

INSTALLATION INSTRUCTIONS: Hidden Winch Kit Mount #4960

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| 1 Hidden Winch Mount | 2 #10 Washers |
| 1 Optional Warn EVO 10-S Winch | 2 3/8-16 Nuts |
| 1 Optional Electronics base plate - mounts under stock battery tray | 6 3/8-16 Nyloc Nuts |
| 1 Optional Battery Lead Set (5 New Color Coded Cables) | 2 1/2-13 x 2" Button Head Cap Screws Black SS |
| 2 Long Reach 3/8-16 Bolt Plates | 2 1/2" Black SS Washers |
| 4 3/8-16 x 1.5" Bolts | 2 1/2"-13 Black SS Nyloc Nuts |
| 6 3/8 SAE Washers (small OD) | 2 1/2" x 1/4" Spacers |
| 4 3/8 USS Washers (BIG OD) | 2 #6-32 x 7/8" SS Phillips Screws |
| 2 5/16 x 1-1/2 Bolts | 1 #6-32 x 1/8" SS Phillips Screws |
| 2 5/16" Washers | 8 8" Zip Ties |
| 2 5/16" Threaded Spring Clips | |

TOOLS NEEDED:

- | | | |
|----------------------|-------------------------|-------------------------------|
| Drill | 7/16" Drill Bit | 6mm Hex Key Wrench |
| Jig Saw or Body Saw | 1/4" Drill Bit | Ratchet Wrench and extensions |
| Marker | 1/8" Drill Bit | 9/16" Open End Wrench |
| Masking Tape | 1-1/4" Hole Saw | 9/16" Deep Well Socket |
| 7/16 Centering Punch | #2 Phillips screwdriver | 1/2" Open End Wrench |
| Hammer | 5/16" Hex Key Wrench | 1/2" Deep Well Socket |
| 1/2" Drill Bit | 4mm Hex Key Wrench | 11/16" Open End Wrench |

BEFORE STARTING THE INSTALL: Make sure you have read through these instructions & understand and prepare for all requirements. Instructions will include guidance to remove the Warn EVO 10-S Winch integrated control pack and installing it and its mount under your stock battery tray.

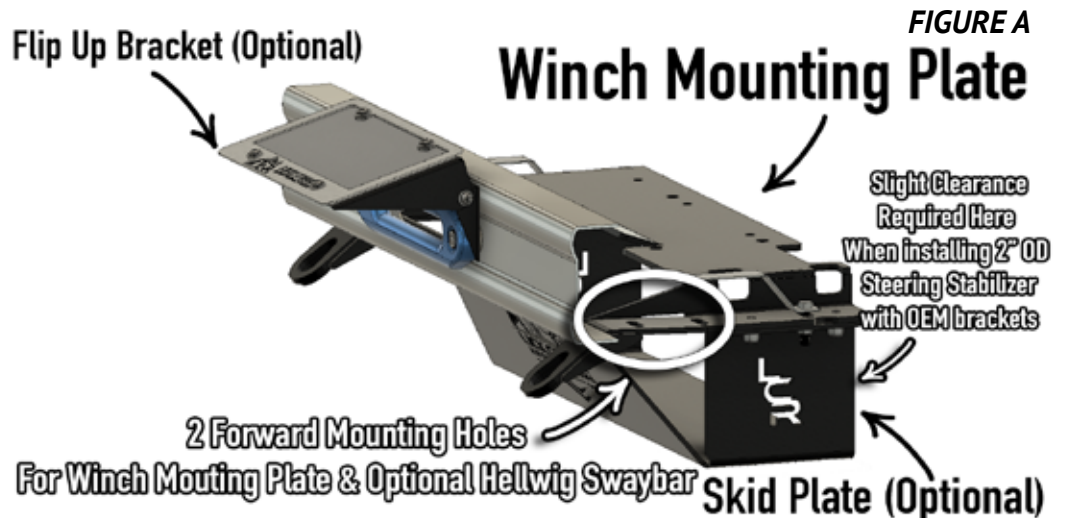
IMPORTANT: 1" OF BODY LIFT IS REQUIRED FOR THIS INSTALL. IF YOU PLAN ON RUNNING A STEERING STABILIZER, THIS SYSTEM IS NOT COMPATIBLE WITH SOME AFTERMARKET STEERING STABILIZER BRACKETS. A 2"OD STABILIZER IS REQUIRED. ANY STABILIZER THAT IS BIGGER THAN 2" OD WILL NOT WORK. SLIGHT CLEARANCE (GRINDING) OF THE WINCH PLATE ON THE DRIVER SIDE EDGE CLOSEST TO THE STABILIZER MAY BE REQUIRED AND THE CLEARANCE NEEDED VARIES DEPENDING ON YOUR SUSPENSION LIFT HEIGHT, TIE ROD/ DRAG LINK SETUP AND PITMAN ARM.

