

Operation

Installing the Attachment

Refer to the *Operator's Manual* for the traction unit for the installation procedure.

Important: Before installing the attachment, position the machine on a level surface, ensure that the mount plates are free of any dirt or debris, and ensure that the pins rotate freely. If the pins do not rotate freely, grease them.

Note: Always use the traction unit to lift and move the attachment.

⚠ WARNING

If you do not fully seat the quick-attach pins through the attachment mount plate, the attachment could fall off the machine, crushing you or bystanders.

Ensure that the quick-attach pins are fully seated in the attachment mount plate.

⚠ WARNING

Hydraulic fluid escaping under pressure can penetrate skin and cause injury. Fluid injected into the skin must be surgically removed within a few hours by a doctor familiar with this form of injury; otherwise, gangrene may result.

- Ensure that all hydraulic-fluid hoses and lines are in good condition and all hydraulic connections and fittings are tight before applying pressure to the hydraulic system.
- Keep your body and hands away from pinhole leaks or nozzles that eject high-pressure hydraulic fluid.
- Use cardboard or paper to find hydraulic leaks; never use your hands.

⚠ CAUTION

Hydraulic couplers, hydraulic lines/valves, and hydraulic fluid may be hot. If you contact hot components, you may be burned.

- Wear gloves when operating the hydraulic couplers.
- Allow the machine to cool before touching hydraulic components.
- Do not touch hydraulic fluid spills.

Removing the Attachment

1. With the plow raised above the ground, shut off the engine and remove the key.
2. Remove the lower lynch pin and clevis pin securing the blade to the plow.

Note: To completely remove the blade, remove both the upper and lower lynch and clevis pins; refer to [Figure 5](#).

3. Swing the blade up and secure it using the lynch and clevis pin as shown in ([Figure 4](#)).

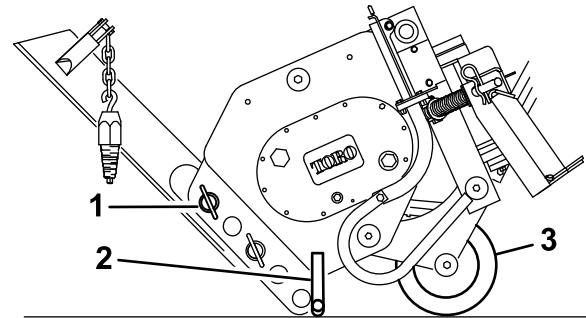


Figure 4

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1. Lynch and clevis pin
2. Stand
3. Couler

4. Tilt the plow forward and lower it to the ground or trailer, with the stand and couler supporting the weight of the plow ([Figure 4](#)).
5. Disconnect the hydraulic hoses and remove the plow as directed in your traction unit *Operator's Manual*.

Installing a Blade

Toro offers several different blades and pullers. Purchase a blade and puller from your Authorized Service Dealer.

⚠ WARNING

The blade is sharp and can swing during installation and removal, cutting, pinching, or crushing hands or feet.

Wear gloves and work boots and securely hold the blade.

1. Park the machine on a level surface and engage the parking brake (if equipped)
2. Raise the plow about 1 m (39 inches) off the ground and install the cylinder lock(s).
3. Shut off the engine and remove the key
4. Remove the 2 lynch pins from the clevis pins in the blade bracket, then remove the clevis pins ([Figure 5](#)) and the existing blade (if installed).

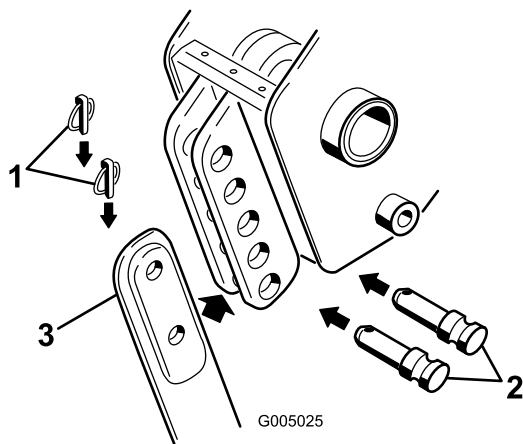


Figure 5

- | | |
|---------------|----------|
| 1. Lynch pin | 3. Blade |
| 2. Clevis pin | |

- Slide the new blade into the blade bracket and secure it at the desired depth (a change in mounting holes changes the depth by 7.6 cm (3 inches), using the clevis pins and lynch pins removed previously (Figure 5).

