HG12500S
HG9500S

GENESIS RECOVERY WINCH

Fitting Instructions

Thank you for choosing our HULK 4X4 Genesis vehicle recovery winch.

In this manual, you will find detailed guidance on the following topics:

- Installation of the winch
- Servicing and maintenance procedures
- Best practices for using the winch
- Breakdown of parts

For a comprehensive understanding of vehicle recovery techniques, we recommend participating in an accredited off-road training course. This will further enhance your knowledge and skills in utilising your winch effectively.

Table of Contents:

What's in the box!

1 x Winch

1 x Synthetic Winch Rope
(Installed however Tensioning Required)

1 x Hawse Fairlead

1 x Clevis Hook and Hand Saver

1 x Mounting Bolts

1 x Earth Lead

1 x Control Box and Power Leads

1 x Control Box Mounting bracket

1 x Wired Remote

2 x Wireless Remotes

1 x Electric Cut-Off Switch

1 x Power Wire to Switch and Battery

1 x User Manual

Models

HG9500S model is rated to 9500lbs weight = 4309kg

HG12500S model is rated to 12500lbs weight = 5669kg

HULK 4X4 accessories (Sold separately)

Kinetic Ropes 9M

19mm - Part #: HU210 8.6T

21mm - Part #: HU211 13T

Complete Recovery Kit

Part #: HU200K

Hyper Shackles

10mm diameter - Part #: HU215 14T

12mm diameter - Part #: HU216 21T

Visit **hulk4x4.com.au** or scan the QR code to view more HULK 4X4 products

Safety and Installation Requirements

To ensure the HULK 4X4 Genesis Winch provides years of reliable operation, please take note of the following in-structions:

Professional Installation: It is highly recommended that a qualified technician or installer handles the installation of this HULK 4X4 Genesis winch.

Rope Tension: The winch rope is initially installed loosely on the drum during assembly. Before applying a full load, it is crucial to tension the synthetic rope properly.

Duty Cycle: This winch has a high-output motor and requires operating with a 50% duty cycle in 30-second intervals. After winching for 30 seconds, allow the motor to cool down for at least 30 seconds. Operating within this duty cycle will ensure the longevity and reliability of the winch.

Operating Voltage: The winch battery should have a minimum rating of 650 CCA (Cold Cranking Amps). Running the engine during winch operation is also recommended to keep the amperage low and voltage high.

Inspection Prior to Installation: Do not install the winch if any parts are broken or damaged.

Correct Installation: Ensure the winch is mounted on a flat surface with the drum rotation in the correct direction. Improper installation will affect the functionality of its braking system.

Solid Connections: Ensure that the power and earth connections are secure. Connect the main leads directly to the battery, and the control box earth directly to the motor's earth.

Compatible Mounting: Ensure the bull bar and winch mounts are suitable and rated for winch installation.

First-Time Use: Before tensioning the rope, run the winch in and out a few times. Pay attention to any unusual sounds or behaviours to identify any anomalies.

Periodic Use: To keep the winch in good working order, free spool the rope out and power it back in at least once a month.

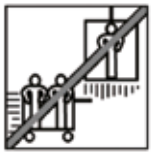
Off-Road Use and High-Pressure Washing: If your vehicle encounters bog holes, water crossings, or undergoes high-pressure washing, free spool the rope out and power it in a couple of times afterward. This will maintain the winch's optimal performance. Always respool the rope under tension.

Incorrect Use: This winch is not designed for industrial use, lifting, or moving people.
Never use the winch to hold a load under transporting conditions.

Read Owner's Manual

Always Use Handsaver

Keep clear of winch, wire rope and hook while operating



Never use winch to lift or move people

Never use winch to hold loads in place

Winch Installation and Torque Settings

Winches are universal and may require alterations to suit specific applications.

