



**DIRTY HAND  
TOOLS**

# 21 Inch Self-Propelled Lawn Mower



**MODEL # 106461**

## Operation Manual



**This safety alert symbol identifies important safety messages in this manual. Failure to follow this important safety information may result in serious injury or death.**

Part # 106464 Rev A

*Designed & Engineered in Colorado, USA*



*Assembled with Foreign & Domestic Components*

For Service or Questions

**Call 1-877-487-8275**

**720-287-5182**

***[www.dirtyhandtools.com](http://www.dirtyhandtools.com)***

Dirty Hand Tools® is a brand of



**FrictionlessWorld**

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# Important Safety Information



WARNING

**WARNING:** Read and thoroughly understand all instructions and safety information before assembling or operating this lawn mower. Failure to do so may cause serious injury or death. Do not allow anyone to operate this lawn mower who has not read this manual. As with all power equipment, a lawn mower can be dangerous if assembled or used improperly. Do not operate this lawn mower if you have doubts or questions concerning safe operation.

Call our customer service department at **720-287-5182**, **1-877-487-8275**, or visit [www.dirtyhandtools.com](http://www.dirtyhandtools.com) if you have any questions or concerns about the safe operation of this equipment.



DANGER

## Intended Use

Do Not Use the lawn mower for any purpose other than for which it was designed. Any other use is unauthorized and may result in serious injury or death.

## Personal Protective Equipment

When operating this lawn mower it is essential that you wear safety gear including goggles or safety glasses, adequate clothing including long pants, tight fitting gloves (no loose cuffs or draw strings). Always wear ear plugs or sound deafening headphones to protect against hearing loss when operating this lawn mower. Always wear sturdy footwear. Never wear sandals, sneakers or open shoes, and never operate the lawn mower with bare feet. Do not wear loose clothing that might get caught in moving parts.



CAUTION

**Whenever you need to make any adjustments or remove grass or debris from the underside of the deck, always shut off the engine and wait five (5) minutes to allow parts to cool.** Disconnect the spark plug wire and keep the wire away from the spark plug to prevent accidental starting.

# Important Safety Information

## General Safety

Failure to follow warnings, cautions, assembly and operation instructions in the Operation Manual may result in serious injury or death.



DANGER

### READ THE OPERATION MANUAL BEFORE OPERATION.

- **Do not** permit children to operate this equipment at any time. Do not permit others that have not read and understood the complete Operation Manual to operate this equipment.
- Keep all people and pets a minimum of 10 feet away from the work area when operating this lawn mower.
- **Do not** operate the lawn mower when under the influence of alcohol, drugs or medication.
- **Do not** allow a person who is tired or otherwise impaired or not completely alert to operate the lawn mower.



