

## Engo 9,000 lb. 12 Volt Electric Winch with Synthetic Rope (87-15 Wrangler YJ, TJ & JK)

**Installation Time:** 1-2 hrs.

**Tools Required:**

- ✓ Ratchet with 14mm, 17mm, 18mm and 19mm sockets or wrenches
- ✓ Philips head screwdriver
- ✓ Flat head screwdriver
- ✓ Crescent wrench

***Pre-Installation notes :***

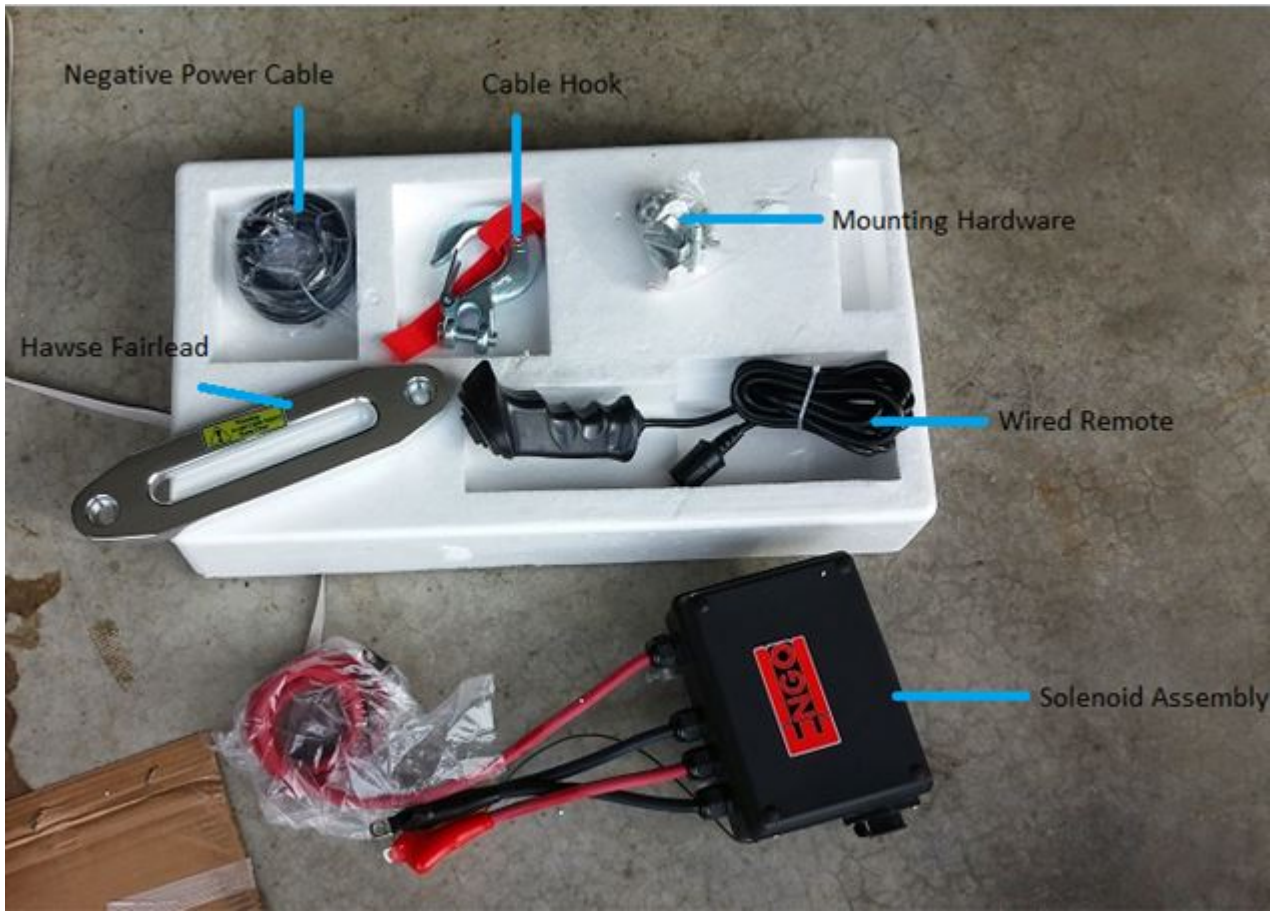
*In this install guide, we are installing the Engo 9000S winch on a Barricade Trail Force HD Front Bumper for a Jeep TJ, which has a built in winch mount plate. This also requires the bumper to be off of the vehicle when initially mounting the winch. If installing on a different bumper, you may need a winch mount plate (sold separately) and the bumper may or may not need to be off the vehicle you are mounting it to.*



