

Recommendations and Practical Advice for Purchasers of New Eno and Force 10 cookers

Thank you for purchasing your new Eno or Force 10! This document is not exhaustive but is based upon our experience over many years. It will help you to avoid some typical pitfalls so you can get the very best from your new product. We strongly recommend that you read this in addition to, **but not instead of**, the manufacturer's own safety and operating manuals which must always be read and understood.

Some of the points covered below may be repeated in the manufacturer's documentation. Manufacturers may change their product and written information from time to time. In the case of any doubt, the manufacturer's documentation supplied with the cooker shall be the overriding document.



Installation and Commissioning

We recommend that all appliances are installed and certified by a suitably qualified marine gas engineer. After installation, the engineer should run through all aspects of your cooker's features and operation, as well as any features that are particular to your own boat's gas set-up, and will share invaluable safety and performance tips.

Apart from the safety, insurance and warranty implications, many cooker problems are caused by incorrect regulation of gas flow. Cooker performance is governed by the quality of the gas supply, so don't hook it up to an old or suspect regulator and pipework as this could be one of the reasons that your old cooker was starting to let you down. Your installation certificate should show the gas pressure reading at the point of entry to the cooker (see **Gas Type and Pressure** below).

- Connection to the cooker

Please connect to your gas supply using the appropriate 8mm adapter as shown below. These are compression fittings and not to be used for direct connection to a rubber hose.

	<p>Eno adapter Product code ENGRGA8505</p>
	<p>Force 10 adapter Product code ENGRGA4805</p>

- **Gas type and pressure**

Your cooker is designed to run on Propane or Butane gas at 30mb of pressure. For outdoor temperatures below 15°C, which is typical for boats in the UK and northern European waters, we recommend Propane for correct operation of the cooker.

- **Cylinder size**

For best performance, use a cylinder with a capacity of no less than 3.5kg. We recommend you start with a fresh gas bottle when your new cooker is fitted.

- **Regulator**



Regulators can lose performance over time and cheap regulators are not designed to withstand the rigours of a marine environment. **We recommend that a new, 30mb marine grade Propane or Butane regulator is fitted with any new installation.** The **GOK** brand is recommended by the oven manufacturers.

- **Pipework**

Is your flexible gas hose in date? The expiry date will be marked on the hose. If it is out of date, or even if it is still in date but the rubber is chafed or starting to crack, it needs to be changed. Ask your gas engineer to blow the entire pipework through with compressed air to clear any oil, water or other debris.

Are there any obstructions, kinks or leaks in the copper or rubber pipework? Get everything checked. Gimbaling cookers will have a section of flexible rubber hose to allow the cooker to swing. A rubber hose with a stainless braided cover is recommended for chafe resistance. Make sure the length is correct and watch how it behaves when the cooker swings on the gimbals.

- **Solenoids and manual shut-off valves**

Any connection is a potential source for a leak so get all connections checked. Solenoid valves in particular have a tendency to restrict gas flow as they age, so check the flow through the solenoid and replace it if there is any doubt.

- **Replace the gimbal brackets**

Your new cooker will come with a set of gimbal brackets. Please use them as your old ones may be worn or of an incompatible design.

Upon satisfactory installation in accordance with the above and any applicable regulations, please operate your cooker **strictly in accordance with the operation manual supplied with the cooker.**

Some General Advice on Cooker Operation and Maintenance

SAFETY FIRST

- Before lighting, please ensure that nothing flammable is placed on or near burners.
- Follow the manufacturer's instructions for lighting the cooker.
- Read and comply with all safety instructions in the vicinity of the stove and in the manual supplied.

Thermocouple Safety Protection

Your ENO or Force 10 is fitted with thermocouples, one for each burner. Their function is to stop the flow of gas should the flame be extinguished if, for example, a pot boils over or there is a gust of wind.

Thermocouple protection is an excellent safety feature that isn't fitted on many domestic ovens. Gas is only permitted to flow when the thermocouple gets hot, so having lit the flame you will need to keep the knob depressed for up to 20 seconds until the thermocouple heats up sufficiently. This will quickly become second nature as you get used to the cooker.

HOB OPERATION

- Check the flame appearance

Check the flame quality at your burners. The flame should be approximately 1 inch/25mm high and mostly blue in colour but with some yellow. Propane tends to burn with a "bluer" flame than Butane.

If your flame at the hob is uneven, hissing or strongly yellow in colour, the burner cap or flame spreader may not be seated correctly.

Avoid very large frying pans as they can direct the flame close to the knobs, causing them to melt.

OVEN OPERATION

- Thermostatically controlled ovens (all Force 10 models, Eno Ultim and ENO Perigord 874371010)

A thermostatic oven control is a very helpful feature for those who enjoy high quality meals on board. For correct operation, set the knob to the required temperature, close the door and wait for up to 20 minutes for the correct temperature to be attained. When the heat setting is reached you will see the flame reduce in size as it cycles to "temperature maintenance" mode. This tells you the thermostatic control is working and it's ready for you to put your food inside. Then "set and forget" and do not adjust the valve until cooking is completed.

A thermostatic valve allows the gas to flow at maximum rate until the set temperature is reached. For this reason please DO NOT adjust the control knob once you've set the temperature as this will only "confuse" the valve. If your recipe requires a change to a different setting, for best results open the door, extinguish the flame, re-light it, dial in the new oven temperature, close the door and "set and forget" again.

We do not recommend that you run on full power 250°C for more than 30 minutes at a time.

- Non-thermostatic ovens

Most of the popular Eno models have non-thermostatic valves which simply adjust the flame up and down for the easiest possible operation by the owner and guests. Temperature control with these cookers is a

matter of checking the oven periodically during cooking and adjusting the flame as necessary. For more precise cooking it's worth considering an oven thermometer. These devices will vary in accuracy, so invest in a quality digital thermometer if temperature readings are important for your cooking needs.

Heat dispersal plate (all Force 10 ovens)

It is essential to the proper operation of your oven that the stainless steel heat dispersal plate is placed on the correct bottom level to ensure even heat distribution. Because of its proximity to the flame it will discolour when first heated and the plate will distort. This is a normal feature of its design and will help to encourage circulation of the heat around the oven. Please do not place dishes directly on the heat dispersal plate.

- Close the door when using the oven

Do not run the oven with the door open. A cooker must never be used as a cabin heater as this may overheat and damage the valves.

- Operation of the grill (broiler)

Force 10 Broilers will take longer to light than other burners as the gas needs a little time to flood the broiler element. Force 10 broilers are designed for toasting, browning off an oven cooked meal and melting cheese. They are not recommended for cooking meat.

Never use the grill with the door closed. Eno oven doors must be $\frac{3}{4}$ closed, with the grill heat shield pulled out to protect the knobs and fascia above. Force 10 ovens have a feature that locks the door partially open when grilling/broiling.

Gilling (broiling) is a rapid operation, so check your food often and don't run it for more than 20 minutes at a time.

- Operation of the hob

If your flame at the hob is uneven, hissing or strongly yellow in colour, the burner cap or flame spreader may not be seated correctly.

Avoid very large frying pans as they can direct the flame close to the knobs, causing them to melt.

Annual checks

Like everything else on board, periodic checks are very important. Annually, and as a minimum, you should:

- check your gimbals and hoses
- Replace the ignition battery if fitted
- Check and clean the condition of the burner caps, flame spreaders and jets
- Check and abide by any instructions from your insurance company

At <https://penguineng.com/> we have uploaded some short maintenance videos and will update them from time to time. Please take a look and don't hesitate to get in touch if you have any questions or concerns.

We hope you find this information useful and that you enjoy cooking with your new Eno or Force 10.