Royalty Core Ford F-150 2004-2008 Grille Installation Instructions

Caution: Only place your Royalty Core Grille on a Clean, Flat, and Well Protected/Cushioned Work Area. Do not place it on a hard surface or where debris could scratch the finish. During installation keep area extremely clean after each step. The finish requires special care during a 90-day period so before installation read grille care instructions thoroughly. Do not touch grille or logo surfaces; only handle product by touching edges only during installation and leaving no finger prints on the surface.
Your Royalty Core grille comes fully assembled to factory specs. Confirm that everything is properly tightened on both sides of the grille. Please be careful to not over tighten logos, which have small 10/32 nuts.

Read All Instructions before Installing. The first step for installation is to remove your factory OEM grille from your truck. You are going to cut the center portion of your OEM grille so that no OEM cross bars, plastic mesh, or any parts show through your Royalty Core grille once installed (See Pictures 1 & 2 to confirm exactly how your OEM grille will look after cutting). Do not cut or remove the OEM plastic lip that runs inward along the edges of the grille opening. Do not unscrew or detach the factory reinforcement frame along the inside borders of your OEM grille surround. Your Royalty Core grille will mount to these OEM parts. You are only cutting plastic and no metal. Your OEM grille opening must be cut large enough to clear the nuts on the backside of your Royalty Core grille but do not over cut. The Royalty Core grille frame will overlap your cut by about a ½-inch around the entire cut. Once you fit your Royalty Core grille inside make sure it's flush and if not trim just enough plastic only where needed to clear the nuts on the backside of your Royalty Core grille. It's held on by a sandwich affect so the overlapping is crucial. The overlapping is also needed to hide the cutting of those OEM cross bars for a clean appearance. Take your time to make the cut symmetrical and solid. Make cuts using a cut off wheel, die grinder, portable jigsaw, or hacksaw. File and sand edges smooth after all cutting. Blow or vacuum your OEM grille clean before installing your Royalty Core grille in it. Position your Royalty Core grille in your OEM grille from the front side only. Make sure all lines of your Royalty Core grille run parallel, smooth, and pinched to the outside lines of your OEM grille with no gaps.
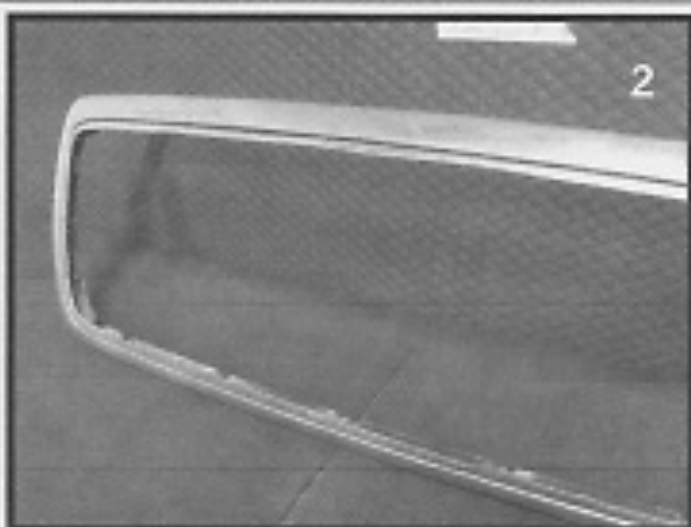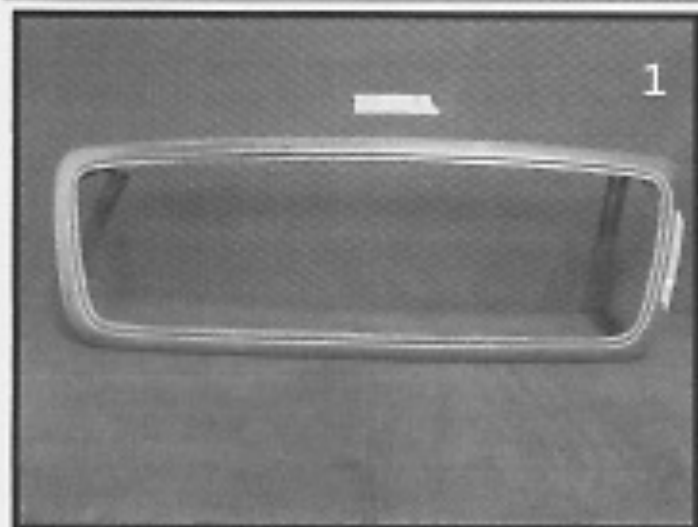
The grey rectangular parts with one hole in the hardware baggy are mounting anchors, which hold your Royalty Core grille on. There are threaded 10/32 studs welded on the backside of your Royalty Core grille, which match the supplied anchors, lock washers, and nuts in the baggy. For an extra quality installation you may notch/cut out the plastic lip on your OEM grille to reduce it to 3/4 inch only where a mounting anchor clamps. These notches would not exceed 1 inch in width. Place your Royalty Core grille into your OEM grille from the front side and slide these mounting anchors on the studs from the backside. The anchor bend should face the back of the grille to grab like a claw. Follow it with a lock washer, nut, and twist slow without any power tools until snug. Once they are all in place confirm from the front side that the fitment is straight then tighten the anchor nuts but do not over tighten.

