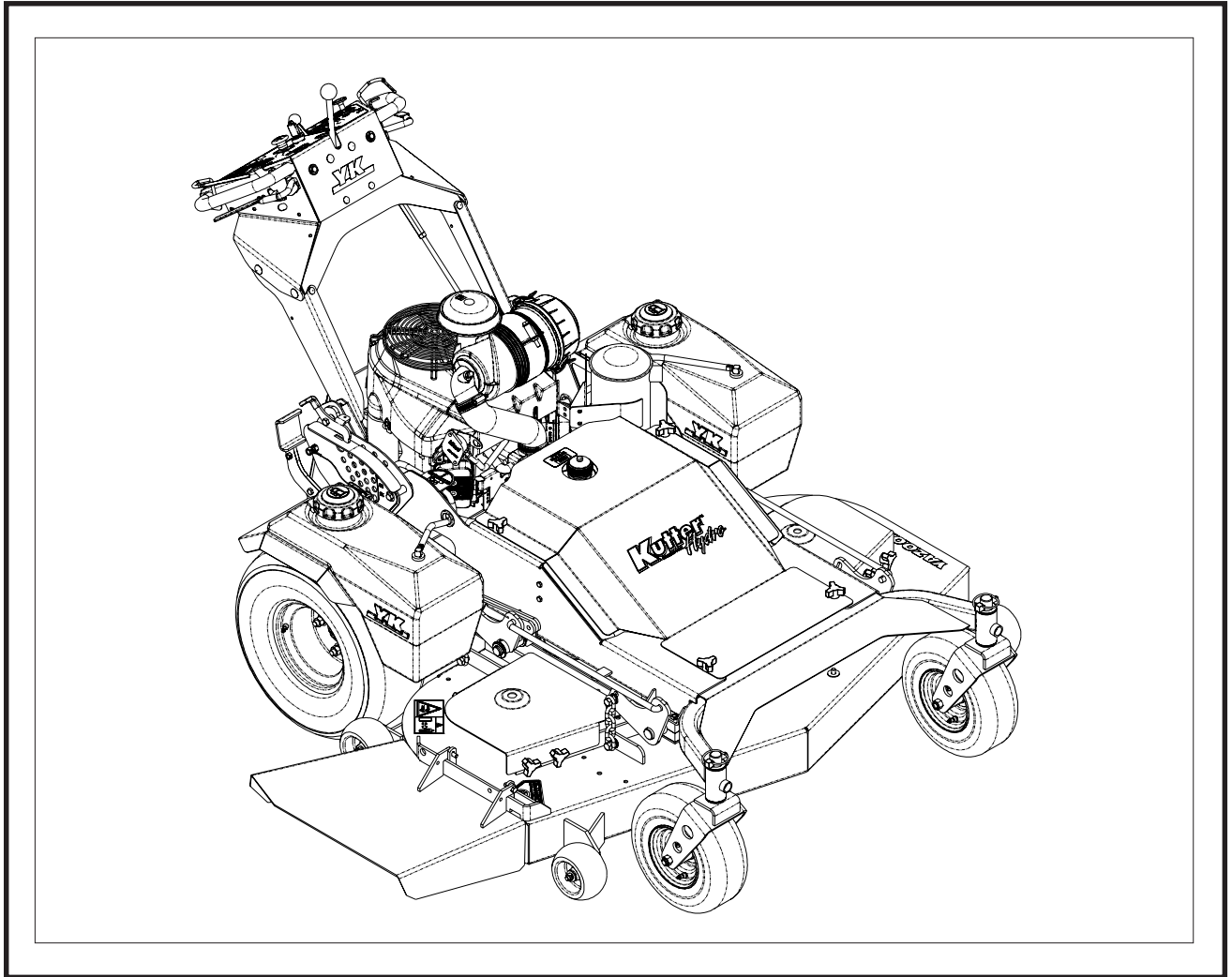


YAZOO / KEES



Operators Manual

Models:
KKFW48171
KKFW52211

Thank you for buying a **Yazoo/Kees!** Before operating your new mower, read, understand and follow the important safety instructions and the other instructions contained in this manual. Lawnmowers and all power equipment, can be potentially dangerous if used improperly. **SAFETY REQUIRES GOOD JUDGEMENT, CAREFUL USE IN ACCORDANCE WITH INSTRUCTIONS AND COMMON SENSE.**

Congratulations on the purchase of your **Yazoo/Kees** mower. This manual has been prepared for the owners and operators of the floating deck walk-behind hydro commercial mowers. Read, understand and follow the safety and operating instructions.



WARNING

Failure to follow cautious operating practices can result in serious injury to the operator or other persons. The owner must understand these instructions, and must allow only trained persons who understand these instructions to operate the mower. Each person operating the mower must be of sound mind and body and must not be under the influence of any mind altering substance.



CAUTION

1. Keep all shields, guards and safety devices in place and in proper working condition.
2. Stop engine and remove spark plug wires or remove key before adjusting, servicing, or performing maintenance.

TECHNICAL ASSISTANCE

If you have any questions pertaining to your mower contact your dealer. To locate the nearest dealer please call 1-877-368-8873 or for more information go to our web site at **www.yazookees.com**.

For technical assistance please write: Yazoo/Kees, 700 Park Street, Beatrice, NE 68310 or call: 1-877-368-8873.

