

Snapdragon Handbook



HISTORY OF T.S.P.(Marine)LIMITED

Thames Structural Plastics was formed in 1959 by Len Wakefield and Ray Walsh and commenced business on a disused army camp site in Rayleigh, Essex. The Company's aim was to build boats and other glass fibre products such as vehicle mouldings and furniture. Of all these, boats proved to be the most successful. In the first three years, the Company's sales were small, but gradual expansion took place and eventually, in 1962, they moved to Southend to larger premises (but still only 1/20th of the present factory size nevertheless).

The boat business continued to expand and in 1962 the first Snapdragon sailing cruiser was launched. This first Snapdragon was a 23' centreboarder; she was sailed locally and following race successes at local clubs, began to sell well along the coast. In 1964 it became necessary to look for a still larger factory and suitable land was found on Canvey and plans put in hand to build the Company's own factory on the existing site. The original unit was extended in three stages in 1965, 1966 and 1967 until the present factory size of 52,000 sq. ft. was attained.

About this time it was felt necessary to simplify the Company's rather tongue twisting name; so Thames Structural Plastics became TSP Marine Ltd., and the name Thames Marine for marketing was born. The Company began to take on mouldings for other firms in the trade i.e. Halcyon 27 and Friendship whilst continuing their own lines. In 1968 a G.P. 14 Dinghy building licence was granted to the firm and proved to be a popular line; hardly surprising since it is one of the largest dinghy classes in the world with sail numbers well over 8,000.

At the 1970 Boat Show, Thames Marine introduced their very own dinghy, the 11' Turtle available both in Kit(Shell) and Complete versions, with a two part Bermudian rig enabling her mast to be carried on a car roof rack. The Turtle has enjoyed almost instant success both in the U.K. and abroad and sail numbers soared to over 350 in the first year. She was selected by the Council of Industrial Design for their Design Index as an outstanding example of good British Design in current production.

In the Autumn of 1970 a sister Company to Thames Marine was formed called Power Marine, to market the motor boats produced by TSP Marine. Their first product was the Pacific 550 cabin cruiser which has sold extremely well both at home and abroad. This was closely followed by the Pacific 350 dory type runabout and a 21' 4 berth cruiser, the Pacific 625, and plans are in hand for a 31' cabin cruiser.

At about the same time another new Company was formed with the Prout Brothers, Prout Marine to market catamarans. The 34' Snowgoose class cruising catamaran was the first of this new venture and at their first London Boat Show the order book was filled for 12 months.

So now TSP Marine Ltd., produce boats for a group of three Companies; Thames Marine, Prout Marine and Power Marine covering almost the complete spectrum of the boating market from dinghies to cruisers of all shapes and sizes all over the world.

THE SNAPDRAGON ASSOCIATION

The Snapdragon Association is an Association, affiliated to the R.Y.A. of owners and crews of Snapdragon class cruisers (of all the different boat lengths).

There is an Association year book containing a list of all Snapdragon owners and the rules of the Association. Also two or three newsletters are produced annually with information about the Association activities such as dinners, rallies, races and also contains stories from members and generally keeps members in touch with one another. An annual championship race is held to find the champion helm in each class and Snapdragon classes feature in many open cruiser races such as the Nore Race etc. There is a separate South Coast branch for Snapdragon bases in that area and they hold local events.

Life membership is only £2.00 and will entitle you to wear the Association tie, cufflinks, sweater and fly the Association pennant. If you are interested in this very lively group contact the Honorary Secretary, Ken Evans, 44 Leigh View Drive, Leigh-on-Sea, Essex.

SOME HINTS ON CRUISING WITH CHILDREN

Sailing with children can, and should, be fun providing you have all the right gear (and do not attempt to race in the Fastnet). Small babies are the least problem - their carrycot is easily secured below by its handles - they can keep snug and warm in one piece sleeping suits, and their food is easily transportable and quick to prepare.

For a one-year-old you will need to take a folding pushchair (you can always stow it in the pram dinghy!), walking reins to use as a safety harness and a miniature lifejacket. At this stage it might be a good idea to temporarily fill in your guard rails with netting to ensure junior does not slip between the gaps.

