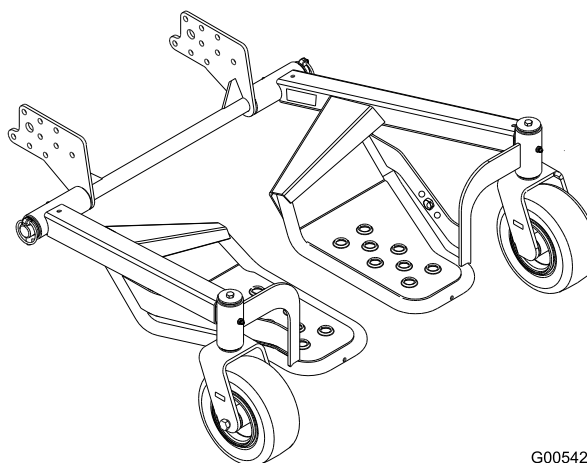




Count on it.

Operator's Manual

Tru Trak[®] Sulky **For Floating Deck Mid-Size Mowers** Model No. 30110—Serial No. 220000001 and Up



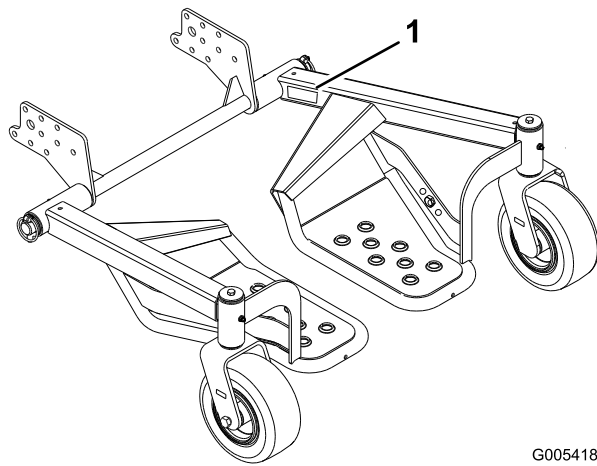
G005422

Introduction

Read this information carefully to learn how to operate and maintain your product properly and to avoid injury and product damage. 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. Figure 1 identifies the location of the model and serial numbers on the product. Write the numbers in the space provided.



G005418

Figure 1

1. Model and serial number location

Model No. _____
Serial No. _____

This manual identifies potential hazards and has safety messages identified by the safety alert symbol (Figure 2), which signals a hazard that may cause serious injury or death if you do not follow the recommended precautions.



Figure 2

1. Safety alert symbol

This manual uses 2 other words to highlight information. **Important** calls attention to special mechanical information and **Note** emphasizes general information worthy of special attention.

Contents

Introduction	2
Safety	3
Safe Operating Practices.....	3
Setup	4
1 Installing the Axle on a Hydraulic Drive Mower with Standard T-Bar Handles.....	5
2 Installing the Axle on a Hydraulic Drive Mower with T2 T-Bar Handles	6
3 Installing the Axle on Gear Drive Mowers with Pistol Grip or T-Bar Handles.....	7
4 Installing the Axle on a Hydraulic Drive Mower with Pistol Grip Handles.....	8
5 Installing the Sulky Assemblies.....	9
6 Adjusting the Handle Height	10
7 Installing the Lanyard	10
8 Installing the Weight Kit.....	12
9 Adjusting the Parking Brake.....	13
Operation	15
Positioning the Sulky for Transport	15
Removing the Weight.....	15
Operating Tips	15
Maintenance	16
Checking the Tire Pressure	16
Greasing the Sulky.....	16
Adjusting the Sulky Transport Position	16

Safety

Improper use or maintenance by the operator or owner can result in injury. To reduce the potential for injury, comply with these safety instructions 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.

When turning, lean forward and toward the direction of the turn to help in keeping your balance.

Safe Operating Practices

General Operation

- Do not modify the sulky or use it on non-approved machines.
- Ensure that the sulky is properly attached to the machine and is in good working order prior to use.
- Allow only the machine operator on the sulky.
- Do not allow use of the sulky by untrained operators.
- Use appropriate personal protective apparatus for eyes, ears, feet, hands, and head.
- Practice operating the machine without the sulky until you become familiar with the controls.
- Before using the machine with the sulky attached, practice operation on a large open, level terrain with no obstacles. The sulky will affect the machine operation, especially on slopes, when turning, and when stopping.
- Use caution when riding the sulky over curbs, rocks, roots, or other obstructions.
- Slow down before making turns and use extra caution on rough terrain and on slopes.
- Travel across slopes, avoiding operation on steep slopes.
- Look behind and down before backing up to be sure of a clear path. Use extra care when operating in reverse.
- Dismount and latch each sulky assembly in the up position when loading the machine for transport.
- Use care when turning to ensure that you do not swing yourself and the sulky into obstacles.

Setup

Loose Parts

Use the chart below to verify that all parts have been shipped.

