



BIG FRONT GRILL™

Installation Instructions

KENWORTH T660

BFG SKU

BFG-03



Important

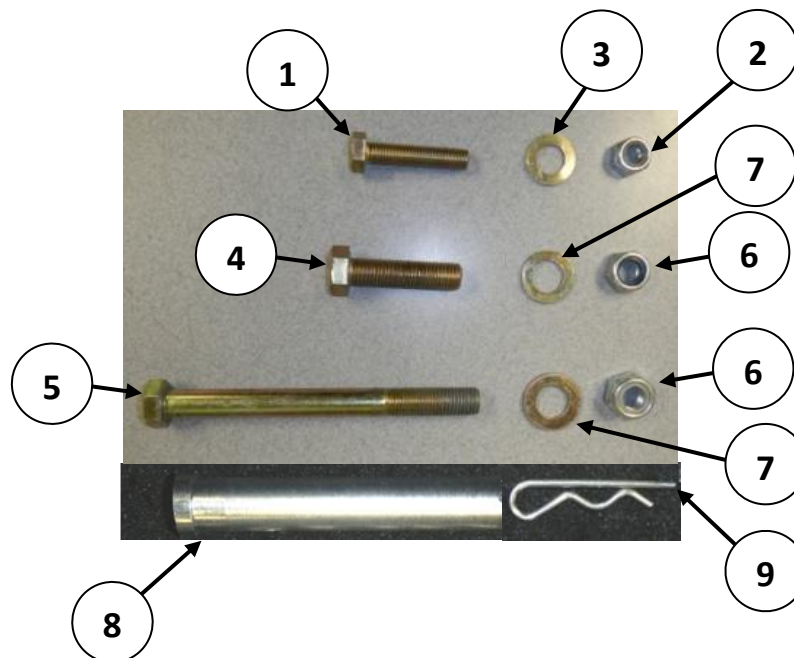
- A BFG Grille Guards are vehicle "Make & Model" specific. Use of a BFG on a vehicle other than on the model it was designed for will constitute improper use of the product and may void warranty.
- B Unless otherwise specified, Class 10.9 or Grade 8 hardware is to be used. For the purposes of these instructions, OE hardware means the truck's original factory hardware.
- C To help maintain the factory finish, avoid acid wash.
- D Ensure bolts of the BFG assembly are fully tightened to the value specified in the installation instruction.

