

# ZT X™ ZT XL™



## Operator's Manual Manuel du Utilisateur

**GRAVELY**

### Models

915200 – ZT XL 52

(SN 080000 +)

915218 – ZT XL 60

(SN 080000 +)

915202 – ZT XL 42

(SN 080000 +)

915230 – ZT X 52

(SN 080000 +)

915204 – ZT XL 52

(SN 080000 +)

915236 – ZT X 52 CARB

(SN 080000 +)

915206 – ZT XL 42

(SN 080000 +)

915238 – ZT XL 42 CARB

(SN 080000 +)

915216 – ZT XL 60

(SN 080000 +)

915240 – ZT XL 52 CARB

(SN 080000 +)

915242 – ZT XL 60 CARB

(SN 080000 +)

915238 – ZT XL 42 CARB

(SN 080000 +)

915240 – ZT XL 52 CARB

(SN 080000 +)

915242 – ZT XL 60 CARB

(SN 080000 +)

915248 – ZT X 42

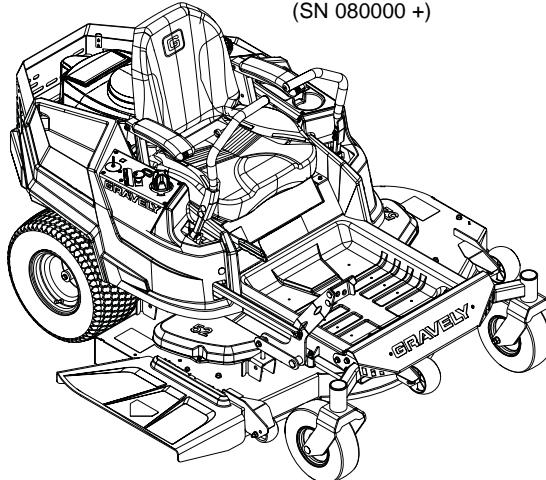
(SN 080000 +)

915249 – ZT X 42 CARB

(SN 080000 +)

915250 – ZT X 52

(SN 080000 +)



**E10**

**E15**

**E20**

**E85**



**EN** ENGLISH

**FR** FRANÇAIS

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# WELCOME

Congratulations on your purchase and welcome to the Gravely family! Every machine in the Gravely lineup is designed for long-lasting and unsurpassed performance. We are confident your machine will be part of your family for many years to come.

## Have Questions or Need Assistance?

[www.gravely.com](http://www.gravely.com)

A parts manual for your unit is available for free download or purchase at [www.gravely.com](http://www.gravely.com).

Manual del operador español está disponible para su descarga gratuita o compra en [www.gravely.com](http://www.gravely.com).

## REGISTER YOUR PRODUCT!

It is extremely important to register your product at time of purchase. Product registration activates the warranty and establishes a communication link from the Ariens Company.

Locate the model and serial number decal on your unit and register those numbers online at [www.gravely.com](http://www.gravely.com). See Figure 1 for decal location. Be aware that the original selling dealer may have already completed product registration on behalf of the original purchaser.

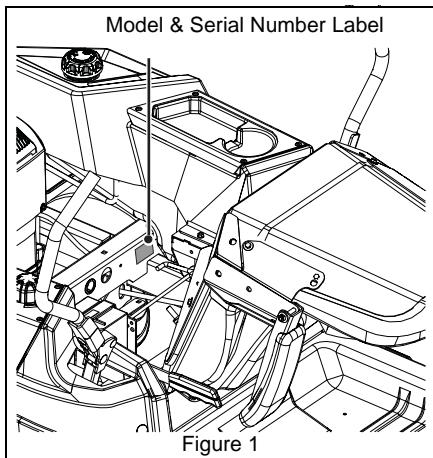


Figure 1

Record model number here.

Record serial number here.

## MANUALS

Before operating or servicing the unit, carefully and completely read the manuals provided with the unit. They contain safety instructions and important information about unit controls.

The engine on this unit is covered by a separate manual. Refer to the engine manual for engine service recommendations. Contact the engine manufacturer for a replacement manual if necessary.

It is your responsibility to read and understand all safety precautions and instructions in the manuals. If you do not understand or have difficulty following the instructions, contact your Gravely dealer for assistance. To locate your nearest dealer, go to [www.gravely.com](http://www.gravely.com).

## DISCLAIMER

Gravely reserves the right to discontinue, make changes to, and add improvements upon its products at any time without public notice or obligation. The descriptions and specifications contained in this manual were in effect at printing. Equipment described in this manual may be optional. Some illustrations may not be applicable to your unit.

## SAFETY

Read these safety rules and follow them closely. Failure to follow these rules could lead to loss of control of unit, severe personal injury or death to you or bystanders, or result in damage to property or the machine.

### PRACTICES & LAWS

Practice usual and customary safe working precautions. Learn applicable rules and laws in your area. Always follow the practices set forth in this manual.

### EMISSION CONTROL SYSTEM

This equipment and/or its engine may include exhaust and evaporative emissions control system components required to meet U.S. Environmental Protection Agency (EPA) and/or California Air Resources Board (CARB) regulations. Tampering with emission controls and components by unauthorized personnel may result in severe fines or penalties. Emission controls and components can only be adjusted by an Ariens Company dealer or an authorized engine manufacturer's service center. Contact your Ariens Company Equipment Retailer concerning emission controls and component questions.

### REQUIRED OPERATOR TRAINING



Read and understand the Operator's Manual and decals on the unit. This information is for your safety and the proper use of your equipment. Failure to follow these

instructions and warnings may cause death or serious injury. If you have purchased this product from a Gravely dealer, the dealer can provide you with training.

Familiarize yourself and any other operators with all controls and the safe use of the features of this unit. If you loan, rent or sell this product to others, provide them with all manuals.

If you have any questions, please call our customer support line at 920-756-4688 or contact us at [www.gravely.com](http://www.gravely.com). Do not use this equipment if, after reading the Operator's Manual and the on-board decals, you have any questions about the safe use of this product.



#### WARNING: AVOID INJURY.

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.

### SAFETY ALERT SYMBOL



This is the safety alert symbol. It means:

- ATTENTION!
- YOUR SAFETY IS INVOLVED!

When you see this symbol:

- BECOME ALERT!
- OBEY THE MESSAGE!

### SIGNAL WORDS

The safety alert symbol above and signal words below are used on decals and in this manual. Read and understand all safety messages.

#### 1. Danger



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

#### 2. Warning



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

#### 3. Caution



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

#### 4. Notice

**NOTICE:** Indicates information or procedures that are considered important but not hazard related. If not avoided property damage could result.

## 5. Important

**IMPORTANT:** Indicates general reference information worthy of special attention.

## SAFETY DECALS

The safety decals on your machine are visual reminders of the important safety information in this manual. All messages on your unit must be fully understood and carefully followed. Safety decals on the machine are explained below.

### Safety Decal Locations

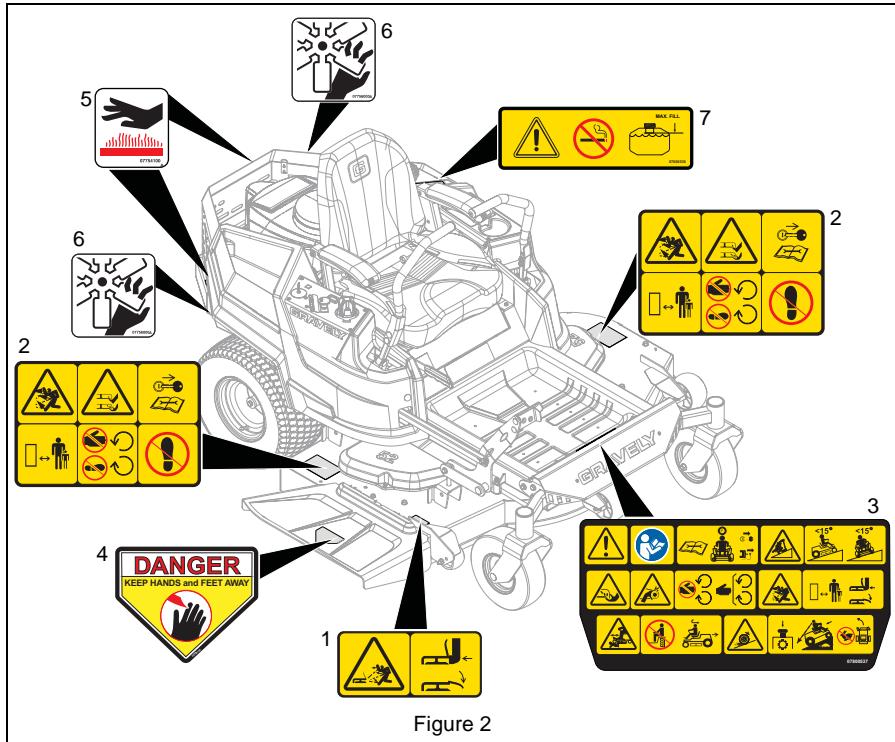


Figure 2

ALWAYS replace missing or damaged safety decals. Replacement decal part numbers are found in the parts manual for your machine and may be ordered from your dealer.

See Figure 2 for safety decal locations.

## Safety Decal Descriptions

### 1. 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.

### 2. DANGER!



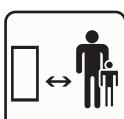
Discharge Hazard - NEVER direct discharge toward people, pets or property. Thrown objects can cause injury or damage.



Amputation 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!



DANGER!



Read and understand the operator's manual before operating unit.

#### 3.1 Amputation Hazard



To avoid amputation hazard DO NOT put hands near rotating blades.



To avoid amputation hazard DO NOT put hands near moving belts.



Keep hands away from all rotating or moving parts.



Keep all guards and shields in place.

#### 3.2 Discharge Hazard



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



DO NOT operate mower unless all guards are in operating position or bagger is attached.

### 3.3 Tipping Hazard



Avoid tipping hazard.



DO NOT operate on slopes over 15°.



DO NOT operate on slopes over 15°.

### 3.4 Service Hazard



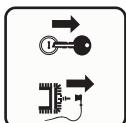
Before servicing unit do the following:



Read owners manual before servicing or making adjustments to unit.



Set parking brake.



Remove key and disconnect spark plug before servicing or making adjustments to unit.

### 3.5 Bystander Hazard



DO NOT operate the unit in the presence of bystanders.



DO NOT carry passengers.

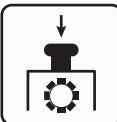


Look behind when operating the unit in reverse.

### 3.6 Loss of Traction Hazard



If loss of traction is experienced do the following:



Disengage PTO.



Proceed off slope slowly.



DO NOT try to turn or speed up.

## 4. DANGER!



ALWAYS keep hands and feet away from discharge chute.

## 5. HOT PARTS!



DO NOT touch parts which are hot from operation. ALWAYS allow parts to cool.

## 6. ROTATING PARTS!



AVOID INJURY. Stay clear of rotating parts.

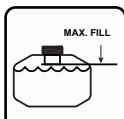
## 7. DANGER!



DANGER!



No smoking.



**IMPORTANT:** DO NOT overfill. Fill fuel tank to below bottom of filler neck.

**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

The following safety instructions are based on the B71.1 specifications of the American National Standards Institute and ISO 5395 in effect at the time of production.

### Training

Read, understand, and follow all instructions on the machine and in the manual(s) before starting.

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

If the operator or the mechanic cannot read the manual, it is the owner's responsibility to explain it to them.

ALWAYS train any inexperienced operators and require them to read and understand all manuals and decals.

Only allow responsible adults, who are familiar with the instructions, to operate this machine.

Only the operator 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 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 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.

<b>Personal Protection</b>	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 wear loose clothing or jewelry and tie back hair that may get caught in rotating parts.	
Wear adequate outer garments.	
NEVER wear open sandals or canvas shoes during operation. Wear adequate safety gear, protective gloves and footwear.	
Wear proper footwear to improve footing on slippery surfaces.	DO NOT operate machine while feeling tired, ill or under the influence of alcohol or other drugs.
ALWAYS wear eye and ear protection when operating machine.	DO NOT put hands or feet near rotating parts or under the machine. Keep clear of the discharge opening at all times.
<b>Before Operating</b>	DO NOT touch parts which are hot. Allow parts to cool.
Keep all nuts and bolts tight to be sure the equipment is in safe working condition.	DO NOT operate machine without the entire grass catcher, discharge guard or other safety devices in place and working.
Maintain the machine to be in compliance with the maintenance schedule.	ALWAYS keep hands and feet away from all pinch points.
Clean grass and debris from unit, especially from around muffler and engine, to help prevent fires.	Avoid slippery surfaces. ALWAYS be sure of your footing.
Check parking brake operation frequently. Adjust and service as required.	NEVER carry passengers.
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.	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.
Ensure Safety Interlock System is functioning properly. DO NOT operate unit if safety interlock is damaged or disabled.	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.
Start and operate unit only when seated in operator's position. Steering control levers must be in neutral, PTO disengaged and parking brake set when starting engine.	ALWAYS disengage PTO, stop unit and engine, remove key, engage parking brake and allow moving parts to stop before leaving operator's position.
NEVER interfere with the intended function of a safety device or reduce the protection provided by a safety device. Check their proper operation regularly.	NEVER engage PTO while raising the attachment, including mower blades, or when attachment is in the raised position.
Keep machine free of grass, leaves or other debris build-up. Clean up oil or fuel spillage and remove any fuel-soaked debris.	Keep safety devices or guards in place and functioning properly. NEVER modify or remove safety devices.
<b>Operation</b>	DO NOT mow in reverse unless absolutely necessary. ALWAYS look down and behind before and while backing.
Be sure the area is clear of bystanders before operating. Stop machine if anyone enters the area.	Stop engine before removing grass catcher or unclogging chute.
NEVER operate machine in a closed or poorly-ventilated area.	Slow down before turning.
ALWAYS maintain unit in safe operating condition. Damaged or worn out muffler can cause fire or explosion.	If you strike a foreign object, stop and inspect the machine. Repair, if necessary, before restarting.

NEVER leave a running machine unattended. ALWAYS turn off blade(s), set parking brake, stop engine and remove key before dismounting.	DO NOT mow on moist or wet grass. Tires may lose traction causing a loss of control.
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.	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.
Know the weight of loads. Limit loads to those you can safely control and the unit can safely handle.	Keep all movements on the slope <i>slow</i> and <i>gradual</i> . DO NOT make sudden changes in speed or direction, which could cause the machine to roll over.

## Operating Conditions

Lightning can cause severe injury or death. If lightning is seen or thunder is heard in the area, do not operate the machine, see shelter.	Operation on slopes may lead to loss of steering control. When operating on slopes be prepared to react to an emergency situation: <ul style="list-style-type: none"> <li>• Return steering levers to neutral position.</li> <li>• Immediately set parking brake.</li> <li>• Turn off PTO and engine.</li> </ul>
ALWAYS check overhead and side clearances carefully before operation.	DO NOT try to stabilize the machine by putting your foot on the ground.
Watch for traffic when operating near or crossing roadways.	DO NOT park on slopes unless necessary. When parking on slope ALWAYS chock or block wheels. ALWAYS set parking brake.
Clear the area of objects such as rocks, wire, toys, etc., which could be thrown by the blades.	Choose a low ground speed so you will not have to stop or shift while on a slope.
Check for weak spots on docks, ramps or floors. Avoid uneven work areas and rough terrain. Stay alert for hidden hazards or traffic.	DO NOT mow near drop-offs, ditches, or embankments. The machine could suddenly roll over if a wheel goes over the edge or if the edge caves in.
Use care when approaching blind corners, shrubs, trees or other objects that may obscure vision.	DO NOT bypass transmission or allow transmission to free-wheel when on a slope.
Dust, smoke, fog, etc. can reduce vision and cause an accident.	
Operate machine only in daylight or good artificial light.	

