Pro-Stance™

Owner/Operator Manual Manuel du Propriétaire/Utilisateur



Models

994126 – Pro-Stance 48 (SN 040000 +)

994128 – Pro-Stance 52 (SN 040000 +)

994130 – Pro-Stance 52 EFI (SN 040000 +)

994127 - Pro-Stance 48 CARB (SN 040000 +)

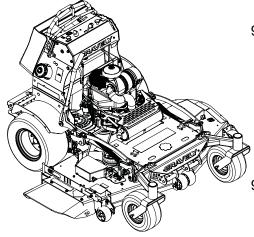
994129 – Pro-Stance 52 CARB (SN 040000 +)

994121 – Pro-Stance 52 (SN 040000 +)

994123 – Pro-Stance 60 (SN 040000 +)

994124 - Pro-Stance 60 EFI (SN 040000 +)

994125 - Pro-Stance 60 CARB (SN 040000 +)





The use of any gasoline exceeding 10% ethanol (E10) or 10% MTBE will void the product warranty.

L'utilisation d'une essence contenant plus de 10%

L'utilisation d'une essence contenant plus de 10% d'éthanol (E10) ou de 10% de MTBE annulent la garantie.







INTRODUCTION

MANUALES EN IDIOMAS DIFERENTES DEL INGLES





Puede obtener manuales en idiomas diferentes del inglés en su distribuidor. Visite a su distribuidor o vaya a www.ariens.com para obtener una lista de idiomas disponibles para su equipo.

También puede imprimir manuales en idiomas diferentes del inglés descargándolos gratuitamente de nuestra página Web:

http://www.gravely.com

THE MANUAL

Before operation of unit, carefully and completely read your manuals. The contents will provide you with an understanding of safety instructions and controls during normal operation and maintenance.

All reference to left, right, front, or rear are given from operator standing in the operation position and facing the direction of forward travel.

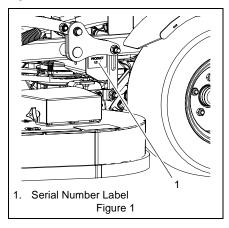
ENGINE MANUAL

The engine on this unit is covered by a separate manual specific to the engine. This manual is included in the literature package that shipped with the unit. Refer to this manual for engine service recommendations. If the engine manual is not available, contact the engine manufacturer for a replacement manual.

MODEL AND SERIAL NUMBERS

When ordering publications, replacement parts, or making service inquiries, know the model and serial numbers of your unit and engine.

Numbers are located on the product registration form in the literature package. They are printed on a serial number label located on the frame of your unit. See Figure 1.



•	Record	unit	model	and	serial	numbers
	here.					

Record engine model and serial numbers here.

PRODUCT REGISTRATION

The Gravely dealer must register the product at the time of purchase. Registering helps Ariens process warranty claims or contact you with the latest service information. Claims meeting requirements during the limited warranty period will be honored, whether or not the product registration card is returned with proof of purchase.

Customer Note: If the Dealer does not register your product, please complete, sign and return the product registration card to Gravely or go to www.gravely.com.

UNAUTHORIZED REPLACEMENT PARTS

Use only Gravely replacement parts. The replacement of any part on this unit with anything other than an Ariens authorized replacement part may adversely affect the performance, durability and safety of this unit and may void the warranty. Ariens disclaims liability for any claims or damages, whether warranty, property damage, personal injury or death arising out of the use of unauthorized replacement parts.

NOTE: A Parts Manual may be downloaded from www.gravely.com.

DISCLAIMER

Gravely reserves the right to discontinue, change and improve its products at any time without notice or obligation to the purchaser.

The descriptions and specifications contained in this manual were current at the time of printing. Equipment described within this manual may be optional. Some illustrations may not be applicable to your unit.

DEALER DELIVERY

Dealer should:

- Test parking brake after unit is assembled to be sure adjustment has not been disturbed in shipment (see Parking Brake Interlock System on page 14). Wheel brakes are properly adjusted at factory.
- Check the safety interlock system to make sure that it is functioning properly. With operator standing on operator platform, unit must not start unless steering levers are in neutral and power takeoff (PTO) is disengaged (off). Engine must stop if operator steps off of operator platform when steering levers are in any drive position or PTO is engaged (on). See Safety Interlock System on page 14.

- Fill out Original Purchaser Registration Card and return the card to Gravely.
- 4. Explain Limited Warranty Policy.
- Explain recommended lubrication and maintenance. Advise customer on adjustments. Instruct customer on controls and operation of unit. Discuss and emphasize the Safety Precautions. Give customer this Owner/Operator and the engine manual. Advise customer to thoroughly read and understand them.

Customer Note: Your Dealer has been provided complete set-up and preparation instructions which must be completed prior to you taking delivery of this unit. The dealer is required to review important information in this manual with you before or upon delivery of the unit or attachment.

SAFETY



WARNING: This cutting machine is capable of amputating hands and feet and throwing objects. Failure to observe the safety instructions in the manuals and on decals could result in serious injury or death.

Slopes are a major factor related to loss-of-control and tip-over accidents. Operation on all slopes requires extra caution.

Tragic accidents can occur if the operator is not alert to the presence of children. Never assume that children will remain where you last saw them.

Gasoline is extremely flammable and the vapors are explosive, handle with care.

Disengage attachment, stop unit and engine, remove key, engage parking brake, and allow moving parts to stop before leaving operator's position.

SAFETY ALERT SYMBOLS



These are safety alert symbols. They mean:

- ATTENTION!
- YOUR SAFETY IS INVOLVED!



When you see this symbol:

- BECOME ALERT!
- OBEY THE MESSAGE!

SIGNAL WORDS

The safety alert symbols above and signal words below are used on decals and in this manual.

Read and understand all safety messages.



DANGER: IMMINENTLY HAZARDOUS SITUATION! If not avoided, WILL RESULT in death or serious injury.



WARNING: POTENTIALLY HAZARDOUS SITUATION! If not avoided, COULD RESULT in death or serious injury.

A

CAUTION: POTENTIALLY HAZARDOUS SITUATION! If not avoided, MAY RESULT in minor or moderate injury. It may also be used to alert against unsafe practices.

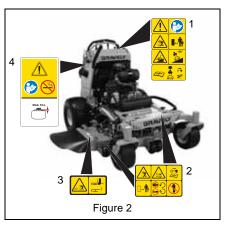
NOTATIONS

NOTICE: General reference information for proper operation and maintenance practices.

IMPORTANT: Specific procedures or information required to prevent damage to unit or attachment.

SAFETY DECALS AND LOCATIONS

ALWAYS replace missing or damaged Safety Decals. See Figure 2 for safety decal locations.



1. DANGER!



WARNING!



Read Owner/Operator Manual. Allow operation only by properly trained adult, never children.



Never direct discharge toward other people. Thrown objects can cause injury.



Operating on slopes may cause the unit to tip unexpectedly. Do not tip mower while operating the unit.



Keep children and others away from unit while operating.



Look down and behind before and while backing. DO NOT operate on slopes over 20°.





Read manual, set parking brake, remove key and remove spark plug before adjusting or repairing unit.



2. DANGER!



Discharge Hazard – NEVER direct discharge toward people, pets or property. Thrown objects can cause injury or damage.



Dismemberment Hazard – NEVER stick hands or feet under deck or shielded areas.



Shut off engine, remove key, and read manual before servicing or making adjustments to unit.



Keep children and others away from unit while unit is in operation.



Keep feet and hands away from all rotating or moving parts.



DO NOT step or stand in this area.

3. DANGER!



Discharge Hazard – NEVER operate unit without discharge chute in operating position. Thrown objects can cause injury or damage.



Do not operate mower unless all guards are in operating position or bagger is attached.

4. CAUTION!



CAUTION!



Read Owner/Operator Manual. Allow operation only by properly trained adult, never children.



No smoking.



Fill fuel tank to bottom of neck – MAXIMUM.



WARNING: Overfilling may cause severe damage to evaporative system!

- Never fill fuel tank when engine is running, hot or unit is indoors. Never overfill fuel tank.
- Replace fuel cap securely and clean up spilled fuel.

SAFETY RULES

This cutting machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

The following safety instructions are based on the B71.4 specifications of the American National Standards Institute in effect at the time of production.

Training

Read, understand, and follow all instructions on the machine and in the manuals before starting.

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

Be sure the area is clear of bystanders and pets before operating. Stop machine if anyone enters the area.

Improper use of power equipment can cause serious permanent injury or death to the operator or a bystander.

Understand:

- · How to operate all controls
- · The functions of all controls
- How to STOP in an Emergency
- · Braking and steering characteristics
- · Turning radius and clearances

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.

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.

Operator Age

Do not allow children under the age of 18 to operate or service any outdoor power equipment.

Local regulations may restrict the age of the operator.

Data indicates operators age 60 years and above are involved in a large percentage of riding mower-related injuries.

These operators should evaluate their ability to operate the riding mower safely enough to protect themselves and others

from serious injury.

Children

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the mowing activity. Never assume that children will remain where you last saw them

Be alert and turn machine off if a child enters the area.

Before and while backing, look behind and down for small children.

Never carry children, even with the blade(s) shut off. They may fall off and be seriously injured or interfere with safe machine operation. Children who have been given rides in the past may suddenly appear in the mowing area for another ride and be run over or backed over by the machine.

Never allow children to operate or service the machine.

Use extreme care when approaching blind corners, shrubs, trees, or other objects that may block your view of a child.

Keep children out of the mowing area and in the watchful care of a responsible adult other than the operator.

Personal Protection

Always wear appropriate clothing including hard hat, protective gloves, safety glasses and hearing protection. Long hair, loose clothing or jewelry may get tangled in moving parts.

DO NOT wear loose clothing or jewelry and tie back hair during operation.

Wear proper footwear to improve footing on slippery surfaces. NEVER wear open sandals or canvas shoes during operation.

Before Operating

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.

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.

Keep all nuts and bolts tight to be sure the equipment is in safe working condition.

Maintain the machine to be in compliance with the maintenance schedule.

Clean grass and debris from unit, especially from around muffler and engine, to help prevent fires.

Check parking brake operation frequently. Adjust and service as required.

Inspect unit before each use for missing or damaged decals and shields, correctly operating safety interlock system, and deterioration of grass catchers. Replace or repair as needed.

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

Ensure Safety Interlock System is functioning properly. DO NOT operate unit if safety interlock is damaged or disabled.

Be sure all drives are in neutral and parking brake is engaged before starting engine. Steering control levers must be in neutral and PTO disengaged. Only start engine from the operator's position. Use seat belts if provided.

Operate unit only when standing in operator zone.

Be sure the area is clear of bystanders and pets before operating.

Never tamper with safety devices. Check their proper operation regularly.

Keep machine free of grass, leaves, or other debris build-up. Clean up oil or fuel spillage and remove any fuel-soaked debris.

Operation

Never operate machine in a closed or poorly ventilated area. Never run an engine in an enclosed area.

ALWAYS maintain unit in safe operating condition. Damaged or worn out muffler can cause fire or explosion.

This product is equipped with an internal combustion type engine. DO NOT use unit on or near any unimproved, forest-covered or brush covered land unless exhaust system is equipped with a spark arrester meeting applicable local, state or federal laws. A spark arrester, if it is used, must be maintained in effective working order by operator.

