

### 3.2 Tonnes Hydraulic Worm Gear Winch

Model: Yak 7

PN: 681260 Std. drum 681262 Std. drum 931621 SSY 681266 Long drum 681268 Long drum

### Introduction

▶ Feature

Line pull: 3,175 kg / 7,000 lb (SAE J706 rating )

3,200 kg (EN 14492 -1 rating)

Line speed: 5.2 mpm at 40 lt/min; 17.1 fpm at 10.6 g/min

Operation pressure: 120 bar / 1,740 psi

Brake: Irreversible worm gear

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

Recommended

wire rope:

\* 10 mm x 10.7 m for Std drum and 16.2 m for Long drum, 1,960 N/mm2 grade with a minimum breaking strength of 69.8 KN required for EN -14492-1 rating

\* 3/8" x 57.4' for Std drum and 87.3' for Long drum, EIPS grade with a minimum breaking strength of

15,663 lbf required for SAE J706 rating

Hydraulic system: PTO/power take off unit driven pump

#### ► Read this manual carefully

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

### ►Information requesting or parts ordering

Please specify the followings information:

· Winch PN · Part description

· Serial number · Replacement part number

 $\cdot$  Quantity for each part

# **Warning**

- This winch shall only be used for vehicle recovery or for pulling and lowering boats off trailers.
- $\boldsymbol{\cdot}$  The line pull and speed are based on the first layer of rope on the drum.
- The rope winding on the drum shall remain 5 wraps from the drum.

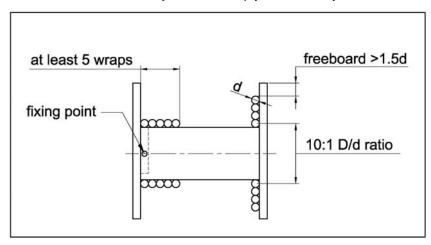
### **Warranty**

Comeup Industries Inc. takes the responsibility for all parts and components to be free from defects in materials and workmanship appearing under normal use for one year from the date of purchase.

### Compliance with EN 14492-1

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

- 1. Refer to the Instruction Manual to install winch for safe winching operation.
- 2. Fit the recommended wire rope 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
  - \* Drum freeboard shall be at least 1.5 x rope diameter.
- 3. 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
  - \* At least two rope windings on the drum.
  - \* Rope attachment to withstand 2.5 x the remaining static force.
- 4. Fit a pressure relief valve to comply with rated capacity limiter.
- 5. Fit an emergency stop valve to comply with emergency stop function.
- 6. Fit a hook with a safety latch to comply with a safety hook.



# **Warning**

- The winch is not sold or intended for the lifting or transportation of people.
- · The winch shall be driven by PTO / power take off unit driven pump
- · Support rack lubrication with EP2 grease shall be made periodically.

# **Winch Mounting**

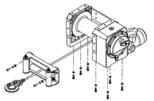
Failure to adequately align, support or attach the winch to a suitable mounting base or angles could result in a loss of efficiency or damaging to the winch, wire rope or mounting base or angles.

### ► Foot Down Mounting

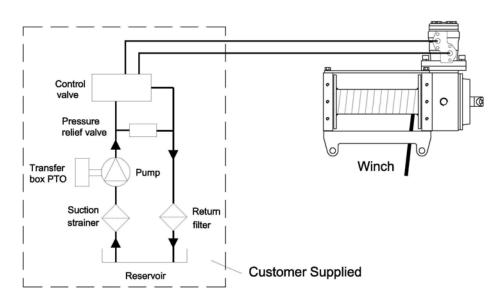
DO NOT position the load direction away from the mounting surface.

- · Wire rope can be wound in an under-wound or above-wound orientation.
- · It is always preferred to use both tie bars in the final installed configuration.
- Seven (7) M8 x 1.25 pitch 8.8 grade w/22 N-m torque setting (maximum) high tensile steel bolts must be used in order to sustain the loads imposed on the winch mounting.
- Two (2) M8 x 1.25 pitch 8.8 grade w/22 N-m torque setting (maximum) high tensile steel bolts must be used for fastening the roller fairlead into the winch.





# **Hydraulic System**



### **Parts List**

Item No.	Description	Part No.	Qty
1	Hydraulic motor kit	881460	1
2	Motor support rack	881461	1
3	Bearing kit	881462	1
4	Worm	881463	1
5	Bearing	881464	1
6	Gear box kit	881465	1
7	1st shaft kit, Std drum	881466	1
	1st shaft kit, Long drum	881467	
8	Drum kit, Std drum	881470	1
	Drum kit, Long drum	881471	
9	Support rack	881472	1
10	Worm wheel	881473	1
11	Coupler kit	881474	1
12	Gearbox rear cover kit	881475	1
13	Clutch kit	881476	1
14	Tie bar kit, Std drum	881477	2
	Tie bar kit, Long drum	881478	
15	Roller fairlead, Std drum	881479	1
	Roller fairlead, Long drum	881480	

# **Winch Assembly**