Un-boxing and Parts List:

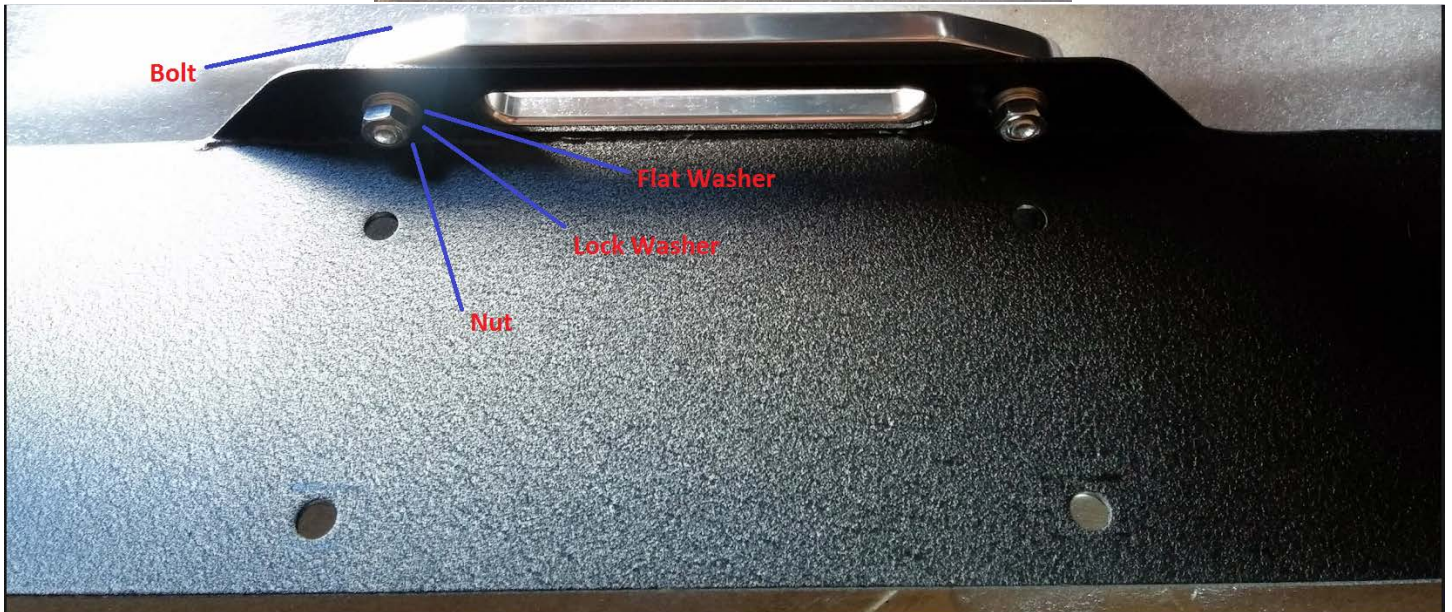






