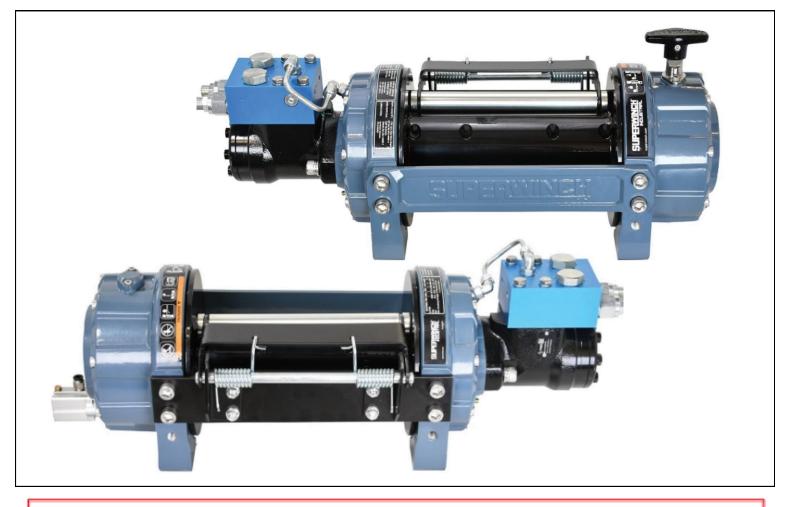


SI Series, EN14492-1 Planetary Hydraulic 8000 lb (35.58 kN) Planetary Hydraulic 10000 lb (44.45 kN) Planetary Hydraulic 12000 lb (53.38 kN



#### Throughout this manual you will find notations with the following headings:



NOTICE

Indicates an imminently hazardous situation which, if not avoided will result in death or serious injury.

Indicates a hazardous situation which, if not avoided could result in death or serious injury.

Indicates a potentially hazardous situation or unsafe practice, which if not avoided could result in injury.

Indicates an unsafe practice, which if not avoided, could result in property damage.

#### The following symbols on the product and in the owners manual are used:



Manual.

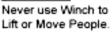


Always use a Hand Saver.



Keep clear of Winch Rope and Hook while operating.







Never use Winch to Hold Load in Place.

Read the Winch Users Guide for additional safety symbols

Safety Precautions

Vestin Automotive Products 320 W. Covina BNd. San Dimas. CA 91773 Tel. (800) 323-2031	E C DECLARATION OF CONFORMITY / EU KONFORMITÄTSERKLÄRUNG DECLARATION DECONFORMITE EUROPEENNE / EU KONFORMITÄTSERKLÄRUNG DECLARATION DECONFORMITE EUROPEENNE / EU CONFORMITÄTSVERKLARING Wer her dater in alleninger Verstwortung, dass de folgenden wirde alle einebluggen Bestimmungen der förgande LU-Rachtinger reflintes 1/ Neus sussignei defatterna sons anter estate et anique reponsability verstwaren in alleninger Verstwortung, dass ein folgenden der foreröve austreternning med ev volgende for freud sustats remplesen treflier is rommåkidel en geprodirectif in orerenstemming med ev volgende annen en voorschriften: 2006/12/EC Machinery Directive/ Maschinementhinis//Machine richtlijn 2006/13/EC ENC Noise Emission in the Environment Winch model S100/13/EC NOUSTRIALS-W-HY-IS-BSD-EN1492	Winsch Certified EU rating WLL   : 35.6 kN (80001b5)     Sterial number   Power Rating : Hydraulte     Sterial number   Power Rating : Hydraulte     Relevant standard upon which conformits is delared include: I. Relevants Moment and feedback include: I. Jan technol.   Relevant standard.     Relevant standard upon which conformits is delared include: I. Relevants or the transport of the standard upon which conformits is normes d'applications substants: / Relevants evaluate: / La present conformits is normes d'applications substants: / Relevants in the transport of the standard state of the state of t	Recommended Rope Diameter : 10 nm (0.38 inch) : 10 nm (0.38 inch) Minimum Tereking Foreiter : 11.0 nm (0.38 inch) : 11.2 M Minimum Recommended Jongth : 37.2 nm (12.1 ft) : 35.6 m (11.8 ft) Maximum Recommended Jongth : 37.2 m (12.1 ft) : 35.6 m (11.8 ft) Name : Jeroth Jantin Position : Director of Engineering Signed : Antheorem (12.1 ft) : Date: Jan 31.7 2022 Signed : Antheorem (12.1 ft) : Date: Jan 31.7 2022 Signed : Antheorem (12.1 ft) : Date: Jan 31.7 2022 Signed : Antheorem (12.1 ft) : Date: Jan 31.7 2022 Signed : Antheorem (12.1 ft) : Date: Jan 31.7 2022 Signed : Antheorem (12.1 ft) : Date: Jan 31.7 2022 Signed : Antheorem (12.1 ft) : Date: Jan 31.7 2022 Signed : Antheorem (12.1 ft) : Date: Jan 31.7 2022 Signed : Antheorem (12.1 ft) : Date: Jan 31.7 2022 Signed : Antheorem (12.1 ft) : Date: Jan 31.7 2022 Signed : Antheorem (12.1 ft) : Signed : Antheore
Westin Automotive Products 320 W. Covina Blvd. San Dimas, CA 91773 Tel: (800) 323-2031	EC DECLARATION OF CONFORMITY / EU KONFORMITÀTSERKI.ÅRUNG DECLARATION DECONFORMITE EUROPEENNE / EU DECLARATION DECONFORMITE EUROPEENNE / EU CONFORMITE EUROPEENNE / EU We hereby declare that the following Wind half all the releval provision of the following EU Directive ; / Wir erklaren in alfolgier / Yasu sourges de disconse on source sette er mage response / Full strans transmission transis af depositions sourcemant is directive surpérans survaurs ; / Wi verklaren hierbij dat de volgende lire i sonrikukted en geportensent in overcenstraming net de volgende verklaren hierbij dat de volgende lire i sonrikukted en geportenset 2006/42/EC Machinery Directive / Maschinenrichtfulie / Machine richtlijn 2006/42/EC Machinery Directive / Maschinenrichtfulie / Machine richtlijn 2000/42/EC EMC Directive Wars-and Stransmission and an Directive	Which model S100429 - INDUSTRALA-10-W-HY-15-BSD-EN14492 Winch Corrfield EU rating WLL 3: 445 kN (100000); Serial number	Rope Compatibility: Reper Compatibility: Minimum Revelorate 111 mm (0.43 incl) : 11 mm (0.43 incl) Minimum Revelorate Force : 80 hN (0.43 incl) : 13 mm (0.43 incl) Minimum Revelorate Force : 1960 Numa2 : 23.47 m (0.43 incl) Marinum Revelorated Largch : 25.7 m (0.41 ) : 24.4 m (0.61 ) Marinum Revelorated Largch : 25.7 m (0.41 ) : 24.4 m (0.61 ) Marinum Revelorated Largch : 25.7 m (0.41 ) : 24.4 m (0.61 ) Marinum Revelorated Largch : 25.7 m (0.41 ) : 24.4 m (0.61 ) Marinum Revelorated Largch : 25.7 m (0.41 ) : 24.4 m (0.61 ) Marinum Revelorated Largch : 25.7 m (0.41 ) : 24.4 m (0.61 ) Marinum Revelorated Largch : 25.7 m (0.41 ) : 24.4 m (0.61 ) Marinum Revelorated Largch : 25.7 m (0.41 ) : 24.5 m (0.41 ) : 24.4 m (0.61 ) : 24.4 m (0.6
Weatin Automotive Products 320 W. Covina Blvd San Dinas, CA 9173 Tel: (800) 323-2031	EC DECLARATION OF CONFORMITY / EU KONFORMITÄTSERKLÅRUNG DECLARATION DECONFORMITET EUROPEENNE / EU DECLARATION DECONFORMITET EUROPEENNE / EU Wre retry dedare that the following Winch fullis all the relevant provisions of the following EU Directives : / Wr retry dedare that the following Winch fullis all the relevant provisions of the following EU Directives : / Wr retry attaction in alteringer Verantworting, data get objected and the relevant provisions of the following EU Directives : / Wr retry attaction in alteringer Verantworting, data get objected and the relevant is attactive respectance in the following EU Directives : / Wretekine in alteringer fortants in the anticet is a stranger exponenting on the relevant is attactive respectance in over easter and the relevant is a stranger exponent in a stranger exponent	Winch model S100430 - IXDUSTRIAL - 12-W-HY-IS-BSD-EN14492 Winch Certified EU rating WLL : 55.4 kN (12000bs) Serial number	Rope Compatibility:

