

## BLUE OX<sup>®</sup> 2010-12 Ford Flex Limited Ecoboost Installation Instructions

#### Please read BOTH these Installation Instructions and the General Towing Instructions before attempting to install or operate this equipment.

- 1. Blue Ox<sup>®</sup> 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 to do "fit work". When necessary, Blue Ox® Dealers can be found at www.blueox.com or by contacting our Customer Care Department at (402) 385-3051.
- 2. Many Blue Ox<sup>®</sup> 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 hardware supplied in the hardware kit or existing hardware specified in the Baseplate Installation Instructions.

Confirm the towability and pre-towing procedures for your vehicle with the owner's manual or contact the vehicle's manufacturer for specific towing procedures.



If the front of your vehicle looks different than this, call us at (402) 385-3051.

Attachment Tab Height: 24-1/4

Attachment Tab Width:

Serial Number

24"

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			
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#### **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

# RNING

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.

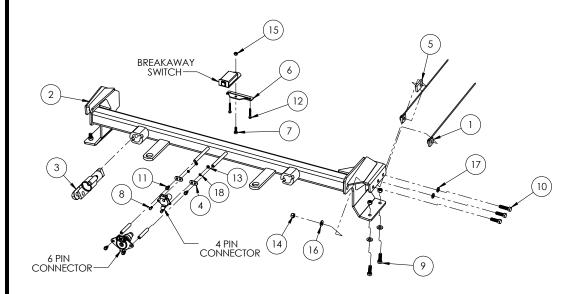


# Installation Instructions

Item No.	Part No.	Description	Qty.
1	61-5208	3/8"-16 Nut Plate with 14" Wire	4
2	61-6762	BX2621 Baseplate	1
3	62-3468	Attachment Tab with Hole	2
4	101-5822	4 Way Connector Adapter	2
5	102-7094	BX2621 Spacer	2
6	102-7249	BX2621 Breakaway Bracket	1
7	201-0050	1/4"-20 x 3/4" Hex Head Bolt, Grade 5, ZP	1
8	201-0192	#10-32 1/2" Round Slotted Head Screw	2
9	201-0368	3/8"-16 x 1-1/4" Hex Head Bolt, Grade 5, ZP	8
10	201-0440	3/8"-16 x 1-1/2" Hex Head Bolt, Grade 5, ZP	2
11	201-0553	1/4"-20 x 1/2" Hex Wshd, Type F TCS, ZP	2
12	201-0654	#10-16 x 1" Self Tapping Screw, ZP	2
13	202-0047	#10-32 Hex Nut	2
14	202-0090	3/8"-16 Hex Nut with Nylon Insert, ZP	6
		1/4"-20 Hex Nut with Nylon Insert, ZP	
16	203-0003	3/8" Flat Washer, ZP	6
17	203-0010	3/8" Lock Washer, ZP	4
18	203-0054	#10 Lock Washer	2
19	226-0049(not shown)	36" Class IV Baseplate Safety Cables	2
20	229-0512(not shown)	1/2" Quicklink, ZP	4
21	290-0437(not shown)	Black Cap Plug	2
22	293-1339(not provided)	Breakaway Switch	1
23	294-0805(not provided)	4 Pin Connector	1
24	294-0902(not provided)	6 Pin Connector	1

#### **Tools Required**

10MM Socket 12MM Socket 7/16" Wrench 9/16" Wrench Large Vise Grip Reciprocating Saw Flat Screwdriver Phillips Screwdriver Utility Knife **Torque Wrench** Tape Measure Drill 1/4" Drill Bit 13/32" Drill Bit 1-1/4" Hole Saw Loctite® Red





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Attachment Tabs: Due to the design of the removable tabs, the RangeFinderII tow bar can not be used. Adapters, except the BX8833 and BX88151, can not be used with this baseplate.

Installation Notes: The front fascia and metal bumper are removed during installation. Drilling is required. Trimming is required.

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 auto manufacturer's tolerances. These minor adjustments may include filing a hole slightly, bending electrical rods or bending end plates.

The BX8848 4-Diode Wiring Kit is recommended for this vehicle.

Handling of some cosmetic parts when installing this product may require the use of protective covers, rags, specialty tools, etc. to prevent damage.

Do not use the towed vehicle for storing luggage, equipment, etc. This may cause you to exceed the towing capacity of the tow bar, baseplate, and its accessories.

#### Installation Instructions:



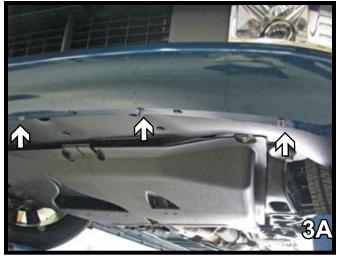
1. Using the 10MM socket, remove the metric bolt from the top corner of the grille (white arrow). Remove two pushpins from the top of the grille (gray arrows). Do this to both sides of the vehicle. Set bolts and pushpins aside to be reinstalled later.