## 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.	To avoid personal injury or property damage, use extreme care in handling gasoline. Gasoline is extremely flammable and the vapors are explosive.
DO NOT operate on slopes of more than 15°.	Ethanol blends must not exceed E10. Higher ethanol content may cause your machine to run hotter and damage your engine.
Mow up and down slopes, not across.	Replace fuel cap securely and clean up spilled fuel before starting engine.
ALWAYS keep the machine in gear when going down slopes. DO NOT shift to neutral and coast downhill.	Extinguish all cigarettes, cigars, pipes and other sources of ignition.
Watch for holes, ruts, bumps, rocks, or other hidden objects. Uneven terrain could overturn the machine. Tall grass can hide obstacles.	Use only an approved gasoline 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.	<b>Batteries</b>
NEVER fuel the machine indoors.	Avoid electric shock. Objects contacting both battery terminals at the same time may result in injury and unit damage. DO NOT reverse battery connections.
NEVER remove gas cap or add fuel with the engine running. Allow engine to cool before fueling.	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.
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.	ALWAYS disconnect negative (-) cable FIRST and positive (+) cable SECOND. ALWAYS connect positive (+) cable FIRST, and negative (-) cable SECOND.
Remove gas-powered equipment from the 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.	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.
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.	No flames, No sparks, No smoking near battery.
NEVER overfill fuel tank. Replace gas cap and tighten securely.	ALWAYS wear safety glasses and protective gear near battery. Use insulated tools.
If fuel is spilled on clothing, change clothing immediately.	ALWAYS keep batteries out of reach of children.

<b>Towing</b>	
Follow the manufacturer's recommendations for weight limits for towed equipment and towing on slopes.	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.
NEVER allow children or others in or on towed equipment.	
Tow only with a machine that has a hitch designed for towing. DO NOT attach towed equipment except at the hitch point.	
On slopes, the weight of the towed equipment may cause loss of traction and loss of control.	
Travel slowly and allow extra distance to stop.	

<b>Accessories</b>	
Follow the manufacturer's recommendation for wheel weights or counterweights.	The use of non-genuine replacement parts or accessories could adversely affect machine operation and safety.
Check grass catcher components and the discharge guard frequently and replace with the manufacturer's recommended parts, when necessary.	Do not change engine governor setting or overspeed the engine.
Use only Ariens Company-recommended attachments that are appropriate to your use and can be used safely in your application.	Maintain or replace safety and instruction labels as necessary.

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.
NEVER weld or straighten mower blades.
NEVER make adjustments or repairs with the engine running.
Mower blades are sharp. Wrap the blade or wear gloves, and use extra caution when servicing them.
ALWAYS keep body and hands away from pin holes or nozzles which eject hydraulic fluid under pressure.

<b>Transporting Unit</b>
Use extra care when loading or unloading the machine into a trailer or truck.
Secure unit chassis to transport vehicle. NEVER secure from rods or linkages that could be damaged.
DO NOT transport machine while engine is running.
ALWAYS turn off power to attachment and shut off fuel when transporting unit.

<b>Storage</b>
NEVER store unit with fuel in fuel tank inside a building where any ignition sources are present.
Keep machine free of grass, leaves or other debris build-up. Clean up oil or fuel spillage and remove any fuel-soaked debris. Allow machine to cool before storing.
For extended storage, close fuel shut off valve and clean unit thoroughly. See engine manual for proper storage.

# ASSEMBLY

## REQUIRED TOOLS

- 1/2", 3/8" 7/16" and 9/16" wrench and/or adjustable wrench

## UNPACK UNIT

1. Disengage transaxles. See *Move Unit Manually* on page 20.
2. Disengage parking brake. See *Parking Brake Lever* on page 18.
3. Move unit from container to a level surface.
4. Engage parking brake. See *Parking Brake Lever* on page 18.
5. Engage transaxles. See *Move Unit Manually* on page 20.
6. Cut all packaging cable ties on unit and discard.
7. Remove packaging material from unit and discard.

## SECURE SEAT CABLE

1. Remove nut and one end of seat cable. Reinstall nut to secure remaining cable end to seat plate. See Figure 3.

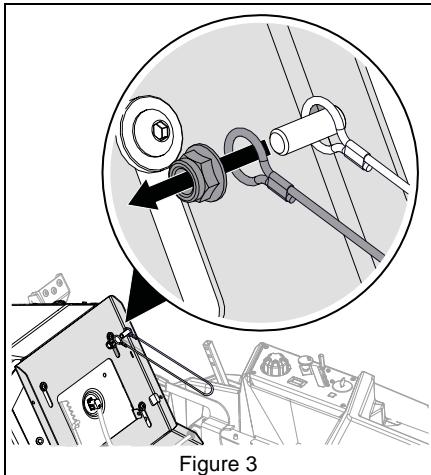


Figure 3

2. Remove nut from bolt on battery tray. Retain nut. See Figure 4.

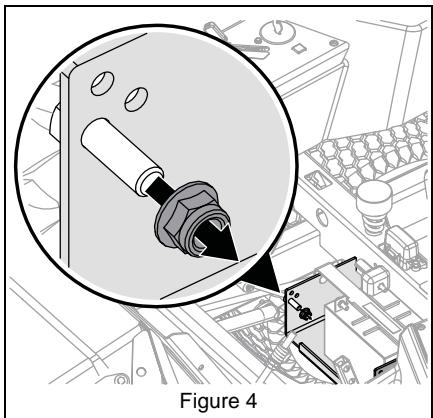


Figure 4

See Figure 5.

3. Tilt seat up slightly so cable end reaches bolt on battery tray.
4. Install cable end onto bolt on battery tray and secure with nut removed in step 2.

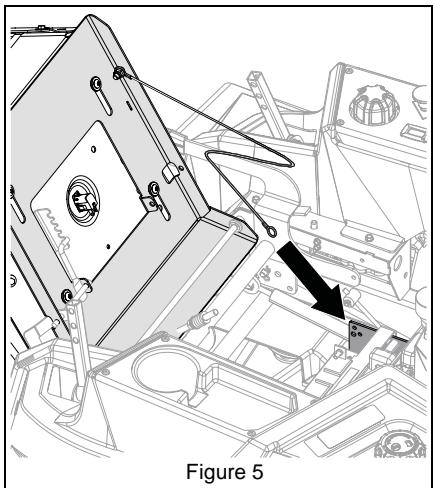


Figure 5

5. *Models 915230, 915236, 915248, 915249, 915250 Only:* Reposition seat. See *Reposition Seat And Connect Switch* on page 12.

6. Insert cable clip into lower hole on battery tray. See Figure 6.

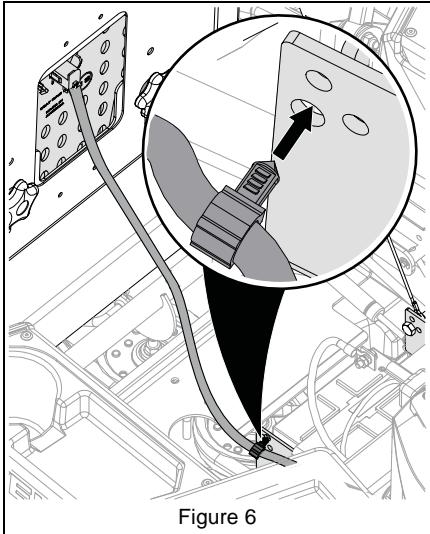


Figure 6

2. Move seat forward and reinstall original hardware. See Figure 8.

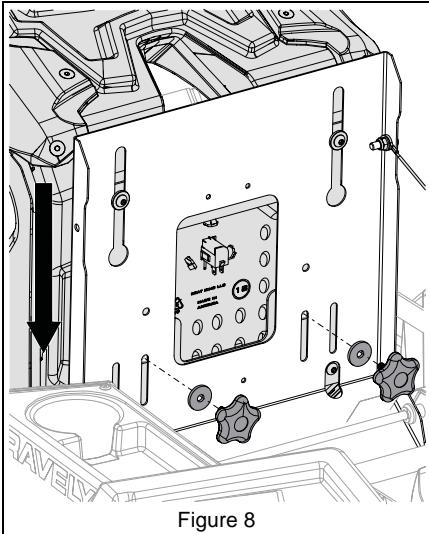


Figure 8

## REPOSITION SEAT AND CONNECT SWITCH

Models 915230, 915236, 915248, 915249, 915250

1. Remove and retain wing knobs and washers from seat plate. See Figure 7.

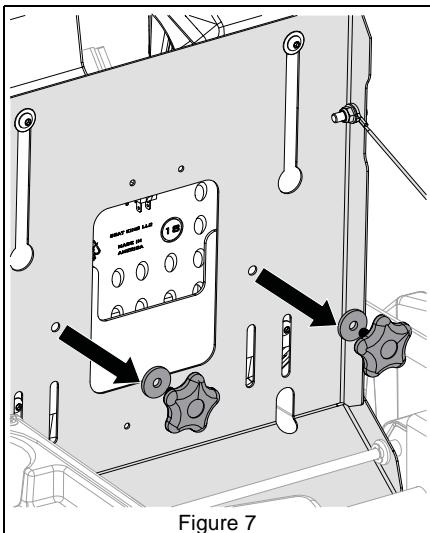


Figure 7

3. Connect start switch.

**IMPORTANT:** Seat switch must be connected for unit to operate.

## SECURE BATTERY CABLE

1. Remove the hex bolt, hex nut and flat steel washer from the negative battery cable. Retain hardware. See Figure 9.

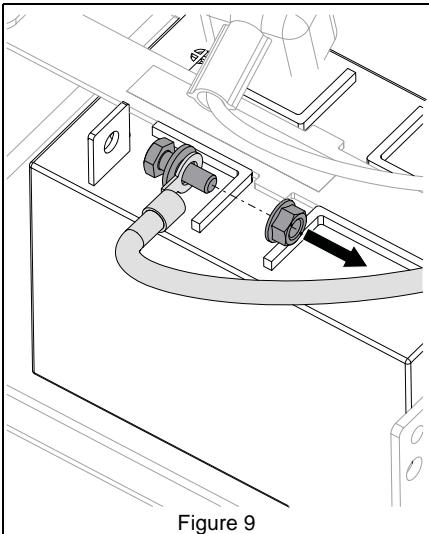


Figure 9

2. Secure negative battery cable to the negative battery terminal using hardware removed in step 1. See Figure 10.

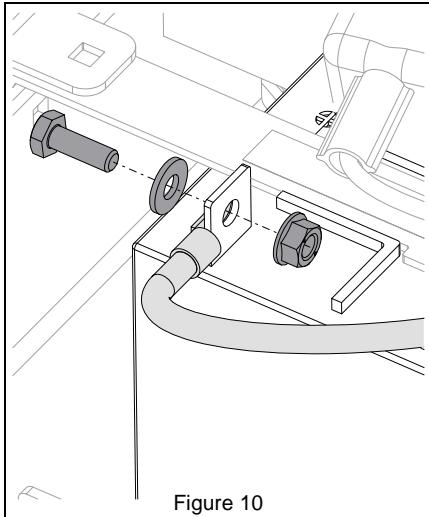


Figure 10

3. Secure lever to upper control arm with hardware from step 1. Do not fully tighten.  
4. Repeat steps 1 – 3 for other steering lever.

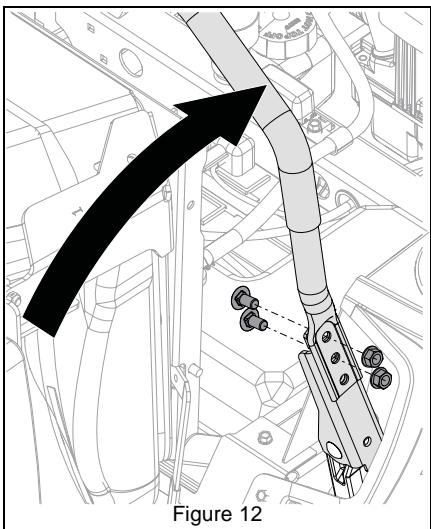


Figure 12

## ASSEMBLE STEERING LEVERS

1. Remove two jam nuts, two flat steel washers and two round head square neck bolts from the steering levers. Retain hardware for reinstallation. See Figure 11.

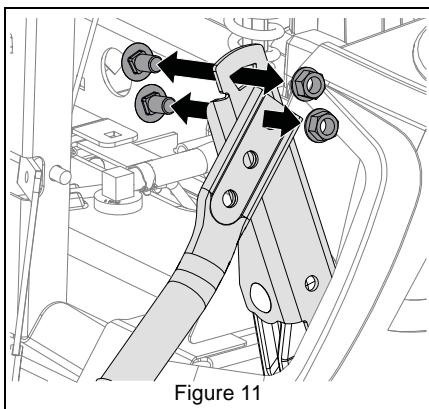


Figure 11

2. Place steering lever in the upright position and adjust lever height. See Figure 12.

- Use upper and middle holes for highest lever position.
- Use middle and lower holes for lowest lever position.

5. Rotate steering levers outward and return seat to operating position.  
6. Align levers. See *Adjust Steering Levers* on page 33. See Figure 13.  
7. Fully tighten hardware.

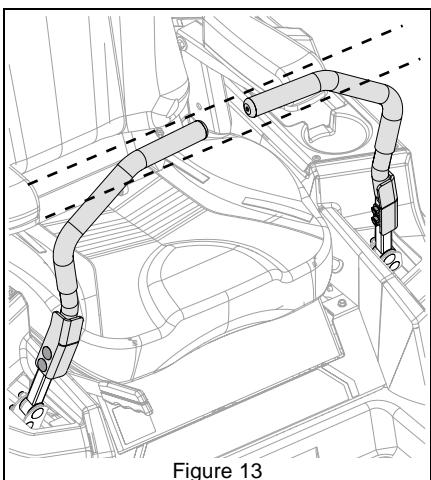


Figure 13

## INSTALL DECK LIFT PEDAL

1. Remove hardware securing deck lift pedal to unit and remove pedal. See Figure 14.

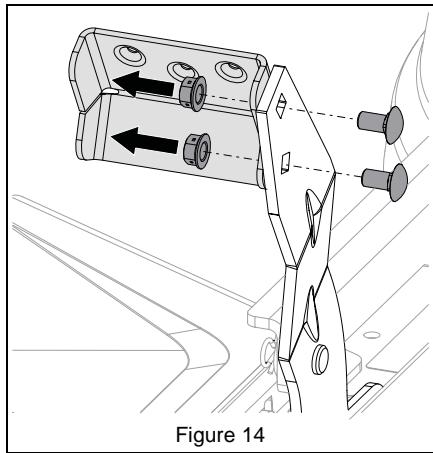


Figure 14

**IMPORTANT: ALWAYS** chock wheels and know all jack stands are strong and secure and will hold weight of unit during maintenance.

