

Instructional Manual: Replacement of Blades for Scotts S2554 Lawn Mower



An instructional manual made for the employees of Joshua Tanner Lawn Care by Benedict Akenga.

Table of Contents

Table of Contents	iii
Introduction.....	v
Chapter 1: How to Properly Connect and Disconnect the Mower Deck	7
Chapter 1	3
Chapter 2: How to Properly Replace Mower Blades.....	5
Chapter 2.....	7
Index	11

Introduction

Joshua Tanner Lawn Care does not have a manual regarding the proper replacement of blades for the tractor mower. A manual is essential because a new employee for JTLC might come across this problem when maintenance of the equipment is required before a big weekend of work. The employees are often too busy working and thinking about the next yard or the next weekend to worry about the equipment, so it is up to the bosses, Josh and Dan, to run maintenance on the equipment. With the increasing demand of lawn care in the area, the mowers are being used constantly over the course of the weekend of work and as a result, the blades are dulling quickly. This becomes a hindrance because Josh, Dan, and I are the only people who know how to properly replace the mower blades. This manual could serve as a beneficial tool for the company as new employees can read and keep them as reference when the blades of the mowers, specifically the tractor mower, run dull and need replacement so as not to overburden the bosses and to teach new employees a valuable skill in the area of lawn care.

Current Problems for Joshua Tanner Lawn Care Employees

Currently, JTLC does not offer any form of instruction manual for its employees. The job of maintenance has always fallen upon the shoulders of Josh, Dan and I. I learned how to properly replace the blades for the tractor mower because Dan has had Josh and I do it during maintenance. While this has been effective thus far, the demand for lawn care is increasing and with it, the demand for employees to fill the new jobs. Taking time to specifically teach the employees how to perform this necessary skill in the conditions and situations that they might face while working for the company would be detrimental in that it would take time away from completing the jobs that need to be done. Also, the new employees are not yet aware of what to do in situations involving the tractor mower. These situations include

- The tractor mower deck unexpectedly disconnecting from the tractor
- The blades breaking at one of the jobs
- A foreign item getting lodged into the deck between the blades and needing to be taken out

If any of these situations arise during one of the jobs, then the pace of work has to slow down because the bosses have to be the ones to fix the tractor mower as they are the only ones with the necessary knowledge. This will take time from the other jobs that need to be done during the workday, which will cause rescheduling jobs for another day, which will lead to customer dissatisfaction and cancellation of jobs, which will cause the business to lose money and not be able to pay its employees, which will result in layoffs and loss of more money, which will put the company out of business. If the employees turn to a manual that details the proper way to remove the deck and replace the blades, then the scale of the loss of time can be lowered

significantly and the employees can get the necessary work done. The goal of JTLC is to skillfully, efficiently, and quickly complete the task at hand. This manual serves only to make sure that that goal is upheld by providing employees with the necessary knowledge for these certain situations so that the company doesn't waste the customers' time and money.

A Manual Detailing the Proper Replacement of Blades for the Tractor Mower

The proposed Instructional Manual will provide new and existing employees with the instructions to learn

- How to properly disconnect the mower deck from the mower
- How to take out the blades from the deck
- How to put new blades on the deck
- How to properly reconnect the mower deck to the mower

If new and existing employees had a manual such as this one, they would be able to read it and get an idea of what is expected of them in terms of running maintenance on the tractor mower. This manual could help them learn all of the different procedures they will need to know to keep the tractor mower and all of its parts running smoothly and effectively. This manual would eliminate the need for the employees to constantly refer to the bosses for help on fixing the tractor mower as it would provide the employees with the necessary knowledge in those situations.

