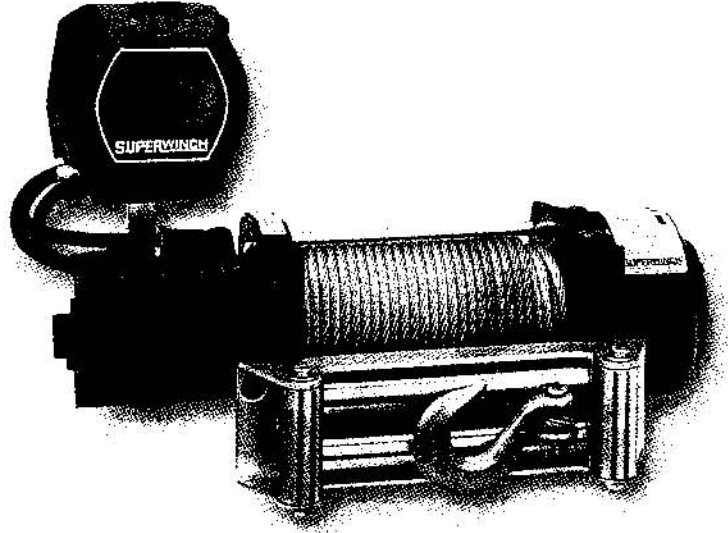


# SUPERWINCH®



## OWNER'S MANUAL

INSTALLATION • OPERATION • MAINTENANCE  
SAFETY PRECAUTIONS • REPAIR PARTS

**X9**  
12 & 24 Volt DC Electric Winch  
Models 1901, 1902

**▲ CAUTION**

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

Superwinch, Inc.  
Winch Drive  
Putnam, CT 06260  
U.S.A.  
Tel. (860) 928-7787  
Fax (860) 963-0811

Superwinch, Ltd.  
Abbey Rise, Whitchurch Road  
Tavistock, Devon PL 19 9DR  
England  
Tel. +44 (0) 1822 614101  
Fax +44 (0) 1822 615204

# INTRODUCTION

Thank you for purchasing an X9 winch from Superwinch. It has been designed and manufactured to provide years of trouble-free operation. We hope you will be pleased with its performance. If you are not, for any reason, please contact our Customer Service Department:  
(860) 928-7787 USA; +44 (0) 1822 614101 England.

When requesting information or ordering replacement parts; always give the following information:

1. Winch Part Number (1901, 1902)
2. Serial Number (found on motor adapter casting)
3. Part Number (found in Replacement Parts List section)
4. Part Description

Please read and understand this Owner's Manual prior to installing and using your winch. Pay particular attention to the General Safety Information. Your winch is a very powerful machine. If used unsafely or improperly, there is a possibility that property damage or personal injury can result. We have included several features in this winch to minimize this possibility; however, your safety ultimately depends on your caution when using this product.

## ▲ CAUTION

*Pay particular attention to the caution and warning notes preceded with these symbols. The notes contain advice for your protection.*

## ▲ WARNING

Correct installation of your X9 winch is a requirement for proper operation. If you install your X9 winch on the front end of your vehicle, **USE THE X9 MOUNTING (FITTING) KIT** which has been designed and manufactured by Superwinch to accommodate your winch and fit your vehicle. **Please Note:** The Superwinch model X9 winch is designed primarily for front mount vehicle use and for other intermittent applications. This winch is not designed to be used in industrial or hoisting applications and Superwinch does not warrant it to be suitable for such use. Superwinch manufactures a separate line of winches for industrial/commercial use. Please contact our Customer Service Department for further information. Note the electrical requirements of the X9 winch you have purchased: Part No. 1901 12-volt DC system Only Part No. 1902 24-volt DC system Only  
Congratulations on your choice!

## ROLLING LOAD CAPACITIES

Slope*	10% (6°)	20% (11°)	30% (17°)	100% (45°)
Lbs.**	45,225	30,600	23,500	11,573
kg**	20 514	13 880	10 659	5250

Ratings assume a 10% coefficient of friction.

\* A 10% slope is a rise of one foot in ten feet. Slope in approximate degrees is also shown above

\*\* All loads shown are for single-line operation. Double-line operation with optional pulley block (p/n 7750A) approximately doubles capacity of winch.

European Union



**Noise** The noise level for this winch in operation is below 92 dB(A).

**Wire Rope** Winches that conform to Machinery Directive 89/392/EEC, are fitted with a 3/8" x 75 ft. wire rope (p/n 90-20136-03), in lieu of standard 5/16" x 100 ft. wire rope.

**Emergency Stop** In order to conform to Machinery Directive 89/392/EEC, each machine installation must be fitted with an Isolator switch (p/n 1562) whereby the machine can be brought safely to a complete stop.

## UNPACKING

This carton contains the following items. Please unpack carefully.

**Read instructions before beginning.**

Description	Quantity
Winch assembly with wire rope	1
Solenoid assembly	1
Solenoid mounting bracket	1
1/4-20 Hex head bolts	4
1/4-20 Hex nuts	2
1/4 External tooth lock washer	4
Terminal boots	3
3/8-16 Square nuts	4
3/8 Lock washers	4
3/8-16 x 1 Hex head bolts, grade 8	4
Hand saver	1
7" Wire ties	6
Long lead wire assembly (color coded yellow)	1
Remote pendant	1
Clevis hook	1
Owner's manual	1

## FEATURES

**Electric Motor** – 2.0 peak hp (1.5 kw) 12V Series Wound or 2.5 peak hp (1.9 kw) 24V Series Wound.

**Braking** – A one way drag brake will hold a 4,500 lb. (2041 kg) load on the first wrap.

**Drum** – Fabricated steel running in copolymer maintenance free bearings.

**Freespool Clutch** – Operated by an easy action lever which disengages the gearbox to allow the wire rope to be pulled out without using electric power. A spring-

loaded drag mechanism reduces backlash and snarling when pulling out the wire rope.