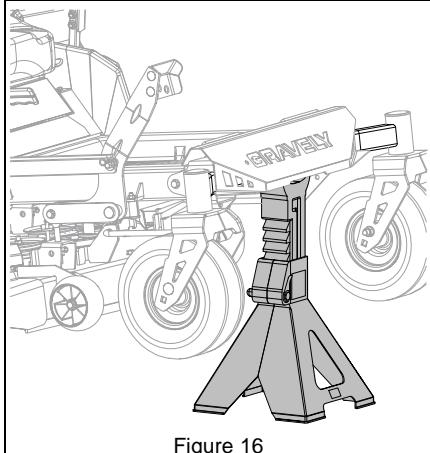


Figure 16

2. Rotate pedal as shown in Figure 15 and secure to unit with hardware removed in step 1.

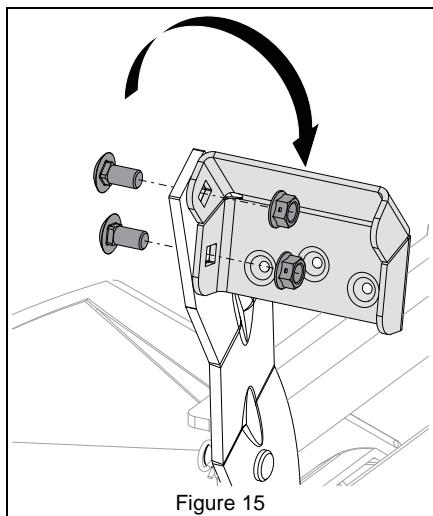


Figure 15

2. Remove hardware retaining front wheel assembly. Retain hardware for reinstallation. See Figure 17.

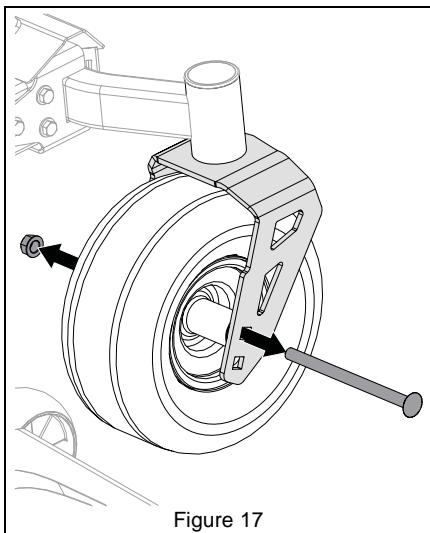


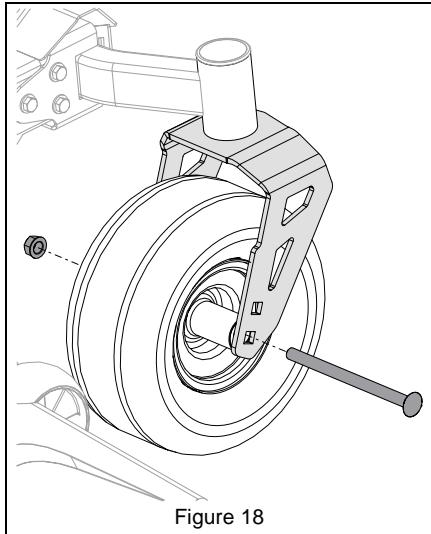
Figure 17

## ADJUST CASTER WHEEL HEIGHT (XL MODELS ONLY)

1. Engage parking brake. Lift front of unit and position suitable jack stand or support under front of unit. See Figure 16.

See Figure 18.

3. Align caster wheel with lower hole in caster fork.
4. Secure wheel to caster fork using original hardware.
5. Repeat steps 2 – 4 on other side.



6. Remove jack stand and lower unit to ground.

## CONTROLS AND FEATURES

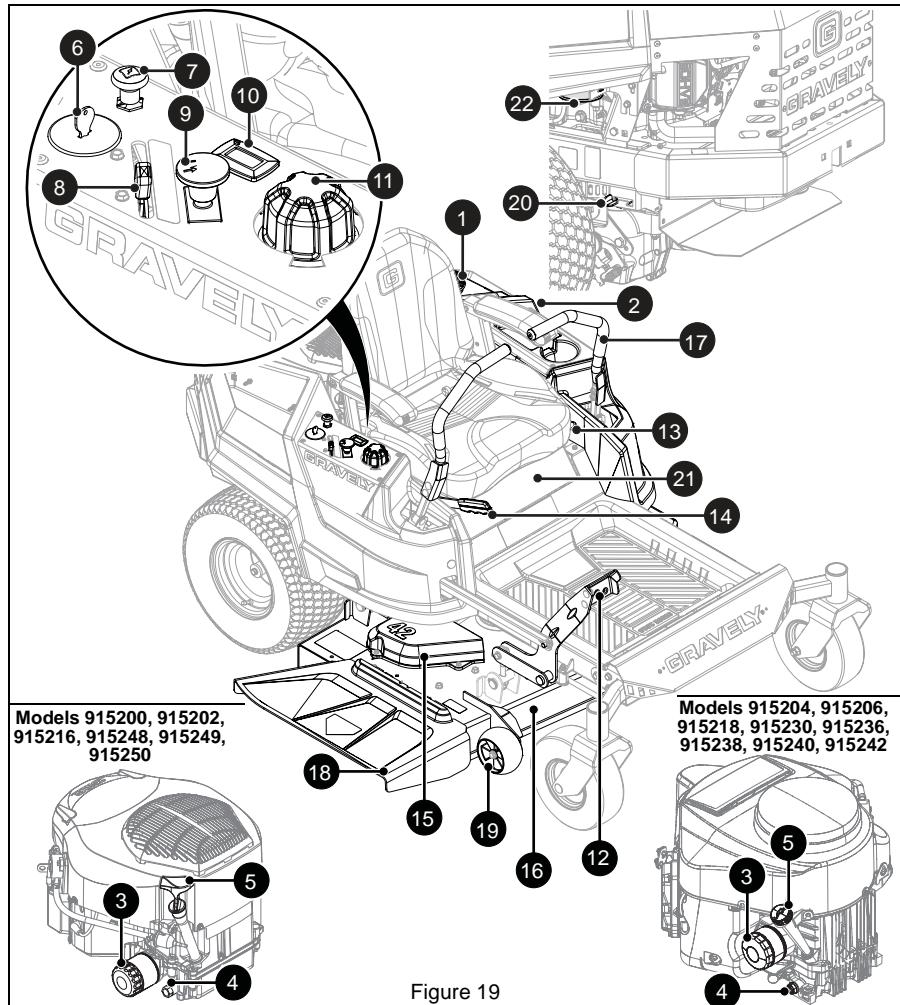


Figure 19

1. Fuel Tank and Cap
2. Fuel Level Window
3. Oil Filter
4. Oil Drain
5. Engine Oil Dipstick
6. Ignition Key
7. Choke Control Knob (Models 915204, 915206, 915218, 915230, 915236, 915238, 915240, 915242, 915248, 915249, 915250)
8. Throttle Control Lever
9. Power Take-off (PTO) Knob
10. Hour Meter
11. Height-of-Cut Dial
12. Deck Lift Pedal
13. Seat Adjustment Lever (Models 915200, 915202, 915204, 915206, 915216, 915218, 915238, 915240, 915242)
14. Parking Brake Lever
15. Belt Guard (2)
16. Mower Deck
17. Steering Lever (2)
18. Discharge Chute
19. Anti-Scalp Wheel
20. Transaxle Bypass Lever (2)
21. Battery (Under Seat)
22. Carbon Canister (Models 915236, 915238, 915240, 915242, 915249)



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

See Figure 19 for all controls and features  
locations.

## IGNITION KEY

See Figure 20.

Controls power to the engine. The key cannot  
be removed when in run position.

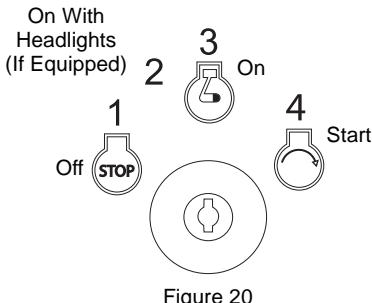


Figure 20

## THROTTLE CONTROL LEVER

See Figure 22.

Controls engine speed.

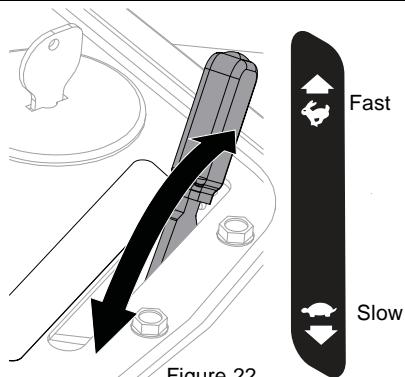


Figure 22

## CHOKE CONTROL KNOB

Models 915204, 915206, 915218, 915230,  
915236, 915238, 915240, 915242, 915248,  
915249, 915250

See Figure 21.

Controls airflow to the engine.

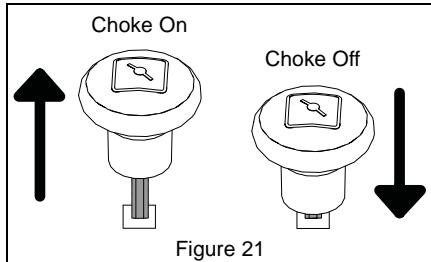


Figure 21

## POWER-TAKE-OFF (PTO) KNOB

See Figure 23.

Controls power to mower blades. The engine  
will not start with the PTO knob in the on  
position.



**WARNING: AVOID INJURY.**  
Blades will not *immediately*  
stop after pushing PTO knob  
down to off position.

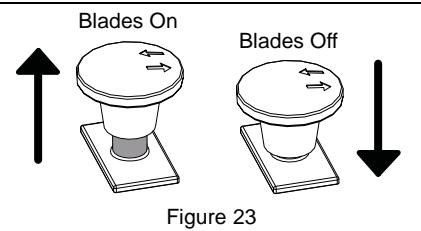


Figure 23

## HOUR METER

Hour meter measures engine runtime and  
cannot be reset.

## HEIGHT-OF-CUT DIAL

Sets the mower height of cut.

## DECK LIFT PEDAL

Raises or lowers mower deck.

## SEAT ADJUSTMENT LEVER

Unlocks seat to allow operator to move seat  
forward or backward and then lock in desired  
position.

## PARKING BRAKE LEVER

See Figure 24.

Controls the parking brake. The engine will not start with brake in the off position.

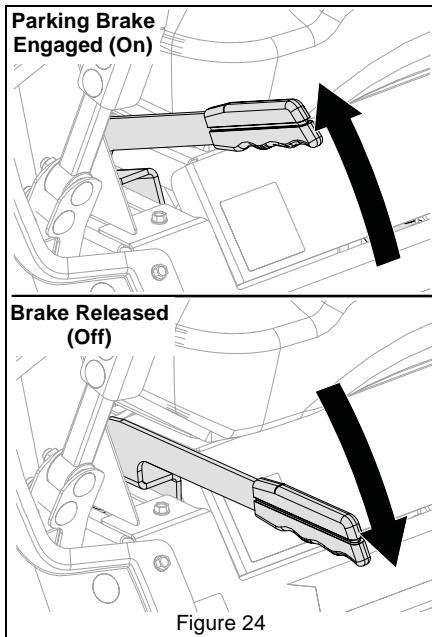


Figure 24

## OPERATION



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

**IMPORTANT:** All references to left, right, front or rear are given from the perspective of operator in operator's position, facing the direction of forward travel.

### EMERGENCY STOPPING

1. Move steering levers to neutral position.
2. Engage parking brake.
3. Push PTO knob down to off position.
4. Turn ignition key to off position and remove key from ignition.

### BEFORE OPERATING UNIT

1. Check fuel level and add fuel if needed.

**IMPORTANT:** Use fresh unleaded fuel with an octane rating of at least 87. DO NOT use E85 blended fuels; the engine is not E20 / E30 / E85 compatible. The maximum recommended ethanol content is 10%. Gravely recommends using a quality fuel stabilizer in all fuel. See *Short-Term Storage* on page 41.

2. Check engine oil level and add oil if needed. Refer to engine manual.
3. Check condition of air cleaner. Refer to engine manual.
4. Check function of the Safety Interlock System by performing the tests in *Check Safety Interlock System* on page 23. Contact your Gravely dealer for repair if any of the tests fail.
5. Set cutting height. See Figure 25.
  - a. Depress and hold deck lift pedal in forward position.
  - b. Rotate height-of-cut dial to desired setting.
  - c. Slowly return deck lift pedal to resting position.

## SAFETY INTERLOCK SYSTEM

Monitors the interaction of various unit features for operator safety.

## STEERING LEVERS

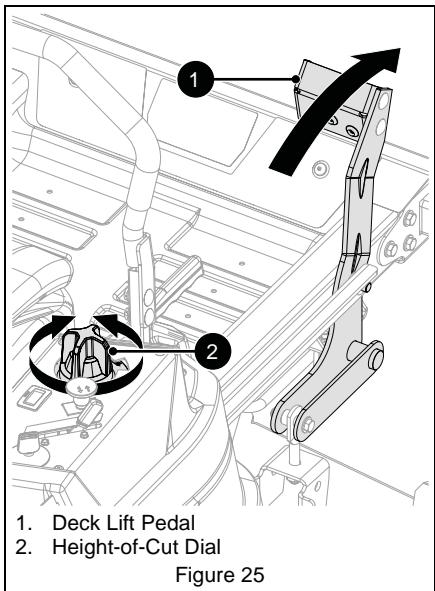
Control the direction and speed of unit. To stop unit, return both steering levers to neutral.

## TRANSAXLE BYPASS LEVERS

Control the transaxles so unit may be moved with the engine off.

## ANTI-SCALP ROLLERS

Help prevent the deck from contacting the ground and scalping the lawn when passing over a high spot.



## OPERATE UNIT

1. Release parking brake.



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

2. Set throttle to slow speed.
3. Pull PTO knob up to on position.

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

4. Move steering levers to begin mowing.

Direction of Travel	Lever Position
Forward	Push both levers forward from neutral position.
Reverse	Pull both levers backward from neutral position.
Right Turn	Push left lever farther forward than the right lever.
Left Turn	Push right lever farther forward than the left lever.
Stop	Return both levers to neutral position.

5. Move throttle control lever to fast.

**IMPORTANT:** 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. For minimum turning radius, slowly reverse inside wheel while moving outside wheel slowly forward.

## START THE ENGINE

1. Push PTO knob down to off position.
2. Move steering levers to neutral position.
3. Engage parking brake.
4. Models 915204, 915206, 915218, 915230, 915236, 915238, 915240, 915242, 915248, 915249, 915250: If engine is cold, pull choke knob up to on position. If engine is warm or hot, turn choke off.
5. Set throttle to slow speed.
6. Insert ignition key and turn to start position. Release key when engine starts.

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

7. Models 915204, 915206, 915218, 915230, 915236, 915238, 915240, 915242, 915248, 915249, 915250: If choke is on, wait a few seconds after engine starts and then push choke knob down to off position.

