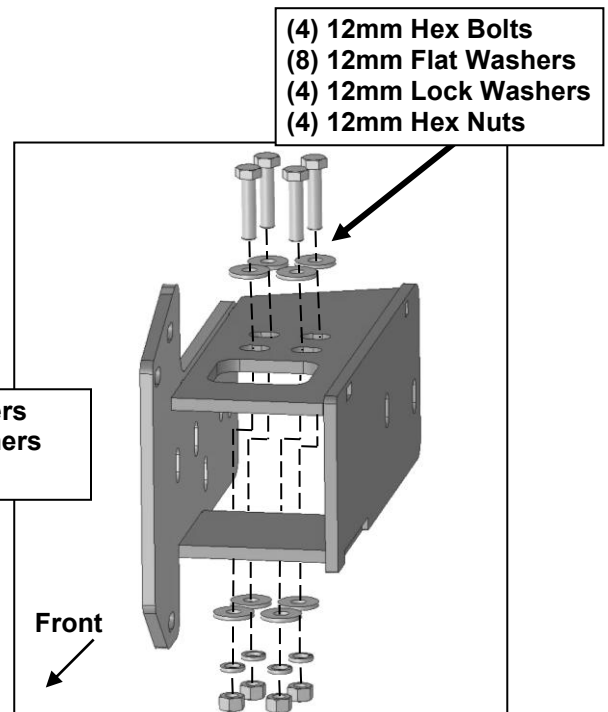
(Fig 5) Remove tow hook assembly and lower frame extension