Do not change the engine governor setting or overspeed the engine.

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

Keep hands and feet away from the cutting units. Do not put hands or feet near rotating parts or under the machine. Keep clear of the discharge opening at all times.

DO NOT touch parts which are hot. Allow parts to cool.

Never operate with the discharge deflector raised, removed or altered, unless using a grass catcher. Make sure other safety devices are in place and working.

Always keep hands and feet away from all pinch points.

Avoid slippery surfaces. Be sure of your footing while using pedestrian controlled equipment, especially when backing up. Walk, don't run. Use extreme caution if operating on wet grass, reduced footing could cause slipping.

Never carry passengers and keep pets and bystanders away. Stop machine if anyone enters the area.

Be aware of the mower discharge direction and do not point it at anyone. Never direct discharged material toward anyone. Avoid discharging material against a wall or obstruction. Material may ricochet back toward the operator. Stop the blade(s) when crossing gravel surfaces.

Never engage PTO when attachment, including mower blades, is not in use. Always turn off power to attachment when not in active use such as traveling or crossing driveways.

Slow down and use caution when making turns and crossing roads and sidewalks. Stop blades if not mowing.

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

Never engage PTO while raising the attachment, including mower blades, or when attachment is in the raised position.

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 modify or remove safety devices.

Do not mow in reverse unless absolutely necessary. Always look behind and down before backing up to be sure of a clear path.

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

Never leave a running machine unattended. Always turn off blade(s), set parking brake, stop engine and remove key before dismounting. Disengage blade(s) when not mowing. Shut off engine and wait for all parts to come to a complete stop before cleaning the machine, removing the grass catcher, or unclogging the discharge guard.

Know the weight of loads. Limit loads to those you can safely control and the unit can safely handle.

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

Operating Conditions

Always check overhead and side clearances carefully before operation.

Watch for traffic when operating near or crossing roadways.

Ensure the area is cleared of objects such as rocks, wire, toys, etc., which could be thrown by the blades prior to operation.

Check for weak spots on docks, ramps or floors. Avoid uneven work areas and rough terrain. Stay alert for hidden hazards or traffic.

Always use ramps to climb curbs to prevent personal injury or equipment damage.

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

Dust, smoke, fog, etc. can reduce vision and cause an accident.

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

Slope Operation

Slopes are a major factor related to loss of control and tip-over accidents, which can result in severe injury or death. Operation on all slopes requires extra caution. If you cannot back up the slope or if you feel uneasy on it, do not mow it.

DO NOT operate on slopes of more than 20°. This maximum degree of operation is without attachments.

Do not operate on slopes of more than 10° with attachments such as grass catchers installed.

Mow across slopes, not up and down.

DO NOT operate the mower on slopes at all when the grass is wet.

DO NOT operate on slopes steeper than you can feel secure about the traction of the tires and the stability of the mower.

Watch for holes, ruts, bumps, rocks, or other hidden objects. Uneven terrain could overturn the machine. Tall grass can hide obstacles.

Do not mow on moist or wet grass. Tires may lose traction causing a loss of control.

Use extra care while operating machine with grass catchers or other attachments; they can affect the stability of the machine. Do not use on steep slopes.

Slow down and use caution when making turns and when changing directions on slopes. Keep all movements on the slope slow and gradual. Sudden changes in speed or direction could cause the machine to roll over.

Avoid starting, stopping, or turning on a slope. If the tires lose traction, disengage the blade(s) and proceed slowly straight down the slope.

Operation on slopes may lead to loss of steering control. When operating on slopes be prepared to react to an emergency situation:

- · Return steering levers to neutral position.
- · Immediately set parking brake.
- · Turn off PTO and engine.

DO NOT try to stabilize the machine by putting your foot on the ground.

DO NOT park on slopes unless necessary. When parking on slope always chock or block wheels. Always set parking brake.

Choose a low ground speed so you will not have to stop or shift while on a slope.

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.

DO NOT operate near drop-offs, ditches, or embankments. Unit can suddenly turn over if a wheel is over the edge of a cliff or ditch, or if an edge caves in.

Do not bypass transmission or allow transmission to free-wheel when on a slope.

Fuel

To avoid personal injury or property damage, use extreme care in handling gasoline. Gasoline is extremely flammable and the vapors are explosive.

Ethanol blends must not exceed E10. Higher ethanol content may cause your machine to run hotter and damage your engine.

Replace fuel cap securely and clean up spilled fuel before starting engine.

Extinguish all cigarettes, cigars, pipes, and other sources of ignition.

Use only an approved fuel container.

Never store the machine or fuel container where there is an open flame, spark, or pilot light such as on a water or space heater or other appliances.

Never fill containers inside a vehicle or on a truck or trailer bed with a plastic liner. Always place containers on the ground away from your vehicle before filling.

Never refuel the machine indoors.

Never remove fuel cap or add fuel with the engine running. Allow engine to cool before refueling.

Fuel is highly flammable and its vapors are explosive. Handle with care. Use only an approved gasoline container with an appropriately sized dispensing spout. NO smoking, NO sparks, NO flames.

Remove equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment with a portable container, rather than from a gasoline dispenser nozzle.

Keep the nozzle in contact with the rim of the fuel tank or container opening at all times until the fueling is complete. Do not use a nozzle lock open device.

Never overfill fuel tank. Replace fuel cap and tighten securely.

If fuel is spilled on clothing, change clothing immediately.

DO NOT OVERFILL! This equipment and/or its engine may include evaporative emissions control system components, required to meet EPA and/or CARB regulations, that will only function properly when the fuel tank has been filled to the recommended level. Overfilling may cause permanent damage to evaporative emissions control system components. Filling to the recommended level ensures a vapor gap required to allow for fuel expansion. Pay close attention while filling the fuel tank to ensure that the recommended fuel level inside the tank is not exceeded. Use a portable gasoline container with an appropriately sized dispensing spout when filling the tank. Do not use a funnel or other device that obstructs the view of the tank filling process.

Towing

Do not attach towed equipment or accessories. This vehicle is not designed to tow.

Accessories

Follow the manufacturer's recommendation for wheel weights or counterweights

Attachments reduce the maximum operating slope angle. DO NOT operate on slopes over 10° when operating with attachments.

Check grass catcher components and the discharge guard frequently and replace with the manufacturer's recommended parts, when necessary.

Use only Ariens Company-recommended attachments that are appropriate to your use and can be used safely in your application.

Batteries

Avoid Electric Shock. Objects contacting both battery terminals at the same time may result in injury and unit damage. DO NOT reverse battery connections.

Reverse connections may result in sparks which can cause serious injury. Always connect positive (+) lead of charger to positive (+) terminal, and negative (-) lead to negative (-) terminal.pj

ALWAYS disconnect negative (-) cable FIRST and positive (+) cable SECOND. ALWAYS connect positive (+) cable FIRST, and negative (-) cable SECOND.

Explosive Gases from battery can cause death or serious injury. Poisonous battery fluid contains sulfuric acid and its contact with skin, eyes or clothing can cause severe chemical burns.

No flames, No sparks, No smoking near battery.

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

ALWAYS keep batteries out of reach of children.

Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

Service

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

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

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

Keep unit free of debris. Clean up oil or fuel spillage.

ALWAYS block wheels and know all jack stands are strong and secure and will hold weight of unit during maintenance. Use jack stands to support components when required.

Carefully and slowly release any pneumatic or hydraulic pressure from components with stored energy.

ALWAYS keep body and hands away from pin holes or nozzles which eject hydraulic fluid under pressure.

NEVER attempt to make any adjustments or repairs to unit while engine is running (except where specifically recommended). Disengage drives, lower implement, set parking brake, stop engine and remove key or disconnect spark plug wire. Wait for all movement to stop before adjusting, cleaning or repairing.

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

Lower cutting deck unless a positive mechanical lock is used.

Allow engine to cool before servicing.

Moving parts can cut or amputate fingers or a hand. On multiblade mowers, rotation of one blade will cause all blades to rotate.

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

Transporting Unit

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

Use full width ramps for loading machine into trailer or truck.

Secure unit chassis to transport vehicle. Never secure from rods or linkages that could be damaged. Tie the machine down securely using straps, chains, cable, or ropes. Both front and rear straps should be directed down and outward from the machine.

Do not transport machine while engine is running.

ALWAYS turn off power to attachment and shut off fuel when transporting unit.

Storage

NEVER store unit with fuel in fuel tank, inside a building where any ignition sources are present.

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.

For extended storage, shut off fuel and clean unit thoroughly. See engine manual for proper storage.

SETUP



WARNING: AVOID INJURY. Read and understand entire *Safety* section before proceeding.

NOTICE: Refer to *Controls and Features* on page 13 during setup.

- Remove packaging and unit from container.
- Unlock and lower operator platform into operating position (see To Move the Operator Platform on page 19).
- 3. Open bypass valves (see *To Push The Unit* on page 19).
- 4. Push unit onto a level surface.
- 5. Close bypass valves.
- Check tire pressures (see Specifications on page 40).



CAUTION: Avoid injury! Explosive separation of tire and rim parts is possible when they are serviced incorrectly:

- Do not attempt to mount a tire without the proper equipment and experience to perform the job.
- Do not inflate the tires above the recommended pressure.
- Do not weld or heat a wheel and tire assembly. Heat can cause an increase in air pressure resulting in an explosion. Welding can structurally weaken or deform the wheel.
- Do not stand in front or over the tire assembly when inflating. Use a clip-on chuck and extension hose long enough to allow you to stand to one side.
- 7. Clip cable tie and remove wrap from steering levers.
- 8. Check steering lever positions (see Steering Lever Adjustment on page 28).
- 9. Remove battery from unit and charge (see *Battery* on page 27).
- 10. Check engine oil level and add if needed (see engine manual).
- Check hydraulic fluid level and add if needed (see Check Hydraulic Fluid Level on page 24).
- 12. Fill engine fuel tank with clean fuel (see *Filling Fuel Tank* on page 17).

IMPORTANT: See engine manual for fuel type.

- 13. Inspect all hardware and tighten if loose.
- Check safety interlock system functions (see Safety Interlock System on page 14).



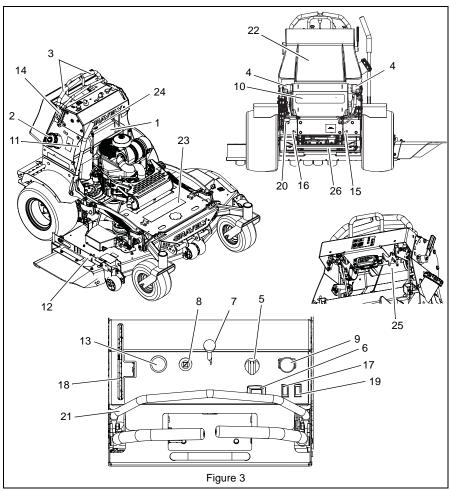
WARNING: FAILURE OF INTERLOCK together with improper operation can result in severe personal injury.

- 15. Lubricate all fittings (see *Maintenance Schedule* on page 21).
- 16. Place discharge chute in the operating position.
- Check that mower deck is level per factory standards (see Leveling the Mower Deck on page 34).
- Check all control functions and ensure unit operates properly (see Controls and Features on page 14).



WARNING: FAILURE OF CONTROLS could result in death or serious injury.

