Compilation of Handy Hints



Suggestions compiled from the archive of

Noelex Nacht Association of Australia Inc

Contents supplied by owners over a 10 year period.

This booklet is dedicated to the owner of a Noelex Yacht, be it a Noelex 25 or Noelex 30. Both yachts are in many respects similar in the sense that many of the suggestions contained in this booklet may apply to both classes.

The Hints, suggestions and pictures were compiled from the archive of Noelex Yacht Association Inc and most were originally submitted by members over a period spanning many years. All have been published at one time or another in '*Telltales*', the official newsletter of the Association.

There are more comprehensive suggestions, improvements and so on, together with many photographs and drawings, to be found on the Association's web site at www.noelex.com

The site features many subjects such as the Association's history, yacht descriptions, many technical aspects, details of cruising grounds, a photograph gallery and private' member only' pages.

Some of the items in this booklet may appear to be duplicated or may feature improvements to original submissions. The items herein are reproduced in the manner they were originally featured in newsletters.

Compilation of the collection will be an invaluable aid to owners having acquired a Noelex yacht in recent times and not being aware of the many improvements and suggestions contained in the Association's archive.

All featured items are suggestions only and are in no way to be interpreted as being official views of the Association

The compilation has been prepared in such a manner that at some future time, pages can be added if more material is to be appended. At that time, members will be notified of any amendments made.

Meanwhile members may wish to print the entire document for easy reference. Those members devoid of Internet facilities will be supplied with a copy in booklet form.

If any member has suggestions worthy of inclusion, these should be send to the Association's central office at 22 Harries Court – Narre Warren North 3804 or alternatively may be emailed to our email address noelex@noelex.com Pictures may be included.



Subject:	Page No.
Water in Boat	5
Tips for More Comfortable and Enjoyable Cruising	
Retrieving	
Sheet Measurements on a Noelex 25	
Jib Sheet Lay-out	8
Sheet Layout Noelex 25 (refer next page for legend to colour coding	
Deck Layout of Halyards and Sheets - Noelex 25	
Forestay Tension	
Traveller Sheeting	
Keel Winch Failure	13
Hi-field Lever	14
Trailer Maintenance	15
Standard Table - Replacing the	15
Refrigeration	
Noelex Trailers	17
Rudder Assembly Maintenance	18
Hull Maintenance	19
Hull Maintenance feedback	20
Pop-Top Water Leaks	
Towing – Swaying whilst	21
Noelex Yacht Squadron Inc	
Noelex Ice Box efficiency improvements.	
Refrigeration versus Battery Usage.	
Rudder blade lifting	
Trailer tyre pressure	27
Tyre Pressure	28
Blade swivel point in rudder box	28
Instruments and other gear	29
Mast and boom	29
Keel winch maintenance	29
Hi-Field Lever maintenance	29
Trailer washing	30
Reefing	30
Yahoo site	31
Trailer Brake Cylinder maintenance	31
ii. the maximum towing mass specified by the towing vehicle's manufacturer; or	32
iii. the rated towing mass of the towbar, coupling or tow ball	32
Lockers – under bunk space	
Weight (NX25)	33
Racing hints	34
Deck layout	36
Genoa	36
Winch Discussion	38
Batteries –Web Sites to Visit	39
Mast tuning guide	
de-luxe version?	40
Whitsunday Parking	40
Winter Maintenance	41
Launching made Easy	41
Copyright © Fred Viergever 22 Harries Court Narre Warren North 3804 Victoria	3

Solar Panels – placing	41
Solar Panels – placing	42
Dual Battery Set-up	
PVC Tubing – use of	45
Boarding Ladder	
Keel Safety Rope	
3imini	46
Nater in Skeg – under floor	46
Sink pump - electrifying	46
Cockpit Light(s)	46
Baling Bucket	47
Engine Well PlugStove and Fire SafetySink Cover	47
Stove and Fire Safety	48
Sink Cover	48
Orink Holder	48
Spinnaker PoleHi-Field Lever - modifying	49
Hi-Field Lever - modifying	49
Hull – preventing damage whilst towing	49
Should I cut a hole in my boat?	50

Water in Boat

- weather seal on your front hatch,
- the position where the stanchions of your pulpit bolts penetrate through the foredeck,
- through the hole where your keel locking device is supposed to be when under way (it generally does not leak when the locking pin is in position)
- the rear supports of your pop top
- overfill of water tank
- clamp around hose at sink outlet loose

More unusual ones are:

- crack inside (at bottom of floor) anchor locker. This type of leak would be difficult to spot because the water would penetrate inside the bulkhead underneath your V-berth and would find its way into the cavity immediately in front of your keel
- imperfection inside front of keelbox which the owner claims was probably a manufacturing fault. (This would only become evident through an onshore inspection with the keel removed).

One member reported water persistently entering cockpit locker(s). Reason for this is usually due to boat being out in the weather when rainwater could find its way over the ridge. One way to overcome this is to apply a self adhesive type seal (the type you get for stopping draught in your house windows or doors) and install this around the edge of the guttering around the opening of your lockers under the lift up lids. It is a cheap and efficient method.

Tips for More Comfortable and Enjoyable Cruising



A boom tent is essential for hot weather comfort (a rear flap can be extended beyond the boom for extra shade using the spinnaker pole or tied down to the staunchions to keep out low sun or glare.

Other points:

- slightly lower the keel when motoring to give better steerage
- fit about seven mainsail ties tied to a length of shock cord along the lower side of the boom to make it easier and quicker to neatly secure the sail
- lower and fold the jib with all the sail along the port side, open the anchor hatch against the jib and secure the hatch in the open position with shock cord to clamp the sail. This makes it easier to use the anchor and reduces the likelihood of getting mud on the sail.
- when the mainsail is lowered, cleat the traveller to one side to give clear passage to the hatch
- attach a rope to pull up the boarding ladder
- take care not to crush the blocks at the mast base when lowering the mast, it also damages the gelcoat
- polish the hull, it keeps underwater growth down if in the water more than a few days (brush the hull under water every 5-7 days on an extended cruise). If there is any growth or barnacle "pimples" on the hull always brush it off in the water, it comes off easily in 45 minutes with goggles & snorkel but can take days of hard work if the boat is taken out of the water
- additional useful space can be made in the cockpit at anchor by fitting a plywood floor piece in the motor well just in front of the motor (and leaving the motor down). This

requires the fitting of rail bearers on either side of the well at a height to give a flush floor extension

- leave a bow rope tied on to the cleat under the front hatch so it is always readily available
- a two tube 12V fluorescent lamp fitted to the cabin roof (over the double bed and just inside the hatch line) and wired to the port rear lamp vastly improves interior lighting at reduced power consumption (and gives a good light for reading & cooking)
- we have not bothered to insert the well plate below the motor yet whilst cruising, but sometimes put it in at night to reduce the "slop" of waves
- the lifelines are left slack for comfort when sitting on the rail in the cockpit and the rear lifelines are not attached. We want to fit backrests to the lifelines and like the idea of a dual throwable lifesaving device (as sold by Bias Boating as seat cushions)
- spray WD40 on brake discs after washing the trailer to reduce disc corrosion
- MAGMA BBQ on rear stanchion with 1kg LPG bottle clamped below it
- cockpit cushions (ours are foam rubber inside zip-up vinyl covers)
- spray insect repellent up the sink drain and in the anchor well (a very large tarantula joined us in the sink having sheltered in the drain whilst the boat was at home)
- "Wash & Wax" treatment after sailing and a sun cover keep the decks looking good
- a horizontal floor fitted in the cupboard below the sink makes storage of kitchenware etc easier
- a chopping board cut to fit over the sink is useful (and hides dirty dishes until washup time)
- BBQ's Galore sold a collapsible table with four removable legs which straddles the traveller track for "Happy Hour" and stores flat aft of the double bed
- the best addition is a chair sold by K-MART. It is of French manufacture, folds to a compact size, has rubber boots, metal frame, fabric seat and must have been purposedesigned to fit perfectly over the motor. It adds a luxury seat to the cockpit compared to balancing uncomfortably on the transom rail

Retrieving

We found that it is easy to forget things to do when coming in to the ramp to haul out. We now count off 5 items as we come in to shore (that's as many as we can remember).

- keel up
- bow rope placed on roller to readily hang on to
- log transducer up
- rudder up
- motor up

Alan & Sue Benn of SURE THING, NX990, NEWCASTLE, NSW.

Sheet Measurements on a Noelex 25

I was handed a schedule detailing a number of measurements relating to a Noelex 25.As our boats get older, many of our halyards and sheets appear to have seen better times. First of all let us talk about the main and jib halyards. Originally these two items consisted of braid material spliced into a stainless steel wire. As these two controls age, often some of the strands of the wire section break, causing some nasty bits sticking out. When this happens, it is usually advisable to think of replacements. Modern technology has come to the rescue in the form of a better material. Spectra was invented and I have it on expert authority that all the larger racing yachts now use only spectra for their halyards. It then follows that perhaps you may also give this material some thought. Spectra is reputed to be incredibly strong, very good wearing and non stretch. When I took my halyard to a well known yacht shop, the proprietor advised me that I should use spectra. I questioned the properties and was advised that I could use a smaller diameter 'rope' and that splicing a stainless steel wire into it could be done at an extra charge but is was old hat. I settled for the expert advise and used spectra. It performed very well next time out so I am happy.

Now for the various measurements. As you replace each halyard or sheet, you should make up your own mind which material to choose. Be warned, it does not come cheap so don't waste your money in buying too much length.

Below I have reproduced the list showing the two options.

Halyard or sheet description

Total Length in braid and/or
Total length in wire/diameter
Spectra/diameter

<u>or</u>

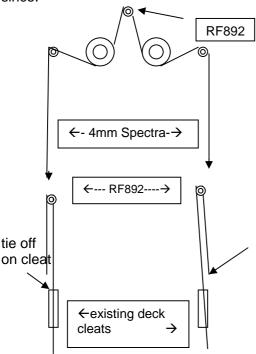
Jib halyard	7.70 m wire 3mm + 11 m braid 8mm	18.70 m spectra 6mm
Jib Sheet	13.80 m braid 8mm	13.80 m spectra 6mm
Jib barber hauler	7.70 m braid 6mm	7.70 m spectra 4mm
Main halyard	8.50 m wire 3mm + 14 m braid 8mm	22.50 m spectra 6mm
Main sheet	11.50 m braid 10mm	Spectra not recommended
Outhaul	6.50 m braid 8mm	6.50 m spectra 6mm
Cunningham	5.00 m braid 8mm	5.00 m spectra 6mm
Cunningham continuous	11.00 m braid 8mm	11.00 m spectra 6mm
Kicker/vang	6.50 m braid 8mm	6.50 m spectra 6mm
Kicker/vang continuous	11.00 m braid 8mm	11.00 m spectra 6mm
Mainsheet traveller	2.30 m braid 6mm	2.30 m spectra 6mm
Mainsheet traveller continuous	6.50 m braid 6mm	6.50 m spectra 6mm
Spinnaker halyard	18.50 m braid8mm	18.50 m spectra 6mm
Spinnaker sheet (x2)	12.50 m braid8mm	12.50 m spectra 6mm
Spinnaker sheet continuous	23.00 m braid 8mm	23.00 m spectra 6mm

Jib Sheet Lay-out

On the subject of the various control lines, there are a number of ways in which you can make handling your Noelex so much easier.

The important ones you should be able to control from either side are the Cunningham, vang and outhaul. Already your jib sheet is continuous. The latter can be easily modified to a 2:1 ratio. Most of our NX yachts have a deck cleat with a rope guide, either side of the deck. You need to do a little experimenting with measurements between the deck cleat and block at the end of the jib traveller. Having done this, you will need about 8 m of 4 mm spectra. Find the middle and attach your jib shackle there. Now lead each side back the normal way and tie a small block such as RF892 at each end of the jib sheet (which now seems too short). You then tie a 6mm diameter length to the top of the cleat (the rope guide), thread through the block at the end of the jib sheet and lead back through the cleat. You now have a 2:1 ratio, which is almost fingertip control. There are other ways I have seen where there is an arrangement leading forward first but my method is much simpler.

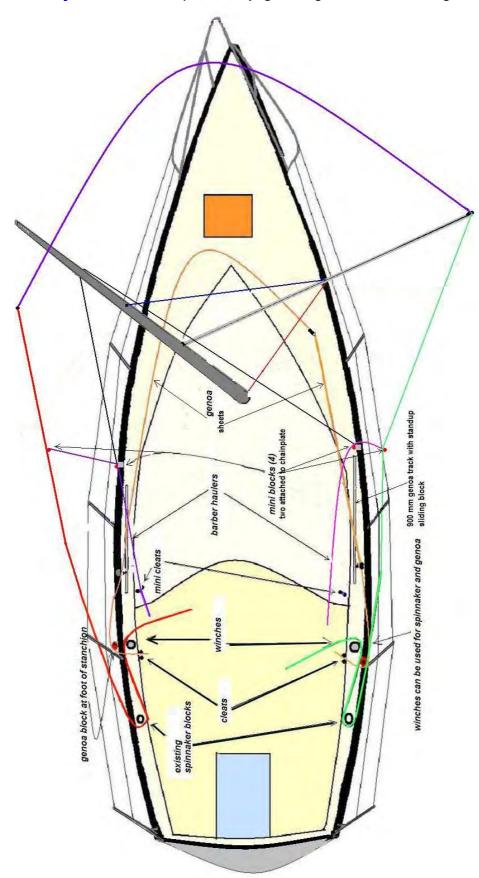
As the jib sheet now has a block permanently attached either end, you leave the jib sheet in place when packing up. I also found that the triple large block arrangement at the clew was not always functioning efficiently. I replaced the centre block with a smaller one and have not had problems since.

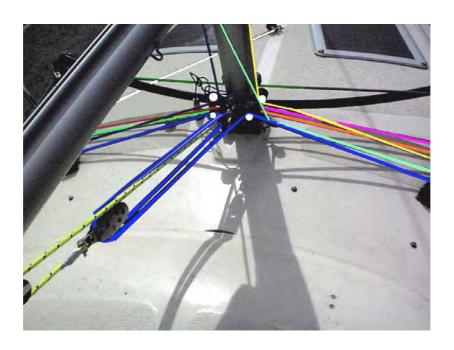


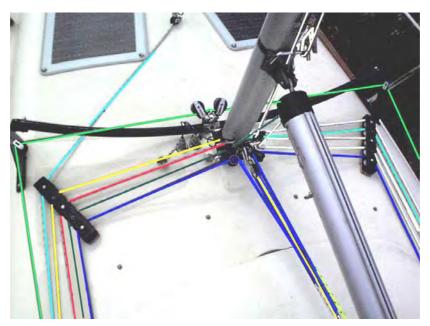
The Cunningham, vang and outhaul can also be easily rearranged to be continuous either side however this can be rather expensive initially. The ideal method is to have a set of five rope clutches on either side on the deck, mounted forwards of the deck winch. The only other cleats you would then require are two, one for the reefing line and one for the pole downhaul. Whilst on the downhaul, I attached the block that sits below your pole on the deck, to the forward side of the foot of the mast. Much better that way and never had a problem of pulling off, because I screwed a saddle on with stainless steel self tappers.