(Fig 6) Passenger/right frame mounting location

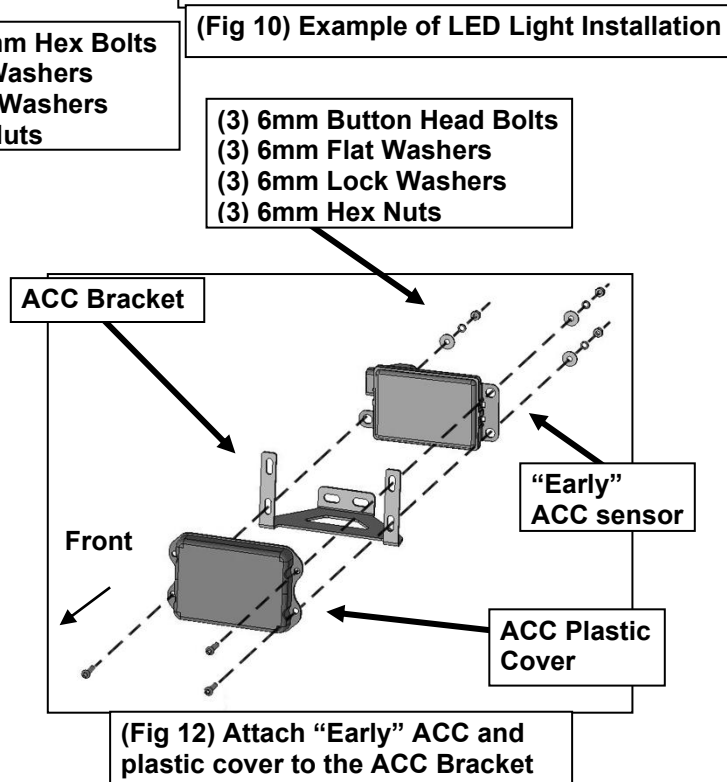
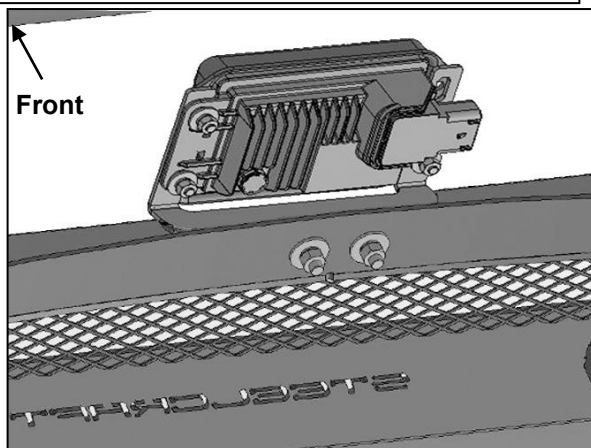
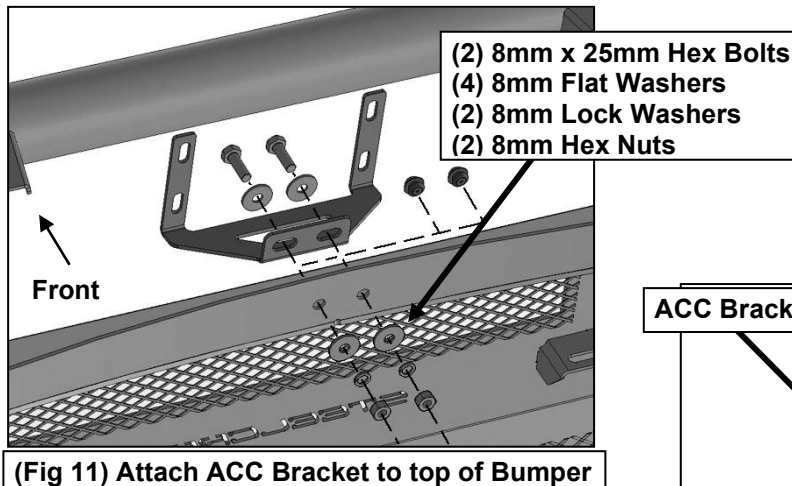
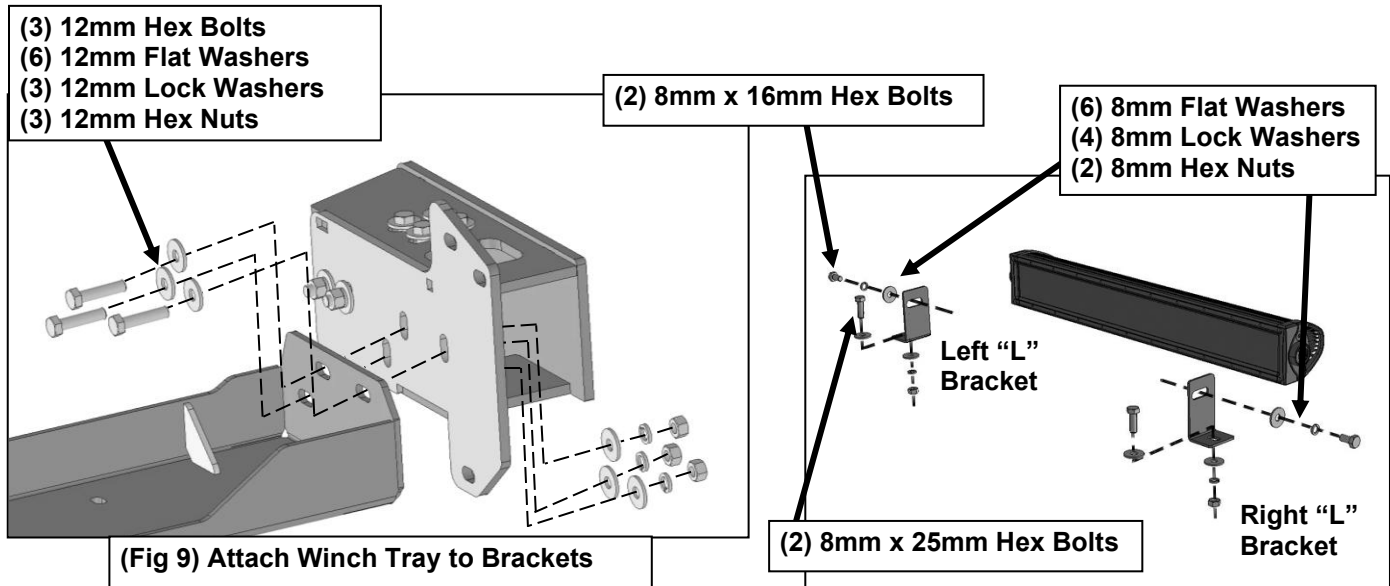