Declaration of Conformity SI12 Declaration of Conformity SI10 Declaration of Conformity SI8,

### READ AND UNDERSTAND THIS MANUAL BEFORE INSTALLATION AND OPERATION OF YOUR SUPERWINCH

### **Table of Contents**

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GENERAL SPECIFICATION DATA

#### **INSTALLATION**

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FREESPOOL USE

TIPS FOR EXTENDING THE LIFE OF YOUR WINCH

#### MAINTENANCE

RUNNING IN, MAINTENANCE & SERVICING

HYDRAULIC SYSTEM TROUBLESHOOTING

### **PARTS**

ACCESSORIES

WARRANTY

### 1. INTRODUCTION

**From all of us at Superwinch, "thank you."** We've built this winch to perform and we've built this manual to help you get the most from your Superwinch.

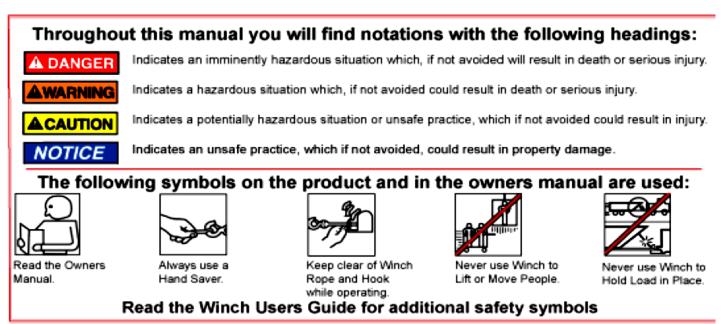
Please read and understand this owner's manual before installing your SI Series winch. You industrial winch is a very powerful machine. If used unsafely or improperly, there is a possibility that property damage or personal injury can result. We have included several unique features in the Hydraulic Industrial winch to minimize this possibility; however, your safety ultimately depends on your caution when using the product.

Pay particular attention to the caution notes preceded with the symbol shown here. The notes contain advice for your safety and protection.

Please Note: The Superwinch SI Series winches are designed for total reliability. This winch is not designed to be used in hoisting applications and Superwinch does not warrant it to be suitable for such use.

### WARNING, CAUTIONS AND NOTES

These warnings, cautions and notes are given throughout these instructions in the following forms:



### **REPAIRS AND REPLACEMENTS**



Before contacting Superwinch or your nearest authorized Superwinch dealer, please have the following information:

Part Number:

Serial Number of the Winch:

#### POISONOUS SUBSTANCES



Many liquids and other substances used should under no circumstances be consumed, and should be kept away from open wounds. These substances include (among others)

hydraulic oil.