Step	Description	Qty.	Use
1	Axle Bolt, (3/8 x 1–3/8 inches) Locknut, (3/8 inch)	1 6 6	Installing the axle on a hydraulic drive mower with standard T-Bar handles.
2	Axle Large spacer Locknut, (3/8 inch) Bolt, (3/8 x 1-3/4 inches)	1 2 6 6	Install the axle on a hydraulic drive mower with T2 T-Bar handles.
3	Axle Small spacer Large spacer Locknut, (3/8 inch) Bolt, (3/8 x 1–3/8 inches) Bolt, (3/8 x 4/1/2 inches) For use with T-Bar, gear drive machine only.	1 2 2 6 6 6 2	Install the axle on gear drive mowers with pistol grip or T-Bar handles.
4	Axle Large spacer Locknut, (3/8 inch) Bolt, (3/8 x 1-3/4 inches)	1 2 6 6	Install the axle on a hydraulic drive mower with pistol grip handles.
5	Left sulky assembly Right sulky assembly Lynch pin Washer, (1-3/4 inches)	1 1 2 2	Install the sulky assemblies.
6	No parts required	–	Adjust the handle height.
7	Lanyard Bolt, (5/16 x 1-1/4 inches) Spacer Small washer Locknut, (5/16 inch) Shoulder bolt Washer, (1/2 inch) Washer, (3/8 inch)	2 2 2 2 4 2 2 2	Install the lanyard.
8	Weight Kit (if needed)	-	Install the weight kit.
9	No parts required	–	Adjust the parking brake.

Step

1

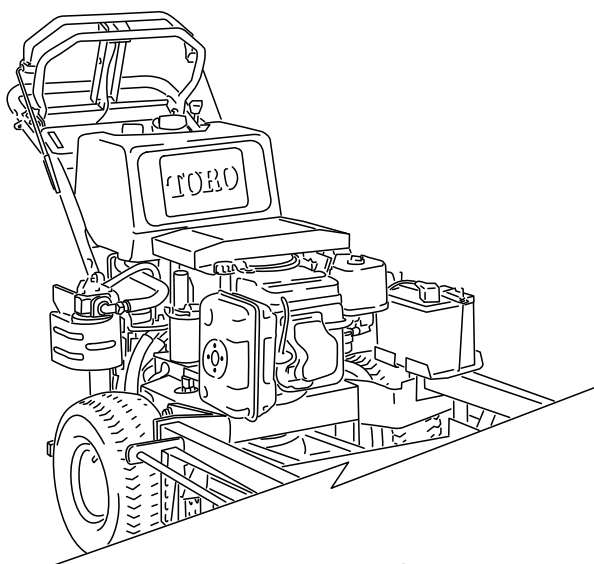
Installing the Axle on a Hydraulic Drive Mower with Standard T-Bar Handles

Parts needed for this step:

1	Axle
6	Bolt, (3/8 x 1-3/8 inches)
6	Locknut, (3/8 inch)

Procedure

If your machine has handles as shown in Figure 3, use the following instructions to install the axle.



G002954

Figure 3



Improper installation or application of a sulky can effect the stability and control of the Mid-Sized Mowers, which could cause personal injury or death.

- Weight kits mounted in the rear position need to be removed when a sulky is installed.
- The parking brake must be adjusted, on units equipped with a parking brake, when a sulky is installed.
- The sulky is not recommended on Mid Size mowers equipped with 32 inch mowers.

1. Stop the engine, set the parking brake, remove the key, and wait for all moving parts to stop before leaving the operating position.
2. Remove the 6 bolts, spacers, and nuts securing the bottom of the two pulley guards on both sides of the frame (3 bolts and nuts on each side) (Figure 4). Save all 6 of the bolts and discard the locknuts.
3. Using the 6 bolts (3/8 x 1-3/8 inches) and locknuts (3/8 inch) supplied with the sulky, install the axle as illustrated in Figure 4.

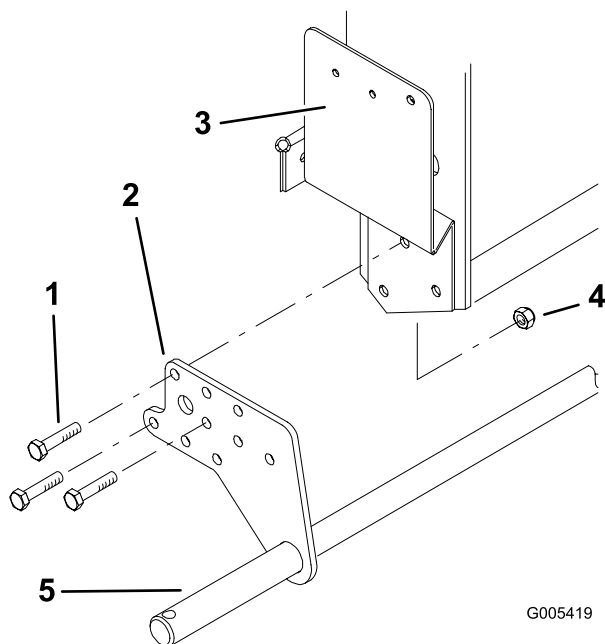


Figure 4

Left side of mower shown

1. Bolt, (3/8 x 1-3/8 inches)
2. Axle mounting bracket
3. Pulley guard
4. Locknut, (3/8 inch)
5. Axle

Note: You can install the axle in one of 3 horizontal positions (Figure 5). For a T-Bar controlled machine, the average person will get the best results using the rear holes; however, if a large person will be using the sulky, you may want to install it using the middle or front holes to give the operator more room.

