

# **K** **KEEPER** PERFORMANCE ENGINEERED™ **WINCHES**



## **Assembly & Operating Instructions** **KWSL2000RM**

**2000 Lb. 12VDC Electric Winch**



**CAUTION!**



**READ AND UNDERSTAND THIS MANUAL BEFORE INSTALLATION  
AND OPERATION OF THIS PRODUCT.**

**DO NOT RETURN THIS PRODUCT TO SELLER.**

# **OWNER'S MANUAL**

# KWSL2000RM 2000 lb. 12VDC Electric Winch

Designed for Marine and Utility Recovery, Boats up to 18' and General Utility Winching Applications.  
**THIS PRODUCT IS NOT INTENDED FOR LIFTING/HOISTING**

## Assembly & Operating Instructions



**PLEASE READ ALL SAFETY PRECAUTIONS AND WARNINGS BEFORE INSTALLING AND USING THE WINCH!**

## Introduction

Thank you for purchasing your KEEPER® Winch.

### **PLEASE READ ALL INSTRUCTIONS, PAYING SPECIAL ATTENTION TO THE SAFETY INSTRUCTIONS.**

Thank you for purchasing a KEEPER WINCH. We hope you will be pleased with your purchase. Your winch was designed for non-industrial use. As with any power tool there is a potential for personal injury if your winch is improperly installed or operated. It is extremely important that anyone operating this winch reads and understands this manual prior to installing and operating this winch.

## Save this Manual

You will need this manual for the safety warnings and cautions, assembly instructions, operating procedures, maintenance procedures, trouble shooting, parts list, and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep both this manual and your invoice in a safe, dry place for future reference.

## KWSL2000RM WINCH SPECIFICATIONS

Capacity	6000 lb. Rolling Load 5000 lb. Boat fully loaded up to 18' long 2000 lb. Pulling Capacity
Max Boat Size:	18 Feet
Max Boat Weight:	5000 lb.
Line Speed:	6 Feet/Minute with Load
Current Draw	6 Amps @ 150 lbs. 20 Amps @ 2,000 lbs.
Cable Length:	30 Feet
Hook Size:	3/4" Opening x 3-3/4" L.
Power Supply	12 Volts DC
Power Cord:	6' Long Negative Lead with attachment clip 20' Long Positive Lead with attachment clip
Remote Switch	On 10' lead
RAPID MOUNT Plate:	8-3/4" x 4-15/16" x 3/16"
Winch Dimensions:	9-1/2" x 7-1/2" x 10"
Net Weight:	24 lbs.

Pulling capacity of winch is rated on first layer of wire rope on the drum. As you accumulate layers your pulling capacity will diminish by 10-15% per layer.

## Included Accessories

1. Power Lead, fitted with water sealed plug and circuit breaker
2. Remote Switch with water sealed plug for safe operation
3. 30' Aircraft Cable with attached hook with latch
4. RAPID MOUNT Bracket for Trailer Hitch Ball
5. Emergency Crank Handle
6. HANDSAVER Strap



FIGURE 1

## Product Features

- 1 Convenient, portable power for pulling boats, self recovery and other heavy loads.
- 2 Powerful 2,000 lb. single line pulling power.
- 3 12 Volt DC.
- 4 Portable, with built-in carrying handle, easy to connect wiring harness, handheld remote and Rapid Mount Ball Hitch Plate.

## Notice

The Warnings, cautions, and Instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

## SAFETY WARNING & CAUTIONS

***WARNING: When using any power equipment, basic safety precautions should always be followed to reduce the risk of personal injury and hazards.***

***READ ALL INSTRUCTIONS BEFORE USING THIS WINCH!***

### **⚠ WARNING ⚠**

Your KEEPER® Winch is a very powerful machine. If used unsafely or improperly, serious personal injury and/or property damage can result.