Tools Required

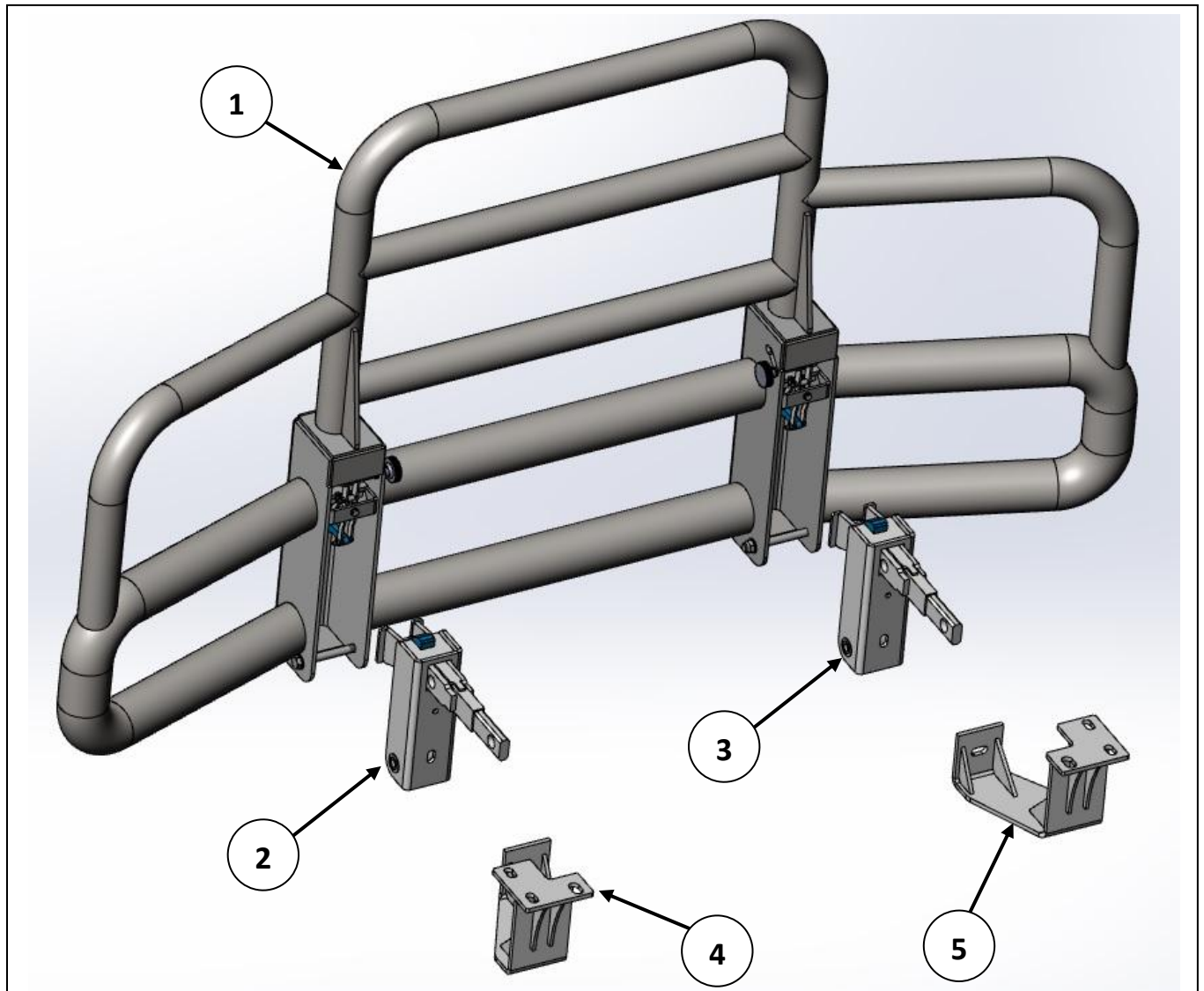
Tool	Spec
Ratchet	Impact gun recommended
Socket	19 mm, 24 mm
Wrench	19 mm, 24 mm
Drill	
Cutting tool	Reciprocating power saw recommended

Loose Hardware Included

Item	Description	QTY	Class	Length
1	HEXBOLT, M12X1.75X60	4	10.9	60 mm
2	HEXNUT, M12X1.75	4	10.9	NA
3	FLATWASHER, M12	8	NA	NA
4	HEXBOLT, M16X2X50	2	10.9	50 mm
5	HEXBOLT, M16X2X170	2	10.9	170 mm
6	HEXNUT, M16X2	4	10.9	NA
7	FLATWASHER, M16	8	NA	NA
8	CLEVIS PIN - 25 X 70	2	NA	NA
9	HAIRPIN COTTER PIN - 3/16" DIA	2	NA	NA



Parts Referenced in this instruction



Item	Part # / Description	QTY
1	BFG-GR04 / GRILL	1
2	BFG-HN-14-DS / BFG HINGE BRACKET DRIVER SIDE	1
3	BFG-HN-14-PS / BFG HINGE BRACKET PASSENGER SIDE	1
4	MTK-03-01-DS / BFG SUBMOUNT DRIVER SIDE	1
5	MTK-03-01-PS / BFG SUBMOUNT PASSENGER SIDE	1

Installation Instructions

1. Remove factory bumper
 - a. Open hood
 - b. Remove two M12 bolts per side per side as shown in Figure 1 (19 mm wrench)
 - c. Close hood and pull factory bumper off the truck

Note: Two factory nut plates removed from the bottom of the truck's frame (Figure 2) will not be used again.



