

# SETUP, PARTS & MAINTENANCE MANUAL BZT 2000 SERIES

#### **Models:**

**642220A BZT 2190 19HP KAW W/48 SIDE DISCHARGE** 

**642221A BZT 2190 19HP KAW W/52 SIDE DISCHARGE** 

**642222A BZT 2230 23HP KAW W/52 SIDE DISCHARGE** 

**642223A BZT 2230 23HP KAW W/61 SIDE DISCHARGE** 

642227A BZT 2230LC 23HP KLR W/52 SIDE DISCHARGE

642228A BZT 2230LC 23HP KLR W/61 SIDE DISCHARGE

**642233A BZT 2250 25HP KAW W/61 SIDE DISCHARGE** 

**642237A BZT 2270 27HP KLR W/61 SIDE DISCHARGE** 



WARNING: If incorrectly used this machine can cause severe injury. Those who use and maintain this machine should be trained in its proper use, warned of its dangers and should read the entire manual before attempting to set up, operate, adjust or service the machine.

Operation & Safety Manual: 4122816



4122815 REV D

## **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.



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

## 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.

#### 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.



## 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.

#### **IMPORTANT MESSAGE**

Thank you for purchasing this Bunton 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 Bunton 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 and watch the operation training video. 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 Bunton dealer for any service or parts needed. Bunton service ensures that you continue to receive the best results possible from Bunton's products. You can trust Bunton replacement parts because they are manufactured with the same high precision and quality as the original parts.

Bunton 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.

Jacobsen, a Textron Company One Bob Cat Lane Johnson Creek, WI 53038-0469

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10-2003

#### NOTICE !!!

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

Jacobsen, a Textron Company strongly warns against, rejects and disclaims any modifications, add-on accessories or product alterations that are not designed, developed, tested and approved by Jacobsen Engineering Department. Any Jacobsen 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 Jacobsen—will result in the Jacobsen 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 Jacobsen will be considered the responsibility of the individual(s) or company designing and/or making such changes. Jacobsen 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.



#### **OPERATION TRAINING VIDEO:**

Part Number

Description

2810586

**BZT 2000 SERIES** 



## 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 Jacobsen 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.

## **A** DANGER

**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.

## **A**CAUTION

**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



**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)

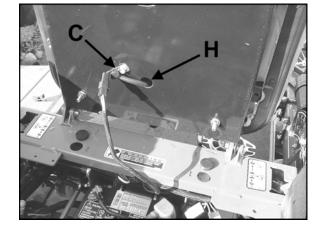
NOTE: All references below to the "right" or "left" are with respect to an operator at the controls.

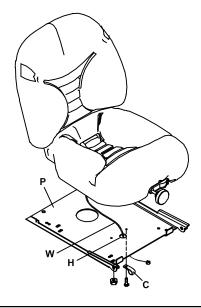
#### 1. UNCRATE UNIT

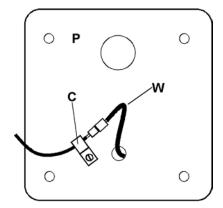
a) Discard packing materials. Remove and discard shipping brackets. Tighten caster wheel axle bolts against caster axle spanner bushings.

#### 2. INSTALL SEAT

- a) Position seat over seat plate and route seat wire W through hole H in seat plate. Drop seat mounting studs through seat plate holes. Secure studs with four 5/16-18 whiz nuts and tighten securely.
- b) Leave enough seat wire between the seat and seat plate to allow full fore and aft travel of the seat. Secure seat wire on the bottom of the seat plate with clip C and a 1/4-20x3/8 thread forming screw.
- c) Connect the tractor harness to the seat wire.





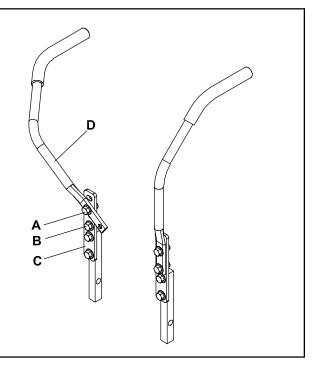


Bottom of seat plate P showing clip C

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

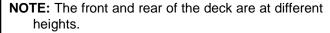
#### 4. TRACTION LEVERS

- 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 fit.

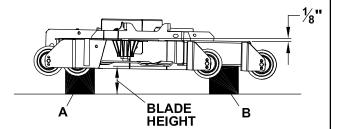


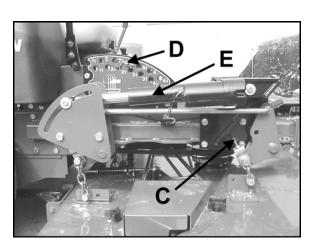
#### 5. **DECK LEVELING**

- a) Park the machine on a smooth, level surface.
   Raise the deck to the transport position.
   Remove pin **D**.
- 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". Continue running the actuator in the "DOWN" direction, so there is plenty of float for the actuator E.



- Measure the height of the blade cutting edge above the ground. Install pin **D** in the hole corresponding to the blade height.
- d) Loosen the jam nuts on the height of cut clips and adjusting screws C. Turn the adjusting screws C until the play is taken out of the chains at all four corners. Tighten the jam nuts against the clips and at the adjusting screws.





#### 6. 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.

**AWARNING** 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		Maintenance is an ongoing job. These intervals are maximum times between maintenance operations. Perform more often under severe conditions.										
OPERATION	FIRST 5 HOURS	DAILY	EVERY 25 HOURS	EVERY 50 HOURS	EVERY 100 HOURS	EVERY 200 HOURS	EVERY 500 HOURS					
ENGINE												
Consult the engine manual for additional information and instructions												
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					х	X**						
Clean Cooling Fins					Х							
Change Oil and Filter	х		See e	ngine manu	facturer's n	nanual						
Check/Replace Spark Plugs						х						
			EAVY DUTY AVY DUTY (									
	LQUITE		YDRAULIC		AIR OLLAR							
Check for Leaks		х										
Check/Top off Oil Level					Х							
Change Oil and Filter	х						х					
			MACHINE									
Check Interlock Operation		х										
Check Tire Pressures		х		_		_						
Check/Top off Battery					Х							
Lubricate All Points				X								

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												

#### **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 Bunton 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**

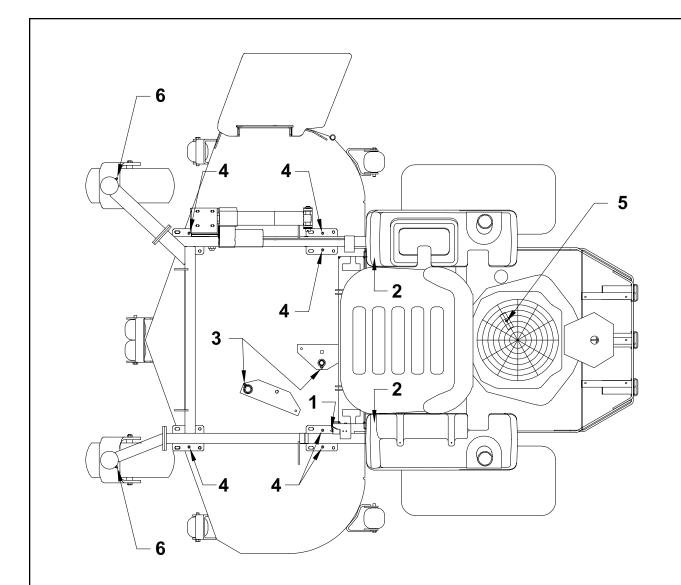
**AWARNING** Battery acid is caustic and fumes are explosive and can cause serious injury or death.

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.

- 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 (1-5) with grease:

- 1. Brake lever pivot (1 point)
- 2. Push arms (2 points located at rear of cutterdeck under each fuel tank)
- 3. Deck idler pivot bearings (2 points)
- 4. Deck lift pivots (6 points)
- 5. Hydro belt tensioner (1 point under engine deck)
- 6. 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 **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

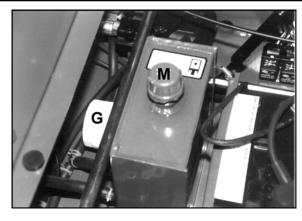
#### **AFTER FIRST FIVE (5) HOURS**

- 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.

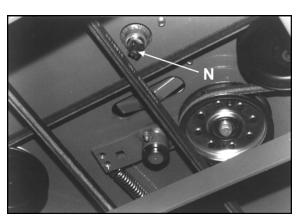
#### **PERIODIC OIL CHANGES**

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

#### NOTES:



View from right side



View from below machine

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 teflon 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.

## **A**WARNING

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:

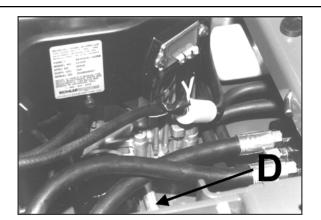
- Remove drain cap **D** and drain the crankcase. Dispose of used oil in accordance with local requirements.
- 2. Clean and replace the cap.
- 3. Change oil filter.
- 4. Fill the crankcase with fresh oil to the full mark. Do not overfill. See engine manual for oil specifications.



- 1. Check oil level with the dipstick.
- 2. 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.

#### **DUAL ELEMENT AIR CLEANER**

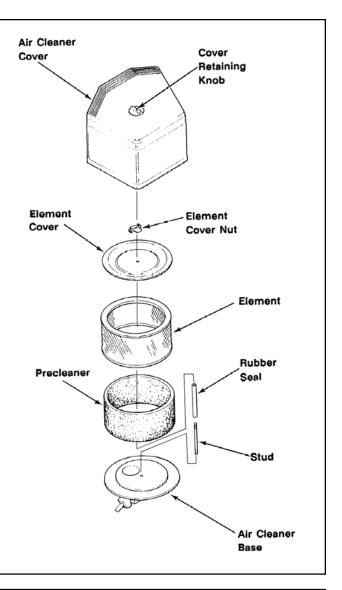
Engines equipped with dual element air cleaners have a paper air cleaner element with an oiled, foam precleaner element on the dirty side of the paper element. Both should be inspected regularly and maintained.

Clean and re-oil precleaner element every 25 hours (more often under dusty conditions).

- 1. Disassemble air cleaner cover.
- 2. Remove precleaner by sliding it off the paper cartridge.
- Wash precleaner in kerosene or liquid detergent and water.
- 4. Wrap precleaner in cloth and squeeze to remove cleaner.
- Saturate precleaner in engine oil. Squeeze to remove excess oil.
- Re-install precleaner over paper cartridge.
   Reassemble air cleaner components and screw assembly down tight.

Every 100 hours (more often under very dusty or dirty conditions), check the paper cartridge.

- Clean by tapping gently.
- Do not wash the cartridge or use compressed air which can cause damage.
- Replace when cartridge is dirty, bent or damaged.

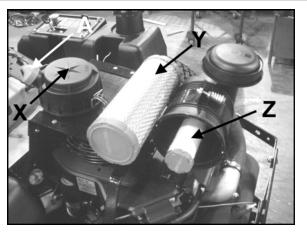


#### **HEAVY DUTY CYCLONIC AIR CLEANER**

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:

- 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.



## LIQUID COOLED DUAL ELEMENT AIR CLEANER

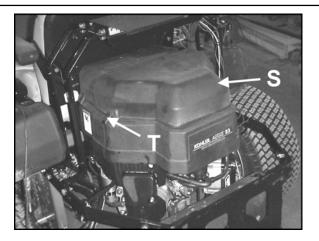
The air cleaner with this engine has a high density paper air cleaner cartridge surrounded by an oiled, foam precleaner element. Both should be inspected regularly and maintained.

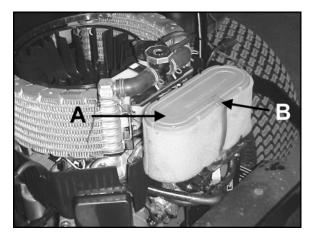
Clean and re-oil precleaner element every 25 hours (more often under dusty conditions).

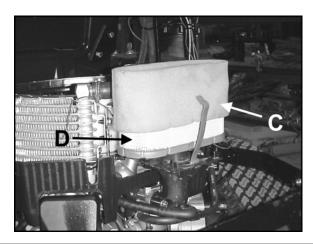
- Remove air intake cover S by releasing the four latches T.
- 2. Disassemble air cleaner cover **A** by removing latch **B**.
- 3. Remove precleaner **C** by sliding it off the paper cartridge **D**.
- 4. Wash precleaner in kerosene or liquid detergent and water.
- 5. Wrap precleaner in cloth and squeeze to remove cleaner.
- 6. Saturate precleaner in engine oil. Squeeze to remove excess oil.
- 7. Re-install precleaner over paper cartridge.
  Reassemble air cleaner components and replace cover. Secure latch back in place.

Every 100 hours (more often under very dusty or dirty conditions), check the paper cartridge.

- Clean by tapping gently.
- Do not wash the cartridge or use compressed air which can cause damage.
- Replace when cartridge is dirty, bent or damaged.







#### **ENGINE COOLING-LIQUID COOLED**

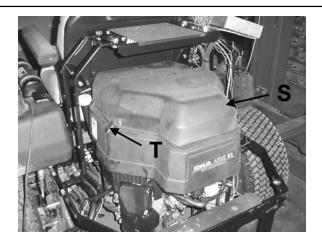
Continued operation with a clogged cooling system will cause severe overheating and can result in engine damage.

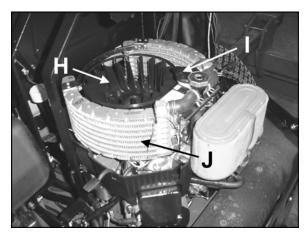
Remove air intake cover **S** by releasing the four latches **T** 

- Daily: Clean air intake cover S.
- Daily: Check coolant level at reservoir I.
- Every 100 hours: Clean cooling fins H and radiator J with reference to information in the engine manufacturer's manual.



Do not open hot. Radiator is under pressure. Remove cap slowly to avoid bodily injury.

