

# INSTALLATION INSTRUCTIONS:

1. Unhook the fog light wiring harness.
2. Remove the side bumper bracket bolts. Two on each side.
3. If an Adaptive Cruise Control Module is present, located on the driver side, it will need to be unplugged and removed. It will be installed later.
4. Remove the factory bumper by removing the eight 18mm bolts. Four on each side.
5. Remove the tow hooks. There are four 18mm bolts holding each tow hook.
6. **Note:** Before installing the mounting plates, make sure the top of the frame rails and the bottom sides of the mounting plates are free of splatter. Slide the tow hook through the opening and mount the mounting plate over the frame. Use the tow hook bolt to install back to the frame. Use four 1/2" x 1 3/4" bolt, facing towards the inside of the frame, to mount the mounting plate to the inside of the frame.
7. Make sure the holes of the tow hook bracket and the holes of the mounting plate line up.
8. Mount the front bumper replacement to the mounting plates by using the 1/2" x 2" bolts.
9. Center the frontend from side to side and raise or lower the frontend as needed.
10. Mount the Adaptive Cruise Control Module to the Adaptive Cruise Bracket (FBF171ACBBL) provided. Use the 1/4" x 1 1/2" bolts provided. Use the four plastic spacers between the adaptive cruise bracket and the rectangle plastic cover. Mount the bracket to the angle iron that is located on the underside of the top plate with 5/16" bolts. The A.C.C. module will face forwards.
11. **MAKE SURE ALL NUTS AND BOLTS ARE TIGHT!!**

## PARTS LIST

Hex Head Bolt: 1/2" - 13 x 1 3/4" .....	QTY: 8
Hex Head Bolt: 1/2" - 13 x 2" .....	QTY: 8
Hex Head Bolt: 1/4" - 20 x 1" .....	QTY: 5
Flat Washer: 1/2" .....	QTY: 32
Lock Nut: 1/2" - 13 .....	QTY: 16
Keyp Nut: 1/4" - 20 .....	QTY: 8
Hex Head Bolt: 1/4" - 20 x 1 1/2" .....	QTY: 3
Flat Washer: 1/4" .....	QTY: 4
Hex Head Bolt: 5/16" - 18 x 1" .....	QTY: 2
Flat Washer: 5/16" .....	QTY: 4
Lock Washer: 5/16" .....	QTY: 2
Hex Nut: 5/16" - 18 .....	QTY: 2
Poly Bag: 6" x 10" .....	QTY: 1
Poly Bag: 16" x 18" .....	QTY: 1
Unthreaded Spacer: 3/8" x 1/2" x .26" ID .....	QTY: 4
FSF15HACP: Adaptive Cruise Plastic .....	QTY: 1
FBF171ACBBL: Adaptive Cruise Bracket .....	QTY: 1
FBF171MPABL: Mounting Bracket .....	QTY: 2

## TOOLS REQUIRED

- Socket Wrench with Extension (Ratcheting wrenches may also be convenient)
- 7mm, 10mm, 15mm, 18mm, 19mm, 3/4 Sockets and Box End Wrenches
- Flat head screw drivers
- Floor jack, jack stands and/or a wood block
- 9/16 drill bit with drill

## MAINTENANCE/CARE

- Periodically check and tighten all fasteners.
- Stripped, fractured, or bent bolts or nuts need to be replaced.
- After washing of the vehicle make sure to fully dry all surfaces

## SENSOR DISCLAIMER

PLEASE NOTE PARKING SENSORS ARE EXTREMELY DELICATE AND MUST BE HANDLED WITH CARE!

Do NOT touch or shift the clear rubber grommet that surrounds the sensor face. DO NOT glue housing into place until orientation and functionality is determined.

## APPENDIX

### Troubleshooting Vehicle Sensors

- Start with a general inspection of the sensor fitment. Check that both the sensors and the sensor clips are fully secure and the sensors are properly centered in the housing.
- Confirm plastic housing is in the correct mounting holes. Misplaced sensor housings could compress sensor and give false readings or faults.
- Use a clean microfiber to wipe the front face of the sensor.
- Inspect connection. Be sure that the sensor is firmly seated into the harness.
- Run through several start cycles (i.e. fully turn the vehicle on and off).
- Finally, disconnect the battery to reset the sensors.