Chapter 1: How to Properly Connect and Disconnect the Mower Deck

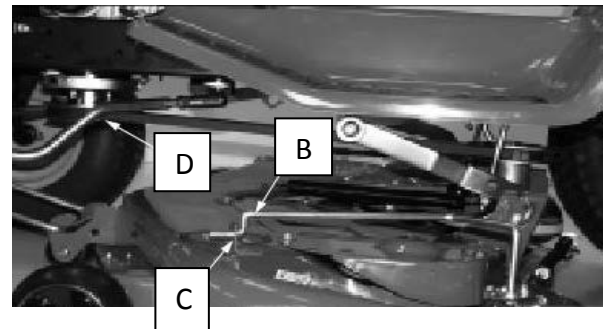
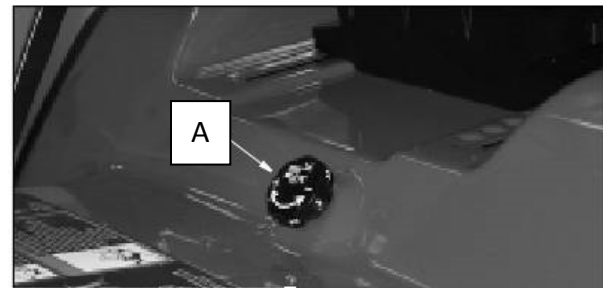


Chapter 1

CAUTION: Avoid injury, before connecting or disconnecting mower from machine: STOP engine. Remove key. Wait for all moving parts to STOP. Avoid injury from loaded spring: LOCK lift lever before removing mower. Avoid injury from spring loaded rod: Make sure you have a tight grip on drive belt tension rod and release slowly

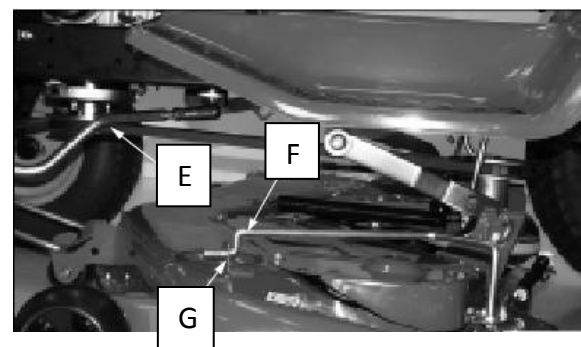
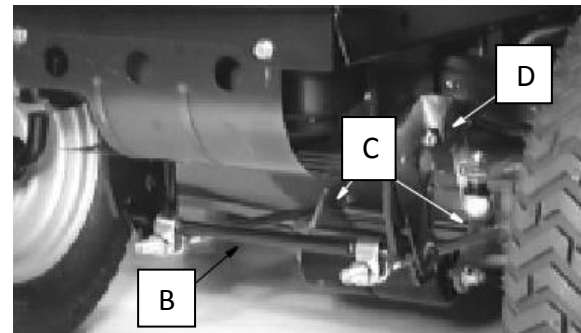
Disconnecting Mower Deck

1. STOP engine, LOCK park brake, push PTO switch down to DISENGAGE, turn key to the OFF position, and remove key.
2. Raise mower lift lever to TRANSPORT (upper) position.
3. Set cutting height knob (A) to 25 mm (1 in.).
4. Put wood blocks under each side of mower.
5. Lower mower to MOWING (lower) position, bring deck down onto blocks.
6. Release drive belt tension rod (B) from bracket (C).
7. Remove belt from engine drive sheave (D).
8. Pull out and push down on lever (E) to release front lift rod assembly (F) and remove from front of deck.
9. Disconnect draft arms, one on each side, by pulling spring loaded J-pins (G) out.
10. Put mower lift lever in the TRANSPORT (upper) position.
11. Slide mower out from under the tractor.



Connecting Mower Deck

1. STOP engine, LOCK park brake, push PTO switch down to DISENGAGE, turn key to the OFF position, and remove key.
2. Raise mower lift lever to TRANSPORT (upper) position.
3. Slide mower under the tractor and line up mower lift brackets with rear draft arms.
4. Put wood blocks under each side of mower.
5. Put mower lift lever in the MOWING (lower) position.
6. Install rear draft arms, one on each side of tractor, to mower lift brackets with spring loaded J-pins (A).
7. Put front lift rod assembly (B) in slotted brackets (C) on mower deck and install the front lift rod assembly to the front of the tractor frame.
8. Push up on lever (D) and lock into tractor frame.
9. Put mower drive belt (E) on engine drive sheave.
10. Push drive belt tension rod (F) into bracket (G).
11. Raise mower lift lever to TRANSPORT (upper) position.
12. Remove wood blocks from both sides of mower.
13. Level mower.



