# WOODS WOODS MOW'N MACHINE

**FZ22-2** 



MAN1192

WCCDS.

#### TO THE DEALER:

Assembly and proper installation of this product is the responsibility of the Woods® dealer. Read manual instructions and safety rules. Make sure all items on the Dealer's Pre-Delivery and Delivery Check Lists in the Operator's Manual are completed before releasing equipment to the owner.

The dealer must complete the online Product Registration form at the Woods Dealer Website which certifies that all Dealer Check List items have been completed. Dealers can register all Woods product at dealer. Woods Equipment.com under Product Registration.

Failure to register the product does not diminish customer's warranty rights.

#### TO THE OWNER:

Read this manual before operating your Woods equipment. The information presented will prepare you to do a better and safer job. Keep this manual handy for ready reference. Require all operators to read this manual carefully and become acquainted with all adjustment and operating procedures before attempting to operate. Replacement manuals can be obtained from your dealer. To locate your nearest dealer, check the Dealer Locator at www.WoodsEquipment.com, or in the United States and Canada call 1-800-319-6637.

The equipment you have purchased has been carefully engineered and manufactured to provide dependable and satisfactory use. Like all mechanical products, it will require cleaning and upkeep. Lubricate the unit as specified. Observe all safety information in this manual and safety decals on the equipment.

For service, your authorized Woods dealer has trained mechanics, genuine Woods service parts, and the necessary tools and equipment to handle all your needs.

Use only genuine Woods service parts. Substitute parts will void the warranty and may not meet standards required for safe and satisfactory operation. Record the model number and serial number of your equipment in the spaces provided:

Model:	Date of Purchase:			
Serial Number: (see Safety Decal section for local	ation)			

Provide this information to your dealer to obtain correct repair parts.

Throughout this manual, the term **NOTICE** is used to indicate that failure to observe can cause damage to equipment. The terms **CAUTION**, **WARNING**, and **DANGER** are used in conjunction with the Safety-Alert Symbol (a triangle with an exclamation mark) to indicate the degree of hazard for items of personal safety.



This is the safety alert symbol. It is used to alert you to potential physical injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



Indicates a hazardous situation that, if not avoided, will result in death or serious injury.



Indicates a hazardous situation that, if not avoided, could result in death or serious injury.



Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

# or **NOTICE**

Is used to address practices not related to physical injury.

**NOTE** Indicates helpful information.

**ALITEC** 

CENTRAL FABRICATORS®

**GANNON**®

**WAIN-ROY**®

**WOODS**®

**WOCDS**®

**2** Introduction

Gen'l (Rev. 2/25/2016)

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

## A WARNING A

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



This product contains chemicals, including lead, known to the State of California to cause cancer, and birth defects or other reproductive harm.

Wash hands after handling.

## **ILEA EL INSTRUCTIVO!**

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

## **SPECIFICATIONS**

Engine: FZ22-2	
Horsepower: FZ22-2	22 HP
Fuel Type:	Gasoline (minimum 85 octane, unleaded recommended)
Standard Tire Size:	Front       .23 x 10.50 - 12         Front (optional)       .23 x 8.50 - 12         Rear       .15 x 6.00 - 6 Rib
Recommended Air Pr	essure:
	Front
Fuel Tank Capacity: .	
Power Unit Dimension	ns: Width
Recommended Mowe	rs: FZ22-248" ,54", 61"

## **GENERAL INFORMATION**



■ Some illustrations in this manual show the mower with safety shields removed to provide a better view. The Mow'n Machine should never be operated with any safety shielding removed.

The purpose of this manual is to assist you in operating and maintaining your Mow'n Machine. Read it carefully. It furnishes information and instructions that will help you achieve years of dependable performance. These instructions have been compiled from extensive field experience and engineering data. Some information may be general in nature due to unknown and varying

operating conditions. However, through experience and these instructions, you should be able to develop procedures suitable to your particular situation.

The illustrations and data used in this manual were current at the time of printing but, due to possible inline production changes, your machine may vary slightly in detail. We reserve the right to redesign and change the machines as may be necessary without notification.

Throughout this manual, references are made to right and left directions. These are determined by standing behind the equipment, facing the direction of forward travel.

## **SAFETY RULES**



## ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by an operator's single careless act.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, judgement, and proper training of personnel involved in the operation, transport, maintenance, and storage of equipment.

It has been said, "The best safety device is an informed, careful operator." We ask you to be that kind of operator.

#### **TRAINING**

- Safety instructions are important! Read all attachment and power unit manuals; follow all safety rules and safety decal information. (Replacement manuals and safety decals are available from your dealer. To locate your nearest dealer, check the Dealer Locator at www.WoodsEquipment.com, or in the United States and Canada call 1-800-319-6637.) Failure to follow instructions or safety rules can result in serious injury or death.
- Data indicates that those operators age 60 years and above are involved in a large percentage of riding mower-related injuries. Those operators should evaluate their ability to operate the riding mower safely enough to protect themselves and others from injury.
- If you do not understand any part of this manual and need assistance, see your dealer.
- Know your controls and how to stop engine and attachment quickly in an emergency.
- Operators must be instructed in and be capable of the safe operation of the equipment, its attachments, and all controls. Do not allow anyone to operate this equipment without proper instructions.
- Never allow children or untrained persons to operate equipment.

#### **PREPARATION**

- Check that all hardware is properly installed. Always tighten to torque chart specifications unless instructed otherwise in this manual.
- Always wear relatively tight and belted clothing to avoid getting caught in moving parts. Wear sturdy, rough-soled work shoes and protective

- equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.
- Make sure attachment is properly secured, adjusted, and in good operating condition.
- Make sure the driveline spring-activated locking collar slides freely and is seated firmly in power unit PTO groove. Make sure the set screws securely attach driveline to the attachment gearbox shaft.
- The safety interlock system was installed for your protection. Do not disconnect, disable, override, or execute any action that would cause this system to malfunction. If malfunction occurs, stop all operation and contact dealer for repair.
- Remove accumulated debris from this equipment, power unit, and engine to avoid fire hazard.
- Keep children out of the mowing area and under the watchful care of a responsible adult other than the operator.
- Make sure all safety decals are installed. Replace if damaged. (See Safety Decals section for location.)
- Make sure shields and guards are properly installed and in good condition. Replace if damaged.
- Be sure either the discharge chute, mulching end cap, or complete vacuum attachment is installed and in good condition. Replace if damaged.
- When using weight transfer system, correct counterweight must be used to maintain stability. See counterweight chart in power unit manual or contact dealer.
- When equipped with ROPS, total vehicle weight with all equipment, ballast, and operator must not exceed 2,590 lbs.
- Inspect and clear area of stones, branches, or other hard objects that might be thrown, causing injury or damage.
- Do not mow on wet grass.
- While fueling, extinguish all cigarettes, cigars, pipes, and other sources of ignition.
- Never fuel the machine indoors.
- Never fill fuel containers inside a vehicle or a truck or trailer bed with a plastic liner. Always place container on the ground away from the vehicle before filling.

(Safety Rules continued on next page)

## **SAFETY RULES**



## ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



(Safety Rules continued from previous page)

- Remove gas-powered equipment from the truck or trailer and refuel on the ground. If this is not possible, then refuel such equipment on a trailer with a portable container, rather than from a gasoline dispenser nozzle.
- Keep the nozzle in contact with the rim of the fuel tank opening at all times until fueling is complete. Do not use a nozzle lock-open device.
- If fuel is spilled on clothing, change clothing immediately.
- Never over-fill tank. Replace gas cap and tighten securely.
- Handle fuel carefully; it is highly flammable. Always use an approved container. Never remove fuel cap or add fuel while engine is running. Allow engine to cool before refueling. Wipe up all spilled fuel before starting engine.

#### **TRANSPORTATION**

- Use extra care when loading or unloading the machine onto a trailer or truck.
- Do not operate or transport on steep slopes.
- Do not operate or transport equipment while under the influence of alcohol or drugs.
- Transport power unit facing rearward when equipped with a sunshade.

#### **OPERATION**

- Keep bystanders away from equipment.
- Keep children out of the mowing area and under the watchful care of a responsible adult other than the operator.
- Make sure people and objects are clear of attachment and discharge area before engaging PTO.
- Be alert and turn machine off if a child enters the mowing area.
- Before and while backing, look behind and down for children.
- Never direct discharge toward people, animals, or property.
- Do not operate or transport equipment while under the influence of alcohol or drugs.
- Operate only in daylight or good artificial light.

- Keep hands, feet, hair, and clothing away from equipment while engine is running. Stay clear of all moving parts.
- When improperly operated, power unit can roll over or upset. Use of rollover protective structure (ROPS) with seat belt securely fastened will reduce the possibility of injury or death if rollover or upset occurs.
- Always use the seat belt when the foldable ROPS is in the upright position. Do not use the seat belt if the foldable ROPS is in the down position. The ROPS and seat belt must be used in all conditions except when mowing on flat terrain under branches or other obstructions. Return ROPS to upright position and fasten seatbelt as soon as possible.
- Use care when operating with ROPS or sunshade around shrubs, trees or other objects that can become entangled with power unit.
- Use extreme care when approaching blind corners, shrubs, trees, or other objects that may block your vision.
- Always comply with all state and local lighting and marking requirements.
- Never allow riders on power unit or attachment.
- Start engine from operator's seat after disengaging power unit PTO and placing steering levers in neutral.
- Look down and to the rear and make sure area is clear before operating in reverse.
- Do not mow in reverse unless absolutely necessary.
- Slow down before turning.
- Do not operate on slopes greater than 15 degrees (27% grade).
- Mow up and down slopes, not across.
- If the tires lose traction on a slope, disengage the blade(s) and proceed slowly straight down the slope.
- Do not stop, start, or change directions suddenly on slopes.
- Do not make sudden changes in speed or direction which could cause the machine to roll over.
- Use extreme care and reduce ground speed on slopes and rough terrain.

(Safety Rules continued on next page)

## **SAFETY RULES**



#### ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



(Safety Rules continued from previous page)

- Installation of a grasscatcher assembly will reduce the stability and maneuverability of the Mow'n Machine when operating on sloping terrain.
- Do not tow a trailer over 200 lbs. Do not tow a trailer or add power unit ballast with a combined weight over 200 lbs. Too much weight can cause loss of traction or stability on a slope. It can also reduce parking brake ability. Too much weight will shorten the hydraulic system life. Never tow a trailer with a grass collection system attached to the power unit.
- Watch for hidden hazards on the terrain during operation.
- Watch for traffic when operating near or crossing roadways.
- Uneven terrain could overturn the machine.
- Do not try to stabilize the machine by putting your foot on the ground.
- Do not mow near drop-offs, ditches, or embankments. The machine could suddenly roll over if a wheel goes over the edge or if the edge caves in.
- Stop power unit and equipment immediately upon striking an obstruction. Turn off engine, remove key, inspect, and repair any damage before resuming operation.
- Do not drive or operate mower in tilt-up position. Power unit stability is not adequate and resulting loads can damage or cause failure of tilt-up mechanism.
- Never leave a running machine unattended.
- Moving steering levers rapidly from forward to reverse or reverse to forward could cause loss of control.
- Do not operate power unit with attachment removed. Attachment is required for power unit stability.
- Before attempting to unplug vacuum hoses, disengage PTO, stop power unit, and remove key.

#### **MAINTENANCE**

- Before dismounting power unit, follow these steps: lower attachment to ground, shut off PTO, set parking brake, shut off engine, position steering levers to neutral swing-out position, and remove key.
- When using a sunshade and lifting hood for maintenance, use caution around pinch points.

- Before attempting to unplug vacuum hoses, disengage PTO, stop power unit, and remove key.
- Before performing any service or maintenance, lower attachment to ground, turn off power unit engine, remove key, and disconnect battery ground cable (negative -).
- Before working underneath, read manual instructions, securely block up, and check stability. Secure blocking prevents equipment from dropping due to hydraulic leak down, hydraulic system failure, or mechanical component failure.
- Do not modify or alter or permit anyone else to modify or alter the equipment or any of its components in any way.
- Do not work on mower in tilt-up position unless lock-up mechanism is in good condition. Replace if damaged.
- Always wear relatively tight and belted clothing to avoid getting caught in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.
- Make sure attachment is properly secured, adjusted, and in good operating condition.
- Do not put Mow'n Machine into service unless clutch is working properly. When the engine is at full throttle, PTO-driven accessories must stop within five seconds after the PTO switch is turned to "OFF." See your dealer for replacement clutches.
- Keep all persons away from operator control area while performing adjustments, service, or maintenance.
- Do not remove radiator cap while engine is hot.
- Do not change engine governor settings or overspeed engine.
- Frequently check blades. They should be sharp, free of nicks and cracks, and securely fastened.
- Do not handle blades with bare hands. Careless or improper handling may result in serious injury.
- Your dealer can supply genuine replacement blades. Substitute blades may not meet original equipment specifications and may be dangerous.

