

### 2013-2018 RAM 1500

# INTEGRATED WINCH (W000)

### 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 precaustions to take below in order to help you make informed decicions 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.

### NOTE

The installation presented in this manual was performed on a 2013 RAM 1500 and may differ slightly from other 4<sup>th</sup> generation models.





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# SET UP

- 1. Read this entire document before peforming any work.
- 2. If you purchased the optional Clutch Relocation Kit or Control Box Relocation Kit, please reference their respectful installation manuals and install them on your winch prior to performing the work outlined in this manual.
- 3. Gather the tools required, outlined in **Table 1**.

Table 1

	Tool List
0	3/8", 8mm, 10mm, 9/16" (or 14mm), 18mm, and 3/4" (or 19mm) Sockets/Wrenches
0	Appropriate Drive Ratchets and Extensions
0	Fine Point Sharpie
0	4mm, 8mm, 1/8", and 7/32" Allen Keys
0	Round File or Die Grinder
0	Flathead Screw Driver
0	Center Punch
0	Drill
0	¾" Drill Bit or Step Drill Bit, 1 3/8" Hole Saw
0	Grinder with Zip Disk or Pnuematic Angle Grinder or Other
0	Hammer
0	Torque Wrench
0	Transmission Jack/Floor Jack (recommended)
0	Electric Impact (recommended)
0	Plastic Pry Tool (recommended)
0	Deburring Tool (recommended)
0	Other tools dependant on hardware provided by winch manufacturer

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





# WINCH MOUNT PREPARATION

- 5. Install the two (2) countersunk 3/8" fasteners in the countersunk holes of the Winch Mount Plate and keep them in place with the 3/8" retaining washers provided as shown in shown in **Figure 1**.
- 6. Install the Fairlead Mount on the Winch Mount Plate as shown in **Figure 2** with four (4) 3/8" carriage bolts, flat/lock washers and nuts provided in the hardware kit. Torque these to **23 ft.-lbs**.





Figure 1 Figure 2

- 7. Install the winch on the Winch Mount Plate as shown in **Figure 3** with hardware provided by your winch manufacturer. Make sure the square cut out in the Winch Mount Plate slides over the VICE Clutch Relocation Extension, if installed.
- 8. Align the winch drum so it spools out at the bottom and centered through the Fairlead Mount opening indicated in **Figure 4.** Torque the hardware as per your winch manufacturer's recommendations.





Figure 3 Figure 4





# STOCK BUMPER REMOVAL

- 9. Remove the six (6) plastic push clips holding the upper radiator cover shown in **Figure 5** below and remove the cover.
- 10. Remove the four (4) 10mm head fasteners securing the upper part of the grill and shown in Figure 6.





Figure 5 Figure 6

- 11. Remove the grill by pulling it straight back as shown in **Figure 7** to release the remaining clips holding it in place. Note to be careful with the grill and hold a rigid part of it while pulling it out of the clips.
- 12. Remove the front two (2) 8mm head fasteners securing the inner fender shown in **Figure 8** below on either side.





Figure 7 Figure 8

- 13. Push the inner fenders off to the side and unclip the headlights by pushing up the white tab seen inside and shown in **Figure 9** below.
- 14. Remove the two (2) 10mm fasteners securing the headlights at the front as shown in **Figure 10** below, remove the headlights and disconnect the wiring connectors.









Figure 9 Figure 10

15. Remove the lower headlight body panel by first removing the one (1) 10mm head fasteners on either side by reaching through the inner fender as shown in **Figure 11** below, and releasing the plastic tabs as shown in **Figure 12** below.





Figure 11 Figure 12

16. Remove the two (2) 10mm head fasteners on either side securing the final plastic support shown in **Figure 13** and secure it out of the way as shown in **Figure 14** below. Note the panel can also be removed with a few plastic clips if preferred.









Figure 13 Figure 14

- 17. Remove the three (3) 18mm sized nuts on either side securing the bumper and shown in **Figure 15**. Note it is a good idea to leave a nut on either side at the end of its threads until the bumper is ready to come off so that it does not unexpectedly fall.
- 18. With a helper remove the front bumper by pulling it straight away from the truck. Note to disconnect the wiring connector if you vehicle is equipped with fog lights.
- 19. Remove the tow lugs (if equipped) by removing the one (1) 18mm head fastener at the back and two (2) 18mm sized nuts at the front on both sides and shown in **Figure 16**.





Figure 15 Figure 16





# WINCH MOUNT INSTALLATION

- 20. With a round hand file or die grinder, slightly open the main bumper mounting holes shown in **Figure 17** on the frame to fit the supplied 1/2" carriage bolts provided in the hardware kit. Note to paint the exposed metal surfaces afterward.
- 21. On the drivers' side frame, cut off or press flat the small tab shown in in Figure 18.





Figure 17 Figure 18

- 22. Place the tow hook U-bolts through the Winch Mount Plate holes shown in Figure 19.
- 23. With a helper lift the winch assembly onto the frame, aligning the previously installed countersunk 3/8" fasteners through the bumper mounting flange and use a ½" carriage bolt and nut to temporarily secure the assembly as shown in **Figure 20**. Note a transmission jack or floor jack can also be used to assist in lifting the winch assembly into position.