Chapter 2: How to Properly Replace Mower Blades

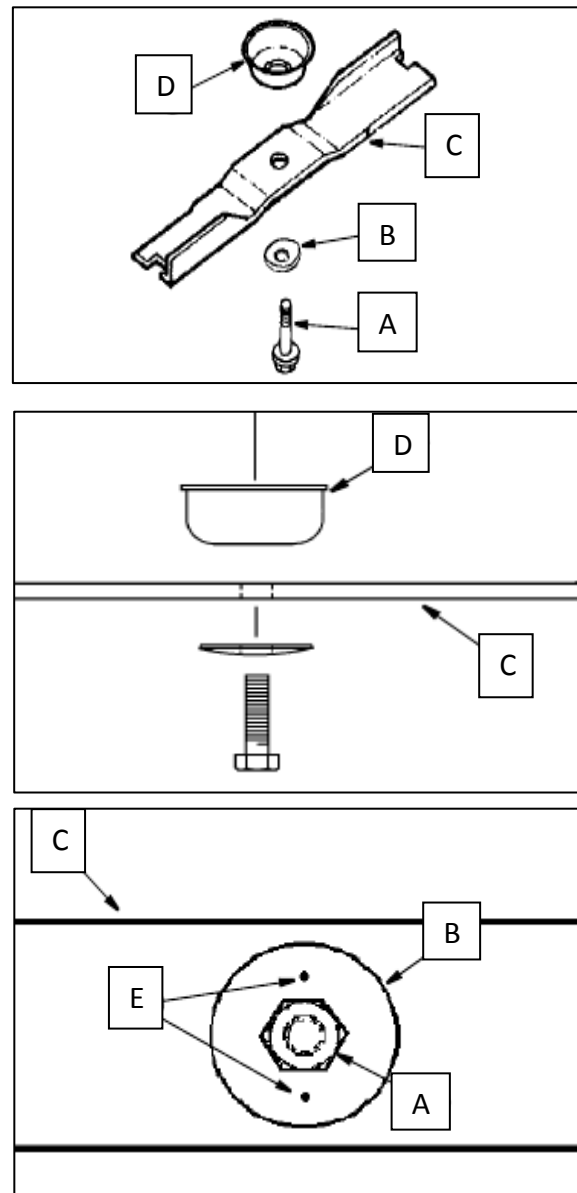


Chapter 2

CAUTION: Avoid injury. Mower blades have sharp edges. Always wear gloves when handling mower blades.

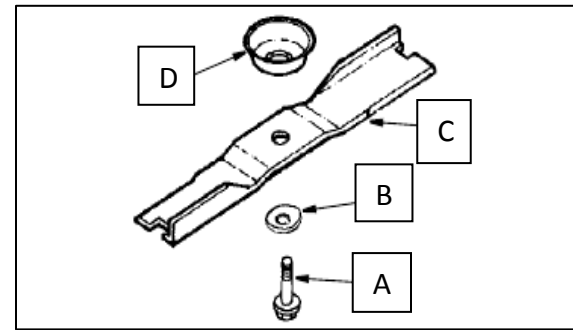
Removing Mower Blades

1. Raise mower deck to gain access to mower blades. If necessary, remove mower deck.
2. Use a wooden block to prevent mower blades from spinning.
3. Remove cap screw (A), round blade washer (B), blade (C) and deflector cup (D).
4. Inspect blades; sharpen/balance or replace as necessary.