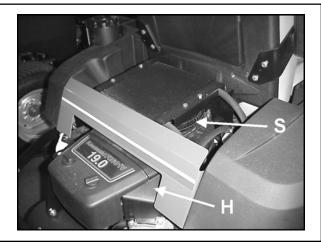




#### **ENGINE COOLING**

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

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



#### **BLADE REMOVAL**

Follow these instructions to prevent injury during blade removal:

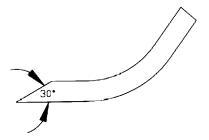
- Loosen with a box wrench or a socket and long breaker bar. To gain additional leverage, slip a long pipe or thick-walled tube over breaker bar or wrench.
- 2. Insert wood block **A** as shown, with grain perpendicular to blade, to prevent blade from turning when loosening.
- 3. Wear thickly padded 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 Bunton blades. Use of another manufacturer's blades may be dangerous.



#### **BLADE BALANCE**

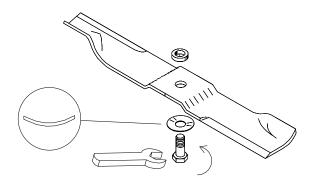
Blade balance must be maintained at 5/8 oz-in (19.4 g-cm) or less. Failure to keep blades balanced causes excess vibration, wear, and shortened life of most components of the machine.

#### To balance a blade:

- 1. Sharpen blade first.
- 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.
- 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.

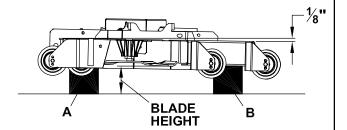


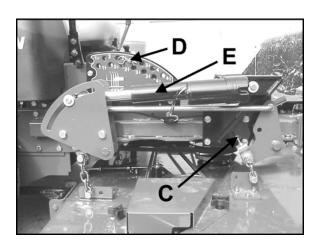
#### **DECK LEVELING**

- a) Park the machine on a smooth, level surface.
   Raise the deck to the transport position.
   Remove pin **D**.
- 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". Continue running the actuator in the "DOWN" direction, so there is plenty of float for the actuator E.

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

- c) Measure the height of the blade cutting edge above the ground. Install pin **D** in the hole corresponding to the blade height.
- d) Loosen the jam nuts on the height of cut clips and adjusting screws C. Turn the adjusting screws C until the play is taken out of the chains at all four corners. Tighten the jam nuts against the clips and at the adjusting screws.





#### **HEIGHT OF CUT**

The height of cut is set by moving height of cut pin  ${\bf N}$  to the hole designated for the height of cut desired.

To change the height of cut:

- 1. Raise 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.

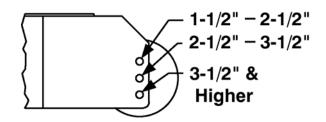
#### NOTES:

- 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

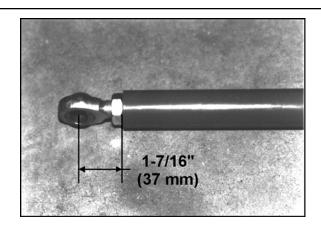
#### **PUSH ARMS**

The push arm rod ends must be adjusted evenly to:

- locate the deck perpendicular to the front-to-rear axis of the machine; and
- so the notch at the front of the engine deck clears the push arm bracket on the rear of the cutterdeck when the cutterdeck is raised to the transport position.

Adjust the rod end length to 1-7/16" (37 mm) to start.

If any additional adjustment is required, adjust both rod ends so the same number of threads show.



#### **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.

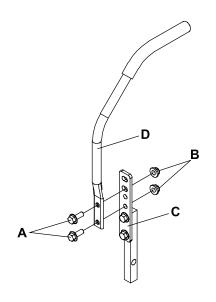
To adjust the height of the control levers:

- 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.

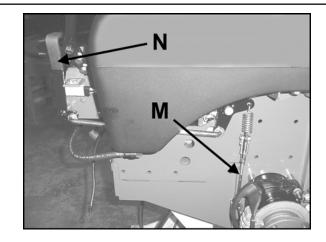


#### **PARKING BRAKE**

Start with parking brake N in the OFF position.

- 1. Disconnect one end of rods **M** (at brakes on both sides of the machine).
- 2. Move the parking brake lever to the ON position.
- Adjust rods M on each brake to be 3/4" short of connecting to the spring when all the slack is taken out of the brake linkage and brake lever N.
- 4. Move the parking brake to the OFF position and reconnect rods **M**.

This adjustment will cause the brake springs to stretch 3/4" when the brake is in the ON position to provide the correct parking brake force without overloading the brake.



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

#### **BELTS**

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

#### **HYDROSTAT ADJUSTMENTS**

A turnbuckle-style hydrostat neutral adjustment is provided.

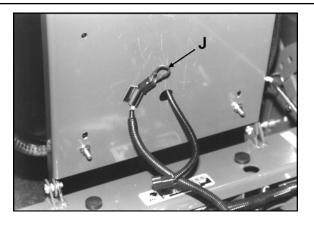
#### Neutral:

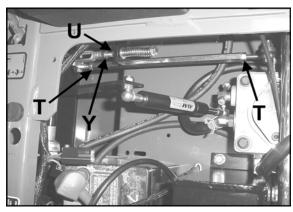
- Support the machine with the rear wheels off the ground. Use jackstands or equivalent support.
   Do not rely only on mechanical or hydraulic jacks.
- 2. Move the traction levers out into the neutral lock position and raise the seat.
- 3. Disconnect the seat switch and temporarily connect the two terminals 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:**

- 1. 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.





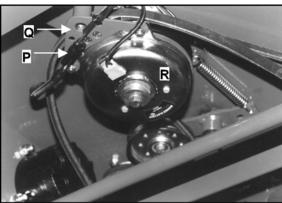
Right side adjustments (wiring harness and seat rod removed for clarity)

**Note:** Always use Bunton replacement belts, not general purpose belts. Bunton 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.





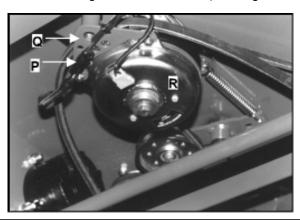
#### **CUTTERDECK BELT**

- 1. Set the cutterdeck in the lowest height-of-cut position.
- 2. 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**

#### **ENGINES:**

**Construction:** Aluminum block with cast-in cast iron sleeves. Aluminum head.

**Configuration:** 4-stroke, vertical shaft, V-twin cylinder, overhead valve, air-cooled or liquid cooled.

#### **DRIVE SYSTEM:**

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

**Pump:** Hydrogear BDP-10A with shock valves 10cc 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: 0"

## 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)

#### **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 12 gallons (46 liters). Fuel selector/shutoff switch on front panel (1/4 turn). Replaceable fuel filter.

#### **MAXIMUM GROUND SPEEDS:**

**Forward:** 8 mph (12.9 km/h) **Reverse:** 4 mph (6.4 km/h)

#### **WHEELS & TIRES:**

#### Drive wheels:

642220A, 642221A: 23 X 8.50-12 4-Ply Turf

**Tread Tires** 

642222A, 642227A: 23 X 10.50-12 4-Ply Turf

Tread Tires

642223A, 642228A, 24 X 12.00-12 4-Ply Turf

642233A, 642237A Tread Tires

Casters: 13 X 5.00-6 4-Ply Smooth Tread Tires

Pressure: 14 p.s.i. (1 kg/cm<sup>2</sup>)

#### **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.

	ENGINES									
MODEL NUMBERS	642220A, 642221A	642222A, 642223A	642233A	642227A, 642228A	642237A					
MANUFACTURER	Kawasaki	Kawasaki	Kawasaki	Kohler	Kohler					
MODEL	FH601V	FH680V	FH721V	LV675S	CV740					
CYLINDERS	2	2	2	2	2					
COOLING	Air	Air	Air	Liquid	Air					
BORE/STROKE	2.96 X 2.99" (75.2 X 76 mm)	2.96 X 2.99" (75.2 X 76 mm)	2.96 X 2.99" (75.2 X 76 mm)	3.15 X 2.65" (80 X 67 mm)	3.27 X 2.64" (83 X 67 mm)					
DISPLACEMENT	41.2 cu.in. (675 cc)	41.2 cu.in. (675 cc)	41.2 cu.in. (675 cc)	41.1 cu. in. (674cc)	44 cu. in. (725cc)					
COMPRESSION	8.5:1	8.1:1	8.1:1	8.5:1	9:1					
OUTPUT POWER	19 hp (14.2 kw) @ 3600 rpm	23 hp (17.2 kw) @ 3600 rpm	25 hp (18.6 kw) @ 3600 rpm	23hp (17.2kw) @ 3600 rpm	27hp (20.1kw) @3600 rpm					
OUTPUT TORQUE	37.0 ft-lb (50.2 J) @ 2500 rpm	39.8 ft-lb (54.0 J) @ 2400 rpm	41.3 ft-lb (56.0 J) @ 2400 rpm	32.0 ft-lb (43 J) @2400 rpm	42.7 ft-lb (57.9 J) @3000 rpm					
LUBRICATION	FULL PRESSURE	FULL PRESSURE	FULL PRESSURE	FULL PRESSURE	FULL PRESSURE					
GOVERNOR	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical					
AIR CLEANER	Dual element	Heavy duty cyclonic	Heavy duty cyclonic	Dual element	Heavy Duty Cyclonic					
IGNITION SYSTEM	Electronic	Electronic	Electronic	Electronic	Electronic					
CHARGING SYSTEM	15 amp, regulated	15 amp, regulated	15 amp, regulated	15 amp. regulated	15 amp. regulated					
BATTERY	BCI group U1	BCI group U1	BCI group U1	BCI group U1	BCI group U1					
FUSES	Two, 20 amp blade	Two, 20 amp blade	Two, 20 amp blade	Two, 20 amp blade	Two, 20 amp blade					
FUEL CONSUMPTION @ MAX LOAD/ SPEED	1.7 gal./hr (6.5 //hr)	2.1 gal./hr (8 l/hr)	2.3 gal./hr (8.8 l/hr)	1.6 gal./hr (6.1 l/hr)	2.2 gal./hr (8.3 l/hr)					

FLUID CAPACITIES	QUANTITY	TYPE	FILTER
FUEL	9.5 gal. (40 l)	REGULAR, UNLEADED GASOLINE	REPLACEABLE
ENGINE OIL	2.1 qts (2 l) KOHLER 2.0 qts (1.9 l) KAWASAKI	SAE 10W30	SPIN-ON REPLACEABLE
HYDRAULIC OIL	HYDRAULIC OIL 2.6 qts (2.46 l)		10 MICRON SPIN-ON REPLACEABLE
COOLANT (Where Applicable)	1.48 qts (1.4 l)	50/50 MIX OF WATER AND ETHYLENE GLYCOL	N/A

	CUTTERDECKS										
MODEL NUMBER	642220A	642221A, 642222A, 642227A	642223A, 642228A, 642233A, 642237A								
TYPE	Side Discharge	Side Discharge	Side Discharge								
CUTTING WIDTH	47.25" (120 cm)	52.5" (133 cm)	61" (155 cm)								
WIDTH	N/A	N/A	N/A								
WIDTH (CHUTE UP)	54" (137 cm)	56.25" (143 cm)	62" (157 cm)								
WIDTH (CHUTE DOWN)	59" (150 cm)	64.5" (164 cm)	73" (185 cm)								
BLADE	high lift (low lift optional)	high lift (low lift optional)	high lift (low lift optional)								
NUMBER OF CUTTING UNITS	3	3	3								
BLADE LENGTH	16.25" (41 cm)	18" (46 cm)	21" (53 cm)								
BLADE THICKNESS	.205" (5.2 mm)	.205" (5.2 mm)	0.25" (6.35 mm)								
TIP SPEED	16778 ft/min 5114 m/min @ 3600 Engine RPM	18585 ft/min 5665 m/min @ 3600 Engine RPM	18850 ft/min 5745 m/min @ 3500 Engine RPM								
DAILY PRODUCTION (8 hr @ 6 mph)	Up to 22.9 acres (9.3 ha)	Up to 25.5 acres (10.3 ha)	Up to 29.5 acres (11.9 ha)								

#### **CONSTRUCTION:**

Fabricated and welded or bolted 10-gauge, doublelayer 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: 50 FT-LBS (68 Nm)