Below is a drawing and part numbers required, but first check out the cost of the rope clutches. This may turn you off!

Sheet Layout Noelex 25 (refer next page for legend to colour coding







Deck Layout of Halyards and Sheets - Noelex 25.

 $\underline{\textit{NOTE:}}$ Writing colour matches rope colours.

Spinnaker pole brace (kicker)

Spinnaker pole topping lift

Main halyard

Vang - double ended

Outhaul - double ended

Reefing line

Spinnaker Halyard
Jib Halyard
Vang - double ended
Cunningham

Outhaul - double ended

The following need to be installed:

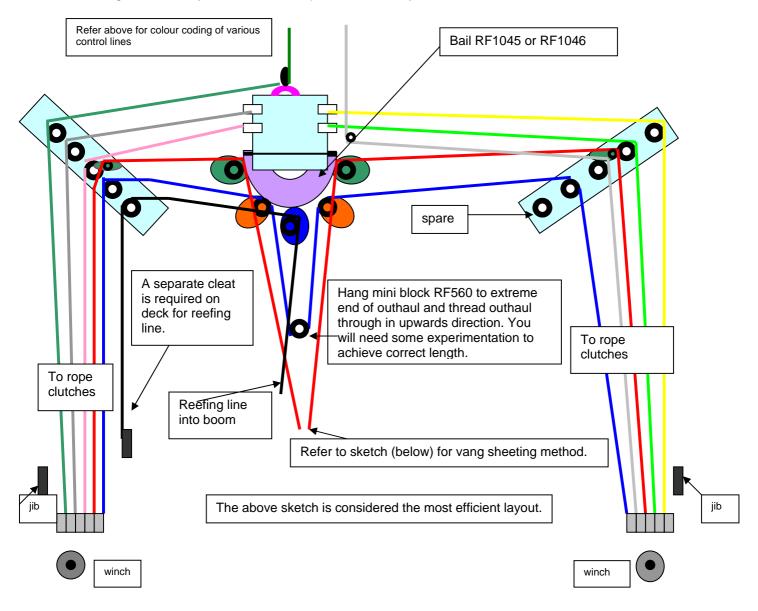
RF1045 series Bail - these come in various diameter sizes - check mast diameter.

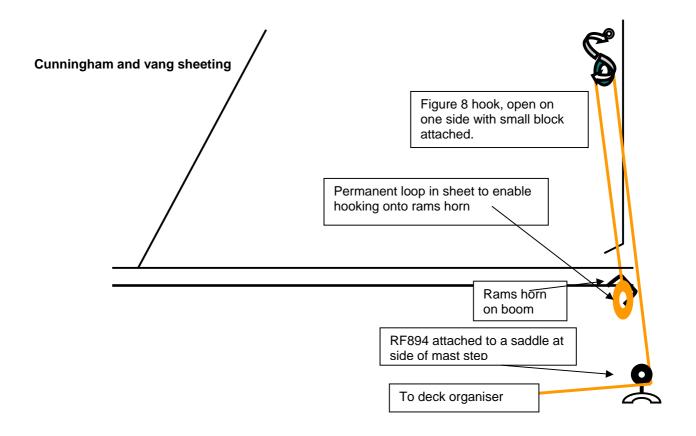
Remove existing rivets that hold foot on mast and drill hole through. Attach the bail with a stainless steel bolt.

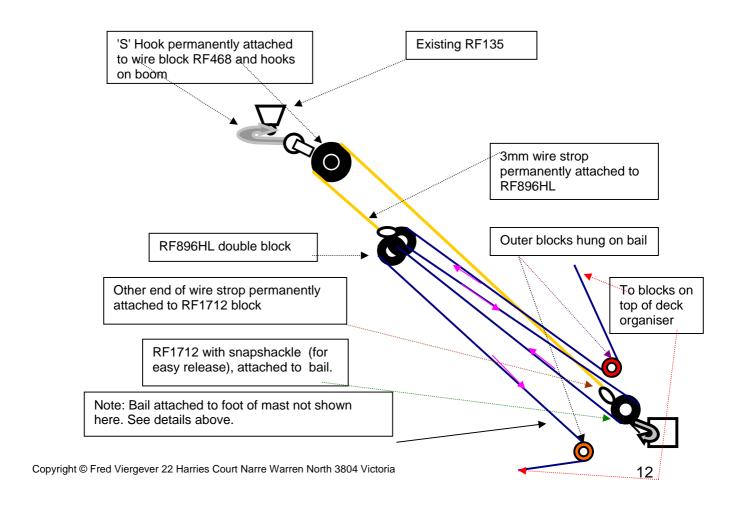
Attach block RF469 (one each side) to deck organiser by removing through deck bolt and replace with suitable full threaded bolt. A locknut should be threaded onto bolt between block and organiser and a washer should be either side of block. This will enable bolt to be locked firmly whilst blocks can swivel. These blocks will now service the continuous vang.

Attach 5 blocks RF894HL to bail RF1045. These blocks will service: outer left and right - the continuous vang, centre block for reefing line and remaining two, for continuous outhaul.

A small block may be attached to the deck via a saddle directly beside mast, to service direction change of Cunningham. Similarly attach a block for pole brace directly in front of mast or attach near base onto mast.







Forestay Tension

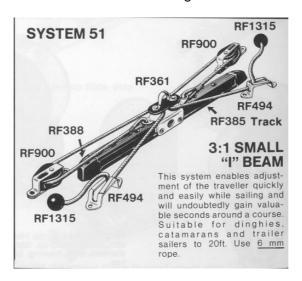
Often I have been asked how much tension there should be on the forestay. If you can attach your forestay without having to crank on via your jib halyard attached temporarily to the anchor guide on the bow, then your forestay is most likely under tensioned. Different wind conditions require different tension. I installed a stay adjuster. You can use several, one is a Ronstan part RF 45. This fitting gives you several height adjustments via a clevis pin.

Traveller Sheeting

Main sheet travellers are a problem in windy conditions. When you need to ease the traveller, it is usually at the wrong side already and the rope is out of reach. You can modify this at minimal cost.

The standard car has a jam cleat either side. Assuming you are making modifications, you can remove the jam cleats.

System 51, which I got from an old Ronstan catalogue, is the ideal modification. Instead of RF900, attach a saddle near the base on the vertical of the cockpit seat just above traveller height. You need to use bolts and backing washers for strength. Hang an RF892 in line with the traveller and an RF894 above it, both on the same saddle. Fit a cam cleat with guide (instead of shown RF494) such as FG2003.0 above it, again bolted through with backing washers and finish off with RF1315. You will now always have your traveller within easy reach it is 3:1 ratio and you make adjustments by pulling upwards with immediate cleating available.



Keel Winch Failure

What happens if the cable breaks or the winch fails?

Number one, if out on the water, you have a problem. Number 2 – do not panic, take a deep breath and count slowly to five. You now feel a little better and begin to regain your rational thinking.

You are out on the water and the keel should be all the way down anyway so continue to sail until nearing a retrieving ramp. Next do the usual dropping of sails, including usage of engine and once comfortable head for the ramp. Near the ramp, after ensuring that the keel pin is out which it should be by then in any case, prepare the approach of the boat in such a way that the keel will eventually strike the concrete in a gentle manner. In other words, run aground. From here on everyone will take a bath.

Position yourself and crew on both sides and start walking the boat up the ramp. This action will push the keel up and eventually the point where the cable connects will become available which can be observed by removing the plate on the side of the keel box. Of course, one crew person would have to again boarded to observe this.

You can now make plans as to how to secure the keel so that the boat can be hauled up on the trailer.

If the winch mechanism has not failed, it may be possible to unwind some cable and make a temporary attachment to the keel and carefully try and winch it up high enough so that the boat can be retrieved. Because a Noelex 25 does not have a swing keel, the keel will have to be within the box so as not to jam at the rear roller. Once up on the rear roller, it may be possible to carefully retrieve.

If all the above is not possible, try and get hold of a manual trailer winch. This winch can be placed on top of the keel box, a cable can be tied temporarily to the keel fixing point and then winch up. The temporary winch will not fall off the top of the box, the sheer weight of the keel holding it in position.

Once retrieved with the boat fully on the trailer, all temporary measures can be removed and the keel let down in it's usual down position on the rollers. After that you can travel home and spend your next weekend making the necessary repairs.

The latter method with the use of a manual winch can also be applied if the installed keel mechanism fails. In that situation unwind all cable from the failed winch, attach it to the temporary unit and winch up and retrieve.

There are several items on the chat site(s) discussing keel winch repair or replacement and further articles on the web site in the Technical section.

Hi-field Lever

The highfield lever is situated underneath the foredeck and accommodates the forestay. First of all, it is a very important part of the rig. Frequent inspection is **mandatory**.

The very end of the lever should already have an existing hole. Through this hole, thread a piece of 4 mm rope and tie a knot in the end so that it can not slip out of the hole.

Remove the nut inside the anchor locker from the top bolt of the towing eye and attach a small tang such as an RF347 (Ronstan part) and securely replace the nut on the bolt.

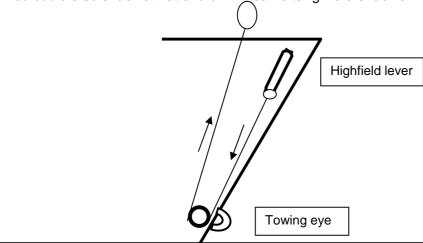
Next, attach a small block - RF666 will do. Lead the rope from the bottom of the lever through the block and tie a loop at the end.

Leave the loop in a handy position on top of the anchor line for easy access.

Now when stepping the mast, all you need do is pull on the loop to lock the lever in place. Saves a lot of skin on your legs and you will find this method efficient.

If you like, you can also leave a loop at the lever end to facilitate easy release.

By the way, the bitter end of your anchor warp is supposed to be permanently attached to the boat. You could also shackle that end on the same tang via a shackle.



Trailer Maintenance

Rust prevention on your trailer maintenance is probably one of the most important items you should have on your agenda and in most cases overlooked by a large number of boat owners. It should not really be cumbersome if you spend a little time often.

Most of us are far too eager to cast off after having parked the car and trailer. What you should do, is purchase a couple of spray cans of fish oil and, next time, after you have launched your Noelex, get out the cans and spray all over the parts you can never reach. You may as well use up both cans as you will probably not get around to it again this season.

It does smell rather fishy, but is not too bad if you keep the breeze behind. Fish oil will leave a long lasting protective coating. When I say this, I mean about one season. There is also a lanolin based product on the market but is a little more expensive and does not come in a spray can. This product comes with a little hand pump. It is however a good product.

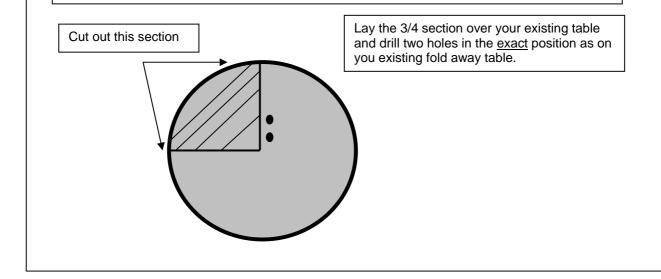
Whilst you are at it spray some WD40 or similar at the axles of your rollers. One word of warning!! If you have done the rollers, take extra care next time you launch. Your Noelex will simply take off from the trailer at 100 miles per hour.

It is essential to have sufficient length of launching rope and you should loop the end a couple of times around the front bar of the trailer. Also, wearing a work glove is advisable as rope burns inside your hands are nasty if sustained.

Standard Table - Replacing the

Here is an idea to leave your 10 kg foldaway table at home and leave more space above your roll out food box

Make an easy table that will attach to the two pins at the side of the keel box. The best shape is round and you can use a bit of 5 ply. The table is about 80 mm diameter and, because of the round shape will cause very little obstruction if wanting to access the forward cabin. This table can be left in place when under way, leaving the entire main cabin floor available. With only two persons on board, you will probably hardly ever use the larger bulky foldaway table again. It is a good idea to apply some stain and varnish prior to use.



Refrigeration

A standard Noelex incorporates a roll out food bin, the rear section of which is commonly called the ice box or refrigerator compartment.

The electric refrigerator unit is not standard and has been added by many owners over the years. Unfortunately most of these units - even though expensive - are not very efficient. Neither is the compartment.

The foam insulation is scanty, consisting merely of a thin sheet along the sides and between the food and fridge section.

You can make good improvement by purchasing some foam sheeting and attaching it along all sides with silicone. To make the foam more durable, purchase a roll of white contact, available at most stationers and paper/books departments in supermarkets or hardware stores.

Wrap this contact around the foam tightly and finish off neatly. You can also glue some foam under for even more insulation.

The ultimate method is to insert proper insulation inside the walls. You can do this easily. First, remove the bin from your boat. Turn it upside down and locate about the centre of the cavity between food storage and ice box. You need a 40 mm hole saw and make two holes at the bottom of the unit.

Keep the bits you remove for later re insertion.

Now buy a couple of cans of liquid foam from your hardware store. Before getting impatient it is advisable to make some supports. Liquid foam, once inserted, will continue to expand for up to 24 hours which could bilge out the sides, causing the rollout action becoming difficult.

I used some floorboard sheeting and temporarily constructed that especially along the sides. In addition you need to temporarily reinforce the inside of the ice box. Two bits of board will do with a supporting bit of timber jammed in.

You can now pour in the foam slowly and let it do it's stuff. The two holes you made are to ensure that the expansion will allow any excess to bubble out as lava in the crater of a volcano. When the foam has set, allow 24 hours, cut off any excess with a sharp knife and replace the two circles you cut out earlier with a bit a silicone. You will be surprised how much more efficient the ice box becomes.

Of course you will also reap these benefits if you already have a fridge unit installed. Without the insulation you may as well not run it.

