

Operator's Manual

# Slope-Pro®

Remote Controlled Slope Mower

Serial No. 2052175 and up



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## Introduction

Thank you for purchasing a Slope-Pro® machine. This product is designed and manufactured to allow safe and productive mowing in difficult conditions. A well-maintained machine will provide years of reliable service.

## Foreword

This is the Operator's Manual for the Slope-Pro® machine. Keep it with the machine at all times. This manual is intended as a guide to the use and maintenance of the machine, so before you operate this machine, study this manual carefully.

### Replace this manual immediately if it becomes lost.

This manual is not considered all-inclusive, so for further information on specific components, e.g. engine, remote control etc., refer to the respective documents included with the manual set for this machine.

The Slope-Pro® machine is a fully remote-controlled, tracked machine designed to tackle difficult locations minimizing the risks to the operator, equipment, and terrain. It employs a gasoline powered EFI engine to power the hydrostatic drive system and mower blades. It is a significant product innovation emphasizing operator safety and productivity in demanding mowing applications.

### Features

- Operating range up to 300 ft from remote control – recommended maximum
- Zero-turn capability
- Operates on inclines up to 50°
- Fuel capacity for all-day operation
- Reduced risk of injury
- No emissions around operator
- No vibrations to hands or body

### Applications

- The Slope-Pro® is ideal maintaining steep slope or hazardous locations, preventing the growth of brush, weeds in areas such as:
  - Roads and highways
  - Parklands and estates
  - Reservoir and canal embankments
  - Landfill Sites
  - Railway embankments
  - Military bases / restricted environments

### OSHA Training Requirements (USA)

The following training requirements have been taken from Title 29, Code of Federal Regulations Part 1928.57 (a) (6). [www.osha.gov](http://www.osha.gov)

Operator Instructions. At the time of initial assignment and at least annually thereafter, the employer shall instruct every employee in the safe operation and servicing of all covered equipment with which he is or will be involved, including at least the following safe operating practices.

### In other jurisdictions

It is good practice, following the initial instruction and at least annually thereafter, the employer shall instruct every employee in the safe operation and servicing of all covered equipment with which he is or will be involved, including at least the following safe operating practices.

–

### Items Included with the Slope-Pro® machine

- Slope-Pro® machine Operator's Manual
- Nbb Operator's Manual for remote control / transmitter
- Kohler Engine Manual
- Machine parts book
- Remote control / transmitter
- Battery charger for remote control / transmitter
- Tool kit (tension release wrench, grease gun, blade balancer tool)
- Brake release tools (two of each: tube, bolt and nut)

### Serial Number Location

The serial number plate for the machine is located on the left-hand rear frame.

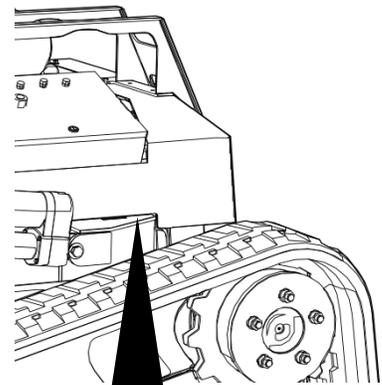
For quick reference, record the following information:

Model: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Date purchased: \_\_\_\_\_

Always state this information when contacting your selling dealer and when ordering spare parts.



<b>PROGRESSIVE TURF EQUIPMENT INC.</b>	
137 West William St., Seaford Ontario Canada	
Phone 519-527-1080	Fax 519-527-2275
Web Site: <a href="http://www.progressiveturfequip.com">www.progressiveturfequip.com</a>	
PRODUCT: Rotary Finishing Mower	
MODEL:	<input type="text"/>
Made In Canada	<input type="text" value="S.N."/>

### Parts Information

Use only Genuine Original Equipment Manufacturers (O.E.M.) replacement parts. The use of "will fit" parts may reduce machine performance, void machine warranties and present a safety hazard. Use Genuine OEM parts.

 <b>WARNING!</b>
<b>USE ONLY GENUINE O. E. M. REPLACEMENT PARTS</b>
- ESPECIALLY CRITICAL ON THE CUTTING BLADES -

 <b>WARNING!</b>
Operating, servicing and maintaining this equipment can expose you to chemicals including engine exhaust, carbon monoxide and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm.
To minimize exposure, avoid breathing engine exhaust, do not idle the engine more than necessary, service equipment in a well-ventilated area and wear gloves or wash your hands frequently when servicing the equipment.
For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

## Unauthorized Modification

- A) Modifications to the original design of the Slope-Pro® machine, including the use of unauthorized accessories or non-genuine OEM parts, may affect the reliability of the machine or make it unstable or unsafe to operate and perform as originally designed and intended. Persons or organizations that make unapproved modifications assume all liability arising from or related to the modification including any adverse affect on the machine.
- B) No modification can be made to the original design or assembly of the Slope-Pro® machine (including any and all attachments, safety or control devices) without the prior written consent of Progressive Turf Equipment's (PTE) Engineering Manager (see contact information below). PTE retains the right to reject all claims which arise from or are related to unauthorized modifications.
- C) Modifications are officially approved if at least one of the following conditions is met:
  - a. The attachment, accessory or part is distributed by Progressive Turf Equipment and is intended for a Slope-Pro® machine application and installed in an approved manner as described in Progressive Turf Equipment's provided instructions; or
  - b. The modification has been approved in writing by the Progressive Turf Equipment's Engineering Manager.
- D) No other entity is authorized by Progressive Turf Equipment to provide such approval.

## Misuse of the Equipment

It is incumbent upon the owner and selling dealer along with their respective employees to warn and discourage users about the misuse of the equipment whenever knowledge of misuse becomes known, whether the act has, is or could occur. Such acts include, but not limited to: riding upon, use of non-OEM parts, operation on unstable or steeper slopes than specified, operating in explosive or fire-hazard areas, modifications that alter the original machine specifications or use other than originally intended, etc.

## Notification of Unauthorized Modification or Misuse

If any person, employee, agent, dealer or distributor becomes aware of any Unauthorized Modification or Misuse of a Slope-Pro® machine, either past or intended, it is the responsibility of that person to ensure that Progressive Turf Equipment Inc's Engineering Manager is notified of the occurrence promptly. That person shall provide; the facts of the occurrence, location, machine serial number, name and contact information of the persons involved.

Send correspondence regarding Unauthorized Modification or Misuse to:

Progressive Turf Equipment Inc.  
137 West William St  
Seaforth, Ontario  
Canada  
N0K1W0

Attn: Engineering Manager

## Product Design

The Slope-Pro® machine has been designed and produced using generally acceptable manufacturing processes as is standard in the industry for the type of equipment that is similar to the machine. As such, the useful life of the machine is ten (10) years from the date of manufacture.

## The official language of the manufacturer is English.

No responsibility is assumed for translations in other languages, which do not correspond to the original meaning.

Slope-Pro® is a Registered Trademark of Progressive Turf Equipment Inc.



## Safety Alert Symbol

This symbol appears at various points in the manual together with a signal word and warning text. It means – be alert! Your safety is involved. This symbol is used throughout the manual to call attention to areas in which carelessness or failure to follow specific procedures may result in personal injury and/or component damage or malfunction.

### Signal Words

**DANGER!** – On a red background - Identifies the most serious hazards where failure to follow listed procedures will result in a high probability of death or serious injury.

**WARNING!** – On an orange background - Denotes a hazard exists that could result in serious injury or death if proper precautions are not taken.

**CAUTION!** – On a yellow background - Is used in areas where failure to follow listed procedures may cause personal injury, component damage or subsequent malfunction.

## Safety Rules

Our policy is to produce products that are safe and reliable. However, even when using well-engineered equipment, there is always an element of risk. To minimize the risks and promote safety at all times, this section of the Operator's Manual details a number of safety rules that must always be followed and obeyed.

Further safety rules and warning texts are given within the respective sections of this manual.

**IMPORTANT! When it comes to safety, nothing will ever replace a careful operator.**

It is imperative that the operator reads and understands all the safety information in this manual before proceeding. Failure to follow the instructions or heed the warnings could result in injury or death. **Proper care is your responsibility.**

The manufacturer cannot anticipate every possible circumstance that might involve a hazard. The hazard alerts in this publication and on the product, are therefore not all inclusive. If a tool, procedure, work method, or operating technique not specifically recommended by the manufacturer is used, it is your responsibility to ensure that it is safe for you and others. You should also ensure the machine will not be damaged or made unsafe by the operation, maintenance, or repair procedures you choose. Modifications or adaptations to the machine are not allowed.

- It is the obligation of the operator to make sure that all guards and shields are in place on the machine. Safety decals must be in place and be readable – accidents may otherwise occur. Contact your dealer or Progressive Turf Equipment Inc. for replacement manuals or decals.
- Should there be any information or instructions in this manual that are not in compliance with local laws or regulations in force in the country or region where this equipment is operated, the local laws and regulations must take precedence.

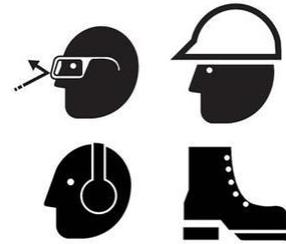


## Safety Precautions

### WARNING!

The operator of this machine must be at least 18 years of age and have sufficient knowledge and instructions before he / she uses the machine. Do not allow unauthorized persons or children to operate the machine.

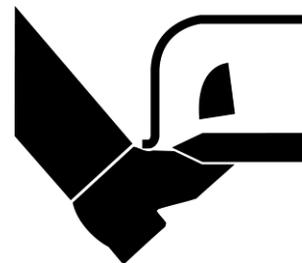
Untrained operators may cause severe injuries or even fatalities. Therefore, it is important that you read and follow the instructions of this Operator's Manual.



### WARNING!

Do not ride or allow riders on the machine. Operate the machine remotely using the controller provided from a safe distance.

- Never use a machine that does not have an Operator's Manual available. Learn and understand the safety signs and symbols on the machine and the operator instructions before you begin to use the machine.
- Wear protective clothing (PPE) – know and use the protective equipment that is to be worn when operating or servicing the machine. Hard hats, protective glasses and face shields, protective shoes, gloves, reflector type vests, and ear protection are types of equipment that may be required. Prolonged exposure to loud noise can cause hearing damage.
- Operate the machine only when physically capable and not under the influence of alcohol or drugs.
- Keep all bystanders well away from the machine when it is operating. Always maintain a safe operating distance from personnel or other equipment.
- Carefully walk the entire area to be mowed beforehand. Look for debris, rocks, tree limbs that could damage or be thrown by the mower blades. Tall grass can hide obstacles.
- Use extra caution when approaching corners, shrubs, trees, or other objects that could obscure vision. Reposition yourself to avoid these conditions. Maintain visibility to the work zone.
- Disengage the blades (PTO) when crossing gravel areas or roadways.
- Always STOP the engine when leaving the machine unattended, turn off the remote control and remove the ignition key and keep the remote control and ignition key in a secure place so that the machine cannot be operated by unauthorized users. See page 28.
- Adhere strictly to all regulations at the worksite pertaining to the operation of this equipment.
- Never remove any element of the exhaust system or any covers and devices from the operational machine.



- Do not use the machine in limited visibility (e.g. Dusk, fog, heavy rain etc.). Mow only in daylight or good artificial light.
- Do not operate the machine with the hood open, removed or with any covers removed. Do not put hands, feet or loose clothing near power driven parts.
- Stop engine / press emergency stop button before allowing anyone to approach the machine.
- Do not touch the engine, exhaust or hydraulic system while running or just after stopping. Hot parts can cause severe burns.

## **WARNING!**

**Engine exhaust gases contain poisonous carbon monoxide. Carbon monoxide is odorless, colorless, and can cause death if inhaled. Do not run engine in confined areas.**

## Operation with the Remote Control

## **WARNING!**

**Machine is operated by remote control and can remain functional beyond the recommended maximum 300 foot operating range. It is the Operator's responsibility to control the machine in a safe manner.**

**Always know and observe the local regulations and or restrictions pertaining to the operation of remote controlled equipment.**

- While operating, the machine must always remain in line of sight of the operator.
- As the machine travels away from the operator, the Operator's ability to determine exact positioning is reduced due to lack of depth perception. Recommended maximum distance between the machine and the Operator is 300 feet, but may be less depending upon Operator skill level, experience and local conditions.
- Whenever the machine is moving or the blade PTO is engaged the operator must remain a minimum of 25 feet away.
- Do not leave the remote control unattended with the engine running.
- When operating the machine in wet / low traction conditions, be aware that the machine can slide, especially on slopes. Position yourself, others and other objects (such as other equipment) accordingly so that the machine will not slide into anyone or anything and no one and no objects will slide or fall into the machine.
- Always mow across the face of slopes, never up and down.
- Never position yourself up or down slope from the machine or in the direction of travel. Even though the Slope-Pro® machine has a fail-safe emergency shut-off system, falling into a running machine can cause severe injury.



## Thrown Objects Hazard



Mowers can throw objects 300 feet or more under adverse conditions.

To avoid serious injury or death to operator or bystanders from thrown objects:

- Keep bystanders 300 feet away and keep everyone away from the blade exhaust area from which objects can be thrown.

▪

**Inspect area for potential thrown objects before mowing:**

- **Remove** debris, rocks, wire, cable, metal objects and other foreign materials from area. Wire, cable, rope, chains and metal objects can be thrown or swing outside deck with great velocity:
- **Mark** all objects that cannot be removed.
- **Avoid** these objects when mowing.

**High grass and weed area inspection**

- **Inspect** for and **remove** any hidden large debris.
- **Mow** at an **intermediate** height.
- **Inspect** and **remove** remaining debris.
- **Mow** at final height.

**Machine thrown object shielding:**

- **Keep all thrown object deflectors** in place and in good condition when mowing.
- **Do Not Operate** with any thrown object deflectors missing, damaged or removed

**Right of Way (Highway) Mowing**

- No shielding is 100% effective in preventing thrown objects. To reduce the possibility of injury:
- Maintain machine shielding and blades in good condition.
- Raise cutting height to 6 inches minimum.
- **Inspect area** thoroughly before mowing to remove potential thrown object hazards.
- **Never allow blades to contact solid objects** like wire, rocks, posts, curbs, guardrails or ground while mowing.

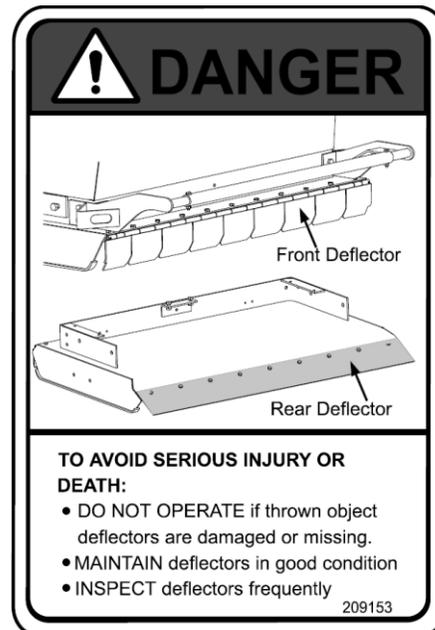
Various jurisdictions have specific requirements for work zone safety. Know and adhere to your local requirements. Treat the instructions in this manual as minimum requirements for safe operation.

A careful and informed operator is the safest operator.



### Mower Operation

- **Do not** exceed mower's rated cutting capacity or cut non-vegetative material.
- **Adjust** cutting height to **AVOID BLADE CONTACT** with solid objects like wire, rocks, posts, curbs, guard rails and fixed obstructions.
- **Do not** travel or transporting between work sites with the blade PTO engaged.
- **STOP MOWING** immediately if blades strike heavy objects, fixed structures, metal guard rails and concrete structures:
- **Blades can fail** from poor maintenance practices and objects can be thrown with great velocity.
- **Inspect** and **replace** any damaged blades.
- **Check** blade bar and spindle for any damage.
- **Do not** mow in standing water
- Stop mowing when EXCESSIVE VIBRATION occurs:
- Stop mower blades and engine
- When it is safe to do so, **inspect** mower for vibration source
- **Replace** any damaged parts and bent or damaged **blades**



### DANGER!

#### To avoid serious injury or death from equipment run over:

- Never allow riders on the machine.
- Never ride on the machine.
- Never stand in the path of the machine
- Never stand below or down slope of the machine as it could slide or roll on top of you.
- Never stand directly upslope of the machine, make sure your footing is stable and solid to prevent slipping or falling into the path of the machine.
- Do not operate the machine in areas where you cannot clearly see in front of the machine path. Failure to see a bystander, drop-off or obstruction could result in serious injury or death.
- Only start and operate the machine with the remote control properly fitted to the operator.
- Immediately stop and shut down the machine if a bystander comes within 300 feet of the machine.
- Never operate the machine towards motor vehicle traffic. Mow in a direction parallel to vehicle traffic.



### Fuel Handling Precautions

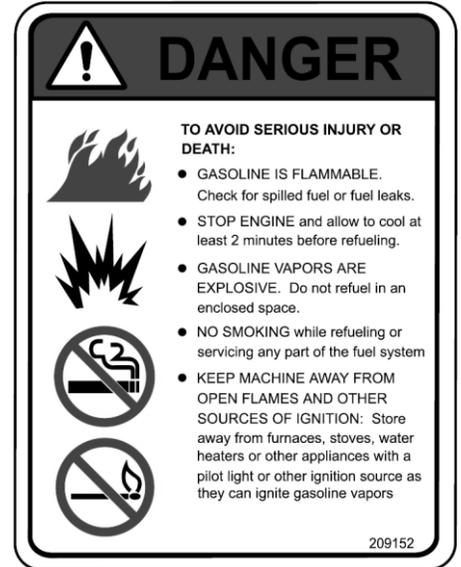
#### **DANGER!**

Gasoline and its vapors are extremely flammable and explosive. Fire or explosion can cause severe burns or death.

- Turn engine OFF when refueling.
- Refill one fuel tank at a time. Remove it from the machine to refill. Replace the empty tank with a full one and properly secure the tank.
- Refuel in a well-ventilated area or outdoors.
- Do not smoke while refueling.
- Do not overfill fuel tanks. Do not fill past “full” mark on fuel tank.
- Keep gasoline away from sparks, open flames, or other ignition sources.
- Check fuel lines, tank caps, hoses and fittings frequently for cracks or leaks. Replace as necessary.
- Never operate the machine without the fuel tank tie-down straps in place.
- Keep the fuel tank cap installed and tight. Should the fuel tank cap be lost, replace it only with the original manufacturer’s approved cap.
- Clean up spilled gasoline immediately. Allow it to evaporate before starting engine.
- Do not operate the machine without muffler, air cleaner, fuel cap or fuel tank vent lines in place.
- Do not crank the engine with the spark plug removed.

### Fire Prevention Precautions

- Prevent combustible debris from collecting on the machine. This debris by itself may not cause a fire, however, when mixed with fuel, oil, or grease in a hot or confined space, the danger of fire increases dramatically.
- Do not operate machine in areas with fire or explosive risk
- Check to make sure gasoline and hydraulic hoses are not worn or damaged, and are routed to avoid chafing.
- Inspect wiring for chafing, breakage, and any routing condition that could expose wiring to damage. This is especially important for positive electrical wires that could make contact with the frame (ground). Pay special attention to the cables from the battery to the starter.
- When reconnecting wires, it is important to connect, route and secure them so they are protected from damage and wear. They must not be routed in contact with fuel or oil hoses.



**To reduce the chance of fire, follow these instructions:**

- Clean dust and debris from the machine daily.
- Inspect the machine daily for potential fire hazards and make any necessary repairs immediately.
- Inspect electrical wiring, connections and hydraulic hoses to ensure they are secure and not rubbing against other components.
- Clean up spilt fuel, any excess grease and oil accumulation or spillage immediately.
- Use only non-flammable solutions for cleaning the machine or components.
- Store oily rags and other combustible materials in a safe, fireproof location.
- Before starting repair work such as welding, remove fuel tanks, clean the surrounding area and place a fire extinguisher close by.
- Store flammable fluids away from fire hazards. Do not incinerate or puncture pressurized containers.

**Battery Maintenance Precautions**

The Slope-Pro is equipped with an Absorbed Glass Mat (AGM) battery and contains no liquid acid within. However, all precautions regarding general battery handling should be observed.

Batteries produce explosive gases. Keep sparks, flames, smoking materials, and other ignition sources away from batteries.

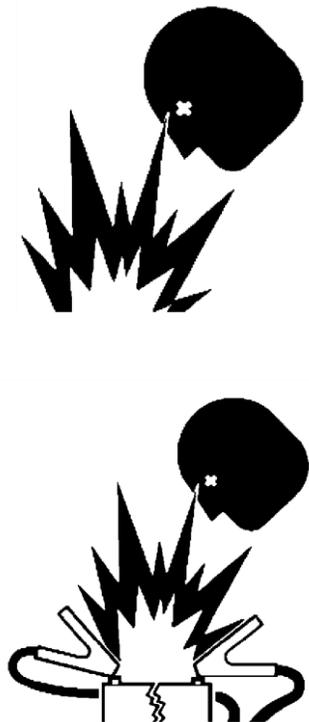
**! WARNING!**

**Explosive gases. No smoking. Keep sparks and flames away from batteries.**

- Never lean over a battery during charging or testing operations.
- Be familiar with procedures for charging and testing a battery. Read and follow the manufacturer's instructions for the battery charger.
- Remove battery from the vehicle before attempting to charge.
- Place a wet cloth over the battery and its vent before charging. Ensure that the cloth is not placed near any belts or any other moving parts.
- Disconnect the negative cable first when removing a battery. Connect it last when installing a battery.
- Do not let metal objects come in contact with the battery terminals.

**! WARNING!**

**Use only voltage regulated battery chargers. Use of constant current chargers can lead to an over-charge condition. Subsequent gas pressure build-up can cause an explosion. Severe personal injury or death could result.**



## Welding and Grinding Work Precautions

**IMPORTANT! A fire extinguisher should be easily accessible during all welding work.**

- Disconnect battery, the receiver and antenna cables.
- Welding repairs are to be performed by a trained welder with proper service instructions. Know the material to be welded and select the correct welding procedure and materials (electrodes, rods, wire) that will provide a weld metal strength equivalent to the parent material.
- Move the machine to a clean, safe area before welding, grinding or using any cutting torch on it. This type of work should only be done in a clean area and not in places that contain combustible liquids, such as fuel tanks, hydraulic pipes or similar.
- Connect arc welder ground as close as possible to work area.
- Work with extra care when welding, grinding or torch cutting near flammable objects.

## Work on Painted Surfaces

Heated paint gives off poisonous gases. Therefore, paint must be removed from an area with a radius of at least 4 in (10 cm) before carrying out welding, grinding, or gas cutting. In addition to the health hazard, the weld will be of inferior quality and strength if the paint is not removed.



Methods and precautionary measures when removing paint:

- Blasting – use respiratory protective equipment and protective goggles.
- Paint remover or other chemicals – use a portable air extractor, respiratory protective equipment, and protective gloves.
- Grinding – use a portable air extractor, respiratory protective equipment, and protective gloves and goggles.

## Working on Hydraulic Systems Precautions

### **WARNING!**

**Risk of personal injury! Wear safety glasses and use protective gloves.**

Relieve all trapped pressure before performing any service to the hydraulic system. Pressure can be maintained in the hydraulic circuits long after the power source and pump have been shut down.

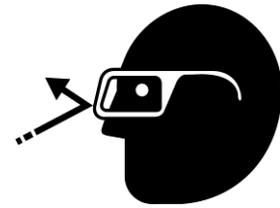
- Relieve all pressure before disconnecting hoses or tubes.
- Tighten all connections before applying pressure.

It is important that each person who comes in contact with the machine be alert to any faults.



Follow these basic precautions:

- Never adjust a pressure relief valve or other pressure-limiting device to a higher pressure than specified.
- Check to make sure hydraulic hoses are not worn or damaged, and are routed to avoid chafing.
- Immediately replace any hydraulic hose that shows signs of swelling, wear, leaks or damage so it does not burst.
- Do not use your hand to check for hydraulic oil leaks. Use a piece of cardboard instead. Hydraulic fluid escaping under pressure can penetrate the skin causing serious injury. If skin penetration occurs, seek medical attention immediately. Relieve all pressure before disconnecting hoses.
- Do not bend or strike high-pressure lines, tubes or hoses, or reinstall them in a bent or damaged condition.



### Handling Hydraulic Oil Precautions

#### **WARNING!**

**Risk of burns! Use protective work gloves.**

- Hot oil can cause painful burns. Use caution when changing the hydraulic oil.
- Oils can irritate and damage the eyes, throat, and sensitive skin. Avoid contact.
- Petroleum based oils are hazardous to the environment. Take special care not to spill or discharge these fluids. Use approved containers and methods to handle and dispose of them.
- Use an authorized disposal and recycling company.



# Safety and Information Decals

**209115 (Under Cowl)**  
**WARNING**  
 USE ONLY GENUINE O.E.M. REPLACEMENT PARTS - ESPECIALLY CRITICAL ON THE CUTTING BLADES -

**209158**  
**WARNING**  
 TO AVOID SERIOUS INJURY FROM HOT SURFACE:  
 • DO NOT touch hot surfaces  
 • DO NOT operate with hood open or covers removed

**209150**  
**DANGER**  
 TO AVOID SERIOUS INJURY OR DEATH:  
 • READ AND UNDERSTAND the provided Operator's Manuals, safety signs and information decals before operating equipment.  
 • CONTACT DEALER immediately if you do not have Operator's manuals.  
 • CONTACT DEALER to explain any instructions not fully understood.  
 • STOP MACHINE. REMOVE KEY, DEPRESS EMERGENCY STOP BUTTON AND WAIT FOR ALL MOVING PARTS TO STOP before servicing, adjusting, reworking, unloading or filling.  
 • ALWAYS WEAR safety glasses, hard hat, hearing protection and safety shoes when operating this equipment.

**209160 (Both Sides)**  
**DANGER**  
 TO AVOID SERIOUS INJURY OR DEATH:  
 • DO NOT ride on machine  
 • NEVER allow riders on machine  
 • NEVER stand in front or behind machine during operation  
 • NEVER stand directly above or below machine when operating on slopes  
 • KEEP BYSTANDERS CLEAR of area before moving machine.

**209153**  
**DANGER**  
 TO AVOID SERIOUS INJURY OR DEATH:  
 • DO NOT OPERATE if thrown object deflectors are damaged or missing.  
 • MAINTAIN deflectors in good condition  
 • INSPECT deflectors frequently

**209157**  
**WARNING**  
 TO AVOID FIRE HAZARDS:  
 • CLEAR AWAY grass or debris from the contact, engine compartment and rear  
 TO AVOID FIRE IGNITION:  
 • DO NOT ALLOW BLADES TO CONTACT rock, metal or soil

**209145 (Both Sides)**  
**WARNING**  
 TO AVOID SERIOUS INJURY OR DEATH:  
 • DO NOT OPERATE with hood open or covers removed

**209156 (Under Cowl)**  
**WARNING**  
 TO AVOID SERIOUS INJURY OR DEATH:  
 • DO NOT OPERATE with hood open or covers removed

**209153**  
**DANGER**  
 TO AVOID SERIOUS INJURY OR DEATH:  
 • DO NOT OPERATE if thrown object deflectors are damaged or missing.  
 • MAINTAIN deflectors in good condition  
 • INSPECT deflectors frequently

**209151 (Both Sides)**  
**DANGER**  
 ROTATING BLADE HAZARD  
 TO AVOID SERIOUS INJURY OR DEATH in operation and maintenance:  
 • STOP moving, Expanding or contracting when blade is down  
 • DO NOT OPERATE with thrown object deflectors removed  
 • KEEP thrown object deflectors in place and in good condition at all times  
 • INSPECT area for potential hazard from object deflectors before moving  
 • REMOVE AND OR AVOID sharp tools or any other foreign material and objects  
 • DO NOT PLACE HANDS ON FEET or any other parts when opening or when engine is running

**209145 (Both Sides)**  
**WARNING**  
 TO AVOID SERIOUS INJURY OR DEATH:  
 • DO NOT OPERATE with hood open or covers removed

**209154 (Both Sides)**  
**WARNING**  
 PINCH POINT HAZARD

**209161 (Both Sides)**  
**WARNING**  
 MACHINE OPERATED BY REMOTE CONTROL

**209164**  
**DANGER**  
 TO AVOID SERIOUS INJURY OR DEATH FROM HIGH PRESSURE HYDRAULIC OIL LEAKS:  
 • PUMP WARNING SIGN  
 • DO NOT touch or spray with oil  
 • KEEP all hydraulic hoses and connections in good condition and light color and keep system pressure  
 • RELEASE pressure before doing maintenance or working on the system  
 • RESIST all hydraulic oil if you splash it on you. Wash immediately with soap and water.  
 • HIGH PRESSURE FLUIDS CAN CAUSE SEVERE BURNING AND DAMAGE TO SKIN AND EYES. ALWAYS WEAR SAFETY GLASSES AND PROTECTIVE GLOVES.  
 • KEEP hands and body away from hoses and fittings when working on them.

**209162**  
**WARNING**  
 TO AVOID SERIOUS INJURY OR DEATH FROM HIGH PRESSURE HYDRAULIC OIL LEAKS:  
 • PUMP WARNING SIGN  
 • DO NOT touch or spray with oil  
 • KEEP all hydraulic hoses and connections in good condition and light color and keep system pressure  
 • RELEASE pressure before doing maintenance or working on the system  
 • RESIST all hydraulic oil if you splash it on you. Wash immediately with soap and water.  
 • HIGH PRESSURE FLUIDS CAN CAUSE SEVERE BURNING AND DAMAGE TO SKIN AND EYES. ALWAYS WEAR SAFETY GLASSES AND PROTECTIVE GLOVES.  
 • KEEP hands and body away from hoses and fittings when working on them.

**209157**  
**WARNING**  
 TO AVOID FIRE HAZARDS:  
 • CLEAR AWAY grass or debris from the contact, engine compartment and rear  
 TO AVOID FIRE IGNITION:  
 • DO NOT ALLOW BLADES TO CONTACT rock, metal or soil

Decal part numbers are shown below the respective illustrations. Always replace damaged or illegible decals. Contact your dealer for a replacement.

## Remote Control Safety Features

A careful and informed operator is the safest operator. Due to the nature of this remote controlled machine, neither the operator nor any bystanders should not be beside this machine while operating. Several safety features have been incorporated into the design of the remote control as outlined below.

Always use both the neck strap and waist belt to secure the remote control to your person. Never hold the remote control in your hands as you may not have full command over the remote control functions in the event of an emergency.



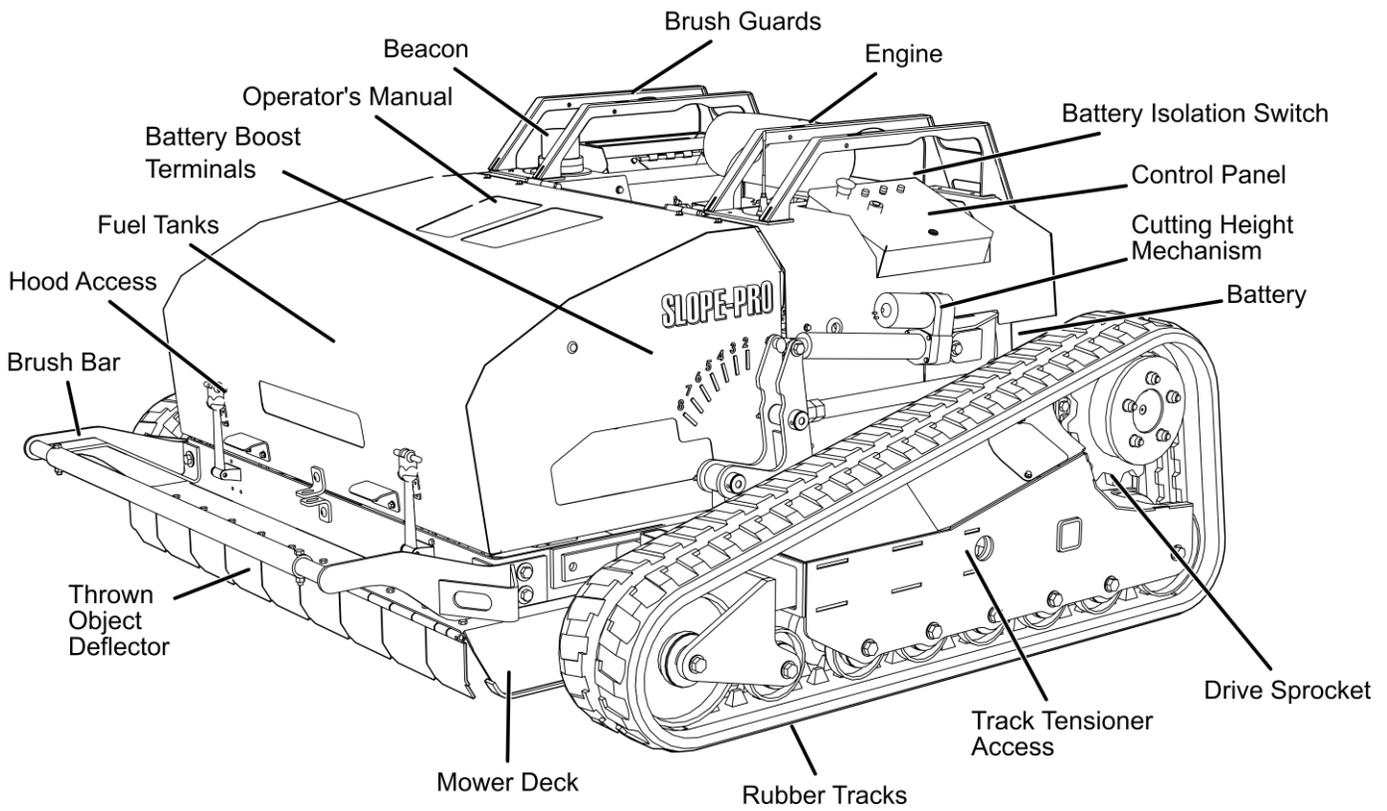
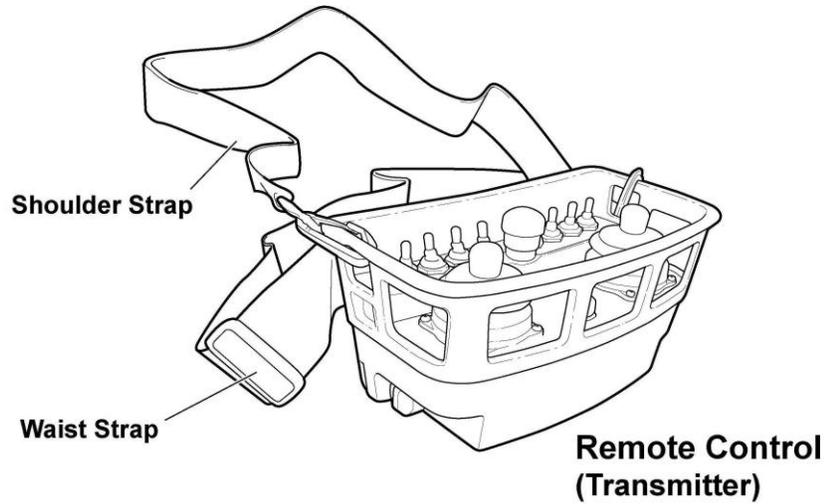
### **WARNING!**

**Machine is operated by remote control and can remain functional beyond the recommended maximum 300 foot operating range. It is the Operator's responsibility to control the machine in a safe manner.**

Feature	Activated when –	Result	Remedy
<b>Engine Start Interlock</b>	Emergency stop(s) applied Drive system or Cruise-Hold engaged (Engine off) PTO engaged (Engine off)	Engine will not start	Release E Stops Return drive to neutral Turn off Cruise-Hold Turn off PTO Re-establish communication
<b>Machine out of Range / Signal Failure Protection</b>	Radio Signal to the machine is lost or machine is out of range from remote control	PTO disengages Drive system stops Brakes are applied Engine remains running	Return drive to neutral Turn off Cruise Hold Turn off PTO Re-establish communication
<b>Foreign Signal / Interference Protection</b>	Any adjacent machinery / equipment is operating on the same frequency	PTO disengages Drive system stops Brakes are applied Engine remains running	Return drive to neutral Turn off Cruise Hold Turn off PTO Re-establish communication Change Frequency (p38)
<b>Emergency Stop Button</b>	An emergency situation occurs and the machine must be stopped immediately	From remote: Engine and drive system shut down. Brakes applied. From Console: Engine, electrical and drive systems shut down. Brakes applied	Correct situation When it is safe to do so, restart in normal manner – See Operating Instructions
<b>Remote Level Switch</b>	Remote is tipped over approximately 45° in any direction	Engine and drive system are stopped. Brakes are applied	Return drive to neutral Turn off Cruise Hold Turn off PTO Re-establish communication

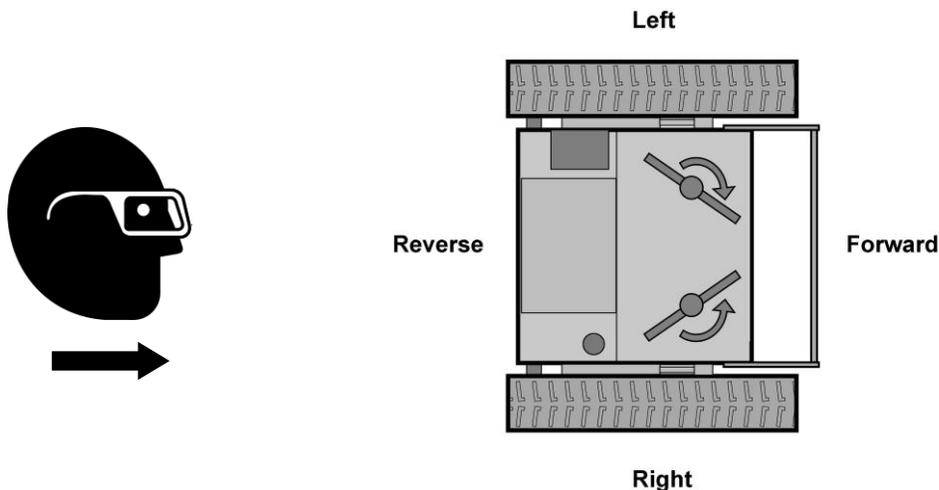
# General Information

## Slope-Pro® Machine Major Components



### Direction References

Throughout this manual, references are made to left-hand and right-hand directions. All directions are indicated with the operator standing at the rear of the machine facing the direction of forward travel.



### Machine Specifications

Engine	– Kohler Command-Pro EFI Engine - 747cc
Travel Speeds	– Infinitely variable up to 4.3 mph
Traction Drive	– Two variable displacement axial piston pumps – Two fixed displacement cam-lobe radial piston motors – Two spring-apply / hydraulic release multi-disc brakes
Cutting Deck Drive	– Belts and electric clutch
Cutting System	– Two-blade rotary – Maintenance-free spindles
Cutting Height	– 2.25 – 8 in
Working Width	– 52 in
Tracks	– Turf Friendly – 9 in wide X 48 in ground contact
Remote Control	– Remote control of all machine functions – 300 foot recommended maximum operating range – Internal switch stops engine and drive, and applies brakes when remote control is tilted more than 45° fore/aft or side to side – Controller-Compact M2 receiver. 7.2V rechargeable
Fuel Tanks	– Two removable 3.2 gal with sight level gauges and quick-disconnect lines
Dimensions	78 in Wide X 80 in Long X 38.75–44.5 in High
Weight	2830 lb

# Controls

## Control Panel

The following controls are located on the control panel on the machine.

### 1. Ignition Switch

This is a three-position switch. The engine cannot be started with this switch from the control panel. Turn the switch clockwise to RUN (I) position to power on the electrical system. Turn the switch counter-clockwise to turn the engine OFF and power off the electrical system.

O = OFF      I = RUN

The left hand most counter-clockwise position is not used

### 2. Emergency Stop Switch (red)

Press the button to kill engine power in an emergency. Pull to release. An emergency stop button is also located on the remote control.

### 3. Check Engine (red)

If illuminated, indicates an engine problem.

