

GP82/83 Handbook & Operators Manual



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guide

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Introduction

The GP82 and GP83 model winches have been designed and built to give the highest

level of performance in a demanding world.

Using materials and designs that set it apart from all its competitors, it is the standard

that others aspire too.

These winches have been built to give the end user total reliability in toughest of

situations and supply unequalled power and speed at those critical moments.

The next pages will provide you with the information that you require to fit use and

maintain these winches.

Mountings:

The GP82/83 has 12 mounting bolt positions and can be fitted standing or lying flat. A

minimum of six retaining bolts must be used at all times.

A winch plate with a minimum thickness of 8mm must be used and be well secured to

the vehicle. Failure to do so could result in damage to the winch or vehicle.

Warning

Failure to fit the winch correctly could result in damage to the winch or vehicle.

Fitting of the winch to a weak or bent winch plate could result in poor operation or

damage to the winch or freespool mechanism.

Wiring

This winch is supplied with two Albright contactor packs and a wiring diagram. Please

follow the next tips.

1/ Use 60/70mm2 Cable from the batteries to the contactors via a suitable cut off

switch.

2/ Use 60/70mm2 cable from the battery earth (ground) to the motor earth (ground)

points

3/ Use 40/50mm2 cable from the solenoids to the motors.

4/ Fit the contactors as close to the winches as possible.

5/ Use quality batteries, we recommend Odyssey

6/ Use quality cable and battery terminals that are professionally fitted

7/ The use of a 100amp plus alternator is recommended.

8/ Always use quality motors from a known source. We recommend the use of matched

motors.

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Warning

Failure to earth (ground) the winch correctly or to use incorrect cables could result in damage to the winch or vehicle electrical system

Winch ropes and cables

The GP82/83 are very powerful and require strong ropes to avoid breakages.

We recommend the use of 11mm Plasma rope or the equivalent strength (10.5ton/21000lb)

We do not recommend the use of steel rope. However if it must be used we advise that a minimum of 10mm is used.

Warning

The use of old, damaged or unsuitable ropes or cables could cause injury to personnel or damage to the vehicle or winch

Free spool fitting and operation

Follow the simple diagram for fitting the freespool control solenoid and operating switch and pipe work.

When mounting the switch, try to mount it in a position where it is easy to see and cannot be knocked accidently.

When using the freespool for the first time, follow these simple rules to ensure positive operation:

- 1/ Before disengaging the freespool be sure there is no load on the winch or cable.
- 2/ When removing cable from the drum take care not to accidently knot the rope
- 3/ After reengaging the freespool we recommend that you run the winch 'out' approx 1 metre and then 'in' to allow the freespool mechanism to engage fully.

Warning

Failure to follow the above instructions could result in injury or incorrect operation of the winch

Using your GP82/83

The GP82/83 is a very fast and powerful winch that requires respect during use.

Here are a few tips and techniques that will help you get the most from the winch.

- 1/ Place your winch switches in a location where they are easy to use and see, also somewhere they cannot be knocked easily.
- 2/ NEVER put your hands in the fairlead or near the winch during operation.

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3/ Always be sure to use a secure winching point.

4/ Do not stall your winch, if your winch should slow down or near stalling STOP. Check for obstructions under or in front of your vehicle or possible faults with your electrical system.

5/ Always allow the winch to stop turning before switching in a different direction.

6/ When winching, always try to keep you wheels turning at the same speed as the winch. This will help aid traction and get the most from the winch.

7/ Always keep the cable or rope under tension this will help to eliminate the chance of over spooling or ropes becoming wrapped around the winch, which to could lead to

breakages or premature rope failure.

8/ Do not allow the cable to 'Bunch' on the drum this could lead to the tie bars being bent or in the worst case actually breaking the winch casing and or damaging the rope or cable.

Maintenance

Care of the GP82/83 is paramount to its reliability and continuing high performance.

Here are a few tips and recommendations:

The GP82/83 holds 0.5litre of oil and various grades can be used dependant on location and temperature of climate. We recommend Dexron 11 (ATF)

The winch oil should be changed on a regular basis (at least yearly)

After prolonged use we recommend the stripping of the motors and cleaning. Check the brushes and holders for correct operation.