The ultimate fridge unit is a Danfoss 12 volt compressor. The existing Italian made fridge you may currently have does not have a compressor. It has a diaphragm and is cooled by a gas no longer available. This unit can be rebuild with the Danfoss at a cost of around \$750.00. You need to ensure that you also have a small automatic 12 volt fan attached on top because you lose more than half the efficiency of cooling without this little fan. Cost of fan is about \$30.00 from electronic stores such as Dick Smith Electronics and is installed by the tradesman doing the conversion. Finally, you get the Battery Current Saver unit and, presto, instead of having your batteries flat over a weekend, you now have sufficient energy for at least 10 days.

I would be interested to receive some articles from members relating their refrigeration experiences on their Noelex yacht. (Noelex 30 owners with their flash diesel engines need not reply. They do not have this problem and some even have a shower recess!!).

Noelex Trailers

Both classes, NX25 and NX30 are in the main equipped with this piece of machinery and it is probably the most neglected yet very important part.

Whatever make of trailer you have, it generally has at least four wheels. Initially these wheels were fitted with tyres that should perhaps never have been used in the first place. The original tyres are most likely passenger car tyres which can be inflated up to about 43 lbs. Nowadays we use a measurement shown as Kps but most gauges still show lbs. of pressure per square inch.

When driving long distances, the air in the tyres warms. Under inflation will cause increase in temperature. The less air, the higher the temperature.

From experience and talking to many owners, it has been found that you should replace your tyres with small truck tyres. These can be inflated to more than 60 lbs., resulting in much cooler tyres. Sure, the ride will be a little harder on a bumpy road but the risk of failure is reduced dramatically. Talk to your tyre retailer and get the correct advice.

Your wheel nuts should be of the dome type, that is, they are totally enclosed. You should fill the nuts with vaseline before you screw them on. This will ensure that water does not easily enter the thread and they will be much easier released, should you need to.

Next, comes the axle nut, covering the bearing. Each wheel should have a 'bearing buddy' fitted. This piece of equipment comes in standard size and simply taps on. It is supplied with a grease nipple and, all you need do is to ensure that you pump grease in it regularly. When doing this, you will find that the pressure of the grease will push out the spring loaded seal. Whilst there is sufficient grease inside the chamber, the spring will continue to push grease into the bearing, making the incident of failure less risky.

Some bearing buddies are see through so that you can see when they are full. Most have a small overflow hole, which will indicate full when escaping of some grease occurs. You should not worry too much about spilling of grease onto your wheels. It will help to preserve the metal from corrosion when salt water invariably runs onto the wheels when launching your boat.

You should never bury your wheels underwater and never launch whilst the bearings are still warm. I am always astonished observing people at a launching ramp becoming quite short tempered when their boat refuses to slide off the trailer. This refusal is simply due to complacency. Almost every boat trailer comes equipped with rollers. The centre rollers support the keel. In our boats the skeg is the keel (not your centre plate). Prior to launching, you must fully raise the centre plate ensuring that it hangs on your keel cable rather than resting on the roller. (Conversely after you have retrieved, you must release the pressure on your keel winch, ensuring that there is no longer any weight on the keel cable).

Keep your trailer winch cable hooked onto your boat, slackened off about 30 to 50 cm. This will ensure that your boat will not escape when backing down the ramp. You will need to ensure that you have a launching rope at least the length of your boat, securely attached.

When ready to launch, undo the hook at the bow, and, when launching with two persons, one person holds the launching rope, wound loosely once around the post. The car driver only needs to let the rig roll about one meter and hits the car's brake pedal. Your boat should then smoothly roll off.

If it does not, and, after finally having floated her off, get out a can of WD40 or similar and spray into the axles of the centre rollers. Spin each roller a few times ensuring that the film of oil has well penetrated. Next time you launch your boat will come off easy. One word of warning!! When I say easy, I mean exactly that. Ensure that you have looped your launching rope once around the post because you may well find yourself swimming!!

It is highly recommended that you use work gloves because a rope burn inside the palm of your hands is very nasty and painful for quite a number of days.

Whilst you have your boat off the trailer, you should also spray the undercarriage. Springs tend to become rusted after having been in contact with salt water. I found the lanolin spray to be the

most durable. You only need to use this perhaps twice a year. An alternative is fish oil but it is a bit smelly.

Most trailers are still fitted with a mechanical device at the draw bar. Here you will find a spring loaded coupling, complete with a grease nipple. You should always pump in some grease until it starts to come out. The grease will ensure the braking efficiency when travelling. On top of the coupling is usually a master cylinder which should always be kept topped up with brake fluid. This cylinder is activated by a small arm which you see disappear into a round rubber, about the size of a 50 cent coin in diameter. The rubber is a dust seal. It does not entirely seal!!. Fine road dust will find its way in. Again, use your WD40 occasionally to keep the small arm moving freely. If you don't, eventually you will rue the day that you failed to service it. At one time or other you will find yourself in a traffic situation when you have to take emergency action by slamming on your brakes to avoid entering the boot of a car in front.

You have avoided a collision, let of a sigh of relief and a few remarks and happily drive on. A little down the road, someone will pass you and yell that you are on fire.

You panic, pull over and find your trailer brakes have gone. How did it happen? Quite simply, the little arm on your master cylinder jammed in, could not come out because of the accumulated dust and you towed your trailer for a few hundred meters with locked trailer brakes.

I know of at least half a dozen cases which turned out very costly but for a little bit of maintenance.

Finally, a word on your other rollers; other than the centre ones. These rollers usually come in sets of four and are usually blue in colour. They are there only to ensure that your boat does not over balance when going round a sharp bend. They should <u>not</u> be in erratic contact with the hull, or, alternatively, in very definite contact.

What happens is, that your boat will generally 'walk' to the centre of the concave keel rollers whilst you are towing. If these balancing rollers are fixed so that they are erratically touching the hull, they will wear into your gel coat, leaving permanent marks on your hull. You can protect the hull by making up stockings of some scraps of carpet that snugly fit over the rollers or, simply drop them down a little so that they do not constantly touch the hull whilst driving.

Adjust the rollers - past midships, in such a way that the hull is in firm contact with the rollers and use a length of seatbelt strap on either side tied to the stanchions at the cockpit. (the standard Mackay trailer has fastening eyes welded just below that point already). This method ensured that the rollers are always firmly against the hull and never rubbing

Rudder Assembly Maintenance

With your boat on the hard, take hold of the rudder assembly. Try and see if it is totally solid, i.e. no movement up/down.

If there is, you will need to replace the bushes of the box, both top and bottom. You will be amazed at the adverse affect worn bushes have on the accuracy of the steerage.

The leading edge of the blade should be undamaged. If there are bits missing, you are asking for trouble.

The blade is made in two pieces, left and right and then glued together. If water is allowed to seep in, the eventual result will be that the two halves come apart. In windy conditions this could be disastrous because the motor is not much of a rudder. In most boats there is very little turning ability of the motor.

You can avoid disaster and overhaul the blade. What you need to do is roughen about 1 to 2 inches (about 40 cm) each side of the leading edge and get some fibreglass material. The 50 mm woven tape is excellent.

Get some resin and fix the tape to the leading edge, pulling it back along both sides.

You should roll the resin and tape, removing all air bubbles. There is a special tool for this but you can make your own for this small job.

The tool consists of little wheels that you make up with some washers. Use larger and smaller ones in an alternate way on a bit of stiff wire or a small bolt or wire.

The spindle of a small paint roller is ideal. The larger washers become little wheels whilst the smaller are used as spacers.

Apply the resin on both sides, don't use too much hardener otherwise it goes off too quick, lay the tape on the resin and use your rolling tool and roll until the tape is no longer white in any place. You can now leave the job and return to-morrow,

The next day you sand it back to a smooth finish.

I developed a cracked seam in my rudder and it went all the way up along the forward edge.

Having applied the material, I found that the blade became a little tight in the rudder box. Sanding will eventually get it right. For just a few dollars and a bit of elbow grease, you may have saved yourself purchasing a new blade which is not only expensive, but not easy to come by now that there is no real manufacturer of Noelex yachts.

Whilst on the blade, when it is manufactured, it is placed in a standard jig and the pin hole is drilled. Most 25's should have the hole transferred about 20 mm up and 20 mm forward. Your rudder should be perpendicular to the water but because of the slant of the transom, you will find that your rudder is on a slight backward angle.

It is very simple to make a new hole and you should fill the old one.

Making the rudder vertical can also be achieved by packing out the pintle fittings. The top one should be packed out further than the lower one. This however is not as easy as drilling another hole.

What does it do to your boat? Well, for a start she will be much easier to handle with weather helm disappearing. You will also have remarkable better control going down wind under spinnaker. Chinese gybes will be almost a thing of the past. How does this affect the Class Rules? Read the Rules. There is a tolerance to place the hole anywhere within a 60mm circle.

Hull Maintenance

Over the years I was often asked why my Noelex always looked as though she was still brand new. What was my secret?

Really there is no secret. All it takes is a little bit of pride and elbow grease.

In Victoria, most boating places have a connection to the sea so there is either salt or brackish water. As many ramps have a fresh water outlet with hose attached, I always hosed down the trailer after launching and again, upon retrieval gave the whole rig a hose down. In the absence of fresh water, a hose down would occur at home, preferably on the lawn. This way, the grass was watered at the same time.

Occasionally I would apply a liquid silicon based polish which seemed to last longer than waxes. Any persistent marks would be removed either with a rag and some petrol or a basic fibreglass cut and polish potion.

There are many fibreglass polishes available but I never bothered with the expensive ones. If you read the label on many of the polishes, you will see a warning that the product may contain such ingredients as hydrochloric acid. This chemical comes pure in a plastic bottle and does not harm the bottle. I figured that, fibreglass being plastic, if I added about 15% by measure to polish, I should be able to create a good cleaning potion. All I had to ensure was, to wear rubber kitchen gloves.

I have used stronger mix of acid occasionally and never did any harm to the gel coat. In fact the sometimes yellowing of white would turn into a brilliant white again using acid.

Small scratches were easily fixed. Having a white hull I obtained some white gel coat. A scratch that penetrated through the gel coat was thoroughly cleaned and slightly scraped to make a better adhering surface. I then wiped the damaged part with some thinners, mixed and applied a little gel coat and covered this with a wide piece of the standard clear adhesive tape. This would ensure an initial smooth surface and would stop the gel coat from running.

After a little while the tape was removed and, using some wet and dry sand paper ranging from reasonably course initially down to 1200 size, the repair was simply sanded back.

Taking a bit of time and patience and polishing up the repair, you would not be able to notice anything different.

On cleaning, the worst area was always the cockpit floor and the seats. Because of the non slip surface, dirt tends to become ingrained. The best way to remove and restore this is by using a stiff brush initially and if there are still stains left, use some water to which you add some hydrochloric acid, gently pour on, leave for a few minutes and then wipe off.

I once owned a Sonata 7 which had quite a bit of discolouration Not knowing the trade secrets, I paid \$200 to have it cleaned and polished. I called in to check on progress and then discovered that the professionals were using acid for cleaning. Since then I have done my own cleaning at a fraction of the cost.

If you are a little hesitant, you can try it out first on your rudder blade. Just be careful with acid because it is not too kind to metal alloys.

Good luck.

Hull Maintenance feedback

There was a bit of feed back about using certain acids to remove those stubborn stains from fibreglass.

The hint was not meant to imply that you dip your boat in an acid bath. As with many of these chemicals, care needs to be taken not only on the material but also in personal safety.

These substances can be dangerous if not handled correctly but, if used wisely, many will certainly do the job.

Going on from this, I wondered how on earth could I get the build up grime from the plastic coating of my lifelines. The boat looked spic and span but the white in the lifelines was no longer white. I tried all sorts of kitchen cleansers to no avail.

I was doing a bit of painting and had to strip off some old weathered varnish from the exterior timber. First I had to remove all the timber, applied the stripper, washed down with turpentine and sanded to brand new teak timber. I wondered if the chemical would eat plastic and tried a bit first. It did not

I then took a one inch brush, laid some paper underneath the life line to protect the deck and applied the stripper to the lifeline.

I could not believe my eyes. I brushed the stripper on lightly and as I moved forward with the brush, the trail left behind was a brilliant white lifeline. Try it, but watch your skin. It bites a little, so wear a glove. Clean off with a rag dipped in turpentine.

Pop-Top Water Leaks

Do you have a leak around the rear stanchions of your pop top? Many do apparently.

What you need to do is lay a small ridge of silicone around the fitting where the stanchion goes through the deck. Make sure that it does not touch the stanchion. The ridge will act as a little dam and prevent rain water running down the pipe, leaking onto your cushions.

Towing - Swaying whilst...

If your boat tends to sway a little when towing, consider the balancing ratio of the towing load to your tow ball. We have quite a bit of weight at the very end of our boats in an outboard motor, a petrol tank, sails in the locker and other items. Also, we tend to stock up the fridge before leaving home, adding more weight past halfway of the boat.

This problem is easily overcome if you move the winch post forward a little. Try a couple of inches first and experiment a little. I found that the best result was obtained if I could hardly lift the front of the trailer, confirming that there was more weight forward of the trailer than towards the end. Also, carrying a spare wheel up front helps.

Noelex Yacht Squadron Inc

Here is a handy hint that does not directly applies to your yacht but to your crew.

You should by now be aware that, taking part in racing activities requires for each person to be on board to have a number available that identifies that person as being an affiliate. In other words, each person on board must at least be a silver card holder as required under the Rules of Racing anywhere in Australia and most countries in the world for that matter.

To obtain that number, a person must be a financial member of a recognised yacht club. This might be ok if you wish to join your local club in some sort of membership structure, however, many clubs charge 100's of dollars for membership. You may find that crew are not always willing to do this, especially if they do not participate often. The Rules will only grant an exception under certain circumstances, including that a person should not race on more than three occasions in any one year.

The cheapest way out is for crew to become associate members of this Association, costing the usual subscription and then to also pay the required levy, currently \$40.00 per annum, which we will pass on to the State Yachting Authority. Once paid, a silver card (able to be upgraded to a gold card) will be issued by the governing authority, enabling that person to then participate in racing activities as a financial member of Noelex Yacht Squadron Inc.

We understand that a silver card number is recognised at any official yacht club, anywhere in Australia and many overseas countries.

This particular arrangement applies only to persons who regularly crew on a Noelex yacht, thus having an active interest in the Class. Outsiders, not in any way connected with Noelex can not take advantage of this arrangement.

Noelex Ice Box efficiency improvements.

The standard roll out food bin/ice box is perhaps the most inefficient piece of equipment found in a Noelex if it is to be used as a means to preserve food for a period of time.

