File: F-7406 Page 1 of 8



# **OPERATORS MANUAL**

Product: TORQ ATV WINCH 4000lb

## **TORQ ATV Winch**



## Warranty

For product warranty, please refer to our website: www.tjm.com.au

	Page 2 of 8
TORQ ATV WINCH	
4000lb	
	*

#### SAFETY PRECAUTIONS

<u>Warning!</u> Observe safety precautions for personal safety and the safety of others. Improper equipment operation may cause personal injury and equipment damage.

Read the following carefully before attempting to operate your winch and keep the instructions for future reference.

#### 1. Dress Properly:

- Don't wear loose clothing or jewellery. They can be caught in moving parts.
- Wear leather gloves when handling winch cable. Do not handle cable with bare hands as broken wires can cause injuries.
- Non-skid footwear is recommended.
- Protective hair covering to contain long hair.

#### 2. Keep a Safe Distance:

- Ensure that all persons stand well clear of winch cable and load during winch operation, 1.5 times the cable length recommended. If a cable pulls loose or breaks under load it can lash back and cause serious personal injury or death.
- Don't step over the cable.
- All visitors and onlookers should be kept away from the work area.
- Keep proper footing and balance at all times.

#### 3. Don't Abuse the Cord:

Keep cord from heat, oil and sharp edges.

#### 4. Don't Overwork the winch:

- If the motor becomes uncomfortably hot to touch, stop and let it cool for a few minutes.
- Don't maintain power to the winch if the motor stalls.
- Don't exceed maximum line pull ratings shown in tables. Shock loads must not exceed these ratings.

#### 5. Avoid Unintentional Starting:

Winch clutch should be disengaged when not in use and fully engaged when in use.

#### 6. Check Damaged Parts:

Before using, you should check your winch carefully. Any part that is damaged should be properly repaired
or replaced by an authorized service centre.

#### 7. Repair Your Winch:

When repairing, use only identical replacement parts or it may cause considerable danger for the user.

#### 8. Re-spool the Cable:

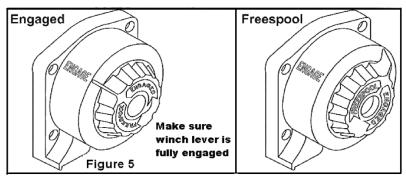
- Leather gloves must be worn while re-spooling. To re-spool correctly, it is necessary to keep a slight load on the cable. Hold the cable with one hand and the remote control switch with the other. Start as far back and in the centre as you can. Walk up keeping load on the cable as the winch is powered in.
- Do not allow the cable to slop through your hand and do not approach the winch too closely.
- Turn off the winch and repeat the procedure until all the cable except 1m is in.
- Disconnect the remote control switch and finish spooling in cable by rotating the drum by hand with clutch disengaged.
- On hidden winches, spool in cable under power but keep hands clear.

<b>File:</b> F-7406	Page 3 of 8
Product:	TORQ ATV WINCH
	4000lb

<u>Warning:</u> The use of any other accessory or attachment other than those recommended in the instruction manual may present a risk of personal injury.

#### **Clutch Operation**

- The clutch is operated by rotating the clutch lever clockwise or anti-clock wise.
- To "ENGAGE" the clutch turn lever clockwise
- To "DISENGAGE" the clutch, turn lever anti-clockwise.



(Diagram for illustration proposes only)

#### **CAUTION**

Never disengage the winch clutch while the wire rope is under tension. Doing this can seriously damage the winch and/or cause property damage and serious injury.

#### **Motor Temperature**

- This winch is designed for intermittent use only.
- Do not run this winch at a high load for an extended period of time.
- To find the run time while using the winch, stop operation.
- Secure the load.
- Release the tension on the cable.
- Place your hand on the motor to check temperature.
- If you feel the motor is warm to the touch, let it cool down for a few minutes.
- 15-20 minutes is usually satisfactory, than feel the motor again to see if it is ok to continue.
- If the motor is labouring, stop sooner and more often to check the motor temperature.
- If the winch motor stalls, quickly stop winching and let the motor cool off.