#### **ANTI-SCALP ROLLERS:**

48" Cutterdecks - 3 Rollers

52" Cutterdecks - 6 Rollers

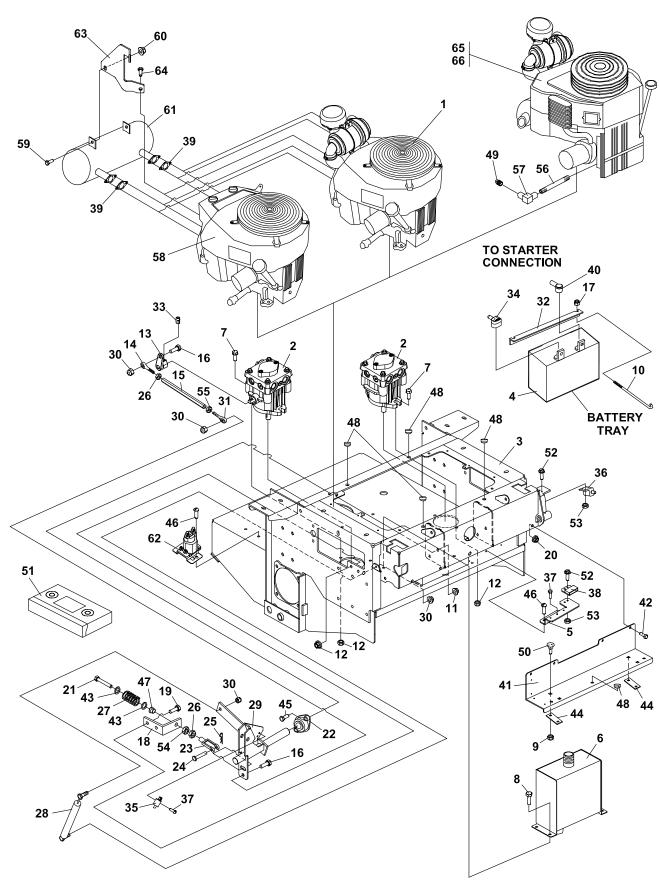
61" Cutterdecks - 7 Rollers

#### **CUTTING HEIGHT & PRODUCTION:**

**Height:** Electric actuator 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

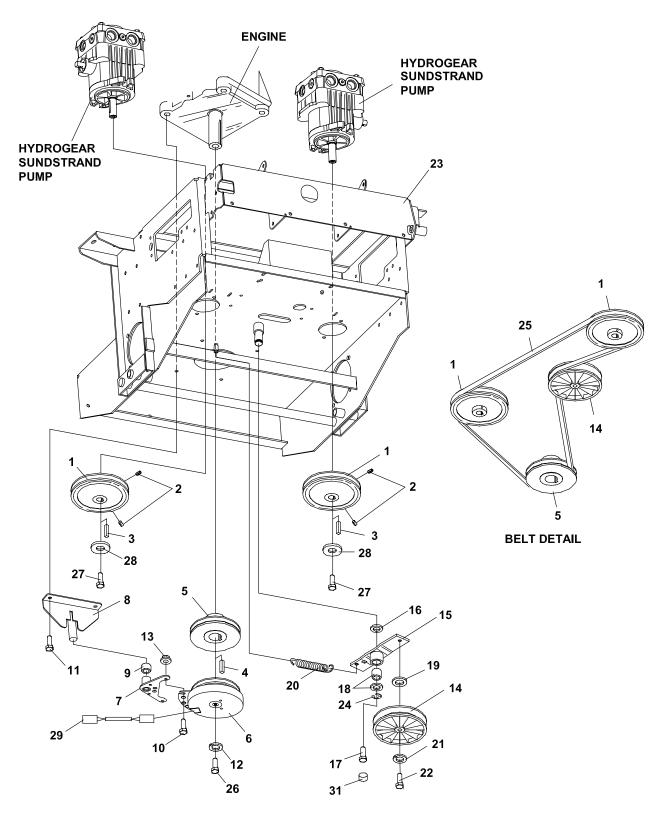
## FIGURE 1



4122815-01 FIGURE 1

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1-1	4118350	ENG-KAW FHV 23 HDAC	1	1-40	2308095	COVER-TERMINAL	1
	4118340	ENG-KAW FHV 25 HDAC	1	1-41		PLATE-KICK	1
	4114746	S-AIR FILTER PRIMARY	1	1-42	64263-011	BLT-FLG HD M10-1.5 X 20	4
	4114747	S-AIR FILTER SAFETY	1	1-43	64163-55	WASHER .328X.75X14 GA	4
	2722214	FILTER-OIL	1	1-44	2188146	STRIP, WEAR	2
	38666	FILTER-FUEL	1	1-45	64123-15	BOLT-3/8-16X3/4 HEX	8
				1-46	64152-23	1/4-20X3/8 LG SP SCREW	4
1-2	4121333	PUMP-HYDRO BDP-10A-44	102	1-47	38304-02	BRG, FLGD PLASTIC	2
	(SEE FIGU	JRE 9 FOR BREAKDOWN)		1-48	810149	BUMPER-RUBBER	7
				1-49	69051-01	PLUG-PIPE 3/8	1
1-3	4128327	S-ENGINE DECK W/LABS	1	1-50	64018-23	BLT-CRG 3/8-16X3/4	4
1-4	108055	BATTERY	1	1-51	2810586	VIDEO-BZT 2000 SERIES	1
1-5		BRACKET-RELAY MNTG	_ 1	1-52	64152-46	SCREW-SLT HH 10-24X1/2	
1-6	2186211	S HYD RESERVOIR W/LAE		1-53	64025-15	NUT-HEX #10-24 KEPS	4
1-7		BLT-FLG HD M10-1.5 X 30	4	1-54	64229-08	LOCK NUT NYLON 5/16-24	2
1-8		BLT-TDFM 3/8-16X1/2	4	1-55	64025-33	NUT-HEX 5/16-24 LH	2
1-9	64268-03	NUT-FL NYLN LOCK 3/8-16		1-56		NIPPLE-PIPE 3/8 X 5	1
1-10	831861	BOLT,BENT BATT HOOK	2	1-57		1ELBOW-3/8 PIPE, 90 DEG	1
1-11	64141-4	NUT-WLF 3/8-16	8	1-58	2720607	ENGINE-KAWASAKI FHV 19	_
1-12	64237-03	LOCKNUT-NYLON M10-1.5			2722212	FILTER-AIR KAWASAKI	1
1-13	4118430	ARM-PUMP	2		2722213	FILTER-PRE KAWASAKI	1
1-14	38369-02	ROD END BALL JOINT LH	2		2722214	FILTER-OIL	1
1-15	2188140	TURNBUCKLE	2		38666	FILTER-FUEL	1
1-16		BLT-METRIC M8-1.25X30	4		/ITEMS 20	40 % FO C4 FOR LICE WITH	
1-17	64229-02	LOCK NUT-NYLON 5/16-18	2		•	46 & 59-64 FOR USE WITH	
1-18 1-19	A1104057	BRKT-REVERSE RETURN BOLT-M10-1.50X25	4		KAWASAK	I ENGINES ONLY)	
1-19	64246-03	NUT-WHIZ M10-1.50	4	1-59	64262 007	BLT-FLG HD M8-1.25 X 20	2
1-20		BLT-HEX 5/16-24X4	2	1-60	64266-02	NUT-FL LOCK M8-1.25	2
1-21	2188145	BEARING75IDSELF-ALIG		1-61	2188226	ASSY-MUFFLER	1
1-22	38020N	CLEVIS YOKE, 5/16 PLATE		1-62	38665	SOLENOID	1
1-24	64188-02	PIN, CLEVIS 5/16X1	2	1-63		BRKT-MUFFLER LH	1
1-25	64168-2	COTTER-HAIRPIN.08X1.19				BRKT-MUFFLER RH	1
1-26	64025-03	NUT-HEX 5/16-24	4	1-64		BLT-FLG HD M6-1.0 X 16	4
1-27	2188139	SPRING-COMPRESSION	2	1-65	2721980	ENG-KOHLER LV675 23HP	1
1-28	2721246	DAMPENER	2		2722712	S-AIR FILTER	1
1-29		WLDMT-MOTION CTRL RH			2722711	S-AIR PRE-FILTER	1
		WLDMT-MOTION CTRL LH			842502	FILTER-OIL KOHLER	1
					38666	FILTER-FUEL	1
1-30	64237-05	LOCKNUT-NYLON M8-1.25	8				
1-31	38369-01	ROD END BALL JOINT RH	2	1-66	4123374	ENGINE-KOHLER CV740S	1
1-32	2182427.7	HOLDDOWN-BATTERY	1		4114746	S-AIR FILTER PRIMARY	1
1-33	64192-06	SETSCR SQHD 5/16-18X3/	4 2		4114747	S-AIR FILTER SAFETY	1
1-34	112386	BOOT,BAT TERM POS	1		2722214	FILTER-OIL	1
1-35	108208	SWITCH DBL POLE	2		38666	FILTER-FUEL	1
1-36	2188156	SWITCH-NONO DBL POLE	1				
1-37		BLT-TDFM 10-32X1/2 TOR	X 7				
1-38	2188154	MODULE-DELAY	1				
1-39		GASKET-MUFFLER	2				
(AV	AILABLE TH	ROUGH KAWASAKI DEALE	R)		* NO	OT ILLUSTRATED	

## FIGURE 2



TORQUE TO 50 FT/LBS +/-10%

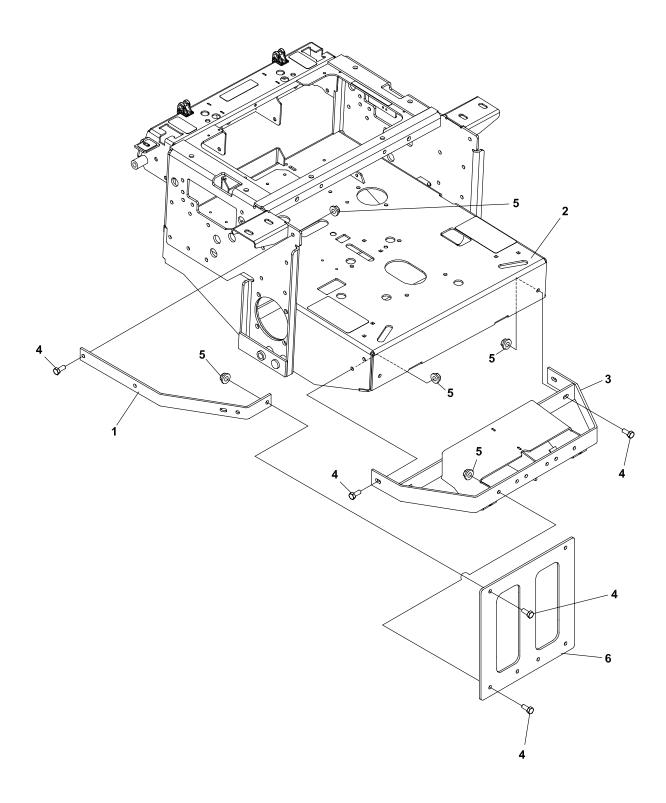
## **LOWER ENGINE DECK ASSY/CLUTCH**

4122815-02 FIGURE 2

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
2-1 2-2 2-3 2-4 2-5 2-6	64164-10 4121339 2721337 (USE ON A (INCLUDES 2722016 (USE ON 1	PULLEY-PUMP SCREW-SET 1/4-20X1/4 KEY-MTRC 5MM SQX28MM 1/4X1/4X1-1/4 MACH KEY PULLEY-4.25 ENGINE CLUTCH-ELECTRIC ILL MODELS EXCEPT 19HP SITEMS 29 & 30) CLUTCH-ELECTRIC 19HP 9HP MODELS ONLY) SITEMS 29 & 30)	1 1 1				
2-7	(USE ON A 2721331.7	WLDMT-CLUTCH STOP LLL MODELS EXCEPT 19HP WLDMT-CLUTCH STOP 9HP MODELS ONLY)	1 ') 1				
2-8 2-9 2-10 2-11 2-12 2-13 2-14 2-15	38304-03 64205-001 64197-005 64006-06 64265-04 2308000 4128923	WLDMT-CLUTCH BRACKE BEARING-FLANGED PLST BLT-METRIC M8-1.25X20 BLT-TDFM 3/8-16X1-1/4 LCKWSHER-HELICAL 7/16 NUT-FL NYL LOCK M8-1.2 PULLEY-IDLER 4.00 EOD S-ASSY-IDLER ARM PUMF S ITEMS 16, 18 & 24)	C 1 2 4 5 1 5 2 1				
2-16 2-17 2-18 2-19 2-20 2-21 2-22 2-23 2-24 2-25 2-26 2-27 2-28 2-29 2-30 2-31	64123-21 4128327 64144-40 2188128 64123-155	SEAL-16 X 24 X 7 BLT-MET HEX M10-1.5x30 BEARING-BALL 10 X 26 X SPACER-0.379X0.750X0.2 SPRING-TENSION WSHR, 3/8 HELICAL LOCI BLT-HEX 3/8-24X1-1/4 S-ENGINE DECK W/LABS SNAP RING-26MM INTRNL BELT-TRACTION DRIVE BLT-HEX 7/16-20X3 BLT-METRIC M6-1X12 WASHER-CONICAL SPRIN ASSY-CLUTCH WIRE KIT-BRAKE POLE RPLCMI END CAP-26 X 7	8 2 5 1 1 ( 1 1 1 1 1 2 1 1G2				

\* NOT ILLUSTRATED

## FIGURE 3

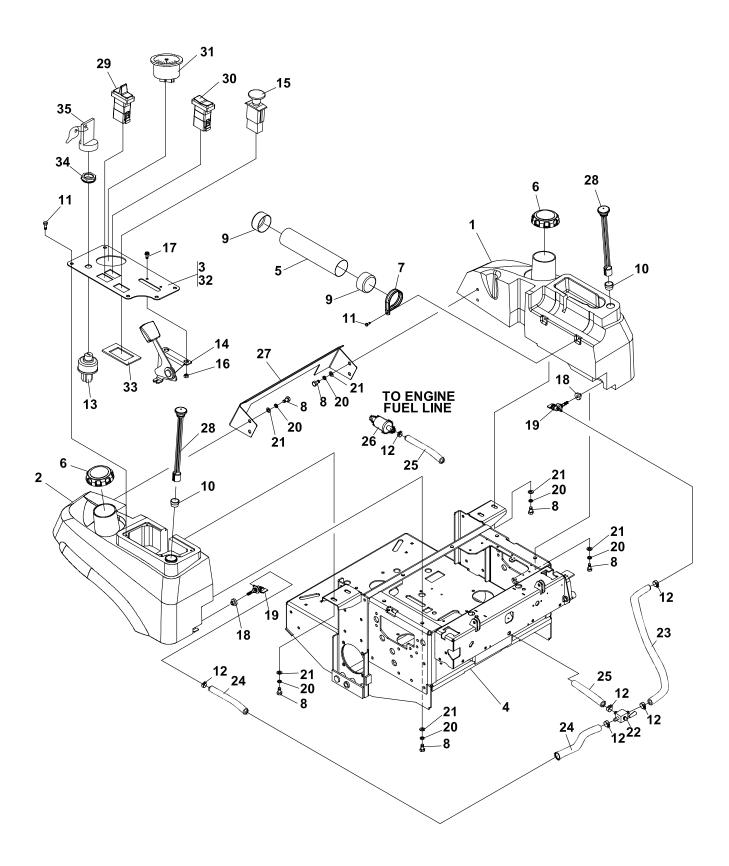


**BUMPER** 

## **BZT 2000** Series

4122815-03						FIC	GURE 3
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
3-1	2722296.7	ARM-BUMPER	2				
3-2	4128327	S ENG DECK W/LABS	1				
3-3	2721324.7	WLDMT-BUMPER	1				
3-4	64263-013	BLT-FLG HD M10-1.5 X 30	10				
3-5	64265-05	NUT-FL NYL LOCK M10-1	.5 10				
3-6	2721932.7	BRACE-VERTICAL	1				