- 1.) Make sure the vehicle is on flat ground, the parking brake is set and wheels are chocked.
- 2.) Disconnect the battery cables and remove your battery.
- 3.) Remove the two bolts that are securing your battery tray to the core support brackets and discard. New ones are included in the kit. Remove the old threaded clips (if any). If your battery tray is in rough shape consider replacing it at this time.
- 4.) Remove your front bumper and if equipped the bumper mounted license plate bracket. Remove the steering stabilizer and brackets and set aside.
- 5.) Test fit your winch mounting plate. Position the bracket in between the frame rails, the extruded part goes up towards the engine **SEE FIGURE A**. The second set of holes behind the recovery points will locate off of the slotted holes in the frame. Temporarily use a 3/8-16 x 1.5" bolt with a 3/8" USS Washer and the standard 3/8-16 nut for each side so you can fasten it in place. Slide the plate as far forward as you can and snug the two bolts to hold it in place. Verify the plate is square to the frame and crossmember and the cutouts in the plate for the steering gearbox bolts are centered on the bolts. Make any small adjustments now if needed then mark the 4 slotted holes you will need to drill in the frame using your marker or a 7/16 center punch You will want to be as close to center as possible in the frame rail that the slot will allow.
- 6.) Remove the winch mounting plate. Using your punch, mark the center of the 4 holes to be drilled. Pilot them with the 1/4" drill bit and finish them with the 7/16" drill bit. Be sure to de-burr the holes as best you can, the rear most holes will be about impos-



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608 Lick Creek Rd.
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sible to reach from inside the frame rail so using a deburring tool or small screwdriver you should be able to remove any internal burrs.

7.) **NOTE: If you have an aftermarket steering box that requires you to drill a different hole you may have to remove that gear box bolt temporarily to get the bolt plate installed.** Use the 2 long reach bolt plates and place 1 into each frame rail into the farthest hole back that you drilled. Be sure the bolts protrude down through the holes you just drilled. The bends in the long reach plates are designed to clear the steering box mounting holes. You may also have to bend the long reach plate a little to make it fit with the aftermarket bolt. Reinstall steering box if removed.



FIGURE B

8.) Refer to the WARN instructions that were provided with your winch along with this step. Make sure you have a large clean work surface, it is helpful to lay down old towels as well. Open and prepare the winch to mount it to the winch mounting plate and remove the Integrated control pack. When you unbox the winch you will need to remove the control pack from atop of the winch. **NOTE: Be sure to take pictures of the color codes on the battery cables and where they attach to the winch motor contacts shown in FIGURE D.** You will need to remove these and replace them with the new color coded cables supplied in the kit. The all black cable is your ground cable to the battery. Be sure to reuse & install the rubber isolator boots that came with the winch on the new cables. Do not tighten the cables down at the winch at this time, that will happen after you attach the winch to the winch plate. Using the 6mm Hex Key Wrench, carefully loosen and remove the two forward bolts that hold in the upper support bridge on the winch **SEE FIGURE B** and only loosen the two rear bolts first so it will swing up giving you access to the control pack mounting screws. Then reinstall the two forward bolts and remove the two rear bolts to gain access to the last two bolts that hold the control pack to its base. Remove those screws and the control pack and set it aside for later. Swing the bridge back into place and reinstall the rear bolts and tighten the four bridge support bolts.



9.) Turn the winch so the side that the cable release handle is facing you. With the winch rope lead secured to the bridge with a zip tie, rotate the handle to the free spool position. Using the 4mm hex key wrench, remove the screw in the base of the handle taking care to not lose the O-Ring on the screw and set it aside. Remove the handle and set aside. Using the 4mm hex key wrench carefully loosen all 7 screws, loosen them but do not remove them. You will loosen them just enough to disengage so you can rotate the handle housing 90° so the handle stem is facing the front of the winch. **SEE FIGURE C NOTE: Take care to keep the case O-Ring in place so you do not pinch it and destroy it and carefully thread the screws back into the housing, check again the O-Ring is not pinched** and tighten the bolts evenly. Now reinstall the handle so it is facing straight up and reinstall the screw and O-Ring. When you rotate the handle back to the lock position it should be facing away from the winch body as shown in **FIGURE C**.