Plowing

- Move the lynch pins to the outside holes on the spring rods to allow the plow to move from side to side (Figure 6).

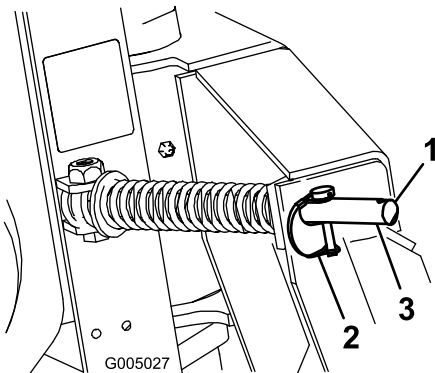


Figure 6

- | | |
|------------------------------|---------------|
| 1. Outer hole | 3. Spring rod |
| 2. Lynch pin (in inner hole) | |

CAUTION

When you remove the lynch pin, the plow could swing into you or a bystander, or cause the traction unit to become unstable.

Hold the plow in the neutral position when moving the lynch pins.

- Connect the material being installed to the plow.
- If your traction unit has a speed selector, move it to the SLOW (turtle) position.
- Start the engine.
- Tilt the attachment plate completely back so that the top of the plow is parallel to the ground (Figure 8).
- Lower the plow so that it is resting on the ground.

Important: Always ensure that the plow is on or in the ground before engaging the auxiliary hydraulics lever. Failure to do so will cause excessive vibration of the traction unit, possibly resulting in damage.

Note: If you dig a hole to lower the blade into before starting, it will reduce the risk of bending the blade.

- Pull the auxiliary-hydraulics lever to the operator grip to engage the plow.
- Slowly lower the plow into the ground to the desired depth, while moving the traction unit backward.
- When finished, release the auxiliary-hydraulics lever to stop the plow.

CAUTION

When plowing on a hill, the plow can swing down hill when raised out of the soil. Due to the weight of the plow, if it swings too fast, the force could tip the traction unit, injuring you or others.

When plowing on a hill, raise the plow out of the ground slowly, letting it swing while the bullet is still in the soil.

- Raise the plow out of the ground far enough to pull the puller out of the soil.
- Move the traction unit rearward to pull out a working length of material, then move forward slightly to create some slack in the line.
- Shut off the engine and remove the key.

Gauging Plow Depth

Normally, you will plow at the maximum depth set by the blade; however, the plow is also equipped with a gauge to allow you to lift the plow and determine how high above maximum depth you are plowing.

The gauge is located on the left side of the plow facing the traction unit. A rod assembly runs from the gauge

to the ground (Figure 8). When you lift the plow, the indicator on the gauge moves down. Marks on the gauge show the number of inches lower or higher than the maximum depth that you are plowing (Figure 7). The gauge reads from +2 to -3. The +2 on the gauge represents a 5.0 cm (2 inch) depth below the bare surface and the -3 on the gauge represents a 7.6 cm (3 inch) above the bare surface. The 0 on the gauge indicates that no offset is applied to the blade depth.

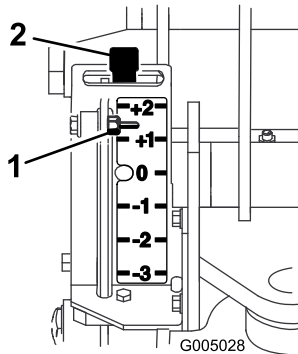


Figure 7

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1. Depth gauge 2. Gauge-locking lever

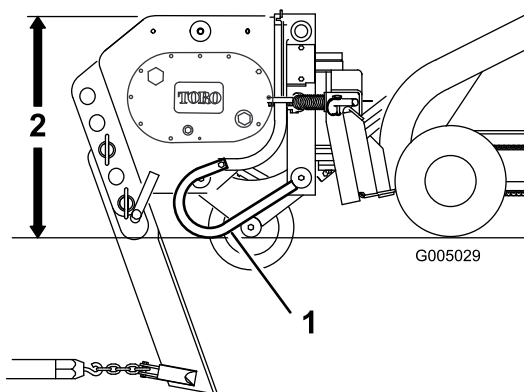


Figure 8

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1. Gauge-rod assembly 2. Parallel to the ground

When plowing bare ground, the maximum depth indicated on the gauge is the 0 mark. You can plow down to the +1 mark, but you will contact the ground with the coulters. Plowing any lower may damage the coulters.

