



**OPERATOR'S & PARTS MANUAL** 



# TO OUR CUSTOMER:

Thank you for purchasing an **EverRide®** Hornet Zero Turn Mower. We believe that you have exercised excellent judgment in your selection. The Hornet mower has been designed to give you many years of satisfactory service. Successful operation and long life depends on proper maintenance and correct operating techniques.

Before you received your unit, the dealer has performed a pre-delivery inspection. The dealer will discuss with you the features, operation and maintenance requirements. Your dealer will always be there to help you any time you need assistance or need equipment related to the use of your **EverRide** mower.

We recommend that you carefully read this entire manual before operating the unit. This operator's manual has been printed to provide you with safe operating techniques, proper maintenance procedures, correct assembly, and parts identification on your **EverRide** Zero Turn Mower. Keep this manual handy for future reference.

Should any assistance be needed in understanding any section of this manual, contact your **EverRide** products dealer.

This equipment is covered by a written warranty which will be provided to you in the pages following.

**EverRide** reserves the right to make changes or add improvements to its products without incurring any obligation to make such changes to products manufactured previously. **EverRide**, or its dealers, accept no responsibility for variations which may be evident in the actual specifications of its products and the statements and descriptions contained in the publication.

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#### OWNER'S WARRANTY INFORMATION

This warranty applies to the original retail purchaser of the EverRide® products only. The warranty period starts upon the terations or modifications will not be covered under warranty. date of the original purchase reflected on the sales invoice.

As a condition to this warranty, the owner/operator shall have read, understood and followed the operator's manual guidelines for operations and maintenance supplied with this product, and that the product registration shall have been mailed to EverRide. Any lack of good maintenance, such as maintaining proper belt tension, tire pressures and lubrication shall be reason for rejection of a warranty claim.

In the judgment of EverRide, any original part found to be defective in material, workmanship or performance, will be repaired or replaced with a new part only by an EverRide Authorized Servicing Dealer without charge for parts and labor based on the following terms and conditions:

### Warranty Coverage:

This warranty is limited to two years from the date of purchase for parts and one year for labor for any EverRide product used for commercial purposes, income producing purposes or residential use. EverRide products used for rental purposes are limited to 90 days of warranty. Engine and battery warranties are provided separately by the manufacturer of those components.

Belts, cutting blades, grass collection bags and tires are guaranteed to be free from manufacturer's defects for the first 90 days.

The mower deck shell will be warranted from cracking as a result of defects in material or workmanship for the life of the unit.

Service parts are warranted for 90 days from the date of purchase.

#### What this warranty does not cover:

The expense incurred for delivering this product to the dealer and returning it after repair. The responsibility of EverRide and its servicing dealers is limited to making the required repairs. Further, no breach of warranty shall be cause for cancellation of the contract of sale.

Subsequent purchasers of the mower other than the original purchaser. This warranty is not transferable.

Product(s) that has (have) been subject to improper maintenance, neglect, misuse, accident, alteration, modified or operated in any way contrary to the instructions specified in the Operator's Manual. Repairs made by unauthorized persons will not be covered under warranty. Damages caused by use of EverRide equipment other than for what it was designed.

Damages that are caused by unauthorized attachments, a-l Any piece of equipment where the serial number has been removed or is made illegible will not be covered under wa-r

Wear or maintenance items (unless defective) including, but not limited to: Clutch and brake linings, light bulbs, grass bags, filters (air, fuel, oil), lubricants & coolants (unless used during an authorized repair), spark plugs, injector nozzles.

As the manufacturer of this product, EverRide reserves the right to change, modify or improve the design of any of its products without assuming any obligation to modify or up grade any mower, previously sold or manufactured.

As stated above, all other implied warranties are limited in duration. Any such implied warranties including merchan-t ability, fitness for a particular purpose, or otherwise, are dis claimed in their entirety after the expiration of the warranty period. EverRide's obligation to the original owner is strictly and exclusively limited to the repair or replacement of de fective parts, and EverRide does not assume nor authorize anyone to assume for them any other obligation.

EverRide assumes no responsibility for incidental, consequential or other damages including, but not limited to: Transportation of the mower to an Authorized Dealer and returning it back, rental of truck or trailer for transportation, expense for gasoline, injury to property, mechanic's travel time and mileage to perform repair(s), rental of a like prod uct, loss of use of the EverRide product, loss of savings or revenue, loss or damage to personal property, and/or tele phone charges.

Exclusions or limitations as stated above may not be allowed in some states. This warranty allows you specific legal rights and you may have other rights in your state.

# Warranty Registration

The warranty registration form must be completed and signed by the authorized dealer and the original purchaser and returned to EverRide within ten days of the date of pu-r chase. The date of purchase is considered the day the unit is delivered.

#### Dealer or Distributor Warranties

The selling dealer and distributor makes no warranty of their own and neither the dealer nor the distributor has any au thority to make any representation or promise on behalf of EverRide, or to modify the terms or limitations of this war ranty in any way.

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# SAFETY FIRST

This symbol, the industry's "Safety Alert Symbol", is used throughout this manual and on labels on the machine itself to warn of the possibility of personal injury. Read these instructions carefully. It is essential that you read the instructions and safety regulations before you attempt to assemble or use this unit.

A

DANGER: Indicates an immediately hazardous situation which, if not

avoided, will result in death or serious injury.

Λ

WARNING: Indicates a potentially hazardous situation which, if not avoided,

could result in death or serious injury.

A

CAUTION: Indicates a potentially hazardous situation which, if not avoided,

may result in minor or moderate injury.

IMPORTANT: Indicates that equipment or property damage could result if

instructions are not followed.

NOTE: Gives helpful information.

This machine meets or exceeds the B71.4 1999 specifications of the American National Standards Institute, in effect at the time of production.

Note: The addition of attachments made by other manufacturers that do not meet the American National Standards Institute certification will cause noncompliance of this machine.

# SAFE OPERATING PRACTICES

The following instructions are from ANSI standard B71.4 - 1999.

# **TRAINING**

Read the Operator's Manual and other training material. If the operator(s) or mechanic(s) cannot read English, it is the owner's responsibility to explain this material to them.

Become familiar with the safe operation of the equipment, operator controls, and safety signs.

All operators and mechanics should be trained. The owner is responsible for training the users.

Never let children or untrained people operate or service the equipment. Local regulations may restrict the age of the operator.

The owner/user can prevent and is responsible for accidents or injuries occurring to themselves, other people or property.

#### **PREPARATION**

Evaluate the terrain to determine what accessories and attachments are needed to properly and safely perform the job. Only use accessories and attachments approved by the manufacturer.

Wear appropriate clothing including hard hat, safety glasses and ear protection. Long hair, loose clothing or jewelry may be tangled in moving parts.

Inspect the area where the equipment is to be used and remove all objects such as rocks, toys and wire, which can be thrown by the machine.

Use extra care when handling gasoline and

other fuels. They are flammable and vapors are explosive.

- a. Use only an approved container
- Never remove gas cap or add fuel with engine running. Allow engine to cool before refueling. Do not smoke.
- c. Never refuel or drain the machine indoors.

Check that operator's presence controls, safety switches and shields are attached and functioning properly. Do not operate unless they are functioning properly.

# **OPERATION**

Never run an engine in an enclosed area.

Only operate in good light, keeping away from holes and hidden hazards.

Be sure all drives are in neutral and parking brake is engaged before starting the engine. Only start engine from the operator's position. Use seat belts if provided and the ROPS is installed.

Slow down and use extra care on hillsides. Be sure to travel in the recommended direction on hillsides. Turf conditions can affect the machine's stability. Use caution while operating near drop-offs.

Slow down and use caution when making turns and when changing directions on slopes.

Never raise deck with the blades running.

Never operate with the PTO shield, or other guards not securely in place. Be sure all interlocks are attached, adjusted properly, and functioning properly.

Never operate with the discharge shield raised, removed or altered, unless using a grass catcher.

Do not change the engine governor setting or over speed the engine.

Stop on level ground, lower implements, disengage drives, engage parking brake (if provided), shut off engine before leaving the operator's position for any reason including emptying the catchers or unclogging the chute.

Stop equipment and inspect blades after striking objects or if an abnormal vibration occurs. Make necessary repairs before resuming operations.

Keep hands and feet away from the cutting units.

Look behind and down before backing up to be sure of a clear path.

Never carry passengers and keep pets and bystanders away.

Slow down and use caution when crossing roads and sidewalks.

Stop blades if not mowing.

Be aware of the mower discharge direction and do not point it at anyone.

Do not operate the mower under the influence of alcohol or drugs.

Use care when loading or unloading the machine into a trailer or truck.

Use care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

# MAINTENANCE AND STORAGE

Disengage drives, lower implement, set parking brake, stop engine and remove key or disconnect spark plug wires. Wait for all movement to stop before adjusting, cleaning or repairing.

Clean grass and debris from cutting units, drives, mufflers, and engine to help prevent fires. Clean up oil or fuel spillage. Let engine cool before storing and do not store near flame.

Shut off fuel while storing or transporting. Do not store fuel near flames or drain indoors.

Park the machine on level ground. Never allow untrained personnel to service machine.

Use jack stands to support components when required.

Carefully release pressure from components with stored energy.

Disconnect battery or remove spark plug wires before making any repairs. Disconnect the negative terminal first and the positive last. Reconnect positive first and negative last.

Use care when checking blades. Wrap the blade (s) or wear gloves, and use caution when servicing them. Only replace blades. Never straighten or weld them.

Keep hands and feet away from moving parts. If possible, do not make adjustments with the engine running.

Charge batteries in an open well ventilated area, away from spark and flames. Unplug charger before connecting or disconnecting from battery. Wear protective clothing and use insulated tools.

Keep all parts in good working condition and all hardware tightened. Replace all worn or damaged decals.

The discharge shield is subject to wear and deterioration. Inspect it regularly. If replacement is required, always replace it with genuine EverRide products.

# **EVERRIDE MOWER SAFETY**

The following list of safety warnings are specific to EverRide products. This list will contain additional

safety information that is important, but not covered by the ANSI standards.

This product is capable of amputating hands and feet and throwing objects. Always follow all safety instructions to avoid serious injury or death.

The safety of the operator is one of our number one concerns when designing a new piece of equipment. Our designers have built in as many safety features as possible. Even with these built in safety features, many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling machinery. Accidents can be avoided by observing all safety precautions. Read and understand all precautions found in the operator's manual before operating the EverRide mower. This equipment must only be operated by those who have been trained in its safe use.

In order to provide a better view, certain photographs or illustrations in this manual may show an assembly with a safety shield removed. However, a machine should never be operated without the safety shields installed. Keep all shields in place. If shield removal becomes necessary for repairs, replace shield prior to machine operation.



**WARNING: DO NOT remove or obscure** DANGER, WARNING, CAUTION or Instruction Decals. Replace any decals that are not readable or are missing. Replacement decals are available from your dealer. The actual location of these Safety Decals is illustrated at the end of this section.

#### **GENERAL SAFETY RULES**

This book must be made available to the operator of the mower at all times.

Read this book carefully and learn how to use the machine correctly. Become familiar with all machine controls and how to stop the machine and the implements or attachments quickly.



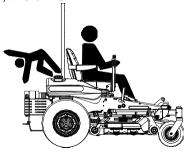
Beware of bystanders, particularly children!



Always look around to make sure that it is safe to start the engine or move the power unit. This is particularly important with higher noise levels as you may not hear people shouting.

# **KEEP PASSENGERS OFF**

Only allow the operator on the machine. Do not carry passengers. This mower is designed for one (1) person, the driver.



Riders on the machine could be struck by foreign objects or thrown off the machine causing serious injury.

Riders obstruct the operator's view which results in the machine being operated in a manner which is unsafe.

DO NOT carry passengers anywhere on the power unit or on any implement or attachment connected to, or installed on the power unit.

# **BEFORE OPERATION**

Pay special attention to the warning, caution and danger labels on the machine.

Do not use starting fluid. Use of starting fluid could damage engine components.



Check the brakes and other mechanical parts for correct adjustment and wear. Replace worn or damaged parts promptly. Check the torque on all hardware regularly.

Do not wear headphones or listen to music while operating the deck. Operating the machinery safely requires your undivided attention.

Keep the power unit and attachments clean. Accumulation of dirt, grease, or grass can lead to fires or personal injury.

Do not modify the power unit or any of its attachments. Unauthorized modification of the machinery may affect its functionality, which could lead to personal injury.

Do not wear loose fitting clothing which could get caught in moving parts. Do not operate this machine while wearing shorts. Always be sure to wear adequate protective clothing. Wearing safety glasses and safety shoes is advisable.



Operator hearing protection is recommended. Extended exposure to loud noise could lead to hearing loss.



A fire extinguisher and first aid box should be carried with the power unit or be kept readily available at all times.



Keep emergency numbers for immediate access.

# **DURING OPERATION**

Do not bypass the starting circuit by shorting across the terminals of the starter motor to start the engine. This may cause the power unit to move suddenly.



Periodically check the starting circuit to make sure all system components operate correctly.

If the starting system does not work, consult your **EverRide** Dealer immediately.

Operate the mower only in daylight or when the area to be mowed is lit well by artificial light.

Never remove the discharge shield from the mower because the discharge shield directs material down toward the turf. If the shield is damaged, be sure to replace it immediately.

Never try to clear the discharge area or the mower blades unless you have moved the motion control arms to the park position, turned the mower PTO switch to the off position, the mower ignition switch is in the off position, the key is removed and the negative battery cable has been removed.

Do not operate the power unit in a confined or non-ventilated area. Carbon monoxide gas is colorless, odorless, and can be fatal.



Do not turn sharply when driving at high speeds.

Park the mower on a firm level surface with the motion control arms in the park position.

When backing, be sure to turn around and look to the rear. Do not mow in reverse unless it is absolutely necessary.

When working in groups, use caution and watch out for others.

Always be aware of mower discharge direction. Make sure it does not point at anyone.



Be sure the engine and rotating blades have stopped before putting hands or feet near the blade

Disengage the blade drive when transporting the machine across drives, sidewalks, etc. Never raise the mower deck while the blades are turning.

Do not put hands or feet under or into the mower when it is running.



Do not touch the engine or muffler when the engine is running or immediately after the engine has stopped. These areas may be hot enough to cause serious burns.

Do not drive the machine on streets or highways. Watch for traffic when crossing streets or while mowing close to roads.

Always inspect the mower for damage after striking a foreign object. Always repair or replace damaged parts before restarting the mower deck.

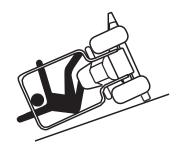
Do not operate the power unit without the mower deck attached.

Make sure the machine and all attachments come to a complete stop before dismounting.

Before dismounting, disengage the PTO, lower all attachments, place the control levers in the park position, turn off the engine, and remove the key.

# **OPERATING ON SLOPES**

Avoid starting or stopping when going up or down a slope. Keep all movements on a slope gradual and slow. Do not make sudden changes in speed or direction.



If tires lose traction while on a slope, disengage the mower blades and back slowly and gradually down the slope.

Do not turn on slopes unless necessary, and then turn slowly and gradually downhill if possible.

Use extra caution when mowing on slopes. If you are unable to back up on the slope, or if you do not feel comfortable on it, then do not mow it.

Mow across slopes, not up and down, to avoid machine tip-over. Do not mow slopes or hills that are too steep for safe operation.

Do not try to stabilize the machine by putting your foot on the ground.

# ROLL OVER PROTECTIVE STRUCTURE (ROPS)

Do not weld, drill or alter the ROPS. Damaged ROPS must not be straightened or used. If damage does occur, consult your **EverRide** Dealer and replace all damaged parts.

If the ROPS is lowered or removed from the power unit for any reason, it must be erected and/or refitted immediately. Original bolts or equivalent replacements must be used and tightened to the correct torque.

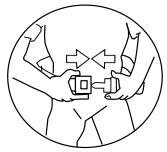
Do not attach chain, ropes, or cables to the ROPS for pulling purposes as this will cause the mower to tip backwards.

EverRide does not recommend the use of the mower with the ROPS removed.

If you have a foldable ROPS, it can be folded down for mower storage. It **must** be pinned in the upright position prior to machine operation.

# **SEAT BELT USAGE**

With the ROPS installed, it is imperative that the seat belt be installed, used, and correctly adjusted at all times. Replace damaged seat belts immediately.



Do not use a seat belt if operating with ROPS folded down or removed.

# **MAINTENANCE**

Only qualified, trained adults should service the machine.

Before maintenance is performed, make sure the mower is parked on a firm flat surface. Remove the key to prevent an accidental start up.

Never attempt to disconnect any safety devices.

Frequently check for worn or deteriorating components that could create a hazard.

Use only genuine **EverRide** replacement parts. Substitute parts could cause product malfunction or possible injury to the operator or bystanders.

Allow the **EverRide** mower time to cool before touching the engine, the muffler, radiator, or any other part which may be hot.

Always stop the power unit and PTO before refueling.

Keep the engine free of grass, leaves, grease and

other debris which could catch fire.

Keep all hardware tight to insure the machine is in a safe working condition. Check the blade mounting nuts often to make sure they are tight.

Perform only maintenance instructions described in this manual. Unauthorized maintenance operations or machine modifications may result in unsafe operating conditions.

For engine maintenance, follow the engine manufacturers recommendations as noted in the engine manual.

# **FUEL SYSTEM**

Handle fuel with care. Diesel fuel is extremely flammable and its vapors can be explosive. Use an approved fuel container.

Never add fuel to the mower while the engine is running or while it is hot. Allow the engine to cool for several minutes before adding fuel.

Keep matches, cigarettes, cigars, pipes, open flames, or sparks away from the fuel tank and fuel container.



Always fill the fuel tanks outside using caution. Fill the tank until the fuel is about one inch from the top of the tank. Use a funnel or spout to prevent spilling. When refueling at a gas pump, always insure the nozzle contacts the neck of the tank while filling.

Replace the machine and container caps and clean up any spilled fuel before starting the engine.

Keep the mower and all fuel containers in a safe

locked place to keep children from tampering with them.

Fuel system components rely upon clean fuel for lubrication and optimum performance. Extreme care must be taken to prevent ingress of dirt and moisture to prevent damage.

Use only approved nonmetal portable fuel containers. If using a funnel, make sure it is plastic and has no screen or filter.

When practical, do not fuel the equipment on truck beds or on trailers. Remove them and fuel on the ground. If this is not possible, use a portable nonmetal fuel container to fill the equipment.

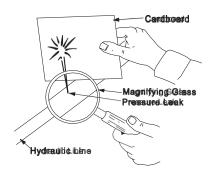
# **HYDRAULIC SYSTEM**

Make sure all hydraulic fluid, hoses, and lines are in good condition and all lines and fittings are tight before applying pressure to the hydraulic system.

Check hydraulic connections frequently. They can leak as a result of damage, as a result of vibration or because they have worked loose.

Relieve all pressures before disconnecting hoses or lines. Escaping oil under pressure can cause serious injury.

Escaping hydraulic fluid under pressure can have sufficient force to penetrate the skin, causing serious injury. Before applying pressure to the system, make sure all connections are tightened, and lines, pipes and hoses are not damaged. Fluid escaping from pinholes may be invisible. Do not use your hands to search for suspected leaks. Instead, use a piece of cardboard and wear protective eye wear such as safety goggles.



If injured by escaping fluid, see a medical doctor at once. Serious infection or reaction will result if proper medical treatment is not administered immediately. This fluid can produce gangrene or severe allergic reaction.

#### **BATTERY MAINTENANCE**

Use caution when charging the battery or performing maintenance on the battery and electrical system.

Do not use a naked flame to check battery electrolyte level. Always use a voltmeter or hydrometer to check the state of the charge.

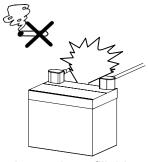
Make sure the battery charger is unplugged before connecting or disconnecting the cables to the battery.

Batteries contain sulfuric acid electrolyte. Always wear protective clothing and eye protection when servicing.

In case of electrolyte contact, rinse area with plenty of water and seek medical attention.

Make sure the battery is charged in a well ventilated location so hydrogen gases that are produced while it is charging can dissipate. Make sure the battery vents in the cap are open. Halt charging if battery exceeds 52°C (125°F).

Keep sparks, flames, and smoking material away from the battery at all times. To avoid sparks, use care when removing battery cables from their posts.



Do not use or charge the refillable type of battery if the fluid level is below the lower limit level mark. Otherwise the parts may prematurely deteriorate which could shorten the battery's service life or cause an explosion.

Before "jump starting" a battery, read and understand all instructions.

Disconnect the battery's ground cable before working on or near any electrical parts.

#### TIRE MAINTENANCE

Always insure the tires are inflated to the correct pressure. Do not inflate the tires above the recommended pressure in the operator's manual.

Make sure all hardware, especially the wheel nuts and bolts have been tightened to the correct torque.

When removing a tire from the power unit, it is necessary to support it with blocks or stands, not a hydraulic jack.

Do not attempt to service a tire unless you have the proper equipment and experience to perform the job. If you are not qualified to make the repairs, take the unit to your **EverRide** dealer or a qualified repair service.



When seating tire beads on the rims, never exceed 2.4 bar (35 p.s.i.) or the maximum inflation specified on your tires. Inflation beyond this maximum pressure may break the bead, or even the rim, with dangerous explosive force.

### REPLACEMENT PARTS

Where replacement parts are necessary for periodic maintenance and servicing, genuine **EverRide** replacements must be used to restore your equipment to original specifications.

EverRide will not claim responsibility for installation of unapproved parts and/or accessories and damages as a result of their use.

#### TRANSPORTING

Disengage the power to the attachments when in transport or not in use.

Do not tow this machine. Use a truck or trailer to transport this machine on public roads.

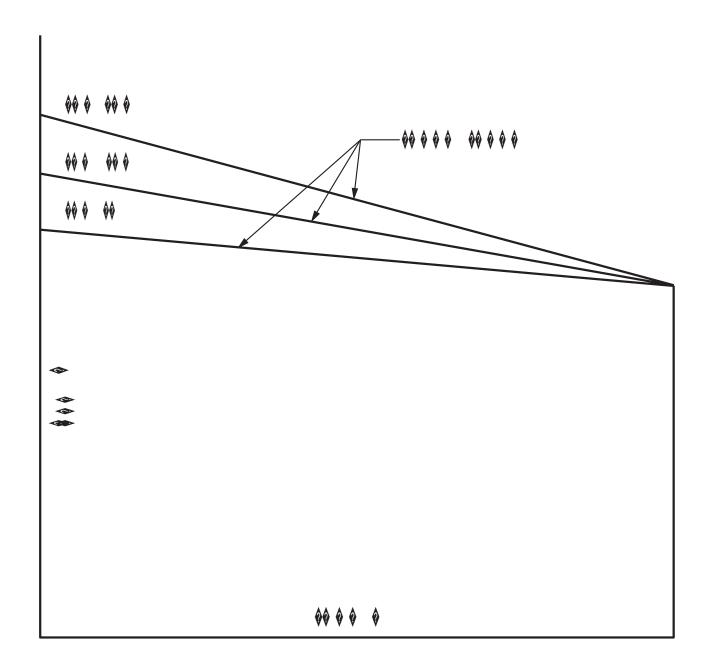
It is recommended this machine not be used on public roads.



