

SCAG

POWER EQUIPMENT

OPERATOR'S MANUAL

CHEETAH II



Models: **SCZII-61V-31FX**
SCZII-61V-36BV
SCZII-61V-37BV-EFI
SCZII-61V-38FX-EFI
SCZII-61V-38CV-EFI
SCZII-61V-40BV-EFI
SCZII-61RD-38FX-EFI
SCZII-61RD-38CV-EFI
SCZII-72V-37BV-EFI
SCZII-72V-38FX-EFI
SCZII-72V-38CV-EFI
SCZII-72V-40BV-EFI

Congratulations on owning a Scag mower! This manual contains the operating instructions and safety information for your Scag mower. Reading this manual can provide you with assistance in maintenance and adjustment procedures to keep your mower performing to maximum efficiency. The specific models that this book covers are listed on the inside cover. Before operating your machine, please read all the information enclosed.



WARNING

FAILURE TO FOLLOW SAFE OPERATING PRACTICES MAY RESULT IN SERIOUS INJURY OR DEATH.

- Read this manual completely as well as other manuals that came with your mower.
- DO NOT operate on steep slopes. To check a slope, attempt to back up it (with the cutter deck down). If the machine can back up the slope without the wheels slipping, reduce speed and use extreme caution.
- Under no circumstances should the machine be operated on slopes greater than 15 degrees. ALWAYS FOLLOW OSHA APPROVED OPERATION.
- Stay two cut widths away from slopes, drop offs, ditches, water, retaining walls, avoid any slope exceeding 15 degrees, and do not mow under trees on slopes with the roll bar down.
- DO NOT mow on wet grass. Wet grass reduces traction and steering control.
- Keep all shields in place, especially the grass discharge chute.
- Before performing any maintenance or service, stop the machine and remove the spark plug wire and ignition key.
- If a mechanism becomes clogged, stop the engine before cleaning.
- Keep hands, feet and clothing away from power-driven parts.
- Keep others off the mower (only one person at a time)

REMEMBER - YOUR MOWER IS ONLY AS SAFE AS THE OPERATOR!

HAZARD CONTROL AND ACCIDENT PREVENTION ARE DEPENDENT UPON THE AWARENESS, CONCERN, PRUDENCE, AND PROPER TRAINING OF THE PERSONNEL INVOLVED IN THE OPERATION, TRANSPORT, MAINTENANCE, AND STORAGE OF THE EQUIPMENT.

This manual covers the operating instructions and illustrated parts list for:

| | | |
|---------------------|-------------------------|----------------------|
| SCZII-61V-31FX | with a serial number of | X5400001 to X5499999 |
| SCZII-61V-37BV-EFI | with a serial number of | X5500001 to X5599999 |
| SCZII-61V-36BV | with a serial number of | Y0600001 to Y0699999 |
| SCZII-61V-38CV-EFI | with a serial number of | X5600001 to X5699999 |
| SCZII-61V-38FX-EFI | with a serial number of | X5700001 to X5799999 |
| SCZII-61RD-38FX-EFI | with a serial number of | X5800001 to X5899999 |
| SCZII-61RD-38CV-EFI | with a serial number of | X5900001 to X5999999 |
| SCZII-61V-40BV-EFI | with a serial number of | Y0000001 to Y0099999 |
| SCZII-72V-37BV-EFI | with a serial number of | X6000001 to X6099999 |
| SCZII-72V-38CV-EFI | with a serial number of | X6100001 to X6199999 |
| SCZII-72V-38FX-EFI | with a serial number of | X6200001 to X6299999 |
| SCZII-72V-40BV-EFI | with a serial number of | X6300001 to X6399999 |

Always use the entire serial number listed on the serial number tag when referring to this product.

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GENERAL INFORMATION

1.1 INTRODUCTION

Your mower was built to the highest standards in the industry. However, the prolonged life and maximum efficiency of your mower depends on you following the operating, maintenance and adjustment instructions in this manual.

If additional information or service is needed, contact your Scag Power Equipment Dealer.

We encourage you to contact your authorized Scag Power Equipment dealer for repairs. All Scag dealers are informed of the latest methods to service this equipment and provide prompt and efficient service in the field or at their service shop. They carry a full line of Scag service parts.

- IMPORTANT -

The replacement of any part on this product by other than the manufacturer's authorized replacement part may adversely affect the performance, durability or safety of this product.

Use of other than original Scag replacement parts will void the warranty.

When ordering parts, always give the model and serial number of your mower. The serial number plate is located on the frame between the engine and seat where shown in Figure 1-1.

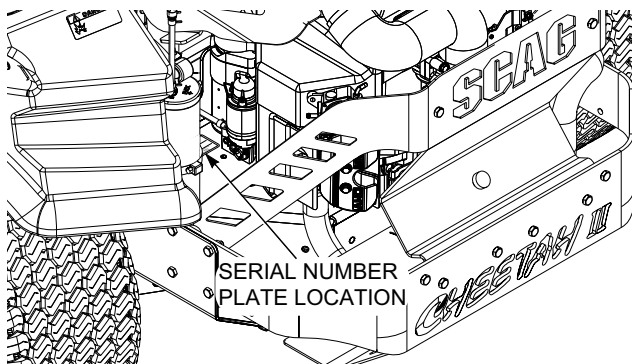


Figure 1-1. Mower Serial Number Plate Location

USE ONLY SCAG APPROVED ATTACHMENTS

AND ACCESSORIES.

Attachments and accessories manufactured by companies other than Scag Power Equipment are not approved for use on this machine. See Section 8, Paragraph 8-1. Be aware that using attachments with the mower may affect stability. Be sure to follow the directions found in the operator's manual.

WARNING

For pictorial clarity, some illustrations and figures in this manual may show shields, guards or plates open or removed. Under no circumstances should your mower be operated without these devices in place.

All information is based upon product information available at the time of approval for printing. Scag Power Equipment reserves the right to make changes at any time without notice and without incurring any obligation.

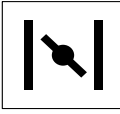
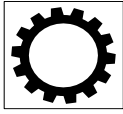


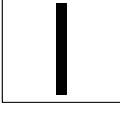

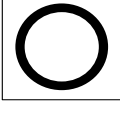




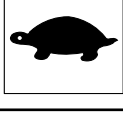
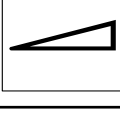


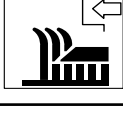
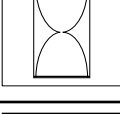

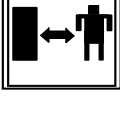
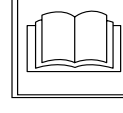
1.2 DIRECTION REFERENCE

The "Right" and "Left", "Front" and "Rear" of the machine are referenced from the operator's right and left when seated in the normal operating position and facing the forward travel direction.

1.3 SERVICING THE ENGINE AND DRIVE TRAIN COMPONENTS

Details regarding the service and repair of the engine, hydraulic pumps and gearboxes are not covered in this manual; only routine maintenance and general service instructions are provided. For service of these components during the limited warranty period, it is important to contact your authorized Scag Power Equipment dealer or find a local authorized servicing agent of the component manufacturer. Any unauthorized work done on these components during the warranty period may void your warranty.

1.4 SYMBOLS

| SYMBOL | DESCRIPTION | SYMBOL | DESCRIPTION |
|---|------------------------------------|---|--------------------------------|
|  | Choke |  | Transmission |
|  | Parking Brake |  | Spinning Blade |
|  | On/Start |  | Spring Tension on Idler |
|  | Off/Stop |  | Oil |
|  | Falling Hazard |  | Thrown Object Hazard |
|  | Fast |  | Slow |
|  | Continuously Variable - Linear |  | Cutting Element - Basic Symbol |
|  | Pinch Point |  | Cutting Element - Engage |
|  | Hour meter/Elapsed Operating Hours |  | Cutting Element - Disengage |
|  | Keep Bystanders Away |  | Read Operator's Manual |

SAFETY INFORMATION

2.1 INTRODUCTION

Your mower is only as safe as the operator. Carelessness or operator error may result in serious bodily injury or death. Hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training of the personnel involved in the operation, transport, maintenance and storage of the equipment. Make sure every operator is properly trained and thoroughly familiar with all of the controls before operating the mower. The owner/user can prevent and is responsible for accidents or injuries occurring to themselves, other people or property.

