# **Operator's Manual**



Worldlawn Power Equipment, Inc. 422 Turnbull Canyon Road City of Industry, CA 91744 Toll Free Number: 1-866-9-mowers (1-866-966-9377)

### **Service Information**



### Worldlawn 33" Residential Mower

#### SERVICE AND REPAIR PARTS INFORMATION

If you have questions, problems, need an Owners or Parts Manual, please contact your local Worldlawn authorized dealer or call the Factory. When calling or writing, please provide the Model and Serial Numbers of your Mower.

#### WORLDLAWN POWER EQUIPMENT, INC.

Phone: (626) 934-8552 Fax: (626) 934-8162 Toll Free Number: 1-866-9-mowers (1-866-966-9377). 422 Turnbull Canyon Road City of Industry, CA 91744 U.S.A.

Web Site: http://www.worldlawnpower.com/

Hours: M-F 8 am to 5 pm (PST) Time

Some of the pictures will vary between models but they usually depict similar information.

#### **MODEL NUMBERS 33" MOWERS**

WY3309BS9 HP OHV I/C Recoil Start EngineWY3311BS11 HP OHV I/C Recoil Start Engine, OptWY3313BS13 HP OHV I/C Recoil Start Engine, Opt

Factory specified replacement parts for your Mower are available from either your local Worldlawn authorized dealer or by calling the Factory.

Contact your local Worldlawn or Briggs and Stratton authorized dealer or call the Factory where local laws require the Mower to have a Spark Arrester Muffler.

For Engine information, contact your nearest authorized Engine Service Dealer. Look in the Yellow Pages under "Engines-Gasoline." The Engine Warranty is covered by the Engine Manufacturer's Limited Warranty.

Record (See FIG. 1)

Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_

### **Table of Contents**

#### **RULES FOR SAFE OPERATION**

Equipment Safety and Training1
Preparation to Mow1
Operating the Mower1
MAINTENANCE
Maintenance and Storage2
Initial Assembly2
Blade Care2
Daily Maintenance2
MOWER OPERATION
Starting the Engine
Stopping the Engine
Engaging the Blades and Wheels
ADJUSTMENTS AND REPAIRS
Blade Replacement
Blade Spindle Belt
Blade Brake Pad Replacement
Blade Drive Belt
Transmission Drive Belt Replacement
Wheel Drive Belt Replacement
Wheel Brake Adjustment
Wheel Drive Control Adjustment6
Blade Drive Lever Adjustment
Cutting Height Adjustment7
ACCESSORY
Steel Grass Catcher
WARRANTY
Warranty Information8



# **Safety Information**

RULES FOR SAFE OPERATION

SAFETY PRECAUTIONS. IT MEANS...ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED.

#### EQUIPMENT SAFETY AND TRAINING

• **READ the OWNER/OPERATORS** Manual Carefully. Be thoroughly familiar with the controls and the proper use of the Mower.

• **NEVER** allow children to operate or ride on the Mower. Do not allow adults to operate the Mower without proper instruction.

• **KEEP** the area of operation clear of all persons, particularly small children and pets.

• **DO NOT** operate the Mower if under the influence of alcohol, medication or when tired or ill.

#### **PREPARATION TO MOW**

• **THOROUGHLY** inspect the area where the Mower is to be used and remove all stones, sticks, wires, bones and other foreign objects.

• **DO NOT** operate the Mower when barefoot or wearing open sandals. Always wear substantial footwear.

• **CHECK** the fuel before starting the engine. Do not fill the Gasoline Tank indoors, when the Engine is running or until the Engine has been allowed to cool for several minutes after running. Clean off any spilled gasoline before starting the engine.

• **DISENGAGE** the Operator Presence Controls and the Mower Blade Lever before starting the engine.

• **NEVER** make a height adjustment or any Mower adjustments while the engine is running.

• **NEVER** operate the Mower in wet grass. Always be sure of your footing; keep a firm hold on the handles and walk; never run.

#### **OPERATING THE MOWER**

• **ALWAYS** wear safety goggles or safety glasses with side shields when operating the Mower.

• **DO NOT** change the Engine Governor settings or overspeed the engine.