2 Just forward of the front tire, inside the wheel well, using 5.5MM socket remove three screws. Do this to both sides of the vehicle. Set screws aside to be reinstalled later.

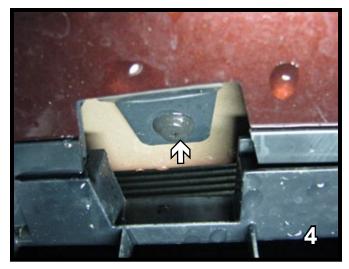


# BLUE OX° 2010-12 Ford Flex Limited Ecoboost Installation Instructions

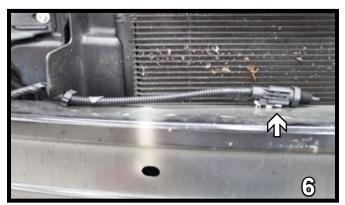


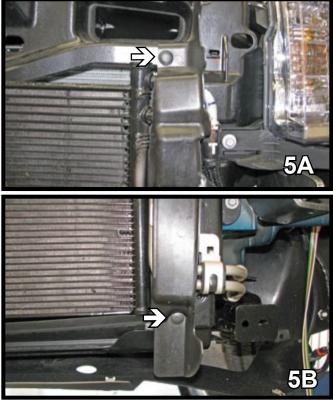


3. Using the 5.5MM socket, remove the seven bolts from the bottom edge of the fascia. Set bolts aside to be reinstalled later.



4. Using the Phillips screwdriver, remove two pushpins located underneath the fascia to each side of the license plate bracket. Pull fascia forward to remove. Set fascia and pushpins aside carefully to be reinstalled later.



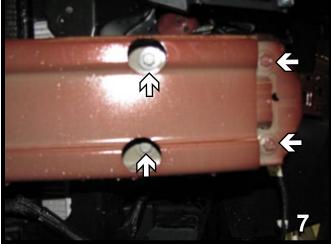


- 5. Remove two pushpins, one on top (5A) and one on the bottom (5B) holding the plastic guard above the bumper. Do this to both sides of the vehicle. Set guard and pushpins aside to be reinstalled later.
- 6. On vehicles equipped with a temperature sensor, the sensor will be relocated from the top of the bumper to the bottom. Unclip sensor from the top of the bumper and move aside.

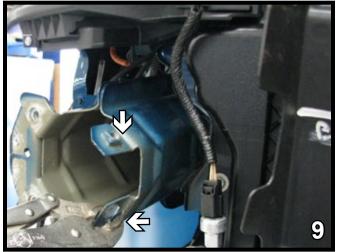
405-0126 Rev. E



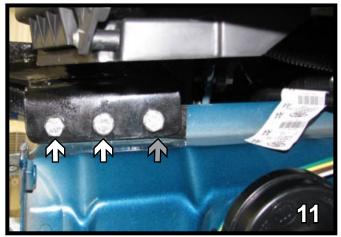
### BX2621 2010-12 Ford Flex Limited Ecoboost Installation Instructions

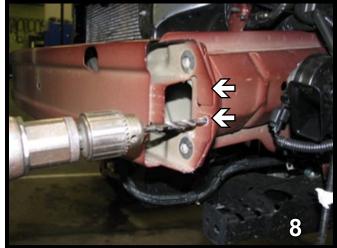


7. Using the 13MM socket, remove four metric bolts from the bumper, two on each side. Set the bolts aside to be reinstalled later.



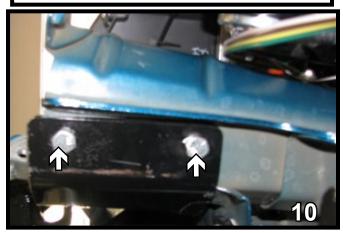
9. On the frame rail, using the vise grip, bend the two inside tabs out flat with the frame. On top of the frame rail, bend the center ribbing toward the radiator (about 6" back from the end). Do this to both sides of the vehicle.





 Using the 1/4" drill bit, drill out the two spot welds on each side. Remove the bumper and set aside to be reinstalled later.

When using power drills be aware of the dangers of torque and drill bit length.

