

WARN VR EVO 12S WINCH INSTALL

Tools Used for this install

- 3/8" drive ratchet
- 1/2" drive ratchet
- Short Extensions
- 1/2" to 3/8" Adapter
- 8mm, 3/8" drive socket
- 10mm, 3/8" drive socket
- 12mm, 3/8" drive socket
- 13mm, 1/2" drive socket
- 14mm, 3/8" drive socket
- 15mm deep, 1/2" drive socket
- 16mm, 3/8" drive socket
- 18mm deep, 1/2" drive socket
- 19mm, 3/8" drive socket
- T45 Torx Driver
- 4mm Allen
- Ft. Lb. Torque Wrench
- Small & regular flathead screwdriver
- Wire cutter (for zip tie removal)
- Extra zip ties to secure power cables
- Needle nose pliers
- Wire fish tape

Torque Specs:

<u>Qty. - Description</u>	<u>Ft-Lbs</u>	<u>Size</u>
5 - Bolts around top edge of bumper	15	T45
2 - Bolts holding inner support gussets to frame	37	16mm
8 - Nuts holding front bumper to frame	66	18mm deep
4 - Bolts through bottom of winch plate to winch	35	16mm
4 - Bolts holding L/R winch plate brackets to frame	37	16mm
4 - Nuts holding winch plate to L/R winch plate bracket	37	15mm deep
7 - Bolts mounting front skid plate	18	13mm
2 - Fairlead bolts	55	19 mm

INSTALLATION

Optional: Raise front of Jeep using ramps.

1. Remove plastic fascia plate covering gap between top of bumper and grille.
 - Use small flathead screwdriver.
 - Pry out two plastic clips.



2. Remove skid plate bolts (7) holding it to the bumper and frame.
 - Use 13mm socket with short extension.

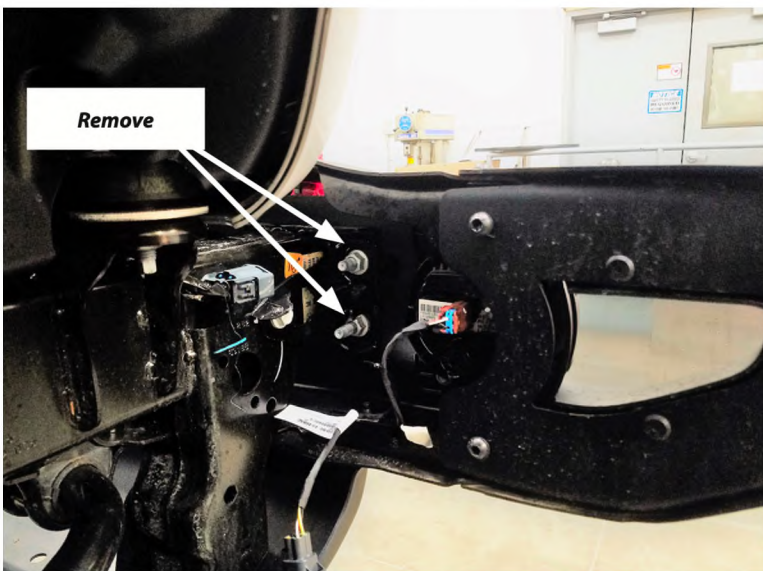


3. Disconnect the fog light wire harness on passenger side.
 - Push in on clip on side of one end and pull other side out.

- Wiggle clip to remove if too tight to easily pull out.



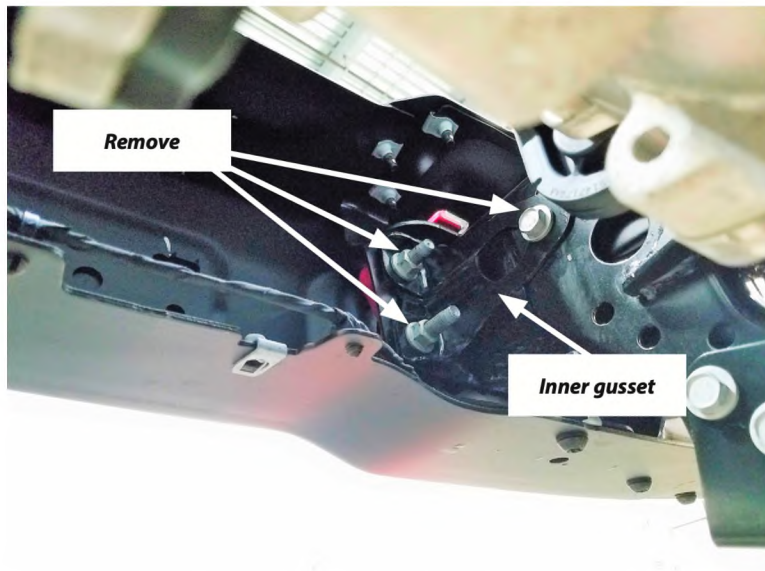
4. Remove bumper nuts (8) between frame and bumper.
 - Use 18mm deep socket.
 - Use breaker bar with long handle if necessary.
 - Four nuts holding driver and passenger side of frame bracket to bumper.
 - Two nuts on each side of frame bracket.
 - Bumper will not fall off by itself when bolts are removed.