This product is capable of amputating hands and feet and throwing objects. Always follow all safety instructions on this product and in the manual to avoid personal injury or death.

READ THIS OPERATOR'S MANUAL AND USE THE QR CODE BELOW TO WATCH THE SAFETY VIDEO BEFORE ATTEMPTING TO START YOUR MOWER. MAKE SURE THAT EVERYONE KNOWS WHERE THE MANUAL IS LOCATED AND KEEP A RECORD OF EACH EMPLOYEE THAT HAS READ THE MANUAL.



Figure 2-1. SAFETY VIDEO QR CODE

A replacement manual is available from your authorized Scag Service Dealer or by contacting Scag Power Equipment, Service Department at P.O. Box 152, Mayville, WI 53050 or contact us via the Internet at www.scag.com. The manual for this machine can be downloaded by using the model and serial number or use the contact form to make your request. Please indicate the complete model and serial number of your Scag product when requesting replacement manuals.

2.2 SIGNAL WORDS



This symbol means **“Attention! Become Alert! Your Safety is Involved!”** The symbol is used with the following signal words to attract your attention to safety messages found on the decals on the machine and throughout this manual. The message that follows the symbol contains important information about safety. To avoid injury and possible death, carefully read the message! Be sure to fully understand the causes of possible injury or death.

SIGNAL WORD:

It is a distinctive word found on the safety decals on the machine and throughout this manual that alerts the viewer to the existence and relative degree of the hazard.



The signal word “DANGER” denotes that an extremely hazardous situation exists on or near the machine that could result in high probability of death or irreparable injury if proper precautions are not taken.



The signal word “WARNING” denotes that a hazard exists on or near the machine that can result in injury or death if proper precautions are not taken.



The signal word “CAUTION” is a reminder of safety practices on or near the machine that could result in personal injury if proper precautions are not taken.

Your safety and the safety of others depends significantly upon your knowledge and understanding of all correct operating practices and procedures of this machine.

2.3 BEFORE OPERATION CONSIDERATIONS

WARNING

Check all hydraulic connections for tightness. Inspect all hydraulic hoses and / or lines to insure they are in good condition before operating.

1. NEVER allow children to operate this riding mower. Do not allow adults to operate this machine without proper instructions.
2. Do not mow when children and/or others are present. Keep children out of the mowing area and in the watchful care of a responsible adult other than the operator. Be alert and turn machine off if a child enters the area.
3. DO NOT allow children to ride or play on the machine, it is not a toy.
4. Keep keys stored in a safe location when the mower is not in use; i.e. where they are inaccessible to children.
5. Clear the area to be mowed of objects that could be picked up and thrown by the cutter blades.
6. DO NOT carry passengers.
7. DO NOT operate the machine under the influence of alcohol or drugs.
8. If the operator(s) or mechanic(s) cannot read English, it is the owner's responsibility to explain this material to them.
9. DO NOT wear loose fitting clothing. Loose clothing, jewelry or long hair could get tangled in moving parts. Do not operate the machine wearing shorts; always wear adequate protective clothing including long pants. Wearing safety glasses, safety shoes and a helmet is advisable and is required by some local ordinances and insurance regulations.

WARNING

Always wear hearing protection. Operating this machine over prolonged periods of time can cause loss of hearing.

10. Keep the machine and attachments in good operating condition. Keep all shields and safety devices in place. If a shield, safety device or decal is defective or damaged, repair or replace it before operating the machine.
 11. Fuel is flammable; handle it with care. Fill the fuel tank outdoors. Never fill it indoors. Use a funnel or spout to prevent spillage. Clean up any spillage before starting the engine.
 12. DO NOT start the engine until any spilled fuel has been cleaned up or has evaporated.
 13. DO NOT add fuel to a running or hot engine. Allow the engine to cool for several minutes before adding fuel. Never fuel indoors or inside enclosed trailers.
 14. See Section 7.5 ENGINE FUEL SYSTEM for fueling procedure.
 15. Keep flammable objects (cigarettes, matches, etc.), open flames and sparks away from the fuel tank and fuel container. Use only approved containers.
 16. Equipment must comply with the latest requirements per SAE J137 and/or ANSI/ASAE S279 when driven on public roads.
- NOTE -**
- If the mower is driven on public roads, it must comply with state and local ordinances as well as SAE J137 and/or ANSI / ASAE S279 requirements. Contact your local authorities for regulations and equipment requirements.*
17. Do not operate without the side discharge chute installed and in the down position or with an optional grass catcher or mulch plate completely installed.
 18. Check the blade mounting bolts at frequent intervals for proper tightness.
 19. Make sure all hydraulic fluid connections are tight and all hydraulic hoses and lines are in good condition before starting the machine.
 20. Be sure the interlock switches are functioning correctly.

WARNING

This machine is equipped with an interlock system intended to protect the operator and others from injury. This is accomplished by preventing the engine from starting unless the deck drive is disengaged, the parking brake is on, the steering control levers are in the neutral position and the operator is in the seat. The system shuts off the engine if the operator leaves the seat with the deck drive engaged and/or the steering control levers are not in the neutral position and the parking brake is not engaged. Never operate equipment with the interlock system disconnected or malfunctioning.

2.4 TESTING THE SAFETY INTERLOCK SYSTEM

The safety interlock system should be tested each time before using the machine. If the safety interlock system does not operate as described below, contact your local Authorized Scag Power Equipment Dealer immediately to have the safety interlock system repaired.

1. Sit in the seat in the operating position, engage the parking brake, place the steering control levers in the neutral lock position, and engage the PTO switch to the ON (up) position. Try to start the engine; the engine should not start.
2. Sit in the seat in the operating position, engage the parking brake, move either of the steering control handles out of the neutral lock position, move the PTO switch to the OFF (down) position. Try to start the engine; the engine should not start. Repeat for the other steering control lever.
3. Sit in the seat in the operating position, disengage the parking brake, place the steering control levers in the neutral lock position, move the PTO switch to the OFF (down) position. Try to start the engine; the engine should not start.
4. Sit in the seat in the operating position, engage the parking brake, place the steering control levers in the neutral lock position, move the PTO switch to the OFF (down) position, and start the engine. With the engine running, release the parking brake and rise slightly off of the seat. The engine should shut off.

5. Sit in the seat in the operating position, engage the parking brake, place the steering control levers in the neutral lock position, move the PTO switch to the OFF (down) position, and start the engine. With the engine running, engage the PTO switch to the ON (up) position, and rise slightly off of the seat. The engine should shut off.
6. Sit in the seat in the operating position, engage the parking brake, place the steering control levers in the neutral lock position, move the PTO switch to the OFF (down) position, and start the engine. With the engine running, move either steering control lever out of the neutral lock position. The engine should shut off. Repeat for the other steering control lever.

2.5 OPERATION CONSIDERATIONS

1. Know the function of all controls and how to stop quickly.

WARNING

DO NOT operate on steep slopes. To check a slope, attempt to back up it (with the cutter deck down). If the machine can back up the slope without the wheels slipping, reduce speed and use extreme caution. Under no circumstances should the machine be operated on slopes greater than 15 degrees. See Figure 2-4, Page 11 to determine approximate slope or use a flat surface and an app on your cell phone. Reference the Safety Video using the QR Code in section 2.1. ALWAYS FOLLOW OSHA APPROVED OPERATION.

2. Reduce speed and exercise extreme caution on slopes and in sharp turns to prevent tipping or loss of control. Be especially cautious when changing directions on slopes.
3. Stay at least 2 cutting widths away from drop-offs, ditches, retaining walls, water, avoid any slope exceeding 15-degrees, and do not mow under trees on slopes with the roll bar down.
4. To prevent tipping or loss of control, start and stop smoothly, avoid unnecessary turns and travel at reduced speed.
5. If the operator were to lose steering control of the mower while operating, move both steering levers to the neutral position and immediately apply the parking brake. Inspect the machine and correct the problem before continuing to operate.

- When using any attachment, never direct the discharge of material toward bystanders or allow anyone near the machine while in operation.
- Before attempting to start the engine, with the operator in the seat, disengage power to the cutter deck, place the steering control levers in the neutral position and engage the parking brake.
- If the mower discharge ever plugs, shut off the engine, remove the ignition key, and wait for all movement to stop before removing the obstruction.

