

# INSTALLATION MANUAL

## BSF24HBL1

### Level of Difficulty

Moderate

Installation difficulty levels are based on time and effort involved and may vary depending on the installer level of expertise, condition of the vehicle and proper tools and equipment.

### Parts List

Qty	Description
1	Driver-side top bracket
1	Passenger-side top bracket
1	Drive-side bottom bracket
1	Passenger-side top bracket
1	Adaptive cruise plastic
2	Adaptive cruise insert
1	Adaptive cruise bracket
1	Adaptive cruise bracket backer
2	Fog light bracket
4	Plastic spacer
6	Rubber grommet
10	Rubber washer
1	Sensor pigtail
2	Hex nut tab, 1/2"
4	Hex head bolt, 1/2"-13 x 2", grade 8
4	Hex head bolt, 1/2"-13 x 1-1/2", grade 5
12	Flat washer, 1/2"
8	Lock washer, 1/2"
4	Hex nut, 1/2"-13
8	Carriage bolt, black, 1/2"-13 x 1-1/2", grade 5
8	Hex lock nut, black, 1/2"-13
8	Flat washer, black, 1/2"
6	Hex head bolt, 1/4"-20 x 1", grade 5
6	Hex nut, 1/4"-20
6	Flat washer, 1/4"
6	Button head bolt, black, 1/4"-20 x 1-1/2"
19	Button head bolt, black, 1/4"-20 x 3/4"
25	Kep nut, black, 1/4"-20
1	Summit bullnose front bumper

### Product Photo



### NOTICE

Before you begin installation, read all instructions thoroughly.

Proper tools will improve the quality of installation and reduce the time required.

Periodic inspection of your product should be performed to ensure all hardware and / or components remain secure.

To help prevent damage to the product or vehicle, refer to the specified torque specifications when securing hardware during the installation process.

### Product Registration and Warranty

Ranch Hand stands behind our products with industry-leading warranties. To get copies of the product warranties, register your purchase or provide feedback, visit: [warranty.curtgroup.com/surveys](https://warranty.curtgroup.com/surveys)

### Maintenance

Mild automotive detergent may be used to clean the product. Do not use dish detergent, abrasive cleaners, abrasive pads, wire brushes or other similar products that may damage the finish.

### Tools Required

Ratchet	Torque wrench
SAE socket set	Metric socket set
SAW wrenches	Metric wrenches
Allen wrench, 5/32"	Socket extension
Ratchet wrench, 15mm	--

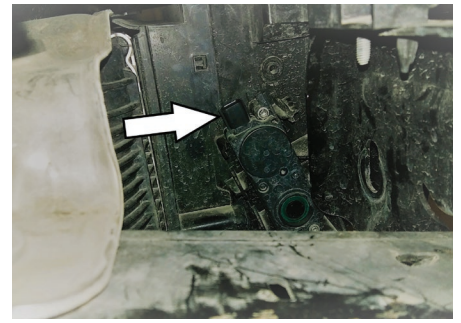
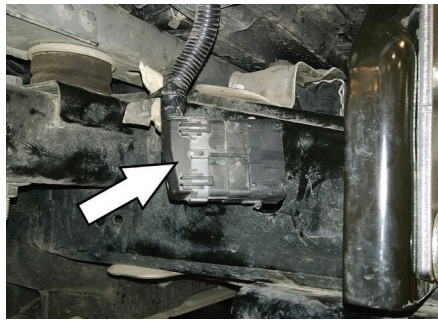
### Torque Specifications

M12 bolt	59 ft-lbs.
1/2" bolt, grade 5	75 ft-lbs.
1/2" bolt, grade 8	110 ft-lbs.

Use above torque setting unless otherwise noted

### Step 1

Before removing the bumper, locate and carefully disconnect the main wiring harness connector and the connector for the bottom louvers, being careful not to damage the locking tabs. Both connectors are located under the bumper on the passenger side.



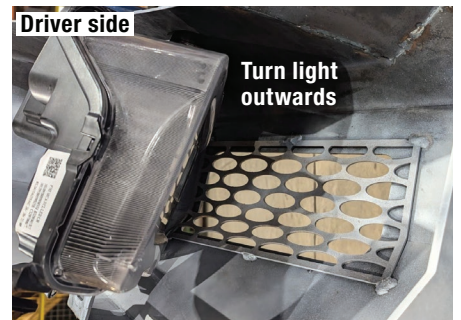
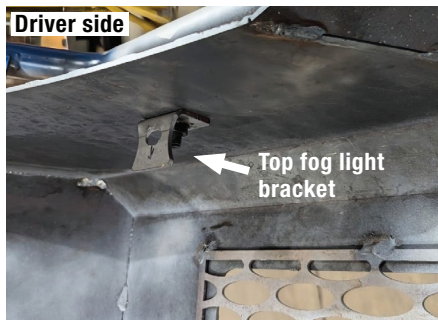
### Step 2

Remove the six (6) 21mm mounting nuts (three on each frame horn) securing the the factory bumper. Locate the last connector above the bottom louver system on the driver side of the bumper. Carefully pull the bumper away from the frame to access the conenctor, and then unplug it, being careful to not damage the locking tabs.



