Operator's Manual



WORLDLAWN®

WY42/48 Commercial Mower

2007-0 hor's



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OPERATOR'S MANUAL

This manual contains assembly ,operating, maintenance, adjustment and safety instructions for your WY42.WY48 ride-on lawn mower,

Before operating your mower, carefully read this manual in its entirety ,By following the operating, maintenance, adjustment and safety instructions, you will prolong the life of your mower, maintain its maximum efficiency and promote safe operation.

Keep this mower Owner's Manual with your unit when lent or transferred

Should this mower Operator's Manual become lost damage or illegible ,replace immediately ,Replacements may be ordered through our sales department or dealers .

If additional information is needed, contact our sales department or dealers

/ WARNING

POTENTIAL HAZARD

This product is a piece of power equipment

WHAT CAN HAPPEN

Failure to follow safe operating practices can result in serious operator injury or even death HOW TO AVIOD THE HAZARD

Keep all shields ,guards and safety devices (especially the grass discharge system)in place and in proper working condition.

Stop machine and wait for all moving parts to stop ,remove spark plug wires or remove key before adjusting ,servicing.or performing maintenance.,

If mower deck becames clogged, stop machine and wait for all moving parts to stop .remove spark wires or remove key before cleaning blockage .

Keep hands, feet, and clothing away from power driven parts,

Keep off mower unless seat platform is provided

Keep others off mower,

! WARNING

POTENTIAL HAZARD

Gasoline is harmful fatal if swallowed .Long-term exposure to vapors has caused cancer in laboratory animals .

WHAT CAN HAPPEN

Failure to use caution may cause serious injury or illness,

HOW TO AVIOD THE HAZARD

Avoid prolonged breathing of vapors.

Keep face away from nozzle and gas tank opening

Keep away from eyes and skin.

Never siphon by mouth.



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1. SAFETY

SAFETY ALERT SYMBOL

This **SAFETY ALERT SYMBOL** is used both in this manual and on the machine to identify important safety messages which must be followed to avoid accidents. This symbol means:

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

The safety alert symbol appears above information which alerts you to unsafe actions or situations and will be followed by the word DANGER, WARNING, or CAUTION.

! DANGER: White lettering/Red background. indicates an imminently hazardous situation which, f not avoided, ILL result in death or serious injury.

! WARNING : lack lettering/Orange background.

Indicates a potentially hazardous situation which, f not avoided, COULD result in death or serious injury.

: Black lettering/Yellow background. Indicates a potentially hazardous situation which, if not avoid, MAY result in minor or moderate injury.

TRAINING

- 1.2.1 Regard the Mower as a piece of power equipment and teach this regard to all who operate this unit.
- 1.2.2 Read the instructions carefully. Familiarize yourself with the controls and the proper use of the equipment.
- 1.2.3 Do not allow operation of this machine by untrained personnel. Never allow children, teenagers, or people unfamiliar with these instructions to use the mower. Local regulations may restrict the age of operator.
- 1.2.4 Avoid mowing while people, especially children, or pets, are nearby. Keep in mind that the

operator or user is responsible for accidents or hazards occuring to other people or their property.

PREPARATION

- 1.3.1 Evaluate the terrain to determine what accessories and attachments are needed to properly and safely perform the job. Only use accessories and attachments approved by manufacture.
- 1.3.2 The use of personal protective equipments, such as (but not limited to) protection for the eyes, ears, feet, and head is recommended.



POTENTIAL HAZARD

This machine produces sound levels in excess of 85 dBA at the operator's ear when in operation.

WHAT CAN HAPPEN

Exposure to sound levels of 85dBA or above for extended periods of time can cause hearing loss.

HOW TO AVOID THE HAZARD

Wear hearing protection when operating this machine.

- 1.3.3 While mowing, always wear substantial footwear and long trousers. Do not operate equipment when barefoot or when wearing open sandals.
- 1.3.4 Thoroughly inspect the area where the equipment is to be used and remove all stones, sticks, wires, bones, and other foreign objects which may damage the equipment or cause personal injury to operator or bystanders.



POTENTIAL HAZARD

Engine exhaust contains carbon monoxide, which is an odorless deadly poison.

WHAT CAN HAPPEN

Carbon monoxide can kill you.

HOW AVOID THE HAZARD

Do not run engine indoors or in a small confined area where dangerous carbon monoxide fumes can collect.



/!\ DANGER

POTENTIAL HAZARD

In certain conditions gasoline is extremely flammable and highly explosive.

WHAT CAN HAPPEN

A fire or explosion from gasoline can burn you, others, and cause property damage.

HOW TO AVOID THE HAZARD

Do not smoke while refueling, and stay away from an open flame or where gasoline fumes may be ignited by spark.

Refuel only outdoors.

Store gasoline in an approved container and keep it out of the reach of children.

Add fuel before starting the engine. Never remove the cap of the fuel tank or add fuel when engine is running or when the engine is hot.