CONTROLS AND FEATURES



- 1. Fuel Tank
- 2. Fuel Cap
- 3. Steering Levers
- 4. Hydraulic Oil Reservoirs
- 5. Ignition Switch
- 6. Hour Meter
- 7. Throttle Lever
- 8. Choke Control Knob (Models 994121, 123, 125, 126, 127, 128, 129)
- 9. Power Take Off (PTO) Switch
- 10. Battery (Behind Access Panel)
- 11. Mower Lift Lever
- 12. Mower Deck
- 13. Transport Lock Lever

- 14. Parking Brake Lever
- 15. Right Transaxle Bypass Lever
- 16. Left Transaxle Bypass Lever
- 17. Oil Pressure Light
- 18. Height-of-Cut (HOC) Index Wheel
- 19. Malfunction Indicator Light (Models 994124, 130)
- 20. Deck Lift Pedal
- 21. Speed Control Bar
- 22. Pad/Rear Access Panel
- 23. Belt Access Panel
- 24. Fuel Gauge
- 25. Carbon Canister (Models 994125, 127, 129)
- 26. Operator Platform

OPERATION



WARNING: AVOID INJURY. Read and understand entire *Safety* section before proceeding.

CONTROLS AND FEATURES

See Figure 4 for Controls and Features locations.

Safety Interlock System



WARNING: Safety interlock system failure and improper operation of unit can result in death or serious injury. Test this system each time the unit is operated. If this system does not function as described, do not operate until repairs are made.

Perform the following tests to ensure the safety interlock system is working properly. If the unit does not perform as stated, contact your Gravely dealer for repairs.

NOTICE: When the parking brake is engaged, the steering levers are locked in neutral.

Test	Steering Levers	PTO	Parking Brake	Engine	
STAF	RTING INT	ERLO	CK		
1	Neutral	Off	Engaged	Starts	
2	Neutral	On	Engaged	Doesn't Start	
3	Neutral	Off	Dis- engaged	Doesn't Start	
OPE	RATING II	NTERLO	OCK (ENGI	NE ON)	
4*	Neutral	On	Engaged	Shuts Off	
5*	Neutral	Off	Dis- engaged	Shuts Off	
* Left control handle (OPC switch) depressed, then released.					

Parking Brake Interlock System

With the parking brake engaged, the steering levers must be locked in neutral.

With the parking brake disengaged, the engine must not start and the engine must shut off if the operator releases the control lever.

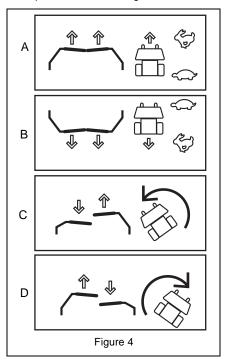
Steering Levers

See Figure 4.

The steering levers control speed and direction. In addition, they will stop the unit.

- a. For straight forward travel, push both steering control levers forward.
- b. For reverse travel, pull both steering control levers backward.
- To turn left, pull the left back or push the right steering control lever forward or a combination of both.
- To turn right, pull the right back or push the left steering control lever forward or a combination of both.

To stop, return both steering levers to neutral.



NOTICE: The steering controls are mechanically locked in neutral whenever the parking brake is engaged.

NOTICE: Aggressive turning can scuff or damage lawns. ALWAYS keep both wheels rotating when making sharp turns. DO NOT make turns with inside wheel completely stopped. To obtain minimum turning radius, slowly reverse inside wheel while moving outside wheel slowly forward.

Ignition Switch



Operate the ignition switch with the removable key. The switch has three positions:

•Off (1)

•On (2)

Start (3)

To start the engine, turn the key to Start, then release to on. To stop the engine, turn the key to off.

Choke Control

Models 994121, 123, 125, 126, 127, 128, 129



Pull the choke knob out (on) to close the choke and start a cold engine.

Push the choke knob in fully (off) to open the choke after the engine warms.

Malfunction Indicator Light Models 994124, 130



The fuel injection system is monitored by an electronic control unit (ECU). If a fault or malfunction is detected in the fuel management system the ECU will generate a signal and the malfunction

indicator light (1) will illuminate. See your Dealer for diagnostics and repair.

Transaxle Bypass Levers

See Figure 7.

The unit can be moved without the engine running by bypassing the transaxles. The bypass levers are located in the back, above the operator platform. See *To Push The Unit* on page 19.

NOTICE: Make sure both transaxles are set to neutral before pushing the unit.

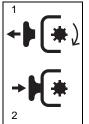
IMPORTANT: DO NOT tow the unit. Transport the unit on an appropriate truck or trailer.

Throttle Lever



The throttle lever changes the engine speed. Move the throttle lever to fast (1) to increase engine speed. Move the lever to slow (2) to decrease engine speed.

Power Take Off (PTO) Switch



1.ON

Pull PTO switch out to engage mower blades.

2. OFF

Push PTO switch to disengage mower blades.

NOTICE: The engine will not start unless the steering levers are in the neutral position, the PTO

switch is in the off position and parking brake is set.

MOWER LIFT AND HEIGHT-OF-CUT (HOC) SYSTEM

Mower lift lever or pedal raises and lowers mower deck for mowing or transport. Height-of-cut (HOC) index wheel sets desired cutting height or transport position. When in the lock position, the transport lock lever allows the deck to automatically lock in the highest (5" (12.7 cm) HOC) position when the lift pedal is pushed fully downward.

Transport Lock Lever

See Figure 5.

When in the lock position, the transport lock knob allows the deck to automatically lock in the highest (5.00") HOC position.

NOTICE: When the transport lock knob is in the lock position (in) the deck will automatically lock at transport height when the pedal is pushed fully down or mower lift lever is pulled fully to the rear.

To raise deck into transport position:

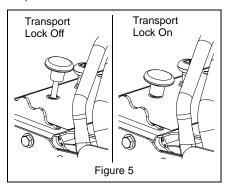
- 1. Push pedal fully down or pull mower lift lever fully to the rear.
- 2. Release pedal or lever.

To lower deck into mowing position:

- 1. Push pedal or pull mower lift lever to release pressure on transport lock knob.
- Pull up on transport lock knob.
- Release pedal or mower lift lever.

To disable this feature:

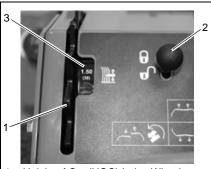
Move transport lock knob up to the Off position.



Height of Cut (HOC)

See Figure 6.

- Push down on mower lift pedal, or pull back on lift lever, to release deck pressure from HOC index wheel.
- 2. If locked, move transport lock lever to unlocked position.
- Rotate HOC index wheel to the desired HOC setting. Height setting is viewed in the center window on top of the HOC adjustment assembly.
- 4. Release mower lift pedal or lift lever.



- 1. Height of Cut (HOC) Index Wheel
- 2. Transport Lock Lever
- 3. HOC Setting Indicator

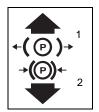
Figure 6

Parking Brake Lever

Engage parking brake; steering levers must lock in neutral.

Disengage parking brake; engine must not start.

Release control lever; engine must turn off.



1. DISENGAGE

Push lever forward to disengage brake.

2. ENGAGE

Pull lever backward to engage brake.

Operator Platform

The operator platform has two positions:

1. Ride

Use as a stand-on mower (platform down)

2. Transport

Use as a walk-behind unit (platform up)

NOTICE: Lock platform using the transport lock latch. See *To Move the Operator Platform* on page 19.

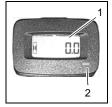


CAUTION: Avoid injury! Use extreme care when operating unit with operator platform in transport position, especially when backing. Reduce engine speed and before moving unit.

HOUR METER

Measures and displays (1) the amount of time engine has been run, time spent on jobs and service intervals. This time cannot be cleared.

Operation



Press and release the toggle button (2) to shift between different functions.

Press and hold the toggle button to reset the timer or clear a service message.

The hour meter has three functions:

1. Timer (TMR1)

Measures the time spent on individual jobs. Press and hold the toggle button to reset the timer to zero. TMR1 will then start measuring engine run time until it is reset to zero again.

2. Service Alert

Displays maintenance interval reminders for:

- Changing engine oil (CHG OIL)
- Changing the hydraulic oil and filter (CHG HYD OIL)
- Servicing the air filter (SRV AIRFILTER)

The alert starts counting down two hours before the maintenance is due. The meter flashes NOW when it reaches the maintenance time.

Press and hold the toggle button to reset the maintenance clock to zero after performing the service.

3. Service Interval Presets

Hour meter is preset for recommended service intervals.

- Hydraulic oil and filter: First 75 hours, every 400 hours thereafter.
- Engine oil and filter: First 25 hours, every 100 hours thereafter

NOTICE: The preset engine oil service intervals in the hour meter are normal recommended intervals. Specific engine manufacturer's recommendations may vary.

FILLING FUEL TANK



WARNING: AVOID INJURY. Read and understand entire *Safety* section before proceeding.

To add fuel to the fuel tank:

- Clean fuel cap and surrounding area to prevent dust, dirt, and debris from entering fuel tanks.
- 2. Remove fuel caps.

IMPORTANT: Refer to engine manual for correct type and grade of fuel.

Fill fuel tank to the bottom of filler neck. See Specifications on page 40 for fuel tank capacity. **IMPORTANT: DO NOT OVERFILL! This** equipment and/or its engine may include evaporative emissions control system components, required to meet EPA and/or CARB regulations, that will only function properly when the fuel tank has been filled to the recommended level. Overfilling may cause permanent damage to evaporative emissions control system components. Filling to the recommended level ensures a vapor gap required to allow for fuel expansion. Pay close attention while filling the fuel tank to ensure that the recommended fuel level inside the tank is not exceeded. Use a portable gasoline container with an appropriately sized dispensing spout when filling the tank. Do not use a funnel or other device that obstructs the view of the tank filling process.

- 4. Replace fuel cap and tighten.
- 5. ALWAYS clean up spilled fuel.

GASOLINE

IMPORTANT: ALWAYS use gasoline that meets the following guidelines:

- · Clean, fresh gasoline.
- A minimum of 87 octane/87 AKI (91 RON).
 High altitude use may require a different octane. Consult your engine manual.
- Gasoline with up to 10% ethanol (gasohol) or up to 10% MTBE (methyl tertiary butyl ether) is acceptable.
- Use of any gasoline other than those approved above may void the engine warranty. If the pumps are not marked for the content of alcohol or ethers, check ethanol and MTBE levels with the fuel supplier.
- Do not modify the fuel system to use different fuels.
- · Never mix oil and gasoline.

NOTICE: All gasoline is not the same. If the engine experiences starting or performance problems after using a new gasoline, switch to a different fuel provider or fuel brand.

IMPORTANT: Excessively oxygenated or reformulated fuels (fuels blended with alcohols or ethers) can damage the fuel system or cause performance problems. If any undesirable operating problems occur, use a gasoline with a lower percentage of alcohol or ether

PRE-START



CAUTION: Make sure all hardware is tight, all safety devices are in place and all adjustments are made correctly.

1. Check Safety Interlock System

If this system does not function as described do not operate until repairs are made.

2. Check Air Cleaner

Check air filter for dirt and overall condition. Clean as required. Follow engine manual maintenance schedule.

3. Check Engine Fuel and Crankcase Oil

Check and add fuel if required. Check that engine crankcase oil is full. Follow engine manual maintenance schedule.

