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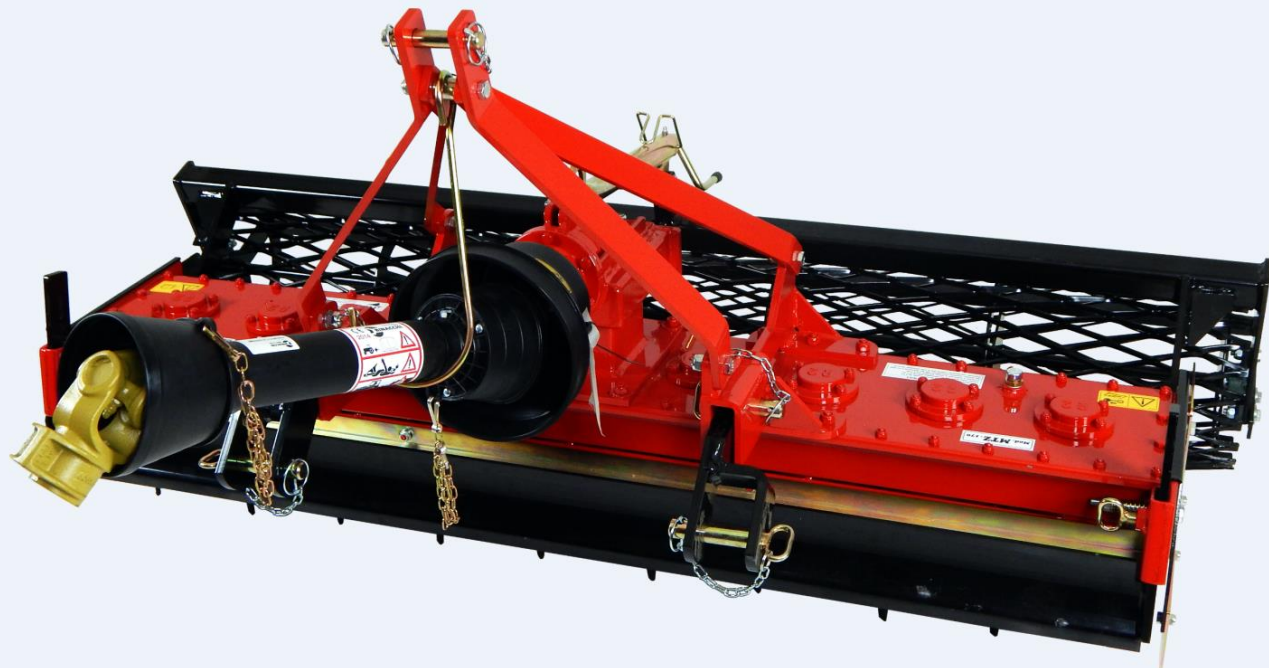


Tractor Tools Power Harrow Assembly Guide

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R2 Rinaldi Power Harrow Assembly Guide



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Scope and Purpose

This guide is limited to the TX35, TS48, and T61 power harrows made by R2 Rinaldi and sold by Tractor Tools Direct. The guide covers models manufactured in 2014 and forward.

This manual is a guide to aid in the assembly and startup of the power harrow models listed above. Consult the operations manual for instructions on usage, service and safety.

Introduction

The photograph in figure 1 shows a T61 power harrow assembled completely from the front. Figure 2 shows detail from the rear of the unit.

