

Inboard Engine Injector Pump - Winter Lay-up

By Bernard Kain, Shrimper 461 (Greylag) (Winter 2003)

When I came to start my inboard engine this summer after the winter lay-up, it all turned over very smartly, but would not start. I followed the usual drill of checking fuel flow etc. and found that the problem lay with the injector pump, from which no fuel flowed. Fortunately I had tried to start it before actually launching. The local engine man in Rock told me that the plunger had almost certainly stuck open as, when the engine stops, it is most likely to cease turning just as it approaches the compression stroke, which means that the injector pump has reached the extent of its travel. The pumping action is a positive push on the plunger, whilst the return is made by a spring and it only needs a small piece of dirt or rust to set in whilst it is stationary for 6+ months to cause it to jam open. Sometimes a sharp blow on the top of the pump will dislodge it, but not in my case, so it meant taking off the injector pump to free up the plunger. I left this to the expert as I understand that, when withdrawing the pump, there are bits that can fall off internally and which then end up in the sump!

I understand that the problem can be avoided by ensuring that, after winterising the engine with anti-freeze and putting in new oil etc., the engine is left so that the plunger has fully returned. This is quite easily done. Turn the engine over by hand until you cannot turn it any further due to compression. Mark the top of the lower pulley (on the crankshaft), lift the decompression lever and turn the crankshaft pulley one further revolution exactly. This ensures that the cycle is at the end of the exhaust stroke and that the injector pump is primed with fuel and ready to be opened by the operating cam.

Whilst you are most unlikely to start the engine by turning it over in this way, it would be sensible to make sure that the stop control is pulled out, as fingers could be lost!