

### **MODEL:**

933330

36 HYDRO MID-15 KAW Z-CTRL

934330

48 HYDRO MID-17 KAW Z-CTRL

935330

ARTS MANUA

**54 HYDRO MID-17 KAW Z-CTRL** 

### **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.

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

Schiller Grounds Care, 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.

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

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04-2009 **1** 

#### NOTICE !!!

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

Schiller 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 Schiller Grounds Care, Inc.'s Engineering Department. Any Schiller Grounds Care, 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 Schiller Grounds Care, Inc.-will result in the Schiller Grounds Care, 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 Schiller Grounds Care, Inc. will be considered the responsibility of the individual(s) or company designing and/or making such changes. Schiller Grounds Care, 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 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 Schiller Grounds Care, 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.

### **A DANGER**

**DANGER** indicates a 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 hazardous situation which, if not avoided, **COULD** 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.

### Schiller Grounds Care, Inc.

Ine Bobcat LaneJohnson Creek, WI 53038 U.S.APhone: 920-699-2000Fax: 920-699-3683

MODEL NUMBER

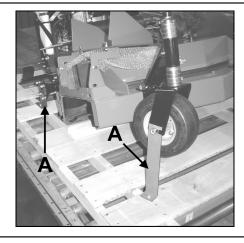
SERIAL NUMBER

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

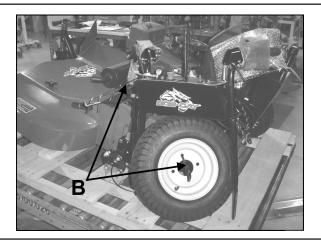
**SERIAL NUMBER:** This number appears only on your mower. It contains the model number followed consecutively by the serial number. Use this number when ordering parts or seeking warranty information.

# GENERAL NOTE: FRONT, REAR, RIGHT HAND AND LEFT HAND REFERENCES BELOW ARE WITH RESPECT TO AN OPERATOR AT THE CONTROLS.

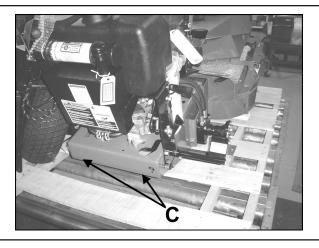
- 1. UNCRATE Place shipping crate on a level surface and remove sides and top.
- 2. Remove shipping brackets **A**, at all (4) locations.



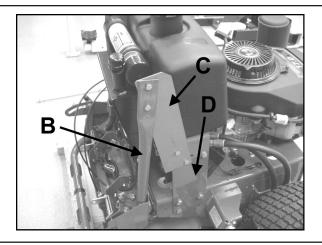
3. Remove wire ties **B** securing tires, upper handle and rods. Set aside for later use.



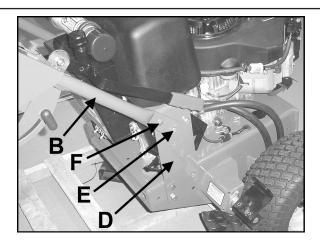
4. Raise the rear of the machine at location **C** and support with jackstands.



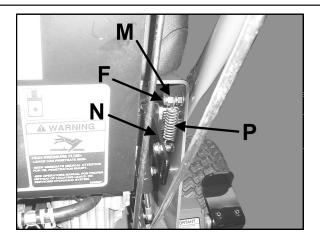
5. Install upper handle **B** to lower handle **D** using (2) 3/8-16 X 1" bolts and (2) 3/8-16 nuts, and (2) 3/8-16 X 1-1/2" bolts and (2) 3/8-16 nuts at location **F** provided in parts bag.



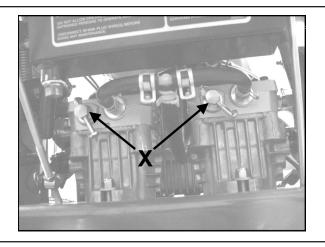
6. Install upper handle **B** to lower handle **D** using (2) 3/8-16 X 1" bolts and (2) 3/8-16 nuts removed in Step 5 at location **E**, and (2) 3/8-16 X 1-1/2" bolts and (2) 3/8-16 nuts at location **F**.



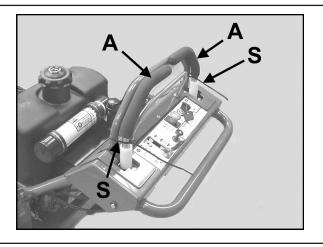
7. Install (2) springs **P** and (2) 3/8-16 nylon locknuts **M** from parts bag onto bolt **F** on each side of the machine. Attach springs to bolts on neutral return brackets **N** as shown.



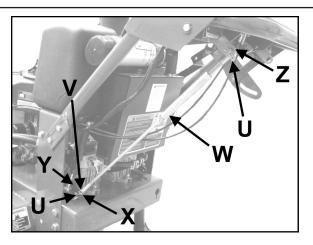
8. Open the bypass valves **X** on each pump by rotating handle counter-clockwise two revolutions.



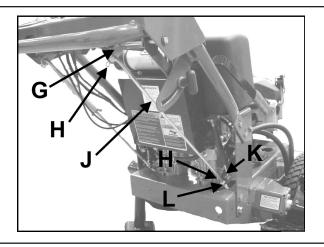
9. Cut and remove wire ties **S** from the control levers **A**. Place the control levers in the neutral position in the control panel.



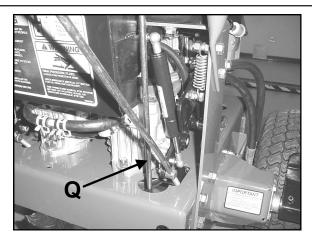
 Install the tracking control assembly W removed in Step 4 on the left hand control Z using pins U. Adjust swivel X to align with pump arm Y. Install pin U and tighten jam nut V.

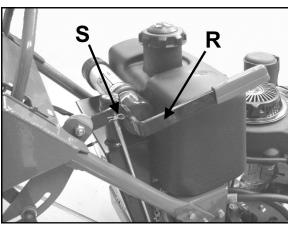


11. Install the right hand control rod J, the shorter of the remaining rods removed in Step 4, on the right hand control G using (2) pins H from the parts bag. Adjust swivel L to align with pump arm K. Install pin H.

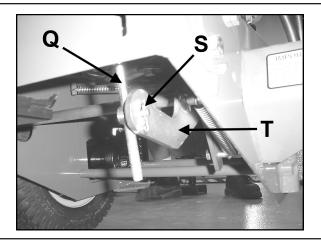


12. Insert threaded end of brake rod **Q** through the slot on the engine deck and attach the other end to the brake control arm **R** and secure in place with hairpin **S** as shown.

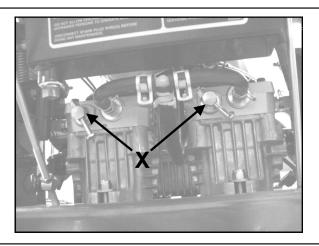




13. Connect swivel on threaded end of brake rod Q to the brake arm T and secure in place with hairpin S as shown. Adjust swivel to provide adequate braking when the brake control arm is engaged. See adjustment section of this manual.



14. Close bypass valves **X** by rotating clockwise until firmly seated.



#### ASSEMBLY/SET-UP INSTRUCTIONS



- 15. Attach cutterdeck per the instructions on the following pages then return to Step 25 of this section.
- 16. Fill engine with oil. (See engine manual for specifications.)
- 17. Fill fuel tank with clean, fresh unleaded fuel.

# **AWARNING** GASOLINE IS HIGHLY FLAMMABLE!

- Fill fuel tank with good quality, clean, regular unleaded gasoline.
- Do not use hi-test fuel.
- Do not smoke.
- Do not spill fuel.
- Fill outdoors.
- Do not overfill. Fill to 1" below bottom of filler neck to allow room for expansion.
- USE A FUNNEL TO FILL GAS TANK
- 18. Check oil level in hydraulic oil reservoir and adjust as necessary.
- 19. Adjust tire pressure in drive wheels and casters to 14 psi (1 kg/cm<sup>2</sup>).
- 20. Before attempting to start the mower, read and understand all sections of the Operation & Safety manual.

#### NOTICE: Special setup instructions.

- Before engaging the cutterdeck, run the engine for five minutes at full RPM. This is recommended for new engine installation to permit complete engine lubrication prior to load.
- Do not engage the cutterdeck at full throttle. Set the throttle half way between the highest and lowest engine speed, engage the PTO switch and increase the engine speed to full before cutting.

### **A**WARNING

Do not use this machine without an approved grasscatcher, grass discharge chute or mulching plate(s) correctly fitted.

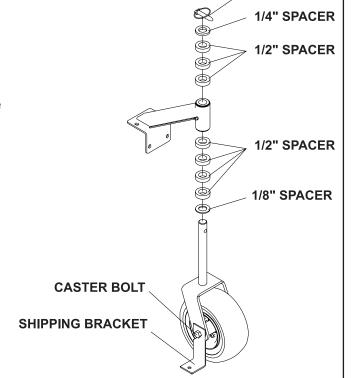
**CUTTERDECK ATTACHMENT:** Two types of cutterdeck mounting systems are available, fixed and floating. Fixed mounting rigidly attaches the cutterdeck to the power unit. Floating mounting allows the cutterdeck to move independent of the power unit providing a more uniform cut. Follow the appropriate instructions below for the type of cutterdeck being attached to the power unit.

#### FIXED CUTTERDECK ATTACHMENT

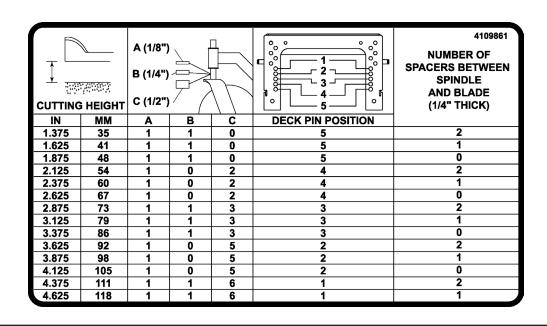
- 1. Remove the cutterdeck from the crate.
- 2. Unbolt the caster wheels and the shipping brackets from the crate.
- Remove the shipping bracket from the caster wheel by loosening the caster bolt and sliding the shipping bracket off and retighten caster bolt.
- 4. Remove quick pin and remove the appropriate number of spacers for the desired height of cut. See height of cut chart below.

**NOTE**: Height of cut chart is also located on bottom of belt cover or in the Operation & Safety Manual.

5. Repeat for other caster wheel assembly.



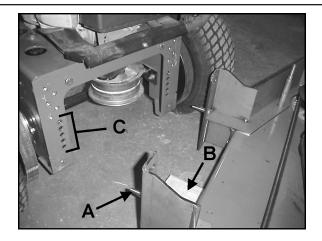
**QUICK PIN** 

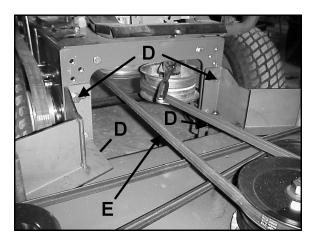


- 6. Remove belt cover and set aside.
- 7. Block the rear of the cutterdeck with the appropriate height block for the desired height of cut **B**. See Support Block Chart below.

