Form No. 3350-453

TORO®

Backhoe

for Dingo® Compact Utility Loaders

Model No. 23160—220000001 & Up

Operator's Manual

CE

Original Instructions (EN/GB)

Contents

Introduction

Read this manual carefully to learn how to operate and maintain your product properly. The information in this manual can help you and others avoid injury and product damage. Although Toro designs and produces safe products, you are responsible for operating the product properly and safely.

You may contact Toro directly at www.Toro.com for product and accessory information, help finding a dealer, or to register your product.

Whenever you need service, genuine Toro parts, or additional information, contact an Authorized Service Dealer or Toro Customer Service and have the model and serial numbers of your product ready. You will find the model and serial number on a plate located on the product.

Write the product model and serial numbers in the space below:

Model No. _____

Serial No. _____

This manual identifies potential hazards and has special safety messages that help you and others avoid personal injury and even death. ***Danger***, ***Warning***, and ***Caution*** are signal words used to identify the level of hazard. However, regardless of the hazard, be extremely careful.

Danger signals an extreme hazard that *will* cause serious injury or death if you do not follow the recommended precautions.

Warning signals a hazard that *may* cause serious injury or death if you do not follow the recommended precautions.

Caution signals a hazard that may cause minor or moderate injury if you do not follow the recommended precautions.

This manual uses two other words to highlight information. **Important** calls attention to special mechanical information and **Note:** emphasizes general information worthy of special attention.

Safety

Improper use or maintenance by the operator or owner can result in injury. To reduce the potential for injury, comply with the safety instructions in the traction unit operator's manual and always pay attention to the safety alert ⚠ symbol, which means CAUTION, WARNING, or DANGER—"personal safety instruction." Failure to comply with the instruction may result in personal injury or death.

⚠ Danger ⚠

There may be buried power, gas, and/or telephone lines in the work area. Electric shock, death, or explosion may occur.

Have the property or work area marked for buried lines and do not dig in marked areas.

8111 Lyndale Avenue South
Bloomington, MN 55420-1196

Danger

There may be overhead power lines in the work area. Electric shock or death may occur if a power line is touched by the backhoe.

Survey and mark the area where there are overhead power lines, and dig with caution under power lines, to ensure that you do not touch them with the backhoe.

Warning

When going up or down hill, the machine could overturn if the heavy end is toward the downhill side. Someone may be pinned or seriously injured by the machine if it overturns.

Operate up and down slopes with the backhoe uphill.

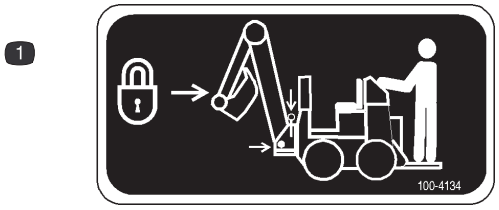
Caution

The tires of the traction unit can be slippery. If the tires are used as a step to climb on to or off of the backhoe, the operator could slip and fall, causing injury.

Use the step provided when climbing on to or off of the backhoe and not the traction unit tires.

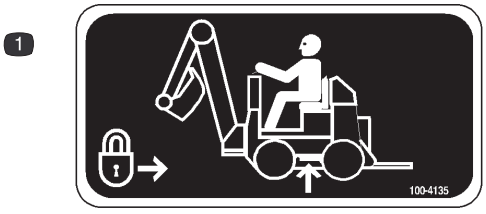
Safety and Instruction Decals

Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or lost.