Figure 1 – Passenger's side is shown

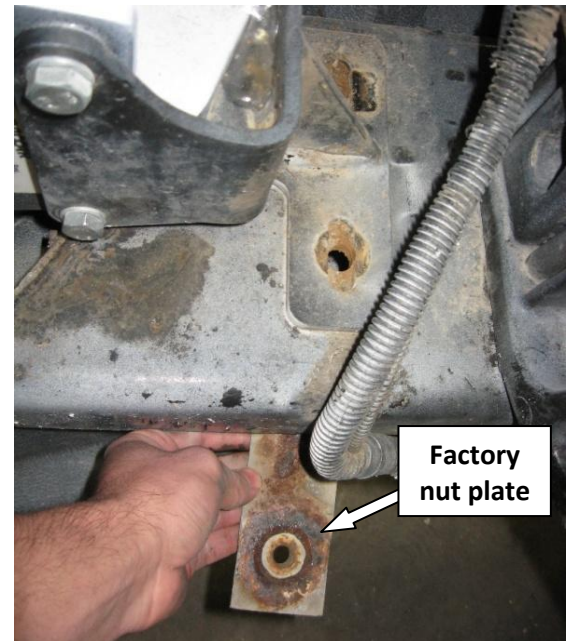


Figure 2 – Driver's side shown

2. Remove two factory tow receiver M16 bolts (one per side) using 24 mm wrench (Figure 3).

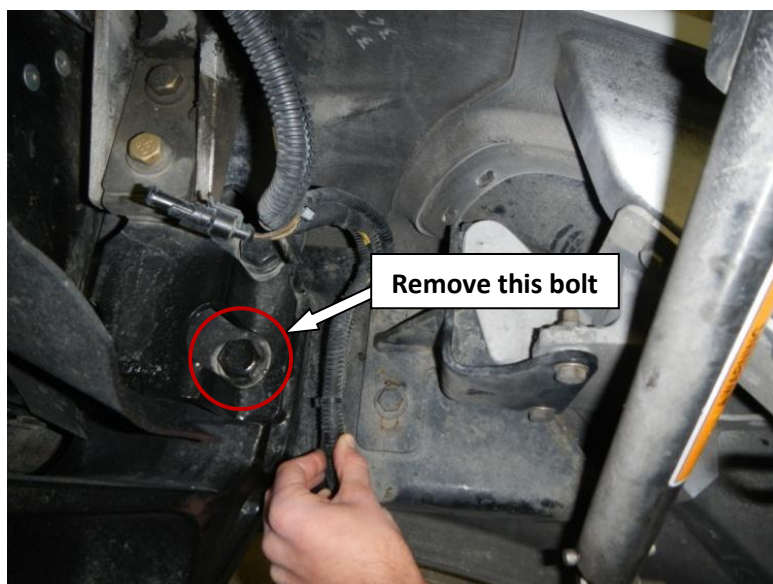


Figure 3 – Passenger's side shown

3. In order to install BFG sub mounts, cut two rectangular holes in the factory bumper according to the dimensions shown in Figure 4.
 - a. Allow the measuring tape to bend and follow the contour of the factory bumper when laying out cut outs.
 - b. Holes are to be cut through both the outer shell and inner lining of the factory bumper. Dimensions for the passenger's side cut out is shown in Figure 3, driver's side cut out is symmetrical.