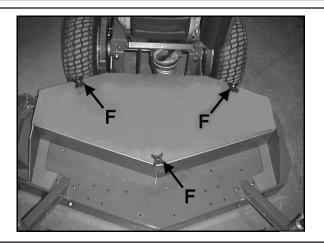
CUTTING HEIGHT	HOLE POSITION ON ENGINE DECK*	BLOCK HEIGHT AT REAR OF DECK (B)				
1.375" - 1.625"	5	1.25'				
1.875" - 2.375"	4	2.00"				
2.625" - 3.125"	3	2.75"				
3.375" - 3.875"	2	3.50"				
4.125" - 4.625"	1	4.25"				
* Position 1 is the highest hole on the engine deck.						

- 8. Position the power unit behind the cutterdeck.
- Move the power unit towards the cutterdeck until the guide pins A engage the appropriate hole C on the power unit for the desired height of cut. Fasten with (4) M12-1.75 X 30 bolts at D.
- Loop the PTO belt E around the electric clutch pulley. Using a 3/8" ratchet wrench or 3/8" breaker bar rotate the PTO belt idler while looping the PTO belt around the cutterdeck pulley.





- 11. Reinstall belt cover and fasten in place with knobs **F**.
- 12. Remove support block from the rear of cutterdeck.
- 13. Remove support from the rear of the power unit.

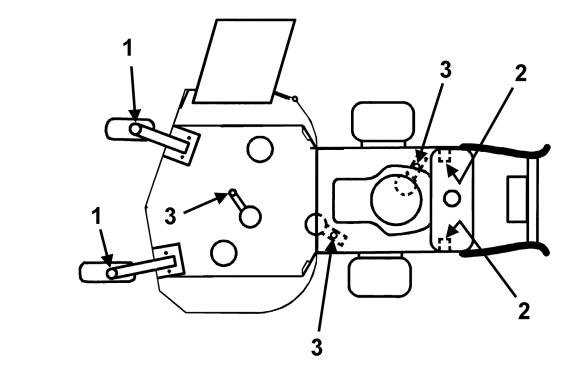


#### MACHINE LUBRICATION

Every 50 Working Hours - Lubricate the following points with grease:

- 1) Caster wheel pivots (2 points)
- 2) Neutral eccentric pin (2 points)
- 3) Idler pivot bearings:
  - a) Engine to cutterdeck belt tensioner
  - b) Cutterdeck belt tensioner
  - c) Hydro drive belt tensioner

**NOTE**: The spindles used on these machines use a superior sealed bearing which does not require relubrication.



#### **ENGINE**

#### **DAILY**

Remove the dipstick **S** and check that the oil level reaches the full mark. If necessary, top off with fresh oil. To obtain the correct oil level, the machine must be level. See engine manufacturer's manual for proper oil viscosity and grade.

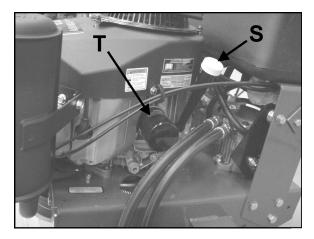
DO NOT OVER FILL!

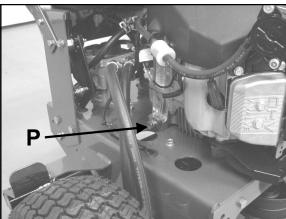
#### **AFTER THE FIRST 5 WORKING HOURS**

While the engine is warm, remove the drain plug **P** and drain the crankcase. Replace oil filter **T**. Clean and replace the plug. Fill the crankcase through the filler hole with fresh oil to the full mark. See engine manufacturers manuals for oil and filter change intervals.

Engine operator's manuals are shipped with each machine. Shop manuals for the engines are available from your local engine dealer.

For Kawasaki FH541V, order: 99924-2045-08



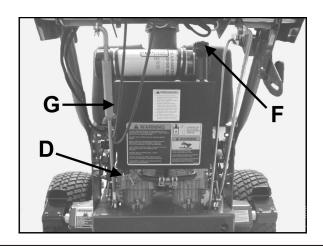


# HYDRAULIC RESERVOIR CHECK, DRAIN AND FILL

Check level every 100 hours or when a leak has occurred. To check level: Remove reservoir cap. Add 10W30 oil until the oil level reaches the bottom of the filler tube. Do not overfill.

#### **EVERY 500 HOURS:**

Change hydraulic oil and filter. Remove plug **D** to drain reservoir. Remove and replace filter. Filter is located on front of tank at **G**. Reinstall plug and fill with 10W30 oil to the bottom of the filler tube **F**.



#### **ENGINE - KAWASAKI KAI**

The maintenance schedule detailed is for average operating conditions. Under extreme conditions (dusty, dirty or more than 8 hrs continuous use) maintain more frequently.

#### Oil (daily)

Remove the dipstick **N** and check that the oil level reaches the full mark. If necessary, top off with fresh oil. To obtain the correct oil level, the machine must be level. See engine manufacturer's manual for proper oil viscosity and grade. DO NOT OVER FILL!

#### **AFTER THE FIRST 5 WORKING HOURS**

While the engine is warm, remove the drain plug **T** and drain the crankcase. Replace oil filter **U**. Clean and replace the plug. Fill the crankcase through the filler hole with fresh oil to the full mark. See engine manufacturers manuals for oil and filter change intervals.

#### Cooling Fins and Air Intake screen (daily)

Ensure that the cooling fins and air intake screen **W** are cleaned daily. Continued operation with a clogged cooling system will cause severe overheating and result in engine damage.

#### Air Cleaner

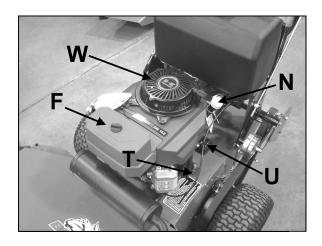
Dual element air cleaners have a paper air cleaner element  ${\bf Z}$  with an oiled, foam precleaner element  ${\bf V}$  on the dirty side of the paper element. Both should be inspected regularly and maintained.

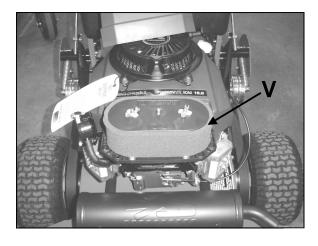
Clean and re-oil precleaner element every 25 hours (more often under dusty conditions).

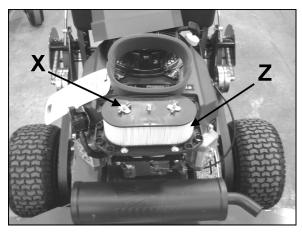
- 1. Disassemble air cleaner cover F.
- 2. Remove precleaner **V** by sliding it off the paper cartridge **Z**.
- 3. Wash precleaner in kerosene or liquid detergent and water.
- 4. Wrap precleaner in cloth and squeeze to remove cleaner.
- Saturate precleaner in engine oil. Squeeze to remove excess oil.
- Re-install precleaner over paper cartridge.
   Reassemble air cleaner components and screw assembly X 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
- Replace when cartridge is dirty, bent or damaged.







#### **Blade Sharpening**

Blades may be sharpened by filing or grinding, but with either method the balance of the blades must be maintained at 5/8 oz/in or less. Failure to maintain balance causes excess vibration, wear and shortened life of not only the blades, but most all components of the machine. To balance a blade after sharpening: attach 1/8 oz of weight 5" from center on the light end. This should make the light end the heavy end. If it does not: File or grind the heavy end until the addition of weight makes the light end the heavy end.

#### NOTE:

- Do not overheat or weaken the blades.
- Do not straighten bent blades. Replace with new Schiller Grounds Care, Inc. blades.
   If lift portion of blade is worn thin replace with a new Schiller Grounds Care, Inc. blade.
- ALWAYS replace with Schiller Grounds Care, Inc. blades—do not use another manufacturer's blades as this could be dangerous.
- Replace cracked or bent blades.

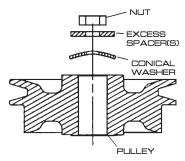
#### **BLADE REMOVAL**

**NOTE:** Follow these instructions to prevent injury when bolt releases.

- 1. Use a box wrench or socket with a long breaker bar to remove spindle bolt under cutterdeck.
- 2. Slip tube over breaker bar or wrench if necessary to gain leverage.
- 3. Keep hands clear as blades may rotate when bolt releases.
- 4. When changing blades, wear thickly padded gloves.
- Block blades from turning by using a piece of wood.

**NOTE:** To prevent blade from turning, place block of wood at **A**, with grain perpendicular to blade.





**Cutterdeck Pulley Assembly** 

#### **BLADE RE-INSTALLATION**

- 1. Place the desired number of spacers (no more than 2) on the spindle bolt below the cutterdeck between the blade and spindle shaft.
- 2. Insert the cutter spindle bolt (from bottom) complete with washer, blade and spacers.
- 3. Place remaining spacer(s) on the spindle bolt above the cutterdeck between the conical washer and nut (as shown). Replace nut and tighten to 70 ft-lbs.

#### **SPARK PLUG**

- Remove plug and check condition.
- Good operating conditions are indicated if the plug has a light grey or tan deposit. A white blistered coating may indicate overheating. A black coating usually means an "over rich" fuel mixture caused by a clogged air cleaner or improper carburetor adjustment. Do not sandblast, wire brush or otherwise try to clean a dirty plug. Best results are obtained with a new plug.
- See engine manufacturers manual for proper spark plug gap.

NOTE: CHANGE ENGINE OIL AND FILTER AFTER FIRST 5 HOURS OF OPERATION.

SERVICE OPERATION	FIRST 5 HOURS	DAILY	EVERY 25 HOURS	EVERY 50 HOURS	EVERY 100 HOURS	EVERY 500 HOURS
ENGINE			-	-	-	
Check Oil Level		х				
Check for Oil & Air Leaks		х				
Clean Air Intake		х				
Clean Air Cleaner		х				
Change Oil & Filter*	х	SEE	ENGINE M	ANUFACTU	RER'S MAN	UAL*
Clean Fuel Sediment Bowl				x		
Replace/Adjust Spark Plug		SEE ENG	NE MANUF	ACTURER'S	S MANUAL	
HYDRAULIC OIL RESERVOIR						
Check Oil Level		х			х	
MACHINE						
Check Tire Pressures		х				
Lubricate All Points				x		

Consult the manufacturer's manual for your engine for further information and instructions.



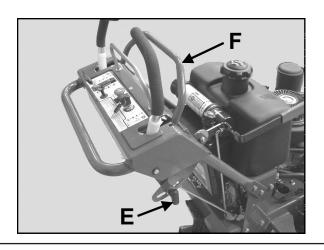
NOTES

GENERAL	DATE	HRS										
Check Tire Pressures												
Lubricate All points												
Check Nuts & Bolts												
ENGINE												
Check Oil Level												
Change Oil												
Clean Air Cleaner Element												
Clean Cooling Fins												
Replace Air Cleaner Element												
Clean & Gap Spark Plugs												
NOTE: After first 5 hours of operation replace engine oil and filters.												

NOTE: Make all adjustments with the engine shut off, spark plug wire disconnected and mower drive disengaged.

#### **Speed Control Bar**

The speed control bar **F** is held by friction pads. If the setting will not hold, tighten knob **E** to increase friction on speed control bar **F**.



#### PARKING BRAKE

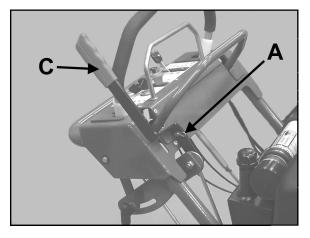
Apply parking brakes and open the bypass valves on the hydraulic pumps. Try to push the machine forward. If wheels rotate, adjust brakes as follows.