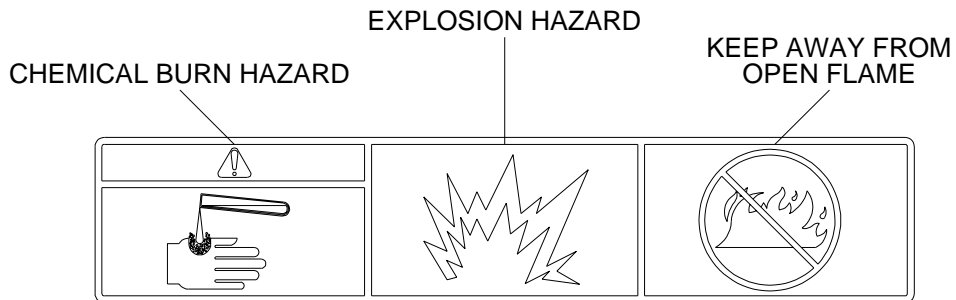
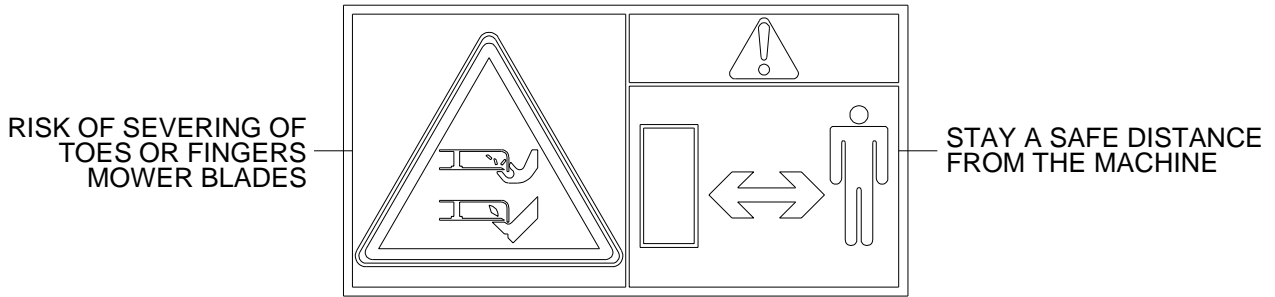
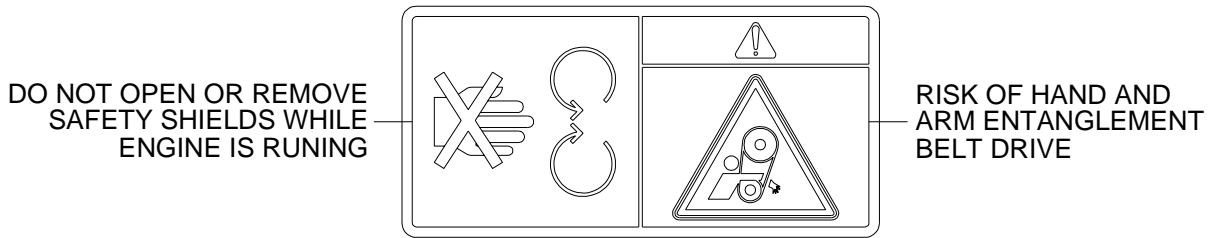
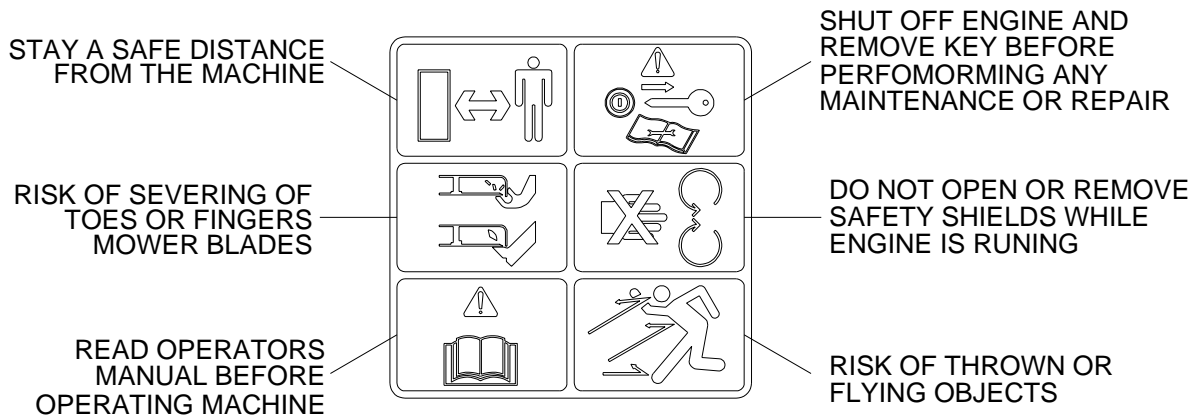
WARNING: Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Continuous dedication to improve our products require that specifications and design are subject to change without notice.

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SAFETY DECALS



SAFETY

TRAINING:

1. Read this manual carefully and question your dealer if something is not clear.
2. Be thoroughly familiar with the controls and proper use of the equipment.
3. Never allow children, teenagers, or people unfamiliar with these instructions to use the mower.
4. Do not mow while people, particularly children, or pets are nearby.