Flashing warning lights and a slow moving vehicle sign are recommended any time the mower is driven on public roads.

Slow moving vehicles are difficult to see on public roads especially at night. Use extreme caution when transporting at night.

Use the diagram below to help you determine the slope of the terrain which is to be mowed. Never attempt to mow a slope of 15 degrees or more.



- 1. Cut this page out of the manual.
- 2. Hold the piece of paper so that Line D is horizontal.
- 3. Align Line E with a pole, tree, house or other vertical structure.
- 4. Fold the paper along the slope guide lines to find the closest line to match the slope of the terrain.



1. 191214

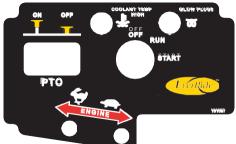


3. 180996





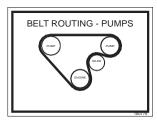
6. 181000



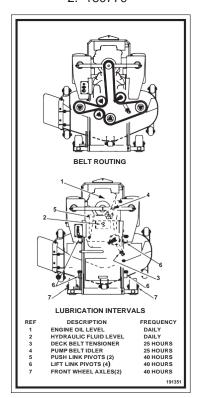
9. 181697



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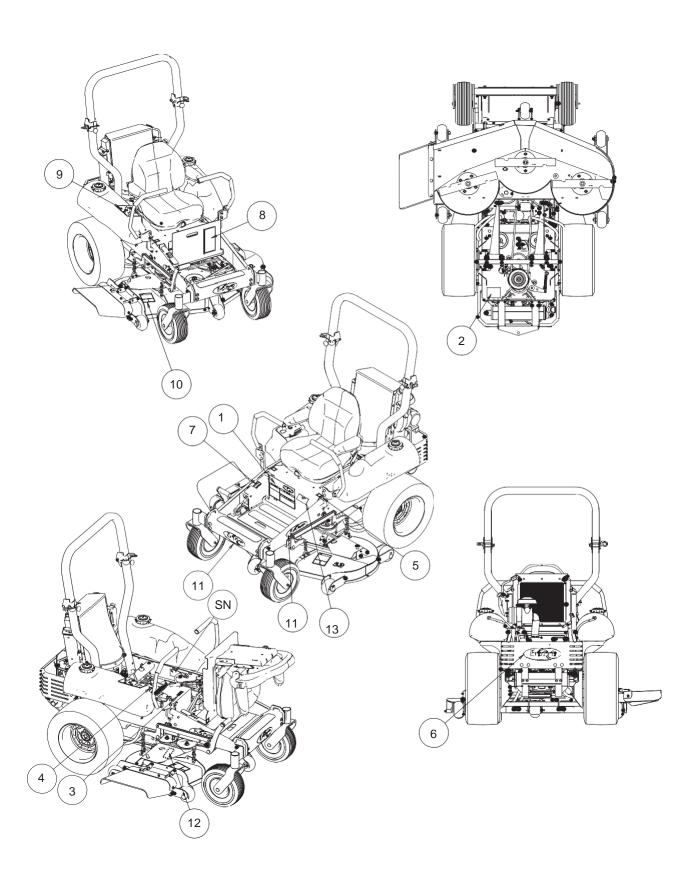
10. 181258



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# INTRODUCTION

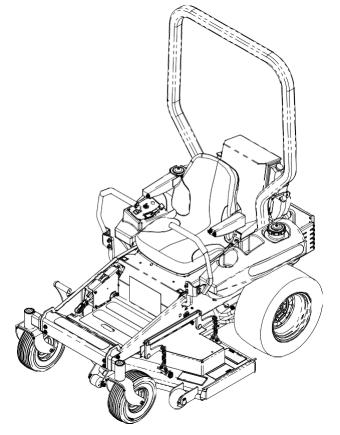
The information in this publication describes the operation, maintenance and servicing of the **EverRide** Hornet mower. Every effort has been made to provide correct and concise information to you, the operator, as available at date of book publication. Your **EverRide** dealer is available should items in this book or details of your machine not be understood.

This book is supplied with each machine to familiarize the operator with proper instructions needed for operation and maintenance. Studying and adhering to these instructions will insure optimum machine performance and longevity. A machine that is maintained properly and operated in the intended manner will provide greater dividends than one that is neglected and/or operated in manner other than as intended. Design and servicing of this machine has been kept as simple as possible to permit maintenance operations to be carried out with tools normally available.

This book should be thoroughly read and understood prior to operation of this machine. Inexperienced operators should study the contents of this publication and receive instruction from an experienced operator when possible. Your **EverRide** dealer can also assist in areas concerning machine operation and provide details concerning safe operation. It is suggested that this booklet be kept readily accessible, preferably with the machine, for future reference if questions or concerns arise. If the original book should become damaged, consult your dealer in regards to acquiring a replacement.

Customers are strongly advised to use an official EverRide dealer in connection with any service problems and adjustments that may occur. The EverRide dealer network is specially trained and equipped for all service work and to advise customers on specific applications of the mower in local





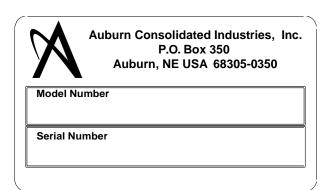
### **IDENTIFICATION**

# **Model / Serial Numbers**

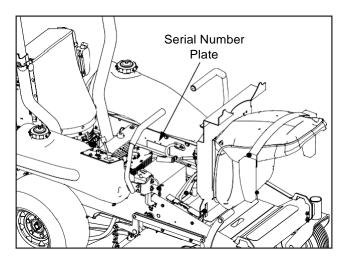
Each EverRide mower is identified by means of model and serial number. As a further identification, the engine is also provided with identification numbers.

To insure prompt, efficient service when ordering parts or requesting repairs from an authorized **EverRide** dealer, these numbers must be provided.

This is what the mower serial number plate looks like. Use the spaces in the serial tag shown to document the model and serial number for your new mower.



The mower serial number plate is located below the operator's seat on the left hand side of the frame below the LH fuel tank. Information contained in this serial tag is the model number and the serial number.



# **ENGINE MODEL NUMBER**

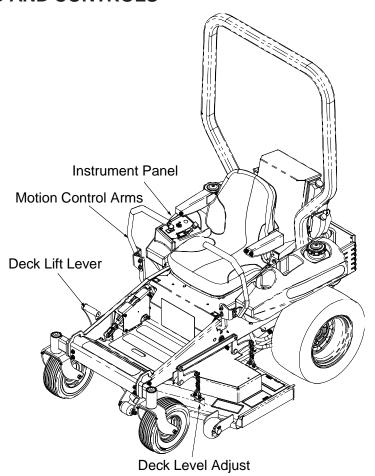
# **ENGINE SERIAL NUMBER**

The engine model number is found on a metal plate on the right side of the engine block next to the electric starter. The engine serial number is located on the same metal plate.

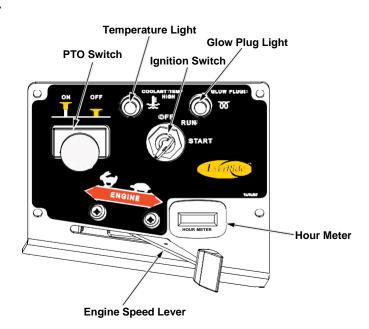
**NOTE:** Reference to left-hand and right-hand, used throughout this manual, refers to the position when seated in operator's seat and facing forward.

Engine troubleshooting, repair or adjustments are not covered in this manual. A service manual for the engine can be ordered from a Yanmar dealer.

# **INSTRUMENTS AND CONTROLS**



# **INSTRUMENT PANEL**



# **ELECTRIC FUEL SHUT OFF**

Turning the ignition switch to the "OFF" position will stop the engine.

#### **IGNITION SWITCH**

The Ignition switch has three positions.

**OFF** - Engine and all electrical circuits off.

**ON** - Power supplied to all circuits. Glow plug will warm while the key is initially turned to this position. After the unit is started, this is the normal operating position.

**IMPORTANT:** The glow plug light will stay on for 15 seconds. Wait until the glow plug light goes out before turning the engine over.

**START** - Starter activated. This position spring-loaded to "ON".

**IMPORTANT:** To prolong starter life, use short starting cycles not exceeding 15 seconds.

#### **TEMPERATURE LIGHT**

The temperature light will only activate when an overheat situation occurs. The engine will continue to run, but the mower deck will shut off and the temperature light will activate when the coolant temperature hits 230° F (110° C). Once the engine has cooled sufficiently, the light will turn off. Before the mower deck will turn back on after an overheat situation, it is necessary to push the PTO switch to the off position and pull it back on.

# **ENGINE SPEED LEVER**



CAUTION: Always control ground speed to insure safe operation. Reduce speed prior to turning or backing the mower.

**IMPORTANT:** DO NOT "race" or excessively load a cold engine.

The engine speed lever controls the engine RPM of the unit. Engine RPM increases as the engine speed lever is moved forward. Decreased engine RPM is achieved by moving the lever rearward.

# **PTO ENGAGEMENT**

The PTO (Power Take Off) engagement switch will be used to activate the mower for use. When the switch is in the up "ON" position, the mower deck will be engaged. When the PTO switch is down, the PTO is disengaged.

**IMPORTANT:** When engaging the PTO, always engage it while the engine is running at full RPM.

#### **HOUR METER**

The hour meter keeps track of how many hours the power unit has been in operation.

The hour meter works electronically and is activated when a current is sensed in the engine magneto.

# **BREAK-IN PERIOD**

- Operation of the mower within the first fifty hours can be a major factor in determining the performance and life of the engine and power unit.
- The engine may be operated at full RPM, but excessive load should be avoided. If engine begins to "bog down", operate the power unit and mower at a slower ground speed while maintaining the engine speed.
- Check engine, pumps, and motors frequently during break-in period. Watch for evidence of leakage of fluids. Replenish levels as required and repair any leaks that may have formed.
- Tighten any nuts, bolts or screws that may have loosened and tighten them as necessary. This is especially true of the wheel retaining nuts.
- Be observant to control arm and parking brake adjustment. Lining materials used on the parking brake will "bed in" in the first few hours of operation and may necessitate the need for early and frequent readjustment.
- Keep area around the fuel tank filler cleaned and make sure the diesel fuel is of correct fuel cetane (45 or higher) and free of contamination.
- Initial oil and oil filter change is after the first 50 hours of use and every 200 hours after.



CAUTION: Propermaintenancepractices cannot be overemphasized. They are required for safe operation. Consult the "Lubrication and Maintenance" section of this manual for full details.

#### MOUNTING AND DISMOUNTING SAFELY

DO NOT step on either side of the mower deck when mounting or dismounting the power unit. Step over the deck when mounting or dismounting.

#### **FUEL**

Make sure the fuel tank is full, but do not overfill. Fuel should remain one inch below the neck of the tank. Be sure to use diesel fuel with a fuel cetane rating of 45 or higher.

Refer to your engine operator's manual for more diesel fuel specifications and recommendations concerning bio-diesel fuels.

Make sure dirt and foreign matter is kept out of the fuel tank. Use only a clean funnel and fuel can to fill the tanks.

#### **SWITCHING FUEL TANKS**

The power unit has two fuel tanks, one located on each side to the rear of the operator. Each tank connects to a fuel shut off valve located below the operator's seat. From the fuel shut off valve a common line leads to the engine.

To use the RH tank, rotate the fuel shut off valve to the middle position. This will allow use of fuel from the RH tank only. When the RH tank is almost empty, move the fuel shut off valve to the left and this will use fuel from the LH tank only.

Always make sure to close the fuel shut off valve before transporting or storing the machine.

#### STARTING THE EVERRIDE MOWER

# **Pre Start Inspection**

Prior to daily start-up of the mower, a few basic procedures should be followed to insure the machine is in optimal operating condition.

- Make sure all safety shields are in place and secured properly.
- Make sure the operator is instructed on correct and safe operation of the power unit and related attachments and implements.

# 19 - OPERATING THE POWER UNIT

- Check engine and hydraulic reservoir oil and replenish as necessary.
- Check the pump belt and drive belt tension and adjust as necessary.
- Insure air intake screens are clear of debris to provide maximum engine cooling.
- General inspection of tires, tire pressure and wheel bolt torque. Observe for external signs of leakage and correct before operating the mower. Check motion control arms for looseness and correct position.
- Check for adequate fuel supply. It is recommended that the fuel tank be replenished following each days use to reduce condensation and provide a full tank for next use.



WARNING: Carefully read and understand the SAFETY section of this manual.



WARNING: Always start and operate the engine in a well ventilated area. If in an enclosed area, vent the exhaust outside.



WARNING: Do not modify or tamper with the exhaust system.

# **Normal Starting**



CAUTION: Do not attempt to start the engine unless you are seated in the operator's seat. Do not allow anyone on the mower except the operator.



DANGER: Only use the key switch to start the engine.



CAUTION: Never use an engine starting aid such as ether. Engine damage will result.

Sit on the operator's seat. Be sure the handles are both facing out in the park position and the PTO is not engaged.

Set the engine speed control to the slow position.

Turn the key from OFF to RUN. Check that all indicators are normal. This will automatically activate a glow plug timer. An indicator light will go out when properly heated.

**NOTE:** The glow plugs are used to assist starting in cold weather conditions. If the engine is being operated in normal or warm weather conditions, the engine may be started without first heating the glow plugs.

Turn the key clockwise to the START position. Release the key as soon as the engine starts. It will return to the RUN position.



CAUTION: Never hold the key in the START position for longer than 15 seconds or the starter motor will overheat.

**NOTE:** Because of safety features, the engine can't be started unless the control arms are in the park position, the operator is in the seat, and the mower PTO is off.

Allow the engine to idle for a few minutes before increasing the RPM or engaging the PTO.

Use the engine speed lever to increase and decrease the engine speed. Moving the lever forward will increase the engine speed while moving the lever backwards will lower the engine speed.

Before turning off engine disengage the PTO, put the handles in neutral, and pull the engine speed lever back to a low idle. Allow the engine to idle for a few minutes and then turn the engine off by turning the key left to the off position. Be sure to remove the key before getting out of the operator's seat. **IMPORTANT:** DO NOT leave the key in the ignition while the machine is unattended.

# **Jump Starting The Power Unit**



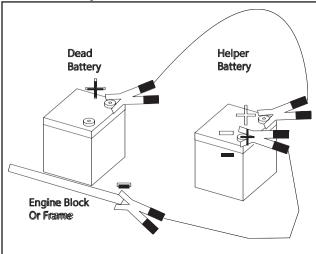
WARNING: Battery gases can be explosive. Keep all cigarettes, sparks or flames away from the battery.



WARNING: If the battery is frozen, do not attempt to jump start the engine.



WARNING: Do not connect the negative battery cable to the power unit battery.



**IMPORTANT:** This mower has a 12-volt negative ground starting system. Use only helper vehicles with the same voltage. Use of a higher electrical voltage vehicle to jump this machine could result in damage to the electrical system.

1. Pull the helper vehicle close enough for easy connection to the battery.



WARNING: Do not allow the vehicles to touch when attempting a jump start.

- Put the mower motion control arms in the park position and put the helper vehicle in the neutral position and apply the parking brake. Turn the engine off.
- 3. Put on safety goggles and rubber gloves.
- 4. Raise the seat and seat plate and attach the red clamp to the red pole (positive +) on the dead mower battery. This clamp should lie parallel with the tractor frame. Attach the other red cable to the red pole (positive +) on the helper vehicle.
- 5. Attach the other black cable to the black (negative -) pole on the helper vehicle.
- 6. Connect the black cable to the mower frame or engine block for a ground. Connect this as far from the mower battery as possible.
- Start the helper vehicle and let it run for a short amount of time. Lower the seat to make sure the positive cable end does not come into contact with the seat plate and start the disabled mower.



WARNING: Do not allow the seat plate to touch the jumper cables when attempting a jump start.

8. Disconnect the cables in the exact reverse order. Start with step 6, then 5 and 4.

# IF THE ENGINE DOES NOT START

If the engine fails to start:

- Wait until the engine comes to a complete stop before you attempt to start it again to avoid starter motor damage.
- Wait at least 30 seconds before you attempt to start the engine again to allow the battery voltage to recover and to avoid starter motor damage.

### WARMING THE MOWER



CAUTION: To avoid personal injury, make sure the control arms remain in the park position during warm-up.

Allow the engine to idle for five minutes after start-up. This allows oil to reach all working parts. Failure to allow the machine to warm-up before applying a load could cause premature wear, seizure, or breakage.

In cold weather the viscosity of hydraulic oil may increase. This can cause decreased oil circulation and low oil pressure. Using the power unit before properly warmed up could cause damage to the hydraulic system. For the proper warm-up time, see the chart below.

TEMPERATURE	WARM-UP TIME REQ.
Higher than 0°C (32°F)	5 Minutes
0 to -10°C (14-32°F)	5-10 Minutes
-10 to -15°C (14 to 5°F)	15 Minutes
Below -15°C (5°F)	DO NOT OPERATE

#### INCREASING ACCELERATION

Moving the engine speed lever forward increases the engine speed and moving it backwards will decrease the engine speed.

For good mowing performance it is important to run the engine at a high speed, but drive at a steady ground speed. If streaking or trailing occurs, decrease your ground speed.

#### **OPERATING THE EVERRIDE MOWER**

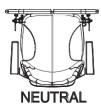
Before using the mower to mow for the first time, it is beneficial to operate the EverRide mower at low speeds in an open area to acclimate yourself to the machine controls.

The control arms are located on both sides of the operator's seat. These arms are used to control the forward, reverse and turning motion of the

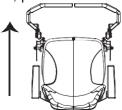
power unit. See the following section for an explanation of the steering controls.

#### STEERING CONTROLS

After starting the power unit, pull the motion control steering levers back together out of the lock position and into the neutral position. You are able to steer the power unit using the motion control levers.



To go forward, push both levers straight ahead.



STRAIGHT FORWARD

To go in reverse, pull both levers straight back.



STRAIGHT REVERSE

To turn right in reverse, leave the right lever in neutral and pull back on the left lever.



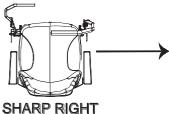
REVERSE RIGHT

To turn left in reverse, leave the left lever in neutral and pull the right lever straight back.



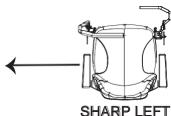
To turn right, leave the right lever in neutral and push the left lever straight ahead.

To make a sharp right turn, push the left lever straight ahead and pull the right lever straight back.



To turn left, leave the left lever in neutral and push the right lever straight ahead.

To make a sharp left turn, push your right lever straight ahead and pull straight back on the left lever.





CAUTION: Use caution when making turns. Slow the machine down to a manageable speed before making sharp turns. This mower can spin very rapidly when pushing forward on one lever and pulling back on the other.

#### STOPPING THE ENGINE

Move the control arms to the park position, idle the engine a few moments and turn the ignition switch to the "Off" position. Remove the key.

# **MOVING A STALLED EVERRIDE MOWER**

If the mower engine stalls and will not restart the unit can be pushed or towed for short distances with the pump bypass valves open. Do not exceed 5 m.p.h. when towing.

**IMPORTANT:** The bypass valves must be opened two full turns before the unit is moved. Be sure the bypass valves are returned to their original closed position before running the mower again. Failure to fully close the bypass valves before operation could result in hydraulic system damage.

#### PARKING THE POWER UNIT



CAUTION: When parking the EverRide mower, stop the engine, lower the mower deck to the ground, move the motion control arms to the park position, turn the key to the "OFF" position and remove the key.

When parking on an incline, be sure to chock the wheels on the downhill side to prevent the power unit from rolling.

# **LOADING THE MOWER**



WARNING: Exercise extreme caution when loading and unloading the unit from a ramp.



WARNING: Use only a single, full width ramp. If individual ramps are necessary, use several to simulate a single full width ramp. Use enough ramps to create an unbroken ramp surface wider than the unit.

# 23 - OPERATING THE POWER UNIT



WARNING: The deck height of cut must be at the highest cutting height to prevent contacting the deck with the trailer or truck.



WARNING: Never exceed a 15 degree angle between the ramps and the truck or trailer when loading the mower.



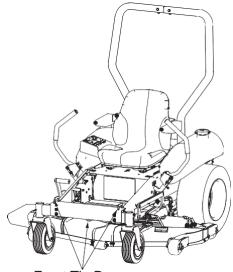
WARNING: Avoid sudden acceleration and deceleration of the unit when loading and unloading the unit to avoid the mower from tipping backward.

The ramp should be long enough that the angles between the truck or trailer do not exceed 15 degrees. A steeper angle may cause the mower deck components to get hung up when moving the mower from ramp to truck or trailer. If loading on or near a slope, position the truck or trailer on the down side of the slope and the ramps should extend up the slope. This will minimize the ramp angle. The trailer or truck should be parked as level as possible to facilitate smooth loading of the mower.

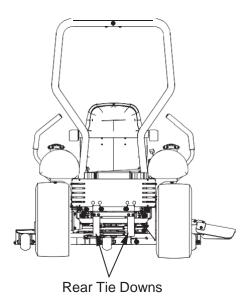
#### TRANSPORTING THE MOWER

Use a heavy duty trailer or truck to transport the mower. Insure the trailer or truck has all of the necessary lighting and markings as required by law.

When transporting the mower, make sure the motion control arms are in the park position, the wheels have been blocked, the machine has been securely fastened by cables, chains or ropes, and the trailer has been secured to the towing vehicle with safety chains. Tie down locations have been built into the machine to facilitate ease during this process. Note the tie down locations in the illustration.



Front Tie Downs



A

WARNING: Driving on a public street or roadway without turn signals, slow moving vehicle emblem, or reflective markings could lead to accidents causing serious personal injury or death. Do not drive the mower on a public street or roadway.

# **GENERAL INFORMATION**

The safe operation of the power unit and mower deck is the responsibility of the operator. The operator MUST be familiar with the mower and power unit controls, how they work, and all safety precautions BEFORE starting operation.

**IMPORTANT:** To avoid damage to the mower, re-torque all fastening hardware, including blade and spindle pulley retaining nuts, after the first hour of mowing operation.



CAUTION: Inspect the mowing blade bolts daily, or whenever a blade has been removed. Torque is 110 to 130 Ft. Lbs. (150-177 N•m).

#### **OPERATING SIDE DISCHARGE MOWERS**

The mower has a hinged discharge shield that discharges the clippings out of the side of the deck and onto the ground.