WARNING

DO NOT use your hand to dislodge the clogged discharge chute. Use a stick or other device to remove clogged material after the engine has stopped running and the blades have stopped turning.

- Be alert for holes, rocks, roots and other hidden hazards in the terrain. Keep away from any drop-offs. Beware of overhead obstructions (low limbs, etc.), underground obstacles (sprinklers, pipes, tree roots, etc.). Cautiously enter a new area. Be alert for hidden hazards.
- Disengage power to cutter deck before backing up. Do not mow in reverse unless absolutely necessary and then only after observation of the entire area behind the mower. If you must mow in reverse, maintain a constant lookout to the rear of the machine and mow slowly.
- DO NOT turn sharply. Use care when backing up.
- Disengage power to cutter deck before crossing roads, walks or gravel drives.
- Mow only in daylight or good artificial light.
- NEVER raise the deck with the blades engaged.
- Take all possible precautions when leaving the machine unattended, such as disengaging the mower, lowering the attachments, setting the parking brake, stopping the engine, and removing the key.
- Disengage power to the attachments when transporting or when not in use.
- The machine and attachments should be stopped and inspected for damage after striking a foreign object, and damage should be repaired before restarting and operating the machine.

CAUTION

Do not touch the engine or the muffler while the engine is running or immediately after stopping. These areas may be hot enough to cause a burn.

DANGER

DO NOT run the engine inside a building or a confined area without proper ventilation. Exhaust fumes are hazardous and contain carbon monoxide which can cause brain injury and death.

- Keep hands and feet away from cutter blades and moving parts. Contact can injure.
- Transport the mower using a heavy duty trailer or truck. Insure the trailer or truck has all of the necessary lighting and markings as required by laws, codes, and ordinances. Secure a trailer with a safety chain.
- Be cautious when loading and unloading onto trailers or trucks. Use only a full width ramp. Ramp angle should be no more than 15 degrees. Back up the ramp and drive down forward.
- When transporting the mower, make sure the park brake is engaged, the steering control levers are in the neutral position, the engine is off with the key removed, and the wheels have been blocked.
- Tie the mower down securely using straps, chains, cable, or ropes. Both front and rear straps must be directed down and outward from machine.
- Use care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.
- NEVER leave the machine running unattended.

Section 2**2.6 ROLL-OVER PROTECTIVE STRUCTURE**** WARNING**

Reduce speed when turning, operating on slopes, slick or wet surfaces. Allow extra distance to stop.

Stay off of slopes too steep for safe operation. To check a slope, attempt to back up it (with the cutter deck down). If the machine can not back up the slope without the wheels slipping, do not operate the machine on this slope. Under no circumstances should the machine be operated on slopes greater than 15 degrees. See Figure 2-4, Page 11 to determine approximate slope or use a flat surface and an app on your cell phone. Reference the Safety Video using the QR Code in section 2.1.

Stay two cut widths away near drop-offs, ditches or embankments. The machine could suddenly roll over if a wheel goes over the edge or if the edge caves in.

Operate the machine smoothly, no sudden turns, starts or stops on a slope.

DO NOT lower the roll bar to mow under trees on slopes. If mowing under trees is required, always use a walk-behind mower or string trimmer.

NEVER tow on slopes. The weight of the towed equipment may cause loss of traction and loss of control.

DO NOT permit untrained personnel to operate the machine.

Be cautious when loading and unloading onto trailers or trucks.

Use only a full width ramp.

Ramp angle should be no more than 15 Degrees. See Figure 2-4, Page 11 to help determine approximate slope or use a flat surface and an app on your cell phone. Reference the Safety Video using the QR Code in section 2.1.

Back up the ramp and drive down forward.

This mower has been designed for good traction and stability under normal mowing conditions. However, caution must be used when traveling on slopes, especially when the grass is wet. Do not mow on wet grass. Wet grass reduces traction and steering control.

Any or all parts of the Roll-Over Protection Structure **MUST NOT** be removed. Failure to adhere to this guideline could result in injury or death.

FOLDABLE ROLL-OVER PROTECTION STRUCTURE** WARNING**

Keep the roll bar in the raised and locked position and the seat belt securely fastened during operation. Failure to do so could cause serious injury or loss of life.

Lower the roll bar only when absolutely necessary.

 WARNING

There is no roll-over protection when the roll bar is in the down position.

Lower the roll bar only when absolutely necessary.

Raise the roll bar as soon as clearance permits.

DO NOT wear the seat belt when the roll bar is in the down position.

ALWAYS wear seat belt when roll bar is in the up position.

Operate the machine smoothly, no sudden turns, starts or stops.

Check the area carefully before mowing for proper overhead clearance (i.e. branches, doorways, etc.).

DO NOT contact any overhead object with the roll bar.

1. To lower the roll bar, remove the hairpin cotter pins and remove the two (2) lock pins. See Figure 2-2.
2. Lower the roll bar to the folded position. See Figure 2-2.
3. To raise the roll bar, lift the bar to the upright position.
4. Install the two (2) lock pins through the holes and secure with the two (2) hairpin cotter pins. See Figure 2-2.

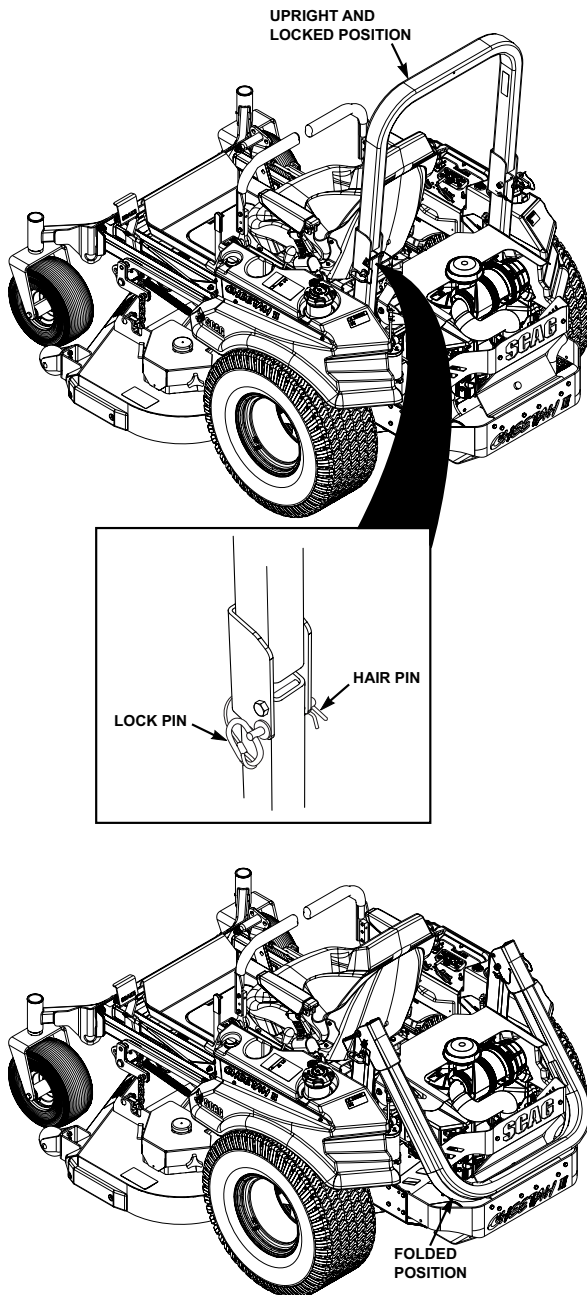


Figure 2-2. Foldable Roll-Over Protection Structure

The potential exposure of the seat belt to severe environmental conditions makes it crucial to inspect the seat belt system regularly.

It is recommended that the seat belt be inspected on a daily basis for signs of damage. Any seat belt system that shows cuts, fraying, extreme or unusual wear, significant discoloration due to UV exposure, dirt or stiffness, abrasion to the seat belt webbing, or damage to the buckle, latch plate, hardware or any other obvious problem should be replaced immediately.

WARNING

Failure to properly inspect and maintain the seat belt can cause serious injury or loss of life.