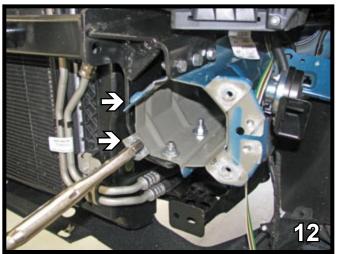


- 10. Slide the baseplate up on the frame rail. Insure the baseplate is level with respect to the vehicle frame. Using the baseplate as a template, drill the two holes on the bottom of the baseplate (10) and the three holes on the side of the baseplate (11) with the 13/32" drill bit. On the bottom (as shown in picture 10) use 3/8-16 x 1" bolts with 3/8' flat washers and 3/8-16 lock nuts. Use Loctite on all bolts. Do this to both sides of the vehicle.
- 11. Attach 3/8 x 1" bolt to 3/8" flat washer and 3/8-16 lock nut in the front hole. In the middle hole, insert a 3/8-16 x 1 1/4" bolt with 3/8" lock washer and 3/8-16 nut plate. In the hole closest to the vehicle (gray arrow), use 3/8-16 x 1 1/2" bolt and 3/8" lock washer with a spacer behind the baseplate and a 3/8" nut plate. Use Loctite Red on all bolts. Do this to both sides of the vehicle.



# Installation Instructions

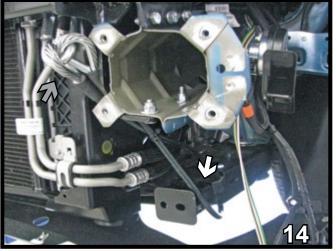
#### BE SURE TO USE LOCTITE® RED ON ALL BOLTS BEFORE TIGHTENING. TIGHTEN ALL BOLTS ACCORDING TO THE TORQUE CHART ON THE FRONT PAGE OF THESE INSTRUCTIONS OR ON PAGE 3 OF THE BASEPLATE TOWING GENERAL INSTRUCTIONS.



12. Using a vise grip, bend the two tabs back. Do this to both sides of the vehicle. Reinstall the bumper.



13. After bumper is reinstalled, when applicable, relocate temperature sensor on passenger's side to the bottom of the bumper using existing holes.



14. Attach the permanent baseplate safety cables to the provided convenience link on the baseplate (gray arrow). The photo above shows the recommended installation of the permanent baseplate safety cables to frame of the vehicle (white arrow). If the vehicle has additional options, not shown above, which interfere with mounting the permanent baseplate safety cables, secure the cable to a solid piece of the vehicle's frame as described in the instructions included with the permanent baseplate safety cables. Do this to both sides of the vehicle.

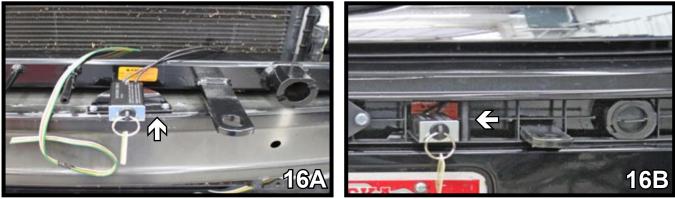


15. Before installing the electrical plug, hold the fascia up in its original location, cut out the horizontal piece from the fascia with the hacksaw blade as necessary for the attachment tabs to come through. Do this to both sides of the vehicle.



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**BX2621** 



16. OPTIONAL: Attach breakaway bracket to metal bumper using #10-16 x 1 1/2 self-drilling screws (16A). The metal bumper may require a pilot hole be drilled prior to attaching the breakaway bracket.

After attaching the breakaway bracket, while holding up the fascia to its original location, cut out an additional horizontal piece from the fascia with the hacksaw blade to accommodate the breakaway as shown in picture 16B. Reinstall fascia.



17. Install the electrical plug on the front of the fascia.

Install the tow bar and safety cables according to the instructions provided in their packages. When demonstrating this to the customer, be sure to include all the contents and packages.

Do NOT substitute other devices if the tow bar pins and clips are misplaced.



## BLUE OX° 2010-12 Ford Flex Limited Ecoboost Installation Instructions



2011 - Shown without removable tabs installed.



2011 - Shown with removable tabs installed.



2010 - Shown with removable tabs installed.

#### CUSTOMER SERVICE COMMITMENT

Blue Ox is committed to providing you with exceptional customer care throughout your lifetime with our products. Our team is here to assist you with any questions you may have regarding the performance of your product. Simply call (402) 385-3051 and you can speak with our customer care team.

Additionally, please visit our website to see which rallies our Destination America team will be attending. For a nominal fee, our service technician will service your towing system to ensure it's in proper working condition. Also, as a commitment to our customers, should you visit our factory. you can stay at our full service Blue Ox campground at no charge along with enjoying a factory tour.

Again, thank you for being our customer and for the confidence you have shown in the performance of our products. It is because of customers like you we enjoy the success we have today.

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.



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