



942246F 37HP KAW W/61" SIDE DISCHARGE

942247F 37HP KAW W/72" SIDE DISCHARGE

ARTS MANUAI



CALIFORNIA

Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

Californie Proposition 65 Avertissement

Les échappements des moteurs diesel et certains de leurs composés sont reconnus par l'Etat de Californie pour être cancérigènes, provoquer des défauts congénitaux et d'autres dangers en matière de reproduction.

California Advertencia

de la Proposicion 65

El estado de California hace saber que los gases de escape de los motores diesel y algunos de sus componentes producen cáncer, defectos de nacimiento y otros daños en el proceso de reproducción humana.

A WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

A AVERTISSEMENT

L'émission du moteur de ce matériel contient des produits chimiques que l'Etat de Californie considère être cancérigènes, provoquer des défauts congénitaux et d'autres dangers en matière de reproduction.

A ADVERTENCIA

El estado de California hace saber que los gases de escape de este producto contienen productos químicos que producen cáncer, defectos de nacimiento y otros daños en el proceso de reproducción humana.

CALIFORNIA Proposition 65 Warning

Battery posts, terminals, wiring insulation, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

WASH HANDS AFTER HANDLING.

IMPORTANT MESSAGE

Thank you for purchasing this CGC, Inc. product. You have purchased a world class mowing product, one of the best designed and built anywhere.

This machine comes with an Operation and Safety Manual and a separate Setup, Parts and Maintenance Manual. The useful life and good service you receive from this machine depends to a large extent on how well you read and understand these manuals. Treat your machine properly, lubricate and adjust it as instructed, and it will give you many years of reliable service.

Your safe use of this CGC, Inc. product is one of our prime design objectives. Many safety features are built in, but we also rely on your good sense and care to achieve accident-free operation. For best protection, study the manuals thoroughly. Learn the proper operation of all controls. Observe all safety precautions. Follow all instructions and warnings completely. Do not remove or defeat any safety features. Make sure those who operate this machine are as well informed and careful in its use as you are.

See a CGC, Inc. dealer for any service or parts needed. CGC, Inc. service ensures that you continue to receive the best results possible from CGC, Inc. products. You can trust CGC, Inc. replacement parts because they are manufactured with the same high precision and quality as the original parts.

CGC, Inc. designs and builds its equipment to serve many years in a safe and productive manner. For longest life, use this machine only as directed in the manuals, keep it in good repair and follow safety warnings and instructions. You'll always be glad you did.

Commercial Grounds Care, Inc. One Bob Cat Lane Johnson Creek, WI 53038-0469

TABLE OF CONTENTS	FIGURES	PAGE
SAFETY		
ASSEMBLY AND SETUP		3-5
MAINTENANCE CHART		6
MAINTENANCE RECORD		7
MAINTENANCE		8-14
ADJUSTMENTS		15-20
BELT REPLACEMENT		21, 22
SPECIFICATIONS		23-26
PARTS SECTION		
UPPER ENGINE DECK ASSY	FIGURE 1	26, 27
LOWER ENGINE DECK ASSY/CLUTCH		
BUMPER		
FUEL TANKS/CONTROL PANEL		
BRAKES/REAR WHEEL		•
OIL COOLER		
HYDRAULICS		
HYDROGEAR PUMP		- ,
KAWASAKI WIRE HARNESS		
SEAT ASSEMBLY & ROPS		,
FOLDING ROPS KIT		•
STEERING/DECK LIFT		
CRADLE ASSEMBLY		
CRADLE & CASTER ASSEMBLY		•
61" SIDE DISCHARGE		,
72" SIDE DISCHARGE		,
BELTS-CUTTERDECK		
DECALS-POWER UNIT		
DECALS-CUTTERDECKS	FIGURE 19	62, 63

10-2008

NOTICE !!!

Unauthorized modifications may present **extreme** safety hazards to operators and bystanders and could also result in product damage.

Commercial Grounds Care, Inc. strongly warns against, rejects and disclaims any modifications, add-on accessories or product alterations that are not designed, developed, tested and approved by CGC, Inc. Engineering Department. Any CGC, Inc. product that is altered, modified or changed in any manner not specifically authorized after original manufacture-including the addition of "after-market" accessories or component parts not specifically approved by CGC, Inc.-will result in the CGC, Inc. Warranty being voided.

Any and all liability for personal injury and/or property damage caused by any unauthorized modifications, add-on accessories or products not approved by CGC, Inc. will be considered the responsibility of the individual(s) or company designing and/or making such changes. CGC, Inc. will vigorously pursue full indemnification and costs from any party responsible for such unauthorized post-manufacture modifications and/or accessories should personal injury and/or property damage result.



This Operator's Manual should be regarded as part of the machine. Suppliers of both new and second-hand machines must make sure that this manual is provided with the machine.



ILEA EL INSTRUCTIVO!

Si no lee Ingles, pida ayuda a alguien que si lo lea para que le traduzca las medidas de seguridad.



This symbol means:

ATTENTION! BECOME ALERT!

Your safety and the safety of others is involved.

Signal word definitions:

The signal words below are used to identify levels of hazard seriousness. These words appear in this manual and on the safety labels attached to CGC, Inc. machines. For your safety and the safety of others, read and follow the information given with these signal words and/or the symbol shown above.

ADANGER

DANGER indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.

AWARNING

WARNING indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.

ACAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices or property damage.

CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, **MAY** result in property damage

Commercial Grounds Care, Inc.

One Bobcat Lane Johnson Creek. WI 53038 U.S.A Phone: 920-699-2000 Fax: 920-699-3683

1

MODEL NUMBER

MODEL NUMBER: This number appears on sales literature, technical manuals and price lists.

SERIAL NUMBER: This number appears only on your mower. It contains the model number followed consecutively by the serial number. Use this number when ordering parts or seeking warranty information.

TOOLS REQUIRED FOR ASSEMBLY

- Wrecking bar
- Claw hammer
- Ratchets: 3/8"
- Sockets: 3/8", 1/2", 17 mm
- Wrenches: 13 mm, 15 mm, 17 mm, 18 mm, 1-1/16", 1-1/8"
- Straight edge
- Tire pressure gauge
- Blocks (for deck leveling)

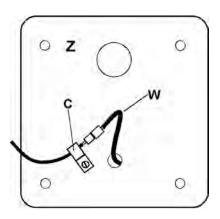
NOTE: All references below to the "right" or "left" are with respect to an operator at the controls.

1. UNCRATE UNIT

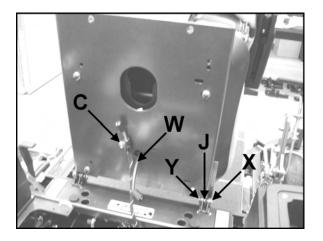
a) Discard packing materials. Remove and discard shipping brackets. Tighten caster wheel axle bolts against caster axle spanner bushings.

2. INSTALL SEAT

- a) Install bushings **J** in seat plate **Z**.
- b) Install seat assembly onto the unit using (2) pins **X** and (2) E-clips **Y**.
- c) Secure seat wire **W** on the bottom of the seat plate with clip **C** and a 1/4-20 X 3/8" thread forming screw.
- d) Connect the tractor harness to the seat wire.



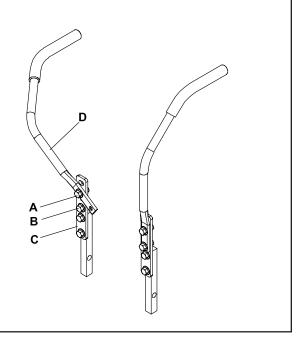
Bottom of seat plate Z showing clip C



3. Set tire pressures to 14 lbs/in² (1.0 kg/cm²). Tires are overinflated for shipping.

4. TRACTION LEVERS

- a) Loosen bolt A and remove bolt B.
- b) Rotate traction lever **D** into position and secure with bolts **A** and **B**. Repeat for the other lever.
- c) Tighten all fasteners.
- d) Sit on the machine. Levers may be adjusted in bracket C for a more comfortable reach, or moved to upper set of holes for a better operator



5. **DECK LEVELING**

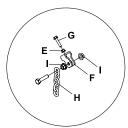
- a) Park the machine on a smooth, level surface. Raise the deck to the transport position.
- b) Lower the deck onto a set of equal height blocks A under the rear corners of the deck. Place another set of blocks B under the front of the deck so that the deck top is pitched forward 1/8".

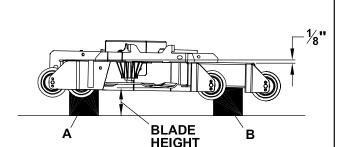
NOTE: The front and rear of the deck are at different heights.

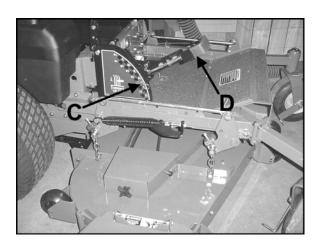
- Measure the height of the blade cutting edge above the ground. Remove pin C and set the height of cut lever D to that height.
- d) Loosen nuts I at all four corners of the deck.

NOTE: This will relieve tension on chains H.

e) Loosen the jam nuts E on the height of cut clips F and adjusting screws G. Turn the adjusting screws G until the play is taken out of the chains H at all four corners. Tighten the jam nuts E against the clips F and at the adjusting screws G. Retighten nuts I at this time.



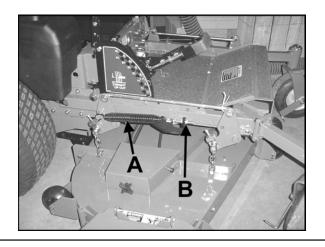




6. COUNTERBALANCE SPRINGS

- a) Raise the cutterdeck all the way.
- b) Adjust the spring A with nut B:
 52" cutterdecks to a length of 9-1/8" (232 mm)
 61" cutterdecks to a length of 9-9/16" (242 mm)
 The springs may be tightened or loosened from this point according to personal preference.

NOTE: The 48" cutterdecks **do not** have counterbalance springs.



7. FINAL PREPARATIONS

- Check the engine and hydraulic oil levels. Top up with the correct oil if necessary. Use 10W30 motor oil
 for the engine. Use fresh, clean 15W40 or 20W50 motor oil or 15W50 synthetic motor oil for the hydraulic
 system.
- Remove the battery from the machine. Fill the battery to the bottom of the vent wells with acid and trickle charge for several hours.

A WARNING

Battery acid is caustic and fumes are explosive and can cause serious injury or death.

Use insulated tools, wear protective glasses or goggles and protective clothing when working with batteries. Read and obey the battery manufacturer's instructions.

Be certain the ignition switch is OFF and the key has been removed before servicing the battery.

- a) Verify battery polarity before connecting or disconnecting the battery cables.
- b) When installing the battery, always assemble the RED, positive (+) battery cable first and the ground, BLACK, negative (-) cable last.
- c) Tighten cables securely to battery terminals and apply a light coat of silicone dielectric grease to terminals and cable ends to prevent corrosion. Keep terminal covers in place.
- Read Operation and Safety Manual before starting.
- Run engine at full RPM for 5 minutes before engaging blades to allow the engine to be fully lubricated before load is applied.
- Check the hydrostat neutral adjustment. Neutral is set at the factory but may require readjustment if air trapped during the initial oil fill has worked out of the system. See adjustments section later in this manual.
- Do not use the machine without an approved grass collector, the grass discharge chute or mulching plates correctly fitted.

MAINTENANCE			ngoing job. rations. Perf				
OPERATION	FIRST 5 HOURS	DAILY	EVERY 25 HOURS	EVERY 50 HOURS	EVERY 100 HOURS	EVERY 200 HOURS	EVERY 500 HOURS
Consu	It the engin	e manual fo	ENGINE or additional	information	n and instru	ıctions	
Check/Top Off Engine Coolant Level (Where Applicable)		x					
Check/Top Off Oil Level		х					
Check For Leaks		Х					
Clean Air Intake Screen		х					
Clean Air Cleaner Precleaner			X*				
Clean Air Cleaner Element					X	X**	
Clean Cooling Fins					X		
Change Oil And Filter	х		See e	ngine manu	facturer's n	nanual	
Check/Replace Spark Plugs						X	
			EAVY DUTY				
			YDRAULIC				
Check For Leaks		Х					
Check/Top Off Oil Level					х		
Change Oil And Filter	х						Х
			MACHINE				
Check Interlock Operation		X					
Check Tire Pressures		Х					
Check/Top Off Battery					Х		
Lubricate All Points				Х			

ZT	200
Se	ries

Series	NOTES	

GENERAL	DATE	HRS	DATE	HRS	DATE	HRS	DATE	HRS	DATE	HRS	DATE	HRS
Check Tire Pressures												
Lubricate All Points												
Check Nuts & Bolts												
ENGINE												
Check Engine Coolant Level (Where Applicable)												
Check Oil Level												
Change Oil												
Clean Air Cleaner Element												
Clean Cooling Fins												
Replace Air Cleaner Element												
Clean & Gap Spark Plugs												
NOTE: After fire	NOTE: After first 5 hours of operation replace engine oil, hydraulic oil and both filters.											

CHECK DAILY

Operator Presence Interlock System - Start Operation

For the engine to crank, the parking brake must be on, the PTO (blades) off and traction levers in the neutral lock position. Sit in the seat and check, one by one, if the engine will crank with the parking brake off, the blades on, and either traction lever out of neutral lock. Also, make sure engine coolant temperature gauge light flashes upon turning key to the **ON** position.

Operator Presence Interlock System - Run Operation

The operator must be in the seat for the engine to run with the parking brake off, the traction levers moved out of the neutral lock position, or the blades on. To check:

- 1. Start the engine and run at 1/2 throttle with the operator on the machine but raised off the seat.
- 2. One by one: move the parking brake to the OFF position, traction levers out of the neutral lock position (check each independently), and turn the blades on. Each check should kill the engine after 1/2 second. (A 1/2 second delay is built into the system to prevent engine cutout when traversing rough terrain.)