***THIS PRODUCT IS NOT INTENDED FOR LIFTING / HOISTING***

## Safety Warnings & Cautions (Continued)

- 1. READ AND UNDERSTAND THIS MANUAL BEFORE OPERATING YOUR WINCH.** After installing the Winch, practice using it before the need arises. **NEVER ALLOW PERSONS UNFAMILIAR WITH THIS PRODUCT TO OPERATE IT. ALWAYS WEAR SAFETY GLASSES WHILE WORKING WITH MACHINERY.**
- 2. DO NOT EXCEED RATED CAPACITY OF THE WINCH. DO NOT OVERLOAD! DO NOT ATTEMPT PROLONGED PULLS OF HEAVY LOADS!** Overloads can damage the Winch and/or the wire rope and create unsafe operating conditions. **FOR LOADS OVER 75% OF THE RATED WINCH CAPACITY, WE RECOMMEND THE USE OF A PULLEY BLOCK (KTA15120 not included) TO DOUBLE LINE THE WIRE ROPE.** (Figure 2). This reduces the load on the Winch, the strain on the wire rope and electrical system.
3. Never apply a load to your winch with the wire rope fully extended. Keep at least 5 turns on the winch drum.
- 4. THE VEHICLE ENGINE SHOULD BE RUNNING DURING WINCH OPERATION.** If winching is performed with the engine turned off, the battery may be too weak to restart the engine.
- 5. DO NOT** operate your vehicle to assist the Winch in pulling the load. The combination of the Winch and vehicle pulling together could overload the wire rope and the Winch.

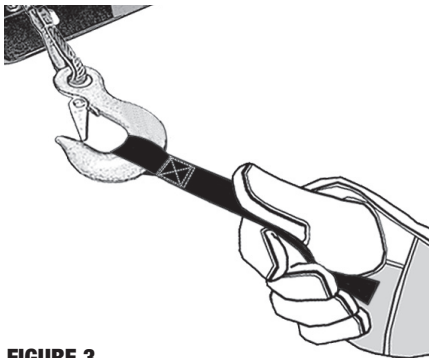
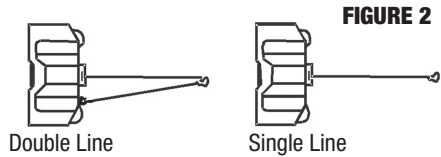


FIGURE 3

- 6. WHEN IN USE, ALWAYS STAND CLEAR OF WIRE ROPE, HOOK AND WINCH.**
- 7. INSPECT WIRE ROPE AND EQUIPMENT FREQUENTLY. A FRAYED, KINKED OR FLATTENED WIRE ROPE NEEDS TO BE REPLACED IMMEDIATELY.** Periodically check the Winch installation to ensure that all bolts are tight.
- 8. USE HEAVY LEATHER GLOVES** when handling wire rope. **DO NOT LET WIRE ROPE SLIDE THROUGH YOUR GLOVED OR UNGLOVED HANDS. ALWAYS USE THE HAND-SAVER STRAP** when guiding the wire rope in or out (Figure 3).
- 9. NEVER WINCH WITH LESS THAN 5 WRAPS OF WIRE ROPE AROUND THE WINCH DRUM** since the wire rope end fastener may **NOT** withstand full load.
- 10. KEEP CLEAR OF WINCH, TAUT WIRE ROPE AND HOOK WHEN OPERATING WINCH. NEVER STEP OVER TAUT WIRE ROPE.**
- 11. NEVER HOOK THE WIRE ROPE BACK ONTO ITSELF.** This will damage the wire rope. Use a **KEEPER WINCH STRAP**, sling, tree saver or other recommended accessory for this type connection (Figure 4).
- 12.** It is highly recommended to lay a heavy cloth (such as a blanket or tarp) over the wire rope when pulling heavy loads (Figure 5). If a wire rope failure should occur, the cloth will act as a damper and help prevent the wire rope from whipping. If mounted on the front of a vehicle then raise the hood for further protection.
- 13. NEVER USE YOUR WINCH FOR LIFTING OR MOVING PEOPLE!**

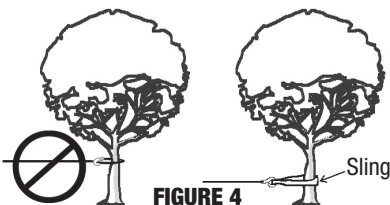
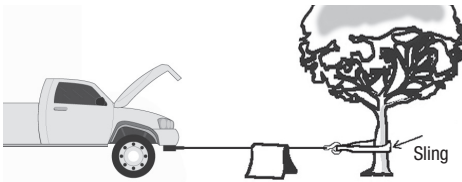