#### **Battery Recommendation**

- A fully charged battery will give the best performance.
- A 12 volt DC battery with a minimum of 12 amp hour charging system will work and 150-250 cranking amps.

#### **Maintenance**

- No lubrication will be needed or required for the life of the winch.
- Inspect the Synthetic rope and winch before every use.

<b>File:</b> F-7406	Page 4 of 8
FIIE: F-/40b	Page 4 of 8 I

Product:	TORQ ATV WINCH	
	4000lb	

Check the electric wiring about every 90 days to insure good, tight connections.

#### **Spooling under Load**

- Always ensure that wire rope passes between winch drum & mounting surface.
- Always wind in the wire rope as evenly and tight as possible

#### **CAUTION**

Avoid shock loading the winch when spooling in. If this is done you can cause a hazardous condition that can break the wire or damage the winch.

- Avoid pulling at an angle for an extended period.
- This will stack the wire up on side of the spool and cause serious damage to the winch.
- You may have to reposition the wire a few times to allow the winch to pull in a straight line.

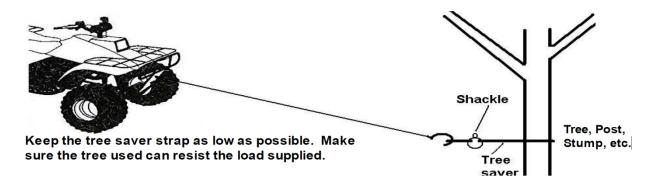
#### Rigging

- Spool out as much wire as possible to the farthest object available.
- Keep the wire in as straight a line as you can.
- Pack the line back on the winch as evenly as possible when retrieving the wire rope.
- Natural anchors like trees, stumps and rocks are the better choices.
- Always use a tree saver where ever possible.
- Only connect the wire rope to an object that will be able to resist the pulling power of the winch being used.
- Using a double line with a snatch block will reduce the load on the winch to about half.
- The lower the amp load on the winch the longer it will take to heat up the motor.

#### **Examples of Winching Techniques**

- These are some good examples on how to rig the wire rope for pulling.
- Always pull as straight as possible.
- Do not connect to anchoring objects that will not withstand the load applied to them.
- Do not allow the wire rope to gather on one side of the winch.
- It can damage or break the winch.