**IMPORTANT:** Make sure choke is completely off. Engine will not run smoothly using partial choke.

## For Best Mowing Results

- Cut grass when it is dry.
- Keep mower blades sharp.
- Keep mower deck properly leveled.
- 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 2.5 cm (1") 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.

## STOP THE ENGINE



**WARNING: AVOID INJURY.**  
Wait for all moving parts to stop before leaving operator's position.

1. Move steering levers to neutral position.
2. Engage parking brake.
3. Push PTO knob down to off position.
4. Set throttle to slow speed.
5. Turn ignition key to off position and remove key from ignition.

## MOVE UNIT MANUALLY

See Figure 26.

**IMPORTANT:** There is one transaxle bypass lever on each side of unit. Ensure that both levers are fully in front or rear position.

- To disengage the transaxles and move unit with the engine off, place both bypass levers in the rear position.
- To engage transaxles and operate unit normally, place both bypass levers in the front position.

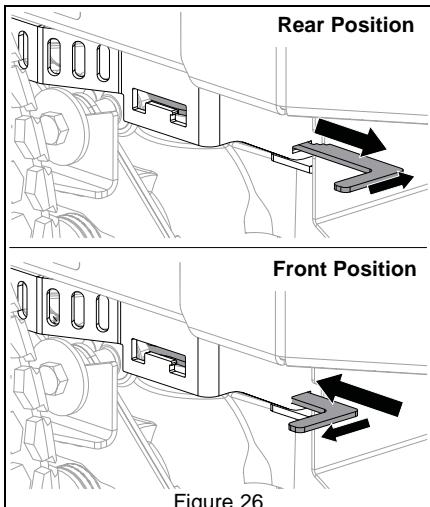


Figure 26

## TRANSPORT UNIT

1. Stop engine, set parking brake and remove key from ignition.
2. Secure unit chassis to transport vehicle.

**NOTICE:** NEVER secure from rods or linkages that could be damaged.

# MAINTENANCE



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

Your Gravely dealer can provide service and adjustments to keep your unit operating at peak efficiency.

Contact an authorized engine manufacturer's service center for engine service.

## MAINTENANCE SCHEDULE

Service Performed	Each Use	Every 25 hrs.	Every 50 hrs.	Every 100 hrs.	Every 400 hrs.
Check Safety Interlock System	•				
Check Parking Brake	•				
Check Engine Oil *	•				
Change Engine Oil *+ Check Tire Pressure					
Check Mower Blades	•				
Check Battery		•			
Clean Battery		•			
Check Carbon Canister Filter			•		
Check Air Filter *			•		
Check Fasteners			•		
Lubricate Unit			•		
Clean Engine Cooling System*				•	
Check Belts					•
Change Hydraulic Oil and Filter (XL Models) **					•

\* Refer to engine manual for instructions

+ Use tubing included in literature pack to drain engine oil.\*\* Change after first 75 hours of operation.

## SERVICE PARTS

See your Gravely dealer to purchase service parts for your unit.

### Common Service Parts

Description	Qty.	Part No.
Fuel Stabilizer – 118 ml (4 oz)	A/R	
• Except Canada		04730300
• For Canada Only		04742400
Seat Switch	1	02754100

### Model 915200

Description	Qty.	Part No.
Drive Belt	1	07200724
Mower Belt	1	07200023
Mower Blade	1	04771200
Hydraulic Oil Filter	2	21545100
Hydraulic Oil (32 oz)	AR	00057100
Fuel Filter	1	21539500
Oil Filter	1	21550800
Air Filter	1	21555300
Pre-Cleaner	1	21555400

### Model 915202

Description	Qty.	Part No.
Drive Belt	1	07200804
Mower Belt	1	07200523
Mower Blade	1	04769800
Hydraulic Oil Filter	2	21545100
Hydraulic Oil (32 oz)	AR	00057100
Fuel Filter	1	21539500
Oil Filter	1	21550800
Air Filter	1	21555300
Pre-Cleaner	1	21555400

### Model 915204

Description	Qty.	Part No.
Drive Belt	1	07200724
Mower Belt	1	07200023
Mower Blade	1	04771200
Hydraulic Oil Filter	2	21545100
Hydraulic Oil (32 oz)	AR	00057100
Fuel Filter	1	21548101
Oil Filter	1	21548100
Air Filter	1	21548000

**Model 915206**

Description	Qty.	Part No.
Drive Belt	1	07200724
Mower Belt	1	07200523
Mower Blade	1	04769800
Hydraulic Oil Filter	2	21545100
Hydraulic Oil (32 oz)	AR	00057100
Fuel Filter	1	21548101
Oil Filter	1	21548100
Air Filter	1	21548000

**Model 915216**

Description	Qty.	Part No.
Drive Belt	1	07200724
Mower Belt	1	07200804
Mower Blade	1	04965000
Hydraulic Oil Filter	2	21545100
Hydraulic Oil (32 oz)	AR	00057100
Fuel Filter	1	21539500
Oil Filter	1	21550800
Air Filter	1	21555300
Pre-Cleaner	1	21555400

**Model 915218**

Description	Qty.	Part No.
Drive Belt	1	07200724
Mower Belt	1	07200804
Mower Blade	1	04965000
Hydraulic Oil Filter	2	21545100
Hydraulic Oil (32 oz)	AR	00057100
Fuel Filter	1	21548101
Oil Filter	1	21548100
Air Filter	1	21548000

**Model 915230**

Description	Qty.	Part No.
Drive Belt	1	07200718
Mower Belt	1	07200023
Mower Blade	1	04771200
Fuel Filter	1	21539500
Oil Filter	1	21548100
Air Filter	1	21548000

**Model 915236**

Description	Qty.	Part No.
Drive Belt	1	07200718
Mower Belt	1	07200023
Mower Blade	1	04771200
Fuel Filter	1	21548101
Oil Filter	1	21548100
Air Filter	1	21548000

**Model 915238**

Description	Qty.	Part No.
Drive Belt	1	07200724
Mower Belt	1	07200523
Mower Blade	1	04769800
Hydraulic Oil Filter	2	21545100
Hydraulic Oil (32 oz)	AR	00057100
Fuel Filter	1	21548101
Oil Filter	1	21548100
Air Filter	1	21548000

**Model 915248**

Description	Qty.	Part No.
Drive Belt	1	07200718
Mower Belt	1	07200523
Mower Blade	1	04769800
Fuel Filter	1	21541500
Oil Filter	1	21397200
Air Filter	1	21555500

**Model 915249**

Description	Qty.	Part No.
Drive Belt	1	07200718
Mower Belt	1	07200523
Mower Blade	1	04769800
Fuel Filter	1	21541500
Oil Filter	1	21397200
Air Filter	1	21555500

**Model 915250**

Description	Qty.	Part No.
Drive Belt	1	07200718
Mower Belt	1	07200023
Mower Blade	1	04771200
Fuel Filter	1	21545700

Description	Qty.	Part No.
Oil Filter	1	21397200
Air Filter	1	21555500

## SERVICE POSITION

See Figure 27.

Before starting any of the following maintenance procedures:

1. Park unit a flat, level surface.
2. Stop engine, remove key and wait for all moving parts to stop and for hot parts to cool.
3. Move steering levers to neutral position and rotate handles outward.
4. Engage parking brake.
5. Disconnect spark plug wires from engine.
6. Tip seat forward.

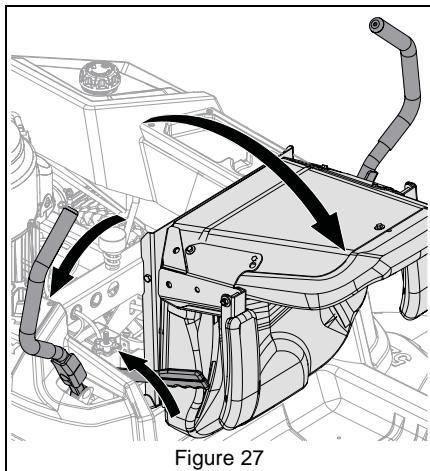


Figure 27

**IMPORTANT:** Reconnect spark plug wires after maintenance.

## CHECK SAFETY INTERLOCK SYSTEM

Check function of the Safety Interlock System by performing the tests below. Contact your Gravely dealer for repair if any of the tests fail.

Test	Steering Levers	PTO	Parking Brake	Result
<b>Starting Interlock</b>				
1	Neutral	Off	On	Engine starts.
2	Forward, Neutral, Reverse	On	On or Off	Engine does not start.
3	Forward, Neutral, Reverse	On or Off	Off	Engine does not start.
<b>Operating Interlock (Engine On)</b>				
4 *	Forward, Neutral, Reverse	On	On or Off	Engine shuts off.
5 *	Forward, Neutral, Reverse	On or Off	Off	Engine shuts off.

\* When operator lifts off seat.

## CHECK PARKING BRAKE

1. Place unit in service position. See *Service Position* on page 23.
2. Set both transaxle bypass levers in the rear position. See *Move Unit Manually* on page 20.
3. Push unit forward.
  - If unit does not move forward, no further action is needed.
  - If unit easily moves forward, adjust the brake lever. See *Adjust Parking Brake Lever* on page 35.

## CHECK ENGINE OIL

**NOTICE:** Engine oil level must be maintained at correct level or engine damage may occur. Refer to engine manual.

## CHECK TIRE PRESSURE

See *Specifications* on page 45 for recommended tire pressure.



**WARNING: AVOID INJURY.**  
Explosive separation of tire and rim parts is possible.

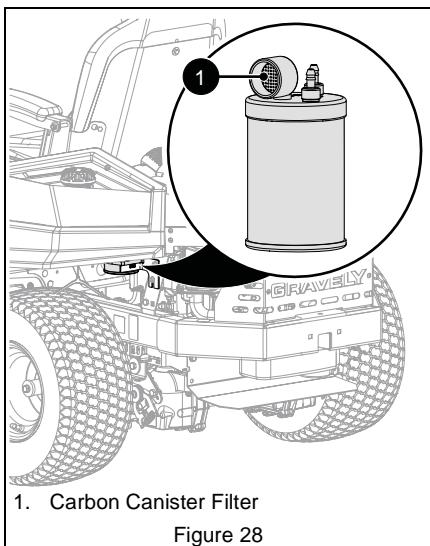
- DO NOT inflate tires above the recommended pressure.
- DO NOT inflate tires with a compressor; use a hand pump.
- DO NOT stand in front of tire assembly when inflating. Use a clip-on chuck and extension hose long enough to allow you to stand to one side.
- DO NOT mount a tire without proper equipment and experience.

## CHECK CARBON CANISTER FILTER

Models 915236, 915238, 915240, 915242, 915249

See Figure 28.

Clean or replace filter whenever engine air filter is cleaned or replaced.



1. Carbon Canister Filter

Figure 28

## CHECK FASTENERS

Check for loose or missing hardware.

## LUBRICATE UNIT

Models 915200, 915202, 915204, 915206, 915216, 915218, 915238, 915240, 915242

See Figure 29.

1. Place unit in service position. See *Service Position* on page 23.
2. Apply grease to seat tracks through slots under seat plate.

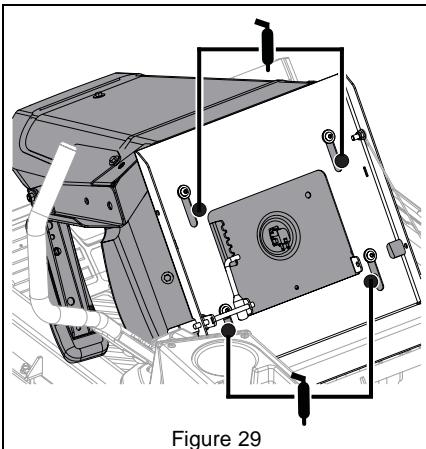


Figure 29

3. Return seat to operating position and slide seat back and forth to spread grease along tracks.

## CHECK MOWER BLADES

Check blades for wear. Replace or sharpen as needed.



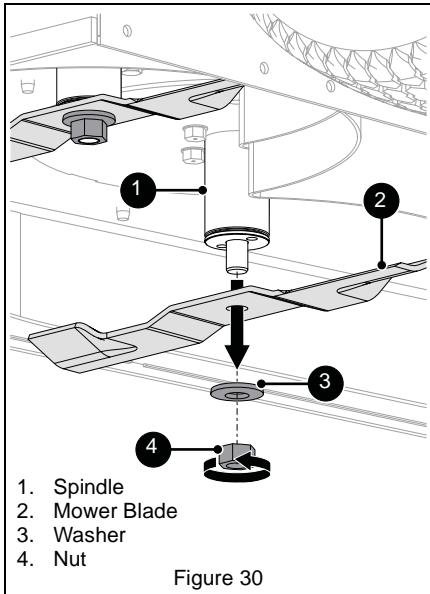
**CAUTION: AVOID INJURY.** Use sturdy gloves or padding to protect hands when working with mower blades.

Rotation of one blade rotates the other blades.

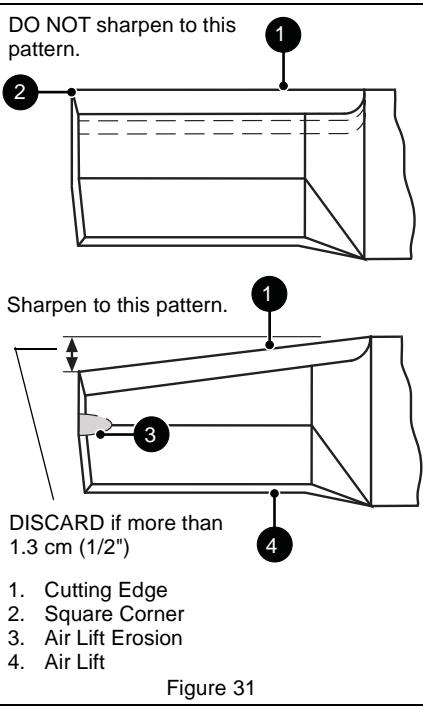
## Remove Blades

See Figure 30.

1. Stop engine, remove key and wait for all moving parts to stop and for hot parts to cool.
2. Remove hardware securing blades to spindles and remove blades. Retain all hardware for reinstallation.



1. Spindle
2. Mower Blade
3. Washer
4. Nut



## Sharpen Blades



**CAUTION:** DO NOT sharpen blades while attached to unit.

See Figure 31.

1. Remove blades from unit. Discard blades if:
  - More than 1.3 cm (1/2") of metal is removed.
  - Air lifts are eroded.
  - Blades are bent or broken.
2. File or grind an equal amount of material from each cutting edge of the blade until sharp. DO NOT change angle of cutting edge or round the corner of the blade.



**CAUTION:** Unbalanced blades cause excessive vibration and eventual damage to unit. Balance blades before reinstalling on unit. NEVER weld or straighten blades.

3. Check blade balance by sliding blade on an unthreaded bolt. If blade does not remain horizontal, sharpen the heavy end until blade is balanced.

## Install Blades

1. Reinstall blades, washers and nuts on spindles. See Figure 30.
2. Torque bolts to 136 N·m – 163 N·m (100 lb·ft – 120 lb·ft).

