



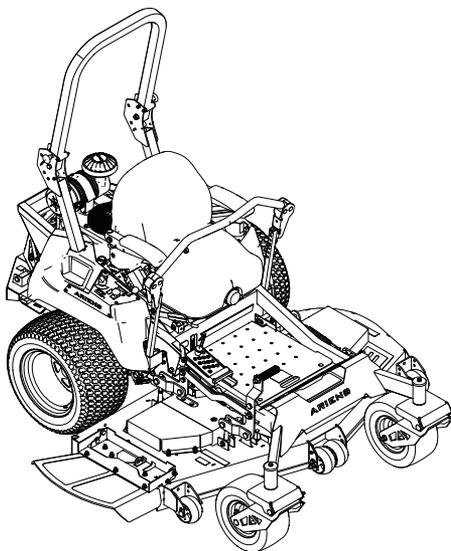
# Zenith

**ARIENS**

- Ⓔ Operator's Manual
- Ⓒ Návod k obsluze
- Ⓓ Betriebsanleitung
- Ⓕ Instruktionsbog
- Ⓔ Lea el Manual del operador
- Ⓕ Käyttäjän käsikirja
- Ⓕ Manuel de l'opérateur
- Ⓕ Manuale d'uso
- Ⓕ Gebruikershandleiding
- Ⓕ Brukerhåndbok
- Ⓕ Instrukcja obsługi
- Ⓕ Manual do Operador
- Ⓕ Руководство оператора
- Ⓕ Návod na obsluhu
- Ⓕ Instruktionsbok
- Ⓕ Kullanıcı Kılavuzu

## Models

- 991320 – Zenith 52”  
Side Discharge  
(SN 000101 +)
- 991321 – Zenith 52”  
Rear Discharge  
(SN 000101 +)
- 991322 – Zenith 60”  
Side Discharge  
(SN 000101 +)
- 991323 – Zenith 60”  
Rear Discharge  
(SN 000101 +)



EC DECLARATION OF CONFORMITY ISSUED BY THE MANUFACTURER – ES PROHLÁSENÍ O SHODĚ, VYDÁNÉ VÝROBCEM – VOM HERSTELLER HERAUSGEGEBENE EG-KONFORMITÄTSSERKLÄRUNG – OVERENSSTEMMELSECERTIFIKAT FOR MODELLER, UDSTEDT AF FABRIKANTEN – DECLARACION DE CONFORMIDAD CE EMITIDA POR EL FABRICANTE – TOOTJA VÄLJASTATUD EC-VASTAVUSDEKLARATSIOON – VALMISTAJAN ANTAMA EY-VAATIMUSTENMUKAISUUSVAKUUTUS – DÉCLARATION DE CONFORMITÉ CE ÉMISE PAR LE FABRICANT – EZ IZJAVA O SKLADNOSTI KOJU DAJE PROIZVOĐAČ – DICHIARAZIONE DI CONFORMITÀ CE DEL PRODOTTO RILA SCIATA DAL PRODUTTORE – EK GAMINTOJO ATITIKTIES DEKLARACIJA – EK ATBILSTĪBAS DEKLARĀCIJA, KURU IZDOD RAŽOTĀJS – EG- CONFORMITEITSVERKLARING, UITGEGEVEN DOOR DE FABRIKANT – EF-SAMSVARSERKLÆRING FRA PRODUSENTEN – DEKLARACJA ZGODNOŒCI Z PRZEPISAMI EC WYDANA PRZEZ PRODUCENTA – CERTIFICADO DE CONFORMIDADE DO MODELO EMITIDO PELO FABRICANTE – СОСТАВЛЕННОЕ ПРОИЗВОДИТЕЛЕМ ЗАЯВЛЕНИЕ О СООТВЕТСТВИИ СТАНДАРТАМ И НОРМАМ ЕС – ES-IZJAVA O SKLADNOSTI, KI JO JE IZDAL PROIZVAJALEC – ES VYHLÁSENIE O ZHODE, VYDANÉ VÝROBCOM – EG-DEKLARATIONEN OM ÖVERENSSTÄMMESE UTFÄRDAD AV TILLVERKAREN – ÜRETİCİ TARAFINDAN DÜZENLENEN EC UYGUNLUK BEYANI

We the undersigned, AriensCo, certify that: My, nižepodpisani, AriensCo, prolašujeme, že: Der Unterzeichnete, AriensCo, bescheinigt, dass: Undertegnede, AriensCo, attesterer, at: Nosotros, los abajo firmantes, AriensCo, certificamos que: Meie, allakirjutanut, ETTEVÖTE ARIENS, kinnitame, et: Allekirjoittanut, AriensCo, vakuuttaa, että: Nous, soussignés AriensCo, certifions que: Mi, dolje potpisani, AriensCo, potvrđujemo da: La sottoscritta società AriensCo certifica che: Mes, žemiau pasirašiusieji, „ARIENS“ kompanija, patvirtiname, jog: Mēs, zemāk parakstīšies, AriensCo, apliecinām, ka: Wij, de ondergetekenden, AriensCo, verklaren dat: Undertegnede, AriensCo, bekrefter at: My, nižej podpisani, AriensCo, oświadczamy, że: Nós, abaixo assinados, certificamos em nome da AriensCo, que: Мы (фирма ARIENS), нижеподписавшиеся, настоящим заявляем, что: Spodaj podpisani AriensCo potrjujemo, da je: My, spoločnosť AriensCo vyhlasujeme, že: Undertecknad, AriensCo, intygar att: Biz alitta imzasi bulunan, AriensCo olarak tasdik ederiz ki:

Type: Typ: Type: Tipo: Tüüp: Tyyppi: Type: Tipo: Type: Tip: Type: Tips: Type: Tip: Tipas: Tipo: Тип: Tip: Type: Tipo: Tip:	Riding Rotary Lawn Mower – Samojízdná Sekačka – Aufsitz-Sichelmäher – Havetraktor med roterende knive – Tractor cortacésped giratorio – Rooter-mururtraktor – Puutarhatriaktori Pyörivällä Leikkuuyksiköllä – Tondeuse à gazon autoportée rotative – Samohodna rotaciona kosilica za travu – Trattorino con unità di taglio rotativa – Savaeigé žolijapové – Braucošais rotējošais zāles plāvējs – Rijdende roterende grasmaaier – Plentraktör med rotorklipper – Samobiežna rotacyjna kosiarzka trawnikowa – Tractor cortador de relva – езда Косилка роторная – Sedežna vrtiljiva kosilnica – Jazdecké rotačná kosačka na trávu – Stitrotorgräsklippare – Döner biçme makinesi sürme
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Trade Name: Obchodní název: Handelsbezeichnung: Firmenavn: Nombre comercial: Kaubamārk: Kauppanimi: Appellation commerciale: Trgováčki naziv: Nome commerciale: Prekės pavadinimas: Komerčiālais nosaukums: Handelsnaam: Handelsnavn: Nazwa handlowa: Nome da Marca: Название фирмы: Trgovsko ime: Názov výrobku: Handelsbeteckning: Ticaret Unvan:	Ariens
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Model, Model Name, Serial Number: Model, název modelu, výrobní číslo: Modell, Modellname und Seriennummer: Model, Modelnavn, Seriennummer: Modelo, Nombre, N° de Serie: Model, Model, Seerianumber: Malli, mallin nimi, sarjanumero: Modèle, nom du modèle, numéro de série: Model, Naziv modela, Serijski broj: Modello, Nome modello, Numero di serie: Modelis, Modelio pavadinimas, Serijos numeris: Modelis, Modelja nosaukums, Sērijas numurs: Model, Model Naam, Volgnummer: Modell, modellnavn, serienummer: Model, nazwa modelu, numer seryjny: Modelo, Nome do Modelo, Número de Série: Модель, наименование модели, серийный номер: Model, Ime modela, Serjska številka: Model, názov modelu, výrobné číslo: Modell, modellnavn, serienummer: Model, Model Adi, Seri Numaras:	991320, Zenith 52 SD, 000101+ 991321, Zenith 52 RD, 000101+ 991322, Zenith 60 SD, 000101+ 991323, Zenith 60 RD, 000101+
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Cutting Width: Pracovní záběr: Schnittbreite: Klippebredde: Anchura de corte: Löikelaius: Leikkuuleveys: Largeur de coupe: Širina reza: Pjovimo plotis: Larghezza: Širėanas platumas: Maabreedte: Atbilst: Klippebredde: Szerokość ciecia: Largura de corte: Ширина скашивания: Širka košnje: Širka kosenja: Klippbredd: Kesme Geniřliđi:	991320: 132 cm 991321: 132 cm 991322: 152 cm 991323: 152 cm
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Conforms to: Odpovídá normě: mit den Anforderungen der folgenden Richtlinien übereinstimmt: Er i overensstemmelse med: Cumple con: Vastab: Täyttää seuraavat vaatimukset: Est conforme à: U skladnosti s: E conforme a: Atitinka: Voldoet aan: Er i samsvar med: Jest zgodny z: De acordo com: Соответствует: v skladu z: Je v zhode s: Överensstämmer med: Uygundur:

2006/42/EC, 2014/30/EU, 2011/65/EU - 2015/863/EU, 2000/14/EC, Annex VI - 2005/88/EC  
 EN ISO 5395-1: 2013 + A1: 2018, EN ISO 5395-3: 2013 + A1: 2017 + A2: 2018  
 EN ISO 14982: 2009, ISO 11094:1991, EN ISO 3744:1995, EN 50581: 2012