At about three-years-old children can have a proper safety harness and be taught the important maxim of 'one hand for yourself and one for the boat'. Safety at sea is not just a question of wearing lifejackets and safety harness etc., It is also sensible behaviour in the dinghy and when coming alongside - in fact, generally behaving in a seamanlike manner. More often accidents happen in overcrowded and overloaded tenders rowing some 50 yards than in shipwrecks at sea!

It is always colder afloat than ashore and children need winter underclothes; thick warm socks; warm long trousers; gloves and woolie hats, and several layers of warm shirts and sweaters. Remember, if they do fall in or over they will probably get the whole lot soaked, so take 2/.....

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a complete change for everyone. Junior two-piece oilskins are very good (much better than ordinary anoraks which get soaked in real downpours) and the overtrousers are particularly useful for keeping both wind and wet at bay. For sleeping proper, winter pyjamas plus warm socks are essential and hot water bottles come in very handy too. Slippers are a real comfort worn below when it's wet and boots have to be discarded in the cockpit.

If a child is seasick regularly it's obviously worth doing some research into the cause. Generally, children playing below for long periods when the boat is heeled will feel queasy and will recover outside in the fresh air. It is important too, to keep warm enough at times like this and involving the children in some activity also helps. If they are old enough let them take their turn at the helm, but at almost any age they can manage buoy spotting and rudimentary navigation, some fishing and even singing games.

If all fails, and sickness is inevitable, give them a bucket rather than let them spew over the side as this is a real danger with children sick and non-caring about holding on. Afterwards give them a sweet or drink to counteract the stomach acid and tuck small ones up warm in bed. Older ones will probably recover in the cockpit. Try not to be too alarmist about the sickness syndrome; children have a tendency to succumb all too easily to group activities!

Keep a stock of games, pencils, paper, scissors, comics and books on board as well as a secret standby hoard for when all else fails to amuse. A sweet and biscuit tin are more essential than luxury on a cruiser with children in the crew. Children are very good at keeping log books and a stiffback book each can be used all season and enlivened with mounted shells and dried flowers; postcards of the ports etc., can even make good reading as well as being a good timefiller. A transistor radio is a real boon, particularly for plays and talks apart from the all-important forecasts.

But the best activity of all is often personal boat responsibilities. It is surprising how soon children master starting the engine; tending the sheets, putting out fenders, scrubbing decks etc, etc. Even washing up is something of a novelty at sea and producing meals is a challenge the older ones appreciate. If possible, try to make some time each day when children can let off some of their physical steam, even if it is only rowing. Better still is a run ashore.

RIGGING YOUR SNAPDRAGON

Your new Snapdragon will be delivered with standard standing and running rigging, mast, boom mainsail and working jib regardless of the stage of complete boat at which your boat has been purchased. If you have the deluxe mast this makes no difference to the standing rigging. You will find standing rigging and halyards attached to the mast with all necessary rigging screws, shackles etc., sheets blocks, jib track stop, mainsheet slide outhaul(not 21, 600, 670 or 890) tabernacle bolts, winch handles, reefing handle and length of terylene to fasten boom up to the backstay will all be stowed away inside the cabin. The following is a suggested and tried procedure for rigging your mast:-

- 1) The mast will travel laying on the cabin deck and supported through the mast tabernacle. Remove all rope and masking tape holding rigging in position alongside the mast.
- 2) Fit both spreaders by inserting the inner end of the spreaders into the requisite sockets. (The spreaders are inter-changeable). Fasten into position using the split pins or bolts provided.
- 3) Sort out the two main or cap shrouds and pass them through the slots provided in the outer end of the spreader plugs. Wire into position and tape up with P.V.C. tape(or similar).
- 4) Ease off all the rigging screws to give sufficient slack when the mast is erected.
- 5) Fasten backstay, rear lower shrouds and cap shrouds.
- 6) Place the foot of the mast in the tabernacle with the track facing downwards towards the deck and insert the pivot bolt through the hole in the tabernacle and the bushed hole in the mast.
- 7) After ensuring that the loose rigging will not foul fittings such as cleats, tiller, remote controls etc., raise the mast. This is easily done walking along the cabin top and pushing the mast 'hand-over-hand'. If you have an assistant he can ensure that no rigging fouls as the mast is raised. Fasten the forestay, then the forward lower shrouds(inner forestay on 600 and 670).
- 8) Initially, it is better to have the mast as upright as possible until you have sailed your boat a couple of times and then perhaps adjust the rigging to suit your personal requirements. The best way to ensure that the mast is upright is to sight up the track and adjust the shrouds as necessary e.g. if the top of the mast is pulled too far over to port, slacken off the port cap shroud and take up on the starboard cap shroud. Once the rigging has been adjusted tighten up the locking nuts or pins. Although all our rigging screws are supplied with locking nuts or pins to prevent them coming undone, it is strongly advised to WIRE ALL RIGGING SCREWS using a soft copper seizing wire(or similar).

