



Installation and Operating Instructions for Automotive Winch Synthetic Rope



Synthetic Rope Kit Parts List Part No. 251262

1. Rope Assembly (3/8" x 100')
2. Hook Strap



WARNING: A minimum of EIGHT wraps of synthetic rope around the drum barrel is required to hold the load. The rope anchor is not designed to hold the load.

Do not exceed maximum line pull rating for winch or 9500 lbs. line pull rating for synthetic rope, **WHICHEVER IS LESS**. Shock loads must not exceed this rating.



CAUTION: Read and understand this manual before installing synthetic rope. Refer to winch owner's manual for all winch operating instructions and warnings.

Tips for Safe Operation

Do not expose rope to chemicals or heat sources.

Avoid prolonged exposure of synthetic rope to ultraviolet rays from sunlight which can degrade rope strength over time. Use a winch cover over winch and rope when not in use.

Any sharp bend in the rope under load decreases its strength substantially and may cause premature damage or failure. Sheave diameters on rotating snatch blocks should be at least 8 times the rope diameter (3" for 3/8" rope).

Avoid pulling rope over rough surfaces or sharp edges. Slide the protective sleeve along the length of the rope to place it at a location where the rope would encounter rough surfaces such as rock or tree branches.

The 10' long protective sleeve can be cut into two 5' lengths for greater flexibility in protecting the synthetic rope. Remove the protective sleeve from the rope before cutting into two lengths, use a cigarette lighter to fuse the cut ends so they will not unravel, and then slide the two pieces back on the rope.

See *Rope Inspection*, page 7 for information on when to replace the synthetic rope.

Maintenance

The most important part of maintenance of the synthetic rope is to inspect it regularly. Any time the winch is used, the synthetic rope should be inspected thoroughly as described on page 7.

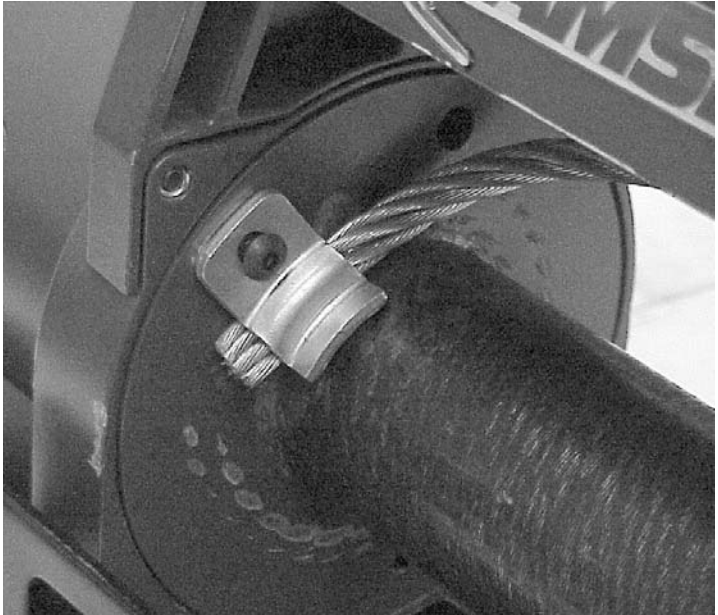
Likewise, inspect the protective sleeve and replace if it becomes torn, fused, or threadbare.

Keep the rope and protective sleeve free of moisture, grease, dirt or other debris. If necessary, clean with a damp cloth.

Installation

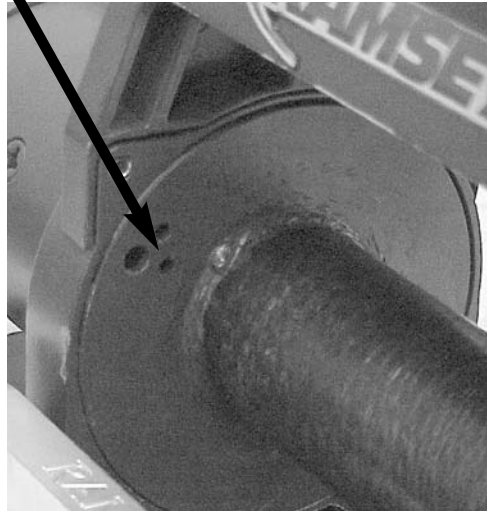
Notes:

- **Rope should be installed so that it feeds from the bottom of the drum.**
 - **An Aluminum Hawse Fairlead, P/N 251266, is recommended for use with the Ramsey Synthetic Rope.**
 - **Before installing synthetic rope, inspect winch drum and smooth any sharp edges on drum barrel, flanges and other winch accessories that may contact the rope.**
 - **The rope anchor requires a 13/64" thru hole or 1/4" tapped hole in the drum flange located $5/8 \pm 1/32$ " from drum barrel.**
1. Unwind new rope by rolling it out along the ground.
 2. Remove steel cable and cable anchor from winch. Retain cable and cable anchor for future use, unless damaged.