## FIGURE 4



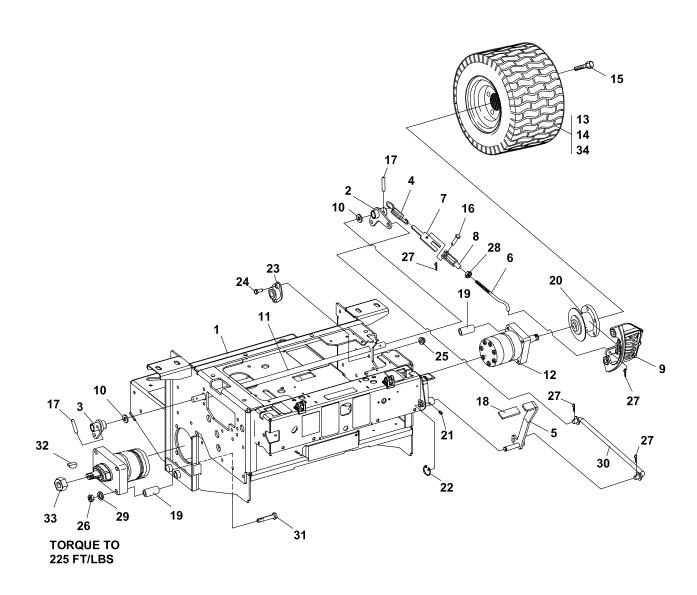
## **FUEL TANKS/CONTROL PANEL**

BZT 2000 Series

4122815-04 FIGURE 4

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
4-1	2721510	TANK-FUEL LH S ITEMS 18 & 19)	1				
4-2	,	TANK-FUEL RH	1				
4.0	,	S ITEMS 18 & 19)	\D 4				
4-3		S CONTROL PANEL W/LA ALL MODELS EXCEPT LIC					
	COOLED)						
4-4	4128327	S ENG DECK W/LABS	1				
4-5		S-DOC TUBE W/LABS	1				
4-6		CAP-FUEL TANK	2				
4-7	38542	CLAMP-DOC TUBE	2				
4-8 4-9		BLT-MET M10-1.5X20 SPINDLE-SHIELD	12 2				
4-9 4-10		GROMMET-GAUGE	2				
4-11		BLT-FLG HD M6-1.0 X 12	7				
4-12		HOSE CLAMP	6				
4-13	128010		1				
4-14	118020-09	CONTROL, THROTTLE	1				
	`	LER ENGINE)					
		CONTROL, THROTTLE	1				
	(FOR KAW	'ASAKI ENGINE)					
4-15	2188153	SWITCH-CLUTCH	1				
4-16		NUT-HEX #10-24 KEPS	2				
4-17	64152-46	SCRSLT HH #10-24X1/2					
4-18	48310	S BUSHING, FUEL TANK					
4-19	38540	S FUEL SHUTOFF VALVE					
4-20	800488	LOCKWASHER M10	12 12				
4-21 4-22		WASHER-M10 VALVE-TANK SELECTOR					
4-23		HOSE 1/4IDX1/2ODX2.00					
4-24		HOSE 1/4IDX1/2ODX1.84					
4-25	48016-22A	HOSE 1/4IDX1/2ODX1.67	1				
4-26	38666	FUEL FILTER	1				
4-27		BRKT-REAR BANNER	1				
4-28		GAUGE-REMOTE FUEL	2				
4-29		SWITCH-DECK HEIGHT	1 1				
4-30	2721815	SWITCH-LIGHT ON/OFF	1				
	`	& 32 USED ON LIQUID					
4 04		MODELS ONLY)	4				
4-31 4-32		GAUGE-TEMP 240 DEG S-CONTROL PANEL BZT	1 1 C 1				
4-32	Z1 ZZZ30	0-00NTNOL PAINEL BZT	LOI				
4-33		SWITCH-RETAINER	1				
4-34		S-KEY SWITCH NYLON N					
4-35	128010-03	S-COVERED KEY	1				

## FIGURE 5



4122815-05 FIGURE 5

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART N	10
5-1	4128327	S-ENGINE DECK W/LABS	1	5-22	64144-3	34
5-2	4113527.7	WLDMT-BRAKE ARM LH	1	5-23	218814	5
5-3	4113529.7	WLDMT-BRAKE ARM RH	1	5-24	64123-1	15
5-4	128102	SPRING, EXTENSION	2	5-25	64141-4	4
5-5	4113518.7	WLDMT-BRAKE LEVER	1	5-26	64207-0	)7
5-6	33213	ROD-SPD CTRL UPPER	2	5-27	64168-2	2
5-7	2182387.7	GUIDE-SPRING	2	5-28	64025-0	)3
5-8	38020N	CLEVIS YOKE, 5/16 PLATE	2	5-29	64006-0	)5
5-9	2188147	ASSY, BRAKE CW (LH)	1	5-30	411353	0
	* 2188148	ASSY BRAKE CCW (RH)	1	5-31	450767	
5-10	64163-06	WSHR,.768/.756X1.25X140	3 2	5-32	64164-0	36
5-11	2183056	SHAFT, BRAKE	1	5-33	64025-3	31
5-12	2188126-0°	1MOTOR-ASSY HYDRAULI	2	5-34	272200	1-
	(INCLUDES	S ITEMS 32 & 33)			198508	
					(ITEM 3	
5-13	2198156-0°	1RIM ASM, W/VALVE STEM	2		642228	Α,
	2198156-02	2TIRE-23X10.5-12 4P	2			
	(ITEM 13 L	JSED ON 642222A & 642227	<b>7</b> A)	SER	VICE PA	R
5-14	2720608-0°	1RIM ASM, W/VALVE STEM	2	2100	3147-01	В
	2720608-02	2TIRE-23 X 8.50-12	2			Р
	(ITEM 14 L	JSED ON 642220A, 642221A	١)			Р
	•		•		147-03	S
5-15	64220-02	BLT-WHL 7/16-20X.75 75D	10			Э
5-16	64188-02	PIN, CLEVIS 5/16X1	2		147-05	С
5-17	64061-25	ROLL PIN-1/4X1-1/4	2		147-06	Р
5-18	2188155	GRIP, 1/4X1X4-1/2	1			Р
5-19	2183063-0	1SPACER, 32MM LONG	8			Р
5-20	2188149	HUB, WHEEL AND DISC	2	2100	147-09	_
5-21	85010N	ZERK, 1/4-28 STR SLFTHF	RD 1	2188	148-01	*(

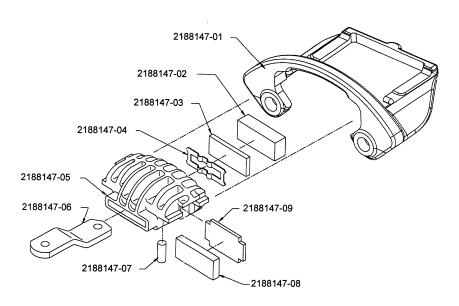
ITEM	PART NO.	DESCRIPTION	QTY
5-22	64144-34	SNAP RING.50	1
5-23	2188145	BEARING75ID SELF ALIG	N2
5-24	64123-15	BOLT-3/8-16X3/4 HEX	4
5-25	64141-4	NUT-WLF 3/8-16	4
5-26	64207-07	NUT-HEX M12-1.75	8
5-27	64168-2	COTTER-HAIRPIN.08X1.19	6
5-28	64025-03	NUT-HEX 5/16-24	2
5-29	64006-05	LOCKWSHR-HELICAL 1/2	8
5-30	4113530	WLDMT-PRK BRAKE ROD	1
5-31	450767	CAPSCREW 12-1.75X110	8
5-32	64164-08	S-KEY FOR WHEEL MOTO	R 2
5-33	64025-31	NUT 1-20 UNSLOTTED TR	W2
5-34	2722001-01	IRIM ASM-W/VALVE STEM	2
	1985085-02	2 TIRE 24X12.00-12NHS 4PI	LY2
	(ITEM 34 U	ISED ON 642223A,	
	642228A, 6	642233A & 642237A)	

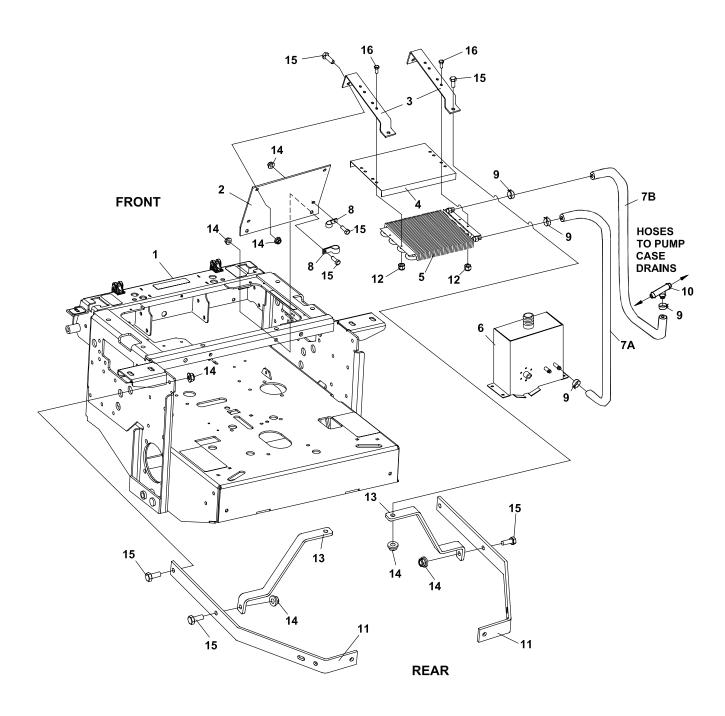
#### SERVICE PARTS FOR 2188147 AND 2188148 QTY/ASSY

2188147-01	BRACKET-MACHINED	1
2188147-02	PAD-CAM SIDE	1
2188147-03	PAD-SUPPORT	1
2188147-04	SPRING-LEVER RETAINER	1
2188147-05	HOUSING	1
2188147-06	CAM LH	1
2188147-07	PIVOT PIN	1
2188147-08	PAD-CARRIER SIDE	1
2188147-09	PAD-SUPPORT	1
-		
2188148-01	*CAM RH	1

#### \* NOT ILLUSTRATED

#### BRAKE ASSEMBLY BREAKDOWN



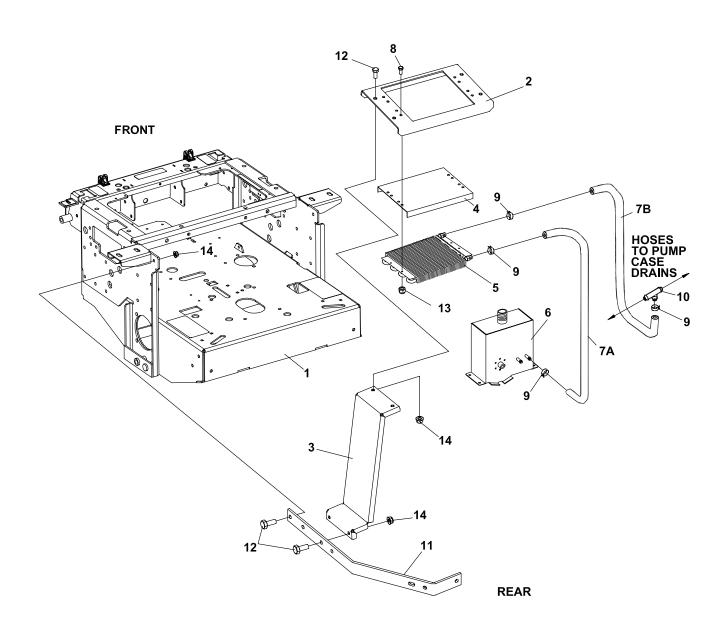


**OIL COOLER** 

# BZT 2000 Series

4122815-06 FIGURE 6

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
6-1	4128327	S ENGINE DECK W/LABS	1				
6-2	2722339.7	BRKT-COOLER FRONT	1				
6-3	2722338.7	BRKT-OIL COOLER	2				
6-4	2720891.7	SCREEN-OIL COOLER	1				
6-5	2188173	COOLER-OIL	1				
6-6	2186211	S HYD RSRVR W/LABS	1				
`		ERVICEABLE LENGTH OF	,				
6-7A		3/8 HIGH TEMP HOSE 26"	·=				
6-7B	69053-05	3/8 HIGH TEMP HOSE 22"	1				
6-8	48228-2A	CABLE-CLIP 3/4 W/INSTN	2				
6-9	88042-04	CLAMP-3/4 CLIP	4				
6-10	58026-01	3 WAY CONNECTOR 3/8	1				
6-11	2722296.7	ARM-BUMPER	2				
6-12	64237-02	LOCKNUT-NYLON M6-1.00	) 4				
6-13	2721928.7	BRACKET-REAR COOLER	2				
6-14	64265-05	NUT-FL NYL LOCK M10-1.	5 11				
6-15	64263-013	BLT-FLG HD M10-1.5 X 30	11				
6-16	64263-002	BLT-FLG HD M6-1.0 X 16	4				

