



M-1821-TWR
2020-2022MY Super Duty
Tremor Super Duty Winch Rope Replacement Kit

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PRIOR TO INSTALLATION READ THESE INSTRUCTION COMPETELY
For questions, Call the FORD PERFORMANCE Techline 1-800-367-3788

Please visit <https://www.performanceparts.ford.com> for warranty information

This product does not have a manufacturer warranty, ropes and covers have a limited life resulting from environment and usage. Items not covered by Warranty include: the removal or reinstallation of the Product, wire rope, synthetic rope, Product finish, light bulbs, fading of materials.

For further details Visit Warn Industries www.warn.com/warranties



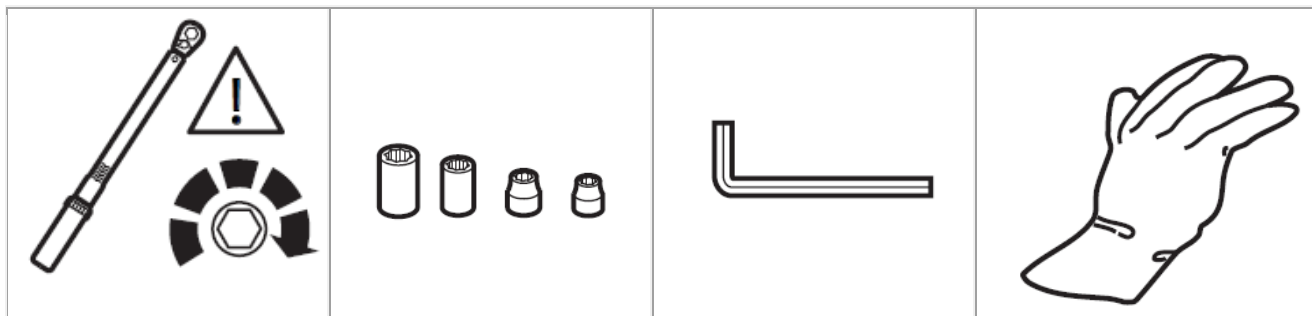
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Kit contents:

Description	Quantity
Tremor Super Duty Synthetic Replacement Rope	1
Abrasion Sleeve	1
Button Head Bolt	1

Special Tool(s) / General Equipment



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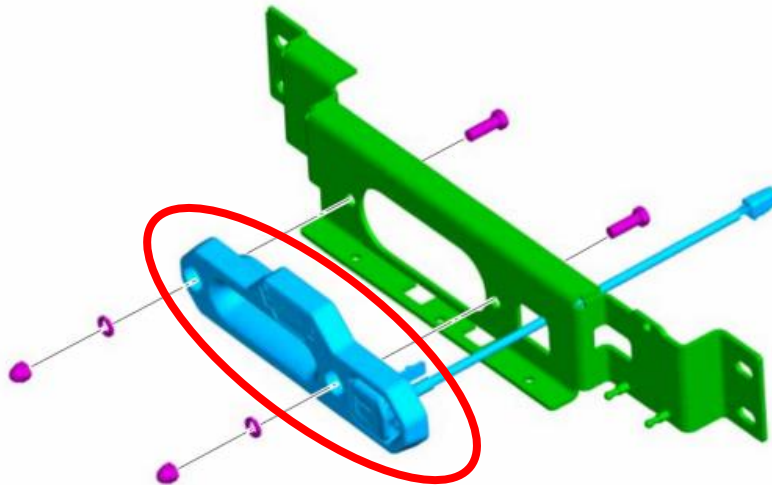
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Removal

THE FOLLOWING STEPS ARE VERY IMPORTANT AND IF NOT PRECISELY FOLLOWED THE LIFE OF THE WINCH AND WINCH ROPE MAY BE COMPROMISED.

⚠ WARNING: Always wear heavy leather gloves when handling winch rope.

1. Disconnect the negative cable from the battery that is used to power the winch.
2. Disengage the clutch.
3. Remove the fairlead.



4. Using gloves, freespool winch rope off drum.

NOTE: For ease of removal, ensure there is no tension on the winch rope prior to attempting removal.

5. Remove the button head fastener and rope washer securing winch rope. Remove winch rope completely and discard.



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Installation

THE FOLLOWING STEPS ARE VERY IMPORTANT AND IF NOT PRECISELY FOLLOWED THE LIFE OF THE WINCH AND WINCH ROPE MAY BE COMPROMISED.