DANGER

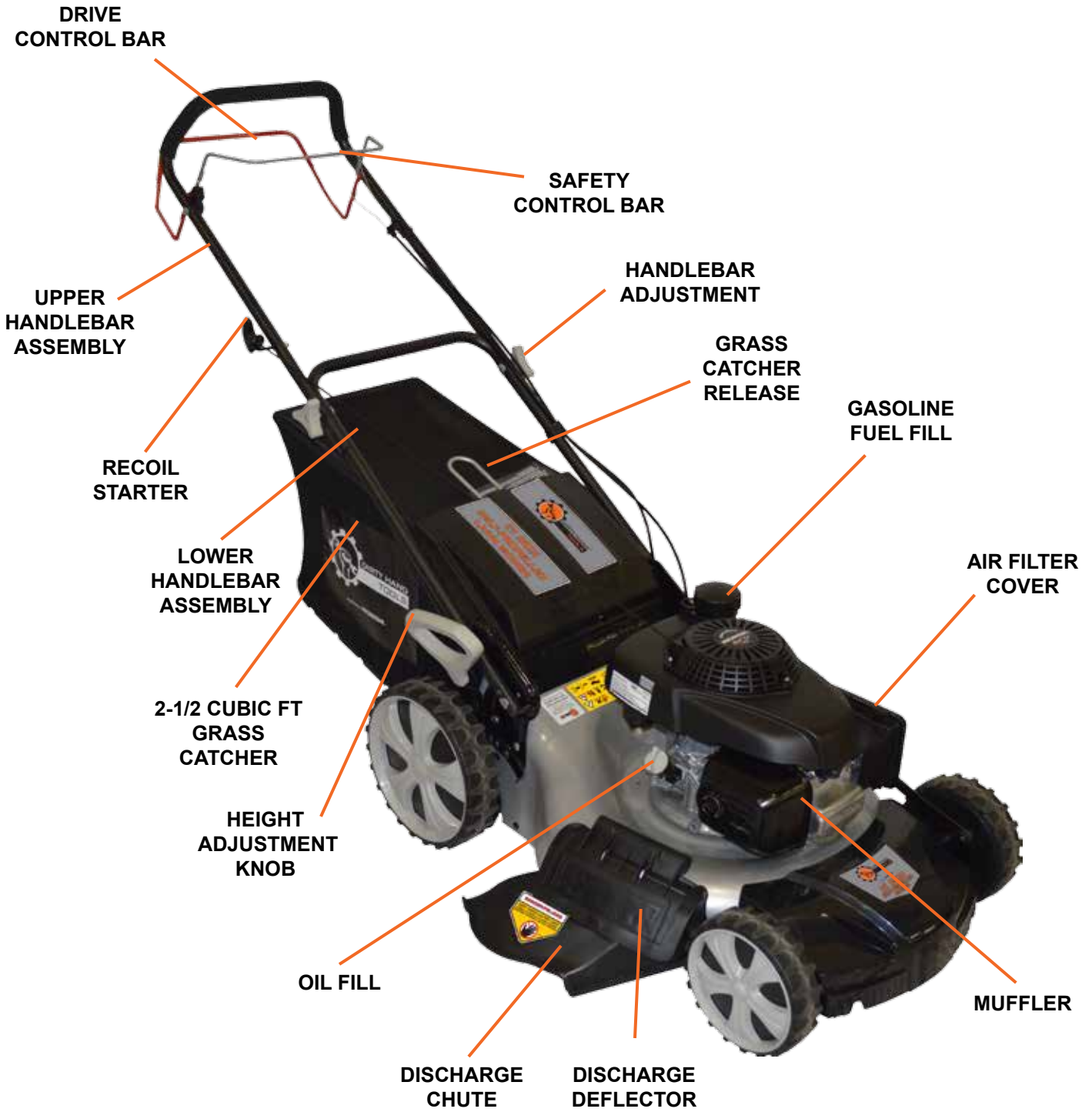
### CAREFULLY INSPECT THE AREA TO BE MOWED AND REMOVE ALL FOREIGN OBJECTS.

- Stop the lawn mower when crossing gravel or loose pebbles.
- Never operate the lawn mower on a slippery, wet, or muddy surface.
- Always operate the lawn mower from behind the handlebars. Never pass or stand on the discharge side of the machine when the engine is running or cutting blade is in motion.
- Never, under any conditions, remove, bend, cut, fit, weld, or otherwise alter standard parts on the lawn mower.
- If the lawn mower strikes a foreign object, makes unusual noise or vibrates excessively, stop the engine and allow to cool down. Detach the spark plug. Wear heavy gloves and use caution when handling the blade. Check for foreign objects on the underside of the mowing deck that may obstruct the blade's movement.
- Be cautious when using your lawn mower around fencing, wires, ropes, and hoses.
- Use caution when approaching blind corners, shrubs, trees, or other objects that may block your view.



# Unpacking and Setup

Your lawn mower is assembled at the factory and shipped with the handlebar folded forwards. Loosen both adjustment knobs and align the handlebar both sides to a comfortable operating position. Tighten the adjustment knobs securely.