• **DO NOT** put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.

• **TEST** the operation of Operator Presence Controls before each use. If Blades rotate longer than three seconds after

the controls are released, stop the Engine and immediately contact your local Worldlawn authorized dealer or call the Factory for instructions. **DO NOT** use the Mower until the mechanism is repaired.

• **MAKING TURNS** The Mower is turned to the right by feathering the RH OPC and pulling the right hand grip to the left. Opposite for turning to the left.

• **WATCH** for traffic and **STOP** the Mower Blades when crossing gravel drives, walks or roadways.

• **MOW** only in daylight or in good artificial light.

• Always run the Engine at the fast speed setting for best mowing performance.

• **STOP** the Engine, after striking a foreign object, disconnect the Spark Plug Wire, thoroughly inspect the Mower for any damage and repair the damage before restarting and operating the Mower.

• If the Mower should start to vibrate abnormally, **STOP** the Engine, disconnect the Spark Plug Wire, and check immediately for the cause. Vibration is generally a warning of trouble.

• **STOP** the Engine whenever you leave the Mower, or during cleaning, repairing or inspecting. Make certain the Blades and all moving parts have stopped. Disconnect the Spark Plug Wire, and keep the Wire away from the Plug to prevent accidental starting.

• **MOW** across the face of slopes; never up and down. Exercise extreme caution when changing direction on slopes. Do not mow on slopes (with an incline of more than 15°.) Exceeding the maximum safe operating angle may cause tipping and loss of Mower control.

• **ALWAYS** mow with all Covers in place and the Discharge Chute in the down position except if an optional Grass Catcher is completely installed.

• **DO NOT** touch Engine parts which may be hot from operation. Allow parts to cool completely before inspecting, cleaning, adjusting, refueling or repairing the Mower.

• Shut off the Fuel Valve at the bottom of the Tank before transporting the Mower on a trailer, FIG.10. Failure to do so may cause flooding of the Carburetor due to road vibration.

1

# Maintenance



USE THE FOLLOWING MAINTENANCE PROCEDURES TO KEEP YOUR MOWER IN GOOD OPERATING CONDITION

#### MAINTENANCE AND STORAGE

• **CHECK** the Blade and Engine Mounting Bolts at frequent intervals for proper tightness.

• **KEEP** all Nuts, Bolts and Screws tight to be sure the equipment is in a safe working condition.

• **NEVER** store the Mower with gasoline in the Tank inside a building where fumes may reach an open flame or spark. Allow the Engine to cool before storing in any enclosure. Store gasoline in a cool, well vented area, and only in an approved container.

• Keep **MOWER** Blades sharp. Use Caution, wear gloves and eye protection when servicing and sharpening Blades.

• To reduce fire hazard, keep the Engine free of grass, leaves, debris and grease.

• Maintain 12-18 psi in the Front Caster Tires and 15-20 psi in the Rear Tires.

• Keep the Transmission Oil level at middle of site glass, use SAE 30. Drain and refill yearly--one pint FIG 13.

• Drain and refill the Engine Crankcase Oil every 25 hours, see FIG 8.

Grease all pivots daily, or more often as needed, depending on operating conditions.
 Use only Worldlawn<sup>®</sup> original equipment replacement

• Use only Worldlawn<sup>®</sup> original equipment replacement parts. "WILL FIT" parts could present a safety hazard and void the Warranty.

#### **INITIAL ASSEMBLY**

The Handlebars and Control Linkages may not be completely installed on the Mower. Attach the Handlebars with two bolts on each side as shown in FIG 8. Route the the Throttle Cable through the Transmisssion Cover and attach to the Engine as shown in FIG 1 and in the Engine Owner/Operator Manual. Each of the Control Rods must be connected as shown in FIG 2 & 10. Follow the instructions

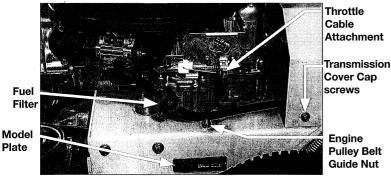


FIG 1 Intek Throttle Attachment

to properly adjust each of the controls. Attach the Discharge Chute FIG. 6. Attach the LH & RH Front Caster Wheel Arm Assembly to the Deck with 4 capscrews in each Arm. FIG.3 To prevent personal injury or Mower damage, do not attempt to start the Engine until the Handlebars and Control Rods are properly installed, checked for proper operation and you have read and understood the safety, controls and operation of the Mower.

