Self-Recovery Winch
Model: DV-12s lite
PN: 850125 12V 850121 12V DC 851024 24V 850127 24V DC

## Introduction

## x Feature

Line pull: $\quad 5,443 \mathrm{~kg} / 12,000 \mathrm{lb}$ wire rope first layer
Synthetic rope: $11 \mathrm{~mm} \times 25 \mathrm{~m}\left(7 / 16^{\prime \prime} \times 82^{\prime}\right)$ synthetic rope
Brake: Patented cone brake holds full load
Clutch: Turn the T-handle for rapid rope payout
Control: Handheld pendant switch powers the winch
x Unpacking
-Winch assembly............................................................... 1 pc

- Control box...................................................................... 1 pc
- Remote control............................................................... 1 pc
- Synthetic rope with sling hook....................................... 1 pc
- Hawse fairlead................................................................. 1 pc
- 1.8 m (6') 2 gauge battery lead.......................................... 1 pc
x 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.
x Winch and hawse 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.
- Hawse fairlead does not mount to the winch directly.
- The synthetic rope shall be wound in an under-wound orientation only.
- Four (4) M10 $\times 1.50$ 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 synthetic fairlead into the mounting channel.
x Wiring Diagram
- Connect thermal sensor harness plug, control ground, and cable A/F1/F2 to the motor.
- Attach the ground lead firmly to the negative (-) battery terminal and power lead to the positive (+) battery terminal. The voltage drop for the winch motor must not exceed $10 \%$ of the nominal voltage of $12 / 24 \mathrm{~V}$ DC.

x 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 $14 \mathrm{~N}-\mathrm{m} / 124 \mathrm{lb}-\mathrm{in}$.



## 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.

The rope winding on the drum shall remain 10 wraps from the drum to support the rated load.

- Manufacturer is not responsible for the results of misuse, misapplication faulty installation or abuse of synthetic rope in any way.


## Parts List

| Item No. | Description | Part No. | Qty |
| :---: | :---: | :---: | :---: |
| 1 | Motor 12V | 882153 | 1 |
|  | Motor 24V | 883126 |  |
| 2 | Tie bar kit | 880003 | 2 |
| 3 | Motor support rack | 881779 | 1 |
| 4 | Motor coupling | 880005 | 1 |
| 5 | Drum bushing | 880006 | 2 |
| 6 | Drum kit | 881521 | 1 |
| 7 | Gearbox support rack | 883360 | 1 |
| 8 | Grounding lead | 880009 | 1 |
| 9 | Synthetic rope | 883285 | 1 |
| 10 | $1^{\text {st }}$ shaft | 881523 | 1 |
| 11 | $33^{\text {rd }}$ ring gear kit | 881524 | 1 |
| 12 | $3{ }^{\text {rd }}$ stage carrier | 881525 | 1 |
| 13 | $3{ }^{\text {rd }}$ bushing | 880014 | 1 |
| 14 | $2^{\text {nd }}$ stage carrier | 881526 | 1 |
| 15 | $1^{\text {st }}$ stage carrier | 881527 | 1 |
| 16 | $1^{\text {st }} \& 2^{\text {nd }}$ ring gear | 881528 | 1 |
| 17 | $1^{\text {st }}$ pinion kit | 880018 | 1 |
| 18 | Clutch kit | 881303 | 1 |
| 19 | Gear box kit | 883361 | 1 |
| 20 | Cone brake disc kit | 880021 | 1 |
| 21 | Brake cover kit | 883362 | 1 |
| 22 | Hawse fairlead | 883410 | 1 |
| 23 | Mounting hardware | 880024 | 1 |
| 24 | Remote control | 880126 | 1 |
| 25 | Handsaver strap | 880026 | 1 |
| 26 | Control box 12V | 881164 | 1 |
|  | Control box 24V | 881165 |  |
| 26-1 | Remote socket kit 12V | 881373 | 1 |
|  | Remote socket kit 24V | 881374 |  |
| 26-2 | Control pack 12V | 881400 | 1 |
|  | Control pack 24V | 881401 |  |
| 27 | Brake clutch base | 881100 | 1 |
| 28 | Sling hook | 882477 | 1 |

Winch Assembly


2022/02/16 Ver:11