# Filling with Gasoline and Oil



WARNING

## **ADD OIL BEFORE STARTING THE ENGINE** **The lawn mower is shipped without fluids installed.**

Keep the caps on the fuel and oil fills until you are ready to pour either gasoline or oil into the correct fill.

Please refer to your Engine Owner's Manual for detailed information on oil quantity and cold temperature oil specifications.

1. Place the machine on a level surface and initially add 1/2 of the SAE 30 high detergent oil into the oil fill and wait one (1) minute for the oil to settle.
2. Check the dipstick and continue adding a few ounces of oil at a time, rechecking the dipstick until the oil reaches the fill mark. Be careful not to overfill.
3. Fill the fuel tank with fresh, unleaded gas (min. 85 Octane), to 1/4" from the top of the fill neck to allow for expansion. Be careful not to overfill and reinstall the cap before starting the engine.



WARNING

## **ALWAYS FILL THE TANK WITH** **ENGINE OFF AND COOL.**

## **ALWAYS CHECK THE OIL LEVEL** **BEFORE OPERATING.**

Allow the engine to cool for at least two minutes before removing the fuel cap.

Before performing any adjustments or any other procedure or inspection, stop the engine, wait five minutes to allow parts to cool. Disconnect the spark plug wire, keeping it away from the spark plug. Contact with internal rotating parts will cause serious personal injury. Never put hands, face, feet, or clothing under the mower deck or discharge opening at any time.



# Operation



CAUTION

## CHECK THE ENGINE OIL LEVEL

**Check fuel level. Remove any debris from around the underside of the lawn mower.**

### Starting

1. Pull the safety control bar up towards the handlebar and continue to hold while pulling the recoil handle.
2. Grasp the recoil starter and slowly pull until you feel resistance. Let the cord retract a little bit and then pull the cord rapidly to start the engine. One or two pulls usually starts the lawn mower. *Releasing the safety control bar stops the engine.*

If the engine fails to start after several pulls of the recoil starter, allow the motor to cool down. Check the cause of hard starting; see the troubleshooting guide.

3. Pull the drive control bar towards the handlebar to move forwards. release the drive control bar to stop moving.

### Stopping the Engine

1. Releasing the safety control bar automatically stops the engine.



WARNING

**The lawn mower can easily throw debris at great velocity, which could cause personal injury or property damage. Do not run the mower over loose gravel, sand or debris that can be expelled.**

The lawn mower discharges cut material to the right. Always try to mow with the uncut tall grass or weeds on the left.

- Always check your work area before mowing and remove any debris that might tangle or damage the machine.
- If you do run into debris and the mower stops running or becomes tangled, turn off the engine and disconnect the spark plug wire before attempting to dislodge the debris.

### Adjusting the Cutting Height

1. Pull the height adjustment knob up or down to the desired cutting height.

### Attaching the Discharge Chute

1. Use the discharge chute to expel grass from the right side.
2. Pull upwards on the discharge deflector. The discharge chute attaches to the bars on the deflector when raised.

# Maintenance



WARNING

**Before performing any maintenance stop the engine, wait five (5) minutes to allow all parts to cool. Disconnect the spark plug wire, keeping it away from the spark plug.**

Regular maintenance is the way to ensure the best performance and long life of your machine. Please refer to this manual and the engine manufacturer's owner's manual for maintenance procedures.

## Maintenance Checklist

Maintenance Procedure	Before Each Use	Every 25 Hours of Use	Every 100 Hours of Use
Check engine oil level	X		
Check general equipment condition including nuts, bolts, welds, etc.	X		
Check the cutting blade for sharpness or for excessive wear	X		
Change the engine oil	The first time after 5 hours of use	X	
Replace the air filter cartridge.		X	
Replace spark plug			X

## Changing the Oil

NOTE: Drain the oil when the engine is warm. Warm oil drains quickly and completely.