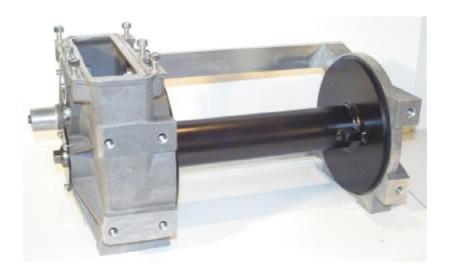
Clean the brake assembly using water to remove mud and dust, after cleaning apply a thin film of water repellent (WD40 or equivalent) The use of oil based products is ok as GP82/83 brakes can be run dry or with grease and oil.

Spare parts:

A full range of consumables and spares are available for the GP82/83

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GP82/83 Free spool drum build instruction manual:



Tools required:



- 1. Circlip Plyers (Inner & Outer)
- 2. Alan Keys. (3mm, 4mm, 6mm, 8mm & 10mm)
- 3. Soft Blow hammer
- 4. Degrease/brake & clutch cleaner
- 5. Rubber/multi purpose grease
- 6. Sealant

Step-by-Step Instructions:

Step 1:



Remove winch drum & strip winch completely so that lower hosing is bare.

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Step 2:

Place the large lower gear into the lower housing with the shoulder facing towards the smaller hole. <u>DO NOT</u> fit any of the other lower parts!!

<u>Note:</u> The early large gears do not have a recess in the face, these will require machining or replacing with type gears so that the free spool drive fits.

Step 3:



Fit large cam gear to intermediate gear (7548) & place into lower housing with the shoulder facing the large hole.

Step 4:



Fit round shim & circlip to small cam gear & fit into the intermediate gear, which is already fitted.

Note: The smooth side of the shim facing the circlip.

Step 5:



Now fit the mainshaft, <u>DO NOT</u> forget to fit the shaft "O" ring. When fitting end bearing, de-grease & use a smear of sealant.

Step 6:





Lay the housing face down & fit the bronze bush & oil seal. Take care not to catch the lips of the seal. When fitted, fit 2 seal retaining screws.

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Step 7:



Turn the housing on its back & fit the large gear into the large gear. Take care not to damage the bearing on the other side.

Note: Make sure all are gears are Clean & grease/dirt free.

Note: The early large gear (7550) does not have a recess, if this is the case our gear will not fit and you will need to replace it with a newer type gear.

Step 8:



Now fit the needle bearing into the gear.

Step 9:



Degrease bearing aperture & bearing. Apply sealant & fit. Knock home carefully with a soft blow hammer.

Step 10:



Degrease bearing spacer apply sealant & fit.

Note: On later models this part has been deleted.

Step 11:



Fit bearing retention plate.

Note: DO NOT over tighten counter sunk screws

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Step 12:



Clean the inside of the drum that receives the piston. Clean the piston & seals and apply rubber grease. Fit piston into drum being careful not to damage the seals.

Note: If no rubber grease is available use normal grease.

Step 13:



Thoroughly clean drum & apply sealant before fitting drum to lower housing.

<u>Note:</u> A sharp tap may be required with a soft-faced hammer to locate the drum all the way home.

Step 14:



Fit drum end support & brace bars & fairlead. This holds the drum in place while the sealant dries.

Step 15:



Fit the piston assembly.

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Step 16:



Fit the pawl mechanism.

Note: This is now an M6 thread.

Step 17:



Fit the top housing.

Step 18: Add 0.5ltr of EP80/90 hypoid gear oil.

Step 19:



Fit the brake assembly.

Note: DO NOT forget to prime the pawl mechanism

Step 20:



Fit the motors of choice.

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Step 21:



Fit to vehicle & Enjoy.

If you have any questions regarding any stage of the above, please don't hesitate to call.