5. **[SKIP THIS STEP]** Remove the frame horn bolt holding the inner frame support gussets and remove the gussets.
 - Use 16mm socket
 - Gussets and hardware will not be reused.

Note: Not sure why Warn includes this step.

- All you need to remove is the bumper nuts between the frame and bumper, which is covered in the previous step.
- The gussets reinforce the support of the tow hooks and do not interfere with the install.
- If you mistakenly took them off, then put them back on now and torque them back up to 37 Ft. Lbs.



6. Carefully remove the bumper and place it on a clean stable surface.

7. Remove cover plate bolts (5) from bumper

- Use T45 Torx Driver
- Cover plate not reused.



8. Reinstall the T45 bolts (5) without the cover.
 - This step is for cosmetic purposes only.
 - Use supplied nuts on bottom side.
 - Use 13mm or small adjustable wrench to hold nut while tightening T45 bolts.
 - Torque to 15 Ft-Lbs.



9. Remove the license plate and license plate holder.
 - Skip and continue with next steps if not reusing.
 - Use small Philips head screwdriver to remove plate holder.

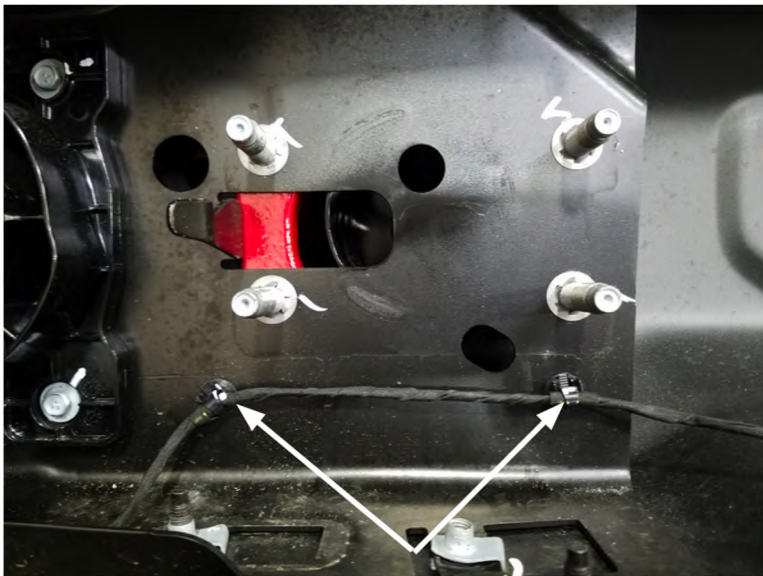


10. Remove license plate holder and fascia plate
 - Press the six clips behind the bumper and press the plate forward.

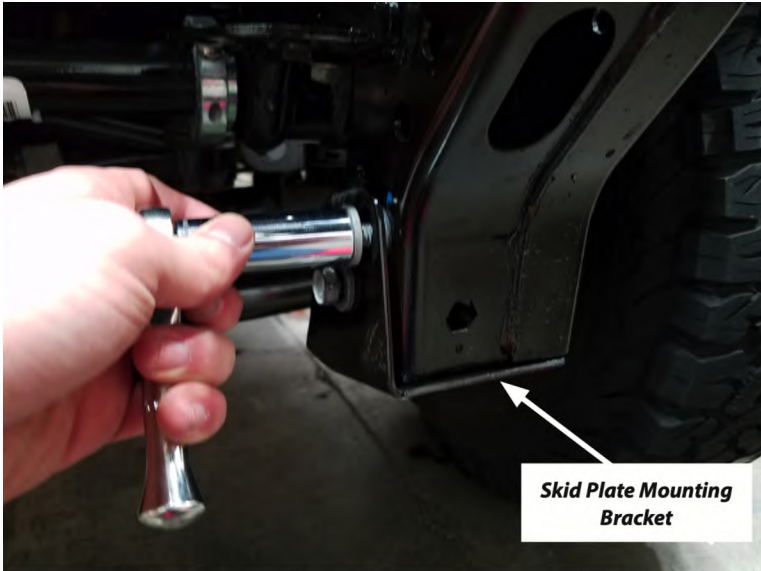


11. **[SKIP THIS STEP]** Disconnect fog light harness Christmas tree clips from the bumper.
- The wire will hang loosely, but will later be secured to winch plate.