Never fill the fuel tank so that gasoline level rises above a level that is 10(mm)below the bottom of the filler neck to allow for gasoline expansion and prevent fuel spillage.

If fuel is spilled, DO NOT attempt to start the engine. Move away from the area of the spill and avoid creating any source of ignition fuel vapors have dissipated.

Do not operate without entire exhaust system in place and in proper working condition.

!\DANGER

POTENTIAL HAZARD

In certain conditions gasoline is extremely flammable and highly explosive.

WHAT CAN HAPPEN

A static charge can ignite gasoline vapors. A fire or explosion from gasoline can burn you, others, and cause property damage.

HOW TO AVOID THE HAZARD

Purchase and store gasoline only in an approved container.

Always place gasoline containers on the ground away from your vehicle filling.

Do not fill gasoline containers inside a vehicle or on a truck or trailer bed because interior carpets or plastic truck bed liners may insulate the container and slow the loss of any static charge.

When practical, remove gas-powered equipment from the truck or trailer and refuel the equipment with its wheels on the ground.

If this is not possible, then refuel such equipment on a truck or trailer from a portable container, rather than from a gasoline dispenser nozzle.

If a gasoline dispenser nozzle must be used, keep the nozzle in contact with rim of the fuel tank or container opening at all times until fueling is complete.

/!\ WARNING

POTENTIAL HAZARD

Gasoline vapor can collect inside enclosed trailers and may be ignited by electrical sparks or hot engine/exhaust components.

WHAT CAN HAPPEN

Explosion and fire may occur, resulting in property damage, personal injury, and/or death.

HOW TO AVOID THE HAZARD

Provide adequate ventilation of any enclosed trailer to prevent build up of gasoline vapors, especially at floor level.

Refuel only outdoors, never inside an enclosed trailer.

Be sure all fuel tanks and gasoline storage containers have proper caps installed to prevent spillage and minimize vapor escaping into the trailer.

Do not place any equipment that is leaking gasoline in an enclosed trailer.

1.4 OPERATION

Although hazard control and accident prevention partially are dependent upon the design and



configuration of the equipment, these factors are also dependent upon the knowledge, maintenance and proper training of the personnel involved in the operation, transportation, maintenance and storage. It is the basic requirement for operators to use the mower safely.

! WARNING

POTENTAL HAZARD

Operating engine parts, especially the muffler, become extremely hot.

WHAT CAN HAPPEN

Severs burns can occur on contact.

Debris, such as leaves, grass, bush, etc. can catch fire

HOW TO AVOID THE HAZARD

Allow engine parts, especially the muffler, to cool before touching.

Remove accumulated debris from muffler and engine area.

Install and maintain in working order a spark arrester before using equipment on forest-covered, grass-covered, or brush-covered unimproved land.

WARNING

POTENTIALHAZARD

Hands, feet, hair, clothing, or accessories can become entangled in rotating parts.

WHAT CAN HAPPEN

Contact with rotating parts can cause traumatic amputation or severe lacerations.

HOW TO AVOID THE HAZARD

Do not operate the machine without guards, shields, and safety devices in place and working properly.

Keep hands, feet, hair, jewelry, or clothing away from rotating parts.

- 1.4.1 Give complete, undivied attention to the job at hand.
- 1.4.2 Mow only in daylight or good artificial light, keeping away from holes and hidden

hazards. NEVER carry passengers. DO not operate the mower when children or others are in the area!

1.4.3 When feasible, avoid operating the equipment in wet grass.

1.4.4 Use mower caution mowing and/or turning on slopes as loss of traction and/or tip-over could occur. The operator is responsible for safe operation on slopes.

/!\ DANGER

POTENTIAL HAZARD

Mowing on wet grass or steep slopes can cause sliding and loss of control.

WHAT CAN HAPPEN

Wheels dropping over edges, ditches, steep banks, or water can cause rollovers, which may result in serious injury, death or drowning.

HOW TO AVOID THE HAZARD

Do not mow slopes when grass is wet.

Do not mow near drop-offs or near water.

Do not mow slopes greater than 15 degrees.

Reduce speed and use extreme caution on slopes.

Avoid sudden turns or rapid speed changes.

- See inside the back cover to determine the approximate slope angle of the area to be mowed.
- Use a walk behind mower and/or a hand trimmer near drop-offs, ditches, steep banks or water. This area can be dangerous, see Figure 1.
- Progressively greater care is needed as the slope increases.
- Always avoid sudden starting or stopping on a slope. If tires lose traction, disengage the blades and proceed slowly off the slope.
- Avoid sudden starts when mowing uphill. Mower may tip backwards.
- Be aware that loss of traction may occur going downhill. Weight transfer to the front wheels may cause drive wheels to slip and cause loss of braking and steering.
- Watch for ditches. holes, rocks, dips, and rises that change the operating angle, as rough terrain



could overturn the machine.