A Shut off Engine and Disconnect the Spark Plug Wire, and keep the wire away from the plug to prevent accidental starting, before making any Inspections, Repairs or Adjustments (Except Carburetor)

**REFER** to the Engine Operating & Maintenance instruction Manual for the following Engine Service Information:

- Safety
- Starting and Stoping
   Maintenance
- Engine Information
- Maintenance
- Adjustments
- Fuel & Starting Info
- Parts and Service & Storage

WOR

Warranty Information

#### **Tipping Mower For Service**

When servicing the underside of the Mower, make sure Mower is securely blocked up to prevent it from falling and injurying anyone.

#### **BLADE CARE**

For best results keep Mower Blades sharp. The Blades can be sharpened with a few strokes of a file or dressed on a grinding wheel. DO NOT attempt to sharpen Blades while on the mower.

1. When sharpening the Blades take care to maintain Blade balance. Check for proper balance before reinstalling. Replace bent or damaged Blades.

**2.** To ensure good cutting performance, install new Blades at the start of each mowing season.

#### DAILY MAINTENANCE

**1.** Make sure all Nuts and Bolts are tight and Pins securely in place. Especially make certain the Engine and Blade Bolts/Nuts are tightened properly.

2. Pressure wash to remove grease, spilled oil, accumulated dirt and clippings from around Belts and underside of Mower.

**3.** Grease Fittings are provided on important parts requiring lubrication. See FIGS 3, 5 &11.

**SAFETY DECALS** Make certain that all Safety Decals on the Mower are kept clean and in good condition. For Replacement, please refer to the Parts Catalog that accompanied the Mower.

Follow the Engine Manufacturer's Instructions for the type of gasoline and oil to use.

Left and right sides of the Mower are taken as viewed from the operator station behind the Mower .





#### **OPERATION**

Your Worldlawn<sup>™</sup> Mower is equipped with a Blade Spindle Brake which stops the Blade rotation when both Operator Presence Controls have been released. DO NOT attempt to defeat the purpose of these controls.

NOTE: The Mower can be manually pushed or pulled by engaging the left Operator Presence Control (OPCs) with or without the engine running.

Wheel Brakes are applied automatically when both Operator Presence Controls (OPCs) are up (Disengaged) FIG 2.

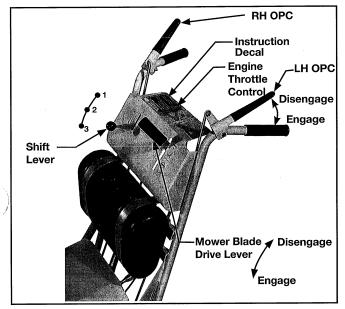


FIG 2 Mower Controls

#### **STARTING THE ENGINE**

Keep hands and feet clear of Mower Blades. Look behind you to be sure there are no obstacles before pulling the Recoil Starter Rope.

**1.** See that the Blade Drive Lever and both Operator Presence Controls are disengaged, FIG 2.

**2.** Move Engine Throttle Control to Choke position. When restarting a warm Engine move Throttle Control to a mid position.

**3.** Stand on the left side of the Mower and place one foot against the rear Tire.

**4.** Grasp the recoil starter rope handle, and pull slowly until resistance is felt. Then pull rapidly to overcome Engine compression and to prevent kickback and start the Engine, when started move Throttle Control to mid position.