DANGER: Without the discharge shield or a complete grass collector installed, you and others are exposed to rotating mower blades and thrown debris. Contact with the mower blades or flying debris could cause severe injury or death.



DANGER: Never remove the discharge shield from the mower because the deflector routes discharged material down toward the ground. If the discharge shield is ever damaged, do not use the mower until it has been replaced.



DANGER: Never put your hands or feet under the mower.



DANGER: Do not try to clear the mower discharge area or mower blades without first turning the mower PTO to off, turning the ignition key to off, removing the key and disconnecting the battery cable.

#### TIPS FOR EFFICIENT MOWING

Blade sharpness affects the appearance of the mowed lawn. A dull or damaged blade will cause grass to appear torn or beaten off, rather than cut cleanly. Mowing blades should be checked regularly and kept sharp to insure the best lawn appearance.

Best results occur normally when the grass is maintained at a height of 2-3 inches (50mm-80mm) It is best to cut the grass often and not too short. To keep a healthy green lawn, do not cut more than 1/3 of the overall grass blade height.

Mower engine speed while mowing should be at the maximum rated RPM. This will insure proper blade speed for effective cutting and discharge of grass clippings.

Travel speed greatly affects mowing performance. The operator must use his or her own best judgment for the ground speed required for encountered mowing conditions. Always use a lower ground speed for slower mowing, rather than lowering the engine RPM.

Mow often! Do not wait for the grass to get too tall. Short grass clippings will disperse better and deteriorate faster.



CAUTION: Clear the area of people, pets, and all visible debris before beginning mowing operations.

Mowing areas with tall grass or weeds may require cutting at 5.5 inches (maximum) height of cut. After mowing once, re-cut the entire area with the mower reset to the desired final height of cut.

The anti-scalp wheels on either side of the front of the mowing deck serve as a convenient mowing guide. When mowing, position the mower so the

# 25 - OPERATING THE MOWER

wheel overlaps the edge of the strip previously cut. This will assure full mowing coverage.

Always keep the left side of the mower toward trees, posts or any other obstacles on the first trip around them.



CAUTION: Mow only during daylight hours, or when the area is well lit artificially.

When transporting, always disengage the mower PTO.

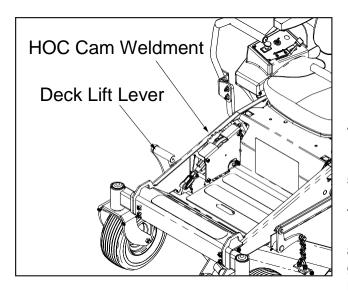
# **CUTTING HEIGHTS:**

The mower can be adjusted to mow from 1.5 inches to 5.5 inches (38-76 mm) height of cut. Grass mowing height should be determined by encountered conditions and personal preferences.

The following recommendations are provided as a guide for cutting height selection.

Lawns = 1.5" to 3" (38-76 mm) Field Cutting = 3" to 5.5" (76-140 mm)

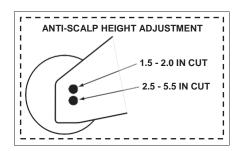
# ADJUSTING MOWER HEIGHT OF CUT



- 1. Raise the mower deck by depressing the deck lift lever as far as possible.
- 2. Hold the deck in the up position and rotate the height of cut control cam to the desired height of cut.
- 3. Once the cam is on the correct height of cut, release the foot peg.

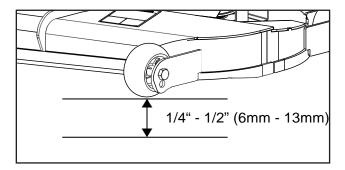
# ANITI-SCALP WHEEL ADJUSTMENT

- Raise the mower by pushing down on the deck lift lever and put the HOC cam into the 5.5" height of cut.
- 2. Place the motion control arms in the park position.
- 3. Set the anti-scalp adjustment to coincide with the height of cut which was chosen. To adjust the anti-scalp rollers, remove the 5/8-11 x 4.25 bolts and reinstall the bolts back in the appropriate hole for the desired height of cut. See illustration for correct hole information.



- 4. Depress the deck raise lever and put the mower into the desired height of cut.
- 5. Lower the deck back into the cut position.

The anti-scalp wheels should always be at least 1/4" - 1/2" (6mm - 13mm) off of the ground. They are meant to keep the deck from scalping the ground in uneven terrain, they are not meant to run along the ground all of the time.



#### **UNEVEN TERRAIN**

Pre-plan mowing over uneven terrain so the grass will be dry, minimizing wheel slippage and spinning, which will damage the turf.



WARNING: To avoid the loss of control and to prevent overturning the mower, always mow across slopes, never up and down.

Pass diagonally through sharp dips. Avoid sharp drop offs completely to prevent "hanging up" the mower.



CAUTION: Keep the power unit motion control arms forward when going downhill.

Before mowing, check the area to determine the best procedure. Consider the grass type and height, and the type of uneven terrain on which the mowing is to take place.

Avoid sudden starts and stops while traveling up or down hill, and slow the ground speed while turning.

# **GRASS DISCHARGE**

The mower deck has been designed to provide maximum air flow for an even discharge of grass clippings. When mowing tall, or lush grasses, select a lower mower ground speed, or reduce the width of cut, for the best discharge efficiency.



WARNING: Never operate the mower with the discharge shield in the raised position.

For the best lawn appearance, do not mow when the grass is wet or heavy with dew. Wet grass could plug the discharge area of the mower, creating an unnatural load through the blades and spindles, possibly damaging the mower deck belt. Wet grass will also leave unsightly clumps on the lawn.

If the mower deck should become clogged, back the unit out of the uncut grass. If the mower will not clear itself, turn the PTO off, raise the deck, shut off the engine, set the brake, remove the key, disconnect the negative battery cable and clean the bottom of the deck.



WARNING: The operator should never attempt to leave the mower seat, with the mower blades rotating, with the mower in motion, or when the engine is running.

In medium and heavy cutting conditions, mow so the discharged clippings will be AWAY from the uncut grass. In light cutting, discharged clippings can be directed onto the uncut grass, allowing them to be recut finer, leaving the lawn almost free of unsightly clippings.

# **PARTS**

Use only genuine **EverRide** service parts. Off the shelf (after market) repair parts may compromise the integrity of the unit. Parts that do not meet **EverRide** specifications may fail, causing injury, equipment or property damage.

Our part numbers can change. When ordering, use the part numbers listed below. If the numbers do change, your **EverRide** dealer will have the correct numbers.

When ordering, make sure to have your power unit and engine serial numbers readily available. You should have recorded these numbers on the identification section of this manual.

Common Mower Parts	
Item	Part No.
Belt, Drive - 48" Deck	191378
Belt, Drive - 52" Deck	192015
Blades, Mower - 48" Deck	191107
Blades, Mower - 52" Deck	191108
Discharge Shield	191559
Shield, LH Deck Belt	191163
Shield, RH Deck Belt	191164
Spindle Assembly - 48"	191517
Spindle Assembly - 52"	191500
Spring, Extension - Deck Tension	356473
Wheel, Gauge - 5.0"	191201

Common Tractor Parts	
Item	Part No.
Air Filter, Primary	191642
Air Filter, Secondary	191643
Belt, Hydraulic Pump Drive	192111
Cable, Throttle	192137
Dampener, Steering Control	180231
Engine Oil Filter - Yanmar	191644
Fuel Filter	192121
Fuel Separator	192123
Fuel Separator - Element	191639
Fuel Tank Cap	192124
Hydraulic Oil Filter	180909
Hydraulic Oil Reservoir Cap	191600
Key, Ignition	105684
Pump Cooler Fan	180993
Switch, Ignition	180620
Switch, Safety	191256
Switch, PTO Engagement	136574
Switch, Seat Safety	181074
Wheel Fork Weldment	192272
Wire Harness	192060

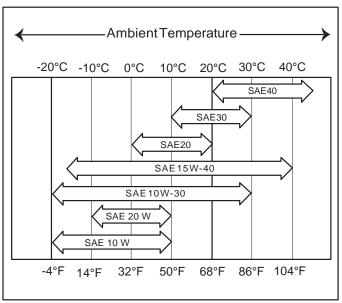
# **LUBRICATION AND PERIODIC MAINTENANCE**

# SPECIFICATIONS AND CAPACITIES

# **Engine Oil**

Use the appropriate SAE viscosity. Oil must meet or exceed; API Service category of CD or higher, ACEA service category of E-3, E-4, or E-5 or JASO service category of DH-1.

# Recommended Viscosity:



Yanmar Engine

# **Recommended Change Interval**

Initial Oil and Filter Change...... 50 hours

Oil and Filter Change, Thereafter..... Every 200 hours Yanmar Engines

# **Engine Coolant**

Use a long life coolant or an extended life coolant that meets or exceeds ASTM D6210, D4985. A conventional (green) ethylene or propylene glycol based coolant is also acceptable.

# Capacity

Radiator and eng	ine	3.46 quarts(3275 mL)
Coolant Recovery	/ Tank	.317 quarts (300 mL)

# 29 - LUBRICATION AND MAINTENANCE

# **Fuel Tank**

Inspect Fuel/Water Separator...... Daily

Replace Fuel/Water Separator Filter Element.................. 200 hours

# **Hydraulic System**

Recommended Oil Viscosity...... SAE 20W-50

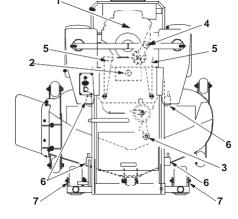
Hydraulic Oil and Filter Change, Thereafter.................. 300 hours

# **Grease Fittings**

Grease Interval (All fittings)...... See Chart Below

Note: Change intervals stated above are for normal usage. Due to adverse operating conditions that may be experienced (extremely dusty or muddy), change intervals may need to be more fre-

quent.



# **LUBRICATION INTERVALS**

REF	DESCRIPTION	FREQUENCY
1	ENGINE OIL LEVEL	DAILY
2	HYDRAULIC FLUID LEVEL	DAILY
3	DECK BELT TENSIONER	25 HOURS
4	PUMP BELT IDLER	25 HOURS
5	PUSH LINK PIVOTS (2)	40 HOURS
6	LIFT LINK PIVOTS (4)	40 HOURS
7	FRONT WHEEL AXLÉS (2)	40 HOURS

#### PERIODIC MAINTENANCE SCHEDULE

Recommended Interval, Each:

Day	50 hr	100 hr	200 hr	300 hr	400 hr	Item To Check	Action Required
						All controls, switches, indicators	Inspect and repair
						Hoses, fan belt, wiring	Inspect and repair
						Grease fittings	Lubricate
						Engine Coolant level	Check and replenish
						Radiator fins	Check and clean
					/-/	Engine Coolant	Flush and Fill
						Engine oil level	Check and replenish
	(*)					Engine oil and filter	Replace
						Hydraulic oil level	Check and replenish
	(*)					Hydraulic oil & filter	Replace
						Air screens	Clean off debris
						Air cleaner dust ejector	Clean
[·]						Air cleaner elements	Inspect, clean or replace
						Fuel tank level	Refill to full level
						Fuel filter	Replace
						Fuel/Water Separator Element	Replace
						Brake adjustment & balance	Check and adjust
						Tire pressure & condition	Check and adjust
						Wheel bolt torque	Check and tighten
						Steering free-play	Check and repair
						Check safety shut off system	Check and repair
						Clean grass buildup from deck	Clean
						Inspect mower blades	Check, sharpen or replace
						Check for loose hardware	Replace or re-torque
						Inspect belts	Tension or replace

Items marked (\*) indicate initial service interval only. Subsequent (later) intervals marked "·". Intervals above are for normal usage. Items marked [•] should be cleaned and inspected every 25 hours. Items marked /-/ are recommended to be replaced every 400 hours or yearly. Severe operating conditions (wet, dusty, etc.), or when previous servicing has indicated need for more frequent action, intervals may need to be more often.

#### **AVOID FUMES**



A CAUTION: Engine exhaust fumes contain carbon monoxide and can cause serious illness or death.



A CAUTION: Never run the mower's engine inside an enclosed area. Operate it only outside or in a location with proper ventilation.

#### SERVICE ACCESS



CAUTION: Shut off the engine before servicing the mower.



CAUTION: Make sure the seat is fully raised and propped in place with a block of wood or similar material before performing any maintenance on the mower.



A CAUTION: The seat can come down very quickly once the seat is released. Lower the seat slowly making sure to pay close attention that everything is clear.

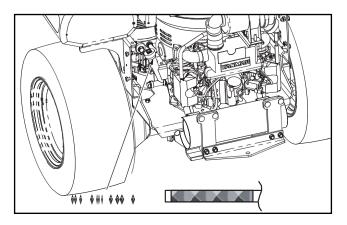
To access the battery and the hydraulic reservoir it is necessary to raise the seat of the power unit. Use caution while lifting and insure the seat is propped in the upright position before beginning service on the mower.

To lower the seat back down, remove the prop and lower the seat slowly back into contact with the frame.

#### **ENGINE OIL LEVEL**

**IMPORTANT:** Failure to check the engine oil level regularly could lead to serious engine problems if oil is too low.

The mower must be parked on level ground with the engine off. Clean the area around the dipstick before removing it. Remove the dipstick and check that the oil level is between the upper limit and the lower limit on the dipstick. Wipe off dipstick, momentarily reinstall in engine (WITHOUT TURNING IT) and check oil level again. Add oil as necessary to achieve the desired level. DO NOT OVERFILL. Reinstall and tighten the dipstick.



**IMPORTANT:** Use caution to prevent from overfilling the engine with oil.

**IMPORTANT:** Use only the oil specified for use in the engine owner's manual.

#### CHANGING THE ENGINE OIL



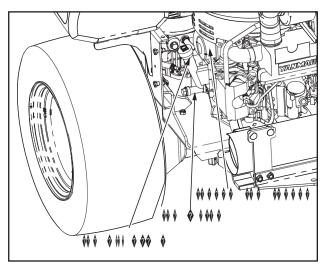


WARNING: Engine oil is a toxic substance. Dispose of used oil properly. Contact your local authorities for approved disposal methods or possible recycling.

Change the engine oil after 50 hours of operation. Change the oil each subsequent 200 hours of operation after the initial change.

1. Run the engine to warm the oil.

- 2. Park the mower on level ground.
- 3. Stop the engine, put the motion control arms in the park position and remove the key.
- Remove the oil drain screw and drain the oil into a suitable container while the engine is still warm.





WARNING: Hot engine oil can cause severe burns. Allow engine oil temperature to drop from hot to warm before attempting to drain and handle the oil.

- 5. Install the oil drain screw.
- 6. Remove the dipstick and refill with fresh oil.
- 7. Check the oil level.

# **OIL FILTER CHANGE**

Change the engine oil filter initially after the first 50 hours of use. Change the engine oil filter every 200 hours of operation after the initial change.

1. Drain the engine oil into a suitable container.



CAUTION: Before removing the oil filter, place a suitable pan under the filter connection.

- 2. Clean the area around the oil filter to keep dirt and debris from the engine and rotate the oil filter counterclockwise to remove it. Wipe off the surface where the filter mounts.
- 3. Coat a film of clean engine oil on the seal of the new filter.



- 4. Install a new filter rotating it clockwise until the seal contacts the mounting surface. Rotate the filter 3/4 of a turn more by hand.
- 5. Refill with engine oil as specified.
- 6. Run the engine for about 10 minutes, stop engine, and check for leakage around filter.
- 7. Check the engine oil levels. Add engine oil until the level is between the upper and lower limits.

### HYDROSTATIC MAINTENANCE



CAUTION: Avoid damage to the hydraulic components as a result of contamination. Be sure to wipe around the filler neck and cap before removal of the hydraulic oil reservoir cap. Do not open the oil reservoir cap unless it is absolutely necessary.

Check the reservoir daily for the proper fluid level.

The pump and motor units require fluid changes yearly or every 250 hours whichever occurs first. The system filter should be changed initially after the first 50 hours of break in. The fluid and filter should be changed and the system cleaned if the fluid would become contaminated with dirt, water, etc.

#### 33 - LUBRICATION & MAINTENANCE

**NOTE:** The integrated pump/motor units are equipped with bypass valves. Please note information in the operation section in relation to moving a stalled power unit.

#### **CHANGING HYDRAULIC FLUID**



CAUTION: Be sure the engine has been stopped, the motion control arms are in the park position, and the key has been removed before changing or checking the hydraulic oil in the mower.



CAUTION: Allow the hydraulic fluid an opportunity to cool. The oil may be hot and could cause serious burns.

- 1. Park the machine on a level surface, stop the engine, put the motion control arms in the park position and remove the key.
- 2. Clean the area around the reservoir filler cap and remove the filler cap from the reservoir.
- To drain the hydraulic fluid, place a suitable container under the hydraulic filter and remove it.
- 4. Place a thin coat of hydraulic oil on the gasket on the oil filter.
- 5. Install the hydraulic oil filter onto the filter adapter.
- Refill the hydraulic reservoir to the recommended level. Reinstall the oil reservoir filler cap.
- 7. Clean up any fluid which may have spilled.

#### **BLEEDING/PURGING THE HYDRAULICS**

**IMPORTANT:** Air in the hydraulic system is the NUMBER ONE cause of hydraulic pump failures. In all cases following hydraulic system service or repair, the hydraulic system MUST be correctly purged

of trapped air before placing the zero-turn mower back in operation.

- 1. Make sure the oil tank is full, the oil must barely cover the fill baffle inside of the tank.
- 2. Raise the rear unit tires off the floor and place it on suitable jack stands.
- 3. Open both pump bypass valves, one on each pump, two full turns.
- 4. Sitting in the operator's seat, start the engine and run it at idle.
- 5. Slowly cycle the motion control arms full forward and full reverse for 10 seconds in each direction, 5 or 6 times. This allows no load oil flow between the pumps and wheel motors.

**NOTE:** The rear tires should rotate, but they'll not be under load.

- 6. Shut off the engine, check and add hydraulic oil as necessary.
- 7. Close the bypass valves on both pumps. Do not over tighten.
- 8. Sitting in the operator's seat, start the engine and run it at idle.
- 9. Slowly cycle the motion control arms full forward and full reverse, 5 or 6 times.

**IMPORTANT:** The rear tires are now rotating under power. Do not touch or contact them. If they do not rotate after 2-3 cycles, stop immediately. There may still be air in the system. Let the pumps cool and try purging again from the beginning.

 Shut off the engine, check and add hydraulic oil as necessary and lower the unit back to the floor.

**NOTE:** It may be necessary to repeat purging procedures until all air is vented out of the hydraulic system.

#### **CHECKING THE HYDRAULIC HOSES**

Inspect the hydraulic hoses to insure they are in good working order every 200 hours.

Check both the hoses and hose clamps to insure there is no wear or damage. If either is found worn or damaged, repair or replace them at once.

#### **BATTERY MAINTENANCE**



WARNING: Battery posts, terminals and related accessories contain lead and lead components, chemicals known by the state of California to cause cancer and reproductive harm.

The original battery shipped with the mower is maintenance free and non-accessible.

If the battery is weak, the engine will be difficult to start. It is important to check the battery performance periodically.

# **INSTALLING THE BATTERY**

- 1. Insert the battery (1) in the tray with the positive post on the right side and negative post on the left side.
- 2. Install the positive battery cable clamp to the positive post on the battery.
- 3. Install the negative battery cable clamp to the negative post on the battery.
- 4. Secure the cables by tightening the 1/4-20 hex nuts securing the square head bolt.
- 5. Install the red terminal boot over both the positive post and the positive cable.
- Secure the battery in place by inserting one end of the hook band into the battery tray and running the other end over the top of the battery into the slot on the opposite end of the battery tray.

#### REMOVING THE BATTERY



WARNING: The battery terminals or metal tools could short against the metal components of the mower causing a spark that could ignite explosive battery gases. When removing the battery from the mower, do not allow the battery terminals to touch any part of the machine. Do not allow metal tools to touch metal parts of the machine while in contact with the battery terminals.



WARNING: Incorrect battery cable routing could damage the mower or cause a spark that could result in explosive battery gases being ignited.



WARNING: Always disconnect the black (negative) battery cable before disconnecting the red (positive) battery cable. Always reconnect the red (positive) battery cable first before reconnecting the black (negative) battery cable.

- Disengage the PTO engagement switch, put the motion control arms in the park position, turn the ignition key to off and remove the key.
- 2. Raise the seat and prop it in the upright position.
- 3. Disconnect the negative battery cable from the battery terminal.
- 4. Slide the red boot off of the positive battery terminal and remove the positive battery cable.
- 5. Remove the rubber strap securing the battery in place.
- 6. Carefully remove the battery using caution to avoid touching the terminal posts on any metal parts.

#### **CHARGING THE BATTERY**



WARNING: Charging the battery produces explosive gases. Never smoke near the battery and keep sparks and flames away.

**IMPORTANT:** Always keep the battery fully charged. This is extremely important when the temperature is below freezing. (32 degrees Fahrenheit or 0 degrees Celsius)

- Remove the battery from the battery compartment under the seat. (see "Removing The Battery" on the prior page)
- 2 Check the electrolyte level.

**NOTE:** It is only necessary to check the electrolyte level on batteries that are not maintenance free.

- Make sure the filler caps have been reinstalled on the battery and charge the battery 10-15 minutes on 25-30 amps or 30 minutes at 4-6 amps.
- 4. After the battery has been fully charged, disconnect the charger from the power source and then disconnect the battery from the charger.
- 5. Install the battery in the machine and connect the battery cables.

#### **CLEANING BATTERY AND TERMINALS**



CAUTION: The battery produces a flammable and explosive gas. The battery may explode. Do not smoke near the battery. Always wear eye protection and gloves. Do not allow direct metal contact across the battery posts. Always remove the negative battery cable first when removing the battery.

- 1. Disconnect and remove the battery.
- Wash the battery with a solution consisting of four tablespoons of baking soda to one gallon of water. Use caution to insure the solution does not get into the battery cells.
- Rinse the battery with plain water and allow to dry.
- 4. Clean the terminals and wire ends with a wire brush until they are bright.
- 5. Reinstall the battery.
- 6. Reattach the battery cables.
- 7. Apply a petroleum jelly or a silicone spray to prevent corrosion.

#### REPLACING FUSES

IMPORTANT: Avoid damage to the electrical circuit. Use only the same size fuse as was originally installed.

There are two fuses on your **EverRide** mower. Both are located next to the relay block under the seat plate on the RH side of the mower. Both are 30 amp fuses.

- 1. Remove the defective fuse from the socket.
- 2. Check the metal clip in the fuse window and discard the fuse if it is broken.
- 3. Install the new fuse in its socket.

# **SAFETY CHECKS**

Check all safety switches daily. Use the following instructions to check the performance of the system. If any of these tests should fail, it is necessary to have the unit repaired immediately.

1. Try to start the power unit when the operator is in the seat, the mower PTO off, and the left

hand motion control arm is not in the park position. Try to start the power unit after switching the RH arm out of the park position and putting the LH motion control arm into the park position. Try starting the power unit after taking both arms out of the park position. The starter must not crank in any of these instances.