PREPARATION:

1. The use of personal protective equipment such as (but not limited to) protection for the eyes, ears, feet and head is recommended.
2. Never operate the mower without proper guards, covers, safety switches and devices in place and properly functioning. Inspect these items daily for their condition and proper operation. If the condition or operation of any of these devices is questionable they must be replaced or repaired before using the mower.
3. Thoroughly inspect the area to be mowed and remove all stones, sticks, wire and other debris that may be thrown by the mower. Also note or mark other obstacles such as holes, stumps, etc..
4. Do not operate the mower when barefoot or wearing open shoes. Always wear substantial footwear and long pants.
5. Fill gas tank before starting mower. DO NOT SMOKE near gasoline containers. Do not fill gas tank indoors or when engine is hot or running. Clean off any spilled gasoline before starting the mower.

OPERATION:

1. Mow only in daylight or good artificial light.
2. Do not operate the mower in wet grass if possible.
3. Mow across slopes. Use extreme caution when mowing or turning on slopes. Always turn to the downhill side. **Do not** mow excessively steep slopes (**mower may tip over and cause injury or death**).
4. Use caution when backing up.
5. Stop the blades when crossing surfaces other than grass; or when traveling to and from the area to be mowed.
6. Never operate the mower with defective, broken or excessively worn parts. Keep all guards, shields, and safety devices in place and in proper working order.
7. Do not change the engine governor settings or over speed the engine. Operating the engine at excessive speeds will increase the hazard of injury and can severely damage your machine.
8. Keep hands, feet and clothing away from rotating parts when operating mower.
9. Stop the blades and engine before leaving the operators position for any reason.
10. Never make adjustments to the mower while engine and/or blades are running.
11. After striking a foreign object, stop mower and remove key. Inspect the mower for any damage and repair it immediately before continuing to mow.
12. Never operate this equipment in an enclosed or confined area without proper ventilation of the engine exhaust.
13. Do not allow any passengers to ride on the mower. Keep others away from the mower when in operation.

SAFETY

TRANSPORTATION:

Turn off fuel valve and strap mower to trailer.

MAINTENANCE:

1. Keep all nuts, bolts and screws tight to keep mower in safe operating condition.
2. Engine maintenance should comply with engine manufactures specifications. See the engine manual for specifications.
3. Never store the mower with gas in the tank inside a building where fumes can reach an open flame or spark.
4. To reduce the risk of fire, keep the mower free of grass, leaves and excessive grease or oil.
5. Have your mower inspected and serviced each year by an authorized **Yazoo/Kees** dealer.
6. Use only authentic **Yazoo/Kees** replacement parts to insure the safety and quality of your mower is maintained.
7. Safety decals should be replaced if they are missing or illegible. Decals can be purchased from your **Yazoo/Kees** dealer.
8. The hydraulic system including all hoses and fittings should be checked frequently for wear or leaks. Never check for leaks with your hands, use a piece of cardboard or wood. Hydraulic oil under pressure could be injected into your body and must be surgically removed within a few hours.

EQUIPMENT SETUP AND ADJUSTMENTS

1. Uncrate mower
2. Cut the plastic wire ties holding the operator presence levers down.
3. Check tire pressure in all four tires. (15 PSI in all tires)
4. Check engine oil with dipstick. Add if needed per engine manufactures specifications.(See engine manual)
5. Check hydraulic oil level. Should be an 1.0" below the bottom of the fill tube.
6. Mount the discharge chute to the front deck using the fasteners provided on the deck.

CUTTING HEIGHT

1. Cutting height ranges from 1 1/4" to 4 3/4" in 1/4" increments.
2. Cutting height is changed by pushing the foot pedal (Figure 1) down until the transport lock lever securely latches into the slot on the top surface of the height plate.
3. At this time, move the pin in the height plate to the desired cutting position and reinsert hairpin.
4. After the pin is placed in the desired hole, press down on the foot pedal and remove the transport lock lever from the slot. Gently remove pressure from the foot lever allowing the lift arm to contact the pin in the height plate.

NOTE: To achieve the best quality cut, the blades should be level with the ground or slightly tipped down in the front.