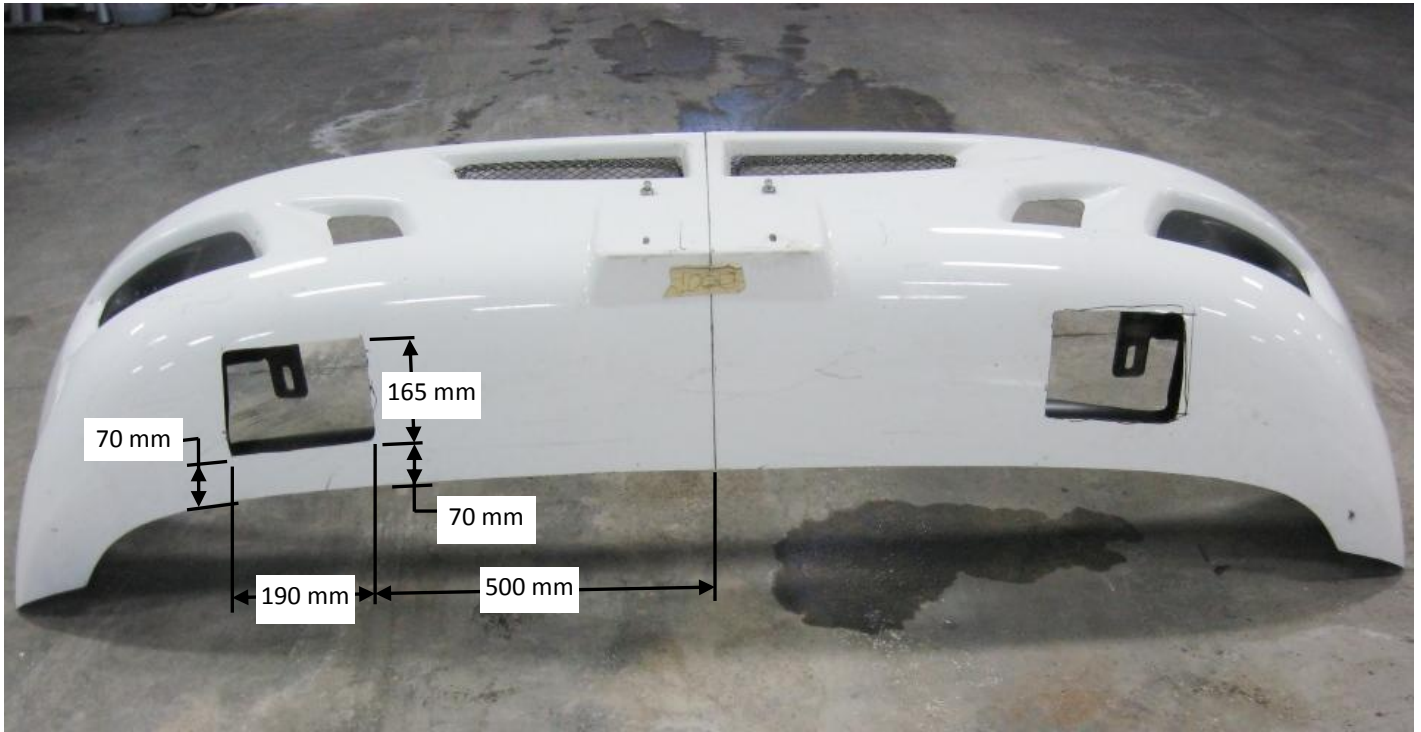


Figure 4 – Factory bumper cut outs

4. Mount factory bumper back in place.

- a. Install four M12X1.75X60 bolts and washers (supplied in the hardware kit) in the factory bumper bracket slots (Figure 5).
- b. Install two M16X2X170 bolts and washers in the tow receiver holes (Figure 5).
- c. From under the truck, mount BFG sub mount (MTK-03-01-DS) onto the driver's side and MTK-03-01-PS onto the passenger's side. Insert BFG sub mounts through the holes in the factory bumper cut in step 3. Align holes in the BFG sub mounts with the holes in truck's frame.
- d. Do not tighten bolts; allow the BFG sub mounts to be moved freely towards and away from the truck.

Note: Trim factory bumper as required to allow for the installation of the BFG sub mounts.