(Safety Rules continued on next page)

## A

# SAFETY RULES ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



(Safety Rules continued from previous page)

- Tighten all bolts, nuts, and screws to torque chart specifications. Check that all cotter pins are installed securely to ensure equipment is in a safe condition before putting unit into service.
- Use care to prevent battery acid from contacting skin.
- Make sure all safety decals are installed. Replace if damaged. (See Safety Decals section for location.)
- Make sure shields and guards are properly installed and in good condition. Replace if damaged.
- Battery posts, terminals, wiring insulation, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. WASH HANDS AFTER HANDLING.

#### **STORAGE**

- Keep children and bystanders away from storage area.
- Never store equipment where fuel or fumes could reach an open flame or spark. Allow engine to cool before storing in an enclosure.
- Never store the machine or fuel container near an open flame, spark or pilot light such as on a water heater or other appliance.
- Do not run engine indoors. Exhaust gases contain carbon monoxide, an odorless and deadly poison.
- Remove key and store in a secure location to prevent unauthorized persons from operating equipment.





## **SAFETY & INSTRUCTIONAL DECALS**

# ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! Replace Immediately If Damaged!



1 - 72407



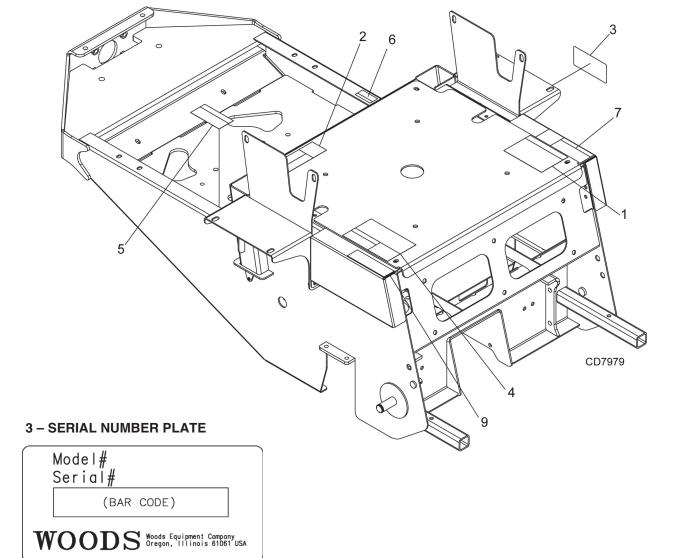
#### TO AVOID SERIOUS INJURY OR DEATH

- Read manual before operating and follow all safety and operating instructions.
   (Manual available from dealer or call 1-800-319-6637)
- Before dismounting, stop engine, engage park brake and remove key.
- Never allow riders.
- Do not operate near drop-offs, embankments and holes.

72407-B

2 - 72404





(Safety Decals continued on next page)

## SAFETY & INSTRUCTIONAL DECALS

## ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! Replace Immediately If Damaged!



(Safety Decals continued from previous page)

#### 4 - 72408



- Operate controls smoothly and slowly, especially on slopes.
- Unit may roll on slopes when not under power. Always engage park brake immediately when engine is turned off or power loss occurs.
- Move very slowly when attachment is removed.
- Do not operate on steep slopes. See Operator's Manual for

72408-B

#### 5 - 72406

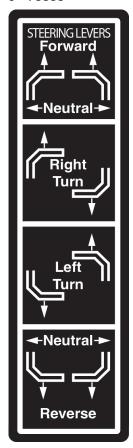


The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

#### 6 - 70376



9 - 78838



#### 7 - 72405



#### **BE CAREFUL!**

Use a clean, damp cloth to clean safety decals. Avoid spraying too close to decals when using a pressure washer; high-pressure water can enter through very small scratches or under edges of decals causing them to peel or come off. Replacement safety decals can be ordered free from your Woods dealer, or in the United States and Canada call 1-800-319-6637.

## **OPERATION**

The operator is responsible for the safe operation of this Mow'n Machine. The operator must be properly trained. Operators should be familiar with the power unit, all attachments that will be used, and all safety practices before starting operation. Read the safety rules and safety decals on page 5 through page 10.

## **WARNING**

- Operators must be instructed in and be capable of the safe operation of the equipment, its attachments, and all controls. Do not allow anyone to operate this equipment without proper instructions.
- Do not operate power unit with attachment removed. Attachment is required for power unit stability.
- Never direct discharge toward people, animals, or property.
- Moving steering levers rapidly from forward to reverse or reverse to forward could cause loss of control.

## **A** CAUTION

- Start engine from operator's seat after disengaging power unit PTO and placing steering levers in neutral.
- Stop power unit and equipment immediately upon striking an obstruction. Turn off engine, remove key, inspect, and repair any damage before resuming operation.

#### **CONTROLS AND SWITCHES**

## **A** WARNING

■ Know your controls and how to stop engine and attachment quickly in an emergency.

The Control and Indicator console is located on the right fuel tank. This console contains controls needed to operate this unit. PTO switch (2) is used to engage attachments: pull up to engage, push down to disengage.

#### Deck Height/Power Tilt™ Adjustment Switch

The deck height and Power Tilt™ switch is used with MXT. Push the toggle switch forward to raise the deck and pull back to lower the deck to the desired cutting height. For Power Tilt operation, pull back and hold the toggle switch to lower the deck and cycle through to the

tilt position. Release switch when deck reaches maximum tilt position. To lower the deck, push and hold toggle switch until it cycles to the desired cutting height. **NOTE:** Power Tilt™ feature must not be used when sitting in the seat.

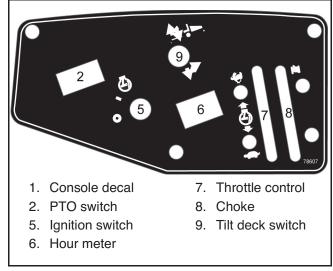


Figure 1. Console Control Locations

#### **Hour Meter**

The hour meter is programmed to alert the operator at various service intervals. The change oil light will flash at 20 hours (initial break in for some models) and every 100 hours after. The light will flash for a period of 4 hours (alternating between hours & change oil) and then resume normal mode. The hour glass will flash every second indicating that it's in running mode.

FZ22-2	Service Intervals						
8 hrs	Engine oil change (break in)						
100 hrs	Engine oil change & filter						
40 hrs	Hydraulic oil change & filter (break in)						
400 hrs	Hydraulic oil change & filter (see hydraulic transmission - change oil & filter, page 18.)						

#### Safety Switch System

Several safety switches are incorporated in the unit's design to prevent it from being started out of PARK (handles pivoted outward) or with PTO engaged.

The PTO control must be in the "OFF" position and the steering handles in the PARK position before unit can be started.

A safety switch in the operator's seat will cause the engine to stop if the operator leaves the seat with the PTO or steering handles engaged. The engine will also stop if the steering handles are moved from PARK if the deck jumper wire is not connected to the wire harness or the deck safety switch is disengaged.

#### **STARTING ENGINE**

## **A** DANGER

■ Do not run engine indoors. Exhaust gases contain carbon monoxide, an odorless and deadly poison.

To enhance starter life, use short starting cycles not exceeding 10 seconds. If engine does not start within 10 seconds, stop cranking for 30 seconds; then repeat starting procedures.

- **1.** Position yourself on the power unit seat.
- 2. Set parking brake.
- **3.** Place steering control handles in the NEUTRAL position (pivoted outward).
- 4. Place PTO switch in the "OFF" position (down).
- 5. Place choke approximately 1/2 open.
- 6. Turn key to "START".
- 7. Warm up engine several minutes at medium throttle.

**NOTE:** Choke as necessary to start. When engine starts, release key immediately. Pull choke gradually back until choke is off and engine is running smoothly.

**NOTE:** Allow engine a warm-up period regardless of the season. Loading a cold engine will shorten its life.

#### **Cold Weather Starting Tips**

- **1.** Use proper oil grade for temperature expected. (Refer to engine manual for oil grade.)
- 2. Set throttle half way open.
- **3.** A warm battery has better starting capacity than a cold one.
- Use fresh fuel, it is better for starting than leftover fuel.

#### STARTING MOWER OR ATTACHMENT



■ Make sure people and objects are clear of attachment and discharge area before engaging PTO.

#### **NOTICE**

- Never engage PTO if the mower blades are plugged with grass or other material. This may cause damage to the electric clutch.
- 1. With engine running, position throttle at half speed.
- 2. Engage PTO by pulling up on the PTO switch.
- 3. Move throttle to full speed and begin operation.

**NOTE:** Starting attachment at lower engine speed will help prolong the life of the clutch and transmission components.

#### **Stopping Mower or Attachment**

Push down on PTO switch.

**NOTE:** If attachment does not stop in five seconds, the unit requires service.

#### **PRACTICE OPERATION**



■ Never allow children or untrained persons to operate equipment.

Operating this unit is not difficult once you are familiar with the use of the controls. Equip the power unit with the attachment you will be using and practice in a flat open area at half throttle setting until you are comfortable with the controls.

Do not operate attachment until you become proficient with controls.

#### **Uneven Terrain Operation**



- Do not operate on slopes greater than 15 degrees (27% grade).
- Do not stop, start, or change directions suddenly on slopes.
- Use extreme care and reduce ground speed on slopes and rough terrain.

12 Operation

## **WARNING**

■ Watch for hidden hazards on the terrain during operation.

Practice steering maneuvers at half throttle.

#### **STEERING HANDLE OPERATION**

## **WARNING**

- Moving steering levers rapidly from forward to reverse or reverse to forward could cause loss of control.
- Do not operate power unit with attachment removed. Attachment is required for power unit stability.

**NOTE:** Speed and direction are controlled with steering handles. Pushing handles forward will move power unit forward. Pulling handles to the rear will move the power unit in reverse. The further forward or rearward

the steering handles are moved, the faster the machine will move.

#### **Steering Handle Positions**

#### **NOTICE**

■ If you become confused during operation, return both handles to the center NEUTRAL position and the power unit will stop.

Forward	Both handles forward
Reverse	Both handles rearward
Gentle Right	Left handle further forward than right
Gentle Left	Right handle further forward than left
360° Left	Left full rearward / right full forward
360° Right	Right full rearward / left full forward

**NOTE:** Moving one handle forward with the other handle in NEUTRAL will also result in a 360-degree circle. However this will cause one drive wheel to dig into the turf and should be avoided.

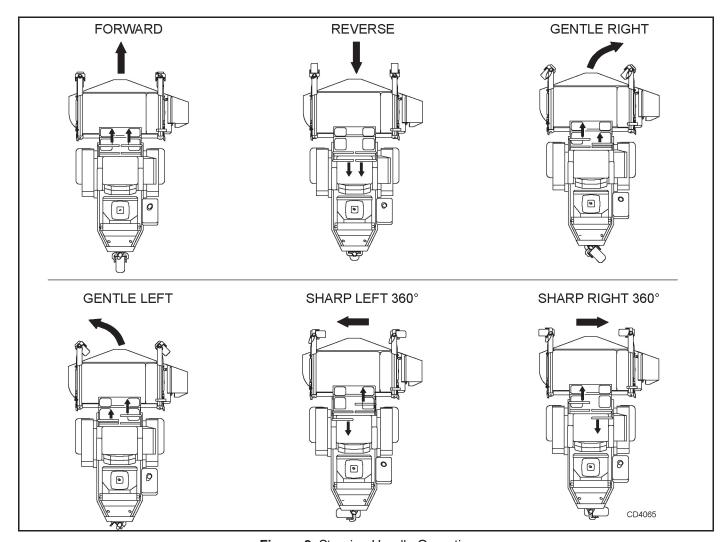


Figure 2. Steering Handle Operation

## **A** CAUTION

- Remove key and store in a secure location to prevent unauthorized persons from operating equipment.
- **1.** Place steering handles in NEUTRAL (pivoted outward).
- 2. Place parking knob in ON position.
- 3. Move throttle to 1/3 setting.
- **4.** Allow engine to idle for several minutes.
- 5. Turn key to OFF position and remove.