The food box section located at the front is fine but the ice box is totally useless for it's purpose. In fact a carry away esky takes more points because ice can be inserted at the point of purchase and has less exposure to ambient temperature than the bag of ice to be carried on many occasions along what sometimes seems miles of jetty.

The everyday esky has probably more insulation foam than the Noelex ice box.

To outshine the humble esky some simple modifications can be made at very little cost but a little bit of care must be exercised.

First you must remove the entire roll out unit and preferably work at it in an enclosed area such as your garage. Having done so, turn it upside down and locate the approximate centre of the widest V-shaped area between food and fridge compartment. A calculated guess will do as the lowest part (now on the top because you have the unit upside down) is reasonably wide.

You will need a hole saw, 40mm diameter. Carefully drill two holes in the bottom and save the cut outs for re insertion later.

Get a torch and shine the light through one hole, peering through the other and you will marvel at the huge space. Could well be an Afghan cave except it is almost totally empty except for a flimsy bit of foam about ½ inch thick.

You now need to acquire two pieces of chipboard or similar about the size of the sides of the entire bin, four bits of timber such as 90 x 45 pine as used in house frames (these need to be longer than the food bin), some smaller bits of chipboard and some short bits of timber.

Screw or nail two lengths of timber to the chipboard making certain that the ends stick out like handles on both ends. Stand each board against the side of the food bin and securely tie the 'handles' with rope, across the back and front of the food bin. It must be very tight. Turn the unit over or on it's side and insert pieces of chipboard on the inside of the ice box. Again you can make up some sort of frame well strutted in between to prevent any movement inwards.

You are now ready to go to work. You need to buy some pouring foam. The best material to use is the 2-pack which can be obtained from many places selling polyurethane products. You will need the smallest available which is a 1 kg tin of each. One is the foam (Polyol) and the other the chemical (Iso) which sets off the reaction.

You can buy it at Polymer/Daystar, 51 Stephen Road Dandenong phone 9793 5444 or from one of their distributors. It is prohibited to send the product via mail order.

The next items you need are a few empty cat or dog food tins. Mark off exactly halfway in two tins and pour one chemical in each tin at exact volume. Best to squeeze the tins a little to have a pouring funnel. Now proceed and pour both into another tin, give a quick stir and pour the contents into one of the holes in the food bin. Don't get distracted because, once the reaction starts it cannot be stopped.

Leave it bubble for a few minutes and when it almost stops rising make up another batch. You may not need as much as the first time and probably use only 3/4 kg in total.

Before it starts to expand out of the holes, lay the two cut outs on the sticky side of some of the gray duct tape and tape the inserts back into the holes. You will need to stack a few bricks on top which will keep them in place. You can now clean up and leave the job alone until the next day.

Do not remove any timbers for at least 24 hours. If you do, you will finish up with rounded sides or less space inside the fridge. The foam will find it's way into any cavity and will in fact creep forwards around the foodbin section. Without the restraints you could well end up with a balloon shape hence it is important that the sides are well constraint to stop bulging.

Keeping the foam in will ensure a dense insulation. If you let it expand out of the holes, the density will be less but still much better than the way it was originally.

The above sounds a long story but it really is very simple. If anything bubbles out, leave it alone until it has set. It is much easier to clean off using a shark kitchen knife when set.

You can go one step further to improve efficiency even more. Refrigeration experts will tell you that insulation will need to be at least 3 to 4 inches thick, which may be fine for a coolroom but not practical for our simple ice box. After all, we only wish to cool an area of about 42 liters.

Before you go and buy your materials, measure up the sides of the entire bin. At Clark Rubber you can buy sheets of white polyurethane foam. You need to obtain two sheets about ¾ inch thick (or 15mm in metric terms), each one large enough to cover a side

Good old silicone will not eat foam so, apply a few dollops of the chemical to the foam and stick it along each side. There will still be sufficient space for the bin to roll in and out but foam damages easily.

To prevent damage, buy a roll of white contact at Woolworths or any other place selling stationery. Apply the contact to the foam, starting at the rear of one side, stick over the foam, continue along the front directly onto the fibreglass and continue to the end of the other side. The contact will last for years and you will hardly notice it from the old shiny surface. You now have achieved double insulation.

The next step is to consider what now to do with the newly insulated piece of furniture where we will discuss refrigeration means.

Refrigeration versus Battery Usage.

There are various means of refrigeration that can be applied. The simplest method is to deep freeze 2 liter plastic milk bottles. When placing them into your home freezer, leave the tops off and do not overfill the bottles. Water expands when it changes to ice.

Another efficient block of ice can be made by recycling an empty wine bladder usually stored inside a wine pack. Remove the bag from the carton and fill with water. Lay inside your freezer and use when required. Make sure the bags lay flat in your freezer as you will need it to be of a uniform shape.

Such a block of ice will last a long time and can easily lay at the bottom of the ice box. Two is better but you lose space.

Bags of ice are not as good because the bags usually leak and someone has to empty out the water later on. Blocks of ice take up half the fridge space.

The more sophisticated way is to have a compressor driven refrigeration unit fitted on the platform at the rear of your roll out bin. For a number of years the standard Noelex fridge was an Italian made unit by the brand name of Indel. These worked via a small 12 volt motorised pump which would force gas through a diaphragm causing refrigeration. Problem is, the diaphragm dies and needs to be replaced. Last time I checked, the cost was \$320.00 which included re gassing. This unit did not come with a refiller tap and was totally sealed. They became very noisy and could not cope very well, especially in warmer ambient temperatures. Furthermore the gas used in that fridge is now a prohibited substance and no longer available. I think it was called Freeon or something similar. You will need to have your Indel modified to enable usage of the new type of refrigerant.

An alternative is to have a free standing unit such as an Engel but, again this takes up space. There are solid state units such as the Finch fridge, running of 12 and/or 240 Volts and LPG in combination.

I would not recommend LPG on a Noelex 25 simply because there has to be a pilot flame going all the time. You cannot have this unit inside so the only alternative is a locker with a vent. Keep in mind that you have a petrol tank not very far away.

Running the Finch fridge on 12 Volts is not a proposition. It works via a heating rod similar to that in your electric kitchen kettle and sucks your battery flat overnight. Fine in a vehicle which charges all the time. Not in a Noelex with only an auxiliary outboard.

The alternative is a proper compressor driven unit. The best one to get is a Danfoss. This unit is German made and is similar to the one in your 240 volt fridge and freezer in your home, except you need the 12 volt version.

Consider how old your fridge is and how reliable it has been for many years and the hours it has given you faultless service.

You would never work your Noelex fridge for that amount of time unless you used it as a permanent place of abode. This is why I speak highly of the Danfoss. It runs totally silent except for the small fan and will actually freeze down to -14°C. It senses when your battery becomes low and will not re start when voltage falls below 11 volts.

If you already have the old Noelex fridge, you can use the already installed evaporator plate inside the fridge. No need to purchase another. All you need is the unit to sit on the platform and have it connected. It does not come cheap and costs as much as your home fridge but once you have it you will marvel at it's performance. You need to shop around for the best possible price.

Danfoss are in the phone book and is located in Mount Waverley, a Melbourne suburb.

The running of the fridge is the next item. Typically small 12 volt refrigerators run via a thermostat control which will turn the compressor on, run for about two minutes and turn it off for a similar period, only to repeat the cycle infinitely until you cut the power source.

Whatever the make of unit, each cycle draws around 4 Amps from your battery each hour. Each start of the electric motor causes a spike of high voltage, quickly dropping to a lower voltage once the compressor runs but this happens 15 times each hour.

Let us consider that you have one 110 A/h battery on your Noelex. At 75% used capacity that battery is effectively flat. In other words, your 110A/h battery will give you service for only 80 Amps. Divide this by 4 (one hour of fridge use takes 4 Amps), the result is 20 hours of fridge running. With two batteries you can usually go away for a weekend and recharge when you get home.

You would normally run your fridge during the day, you should keep it full to minimise vacant air space and you should turn it off when going to bed. It would normally remain closed whilst you sleep thus not letting in much warm air. Average running time would then be 16 hours per day, using 64 Amps.

Those members blessed with a Diesel engine in a Noelex 30 probably don't have this problem.

There are other means of course to top up the battery. You can install a solar panel or you can have a small portable generator on board. The latter is a good investment, costing around \$600.00 because you can stand it in the dinghy and attach the charging cord via the socket usually used by the outboard. Being portable, you can take it ashore with a 240 volt lead light and hang it in a tree.

You now have a light source if you wish to have a barbecue on the beach.

The small Yamaha is about the size of a portable sewing machine and will run for 6 hours on 1 liter of fuel and is a 4-stroke, thus very quiet. It is also very handy to use with a small 240 volt TV set and will run an electric drill of around 350 watts. I have used mine at home during long periods of power failure, plugging in the TV and a light without any hassles. There are of course other makes/models available.

Having read this far you probably conclude that having a fridge is a waste of time, however, there is an alternative method which is an electronic thermostat.

This unit requires you to pump up your fridge thermostat to 'fully on', permanently, i.e. the highest setting of the fridge.

The electronic thermostat lets you dial the period of time you want the fridge to run. Instead of the 2 minutes on/2 minutes off cycle, you may for instance dial 8 minutes on and 22 minutes off. You

now have only two starts of the fridge compressor each hour, cutting the amperage usage from 4 Amps per hour to only 1 Amp per hour. In other words, instead of the previously mentioned 20 hours maximum you would get out of your battery, you now get 80 hours. A vast improvement. This is where the commercial comes in.

Some 20 years ago I designed a very crude time clock, which received a spike from the hour hand on an analog clock, via a small wire attached to the hour hand, similar to the wire found on a model train or slot car. Each half hour the wire would cause a switch to be activated which in turn would start the fridge.

Modern electronics became available in the mid 80's and I designed and patented a 30 minute electronic clock which would have a duty cycle and a rest cycle, variable in 'on' or 'off' time.

The design was given to an electronic engineer for more efficiency and reliability improvements and was in fact tested at the University of W.A. to establish it's integrity. This test resulted in a glowing report.

The design is so good that it does not suffer break downs; it is totally solid state with no moving parts, except a heavy duty relay. It keeps on working reliably until the power is cut. The product has been advertised in various magazines and is very popular with many 4WD and yachties alike. It is also described on our web site in the sponsors section. Being a one off design, I could not see much future in setting up a one only product business. I was offered to sell the design but decided to retain ownership instead and manufacture units when ordered.

If you wish to go to the expense of a proper fridge on your Noelex, utilizing the roll out fridge/foodbin, you should consider the Battery Current Saver in conjunction. Without it you are really wasting your money on a fridge because more often than not you will run out of battery power.

In most cases you will not need solar panels or generators. Just a Battery Current Saver and two large batteries, joined via a battery isolator switch so that both batteries will charge when the outboard or other source of input is running. For output you need a left/off/right switch which will enable conserving one battery, running off the other. A suitable heavy duty switch costs around \$45.00 and is easily available.

A battery isolator switch is also easily obtained from most car accessory places and a good unit will cost around \$175.00 but well worth getting. It is simple to install, totally out of the way.

If anyone is interested, I can draw up a wiring and fitting diagram for all items and publication in Telltales.

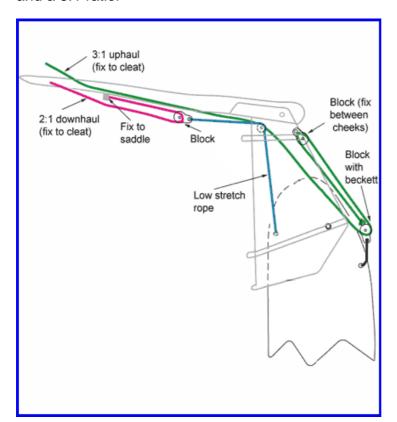
If there is sufficient demand we may include some of it on the web site or you can contact me direct.

And lastly, if you want to be really upmarket, go to Kmart and have a look in their Autoparts section. Here you can obtain a battery operated digital combination clock/thermometer that incorporates a small wire with a sensor. It costs around \$20.00 and comes with an adhesive back. It is black in color, has a large digital face and is about 40mm x 70mm x 10mm.

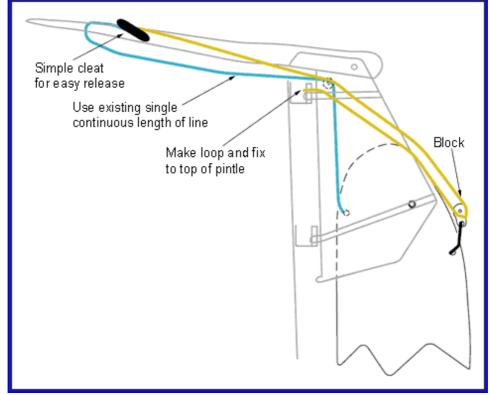
You stick this thermometer/clock to the front of the bin so that it is clearly visible between the steps. Run the sensor wire in between the edging to the end and hang it inside the ice box. You now have a visual means of establishing what is happening to the temperature of your next beer. Flicking the switch will show you the ambient temperature or the time of day.

Rudder blade lifting

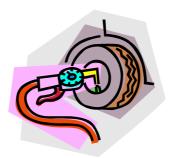
Below are some suggestions to modify the swing upward lift of the rudder blade to a 2:1 and a 3:1 ratio.







Trailer tyre pressure



From the various e-mails, it is obvious that there is no common ground. My explanation is based on experience, talking to experts over the years and good old commonsense.

In my younger years at school, I learned that density has a property enabling less build up of heat or, at least it would take longer to accumulate. It may sound simplistic but to me it makes sense that the insertion of more molecules into a tyre would have a detrimental affect on heat build up as the tyre is rotating against a road surface, thus causing friction.

Moreover, most tyre manufacturers include specifications, usually visible on the wall of a tyre.

This specification is arrived at through rigid testing and is based on the expected load to be carried under normal circumstances. Vehicle manufacturers also attach a plate to their vehicles, often found inside the front door frame of your car.

One might assume that the figure arrived at is based on the average load placed on the four wheels. This also applies to small trucks within the recommended load carrying capacity range.

A motor vehicle may have mum and dad in the front and two children in the back seat which one can assume as average. Total weight may be around 200 kg. How often do you substitute the two children for maybe three adults weighing around 75 kg each? Add the front seat contents, perhaps another 150 kg, making a total of 375 kg, almost double the weight. Add to this what your guests may have placed in the boot (which could be anything from just a bag to perhaps quite a few cans of refreshments) and you have up to 500 kg. To me it makes sense that the tyres could well be under inflated if the vehicle's manufacturer specifications were followed.