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M8274 Twin motor top housing fitting instruction manual:



Tools required:



1.	Hammer	7.	8mm drill bit
2.	10mm spanner	8.	Sealant
3.	¼ ball headed Allen key	9.	Thread lock (supplied)
4.	2.5mm Allen key	10.	3/8 socket & ratchet
5.	Small flat blade screw driver	11.	Scribe
		12.	Centre punch

Kit Contents:

- Gigglepin Twin motor top housing
- 1x Nut & Bolt
- 1x Tube of thread lock
- 1x Breather connector
- 3m of 6mm breather tube

Recommendation:

It is recommended that before installing the twin motor upgrade that you install the Gigglepin up rated mainshaft kit.

3.5mm drill bit

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Step-by-Step Instructions:

Step 1:



Using the ¼" Alley key, remove the 3 bolts that secure the upper motor housing & place to one side.

At this point, we would recommend carrying out any service work to the lower part of the winch and changing the oil.

We recommend 0.2 ltr of EP80/90.

Step 2:



Fit the breather elbow to the housing side cover.

Step 3:



Remove the bolts from the Gigglepin top housing. Take care & place them somewhere safe.

Taking care, ease the side plate from the top housing and place somewhere safe.

Step 4:



Without using sealant fit the new top housing to the winch taking care to make sure it locates correctly.

Fit and tighten the 3 standard fixings.

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Step 5:



Using the scribe, mark the position of the new mounting on the lower housing, using the top housing as a guide.

Step 6:



With the centre punch spot, mark the centre of the scribe mark. Then make sure to protect the inside from swarf.

Drill through the mark made by the punch with the 3.5mm drill bit. Then enlarge the hole with the 8mm drill bit.

Clean away the swarf and tidy the edge of the new mounting hole.

Step 7:



Insert the 3 bolts onto the housing as shown.

Step 8:



Apply a bead of silicone type sealant to the mating and fit side plate to the winch top housing.

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Step 9:



Before fitting the bolts take care that the special washers are fitted correctly with the raised inner facing the bolt head.

At this point the bolts may be evenly tightened taking care to draw the end plate evenly.

Step 10:



Apply a bead of silicone type sealant to the top housing and fit the winch taking care to ensure the correct location and meshing is achieved.

** Important note **

Apply the thread lock to each of the 4 square nuts and tighten fixings as required.

Step 11:



The motors can now be fitted. We recommend the use of a gasket or a small bead of silicone type sealant. We also suggest a smear of grease (Multipurpose) is applied to the shaft of the motor before engaging to the top housing.

Please allow 24 hours for all sealants and thread locks to dry.

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Step 12:



Your winch is now ready to be installed onto your vehicle.

Please ensure that the breather is routed to a high point on the vehicle were water and dirt ingress is unlikely.

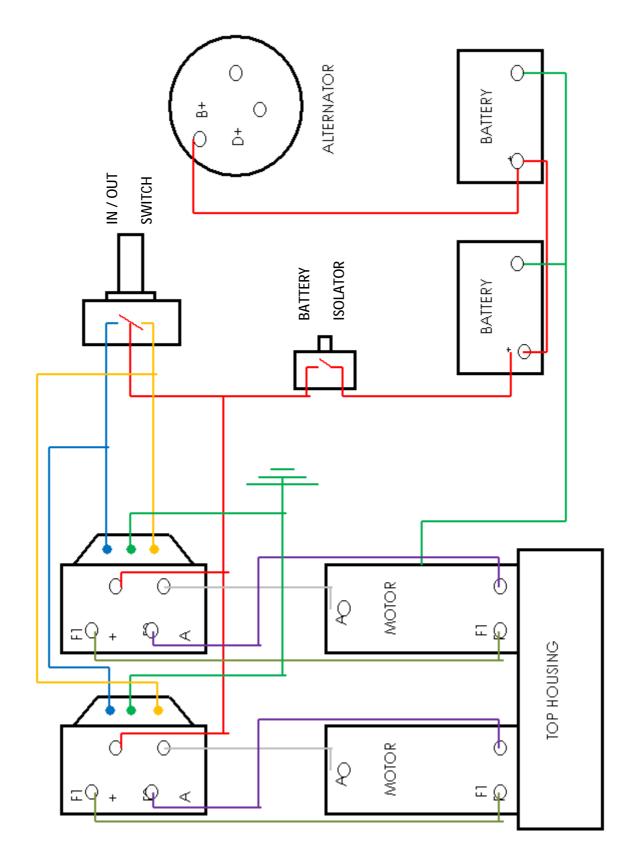
We recommend that the oil is changed after 1st use and a regular intervals thereafter.