## CHECK BATTERY



**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.

### Remove Battery

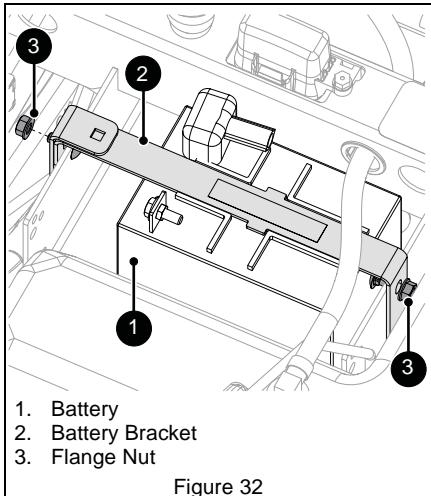
1. Place unit in service position. See *Service Position* on page 23.
2. Disconnect the negative cable and then the positive cable from the battery.

See Figure 32.

3. Remove hardware retaining battery brackets and remove brackets.

**IMPORTANT:** Remove flange nuts and brackets only. DO NOT remove bolts from battery tray.

4. Remove battery.



### Install Battery

#### Install Factory Battery

Battery bracket configurations for a U1 battery and a factory-installed battery are different. If replacing a U1 battery with a factory-installed battery, see step 1. If a factory-installed battery was most recently used, advance to step 2.

1. Remove hardware retaining L-bracket to battery bracket and reinstall hardware into L-bracket hole nearest curved edge. See Figure 33.

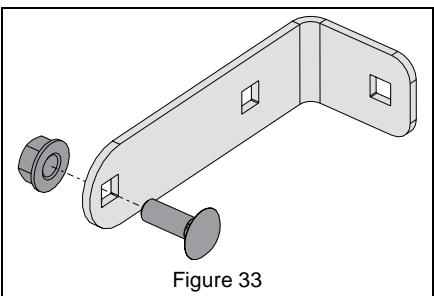


Figure 33

See Figure 34.

2. Place battery on battery tray so terminals are positioned nearest right side of unit.
3. Install battery bracket over battery and onto bolts in battery tray.
4. Reinstall L-bracket onto bolt and secure with flange nut.
5. Secure remaining battery bracket end to battery tray with original flange nut.
6. Connect positive cable to positive battery terminal and then the negative cable to negative battery terminal.
7. Return seat to operating position.

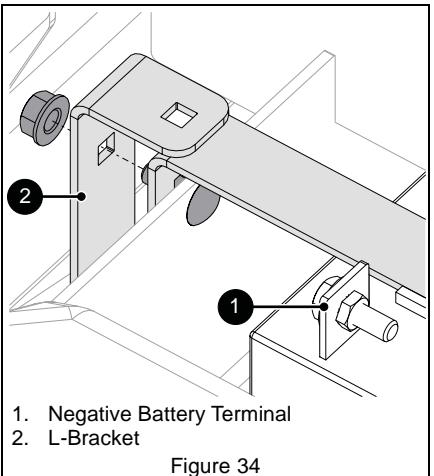


Figure 34

### Install U1 Battery

1. Remove factory battery. See *Remove Battery* on page 26.
2. Remove hardware from L-bracket and secure L-bracket to battery bracket. See Figure 35.

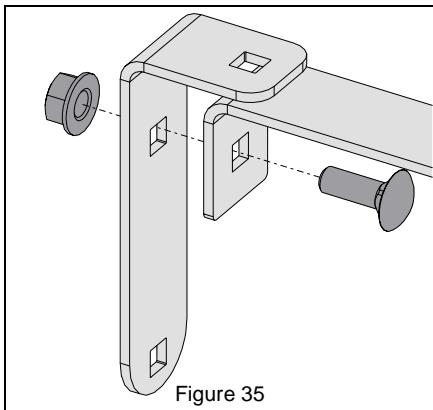


Figure 35

3. Place U1 battery in battery tray so terminals are positioned toward the front of unit.
4. Install battery bracket over battery and onto bolts in battery tray. Secure with two flange nuts. See Figure 36.

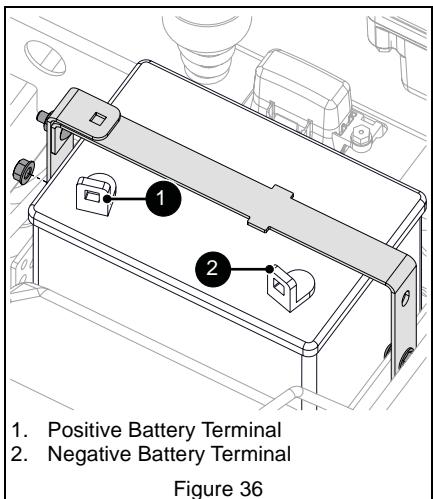


Figure 36

5. Connect positive cable to positive battery terminal and then the negative cable to negative battery terminal.
6. Return seat to operating position.

### Clean Battery

1. Remove battery from unit. See *Remove Battery* on page 26.
2. Clean terminals and battery cable ends with a wire brush.
3. Coat terminals with dielectric grease or petroleum jelly.
4. Reinstall battery. See *Install Battery* on page 26.

### Charge Battery

Check battery with a voltmeter. If battery is less than 11 volts, charge battery.

**NOTICE:** DO NOT fast charge. Charging at a higher rate damages or destroys the battery. ONLY use an automatic charger designed for use with your battery.

**IMPORTANT:** Always follow information provided on battery by battery manufacturer. Contact battery manufacturer for detailed information about charging.

**IMPORTANT:** Gravely does not recommend jump starting your unit. Jump-starting can damage engine and system components. Refer to engine manual for detailed information.

1. Remove battery from unit. See *Remove Battery* on page 26.
2. Place battery on bench or other well-ventilated area.
3. Connect positive lead of charger to positive battery terminal.
4. Connect negative lead of charger to negative battery terminal.
5. Charge battery following battery manufacturer's instructions.
6. Reinstall battery. See *Install Battery* on page 26.

## CHECK MOWER BELTS

Check belts for wear and replace as needed.

### Remove Deck Drive Belt

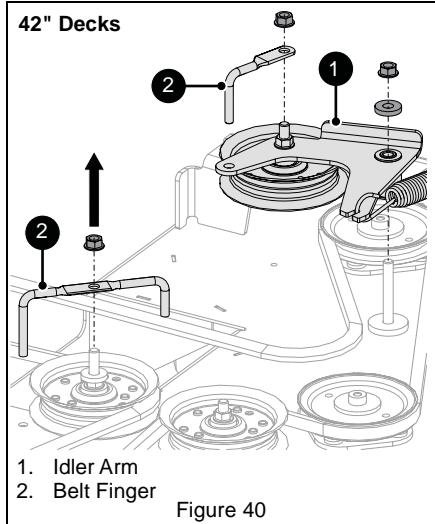
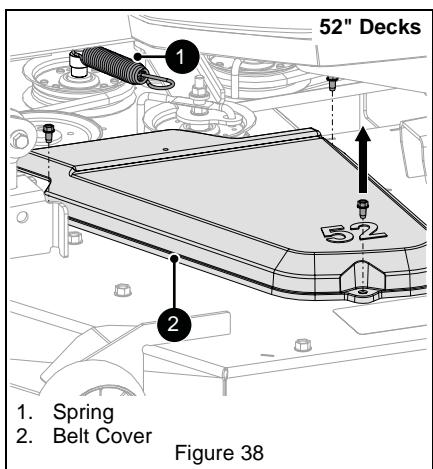
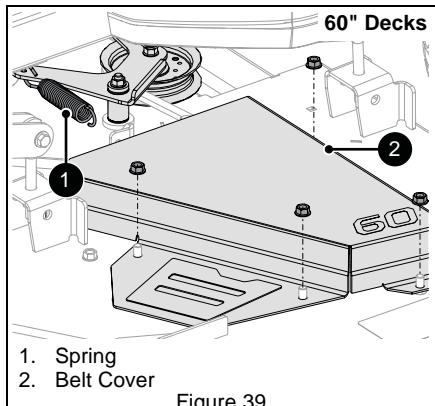
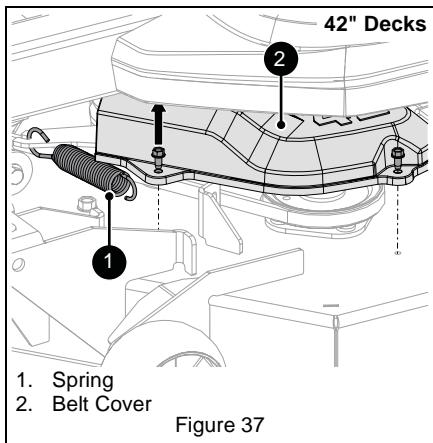


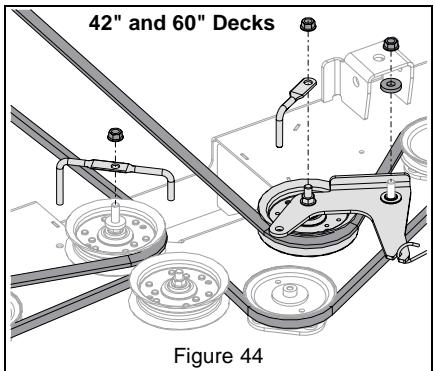
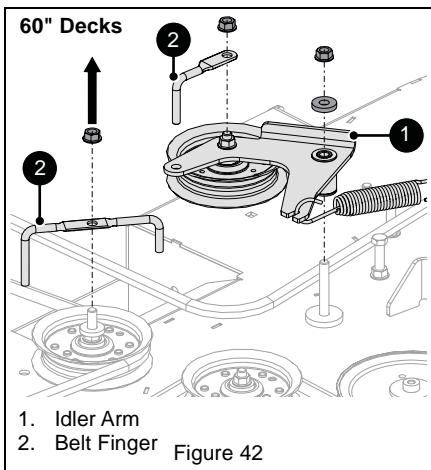
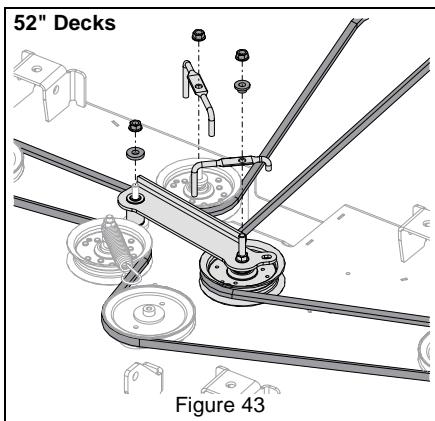
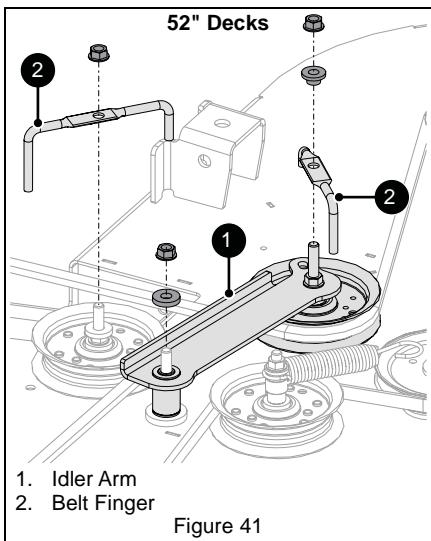
**CAUTION:** Keep body parts away from idler when releasing idler spring tension.

1. Stop engine, remove key and wait for all moving parts to stop and for hot parts to cool.
2. Lower deck to lowest cutting height.

See Figure 37, Figure 38 and Figure 39.

3. Remove hardware securing belt covers to deck and remove belt covers. Retain all parts for reinstallation.
4. Disconnect idler spring.





6. Remove deck drive belt.

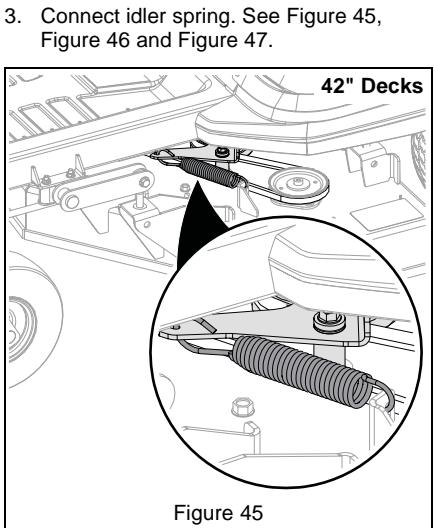
### Install Deck Drive Belt

See Figure 43 and Figure 44.

1. Install deck drive belt.

**IMPORTANT:** Belt will not have tension until routed around drive pulley and idler arm is reinstalled.

2. Reinstall idler arm and belt fingers.



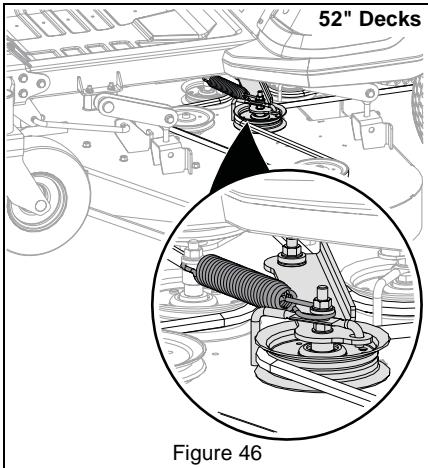


Figure 46

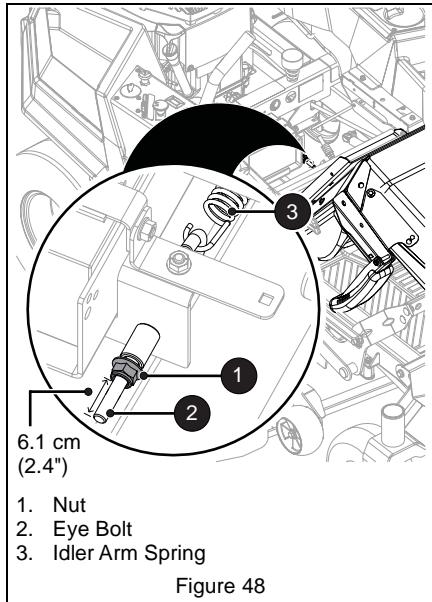


Figure 48

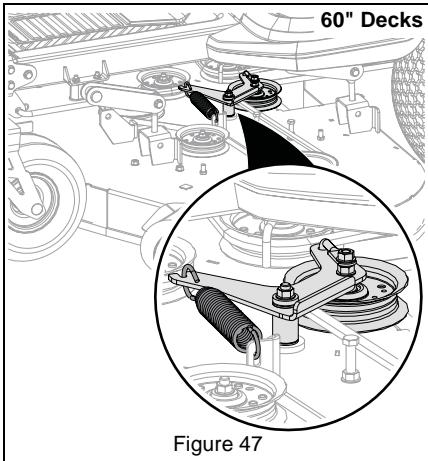


Figure 47

4. Reinstall belt covers and secure with original hardware.

**IMPORTANT:** Make sure belt has tension and remains aligned after installation is complete.

### Remove Ground Drive Belt

**IMPORTANT:** Retain all parts for reinstallation.

1. Place unit in service position. See *Service Position* on page 23.
2. Remove deck drive belt. See *Remove Deck Drive Belt* on page 27.
3. Loosen nut on eye bolt and disconnect idler arm spring. See Figure 48.