FIGURE 4

**FIGURE 5**



18. Equipment such as hooks, pulley blocks, straps, etc. should be sized for winch capacity and periodically inspected for damage that could reduce their strength.
19. **NEVER RELEASE FREESPOOL CLUTCH WHEN THERE IS A LOAD ON THE WINCH.**

20. **NEVER WORK ON OR AROUND THE WINCH DRUM WHEN WINCH OR WIRE ROPE IS UNDER LOAD.**

21. **DO NOT OPERATE WINCH WHEN UNDER THE INFLUENCE OF ANY DRUGS OR ALCOHOL.**

22. **ALWAYS DISCONNECT WINCH POWER LEADS TO BATTERY BEFORE WORKING ON OR AROUND THE WINCH DRUM** so that Winch cannot be turned on accidentally.

23. When moving a load, slowly take up wire rope slack until it is taut. Stop, recheck all Winching connections. Be sure the hook is properly seated. If a nylon sling is used, check the attachment to the load.

24. When using a vehicle mounted Winch to move a load, place the vehicle transmission in neutral (never in Park), set vehicle hand-brake, and chock all wheels.

25. **DO NOT USE THE WINCH TO HOLD LOADS IN PLACE.** Use other means of securing loads such as KEEPER brand tie-down straps.

26. **USE ONLY FACTORY APPROVED SWITCHES, ADAPTERS, REMOTE CONTROLS AND ACCESSORIES.** Use of non-factory approved components may cause injury or property damage and could void your warranty.

27. **DO NOT MACHINE OR WELD ANY PART OF THE WINCH.** Such alteration may weaken the structural integrity of the Winch and could void your warranty.

28. This is a 12 Volt DC Winch. **CONNECT ONLY TO 12 VOLT DC BATTERY. DO NOT CONNECT WINCH TO EITHER 110V OR 220V AC CURRENT AS WINCH WILL BURN OUT OR FATAL SHOCK WILL OCCUR.** This will void warranty.

29. Never allow shock loads to be applied to Winch or wire rope.

30. Use extreme caution when winching a load up and down a ramp or incline.

31. Keep people, other than operator, pets, and property clear of Winching path, front, rear and sides for 60'

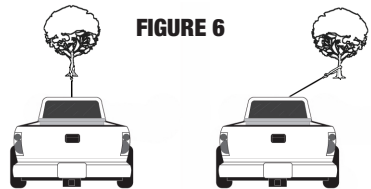
32. The Hand Crank provided with your winch is for emergency use only (i.e. in case of battery failure). Never use the Hand Crank to assist your winch when it is running. Always remove the Hand Crank when your winch is not in use. Do Not operate your winch or allow your winch to freewheel with the Hand Crank INSTALLED.

14. **OUR WINCH IS NOT INTENDED FOR OVER HEAD HOISTING OPERATIONS.**

15. **AVOID CONTINUOUS PULLS FROM EXTREME ANGLES.** This will cause the wire rope to pileup on one end of the drum (Figure 6). This can jam the wire rope in the Winch, causing damage to the wire rope or Winch.

16. **NEVER OBSCURE THE WARNING INSTRUCTION LABELS ON THE WINCH.**

17. Always operate Winch with an unobstructed view of the Winching operation.



**FIGURE 6**

## SPECIAL WARNINGS WHEN USING THIS ELECTRIC WINCH

**⚠ WARNING ⚠** *Using this powerful tool may create special hazards. Take particular care to safeguard yourself and those around you.*

### **The Cable**

Be sure the cable is in good condition and is attached properly. Do not use the winch if the cable is frayed. Do not replace the cable with a cable of lesser strength.

### **The Battery**

Be sure the battery is in good condition. Avoid contact with battery acid or other contaminants. Always wear ANSI approved eye protection when working around a battery. Have the engine running when using the winch to avoid running the battery down.