1. Before proceeding, carefully inspect the contents of the box to ensure all necessary components are present.
2. Thoroughly read and understand the winch manual before installation.
3. Verify the orientation of the winch and rotate the gearbox and motor if necessary. Refer to page 7 & 8 for instructions.
4. Inspect the winch bolts to ensure they have the correct tension and prepare them for installation.
5. Before proceeding with installation, remove the positive connection from the vehicle battery.
6. If required for installation, remove the bull bar or outer frame.
7. Install the winch into the cradle, ensuring that the drum supports are parallel and the winch is square. Refer to torque settings below. Make sure the drum direction is anti-clockwise when looking at the gearbox end. (refer to figure 1 below)
8. Insert the square nuts into the drum supports and thread the bolts with the spring and flat washer to hold the winch in place. Tighten the bolts to a torque of 55Nm.
9. If the winch bolts need to be longer for mounting, replace them with 8.8 ISO grade or higher bolts.
10. If the winch mount uses the fairlead, use the longer bolts supplied specifically for this purpose.
11. Reattach the bar work or frame to the vehicle after completing the necessary installations.
12. Mount and install the control box onto the bar work or frame.
13. Connect and wire up the winch, including the isolator switch. Ensure that all wires are secure and have adequate clearance to prevent rubbing on any components. (See page 10)
14. Ensure all connections are clean and solid.
15. Mount the hawse fairlead and pass the rope through it before installing the clevis hook.
16. Perform a final inspection of the winch setup before connecting the vehicle's battery.
17. Start the vehicle's engine. Free spool the rope out and power it in a couple of times. Test both the wireless and wired remotes.
18. Before use, pretension the rope onto the drum.
19. Ensure that the customer has a copy of this manual and understands how to operate the winch.

Drum rotation anti-clockwise looking at the gearbox

Nut and Bolt Torque Settings

Bolt sizes below represent the head size or socket size required
Ensure you use a medium grade thread locker for all nuts and bolts

Do not tighten any bolts with an impact wrench.

Gearbox Housing	3mm allen head bolts	2.26 - 2.82Nm
Tie bars	6mm allen head bolts	15Nm
Winch to mounting cradle bolts	5/8th / 16mm hex head bolts	55Nm
Fairlead Mount bolts	10mm allen head	45Nm
Control box bracket to winch mount	4mm allen head bolts	2.26 - 2.82Nm
Motor end plate bolts	10mm hex head	4.5Nm
Motor terminal bolts	13mm hex head	15Nm
Winch rope to drum	Allen head Bolt	15Nm

Motor Rotation Instruction

The HULK 4X4 Genesis winch is designed with a motor that can be rotated to accommodate various vehicle configurations.

Follow these steps:

1. Place the winch on a bench and stand it securely on its gearbox end using a soft rag or cardboard to prevent damage or tipping.
2. Loosen and remove the 8 small Allen key bolts that hold the motor cover in place. Remove the motor cover carefully.
3. Take note of the current orientation of the motor. The motor can be rotated in 90-degree increments.
4. Loosen and remove the two 10mm bolts from the thread.
5. Lift the motor up and rotate it in 90-degree increments until the desired alignment is achieved. Remove cap and ensure retaining spring is on top of the bearing. When re-installing retaining spring be cautious not to damage brushes as they will skim off armiture.
6. Before reassembling, ensure that the motor seal is in the correct position.
7. Securely tighten the motor bolts to a torque of 4.5Nm, using a cross hatch star configuration.
8. Place the motor cover back in position and fasten it with the 8 cover bolts tightened to a torque of 2.26-2.82Nm.

Gearbox Rotation Instruction

The HULK 4X4 Genesis winch allows for rotation of the gearbox to accommodate different vehicle configurations.

1. Place bare winch on a bench and stand it securely on its motor end using a soft rag or cardboard to prevent any damage or instability.

2. Loosen and remove the 8 small Allen key bolts that hold the gearbox in place. Do not remove the gearbox itself.

3. Gently tap the gearbox assembly to release the main housing and allow for rotation.

4. Lift the gearbox assembly up 3-5mm and rotate it in 45-degree increments until the desired alignment is achieved.

5. Before reattaching the gearbox assembly, ensure that the gearbox seal is in the correct position.

6. Securely tighten the gearbox bolts to a torque of 2.26-2.82Nm, using a cross hatch star configuration.

7. Lay the winch down on the bench and test the gearbox and clutch to ensure proper functionality.

Note: Avoid using impact drivers, as they can strip the housing threads and cause damage.

