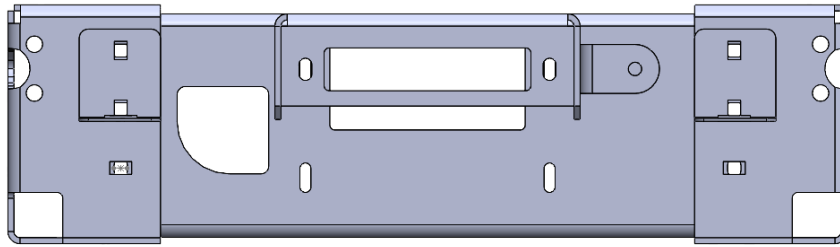


2010 - 2018 RAM 2500/3500
INTEGRATED WINCH (W070)
INSTALLATION INSTRUCTIONS



SAFETY

Your safety is extremely important to us. Working on vehicles has ever-present hazards which require precautions at all times to avoid injury or death. We've outlined some precautions to take below in order to help you make informed decisions about your safety before installing this product. This is not an exhaustive list, and you must use your own good judgment before performing any work in each step of this installation.

ALWAYS:

- wear eye protection
- use tire blocks and emergency brake
- disconnect battery(s)
- use care when moving components
- route electrical cables away from moving parts
- identify all pinch points
- wear gloves
- identify slipping and tripping hazards
- wear steel toe footwear
- understand proper use of tools before use
- work on a flat surface
- use care when lifting components
- insulate cables
- jack your vehicle from the OEM's lifting points
- torque all fasteners to suggested specs
- remove any hazards before starting on the job

LIABILITY

All liability for installation and use of this product rests with the owner. Improper installation, maintenance, and operation can result in serious injury or death as well as equipment or vehicle damage. Use this product at your own risk.



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SET UP

1. Read this entire document before performing any work.
2. Gather the tools required, outlined in **Table 1**.

Table 1

Tool List
○ Socket Set
○ 18mm, 19mm, 24mm Wrench
○ Clip Remover Set, or Flathead Screwdriver
○ Penetrating Lube (If Necessary)
○ Electric Impact Driver (Optional)
○ Torque Wrench
○ 8mm Allen Key

3. Park your RAM on flat ground, engage the emergency brake, block the tires, and disconnect the negative battery terminal.

STOCK BUMPER REMOVAL

4. Using a plastic clip remover or flathead screwdriver, remove the six (6) plastic clips holding the plastic cover in place, as seen in **Figure 1**. Remove the plastic cover and set aside.
5. Remove the four (4) 10mm head bolts on top of the grille, as shown in **Figure 2**.



Figure 1



Figure 2

6. Remove the grille by pulling it off the vehicle and set it aside. Note that the grille is also held in place with two (2) plastic clips.
7. Disconnect the clips holding the block heater cable in place and set it aside. If your RAM has front parking sensors or fog lights, disconnect the appropriate wiring harnesses located behind the bumper on the driver's side.
8. Remove the two (2) 18mm nuts holding the bumper to the frame on both sides of the bumper, as shown in **Figure 3**.



Figure 3



Figure 4

9. Remove the four (4) plastic clips attaching the splash shield to the bumper, as shown in **Figure 4** .



Figure 5



Figure 6

10. While supporting the bumper (with a helper, jack, etc.), remove the two collars holding the bumper onto the frame, as shown in **Figure 5**. Slide the bumper off the truck and set aside.
11. Using a 24mm wrench and deep socket, remove the two (2) fasteners and bracket on either side of the frame, as shown in **Figure 6**.

BUMPER PREPARATION

12. Remove the two (2) 10mm head bolts and two (2) plastic clips holding the mesh insert onto the bumper, as shown in **Figure 7**, then remove the mesh insert and set aside.
13. Remove the four (4) 18mm head bolts on the intermediate bracket, as seen in **Figure 8**. Remove the bracket and set aside.



Figure 7



Figure 8

14. If your truck came with tow hooks, remove the two (2) 17mm head fasteners on the side of the bracket closer to the center of the truck, as shown in **Figure 9**.
15. Install the new frame bracket using the provided M12 (19mm head) bolts, washers, and nuts, leaving the nuts finger tight, as shown in **Figure 10**.



Figure 9



Figure 10

16. Slide the bracket assembly back over the frame and reinstall the collar and one (1) provided M16 (24mm head) fastener, as shown in **Figure 11**.



Figure 11

17. Repeat steps 13-16 for the bracket on the other side of the vehicle.
18. If purchased, install the control box relocation kit onto the winch before proceeding.