#### SYNTHETIC RUBBER



Many 'O' ring seals, flexible pipes and similar items, when subjected to fire or heat can become highly corrosive. Handle with seamless industrial gloves only. Should skin contact occur,

remove contaminated clothing immediately and obtain medical assistance without delay.

#### **RECYCLING AND THE ENVIROMENT**



It is illegal to dispose of used oil in the ground, down sewers or drains, or into waterways.

Dispose of used oil through an authorized waste disposal

contractor or recycling center. If in doubt contact your local authority for advice on how to dispose of the oil or disposal facilities.

### SI8 8000 lb (35.58 kN)

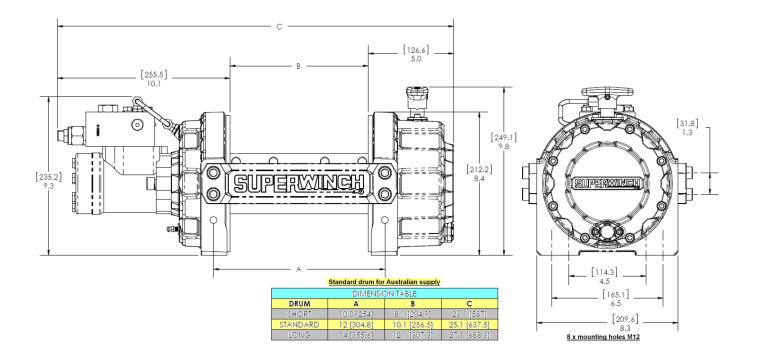
SI-8 Spe	cifications	Line Speed Per Layer 15 G p/m	
Pressure (maximum)	2200 psi (151.7 Bar)	(	57 L p/min )
Flow (maximum)	15 GPM (57 L p/m)	Layer 1	15 M p/m ( 49 ft p/m )
Lubrication (gearbox)	Synthetic Grease	Layer 2	18 M p/m ( 58 ft p/m )
Compliance	SAE J706 EN14492-01	Layer 3	21 M p/m ( 68 f t p/m )
Gearbox	2 Stage Planetary 16:1		
Motor	80 cc Hyd Gear Motor		
Brake (hydraulic release)	Spring applied multi disk	Line Pull	Per Layer 15 G p/m
Load Block Valve	Bidirectional Brake Control		o/min at 2100 psi))
Free spool	Manual or Pneumatic	Layer 1	8000 lb (35.58 kN)
Drum EN Specification	W 256.5 mm x ø 100 mm	Layer 2	6710 lb (29.85 kN)
Weight (boxed shipping)	49 kg (no rope)	Layer 3	6035 lb (26.85 kN)
Wire rope	10 mm		
Rope Length	25 Metre (maximum)		

# SI10 10000 lb (44.45 kN)

SI-10 Spe	ecifications	Line Speed Per Layer 15 G p/m (57 L p/min)		
Pressure (maximum)	2000 psi (136 Bar)		,	
Flow (maximum)	15 GPM (57 L p/m)	Layer 1	9.5 M p/m(31 ft p/m)	
Lubrication (gearbox)	Synthetic Grease	Layer 2	11 M p/m ( 37 ft p/m )	
Compliance	SAE J706 EN14492-01	Layer 3	14 M p/m ( 45 ft p/m )	
Gearbox	2 Stage Planetary 16:01			
Motor	125 cc Hyd Gear Motor			
Brake (hydraulic release)	Spring applied multi disk	Line Pul	l Per Layer 15 G p/m	
Load Block Valve	Bidirectional Brake Control	( 57 L	p/min at 2000 psi))	
Free spool	Manual or Pneumatic	Layer 1	10000 lb (44.4 kN)	
Drum EN Specification	W 256.5 mm x ø 100 mm	Layer 2	8333 lb (37.0 kN)	
Weight (boxed shipping)	49 kg (no rope)	Layer 3	7143 lb ( 31.7 kN)	
Wire rope	7/16" (11mm)			
Rope Length	25 metre (maximum)			

# SI2 12000 lb (53.38 kN)

SI-12 Spe	cifications	Line Speed Per Layer 15 G p/m		
Pressure (max operating) Flow (maximum) Lubrication (gearbox) Compliance Gearbox Motor	2050 psi (158 Bar) 15 GPM (57 L p/m) Synthetic Grease SAE J706 & EN14492-01 2 Stage Planetary 16:01	(57 L p/min) Layer 1 8.5 M p/m (28 ft p/m) Layer 2 9.4 M p/m (31 ft p/m) Layer 3 10.2 M p/m (34 ft p/m)		
Brake (hydraulic release) Load Block Valve	160 cc Hyd Gear Motor Spring applied multi disk Bidirectional Brake Control	Line Pull Per Layer 15 G p/m ( 57 L p/min at 2050 psi))		
Free spool Drum EN SPEC Weight (boxed shipping)	Manual or Pneumatic W 256.5 mm x Ø 100 mm 53 kg (no rope)	Layer 112000 lb (53.37 kN)Layer 210000 lb (44.4 kN)Layer 38573 lb ( 38.1 kN)		
Wire rope Rope Length	12 mm recommended 25 metre (maximum)			