- Try to start the power unit when the operator is in the seat, the mower PTO on, and the motion control arms in the park position. The starter must not crank in this situation.
- 3. Try to start the power unit when the operator is not in the seat, the PTO is off and the motion control arms are in the park position. The starter must not crank in this situation.

#### CHECKING THE KILL CIRCUITS

Check the kill circuits daily.

- 1. Run engine at 1/3 throttle, engage the mower PTO and lift off of the seat. The engine should stop within 3 seconds.
- Run engine at 1/3 throttle, engage the mower PTO, move a motion control arm out of the neutral lock and lift off of the seat. The engine should again stop within 3 seconds. Repeat for the opposite motion control arm.

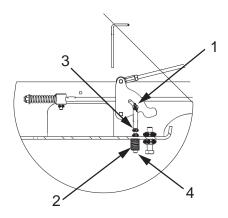
**NOTE:** If the machine does not pass either of these tests, DO NOT OPERATE THE UNIT. Take it to your **EverRide** Servicing Dealer.

#### **ELECTRIC CLUTCH STOP CHECK**

Start the engine and run at full RPM. Engage the mower PTO. Allow the engine RPM to stabilize and then disengage the PTO. The mower blades should stop turning in less than 7 seconds. If they do not stop within 7 seconds, take the mower to the dealer for service immediately.

#### **NEUTRAL ADJUSTMENT**

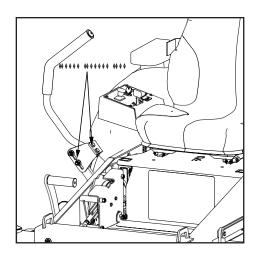
Before making any adjustments, be sure to check the tire air pressure. Incorrect air pressure can cause the unit to pull to one side. The correct air pressure is 20 p.s.i. in the front wheels and 12 p.s.i. in the rear.



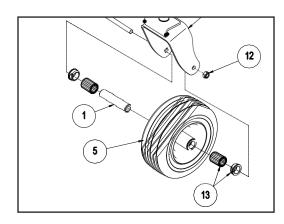
- 1. Stop the engine and remove the ignition key.
- 2. Tilt the seat forward.
- Move the control lever rearward and release the control lever. This control lever should return to a position where the control lever can be swung outward and lock in the neutral outward position without moving the control lever forward or rearward.
- 4. If adjustment is needed, move the control lever back to the inward position and begin to pull rearward. At this beginning rearward motion the clevis pin should begin to contact the end of the slot (1) and start putting pressure on the spring (2).
- 5. If adjustment is needed, loosen the nut against the yoke (3) and while applying slight rearward pressure on the motion control lever, turn the head of the adjustment bolt (4) in the appropriate direction until the lever is centered.

#### 37 - LUBRICATION AND MAINTENANCE

- Move the control lever rearward and release the control lever. This control lever should return to a position where the control lever can be swung outward and lock in the neutral outward position.
- After both sides have been adjusted, the handles can be aligned by loosening the hardware on the handles in the locations shown below.



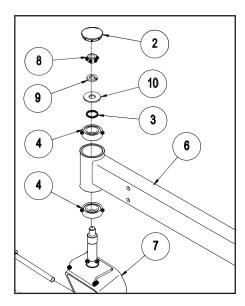
# SERVICING THE CASTER WHEEL ROLLER BEARINGS



- Park the unit on a level surface, put the motion control arms in the park position, turn off the engine and remove the key.
- 2. Raise the front of the power unit and support it with jackstands.

- 3. Remove the lock nut, bolt and wheel assembly from the wheel fork assembly.
- 4. Remove the bushings, bearings and the spacer tube from the wheel assembly.
- 5. Clean and inspect the bearings and pack with clean grease. Replace bearings as needed.
- 6. Install the spacer tube, bearings, and new seals.
- 7. Install the wheel assembly using the bolt and locknut removed in step 3.

# SERVICING THE CASTER PIVOT BEARINGS



- 1. Park the unit on a level surface, put the motion control arms in the park position, turn off the engine and remove the key.
- 2. Raise the front of the power unit and support it with jackstands.
- 3. Remove the cap (2), the 5/8 hex nut (8), the 5/8 flat washers (10) and lock washers (9), spiral washers (3) and the front wheel weldment (7).

4. Clean and inspect the bearings. Replace the bearings if needed.

NOTE: The bearings are press fit. Be sure to press only on the outer race.

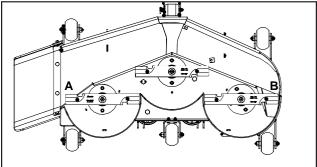
- 5. Reinstall the 5/8 flatwasher, 5/8 lockwasher, spiral washer and secure in place using the 5/8 hex nut removed prior.
- 6. Reinstall the cap.

#### LEVELING THE DECK



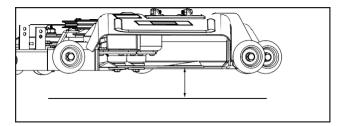
CAUTION: Stop the engine, put the motion control arms in the park position and remove the key from the ignition before performing any maintenance or repairs on this unit.

- 1. Set the front tire pressure to 20 p.s.i. and the rear tire pressure to 12 p.s.i.
- 2. Place the mower on a level surface.
- 3. Raise the mower deck to the highest position and adjust the cut height to 3 inches.
- 4. Lower the deck back to cut position.
- 5. Set both of the outside blades to be perpendicular to the mower as shown.



 Measure the height of the blade tips on both A and B and adjust the front adjustment bolts and the rear U-bolts to insure the deck is level from left to right. 7. Rotate the mower blades so they are parallel to the mower deck. Use the rear adjustment bolts to adjust the deck so that the rear blade tip is 1/8" higher than the front blade tip on the same blade.

Measure the blade heights to make sure they match what is shown on the height of cut dial. The height is measured as the distance between the ground and the bottom of the blade. If the blade height does not match the dial height, see Synchronizing Height of Cut.



#### SYNCHRONIZING HEIGHT OF CUT

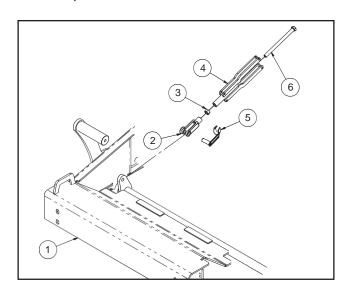


CAUTION: Stop the engine, put the motion control arms in the park position and remove the key from the ignition before performing any maintenance or repairs on this unit.

**NOTE:** It is necessary to insure the deck is level before synchronizing the height of cut dial with the deck blade height.

- Raise the mower deck to the highest position. Take the weight off of the deck lift linkage by inserting wood blocks under each corner of the deck and slowly lowering it until it is resting on the blocks.
- 2 Loosen the 1/2 jam nut (4) from the 1/2 adjustable yoke (2). Pull the 1/2" clevis spring pin (5) out of the adjustable yoke. If the blade height is higher than the height of cut dial, tighten the yoke onto the 1/2-13 x 4.5" bolt which runs through the height of cut index arm weldment (4). If the blade height is lower than the height of cut dial, then loosen the yoke on the 1/2-13 x 4.5" bolt.

**NOTE:** Set the height of cut to the front tip of the center blade.



- 3. Tighten the 1/2 jam nut back down to lock it into position.
- 4. Raise the deck back to the highest position and remove the blocks from below the deck. Measure the blade height again to insure it now matches the height on the dial. If not, then repeat the prior steps until the two heights are synchronized.

#### **DRIVE ADJUSTMENTS**

Steering and motion controls should be uniform during forward and reverse motions. The motion control arms should always return to neutral when released from the reverse position.



CAUTION: Never make any adjustments unless the engine has been stopped, the motion control arms are in the park position, and the ignition key has been removed.

# **ENGINE AIR CLEANER SERVICE**



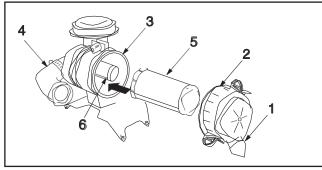
CAUTION: To prevent excessive engine wear, do not run the engine without the air cleaner installed.

IMPORTANT: The engine requires a large amount of air intake when running. Reduced air intake can impact engine performance. Always keep radiator screen clean. Always keep the covers and screens in place.



CAUTION: Touching hot surfaces can burn skin. The engine and components will be hot after the unit has been running. Allow the engine and components to cool before servicing the unit.

#### YANMAR AIR CLEANER SERVICE



The Unloader Valve (1) will allow for the removal of fine dirt and dust from the canister body (3) without disassembly. While in operation, this valve will suck closed at 1/3 to 1/2 throttle.

- With the engine shut off, squeeze the valve by hand to release dust and debris.
- In very dusty operating conditions, the valve may have to be opened every 2 to 3 hours.

Remove the air cleaner cover and make a general inspection of the entire assembly. If it is unusually dirty or if dirt build-up is easily visible on the inside of the canister body, the entire assembly, including the inlet hose, must be removed from the engine.

With the air cleaner removed from the engine, and with the cartridges and gaskets removed, wash the hard parts with cleaning solvent and blow them dry

with compressed air. **Do not wash the air cleaner** cartridges!

**NOTE:** If canister gaskets are broken or missing, BOTH air cleaner elements MUST be replaced.

Inspect and clean the primary air cleaner cartridge (5) assembly every 25 hours. Replace the paper element yearly or every 250 hours, whichever comes first.

The primary (large) cartridge is cleaned by rolling and "tapping" it on a hard surface. If the paper pleats are punctured or torn, the primary element must be replaced.

Replace the secondary cartridge (6) yearly or every 250 hours whichever comes first.

Inspect the secondary cartridge. If there is dust inside the air inlet, this indicates a leaking gasket or that the cartridge may need serviced more often.

**IMPORTANT: DO NOT** attempt to clean the secondary element. This filter element must be replaced if it is unusually dirty or damaged.

**NOTE:** Operation in dusty conditions may require more frequent maintenance of the primary and secondary air cleaner cartridges.



CAUTION: Do not use pressurized air to clean paper element.

#### **FUEL SYSTEM SERVICE**



CAUTION: Diesel Fuel vapors are extremely explosive and flammable under certain conditions. Do not smoke while handling fuel. Keep fuel away from flames or sparks. Shut off engine and allow the machine to cool before servicing or refueling. Always work in a well ventilated area. Never overfill

the fuel tank and clean up spilled fuel immediately.



CAUTION: Be sure the engine is stopped, the motion control arms are in the park position and the key is removed before making any repairs.



CAUTION: Be sure to inspect the fuel lines periodically. The lines are subject to deterioration and wear. Fuel could leak out onto a running engine and cause a fire.



WARNING: Improper use of solvents can result in fire or explosion. Do not use gasoline, diesel fuel or low flash point solvents to clean the fuel filter and/or the fuel pump. Clean only in a well ventilated area away from sources of sparks or flame, including any appliances with a pilot light.

**IMPORTANT:** Special care should be taken when the fuel lines are removed for maintenance or repair. Close both ends of the fuel line with a piece of paper or a clean cloth to prevent dust or dirt particles from contaminating the fuel. Even a small amount of dust or dirt can cause premature wear or failure of fuel components.

The fuel line connections are composed of rubber and they will age regardless of the service period. If there is any deterioration of the fuel lines or clamps, replace them.

Check the fuel filter regularly. If it is clogged by debris or contaminated with water, replace it.

The fuel filter cannot be disassembled. If the fuel filter becomes clogged, replace it with a new one. Adhere to the procedure following to replace the fuel filter.

The fuel filter is located between the engine and the left side rail of the mower frame.

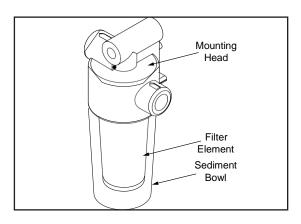
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- 1. Park the machine safely.
- 2. Cut the flow to the fuel filter by setting the fuel shutoff valve to off.
- 3. Disconnect the hose clamps from the fuel filter.
- 4. Slide the fuel line off of both ends of the fuel filter.
- 5. Install the new fuel filter paying close attention to the flow direction noted on the fuel filter.
- 6. Turn the fuel shut off to the ON position.

The fuel pump can not be disassembled. If the fuel pump fails, replace it with a new one.

#### **FUEL/WATER SEPARATOR SERVICE**

This unit is supplied with a fuel/water separator that will pull out water and potential contaminants to protect your fuel pump and engine. When water is visible in the see-through bowl or engine performance is noticeably reduced, service is required.



- 1. Park the machine safely. Ensure all engine components are cool before performing maintenance on the vehicle.
- 2 Turn the fuel selector valve to the "off" position.

- Spin the see through sediment bowl off of the mounting head by turning in a counterclockwise motion.
- 4. Remove the used filter element and replace it with a new element.
- 5. Thread the see through sediment bowl on to the mounting head and tighten hand tight only.
- 6. Start the engine and check for leaks. Correct as necessary with the engine off.

## **FLUSH & FILL ENGINE COOLANT**



**DANGER:** NEVER remove the radiator cap if the engine is hot. Steam and hot engine coolant will spurt out and seriously burn you. Allow the engine to cool down before you attempt to remove the radiator cap.



**DANGER:** Securely fasten the radiator cap after you check the radiator. Steam can spurt out during engine operation if the cap is loose.



DANGER: Always check the levels of the engine coolant by observing the reserve tank.

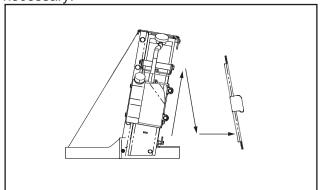
Engine coolant contaminated with rust or scale reduces the cooling effect. Even when extended life engine coolant is properly mixed, the engine coolant gets contaminated as its ingredients deteriorate. Replace the engine coolant every 400 hours or once a year.

- 1. Remove the radiator cap.
- 2. Loosen and remove the radiator hose and drain the engine coolant.
- 3. After draining the engine coolant, reinstall and tighten the radiator hose.

- 4. Pour the 50/50 mix of engine coolant/water slowly into the radiator until it is even with the lip of the engine coolant filler port. Make sure that air bubbles do not develop as you fill the radiator. As the coolant enters the radiator, squeeze the radiator hose to help remove air from the cooling system.
- 5. Fasten the radiator cap and align the tabs on the back side of the radiator cap with the notches on the engine coolant filler port. Press down and turn the cap clockwise 90 degrees.
- Remove the cap on the reserve tank and fill it to the LOW (Cold) mark with engine coolant. Reinstall the cap.
- 7. Check the hose that connects the reserve tank to the radiator. Be sure it is securely connected and there are no cracks or damage. If the hose is damaged, engine coolant will leak out instead of going into the reserve tank.
- 8. Run the engine until it is at operating temperature. Check the level of engine coolant in the reserve tank. When the engine is running and the engine coolant is at normal temperature, the coolant level in the tank should be at the FULL (HOT) mark. If the engine coolant is not at the FULL (HOT) mark, add additional engine coolant to the reserve tank to bring the level to the FULL (HOT) mark.

#### **COOLING SYSTEM CLEANING**

Before each use check to make sure the radiator screen is free from grass and debris and clean if necessary.



To remove the screen, slide the screen up, pull out on screen and pull down on the screen while pulling the bottom of the screen towards you. If the cooling air intake is clogged, engine cooling will deteriorate which can lead to engine damage.



CAUTION: Do not run the engine before all cooling system parts are reinstalled to keep the cooling as intended.

#### DAILY CHECK OF COOLING SYSTEM

Check the level of the engine coolant in the reserve tank. When the engine is cold, the level in the tank should be at the LOW (COLD) mark.

#### PRIMING THE FUEL SYSTEM

The fuel system needs to be primed if the engine is to be started the first time, if the unit has been run out of fuel or after fuel system maintenance such as fuel filter or fuel separator.

- 1. Ensure the fuel selector valve has selected a tank to operate from.
- 2. Check the level of fuel in the selected fuel tank. Refill the tank if necessary.
- 3. Turn the key to "ON" position. The electric fuel pump will feed fuel into the system.
- 4. When the fuel filter is clear of air bubbles, the engine is ready to start.
- Never use the starter motor to crank the engine to prime the fuel system. This may cause the starter motor to overheat and damage the coils, pinion and/or ring gear.

#### SEASONAL STORAGE

Your EverRide mower represents an investment which you should get the greatest possible benefit. Therefore, when the mowing season is over, the mower should be thoroughly checked and prepared for storage so a minimum amount of time will be required to put it to work for the next season.

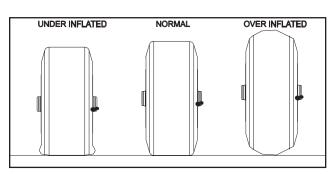
#### 43 - LUBRICATION AND MAINTENANCE

The following procedures are recommended for seasonal storage.

- Thoroughly clean entire EverRide mower, especially the engine and the top and underside of the deck.
- 2. Remove, replace, or sharpen the mowing blades.
- 3. Check and adjust the deck belt.
- Service the EverRide mower as noted on the lubrication schedule on page 29. Tighten all fasteners to the recommended torque, as shown on the Bolt Torque Chart on page 47.
- Check the mower for damaged or excessively worn parts. Make replacements immediately with genuine EverRide service parts.
- Power units to be stored over 30 days should be completely drained of fuel to prevent gum deposits from forming on injectors, fuel filter, and the tank.
- Repaint or spray touch up paint on the mower where necessary to prevent corrosion and to maintain the appearance. Replace all illegible safety decals.
- 8. Store the mower in a clean, dry location. If the mower deck will be removed for storage, make sure it is resting on blocks with the wheels raised from the ground or floor.
- 9. Change the power unit engine oil before the first use after storage. See "Changing the Engine Oil" on page 31.

#### TIRE AND WHEEL MAINTENANCE

Visually inspect the tires each time before use. Be careful not to run the tires under or over inflated. This can cause tire damage. The correct tire pressure for the front tires is 20 p.s.i. and rear wheels is 12 p.s.i.





CAUTION: Separation of a tire and rim can cause an explosion that could cause serious injury or death.



A

CAUTION: Check the tires for low pressure, cuts, bubbles, damaged rims, or missing lug bolts and nuts.



CAUTION: Always use a clip-on chuck with an extension long enough to allow you to stand on one side of the wheel while inflating the tires. Do not stand directly in front of the tire while inflating.



CAUTION: Never weld or heat a tire and wheel assembly. The heat can cause the air inside of the tire to expand and result in a tire explosion. Welding also can structurally weaken or deform the wheel.

When reinstalling the wheel after service, be sure to torque the nuts to 75 ft. lbs. (101 N•m). Drive 200-250 yards and then re-torque.

#### **BLADE MAINTENANCE**



CAUTION: Before removing the blades, be sure the engine has stopped and the

## 45 - LUBRICATION AND MAINTENANCE

key has been removed.



CAUTION: The blades may be sharp. Wear gloves or wrap them in a towel before handling them.

Inspect the blades daily for straitness, sharpness, and balance. Replace the blades if they are cracked, worn, bent or out of balance.

**NOTE**: Keep blades sharp. Mowing with dull blades will cause poor cut performance. It will also put additional strain on the engine by slowing the mower cutting speed.

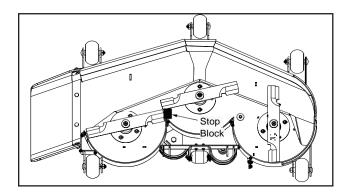


WARNING: Never try to straighten a blade which has been bent or try to weld a blade that is cracked. Always replace with a new blade to assure safety.

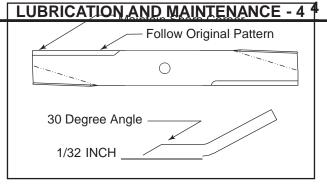
To sharpen the blades, remove the blades by inserting a block of wood and turning the blade bolt counter clockwise.



CAUTION: Always wear safety eye protection when sharpening the blades.

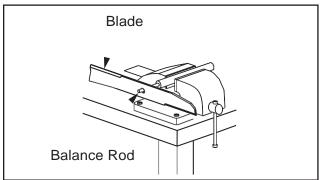


Be sure to wear a thick glove or wrap the blade in a towel to protect your hands from being cut. Insert the blades in a vise and use a mill file or grinder. File the blade along the original angle until the blade tip is at a 30° angle again.



**IMPORTANT:** When sharpening blades, be sure to grind the same amount on each side. Unbalanced blades will cause excessive vibration and could cause the spindles to wear prematurely.

Check the blade balance by inserting a horizontal rod through the center hole of the blade. The heavy side of the blade will drop down. Sharpen the heavy side of the blade until the blade is balanced.



After sharpening, install the blades back onto the mower deck. Make sure the wings are facing up. Reinstall the blade bolt and lockwasher and torque the blade bolt to 110 ft. lbs.

# CLEANING GRASS BUILDUP FROM DECK



CAUTION: Before cleaning grass buildup, be sure the engine has stopped and the key has been removed.

Cleaning the underside of the deck regularly will help maintain deck cutting efficiency. Clean the underside of the deck as often as possible. To gain access to the underside of the deck, depress the deck lift foot pedal and move the deck cut height adjustment to the highest setting. Raise the front of the power unit and support it with jackstands.

Clean out any grass buildup from under the deck and discharge shield.

#### **BELTS - GENERAL INFORMATION**

Inspect the belt pulley grooves and flanges for wear. A new belt, or one in good condition, should not "bottom out" in the pulley groove. Replace the belt when the belt touches the bottom of the groove otherwise the belt will slip excessively.

Always use caution when changing a belt. Never pry a belt to try to get it on a pulley. This could cut or damage the belt fibers.

Always keep oil and grease away from the belts and never use belt dressings. These materials will break down the construction of the belt and lead to premature failure.

Belts should be checked regularly, and replaced approximately at 200 hour intervals. Belts should also be replaced any time the belt(s) show evidence of cracking, missing pieces, friction burns from slipping, or other extreme damage. Small cracks or fabric polishing are normal.

Small branches and other similar debris can get onto the top of the deck, into the pulleys, which may cause the belt(s) to break or come off the pulleys. Make sure the area to be mowed is cleared of this debris, and make sure all belt guards are in place, before mowing.

To guarantee long life of the belts, always use genuine **EverRide** belts. Off the shelf belts (hardware store items) do not meet **EverRide** specifications for strength and longevity.

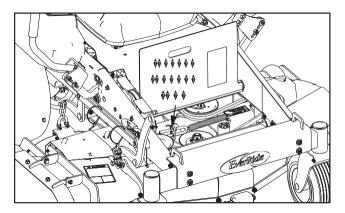
#### **DRIVE BELT R & R**



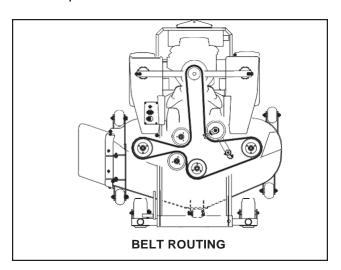
WARNING: Most service work requires the engine to be shut OFF. To prevent

injury while working on the mower, remove the ignition key and disconnect the negative (-) cable from the battery.