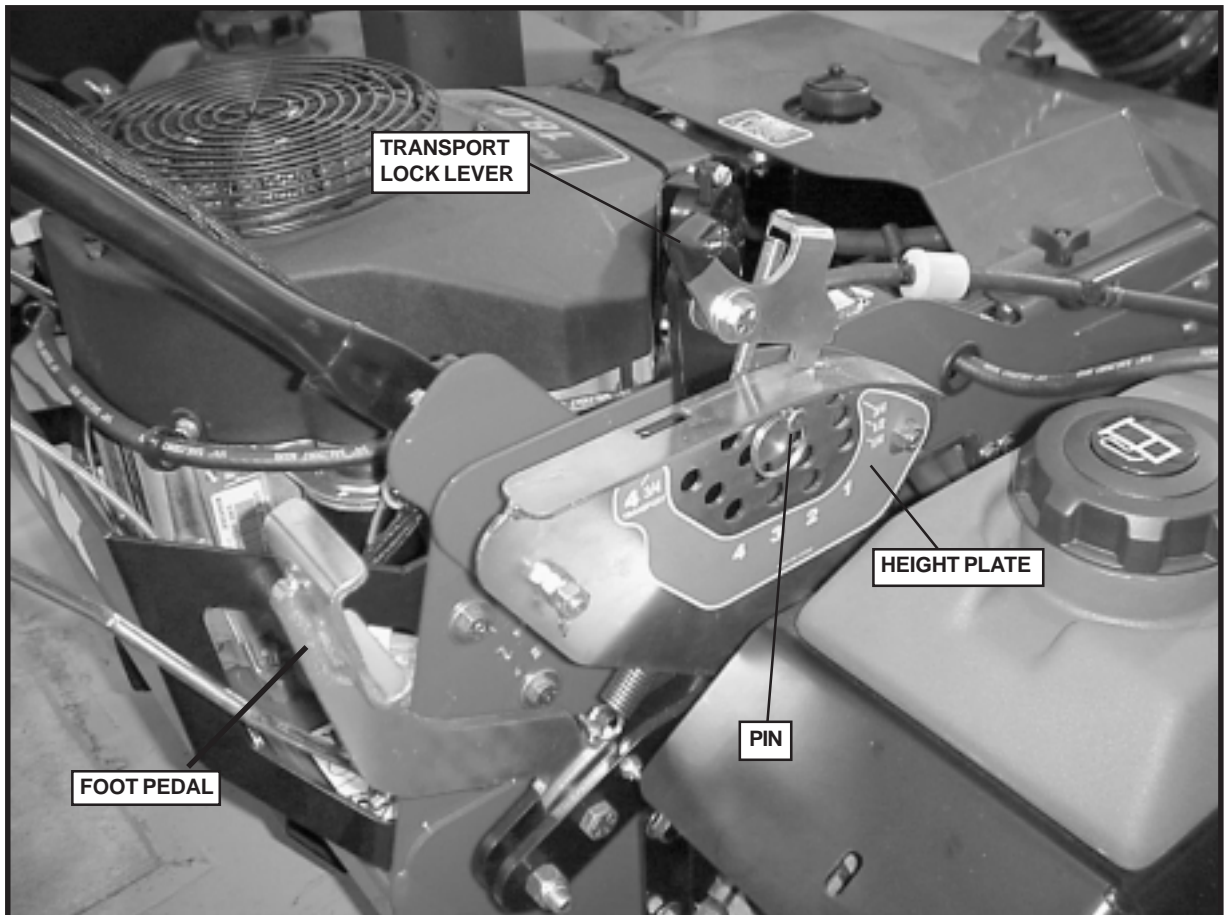


FIGURE 1

MOTION CONTROL ADJUSTMENT

This adjustment must be made with the drive wheels rotating.

1. Raise rear of the unit off of the ground until the tires can rotate freely. Secure the unit with jack stands. **CAUTION:** Keep hands, feet and clothing away from rotating tires.
2. With the blades disengaged, and the drive levers locked securely in the thumb latches, start the engine.
3. Move the ground speed lever to the fast position.
4. Using two 9/16" wrenches, loosen the jam nut on the bottom side of the turnbuckle on the motion control linkages.
5. Turn the turnbuckle in the appropriate direction until the tire stops turning.
6. Holding down either or both O.P. levers, unlock the thumb latches and release the drive levers. The tires should be rotating full speed forward.
7. Pull up on the drive levers and lock them in the thumb latches.
8. Verify that the tires stop rotating. Readjust fo necessary.
9. Tighten jam nuts on motion control linkages.
10. Repeat on the other side if necessary.

After these adjustments have been made, it may be necessary to adjust the tracking bolt and tracking knob. See Tracking Adjustments.

TRACKING ADJUSTMENTS

This adjustments must be made with the drive wheels rotating.

1. Raise the rear of the unit off of the ground until the tires can rotate freely. Secure the unit with jack stands. **CAUTION:** Keep hands, feet and clothing away from rotating tires.
2. With the blades disengaged, and the drive levers locked securely in the thumb latches, start the engine.
3. Adjust the motion control linkages (See Motion Control Adjustments).
4. With the ground speed lever in the fast position, loosen the tracking knob and tracking bolt until the threaded portion is just thru the weld nuts.
5. Tracking knob and tracking bolt are located under the console towards the front outer corners.
6. Move the ground speed lever to the slow position.
7. Adjust the tracking bolt and the tracking knob until they just contact the tracking plate that is welded to the drive levers. (See Figure 2).
8. Holding down either or both O.P. levers, unlock the drive levers from the thumb latches. The tires should not rotate. If they do, further adjustments may be needed.
9. Once the tires stop rotating, move the ground speed lever to the fast position and back to the slow position. Verify that the tires do not rotate. Readjust if necessary.
10. Lock the drive levers into the thumb latches. Verify that the tires do not rotate. Readjust if necessary.

NOTE: A small amount of grease needs to be on the tracking plate where the tracking bolt and tracking knob contact it. Failure to keep grease on the tracking plate may result in premature mis-adjustments of either tracking or motion control linkages.

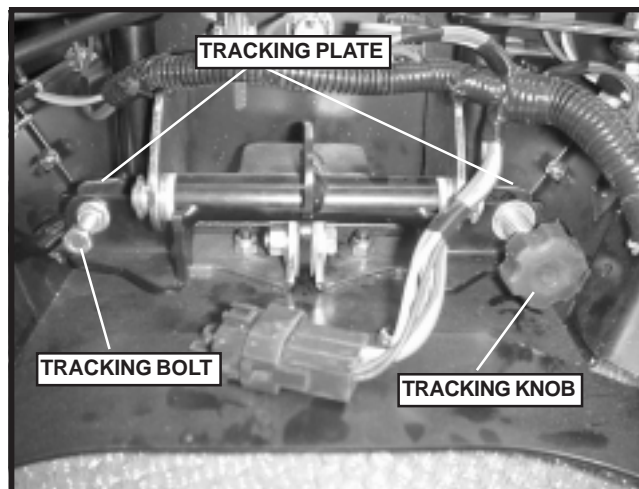


FIGURE 2

MOWER DECK LEVELING:

1. Position mower on a flat surface and stop engine.
2. Check the tire pressure of all four tires. Inflation should be 15 psi.
3. Place two 2x4's on edge under the blades from side side and lower the deck down onto the 2x4's.
4. Place the height of the deck in the 3 1/2" cutting height position.