<p>Notified Body – Pověřená osoba – Benachrichtigte Körperschaft – Bemyndiget organ      – Organismo notificado – Teavitatud asutus – Entité notifiée – Organisme notifié –      Obavješteno tijelo – Organismo notificato – Registruota instancija –Pietieiktā iestāde      – Aangemelde instantie – Teknisk kontrollorgan – Organ zaświadczający –      Organismo Certificador – Уполномоченным органом – Priglašeni organ –      Notifikovaný Organ – Anmält organ – Onaylanmış Kuruluş</p>	<p>Notified Body      00905 Intertek Deutschland GmbH      Stangenstr. 1      70771 Leinfelden-Echterdingen      Germany</p>
<p>Representative Measured Sound Power Level (<math>L_{wa}</math>) –      Reprezentativní hodnota změněné hladiny akustického výkonu      (<math>L_{wa}</math>) – Repräsentativer gemessener Geräuschpegel (<math>L_{wa}</math>) –      Näitlik mõõdetud helivõimsuse tase (<math>L_{wa}</math>) – Repräsentativ, mält      støjefektive medlo (<math>L_{wa}</math>) – Nivel de potencia acústica      representativa medido (<math>L_{wa}</math>) – Tyypillinen mitattu äänitehotaso      (<math>L_{wa}</math>) – Niveau de puissance acoustique représentatif mesuré      (<math>L_{wa}</math>) – Reprezentativna izmjerena razina snage zvuka (<math>L_{wa}</math>) –      Livello di potenza sonora rappresentativo rilevato (<math>L_{wa}</math>) –      Repräsentativais izmērtais skaņas jaudas līmenis (<math>L_{wa}</math>) –      Būdingas išmatuotas garso galios lygis (<math>L_{wa}</math>) – Repräsentatif      gemeten geluidsniveau (<math>L_{wa}</math>) – Reprezentatív mält lydeffektivná      (<math>L_{wa}</math>) – Zmierzonu reprezentatywny poziom mocy akustycznej      (<math>L_{wa}</math>) – Nivel de Potência de Som Medido Representativo (<math>L_{wa}</math>) –      Reprezentativníy izmerennyy level' zvukovoy      mošnosti (<math>L_{wa}</math>) – Trična izmjerena raven zvočne moči (<math>L_{wa}</math>) –      Charakterističká zmeraná hladina akustického výkonu (<math>L_{wa}</math>) –      Reprezentativ uppmätt ljudnivå (<math>L_{wa}</math>) – Örnek Ölçülmüş Ses Güç      Seviyesi (<math>L_{wa}</math>)</p>	<p>Guaranteed Sound Power Level (<math>L_{wa}</math>) – Zaručovaná hodnota      hladiny akustického výkonu (<math>L_{wa}</math>) – Garantierter Geräuschpegel      (<math>L_{wa}</math>) – Garantert støjefektiveau (<math>L_{wa}</math>) – Nivel de potencia      acústica garantizado (<math>L_{wa}</math>) – Tagatud mõõdetud helivõimsuse tase      (<math>L_{wa}</math>) – Taattu äänitehotaso (<math>L_{wa}</math>) – Niveau de puissance acous-      tique garanti (<math>L_{wa}</math>) – Zajamčena razina snage zvuka (<math>L_{wa}</math>) – Livello      di potenza sonora garantito (<math>L_{wa}</math>) – Garantuotas garso galios      lygis (<math>L_{wa}</math>) – Garantētais skaņas jaudas līmenis (<math>L_{wa}</math>) – Gega-      randeerd geluidsniveau (<math>L_{wa}</math>) – Garantert lydeffektivná (<math>L_{wa}</math>) –      Gwarantowany reprezentatywny poziom mocy akustycznej (<math>L_{wa}</math>) –      Nivel de Potência de Som Medido Garantido (<math>L_{wa}</math>) –      Гарантированный уровень звуковой мощности (<math>L_{wa}</math>) – Zajam-      čena raven zvočne moči (<math>L_{wa}</math>) – Zaručena hladina akustického      výkonu (<math>L_{wa}</math>) – Garantert uppmätt ljudnivå (<math>L_{wa}</math>) – Garanti      Edilmiş Ses Güç Seviyesi (<math>L_{wa}</math>)</p>
<p>991322: 104 dB<sub>A</sub>          991323: 104 dB<sub>A</sub></p>	<p>991322: 105 dB<sub>A</sub>          991323: 105 dB<sub>A</sub></p>
<p>Engine Power (Kw @ RPM): Výkon motoru při regulovaných otáčkách (Kw při ot./min):      Motorleistung (kW bei U/Min): Motoreffekt (Kw @ RPM): Potencia del motor (Kw a RPM): Mootori      võimsus (Kw @ RPM): Enimmäisteho (Kw @ RPM): Puissance moteur (Kw au régime max.):      Snaga motora (kW pri o/min): Potenza max. del motore (Kw a giri/min.): Variklio galia (Kw @ RPM):      Džineja jauda (Kw pie apgrīzētiem minūtē): Motor Vermogen (Kw @ RPM): Motoreffekt (Kw @      RPM): Moc silnika (Kw przy obr./min): Potência (Kw @ RPM): Мощность двигателя (кВт при      об/мин): Moč motorja (KW pri vrt./min.): Výkon motora (Kw @ RPM) (Kw / ot./min.): Motoreffekt (Kw      @ varvtal): Motor Gücü (Kw @ RPM):</p>	<p>991322: 16.5 @ 3100          991323: 16.5 @ 3100</p>
<p>Authorised Representative/Zplnomocnený zástupce/      Bevollmächtigter Vertreter/Autoriseret repræsentant/ Representante      autorizado/Valtuutetu edustaja/Representant      autorisē/Rappresentante autorizzato/Geautoriseerd      vertegenwoordiger/Autoriser representant/Autoryzowany      przedstawiciel/ Representante autorizado/Уполномоченный      представитель/ Spilnomocnený zástupca/Auktoriserad      representant/Yetkili Temsilci</p>	<p>Authorized to Compile the Technical File / Oprávněný vytvořit      technickou dokumentaci / Zur Anlage der technischen Akte      ermächtigt / Autoriseret til at kompilere den tekniske fil /      Autorizado para compilar los archivos técnicos / Volititud      tehnilisi dokumente koostama / Valtuutettu laatimaan teknisen      tiedoston / Autorisé à remplir la fiche technique / Ovlaštena      osoba za pripremu tehničke arhive / Autorizzato alla      compilazione del fascicolo tecnico / Įgalios sudaryti techninį      failą / Pilnvarots sastādīt tehnisko lietu / Geautoriseerd om het      technische bestand samen te stellen / Autoriseret til å produsere      den tekniske filen / Uprawniony do przygotowania dokumentacji      technicznej / Autorizado a Compilar o Ficheiro Técnico /      Уполномочен на составление технического файла /      Pooblaščenec za pripravo tehnične dokumentacije / Oprávněný      na zostavenie súboru technickej dokumentácie / Auktoriserad      att kompilera den tekniska filen / Teknik Dosyayı Derlemeye      Yetkili</p>
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<p>Chad Saubert          Director Product Liability and Conformance          AriensCo          Brillion, WI 54110-1072 USA</p>	<p>CH C. SB</p>

# TABLE OF CONTENTS

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<b>WELCOME</b> .....	<b>1</b>	<b>MAINTENANCE</b> .....	<b>16</b>
Register Your Product! .....	1	Service Position .....	16
<b>SAFETY</b> .....	<b>2</b>	Maintenance Schedule .....	17
Practices & Laws .....	2	Service Parts .....	17
Emission Control System .....	2	Check Safety Interlock System .....	17
Required Operator Training .....	2	Check Parking Brake .....	18
Safety Alert Symbol .....	2	Check Engine Oil .....	18
Signal Words .....	2	Check Tire Pressure .....	18
Safety Decals .....	3	Check Fasteners .....	18
Safety instructions .....	7	Lubricate Unit .....	18
<b>CONTROLS AND FEATURES</b> .....	<b>10</b>	Check Mower Blades .....	18
Ignition Key .....	11	Battery Service .....	20
Choke Control Knob .....	11	Check Mower Belts .....	21
Throttle Control Lever .....	11	Check Hydraulic System .....	21
Power-Take-Off (PTO) Knob .....	11	<b>SERVICE &amp; ADJUSTMENTS</b> .....	<b>22</b>
Hour Meter .....	11	Adjust Seat .....	22
Height-of-Cut Adjustment System .....	11	Adjust Steering Levers .....	23
Transport Lock Release Lever .....	12	Adjust Unit to Drive Straight .....	24
Deck Lift Pedal .....	12	Adjust Transaxles .....	24
Seat Adjustment Lever .....	12	Electrical Service .....	25
Rollover Protection Structure (ROPS) ..	12	Replace Mower Belts .....	26
Parking Brake Lever .....	12	Replace Transaxle Drive Belt .....	28
Safety Interlock System .....	12	Reverse Clutch Brake Plates .....	29
Steering Levers .....	12	Adjust Anti-Scalp Wheels .....	30
Transaxle Bypass Levers .....	12	Adjust Parking Brake Lever .....	30
Anti-scalp Wheels .....	12	Remove and Install Mower Deck .....	30
<b>OPERATION</b> .....	<b>13</b>	Level and Pitch Mower Deck .....	31
Emergency Stopping .....	13	<b>TROUBLESHOOTING</b> .....	<b>34</b>
Before Operating Unit .....	13	<b>STORAGE</b> .....	<b>36</b>
Position ROPS .....	13	Short-Term Storage .....	36
Start the Engine .....	14	Long-Term Storage .....	36
Operate Unit .....	14	Start-of-Season Preparation .....	36
Stop the Engine .....	15	<b>ACCESSORIES</b> .....	<b>36</b>
Move Unit Manually .....	15	<b>SPECIFICATIONS</b> .....	<b>37</b>
Transport Unit .....	16	<b>WARRANTY</b> .....	<b>39</b>
Release Transport Lock .....	16		

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# WELCOME

Original Instructions.

Congratulations on your purchase and welcome to the Ariens family! Every machine in the Ariens 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?

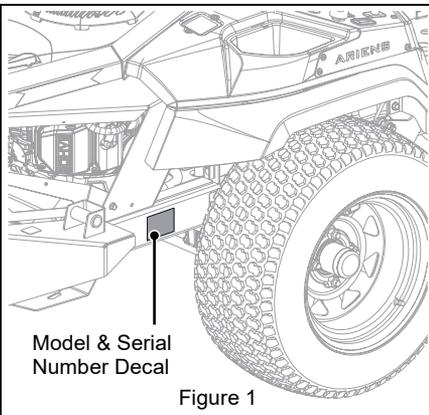
[www.ariens.com](http://www.ariens.com)

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

Locate the model and serial number decal on your unit and register those numbers online at [www.ariens.com](http://www.ariens.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.



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.

Your dealer must review important information in this manual with you before or upon delivery of the unit. 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 Ariens dealer for assistance. To locate your nearest Ariens dealer, go to [www.ariens.com](http://www.ariens.com).

### DISCLAIMER

Ariens 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 dealer or an authorized engine manufacturer's service center. Contact your Ariens 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 an Ariens 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.ariens.com](http://www.ariens.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 body parts and throwing objects. Failure to observe the safety instructions in the manuals and on decals could result in serious injury or death. ALWAYS disengage blades, stop unit and engine, remove key, set parking brake and allow moving parts to stop before leaving operator's position.

## 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.

**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 Locations

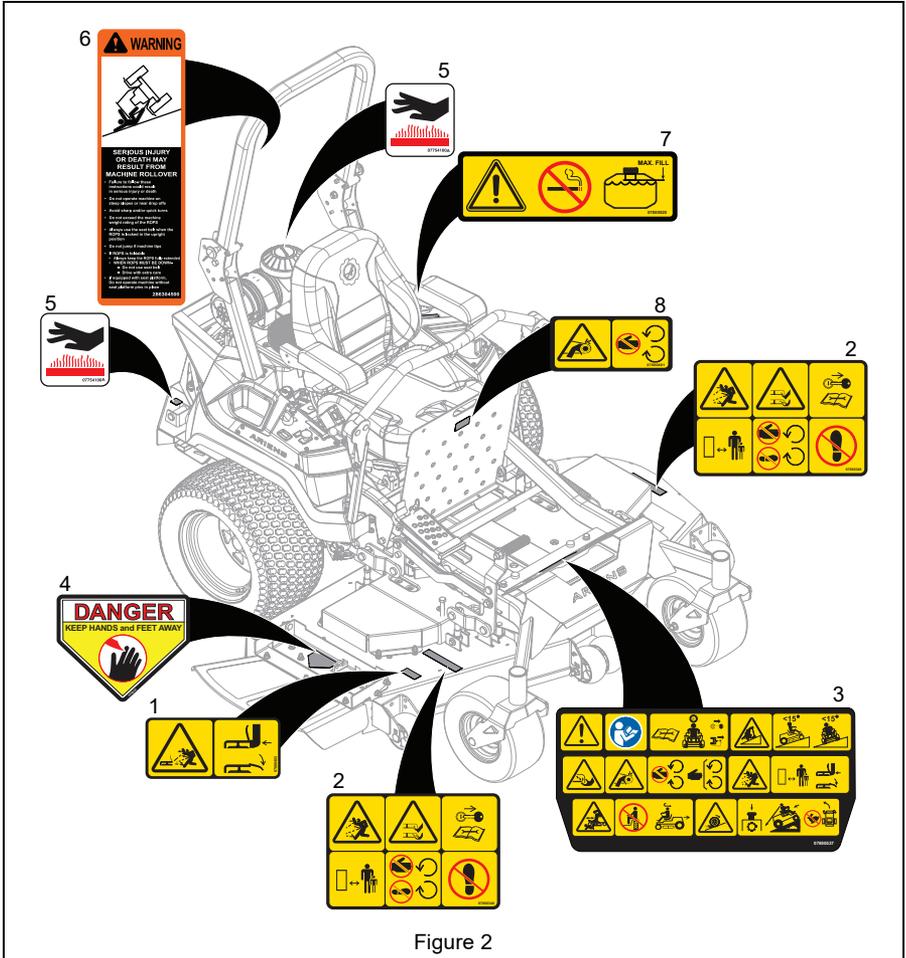


Figure 2

# 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. 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. 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.

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

### 3. Tipping Hazard



Avoid tipping hazard.



DO NOT operate on slopes over  $15^\circ$ .



DO NOT operate on slopes over  $15^\circ$ .

### 3. 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. Bystander Hazard



DO NOT operate the unit in the presence of bystanders.



DO NOT carry passengers.

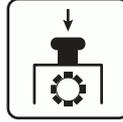


Look behind when operating the unit in reverse.

### 3. 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. WARNING!



**SERIOUS INJURY OR DEATH** may result from machine rollover.

- Failure to follow these instructions could result in serious injury or death.
- **DO NOT** operate machine on steep slopes or near drop offs.
- Avoid sharp and/or quick turns.
- **DO NOT** exceed the machine weight rating of the ROPS.
- **ALWAYS** use the seat belt when the ROPS is locked in the upright position.
- **DO NOT** jump if machine tips.
- If ROPS is foldable:
  - **ALWAYS** keep the ROPS fully extended.
  - **WHEN ROPS MUST BE DOWN:**
    - **DO NOT** use seat belt.
    - Drive with extra care.
- If equipped with seat platform:
  - **DO NOT** operate machine without seat platform pins in place or locks engaged.

### ROLLOVER PROTECTIVE STRUCTURE

To maintain operator protection and roll bar certification:

- Replace a damaged roll bar, **DO NOT** attempt to repair or modify.
- Any alteration of the roll bar must be approved by the manufacturer.
- **DO NOT** exceed the machine weight rating of the roll bar.

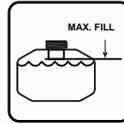
## 7. DANGER!



**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.

## 8. DANGER!



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



Keep hands away from all rotating or moving parts.

## SAFETY INSTRUCTIONS

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.

### Safe Practices for Ride-On Mowers

If used improperly, this machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death. Use only for purposes intended as set forth in the Operator's Manual. Other use is improper and may cause serious injury or death.

#### General Information

Read, understand, and follow instructions and warnings in this manual and on the machine, engine and attachments.

Only allow operators, who are responsible, trained, familiar with the instructions, and physically capable to operate the machine.

DO NOT carry passengers and keep people or pets away from the mowing area.