#### **STOPPING THE ENGINE FIG 2.**

**1.** Release and disengage both Operator Presence Controls, Blade Drive Lever will disengage automatically.

**2.** Move Throttle Control to Slow position to slow down Engine speed, then move Throttle Control to Stop position.

### **Mower Operation**

#### **BLADES AND WHEEL DRIVES FIG 2.**

**1.** Squeeze and hold the LH Operator Presence Control engaged.

**2.** Slowly and firmly push the Mower Blade Drive Lever forward to engaged position. DO NOT RAM THIS LEVER.

**3.** Move Gear Shift Lever to select desired speed according to mowing conditions and terrain :

1st (Low)	1.85 mph
2nd (Medium),	2.65 mph
3rd (High) for travel	3.55 mph

**4.** To start forward movement, slowly squeeze the RH Operator Presence Control to engaged position.

A Stop forward travel before changing speeds. Release the right Operator Presence Control, shift to desired gear, again squeeze the right Operator Presence Control.

**5.** For reverse travel, release the right Operator Presence Control and manually pull the Mower backwards.

**6** . To stop the Blades and Wheels, release both Operator Presence Controls which applies the Blade Brake and both Wheel Brakes.

#### ADJUSTMENTS AND REPAIRS

Remove and reinstall the Belt Cover for any service of Spindles, Blades, Blade Brake Pad and Blade Drive Belts.

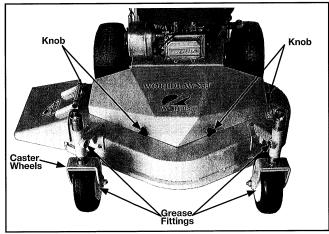


FIG 3 Belt Cover

 To remove the Belt Cover, loosen four Knobs, lift Belt Cover up and pull toward the front of the Mower.
 Reinstall Belt Cover in reverse directions and install four Knobs.

DO NOT OPERATE MOWER WITHOUT BELT COVER INSTALLED. FAILURE TO FOLLOW THIS INSTRUCTION COULD RESULT IN PERSONAL INJURY AND OR MOWER DAMAGE.



#### **BLADE REPLACEMENT FIG 4**

**1.**Remove belt cover and block up front of Mower. Remove Spindle Bolt, Belleville Washer, thick Flat Washer and Lock Nut.

**2.** Reinstall all parts in proper order. Be sure splined Spacer fits above the blade and the Flats in Blade are aligned with flats on the Spindle shaft. Torque to 35-45 ft. lbs.

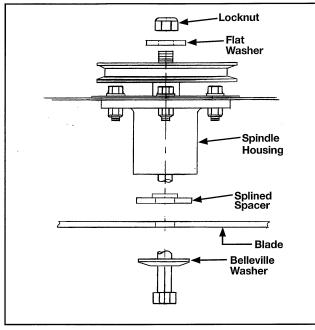


FIG 4 Mower Spindle & Blades

#### BLADE SPINDLE BELT FIG 5

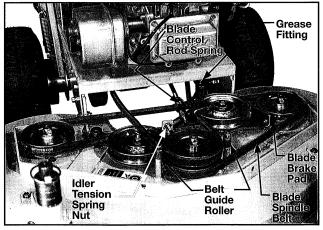


FIG 5 Blade Spindle Belt

**1.** Be sure Mower Blade Drive Lever and Operator Presence Controls are disengaged. FIG 2

**2.** Remove both center Spindle Pulley Belt Guide Rollers and remove the Blade Drive Belt from around center Pulley.

3. Remove Idler Tension Spring Lock Nut.

4. Remove old Belt or replace with a new Belt, route Belt around Pulleys as shown. Reinstall Blade Drive Belt and Belt Guide Rollers, tighten Spring Tension Lock Nut.
6. Recheck all Belt Guides for 1/8" clearance.

#### **BLADE BRAKE PAD REPLACEMENT FIG. 5**

**1.** Move Idler Assembly out of the way and remove hardware securing Blade Brake Pad.

**2.** Install new Pad, center the Pad in the Spindle Pulley groove, retighten Nuts.

**3.**Operate Controls to see that the Blade Brake Pad properly centers in the left Spindle Pulley groove.

**4.** Test operation of the Blade Brake system, to see that the Blade Brake stops Blade rotation within 3 seconds.

#### **BLADE DRIVE BELT FIG 6**

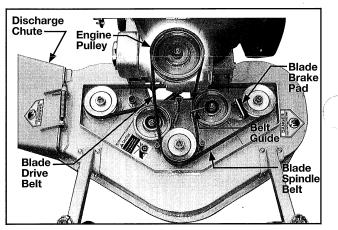


FIG 6 Blade Drive Belt

**1.** Be sure Blade Drive Lever and Operator Presence Controls are disengaged, FIG 2.

**2.** Remove both center Spindle Pulley Belt Guide Rollers, FIG 5, loosen and remove Belt Guide from Engine Pulley , nuts are shown in FIG 8.