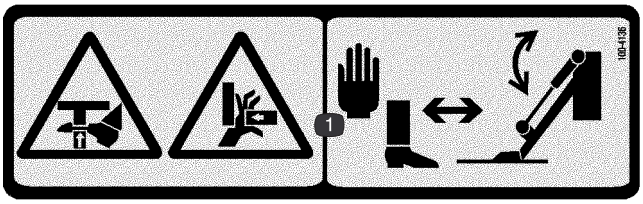
100-4134

1. Lock the boom before transporting the backhoe.



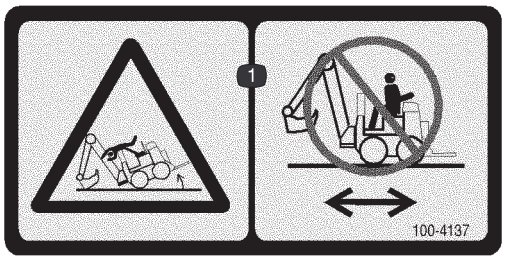
100-4135

1. Install and secure the side bars before operating the backhoe.



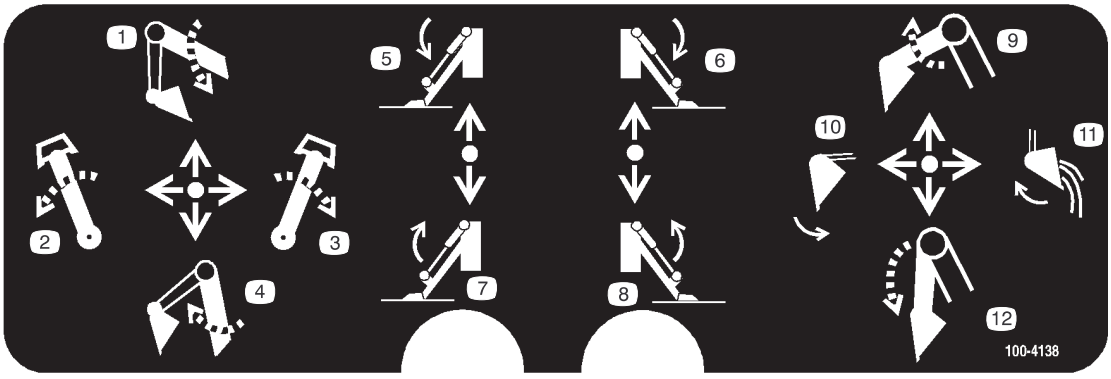
100-4136

1. Crushing hazard of hand and foot—keep hands and feet a safe distance from a moving stabilizer.



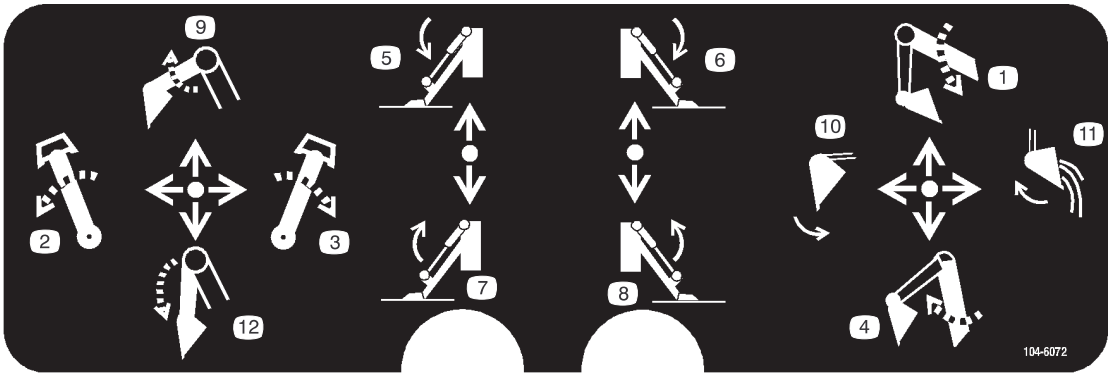
100-4137

1. Tipping hazard—do not move the traction unit while seated on the backhoe.



100-4138

1. Lower the boom.
2. Rotate the boom left.
3. Rotate the boom right.
4. Raise the boom.
5. Lower the left stabilizer.
6. Lower the right stabilizer.
7. Raise the left stabilizer.
8. Raise the right stabilizer.
9. Raise the dipperstick.
10. Curl the bucket.
11. Dump the bucket.
12. Lower the dipperstick.

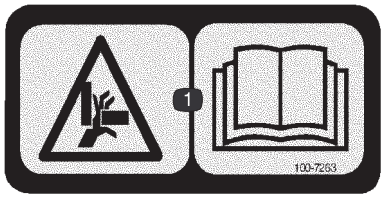


100-4138 (CE only)

1. Lower the boom.
2. Rotate the boom left.
3. Rotate the boom right.
4. Raise the boom.
5. Lower the left stabilizer.
6. Lower the right stabilizer.
7. Raise the left stabilizer.
8. Raise the right stabilizer.
9. Raise the dipperstick.
10. Curl the bucket.
11. Dump the bucket.
12. Lower the dipperstick.

100-4132

1. Crushing hazard, backhoe—keep bystanders a safe distance from the backhoe.



100-7263

1. Crushing hazard of hand—read the *Operator's Manual.*

100-4133

1. Warning—read the *Operator's Manual.*
2. Explosion and electric shock hazards—do not dig in areas with buried gas or electrical lines, and do not operate under overhead electrical lines.
3. Crushing hazard, backhoe—lock the boom before leaving the machine.
4. Tipping hazard—do not move the traction unit while seated on the backhoe, install the counter–weight, and lower the stabilizers.

Specifications

Note: Specifications and design are subject to change without notice.

Width	34.5 inches (87.6 cm)
Length	112.5 inches (286 cm)
Transport height	84 inches (213 cm)
Fully raised height	115 inches (292 cm)
Weight	710 lbs (322 Kg)
Digging depth (maximum)	79 inches (200.6 cm)
Bucket rotation	135 degrees
Swing arc	151 degrees
Stabilizer spread (working)	130 inches (330 cm)

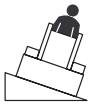
Stability Ratings

To determine the degree of slope you can traverse with the backhoe installed on a traction unit, find the stability rating for the hill position you want to travel in the following table, 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.

Warning

Exceeding the maximum recommended slope can cause the traction unit to tip, crushing you or bystanders.

Do not drive the traction unit on a slope steeper than the maximum recommended slope, as determined in the following table and the traction unit operator's manual.

Orientation	Stability Rating
Front Uphill 	C
Rear Uphill 	D
Side Uphill 	C

Important If your traction unit has a rear operator's platform, the counterweight must be used on the platform while using the backhoe, or the traction unit will become unstable.

Setup

Loose Parts

Note: Use the chart below to identify parts for assembly.

DESCRIPTION	QTY.	USE
Dingo 200/300 Series Backhoe Kit (sold separately) Dingo TX Backhoe Kit (sold separately)	1 1	One kit required to connect the backhoe to your traction unit
Bucket, 9, 12, or 16 inch (23, 30, or 41 cm)	1	Install on the backhoe. Must be purchased separately.

The backhoe mounts slightly differently to the Dingo 200/300 series traction unit than it does to the Dingo TX. If you will be using the backhoe on a Dingo 200/300 series traction unit, install the Dingo 200/300 Series Backhoe Kit on your traction unit. If you will be using the backhoe on a Dingo TX traction unit, install the Dingo TX Backhoe Kit on your traction unit. Use the instructions provided in this section to install these kits.

Installing the Dingo 200/300 Series Backhoe Kit

If you will be using the backhoe with a Dingo 200 or 300 series traction unit, install the side bar brackets and tilt cylinder pin included in the Dingo 200/300 Series Backhoe Kit.

Installing the Side Bar Brackets

1. Remove the traction unit manual holder and relocate it under the control panel (models 22305 and 22305TE only).
2. Remove the battery from the traction unit. Refer to your traction unit operator's manual.

Note: If you have a Dingo 300 series, diesel traction unit, you do not need to remove the battery; however, you do need to remove the loader arm cylinder and exhaust cover plate on the right side of the machine. To remove the loader arm cylinder, you need to raise the loader arms and

install the cylinder lock on the left side before removing the right cylinder. Replace the cylinder and plate when finished installing the side bar bracket.

3. Examine your traction unit. If it has three mounting holes pre-drilled in the frame, a few inches in front of each lift cylinder (Fig. 1), skip to step 6.

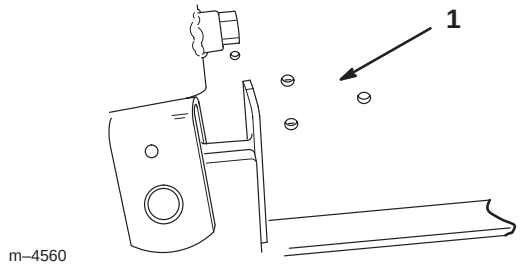


Figure 1

1. Holes

4. Line up the side bar bracket as illustrated in Figure 2 and mark the centers of the three holes (you may need to adjust the position of the bracket slightly so that the bracket and back-plate do not interfere with weldments on the traction unit).