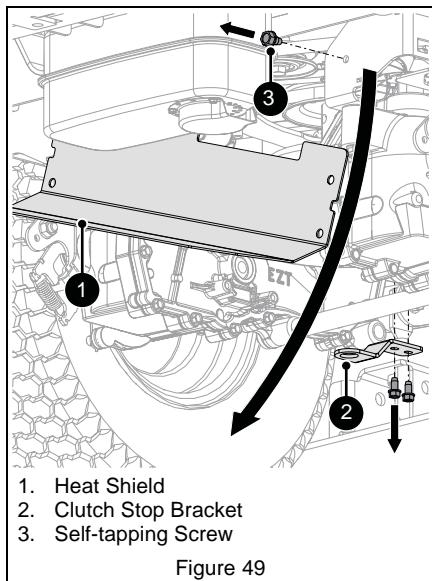


Figure 49

6. Disconnect clutch wire.
7. Remove ground drive belt.

**NOTICE:** Route the belt over the top of the pulleys for easiest removal.

### Install Ground Drive Belt

1. Install ground drive belt. See Figure 50.

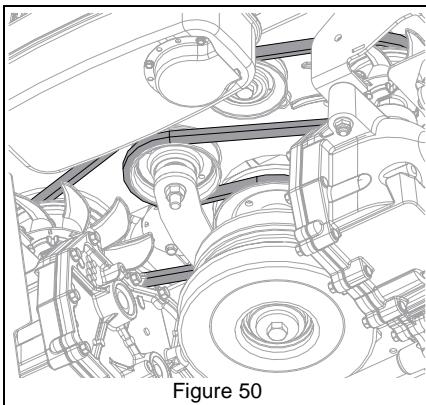


Figure 50

2. Reconnect clutch wire.
3. Reinstall clutch stop bracket and secure with two self-tapping screws removed earlier.
4. Rotate heat shield into position and secure to unit with self-tapping screw removed earlier.
5. Reconnect idler arm spring to eye bolt and secure bolt to unit with nut. Tighten until the nut is 6.1 cm (2.4") from the threaded end of the eye bolt. See Figure 48.
6. Reinstall deck drive belt. See *Install Deck Drive Belt* on page 29.

## HYDRAULIC OIL

Models 915200, 915202, 915204, 915206, 915216, 915218, 915238, 915240, 915242

### Check Hydraulic Oil Level

See Figure 51.

1. Place unit in service position. See *Service Position* on page 23.
2. Check oil level in expansion tanks. Oil should reach the cold fill indicator mark.

**NOTICE:** Engine should be cold when checking initial oil level.

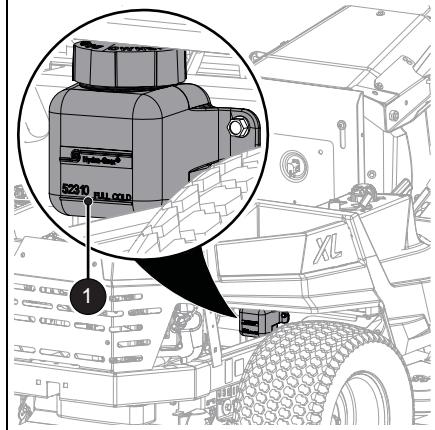
3. Operate unit for about 1 minute and recheck the levels.
4. Add hydraulic oil, if needed. See *Add Hydraulic Oil* on page 31.

### Add Hydraulic Oil

See Figure 51.

1. Place unit in service position. See *Service Position* on page 23.
2. Remove the cap from the expansion tank.
3. 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.
4. Reinstall the expansion tank cap.

The hydraulic fluid should be at the cold fill line of the expansion tank.



1. Cold Fill Indicator Mark

Figure 51

### Change Hydraulic Oil and Filter

Models 915200, 915202, 915204, 915206, 915216, 915218, 915238, 915240, 915242

**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. Operate unit for a few minutes to warm hydraulic oil.
2. Stop engine, remove key and wait for all moving parts to stop and for hot parts to cool.
3. Position container under oil filter to catch used oil.

See Figure 52.

4. Remove filter guard and oil filter from transaxle.
5. Remove the vent plug from the inlet port and allow the transaxle to drain completely.

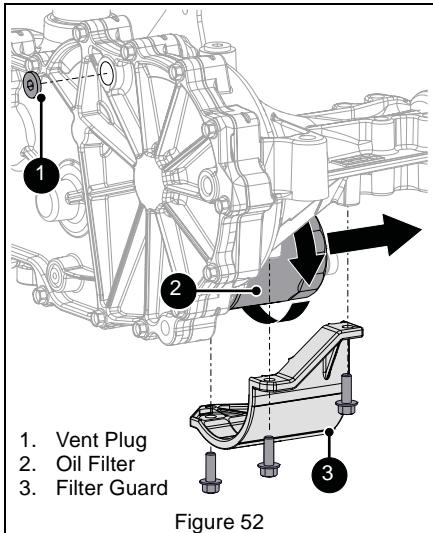


Figure 52

6. Wipe filter-mounting surface clean.
7. Lubricate rubber gasket on new oil filter with clean hydraulic oil.
8. Spin filter onto filter housing until it makes contact, and then turn filter 3/4 turn to tighten.
9. Reinstall filter guard and torque to 7.3 N•m (65 lb-in). DO NOT overtighten.
10. Add 15W-50 synthetic motor oil (Gravely p/n 00057100) or equivalent until oil appears at the bottom of the vent port (1892.7 mL (64 fl. ounces) per transaxle).
11. Reinstall the vent plug and tighten to 20.3 N•m (180 lb-in).
12. Add hydraulic oil to expansion tank until oil reaches cold fill indicator mark. See *Add Hydraulic Oil* on page 31.
13. Repeat steps 3 – 12 for other transaxle.
14. Purge hydraulic system. See *Purge Hydraulic System* on page 32.

## Purge 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.

1. With the unit up to and facing a wall, jack up the unit so that both drive wheels are off the ground.
2. Disengage the parking brake and put the transaxle bypass levers in the neutral position. See *Move Unit Manually* on page 20.
3. Start the engine and slowly move the steering levers in forward and reverse five or six times.
4. Stop the engine and put the transaxle bypass levers in the drive position (see *Move Unit Manually* on page 20).
5. Start the engine and slowly move the steering levers in forward and reverse five or six times.
6. Stop the engine, check the oil level and add oil as needed.
7. Repeat steps 2 – 6 until the transaxles operate smoothly in forward and reverse at normal speeds without excessive noise.

## ADJUSTMENTS



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

### ADJUST SEAT

Models 915200, 915202, 915204, 915206, 915216, 915218, 915238, 915240, 915242

See Figure 53.

1. Pull seat adjustment lever up to unlock seat.
2. Move seat to desired position.
3. Release seat adjustment lever to lock seat in place.

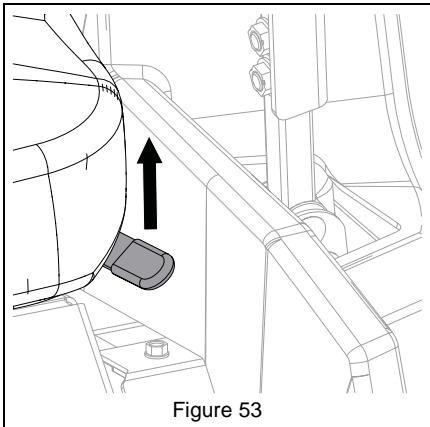


Figure 53

**Models 915230, 915236, 915248, 915249, 915250**

See Figure 54.

1. Tip seat forward.
2. Loosen the two wing knobs located at the front of the seat plate.
3. Adjust seat to desired position.
4. Tighten wing knobs.

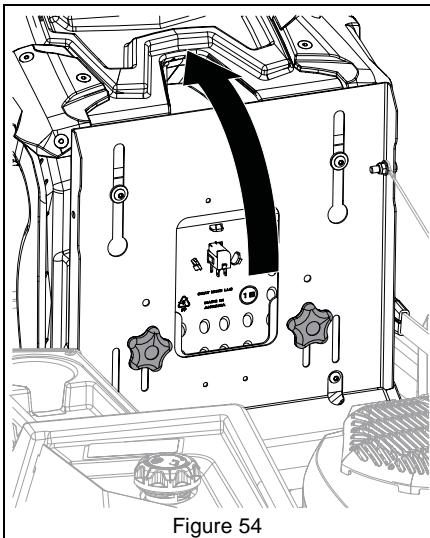


Figure 54

5. Return seat to operating position.

## **ADJUST STEERING LEVERS**

### **Adjust Steering Lever Height**

See Figure 55.

1. Remove hardware securing steering lever to upper control arm.
2. Place steering lever in desired adjusting hole.
  - Use upper and middle holes for highest lever position.
  - Use middle and lower holes for lowest lever position.
3. Reinstall hardware in upper control arm.
4. Align levers side to side. See *Adjust Steering Level Reach* on page 34.
5. Fully tighten hardware.

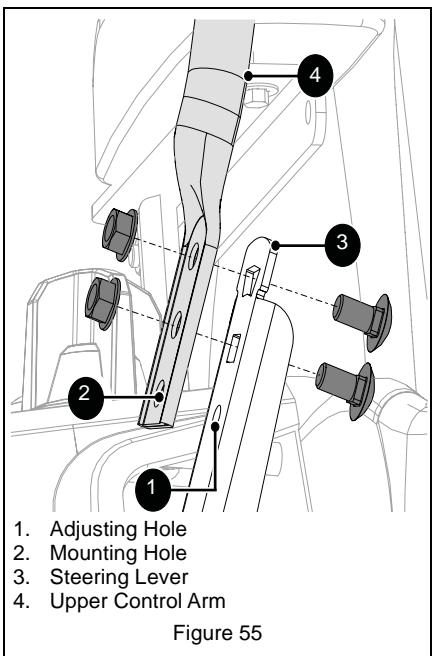
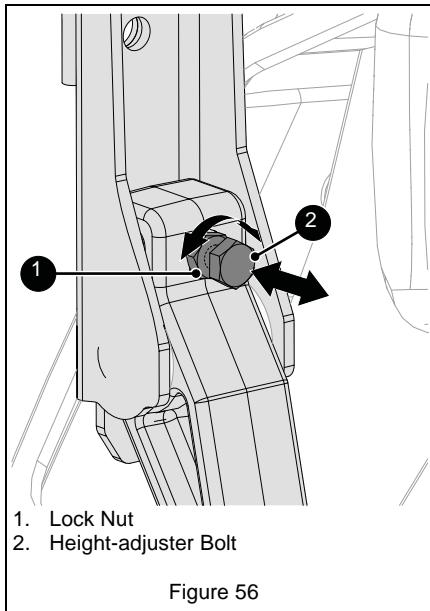


Figure 55

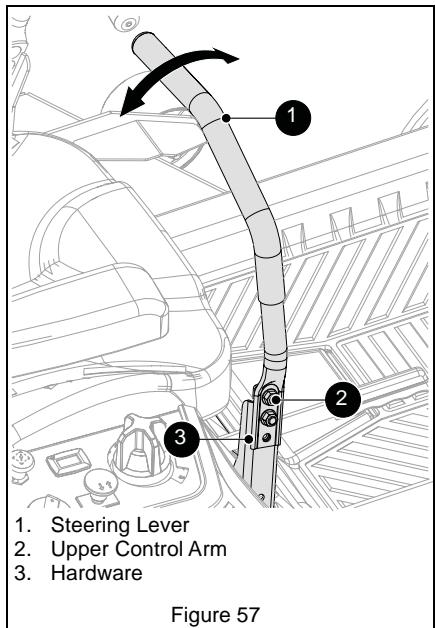
See Figure 56.

1. Loosen lock nut on height-adjustment bolt.
2. Turn bolt in or out until levers are at the same height.
3. Tighten lock nut.



1. Lock Nut
2. Height-adjuster Bolt

Figure 56



1. Steering Lever
2. Upper Control Arm
3. Hardware

Figure 57

## ADJUST UNIT TO TRACK STRAIGHT

**NOTICE:** Reverse travel can only be adjusted by your Gravely dealer.

### Check Tire Pressure

1. Check pressure of both tires. See *Specifications* on page 45 for recommended tire pressure.
2. Recheck unit tracking. If unit still does not track straight, note which side the unit pulls toward and increase the tire pressure on that side.

**IMPORTANT:** DO NOT exceed maximum tire pressure listed on tire sidewall.

If increasing tire pressure on one side does not correct tracking problem, adjust the steering levers.

## Adjust Steering Level Reach

See Figure 57.

1. Loosen hardware securing steering lever to upper control arm.
2. Pivot steering lever to desired position.
3. Ensure levers are aligned with each other.
4. Tighten hardware.

## Adjust Steering Levers

See Figure 58.

If adjusting tirepressure did not correct tracking problem:

1. Loosen jam nut on adjustment bolt of steering lever that needs adjustment.
2. Adjust drive wheel speed.
  - Turn adjustment bolt counterclockwise to increase steering lever travel and drive wheel speed.
  - Turn adjustment bolt clockwise to decrease steering lever travel and drive wheel speed.
3. Tighten jam nut.

**IMPORTANT:** Adjustment bolt must contact steering lever. DO NOT turn adjustment bolt too far counterclockwise.

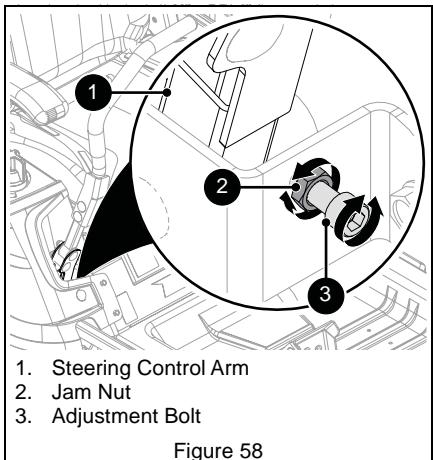


Figure 58

## ADJUST PARKING BRAKE LEVER

1. Park unit on a flat, level surface and chock wheels so unit cannot roll.
2. Position deck at lowest cutting height.

See Figure 59.

3. Loosen upper jam nut and adjust lower nut up or down until brake lever functions correctly.
4. Tighten upper jam nut against lower nut.
5. Return seat to operating position.

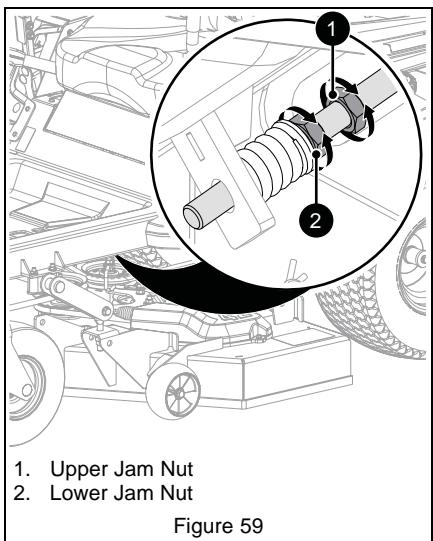


Figure 59

## REMOVE AND INSTALL MOWER DECK

### Remove Deck

1. Set deck to lowest cutting height.
2. Position supports, such as wood blocks, under mower deck.

See Figure 60, Figure 61 and Figure 62.

3. Remove hardware securing belt covers to deck and remove belt covers. Retain all parts for reinstallation.
4. Disconnect idler spring.