1. Check the full length of the seat belt webbing for cuts, wear, fraying, dirt and stiffness. See Figure 2-3.
2. Check the seat belt webbing in areas exposed to ultra violet rays from the sun or extreme dust or dirt. If the original color of the webbing in these areas is extremely faded and/or is packed with dirt, the physical strength of this webbing may have deteriorated. If this condition exists, replace the seat belt system.
3. Check the buckle and latch for proper operation and determine if the latch plate is excessively worn, deformed, or if the buckle is damaged or cracked. See Figure 2-3.
4. Be sure to confirm that the seat belt recoil latch is functioning properly.

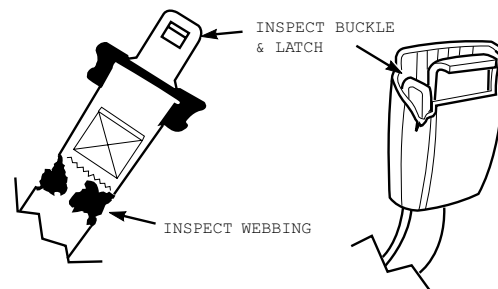


Figure 2-3. Seat Belt Inspection

2.7 MAINTENANCE CONSIDERATIONS AND STORAGE

1. Never make adjustments to the machine with the engine running unless specifically instructed to do so. If the engine is running, keep hands, feet, and clothing away from moving parts.
2. Disengage drives, lower implement, set parking brake, stop engine and remove key or disconnect spark plug wire to prevent accidental starting of the engine when servicing or adjusting the machine. Wait for all movement to stop before adjusting, cleaning or repairing.
3. Disconnect battery or remove spark plug wire before making any repairs. Disconnect the negative terminal first and the positive last. Reconnect the positive first and the negative last.
4. Keep all nuts, bolts and screws tight, to ensure the machine is in safe working condition. Check blade mounting bolts frequently to be sure they are tight.
5. Do not change the engine governor settings or overspeed the engine. See the engine operator's manual for information on engine settings.
6. To reduce fire hazard, keep the cutting units, drives, muffler and engine free of grass, leaves, excessive grease, oil and dirt.
7. Park the machine on level ground and engage the parking brake.
8. NEVER allow untrained personnel to service the machine.
9. Use care when checking blades. Use a Blade Buddy (P/N 9212), wrap the blade(s) or wear gloves and USE CAUTION when servicing blades. Only replace blades. NEVER straighten or weld blades.
10. Keep all parts in good working condition. Replace all worn or damaged decals.
11. Use jack stands to support components when required.
12. Carefully release pressure from components with stored energy.



WARNING

Hydraulic fluid is under high pressure and can penetrate skin causing injury. If hydraulic fluid is injected into the skin, it must be surgically removed within a few hours by a doctor or gangrene may result.

Keep body and hands away from pinholes or nozzles that eject hydraulic fluid under high pressure. Use paper or cardboard and not hands to search for leaks.

Safely relieve all pressure from the hydraulic system by placing the control levers in the neutral lock position and shutting off the engine before performing any work on the hydraulic system.

If you need service on your hydraulic system, please see your authorized Scag dealer.

13. Let the engine cool before storing.
14. DO NOT store the machine near an open flame.
15. Shut off fuel while storing or transporting.
16. DO NOT store fuel near flames or drain indoors.
17. Charge batteries in an open, well ventilated area, away from spark and flames. Unplug charger before connecting or disconnecting from battery. Wear protective clothing and use insulated tools.

2.8 USING A SPARK ARRESTOR

The engine in this machine is not equipped with a spark arrestor muffler. It is in violation of California Public Resource Code Section 4442 to use or operate this engine on or near any forest covered, brush covered or grass covered land unless the exhaust system is equipped with a spark arrestor meeting any applicable local or state laws. Other states or federal areas may have similar laws. Check with your state or local authorities for regulations pertaining to these requirements.

2.9 SPARK IGNITION SYSTEM

This spark ignition system complies with Canadian ICES-002.

2.10 SAFETY AND INSTRUCTIONAL DECALS

⚠ DANGER

SPINNING BLADES
KEEP CLEAR
BLADE CONTACT & THROWN OBJECTS CAN INJURE

483407

483407

↑ FORWARD **R**
F **↓**
REVERSE

482100

⚠ WARNING

ROTATING BLADES AND BELTS

- Keep hands, feet & clothing clear
- Keep all guards in place
- Shut off engine & disengage blade clutch before servicing
- Use caution in directing discharge
- Read instruction manual before operating

DO NOT OPERATE UNLESS GRASS CATCHER, MULCHING KIT OR DISCHARGE CHUTE IS INSTALLED

483406

⚠ WARNING

SERIOUS INJURY OR DEATH MAY RESULT FROM MACHINE ROLLOVER

Failure to follow these instructions could result in serious injury or death

- Do not operate machine on steep slopes or near drop offs
- Avoid sharp and/or quick turns
- Do not exceed the machine weight rating on the ROPS
- Always use the seat belt
- Do not jump if machine flips while ROPS is fully extended and using seat belt
- If ROPS is foldable: Keep ROPS fully extended whenever possible

WHEN ROPS MUST BE DOWN:
Do not use the seat belt
Drive with extra care

483300

483300

IMPORTANT

Operation on slopes can be hazardous.

This machine was originally equipped with a Rollover Protection Device with a Roll Bar and Seat Belt.

See your dealer if either is missing or damaged.

483425

483425

START/DRIVE PROCEDURE

- Engage parking brake
- Disengage mower deck drive
- Move control handles to neutral lock position
- Start engine
- Release parking brake
- Select forward or reverse with hydro control handles

⚠ WARNING

AVOID SERIOUS INJURY OR DEATH

- Read the Operator's Manual
- Solicite etiquetas en español a un distribuidor Scag
- Operate only on slopes you can back up and never on slopes greater than 15 degrees
- If machine stops going uphill, stop blades and back down slowly
- Avoid sudden turns
- Do not mow when children or others are around
- Never carry children even with blades off
- Look down and behind before and while backing
- Keep safety devices (guards, shields, switches, etc.) in place and working
- Remove objects that could be thrown by the blades
- Trained operators only

483443

⚠ DANGER

Avoid injury from burns

- Shut off engine
- Allow to cool several minutes
- Remove cap slowly
- Do not overfill

Molded in Fuel Tank

⚠ WARNING

INSTALL BELT COVER BEFORE OPERATING MACHINE

READ OPERATOR'S MANUAL

483402

483402

⚠ WARNING

Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrester may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.

483900

(supplied with California models only)

IMPORTANT ADJUSTMENT PROCEDURES
READ OPERATORS MANUAL FOR MORE DETAILS
Check tire pressure: SC211-61/72 Drive tires-12 psi
Caster tires-Flat Free

HYDRAULIC FLUID LEVEL
Check hydraulic fluid level while fluid is cool. Fluid level should be at full cold line on tanks. Fill with 20W50 motor oil only.

FREE WHEEL OPERATION
To move machine without running engine, turn valve on LH & RH transaxles from RUN to BY-PASS. (see operator's manual)

NEUTRAL ADJUSTMENT

ALIGN TABS

To re-set neutral, have engine off and control levers in neutral. Remove rear wheels. Adjust linkage turnbuckle until tabs on transaxle align. Repeat for opposite side. If wheels still creep after adjustment, see an authorized Scag dealer.

486612

TRACKING ADJUSTMENT

CONTROL LEVER
Stop Bolt

If machine pulls to right, adjust LH control stop bolt CW (inward) to slow left wheel down.
If machine pulls to left, adjust RH control stop bolt CW (inward) to slow right wheel down.