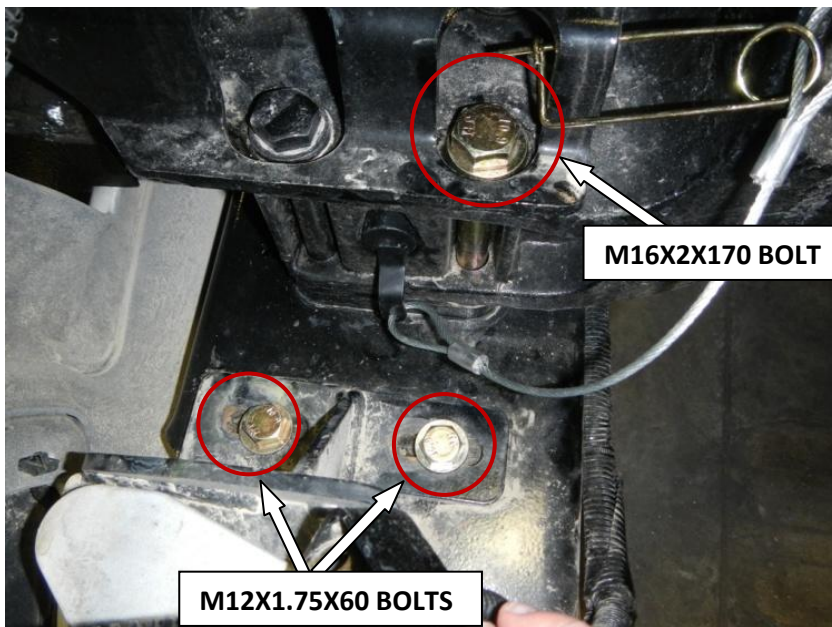


Figure 5 – Driver's side shown

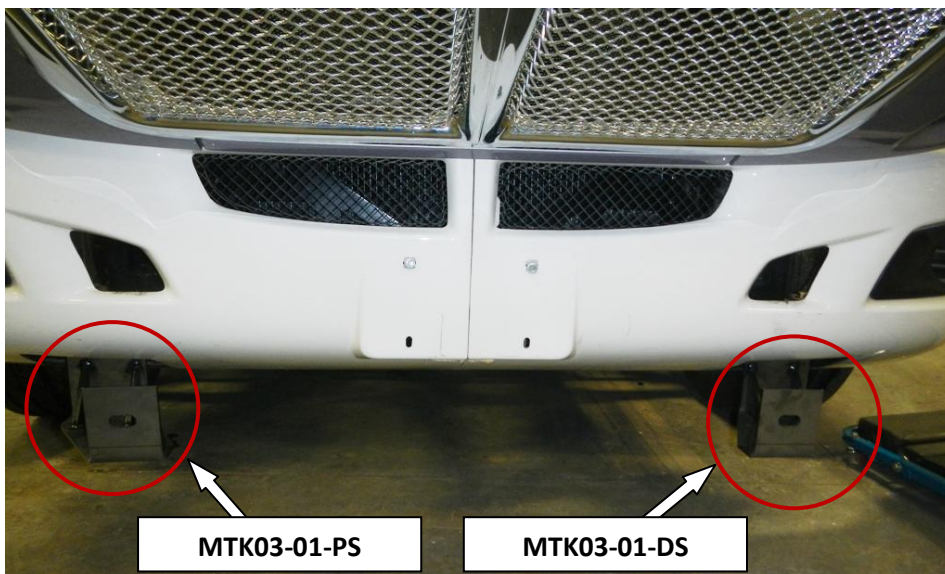


Figure 6 – BFG sub mounts installed

5. Insert BFG Grill into the truck's tow receivers as shown in Figure 7.

Note: BFG is open in Figure 7 to clearly show the installation. It is easier to insert the BFG with the Grill closed.