Repair machine before using if the Operator Presence Interlock System does not operate correctly in start or run. Contact your authorized CGC, Inc. dealer.

Hardware

Tighten any nuts and bolts found loose. Replace any broken or missing cotter pins. Repair any other problems before operating.

Tire pressure

Tires should be kept inflated at 14 lbs/in² (1.0 kg/cm²). Improper tire inflation can cause rapid tire wear and poor traction. Uneven inflation can cause uneven cutting.

BATTERY

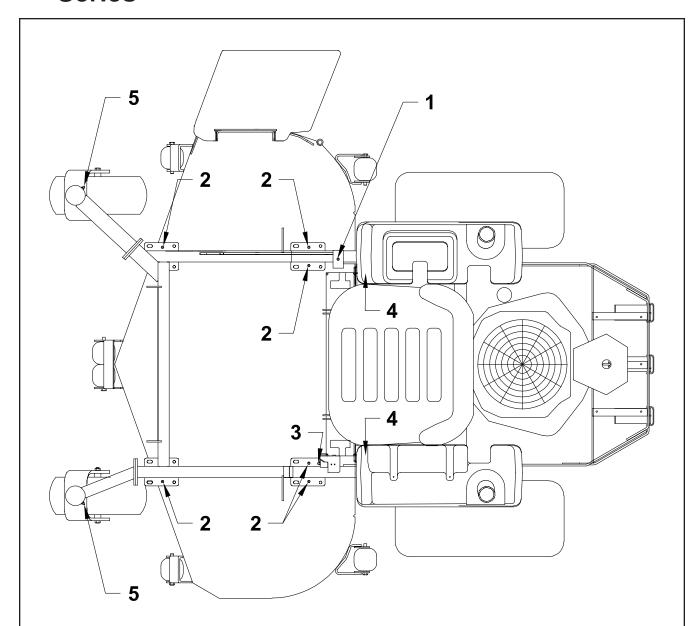
AWARNINGBattery acid is caustic and fumes are explosive and can cause serious injury or death.

Use insulated tools, wear protective glasses or goggles and protective clothing when working with batteries. Read and obey the battery manufacturer's instructions.

Be certain the ignition switch is OFF and the key has been removed before servicing the battery.

- 1. Verify battery polarity before connecting or disconnecting the battery cables.
- 2. When installing the battery, always assemble the RED, positive (+) battery cable first and the ground, BLACK, negative (-) cable last.
- 3. When removing the battery, always remove the ground, negative () cable first and the red, positive (+) cable last.

- 4. Check the electrolyte level every 100 hours of operation.
- Clean the cable ends and battery posts with steel wool. Use a solution of baking soda and water to clean the battery. Do not allow the solution to enter into the battery cells.
- Tighten cables securely to battery terminals and apply a light coat of silicone dielectric grease to terminals and cable ends to prevent corrosion. Keep terminal covers in place.



LUBRICATION

Every 50 hours of operation, lubricate the following points (1-4) with grease:

- 1. Deck lift rockshaft (1 point)
- 2. Deck lift pivots (6 points)
- 3. Brake lever pivot (1 point)
- 4. Push arms (2 points located at rear of cutterdeck under each fuel tank)
- 5. Caster wheel pivots (2 points)
 (Lubricate every 500 hours or once a year)

NOTE ON BLADE SPINDLES - The blade spindles on these machines use a superior sealed bearing that does not require relubrication.

HYDRAULIC SYSTEM

Fluid level in the hydraulic system should be checked after the first 5 hours of operation, and every 100 hours thereafter, or when a leak has occurred. If the fluid is low, check all components for leaks.

To check, remove reservoir cap \mathbf{M} . The fluid level should be at the bottom of the filler tube. If low, top up (do not overfill). Use one of the oils listed below:

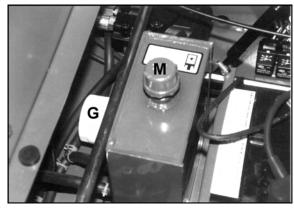
- SAE 15W40 motor oil
- SAE 20W50 motor oil
- 15W50 synthetic motor oil

AFTER FIRST FIVE (5) HOURS

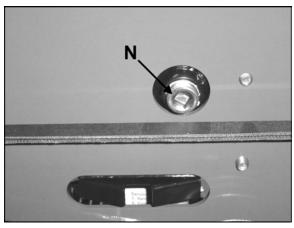
- Remove plug N to drain hydraulic reservoir. Dispose of used oil in accordance with local requirements.
- 2. Clean and replace the plug.
- 3. Change hydraulic oil filter **G**.
- 4. Fill the reservoir with fresh oil to the bottom of the reservoir filler tube, using an oil from the list above. Do not overfill.

PERIODIC OIL CHANGES

Change the hydraulic fluid and hydraulic filter after each 500 hours of operation using the same procedure given above.



View from right side



View from below machine

NOTES:

Before servicing the hydraulic system, stop the engine, disconnect spark plug wires and disengage the PTO.

- After any hydraulic line is opened, plug or cap it promptly to reduce the risk of contamination.
- Do not use sealant tape on hydraulic pipe fittings. Use a liquid sealant that will dissolve into the system.
- Make sure all hydraulic connections are tight and hydraulic hoses and lines are in good condition before applying pressure to system.

AWARNING

The machine's hydraulic system operates under high pressure. When checking for leaks, do not use your hands to attempt to find a leak. Instead, use cardboard or paper. Escaping hydraulic fluid can be under sufficient pressure to penetrate skin and cause serious injury. If hydraulic fluid is injected into the skin, it must be promptly removed by a doctor familiar with this form of injury or gangrene may result.

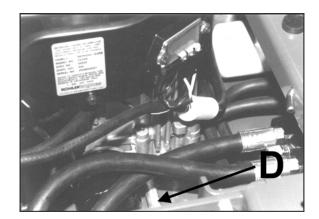
ENGINE OIL

Do not perform engine maintenance without the engine off, spark plug wires disconnected and PTO disengaged.

AFTER FIRST FIVE (5) HOURS

While the engine is warm:

- Remove drain cap **D** and drain the crankcase. Dispose of used oil in accordance with local requirements.
- 2. Clean and replace the cap.
- 3. Change oil filter.
- Fill the crankcase with fresh oil to the full mark. Do not overfill. See engine manual for oil specifications.



DAILY

- 1. Check oil level with the dipstick.
- If oil is needed, add fresh oil of proper viscosity and grade. See engine manual for oil specifications. Do not overfill.
- 3. Replace dipstick before starting engine.

PERIODIC OIL CHANGES

- 1. See engine manual for oil and filter change intervals after the break-in period.
- 2. Follow instructions for first oil change, above.

SPARK PLUGS

Remove each plug and check condition.

- Good operating conditions are indicated if the plug has a light coating of grey or tan deposit.
- A white blistered coating indicates overheating. A black coating indicates an "over rich" fuel mixture. Both may be caused by a clogged air cleaner or improper carburetor adjustment.
- Do not sandblast, wire brush or otherwise attempt to repair a plug in poor condition. Best results are obtained with a new plug.
- Set plug gap as specified in engine manual.

FUEL FILTER (CARBURETED MODELS)

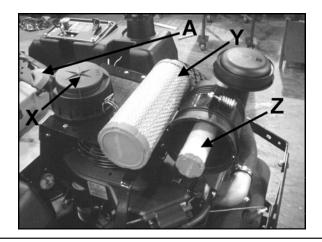
An inline fuel filter is located in the fuel supply line. Inspect at every oil change to make sure it is clean and unobstructed. Replace if dirty.

HEAVY DUTY CYCLONIC AIR CLEANER

Clean and replace the air cleaner element as specified in the service chart. Uneven running, lack of power or black exhaust fumes may indicate a dirty air cleaner.

To replace air cleaner elements:

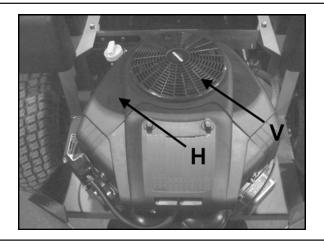
- 1. Unclamp end cover **X** and remove existing cleaner elements.
- Insert new elements Y and Z and replace cover.
 Ensure the breathing port A is pointing down and towards the front of the tractor.



ENGINE COOLING

Continued operation with a clogged cooling system will cause severe overheating and can result in engine damage.

- Daily: Clean air intake screen V.
- Every 100 hours: Clean cooling fins beneath blower housing H with reference to information in the engine manufacturer's manual.



WASHING MACHINE

CAUTION: Improperly washing a machine can cause water to enter bearings and other components. This can greatly reduce component life.

- Do not use a pressure washer. Do not direct water at bearings or seals. High pressure water can blow past seals ad enter seal bearings.
- Allow the machine to cool down before washing.
 Water on a warm machine can be sucked into sealed bearings as they cool.
- Avoid getting electrical connections wet. Water can cause electrical faults and corrosion of electrical components.

CLEANING MACHINE

Clean the machine after use. The machine will run cooler and last longer if kept free of clippings and other debris. A clean machine also reduces the risk of fire due to accumulation of combustible debris and chaff

Brush or blow clippings and debris off the cutterdeck and engine deck.

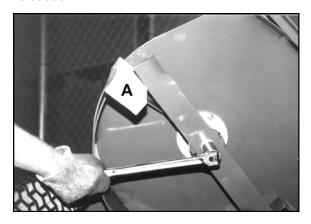
BELTS

All belts are tensioned by spring loaded idlers. No adjustment is required.

BLADE REMOVAL

Follow these instructions to prevent injury during blade removal:

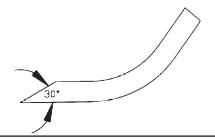
- Loosen with a box wrench or a socket and long breaker bar. To gain additional leverage, slip a long pipe or thick-walled tube over breaker bar or wrench.
- 2. Insert wood block **A** as shown, with grain perpendicular to blade, to prevent blade from turning when loosening.
- 3. Wear thickly padded gloves. Keep hands clear of blade path. Blades may rotate when bolt releases.



SHARPENING

Blades may be sharpened by filing or grinding.

- Inspect blades before sharpening.
- Replace bent or cracked blades.
- Replace blades when the lift portion has worn thin.
- Maintain cut angle at 30°.
- Do not overheat blades when sharpening.
- Always use CGC, Inc. blades. Use of another manufacturer's blades may be dangerous.



BLADE BALANCE

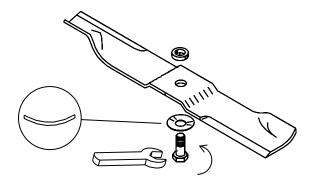
Blade balance must be maintained at 5/8 oz-in (19.4 g-cm) or less. Failure to keep blades balanced causes excess vibration, wear, and shortened life of most components of the machine.

To balance a blade:

- 1. Sharpen blade first.
- 2. Balance the blade at the center.
- 3. Attach a 1/8 oz (3.9 g) weight at a distance 5" (127 mm) from center on the light end. This should make the light end the heavy end:
 - If it does, the blade is balanced.
 - If does not, file or grind the heavy end until the addition of the weight makes the light end the heavy end.

BLADE INSTALLATION

- 1. Wear thickly padded gloves to prevent cuts from the sharp blade.
- 2. Insert the blade bolt, in order, through the conical washer (cup side toward the blade, as shown), the blade, and the blade spacer.
- 3. Install assembly on the blade spindle.
- 4. Torque the blade bolt to 70 ft-lbs.



DECK LEVELING

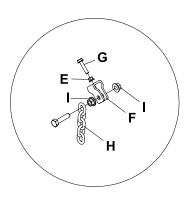
- a) Park the machine on a smooth, level surface. Raise the deck to the transport position.
- b) Lower the deck onto a set of equal height blocks A under the rear corners of the deck. Place another set of blocks B under the front of the deck so that the deck top is pitched forward 1/8".

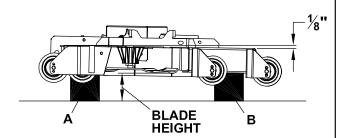
NOTE: The front and rear of the deck are at different heights.

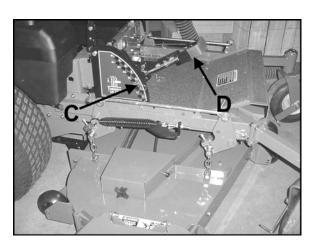
- c) Measure the height of the blade cutting edge above the ground. Remove pin C and set the height of cut lever D to that height.
- d) Loosen nuts I at all four corners of the deck.

NOTE: This will relieve tension on chains H.

e) Loosen the jam nuts E on the height of cut clips F and adjusting screws G. Turn the adjusting screws G until the play is taken out of the chains H at all four corners. Tighten the jam nuts E against the clips F and at the adjusting screws G. Retighten nuts I at this time.







HEIGHT OF CUT

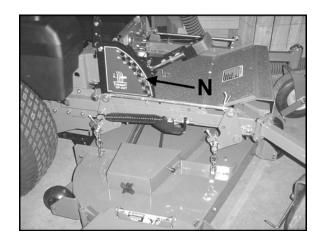
The height of cut is set by moving height of cut pin **N** to the hole designated for the height of cut desired.

To change the height of cut:

- 1. Lift the deck to the highest position.
- 2. Move pin **N** to the selected hole.
- 3. Lower the deck until the lift lever is stopped by the pin.

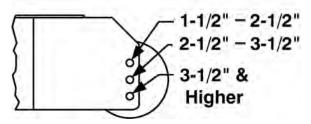
NOTES:

- Height of cut may vary due to the amount of tread on the tires, tire diameter or inflation pressure.
- For best results, adjust the rear deck rollers for the height of cut to be used (see below).



REAR DECK ROLLERS

The rear outside deck rollers are adjustable up and down to provide improved deck flotation and scalping protection at various heights of cut. They are not intended to ride continuously on the ground. Adjust no closer than 3/8" (10mm) to the ground.