### **Stand Back**

Stay out of the direct line that the cable is pulling. In case it slips or breaks, it will “whiplash” along this line. Keep hands, clothing, hair and jewelry clear of the winch while in use. Use a spotter to assist you in assuring that it is safe to operate the winch. Make sure this person is out of the way of the vehicle and the cable before activating the winch.

### **Power Limits**

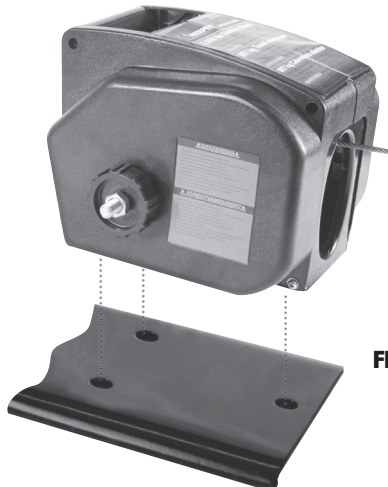
Do not attempt to exceed the pulling limits of this winch. Never use the hand crank to “assist” the winch. This will damage the winch and may cause personal injury.

## INSTALLATION - Mounting Your Winch

*Your winch is designed to be mounted temporarily using the RAPID MOUNT Ball Trailer Hitch Mounting Plate. However, you may also mount your winch permanently*

### **Permanent Mounting**

1. Select a mounting site on the bumper of your vehicle, truck bed, boat trailer, or other suitable location.  
NOTE: This winch can generate 2,000 lbs. pulling force. Be sure the location you select can withstand this much force.
2. Align the winch with the desired location and mark for drilling the locations of the 3 holes on the base of the winch.
3. Drill these holes where you wish to mount the winch on a stable structural support location on your vehicle or trailer (**Figure 7**).
4. Using hardened steel bolts at least 3/8” in diameter, install your winch to the location.



**FIGURE 7**

## Temporary Mounting

1. Attach the (3) Plate Stud Bolts to the Adapter Plate (**Figure 8**), as shown, using the supplied nuts. Tighten securely.

**FIGURE 8**



**FIGURE 9**



2. Insert the heads of the Plat Studs into the keyhole slots on the back of the winch.
3. Attach the Winch/Adapter Plate assembly to your trailer hitch by inserting the trailer hitch ball through the shaped hole in the Adapter Plate (**Figure 9**).

## Using Your Winch

1. Put your vehicle in Neutral. (Never winch with your vehicle in Gear or in Park since this could damage your vehicle's transmission). Engage your emergency brake. Block the wheels from rolling, using suitable chocks.
2. To pull out the cable, turn the CLUTCH KNOB counterclockwise to loosen it, and then pull out the cable you need. Always leave at least five turns of the cable on the spool to prevent pulling the cable out of the winch.
3. Hook onto the object using a pulling point, tow strap or chain. Never wrap the cable around the object and hook on the cable itself. This can cause damage to the object being pulled and kink or fray the cable.
4. Re-tighten the clutch knob clockwise.
5. Stand clear, and when it is safe to do so, use the power switch in the remote control to retract the cable and winch the item as desired.

## Wiring your Electric Winch

*Your winch may be used with temporary wiring or permanent wiring.*

1. Lift the rubber polymer door and plug the POWER CABLE into the PLUG on the right side of the winch body (**Figure 10**). Route the Electric Cord from the winch to your battery, being careful to avoid tangling it in moving equipment, or causing a tripping hazard.



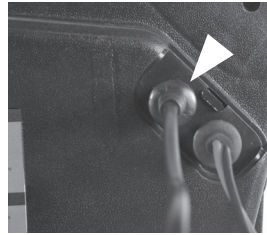
**FIGURE 10**



2. Connect the Black Clamp Handle of the POWER CABLE to the frame of your vehicle, establishing a ground connection. Connect the Red Clamp Handle to the Positive (+/Red) terminal of your battery (Figure 11). **Note: Be sure you are using a 12V automotive battery or equivalent, in good condition.**
3. Taking the Remote Control Unit, insert the Socket at the end of the cord into the Plug on the left side of the winch body labeled "remote Control" (Figure 12).
4. Set the remote control aside in a safe place until ready for use.
5. Be careful plugging in the units as each as their own receptacle.