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- 9) The amount of tension on the rigging is very much a personal preference and much argued over round sailing club bars. All cruisers launched and rigged by us have the rigging set up fairly tightly but you can always alter this if required. You do not need it so tight that you can play a tune on it!
- 10) Fix the boom to the gooseneck.
- 11) The outer end of the boom is held up by the 18" x $\frac{3}{4}$ " circ. securing line looped through a shackle attached to the backstay.

RUNNING RIGGING

All Snapdragons are supplied with mainsheet and blocks, jib sheet, main halyard, jib halyard and flag halyard as standard, complete with necessary shackles.

Mainsheet

This comes reeved through the necessary blocks and has only to be shackled- the upper block (F.S.I.) to the end boom swivel tang, the mainsheet jamb block (370) to the mainsheet eyes (S/D 21,600 and 670) or mainsheet track slide (S/D 747, 27 and 890). On the Snapdragon's 747 and 27 there is a terylene outhaul which is shackled to the mainsheet slide and taken through the jamb cleat (aft amidships of the mainsheet track). There are also track stops to limit the travel of the mainsheet and these should be set approximately 4" from each track and stop. DO NOT LET THE SLIDE SLAM AGAINST THE END OF THE TRACK.

Jib Sheets

All headsail sheets (jib, storm and genoa) are led outside all the standing rigging and through the eye on the genoa track slide. This eye is adjustable on its track to suit different headsails - right forward when carrying a storm jib, in the centre for the working jib, aft for the genoa. The ends of the headsails sheets are then taken through the 8" nylon cleat on the top of the coaming, aft of the sheet winches. The sheet has no eye in the centre to shackle it to the clew of the sail, and should be passed through to clear and then tied in a reef knot. This method is used as when first hoisted and the boat is head to wind the clew will flogg very close to the head of the crew who has just hoisted it and could prove dangerous. When attaching headsails fasten the tack to the wire jib tack strop provided - this raises the foot of the headsail sufficiently to ensure good sailing setting.

RUNNING-IN PROCEDURE

Before you venture out for the first time, check:-

- all the rigging screws are done up
- all the shackles are done up
- the gas bottle is secure in its housing and turned off
- tiller nuts are tight
- read carefully engine manufacturers handbook
- * oil level in engine
- fuel quantity
- * presence of grease in stern tube and screw down greaser
- one full turn every hour

After your first trip check:-

- rigging nuts are still tight and that the bottle screws are OK
- the shackles on the running and standing rigging are still tight
- * stern gland grease

After about three trips, check:-

- the engine bolts are tight and have not come loose
- fuel line connections are tight and there are no leaks
- * tighten the stern gland to prevent leaks
- jubilee clip connection on the sea toilet and sink are still tight and nothing has worked loose
- tiller nuts
- deck fittings and see that none of the nuts and backing plates are loose(chain plates included)
- re-tighten rigging and fit locking wire

IMPORTANT

- * engine alignment should also be checked by a competent engineer as engines, after about 10 hours running, will settle on their beds and may need re-alignment.

* THESE ITEMS APPLY TO INBOARD INSTALLATIONS ONLY

MAINTENANCE

Glassfibre - should be washed down with a detergent and warm water. The wholesale use of an abrasive powder such as Vim will destroy the shine. There is no need to use wax when the boat is laid-up; this only attracts the dirt. Any surface scratches can be rubbed down and deep scratches can be touched up with gelcoat. A repair kit is available from Thames Marine. When ordering same please mention colour and colour code number required.

