



Tow Hitch Attachment

OEM-290-101 / 290-101-081

CAUTION

- Before inspecting, cleaning or servicing the machine, shut off the engine, make sure that all moving parts have come to a complete stop, and disconnect the spark plug wire.

Failure to follow these instructions can result in personal injury or property damage.

The rear (tine section) of your PTO Horse Model Tiller can be removed in minutes, leaving the Power Unit free to pull a cart or other drag-behind implement with the aid of the Tow Hitch.

This is a standard tow hitch design which can be used for attachments including the TROY-BILT Sweep Cultivator. You may also use it with other attachments you already own, such as a lawn roller, four-wheel shredder, or a drag-mat.

However, before using such equipment with your new Tow Hitch, refer to the operating instructions and safety rules provided with the attachment being used.

When you attach a piece of equipment like a dump cart, which requires pivoting action for turning, you must put one pin through the center holes of the Tow Hitch. When you hook-up a piece of equipment that has no pivoting action, such as the Sweep Cultivator, you must put two pins through the outer holes of the Tow Hitch.

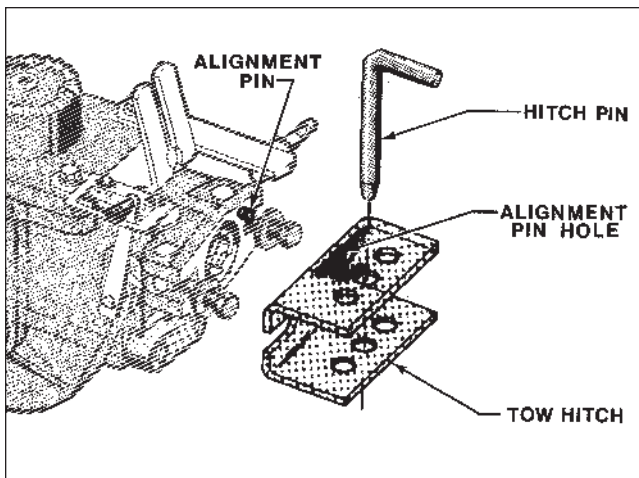


Figure 1: Tow Hitch attachment.

Before installing the Tow Hitch, you must remove the tines (or any other attachment) from the back of your tiller.

WARNING

- Maximum load capacity of the Tow Hitch is 400 pounds.
- Never allow riders on any attachments being towed. See other safety rules on the back page.

The Tow Hitch Attachments includes the following components:

Part No.	Description	Qty.
1900779	Hitch– Mounting Plate	1
GW-9363	Hitch Pin.....	1
GW-2006	Dust Caps – two, protective covers (shown in Figure 2).....	2
GW-2288	Label – Warning	1

CAUTION

Put Wheels/Tines/PTO Drive Lever in NEUTRAL position. Stop engine, let all moving parts come to a complete stop, and disconnect spark plug wire. Failure to follow these instructions can result in personal injury or property damage.

ASSEMBLY AND INSTALLATION

Step 1: Remove the Tine Attachment

- If you have kickstand, move it down as shown in Photo 1.
- If you do not have a kickstand, place a sturdy box or block under the engine for stability when the Tine Attachment is removed. See Photo 2.

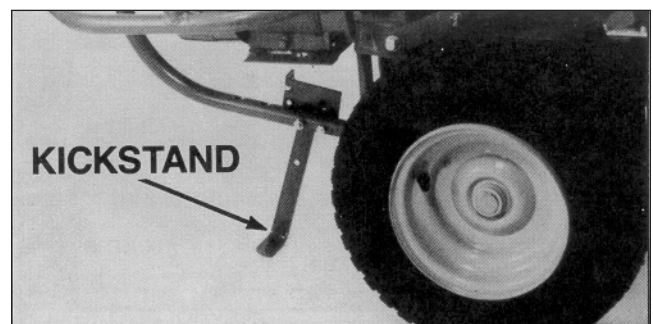


Photo 1: Put down the kickstand.



Photo 2: Place a block or box under the engine.

C. Place the Tines/PTO Lever in the DISENGAGED position. See Photo 3.

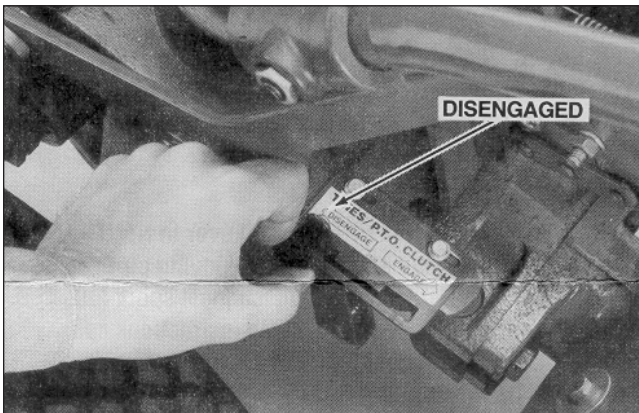


Photo 3: Tines/PTO Lever in DISENGAGED position.