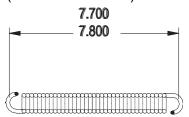
 Set the mower in the lowest height of cut. Raise the floor pan. Remove the belt shield(s). Loosen tension on the belt by loosening the two 3/8-16 nuts on the u-bolt for the tension arm. Roll the drive belt off the idler pulley.



 Install a new drive belt, making sure it is routed according to the decal on the bottom of the floor pan.



 Tighten the 3/8-16 nut until the length of the spring, inside hook to inside hook is 7.7-7.8 inches (196 mm - 198 mm).

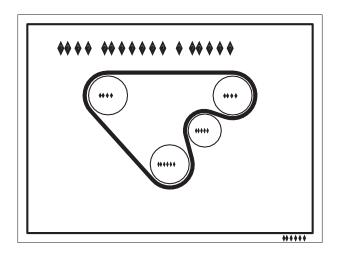


**NOTE:** Make sure the belt guide is positioned in the correct location. The point of the belt guide should point toward the RH spindle pulley.

4. Reinstall the belt shields. Lower the floor pan.

#### PUMP BELT R & R

- Make sure the mower is on a firm level surface, the PTO switch is off, the engine is shut off, the motion control levers are in the park position, the negative battery cable is removed, and the lift control lever is unlocked.
- 2. Place the deck in the highest position.
- Release the deck belt tension by loosening the tension spring. Remove the belt from the electric clutch. It is not necessary to remove the belt from any other pulleys.
- 4. Release the tension from the pump belt by using a 3/8" breaker bar in the square hole on the tension arm. Pull back on the tension arm and pull the belt out from behind the pulley. Use caution when releasing the belt tension arm as there is pressure on the arm.
- Slide the belt off of the pump pulley. The belt will have to be slid above the pump pulley to allow the belt to be removed from the other pulleys.
- Slide the belt off of the pump pulleys and it now should slide easily off of the engine pulley.
- 7. Install the new belt by sliding it above the pump pulley. Route the belt as shown below.
- 8. Pull the idler pulley on the tension arm back and slide the belt under the pulley.



- Reinstall the deck belt drive on the clutch and make sure it is routed properly on all pulleys.
- 10. Re-tension the deck belt idler using the deck belt tension explanation on page 45.
- 11. Reattach the negative battery cable.

# **47 - BOLT TORQUE CHART**

## **FASTENER TORQUES**

Mounting bolts and fasteners may tend to work loose during operation due to vibration or stress. A visual check of the complete mower should be made daily. All fasteners should be checked for correct retention torque, weekly, and more often if the unit is being operated in rough areas.

All locally procured fastening hardware should be Grade 5 or equivalent. Use the following chart for general torque specifications for Grade 5 standard fasteners. Special fastener torques for the mower are shown separately below.

	SAE Grade 5					
Fastener Size	lbsft.	lbsft.		N-m		
	Lubricated		Dry	Lubricated		Dry
1/4-20	7		9	9		12
5/16-18	15		20	20		27
3/8-16	30		35	41		47
7/16-14	45		55	61		75
1/2-13	60		80	81		108
9/16-12	100		120	136		163
5/8-11	130		170	176		231
3/4-10	220		300	298		407

	Metric Class 8.8 or 9.8				
Fastener Size	lbsft.	lbsft.			
	Lubricated	Dry	Lubricated	Dry	
M8	17	20	23	27	
M10	34	40	46	54	
M12	55	70	75	95	
M14	90	110	122	149	
M16	145	175	197	237	
M20	280	350	380	475	

**NOTE:** "Lubricated" means coated with a lubricant such as engine oil. "Dry" means plain or zinc plated without any lubrication.

#### **IMPORTANT:**

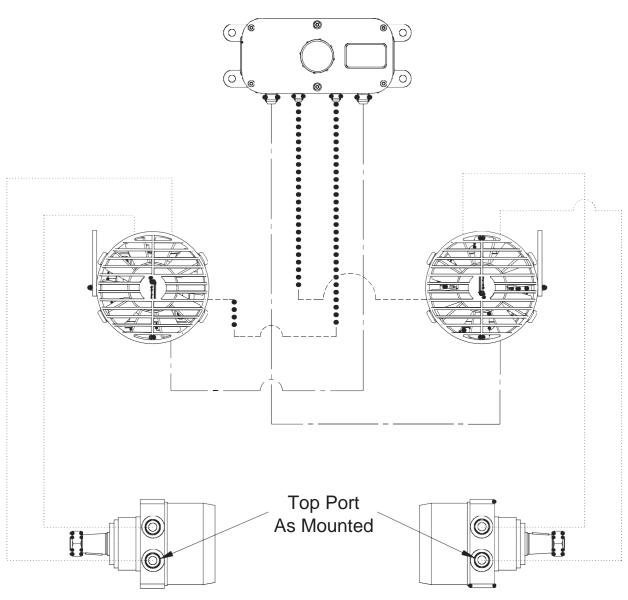
Torque values SHOULD NOT be followed when fastening plastic parts!

# **SPECIAL FASTENER TORQUES**

Mowing Blade Retaining Bolt - <b>Grade 8</b> (9/16-12 x 1-3/4)	110 to 130 ft. lbs. (150-177 N•m)
Spindle Pulley Retaining Nut (3/4-16 UNF)	80 ft. lbs. (109 N•m)
Spindle Housing Retaining Nuts (7/16-20 UNF)	35-45 ft. lbs. (48-61 N•m)
Wheel Nuts (1/2-20 Lug Nuts)	75 ft. lbs. (101 N•m)
Hub Retaining Nuts	350-450 ft. lbs. (475-610 N•m)

**NOTE:** Refer to your engine owner's manual for engine hardware torques.



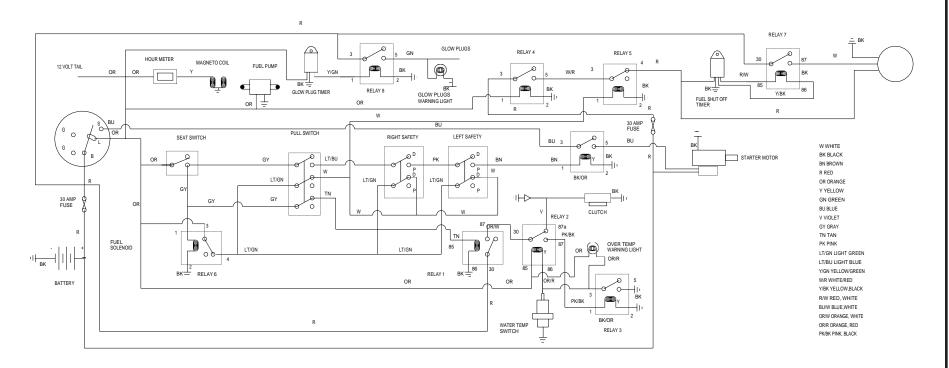


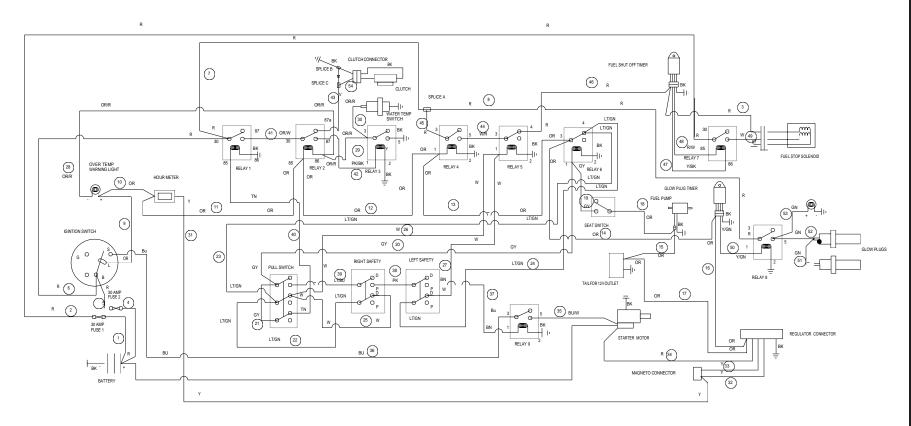
High Pressure

—-- Charge Pump Inlet

----- Case Drain

# **HYDRAULIC SCHEMATIC - 48**





# **MOWER TROUBLESHOOTING GUIDE-52**

The following troubleshooting guide is for the mower deck and its drive. This assumes the power unit engine is running to prescribed specifications. Consult the mower repair reference for all system checks.

Before attempting repair or test, observe the general condition of the power unit and mower. Make certain the power unit is operating properly and the mower is setup correctly. The following information may give you some hints in what to look for when attempting to solve a problem with the mower. If the problem cannot be easily solved, contact your **EverRide** dealer.

SYMPTOM	PROBLEM	CORRECTION
Excessive Vibration.	Loose spindle/blade fasteners.	Re-torque or replace as necessary.
	Blade interference with grass	
	buildup in deck.	Clean the underside of the deck.
	Blades out of balance.	Balance blades according to
		instructions found on page 44.
	Blade(s) broken or worn badly.	Replace mowing blades in sets of 3.
	Engine mounting bolts are loose.	Tighten the engine mounting bolts.
	Engine/Idler/Blade pulley loose.	Tighten the pulley.
	Engine Pulley damaged.	Contact Dealer.
	Failed spindle bearing	Replace Bearings.
Uneven Cutting Height.	Blades dull.	Sharpen or replace blades.
	Cutting blade(s) is/are bent.	Install new cutting blades.
	Deck is not level.	Level Deck.
	Anti-scalp not set correctly.	Adjust height of anti-scalp wheel.
	Grass buildup under deck.	Clean underside of deck.
	Incorrect tire pressure.	Adjust p.s.i. to 12 p.s.i rear and 15
		p.s.i. front.
	Blade spindle bent.	Contact Dealer.
	Ground speed too fast	Cut at slower speed.
Blades Wear Too Fast.	Cutting in sandy conditions.	Increase deck mowing height.
	Cutting in rocky conditions.	Increase deck mowing height.
	Heat treat has been removed by	
	sharpening with grinder.	Replace mowing blades in sets of 3.
Not Cutting Clean.	Blades dull.	Sharpen or replace blades.
	Blades installed upside down.	Install blades correctly.
	Blade RPM too low.	Use full throttle position.

# 51 - MOWER TROUBLESHOOTING GUIDE

Mower deck not level. See cutting heights (page 25).

Tires under inflated (12 p.s.i. rear

and 20 p.s.i. front).

Mower tires mashing grass. Too wet or lush to mow. Reverse

direction and re-mow the area.

Ground speed too fast. Reduce ground speed.

Excessive grass buildup

under mower deck. Clean underside of deck.

Streaking or Windrow

**Conditions in Swath.** Blades dull. Sharpen or replace blades.

Blades installed upside down. Install blades correctly.

Conditions too wet for mowing. Allow grass to dry before mowing.

Excessive grass buildup

under mower deck. Clean underside of deck.

Ground speed too fast for

conditions. Operate at slower speeds.

Blades Don't Rotate. Deck belt is worn, loose Install new deck belt.

or broken.

Deck belt off pulley. Reinstall deck belt.

Clutch not operating. Inspect. Replace if necessary.

Mower Loads Power Unit. Engine RPM too low. Use full throttle position.

Ground speed too fast. Reduce ground speed.

Excessive grass buildup

under mower deck. Clean underside of deck.

Excessive Noise. Grass and lawn debris buildup under the deck will cause excessive noise

as the mower blades will contact the eventual hardened buildup. Clean the underside of the deck regularly, especially if the mowing conditions were

wet or extremely lush.

# 53 - POWER UNIT TROUBLESHOOTING GUIDE

SYMPTOM	PROBLEM	CORRECTION
Engine Idling Poorly	Injector nozzles adjusted incorrectly.	Contact dealer.
Engine Runs But Won't Move	Drive belt loose or broken. Hydrostatic reservoir oil low. Pump bypass valve open. Hydrostatic oil filter plugged. Damaged pump or motor.	Tighten or replace the drive belt. Refill reservoir. Put in closed position. Replace filter. Contact dealer.
Power Unit Loses Power or Hydrostat System Overheats	Hydrostatic oil reserve too low. Pump or motor damaged. Hydrostatic oil reservoir blowing oil out of cap.	Refill reservoir. Contact dealer.  Overfill or water contaminated.
Loss of Power or System Will Not Operate in Either Direction	Restrictions in air cleaner. Poor compression. Steering linkage needs adjustment. Hydraulic bypass valve open. Pump belt broken or worn. Pump belt off of pulley.	Service air cleaner. Contact dealer. Contact dealer. Close the bypass valve. Replace belt. Reinstall belt on pulley.
Engine Overheating	Air intake screen clogged. Cooling fins clogged.	Service air intake screen. Clean fins.
Engine Stalling While Blades are Engaged	Operator not in seat. Faulty safety system. Spindle bearing failure. Blades locked by foreign matter.	Sit on seat. Contact dealer. Contact dealer. Clean underside of deck.
Low Engine Oil Pressure	Low oil level. Oil diluted or too light.	Add oil. Change oil and locate source of contamination.
High Oil Consumption	Numerous possible causes.	Contact dealer.
Engine Will Not Turn Over	Dead battery. Bad ground connection. Poor terminal connection at battery. Poor wiring harness connections. Bad park switch. Bad PTO switch. Motion control arms not in park position. PTO switch engaged. Operator not in seat. Blown fuse.	Charge unit or jump start. Correct the connection. Correct the connection. Correct the connection. Contact dealer. Contact dealer. Put arms in park. Disengage PTO switch. Sit in seat. Replace fuse.

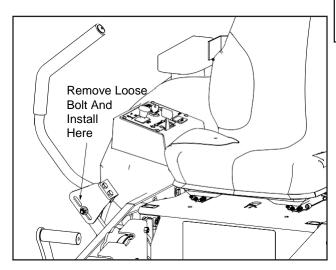
# POWER UNIT TROUBLESHOOTING GUIDE -54

SYMPTOM	PROBLEM	CORRECTION
Engine Turns Over But Doesn't Start	No fuel or line plugged. Bad fuel solenoid. Fuel valve turned off. Dirt in fuel filter. Dirt, water, or stale fuel. Incorrect fuel in fuel system.	Fill tank or replace line. Contact dealer. Turn fuel valve on. Replace fuel filter. Contact dealer. Drain tank and replace with proper fuel.
	PTO switch is on. Control levers are not in park. No operator in seat. Bad seat switch. Bad park switch.	Turn PTO switch off. Put levers in park. Sit on seat. Contact dealer. Contact dealer.
Power Unit Jerky When Starting or Operates in One Direction Only	Motion control linkage needs adjustment. Hydrostatic pump failure. Wheel motor failure. Bypass valve open.	Contact dealer. Contact dealer. Contact dealer. Close bypass.
Power Unit Creeps When Motion Control Arms are in Neutral	Motion control linkage needs adjustment.	Contact dealer.
Power Unit Circles or Veers	Motion control linkage needs adjustment. Hydrostatic pump failure. Wheel motor failure. Tires improperly inflated.	Contact dealer. Contact dealer. Contact dealer. Adjust front tire pressure 20 p.s.i. and rear tires to 12 p.s.i.
Abnormal Vibration	Engine mounting bolts loose. Loose engine pulley. Engine pulley damaged.	Torque engine bolts. Tighten pulley. Contact dealer.

#### **SETUP INSTRUCTIONS**

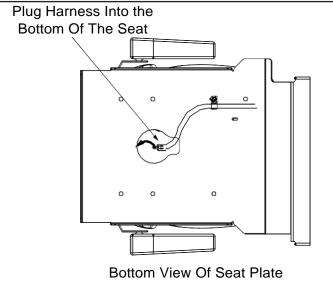
Mowers are shipped partially assembled. After uncrating the power unit and mower deck, initial setup is required.

- Remove all packaging. If the seat was not installed at the factory, carefully set it aside for later installation.
- 2. The motion control arms have been lowered during packaging. Remove the loose 3/8-16 x 1.50 bolts from the handles and reinstall them in the location shown.



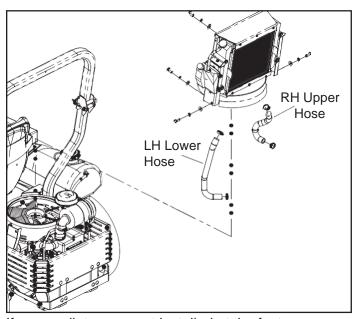
If your unit does not have the seat installed, proceed with step 3.

- 3. Remove the 5/16 flat washers and locknuts from the four studs protruding from bottom of the seat.
- Route the seat switch end of the wiring harness up through the seat plate. Plug the harness into the seat switch located on the bottom of the seat.



5. Connect the seat to the seat plate by sliding the 5/16 studs through the seat plate and secure it in place using the 5/16 flat washer's and locknuts removed in step 3. The front left stud requires the installation of a P-Clip which was slid over the harness durring assembly. Route the harness as shown.

#### **RADIATOR ASSEMBLY & INSTALLATION**



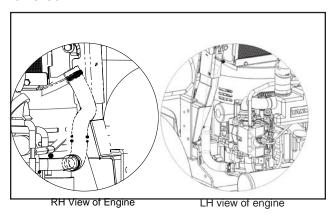
If your radiator was not installed at the factory,

insert a pair of hose clamps over the hose ends and attach the RH upper radiator hose by sliding one end of the hose on the radiator outlet. Repeat for the LH lower radiator hose.

Slide the radiator assembly down over the LH and RH radiator support uprights which are installed from the factory. Make sure the radiator fits securely over the rubber seal mounted on the outside of the engine fan.

Secure the radiator assembly in place using four  $3/8-16 \times .75$  hex bolts, 3/8 lockwashers and 5/16 flatwashers. Torque hardware according to the torque chart on page .

After securing the radiator assembly in place, it may be necessary to center the assembly over the engine fan shroud by loosening the top two bolts attaching the LH and RH radiator support uprights to the mower frame (the top holes in the uprights are slotted). Push forward or pull back on the LH and RH radiator support uprights, tipping the radiator assembly forwards or backwards as necessary to better center it over the engine fan shroud and keep it from hitting the shield on the back of the seat plate when the seat is raised and lowered.



Attach the loose ends of the upper and lower radiator hoses to the openings on the engine block. Slide the hose clamps down and tightly secure them to both the engine block and the radiator.

Fill the radiator with anti-freeze and water by following the flush and fill procedures in the operator's manual.

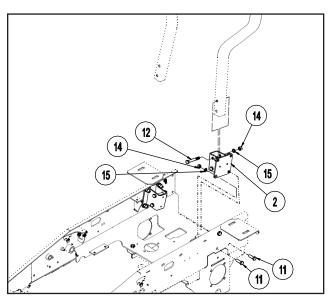
#### **BATTERY INSTALLATION**

The battery supplied with your mower is sealed, it will not be necessary to activate it. The battery cables were disconnected during shipment. Reconnect the battery cables prior to attempting to start the machine. If the engine does not turn over by turning the ignition switch, it may be necessary to charge the battery.

#### HYDRAULIC OIL SERVICE

The power unit is shipped with hydraulic oil in the system. If the tracking is erratic, make sure the dealer purges the system according to the repair manual instructions. If the oil level is low, below the edge of the baffle in the oil reservoir, fill with SAE 20W-50 non-detergent motor oil.

#### ATTACHING THE ROPS TO THE MOWER



If your unit does not have the mount pockets installed, follow these directions to install.

Using a hoist or a jack, raise the rear of the tractor off of the ground. Insert floor jacks under the axle to support the weight of the tractor. Remove the five lug nuts securing the wheel to the wheel hub.

Install the LH ROPS mount pocket (2) to the inside of the mainframe above the wheel motor, with the pocket tipped outward at the top. Loosely secure with four 1/2-13 x 1 1/2 bolts (11) and retain with 1/2" lockwashers (15) and 1/2-13 standard hex nuts (14). DO NOT TORQUE. Repeat for the RH ROPS mount pocket.

Raise and place the ROPS posts into the pockets. Loosely install 1/2-13 x 3 1/2 bolts (10) through the pockets and ROPS posts and retain with 1/2 inch lockwashers (13) and standard 1/2-13 hex nuts (14).

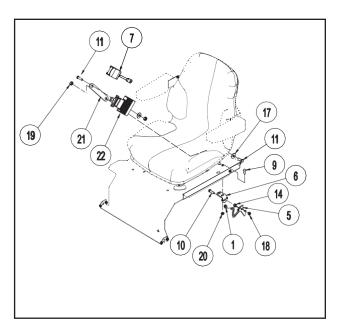
**NOTE:** If a folding ROPS is to be installed, the top must be installed so it tips rearward.

Torque all hardware using the torque values for grade 5 hardware in the torque chart on page.

Reistall the rear wheels to the wheel hub and lower the mower back to the ground.

**NOTE:** Both the folding and fixed ROPS will come with a 181592 star knob. It is only used with the folding ROPS.

#### ATTACHING THE SEAT LATCH & SEAT BELT



If your seat latch was not installed at the factory, install the Hook Latch (5) by inserting a 3/8-16 x 1.25 Hex Bolt (10) through the Latch Bracket (6) through a 3/8-16 hex nut (14), and through the latch bracket (5). Secure with a 3/8-16 crown locknut.

Install the Mower seat latch assembly by first inserting two 5/16-18 x 1 carriage bolts down through the predrilled holes in the seat plate and through the latch bracket (6). Slide the compression spring (1) between the seat plate and the small tooth on the latch bracket (5). Secure the 5/16 carriage bolts with 5/16-18 whiz locknuts (20).

Install the seat belt bracket ends to the mounts on either side of the seat, just below the arm rest hinge points. The roll up belt housing (22) must be installed with the extension (21) installed on the left side of the seat. To secure the roll up belt housing, first insert a 7/16-14 x 1 1/4 bolt (11) through a 7/16 flatwasher (17), through the seat bracket, and through one end of the extension. Secure with a 7/16-14 crown locknut (19). Attach the roll up belt housing to the extension by inserting a 7/16-14 x 1.25 bolt (11) through the roll up belt housing and through the extension. Secure with a 7/16 flat washer and 7/16-14 crown locknut.

Torque all hardware using the torque values for grade 5 hardware in the torque chart on page .