#### HYDRAULIC SYSTEM RECOMMENDATIONS

Note: These parts are listed as minimum expectations for the Superwinch SI Series to perform to its fullest.				
System Type	Open system with filtered return line			
Relief Valve	Set at winch operating pressure			
Pump	A max oil supply of 15 gallons per minute (57 Liters/ per minute) at top motor RPM. The pump must be capable of delivering a pressure of 2320 PSI or 160 bar.			
Reservoir	Must be fitted with an oil filler device comprising of a strainer, an air filter, and a dip stick. The capacity of the tank should be at least 15.8 gal (60 L). Note: Do not fill the tank to the top, since there must be space for expansion in the tank. Suitable hydraulic oil is Castrol CRML or equivalent. Typical viscosity rating of 150 – 175 CST at 100 degrees C			
Hoses	Hoses should have a working pressure of 2900 psi (200 bar) or greater. Pressure and flow loss is increased as hose length increases and/or bore sizes decreases. Pressure and return lines in excess of 11.5 ft. (3.5 m) should be compensated with an increase in nominal bore size.			
Control Valve	4- way, 3- position self-centering with ports A & B to tank in the neutral position and built in relief valve. The relief valve must be set at the winch operating pressure. The valve should be mounted as close to the winch as possible.			
Load Control Valve	A load control valve provides dynamic braking to give a controlled smooth strop on winch-out under load.			
Hydraulic Motor	1/2" SAE O-ring boss ports			
Oil Suction Strainer Rating	Approx. 250 microns			
Return line Filter Rating	10 to 40 microns			

# 3. HYDRAULIC SYSTEM INSTALLATION

#### INSTALLATION

# 

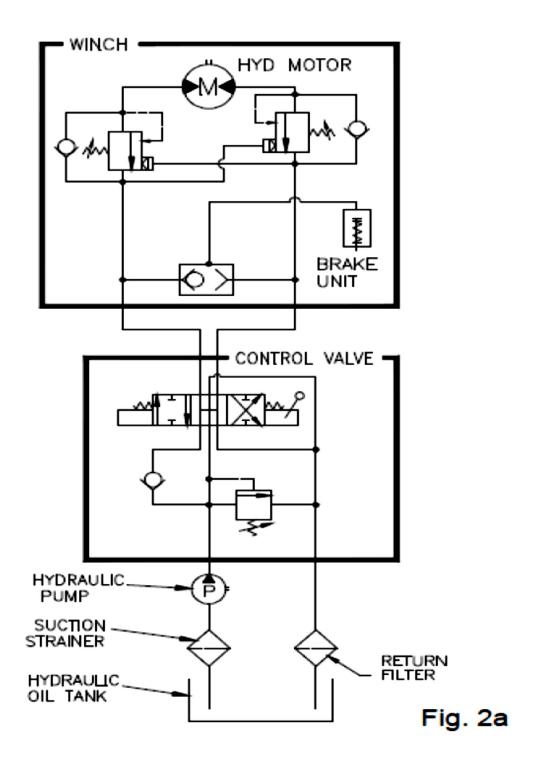
It is vital that all hose lengths are kept to a minimum. Pressure and flow loss is increased as hose length increases and/or bore size decreases. Pressure and return lines in excess of 11.5 ft. (3.5m) should be compensated with an increase in bore size.



As a general rule: All installation work on a hydraulic system should prioritize cleanliness and accuracy to insure the hydraulic system functions properly.

#### HYDRAULIC CIRCUITS

### WITH LOAD CONTROL



# 4. WINCH INSTALLATION

### MOUNTING

The Figures below show the mounting dimensions for the Superwinch SI 8,10, 12, 15 & 18. The Superwinch SI8,10 & 12 serries is mounted 8 bolts only to dimensions shown in foot down (see below) or in a foot forward.

Due to the rating of these winches:

- Insure mountings are secure.
- Use Only M12 Grade 8 High tensile steel bolts
- Remember that the winch is only as strong as the plate and hardware it is mounted to.

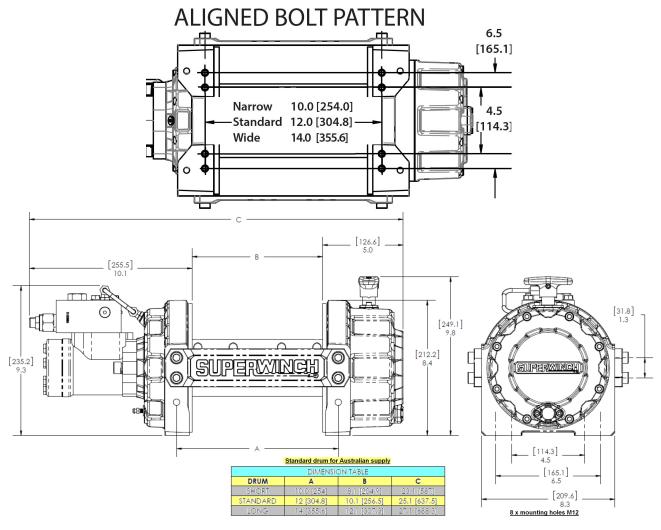


**Important: All eight mount holes should be used.** Use only the threaded holes provided, DO NOT drill and tap new holes in the winch. DO NOT weld the winch or any parts of the winch to the mounting plate.



Precautions for foot down mounting

- 1. The winch must be mounted to suitable steel plate suited to winch capacity
- 2. All mounting holes in the bottom of each supporting casting must be used

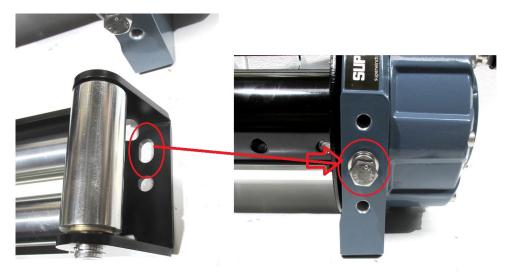


### SUPERWINCH SI INDUSTRIAL Roller Fairlead Installation UNDERWOUND SI8, SI10 & SI12



The Superwinch SI Industrial roller is to be installed once the winch is mounted and secured into position.