Due to the nature of the straight cut gear teeth you may find the winch noisy in operation, this is quite normal.

If you have any questions regarding any stage of the above, please don't hesitate to call.

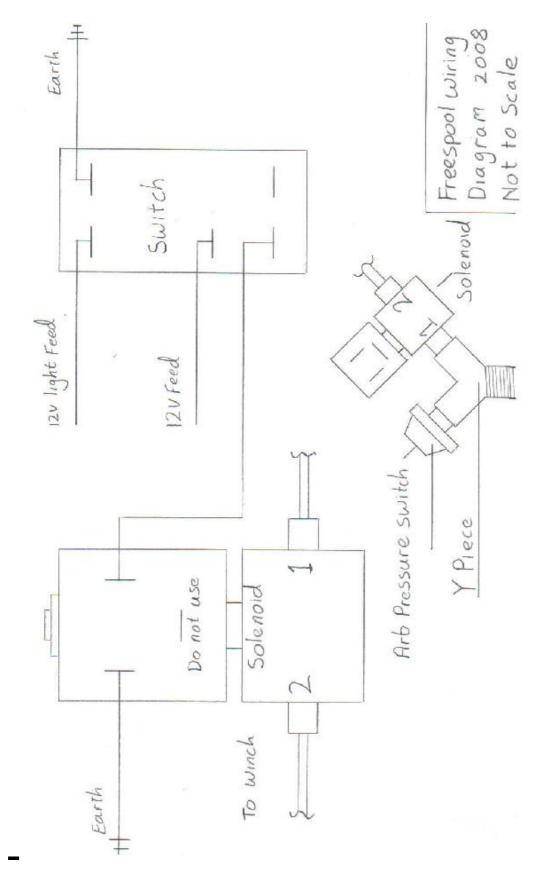
GP82/83 wiring diagram:

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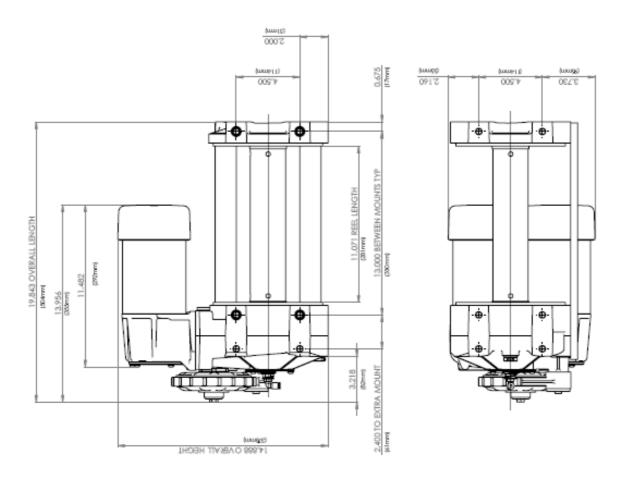
GP82/83 free spool wiring diagram:

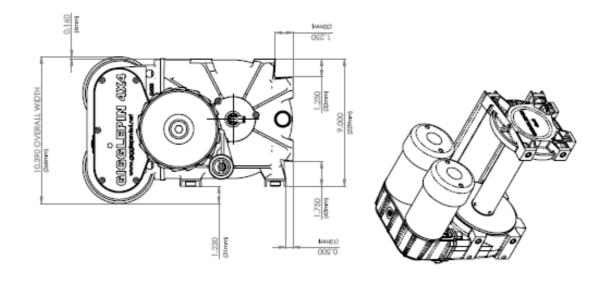
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