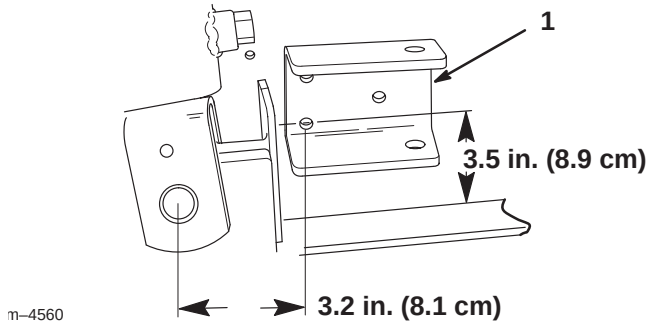


Figure 2

1. Side bar bracket

5. Drill three, 9/16 in. (1.43 cm) diameter holes through the side of the traction unit at the marked locations.

6. Secure the side bar bracket to the side of the traction unit using the back-plate, three carriage bolts, and three nuts (Fig. 3).

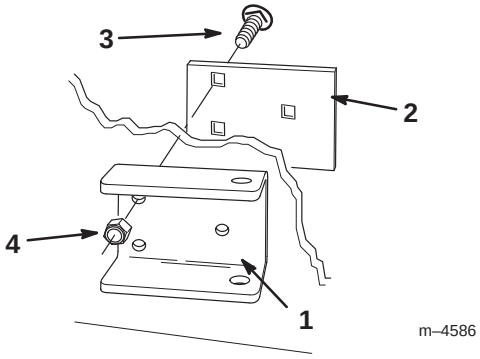


Figure 3

1. Side bar bracket
2. Back-plate
3. Carriage bolt
4. Nut

7. Torque the nuts to 75 ft-lbs (102 N·m).

8. Repeat steps 3–7 for the other side of the traction unit.

9. Install the battery from the traction unit. Refer to your traction unit operator's manual.

Note: On some Dingo 200 series traction units, the bolt heads will interfere with the battery case. If this happens, elongate the holes in the frame for mounting the battery clamp.

Changing the Tilt Cylinder Pin

1. Place a block in front of the mount plate so that it cannot swing forward when you remove the tilt cylinder pin.

Caution

When you remove the tilt cylinder pin, the mount plate may swing forward, crushing your feet or hands, or those of bystanders.

Block up the mount plate before removing the tilt cylinder pin.

2. Remove the bolt securing the upper tilt cylinder pin (Fig. 4).

3. Using a hammer and punch, remove the tilt cylinder pin.

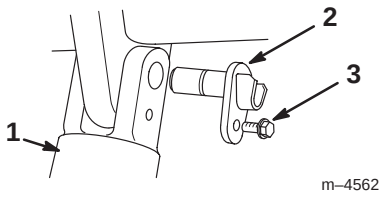


Figure 4

1. Tilt cylinder
2. Tilt cylinder pin
3. Bolt

4. Apply a generous coating of grease to the new pin.
5. Install the new pin into position and secure it with a bolt (Fig. 5).

Note: Leave the new pin installed, even when you remove the backhoe.

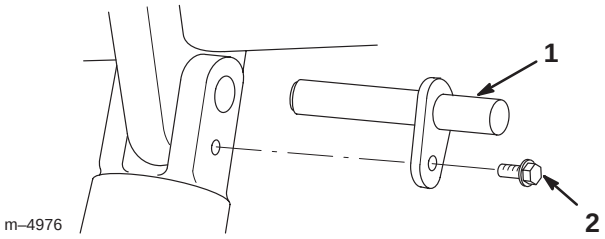


Figure 5

1. New tilt cylinder pin
2. Bolt

Installing the Dingo TX Backhoe Kit

If you will be using the backhoe with a Dingo 200 or 300 series traction unit, install the tilt cylinder pin included in the Dingo TX Backhoe Kit.

1. Block up the mount plate so that it cannot swing forward.

Caution

When you remove the tilt cylinder pin, the mount plate may swing forward, crushing your feet or hands, or those of bystanders.

Block up the mount plate before removing the tilt cylinder pin.

2. Remove the bolt and nut securing the upper tilt cylinder pin on the traction unit (Fig. 6).
3. Using a hammer and punch, remove the tilt cylinder pin.
4. Install the new pin into position and secure it with the bolt and nut removed previously, using the middle hole on the pin (Fig. 6).
5. Grease the pin using the fitting on the tilt cylinder.

Note: Leave the new pin installed, even when the backhoe is removed.

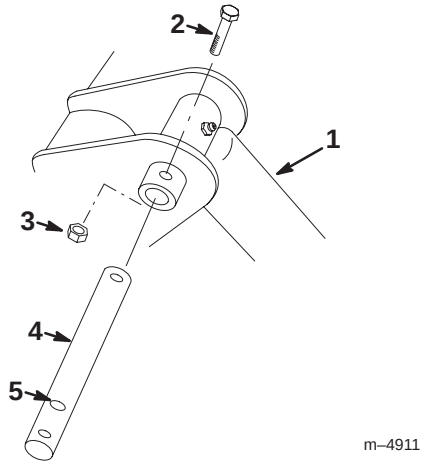


Figure 6

1. Tilt cylinder
2. Bolt
3. Nut
4. New tilt cylinder pin
5. Middle hole

Greasing the Backhoe

Before using the backhoe for the first time, ensure that all of the fittings are fully greased; refer to Greasing and Lubrication, page 15.

Installing a Bucket

The backhoe does not come with a bucket installed because several sizes of buckets are available for you to choose from. Install your bucket as follows:

1. Connect the backhoe onto the traction unit and raise the dipperstick above the ground; for more information, refer to Operation, page 9.
2. Remove the bolts and nuts securing each of the two bucket pins to the dipperstick (Fig. 7).
3. Remove the pins.
4. Align the pin holes in the bucket with the mounting holes in the dipperstick (Fig. 7).
5. Secure the bucket with the pins, bolts, and nuts removed previously (Fig. 7).

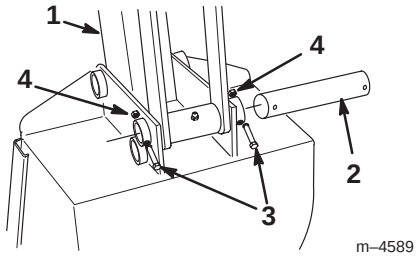


Figure 7

1. Dipperstick
2. Bucket pin
3. Bolt
4. Nut

Adjusting the Seat

Caution

The seat mounting bracket has several pinch points. You could pinch and/or cut your fingers when adjusting the seat.