You may then remove the front tie bar without risk of winch misalignment. The roller fairlead is used in place of the tie bar



The Superwinch SI Industrial roller is bolted to the second hole as indicated in the picture above.

The elongated hole of the roller fairlead frame is used to allow for positioning. Secure the roller fairlead in position as close to the mounting floor as possible.



### **After Mounting Check**

After mounting and tightening all mounting bolts, place the winch in freespool and check the drum rotation. If the winch is mounted incorrectly, it may bind causing poor freespooling and decreased winch performance.

**Binding drum?** If the drum does bind, loosen all mounting bolts and rotate the drum once again to see if it free rotates. Tighten the bolts one at a time, slowly, checking the drum rotation until the winch is securely fastened. If the drum continues to bind, it could be that one or more of the mounting system's holes are out of position.

# 5. **ROPE INSTALLATION**

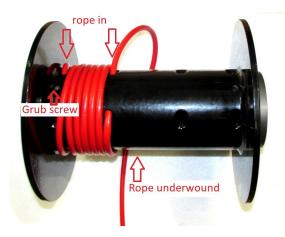


Use caution when installing/using winch line. Incorrect installation can lead to part damage. Follow these instructions.

Wire Rope: Wire rope must have a steel core.

Synthetic Rope: Superwinch recommends certified Dyneema synthetic ropes.

- 1. Unwind the rope from the spool and lay it out along the ground with the tapered end nearest to the winch. **NEVER** wind the rope straight onto the drum from a coil.
- 2. Disengage the freespool
- 3. Insert the tapered end of the rope into the cross-hole in the end of the drum and secure by tightening the setscrew. Synthetic rope only: insert tapered end of rope into the cross-hole and run across drum. Tape rope down and spool 5-6 wraps over the taped rope end.
- 4. Re-engage the freespool.
- 5. Carefully run the winch in the "Winch In" direction. Keeping tension on the rope. Spool 5 or 6 wraps of rope neatly onto the drum.
- 6. Apply moderate tension (approx. 1,500 lbs. or 680 kg to the rope). Carefully run the winch in the "Winch In" direction. Ensure the layers are neatly wrapped onto the drum. This will minimize damage to the lower layers of rope when a load is applied.



**Rope Installation EN drum** 

### 6. FREESPOOL OPERATION



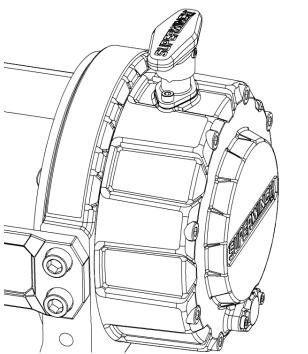
Avoid pulling a load at more than a 15 degree angle in relation to the winch. This will reduce wear and tear on the winch and cable.

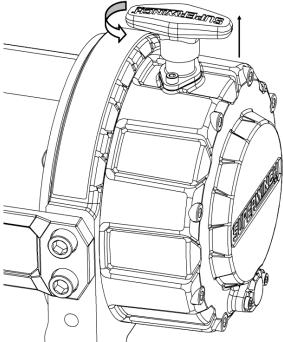
NOTE: The winch is designed such that it cannot be freespooled when the drum is under load.

To place the winch in freespool with use of manual disengage freespool, raise and rotate 90° As shown in disengaged diagram below.

Winch Engaged Position

Winch Disengaged Position





### **Pneumatic Freespool Option**

A pneumatic freespool may be fitted to your Superwinch SI winch. Follow the same safety instructions as provided for the manual freespool option.

#### **PULLING OUT THE ROPE**



Insure no load is on the winch line then disengage the freespool. With a pair of gloves on, pull out the rope and secure it to an anchor or load. Check that there are at least 5 turns of rope

remains on the drum. Re-engage the freespool.

# Pneumatic Freespool Installation P/No S100512



#### <u>Tools Required</u> 4mm ball end Allen key

There are two 4mm socket head cap screws supplied with the S100512 pneumatic freespool, as required for installation. These are located as show in the picture.

#### **IMPORTANT**

To secure in tighten both screws fully to bring the S100512 into position.

It is important to then retighten both screw for the second time to fully secure.

Failure to properly secure will allow the o-ring to not fully seal. It can also allow the S100512 to loosen over time.

The S100512 pneumatic freespool can be mounted in various positions on the SI gearbox as shown in the image below.

There are two mounting holes in the gearbox housing, one at the end and one on the circumference.

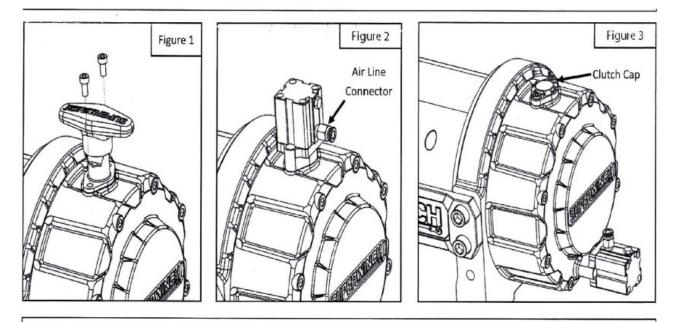
The blanking plug can be removed and located to the alternative mount bole. Retighten using instruction above.