- Use extreme care with grass catchers or attachments. These can change the stability of the machine and cause loss of control.
- Follow the manufacture's recommendations for wheel weight or counterweights to improve seability.
- 1.4.5 Use machine caution when backing up. LOOK BEHIND YOU!!
- 1.4.6 Stop the blades when crossing surfaces other than when transporting the mower to and from the area to be mowed.
- 1.4.7 Never operate the mower with defective guards, shields, or covers. Always have safety shields, guards, switches, and other devices in place and in proper working condition.
- 1.4.8 DO NOT change the engine governor setting or overspeed the engine. Operating an engine at excessive speed may increase the hazard of personal injury.
- 1.4.9 Disengage PTO before starting engine.
- 1.4.10 Start the engine carefully with feet well away from the blades.
- 1.4.11 Keep hands, feet, and clothing away from rotating parts while the mower is being operated.
- 1.4.12 Stop engine, wait for all mowing parts to stop and remove key:
- Before checking, cleaning or working on the mower.
- After striking a foreign object(inspect mower for damage and make repairs before restarting and operating the mower).
- Before clearing blockages.
- When ever you leave the mower.
- Stop the engine and wait for all moving parts to stop:
- Before refueling.
- Before dumping the grass catcher.
- 1.4.13 The fuel system is provided with a shut-off valve. The fuel shut-off valve is used to shut off the fuel:
- When the machine will not be used for a few

days.

- During transport to and from the job.
- When parked inside a building.
- Remove the fuel tank.
- 1.4.14 This mower was designed for one operator only. Keep all others away from mower during operation.
- 1.4.15 DO NOT mow with the discharge deflector raised, removed, or altered unless there is a grass collection system or mulch kit in place and working properly.
- 1.4.16 Be aware of the mower discharge and direct discharge away from others.
- 1.4.17 DO NOT operate the mower under the influence of alcohol drugs.
- 1.4.18 Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

1.5 MAINTENANCE AND STORAGE

- 1.5.1 For engine maintenance, follow the engine manufacture's recommendations precisely as stated in the engine manual.
- 1.5.2 Keep engine, engine area, and hydraulic pump area free from accumulation of grass, leaves, excessive grease, or oil and other debris, which can accumulate in this areas. These materials can become conbustible and may result in a fire.
- 1.5.3 Store fuel in a container specifically designed for this purpose in a cool, dry place.
- 1.5.4 Keep the mower and fuel container in locked storage to prevent children from playing or tamping with them.
- 1.5.5 Gasoline powered equipment or fuel containers should not be stored in a basement or any enclosed area where open pilot lights or heat appliances are present.
- 1.5.6 Maximum mowing results and safety can only be achieved if the mower is properly maintained and operated correctly.
- 1.5.7 Check all bolts frequently to maintain proper tightness.
- 1.5.8 Keep all guard, shields and all safety devices in place and in safe working condition.
- 1.5.9 Frequently check for worn or deteriorating

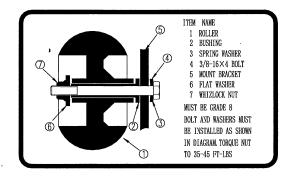


components that could create a hazard.

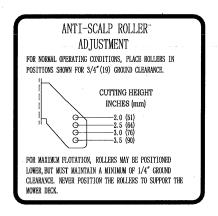
1.5.10 All replacement parts must be the same as or equivalent to the parts supplied as original equipment.

1.6 SAFETY SIGNS

- 1.6.1 Keep all safety signs legible. Romove all grease, dirt, and debris from safety signs and instructional labels.
- 1.6.2 Safety signs must be replaced if they are missing or illegible.
- 1.6.3 When new components are installed, be sure that current safety signs are affixed to the replaced components
- 1.6.4 New safety signs may be obtained from your authorized equipment dealer or distributor or from WORD PLANT-PROTECTING MACHINERY CO.,LTD.
- 1.6.5 Safety signs may be affixed by peeling off the backing to expose the adhensive surface. Apply only to clean, dry surface. Smooth to remove any air bubbles.
- 1.6.6 Familiarize yourself with the following safety signs and instruction labels. They are critical to the safety operation of your machine.



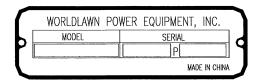
Location 3:On the Mower Deck(WY48)



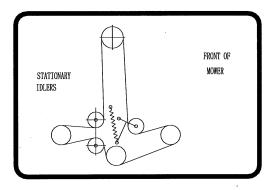
Location 4:On the Mower Deck(WY48)



Location 1:On Top of Mower Deck Belt Shields, Left and Right Sides



Location 2:On Bottom of Model Plate

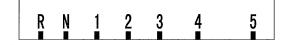


Location 5:On the Mower Deck(WY48)





Location 6:On the Mower Deck



Location 7:Throttle control on Bottom of Model Plate



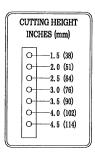
Location 8:On the Fuel Tank



Location 9:Top Front of RH Mower Deck(WY48)



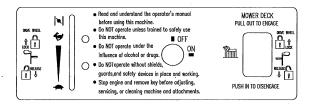
Location 10:Top Front of RH Mower Deck(WY42)