NOTE: make sure deck lift blocks are tightly bolted to the frame .

5. Adjust the four upper chain bolts up until the chains are tight.
6. Check chains for equal tension. If unequal, adjust upper chain bolt in slot.
7. Remove 2 x 4's and measure from the cutting edge of the blade to a flat surface to check deck cutting height.

ADJUSTMENTS

FRONT DECK BELT ROUTING:

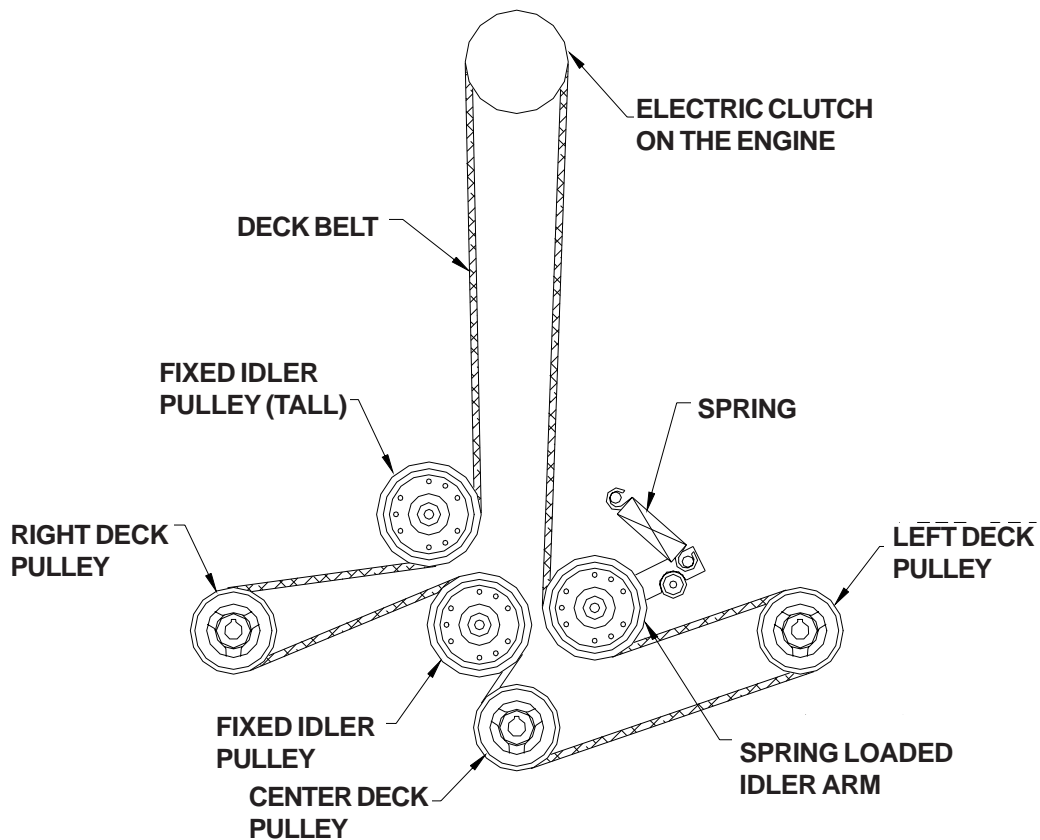


FIGURE 3

PUMP BELT

1. Before performing adjustments on pump belt, turn the mower off and disconnect spark plug wire or wires.
2. Check tension on the belt. If it feels loose adjustment will need to be made.
3. Loosen the nut on the bottom of the idler pulley.
4. Slide the idler pulley against the belt, retighten the nut while applying pressure to the idler pulley.

INTERLOCK SAFETY SYSTEM

The interlock safety systems's function is to prevent the engine from starting if the blades are engaged or the drive levers are not locked in the thumb latches. It also causes engine shut down if the operator falls from, or attempts to leave the operator position while the blades are engaged or the drive levers are unlocked from the thumb latches. After the engine starts, the operator must hold down either the left or right operator presence lever before engaging the blades or unlocking the drive levers from the thumb latches. If neither operator presence lever is held down, the engine will stop. Check the function of the safety electrical system on a regular basis.

1. Engine **MUST** kill if blades are engaged without at least one O.P. lever held down.
2. Engine **MUST** kill if the ddrive levers are unlocked from the thumb latches without holding down at least one operator presence lever.
3. Engine **MUST** not start unless blades are off and the drive levers are locked in the thumb latches.
4. **DO NOT** operate the mower if the interlock safety system allows operation or starting in any unsafe condition.

OPERATING INSTRUCTIONS

CONTROLS:

Be thoroughly familiar with all controls their function and how to operate them before operating the mower.