Take care to keep your fingers away from the seat mounting bracket when moving the seat up and down and when lowering the seat into position.

1. Stop the engine.
2. Tilt the seat forward.
3. Loosen the knobs on the bottom of the seat (Fig. 8) and slide the seat forward or back as needed.
4. To adjust the seat height, remove the hairpin cotter and pin from the seat stand (Fig. 8) and raise or lower the seat as required.

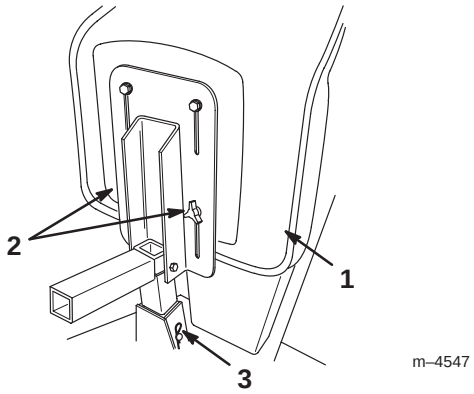


Figure 8

1. Seat
2. Knobs
3. Pin and hairpin cotter

5. When you have the proper height, install the pin and hairpin cotter to secure the seat.

Operation

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

Operation Checklist

To ensure safe, effective use of the backhoe, complete the following activities before, during, and after operating the backhoe:

Note: For detailed descriptions of these procedures, refer to Installing the Backhoe on the Traction Unit (page 10) and Operating the Backhoe (page 11).

Before Operation:

- Locate and mark underground utilities.
- Install the counterweight on the traction unit.
- Install the links between the backhoe and the tilt cylinder pin on the traction unit.
- Install the side bars between the backhoe and the traction unit frame (Dingo 200/300 series traction units only).
- Install the hydraulics lever clamp over the traction unit controls.
- Lower the stabilizer arms before digging.

During Operation:

Only operate the backhoe from the backhoe seat.

Only move the traction unit from the traction unit operator’s position and not from the seat of the backhoe.

After Operation:

Install the pins securing the boom from moving up and down and side to side (Figs. 17 and 18) before leaving the backhoe unattended, transporting it, or disconnecting it from the traction unit.

Backhoe Overview

Figure 9 illustrates the backhoe. Familiarize yourself with all of the components listed in Figure 9.

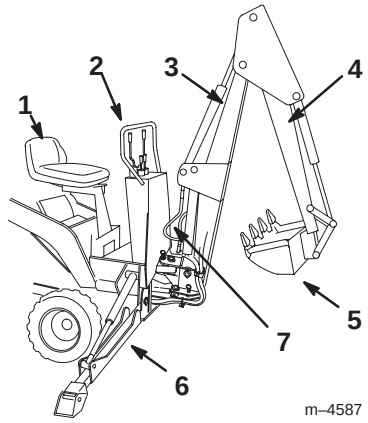


Figure 9

1. Seat
2. Controls
3. Boom
4. Dipperstick
5. Bucket
6. Stabilizer
7. Speed adjustment valve

Controls

Familiarize yourself with all of the controls listed in Figure 10 before you operate the backhoe.

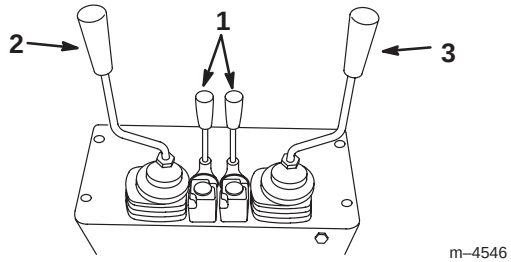


Figure 10

1. Stabilizer control levers
2. Boom control lever
3. Dipperstick/bucket control lever

Note: On CE units the control for raising and lowering the dipperstick and raising and lowering the boom are reversed (i.e., the boom control is on the right and the dipperstick control is on the left). The swing and bucket controls do not change.

Stabilizer Control Levers

Move the stabilizer control levers forward to lower the stabilizers and rearward to raise the stabilizers.

Boom Control Lever

Move the boom control lever forward to lower the boom and rearward to raise the boom. Move the boom control lever to the right to swing the boom to the right and move it left to swing the boom to the left.

You can also move the boom control lever into an intermediate position (i.e., forward and left, forward and right, rearward and left, or rearward and right) to swing the boom at the same time as you raise or lower it.

Dipperstick/Bucket Control Lever

Move the dipperstick/bucket control lever forward to extend the dipperstick and rearward to retract the dipperstick. Move the dipperstick/bucket control lever to the right to dump the bucket and move it left to load the bucket.

You can also move the dipperstick/bucket control lever into an intermediate position (i.e., forward and left, forward and right, rearward and left, or rearward and right) to extend or retract the dipperstick at the same time as you load or dump the bucket.

Connecting the Backhoe to the Traction Unit

Important Before connecting any attachments to the traction unit, ensure that the mount plates are free of any dirt or debris and that the pins rotate freely.

1. Start the engine.
2. Attach the backhoe to the traction unit mount plate as described in the traction unit *Operator's Manual.*
3. Tilt the backhoe part of the way back.
4. Stop the engine.
5. Attach the hydraulic hoses to the traction unit as described in the traction unit *Operator's Manual.*
6. Start the engine.
7. Tilt the backhoe all the way back.

Caution

Tilting the backhoe can pinch or crush your hands.

Keep away from the moving backhoe when tilting.

8. Slide the two links on each end of the tilt cylinder pin and the backhoe link pin and secure them with two lynch pins (Fig. 11 for Dingo 200/300 Series traction unit or Fig. 12 for Dingo TX traction unit).

Note: You may need to move the attachment tilt lever to line up the holes in the links with the pins.

