

Crawley Branch of

The British Sub-Aqua Club.

# **CLUB RIB INFO.**

An aide for boat handlers and coxswains.

**Kevin Turner - Equipment Officer** 

**Version 3 – 30 July 2010** 

#### Foreword...

I have tried to cover the most important aspects, their general care safety equipment required and attention to preserve the life and reduce expensive repair bills.

The most important thing to stress is no one knows everything about the RIB, so if you don't know about a particular aspect, ask someone else who does.

Kevin Turner.

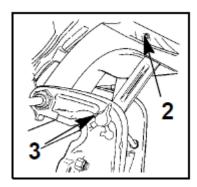
#### Contents...

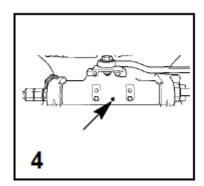
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## Checklist 1 - Prepare the RIB for to go diving...

- 1) Check that the RIB has all necessary equipment on board, (see items below), and that it is all securely tied down.
- 2) Necessary equipment includes:
  - a. Boat seat, and bungees for boat seat
  - b. Key box, containing
    - 1. Master isolator key
    - 2. Engine key
    - 3. Kill cord
    - 4. Key ring with hitch-lock, Tilgate barriers, and Club Hut key
  - c. Bow locker cover, and bungees for cover
  - d. Contents of bow locker
    - 1. Anchor and rope
    - 2. Inflator pump and hose for tubes
    - 3. Sea anchor
  - e. Diving Flag
  - f. 2 Oars
  - g. Emergency Fuel Container
  - h. Within the compartment over the cylinder rack
    - 1. Marinox Oxygen Set
    - 2. First Aid Kit
    - 3. Fire Extinguisher
  - i. Throwing line, in holder by the driving seat
  - j. Contents of dry box
    - 1. Flares (Inshore Pack)
    - 2. Air horn
    - 3. Handheld VHF Radio with charged battery
  - k. Contents of Tool box
    - 1. Tool roll
    - 2. Spare spark plug(s)
    - 3. WD40 spray can
    - 4. Spare kill cord
    - 5. Spare engine key
  - I. Fenders and ropes

- m. Painter
- n. Stern mooring line(s)
- o. Shot Line (depth of water plus 10-20%)
- p. Shot Weight (About 25kg)
- q. Shot Buoy (50% more buoyancy than the weight)
- 3) Check that the tubes are properly inflated, and inflate to the proper pressure if necessary.
- 4) Check that the engine covers are present.
- 5) Check that the hull drain plug is present.
- 6) Check two-stroke oil reservoir levels, and refill as necessary.
- 7) Replace engine covers and secure.
- 8) Grease both nipples on top of trailer hitch arm one squeeze each.
- 9) Grease the nipple under the bearing saver caps on each wheel hub. Continue until grease comes out of the inspection hole.
- 10) Grease two nipples on engine transom brackets
  - (2) until grease emerges from bottom of pillar
  - (4) one squeeze





- 11) Grease one nipple on rear of auxiliary engine one squeeze
- 12) Release, unscrew fully, and grease light board arms clamps.
- 13) Re-tighten clamps gently.
- 14) Turn steering wheel left and right, cleaning and greasing the push-rod at the engine transom bracket as necessary.
- 15) Power up electrics and test electrical items for correct operation a. Navigation lights on A-frame

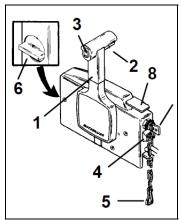
- b. VHF
- c. GPS
- d. Echo Sounder
- e. Aux pump).
- 16) Inform the Equipment Officer of any missing or damaged items.

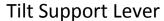
## Checklist 2 - Prepare the RIB for towing...

