





1. Introduction:

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A. Proud Owner:

. You are now the proud owner of a Bro-Tek Wheel Spacers. These Wheel Spacers are made for your Yanmar tractor rear axle. Please read these instructions, before installing the Wheel Spacers. The Wheel Spacers have been designed for easy installation on your Yanmar. Wheel Spacers are a bolt-on item. Unit will be shipped complete in a box, all hardware included. Designed to be very easy to install.

MImportant If you have a Mid Mount Mower, the wheel will be push out & may contact.

B. Feedback:

. We would love any feedback that you could give us (Positive/Negative), to improve our product line. Please email us your comments/pictures too: bro-tek@hotmail.com or you can reach us at www.bro-tek.com

2. <u>Safety Precautions</u>: <u>MImportant Safety</u>

- A. Park on a firm level area.
- B. Stop engine, set brake, remove key and wait for all moving parts to stop before servicing, adjusting or unplugging.
- $\boldsymbol{\mathsf{C}}.$ Block up before working beneath unit.





3. Tools/torque/Parts required:

- A. Socket 22mm, 19mm, 17mm (Short ..spin lug bolt into axle & Deep)
- **B. Torque wrench** (135 Lb-Ft).
- C. Floor Jack & Jack stands.
- D. Pry-bar or round pipe (see pic below).
- E. Locktite, High Strength Thread locker
- F. Chainsaw file

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4. Assembly Instructions:

A. Once you have followed the safety precautions & have removed the Wheel Spacers from its packaging, please take notes of all the parts & follow the assembly instruction.

B. Free up work place of all disturbances & clutter. Take your time installing it (This can normally be done by one person in 20 to 35 minutes).

C. Before lifting, with the jack, the YANMAR, break loose the nuts on the rear wheels, this will help out.

D. Jackup & place the jack stand on the YANMAR. (Ref to owner's manual) \triangle Jack stands must be stable/secure

E.It's now the time to remove the tire.

Caution if you have loaded tires and haven't taken them off before then beware they can be VERY heavy. Make sure that the jack stands are stable before removing the wheel.

F. The factory 2 nuts & 4 bolts are the same $14mm \times 1.5$ tread as the one supplied with the spacers, but do not have the taper/cone seat.





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MImportant we recommend removing the axle Stud (2 each side), the best way is to double nut the stud & tight these together & back out the back nut /Counterclockwise. We have supplied new Taper Lug bolts 14mmx1.5 use these to install the spacer to the axle.

Now is a good time to test fit the spacer to the Axle & then to the wheel rim. The spacer should make full contact to the axle & the

nuts/lug bolt has full tread contact^(M), it's much easier to sort any</sup> problems without having anything bolted down.

If everything looks good add some Locktite to lug bolts 🕰 G.To install the spacers, you will need hold the axle from turning.

Parking brake should work, but a long bar(see photo) 🗥 careful not to damage the wheel spacers stud tread (a Wooden bar or a rag/rubber around the steel bar will help protect the treads, add High Strength Thread locker to the bolts.

Get your short socket & make sure to use the supplied Lug bolt that came with the spacers. 🕰 the bolts have a tapered end, make sure only tapered bolts are used to install the spacers to the axle.

 Δ Please take the time to make the install/Torque bolt in a 3 steps. First hand tighten the bolts; Second torque the bolts to half the torque in a crisscross/Star pattern & Finally torque the bolt to their final value of 120 ft. 1bs for the spacers to the axle.



H. Get your deep socket, install the rim/wheel (using a steel Shovel, under the tire and moving it around makes it easier to get everything align) & now use the new lock washers supplied & the nuts from the spacer. Torque the nuts to 130 ft. lbs for the rim in the same 3 steps as above.







I. Check clearances around the Wheel, no point of contact should be noticed. Make sure to fully turn the steering left/right.

J. Check everything out for clearances & binding. Recheck nuts & bolts after the first 2 hours of travel & at your regular oil change.

A low speed test drive on a bumpy terrain with steering fully rotated should reveal any problem area. Make sure to correct the problem before any other driving.

Our recommendations would be for sure to make witness marks after installed, using a paint pens on the back side of the axle lug bolts & also on the studs /lug nut of the wheel side. Make for an easy inspection of the tractor.



5. Congratulations:

You have successfully installed your Bro-Tek Wheel Spacers. We hope this was a pleasant experience & that you would recommend this product to all of your tractor friends. The Wheel Spacers can remain on the YANMAR for all the preventative maintenances & the every day use.

6. Thank you:

We would like to thank you for supporting us & hope to do future business with you with our new upcoming line of products.