Once everything is fully tightened and looking great, install your OEM grille with your Royalty Core grille in it on your truck.

Important Grille & Logo Care: Wash your grille regularly with warm water and regular car wash soap only. When finished please email us pictures of different angles with your entire truck in each picture for the Royalty Core website. The Royalty Core team is very grateful for your business!!! Thank you!!!

Royalty core

Royalty Core Bumper Grille Installation Instructions

Caution: Only place your Royalty Core Grille on a Clean, Flat, and Well Protected/Cushioned Work Area. Do not place it on a hard surface or where debris could scratch the finish. During installation keep area extremely clean after each step. The finish requires special care during a 90-day period so before installation read grille care instructions thoroughly. Do not touch grille or logo surfaces; only handle product by touching edges only during installation and leaving no finger prints on the surface.

Your Royalty Core grille comes fully assembled to factory specs. Confirm that everything is properly tightened on both sides of the grille. Please be careful to not over tighten logos, which have small 10/32 nuts.

Read All Instructions before Installing. The first step for installation is to remove your factory bumper from your truck. The Royalty Core grille frame is designed to overlap your bumper opening and secure as a sandwich effect. Trim if needed the lip of your bumper opening if in the way of the nuts on the back of the Royalty Core grille. For a clean look make sure no OEM plastic or metal is seen through your Royalty Core grille mesh. Position your Royalty Core grille in your bumper from the front side only. Make sure all lines of your Royalty Core grille run parallel, smooth, and pinched to the outside lines of your OEM grille with no gaps.

Important: Make sure your Royalty Core grille is in the precise placement before drilling through the OEM plastic for the provided mounting screws. You're not drilling or modifying your Royalty Core grille. Drill this hole through the Royalty Core mounting bracket hole as a guide. Only drill one hole, enter a provided screw with washer, flat nut on the other side with the bow facing in, and make sure grille is positioned correctly before repeating this process again. Drill and enter one screw at a time to prevent a bunch of holes drilled slightly off. Do not drill all holes at once.

The grey rectangular parts with one hole in the hardware baggy are mounting anchors, which hold your Royalty Core grille on. There are threaded 10/32 studs welded on the backside of your Royalty Core grille, which match the supplied anchors, lock washers, and nuts in the baggy. Place your Royalty Core grille into your bumper from the front side and slide these mounting anchors on the studs from the backside. The anchor bend should face the back of the grille to grab like a claw. Follow it with a lock washer, nut, and twist slow without any power tools until snug. Once they are all in place confirm from the front side that the fitment is straight then tighten the anchor nuts but do not over tighten. When it looks great mount your bumper back on your truck and your finished. Install time is about 1 hour.

Important Grille Care: Wash your grille regularly with warm water and regular car wash soap only. When finished please email us pictures of different angles with your entire truck in each picture for the Royalty Core website.

The Royalty Core team is very grateful for your business!!! Thank you!

LED Light Bar Installation Instructions

Mounting

Mount light bar in desired location, keep bottom base nuts snug but don't tighten. Adjust bar so it is centered on where you want it mounted. Tighten bolt on the bottom of the bracket to 20 ft./lbs. Mounting tabs should be placed 3.5" in from each end and then 12" from there.