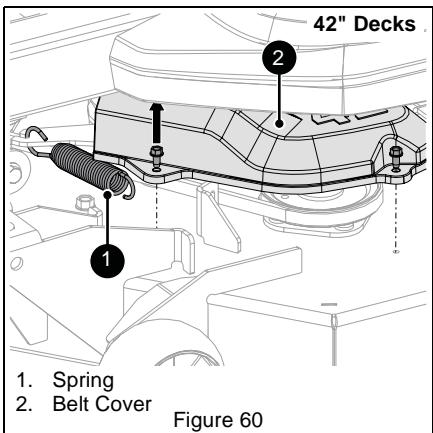
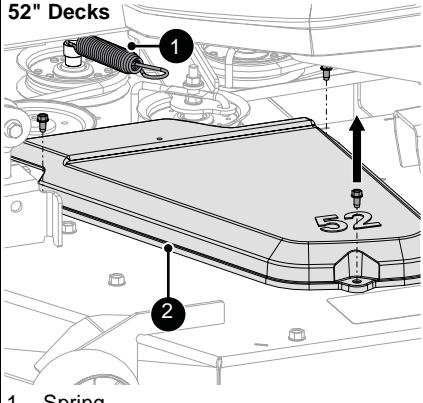


Figure 60

**52" Decks**

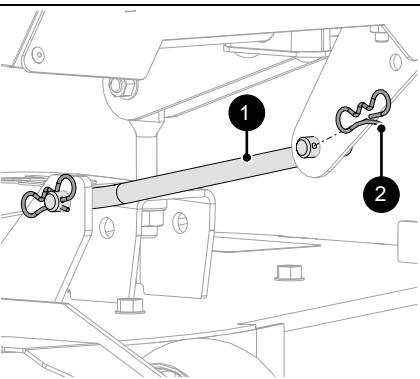


1. Spring
2. Belt Cover

Figure 61

See Figure 64.

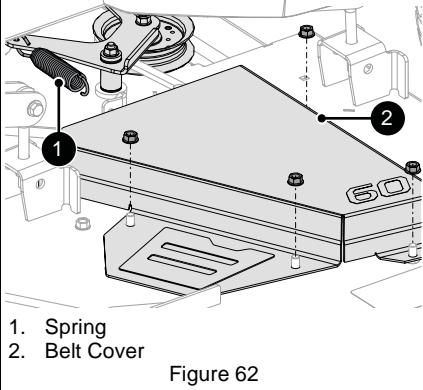
4. Remove one hairpin from drag link to disconnect drag link from mower deck bracket. Retain all parts for reinstallation.
5. Repeat step 4 on other side.



1. Drag Link
2. Hairpin

Figure 64

**60" Decks**



1. Spring
2. Belt Cover

Figure 62

3. Remove deck drive belt from rear drive pulley. See Figure 63.

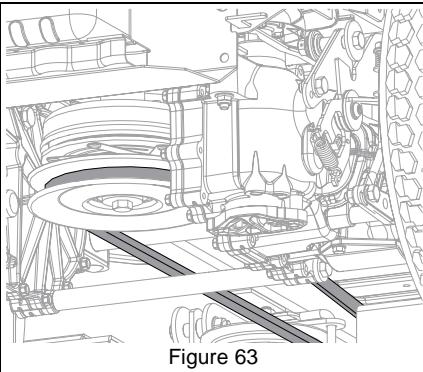


Figure 63

3. Remove one hair pin and one nylon flat washer from deck lift lever. Retain hardware for reinstallation. See Figure 65.

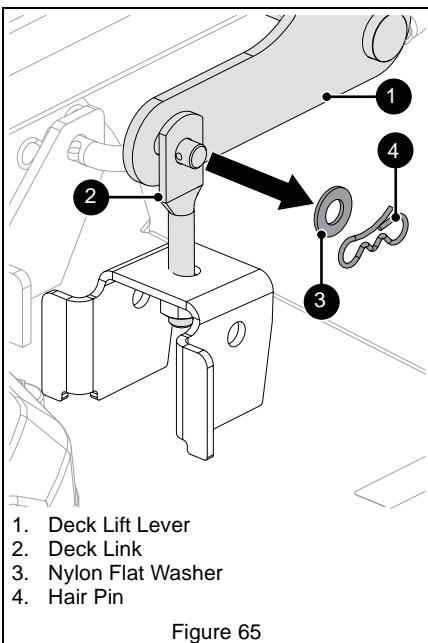


Figure 65

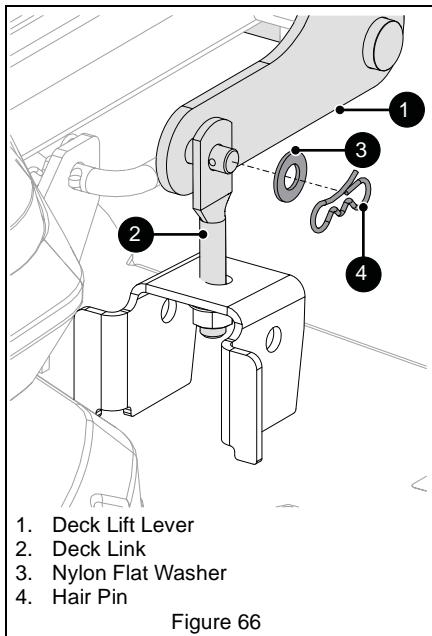
4. Repeat step 3 for the three remaining deck lift levers.
5. Move deck from under unit.

## Install Deck

1. Position deck under unit.

See Figure 66.

2. Secure deck lift lever to deck link using original hardware.



1. Deck Lift Lever
2. Deck Link
3. Nylon Flat Washer
4. Hair Pin

3. Repeat step 2 for the three remaining deck lift levers.
4. Reinstall drag link through mower deck bracket and secure with hairpin removed earlier. See Figure 64.
5. Repeat step 4 on other side.
6. Secure drive belt around drive pulley.
7. Connect idler spring.
8. Reinstall belt covers and secure with original hardware.

## ADJUST MOWER DECK



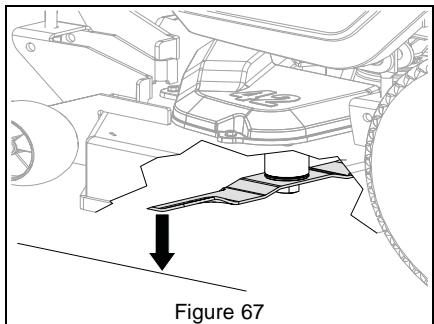
**CAUTION: AVOID INJURY.** Use sturdy gloves or padding to protect hands when working with mower blades.

Rotation of one blade rotates the other blades.

## Level Mower Deck

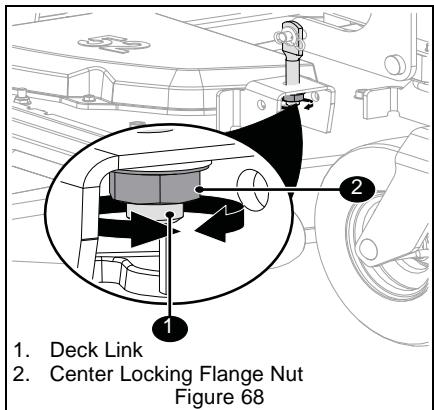
**IMPORTANT:** Make sure unit is on a flat, level surface and that tires are inflated to the recommended pressures. See *Specifications* on page 45

1. Set deck to highest cutting height.
2. Position mower blades so blade ends point left to right across the width of the deck.
3. On both sides of the unit, measure the distance to the ground at the cutting edge of the blade. See Figure 67.



- If the measurements are  $\pm 0.635$  cm (1/4") of one another, no adjustment is needed.
- If adjustments are needed, adjust the center locking flange nut on the deck link. Tighten the nut to raise the deck; loosen the nut to lower the deck. See Figure 68.

**IMPORTANT:** It may be necessary to adjust the nut on more than one of the deck links.



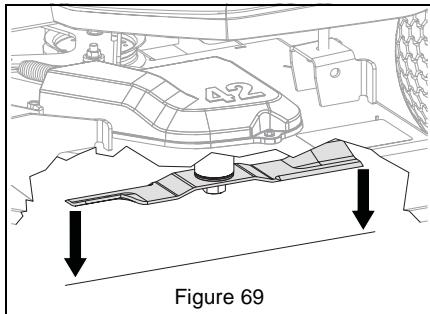
1. Deck Link
2. Center Locking Flange Nut

## Set Blade Pitch

Pitch is the difference in blade height from front to back.

**IMPORTANT:** Level the mower deck before setting blade pitch.

1. Set deck to highest cutting height.
2. Position mower blades so blade ends point front to back.
3. On both sides of the unit, measure the distance to the ground at the front and rear tip of the blade. See Figure 69.



- If the front tip of the blade is  $\pm 0.635$  cm (1/4") lower than the rear, no adjustment is needed.
- If adjustments are needed, adjust the nylon locking flange nut on the deck link. Tighten the nut to raise the deck; loosen the nut to lower the deck. See Figure 68.

## TROUBLESHOOTING

Problem	Probable Cause	Correction
<b>Engine does not start.</b>	Safety Interlock System is not engaged or is faulty.	Check Safety Interlock System. See <i>Check Safety Interlock System</i> on page 23.
	Fuel tank is empty.	Fill fuel tank. See <i>Before Operating Unit</i> on page 18.
	Fuel supply is contaminated.	Replace with clean fuel.
	Battery is discharged.	Charge battery. See <i>Charge Battery</i> on page 27.
	Connection between battery and battery cables is poor.	Tighten and/or clean battery and battery cables. See <i>Clean Battery</i> on page 27.
	Spark plug wire(s) are loose or spark plug(s) are faulty.	Connect spark plug wire(s) or replace spark plug(s). Refer to engine manual.
	Electrical system is faulty.	Contact your Gravely dealer.
	Engine is faulty.	Contact your Gravely dealer.
<b>Engine runs rough.</b>	Choke control knob is in on position. (Models 915204, 915206, 915218, 915230, 915236, 915238, 915240, 915242, 915248, 915249, 915250)	Move knob to off position.
	Air filter cartridge is plugged.	Clean or replace air filter cartridge. Refer to engine manual.
	Engine is faulty.	Contact your Gravely dealer.
<b>Engine overheats.</b>	Engine oil level is low.	Add engine oil. Refer to engine manual.
	Cooling fins are plugged.	Clean engine. Refer to engine manual.
	Engine is faulty.	Contact your Gravely dealer.
<b>Unit does not drive.</b>	The transaxles are bypassed.	Engage levers. See <i>Move Unit Manually</i> on page 20.
	Ground drive belt is faulty.	Contact your Gravely dealer.
	Transaxles are faulty.	Contact your Gravely dealer.
<b>PTO malfunctions.</b>	Operator presence switch is not engaged.	Activate switch by sitting on operator seat.
	Operator presence switch is faulty.	Contact your Gravely dealer.
	Deck drive belt is faulty.	Replace deck drive belt. See <i>Remove Deck Drive Belt</i> on page 27.
	PTO switch, wiring, connectors or clutch are faulty.	Contact your Gravely dealer.
<b>Unit moves with engine off and parking brake engaged.</b>	Parking brake needs adjustment.	Adjust parking brake lever. See <i>Adjust Parking Brake Lever</i> on page 35.
	Parking brake is faulty.	Contact your Gravely dealer.
<b>Unit does not track straight.</b>	Tire pressure is incorrect.	Check tire pressure. See <i>Specifications</i> on page 45.
	Steering levers need adjustment.	See <i>Adjust Steering Levers</i> on page 33.
	Transaxles and/or linkages need adjustment.	Contact your Gravely dealer.

## TROUBLESHOOTING

Problem	Probable Cause	Correction
<b>Unit creeps when steering levers are in neutral position.</b>	Transmission and/or linkage need adjustment.	Contact your Gravely dealer.
<b>Poor cutting quality.</b>	Mower blades not level or mower deck pitch is incorrect.	Level and adjust pitch of mower deck. See <i>Adjust Mower Deck</i> on page 37.
	Mower blades are dull or faulty.	Sharpen or replace mower blades. See <i>Sharpen Blades</i> on page 25.
	Mowing speed is too fast.	Drive slower when cutting grass.
	Belt tension or condition is poor.	Replace deck drive belt. See <i>Check Mower Belts</i> on page 27.
	Cutting height is too low.	Do not set height of cut too low. For very tall grass, mow twice.

## STORAGE

### SHORT-TERM STORAGE

**IMPORTANT:** NEVER wash unit with high-pressure water or store outdoors.

1. Allow unit to cool and clean with mild soap and water.
2. Tighten all hardware to correct specifications.
3. Inspect unit for visible signs of wear or damage. Repair as needed.
4. Prepare fuel system for storage.

**NOTICE:** Gravely recommends using a quality fuel stabilizer in all fuel. Gasoline left in the fuel system without a stabilizer, even for short periods of time, deteriorates and leaves gummy deposits in the system that may damage the carburetor and fuel hoses, filter and tank. For the best effectiveness, add stabilizer to all fuel containers whenever purchasing fuel. Add the stabilizer to the container before adding fuel.

- a. Add fuel stabilizer (see *Service Parts* on page 21) or equivalent according to manufacturer's instructions to the fuel tank and any fuel containers with remaining fuel.
- b. Run engine outdoors for at least 5 minutes to allow stabilizer to reach the carburetor.

5. Turn ignition key to off position and remove from ignition.
6. Store unit in a cool, dry, protected area. DO NOT store unit outdoors.

### LONG-TERM STORAGE

1. Perform short-term storage procedures.
2. Lubricate as directed in *Maintenance* on page 21.
3. Touch-up all scratched painted surfaces.
4. Remove and charge battery as directed in *Charge Battery* on page 27. Store battery in a cool, dry, protected area.
5. Store unit in a cool, dry, protected area. Do not store unit outdoors.

## ACCESSORIES

See your Gravely dealer for a complete list of compatible accessories and attachments for your unit.

Description	Part No.
Mulch Kit - 42"	71513900
Mulch Kit - 52"	71514000
Mulch Kit - 60"	71514400
Headlight Kit	71514100
Bagger Kit*	81504300
Trailer Hitch Kit	71514900

\*Requires additional kit 71514500 for installation on 60" decks

Requires hitch kit 71514900 for all models serial number 30000+

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1. Before adding fuel for the first time after long-term storage, add fresh, stabilizer-treated fuel to fuel tank and any fuel containers with remaining fuel.