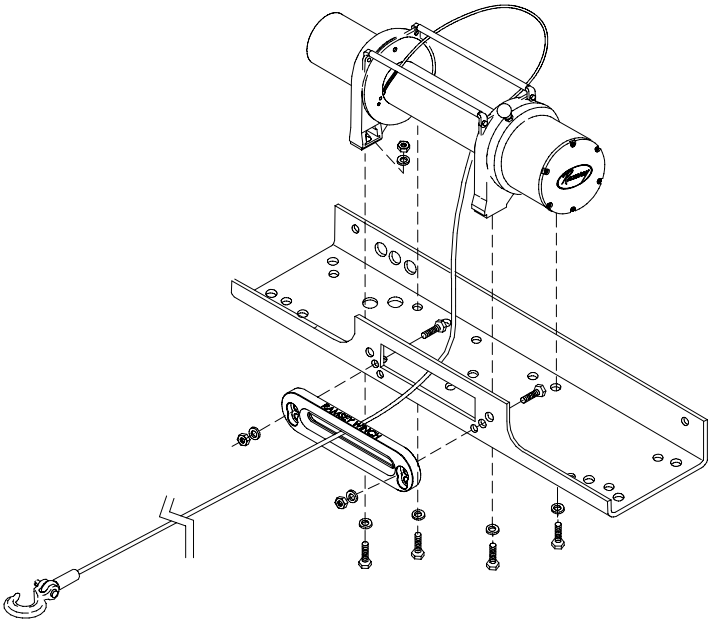


3. Rotate drum to locate existing hole in flange that is closest to the drum barrel.

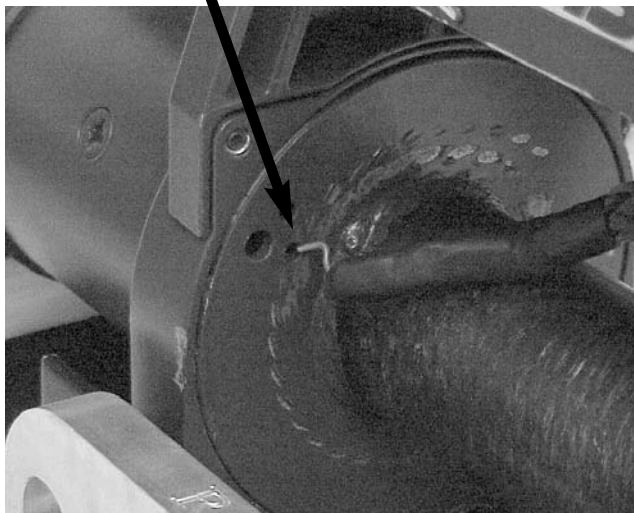
If there is no existing hole at the right location on the flange, a 13/64" thru hole will need to be drilled in the drum flange as shown.



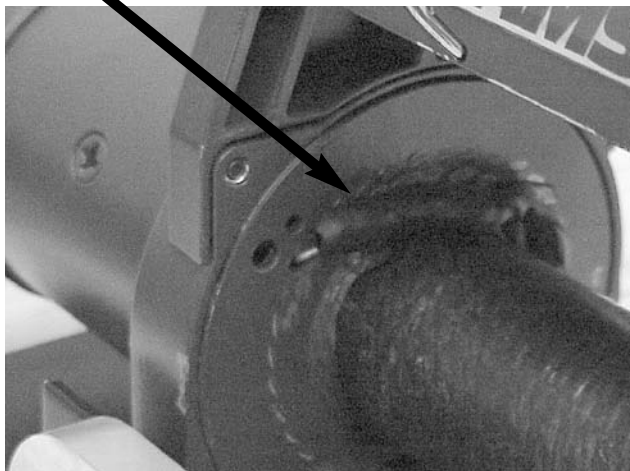
4. Feed synthetic rope through aluminum hawse fairlead and under drum as shown below.



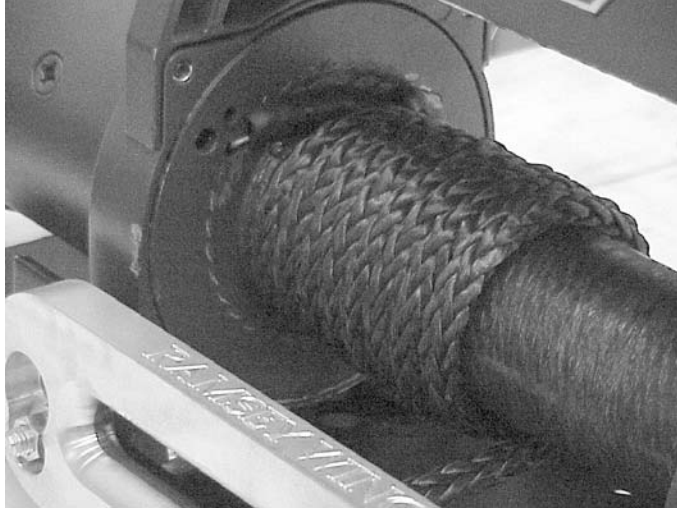
5. Insert synthetic rope anchor into hole in flange closest to drum barrel.



Pull synthetic rope tight to seat anchor in hole.



6. Carefully run winch in the “reel-in” direction. Keeping tension on end of rope, spool all the rope onto the drum, taking care to form neatly wrapped layers.



Rope Inspection

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.

Rope should be replaced when

- **Rope bulk anywhere along the length is reduced by 25% 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.**

Examples:



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.**

Warranty Information

New Synthetic Rope assemblies are warranted against defects in workmanship and materials. No warranty applies after initial use.



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