#### **MOVING DISABLED POWER UNIT**

Manually move disabled power unit by following these steps.

- 1. Locate dump valve on neutral link at middle, underneath frame.
- 2. Pull up and back and down to lock in open position.
- **3.** Pull up and back and then forward and down to return to operation.

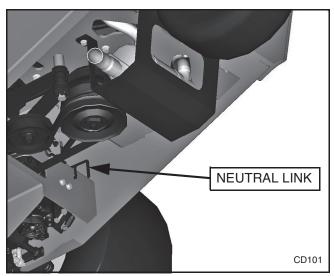


Figure 3. Left Pump Dump Valve

#### **WEIGHT TRANSFER SYSTEM**



■ When using weight transfer system, correct counterweight must be used to maintain stability.

The weight transfer is designed to place an additional load on the drive wheels, providing additional traction.

- **1.** Attach mower to power unit and set to desired cutting height.
- 2. Torque bolt on both sides to 35 lbs-in.

**NOTE:** Counterweight is needed to provide adequate stability. Optional counterweight kit 78727 is required with 60" sweeper.

Counterweights are not required when power unit is equipped with a grass catcher system.

## **WARNING**

■ Do not tow a trailer over 200 lbs. Do not tow a trailer or add power unit ballast with a combined weight over 200 lbs. Too much weight can cause loss of traction or stability on a slope. Too much weight will shorten the hydraulic system life. Never tow a trailer with a grass collection system attached to the power unit.

 NER PRE-OPERATION CHECK LIST	Pay particular attention to the cooling fins, governor parts and muffler.
 Review and follow all safety rules and safety decal instructions on pages 5 through 10.	Do not allow riders.
 Check that all safety decals are installed and in good condition. Replace if damaged.	Inspect area and remove stones, branches o other hard objects that might be thrown, causing injury or damage.
 Check to make sure all shields and guards are properly installed and in good condition. Be sure	Clean air intake screen. Check air cleaner; ser vice if necessary.
that either the discharge shield or complete vac- uum attachment is installed.	Clean area around oil fill dipstick. Remove dip stick and check to be sure oil is in operating
 Check that all hardware and cotter pins are properly installed and secured.	range (between marks on dipstick). Add oil if necessary but <b>Do Not Overfill.</b> Install Dipstick assembly firmly until cap bottoms out on tube
 Check that equipment is properly and securely attached to power unit.	Dipstick assembly must always be secured into fill tube when engine is running.
 Make sure driveline spring-activated locking pin or collar slides freely and is seated firmly in	Check all lubrication points and grease as instructed in the lubrication information, page 16.
power unit PTO spline groove and in gearbox — spline groove.	Perform a functional check of the safety interlock system each time you operate the unit. Place both steering levers outward, start engine
 Check for grass wrap on PTO shaft. When mowing long grass, remove key and check for grass wrap around PTO shaft every 30 minutes of operation.	engage PTO and then rise up out of the seat; the engine should die. If it does not, do not operate unit until the safety interlock system has been repaired and operates properly.



## **OWNER SERVICE**

## **A** WARNING

- Before performing any service or maintenance, lower attachment to ground, turn off power unit engine, remove key, and disconnect battery ground cable (negative -).
- Before working underneath, read manual instructions, securely block up, and check stability. Secure blocking prevents equipment from dropping due to hydraulic leak down, hydraulic system failure, or mechanical component failure.
- Keep all persons away from operator control area while performing adjustments, service, or maintenance.

## **A** CAUTION

■ Always wear relatively tight and belted clothing to avoid getting caught in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.

#### **SERVICE ENGINE**

**NOTE:** Follow engine manufacturer recommendations in engine manual.

#### **Check Engine Oil Level**

**NOTE:** Never attempt to check oil level while engine is running. Serious injury or damage to equipment could result.

- 1. Park power unit on a level surface.
- 2. Stop engine and clean off dirt and dust from around dipstick.
- **3.** Remove dipstick, check oil level. Oil level should be between marks on dipstick.
- **4.** Add oil as necessary. See engine owner's manual for specifications.

#### **Change Engine Oil**

#### **NOTICE**

- Use care to prevent hot oil from contacting bare skin.
  - 1. Run engine to allow oil to become hot. This will ensure that most foreign materials are in suspension and will be flushed out with the oil.
- 2. Install hose on drain. Open drain valve.
- 3. Remove oil filter.
- 4. Install new oil filter.
- 5. Close drain valve, remove hose.

**NOTE:** Refer to the engine manual for oil specifications, capacity, service rating, and proper grade.

#### **LUBRICATION INFORMATION**

- **1.** Do not let excess grease collect on or around parts, particularly when operating in sandy areas.
- See Figure 4 for lubrication points and frequency or lubrication based on normal operating conditions.
   Severe or unusual conditions may require more frequent lubrication.
- 3. Use a lithium grease of #2 consistency with a MOLY (molybdenum disulfide) additive for all locations unless otherwise noted. Be sure to clean fittings thoroughly before attaching grease gun. One good pump of most guns is sufficient when the lubrication schedule is followed.

#### **Lubrication (Service Intervals)**

Ref	Description	Frequency
1.	Deck Pivot	8 hours
2.	Driveshaft	8 hours
3.	Blade Spindles	40 hours
4.	Wheels	8 hours
5.	Engine Oil Level (check)	8 hours
6.	Gearbox (under deck) and tractor	500 hours
7.	Front Lift Linkage	40 hours
8.	Caster Pivot	40 hours

## 16 Owner Service

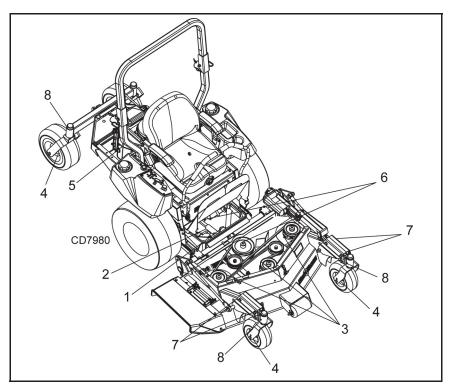


Figure 4. Lubrication Diagram

#### **TAILWHEEL MAINTENANCE**

Once a year, disassemble tailwheel assembly and inspect roller bearings:

- **1.** Remove dust cap (2) from top of tailwheel assembly (1).
- 2. Remove cotter pin (3) and slotted hex nut (4).
- **3.** Remove wheel fork (10), bearing cones (6) and remaining hardware from assembly.
- **4.** Inspect bearing cones (6) and bearing cups (7) for wear and replace if necessary. Replace seals and washers as necessary.
- **5.** Pack bearing cones (6) with a good grade wheel bearing grease.
- **6.** Install wheel fork (10) bearing cones (6) and remaining hardware into assembly as shown.
- **7.** Set bearings by torquing nut to 26 lbs-ft. All bearing free play should be removed.

**NOTE:** Proper bearing adjustment is essential to good bearing life.

If bearings are loose, casters will wobble and/or slap side-to-side.

If bearings are overtightened, loosen hex nut and rap shaft with a lead hammer to loosen bearings. Readjust bearings until proper setting is obtained.

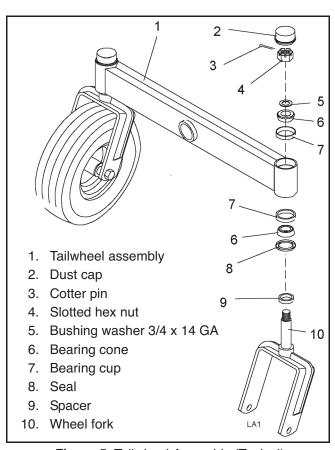


Figure 5. Tailwheel Assembly (Typical)

#### **HYDROSTATIC TRANSMISSION SERVICE**

**NOTE:** Hydrostatic system should require no servicing or oil additions between regularly scheduled maintenance. Opening expansion tank excessively may introduce dirt and foreign particles shortening hydrostatic life.

#### **External Maintenance**

Regular external maintenance of the transaxle should include the following:

- **1.** Check the vehicle operator's manual for the recommended load ratings. Insure that the current application does not exceed load rating.
- 2. Check oil level in accordance with "Fluid Change Procedure," step 12, page 19.
- Inspect the vehicle drive belt, idler pulley(s), and idler spring(s). Insure that no belt slippage can occur. Slippage can cause low input speed to the transaxle.
- 4. Inspect the vehicle control linkage to the directional control arm on the transaxle. Also insure that the control arm is securely fastened to the trunnion arm of the transaxle.
- Inspect the bypass mechanism on the transaxle and the vehicle linkage to insure that both actuate and release fully.

#### **Service and Maintenance Procedures**

Some of the service procedures presented on the following pages can be performed while the transaxle is mounted on the vehicle. Any repair procedures as mentioned in the repair section of this manual must be performed after the unit has been removed from the vehicle.

#### **Fluids**

The fluids used in Hydro-Gear<sup>®</sup> products have been carefully selected, and only equivalent, or better products should be substituted.

Typically, an engine oil with a minimum rating of 9.0 cSt (55 SUS) at 230° F (110° C) and an API classification of SL is recommended. A 20W50 engine oil has been selected for use by the factory and is recommended for normal operating procedures.

#### Fluid Volume and Level

Certain situations may require additional fluid to be added or even replaced.

Purging will be required if oil has been changed. Refer to the purging procedures on page 19.

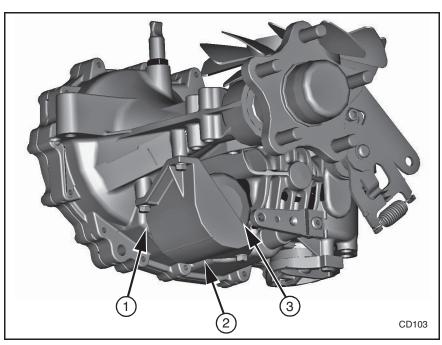


Figure 6. Hydrostat Filter and Guard

#### **FLUID CHANGE PROCEDURE**

This transaxle is designed with an external filter for ease of maintenance. To ensure constant fluid quality levels and longer life, an initial oil and filter change at 75-100 hours, then every 400 hours thereafter is recommended.

The following procedure can be performed with the transaxles installed in the vehicle, and the vehicle on level ground. Apply the bypass valve for each transaxle and lock the vehicle parking brake.

- 1. Remove the three 1/4" filter guard screws and filter guard. Clean any loose debris from around the perimeter of the filter.
- 2. Place an oil drain pan (12" or more diameter and 8 qt. capacity is optimal) beneath the oil filter. Remove the oil filter from the transaxle.
- After the oil has drained, wipe the filter base surface off and apply a film of new oil to the gasket of the new replacement filter (part number 78726).
- Install the new filter by hand; turn 3/4 to one full turn after the filter gasket contacts the filter base surface.
- **5.** Re-install the filter guard with three 1/4" screws. Torque each screw to 65 in. lbs. (7.3 Nm).
- Repeat steps 1-5 on the opposite side transaxle drive.
- Drain old oil filters of all free flowing oil prior to disposal. Place used oil in appropriate containers and deliver to an approved recycling collection facility.
- **8.** Remove the top port plug from the left side and right side transaxles prior to filling with oil. This will allow the transaxles to vent during oil fill.
- **9.** Remove the cap from the transaxle's expansion tank located on the vehicle frame.
- 10. Fill with 20W50 motor oil until oil just appears at the bottom of each transaxle's top port (approximately 2 qts. per transaxle, 4 qts. total). Install the top port plug into each transaxle as the oil level reaches this port.
- **11.** Install and torque the top port plugs to 180 in. lbs. (20.3 Nm).
- **12.** Continue to fill the transaxles through the expansion tank until the "Full Cold" line is reached on the Hydro-Gear<sup>®</sup> expansion tank. An additional .5 qt will be needed to fill expansion tank.

- **13.** Re-install the expansion tank cap by hand. Be careful to not over tighten.
- **14.** Proceed to the purge procedure.

#### **PURGING PROCEDURES**

Due to the effects air has on efficiency in hydrostatic drive applications, it is critical that it is purged from the system.

Air creates inefficiency because its compression and expansion rate is higher than that of the oil approved for use in hydrostatic drive systems.

These purge procedures should be implemented any time a hydrostatic system has been opened to facilitate maintenance or the oil has been changed.

The resulting symptoms in hydrostatic systems may be:

- 1. Noisy operation.
- 2. Lack of power or drive after short term operation.
- **3.** High operation temperature and excessive expansion of oil.