Height of cut ranges for roller adjustment

CONTROL LEVERS

There are two mounting positions for the control levers, upper and lower. The lower position works well for most people. Taller operators may need the upper position.

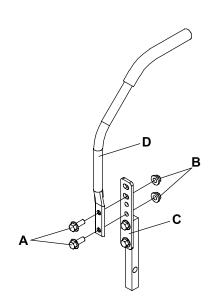
To adjust the height of the control levers:

- Remove bolts A and nuts B.
- Align holes in control lever **D** with appropriate holes in traction lever bracket **C**.
- Install bolts A and nuts B.

The upper mounting hole for the control levers is slotted to allow fore-aft adjustment and to allow alignment of the levers.

To adjust or align the control levers:

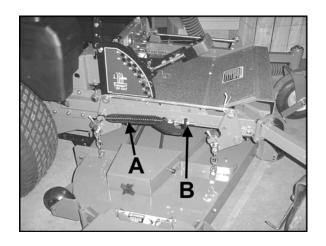
- Loosen nuts **B**.
- Adjust control lever position.
- Tighten nuts **B**.



COUNTERBALANCE SPRINGS

- a) Raise the cutterdeck all the way.
- b) Adjust the spring A with nut B:
 52" cutterdecks to a length of 9-1/8" (232 mm)
 61" cutterdecks to a length of 9-9/16" (242 mm)
 The springs may be tightened or loosened from this point according to personal preference.

NOTE: The 48" cutterdecks **do not** have counterbalance springs.



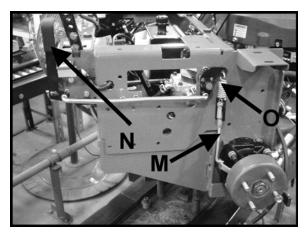
PARKING BRAKE

Park machine on a smooth level surface.

Support the machine with the rear wheels off the ground, using jack stands or equivalent. DO NOT rely on mechanical or hydraulic jacks.

- 1. Remove rear wheels.
- 2. Measure spring length **O** with parking brake **N** in the OFF position.
- 3. Move parking brake **N** to the ON position and measure length of spring **O** again. When spring deflects 3/8" it is properly adjusted.
- If adjustment is required, return parking brake N to the OFF position.
- 5. Disconnect one end of rod **M** at the brake and loosen jam nut.
- 6. Adjust rod **M** in or out as required until 3/8" deflection in brake spring **O** is achieved with parking brake **N** in the ON position.
- 7. Reconnect rod M and retighten jam nut.
- 8. Repeat steps 2-7 on opposite side of machine.
- 9. Replace wheels and tighten wheel nuts.

NOTE: Parking brake must be in the OFF position to properly seat brake drums.



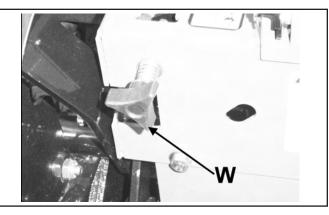
Parking brake assembly (tire and deck not shown for clarity - brake in ON position).

This adjustment will cause the brake springs to stretch 3/8" when the parking brake is in the ON position, providing the correct parking brake force without overloading the brake arm.

TRACKING HANDLES

An adjustment is provided to allow the operator to align the control levers with each other during operation.

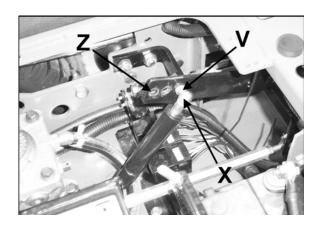
- 1. Turn knob **W** clockwise to shorten control lever travel.
- 2. Turn knob **W** counter-clockwise to increase control lever travel.



DAMPERS

Different damper mounting holes have been provided for various operator preferences with control lever motion.

- For a stronger resistance feel, mount the dampers X in the outer most hole Z of the motion control weldment.
- For a lighter resistance feel, mount the dampers X in the inner most hole V of the motion control weldment.

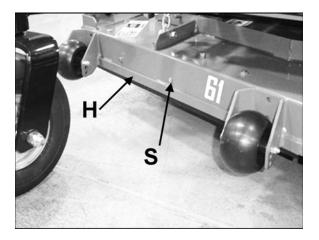


FRONT DECK LIP

Adjustable front deck lips have been provided on 52 in. and 61 in. cutterdecks for various cutting conditions.

To revise per conditions:

- 1. Loosen the front bolts S.
- 2. Adjust height of H.
- 3. Retighten S once you have desired height.



HYDROSTAT ADJUSTMENTS

A turnbuckle-style hydrostat neutral adjustment is provided.

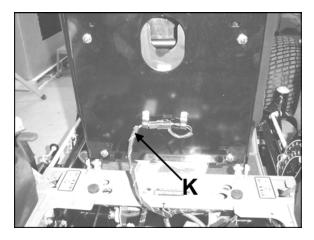
Neutral:

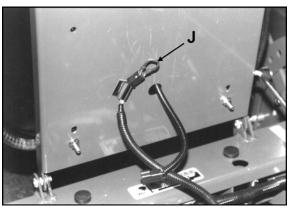
- Support the machine with the rear wheels off the ground. Use jackstands or equivalent support. Do not rely only on mechanical or hydraulic jacks.
- 2. Move the traction levers out into the neutral lock position and raise the seat.
- 3. Disconnect the seat switch wire **K** and temporarily connect the two terminals with jumper wire **J** as shown.
- 4. Start the engine and run at low speed.
- 5. Loosen jam nuts **T** at both ends of the turnbuckle.
- Rotate the turnbuckle until the corresponding wheel stops turning. Lock the turnbuckle jam nuts. Run the engine up to high idle to check the adjustment. Readjust if necessary.
- 7. Repeat steps 5 and 6 for the opposite side.
- 8. Remove the jumper wire and reconnect the seat switch.

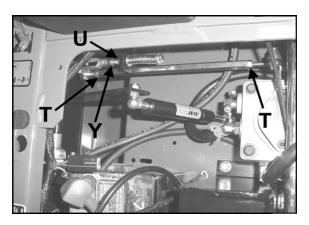
Reverse Return:

- Move traction levers out to the neutral lock position and raise the seat.
- 2. Locknut **U** should be run on the bolt as far as it will go.
- Loosen jam nut Y. Adjust the clevis yoke by turning the head of the bolt until the clevis pin just makes contact with the rear of the slot in the lever it connects with. Tighten jam nut Y.
- 4. Repeat steps 2 and 3 for the opposite side.

NOTE: A slight creep in reverse is acceptable provided the wheel does not turn and the hydrostat pump does not whine when the parking brake is on.







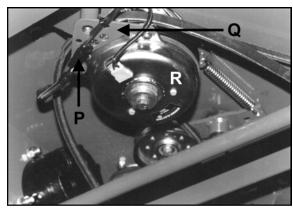
Right side adjustments (wiring harness and seat rod removed for clarity)

Note: Always use CGC, Inc. replacement belts, not general purpose belts. CGC, Inc. belts are specially designed for use on commercial mowers and will normally last longer.

ENGINE-CUTTERDECK (PTO) BELT

- 1. Set the cutterdeck in the lowest height-of-cut position.
- Attach a short extension to a 3/8" drive ratchet.
 Insert the ratchet extension into the square hole in the idler arm and use the ratchet to rotate the idler assembly enough to remove the belt.
 Remove the belt from the idlers and center cutterdeck pulley. Push belt back under engine deck.
- 3. Disconnect the electric clutch from the wire harness at plug **P**.
- 4. Remove the carriage bolts securing torque restraint **Q** to clutch **R**. Remove torque restraint.
- 5. Remove old belt from the machine.
- 6. Install a new belt by performing the these steps in reverse order.





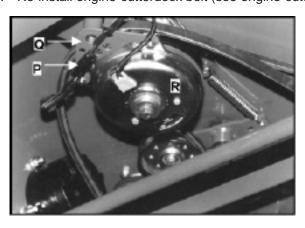
CUTTERDECK BELT

- 1. Set the cutterdeck in the lowest height-of-cut position.
- Remove the engine-cutterdeck belt from the deck idlers and pulley (see engine-cutterdeck belt replacement). Push it aside but don't remove it from the machine.
- 3. Run the cutterdeck belt off the idler as shown. Remove it from the deck.
- 4. Install the new belt by performing these steps in reverse order. Take care to get the new belt on the correct side of the belt guides.
- 5. Re-install engine-cutterdeck belt (see engine-cutterdeck belt replacement).



PUMP-DRIVE BELT

- 1. Remove engine-cutterdeck belt (see engine-cutterdeck belt replacement).
- 2. Attach an extension to a 3/8" drive ratchet. Insert the ratchet extension in the square hole of the pump drive idler arm. Use the ratchet handle to rotate it enough to remove the pump drive belt.
- 3. Install a new pump drive belt in the same manner as it was removed.
- 4. Re-install engine-cutterdeck belt (see engine-cutterdeck belt replacement).





POWER UNITS

ENGINE:

Construction: Aluminum block with cast-in sleeves. cast iron, metal gasket.

Configuration: 4-stroke, vertical shaft, V-twin cylinder, overhead valve, liquid-cooled indirect injection diesel. Deck cuts out if engine overheats.

DRIVE SYSTEM:

Full hydrostatic pump and wheel motor combination for independently controlled drive wheels.

Pump: Hydrogear PR-4ECA-EYIX-XXX with shock valves 16cc variable displacement piston pump.

Motors: Parker/Ross 15 cu.in. displacement MB series. Direct drive 1-1/4" (31.8mm) diameter output shaft.

Turn Radius: True Zero

OPERATOR PRESENCE INTERLOCK SYSTEM:

Start: The PTO (blades) must be off, traction levers in neutral lock, and parking brake on for engine to crank.

Run: Operator must be in seat to take parking brake off, to move traction levers out of the neutral lock position, or to turn the PTO (blades) on or the engine will kill. The parking brake must be off for the traction levers to move out of the neutral lock position.

The operator may leave the seat with the engine running if the parking brake is on, the PTO (blades) is off, and the traction levers are in the neutral lock position. A time delay eliminates annoying engine cutout from operation over rough terrain.

WEIGHT:

1025 lbs (465 kg) with 61" cutterdeck. 1315 lbs (596 kg) with 72" cutterdeck.

CONTROLS:

Throttle; choke; power takeoff (PTO) clutch switch; traction levers; parking brake lever; lift lever.

FUEL SYSTEM:

One tank on each side of operator, each with a shutoff (1/4 turn). Total capacity 9-1/2 gallons (40 liters). Fuel selector/shutoff switch on front panel (1/4 turn). Replaceable fuel filter.

MAXIMUM GROUND SPEEDS:

Forward: 8.5 mph (13.7 km/h) **Reverse:** 4 mph (6.4 km/h)

WHEELS & TIRES:

Drive wheels:

942246F & 942247F: 24 X 12.00-12 4-Ply Turf

Tread Tires

Casters: 13 X 6.50-6 4-Ply Rib Tread Tires

Pressure: 14 p.s.i. (1 kg/cm²)

BRAKING:

Hayes disc type parking brakes. Spring applied for overload protection.

SEAT:

High back, foam padded full suspension seat with standard armrests. Fore and aft adjusters, hinged for easy tilt-up access to pumps and battery. Internally mounted seat switch.

ENGINE								
MODEL NUMBERS	942246F, 942247F							
MANUFACTURER	KAWASAKI							
MODEL	FX1000V							
CYLINDERS	2							
COOLING	AIR							
BORE/STROKE	3.5 X 3.15 (89.15 X 80mm)							
DISPLACEMENT	61 cu.in. (999 cc)							
COMPRESSION	84:1							
OUTPUT POWER	37 hp (27.6 kw) Gross @ 3600 rpm							
OUTPUT TORQUE	51.4 ft-lb (69.7nm) @ 2400 rpm							
LUBRICATION	FULL PRESSURE							
GOVERNOR	Mechanical							
AIR CLEANER	Heavy Duty Cyclonic							
IGNITION SYSTEM	Electronic							
CHARGING SYSTEM	20 amp, regulated							
BATTERY	BCI group U1							
FUSES	Two, 20 amp blade							
FUEL CONSUMPTION @ MAX LOAD/ SPEED	1.20 gal./hr (4.6l/hr)							

FLUID CAPACITIES	QUANTITY	TYPE	FILTER
FUEL	9.5 gal. (40 l)	Gas	REPLACEABLE
ENGINE OIL	2.4 qts (2.27 l)	See Engine Manufacturer's Manual	SPIN-ON REPLACEABLE
HYDRAULIC OIL	2.6 qts (2.46 l)	SAE 15W40 MOTOR OIL, SAE 20W50 MOTOR OIL, 15W50 SYNTHETIC	25 MICRON SPIN-ON REPLACEABLE
COOLANT (Where Applicable)	1.48 qts (1.4 l)	50/50 MIX OF WATER AND ETHYLENE GLYCOL	N/A

GENERAL	DATE	HRS	DATE	HRS	DATE	HRS	DATE	HRS	DATE	HRS	DATE	HRS
GENERAL	DATE	пкэ	DATE	пкэ	DATE	пкэ	DATE	пкэ	DATE	пкэ	DATE	пкэ
Check Tire Pressures												
Lubricate All Points												
Check Nuts & Bolts												
ENGINE												
Check Engine Coolant Level (Where Applicable)												
Check Oil Level												
Change Oil												
Clean Air Cleaner Element												
Clean Cooling Fins												
Replace Air Cleaner Element												
Clean & Gap Spark Plugs												
NOTE: After	NOTE: After first 5 hours of operation replace engine oil, hydraulic oil and both filters.											