#### IMPORTANT

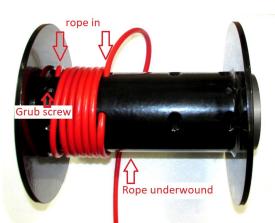
The gearbox housing can be rotated to create additional mount positions for the freespool.

This should done at the time of winch assembling or by an authorised dealer. Incorrect rotation may dislodge sealing rings, preventing freespool function. It can also allow moisture entry.

Unauthorised procedures will void warranty.



- 5. Connect an air line to the air line connector.
- 6. Apply air pressure to the air clutch to freespool the winch.



**Rope Installation EN drum** 

# 7. TIPS FOR EXTENDING THE LIFE OF YOUR WINCH

#### 1. KEEP A TIGHTLY WOUND ROPE DRUM

Do not allow the wire rope to become loosely- wound. A loosely-wound drum allows the rope, under load, to work its way down into the layers of rope, cause it to bind and possibly damage the rope.

#### 2. USE A PULLEY BLOCK AND SHACKLET FOR HEAVY LOADS

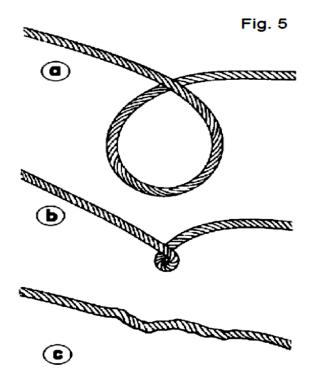
To maximize the winch and rope life, use a pulley block and shackle to double line heavier loads.

3. The pull required to start a load moving is often must greater than the pull required to keep it moving. **AVOID FREQUENT STOPPING AND STARTING** during a pull.

#### 4. PREVENT KINKS IN THE WIRE ROPE BEFORE THEY OCCUR

(Fig. 5a) This is the start of a kink. At this time, the wire rope should be straightened. (Fig. 5b) The wire rope was pulled and the loop has been tightened to a kink. The wire rope is now permanently damaged and must be replaced.

(Fig. 5c) This is a result of kinking at different points, in each strand under a great load. This will reduce the load capacity of the wire rope. The wire rope must be replaced.



# **MAINTENANCE & SERVICING**

Your Superwinch SI winch will come pre lubricated from the factory ready to install.

Drum bearings and gearbox are lubricated with a recommended: Shell Gadus synthetic lubricant.

Once installed and after initial use all mounting bolts and hose connections should be check to be tight and secure.

# **Daily**

### Check for any rope damage

**Steel Ropes:** If kinked, damaged, rusted or has broken strands must be replaced. **Synthetic Ropes:** If damaged, frayed or old and discoloured must be replaced.

# **Regularly**

Check mounting bolts and hose connections. Making sure they are tight and secure.

# Servicing

To extend the life of your winch. It is recommended that your winch be serviced at regular intervals based on usage or suitable time intervals.

After 50 hours of winching or a yearly service is recommended.

Servicing of your SI Superwinch should only be performed by an authorised service centre or service provider.

For correct continued performance and safety any replacement of parts must be genuine Superwinch approved parts.

For approved service providers check with Superwinch or B&C Winches if you are in Australia

# 9. HYDRAULIC SYSTEM TROUBLESHOOTING

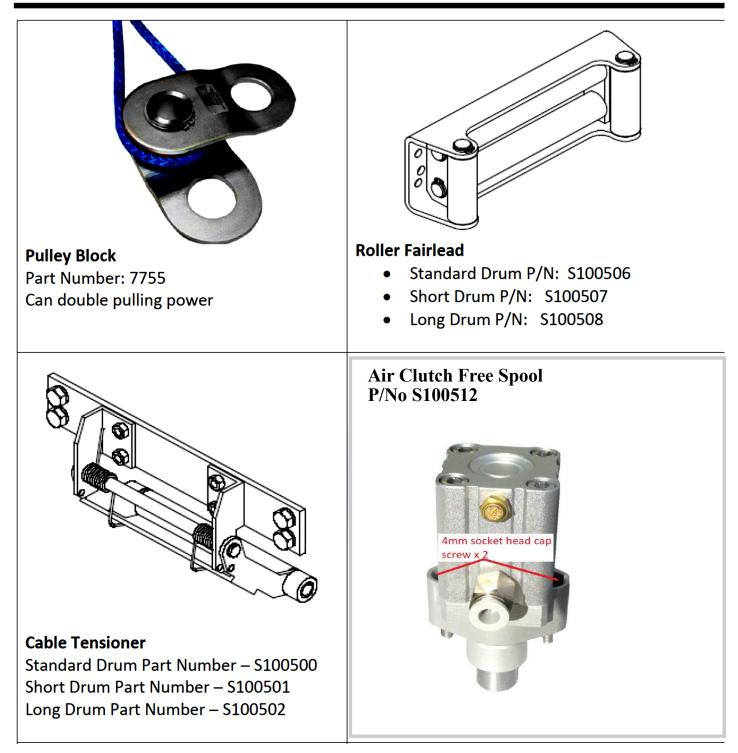
Most hydraulic system failures follow the same pattern- a gradual or sudden loss of pressure or flow with a resulting loss of power. Any one of the systems' components may be at fault. By following this step- by –step procedure, the trouble can be isolated in a short time.