Before starting, make sure the transaxle is at the proper oil level. If it is not, fill to the specifications outlined in this manual.

The following procedures are best performed with the vehicle drive wheels off the ground. Then repeat under normal operating conditions. If this is not possible, then the procedure should be performed in an open area free of any objects or bystanders.

- 1. Disengage the brake if activated.
- 2. With the bypass valve open and the engine running, slowly move the directional control in both forward and reverse directions (5 or 6 times).
- 3. With the bypass valve closed and the engine running, slowly move the directional control in both forward and reverse directions (5 to 6 times). Check the oil level, and add oil as required after stopping the engine.
- 4. It may be necessary to repeat Steps 2 and 3 until all the air is completely purged from the system. When the transaxle operates at normal noise levels and moves smoothly forward and reverse at normal speeds, then the transaxle is considered purged.

#### SERVICE BATTERY

## **A** WARNING

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

## **A** CAUTION

Use care to prevent battery acid from contacting skin.

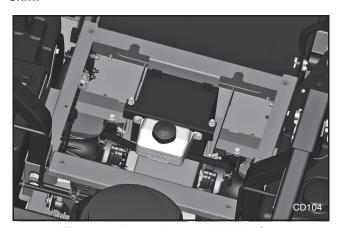


Figure 7. Battery Located Under Seat

#### Refer to Figure 7.

Clean battery at least once a season by following these steps:

- 1. Remove the seat to access the battery.
- **2.** Inspect cables for deterioration and loose connections.
- 3. Clean terminals.
- **4.** Inspect battery to make sure tie-down is tight and battery is secured in place.
- **5.** Inspect battery case for cracks or leaks; replace battery if necessary.
- **6.** Test battery with hydrometer; recharge battery if less than 75% charge is indicated.
- 7. Add water if necessary.

#### **BURNISH CLUTCH**

#### NOTICE

■ A new clutch or one that has not been used for three months, will require burnishing to dress

drive surface. The clutch could fail if you do not accomplish the following procedure.

- **1.** Place steering control handles in PARK (pivoted outward). Start engine and run at half throttle.
- **2.** Turn clutch switch (PTO) "ON" 30 seconds and "OFF" for 30 seconds. Repeat cycle 20 times.

**NOTE:** The 30 seconds "OFF" allows clutch surface to cool.

#### **RETURN TO OPERATION**

## **WARNING**

- Make sure shields and guards are properly installed and in good condition. Replace if damaged.
- Make sure all safety decals are installed. Replace if damaged. (See Safety Decals section for location.)

#### **CLEANING**

#### After Each Use

- Remove large debris such as clumps of dirt, grass, crop residue, etc. from machine.
- Inspect machine and replace worn or damaged parts.
- Replace any safety decals that are missing or not readable.

#### **Periodically or Before Extended Storage**

- Clean large debris such as clumps of dirt, grass, crop residue, etc. from machine.
- Remove the remainder using a low-pressure water spray.
  - 1. Be careful when spraying near scratched or torn safety decals or near edges of decals as water spray can peel decal off surface.
  - **2.** Be careful when spraying near chipped or scratched paint as water spray can lift paint.
  - **3.** If a pressure washer is used, follow the advice of the pressure washer manufacturer.
- Inspect machine and replace worn or damaged parts
- Sand down scratches and the edges of areas of missing paint and coat with Woods spray paint of matching color (purchase from your Woods dealer).
- Replace any safety decals that are missing or not readable (supplied free by your Woods dealer).
   See Safety Decals section on page 9 for location drawing.

## **DEALER SERVICE**

The information in this section is written for dealer service personnel. The repair described here requires special skills and tools. If your shop is not properly equipped or your mechanics are not properly trained in this type of repair, you may be time and money ahead to replace complete assemblies.

## **A** WARNING

- Before performing any service or maintenance, lower attachment to ground, turn off power unit engine, remove key, and disconnect battery ground cable (negative -).
- Keep all persons away from operator control area while performing adjustments, service, or maintenance.

## **A** CAUTION

■ Always wear relatively tight and belted clothing to avoid getting caught in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.

## TROUBLESHOOTING HYDROSTATIC PUMP

#### **Loss of Power in Transmission**

- 1. Make sure transmission fluid is correct.
- Make sure hydrostatic pump and fan blades are clean.
  - **NOTE:** Overheating can cause loss of power or fluid leaks from excess fluid expansion.
- 3. Make sure dump valves are tightened down.

#### **No Positive Neutral Position**

If drive wheels try to travel forward or reverse when parking brake is in the PARK position (pivoted outward), adjustment of hydrostatic pumps is necessary.

- Block up power unit frame so both drive wheels are off the ground.
- 2. Place parking knob into OFF position.
- 3. Loosen jam nut (1) on linkage rod as shown in Figure 9.
- **4.** Place steering handles in the neutral position (pivoted outward) and start engine.
- **5.** If drive wheels turn, turn rod out or in until wheel stops.
- 6. Tighten jam nut.
- **7.** Repeat steps 3 through 6 for other hydrostatic pump control arm.

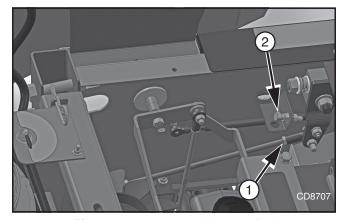


Figure 9. Jam Nut on Linkage Rod

#### Straight Line Travel

- Check tire pressure; tires must have equal air pressure.
- 2. Check travel; drive forward with both steering handles full forward at half throttle.
  - If travel is not straight, adjust steering handle stop bolt (2) on opposite side of turn.
  - If power unit turns to the left, raise steering stop bolt (2) on the right.
  - If power unit turns to the right, raise steering stop bolt (2) on the left.

#### TROUBLESHOOTING ENGINE

PROBLEM	POSSIBLE CAUSE	SOLUTION	
Engine will not crank	PTO switch is "ON"	Switch to the "OFF" position	
	Steering handles are not in "NEU-TRAL"	Pivot steering handles outward	
	Battery is discharged	Charge or replace battery	
	Starter fuse is blown	Replace fuse	
	Steering handle switches are out of adjustment	Listen for the switch "click" and adjust as necessary	
Engine cranks but will not start	Fuel tank is empty	Fill fuel tank	
	Fuel line or fuel filter is restricted	Bleed fuel line or replace fuel filter	
	Ignition fuse is blown	Replace fuse	
	Loose wires or connections	Inspect wire connection and safety switches	

#### **NOTICE**

- The following test must be performed with an accurate voltmeter. The amperage in this circuit is too low for a test light. This circuit is the ground side of a relay.
- 1. Check seat switch and deck safety switch/jumper.
  - a. Raise seat assembly and secure with prop rod.
  - **b.** Turn key switch "ON", engage seat switch and move deck to highest cut height position.
  - **c.** Check voltage at the pink and black wires on the main wire harness where it connects into the seat switch wire harness. (2 way Packard 56 series connector located underneath seat pan on the right side next to steering pivot block.)
  - If there is voltage at one wire but not the other, either the switches/jumper are defective or not fully engaged. The pink and black wires are part of a series circuit that includes the seat switch and deck safety switch (on power tilt deck) or weatherpack jumper.
  - If there is voltage on only one wire check each switch ((seat switch, deck safety switch, (located on the deck), or weatherpack jumper)) individually to determine which switch is defective or not closed. The weatherpack jumper should be connected to the main wire harness, underneath the seat pan by the left hand steering pivot linkage if there is not a deck or a standard deck is attached.
  - Check the deck safety switch refer to Figure 10 and troubleshooting deck safety switch. If the

deck switch is open the engine will kill when pulling handles in.

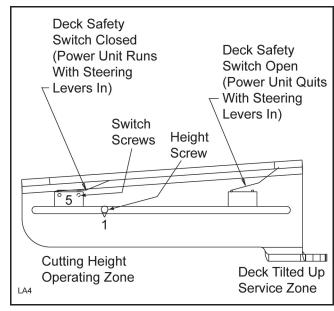


Figure 10. Power Tilt Deck Safety Switch Layout

- If there is voltage at both pink/black wires mentioned in the previous paragraph, check voltage at yellow/red parking brake wires with the park brake off.
- If voltage is not present, the wire between the seat relay and parking brake switch is unconnected or the seat relay is defective and must be replaced.
- If voltage is present at one wire but not the other, the parking brake switch is defective and must be replaced.

#### **Troubleshooting Deck Safety Switch**

- 1. Pull handlebars in with deck in lowest cutting height position (1), see Figure 10.
- Check that switch is making contact with the height gauge.
- **3.** Check that the wires are properly hooked up to power unit.
- 4. Adjust switch bracket location on actuator if needed (four screws). Make sure height screw does not bottom out on slot in either direction when raising or lowering deck.
- **5.** Check that screws holding switch to bracket are not too tight and holding lever open.
- **6.** Adjust safety switch lever or replace switch if necessary.
- **7.** After adjustments, check that engine cuts out with deck partially raised.

#### **HYDROSTAT DRIVE REMOVAL**

- Place power unit on a level surface and remove key.
- 2. Place power unit on stands to allow access to bottom of the machine and remove drive wheels.
- **3.** Remove brake linkage from control arm on hydrostat.
- Remove brake arm actuator and spring from brake arm.
- 5. Remove expansion tank hose from hydro.
- 6. Loosen idler spring and remove belt.
- 7. Remove two outer screws, washers and nuts.
- **8.** At front of machine, remove two screws and nuts attaching small L bracket.
- **9.** At rear of machine, remove two screws and nuts attaching small L bracket.
- **10.** While supporting hydro (each hydro weighs approximately 33 pounds), remove front and rear screws and nuts.
- **11.** Lower hydro down and out from under unit.
- **12.** For repair parts information, contact Hydro-Gear<sup>®</sup> at 1-877-728-7410 for nearest authorized dealer.

#### **HYDROSTAT DRIVE INSTALLATION**

- **1.** Position hydro under frame and carefully raise up into position.
- Install two outer screws, washers and nuts finger tight.
- 3. Install small L bracket at the front and rear using long bolts through frame loosely.

- **4.** Install screws and nuts in the front and rear of the frame finger tight.
- **5.** With hydro positioned squarely, tighten small L bracket nuts and then the longer screws through frame.
- **6.** Tighten outer nuts.
- **7.** Install belt and tighten spring to proper belt tension.
- 8. Install expansion tank hose.
- **9.** Install brake arm actuator and spring on brake arm. No adjustment necessary if arm was not moved.
- **10.** Install brake linkage from control arm to hydrostat.
- **11.** Proceed to oil change maintenance for proper oil change and pump purging.

#### **BELT REMOVAL**

- 1. Remove key from switch.
- 2. Loosen idler spring bolt, and derail belt from pulleys.
- 3. Remove belts.

#### **ENGINE REMOVAL**

- **1.** Disconnect throttle cable, battery cables, hoses, fuel line, and electrical wires from engine.
- **2.** Remove the four engine mounting bolts from bottom of power unit frame.
- Remove belts from the engine pulleys. See Belt Removal.
- 4. Remove exhaust.
- 5. Lift engine from the power unit frame.

**NOTE:** Contact your authorized engine dealer for parts and repairs.

#### PARKING BRAKE ADJUSTMENT

**NOTE:** Hydrostatic system parking brake is similar to automotive style parking pawl and is not a service brake. Brake system is for parking of unit and emergency use only. The drive wheel may have to rotate slightly to engage pawl in locking ring (usually less the 3 degrees of wheel rotation).

**NOTE:** Parking brake is adjusted from the factory and should require no maintenance unless the system parts are replaced.

**NOTE:** Adjust right and left brakes individually.

- 1. With drive wheels off of the ground and brake handle is in ON position, check to see if drive wheel rotates.
- If drive wheel rotates and park brake does not engage, remove screw from top of park brake release link and free park brake release rod. (If

- drive wheel rotates with park brake engaged, there may be internal hydrostatic problems. Contact authorized Hydro-Gear® dealer).
- 3. Check to see if there is spring tension on hydrostat brake arm. Hydrostat brake arm should be roughly horizontal with park brake engaged. Tension spring to 1/8" past initial tension. Repeat 1.
- 4. Loosen jam nuts at top and bottom of brake rod. Adjust rod centers as necessary to maintain full brake engagement. Tighten jam nuts at top and bottom of brake rod.
- **5.** Move parking brake to OFF position, check to see if drive wheel rotates. Park brake release arm should be pushing down on hydrostat brake arm, releasing the parking brake.
- **6.** Confirm free movement of control arm, park brake release rod and parking brake spring.
- 7. Repeat for opposite side.