	CUTTERDECKS	5
MODEL NUMBER	942246F	942247F
TYPE	Side Discharge	Side Discharge
CUTTING WIDTH	61" (155 cm)	71.5" (181 cm)
WIDTH (CHUTE UP)	62" (157 cm)	72.5" (184 cm)
WIDTH (CHUTE DOWN)	73" (185 cm)	84.0" (213 cm)
BLADE	High Lift (low lift optional)	High Lift (low lift optional)
NUMBER OF BLADES	3	3
BLADE LENGTH	21" (53 cm)	24.5" (63 cm)
BLADE THICKNESS	0.25" (6.35 mm)	0.25" (6.35 mm)
TIP SPEED	18100 ft/min 5517 m/min @ 3800 Engine RPM	18153 ft/min 5533 m/min @3800 Engine RPM
DAILY PRODUCTION (8 hr @ 6 mph)	Up to 29.5 acres (11.9 ha)	Up to 34.7 acres (14.0 ha)

CONSTRUCTION:

Fabricated and welded 10-gauge, double-layer steel top with 7-gauge side skirts. Full floating design.

CUTTERDECK DRIVE SYSTEM:

Electric clutch/brake drives belt directly from engine to center spindle of cutterdeck. No twists in drive belt.

SPINDLES:

Top mounted and maintenance free, with 1" shaft in precision machined, aluminum housing

SPECIFIC TORQUES

BLADE BOLT TORQUE: 70 FT-LBS (95 Nm) WHEEL HUB NUTS: 225 FT-LBS (237 Nm) ENGINE CRANKSHAFT BOLT: 40 FT-LBS (68 Nm)

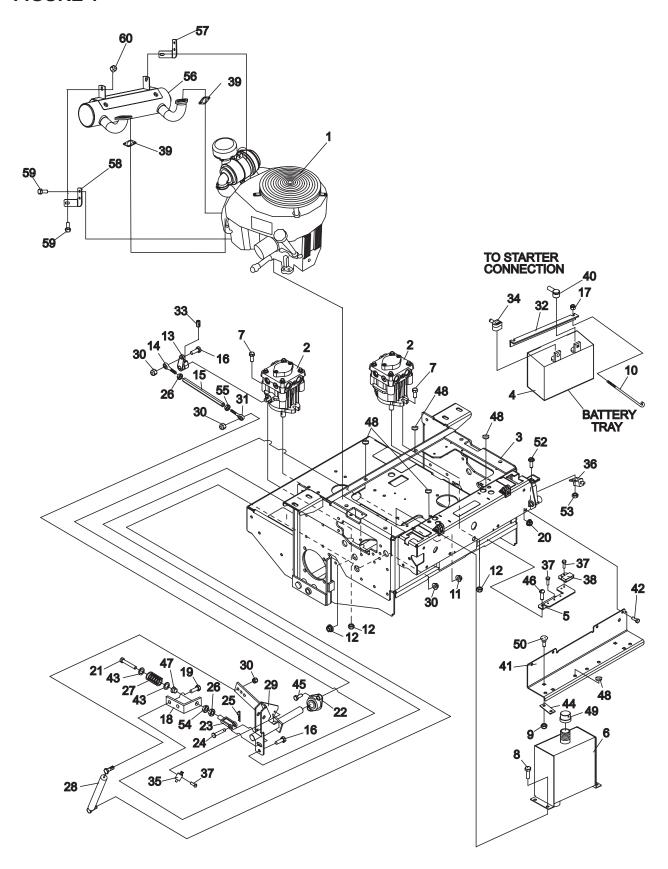
ANTI-SCALP ROLLERS:

61" Cutterdecks - 7 Rollers 72" Cutterdecks - 7 Rollers

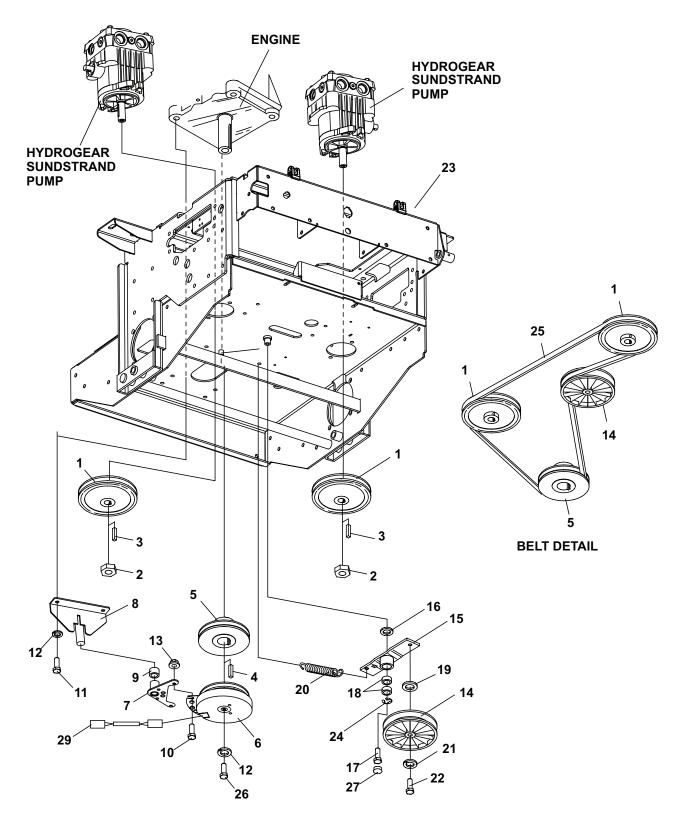
CUTTING HEIGHT & PRODUCTION:

Height: Spring assisted lift lever allows easy setting of cut heights from 1-1/2" to 4-1/2" in 1/4" increments. "Set and forget" feature allows height of cut to be set and returned to without searching from operator position.

PARTS SECTION

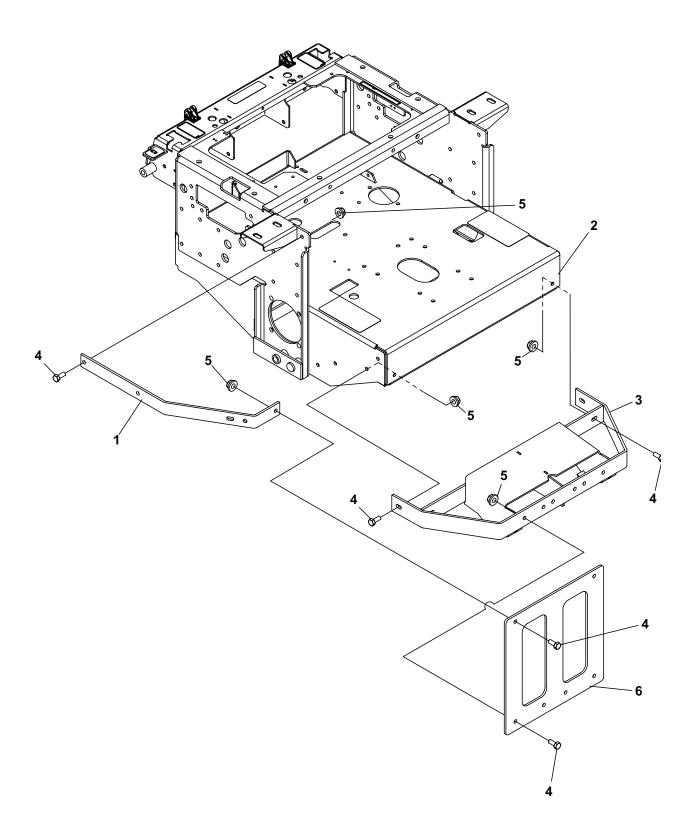


ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	4160660	ENGINE-37 HP KAWASAKI	1	37	64197-015	BLT-TDFM 10-32X1/2 TORX	8
	4152953	S-AIR FILTER PRIMARY	1	38	2188154	MODULE-DELAY	1
	4152954	S-AIR FILTER SAFETY	1	39		1 GASKET-MUFFLER	2
	2722214	FILTER-OIL	1	(AV	AILABLE TH	ROUGH KAWASAKI DEALE	R)
	38666	FILTER-FUEL	1				
	44==040	DUM	_	40	2308095	COVER-TERMINAL	1
2	4157242	PUMP-HYDROSTATIC	2	41		PLATE-KICK	1
	(SEE FIGU	IRE 8 FOR BREAKDOWN)		42		BLT-FLG HD M10-1.5 X 20	4
2	4163543	S ENGINE DECK W// ABS	4	43	64163-55	WASHER .328X.75X14 GA	4
3 4	4103343	S-ENGINE DECK W/LABS BATTERY	1 1	44 45	2188146 64123-15	STRIP, WEAR BOLT-3/8-16X3/4 HEX	2 8
4	(OBTAIN L		ı	46	64152-23	1/4-20X3/8 LG SP SCREW	2
	(ODIAIN L	OCALLI)		47	38304-02	BRG, FLGD PLASTIC	2
5	4138850 7	BRACKET-RELAY MNTG	1	48	810149	BUMPER-RUBBER	8
6	2186211	S HYD RESERVOIR W/LAE	-	49	69216.7	CAP-RESERVOIR	1
7		BLT-FLG HD M10-1.5 X 30	4	50	64018-23	BLT-CRG 3/8-16X3/4	4
8		BLT-TDFM 3/8-16X1/2	4	51	64207-06	NUT-HEX M6-1	1
9	64268-03		4	52	64152-46	SCREW-SLT HH 10-24X1/2	
10	831861	BOLT-BENT BATT HOOK	2	53	64025-15	NUT-HEX #10-24 KEPS	2
11	64141-4	NUT-WLF 3/8-16	8	54	64229-08	LOCKNUT NYLON 5/24	2
12	64237-03	LOCKNUT-NYLON M10-1.5	8	55	64025-33	NUT-HEX 5/24 LH	2
13	4159521	ARM-PUMP	2	56	4163220	ASSY-MUFFLER	1
14	38369-02	ROD END BALL JOINT LH	2	57	4163257.7	BRACKET-MUFFLER, LH	1
15	2188140	TURNBUCKLE	2	58	4163258.7	BRACKET-MUFFLER, RH	1
16		BLT-MET M8-1.25X30	4	59	64263-007	BLT-FLG HD M8-1.25 X 20	6
17	64229-02		2	60	64266-02	NUT-FL CROWN LOCK M8-1.2	25 2
18		BRKT-REVERSE RETURN	2				
19	A1104057		4				
20	64246-03	NUT-WHIZ M10-1.50	4				
21		BLT-HEX 5/24X4	2		± 11	OT !! ! !!OTD ATED	
22	2188145	BEARING75IDSELF-ALIG			* N	OT ILLUSTRATED	
23	38020N	CLEVIS YOKE, 5/16 PLATE	2 2				
24 25	64188-02 64168-2	PIN, CLEVIS 5/16X1 COTTER-HAIRPIN.08X1.19					
25 26	64025-03	NUT-HEX 5/24	4				
27	2188139	SPRING-COMPRESSION	2				
28	2722384	DAMPENER	2				
29		WLDMT-MOTION CTRL RE					
20		WLDMT-MOTION CTRL LH					
			•				
30	64237-05	LOCKNUT-NYLON M8-1.25	8				
31	38369-01	ROD END BALL JOINT RH					
32	2182427.7	HOLDDOWN-BATTERY	1				
33	64192-06	SETSCR SQHD 5/18X3/4	2				
34	112386	BOOT,BAT TERM POS	1				
35	108208	SWITCH DBL POLE	2				
36	2188156	SWITCH-NONO DBL POLE	1				
				1			

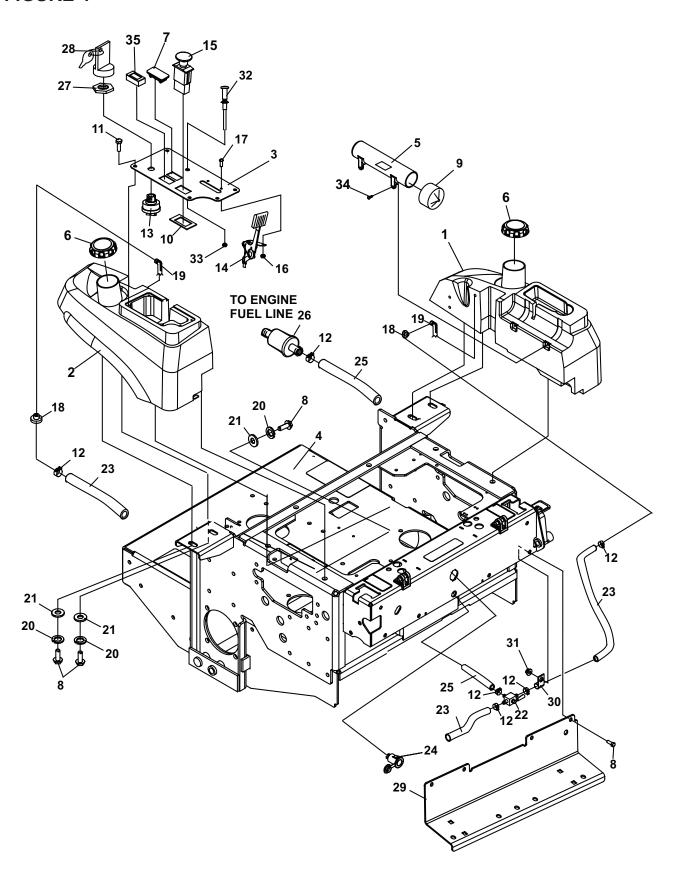


TORQUE TO 50 FT/LBS +/-10%

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	4157180	PULLEY-PUMP	2				
2	64151-26	NUT 7/20 NYLON INST	2				
3	64164-29	KEY-3/16 X 3/4	2				
4	64164-12	KEY	1				
5	4121339	PULLEY-4.25 ENGINE	1				
6	2721337	CLUTCH-ELECTRIC	1				
7	2721338.7	WLDMT-CLUTCH STOP	1				
8	2186147.7	WLDMT-CLUTCH BRACKE	ET 1				
9	38304-03	BEARING-FLANGED PLST	ΓC 1				
10	64205-001	BLT-MET M8-1.25X20	2				
11	64123-16	BLT-HEX 3/8-16X1-1/4	4				
12	64006-03	LCKWSHER-HELICAL 7/16	6 4				
13	64265-04	NUT-FL NYL LOCK M8-1.2	5 2				
14	2308000	PULLEY-IDLER 4.00 EOD	1				
15	4128923	S-ASSY-IDLER ARM PUMP	⊃ 1				
	(INCLUDES	S ITEMS 16, 18 & 24)					
16	4127999	SEAL	1				
17	64270-01	BOLT-MET HEX M10-1.5X	30 1				
18	4128004	BEARING	1				
19	33148-01	SPACER-0.379X0.750X0.2	5 1				
20	2188131	SPRING-TENSION	1				
21	64006-03	WSHR, 3/8 HELICAL LOC	K 1				
22	64123-21	BLT-HEX 3/8-24X1-1/4	1				
23	4163543	S-ENGINE DECK W/LABS	1				
24	64144-40	SNAP RING	1				
25	4161305	BELT-TRACTION DRIVE	1				
26	64123-155	BLT-HEX 7/20X3	1				
27	4128002	END CAP	1				
28 *	4121560	KIT-BRAKE POLE RPLCM	NT 1				
29	2720949	ASSY-CLUTCH WIRE	1				