Note: Not sure why Warn includes this step. Leaving the harness attached does not interfere with the install or putting the bumper back on later.

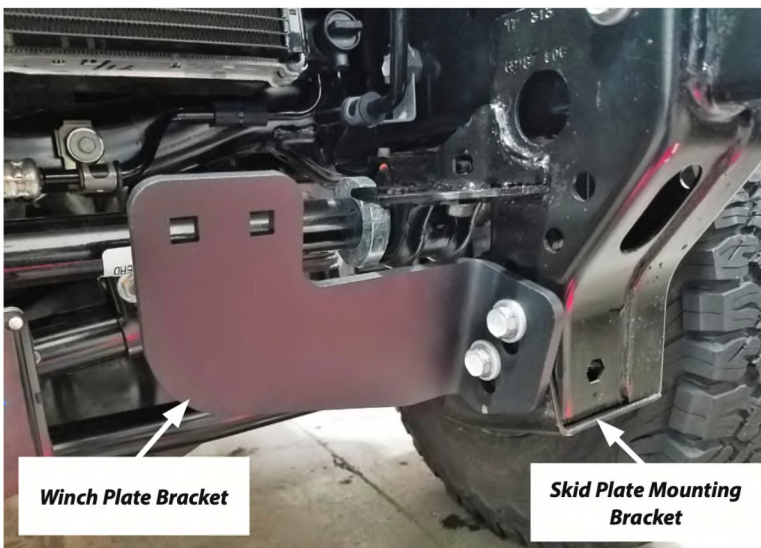


12. Remove bolts (4) attaching skid plate brackets to frame.
- Use 16mm socket.
 - Two bolts on each bracket (driver and passenger side).
 - Retain hardware and brackets for winch plate bracket installation.



13. Install L/R winch plate brackets & skid plate mounting brackets back to frame
- Use same bolts (4) previously removed.
 - Do not fully tighten the hardware at this time.
 - Leave just loose enough for bracket to slide up/down.

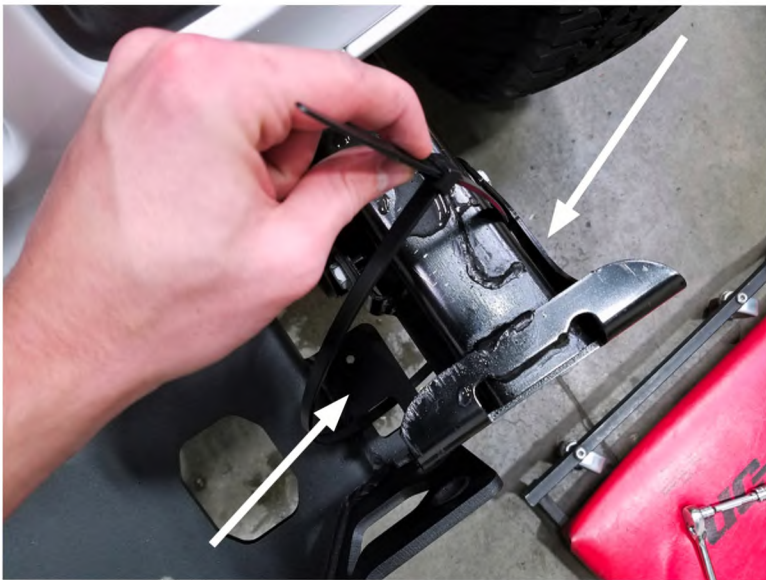
Note: On Rubicon, there limited clearance due to the sway bar disconnect, so on passenger side, insert carriage bolts before attaching bracket.



14. Install winch plate onto brackets with supplied carriage bolts (4) and nuts (4).
- Use 15mm deep socket.
 - Do not fully tighten the fasteners at this time.



15. Thread the supplied zip ties through the holes on the winch plate wings and through the frame.
- Start the zip ties, but do not fully tighten it.



16. Lift the front of the winch plate until the mounting holes are aligned between the winch plate and the frame rails.
- Tighten the zip ties to hold the plate in this location.



17. Attach the supplied black ground cable to ground bolt on back of winch.

- Leave nut loose. It will make routing cable up to battery easier by allowing self-adjust the angle of end connected to the ground bolt.
- Go back and tighten nut down after routing the cable.



