

Ski Club of SA: PORTALIFTS 1 & 2 DOCUMENTATION, PART 4 of 5

PORTABLE SKI LIFTS No.1 with GS45 engine and No. 2 with GX240 engine: Periodic maintenance

v 30 March 2010 "Rectify" hereunder may mean items must be taken down to the main hut or back to town for treatment. Alternatively, it may mean replacement must be obtained and brought up the mountain.

Before and after each skiing season (with reference to inventory; see USERS' MANUAL):

Entire outfit:

Check for completeness per inventory; report missing items. Rectify shortfalls. Re items 2a,b, it is uncertain whether the full complement (2 ropes w reel(s)) will be on hand for each of the lifts.

Item 1a: Engine (with catch loop on Lift No 1)

Check tightness of various fasteners, condition of various parts. Rectify or report as nec'y

Check tightness of grub screw on drive pulley on engine output shaft; rectify if nec'y

Check internal state of petrol tank and carburettor float chamber; should be empty and free of residue/gum from petrol left in them. Report if not; item(s) may need to go down for cleaning.

Check sump oil level and condition. If nec'y top up, or drain and replace. **???? QUANTITY?**

Put a small qty of petrol in tank, try to start engine, test raising and lowering speed (see hints in USERS' MANUAL). **Drain petrol tank and carburettor.** Report result, rectify if nec'y.

Rucksack frame

Check condition of all parts, check lashings onto the frame, to ensure frame can be used for portage (carrying lift to site of use). Report, rectify if nec'y.

FOR PORTABLE SKI LIFT No.1 with GS45 engine:

Item 1b: Drive pulley/chain drive assembly

Check for tightness of fasteners, wear on sprockets, excessive slackness of the chain. Check for adequate grease on the chain. Report, rectify as nec'y

Items 1a,b Drive unit

Perform trial assembly including the V-belt and tensioning thereof, ie check function of the tensioner. Report, rectify if nec'y

FOR PORTABLE SKI LIFT No. 2 with GX240 engine:

Item 1b Drive pulley/tension bar assembly incl. catch loop

Check for tightness of fasteners and grub screws in pulleys, chk condition of various parts. Report, rectify as nec'y

Items 1a,b Drive unit

Perform trial assembly including the V-belt(s). Check tension of V-belt(s), adjust if nec'y (see USERS' MANUAL / Fig 1a for Lift No 2). Report, rectify where nec'y

FOR BOTH LIFTS:

Items 2a,b Liftrape(s) and reel(s)

Inspect: The ropes should have all 3 strands intact. A degree of fraying, due to rubbing on rocks or the effect of the V-groove drive pulley, is acceptable. Possibly the ropes have been affected by age or ultraviolet radiation, and will break when loaded. A brochure from Southern Ropes, ~2007, says "UV degradation is indicated by discoloration and the presence of splinters and slivers on the surface of the rope".

Replacing liftrape(s): Rope used to come in 10kg/220m rolls. So a 400m length was obtained by splicing together two 10kg rolls.

Items in Package 5, in rucksack:

V-belt and spare V-belt

Check condition of V-belt(s); report if in need of replacement

Return pulley and two idler pulleys

Pulleys should be secure in the holders, be easily removable / replaceable. Should turn freely; the bearing(s) may in time need replacement.

Tensioning assembly (triple purchase), spring with end yoke/s

Spring should be tested, perhaps using tensioning assembly: Measure unloaded length. Stretch the spring (by estimated 2.5m) to give tension 25kg/55lb; it should give tension 20kg/44lb or less when then allowed to contract 0.5m. Should return to unloaded length when load is removed. Report deviation, also any inadequacy of the tensioning assembly. Rectify.

All other items within Package 5

Inspect for serviceability. Report; rectify where necessary.

After completing above, stow/store the outfit in accordance with USERS' MANUAL