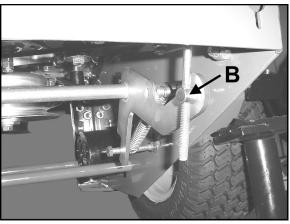
#### TO ADJUST:

- 1. Remove the hairpin cotter **A** from the brake rod at the brake lever **C** as shown.
- 2. Slide the brake rod out of the brake lever and turn the rod in or out of the brake swivel **B** as needed.

**NOTE**: The brake should initially be adjusted so that the brake rod extends through swivel **B** 1-1/4" as shown. If more brake pressure is required adjust as necessary.

- 3. Reassemble brake rod to the brake lever using hairpin **A** removed in Step 1.
- 4. Apply parking brakes and try to push the machine forward. If wheels rotate, readjust brakes.
- 5. Close bypass valves on the hydraulic pumps.





TRACTION DRIVE HYDROSTAT ADJUSTMENTS: The following adjustments must be done in order.

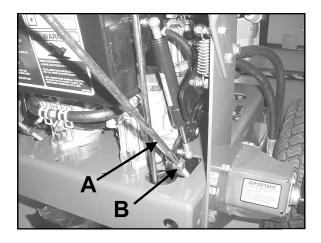
#### STEP 1 - Set Neutral

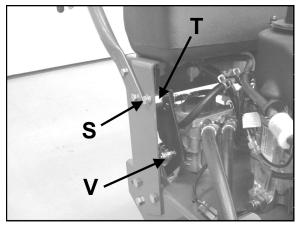
Neutral is set at the factory. If it should require adjustment, raise the wheels off the ground by supporting the machine on jackstands or blocks. Disconnect the control rod **A** at each pump end. Loosen bolt **S** securing the neutral plate eccentric shaft just enough to turn the shaft. Start the engine and run at low speed. Turn eccentric shaft **T** to raise or lower the point at which the follower bearing is held in the center of the "**V**" until the wheels stop turning. Tighten the eccentric shaft bolt. Increase the throttle setting and check the adjustment. Readjust if necessary. Shut the engine off before proceeding to Step 2.

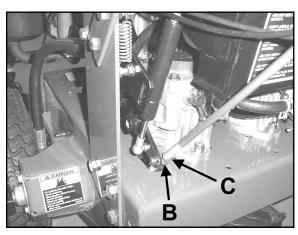
#### **STEP 2 - Adjust Control Rods**

First adjust neutral, as outlined in Step 1. Set control levers to neutral. Adjust swivels **B** on lower ends of control rods **A** so they just go into the holes on the pump arm control plates.

After adjusting swivel  ${\bf B}$  on left side, tighten jam nut  ${\bf C}$ .





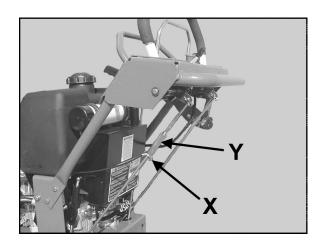


#### TRACKING ADJUSTMENT TURNBUCKLE

The tracking adjustment turnbuckle provides tracking control to correct for any hydraulic circuit or linkage differences from one side to the other.

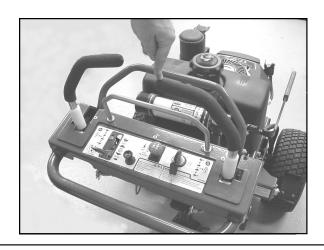
To correct tracking:

- 1. Loosen wingnut **X**.
- 2. Rotate the tracking adjustment turnbuckle **Y** to the right to make the machine track to the right.
- 3. Rotate the tracking adjustment turnbuckle **Y** to the left to make the machine track to the left.
- 4 Tighten wingnut X.



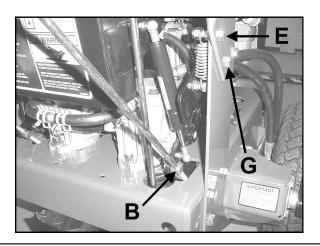
#### **CONTROL LEVERS**

The control levers are controlled by spring tension, and require no adjustment.



#### HANDLE BAR HEIGHT ADJUSTMENT

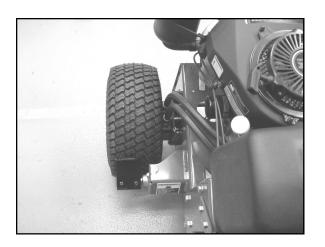
To adjust handle bar height: Remove swivel **B** at each pump control arm and the parking brake rod. Remove bolts **G** and loosen bolts **E** on each side of handlebars. Raise or lower as required. Reposition upper handle and reinsert bolts at location **G** into appropriate hole in lower handle and tighten. Readjust control rods and swivels and reinstall. Readjust parking brake and rod.



#### TRACK WIDTH ADJUSTMENT

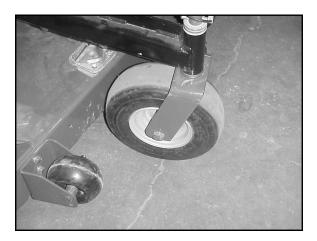
The track width originally set from the factory can be increased an additional 3-1/4" overall by performing the following steps.

- 1. Loosen wheel lug nuts on both drive tires.
- 2. Raise rear of unit so that drive tires are off the ground. Support the unit with jack stands.
- Remove wheel lug nuts and wheels. Reattach
  wheels with the tires rotated so the wheel offset
  is the opposite of when they were previously
  installed. Install and tighten lugnuts until they are
  snug
- 4. Lower machine off of the jack stands and torque wheel lug nuts to 85 ft-lbs.



#### TIRE PRESSURE ADJUSTMENT

Tire pressures should be maintained at 14 psi (1.0 kg/cm<sup>2</sup>).





#### **PTO BELT**

1. Rotate idler arm using a 3/8" ratchet or breaker bar and remove belt.



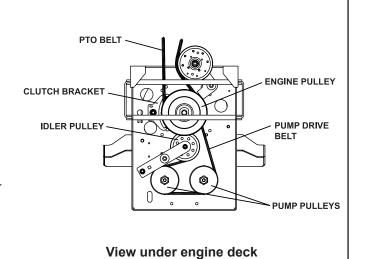
#### **CUTTERDECK BELT**

- 1. Remove PTO belt.
- 2. Rotate idler arm using a 3/8" ratchet or breaker bar and remove belt.
- 3. Replace in the reverse order.

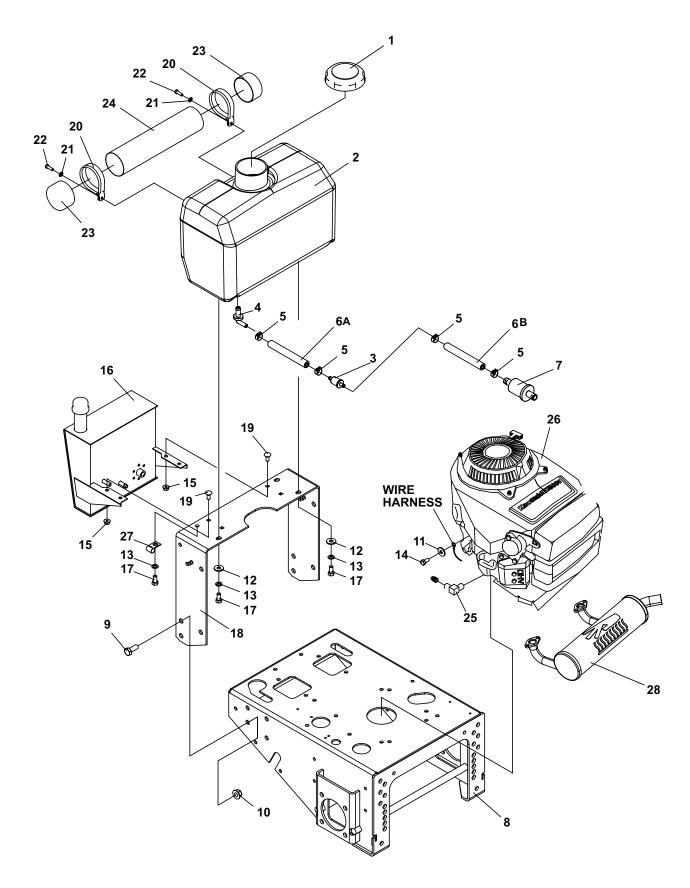


#### **PUMP-DRIVE BELT**

- 1. Remove PTO belt from the engine clutch.
- 2. Disconnect the clutch wire harness.
- 3. Unbolt clutch bracket from clutch and rotate the clutch to allow enough clearance to remove the clutch bracket.
- 4. Rotate idler arm using a 3/8" ratchet or breaker bar inserted into the square hole in the idler arm.
- 5. Remove pump-drive belt.
- 6. Replace by following steps in reverse order.