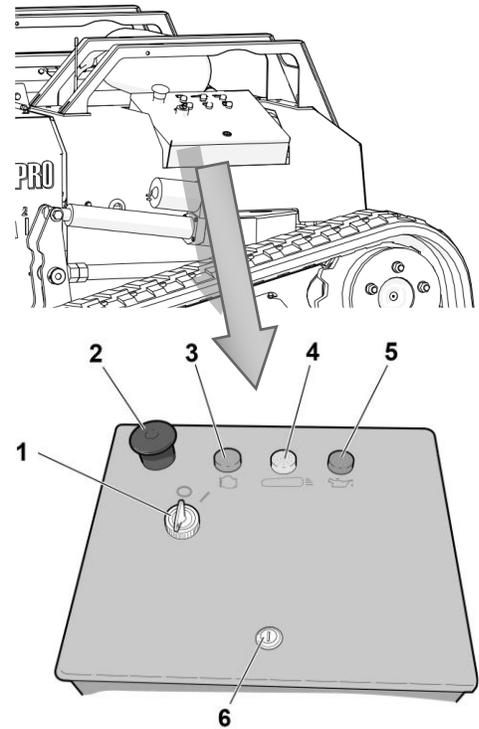
### 4. Drive System (amber)

If illuminated, indicates the drive system is activated

### 5. Low Engine Oil Pressure (red)

If illuminated, indicates an engine oil pressure problem.

### 6. Panel Lock



## Service meter / Tachometer

The Service meter mounted to the left side of the engine. When running, the tachometer displays engine rpm. When the engine is stopped, engine running hours are displayed.



## Remote Control

The remote control is considered part of the machine. For more information refer to the remote control user manual supplied with the manual set for the machine.

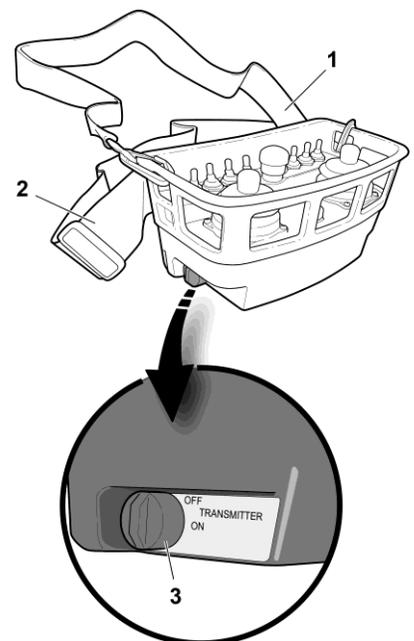
### 1. Shoulder Strap, 2. Waist Strap

Place these straps over your head and around the shoulders / waist to support the remote control. Adjust for a comfortable fit.

### 3. Remote ON / OFF Switch

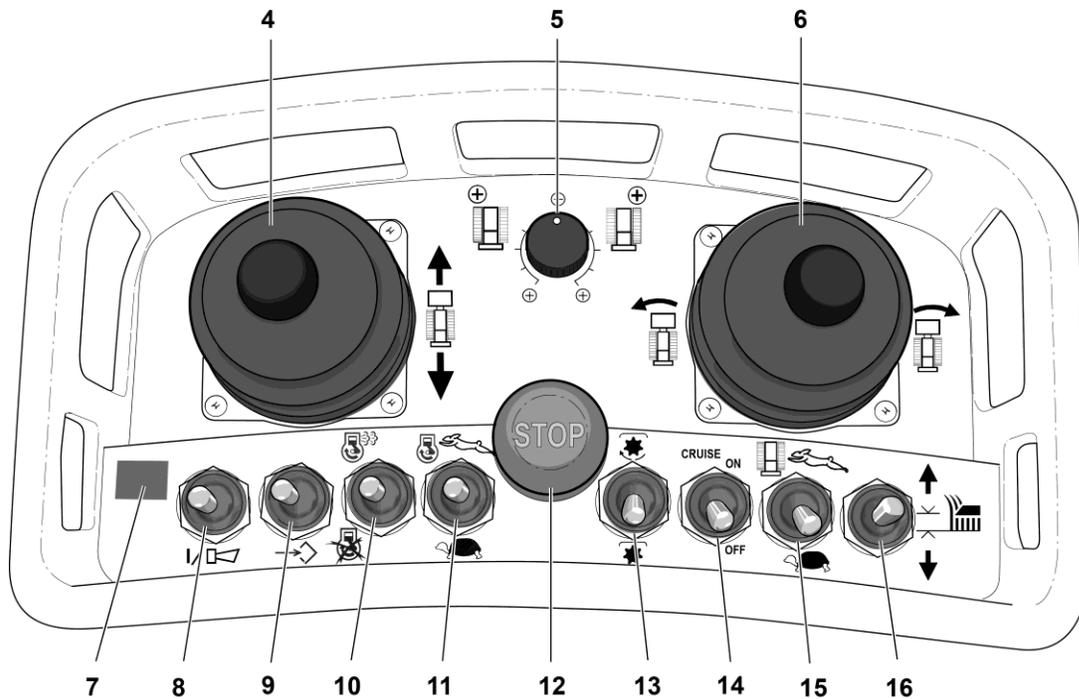
This is the power switch for the remote control. Turn fully clockwise to power up the remote control. Once powered up, the engine can be started and the machine completely controlled using the remote. The switch must be kept on at all times to operate the machine.

Turn the switch fully counter-clockwise to turn the power switch OFF.



## WARNING!

Engine will remain running if remote control is powered off during operation. Drive will stop, brakes will engage and PTO will disengage.



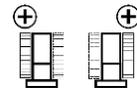
#### 4. Direction Control (self-centering)

Push forward on the control lever for forward travel. Pull rearward for reverse travel. The further the lever is pushed, the faster the machine will travel. When the desired speed is reached, set the cruise ON. See *item 14 Cruise Hold On/Off*.



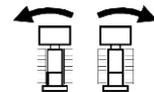
#### 5. Bias Control

This control keeps the machine running straight when encountering different traction conditions from one track to the other. If traction is lost on one side, the machine will turn in that direction. Turn the dial clockwise to increase right-hand track speed. Turn the dial counter-clockwise to increase the left-hand track speed.



#### 6. Steering Control (self-centering)

Push the control lever to the left for left-hand turns. Push the control lever to the right for right-hand turns. The farther the lever is pushed, the more aggressive the turn will be. Pushing the lever fully left or right will allow a full turn on the spot.



#### 7. Frequency Indicator Lamp

Indicates the radio frequency for the remote control. During operation, the red lamp flashes to indicate normal operation. For more information, refer to the remote control operator's manual.



#### 8. Enable / Horn (self-centering)

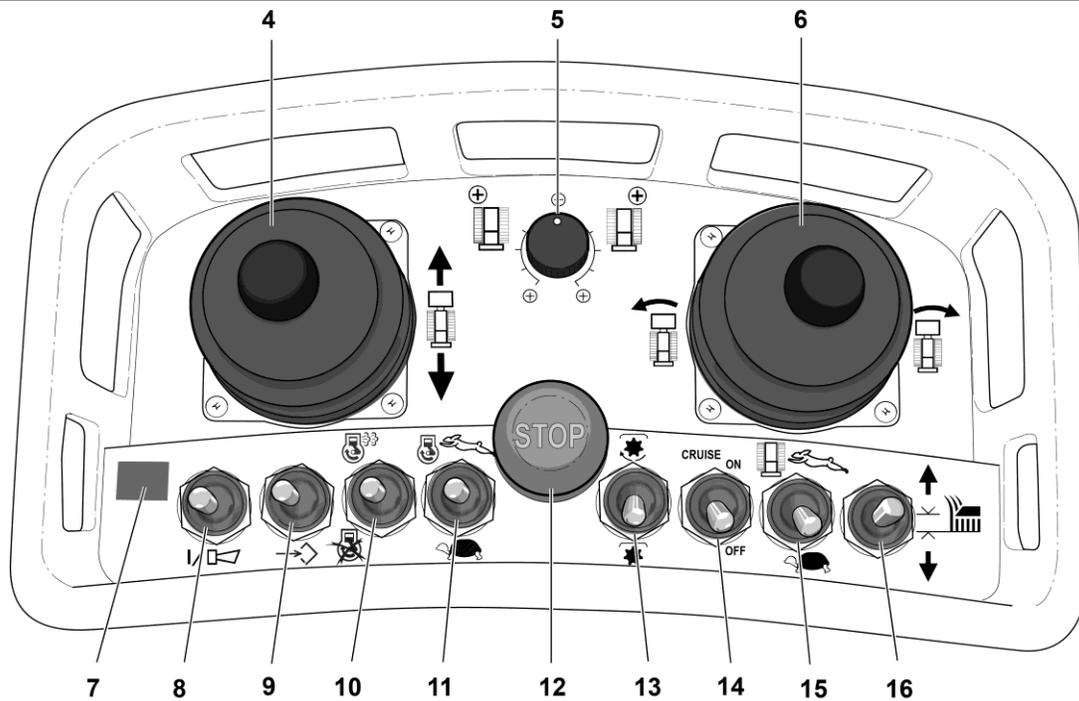
This switch synchronizes the wireless signal between the remote control and the receiver on the machine. Push the control switch forward to initiate a "handshake" between the two and the horn will sound when communication is established.

After synchronization this switch activates the horn at any time.

#### 9. Frequency (self-centering)

The Slope-Pro® machine's remote control can operate on 50 different radio frequencies. This permits the safe usage of multiple machines on a single work site. Refer to the Remote Control manual for more information. For information on changing frequency, see Page 38.





**10. Engine Start / Stop (self-centering)**

Push the control switch forward and hold to start the engine. Pull it rearward to stop the engine.



**11. Throttle Up / Down (self-centering)**

Push the control switch forward to raise engine speed (work mode). Pull the switch rearward to lower engine speed.



**12. Emergency Stop**

Depress this button to kill the engine in an emergency. An emergency stop button is also located on the control panel on the machine. Rotate clockwise to release.



**13. PTO On / Off**

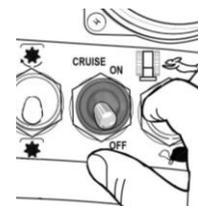
This control switch engages the power take-off (PTO) to power the mower blades. Push the control switch forward to engage the mower deck (On). Pull the control switch rearward to disengage the mower (Off).



\*Note – The PTO switch must be in the “Off” position to initiate a “handshake” between the machine and remote.

**14. Cruise Hold On / Off**

Use this switch to set and maintain the mowing speed. Use the directional control lever (4) to set the machine in motion. Once the desired cutting speed is reached, push this control lever forward to lock the speed.



Switch Cruise Hold to OFF to release.

**15. Range Low / High (Work / Travel)**

This control switch sets the speed range of the machine in either high or low range. Push the lever forward for high-speed (travel) range. Pull the control lever rearward for low speed (work) range.





## Pre-start Instructions

### BEFORE OPERATING THIS MACHINE

Check that the Operator's Manual is located in the manual container and is in good condition. Contact your dealer immediately if you do not have an Operator's Manual

Carefully read the Operator's Manual, completely understand the Safety Messages and instructions, and know how to correctly operate this machine. Contact your dealer for an explanation of any instruction not fully understood.

Verify that all safety decals are in place and legible, guards and covers are in place and properly secured / positioned.

#### 1. Check Engine Oil

Check engine oil daily or before each use. If low, add oil. Do not overfill.

Make sure the machine is parked on level ground. The engine must be OFF and allowed to cool.

- Clean any debris from around the dipstick to prevent oil contamination.
- Withdraw dipstick and wipe off oil.
- Re-insert dipstick fully, then remove to check. Oil should be up to, but not over the F (full) mark on the dipstick.
- If the oil level is low, add until it is up to the F mark. The filler cap is located on the left-hand side of the engine.
- Add oil in small amounts and recheck with the dipstick before adding more.
- Reinstall the filler cap and make sure the dipstick is secure.

**IMPORTANT! Ensure oil level is at the F (full) mark for steep slope operation.**



### CAUTION!

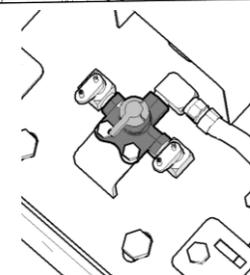
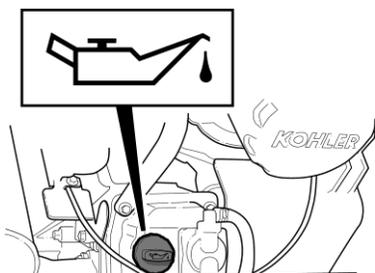
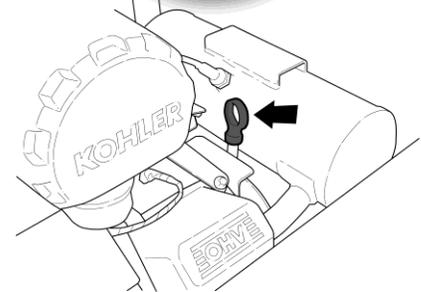
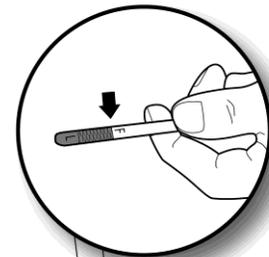
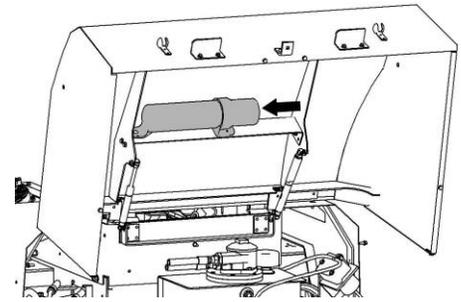
To prevent extensive engine wear or damage, always maintain proper oil level in the crankcase. Never operate the engine with the oil level below the L (low) or above the F (full) marks on the dipstick.

#### 2. Check Fuel Level and Tank Security

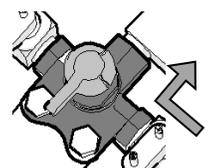
The fuel tanks are accessed inside the front hood. Each tank has a sight level gauge. Only one tank is used at a time. A quarter-turn valve is located between the tanks to select the active fuel tank. Verify that tanks are secure and straps are in good condition.

If fuel is required, remove the tank from the machine.

- Disconnect the fuel tank's vent line and remove the tank strap.
- Depress the latch on the fuel line connector and pull the hose off of the spigot.
- Remove the tank and refuel in a well-ventilated area away from the machine.
- When installing the fuel tank, ensure connector is clean. Reconnect vent line, fuel line, and tank strap. Wipe up any spilled fuel.
- Ensure that the air inlet valve is open on the operating tank.



RH TANK



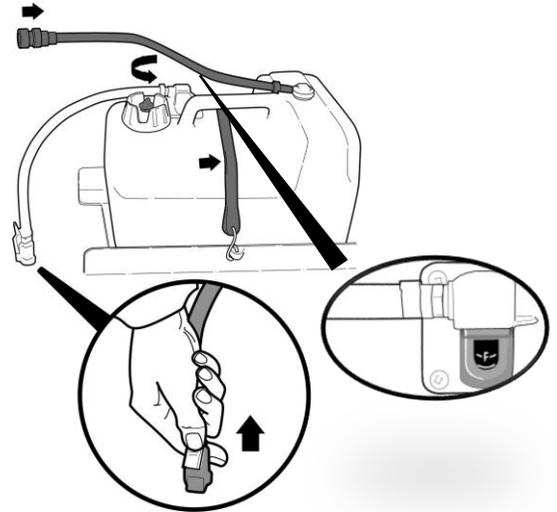
LH TANK

## **! WARNING!**

Remove the gas tank from the machine to fuel up. Gasoline and gasoline vapors are extremely flammable and can explode if ignited causing fires and severe burns. Refill the fuel tank outdoors or in a well-ventilated area. Clean up spilled fuel immediately.

## **! CAUTION!**

Reconnect fuel supply and vent lines before operating the engine. In order to comply with emissions regulations, both fuel supply and vent lines must be connected at all times. Failure to do so will result in abnormal engine operation. **DO NOT** run the machine with the hood open.



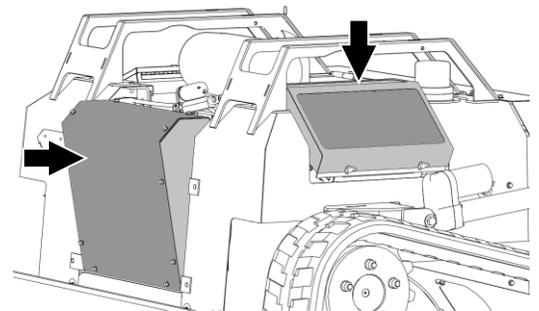
### 3. Check Cooling Areas

Make sure rear screen, hydraulic oil cooler and engine surfaces are kept clean and free of debris.

If dust build-up is present between the hydraulic cooler fins, the cooler cover will pivot up for cleaning by loosening the (2) wing bolt.

The electric cooling fan may start without notice and discharge dust, always protect your eyes with proper safety equipment.

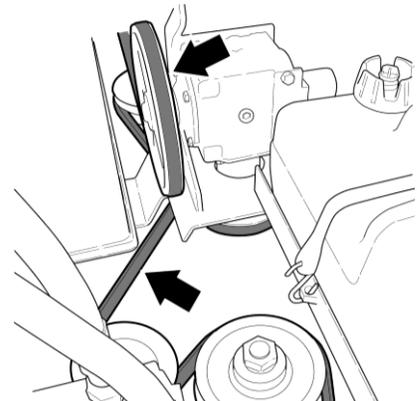
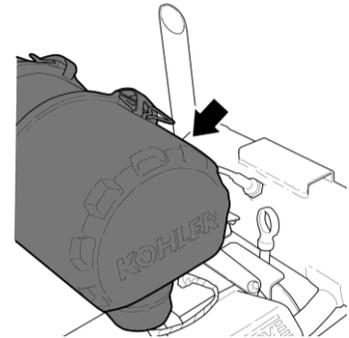
In some cases where the mowing conditions are extremely dry, grass debris may collect on the rear screen. If this happens, run the machine in reverse to help avoid the problem.



### 4. Air Cleaner

Check the air cleaner daily before starting the engine for dirt and debris. Remove the cover and remove any loose debris or material from the filter element.

**IMPORTANT! Running the engine with loose or damaged air cleaner components could allow unfiltered air into the engine, causing premature engine wear or failure.**



### 5. Drive Belts

Open the front hood and check condition of all drive belts.

Check both of the main drive belts on the engine output shaft.

Check both mower drive belts. Look for cracking or wear.

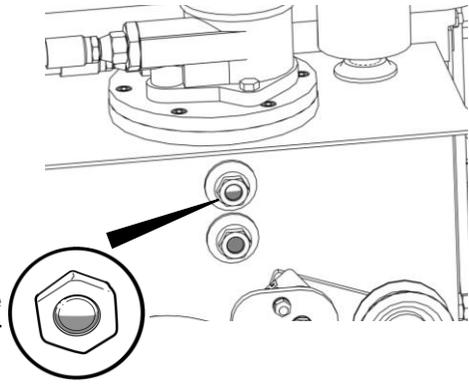
Clean any debris from this area.

**6. Hydraulic Oil Level**

Check the sight glass on the front of the hydraulic tank. The oil level should be visible half way in the upper sight glass with the machine parked on level ground. If oil needs to be added, refer to page 40 for more information on oil type and procedure.

Inspect the oil tank breather and remove any debris.

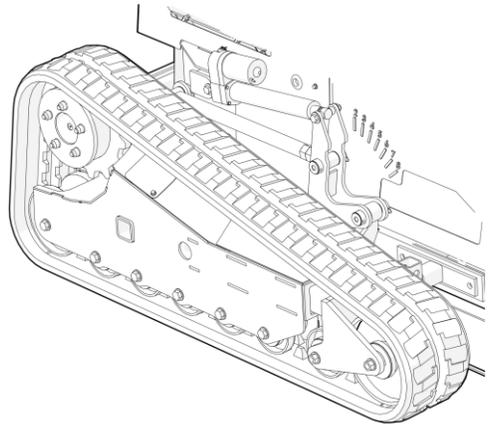
Check for any signs of hydraulic leaks



**7. Tracks and Height Adjustment**

Check the condition of the tracks and drive mechanism. Check the deck height adjustment mechanism. Clean any debris from these areas.

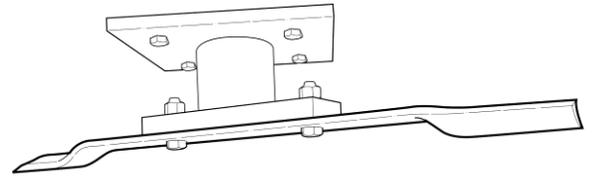
To check track tension, refer to page 43.



### 8. Mower Blades and Spindles

Check the mower blades, spindles and the underside of the deck. Replace any blade that is bent, excessively nicked, worn or has any other damage. Small nicks can be ground out when sharpening.

- Make sure blades are tight and in good condition.
- Clean any debris from these areas.
- When replacing mower blades, be aware of blade rotation as blades rotate in opposite directions. Ensure the cutting edge is facing in the correct direction
- When viewed from above and per machine orientation as identified on page 17, the left hand blade turns clockwise.
- When viewed from above and per machine orientation as identified on page 17, the right hand blade turns counter clockwise.
- Always ensure blades are balanced. Refer to page 49



### 9. Hoods, Covers

Check that all hoods and covers are in place and in good condition.

- Check thrown object deflectors on front and rear of mower and ensure they are free to move and naturally hang down without any binding.
- Check all hoods and covers for loose parts or damage.
- Ensure that hood strut lock functions correctly
- Do not rely on the hood strut lock to secure the hood in the open position if mower positioned on a slope or if the hood is opened during high or gusty winds.

#### Check All Fasteners

Ensure all fasteners are present and properly tightened.



# Operating Instructions

## Run-in

The first few hours of machine use are called the “run-in” period. Some parts of the machine will need to be checked for adjustment after this period; therefore, the following procedures must be performed to keep the machine in proper operating condition.

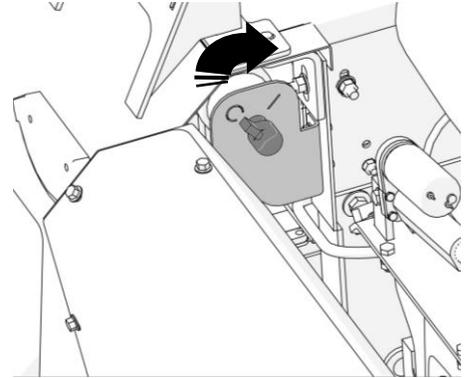
Perform these checks after the first 4 hours of use, then at the scheduled intervals after that. See Daily Pre-Start Check page 40.

- Check tension of all drive belts. Refer to page 45.
- Check all oil levels.
- Check all fasteners. Refer to page 54.

## Starting the Engine

- Perform all the Pre-start Checks outlined on page 40.

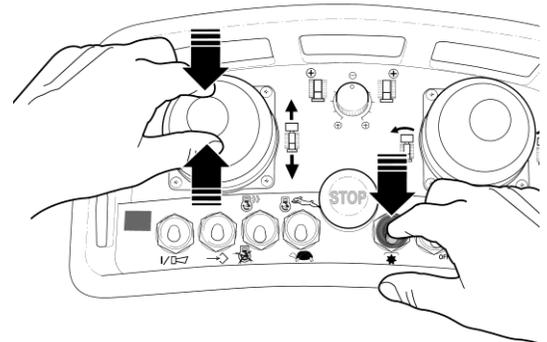
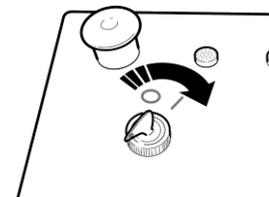
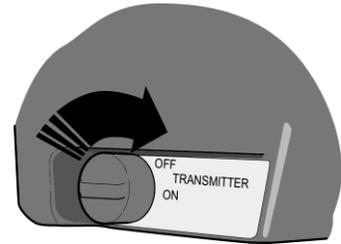
The engine is started using the remote control. Use the remote control to change the engine operating speed.



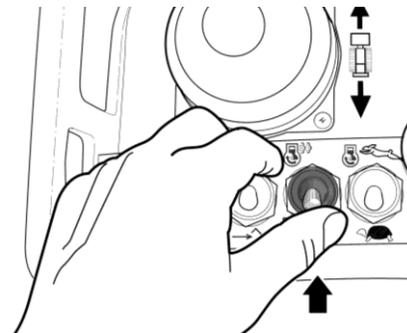
## **!** CAUTION!

**If the engine does not start, do not crank the starter continuously more than 10 seconds at a time. Damage to the starter may result. Allow the starter to cool for 60 seconds between attempts.**

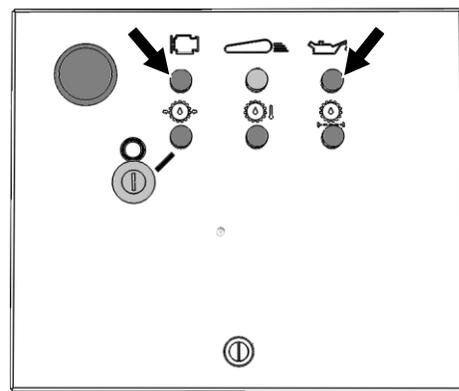
- Turn the battery isolation switch ON (I) position.
- Reset all emergency stop buttons if applicable (console and remote control).
- Make sure the directional control lever is centered in the neutral position. The machine will not start if the drive system is engaged.
- Make sure the PTO is disengaged. As a safety precaution, the machine will not start with the PTO engaged.
- Turn the on/off switch on the remote control to the ON position.
- Turn the ignition key on the machine console to the RUN (I) position.
- Push the Enable toggle switch to establish communication between the remote control and machine. The horn will sound when communication is established.



- Push the Engine Start toggle switch forward to engage the starter. Release when the engine starts.



- Once the engine is running, verify the Check Engine and Low Engine Oil Pressure warning lamps on the console are OFF. If they are NOT off, stop the engine immediately and have a qualified technician rectify the problem.

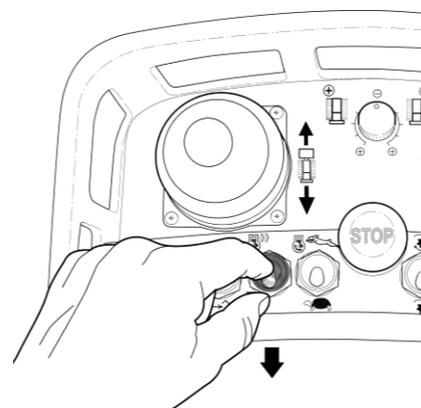


### Cold Weather Operation

- Ensure the proper oil viscosity is used for the anticipated ambient temperature. See page 40.
- Allow engine and hydraulic system to warm up for 15 minutes before operating machine in temperatures below 10°C (50°F).
- If it is anticipated that the machine will encounter temperatures below 7°C (37°F) it is recommended to store machine indoors if using the factory fill hydraulic oil.
- Remove mud and debris from machine prior to shutdown.

### WARNING!

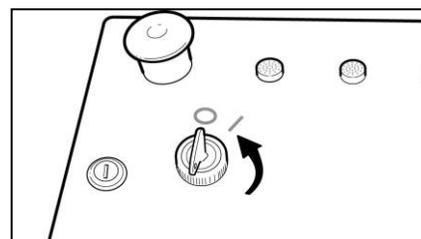
Engine exhaust gases contain poisonous carbon monoxide. Carbon monoxide is odorless, colorless, and can cause death if inhaled. Do not run engine in confined areas.



### Stopping the Engine

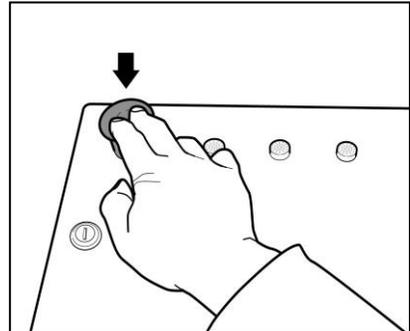
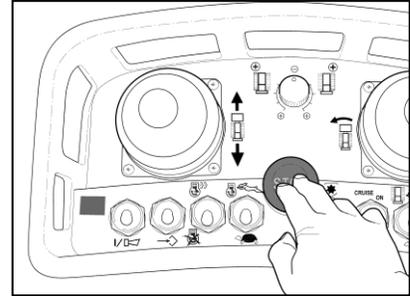
**IMPORTANT!** Run engine at idle for 5–10 minutes before shut down to allow internal engine components to cool.

- Pull the engine start /stop control switch on the remote control rearward towards the operator to the off position.
- On the control panel, turn the key switch counter-clockwise to the OFF (O) position.
- Turn the remote on/ off switch to the OFF position.
- NOTE! Engine cannot be re-started for 5 seconds after activating the engine stop function.



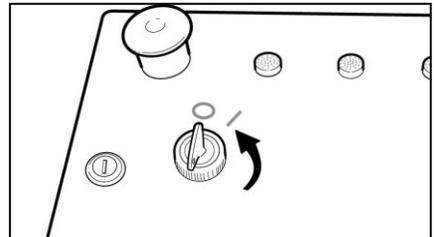
### Stopping the Engine in an Emergency

- If it is necessary to stop the engine in an emergency, depress the red STOP button on the remote control **or** the red stop button on the machine console. Depressing either button stops the engine.



### Leaving Machine Unattended

- If leaving machine unattended always locate in a safe area away from hazards such as vehicular traffic.
- Flag the area if necessary.
- Park on a level surface. Block the tracks to prevent movement if necessary. Shut off the machine.
- Remove and retain the ignition key.
- Lock the hood.
- Secure the remote control unit in a safe location to prevent unauthorized use.

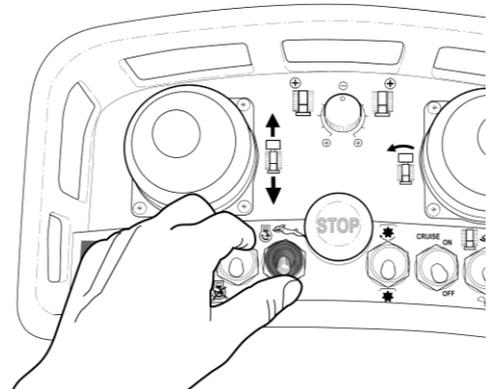


### Engine Throttle

- Increase the engine speed by pushing the throttle up / down toggle switch forward. Set the engine speed to maximum for machine operation.

**IMPORTANT! Do not tamper with the engine governor setting to increase maximum engine speed.**

For best cutting and overall operational performance, always operate with the engine at maximum rpm.

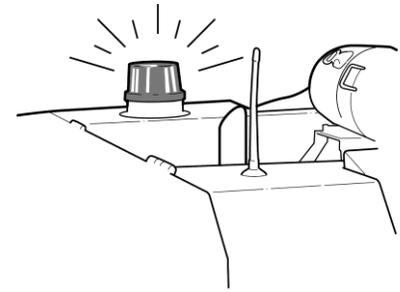


## Driving the Machine

### Direction / Speed Control

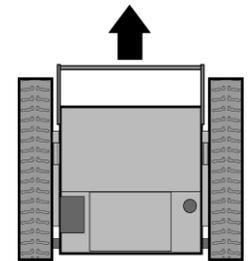
The direction / speed control is infinitely variable. The mowing speed can be adjusted to match conditions. The normal direction of travel is with the brush bar facing forward.

When the drive system is engaged, the beacon will flash.



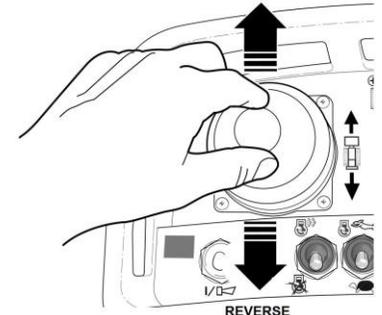
Set the machine in motion by moving the directional control lever. Pushing the control forward moves the machine in the forward direction.

- The farther the control lever is pushed, the faster the machine will travel. Releasing it will stop the machine.
- To reverse the machine, pull the control lever rearward toward the operator.

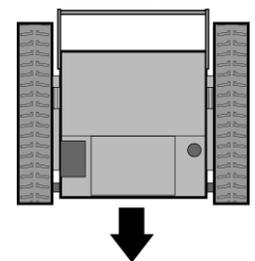


Forward

FORWARD



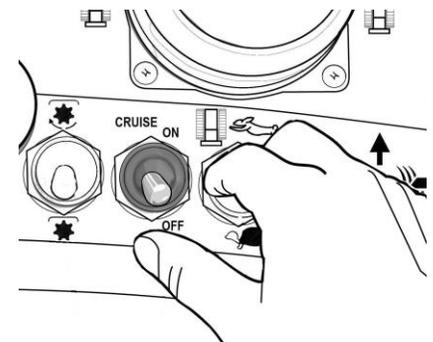
Reverse



### Cruise Hold (Ground Speed Hold)

Once the desired ground speed is achieved, the Operator can hold that speed using the built-in "Cruise Hold" feature. This alleviates strain and fatigue for the operator trying to constantly maintain a set speed.

- When the desired ground speed is reached, set the "Cruise Hold" switch to the ON position to maintain a constant speed.
- NOTE – To disengage, the "Cruise Hold" switch must be turned "OFF".
- Reset the "Cruise Hold" by switching it off then back on once the desired cutting speed is reached.
- When the "Cruise Hold" is activated the Forward / Reverse direction control lever is de-activated.
- The "Cruise Hold" switch must be in the "OFF" position prior to starting the engine.



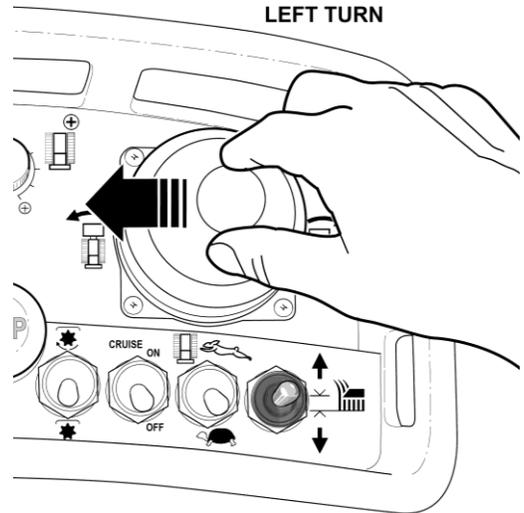
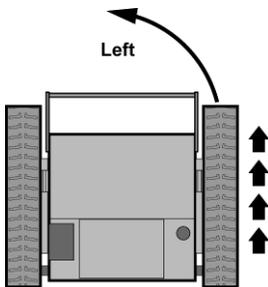
**Steering**

Use the right-hand control lever to steer the machine. Push the lever to the right or to the left to steer in that direction, as viewed from the rear of the machine. Sense of direction is reversed if viewed from front of machine.

Always avoid sharp turns as this may lead to de-tracking. Use three point turns whenever possible. See page 36.

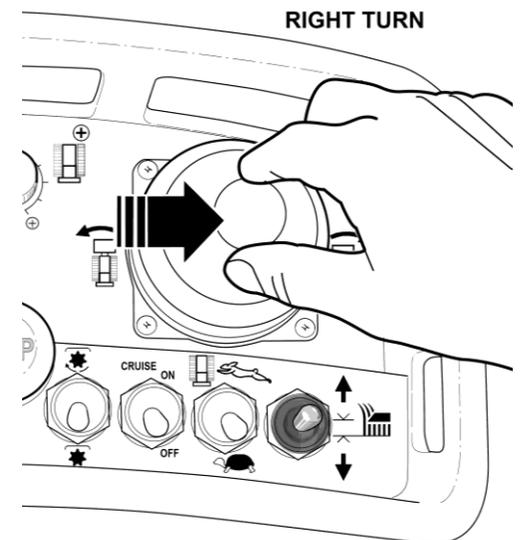
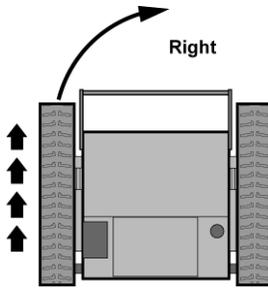
**Left-hand Turn**

- Push the lever to the left to make a left-hand turn. The farther the lever is pushed, the sharper the turn. The drive on the left hand side is slowed or stopped to allow the turn.



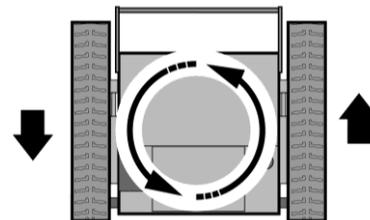
**Right-hand Turn**

- Push the lever to the right to make a right-hand turn. The farther the lever is pushed, the sharper the turn. The drive on the right hand side is slowed or stopped to allow the turn.



### Spin or Pivot Turns

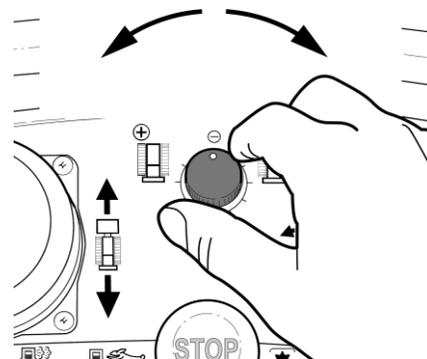
- Make a complete 360° turn by pushing the control lever fully to the left or right. The drive mechanism on that side will reverse in the turn direction allowing the machine to pivot about its axis.



### Bias Control

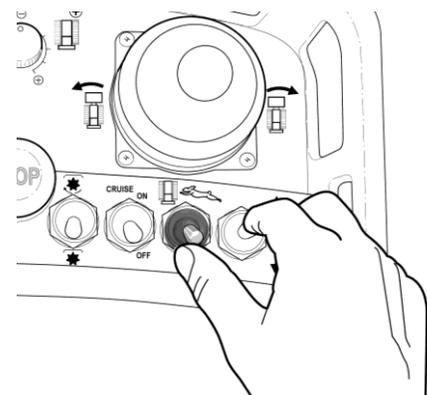
Use the Bias Control knob to make small steering adjustments while the machine is moving to keep it running straight. Use the Bias Control to compensate if poor traction conditions are encountered and the machine does not track straight.

- Turn the dial to the right to apply more aggression to the right track. Turn the dial to the left to apply more aggression to the left track.



### Speed Range

- Adjust the High / Low speed range of the machine depending on mowing conditions.
- Use Low Range for most cutting applications and maneuvers on slopes.
- Use the High Range for travel.

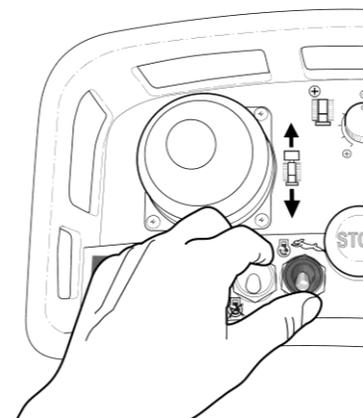


## **CAUTION!**

Bring the machine to a complete stop before changing speed range. Damage to the drive system may otherwise result.

### Machine Shutdown

- Reduce engine speed to low idle.
- Disengage mower PTO.
- Run engine at low idle for 5–10 minutes to allow internal engine components to cool.
- Turn engine off.
- Remove debris from engine cooling inlet grill.
- Remove mud and debris from machine prior to shutdown.
- The electric cooling fan may start without notice and discharge dust, always protect your eyes with proper safety equipment.

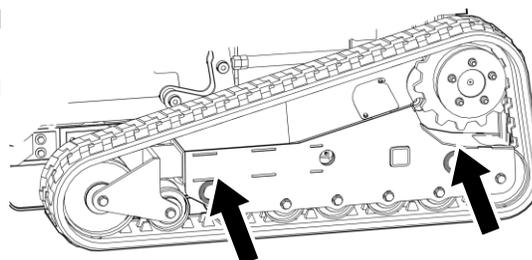


## Transporting the Machine

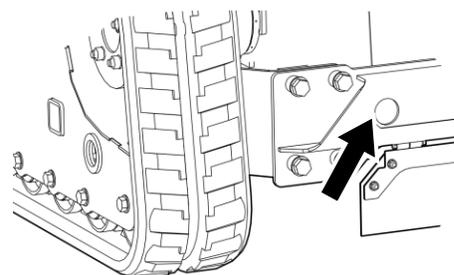
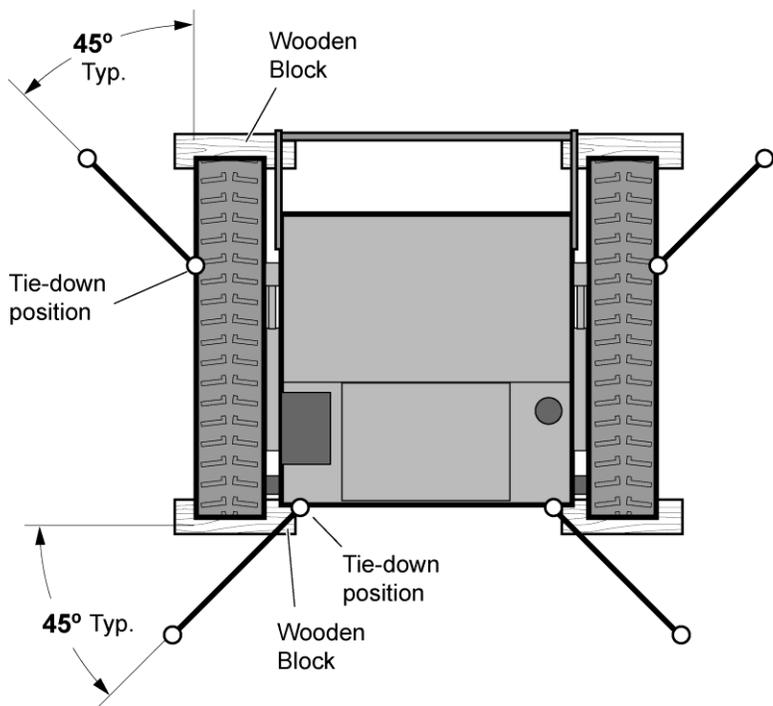
The machine is provided with tie down locations on the rear frame and the side of the track assemblies for transporting. Machine weight is 2640 lb.

