## PARTS LIST

| PARTS # | Description | PARTS # | Description |
|---|---|---|---|
| 1 | Screw | 32 | Washer |
| 2 | Washer | 33 | Screw |
| 3 | Left shell | 34 | Input plug |
| 4 | Spindle sleeve | 35 | Control plug |
| 5 | Gear #1 | 36 | Handle |
| 6 | Gear #2 | 37 | Nut |
| 7 | Cotter pin | 38 | Bolt |
| 8 | Shaft | 39 | Battery clamp |
| 9 | Union shaft | 40 | Remote control |
| 10 | Motor | 41 | Hook |
| 11 | Nut | 42 | Gear #4 |
| 12 | Bolt | 43 | Spindle |
| 13 | Clamp | 44 | Gear #5 |
| 14 | Frame | 45 | Frinction disc |
| 15 | Cable spring plate | 46 | Disc plate |
| 16 | Back plate | 47 | Clutch driving handle |
| 17 | Cotter pin | 48 | Nut |
| 18 | Pisition shaft | 49 | Crank handle |
| 19 | Bearing | 50 | Circuit breaker |
| 20 | Plate | 51 | Washer |
| 21 | Cable Plate | 52 | Screw |
| 22 | Shaft sleeve | 53 | Bolt |
| 23 | Cable shaft | 54 | Washer |
| 24 | Cable plate B1 | 55 | Nut |
| 25 | Cable plate B2 | 56 | Base plate |
| 26 | Gear #3 | 57 | Nut |
| 27 | Washer | 58 | Washer |
| 28 | Washer | 59 | Spring |
| 29 | Nut | 60 | Ratchet |
| 30 | Right shell | 61 | Ratchet shaft |
| 31 | Nut | 62 | Cotter pin |



Hilka

88992007
35084

# 12V Vehicle Winch


INSTRUCTION MANUAL

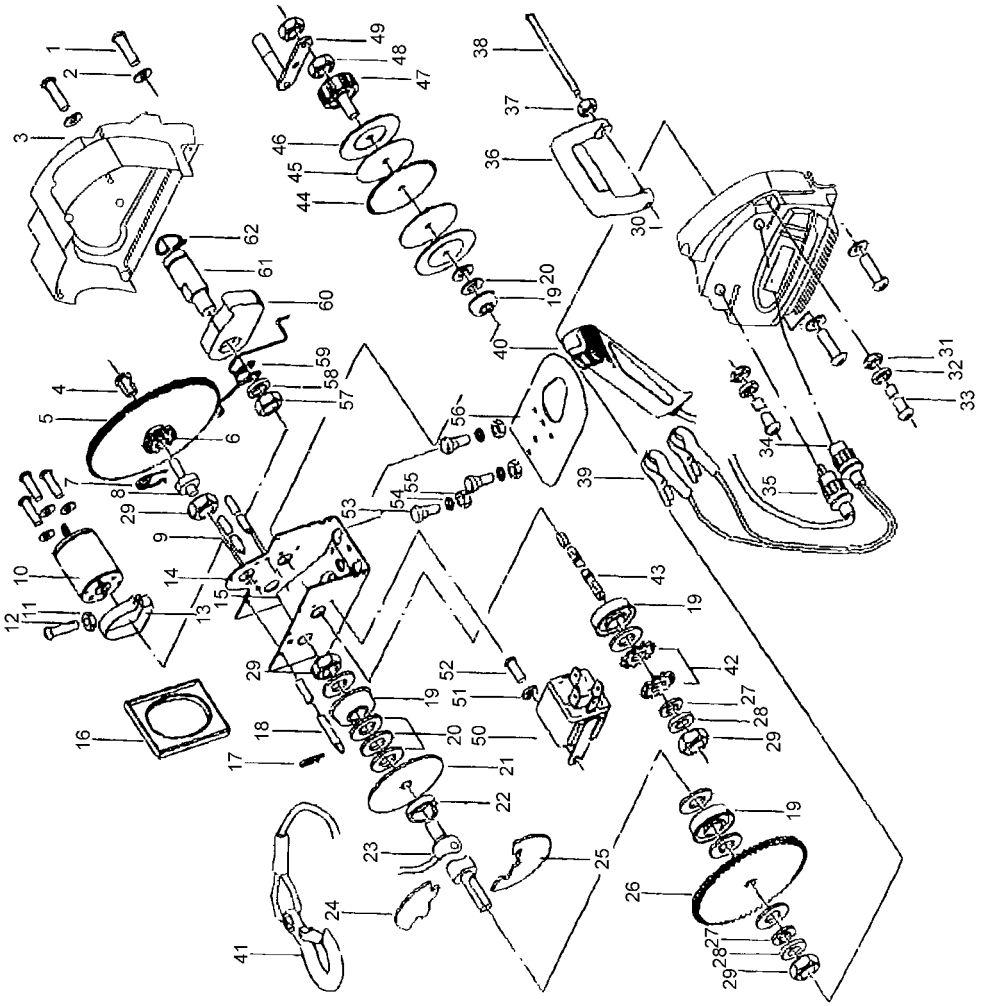
**SPECIFICATIONS**

| | |
|---|---|
| Capacity: | 5000 lb. Rolling |
| | 4000 lb. Marine |
| | 1700 lb. Pulling Capacity |
| Max. Boat Size: | 5.4m (18') |
| Line Speed: | 1.8m (6') Per Minute with Full Load |
| Hook Size: | 1.9cm (3/4") Opening x 10cm (4") L |
| Cable length: | 9m (30') |
| Power Supply: | 12 Volts |
| Power Cord: | 7.6m (25') L. Negative Lead |
| | 7.6m (25') L. Positive Lead |
| Remote Switch: | 3m (10') L. |
| Overall Dimensions: | 20.3cm (8") x 22.8cm (9") x 19cm (7-1/2") |