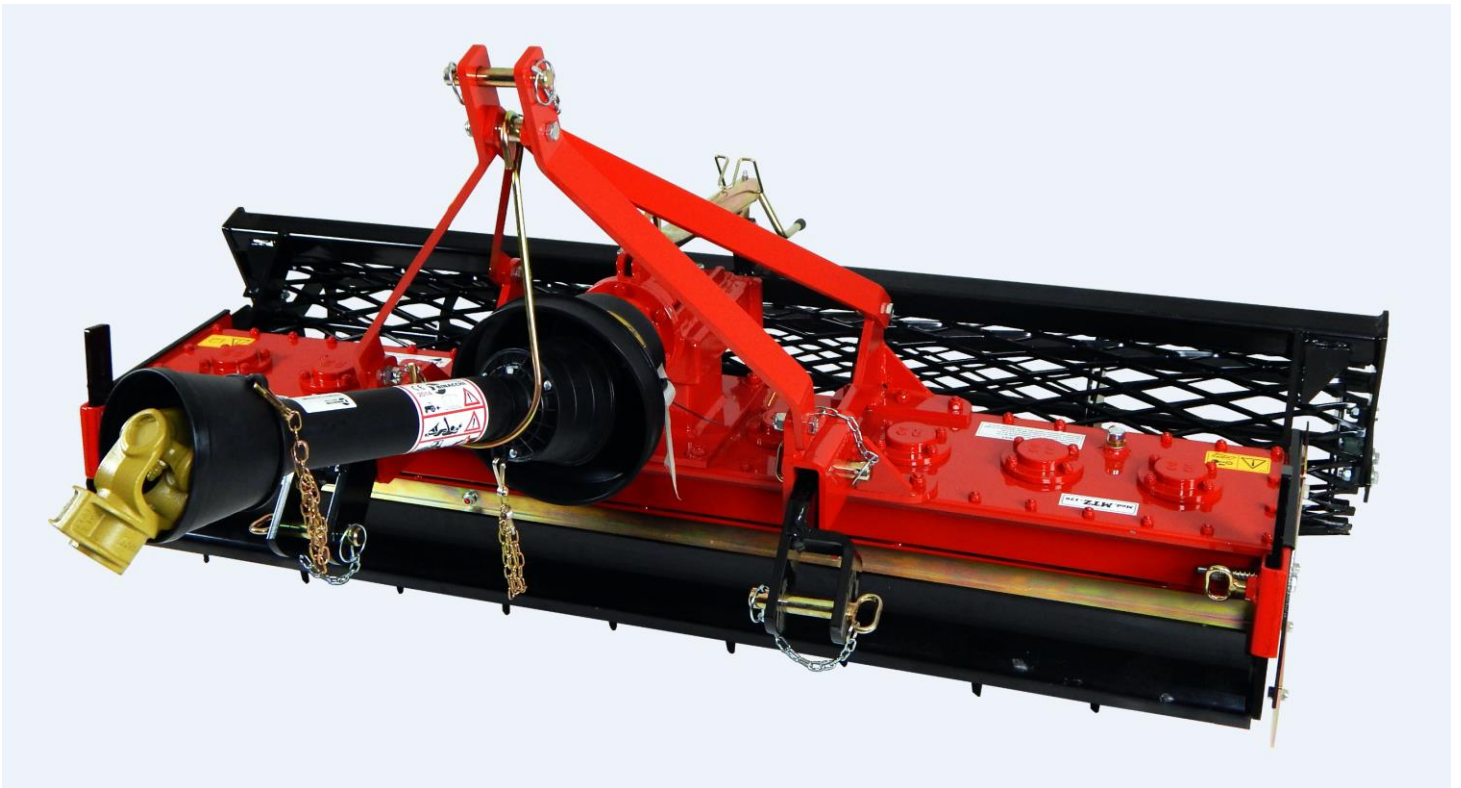


Figure 1 assembled T61 power harrow front view



Figure 2 rear of power harrow



Figure 3 power harrow in box as shipped

The machine will arrive in a corrugated box on a pallet. Shipping weight can range from 350 – 600 lbs depending on the machine, so you will need a forklift or a loader with pallet forks to unload it from the back of the truck and move it safely.

Unboxing

Remove the smaller unattached parts from the box by hand.



Figure 4 box contents

If you have a hoist or safe means to lift the unit out of the box, a lift point is provided as shown in figure 5.



Figure 5 lift point

Alternatively, you can cut the sides off the box, assemble the hitch components as shown in the next section, and lift it off the pallet.

Assembly

Install the lower three point hitch attachment points so that they face down as shown.



Figure 6 lower lift arm attachment points

The frame that the top link attaches to bolts on as shown.

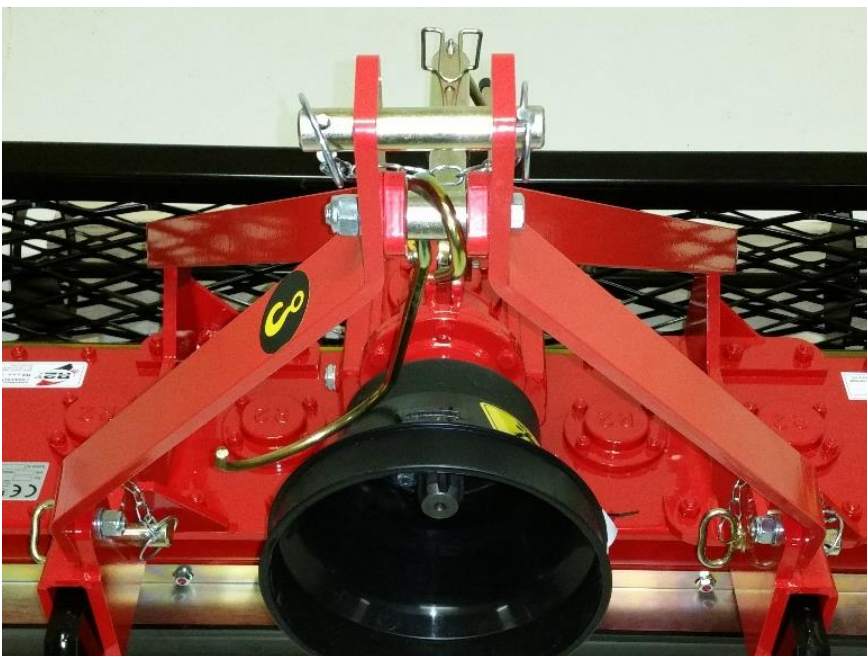


Figure 7 top link attachment point

Driveline

The PTO driveline has a shear bolt to protect the power harrow should it run into a large obstacle. Replace with only the same size and grade of bolt. Note that the bolt is metric. A grade “8.8” in metric is a low strength soft bolt. Do not use a grade “8” SAE (English) because it is a hardened type.

