## Tartan 37 Technical Resources

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## Chapter 3: Engine, transmission and prop

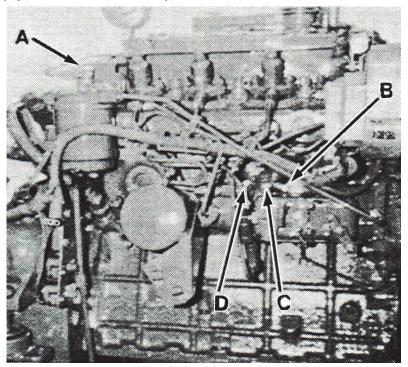
Section 3: Bleeding the Westerbeke 50 Tom Wells #224 Higher Porpoise

## "BLEEDING THE 'BEASTE"

A while back, a T37 owner reported that following a filter change, his Westerbeke 50 would not start after repeated attempts by his mechanic to bleed the system. The mechanic then told him that he would need a new injector pump! That was not the case – the mechanic simply did not know how to bleed this engine.

Bleeding the injector pump on a Westerbeke 50 is a painful, multi-step process. The bleed screws are tough to get at, and you do need to run the starter for part of the process, so **wear no loose clothing or jewelry that could snag in the belts and be <u>VERY CAREFUL</u>. You will need an assistant to do this properly.** 

This photo diagram was taken from the Westerbeke 50 manual. The picture quality is not the best, but it will help you locate the bleed points.



1. Begin as usual by loosening the banjo bolt on the secondary filter (Point A - Located on the back of the engine) and then bleed this point by using the priming lever on the lift pump. If the lift pump lever has very little travel, "bump" the starter to cycle the cam until the lever moves freely.

2. After bleeding the secondary filter, there are three –count 'em - three bleed points on the injector pump body that you have to hit before you get to the injectors themselves.

The first point (Point B) is right next to the incoming line from the secondary filter. You can bleed this one using the priming lever on the lift pump. Purge air until you get clear fuel flow, then tighten it.

After the first point has been bled, move to the next (Point C), which is on top of the injector body near the fuel pressure sender. For this one, you will need to run the starter. (The W50 manual says you can use the lift pump, but getting al lair out that way is difficult.) Purge any air and get clear fuel flow, then tighten it.

The final bleed point on the injector body (Point D) is on the back end, near the lines to the injectors. Use the starter for this one, too. You need to get strong spurts from it after any air has cleared, then tighten it.

3. Now you are ready to do the injector lines. Loosen the securing nuts on the injector lines. These are the ones directly on the lines at the injector. Cycle the starter until fuel drips from each line, then tighten all four. Start the engine- it should start right away if you did all the steps properly.

It took me two tries the first time I did this. Since then, when I have had to bleed the system after filter replacement, etc. it has worked on the first try each time but one. The second try worked that time as well.

<u>GOOD LUCK!</u>