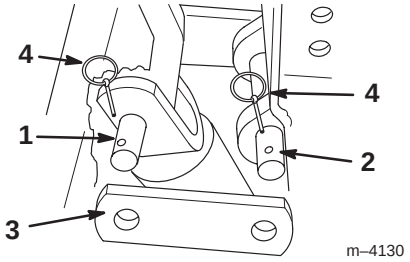


Figure 11

1. Tilt cylinder pin
2. Backhoe link pin
3. Link
4. Lynch pin

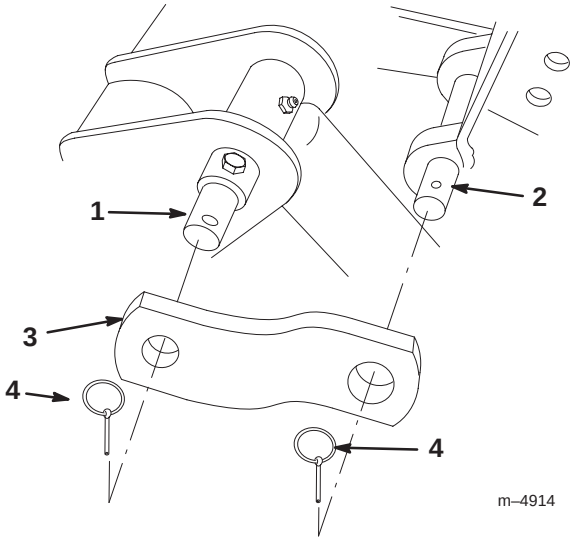


Figure 12

1. Tilt cylinder pin
2. Backhoe link pin
3. Link
4. Lynch pin

9. If you are installing the backhoe on a Dingo 200/300 series traction unit, install the side bars on each side as illustrated in Figure 13. The decal on each side bar must be visible when installed.

Important If the bars do not fit snuggly, remove them, loosen the jam nut, and thread the compound side bar together or apart as needed to ensure that they fit as tight as possible (Fig. 13). Tighten the jam nut when finished.

Note: If you have a Dingo 300 series, diesel traction unit, you may need to loosen the hood and slide it up in the mounting slots to ensure that the hood does not interfere with the side bars.

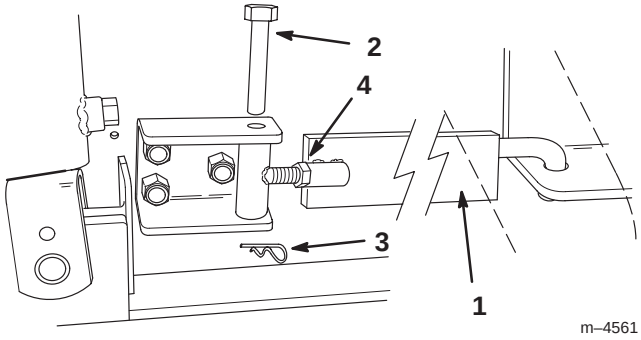


Figure 13

1. Side bar
2. Pin
3. Hairpin cotter
4. Jam nut

Operating the Backhoe

Preparing the Backhoe

1. Drive to the work location.

2. If you are using the backhoe with a Dingo 200/300 series traction unit, install the auxiliary hydraulics clamp as follows:

A. Pull the auxiliary hydraulics lever to the operator grip and install the hydraulics lever clamp by pushing it over the hand grip and sliding it right so that the pin through the clamp slides under the right hand grip (Fig. 14).

B. If your traction unit has a parking brake, engage it.

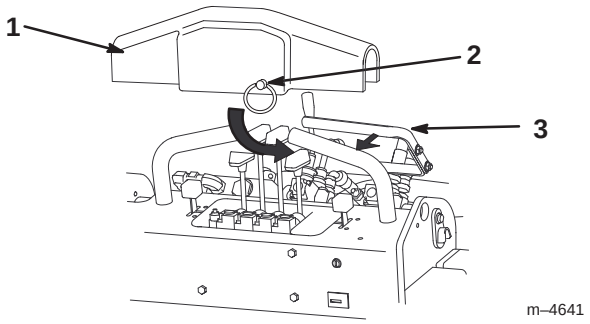


Figure 14

1. Hydraulics lever clamp
2. Pin
3. Auxiliary hydraulics lever

3. If you are using the backhoe with a Dingo TX traction unit, install the auxiliary hydraulics clamp as follows:

A. Set the throttle 2/3 of the way to the rabbit position on the traction unit.

B. Pull the lever and clamp down to the reference bar so that the clamp routes behind the loader arm/attachment tilt lever.

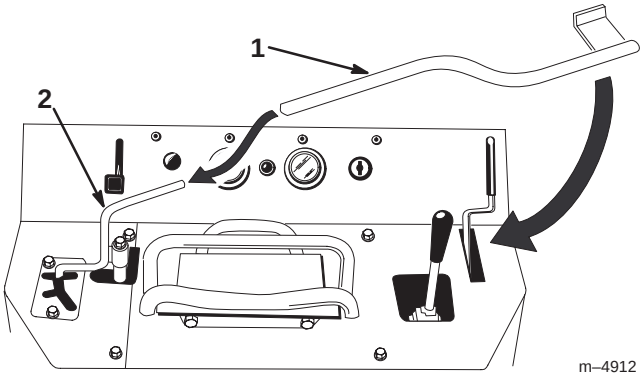


Figure 15

1. Hydraulics lever clamp
2. Auxiliary hydraulics lever

C. Set the parking brake and release the clamp so that it catches under the brake lever (Fig. 16).

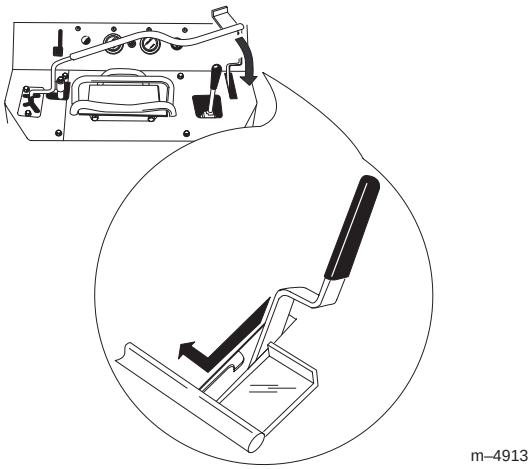


Figure 16

1. Hydraulics lever clamp
2. Pin
3. Auxiliary hydraulics lever

4. Push the stabilizer control levers forward to lower both stabilizers until they touch the ground and the front wheels of the traction unit come off of the ground slightly.

5. Remove the two pins locking the boom in place (Figs. 17 and 18) and place them in the storage positions (Fig. 19).

Note: One pin prevents the boom from swinging side to side (Fig. 17) and the other prevents the boom from moving up and down (Fig. 18).