When plowing grass covered ground, the gauge will read about an inch lower than the actual depth because of the grass. In this case, lower the plow to the desired coulters depth and note the reading on the gauge.

If you transport the plow or plow rough terrain, you can lock the gauge at the +2 position to keep it from being damaged. To lock the gauge, manually raise it to the +2 position and move the locking lever to the left.

Transport Position

1. With the plow raised above the ground, shut off the engine and remove the key.
2. Remove the lower lynch pin and clevis pin securing the blade to the plow.

Note: To completely remove the blade, remove both the upper and lower lynch and clevis pins; refer to Figure 5.
3. Swing the blade up and secure it using the lynch and clevis pin as shown in Figure 4.
4. When transporting the attachment, keep it as close to the ground as possible, no more than 15 cm (6 inches) above the ground. Tilt it rearward.

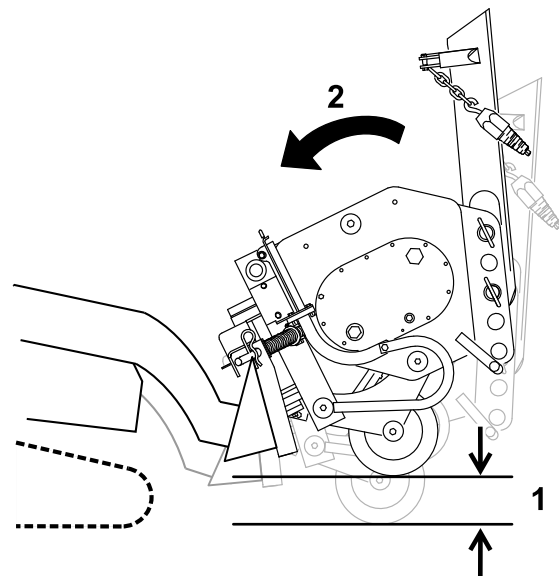


Figure 9

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1. No more than 15 cm (6 inches) above the ground
2. Tilt the attachment rearward.

Transporting the Plow

1. Move the lynch pins to the inside holes on the spring rods to prevent side-to-side movement (Figure 6).

⚠ CAUTION

Failure to secure the plow allows it to swing side-to-side and unbalance the plow. Due to the weight of the plow, if it swings too fast, the force could tip the traction unit, injuring you or bystanders.

Always secure the plow with the lynch pins in the inner holes of the spring rods before transporting the plow.

2. Raise the loader arms just enough to ensure that the blade clears the ground.

Important: Important: Never transport the plow with the arms fully raised.

Operating Tips

- Some older model traction units have holes through the spring and quick-attach pins on the mount plate (Figure 10) to allow you to install 2 hairpin cotters when plowing long runs. This ensures that the vibration of the plow does not cause the pins to come loose.

Note: The quick-attach pins on newer traction units no longer need the hairpin cotters.

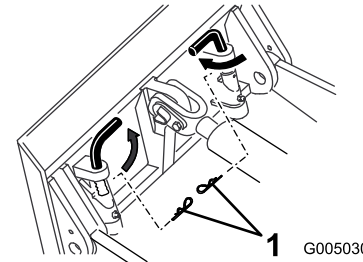


Figure 10

1. Hairpin cotters

- To reduce wear on the traction unit drive chain (if your model has one), tighten the chain so there is only 5 cm (2 inches) of slack on the upper span (refer to your traction unit *Operator's Manual* for instructions).
- Clean the area of trash, branches, and rocks before plowing to prevent equipment damage.
- Always begin plowing with the slowest ground speed possible. Increase speed if conditions permit, but do not allow the tires or tracks to spin. Spinning the tracks or tires causes turf damage and places stress on the traction unit.
- Always use full throttle (maximum engine speed) when plowing.
- Always plow backward (in reverse).
- If your traction unit has a speed selector and a flow divider, move the speed selector to the SLOW (turtle) position and the flow divider to the 10 o'clock position.
- Avoid sharp turns when plowing to increase productivity and minimize ground disturbance.
- If your traction unit has tires and you have the agricultural or Sitework Systems tires installed on the traction unit, remove the tires and move the right-side tires to the left and the left-side tires to the right.

Note: This ensures that the tire tread points to the rear to give you the most traction when using the vibratory plow.