486612

486612

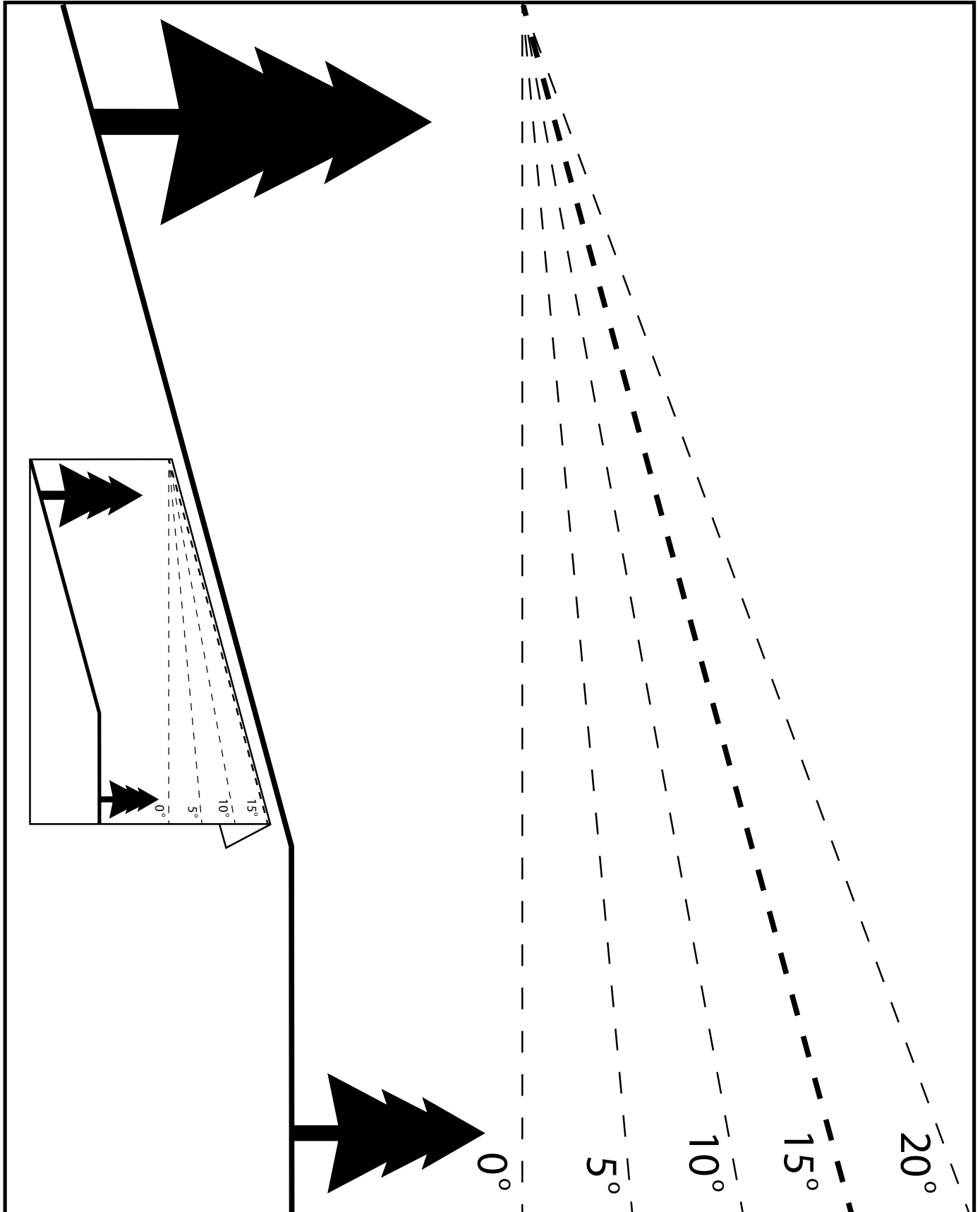


Figure 2-4. Slope Angle Graph

SPECIFICATIONS

3.1 ENGINE

| | |
|---|---|
| General Type | Heavy Duty Industrial/Commercial Gasoline |
| Engine Model: | |
| Scag Model SCZII-61V-31FX, SCZII-61RD-31FX..... | Kawasaki FX921V |
| Scag Model SCZII-61V-38FX-EFI, SCZII-61RD-38FX-EFI, SCZII-72V-38FX-EFI..... | Kawasaki FX1000V |
| Scag Model SCZII-61V-37BV-EFI, SCZII-72V-37BV-EFI..... | Briggs & Stratton #61A7 |
| Scag Model SCZII-61V-40BV-EFI, SCZII-72V-40BV-EFI..... | Briggs & Stratton #61G8 |
| Scag Model SCZII-61V-38CV-EFI, SCZII-61RD-38CV-EFI, SCZII-72V-38CV-EFI..... | Kohler Command Pro ECV980 |
| Displacement: | |
| Kawasaki 31FX (FX921) | .999cc |
| Kawasaki 38FX-EFI (FX1000)..... | .999cc |
| Briggs & Stratton 37BV-EFI (#61A7)..... | .993cc |
| Briggs & Stratton 40BV-EFI (#61G8)..... | .993cc |
| Kohler 38CV-EFI (ECV980)..... | .999cc |
| Type: | |
| Kawasaki (FX)..... | 4-Cycle, Air-Cooled, Naturally Aspirated Gasoline, OHV |
| Briggs & Stratton (#61A7)..... | 4-Cycle, Air-Cooled, Naturally Aspirated Gasoline, OHV |
| Briggs & Stratton (#61G8)..... | 4-Cycle, Air-Cooled, Naturally Aspirated Gasoline, OHV |
| Kohler (ECV980)..... | 4-Cycle, Air-Cooled, Naturally Aspirated Gasoline, OHV |
| Cylinders..... | 2 with Cast Iron Sleeves |
| Governor..... | Mechanical Type with Variable Speed Control Set At 3600 RPM |
| Idle Speed | |
| Kawasaki..... | 1550 RPM |
| Briggs & Stratton..... | 1750 RPM |
| Kohler..... | 1500 RPM |
| Carburation: | |
| Kawasaki (FX921V)..... | Fixed Jet Downdraft Carburetor |
| Kawasaki (FX1000V)..... | Electronic Fuel Injection |
| Briggs & Stratton (#61A7, #61G8)..... | Electronic Fuel Injection |
| Kohler (ECV980)..... | Electronic Fuel Injection |
| Fuel Pump: | |
| Kawasaki (FX)..... | Mechanical with In-Line Fuel Filter |
| Kawasaki (FX1000V)..... | Returnless High Pressure Fuel Module with Pulse Type Priming Pump |
| Briggs & Stratton..... | Electric with In-Line Fuel Filter |
| Kohler (ECV980)..... | Mechanical with In-Line Fuel Filter |
| Fuel..... | Non-Leaded Gasoline with a Minimum Octane Rating of 87 |
| Oil Pump..... | Full Pressure w/Full-Flow Filter |
| Starter..... | Electric Starting with Solenoid Shift |
| Belts..... | Kevlar cord. Self-adjusting, Self-tightening |

3.2 ELECTRICAL

| | |
|-------------------------|---|
| Battery | 12 Volt |
| Charging System..... | Alternator |
| Charging Output: | |
| Kawasaki..... | 12 Volt, 20 Amp |
| Briggs & Stratton..... | 12 Volt, 20 Amp |
| System Polarity..... | Negative Ground |
| Interlock Switches..... | Seat, Neutral Control, Mower Engagement (PTO), Parking Brake |
| Instrument Panel..... | Ammeter, Key Switch, Throttle Lever, Manual Choke, PTO Switch and Fuses |
| Fuses..... | Two (2) 20 Amp |

Section 3

3.3 POWER HEAD

| | |
|---|--|
| Drive System | Hydraulic Drive with Two Hydro-Gear™ Integrated Zero-Turn Axles |
| Scag Model (SCZII) | Hydro-Gear™ ZT-5400 |
| Steering/Travel Control | Twin Lever Fingertip Steering Control with Individual Control to Each Wheel with Gas Spring Dampers |
| Parking Brake | Foot Pedal Actuated Linkage to Brakes on Both Drive Wheel Axles |
| Wheels: | |
| (2) Front Caster - (61" & 72" Deck) | 13 X 6.50 Four Ply, Flat Free |
| (2) Drive - (61" & 72" Deck) | 24 x 12 x 12 Four-Ply Pneumatic Tubeless, Radius Edge |
| Tire Pressure: | |
| Front Caster | Flat Free |
| Drive | 12 PSI |
| Fuel Tank | 13-Gallon Total Capacity, (Dual) Seamless Roto-Low Perm. Tanks with Large Opening and Fuel Gauge |
| Seat | Padded, Thick Cushion with Tall Back Rest and Recline |

| | | |
|--------------------|------------------------|-------------------|
| Travel Speed | Low Range | High Range |
| Forward | 0 up to 12 MPH | 0 up to 16 MPH |
| Reverse | 0 up to 5 MPH | 0 up to 8 MPH |

-NOTE- The machine will travel at 16 mph for transport purposes. For best cutting performance the forward travel speed should be set in low range and adjusted depending upon the cutting conditions.