Control Box Mounting Instructions

For mounting the control box, you have multiple options:

Option 1:

1. Place the control box onto the tie plate.
2. Use the 4 x M4 Allen key bolts to securely mount the control box.

Option 2:

1. Remove the tie plate bolts on the motor side of the winch.
2. Securely mount the control box to the bracket using the M4 Allen key bolts and nylock nuts.
3. Mount the control box bracket using the tie plate bolts.

Option 3:

1. Determine the ideal location for mounting the control box on the bull bar.
2. Pre-drill the necessary mounting holes on the bull bar.
3. Mount the control box onto the bull bar bracket using the M4 Allen key bolts and nylock nuts.
4. Attach the control box bracket to the bull bar to complete the mounting process.

Please choose the option that suits your specific installation requirements or preferences.

Option 1

Option 2

Control Box Wiring Instructions

When wiring the control box, follow these steps to ensure proper installation:

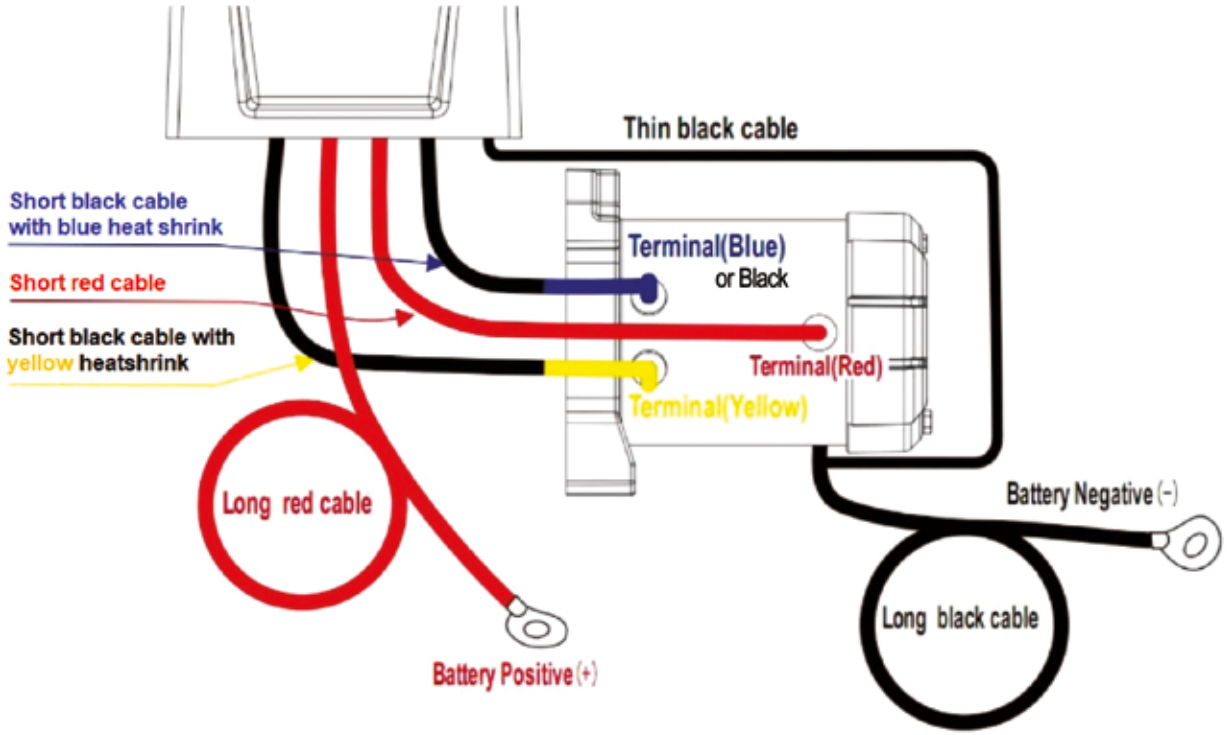
1. Ensure that the wiring leads are long enough to reach their respective connections without being stretched or rubbing on sharp corners.