4. Check Tire Pressure

See *Specifications* on page 39 for correct tire pressure.

5. Check Hydraulic Fluid Level

See Check Hydraulic Fluid Level on page 24.

6. Set Cutting Height

Make sure the deck is set to the correct cutting height. See *Height of Cut (HOC)* on page 16.

STARTING AND SHUT OFF



CAUTION: Read entire Owner/Operator and Engine Manual first. DO NOT attempt to start engine at this time.

Carburetor

Models 994121, 123, 125, 126, 127, 128, 129

To start engines with a carburetor:

- 1. Move the steering levers to the neutral position.
- 2. Move the PTO switch in the off position.
- 3. Engage parking brake.
- If the engine is cold, move the choke control to the on position. If the engine is warm or hot, do not use choke.
- Move the throttle to 3/4 fast position. See the engine manual for detailed instructions.
- 6. Put the ignition key in the switch and turn it to the Start position.

- As soon as the engine starts, release the key.
- Move the choke control to the off position from the Choke position. Wait until the engine is running smoothly before operation.

To stop the engine:

- Bring the steering levers to neutral.
 Disengage the PTO and engage the parking brake.
- Move the throttle lever to the slow position.
- 3. Turn the ignition key to the off position.

Electronic Fuel Injection Models 994124, 130

To start engines with fuel injection:

- 1. Move the steering levers to the neutral position.
- 2. Move the PTO switch to the off position.
- Engage parking brake.
- 4. Place the throttle control halfway between the slow and fast positions.
- Insert the ignition key in the switch and turn the key switch to the on position for one minute. This allows the fuel pump to cycle and prime the system.
- 6. Turn the key switch off.

steps 5 and 6.

- Turn the key switch to the Start position, crank and start engine.
 If the engine fails to start, repeat
- As soon as the engine starts, release the key
- If the engine does not start after two priming intervals, contact your Dealer for further assistance.

IMPORTANT: Do not crank the engine continuously for more than 10 seconds at a time. If the engine does not start, allow a 60-second cool down period between starting attempts.

To stop the engine:

- Bring the steering levers to neutral.
 Disengage the PTO and engage the parking brake.
- Move the throttle lever to the slow position.
- 3. Turn the ignition key to the off position.

STOPPING IN AN EMERGENCY



WARNING: Operating unit on slopes may lead to loss of steering control. When operating on slopes be prepared to react to an emergency situation.

- 1. Return steering levers to neutral position.
- 2. Immediately set parking brake.
- 3. Turn off PTO and engine.

TO MOW WITH UNIT

Operate the unit only when standing in the operator's position.

- 1. Start the engine. Let the engine warm until it is running smoothly.
- 2. With left steering control (OPC) depressed, release parking brake.



WARNING: Move the steering control levers slowly and keep the throttle control lever at slow speed until you learn how to operate the unit.

- 3. Move the steering levers to neutral.
- 4. Slow the engine down to about 3/4 speed.
- With left steering control (OPC) depressed, turn on the PTO switch to engage the mower.

IMPORTANT: Never engage the PTO if the mower is plugged with grass or other material. This may cause damage to the electric clutch

- 6. Move throttle control to the fast position.
- 7. Move the steering levers forward to obtain a slow ground speed.
- 8. To disengage the mower, move the PTO switch to the off position.
- When you know how to operate the unit, select a speed appropriate to your mowing conditions.

PARKING

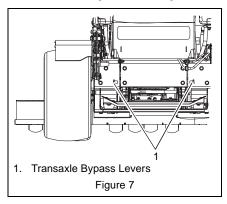
To park the unit:

- Bring the steering levers to neutral. Turn off PTO.
- 2. Move the throttle lever to the slow position.
- 3. Engage the parking brake.

- 4. Lower the attachment.
- 5. Turn the ignition key to the off position and remove the key.

TO PUSH THE UNIT

Place the transaxles in bypass mode to move the unit with the engine off. See Figure 7.



NOTICE: Make sure both transaxles are set to neutral before pushing the unit.

IMPORTANT: DO NOT tow the unit.

Transport the unit on an appropriate truck or trailer.

- 1. Shut off engine.
- 2. Pull the right and left bypass levers to the lockout detent position.



WARNING: Do not bypass transmission when on a slope.

- 3. Disengage parking brake.
- Push unit to desired location.
- 5. Engage parking brake.
- Return the right and left bypass levers to the drive position.

TO MOVE THE OPERATOR PLATFORM

See Figure 8.

To rotate platform up:

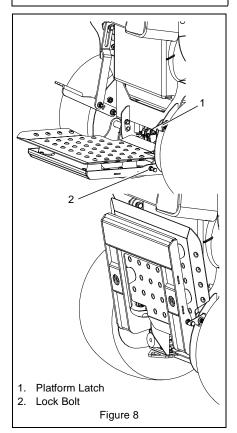
- Stop unit, disengage PTO and wait for all moving parts to stop.
- Engage parking brake.
- Clean any accumulated debris from platform.
- 4. Rotate platform up until platform latch fully engages lock bolt on platform.

To rotate platform down:

- 1. Stop unit, disengage PTO and wait for all moving parts to stop.
- 2. Engage parking brake.
- 3. Release platform latch.
- 4. Rotate platform down into standing position.



CAUTION: Platform will drop when latch is released. Stand clear when releasing platform.



FOR BEST PERFORMANCE

- · Cut grass when it is dry.
- · Keep mower blades sharp.
- Keep mower deck properly leveled.
- · Adjust anti-scalp rollers to prevent scalping.
- Do not set height of cut too low. For very tall grass, mow twice.
- · Do not travel too fast.
- Mow with the engine set at full throttle.
- When mulching, only remove 1/3 of grass length per cutting. Do not cut more than 1 inch (2.5 cm) at any one time.
- · Discharge clippings into areas already cut.
- · Vary cutting pattern with each mowing.
- Do not allow grass or debris to collect inside of mower deck. Clean after each use.

MAINTENANCE SCHEDULE



WARNING: AVOID INJURY. Read and understand entire *Safety* section before proceeding.

Proper maintenance can prolong the life of unit. The following charts show the recommended service schedule. More frequent service may be required due to extreme working conditions (heavy loads, high ambient temperatures, dusty conditions, or airborne debris).

See the maintenance instructions in the Engine Manual for additional information.

Period	Service	Task
	Check Safety Interlock	WARNING: Safety interlock system failure and improper operation of unit can result in death or serious injury. Test this system each time the unit is operated. If this system does not function as described, do not operate until repairs are made. See Safety Interlock System on page 14.
	Check Parking Brake Interlock System	See Parking Brake Interlock System on page 14.
	Check Hydraulic Fluid	Check hydraulic oil level mark on expansion tank. Add 15W-50 synthetic motor oil (Gravely p/n 00057100) or equivalent as needed. Do not overfill. See <i>Check Hydraulic Fluid Level</i> on page 24.
	Check Tires	See Specifications on page 40 for correct tire pressure.
		CAUTION: Avoid injury! Explosive separation of tire and rim parts is possible when they are serviced incorrectly:
Each Use		Do not attempt to mount a tire without the proper equipment and experience to perform the job.
		Do not inflate the tires above the recommended pressure.
		Do not weld or heat a wheel and tire assembly. Heat can cause an increase in air pressure resulting in an explosion. Welding can structurally weaken or deform the wheel.
		Do not stand in front or over the tire assembly when inflating. Use a clip-on chuck and extension hose long enough to allow you to stand to one side.
	Clean Unit	Clean engine, battery, operator's platform, mower deck, etc. of dirt and debris. Do not use solvents, hard cleaners, or abrasives.
		NOTICE: Protect painted surfaces with automotive type wax.
		IMPORTANT: Do not spray the unit with water, especially when the unit is warm from operation. Water can seep into bearings and damage them.
	Follow Engine Manual Maintenance Schedule	Perform scheduled engine maintenance. Refer to engine manual for detailed instructions.
Every 25 Hours	Check Mower Blades	Check mower blades for wear. Sharpen or replace as needed. See <i>Mower Blades</i> on page 25.

Period	Service	Task		
	Check Air Fllter	Check air filter for dirt. Clean as required. Follow Engine Manual for maintenance schedule.		
Every 50 Hours	Lubricate Unit	Oil all pivot points and pin connections. Grease lube fittings.		
	Check Parking Brake	Adjust if necessary. See Parking Brake Adjustment on page 29.		
	Clean Battery	Keep battery and its terminals clean. See <i>Clean Battery</i> on page 27.		
Every	Clean engine cooling system	Check and clean cooling fins and inside the engine shrouds to remove grass, chaff or dirt.		
100 Hours	Check Fasteners	Check mower blade mounting hardware and all other fasteners. Replace missing or damaged fasteners. Tighten all nuts and bolts to their correct torque value		
	Check Belts	Replace worn or deteriorated belts. See Replacing Mower Belts on page 30 and See Replacing the Hydro Pump Belt on page 31.		
	Change Hydraulic Fluid and Filter*	Drain hydraulic fluid tank, replace hydraulic oil filter, refill system. See <i>Add Hydraulic Fluid</i> on page 24.		
	Lubricate Caster Fork Bearings	Shut off unit, wait for all moving parts to stop, remove key and engage parking brake. Remove grease cap.		
		Remove plug and install grease fitting.		
Every 400 Hours		Apply grease to the fitting until new grease appears at the top of the upper bearing.		
		5. Remove the grease fitting and reinstall the plug.6. Reinstall the grease cap.		
	Lubricate Caster Wheel Bearings	7. Shut off unit, wait for all moving parts to stop, remove key and engage parking brake.		
		Apply grease through fitting until grease squeezes through the seal in the wheel hub.		

^{*}Change hydraulic fluid and filter after first 75 hours of operation.

SERVICE AND ADJUSTMENTS

Gravely Dealers will provide any service which may be required to keep your unit operating at peak efficiency. Should engine service be required, it can be obtained from a Gravely Dealer or the engine manufacturer's authorized service center.



WARNING: AVOID INJURY. Read and understand entire *Safety* section before proceeding.



CAUTION: HOT SURFACES may result in injury. DO NOT touch engine or drive parts which are hot from operation. Allow parts to cool before servicing.



WARNING: Oil on belts causes premature belt failure. DO NOT allow any oil to spill on belts.

SERVICE ACCESS

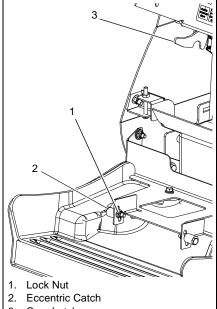
- Place unit on a flat level surface.
 ALWAYS stop engine. Ensure unit is secure and chock wheels. Strap and clamp onto lift if used.
- 2. Place steering levers in neutral position and engage parking brake.
- 3. Open rear access panel and belt access panel as needed.

Access Panel Cam Latch Adjustment See Figure 9.

Access panel should be held tightly against control panel by the cam latch to tightly seal the area and not rattle during operation.

To adjust:

- 1. Loosen lock nut retaining catch.
- 2. Move eccentric catch to desired position.
- 3. Tighten lock nut.
- Close panel to ensure latch catches the eccentric and that desired seal is achieved.
- 5. Readjust if necessary.



Cam Latch

Figure 9

CHECK ENGINE OIL

See Figure 10.