#### **CLUTCH REPAIR**

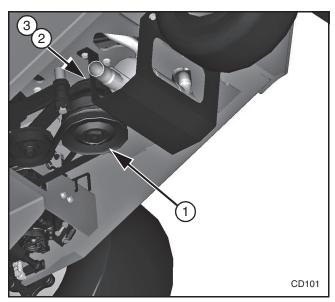


Figure 11. Clutch Assembly

#### **Remove Components**

- **1.** Position unit on level ground and set brake handle to ON position, stop engine and remove key.
- 2. Loosen PTO idler arm spring and remove belt.

- **3.** Disconnect electrical wire harness from clutch (1).
- 4. Remove screw from end of crank shaft.
- 5. Remove clutch from crank shaft. Be sure to capture spacer between clutch (1) and drive pulley (2). Drive pulley (2) is held on by drive belt. If no drive belt is installed at this point, drive pulley (2) and top spacer (3) will also come off of crankshaft.

#### **Install Clutch**

- 1. Install spacer (3), drive pulley (2) if previously removed.
- 2. Install spacer (3) between drive pulley (2) and clutch (1).
- 3. Align key on clutch (1) with keyway on crankshaft.
- **4.** Align anti rotation rod with closed slot of clutch (1).
- 5. Install clutch (1) on crankshaft.
- **6.** Insure that clutch (1) engages anti rotation rod.
- Place drop of Loctite 242 (Blue) on threads of screw.
- 8. Install screw and torque to 55-60 FT-LB.
- **9.** Reinstall belt and retighten idler arm spring to proper belt tension.
- Attach electrical wiring harness. Insure wiring harness is held out of the way of moving parts and belts.
- 11. Follow Clutch Burnishing instructions on page 20.

#### **RETURN TO OPERATION**

When you have completed service and maintenance functions, read and comply with these safety messages before returning unit to operation.



- Make sure all safety decals are installed. Replace if damaged. (See Safety Decals section for location.)
- Make sure shields and guards are properly installed and in good condition. Replace if damaged.

## **ASSEMBLY**

#### **DEALER SET-UP INSTRUCTIONS**

Assembly of this Mow'n Machine is the responsibility of the Woods dealer. It should be delivered to the owner completely assembled, lubricated, and adjusted for normal cutting conditions.

Set up the Mow'n Machine as received from the factory with these instructions. Complete the Dealer Check Lists on page 27 when assembly is completed.

#### **Power Unit Preparation**

- **1.** Remove crating from around power unit. Remove power unit from pallet and place on blocks.
- **2.** Remove Operator's Manual from power unit frame and save for original retail purchaser.

**NOTE:** Dealer must complete and return product registration card at time of sale.

#### Lubrication

#### **NOTICE**

- Running engine without oil will cause engine failure.
- 1. Check engine oil level (30W).
- 2. Check that oil levels (20W-50) in hydro expansion tank are at correct level.

**NOTE:** See Owner Service section for engine, transmission, and lubrication information.

#### **Fuel**

Fill fuel tank with the correct fuel. Refer to engine manual.

#### **INSTALL DRIVE TIRES**

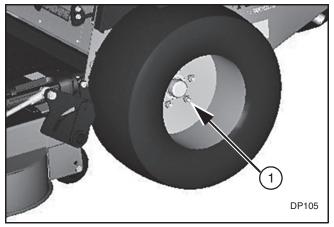


Figure 12. Drive Tire Installed

- 1. Install drive tires using five lug nuts (1) from bag of loose parts shipped with machine.
- 2. Torque lug bolts to 85 lbs-ft.

#### **Drive Tire Pressure:**

Turf Tires 12 psi Chevron Tires 10 - 12 psi

#### TAIL WHEEL INSTALLATION

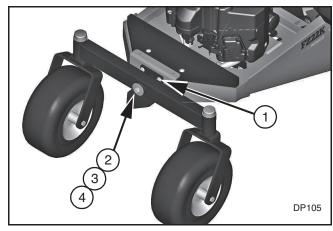
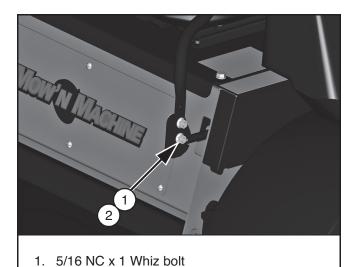


Figure 13. Dual Tail Wheel Installed

#### **Dual Tail Wheel**

- **1.** Attach pivot mount adapter to rear of power unit frame using 4 flange screws.
- 2. Slide tail wheel arm over pivot.
- Attach arm with large flat washer (2), lock washer
   and screw (4).
- 4. Torque hardware to 38 FT-LB.
- 5. Inflate tires to 18 psi.

#### **ADJUST STEERING HANDLES**



- C/10 Flammed leads must
- 2. 5/16 Flanged lock nut

Figure 14. Steering Handle Adjustment

- 1. Remove whiz bolt (1) and lock nut (2) from left steering lever mount.
- 2. Position steering handle to desired location on steering lever mount. The top and middle holes are

- for taller operators and the middle and bottom holes are for shorter operators. Do not tighten hardware at this time. Repeat steps 1 and 2 for right steering handle.
- Rotate handles inward. Align handles with one another. Torque all hardware to 12 lbs-ft. Make sure handles stay in alignment.

#### **Straight Line Travel**

- **1.** Check tire pressure; tires must have equal air pressure.
- **2.** Check travel; drive forward with both steering handles full forward at half throttle.
  - If travel is not straight, adjust steering handle stop bolt on opposite side of turn.
  - If power unit turns to the left, raise steering stop bolt on the right.
  - If power unit turns to the right, raise steering stop bolt on the left.
  - For quick adjustments, access stop bolt throught front cover.



## **DEALER CHECK LISTS**

#### PRE-DELIVERY CHECK LIST

(DEALER'S RESPONSIBILITY)

Inspect the equipment thoroughly after assembly to make sure it is set up properly before delivering it to the customer. The following check list is a reminder of points to inspect. Check off each item as it is found satisfactory, corrections are made, or services are performed.

 Check that all safety decals are installed and in good condition. Replace if damaged.
 Check that all shields and guards are properly installed and in good condition. Replace if damaged.
 Properly attach implement to power unit and make all necessary adjustments.
 Check all bolts to be sure they are properly torqued.
 Check that all cotter pins and safety pins are properly installed. Replace if damaged.
 Check and grease all lubrication points.
 Check the level of gearbox fluids before delivery.
 Run unit immediately following set-up to double- check systems operation including hydrostatic neutral and safety switch system (page 11).
 Check all fluid levels. See Lubrication, page 25.
 Check tire pressure. See Drive Tire Pressure, page 25.

#### **DELIVERY CHECK LIST**

(DEALER'S RESPONSIBILITY)

 Show customer how to make adjustments.
 Instruct customer how to lubricate and explain importance of lubrication.
 Point out the safety decals. Explain their meaning and the need to keep them in place and in good condition. Emphasize the increased safety hazards when instructions are not followed.
 Present Operator's Manual and request that customer and all operators read it before operating equipment. Point out the manual safety rules, explain their meanings, and emphasize the increased safety hazards that exist when safety rules are not followed.
 Show customer how to make sure driveline is properly installed and that spring-activated locking pin or collar slides freely and is seated in groove on power unit PTO shaft.
 Show customer the safe, proper procedures to be used when mounting, dismounting, and storing equipment.
 Make customer aware of optional equipment available so that customer can make proper choices as required.



## **NOTES**

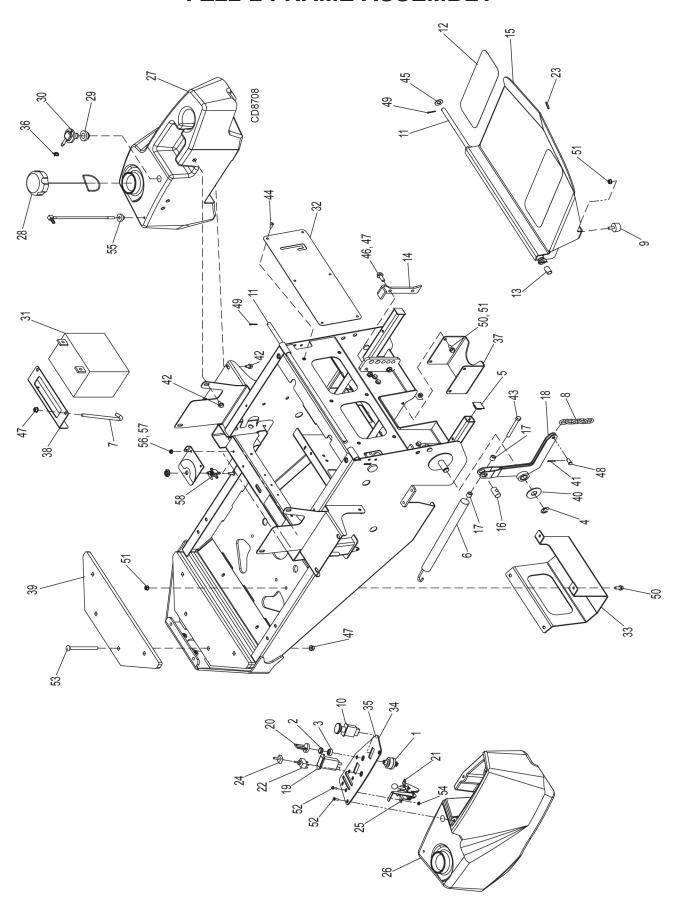
# WOODS

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## **FZ22-2 FRAME ASSEMBLY**



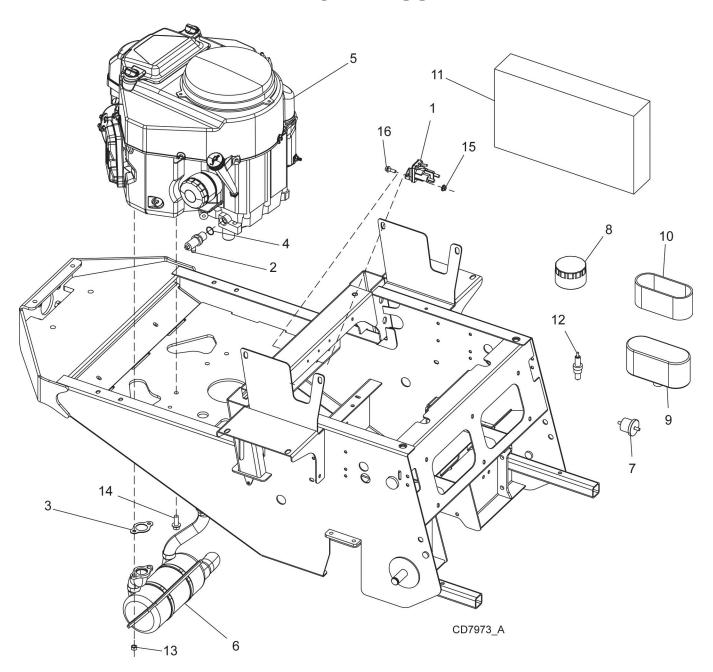
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## **FZ22-2 FRAME ASSEMBLY PARTS LIST**