(Fig 7) Attach Driver/left side Mounting Bracket over the frame

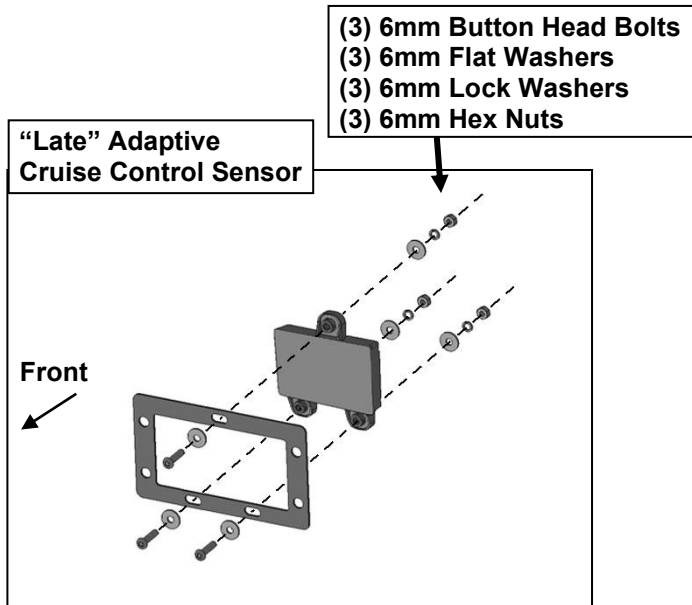


(Fig 8) Attach Driver/left Mounting Bracket to top of frame

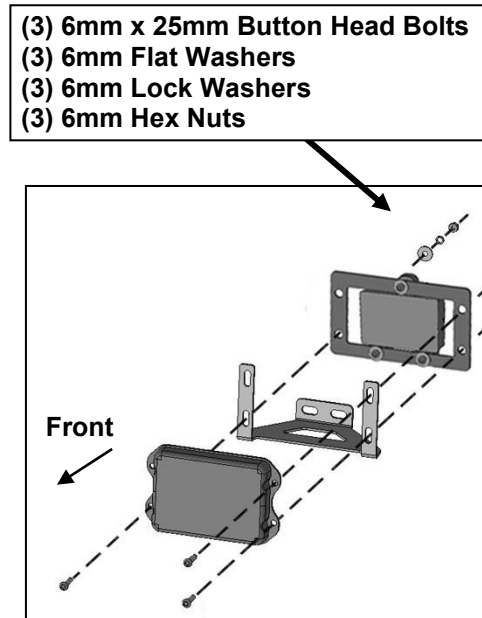
Driver/left Side Installation Pictured



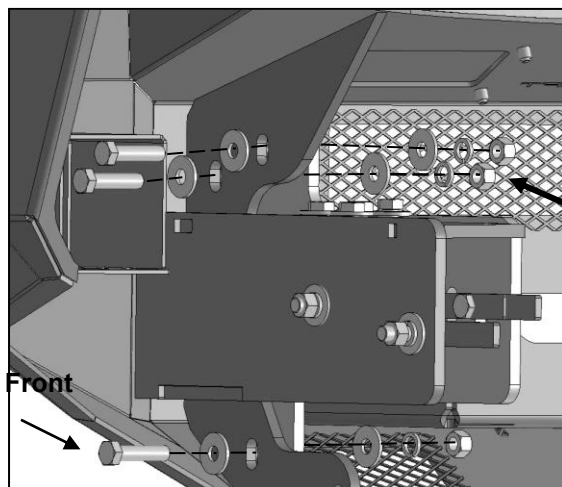
Driver/left Side Installation Pictured



(Fig 14) Attach "Late" ACC sensor to back of Adapter Bracket

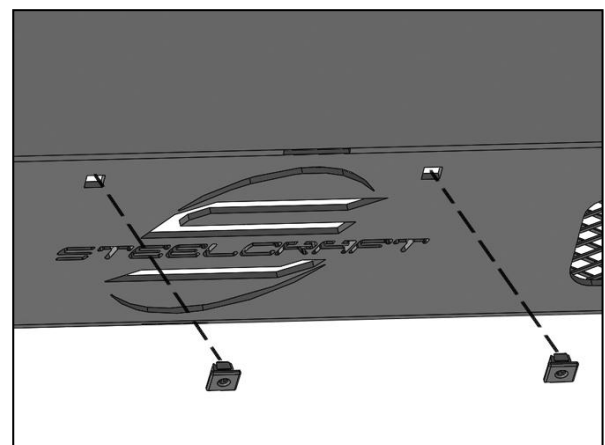


(Fig 15) Attach Adapter Bracket with "Late" ACC and plastic cover to the ACC Bracket



(Fig 16) Attach passenger/right side of Bumper to Mounting Bracket

WARNING! Do not crawl under bumper unless the bumper is properly supported on blocks or stands or the bumper may fall.



(Fig 17) Push plastic plugs into holes in Bumper for license plate if required

Supplemental Installation Steps: Some 2022 F-350's will have an extra cooler between frame.

- Trim tabs off OE cooler brackets so they rest flat against the bumper brackets:



- Install cooler onto forward bolt plate:

