




## Stability Ratings

<b>Warning</b>	
<p><b>If you exceed the maximum slope, the traction unit could tip, possibly crushing you or bystanders.</b></p> <p><b>Do not drive the the traction unit on a slope steeper than the maximum recommended slope.</b></p>	

To determine the degree of slope you can traverse with the power rake installed on a traction unit, find the stability rating for the hill position you want to travel in the table below, then find the degree of slope for the same rating and hill position in the Stability Data section of the traction unit *Operator's Manual*.

Orientation	Stability Rating
<b>Front Uphill</b> 	<b>B</b>
<b>Rear Uphill</b> 	<b>D</b>
<b>Side Uphill</b> 	<b>C</b>

**Important** If you have a traction unit other than the TX, use the counterweight on the traction unit when using the power rake, or the traction unit may become unstable.

## Setup

### Extending the Caster Wheels

1. Extend the caster arms so that the caster wheels are in the operating position.
2. Tighten the caster locking handles to secure the caster arms in place.

Refer to your traction unit *Operator's Manual* for information on installing and removing attachments from your traction unit.

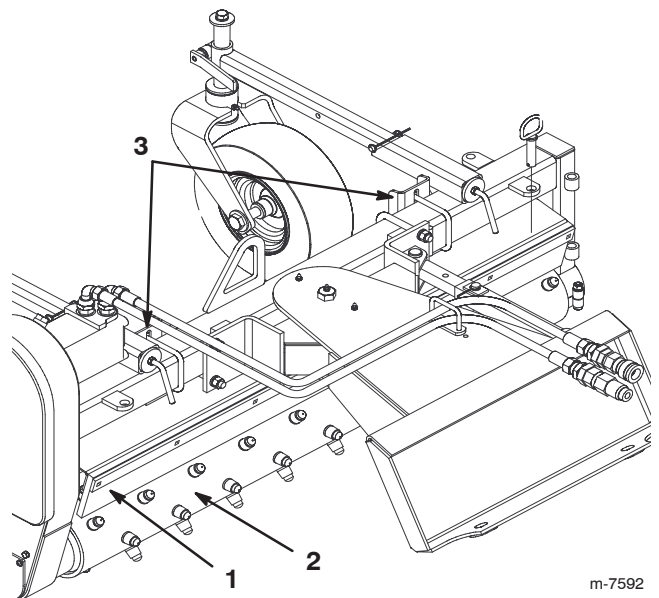
## Operation

**Important** Lift and move the attachment using the traction unit.

Refer to your traction unit *Operator's Manual* before installing, operating, and removing the power rake.

### Setting the Barrier Gap

The normal gap between the roller and barrier for average conditions is about 1-1/4 inch. You can adjust this gap by loosening the U-bolt that holds the barrier mount and sliding it up or down. A wider opening allows more dirt and rock to pass through. For finer raking, reduce the gap, but be careful not to let the roller hit the barrier. The gap should be the same all the way across (Fig. 2).



**Figure 2**





- |            |                           |
|------------|---------------------------|
| 1. Barrier | 3. Barrier gap adjustment |
| 2. Roller  |                           |

## Starting the Power Rake

With the end plates mounted in the working position and the rake straight (the end plates parallel with the traction unit track), material can be moved along, filling in the low spots. This attachment is used to clear the ground of rocks, so you do not need to clear all the rocks from the area prior to operating the power rake.

1. Start the traction unit engine.
2. Lower the power rake slowly to the ground.
3. Engage the hydraulic control lever for auxiliary implements.
4. Move the traction unit forward or backward as desired.

**Note:** For the roller to operate effectively, rotate it in the opposite direction of the traction unit track. The direction of the roller rotation is controlled by the traction unit hydraulic controls. Refer to the chart below.

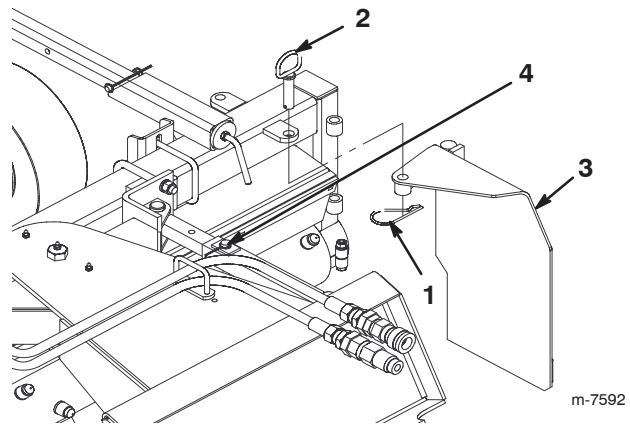
Roller Rotation	Travel Direction
	
	

## Using the End Plates

The end plates contain the material in front of the roller while the clean material passes between the roller and the barrier. With the end plates mounted in the working position and the rake straight (parallel with traction unit track), the material can be moved, filling in the low spots.