⚠ WARNING: MOVING PARTS ENTANGLEMENT HAZARD. Failure to observe these instructions could lead to serious injury or death.

⚠ WARNING: Always position fairlead with warning readily visible on top.

⚠ WARNING: Always wear heavy leather gloves when handling winch rope.

⚠ WARNING: Always replace the WARN fairlead if damaged or abused.

⚠ WARNING: Always keep hands clear of winch rope, hook loop, hook and fairlead opening during installation, operation, and when spooling in or out.

1. Disconnect the negative cable from the battery that is used to power the winch.

⚠ WARNING: Never bend rope around unprotected, sharp corners.

⚠ WARNING: Never use rope over a rough surface without abrasion protection.

2. Slide the black abrasion sleeve over the rope from the end opposite of the hook. Slide the sleeve towards the hook end of the rope.
3. Insert the synthetic rope through the fairlead and around the winch drum from the top.
4. Apply Loctite 271 or equivalent product to the supplied ¼"-20 x ½" long button head fastener.
5. Insert the button head fastener supplied and the machined rope washer. Before tightening the bolt, install the rope eyelet on the machined rope washer. Tighten the ¼"-20 button head bolt to 8 ft. lbs.
6. Reconnect negative cable to the battery that is used to power the winch.

⚠ WARNING: Always wind the winch rope on top of drum. Super Duty application only.

⚠ WARNING: Never operate winch with less than 10 wraps of winch rope around the drum. Rope could come loose from the drum, as the winch rope attachment to the drum is not designed to hold a load.

⚠ WARNING: Never touch winch rope or hook while someone else is at the control switch or during winching operation.

7. Turn the clutch lever on the winch to the "Engaged" position.
8. Power in and wind 10 wraps of winch rope onto the drum while applying tension on the winch rope.

Proceed to the 'Rope Spooling Instructions' section.

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Rope Spooling Instructions

THE FOLLOWING STEPS ARE VERY IMPORTANT AND IF NOT PRECISELY FOLLOWED THE LIFE OF THE WINCH AND WINCH ROPE MAY BE COMPROMISED.

⚠ WARNING: Always keep hands clear of winch rope, hook loop, hook and fairlead opening during installation, operation, and when spooling in or out.

⚠ WARNING: Never operate winch with less than 10 wraps of winch rope around the drum. Rope could come loose from the drum, as the winch rope attachment to the drum is not designed to hold a load.

⚠ WARNING: Never touch winch rope or hook while someone else is at the control switch or during winching operation.

⚠ WARNING: Always wear heavy leather gloves when handling winch rope.

⚠ WARNING: Always wind the winch rope on top of drum. Super Duty application only.

1. It is now necessary to spool the remaining rope onto the winch drum. Choose a FLAT AND LEVEL location that is large enough to run out the entire length of rope.
2. Ensure the rope is completely spooled out except for atleast 10 wraps on the drum. Then turn the clutch lever on the winch to the "Engaged" position.

⚠ WARNING: Always use supplied hook strap whenever spooling winch rope in our out, during installation and during operation.

3. Attach the hook end of the rope to a suitable anchor point and back the vehicle away from the anchor point leaving approximately 6 ft. (2m) of slack rope lying on the ground. Before getting out of the vehicle, set the parking brake, place the vehicle in gear or park and turn the vehicle off.
4. Connect the remote control to the winch. Standing approximately 8 ft. (2.5m) away from the winch, power-in the winch until all of the slack is wound onto the winch drum. **WARNING! Always wind the winch rope on the top of the drum. Super Duty application only.** Disconnect the remote control from the winch. Hold tension on the rope with one hand; carefully push the rope to the side of the drum the rope is attached to so there are no gaps between each coil of the drum. Be sure to check that the rope is winding off of the top of the drum, not the bottom, or the automatic load holding brake will not function properly. (If the rope is winding off the bottom you have powered the winch "out" instead of "in" on the remote control)
5. If there is still rope laying on the ground, back the vehicle away until the rope is off of the ground.

⚠ WARNING: Never touch winch rope or hook while someone else is at the control switch or during winching operation.

⚠ WARNING: Never touch winch rope or hook while under tension or under load.

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⚠ WARNING: Always stay clear of winch rope and load and keep others away while winching.