I have it on good advice that these specifications are arrived at to make the ride in a vehicle as smooth and comfortable as possible under average circumstance. Getting back to your Noelex.

Travelling with your four wheel trailer containing a Noelex 25 in city traffic, you would on most occasions not go much over 70 km/h. You stop at many intersections and your tyres hardly warm up. The towing weight of a Noelex 25 has a published weight rated at 1780 kg (about 100 kg less for boats with a lower than NX800 number). The actual weight of any particular boat Is however debateable

How much extra stuff have you loaded into your boat? Are you going to travel long distance at speeds up to 100 km/h?

In the latter instance, first of all I would ensure that the tyres are not standard vehicle tyres, which have a maximum inflation pressure rating to 43 lbs. each.

I would have small truck tyres which have a maximum rating to 65 lbs. of pressure.

On a long distance I would inflate anywhere between 50 and 55 lbs., ensuring that all have equal pressure.

If you have done your homework correctly, you would have ensured that all bolts and nuts on your trailer are appropriately tightened so that these cannot come undone. Your boat sits on it's keel on the trailer, not on the hull. The side rollers are there simply to stop the boat rolling off sideways whilst negotiating curves in your travels along the road.

Having followed all the standard maintenance checks, even though the ride may be a bit harder, your boat will not damage or fall apart with the higher pressure. Also, your tyres will remain cool and will last for many more distance than if under-inflated around 38 lbs.

You can run your own checks. After having driven for some considerable distance and taking a compulsory stop, hold your hand against each wheel and check any build up of heat. There should not be any to speak of. And one other tip: Also test the centre of the wheel where your bearings reside. There should not be any heat radiating. If there is, change the bearings!!

Tyre Pressure

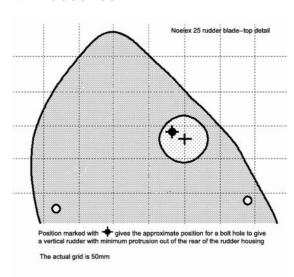
I took the liberty to pass this email about tyre pressure onto our Chief Engineer here at Isuzu Trucks. This is what he had to say:-

"The 2001 Tyre & Rim Association Standards Manual (The "bible" for tyre people) says that these tyres (4 x 175R13 8PR Light truck tyres) have a maximum load capacity of 750 kg per tyre, when inflated to 450 kPa (65 psi).

If the trailer grosses at about 2,000 kg, then the pressure should be at LEAST enough to carry 500 kg per tyre. The book says that this pressure is about 250 kPa (just over 36 psi).

So, I don't believe the issue was under-inflation, or low tyre pressure, UNLESS the 38 psi reading was taken when the tyres were hot. A 38 psi reading when hot could equate to 32 psi or less when cold.

It could be a faulty batch of tyres, but every retailer will probably have a different theory! "Regards Paul – Solace NX25 736



Blade swivel point in rudder box.

The bolt holding the rudder blade and acting as the swivel point should not be over-tight. You should have a self locking nut. The one with the nylon build into it.

Over-tightening will cause compression of the rudder box, resulting in locking the blade thus preventing it to swivel freely. It is quite simple to do this whilst on the hard. There should be no sideways play. If there is, you may have to replace the black inserts that hold the pin.

You should also check the bearings at your rudder pintles. Each contains a pair, a top and a bottom insert. If you can rock your blade up and down, you have worn parts. See below where to get replacements.

Applying Vaseline to the sides of your rudder blade will assist in smooth up and down tilt/drop operation.

Instruments and other gear

Many boats carry Silva instruments which are made in Sweden. Repairs and spare parts can in the first instance be obtained from Silva Industries, the Australian agent being located as follows:

Silva Compass Distributors - 44 Alexandra Parade - Clifton Hill Victoria 3068

Phone (03) 9489 9766 - www.silva.se

You can also try:

John EDWARDS - 20 Nepean Highway - Aspendale Victoria 3195 Phone (03) 9580 1648

Most Noelex parts can be obtained from 'BOATWORKS' (peter Welch). You have his phone number in your member directory or check our web site. Peter will send small parts within 24 hours via express mail. Ring him for availability of the part you are looking for.

Mast and boom

Make sure that the pulleys at both ends of boom and all those that are permanently build into your mast are regularly serviced with some W40 or similar. Pay particular attention to the bronze pulleys at the foot of mast and both ends of boom. It is probably too late if these cease as a result of corrosion. If this has happened to your equipment, either pay a hefty price to have them replaced or follow this procedure.

The first thing you have to acquire is a lot of patience.

Next, find a small solid pin that you can use to tap out the crimped hollow pin. These should come out easily, especially if you apply some spray and let it soak in.

You now need to sit down comfortably, get a one sided razor blade and a long, thin needle and your WD40 or similar can.

If you have a good magnifying glass, use it to have a good lock at the green corrosion.

Start scraping with your razor blade and the needle. With patience you will get there. WARNING!!! Do not try and use implements such as pliers or a hammer and tapping device. You will end up breaking the side guides of the bronze pulleys.

Once you have gone through this exercise, you will never ever let these cease up again.

Keel winch maintenance

Your keel winch has a grease nipple. On most boats this nipple is too short for proper application of a standard grease gun. Replace it with a longer one.

Also, spread some grease over the wound cable. It will find its way in between and helps preserve the cable longer. I had my Noelex for 16 years and never had to replace the cable.

Hi-Field Lever maintenance

Pay some attention to the out of sight highfield lever mechanism inside your anchor well. If there is any sign of wear near the swage on the small cable, replace it.

Saves dropping your mast unexpectedly.

Trailer washing

Always wash your trailer with fresh water after having dunked the rear in salt water. Hose inside the framework to clean any salt residue. Most of our trailers have been build with an enclosed framework but drainage holes at the end. Some have the ends open.

Your best protection from corrosion inside the metal is to get yourself a couple of cans of lanolin spray or fish oil. Spray the inside of the metal once a year. Spraying from a pressure can into the frame will cause the material from the can to form a cloud which will find it's way quite a long way up and inside the frame. Don't be afraid to empty the contents of an entire can per side in one go. Just make certain that there is no moisture present at the outset.

If you do this during the winter, you can easily initially blow hot air inside the frame via the outlet of your vacuum cleaner or from a hairdryer – this will dry up any moisture still present

The above described method is certain to stop corrosion inside the frame in its track.

Reefing

There seem to be many thoughts on this subject.

I thought the correct procedure was to point the bow into the wind, followed by:

- 1. take tension off vang;
- 2. ease main halyard sufficient for your forward hand to attach the cringle at the luff to the ramshorn (you can use Cunningham if you like but in that case you have to ensure that you cleat this in securely prior to hoisting main halyard again). Make sure you use the reefing eye and not the Cunningham eye;
- 3. pull or winch on the reefing line sufficient so that the reefing eye (new clew) is near to the boom;
- 4. raise halyard (you will need to winch this on)
- 5. re attach vang tension

I always left the bottom reef line in place in the leech, leaving it slack enough so that it does not pull on the leech when the sail is fully raised.

The reefing line is attached to the boom far enough back so that, when reefed, the reefing eye in the leech becomes the new clew, slightly forward of the tie off position. In other words, your tie off should be between the (new) clew and the end of your boom, as the reefing line now becomes your new outhaul.

As Ian Wilson suggests, you can use your topping lift to hold up the boom but this takes more time and gets too involved, especially for marital female crew. You should be able to put in a reef in under 30 seconds if you leave the reefing line permanently in place around the boom.

Many people tie off incorrectly. You should come downwards from the sail, around the boom, hook the end around the line on the other side of the main between the foot of the sail and the boom, come back and go the opposite way (downwards) around the boom and tie off. This way the line strangles itself and is easy to undo. Some people have a cleat on both sides of the boom but as you would probably never ever use reef no. 2 (if you have one) there is no need for a second cleat or any cleat for that matter.

Most new sails nowadays come with only one reefing point. If you were out there in a big blow, you would be better off using your storm jib.

This handy little sail should be used first, prior to reefing but, sadly, many still have it in 'as new' condition in the locker. Just for fun, why don't you try out your storm jib in heavier winds. Don't feel diminished using it. You will be surprised how easy your boat handles with a full main and storm jib.

Please note the importance of not applying vang tension until the reef is in place, otherwise you could do severe damage to your main or boom. You should start a reefing manoeuvre with your vang and end it with your vang.

Yahoo site

A number of members have changed e-mail server and hopefully, all have send their new address so that our records can be amended.

Please note that you should also amend your address if you are subscribed to our chat site.

Furthermore, some members do not wish to receive all messages posted and are sending us a request to remove them from the list.

Please scroll down to the bottom of any Yahoo message you may have in your inbox. It is there where you will find an instruction to unsubscribe yourself. It just seems unnecessary double handling to ask me to do it. If you wish to unsubscribe, send your message direct to Yahoo and then you know it is done.

Trailer Brake Cylinder maintenance.

Now that many boats are out of the water, it may be time to spend a little attention to your trailer. One part often overlooked is the brake cylinder at the front of your trailer. Even though there is a dust cap at the front, road dust and grime does find its way into the chamber.

If you don't give some attention to that part, you may find that your brakes on the trailer may lock up unexpectedly.

All you need do is a little squirt of WD40 or similar behind the dust cap to ensure that the piston chamber remains lubricated. Just a few minutes could save you a lot of money. Disc brake pads are not cheap to replace.

If you have dome nuts on your wheels, insert some vaseline inside the threads and screw them back in place. So much easier to undo if you ever have a flat tyre or need to change the wheel.

The following article is an excerpt from details published by VicRoads.

DEPARTMENT OF TRANSPORT AND REGIONAL SERVICES NATIONAL CODE OF PRACTICE

Building Small Trailers

Information for manufacturers and summarised construction requirements for trailers less than 4.5 tonnes aggregate trailer mass

1 Revision 4 June 1999

11.2 All Trailers Except Single-axled Trailers with GTM Not Exceeding 0.75 Tonne

These trailers must be fitted with an efficient braking system. For trailers not over 2 tonnes GTM, an efficient braking system is considered to have brakes operating on the wheels on at least one axle.

Every trailer over 2 tonnes GTM must have brakes operating on **all wheels**.

All brakes must be operable from the driver's seat of the towing vehicle except for over-run brakes.

Over-run brakes may be used on trailers up to 2 tonnes GTM.

Every trailer over 2 tonnes GTM must have a brake system which will cause immediate

application of the trailer brakes in the event of the trailer becoming detached from the towing vehicle (breakaway brake). Under these circumstances the brakes must remain applied for at least 15 minutes.

VICROADS - ROAD SAFETY / SAFER VEHICLES / VEHICLE STANDARDS INFORMATION Vehicle Standards Information 20

Answers to Common Lighting and Mechanical Questions

Q1: Trailer Brakes - Do I need them?

A: Brakes are required on all trailers with a gross mass of more than 750 kgs. For further information see Information Sheet No.9 and the current Federal Vehicle Standards Bulletin No.1.

Q2: Vacuum brakes on heavy trucks and trailers - Are they still legal?

A: Yes, provided they meet the requirements for braking in the Standards for Registration. It is rare to see this type of system on a modern heavy vehicle because it is difficult to provide the necessary parking and emergency braking facilities at a reasonable cost, but it can be done and it is legal.

Q3: Trailers - How heavy a trailer (including load) can I tow behind my motor vehicle?

- A: Generally trailer and load should not weigh more than the least of:
 - i. the maximum mass specified by the trailer manufacturer;
 - ii. the maximum towing mass specified by the towing vehicle's manufacturer; or
 - iii. the rated towing mass of the towbar, coupling or tow ball.

Generally for vehicles up to 4.5 tonnes GVM without a manufacturer's recommended towing figure the maximum mass of trailer and load may be up to 1.5 times the unladen (tare) mass of the towing vehicle provided the load limits of the towing equipment, etc. are not exceeded and the combination is properly set up and braked. For vehicles over 4.5 tonnes GVM the maximum mass of the trailer should not exceed the weight of the towing vehicle.

VICROADS - ROAD SAFETY / SAFER VEHICLES / VEHICLE STANDARDS INFORMATION Vehicle Standards Information 9

Registration requirements for light trailers manufactured before July 1991

The information in this circular is a summary of the construction requirements in Victoria's Standards for Registration and the ADR's that apply to trailers up to 4.5 tonnes ATM manufactured before July 1991.

The introduction of the third edition Australian Design Rules (ADR's) and the Federal Motor Vehicles Standards Act has resulted in a number of changes to the registration and construction requirements for some vehicles.

Trailers built before July 1991 are required to comply with the standards specified in the Road Safety (Vehicles) (Vehicles Standards) Regulations 1999.

As well as requiring compliance with the relevant standards, owners are reminded that it is their responsibility to ensure that the vehicle is in a roadworthy condition at all times.

9. Braking

All trailers with a gross trailer mass (GTM) exceeding 750kg must be fitted with an efficient brake system which operates on all wheels of at least one axle.

Where the GTM of a trailer exceeds 2 tonnes, the brakes must be designed to be operated by the driver of the towing vehicle from the normal driving position and be fitted with equipment to

automatically apply and hold the trailer brakes on, for at least 15 minutes, in the event of the trailer breaking away from the towing vehicle (breakaway brakes).

Over-run brakes are not permitted on a trailer with a GTM exceeding 2 tonnes.

Lockers - under bunk space

Whatever locker I used, under any berth or under the sink, everything always seemed to be messy. This was due of course to the rounding of the shape of the hull.

At the expense of using some space, I used some thin ply and glued a bit of 2×1 timber along one side. This bit of timber would become an elevation at the lowest side of the locker floor and the other side of the ply would lay flush against the hull.

Having such an insert in each locker resulted in having a at least partial level floors.

O.k., I lost a little space but the small innovation made up easily for the inconvenience of everything always being untidy.

If you applied this idea under the sink, you could actually make up two bits of flooring, side by side in a sort of stepped formation. The result is two level areas under the sink where items such as saucepans would remain neatly stored. In fact, if you want to, it is very easy to divide the under sink area into two and glue in a small shelf, about halfway under the sink. All I did was, glue in a couple of small blocks to facilitate holding a bit of ply shelving resulting in doubling the storage space.

I also encouraged my wife to try and collect some extra shopping bags at the supermarket from time to time. These were simply stowed in the area behind the cutlery drawer. There is nothing at all there except a large unused space.

Simply pull out the cutlery drawer, shove in a handful of bags and re insert the drawer.

When you need a bag, just reach in to the left under the sink and grab a bag for your disposals. All out of sight and good use made of otherwise empty space.

