



Mercury Engine Maintenance Workshop

Date: Saturday 31 August; Rescue Helicopter Hanger, Gisborne Airport

Programme: 9:00am to 3:00pm (bring your lunch). Learn basic maintenance and increase your knowledge on Mercury Surf Engines

Who should attend: All new IRB Drivers and those Drivers that have not previously attended this Workshop, plus the person responsible for Club Engine maintenance (previous attendees are also welcome).

Note: The intention of the Workshop is for the attendees to recognise when engine maintenance is required and to notify the Powered Craft Officer of this, rather than attempt to complete the work themselves without authority.

Engines to bring: Only current patrol engines are eligible for this workshop. A minimum of two people to work on each engine.

Workshop Instructor: David Hickey will deliver the Workshop

Please Note: A Mercury Engine Technician will not be present at this Workshop and Clubs are advised to contact a local Mercury Service Agent for any technical engine problems

Cost: There is no cost to Clubs or participants to attend this Workshop inclusive most parts and accessories (higher priced items if required will incur a charge).

Registration: Please register the names of people attending and also the number of engines you will bring with david.hickey@surflifesaving.org.nz by Monday 26 August.

In it for life



Tools (bring what you have)

- 32mm ring spanner (Engine tilt)
- Complete socket set and ratchet
- 10mm & 13mm open ended ring spanners
- 1 large and 1 medium flat screwdrivers
- Large and small Phillips screwdriver
- Medium adjustable crescent
- Long nose pliers
- Flush drum (if you can fit one in)
- Fuel bladder to run engine
- **Engine stand/trolley for each engine**

Service Checklist

- Drain and replace gearbox oil, check drain screw seals for wear. If signs of water contamination is present in oil, check/replace propeller shaft seal (also check/replace water pump oil seal if significant contamination)
- Remove propeller and thrust hub, check front of thrust hub for excessive wear requiring replacement. If thrust hub will not remove check propeller shaft for damage (twisting)
- Remove gearbox and check/replace water pump impeller and liner insert
- Check for excessive 'play' between the steering bracket and assembly bracket, replace top and lower bushing if required. Apply grease to assembly bracket nipple
- Check steering friction for turning resistance and if required tighten nyloc nut at the base of the compression tube
- Check/tighten upper and lower engine mount nyloc nuts
- Check tiller arm bushes, replace if worn. Check tiller arm holds position when tilted. Do not over tighten tension as this will impact on throttle return spring
- Remove fuel filter bowl and flush, clean filter, apply grease to fuel bowl thread and reassemble
- Remove carburettor cover, clean choke plate surface including screws. Smear top of screws with a little grease to inhibit corrosion. Lubricate choke shaft internally and externally. Apply full throttle and visually check throttle plate alignment, adjust throttle stop screw if required
- Apply full throttle and release grip, check throttle return mechanism (spring) is functioning correctly
- Check pull start engagement and adjust/replace ratchet spring assembly if required. Check rope for wear. If pull start operation is not smooth, check/clean/replace starter spring
- Remove and clean/replace spark plugs
- Check connection of ignition coil leads into coil and spark plug caps. Ensure security of leads around spark plugs to avoid cowling cover attachment interference
- Check cowling cover attachments for security
- Start and run engine for correct operation including carburettor mixture and idle speed

Further Information: If you have any further enquiries, please contact David Hickey.

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