

# Intrusion Beams

Ford Ranger | 2019+

Part #: 123614 Rev. 090823



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## SAFETY WARNING

BDS Suspension Co. recommends this system be installed by a professional technician. In addition to these instructions, professional knowledge of disassembly/ reassembly procedures and post installation checks must be known.

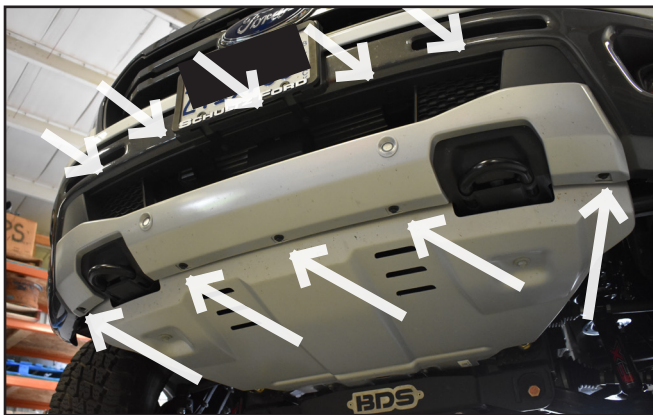
## INSTALLATION INSTRUCTIONS

1. Park the vehicle on a clean, flat surface and block the rear wheels for safety.

### FRONT INTRUSION BEAM

2. Remove the five (5) bolts on the bottom of the front bumper valence cover.
3. Remove the five (5) push pins on the upper part of the front bumper valence cover. If equipped also remove the two (2) bolts attaching the front license plate mount to the front bumper.

**FIGURE 1**



4. There are eight (8) clips holding the front bumper valence cover on. Carefully pull back on the front bumper valence cover to remove it from the vehicle.
5. Disconnect the wire harness from the two sensors in the front bumper valence cover.
6. Remove the two front tow hook covers.

### 123614 Box Kit

Part #	Qty	Description
03802	2	Rear Intrusion Beam
03803	2	Front Intrusion Beam
9474K54	2	2" x 1.5" Rectangular Plug Cap
9565K38	2	2" x 2" Square Plug Cap

**FIGURE 2**



7. Mark the position of the six (6) bumper nuts and front bumper position relative to the frame. Remove the nuts and with the help of an assistant remove the bumper from the vehicle. While removing the bumper the main wire harness for the bumper can be accessed. Disconnect the wire harness and set the bumper aside.

**FIGURE 3**

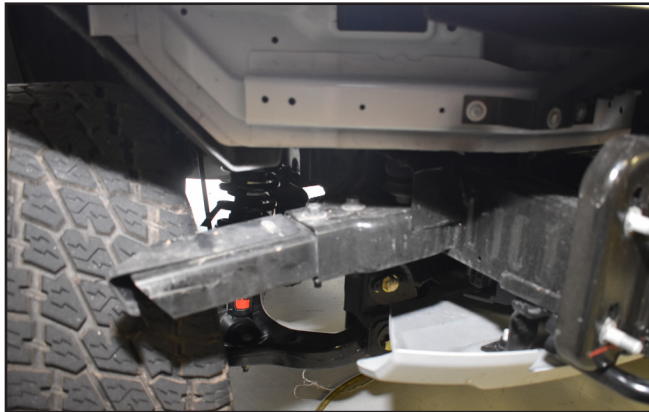


**FIGURE 4**



8. Remove the two bolts attaching the front intrusion beam to the frame. Save the bolts for later installation. Discard the intrusion beam and cover.

**FIGURE 5**



9. Install the 2" x 2" Square Plug Cap into the new front square intrusion beam.
10. Install the new front intrusion beam with the factory hardware. The intrusion beam will offset forward in the opening to provide maximum tire clearance. Torque hardware to 60 ft-lbs.

**FIGURE 6**



**FIGURE 7**



11. Once both intrusion beams have been replaced, with the help of an assistant reinstall the front bumper. Make sure to reconnect the main wire harness for the bumper. Torque the bumper nuts to 76 ft-lbs. Make sure to line up the bumper with the marks made in the previous step.
12. Reinstall the two front tow hook covers.
13. Reconnect the two sensors in the bumper valence cover to the wire harness.
14. Reinstall the front bumper valence cover in reverse order that it was removed. Torque the bumper valence cover bolts to 36 in-lbs.

### **REAR INTRUSION BEAM**

15. Remove the fender trim bolt (Torx T25). Save bolt for later installation.

**FIGURE 8**



16. Remove the three (3) pin-type retainers on the rear of the fender liner in order to access the inner structure. Save pin-type retainers for later installation.

17. Remove the four (4) bolts attaching the inner plastic structure to the body. Remove the plastic inner structure from the vehicle. Save bolts for later installation.

**FIGURE 9**



**FIGURE 10**



18. The rear intrusion beam will need to be cut to remove it from the vehicle. A sawzall works best to cut all the way through the intrusion beam.

**FIGURE 11**



19. Remove the two bolts attaching the rear intrusion beam to the frame. Save the bolts for later installation. Discard the intrusion beam.
20. Install the 2" x 1-1/2" Rectangular Plug Cap into the new rear rectangular intrusion beam.

**FIGURE 12A**



**FIGURE 12B**



21. Install the new rear intrusion beam with the factory hardware. Ensure beam cutout is facing forward. Do this on passenger and driver side. The intrusion beam will offset towards the rear in the opening to provide maximum tire clearance. Torque hardware to 60 ft-lbs.
22. Reinstall the inner plastic structure with the factory hardware. Torque hardware 16 ft-lbs.
23. Reinstall the pin-type retainers back to their factory positions.
24. Reinstall the fender trim bolt.

**FIGURE 13**



25. Check all hardware after 500 miles.