



TILLER SETUP GUIDELINES

These guidelines are intended for Yanmar tractors and rototillers, but work for most other brands as well. If in doubt refer to your tiller manual or your tractor dealer/mechanic. RCO Tractor will not be held liable for damage or injury resulting from following this guide.

1. Never perform any of the following steps with the tractor running or the PTO engaged. Doing so can result in serious injury.
2. In most cases you will NOT want to use a PTO Over-run Clutch when running a tiller because it will make drive shaft installation difficult, if not impossible. Running a tiller with no over-run clutch does not create the same safety concern that a brush mower or other high inertia implement does.
3. Make sure the PTO shaft on your tractor and the matching input shaft on the tiller are free of rust or any deformation that would make driveshaft installation difficult. Rust comes off easily with a wire wheel on a drill or grinder. Burrs or deformation may require hand filing. Grease the surface of both shafts liberally.
4. Make sure the female drive shaft ends are also in good shape as described above. Grease the internal splines as you did with the pto shaft. Grease the universal joints with a grease gun, and make sure both U joints move freely. Lubricate the locking pins and push buttons on both ends of the drive shaft. Slide the driveshaft apart and grease both male and female telescoping interfaces.
5. Connect the drive shaft to the tiller. Make sure the locking pin has engaged the circumferential groove on the tiller input shaft. Failure to do so can result in product damage or personal injury during tiller operation.
5. Connect the tiller to your 3pt lift as you would with any implement. If your tiller is equipped with tail wheels they can be adjusted down to make it easier to position and connect the tiller, but you'll need to crank them up before tilling. Don't forget to adjust your stabilizer chains so the tiller doesn't swing from side to side.
6. Connect the tractor-end of the drive shaft to the tractor's PTO shaft. If the drive shaft will not compress to a short enough length to slide on easily, you may need to start the tractor and raise the 3pt to create enough space to install the drive shaft. **Always shut the tractor off and lockout the 3pt hydraulics, or better yet, block the tiller with something sturdy to insure that it can't come down on your foot.**
7. Now that everything is connected, you want to adjust your top link so that the tiller is tilted properly, adjust your 3pt so that the tiller can not make contact with the rear tires, and adjust your tail wheels to set the desired tilling depth. You will also need to insure that the drive shaft U joints do not bind when the drive shaft is turning. You should check this at both the top and bottom of the available range of 3pt travel. View the pictures at right for examples.

Fig. 1 shows the proper setup with the tiller resting on the ground.