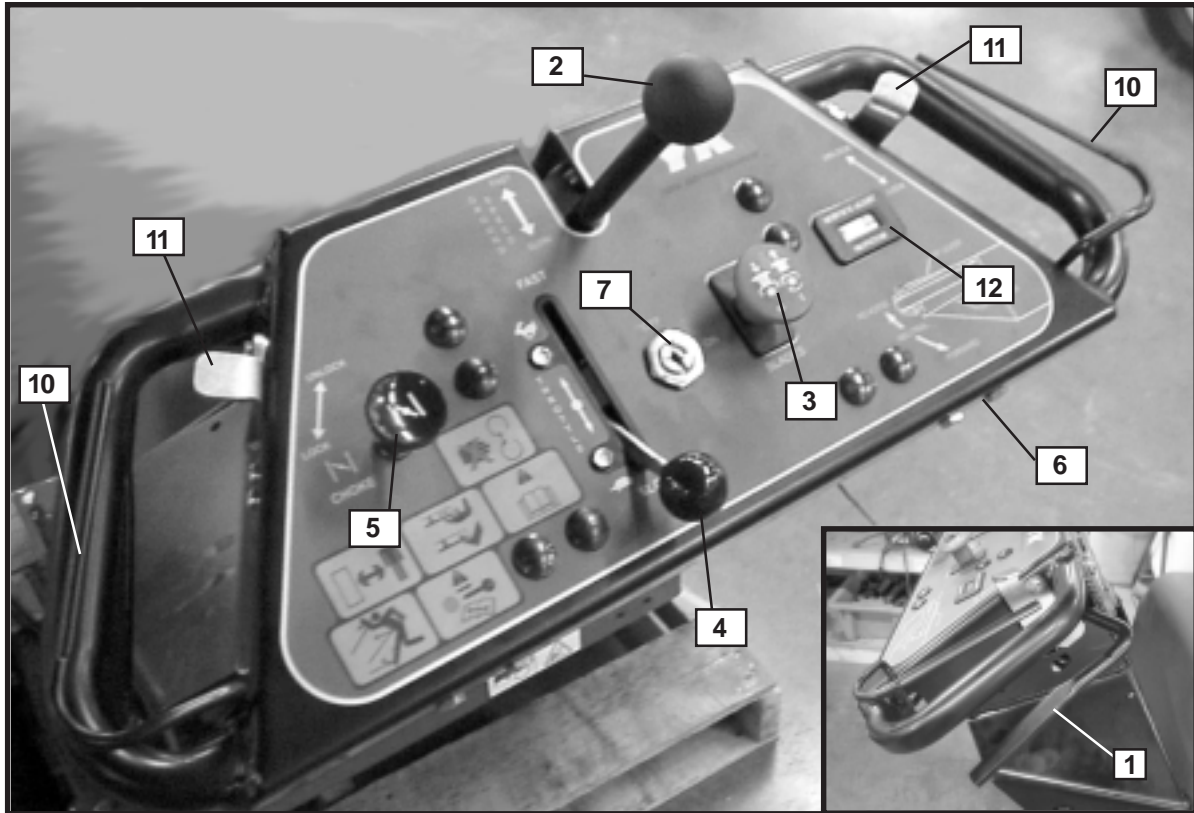


FIGURE 4

1. Drive levers: Located on each side of the handle control direction of movement. The left lever controls the flow of oil from the left hydro pump to the left wheel motor. The right lever controls the flow of oil from the right hydro pump to the right wheel motor.
2. Ground speed lever: Located in the center of the console. Controls the forward speed of the mower. Push the lever forward if you want to go faster, pull it back to go slower or pull it all the way back to the neutral or stop position.

NOTE: To begin motion the operator must move the ground speed lever forward before disengaging the thumb latches. After you release the thumb latches allow the drive levers to move down at the same time. The mower will move in a straight line in that direction.

Movement of the right lever down will cause the right wheel to rotate in a forward direction. Movement of the left lever down will cause the left wheel to rotate in a forward direction. To stop forward travel pull levers up into the stop position.

To turn right while moving in a forward direction pull the right drive lever up towards the stop position, this will slow the right wheel and cause the mower to turn in that direction.

To turn left while moving in forward direction pull the left drive lever up towards the stop position, this will slow the left wheel and cause the mower to turn in that direction.

3. Blade engagement switch: Located in the center of the console. To engage the blades pull up on the switch. Push down on the switch to disengage the blades.
4. Throttle control: Located in the middle of the console. Use the throttle to control the engine RPM.
5. Choke control: Use when starting cold engine do not run choke when engine is warm.
6. Tracking knob: Located on the bottom right front corner of the console. If the mower will not travel in a straight line on a smooth surface, turn the tracking knob the proper direction until it straightens out.
7. Key switch: Located on the console. The key switch must be turned on, blades disengaged, and ground speed lever in neutral before starting.
8. Fuel shut off valve: Located on the right side of the engine on the frame. (Not shown.)
9. Pump release valves: Located at the back left corner of the left pump and front right corner of right pump. Used to release the system so unit may be moved by hand when not running. (Not shown.)

NOTE: Only rotate about a 1/4 to 1/2 of a turn to release system.

10. Operator presence levers: Located on the handle. One or both levers must be pressed against the handle for the mower to remain running, when the blades are engaged or the ground speed lever is not in the neutral position.
11. Thumb Latches: Located on the handle, allows the the drive levers to be held in the stop position.
12. Hour Meter: Located on the console, shows the number of hours unit has been run.