DO NOT operate the machine while physically or mentally impaired, feeling tired, ill or under the influence of alcohol or drugs.

Follow the manufacturer's recommendation for wheel weights or counterweights.

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

#### Preparation Before Operating

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

Clear the operating area of all objects which could be thrown by or interfere with operation of the machine.

Keep the area of operation clear of all bystanders, particularly small children. Stop the machine and attachment(s) if anyone enters the area

DO NOT operate the machine without the entire grass catcher, discharge chute, or other safety devices in place and functioning properly. Check frequently for signs of damage, wear or deterioration and replace as needed.

NEVER tamper with safety devices. Check their proper operation regularly. NEVER do anything to interfere with the intended function of a safety device or to reduce the protection provided by the safety device.

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

Wear appropriate personal protective equipment such as safety glasses, hearing protection, and substantial footwear. DO NOT mow barefoot or while wearing sandals.

#### Operating

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.

Only run the engine in well ventilated areas. Exhaust gases contain carbon monoxide, an odorless deadly poison.

Only operate the machine in daylight or good artificial light.

Avoid holes, ruts, bumps, rocks and other hazards. Uneven terrain could overturn the machine, or cause operator to lose their balance, footing and/or control of the mower.

DO NOT put hands or feet near rotating parts or under the machine. Keep clear of the discharge opening at all times.

Avoid slippery surfaces. ALWAYS be sure of your footing.

Stop engine before removing grass catcher or unclogging chute.

DO NOT direct discharge 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. DO NOT mow into roads or across sidewalks.

DO NOT leave a running machine unattended. ALWAYS park on level ground, disengage the attachment, set parking brake, stop engine and remove key (if applicable) before leaving the operator's position.
DO NOT mow in reverse unless absolutely necessary. ALWAYS look down and behind before and while backing.
Lightning can cause severe injury or death. If lightning is seen or thunder is heard in the area, DO NOT operate the machine; seek shelter.
If you strike a foreign object, stop and inspect the machine. Repair, if necessary, before restarting.
ALWAYS check overhead and side clearances carefully before operation. Keep in mind that your mower deck may be wider than your track width.

<b>Children Specific</b>
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.
Keep children out of the operating area and under the watchful care of a responsible adult other than the operator.
Do not carry children, even with the blade(s) shut off. Children could fall off and be seriously injured or interfere with safe machine operation. Children who have been given rides in the past could suddenly appear in the mowing area for another ride and be run over or backed over.
DO NOT allow children under the age of 18 to operate any outdoor power equipment.

<b>Slope Specific</b>
Slopes are a major factor related to accidents. Operation on slopes requires extra caution. If you feel uneasy on a slope DO NOT mow it. Use the parking brake for emergency stops.
DO Not operate on slopes of more than 15°.
Do not mow within 1.2 M (4 feet) of a drop off. Do not mow within 1.2 M (4 feet) of a pond or other waterway.
The primary hazard of slope operation is loss of control and/or roll over.

Mow up and down slopes, NEVER across. Exercise caution when changing direction on slopes. Use caution while operating near dropoffs.
Avoid mowing wet grass. Wet surfaces can cause a loss of traction and control.
DO NOT operate machine under any condition where traction, steering, or stability is in question. Tires could slide even if the wheels are stopped.
Always keep the machine in gear when going down slopes. Do not coast downhill.
Avoid starting and stopping on slopes. Avoid making sudden changes in speed or direction. Make turns slowly and gradually.
Use extra care while operating machine with a grass catcher or other attachment(s). They can affect the stability of the machine.

<b>Fire and Fuel Specific</b>
Extinguish all cigarettes, cigars, pipes and other sources of ignition.
Use only an approved fuel container.
DO NOT remove fuel cap or add fuel with the engine running or while hot.
DO NOT refuel indoors or in enclosed spaces.
DO NOT store the machine or fuel container, or refuel, where there is an open flame, spark, or pilot light such as on a water heater or other appliance.
If fuel is spilled, DO NOT attempt to start the engine and avoid creating any source of ignition until fuel vapors have dissipated.
To help prevent fires: keep machine free of grass, leaves, or other debris build up; clean up oil or fuel spillage and remove any fuel soaked debris; allow engine to cool before storing.
Use extra care in handling gasoline and other fuels. They are flammable and vapors are explosive.

<b>Hauling</b>
Use a single full-width ramp for loading and unloading a machine for transport. Secure with appropriate straps.

<b>Towing</b>
Follow the manufacturer's recommendation for weight limits for towed equipment and towing on slopes.

## **ROPS**

The ROPS is an integral safety device. Do not remove or alter the ROPS.

Keep a folding ROPS in the raised and locked position and use the seat belt when operating the machine.

Lower a folding ROPS temporarily only when absolutely necessary. Do not wear the seat belt when folded down. There is no rollover protection when a folding ROPS is in the down position.

Frequently inspect the ROPS and the seatbelt for damage. Replace a damaged ROPS. Do not repair or alter.

## **Service**

Keep machine in good working order. Replace worn or damaged parts.

Use caution when servicing blades. Wrap the blade(s) or wear gloves. Replace damaged blades. DO NOT repair or alter blade(s).

Disconnect spark plug wire(s) and the negative battery cable before making any repairs.

Use only attachments recommended by AriensCo that are appropriate to your use and can be used safely in your application.

The use of non-genuine replacement parts or accessories could adversely affect machine operation and safety.

DO NOT change engine governor setting or overspeed the engine.

# CONTROLS AND FEATURES

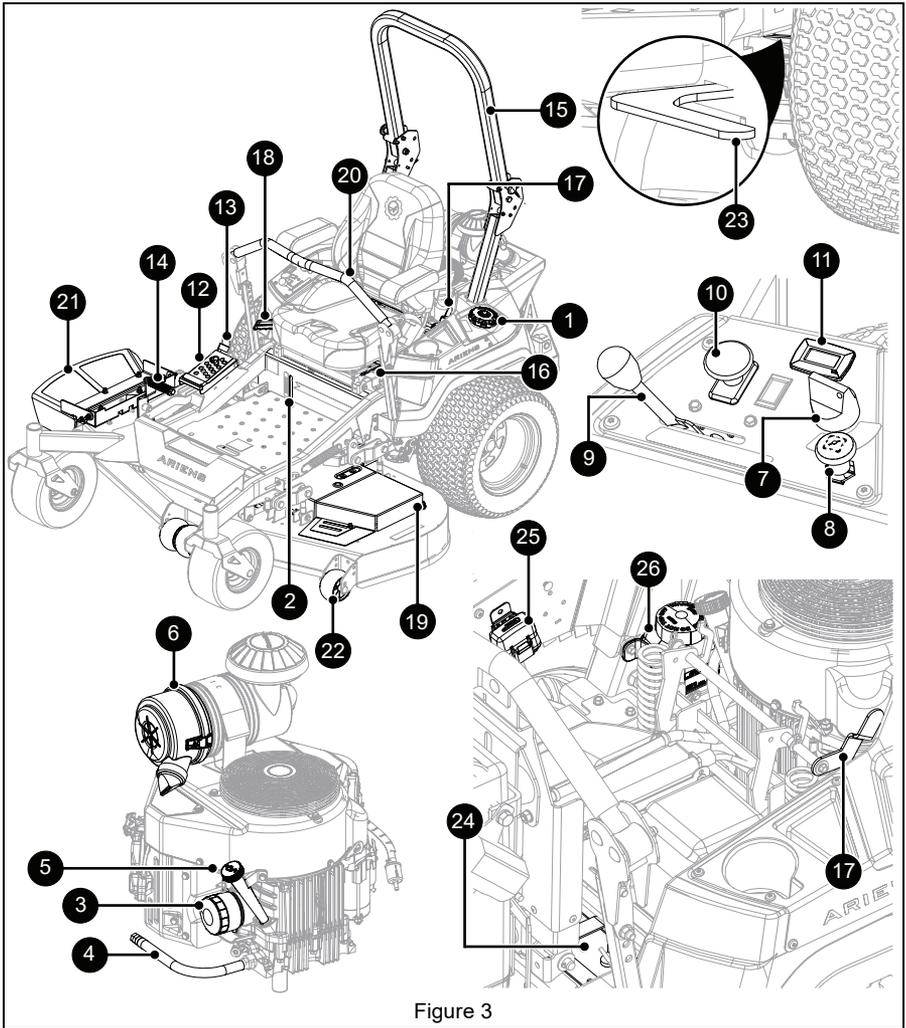


Figure 3

- |                                     |  |
|-------------------------------------|--|
| 1. Fuel Tank and Cap                | 14. Deck Lift Pedal                      |
| 2. Fuel Level Window                | 15. Rollover Protection Structure (ROPS) |
| 3. Oil Filter                       | 16. Seat Adjustment Lever                |
| 4. Oil Drain                        | 17. Seat Latch                           |
| 5. Engine Oil Dipstick              | 18. Parking Brake Lever                  |
| 6. Air Filter                       | 19. Belt Cover (3)                       |
| 7. Ignition Key                     | 20. Steering Lever (2)                   |
| 8. Choke Control Knob               | 21. Discharge Chute                      |
| 9. Throttle Control Lever           | 22. Anti-Scalp Wheel (6)                 |
| 10. Power Take-off (PTO) Knob       | 23. Transaxle Bypass Lever (2)           |
| 11. Hour Meter                      | 24. Battery (Under Seat)                 |
| 12. Height-of-Cut Adjustment System | 25. Fuse Box                             |
| 13. Transport Lock Release Lever    | 26. Hydraulic Oil Expansion Tank (2)     |



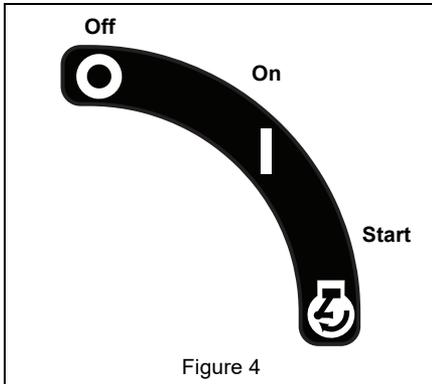
**WARNING: AVOID INJURY.**  
Read and understand the  
*Safety* section before  
proceeding.

See Figure 3 for all controls and features  
locations.

## IGNITION KEY

See Figure 4.

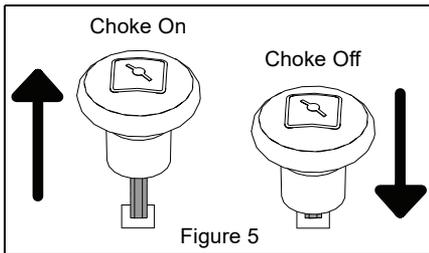
Controls power to the engine. The key cannot  
be removed when in run position.



## CHOKE CONTROL KNOB

See Figure 5.

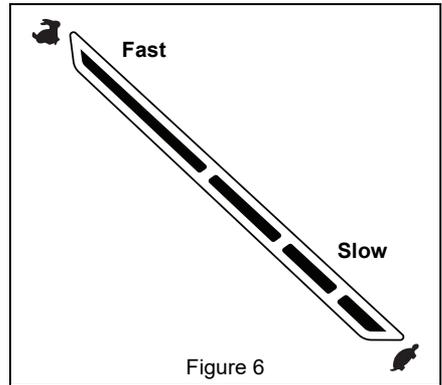
Controls airflow to the engine.



## THROTTLE CONTROL LEVER

See Figure 6.

Controls engine speed.



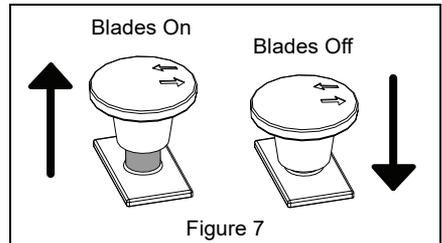
## POWER-TAKE-OFF (PTO) KNOB

See Figure 7.

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.



## HOUR METER

Hour meter measures engine runtime and  
cannot be reset.

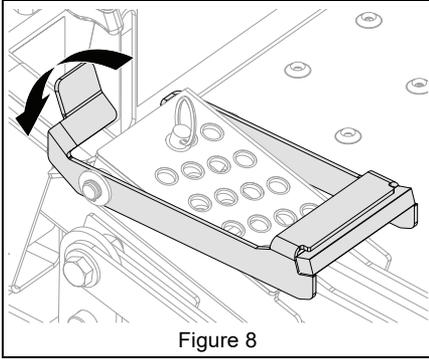
## HEIGHT-OF-CUT ADJUSTMENT SYSTEM

Sets the height of cut.

## TRANSPORT LOCK RELEASE LEVER

See Figure 8.

Releases deck from transport lock position.



## DECK LIFT PEDAL

Raises mower deck to change height-of-cut setting.