Before transporting:

- Clean the machine removing any debris.
- Ensure hood is fully secured. Check to make sure there are no loose parts or tools on the machine or under the hood.
- Move machine onto transporting vehicle / trailer.
- Lower machine until it contacts the stops.
- Block machine and tie down to the locations shown.
- Place wooden blocks against the end of the tracks at one end of the machine.
- Place tie-down straps or chains in positions shown on this end of the machine at 45° angles from the machine frame.
- Block the other end of the machine.
- Place tie-down straps or chains at 45° angles as shown.



### Tie-down Positions

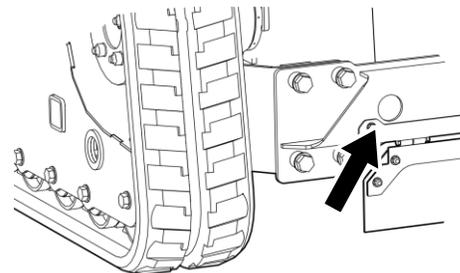


## Recovery

Holes are provided on the rear of the frame in the event it is necessary to tow the machine. The machine can only be towed at a slow speed over a short distance with the engine off and brakes released.

### CAUTION!

**Block the machine so it cannot move. Once the brakes are released there will be nothing holding the machine in place. Be especially careful on slopes.**

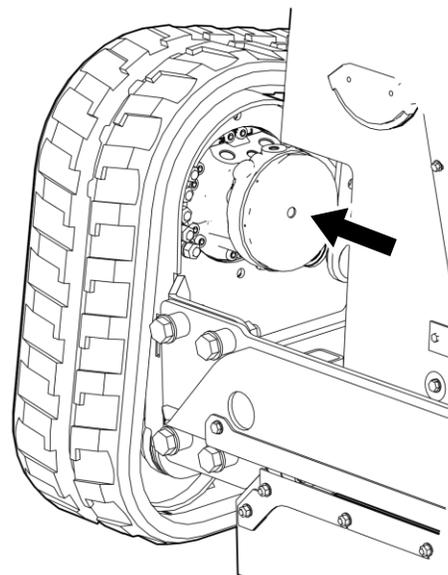


### CAUTION!

**Tow the machine at SLOW speeds over SHORT distances only. Damage to the hydrostatic drive system may otherwise result. Tow the machine with the engine OFF and brakes released.**

Spring applied brakes are built-into each hydraulic drive motor assembly. Whenever the engine is off, the brakes are automatically applied. If the engine will not start and towing is necessary, the brakes must be manually released.

A hydraulic wheel motor is located on each side to drive the track. The brakes inside of each wheel motor are applied when there is a lack of hydraulic oil pressure. In an emergency situation, the brakes can be manually released.



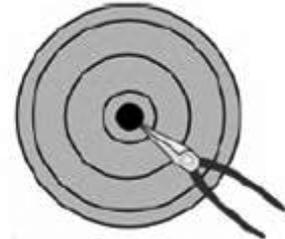
**! DANGER!**

Do not operate machine with the brakes released.

**Manually Release Brakes**

Follow this procedure for both sides of the machine.

- Remove the rubber plug from the brake protector.
- Loosen the locknut.

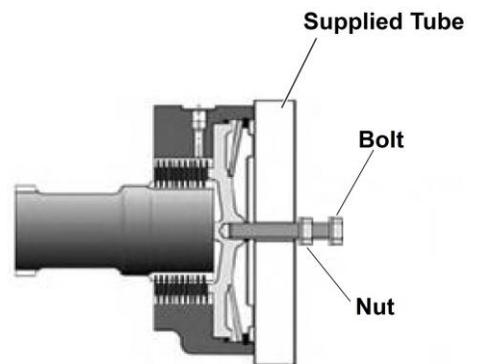


**Note:**

The tube, bolt and nut required to release the brakes are located under the hood of the machine (beside the operator's manual holder).

Position the supplied tube with the hole centered over the brake access hole. Insert the supplied bolt / nut through the hole in the tube into the brake housing.

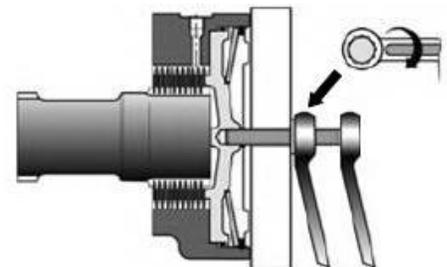
Finger-tighten the bolt until it reaches the bottom of the threads. Do not over-tighten.



Tighten the nut while holding the bolt preventing it from turning. As the nut is tightened\* the brake is released, continue tightening the nut until the motor turns freely. The brake on that side of the machine is released. Repeat on the other side of the machine.

\* It may take up to 80 ft-lb. to fully release the brake.

Reverse the above procedure to put each motor back into service prior to operating the machine.



NOTE: Install a new rubber plug on re-assembly.

## Mowing

### **WARNING!**

Keep all bystanders well away from the machine when it is operating. Always maintain a safe operating distance between personnel and other equipment. Carefully walk the entire area to be mowed beforehand. Look for debris, rocks, tree limbs that could damage or be thrown by the mower blades. Tall grass can hide obstacles. Use extra caution when approaching blind corners, shrubs, trees, or other objects that could obscure vision. Reposition yourself to avoid these conditions. Disengage the blades (PTO) when crossing gravel areas or roadways.

### Engaging / Disengaging Blades (PTO)

#### **CAUTION!**

Ensure engine speed is at low idle when engaging PTO. Failure to do so will result in premature component failure.

#### **CAUTION!**

If mowing tall grass, fully raise deck or move to an area with lower grass before engaging PTO to avoid overloading clutch.

- With the engine at low idle speed, push the PTO on/off toggle switch forward to engage the PTO.
- With the engine at low idle speed, pull the PTO on/off switch rearward to disengage the PTO.

### Cut Height Adjustment

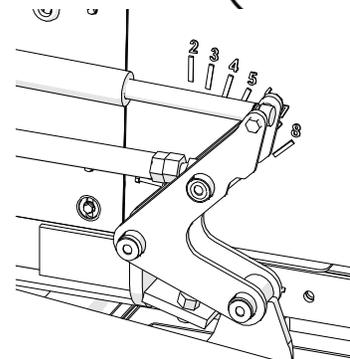
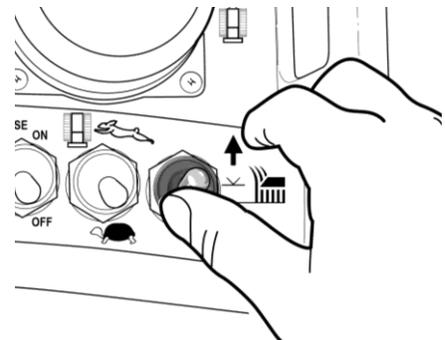
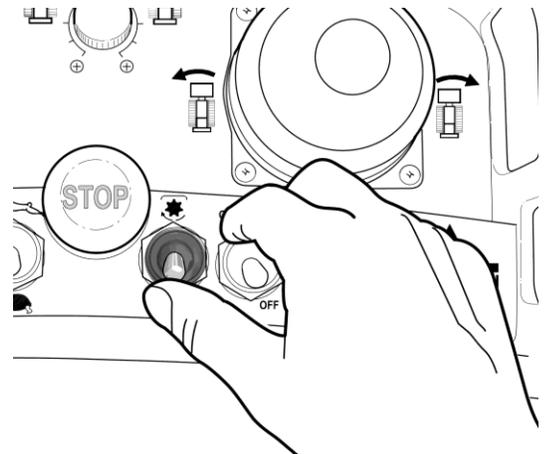
The deck height is fully adjustable from 2.25–8 inches.

- Push the deck raise / lower toggle switch on the remote control forward to raise the deck height. Pull the switch rearward to lower the deck. The deck can be raised or lowered while the machine is moving.
- Observe the height indicator on the side of the machine.

#### High grass and weed area inspection

- **Inspect** and **remove** any hidden large debris.
- **Mow** at an **intermediate** height.
- **Inspect** and **remove** remaining debris.
- **Mow** at final height.

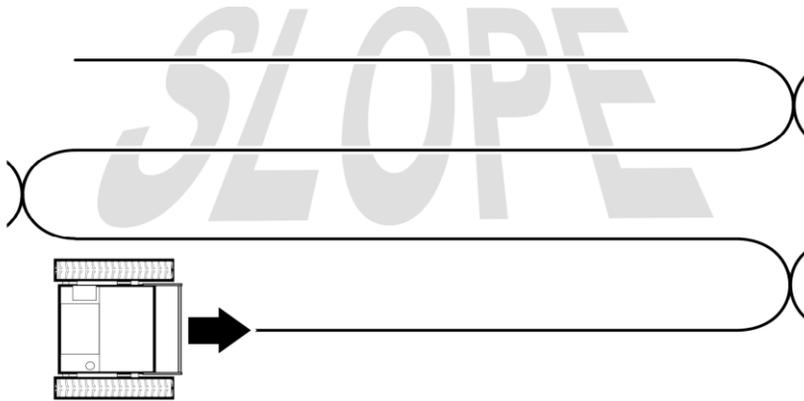
**NOTE:** An audible 'clicking' sound will be heard when the actuators are at the end of their stops. Release the deck raise / lower switch.



## Slope Work

### **WARNING!**

Never position yourself up or down slope from the machine or in the direction of travel. Falling into a running machine can cause severe injury or death.



The preferred cutting direction on slopes is to cut along the slope and not up and down. Mowing in this manner could also help reduce erosion. Always use three point turns at the end of each pass. Remember to vary mowing pattern over time to avoid the creation of ruts in the terrain from.

### **CAUTION!**

Not all mowing applications are suitable for cutting along the slope. In order to reduce the likelihood of detracking it may be necessary to approach the slope at an angle to achieve acceptable results. Approach wash-outs and other uneven terrain with caution.

### **WARNING!**

If the machine begins to show signs of sliding down the slope or otherwise losing traction, stop mowing immediately. Move the machine to a safe location and re-assess the suitability of the area to be mowed.

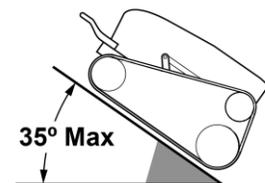
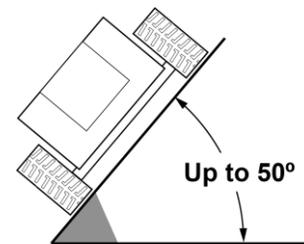
The machine can be safely operated on slopes ranging up to 50°. As a guide, a 50° slope would be extremely difficult to walk up, depending on surface and traction conditions.

If cutting up and down the slope is necessary, limit mowing to slopes less than 35°. As a guide, a 35° slope is moderately difficult to walk up.

The machine is provided with a slope meter on the rear left-hand side of the machine for reference.

- Use caution when approaching the machine, always turn off the machine blades and approach from a safe direction, never from directly above or below the machine.
- Always use caution when operating in hilly terrain, when there are changing ground conditions, including dry to wet surfaces or operating over mowed surfaces, as all may have reduced traction.

Degrees	Slope	Grade
50°	0.84 to 1	120%
45°	1 to 1	100%
26.6°	2 to 1	50%
18.4°	3 to 1	33%



## Track Precautions

In certain operating conditions, there is a risk that the track could be damaged by de-tracking or 'jumping' out of position, requiring the track be reinstalled. Overall service life of the track could also be reduced.

Always:

- Avoid fast, sharp turns or sliding of the tracks on asphalt or concrete surfaces.
- Prevent foreign objects from becoming entangled in the track.
- Remove any debris or mud which could interfere with the operation of the machine
- Clean off oil, fuel and grease immediately from the track as they will degrade the rubber.
- When storing the equipment outdoors for an extended period of time, cover the tracks to reduce sunlight exposure.

To minimize the occurrence of de-tracking, always ensure proper track tension and follow good operating practices.

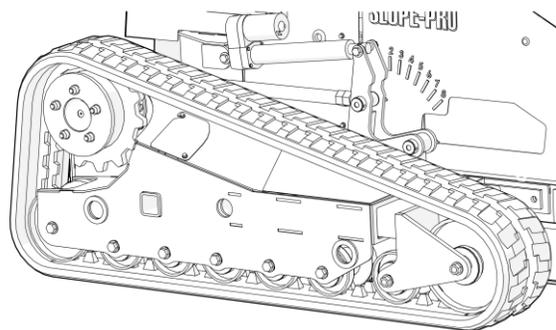
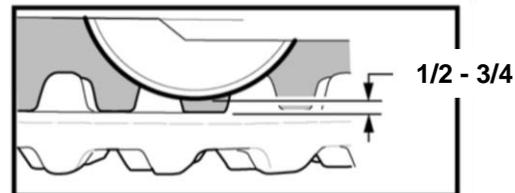
## Maximizing Rubber Track Life and Lowering Operating Costs

The rubber tracks used on the Slope-Pro® are of high quality construction and should provide a long serviceable life, as long as basic operating practices are followed. Lower owning and operating costs can be achieved by reducing wear on the track and by minimizing damage caused by de-tracking.

Track life is very dependent upon terrain, operation and the application, and it is impossible to estimate a track life expectancy. For this reason there is no wear guarantee on the rubber tracks. The more careful an operator is when operating the Slope-Pro, the better the track wear performance will be. As with all rubber tracked equipment, to get the maximum life out of the tracks on your mower, you must treat them with care. We offer the following information as basic operation guidelines:

### Do's:

- **Check track tension on a regular basis.**  
Loose tracks can more easily de-track; however do not over-tighten. Over-tightening may cause power loss, excessive idler bearing wear, and damage the tracks. A properly adjusted track has 3/4 in of slack between the track and the roller. Remove excess slack with the track tension adjuster. In order to properly measure slack, the track must be lifted off the ground using the jacking procedure, as outlined on page 42. Check more frequently in the first 50 hours of operation.
- **Alternate the turning direction between one side and the other.**  
Continuous turning to the same side can accelerate wear of sprocket teeth, track tread, guide lugs and rollers. Use three point turns whenever possible.



- **Maintain a clean undercarriage**  
Debris build-up in and around the undercarriage will lead to premature roller bearing failure and increased track wear.
- **Inspect component condition.**  
Excessively worn sprockets or undercarriage components will reduce useful track life.

**Avoid:**

- **Turning while manoeuvring across obstacles.**  
Turning when on an obstacle such as a log or curb, can accelerate wear to the track guide lugs, and track components. It is best to turn when both tracks are on the same plane. If an obstacle must be crossed, position the mower perpendicular to the object and cross it slowly.
- **Making spin or 360° pivot turns, instead, perform a three point turn.**  
Pivot turns cause accelerated wear and/or increase the potential for de-tracking, particularly if track tension is not set to the specifications as outlined in the Operator's Manual. Operators should use three point turns whenever possible.
- **Traveling with one track on a slope, against a curb or wall while the other track is on a flat surface.**  
Always travel with both tracks on same plane or surface. Operating tracks with the outside/inside edge of the track turned up on a curb or wall etc., can cause damage to the edge of the track and lead to de-tracking and shorten life.

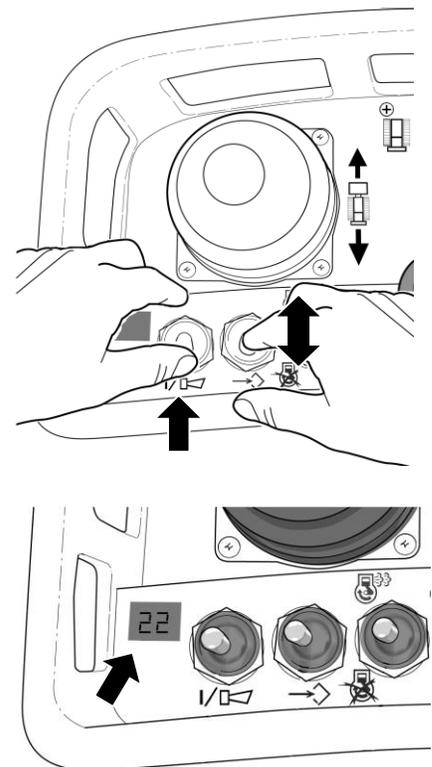
**Changing Operating Frequency**

When working in close proximity to another Slope-Pro or any other source of Radio Frequency emissions it is possible that the Slope-Pro machine may receive unwanted signals. To avoid unwanted activity on the machine, a protection device within the control disables the machine drive, disengages the PTO, and engages the parking brake. The Horn / Enable switch must be toggled to re-establish communication with the machine to continue operation..

To avoid this interference, the transmitter can be changed to a different channel for interference-free operation.

To change the frequency of the transmitter:

- Depress and hold the Horn / Enable switch (horn will sound continuously).
- Toggle the Frequency switch up or down to a channel away from the previous setting.
- When changing frequency, the new channel will be shown on the LED display beside the Horn / Enable switch.



## Dusty / Dry Conditions

If mowing in dry, dusty conditions, there may be some debris build-up on the rear screen, hydraulic cooler, and/or engine compartment. Do not allow debris etc. to build up. This debris by itself may not cause a fire; however, when mixed with fuel, oil, or grease in a hot or confined space, the danger of fire increases dramatically.

### CAUTION!

**Do not allow the rear screen to get covered or plugged with debris. The engine will overheat. Keep the screen clean. Be aware of hot surfaces.**

If necessary, run the machine in the opposite direction to help avoid debris buildup.

## Brush Cutting

The machine can be used to cut small sapling trees. The brush bar at the front of the machine will push them over as it passes.

For brush cutting:

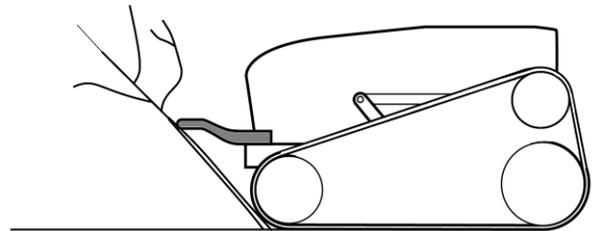
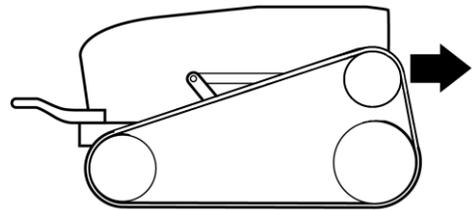
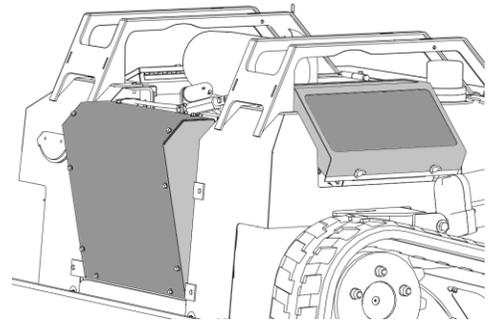
- Run the machine in **WORKING** range speed.
- Do not cut brush larger than 3/4 in diameter.
- Once it is safe to do so, clean debris from blades and spindles after use.

### WARNING!

**Mowers can throw objects 300 feet or more under adverse conditions.**

**To avoid serious injury or death to operator or bystanders from thrown objects:**

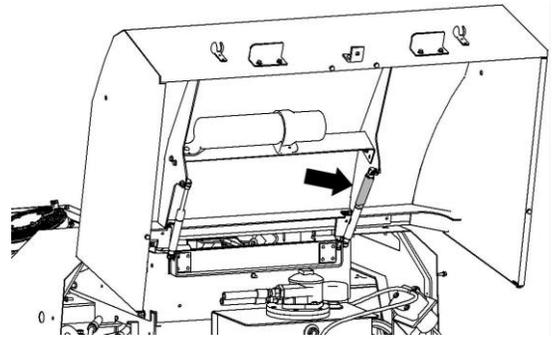
- Keep bystanders 300 feet away



## Maintenance

Maintenance should always be performed by a qualified service technician familiar with servicing similar equipment, using good safety and workmanship practices.

**Always observe proper lock-out procedures when performing any maintenance work.** Always remove and retain the ignition switch key, block and or support machine using equipment designed for the task. Be aware of hot areas and ensure the hood strut lock is functioning properly and can adequately hold open the hood.



### Recommended Fluids

Component	Oil Grade	Recommended Viscosity at Ambient Temperatures										
		°F	-40	-22	-4	+14	+32	+50	+68	+86	+104	+122
		°C	-40	-30	-20	-10	0	+10	+20	+30	+40	+50
Engine	Engine Oil API Classification SJ or higher	SAE 10W-30										
		SAE 30										
Hydraulic System	Hydraulic Oil Premium Quality HVI (High Viscosity Index)	SAE 5W-30										
		ISO HVI 32										
Gearbox	Gear Oil API GL-5	ISO HVI 46										
		ISO HVI 68										
Grease Fittings	Multi-purpose Grease MPG	SAE 80W90										
		NLGI EP0 or EP1										
		NLGI EP2										

### Daily Pre-Start Check List

Refer to the relevant sections of this manual for detailed instructions

- Ensure Operator's Manual is stored within manual container on machine
- Verify that all safety decals are legible
- Ensure the horn is operational
- Check engine oil level
- Check fuel level and tank security (both)
- Check cooling areas
- Check air cleaner and connections
- Check drive belts
- Check for / remove any debris
- Check hydraulic tank level or for signs of leakage
- Check tracks, remove debris from undercarriage
- Check height adjustment
- Verify mower blades, spindles are in good condition and properly secured
- Verify that PTO clutch functions correctly
- Hoods and guards are in good condition and in place
- Check all fasteners

### Oil Disposal

Protect and respect the environment. Dispose of used oil and filters at your local recycling center or municipal collection center in accordance with local regulations.

## Service Interval Chart

Always perform the following procedures as required when either elapsed hours of use or calendar time (whichever comes first) has been reached to determine service intervals. Before each consecutive service interval is performed, all maintenance from the previous interval must be performed.

Service Procedure	Interval						
	Initial Run-In 4h	50h / Weekly	100h	200h / Yearly	300h / Yearly	600h	1500h / Yearly
Check oil levels	X	-	-	-	-	-	-
Check air intake and cooling areas; clean as necessary	-	-	-	-	-	-	-
Check air cleaner element <sup>2</sup>	-	X <sup>1</sup>	-	-	-	-	-
Grease PTO bearings	-	X	-	-	-	-	-
Check track tension <sup>3</sup>	X	X	-	-	-	-	-
Change engine oil <sup>2</sup>	-	-	X <sup>1</sup>	-	-	-	-
Remove and clean engine shrouds and cooling areas <sup>2</sup>	-	-	X <sup>1</sup>	-	-	-	-
Clean and inspect engine oil cooler <sup>2</sup> & Hydraulic oil Cooler	-	-	X <sup>1</sup>	-	-	-	-
Check drive belt tensions: pump drive / PTO drive / mower drive	X	-	X	-	-	-	-
Check Spindle condition	-	-	X	-	-	-	-
Replace engine oil filter <sup>2</sup>	-	-	-	X <sup>1</sup>	-	-	-
Replace fuel filter <sup>2</sup>	-	-	-	X <sup>1</sup>	-	-	-
Clean, set gap or replace spark plugs, and set gap <sup>2</sup>	-	-	-	X	-	-	-
Replace engine air cleaner element and check inner element <sup>2</sup>	-	-	-	-	X <sup>1</sup>	-	-
Replace engine air cleaner inner element <sup>2</sup>	-	-	-	-	-	X <sup>1</sup>	-
Change Hydraulic oil / filter	-	-	-	-	-	-	X <sup>1</sup>
Change gearbox oil	X	-	-	-	-	-	X <sup>1</sup>

1 Perform procedures more frequently under extremely dusty/dirty conditions

2 Refer to the supplied Kohler Engine Manual for details

3 Check track tension frequently when tracks are new

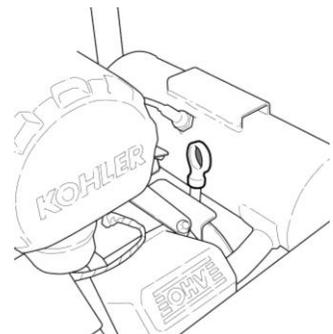
### 4 Hours - Initial Run-In

Check engine oil.



**WARNING!**

Be careful when checking oil. Hot oil can burn unprotected skin.



**Check Track Tension**

A properly adjusted track has 3/4 in of slack in it. Remove excess slack with the track tension adjuster. In order to properly measure slack, the track must be lifted off the ground. Lift each track up using the Jacking Procedure.

**Jacking Procedure**

The machine can be raised up off the ground using the included jack stands and the deck raise / lower assembly.

Jacking the machine is useful for measuring track tension or general track maintenance and cleaning.

Four jack posts are mounted on the machine frame – one in each corner.

**NOTE! Use the jack stands in pairs, either on one side, or both sides. Do not use to lift only the front or the rear.**



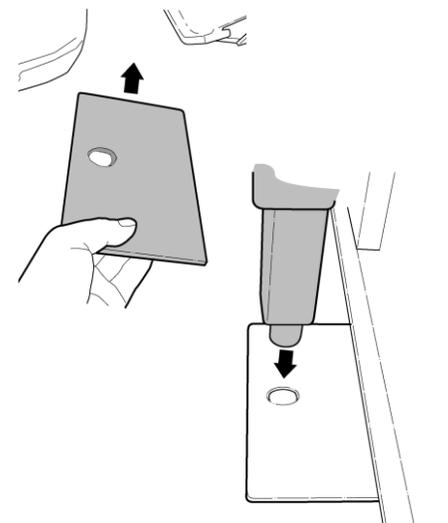
**! WARNING!**

**Perform jacking procedure on level ground with the engine off. Personal injury may otherwise result.**

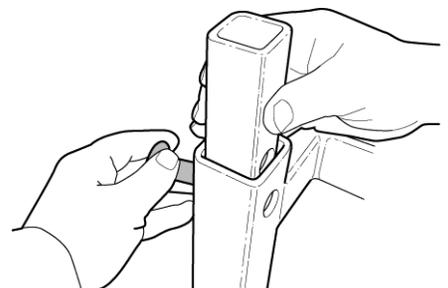
If possible, start with the mower deck raised to the highest possible cutting height. This can be accomplished without running the engine. Establish communications between the remote control and the machine – do not start the engine.

Insert a foot plate under each jack position on the side of the machine to be raised. Block the track on the opposite side of the machine.

Insert a jack leg into each tube on the machine frame. Position them at the lowest position.



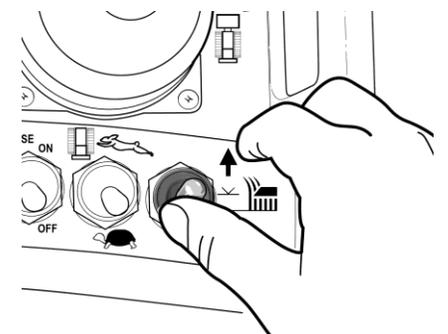
Insert the pins through the machine frame and jack tube; secure the pins in the tube with the clip.



Turn on the ignition switch on the console. After communication has been established, do not start the engine. Use the mower deck raise/lower switch on the remote control to lower the machine which will raise the track(s) as the machine is supported on the jack stands.

Stop when the actuators are at the end of their stops. An audible 'clicking' sound will be heard.

Reverse this procedure to lower the track(s) to the ground.



## Track Tension Adjustment

**IMPORTANT! Loose tracks can more easily de-track; however do not over-tighten. Over-tightening will damage the tracks, increase bearing wear and damage drive components.**

Jack one side of the machine up at a time using the procedure outlined on page 42.

A grease filled hydraulic cylinder is used to tension the tracks of the SlopePro®. The tensioner cylinder is located within the track frame, the service connections are accessible behind a cover on the outside of the track frame (as shown). Track tension is set using a standard grease gun equipped with a pressure gauge (supplied with the machine).

There are (2) connections on each cylinder. One is a high pressure grease zerk fitting for pressurizing the cylinder to set track tension (the fitting toward the rear of the machine). The other connection is a bleeder screw used to relieve the pressure in the tensioner cylinder (the fitting toward the front of the machine). A wrench is supplied for the bleeder screw which will direct the removed grease to a suitable receptacle.

### Setting Track Tension

Remove access cover from track frame to gain access to service connections.

Wipe any grease or dirt away from the grease zerk (rear connection).

Connect grease gun to zerk fitting and pump grease until pressure gauge reads 1200-1500 psi.

Remove grease gun from zerk fitting and clean any residual grease from the machine.

Reinstall access cover on the track frame.

### Relieving Track Tension

Remove access cover from track frame to gain access to service connections.

Wipe any grease or dirt away from the bleeder screw (front connection).

Insert supplied wrench on to the bleeder screw and turn counter-clockwise. Place a cup or other suitable receptacle under the handle of the wrench. The grease purged from the cylinder will flow through the wrench handle and into the receptacle.

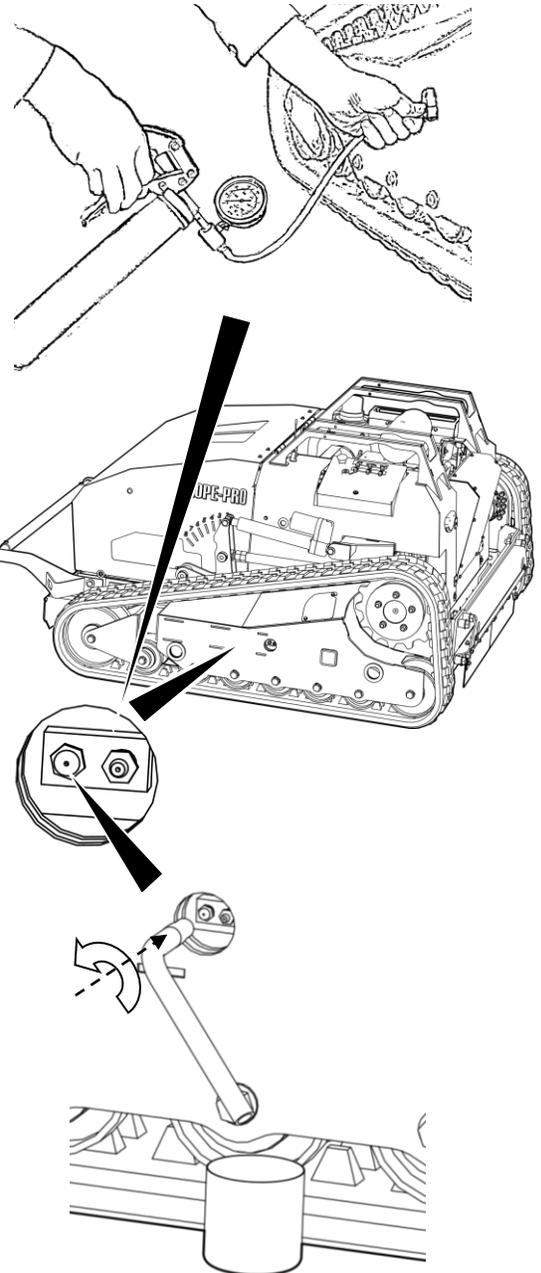
When the tension is relieved sufficiently for the required service, tighten the bleeder screw with the wrench and clean any remaining grease from the machine.

Reinstall access cover on the track frame.

Also check roller condition. Look for bearing wear or looseness.

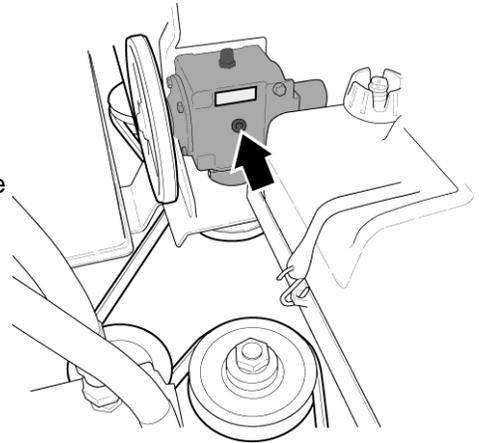
Note:

Refer to a qualified service technician if the track must be removed.



**Change gearbox oil – initial run-in**

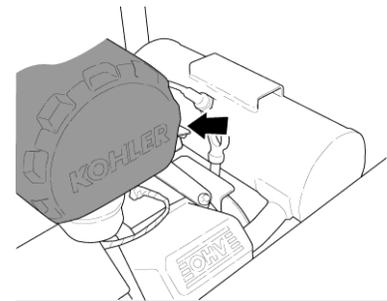
- Change gearbox oil when warmed to operating temperature.
- Thoroughly flush gearbox with a cleaning oil and refill. Refer to page 50 for oil change procedure.



**50 Hour / Weekly Interval**

**Check Air Filter Precleaner**

Check precleaner more frequently in dusty conditions. Refer to Kohler Engine Manual for further information.

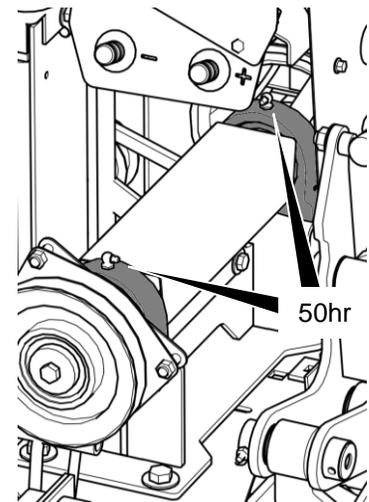


**Grease PTO Bearings**

There are only two grease fittings on the machine. These are found on the main drive shaft bearings. All other shaft bearings do not require greasing.

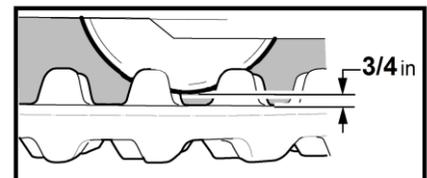
- Grease main drive shaft bearings every 50 hours. Pump 3–5 shots each with a standard manually operated grease gun.
- Power assisted grease gun is NOT recommended
- Use NLGI grade 2 General Purpose Grease only.

**IMPORTANT! Do not over grease. Forcing grease into the bearings will damage the seals.**



**Check Track Tension**

A properly adjusted track has **1/2 - 3/4 in of slack** in it. Remove excess slack with the track tension adjuster. In order to properly measure slack, the track must be lifted off the ground. Lift each track up using the Jacking Procedure. Loose tracks can more easily de-track; however do not over-tighten. Over-tightening may cause power loss, excessive idler bearing wear, and damage the tracks.



See page 43.

## 100 Hour Interval

Change engine oil.

### **WARNING!**

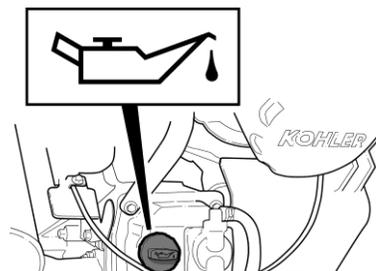
Be careful when changing oil. Hot oil can burn unprotected skin.

- Engine oil capacity is 2 US qt (2 l).
- Refer to Kohler Engine Manual for procedure.
- 

### Recommended engine oil

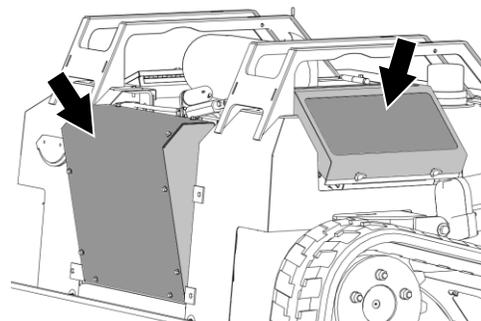
Factory fill oil is SAE30 used for engine break-in.

Recommended engine oil is AMSOIL Formula 4-stroke 10W30 / SAE 30 small engine oil.



### Remove and Clean Engine Shrouds

- Refer to the Kohler Engine Manual for details
- Clean debris from these areas



### Clean/inspect engine and hydraulic oil cooler

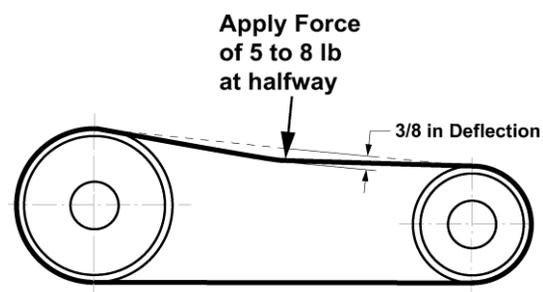
- Clean debris from these areas.
- Check for oil leaks.

### Check Drive Belt Tension

Proper belt tensioning is a fundamental factor in successful V-belt life.

Lack of tension will cause slippage, and too much tension will cause excessive belt stretch as well as damage to the drive components, such as bearings and shafts. Therefore, the following procedure is recommended to ensure proper belt tension:

- At the mid-point of the span, apply a deflection force with a spring scale in the direction perpendicular to the span until the belt is deflected the 3/8 in.
- The recommended force to deflect the belt 3/8 of an inch is a minimum of 5 lb to a maximum of 8 lb. Adjust belt tension to suit.
- The first 24 to 48 hours of operation is the belt "run in" period. To ensure satisfactory belt performance, belt tension should be checked during this time period.



Refer to the following pages for drive belt adjustment procedures.

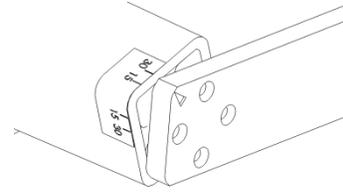
### Belt Adjustment – Pump Drive / PTO Drive / Gearbox

Drive belts for these components utilize an automatic rubber torsion tensioning device. These tensioners are pre-set upon installation and require no further adjustment or maintenance.

In normal service the tensioner arm angle (see detail at right) should read between 30 degrees and 15 degrees.

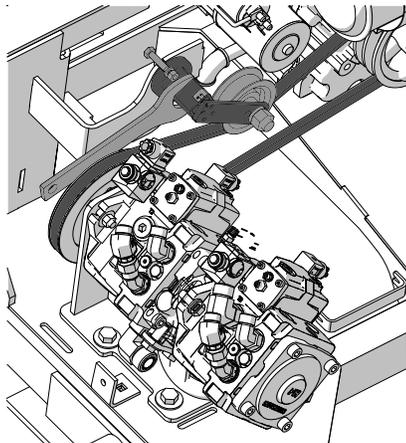
A wrench is provided with the machine to facilitate installation / removal of belt tensioner.

**Position wrench close to the flange end of tensioner base.**

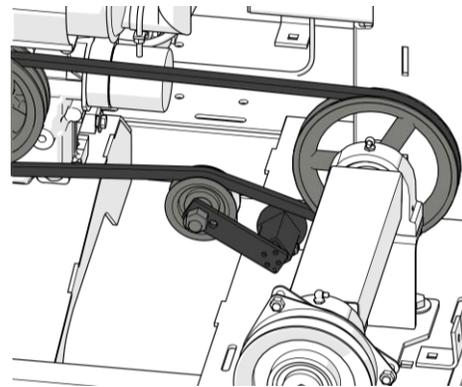


To release belt tension:

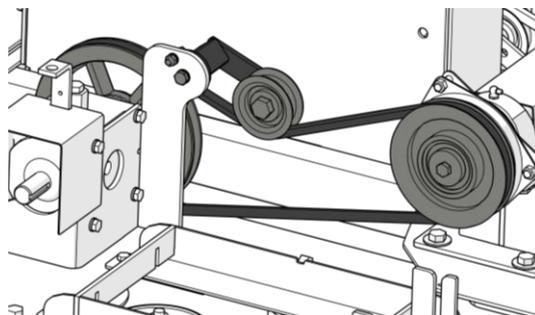
- Remove cowl panes as necessary to access belts.
- Remove 5/16 locating bolt from base of tensioner.
- Place provided wrench on square base of tensioner.
- While holding provided wrench, loosen M10 bolt securing tensioner base to frame.
- Rotate wrench to relieve tension on tensioner.
- To tension belt:
- Tighten M10 bolt finger tight securing tensioner base to frame.
- Use provided wrench on square base of tensioner to rotate tensioner base, applying belt tension.
- While holding tension with wrench, tighten the M10 bolt securing tensioner base to frame.
- When the locating holes align, install the 5/16 locating bolt.