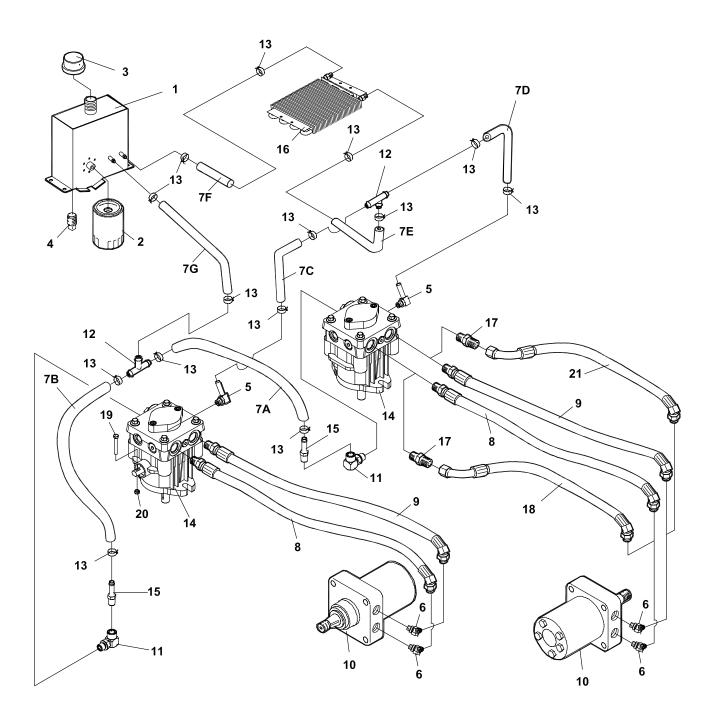


## **OIL COOLER-LIQUID COOLED**

BZT 2000 Series

4122815-07 FIGURE **7** 

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
7-1	4128327	S ENGINE DECK W/LABS	1				
7-2	2722371.7	BRKT-OIL COOLER 223LC	1				
7-3	2722424.7	BRKT-OIL COOLER 223LC	2				
7-4	2720891.7	SCREEN-OIL COOLER	1				
7-5	2188173	COOLER-OIL	1				
7-6	2186211	S HYD RSRVR W/LABS	1				
(690 7-7A 7-7B 7-8 7-9 7-10 7-11 7-12 7-13 7-14	69053-05 69053-05 64263-002 88042-04 58026-01 2722296.7 64263-012 64237-02	ERVICEABLE LENGTH OF 5 3/8 HIGH TEMP HOSE 30" 3/8 HIGH TEMP HOSE 34"  BLT-FLG HD M6-1.0 X 16 CLAMP-HOSE 5/8 3 WAY CONNECTOR 3/8 ARM-BUMPER BLT-FLG HD M10-1.5 X 25 LOCKNUT-NYLON M6-1.00 NUT-FL NYL LOCK M10-1.5	1 1 4 4 1 2 11 0 4				



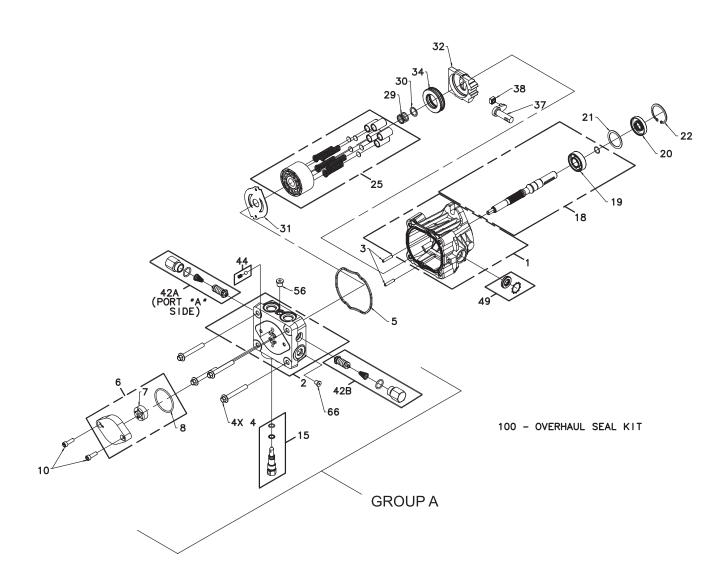
**HYDRAULICS** 

# BZT 2000 Series

4122811-06 FIGURE 8

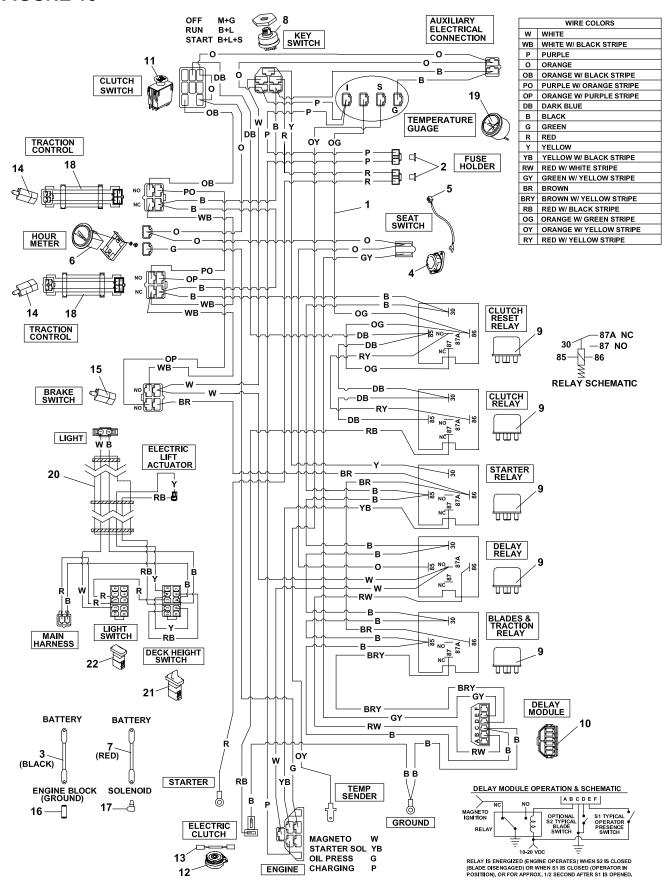
ITEM	PART NO.	DESCRIPTION	QTY
6-1	2186211	S HYD RESERVOIR W/LAE	3 1
6-2		FILTER 25 MICRON	1
6-3	69216.7	CAP-RESERVOIR	1
6-4		PLUG-MAGNETIC	1
6-5		FTG-90 BRB 9/16-18X.38	2
6-6	108205-03	ELBOW-MALE 45 37-ORB	4
		ERVICEABLE LENGTH OF 5	5")
6-7A		3/8 HIGH TEMP HSE 18"	1
6-7B	69053-05	3/8 HIGH TEMP HSE 15"	1
6-7C	69053-05	3/8 HIGH TEMP HSE 19"	1
6-7D	69053-05	3/8 HIGH TEMP HSE 12"	1
		3/8 HIGH TEMP HSE 22"	1
6-7F		3/8 HIGH TEMP HSE 26"	1
6-7G	69053-05	3/8 HIGH TEMP HSE 5"	1
6-8	2188157-0	1HOSE HYD ORB 37-22.38	2
	(QTY OF 1	FOR KAWASAKI ENGINE)	
6-9		2HOSE HYD ORB 37-25.00	2
6-10		1MOTOR-ASSY HYD	2
6-11		1FTG 9/16-18 ORB X 3/8	2
6-12		3 WAY CONNECTOR 3/8	2
6-13		CLAMP-HOSE 5/8	14
6-14		PUMP-HYDRO BDP-10A-44	
		FITTING-3/8 BARB 1/4	2
6-16		OIL COOLER	1
6-17		FTG-STRGHT 8 ORB X 8 J	
6-18		1HOSE-1/2 37/45 37 26.25	1
	ONLY)	&18 FOR KAWASAKI ENG	
6-19	64123-60	BOLT, 1/4-20X2 HEX	2
6-20	64229-01	LOCKNUT-NYL 1/4-20	2
6-21		2HOSE-1/2 37/45 37	1
J = .		OR KAW 25HP ENG ONLY)	•

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							



4122811-07 FIGURE 9

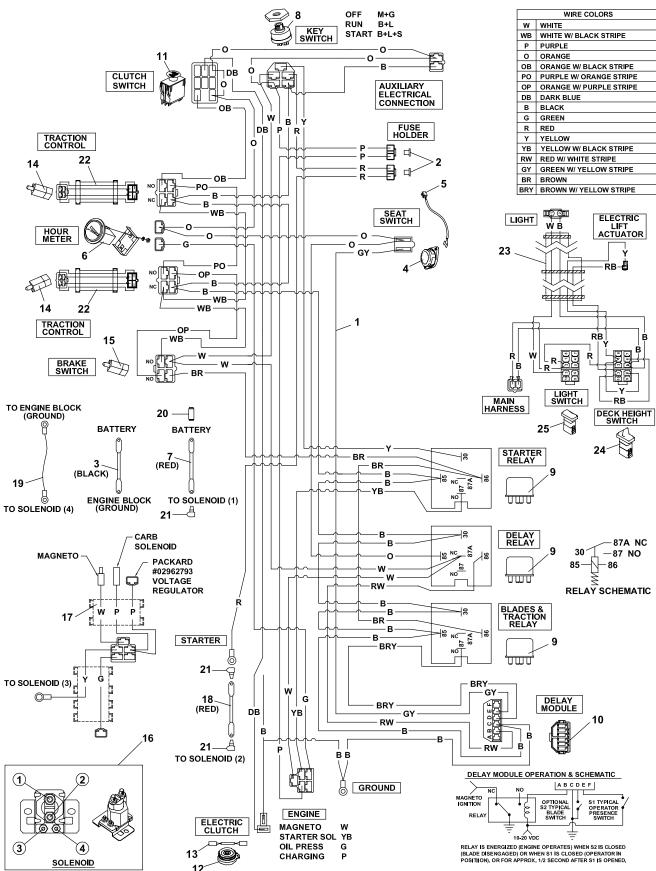
ITEM	HYDROGEAR PART NO.	TEXTRON PART NO.	DESCRIPTION	QTY
9-1	70516		HOUSING KIT	1
9-2	70517		END CAP KIT	1
9-3	50641		STRAIGHT HEADLESS PIN	2
9-4	50969	2721615-01	FLANGE BOLT M8-1.25 X 60	4
9-5	51232	2721615-02	HOUSING O-RING	1
9-6	2513027	38345-06	CHARGE PUMP KIT	1
9-7	50273	38345-07	STD GEROTOR ASSEMBLY	1
9-8	9004101-1340	38345-08	O-RING	1
9-10	50095	38345-10	SOCKET SCREW M6-1.0 x 20	2
9-15	2513030		BYPASS VALVE KIT (BLANK)	1
9-18	70521	2721615-07	PUMP SHAFT KIT	1
9-19	50315		BALL BEARING 17 X 40 X 12	1
9-20	51161		LIP SEAL 17 x 40 x 12	1
9-21	50951		SPACER	1
9-22	50329		RETAINING RING	1
9-25	70331	38345-12	CYLINDER BLOCK KIT	1
9-29	2003014		BLOCK SPRING	1
9-30	2003017		BLOCK THRUST WASHER	1
9-31	51246	2721615-09	VALVE PLATE	1
9-32	2003087	188059-11	SWASH PLATE	1
9-34	50551	2721615-11	BALL THRUST BEARING	1
9-37	2003005	188059-15	ARM-TRUNION	1
9-38	2000015	2721615-13	SLOT GUIDE	1
9-42A	70743	4121354	SHOCK VALVE KIT (.031")	1
9-42B	70741	4121355	SHOCK VALVE KIT (BLANK)	1
9-44	70403	2721615-16	CHARGE RELIEF VALVE KÍT	1
9-49	2513043	2721615-17	TRUNNION SEAL/RETAIN KIT	1
9-56	9005110-4400		STRAIGHT THREAD PLUG	1
9-66	9005110-3100		5/16 SAE PLUG	1
9-100	70525	2721615-18	OVERHAUL SEAL KIT	1



## **KOHLER WIRE HARNESS-LIQ. COOLED**

4122815-10 FIGURE 10

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
10-1	2722147	HARNESS-WIRING	1				
10-2	148082-20	FUSE-20 AMP	2				
10-3	108061-13	CABLE-BATTERY 36 BLAC	CK 1				
10-4	4124009	SWITCH-SEAT, NO	1				
10-5	158136	WIRE-SEAT SWITCH	1				
10-6	48030N	HOUR METER ASSEMBLY					
10-7		2CABLE-BATT W/CONDUIT S ITEMS 16 & 17)	1				
10-8	128010	KEY-SWITCH	1				
10-9	2722325	RELAY-40AMP SEALED	5				
	2188154	MODULE-DELAY	1				
10-11	2188153	SWITCH, CLUTCH	1				
10-12	2721337	CLUTCH-ELECTRIC	1				
	`	LL MODELS EXCEPT 19HP S 2720949 WIRE ASSY)	)				
	(IIVOLODE)	3 27 203 43 WINE AGO 1)					
	2722016	CLUTCH-ELECTRIC 19HP	1				
	(USE ON 1	9HP MODELS ONLY)					
	(INCLUDES	S 2720949 WIRE ASSY)					
10-13	2720949	ASSY-CLUTCH WIRE	1				
10-14	108208	SWITCH-DBL POLE	2				
10-15	2188156	SWITCH-NONO DBL POLE	Ξ 1				
10-16	112386	BOOT-BAT TERM POS	1				
10-17	2308095	COVER-TERMINAL	1				
10-18	2188172	HARNESS-PIGTAIL	2				
	2722635	GAUGE-TEMP 240 DEG	1				
	2721903	HARNESS-CONTROL PNL	. 1				
	2721814	SWITCH-DECK HEIGHT	1				
10-22	2721815	SWITCH-LIGHT	1				