Location 11:On the Mower Deck



Location 12:Top Front of Console



Location 13:On the Console



Location 14:On the Bottom of Model Plate



Location 15:On the Mower Deck





Location 16:On the Bottom of Console



Location 17:Top Front of Cover(WY48)



Location 18:Top Front of Cover(WY42)

2.SPECIFICATIONS

2.1 Model Number:

WY4215KH WY4218KH WY4815KH WY4815KH

2.2 Engine:

- Model: Commercial
- Brand/Model: Kohler(U.S.A)CV15T,CV493T
- Horsepower: Kohler CV15T=15HP,CV493T=18HP
- Type:4 cycle gasoline engine, air cooled, single

cylinder, vertical shaft engine.

- Displacement: CV15T=426cc CV493T=490cc
- Governor:

CV15T=3600rpm(+/-50rpm),idle set at 1200rpm(+/-75rpm), CV18T=3600rpm(+/-50rpm),idle set at 1200rpm (+/-75rpm).

- Air Cleaner: Large capacity duel element with cyclonic-type air filter.
- Vent-pipe: With muffler.
- Starter: Electronic ignition with recoil starter.
- Fuel Pump Group: See manufacture's specification

2.3 Frame Assembly

- Front Frame: Rectangle tube 40*40*4mm
- Thickness:5mm steel.
- Fuel Tank:5 gallon seamless polyethylene.
- Drive Wheel: 13.0*6.50-6 two-ply pneumatic tubeless.
- Tires: 9*3.5 pneumatic tubeless.

2.4 Drive System

- Type: Belt drive with twin power belts for increased friction to pulley surface
- Transmissions :Peerless 5-speed transmission, Model #700-079
- Steering/Travel Control: Clutch/brake fingertip steering, key lock switch.
- Brakes:6"drum,band brake, one on each wheel.
- Safety Group: Hand actuated operator presence system with blade clutch and transmission interlock to engine kill.
- Forward Speed Range:0 to 6.0mph(0-9.6km/h)
- Reverse Speed Range:0 to 2.0mph(0-3.2km/h)

2.5 Cutter Deck

- Type: Out-front design with anti-scalp rollers.
- True Cutting Width:WY42=42.0"(106.7cm) WY48=48.0"(121.9cm)
- Blade engagement: Electric blade engagement clutch with control panel switch.
- Cutting Height Adjustment: Manual adjustment 1.5"(3.8cm) to 4.5"(11.43cm) in 0.5"(1.27cm) increments



- Cutter Blades: 5mm thick, WY42=there (3) 14.5" (36.8cm)blades, WY48=there(3)16.5"(41.9cm) blades.
- Cutter Deck Belts: B-section.

2.6 OPERATOR CONTROLS

- Key switch: It is on the control panel switch, Recoil starter has two positions, turn to "on" could start the engine, turn to "off" stop the engine. Electronic ignition model has there position, when starting turn to "start" position, then remove you hand.
- Throttle Control: Located on the control panel switch. Throttle is used to control engine speed.
 Moving throttle lever forward will increase engine speed and moving throttle lever to the rear will decrease engine speed.
- PTO Engagement Switch: PTO engagement switch is used to control blades engage and stop.
 Switch must be pulled out to engage the blades.
 Switch is pushed to stop the blades.
- Hand actuated operator presence system: The mower can be manually pushed or pulled by engaging the left operator presence control with or without the engine running.
- Steering Brake Lever: While squeezing the steering lever switch with both hands, release right and left neutral latched, replace right and left steering lever to make mower travel. When the steering levers are released, the mower will travel stright to make right turn, squeeze the steering lever RH. To turn left, squeeze the steering lever LH.
- Neutral Latch: Located bottom the handle bar. It is used to lock the steering brake lever when stoping.
- Gear shift lever :It is used to control the traveling speed.
- Fuel shut-off valve: The fuel shut-off valve is used to shut off the fuel when the machine will not be used for a few days, during transport to and from the jobsite, and when parked inside the building.

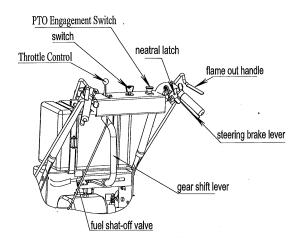


FIG1

2.7 Accessories:

- a) Grass catcher: 100L, see FIG2
- b) Mulching Blade: see FIG3
- c) Platform: see FIG4



FIG2

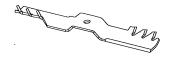


FIG3

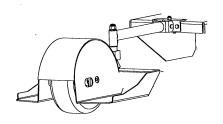


FIG4



2.8 Approximate Dimensions:

2.8.1 Width:

Model	WY42	WY48
No Deck	36. 2"	36.9"
No Discharge chute	43.8"	49. 2"
With Discharge chute	53. 1"	59"

2.8.2 Length:

- WY42=72.8" (185.0cm)
- WY48=74.6" (189.5cm)