<u>Condition</u>	Possible Cause	<u>Operation</u>
System Inoperative	No Oil in system	Fill system and check for leaks
	Insufficient oil in system	Fill system and check for leaks
	Wrong oil in the system	Refer to manufacturers' specifications of the hydraulic pump
	Filter dirty or clogged	Drain oil and replace filter. Check for leaks
	Oil Line restriction. Oil lines dirty or collapsed.	Replace damaged hoses. Change oil
	Leakage	Check all components, particularly the relief valve, for proper settings.
System Operates Erratically	Air in the system	Check the suction side of the system for leaks. Repair
	Cold Oil	Allow System to warm- up period
	Dirty or damaged components Restriction in filters or lines	Clean or repair as necessary Clean and/or replace elements or lines
System Operates Slowly	Oil viscosity is too high or cold oil	Allow oil to warm up before operating or change oil to a proper viscosity.
	Low Pump drive speed	Increase engine speed, refer to the pump owner's manual
	Low Oil Level	Check reservoir and add oil as necessary
	Improper adjustments and Oil Leaks	Check relief valves, etc. Adjust per manual of pump. Tighten all fittings.

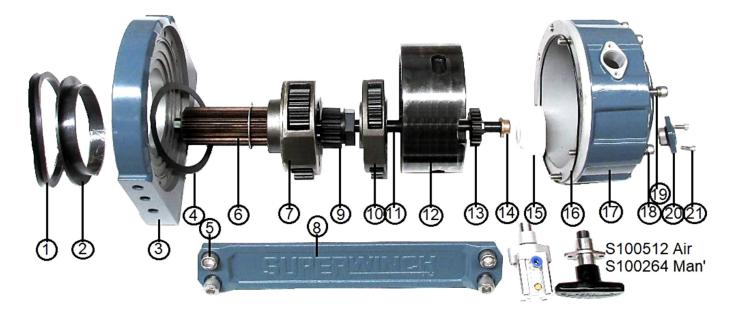
# 9. HYDRAULIC SYSTEM TROUBLESHOOTING

Incorrect oil, low oil, dirty oil.Use recommended oil, fill reservoir, clean oil, replace filterExcessive component internal leakageRepair or replace components as necessary. Check system pressureMalfunctioning oil coolerClean or repair Clean dirt and mud from the oil cooler and other componentsFoaming of the OilIncorrect, dirty or low oil Air leaksReplace, clean or add oil as neededLoad Moves with Control Valve in NeutralControl valve not centering when releasedCheck for spool binding and repair Tighten all fittingsControl Valve BindingValve linkage misaligned squarelyRepair Valve is centering rightDrum will not rotate at allLow Flow rate squarelyCheck for spool binding. Refer to WINCH mounting pageWinch runs slowLow Flow rate Brake does not fully disengageCheck for ake sure pressures are high enough to release the brake	Overheating of Oil in the system	Oil is passing through the relief valve for an excessive amount of time	Return control valve to neutral when not in use, allow to cool down	
internal leakagenecessary. Check system pressureMalfunctioning oil coolerClean or repairInsufficient heat radiationClean dirt and mud from the oil cooler and other componentsFoaming of the OilIncorrect, dirty or low oil Air leaksReplace, clean or add oil as neededLoad Moves with Control Valve in NeutralControl valve not centering when releasedCheck for spool binding and repairControl Valve BindingValve linkage misaligned squarelyReplaceDrum will not rotate at allWinch is not mounted squarelyCheck shuttle valve operation. Check shuttle valve operation. Check shows for leakage. Check port for blockage. Disassemble & inspect brakeWinch runs slowLow Flow rate 			,	
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Not tight enoughvalve is centering rightControl Valve BindingValve linkage misalignedRepairValve DamagedReplaceValve DamagedChecking mounting. Refer to WINCH mounting pageDrum will not rotate at allBrake not disengagingCheck shuttle valve operation. Check hose for leakage. Check port for blockage. Disassemble & inspect brakeWinch runs slowLow Flow rateCheck flow rate. See hydraulic systems flow spec pageBrake does not fullyCheck to make sure pressures are			Check for spool binding and repair	
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Drum will not rotate at allsquarelyWINCH mounting pageBrake not disengagingCheck shuttle valve operation. Check hose for leakage. Check port for blockage. Disassemble & inspect brakeWinch runs slowLow Flow rateCheck flow rate. See hydraulic systems flow spec pageBrake does not fullyCheck to make sure pressures are		Valve Damaged	Replace	
Brake not disengaging Check hose for leakage. Check port for blockage. Disassemble & inspect brake   Winch runs slow Low Flow rate Check flow rate. See hydraulic systems flow spec page   Brake does not fully Check to make sure pressures are	Drum will not rotate at all			
Winch runs slow Systems flow spec page   Brake does not fully Check to make sure pressures are		Brake not disengaging	Check hose for leakage. Check port for blockage. Disassemble &	
	Winch runs slow	Low Flow rate		
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# 10. ACCESSORIES



#### SI 8 / 10 / 12 Gear Assembly Exploded View



No	Part No	Description	Qu'	No	Part No	Description	Qu'
1	S100727	V Face Seal	1	12	S100749	Ring Gear	1
2	S100317	Drum Bearing	1	13	S100633	Sun Gear 1st Stage	1
3	S100554	Upright Housing	1	14	S102557	Bush Drive Shaft Support	1
4	S100771	Thrust Bearing	1	15	S102842	Spacer 1st Stage Planet	1
5	S100882	SHCS M12 x 1.75 x 30mm	8	16	S100620	"O" Ring	1
6	S101794	Splined Drive & Circlip	1	17	S100556	Gearbox Cover	1
7	S102536	2nd stage Planet Assy	1	18	S100726	SHCS M8 x 1 x 85mm	8
8	S101784	Tie Bar	2	19	S101448	Washer Spring M8	8
9	S102218	Sun Gear 2nd Stage	1	20	S100636	Cap & "O" Ring	1
10	S102542	1st Stage Planet Assy	1	21	S100605	SHCS M5 x .8 x 12mm	2
11	S102840	Drive Shaft	1				