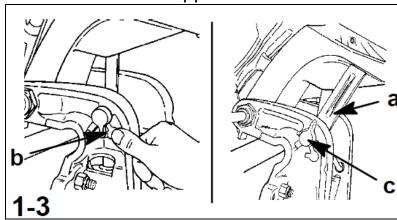
- 1) Check that the toolkit in the green box is complete, and place it in the towing vehicle. Contents should be:
  - a. SAS clamp, which must be used anytime the trailer is left unattended when not attached to a vehicle.
  - b. Scissor Jack
  - c. Wheel Brace
  - d. Spare Hub Bearings
  - e. All the necessary tools to change a Hub Bearing
  - f. Waterproof grease
  - g. A grease-gun
- 2) Check that the tubes are properly inflated, and inflate to the proper pressure if necessary.
- 3) Check that the engine covers are secure.
- 4) Check that the elephant's trunk is up and secured.
- 5) Check that the hull drain plug is in place and secured.
- 6) Raise the engine up using the trim/tilt switch (3) on the remote commander.
- 7) Remove any supporting rod from the transom bracket.
- 8) Engage the tilt support lever (a) by rotating the knob (c) to bring the support lever upward.
- 9) Lower the outboard to rest on the tilt support lever.
- 10) Attach the red/orange covers over the propellers of both the main and auxiliary engines.
- 11) Extend the trailer extension light board arms so that the light board will sit at about the end of the tubes (do not extend further than this as the clamps will become ineffective)
- 12) Tighten down the clamps on the extension arms fully.
- 13) Attach the trailer light board to the extension arms, and lock it into place with the special spring circlips.

- 14) Fit the number plate of the towing vehicle to the light board. Secure it in place with electrical tape or similar.
- 15) Run the lighting cable carefully along the top/inside of the RIB to the front of the trailer, and secure with enough slack so that the cable is not pulled out on sharp turns to the left or right.
- 16) Check that RIB is strapped to trailer by the two rear ratchet straps (normally in place), and tie off any slack in the straps so it doesn't flap, which can be distracting for the driver
- 17) Ensure that the winch strap is properly locked off.
- 18) Ensure that the front of the boat is properly strapped down with the correct ratchet strap.
- 19) Ensure painter is securely and tidily tied off.
- 20) Hitch up and ensure brake away cable and lighting board are connected.
- 21) Wind jockey wheel all the way up.
- 22) Lift and secure jockey wheel, fully up beside the towing arm.
- 23) Check side lights, brake lights and indicators are all working.

#### Remote Commander







### **Checklist 3 - Prepare the RIB for Launching...**

- 1) Pay launch fees as necessary.
- 2) Detach electrics from towing vehicle.
- 3) If launch is being done by slipway tractor,
  - a. detach break-away cable
  - b. lower Jockey Wheel
  - c. unhitch trailer from the towing vehicle.
- 4) Remove light board and store carefully with the circlips.
- 5) Ensure light board extension arms are secured back into trailer, pointing downwards and inwards, and clamps gently tightened.
- 6) Remove rear ratchet straps and store with light board.
- 7) Remove front ratchet strap and store with light board.
- 8) Remove covers from propellers and store with light board
- 9) Raise engine, and drop the tilt support lever, leaving engine in the lifted position.
- 10) Tie painter loosely, but securely, to winch support bracket.
- 11) Insert master key into the fuse box, and turn on electrics.
- 12) Insert engine key into the remote commander.
- 13) Attach kill-cord to the remote commander
- 14) Prime fuel in main engine by squeezing bulb in fuel line.
- 15) Drive the trailer to the water. It is not normally necessary to submerge the trailer deeper than the bottom of the steel wheels so always ask the driver not to submerge the hubs.
- 16) Ensure that all personnel are well clear of the trailer
- 17) Have at least one helper ready in a drysuit or wetsuit, holding onto the painter as the boat is pushed off the trailer.
- 18) Recheck that you have all the required safety equipment.
- 19) Load on kit.
- 20) Have a nice safe days diving

#### Checklist 4 - Recover the RIB from the water...

- 1) Remove all kit. There is too much stress put on the winch, and wincher, if the boat is full when it is winched onto the trailer.
- 2) Drain / pump as much water out of the boat as possible if necessary, take it for a short run with the elephant's trunk down.
- 3) Prepare trailer by putting winch into free-wheel mode, and pull out winch strap as far as the end of the trailer.
- 4) Raise the engine up using the trim/tilt switch on the remote commander.
- 5) Reverse trailer into water. It is not normally necessary to submerge the trailer deeper than the bottom of the steel wheels. Ask the driver not to submerge the hubs.
- 6) Manually position boat in middle of trailer, and connect winch hook. Have someone hold the boat steady and straight.
- 7) Winch the RIB back onto the trailer. The winch has two speed settings, so use the appropriate one. Ensure the winch strap winds flat onto the reel, and does not rub or curl up at the sides. This may require another person to guide it onto the reel.
- 8) Tie painter loosely, but securely, to winch support bracket.
- 9) Lower Elephant's Trunk.
- 10) Remove the hull drain plug keep the plug secured.
- 11) Ensure that all personnel are well clear of the trailer
- 12) Drive RIB and Trailer up slipway and park appropriately
- 13) Turn off electrics, and remove Master Key from fusebox.
- 14) Remove Engine Key from remote commander.
- 15) Remove Kill-cord from remote commander.
- 16) Store the above three items in plastic pot under the seat.
- 17) Follow "Checklist 2 Prepare the RIB for towing..." on page 6