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

1. **KEEP WORK AREA CLEAN**. cluttered areas invite injuries.
2. **OBSERVE WORK AREA CONDITIONS**.Do not use tools in damp, wet, or poorly lit locations. Don't expose to rain. Keep work area well lit. Do not use electrically powered equipment in the presence of flammable gases or liquids.
3. **KEEP CHILDREN AWAY**. Children must never be allowed in the work area. Do not let them handle machines, tools, or equipment.
4. **STORE IDLE EQUIPMENT**. When not in use, tools must be locked up in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
5. **DO NOT FORCE THE TOOL**. It will do the job better and more safely at the rate for which it was intended. Do not use inappropriate attachments in an attempt to exceed the tool's capacities.
6. **USE THE RIGHT TOOL FOR THE JOB**. Do not use a tool for a purpose for which it was not intended.
7. **DRESS PROPERLY.** Do not wear loose clothing or jewelry, as they can be caught in moving parts. Non-skid footwear is recommended. Wear restrictive hair covering to contain long hair. Always wear appropriate work clothing.
8. **USE EYE, EAR AND BREATHING PROTECTION**. Always wear ANSI approved impact safety goggles if you are producing metal filings or wood chips. Wear an ANSI approved dust mask or respirator when working around metal, wood, and chemical dusts and mists. Use ANSI approved ear protection when working in a loud or noisy environment.
9. **DO NOT ABUSE THE POWER CORD.** Protect the power cord from damage, either from impacts, pulling or corrosive materials. Do not yank machine's cord to disconnect it from the receptacle.
10. **DO NOT OVERREACH**. keep proper footing and balance at all times. Do not reach over or across running machines.
11. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safer performance.





**PULLING CAPACITY**

This winch has a capacity of 1700 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 1700 lbs on level ground

b) Move a water borne craft of up to 4000 lbs

c) Maintain movement of a wheel vehicle up to 5000 lbs

Pulling capacity is reduced as incline increases, for example, rolling capacity is reduced from 5000 lbs on flat ground to 1000 on a 45 degree incline. Please remember that this is indications only and depends on the vehicle or application that is being applied and the surface .

**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 overtighten.
2. Place the end of the hand crank over the flattened end of threaded shaft on the left side of the winch.
3. Rotate the hand crank clockwise to tighten the cable. Continue to turn until the cable has been completely retracted.

**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.



12. **REMOVE ADJUSTING KEYS AND WRENCHES**. Be sure that keys and adjusting wrenches are removed from the tool or machine work surface before operation.
13. **AVOID UNINTENTIONAL STARTING**. Be sure that you are prepared to begin work before turning the start switch on.
14. **STAY ALERT**. Watch what you are doing. Do not operate this machine when you are tired.
15. **DO NOT OPERATE THIS MACHINE WHILE UNDER THE INFLUENCE OF ALCOHOL, DRUGS, OR PRESCRIPTION MEDICINES**.
16. **CHECK FOR DAMAGED PARTS**. Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts, any broken parts or mounting fixtures, and any other condition that may affect proper operation. any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if any switch does not turn on and off properly.

**SPECIAL WARNINGS WHEN USING THIS ELECTRIC WINCH**

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 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

### Temporary wiring

1. Plug the imput plug (part #34) of the battery clamp (part #39) into the plug on the right side of the power winch body. this plug is labeled “Power”. Route the Electric cord from the winch to your battery, being careful to avoid tangling it in moving equipment, or causing a tripping hazard.
2. Connect the black clamp handle of the battery clamp (part#39) to the frame of your vehicle,establishing a ground connection. Connect the red clamp handle to the positive (+/red) terminal of your battery. Note: Be sure you are using a 12V automotive battery or equivalent, in goodcondition.
3. Taking the remote control (part #40), insert the control plug (part #35) at the end of the cord into the plug on the left side of the power winch body labeled “remote control”.
4. Set the remote control aside in a safe place until ready for use.

### Permanent wiring

1. Attach the circuit breaker (part #50) 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, attaching 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 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 battery clamp (part #39) 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 (part #50) 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 engine. 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.



## MOUNTING WINCH

### 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. you may need to use steel reinforcement plates, or weld on additional bracing, depending on the desired mounting location.
2. Align the winch with the desired location, and mark for drilling the locations of the 4 holes on the base of the winch.
3. Drill these locations on your vehicle.
4. Using hardened steel bolts at least 3/8” in diameter, install your winch to the location.

### Temporary mounting

1. Attach the three plate stud bolts to the adapter plate, as shown, using the supplied nuts.
2. Index the heads of the plate 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.

## USING 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.) Put your emergency brake on. Block the wheels from rolling, using suitable chocks.
2. To pull out the cable, turn the crank handle (part #49) counterclockwise to loosen it, then pull out the cable you need. always leave at least three turns of 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 onto the cable itself. This can cause damage to the object being pulled, and kink or fray the cable.
4. Re-Tighten the clutch knob. (This is most important as it will not reach its full capacity unless this is done)
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.

**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.