2. Make sure that all connections are clean and securely attached to the correct terminals to prevent any electrical issues.

3. The small earth lead from the control box should be mounted directly to the earth terminal on the motor for proper grounding.

4. If you need to extend the wiring, use a larger wire size to prevent any voltage drop over the additional length, ensuring reliable electrical performance.

Winch Wiring Connections



Synthetic Rope Care and Pre-Tensioning Instructions

Although the benefits of the synthetic rope outweigh those of steel rope, it requires more care and attention.

Care and maintenance:

- The synthetic rope has been UV stabilized, but prolonged exposure to direct sunlight should be avoided.
- If the rope becomes muddy or sandy, wash it in mild soapy water and allow it to dry in a cool, shaded area.
- Regularly inspect the rope for abrasions, fraying, cuts, or loose strands. Do not use the rope if any damage is detected.
- Avoid side angle pulling to prevent wear and potential breakage. If possible, adjust the pulling angle or anchor point for a more direct recovery.
- Do not attach items like the clevis hook directly onto the rope to prevent damage.
- Use a tree protector instead of wrapping the rope around trees and anchor points.

Pre-tension:

- Ensure the vehicle is in a safe environment with 30m access in the front.
- Place the vehicle in neutral and engage the handbrake.
- Free spool the rope out until only 3 wraps are left on the drum, then anchor it to a solid point.
- Start the vehicle, engage the isolator switch, put on gloves, and have the winch remote ready.
- Engage the winch clutch and begin spooling the rope onto the drum without tension.
- With only light tension, spool on the rope, ensuring it is closely bunched. Once half the drum is covered, engage the handbrake and continue to load the rope under tension, directing it against the previous wrap.
- Repeat this process for the length of the rope, except for the last 1.5m. Remove it from the anchor and, using the hand saver, spool the remaining length on with pulse trigger actions.
- Secure the hook either on an anchor or against the fairlead under slight tension, then disengage the isolator switch.

Following these care and pre-tensioning instructions will help maximize the performance and longevity of the synthetic rope.

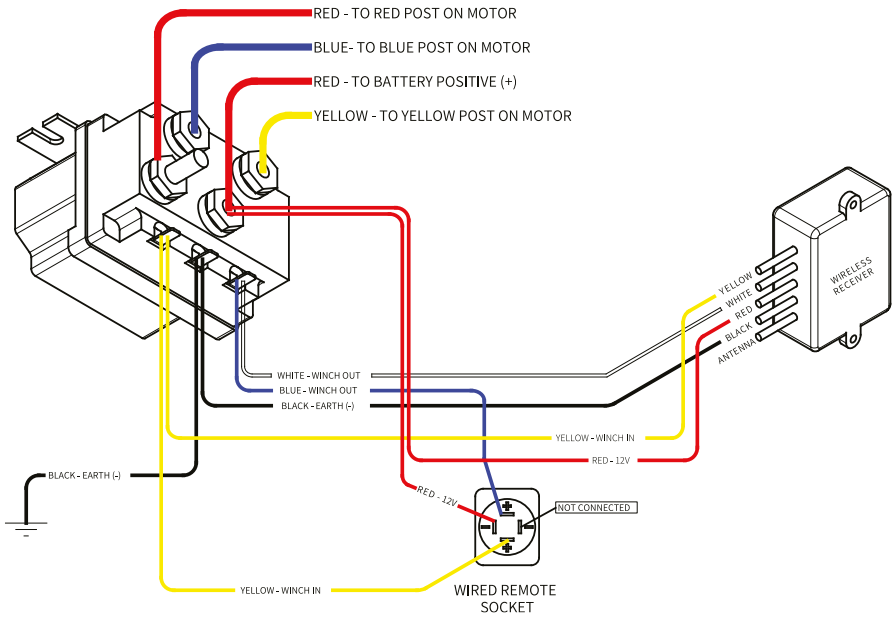
Winch Controls

Wired Remote:
To use the wired remote, simply plug it into the control box, ensuring proper alignment without forcing the plug in. Caution should be taken not to damage or misalign the pins. To remove the wired remote, press the lock button down and then remove it.