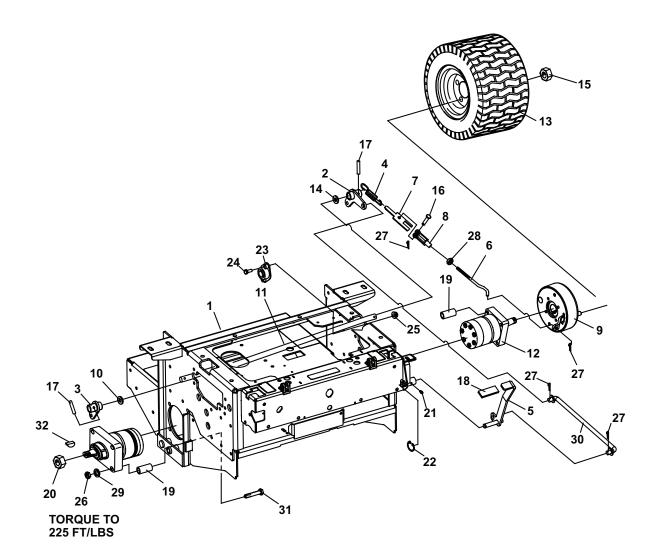


ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	2722296.7	ARM-BUMPER	2				
2	4163543	S ENG DECK W/LABS	1				
3	2721324.7	WLDMT-BUMPER	1				
4	64263-013	BLT-FLG HD M10-1.5 X 30	10				
5	64265-05	NUT-FL NYL LOCK M10-1.5	5 10				
6	2721932.7	BRACE-VERTICAL	1				

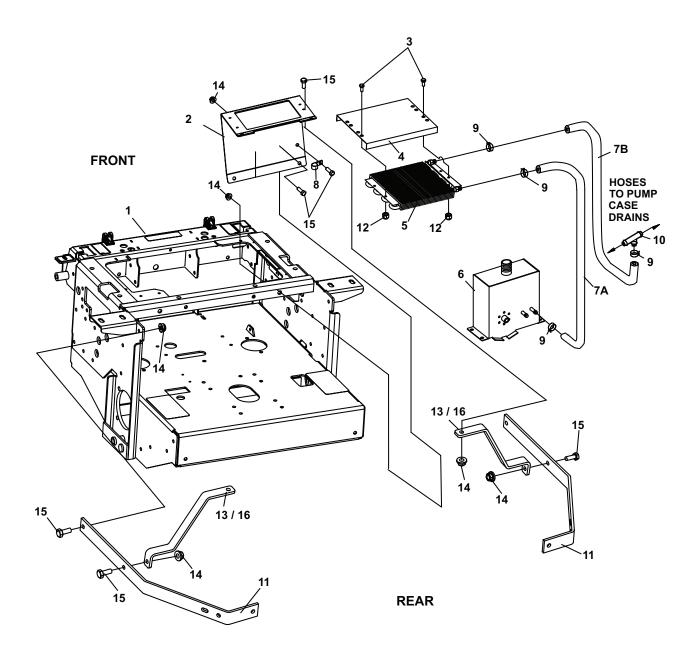


eries FIGURE 4

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	4162990 (INCLUDES	TANK-FUEL LH S ITEMS 18 & 19)	1				
2	4162991 (INCLUDES	TANK-FUEL RH S ITEMS 18 & 19)	1				
3	4163546	S-CONTROL PANEL	1				
4	4163543	S ENG DECK W/LABS	1				
5	4160281	S DOC TUBE W/LABEL	1				
6 7	4130320	CAP-FUEL GASOLINE 3.5	2				
8	4110023	PLUG-SWITCH HOLE BLT MET M10-1.50X20	1 12				
9	38061A	VINYL CAP	1				
10	2188178	SWITCH-RETAINER	1				
11		BLT-FLG HD M6-1.0 X 12	5				
12	88042N	HOSE CLAMP	6				
13	128010	KEY-SWITCH	1				
14		CONTROL-THROTTLE	1				
15	2721505	SWITCH-PTO	1				
16		NUT-HEX #10-24 KEPS	2				
17		SCRSLT HH #10-24X1/2	2				
18	4132325	GROMMET-FUEL TANK	2				
19	4162997-001	TUBE-FUEL LINE	2				
20	800488	LOCKWASHER M10	8				
21	64251-004	WASHER-M10	8				
22	2188161	VALVE-TANK SELECTOR	1				
23	4162977-016	3HOSE,.25IDX.50OD X 48"	1				
24	4142266	CONNECTOR, 12V RECEP	PT 1				
25		9HOSE25IDX.50OD X 24"	1				
26	38666	FILTER, FUEL B&S	1				
27		S-KEY SWITCH NYLON NU					
28		S-COVERED KEY	1				
29		PLATE-KICK	1				
30	48228-2A		1				
31	64246-03	NUT-WHIZ M10-1.50	4				
32		CONTROL-CHOKE 55"	1				
33	64025-04		1				
34		BLT-FLG HD M6-1.0 X 16	2				
35	4136792	METER-HOUR	1				

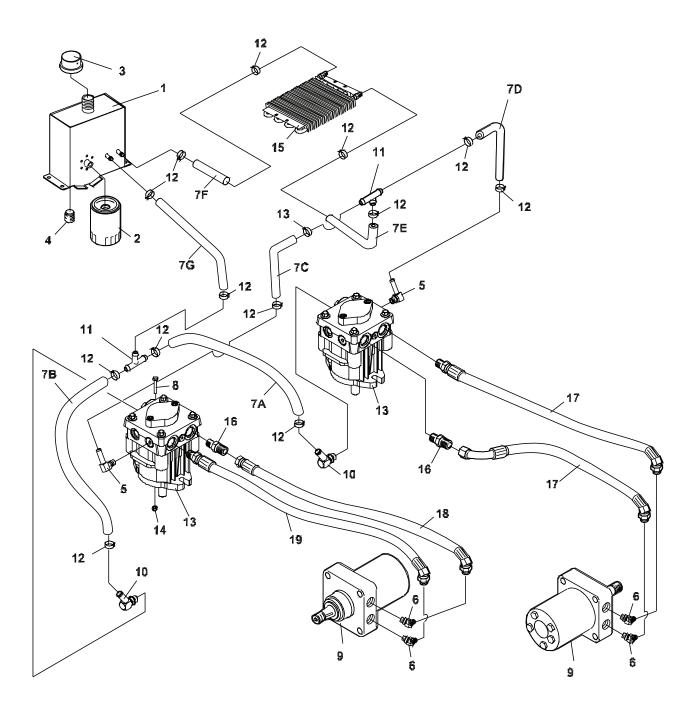


ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1 2 3 4 5 6	4158801.7 128102 4159241.7 4159701 (USED ON 4159700	S-ENGINE DECK W/LABS WLDMT-BRAKE ARM LH WLDMT-BRAKE ARM RH SPRING,EXTENSION WLDMT-BRAKE LEVER ROD-BRAKE CONTROL 61" ONLY) ROD-BRAKE CONTROL 72" ONLY)	1 1 1 2 1 2	26 27 28 29 30 31	64223-10 (COTTER-HAIRPIN.08X1.19 NUT-HEX 5/24 LOCKWSHR-HELICAL 1/2 WLDMT-PRK BRAKE ROD	8 4 2 8 1 8
7 8 9 9A* 9B* 9C* 9D* 10 11	38020N 4159281 4159281-00 4159281-00 4159281-00 4159281-00 64163-06 4159000 4159280	GUIDE-SPRING CLEVIS YOKE, 5/16 PLATE BRAKE-PARKER 1 BRAKE-BACK PLATE W/ PA 2 BRAKE-DRUM 3 BRAKE-SCREW 4 BRAKE-HUB WSHR,.768/.756X1.25X14 BAR-PARKING BRAKE MOTOR-PARKER S ITEMS 20 & 32)	2 DS1 1 4 1	32	64164-08 *NOT ILLU	S-KEY FOR WHEEL MOTO	₹2
13		ASSY-WHEEL 24 X 12-12 2TIRE 24X12.00-12NHS 4PI	2 _Y 2				
14 15 16 17 18 19	64188-02 64061-25 2188155 2183063-0 (USED ON 2183063-0	WASHER WHEEL NUT-1/2-20 PIN, CLEVIS 5/16X1 ROLL PIN-1/4X1-1/4 GRIP, 1/4X1X4-1/2 1SPACER, 32MM LONG 61" DECKS ONLY) 5SPACER, 19.05X12.97IDX 72" DECKS ONLY)	1 8 2 2 1 8				
20 21 22 23 24 25	64025-31 85010N 64144-34 2188145 64123-15 64141-4	NUT 1-20 UNSLOTTED TR ZERK, 1/4-28 STR SLFTHE SNAP RING.50 BEARING75ID SELF ALIO BOLT-3/8-16X3/4 HEX NUT-WLF 3/8-16	RD 1 1				



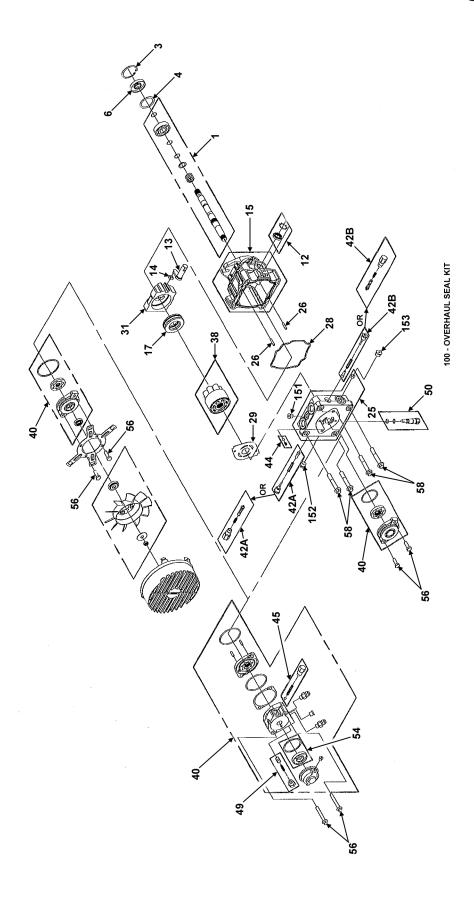
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	4163543	S ENGINE DECK W/LABS	1				
2	4162889.7	BRKT-COOLER FRONT	1				
3	64263-002	BLT-FLG HD M6-1.0 X 16	4				
4	2720891.7	SCREEN-OIL COOLER	1				
5	2188173	COOLER-OIL	1				
6	2186211	S HYD RSRVR W/LABS	1				
(690	53-05 IS A SI	ERVICEABLE LENGTH OF (55")				
7À	69053-05	3/8 HIGH TEMP HOSE 26"	1				
7B	69053-05	3/8 HIGH TEMP HOSE 22"	1				
8	48228-2A	CABLE-CLIP 3/4 W/INSTN	2				
9	88042-04	CLAMP-3/4 CLIP	4				
10	58026-01	3 WAY CONNECTOR 3/8	1				
11	2722296.7	ARM-BUMPER	2				
12	64237-02	LOCKNUT-NYLON M6-1.00) 4				
13	4162890.7	BRACKET-REAR COOLER	2				
14	64265-05	NUT-FL NYL LOCK M10-1.	5 9				
15	64263-013	BLT-FLG HD M10-1.5 X 30	9				
16	4162804	SHIELD-HEAT	1				