Check the engine crankcase oil every 5 hours of operation. Oil level MUST be maintained in safe operating range on dipstick at all times or engine damage will result. See engine manual for correct oil level.

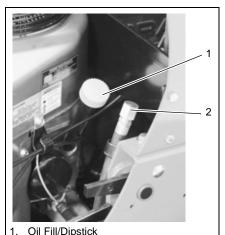
Park unit on a level surface. Refer to engine manual for detailed instructions.

CHANGE ENGINE OIL

Change oil per engine manufacturer's recommendations. Refer to Engine Manual for detailed instructions.

Run engine just prior to changing oil. Warm oil will flow more freely and carry away more contamination. Remove the oil drain plug from the rear of the unit and tip the unit back to help drain all the oil.

NOTICE: To drain the oil, use the oil drain hose supplied with unit, not the drain plug that is shown in the engine manual.



- 2. Oil Drain Hose

Figure 10

HYDRAULIC FLUID



WARNING: HYDRAULIC FLUID can result in severe burns. Fluid in hydraulic system can penetrate skin and result in serious injury or death.

Be sure to stop the engine before doing any work on hydraulic parts. Keep body and hands away from pin holes or nozzles which expel hydraulic fluid when under pressure. Use paper or cardboard, not hands, to search for leaks.

Ensure all hydraulic fluid connections are tight and all hydraulic hoses and lines are in good condition before applying pressure to system.

FOREIGN FLUID INJECTED INTO BODY can result in gangrene. Fluid must be surgically removed within a few hours by a doctor familiar with this form of injury.

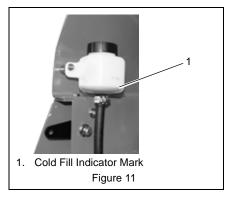
Check Hydraulic Fluid Level

See Figure 11.

Check the system with the unit cold and parked on a flat, level surface. Then run the unit for about one minute and recheck the levels.

Add Hydraulic Fluid

- 1. Remove the cap from the expansion tank.
- Fill the expansion tank with 15W-50 synthetic motor oil (Gravely p/n 00057100) or equivalent until oil level reaches the cold fill line on the tank.
- Install the expansion tank cap and then purge the system. See Purging the Hydraulic System on page 25.



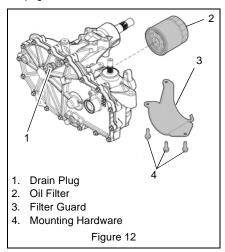
Change Hydraulic Fluid and Filter

See Figure 12.

NOTICE: Change hydraulic fluid and filter after the first 75 hours of operation and then every 400 hours. Use 15W-50 synthetic motor oil (Gravely p/n 00057100) or equivalent.

- 1. Place container under oil filter to catch oil.
- Remove the filter guard and oil filter from the transaxle.
- Remove the oil drain plug or fitting from the inlet port and allow the transaxle to drain completely.
- Clean the filter mounting surface and then lubricate rubber gasket on new oil filter with clean hydraulic oil.
- Spin new oil filter onto filter housing until it makes contact. Tighten oil filter another 3/4 turn.
- Install the filter guards removed in step 2.
 Tighten the mounting screws to 5.4 lbf-ft (7.3 N•m).
- Fill with 15W-50 synthetic motor oil (Gravely p/n 00057100) or equivalent until oil appears at the bottom of the drain plug (about 2 quarts per transaxle). Install the drain plug and tighten to 15 lbf-ft (20.3 N•m).

 Repeat steps 1 – 7 for the other transaxle. See Add Hydraulic Fluid on page 24.



Purging the Hydraulic System



WARNING: This adjustment requires operating the engine. Use extreme care to avoid contact with moving parts and hot surfaces. Be sure rear of unit is well supported and secure before starting engine.

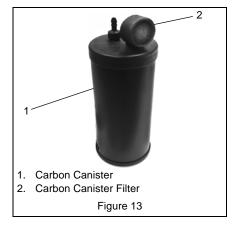
- With the unit up to and facing a wall, jack up the unit so that both drive wheels are off the ground.
- Disengage the parking brake and put the transaxle bypass levers in the neutral position. See *To Push The Unit* on page 19.
- Start the engine and slowly move the steering levers forward and reverse five or six times.
- 4. Stop the engine and put the transaxle bypass levers in the drive position. See *To Push The Unit* on page 19.
- Start the engine and slowly move the steering levers in forward and reverse five or six times.
- Stop the engine, check the oil level and add oil as needed.
- Repeat steps 2 6 until the transaxles operate smoothly in forward and reverse at normal speeds without excessive noise.

CARBON CANISTER FILTER

Models 994125, 127, 129

See Figure 13.

- Check the carbon canister filter for debris accumulation every time the unit is filled with fuel. Remove any buildup.
- Clean or replace the carbon canister filter whenever the engine air filter is cleaned or replaced.



MOWER BLADES

See Figure 14.

Remove



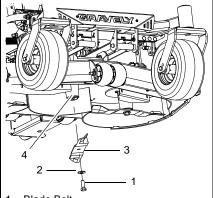
CAUTION: Use sturdy gloves or padding to protect hands when working with mower blades.

Rotation of one blade will rotate the other blades.

- 1. Turn the engine off. Remove the ignition key. Disconnect spark plug wires.
- Remove the bolts, bevel washers, blades and spindle hubs from the spindle assemblies.

Replace

- 1. Install the blades, bevel washers and bolts on the spindle assemblies.
- 2. Torque bolts to 115 160 lbf-ft (156 217 N•m).
- 3. Reconnect spark plug wires.



- 1. Blade Bolt
- 2. Bevel Washer
- 3. Blade
- 4. Spindle Assembly

Figure 14

Sharpen the Mower Blades

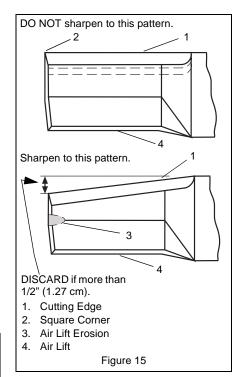
See Figure 15.



CAUTION: DO NOT sharpen mower blades while on unit. An unbalanced mower blade will cause excessive vibration and eventual damage to unit. Check mower blade balance before reinstalling blades.

NEVER weld or straighten bent blades.

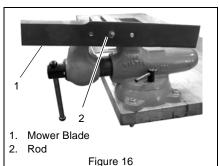
- Remove mower blade from unit. Discard mower blade if:
 - More than 1/2" (1.3 cm) of metal is removed.
 - · Air lifts become eroded.
 - · Blade is bent or broken.
- Sharpen mower blade by removing an equal amount of material from each end of mower blade. DO NOT change angle of cutting edge or round the corner of the mower blade.



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

3. Check mower blade balance. See Figure 16.

Clamp a bolt to a table or mount in a vise and slide mower blade onto unthreaded portion. A balanced blade should remain in a horizontal position. If either end of mower blade moves downward, sharpen the heavy end until blade is balanced.



- 4. Make sure the wings are facing up and Install mower blade(s) on unit.
- 5. Torque bolts to 115 160 lbf-ft (156 - 217 N•m).

FUSE BLOCK

The fuse/relay panel is located behind the rear access panel, below the control panel.

Fuse Block Diagram START/RUN RELAY PTO RELAY OPERATOR STARTER FUSE PRESENCE TIME DELAY RELAY SOLENOID



Harness Main Fuse Location

Figure 17

BATTERY



WARNING: AVOID INJURY, Read and understand entire Safety section before proceeding.



WARNING: Battery posts, terminals and related accessories contain lead and lead compounds. chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

Cleaning the terminals is the only regular battery maintenance required.

Remove Battery

- 1. Shut off engine. Engage parking brake. Remove the ignition key.
- 2. Place rear access panel in the service position.

- 3. Disconnect cables from battery (negative, then positive). See Figure 18.
- Remove hold-down bracket and remove batterv.



- **Negative Terminal**
- 2. Positive Terminal
- Battery
- 4. Hold Down Bracket

Figure 18

Replace Battery

- Replace battery and secure with holddown bracket.
- Reconnect cables to battery (positive, then negative). Position boot over positive terminal.

Clean Battery

Keep battery and terminals clean. Inspect every 100 operating hours or monthly for best performance.

- 1. Remove battery from unit.
- 2. Clean terminals and battery cable ends with wire brush.
- 3. Coat terminals with dielectric grease or petroleum jelly.
- Replace battery.

Charging the Battery

Battery Electrolyte First Aid

Follow First Aid directions for contact with battery fluid.

- External Contact: Flush with water.
- Eyes: Flush with water for at least 15 minutes and get medical attention immediately!
- · Internal Contact: Drink large quantities of water. Follow with milk of magnesia, beaten egg or vegetable oil. Get medical attention immediately!

In case of internal contact, DO NOT induce vomiting!

IMPORTANT: DO NOT fast charge. Charging at a higher rate will damage or destroy battery. ONLY use an automatic charger designed for use with your battery.

ALWAYS follow information provided on battery by battery manufacturer. Contact battery manufacturer for extensive instructions to charge battery.

- 1. Remove battery from unit. See *Remove Battery* on page 27.
- 2. Place battery on bench or other well-ventilated place.
- 3. Connect positive (+) lead of charger to positive (+) terminal, and negative (-) lead to negative (-) terminal.
- 4. Charge battery according to charger and battery manufacturers' instructions.
- 5. Replace battery. See *Replace Battery* on page 27.

Jump-Starting

Gravely does not recommend jump-starting your unit. Jump-starting can damage engine and electrical system components. See your engine manual for more detailed information.

TRANSAXLE NEUTRAL ADJUSTMENT

Eliminating Excessive Creeping of the Unit

See Figure 19.

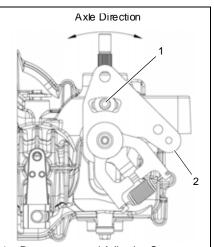


WARNING: This adjustment requires operating the engine. Use extreme care to avoid contact with moving parts and hot surfaces. Be sure rear of unit is well supported and secure before starting engine.

- If hydraulic system is cold, run unit for a minimum of five minutes, then shut off engine.
- With the unit up to and facing a wall, jack up the unit so that both drive wheels are off the ground.
- 3. Remove the drive wheels from the unit.
- 4. Start the engine, run engine at full throttle, and release the parking brake.
- Move the steering levers from Forward to Reverse several times to make sure controls are free. Then return steering levers to neutral position.
- 6. Check wheel(s) for movement.

NOTICE: The right and left hydraulic pumps are adjusted the same way.

- If a wheel moves, adjust the return to neutral mechanism on the hydraulic pump:
 - a. Loosen the return to neutral screw on the pump.
 - Slowly move the speed and direction control bracket clockwise or counterclockwise until the wheel stops moving.
 - Hold the stop bracket in position and tighten the return to neutral screw on the pump.
- Move steering levers from Forward to Reverse several times and return steering levers to neutral position. Check wheel(s) for movement.
- 9. If wheel is still moving, repeat steps 7 and 8.
- 10. Shut off engine.
- 11. Replace drive wheels.



- 1. Return-to-neutral Adjusting Screw
- Speed and Direction Control Arm Figure 19

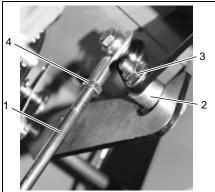
STEERING LEVER ADJUSTMENT

See Figure 20.