10.) Turn the winch over so it is resting on the bridge and the front of the winch is facing towards you, the 4 mounting holes are facing up and the release handle is facing you. Locate the 4 square nuts in the winch hardware and place them in their slots and locate the 4 mounting bolts with lock washers and flat washers. Place the winch plate on top of the winch with the recovery points facing the front, it should nestle over top of the winch slightly, install the 4 mounting bolts & washers in the correct orientation and tighten the plate to the winch.

11.) Carefully rotate the cables so they are facing up through the notch and route them across the winch plate. The three holes on the back edge of the plate are for zip ties to attach the cables to the plate and secure them neatly. They will be aimed towards the passenger side of the Bronco at this time. **IMPORTANT: Be sure that no cable ends at the winch are contacting each other and the rubber isolator boots are used after all nuts are tight.**

12.) For this step have a friend help you and exercise caution as you will be lifting the weight of the winch overhead. We have found it easiest to simply lay on your back and bench press the winch into place and your friend can thread the nyloc nuts and washers on the two bolts that are protruding through the frame to hold the winch in place.

13.) With the winch now loosely in place it is time to route the cables, they will route over the top of the frame rail and in front of the pass side body mount and exit up into the cavity between the core supports that your battery tray was attached to. Refer to **Figure C**.

Note: If your Bronco has a Hellwig Front sway bar, or if you are installing one at this time use Step 14A, if you are not currently using a Hellwig Sway Bar then follow Step 14

14.) Carefully reach into the frame rails and install the 4 bolts into the front of the mount and thread on the nuts and washers.

14a.) Using your Hellwig supplied thread plate and studs, it is recommended to place some red locite on the studs and screw them into the plate until they are flush and let the thread locker cure. Place the plates into the front frame rails and through the winch plate. Install the nuts at this point and use them to draw up the plate to the frame and secure it in place with the rear bolts. Tighten the 3/8" nuts firmly. Remove the nuts on the sway bar plates and install the sway bar using Hellwigs instructions and secure it.

15.) Move back to the bench and prep the electronics. The VR EVO 10-S winch comes with a factory wireless/wired remote. Using the provided hardware you will uninstall the components from their factory plastic housing and transfer them onto the stainless electronics plate. There will be 3 black ground wires, you will reuse the two shortest ones and discard the third long one. This electronics plate we supply will reutilize the rubber dust cover for the winch control port and provide all of the appropriate mounting holes for the components and ground point. **NOTE: Be sure to photograph the color coded cables and which terminal posts they go on.**

You can connect the Red cable to the relay pack and the remaining cables will attach when you are installing it in the Bronco. **SEE FIGURE D.**

16.) **IMPORTANT: Be sure to pay attention to orientation of the cables when tightening them down so no bare terminals are in contact with each other.** Moving the electronics to the Bronco, you will need to connect the color coded cables to the appropriate points on the relay pack. Sometimes they add color onto the ends of the relay pack posts for the appropriate color coding. Once satisfied, place the plate into the grooves of the core support utilizing the new threaded C clips. Replace the battery tray and carefully check the routing of the wired connector so it doesn't become pinched. Using the new 5/16 bolts

Step 5 - Proper orientation of winch mounting plate shown.

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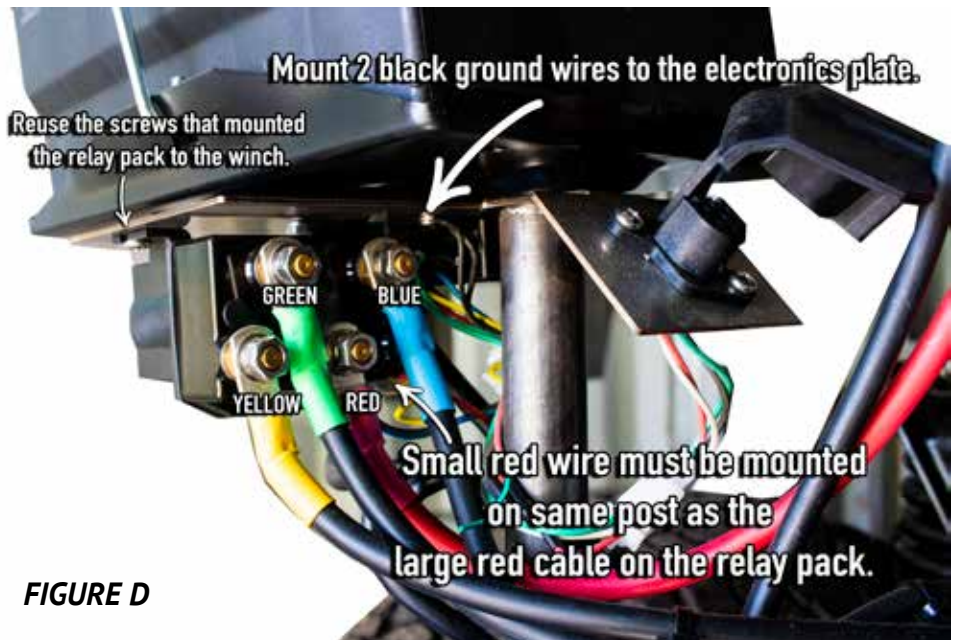


FIGURE D

and washers, secure the battery tray with the positive and negative cables routed against the core support as they will lay over top of the battery and terminate on the battery terminal clamp screws.