18. Mount winch onto winch plate

- Slide the supplied square nuts (2) into slot of feet on winch first.
- Carefully place winch on winch plate being careful to not let the nuts fall out of the feet.
- Carefully route power and ground cable under grill and around bumper frame. Leave it hanging loose to the side. Will route up to battery in later step.
- Place a lock washer and flat washer onto each of the supplied bolts.

- Hand screw bolts with washers into bottom of winch, through winch plate, into feet nuts.

19. Torque hardware to specifications

- Use 16mm socket.
- 35 Ft-Lbs for four bolts through bottom of winch plate to winch

20. Disengage winch and spool out rope (min. 1 foot.)

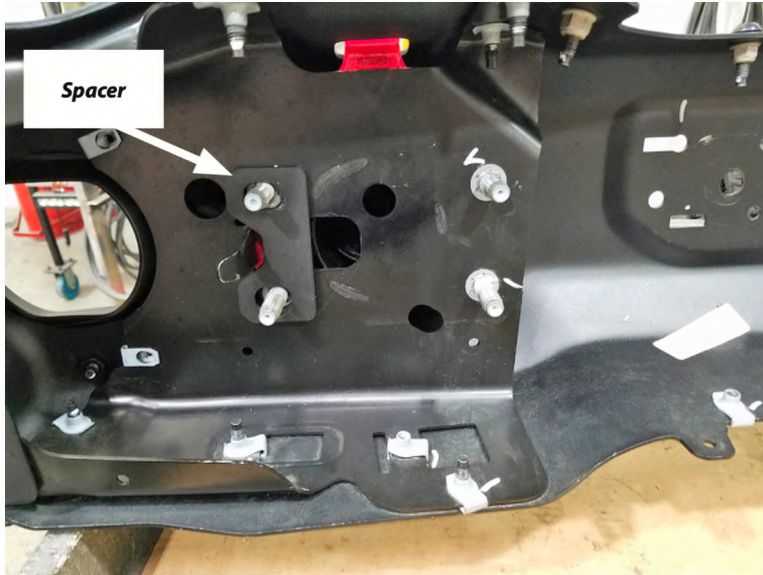
- Pull enough line out to route it through the bumper fairlead first when putting the bumper back on.

21. Check mounting hole alignment

- Once confirmed, tighten zip ties, in order to keep the holes aligned while mounting.
- Trim off excess of zip tie.



22. Place which plate spacers onto each of the outer sets of studs on the bumper.



23. Secure the filler plate and fairlead to bumper using the supplied hardware.

- 19mm socket for 2 bolts.
- Fully tighten all hardware per fairlead install specifications (50-55 Ft-Lbs).

Note: There is very restricted clearance after the bumper is put back on to allow you to put the nut on the bolt and hold it so that it doesn't spin. There is no room for a socket or wrench, so it is much easier to do it now.

24. Reinstall the front bumper using stock factory nuts at the eight mounting points in the frame.

- Be sure to feed the winch rope through the fairlead opening in the bumper.
- Make sure the bumper is fully seated against the mounting plates on the frame
- Screw on original bumper nuts (8) using 18mm deep socket.
- Top nut inside the frame on passenger side may be hard to reach. Put tape on nut to hold it in socket so nut does not fall out while trying to attach it on bolt.
- Tighten and torque nuts to 66 Ft-Lbs.
- Cut zip ties off. Not needed anymore.

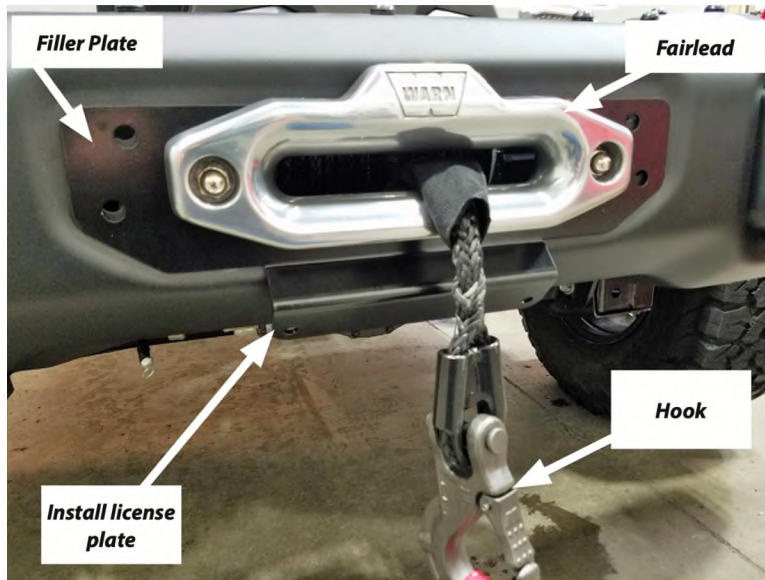
25. Tighten the L/R winch plate brackets & skid plate mounting brackets to frame that were previously left loose in earlier step.