REF	PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
1	01563700	1	Key switch	31	*	1	Battery, 340 CCA
2	06517400	1	Panel nut	32	1044901	1	Front cover
3	07517700	1	Ignition cap	33	78779	1	Skid plate
4	35139	2	Retainer ring	34	78606	1	Console
5	70179	1	Plug - 1.25 Sq - Plastic	35	78607	1	Decal, instruction
6	71144	2	Spring assembly	36	78610	12	Hose clamp
7	71156	2	.375-16 x 6.00 Bolt hook	37	78632	1	Gearbox shield
8	71170	2	Chain-lift	38	78717	1	Battery hold down
9	71444	2	Rubber bumper	39	78718	6	Weight, 15.6 lb
10	72262	1	Toggle 2P DT 2position clch	40	11036	2	3/4x1-1/2x18GA Washer
11	72410	1	Pivot rod	41	1326 *	2	1/8 x 1/2 Cotter pin
12	72411	2	Foot rest tread	42	16231	8	5/16 NC x 1/2 Flanged cap screw
13	73581	2	.5 x .62 x 1.0 Bushing, nylon	43	24660 *	2	3/8 NC x 3-1/2 Cap screw FT GR5
14	73827	1	Bracket	44	301300 *	6	1/4NC x 3/4 Truss head screw
15	73891	1	Foot rest assembly	45	3598 *	2	1/2 SAE Flat washer
16	73895	2	Weight transfer pin	46	62153	4	3/8NC x 1 Flanged Screw SRTD
17	73896	4	Weight transfer sleeve	47	70069 *	8	3/8 NC Flanged whiz nut
18	73898	2	Traction arm assembly	48	70070	2	.375 x .75 Clevis pin
19	73902	1	Hour meter	49	71630 *	4	1/8 x 3/4 Cotter pin
20	75196	1	Key	50	71851	8	5/16 NC x 3/4 Flanged cap screw
21	75472	1	Throttle cable	51	73163 *	10	5/16 NC Flanged whiz nut
22	75520	1	Switch deck	52	73542 *	7	10-24 x .50 Machined screw
23	75546	1	Glide	53	90001708 *	4	3/8 NC x 4.5 Carriage bolt ZP
24	75553	1	Boot	54	FA448 *	7	10-24 Nut w/Nylon insert
25	78069	1	Choke cable	55	78798	2	Bushing
26	1043268	1	Fuel tank, RH	56	70068	2	1/4 NC Whiz bolt
27	1043269	1	Fuel tank, LH	57	70065 *	2	1/4 NC Whiz nut
28	78333	2	Gas cap	58	2188161	1	Fuel selector valve
29	78799	2	Grommet				
30	78335	2	Remote vent		*	Stanc	dard hardware, obtain locally

MAN1192 (1/13/2017) Parts 31

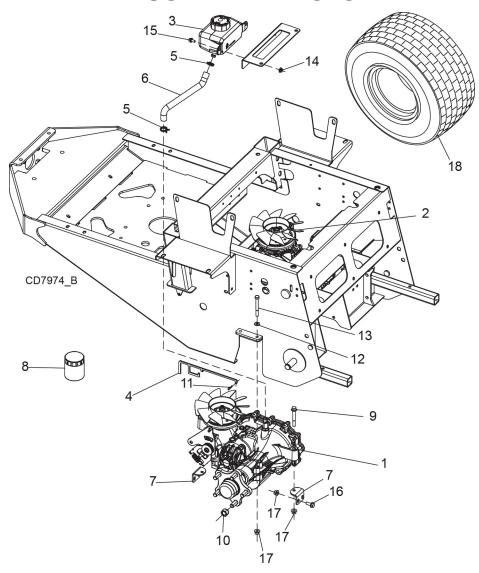
## **FZ22-2 ENGINE ASSEMBLY**



REF	PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
1	75310	1	Solenoid	10	78724	1	Air pre-filter
2	75325	1	Drain valve	11	78725	1	Engine tune up kit
3	75364	2	Exhaust gasket	12	21536100	2	Spark plug
4	75366	1	16mm O-ring	13	78738	4	Nut, Whiz M8 x 1.25P Flange Stainless
5	78457	1	Kawasaki, FS651V	14	62153	4	3/8 NC x 1 Flange Head Screw Serated
6	78778	1	Exhaust	15	70065 *	4	1/4 NC Whiz nut
7	71812	1	Fuel filter	16	70068	4	1/4 NC x 3/4 Whiz bolt
8	78722	1	Oil filter				
9	78723	1	Air filter			*	Standard Hardware, Obtain Locally

**32** Parts MAN1192 (1/13/2017)

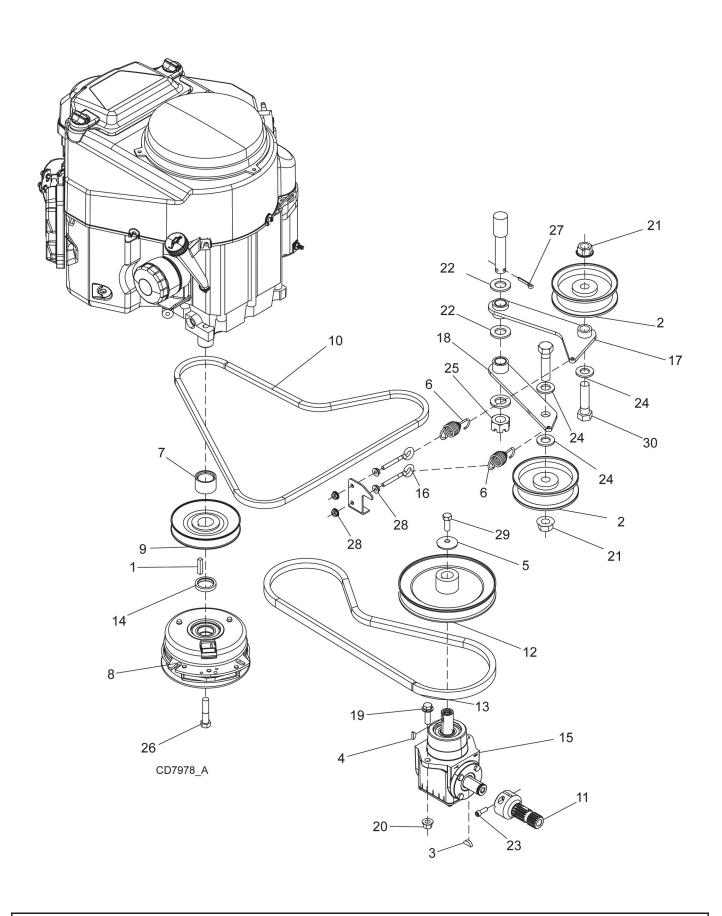
## **HYDROSTAT DRIVE SYSTEM**



REF	PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
1	78454	1	Hydrostat drive, RT	15	71206	2	1/4-20 Flanged hex screw
2	78455	1	Hydrostat drive, LT	16	71851	8	5/16 NC x 3/4 Flanged cap screw
3	78456	1	Expansion tank	17	73163 *	16	5/16 NC Flanged whiz nut
4	78555	2	Neutral link	18	73955	2	23 x 10.50 Turf tire & wheel -or-
5	78611	4	Hose clamp, dual wire, .75	18	74093	1	23 x 10.50 Chevron tire & wheel(right)
6	78612	2	Hose, expansion tank	18	74097	1	23 x 10.50 Chevron tire & wheel(left) -
7	78621	4	Angle, hydro support				or-
8	78726	2	Oil filter, ZT-3400	18	78625	2	23 x 8.50 Turf tire & wheel
		_	,	18	75101		23 x 10.50 Turf tire
9	78623	4	5/16NC x 2-1/2 Flanged cap screw, GR8	18	75102		23 x 10.50 Chevron tire
10	1010706	10	1/2-20 Wheel nut	18	78731		23 x 8.50 Turf tire
11	21363 *	2	1/16 x 1 Cotter hair pin #2				
12	35155 *	4	5/16 SAE Flat washer ZP			*	Standard Hardware, Obtain Locally
13	62155 *	4	5/16 NC x 2-3/4 Cap screw GR5		Note: Cor	ntact	Hydro-Gear <sup>®</sup> for repair information.
14	70065 *	2	1/4 NC Whiz nut				

MAN1192 (1/13/2017) Parts 33

## PTO, CLUTCH & PUMP ASSEMBLY

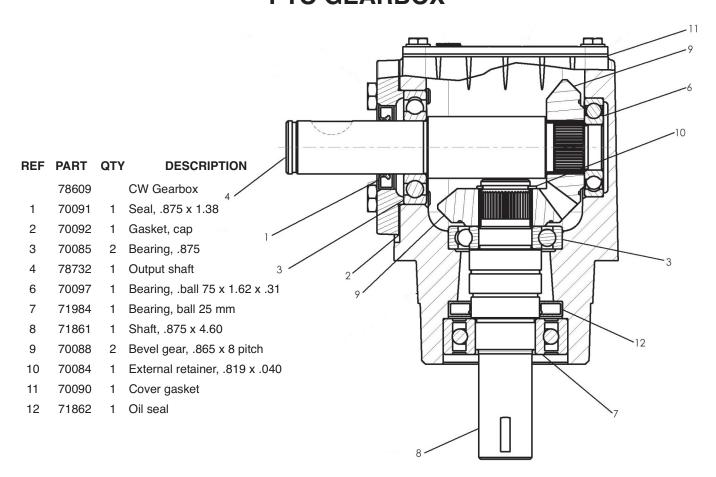


**34** Parts MAN1192 (1/13/2017)

## PTO CLUTCH & PUMP ASSEMBLY PARTS LIST

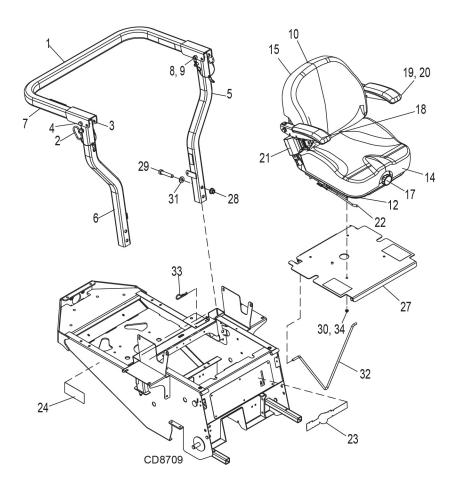
REF	PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
1	3886 *	1	1/4 x 1/4 x 1-1/4 Key	17	78813	1	Idler arm drive
2	51880	2	Flanged idler	18	78815	1	Idler arm PTO
3	62233	1	.187 X .75 Key Woodruff	19	1033958	2	3/8NC x 1-1/4 Flanged screw
4	64051	1	5/32 x 5/8 Key Woodruff	20	14350 *	2	3/8 NC Flanged lock nut
5	70005	1	Cupped washer	21	19025 *	2	5/8 NC Flanged lock nut
6	73826	2	Extension spring	22	2864 *	3	3/4 SAE Hardened flat washer
7	74076	1	1.135 x 1.500 x 1.000 Sleeve	23	2978 *	2	1/4 NC x 3/4 Socket Head Cap Screw
8	78465	1	Electric clutch	24	57817 *	3	5/8 SAE Hardenend flat washer
9	78469	1	Engine drive pulley	25	5849 *	1	3/4 NF Slotted hex nut
10	78837	1	V-Belt A 61	26	62533 *	1	7/16 NF x 2 Cap screw GR5
11	78493	1	1.0 Stub shaft	27	64291 *	1	5/32 x 1 Cotter pin
12	78530	1	Gearbox pulley	28	70065 *	4	1/4 NC Whiz nut
13	78836	1	V-Belt B 51	29	78188 *	1	3/8NF x 1 Cap screw GR5
14	78608	1	1/4 Spacer	30	941 *	2	5/8 NC x 2-1/2 Cap screw GR5
15	78609	1	Gearbox RT angle				
16	78734	2	.25 x 3.00 Eye bolt		*	Stand	dard hardware, obtain locally

## **PTO GEARBOX**



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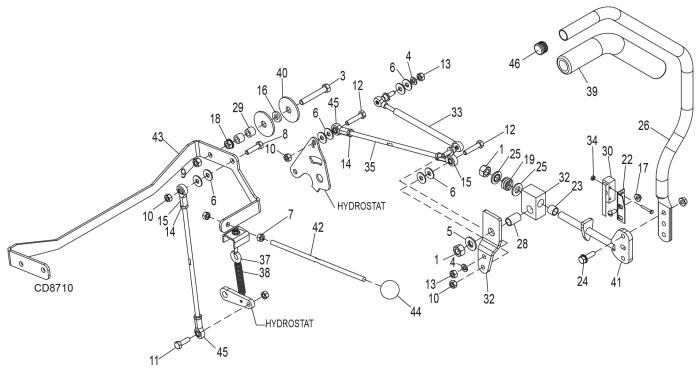
## **SEAT ASSEMBLY**