Wiring

Mount-Switch-provided-in harness (if you have your own switch its ok to use) now-carefully route the harness from the mounted switch to the battery and then to the LED bar wire harness connector. Test the light at this time.

Adjust LED Bar

Adjust the light to the desired horizontal height, then use an allen wrench to tighten both allen bolts on each end. A good reference point is at 20 ft.: the top of the beam should be 3" down from center of light (with the light bar at dead center). Tighten light and enjoy.

Custom Wiring (optional)

All electronics are internal so there is no need to mount external electronics. Each light has a simple 2 wire hook up. Red being +12v and black being -12v. Lights should be wired to a switch through a relay with a maximum of 2 lights per relay, up to 12" bars, and 1 light per relay for larger, for optimum durability and performance. Each relay should be wired as follows:
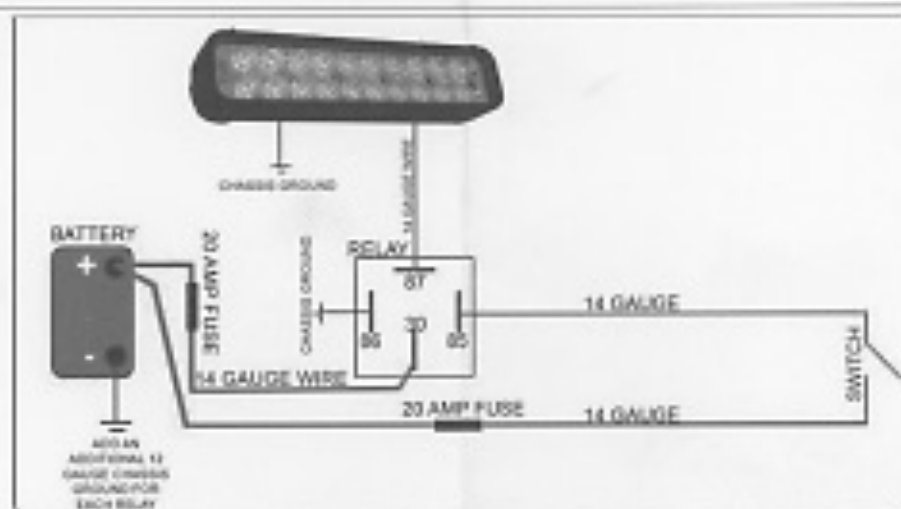
- 86 - chassis ground
- 85 - 12v + trigger from switch
- 30 - 14 gauge 12+ from battery (minimum gauge is 14 for 2 lights)
- 87 - 14 gauge out to red (or white for 6504) wire on lights (max 2 lights per relay pack)

Duplicate relay packs can be wired for additional lights. Switch trigger can be jumped from relay to relay.

Remaining black wire on light should be chassis grounded or grounded to the negative terminal of the battery; making sure grounding surface is cleaned down to metal, using a stainless steel bolt to secure grounding ring.

LED Light Bar Power and Switch Kit

1. power on/off switch
2. power switch connection
3. negative small connection
4. positive small connection
5. relay
6. relay fuse
7. positive battery connection
8. negative battery connection
9. LED lamp

Vision X
Vision Lighting Systems

Mounting –

Mount light bar in desired location, keep bottom base nuts snug but don't tighten. Adjust bar so it is centered on off road machine. Tighten bolt on the bottom of the bracket to 20 ft/lbs. Mounting tabs should be placed 3.5" in from each end and then 12" from there.

Wiring –

Mount switch provided in harness (if you have your own switch it's OK to use) now carefully route the harness from the mounted switch to the battery and then to the LED bar wire harness connector. Test the light at this time.

Adjust light –

Adjust the light to the desired horizontal height, then use the supplied Allen wrench to tighten both side Allen bolts on each end. A good reference point is at 20 ft; the top of the beam should be 3" down from center of light (with the light bar at dead center). Tighten light and enjoy.

Custom Wiring (optional) –

All electronics are internal so there is no need to mount external electronics. Each light has a simple 2 wire hook up. Red being + 12v and black being – 12v. Lights should be wired to a switch through a relay with a maximum of 2 lights per relay, up to 12" bars, and 1 light per relay for larger, for optimum durability and performance. Each relay should be wired as follows:

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