**Remote Switch** – 12' (3.66m) hand held pendant switch assembly with interlocking reverse switch and trigger.

**Mounting** – Optional custom-engineered mounting kits are available for vehicle frame attachment

## INTERMITTENT DUTY

An electric winch is like any other motor driven power tool such as an electric drill or saw. The electric motor should not be allowed to become excessively hot. Normal precautions will extend the life of your motor. Keep the duration of pulls as short as possible. **If the end of the**

**motor becomes uncomfortably hot to touch**, stop winching and allow the motor to cool down.

### ▲ CAUTION

*If the winch motor stalls, do not continue to apply power to the winch.*

## PERFORMANCE

Wire Rope Layer	Max. Pulling Capacity lbs	kg
1	9,000	4082
2	7,365	3340
3	6,230	2825
4	5,400	2450
5	4,765	2161

Load lbs	kg	Speed* 12V		Speed* 24V		Motor Current (Amps)*	
		ft/min	m/min	ft/min	m/min	12V	24V
0	0	32.0	9.8	38.0	11.6	73	42
1,000	454	18.0	5.5	21.7	6.6	130	72
2,000	907	13.8	4.2	17.1	5.2	165	90
4,000	1814	9.0	2.7	12.0	3.6	240	133
6,000	2722	6.0	1.8	8.3	2.5	316	181
9,000	4082	2.5	0.8	3.5	1.0	420	252

## SPECIFICATIONS

Working Load\* . . . 9,000 lbs. (4082 kg)  
 Stall Load 12V\*, 24V\* . . . . .12,700 lbs.  
 (5760 kg)  
 Wire Rope . . . . . 5/16" x 100'

12V Motor . . . 2.3 hp (1.7 kw) peak  
 24V Motor . . . 2.5 hp (1.9 kw) peak  
 Gear Ratio . . . . . 253:1

\*Based on first layer performance

# GENERAL SAFETY INFORMATION

Your X9 winch is a very powerful machine. Treat it with respect, use it with caution and always follow these safety guidelines.

**▲ WARNING** *The responsibility for safe operation of the winch and prevention of personal injury and property damage ultimately rests with you, the operator. There is no substitute for the use of good judgement and caution in operating a winch.*

**▲ WARNING** *The wire rope may break before the winch stalls. For heavy loads, use a pulley block to reduce the load on the wire rope.*

1. The X9 winch is rated at 9,000 pounds (4082 kg) (single line) capacity on the wire rope layer closest to the drum. **DO NOT OVERLOAD. DO NOT ATTEMPT PROLONGED PULLS AT HEAVY LOADS.** Do not maintain power to the winch if the motor stalls. Overloads can damage the winch and/or the wire rope and create unsafe operating conditions. **FOR LOADS OVER 6,000 POUNDS (2721 KG), WE RECOMMEND THE USE OF THE OPTIONAL PULLEY BLOCK TO DOUBLE LINE THE WIRE ROPE (Figures 1 & 15).** This reduces the load on the winch and the strain on the wire rope by approximately 50%. If attaching back to vehicle, attach to the frame or other load bearing part. **The vehicle engine should be running during winch operation to minimize battery**

**drain and maximize winch power and speed.** If considerable winching is performed with the engine off, the battery may be too weak to restart the engine.

2. **AFTER READING AND UNDERSTANDING THIS MANUAL, LEARN TO USE YOUR WINCH.** After installing the winch, practice using it so you will be familiar with it when the need arises.
3. **DO NOT "move" your vehicle to assist the winch in pulling a load.** The combination of the winch and vehicle pulling together could overload the wire rope and the winch itself.
4. **KEEP WINCHING AREA CLEAR.** Do not allow people to remain in the area during winching operations. **ALWAYS STAND CLEAR OF WIRE ROPE/HOOK AND WINCH. IN THE UNLIKELY EVENT OF ANY COMPONENT FAILURE IT'S BEST TO BE OUT OF HARM'S WAY.**
5. **INSPECT WIRE ROPE AND EQUIPMENT FREQUENTLY. A FRAYED WIRE ROPE WITH BROKEN STRANDS SHOULD BE REPLACED IMMEDIATELY.** Always replace wire rope with the manufacturer's identical replacement part (see Replacement Parts List). Periodically check the winch installation to ensure that all bolts are tight.
6. **USE HEAVY LEATHER GLOVES** when handling wire rope. **DO NOT LET WIRE ROPE SLIDE THROUGH YOUR HANDS EVEN WHEN WEARING GLOVES.**

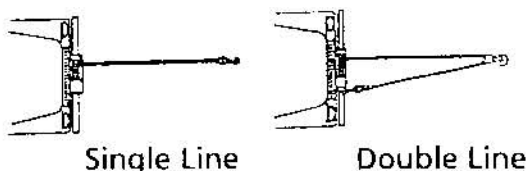


Figure 1