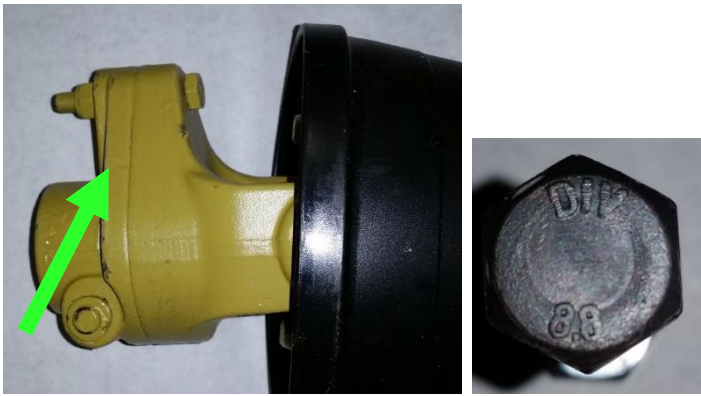


Figure 8 driveline with shear bolt grade “8.8”

The shear bolt end is installed on the machine’s PTO, opposite the tractor end. Before installing the driveline, it may be necessary to cut it to length to match your tractor. Drivelines ship long to accommodate larger tractors having longer lift arms. Consult our video or manual on how to cut a PTO shaft for instructions. You can find them on the product page for the power harrow located under the “Manuals” and “Video” sections. Just scroll down from the top to find them.



Figure 9 “Manuals” and “Video” section on the power harrow product page

Once the PTO driveline is the correct length, grease both ends before installing. Refer to the manual that is attached to the driveline as it details cutting, lubrication, and service procedures.

Lubrication

The top gearbox uses conventional gear oil. EP 90, 80W-90 or 85W-140 are compatible gear oils that are easy to find. Oil is added by removing the vent plug on top of the gearbox. The oil should show in the lower glass window. Do not overfill; the oil level should not be above the glass window.



Figure 10 top gearbox with vent and sight-glass window

When cleaning the machine, take care to avoid direct sprays of water at the vent plug. It is possible that water could enter the gearboxes through top vents if a pressure washer or a direct stream of water is aimed toward the vent.

The lower gear unit is filled to 2 cm (.8") deep with NLGI Type "0" (zero) grease. It must be checked after the unit has been running long enough to warm the lower gear case. Type "0" grease is about the consistency of mustard at room temperature. Check it when the machine is level. Only add grease if needed. The machine comes with grease in the lower unit. Do not use standard NLGI #2 tube grease as it is not liquid enough and will channel around the gears.

There is a decal near the fill/check point on the lower unit.

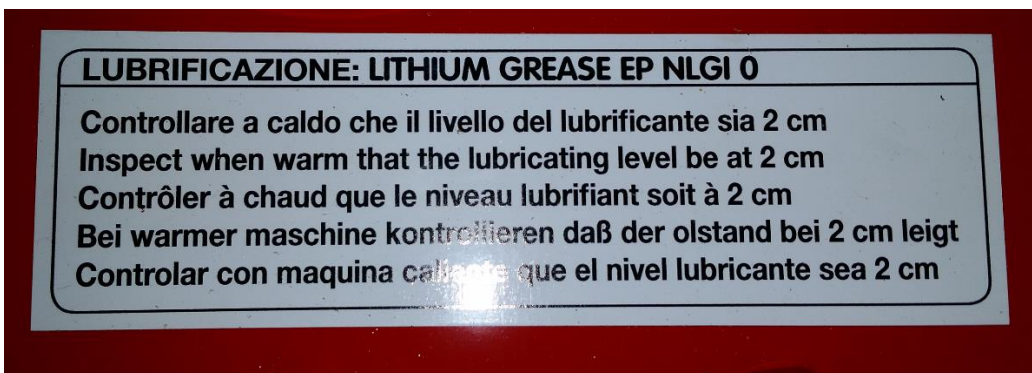


Figure 11 decal for grease type and level for lower unit

The NLGI type 0 grease is not commonly stocked in stores, but it is fairly easy to find online. A Google search for “corn head grease” will likely help you find the product. It will be many years before you are likely to need to add or change grease under normal usage of the machine.

Read the Operator’s Manual

This guide only covers getting the *machine* ready to use. The operator’s manual prepares the *person* to be ready to use the machine in a safe and productive way. Simple things like lifting the unit before turning a corner may not be obvious to an untrained operator, but could damage the machine. Never let anyone operate the machine without first having read the operators manual. If you lose the manual, you can download one from our website.