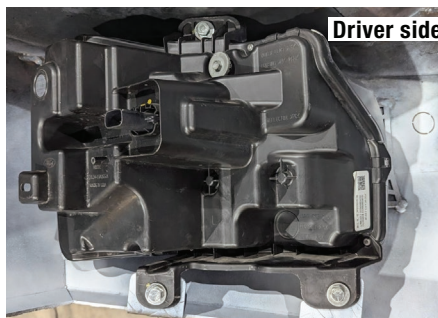
### Step 3

Loosely secure the top "L" bracket to the top plate using a 1/4" button head bolt and kep nut. The formed side of the bracket should face rearward. Secure the top hole of the fog light to the "L" bracket using a 1/4" x 1" bolt. If necessary, rotate the top bracket outwards to access the top hole of the fog light.



### Step 4

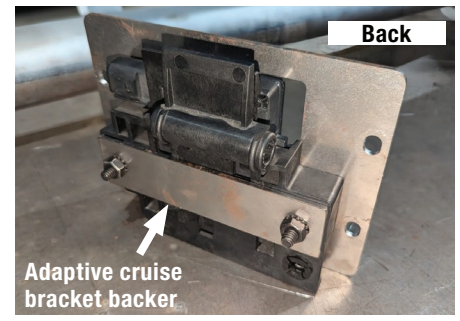
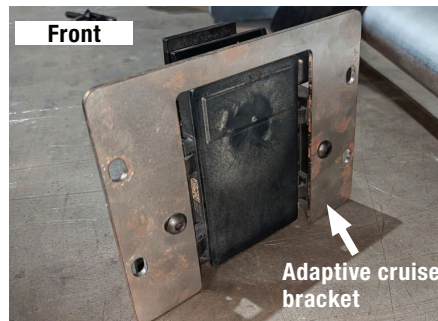
Bolt the bottom two (2) holes of the fog light to the formed tabs on the bottom of the skirts using 1/4"x 1" bolts, washers and kep nuts.



### Step 5

If adaptive cruise control (ACC) is present, remove the ACC module from the factory bumper. Install the module to the ACC bracket using two 1-1/2" button head bolts and kep nuts. Place the backer bracket on the rear of the module.

**Note:** If Adaptive Cruise Control is not present, install the insert and proceed to step 7.



### Step 6

**Driver-side opening:** Mount the ACC module/bracket to the frontend. Insert four (4) 1-1/2" button head bolts and rubber washers, from the front side through the bolt holes. Slide the black plastic cover, and plastic spacers over the bolts on the rear side of the module, then mount the ACC module/bracket over the bolts and secure it with kep nuts.

**Passenger-side opening:** Use four 3/4" button head bolts and rubber washers through the bolt holes. Mount the insert from the back side and secure with kep nuts.

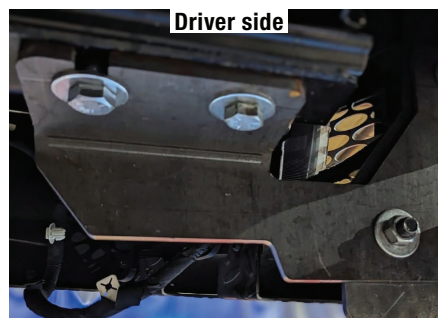


### Step 7

Route the main wiring harness disconnected from the factory bumper in step 1 through the large square holes of the uprights in the front end. If sensors are present, remove the knockouts in the front end and install rubber grommets into the holes. Install the sensors into these holes and connect the fog light and adaptive cruise control wiring harnesses.

### Step 8

If tow hooks are present, remove them. Mount the bottom brackets along with the tow hooks to the bottom of the frame. Mount the top brackets to the two (2) outside holes in the frame plate. Use the provided 1/2" hardware. The bottom brackets should be about 39-1/2" outside diameter apart and will mount to the inside of the uprights. The top brackets should be about 40-3/8" inside diameter apart and will mount to the outside of the uprights.



### Step 9

Install the license plate to the center two holes on the front end.