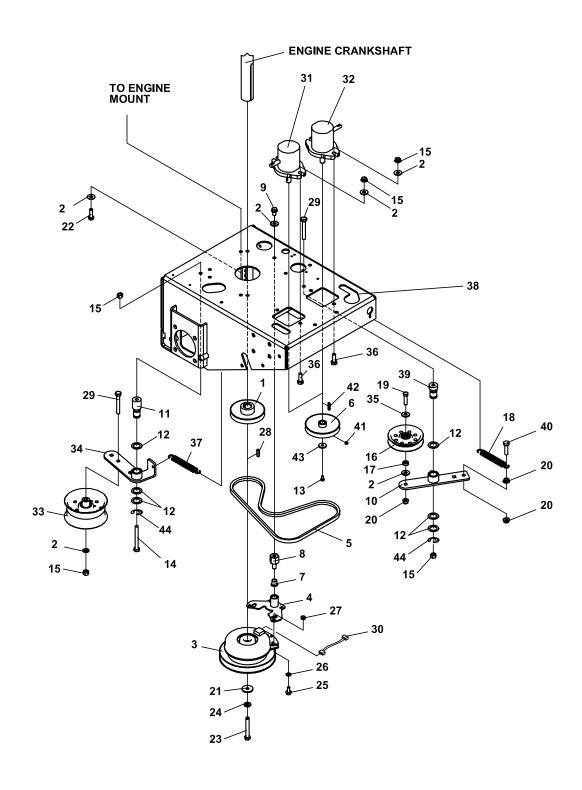


# PARTS SECTION





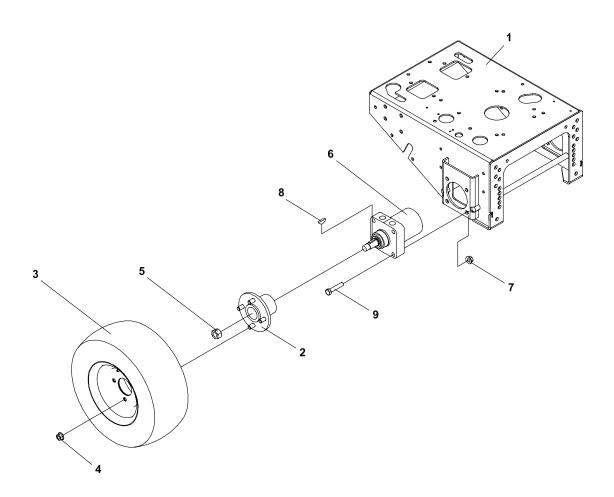
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1-1 1-2	4130320 4163068-1 (INCLUDES I	CAP-FUEL GASOLINE 3.5 TANK-FUEL TEM 4)	1				
1-3 1-4 1-5	4163012 88042N	GROMMET-FUEL TANK S FUEL SHUT-OFF VALV HOSE CLAMP	1 1 4				
1-6	6A - CUT TO 6B - CUT TO		1				
1-9 1-10 1-11 1-12 1-13 1-14	38666 4131068.2 64123-39 64229-05 64002-04 64163-31 64006-03 64205-018 64229-02	FILTER, FUEL WLDMT-DECK ENG HYDR BOLT-HEX 1/2-13X1-1/4 LOCKNUT, 1/2-13 NYLON LOCKWASHER, EXT. 5/16 WASHER, 25/64X1X12 LOCKWSHR-HELICAL 3/8 BLT MET M8-1.25 X 15 LOCKNUT-NYLON 5/16-18	1 O 1 6 6 1 3 4 1 4				
1-17	2306127 64123-15 4120917.7	S-HYD RESEVOIR W/LABS BLT-HEX 3/8-16X3/4	4				
1-20 1-21 1-22 1-23 1-24 1-25 1-26	64018-9 38542 64006-01 64123-89 38061A 2306144 48255-01 4156981 (USED ON 93 4156980 (USED ON 93 2722214 4153902 4153903	WER, HYDRO BLT-CRG 5/16-18 X 3/4 CLAMP-DOCU TUBE LOCKWSHR-HELICAL 1/4 BLT-HEX 1/4-20 X 3/4 SHIELD-SPINDLE S DOCU TUBE W/LAB STREET ELBOW 90DEG 3/2 ENG-17HP KAW KAI W/CH 34330 AND 935330 MODELS ENG-15HP KAW KAI W/CH 33330 MODEL ONLY) OIL FILTER AIR FILTER PAPER ELEME FILTER FOAM PRECLEANI	G 1 S) G 1				
	À158116	CLAMP-3/4 CLIP MUFFLER-15HP KAW 33330 MODEL ONLY) MUFFLER-17HP KAW 34330 AND 935330 MODELS	1 1 5)				



# LOWER ENGINE DECK ASSY/CLUTCH

# Hydro Midsize

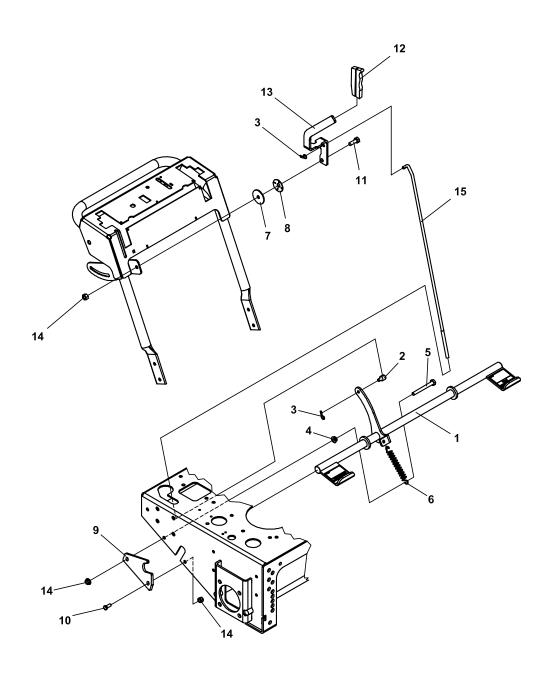
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
2-1	2721647	PULLEY-4.50E.O.D.	1				
2-2	64163-31	WASHER, 25/64 X 1 X 12	11				
2-3	2721110	CLUTCH-ELECTRIC	1				
2-4	2721331.7	WLDMT-CLUTCH STOP MI	D 1				
2-5	2721642	BELT-HA 49.0	1				
2-6	2722244	PULLEY- A SECTION 4.50	2				
2-7	38304-03	BRG-FLANGED PLASTIC	1				
2-8	4121540	PIN-CLUTCH	1				
2-9		BLT-3/8-16 X 3/4	1				
	2721641.7	WLDMT-IDLER	1				
	4116712	PIN-PIVOT	1				
	64163-65	WASHER890X1.375X18G					
	64205-013	BLT-MET M6-1 X 12	2				
	64123-138	BLT-HEX 3/8-16X3-3/4	1				
	64229-03	LOCKNUT-NYLON 3/8-16	7				
	2308000	PULLEY-IDLER 4.00 EOD	1				
	33148-01	SPACER	1				
	38219	SPRING-TENSION	1				
	64123-87	BLT-HEX 3/8-16 X 1-3/4	1				
	64141-4	NUT-WLF 3/8-16	3				
	64163-51	WSHR.453 X 1.38 X 7GA	1				
	64197-005	BLT-TDFM 3/8-16X1-1/4	4				
	64123-155	BLT-HEX 7/16-20 X 3	1				
	64006-06	LOCKWSHR-HELICAL 7/1	1				
	64123-54	BOLT, 5/16-18X3/4 HEX	2				
	64163-03	WSHR256ID X.62DX18GA					
	64229-02	LOCKNUT-NYLON 5/16-18	2				
	64164-12	1/4X1/4X1 SQ END KEY	1				
	64123-75	BOLT, 3/8-16X3 HEX	2				
	2720949	ASSY-CLUTCH WIRE	1				
	4163316	PUMP-HYDRO LH	1				
	4163317	PUMP-HYDRO RH	1				
	2721541	PULLEY-IDLER 5 IN	1				
	2721401.7	WLDMT-IDLER ARM	1				
	64163-61	WSHR .81X.406X16GA	1				
	64123-16	BLT-HEX 3/8-16X1-1/4	4				
	2188131	SPRING-EXTENSION	1				
	4131068.2	WLDMT-DECK ENG HYDR	0 1				
	4116691	PIN-PIVOT	1				
	64123-70	BOLT-HEX 3/8-16X1-1/2	1				
	64044-6	SCREW-SET 5/16-18 X 1/4	4				
	64238-03	KEY-MET 5MM SQ X 28	2				
	64209-09	WASHER-CONICAL SPRIN					
2-44	64221-04	E-RING.875	2				



**DRIVE WHEELS** 

# Hydro Midsize

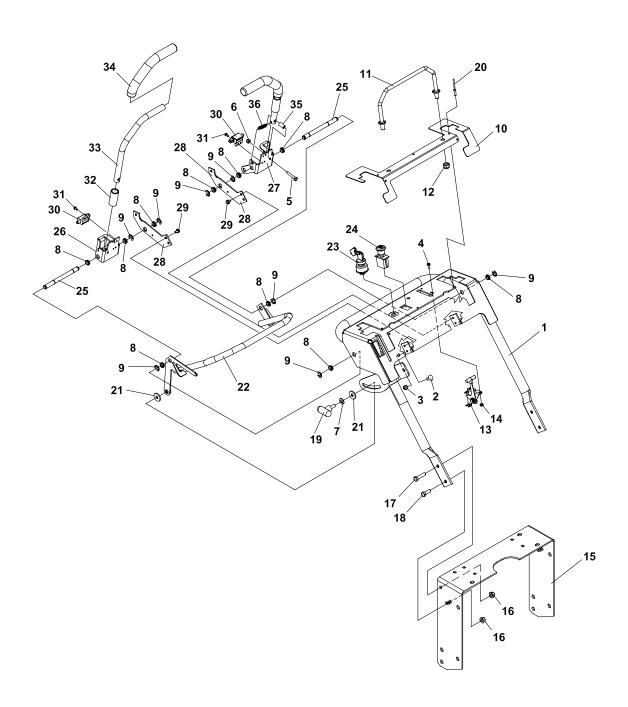
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
3-1	4131068.2	WLDMT-DECK ENG HYDRO	) 1				
3-2	2721620.7	WLDMT-HUB	2				
3-3	2721956	ASSY-WHEEL 16 X 7.50 X 8	2				
	2721956-01	TIRE-16X7.50X8 MLTI TRC	1				
	2721956-02	WHEEL W/ DUAL VALVES	1				
3-4	64267-01	NUT-HEX FLANGED 1/2-20	8				
3-5	64025-06	NUT-HEX 3/4-16 2A	2				
3-6	2308051	MOTOR-WHEEL ROSS MF	2				
3-7	64141-13	NUT WLF 1/2-13	8				
3-8	64164-28	KEY-WOODRUFF	2				
3-9	64123-72	BLT-HEX 1/2-13X2-1/2	8				



**PARKING BRAKE** 

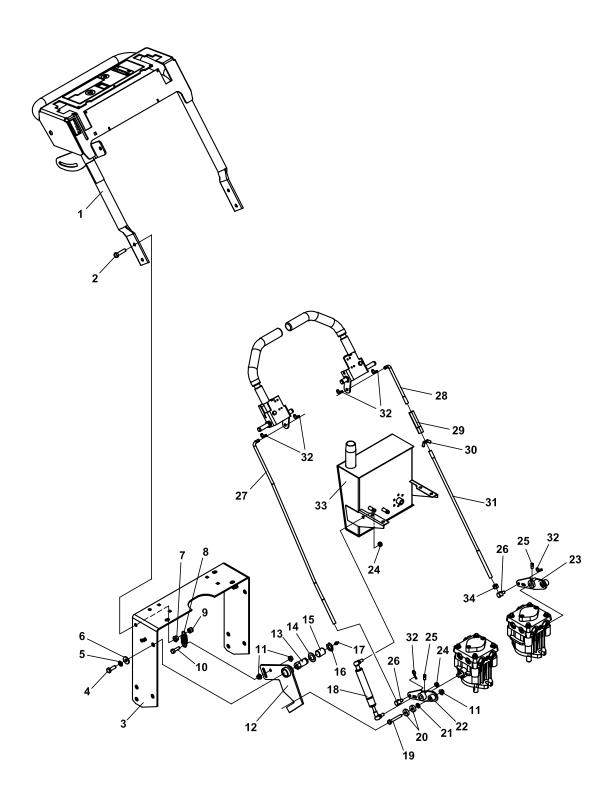
# Hydro Midsize

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
4-1	4131746	WLDMT-BRAKE SHAFT	1				
4-2	33103	SWIVEL	1				
4-3	64168-2	COTTER-HAIRPIN.08X1.19	2				
4-4	64001-6	NUT-HEX JAM 3/8-16	1				
4-5	64123-138	BLT-HEX 3/8-16X3-3/4	1				
4-6	2188131	SPRING-EXTENSION	1				
4-7	64163-17	25/64 X 2 X 11GA WASHR	1				
4-8	64171-2	WAVE WASHER	1				
4-9	4131072.7	PLATE-BRK SHFT RETNR	2				
4-10	64123-50	BOLT-HEX 3/8-16X1	3				
4-11	64123-16	BLT-HEX 3/8-16X1-1/4	1				
4-12	38404-01	GRIP,CONTROL LEVER	1				
4-13	4116495.7	LEVER-BRAKE ARM	1				
4-14	64229-03	LOCKNUT-NYLON 3/8-16	5				
4-15	4135058	ROD-BRAKE	1				