REF	PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
1	1032106	1	ROPS Folding	19	78496	2	Arm rest pad, 13M
2	1035001	2	Hinge pin assembly	20	78495	1	Arm rest assembly, LH, 13M
3	1035002	2	Anti-rattle spring	21	78497	1	2IN Retractable seat belt, 13M
4	1035003	1	ROPS stop 2.0	22	78503	1	4IN Track set, 13M
5	1035004	1	Post, LH	23	78700	1	DCL, Mown Machine
6	1035005	1	Post, RH	24	78834	2	DCL, Model FZ22-2
7	1035006	1	Top loop	27	78832	1	Seat platform w/decals
8	14069 *	2	1/2 NC x 3-1/4 Cap screw	28	19025 *	4	5/8 NC Flanged lock nut
9	765 *	2	1/2 NC Lock nut, plated	29	21341	4	5/8 NC x 3-1/4 Bolt GR5 ZP
10	78468	1	Seat, 13M w/belt	30	4378 *	4	5/16 Flat washer STD ZP
12	78498	1	Bellows, 13M	31	57817 *	4	5/8 SAE Hardened flat washer
13	75502	1	Delta plunger, 13M	32	78820	1	Prop rod
14	78500	1	Cushion cover, 13M	33	18270 *	1	3/16 Safety pin
15	78501	1	Back cover, 13M	34	73163 *	6	5/16 NC Flanged whiz nut
16	78502	1	Wiring harness, 13M				
17	78504	1	Weight adjust knob, 13M		*	Stand	dard hardware, obtain locally
18	78494	1	Arm rest assembly, RH, 13M				

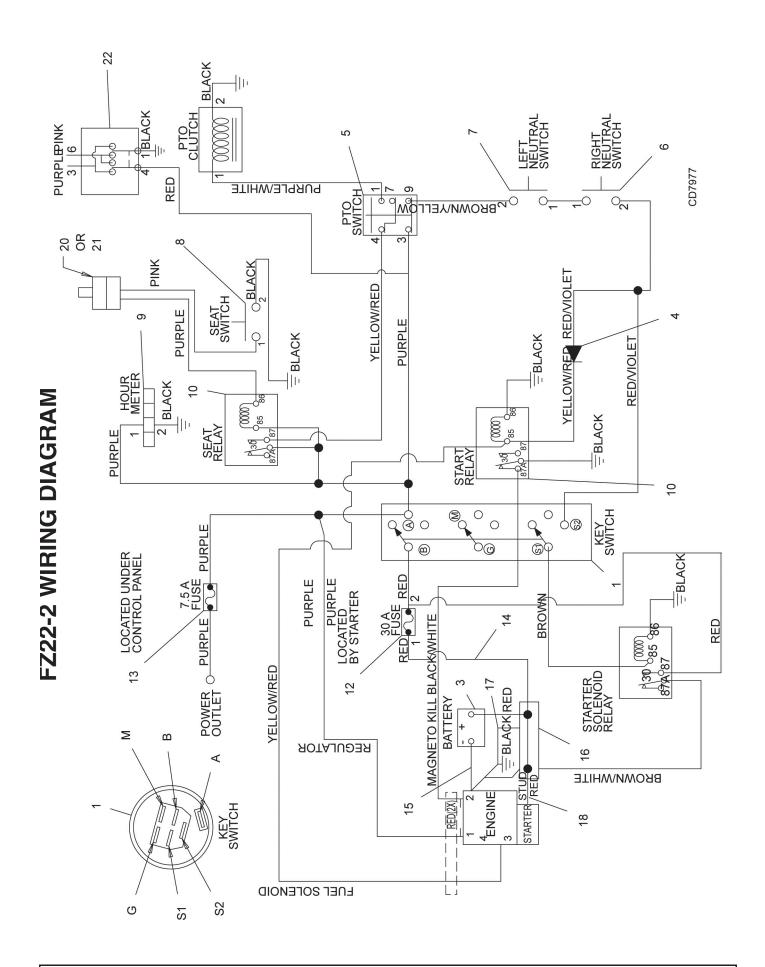
**36** Parts MAN1192 (1/13/2017)

# STEERING ASSEMBLY



REF	PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
1	765 *	4	1/2 NC Hex lock nut	24	71632	4	5/16 NC X 1 Whiz bolt
2	1282	4	1/4 NC x 1/2 Round head screw	25	72886	4	Nylon shoulder washer
3	2290 *	2	3/8 NC x 2-1/2 HHCS	26	73023	2	Steering lever
4	2472 *	4	5/16 Lock washer	27	73163 *	4	5/16 NC Flanged whiz nut
5	3598 *	2	1/2 Flat washer	28	73581	2	Pivot bushing
6	4378 *	16	5/16 Flat washer	29	73896	4	Weight transfer sleeve
7	4529 *	2	5/16 NC Hex nut	30	75105	2	Steering safety switch
8	6250 *	2	5/16 NC X 1-1/4 Hex bolt Gr 5	31	75458	1	Steering pivot - RH
9	6698 *	2	3/8 NC Hex lock nut	32	75459	1	Steering pivot - LH
10	6778 *	8	5/16 NC Hex lock nut	33	75488	2	Dampener
11	14562 *	2	5/16 NC X 1 Hex head cap screw GR5	34	75570 *	4	6-32 Nylock nut
12	24408 *	4	5/16 NC X 1-1/2 Hex head cap screw	35	78492	2	Linkage rod
			GR5	36	78514	2	Brake rod
13	30515 *	4	M8 X 1.25 Hex nut	37	78633	2	1/4 x 2.0 Eye bolt
14	33654 *	8	5/16 NF Jam nut	38	78705	2	Extension spring .5062-2.5-10
15	37613	4	Rod end, 5/16 NF female	39	78719	2	Foam handle grip
16	44546 *	2	3/8 Flat washer, extra thick	40	78775 *	4	1/2 Flat washer
17	70065 *	6	1/4 NC Whiz nut	41	78810	2	Steering arm
18	70069 *	2	3/8 NC Flanged whiz nut	42	1044436	1	Brake rod extension
19	70162	2	Compression spring	43	1044446	1	Brake link
20	70284	4	6-32 x 1 bolt	44	1044448	1	Brake knob
21	70423	2	1/2 Nylon washer	45	09107800	4	5/16 NF LH Female rod end
22	71314	1	Steering safety switch mount - LH	46	09211400	2	Caplug - handlebar
22	71313	1	Steering safety switch mount - RH		HHCS		Head Cap Screw
23	71323	4	1/2 Nylon Bushing		*		dard hardware, obtain locally

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38 Parts

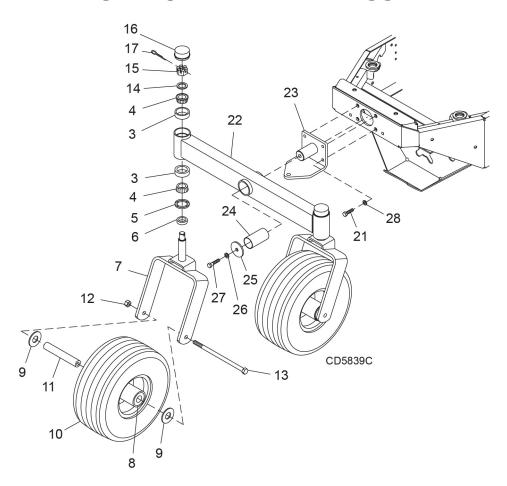
MAN1192 (1/13/2017)

# **FZ22-2 WIRING DIAGRAM PARTS LIST**

PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
78613	1	FZ22-2 Wiring assembly	13	71387	1	Fuse - 7.5 amp auto
01563700	1	Ignition switch	14	78043	1	Positive battery cable w/ terminal boot
75196	1	Ignition key	15	78042	1	Negative battery cable
	1	Battery 12V L-Terminals 340CCA (obtain locally)	16	75310	1	Engine solenoid relay
73046	1	Diode assembly	17	75324	1	Ground wire solenoid
72262	1	•	18	75390	1	Positive cable, short
_			18A	75392	1	Boot (not shown)
		3 ,	19	75309	1	Engine wiring harness jumper
			20	78636	1	Jumper
			21	78637	1	Deck switch 39"
		Fuse - 30 amp auto	22	75520	1	Toggle switch
	78613 01563700 75196  73046 72262 75105 75502 73902 71475	78613 1 01563700 1 75196 1	78613 1 FZ22-2 Wiring assembly  01563700 1 Ignition switch  75196 1 Ignition key 1 Battery 12V L-Terminals 340CCA (obtain locally)  73046 1 Diode assembly  72262 1 PTO Switch  75105 2 Steering safety switch  75502 1 Seat switch  73902 1 Hour meter  71475 1 Bosch style relay	78613 1 FZ22-2 Wiring assembly 13 01563700 1 Ignition switch 14 75196 1 Ignition key 15 1 Battery 12V L-Terminals 340CCA (obtain locally) 16 73046 1 Diode assembly 17 72262 1 PTO Switch 18 75105 2 Steering safety switch 18A 75502 1 Seat switch 19 73902 1 Hour meter 20 71475 1 Bosch style relay 21	78613         1         FZ22-2 Wiring assembly         13         71387           01563700         1         Ignition switch         14         78043           75196         1         Ignition key         15         78042	78613 1 FZ22-2 Wiring assembly 13 71387 1 01563700 1 Ignition switch 14 78043 1 75196 1 Ignition key 15 78042 1 6054 1 Diode assembly 16 75310 1 73046 1 Diode assembly 17 75324 1 72262 1 PTO Switch 18 75390 1 75105 2 Steering safety switch 18A 75392 1 75502 1 Seat switch 19 75309 1 73902 1 Hour meter 20 78636 1 71475 1 Bosch style relay 21 78637 1

MAN1192 (1/13/2017) Parts 39

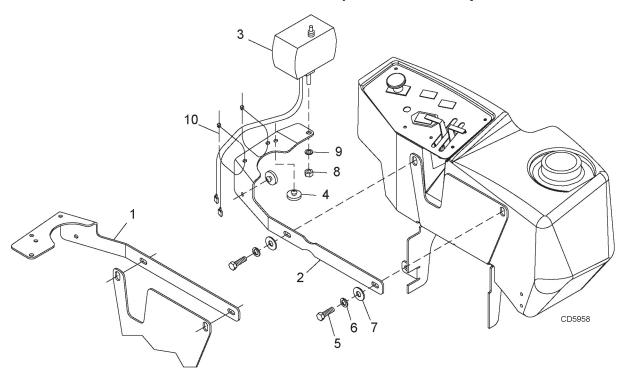
# WIDE STANCE TAILWHEEL ASSEMBLY



REF	PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
3	3585	4	Bearing cup	15	5849	2	3/4 NF Slotted hex nut
4	3586	4	Bearing cone	16	70332	2	Dust cap
5	70328	2	Seal, 1.5 x 2 x .187	17	64291 *	2	Cotter pin, 5/32 x 1
6	70086	2	Spacer, 1.013 x 1.5 x .375	21	62153 *	4	3/8 NC x 1 Flanged screw SRTD
7	73818	2	Wheel fork	22	70336	1	Axle beam (includes item #22)
8	05435700	4	Bearing, 25 mm x 52 mm x 15 mm	23	73740	1	Rear axle pivot
9	3598 *	4	1/2 Flat washer	24	74065	2	Oilite bushing
10	07147800	2	Wheel & tire assembly tire, 15 x 6-6	25	70602	1	Washer, 1/2 x 2-1/4
11	09231800	2	Spacer - wheel	26	855 *	1	1/2 Standard lock washer
12	765 *	2	1/2 NC Lock nut	27	25475 *	1	1/2 NC x 1 HHCS full thread GR5
13	38107	2	1/2 NC x 9 HHCS				
14	70417	2	Bushing washer		*	Stand	dard Hardware, Obtain Locally