OPERATING INSTRUCTIONS

STARTING AND OPERATION:

1. Making sure the blades are disengaged, drive levers locked in the thumb latches and the fuel valve on.
 2. Choke if needed. Adjust throttle to full, turn key to start position, until engine starts.
 3. Once the engine is running adjust the throttle.
 4. Holding down at least one of the operator presence levers, engage blades and set RPM to maximum, but not choked. NOTE: Be sure all persons are clear of area before engaging the blades. To prolong spindle bearing and belt life engage and disengage blades at approximately 1/2 throttle.
 5. Set the ground speed lever to the desired position.
 6. Release the drive levers from thumb latches at the same time.
- NOTE: Thumb latches are spring loaded to unlock when the drive levers are squeezed.

MAINTENANCE

1. Engine oil level: Check daily with engine cold and on a flat surface. Remove the dipstick and wipe clean. Reinsert the dipstick all the way, but do not screw down. Remove the dipstick and check oil level. If oil level is low add oil. Use engine manufacturers specs for type of oil.
2. Pump drive belt: Stop engine and remove key. Check the tension on the belt.
3. Mower blades: Stop engine and remove key. Inspect blades and sharpen or replace as needed. Check daily or more often if needed. The machine requires more power with dull blades and gives a poor cut. If blades get bent, replace them. Blades shouldn't have any notches from hitting objects. The air foil on top of the blade should be sufficient to raise the grass for cutting. If blades are in good condition, sharpen at an angle of 22 to 28 degrees about 2-1/2 inches in from the tips. Note: After sharpening, check blades for proper balance, if needed correct balance to prevent excessive vibration.
4. Safety interlock system: Check daily and never operate the mower if this system is not functioning properly.
5. Hardware: Stop engine and remove key, thoroughly inspect the entire machine for any missing or loose hardware. Check daily.
6. Air cleaner: Stop engine and remove key. Remove plastic cover and loosen wingnut on the air cleaner. Remove the foam pre-cleaner and wash or replace if needed. Inspect paper filter and replace if dirty. Check every 25 hours, daily if in very dirty conditions. Fuel efficiency, engine RPM, and available power goes down rapidly if the air filter is dirty. Prolonged effects could damage the engine.
7. Engine oil: Change oil to manufacturers specifications. Stop engine and remove key. Drain oil when engine is warm. **Thoroughly clean around cap before removing.** Remove oil drain cap from the right side of engine block and replace drain cap. Remove oil filter and replace. Put a light coat of clean oil on the filter gasket before installing. Fill engine with oil using manufacturers specs, see Kawasaki owner's manual. Start engine and idle slowly to allow the oil to recoat the interior of the engine and then inspect for leaks.
8. Hydraulic oil: Check daily. **Thoroughly clean around cap.** Remove cap. Oil level should be 1" below the bottom of the fill tube. If not, add oil. NOTE: Use only 15w - 50 mobil1.
9. Tire pressure: Check every 25 to 50 hours. Pressure in all four tires should be 15 PSI.
10. Belts: Check every 25 hours. Stop engine and remove key. Check the condition of all belts.
12. Lubrication (every 25 hours): Caster tires and front caster pivots (Clean grease zerk thoroughly before greasing)
13. Fuel filter: Replace every 100 hours or as needed.

MAINTENANCE

14. Hydraulic filter and oil: Change every 500 hours or yearly. Stop engine and remove key. Clean around the filter and the drain plug on the bottom side of the tank. Remove the filter and allow any oil to drain from the filter head. Then replace with new filter. Use only Yazoo/Kees p/n 102606, filter which has a bypass valve and the correct micron filter. Remove the cap nut from the bottom of the tank and allow the tank to drain, reinstall the cap nut. Fill tank with 15w - 50 mobil1, 1" below the fill tube and replace cap. Block up the rear of unit until wheels will rotate freely and start engine at a slow idle, move the control levers forward and run for several minutes. Stop engine and recheck oil level. If wheels don't respond an air lock has occurred within the hydraulic system. Bleed air from lines, or let stand overnight to allow the air to dissipate out of the oil. Retry responses & check the oil level.

