Capstan Rope Winch

Distributed by NovaJack

Operation Manual

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Caution - Read instructions before operation

Important: Fuel/Oil Mix is 24:1

Many uses of a pulling device involve serious risk of injury or damage to valuable property. Do not underestimate the potential danger.

The Capstan rope winch is designed and manufactured for portable use only. (It is not to be permanently mounted).

Operate with caution - Save instructions for future reference

MAINTENANCE

When you have completed your pulling job, clean and dry the unit and check the winch, rope and tether for any damage or wear. Periodically check for loose screws or broken parts. The capstan unit is lubricated at the factory and should require no lubrication or maintenance. NOTE: Some oil may leak from the bearings under the capstan drum on either unit, or around the input shaft. However, sufficient oil will remain in the unit.

Maintain the engine per the instructions supplied with the engine. When any engine is stored for an extended period, the gasoline should be removed from the gas tank and carburetor.

ROPE SAFETY

Capstan winches are for use with LOW STRETCH rope. Make sure the winch rope is made of a low stretch material such as polyester or Kevlar. Polypropylene and polyethylene rope is dangerous for use with the winch because of high stretch and low melting point. Nylon rope has very high stretch. Be sure the rope is undamaged and of adequate strength for the intended load.

TYPICAL MINIMUM BREAKING STRENGTH OF ROPE - POLYESTER, 3300 pounds, 5/16" or 3/8" only.

CAUTION - STRETCH MEANS DANGER ! Stretch in the winch line can cause the rope to snap out of your hand with extreme force and could cause a serious injury by pulling your hand or body into the winch. Stretch in the winch line can

cause the load to "break free" with considerable force and jump in an unpredictable and dangerous manner. All rope will stretch. A long rope will stretch more than a short rope. The more the pull the more a rope will stretch. Use care when releasing tension on the winch line. The line can recoil and pull your hand into the winch or cause a severe rope burn. Wear gloves.

BASIC SAFETY RULES

Do not operate the winch while drinking or under the influence of drugs. Select attachment points that are strong enough to stand the pull. Do not place your hands inside the fairleads or on the drum while the engine is operating. Avoid standing in line with rope under tension. Operate the winch from the side and at a safe distance. Keep body parts out of the coils of the rope. Do not loop the tail of the rope around your hands.

Keep spectators clear of the work area. Keep people out of vehicles being pulled by the rope when there is any danger of the vehicle "running away" of rolling over if the rope breaks of the vehicle slips. **This winch is not intended for lifting loads**. There is no safety device built into the winch to prevent the load from falling if the winch rope is released. Do not use the winch to lift people. Stand clear of the suspended load.

HOW TO USE A ROPE WINCH

Step 1. Attach the winch

The first step when using the Capstan Rope Winch is to attach the winch to an object with the 6 foot long polyester choker supplied with the winch. Simply use the two safety hooks installed on the winch to secure the choker.

When the attachment point is an item such as a stump, post or trailer hitch ball, the choker can simply be looped over the object to which you wish to attach the winch.

Position the winch so that the fairlead is pointed in the direction of pull. When the winch starts to pull, the winch will swing and twist on the choker to align itself with the pull and the rope. The choker and winch should be able to move without hitting an obstruction or causing damage.

Be certain that the attachment point is strong enough to withstand the pull without damage or breaking. When you attach the winch to a vehicle, such as around a trailer hitch ball, tow hooks, grill guard or spring mount, be certain that you will not bend or break the tie point. Many accessories such as grill guard, tow hooks and even trailer hitches can pull loose when they are used for winching.

Avoid looping the chocker around sharp edges that could cut or damage the polyester belt. When you use a post, tree or stump as an attachment point, be sure to place the choker near the base.

Step 2. Tie off the winch rope

The key to safety using the winch is common sense when you lay out the rope for the pull. The wide variety of situations encountered in actual use do not allow us to give specific instructions, however consider the following points:

Use strong, low stretch rope and good knots (learn to tie a bowline). Use blocks and pulleys to turn corners and multiply the puling power when the pull is close to the breaking strength of the rope, or near the pulling capacity of the winch (2000 pounds).