Wireless Remote:

- The wireless remote for this winch has been paired with the unique wireless receiver mounted in the control box.
- To activate the wireless remote, hold down both the "in" and "out" buttons on the remote for more than 2 seconds. The indicator light will turn on.
- To turn off the wireless remote, complete the same process, and the indicator light will turn off.
- If the indicator light fails to turn on, replace the battery by unscrewing the back cover and replacing the 23A 12V battery.
- If the remote needs to be replaced, the wireless receiver will also need to be replaced.
- Store both remotes in a dry area safe from damage.

Wireless Receiver Wiring Configuration:



Wireless remote control opening method:

Hold down the ↓ and ↑ buttons on the remote control for more than **2 seconds** at the same time and wait for the light to come on to use the remote control.

When the remote control is not in use, please turn off the remote control handle in time. The method of turning off the remote control is the same as that of turning on the remote control.

Winch Usage and Maintenance Guide

By following this maintenance and usage guide, you can ensure the longevity and effective use of your winch for years to come.

Clutch Operation:

- Free spooling the rope out offers two main benefits:
  1. Faster line speed
  2. Reduced brake shaft wear - Powering out will wear down the internal cone brake
- To disengage the clutch, lift and rotate the clutch handle 180 degrees to the free spool position.
- Pull out the desired amount of rope and then re-engage the clutch by lifting the clutch handle and rotating 180 degrees.
- Never turn the clutch while the winch is working.
- If the clutch is hard to rotate, it may be due to a load on the drum. Release the load and retry the clutch.

Winch Duty Cycle:

This winch is designed for intermittent powering. Continuous load could cause the motor to burn out.
Several situations can decrease the duty cycle of the winch and leave it inoperatable:

1. Overloading the winch, bogged situations, and obstacles
Recommendation: Remove obstacles or create ramps if necessary.

2. Additional load, such as towing
Recommendation: Use a snatch block or winch ring to increase pulling capacity.

3. The distance of the anchor point
Winches are rated on the first layer of rope if your anchor is only 5m away you will be pulling from the third layer.
Recommendation: Move the anchor further away to ensure the maximum pulling capacity.

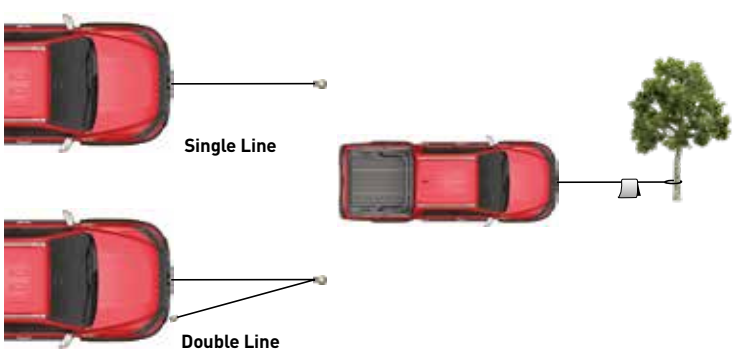
4. Power and voltage running to the winch
Lower voltages increase amps and heat.
Recommendation: Allow the battery time to recharge and keep the engine running.

We recommend a 50% duty cycle: 30 seconds of winching followed by 30 seconds of rest, unless any of the above conditions cannot be met.

Using Your Winch:

- If your vehicle or another vehicle is stuck the time has come to winch!
- Ensure the vehicle is in a safe environment with clear access in the front.
- Identify the best place for an anchor point and align the rope with the vehicle's departure path. Use a winch extension if needed.
- Avoid allowing the rope to touch any obstacles. Use a cable damper to eliminate recoil if the rope breaks.
- Ensure clear communication with other participants if other vehicles are involved in the recovery process.
- If the winch reaches its capacity due to overloading or a bogged scenario, use a pulley block or winch ring for mechanical advantage. (Refer to Image 2)
- When pulling from an angle, periodically stop and respool the rope to prevent damage. (Refer to Image 1)
- After use under load, respool the winch to ensure it is ready for the next recovery. (Refer to the pre-tensioning instructions on page 13)

