

BX2689 2019-2022 Ford Ranger Pickup (Includes Adaptive Cruise Control) Installation Instructions

Attachment Tab Height: 17"

Attachment Tab Width: 31"

Serial Number

Please read BOTH these Installation Instructions and the General Information sheet prior to installing or operating this equipment.

- Blue Ox[®] towing products and accessories are intended to be installed by Blue Ox[®] Dealers who are familiar with our products and have the equipment and knowledge necessary to do "fit work".
- Many Blue Ox[®] baseplates are designed to use existing holes and hardware to mount the baseplate to the towed vehicle. Even though bolts are there, do not assume they are adequate for baseplate mounting. Always use the hardware supplied in the hardware kit and existing hardware as specified in the installation instructions.



Reference your vehicle owner's manual for manufacturer's towing specifications.

Bolt Torque Specifications

Torque in Foot-Pounds for Inch Bolts

| Bolt Size | Grade 5 | Grade 8 | |
|------------------|---------|---------|--|
| 1/4" | 10 | 14 | |
| 5/16" | 19 | 29 | |
| 3/8" | 33 | 47 | |
| 7/16" | 54 | 78 | |
| 1/2" | 78 119 | | |
| 5/8" | 154 | 230 | |
| 3/4" | 257 | 380 | |

Bolt Torque Specifications Torque in Foot-Pounds for Metric Bolts

| Bolt Size | Grade 8.8 | Grade 10.9 |
|-----------|-----------|------------|
| 6MM | 6 | 8 |
| 8MM | 16 | 22 |
| 10MM | 31 | 40 |
| 12MM | 54 | 70 |
| 14MM | 89 | 117 |
| 16MM | 161 | 230 |
| 18MM | 222 | 318 |

A WARNING

Failure to read and follow these instructions could result in separation of the towed vehicle from the tow bar, causing property damage, loss of towed vehicle, personal injury or death. **Instruction Notes:** The belly pan is removed and reinstalled for the baseplate installation.

Place all components that are removed on a flat, sturdy surface. All items will be reinstalled unless otherwise noted after the baseplate is installed.

The dimensional variations between otherwise identical vehicles can be considerable. While the baseplate was designed for easy installation, it may be necessary to tailor the baseplate slightly to compensate for vehicle manufacturer's tolerances.

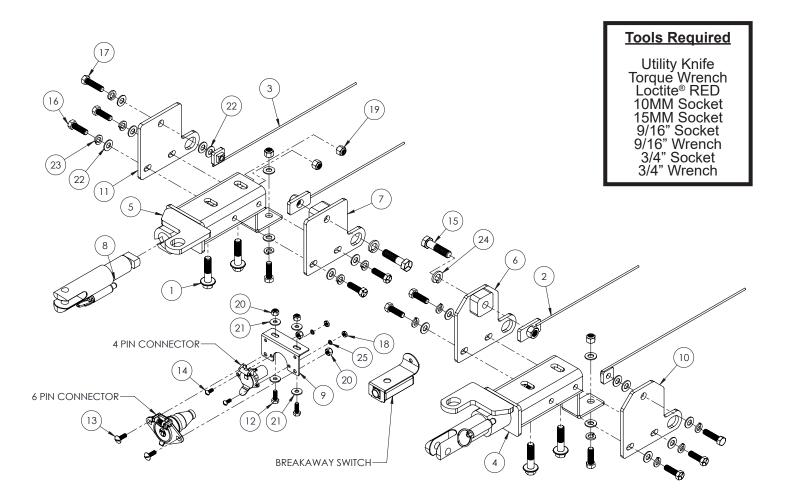
The BX8869 Tail Light Wiring Kit is recommended for this vehicle. For vehicles with LED lights the BX8848 is recommended.

Drill a hole according to the tail light wiring kit instructions.



NOTICE

- Handling of some cosmetic parts when installing this product may require the use of protective covers, rags, specialty tools, etc. to prevent damage.
- When using power drills be aware of the dangers of torque and drill bit length.
- When using a reciprocating saw be aware of objects behind the cutting surface.
- Use a good quality paint to spray cut edges of frame to prevent rusting.
- Be sure that **ALL** electrical connections are plugged in and accessories are functioning properly before reinstalling the fascia.
- The baseplate is computer tested to your vehicle's GVWR, exceeding this weight will void the manufacturer's warranty.
- Be sure to use a sufficient amount of Loctite[®] Red on all bolt threads before tightening. Tighten all bolts according to the torque chart provided unless specified.
- Dealer or installer be certain the user receives these instruction sheets.
- If the baseplate is in an accident, it must be replaced. DO NOT use it again! An accident can cause unseen damage and using it again could result in more damage or serious injury. DO NOT use the baseplate if it is damaged or missing parts.