6. The following steps should be done using two people for proper safety. If you attempt to tension your rope alone be sure to always engage the parking brake, place the transmission in gear and turn the vehicle off every time you exit the vehicle to inspect the winch rope. Never exit the vehicle with a load on the winch rope.
7. Use care to evenly wrap each layer to prevent damage to the rope. Tensioning the rope is critical to ensure a long product life. Tensioning the rope prevents the rope from sinking into the lower layers under load.
8. Pass the remote control through the driver's window for the driver of the vehicle to operate. Instruct your assistant to stand to the side of the vehicle and away from the winch rope. Your assistant should signal you if the rope is winding correctly by watching it move across the fairlead as the rope is powered in. Start the vehicle and place the transmission in neutral. Release the parking brake while applying moderate brake pedal pressure. Power the winch remote in. After winching in for approximately 6 ft. (2 m), stop winching. Slowly let up off of the brake pedal and then apply the parking brake. This will ensure that there is no load on the winch rope. Then place the transmission in park or gear and turn the vehicle off. Exit the vehicle and inspect the winch rope is being evenly wound onto the winch drum and not sinking into the lower layer. If the rope is sinking, power the rope out and repeat this step from the beginning with more brake pedal pressure.
9. Once you are convinced the rope is winding on the winch properly, repeat step 6 until the vehicle is within 6 ft. (2 m) of the winch anchor. Once within 6 ft. (2 m), slowly let up off of the brake pedal and then apply the parking brake. This will ensure that there is no load on the winch rope. Then place the transmission in park or in gear and turn the vehicle off. Exit the vehicle and inspect the winch rope is being evenly wound onto the winch drum. Disconnect the hook from the anchor. While holding onto the supplied hook strap, hold tension on the winch rope and slowly power in the winch by "pulsing" the power-in on the remote control until the hook is within 3 ft. (1 m) of the fairlead. Stop winching in and attach the hook to a suitable anchor point on the vehicle. **DO NOT POWER THE HOOK INTO THE FAIRLEAD.** This would cause irreparable damage to the fairlead. Once the hook is suitably attached to the vehicle, power in the remaining slack in the winch rope by "pulsing" the power-in on the remote until there is minimal slack in the winch rope.

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MAINTENANCE AND CARE

Cleaning:

- Use low pressure water to clean synthetic rope. Do not use any chemicals.
- Do not direct high pressure water (pressure washers, car washes, etc.) directly between the drum support and drum flange or clutch lever.
- Use low pressure water and a soapy rag or sponge to clean the winch.
- Avoid using chemicals that may damage the finish.
- Thoroughly clean salt residue from the winch as soon as possible to minimize corrosion.

Rope Inspection:

⚠ WARNING Always inspect winch rope, hook, and slings before operating winch. Frayed, kinked or damaged winch rope must be replaced immediately. Damaged components must be replaced before operation. Protect parts from damage.

When rope is first used, the outer filaments of the rope will quickly fuzz up. This is the result of these filaments breaking and this roughened surface will actually protect the fibers underneath. The condition should stabilize, not progress. If the surface roughness increases, excessive abrasion is taking place and strength is being lost.

Look closely at both the inner and outer fibers. When either is worn the rope is obviously weakened. Open the strands and look for powdered fiber—this is a sign of internal wear.

Localized discolorations could potentially represent chemical attack by anything from gear oil to battery acid. When doubt exists, replace the rope.

Rope should be replaced when:

- Rope bulk anywhere along the length is reduced by 10% or more by abrasion.
- Two or more adjacent strands are cut.
- Flat areas or lumps are found that are not eliminated by flexing rope.
- Excessive fused or melted fibers are found. Any such areas will be stiff and the rope will have a glazed appearance.



• Rope with original bulk.



• Rope displaying 25% strand volume reduction from abrasion—rope should be replaced.



• Rope strand showing full volume.



• Rope strand reduced by 25% abrasion—rope should be replaced.



• Rope exhibits fiber-set from compression. A slight sheen is visible. This is not a permanent characteristic and can be eliminated by flexing the rope.



• Rope displays two adjacent cut strands—rope should be replaced.

Maintenance:

- Replace rope every 12 months with WARN® synthetic winch rope only.
- Inspect the rope before and after each winching operation. Frayed or damaged rope must be replaced immediately. See rope care and storage.
- The rope must always spool onto the drum as indicated by the drum rotation decal on the winch.

Always take time to fully understand your winch and the winching operation by reviewing the Basic Guide to Winching Techniques included with your winch.

For further information or any questions contact:

WARN INDUSTRIES, INC.
12900 S.E. Capps Road, Clackamas
OR USA 97015-8903, 1-503-722-1200,
Customer Service: 1-800-543-9276
Dealer Locator Service: 1-800-910-1122
or visit www.warn.com.

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