



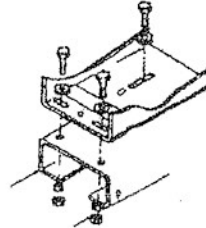
## IMPORTANT

Read the instructions carefully in conjunction with the illustrations before using the appliance.

**NOTE:** Layers to mean cable, rope or strap

## INSTALLING

Mounting structure must be capable of withstanding loads within the capacity of the winch. Mount winches with 3/8" diameter bolts and lock nuts. For increased strength and safety, this winch should be mounted with three 3/8" bolts, washers and lock washers as shown in the drawing.



## OPERATING

Do not exceed the load capacity rating of the winch. Capacity rating is based on one "layer" around the drum. As "layer" builds on drum, capacity decreases. Obtain "layers" manufacturers recommendation for size and type. Use proper end connection for attaching the hook to the "layer". When anchoring "layer" to drum 4 to 6 wraps must remain on drum to supply friction for a proper anchor. Keep "layers" properly aligned on drum.

**CAUTION:** Never fully extend the "layers" while under-load.

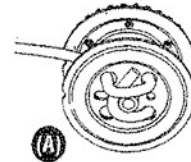
## INSPECTION AND MAINTENANCE

Moving parts including gears, ratchets and shafts must be kept clean and lubricated to insure proper and safe operation. Components can be affected by chemicals, salts and rust and should be examined for safe operation before each use. Do not operate winch if "layer" is knotted or kinked or has any sign of weakening. Keep hands away from load bearing cables, rope, straps, sheaves, drums and pulleys while operating.

## ATTENTION

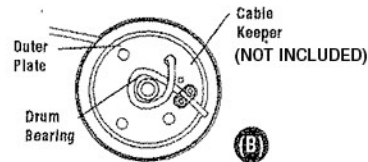
Boat trailers not equipped with keel and side hull rollers are designed to be submerged in the water when the boat is loaded, i.e., the boats should be "floated" onto the trailer. If the trailer is not submerged, attempts to "drag" the boat onto this type of trailer can cause winch failure and possible injury. Winches are not designed to secure boats to trailers. Boat tie downs should be used. Instructions for attaching rope to winch drum, requires no bolts, nuts or rope keeper.

See Illustration (A), threading rope through holes in drum side.



**CAUTION:** Never fully extend the rope while pulling load. Keep four (4) complete turns of rope around the drum, otherwise rope can pull loose from drum. Requires no bolts, nuts or rope keeper.

Instructions for attaching cable to winch drum. Requires cable keeper fastened through square hole. See Illustration (B)



**CAUTION:** Never fully extend the cable while pulling a load. Keep four (4) complete turns of cable around the drum, otherwise cable can pull loose from drum.

Instructions for attaching straps to winch drum. Pass the strap loop under the cross bolt, insert strap-anchor in the strap loop, then pull tight. See Illustration (C)

**CAUTION:** Never fully extend the strap while pulling a load. Keep four (4) complete turns of strap around the drum, otherwise strap can pull loose from drum.

## WARNING

- This winch is not to be used for lifting humans or for hoisting loads over people occupied areas. Do not walk or work under a load suspended by this unit
- Handle and nut must be tightened against shoulder before operating winch
- Apply standard auto grease to drum gear and drive gear. Apply oil to all moving shafts

