

Cold Weather Starting on Yanmar Tractors

Question: Why will my tractor not start now that the weather's cold?

Answer:

First, make sure you're following the start-up steps in your manual. If you haven't read this stuff, then as your mother used to say, "Shame on you!" This also assumes that your tractor is in good basic running condition, not suffering from low cylinder compression, a clogged air intake, or other basic maladies.

Next, make sure your battery is fully charged, or use the jump start setting on a battery charger.

Still won't start?

There are a lot of potential contributors here. Are you using both compression release AND Thermostart? Make sure the thermostart element is heating up by feeling near the thermostart plug on the intake to see if you feel any warmth....if not, you can double check on some models (like YM1500, 1700, 2000) by removing the air cleaner, then you'll actually be able to see the plug get red hot if it's working properly. You can also use a multi-meter or test light to confirm that the element is receiving power. You should always go IMMEDIATELY from thermostart to cranking. Also, make sure the thermostart tank on top of the engine is primed with a little diesel fuel.... Thermostart is so effective because it's actually igniting a drop of fuel with the heating element (aka Thermostart plug).

When it's real cold, I like to crank for a few seconds with the compression release pulled just to get things moving, then stop cranking and activate the thermostart for about 20 seconds and crank immediately.

lffy fuel quality / water in the fuel could be a contributor. Fresh fuel, with some Power Service diesel fuel additive (or similar, like Lucas Oil's additive) couldn't hurt.

If all this fails, you might have to consider something weird, like air in the fuel lines (Have you changed fuel filter recently? or run it out of fuel?). Have you noticed any unusual leaks?

But really, when you get right down to it, it's always tougher to start a diesel in cold weather, even when everything is in proper working order. The culprits are cold iron and cold thick oil. This is why our northern customers in the know either keep them in a heated garage, or use multiple block heaters. We have magnetic block heaters that plug into a wall socket and "plunk" right onto whatever metal surface you want..... one on the oil pan and one on the block or head is a good start. One or two on the bottom of the transmission won't help with starting, but it will keep your hydraulic fluid from getting real thick, and shorten your warm up time so you can get to work more quickly....this is especially useful on Powershift equipped models.

DON'TS:

Don't use ether or other starter fluids on your tractor. Using ether is treating the symptom (My tractor won't start), as opposed to treating the cause of the problem (bad fuel, low compression, malfunctioning thermostart unit, etc.) It's VERY easy to do serious engine damage in this manner.

Don't crank and crank and crank a hard starting motor until you fry your starter. Starters lead a hard enough life as it is.... Don't make it worse by abusing them. If your starter is hot to the touch, you need to let it cool off before attempting to start again.

Don't disable your starter safety switch down near the clutch pedal. Somebody's bound to get hurt.

There are plenty of other Don'ts that we're forgetting, but if you follow the guidelines in your manual (click here if you need to buy a manual for your Yanmar), and use your inborn common sense and fear of dismemberment and death, you should come out OK.