## SEAT ADJUSTMENT LEVER

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

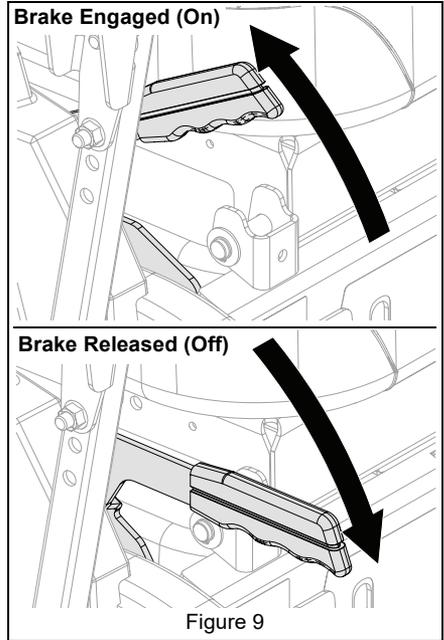
## ROLLOVER PROTECTION STRUCTURE (ROPS)

Help protect operator that is wearing their seatbelt in the event of a rollover. **DO NOT** wear seatbelt when operating with ROPS in the lowered position.

## PARKING BRAKE LEVER

See Figure 9.

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

Engage and disengage the transaxles so unit may be moved with the engine off.

## ANTI-SCALP WHEELS

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

## 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. Set parking brake.
3. Push PTO knob down to off position.
4. Turn ignition key to off position and remove key.

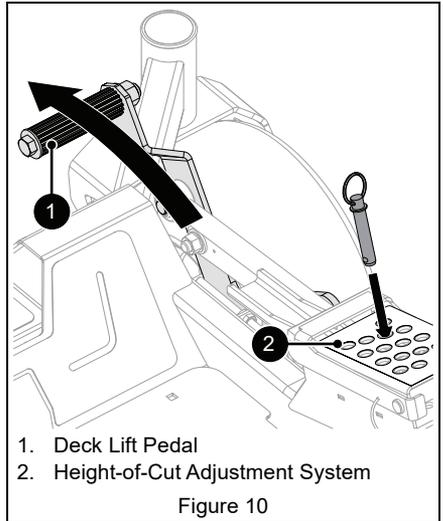
### BEFORE OPERATING UNIT

**IMPORTANT:** Register your product! See *Register Your Product!* on page 1.

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%. Ariens recommends using a quality fuel stabilizer in all fuel. See *Short-Term Storage* on page 36.

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 17. Contact your Ariens dealer for repair if any of the tests fail.
5. Set cutting height. See Figure 10.
  - a. Push mower lift pedal forward until transport lock engages.
  - b. Insert adjustment pin through desired setting in height-of-cut adjustment system.
  - c. Push mower lift pedal slightly forward, release transport lock and slowly release pedal until it contacts adjustment pin and stops.



1. Deck Lift Pedal
2. Height-of-Cut Adjustment System

Figure 10

### POSITION ROPS

**IMPORTANT:** Inspect ROPS and seatbelt for damage and loose or missing hardware.

### Raise Center Bar

See Figure 11.

1. Remove hairpins from lock pins and remove lock pins from hinge plate.
2. Raise center bar and secure with lock pins and hairpins.



**WARNING: AVOID INJURY.**  
Seatbelt **MUST** be worn when operating with center bar raised.

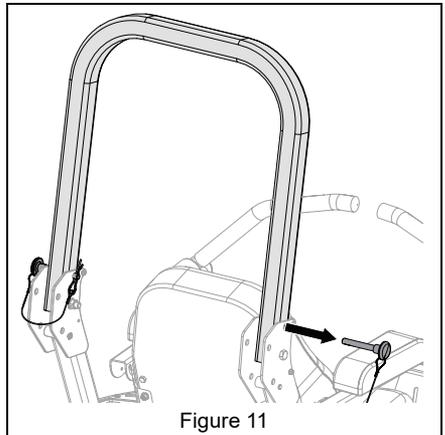


Figure 11

## Lower Center Bar

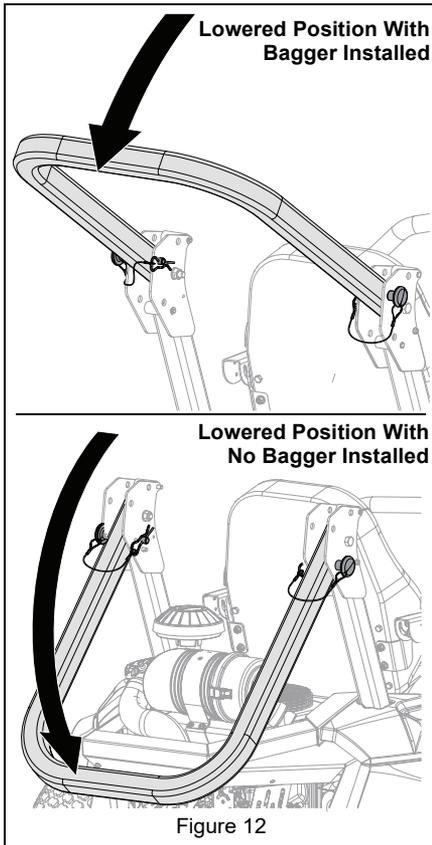
See Figure 12.



**WARNING: AVOID INJURY.** Lower the center bar only when needed to drive under an object. There is no rollover protection with the center bar in the lowered position. DO NOT wear seatbelt when ROPS is in lowered position.

1. Remove hairpins from lock pins and remove lock pins from hinge plate.
2. Lower center bar and secure with lock pins and hairpins.

**IMPORTANT:** Return center bar to the raised position when clear of obstacles.



## START THE ENGINE

1. Push PTO knob down to off position.
2. Move steering levers to neutral position.
3. Engage parking brake.
4. 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.

**NOTICE:** 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. 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.

## OPERATE UNIT

1. Release parking brake.
2. Set throttle control lever to fast position.

**IMPORTANT:** Engaging the PTO knob with the throttle lever set lower than fast position can cause excessive belt wear. ALWAYS use fast position when engaging the PTO.

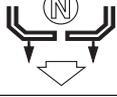
3. Pull PTO knob up to on position.

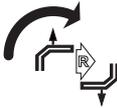
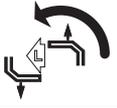
**IMPORTANT:** Never engage the PTO if the mower is plugged with grass or other material. This may cause damage to the electric clutch.



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

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. 

Direction of Travel	Lever 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. 

**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.

### For Best Mowing Results

- Cut grass when it is dry.
- Keep mower blades sharp.
- Keep mower deck properly leveled.
- Adjust anti-scalp wheels to prevent scalping.
- Do not set height of cut too low. For very tall grass, mow twice.
- Do not travel too fast.
- Mow with the engine set at full throttle.
- When mulching, only remove 1/3 of grass length per cutting. Do not cut more than 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. Place steering levers in neutral position and rotate outward.
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.

## MOVE UNIT MANUALLY

Bypass the transaxles to move the unit with the engine off.

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

1. Stop engine, remove key and wait for moving parts to stop and for hot parts to cool. See *Stop the Engine* on page 15.
2. Pull both transaxle bypass levers out into bypass position. See Figure 13.

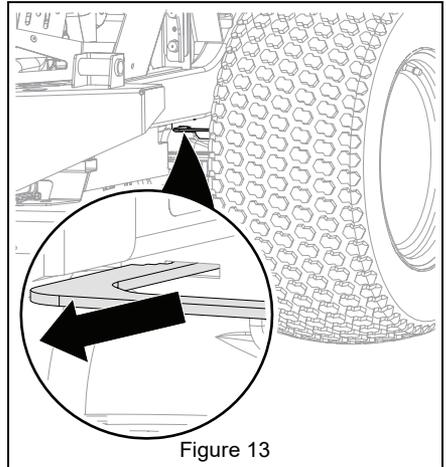


Figure 13

3. Release parking brake and push unit to desired location.
4. Engage parking brake.
5. Return transaxle bypass levers to operating position. See Figure 14.

## MAINTENANCE



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

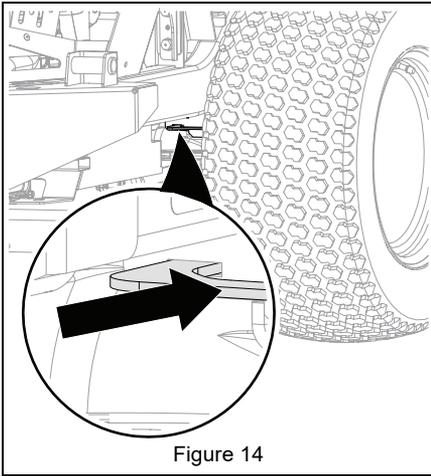


Figure 14

### TRANSPORT UNIT

1. Push deck lift pedal completely forward to engage transport lock. Release pedal.
2. Move unit to transport vehicle.
3. Stop engine, engage parking brake, remove key from ignition.
4. Secure mower frame to transport vehicle.

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

### RELEASE TRANSPORT LOCK

1. Push deck lift pedal forward and lift transport lock release lever.
2. Slowly return mower lift pedal to resting position.

Proper maintenance can prolong the life of unit. The *Maintenance Schedule* on page 17 shows the recommended service schedule.

Your Ariens 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.

More frequent service may be required due to working conditions (heavy loads, high ambient temperatures, dusty conditions, or airborne debris).

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

### SERVICE POSITION

See Figure 15.

1. Park unit on a flat, level surface.
2. Stop engine, remove key and wait for moving parts to stop and for hot parts to cool.
3. Engage parking brake.
4. Chock wheels. Strap and clamp unit onto lift, if used.
5. Disconnect spark plug wires from engine.
6. Place steering levers in neutral position and rotate outward.
7. Pull seat latch and rotate seat forward.

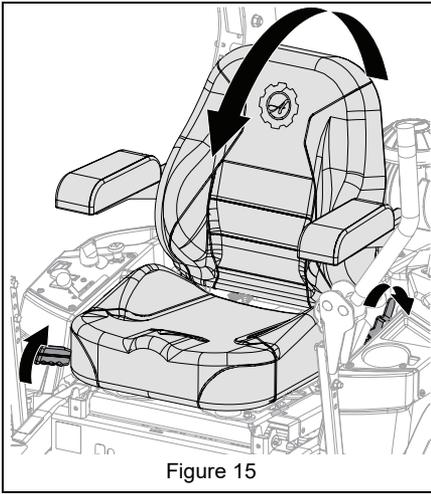


Figure 15

## MAINTENANCE SCHEDULE

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

\* Refer to engine manual for instructions.  
 \*\* Change after first 75 hours of operation.

## SERVICE PARTS

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

Description	Qty.	Part No.
Transaxle Drive Belt	1	07225600
Mower Belt – Left 60"	1	07200817
Mower Belt – Right 60"	1	07200807
Mower Belt – Left 52"	1	07200815
Mower Belt – Right 52"	1	07200805
Mower Blade	3	03253900
Seat Switch	1	02754100
Hydraulic Oil – 32 oz (1 Qt.)	AR	00057100
Hydraulic Oil Filter	2	21545100
Fuel Filter	1	21548101
Engine Oil Filter	1	21535800
Air Filter Outer Primary Element	1	21548800
Air Filter Inner Safety Element	1	21548700
Fuel Stabilizer – 118 ml (4 oz.)	AR	04730400
Relay	1	04438400

## CHECK SAFETY INTERLOCK SYSTEM

Check function of the Safety Interlock System by performing the tests below. Contact your Ariens 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. Park unit on a flat, level surface.
2. Position steering levers in neutral.
3. Engage parking brake.
4. Stop engine and wait for moving parts to stop and for hot parts to cool.
5. Bypass transaxles. See *Move Unit Manually* on page 15.
6. Push unit forward.
  - If unit does not move forward, no adjustment is needed.
  - If unit moves forward easily, adjust the brake lever.

## 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 37 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 FASTENERS

Check for loose or missing hardware.

## LUBRICATE UNIT

1. Apply oil to all pivot points and pin connections.

### Lubricate Seat

See Figure 16.

1. Place unit in service position. See *Service Position* on page 16.
2. Apply grease to seat tracks through slots under seat plate.

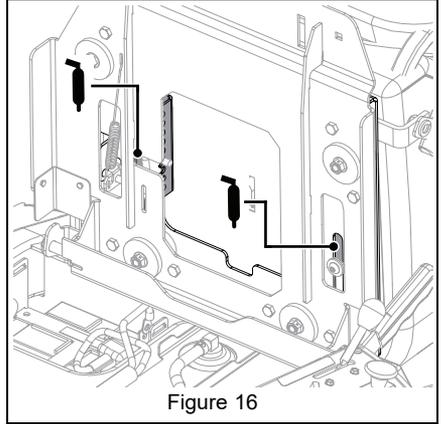


Figure 16

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

1. Stop engine, remove key and wait for moving parts to stop and for hot parts to cool.
2. Disconnect spark plug wires.
3. Remove hardware securing blades to spindles and remove blades. Retain all hardware for reinstallation. See Figure 17.