Weight (NX25)



So your average Noelex 25 comes in well under the 2 ton weight limit and you start to look for spending some more money and get some more gadgets. However, this rated weight is based on a 'standard' yacht on a trailer complete with a set of sails and perhaps a compass, cheaper versions of stove and toilet and an 8 hp outboard, empty fuel and water tank and some other items as listed in the manufacturer's brochure. The latter is now at least seven years old.

Most boats have had items added by owners and all those come to quite some weight. Added to these your anchor/warp/chain, instruments and radios, your wet and safety gear, contents of esky, electric trailer winch and spare tyre now so often seen permanently attached to the front of the trailer - and so on, - could well place you in the position where you exceed the limit whilst on the road.

If you were stopped and directed to proceed to a weighbridge, the resulting total weight is the figure that determines if you are legal with your current setup. No use arguing that this and that does not normally belongs to the boat.

To protect your investment for insurance purposes you should ensure that your boat remains within the limit and carry excess gear in your car if necessary or, alternatively, you may have to spend anywhere near \$3000 and make the brake-away modification to your trailer

Copyright © Fred Viergever 22 Harries Court Narre Warren North 3804 Victoria

By now there is a lot of information available from other members. Just ask the question on our chat site and you will be certain to get a few replies.

Racing hints

Some hints supplied by Dennis Hambleton. Most of us are cruisers, yet when we spot another Noelex heading for a anchorage, we try and get there first. Later, over a few drinks the question usually comes up on the subject of how can I get my boat to go as fast as yours? To help you tune your boat, I have borrowed Dennis' observations.

Dennis's tips...

.Here are some of my observations on racing a N25, including against other trailables.

- For racing in rough water, get the ends of the boat as light as possible to prevent pitching. That means re-locating the anchor and chain onto the floor in the cabin near the center of buoyancy. I had mine in a heavy duty plastic box (bought at K-Mart), which was fixed in the gap next to the center board.
- Make sure that the engine plate seals so that it does not leak and have an effective self bailer to take the water out of the well. Otherwise, you might be carrying up to 15 to 20 liters (or up to 20kg) in there right at the stern the very worst place.
- Use a small plastic fuel tank with the minimum amount of fuel depending on the race requirements or the needs of the day.
- Place all spare sails in the cabin near to the center case and try to get the rear lockers empty.
 Place all crew bags and gear on the floor with the heaviest lowest, right behind the center case.
- Get the rig tight enough so that the pre-stress in the mast prevents it from pumping. This
 means more on heavy days where you are likely to slam into waves.
- Be conscious of the amount of tension you have in the top tie-in batten. On light days use a lot or pre-tension to induce a fullish head in the sail. On heavy days of 22-23K+ tie the batten in neat with no or hardly any tension as you will not be looking for much lift in the top of the sail. Experiment for batten tension in between. Better still is to have a stiffer batten for heavy days.
- Sit forward in the boat so that the transom never drags in the water. An old salt once told me that it always better to push water than to drag water! You push over a small area but drag over a large one. I believe him. Because of my weight, I had to sit hard up against the bulkhead with my crew on the topsides. This also keeps all the weight closer to the center of buoyancy and closer to the maximum beam and makes the boat pitch a LOT less when beating to windward.
- I found that the boat went to windward best overall at about 20 degrees angle of heel, in all conditions. That meant sitting to leeward in the light and setting the traveler in the heavy to achieve that.
- When sailing downwind when surfing conditions are reached, make sure that the crew weight is stacked as far aft as possible to ensure you get the smallest wetted surface area possible. Once surfing and you are on a wave this is more important than transom drag. Over the last few seasons I have sailed a lot against a well sailed Sonata26, a moderately well sailed Farr 7500 (not 740 the sports), and a Castle650. We would beat the Farr comfortably in all conditions. The Sonata would clean me up on boatspeed most times under about 8 10 knots

and by big margins under 6 knots. Between about 8 and 12 knots we were generally competitive with the Sonata and would often beat it if the wind was closer to 12 knots, mainly because of downwind advantage. Over 12 knots we would usually beat it and over 15 knots we would expect to beat the Sonata upwind and downwind.

■ The Castle 650 is a speed machine in light to moderate conditions and would trounce both the Noelex and the Sonata. However, the Castle drops off over 17 - 18 knots and at 25 knots seems to be really struggling For what it is worth, the AMS rating on my N25 was 0.719 and the Sonata 26 was 0.742. That means that a Sonata 26 has to give a Noelex 25 about 3.5minutes in a two hour race. So, unless it is very light (<6K), we would beat the Sonata on AMS unless we made a tactical stuff up. With respect to N25 boatspeed,

I remember there was some debate on this sometime ago. A search of the archives should find it.

To summarize, there is a generic theory (C. A. Marchaj: "Sailing Theory & Practice"; page 254) that says that any boat in displacement mode will travel at a maximum speed in knots of about 1.4 times the square root of its length in feet. For a N25that would be $1.4 \times 5 = 7$ knots. Actually a bit less (more like 6.7 knots), because the water line length is less than 25 feet.

To go faster than that, the boat has to either 'lift' out of full displacement mode - that is, start to plane (the limit for planing being the boat going over the water rather than through it), or surf. In the first case, lifting out of displacement mode, disproportionate amounts of power are required to gain a little extra speed because most of the extra power is required to lift the boat. For example, my boat would do about 5 knots or so on one third throttle and about one knot more flat out with an 8hp 2 stroke Yamaha. The fuel consumption would go up dramatically for little increase in speed. Fortunately for us, a N25 will surf easily downwind.

On Port Philip, where the waves are steep and generally reach 1.5 to 2 metros in winds of 25K to30K it is fairly easy to achieve surfing burst speeds of 10 knots to 12knots, even with 2 reefs in the main and a goosewinged self tacking jib. The non surfing speed, however, would be more conventional like 7 - 8 knots.

The averaging time on your speedo will have a lot to do with the maximum speed you see. I believe that most GPS's average over 2 seconds or more so they would tend to give a more conservative view of peak boat speed than most logs(I think).(see ed.note below)

In a recent night race we ran a very long dead downwind leg in conditions averaging about 30 knots. There were three of us on the boat and we had two reefs in the main and the standard spinnaker up. The leg lasted about two and half hours from 1.00am to about 3.30am. We were continually getting over 14 knots and the highest we saw was 14.8 knots, although I can tell you that we were not looking at the speedo all that much. In the whole leg we did not have one really bad moment. We were just worried about something breaking which fortunately it did not. Later, after thinking about how controlled the boat was on that leg, I came to the conclusion that the skeg was of immeasurable value in keeping the boat tracking straight.

From memory, in the 5 years I had my N25 I only used my 2nd spinnaker (a smaller flat spinnaker) a couple of times. This was due to the increasing trend towards windward and return courses and the relatively low hoist height on the N25 making it fairly easy to control the standard spinnaker, especially when running free. Regards Dennis

(ed.note)

- Dennis's research seems to reinforce that 8 hp is adequate for a Noelex 25. In addition it is much lighter than larger 9.9 hp and over engines, resulting in a better balanced hull as related to horizontal position.
- Refer also to our technical section on the web site for instructions on keeping water out of well when underway.
- On rigging, if you can attach your forestay to the highfield lever cable coming through the deck without having to use your winch and jib halyard, your rig tension is most likely far too slack. A

good indication is to observe the curve to leeward in your forestay when sailing to windward. Excessive curve will affect your boat's pointing ability and make the headsail inefficient. You won't win many races!!

Deck layout

There have been a few questions concerning deck lay out for spinnaker and genoa fittings and sheeting arrangements.

I attempted to make a drawing but it became too cluttered to understand. Instead I will make a written description which is easier to understand, supported with the drawing.

Most boats already have a spinnaker and fittings but if you do not, you will need to spend a small fortune to set yourself up.

Basically you have a sheet and a brace, a sail and a pole. The pole hooks onto the sail at one end and onto the eye on the mast at the other end. Many people attach the pole incorrectly. It should be hooked on to the mast from below – not from the top, i.e. the jaw opening faces up.

Also you should have a barber hauler on each side. This simply consists of a (maximum) 4 mm rope with a small block attached on one end. Through this you run your sheet and brace so that the block actually seems to run up and down your sheet/brace.

Another small block hangs at the bottom of your chainplate, amidships and you lead the thin rope through it and finally through a mini cleat attached on the outside of the gunwale around the middle of the cockpit. Get a mini cleat with a rope guide so that the rope always stays in place. This set up will allow you to have full control over the brace.

You may already have a brace (kicker) on the pole which stops your pole from skying.

The standard set up has been to install flat mounted ratchet blocks about 1/3rd back on the cockpit coaming with a cleat in the vicinity on each side. You will need to remove these blocks and place them further aft, about 2/3rd back of the cockpit if you intend to invest in a genoa. Refer later on about this subject.

If you do not have spinnaker gear installed I suggest that you drop me a note or e-mail and get an idea of which parts to get and where to install those. It is rare if you are in this category as almost every Noelex came standard with gear installed.

Whilst there are various adaptations, you should invest in a pair of Mickey Mouse Ears. These are a pair of fittings that you fasten on the side of the boom towards the point where your main sheet attaches. You also need a couple of eye fittings on each side of the boom near the mast. Having these will allow leaving just about everything attached to the spinnaker, making for an easy launch next time. You simply slide the pole aft into the ears, leaving the kicker and topping lift attached and clip the beak of the pole nearest the mast onto one of the eyes. I should also mention that standard fit was to place a block on the deck about 60 cm in front of the mast which facilitates your kicker. You should remove this from the deck and attach it to the foot of the mast — at the front — with a securely fastened saddle. If it is on the deck it will always tend to interfere with your genoa sheet.

Genoa

Let me now get onto the subject of a genoa.

You do not need half as many parts as for a spinnaker but those you need are expensive. You need:

a genoa – a sheet (rope) – a halyard shackle

two 900 mm tracks, each with a stand up sliding block – two winches – two (preferably) ratchet blocks and two cleats.

The sail is made to standard by your sail maker and needs no further explanation.

The sheet needs to be continuous and long enough to reach from the clew of the sail, forward around the front of the mast and back to the cockpit on the other side plus a similar length for the other side.

You find the middle and tie off into a loop with whipping twine and insert your halyard shackle for attaching to the clew.

You install a 900 mm track on the deck on each side. On starboard, the end of the track should be about below the letter N of the word Noelex. Conversely you install on port in the same place but not under the letter because the word runs the other direction.

Each hole in the track has to be fastened through the deck with a countersunk bolt and washer and dome nut inside the boat. Failing to do this may well result in the track being torn off.

On the eye at the bottom of the stanchion beside the cockpit you hang the ratchet block – one on each side. To prevent these blocks from eventually marking your gelcoat, you can attach a piece of shock chord to the other side of the blocks and tie it off midway up on the stanchion. This will usually hold it clear of the surface area.

Slightly forward you most likely have a flat mounted spinnaker block. Remove this and move it aft. Now utilize that spot to install your winch. Any past holes that you cannot use should be filled to prevent leakage of water. You should be able to use at least one of the holes to bolt down the winch.

Install the winches as close to the outside edge of the gunwale as possible. This will prevent damage to your gelcoat by the genoa sheets

On port you need to install a cleat slightly forward of the winch. On starboard this cleat has to be slightly backwards of the winch.

Having installed the parts, lead your genoa sheet through the sliding blocks on the track, through the ratchet block and around the winch.

If you decide not to install winches, just forget about a genoa altogether. You will never be able to efficiently control a genoa without winches unless you are superman.

Be careful to always remove the winch handle after use because they sink very quickly. There is a floating version available.

In all you can expect to pay: (approximately)

2 tracks with ends and bolts \$150.00

2 sliding blocks \$165.00

2 ratchet blocks \$140.00

2 winches \$300.00

2 cleats \$60.00

sheet \$75.00 and shackle \$10.00

genoa, perhaps around \$1000.00

Add it all up and there is little change out of \$2000.00. Prices are based on those shown in the current Whitworth's catalogue.

Be aware that sailing with a genoa in winds up to about 12 knots can be exhilarating but going about is not as easy. The best way is to train one of your crew to hold the sail until the bow has gone through the wind, the sail catches the wind from the other side, starts to fill and at the right moment throw off the sheet and get the other crewman to haul in very quick. If this is not timed exactly, the sheet will have to be winched on via a winch handle. If the sheet is let go too early, more often than not will the clew fitting become hooked near the mast.

It may all sound too difficult but it is really worth the effort if you participate in club racing and always end up at the tail end of the fleet. With a genoa you will be more often at the front with the leaders.

I should also make some mention of recent questions on our chat site concerning the size of your jib.

Your current Class Rules contain all the measurements for each sail. At some stage, a number of years ago, there was apparently a reading error by some sail makers. This culminated in reading the length of the foot of the jib as 2770 mm whereas the correct figure is 2570 mm.

The end result seems to have been that some boats were fitted with a sail that does not fit the triangle when tension is applied.

It is unclear if some of the more fastidious skippers were aware of this but in any case, some different method of sheeting was 'invented' to compensate for the larger size which did give some 'in the know' an advantage, which is now being corrected.

If you have been subjected to the problem, I suggest that you take your sail to a sail maker for alteration. The larger size is not legal and we are not about to make changes to the Class Rules.

If any of your sails are in need of replacement, you should confirm with your sail maker that he uses the measurements as laid down in the Rules.

A copy can be supplied should you be unable to locate your booklet or you can request a copy via e-mail.

Whilst on Class Rules, an engine is not considered to be part of a boat. However there is a recommendation as to size and weight which was arrived at after careful consideration to be the minimum required to be carried and adequately propel a boat the size of a Noelex 25.

There are also safety prescriptions which are mandatory to racing as well as cruising. In the case of a calamity, the skipper could well be held liable under various laws if his boat was found to be unsafe under certain conditions and injury or loss of life resulted.

There is a report of boats racing with just a small 2 hp engine which is not considered safe in the first instance and not in the spirit of the Class Rules.

If this continues to be reported, the committee may decide to delete the 'recommendation' and include an engine as described in the Class Rules in the inventory to be carried in racing activities to be of a mandatory minimum weight

Winch Discussion

There also seems to be some confusion in regard to the drawing recently published relating to the genoa and spinnaker sheet layout.

I consider my IQ to be of reasonable standard and it does not take much to work out that, if a sheet is wound clockwise around a winch on port (most winches will tighten your sheets winding clockwise) then the bitter end would be somewhere between the bow and the winch if that sheet were to come across the boat, hence a cleat would need to be forward of the winch.

If you now wound a sheet around your starboard side winch in a clockwise direction, the bitter end would be somewhere between the winch and the stern of your boat, again, if that sheet were to come across the boat. Would you then not place your cleat somewhere aft of the winch?

This formula does not apply to the winches you have on your deck as the pull of any sheet, halyard or rope on those winches is from a bow to stern direction, meaning they both haul on in a clockwise direction.

All seems elementary to me, even with my average IQ.

Just to enlighten winches even further, you can actually alter the direction of turn of a winch if you so desire. To do this, undo the large grub screw in the centre, carefully lift off the winch and place on a clutter free surface. Both, top and bottom sections have two small pins held in with a spring. You will also observe two similar vacant spots facing the opposite direction. Simply carefully remove pins and springs and move them to the vacant spots, then re-assemble the unit. Your winch is now working in an anti clockwise direction.

I have seen a number of different brands and almost all of them had that facility.

The drawing also clearly shows that the winches and associated cleats can be used for either genoa or spinnaker, whichever is in use at the time. It is written in plain English.

So far as the barber hauler on the spinnaker is concerned, when in use it is only used on the windward side which is usually the same side as the pole.

Why would you place the mini cleat on the deck when it is much more convenient to fasten it to the side of your 'plank' (on most Noelex yachts this is the coloured section above the gunwale rubber or rubbing strake) somewhere convenient, maybe halfway back or thereabouts from the bulkhead where usually the compass is mounted. That way even the helmsperson can easily reach over to haul on or let go.

When it is said 'about 1/3', that's exactly what it means, i.e. to me that means approximately. If I wanted to quote exact measurements in millimetres, feet or inches, I would have done so.

I trust that the above clarifies the details of the drawing and some other items.

Wherever you choose to place your fittings is entirely your choice. If you have purchased a second hand boat and you are not certain as to the placement and meaning of certain items, you should speak to the previous owner rather than launch criticism on your Association. We do not dictate what you should place or where to place it. We just recommend.

Our aim is to help, in the true sense of the word.

Batteries -Web Sites to Visit

Self-help and self tuition is a great thing. You are more likely to learn well through self tuition because you are genuinely interested yourself to discover something then half listen to someone else.

On that track, Peter Gosden (your Cruise Director) gave me a call and mentioned a few web sites to visit.

I took his advice and spend a little time reading some of the information.

As many members know, I do not have a Noelex now but just the same, reading some of the information available, still caught my interest to the point that I highly recommend you visit some of those sites.

Here are some:

www.vonwentzel.net/Battery/index.html

once on the site, click on Technical:

You can learn all there is about batteries.

Next go to www.boatsafe.com

Pick whatever subject interest you and I know many of them will, and if still keen, go to:

www.watermakers.com

Interesting articles on fresh water making.

There are probably hundreds of sites out there and if you know of a worthwhile informative site, either drop me a note or put your message on the chat site.

The rest of my Handy hints are very simple on this occasion. All I ask is that you actually do read your Telltales. There often is a lot of information that may assist and it is your barometer as to the state and health of your Association.

Mast tuning guide

Have you ever checked the correctness of your mast? Follow these instructions.

Begin with the boat on its trailer on level ground. Jack the front of the trailer until the boat is level. A level placed on the cockpit seat is the easiest way.

Check level across and bow/stern positions. When you are happy that the boat is perfectly level, begin checking your mast position.

The mast, with stays tight, (the forestay should be tight at this stage but <u>not</u> locked down with the highfield lever), should have about 70mm of aft rake.

This can be checked by hanging a weight on the main halyard and let it hang vertical to just above deck level. The edge of the weight attached to the halyard should be about 70mm away from back of the foot of the mast.

Stays should be as tight as you can get them.

In fact, if you can easily attach your forestay shackle to the highfield lever, your side stays are most likely too slack. It is quite o.k. to attach your spinnaker halyard to the bow fitting, crank on with your winch, then attach forestay and lock down highfield lever.

Now check that there is no side bend in the mast. To do this, find the exact centre on top of the transom coaming, find someone to hold the main halyard shackle on that spot, step back and line up the halyard with the track in the mast by sighting. The halyard should be perfectly in line with the track.

If your sidestays are exactly the same length and your turnbuckles are of identical measurement, all should be well. If not, this may indicate that the mast base is not perfect. You may then have to get a file and file off the base a little. You can try and check how much by placing a coin under the mast on the side to which the mast is leaning. The thickness of the coin will indicate how much correction you need to make.

The slot in the mast step should have slightly elongated holes to allow for the pin to move up or down a little.

Note that mast rake is not mast bend. Normally you create bend when the mast becomes under load via various means such as boom, vang, outhaul, main sheet and wind pressure in the sail.

de-luxe version?

never understood what 'de-luxe' fit out meant.

When I got my Noelex it was a 'de-luxe' and all I got was a compass and a spinnaker.

Every other boat had whatever I had except the spinnaker. None came with such items as a stove, toilet, refrigeration, only one battery (and one box), no radio whatsoever, neither life jackets nor flares and so on. Not even a packet of band-aids or a packet of aspirin.

If you think of upgrading to a new boat, it may pay to find out what comes with it if ordering a deluxe model. You probably decide that hanging on to what you have got is not so bad after all. Mind you, we have a number of prospective purchasers available almost all the time so let me know if you are thinking of parting company.

Whitsunday Parking

We are fortunate indeed to sign up Peter and Carol Gault at Airlie Beach.

Peter advises that they live on a 6 acre property and any member is welcome to use the facility to park car and trailer.

This could be well patronised with the number of members regularly visiting that area.

It should be understood however that parking is at the visitor's responsibility but probably still safer than just leaving your rig at the public car park at a ramp.

Whilst no email address has been advised, you can contact Peter or Carol on 0408 029 721.

If you intend a holiday and are looking for company, be on the look out for fellow members. It can get quite windy and going to destinations in company is definitely a recommendation. Be aware that, most times, you will need to radio ahead if intending to visit Hamilton Island. They will not let you in unless you have booked prior.

Winter Maintenance

It is appropriate to remind you of the need to attend to service of your boat during the off season.

You should pay particular attention to all those hidden items.

Inside your anchor well are the mechanics of your highfield lever. It is the little cable you should inspect. If it goes, so does your mast. Have a careful feel of the cable, particularly around the swage. If you find any of the wires broken, replace the whole small cable.

Another item often overlooked concerns your steering. Your rudder contains small black bushes. You should check by trying to rock the rudder box and ensure that there is no movement. If there is, get in contact with Peter Welch from Boatworks and get yourself a new set of bushes. The same goes for the bushes that house the pin securing the swivel point of your blade.

Launching made Easy

The keel rollers of your trailer are often overlooked. You should not have to break your back getting the boat to roll off at the ramp. Beware though! Once you have used your can of WD40 or similar on the axles of your rollers, your boat will roll off so quick that you may do some physical damage to your hands via rope burns. Always use a long launching rope and 'let her go'. She will soon stop due to the braking action of the water surface on the hull.

The side benefit is that you will appear to be an expert to the usual onlookers at many ramps. It is educational to act as a spectator at a busy ramp and watch how not to launch a boat.

Solar Panels - placing



Here is a hint supplied by Arthur Hicowe. I like this one as the solar panel will receive more sunlight in that position then if mounted under the boom. Also, it is fairly simple to lead wiring with the main battery leads that should be running from the engine socket through the locker.

Hi Fred,

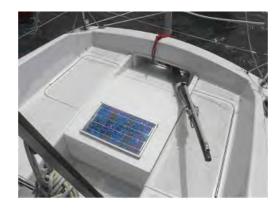
Below is a photo of our engine box. We keep Capricorn Dancer on a swing mooring for seven months of the year and the engine box protects the outboard motor from the weather and prying eyes. It will fit over the

motor in both the up and down positions.

The box is simply constructed form waterproof plywood (Bunnings grade) and scrap timber for the frame screwed and glued together.

It will be noted that the sides are set in to allow clearance for the cockpit locker catches and padlocks. The rear top panel slopes downward to allow clearance for the tiller.

The top of the box provides an excellent mounting place for a solar panel which is connected to the charging circuit via a cable and plug/socket in the forward face of the engine well. Best Regards, Arthur Hicowe.



Batteries

NOELEX 25 BATTERY REGIME WHICH WORKS FOR 'SURE THING'

Based on; the use of two wet cell 85AH deep cycle batteries purchased at the same time, the use of a Honda EXD400 30/15Amp generator for charging, a WAECO CF-50 refrigerator, lights, radio/stereo, navigation instruments, cruising for several weeks at a time.

Some articles say batteries should not be connected in parallel for charging. Provided both are of the same age, are at a similar level of discharge and are in the same condition of health, they should have similar internal resistance and can be charged satisfactorily in parallel. A check can be made from time to time at the end of charge by testing to see if both have reached a similar level of charge. Parallel charging has been used in this way on "SURE THING" for five years without any detrimental effects. The charger has adequate capacity and would otherwise have to be run for longer periods on a lighter load for separate charging.

Specific Gravity measurement is a pain. A \$16 digital multimeter works fine. Find a load-voltage measurement to work off e.g. check the battery terminal voltage with only the refrigerator compressor running (about 3 amps). When this has dropped to 12.0 volts change to the other battery. When the second battery drops to 12.0 volts under the same load it is time to recharge both.

The Honda generator is mounted on a bracket off a rear staunchion and a lead is connected when required. The lead has two plugs, which are then plugged into sockets under the top step, each socket being wired to the respective battery terminal. The plugs, sockets & wiring have to be rated for the charging current & the wiring to minimise voltage drop. Knowledge & care is required because the batteries can deliver damaging heavy current if for example connectors at the generator were allowed to come together and create a short circuit. The lead is connected to the generator, the generator is started and first one then the second plug is connected to its socket. An alternative arrangement would be to install a large 4-position safety switch (batt.1, batt.2, parallel, OFF) and a single plug & socket.

The batteries are charged once per day in parallel as above for 2-2.5 hours and 1.5 litres of fuel. Charging is stopped at 14.5 Volts. The refrigerator is run continuously (thermostat set for freezing) while charging to take advantage of the generator capability and reduce subsequent load on the battery.

The electrolyte level is checked regularly and topped up with distilled water to ensure the plates are correctly covered.

The batteries are not discharged below about 50% capacity (12.2Vo/c, SG 1.190) as indicated by 12.0V with the refrigerator compressor running.

When the boat is not being used, the batteries should be kept charged to ensure sulphation of the plates does not occur. Sulphation reduces battery life and starts when battery voltage drops below 12.4Vo/c, SG 1.225. A top-up charge is typically required every 4-5 weeks when not in use. Alternatively a low current float charger can be used to maintain full charge. "80% of battery failure is related to sulphation build-up and only 30% of batteries reach the 48 month mark" according to one article. The "www...com" is full of tutorials & comment on battery care.

There is no solar panel and minimal reliance on charge from the outboard motor. A single 85AH battery could be used but would require the generator to be run more frequently. Two batteries gives backup, requires only one charge per day and avoids having to charge at early morning or late evening. The refrigerator is by far the biggest electrical load, without this, a small solar panel or reliance on the outboard would probably suffice.

The WAECO CF-50 refrigerator is 52 litre capacity and when set for a maximum temperature of 5C it runs ¼ of the time at 20C ambient and 1/3 of the time at 30C ambient.

Dual Battery Set-up

As foreshadowed, here then is a description how to arrange the setting up of a dual battery system with each battery being charged independently any time the engine is started or when a battery charger is attached to the system.

Your engine should already have a rectifier installed if it has a charging unit. If not, you need to get a rectifier which is a small electronic part, available at electronic outlets such as Dick Smith, Tandy Electronics and the like. You would need an AC to 12 Volt DC rectifier.

Without a charging unit, the engine's output normally is AC current and the voltage output depends on how high you rev the engine. The higher the revs, the higher the voltage meaning that output is uncontrolled. Alternatively, it may have an uncontrolled DC output in which case you still need a rectifier to rectify to controlled 12 Volt DC.

A rectifier will convert the AC current to DC current or control the uncontrolled DC output to between 12 Volts and 15 Volts. For the sake of explanation I have drawn the rectifier as the top right image.

If your engine's output is uncontrolled DC, you connect to the points marked AC from the engine and then follow the diagram.

Let me assume that you have a charging unit already installed in the engine and that you have two wires coming from the engine (putting out a little over 12 Volts DC), a positive and a negative regulated DC output. You would have these two wires connected to your battery and when the engine is running, you charge the battery.

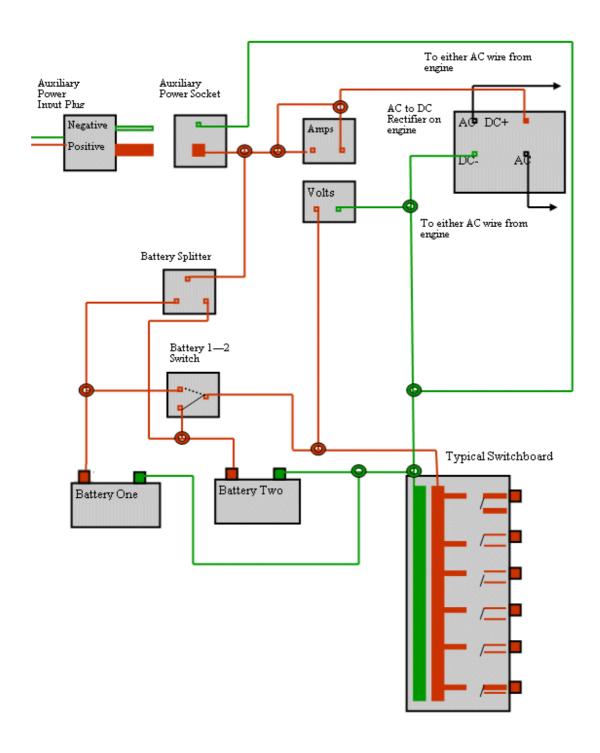
NOTE: All green lines represent Negative whilst all red lines represent Positive. You can
install a marine type two-pin socket and connect the two wires that run to your battery to it.
Note that the green lines are all connected one way or another to your entire electrical
system, including both batteries. The red (the positive) goes to the splitter and is looped off
the engine's positive output line to the socket.

If you have a solar panel installed or have a small generator and you are not running the engine, you simply plug that source onto the socket and, providing you have an identical plug on the other source, you plug that into the socket and, presto, you are now charging from that source. No need for extra wiring. The engine's output is strictly one way as build in diodes prevent current running in the opposite direction.

The Battery splitter connects directly to battery one and battery two. The image below the battery splitter is a left/centre/right switch. The centre position turns all power off and you simply select left to run off battery one and right off battery two or vice versa if you prefer. You would need a heavy duty automotive switch rated a 15 Amps.