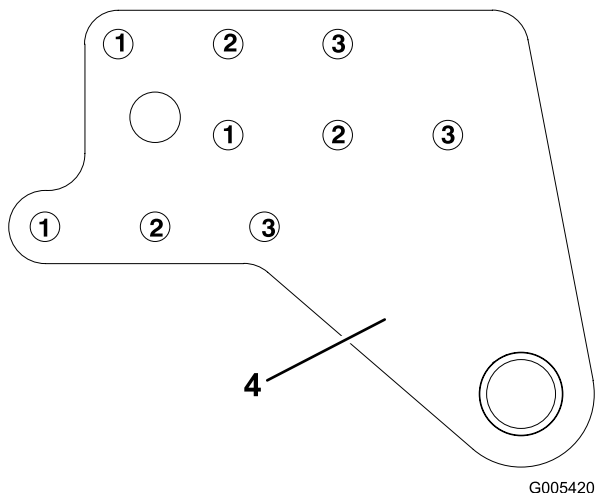


Figure 5

1. Front holes (pistol grip machines)
2. Middle holes
3. Rear holes (T-bar machines)
4. Axle mounting bracket

Step 2

Installing the Axle on a Hydraulic Drive Mower with T2 T-Bar Handles

Parts needed for this step:

1	Axle
2	Large spacer
6	Locknut, (3/8 inch)
6	Bolt, (3/8 x 1-3/4 inches)

Procedure

If your machine has handles as shown in Figure 6, use the following instructions to install the axle.

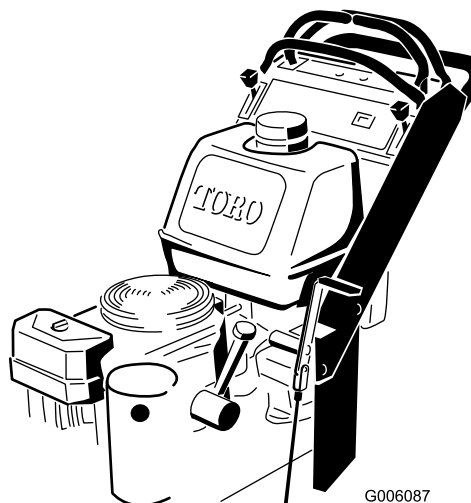


Figure 6



Improper installation or application of a sulky can effect the stability and control of the Mid-Sized Mowers, which could cause personal injury or death.

- Weight kits mounted in the rear position need to be removed when a sulky is installed.
- The parking brake must be adjusted, on units equipped with a parking brake, when a sulky is installed.
- The sulky is not recommended on Mid Size mowers equipped with 32 inch mowers.

1. Stop the engine, set the parking brake, remove the key, and wait for all moving parts to stop before leaving the operating position.
2. Position the axle mounting brackets on both sides of the machine frame (Figure 7).
3. Insert the large spacers between the axle mounting brackets and the frame, lining up the holes (Figure 7).

Note: You can install the axle in one of 3 horizontal positions (Figure 5). For a T-Bar controlled machine, the average person will get the best results using the rear holes; however, if a large person will be using the sulky, you may want to install it using the middle or front holes to give the operator more room.

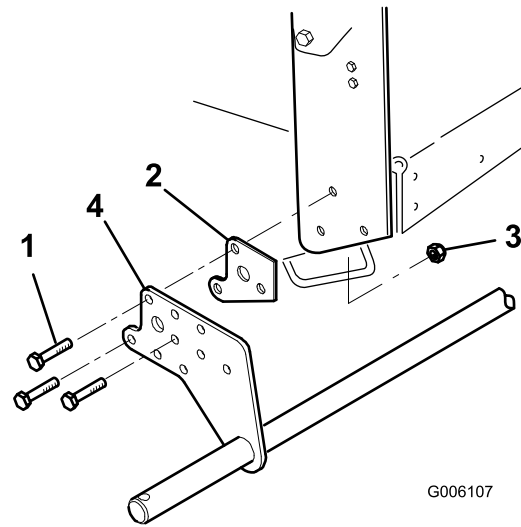


Figure 7

- | | |
|-------------------------------|--------------------------|
| 1. Bolt, (3/8 x 1-3/4 inches) | 3. Locknut, (3/8 inch) |
| 2. Large spacer | 4. Axle mounting bracket |

4. Using the 6 bolts (3/8 x 1-3/4 inches) and locknuts (3/8 inch) supplied with the sulky, install the axle as illustrated in Figure 7.

Step 3

Installing the Axle on Gear Drive Mowers with Pistol Grip or T-Bar Handles

Parts needed for this step:

1	Axle
2	Small spacer
2	Large spacer
6	Locknut, (3/8 inch)
6	Bolt, (3/8 x 1-3/8 inches)
2	Bolt, (3/8 x 4-1/2 inches) For use with T-Bar, gear drive machine only.

Procedure



Improper installation or application of a sulky can effect the stability and control of the Mid-Sized Mowers, which could cause personal injury or death.

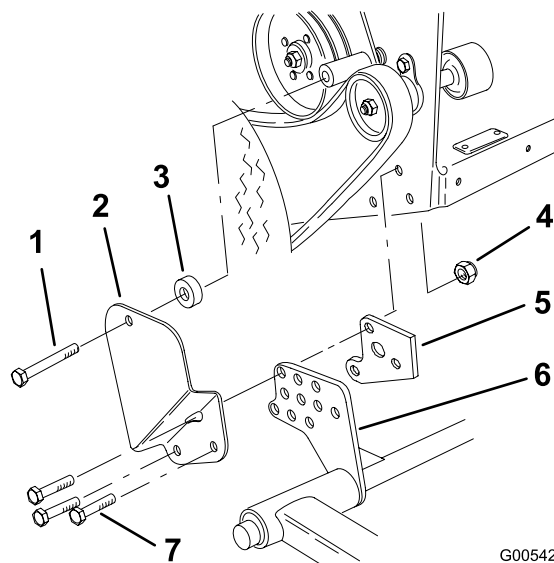
- Weight kits mounted in the rear position need to be removed when a sulky is installed.
- The parking brake must be adjusted, on units equipped with a parking brake, when a sulky is installed.
- The sulky is not recommended on Mid Size mowers equipped with 32 inch mowers.