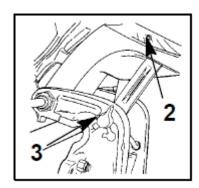
## Checklist 5 - Cleaning the RIB after use in the sea...

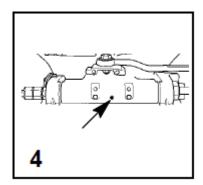
- 1) Detach electrics from towing vehicle.
- 2) Detach break-away cable
- 3) Drop Jockey Wheel and secure
- 4) Unhitch trailer from the towing vehicle.
- 5) Remove toolkit in the green box from towing vehicle.
- 6) Remove light board and store carefully with the circlips.
- 7) Ensure light board extension arms are secured back into trailer, pointing downwards and inwards, and clamps gently tightened
- 8) Remove any debris from inside of the RIB
- 9) Remove detachable items such as flags, rinse thoroughly in fresh water, and put aside to drain / dry.
- 10) Remove any ropes used, rinse in fresh water, and put aside to drain / dry.
- 11) Remove hull drain plug from back of RIB
- 12) Lower "Elephant's Trunk" (self-bailer)
- 13) Run engine through with fresh water.
  - a. Install the flushing attachment so the rubber cups fit tightly over the cooling water intake.
  - b. Attach a water hose to the flushing attachment. Turn on the water and adjust the flow so water is leaking around the rubber cups to ensure the engine receives an adequate supply of cooling water.
  - c. Start the engine and run it at idle speed in neutral shift position.
  - d. Adjust water flow (if necessary) so excess water continues leaking out from around the rubber cups to ensure the engine is receiving an adequate supply of cooling water.
  - e. Check for a steady stream of water flowing out of the water pump indicator hole. Continue flushing the outboard for 3 to 5 minutes, carefully monitoring water supply at all times.
  - f. Stop the engine, turn off the water, and remove the flushing attachment. Put key and kill-cord away.

- 14) Run auxiliary engine through with fresh water
  - a. Place a container under the engine, and fill it with water until the water inlet holes on the engine are covered.
  - b. Start the engine and run it at idle speed in neutral shift position.
  - c. Check for a steady stream of water flowing out of the water pump indicator hole. Continue flushing the outboard for 3 to 5 minutes, carefully monitoring water supply at all times.
  - d. Stop the engine.
  - e. Empty the container
- 15) Remove any grease or oil on the boat floor, or on the tubes, with washing up liquid solution and a soft brush.
- 16) Rinse RIB hull (inside and outside), the tubes, and the exterior of the engine with fresh water. This should be done with the RIB on a slight incline backwards to facilitate drainage.
- 17) Lightly and carefully rinse the console in water. Leave the seat in place and do not spray water directly under seat or onto/into electrical contacts on top of console or GPS.
- 18) Connect hose to wheel wash out for a rinse.
- 19) Remove hatch at bow of boat, and inspect anchor locker.

  Remove excess water. Remove contents and rinse out with fresh water if necessary.
- 20) Remove engine covers, and spray liberally with WD40.
- 21) Check two-stroke oil reservoir levels, and refill as necessary.
- 22) Replace engine covers and secure.
- 23) Grease the nipple under the bearing saver caps on each wheel hub. Continue until grease comes out of the inspection hole.

- 24) Grease two nipples on engine transom brackets
  - (2) until grease emerges from bottom of pillar
  - (4) one squeeze





- 25) Release, unscrew fully, and grease light board arm clamps.
- 26) Re-tighten clamps gently.
- 27) Turn steering wheel left and right, cleaning and greasing the push-rod at the engine transom bracket as necessary.
- 28) Let all water drain from RIB and push back into hut.
- 29) Replace any supporting rod back into the transom bracket.
- 30) Drop engine down
- 31) Inform the Equipment Officer of any missing or damaged items.