The voltmeter is positioned is such a way that it will show the condition of whichever battery you are running off at the time. The Amp meter will show what Amps the engine is pumping out. Whilst on the Amp meter, I am not certain if it required a negative connection also. If you were to get one that does need it, just connect into the green depicted wire. The one I had did not need a negative.

I have drawn a six outlet switchboard but the size is optional to yourself. Usually a switchboard has a continuous plate for negative and you connect the negative from any instrument, lights etc to that side. All positives of items you install usually have a separate connection point and it is the switch that makes the connection when turned on or depressed, depending on what type of switches you have.



PVC Tubing – use of...

Arthur Hicowe sent me a number of handy hints of items he has implemented to good use on his NX25 'Capricorn Dancer'.

These include such things as attaching PVC tubing to pulpit/pushpit to temporarily store boat hook (or even hold your fishing rod?) with the simple electrical cable ties, a boom crux that sits neatly over the traveller when the boat is at rest and some other items.

Mentioning PVC tubing will probably set you thinking. This material is available at very little cost in many hardware stores and comes in various sizes. Short lengths can be used in many situations on any yacht, inside and out and when used in conjunction with plastic cable ties, can be easily removed at any time or re-positioned. Imagination is all that is required.

There are some items I like and here is one that may be of good interest and a simple way to make. In particular, I always found that when using the boarding ladder, the stainless steel surface is very slippery when feet are wet and it is very easy to slip sideways on the rungs, usually ending in a nasty bruise on the leg or half the skin missing.

So here then is what Arthur has done to prevent injury.

Boarding Ladder

Hi Fred.

Herewith our Handy Hint No 4.

We found the stainless steel rungs on the boarding ladder to be quite hard on bare feet so we added wooden treads to the rungs.

Once again we utilised decking timber (either Merbau or Ulin). The treads are cut neatly to fit as shown in the photos, a hole saw or large bit being used to form the radius around the vertical sections of the ladder. The reeded side of the decking timber is uppermost to provide a non-slip surface for wet feet. The timber treads are attached to the S/s rungs with S/S self tapping screws, 3 in each, drilled and inserted from underneath.

Several coats of decking oil will enhance and protect the timber. The ladder still folds neatly together with the added treads. For a finishing touch we added white rubber table leg tips to the open S/S tubular ends of the ladder.



Image shows ladder in folded position



Ladder fully extended

Keel Safety Rope

There have been a number of inquiries of late in regard to the safety rope, attached to your keel, inside the keel casing of a Noelex 25.

This rope is there for a special purpose. If you should ever have the misfortune of breaking your keel cable, the rope is there to ensure that your keel does not end up in the trophy case of Davey Jones' locker.

Your Noelex does come with a keeper plate, usually at the very bottom of your keel casing, which is meant to prevent the keel from escaping, should the cable, or the winch for that matter, fail. The rope is there as an added safety device and should be subject to your normal check and maintenance of all equipment.

Inspection is best carried out after the boat has been launched and the keel wound down. You will need to remove the plate at the side of your keel case and then make a thorough inspection. Removal of the plate will not result in water streaming in.

Bimini

Can anyone give us a good description of a bimini suitable for a Noelex 25. Some members are keen to have one made and suggestions as to type and fixing are requested. We are aware that only the last few NX25's manufactured incorporated mouldings for that type of canopy, however, earlier models should lend themselves equally as well to have one installed.

There are a number of boats around and the easiest way to obtain information is to ask on the chat site or enquire from Peter Welch at Boatworks in Melbourne.

Water in Skeg - under floor

Another question we could not answer relates to water entering a Noelex 25, somewhere in the vicinity of the keel case area. Our member removed all floorboards, could not find any reason as to why water should enter, filled part of the bilge with water via his garden hose and did not observe any moisture escaping anywhere under the boat, whilst at rest on the trailer. Our only suggestion was that, perhaps the keel casing has a hairline crack, opening only whilst the keel is down and under pressure whilst beating into the wind.

Has any other '25 owner encountered this problem? Reference should be made to the chat sites where there have been a number of discussions, discoveries and remedies.

Sink pump - electrifying

Laurie WHITE (NX25 "KASHMIR") finds the old caravan type sink pump very inefficient. He has obtained an economical, small electric pump, cut the hose and fitted the pump in line. Now, getting a drink of water is a simple matter of a push on a button.

A great idea, especially to the female gender found on board many of our boats. You can find his telephone number in the member listing of our register, should you wish to follow suit.

Cockpit Light(s)

Another great idea is to permanently install a cockpit light.

There is a large cavity in the top of your transom. Get yourself a small, round recessed light fitting similar to the transom light and a waterproof marine type switch drill a suitable hole, preferably on the port side, about in front of the boarding ladder.

When moored (or beached stern in), it is of great assistance when returning from shore, to just reach over and turn on a light. This is especially appreciated on a dark night. Not only is it convenient, it also contributes to safety when clambering aboard in darkness to find the companionway. There is no need to go to great lengths to install wiring; a simple wire, direct from your battery, gives continuous access to some form of lighting when your main switch is

turned off.

Better to drill a hole in your boat than to sustain bruised, \ sprained or even broken limbs. Most of us have some form of charging system from the outboard engine. Usually there is a wire with a rustproof plug leading to a socket somewhere near the transom.

Some of us carry small portable generators when proceeding on a cruise. If you obtain a similar type of plug as that coming from your outboard, attach that to the lead from your generator and, presto, unplug the outboard, insert the generator and you are on your way. Similarly, those carrying solar panels can use the same adaptation. There is a full description included in Dual Battery Wiring.

Baling Bucket

No doubt you are aware that it is mandatory nowadays to carry two baling buckets of 10 liters capacity each. Trouble is, those plastic buckets are very fragile. If you look around a building site you can pick up some very good buckets which are very sturdy. I use buckets that used to contain 10 kg of pool chlorine. These are strong, clean and easy to come by. If you do not have a swimming pool, ask around your friends or ask at a building site where one can pick up very good buckets which are otherwise discarded. The 10 kg buckets are ideal.

Whilst not a handy hint, there are a number of owners intending to visit the Whitsunday area over the next few months. If you are going and looking for company, be on the look out for fellow members. It can get quite windy and going to destinations in company is definitely a recommendation. Be aware that, most times, you will need to radio ahead if intending to visit Hamilton Island. They will not let you in unless you have booked prior.

Engine Well Plug

Brian Jones from Tamworth NSW reported that he had lost his venturi in the motor well plate and asked where he could obtain a replacement.

Having encountered this problem myself, I advised him to obtain Ronston self baler part number RF 249 or RF 250 and have a go at fitting it.

He has done so and send a thank you e-mail expressing his delight and great satisfaction.

It occurred to me that you may also be interested.

Firstly then, when you insert the plate and are sailing, you are carrying a certain amount of water in the well. Because this is at water level, there is not much extra weight involved as the water level will go up and down.

As water travels in freely (also you will find that the plug does not really seal), there must be upwards water pressure as the stern goes lower in the water.

It then follows that, if you were to devise a method to empty the well, the stern section would be higher out of the water because of the upward water pressure on a sealed compartment.

This is where we get a little technical.

What you need to do first is to purchase the fitting. It has a lever, allowing you to open/shut the self bailer.

Having obtained the part, cut a neat hole in the centre of the plug (your well plate) so that the baler will fit snugly and use the rubber seal supplied when fitting.

Next you need to thoroughly clean the inner lip of your well and the plug.

 Hint - Use of masking tape will allow a neater finish when removing the tape after the silicone has set (see next paragraph). You must line the bottom of your plug with plastic and gladwrap will be fine.

Get a tube of silicone and, after masking off around the well, apply a liberal amount of silicone on the inner lip of the well.

Rest the plate (with the plastic lining) on the silicone and apply just enough pressure so that the

silicone becomes smooth; as a result of the slight pressure it will even out and some will squeeze out but this excess can be easily removed later with a sharp knife such as a Stanley knife or razor blade.

It is important that you let it set properly.

Next day (preferably two days later), lift the plate out, remove the gladwrap, remove the masking tape in the well, tidy up the excess silicone with a razor blade and you will have a permanent waterproof seal in your well.

Because of the flexible properties of the silicone, it will act as a rubber seal and actually compresses when you lock in the plate, making the well waterproof. You will be amazed on how quickly the water is sucked out through the self drainer once you get underway, under sail

Stove and Fire Safety

The picture below portrays a very good safety item easily made and installed.

The item is a heat shield made of copper and deflects heat and flames from the port window when the outside burner of the stove is in use. In addition it can be used underneath as a base when using the grill as a toaster



(Hint supplied by David Brook - Gun Runner

Sink Cover

Another hint David supplied relates to a sink cover. I would like to extend on this. I used a piece of 5-ply (sea ply) and made it to the measurement at the end of the floor in the cockpit where the motor well begins.

Measure up about a square to fit in front of the motor with the motor in the down position. You will need to obtain some aluminium square tubing and screw a piece to just below cockpit floor level on both sides of the well. These will act as brackets to lay your insert on. You have now effectively extended your cockpit floor by about 30 cm. The piece of 5 ply is dressed in f/g cloth and covered with gel coat. Once set, a little elbow grease will help sanding to a smooth finish.

Drill a hole, big enough to insert your finger for easy lifting and use the finished article as a sink cover when required. With a little care you can make the cover the correct size to fit in both places. I glued a couple of non skid self adhesive material to the top making it safe to stand on when used as a cockpit floor extension and I applied a couple of strips of silicone to the underside to ensure that it does not slip off the sink when in place there whilst the boat is underway. When used as a sink cover it effectively enlarges the kitchen area when preparing food.

Drink Holder

Another good gadget can be made cheaply from a piece of plastic $90mm \times 60mm$ rectangular down pipe., the type used to carry water away from the spouting of a house.

All you need is a bit of ply or perspex type material that will neatly sit in the groove normally used for the lower storm board in the companionway.

First, measure the width of the companionway opening about 60mm from the bottom (groove) side. Next use the 60mm side of the piece of PVC as the vertical and shape the ends so that these are shaped to the bottom part of the companionway. Use a piece of plywood about 100mm wide and shape it to the bottom part of your bottom storm board and screw the PVC piece to it.

Insert the shaped plywood in the storm board groove to ensure that it fits snugly. If it does, remove it, unscrew the PVC and draw out three circles in the 90mm face (the side facing up) of the piece of pipe and cut these out of the top only and re-attach to the shaped piece of plywood..

Make the holes large enough to accommodate a stubby holder. With this gadget in place when there is no need for the storm board, one can easily and quickly put down securely a drink when the skipper calls to go about or whatever he says that requires the crew to make their hands available for crew work. It avoids wastage of brown liquid.

Spinnaker Pole

Do you find when setting your spinnaker pole, followed by hoisting the spinnaker that the pole often seems to want to come aft? That is, it is actually pointing backwards.

I have attached elastic type straps,(ockey straps), permanently at the eye where your lifeline attaches to the pulpit. Hook the strap in and squeeze the hook so that it can not fall off. When setting the pole, hook whatever side you set the pole on to the relative strap temporarily to the pole. The strap will now prevent the pole from coming aft when setting the spinnaker. Once you have the rig set to your satisfaction, get your crew to simply unhook the strap. It cannot be lost overboard because you have made sure that the hook at the other end is securely fastened to the pulpit.

Both straps come in use again when the boat is unrigged and the mast is laid down. You can now utilise the straps to hook onto each side stay, ensuring that the wires do not kink or rub on the deck whilst travelling.

Hi-Field Lever - modifying

A number of owners have made comments about the difficulty using the high field lever when stepping the mast. This is particularly difficult when the anchor rope gets in the way.

At the bottom of the anchor well you should have a place to which the end of your anchor line should be attached. At this point you can attach a s/s straplike plate readily available at yacht chandlers and attach a pulley on the other end. Now attach a piece of 4mm rope through the hole in the high field lever. There should be a hole at the bend of your lever. Tie a secure knot at the end of the rope on the inner side of the lever. Lead the rope downwards through the pulley and tie a few knots or a loop so that it is easy to hang onto.

Now, when you need to push your lever down, instead you pull upwards on your bit of rope, effectively pulling the lever down.

This simple method makes live so much easier when stepping the mast.

Hull – preventing damage whilst towing

Many of our boats travel long distances on trailers often over poorly surfaced roads. The trailer rollers are there to keep your boat correctly seated on the trailer but unfortunately they also have a habit of polishing the gel coat so well that the surface rubs off in extreme cases. This superficial 'damage' can be prevented. What you do is obtain some scraps of carpet. Cut a strip equal to the width of the roller. Measure this strip around the roller and cut off to size. You can than tape the ends together and slip, like a stocking, over roller. A small dollop of silicone may be used to hold it in position. You need to only cover the outside rollers as the carpet will prevent excessive rocking of the centre bar. It may pay to make a few spares in case you lose one when launching your boat.

Should I cut a hole in my boat?

Why not! after all, it is your boat and you should make it as convenient to you as you would like it to be.

The place referred to is the area underneath (around) your sink.

Stick your hand under and feel around in the wasted space. What you do is mark out neatly either an oval or rectangle on the vertical bit above your access door. Carefully cut out an opening large enough to stick your hand through. You can line the edge of the hole you have just made with some plastic or rubber

beading. Now that you can see in, measure the area and make yourself a shelf from some plywood that will fit around the sink. You can clue this in place with some silicone or *FIG* resin and line the shelf with a piece of boat carpet. The storage space you have created is quite deep and an excellent spot to store those longer BBQ utensils, soup spoons and other gadgets that do not fit in your cutlery drawer. Once you have completed the job you will be the envy of many other Noelex owners who did not get this 'extra' build into their boat; and when you sit there looking at it, it does not even look out of place.

How to do it:

Carefully cut out the blue section with a fine jigsaw a little lower than the bottom of the sink. Attach two small strips of timber horizontally to each side inside the cavity and lay a 'floor' made from some plywood. Make two small rectangular cut-outs at front end of floor. The floor can be extended back to near the top of water tank. Line the new floor with a piece of boat carpet and you are done

Next, re-use the cut out section, smooth edges so that it looks presentable and attach two 'legs' to the inside bottom edge a little smaller than the two cut outs in floor. These will now serve as inserts in the slots made in the front of the floor and will secure the bottom when inserted. Lastly, glue a small door magnet to the inside top of the cut-out and attach a small metal plate to inside top section, in the centre of the hole.

When the legs are inserted first, followed by pushing the top of the insert (with the door magnet) against the small metal plate, the new 'hatch' is secured and will remain in place.