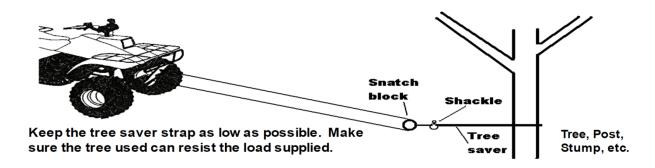
## Pulling with a single line



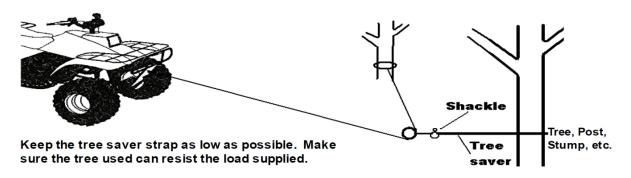
**File:** F-7406 **Page 5 of 8** 

Product:	TORQ ATV WINCH	
	4000lb	

## Using a snatch block with a straight pull



## Change of direction of pull



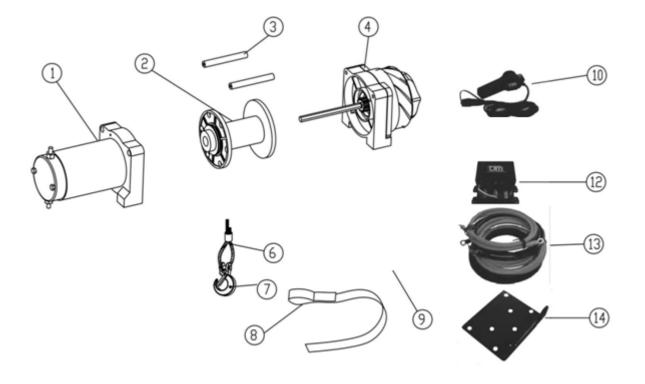
### **Trouble Shooting Guide**

<u>Symptoms</u>	Possible Cause/s	Suggested Remedy
	Switch apply not connected properly	Insert switch assy firmly to the
	Switch assy not connected properly	connector
	Loose battery cable connection	Tighten nuts on cable connectors
		Tap solenoid to free contact, applying
	Solenoid malfunctioning	12 volts to coil terminal directly. Make
Motor does no turn on		an audible clicking when activating.
Wiotor does no turn on	Defective Switch assy	Replace switch assy
	Defective motor	Check for voltage at armature port
		with switch pressed. If voltage is
		present, replace motor.
	Water has entered motor	Drain and dry. Run in short bursts
	Water has entered motor	without load until completely dry.
Motor runs too hot	Long period of operation	Let winch cool down periodically
Motor runs slowly or without	Battery run down	Recharge battery
normal power	Insufficient current or voltage	Clean, tighten or replace the
normai power	insuncient current of voltage	connector
Motor runs but cable drum does not turn	Clutch not engaged	Turn clutch gear ENGAGED position
	Defective or stuck color ::-	Tap solenoid to free contacts
Motor runs in one direction only	Defective or stuck solenoid	Replace solenoid
	Defective Switch assy	Replace switch assy

File: F-7406 Page 6 of 8

Product:	TORQ ATV WINCH	
	4000lb	

Part Breakdown List			
Item	Qty	Part Number	Description
1	1	946TQATVMTR	Motor 4.6HP 12V
2	1	946TQATVDRM	Drum (4000 ATV)
3	2	946TQATVTBR	Tie Bar Kit (Pair)
4	1	946TQATVGEAR	Gearbox
5	1		N/A
6	1	946TQATVSYN	3/16" Dyneema Cable (not shown)
7	1	946TQATVHOOK	1/4" Safety hook
8	1	946TQATVHOOKS	Hook Strap
9	1	946TQATVHSE	Hawse Fairlead
10	1	946TQATVHC	Handheld Control
11	1		N/A
12	1	946TQATVSKIT	Solenoid Kit
13	1	946TQATVCBLKT	Electrical Cable Kit
14	1	946TQATVMTP	Mounting Plate

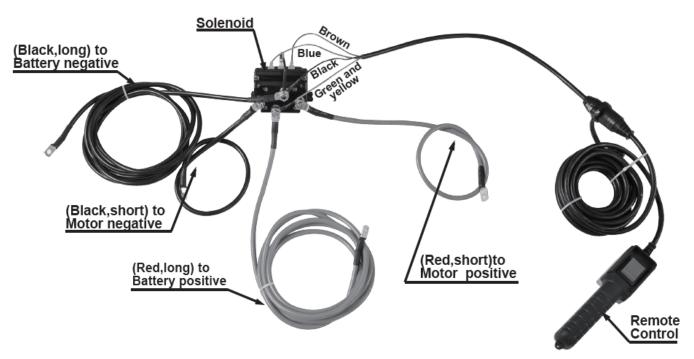


(Diagram for illustration proposes only)

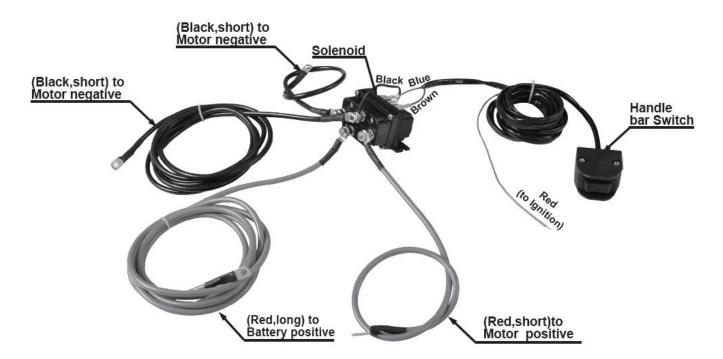
File: F-7406 Page 7 of 8

Product:	TORQ ATV WINCH
	4000lb

### Wiring Diagram for Handheld Control



Wiring Diagram for Optional Extra Handle Bar Control



<b>File:</b> F-7406	Page 8 of 8
Product:	TORQ ATV WINCH
	4000lb
	.555.5

## **Notes**