2. Charge and install the battery.

## SPECIFICATIONS

<b>Model Number</b>	<b>915200</b>	<b>915202</b>	<b>915204</b>	<b>915206</b>		
<b>Model</b>	ZT XL 52	ZT XL 42	ZT XL 52	ZT XL 42		
<b>Engine</b>	Kohler 7000 Pro with Smart Choke		Kawasaki FR			
Engine Displacement – cm <sup>3</sup> (in <sup>3</sup> )	725.0 (44.2)		726.0 (44.3)			
Maximum RPM – No Load	3300					
Oil Capacity	Refer to Engine Manual					
<b>Drive</b>						
Forward Maximum – km/h (mph)	11.3 (7.0)					
Reverse Maximum – km/h (mph)	4.8 (3.0)					
Turning Radius	Zero					
Brakes	Internal Transmission					
<b>Electrical</b>						
Starter	Electric					
Battery	12V Maintenance-Free 190CCA (U1 Replaceable)					
PTO (Power Take-Off)	Electric					
<b>Fuel</b>						
Fuel Tank Capacity – Liter (gal)	10.5 (2.8)					
<b>Size and Weight</b>						
Length – cm (in)	196.9 (77.5)					
Width – cm (in)	161.0 (63.4)	137.7 (54.2)	161.0 (63.4)	137.7 (54.2)		
Weight – kg (lbs.)	308.0 (679.0)	299.8 (661.0)	308.9 (681.0)	300.7 (663.0)		
Height – cm (in)	103.9 (40.9)					
<b>Tires</b>						
Front Tire Size – in	11 x 6-5					
Rear Tire Size – in	20 x 10-10	20 x 8-10	20 x 10-10	20 x 8-10		
Recommended Front Tire Pressure – kPa (psi)	186 – 228 (27 – 33)					
Recommended Rear Tire Pressure – kPa (psi)	62 – 76 (9 – 11)					
<b>Mower Deck</b>						
Cutting Height – cm (in)	3.8 – 11.4 (1.5 – 4.5)					
Cutting Width – cm (in)	132.1 (52.0)	106.7 (42.0)	132.1 (52.0)	106.7 (42.0)		
Mower Deck Lift	Foot Operated					
<b>Transmission</b>						
Type	Hydro-Gear® ZT2800 with charge pumps and external filter					

## SPECIFICATIONS

Model Number	915216	915218	915230
Model	ZT XL 60	ZT XL 60	ZT X 52
Engine	Kohler 7000 Pro with Smart Choke	Kawasaki FR730	Kawasaki FR691
Engine Displacement – cm <sup>3</sup> (in <sup>3</sup> )	747.0 (45.6)	726.0 (44.3)	
Maximum RPM – No Load		3300	
Oil Capacity	Refer to Engine Manual		
<b>Drive</b>			
Forward Maximum – km/h (mph)	11.3 (7.0)		
Reverse Maximum – km/h (mph)	4.8 (3.0)		
Turning Radius	Zero		
Brakes	Internal Transmission		
<b>Electrical</b>			
Starter	Electric		
Battery	12V Maintenance-Free 190CCA (U1 Replaceable)		
PTO (Power Take-Off)	Electric		
<b>Fuel</b>			
Fuel Tank Capacity – Liter (gal)	10.5 (2.8)		
<b>Size and Weight</b>			
Length – cm (in)	196.9 (77.5)		
Width – cm (in)	181.6 (71.5)		161.0 (63.4)
Weight – kg (lbs.)	314.8 (694)	316.2 (697)	274.4 (605.0)
Height – cm (in)	103.9 (40.9)		
<b>Tires</b>			
Front Tire Size – in	11 x 6-5		11 x 4-5
Rear Tire Size – in	20 x 12-10		18 x 8.5-8
Recommended Front Tire Pressure – kPa (psi)	186 – 228 (27 – 33)		262 – 317 (38 – 46)
Recommended Rear Tire Pressure – kPa (psi)	62 – 76 (9 – 11)		
<b>Mower Deck</b>			
Cutting Height – cm (in)	3.8 – 11.4 (1.5 – 4.5)		
Cutting Width – cm (in)	152.4 (60.0)		132.1 (52.0)
Mower Deck Lift	Foot Operated		
<b>Transmission</b>			
Type	Hydro-Gear® ZT2800 with charge pumps and external filter		Maintenance-Free Hydro-Gear® EZT Transaxles

## SPECIFICATIONS

Model Number	915236	915238	915240	915242			
<b>Model</b>	ZT-X 52 CARB	ZT-XL 42 CARB	ZT-XL 52 CARB	ZT-XL 60 CARB			
<b>Engine</b>	Kawasaki FR691V CARB	Kawasaki FR651V CARB	Kawasaki FR691V CARB	Kawasaki FR730V CARB			
Engine Displacement – cm <sup>3</sup> (in <sup>3</sup> )	726.0 (44.3)						
Maximum RPM – No Load	3300		3300 ± 100				
Oil Capacity	Refer to Engine Manual						
<b>Drive</b>							
Forward Maximum – km/h (mph)	11.3 (7.0)						
Reverse Maximum – km/h (mph)	4.8 (3.0)						
Turning Radius	Zero						
Brakes	Internal Transmission						
<b>Electrical</b>							
Starter	Electric						
Battery	12V Maintenance-Free 190CCA (U1 Replaceable)						
PTO (Power Take-Off)	Electric						
<b>Fuel</b>							
Fuel Tank Capacity – Liter (gal)	10.5 (2.8)						
<b>Size and Weight</b>							
Length – cm (in)	196.9 (77.5)						
Width – cm (in)	161.0 (63.4)	137.7 (54.2)	161.0 (63.4)	181.6 (71.5)			
Weight – kg (lbs.)	279.0 (615.0)	299.8 (661.0)	308.9 (681.0)	314.8 (694)			
Height – cm (in)	103.9 (40.9)						
<b>Tires</b>							
Front Tire Size – in	11 x 4-5	11 x 6-5					
Rear Tire Size – in	18 x 8.5-8	20 x 8-10	20 x 10-10	20 x 12-10			
Recommended Front Tire Pressure – kPa (psi)	262 – 317 (38 – 46)	186 – 228 (27 – 33)					
Recommended Rear Tire Pressure – kPa (psi)	62 – 76 (9 – 11)						
<b>Mower Deck</b>							
Cutting Height – cm (in)	3.8 – 11.4 (1.5 – 4.5)						
Cutting Width – cm (in)	132.1 (52.0)	106.7 (42.0)	132.1 (52.0)	152.4 (60.0)			
Mower Deck Lift	Foot Operated						
<b>Transmission</b>							
Type	Maintenance-Free Hydro-Gear® EZT Transaxles	Hydro-Gear® ZT2800 with charge pumps and external filter					

## SPECIFICATIONS

Model Number	915248	915249	915250
Model	ZT X 42	ZT X 42 CARB	ZT X 52
Engine	Kohler KT 7000 Series		
Engine Displacement – cm <sup>3</sup> (in <sup>3</sup> )	725.0 (44.2)		
Maximum RPM – No Load	3300		
Oil Capacity	Refer to Engine Manual		
Drive			
Forward Maximum – km/h (mph)	11.3 (7.0)		
Reverse Maximum – km/h (mph)	4.8 (3.0)		
Turning Radius	Zero		
Brakes	Internal Transmission		
Electrical			
Starter	Electric		
Battery	12V Maintenance-Free 190CCA (U1 Replaceable)		
PTO (Power Take-Off)	Electric		
Fuel			
Fuel Tank Capacity – Liter (gal)	10.5 (2.8)		
Size and Weight			
Length – cm (in)	196.9 (77.5)		
Width – cm (in)	137.7 (54.2)	161.0 (63.4)	
Weight – kg (lbs.)	258.5 (570.0)	279.0 (615.0)	
Height – cm (in)	103.9 (40.9)		
Tires			
Front Tire Size – in	11 x 4-5		
Rear Tire Size – in	18 x 8.5-8		
Recommended Front Tire Pressure – kPa (psi)	262 – 317 (38 – 46)		
Recommended Rear Tire Pressure – kPa (psi)	62 – 76 (9 – 11)		
Mower Deck			
Cutting Height – cm (in)	3.8 – 11.4 (1.5 – 4.5)		
Cutting Width – cm (in)	106.7 (42.0)	132.1 (52.0)	
Mower Deck Lift	Foot Operated		
Transmission			
Type	Maintenance-Free Hydro-Gear® EZT Transaxles		

**GRAVELY**

# Outdoor Power Equipment Limited Warranty

Ariens Company (Ariens) warrants to the **original purchaser** that Gravely brand products purchased on or after 3/16/2018 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 "Residential 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 Gravely dealer 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. Pick-up and delivery are at the owner's expense.

The warranty code is found on the model and serial number identification label on the unit.

Warranty Code	Product Group	Warranty Period
<b>Products Purchased Prior to 3/16/2018</b>		
CA	Pro-Turn 100, Pro-Turn 200, Compact-Pro, Pro-Stance and Pro-Walk Mowers	3 Years Residential Use. 2 Years Commercial Use.
CD	Pro-Turn 400 Mowers	3 Years Residential Use. 3 Years Commercial Use (Years 1 & 2: Parts & Labor, Year 3: Parts Only).
CF	Pro-Turn Mowers	3 Years Residential Use. 2 Years or 1000 Hours* Commercial Use.
CG	Pro-QXT, Two-wheel Tractors	2 Years.
<b>Products Purchased on or After 3/16/2018</b>		
CH	Pro-Turn Z and Pro-Turn ZX Mowers	4 Years or 750 Hours.*
CG,CJ	Pro-QXT	4 Years or 500 Hours.*
CA, CK	Compact-Pro and Pro-Walk Hydro Mowers	4 Years or 750 Hours.* No Hour Limit for First 2 Years.
CA, CL	Pro-Turn 100 and Pro-Stance Mowers	5 Years or 1000 Hours.* No Hour Limit for First 2 Years.
CA, CM	Pro-Turn 200 Mowers	5 Years or 1250 Hours.* No Hour Limit for First 2 Years.
CD, CN	Pro-Turn 400 Mowers	5 Years or 1500 Hours.* No Hour Limit for First 2 Years.
CO	Pro-Walk Gear Mowers	2 Years.
CP	Pro-Turn Mowers	4 Years or 1000 Hours.*
<b>Products Not Affected by Purchase Date</b>		
AA	Serialized Attachments	1 Year.
AB	Serialized Attachments	2 Years.
HA	ZT, ZT-X and ZT-XL Mowers	3 Years Residential Use. 90 Days Commercial Use.
HB	ZT-HD Mowers	3 Years Residential Use. 1 Year Commercial Use.
UG	Atlas JSV	1 Year.

\* Whichever comes first.

## Special Extensions

The chart below details special **extensions** to warranty terms. Warranty terms are total time periods covered. If any product is rented or leased, there are no extensions to the 90-day warranty.

Warranty Code	Warranty Term Extension	Warranty Period	Detail
CA, CD, CL, CM, CN, CO	Mower Deck Shell and Main Frame	Lifetime Limited for Residential and Commercial Use.	Warranty is for parts only after the initial warranty period. Components are covered for manufacturer's defect only, not wear.
CH	Gravely V-Twin Engine	4 Years or 500 Hours* for Residential and Commercial Use.	
HA, HB	Mower Deck Shell and Main Frame	5 Years Limited Residential Use. No Commercial Warranty.	Years 1 – 3 parts and labor. Years 4 – 5 parts only.

\* Whichever comes first.

## Exclusions and Limitations

The charts below detail special **exclusions and limitations** to this warranty.

Warranty Term Exclusions	Warranty Period
Air filters, brake arms, brake linings, brake shoes, brushes, cutters, fuel filters, headlights, knives, light bulbs, lubricants, mower blades, oil, oil filters, spark plugs, scraper blades, shear bolts, skid shoes and spoon tines.	Components are not covered under warranty.

### Hydro-Gear Transaxle Limitation

See Hydro-Gear warranty. The warranty is administrated by Ariens Company.

Warranty Term Limitations	Warranty Period
Cloth, Plastic and Rubber Components. Mufflers, Tires, Belts and Cables.	2 Years Residential Use. No Commercial Warranty. Components are covered for manufacturer's defect only, not wear.

### Exclusions – Items Not Covered by This Warranty

- Parts that are not genuine Gravely service parts are not covered by this warranty and may void the warranty if the parts result in premature wear or damage to the product.
- 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.
- Any misuse, alteration, improper assembly, improper adjustment, neglect, or accident which requires repair is not covered by this warranty.
- Repairs or adjustments required due to failure to use fresh fuel or failure to properly prepare the unit for periods of non-use.
- 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.

### Evaporative Emissions Control Warranty Exception

As required by the California Air Resources Board (CARB) and the US Environmental Protection Agency (EPA) the evaporative emissions control system is warranted to the ultimate purchaser, and any subsequent owner, for two years.

The CARB and EPA evaporative emissions control system warranty is described in a separate evaporative emission control warranty statement.

## **Special Exclusions for Job-site Vehicles**

The following uses void the warranty terms on Atlas JSV (Warranty Code UG) vehicles:

- Renting or leasing the vehicle.
- Using the vehicle to tow or carry loads in excess of the limits specified in the operator's manual.
- Modifying the vehicle with parts and accessories that are not genuine or authorized Gravely parts or accessories.
- Modifying the vehicle without express written authorization from Gravely.
- Operating the vehicle when it has not been completely and properly assembled and pre-delivered by an authorized Gravely dealer.

## **Pro-Rated Battery Warranty**

Battery warranty is pro rated for one year and is based on the total cost for battery replacement. Units used for rental or lease have no exceptions to the 90-day warranty. Total battery reimbursement will not exceed 45.00 USD.

Months	% Coverage
1 – 3	100
4	75
5	66.6

Months	% Coverage
6	58.3
7	50.0
8	41.6

Months	% Coverage
9	33.3
10	25.0
11	16.6
12	8.3

## **Engines**

The chart below details engine warranty information. Engine warranty terms may vary from the specific terms of this warranty. If inconsistent, the terms of the engine warranty shall apply to the engine and its component parts.

Engine Manufacturer	Detail
Gravely V-Twin	Gravely- and Yamaha-branded engines are warranted by the manufacturer and the warranty is administrated by Ariens Company. Refer to the engine manual for warranty statements.
Yamaha	Covered by the engine manufacturer's warranty. Refer to the engine manufacturer's warranty statements.
Briggs & Stratton, Kawasaki, Kohler, Subaru	Covered by the engine manufacturer's warranty. Refer to the engine manufacturer's warranty statements.

## **Parts and Accessories**

Service replacement parts and non-serialized accessories are warranted for 90 days from date of purchase. Parts and accessories must be installed by an authorized Gravely dealer to be covered. Labor is not included.

## **Customer Responsibilities**

**Register the product immediately at the time of sale.** If the dealer does not register the product, the customer must register the unit on-line at [www.gravely.com](http://www.gravely.com).

To obtain warranty service, the **original purchaser** must:

- Ensure that the maintenance and adjustments explained in the Operator's Manual are routinely completed.
- Promptly notify Ariens Company or an authorized Gravely 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 Gravely service representative.

To find an authorized dealer use the dealer locator on our websites, or contact us by mail or phone.

Globally except Australia or New Zealand:	Australia:	New Zealand:
Ariens Company 655 W. Ryan Street Brillion, WI 54110 Phone: (920) 756 - 4688 <a href="http://www.gravely.com">www.gravely.com</a>	Masport Australia Pty Ltd 27 Commercial Drive Dandenong South Victoria 3175 Australia Phone: 1300 366 225 <a href="http://www.masport.com.au">www.masport.com.au</a>	Masport Ltd 1-37 Mt. Wellington Highway, Pamure, Auckland 1060 New Zealand Phone: 0800 627 7678 (New Zealand) <a href="http://www.masport.co.nz">www.masport.co.nz</a>

## ***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.*



655 West Ryan Street  
Brillion, WI 54110

[www.gravely.com](http://www.gravely.com)

**WARNING**

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

An *Ariens* Company Brand