**3.** Remove Blade Drive Belt and replace Belt, route Belt around Pulleys as shown.

**4.** Reposition Belt Guides to 1/8" clearance from tensioned Belt and tighten.

**5.** To adjust belt tension, tighten or loosen Lock Nuts on Blade Control Rod Spring FIG 5.

**6.** Operate the Mower Blade Drive Lever to see that the Belt Guides clear the pulleys and the Belt and that the Blade Brake functions properly.



#### **TRANSMISSION DRIVE BELT REPLACEMENT FIG 7**

**1.** Remove Engine Pulley Belt Guide FIG. 1 & 8 and Blade Drive Belt from Engine Drive Pulley. Idler Pulley is spring loaded.

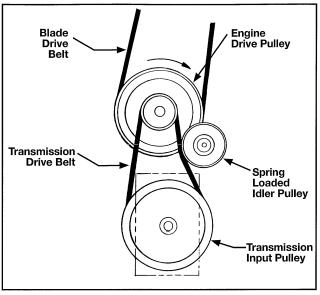


FIG 7 Transmission Drive Belt (As viewed from top of mower)

**2.** Install new Belt, reinstall Engine Pulley Belt Guide to give 1/8" minimum clearance.

#### WHEEL DRIVE BELT REPLACEMENT FIG 8

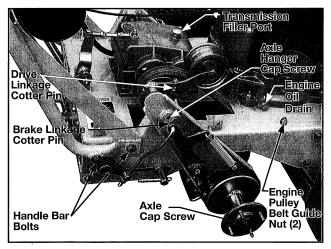


FIG 8 Wheel Drive Belts

 Raise and Securely block up rear Mower Frame so tires clear the ground and work from RH side of Mower
 Remove 4 Cap Screws and lift off Transmission Cover FIG 1. 3. Remove Axle Cap Screw and FW from Axle end.

**4.** Release tension on Brake Band by engaging, RH OPC, remove Brake Drum, and Wheel from Axle end.

5. Remove 3 Cap Screws.

6. Turn the Axle Housing and remove Wheel Drive Belt set.

**7.** Install new Belt set. Reassemble in reverse order. Check out proper operation of Wheel Drive System and reinstall Transmission Cover.

#### WHEEL BRAKE ADJUSTMENT FIG 9

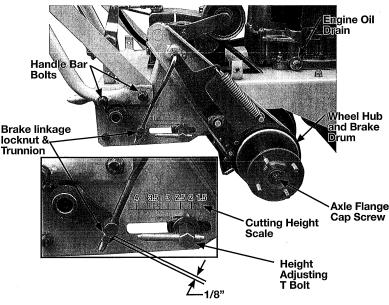


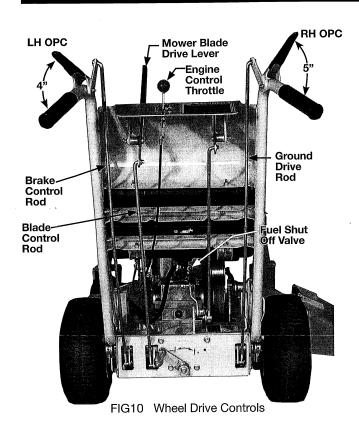
FIG 9 Brake linkage

**1.** This adjustment may be required if the Mower does not hold on a hill with the Operator Presence Controls disengaged or if the Brake(s) drag when both Operator Presence Controls are engaged.

**2.** With both OPC's disengaged, adjust Lock Nuts to 1/8" free travel between Nut and Trunnion.

**3.** Keep Brakes adjusted and balanced between right and left Rear Wheels to prevent Mower from dragging or pulling to one side.





