Please visit www.blueox.com for the latest version of these installation instructions.



# **BX2720** 2006-2011 Kia Rio Installation Instructions

Attachment Tab Height: 15"

Attachment Tab Width: 24"

**Serial Number** 

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

- Blue Ox<sup>®</sup> towing products and accessories are intended to be installed by Blue Ox<sup>®</sup> Dealers who are familiar with our products and have the equipment and knowledge necessary to do "fit work". If needed, Blue Ox<sup>®</sup> Dealers can be found at www.blueox.com or by contacting our Technical Service Department at (402) 385-3051.
- 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 the hardware supplied in the hardware kit and existing hardware as specified in the installation instructions.



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

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

Torque in Foot-Pounds for Inch Bolts					
<b>Bolt Size</b>	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** 

#### **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.

Tools Required Phillips Screwdriver Torque Wrench Large Vise Grips Reciprocating Saw Hack Saw Blade Tape Measure Drill Loctite® RED 13/32" Drill Bit 1-1/4" Hole Saw 8MM Socket 10MM Socket 9/16" Socket 9/16" Wrench			7 NNECTOR
11 4 Item No.	Part No.	6 PIN CONNECTOR	Qty.
1	.61-5208		
2		BX2720 Baseplate	
3		Attachment Tab Assembly with Hole	
4		3/4" OD x .406 ID x 3/4" Špacer Tube	
5		#10-32 1/2" Round Slotted Head Screw	
6	.201-0368	3/8"-16 x 1-1/4" Hex Head Bolt, Grade 5	8
7	.201-0655	6MM-1.0 x 30MM Hex Head Bolt, Grade 8.8, ZP	1
8		6MM-1.0 x 45MM Hex Head Bolt, Grade 8.8, ZP	1
9		#12-14 x 1" Self Drilling Screw, ZP	
10		#10-32 Hex Nut	
11	.203-0001	1/4" Flat Washer, ZP	2
12		1/4" Lock Washer, ZP	
13		3/8" Lock Washer, ZP	
14		#10 Lock Washer, ZP	
15	. 299-0685	Electrical Bracket	1
16	.226-0046(not shown)	Class III Safety Cables	2
17	.229-0359(not shown)	3/8" Quicklink, ZP	2
18	· · · · · · · · · · · · · · · · · · ·	Black Cap Plug Receiver	
Important	· /		

#### 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.

## Vehicle Weight:

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 fascia and washer reservoir are removed and reinstalled during installation of the baseplate. Drilling is required. Trimming is required.

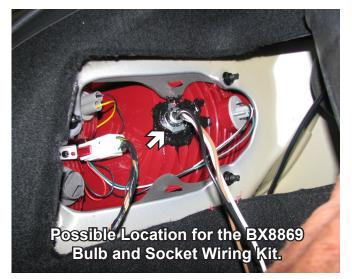
The dimensional variations between otherwise identical vehicles can be considerable. While the baseplate was designed for easy installation, it may be necessary to tailor the baseplate slightly to compensate for auto manufacturer's tolerances. These minor adjustments may include filing a hole slightly, bending electrical rods or bending end plates.

The BX8869 Bulb and Socket Wiring Kit is recommended for this vehicle.

# **Installation Instructions:**



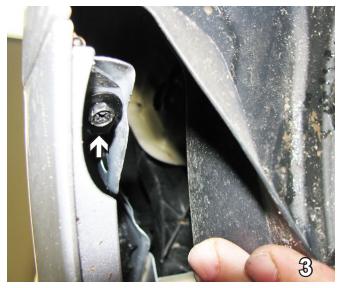
1. Using a Phillips screw driver, remove eight plastic Phillips push pins from the top of the fascia. Set push pins aside to be reinstalled later.



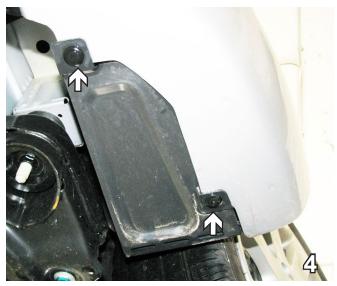
Handling of some cosmetic parts when installing this product may require the use of protective covers, rags, specialty tools, etc. to prevent damage.



2. Using an 8MM socket, remove three bolts forward of the front tire on the wheel well. Do this to both sides of the vehicle. Set push pins aside to be reinstalled later.



 Pull the plastic wheel well cover back, using an 8MM socket remove the bolt underneath. Do this to both sides of the vehicle. Set the bolts aside to be reinstalled later.