# **59 - SPECIFICATIONS**

MODEL EZYN2048S or EZYN2052S

Engine Yanmar 2V750-CVER
Type V-Twin Liquid Cooled
Displacement 45.7 cid (749 cc)
Horsepower (Gross) 17.83 HP (13.33 kW)

Maximum Torque 32.8 lb-ft (44.5 N-m) @ 3200 RPM

Bore 3.07 in (78 mm)
Stroke 3.09 in (78.4 mm)

Crankcase Capacity 2.4 US qts (2.27 L) Dipstick Upper Limit /

1.4 US qts (1.31 L) Dipstick Lower Limit

**FUEL** 

Type Diesel

Tank Capacity - Both Tanks 12 US gal (44.8 L)

Consumption @ 3200 rpm 1.2 gal/hr

HYDROSTATIC DRIVE SYSTEM

Steering 2 Hand Levers

Transmission Twin Pumps and Wheel Motors

Hydraulic System Capacity 1 gal (3.8 L)

Maximum Travel Speeds Forward 10 mph (14.5 km/h) - Reverse 4

mph (4.83 km/h)

Tire Size

Rear Drive Tires, 23x10.5-12 TurfTread
Front Caster Tires, 13 x 5.00 - 6 Ribbed Tread

Deck 6 Anti-Scalp Rollers

**ELECTRICAL SYSTEM** 

Battery 12V 433 CCA - Negative Ground

Charging System 12V, 20 amp
Starter 12V Electric
Fuse Protection 30 amp

Power Take Off (PTO) Ogura® GT-2.5 Clutch

Blade Brake Dry Single Disk (thru PTO Clutch/Brake)

PARKING BRAKE

Motion Control Lever Actuated Integrated Steering Lever Disc Brakes

MOWER DECK 48 Inch Side Discharge 52 Inch Side Discharge

Style High Volume Tunnel Deck

# **SPECIFICATIONS - 58**

**Dimensions** 

Width 48.5 in (1232 mm) 53.6 in (1361 mm)

Depth 4.1 - 5.6 in (104 - 140 mm)
Steel Thickness Full 7 Gauge - Welded Construction

Deck Lift Foot Operated

HOC Adjustment Fingertip Control Dial Gauge
Cutting Height (.25 in Increments) 1.5 - 5.5 in (38 - 140 mm)

Mowing Blades

Tip Speed @ 3600 RPM 18,800 fpm (5730 m/min) 18,900 fpm (5760 m/min)

Length 16.50 in (4199 mm) 18.00 in (4570 mm)

Thickness 0.203 in (4.98 mm)

Number of Blades Three

ROPS Fixed or Folding

#### WEIGHTS/MEASUREMENTS

Shipping Weight w/o Mower Deck 945 lbs (429 kg) Folding ROPS Weight\* 56 lbs (25 kg) 48 inch Deck Weight\* 174 lbs (79 kg) 52 inch deck Weight\* 182 lbs (83 kg) Overall Width w/o Mower Deck 45.7 in (1161 mm) Overall Width - 48 in Deck 48.5 in (1232 mm) Overall Width - 52 in Deck 53.6 in (1361 mm) Overall Length 76 in (1930 mm) Overall Height w/o ROPS 48.5 in (1232 mm) Overall Height w/ROPS 71.0 in (1803 mm) Wheelbase 46.7 in (1186 mm) **Ground Clearance\*\*** 5.0 in (127 mm)

<sup>\*</sup> Add unit, ROPS and deck weight for total Mower weight.

<sup>\*\*</sup> With deck in the transport position.

# PLEASE USE THIS SECTION FOR THE FOLLOWING INFORMATION

When needing replacement parts, contact your **EverRide** dealer. They will need the model and serial numbers of the mower to give you the most up-to-date parts for your equipment. Refer the dealer to the parts illustration title and the item number of the parts required.

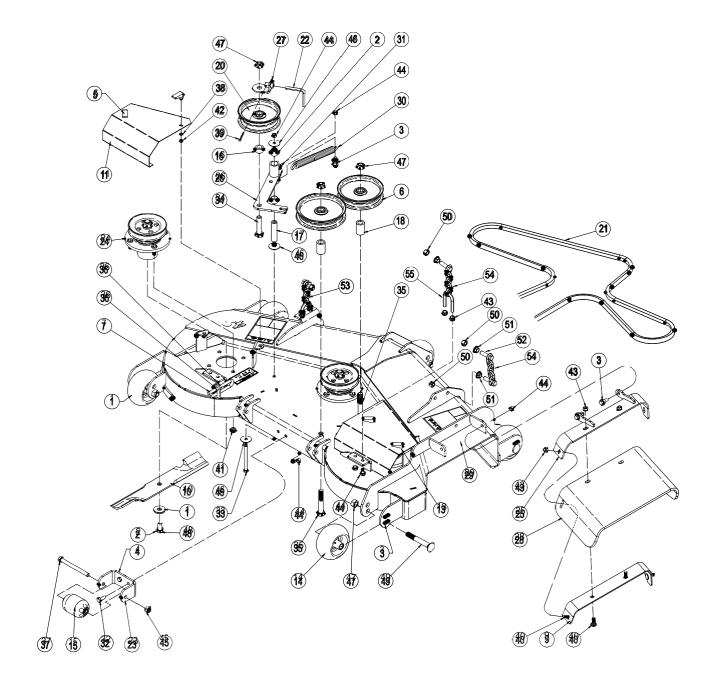
Use only genuine EverRide service parts on EverRide equipment.

Refer to the parts illustration to assist with assembly and disassembly of the mower.

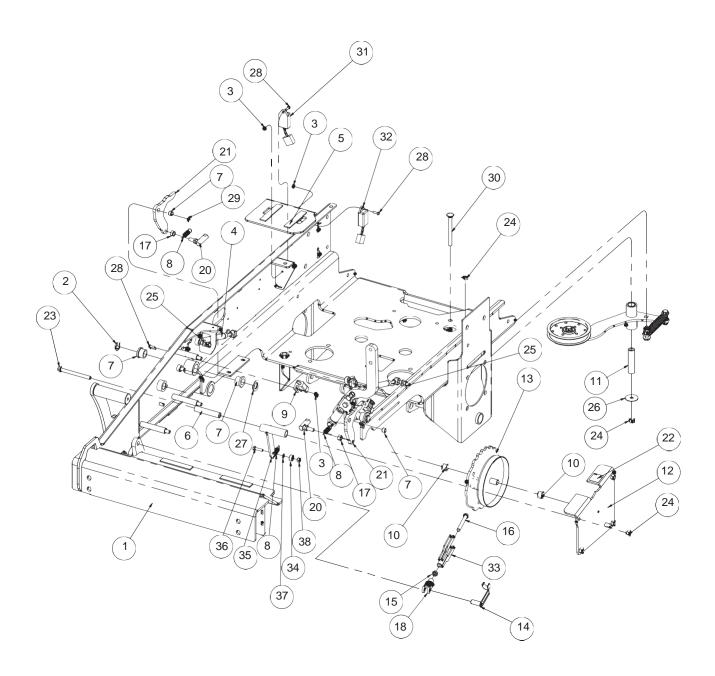
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EverRide reserves the right to change, modify, or eliminate from time to time, for technical or other reasons, certain or all data, specifications, or equipment of the product, or the products themselves, without any liability or obligation.



ITEM 1 2 3	PART NO 103906 105546	QTY 3 2 3	DESCRIPTION WASHER, M14 X M40 X M4.5 FLAT Y BRG, SLV .753 X .878 X .750 BOLT, 1/2 X 1.06 X 3/8-16 SLD 5 Y
4	135139 140280	1	PULLEY, FLAT 6.00 X .635 W/BRG
5	160169	2	DECAL, WARNING - SHIELD
6	161955	1	PULLEY, FLAT 5.50 X .635 W/BRG
7	181194	1	U-BOLT, RD .63 X 4.50 X 3/8-16 SP Y
8	181258	2	DECAL, DANGER - DECK
9 10	191098	1 3	PLATE, DISCHG SHIELD SUPPORT
10	191107 191108	3	BLADE, 16.500 LO-LIFT - 48" BLADE, 18.000 LO-LIFT - 52"
11	191163	1	SHIELD, LH ZTM BELT
12	191164	1	SHIELD, RH ZTM BELT
13	191165	4	LATCH, 12-24 SOUTHCO
14	191201	5	WHEEL, GAUGE 5.00 X 3.31
15 16	191226	1	WHEEL, GAUGE 2.56 X 3.94 SYM
16 17	191255 191347	1 1	BUSHING, .688 X 1.13 X .625 TUBE, RD .750 X .156 X 3.05
18	191355	2	BUSHING, .688 X 1.13 X 1.68
19	191369	1	DECAL, DECK 48"
	191370	1	DECAL, DECK 52"
20	191374	1	PULLEY, FLAT 5.00 X .635 W/BRG
21	191378	1	BELT, B138K SPECIAL - 48"
22	192015	1	BELT, B145K SPECIAL - 52"
22 23	191381 191486	1 1	BELT KEEPER, 90° W/HOLE BRACKET, ANTI-SCALP
24	191517	3	ASSY, SPINDLE BALL BRG W/PULLEY - 48"
2-7	191500	3	ASSY, SPINDLE BALL BRG W/PULLEY - 52"
25	191531	1	WLDT, DISCHARGE SHIELD BRACKET
26	191533	1	WLDT, DECK BELT TENSIONER
27	191537	1	WLDT, BELT KEEPER Y
28	191559	1	SHIELD, RUBBER DISCHARGE
29	192247	1	WLDT, 48" SD DECK HORNET DSL
30	192251 356473	1 1	WLDT, 52" SD DECK HORNET DSL SPRING, EXT .910 X .177 X 6.15 Y
31	959994	1	FTG, 1/4-28 TPR 45 GREASE ZERK
32	960046	2	BOLT, 3/8-16 X 1.00 HEX 5 Y
33	960058	1	BOLT, 3/8-16 X 4.00 HEX 5 Y
34	960160	1	BOLT, 5/8-11 X 2.75 HEX 5 Y
35	960163	2	BOLT, 5/8-11 X 3.50 HEX 5 Y
36 37	960502	2	NUT, 3/8-16 STD HEX GR5 Y
37 38	961343 961701	1 4	BOLT,M12X1.75X130HH GR8.8 Y WASHER, M6 REG FLAT Y
39	962038	1	PIN, COT .156 X 1.50 EXTP Y
40	963020	4	BOLT, 3/8-16 X 1.00 CRG 5 Y
41	964005	12	NUT, 7/16-20 HEX GR5 Y
42	964014	4	LOCKNUT, 12-24 NYLOC Y
43	964016	10	LOCKNUT, 3/8-16 WHIZ Y
44 45	964022	12	LOCKNUT, 3/8-16 CROWN Y LOCKNUT, M12 X 1.75 NYLOC Y
45 46	964044 964502	1 3	LOCKNUT, M12 X 1.75 NYLOC Y WASHER, .375 X 1.50 X .O63 FLAT Y
47	967392	8	LOCKNUT, 5/8-11 CROWN Y
48	967397		BOLT, 9/16-12 X 1.00 HEX 8 Y
49	968088	3 5 5 5	BOLT, 5/8-11 X 4.50 CRG Y
50	964061	5	LOCKNUT, 7/16-14 CENTER
51 52	967342	5	LOCKNUT, 7/16-14 WHIZ
52 53	960081 150110	5 1	BOLT, 7/16-14 X 1.50 HEX Y CHAIN, 4 LINKS 1/4"
53 54	150110	3	CHAIN, 4 LINKS 1/4 CHAIN, 5 LINKS 1/4"
55	181017	3	U-BOLT, RD 1.00 X 2.50 X 3/8-16 Y

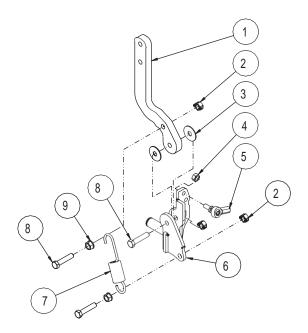


# HANDLE & HEIGHT OF CUT ASSEMBLY - 64

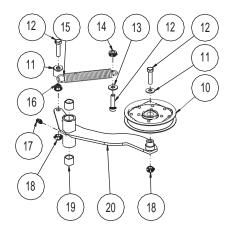
ITEM	PART NO	QTY	DESCRIPTION
1	192010	1	WLDT, UNIBODY HORNET DIESEL
2	130886	2	E-RING, .750 X .050 Y
3	130923	6	NUT, 10-24 KEPS Y
4	180231	2	DAMPNER, STEERING CONTROL
5	180897	6	FOAM, .125 X .750 X 4.00
6	191151	4	SPACER, .63 X .385 X 3.250 Y
7	103380	2	BEARING SLV, .377 X .503 X .375
8	191183	2	SPRING, EXT .500 X .041 X 1.75
9	191256	2	SWITCH, PLUNGER DP - N.O N.C.
10	191298	2	BRG, SLV .627 X .752 X .500 BRNZ
11	191347	1	TUBE, Ø.750 X Ø.438 X 3.047
12	191528	1	WLDT, HOC COVER
13	191617	1	WLDT, HOC CAM CONTROL S/O
14	191295	1	PIN, CVS SPG 1/2" YOKE SPEC Y
15	964011	1	NUT, 1/2-13 JAM GR 5
16	967189	1	BOLT, 1/2-13 X 4.50 HEX 8 Y
17	967054	2	NUT, 3/8-24 STD HEX
18	161897	1	YOKE, ADJUSTABLE 1/2-13 Y
19	192095	1	SUB ASSY, HOC INDEXER
20	191186	2	BALL JOINT, 3/8 X 24
21	191137	2	PLATE, BRAKE LEVER
22	192214	1	DECAL, HOC
23	960058	4	BOLT, 3/8-16 X 4.00 HEX 5 Y
24	964022	6	LOCKNUT, 3/8-16 CROWN Y
25	964047	4	LOCKNUT, M8-1.25 CROWN Y
26	964502	1	WASHER, .375 X 1.50 X .063 FLAT Y
27	967061	2	BUSHING, MACH .750 X 1.25 X .075 Y
28	967340	6	SCREW, 10-24 X .625 PAN PHL MAC Y
29	967358	2	E-RING, .375 X .035 Y
30	967403	1	BOLT, 3/8-16 X 4.00 CRG 5 Y
31	N/A	1	FUEL SOLENOID TIMER - ENG. MFG ONLY
32	N/A	1	GLOW PLUG TIMER - ENG. MFG. ONLY
33	191532	1	WLDT, HOC LINK
34	191185	1	BRG, BAL .250 X .688 X .313
35	191527	1	WLDT, HOC INDEX ARM
36	960002	1	BOLT, 1/4-20 X 1.00 HEX 5
37	961701	1	WASHER, M6 REG FLAT Y
38	964048	1	LOCKNUT, 1/4-20 NYLOC

# 65 - HANDLE CONTROLS/PUMP TENSIONER

#### **Handle Control**



# **Pump Tensioner**



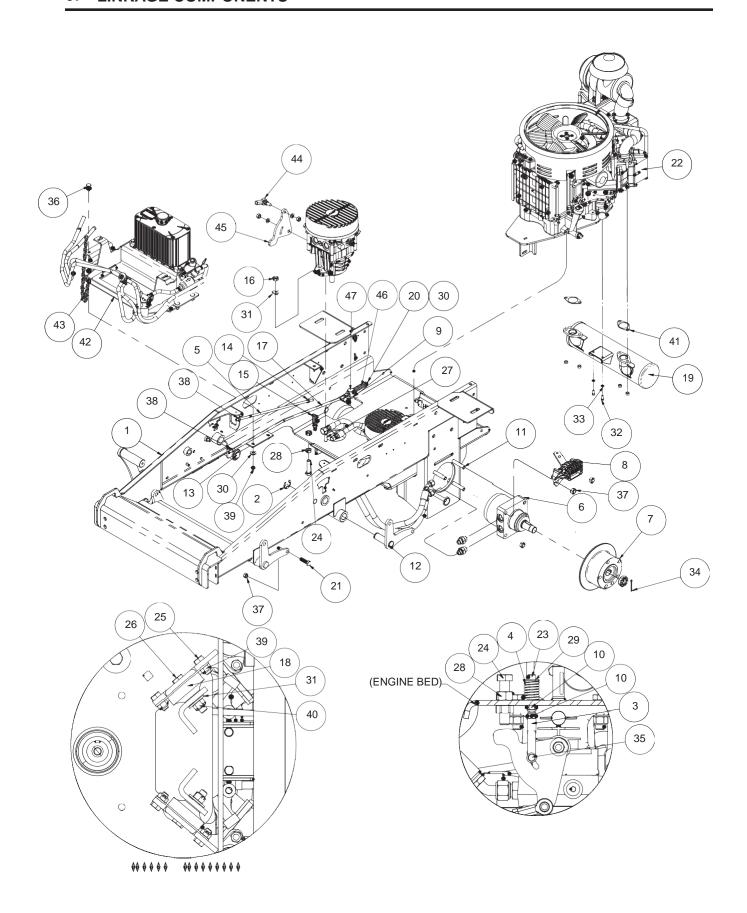
# HANDLE CONTROLS/PUMP TENSIONER - 66

#### **Handle Control**

ITEM	PART NO	QTY	DESCRIPTION
1	191082	1	PLATE, STEERING CONTROL
2	964022	3	LOCKNUT, 3/8-16 CROWN Y
3	180961	2	WASHER, .400 X 1.27 X .062 NYLON
4	964003	1	NUT, 5/16-24 STD HEX GR5 Y
5	180606	1	BALL JOINT, RH 5/16 FMAL W/STD
6	191513	1	WLDT, RH STEERING CONTROL
	191510	1	WLDT, LH STEERING CONTROL
7	191261	1	SPRING, EXT .980 X .162 X 4.00 B
8	960049	3	BOLT, 3/8-16 X 1.75 HEX 5 Y
9	964016	2	LOCKNUT, 3/8-16 WHIZ Y

# **Pump Tensioner**

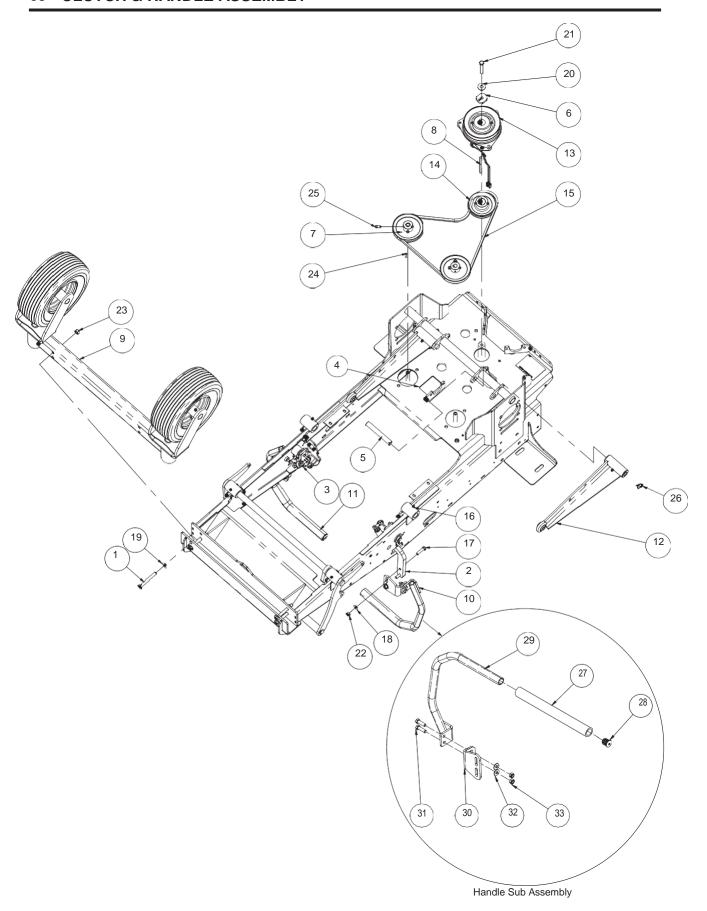
ITEM	PART NO	QTY	DESCRIPTION
10	180927	1	PULLEY, FLAT 4.50 X .669 W/BRG
11	960701	3	WASHER, .313 REG FLAT Y
12	960048	3	BOLT, 3/8-16 X 1.50 HEX 5 Y
13	191179	4	BRG, FLG .750 X 1.00 X .750 BRNZ
14	964016	1	LOCKNUT, 3/8-16 WHIZ
15	110580	1	SPRING, EXT .875 X .125 X 4.25 Y
16	964016	2	LOCKNUT, 3/8-16 WHIZ Y
17	959995	1	FTG, 1/4-28 STRGT GREASE ZERK
18	964022	2	LOCKNUT, 3/8-16 CROWN Y
19	105546	2	BRG, SLV .753 X .878 X .750
20	192014	1	WLDT, PUMP BELT TENSIONER



