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## Maintenance

### Refuelling

**THE WINCH RUNS ON LPG WHICH IS A HIGHLY FLAMMABLE GAS. DO NOT REFUEL THE WINCH ON YOUR OWN UNLESS YOU ARE SIGNED-OFF TO DO SO. THE WINCH AND ITS RETRIEVE VEHICLE MUST BE SWITCHED OFF DURING REFUELING.**



The Skylaunch has 2 fuel tanks which are filled with LPG from Portmoak's own tank just outside the clubhouse. The key used to unlock the tank's padlocks can be found inside the winch.



Unlock the gate and remove the padlock from the main isolator switch. Turn the isolator switch clockwise until it clicks.

## Begin Refuelling



Remove the yellow cap from whichever tank you wish to fill. Carefully screw on the hose to the tank's fitting. Be careful not to under- or over-tighten the connector. Open the hose's valve and use the clip to hold it open - there may be some leakage of LPG when you do this.

Using the thin piece of wood left at the control unit; press and hold the green button. The sound of the pump will change substantially once the tank is full. Release the button when this is heard.

Close the hose's valve - there will be a small burst of LPG from the connector. Then, carefully unscrew the connector, making sure to not accidentally unscrew or damage the tank's fitting (it has been snapped before). Replace the tank's yellow cap.



**Note:** The tank’s gauge shows the pressure inside the tank. Around 60 is full.

Then, refuel the other tank (if required).

### Finishing Up

Place the hose back into its stand. Flick the main isolator switch back to off and replace the padlock. Place the piece of thin wood back in its slot at the control unit.

Remember to re-lock the gate.

### Emergencies

Whilst it is very unlikely, if the flow of LPG cannot be stopped from the large main tank, press the red button on the control unit. This will cut-off the supply from the tank.

The following table has been provided by AvantiGas:

Gas leak OUTDOORS	Major LEAK or FIRE
<ul style="list-style-type: none"> <li>* Extinguish all naked flames immediately.</li> <li>* Turn off the gas at the gas shut-off valve on your tank.</li> <li>* Call AvantiGas on our 24-hour emergency phone number - <b>0808 178 2009</b>.</li> </ul>	<ul style="list-style-type: none"> <li>* Avoid personal risks.</li> <li>* Call the fire brigade on <b>999</b> and advise them it’s a leak/fire involving LPG (Liquefied Petroleum Gas).</li> <li>* Evacuate everyone from the area.</li> <li>* Keep upwind of any leakage.</li> <li>* Call AvantiGas if it’s safe to do so on our 24-hour emergency phone number - <b>0808 178 2009</b>.</li> </ul>

### Replacing Weak Links



Using a ratchet, remove the bolt from the weak link assembly and the strop.

Place a new weak link of the correct colour in the weak link assembly. Verify that its number matches the strop's colour. Insert and tighten a nut and bolt. It should be relatively tight, but the shackle should still be able to move with some resistance.



Then, place the strop's shackle over the weak link assembly, and insert and tighten a nut and bolt. Again, it should be relatively tight whilst allowing some movement with resistance.

## Oil

There is a container of oil stored in the winch. Topping up the winch's oil levels is very similar to the process for doing the same to a car. There is a cap on the top of the engine for this purpose.

## Splicing Dyneema



Trim the cable using a pair of scissors to remove the frayed ends.



Mark each end of the cable, leaving around a foot of extra cable on each end.



Attach either end of the cable to the splicing fid (which can be found in the blue wallet in the winch's cabin). Then, push the splicing fid (with the cable end attached) through the mark you placed on the other cable end.



Working away from the cable's broken end, push the fid through the cable 3 times.



After the 3rd time, push the fid into the cable (instead of pushing all the way through). Carefully feed the fid through the centre of the cable.



Once all the cable has been fed through the inside of the other end, remove the fid. The cable's end should still be attached to the fid.



Detach the cable end from the fid, then using a pair of scissors, further trim the cable end to create a smaller point.



Pull the cable tight until the end of the cable is no longer visible.



**Repeat the above steps for the other cable end.**

From:

<https://pilots.scottishglidingcentre.co.uk/> - **Portmoak Pilot's Information and Airfield Manual**

Permanent link:

<https://pilots.scottishglidingcentre.co.uk/winch/maintenance>

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