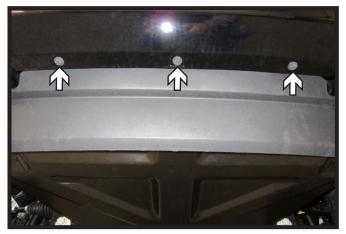
| Item No. | Part No. | Description | Qty. |
|----------|---------------------|---|------|
| 1 | Existing | M12 x 1.75MM Bolt | 4 |
| 2 | 61-4604 | 1/2"-13 Nut Plate w/ 10" Wire | 2 |
| 3 | 61-5208 | 3/8" Nut Plate w/ 14" Wire | 2 |
| 4 | 61-8519 | BX2689 Baseplate, DS | 1 |
| 5 | 61-8520 | BX2689 Baseplate, PS | 1 |
| 6 | 61-8521 | Side Plate, DS | 1 |
| 7 | 61-8522 | Side Plate, PS | 1 |
| 8 | 62-3468 | Attachment Tab Assembly with Hole | 2 |
| 9 | 101-6135 | Electrical Bracket, 90° Bend | 1 |
| 10 | 101-10739 | Plate, DS | 1 |
| 11 | 101-10740 | Plate, PS | 1 |
| 12 | 201-0050 | 1/4"-20 x 3/4" Hex Head Bolt, Grade 5, ZP | 2 |
| 13 | 201-0111 | 1/4"-20 x 3/4" Slot Truss Head Screw | 2 |
| 14 | 201-0192 | #10-32 1/2" Round Slotted Head Screw | 2 |
| 15 | 201-0283 | 1/2"-13 x 2" Hex Head Bolt, Grade 5,, ZP | 2 |
| | | 3/8"-16 x 1-1/4" Hex Head Bolt, Grade 5, ZP | |
| 17 | 201-0440 | 3/8"-16 x 1-1/2" Hex Head Bolt, Grade 5, ZP | 2 |
| | | #10-32 Hex Nut | |
| 19 | 202-0090 | 3/8"-16 Hex Nylon Insert Lock Nut, ZP | 10 |
| 20 | 202-0102 | 1/4"-20 Hex Nylon Nut, ZP | 4 |
| 21 | 203-0001 | 1/4" Flat Washer, ZP | 4 |
| 22 | 203-0003 | 3/8" Flat Washer, ZP | 18 |
| 23 | 203-0010 | 3/8" Lock Washer, ZP | 12 |
| 24 | 203-0012 | 1/2" Lock Washer, ZP | 2 |
| 25 | 203-0054 | #10 Lock Washer, ZP | 2 |
| 26 | 226-0049(not shown) | Class IV Safety Cables | 2 |
| 27 | 229-0512(not shown) | 1/2" Quick Link, ZP | 2 |
| | | Black Cap Plug Receiver | |

Important:

Use only genuine factory replacement parts on your baseplate. Do **NOT** substitute homemade or non-typical parts. If a bolt is lost or in need of replacement, for your safety and the preservation of your baseplate, be sure to use a replacement bolt of the same grade (In most cases it will be Grade 5, please reference the parts list above). Replacement parts may be ordered through your nearest Blue Ox® Dealer or Distributor. Failing to follow and/ or altering these installation instructions in either installation or required equipment will void the manufacturer's warranty. Towing behind a non-motorized vehicle will void the warranty.



1. Remove plastic shield from both tow hooks.



2. **For Vehicles with a Shroud:** Using a 10MM socket, remove the three (3) bolts from the front of the plastic shroud.



3. **For Vehicles with a Shroud:** Pull down the front of the plastic shroud. Using a 10MM socket, remove the three (3) bolts. Two (2) from the driver side and one (1) from the passenger side of the vehicle.



4. **For Vehicles with a Shroud:** Using a 10MM socket, remove the two (2) bolts from the underside of the vehicle. Do this on both sides of the vehicle.



5. For Vehicles with a Shroud: Using a 10MM socket, remove the one (1) bolt from in front of the tire. Do this on both sides of the vehicle. Remove plastic shroud and set aside to be reinstalled later.





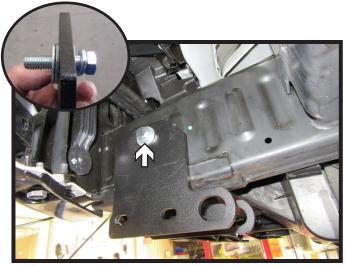
6. Using a 15MM socket, remove the front two (2) bolts of the belly pan. Loosen the back two (2) bolts then slide belly pan off and set aside to be reinstalled later.