Lay out your rope so the load will not hang up or dig in on the pull. Try to attach the winch in such a manner that the front end of the load is being lifted. Don't pull down or through an obstruction, such as when a load is being pulled up a slope or ramp and then over a break. As a general rule, if the rope is dragging on the ground when the load is being pulled, the rigging is not correct.

Do not pull a load down a slope towards the winch and to where you are standing to operate the winch because the load could coast or run away and you would have no way to stop it.

TIE OFF OPTION 1: In most cases the winch is attached to an unmovable object with the polyester choker and the rope is tied to the object that you want to move so that it can be pulled to the winch's location as the winch winds in the rope.

TIE OFF OPTION 2: Sometime the winch is attached to the object that you want to move with the choker, and the winch rope is tied to an unmovable object. Then the winch and the object you want to move are both pulled to the point where the rope is tied off as the winch winds in the rope. This method is useful when you must be near the load to guide its movement and control the winch operation, such as when operating the winch alone.

Step 3. Wrap the rope onto the drum

First check over the machine, rope, knots, rigging and load to be sure you are not going to cause damage, or risk life and property.

A. Start the engine.
B. Feed the rope through the inlet fairlead.

C. Wrap the rope around the rotating drum (3 loops).

D. Bring the rope behind the outlet fairlead.

Stand away from the unit and apply tension to the tail of the rope to move the load. Be careful not to get tangled in the coils of rope. **Do not loop the rope around your hand or body**. Pull on the tail so that the rope is against the exit hook when it feeds off the drum. This allows you to see the winch and yet be out of the path the rope would follow if it were to break. DO NOT PLACE YOUR HANDS INDIDE THE FAIRLEADS OF ON THE DRUM WHILE THE ENGINE IS OPERATING. Watch the capstan winch while operating to be sure you do not get a backlash. If you do, release the tension on the rope and stop the engine before you work to clear the snarl.

Pull lightly on the free end of the rope to make the winch pull. Stand 10 to 20 feet to the side of the winch and rope of space and location allow.

Simply pull the rope hand over hand into coils near your feet or into a container (storage reel) as the winch pulls in the load.

If the rope is slipping on the drum while you are pulling, place more wraps on the drum. If the winch reaches its capacity, the engine will stall. You must re-rig or rock the load. To rock the load, pull until the engine almost stalls, then slack off the pressure on the tail. Then pull on the tail again. Use care not to do this so often that you wear through the rope.

If the winch is pulling rope and the load is not moving (usually when you have a very long rope) your rope is stretching and may be reaching the breaking point and you are in danger of snap back. Slack off the tail but be cautious of snap back that could jerk the rope out of your hands and cause a rope burn or pull you into the winch.

To pause when pulling, slack off the pressure of the tail of the rope and allow the rope to slip on the drum. Do not allow the rope to slip on the drum for more than a few seconds while you have a load on the rope (it can melt some rope materials). To stop in the middle of a pull without releasing the tension on the load, you must keep pressure on the tail by holding the tail or tying it to a secure object. Then turn off the engine.

Knots will not pass through the fairlead and will cause snarls. If you must tie two pieces of rope together to reach the load, stop the winch before the knot reaches the winch. Tie the load to an anchor and release the tension on the winch rope. Feed the knot around the drum and restart the winching operation.

SPECIAL INSTRUCTIONS - MODEL SP

Capstan Rope Winch Model SP is built with a 2 cycle gasoline engine. Instructions for operating and maintaining the engine are in separate instructions packed with the unit.

MIX FUEL PER THE ENGINE INSTRUCTIONS 24:1

NOTE: The engine will operate better and start easier after a short break-in period. It is best to start the engine and allow the unit to run through one tank of gas before you put the unit to work.

Photo gallery: