

FINDELN- A BRIEF GUIDE

ENGINE

- Findeln's engine is a 35 Hp Beta 1305 with a conventional gearbox and shaft delivering the power to a three bladed fixed propeller.
- Cruising speed of approximately 6.5 knots at 2,300 rpm.

There is little to be gained by exceeding 2,500 rpm, so please don't!

- Engine oil dipstick is accessed via the starboard engine room hatch, adjacent to the navigator's berth. **Check daily in the morning when engine is cold, and do not overfill.**
- Both engine and gearbox use the same oil; spare oil is under the navigators berth, together with the tool kit.
- Engine spares (filters, impeller, belts) are located under the aft section of navigators berth;
- It is normal for the engine bilge to fill with about 2-3 litres – this is from the wet stern gland and also from ingress through the steering and throttle cables.

Starting Engine

1. Switch battery on at main switch, under to navigator's seat;
2. Check gearbox is in NEUTRAL (throttle lever vertical);
3. Move key to left (heat setting) and hold there for about ten seconds;
4. Turn key fully to right to start engine;
5. Depress the button in the centre of the base of the throttle to engage neutral, and move the lever forward approximately 35° to pick up engine revs whilst engine warms up;
6. Leave key in first setting to right (Run) when engine is running – **DO NOT SWITCH OFF!**
7. Check cooling water is coming out.
8. Once engine has warmed up, return throttle to vertical position.

When using engine please do not over rev, and remember to pause in the neutral position when moving from forward to reverse.

Stopping Engine

1. To stop engine, return throttle to neutral and press left hand (Stop) button on switch panel until engine stops;
2. Turn key off (vertical position)
3. Turn off power at engine control panel;
4. **DO NOT RUN THE ENGINE WITHOUT A BATTERY SWITCHED ON.**

FUEL SYSTEM

- The fuel tank is located under the cockpit, at the aft end of the engine room. It has 150l capacity, measured via a dipstick (cockpit locker). Fuel consumption is approx 2 litres per hour, increasing rapidly above 2500 rpm.
- Filler for the fuel is located under the helm position;
ENSURE FILLER IS TIGHTENED UP AFTER USE.
- Spare fuel (20 litres) is located in the cockpit locker – green top on can.
- Manual shut off valve is on the on the tank itself, as is the one for the heating.
- Fuel supply also serves the domestic heating - if this is used continually remember to adjust consumption figures!

**PLEASE REFUEL BOAT AT ARDFERN/CRAOBH
HAVEN/CRINAN BOATS BEFORE RETURNING INTO THE
CANAL AT THE END OF YOUR HOLIDAY**

FINDELN - A BRIEF GUIDE

SAILS

- 140% Furling genoa is permanently rigged; keep some tension on sheets when furling sail and when in harbour;
- Removable inner forestay is tied off to starboard shrouds; when it is needed attach to deck eye immediately to rear of anchor windlass;
- Storm jib is under berth in forward cabin; this hanks into the inner forestay when needed (sheets attached);
- Mainsail is stowed inside stacpac system - unzip fully before use, and make sure that the main halyard runs **inside** the lazyjack line.
- All reefing lines are led aft to cockpit (slab reefing) – the reefing eyes will need to be hooked over the cringle when reefing. Findeln benefits from reefing early in a blow;
- Outhaul should not normally need to be adjusted;
- For downwind sailing the pole can be used to pole out the genoa. Under these conditions it is also advisable to slacken off the lazyjacks to reduce chafe on the mainsail.

ANCHOR

- Main anchor is 45lb Bruce, attached to 53m chain which is in turn attached to the anchor locker;
- Anchor chain marked as follows:

10m	Green	
20m	Yellow	
30m	Red	THINK TRAFFIC LIGHT – GREEN IS GO, RED IS STOP
40m	Red & Green	
50m	Red and yellow	

- Second (kedge) anchor (7kg PLOUGH) together with 10m chain and 30m warp are located in cockpit locker in blue drum;
- **ONLY USE WINDLASS WITH THE ENGINE RUNNING;**
- Make chain fast to deck cleats, **NOT** the windlass;
- There is a chain hook in the cockpit locker, which makes things more comfortable for those in the forward cabin;
- To prevent water ingress into the forward berths, please push the pile of chain forward once it has been retrieved.

Please take care not to scratch the bow of the boat when retrieving the anchor, and under no circumstances should the boat be motored forward with the anchor still to be finally retrieved. We will check the bow after each charter for damage.

Please lift the last 2 metres or so by hand to prevent damaging the furling drum.

FINDELN - A BRIEF GUIDE

TENDER AND OUTBOARD

- Tender is a 2.8m Zodiac Fastroller dingy with an inflatable floor and a solid transom - roll out on foredeck, inflate and lower over side (pump is in cockpit locker – observe instructions on pump);
- Outboard is a 2.5hp Mariner 2 stroke, 1:100 oil:petrol mix, spare fuel in cockpit locker;
- To operate outboard:
 1. Pull out choke, turn throttle to start position and open breather on fuel tank;
 2. Check that fuel supply is on, and pull handle to start engine;
 3. Once engine has started, push in choke **and set throttle to tickover before moving off;**
 4. To go backwards the engine is simply turned through 180°

**THE DINGY CAN BE TOWED BEHIND THE BOAT IN LIGHT WINDS,
BUT ONLY AFTER THE OUTBOARD HAS BEEN REMOVED**

ELECTRICAL SYSTEM

Shorepower

Findeln has shorepower fitted for use in a marine (connection in cockpit locker) which is linked to a battery charger that charges both battery banks. There are also two 13amp sockets in the portside cupboard immediately forward of the chart table.

Domestic Electrics

Domestic battery bank is No 1 on switch panel, engine is No 2

The following should only be used with the engine running:

1. Fridge
2. Anchor Windlass
3. Autopilot

Switches do as they say, with the following exceptions:

NAV 1 is the masthead tri-colour;

NAV 2 is bow and stern lights;

AUX 1 powers the instrumentation and stereo;

Water pump pressurises the domestic hot and cold water throughout the boat;

Shower pump powers the two shower pumps, both of which are switched inside the heads;

Autopilot switch has to be pulled to switch off;

AUX 5 is Spare

AUX 6 is VHF

Specific points to note include:

- There are full manuals for all instruments on board in the boat file;
- There are plenty of lights on the boat, mostly individually switched. Be selective with their use, otherwise the batteries will quickly draw down;
- Stereo/CD player is independently powered.
- Anchor windlass circuit breaker is under navigator's berth.
- Domestic batteries are located under the navigator's berth. There are three 110 AH cells. The emergency engine battery is under the navigator's seat.

The engine will need to be used for a minimum of 1-2 hrs per day to keep the batteries charged.

FINDELN - A BRIEF GUIDE

HEATER

Only start the heater with the engine running; once it has started the engine can be turned off. The heater will take a few minutes to shut down when it is switched off, **during which time the batteries should not be switched off.**

GALLEY

- All rings and the oven have a thermocouple; hold button in for a few seconds once the gas has lit;
- Gas shut off valve is below the cooker, together with the gas alarm sensor;
- Gas locker is next to the cockpit locker - **turn gas off at night**
- Gas alarm is located under the navigators seat - if it sounds extinguish all naked lights, turn off gas at source, ventilate boat and pump out bilge **WITH MANUAL BILGE PUMP.**

PLUMBING

- Freshwater capacity is 300 litres;
- Water filler is midships on the starboard side - tighten up after use;
- Spare 20 litres of water in the cockpit locker;
- Hot water is heated by the engine;
- Water pump pressurises hot and cold water to the galley and both heads;
- Shower discharge pump needs to be turned on at the main switch panel, and then the individual orange rocker switches in each heads are used to pump out shower as it fills;
- Heads - **USE PLENTY OF WATER, AND ONLY A (LITTLE) PAPER - NOTHING ELSE TO GO DOWN THE TOILET - CLEARING BLOCKED HEADS WILL INVOLVE A £50 SURCHARGE**
- To minimise the chance of blockage, operate as follows:
 1. Move pump switch to left and pump until there is about 5" (125mm) of water in the pan;
 2. Once ablutions have been finished, move pump switch to right and pump pan dry;
 3. Move switch to left position and **GIVE AT LEAST 20 PUMPS** to clear the pipes;
 4. Return switch to right position and pump again until pan is dry. Leave heads in this conditions.

SAFETY EQUIPMENT

The location of seacocks and fire extinguishers are shown on the next page.

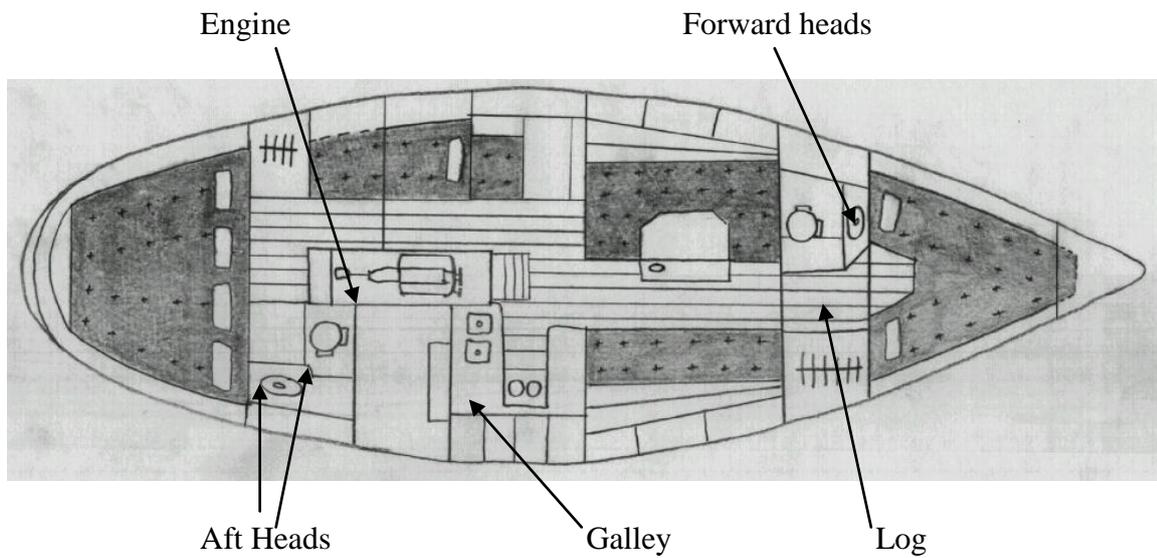
- Fire blanket is adjacent to galley on aft bulkhead;
- Flares are located under companionway;
- Lifejackets and safety lines are under aft port saloon berth;
- First Aid kit is in saloon; **please use the orange kit for day to day issues, as breaking into the foil MCA kit will mean that it has to be replaced at a cost of £55 (to you!);**
- Grab bag for the liferaft is located under the companionway.

Liferaft is self launching as a last resort, but for this to happen the boat has to be under water! Only launch the raft in an extreme emergency (ie on fire or sinking) and remember that you are supposed to step up into the raft!

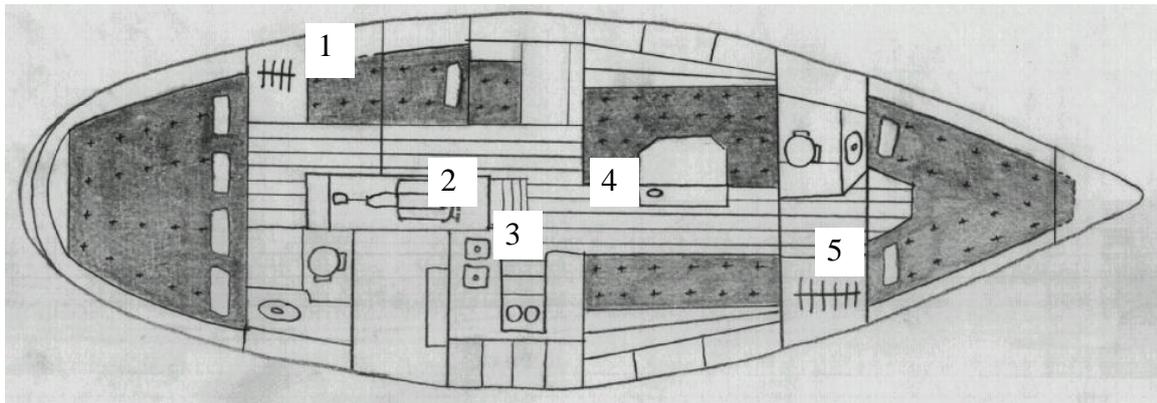
Emergency steering gear is located in the cockpit locker – access hatch is on aft deck; key is hanging on starboard handle next to companionway hatch;

Bungs for seacocks etc are above the navigators berth.

FINDELN Seacocks



Fire extinguishers



1. Aft cabin
2. Engine room (automatic)
3. Between galley and companionway
4. Forward end of saloon table
5. Forward cabin bulkhead

Spares etc

Miscellaneous spares and chandlery are kept in drawers under chart table