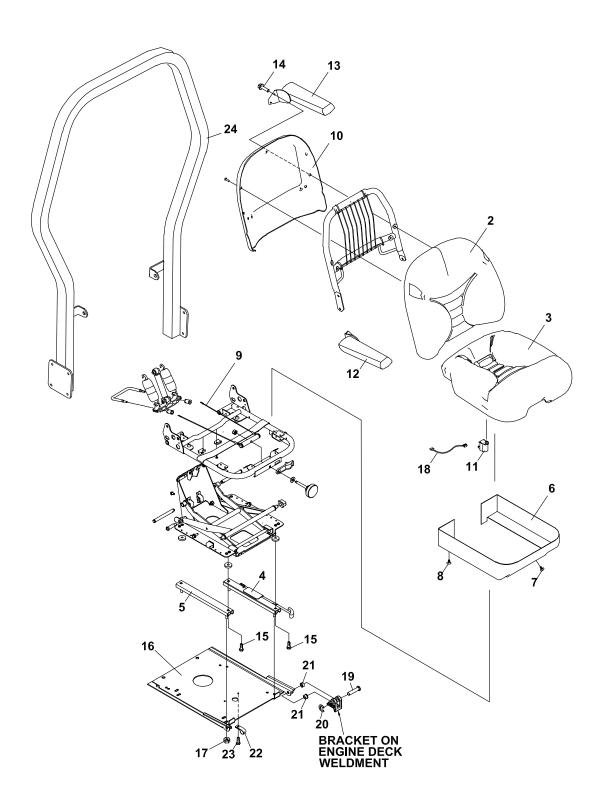


### **KAWASAKI WIRE HARNESS**

# BZT 2000 Series

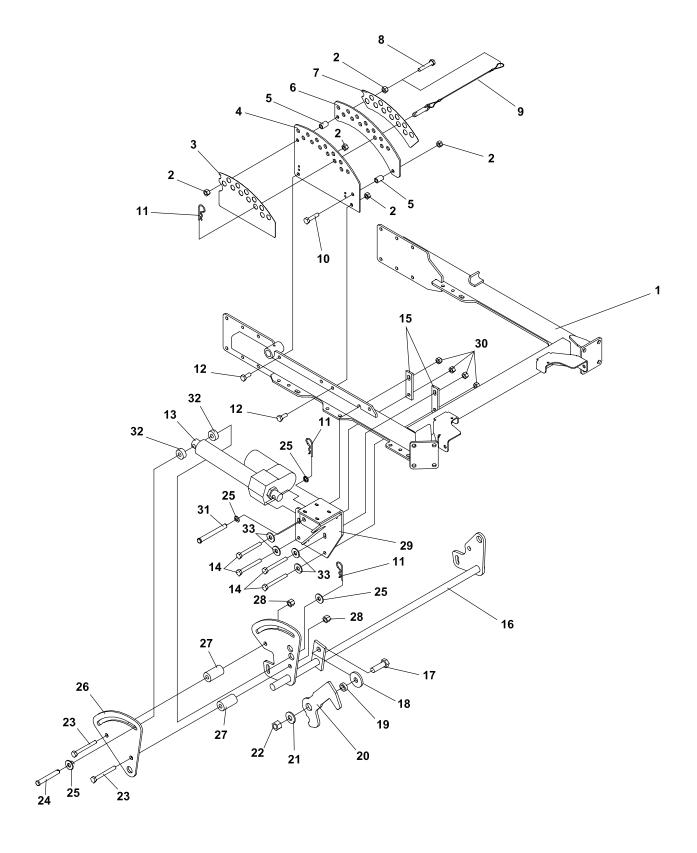
4122815-11 FIGURE 11

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
11-1	2721375	HARNESS-WIRING MAIN	1				
11-2	148082-20	FUSE-20 AMP	2				
11-3	108061-13	CABLE-BATTERY 36 BLAC	CK 1				
11-4	4124009	SWITCH-SEAT, NO	1				
11-5	158136	WIRE-SEAT SWITCH	1				
11-6	48030N	HOUR METER ASSEMBLY	1				
11-7		ICABLE-BATT W/CONDUIT SITEMS 20 & 21)	1				
11-8	128010	KEY-SWITCH	1				
11-9	2722325	RELAY-40AMP SEALED	3				
11-10	2188154	MODULE-DELAY	1				
11-11	2188153	SWITCH, CLUTCH	1				
11-12	2721337	CLUTCH-ELECTRIC	1				
	(USE ON A	LL MODELS EXCEPT 19HP	)				
	(INCLUDES	S 2720949 WIRE ASSY)					
	2722016	CLUTCH-ELECTRIC 19HP	1				
		9HP MODELS ONLY)					
	(INCLUDES	S 2720949 WIRE ASSY)					
11-13	2720949	ASSY-CLUTCH WIRE	1				
11-14	108208	SWITCH-DBL POLE	2				
11-15	2188156	SWITCH-NONO DBL POLE	∃ 1				
11-16	38665	SOLENOID	1				
11-17	2188224	HARNESS-JUMPER	1				
11-18	108061-04	CABLE-BATTERY 20 RED	1				
	2188225	WIRE-GROUND	1				
11-20	112386	BOOT-BAT TERM POS	1				
11-21	2308095	COVER-TERMINAL	3				
	2188172	HARNESS-PIGTAIL	2				
	2721903	HARNESS-CONTROL PNL					
	2721814	SWITCH-DECK HEIGHT	1				
11-25	2721815	SWITCH-LIGHT	1				



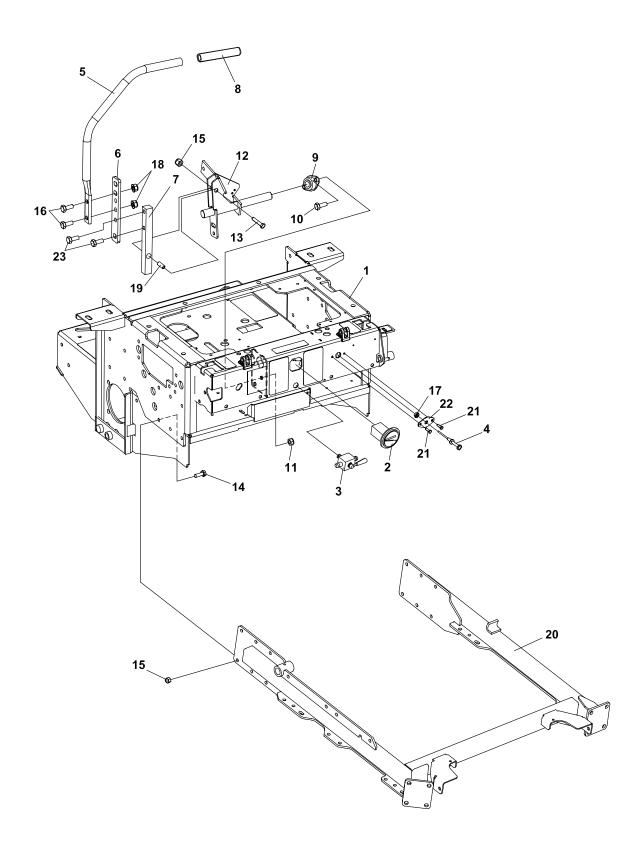
4122811-14 FIGURE 12

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
12-1	4122479	SEAT-SUSPENSION	1				
	(INCLUDES	S ITEMS 2-15)					
40.0	4400470 0	ACHOLHON CEAT DACK	4				
12-2		1CUSHION-SEAT BACK	1				
12-3		2CUSHION-SEAT BOTTOM					
12-4		SSLIDE RAIL-ADJUSTER	1				
12-5		4SLIDE RAIL-SLAVE	1				
		5SKIRT-SEAT ASSY	1				
		CLIP-SMALL XMAS TREE	3				
_		7CLIP-LARGE XMAS TREE					
		8ASSY-CABLE	1				
		9BACK PANEL-SEAT	1				
12-11	4124009	SWITCH-SEAT NO	1				
		ARMREST-RH	1				
12-13	4122480	ARMREST-LH	1				
12-14	64123-68	BOLT-HEX 5/16-18X1	4				
12-15	64123-54	BOLT, 5/16-18X3/4 HEX	4				
12-16	4121386.7	PLATE-SEAT	1				
12-17	64141-6	NUT-WLF 5/16-18	4				
12-18	158136	WIRE-SEAT SWITCH	1				
12-19	33138-09	PIN-CLEVIS GRVD	2				
12-20	64144-30	SNAP RING.375	2				
		BRG-NYLINER 3/8	4				
12-22	48228A	CABLE CLIP-INSULATED	1				
12-23	64152-23	SCREW 1/4-20X3/8	1				
	01	OTIONAL DODG:					
40.04		PTIONAL ROPS:					
12-24	970162	ATT-ROPS					
	(INCLUDES	5 ITEM 22)					
12-25	*2208260	S-SEAT BELT	1				
	* N(	OT ILLUSTRATED					
		J					



4122815-13 FIGURE 13

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
13-1	2722723.7	WLDMT-CRADLE	1				
13-2	64237-03	LOCKNUT-NYLN M10-1.5	5				
13-3	2000791	LBL-OUTSIDE HOC	1				
13-4	2182523.7	PLATE-HEIGHT ADJ OUT	ER1				
13-5	2183071-03	3SPACER	2				
13-6	2182524.7	PLATE-HEIGHT ADJ INNE	R 1				
13-7	2000790	LABEL-INNER HOC	1				
13-8	64205-008	BLT-MET M10-1.50X55	1				
13-9	2188141	ASSY, PIN & LANYARD	1				
13-10	64205-034	BLT-MET M10-1.50X45	1				
13-11	64168-1	PIN-COTTER .120X2-3/8	3				
13-12	A1104057	BLT-MET M10-1.5X25	2				
13-13	2720642	<b>ACTUATOR-LINEAR 12VI</b>	DC 1				
13-14	64205-009	BLT-MET M10-1.5X65	4				
13-15	2721644.7	PLATE-BOLT	2				
13-16	2722614.7	WLDMT-ELECTRIC LIFT	1				
13-17	64205-055	BLT-MET M16-2.0 X 50	1				
13-18	64163-78	WASHER635 X 2.00	1				
13-19	2183084	SPACER-16.25X50.8X8.5I	_G 1				
13-20	2182522.7	LEVER-DECKLIFT	1				
13-21	64209-03	SPRING WASHER .67 ID	1				
13-22	64237-04	LOCKNUT-NYLON M16-2.	0 1				
13-23	64263-022	BLT-FLG HD M12-1.75 X 9	90 2				
13-24	64188-40	PIN, CLEVIS 1/2 X 3-1/2	1				
13-25	64163-19	WSHR-33/64X1-1/4X12GA	4				
13-26	4112962.7	PLATE-DECKLIFT ELECT	1				
13-27	2183077	SPACER-DECKLIFT	2				
13-28	64265-06	NUT-FL NYL LOCK M12-1	.752				
13-29	2721645.7	WLDMT-EL LIFT MTG BR	KT 1				
13-30	64265-05	NUT-FL NYL LOCK M10-1	.5 4				
13-31	64188-43	PIN-CLEVIS	1				
13-32	2188227	SPACER 1.25 X 0.50 X 0.5	52 2				
13-33	64251-004	WHSR-M10	4				



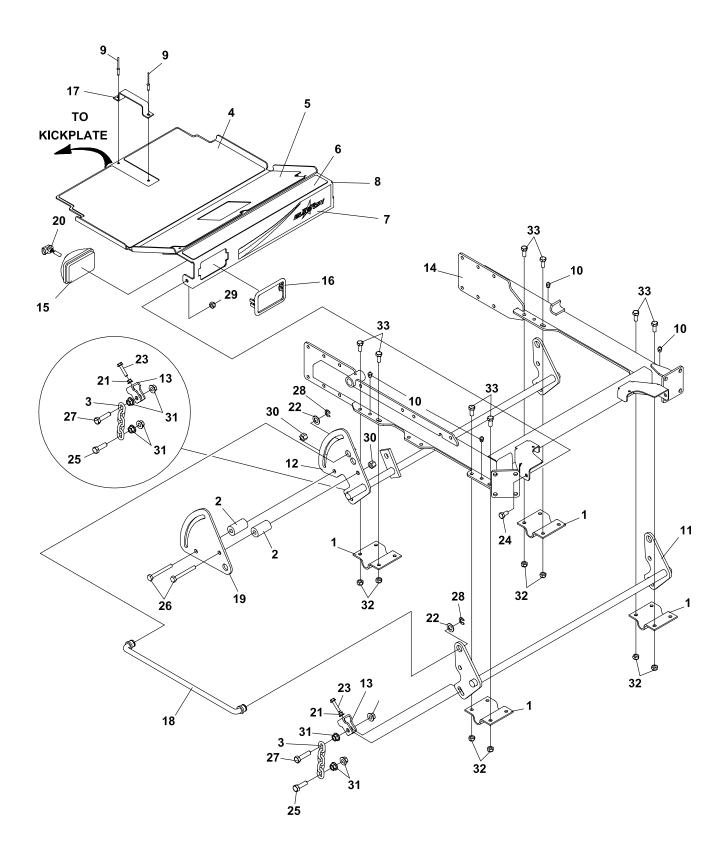
## STEERING/INSTRUMENTS

# BZT 2000 Series

4122815-14 FIGURE 14

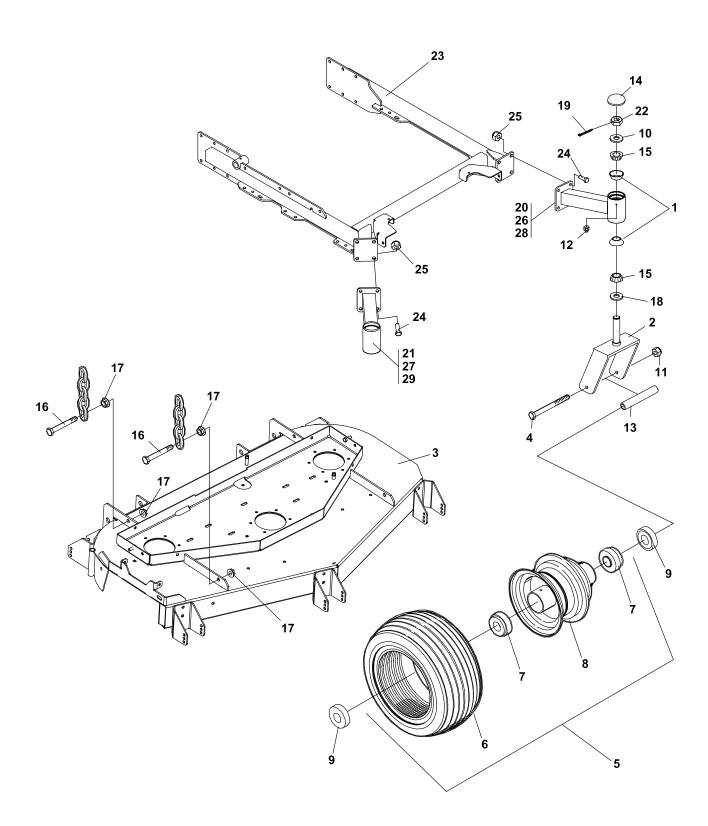
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
14-1	4128327	S ENGINE DECK W/LABS	1				
14-2		HOUR METER ASSEMBLY	´ 1				
14-3		VALVE-TANK SELECTOR	1				
14-4		CONTROL-CHOKE 40.0	1				
	(USE WITE	H KOHLER ENGINES)					
	108009-03	CONTROL-CHOKE 51.0	1				
	`	ł KAWASAKI & LIQUID COC	DLED				
	ENGINES)						
14-5	4122172.7	LEVER-TRACTION CNTRL	. 2				
14-6	4122173.7	BRKT-TRACTION LEVER	2				
14-7	2183074	BRKT-HANDLE	2				
14-8	2188144	GRIP75 IDX12	2				
14-9	2188145	BEARING75ID SELF ALIG	SN 4				
		BOLT-3/8-16X3/4 HEX	8				
		NUT-WLF 3/8-16	8				
		WLDMT-MTN CONTRL RH					
*	4112104.7	WLDMT-MTN CONTRL LH	1				
14-13	64205-011	BLT-METRIC M10-1.50X40	2				
14-14	A110406	SCREW,M10X1.5X30 HH	12				
14-15	64237-03	LOCKNUT-NYLON M10-1.5	5 14				
14-16	64263-012	BLT-FLG HD M10-1.5 X 25	4				
		NUT-HEX 3/8-24	1				
		NUT-FL NYL LOCK M10-1.					
	2183073	SPACER	2				
		WLDMT-CRADLE	1				
		1/4-20X3/8 LG SP SCREW					
		PLATE-CHOKE MOUNT	1				
14-23	64263-013	BLT-FLG HD M10-1.5 X 30	4				