1. Stop the engine, set the parking brake, remove the key, and wait for all moving parts to stop before leaving the operating position.
2. Remove the 4 bolts and nuts securing the bottom of the two pulley guards on the sides of the frame (2 bolts and nuts on each side) (Figure 8).
3. Remove the long bolt and nut securing the top of each pulley guard (Figure 8). Save the bolt for whenever the axle is removed.
4. Insert the axle mounting brackets between the pulley guards and the frame (Figure 8).

5. Insert the large spacers between the axle mounting brackets and the frame, lining up the holes (Figure 8).

Note: You can install the axle in one of 3 horizontal positions (Figure 5). For a T-bar controlled machine, the average person will get the best results using the rear holes; however, if a large person will be using the sulky, you may want to install it using the middle or front hole to give the operator more room. For a pistol grip machine, use the front holes.

6. Using the 6 bolts (3/8 x 1-3/8 inches) and locknuts (3/8 inch) supplied with the sulky, secure the bottom of the pulley guards, the axle, and the spacers as illustrated in Figure 8.
7. Slide the small spacers between the top of the pulley guards and the mounting tube on the frame, and secure them using 2 bolts (3/8 x 4-1/2 inch) and the nuts removed in step 3 (Figure 8).



G005421

Figure 8

- | | |
|-------------------------------|-------------------------------|
| 1. Bolt, (3/8 x 4-1/2 inches) | 5. Large spacer |
| 2. Pulley guard | 6. Axle mounting bracket |
| 3. Small spacer | 7. Bolt, (3/8 x 1-3/8 inches) |
| 4. Locknut, (3/8 inch) | |

Step

4

Installing the Axle on a Hydraulic Drive Mower with Pistol Grip Handles

Parts needed for this step:

1	Axle
2	Large spacer
6	Locknut, (3/8 inch)
6	Bolt, (3/8 x 1-3/4 inches)

Procedure



Improper installation or application of a sulky can effect the stability and control of the Mid-Sized Mowers, which could cause personal injury or death.

- Weight kits mounted in the rear position need to be removed when a sulky is installed.
- The parking brake must be adjusted, on units equipped with a parking brake, when a sulky is installed.
- The sulky is not recommended on Mid Size mowers equipped with 32 inch mowers.

1. Stop the engine, set the parking brake, remove the key, and wait for all moving parts to stop before leaving the operating position.
2. Position the axle mounting brackets on both sides of the machine frame (Figure 9).
3. Insert the large spacers between the axle mounting brackets and the frame, lining up the holes (Figure 9).

Note: You can install the axle in one of 3 horizontal positions (Figure 5). For a pistol grip machine, use the front holes.

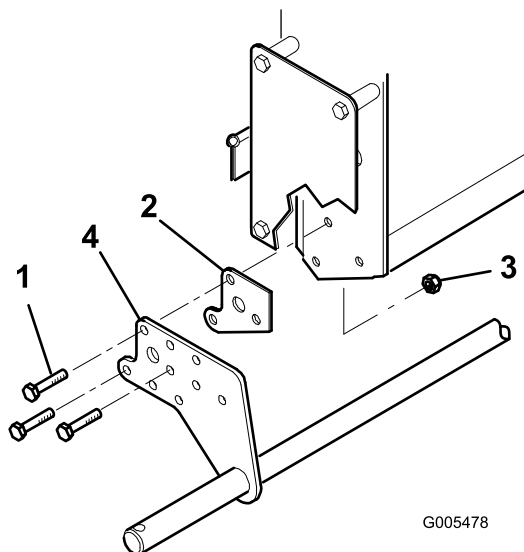


Figure 9

1. Bolt, (3/8 x 1-3/4 inches)
2. Large spacer
3. Locknut, (3/8 inch)
4. Axle mounting bracket

4. Using the 6 bolts (3/8 x 1-3/4 inches) and locknuts (3/8 inch) supplied with the sulky, install the axle as illustrated in Figure 7.

Note: You may have difficulty installing one of the bolts on the right side due to interference with the traction control lever. If this happens, disconnect the control rod from the pistol grip (Figure 10) to drop the lever out of the way. When finished, reconnect the control rod.

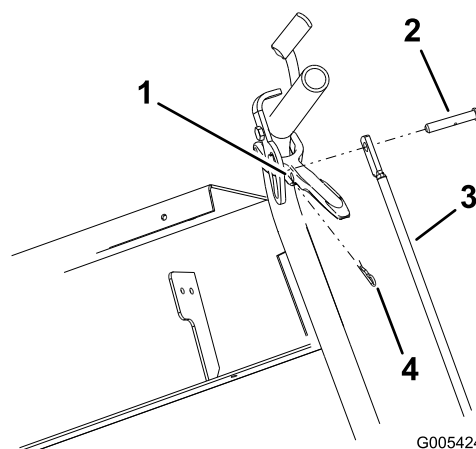


Figure 10

1. Pistol grip
2. Clevis pin
3. Control rod
4. Hairpin cotter pin

Step 5

Installing the Sulky Assemblies

Parts needed for this step:

1	Left sulky assembly
1	Right sulky assembly
2	Lynch pin
2	Washer, (1-3/4 inches)

Procedure

1. Slide the mounting tube on each sulky assembly over the ends of the axle with the foot rests towards the inside (Figure 11).
2. Secure the sulky assemblies using a washer (1-3/4 inch) and lynch pin on each side (Figure 11).
3. Grease the sulky; refer to Greasing the Sulky.