Varnished parts - any deterioration should be dealt with immediately even during the season, to avoid the wood becoming damp and discolouring. Oil based varnish was used in the manufacture and this should be borne in mind when preparing the wood for a further coat of varnish.

Antifoul - is only effective for one season. At the end of a season it should be scrubbed down with a stiff brush to remove the flaky particles and then repainted. Thames Marine originally used hard Geltox from British Paints.

Sails and sheets - at the end of a season these should be taken home and washed well in water using little or no soap (avoid detergents), and after drying stored in a warm well-ventilated place. All seams and batten pockets should be checked for worn stretching.

Water systems - before leaving the boat during the first season it is important to completely drain the fresh water system, including the toilet and engine.

Engine - full details for winterising your engine will be found in the engine handbook.

Ventilation - it is advisable to leave the boat well ventilated during the winter, check the ventilators are open and remove all galley equipment, bedding etc.

YANMAR ENGINE STARTING PROCEDURE

Please study your Yanmar engine manual and section marked RUNNING-IN BEFORE VENTURING OUT - the following notes are for quick reference and should be used in conjunction with manual instructions:-

- 1) Fuel cock should be unscrewed to full extent.
- 2) Turn on the seacock to the water intake. Lever down is on. Horizontal is off.

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- 3) Open the morse throttle control lever to full throttle(the throttle control is the shorter of the two levers).
- 4) Switch on mains switch to be found in the engine case(747)or engine cockpit locker(27).
- 5) Open decompressor by pulling black knob in cockpit. Then press starter button. When fly wheel is spinning ease in on the decompressor lever.
- 6) After starting the engine, should be throttled back to a fast tick over and should be left running for a few minutes to warm up.
- 7) Check that engine cooling water is coming out of the exhaust outlet in the centre of the transom above the water line.
- 8) The gear lever(the longer of the two control levers)positions are upright for neutral, forward for ahead, rear for reverse.
- 9) To stop the engine throttle right back with the throttle lever and the engine will stop. Switch off the ignition. Leave fuel on.
IMPORTANT - DAMAGE TO THE ALTERNATOR WILL RESULT IF IGNITION IS TURNED OFF BEFORE THE ENGINE STOPS TURNING.
- 10) When you switch off the engine, last thing, wind the stern-greaser down whilst the grease is warm. This ensures that the stern tube does not leak whilst the boat is left and next time the boat is ready to go. Usually one complete turn is sufficient. Always leave in reverse to prevent prop being spun by tide flow.
- 11) Whilst the engine is running a periodic check should be made to make sure oil is circulating, shown by the visual indicator on engine crank case. Or by oil light if fitted.

FUEL - High grade diesel fuel.

LUBRICATING OIL - SAE 20 (Service D.S.)

RUNNING-IN PERIOD - 20 hrs - then carry out oil change.

STERN GREASE - Please check with engine maker's manual.

ALBIN AD21 STARTING PROCEDURE

Please study your Albin AD21 engine manual and section marked RUNNING-IN BEFORE VENTURING OUT - the following notes are for quick reference and should be used in conjunction with the manual instructions:

- 1) Check fuel is on. Fuel cock should be unscrewed to full extent.
- 2) Turn on the seacock to the water intake. Lever up is on. Horizontal is off.
- 3) Open the morse throttle control lever to full throttle (see note 8).
- 4) Switch on the ignition switch by turning clockwise, and press in and turn to start.
- 5) Hold the starter for about 5 seconds, release to ease the load on the battery, then turn again.
- 6) After starting the engine, should be throttled back to a fast tick over and should be left running for a few minutes to warm up.
- 7) Check that engine cooling water is coming out of the exhaust outlet in the centre of the transom just above the water line.
- 8) The controls are of a single lever type, upright is neutral and tick over. Push forward to go ahead - the further pushed, the faster the boat will go. To go astern move lever in similar manner. To rev up engine out of gear, pull out silver knob below lever when in neutral - when lever is moved it will open the throttle only.
- 9) When you switch off the engine, last thing, wind the stern-greaser down whilst the grease is warm. This ensures that the stern tube does not leak whilst the boat is left and next time the boat is ready to go. Usually one complete turn is sufficient. Always leave in reverse to prevent prop being spun by tide flow.
- 10) Whilst the engine is running a periodic check should be made to make sure oil is circulating, shown by the visual indicator on engine crank case. Or by oil light if fitted.