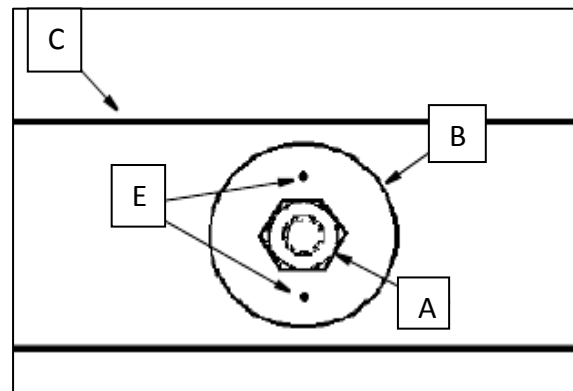
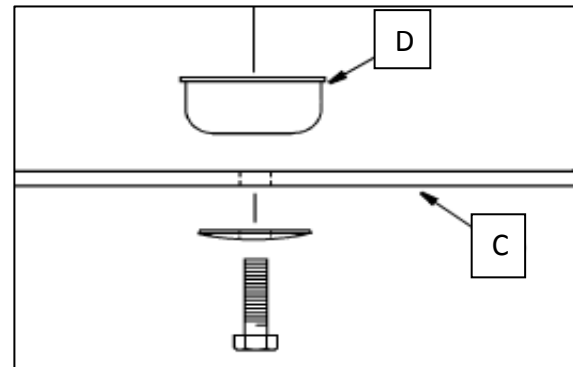
Installing Mower Blades

1. Lightly lubricate cap screw threads with a general purpose grease or oil to prevent rusting and seizing.
2. Install deflector cup (D) on spindle.
3. Position mower blade (C) with the cutting edge towards the ground onto the mower spindle.



IMPORTANT: Some blade washers (B) have two index marks (E). When these blade washers are installed, the index marks must be visible. This will indicate that the cup side of the washer is toward the blade (C).

4. Install blade washers (B) and make sure 2 index marks (E) are visible when installed.
5. Install and tighten cap screw (A) by hand until mower blade is in full contact (fully seated) with spindle.
6. Block mower blade to prevent spinning. Tighten cap screw (A).



Troubleshooting for Mower Deck

If you are experiencing a problem that is not listed in this chart, see Dan or Josh Shipman for further service.

If	Check
Discharge Chute Plugging	<ul style="list-style-type: none"> • Belt installed incorrectly. • Grass too wet. • Grass too long. • Restricted air flow. • Check mower front-to-rear level. • Engine rpm too low • Travel speed too fast
Patches of Grass Uncut	<ul style="list-style-type: none"> • Travel speed too fast. • Engine rpm too low.
Belt Slipping	<ul style="list-style-type: none"> • Debris in sheaves. • Worn belt.
Too Much Vibration	<ul style="list-style-type: none"> • Debris on mower deck or in sheaves. • Damaged drive belt. • Damaged sheaves or sheaves out of alignment. • Blades out of balance.
Blades Scalping Grass	<ul style="list-style-type: none"> • Cutting too low. • Turning speed too fast. • Ridges in terrain. • Rough or uneven terrain. • Low tire pressure • Mower gauge wheels not adjusted correctly. • Bent blade(s).
Uneven Cut	<ul style="list-style-type: none"> • Mower not level. • Travel speed too fast. • Blades dull. • Mower gauge wheels not adjusted correctly. • Tire pressure.
Requires High Effort to Lift and Latch Lift Handle	<ul style="list-style-type: none"> • Front draft arm on mower is adjusted too short, causing lift system to bind up.
Mower Loads Down Tractor	<ul style="list-style-type: none"> • Engine rpm too low. • Travel speed too fast. • Debris wrapped around mower spindles.

	<ul style="list-style-type: none">• Bagging blades on mower.
Grass Tips are Jagged and Turn Grayish Brown after Mowing	<ul style="list-style-type: none">• Dull mower blades.• Bent blades.• Front-to-rear blade adjustment not set properly.
Mower (or other attachment) Stops When REVERSE foot pedal is depressed and Attachment is Engaged	<ul style="list-style-type: none">• Normal condition.

Index

Blades, 1, iii, vi, 5, 7, 8, 9

Connecting, 4

Disconnecting, 3

Install, 4, 8

Installing, 8

Mower, 1, iii, vi, 7, 3, 4, 5, 7, 8, 9, 10

Removing, 7

Troubleshooting, 9