D. Using a long $\frac{3}{4}$ " wrench, loosen, but do not remove, the two swing-bolts which connect the transmissions of the Power Unit and the Tine Attachment Unit, until you can swing the bolts outward. See Photo 4.

E. With one hand on the handlebars, tip the Power Unit forward about one inch while pulling

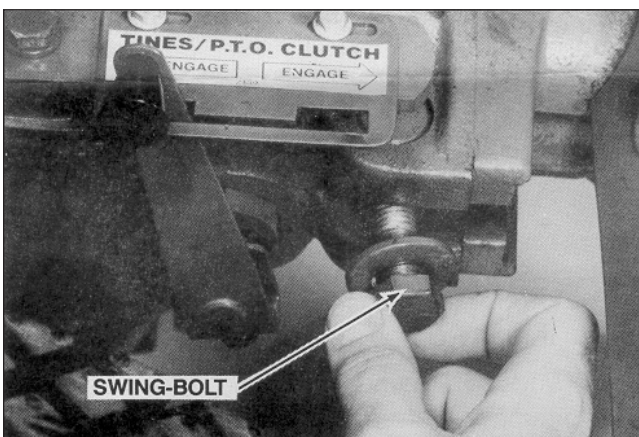


Photo 4: Move the swing-bolts outward.

back on the Tine Attachment with your other hand. This releases the Power Unit alignment pin from the alignment hole on the Tine Attachment. Refer to Photo 5.

F. Remove the Tine Attachment and set it aside.

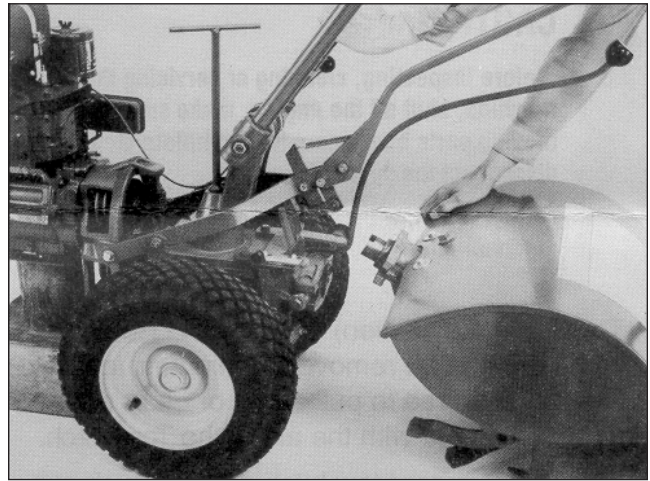


Photo 5: Remove the Tine Attachment.

G. Because so many PTO Horse Model Tiller owners use their power units with other Troy-Bilt attachments, Troy-Bilt has designed a Tine Cradle which is a convenient accessory for storing the Tine Attachment in a level position. This prevents transmission gear oil leakage and also assists in the removal and replacement of the Tine Attachment. Refer to Photo 6 below showing the Tine Attachment in place on the Tine Cradle. To order a Tine Cradle for your Horse Model Tiller, order Part No. GW-12583.

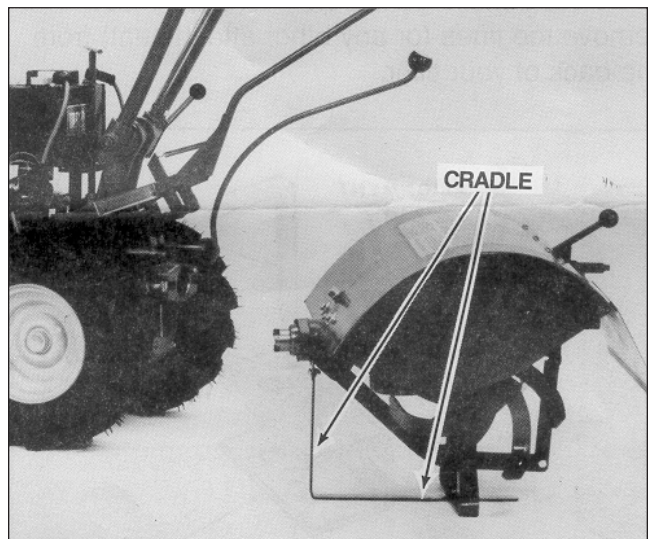


Photo 6: Tine Attachment stored on Tine Cradle.

H. If you do not have a Tine Cradle, you may instead prop up the Tine Attachment housing with a block of wood to keep the transmission housing level, thereby preventing gear oil from leaking out of the dipstick hole.



CAUTION

- Always handle the edges of the tiller hood carefully. Constant soil abrasion can make the edges very sharp. Wear thick gloves for protection.
- When an attachment is removed from the Power Unit, always place a wood block or other sturdy support beneath the coupling to prevent the attachment from falling forward.

Step 2: Use of Dust Caps

A. Two protective dust caps are provided with your new Tow Hitch. One dust cap is for the PTO access hole in the transmission. The other is for the dog clutch coupling of the Tine Attachment.

B. Insert the smaller, 1- $\frac{1}{2}$ " dust cap into the PTO access hole, as shown in Figure 2, whenever the Power Unit is detached from the Tine Attachment. With the dust cap in place, the access hole is protected from the entry of dust, dirt and moisture. The dust cap may remain in place for the operation of non-powered attachments such as the Tow Hitch. It must, however, be removed before attaching the Tine Attachment or other powered attachments.

C. The larger 1- $\frac{3}{4}$ " dust cap should be placed over the protruding end of the Tine Attachment dog clutch coupling whenever the Tine Attachment is not being used. This dust cap protects the coupling from dust, dirt, and moisture. Proper placement of this dust cap is shown in Figure 2. It must be removed before the Tine Attachment is connected to the Power Unit.

NOTE — When using the dust cap on the Power Unit, the Tines/PTO Clutch Lever should be in the DISENGAGE position.

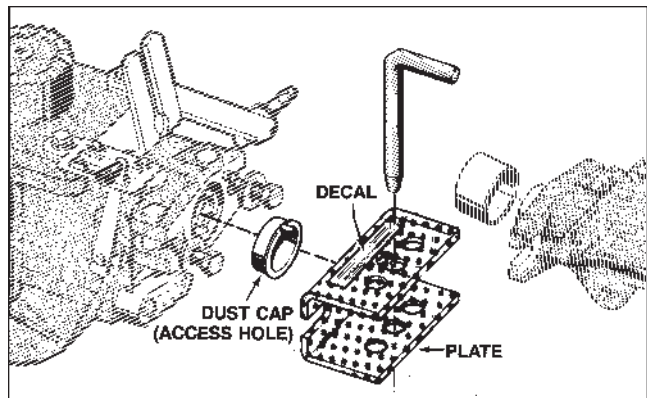


Figure 2: Insert both dust caps.

Step 3: Install the Tow Hitch

A. Align the hole in the right-hand corner of the Tow Hitch with the alignment pin at the PTO access hole. Move the swing-bolts into the slots in the Tow Hitch. Note that the washers on the swing-bolts should be next to the bolt heads.

B. Tighten the swing-bolts by alternating between the two bolts to achieve even tightness. Tighten the bolts securely, using a $\frac{3}{4}$ " wrench at least 11" long (this length provides sufficient leverage to tighten securely), until the concave washers on both bolts are flat. Or, if you have a torque wrench, tighten each bolt to 70-80 ft/lbs.

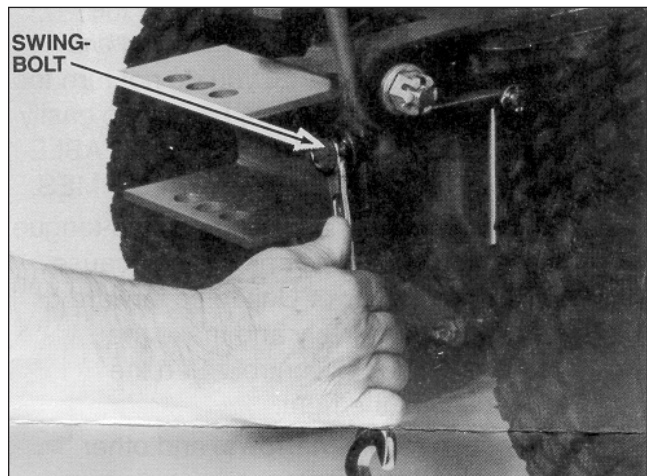








Photo 7: Tighten both swing-bolts.

Check the bolts for tightness every 2- $\frac{1}{2}$ operating hours. The Tow Hitch is now ready to accept the attachment. See Photo 7.