- 1. Shut off engine. Remove the ignition key.
- Place rear access panel in the service position. See Service ACCESS on page 23.
- 3. Engage parking brake.
- 4. Loosen the eccentric spacer nut.

- Loosen the jam nut at the top and bottom of the tie rod and then turn the tie rod until the steering levers align. Adjust both left and right sides as needed.
- Once levers are aligned, tighten jam nuts and eccentric spacer nut. Be sure to tighten the end of the fastener that in not directly contacting the eccentric. This will prevent the eccentric from rotating while being tightened.

NOTICE: Adjust steering lever interlock if the steering levers are shifted during application of the brake (see *Steering Lever Interlock Adjustment* on page 29).



- 1. Tie Rod
- 2. Eccentric Spacer
- 3. Eccentric Spacer Nut
- 4. Jam Nut

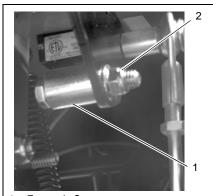
Figure 20

Steering Lever Interlock Adjustment

See Figure 21.

Adjustment is required if a steering lever moves forward or backward when the parking brake is applied.

- Stop engine and remove ignition key. Chock wheels to prevent unit from rolling
- 2. Release parking brake.
- Loosen but do not remove the outer lock nut on the eccentric brake bushing.
- 4. Engage the parking brake. Bushing will seat in notch in brake lever bracket.
- 5. Tighten lock nut.
- 6. If necessary, adjust steering levers to ensure full alignment with each other.



- Eccentric Spacer
- 2. Lock Nut

Figure 21

ADJUSTING UNIT TO TRACK STRAIGHT

Check and adjust tire pressure. Increase pressure on side unit tracks. DO NOT exceed maximum recommended tire pressure (see *Specifications* on page 40).

- 1. Start engine and run until it reaches normal operating temperature.
- Move machine to an open, level area for operation.
- 3. Drive machine forward, pushing both control levers all the way to index bar.
- If machine does not drive in a straight line, a slight adjustment can be made to the steering levers (see Steering Lever Adjustment on page 28).

PARKING BRAKE ADJUSTMENT

The parking brake must keep the unit from rolling.

Check Adjustment

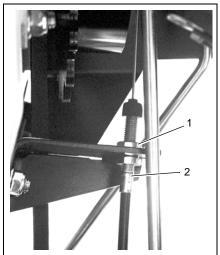
NOTICE: Check parking brake on both sides of unit.

- Engage parking brake and set both transmission bypass levers to neutral position (see *To Push The Unit* on page 19).
- Attempt to push unit forward. If unit easily rolls forward, transmission brakes are not fully engaged. Tighten brake cable (see Adjust Parking Brake on page 30).
- 3. Recheck that brake functions properly.

Adjust Parking Brake

See Figure 22.

- 1. Disengage parking brake.
- Loosen jam nut on parking brake cable adjuster and pull down on adjuster barrel until cable is taut, not tight.
- Thread bottom nut until it contacts bracket.
- 4. Tighten the top jam nut.



- 1. Jam Nut
- Parking Brake Cable Adjuster Figure 22
- 5. Engage parking brake and check adjustment. Repeat as needed.
- 6. Set both bypass levers to drive position after brake adjustment.

PTO BELT



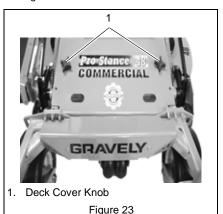
WARNING: Moving parts can cut or amputate body parts. ALWAYS wait for moving parts to stop before performing maintenance or service.



CAUTION: Damaged or worn belts may result in injury and/or damage to unit. Check belts for excessive wear or cracks often.

PTO Belt Access

- 1. Properly stop, park, and turn off unit (see *Operation* on page 14).
- Wait for unit to cool before accessing belts.
- 3. Remove belt access panel. See Figure 23.



- 4. Lower the mower deck.
- Remove belt covers.

Replacing Mower Belts



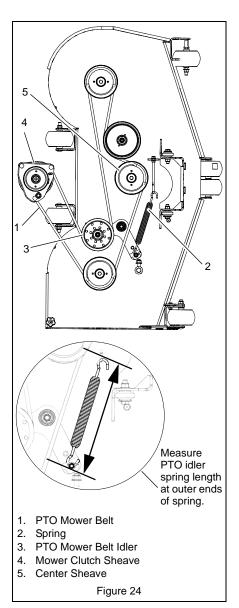
CAUTION: Use care when releasing idler spring tension. Keep body parts well away from idlers when performing this operation.

See Figure 24.

- Turn the deck belt idler spring adjusting nut to relieve tension from the idler spring.
- 2. Remove deck belt from deck sheaves.
- 3. Install new deck belt.
- Tighten the adjusting nut to extend the belt. Tighten until the idler spring extends to 14" (35.6 cm) (measured from outside hook to outside hook) for 48" and 52" decks and to 14.75" (37.5 cm) for 60" decks.

NOTICE: The drive design holds constant tension as the belt wears, so future adjustment is not necessary.

- Verify that there are no twists in belts and that they are routed correctly.
- Replace deck cover and belt guards on deck.



Replacing the Hydro Pump Belt

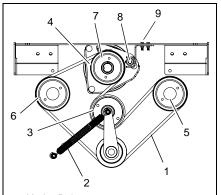
See Figure 25.

- 1. Properly stop and park unit (see *Starting and Shut Off* on page 18).
- Using 1/2" (1.3 cm) ratchet/breaker bar with an extension, extend the spring to relieve belt tension and remove the PTO belt from the mower clutch sheave (see Replacing Mower Belts on page 30).



CAUTION: Use care when releasing idler spring tension. Keep body parts well away from idlers when performing this operation.

- Slowly release the tension on the hydro pump belt idler until all the tension is removed from the spring.
- Remove the clutch anchor and mounting hardware.
- Remove clutch stop and mounting hardware.
- 6. Remove old hydro pump belt.
- Install new hydro pump belt by positioning belt on sheaves.
- 8. Replace clutch stop. Tighten hardware to 13 − 17 lbf-ft (18 − 23 N•m).
- Replace mower belt on mower clutch sheave. See Replacing Mower Belts on page 30.
- 10. Verify that there are no twists in belts and that they are routed correctly.



- 1. Hydro Belt
- 2. Spring
- 3. Idler
- 4. Engine Sheave
- 5. Right Hand Hydrostat
- 6. Left Hand Hydrostat
- 7. Clutch
- 8. Clutch Anchor
- 9. Clutch Stop

Figure 25

MOWER DECKS

Anti-scalp Roller Adjustment

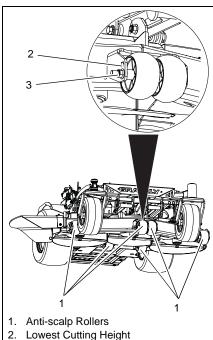
See Figure 26.

The anti-scalp rollers are set at the factory for typical mowing height, but can be adjusted for high or low cutting conditions.

Anti-Scalp rollers are intended to prevent lawn scalping, not to control cutting height. For a very high cutting height, set the antiscalp rollers in the lowest position on the bracket.

For a very low cutting height, set the antiscalp rollers in the highest position on the bracket.

NOTICE: There are four anti-scalp rollers on the outside of the mower deck and two antiscalp rollers on the inside of the mower deck. Make sure all anti-scalp rollers are set at the same height.



- 3. Highest Cutting Height

Figure 26

Deck Lift Assist Adjustment

See Figure 27.

The deck lift assist springs are adjusted to reduce lift effort or to increase deck stability.

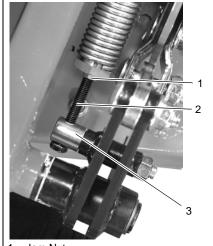
To adjust the force required to lift the deck:

- 1. Loosen the jam nut (1) on the lift assist spring anchor bolt.
- Adjust the spring anchor to the desired setting:
 - · Loosen the spring anchor (turn counterclockwise) to decrease spring tension and increase the effort required to raise and lower the deck. This will also add stability to the deck.
 - Tighten the spring anchor (turn clockwise) to increase spring tension and decrease the effort required to raise and lower the deck.

IMPORTANT: Excessive spring tension will make the deck more likely to lift and bounce off the turf when the mower travels over rough terrain.

- Repeat for the other side of the deck.
- 4. Measure the distances between the end of the assist springs and the trunnions on both sides. Ensure that both assist springs are adjusted to the same dimension.

NOTICE: Lift springs must be adjusted to the same tension on each side of the deck to prevent cut quality issues.



- Jam Nut
- Adjustable Spring Anchor
- Trunnion

Figure 27

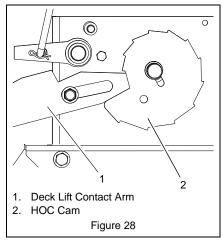
HOC INDICATOR ADJUSTMENTS

For accurate cutting the height shown on the HOC indicator dial must match the cutting height.

Adjust Index Wheel

- Release tension on HOC belt (see Adjust HOC Belt Tension on page 33).
- Move transport lock knob into off (up) position.
- Move deck to lowest position 1.5" (38 mm).

IMPORTANT: Deck is in lowest position when deck lift contact arm is seated on the lowest position of the HOC cam. See Figure 28.

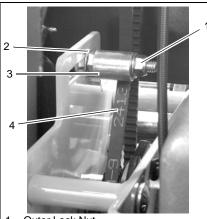


- 4. Rotate HOC wheel so the lowest cutting position (1.5 (38)) is indicated. Reset dial position if necessary.
- 5. Tighten belt tensioner.

Adjust HOC Belt Tension

See Figure 29.

- Loosen the outer lock nut on the HOC belt tensioner.
- 2. Loosen the inner lock nut enough to allow the tensioner to move.
- Using a spring scale or similar tool, position the tensioner to where 5 – 7 lbs (2.3 – 3.2 kg) of force is applied to the HOC belt.
- 4. Tighten the inner lock nut.
- 5. Tighten the outer lock nut.



- 1. Outer Lock Nut
- 2. Inner Lock Nut
- Belt Tensioner
- 4. HOC Belt

Figure 29

Removing the Mower Deck

See Figure 30.

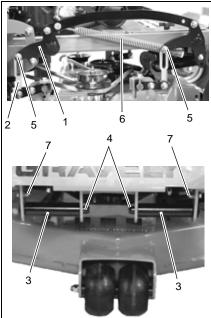
 Remove PTO belt (see Replacing Mower Belts on page 30).



WARNING: AVOID INJURY. Mower lift arms and mower lift pedal could cause severe injury if tension on the lift assist spring is not released before disconnecting the lift links. Springs store energy. Keep body parts well away from pinch points when removing the deck.

NOTICE: Support the mower deck on blocks or jack stands before disconnecting links from mower lift arms to prevent the deck from falling.

- Raise the deck to the transport position and release tension on the lift assist springs (6) from the mower lift arms (1) on each side of the deck.
- Slowly lower the deck to its lowest position.
- 4. Remove hardware (5) retaining mower lift links (2) attached to mower deck.
- Remove the front mounting pin hardware
 and drag link mounting pins (4).
- Slide mower deck out from under unit.