3.4 CUTTER DECK

| | |
|---------------------------------|--|
| Type | Floating, Adjustable, Anti-Scalping, Hybrid Design Combines Out-Front and Belly-Mount Designs |
| Construction | Tri-Plate deck construction |
| | Top of deck consists of three steel plates totaling nearly 1/2" of steel.,7-gauge (3/16") deck skirt. |
| True Cutting Width: | |
| 61V / 61RD | 61" (155.0 cm) |
| 72V | 71.5" (181.6 cm) |
| Cutting Height Adjustment | Foot-Operated Lever Adjustment from Operator's Seat, 1-1/4" to 5" in 1/4" increments |
| Cutter Blades | .197 or .250 Thick, Milled Edge, Wear Resistant |
| 61V / 61RD | Three (3) 21" blades |
| 72V | Three (3) 24.5" blades |
| Blade Engagement | Electric Blade Engagement Clutch with Control Panel Switch Connected to the Cutter Deck through a belt. |
| Discharge Opening | Extra-Wide Discharge Opening with Spring-Loaded Discharge Chute and Turbo Baffle |
| Discharge Opening - 61RD | Extra-Wide Rear Discharge Opening |
| Discharge Chute | Black, Polypropylene (Plastic), Flexible |
| Discharge Chute - 61RD | Rubber Deflector |
| Spindles | Heavy-Duty 1-1/8" Top Dimension Spindle Shaft, Cast Housing, Taper Roller Bearing, Low Maintenance with Top Access Grease Fitting and Grease Overfill Relief Poppet |
| Spindle Pulleys | Split Steel with Easily Removed Taper Hubs |
| Cutter Deck Belts | B-Section with Kevlar Cord, Self-Adjusting, Self-Tightening |
| Electric Clutch Type | Ogura Heavy Duty PTO Clutch Brake |

3.5 HYDRAULIC SYSTEM

| | |
|----------------------------|-----------|
| Hydraulic Oil Filter | 40 Micron |
| Hydraulic Reservoir | Nylon |

3.6 WEIGHTS AND DIMENSIONS

| | 61V | 61RD | 72V |
|---------------------------------|-----------|------------|------------|
| Length..... | 85.5" | 85.5" | 91" |
| Tracking Width..... | 55.25" | 55.25" | 55.25" |
| Overall Width w/chute down..... | 73.5" | 63.5" | 83" |
| Overall Width w/chute up..... | 62.75" | N/A | 73.25" |
| Overall Height w/ROPS up..... | 67" | 67" | 67" |
| Overall Height w/ROPS down..... | 49.5" | 49.5" | 49.5" |
| Operating Weight..... 1..... | 364-1377# | 1364-1377# | 1399-1412# |

3.7 PRODUCTIVITY

| | 61V / 61RD | 72V |
|--------------------|------------|-----|
| Cutting Width..... | 61" | 72" |
| Acres Per Day..... | 23.7 | 28 |

The preceding data will aid you in determining how many acres your Scag mower will cut per day. The chart is an estimate based on 8 hours per day cutting time at 6 MPH with a 20% allowance for overlap and turns.

NOTES

OPERATING INSTRUCTIONS

CAUTION

Do not attempt to operate this mower unless you have read this manual. Learn the location and purpose of all controls and instruments before you operate this mower.

Before operating the mower, familiarize yourself with all mower and engine controls. Knowing the location, function and operation of these controls is important for safe and efficient operation of the mower.

This machine is equipped with the Tiger Eye Advanced Monitoring System. With the key in the on position, before starting the engine, the lights for the Seat Indicator, PTO Indicator, Neutral Indicator and Park Brake Indicator should be illuminated. This indicates there is an operator in the seat, the PTO is off, steering levers are in neutral, and the parking brake is applied. When all the lights are illuminated, the key can be turned to the start position and the mower can be started. See Section 4.3 Safety Interlock System. If any of these indicator lights are not illuminated, the engine will be prevented from starting. If additional information or service is needed, contact your Scag Power Equipment Dealer.

4.1 TIGER EYE INSTRUMENT IDENTIFICATION

1. **Service Air Filter Indicator (Figure 4-1). Optional Accessory.** Indicates the condition of the engine air filter. Icon will display when it is time to change the air filter.
2. **Glow Plug Indicator (Figure 4-1). Used on Diesel Powered Units Only.** Indicator turns on when the key switch is turned to the PREHEAT position. Glow plugs must be preheated for 5 to 10 seconds before starting the engine.
3. **Oil Pressure Indicator (Figure 4-1). Used on Diesel Powered Units Only.** Indicates engine oil pressure. Reference the engine operator's manual for further information.
4. **Service Engine Indicator (Figure 4-1).** Indicates the maintenance reminder for the engine oil change. Has preset maintenance reminder and will start flashing scheduled maintenance 2 hours before preset time and continue flashing until 2 hours after. Automatically resets.
5. **Voltmeter Indicator (Figure 4-1).** Indicates the condition of the charging system. When the engine is running, in normal operating conditions, the bar graph should be in the 12 to 14 volt range.
6. **Seat Indicator (Figure 4-1).** Light will illuminate when the operator is in the seat engaging the seat switch.
7. **PTO Indicator (Figure 4-1).** Light will illuminate when the PTO (mower deck) switch is in the OFF position.
8. **Hourmeter Indicator (Figure 4-1).** Indicates the number of hours the engine has been operated. It only operates when the engine is running. Will start flashing with the Service Engine Indicator at scheduled maintenance 2 hours before preset time and continue flashing until 2 hours after. Automatically resets.
9. **Neutral Indicator (Figure 4-1).** Light will illuminate when the steering control levers are in the neutral lock position.
10. **Park Brake Indicator (Figure 4-1).** Light will illuminate when the park brake is in the engaged (ON) position.
11. **Water Temperature Indicator (Figure 4-1). Used on Liquid Cooled Models Only.** Indicates the operating temperature of the engine. If the engine temperature exceeds the maximum preset value, the indicator will flash and the Park Brake, PTO, Seat and Neutral indicator lights will flash in an alternating pattern.