Figure 19 Figure 20

24. Install the frame reinforcement brackets as shown in **Figure 21**. The upper part of the frame reinforcement bracket can be secured by the 3/8" countersunk fastener previously installed and shown



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in **Figure 22**, fasten this with 3/8" flat/lock washer and nuts provided in the hardware kit. Adjust the alignment of the Winch Mount Plate to be centered on the truck frame (and center the bumper mounting holes in the slots of the frame mounting flanges). Torque the 3/8" hardware to **33 ft.-lbs** and then the temporary ½" carriage bolts securing the winch assembly can be removed.





Figure 21 Figure 22





# **BUMPER MODIFICATIONS**

- 25. A place for the fairlead to extrude needs to be cut out from the lower portion of the bumper. To do so, fasten the Location Marking Stencil provided as seen in **Figure 23** by bolting the short 3/8" hardware through the lower two (2) license plate bracket mounting holes. If your truck has the license plate mounting bracket installed it will first need to be removed.
- 26. Trace the fairlead outline as shown in **Figure 24** and mark the four (4) corner drilling locations. Also mark the single drill location for the hook anchor (passenger side) and three (3) drilling locations for the Clutch Relocation Bearing (driver's side) if purchased.





Figure 23 Figure 24

27. Remove the stencil, center punch the four (4) corners as shown in **Figure 25** and the one (1) Hook Anchor position showed in **Figure 26** on the passenger side. If installing the Clutch Relocation Kit, also center punch the three (3) drilling positions marked on the driver's side.



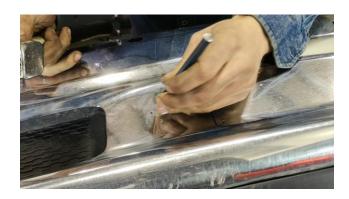


Figure 25 Figure 26

- 28. Remove the stencil and drill out the four (4) corners of the fairlead cutout to **3/4**" as shown in **Figure 27**. Note a step drill is recommended and pilot hole of 1/8" to start.
- 29. Drill the Hook Anchor hole to 1/2".



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30. If the Clutch Relocation Kit was purchased, drill the center hole with a **1 3/8**" Hole Saw from the back as shown in **Figure 28** below and the two side holes to ¼".





Figure 27 Figure 28

31. With a zip disk and grinder/pneumatic angle grinder or other, cut the remaining sections of the fairlead cutout by connecting the four (4) drilled corners as shown in **Figure 29**. The finished modification can be seen in **Figure 30** with all options.



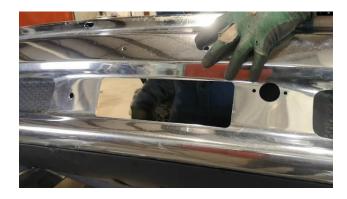


Figure 29 Figure 30

- 32. Note to de-burr all holes and paint all exposed metal edges.
- 33. The bumper mounting studs are replaced with longer and higher grade fasteners provided in the hardware kit. Remove the stock bumper mounting studs as shown in **Figure 31** by hitting them back with a hammer and install the six (6) 1/2" carriage bolts with the Bumper Mounting Shim and retaining washers as shown in **Figure 32**. Note it is beneficial to replace one stud at a time.









Figure 31 Figure 32

- 34. Install and tighten the Hook Anchor in the drilled  $\frac{1}{2}$ " hole with a washer on the front and back as shown in **Figure 33**.
- 35. If the Clutch Relocation Kit was purchased, install the UHMW Bearing Block as shown in **Figure 34**.





Figure 33 Figure 34



# **BUMPER INSTALLATION**

- 36. With a helper install the bumper back on the truck as shown in **Figure 35**. If installing the Clutch Relocation Kit, be careful and align the Clutch Extension through the UHMW Bearing Block.
- 37. Install the six (6) stock bumper mounting nuts (18mm) on the bumper and torque to 60 ft.-lbs.
- 38. Install the tow lugs using the factory hardware. Note to sandwich the frame reinforcement bracket beneath the tow lug at the back and torque to **63 ft.-lbs**. If your truck is not equipped with tow lugs, install the replacement plate and hardware as shown in **Figure 36** below.





Figure 35 Figure 36

- 39. Install the fairlead with hardware provided by your winch manufacturer as shown in Figure 37.
- 40. If the Clutch Relocation Kit was purchased, install the clutch handle with the stock set screw as shown in **Figure 38**.





Figure 37 Figure 38

41. Reinstall the plastic support with the four (4) 10mm fasteners.



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- 42. Reinstall the lower headlight body panel along with the two (2) 10mm fasteners.
- 43. Reinstall the headlights by reconnecting the electrical connectors, put them in place and re-clip the plastic tab from behind the inner fender and install the two (2) 10mm fasteners on both sides.
- 44. Reinstall the inner fenders and two (2) 8mm fasteners on either side.
- 45. Reinstall the grill by clipping the lower part in first then installing the four (4) upper 10mm fasteners.
- 46. Reinstall the upper radiator cover with the six (6) plastic push clips.
- 47. Connect your winch to the battery as per the winch manufacturer installation instructions.
- 48. After 100 km of driving and after the first use of the winch, check all fasteners and re-toque the hardware to the specifications previously outlined.