Pump Drive Tensioner  
with Wrench



PTO Drive Tensioner



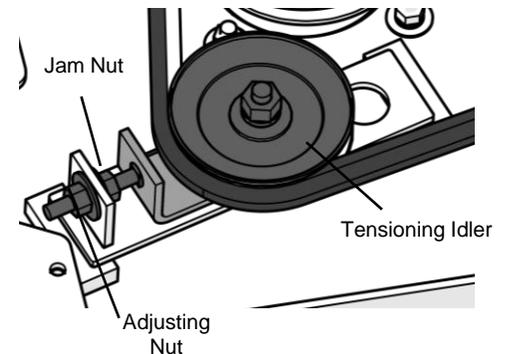
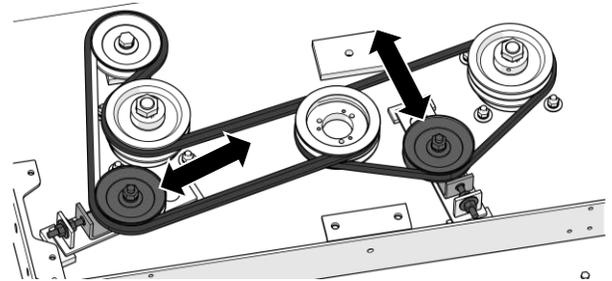
Gear Box Tensioner

### Adjust Mower Drive Belt Tension

There are 2 drive belts to transmit power from the gear box to the blade spindles. Each drive belt utilizes an adjustable sliding tensioner idler to set belt tension.

In the event that belt adjustment must be made, follow these steps for each belt:

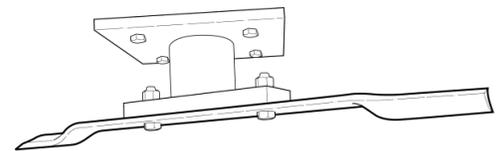
- 1) Remove fuel tanks to access belt adjusters.
- 2) Loosen the jam nut on the adjusting screw.
- 3) Loosen the nut fixing the tensioning idler to the mower deck.
- 4) Set desired belt tension by turning the adjusting nut
  - Clock Wise to tighten belts
  - Counter Clock Wise to loosen belts
- 5) Tighten the nut fastening the tensioning idler to the mower deck.
- 6) Tighten jam nut on the adjusting screw.
- 7) See Check Drive Belt Tension on page 45 for proper tension



### Spindle Inspection

Spindles are equipped with maintenance free roller bearings. Inspect blade spindles by first loosening the two mower blade drive belts. Wearing protective gloves, and one at a time, grasp each blade and attempt to move it from side to side. If any free play is noted, it is necessary to have the spindle serviced by a qualified technician.

NOTE: Spindle nut is left-hand thread. Nut torque is 60 ft-lb.



## 200 Hour / Monthly Interval

### Change engine oil and filter

Refer to Kohler Engine Manual for procedures.

**IMPORTANT!** Recommended engine oil is AMSOIL Formula 4-stroke 10W30 / SAE 30 small engine oil.

### Replace fuel filter

Refer to Engine Manual for procedure.

**IMPORTANT!** The Kohler ECH749 engine is fuel injected and requires a special fine fuel filter. Failure to use filter PT605491 will damage the fuel injection components.

### Spark Plugs

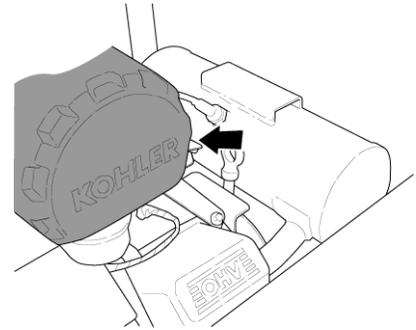
Clean, set gap or replace spark plugs.

Refer to the Engine Manual for procedures.

### 300 Hour / Yearly Interval

Replace engine air cleaner filter element.

Check inner filter element.



### 600 Hour Interval

Replace air cleaner inner filter element.

### 1500 Hour / Yearly Interval

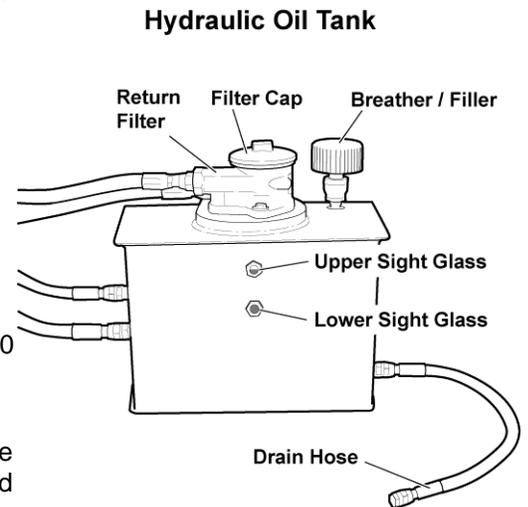
#### Change Hydraulic Oil / Filter

Hydraulic tank capacity is 6 gal US. Clean the tank surface prior to changing oil. Factory fill hydraulic oil is ISO HVI 46

#### **CAUTION!**

When adding hydraulic oil, always pump new oil through a 10 micron absolute filter to ensure oil cleanliness.

- Use remote drain hose to drain oil into an approved container.
- Change return filter element.
- Pump new oil through a filter to refill tank. Refer to table on page 40 for proper oil.
- Refill so oil level is to the bottom of the upper sight glass.
- After filling hydraulic system, start machine and operate in a safe location forward and back for a few moments. Shut off engine and recheck level. Adjust if required.

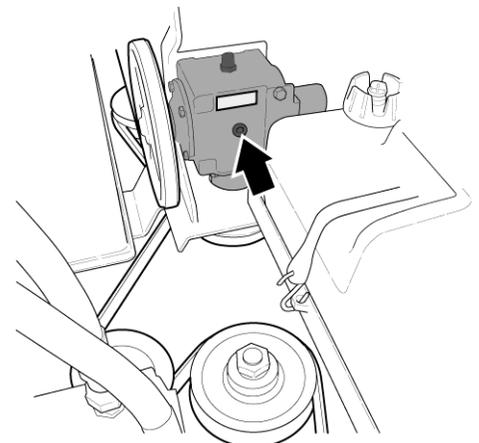


#### **WARNING!**

Be careful when changing oil. Hot oil can burn unprotected skin.

#### Change Oil in Gearbox

- Remove gearbox mount assembly from machine to drain oil into an approved container. Oil is drained by removing vent assembly from top of gearbox and inverting assembly.
- Reinstall the gearbox mount assembly.
- Remove oil level plug from side of gearbox (arrow). Fill through opening on top of gearbox to level where oil just starts to flow out of side hole (approx. 475ml). Use 80W90 gear oil or equivalent.



## As Required Maintenance

### Sharpening / Balancing Blades

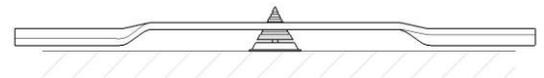
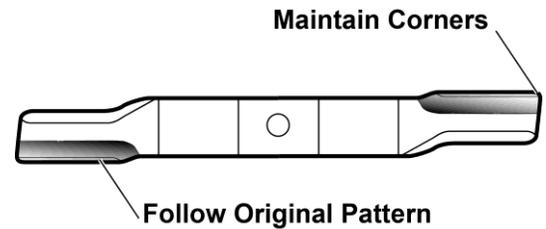


#### WARNING!

Use gloves when handling mower blades. Blades can be very sharp.

**IMPORTANT!** When sharpening blades, be sure material removed is equal on both sides of the blade. Unbalanced blades will cause excessive vibration leading to cracks in machine components.

- Clean all material from the blade prior to sharpening and balancing.
- Grind or file blades following original pattern as shown.
- Sharpen to a razor edge. Do not sharpen backside of blade.
- Use the supplied cone balancer to verify blade balance. When the blade is correctly balanced, the blade will remain horizontal.



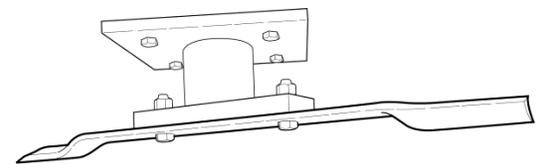
### Changing Mower Blades

**IMPORTANT!** Only original equipment blades should be used when replacing worn out or damaged mower blades. They are made of special steel alloys and subjected to rigid heat-treat and inspection requirements.

Substitute blades may not meet these rigid specifications and **MAY BE DANGEROUS.**

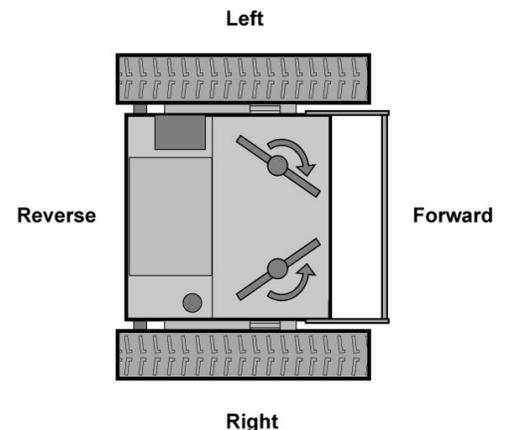
Maintenance should always be performed by a qualified service technician familiar with servicing similar equipment, using good safety and workmanship practices.

Always observe proper lock-out procedures when performing any maintenance work including changing or servicing the blades. Always remove and retain the ignition switch key, block and or support machine using equipment designed for the task.



Replace any blade that is bent, excessively nicked, worn or has any other damage. Small nicks can be ground out when sharpening.

- When replacing mower blades, be aware of blade rotation as blades rotate in opposite directions. Ensure the cutting edge is facing in the correct direction
- The left hand blade is painted RED
- The right hand blade is painted BLACK
- When viewed from above and per machine orientation as identified on page 17, the left hand blade turns clockwise.
- When viewed from above and per machine orientation as identified on page 17, the right hand blade turns counter clockwise.



- Both blades use two 1/2 in X 1 3/4 lg. Grade 5 bolts with lock washers and nuts to hold blade to blade spindle support bar. When changing blades, be sure that these fasteners are in good condition and tightened to the proper specification (85ft-lbs) so they will not come loose during operation.

**Using Booster Battery**



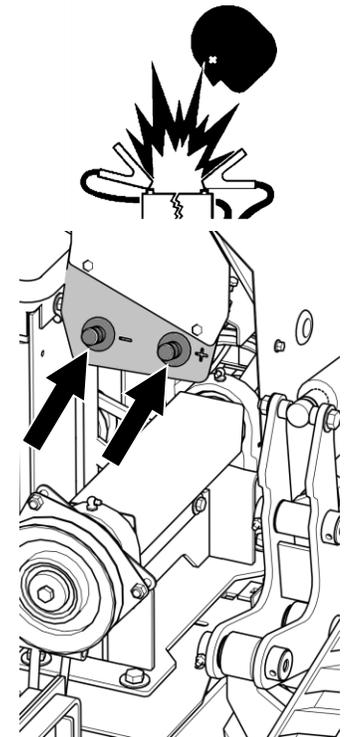
**WARNING!**

**Explosive gases. No smoking. Keep sparks and flames away from batteries.**

In the event that the machine battery has become discharged and must be started in short order a booster battery may be used.

Boost terminals are provided under the hood to facilitate boost starting using appropriate booster cables.

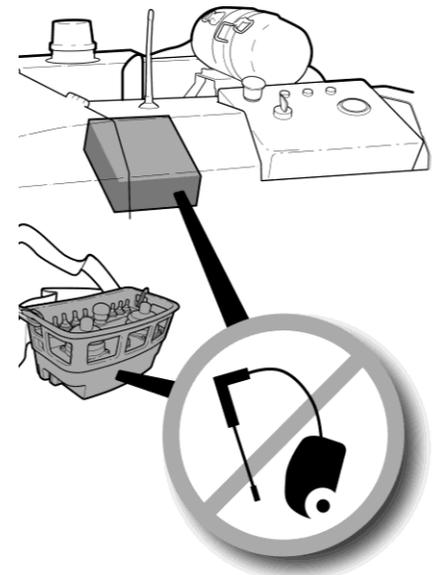
- Connect positive (+) post of boost battery to positive (+) boost terminal on machine.
- Connect negative (-) post of boost battery to negative (-) boost terminal on machine.
- Start machine and allow to run for several minutes.
- Carefully disconnect cables in the reverse order.



**Cleaning**

**IMPORTANT! If using a power washer to clean the machine, be careful of electrical system components. Do not use a power washer on the control panel or the remote control. Damage to sensitive electronics could occur causing a system malfunction.**

Warning decals are placed on the machine in these locations.



## End of Season Maintenance / Long term Storage

In preparation for long term storage of the machine:

- Remove all grass clippings and debris from the machine.
- Clean all grass build-up from under the deck of the machine.
- Thoroughly wash the machine.
- Inspect machine and replace or repair any worn or damaged parts.
- To prevent rust, repair any scratched or chipped metal surfaces.
- Apply a light coat of oil to any exposed steel surfaces and pivot points.
- Lubricate PTO bearings.
- Ensure battery disconnect switch is in the "Off" Position.

It is important to prevent gum deposits from forming in the engine fuel system parts. Draining the fuel system or adding fuel stabilizer are the best methods.

To empty the engine fuel system:

- Disconnect the fuel tanks.
- Start the engine and let it run until it stalls.
- Drain tanks\* and use fresh fuel next season.

If using fuel stabilizer:

- Add stabilizer to gasoline in one fuel tank. Always follow mix ratio stated on stabilizer container.
- Remove other fuel tank and drain\*.
- With stabilizer in fuel, run engine 10 minutes after adding stabilizer to allow it to flow through the entire fuel system. Do not empty the gas tank containing stabilizer.
- Use fresh fuel next season.

To prevent corrosion within the engine cylinders, remove the engine spark plugs and add one tablespoon of engine oil into the cylinders. Reinstall spark plugs (do not connect spark plug wires). Crank the engine 2 or 3 times to distribute oil. Reinstall spark plug wires.

Cover exhaust pipe to prevent debris / moisture from entering the muffler.

If possible, store the machine indoors. If not, place a suitable protective cover over the machine. Do not use a plastic cover. Plastic covers can allow condensation to form underneath it, which will cause rust.

\*Protect and respect the environment. If disposing of old gasoline, do so in accordance with local regulations.

## Troubleshooting Guide

For problems specific to the engine or the remote control, refer to the user manual for that component included with the manual set.

### Machine Drive Belts and Spindles

Problem	Cause	Remedy
Belt Slippage Belt Squeal	– Improper belt tension	– Adjust tension (Deck Belts) – Inspect / Replace Belt / Auto Tensioner (Others) – Ensure proper OEM belts are used.
	– Oily belt drive	– Clean drive / Replace belts
Rapid Belt Wear	– Belt slippage – Belt not located properly in groove	– Increase belt tension – Place belt properly in groove. – Ensure proper OEM belts are used.
Overheated spindle bearings	– Belt Slippage – Excessive belt tension – Worn bearings	– Increase belt tension – Set belt tension properly – Replace bearings

### Hydraulic Drive System

Problem	Cause	Remedy
High Oil Temperature	– Hydraulic Oil Cooler Blockage – Restriction / blockage in mechanical track drive System – Pinched / Kinked Hose	– Clean debris from cooler face & core. – Inspect & Repair – Inspect & Repair
Slow / Sluggish Response, Unusual Noise	– Low oil level – Worn pump drive belt – Clogged oil filter – Air in Hydraulic Oil	– Top-up oil level – Inspect / Replace Belt or Auto Tensioner – Replace filter – Top-up oil level, inspect suction hose
No Drive	– Low oil level – Worn / missing pump drive belt – Clogged oil filter – Improper electrical connection to pump – Low Charge Pressure	– Top-up oil level – Inspect / Replace Belt or Auto Tensioner – Replace filter – Inspect / repair electrical system – See qualified service personnel

**High Oil Temperature:**

With the engine shut off, check for evidence of external oil leakage around seals, housings, or hose connections. Also check for pinched or kinked hoses that could restrict oil flow and cause excessive heat build-up in the hydraulic oil.

Check oil cooler for debris build-up that can restrict air flow through core. Clean core with compressed air if required.

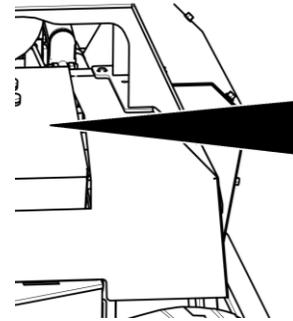
Check hydraulic oil level in reservoir and add the correct amount and type of hydraulic oil, if necessary.

Check the quality of the oil; change if milky, dirty or discolored. Also smell the oil. A burnt odor indicates excessive heat that will destroy the lubricating qualities of the oil. Again, the oil should be changed if this condition is found. Determine the cause of the excessive heat and correct it.

Determine if the return filter is plugged or damaged. A filter that has failed will permit oil to bypass the system, affecting system operation and tests. If the filter is plugged, examine the contamination to determine what may have caused the failure.

### Electrical System

Relays – if fuses are ok, replace suspect relay with a known working relay to test.  
 Never replace a damaged fuse with a fuse of a higher or lower current value.

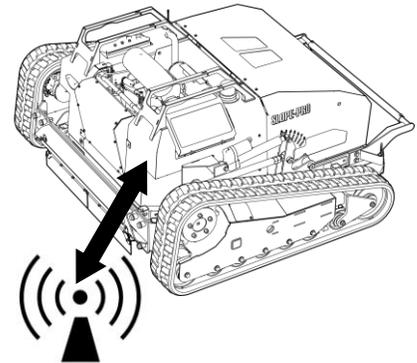


ID	FUSE	FUNCTION	LOCATION
1	10A	ENGINE START	FUSE BLOCK
2	10A	THROTTLE CONTROL	FUSE BLOCK
3	15A	RADIO/CONTROL UNIT	FUSE BLOCK
4	10A	HYD. COOLER FAN	FUSE BLOCK
5	10A	BRAKE VALVE	FUSE BLOCK
6	10A	PFO CLUTCH	FUSE BLOCK
7	20A	IGN POWER	IN-LINE
8	40A	MAIN POWER	IN-LINE
9	20A	LH LIFT - LOWER	IN-LINE
10	20A	RH LIFT - LOWER	IN-LINE
11	20A	LH LIFT - RAISE	IN-LINE
12	20A	RH LIFT - RAISE	IN-LINE

\*NOTE - ADDITIONAL FUSES LOCATED ON ENGINE. CONSULT ENGINE OWNER'S MANUAL FOR INFO.  
209146

### Radio Control System

There are various environmental and operational factors that can affect the performance of the radio control system.  
 Radio interference from other sources can cause the communication between the transmitter and receiver to be dropped. This is normal and can be reduced or avoided by switching to another channel on the transmitter. (See page 38).  
 Communication can also be lost during operation due to the proximity of the transmitter to the machine. A sensitive area has been identified at the right rear of the machine. If the operator is situated down-slope from the right-hand rear side of the machine it is possible that radio communication may be lost. Try to avoid this positioning in order to have uninterrupted operation.



### Torque for Fasteners

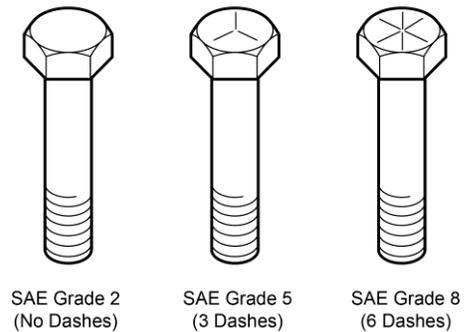
The table lists the correct tightening torque for fasteners on the machine, unless otherwise stated elsewhere. When bolts are to be tightened or replaced, refer to this chart to determine the proper torque except when specific torque values are assigned in the manual. Only SAE grade 5 fasteners are to be used in the assembly of this machine, or as otherwise specified in the associated Parts List.

#### Recommended Torque Value

Values shown in Ft-lb (Nm)

Bolt Diameter (inches)	SAE Grade 5
5/16	21 (28)
3/8	38 (52)
7/16	55 (75)
1/2	85 (115)
9/16	125 (170)
5/8	175 (240)
3/4	300 (410)
7/8	450 (610)
1	680 (925)
1 in Spindle Nut	60 (82)

#### SAE Bolt Head Markings



## WARRANTY POLICY

Progressive Turf Equipment Inc. warrants each new product to be free of defects in material and workmanship to the original purchaser. Warranty will be applicable, from the original date of purchase (sale) of a new, unused:

### Slope-Pro® SP-52

Progressive Turf Equipment Inc. will provide the following warranty coverage for Progressive Turf Equipment Inc., manufactured components and general assemblies (the base) that are found on the Slope-Pro®:

- 12 months from date of sale for non-commercial, governmental or municipal customers
- 6 months from date of sale for commercial/industrial customers

The following components are covered by the Original Equipment Manufacturer of that component who may offer coverage of a different duration and terms than offered by Progressive Turf Equipment Inc:

	<b>Manufacturer</b>	<b>Warranty Coverage</b>
<b>Engine</b>	<b>Kohler</b>	<ul style="list-style-type: none"><li>• Limited 2 year warranty from date of sale</li></ul>
<b>Pump</b>	<b>Hansa</b>	<ul style="list-style-type: none"><li>• 12 month warranty from date of sale (machine delivery to customer)</li></ul>
<b>Motor</b>	<b>Poclain</b>	<ul style="list-style-type: none"><li>• 24 months from date of sale or 2000 hours of operation, whichever comes first</li></ul>
<b>Remote Control</b>	<b>NBB</b>	<ul style="list-style-type: none"><li>• 12 months from date of sale</li></ul>
<b>Gear box</b>	<b>Von Ruden</b>	<ul style="list-style-type: none"><li>• 6 months from date of sale</li></ul>

**To validate warranty, the Delivery and Warranty Registration form must be completely filled out & returned to Progressive Turf Equipment Inc.**

This warranty will not cover any components which, in the opinion of the company, have been subjected to negligent use, alteration, and accident, damage due to lack of maintenance or use of wrong lubricants, or if parts supplied by others have been used in repairs of any product manufactured by Progressive Turf Equipment Inc. Items such as lubricants, blades, belts, tracks, filters and batteries are considered consumable wear items and are excluded from Progressive Turf Equipment Inc.'s warranty coverage. Warranty coverage on these items is limited to what is provided by the OEM of the applicable part, if any.

Our obligation, in the event that any Progressive Turf Equipment Inc. product warranted, shall become defective or fail, will be limited to repairing or replacing any defective part, subject to company approval. All defective parts must be retained and preserved in good condition for 60 days after applying for warranty consideration. This warranty will not provide for service calls to customer location or for transportation of equipment to dealer location if such service is required. Warranty repair work must be performed by a trained service technician and at an authorized service location.

The sole liability of Progressive Turf Equipment Inc. under this warranty or any implied warranty, shall be limited as set forth herein. The customer agrees that Progressive Turf shall not in any event be obligated to reimburse, or pay the customer for any expense, including but not limited to, loss of profits, rental of substitute equipment, or any direct, incidental or consequential damages to any person or property for any reason or caused by reason of Progressive Turf Equipment Inc., negligence, or otherwise in connection with the sale, delivery, installation, training or use of the equipment. The customer shall indemnify and hold Progressive Turf Equipment Inc. harmless against all such liability. PROGRESSIVE TURF EQUIPMENT INC. DISCLAIMS ANY EXPRESS (EXCEPT AS SET FORTH HEREIN) AND IMPLIED WARRANTIES WITH RESPECT TO THE GOODS INCLUDING, BUT NOT LIMITED TO, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND MAKES NO WARRANTY AS TO THE DESIGN, CAPABILITY, CAPACITY, OR SUITABILITY FOR USE OF THE GOODS.

Progressive Turf Equipment Inc. reserves the right to make improvements to the design or changes to the specifications at any time without prior notice or any obligation or duty to inform current owners or modify units previously sold.

This warranty is not subject to change or modification by anyone, including dealers, and no one is authorized to make any representation on behalf of Progressive Turf Equipment Inc.

### **KEEP FOR YOUR RECORDS:**

Purchaser should fill in the blanks below for his reference when buying repair parts and/or for proper machine identification when applying for warranty.

Model \_\_\_\_\_ Serial Number \_\_\_\_\_

Date Purchased \_\_\_\_\_ Dealer \_\_\_\_\_

**Read your Operator's Manual** This warranty coverage supersedes all written warranties, effective April 15, 2015.



**IMPORTANT: DEALER MUST COMPLETE AND MAKE A COPY OF THIS FORM AND SUBMIT TO PROGRESSIVE TURF EQUIPMENT WITHIN 5 DAYS OF DELIVERING THE EQUIPMENT TO VALIDATE WARRANTY.  
DELIVERY AND LIMITED WARRANTY REGISTRATION FORM**

Mail or fax to: PO Box 940, Seaforth, Ontario Canada N0K1W0 Fax: (519)527-2275

**SLOPE-PRO® MACHINE INFORMATION**

Machine Identification	Serial Number	Hour Meter Reading	Date Delivered	yyyy/mm/dd
	Dealer		Authorized Dealer Training Representative	Print
Branch Location				Signature

**CUSTOMER**

Company Name		Email	
Address		Phone	
City		Fax	
State / Province		Authorized Customer Representative	Print
ZIP / Postal Code			Signature

**Pre-Delivery Check List** – Performed by qualified Dealer representative for authorized Customer’s representative.

Refer to the Slope-Pro® machine Operator’s Manual for detailed instructions

- |   |   |
|---|---|
| <input type="checkbox"/> Ensure Operator’s Manual is stored within manual container | <input type="checkbox"/> Check hydraulic tank level   |
| <input type="checkbox"/> Verify that all safety decals are legible                  | <input type="checkbox"/> Check tracks   |
| <input type="checkbox"/> Check engine oil level                                     | <input type="checkbox"/> Check height adjustment  |
| <input type="checkbox"/> Check fuel level and tank security (both)                  | <input type="checkbox"/> Verify that PTO clutch functions correctly                               |
| <input type="checkbox"/> Check cooling area   | <input type="checkbox"/> Verify mower blades, spindles are in good condition and properly secured |
| <input type="checkbox"/> Check air cleaner and connections                          | <input type="checkbox"/> Verify that hoods and guards are in good condition and in place          |
| <input type="checkbox"/> Check drive belts  |   |

**Authorized Customer Representative:** please initial beside the following boxes, when the item(s) are demonstrated to you and only after you fully understand the operation and / or significance of each item:

Showned location of and reviewed Operator’s Manual and the limited warranty information, terms and conditions		Instructed on the forward and reverse movement and left and right steering functions	
Understand the Warning, Danger and Caution notifications identified in the warning decals and Operator’s Manual		Engagement and disengagement of the mower blades and cutting height adjustment	
Instructed on all functions of the remote control, including initial control communication and identification of all functions		Understand the potential dangers of remote control vehicle operation as identified in but not limited to scenarios listed in the Operator’s Manual	
Instructed on the proper starting, shut down and emergency stop operation		Instructed on the maintenance requirements as identified in the Operator’s Manual	

As an authorized representative of the Customer, I hereby acknowledge acceptance of the above machine and that the machine was verified against the above check list. I have read and understood the nature and extent of the limited warranty information provided. I have been advised on and understand the proper operation, safety procedures, maintenance requirements, limitations and capabilities of this equipment for which it was designed and described in the Operator’s Manual.

Authorized Customer Representative	DATE
Print	Signature
	yyyy/mm/dd



# DAILY PRE-OPERATION INSPECTION CHECKLIST

MOWER ID#	PERFORMED BY Supervisor Operator
DATE	SHIFT

## WARNING!

Machine is operated by remote control and can remain functional beyond the recommended maximum 300 foot operating range. It is the Operator's responsibility to control the machine in a safe manner.



### BEFORE OPERATING THIS MACHINE

Check that the Operator's Manual is located in the manual container and is in good condition. Contact your dealer immediately if you do not have an Operator's Manual

Carefully read the Operator's Manual, completely understand the Safety Messages and instructions, and know how to correctly operate this machine. Contact your dealer to obtain and explanation of any instruction not fully understood.

- Wear Personal Protective Equipment (PPE) – know how to use the protective equipment when operating the machine. Hard hats, protective glasses and face shields, protective shoes, gloves, reflector type vests, and ear protection are types of equipment that may be required.
- Operate the machine only when physically fit and not under the influence of alcohol or drugs
- Operate this machine only if you have read and understood the warning and operating instructions found in the machines Operator's Manual
- Ensure you are properly trained to operate the machine
- Ensure you are familiar with all controls and emergency stopping procedures
- Verify you have all the required Personal Protective Equipment and know how to use them
- Ensure you are familiar with and follow all local regulations at the worksite, pertaining to the operation of this equipment

**Refer to the relevant sections of this manual for detailed instructions.**

OPERATOR'S SIGNATURE \_\_\_\_\_

This Pre-Operation Inspection form may be duplicated for extra copies.

# DAILY PRE-OPERATION INSPECTION CHECKLIST

MOWER ID#	PERFORMED BY
	Supervisor
	Operator
DATE	SHIFT



## WARNING!

**Before conducting the inspection, always observe proper lock-out procedures when performing any maintenance work. Always remove and retain the ignition key, block and or support machine using equipment designed for the task. Be aware of hot areas and ensure the hood strut lock is functioning properly and can adequately hold open the hood.**

<b>Pre-Start Checks Prior to Operating</b>	Condition at Start of Shift	Specific Comments if not O.K.
Ensure Operator's Manual is stored within manual container on machine		
Verify that all safety decals are legible		
Ensure the horn is operational		
Check engine oil level – on level ground		
Check fuel level and tank security (both)		
Check cooling area		
Check air cleaner and connections		
Check drive belts		
Check for and remove any debris		
Check hydraulic tank level and for signs of leakage		
Check tracks for correct adjustment		
Check height adjustment		
Verify mower blades, spindles are in good condition and properly secured		
Hoods and guards are in good condition and in place		
Check all fasteners		

## Functional Checks Prior To Operating

Ensure horn sounds when communication is established between remote control and machine		
Ensure emergency stops on remote control and machine operate properly		
Ensure excessive tilt angle shut down functions on remote control		
Verify that flashing light illuminated when machine is in motion		
Verify that all operation controls function correctly		
Verify that PTO clutch functions correctly		

OPERATORS SIGNATURE \_\_\_\_\_

This Pre-Operation Inspection form may be duplicated for extra copies.

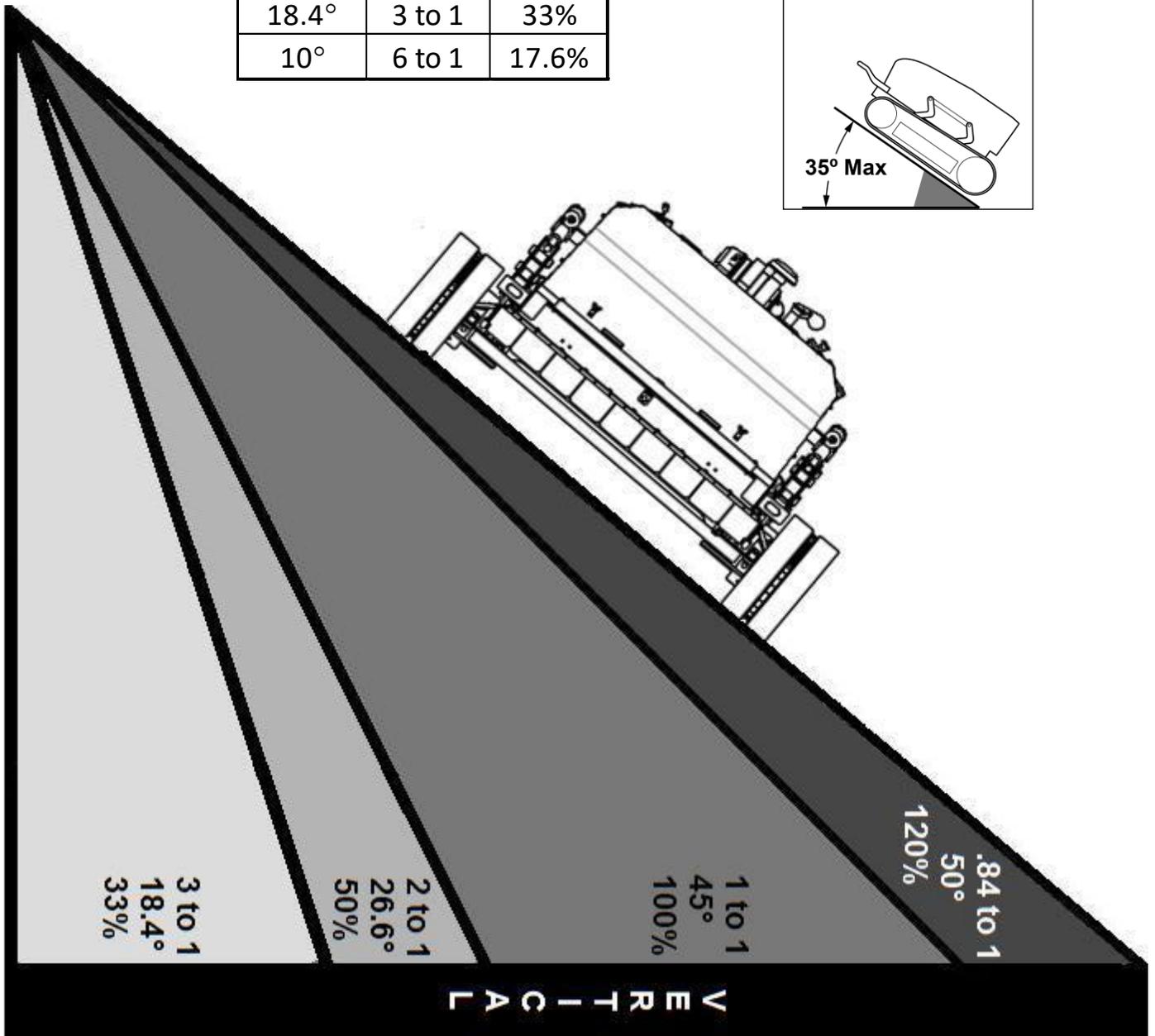
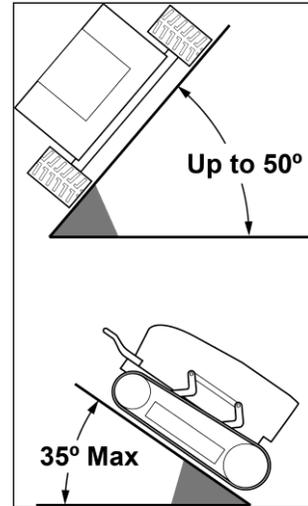
**DO NOT OPERATE AN UNSAFE MOWER**

**PAGE 2 OF 2**

# Slope Estimate Gage Instructions

To help estimate the angle of a slope align the thick black bar with a known vertical surface such as a building or utility pole. Fold the paper until the folded edge aligns with the slope. Estimate the slope from the gradients noted on the diagram. See page 36 for permissible operating slopes.

Degrees	Slope	Grade
50°	0.84 to 1	120%
45°	1 to 1	100%
26.6°	2 to 1	50%
18.4°	3 to 1	33%
10°	6 to 1	17.6%





Parts List

# Slope-Pro<sup>®</sup>

Remote Controlled Slope Mower

Serial No. 2052175 & UP



PROGRESSIVE TURF EQUIPMENT INC.  
137 WEST WILLIAM STREET  
SEAFORTH, ONTARIO  
CANADA N0K 1W0  
TOLL FREE: 800 668-8873  
ISSUE DATE: April, 2019  
P.N. 120532



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



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## General Information

### Serial Number Location

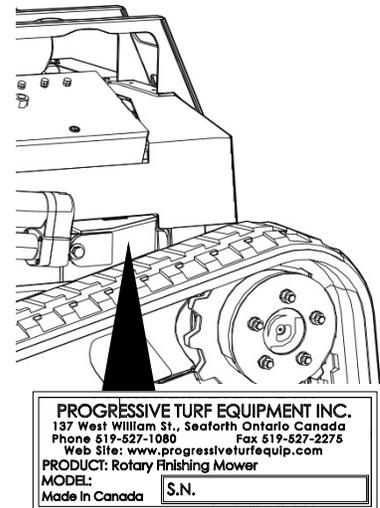
The serial number plate for the machine is located on the left-hand rear frame.

For quick reference, record the following information:

Model: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Date purchased: \_\_\_\_\_



Always state this information when contacting your selling dealer and when ordering spare parts.

### Parts Information

Use only Genuine Original Equipment Manufacturers (O.E.M.) replacement parts. The use of “will fit” parts may reduce machine performance, void machine warranties and present a safety hazard. Use Genuine OEM parts.

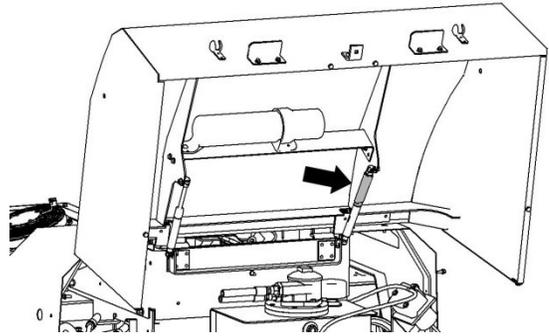


Si No Lee Ingles, Pida Ayuda a Alguien Que Se Lo Lea  
Para Que le Traduzca Las Medidas de Seguridad

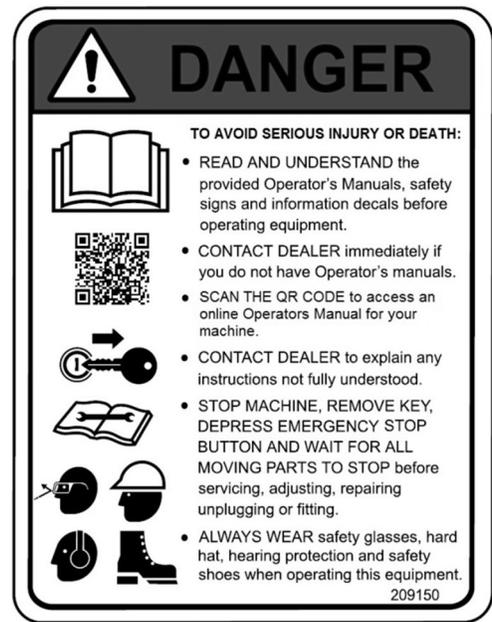
## Maintenance

Maintenance should always be performed by a qualified service technician familiar with servicing similar equipment, using good safety and workmanship practices.

**Always observe proper lock-out procedures when performing any maintenance work.** Always remove and retain the ignition key, block and or support machine using equipment designed for the task. Always turn the main power disconnect switch to the “Off” position. Be aware of hot areas and ensure the hood strut lock is functioning properly and can adequately hold open the hood.



It is imperative that the operator or qualified service technician reads and understands all the safety information in the Operator's Manual before proceeding. Failure to follow the instructions or heed the warnings could result in injury or death. **Proper care is your responsibility.**



## WARNING!

Machine is operated by remote control and can remain functional beyond the recommended maximum 300 foot operating range. It is the Operator's responsibility to control the machine in a safe manner.

Always know and observe the local regulations and or restrictions pertaining to the operation of remote controlled equipment.



## PARTS ORDERING GUIDE

The following instructions are offered to help reduce delays and errors in procuring replacement parts for the equipment in this manual.

1. The Parts Manual is prepared in logical sequence and grouping of parts that belong to the basic machine featured in this manual. Part Numbers and Descriptions are given to help locate the parts and quantities required.
2. The Purchase Order must indicate the Name and Address of the person or organization ordering the parts, and, if possible, the serial number of the machine for which the parts are being ordered.
3. The purchase order must clearly list the quantity of each part, the complete and correct part number, and the basic name of the part.
4. The manufacturer reserves the right to substitute parts where applicable.
5. Some parts may be unlisted items which are special production items not normally stocked and are subject to special handling. Request a quotation for such parts before sending purchase order.
6. The manufacturer reserves the right to change prices without notice.



Since we at Progressive Turf Equipment are constantly striving to improve our products, we reserve the right to change specifications or design at any time.