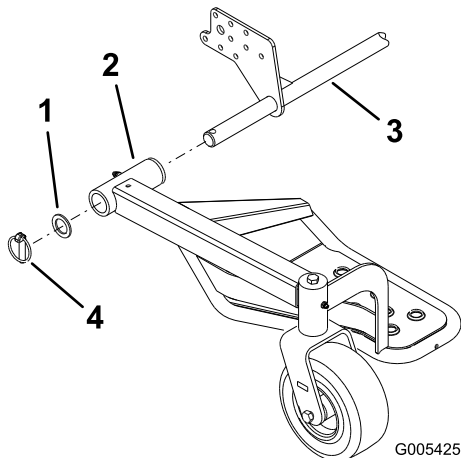


Figure 11

Left side shown

- | | |
|---------------------------|--------------|
| 1. Washer, (1-3/4 inches) | 3. Axle |
| 2. Sulky assembly | 4. Lynch pin |

Step 6

Adjusting the Handle Height

No Parts Required

Procedure

Note: Machines with a T2 handle are not adjustable.

Because the sulky raises you several inches off of the ground, adjust the handle height to accommodate the user on the sulky comfortably. Refer to the mower *Operator's Manual* for more information on changing the handle height.

Step 7

Installing the Lanyard

Parts needed for this step:

2	Lanyard
2	Bolt, (5/16 x 1-1/4 inches)
2	Spacer
2	Small washer
4	Locknut, (5/16 inch)
2	Shoulder bolt
2	Washer, (1/2 inch)
2	Washer, (3/8 inch)

Procedure

1. Install the nut (5/16 inch), small washer, spacer, lanyard and bolt (5/16 x 1-1/4 inches) into the center hole (Figure 12).

Note: The sulky transport position can be raised or lowered. Refer to Adjusting the Sulky Transport Position.

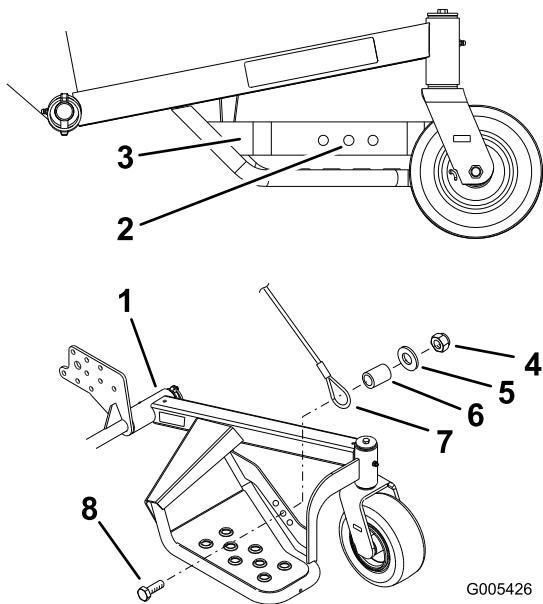


Figure 12

- | | |
|-------------------------|--------------------------------|
| 1. Sulky assembly | 5. Small washer |
| 2. Center hole | 6. Spacer |
| 3. Side support | 7. Lanyard |
| 4. Locknut, (5/16 inch) | 8. Bolt, (5/16 x 1-1/4 inches) |

Note: The machines with T2 handles do not need a hole drilled into the side of the machine for installing the lanyard. Proceed to item 6 in this step to install the lanyard (Figure 15).

2. Raise the sulky and position the lanyard loop until it is in a clear location on the pulley guard, both on the outside and inside of the guard (Figure 13).
3. If a hole does not exist in or near this location, mark the location of the lanyard loop.

Important: The sulky must be at least 1-1/2 inches (3.8 cm) from any contact point such as the machine handle or the gear shift lever (when pushed to the right or left) on gear drive machines (Figure 13).

4. Drill a 11/32 inch hole at the marked location.
5. Remove the lanyard from the sulky assembly.

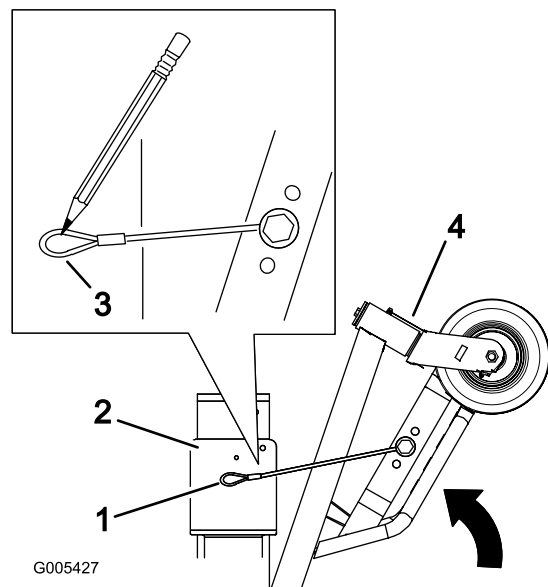


Figure 13

- | | |
|-----------------|-------------------|
| 1. Lanyard | 3. Mark location |
| 2. Pulley guard | 4. Sulky assembly |

6. Install the shoulder bolt, washer (1/2 inch), lanyard, washer (3/8 inch), and locknut (5/16 inch) to the pulley guard (Figure 14 and Figure 15).

Note: When the lanyard is attached to the machine, it must not be able to be removed (Figure 14 and Figure 15).