FUEL - High grade diesel fuel.

LUBRICATING OIL - SAE 20 (Service DS)

RUNNING-IN PERIOD - 20 hrs. - then carry out oil change.

STERN GREASE - Please check with engine maker's manual.

BRITT ENGINE STARTING PROCEDURE

Please study your Britt Marine engine manual and section marked RUNNING-IN BEFORE VENTURING OUT - before attempting to operate the engine. The following notes are intended for quick reference and should be used in conjunction with the instructions in the engine manual:

- 1) Fuel cock should be unscrewed to full extent.
- 2) Check that the fuel filter which is situated in the fuel line in the engine case is full of fuel.
- 3) Turn on the seacock to water intake. Lever up is on. Horizontal is off.
- 4) Pull out the choke lever fitted in the starboard cockpit locker.
- 5) Open the morse throttle control lever to $\frac{1}{2}$ throttle (the throttle control is the shorter of the two levers).
- 6) Turn on the ignition. The ignition key on the Britt engine is no different to the normal car turn ignition. To switch ignition on, turn the key to the right.
- 7) The engine is started by pushing the key in and turning to the right.
- 8) Once the engine is running, gradually reduce the choke as the engine warms up.
- 9) Check that the cooling water is coming out of the exhaust outlet. This outlet is in the centre of the transom just above the water line.
- 10) The gears are engaged as follows: lever in the upright position for neutral., forward for ahead, astern for reverse.
- 11) To stop the engine throttle back, turn off the ignition and turn off the fuel at the tank.
- 12) Periodically during the running the engine instruments should be checked to ensure that a consistent oil pressure and temperature are kept.
- 13) When you switch off the engine, last thing, wind the sterngreaser down whilst the grease is warm. This ensures that the stern tube does not leak whilst the boat is left and next time the boat is ready to go. Usually one complete turn is sufficient. Always leave in reverse to prevent prop being spun by tide flow.

FUEL - medium grade petrol should be used

LUBRICATING OIL - Should be Viscosity SAE 30 during the summer months and SAE 20 during the winter

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RUNNING-IN PERIOD - 25 hours

STERN GREASE - Please check with engine maker's manual

VIRE ENGINE STARTING PROCEDURE

Please study your Vire engine manual and section marked RUNNING-IN BEFORE VENTURING OUT - the following notes are for quick reference and should be used in conjunction with the instructions in the engine manual:

- 1) Fuel cock should be unscrewed to full extent.
- 2) Turn on the seacock to the water intake. Lever up is on. Horizontal is off.
- 3) Pull out the choke lever - fitted on the starboard side on the inside of the engine box.
- 4) Open the throttle on the morse remote control. The throttle lever is the shorter of the two levers and has a black top fitting.
- 5) Check that the earthing switch is in the running position (marked GANG on the engine casing).
- 6) Start the engine by turning the ignition key clockwise.
- 7) Once the engine is running, gradually reduce the choke as the engine warms up.
- 8) Check that cooling water is coming out of the exhaust outlet. This outlet is in the centre of the transom just above the water line.
- 9) The gear lever (the longest lever with the red top) positions are: upright for neutral, forward for ahead, rear for reverse.
- 10) To stop the engine throttle back, switch the earthing switch off (in the STOP position) and switch off the ignition.
- 11) When you switch the engine off, last thing, wind the sterngreaser down whilst the grease is warm. This ensures that the stern tube does not leak, whilst the boat is left and next time the boat is ready to go. Usually one complete turn is sufficient. Always leave in reverse to prevent prop being spun by tide flow.

FUEL MIX - 30-1

RUNNING-IN - for first 10 hrs 16-1 then 20-1 Use SAE 30.

OIL - petrol mix