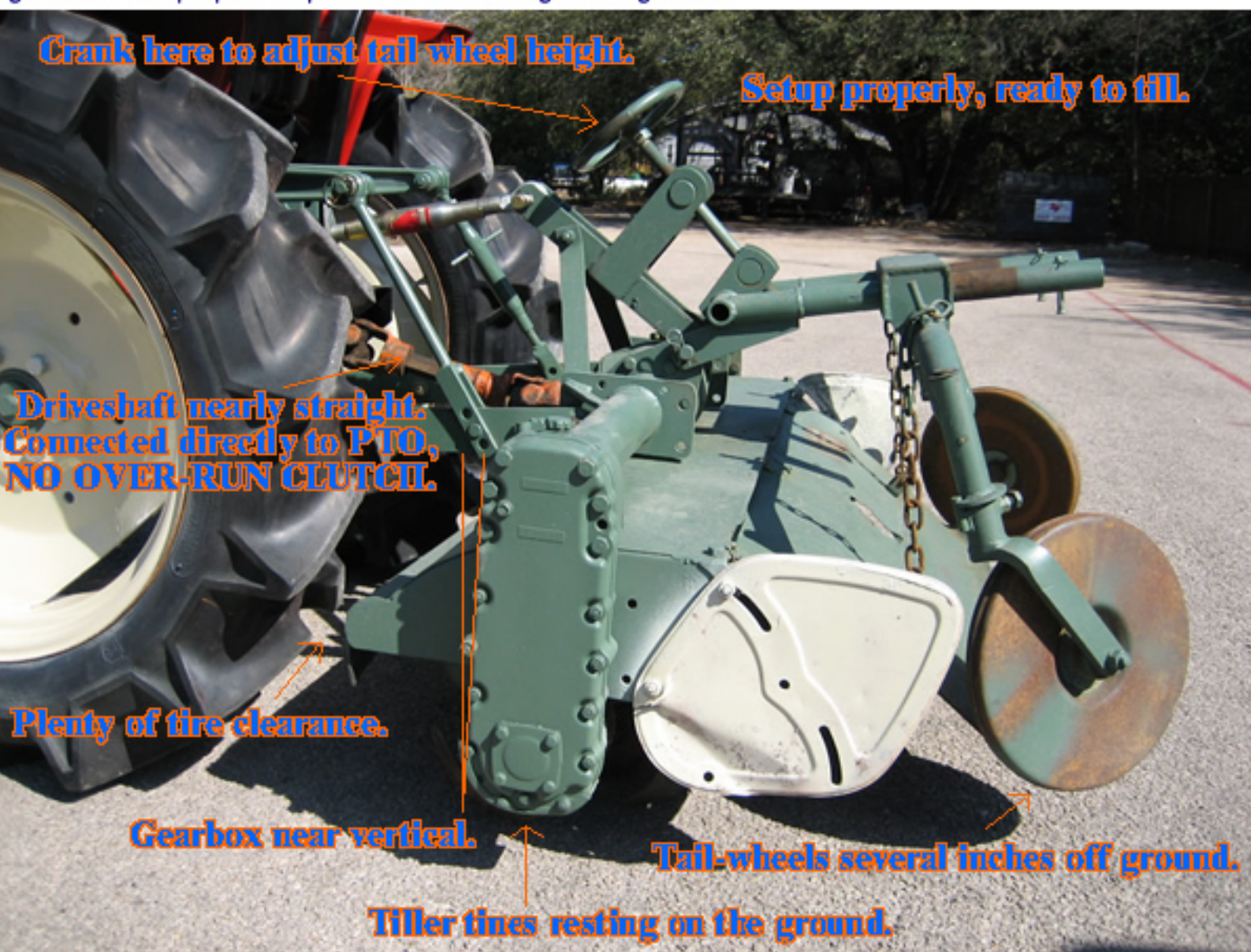


Fig. 2 shows what it should look like with the tiller raised up for transport.



Fig. 3 shows what NOT to do. Tiller will contact the rear tires, and driveshaft U joints may bind and break if tiller is raised too high. It's a good idea "Lock out" the upper end of your 3pt lift range of motion by putting a wing-nut through the metal guide that the 3pt control lever slides through. It's easy to loosen and get out of the way when you want to use another implement.

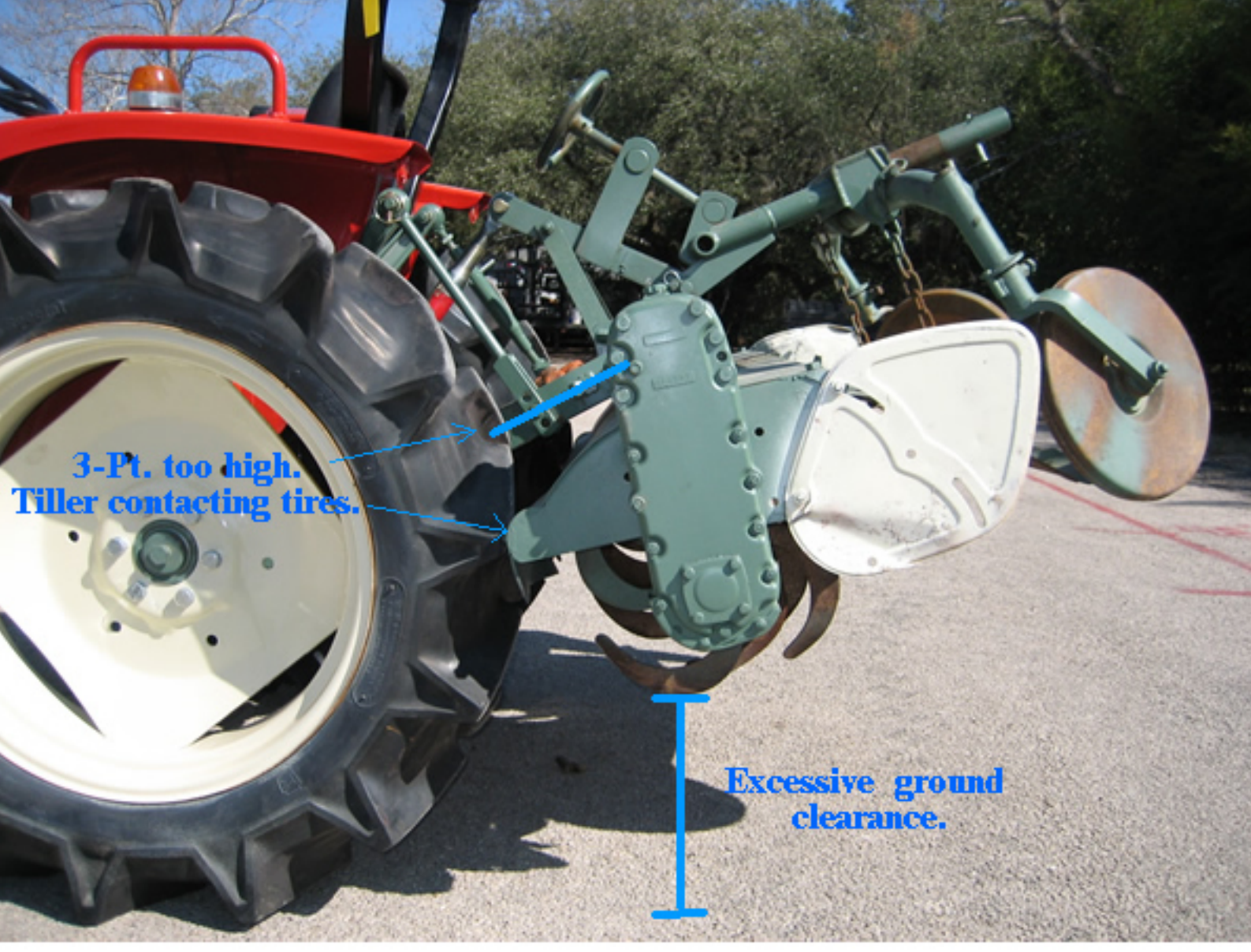


Fig. 4 shows what it will look like when you're tilling, with the tines down in the ground, and the tail wheels resting on the ground. You have to use your imagination a bit, because I don't have a good spot here at the shop to actually till. So I parked the tractor with the tiller hanging over a low spot, so that I could lower it into the actual tilling position and turn the drive shaft with the tractor shut off and the PTO in neutral. If the drive shaft binds with the tiller in tilling position DO NOT RUN IT. Contact your dealer for assistance.