- a. Pull the knobs of the BFG up and open the bar (Figure 7).
- b. Open the hood and insert factory tow pin into tow receivers. Adjust the position of the BFG as required to ensure alignment of the factory tow receiver holes and holes in the BFG hinge bracket (follow truck's manual to ensure proper installation of the tow pins).
Twist lock tow pins in place (Figure 8).

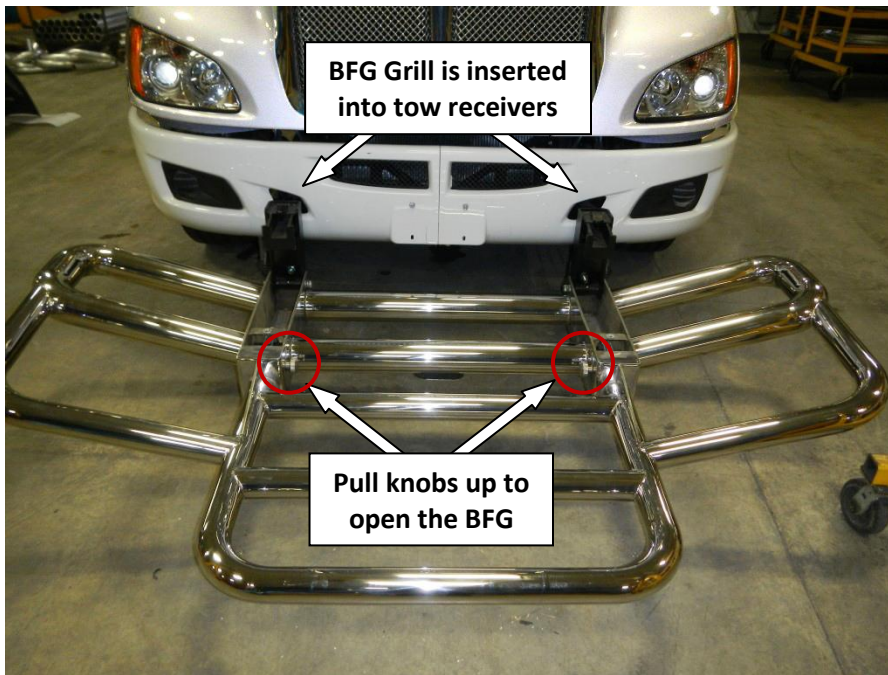


Figure 7

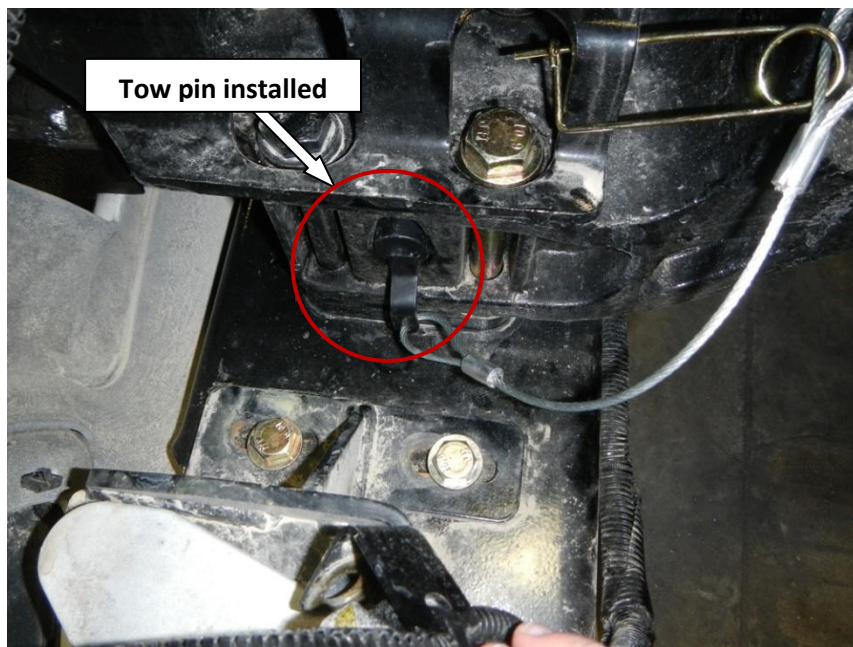


Figure 8 – Driver's side shown

6. While the BFG is still open, attach BFG Grill and BFG sub mounts using two M16X2X50 bolts, nuts and washers (Figure 9 and 10). Do not tighten bolts yet.