2.8.3 Height:

- WY42=41" (105.0cm)
- WY48=41" (105.0cm)

2.8.4 Widthwise:

- Drive Wheel: 20.8" (84.5cm)
- Caster Wheel:31.5" (80cm)

2.8.5

- WY42=33.3 (84.5cm)
- WY48=35" (89cm)

2.8.6 Curb Weight:

- WY42 = 200 kg (440lbs)
- WY48 = 214kg (lbs)

2.9 Torque Requirements

- Cutter Housing Spindle Nut:190-197N.m
- Blade Mounting Bolt:156-163N.m
- Engine Deck/Front Frame Mount Bolts: 55-70N.
 m
- Anti-Scalp
- Roller Bolts:54-61N.m

3.ASSEMBLY INSTRUTIONS

3.1 Open Crate

Open crate. Remove loose parts (i.e., operator's manual, etc) from crate. Remove unit from crate, check crate thoroughly for loose parts.

3.2 Initial Assembly

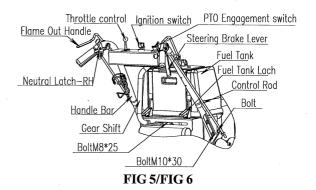
- Attach the handle with four Hex Hd Bolts, Nylon Insert Locknuts on each side as show in FIG5
- Route the Throttle Cable through the Transmission Cover and attach to engine as show in FIG5 and in the Engine Operator Manual.

Each of the control rods must be connected. Follow the instructions to properly adjust each of the controls.

- Connect the throttle wire to the engine as shown in the Engine Manual. Connect fuel Tank line to the Engine and OPC line to the engine. See FIG6
- Discharge Chute: Loosen two M8 nylon nuts attaching discharge chute. Lower the discharge chute into position. Retighten nylon nuts until chute is snug but can pivot freely. See FIG7
- Put the fuel tank into the position and lock it as show as in FIG 5

3.3 Service Engine

Engine is shipped without oil. Check oil level and fill to the appropriate lever with SAE10W-30 or 10W-40.



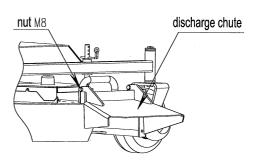


FIG 7

4 Operation Instructions

Read the instructions carefully before operate the mower.



4.1 PRE-START

- Fill fuel tanks. For best results use only clean, fresh regular grade unleaded gasoline with an octane rating of 87 or higher. Regular grade leaded gasoline may also be used; however, combustion chamber and cylinder head will require more frequent service; see Engine Owner's Manual, do not add oil to gasoline. Do Not overfill fuel tank.
- Open the fuel tank shut-off valve.
- Make sure you understand the controls, their locations ,their functions, and their safety requirements.
- Refer to Maintenance. Section 5, and perform all necessary inspection and maintenance steps.
- Check tire pressure in drive wheels. Proper inflation pressure for tires is 20psi(140kpa)
- Check tire pressure in caster wheels. proper inflation pressure for tires is 20psi(140kpa)

4.2 Starting Engine

- Brake must be engaged, the PTO switch disengaged, and the motion control levers on the neutral lock position.
- On a cold engine, place the throttle midway between the "SLOW" and "FAST" positions and push choke lever forward to the "ON" position. Turn ignition switch to the "start" position. Release the switch as soon as engine starts.

4.3 Mowing

 The PTO clutch push-pull switch engages the cutting blades. Be sure that all persons are clear of mower deck and discharge area before engine PTO.

IMPORTANT: Operator must be in seat before the PTO can be engaged. Set throttle to "midway" position. Pull outward on the switch to the "ROTATE" position. Accelerate to full throttle to begin mowing.

 Stopping PTO: Set the throttle to the "midway" position, push in on the switch to the "STOP" position and stopping the PTO.

! DANGER

POTENTIAL HAZARD

The rotating blades under the mower deck are dangerous.

WHAT CAN HAPPEN

Blade contact can cause serious injury or kill you.

HOW TO AVOID THE HAZARD

DO NOT put hands or feet under the mower or mower deck when the blades are engaged.

! DANGER

POTENTIAL HAZARD

An uncovered discharge opening will allow objects to be thrown in an operator's or bystander's direction. Also, contact with the blade could occur.

WHAT CAN HAPPEN

Thrown objects or blade contact can cause serious injury or death.

HOW TO AVOID THE HAZARD

Never operate the mower with the discharge deflector raised, removed, or altered unless there is a grass collection system or mulch kit in place and working properly.

4.4 Moving Operator

- Lock the steering levers (LH and RH), Remove throttle control to your need.
- Take the steering levers in hand, remove the lock. Then unloosen, the mower could travel.
- While squeezing the steering lever switch with both hands, release right and left neutral latched, replace right and left steering levers to make mower travel.

When the steering levers are released, the mower will travel stright to take right turn, squeeze the steering lever RH. To turn left, squeeze the steering lever LH.