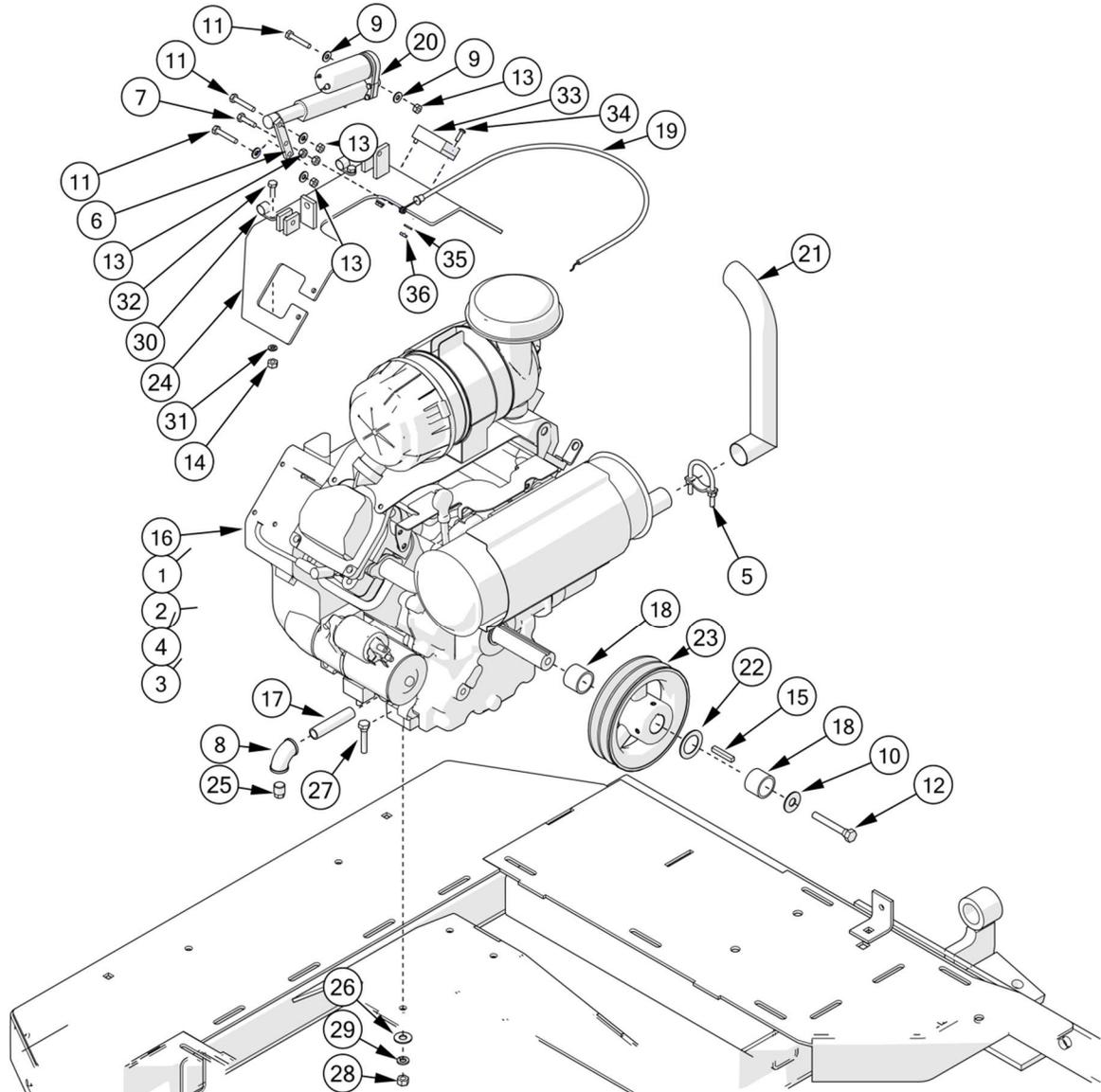
# 1 SERVICE PART QUICK REFERENCE GUIDE

	Part Description	Service Part #
<b>Engine &amp; Hydraulic Filters</b>	Engine Air Filter – Main (Standard)	605487
	Engine Air Filter – Safety (Standard)	605489
	Engine Air Filter – Main (Opt – High Capacity)	605038
	Engine Air Filter – Safety (Opt – High Capacity)	605040
	Engine Oil Filter	605485
	Engine Fuel Filter	605491
	Hydraulic Oil Filter	605354
<b>Drive &amp; Deck Belts</b>	Engine-Jackshaft	604961
	Engine-Hydraulic Pump	604961
	Clutch-Gearbox	604963
	RH Spindle	212055
	LH Spindle	604957
<b>Blades</b>	Standard Blade Kit (LH & RH Blades)	604578
<b>Recommended Fluids</b>	Engine Oil	*API Classification; SJ or higher (Refer to Operators Manual)
	Hydraulic Oil	*Premium Quality HVI (Refer to Operators Manual)
	Gearbox	SAE 80W90 Gear Oil
	Grease Fittings	*Multi-Purpose Grease

\* Refer to the Maintenance Section of the Operators Manual for recommended fluid viscosity for your operating area.

## 2 ENGINE

### 2.1 Engine Accessories

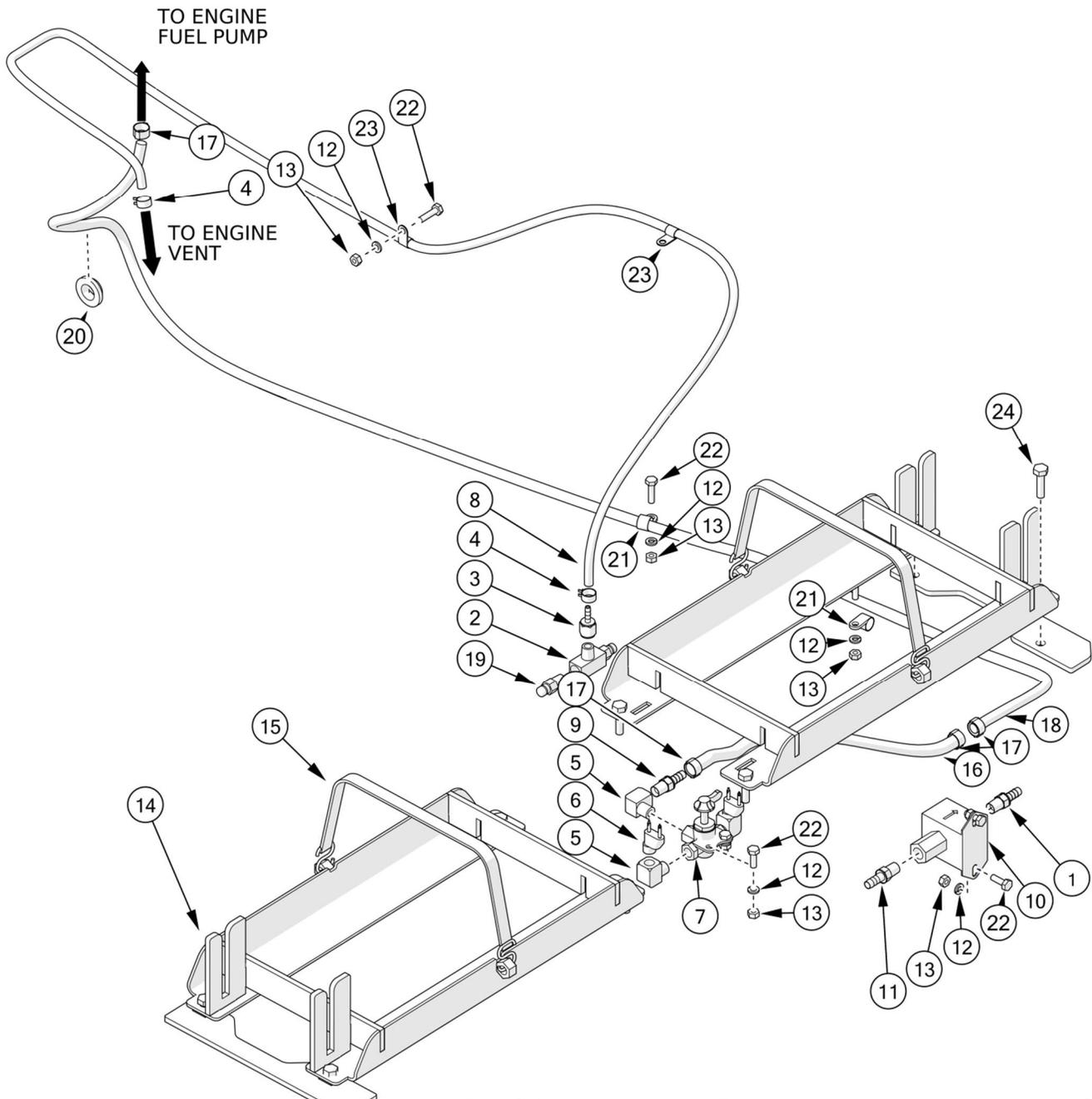


ITEM	PART #	DESCRIPTION	QTY
5	605031	1 1/2" EXHAUST CLAMP	1
6	604599	ARM-THROTTLE BODY	1
7	O.L.	HEX BOLT - 1/4 x 1.0 NC GR5 PL	1
8	605501	ELBOW - 3/8 X 90° GALV.	1
9	O.L.	FLAT WASHER- 1/4 PL	5
10	O.L.	HARDENED WASHER- 7/16: USS YEL	1
11	O.L.	HEX BOLT - 1/4 x 1.5 NC GR5 PL	3
12	O.L.	HEX BOLT- 7/16 X 1.5 UNF GR5 PL	1
13	O.L.	HEX LOCK NUT - 1/4NC GR5 PL	5
14	O.L.	HEX NUT - 1/4NC GR5 PL	2
15	O.L.	KEY - SPINDLE - 1/4" X 1-9/16"	1
16	604106	KOHLER ENGINE	1
17	605499	PIPE NIPPLE - 3/8 NPT X 3 GALV	1
18	605467	ENGINE PULLEY SPACER	2
19	605809	THROTTLE CABLE	1
20	604881	ACTUATOR-THROTTLE	1
21	604580	EXHAUST STACK - W.A.	1

ITEM	PART #	DESCRIPTION	QTY
22	O.L.	SHIM WASHER - 1.188"	1
23	604118	MAIN DRIVE PULLEY	1
24	604336	MTG PLATE - THROTTLE	1
25	O.L.	HEX PIPE PLUG - 3/8" NPT	1
26	O.L.	FLAT WASHER- 3/8 PL	4
27	O.L.	HEX BOLT- 3/8 X 1.75 NC GR5 PL	4
28	O.L.	HEX NUT - 3/8NC GR5 PL	4
29	O.L.	LOCK WASHER, SPLIT- 3/8 PL	4
30	229010	9/16" TUBE CLAMP	2
31	O.L.	LOCK WASHER- 1/4 PL	2
32	O.L.	HEX BOLT - 1/4 X 0.75 NC GR5 PL	2
33	605375	TACHOMETER / HOURMETER	1
34	O.L.	MACHINE SCREW - #10-24 X 0.75	2
35	O.L.	LOCK WASHER- #10 PL	2
36	O.L.	HEX NUT - #10-24 GR2 PL	2

O.L. - OBTAIN LOCALLY

## 2.2 Fuel System

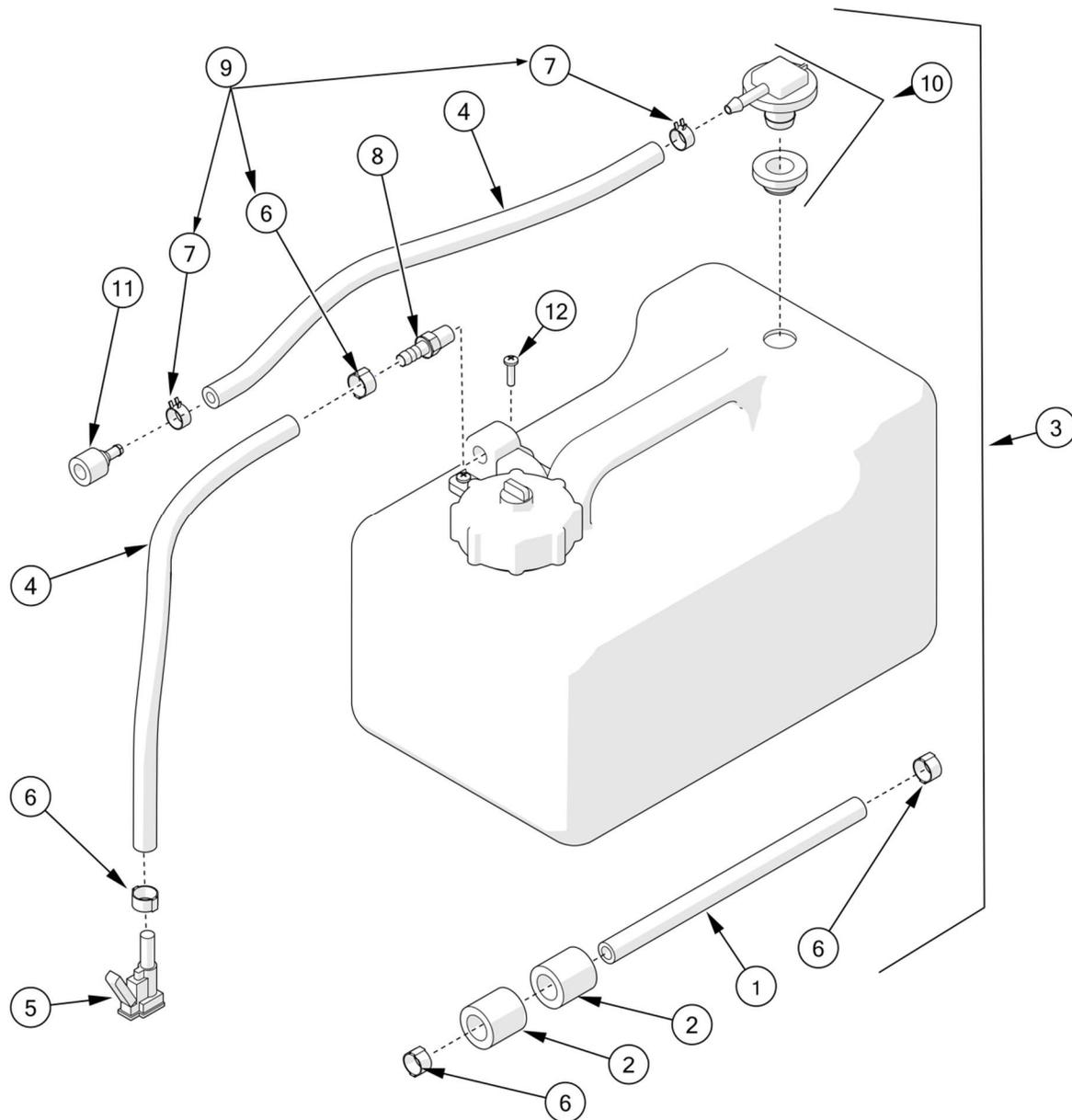


ITEM	PART #	DESCRIPTION	QTY
1	SEE ITEM #25	1/4" X 1/8" NPT MALE HOSE BARB	1
2	SEE ITEM #25	1/4 NPT TEE - FXMXF	1
3	SEE ITEM #25	3/16" X 1/4 NPTF HOSE BARB	1
4	229015	7/16 SPRING HOSE CLAMP	2
5	SEE ITEM #25	ELBOW - 1/4" F-NPT X 1/4" M-NPT	3
6	605219	MALE QUICK CONNECT - FUEL	2
7	604057	SELECTOR VALVE	1
8	605415	3/16 FUEL LINE- TEE TO ENGINE	1
9	SEE ITEM #25	5/16 X 1/4" NPT MALE HOSE BARB	1
10	604724	FUEL PUMP	1
11	SEE ITEM #25	5/16 X 1/8" NPT MALE HOSE BARB	1
12	O.L.	LOCK WASHER- 1/4 PL	7
13	O.L.	HEX NUT - 1/4NC GR5 PL	7

ITEM	PART #	DESCRIPTION	QTY
14	604696	FUEL TANK MOUNT - W.A.	2
15	605319	15" RUBBER STRAP	2
16	605217	FUEL HOSE - PUMP TO TEE	1
17	605209	EAR CLAMP - 9/16 STEPLESS	4
18	605235	FUEL HOSE- PUMP TO FILTER	1
19	605379	MALE QUICK CONNECT- VENT	2
20	605203	GROMMET	1
21	229010	9/16 TUBE CLAMP	2
22	O.L.	HEX BOLT - 1/4 X 1.00 NC GR5 PL	6
23	229013	3/8 TUBE CLAMP	2
24	O.L.	HEX BOLT - 3/8 x 1.25 NC GR5 PL	8
25	605356	FUEL FITTING KIT-COMPLETE SYSTEM	1

O.L. - OBTAIN LOCALLY

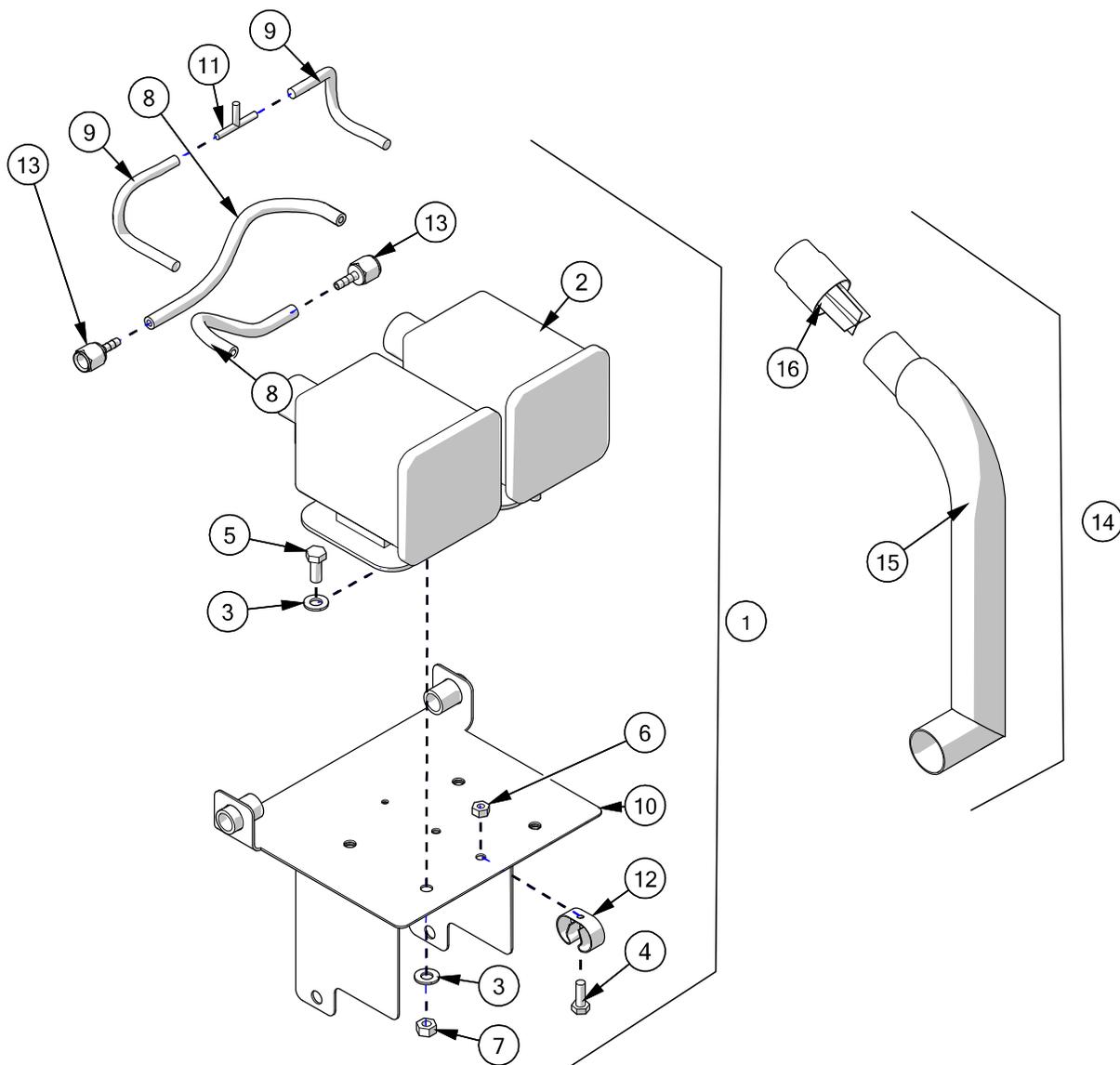
## 2.3 Fuel Tank Assembly



ITEM	PART #	DESCRIPTION	QTY
1	605677	FUEL HOSE - 3/8" X 5' LONG	1
2	604099	WEIGHT - DROP HOSE	2
3	604476	FUEL TANK ASSEMBLY	1
4	605675	FUEL HOSE - 5/16" X 5' LONG	2
5	605207	FEMALE FUEL QUICK CONNECT	1
6	SEE ITEM #9	EAR CLAMP - 9/16	4
7	SEE ITEM #9	9/16 SPRING HOSE CLAMP	2
8	SEE ITEM #13	5/16 MALE HOSE BARB	1
9	604636	HOSE CLAMP KIT - COMPLETE	1
10	605352	FUEL TANK VENT KIT	1
11	605381	FEMALE QUICK CONNECT	1
12	O.L.	MACHINE SCREW - #10-32 X 0.75	4
13	605356	FUEL FITTING KIT - COMPLETE SYSTEM	1

O.L. - OBTAIN LOCALLY

## 2.4 Evaporative Emission System / Spark Arrestor (California)



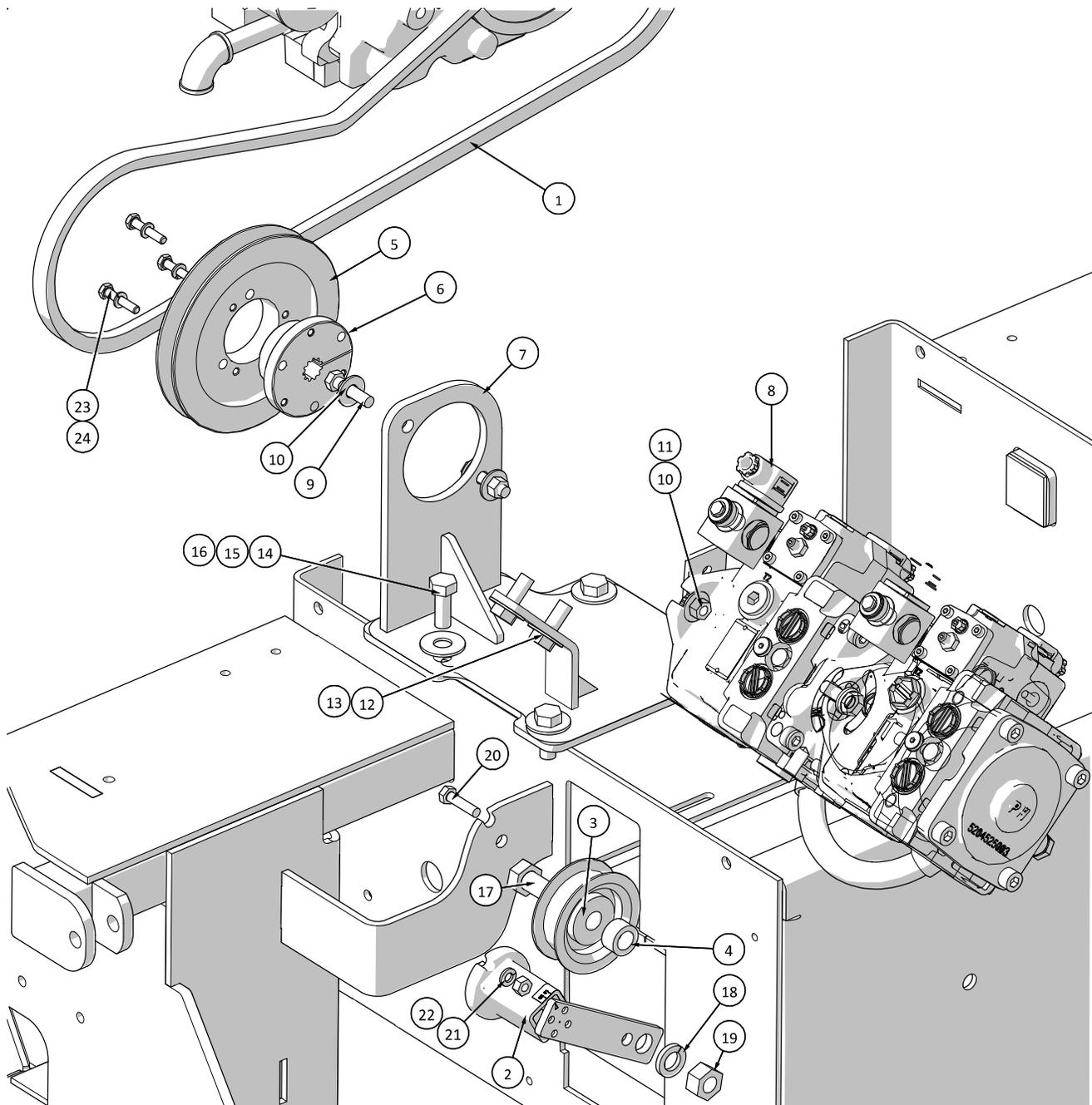
ITEM	PART #	DESCRIPTION	QTY
1	604548	KIT - CARBON CANNISTER	1
2	605581	CARBON CANNISTER	2
3	O.L.	FLAT WASHER- 5/16 PL	8
4	O.L.	HEX BOLT - 1/4 x .75 NC GR5 PL	1
5	O.L.	HEX BOLT- 5/16 X .75 NC GR5 PL	4
6	O.L.	HEX NUT - 1/4NC GR5 PL	1
7	O.L.	HEX NUT - 5/16NC GR5 PL	4
8	605679	FUEL HOSE - 3/16" X 3' LONG	2
9	605629	FUEL HOSE - 1/8" X 3' LONG	2

ITEM	PART #	DESCRIPTION	QTY
10	604536	MTG PLATE - CARBON CANNISTER	1
11	605631	TEE FITTING	1
12	605503	HOSE CLIP	1
13	605413	3/16" BARB X 1/4 NPTF	2
14	604994	KIT - SPARK ARRESTOR	1
15	604992	EXHAUST STACK - SPARK ARRESTOR	1
16	605348	SPARK ARRESTOR	1

O.L. - OBTAIN LOCALLY

## 3 Hydraulic System

### 3.1 Hydraulic Pump Assembly

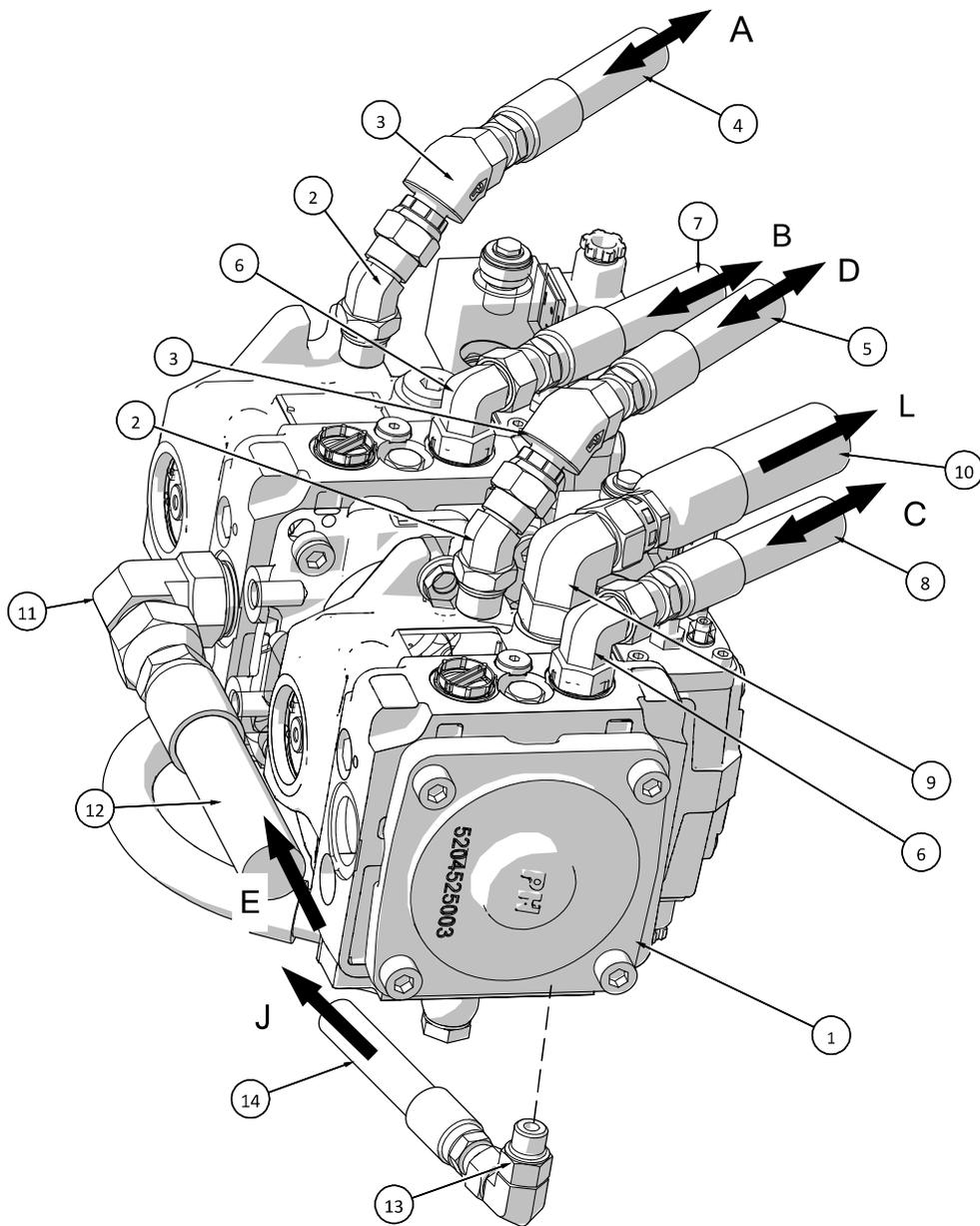


ITEM	PART #	DESCRIPTION	QTY
1	604961	BELT - B57	1
2	606224	IDLER TENSIONER ARM	1
3	212000	IDLER PULLEY	1
4	600142	BUSHNIG	1
5	605775	SHEAVE PULLEY - 6.45"	1
6	605034	SHEAVE BUSHING KIT- 18MM	1
7	604766	PUMP MOUNT - POCLAIN MS10	1
8	605200	PUMP ASSY - POCLAIN PM10	1
9	O.L.	HEX BOLT- 3/8 X 1.5 NC GR5 PL	2
10	O.L.	FLAT WASHER- 3/8 PL	4
11	O.L.	HEX NUT - 3/8NC GR5 UPL	2
12	O.L.	HEX BOLT - M12 X 30GR 8.8	2
13	O.L.	FLAT WASHER- 7/16 PL HARDENED	2

ITEM	PART #	DESCRIPTION	QTY
14	O.L.	HEX BOLT- 1/2 X 1.25 NC GR5 PL	4
15	O.L.	FLAT WASHER- 1/2 PL	8
16	O.L.	HEX NUT - 1/2NC GR5 PL	4
17	O.L.	HEX BOLT- 5/8 X 2.5 NC GR5 PL	1
18	O.L.	LOCK WASHER- 5/8 PL	1
19	O.L.	HEX NUT - 5/8NC GR5 PL	1
20	O.L.	HEX BOLT- 5/16 X 1.25 NC GR5 PL	1
21	O.L.	LOCK WASHER- 5/16 PL	1
22	O.L.	HEX NUT - 5/16NC GR5 PL	1
23	O.L.	HEX BOLT - 1/4" X 1.375 NC GR5 PL	3
24	O.L.	LOCKWASHER - 1/4" PL	3

O.L. - OBTAIN LOCALLY

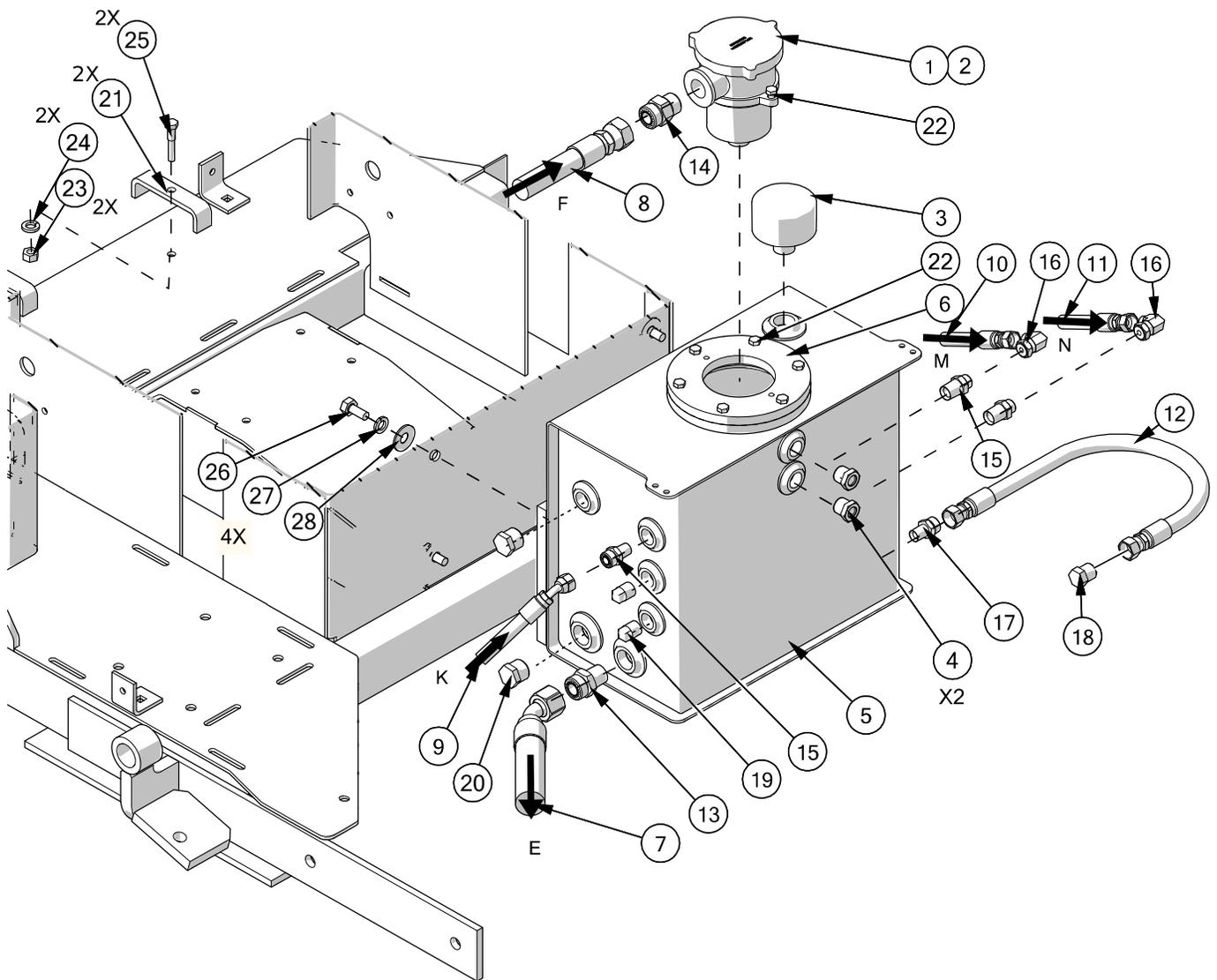
### 3.2 Hydraulic Pump and Fittings



ITEM	PART #	DESCRIPTION	QTY
1	605200	PUMP ASSY - POCLAIN PM10	1
2	221133	ELBOW 45 - -8 ORFS X -8 ORB	2
3	221135	ELBOW 45 SWVL - -8 ORFS	2
4	604800	HOSE ASSY - RH A PORT	1
5	604804	HOSE ASSY - LH A PORT	1
6	221134	ELBOW 90 - -8 ORFS X -8 ORB	2
7	604802	HOSE ASSY - RH B PORT	1
8	604806	HOSE ASSY - LH B PORT	1

ITEM	PART #	DESCRIPTION	QTY
9	221132	ELBOW 90 - -10 ORFS X -10 ORB	1
10	604796	HOSE ASSY - PUMP-COOLER	1
11	221131	ELBOW 90 - -12 ORFS X -12 ORB	1
12	604794	HOSE ASSY - SUCTION	1
13	604861	ELBOW - -6 ORFS X -6 ORB	1
14	604972	HOSE ASSY - BRAKE FEED	1

### 3.3 Hydraulic Tank and Fittings

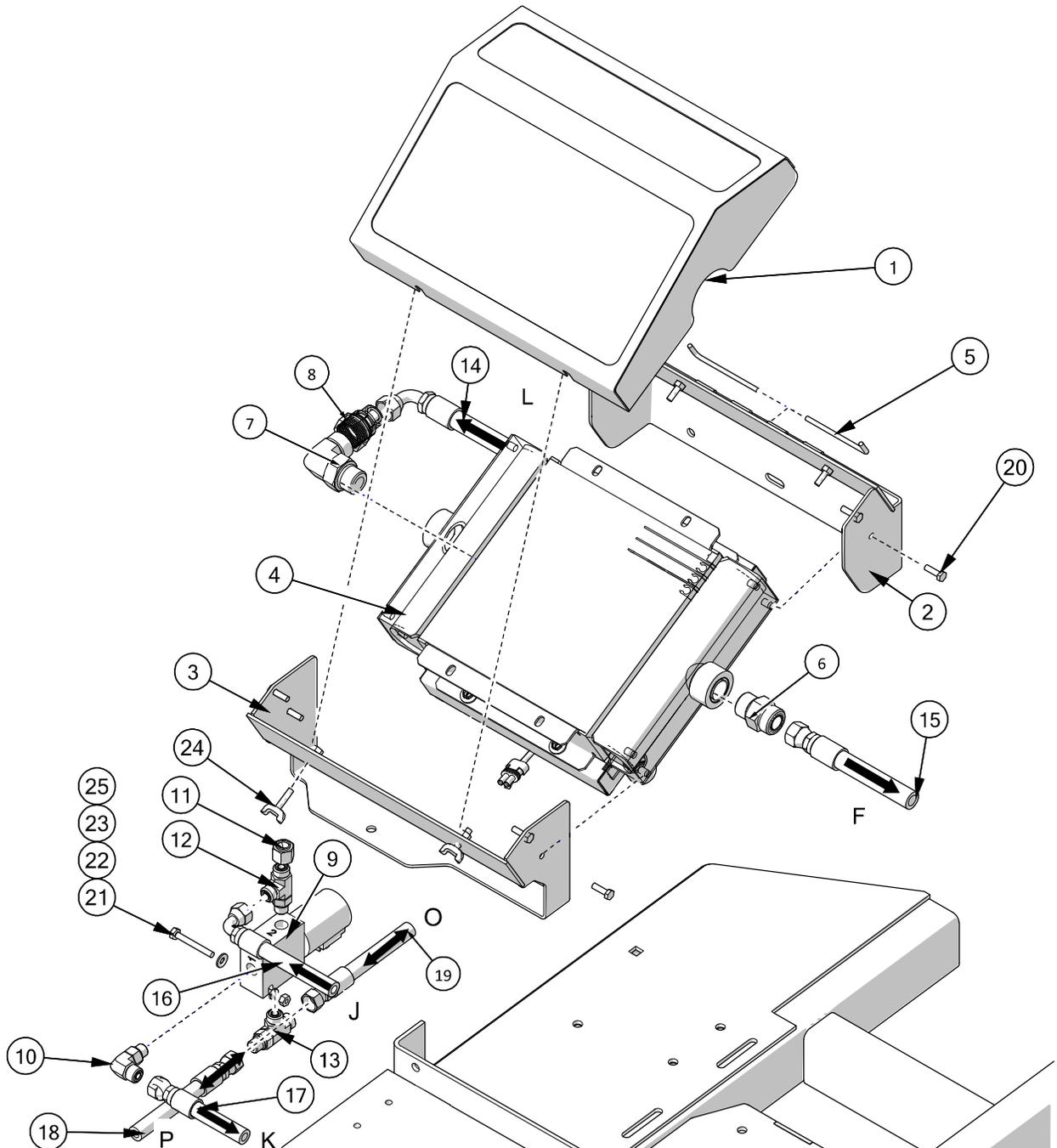


ITEM	PART #	DESCRIPTION	QTY
1	604976	HYD FILTER ASSY - RETURN	1
2	605354	FILTER ELEMENT	1
3	604611	HYDRAULIC VENT. FILTER	1
4	604325	1/2 NPT SIGHT GLASS	2
5	604236	HYDRAULIC TANK	1
6	605062	COVER PLATE - HYD. TANK	1
7	604794	HOSE ASSY - SUCTION	1
8	604798	HOSE ASSY - COOLER - TANK	1
9	604974	HOSE ASSY - BRAKE DRAIN	1
10	605302	HOSE ASSY - RH MOTOR T	1
11	605304	HOSE ASSY - LH MOTOR T	1
12	604731	HOSE ASSY - TANK DRAIN	1
13	222032	ADAPTER - 3/4 NPT X -12 ORFS	1
14	222028	ADAPTER - -12 ORBM X -12 ORFSM	1
15	604747	1/2 NPT X -6 ORFS STR	3

