

Self-Recovery Winch

Model: Rhino 12

PN: 851212 12V DC 851224 24V DC

Introduction

▶ Feature

Line pull: 5,440 kg / 12,000 lb single line (SAE J706 rating)

5,100 kg single line (EN-14492-1 rating)

Brakes: Automatic, full load CBS & an auxiliary inverted current brake

Clutch: Turn the T-handle for rapid wire rope payout

Control: Handheld pendant switch powers the winch

Read this manual carefully

You should carefully read and understand this manual before operating it. Careless winch operation may result in personal injury hazards or property damage.

Installation

Before using the winch, make sure all electrical components have no corrosion or damaged; the environment should be clear and dry.

Mounting

- Winch shall be mounted on a flat and hard surface
- Winch should be mounted as closed to center and as horizontal as possible to the direction of the line pull.

Wire rope shall be wound in an under-wound orientation only.

orientation only.

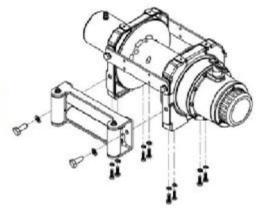
Eight (8) M12 X 1.5 pitch 12.9 grade high tensile steel bolts must be used in order to sustain the loads imposed on the winch mounting.

 Two (2) M12 x 1.5 pitch 8.8 grade high tensile steel bolts must be used for fastening the roller fairlead into the mounting channel.

It is always preferred to use both tie bars in the final installed configuration.



The winch complies with European Standard of EN-14492:2006
Power-Driven Winches and the latest Machinery Directive: 2006/42/EC provided that the OWNER or END USER complies with all responsibilities described below.



- Refer to the Instruction Manual to install winch for safe winching operation.
- Fit a wire rope at 12 mm (1/2") x 30.5 m (100') grade 1960 N/mm2 or EIPS with a minimum breaking strength of 100.5 KN to comply with EN ratings;

* Rope drives with steel wire rope shall be dimensioned

* At least 2:1 wire rope working coefficient for the first rope layer.

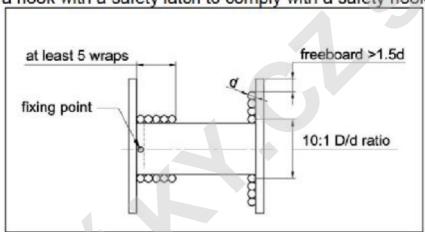
* At least 10:1 D/d ratio to the centre of the rope

* At least 1.5 layer of wire rope freeboard.

 The wire rope must be painted red for 1.6 m on both ends and at least five (5) wraps of wire rope remained around the drum to comply with EN ratings;

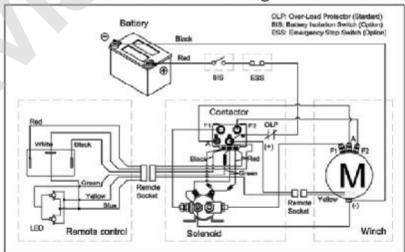
At least two rope windings on the drum.

- * Rope attachment to withstand 2.5 x the remaining static force.
- Fit an emergency stop switch to comply with emergency stop function.
- Fit a hook with a safety latch to comply with a safety hook.



Wiring Diagram

 Attach the black lead firmly to the negative (–) battery terminal and red lead to the positive (+) battery terminal. The voltage drop for the winch motor must not exceed 10% of the nominal voltage of 12/24V DC



 The over-load protector built in the control box shall be manually reset after reducing the load.

Warning

- The winch is not intended to be used in any manner for the movement or lifting of personnel.
- The rated line pull shown is based on the first layer of rope on the drum for the winch only, consult the wire rope manufacturer for wire rope rating.
- · The rope winding on the drum shall remain 5 wraps from the drum.

Parts List

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Item No.	Description	Part No.	Qty	
1	Motor 12V	881296	1	
	Motor 24V	881297		
2	Tie bar kit	881583	2	
3	Motor support rack kit	881595	1	
4	Motor coupling	880047	1	
5	Drum bushing	880048	2	
6	Drum kit	881596	1	
7	Gearbox support rack	881597	1	
8	Grounding lead	880009	1	
9	1 st shaft	880053	1	
10	3 rd ring gear kit	880054	1	
11	3 rd stage carrier kit	880055	1	
12	2 nd stage carrier kit	880104	1	
13	1 st stage carrier kit	880107	1	
14	C ring	880058	1	
15	1 st & 2 nd ring gear	880059	1	
16	1 st pinion kit	880060	1	
17	Clutch kit	880061	1	
18	Gear box kit	880062	1	
19	Brake base	880063	1	
20	Cone brake disc kit	880021	1	
21	Brake cover kit	880065	1	
22	Roller fairlead	881587	1	
23	Mounting hardware	881598	1	
24	Remote control	880126	1	
25	Detachable control box 12V	881645		
25	Detachable control box 24V	881646	 1	
25-1	Remote socket kit 12V	881589	1	
25-1	Remote socket kit 24V	881590		
25.2	Detachable control pack 12V	881647	1	
25-2	Detachable control pack 24V	881648	1 '	
26	Brake clutch base	881434	1	

Winch Assembly