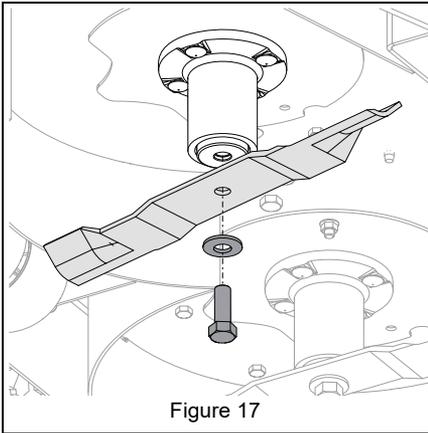


Figure 17

### Sharpen Blades



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

1. Remove blades. 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. See Figure 18.

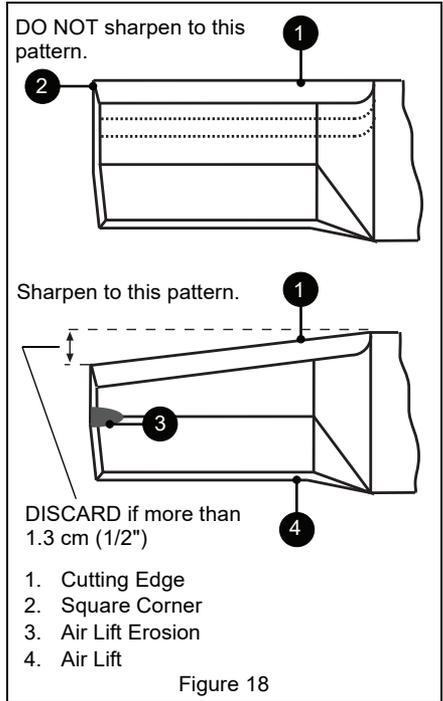


Figure 18



**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

See Figure 17.

1. Reinstall blades and secure with original hardware. Torque to 156 N•m – 217 N•m (115 lb-ft – 160 lb-ft).

## BATTERY SERVICE



**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.

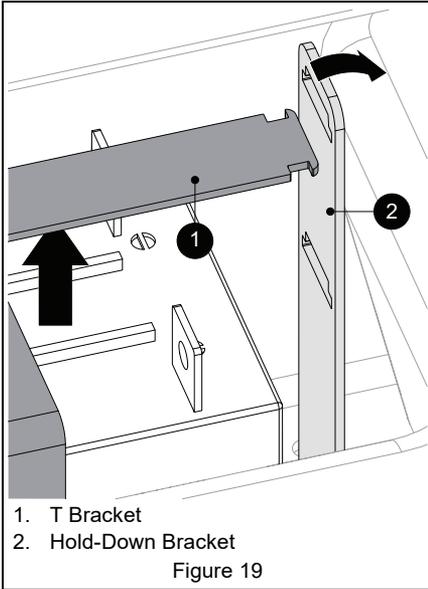
### Remove Battery

#### *Remove Factory Battery*

1. Place unit in service position. See *Service Position* on page 16.
2. Disconnect the negative cable and then the positive cable from the battery.

See Figure 19.

3. Loosen hex nut securing right hold-down bracket to frame.
4. Remove T bracket from lower slots in hold-down brackets.
5. Remove battery.



1. T Bracket
2. Hold-Down Bracket

Figure 19

#### *Remove U1 Battery*

1. Place unit in service position. See *Service Position* on page 16.
2. Disconnect the negative cable and then the positive cable from the battery.
3. Loosen hex nut securing right hold-down bracket to frame.

4. Remove T-bracket from upper slots in hold-down brackets. Retain for reinstallation.
5. Remove battery.

### Clean Battery

1. Clean terminals and battery cable ends with a wire brush.
2. Coat terminals with dielectric grease or petroleum jelly.

### Install Battery



**CAUTION:** DO NOT allow direct metal contact across battery posts.

#### *Install Factory Battery*

1. Reinstall positive cable and then the negative cable.
2. Insert T bracket through lower slots in hold-down brackets.
3. Tighten hex nut securing right hold-down bracket to frame.
4. Return seat to operating position

#### *Install U1 Battery*

1. Reinstall positive cable and then the negative cable.
  2. Insert T bracket through upper slots in hold-down brackets.
- See Figure 20.
3. Tighten hex nut securing right hold-down bracket to frame.
  4. Return seat to operating position.

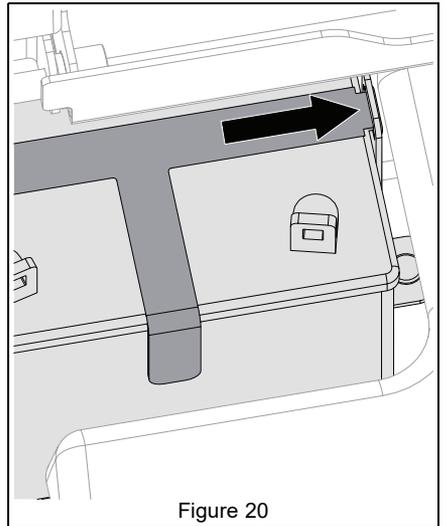


Figure 20

## 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.

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

1. Remove battery from unit. See *Remove Battery* on page 20.
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 20.

## Jump Starting

Ariens does not recommend jump starting your unit. Jump-starting can damage engine and system components. Refer to engine manual for details.

## CHECK MOWER BELTS

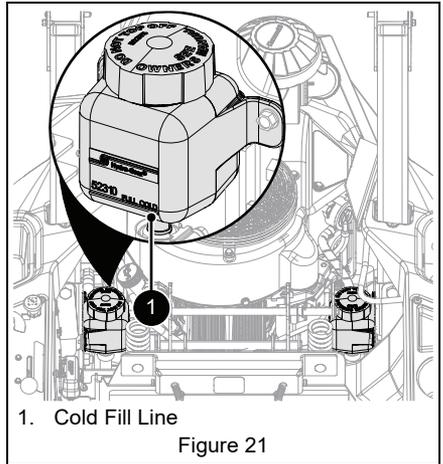
Check belts for wear and replace as needed.

## CHECK HYDRAULIC SYSTEM

### Check Hydraulic Oil Level

1. Place unit in service position. See *Service Position* on page 16.
2. Check oil level in expansion tanks. Oil should reach the cold fill indicator mark. See Figure 21.

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



3. Operate engine for 1 minute and recheck oil levels.
4. Add hydraulic oil, if needed.
  - a. Remove expansion tank caps.
  - b. Fill expansion tanks with 15W-50 synthetic motor oil until oil reaches the cold fill indicator mark. See Figure 21.
  - c. Reinstall expansion tank caps.

## Change Hydraulic Oil and Filter

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 22.
4. Remove filter guard and oil filter from transaxle.
5. Remove the vent / fill plug from the fill port and allow transaxle to drain completely.

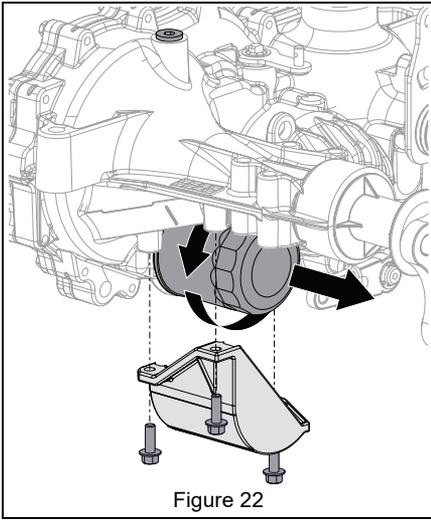


Figure 22

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 until oil appears at the bottom of the fill port (1892.7 mL [64 fl. ounces] per transaxle).
11. Reinstall the vent / fill plug and torque to 20.3 N•m (180 lb-in).
12. Add hydraulic oil to expansion tank until oil reaches cold fill indicator mark.
13. Repeat steps 3 – 12 for other transaxle.
14. Purge hydraulic system. See *Purge Hydraulic System* on page 22.

### Purge Hydraulic System

Purge air from hydraulic system after draining oil or changing the filter.



**WARNING: AVOID INJURY.** 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. Park unit facing a wall or chock wheels.
2. Release parking brake.

3. Support unit so drive wheels are off the ground.
4. Bypass transaxles. See *Move Unit Manually* on page 15.
5. Start the engine and slowly move steering levers forward and backward 5 or 6 times.
6. Return transaxle bypass levers to operating position. See *Move Unit Manually* on page 15.
7. Slowly move steering levers forward and backward 5 or 6 times.
8. Stop engine, lower unit to ground and check oil level. Add oil if needed.
9. Repeat steps 1 – 8 until transaxles operate smoothly in forward and reverse at normal speed without excessive noise.

## SERVICE & ADJUSTMENTS



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

### ADJUST SEAT

See Figure 23.

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.

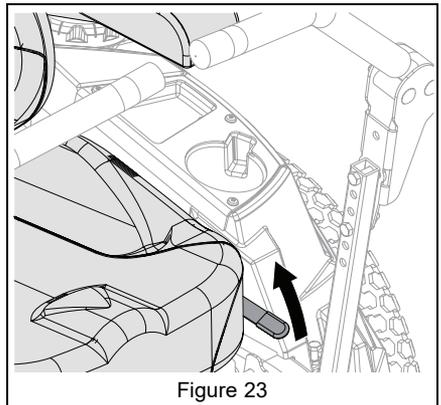


Figure 23

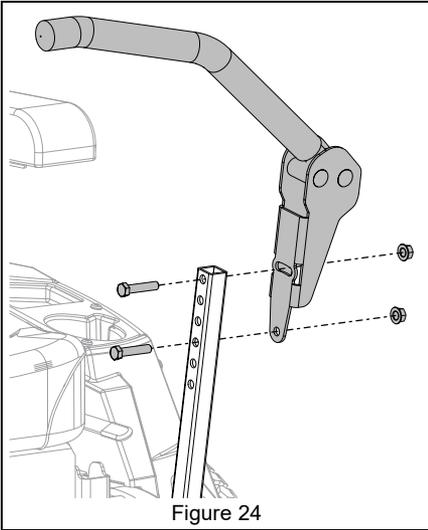
## ADJUST STEERING LEVERS

### Adjust Height

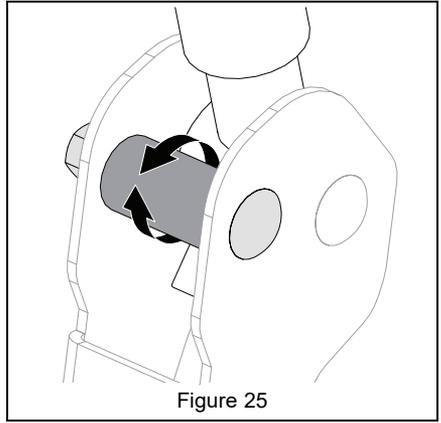
The steering lever height may be adjusted for operator comfort.

See Figure 24.

1. Stop engine, remove key and wait for moving parts to stop and for hot parts to cool.
2. Remove steering lever hardware and remove steering lever from lower control arm.
3. Position steering lever at desired height and align with lower control arm. Secure with original hardware.

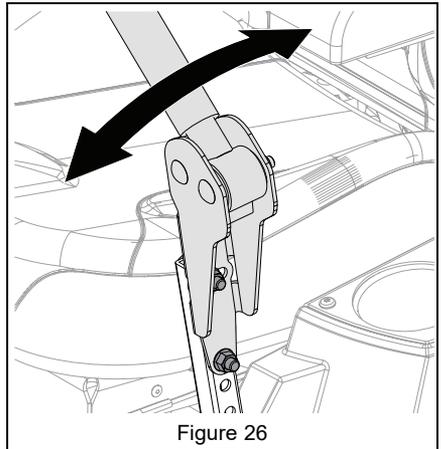


4. Adjust steering lever position. See *Adjust Steering Levers* on page 23.
5. Turn eccentric spacer so levers are at the same height and have a 1.3 cm – 2.5 cm (1/2" – 1") gap between lever ends. See Figure 25.



If there is more than 3.2 mm (1/8") between the horizontal alignment of the steering levers, align the levers.

6. Stop engine, remove key and wait for moving parts to stop and for hot parts to cool.
7. Engage parking brake.
8. Loosen mounting hardware, align levers and tighten hardware. See Figure 26.



## Adjust Forward Position

The steering lever forward position may be adjusted for operator comfort.

1. Stop engine, remove key and wait for moving parts to stop and for hot parts to cool.
2. Loosen mounting hardware on steering lever assemblies.
3. Place steering levers in desired position:
  - Gently push levers forward for greater distance from operator.
  - Gently pull levers back for closer distance to operator.
4. Tighten hardware.

## ADJUST UNIT TO DRIVE STRAIGHT

### Adjust Tire Pressure

1. Place unit in service position. See *Service Position* on page 16.
2. Check tire pressures. If needed, adjust to recommended pressures. See *Specifications* on page 37.
3. Check tracking.
  - If unit does not track straight, increase tire pressure to the drive wheel of the side it moves toward.