4. Underneath the fascia in the corner remove the two plastic push pins. Do this to both sides of the vehicle. Set push pins aside to be reinstalled later.



5. Underneath the fascia in the center remove the two plastic push pins. Set fascia and push pins aside carefully to be reinstalled later.



6. On the passenger side, using a 10MM socket remove one bolt from the top of the washer reservoir. Set bolt aside to be reinstalled later.



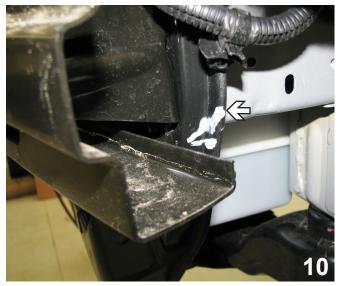
7. Using a 10MM socket, remove one bolt from the right side (white arrow) of the washer reservoir. Set the bolt aside to be reinstalled later. Unplug the electrical connection and the hose and cap the hose (gray arrow).



8. Using a 10MM socket on the left side of the washer reservoir remove two bolts. Set bolts and reservoir aside to be reinstalled later.



9. Trim flush with the bottom of the frame and in until even with the side of the frame. Do this to both sides of the vehicle.



10. Go up 1/2" from where the cut started flush with the bottom of the frame. Cut out a v notch to the point of intersection with the side of the frame. Do this to both sides of the vehicle.

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



 Loosen the ground wires (white arrows). Flatten the pins (gray arrows) and turn the wires to a vertical position. Do this on both sides of the vehicle.



12. Slide the base plate up and align with the existing holes. Insert a 6MM-1 x 30MM bolt into the existing hole on the driver's side. On the passenger side, use a 6MM-1 x 45MM bolt. Tighten. Be sure the base plate is level with respect to the vehicle frame. Do this on both sides of the vehicle.



13. Using a 13/32" drill bit with the base plate as a template drill one hole (white arrow). Using a 1-1/4" hole saw, drill a hole in the frame next to the ground wires for the nut plates (gray arrow). Do this on both sides of the vehicle. Be sure to install only one bolt assembly per side to stabilize baseplate before drilling the remaining holes.

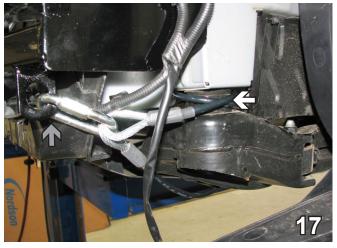


14. Insert 3/8"-16 x 1-1/4" bolt with 3/8" lock washer and fasten to 3/8"-16 nut plate inserted into the 1-1/4" hole. Be sure to use Loctite on this bolt. Drill the other three holes. Remove the 6MM bolts, inserted in step 12. Do this on both sides of the vehicle.

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.



15. On the driver's side reinsert the 6MM-1 x 30MM bolt with 1/4" lock washer, 1/4" flat washer and the sensor (white arrow). Insert the remaining three 3/8"-16 x 1-1/4" bolts with 3/8" lock washers (gray arrows) and fasten to 3/8"-16 nut plates inserted into the 1-1/4" holes. Be sure to use Loctite on all the bolts. Do this on both sides of the vehicle.



17. Attach the permanent baseplate safety cables to the provided convenience link on the baseplate (see grey arrow). The photo above shows the recommended installation of the cables to frame of vehicle (see white arrow). Additional options may interfere with suggested mounting; in this case secure the cables to a solid piece of the frame as described in the instructions included with the permanent baseplate safety cables. Be sure the safety cables do not rub against any hoses or moving parts. Do this to both sides of the vehicle.



16. On the passenger side, insert the three 3/8"-16 x 1-1/4" bolts with 3/8" lock washers and fasten to 3/8"-16 nut plates inserted into the 1-1/4" holes. Be sure to use Loctite on all the bolts. Reattach the washer reservoir using the existing bolts and a 6MM-1 x 45MM bolt with 1/4" lock washer, 1/4" flat washer and 1/2" spacer tube into the hole shown.

Be sure that **ALL** electrical connections are plugged in properly and functioning **BEFORE** installing the fascia.

18. Reinstall the fascia. Be sure to install all bolts and push pins.

#### DEALER or INSTALLER: Be certain the user receives the instruction sheets for their products.

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.





Shown without removable tabe installed.

Shown with removeble tebs instelled.

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.

## 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 technical service 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.

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# **General Information**

- Ensure that your product(s) are registered online at www.blueox.com. 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<sup>®</sup> 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.