^{*} NOT ILLUSTRATED

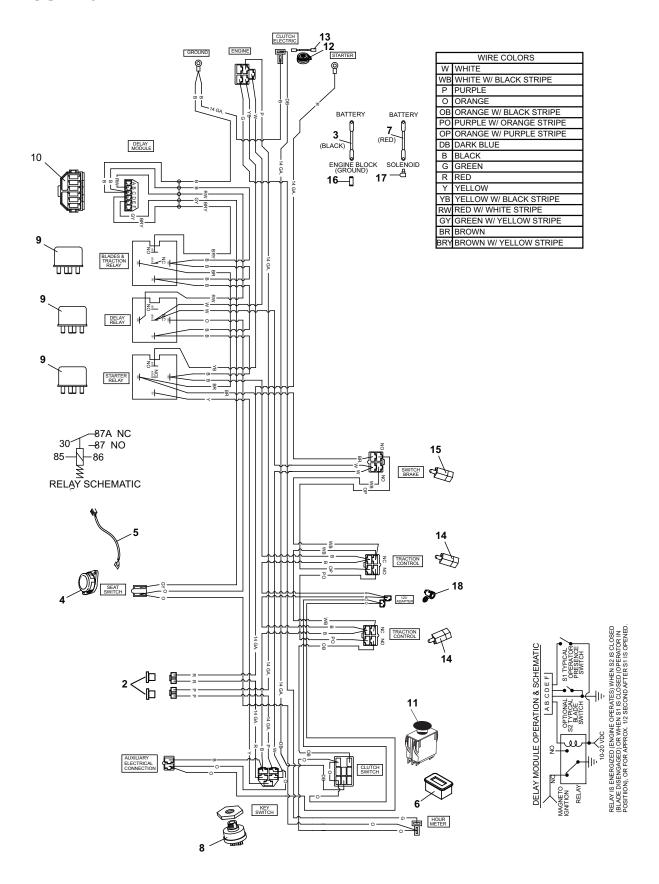


ITEM	PART NO.	DESCRIPTION	QTY
1	2186211	S HYD RESERVOIR W/LAE	3 1
2	2720396	FILTER 25 MICRON	1
3	69216.7	CAP-RESERVOIR	1
4	4160243	PLUG-HYDRAULIC TANK	1
5	158058-04	FTG-90 BRB 9/18X.38	2
6	108205-03	ELBOW-MALE 45 37-ORB	4
(690	53-05 IS A S	ERVICEABLE LENGTH OF 5	55")
7A	69053-05	3/8 HIGH TEMP HSE 18"	1
7B	69053-05	3/8 HIGH TEMP HSE 15"	1
7C	69053-05	3/8 HIGH TEMP HSE 19"	1
7D	69053-05	3/8 HIGH TEMP HSE 12"	1
7E	69053-05	3/8 HIGH TEMP HSE 22"	1
7F	69053-05	3/8 HIGH TEMP HSE 26"	1
7G	69053-05		1
8	64123-60	BOLT, 1/4-20X2 HEX	1
9	4159280	MOTOR-PARKER	2
10		1FTG 9/18 ORB X 3/8	2
11	58026-01	3 WAY CONNECTOR 3/8	2
12		CLAMP-HOSE 5/8	14
13	4157242	PUMP-HYDRO 16cc	2
14		LOCKNUT-NYL 1/4-20	2
15	2188173	OIL COOLER	1
16	48089-03	FTG-ST 8 ORB X 8 JIC	3
17		1 HOSE-1/2 37/45 37 26.25	2
18	2720320-02	2HOSE-1/2 37/45 37	1
19	2188157-02	2HOSE-HYD ORB-37 25.00	1

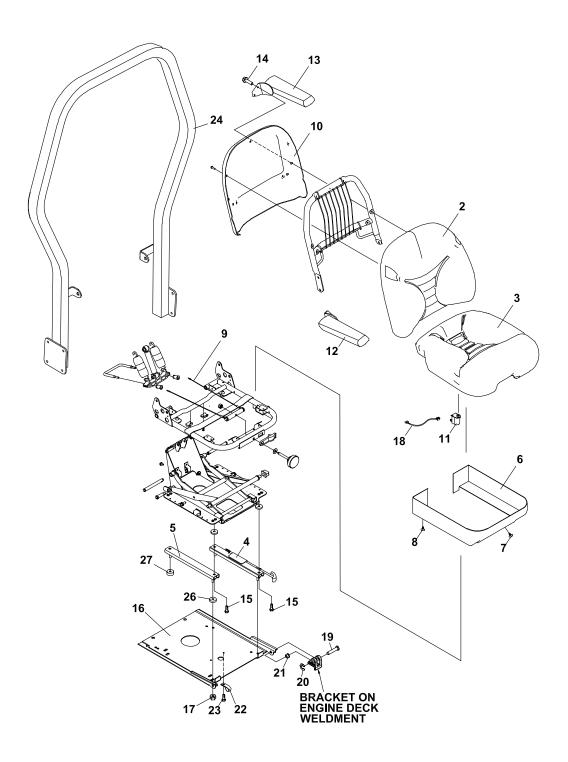
SAE	PORT 'O' RING	
PART NUMBER	THREAD SIZE	AS-568#
158061-10	9/16-18	-906
158061-11	3/4-16	-908
158061-12	7/8-14	-910
158061-13	1-1/16-12	-912
158061-14	1-5/16-12	-916
158061-16	1-5/8-12	-920
158061-03	1-7/8-12	-924



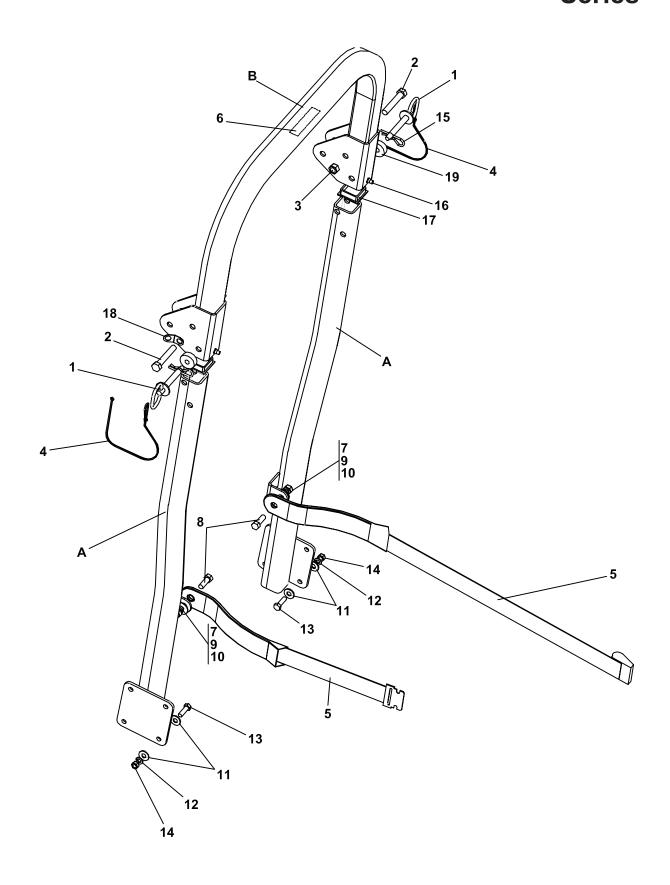
ITEM	HYDROGEAR PART NO.	CGC, INC. PART NO.	DESCRIPTION	QTY
1	71019	4157242-001	PUMP SHAFT KIT-TAPERED	1
3	2000038	4157242-002	RETAINING RING	1
4	2000023	4157242-003	SPACER	1
6	51092	4157242-004	LIP SEAL	1
12	70739	4157242-005	TRUNNION SEAL/RETAINER	1
13	2000014	4157242-006	TRUNNION ARM	1
14	2000015	188059-09	SLOT GUIDE	1
15	70738	4157242-007	HOUSING KIT	1
17	51462	4157242-008	BALL THRUST BEARING	1
25	70736	4157242-009	END CAP KIT W/POPPETS	1
26	50641	4157242-010	STRAIGHT HEADLESS PIN	2
28	51437	4157242-011	HOUSING O-RING	1
29	52371	4157242-012	VALVE PLATE	1
31	51436	4157242-013	SWASHPLATE	1
38	70735	4157242-014	CYL BLOCK KIT (16 cc)	1
40	2510071	4157242-015	CHARGE PUMP KIT	1
42A	70743	4121354	SHOCK VALVE KIT (0.031" ORF	: 1
42B	70741	4121355	SHOCK VALVE KIT (BLANK)	1
44	70402	4157242-016	CHARGE RELIEF VALVE KIT	1
45	2510082	4157242-017	AUX RELIEF VALVE KIT	1
49	2510020	4157242-018	AUX BYPASS/CHECK KIT	1
50	2513030	4157242-019	BYPASS VALVE KIT (BLANK)	1
54	2510090	4157242-020	AUX FILTER KIT	1
56	50173	4157242-021	BOLT-M8-1.25 X 25	2
58	51457	4157242-022	FH M10 X 65	4
100	70740	4157242-023	OVERHAUL SEAL KIT	1
151	9005110-4400	4157242-024	STRAIGHT THREAD PLUG	1
152	9005100-5600	4157242-025	9/16 STEEL PLUG	1
153	9005100-5600	4157242-025	9/16 STEEL PLUG	1



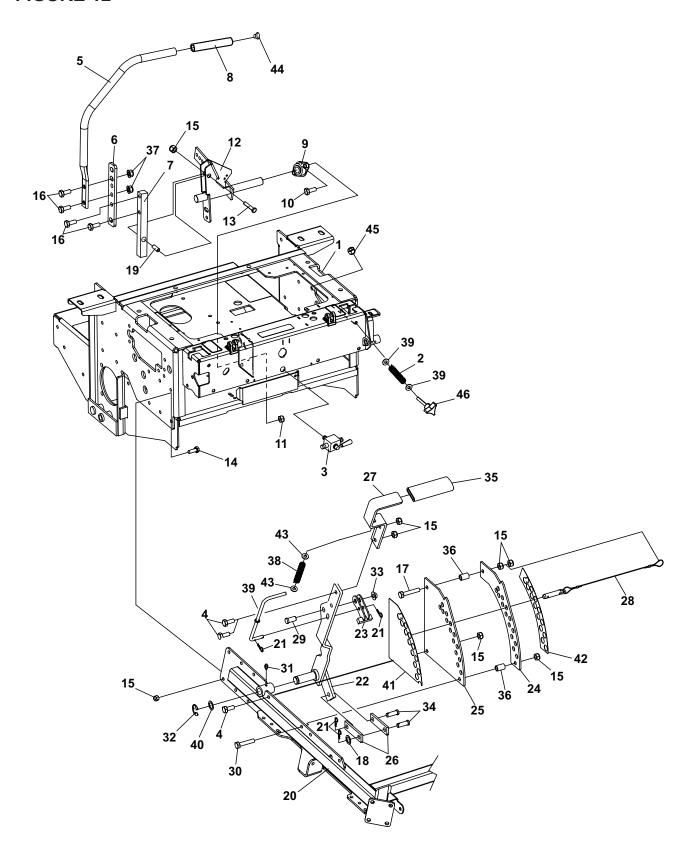
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	4163532	HARNESS-WIRING MAIN	1				
2	148082-20	FUSE-20 AMP	2				
3	108061-13	CABLE-BATTERY 36 BLAC	K 1				
4	4124009	SWITCH-SEAT, NO	1				
5	4143068	JUMPER-SEAT SWITCH	1				
6	4136792	METER-HOUR	1				
7	2722227-02	2CABLE-BATT W/CONDUIT	1				
	(INCLUDES	S ITEMS 20 & 21)					
0	400040	KEV OMITOLI	4				
8	128010	KEY-SWITCH	1				
9	2722325	RELAY-40AMP SEALED	3				
10	2188154	MODULE-DELAY	1				
11	2721505	SWITCH-PTO	1				
12	2721337	CLUTCH-ELECTRIC	1				
13	2720949	ASSY-CLUTCH WIRE	1				
14	108208	SWITCH-DBL POLE	2				
15	2188156	SWITCH-NONO DBL POLE	1				
16	4142266	CONNECTOR-12V	1				
17	2188224	HARNESS-JUMPER	1				
18	108061-04	CABLE-BATTERY 20 RED	1				
19	2308095	COVER-TERMINAL	3				
20	112386	BOOT-BAT TERM POS	1				



ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1		SEAT-SUSPENSION S ITEMS 2-15)	1				
2	4122479-0	1CUSHION-SEAT BACK	1				
3		2CUSHION-SEAT BOTTOM	1				
4		3SLIDE RAIL-ADJUSTER	1				
5	4122479-0	4SLIDE RAIL-SLAVE	1				
6	4122479-0	5SKIRT-SEAT ASSY	1				
7	4122479-0	6CLIP-SMALL XMAS TREE	3				
8	4122479-0	7CLIP-LARGE XMAS TREE	4				
9	4122479-0	8ASSY-CABLE	1				
10	4122479-0	9BACK PANEL-SEAT	1				
11	4124009	SWITCH-SEAT NO	1				
12	4122481	ARMREST-RH	1				
13	4122480	ARMREST-LH	1				
14	64123-68	BOLT-HEX 5/18X1	4				
15	64123-54	BOLT, 5/18X3/4 HEX	4				
16	4121386.7	PLATE-SEAT	1				
17	64141-6	NUT-WLF 5/18	4				
18	4143068	JUMPER-SEAT SWITCH	1				
19		PIN-CLEVIS	2				
20	64144-30	SNAP RING	2				
21	38371-01	BRG-NYLINER 3/8	2				
22	48228A	CABLE CLIP-INSULATED	2				
23	64152-23	SCREW 1/4-20X3/8	2				
	Ol	PTIONAL ROPS:					
24	970162	ATT-ROPS					
	(INCLUDE:	STIEM 22)					
25 *	2208260	S-SEAT BELT	1				
26`		7 SPACER-NYLON 3/8"	2				
27	2720975-0	9 SPACER-NYLON 1/4"	2				
	* N	OT ILLUSTRATED					



ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	4162879	PIN-HITCH 1/2	2				
2	64123-31	BOLT-1/2-13 X 3	2				
3	64151-7	LOCKNUT- 1/2-13	2				
4	4162880	LANYARD-NYLON	2				
5	4162882	SEATBELT	1				
6	4160347	LABEL-WARNING ROPS	1				
7	64163-19	WASHER-FLAT 7/16	2				
8	64123-28	BOLT-7/16 X 1-1/4	2				
9	64006-06	LOCKWASHER-7/16	2				
10	64151-11	LOCKNUT-7/16	2				
11	64163-31	WASHER-3/8	16				
12	64006-03	LOCKWASHER-3/8	8				
13	64123-16	BOLT-3/8-16 X 1-1/4	8				
14	64025-05	NUT-3/8-16 HEX	8				
15	64168-1	PIN-COTTER	2				
16	4160343	BUMPER RUBBER	2				
17	4160344	PLUG	2				
18	4160348	WASHER-FORMED	2				
19	4162878	WASHER-RUBBER	2				