- 1. Mower Lift Arm
- 2. Mower Lift Link
- 3. Mower Mounting Arm
- 4. Drag Link Mounting Pin
- 5. Mounting Hardware
- 6. Lift Assist Spring
- 7. Mounting Pin Hardware Figure 30

Installing the Mower Deck

See Figure 30.

- 1. Slide mower deck under unit.
- 2. Connect front mower mounting arms (3) to deck with mower mounting pins.
- Install link chains on the mower lift arms in the same holes they were removed from.
- 4. Install PTO mower belt (see *Replacing Mower Belts* on page 30).
- Raise the deck to the transport position and connect the lift assist springs to the lift arms
- 6. Level mower deck (see *Leveling the Mower Deck* on page 34).

Leveling the Mower Deck

These adjustments should be made on a level surface with the tires inflated to the correct air pressure.

Check Blade Level and Pitch

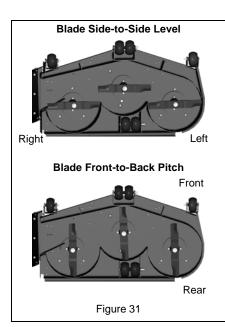
- 1. Raise mower deck to a 3 1/4" (8.3 cm) cutting height.
- 2. Shut off engine. Engage parking brake. Remove the ignition key.

NOTICE: Place blocks under the bottom edge of the deck, not under the reinforcement bar welded along deck face.

- 3. Place blocks at each corner of the deck to support the weight of the deck.
- Turn the blades so the blade ends point left to right across the width of the deck.
- 5. Measure the distance between the ground and cutting edge of the blade on the left blade (Left position in Figure 31) and on the right blade (Right position in Figure 31). Distances should be within 3/16" (4.7 mm). If they are not, raise the low side of the deck using the height adjusters on the deck lift brackets (see Figure 32).
- 6. After deck is level side to side, check the deck front to back pitch.
- 7. Turn the blades so the blade ends point front to back as shown in Figure 31.
- Measure the distance between the ground and the cutting edge of the middle blade at the front of the deck (Front position in Figure 31) and between the ground the cutting edge of the left and right blades at the rear of the deck (Rear position in Figure 31).
- The cutting edge at the front of the deck (Front position in Figure 31) should be 1/8" (3.2 mm) lower than the cutting edges at the rear of the deck (Rear position in Figure 31).
- 10. If measurements are out of range, raise the low side of the deck using the height adjusters on the deck lift brackets (see Figure 32). Be sure to raise the deck evenly to keep the deck level side to side.

NOTICE: Pitching the front of the blades lower than the rear provides a balance between cut quality and the power needed to cut grass. Certain cutting conditions require the deck to be pitched with the rear of the blades lower than the front. Heeling the deck this way requires more engine power but can provide better cut quality.

11. Remove the blocks from under the deck.

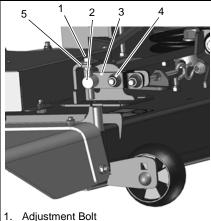


Adjust Blade Height

See Figure 32.

Level and pitch the mower with the height adjusters (3) on each deck lift bracket.

- 1. Loosen mounting hardware (4) and trunnion nut (2). Loosen jam nut (5).
- 2. Turn the adjustment bolt (1) clockwise to lower the deck or counterclockwise to raise the deck.
- 3. Adjust all four corners of the deck to desired pitch, ensuring that deck is even side to side and front to back.
- 4. Tighten jam nut, mounting hardware and trunnion nut.



- 2. Deck Lift Trunnion
- 3. Height Adjuster
- Mounting Hardware
- 5. Jam Nut

Figure 32

CLUTCH ADJUSTMENT

If clutch fails to engage or disengage properly or begins to make abnormal noise, check the air gap adjustment at the three inspection slots. See Figure 33..

To check:

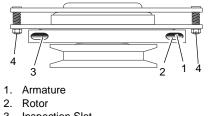
- 1. Stop engine, remove key and wait for all hot parts to cool.
- 2. Measure the air gap between the armature and the rotor.
 - Minimum: A .016" feeler gauge should slide between armature and rotor with slight contact.
 - Maximum: A .020" feeler gauge should slide between armature and rotor with slight contact.
- 3. Repeat for each inspection slot.

To adjust:

- 1. If necessary, loosen gap adjustment nuts until a .016" feeler gauge fits between armature and rotor.
- 2. Slide a .020" feeler gauge between armature and rotor.
- 3. Tighten gap adjustment nut until there is slight contact on feeler gauge.
- 4. Repeat steps 1 − 3 at each inspection slot.

NOTICE: Adjust air gap as evenly as possible.

- 5. Start unit, engage and disengage PTO.
- 6. Shut off unit.
- Recheck air gap and adjust if needed.



- 3. Inspection Slot
- Gap Adjustment Nut

Figure 33

STORAGE



WARNING: AVOID INJURY. Read and understand entire Safety section before proceeding.

SHORT TERM

NEVER spray unit with high-pressure water or store unit outdoors.

Inspect unit for visible signs of wear. breakage or damage.

Keep all nuts, bolts and screws properly tightened and know unit is in safe working condition.

Store unit in a cool, dry protected area.

LONG TERM

Clean unit thoroughly with mild soap and low pressure water and lubricate (see Transaxle Neutral adjustment on page 28). Touch up all scratched painted surfaces.

Remove weight from wheels by positioning blocks under frame or axle.

Clean and charge the battery. Charge battery every three to four weeks when storing unit.

Fuel System

Gasoline left in the fuel system for extended periods without a stabilizer will deteriorate, resulting in gum deposits in the system. These deposits can damage the carburetor and the fuel hoses, filter and tank. Prevent deposits from forming in the fuel system during storage by adding a quality fuel stabilizer to the fuel. Follow the recommended mix ratio found on the fuel stabilizer container.

IMPORTANT: NEVER store the engine with fuel in the fuel tank inside of a building with potential sources of ignition.

Add Fuel Stabilizer

- 1. Add fuel stabilizer, following the manufacturer's instructions.
- 2. Re-start engine.
- 3. Run engine to distribute conditioned fuel through the fuel system.
- Slow the engine to an idle speed.
- 5. Stop engine.

To Take the Unit Out of Storage

- 1. Refer to the engine service manual to prepare the engine for service.
- Put fresh, clean fuel in the fuel tank.
- 3. Begin the maintenance schedule.
- 4. Charge and install the battery.

	TROUBLESHOOT	ING
PROBLEM	PROBABLE CAUSE	CORRECTION
	PTO engaged.	Disengage PTO.
	Parking brake disengaged.	Engage parking brake.
	Loose or corroded battery cables.	Clean and tighten battery cables. See Clean Battery on page 27.
	Discharged battery.	Charge battery. See Charging the Battery on page 27.
	Faulty starter.	See your Gravely Dealer.
Engine does not crank.	Blown fuse.	Check main fuse and replace if necessary.
	Failed relay.	Check relays in fuse block and replace if necessary
	Loose or broken wires.	Check wire harness and connections.
	Weak battery.	Check voltage and charge if required. See <i>Charging the Battery</i> on page 27.
	Fuel tank empty.	Fill fuel tank. See Filling Fuel Tank on page 17.
	Faulty spark plug.	Replace spark plug. Refer to Engine Manual.
Engine cranks but	Air cleaner is plugged or dirty.	Clean or replace air cleaner. Refer to Engine Manual.
does not start.	Fuel filter is dirty.	Clean or replace fuel filter. Refer to Engine Manual.
	Faulty engine.	Refer to Engine Manual or see your Gravely Dealer.
	Weak battery.	Check voltage and charge if required. See <i>Charging the Battery</i> on page 27.
Oil pressure light is on.	Oil pressure is low.	Refer to Engine Manual.
Engine continues to run when	Ignition ground wire disconnected.	Connect ground wire to clean metal surface.
ignition key is in the off position.	Ignition switch failure.	Replace ignition switch. See your Gravely Dealer.
PTO or mower	Operator presence switch not depressed.	Depress operator presence switch by holding down right steering control handle.
engage or shut off.	Faulty PTO switch.	Check the electrical system to the clutch for damage or wear. See your Gravely Dealer.
	Parking brake engaged.	Disengage parking brake.
Unit does not	Transmission bypass levers open.	Close transmission bypass levers. See <i>To Push The Unit</i> on page 19.
drive.	Hydraulic oil level low.	Add hydraulic oil. See <i>Check Hydraulic Fluid Level</i> on page 24.
	Faulty hydraulic drive system.	See your Gravely dealer.

TROUBLESHOOTING					
PROBLEM	PROBABLE CAUSE	CORRECTION			
	PTO engaged.	Disengage PTO.			
	Parking brake disengaged.	Engage parking brake.			
	Loose or corroded battery cables.	Clean and tighten battery cables. See Clean Battery on page 27.			
	Discharged battery.	Charge battery. See Charging the Battery on page 27.			
	Faulty starter.	See your Gravely Dealer.			
Engine does not crank.	Blown fuse.	Check main fuse and replace if necessary.			
	Failed relay.	Check relays in fuse block and replace if necessary			
	Loose or broken wires.	Check wire harness and connections.			
	Weak battery.	Check voltage and charge if required. See <i>Charging the Battery</i> on page 27.			
	Fuel tank empty.	Fill fuel tank. See Filling Fuel Tank on page 17.			
	Faulty spark plug.	Replace spark plug. Refer to Engine Manual.			
Engine cranks but	Air cleaner is plugged or dirty.	Clean or replace air cleaner. Refer to Engine Manual.			
does not start.	Fuel filter is dirty.	Clean or replace fuel filter. Refer to Engine Manual.			
	Faulty engine.	Refer to Engine Manual or see your Gravely Dealer.			
	Weak battery.	Check voltage and charge if required. See <i>Charging the Battery</i> on page 27.			
Malfunction Indicator Light (MIL) illuminates (Models 994124, 130).	Electronic fuel injection (EFI) system is malfunctioning.	Stop engine and see engine manual.			