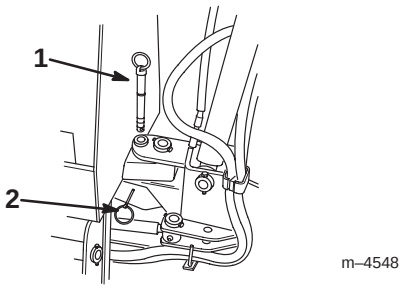


Figure 17

1. Pin
2. Lynch pin

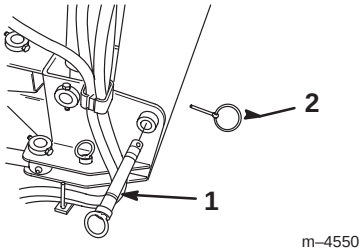


Figure 18

1. Pin
2. Lynch pin

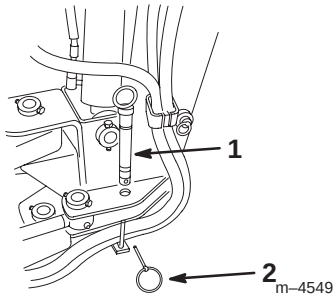


Figure 19

1. Pin
2. Lynch pin

Digging a Hole

Using a backhoe with precision and proficiency takes time and practice. In general, you dig a hole by extending the dipperstick and bucket, lowering them into the ground, and then pullback on the dipperstick while raising the boom and curling the bucket rearward (Fig. 20).

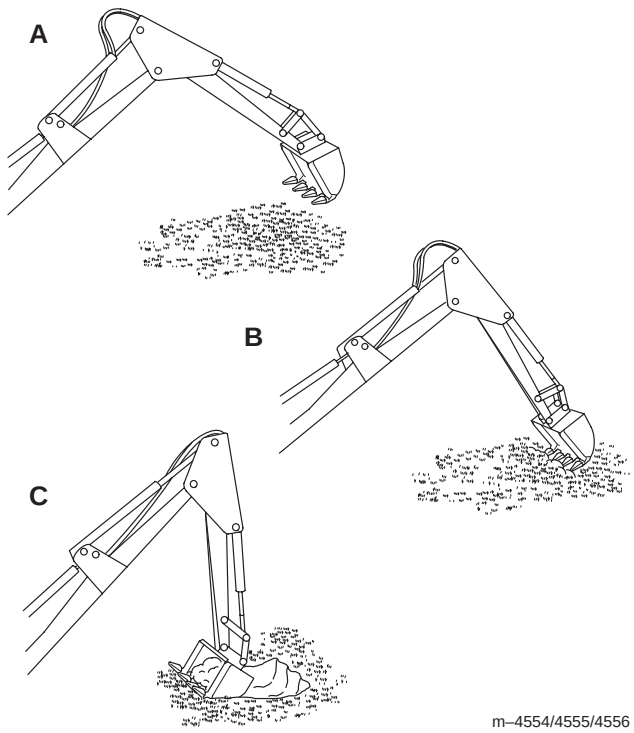


Figure 20

To empty the bucket you swing it to the left or right and extend the dipperstick and uncurl bucket, dumping the load (Fig. 21).

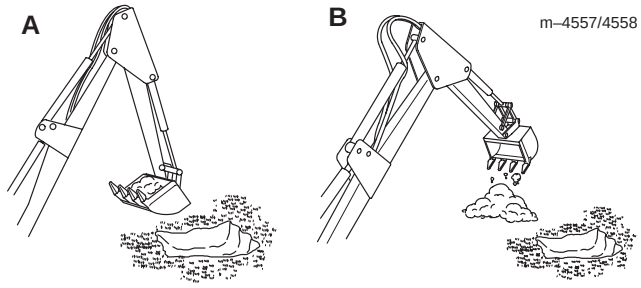


Figure 21

The distance you extend the dipperstick and bucket and the size of bite you take will vary greatly with the soil type, moisture content of the soil, and obstructions in the soil, such as tree roots and rocks.

Spend some time practicing with the backhoe to get the feel for how it operates and how to best use it in the conditions in which you work. Please read and use the following tips when operating the backhoe:

- Do not dig too close to the backhoe body or stabilizers. The backhoe could undercut the stabilizers or traction unit causing the machine to fall into the hole.

Warning

If you dig too close to the backhoe, the backhoe could fall into the hole, tipping on top of you causing severe injury.

Ensure that you do not dig within three feet of the backhoe or stabilizers.

- Do not take large bites of soil. Instead, sweep the bucket through the soil using the swinging motion of the dipperstick a few inches deep at a time.
- If the bucket catches in the soil, uncurl the bucket, raise the boom slightly, and continue digging.
- If your traction unit has a speed selector, set it to the fast position (rabbit) while you are learning how to operate the backhoe (this will slow the backhoe down). Set it to the slow position (turtle) once you feel you have mastered the use of the backhoe.
- If your traction unit has a flow divider, set it to the 11 o'clock position.

Securing the Backhoe for Transport

Warning

If you do not secure the boom, it could swing or lower during transport or when disconnecting the backhoe from the traction unit. The traction unit could become unstable causing loss of control and you or bystanders could be injured. If the boom swings when disconnecting, it could crush or amputate fingers or hands as you disconnect the attachment locking pins.

Always secure the boom before transport and before disconnecting the backhoe from the traction unit.

1. Fully raise the boom, retract the dipperstick, and curl the bucket rearward (Fig. 22). Ensure that you center the boom locking pin holes as much as possible.