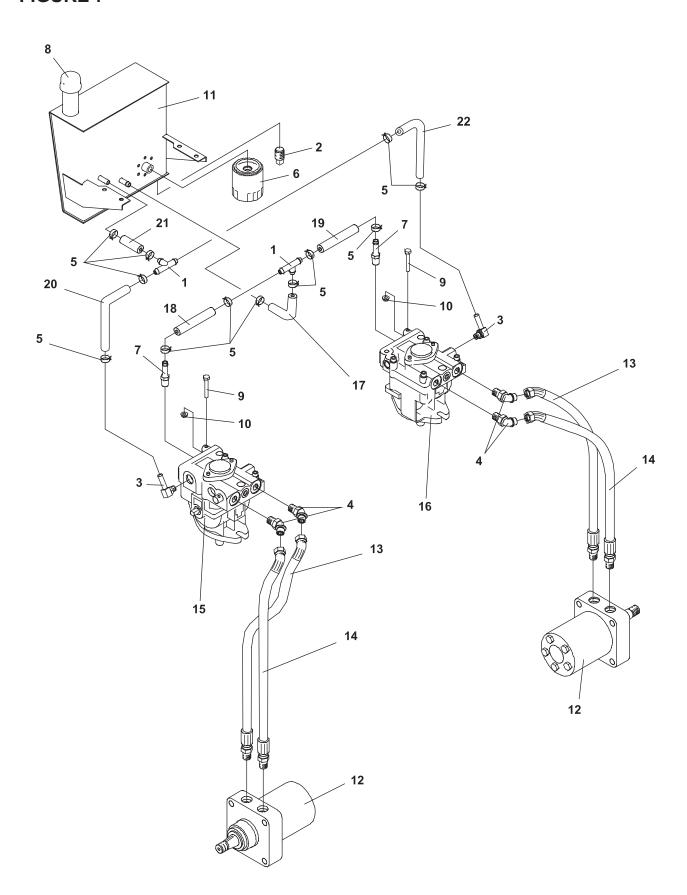


ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
5-1	4120259	S-UP HNDLE W/ LABELS	1				
5-2	64018-9	BLT-CRG 5/16-18X3/4 G5	1				
5-3	64229-02	LOCKNUT-NYLON 5/16-18	1				
5-4	64152-46	SCREW-SLT HH 10-24X1/2	2				
5-5	64123-07	BOLT, 1/4-20X1-1/2 HEX	2				
5-6	64229-01	LOCKNUT-NYLON 1/4-20	2				
5-7	64163-61	WSHR .81X.406X16GA	1				
5-8	4116398	BSHG-IGUS, .50 IDX.13 TH	K 10				
5-9	64221-05	E-CLIP, .328 ID	8				
5-10	4118586.2	PANEL-COVER, HYDRO	1				
5-11	4118392	ROD-REVERSE ASSIST	1				
5-12	64229-05	LOCKNUT, 1/2-13 NYLON	2				
5-13	38357-06	CONTROL-THROTTLE	1				
5-14	64025-15	NUT-HEX #10-24 KEPS	2				
5-15	4120917.2	HANDLE-LOWER, HYDRO	1				
5-16	64141-4	NUT-WLF 3/8-16	4				
5-17	64123-70	BOLT-HEX 3/8-16X1-1/2	2				
5-18	64123-50	BOLT-HEX 3/8-16X1	2				
5-19	4114727	KNOB-SPEED CONTROL	1				
5-20	64215-05	RIVET-POP IFI# 64	5				
5-21	2308066	WSHR-FRICTION	2				
	4116405.2	WLDMT-SPEED CONTROL	. 1				
5-23	38148	SWITCH-ENGINE STOP	1				
5-24	2721505	SWITCH-PTO	1				
5-25	4116374	BAR-HYDRO CONTROL	2				
5-26	4116404	WLDMT-RH CNTRL,HYDRO	) 1				
5-27	4116403	WLDMT-LH CNTRL,HYDRO	) 1				
5-28	4116953.2	PLATE-PIVOT SHAFT	2				
	64152-23	1/4-20X3/8 LG SP SCREW	6				
	108208	SWITCH-OP PRESENCE	2				
5-31	64197-015	BLT-TDFM 10-32X1/2 TOR	4				
5-32	4119625	BHSG-CONTROL LEVER	2				
	4116376	TUBE-CONTROL	2				
	4117741	GRIP-MOTION LVR, MIDSZ					
	4116380	SPACER-CONTROL	2				
5-36	4118378	SPRING-EXTENSION	2				





ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
6-1	4120259	S-UP HNDL W/ LBLS, HYD	1				
6-2	64123-70	BOLT-HEX 3/8-16X1-1/2	2				
6-3	4120917.7	HANDLE-LOWER, HYDRO	1				
6-4	64123-02	BLT-HEX 3/8-24X1	2				
6-5	64006-03	WSHR, 3/8 HELICAL LOCI	<b>〈</b> 2				
6-6	64163-61	WSHR .81X.406X16GA	2				
6-7	64141-4	NUT-WLF 3/8-16	2				
6-8	4119746	SPRING-NEUTRAL RETUR	RN 2				
6-9	64229-03	LOCKNUT-NYLON 3/8-16	2				
6-10	64123-68	BOLT-HEX 5/16-18X1	2				
6-11	64141-6	NUT, 5/16-18	6				
6-12	2721617.7	WLDMT-SPEED CONTROL	_ 2				
6-13	2303058	SHAFT-ECCENTRIC (HEX)	) 2				
6-14	64163-06	WASHER	2				
6-15	2308076-02	BEARING-PLASTIC	2				
6-16	64144-16	RING,CLIP75X.062	2				
6-17	85010N	ZERK, 1/4-28 STR SLFTHF	RD 2				
6-18	2228065	DAMPENER	2				
	64123-56	BLT-HEX 5/16-18X2	2				
6-20	38372	BEARING-BALL	4				
6-21	64163-02	WSHR321X.593X11GA	2				
	4114742.7	WLDMT-RH PUMP CNTRL	1				
	4114745.7	WLDMT-LH PUMP CNTRL	1				
	64237-05	LOCKNUT-NYLON M8-1.25					
	64192-04	SET SCREW SQ 5/16-18X					
	33103	SWIVEL	2				
	4121937	ROD-RH CONTROL	1				
	4121897	ROD-LH CONTROL, UPPE					
	4121898	TURNBUCKLE-3/8-16	1				
	64214-02	NUT-WING 3/8-16	1				
	4121896	ROD-LH CONTROL, LOWE					
	64168-2	COTTER-HAIRPIN.08X1.19					
	2306127	S HYD RESERVOIR W/LAE					
6-34	64001-6	NUT-HEX JAM,3/8-16	1				



# Hydro Midsize

#### FIGURE 7

QTY

ITEM	PART NO.	DESCRIPTION C	ΥT
7-1	58026-01	3-WAY CONNECTOR	2
7-2	108029	PLUG, MAGNETIC	1
7-3	158058-04	FITTING-90 BARB, ADJ.	2
7-4	108205-02	ELBW-MALE 45 8X8 37-ORB	4
7-5	88042-04	CLAMP-HOSE 5/8"	12
7-6	2720396	FLTR, 25 MCRN SM CAM	1
7-7	69060-01	FTG-BARB 9/16 X 3/8 ST	2
7-8	69216.7	CAP-RESERVOIR	1
7-9	64123-60	BOLT, 1/4-20X2 HEX	2
7-10	64229-01	LOCKNUT-NYLON 1/4-20	2
7-11	2306127	S HYD RESER W/LABS	1
7-12	2308051	MOTOR WHEEL ROSS	2
7-13	2692300-01		
7-14	2692300-02	HOSE-1/2 37/ORB X 18.5 LG	2
7-15	4163317		1
	(SEE FIG 16	FOR PARTS BREAKDOWN)	
7-16	4163316	PUMP-HYDRO LH	1
	(SEE FIG 16	FOR PARTS BREAKDOWN)	
(6905	3-05 IS A SEF	RVICEABLE LENGTH OF 55")	
<del>7</del> -17	69053-05	3/8 HI TEMP HOSE 17.0"	1
7-18	69053-05	3/8 HI TEMP HOSE 5.0"	1
7-19	69053-05	3/8 HI TEMP HOSE 5.0"	1
7-20	69053-05	3/8 HI TEMP HOSE 7.5"	1
7-21	69053-05	3/8 HI TEMP HOSE 6.8"	1
7-22	69053-05	3/8 HI TEMP HOSE 12.0"	1

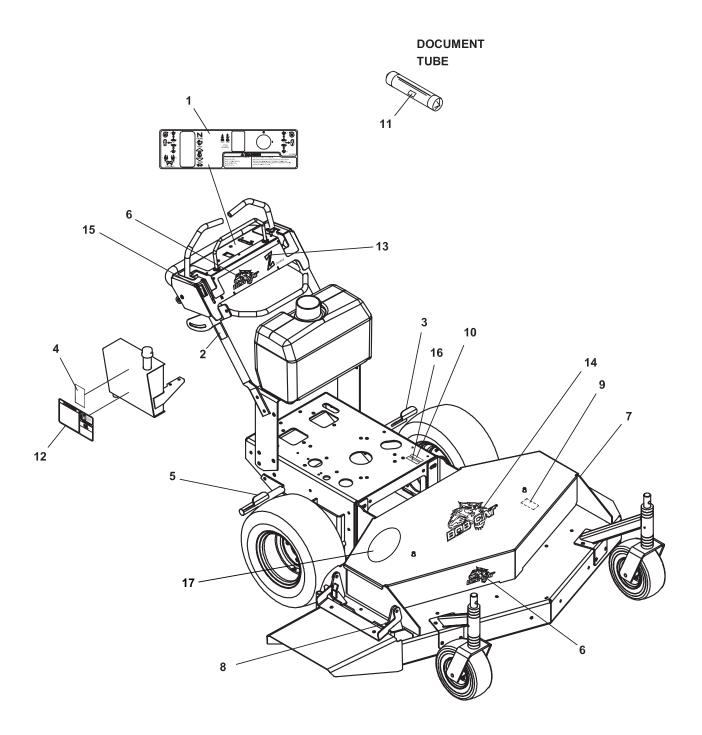
#### **SERVICEABLE HYDRAULIC O-RINGS**

**DESCRIPTION** 

ITEM PART NO.

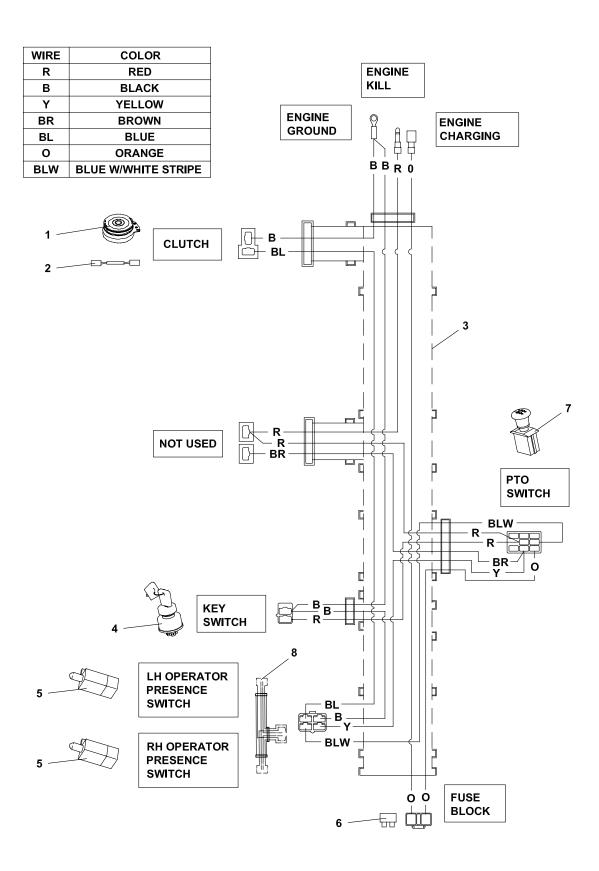
SAE PORT 'O' RING						
PART NUMBER	THREAD SIZE	AS-568#				
158061-10	9/16-18	-906				
158061-11	3/4-16	-908				
158061-12	7/8-14	-910				
158061-13	1-1/16-12	-912				
158061-14	1-5/16-12	-916				
158061-16	1-5/8-12	-920				
158061-03	1-7/8-12	-924				