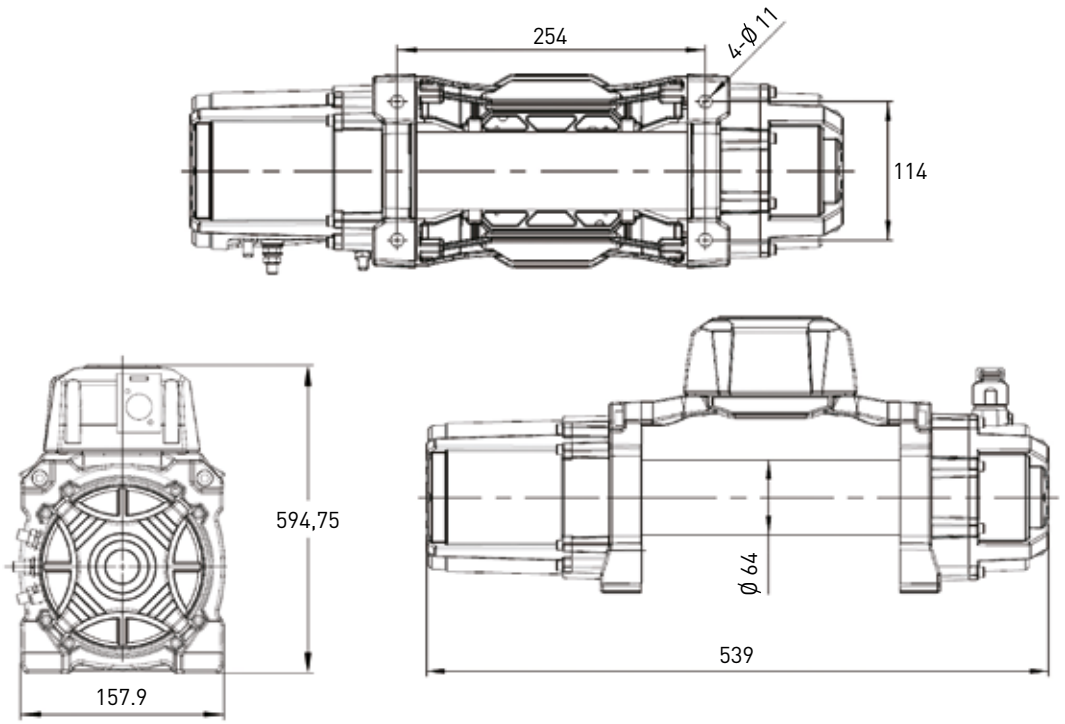
By following this maintenance and usage guide, you can ensure the longevity and effective use of your winch for years to come.



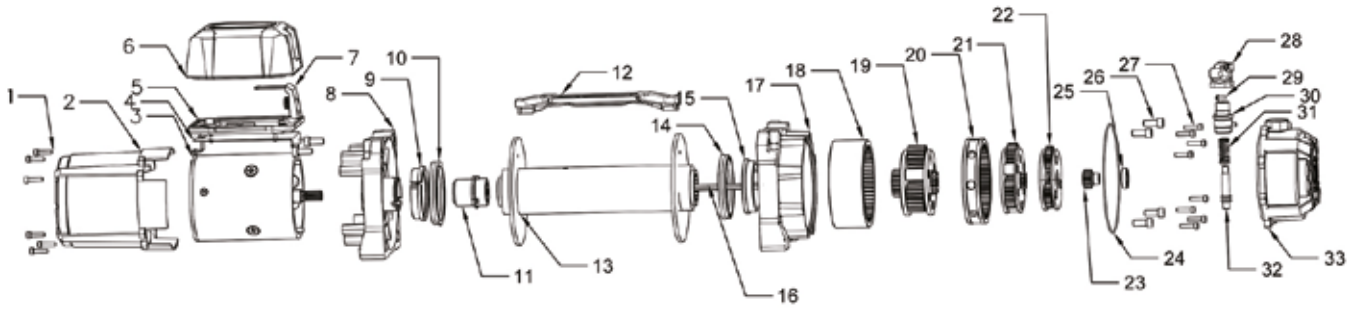
Winch Maintenance Schedule

Failure to follow the maintenance schedule may result to low performance and possibly void warranty.