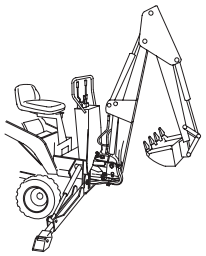


Figure 22

2. Pull the stabilizer levers rearward until the stabilizers are fully raised.

3. Secure the boom using the two pins removed prior to operation (Figs. 23 and 24).

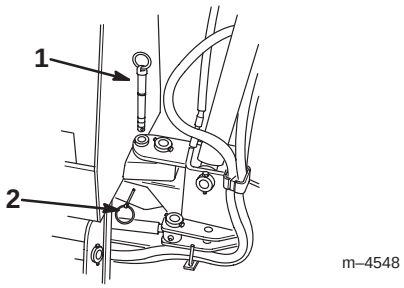


Figure 23

1. Pin
2. Lynch pin

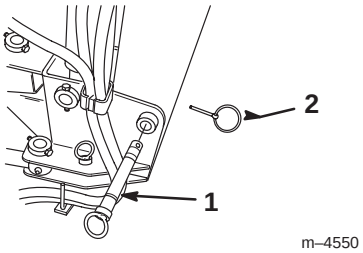


Figure 24

1. Pin
2. Lynch pin

4. Stop the engine and remove the key.

5. Remove the hydraulics lever clamp (Fig. 14 or 15).

6. Secure the clamp under the backhoe seat by inserting the end of the pin in the clamp into the hole in the seat support (Fig. 25 for Dingo 200/300 series traction units. The Dingo TX has a shorter pin through its clamp).

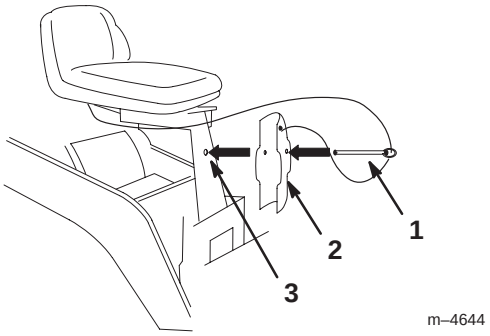


Figure 25

1. Pin
2. Clamp
3. Hole in seat support

7. Slowly transport the backhoe as needed.

Disconnecting the Backhoe from the Traction Unit

1. Secure the backhoe in the transport position (refer to Securing for Transport, page 13), move the backhoe to a level storage area, and stop the engine.

Warning

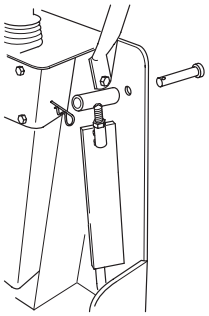
If you do not secure the boom, it could swing or lower during transport or when disconnecting the backhoe from the traction unit. The traction unit could become unstable causing loss of control and you or bystanders could be injured. If the boom swings when disconnecting, it could crush or amputate fingers or hands as you disconnect the attachment locking pins.

Always secure the boom before transport and before disconnecting the backhoe from the traction unit.

2. If you are removing the backhoe from a Dingo 200/300 Series traction unit, remove the side bars as follows:

A. Remove the hairpin cotters and pins securing the side bars and remove the side bars (Fig. 13).

B. Pin the side bars in the storage positions as illustrated in Figure 26.



m–4590

Figure 26

3. Start the engine.

4. Remove the lynch pins securing the links and remove the links (Fig. 11 or 12).

Note: You may need to adjust the tilt lever slightly to loosen the links.

5. Secure the links and two lynch pins for storage on the pins on the backhoe and the other two lynch pins on the traction unit tilt cylinder pin.

6. Disengage the attachment lock pins by turning them to the outside.

7. Tilt the backhoe forward slowly until the storage supports on the backhoe receiver plate and the bucket contacts the ground.

Warning

If you remove the backhoe from the traction unit without a bucket installed on the dipperstick, the backhoe will be unstable. The backhoe could tip over injuring you or other bystanders.

Do not remove the backhoe from the traction unit without first installing a bucket onto the backhoe.

8. Stop the engine.

9. Move the auxiliary hydraulic lever forward, backward, and back to the neutral position to relieve hydraulic pressure at the hydraulic couplers.

10. Slide the collar back on hydraulic couplers and disconnect them.

11. Install protective covers onto the hydraulic couplers on the traction unit.

12. Start the engine.

13. Tilt the mount plate forward and back the traction unit away from the backhoe.

Maintenance

Caution

If you leave the key in the ignition switch, someone could start the engine. Accidental starting of the engine could seriously injure you or other bystanders.

Remove the key from the ignition switch before you do any maintenance.

Service Interval Chart

Service Operation	8 Hours	Storage Service
Grease fittings	X	X
Chipped surfaces–paint		X

Greasing and Lubrication

Service Interval/Specification

Grease all fittings every 8 operating hours (Fig. 27). Note that in most cases the grease fittings are located in the center of every pivot pin. Also, grease the fitting in the swing cylinder pivot pin, located under the seat column, under the backhoe (this location is not shown in Figure 27).

Grease all fittings immediately after every washing.

Grease Type: General-purpose grease

How to Grease

1. Stop the engine and remove the key.

2. Clean the grease fittings with a rag.

3. Connect a grease gun to each fitting.

4. Pump grease into the fittings until grease begins to ooze out of the bearings.

5. Wipe up any excess grease.

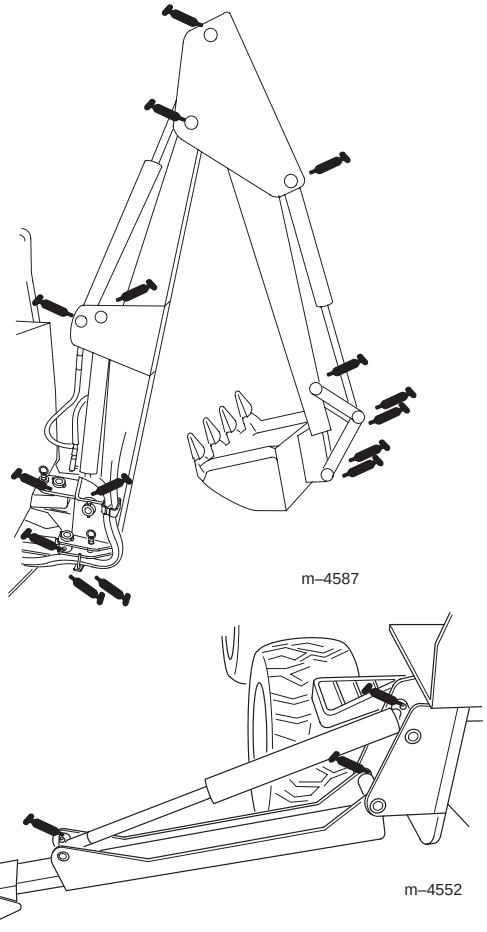


Figure 27

Changing the Bucket Orientation

You can change the angle that the bucket is mounted on the dipperstick to a position that allows you to dig more vertically. This will allow you to dig very close to a foundation, or dig a square sided hole. To change the orientation, complete the following procedure:

1. Remove the bolts and nuts securing the upper bucket pin (Fig. 28).
2. Remove the pin.
3. Swing the bucket up, aligning the second set of holes with the mounting holes on the dipperstick (Fig. 28).
4. Secure the bucket with the pin, bolt, and nut removed previously.