# NOTE: <u>DO NOT</u> use sealant tape on any hydraulic fittings. Use a liquid pipe sealant.



# Hydro Midsize

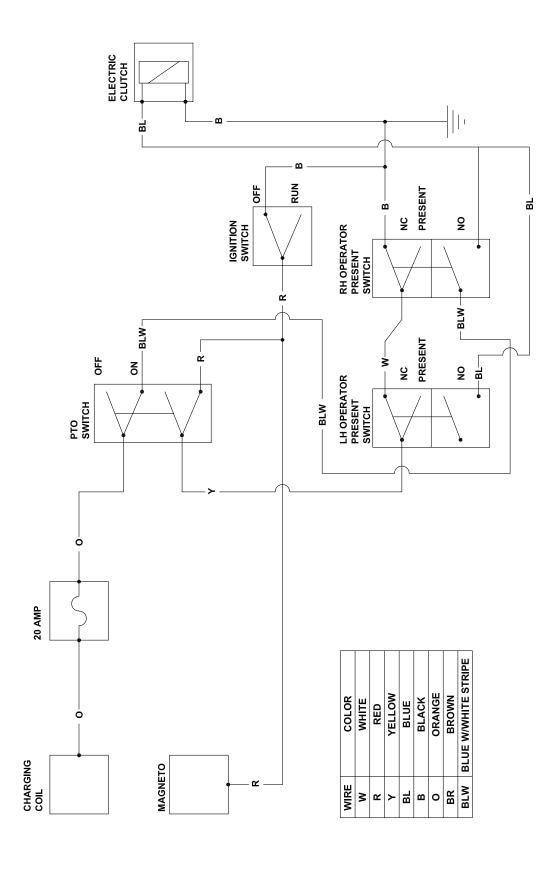
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
8-1	4119905	LABEL-CTRL PNL HYD	1				
8-2	2000672	LABEL-PARKING BRAKE	1				
8-3	2000570	LABEL-WARN FUEL PICT	1				
8-4	340830	<b>DECAL-CAUTION SPANISH</b>	H 1				
8-5	2000571	LABEL-IMPORTANT	1				
8-6	4158402	LABEL-BOBCAT, S	2				
8-7	2000572	LABEL-WARNING BLADES	1				
8-8	2000677	LABEL-DANGER/WARNING	G 1				
8-9	2000678	LABEL-ROT PRTS/B-WSHF	₹ 2				
	(LOCATED L	INDER BELT COVER)					
8-10	2000704	LABEL-MIDSIZE PATENT	1				
8-11	2000673	DECAL - OP MAN/TIRES	1				
8-12	2000661	LABEL-HYD TANK WARN	1				
8-13	4120256	LABEL-Z CONTROL	1				
8-14	4158401	LABEL-BOBCAT, L	1				
8-15	4120215	LABEL-SPEED CONTROL	1				
8-16	00214-10	DECAL-PATENT NUMBER	1				
8-17	4163037	LABEL-DURADECK	1				

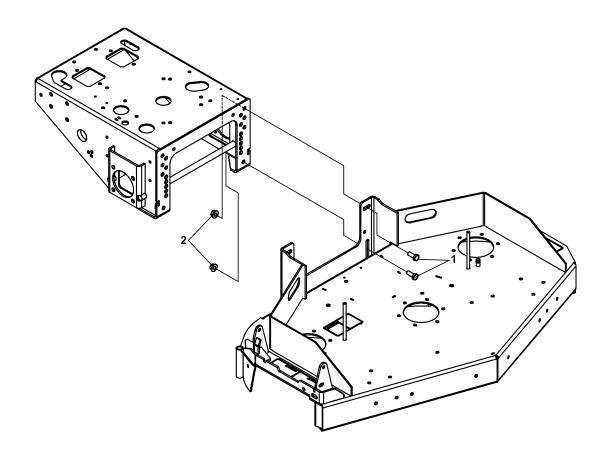


# **WIRE DIAGRAM-RECOIL START**



ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
9-1	2721110 (INCLUDES	CLUTCH-ELECTRIC TEM 2)	1				
9-2 9-3	2720949 4131438 (INCLUDES	ASSY-CLUTCH WIRE HARNESS-MID GEAR DRV ITEM 6)	1 1				
9-4 9-5 9-6 9-7 9-8	38148 108208 148082-10 2721505 4131439	SWITCH-ENGINE STOP SWITCH DBL POLE NC/NC FUSE 10 AMP SWITCH-PTO JUMPER-GEAR DRIVE	1 2 1 1 1				

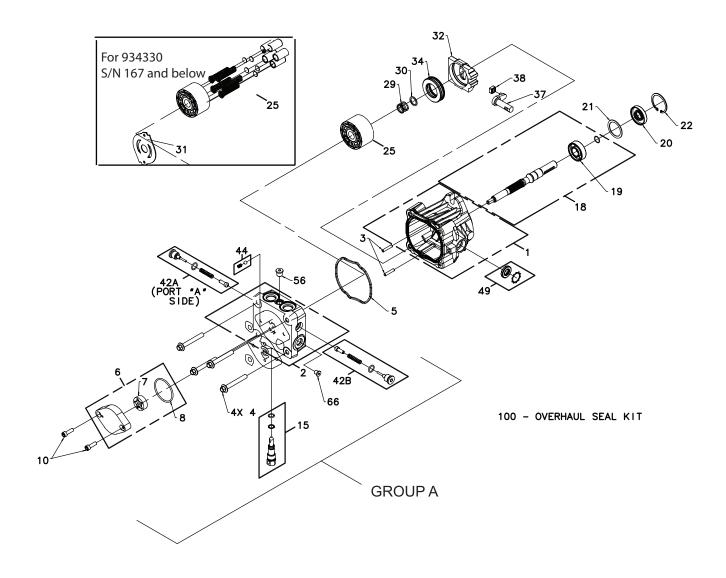




**CUTTERDECK MOUNTING** 

H	ły	dı	ro	)
M	id	S	Z	e

•••						FIGU	RE 11
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
	64263-018 64246-04	BLT-FLG HD M12-1.75 X 30 NUT-WHIZ M12-1.75	0 4 4				
11-2	04240-04	NOT-WHIZ WITZ-1.75	4				



## Hydro Midsize

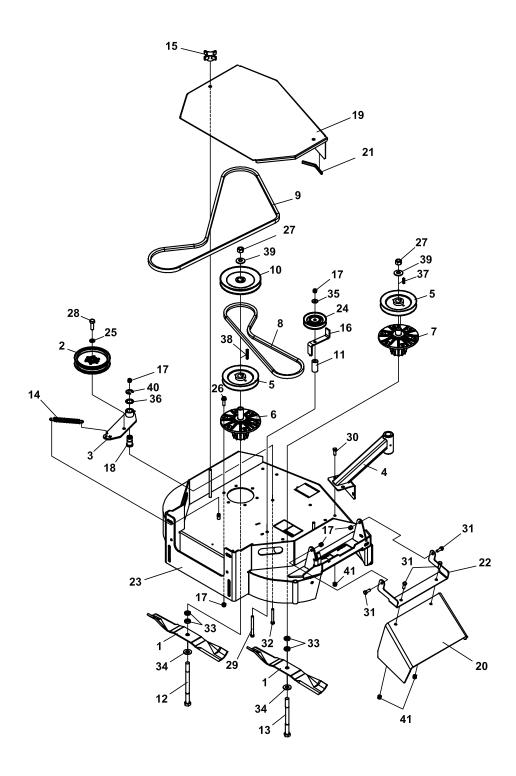
#### FIGURE 12

4112782 & 4163317 PUMP-HYDRO RH ILLUSTRATED AS SHOWN
2721615 & 4163316 PUMP-HYDRO LH ILLUSTRATED AS SHOWN EXCEPT GROUP A IS ROTATED 180° AROUND THE CENTERLINE OF THE PUMP.

12-1	70516		HOUSING KIT	1
12-2	*70517		END CAP KIT	1
	^71615		END CAP KIT	1
12-3	50641		STRAIGHT HEADLESS PIN	2
12-4	50969	2721615-01	FLANGE BOLT M8-1.25 X 60	4
12-5	*51232	2721615-02	HOUSING O-RING	1
	^52629	4163316-01	HOUSIGN O-RING	1
12-6	2513027	2721615-03	CHARGE PUMP KIT (STD)	1
12-7	50273	2721615-04	STD GEROTOR ASSEMBLY	1
12-8	9004101-1340	2721615-05	O-RING	1
12-10	*50095	2721615-06	SOCKET HEAD M6-1.0 X 20	2
	^50975	4163316-02	SOCKET HEAD M6-1/0 X 20	2
12-15	2513030		BYPASS VALVE KIT (BLANK)	1
12-18	70521	2721615-07	PUMP SHAFT KIT	1
12-19	50315		BALL BEARING 17 X 40 X 12	1
12-20	51161		LIP SEAL 17 x 40 x 12	1
12-21	50951		SPACER	1
12-22	50329		RETAINING RING	1
12-25	*70331	38345-12	CYLINDER BLOCK KIT	1
	^70723	4163316-03	CYLINDER BLOCK KIT	1
12-29	2003014		BLOCK SPRING	1
12-30	2003017		BLOCK THRUST WASHER	1
12-31	51246	2721615-09	VALVE PLATE	1
12-32	2003087	2721615-10	SWASHPLATE	1
12-34	50551	2721615-11	BALL THRUST BEARING	1
12-37	2003005	2721615-12	TRUNNION ARM	1
12-38	2000015	2721615-13	SLOT GUIDE	1
12-42	x 2510027	2721615-14	· · · · · · · · · · · · · · · · · · ·	1
12-42E	3 2510050	2721615-15	0.1=0.1 17 (=== 1.11 (=== 1.11)	1
12-44	*70403	2721615-16	CHARGE RELIEF VALVE KIT	1
	^70402	4163316-04		1
12-49	2513043	2721615-17	TRUNNION SEAL/RETAINER KIT	1
12-56	9005110-4400			1
12-66	9005110-3100		0 0 0 = . = 0	1
12-100	70525	2721615-18	OVERHAUL SEAL KIT	1

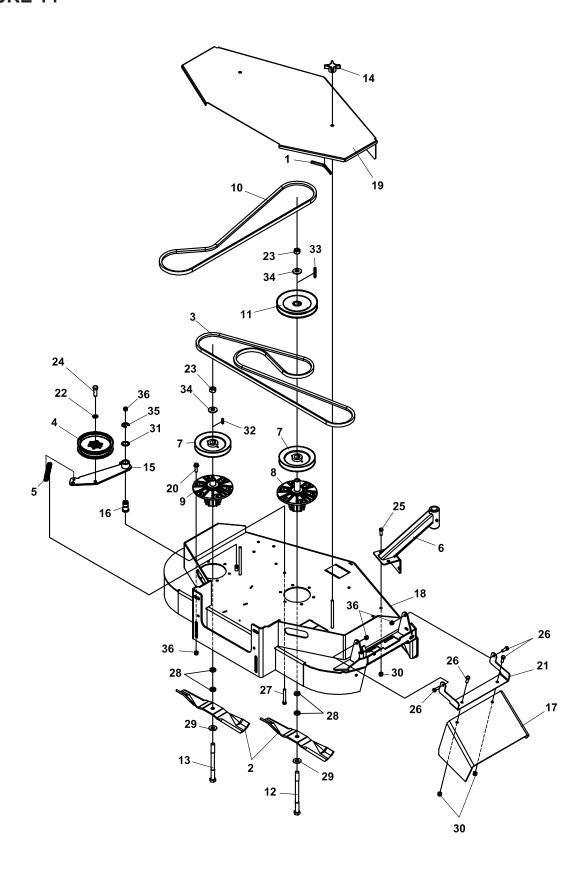
\*Use for:934330 S/N 167 and below ^Use for: 934330 S/N 168 and below