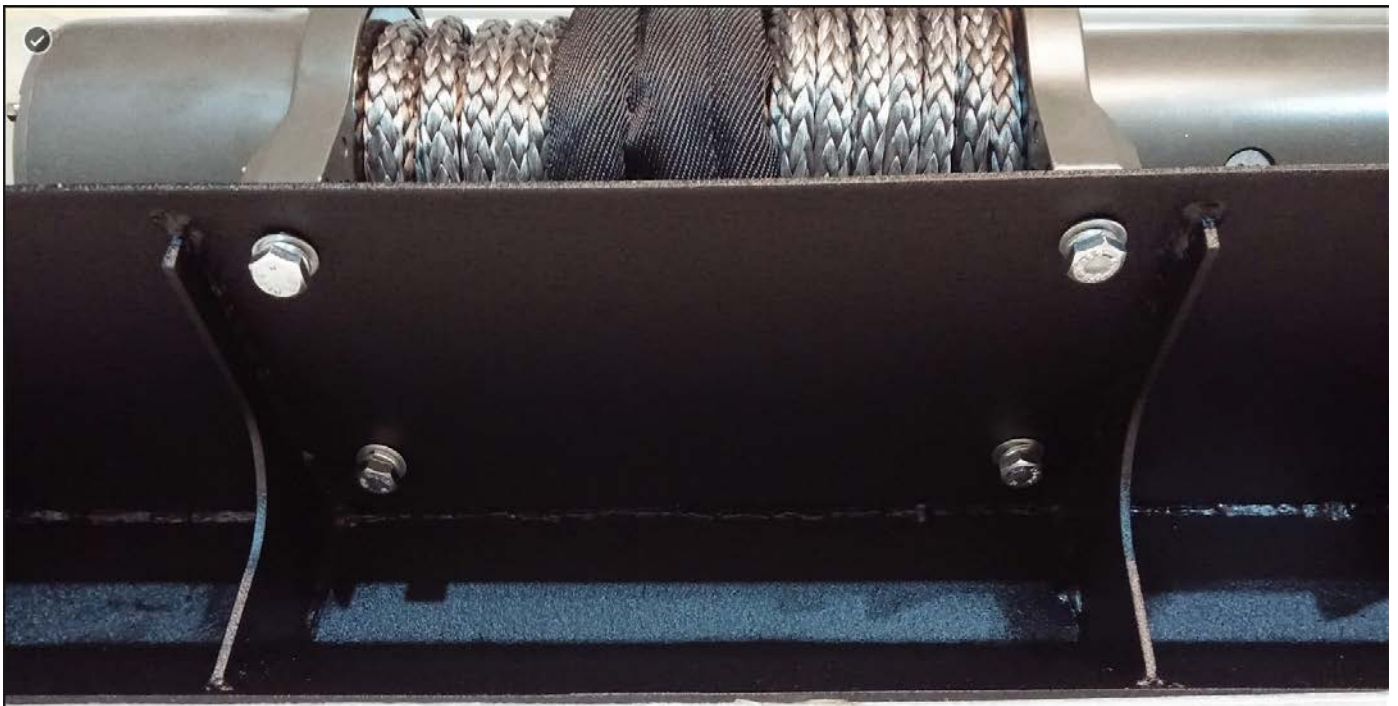
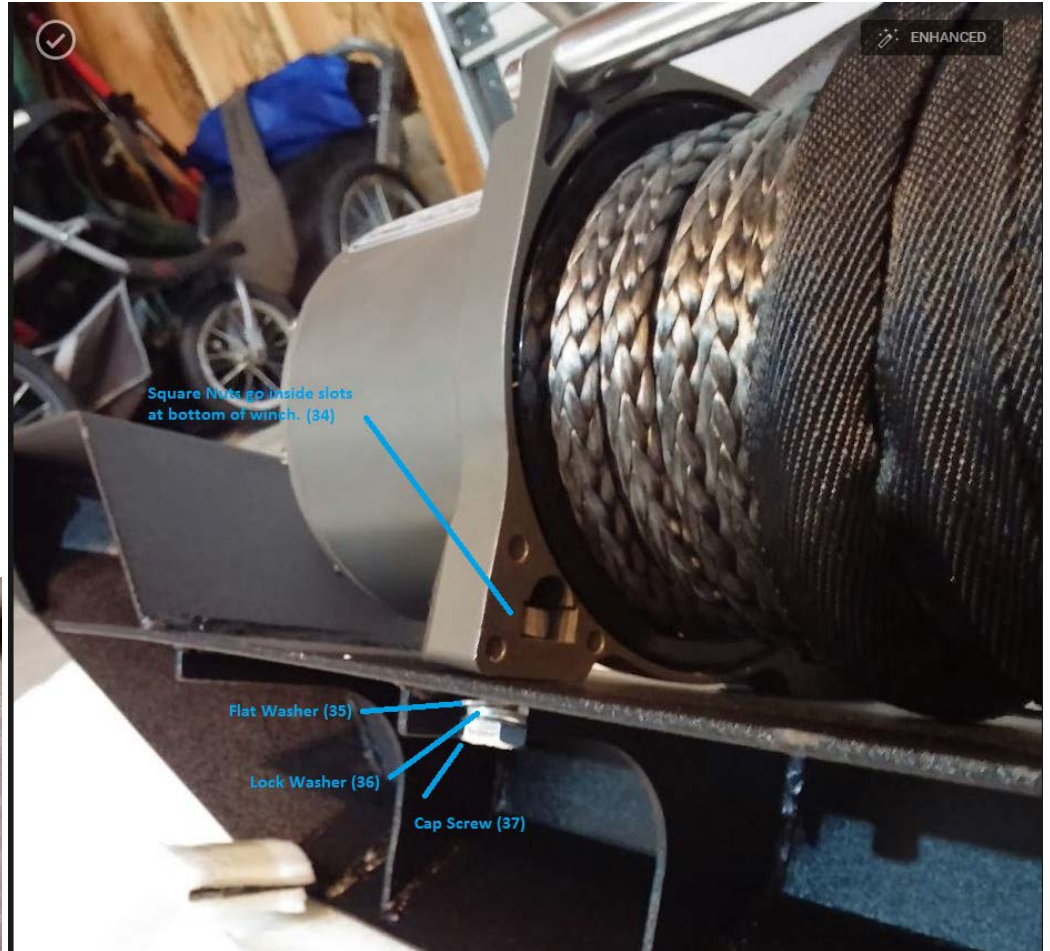
## Installation Instructions:

1. Install the hawse fairlead to the bumper or winch plate using the two thick bolts, large lock washers, and large washers provided. When mounting the bolt into the rear of the bumper and winch plate, you will use the 18mm wrench or socket to tighten. If using the nut in the rear, you will use the 19mm wrench or socket. While tightening the nut from the back, I held the front bolt in place with a flat head screwdriver since a socket would not fit.





2. Mount the winch to the bumper (or winch plate) using the four Cap screws (37), Lock Washers (36), Flat Washers (35), and Square Nuts(34) using a socket wrench and 17mm socket.



3. Mount the bumper or winch plate to the vehicle using instructions provided by the winch plate or bumper manufacturer and feed the winch cable end loop through the fairlead. Next, attach the cable hook to the cable loop.



4. Mount the solenoid box. Make sure the screws on the solenoid box clamp are loosened all of the way before installing. Hook the front of the solenoid bracket onto the upper front bar of the winch and then clamp it onto to the upper rear bar. Once seated properly tighten the screws in the back of the bracket with a Phillips head screwdriver. \*\*\*You may want to wait until all cabling is hooked up to tighten where desired.\*\*\*





5. Attach the cables from the solenoid box to the same color connectors on the winch using a 14mm socket or wrench.
  - a. The yellow cable to the yellow screw port.
  - b. The large short red cable to the red screw port.
  - c. The large short black cable to the top black screw port.



6. Screw the thin black cable from the solenoid box and the long negative battery cable into the black screw port at the bottom of the winch using a 14mm socket or wrench.



7. Run the long red power cable to the positive (red) port on the battery and screw it down using a crescent wrench. Run the long black power cable to the negative (black) port on the battery and screw it down using a crescent wrench. For this install, I routed the cable through the passenger side of the grill and through a hole at the upper corner of the radiator area and back to the battery in a way that allows for zip tying it down and keeps it away from heat. You may also consider putting flexible cable tubing (not provided) over the power cables for additional protection/shielding.





8. Tighten and check all bolts, screws, and connections. Put the provided rubber connection shields over screws on winch where applicable. Plug in wired remote and test winch.
9. Refer to the manufacturer provided instruction manual for operation and safety instructions.
10. Lastly, enjoy your Engo winch!



**Installation Instructions Written by ExtremeTerrain Customer Karl M. 02/20/2015**