ITEM	PART #	DESCRIPTION	QTY
16	605965	ELBOW SWVL 90 -6 ORFS	2
17	604735	1/2 NPT X -8 ORB STRAIGHT	1
18	604749	PLUG -8 ORFS	1
19	605025	1/2" PIPE PLUG	2
20	605027	3/4" PIPE PLUG	2
21	605615	HOSE HOLD DOWN CLAMP	2
22	O.L.	HEX BOLT- 5/16 X .75 NC GR5 PL	8
23	O.L.	HEX NUT - 3/8NC GR5 PL	2
24	O.L.	LOCK WASHER - 3/8 PL	2
25	O.L.	HEX BOLT - 3/8 X 2 NC GR5 PL	2
26	O.L.	HEX BOLT- 1/2 X 1 NC GR5 PL	4
27	O.L.	LOCK WASHER - 1/2 PL	4
28	O.L.	FLAT WASHER- 1/2 PL	4

O.L. - OBTAIN LOCALLY

### 3.4 Hydraulic Cooler and Brake Valve



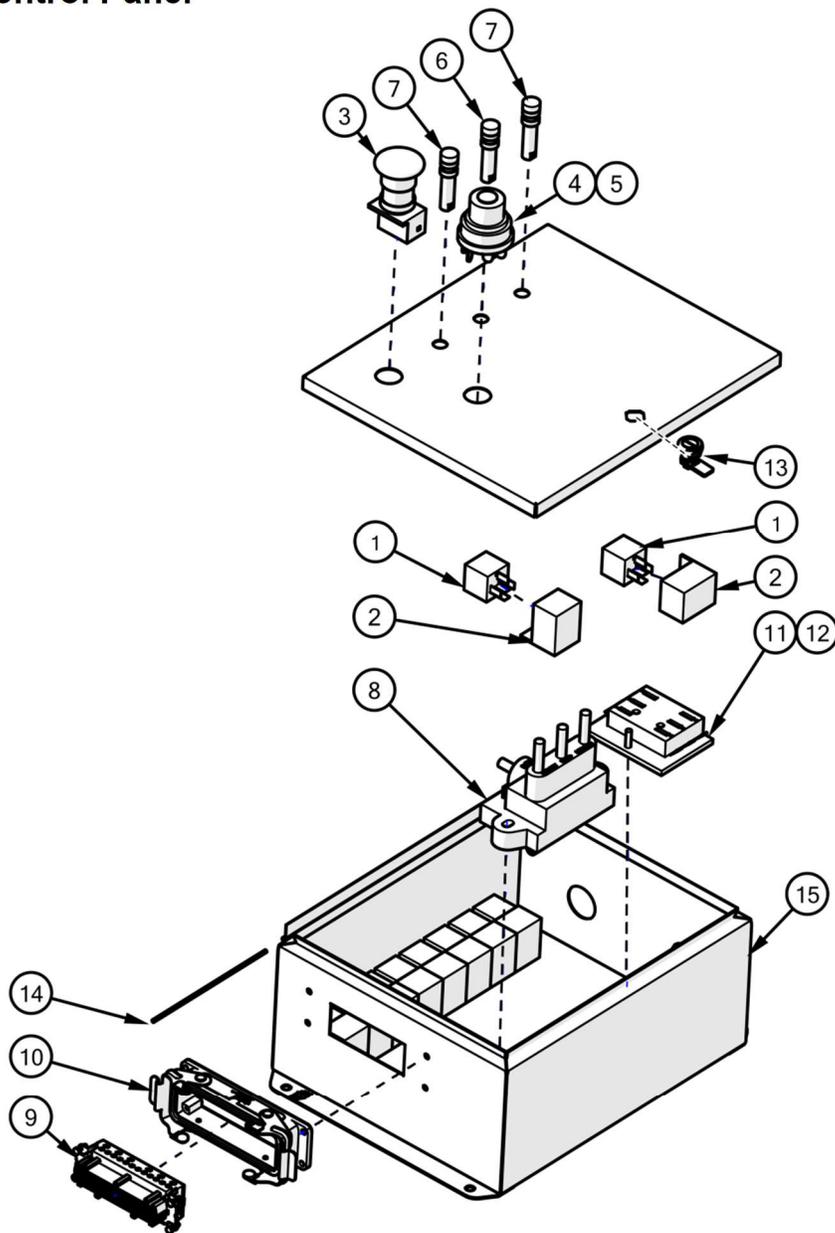
ITEM	PART #	DESCRIPTION	QTY
1	604648	COOLER GUARD - W.A.	1
2	604644	BRACKET - OIL COOLER - UPPER	1
3	604646	BRACKET - OIL COOLER - LOWER	1
4	605070	OIL COOLER - 12V FAN	1
5	605080	HINGE PIN - COVER	2
6	222028	ADAPTER - -12 ORB X -12 ORFS	1
7	222029	ELBOW 90 - -12 ORB X -10 ORFS	1
8	222030	REDUCER - -12 ORFS X -10 ORFS	1
9	604317	SOLENOID VALVE-SLOPE PRO	1
10	604861	ELBOW - -6 ORFS X -6 ORB	1
11	605179	CAP - -6 ORFS	1
12	604739	RUN TEE - -6 ORB X - 6ORFS	1
13	222031	BRANCH TEE -6 ORB X - 4ORFS	1

ITEM	PART #	DESCRIPTION	QTY
14	604796	HOSE ASSY-PUMP-COOLER	1
15	604798	HOSE ASSY - COOLER - TANK	1
16	604972	HOSE ASSY - BRAKE FEED	1
17	604974	HOSE ASSY - BRAKE DRAIN	1
18	604808	HOSE ASSY - RH BRAKE	1
19	604810	HOSE ASSY - LH BRAKE	1
20	O.L.	HEX BOLT - M6 X 20GR 8.8	8
21	O.L.	HEX BOLT - 1/4 X 2.0 NC GR5 PL	2
22	O.L.	FLAT WASHER- 1/4 PL	2
23	O.L.	HEX NUT - 1/4NC GR5 PL	2
24	O.L.	WING SCREW - 1/4 X 1.00	2
25	O.L.	LOCKWASHER - 1/4"	2

O.L. - OBTAIN LOCALLY

## 4 Electrical System

### 4.1 Control Panel



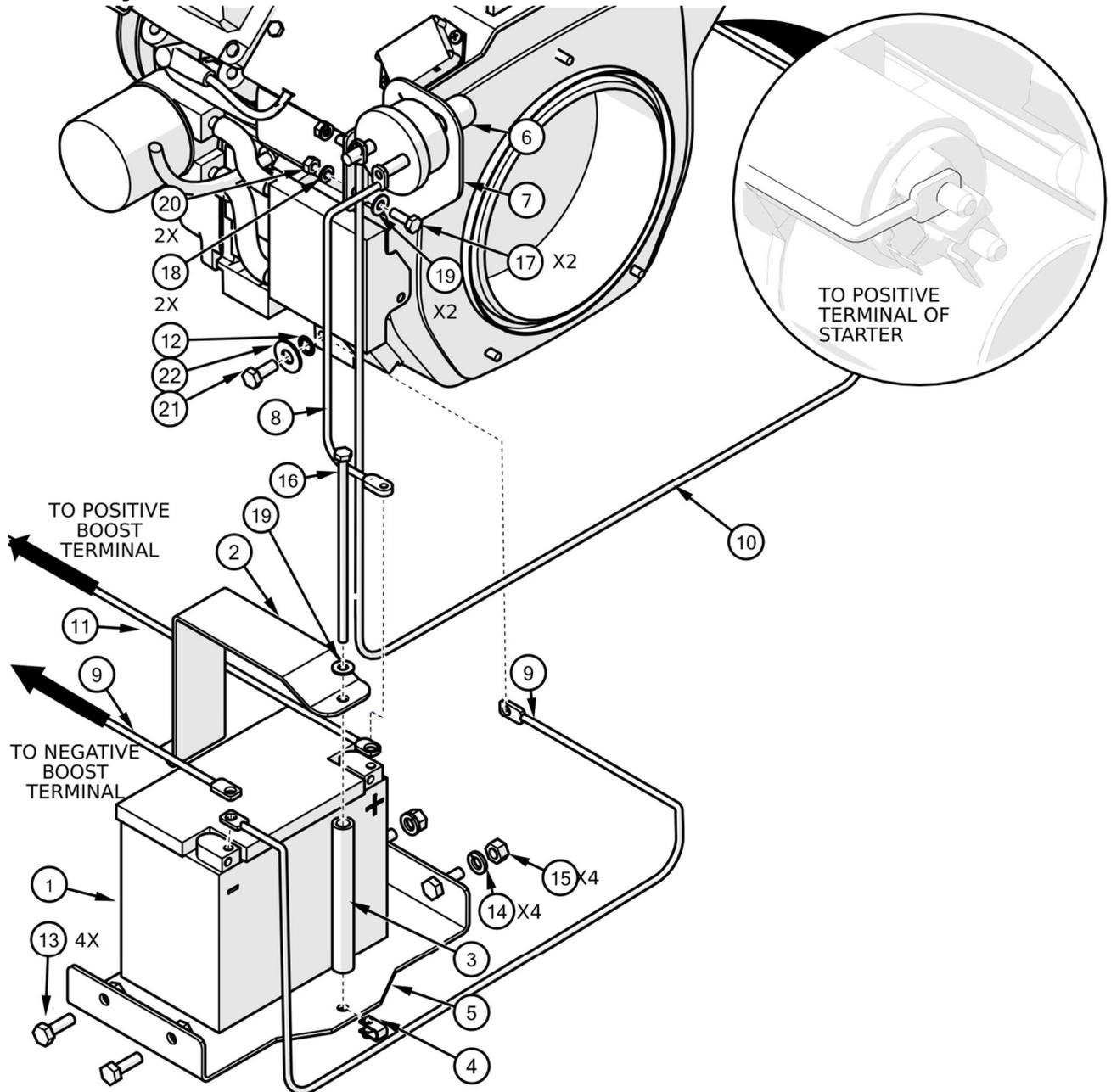
ITEM	PART #	DESCRIPTION	QTY
1	604187	CUBE RELAY - 40A	10
2	605711	RELAY SOCKET	10
3	605161	EMERGENCY STOP	1
4	605655	KEY SWITCH	1
5	605657	KEY SET - IGNITION	1
6	605159	AMBER LIGHT	1
7	605155	RED LIGHT	2
8	604333	REVERSING RELAY	1

ITEM	PART #	DESCRIPTION	QTY
9	605713	24 PIN FEMALE INSERT	1
10	605715	24 PIN PANEL MOUNT	1
11	605167	FUSE PANEL - 6 ATC	1
12	604572	KIT - FUSE ASSORTMENT	1
13	604091	LATCH - CONTROL PANEL	1
14	605787	HINGE PIN	2
15	604285	CONTROL PANEL - PAINTED	1

O.L. - OBTAIN LOCALLY



### 4.3 Battery and Cables



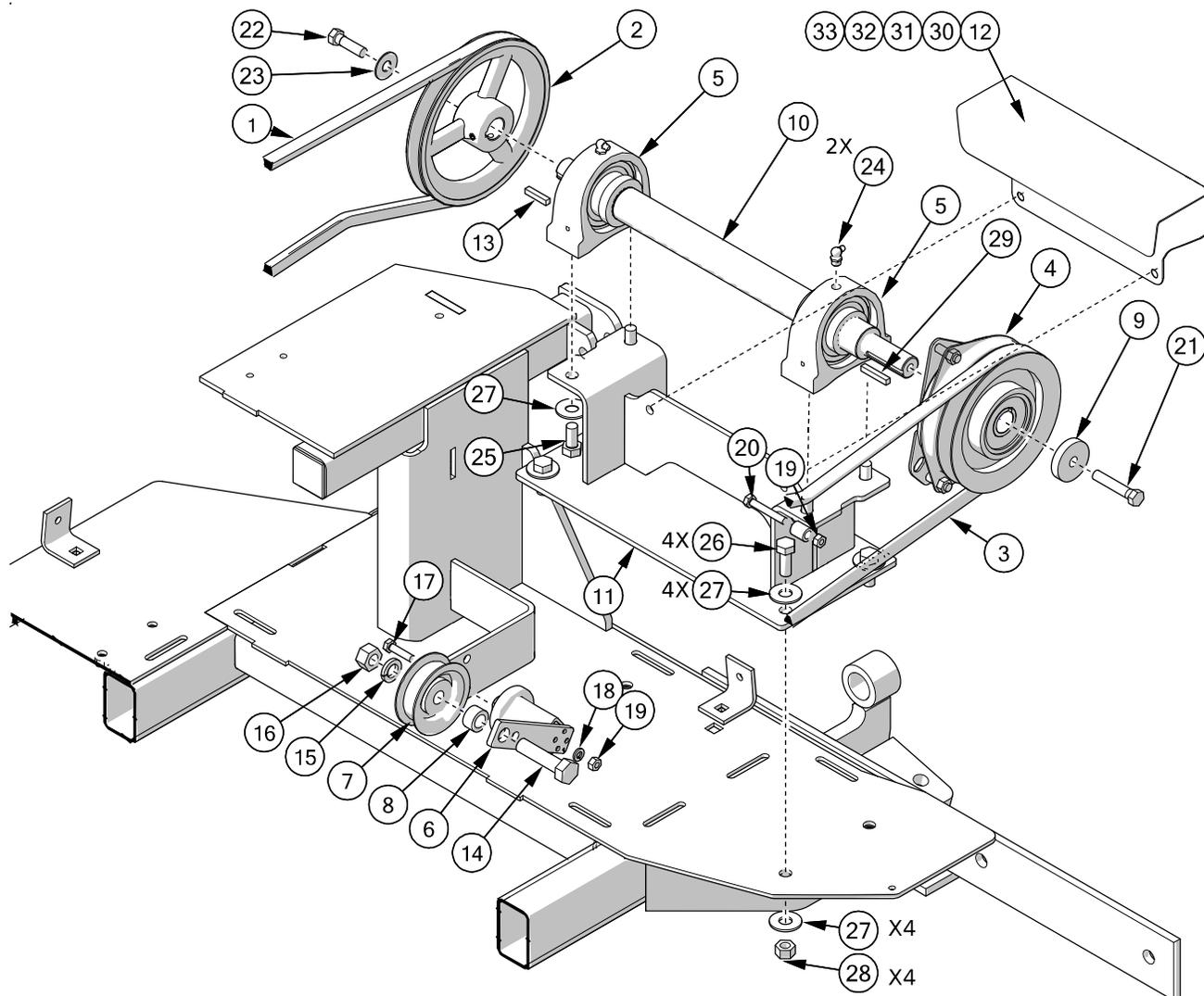
ITEM	PART#	DESCRIPTION	QTY
1	604908	BATTERY - ETX30L	1
2	605240	STRAP - BATTERY MOUNT	1
3	605242	BATTERY STOP TUBE	1
4	605783	1/4-20 U-NUT	1
5	604805	PLATE - BATTERY MOUNT	1
6	605899	DISCONNECT SWITCH	1
7	605879	SWITCH BRACKET	1
8	605903	POSITIVE CABLE - BATTERY/SWITCH	1
9	605795	BATTERY CABLE - NEGATIVE	2
10	605793	BATTERY CABLE - POSITIVE	1
11	604898	CABLE - POSITIVE BOOST TO BATT.	1
12	605821	TOOTHED WASHER - 3/8"	1

ITEM	PART#	DESCRIPTION	QTY
13	O.L.	HEX BOLT- 3/8 X 1 NC GR5 PL	4
14	O.L.	LOCK WASHER- 3/8 PL	4
15	O.L.	HEX NUT - 3/8NC GR5 PL	4
16	O.L.	HEX BOLT - 1/4 x 6.5 NC GR5 PL	1
17	O.L.	HEX BOLT - 1/4 x .75 NC GR5 PL	2
18	O.L.	LOCK WASHER- 1/4 PL	2
19	O.L.	FLAT WASHER- 1/4 PL	3
20	O.L.	HEX NUT - 1/4NC GR5 PL	2
21	O.L.	HEX BOLT M8 X 20MM PL	1
22	O.L.	FLAT WASHER- 3/8 PL	1

O.L. - OBTAIN LOCALLY

# 5 PTO / Mower Deck

## 5.1 Jack Shaft / Clutch

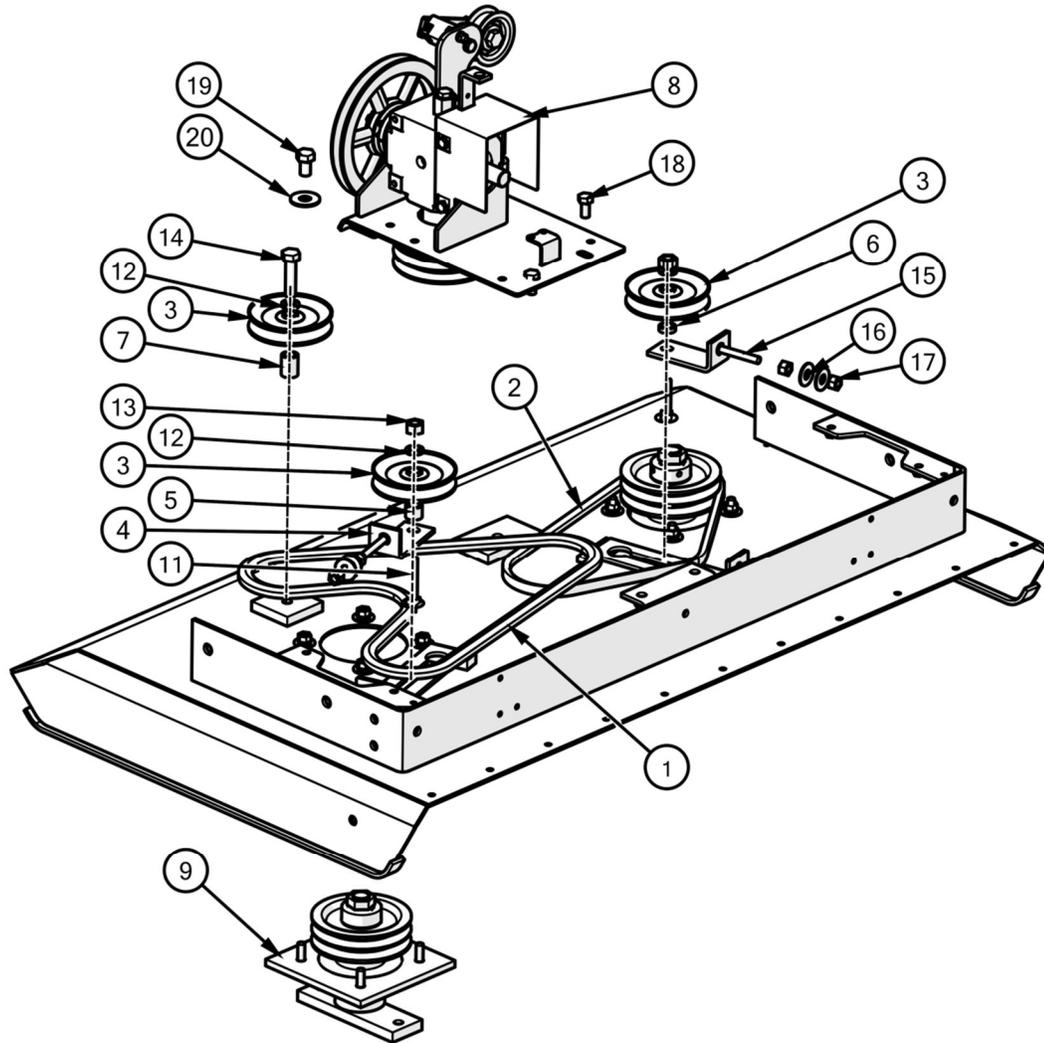


ITEM	PART #	DESCRIPTION	QTY
1	604961	BELT - B57	1
2	604829	PULLEY - 7.75"	1
3	604963	BELT - B59	1
4	605360	PTO CLUTCH - ELECTRIC	1
5	604273	BEARING	2
6	606194	IDLER TENSION ARM	1
7	212000	IDLER PULLEY	1
8	600142	BUSHING - BLACK	1
9	605012	WASHER - CLUTCH	1
10	604171	SHAFT - PTO	1
11	604874	PTO MOUNT - W.A.	1
12	605260	SHIELD - SHAFT	1
13	O.L.	KEY - 1/4 X 1 1/4	1
14	O.L.	HEX BOLT- 5/8 X 2.5 NC GR5 PL	1
15	O.L.	LOCK WASHER- 5/8 PL	1
16	O.L.	HEX NUT - 5/8NC GR5 PL	1
17	O.L.	HEX BOLT- 5/16 X 1.25 NC GR5 PL	1

ITEM	PART #	DESCRIPTION	QTY
18	O.L.	LOCK WASHER- 5/16 PL	1
19	O.L.	HEX NUT - 5/16NC GR5 PL	2
20	O.L.	HEX BOLT- 5/16 X 2 NC GR5 PL	1
21	O.L.	HEX BOLT- 7/16 X 2.25 NC GR5 PL	1
22	O.L.	HEX BOLT- 7/16 X 1.5 NC GR5 PL	1
23	O.L.	FLAT WASHER- 7/16 PL HARDENED	1
24	O.L.	GREASE FITTING 90 DEG	2
25	O.L.	HEX BOLT- 1/2 X 1 NC GR5 PL	4
26	O.L.	HEX BOLT- 1/2 X 1.25 NC GR5 PL	4
27	O.L.	FLAT WASHER- 1/2 PL	12
28	O.L.	HEX NUT - 1/2NC GR5 PL	4
29	O.L.	KEY - 1/4 X 1 1/2	1
30	O.L.	HEX BOLT - 3/8 X 1 NC GR5 PL	4
31	O.L.	FLAT WASHER - 3/8 PL	4
32	O.L.	LOCK WASHER - 3/8 PL	4
33	O.L.	HEX NUT - 3/8NC GR5 PL PL	4

O.L. - OBTAIN LOCALLY

## 5.2 Mower Deck Assembly

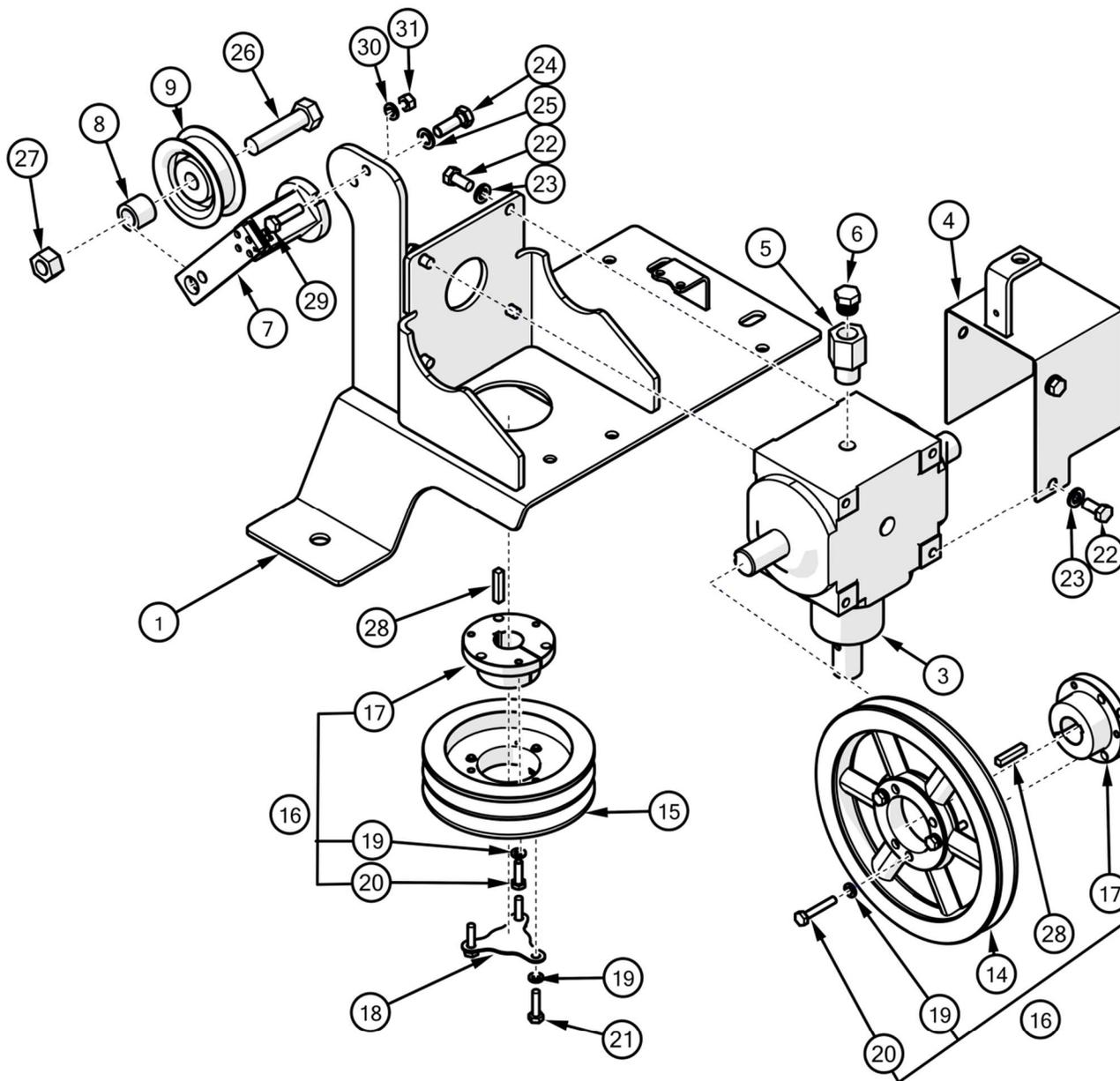


ITEM	PART #	DESCRIPTION	QTY
1	212055	BELT - B66	1
2	604957	BELT - B44	1
3	212009	IDLER PULLEY	3
4	526331	IDLER PULLEY BRACKET	2
5	606445	IDLER SPACER - 0.75	1
6	526335	IDLER SPACER - 0.25	1
7	604899	IDLER SPACER - 1.28	1
8	SECT. 5.3	GEARBOX MOUNT - ASSY	1
9	SECT 5.6	BLADE SPINDLE ASSY	2
10	O.L.	CARR. BOLT- 5/8 X 2.5 NC GR5 PL	1
11	O.L.	CARR. BOLT- 5/8 X 3 NC GR5 PL	1

ITEM	PART #	DESCRIPTION	QTY
12	O.L.	LOCK WASHER- 5/8 PL	3
13	O.L.	HEX NUT - 5/8NC GR5 PL	2
14	O.L.	HEX BOLT- 5/8 X 2.5 NC GR5 PL	1
15	O.L.	CARR. BOLT- 1/2 X 3 NC GR5 PL	2
16	O.L.	FLAT WASHER- 1/2 PL	4
17	O.L.	HEX NUT - 1/2NC GR5 PL	4
18	O.L.	HEX BOLT- 1/2 X 1 NC GR5 PL	2
19	O.L.	HEX BOLT- 5/8 X 1 NC GR5 PL	1
20	O.L.	FLAT WASHER- 5/8 PL	1

O.L. - OBTAIN LOCALLY

### 5.3 Gear Box Assembly

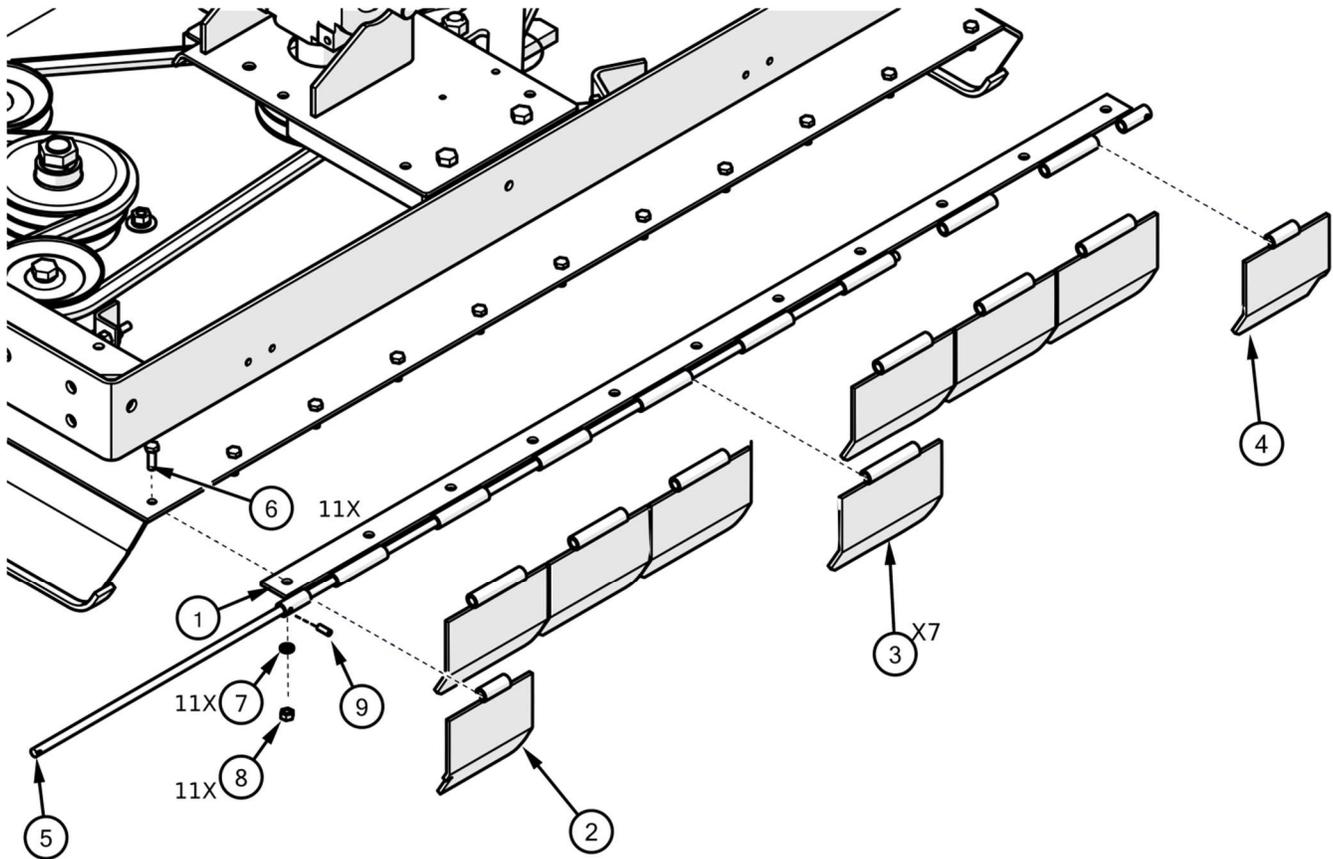


ITEM	PART #	DESCRIPTION	QTY
1	604322	GEAR BOX MOUNT - WA	1
3	604180	GEAR BOX	1
4	604496	GEAR BOX GUARD	1
5	605749	1/2" NPT ADAPTER	1
6	221055	BREATHER VENT	1
7	606224	IDLER TENSIONER (W/ ITEM 24 & 25)	1
8	606447	IDLER SPACER- CENTER	1
9	212000	IDLER PULLEY	1
14	605196	SHEAVE - 9" OD	1
15	604083	SHEAVE - 6" OD	1
16	604704	BUSHING KIT (WITH HARDWARE)	2
17	SEE ITEM 16	SHEAVE BUSHING	2
18	604077	RETAINER PLATE	1
19	O.L.	LOCKWASHER - 1/4 PL	9

ITEM	PART #	DESCRIPTION	QTY
20	O.L.	HEX BOLT - 1/4 X 0.875 NC GR5 PL	6
21	O.L.	HEX BOLT - 1/4 x 1 NC GR5 PL	1
22	O.L.	HEX BOLT - 3/8 x .75 NC GR5 PL	6
23	O.L.	LOCK WASHER - 3/8 PL	6
24	O.L.	HEX BOLT - M10 X 30MM	1
25	O.L.	LOCKWASHER - M10 PL	1
26	O.L.	HEX BOLT- 5/8 X 2.5 NC GR5 PL	1
27	O.L.	HEX NUT - 5/8NC GR5 PL	1
28	O.L.	KEY - 1/4 X 1 1/4	2
29	O.L.	HEX BOLT - 5/16 X 1.25 NC GR5 PL	1
30	O.L.	LOCK WASHER - 5/16 PL	1
31	O.L.	HEX NUT - 5/16NC GR5 PL	1

O.L. - OBTAIN LOCALLY

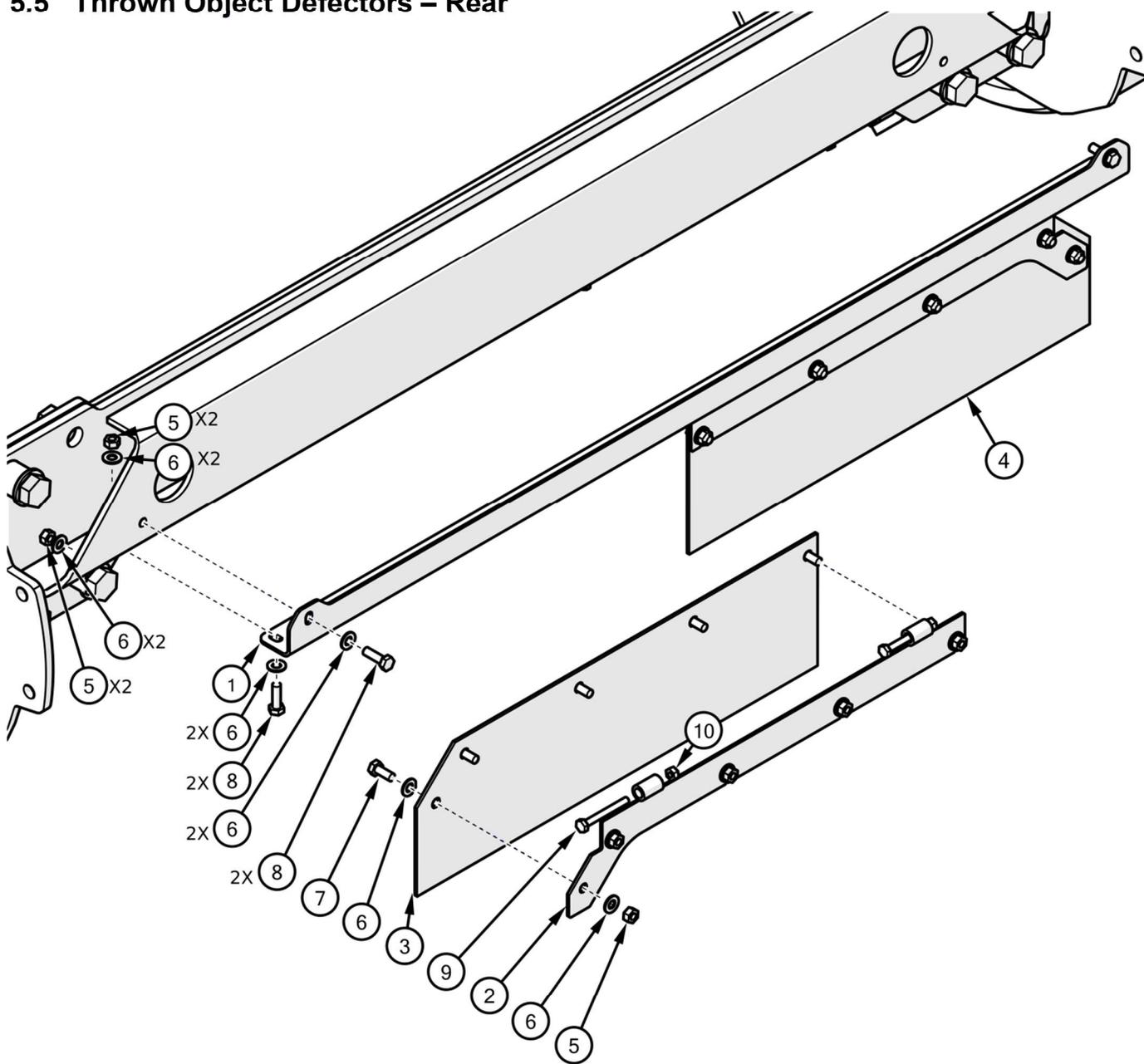
## 5.4 Thrown Object Deflectors



ITEM	PART #	DESCRIPTION	QTY
1	604468	HINGE	1
2	604464	L.H. DEFLECTOR	1
3	604462	FRONT DEFLECTOR	7
4	604466	R.H. DEFLECTOR	1
5	605687	HINGE PIN	1
6	O.L.	HEX BOLT- 5/16 X 1 NC GR5 PL	11
7	O.L.	LOCK WASHER, 5/16 PL	11
8	O.L.	HEX NUT - 5/16NC GR5 PL	11
9	O.L.	1/4" X 5/8" ROLL PIN	1

O.L. - OBTAIN LOCALLY

### 5.5 Thrown Object Defectors – Rear

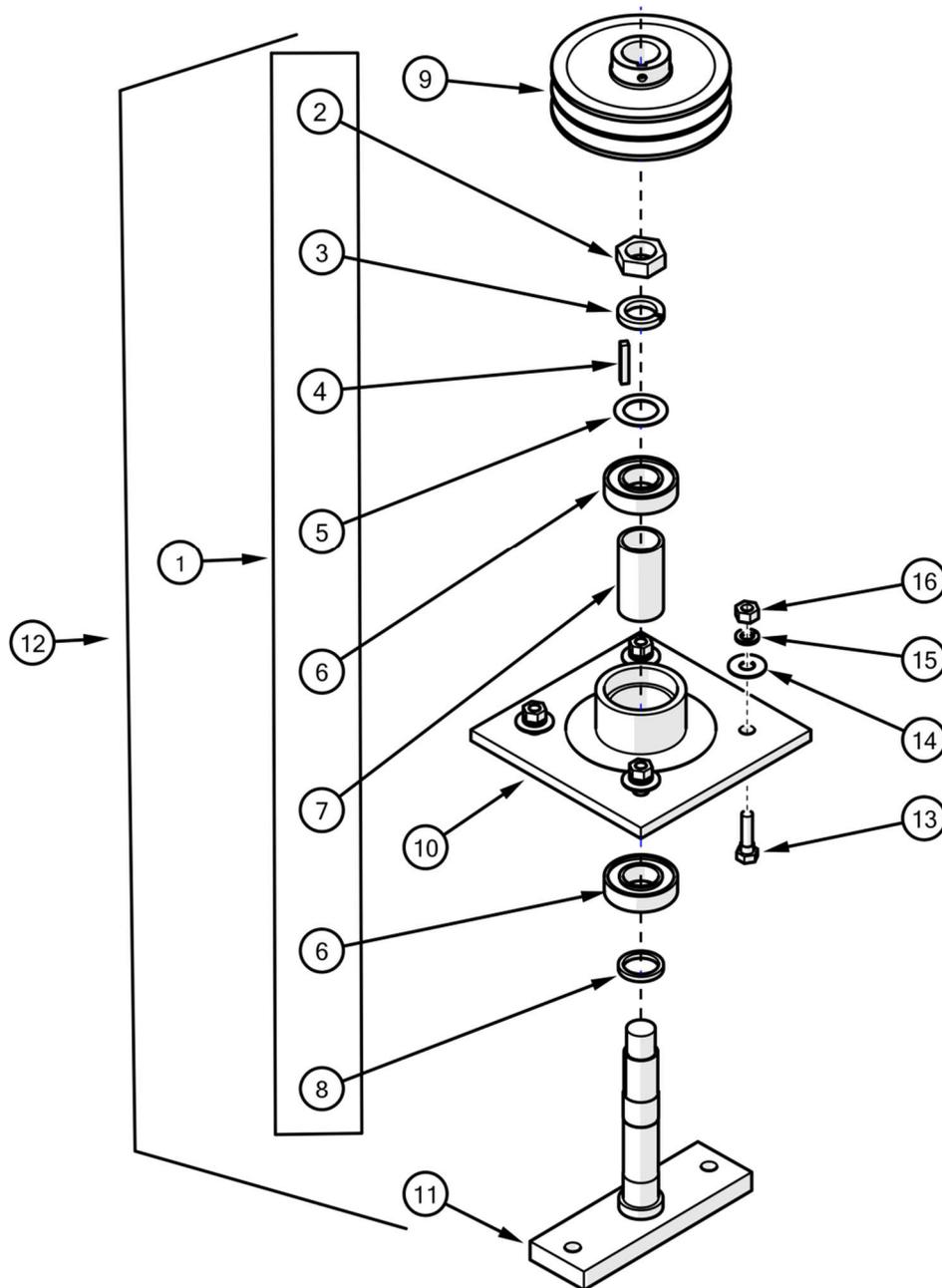


ITEM	PART #	DESCRIPTION	QTY
1	604660	BRACKET - REAR DEFLECTOR	1
2	604662	REAR DEFLECTOR HINGE	2
3	609001	BELT - REAR DEFLECTOR- LH	1
4	609003	BELT - REAR DEFLECTOR- RH	1
5	O.L.	HEX NUT - 5/16NC GR5 PL	14
6	O.L.	FLAT WASHER- 5/16 PL	28
7	O.L.	HEX BOLT- 5/16 X .75 NC GR5 PL	10
8	O.L.	HEX BOLT- 5/16 X 1 NC GR5 PL	4
9	O.L.	HEX BOLT - 1/4 x 2.5 NC GR5 PL	4
10	O.L.	HEX LOCK NUT - 1/4NC GR5 PL	4