**FIGURE 11**  
Red Positive (+)  
to Battery



**FIGURE 12**

## Permanent Wiring

1. Attach the circuit breaker to the Positive (+/Red) terminal of your battery, using the battery terminal clamp bolt.
2. Plan a route for the wiring from the point of the vehicle where the winch will be mounted, or used, to the battery. This route must be secure, out of the way of moving parts, road debris, or any possibility of being damaged by operation or maintenance of the vehicle. For example, you may wish to route the wires under the vehicle, attached it to the frame using suitable fasteners. Do not attach the wires to the exhaust system, drive shaft, emergency brake cable, fuel line, or any other components which may create damage to the wiring through heat or motion, or create a fire hazard.
3. If you drill through the bumper or any part of the body to route the wires, be sure to install a rubber grommet in the hole to prevent fraying of the wires at that point.
4. Route the POWER CABLE from the point the winch will be used to the battery, following the precautions discussed above.
5. Remove the Red Clamp handle, and attach the red wire to the circuit breaker which is mounted onto the Positive (+/Red) terminal of your battery.
6. Remove the Black Clamp handle and attach the black wire to the frame of your vehicle, creating a secure electrical ground.

## **⚠ WARNING ⚠**

1. Always CONNECT Red to Red (Positive to Positive) and Black to the frame, making a ground connection, when using battery power from your vehicle.
2. Never continue use of your winch or other accessory until the battery is completely run down.
3. You may wish to keep your engine running while using this winch to continually recharge the battery. However, exercise extreme caution when working around a running vehicle.
4. Do not use a dirty, corroded or leaking battery. You may suffer injury from acid burns.
5. Always wear ANSI approved safety glasses when working around or with a battery.



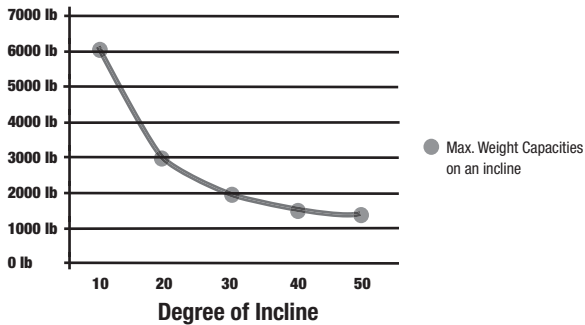
## **⚠ WARNING ⚠**

1. Keep hands, clothing, hair and jewelry clear of the drum area and cable when winching.
2. Never use the winch if the cable is frayed, kinked or damaged.
3. Never allow anyone to stand near the cable or in line with the cable behind the winch while it is under power. If the cable should slip or break, it can suddenly whip back towards the winch, causing a hazard for anyone in the area. Always stand well to the side while winching.

## **PULLING CAPACITY**

1. This winch has a capacity of 2,000 lbs. Applying this measurement to practical applications, you can use this winch to move the following:
  - a. Move a load from a dead stop of up to 2,000 lbs., on level ground.
  - b. Move a water craft of up to 5,000 lbs. and up to 18' long.
  - c. Maintain movement of a pneumatic tired rolling load of up to 6,000 lbs.
2. Pulling Capacity is reduced as incline increases. For example, rolling capacity is reduced from 6,000 lbs. on flat ground to 1,100 lbs. on a 45° incline. Please refer to the following chart for estimated pulling capacity (rolling weight) on various inclines.

### ***Maximum (Rolling) Weight Capacities on an Incline***



## **Using the Emergency Hand Crank**

### **⚠ WARNING ⚠**

***Do Not Use the crank to assist an operating winch. This will damage the winch and may cause personal injury.***

1. Turn the clutch knob clockwise until hand tight. Do not force it or over tighten.
2. Place the end of the hand crank over the flat-tended end of threaded shaft on the left side of the winch (**Figure 13**).
3. Rotate the hand crank clockwise to tighten the cable. Continue to turn until the cable has been completely retracted.



**FIGURE 13**

## Maintenance

1. Lubricate the cable occasionally with a light oil.
2. Grease the gears every 6 months. To do this, remove the clutch knob and separate the left and right housing. Use any good quality waterproof grease.