ITEM PART N	O. DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1 4163543	S ENGINE DECK W/LABS	1				
2 4163746	SPRING	2				
3 2188161	VALVE-TANK SELECTOR	1				
4 A1104057	BOLT-M10-1.50X25	3				
5 4163691.7	LEVER-TRACTION CNTRL	2				
6 4122173.7	BRKT-TRACTION LEVER	2				
7 2183074	BRKT-HANDLE	2				
8 4163690	GRIP-HANDLE	2				
9 2188145	BEARING75ID SELF ALIGN					
10 64123-15	BOLT-3/8-16X3/4 HEX	8				
11 64141-4	NUT-WLF 3/8-16	8				
12 4112105.7 *4112104.7	WLDMT-MTN CONTRL RH	1 1				
4112104.7	WLDMT-MTN CONTRL LH	'				
13 64205-011	BLT-MET M10-1.50X40	2				
14 A110406	SCREW,M10X1.5X30 HH	12				
15 64237-03	LOCKNUT-NYLON M10-1.5	20				
16 64263-013	BLT-FLG HD M10-1.5 X 30	8				
17 64205-008	BLT-MET M10-1.50X55	1				
18 64163-43	WSHR.443/.454X1X11GA	1				
19 2183073	SPACER	2				
20 4159920.7	WLDMT-CRADLE COTTER-HAIRPIN.08X1.19	1 4				
21 64168-2 22 2720551.7	WLDMT-DECK LIFT LEVER	1				
23 4162904.7	WLDMT-DECK EII 1 LEVEK WLDMT-LVR STOP LATCH	1				
24 4163391.7	BRKT-INNER DECK LIFT	1				
25 4163390.7	BRKT-OUTER DECK LIFT	1				
26 4116590.7	BRACKET-LIFT LINK	2				
27 2720501.7	HANDLE-LIFT ARM	1				
28 4159060	ASSY, PIN & LANYARD	1				
29 64188-53	PIN-CLEVIS 1/2X1.0	1				
30 64205-052	BLT-MET M10-1.5X50	1				
31 85010N	ZERK, 1/4-28 STR SELF TH	1				
32 64221-04	E-RING .875	1				
33 64175-05	NUT-PUSH 1/2	1				
34 64188-36	PIN, CLEVIS 7/16X1-1/4	2				
35 2188143	GRIP	1				
	SPACER-15.88X10.32X24	2				
37 64265-05	NUT-FL NYL LOCK M10-1.5	4				
38 2720544	SPRING-COMPRESSION	1				
39 4159284 40 64163-65	ROD-LIFT STOP WSHR .890X1.375X18GA	1 7				
41 4163666	LBL-ZT200 HT CUT OUTER	1				
42 4163667	LBL-ZT200 HT CUT INNER	1				
43 64163-29	WASHER-21/64 X 1 X 11GA	2				
44 4163692	CAP-END	2				
45 64229-02	NUT-NYLON LOCK 5/16-18	2				
46 4163446	KNOB	2				
*	NOT ILLUSTRATED					

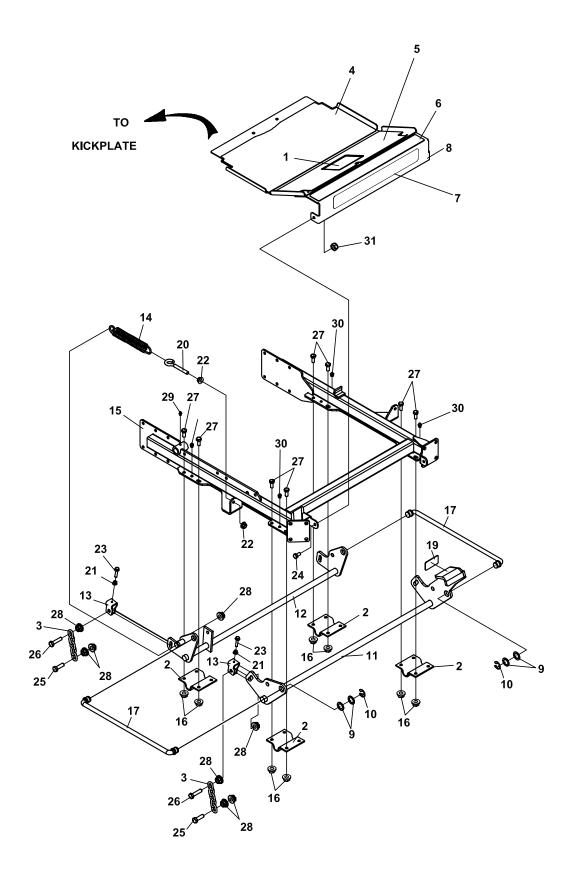
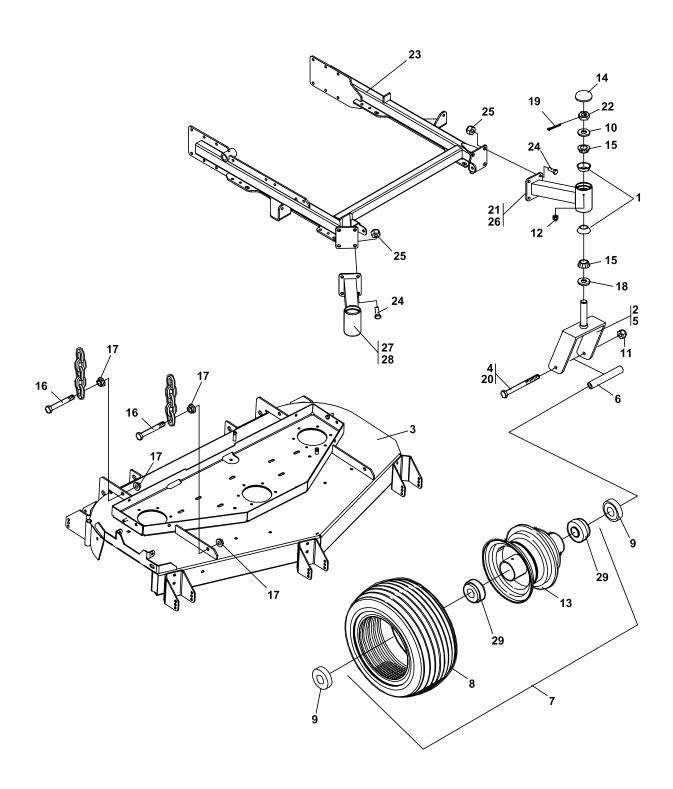


FIGURE 13

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1 2 3	2188127 (QTY 4 USI (QTY 2 USI 2722454	LABEL-WARNING BRACKET-SHAFT HANGER CHAIN-6.35 (.250) 5 LINKS ED ON 61" DECK) ED ON 72"DECK) CHAIN-6.35 (.25) 3 LINKS ED ON 72" DECK)	1 4 4				
4 5 6 7 8	4109780	MAT-FOOT PLATE LOWER MAT-FOOT PLATE MIDDLE MAT-FOOT PLATE UPPER LABEL-PREDATOR PRO S-FOOT PLATE S ITEMS 4-7)	1 1 1 1				
9 10 11 12 13 14 15 16 17 18 * 19 20 21 22 23 24 25 26 27 28 29 30 31	64221-04 4159283.7 2722559.7 2722630 2722719 4159920.7 64265-05 4109960 4111842.7 4139785 4113682 64141-2 64141-4 64197-020 64205-007 64205-060	WASHER890X1.375X18G/ E-RING.875 WLDMT-DECK LIFT, FRONT WLDMT-DECK LIFT, REAR CLIP-DECK HEIGHT ADJ SPRING-DECK LIFT WLDMT-CRADLE NUT-FL NYLN LCK M10-1.5 WLDMT-DECK LIFT ROD BRKT-SPRING ANCHOR LIFT MAT-FOOT LIFT ROD-SPRING MOUNT NUT-WLF 1/4-20 NUT-WLF 3/8-16 BLT-TDFM 1/4-20X1-1/2 BLT MET M10-1.50X20 BLT-MET M12X1.75X40 BOLT-MET M12-1.75X50 BLT-FLG HD M10-1.5 X 30 NUT-WHIZ M12-1.75 ZERK, 1/4-28 STR SLFTHR ZERK-1/8 PIPE LOCKNUT-NYLON M10-1.5	4 1 1 4 2 1 15 2 4 4 4 4 4 15 16				

*NOT ILLUSTRATED

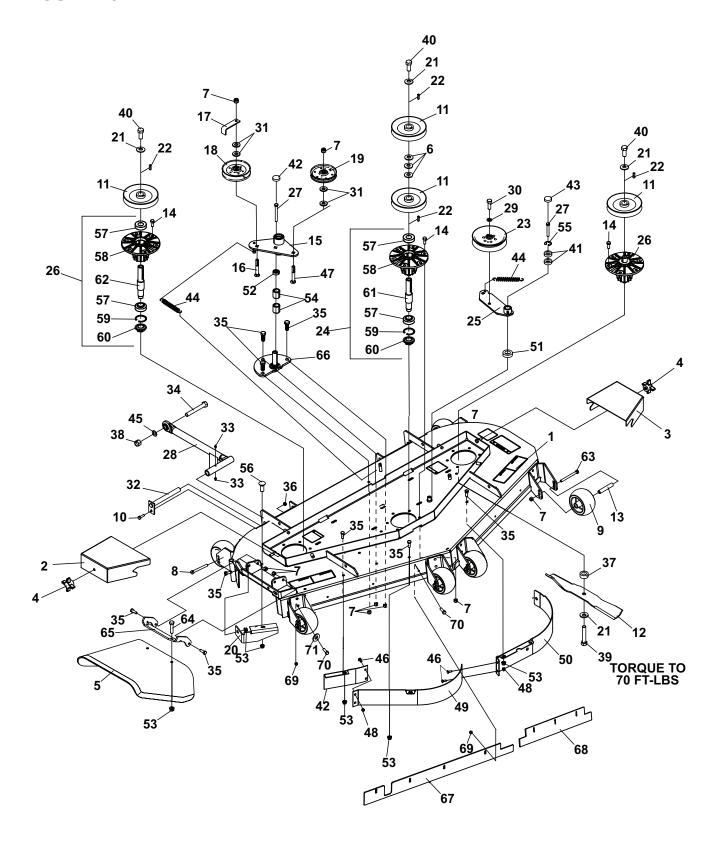


CRADLE & CASTER ASSEMBLY

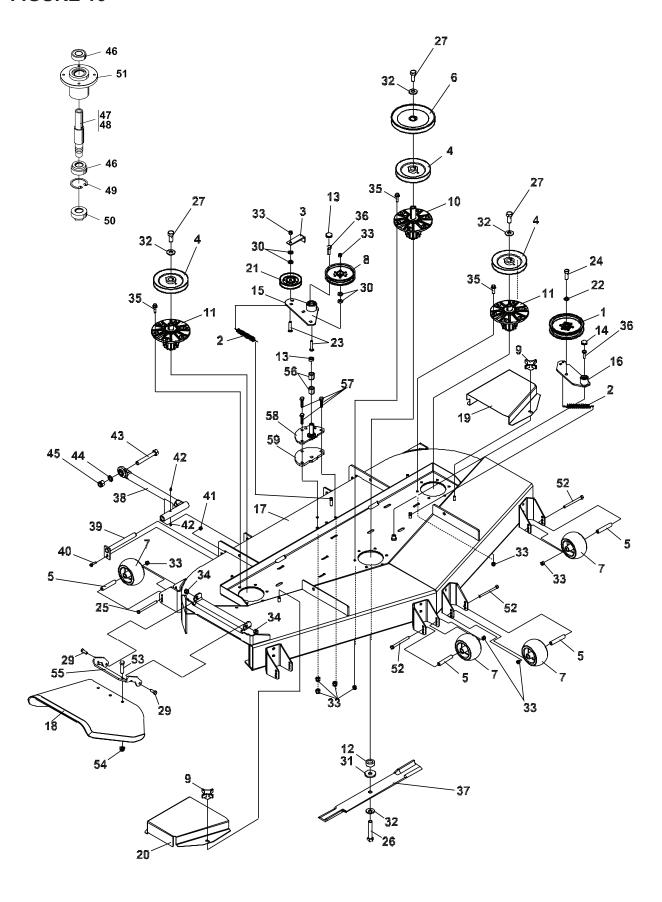
ZT 200 Series

eries FIGURE 14

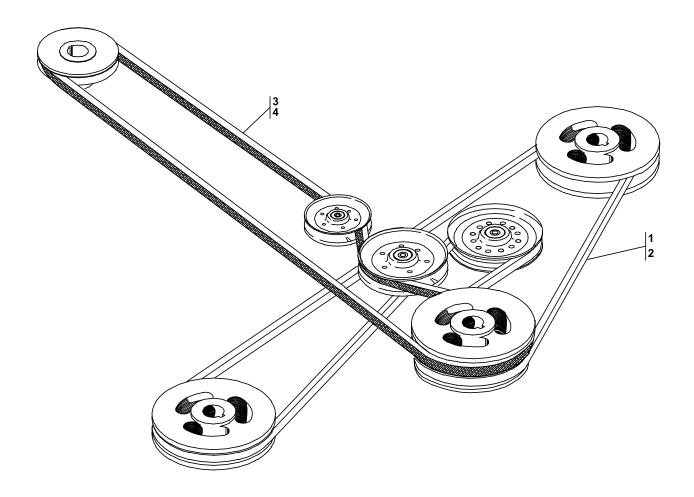
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	48043-03C	CUP, OUTER BEARING	4				
2		WLDMT-CASTER YOKE	2				
3		DECK/W LABS	_				
4	64123-215	BOLT-HEX 3/4-10X7 1/2	2				
5		WLDMT-CASTER YOKE	2				
6		3SPANNER-13X6.5 WHEEL	2				
7	2722326	ASSY-WHL 13X6.5-6	2				
	(INCLUDES	S ITEMS 8, 13 & 29)					
8	2722326-0	1TIRE-13X6.50-6 SMTH TRI	D 2				
9	2722231	SPACER-END	4				
10	64163-64	WSHR 1.015X1.500X14GA	. 2				
11	64229-07	LOCKNUT-NYLON 3/4-10	2				
12	85010N	ZERK, 1/4-28 STR SLF TH	D 2				
13	2722326-02	2RIM ASM-W/VALVE STEM	2				
14	2188135	DUST COVER	2				
15		CONE, OUTER BEARING	4				
16	64205-029	BLT-MET M12X1.75X40	4				
17		NUT-WHIZ M12-1.75	8				
18	48480		2				
19		COTTER PIN	2				
20		BOLT-3/4-10 X 10	2				
21		WLDMT-CASTER ARM 61	1				
22		NUT-HEX 3/4-16 SLOT U	2				
23		WLDMT-CRADLE	1				
24		BOLT-M12-1.75X30	8				
25	64237-06	LOCKNUT-NYLON M12-1.7	75 8				
	(ITEMS 26 &	27 USED WITH 72" DECKS)				
26	,	WLDMT-CASTER ARM 72					
27		WLDMT-CASTER ARM 72F					
28		WLDMT-CASTER ARM 61F & 28 USED WITH 61" DECF					
29	2722228-0	3BEARING	2				