O.L. - OBTAIN LOCALLY

## 5.6 Blade Spindle

Slope-Pro Serial # 1152101 to 2052179



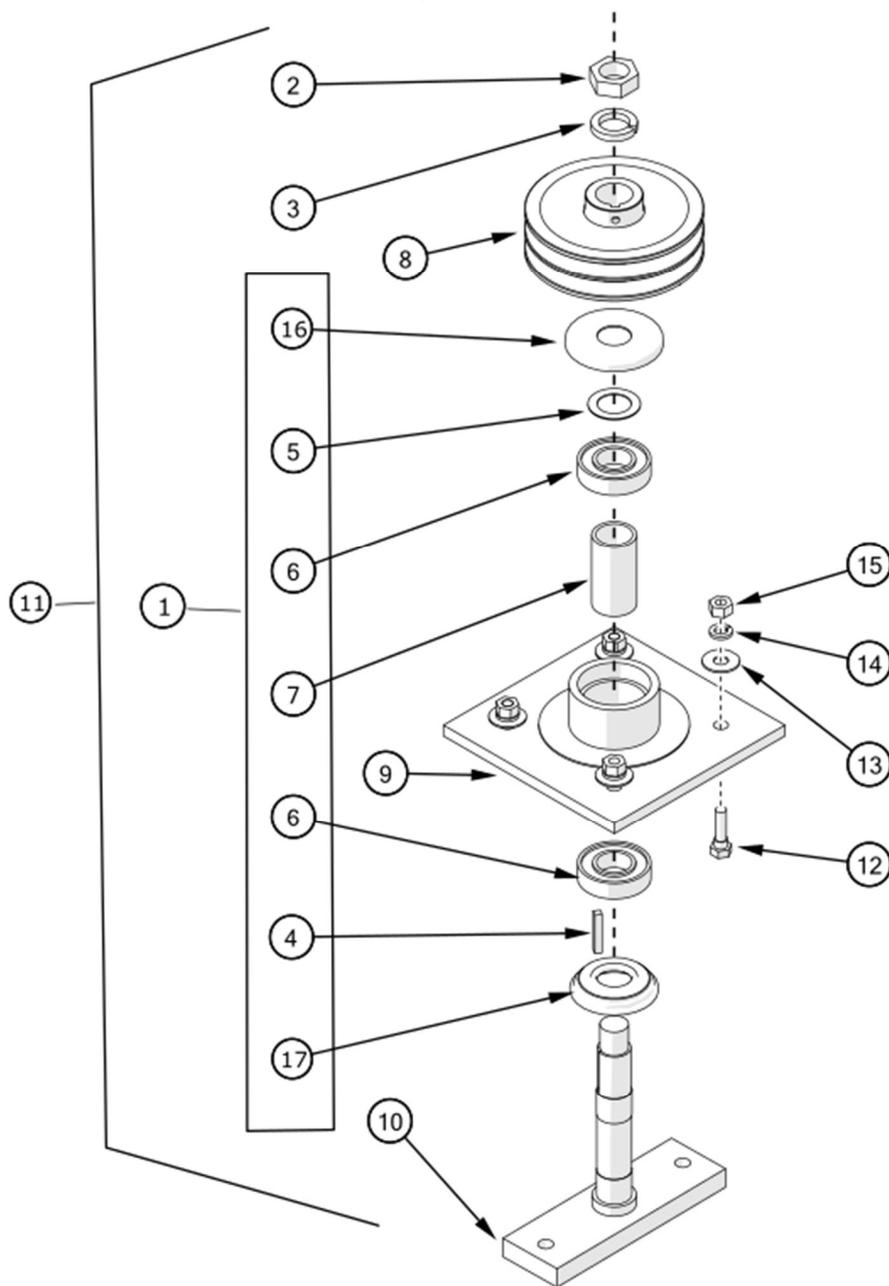
ITEM	PART #	DESCRIPTION	QTY
1	604568	REBUILD KIT - 6206 BLADE SPINDLE	1
2	521003	HEX NUT- L.H.	1
3	521002	LOCK WASHER KIT- LH (3 PCS)	1
4	O.L.	KEY - 1/4" X 1 1/2"	1
5	----	1.125" SHIM WASHER	1
6	----	BEARING	2
7	----	SPACER TUBE	1
8	----	SPACER - BLADE SPINDLE	1
9	521790	5.9" BLADE SPINDLE PULLEY	1

ITEM	PART #	DESCRIPTION	QTY
10	521700	SPINDLE HOUSING	1
11	521307	BLADE SPINDLE	1
12	604125	BLADE SPINDLE ASSEMBLY	1
13	O.L.	HEX BOLT- 7/16 X 1.5 NC GR5 PL	4
14	O.L.	FLAT WASHER- 7/16 PL	4
15	O.L.	LOCK WASHER- 7/16 PL	4
16	O.L.	HEX NUT - 7/16NC GR5 PL	4

O.L. - OBTAIN LOCALLY

### 5.7 Blade Spindle with Cap

Slope-Pro Serial # 2152180 & Up

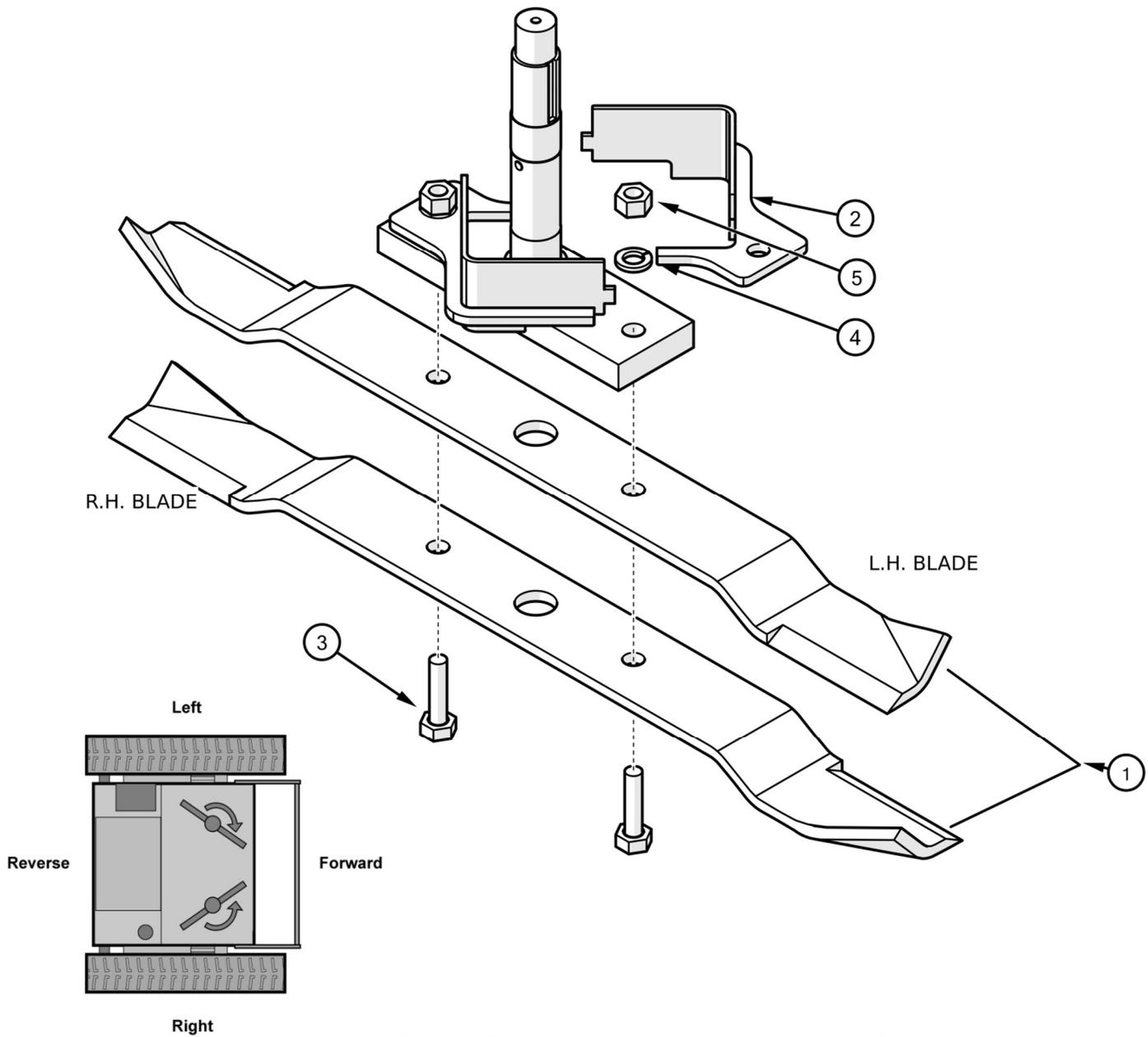


ITEM	PART #	DESCRIPTION	QTY
1	527571	SPINDLE REBUILD KIT	1
2	521003	HEX NUT- L.H.	1
3	521002	LOCK WASHER KIT- LH (3 PCS)	1
4	O.L.	KEY - 1/4" X 1 1/2"	1
5	----	1.125" SHIM WASHER	1
6	----	BEARING	2
7	----	SPACER TUBE	1
8	521790	5.9" BLADE SPINDLE PULLEY	1
9	527582	SPINDLE HOUSING	1

ITEM	PART #	DESCRIPTION	QTY
10	521307	BLADE SPINDLE	1
11	527592	BLADE SPINDLE ASSEMBLY	1
12	O.L.	HEX BOLT- 7/16 X 1.5 NC GR5 PL	4
13	O.L.	FLAT WASHER- 7/16 PL	4
14	O.L.	LOCK WASHER- 7/16 PL	4
15	O.L.	HEX NUT - 7/16NC GR5 PL	4
16	600625	SHIELD - SPINDLE TOP	1
17	527558	HOUSING BOTTOM CAP	1

O.L. - OBTAIN LOCALLY

## 5.8 Mower Blades

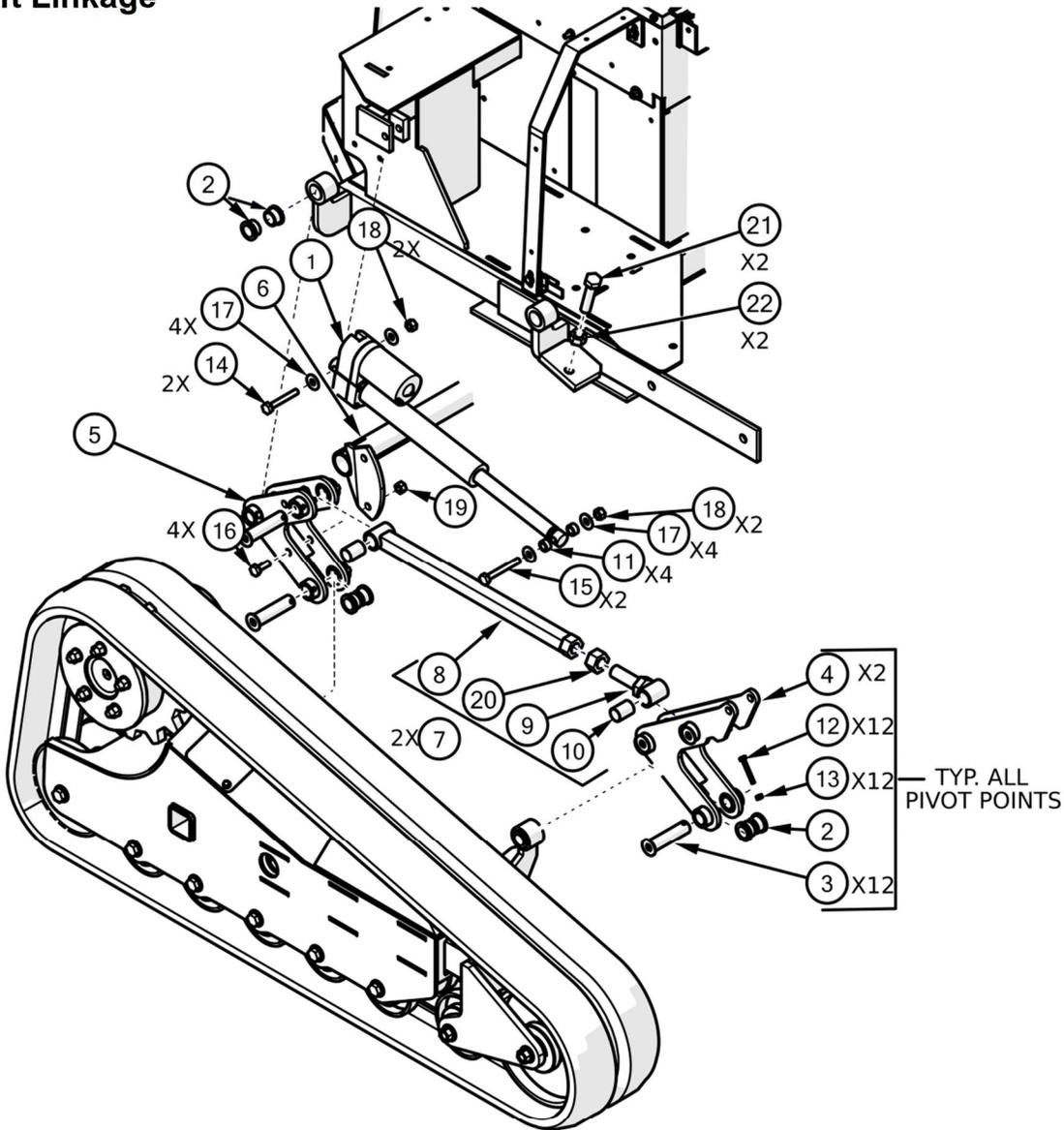


ITEM	PART #	DESCRIPTION	QTY
1	604578	BLADE KIT	1
2	604738	SPINDLE GUARD - WA	2
3	O.L.	HEX BOLT- 1/2 X 1.75 NC GR5 PL	2
4	O.L.	LOCK WASHER- 1/2 PL	2
5	O.L.	HEX NUT - 1/2NC GR5 PL	2

O.L. - OBTAIN LOCALLY

## 6 Lift Linkage / Track Frames

### 6.1 Lift Linkage

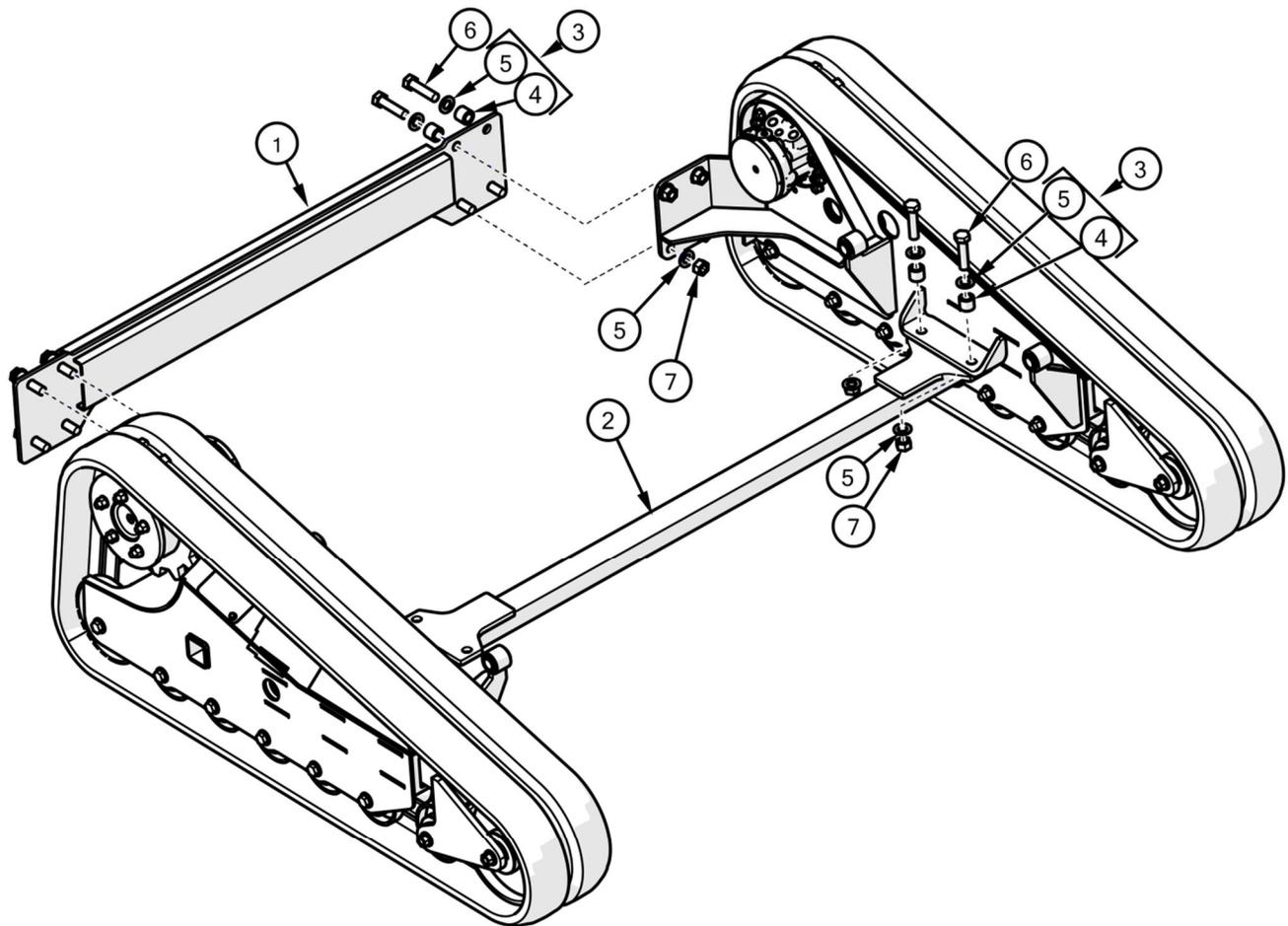


ITEM	PART #	DESCRIPTION	QTY
1	604251	ACTUATOR - LIFT	2
2	604552	FLANGE BSHG KIT (4PCS)	16
3	604914	PIN - QUADRANT	12
4	604616	QUADRANT	2
5	604352	QUADRANT - REAR	2
6	604350	ROCK SHAFT	1
7	604394	LINK ARM ASSEMBLY	2
8	604390	LINK ARM	1
9	604392	ADJUSTER	1
10	529240	SLEEVE BEARING 1" - 12 PCS	2
11	604564	SPACER - 1/2 X 0.424 (4 PC KIT)	4
12	O.L.	HEX BOLT - 1/4 X 2.0 NC GR5 PL	12

ITEM	PART #	DESCRIPTION	QTY
13	O.L.	HEX NUT - 1/4NC GR5 PL	12
14	O.L.	HEX BOLT- 1/2 X 3 NC GR5 PL	2
15	O.L.	HEX BOLT- 1/2 X 2.5 NC GR5 PL	2
16	O.L.	HEX BOLT- 1/2 X 1.25 NC GR5 PL	4
17	O.L.	FLAT WASHER- 7/16 PL HARDENED	8
18	O.L.	HEX LOCK NUT - 1/2NC GR5 PL	4
19	O.L.	HEX NUT - 1/2NC GR5 PL	4
20	O.L.	JAM NUT - 1.00 NC GR8 PL	1
21	O.L.	HEX BOLT - 3/4 X 2.5 NC GR5 PL	2
22	O.L.	HEX NUT - 3/4NC GR5 PL	2

O.L. - OBTAIN LOCALLY

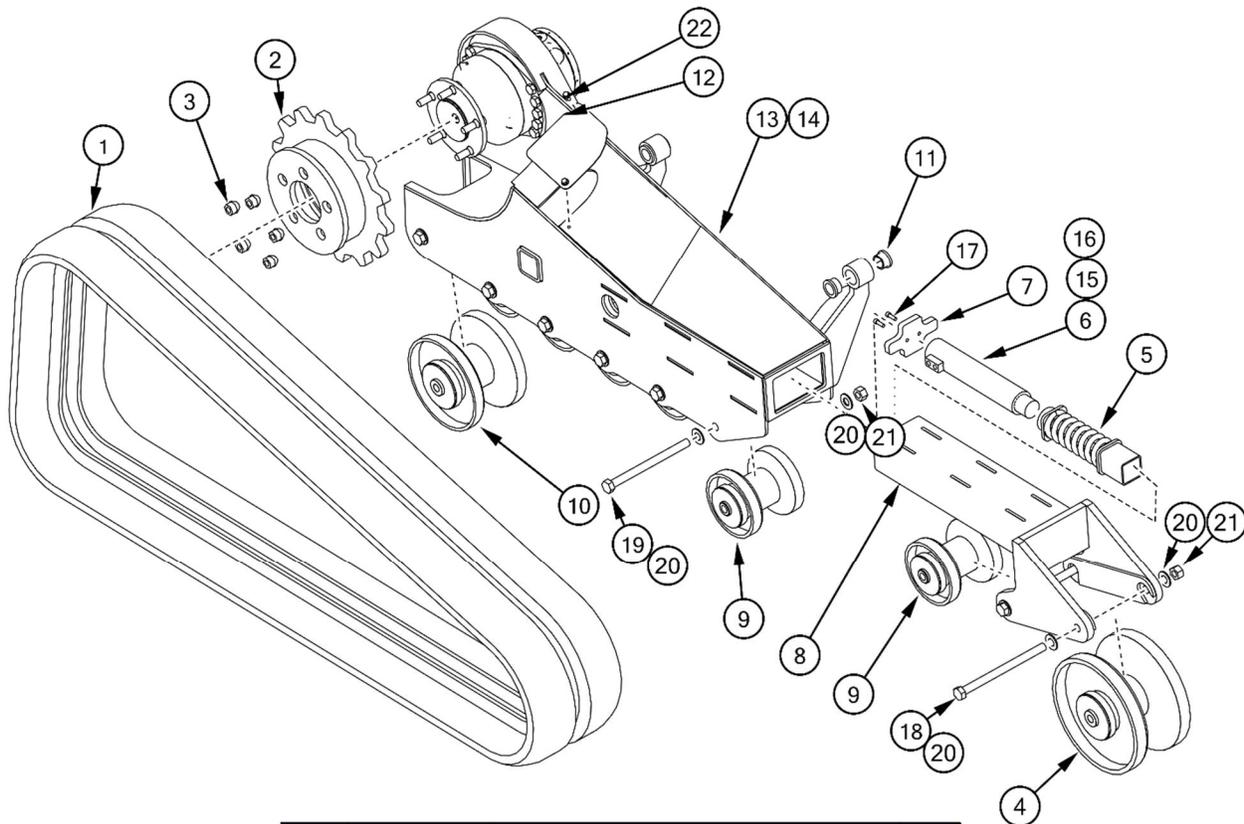
## 6.2 Track Frame



ITEM	PART #	DESCRIPTION	QTY
1	604304	CROSS MEMBER - REAR	1
2	604906	CROSS MEMBER - TRACK - MID	1
3	604688	SPACER KIT (4 SPACERS & 8 WASHERS)	1
4	ITEM 3	SPACER	12
5	ITEM 3	FLAT WASHER - 3/4 HARDENED	24
6	O.L.	HEX BOLT- 3/4 X 3 NC GR5 PL	12
7	O.L.	HEX NUT - 3/4NC GR5 PL	12

O.L. - OBTAIN LOCALLY

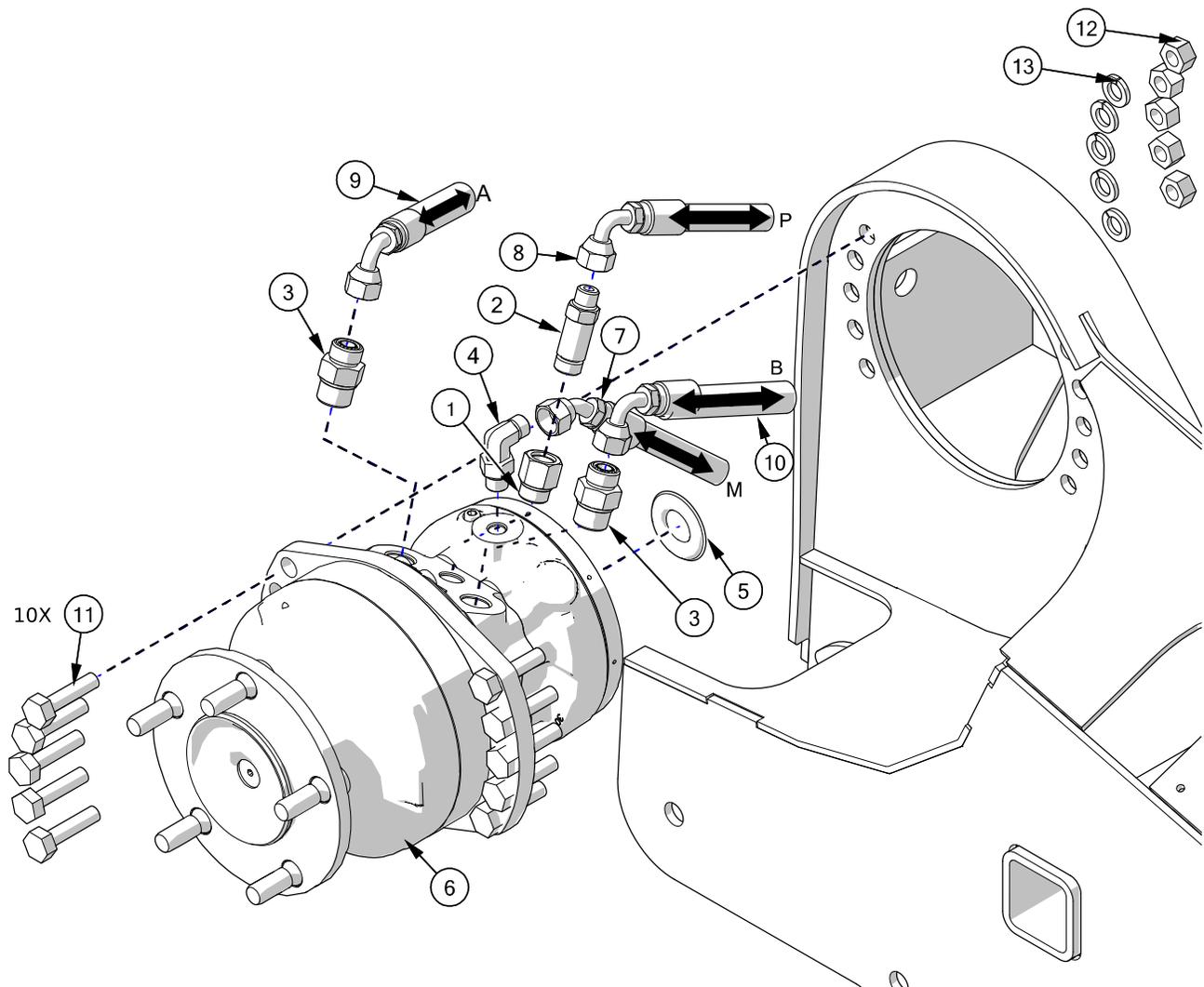
### 6.3 Track Assembly



ITEM	PART #	DESCRIPTION	QTY
1	605194	TRACK	1
2	604824	SPROCKET	1
3	604556	LUG NUT KIT (5 PCS)	1
4	SECTION 6.7	IDLER - FRONT ASSEMBLY	1
5	604868	REBOUND SPRING ASSEMBLY	1
6	605162	TENSIONER CYLINDER	1
7	605192	SPACER - TENSIONER CYLINDER	1
8	604830	TENSIONER YOKE	1
9	SECTION 6.7	TRACK ROLLER ASSEMBLY	7
10	SECTION 6.7	IDLER - REAR ASSEMBLY	1
11	604552	FLANGE BUSHING KIT (4 PCS)	1
12	605163	TRACK PIN SHIELD	1
13	604826	TRACK FRAME - RH	1
14	604818	TRACK FRAME - LH (NOT SHOWN)	1
15	604966	BLEEDER SCREW (5 PCS)	1
16	604964	GREASE FITTING - HIGH PRESS. (5 PCS)	1
17	O.L.	SOCKET CAP SCREW-1/4-20 X 3/4	2
18	O.L.	HEX BOLT- 5/8 X 8.5 NC GR5 PL	2
19	O.L.	HEX BOLT- 5/8 X 8.0 NC GR5 PL	6
20	O.L.	FLAT WASHER - 5/8 HARDENED	16
21	O.L.	HEX NUT - 5/8NC GR5 PL	8
22	O.L.	FLANGE BOLT - 1/4 X 3/4	2

O.L. - OBTAIN LOCALLY

## 6.4 R.H. Hydraulic Motor Assembly

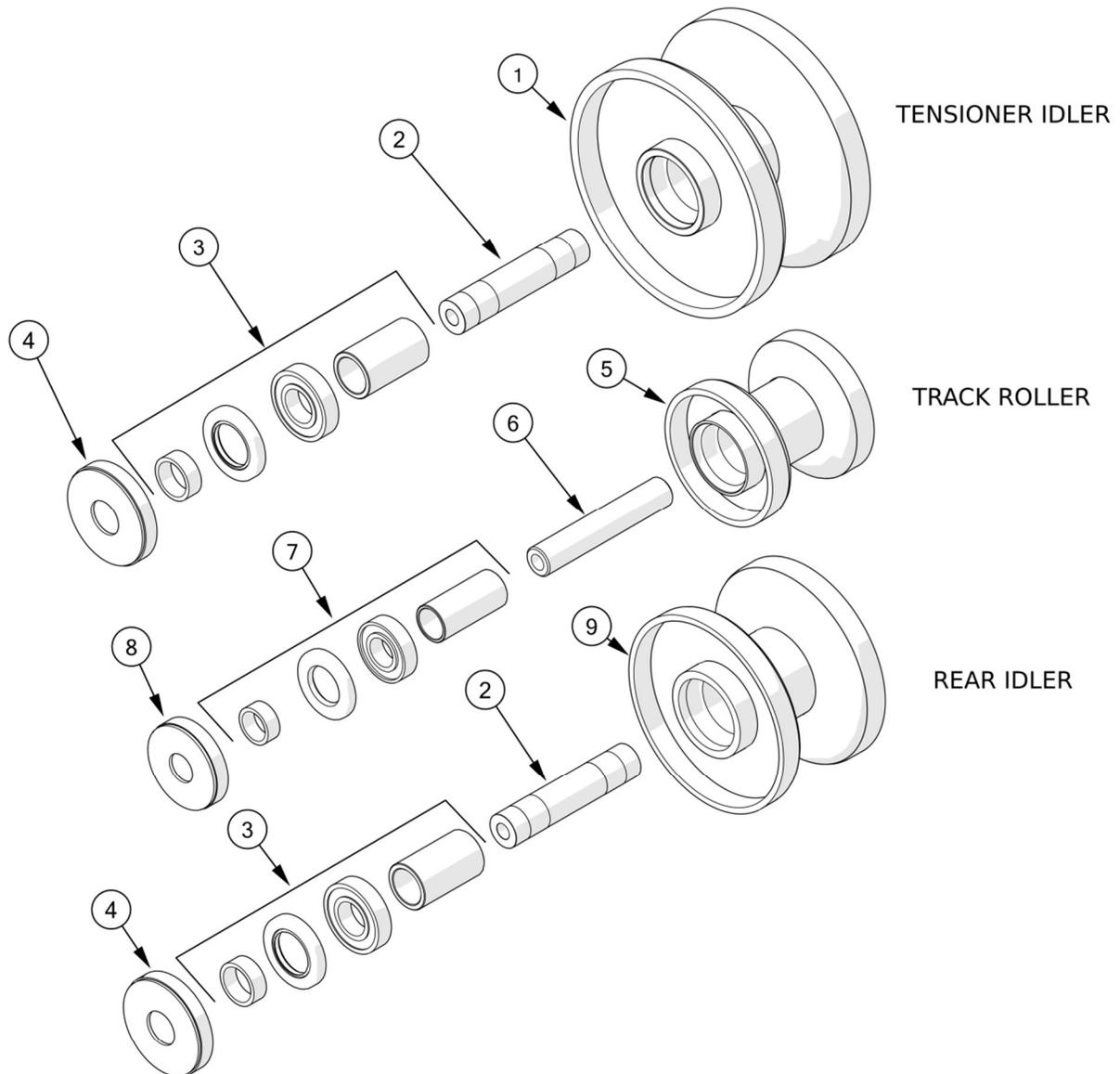


ITEM	PART #	DESCRIPTION	QTY
1	605306	STR ADATPER - -8 ORBM X -6 ORBF	1
2	605308	STR ADAPTER - -6ORB X -6ORFS LONG	1
3	604859	STR. ADAPTER -8 ORFS X -10 ORB	2
4	605312	ELBOW 90 - -6 ORB X -4 ORFS	1
5	604079	PLUG - BRAKE RELEASE ACCESS	1
6	604140	RADIAL PISTON HYD. MOTOR	1
7	604808	HOSE ASSEMBLY - RH BRAKE	1
8	605302	HOSE ASSEMBLY - RH DRAIN	1
9	604800	HOSE ASSEMBLY - RH A PORT	1
10	604802	HOSE ASSEMBLY - RH B PORT	1
11	O.L.	HEX BOLT- 1/2 X 1.75 NC GR5 PL	10
12	O.L.	HEX NUT - 1/2NC GR5 PL	10
13	O.L.	LOCK WASHER - 1/2 PL	10

O.L. - OBTAIN LOCALLY



## 6.6 Idler Assemblies

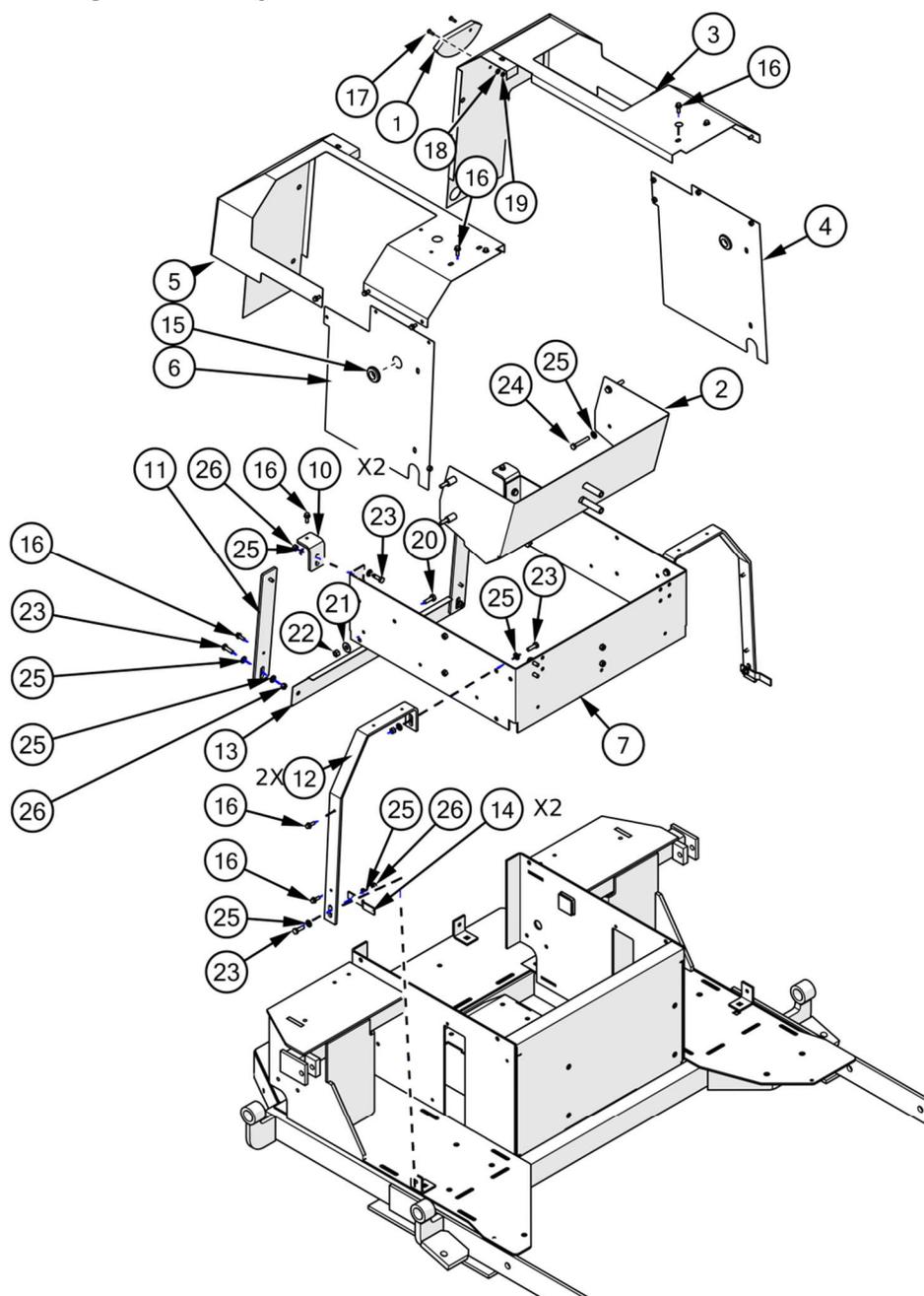


ITEM	PART #	DESCRIPTION	QTY
1	604840	IDLER - FRONT	1
2	605140	PIN - IDLER	2
3	604890	IDLER REBUILD KIT	1
4	604832	DIRT SHIELD	2
5	604330	ROLLER	1
6	604858	PIN - ROLLER	1
7	604892	ROLLER REBUILD KIT	1
8	604686	DIRT SHIELD - ROLLER	1
9	604836	IDLER - REAR	1