4.5 Stopping engine: Bring unit to a full stop.

Disengage the PTO, move motion control levers to the neutral lock position and engage parking brake.



Rotate ignition switch to "OFF" position. Remove the key to prevent children or other unauthorized persons from starting the engine.; Close fuel shut-off valve when the machine will not be used for a few days, when transporting, and when the unit is parked inside a building.

5.MAINTENANCE&ADJUSTMENTS

! WARNING

POTENTIAL HAZARD

While maintenance or adjustments are being made, someone could start the engine.

WHAT CAN HAPPEN

Accidental starting of the engine could seriously injure you or other bystanders.

HOW TO AVOID THE HAZARD

Remove the key from the ignition switch and pull the wire(s) off the spark plug(s) before you do any maintenance. Also push the wire(s) aside so it does not accidentally contact the spark plug(s).

! WARNING

POTENTIAL HAZARD

The engine can become very hot.

WHAT CAN HAPPEN

Touching a hot engine can cause severe burns.

HOW TO AVOID THE HAZARD

Allow the engine to cool completely before service or making repairs around the engine area.

5.1PERIODIC MAINTENACE

5.1.1Check the engine oil level:

Service Interval: Daily

- Stop engine, wait for all moving parts to stop and make sure unit is on a level surface.
- Check with engine cold.

- Clean area around dipstick. Remove dipstick and wipe oil off. Reinsert te dipstick. Do not screw into place. Remove the dipstick and read the oil level.
- If the oil level is low, add oil to bring the oil level up to the "FULL" mark on the dipstick. Use oil as specified in the Engine Owner's Manual.

IMPORTANT:DO NOT operate the engine with the oil level below the "LOW" or "ADD" mark on the dipstick, or over the "FULL" mark.

5.1.2Clean engine cooling system:

Service Interval: Daily or more often in dry conditions

! CAUTION

POTENTIAL HAZARD

Excessive debris can cause the engine and hydraulic system to overheat.

WHAT CAN HAPPEN

Excessive debris around the engine cooling air intake and inside of the pump compartment can create a fire hazard.

HOW TO AVOID THE HAZARD

Clean all debris from around the engine and hydraulic pumps daily.

- a) Stop engine, wait for all moving parts to stop, and remove the key.
- b) Clean all debris from rotating engine air intake screen and from around engine shrouding.

5.1.3 Clean grass build-up under deck.

Service Interval: Daily

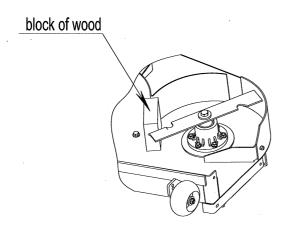
- Stop engine, wait for all moving parts to stop, and remove key.
- Clean out any grass build-up from underside of deck and in discharge chute.

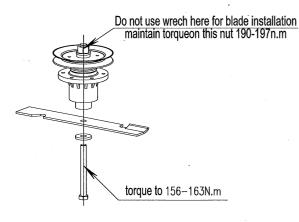
5.1.4 Check mower blades.

Service Interval: Daily



- Stop engine, wait for all moving parts to stop, and remove the key.
- Lift deck.
- Inspect blades and sharpen or replace as required.
- Re-install the blades(if they were removed)by placing a block of wood between the front or rear baffles and the blade then torque the blade bolts to 115-120ft.lbs(156-163 N-M).Be sure the spring disk washer cone is installed toward the bolt head.(See Figure 7).





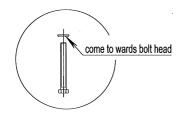


Figure 7

/! CAUTION

POTENTIAL HAZARD

Operating a mower deck with loose or weakened blade bolts can be dangerous.

WHAT CAN HAPPEN

A loose or weakened blade could allow a blade rotating at a high speed to come out from under the deck, causing serious injury or property damage.

HOW TO AVOID THE HAZARD

DO NOT lubricate the threads of the bolt or spindle before assembly.

Torque the blade bolt to 115-120ft.lbs(156-163 N-M).

5.1.5 Check safety interlock system.

Service Interval: Daily

- Check starting circuit. Starter Should crank with parking brake Engaged, PTO Disengaged and motion control levers moved out in the Neutral Lock position. start Parking brake engaged, PTO Engaged and motion control levers in the Neutral Lock position-starter Must Not Crank.
- Try to start with Operator In Seat, parking brake Enaged, PTO Disengaged, and the Left Motion Control Lever In, starter Must Not Crank, repeat again with the Right Lever In, then with Both Levers In-starter Must Not Crank.
- Check kill circuit. Run engine and hands left the throttle control, engine must stop in 3 second

NOTE: If machine does not pass any of these tests, do not operate. Contact your authorized WORLDLAWN POWER EQUIPMENT SERVICE DEALER. It is essential that operator safety mechanisms be connected and in proper operating condition prior to use for mowing.