^ Use for 933330 and 934330



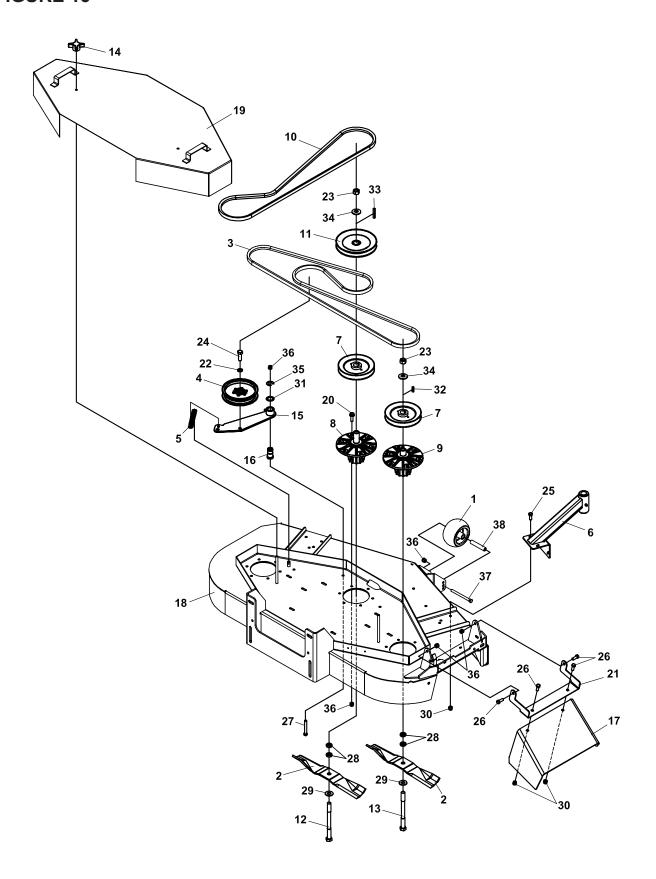
# Hydro Midsize

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
13-1	112111-02	BLADE 18.00 OFFST HLFT	2				
	128169	PULLEY, IDLER 5.50	1				
	4163871.7	WLDMT-DECK IDLER	1				
	4124108	S CASTER SUPPORT	2				
	2308140	PULLEY-ENGINE	2				
	2721097	S-ASSY SPINDLE 6 LONG	1				
13-7	2721323	S-ASSY SPINDLE 6 SHOR	T 1				
13-8	2721477	BELT-HB 56.75	1				
13-9	2721478	BELT-HB 85.25	1				
13-10	2721479	PULLEY-6.75	1				
13-11	2721485	SPACER-IDLER	1				
13-12	64123-77	BLT-HEX 5/8-18X8 1/2	1				
13-13	864123-265	BLT-HEX 5/8-18X7 1/2	1				
13-14	38219	SPRING-TENSION	1				
13-15	38524	KNOB-4 PRONG 3/8-16	2				
13-16	4115420.7	GUIDE-BELT	1				
13-17	64229-03	LOCKNUT-NYLON 3/8-16	16				
13-18	34116661	PIN-PIVOT	1				
13-19	4119064.2	COVER-BELT, 36 FIXED	1				
13-20	4131477.2	CHUTE-DECK, 32-54 SD	1				
13-21	108074-13	FLEX TRIM 44.38	1				
13-22	4120257.2	BRKT-CHUTE SUPPORT	1				
13-23	4121969	S-36SDFIXED DK W/ LABS	3 1				
13-24	4135265	PULLEY-V IDLER	1				
13-25	64006-05	LOCKWSHR-HELICAL 1/2	1				
13-26	64262-012	BLT-FLG HD 3/8-16 X 1-1/4					
13-27	64025-16	NUT-HEX 5/8-18	2				
13-28	864123-05	BLT-HEX 1/2-20X1-1/2	1				
13-29	64123-139	BOLT-3/8-16X4 HEX	1				
13-30	64262-010	BLT-FLG HD 3/8-16 X 3/4	8				
13-31	64123-50	BOLT-HEX 3/8-16X1	4				
13-32	264123-88	BOLT, 3/8-16X2-3/4 HEX	1				
13-33	864163-12	.635/.640X1.0X.25 WASH	4				
13-34	64163-16	WSHR-41/64X1-3/8X12GA	2				
	64163-31	WASHER, 25/64X1X12	1				
	64163-65	WASHER890X1.375X18G	A 1				
	'64164-12	KEY-1/4X1/4X1 SQ END	1				
	864164-13	1/4X1/4X2 SQ KEY	1				
	64209-03	SPRING WASHER.67 ID	2				
	64221-04	E-RING.875	1				
13-41	64141-4	NUT-WLF 3/8-16	10				



# Hydro Midsize

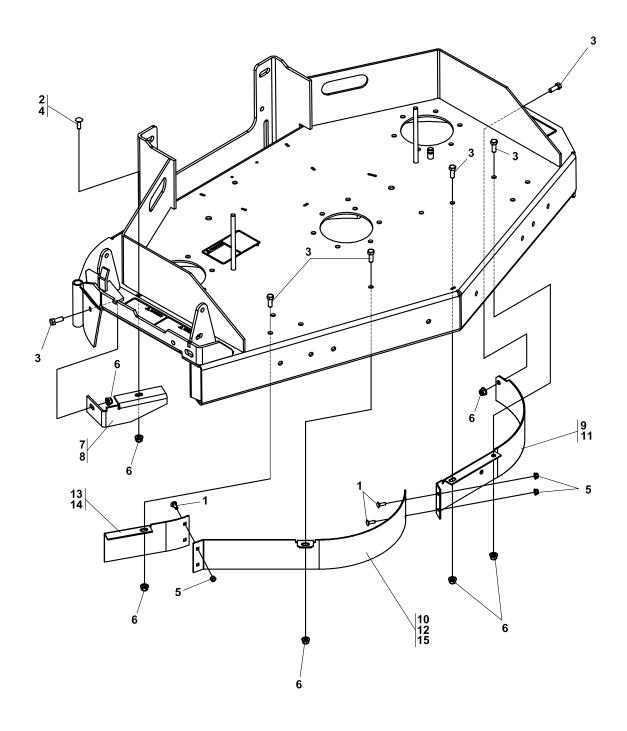
ITEM PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
14-1 108074-09	S CHANNEL-FLEX TRIM 7.	121	[			
14-2 112111-01	BLADE 16.25 OFFST HLFT	3				
14-3 128110	BELT-CUTTERDECK	1				
14-4 128169	PULLEY, IDLER 5.50	1				
14-5 2188131	SPRING-EXTENSION	1				
14-6 4124108	S CASTER SUPPORT	2				
14-7 2308140	PULLEY-ENGINE	3				
14-8 2721097	S-ASSY SPINDLE 6 LONG	1				
14-9 2721323	S-ASSY SPINDLE 6 SHORT	Γ2				
14-10 2722160	BELT-HB 73.00	1				
14-11 2722161	PULLEY-6.75 EOD	1				
14-1264123-77	BLT-HEX 5/8-18X8 1/2	1				
14-13 64123-265	BLT-HEX 5/8-18X7 1/2	1				
14-14 38524	KNOB-4 PRONG 3/8-16	2				
14-154110580.7	WLDMT-IDLER	1				
14-164116661	PIN-PIVOT	1				
14-174131477.2	CHUTE-DECK, 32-54 SD	1				
14-18 4119381	S 48 SD FIXED DK W/LABS	3 1				
14-194119515.2	COVER-BELT FIXED 48	1				
14-2064262-012	BLT-FLG HD 3/8-16 X 1-1/4					
14-21 4120257.2	BRKT-CHUTE SUPPORT	1				
14-22 64006-05	LOCKWSHR-HELICAL 1/2	1				
14-23 64025-16	NUT-HEX 5/8-18	3				
14-24 64123-05	BLT-HEX 1/2-20X1-1/2	1				
14-2564262-010	BLT-FLG HD 3/8-16 X 3/4	8				
14-26 64123-50	BOLT-HEX 3/8-16X1	4				
14-27 64123-88	BOLT, 3/8-16X2-3/4 HEX	1				
14-28 64163-12	.635/.640X1.0X.25 WASH	6				
14-29 64163-16	WASHR-41/64X1, 3/8X12G/					
14-30 64141-4	NUT-WLF 3/8-16	10				
14-31 64163-65	WASHER890X1.375X18G					
14-32 64164-12	KEY-1/4X1/4X1 SQ END	2				
14-33 64164-13	1/4X1/4X2 SQ KEY	1				
14-34 64209-03	SPRING WASHER.67 ID	3				
14-35 64221-04	E-RING.875	1				
14-36 64229-03	LOCKNUT-NYLON 3/8-16	21				



