

## Winch Cable Retrieving

### Objective

This SOP documents the procedures for retrieving winch cables and is a supplement to a practical training session conducted by the winch master, winch driver or other qualified club member. The Winch driver is responsible for directing winch cable retrieving operations.

### Daily Inspections

All club ground equipment has to have a daily inspection (DI) before use. Before driving the tow out truck ensure the following checks have been completed (they will usually be completed by the winch driver).

- If possible check engine oil and radiator levels before starting.
- Check (visual) that all tyres are inflated and inflate where necessary.
- Check for anything that has recently broken or fallen off.
- Ensure there is enough fuel (Diesel) for the day's operation.
- Check the cable traces and parachutes are in the trough at the back of the truck. There should be two large parachutes used for normal conditions and two smaller parachutes used for cross wind launching.
- Check the cable maintenance tool kit is present. There should be:
  - Bolt cutters.
  - A tool box with various tools in it and spare ferrules for repairing cables.
  - The handle for the crimping press and a screwdriver are kept in the cage for the press.
  - There is a supply of ferrules kept in the winch spares cupboard. Please make sure that you inform either the winch master or the office they are running low.

### The Tow Out Truck

The truck is adapted from a Ford Transit. It does not have power steering or ABS and can be heavy to maneuver. Great care must be exercised on slippery surfaces, because the front wheels lock easily and could cause loss of control. There are some essential safety procedures to follow:

- The speed limit on the airfield is 20 mph.
- The tow out truck can only to be driven by club members who have a full driving license or club members who have been given specific exemption.
- Do not drive the truck with the cable tow out arms extended (unless towing cables).
- Do not maneuver truck with cables attached.
- Drive very carefully when maneuvering near the launch point and anywhere where gliders are parked.
- If you hear a STOP command stop driving immediately. There have been accidents where the truck driver has driven over the wing of a glider.

## Attaching Winch Cables

Position the tow out truck about 20-30metres in front of the winch on the track between the winch and the launch point. You may have to driver around the winch to position the truck. Follow the process below to attach the winch cables. See Appendix A for illustrations.

- Lay out the 'chutes and cables along each side of the winch track.
- Extend the truck tow out arms so that the rod along the top of the arm engages and raises the post at the outer end ready for hooking the cable attachment wire.
- The winch cable is attached to the shroud end of the 'chute. There is a trace which connects to the weak link and coloured strop through the shackle at the top of the 'chute. There is a wire loop, which is used for attaching to the truck tow out arms.
- Thread the wire loop through one of the rings at the weak link end of the trace.
- Gather up the trace and strop and place in the trough at the rear of the truck making sure that the cables are behind the post on the side of the trough.
- Connect the cable to the tow out arms using the wire loop.
- Don't pull the cable from the winch too quickly or you will need to manually wind it back onto the drum.
- Ensure the tow out brakes on the winch are applied (ON).

## Towing Attached Winch Cables

Try to drive smoothly and avoid jerking the cables when setting off. Once moving try to maintain constant acceleration and speed.

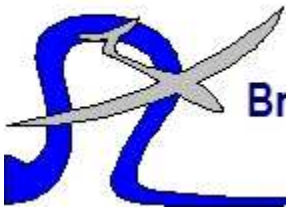
- Take up slack slowly making sure both cables are under tension before gently accelerating away in 1<sup>st</sup> gear.
- Once moving change as smoothly as possible to 2<sup>nd</sup> gear and tow the cables out at 15-20 mph trying to maintain a constant speed. Try to drive in a straight line so the cables stay on either side of the track.
- As the cables become extended the drag will be become more noticeable and require more power.

## Detaching Attached Winch Cables

Detaching the cables is an automatic process, but the cables can become snagged and the automatic release may not always work. If this happens the cables will have to be detached manually. Do not rush the process and listen out for a STOP command. If you hear a STOP command, stop immediately.

- At the launch point depressing the clutch will be enough to stop the truck and the tension in the cables will usually be enough to pull the truck back a few feet to allow the cables to be detached.
- If there is too much tension in the cables, back the truck up until the tension disappears and the cables can be detached.
- Make sure that no one is in the way and use the tow out arm cords (on the roof of the cab) to retract the tow out arms. They need a firm pull.
- Once the tow out arms are fully retrieved and locked gently drive forward until the cables are free of the truck.

**Be aware that helpers may try and assist the operation my unloading the cables. Be vigilant when releasing the cables.**



## **Returning to the Winch**

Once the cables are free drive carefully around the back of the launch vehicle and position the truck so it can be driven back down the winch track to the winch. Check with the launch point organiser when you should return to the winch.

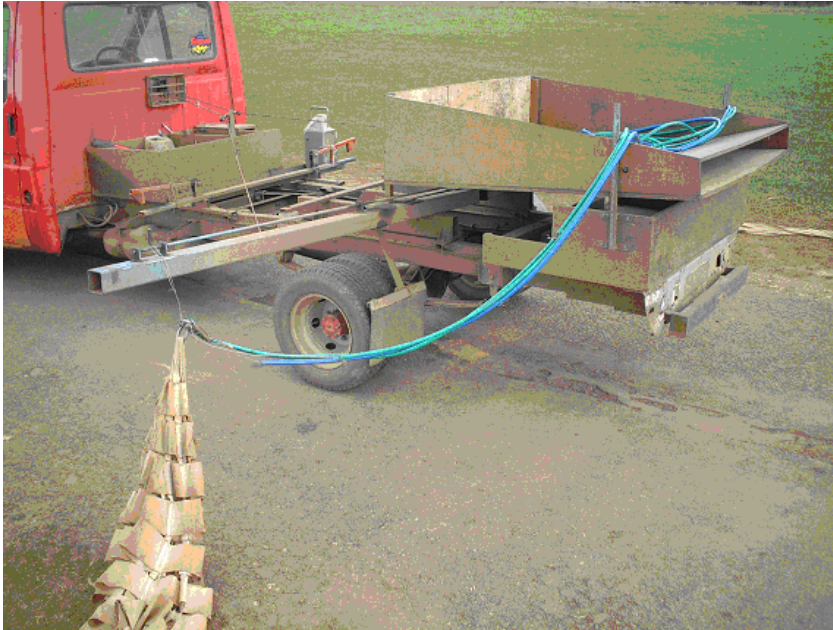
- You may be advised to return immediately
- You may be advised to return after one cable has been used
- You may be advised to return after both cables have been used.

**When maneuvering near the launch point take special care to avoid gliders positioned in the launch grid. It has been known for the retrieve truck to drive over a glider wing. DO NOT RUSH THE MANOUEVERING AND LISTEN FOR INSTRUCTIONS.**

## Appendix A

### Tow out truck - Cable Attachment

The following picture shows the tow out truck with arms extended and the cables hooked on to the arms (using the wire loop) and the cables placed in the tow out trough. Note that the parachutes hang loose and are not placed in the trough.



### Winch Tow Out Brakes

The following picture shows the winch tow out brakes. To tow out the cables the levers must be in the UP position.



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