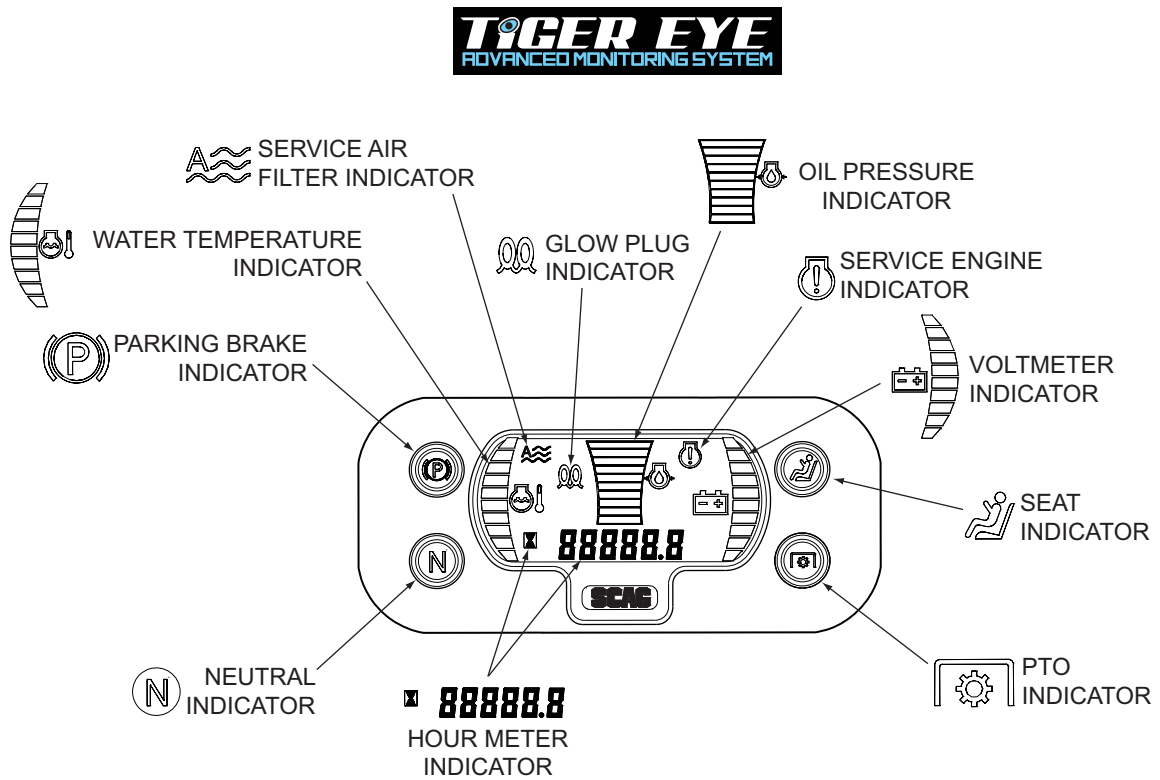


Figure 4-1. Tiger Eye Advanced Monitoring System

4.2 CONTROLS IDENTIFICATION

1. **Ignition Switch (Figure 4-3).** The ignition switch is used to start the engine and has three positions; OFF, ON, and START.
2. **Mower Deck Switch (Figure 4-3).** Used to engage and disengage the mower drive system. Pulling up on the switch will engage the deck drive. Pushing down on the switch will disengage the deck drive.
3. **Engine Choke Control (Figure 4-3).** Used to start a cold engine.
4. **Engine Throttle Control (Figure 4-3).** Used to control the engine speed. Pushing the lever forward increases engine speed. Pulling the lever back decreases engine speed. Full back position is the IDLE position. Full forward is the cutting position.
5. **Left Steering Control (Figure 4-3).** Used to control the mower's left wheel when traveling forward or reverse.
6. **Right Steering Control (Figure 4-3).** Used to control the mower's right wheel when traveling forward or reverse.
7. **Fuse Holders (Figure 4-3).** Two 20-amp fuses protect the mower's electrical system. To replace fuses, pull fuse out of the socket and install a new fuse.
8. **Parking Brake Control (Figure 4-3).** Used to engage and disengage the parking brakes. Push the brake pedal forward and pull the brake latch lever back to engage the parking brakes. Push the brake pedal fully forward, then release, to disengage the parking brakes.
9. **Fuel Tank Gauge (Figure 4-3).** Indicates the amount of fuel in the fuel tank.
10. **Dump Valve Control Levers (Figure 4-2).** Located on the hydraulic axles, used to "free-wheel" the mower. Rotating the levers clockwise until they stop allows the unit to move under hydraulic power. Rotating the levers counter-clockwise allows the mower to be moved by hand (free-wheeling).

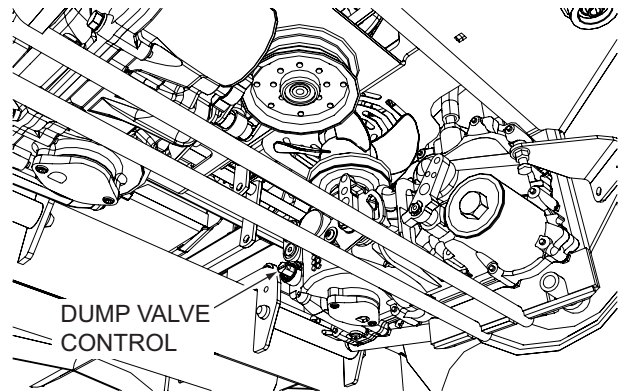


Figure 4-2. Dump Valve Control

11. **Deck Lift Foot Lever (Figure 4-3).** Used to raise and lower the cutter deck. Push full forward to lock in the transport position.
12. **Cutting Height Adjustment (Figure 4-3).** Used to set the cutter deck at the desired cutting height.
13. **Deck Release Lever (Figure 4-3).** Used to lock the cutter deck in the transport position. Push the foot pedal forward and pull back on the release lever to release the cutter deck for normal mowing.
14. **Speed Control Lever (Figure 4-3).** Used to select the mowers operating range. For the best performance while cutting, the LOW speed should be selected. HIGH speed should be selected for transport operation.
15. **Suspension Control Lever (Figure 4-3).** Used to select the optimum suspension rate based on the operator.
16. **Seat Belt (Figure 4-3).** Used to secure the operator. Seat belt must be worn at all times when the ROPS is in the upright and locked position.
17. **Seat Hold Down Release Latch (Figure 4-3).** Located behind the seat. Used to secure the seat in the operator's position. Release the latch to gain access under the seat.
18. **Check Engine Light (Figure 4-3WW).** Indicates the operation of the engine sensors on the Fuel Injection Engines (EFI). If a problem occurs with a sensor on the engine, the light will flash a code. See your authorized Scag Power Equipment dealer for diagnosis and repair.

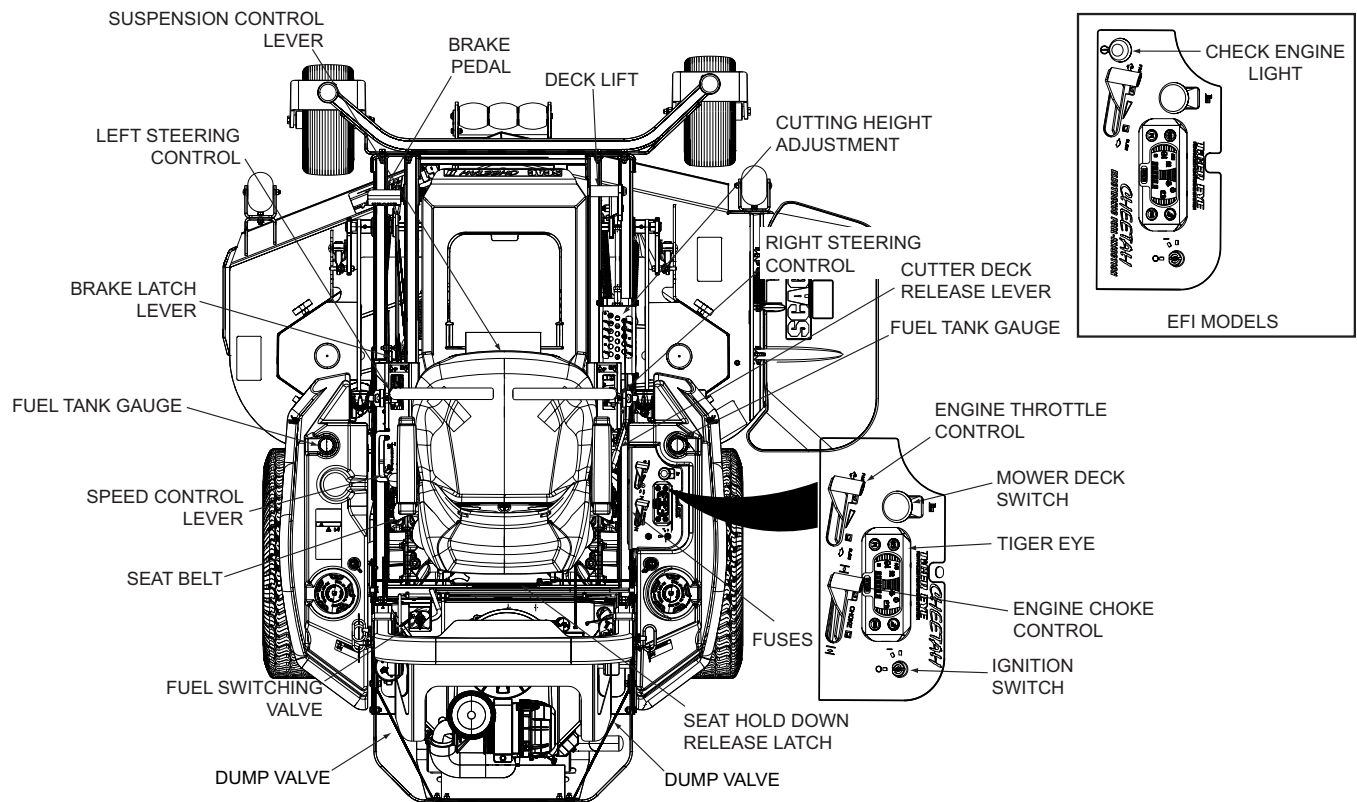


Figure 4-3. Controls and Instruments

4.3 SAFETY INTERLOCK SYSTEM

The mower is equipped with a safety interlock system that prevents the engine from starting unless the deck drive is disengaged, the parking brake is engaged, the steering control levers are in the neutral position and the operator is in the seat. The interlock system shuts off the engine if the operator leaves the seat with the steering control levers not in the neutral position and/or the cutter blades engaged and the parking brake not engaged.