#### **MOUNTING-54" FIXED DECK**

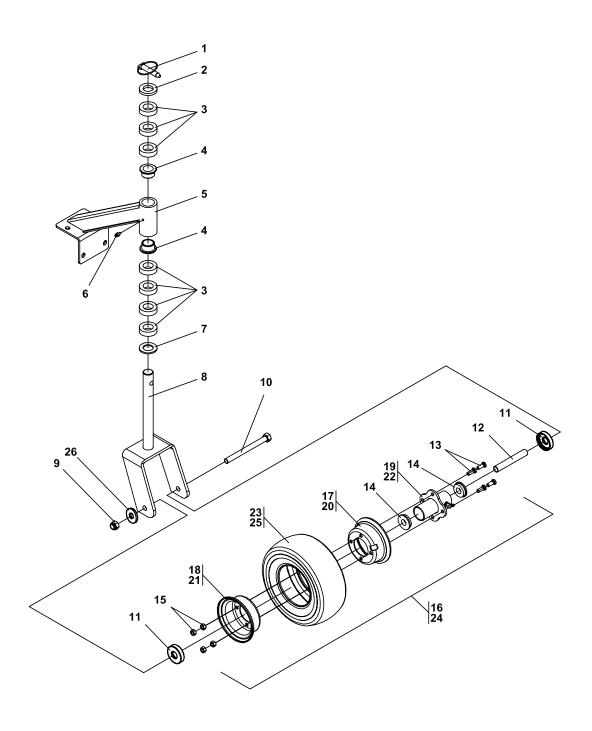
# Hydro Midsize

ITEM PART NO	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
15-1 2721512	ROLLER-5X2.75 CENTERE	D 1				
15-2 112111-02	BLADE 18.00 OFFST HLFT	3				
15-3 2188176	BELT-CUTTERDECK 54	1				
15-4 128169	PULLEY, IDLER 5.50	1				
15-5 2188131	SPRING-EXTENSION	1				
15-6 4124108	S-CASTER SUPPORT 9 IN.	2				
15-7 2308140	PULLEY-ENGINE	3				
15-8 2721097	S-ASSY SPINDLE 6 LONG	1				
15-9 2721323	S-ASSY SPINDLE 6 SHORT	Γ2				
15-102722570	BELT-HB 75.75	1				
15-11 2722161	PULLEY-6.75 EOD	1				
15-1264123-77	BLT-HEX 5/8-18X8 1/2	1				
15-13 64123-265	BLT-HEX 5/8-18X7 1/2	1				
15-14 38524	KNOB-4 PRONG 3/8-16	2				
15-154110580.7	WLDMT-IDLER	1				
15-16 4116661	PIN-PIVOT	1				
15-174131477.2	CHUTE-DECK, 32-54 SD	1				
15-184128849	S 54 SD CUT DECK W/ LAE	3S1				
15-194129134.2	WLDMT-COVER BELT 54	1				
15-2064262-012	BLT-FLG HD 3/8-16 X 1-1/4	18				
15-214120257.2	BRKT-CHUTE SUPPORT	1				
15-2264006-05	LOCKWSHR-HELICAL 1/2	1				
15-23 64025-16	NUT-HEX 5/8-18	3				
15-24 64123-05	BLT-HEX 1/2-20X1-1/2	1				
15-25 64262-011	BLT-FLG HD 3/8-16 X 1	8				
15-26 64123-50	BOLT-HEX 3/8-16X1	4				
15-27 64123-88	BOLT, 3/8-16X2-3/4 HEX	1				
15-28 64163-12	.635/.640X1.0X.25 WASH	6				
15-2964163-16	WASHR-41/64X1, 3/8X12G/	4 3				
15-30 64141-4	NUT-WLF 3/8-16	10				
15-31 64163-65	WASHER890X1.375X18G	A 1				
15-3264164-12	KEY-1/4X1/4X1 SQ END	2				
15-33 64164-13	1/4X1/4X2 SQ KEY	1				
15-34 64209-03	SPRING WASHER.67 ID	3				
15-35 64221-04	E-RING.875	1				
15-36 64229-03	LOCKNUT-NYLON 3/8-16	22				
15-37 64123-173	BLT-HEX 3/8-16X4-1/2	1				
15-38 2720685	SPACER-ROLLER	1				



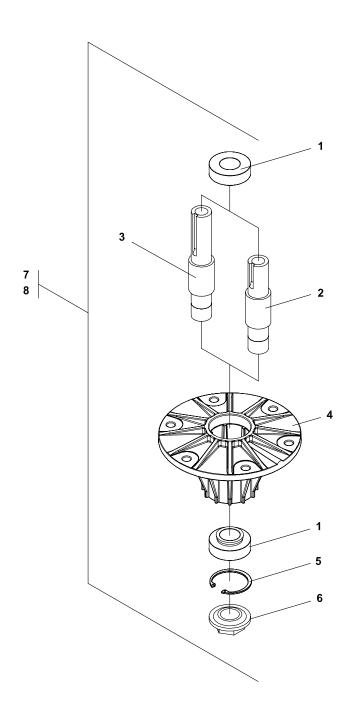


ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
16-1	64018-2 (NOT USED	BLT-CRG 1/4-20X3/4 ON 36" DECKS)	4				
16-2		BLT-CRG 3/8-16X1 ON 48" DECKS)	1				
16-3	QTY USED (	BOLT-HEX 3/8-16X1 ON 36" DECK ON 48" DECK ON 54" DECK	5 7 8				
16-4		BLT-FLG HD 3/8-16 X 1-1/4 DN 48" DECK	1				
16-5		OCKNUT-1/4-20 NYLON ON 36" DECKS)	4				
16-6	QTY USED (	NUT-FL NYLON LOCK 3/8- DN 36" DECK DN 48" DECK DN 54" DECK	6 7 8				
16-7		BAFFLE-DISCHARGE 6", 54" DECK)	1				
16-8		BAFFLE-DISCHARGE 32-4 8" DECKS ONLY)	18 1				
16-9		BAFFLE-48 FRONT LH 8" DECKS ONLY)	1				
16-10		BAFFLE-FRONT CTR 8" DECKS ONLY)	1				
16-11	4118427.7 (USED ON 5	BAFFLE-FRONT LH 4" DECKS ONLY)	1				
16-12		BAFFLE-FRONT CTR 4" DECKS ONLY)	1				
16-13		AFFLE-RIGHT FRONT 4" DECKS ONLY)	1				
16-14		AFFLE-RIGHT FRONT 8" DECKS ONLY)	1				
16-15		AFFLE-FRONT DECK 6" DECKS ONLY)	1				

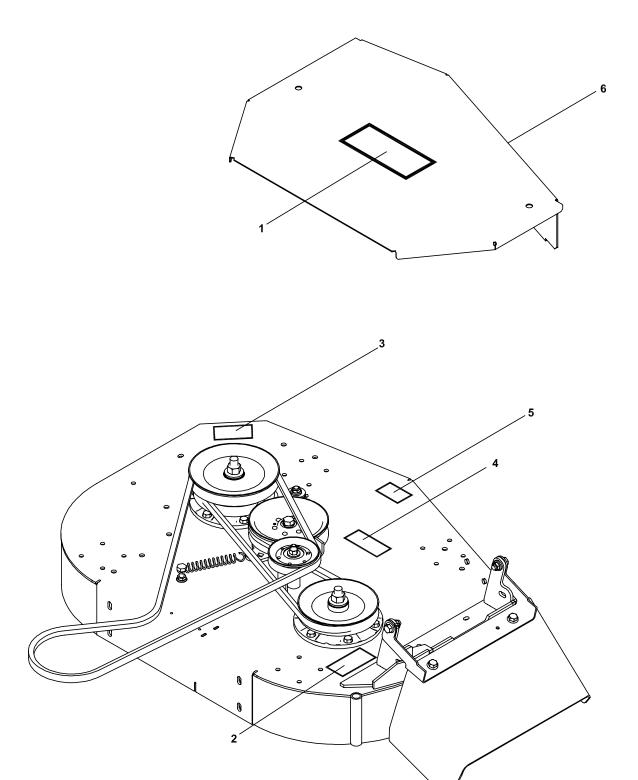




ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY		
4124110 ASSY-CASTER 9IN BOBCAT 2 (INCLUDES ITEMS 1-3, 7-11 & 20 QTYs LISTED) (NOTE 2 ASSYS REQUIRED PER MACHINE)					17-23 38504 S TIRE-9x3.50-4 SMOOTH 1 *38505 S TUBE-9x3.50-4 1 OPTIONAL FLAT PROOF WHEEL & TIRE				
17-2 6 17-3 6 17-4 4 17-5 4	64173-04 64163-07 64163-22 4129801 4124108 (INCLUDES	QUICK PIN 1-1/32X1-3/4X1/4 WASH 1-1/32X1-3/4X1/2 WASHR BUSHING-FLANGED S CASTER SUPPORT ITEMS 4 & 6, QTYs LISTED)	1 1 7 2 1	17-24 <i>4</i> (	1114430 WITH 2.75 [ NCLUDES I WITH 2.81 [	ASSY-WHEEL 9"CAREFREDIA. BOLT CIRCLE TEMS 11-15, 17-19, 24 & 26) DIA. BOLT CIRCLE TEMS 11-15, 20-22, 24 & 26)	Ε 1		
17-7	85010N 64163-84 2721484.7	ZERK GREASE FITTING WSHR-1.015 X 1.75 X .125	1 1 1		1114430-015 34251-005	S-TIRE 9 CAREFREE WASHER	1 2		
17-9 ( 17-10 ( 17-11 2 17-13 ( 17-14 2 17-15 ( 17-16 2	64229-05 64123-166 2722591 2722230-045 64123-01 2722682 64141-1 2722681 (INCLUDES	BLT-HEX 5/16-24X3/4 BEARING-9" WHEEL	1 1 2 1 4 2 4		* <b>N</b>	OT ILLUSTRATED			
17-182 17-192	2720644 2720645 2722680 (INCLUDES	S WHEEL HALF S WHL HALF, VALVE SD HUB-9"WHEEL W/BRGS ITEMS 13 & 14)	1 1 1						
17-21 4 17-22 4	4132614 4132615 4132616 (INCLUDES		1 E 1 1						

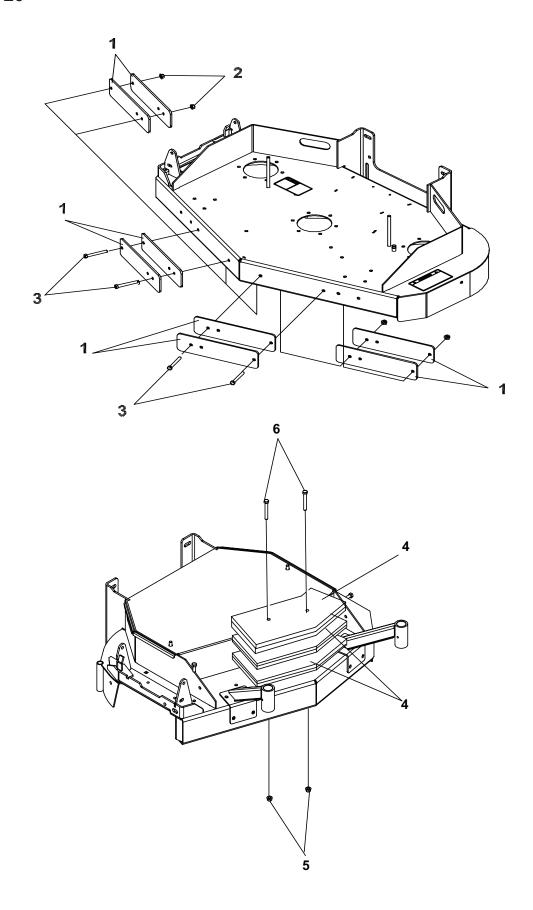


ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
18-1	38348-01	BEARING-SPINDLE SEALI	ED2				
18-2	33179-02	SPINDLE-SHORT	1				
	(USED IN ITE	EM 8)					
18-3	33179-01	SPINDLE-LONG	1				
	(USED IN ITE	EM 7)					
18-4	2721096	HOUSING-SPINDLE 6 HOL	_E 1				
18-5	64144-38	SNAP-RING	1				
18-6	38315	NUT-SPINDLE	1				
18-7	2721097	ASSY-SPINDLE LONG	1				
	(INCLUDES I	TEMS 1, 3, 4-6)					
18-8	2721323	ASSY-SPINDLE SHORT	1				
	(INCLUDES I	TEMS 1, 2, 4-6)					



#### 9

IV	iiusize					FIG	URE 19
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
-	4158442	LABEL-BOB-CAT, LARGE	1				
-	2000677	LABEL-DANGER/WARNING	-				
19-3	2000572	LABEL-WARNING BLADES	3 1				
19-4	2000678	LABEL-ROT PARTS/WSHR	2				
19-5	4116761	LABEL-MADE IN USA	1				
19-6	4158440	LABEL-BOB-CAT, SMALL	1				



**WEIGHTS** 

ITE	M PART NO	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
20-	1 4163349.7	WEIGHT					
(QTY 8 ON THE 48" DECK)							
	,	2 ON THE 54" DECK)					
20-	2 64229-03	NUT-NYLOC 3/8-16	4				
20-	3 64123-82	BOLT, 3/8-16X2 1/2 HEX	4				
	(U	SED ON 48" ONLY)					
	64123-16	BOLT-3/8-16X1-1/4	2				
(USED ON 54" ONLY)							
20-	4 4163960.7	COVER-36 SD WEIGHT	1				
20-	5 64268-03	NUT-FLG LOCK 3/8-16	2				
20-	6 64123-79	BOLT, 3/8-16X3-1/4 HEX	2				
	(ITEMS 4-6 USED ON 36" DECK ONLY)						