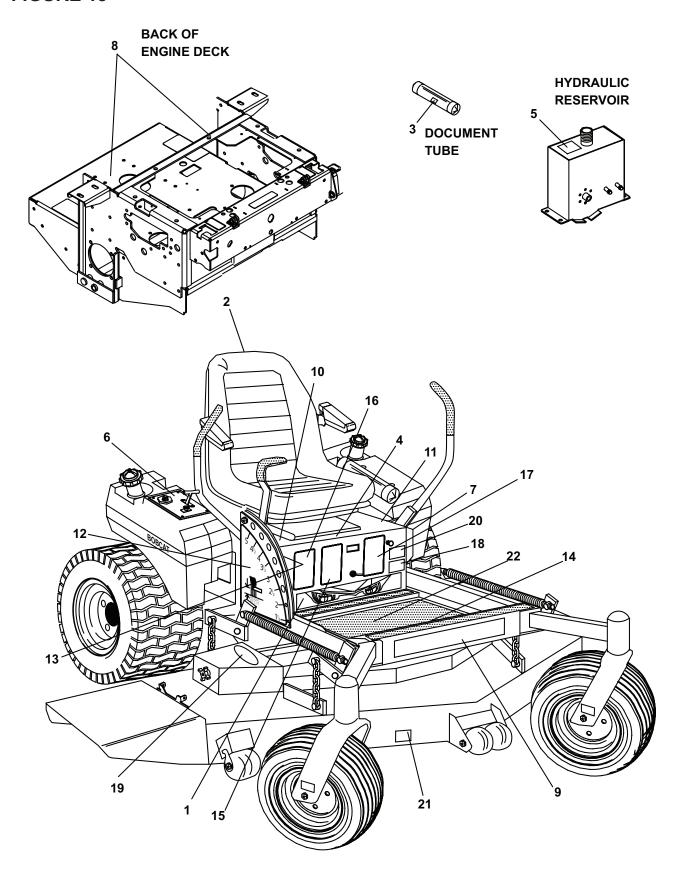
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	4163757	S-61" DECK	1	43	4128002	END CAP	2
2	2182352.2	BELT COVER RH	1	44	2188131	SPRING-EXTENSION	2
3	2182351.2	BELT COVER LH	1	45	64163-73	WSHR625IDX1.120DX.06	A/R
4	38524	KNOB-4 PRONG 3/8-16	2	46	64018-2	BLT-CRG 1/4-20X3/4	4
5	4147399	CHUTE-RUBBER ASSY	1	47	64018-5	BLT-CRG 3/8-16X1-3/4	1
6	64163-64	WSHR-1.015X1.500X14GA	. 3	48	64229-01	LOCKNUT-1/4-20 NYLON	4
7	64229-03	LOCKNUT NYLON 3/8-16	34	49	4134340.7	BAFFLE-FRONT CTR 61	1
8	64123-173	BLT-HEX 3/8-16X4-1/2	2	50	4117663.7	BAFFLE-FRONT LH	1
9	2721512	ROLLER-5X2.75 CENTERS	ED 7	51	4127999	SEAL	1
10	64123-68	BOLT-HEX 5/18X1	2	52	4163014	SPACER	1
11	2308140	PULLEY ENGINE	4	53	64268-03	NUT-FL NYLN LOCK 3/8-16	10
12		BLADE 21.00 OFFST HLFT	- 3	54	4163155	INNER RING	2
13	2720685	SPACER-ROLLER	7	55	64144-40	SNAP RING	2
14		BLT-FLG HD 3/8-16 X 1-1/4	18	56	64018-3	BOLT-3/8-16X1 CARRIAGE	1
15	4163028	ASSY-IDLER ARM PTO	1	57	38348-01	BEARING-SPINDLE SEALE	•
16	64018-18	BOLT-CARRIAGE 3/8-16X2	2 1	58	2721096	HOUSING-SPINDLE 6 HOL	
17	2302125.7		1	59	64144-38	SNAP RING	3
18	48393	PULLEY, V IDLER	1	60	38315	NUT-SPINDLE	3
19	38297	IDLER, 5.0 OD FLNGD	1	61		1 SHAFT-SPINDLE LONG	1
20		BAFFLE-DISCHARGE	1	_		849 CENTER SPINDLE ONL	•
21	64209-03		6	(00	DED ON 4113	049 CENTER OF HADEL ONE	' /
22	64164-12	1/4X1/4X1 SQ END KEY	4	62	2183070 0	2 SHAFT-SPINDLE	2
23	128169	PULLEY, IDLER 5.50	1	1		5850 OUTER SPINDLE ONLY	
24	4115849	S-ASSYSPNDL ZT200 CN1	•	(0,	OLD ON 411	5050 COTER SI INDEL CIVET)
27		S ITEMS 57-61)	1111	63	6/102 217	BLT-HEX 3/8-16X4-1/4	5
	(IIVCLODE)	311 EWIS 31 -01)		64		BLT-FLG HD 3/8-16 X 1-1/2	2
25	4129076	ASSY-DECK IDLER 61"	1	65		HINGE-CHUTE RUBBER	1
23		S ITEMS 41, 43, 51 & 55)	'	66		WLDMT-IDLER PIN	1
	(IIVCLODE)	311 EMO 41, 43, 31 & 33)		67		EXTENSION-61IN, LH	1
26	4115850	S-ASSYSPNDL ZT200 OUT	Г 2	68		EXTENSION-61IN, RH	1
20		S ITEMS 57-60 & 62)	. 2	69	64141-2	NUT-WLF 1/4-20	1
	(IIVCLODE)	311 EWIS 31 -00 & 02)		70	-	BLT-HEX 1/4-20X1	1
27	64270-02	BOLT-HEX M10-1.5X30 ISO CL10	10.2	71		WASHER328X.75X14GA	1
28		WLDMT-PUSHBAR	2	' '	04103-33	WASHER320X.73X14GA	ı
29	64006-05	LOCKWSHR-HELICAL 1/2	1				
30		BLT-HEX 1/2-20X1-1/2	1				
31		WSHR.383/.393X.88X7	4				
32	2186125	WLDMT-LOCK, PUSHBAR	2				
33	85010N	ZERK, 1/4-28 STR SLF TH					
34		BLT-HEX 5/8-11X5	2				
3 4 35	64123-132	BOLT-HEX 3/8-16X1	12				
36	64229-02		2				
	4118314		3				
37 38		SPACER-BLADE 16MM					
38 39		LOCKNUT, NYLON 5/8-11	2				
39 40		BLT-HEX 5/8-18X3.75	3				
		BLT-HEX 5/8-18X1.5	3				
41	4128004	BEARING	3 1				
42	4134344./	BAFFLE-RIGHT FRONT	I				



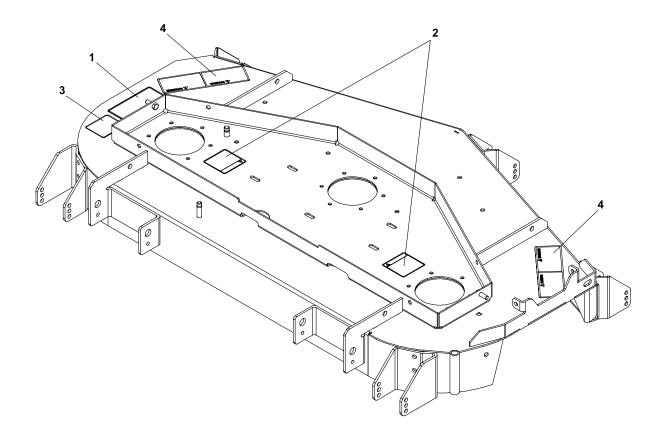
ITE	M PART N	O. DESCRIPTION	QTY	ITE	M P	ART N	O. DESCRIPTION	QTY
1	128169	PULLEY-IDLER	1		64262		BLT-FLG HD 3/8-16 X 1-1/4	18
2	2188131	SPRING-EXTENSION	2		64270		BOLT-MET M10-1.5x30	2
3	2302125.7	GUIDE-BELT	1	37	39702	261	BLADE-HIGH LIFT	3
4	2308140	PULLEY-ENGINE	3	38	41331	55.7	WLDMT-PUSH ARM	2
5	2720685	SPACER-ROLLER	7		21861		WLDMT-LOCK, PUSHBAR	2
6	2721415	PULLEY	1		64123		BOLT-HEX 5/18X1	2
7	2721512	ROLLER	7		64229		LOCKNUT-5/18	2
8	38297.W	IDLER	1		85010			5
9	38524.W	KNOB-4 PRONG	4		64123			2 5 2 2
10	4115849	S-ASSY SPINDLE CENTER	1		64163			2
	(INCLUDES	ITEMS 46, 47, 49-51)			64229			2
					38348			6
11	4115850	S-ASSY SPINDLE OUTER	2				SHAFT-SPINDLE LONG	1
	(INCLUDES	ITEMS 46, 48-51)					SHAFT-SPINDLE	2
				_	64144		SNAP RING	3
12	4118314	SPACER-BLADE	1	1	38315		NUT-SPINDLE	3
13	4163014	SPACER	1	1	27210			3
14		END CAP	2		64018			4
15		ASSY-IDLER ARM PTO	1		64262			3
		BEARING	2		64268		MUT-FL NYLON LOCK 3-16	3
	64144-40	SNAP RING	1	1	41472		HINGE-CHUTE, 72"	1
	85010N ZE	RK 1/4-28	1		4163		INNER RING	2
	548138 BE	EARING-NDL.88 1.12 1.00	2		64123			3
	521438 GI	REASE SEAL	1				WLDMT-IDLER PIN	1
				59	4163	189.7	PLATE-SPACER	1
16	4129076	ASSY-DECK IDLER 61"	1					
	4127999	SEAL	1					
	4128004		2					
	64144-40	SNAP RING	1					
	4145468	S-72 CUTTERDECK W/LABS						
	4147335	CHUTE-RUBBER, ASSY 72"	1					
	4131945.2	GUARD-BELT LH	1					
	4131946.2	GUARD-BELT RH	1					
	48393	PULLEY-V IDLER	1					
	64006-05	LOCKWASHER-1/2	1					
	64018-18	BOLT-CRG 3/8-16 X 2	2					
	64123-05	BLT-HEX 1/2-20X1-1/2	1					
	64123-173	BLT-HEX 3/8-16X4-1/2	2					
	64123-187	BLT-HEX 5/8-18 X 3 3/4	3					
	64123-208	BLT-HEX 5/8-18X1.5	3					
	64123-217	BLT-HEX 3/8-16X4-1/4	1					
	64123-39	BOLT-HEX 1/2-13X1-1/4	2					
	64163-46	WASHER	4					
	64163-78	WASHER	3					
	64209-03	SPRING WASHER	6					
	64229-03	LOCKNUT-3/8-16	30					
34	64229-05	LOCKNUT-1/2-13	2					



ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	128003	BELT-CUTTERDECK 61	1				
2	4135683	BELT-CUTTERDECK 72	1				
3	2188134 (USE ON 6	BELT-PTO 61 61" SD DECK)	1				
4	2722554 (USE ON 7	BELT-PTO 72 72" SD DECK)	1				



ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	4143966	LABEL-BOBCAT EYES	1				
2	4158401	LABEL-BOBCAT PRED PR	O 1				
3	2000735	LABEL-OPER MAN	1				
4	2000590	LABEL-WARN BATTERY	1				
5	2000691	LABEL-HYDR OIL FILL	1				
6	4124415	LABEL-CONTROL PANEL	1				
7	2000693	LABEL-PARK BRAKE	1				
8	2000698	LABEL-FUEL/LEAKS	2				
9	4157862	LABEL- PREDATOR PRO	1				
10	2000700	LABEL-RH TRACTION	1				
11	2000701	LABEL-LH TRACTION	1				
12	4163666	LABEL-HT CUT OUTER	1				
13	4163667	LABEL-HT CUT INNER	1				
14	4118843	LABEL-WARNING	1				
15	2000706	LABEL-FUEL	1				
16	340830	LABEL-CAUTION SPANISH	1 1				
17	4114158	LABEL-TIRES	1				
18	4116761	LABEL-MADE IN USA	1				
19	4163037	LABEL-DURADECK	1				
20	4162925	LABEL-37 HP	1				
21	4162916	LABEL-DECK SIZE, 61"	1				
	4162917	LABEL-DECK SIZE, 72"	1				
22	4163355	LABEL-BELT ROUTING	1				



DECALS-CUTTERDECKS

ZT 200

5	beries				FIG	URE 19	
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1 2 3 4	2000572 2000577 2000696 2000677	LABEL-WARNING BLADES LABEL-WARNING LABEL-BLADE INSTALL LABEL-DANGER/WARNING	2				