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

- If increasing tire pressure does not correct tracking, adjust the limiter bolts as directed below.

### Adjust Limiter Bolts

See Figure 27.

Limiter bolts can be adjusted to increase or decrease drive wheel speeds. To adjust:

1. Loosen jam nut.
  - Turn limiter bolt counterclockwise to increase maximum drive wheel speed on that side.
  - Turn limiter bolt clockwise to reduce maximum drive wheel speed on that side.
2. Tighten jam nut.

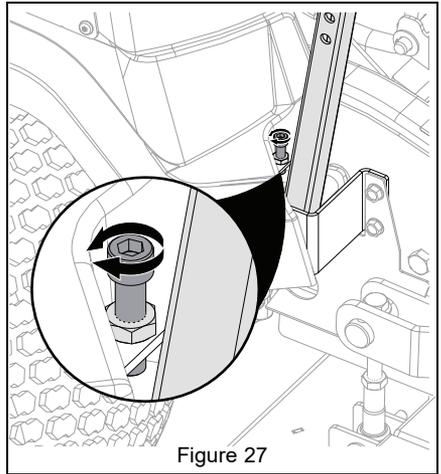


Figure 27

3. Align steering levers. See *Adjust Steering Levers* on page 23.

## ADJUST TRANSAXLES

### Check For Excessive Creep



**WARNING: AVOID INJURY.**

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. Operate unit for a minimum of 5 minutes to warm hydraulic system.
2. Stop engine and engage parking brake.
3. Check front wheels and support unit so both drive wheels are off the ground.
4. Remove drive wheels.
5. Start engine, move throttle lever to fast position and release parking brake.
6. Move steering levers forward and backward 5 or 6 times and then return levers to neutral position.
7. Check hubs for rotation.
  - If there is only slight rotation, stop engine, reinstall wheels and lower unit to ground.
  - If there is excessive rotation, adjust neutral position as directed below.

**IMPORTANT:** Torque wheel lug nuts to 81.3 N•m – 122.0 N•m (60 lb-ft – 90 lb-ft).

## Adjust Neutral Position

If wheel hub has excessive rotation after checking for excessive creep, adjust neutral position.

1. Loosen the return-to-neutral screw on the transaxle. See Figure 28.

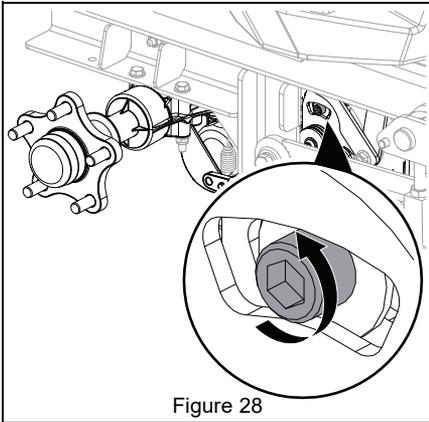
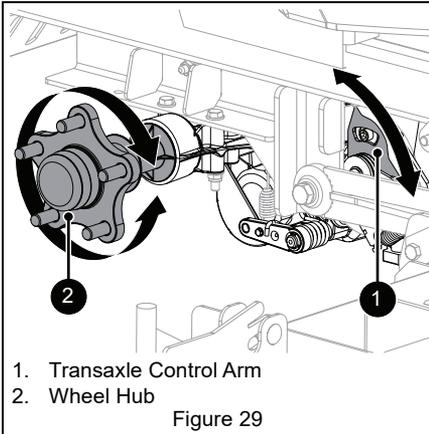


Figure 28

2. Slowly turn transaxle control arm in the opposite direction of hub rotation until hub stops. See Figure 29.



1. Transaxle Control Arm
2. Wheel Hub

Figure 29

3. Hold the transaxle control arm in position and tighten the return-to-neutral screw.
4. Start engine, move throttle lever to fast position and release parking brake.
5. Move steering levers forward and backward 5 or 6 times and then return levers to neutral position.

6. Check wheel hubs for rotation.
  - If there is only slight rotation, stop engine, reinstall wheels, return unit to operating position and advance to *Adjust Parking Brake Lever* on page 30.
  - If there is excessive rotation, repeat steps 1 – 6.

**IMPORTANT:** Torque wheel lug nuts to 81.3 N•m – 122.0 N•m (60 lb-ft – 90 lb-ft).

## ELECTRICAL SERVICE

See Figure 30.

### Replace Fuse

**NOTICE:** To avoid damaging the circuit, replace fuses with fuses of the same amperage rating. Determine the cause of electrical failure and repair before replacing failed electrical components.

1. Place unit in service position. See *Service Position* on page 16.
2. Remove fuse box cover.
3. Remove defective fuse.
4. Determine cause of fuse failure and repair condition.
5. Install new fuse.
6. Replace fuse box cover. Ensure cover snaps tightly in position.

### Replace Relay

**NOTICE:** Relays are interchangeable. Use only quality replacement parts. See *Service Parts* on page 17.

1. Place unit in service position. See *Service Position* on page 16.
2. Remove fuse box cover.
3. Remove defective relay.
4. Determine cause of relay failure and repair condition.
5. Install new relay.
6. Replace fuse box cover. Ensure cover snaps tightly in position.

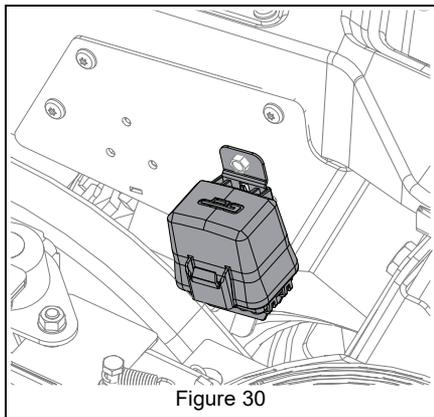


Figure 30

## REPLACE MOWER BELTS



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

### Remove PTO Belt

1. Place unit in service position. See *Service Position* on page 16.
2. Position mower deck at lowest cutting height.
3. Remove hardware securing belt covers to deck and remove belt covers. See Figure 31.

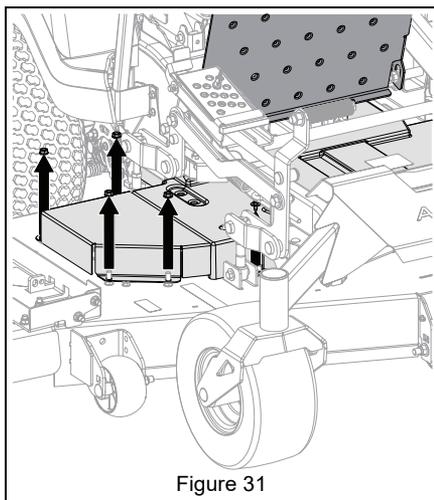


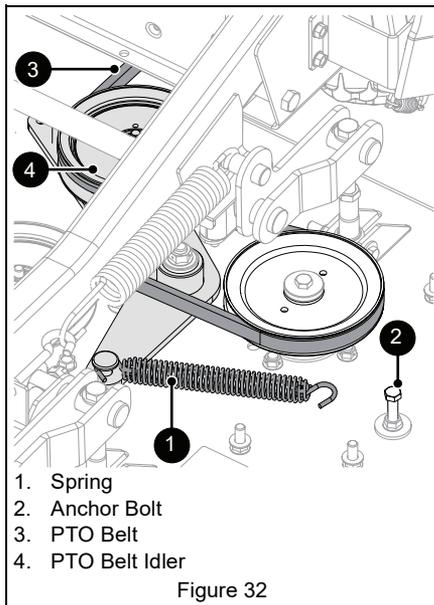
Figure 31



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

See Figure 32.

4. Slowly remove spring hook from anchor bolt to release tension from belt idler.
5. Remove PTO belt.



1. Spring
2. Anchor Bolt
3. PTO Belt
4. PTO Belt Idler

Figure 32

## Remove Mower Drive Belt

1. Remove PTO belt. See *Remove PTO Belt* on page 26.



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

See Figure 33.

2. Slowly remove spring hook from anchor bolt to release tension from belt idler.
3. Remove mower drive belt.

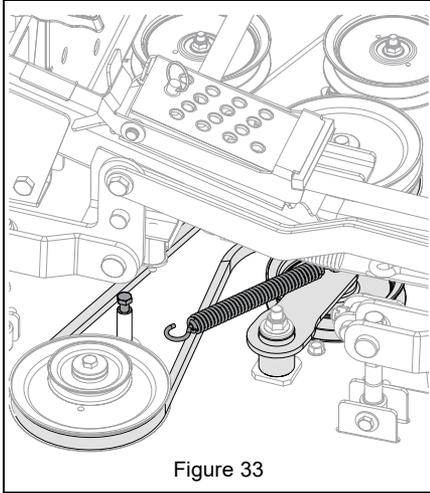


Figure 33

## Install Mower Drive Belt

See Figure 34.

1. Install mower drive belt around bottom groove of split pulley at deck center and around bottom groove of right spindle pulley.
2. Reinstall idler spring hook around anchor bolt to apply tension to belt.

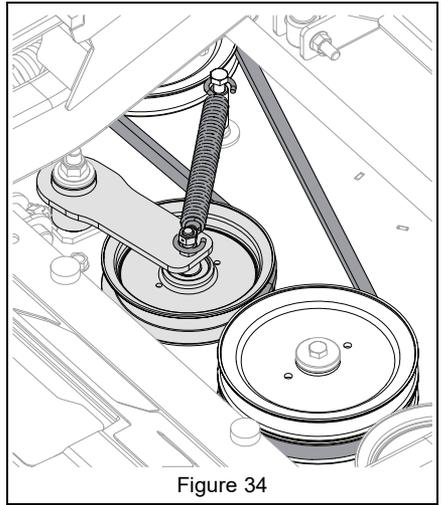


Figure 34

**IMPORTANT:** Make sure belt has tension and is aligned in all pulleys.

## Install PTO Belt

**IMPORTANT:** Mower drive belt **MUST** be installed before PTO belt.

1. Install PTO belt around clutch sheave at rear of unit.

See Figure 35.

2. Install PTO belt around top groove of split pulley at deck center and around left spindle pulley.
3. Align belt with idler pulleys.
4. Reinstall idler spring hook around anchor bolt to apply tension to belt.

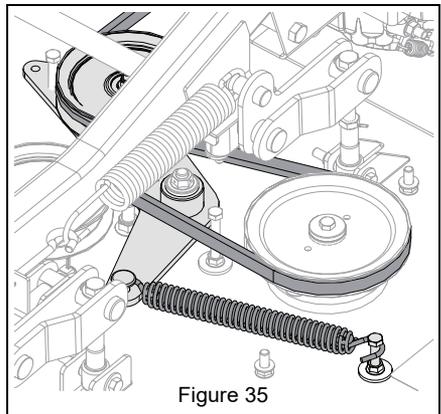


Figure 35

**IMPORTANT:** Make sure belt has tension and is aligned in all pulleys. See Figure 36.

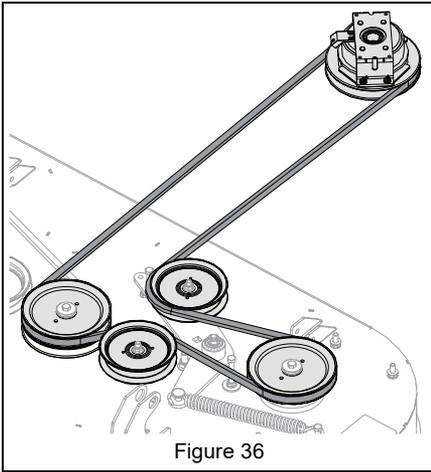


Figure 36

5. Reinstall belt covers and secure with original hardware.

## REPLACE TRANSAXLE DRIVE BELT

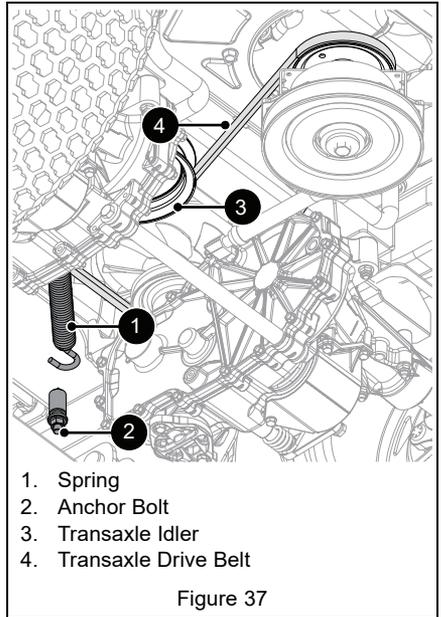
### Remove Transaxle Drive Belt

1. Place unit in service position. See *Service Position* on page 16.
2. Remove PTO belt from clutch. See *Remove PTO Belt* on page 26.