5.1.6 Check for loose hardware.

Service Interval: Daily

- Stop engine, wait for all moving parts to stop, and remove key.
- Visually inspect maheine fro any loose hardware or any other possible problem. Tighten hardware or correct the problem before operating.

5.1.7 Service air cleaner.

Service Interval:50 hrs.

More often under severe conditions. See Engine manual for additional information.

- Stop engine, wait for all moving parts to stop, and remove the key.
- Loosen retaining clips and remove air cleaner compartment cover.
- Remove paper element. Check the condition of the paper element. Replace if dirty, bent or damaged.
- Do NOT wash or use pressurized air to clean paper element or inner element.

5.1.8 Change engine oil.

Service Interval: 100 hrs.

NOTE: Change oil and filter after first five(5)hrs. of operation.

- Stop engine, wait for all moving parts to stop, and remove key.
- Drain oil while engine is warm from operation.
- Replace the oil filter Every Other oil change. Clean around oil filter and unscrew filter to remove. Before reinstalling new filter, apply a thin coating of oil on the surface of the rubber seal. Turn filter clockwise until rubber seal contacts the filter adapter then tighten filter an additional 2/3 to 3/4 turn.
- Clean around oil fill cap and remove cap. Fill to specified capacity and replace cap. Use oil recommended in engine owner's manual. DO NOT overfill.
- Start the engine and check for leaks. Stop engine and recheck oil lever.

5.1.9 Check tire pressures:

Service Interval:40hrs.

Stop engine, wait for all moving parts to stop, and remove key.

- Check tire pressure in drive tires.
- Inflate drive tires to 20psi(140kPa).
- Check tire pressure in Caster tires.
- Inflate caster tires to 20psi(140kPa).

5.1.10 Check condition of belts:

Service Interval:40hrs.

- Stop engine, wait for all moving parts to stop, and remove key.
- Check under engine deck to check pump drive belt
- Remove left and right belt shields on deck and lift out floor pan to inspect deck drive belt.
- See Sections 5.2.3 and 5.2.4, for belt adjustment.

5.1.11 Lubricate grease fitting:

• Service Interval: Refer to chart.

Stop engine, wait for all moving parts to stop, and remove key. See the figure 8.

LUBRICATION CHART,

FITTING	INITIAL	SERVICE		
LOCATIONS	PUMPS	INTERVAL		
1	1	50hrs		
2	1	100hrs		
3	1	50hrs		
4	1	200hrs		
5	1	100hrs		



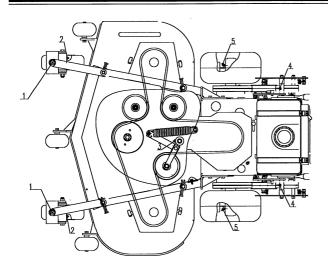


figure 8.

5.2 ADJUSTMENTS

IMPORTANT: Disengage PTO, shut off engine, wait for all moving parts to stop, and remove key before servicing, cleaning or making adjustments to the unit.

5.2.1 Cutting Height Adjustment.

- Stop machine and move drive levers out to neutral lock position.
- Disengage PTO.

NOTE: When changing cutting height positions, always come to a complete stop and disengage the PTO.

- Insert height adjustment pin into hole corresponding to desired cutting height and install hairpin cotter. See decal on deck lift plate. Move lever out of transport position and down onto height adjustment pin to mow at selected height.
- Adjust anti-scalp rollers for Normal Operating Conditions. Stop engine, wait for all moving parts to stop, and remove key. Place rollers in one of the Position shown in Figure 8.Rollers will maintain 3/4 in.(19mm)clearance to the ground to minimize gouging and roller wear or damage. For Maximum Deck Flotion, place rollers one hole position lower. Rollers should maintain 1/4 in.(6.4mm)minimum clearance to ground. Do

Not adjust rollers to support the deck. Be sure bolt is tightened properly or loss of anti-scalp roller may result.

5.2.2 Mower Deck Belt Adjustments

WY48: Self-tensioning-No adjustment necessary.
WY42 (See figure 10): Remove the belt cover. Adjust the mower belt tension gauge. The blade drive
Lever is engaged, tension the mower belt, and adjust the belt so that the belt moves 1/4" with10
Pounds of pressure. Adjust the tension by tightening or loosening the Connecting rod nut.

WARNING: Be sure engine is off before removing belt cover.

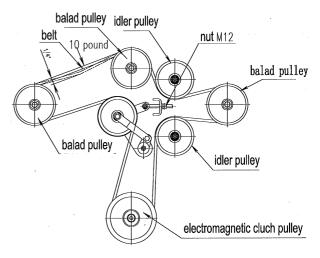


figure 9

5.2.3 Transmission Drive Belt

Transmission drive belt is on the underside of the engine frame weldment, adjust the belt moves 1/4" with 10 pounds of pressure, adjust the tension by moving transmission drive idler pulley.

WARNING: Shut off engine and disconnect the spark

plug wire before adjusting the belt.