#### \* NOT ILLUSTRATED



4122815-15 FIGURE 15

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
15-1	2182356.7	BRKT-SHAFT HANGER	4				
15-2	2183077	SPCR-DKLIFT ACTUATOR	2				
15-3	2188127	CHAIN-6.35 (.250) 5 LINKS	4				
15-4	2721859	MAT-FOOT PLATE LOWER	R 1				
15-5	2721860	MAT-FOOT PLATE MIDDLE	≣ 1				
15-6	2721861	MAT-FOOT PLATE UPPER	. 1				
15-7	4124270	LABEL-FOOT PLATE, BZT	1				
15-8	2721868	S-FOOT PLATE W/LABS	1				
	(INCLUDES	S ITEMS 4-6, 9 &17)					
15-9	64215-07	RIVET-POP IFI #84	2				
15-10	85051	ZERK-1/8 PIPE	6				
15-11	2722558.7	WLDMT-DECK LIFT, FROM	IT 1				
15-12	2722614.7	WLDMT-ELECTRIC LIFT	1				
15-13	2722630	CLIP-DECK HEIGHT ADJ	4				
15-14	2722723.7	WLDMT-CRADLE	1				
15-15	3010329	LAMP-FLOOD 12V	1				
15-16	3010330	KIT, SNAP MOUNT BEZEL	1				
15-17		HANDLE W/SLOT	1				
15-18	4109960	ROD-DECK LIFT	2				
15-19	4112962.7	PLATE-DECK LIFT OUTER	. 1				
15-20	5003693		1				
15-21	64141-2	NUT-WLF 1/4-20	4				
		WSHR.890X1.375X18GA	8				
		BLT-TDFM 1/4-20X1-1/2	4				
		BLT MET M10-1.50X20	2				
		BLT-MET M12X1.75X40	4				
		BLT-FLG HD M12-1.75 X 9					
15-27		BLT-MET M12-1.75X50	4				
15-28		E-RING .875	4				
15-29		LOCKNUT-NYLON M10-1.5					
15-30		NUT-FL NYL LOCK M12-1.					
15-31		NUT-WHIZ M12-1.75	16				
		NUT-FL NYL LOCK M10-1.					
15-33	64263-013	BLT-FLG HD M10-1.5 X 30	15				

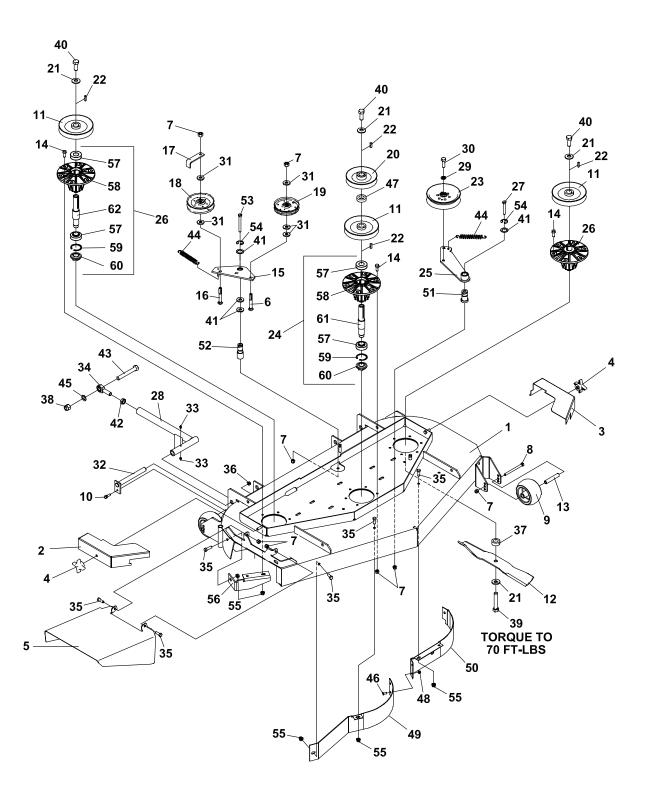


## **CRADLE & CASTER ASSEMBLY**

BZT 2000 Series

4122815-16 FIGURE 16

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
16-1	48043-03C	CUP, OUTER BEARING	4				
16-2		WLDMT-CASTER YOKE	2				
16-3		DECK/W LABS					
16-4	64123-215	BOLT-HEX 3/4-10X7 1/2	2				
16-5	2722228	WHEEL-13X5.00-6 ASSY	2				
	(INCLUDES	S ITEMS 6-8)					
16-6	2720475-01	ITIRE-13X5.00-6 SMOOTH					
16-7	2722228-03		2				
16-8		IRIM-13"ASSY W/VALVE	1				
16-9		SPACER-END	4				
		WSHR 1.015X1.500X14GA					
		LOCKNUT-NYLON 3/4-10	2				
	85010N	ZERK, 1/4-28 STR SLF TH					
		2SPANNER-13" WHEEL	2				
	2188135		2				
		CONE, OUTER BEARING BLT-METRIC M12X1.75X4	4				
		NUT-WHIZ M12-1.75	0 4 8				
		SEAL CR 12411	2				
		COTTER PIN	2				
		WLDMT-CASTER ARM 52	_				
16-21		WLDMT-CASTER ARM 52					
16-22	64025-20	NUT-HEX 3/4-16 SLOT U	2				
		WLDMT-CRADLE	1				
16-24	A1105061	BOLT-M12-1.75X30	8				
16-25	64237-06	LOCKNUT-NYLON M12-1.	75 8				
16-26	2722401.7	WLDMT-CASTER ARM 48	LH1				
16-27	2722400.7	WLDMT-CASTER ARM 48	RH1				
	(USED WIT	TH 48" DECKS)					
		WLDMT-CASTER ARM 61					
16-29		WLDMT-CASTER ARM 61	RH1				
	(USED WIT	TH 61" DECKS)					
				1			

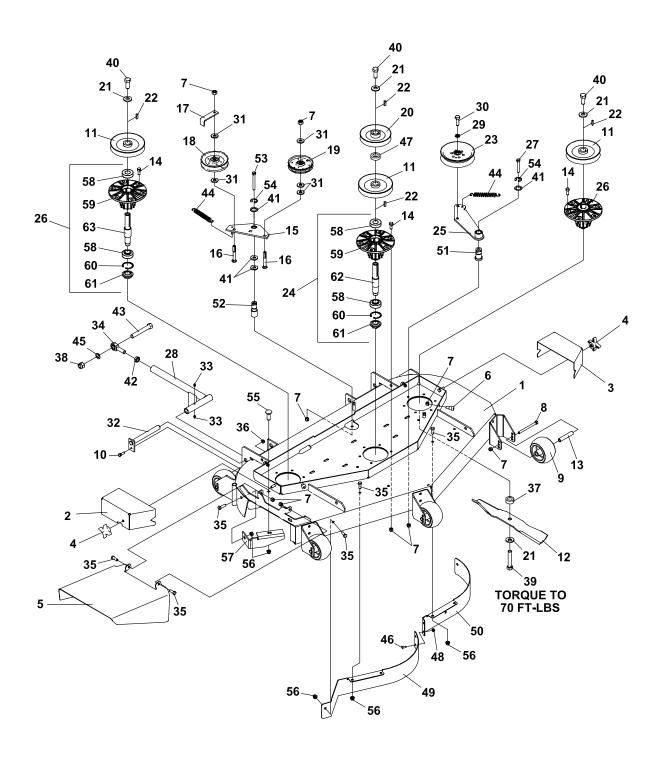


4122815-17

FIGURE 17 **DESCRIPTION QTY** 

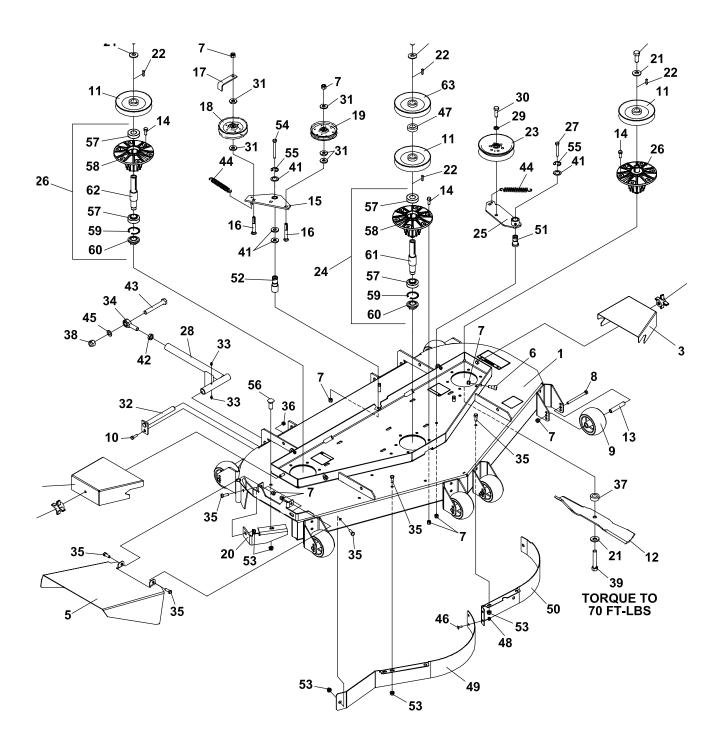
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESC
17-1	4127971	S-48INCH DECK W/LABEL	S 1	17-46	64018-2	BLT-CRG
17-2	4127853.5	COVER-BELT RH 48	1	17-47	64163-68	WSHR-1.0
17-3	4127852.5	COVER-BELT LH 48	1	17-48	64268-01	NUT-FL N
17-4	38524	KNOB-4 PRONG 3/8-16	2	17-49	4120180.7	BAFFLE-4
17-5	32723.5	CHUTE-DISCHARGE	1	17-50	4120175.7	BAFFLE-4
17-6	64018-5	BLT-CRG 3/8-16X1-3/4	1	17-51	4116661	PIN-PIVO
17-7	64229-03	LOCKNUT NYLON 3/8-16	26	17-52	4116712	PIN-PIVO
17-8		BLT-HEX 3/8-16X4-1/2	3	17-53	64123-138	BOLT-HEX
17-9		ROLLER-5X2.75 CENTER		17-54	64221-04	E-RING.87
17-10	64123-54	•	2	17-55	64268-03	NUT-FL N
		PULLEY ENGINE	3	17-56	4120208.7	BAFFLE-D
		BLADE 16.25 OFFST HLFT		17-57	38348-01	BEARING-
17-13	2720685		3	17-58	2721096	HOUSING
17-14		BLT-FLG HD 3/8-16 X 1-1/4	18	17-59	64144-38	SNAP RIN
		WLDMT-PTO IDLER	1	17-60	38315	<b>NUT-SPIN</b>
17-16	64018-18			17-61	2183070-01	ISHAFT-SF
	2302125.7	GUIDE-BELT	1	(USE	ED ON 4115	849 CENTE
17-18	48393	PULLEY, V IDLER	1			
17-19		IDLER, 5.0 OD FLNGD	1	17-62	2183070-02	2SHAFT-SF
17-20	2228034	PULLEY-5.25 DEEP GRV	1	(US	ED ON 4115	850 OUTE
17-21	64209-03	SPRING WSHR .67 ID	6			
17-22	64164-12	1/4X1/4X1 SQ END KEY	4			
	128169	· · · · · · · · · · · · · · · · · · ·	1			
17-24	4115849		ΓR 1			
	(INCLUDES	S ITEMS 57-61)				
17-25	4110580.7	WLDMT-IDLER	1			
17-26	4115850	S-ASSYSPNDL ZT200 OUT	ΓR2			
	(INCLUDES	S ITEMS 57-60 & 62)				
17-27	64123-88	BOLT, 3/8-16X2-3/4 HEX	1			
17-28	2186185.7	WLDMT-PUSHBAR	2			
17-29	64006-05	LOCKWSHR-HELICAL 1/2	1			
17-30	64123-05	BLT-HEX 1/2-20X1-1/2	1			
17-31	64163-46	WASHER.383/.393X.88X70	GA4			
17-32	2186125	WLDMT-LOCK, PUSHBAR	2			
17-33	85010N	ZERK, 1/4-28 STR SLF TH	D 4			
17-34	2188142-01	1ROD END 5/8	2			
17-35	64123-50	BOLT-HEX 3/8-16X1	8			
17-36	64229-02	LOCKNUT-NYLON 5/16-18	2			
17-37	4118314	SPACER-BLADE 16MM	3			
17-38	64229-06	LOCKNUT, NYLON 5/8-11	2			
17-39	64123-187	BLT-HEX 5/8-18X3.75	3			
17-40		BLT-HEX 5/8-18X1.5	3			
17-41	64163-65	WASHER890X1.375X18G	6A 4			
17-42	64001-1	NUT-HEX JAM,5/8-18	2			
		BLT-HEX 5/8-11X4-1/2	2			
	2188131	SPRING-EXTENSION	2			
17-45	64163-73	WSHR625IDX1.120DX.06	SA/R			