#### WHEEL DRIVE CONTROLS ADJUSTMENT FIG 10

1. This adjustment is made after properly adjusting the Wheel Brake Linkage of 1/8".

2. Adjust Linkage to give LH OPC travel of 4" and RH OPC of 5" FIG. 10.

3. Remove cotter pin, and screw trunnion in or out to adjust OPC travel.

#### **BLADE DRIVE LEVER ADJUSTMENT FIG 10**

**1.** Stop Engine, wait for all parts to stop moving.

2. Engage left Operator Presence Control, engage Blade Drive Lever, release your hand from Blade Drive Lever, it should stay engaged. Release both Operator Controls Presence and the Blade Drive Lever must disengage.

**3.** If the Blade Drive Lever will not stay engaged: then, an adjustment must be made.

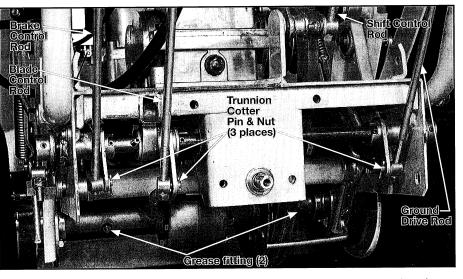


FIG 11 Blade Drive Lever Adjustment (rear shield removed to show linkage)

4. Have an assistant hold down the LH Operator Presence Control and hold the Blade Drive Lever in. Look inside the Center cutout at the rear of the Frame and make sure the Interlock Latch is fully engaged with the Drive Engage Lever.
5. If they are not fully engaged, improper operation or premature wear could result. To adjust, remove Cotter Pin and Blade Control Rod from the Blade Drive Lever, lengthen or shorten the Rod one turn and reinstall. Retest per paragraph 2 above. Repeat if necessary.

6. Adjust Blade Control Rod to within 1/4" of top of slot.7. When properly adjusted the Blade Drive Lever will disengage

when both Operator Presence Controls are released.



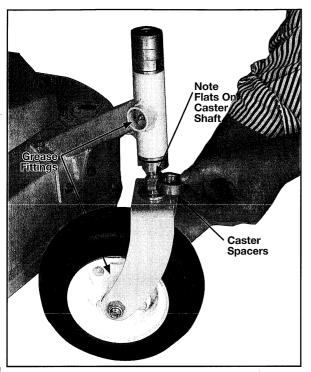
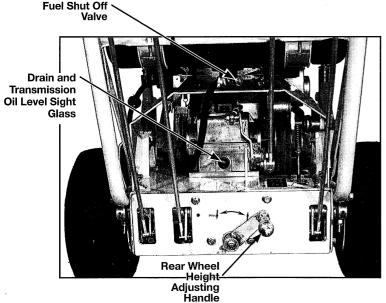


FIG 12 Repositioning Caster Spacers





#### **CUTTING HEIGHT ADJUSTMENT**

The cutting height can be adjusted from 1-1/2 to 4" in 1/2" increments by changing the height of the Mower Deck. One must adjust both the Caster Wheels and then the Rear Wheel height crank.

Always maintain a 1/8-3/16" (Blade cutting height pitch) lower at the front center Blade than at the back of either outside Blades.

### A Be sure ENGINE IS OFF and all Controls disengaged.

1. Raise and block front of Mower Deck, remove Snap Pin and Flat Washer, FIG 12. To raise height of cut, lower Caster Wheel Yoke 3-4", lift off Spacer from top and place on the underside of the Caster Wheel Bracket.

2. Rotate the Spacer to align with flat in the Yoke Shaft and slide the Spacer onto the Shaft.

3. No spacer at the bottom reflects a cutting height of 1/2". Each Spacer added to or removed from the bottom will adjust the cutting height 1/2". Reinstall Flat Washer and Snap Pin, remove blocking.

4. Make sure the same number of Spacers are positioned the same on both Caster Shafts.

5. To adjust the Rear Wheel settings refer to Fig 9. Loosen both Height Adjusting T-Bolts. Unlock the Rear Wheel Height Adjusting Handle Fig. 13. Rotate the Handle clockwise to raise and counterclockwise to lower the Rear Wheels. Align the pointer on the register mark which corresponds with the number of Caster Spacers on the bottom of the Caster Wheel Bracket.

