

# Self-Recovery Winch Model: *DV-12 light*

PN: 850012 12V DC 850124 24V DC

#### **Introduction**

►eature	
Line pull:	5,443 kg / 12,000 lb wire rope first layer
Wire rope:	9.5 mm × 25 m (3/8" × 82') galvanized aircraft A7 × 19
Brake:	Patented cone brake holds full load
Clutch:	Turn the T-handle for rapid wire rope payout
Control:	Handheld pendant switch powers the winch

#### Unpacking

• Winch assembly	····· 1 pc
Detachable control box	····· 1 pc
Remote control	1 рс
• Wire rope with hook	1 рс
• Roller fairlead	1 рс
<ul> <li>1.8 m ( 6' ) 2 gauge battery lead</li> </ul>	1 рс

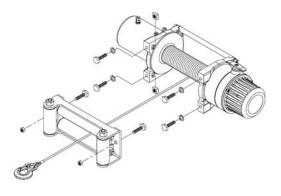
#### Read this manual carefully

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.

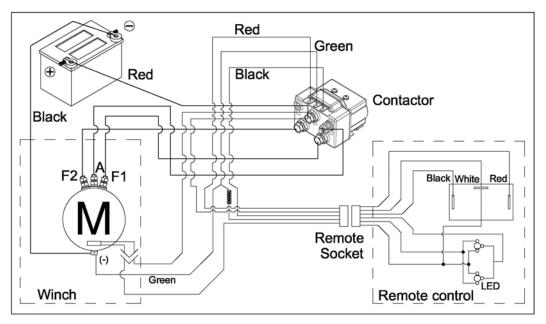
- Winch and roller fairlead mountings
  - It is very important that the winch will be mounted on a flat and hard surface of mounting channel in order to make sure the motor, drum and gearbox housing are aligned correctly.
  - Roller fairlead does not mount to the winch directly.



- The wire rope shall be wound in an under-wound orientation only.
- Four (4) M10 x 1.50 pitch 8.8 grade high tensile steel bolts must be used in order to sustain the loads imposed on the winch mounting.
- Two (2) M12 x 1.75 pitch 8.8 grade high tensile steel bolts must be used for fastening the roller fairlead into the mounting channel.

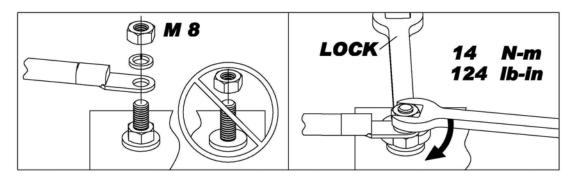
#### Wiring Diagram

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.



Nut fastening for motor & contactor

1.Holding the lower nut on the stub and fastening the upper nut clockwise. 2.The torque setting for nut is 14 N-m/124 lb-in.



## <u>Warning</u>

- 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.
- The rope winding on the drum shall remain 5 wraps from the drum.

## Parts List

Item No.	Description	Part No.	Qty
1	Motor 12V	881294	1
	Motor 24V	881295	1
2	Tie bar kit	880003	2
3	Motor support rack	880004	1
4	Motor coupling	880005	1
5	Drum bushing	880006	2
6	Drum kit	881521	1
7	Gearbox support rack	881866	1
8	Grounding lead	880009	1
9	Wire rope w/hook	881522	1
10	1 <sup>st</sup> shaft	881523	1
11	3 <sup>rd</sup> ring gear kit	881524	1
12	3 <sup>rd</sup> stage carrier	881525	1
13	3 <sup>rd</sup> bushing	880014	1
14	2 <sup>nd</sup> stage carrier	881526	1
15	1 <sup>st</sup> stage carrier	881527	1
16	1 <sup>st</sup> & 2 <sup>nd</sup> ring gear	881528	1
17	1 <sup>st</sup> pinion kit	880018	1
18	Clutch kit	881303	1
19	Gear box kit	881529	1
20	Cone brake disc kit	880021	1
21	Brake cover kit	881530	1
22	Roller fairlead	880023	1
23	Mounting hardware	880024	1
24	Remote control	880126	1
25	Handsaver strap	880026	1
26	Detachable control box 12V	881164	1
20	Detachable control box 24V	881165	
26-1	Remote socket kit 12V	881373	1
	Remote socket kit 24V	881374	
26-2	Detachable control pack 12V	881400	- 1
	Detachable control pack 24V	881401	
27	Brake clutch base	881100	1

## Winch Assembly