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

3. Under unit, slowly remove spring hook from anchor bolt to release transaxle idler tension. See Figure 37.



1. Spring
2. Anchor Bolt
3. Transaxle Idler
4. Transaxle Drive Belt

Figure 37

See Figure 38.

4. Remove hardware securing clutch stop bracket to frame and remove bracket.

**NOTICE:** DO NOT cut cable tie.

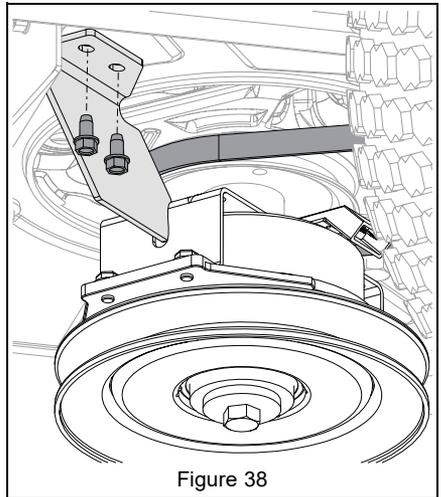


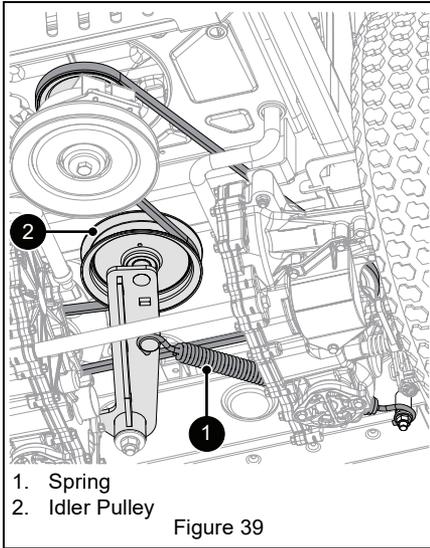
Figure 38

5. Remove transaxle drive belt from drive system in the following order:
  - a. From right transaxle sheave.
  - b. From left transaxle sheave.
  - c. From clutch sheave.

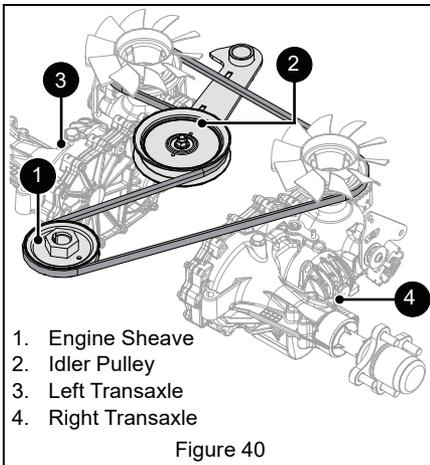
## Install Transaxle Drive Belt

See Figure 39.

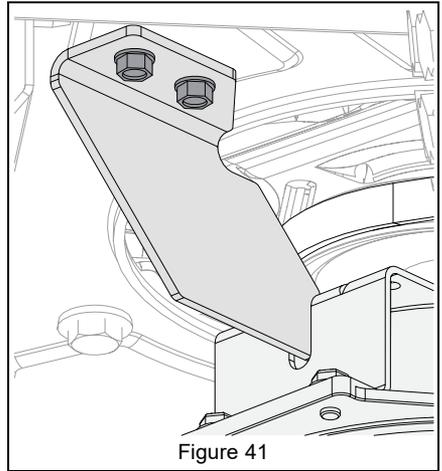
1. Install transaxle drive belt to drive system in the following order:
  - a. Around clutch sheave.
  - b. Around left transaxle sheave.
  - c. Around right transaxle sheave.
2. Align belt with idler pulley.
3. Reinstall idler spring hook onto anchor bolt. Make sure belt has tension and is aligned in all pulleys.



**IMPORTANT:** Make sure belt has tension and is aligned in all pulleys. See Figure 40.



4. Reinstall clutch stop bracket and secure with original hardware. See Figure 41.

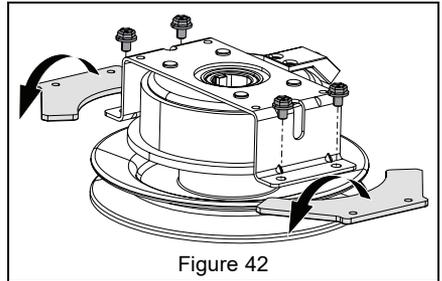


5. Reinstall PTO belt. See *Install PTO Belt* on page 27.

## REVERSE CLUTCH BRAKE PLATES

See Figure 42.

1. Remove hardware securing brake plates to clutch bracket. Retain for reinstallation.
2. Reverse the brake plates and secure to clutch bracket using original hardware.



## ADJUST ANTI-SCALP WHEELS

See Figure 43.

The anti-scalp wheels are set at the factory for typical mowing height, but can be adjusted for high or low cutting conditions. Make sure all wheels are set to the same height.

1. Place unit in service position. See *Service Position* on page 16.
2. Remove hardware securing anti-scalp wheels to deck and remove wheels.
3. Position wheels as necessary:
  - For a very high cutting height, set the anti-scalp wheels in the lowest position on the bracket.
  - For a very low cutting height, set the anti-scalp wheels in the highest position on the bracket.
4. Secure with original hardware.

**IMPORTANT:** All anti-scalp wheels **MUST** be set to the same height.

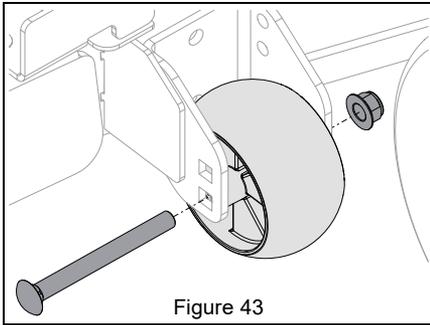
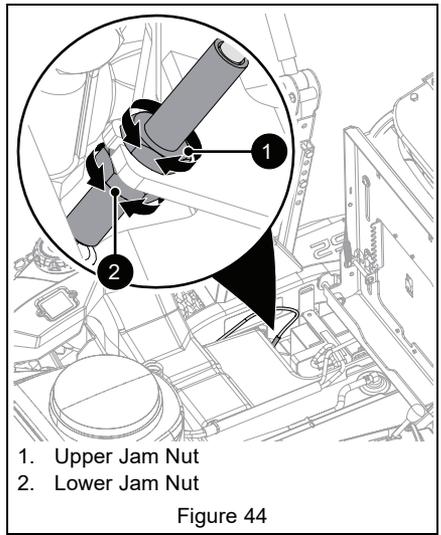


Figure 43

## ADJUST PARKING BRAKE LEVER

See Figure 44.

1. Place unit in service position. See *Service Position* on page 16.
2. Loosen jam nuts on cable adjustment barrel.
3. Adjust cable tension.
  - To increase lever response, loosen the upper jam nut and tighten the lower jam nut until both jam nuts are tight against cable bracket.
  - To decrease lever sensitivity, loosen the lower jam nut and tighten the upper jam nut until both jam nuts are tight against cable bracket.
4. Check parking brake and readjust if necessary. See *Check Parking Brake* on page 18.



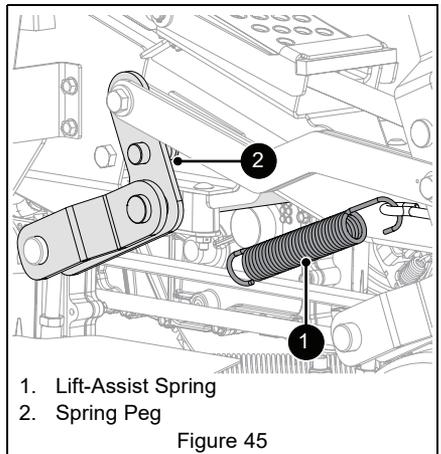
1. Upper Jam Nut
2. Lower Jam Nut

Figure 44

## REMOVE AND INSTALL MOWER DECK

### Remove Deck

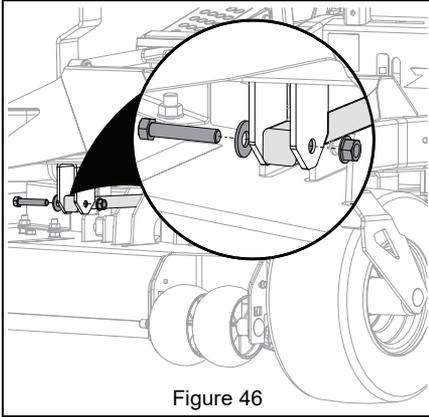
1. Place unit in service position. See *Service Position* on page 16.
2. Set deck to lowest cutting height.
3. Position supports, such as wood blocks, under mower deck.
4. Remove PTO belt. See *Remove PTO Belt* on page 26.
5. Slowly disconnect lift-assist springs from spring peg on each side of deck. See Figure 45.



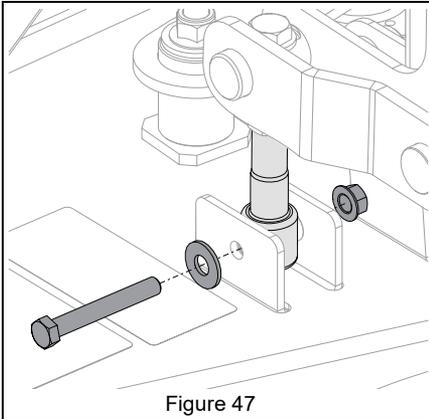
1. Lift-Assist Spring
2. Spring Peg

Figure 45

- Remove hardware retaining drag links to frame. See Figure 46.



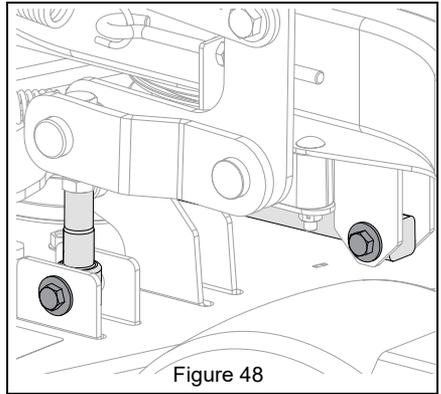
- Remove hardware retaining deck lift links to deck lift brackets. See Figure 47.



- Remove deck from under unit.

### Install Deck

- Position deck under unit.  
See Figure 48.
- Reinstall drag links to frame with original hardware.
- Secure deck lift links to deck lift brackets with original hardware.



- Reinstall PTO belt. See *Install PTO Belt* on page 27.
- Reconnect lift-assist springs to spring pegs.
- Level the deck. See *Level and Pitch Mower Deck* on page 31.

## LEVEL AND PITCH MOWER DECK

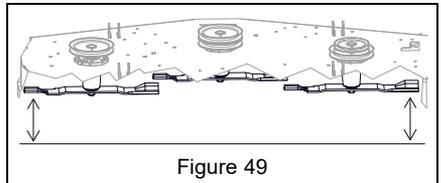
**IMPORTANT:** Make sure unit is on a flat, level surface and that tires are inflated to the recommended pressures.

### Check Blade Level and Pitch

- Raise deck to 3 1/2" (8.9 cm) cutting height.
- Stop engine, remove key and wait for moving parts to stop and for hot parts to cool.
- Engage parking brake.

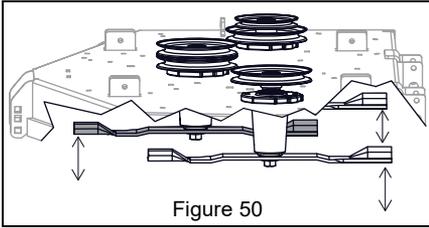
See Figure 49.

- Position mower blades so ends point left to right across the width of the deck.
- Measure the distance between the ground and the cutting edge of the left and right blades. If the measurements are not within 4.7 mm (3/16") of each other, level the deck. See *Level and Pitch Mower Deck* on page 31.



See Figure 50.

6. Position mower blades so ends point front to back and measure the following:
  - At the front of the deck, measure the distance between the ground and the cutting edge of the middle blade.
  - At the rear of the deck, measure the distance between the ground and the cutting edge of the left and the right blades.

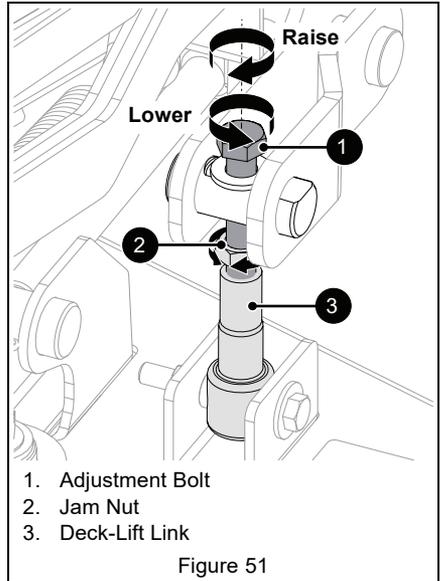


If the front measurement is not 3.2 mm (1/8") lower than the rear measurements, adjust the blade pitch. See *Adjust Blade Pitch* on page 33.