O.L. - OBTAIN LOCALLY

# 7 Cowling / Covers

## 7.1 Cowling Assembly

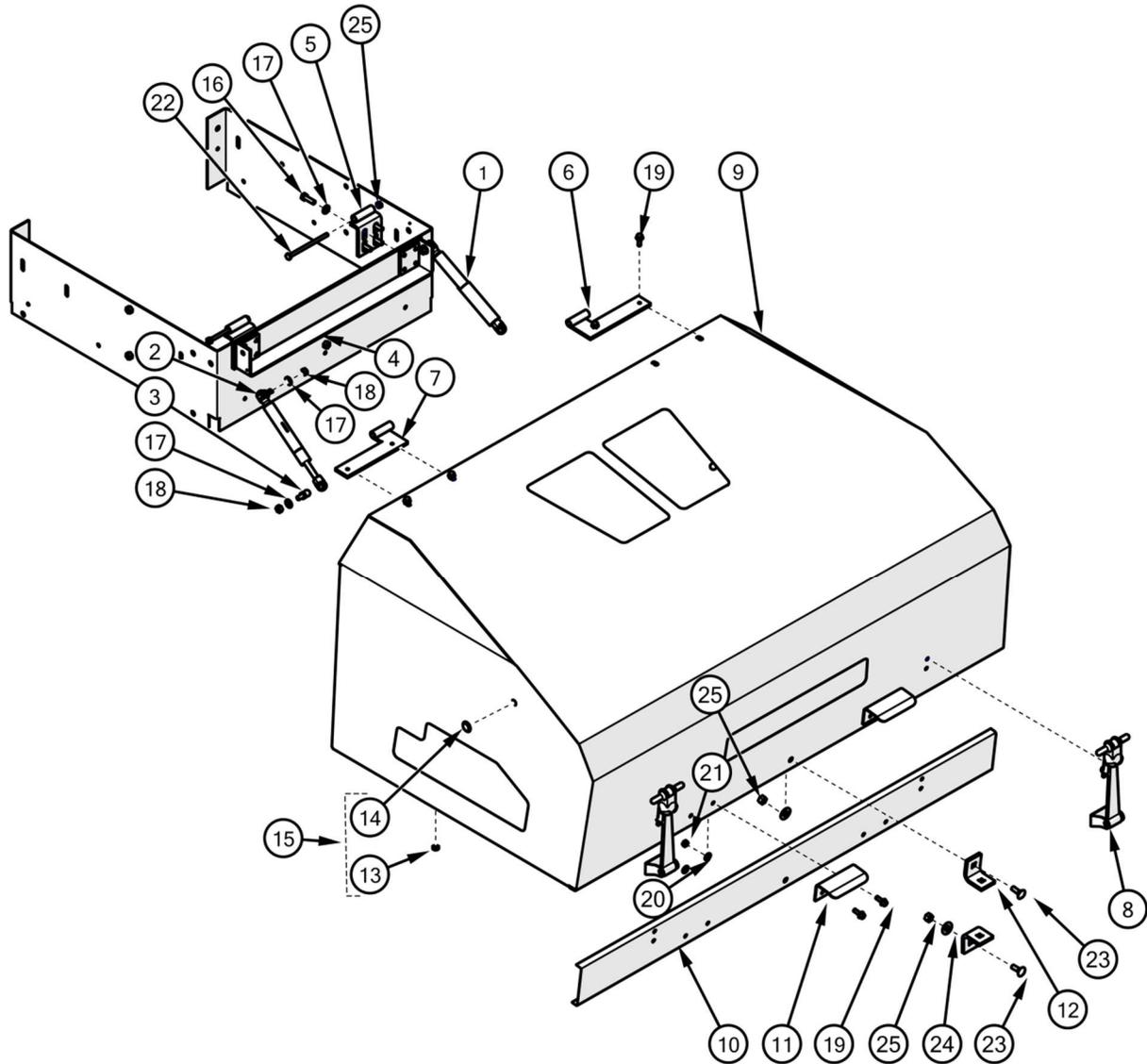


ITEM	PART #	DESCRIPTION	QTY
1	605029	SLOPE ANGLE INDICATOR W/ HARDWARE	1
2	604634	HEAT SHIELD	1
3	604456	QUARTER PANEL - LH - WA	1
4	604918	ACCESS PANEL - LH	1
5	604778	QUARTER PANEL - RH - WA	1
6	604922	ACCESS PANEL - RH	1
7	604446	HEAT SHIELD MOUNT	1
10	605823	COWL MTG BAR - REAR UPPER	2
11	605825	COWL MTG BAR - REAR LOWER	2
12	604761	MTG BAR - COWL	2
13	605526	FILLER PLATE - REAR COWL	1
14	605277	GUIDE PLATE - HOOD	2
15	605771	GROMMET - 7/8 X 1-1/4	2

ITEM	PART #	DESCRIPTION	QTY
16	O.L.	FLANGE BOLT - 1/4 X 1/2 PL	21
17	O.L.	MACHINE SCREW - #10-24 X 0.75	2
18	O.L.	LOCKWASHER - #10	2
19	O.L.	HEX NUT - #10-24 GR2 PL	2
20	O.L.	HEX BOLT - 3/8 X 1 NC GR5 PL	2
21	O.L.	FLAT WASHER - 3/8 PL	4
22	O.L.	HEX NUT - 3/8NC GR5 PL	2
23	O.L.	HEX BOLT - 5/16 X 1 NC GR5 PL	10
24	O.L.	HEX BOLT - 5/16 X 2 NC GR5 PL	6
25	O.L.	FLAT WASHER - 5/16 PL	24
26	O.L.	HEX NUT - 5/16NC GR5 PL	8

O.L. - OBTAIN LOCALLY

## 7.2 Hood and Strut Assembly

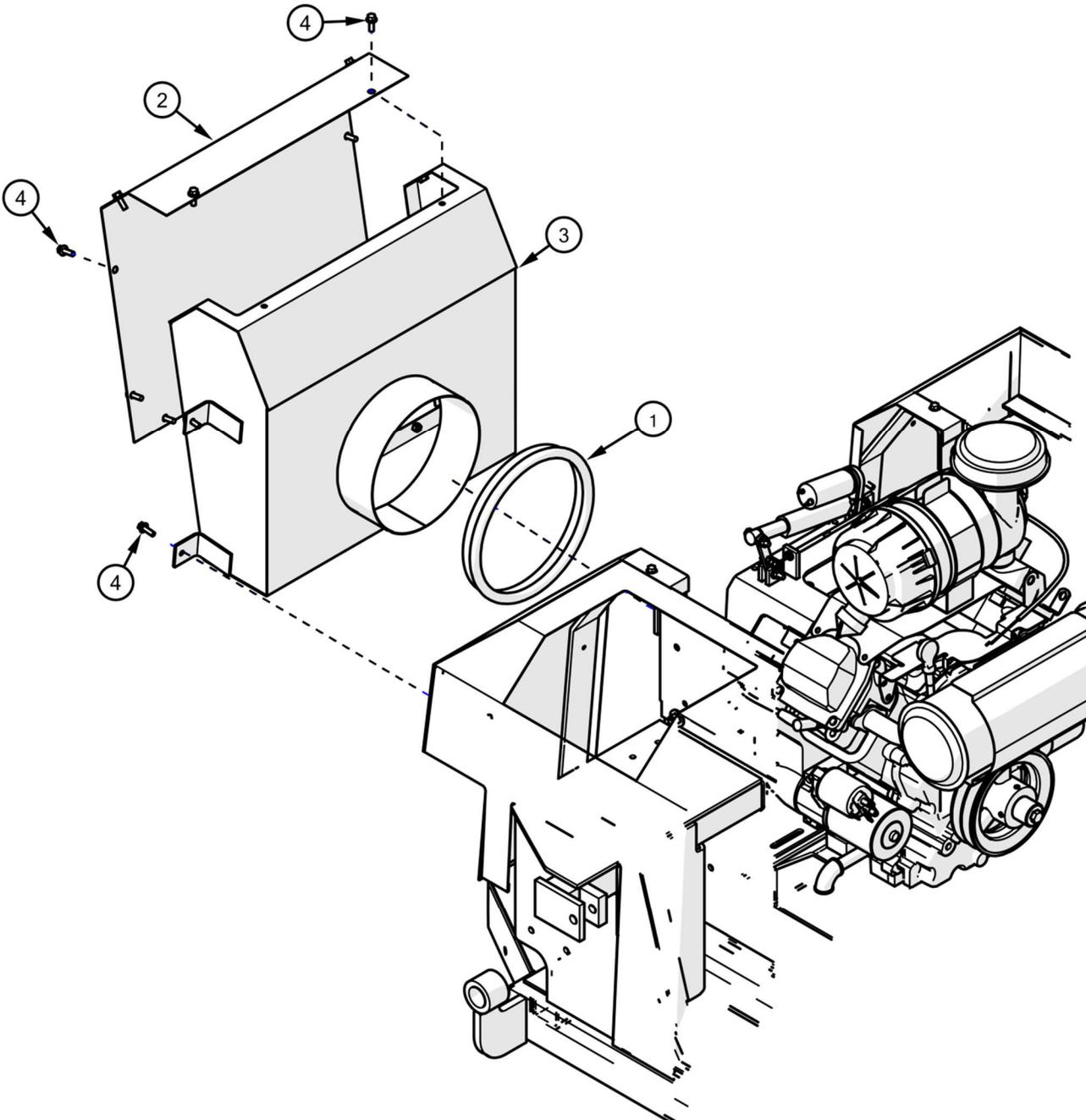


ITEM	PART #	DESCRIPTION	QTY
1	605635	LH GAS SPRING W/LOCK	1
2	604465	RH GAS SPRING	1
3	605289	BALL STUD	4
4	604522	STRUT MOUNT	1
5	604368	HINGE	2
6	604480	HINGE HALF - LH	1
7	604474	HINGE HALF - RH	1
8	604929	HOOD LATCH ASSM.	2
9	604640	COWL - FRONT	2
10	605621	HOOD STIFFENER	1
11	605445	HANDLE - COWL	2
12	605411	LOCKING PLATE	2
13	ITEM 15	RUBBER BUMPER	2

ITEM	PART #	DESCRIPTION	QTY
14	ITEM 15	COWL PLUG - 1/2"	2
15	604726	COWL PLUG KIT (6 PCS)	1
16	O.L.	HEX BOLT - 5/16 X 1 NC GR5 PL	8
17	O.L.	FLAT WASHER - 5/16 PL	12
18	O.L.	HEX NUT - 5/16NC GR5 PL	4
19	O.L.	FLANGE BOLT - 1/4 X 3/4	8
20	O.L.	FLAT WASHER - 1/4 PL	4
21	O.L.	HEX NUT - 1/4NC GR5 PL	4
22	O.L.	HEX BOLT - 3/8 x 4.5 NC GR5 PL	2
23	O.L.	CARR. BOLT - 3/8" X 1" GR5 PL	2
24	O.L.	FLAT WASHER - 3/8 PL	2
25	O.L.	HEX NUT - 3/8 NC GR5 PL	4

O.L. - OBTAIN LOCALLY

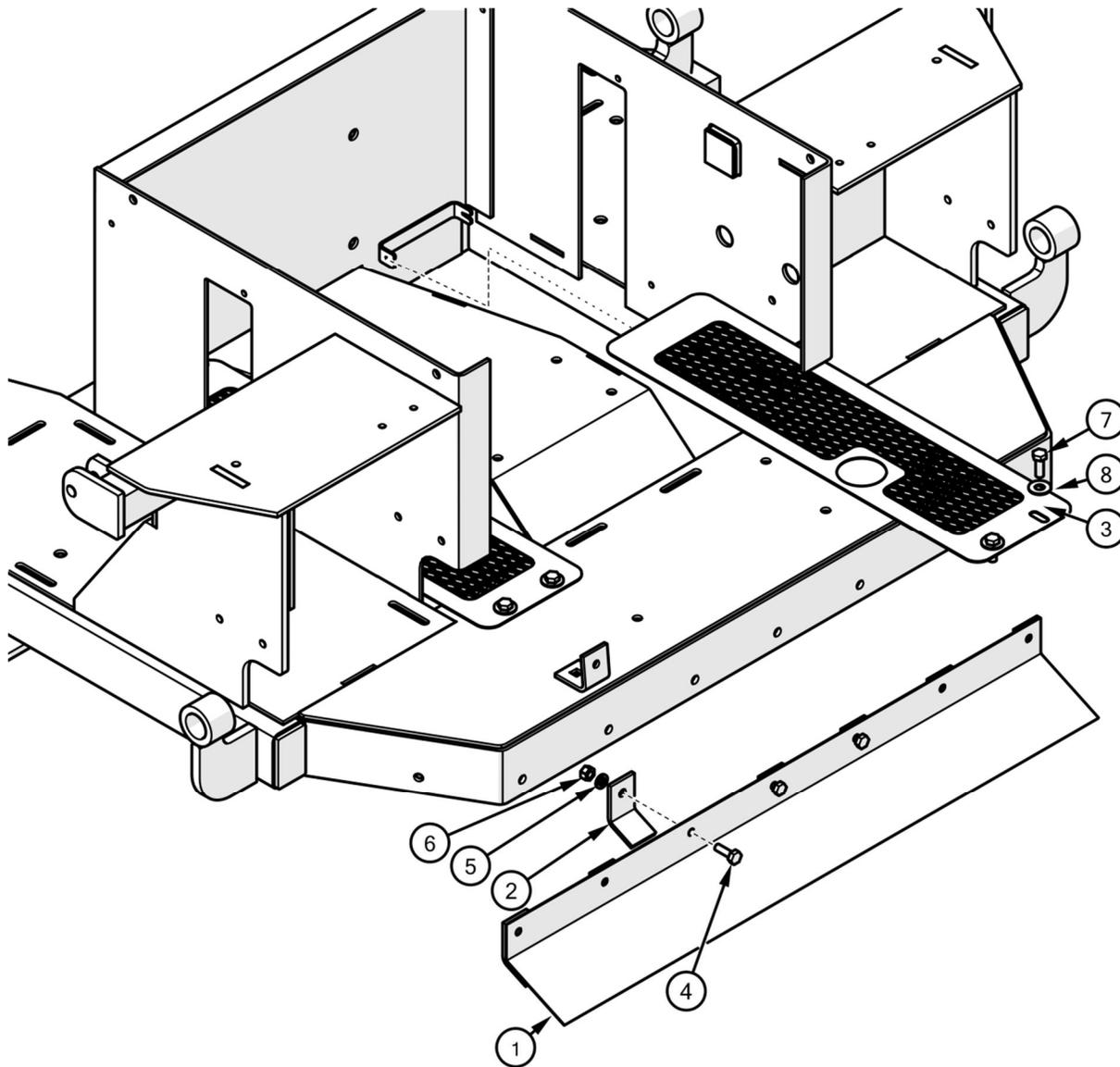
### 7.3 Air Inlet Box



ITEM	PART #	DESCRIPTION	QTY
1	605523	BULB SEAL	1
2	605495	SCREEN - AIR INLET	1
3	604576	AIR INLET BOX	1
4	O.L.	FLANGE BOLT - 1/4 X 3/4	14

O.L. - OBTAIN LOCALLY

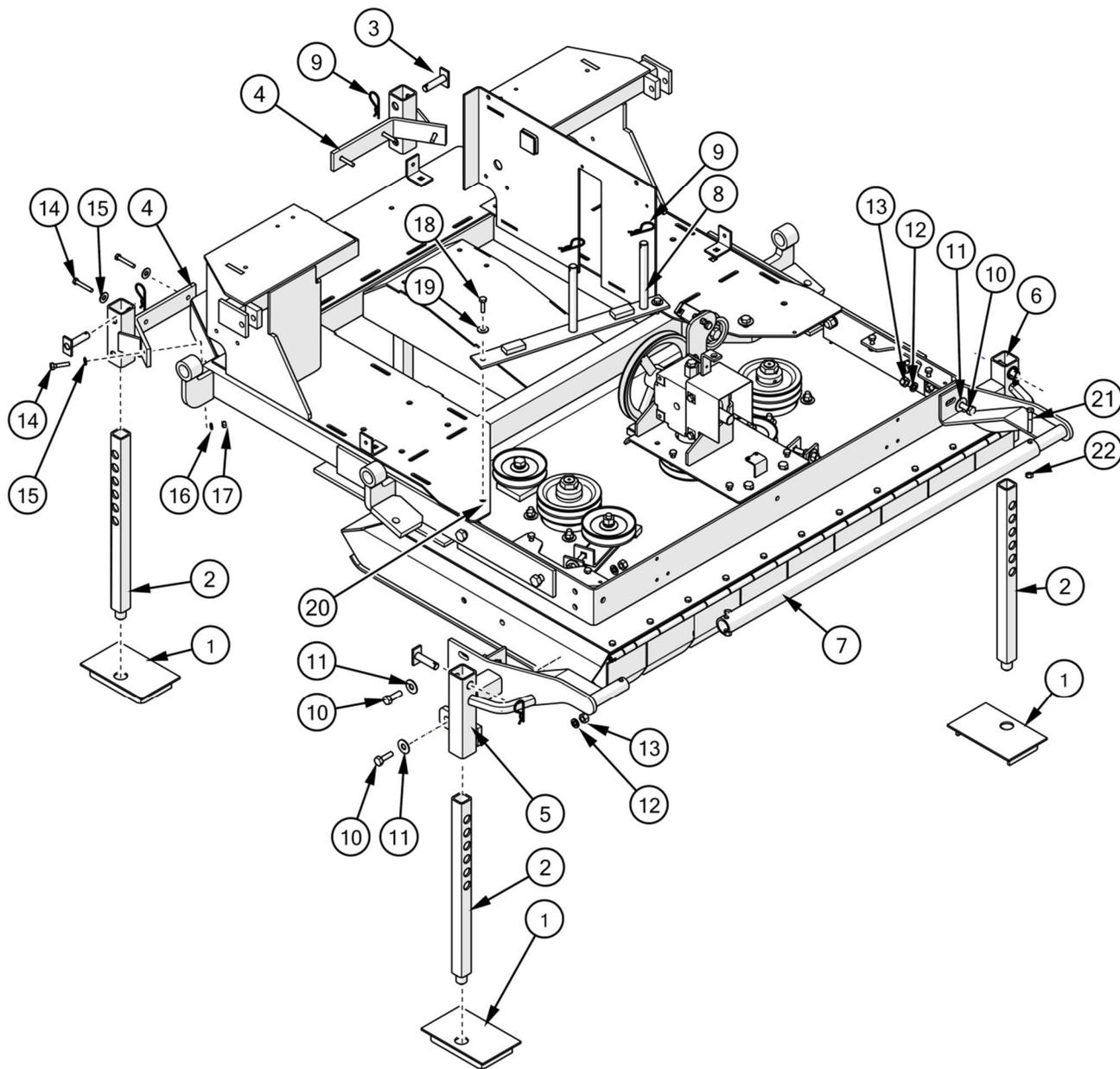
## 7.4 Main Frame Accessories



ITEM	PART #	DESCRIPTION	QTY
1	605067	REAR SEALING FLAP	1
2	605069	BRACKET	7
3	604780	BOTTOM SCREEN	2
4	O.L.	HEX BOLT- 5/16 X 1.50 NC GR5 PL	3
5	O.L.	LOCK WASHER, SPLIT - 5/16 PL	3
6	O.L.	HEX NUT - 5/16NC GR5 PL	3
7	O.L.	HEX BOLT - 3/8 X1 NC GR5 PL	4
8	O.L.	FLAT WASHER - 3/8 PL	4

O.L. - OBTAIN LOCALLY

## 7.5 Lift Supports



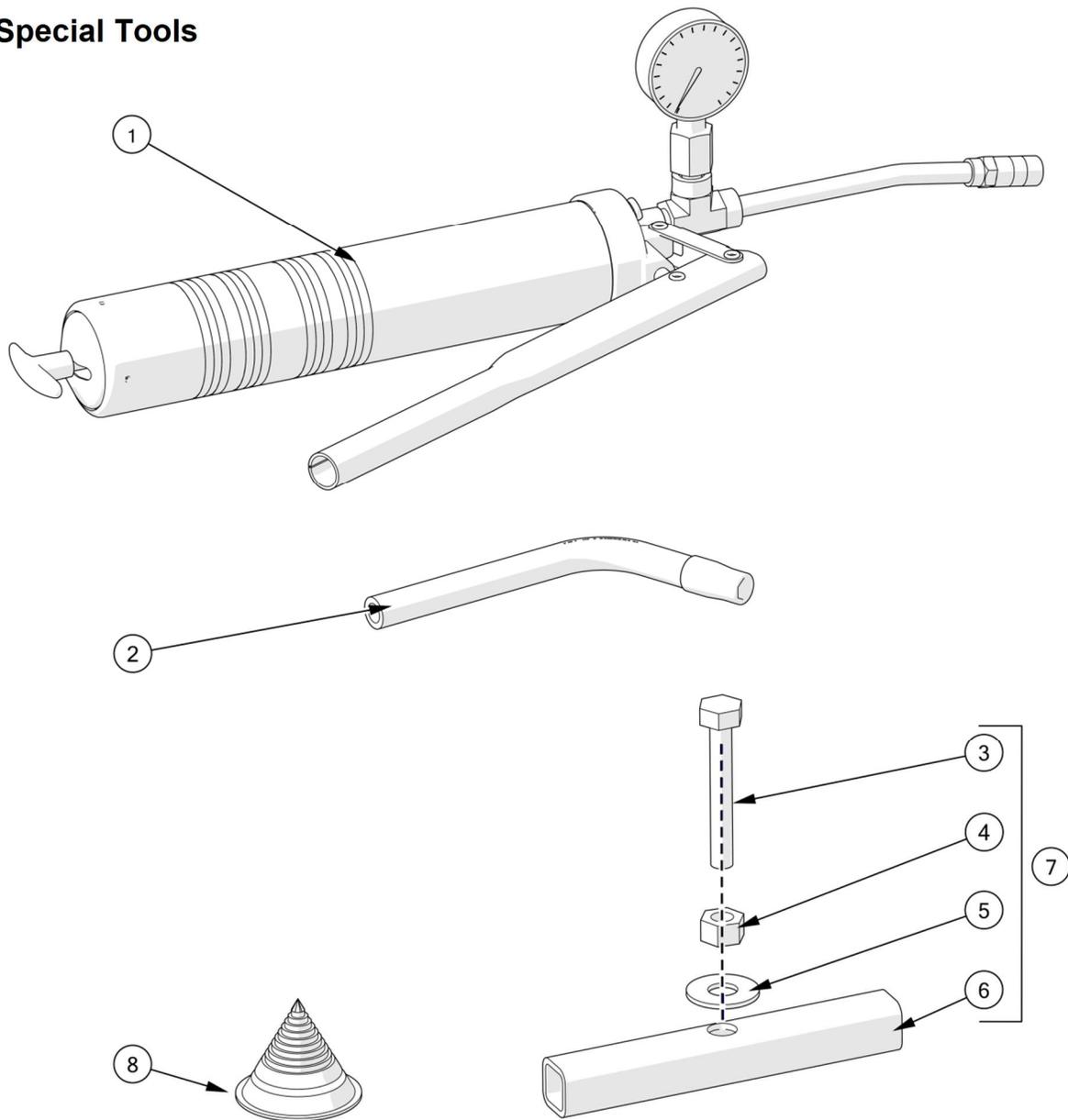
ITEM	PART #	DESCRIPTION	QTY
1	604494	FOOT PLATE	4
2	604492	LEG	4
3	604586	PIN - W.A.	4
4	604582	REAR LIFT BRACKET	2
5	604934	BRACKET - PUSH BAR - RH	1
6	604932	BRACKET - PUSH BAR - LH	1
7	604497	TUBE - PUSH BAR	1
8	604504	JACK MOUNT	1
9	O.L.	HAIR PIN - 5/32" X 2-15/16"	6
10	O.L.	HEX BOLT- 1/2 X 1.5 NC GR5 PL	8
11	O.L.	FLAT WASHER- 1/2 PL	9
12	O.L.	LOCK WASHER- 1/2 PL	8

ITEM	PART #	DESCRIPTION	QTY
13	O.L.	HEX NUT - 1/2NC GR5 PL	8
14	O.L.	HEX BOLT - 5/16 X 1.5 NC GR5	6
15	O.L.	FLAT WASHER- 5/16 PL	6
16	O.L.	LOCK WASHER - 5/16 PL	6
17	O.L.	HEX NUT - 5/16NC GR5 PL	6
18	O.L.	HEX BOLT - 3/8 x 1.25 NC GR5 PL	2
19	O.L.	FLAT WASHER- 3/8 PL	2
20	O.L.	HEX NUT - 3/8NC GR5 PL	2
21	O.L.	HEX BOLT- 3/8 X 2 NC GR5 PL	2
22	O.L.	HEX LOCK NUT - 3/8 NC GR5 PL	2

O.L. - OBTAIN LOCALLY

## 8 Special Tools

### 8.1 Special Tools

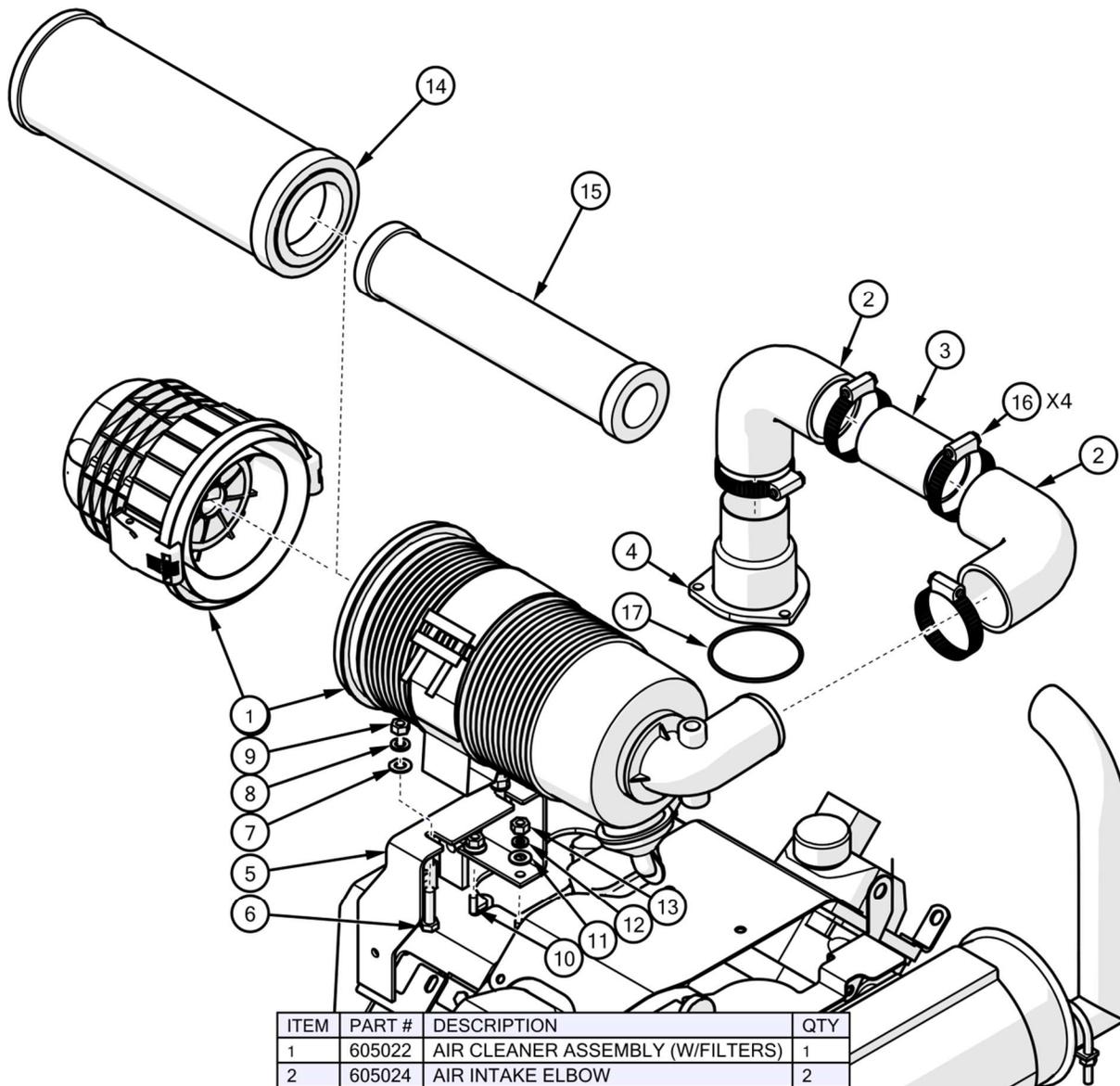


ITEM	PART #	DESCRIPTION	QTY
1	604926	GREASE GUN /W GAUGE	1
2	604920	WRENCH - TENSION RELEASE	1
3	O.L.	HEX BOLT - M12 X 75	1
4	O.L.	HEX NUT - M12 PL	1
5	O.L.	HARDENED WASHER - 7/16 USS	1
6	-	RELEASE BAR - BRAKE	1
7	605654	KIT - BRAKE RELEASE TOOL	1
8	209000	BLADE BALANCER	1

O.L. - OBTAIN LOCALLY

## 9 Optional Equipment

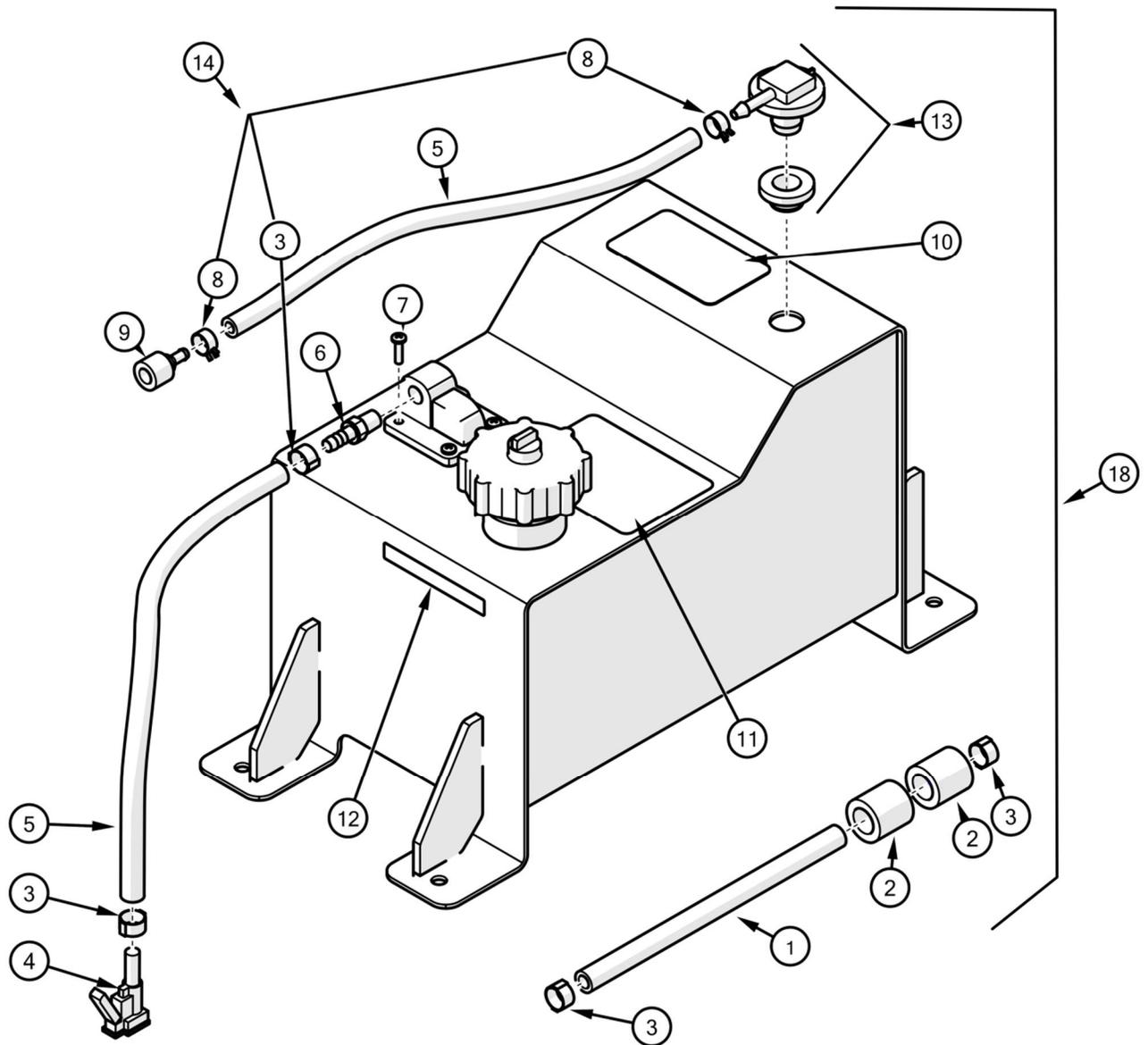
### 9.1 High Capacity Air Cleaner



ITEM	PART #	DESCRIPTION	QTY
1	605022	AIR CLEANER ASSEMBLY (W/FILTERS)	1
2	605024	AIR INTAKE ELBOW	2
3	605026	TUBE - AIR INLET	1
4	604730	AIR INLET ADAPTER	1
5	604728	BRACKET - HD AIR CLEANER	1
6	O.L.	HEX BOLT- 5/16 X 1.00 NC GR5 PL	2
7	O.L.	FLAT WASHER- 5/16 PL	2
8	O.L.	LOCK WASHER- 5/16 PL	2
9	O.L.	HEX NUT - 5/16NC GR5 PL	2
10	O.L.	CARR BOLT - 1/4 X 3/4 NC GR5 PL	2
11	O.L.	FLAT WASHER - 1/4" PL	2
12	O.L.	LOCK WASHER- 1/4 PL	2
13	O.L.	HEX NUT - 1/4NC GR5 PL	2
14	605038	FILTER CARTRIDGE - PRIMARY	1
15	605040	FILTER CARTRIDGE - SAFETY	1
16	O.L.	HOSE CLAMP - 1.75-2.75	4
17	605028	O-RING	1

O.L. - OBTAIN LOCALLY

## 9.2 Permanent Mounted Steel Fuel Tanks



ITEM	PART #	DESCRIPTION	QTY
1	605677	FUEL HOSE - 3/8" X 5' LONG	1
2	605589	WEIGHT - DROP HOSE	2
3	SEE ITEM #14	EAR CLAMP - 9/16 STEPLESS	4
4	605207	FEMALE FUEL QUICK CONNECT	1
5	605675	FUEL HOSE - 5/16" X 5' LONG	2
6	SEE ITEM #16	5/16 MALE HOSE BARB	1
7	O.L.	MACHINE SCREW - #10-32 X 0.75	4
8	O.L.	9/16 SPRING HOSE CLAMP	2
9	605381	FEMALE QUICK CONNECT- SUZUKI	1
10	SEE ITEM #15	DECAL - GAS TANK INSTRUCTIONS	1
11	SEE ITEM #15	DECAL - GASOLINE DANGER	1
12	SEE ITEM #15	DECAL - FUEL LEVEL	1
13	605352	TANK VENT KIT	2
14	604636	HOSE CLAMP KIT - COMPLETE	1
15	605354	FUEL TANK DECAL KIT	1
16	605356	FUEL FITTING KIT - COMPLETE SYSTEM	1
18	604700	STEEL TANK KIT (2 COMPLETE TANKS)	1

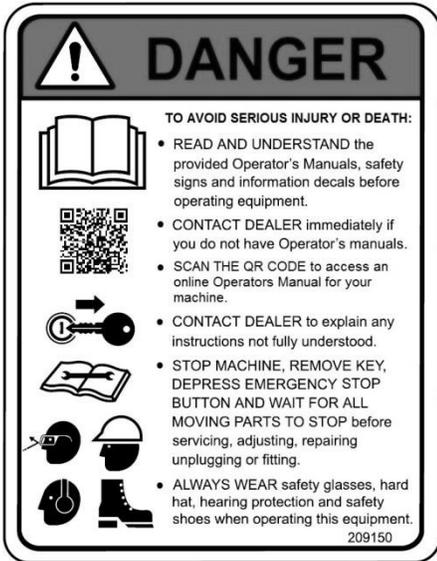
O.L. - OBTAIN LOCALLY

# 10 Decals

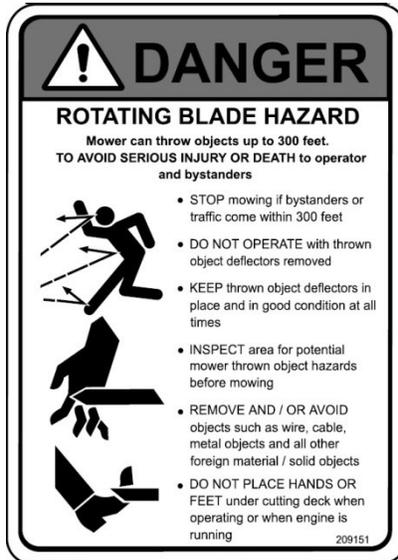
## 10.1 Safety

605870 - SLOPE PRO SAFETY DECAL KIT

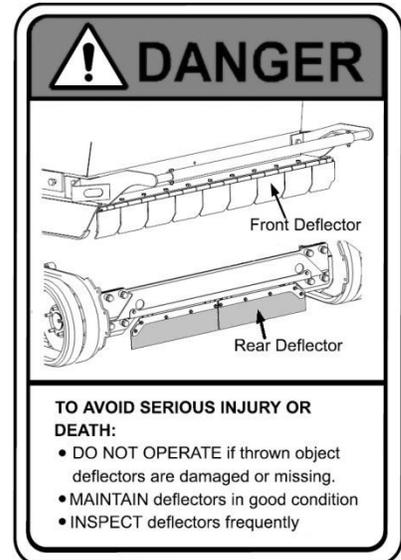
(CONTAINS ALL SAFETY DECALS ON THE FOLLOWING PAGES)



209150  
DECAL – GENERAL DANGER



209151  
DECAL – DANGER ROTATING BLADE



209153  
DECAL – THROWN OBJ DEFLECTOR



209154  
DECAL – PINCH POINT HAZARD



209155  
DECAL – AIR BOX IN PLACE



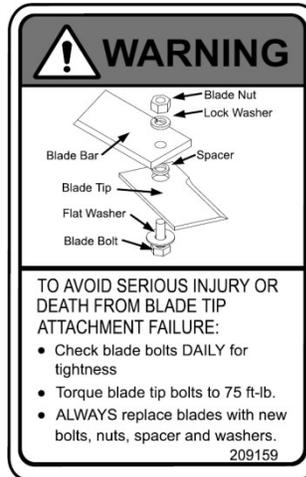
209156  
DECAL – COVERS REMOVED



209157  
DECAL – FIRE HAZARD



209158  
DECAL – HOT SURFACE



209159  
DECAL - SWING TIP BLADE



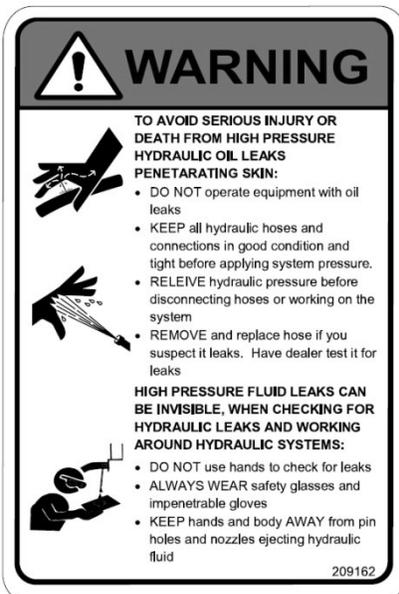
209161  
DECAL – REMOTE CONTROLLED MACHINE



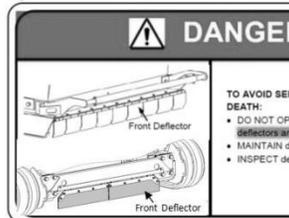
209160  
DECAL – NO RIDERS / RUN OVER



209115  
DECAL – OEM PARTS



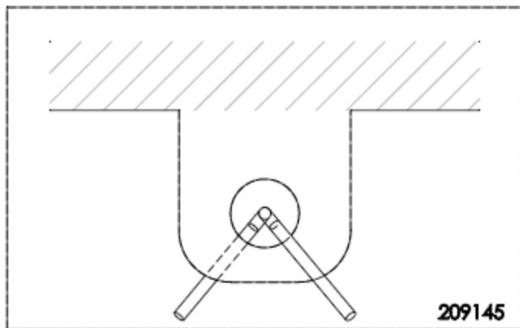
209162  
DECAL – HYD PRESSURE HAZARD



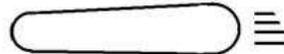
209164  
DECAL – COMPOSITE DANGER

## 10.2 General Info

605872- SLOPE PRO MOWER DECAL KIT  
 (CONTAINS ALL DECALS ON THIS PAGE)



209145  
 DECAL – TIE DOWN



209147  
 DECAL – CONTROL PANEL

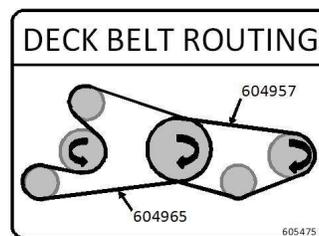


209163  
 DECAL – OFF / ON

ID	FUSE	FUNCTION	LOCATION
1	10A	ENGINE START	FUSE BLOCK
2	10A	THROTTLE CONTROL	FUSE BLOCK
3	15A	RADIO/CONTROL UNIT	FUSE BLOCK
4	10A	HYD. COOLER FAN	FUSE BLOCK
5	10A	BRAKE VALV E	FUSE BLOCK
6	10A	PTO CLUTCH	FUSE BLOCK
7	20A	IGN POWER	IN-LINE
8	40A	MAIN POWER	IN-LINE
9	20A	LH LIFT - LOWER	IN-LINE
10	20A	RH LIFT - LOWER	IN-LINE
11	20A	LH LIFT - RAISE	IN-LINE
12	20A	RH LIFT - RAISE	IN-LINE

\*NOTE - ADDITIONAL FUSES LOCATED ON ENGINE, CONSULT ENGINE OWNER'S MANUAL FOR INFO.

209146  
 DECAL – FUSE IDENTIFICATION



605475  
 DECAL – BELT ROUTING



605011  
 DECAL - SLOPE MOWER



605013  
 DECAL – SLOPE-PRO



605017  
 DECAL – PROGRESSIVE TURF