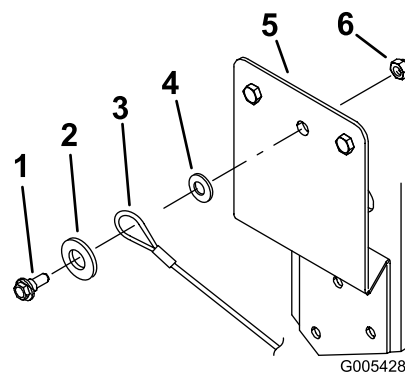


Figure 14

- | | |
|-----------------------|-------------------------|
| 1. Shoulder Bolt | 4. Washer, (3/8 inch) |
| 2. Washer, (1/2 inch) | 5. Pulley guard |
| 3. Lanyard | 6. Locknut, (5/16 inch) |

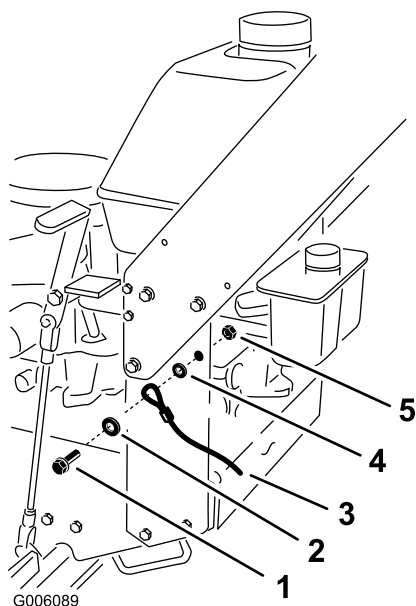


Figure 15

T2 T-Bar Handle Shown

- | | |
|-----------------------|-------------------------|
| 1. Shoulder Bolt | 4. Washer, (3/8 inch) |
| 2. Washer, (1/2 inch) | 5. Locknut, (5/16 inch) |
| 3. Lanyard | |

7. Raise the sulky assembly and attach the lanyard.

Note: The sulky transport position can be raised or lowered by using the three different holes in the sulky side support (Figure 12).

8. Repeat these steps for the opposite sulky assembly.

Note: If the handle bar is lowered the lanyard may have to be re-positioned to attain proper clearance for the raised sulky.

Step 8

Installing the Weight Kit

Parts needed for this step:

-	Weight Kit (if needed)
---	------------------------

Procedure



Use the correct weight kits when the sulky is installed or personal injury or death could occur.

- Never operate the machine with out recommended front weight kits.
- Do not use rear weights when a sulky is installed.
- Remove all rear weights when installing a sulky.

Use the following figures to determine the weight kit needed for your mower. If needed, a weight kit is available through an Authorized Service Dealer.

Refer to the Weight Kit for the correct procedures to install the weight.

Important: A weight kit is required for Mid Sized mowers equipped with a 44 inch mower deck (Classic mower decks)(Figure 16).

Weight Kit, 106-0820, is used on Mid-Size mowers (Classic mower decks) with a carrier frame and adjusting rod shown in Figure 16.

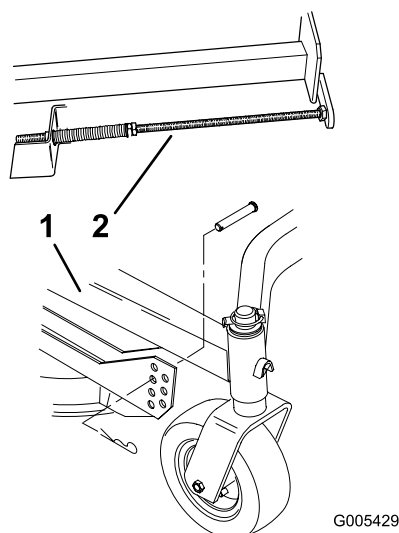


Figure 16

1. Carrier frame 2. Adjusting rod

Important: A weight kit is not required for Mid Sized mowers with height-of-cut pins shown in Figure 17 and with a serial number of 210000001 through 220000001.

To enhance the performance of the machine, install Weight Kit, 106-5491, onto Mid-Size mowers (SFS mower decks) with the style of height-of-cut pins shown in Figure 17.

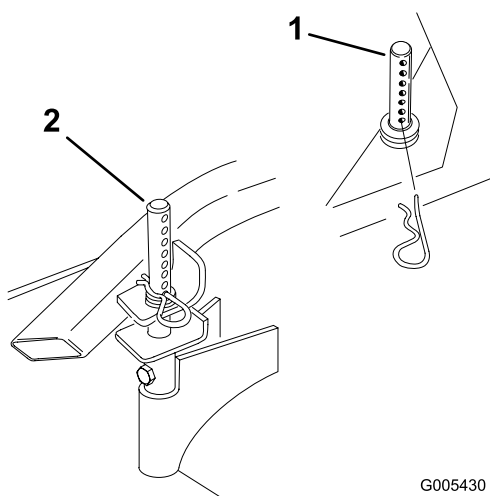


Figure 17

1. Front height-of-cut pin 2. Rear height-of-cut pin

Important: A weight kit is not required for Mid Sized mowers with height-of-cut pins shown in Figure 18.

To enhance the performance of the machine, install Weight Kit(s), 112-9971, onto Mid-Size mowers (TURBO FORCE mower decks) with the style of height-of-cut pins shown in Figure 18.

Use the following table to determine the number of weights recommended to install a Tru Trak® Sulky on a Mid-Size mower with a TURBO FORCE mower deck (Figure 18).