Classification of check			Item		Checking method	Checking reference
Before every use	Periodical					
	One month	Three month				
		*	Complete winch		Operate the winch in and out	Minimise corrosion of the internal motor components
*			Installation	Mounting bolts & alignment	Bolts tension & wear	Tightened and aligned
*			Remote control	Working	Manual	Reasonable actuation
		*		Wearing in contact points	Visual	Free of wear or damage
*			Rope	Broken strands	Visual, measuring (Monthly)	Less than 10%
*	*			Decrease in rope diameter	Visual, measuring (Monthly)	7% of nominal Diameter max
*				Deforming or corrosion and fastening condition of end	Visual	No existence of abnormalities
		*	Freespool	Wear in spring	Visual evidence of wear	Free of wear or damage
		*	Motor	Visual damage	Visual evidence of wear	No existence of abnormalities
		*	Brake			
*		*		Performance	check operation on an incline	engaged no slip
		*	Gearbox	Damage wearing	Visual / operational evidence of wear	Free of wear or damage and distortion



Winch Exploded View



Item #	Description	Qty
1	Socket Screw M5 x 18	8
2	Motor Cover	1
3	9500 & 12500 Motor	1
4	Control box brackets	2
5	Control box base plate	1
6	Control box top cover	1
7	Waterproof remote plug cover	1
8	Drum support- Motor	1
9	Nylon bearing	1
10	Seal kit	1
11	Brake	1
12	Tie plate	1
13	Drum assembly	1
14	Seal kit	1
15	Nylon bearing	1
16	Drive shaft	1
17	Drum support- Gear box	1

Item #	Description	Qty
18	Clutch gear	1
19	Gear Assy 3 stage	1
20	Clutch ring	1
21	Gear Assy 2 stage	1
22	Gear Assy 1 stage	1
23	Sun Gear	1
24	O ring seal gear box	1
25	Bearing	1
26	Socket screw M8 x 25	4
27	Socket screw M5 x 20	8
28	Clutch handle	1
29	Clutch handle retaining bolt M4 x 8	1
30	Clutch sleeve	1
31	Clutch spring	1
32	Clutch box	1
33	Gear box cover	1

Spare Parts

Product	Qty	Part #
9500 and 12500 Motor	1	HG9500-3
Waterproof remote plug cover	1	HG9500-7
Drum support - Motor	1	HG9500-8
Brake	1	HG9500-11
Tie plate	1	HG9500-12
Drum assembly	1	HG9500-13
Drive shaft	1	HG9500-16
Drum support- Gear box	1	HG9500-17
Socket screw M8 x 25	4	HG9500-26
Mounting bolt kit (includes below bolts)	1	HG9500-43
Motor brushes 9500 and 12500	1	HG9500-3-1
Control box 9500 and 12500	1	HG9500-37
500amp contactor	1	HG9500-38
Wirless remote kit (inc receiver & 2 x remotes)	1	HG9500-39
Wired remote	1	HG9500-40
Remote socket extension	1	HG9500-41
Control box relocation wire kit 1.2m x Yellow, Red and Blue	1	HG9500-42
Synthetic rope 9500 - 30 x 10mm Black with anchor	1	HG9500-33
Synthetic rope 12500 - 28 x 11mm Black with anchor	1	HG12500-34
Clevis hook	1	HG12500-35
Hawse fairlead	1	HG9500-36
Gear box kit 9500 (includes 17 to 33)	1	HG9500-44
Gear box kit 12500 (includes 17 to 33)	1	HG12500-44
Brake kit (includes 11 & 16)	1	HG9500-45
Winch seal and maintenance kit	1	HG9500-46

DISTRIBUTED BY
Automotive Imports
22-28 Lexton Road,
Box Hill, Victoria,
Australia