ACCESSORIES

See your authorized Gravely dealer to add these optional accessories to your unit.

those option	ar accessories to your arm.
Part No.	Description
79104500	Mulching Kit – 48" (Models 994126, 127)
79213500	Mulching Kit – 52" (Models 994121, 128, 129, 130)
79401400	Mulching Kit – 60" (Models 994123, 124, 125)
79401200	Catcher Adapter
79401300	Kit, Pro-Stance OCDC

SERVICE PARTS

Be sure to always use genuine Gravely parts to keep your unit running like new.

parts to keep your unit running like new.				
Part No.	Qty	Description		
21537000	1	Air Filter Outer Element		
21536900	1	Air Filter Inner Element		
21535800	1	Engine Oil Filter – Kawasaki (Models 994123, 125, 126, 128)		
21536100	2	Spark Plug – Kawasaki (Models 994123, 125, 126, 127, 128, 129)		
21538400	1	Fuel Filter – Kawasaki (Models 994123, 125, 126, 127, 128, 129)		
21397200	1	Engine Oil Filter – Kohler EFI (Models 994124, 130)		
21544000	2	Spark Plug – Kohler EFI (Models 994124, 130)		
21547528	1	Fuel Filter – Kohler EFI (Models 994124, 130)		
21500009	2	Spark Plug – Kohler ZT 730 (Model 994121)		
21500010	1	Air Filter – Kohler ZT 730 (Model 994121)		
21545700	1	Fuel Filter– Kohler ZT 730 (Model 994121)		
21545100	2	Hydraulic Oil Filter		
07200706	1	PTO Belt (Engine to Deck) – 48"		
07200712	1	PTO Belt (Engine to Deck) – 52"		
07200713	1	PTO Belt (Engine to Deck) – 60"		
07226400	1	Traction Belt (Hydro Pump)		
00450200	3	Mower Blade – 48"		
00450300	3	Mower Blade – 52"		
09081200	3	Mower Blade – 60"		

SPECIFICATIONS							
Model Number 994126 994128 994130 9941							
Model	Pro-Stance 48	Pro-Stance 52	Pro-Stance 52 EFI	Pro-Stance 52			
Engine	Kawa	Kohler					
Displacement – in ³ (cc)	44.3	(726)	45.6 (747)	45.6 (747)			
Governed RPM (May differ from maximum RPM)		3600	± 100				
Liquid or Air Cooled		A	ir				
Speed							
Forward Maximum – mph (km/h)		9 (1	4.5)				
Reverse Maximum – mph (km/h)		4 (6	6.4)				
Turning Radius		Ze	ro				
Electrical							
Starter		Elec					
Battery	12-Vol	t Maintenance-F		10U1L			
Power Take-Off		Electric PTO	Clutch/Brake				
Fuel							
Fuel Type	Refer to engine manual						
Tank Capacity – gal. (L)	9 (34.1)						
Transmission							
Туре		Hydrosta					
Transmission Oil	Use 15W-50 s	synthetic motor equiv		00057100) or			
Hydraulic Oil Filter		Ye	es				
Size and Weight							
Length – in. (cm)		61 (155)				
Width – in. (cm) With Discharge Chute: Without Discharge Chute:	62.3 (158.2) 50.0 (127.0)		67.5 (171.5) 55.5 (141.0)				
Weight – lbs (kg)	995 (451.3)	1016 (460.8)	1026 (465.4)	1004 (455.4)			
Tires			· · · · · · · · · · · · · · · · · · ·				
Front Tire Size – in.	13 x 6.5-6						
Rear Tire Size – in.	20 x 10.5-8						
Rear Tire Pressure –psi (kPa)	Rear Tire Pressure –psi (kPa) 12 – 15 (83 – 103)						
Mower Deck	•						
Cutting Width – in. (cm)	48 (121.9) 52 (132.1)						
Cutting Height – in. (cm)		1.5 – 5 (3	.8 – 12.7)				
Cutting Height Increments – in. (cm)		.25 (.	635)				

	SPECIFICATIONS					
Model Number	994123	994124	994127	994129	994125	
Model	Pro-Stance 60	Pro-Stance 60 EFI	Pro-Stance 48 Carb	Pro-Stance 52 Carb	Pro-Stance 60 Carb	
Engine	Kawasaki	Kohler EFI		Kawasaki		
Displacement – in ³ (cc)	44.3 (726)	45.6 (747)		44.3 (726)		
Governed RPM (May differ from maximum RPM)			3600 ± 100			
Liquid or Air Cooled			Air			
Speed	•					
Forward Maximum – mph (km/h)			9 (14.5)			
Reverse Maximum – mph (km/h)			4 (6.4)			
Turning Radius			Zero			
Electrical						
Starter			Electric			
Battery	1		nance-Free 2	,	1L	
Power Take-Off		Electi	ric PTO Clutch	n/Brake		
Fuel						
Fuel Type		Refe	er to Engine M	lanual		
Tank Capacity – gal. (L)	9 (34.1)					
Transmission						
Туре		F	Hydrostatic Dr	ive		
Transmission Oil			V-50 synthetio 'n 00057100)			
Hydraulic Oil Filter			Yes			
Size and Weight						
Length – in. (cm)	62 (1	57.5)	61 (155)	62 (157.5)	
Width – in. (cm) With Discharge Chute: Without Discharge Chute:	,	191.3) (160)	62.0 (157.5) 49.0 (124.5)	67.5 (171) 55.5 (141)	75.3 (191.3) 63.0 (160)	
Weight – lbs (kg)	1043 (473.1)	1048 (475.4)	995 (451.3)	1015 (460.4)	1043 (473.1)	
Tires						
Front Tire Size – in.			13 x 6.5-6			
Rear Tire Size – in.			20 x 10.5-8			
Rear Tire Pressure – psi (kPa)						
Mower Deck	•					
Cutting Width – in. (cm)	60 (1	52.4)	48 (121.9)	52 (132.1)	60 (152.4)	
Cutting Height – in. (cm)	1.5 – 5 (3.8 – 12.7)					
Cutting Height Increments – in. (cm)	.25 (.635)					



Commercial Mowing Equipment Limited Warranty

Ariens Company (Ariens) warrants to the **original purchaser** that Ariens, Gravely and Countax brand products purchased on or after 1/1/2013 and designated or labeled commercial products by Ariens Company will be free from defects in material and workmanship for the time period noted in the chart below. Equipment put to personal use around a single household or residence is considered "Consumer Use"; equipment put to any business use (agricultural, commercial, or industrial) or used at multiple locations is considered "Commercial Use." If any product is rented or leased, then the duration of these warranties shall be 90 days after the date of purchase.

An authorized Ariens dealer (Ariens brand products), Gravely dealer (Gravely brand products), or Countax dealer (Countax brand products) will repair any defect in material or workmanship, and repair or replace any defective part, subject to the conditions, limitations and exclusions set forth herein. Such repair or replacement will be free of charge (labor and parts) to the original purchaser except as noted below.

Warranty Code	Product Group	Warranty Period Consumer Use	Warranty Period Commercial Use
CA	Pro-Turn 100 & 200, Pro-Master, Compact-Pro, Pro-Stance, Pro-Ride, Pro-Walk Mowers, Pro-Zoom, etc.	3 Years	2 Years
СВ	Turf Mowing Equipment: CL, TRM, TVM, FP, PM-3084, etc.	3 Years	2 Years
CC	Pro 20 Series Walk-Behind Mowers, Commercial 21	3 Years	1 Year
N/A	Service (replacement) Parts	90 Days (no labor)	90 Days (no labor)
CD	Pro-Turn 400	3 Years	3 Years (Years 1 & 2: Parts & Labor, Year 3: Parts Only)
CF	Pro-Turn	3 Years	2 Years or 600 Hours

Special Extensions

The chart below details special extensions to this warranty:

Warranty Code	Warranty Exception	Warranty Period	Use	Detail
CA, CD	Mower Deck Shell on Commercial Mowers	Lifetime	All	2 Years parts and labor (Commercial), 3 Years parts and labor (Consumer), parts-only thereafter.
CA, CD	Main Frame on Commercial Mowers	Lifetime	All	2 Years parts and labor (Commercial), 3 Years parts and labor (Consumer), parts-only thereafter.
CA, CD	Cast Iron Deck Spindles	3 Years	All	3 Years for all users including Commercial.
СВ	Reels	Lifetime	All	Warranty on reels only against bending or breaking.

Exceptions and Limitations

The chart below details special exceptions to this warranty:

Warranty Code	Warranty Exception	Warranty Period	Use	Detail
All	Batteries	1 Year	All	Prorated
All	Belts, Muffler, Tires	None	Commercial	These components are not covered when used commercially.
All	Cloth, Plastic, and Rubber Components (Including Belts and Cables)	Maximum 2 Year	All	Warranty is limited to 2 years for consumer use. Except as noted above, these components are covered for defect, not for wear.
All	Engines	See Engine Manufacturer's Warranty	All	Engines are covered by engine manufacturer's warranty. Refer to engine manufacturer's warranty statement.

Customer Responsibilities

Register the product immediately at the time of sale. If the dealer does not register the product, the customer must complete the product registration card in the literature package and return it to the Ariens Company, or register the unit online at www.ariens.com, www.gravely.com, www.countax.com.

To obtain warranty service, the original purchaser must:

- Perform the maintenance and adjustments explained in the owner's manual.
- Promptly notify Ariens or an authorized Ariens, Gravely or Countax service representative of the need for warranty service.
- Transport the product to and from the place of warranty service at owner's expense.
- Have the warranty service performed by an authorized Ariens, Gravely or Countax service representative.

To Find an Authorized Service Representative:

In the U.S. and Canada:					
Use the dealer locator on our websites: www.ariens.com • www.gravely.com					
Or contact us by mail or by phone:					
In the U.S., Canada, Mexico, Caribbean, Central and South America:	In Europe, Asia, Africa or the Middle East:	In Australia or New Zealand:			
Ariens Company 655 W. Ryan Street Brillion, WI 54110 Phone: (920) 756 - 4688 www.ariens.com	Countax Ltd, Countax House Great Haseley, Oxfordshire, OX44 7PF Phone: 0800 597 7777 www.countax.com	Ariens Company Building 2 6 Wedgewood Rd. Hallam, Victoria 3803 Australia Phone: (03) 9796 4244 1800 335 489 www.ariens.com.au			

Exclusions – Items Not Covered by This Warranty

- Parts that are not genuine Ariens, Gravely or Countax service parts are not covered by this
 warranty and may void the warranty.
- Damages resulting from the installation or use of any part, accessory, or attachment which is not approved by the Ariens Company for use with product(s) identified herein are not covered by this warranty.
- The following maintenance, service and replacement items are not covered by this warranty
 unless they are noted in the Limitations section above: lubricants, spark plugs, oil, oil filters,
 air filters, fuel filters, brake linings, brake arms, brake shoes, skid shoes, scraper blades,
 shear bolts, mower blades, mower vanes, brushes, headlights, light bulbs, knives, cutters.
- Any misuse, alteration, improper assembly, improper adjustment, neglect, or accident which
 requires repair is not covered by this warranty.
- Use of gasoline blends exceeding 10% ethanol voids any and all warranties.



- Products are designed to the specifications in the area that the product was originally
 distributed. Different areas may have significantly different legal and design requirements.
 This warranty is limited to the requirements in the area in which the unit was originally
 distributed. Ariens Company does not warrant this product to the requirements of any other
 area. Warranty service is limited to service within the area originally distributed.
- In countries other than the United States and Canada, contact the Ariens Company dealer for warranty policies that govern within your country. Rights may vary from country to country and within any one country.

Disclaimer

Ariens Company may from time to time change the design of its products. Nothing contained in this warranty shall be construed as obligating the Ariens Company to incorporate such design changes into previously manufactured products, nor shall such changes be construed as an admission that previous designs were defective.

LIMITATION OF REMEDY AND DAMAGES

Ariens Company's liability under this warranty, and under any implied warranty that may exist, is limited to repair of any defect in workmanship, and repair or replacement of any defective part. Ariens Company shall not be liable for incidental, special, or consequential damages (including lost profits). Some states do not allow the exclusion of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

AUSTRALIAN CONSUMER LAW

The following applies solely to warranties subject to Subsection 102(1) of the Australian Consumer Law: Our goods come with guarantees that cannot be excluded by the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and failure does not amount to a major failure.

DISCLAIMER OF FURTHER WARRANTY

Ariens Company makes no warranty, express or implied, other than what is expressly made in this warranty. If the law of your state provides that an implied warranty of merchantability, or an implied warranty of fitness for particular purpose, or any other implied warranty, applies to Ariens Company, then any such implied warranty is limited to the duration of this warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

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





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