Number of Weights to use with the TRU TRAK® Sulky for Mid-Size mowers with TUBRO FORCE mower decks only				
Deck size	Gear Driven Mowers		Hydraulic Driven Mowers	
	Number of Weights	Weight Position	Number of Weights	Weight Position
36	3	Front	4	Front
40	4	Front	4	Front
48	1	Front	3	Front
52	0		2	Front
60	Not Available		1	Front

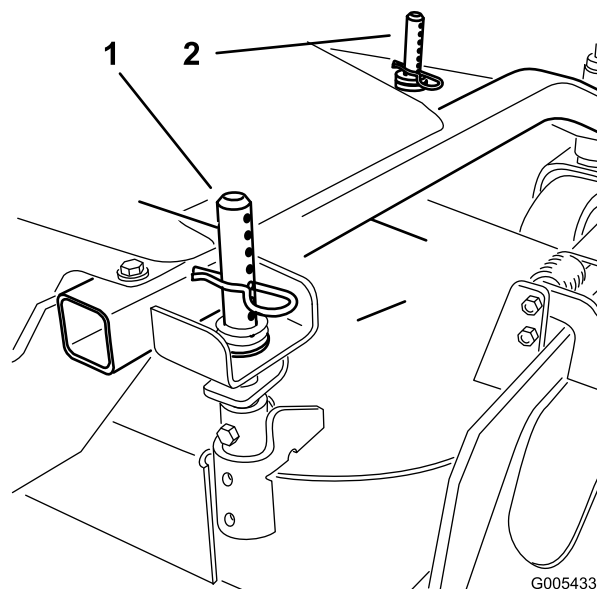


Figure 18

1. Rear height-of-cut pin 2. Front height-of-cut pin

Step 9

Adjusting the Parking Brake

No Parts Required

Procedure

After installing the sulky, adjust the machine's parking brake to compensate for the increased machine weight.

Refer to the Mid-Size mower *Operator's Manual* for the correct procedure to adjust the parking brake.

Operation

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

Positioning the Sulky for Transport

Before placing the machine on a trailer, lift each sulky assembly up and secure them with the lanyards (Figure 19). This will keep the sulky from bouncing during transport and make the machine more compact.

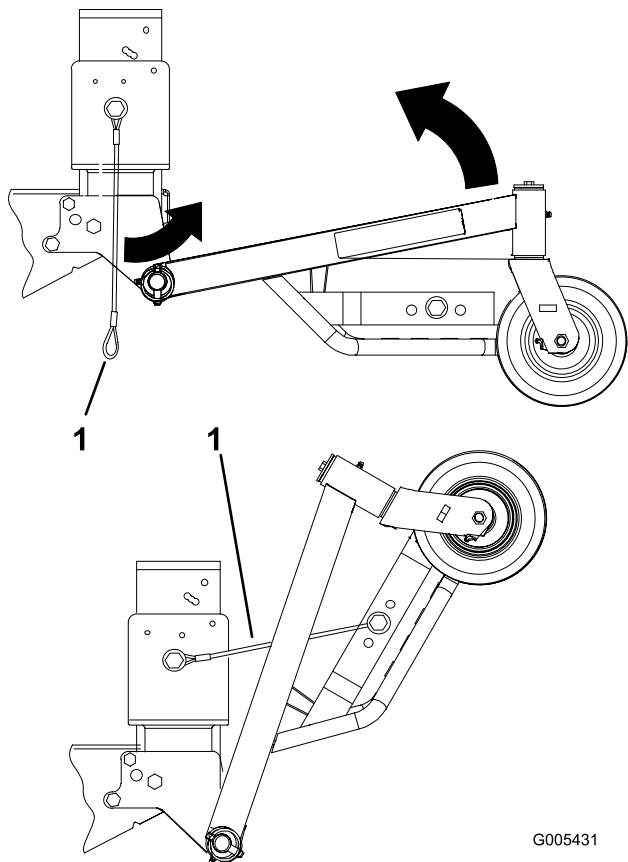


Figure 19

1. Lanyard

Removing the Weight

Important: If the sulky and axle are removed from the machine, install the weights to their original position before the sulky was installed.

Operating Tips

Learning to Drive

Drive slowly and take time to learn how the sulky moves when using it for the first time.

Turning with a Sulky

Use care when turning to ensure that you do not swing yourself and the sulky into obstacles.

When turning, lean forward and toward the direction of the turn to help keep your balance.

Adjusting the Wheel Drive Traction

If your machine is a gear drive, pistol grip machine, you may need to adjust the wheel drive tension; refer to your machine *Operator's Manual*.

Maintenance

Checking the Tire Pressure

Ensure that the caster wheel tires are filled with air to 50 psi (345 kPa) every 8 operating hours or before each use.

Greasing the Sulky

Grease all grease fittings every 25 operating hours and immediately after every washing.

Grease type: General-purpose grease.

1. Clean the grease fittings with a rag.
2. Connect a grease gun to each fitting.
3. Pump grease into the fittings until grease begins to ooze out of the bearings.
4. Wipe up any excess grease.

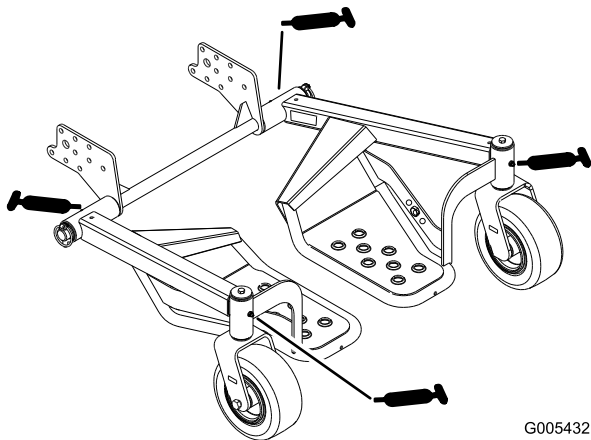


Figure 20

the sulky wheel is used when the handle is in the high position. The middle hole is for the middle handle height position and the front hole is for the low handle height position.