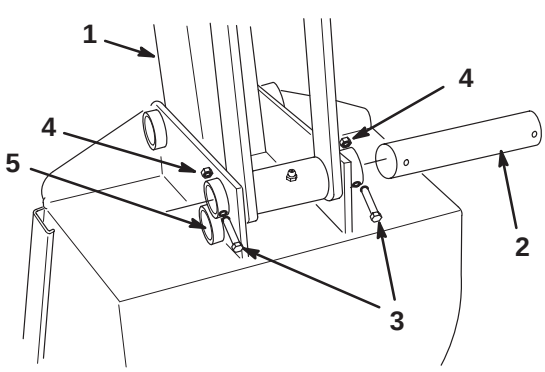


Figure 28

1. Dipperstick
2. Upper bucket pin
3. Bolt
4. Nut
5. Second set of holes

Adjusting the Boom Speed

You can adjust the speed that the boom moves by changing the setting of three speed adjustment valves. The valve that controls the up and down movement is located on top of the boom (Fig. 9).

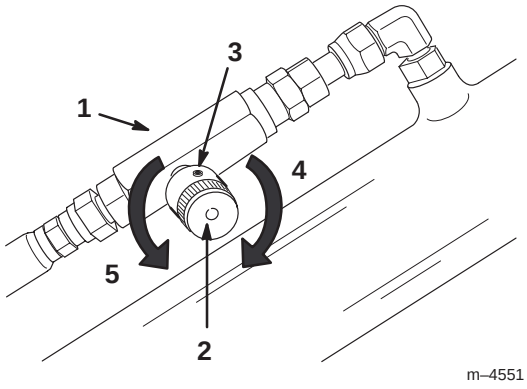


Figure 29

1. Speed adjustment valve
2. Knob
3. Set screw
4. Slow
5. Fast

The two valves that control the left and right swing of the boom are located inside of the controls access panel (Fig. 30). To access these valves, remove six locknuts and the panel. Adjust both valves equally. Replace the access panel when finished.

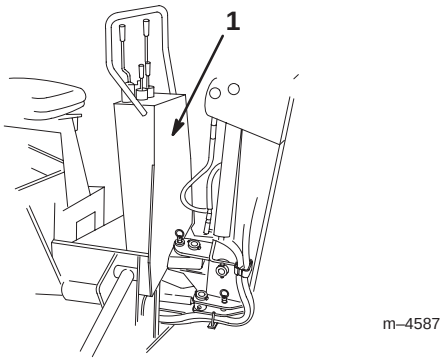


Figure 30

1. Controls access panel

To adjust the valves, complete the following procedure and refer to Figure 29.

1. Loosen the set screw located on the side of the knob on the valve.

2. To increase the speed of the boom, turn the knob counter-clockwise.

3. To decrease the speed of the boom, turn the knob clockwise.

4. Tighten the set screw.

Storage

1. Before long term storage wash the attachment with mild detergent and water to remove dirt and grime.

2. Apply grease to all grease fittings.

3. Check and tighten all bolts, nuts, and screws. Repair or replace any part that are damaged or worn.

4. Paint all scratched or bare metal surfaces. Paint is available from your Authorized Service Dealer.

5. Store the attachment in a clean, dry garage or storage area. Cover it to protect it and keep it clean.

Troubleshooting

PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
Backhoe does not operate	1. Hydraulic coupler not completely connected	1. Check and tighten all couplers.
	2. Auxiliary hydraulics valve on the traction unit is not fully engaged.	2. Engage the valve.
	3. Transport pins were not removed.	3. Remove the pins.
	4. Hydraulic fluid level is low.	4. Fill the traction unit hydraulic tank.
	5. Damaged hydraulic coupler	5. Check couplers and replace any that are defective.
	6. Obstructed hydraulic hose	6. Find and remove the obstruction.
	7. Pinched hydraulic hose	7. Replace the hose.
	8. Auxiliary hydraulic valve on the traction unit is not opening.	8. Repair the valve.
	9. Hydraulic coupler not completely connected	9. Check and tighten all couplers.
	10. Bent piston rod	10. Contact your Authorized Toro Dealer.

PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
Backhoe is operating slowly	1. Hydraulic oil is cold.	1. Allow the engine to warm the oil before operating.
	2. Engine speed is too slow.	2. Increase the throttle speed of the traction unit.
	3. Speed adjustment valve is set too slow.	3. Adjust the speed adjustment valve to obtain the desired speed.
	4. Pinched hydraulic hose	4. Replace the hose.
	5. Speed adjustment valve is leaking oil.	5. Contact your Authorized Toro Dealer.
	6. Damaged cylinder	6. Contact your Authorized Toro Dealer.
	7. Damaged hydraulic pump	7. Contact your Authorized Toro Dealer.
Backhoe fails to hold up a load (all loads will normally settle down over a long period of time)	1. Damaged hydraulic hose	1. Replace the hose.
	2. Damaged cylinder	2. Contact your Authorized Toro Dealer.
	3. Damaged control valve	3. Contact your Authorized Toro Dealer.
Hydraulic oil leakage	1. Damaged hydraulic hose	1. Replace the hose.
	2. Damaged hydraulic system	2. Contact your Authorized Toro Dealer.
Swing cylinder malfunctioning	1. Damaged cylinders, swing restrictors, or cross-over relief valve	1. Contact your Authorized Toro Dealer.
Control valve sticking or working hard	1. Dirty hydraulic oil	1. Change the hydraulic oil.
	2. Damaged or dirty valve	2. Contact your Authorized Toro Dealer.
	3. Damaged cylinder	3. Contact your Authorized Toro Dealer.
Backhoe operation is spongy or jerky	1. Hydraulic fluid level is low.	1. Fill the traction unit hydraulic tank.
	2. Air in the hydraulic system	2. Extend the cylinders as far as possible and hold them in an extended position for several seconds.
	3. Hydraulic oil is cold.	3. Allow the engine to warm the oil before operating.
	4. Pinched hydraulic hose	4. Replace the hose.


TORO®