

## Removing and Replacing Servo Trays

Servo trays are busy areas of the boat and there are a number of maintenance and repair jobs that are easier to do with the tray removed. There are slight differences in procedure for removing DF65 and DF95 servo trays.

## Removing the DF65 servo tray

Version 5 (and earlier) DF65s have two servo trays; one port side and the other on starboard. Four screws secure each. Version 6 DF65s have a single tray secured by four screws.

The following procedure removes the DF65 servo trays with all components attached.



DF65 Version 6 servo tray

- Remove the rig and power up the boat.
- At the transmitter centralise the steering and move the sheets to fully in (close hauled position).
- The DF65 instruction manual does not specify the position of the winch line clip when sheeted in. A measurement of 115mm from the back of the transom to the forward end of the winch line clip works well, Use a piece of tape on the deck to mark the clip position so we can return to this during later assembly. This is covered in the notes on Adjusting Servos.
- Switch off the boat and transmitter.
- Note the direction the winch line is wound on the drum. Remove the screw securing the drum, lift the drum off the top of the winch and let it dangle over the side. Don't worry if the drum unwinds.
- Remove the battery or battery cassette.
- Steering pushrod:
  - On a DF65 V5 hull, remove the steering servo arm from the top of the servo so that it can be disengaged from the Z-bend in the end of the pushrod. Once they are apart,

- replace the servo arm at the same angle you previously noted and secure with the retaining screw. Slide the pushrod back so it clears the back end of the servo tray.
- On V6 hulls, loosen the hex head screws that secure the rudder pushrod at the servo arm and the rudder arm. Slide the pushrod back so it clears the back end of the servo tray.
- Cut the cable tie that holds the on-off switch control rod. Rotate the rod so that it comes free of the switch toggle and slide it back so it clears the back end of the servo tray.
- Undo the screws holding the tray(s) and lift it free
  of the boat. The tray will still be tethered to the
  boat by the winch line, but you will be able to
  remove it from the hull and work on it
  independently.

## Removing the DF95 servo tray

The following procedure removes the DF95 servo tray with all components attached.



DF95 servo tray

- Remove the rig and power up the boat.
- At the transmitter centralise the steering and move the sheets to fully in (close hauled position).
- The DF95 instruction manual specifies the sheeted in position of the winch line clip as 165mm from the transom hook to the forward end of the winch line clip. Use a piece of tape on the deck to mark the clip position so we can return to this during later assembly. Check the notes on *Adjusting Servos*.
- Switch off the boat and transmitter and note the direction the winch line is wound on the drum.
- Remove the securing screw in the centre of the winch drum, lift the drum off the top of the winch and let it dangle over the side. Don't worry if the line on the drum unwinds.
- Remove the battery or battery cassette.
- Loosen the hex head screws that secure each end of the rudder pushrod. Slide the pushrod back so it clears the back end of the servo tray.
- Undo the six screws holding the tray and allow it to drop into the hull.

• The servo tray will still be held by the power switch push-rod which needs to be disconnected from the switch toggle. Rotate the tray anticlockwise inside the hull so that the end of the push-rod can be slid out of the hole in the switch toggle. The rod may need some gentle persuasion to exit the toggle. A little squirt of CorrossionX to ease any binding between the parts will help.



Rotate the tray to separate the switch push-rod

The tray can now be lifted clear of the boat. It
will still be tethered to the boat by the winch line,
but you will be able to remove it from the hull and
work on it independently.

## Replacing servo trays

To replace the servo tray, execute the removal procedure in reverse order.

Power up the boat and the trim sheets fully in. Ensure the winch line is not looped around the pushrods and is able to run freely. Mount the tray in place and reconnect pushrods in the order appropriate to your hull.

Wind line onto the drum, in the direction you previously noted, so that with the drum hovering over the winch spline, the winch line clip lines up on its mark. You should be able to drop the drum back onto the winch spline and check the clip position. You may need to adjust one spline rotation at a time until the clip is at its sheeted in position. Press home the drum and secure with the retaining screw.

Give it a quick bench test. All done.

You may need to re-centre the steering servo and rudder. See the notes on Servo Adjustment for this.