4. Install the nut (5/16 inch), small washer, spacer, lanyard and bolt (5/16 x 1 inch) into the desired hole (Figure 21).

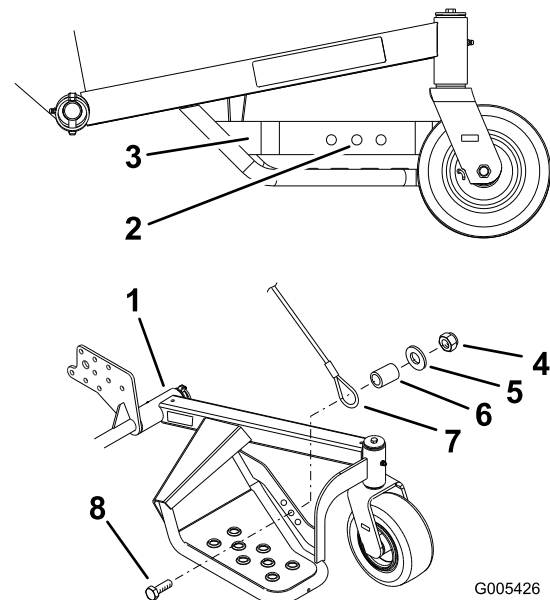


Figure 21

- | | |
|-------------------------|--------------------------------|
| 1. Sulky assembly | 5. Small washer |
| 2. Center hole | 6. Spacer |
| 3. Side support | 7. Lanyard |
| 4. Locknut, (5/16 inch) | 8. Bolt, (5/16 x 1-1/4 inches) |

Adjusting the Sulky Transport Position

The sulky transport position can be raised or lowered by using the three different holes in the sulky side support.

1. Remove the nut (5/16 inch), small washer, spacer, lanyard and bolt (5/16 x 1-1/4 inches) from the sulky side support (Figure 21).
2. Determine the handle height position. Refer to the *Operator's Manual* for the handle height position.
3. Locate the three adjustment holes in the sulky assemblies (Figure 21). The hole closest to



Landscape
Contractor
Equipment (LCE)

The Toro Total Coverage Guarantee

A Limited Warranty

Conditions and Products Covered

The Toro® Company and its affiliate, Toro Warranty Company, pursuant to an agreement between them, jointly promise to repair the listed Toro Products if defective in materials or workmanship. The following time periods apply from the date of purchase:

This warranty applies to:

- ProLine Mid-Size Mowers and Attachments 1 year
- Z Master Mid-Mount ZRTs and Attachments 1 year

Components	Warranty Period
Traction Unit Frame and Carrier Frame	2 year
All Spindles	3 years Parts 2 years Labor
Engines* and /Hydraulic System	2 years
Deck Shells (34 ² -72 ²)	2 years
Z500 Series Electric Clutch	2 years
Remaining Components	1 year

*Some engines used on Toro LCE Products are warranted by the engine manufacturer. This warranty includes the cost of parts and labor, but you must pay transportation costs.

Instructions for Obtaining Warranty Service

If you think that your Toro Product contains a defect in materials or workmanship, follow this procedure:

1. Contact any Toro Authorized or Master Service Dealer to arrange service at their dealership. To locate a dealer convenient to you, access our website at www.Toro.com. You may also call our Toro Customer Care Department toll free at 888-865-5676 (U.S. Customers) or 888-865-5691 (Canada customers).
2. Bring the product and your proof of purchase (sales receipt) to the Service Dealer.

If for any reason you are dissatisfied with the Service Dealer's analysis or with the assistance provided, contact us at:

LCB Customer Service Department
Toro Warranty Company
8111 Lyndale Avenue South
Bloomington, MN 55420-1196

Owner Responsibilities

You must maintain your Toro Product by following the maintenance procedures described in the operator's manual. Such routine maintenance, whether performed by a dealer or by you, is at your expense.

Items and Conditions Not Covered

There is no other express warranty except for special emission system coverage on some products. This express warranty does not cover the following:

- Cost of regular maintenance service or parts, such as filters, fuel, lubricants, tune-up parts, blade sharpening, brake and clutch adjustments.
- Any product or part which has been altered or misused or required replacement or repair due to normal wear, accidents, or lack of proper maintenance.
- Repairs necessary due to improper fuel, contaminants in the fuel system, or failure to properly prepare the fuel system prior to any period of non-use over three months.
- Pickup and delivery charges.

General Conditions

All repairs covered by this warranty must be performed by an Authorized Toro Service Dealer using Toro approved replacement parts.

Neither The Toro® Company nor Toro Warranty Company is liable for indirect, incidental or consequential damages in connection with the use of the Toro Products covered by this warranty, including any cost or expense of providing substitute equipment or service during reasonable periods of malfunction or non-use pending completion of repairs under this warranty.

Some states do not allow exclusions of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions and limitations may not apply to you.

All implied warranties of merchantability (that the product is fit for ordinary use) and fitness for use (that the product is fit for a particular purpose) are limited to the duration of the express warranty.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Countries Other than the United States or Canada

Customers who have purchased Toro products exported from the United States or Canada should contact their Toro Distributor (Dealer) to obtain guarantee policies for your country, province, or state. If for any reason you are dissatisfied with your Distributor's service or have difficulty obtaining guarantee information, contact the Toro importer. If all other remedies fail, you may contact us at Toro Warranty Company.