## Level Mower Deck

See Figure 51.

1. Lower the high side of deck:
  - a. Loosen jam nuts against deck-leveling links.
  - b. Turn adjustment bolts counterclockwise.
  - c. Measure distance between the ground and cutting edges of left and right blades. Continue adjustment if necessary.
  - d. Tighten jam nuts against deck-leveling links.
2. Raise the low side of deck:
  - a. Loosen jam nuts against deck-leveling links.
  - b. Turn adjustment bolts clockwise.
  - c. Measure distance between the ground and cutting edges of left and right blades. Continue adjustment if necessary.
  - d. Tighten jam nuts against deck-leveling links.



## Adjust Blade Pitch

**IMPORTANT:** Side-to-side deck heights MUST remain level even after completing pitch adjustment.

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

1. Increase forward pitch:
  - a. Loosen jam nuts against all deck-leveling links.
  - b. Turn front adjustment bolts counterclockwise to lower deck front.
  - c. Turn rear adjustment bolts clockwise to raise deck rear.
  - d. Check adjustment. See *Check Blade Level and Pitch* on page 31.
  - e. Tighten jam nuts against deck-leveling links.
2. Decrease forward pitch:
  - a. Loosen jam nuts against all deck-leveling links.
  - b. Turn front adjustment bolts clockwise to raise deck front.
  - c. Turn rear adjustment bolts counterclockwise to lower deck rear.
  - d. Check adjustment. See *Check Blade Level and Pitch* on page 31.
  - e. Tighten jam nuts against deck-leveling links.

## 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 17.
	Fuel tank is empty.	Fill fuel tank. See <i>Before Operating Unit</i> on page 13.
	Fuel supply is contaminated.	Replace with clean fuel.
	Battery is discharged.	Charge battery. See <i>Install U1 Battery</i> on page 20.
	Connection between battery and battery cables is poor.	Tighten and/or clean battery and battery cables. See <i>Clean Battery</i> on page 20.
	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 Ariens dealer.
<b>Engine runs rough.</b>	Engine is faulty.	Contact your Ariens dealer.
	Choke control knob is in on position.	Move knob to off position.
	Air filter cartridge is plugged.	Clean or replace air filter cartridge. Refer to engine manual.
<b>Engine overheats.</b>	Engine is faulty.	Contact your Ariens dealer.
	Engine oil level is low.	Add engine oil. Refer to engine manual.
	Cooling fins are plugged.	Clean engine. Refer to engine manual.
<b>Unit does not drive.</b>	Engine is faulty.	Contact your Ariens dealer.
	The transaxles are bypassed.	Engage levers. See <i>Move Unit Manually</i> on page 15.
	Transaxle drive belt is faulty.	Contact your Ariens dealer.
<b>PTO malfunctions.</b>	Transaxles are faulty.	Contact your Ariens dealer.
	Operator presence switch is not engaged.	Activate switch by sitting on operator seat.
	Operator presence switch is faulty.	Contact your Ariens dealer.
	PTO belt is faulty.	Replace belt. See <i>Replace Mower Belts</i> on page 26.
<b>Unit moves with engine off and parking brake engaged.</b>	PTO switch, wiring, connectors or clutch are faulty.	Contact your Ariens dealer.
	Parking brake needs adjustment.	Adjust parking brake lever. See <i>Adjust Parking Brake Lever</i> on page 30.
<b>Unit does not drive straight.</b>	Parking brake is faulty.	Contact your Ariens dealer.
	Tire pressure is incorrect.	Check tire pressure. See <i>Specifications</i> on page 37.
	Steering levers need adjustment.	See <i>Adjust Steering Levers</i> on page 23.
<b>Unit creeps when steering levers are in neutral position.</b>	Transaxles and/or linkages need adjustment.	Contact your Ariens dealer.
	Transmission and/or linkage need adjustment.	Contact your Ariens dealer.

## TROUBLESHOOTING

Problem	Probable Cause	Correction
<b>Poor cutting quality.</b>	Mower blades not level or mower deck pitch is incorrect.	Level and adjust pitch of mower deck. See <i>Level and Pitch Mower Deck</i> on page 31.
	Mower blades are dull or faulty.	Sharpen or replace mower blades. See <i>Sharpen Blades</i> on page 19.
	Mowing speed is too fast.	Drive slower when cutting grass.
	Belt tension or condition is poor.	Replace mower belts. See <i>Check Mower Belts</i> on page 21.
	Cutting height is too low.	Do not set height of cut too low. For very tall grass, mow twice.
<b>Blades do not stop within 5 seconds.</b>	Clutch brake plates worn.	Reverse clutch brake plates. See <i>Reverse Clutch Brake Plates</i> on page 29. If clutch brake plates have already been reversed, replace clutch.

## 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:** Ariens 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 17) 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 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 Schedule* on page 17.
3. Touch-up all scratched painted surfaces.
4. Remove and charge battery as directed in *Install U1 Battery* on page 20. Store battery in a cool, dry, protected area.
5. Store unit in a cool, dry, protected area. DO NOT store unit outdoors.

### START-OF-SEASON PREPARATION

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.

## ACCESSORIES

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

Description	Part No.
Mulch Kit – 52"	79105800
Mulch Kit – 60"	79105900
Hitch Kit	79202300
Headlight Kit	79106800
Light Operator Seat Spring Kit	79107000

# SPECIFICATIONS

Model Number	991320	991321	991322	991323
<b>Description</b>	Zenith 52 Side Discharge	Zenith 52 Rear Discharge	Zenith 60 Side Discharge	Zenith 60 Rear Discharge
<b>Engine</b>	Kawasaki FX 730V			
Engine Displacement – cm <sup>3</sup> (in <sup>3</sup> )	726 (44.3)			
Maximum RPM – No Load	3100			
Oil Capacity	Refer to engine manual.			
Liquid or Air Cooled	Air			
<b>Transmission</b>				
Type	Hydrostatic Drive			
Oil	15W-50 synthetic motor oil (Ariens p/n 00057100) or equivalent			
Hydraulic Oil Filter	Yes			
<b>Drive</b>				
Forward Maximum – km/h (mph)	12.9 (8)			
Reverse Maximum – km/h (mph)	6.4 (4)			
Turning Radius	Zero			
Brakes	Parking			
<b>Electrical</b>				
Starter	Electric			
Battery	12-Volt 12A-190 CCA (U1 Replaceable)			
PTO (Power Take-off)	Electric PTO Clutch / Brake			
<b>Fuel</b>				
Fuel Tank Capacity – Liter (gal)	19.3 (5.1)			
Type	See Engine Manual			
<b>Size and Weight</b>				
Length – cm (in)	200.7 (79)			
Width – cm (in)	190.5 (75)			
Height – cm (in)				
• with ROPS extended	184.2 (72.5)			
• with ROPS folded	124.5 (49.0)			
Weight – kg (lbs)	420.2 (926.4)	411.0 (906.1)	429.1 (946.0)	422.7 (931.9)
<b>Tires</b>				
Front Tire Size – in	13 x 6.5-6			
Rear Tire Size – in	22 x 10.5-12		22 x 12-12	
Recommended Front Tire Pressure – kPa (psi)	137.9 – 172.4 (20 – 25)			
Recommended Rear Tire Pressure – kPa (psi)	103.4 – 124.1 (15 – 18)			
<b>Mower Deck</b>				
Cutting Height – cm (in)	3.8 – 12.7 (1.5 – 5.0)			
Cutting Height Increments	0.635 (0.25)			
Cutting Width – cm (in)	132.1 (52)		152.4 (60)	
Mower Deck Lift	Mechanical Pin Lock			

**CE Sound and Vibration (Ref. EN ISO 5395-3:2013 + A1:2017 + A2:2018)**

<b>Model Number</b>	<b>991322</b>	<b>991323</b>
Oper. Ear Sound Pressure (Lpa) in dBA	91	
Uncertainty in dBA	2.55	
Measured Sound Power Level (Lwa) in dBA	104	
Uncertainty in dBA	1	
Guaranteed Sound Power Level (Lwa) in dBA	105	
Vibration Measure ( $m/s^2$ ) at Operator Hands	2.55	
Uncertainty in $m/s^2$	1.28	
Vibration Measure ( $m/s^2$ ) at Operator Seat	0.556	
Uncertainty in $m/s^2$	0.278	



# ARIENS®

## Outdoor Power Equipment Limited Warranty

AriensCo warrants to the **original purchaser** that Ariens brand products purchased on or after 09/01/2022 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 Ariens 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
AA	Serialized Attachments	1 Year.
CH, CQ	ZENITH Mowers	4 Years or 750 Hours.*
HD	RAZOR Walk-Behind Mowers	3 Years Residential Use. 90 Days Commercial Use.
HE	EDGE Mowers	2 Years or 150 Hours.*
HF	IKON Mowers	3 Years or 300 Hours.*
HH	APEX Mowers	4 Years or 500 Hours.*
HI	RAZOR Walk-Behind Mowers	4 Years Residential Use. 90 Days Commercial Use.
PA	921-Series Brushes	3 Years Residential Use. 90 Days Commercial Use.
PB	926-Series Brushes	3 Years Residential Use. 1 Year Commercial Use.
SA	Professional Sno-Thro	3 Years Residential Use. 1 Year Commercial Use.
SB	Compact, Deluxe and Platinum Sno-Thro and Path-Pro	3 Years Residential Use. 90 Days Commercial Use.
SC	S18	2 Years Residential Use. 90 Days Commercial Use.
SD	Deluxe and Platinum EFI Sno-Thro	3 Years Residential Use. 90 Days Commercial Use.
SE	920-Series Classic Sno-Thro, Crossover	3 Years Residential Use. 90 Days Commercial Use.
SF	MAMMOTH Tractor	2 Years or 500 Hours.*

\* 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
SA	Cast Iron Auger Gear Case	5 Years.
SB, SD	Cast Iron Auger Gear Case	5 Years Residential Use. 1 Year Commercial Use.

## Exclusions and Limitations

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

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

Hydro-Gear Transaxle Limitation
See Hydro-Gear warranty. The warranty is administrated by AriensCo. Refer to <a href="http://www.ariens.com">www.ariens.com</a> for warranty statement.

Warranty Term Limitations	Warranty Period
Cloth, Plastic and Rubber Components. Mufflers, Tires and Belts.	Components are covered for manufacturer's defect only, not wear.
Parker Actuators	1 Year.

### Exclusions – Items Not Covered by This Warranty

- Parts that are not genuine Ariens 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 AriensCo 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.**
- **Any tampering with the hour meter 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. AriensCo 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 AriensCo 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.

### Battery Warranty

Battery warranty is one year. Units used for rental or lease have no exceptions to the 90-day warranty. Total battery claim reimbursement will not exceed 45.00 USD.

## Transmissions

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

Transmission Manufacturer	Detail
Hydro-Gear Transaxle	See Hydro-Gear warranty. The warranty is administrated by AriensCo. Refer to <a href="http://www.ariens.com">www.ariens.com</a> for warranty statement.
Parker Hannifin Drive & Valve Systems	Parker Transaxles, Pumps, Wheel Motors and Valves* are warranted for the length of equipment warranty period. Refer to Warranty Code chart above. Warranty is administered by AriensCo.

\* Parker Actuators see Limitations chart above.

## 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
Ariens AX	Ariens-branded engines are warranted by the manufacturer and the warranty is administrated by AriensCo. Refer to the engine manual or <a href="http://www.ariens.com">www.ariens.com</a> for warranty statements.
Briggs & Stratton, Kawasaki, Kohler	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. 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.ariens.com](http://www.ariens.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 AriensCo or an authorized Ariens service representative of the need for warranty service.
- Transport the product to and from the place of warranty service at owner's expense.
- Have the warranty service performed by an authorized Ariens 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:
AriensCo 655 W. Ryan Street Brillion, WI 54110 Phone: (920) 756 - 4688 <a href="http://www.ariens.com">www.ariens.com</a>	Roy Gripske & Sons Pty Ltd 11 Sodium Street Narangba Queensland 4504 Australia Phone: (61130) 036 3004 <a href="http://www.rgs.com.au">www.rgs.com.au</a>	Masport Ltd 320 Ti Rakau Drive East Tamaki Auckland 2013 New Zealand Phone: 0800 627 7678 <a href="http://www.masport.co.nz">www.masport.co.nz</a>

## ***Disclaimer***

AriensCo may from time to time change the design of its products. Nothing contained in this warranty shall be construed as obligating the AriensCo 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***

AriensCo 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. AriensCo 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.

AriensCo shall not be held liable for damages, including premature wear and tear, or injuries caused by installation of unauthorized parts and accessories or for parts and accessories not installed by an authorized Ariens dealer.

## ***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***

AriensCo 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 AriensCo, 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.*





**ARIENS®**

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