#### HANDLE CONTRIDUESXIBLENCIONER - 68

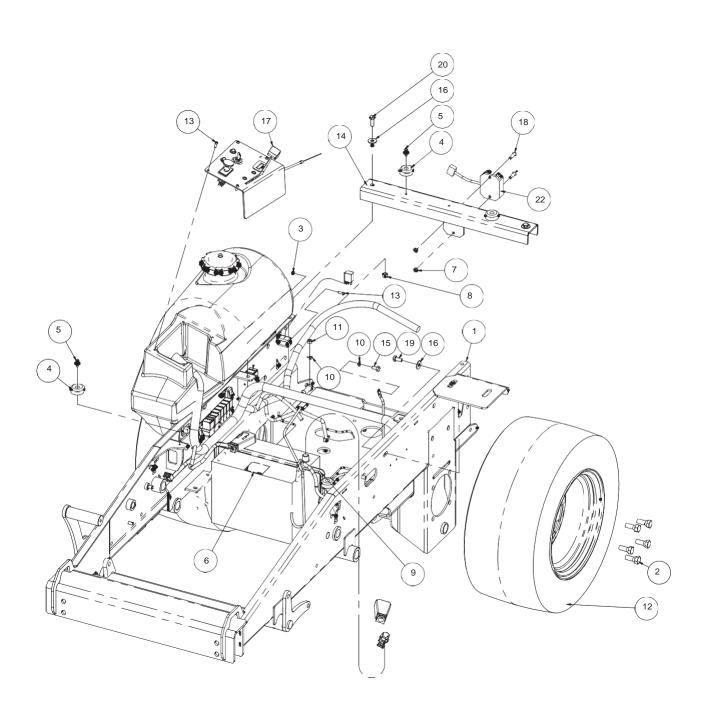
ITEM	PART NO	QTY	DESCRIPTION
1	192010	1	WLDT, UNIBODY HORNET DIESEL
2	180922	2	E-RING, 1.00 X .050 Y
3	180956	2	YOKE, 1/4-20 RH ADJUSTABLE
4	180957	2	SPRING, COM .784 X .092 X 1.50
5	191080	2	ROD, PUMP CONTROL HORNET
6	191103	2	MOTOR, PARKER TL195 WHEEL
7	191110	2	HUB, WHEEL - 5 BOLT, 8" DISC
8	191111	1	CALIPER, M15 BRAKE & BRKT CCW
9	191112	1	CALIPER, M15 BRAKE & BRKT CW
10	964048	4	LOCKNUT, 1/4-20 NYLOC Y
11	191509	2	WLDT, WHEEL MOTOR PLATE
12	191511	1	WLDT, LH REAR DECK LIFT
13	191512	1	WLDT, RH REAR DECK LIFT
14	967338	2	NUT, 5/16-24 HEX GR5 LH Y
15	967350	2	RING, RUE .250 x .041 x .844
16	964025	4	LOCKNUT, 7/16-14 CROWN Y
17	192122	2	ROD, BRAKE LONG C
18	192104	3	ISOLATOR CONICAL MOUNT
19	192113	1	MUFFLER, YANMAR 18 HP DIESEL
20	964066	2	LOCKNUT, 3/8-24 CROWN
21	960117	2	BOLT, 1/2-13 x 2.25 HEX
22	N/A	1	SUB ASSY, ENGINE YANMAR DIESEL
23	967393	2	BOLT, 1/4-20 X 2.75 SOC 8 Y
24	473450	2	BOLT, 1/2-13X2 3/4 GR 2 Y
25	960022	6	BOLT, 5/16-18 X .750 HEX 5 Y
26	960050	3	BOLT, 3/8-16 X 2.00 HEX 5 Y
27	960081	4	BOLT, 7/16-14 X 1.50 HEX 5 Y
28	960504	2	NUT, 1/2-13 STD HEX GR5 Y
29	960700	2	WASHER, .250 REG FLAT Y
30	960701	4	WASHER, .313 REG FLAT Y
31	960702	7	WASHER, .375 REG FLAT Y
32	961264	2	BOLT, M6 X 1.00 X 16 HEX 8.8 Y
33	961602	2	WASHER, M6 SPRG LOCK Y
34	962020	2	PIN, COT .125 X 1.75 EXTP Y
35	962200	2	PIN, CVS .250 X 1.00 X .859 Y
36	963074	4	BOLT, 5/16-18 X 1.00 CRG 2 Y
37	964000	10	LOCKNUT, 1/2-13 CROWN Y
38	964003	2	NUT, 5/16-24 STD HEX GR5 Y
39	964021	10	LOCKNUT, 5/16-18 CROWN Y
40	964022	3	LOCKNUT, 3/8-16 CROWN Y
41	191645	2	GASKET, MUFF. W/NUTS & WSHRS
42	192267	1	WLDT, BATTERY TRAY S/O
43	191487	1	CHAIN, .148 X 27 LINKS
43 44	180982	2	BALL JOINT, 5/16 FMAL W/STD
45	191081	2	PLATE, PUMP CONTROL ARM
46	191177	2	SPING, COM .710 X .142 X 2.50
47	191176	2	PIN, BRAKE LINKAGE
77	131170	_	I IIV, DIVANE LIIVIVAOL

# 69 - CLUTCH & HANDLE ASSEMBLY



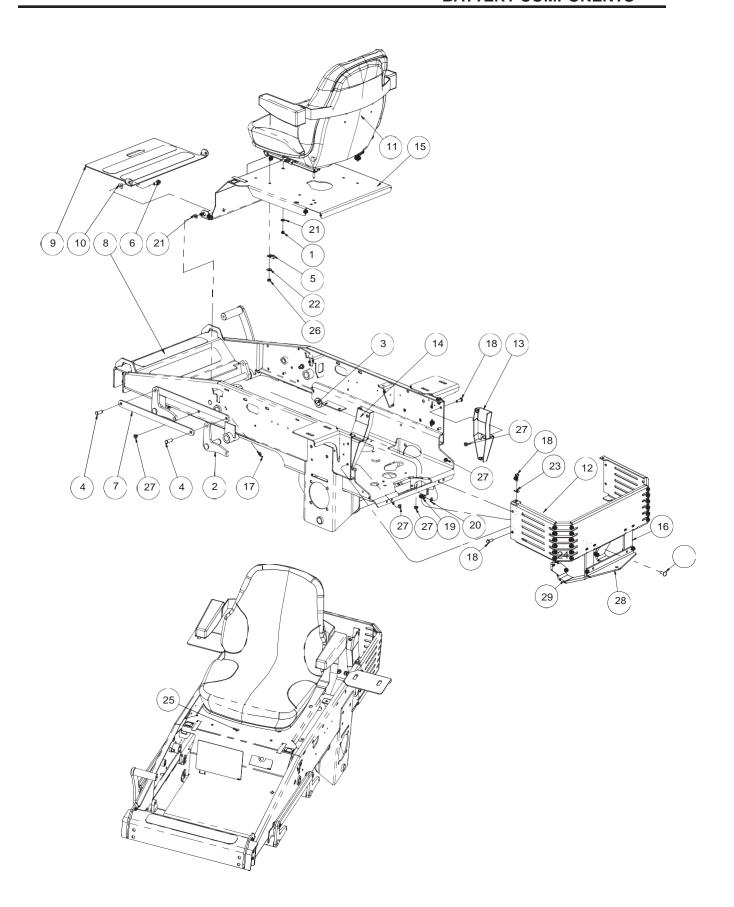
# 71 - BATTERY COMPONENTS

ITEM	PART NO	QTY	DESCRIPTION
1	967399	4	BOLT, 7/16-14 X 3.5 HEX 8 Y
2	192084	1	SUB ASSY RH HANDLE CONTROLS
3	192085	1	SUB ASSY LH HANDLE CONTROLS
4	180779	1	DECAL, BELT ROUTING - PUMPS
5	191048	2	PIN, MFG .750X5.38X4.88 XDRL Y
6	191203	1	WASHER, CLUTCH UNIVERSAL W/KEY
7	191265	2	PULLEY, V-BELT 5.00 X .591 W/KEY
8	192067	1	KEY, .250 X .250 X 4.875 SQ
9	192076	1	FRONT AXLE ASSEMBLY
10	181349	1	ASSY, RH HANDLE W/ GRIP S/O
11	181350	1	ASSY, LH HANDLE W/ GRIP S/O
12	192094	2	SUB ASSY, DECK PUSH LINK
13	192107	1	CLUTCH, OGURA GT2.5 Ø1.125 D
14	192110	1	PULLEY, V-BELT 4.50 X 1.13 W/KEY
15	192111	1	BELT, A57K ARAMID CORD
16	959995	4	FTG, 1/4-28 STRGT GREASE ZERK
17	960048	4	BOLT, 3/8-16 X 1.50 HEX 5 Y
18	960701	4	WASHER, .313 REG FLAT Y
19	960702	4	WASHER, .375 REG FLAT Y
20	960703	1	WASHER, .438 REG FLAT Y
21	19M7810	1	BOLT, M10 X 1.50 X 80 FGH
22	964022	4	LOCKNUT, 3/8-16 CROWN Y
23	964025	4	LOCKNUT, 7/16-14 CROWN Y
24	966058	2	KEY, M5 X M5 X M30 RD
25	967343	4	SET SCREW, 5/16-18 X .625 SQ CUP
26	967357	2	RING, RUE .750 x .080 x 2.081
27	180617	1	GRIP, FOAM
28	180639	1	PLUG, 7/8" END
29	181348	1	WLDT, LH STEERING HANDLE
	181347	1	WLDT, RH STEERING HANDLE
30	191083	1	PLATE, STEERING CONTROL BENT
31	960047	2	BOLT, 3/8-16 X 1.25 HEX 5 Y
32	960701	2	WASHER, .313 REG FLAT Y
33	964022	2	LOCKNUT, 3/8-16 CROWN Y



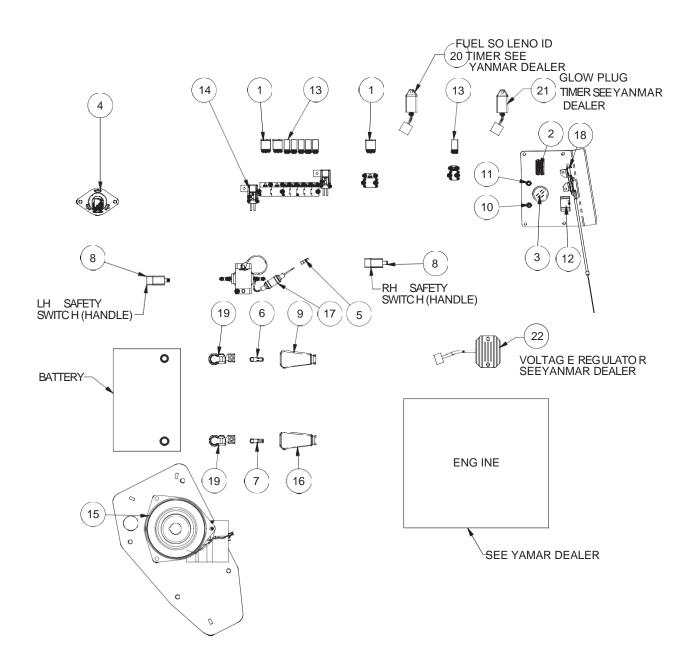
# 73 - SEAT & ENGINE GUARD PLATE ASSEMBLY

ITEM	PART NO	QTY	DESCRIPTION
1	192010	1	WLDT, UNIBODY HORNET DIESEL
2	967133	10	BOLT, 1/2-20 X 1.00 LUG Y
3	130923	6	NUT, 10-24 KEPS Y
4	180390	4	BUMPER, RUBBER .625 X 1.50 DIA
5	968100	4	RIVET, 3/16 X .500 POP ST
6	180996	1	DECAL, DANGER - BATTERY
7	964048	2	LOCKNUT, 1/4-20 NYLOC Y
8	964022	2	LOCKNUT, 3/8-16 CROWN Y
9	181228	1	BAND, 15" RUBBER BUNGEE
10	961603	2	WASHER, M8 SPRG LOCK Y
11	961553	1	NUT, M8 X 1.25 HEX GR8.8 Y
12	191228	2	ASSY, TIRE & RIM - 23X10.50-12
13	967340	10	SCREW, 10-24 X .625 PAN PHL MAC Y
14	192263	1	PLATE, TOP CROSSMEMBER
15	961283	1	BOLT, 8M X 1.25 X 16 HEX 8.8 Y
16	960702	6	WASHER, .375 REG FLAT Y
17	N/A	1	SUB ASSY, CONTROL PANEL
18	960002	2	BOLT, 1/4-20 X 1.00 HEX 5 Y
19	960045	4	BOLT, 3/8-16 X .750 HEX 5 Y
20	960046	2	BOLT, 3/8-16 X 1.00 HEX 5 Y
21	960047	4	BOLT, 3/8-16 X 1.25 HEX 5 Y
22	N/A	1	REGULATOR, VOLTAGE ENG. MFG ONLY



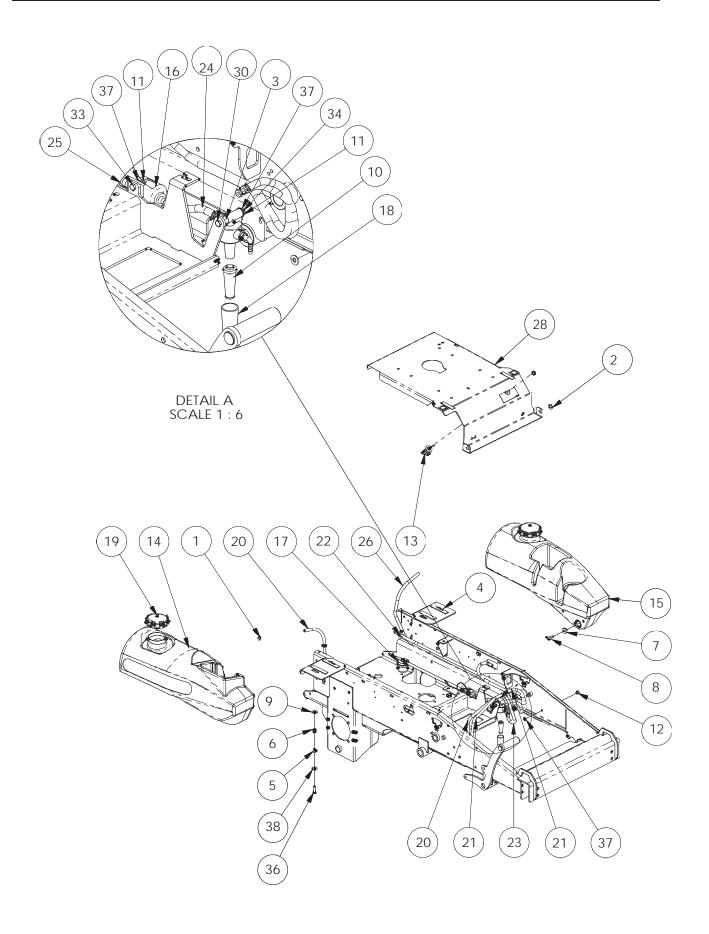
# 75 - ELECTRICAL COMPONENTS

ITEM	PART NO	QTY	DESCRIPTION
1	964048	1	LOCKNUT, 1/4-20 NYLOC Y
2	191511	1	WLDT, LH FRONT DECK LIFT
3	191512	1	WLDT, RH FRONT DECK LIFT
4	110330	4	PIN, CVS .500 X 1.25 X 1.02 Y
5	111886	1	P-CLIP, .500 INSULATED
6	135139	1	BOLT, 1/2 X 1.06 X 3/8-16 SLD 5 Y
7	191142	4	PLATE, ARM CONNECTOR LINK
8	191257	2	TAPE, TRACTION 3.00 X 17.00
9	191613	1	ASSY, FLOOR PAN W/DECALS S/O
10	967398	1	WASHER, .510 X 1.00 X .068 NYLON
11	180916	1	SEAT, FULL SUSPENSION
12	192257	1	PLATE, REAR ENGINE GUARD
13	192141	1	WLDT, SPIGOT RH
14	192145	1	WLDT, LH SPIGOT
15	192186	1	ASSY, SEAT PLATE W/DECALS
16	192259	1	BRACE, RH BENT ARM HITCH
17	967354	4	RING, RUE .500 x .062 x 1.420
18	960046	8	BOLT, 3/8-16 X 1.00 HEX 5 Y
19	960502	4	NUT, 3/8-16 STD HEX GR5 Y
20	960602	4	WASHER, .375 MED SPRG LOCK Y
21	960700	2	WASHER, .250 REG FLAT Y
22	960701	4	WASHER, .313 REG FLAT Y
23	960702	2	WASHER, .375 REG FLAT Y
24	963019	4	BOLT, 3/8-16 X 1.00 CRG 5 SN Y
25	963095	1	BOLT, 1/4-20 X .750 CRG 5 Y
26	964021	4	LOCKNUT, 5/16-18 CROWN Y
27	964022	9	LOCKNUT, 3/8-16 CROWN Y
28	180604	1	PLATE, HITCH
29	192260	1	BRACE, LH BENT ARM HITCH



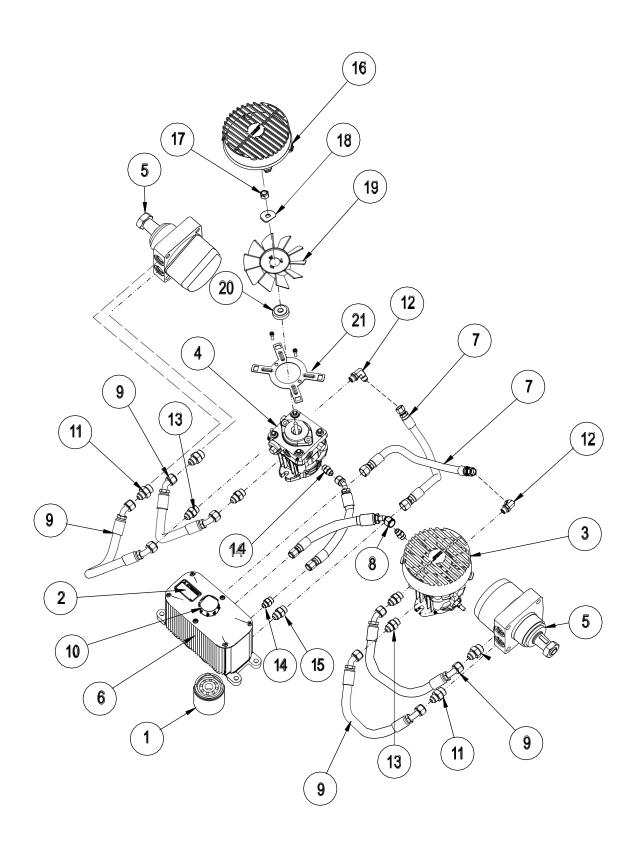
#### 77 - FUEL COMPONENTS

ITEM	PART NO	QTY	DESCRIPTION
1	102770	3	RELAY, ISO MINI ELEC.
2	136574	1	SWITCH, PTO ENGAGEMENT
3	180620	1	SWITCH, KEY - 3 POSITION
4	181074	1	SEAT SWITCH S/O
5	192183	1	ELEC, MALE BULLET 22-18
6	191216	1	CABLE, BATTERY - 35" POSITIVE
7	191227	1	CABLE, BATTERY - 35" GROUND
8	191256	2	SWITCH, PLUNGER DP - N.O N.C.
9	192162	1	BOOT, TERMINAL - RED
10	192059	1	LIGHT, AMBER WARNING
11	192069	1	LIGHT, RED WARNING
12	192070	1	HOURMETER, QUARTZ
13	192071	6	RELAY, MICRO
14	192060	1	WIRE HARNESS YANMAR
15	192107	1	CLUTCH, OGURA GT2.5 Ø1.125 D
16	192161	1	BOOT, TERMINAL - BLACK
17	192120	1	PUMP, ELECTRIC 12V FUEL
18	192137	1	CABLE, THROTTLE
19	192160	2	TERMINAL, BATTERY TOP POST
20	N/A	1	FUEL SOLENOID TIMER (WHITE)
21	N/A	1	GLOW PLUG TIMER (BLACK)
22	N/A	1	REGULATOR, VOLTAGE



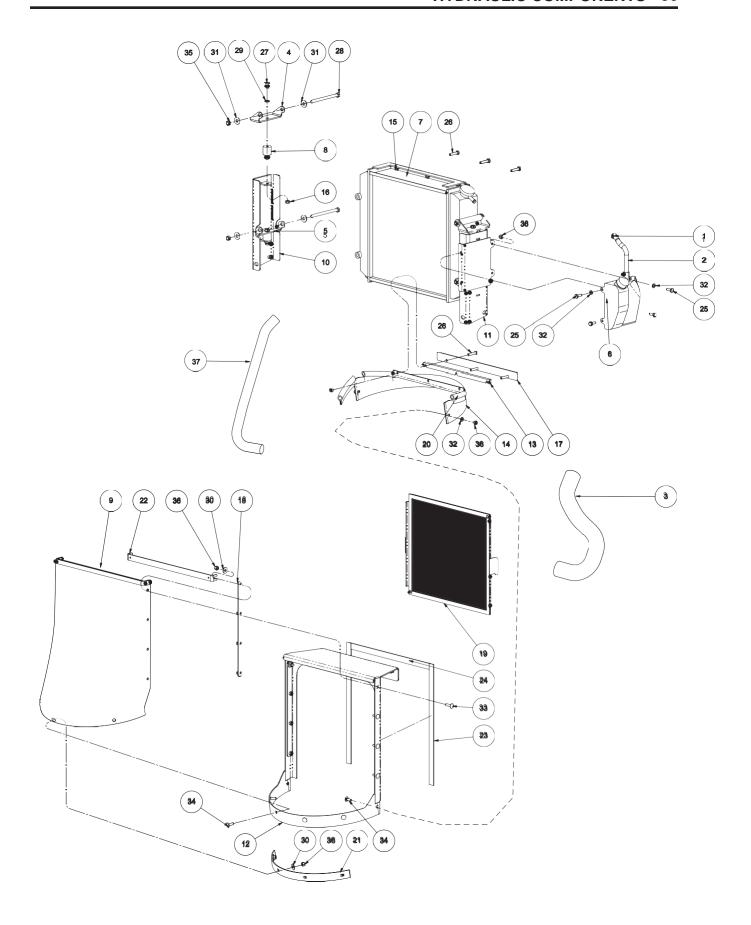
#### 79 - HYDRAULIC COMPONENTS

ITEM	PART NO	QTY	DESCRIPTION
1	130924	16	CLAMP, HOSE - 1/2" SPRING
2	967398	1	WASHER, .510 X 1.00 X .068 NYLON
3	164140	1	SPACER, Ø.500 X Ø.282 X .500 Y
4	180897	4	FOAM, .125 X .750 X 4.00
5	181023	4	SPACER, GAS TANK ATTACHMENT
6	181027	4	SPRING, COM .660 X .067 X .625
7	181208	4	TANK FITTING, RUBBER S/O
8	191605	4	FTG, 90 1/4HOSE X 1/2HOSE S/O
9	964505	4	WASHER, .500 X 1.00 X .105 FLAT Y
10	191639	1	FILTER, FUEL RACOR FWS S/O
11	964031	4	LOCKNUT, 1/4-20 CENTER Y
12	964022	1	LOCKNUT, 3/8-16 CROWN Y
13	192112	1	VALVE, DUAL SELECTOR
14	192139	1	FUEL TANK, RH W/RETURN
15	192140	1	FUEL TANK, LH W/RETURN
16	192120	1	PUMP, ELECTRIC 12V FUEL
17	192121	1	FILTER, FUEL S/O
18	192123	1	FILTER, FUEL/WATER SEPARATOR
19	192124	2	CAP, FUEL DIESEL S/O
20	192125	1	HOSE, FUEL 1/4 X 65.5
21	192126	2	HOSE, FUEL 1/4 X 30.00
22	192128	1	HOSE, FUEL 1/4 X 50.00
23	192129	1	HOSE, FUEL 1/4 X 13.50
24	192130	1	HOSE, FUL 1/4 X 6.00
25	192131	1	HOSE, FUEL 1/4 X 17.00
26	192132	1	HOSE, FUEL 1/4 X 59.00
27	192134	1	FTG, ADP 3/16MBARBX1/4MBARB
28	192186	1	ASSY, SEAT PLATE W/DECALS
29	192163	1	FTG, 90° 1/4 NPT X 1/4 HOSE BARB
30	192164	1	FTG, 1/4 NPT X 1/4 BARB
31	192183	1	ELEC, MALE BULLET 22-18
32	960002	1	BOLT, 1/4-20 X 1.00 HEX 5 Y
33	960003	1	BOLT, 1/4-20 X 1.25 HEX 5 Y
34	960008	1	BOLT, 1/4-20 X 2.50 HEX 5 Y
35	960045	1	BOLT, 3/8-16 X .750 HEX 5 Y
36	960047	4	BOLT, 3/8-16 X 1.25 HEX 5 Y
37	960700	4	WASHER, .250 REG FLAT Y
38	960701	4	WASHER, .313 REG FLAT Y
39	960702	1	WASHER, .375 REG FLAT Y