1. For convenience, place the machine up on a wooden pallet or workbench.
2. Remove the oil cap/dipstick and position a suitable oil receptacle beside the oil fill tube.
3. Make sure to securely tighten the gas fill cap.
4. Using the handle of the trimmer/mower, tip the machine to drain the oil out through the oil filler tube into a suitable receptacle.

# Troubleshooting



WARNING

**BEFORE PERFORMING ANY MAINTENANCE PROCEDURE STOP THE ENGINE, WAIT FIVE (5) MINUTES TO ALLOW ALL PARTS TO COOL.**

**Disconnect the spark plug wire, keeping it away from the spark plug.**

PROBLEM	SOLUTION
<p><b>Recoil will not pull out or is difficult to pull.</b> <i>(Refer to the engine Owner's Manual)</i></p>	<ul style="list-style-type: none"> <li>• Check the engine oil level.</li> <li>• There may be an oil compression lock in the cylinder. Take out the spark plug; hold a rag over the spark plug hole and pull the recoil cord several times to blow out any oil in the cylinder. Wipe off the spark plug and reinstall it.</li> <li>• The recoil may be broken or jammed.</li> </ul>
<p><b>The engine will not start.</b></p>	<ul style="list-style-type: none"> <li>• Check for proper attachment of the spark plug wire.</li> <li>• Check that the engine has the right amount of clean oil. If the oil is dirty, change it following the procedure on page 10.</li> <li>• Use only fresh, clean, unleaded gas. If the gas is old, change it. Use a fuel stabilizer to keep gas longer than one month.</li> <li>• Check that the air filter is clean.</li> <li>• Make sure that the spark plug is clean. If the spark plug is dirty or cracked, change it. If it is oily, leave it out, hold a rag over the spark plug hole and pull the recoil cord several times to blow out any oil in the cylinder, then wipe off the spark plug and reinsert it.</li> </ul>
<p><b>Engine smokes.</b></p>	<ul style="list-style-type: none"> <li>• Check the oil level and adjust as needed.</li> <li>• You may be operating the machine on too great an incline.</li> <li>• Check the air filter and clean or replace if needed.</li> <li>• You may be using the wrong oil - too light for the temperature. Refer to your engine Owner's Manual for detailed information.</li> </ul> <p><b>Visit our web site at <a href="http://www.dirtyhandtools.com">www.dirtyhandtools.com</a> or call 1-877-487-8275 for assistance.</b></p>

# Warranty & Specifications

## IMPORTANT NOTICE

We, the manufacturer, reserve the right to change the product and/or specifications in this manual without notification. The manual is for information usage only and the pictures and drawings depicted herein are for reference only.

## Warranty Repair and Service

Do not return this product to the store for warranty issues or repair. Call our customer service department at **720-287-5182**, **1-877-487-8275**, or visit [www.dirtyhandtools.com](http://www.dirtyhandtools.com) for the location of the nearest service center.

**Record the information below for future reference.**

**Model No.** \_\_\_\_\_

**Serial No.** \_\_\_\_\_

**Date of Purchase** \_\_\_\_\_

**Place of Purchase** \_\_\_\_\_

SKU/Part No.	106461
Description	21 Inch Self Propelled Lawn Mower
Engine	4.4HP/160cc Honda GCV160 Engine* EPA/50 State Approved
Engine Speed	3100 rpm
Cutting Width	21 Inches
Cutting Height	1.18" - 3.15" (31 - 85mm)
Cutting Height Positions	7
Cutting Options	4 in 1
Catcher Volume	2.5 Cubic Feet
Wheel Size	7.5" dia. (front), 10.5" dia. (rear)
Dimensions	65"L x 30"W x 44"H (1651x762x1118mm)
Weight	88 Lbs. (40Kg)
Warranty	2 Year Limited Warranty/3 Year Engine Warranty

\*As rated by engine manufacturer

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