 Using a 15MM socket, remove the two (2) bolts from the tow hook. Remove tow hook, it will not be reinstalled. Do this on both sides of the vehicle.



8. There are two (2) support brackets styles for each side of the vehicle. The tapered edge brackets are for the driver side of the vehicle and the square edge brackets are for the passenger side of the vehicle. Note: The plates with the welded spacer are installed toward the inside of the vehicle.



 Attach outer side plate using 3/8" bolt with lock washer, flat washers and nut plate. Leave loose. Do this on both sides of the vehicle.

Note: Place two (2) flat washers between the plate and the frame (inset).

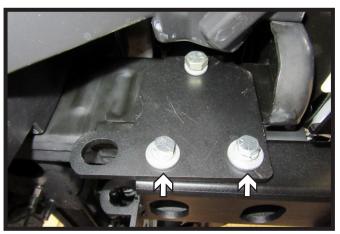


 Attach inner side plate using a 1/2" bolt with lock washer and nut plate. Leave loose. Do this on both sides of the vehicle.



- 11. Reinstall existing tow hook bolts. Do this on both side of the vehicle.
- ** Use Loctite[®] Red on all bolt threads and tighten all bolts to the appropriate torque. **

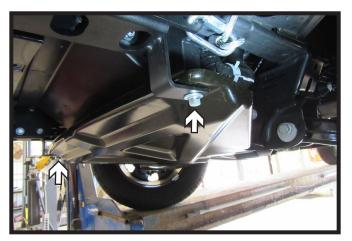




- 12. Attach baseplates to side plates using four (4) 3/8" x 1-1/4" bolts with lock washers, flat washers, and nylon lock nuts. Tighten all bolts at this time. Do this on both sides of the vehicle.
 - ** Use Loctite® Red on all bolt threads and tighten all bolts to the appropriate torque. **



13. Attach the permanent baseplate safety cables to the provided convenience link on the baseplate. The photo above shows the recommended installation of the cables to frame of vehicle. Additional options may interfere with suggested mounting; in this case, secure the cables to a solid piece of the frame as described in the General Information sheet. Be sure the safety cables do not rub against any hoses or moving parts. Do this on **BOTH** sides of the vehicle.



- Belly Pan Style A: Slide the belly pan onto back bolts and place on top of the baseplate brackets. Attach belly pan to brackets using two (2) 3/8" x 1-1/4" bolts with lock washer, flat washer, and nylon lock nuts. Tighten back belly pan bolts. Note: The front bolts will attach to the bottom of the baseplate brackets for Style B belly pan.
- ** Use Loctite[®] Red on all bolt threads and tighten all bolts to the appropriate torque. **





15. **For Vehicles with a Shroud:** Hold shroud up to the vehicle, as close to the original position as possible. Mark and trim as needed to allow clearance for baseplate. Reinstall plastic shroud.

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General Information

- 1. . It is crucial to register your product(s) so that you may be alerted of product offerings, updates, upgrades, maintenance and safety bulletins, and/or recalls.
- 2. It is the owner's responsibility to inspect all towing equipment for cracked welds, missing or worn parts and loose bolts before each towing trip. Be sure to use Loctite[®] Red on all bolts and tighten to the recommended specifications.
- 3. It is the owner's responsibility to hook up all towing equipment per manufacturer's instructions/ recommendations.
- 4. Remove the attachment tabs when not in use (if applicable).

Notice To Baseplate Installer

1. It is YOUR responsibility to watch for:

- Oil cooler and air conditioner lines
- Electrical wires and hoses
- Missing parts or attaching points on the frame

** If the baseplate is improperly installed and is against a wire or hose, it could cause fluid leaks or electrical shorts some time after the actual baseplate installation.

Permanent Baseplate Safety Cable Installation

Permanent baseplate safety cables are strongly recommended when towing a vehicle with a tow bar. The principle function of the permanent baseplate safety cables is to prevent the towed vehicle from breaking loose in the event the connection between the frame of the towed vehicle and the baseplate fails or becomes disconnected. The cables must be connected from the baseplate to the frame rail or cross member of the vehicle's frame. The illustrations below show the possible arrangements recommended by Blue Ox®. Each permanent baseplate safety cable must have an adequate weight rating for the towing system. The weight rating of the two (2) cables together will not qualify.

Do not mount the permanent baseplate safety cables against wires, hoses or brake lines.

These permanent baseplate safety cables should remain installed as long as the baseplate is installed on the vehicle. Permanent baseplate safety cables are to be used in conjunction with, and NOT a replacement for legally required safety cables attaching the towed vehicle to the towing vehicle.