You can mount the end plates to either the front or the back of the power rake, depending on the raking direction. When you move the end plates from front to back, you must move the left one to the right side and the right one to the left side.

To move the end plate, remove the hair pin from the end plate pin, and pull out the pin from the end plate (Fig. 3).



**Figure 3**

1. Hair pin
2. End plate pin
3. End plate
4. Angle locking pin

## Angling the Roller

You can angle the roller 20° in either direction. For windrowing, remove the angle locking pin (Fig. 3), slide the angle mount to a new set of holes, and insert the pin.

## Operating Tips

**Important** Do not drop the power rake onto the ground with the roller turning. Sudden high speed jolts multiply the stress to the drive line and can cause extreme damage.

- Always begin power raking at the slowest ground speed possible. Increase the ground speed if conditions permit.
- Always use full throttle (maximum engine speed).
- If a rock or other obstruction gets into the teeth, stop the hydraulics and drive the traction unit forward until the obstruction is dislodged.
- Reduce the ground speed in rocky conditions. Increase the ground speed if the conditions permit.
- The roller should be level with the ground. The power rake should also be level with the ground front to back. To accomplish this, raise or lower the gauge wheels and use the traction unit's tilt cylinder.
- To allow the roller to penetrate deeper into the ground, loosen the handle and raise the gauge wheels. To raise the roller, lower the gauge wheels.

- Because the chain case end of the roller is heavier than the other end of the roller, set the tire closest to the chain case down 3/4 inch lower than the opposite tire. This will still give an even grade when landscaping.
- You can achieve further depth control by tilting the rake forward on its gauge wheels to raise the roller, or tilt the rake back to raise the gauge wheels and allow the roller to penetrate more deeply.
- Check the air pressure in each tire regularly to maintain an even and consistent grade.
- To break up compacted soil, roll back the attachment plate to take the guide wheels off the ground so that only the toothed roller is in contact with the ground. Control the ground speed to avoid stalling the toothed roller. Remove the end plates to allow material to move out of the way if you are only trying to break up the soil.
- To remove loose debris, tilt the traction unit attachment plate until the guide wheels control the depth of the toothed roller. You can angle the rake at this time for windrowing debris or you can set the rake straight with both end plates installed to collect debris. You can increase the traction unit speed when you do this.
- For finish grading, tilt the rake forward until the teeth of the toothed roller are barely touching the soil. You can increase the traction unit speed to collect the material from the high spots and leave it in the lower areas.
- To thatch grassy areas, tilt the traction unit attachment plate forward to support the rake on the front gauge wheels and the toothed roller raised so that the teeth are just grazing the surface. The travel speed should be slow.

# Maintenance

**Note:** Determine the left and right sides of the machine from the normal operating position.

## Recommended Maintenance Schedule

Maintenance Service Interval	Maintenance Procedure
10 Hours	<ul style="list-style-type: none"> <li>• Check all hardware and tighten all nuts and bolts as needed.</li> </ul>
Weekly	<ul style="list-style-type: none"> <li>• Lubricate all pivot points.</li> <li>• Lubricate the caster axle.</li> <li>• Lightly lubricate the bearing at each end of the roller with 1 or 2 pumps of grease.</li> <li>• Check the tire pressure (Maintain at 20 psi cold).</li> </ul>
Monthly	<ul style="list-style-type: none"> <li>• Inspect the drive chain for stretching.</li> <li>• Check the oil level in the chain case and add oil if necessary.</li> </ul>
Quarterly	<ul style="list-style-type: none"> <li>• Change the oil in the chain case; add 1.5 pints of 85–140 wt. lube.</li> </ul>
Storage	<ul style="list-style-type: none"> <li>• Paint chipped surfaces.</li> </ul>

Caution

**If you leave the key in the ignition switch, someone could start the engine, seriously injuring you or bystanders.**

**Remove the key from the ignition switch before performing any maintenance.**