17.) Reinstall your battery and connect the winch power leads to the appropriate terminals. Use the remaining zip ties to clean up and route the cables from the winch to the control pack and battery. If you purchased the new pre-cut factory bumper **#4968**, skip to step 19.

18a.) Move your front bumper to your work bench or saw horses. You will need to mask off the center of the bumper, if you have bumperettes installed, remove them so you can utilize the holes for accurate measuring and layout. Use the masking tape and cover everything between the two frame mount areas. You will need to measure and find the center of the bumper from both left to right as well as top to bottom and layout everything from the center out.

18b.) Next take the center mark you made and make a horizontal line and extend it 8" both left and right. This will be your center marker for all of your holes to drill. Next you will measure out both to the left and to the right, marking 2 points at 5". Now you will place the fairlead template provided in the kit on the holes lining up the two outer holes with the dots labeled A. Using your marker mark the dots marked B and trace the top and bottom edge of the template onto your masking tape. Pilot the 4 holes with the 1/8" bit. The outside holes (A on the template) you will proceed to go up in drill bit size until they are opened up to 1/2" and then deburr the holes.

18c.) The two inside holes (B on the template) you will need to drill with your 1 1/4 hole saw. When done the tops of the holes should intersect the upper and lower parallel lines. You will follow these lines with your saw and cut out the slot. When done your bumper should look as shown in **FIGURE E**. Finish up by using a file to smooth and deburr the edges. You may need to tweak the slot a bit to make sure your winch rope will not chaff. Once satisfied use a bit of clear nail polish or paint to coat the edges of the bumper, making sure you are only painting raw metal not the chrome to seal off the edges. 2 to 3 applications may be necessary.

19.) At this time if you did not purchase the optional skid plate you can proceed to step 20. To install the skid plate, be sure your steering stabilizer and brackets are removed first. You will have two 3/8-16 threaded holes in the winch plate mount at each frame rail. Install the four 3/8 - 16 studs provided into these threaded holes provided in the separate skid plate hardware mounting kit. It is recommended to use 2 drops of red loctite provided when installing them into the winch mount plate. Once all 4 studs are mounted and tight, install the skid plate over the winch and allow the skid plate to slide over the 4 studs. Use the provided washers and nuts to secure the skid plate to the winch mounting plate but do not tighten the nuts down yet. The skid plate also mounts behind the front bumper using the 2 fairlead mounting holes. It is best to install the skid plate first then the front bumper. Once the skid plate is in place you can move onto step 20.



20.) Reinstall your bumper and bumperettes if so equipped. Once everything is secured back on your Bronco you can install the fairlead. If you have purchased the license tag bracket, it will install behind the fairlead and in front of the spacers. Using the supplied black hardware and 2 spacer washers assemble the fairlead to the bumper, center it over the opening and tighten securely.

21.) If you are not installing a steering stabilizer, you will now want to tighten the 4 skid plate bolts. If you are installing a stabilizer, do not tighten these 4 bolts yet and proceed to step 22.

22.) As shown in **FIGURE A**, if you want to install a steering stabilizer you may run into a few challenges that requires some slight modification to the skid plate. Keep in mind, if you are going to run a steering stabilizer you will need to use a stabilizer that does not exceed 2" in diameter and you must use OEM style stabilizer brackets. Once you have the brackets and stabilizer mounted, have a helper slowly cycle the wheels left to right and watch to see where the stabilizer makes contact with the skid plate. Push the skid plate as far forward as possible then tighten down the nuts that secure it to the winch mounting plate. You may have to grind away material off the skid plate where the stabilizer makes contact with it to allow enough clearance for the stabilizer to function properly. Once the clearance has been made you can touch up the skid plate with black paint and make sure all hardware is tight. Follow Warn's directions for setup before your first use off-road.

23.) To wrap it up, cut the zip tie that is securing the winch rope and pass the end of the rope through the fairlead and attach the included hook from the winch kit. Activate the remote and test for operation. Be sure to unspool the rope and wind it under the vehicle's weight for tension before first use.

LIMITED WARRANTY

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