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#### SI8/10/12 Brake Parts Exploded View

	<u>SI8/10/12</u>	Brake Parts Exploded Vi	ew				
<u>No</u>	Part No	Description	<u>Qu'</u>	No	Part No	Description	<u>Qu'</u>
1	32193-02	Motor Hydraulic SI8	1	9	S100620	"O" Ring	1
1	32192-04	Motor Hydraulic SI10	1	10	S100554	Upright Housing	1
1	S104009	Motor Hydraulic SI12	1	11	S100317	Drum Bearing	1
2	S100904	<b>Right Angle Fitting</b>	2	12	S100727	"V" Face Seal	1
3	S100558	Brake Cover & Seal (S100818)	1	13	S100082	Manifold LCV (all models)	1
4	S100814	Fixed Brake disc	4	14	S100916	Bolt 5/16" x 2 1/2"	4
5	S100813	Rotating Disc	3	15	S100917	Washer Spring 5/16"	4
6	S100926	Brake Coupling	1	16	S101103	Tube Assy	1
7	S100824	Thrust Washer	1	17	S100746	Bolt 8mm x 45mm	8
8	S100922	Pressure Plate	1	18	S101448	Washer Spring 8mm	8

Note A: Seal Part No S100818 is recommended to be supplied complete and inserted in Item 3

# Superwinch Limited Warranty Valid World Wide

**LIMITED WARRANTY.** Supervinch ("Seller") warrants to the original buyer ("you") all parts and components except wire rope to be free from defects in materials and workmanship for a period of (one) 1 year from the provable date of purchase. Any Supervinch product which is defective will be repaired or replaced without charge to you, upon compliance with these procedures. The warranties set forth herein are exclusive and in lieu of all other warranties, whether oral or written, express or implied.

**LIMITED WARRANTY PERFORMANCE PROCEDURE.** Upon discovery of a defective Superwinch product, contact the Seller or any Factory Authorized Service Centre written notice of such defect and mail, ship or otherwise deliver the defective Superwinch, postage or shipping prepaid. Repairs or replacements by Seller under this limited Warranty will normally be accomplished within fifteen (15) business days after receipt of the defective Superwinch. Seller or its Authorized Agents may make reasonable charges for parts and labor for repairs not covered by this limited warranty.

**WARRANTY AND REMEDY LIMITATIONS AND EXCLUSIONS.** Repair and/or replacement of the defective Superwinch or component thereof as provided herein is the exclusive remedy for the Buyer. The following exclusions or limitations of warranties and limitations of remedies shall be expressly applicable:

A. Express warranties. Seller Warrants that the Superwinch is as described in the "Superwinch Owner's Manual" provided herewith; no other express warranty is made in respect to the Superwinch. If any model or sample was shown to the Buyer, such model or sample was used for illustrative purposes only, and shall not be construed as a warranty that the Superwinch will conform to the sample or model. SELLER MAKES NO EXPRESS WARRANTY WITH RESPECT TO WIRE ROPE INCORPORATED IN THE PRODUCT.

B. Implied Warranties. THE IMPLIED WARRANTY OF MERCHANTABILITY AND ALL OTHER IMPLIED WARRANTIES SHALL ONLY EXTEND FROM THE PROVABLE DATE OF PURCHASE FOR ONE (1) YEAR. THE WIRE ROPE IS SOLD "AS IS", WITHOUT ANY IMPLIED WARRANTIES. SOME STATES WITHIN THE USA DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

C. Incidental and Consequential Damages. SUBJECT TO SELLER'S LIMITED WARRANTY OBLIGATIONS SET FORTH HEREIN, SELLER SHALL NOT BE RESPONSIBLE FOR INCIDENTAL DAMAGES OF ANY KIND, OR FOR CONSEQUENTIAL DAMAGES TO PROPERTY, LOSS OF PROFITS AND LOSS OF USE WHICH MAY BE CAUSED BY ANY DEFECT IN, OR MALFUNCTION, OR FAILURE OF ENCLOSED SUPERWINCH. SOME STATES WITHIN THE USA DO NOT ALLOW EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

D. Condition of Warranty. Seller shall not be required to comply with its warranty duties provided herein if the defect, malfunction, or failure of the Superwinch was caused by damage (not resulting from defective or malfunctioning components) or unreasonable use by you. Unreasonable use shall include, but is not limited to, installation or use of the Superwinch without compliance with the instructions contained in the Superwinch Owner's Manual for the particular model number. Seller's liability under this warranty or for

any loss or damage to the Superwinch product shall not exceed the cost of correcting defects in or replacing the Superwinch product, and upon expiration of the warranty period, all such liability shall terminate. The agents, dealers and employees of the Seller are not authorized to make modifications to this warranty, or additional warranties binding on the Seller. Accordingly, additional statements, whether oral or written, do not constitute warranties and should not be relied upon.

**LEGAL REMEDIES OF BUYER.** This Limited Warranty gives you specific legal rights, and you may also have other rights which vary from State to State within the USA and from country to country. You may also have implied warranty rights. In the event of a problem with Limited Warranty service or performance, the Buyer may be able to go to small claims court, a state Court or a federal district court in the USA or to appropriate jurisdictions outside the USA.

**INQUIRES.** Any enquiries regarding compliance with the warranties provided herein may be addressed in writing to the address below.

13-1 WARRANTY

**Superwinch** 20750 S.W. 115<sup>th</sup> Avenue, Tualatin OR 97062

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