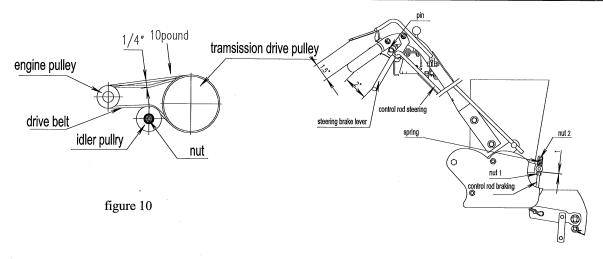


figure 11

5.2.4 Drive Control Adjustments

- The drive control is a system of interconnected machine element made up of steering and braking functions, that is to say, one steering lever applies to neutral latch lock position or neutral latch unlock position. When two steering levers are in neutral lock position, the power is disengaged. To brake, adjust brake lever and control rod beside the mower of the same strength.
- Adjusting control rod: Remove hair pin on the top of control rod, pull out the control rod from steering lever, turn the control rod so that the length of two control rods is same, reinstall all parts in proper order.
- Adjusting brake lever: Loosen or tighten nylon insert locknut at the bottom of brake lever to adjust the length of the brake lever. See figure 11

6 TROUBLE SHOOTING

6.1 MOWER PULLS LEFT OR RIGHT (W/LEVERS FULLY FORWARD).

Check air pressure in tires;20psi (140kpa) /drive,20psi (140kpa) /pneumatic casters.

6.2 MOWER CUTS UNEVENLY.

- Check air pressure in tires;20psi (140kpa) /drive, 20psi (140kpa) /pneumatic casters.
- Check deck leveling (See Adjustments Section 5.2.2)
- Check blades tip to tip for straightness

Note: The front of the mower deck will be approximately 6.4mm lower than the back of the mower deck, This is the "rake" of the deck.

6.3 ENGINE WILL NOT START

- Make sure there is fuel in the fuel tank and that the fuel valve is open.
- Check that the PTO is disengaged.
- Check that the spark plug wires are properly connected.
- Make sure the parking brake is set and motion control levers are moved out(neutral lock position).
- Check for loose or faulty wiring connections.



Check for corrosion at all wiring connections.
 Even minor corrosion may cause a faulty connection.
 Clean connector terminals thoroughly with electrical contact cleaner, apply dielectric grease and reconnect.

NOTE: After carefully checking the above steps, attempt to start the engine. If it does not start, contact your authorized machine service dealer.

IMPORTANT: It is essential that all operator safety mechanisms be connected and in proper operating condition prior to mower use.

When a problem occurs, do not overlook the simple causes. For example, starting problems could be caused by an empty fuel tank.

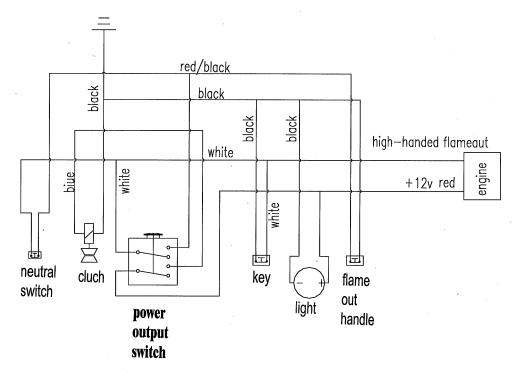
The following table lists some of the common causes of trouble. Do not attempt to service or replace major items or any items that call for special timing of adjustments procedures. Have this work done by your Engine Service Dealer.

- 1→NO FUEL
- 2→IMPROPER FUEL
- 3→DIRT IN FUEL LINE
- 4→DIRTY AIR FILTER
- 5→FAULTY SPARK PLUG
- 6→ENGINE OVERLOADED
- 7→BLOCKED FUEL FILTER
- 8→INCORRECT OIL LEVER

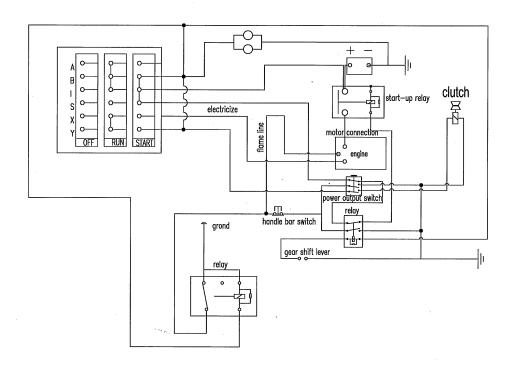
ENGINE TROUBLESHOOTING TABLE

Will not Start	1		3	4	5	6	7	
Hard starting	1	2	3	4	5	6	7	
Stops suddenly	1		3	4		6	7	8
Lacks power		2	3	4	5	6	7	8
Operates erratically		2	3	4	5	6	7	
Knock or pings		2				6		
Skin or misfires		2	3	4	5			
Backfires			3	4	5	6		
Overheats			3	4		6		8
High fuel consumption				4	5	6		





Recoil Diagram



Electrical diagram

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