#### # Spacer below **Cutting Height** Cutting Height desired Caster pivot Scale 1-1/2' 0 Front Mark 2" 1 2nd Mark 2-1/2" 2 3rd Mark 3" 3 4th Mark 3-1/2" 4 5th Mark 4" 5 6th Mark

#### CUTTING HEIGHT ADJUSTMENT CHART



### Warranty Information

#### LIMITED WARRANTY WORLDLAWN POWER EQUIPMENT, INC. 33" MOWER

Worldlawn Power Equipment, Inc, ("Worldlawn") warrants that the Worldlawn 33" Mower ("Mower") will be free from defects in material and workmanship for a period of one year commercial from the original date of purchase. During the warranty period, Worldlawn will repair or replace, at its option, any Mower or part thereof which is found to be defective in material or workmanship. This warranty specifically excludes wear items, including but not limited to, belts, blades, and tires. This warranty also specifically excludes parts covered by another manufacturer's warranty, which parts are covered only by that manufacturer's warranty.

This limited warranty extends only to the original retail purchaser ("Owner") of a Mower. It is not transferable. This warranty extends only to those Mowers purchased for private residential and commercial use. A Mower purchased for any other reason, for example as a rental unit, shall have a ninety (90) day warranty under the same terms and conditions as set forth herein.

Proof of purchase will be required to substantiate all warranty claims. All warranty work must be performed by an authorized Worldlawn Dealer. Any work done on or to the Mower by anyone other than an authorized Worldlawn Dealer, including the original purchaser, voids all provisions of this warranty except those provisions which limit Worldlawn's liability (as set forth below).

Any Mower or part thereof which, in Worldlawn's sole discretion, is deemed defective shall be repaired or replaced, at Worldlawns option, without charge for parts or labor. To take advantage of this warranty, the Mower must be returned to an authorized Worldlawn Dealer within the warranty period. The cost of delivering the Mower to the authorized Dealer and return delivery shall be the responsibility of the Owner. Worldlawn's sole responsibility with any claim made under this warranty is limited only to repairing or replacing the Mower or a defective part thereof, and no claim of breach of warranty shall be cause for recision, cancellation, or voiding the contract of sale of the Mower.

This warranty does not extend to any Mower or part thereof which has been misused, neglected, damaged, abused, not properly installed or maintained, altered or which has been operated in any way contrary to the operating instructions as specified in the Owner/Operator Manual. This Warranty does not extend to any repair or replacement made necessary by normal use. This warranty does not extend to the engine which is warranted separately by the engine manufacturer.

THE WARRANTY EXPRESSED HEREIN IS IN LIEU OF OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OR MERCHANTIBILITY OR FITNESS FOR A PARTICULAR USE, AND IS IN LIEU OF ANY AND ALL OTHER OBLIGATIONS OR LIABILITY ON WORLDLAWN'S PART.

UNDER ANY AND ALL CIRCUMSTANCES, WORLDLAWN'S TOTAL LIABILITY TO OWNER FOR ANY AND ALL CLAIMS, LOSSES OR DAMAGES, INCLUDING LOSS OF PROFITS, ARISING OUT OF ANY CAUSE WHATSOEVER, WHETHER BASED IN CONTRACT, NEGLIGENCE OR OTHER TORT, STRICT LIABILITY, BREACH OF WARRANTY OR OTHERWISE, SHALL IN NO EVENT EXCEED THE PURCHASE PRICE OF THE MOWER. IN NO EVENT SHALL WORLDLAWN BE RESPONSIBLE FOR SPECIAL, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES.

### Accessory

Steel Grass Catcher: Model # WY33-SGC (2.27 Bushel, Weight 23 lbs.



### Notes

:

< · · હ

9



#### WORLDLAWN POWER EQUIPMENT, INC.

Phone: (626) 934-8552 Fax: (626) 934-8162

Toll Free Number: 1-866-9-mowers (1-866-966-9377)

422 Turnbull Canyon Road City of Industry, CA 91744 U.S.A. Web Site: http://www.worldlawnpower.com/

© Copyright Worldlawn Power Equipment Inc.

Form No. 33102