#### 81 - RADIATOR ASSEMBLY COMPONENTS

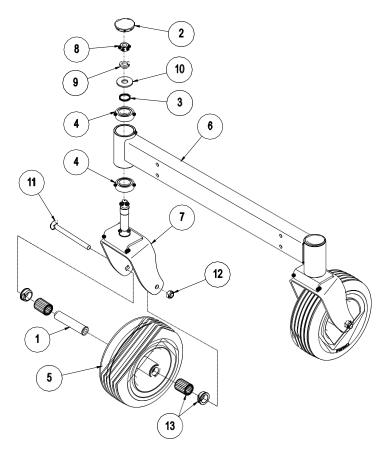
ITEM	PART NO	QTY	DESCRIPTION
1	180909	1	FILTER, 25 MICRON
2	181254	1	DECAL, HYDRAULIC OIL
3	191101	1	PUMP, HYDRO-GEAR LEFT HAND
4	191102	1	PUMP, HYDRO-GEAR RIGHT HAND
N/I	191618	2	SEAL KIT, HYDRO-GEAR PUMP
5	191103	2	WHEEL MOTOR, PARKER TL195
N/I	191619	2	SEAL KIT, PARKER WHEEL MOTOR
6	191616	1	TANK, HYDRAULIC S/O W/DECALS
7	191204	2	HOSE, HYD 3/8 9/16&3/4FJICSW
8	191205	2	HOSE, HYD 3/8 9/16JICFESW
9	192138	4	HOSE, HYD 8 - 12 FJIC 45° 19
10	191600	1	CAP, HYDRAULIC
11	231104	4	ADAPTER, 7/8 MOR X 3/4 MJIC
12	313270	4	FTG, 90 9/16 MOR X 9/16 MJIC
13	313391	4	ADAPTER, 3/4-16 MOR X 3/4-16 JIC
14	221285	2	FTG, ADP 9/16-18 MOR X 9/16 MJIC
15	313391	2	ADAPTER, 3/4-16 MOR X 3/4-16 JIC
16	191620	2	SHROUD, PUMP
17	964066	2	LOCKNUT, 3/8-24 CROWN
18	180995	2	WASHER, .375 X 1.24 X .072 BLVL
19	191621	2	FAN, PUMP
20	180994	2	HUB, FAN
21	191622	2	PLATE, SHROUD MOUNT



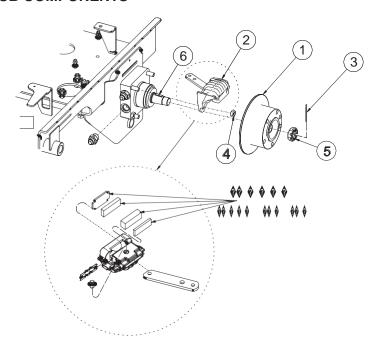
#### 81 - RADIATOR ASSEMBLY COMPONENTS

ITEM	PART NO	QTY	DESCRIPTION
1	130924	1	CLAMP, HOSE - 1/2" SPRING
2	192037	1	HOSE, RADIATOR OVERFLOW
3	192039	1	HOSE, TOP RADIATOR
4	192040	2	BRACKET, RADIATOR
5	192041	2	BRACKET 2, RADIATOR
6	N/A	1	SUPPLIED WITH 192018
7	192057	1	RADIATOR, YANMAR
8	192058	4	RUBBER MOUNT
9	192072	1	SHROUD, FAN RUBBER
10	192149	1	WLDT, RH SUPPORT
11	192151	1	WLDT, SUPPORT LH
12	192191	1	WLDT, SHROUD FRAME
13	192195	1	PLATE, SPACER RADIATOR
14	192196	1	WLDT, REAR BAFFLE
15	192199	1	WLDT, SCREEN RUNNER
16	967115	4	LOCKNUT, 5/16-18 NYLOC Y
17	192202	1	PLATE, BOTTOM SHROUD LIP
18	192203	2	PLATE, SHROUD RETAINER
19	192204	1	WLDT, RADIATOR SCREEN
20	192209	2	SEAL, RUBBER .625 X 3.75
21	192212	1	INNER STRAP RADIATOR COWL
22	192217	1	UPPER INNER STRAP RADIATOR COWL
23	192219	2	GASKET, FOAM .125 X .750 X15.25
24	192220	1	GASKET, FOAM .125 X .750 X 13.5
25	960001	4	BOLT, 1/4-20 X .750 HEX 5 Y
26	960003	6	BOLT, 1/4-20 X 1.25 HEX 5 Y
27	960021	4	BOLT, 5/16-18 X .500 HEX 5 Y
28	960037	4	BOLT, 5/16-18 X 4.50 HEX 5 Y
29	960601	4	WASHER, .313 MED SPRG LOCK Y
30	960700	6	WASHER, .250 REG FLAT Y
31	960701	8	WASHER, .313 REG FLAT Y
32	961701	6	WASHER, M6 REG FLAT Y
33	963051	2	BOLT, 1/4-20X1.00 CRG 5 Y
34	963095	12	BOLT, 1/4-20 X .750 CRG 5 Y
35	964021	4	LOCKNUT, 5/16-18 CROWN Y
36	964048	21	LOCKNUT, 1/4-20 NYLOC Y
37	192038	1	HOSE, BOTTOM RADIATOR

#### FRONT WHEEL ASSEMBLY



#### **REAR BRAKE & HUB COMPONENTS**



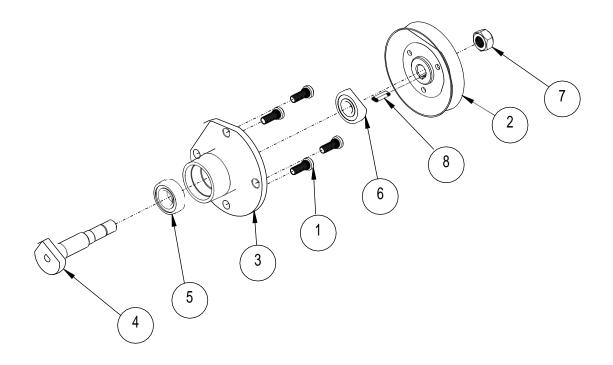
#### FRONT WHEEL ASSEMBLY

ITEM	PART NO	QTY	DESCRIPTION
1	191397	2	TUBE, RD 1.00X.500X4.76
2	191052	2	CAP, DUST 2.04
3	191100	2	WASHER, WAVE 1.0 SHAFT 1.25 BORE
4	149230	4	BRG, BALL .984 X 2.05 X .591 - 6205
5	191386	2	ASSY, TIRE & RIM 13X5-6 W/R BRG
6	192269	1	WLDT, FRONT AXLE
7	192272	2	WLDT, FR WHEEL FORK
8	960505	2	NUT, 5/8-11 STD HEX GR5
9	960605	2	WASHER, .625 MED SPRG LOCK
10	960705	2	WASHER, .625 REG FLAT
11	960530	2	BOLT, 1/2-13 X 7.00 CRG
12	964000	2	LOCKNUT, 1/2-13 CROWN
13	191604	1	KIT, 1.00 x 4.75 HUB BEARING

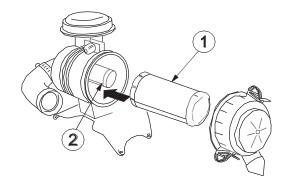
#### **REAR BRAKE & HUB COMPONENTS**

ITEM	PART NO	QTY	DESCRIPTION
1	191110	2	WHEEL HUB, 8" DISC 5 BOLT
2	191111	1	ASSY, M15 BRAKE & BRKT CCW - LH
	191112	1	ASSY, M15 BRAKE & BRKT CW - RH
3	962020	2	PIN, COT .125 X 1.75 EXTP
4	964000	8	LOCKNUT, 1/2-13 CROWN
5	191625	2	NUT, HUB RETAINING
6	191603	2	KEY, WDRF .312X1.00-#502 HRD
***	191606 Includes Cam	2 Pad Support,	KIT, BRAKE PAD REPLACEMENT KIT Carrier Pad Support, Cam Pad & Carrier Pad

#### SPINDLE ASSEMBLY



#### **AIR FILTER ASSEMBLY**



#### SPINDLE ASSEMBLY

ITEM	PART NO	QTY	DESCRIPTION
1	145561	4	BOLT, 7/16-20 X 1.22 SPC 5
2	180780	1	PULLEY, V-BELT 5.75X.750 52"
	191115	1	PULLEY, V-BELT 4.50X.750 48"
3	191013	1	SPINDLE, MACHINED BALL BRG
4	191014	1	SHAFT, SPINDLE
5	149230	1	BRG, BALL M25XM52XM15 6205
6	103977	1	BRG, BALL M20XM52XM15 6304
7	964024	1	LOCKNUT, 3/4-16 CROWN
8	966045	1	KEY, .250 X .250 X 1.00 SQ

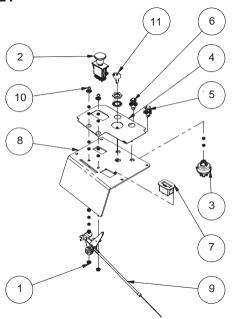
<sup>\*</sup> NOTE: Quantities listed are per spindle.

#### **AIR FILTER ASSEMBLY**

ITEM	PART NO	QTY	DESCRIPTION
1	191642	1	FILTER, PRIMARY AIR
2	191643	1	FILTER, SECONDARY AIR

#### 87 - CONTROL PANEL ASSEMBLYGRINDS E ASSEMBLY/AIR FILTER ASSEMBLY - 86

#### **CONTROL PANEL ASSEMBLY**



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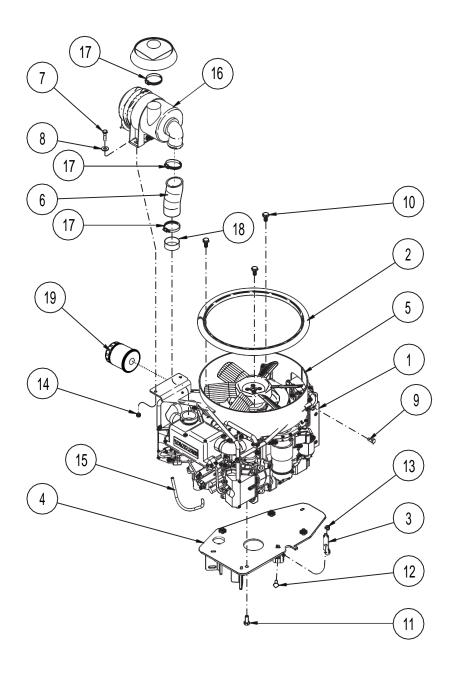
#### 89 - ENGINE COMPONENTS

#### **CONTROL PANEL ASSEMBLY**

ITEM	PART NO	QTY	DESCRIPTION
1	130923	2	NUT, 10-24 KEPS Y
2	136574	1	SWITCH, PTO ENGAGEMENT
3	180620	1	SWITCH, KEY - 3 POSITION
4	181698	1	DECAL, CONTROL PANEL EVERRIDE-D
5	192059	1	LIGHT, AMBER WARNING
6	192069	1	LIGHT, RED WARNING
7	192070	1	HOURMETER, QUARTZ
8	191641	1	PLATE, CONTROL PANEL S/O
9	192137	1	CABLE, THROTTLE
10	967340	2	SCREW, 10-24 X .625 PAN PHL MAC Y
11	105684	1	KEY, IGN SERVICE ONLY

R	O	P	S

ITEM	PART NO	QTY	DESCRIPTION
1	160176	1	SPRING, COMPRESSION
2	181561	2	WLDT, ROPS MOUNT
3	N/A	1	ROPS, FIXED
4	191492	1	ROPS, FOLDING
5	191495	1	HOOK, LATCH
6	191496	1	BRACKET, LATCH
7	181572	1	ASSY, SEAT BELT
8	181591	2	ASSY, FOLDING ROPS LOCK PIN S/O
9	963074	2	BOLT, 5/16-18 X 1.00 CRG GR5 Y
10	960047	1	BOLT, 3/8-16 X 1.25 HEX GR5 Y
11	960079	2	BOLT, 7/16-14 X 1.00 HEX GR5 Y
12	960114	8	BOLT, 1/2-13 X 1.50 HEX GR5 Y
13	960122	4	BOLT, 1/2-13 X 3.50 HEX 5 Y
14	960502	1	NUT, 3/8-16 STD HEX GR5 Y
15	960504	12	NUT, 1/2-13 STD HEX GR5 Y
16	960604	12	WASHER, .500 MED SPRG LOCK Y
17	960703	4	WASHER, .438 REG FLAT Y
18	964022	1	LOCKNUT, 3/8-16 CROWN Y
19	964025	2	LOCKNUT, 7/16-14 CROWN Y
20	964019	2	LOCKNUT, 5/16-18 WHIZ Y
21	181592	2	KNOB, STAR S/O
22	960121	2	BOLT, 1/2-13 X 3.50 HEX 5 Y
23	967106	2	LOCKNUT, 1/2-13 CENTER
24	181680	1	STRAP



#### **ENGINE COMPONENTS - 90**

ITEM	PART NO	QTY	DESCRIPTION
1	192018	1	ENGINE, YANMAR 20 HP 2V750-CVER
2	192179	1	SEAL, RUBBER .750 X 44
3	192222	1	PLATE, CLUTCH STOP
4	192223	1	WLDT, ENGINE MOUNTING PLATE
5	192225	1	WLDT, FAN SHROUD
6	192234	1	HOSE, AIR CLEANER
7	960024	2	BOLT, 5/16-18 X 1.25 HEX 5 Y
8	960701	2	WASHER, .313 REG FLAT Y
9	961283	1	BOLT, 8M X 1.25 X 16 HEX 8.8 Y
10	961305	3	BOLT, M10 X 1.50 X 20 HEX 8.8 Y
11	961306	4	BOLT, M10 X 1.50 X 25 HEX 8.8 Y
12	963074	1	BOLT, 5/16-18 X 1.00 CRG 2 Y
13	964021	1	LOCKNUT, 5/16-18 CROWN Y
14	967115	2	LOCKNUT, 5/16-18 NYLOC Y
15	SUPPLIED W/ENGINE	1	HOSE, COOLANT
16	SUPPLIED W/ENGINE	1	AIR CLEANER, DONALDSON
17	SUPPLIED W/ENGINE	3	#32 HOSE CLAMP
18	SUPPLIED W/ENGINE	1	TUBE, AIR CLEANER HOSE BACKER
19	191644	1	FILTER, YANMAR OIL

#### 91 - PARTS LIST

PART NO	PAGE	ITEM
	1	
102770	76	1
103380	64	7
103906	62	1
103977	86	6
105546	62	2
105546	66	19
105684	88	11
110330	74	4
110580	66	15
111886	74	5
130886	64	2
130923	64	3
130923	72	3
130923	88	1
130924	78	1
130924	82	1
135139	62	3
135139	74	6
136574	76	2
136574	88	2
140280	62	4
145561	86	1
149230	84	4
149230	86	5
150110	62	53
150111	62	54
160169	62	5
160176	88	1
161897	64	18
161955	62	6
164140	78	3
180231	64	4
180390	72	4
180604	74	28
180606	66	5
180617	70	27
180620	76	3
180620	88	3
180639	70	28

PART NO	PAGE	ITEM
180779	70	4
180780	86	2
180897	64	5
180897	78	4
180909	80	1
180916	74	11
180922	68	2
180927	66	10
180956	68	3
180957	68	4
180961	66	3
180982	68	44
180994	80	20
180995	80	18
180996	72	6
181017	62	55
181023	78	5
181027	78	6
181074	76	4
181194	62	7
181208	78	7
181228	72	9
181254	80	2
181258	62	8
181347	70	29
181348	70	29
181349	70	10
181350	70	11
181561	88	2
181572	88	7
181591	88	8
181592	88	21
181680	88	24
181698	88	4
191013	86	3
191014	86	4
191048	70	5
191052	84	2
191080	68	5

PART NO	PAGE	ITEM
<u> </u>		
191081	68	45
191082	66	1
191083	70	30
191098	62	9
191100	84	3
191101	80	3
191102	80	4
191103	68	6
191103	80	5
191107	62	10
191108	62	10
191110	68	7
191110	84	1
191111	68	8
191111	84	2
191112	68	9
191112	84	2
191115	86	2
191137	64	21
191142	74	7
191151	64	6
191163	62	11
191164	62	12
191165	62	13
191176	68	47
191177	68	46
191179	66	13
191183	64	8
191185	64	34
191186	64	20
191201	62	14
191203	70	6
191204	80	7
191205	80	8
191216	76	6
191226	62	15
191227	76	7
191228	72	12
191255	62	16
191256	64	9

PART NO	PAGE	ITEM
191256	76	8
191257	74	8
191261	66	7
191265	70	7
191295	64	14
191298	64	10
191347	62	17
191347	64	11
191355	62	18
191369	62	19
191370	62	19
191374	62	20
191378	62	21
191381	62	22
191386	84	5
191397	84	1
191486	62	23
191487	68	43
191492	88	4
191495	88	5
191496	88	6
191500	62	24
191509	68	11
191510	66	6
191511	68	12
191511	74	2
191512	68	13
191512	74	3
191513	66	6
191517	62	24
191527	64	35
191528	64	12
191531	62	25
191532	64	33
191533	62	26
191537	62	27
191559	62	28
191600	80	10
191603	84	6
191604	84	13

# 93 - PARTS LIST

PART NO	PAGE	ITEM
191605	78	8
191606	84	***
191613	74	9
191616	80	6
191617	64	13
191618	80	N/I
191619	80	N/I
191620	80	16
191621	80	19
191622	80	21
191625	84	5
191639	78	10
191641	88	8
191642	86	1
191643	86	2
191644	90	19
191645	68	41
192010	64	1
192010	68	1
192010	72	1
192014	66	20
192015	62	21
192018	90	1
192037	82	2
192038	82	37
192039	82	3
192040	82	4
192041	82	5
192057	82	7
192058	82	8
192059	76	10
192059	88	5
192060	76	14
192067	70	8
192069	76	11
192069	88	6
192070	76	12
192070	88	7
192071	76	13

PART NO	PAGE	ITEM
192072	82	9
192076	70	9
192084	70	2
192085	70	3
192094	70	12
192095	64	19
192104	68	18
192107	70	13
192107	76	15
192110	70	14
192111	70	15
192112	78	13
192113	68	19
192120	76	17
192120	78	16
192121	78	17
192122	68	17
192123	78	18
192124	78	19
192125	78	20
192126	78	21
192128	78	22
192129	78	23
192130	78	24
192131	78	25
192132	78	26
192134	78	27
192137	76	18
192137	88	9
192138	80	9
192139	78	14
192140	78	15
192141	74	13
192145	74	14
192149	82	10
192151	82	11
192160	76	19
192161	76	16

PART NO	PAGE	ITEM
- 1	- 1	
100100	70	
192162	76	9
192163	78	29
192164	78	30
192179	90	2
192183	76	5
192183	78	31
192186	74	15
192186	78	28
192191	82	12
192195	82	13
192196	82	14
192199	82	15
192202	82	17
192203	82	18
192204	82	19
192209	82	20
192212	82	21
192214	64	22
192217	82	22
192219	82	23
192220	82	24
192222	90	3
192223	90	4
192225	90	5
192234	90	6
192247	62	29
192251	62	29
192257	74	12
192259	74	16
192260	74	29
192263	72	14
192267	68	42
192269	84	6
192272	84	7
221285	80	14
231104		11
	80	
313270	80	12
313391	80	13
313391	80	15

PART NO	PAGE	ITEM
356473	62	30
473450	68	24
959994	62	31
959995	66	17
959995	70	16
960001	82	25
960002	64	36
960002	72	18
960002	78	32
960003	78	33
960003	82	26
960008	78	34
960021	82	27
960022	68	25
960024	90	7
960037	82	28
960045	72	19
960045	78	35
960046	62	32
960046	72	20
960046	74	18
960047	70	31
960047	72	21
960047	78	36
960047	88	10
960048	66	12
960048	70	17
960049	66	8
960050	68	26
960058	62	33
960058	64	23
960079	88	11
960081	62	52
960081	68	27
960114	88	12
960117	68	21
960121	88	22
960122	88	13
960160	62	34

PART NO	PAGE	ITEM
960163	62	35
960502	62	36
960502	74	19
960502	88	14
960504	68	28
960504	88	15
960505	84	8
960530	84	11
960601	82	29
960602	74	20
960604	88	16
960605	84	9
960700	68	29
960700	74	21
960700	78	37
960700	82	30
960701	66	11
960701	68	30
960701	70	18
960701	70	32
960701	74	22
960701	78	38
960701	82	31
960701	90	8
960702	68	31
960702	70	19
960702	72	16
960702	74	23
960702	78	39
960703	70	20
960703	88	17
960705	84	10
961264	68	32
961283	72	15
961283	90	9
961305	90	10
961306	90	11
961317	70	21
961343	62	37

PART NO	PAGE	ITEM
	•	•
961553	72	11
961602	68	33
961603	72	10
961701	62	38
961701	64	37
961701	82	32
962020	68	34
962020	84	3
962038	62	39
962200	68	35
963019	74	24
963020	62	40
963051	82	33
963074	68	36
963074	88	9
963074	90	12
963095	74	25
963095	82	34
964000	68	37
964000	84	12
964000	84	4
964003	66	4
964003	68	38
964005	62	41
964011	64	15
964014	62	42
964016	62	43
964016	66	9
964016	66	14
964016	66	16
964019	88	20
964021	68	39
964021	74	26
964021	82	35
964021	90	13
964022	62	44
964022	64	24
964022	66	2
964022	66	18

PART NO	PAGE	ITEM
964022	68	40
964022	70	22
964022	70	33
964022	72	8
964022	74	27
964022	78	12
964022	88	18
964024	86	7
964025	68	16
964025	70	23
964025	88	19
964031	78	11
964044	62	45
964047	64	25
964048	64	38
964048	68	10
964048	72	7
964048	74	1
964048	82	36
964061	62	50
964066	68	20
964066	80	17
964502	62	46
964502	64	26
964505	78	9
966045	86	8
966058	70	24
967054	64	17
967061	64	27
967106	88	23
967115	82	16
967115	90	14
967133	72	2
967189	64	16
967338	68	14
967340	64	28
967340	72	13
967340	88	10
967342	62	51

PART NO	PAGE	ITEM
967343	70	25
967350	68	15
967354	74	17
967357	70	26
967358	64	29
967392	62	47
967393	68	23
967397	62	48
967398	74	10
967398	78	2
967399	70	1
967403	64	30
968088	62	49
968100	72	5

#### 99 - MAINTENANCE RECORDS

Record dates of the services as they are performed for easy reference.

1	T	1
Oil Filter and Engine Oil Change	Lubricate Machine	Air Cleaner Element Clean or Replace
Linging On Onlange	Eddition Machine	Cloair of Mepiace
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		<u> </u>
<del></del>	•	