**40** Parts MAN1192 (1/13/2017)

# **HEADLIGHT KIT (OPTIONAL)**

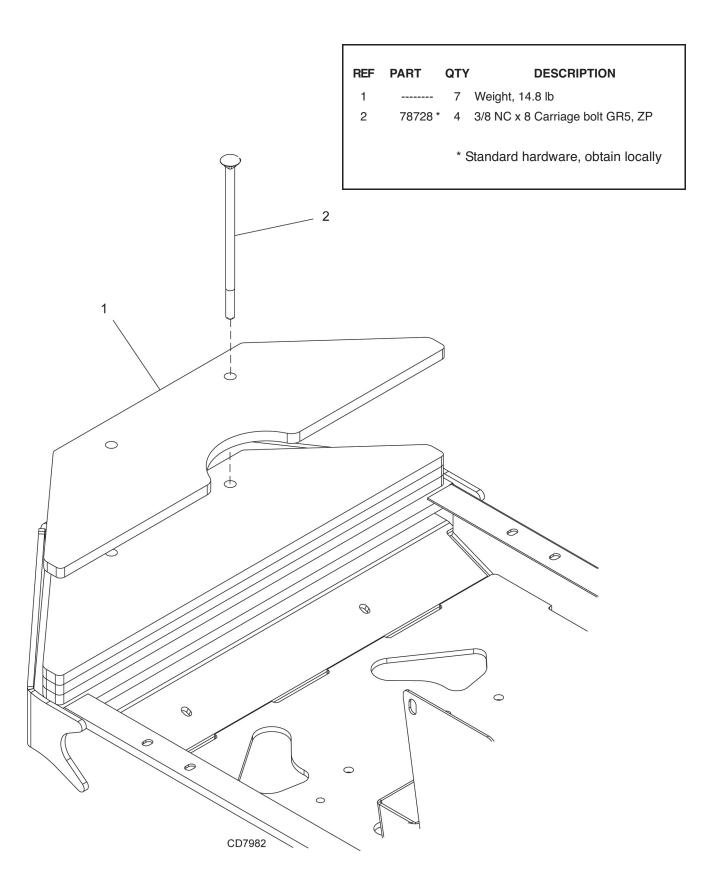


REF	PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
	73938		Headlight kit	7	4378 *	4	5/16 Flat washer
1	73937	1	Light bracket - left	8	5288 *	2	1/4 NC Hex nut
2	73936	1	Light bracket - right	9	1985 *	2	1/4 Lock washer
3	73935	2	Rect. work light with switch	10	*	8	Plastic tie
4	07516000	4	Button bumper		*	Stand	dard hardware, obtain locally
5	6096 *	4	5/16 NC x 3/4 HHCS				
6	2472 *	4	5/16 Lock washer	NOT	<b>-0</b>	المالد؛	

**NOTES:** Headlight power outlets are located near the steering pivot blocks.

MAN1192 (1/13/2017) Parts 41

# 78727 COUNTERWEIGHT MOUNT KIT (OPTIONAL)



**42** Parts MAN1192 (1/13/2017)

## **BOLT TORQUE CHART**

Always tighten hardware to these values unless a different torque value or tightening procedure is listed for a specific application.

Fasteners must always be replaced with the same grade as specified in the manual parts list.

Always use the proper tool for tightening hardware: SAE for SAE hardware and Metric for metric hardware.

Make sure fastener threads are clean and you start thread engagement properly.

All torque values are given to specifications used on hardware defined by SAE J1701 MAR 99 & J1701M JUL 96.



**SAE SERIES TORQUE** 



(No Dashes)

SAE Bolt Head Identification



**SAE Grade 5** (3 Radial Dashes)



**SAE Grade 8** (6 Radial Dashes)

(A)		MARKING ON HEAD										
Diameter	Wrench	SA	Æ 2	SA	SAE 5		E 8					
(Inches)	Size	lbs-ft	N-m	lbs-ft	N-m	lbs-ft	N-m					
1/4"	7/16"	6	8	10	13	14	18					
5/16"	1/2"	12	17	19	26	27	37					
3/8"	9/16"	23	31	35	47	49	67					
7/16"	5/8"	36	48	55	75	78	106					
1/2"	3/4"	55	75	85	115	120	163					
9/16"	13/16"	78	106	121	164	171	232					
5/8"	15/16"	110	149	170	230	240	325					
3/4"	1-1/8"	192	261	297	403	420	569					
7/8"	1-5/16"	306	416	474	642	669	907					
1"	1-1/2"	467	634	722	979	1020	1383					



**METRIC SERIES** 

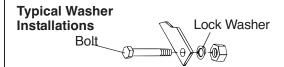


Metric Bolt Head Identification Grade 8.8



Metric Grade 10.9

			Coarse	Thread			Fine 7	hread		
(A)			Marking	on Head				(A)		
Diameter & Thread Pitch	Wrench	Metri	ic 8.8	Metri	c 10.9	Metri	ic 8.8	Metri	c 10.9	Diameter & Thread Pitch
(Millimeters)	Size	N-m	lbs-ft	N-m	lbs-ft	N-m	lbs-ft	N-m	lbs-ft	(Millimeters)
6 x 1.0	10 mm	8	6	11	8	8	6	11	8	6 x 1.0
8 x 1.25	13 mm	20	15	27	20	21	16	29	22	8 x 1.0
10 x 1.5	16 mm	39	29	54	40	41	30	57	42	10 x 1.25
12 x 1.75	18 mm	68	50	94	70	75	55	103	76	12 x 1.25
14 x 2.0	21 mm	109	80	151	111	118	87	163	120	14 x 1.5
16 x 2.0	24 mm	169	125	234	173	181	133	250	184	16 x 1.5
18 x 2.5	27 mm	234	172	323	239	263	194	363	268	18 x 1.5
20 x 2.5	30 mm	330	244	457	337	367	270	507	374	20 x 1.5
22 x 2.5	34 mm	451	332	623	460	495	365	684	505	22 x 1.5
24 x 3.0	36 mm	571	421	790	583	623	459	861	635	24 x 2.0
30 x 3.0	46 mm	1175	867	1626	1199	1258	928	1740	1283	30 x 2.0

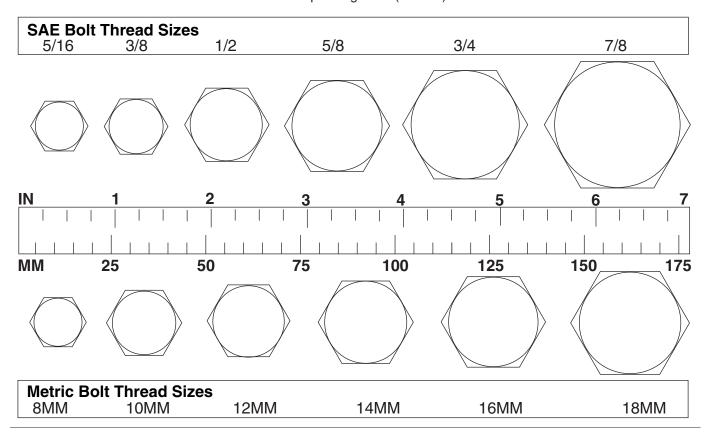






# **BOLT SIZE CHART**

NOTE: Chart shows bolt thread sizes and corresponding head (wrench) sizes for standard SAE and metric bolts.



## **ABBREVIATIONS**

AG	Agriculture
ASABE	American Society of Agricultural &
	Biological Engineers (formerly ASAE)
ASAE	. American Society of Agricultural Engineers
ATF	Automatic Transmission Fluid
BSPP	British Standard Pipe Parallel
BSPTM	British Standard Pipe Tapered Male
CV	Constant Velocity
CCW	Counter-Clockwise
CW	Clockwise
F	Female
FT	Full Thread
GA	Gauge
GR (5, etc	c.) Grade (5, etc.)
	Hex Head Cap Screw
HT	Heat-Treated
JIC	Joint Industry Council 37° Degree Flare
LH	Left Hand
LT	Left
m	Meter
mm	Millimeter
	Male

MPa	Mega Pascal
	Newton
	National Coarse
	National Fine
	National Pipe Straight Mechanical
	National Pipe Tapered
	ional Pipe Tapered Swivel Female
	O-Ring Boss - Male
	Pitch
PBY	Power-Beyond
psi	Pounds per Square Inch
PTO	Power Take Off
QD	Quick Disconnect
RH	Right Hand
ROPS	Roll-Over Protective Structure
RPM	Revolutions Per Minute
RT	Right
SAE	Society of Automotive Engineers
UNC	Unified Coarse
UNF	Unified Fine
UNS	Unified Special

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(Mow'n Machine™ Zero-Turn Mower Replacement Parts)

Woods Equipment Company ("WOODS") warrants replacement parts for Mow'n Machine™ zero-turn mowers and attachments to be free from defect in material and workmanship for a period of ninety (90) days from the date of delivery of the product to the original purchaser.

IMPLIED WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO A PERIOD OF NINETY (90) DAYS FROM THE DATE OF DELIVERY OF THE PRODUCT TO THE ORIGINAL PURCHASER. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This Warranty is extended solely to the original purchaser of the product. Should the original purchaser sell or otherwise transfer the product to a third party, this Warranty does not transfer to the third party purchaser in any way. There are no third party beneficiaries of this Warranty.

This Warranty does not cover normal wear or tear, or normal maintenance items, or any damage, failure or loss caused by improper operation, improper maintenance, misuse, or an accident.

WOODS' obligation under this Warranty is limited to, at WOODS' option, the repair or replacement, free of charge, of the product if the product is defective or in noncompliance with this Warranty. The product must be returned to WOODS with proof of purchase within thirty (30) days after such defect or noncompliance is discovered or should have been discovered, routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid. WOODS shall complete such repair or replacement within a reasonable time after WOODS receives the product.

WOODS shall not be liable for any incidental or consequential losses, damages or expenses, arising directly or indirectly from the product, whether such claim is based upon breach of contract, breach of warranty, negligence, strict liability in tort or any other legal theory. Without limiting the foregoing, WOODS shall not be liable for any damages relating to (i) lost profits, business, revenues or goodwill; (ii) any expense or loss incurred for labor, supplies, substitute machinery or rental; or (iii) any other type of damage to property or economic loss. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you.

No agent, representative, dealer, distributor, service person, salesperson, or employee of any company, including without limitation, WOODS, its authorized dealers, distributors, and service centers, is authorized to alter, modify, or enlarge this Warranty.

This Warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

Answers to any questions regarding warranty service and locations may be obtained by contacting:

**WOODS®** | A Blount International Brand

2606 South Illinois Route 2 Post Office Box 1000 Oregon, Illinois 61061 USA 800-319-6637 tel

800-399-6637 fax woodsequipment.com **WCCDS** 

ALITEC TO CENTRAL FABRICATORS GANNON GANNON

WAIN-ROY

WOOD



### LIMITED WARRANTY

#### Mow'n Machine™ Zero-Turn Mowers

Please Enter Information Below and Save For Future Reference.						
Date Purchased:	From (Dea	ıler):				
Model Number:	Serial Nun	nber:				

#### WHAT IS COVERED:

Woods Equipment Company ("WOODS") warrants Mow'n Machine™ zero-turn mowers, attachments and accessories to be free from defect in material and workmanship for the warranty periods listed below.

#### FOR HOW LONG:

Mow'n Machine Model #FZ22K, FZ23B, FZ25D, FZ28K & attachments are warranted for two (2) years from the date of delivery to the original purchaser or 2000 hours of operation, whichever occurs first.

IMPLIED WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN WARRANTY PERIODS LISTED ABOVE. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

#### WHO IS COVERED:

This Warranty is extended solely to the original purchaser of the product. Should the original purchaser sell or otherwise transfer the product to a third party, this Warranty does not transfer to the third party purchaser in any way. There are no third party beneficiaries of this Warranty.

#### WHAT IS NOT COVERED:

This Warranty does not cover normal wear or tear, or normal maintenance items, or any damage, failure or loss caused by:

- 1. Improper operation, improper maintenance, misuse, or an accident;
- 2. Any modification or repair by someone other than WOODS, a WOODS' authorized dealer or distributor, and/or a WOODS' authorized service center; or
- 3. Repairs made with parts other than those obtained through WOODS.

WOODS makes no warranty, express or implied, with respect to engines, batteries, tires or other parts or accessories with respect to which the manufacturer provides a separate warranty.

#### WHAT WOODS WILL DO TO CORRECT PROBLEMS:

WOODS' obligation under this Warranty is limited to, at WOODS' option, the repair or replacement, free of charge, of the product if the product is defective or in noncompliance with this Warranty. The product must be returned to WOODS with proof of purchase within thirty (30) days after such defect or noncompliance is discovered or should have been discovered, routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid. WOODS shall complete such repair or replacement within a reasonable time after WOODS receives the product.

#### **OTHER LIMITATIONS:**

WOODS shall not be liable for any incidental or consequential losses, damages or expenses, arising directly or indirectly from the product, whether such claim is based upon breach of contract, breach of warranty, negligence, strict liability in tort or any other legal theory. Without limiting the foregoing, WOODS shall not be liable for any damages relating to (i) lost profits, business, revenues or goodwill; (ii) any expense or loss incurred for labor, supplies, substitute machinery or rental; or (iii) any other type of damage to property or economic loss. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you.

No agent, representative, dealer, distributor, service person, salesperson, or employee of any company, including without limitation, WOODS, its authorized dealers, distributors, and service centers, is authorized to alter, modify, or enlarge this Warranty.

#### HOW STATE I AW APPLIES:

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

#### **QUESTIONS:**

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# PART NO. MAN1192

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