C. Be sure to raise the kickstand or remove the engine support before you attempt to drive the Power Unit forward.

SAFETY CAUTIONS

It is very important that you strictly follow the safety cautions on this page, in addition to those previously mentioned in this brochure.

-  Never allow riders on any towable attachment. Without conventional steering or brakes, this machine is not safe for transporting passengers. Riding on an attachment could result in personal injury or damage to property.
-  Never shift the Wheel Speed Shift Lever while on a slope unless the machine is stopped crossways to the slope. The momentary passage of the lever through the Free Wheel position could allow the Power Unit and its towed load to roll down hill out of control.
-  The Power Unit and Tow Hitch are designed to pull up to 400 pounds. If towing on slopes or under slippery conditions, reduce the load appropriately so it is controllable at all times.
-  When using pivoting attachments which allow turning, avoid turning the machine too sharply, particularly when in reverse, to minimize the chance of jack-knifing. If jack-knifing does occur, let go of the Wheels/Tines/PTO Drive Lever to stop movement. Be sure that nothing interferes with the operation of the Wheels/Tines/PTO Drive Lever or the Wheel Speed Shift Lever while you are turning. Make sure that you do not turn too sharply so you will always be able to easily reach these levers. **YOU MUST BE ABLE TO STOP THE MACHINE AT ALL TIMES.**
-  Attachments that have only a single-tongue connection should **not** be used because they allow the Power Unit to tip forward or backward excessively and make the machine difficult to control. See the illustrations to the right.
-  Some lawn rollers, harrows, and other drag-type attachments may come very close to you as you make sharp turns. Stay away from this equipment. **We suggest you do not use such attachments.**

ALWAYS USE A DOUBLE-TONGUE CONNECTION – SEE FIGURES 3 AND 4.

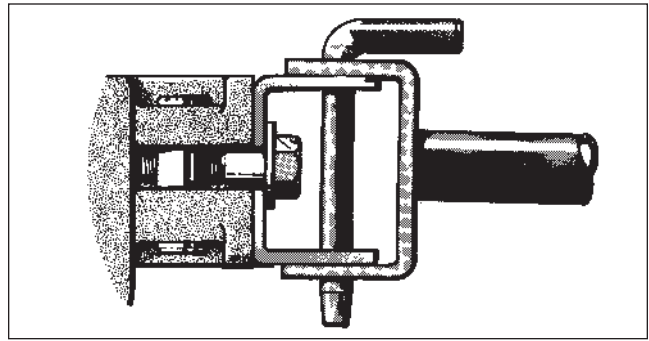


Figure 3: One kind of double-tongue connection.

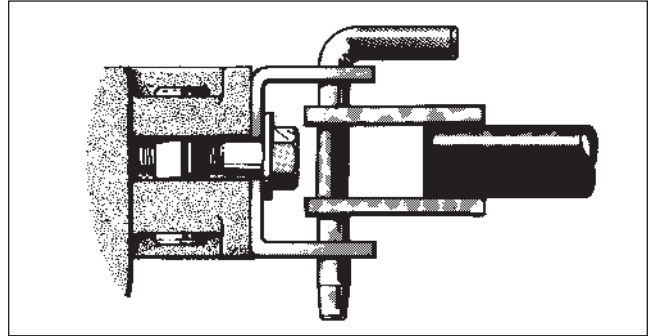


Figure 4: Another kind of double-tongue connection.

DO NOT USE A SINGLE-TONGUE CONNECTION – SEE FIGURE 5 BELOW.

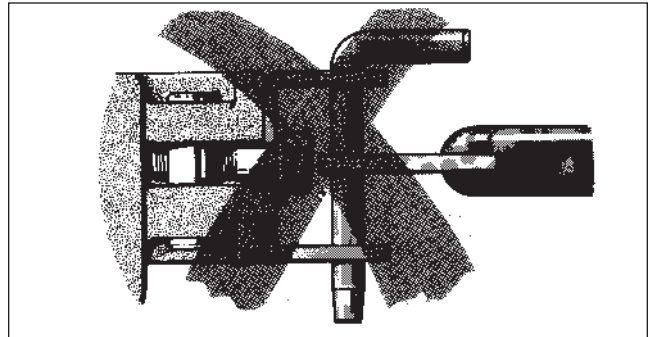


Figure 5: Single-tongue connection.

NOTE

If you have any problems or questions with the installation or use of your new Tow Hitch, contact the Service Department at Troy-Bilt LLC for assistance.

For customer assistance, visit www.troybilt.com, contact your nearest authorized dealer or:

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