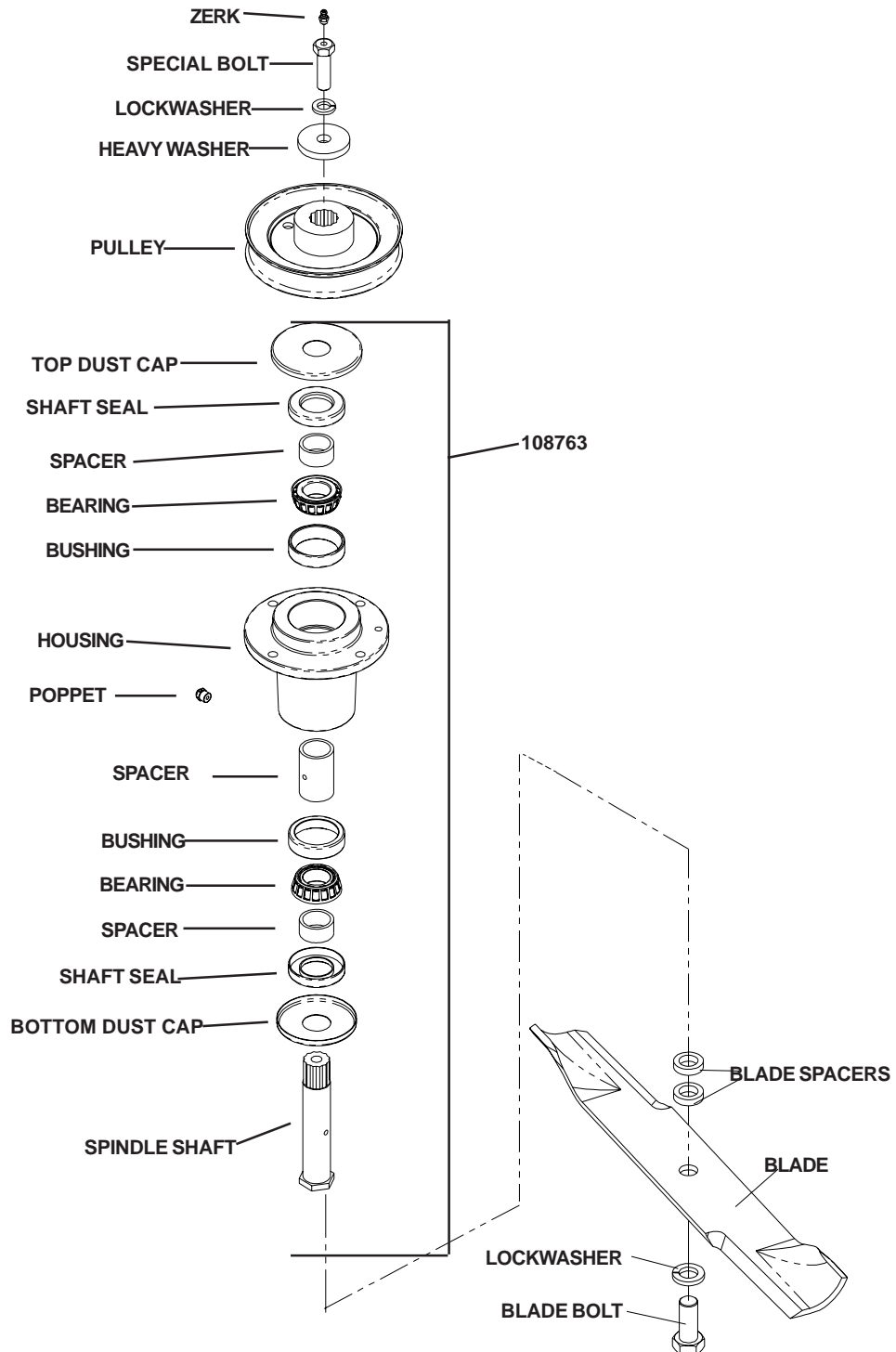
Note: Serious damage to the pumps and wheel motors can occur if the system is run with an air lock.

MAINTENANCE

CUTTER HOUSING SPINDLE ASSEMBLY

Grease housings once weekly or every 40 to 50 hours of use. Use a good synthetic grease. Pump grease in until a small amount purges from the poppet on the underside of the deck. Check the torque of the pulley bolt (45 ft/lbs) should be maintained.

SPINDLE ASSEMBLY



MAINTENANCE CHART

Maintenance	Maintenance Interval (hours)						
	Daily	25	50	100	200	250	500
Engine (4)							
Check oil level	X						
Change oil and filter (1)				X			
Clean the air filter's (2)		X					
Replace air filter's (2)				X			
Check for fuel and oil leakage	X						
Clean cooling flanges (2)				X			
Check cooling air inlet	X						
Replace fuel filter				X			
Replace plugs				X			
Electrical							
Check the safety system	X						
Lubricate							
Deck idler arm		X					
Caster swivels					X		
Caster tires				X			
Throttle cable				X			
Choke cable				X			
Cutter housings				X			
Tracking Plate				X			
Ground Speed Rollers				X			
General							
Check bolts and nuts	X						
Check cutting deck		X					
Clean cutting deck (2)	X						
Check tire pressure (15 psi)		X					
Check belts				X			
Check and adjust throttle cable				X			

Notes:

1. Change engine oil and filter after first 50 hours and then every 100 hours.
2. During dusty or dry conditions cleaning and replacement should be more frequent.

TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSES
Engine won't start	<ol style="list-style-type: none"> 1. Blade switch engaged. 2. Drive levers not locked in thumb latches. 3. Fuel valve closed or turned to empty tank. 4. No fuel. 5. Spark plug wires off. 6. Bad spark plugs. 7. Blown fuse
Mower will not move or moves slowly or hard	<ol style="list-style-type: none"> 1. Pump bypass valves open. 2. Pump drive belt loose or off. 3. Hydraulic system failure. 4. Air in the hydraulic system.
Blades won't engage	<ol style="list-style-type: none"> 1. Blade belt off of pulleys. 2. Blown fuse.
Uneven cut	<ol style="list-style-type: none"> 1. Tire pressure uneven. 2. Blades bent (check tip to tip one blade thickness) 3. Air foil of blade worn or bent.
Cut is ragged	<ol style="list-style-type: none"> 1. Blades dull. 2. Ground speed too fast. 3. Grass accumulation under deck.
Mower moves when in neutral position	<ol style="list-style-type: none"> 1. Motion control linkage out of adjustment. 2. Pump arms loose or out of adjustment.
Mower pulls left or right	<ol style="list-style-type: none"> 1. Tire pressure uneven. 2. Motion control linkage adjustment. 3. Soft terrain. 4. Slope too steep. 5. Tracking not adjusted.

When a problem occurs, do not overlook the simple causes.

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