- Use 16mm socket.
- Torque to 37 Ft-Lbs.

26. Tighten winch plate nuts (4) on the L/R winch plate bracket carriage bolts (4) left loose in earlier step.

- Make sure M10 carriage bolts are fully slotted into square holes.
- Use 15mm deep socket.
- Torque to 37 Ft-Lbs.

27. Thread the winch rope through the filler plate and fairlead.

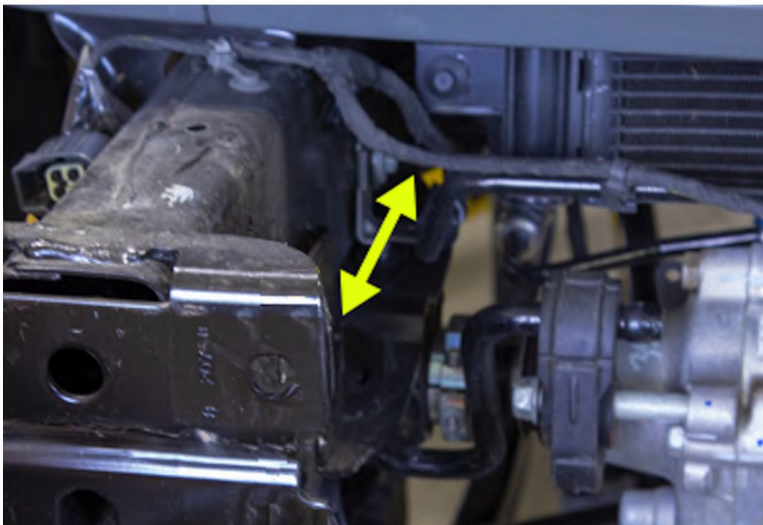


28. Install the license plate onto the flange on the fairlead filler plate.

29. Install the hook to winch line.

30. Route the winch ground and power cables up to the battery.

- Keep the cables clear of any areas with extreme heat or any moving parts.
- Zip tie cables where needed.



NOTE: I routed under grille next to the inside of bumper frame, under the frame cross member and then up next to the air box. Use a fish tape or coat hanger to fish the cable up from above.

31. Tighten ground cable nut to on back of winch, previously left loose in earlier step.
32. Connect power/ground cable to battery or via an optional relay (solenoid).



NOTE: I used the optional “Extreme Duty Battery Terminals for Jeep JL/JT” available from Quadratec: <https://www.quadratec.com/p/quadratec/-JL-HDBT-extreme-duty-battery-terminals-jeep-wrangler-jl>

33. Pretension the winch line.
34. Reinstall the front skid plate using the factory bolts (7).
 - Loosely install bolts in all holes to avoid the need for slotting rear holes.
 - Depending on fitment, some slotting of rear stock skid pan holes may be required.
 - Use 13mm socket with short extension.
 - Tighten and torque to 18 Ft- Lbs.

35. Finished.

OPTIONS:

1) Add the Fishbone flip-up license plate holder.

It offers ample clearance if later adding a Factor 55 FlatLink.

- **Fishbone Offroad Hawse Fairlead License Plate Mount FB21098**
<https://www.fishboneoffroad.com/products/hawse-fairlead-license-plate-mount>



2) Install Maximus-3 Filler Trim Plates.

- **JL FILLER TRIM PLATES – STANDARD, Model JL1017FS**
<https://maximus-3.com/home/jl-filler-trim-plates-standard>



3) Hide the 2-gauge cables coming off the back of the winch

Requires removing the grille. It is a tight fit with the Warn VR EVO 12-S winch, so this would need to be done when placing the winch on the plate.

- **VR Evo 10s Wire Reroute - Should I? (DONE)**
<https://www.jeepgladiatorforum.com/forum/threads/vr-evo-10s-wire-reroute-should-i-done.66022/#post-1083504>



- **How to Remove the Grill from a 2018 Jeep Wrangler JL**
<https://www.youtube.com/watch?v=ILleBtsSjQ>
- **Stock Grill Mod for Easy Access | Northridge4x4**
<https://www.youtube.com/watch?v=wXnxPIB3v34>