Figure 9 – Driver's side shown

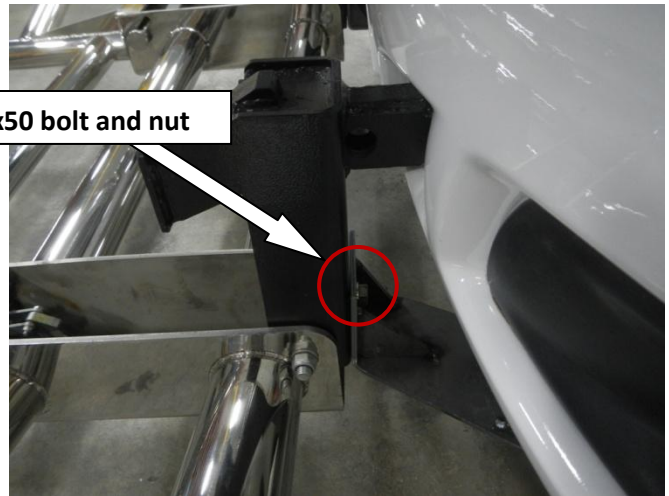


Figure 10

7. With hood of the truck open, tighten four M12 factory bracket bolts to 80 ft-lb, and two M16 tow receiver bolts to 200 ft-lb (Figure 11).

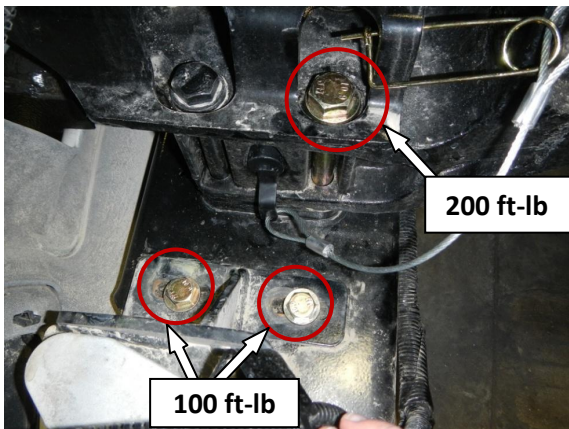


Figure 11 – Driver's side shown

8. Torque two M16 bolts attaching BFG Grill to the BFG sub mount to 200 ft-lb.

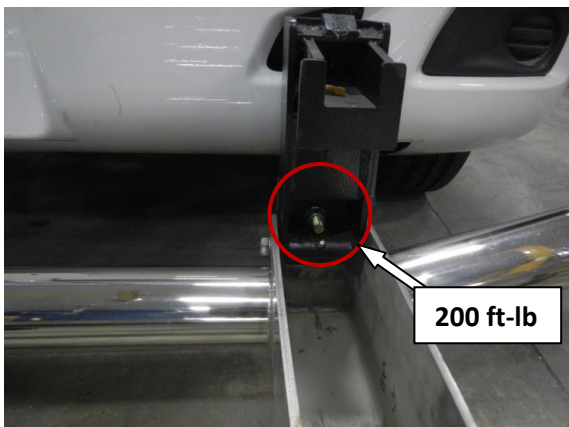


Figure 12 – Driver's side shown

9. Release the knobs and close the BFG (Figure 13). The latch mechanism has been adjusted and is ready for use. If adjustment is needed in the future, please follow the latch adjustment instruction.



Figure 13