WINCH MOUNT INSTALLATION

- Slide the winch mount behind the two (2) previously installed frame mounts, aligning the three (3) slots on each side. Using the provided M12 carriage bolts and flange nuts, secure the winch mount in place, beginning with the bottom two (2) holes, as shown in **Figure 12**.
- If purchased, align the integrated light brackets with the top two holes and install using the same M12 carriage hardware, as shown in **Figure 13**. Otherwise, skip the brackets and install the rest of the M12 carriage hardware, leaving all hardware hand tight.



Figure 12



Figure 13

- Install two (2) 3/8" carriage bolts on the bottom of the winch mount and secure in place with a washer and nut, as shown in **Figure 14**. Repeat for the other side.
- Torque the 18mm nuts holding the frame bracket to **70 ft-lbs**, and the larger 24mm nut to **150 ft-lbs**, as shown in **Figure 15**. After torquing, mark all fasteners with a paint pen to help keep track of which fasteners have been tightened, and to check for loosening.



Figure 14

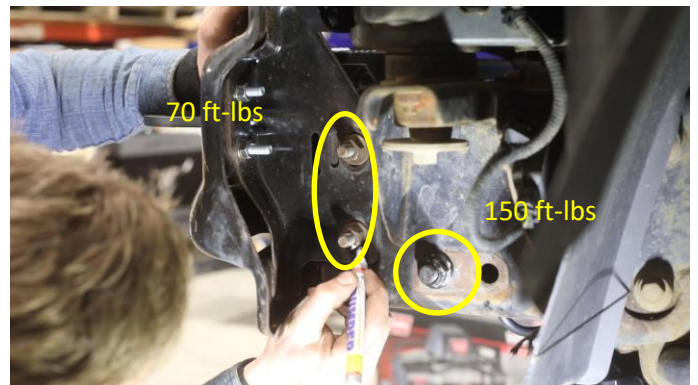


Figure 15

23. Torque the inner tow hook bolts to **50 ft-lbs**, the 3/8" nuts on the bottom of the winch mount to **28 ft-lbs**, and the M12 flange nuts to **85 ft-lbs**.
24. Lift the winch into place, with the front of the winch facing the ground, allowing clearance for the winch to spool over the top and out through the fairlead hole. Secure the winch using hardware provided by the winch manufacturer, as shown in **Figure 16**. Ensure the clutch handle is pointing through the front face of the winch mount.
25. Install the hook bracket onto the side of the winch mount using two 3/8" carriage bolts. Secure the bracket in place using 3/8" washers and nuts, as shown in **Figure 17**.



Figure 16



Figure 17

26. Install the provided hook kit using an 8mm Allen key and a 19mm wrench, as shown in **Figure 18**. Ensure the centerline of the hook is parallel to the ground.
27. Slide the winch line through the hole in the winch fairlead and secure the fairlead to the winch mount, as shown in **Figure 19**. Note: if using a Smittybilt winch, ensure the fairlead is on the winch line before connecting the line to the winch, as the hook is permanently attached to the line.



Figure 18



Figure 19

28. If using a Warn winch, attach the hook using the manufacturer provided dowel and cotter pin, as shown in **Figure 20**.
29. If purchased, install the lights onto the light bracket using the hardware included with the lights, as shown in **Figure 21**. Leave the nuts finger tight so the lights can be easily adjusted after the bumper is reinstalled.
30. Replace the inside bumper mounting stud on both sides with the longer M12x45 Carriage Bolts provided in the hardware kit and secure with the retaining washers as shown in **Figure 21**.



Figure 20



Figure 21

BUMPER INSTALLATION

31. Unspool a few feet of rope on the winch and feed it through the slot in the bumper, then align the eight (8) bolts with their respective holes. Reinstall the factory nuts to secure the bumper in place, tightening each nut to **70 ft-lbs.**
32. Reinstall the plastic clips holding the splash guard onto the top of the bumper. Reconnect the wiring harnesses for the parking sensors and fog lights if necessary.
33. With the bumper secure, adjust and finalize the position of the lights and the fairlead and secure them in place, using a 13mm wrench and a 3/8" socket respectively.
34. Finish wiring the winch and lights (if purchased) as per manufacturer instructions and ensure everything works properly before reinstalling the grille.
35. Reinstall the grille by first aligning the plastic clips and pressing the grille into place, then reinstall the four (4) 10mm head bolts. Note that the two outside screws have a wood screw type thread (pointy end), while the inner screws have a machine screw type thread (flat end).
36. Reinstall the plastic cover using the six (6) plastic clips that were removed earlier.
37. After 100 km (60 miles) of driving and after the first use of the winch, check all fasteners and re-torque hardware to their respective specifications.