SPINDLE ER SPINDLE ONLY)



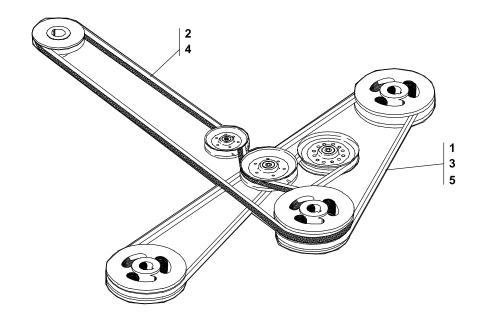
4122815-18 FIGURE 18

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
18-1	4118615	S-52INCH DECK W/LABEI	_S 1	18-46	64018-2	BLT-CRG 1/4-20X3/4	2
18-2	2722574.5	COVER-BELT RH	1	18-47	64163-68	WSHR-1.015X1.5X9GA	1
18-3	2722575.5	COVER-BELT LH	1	18-48	64268-01	NUT-FL NYLN LOCK 1/4-20	2
18-4	38524	KNOB-4 PRONG 3/8-16	2	18-49	4118428.7	BAFFLE-FRONT RH	1
18-5	32723.5	CHUTE-DISCHARGE	1	18-50	4118427.7	BAFFLE-FRONT LH	1
18-6	64166-17	BLT-SHLDR 3\8-16X1.12	4	18-51	4116661	PIN-PIVOT	1
18-7	64229-03	LOCKNUT NYLON 3/8-16	34	18-52	4116712	PIN-PIVOT	1
18-8	64123-173	BLT-HEX 3/8-16X4-1/2	6	18-53	64123-138	BOLT-HEX 3/8-16X3-3/4	1
18-9	2721512	<b>ROLLER-5X2.75 CENTER</b>	ED6	18-54	64221-04	E-RING.875	1
18-10	64123-54	BOLT, 5/16-18X3/4 HEX	2	18-55	64018-3	BOLT-3/8-16X1 CARRIAGE	1
18-11	2308140	PULLEY ENGINE	3	18-56	64268-03	NUT-FL NYLN LOCK 3/8-16	
18-12	112111-02	BLADE 18.00 OFFST HLF	Т 3	18-57		BAFFLE-DISCHARGE	1
18-13	2720685	SPACER-ROLLER	6	18-58	38348-01	BEARING-SPINDLE SEALE	D6
18-14		BLT-FLG HD 3/8-16 X 1-1/	4 18	18-59	2721096	HOUSING-SPINDLE 6 HOL	
18-15		WLDMT-PTO IDLER	1	18-60	64144-38	SNAP RING	3
18-16	64018-18	BOLT-CARRIAGE 3/8-16X		18-61	38315	NUT-SPINDLE	3
18-17		GUIDE-BELT	 1			SHAFT-SPINDLE LONG	1
18-18	48393	PULLEY, V IDLER	1			849 CENTER SPINDLE ONL	-
18-19	38297	IDLER, 5.0 OD FLNGD	1	(00)	_D ON 4113	049 CENTER SI INDEE ONE	- ' /
18-20	2228034	The state of the s	1	18-63	2183070-0	2SHAFT-SPINDLE	2
18-21	64209-03		6			0 OUTER SPINDLE ONLY)	2
18-22	64164-12		4	(USED	ON 411363	O OOTER SPINDLE ONLT)	
18-23	128169		1				
18-24	4115849	S-ASSYSPNDL ZT200 CN					
10-24		S ITEMS 58-62)	111 1				
	(						
18-25	4110580.7	WLDMT-IDLER	1				
18-26	4115850	S-ASSYSPNDL ZT200 OU	TR2				
	(INCLUDES	S ITEM 58-61 & 63)					
18-27	64123-88	BOLT, 3/8-16X2-3/4 HEX	1				
18-28		WLDMT-PUSHBAR	2				
18-29		LOCKWSHR-HELICAL 1/2					
18-30		BLT-HEX 1/2-20X1-1/2	1				
18-31	64163-46	WASHER.383/.393X.88X7					
18-32	2186125	WLDMT-LOCK, PUSHBAR	_				
18-33	85010N	ZERK, 1/4-28 STR SLF TH					
18-34		1ROD END 5/8	2				
18-35	64123-50	BOLT-HEX 3/8-16X1					
			9 3 2				
18-36	64229-02 4118314	LOCKNUT-NYLON 5/16-18					
18-37		SPACER-BLADE 16MM	3				
18-38	64229-06	LOCKNUT, NYLON 5/8-11	2				
18-39		BLT-HEX 5/8-18X3.75	3				
18-40		BLT-HEX 5/8-18X1.5	3				
18-41	64163-65	WASHER890X1.375X180					
18-42	64001-1	NUT-HEX JAM,5/8-18	2				
18-43		BLT-HEX 5/8-11X4-1/2	2				
18-44	2188131	SPRING-EXTENSION	2				
18-45	64163-73	WSHR625IDX1.12ODX.0	DA/K				
				1			



4122815-19 FIGURE 19

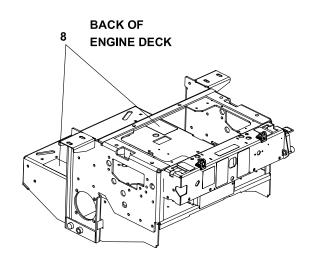
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
19-1	4120585	S-61INCH DECK W/LABEL	S 1	19-46	64018-2	BLT-CRG 1/4-20X3/4	2
19-2	2182352.5	BELT COVER RH	1	19-47	64163-68	WSHR-1.015X1.5X9GA	1
19-3	2182351.5	BELT COVER LH	1	19-48	64268-01	NUT-FL NYLN LOCK 1/4-2	0 2
19-4	38524	KNOB-4 PRONG 3/8-16	2	19-49	4117664.7	BAFFLE-FRONT CENTER	1
19-5		CHUTE-MID 61	1	19-50	4117663.7	BAFFLE-FRONT LH	1
19-6		BLT-SHLDR 3\8-16X1.12	4	19-51	4116661	PIN-PIVOT	1
19-7		LOCKNUT NYLON 3/8-16	35	19-52	4116712	PIN-PIVOT	1
19-8		BLT-HEX 3/8-16X4-1/2	7	19-53	64268-03	NUT-FL NYLN LOCK 3/8-1	6 8
19-9	2721512	ROLLER-5X2.75 CENTERE		19-54		BOLT-HEX 3/8-16X3-3/4	1
19-10		BOLT, 5/16-18X3/4 HEX	2	19-55		E-RING.875	1
19-11	2308140	PULLEY ENGINE	4	19-56			
19-12		BLADE 21.00 OFFST HLFT		19-57		BEARING-SPINDLE SEALI	
19-13	2720685	SPACER-ROLLER	7	19-58			_E 3
		BLT-FLG HD 3/8-16 X 1-1/4		19-59		SNAP RING	3
19-15		WLDMT-PTO IDLER	1	19-60		NUT-SPINDLE	3
	64018-18	BOLT-CARRIAGE 3/8-16X2		19-61	2183070-01	SHAFT-SPINDLE LONG	1
19-17		GUIDE-BELT	1	(USI	ED ON 4115	849 CENTER SPINDLE ONI	LY)
19-18	48393	PULLEY, V IDLER	1				
19-19	38297	IDLER, 5.0 OD FLNGD				2SHAFT-SPINDLE	2
19-20		BAFFLE-DISCHARGE	1	(US	ED ON 4115	850 OUTER SPINDLE ONL	.Y)
19-21		SPRING WSHR .67 ID	6				
		1/4X1/4X1 SQ END KEY	4				
19-23		PULLEY, IDLER 5.50	1				
19-24	4115849	S-ASSYSPNDL ZT200 CNT	R 1				
	(INCLUDES	S ITEMS 57-61)					
19-25	2186138.7	WLDMT-DECK IDLER	1				
19-26	4115850	S-ASSYSPNDL ZT200 OUT	2				
	(INCLUDES	S ITEM 57-60 & 62)					
19-27	64123-88	BOLT, 3/8-16X2-3/4 HEX	1				
19-28	2186185.7	WLDMT-PUSHBAR	2				
19-29	64006-05	LOCKWSHR-HELICAL 1/2	1				
19-30	64123-05	BLT-HEX 1/2-20X1-1/2	1				
19-31	64163-46	WSHR.383/.393X.88X7GA	5				
19-32	2186125	WLDMT-LOCK, PUSHBAR	2				
19-33	85010N	ZERK, 1/4-28 STR SLF THI	) 4				
19-34	2188142-01	1ROD END 5/8	2				
19-35	64123-50	BOLT-HEX 3/8-16X1	9				
19-36	64229-02	LOCKNUT-NYLON 5/16-18	2				
19-37	4118314	SPACER-BLADE 16MM	3				
19-38	64229-06	LOCKNUT, NYLON 5/8-11	2				
19-39		BLT-HEX 5/8-18X3.75	3				
19-40		BLT-HEX 5/8-18X1.5	3				
19-41	64163-65	WASHER890X1.375X18G	A 4				
19-42	64001-1	NUT-HEX JAM,5/8-18	2				
19-43		BLT-HEX 5/8-11X4-1/2	2				
19-44	2188131	SPRING-EXTENSION	2				
19-45	64163-73	WSHR625IDX1.120DX.06	A/R				



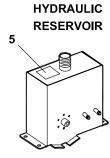
## **BELTS-CUTTERDECK**

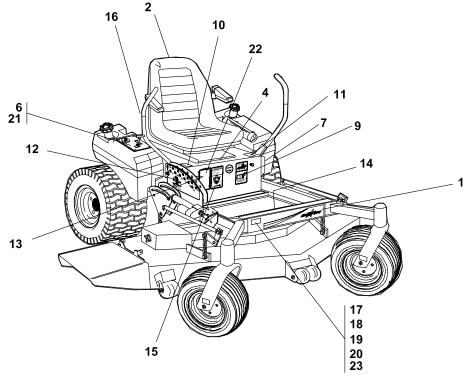
### **BZT 2000** Series

	Serie	4122811-20				FIG	URE 20
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
20-1	2188176	BELT-CUTTERDECK 54	1				
20-2	2720815	BELT-PTO 48/52	1				
20-3	128003	BELT-CUTTERDECK 61	1				
20-4	2188134 (USE ON 6	BELT-PTO 61 31" SD DECK)	1				
20-5	128110	BELT-CUTTERDECK 48	1				



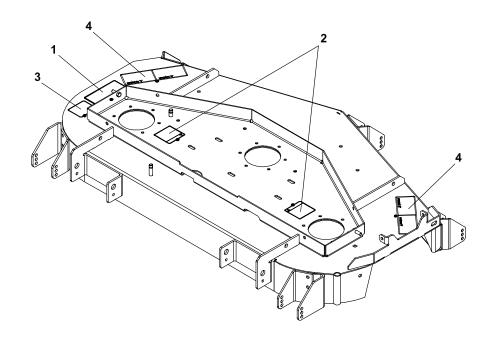






4122815-21 FIGURE 21

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
21-1	4124270	LABEL-FOOT PLATE, BZT	1				
21-2	4124264	LABEL-BUNTON	1				
21-3	2000735	LABEL-OPER MAN	1				
21-4	2000590	LABEL, WARN BATTERY	1				
21-5	2000691	LABEL - HYDR OIL FILL	1				
21-6	4124415	LABEL-CONTROL PANEL	1				
21-7	2000693	LABEL - PARK BRAKE	1				
21-8	2000698	LABEL(DBL) - FUEL/LEAKS	S 2				
21-9	4114158	LABEL-TIRES	1				
21-10	2000700	LABEL - RH TRACTION	1				
21-11	2000701	LABEL - LH TRACTION	1				
21-12	2000790	LABEL - HEIGHT OF CUT	1				
21-13	2000791	LABEL - INSIDE H.O.C.	1				
21-14	2000695	LABEL - WARN/USING	1				
21-15	2000706	LABEL-FUEL	1				
21-16	2721993	LABEL-BUNTON STRIPE	1				
21-17	4124299	LABEL-BZT 2250	1				
	(USED ON	25 HP ONLY)					
21-18		LABEL-BZT 2230	1				
	(USED ON	23 HP ONLY)					
21-19		LABEL-BZT 2190	1				
	(USED ON	19 HP ONLY)					
	`	& 21 USED ON LIQUID					
		MODELS ONLY)					
		LABEL-BZT 2230LC	1				
21-21	4124416	LABEL-CONTROL PANEL	1				
		DECAL-CAUTION SPANIS	H 1				
21-23		LABEL-BZT 2270 DIECUT	1				
	(USED ON	27 HP ONLY)					



## **DECALS-CUTTERDECKS**

BZT 2000 Series

4122811-22 FIGURE 22

		412201122				1.10	OIL ZZ
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
22-1 22-2 22-3 22-4	2000577 2000696	LABEL-WARNING BLADE LABEL-WARNING LABEL-BLADE INSTALL LABEL-DANGER/WARNIN	2 1				

### **World Class Quality, Performance And Support**



Equipment from Jacobsen, a Textron company, is built to exacting standards ensured by ISO 9001 and ISO 14001 registration at all our manufacturing locations.

A worldwide dealer network and factory-trained technicians backed by Textron Parts Xpress provide reliable, high-quality product support.