WARNING

Never operate the mower with the interlock system disconnected or malfunctioning. Do not disengage or bypass any switch; injury to yourself and others or property damage could result.

4.4 TESTING THE SAFETY INTERLOCK SYSTEM

The safety interlock system should be tested each time before using the machine. If the safety interlock system does not operate as described below, contact your local Authorized Scag Power Equipment Dealer immediately to have the safety interlock system repaired.

1. Sit in the seat in the operating position, engage the parking brake, place the steering control levers in the neutral lock position, and engage the PTO switch to the ON (up) position. Try to start the engine; the engine should not start.
2. Sit in the seat in the operating position, engage the parking brake, move either of the steering control handles out of the neutral lock position, move the PTO switch to the OFF (down) position. Try to start the engine; the engine should not start. Repeat for the other steering control lever.
3. Sit in the seat in the operating position, disengage the parking brake, place the steering control levers in the neutral lock position, move the PTO switch to the OFF (down) position. Try to start the engine; the engine should not start.

4. Sit in the seat in the operating position, engage the parking brake, place the steering control levers in the neutral lock position, move the PTO switch to the OFF (down) position, and start the engine. With the engine running, release the parking brake and rise slightly off of the seat. The engine should shut off.
5. Sit in the seat in the operating position, engage the parking brake, place the steering control levers in the neutral lock position, move the PTO switch to the OFF (down) position, and start the engine. With the engine running, engage the PTO switch to the ON (up) position, and rise slightly off of the seat. The engine should shut off.
6. Sit in the seat in the operating position, engage the parking brake, place the steering control levers in the neutral lock position, move the PTO switch to the OFF (down) position, and start the engine. With the engine running, move either steering control lever out of the neutral lock position. The engine should shut off. Repeat for the other steering control lever.

4.5 INITIAL RUN-IN PROCEDURES

FIRST DAY OF USE OR APPROXIMATELY 20 HOURS

1. Check all belts for proper alignment and wear at 2, 4 and 8 hours.
2. Change the engine oil and oil filter after the first 20 hours of operation. (See Section 7.4.)
3. Check hydraulic oil level in reservoir. (See Section 7.3.)
4. Check for loose hardware. Tighten as needed.
5. Check interlock system for proper operation. (See Section 4.4.)
6. Check tire pressure. Adjust pressure if necessary. (See Section 7.10.)

4.6 STARTING THE ENGINE

CAUTION

DO NOT USE STARTING FLUIDS. Use of starting fluids in the air intake system may be potentially explosive or cause a “runaway” engine condition that could result in engine damage and/or personal injury.

1. Be sure the fuel shutoff valve, located behind the operator's seat, is fully open. (See Figure 4.2.)
2. Secure the ROPS in the upright and locked position.
3. Sit in the operator's seat, fasten seat belt and place the steering control levers in the neutral position.
4. Engage the parking brake.
5. Place the PTO switch in the disengaged position.
6. If the engine is cold, choke the engine as needed.
7. Move the engine throttle control to about half engine speed.
8. Turn the ignition key to the START position and release the key as soon as the engine starts. Do not hold the key in the START position for more than 15 seconds at a time. Allow at least 60 seconds between each cranking attempt to prevent overheating of the starter motor. Prolonged cranking can damage the starter motor and shorten battery life.
9. Allow engine to warm before operating the mower.

4.7 GROUND TRAVEL AND STEERING

- IMPORTANT -

If you are not familiar with the operation of a machine with lever steering and/or hydrostatic transmissions, the steering and ground speed operations should be learned and practiced in an open area, away from buildings, fences, or obstructions.

Learn the operation on flat ground before operating on slopes.

Start practicing with a slow engine speed and slow forward travel.

Learn to feather the steering controls to obtain a smooth operating action.

Practice operating the mower until you are comfortable with the controls before proceeding to mow.

Section 4**FORWARD TRAVEL**

To travel forward with the mower, disengage the parking brake, pull levers inward out of the neutral lock position and slowly push the steering control levers forward an equal distance. The further the steering control levers are pushed forward the greater the forward speed will be. To increase the speed, push the steering control levers further forward and to decrease the speed, pull the steering control levers back.

To stop the forward travel, pull the steering control levers back to the neutral position.

To steer the mower left while traveling forward, pull the left steering lever back. The further the lever is pulled back, the quicker the mower will turn left.

To steer the mower right while traveling forward, pull the right steering control lever back. The further the lever is pulled back, the quicker the mower will turn right.

- NOTE -

Smooth operation of the steering levers will produce smooth mower operation. While learning the operation of the steering controls, keep the travel speed low.

- IMPORTANT -

Do not travel forward over a curb. The mower will hang up on the curb. Raise the deck and travel backwards over the curb at a 45 degree angle. (See Section 4.2, items 11 - 13, on page 16 for cutter deck raising descriptions.)

REVERSE TRAVEL

CAUTION

Before backing up, observe the rear for persons and obstructions. Clear the area before backing up. Possible injury or property damage could occur.

To travel in reverse, pull levers inward out of the neutral lock position and pull both handles back. Keep the travel speed low while traveling in reverse.

- NOTE -

The mower may not travel straight in reverse. Slight adjustments may need to be made using the steering controls.

To steer left while traveling in reverse, allow the left steering control lever to move forward. The further the control is allowed to move forward, the quicker the mower will turn left.

To steer right while traveling in reverse, allow the right steering control lever to move forward. The further the control is allowed to move forward, the quicker the mower will turn right.


To stop the reverse travel, allow the steering control levers to return to the neutral position. If the mower is to be parked, place the handles in the neutral lock position and engage the parking brake.


CAUTION

Disengage power to the mower before backing up. Do not mow in reverse unless absolutely necessary and then only after observation of the entire area behind the mower.

4.8 ENGAGING THE DECK DRIVE (CUTTER BLADES)

1. Set the throttle at about 3/4 speed. Do not attempt to engage the deck drive at high speed as this shortens the electric clutch life — use only moderate engine speed when engaging the deck drive.



DANGER

ROTATING BLADES

NEVER PUT YOUR HANDS INTO THE DISCHARGE CHUTE FOR ANY REASON!

Shut off the engine and remove the key and only then use a stick or similar object to remove material if clogging has occurred.

2. Engage the deck drive by pulling out on the yellow switch, located on the instrument panel, to the engage position. See Figure 4-4.

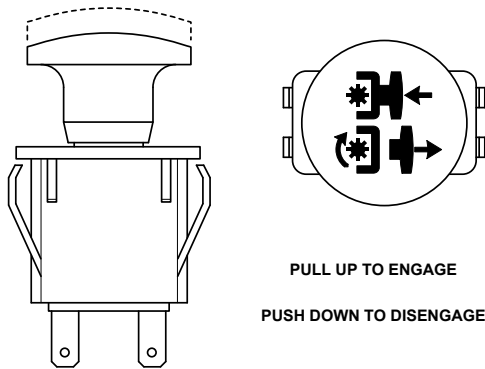



Figure 4-4. Cutter Engage Switch

- NOTE -

A squealing noise may be heard when engaging or disengaging the deck drive. It is caused by the electric clutch plates meshing as the mower comes up to speed. This is normal.

3. To disengage the deck drive, push the switch in to the disengage position.
4. Always operate the engine at full throttle to properly maintain cutting speed. If the engine starts to lug down, reduce the forward speed and allow the engine to operate at maximum RPM.

4.9 HILLSIDE OPERATION



WARNING

DO NOT operate on steep slopes. To check a slope, attempt to back up it (with the cutter deck down). If the machine can back up the slope without the wheels slipping, reduce speed and use extreme caution. Under no circumstances should the machine be operated on slopes greater than 15 degrees. See Figure 2-4, page 11 to determine approximate slope of area to be mowed. ALWAYS FOLLOW OSHA APPROVED OPERATION.

1. This mower has been designed for good traction and stability under normal mowing conditions. However, caution must be used when traveling on slopes, especially when the grass is wet. Wet grass reduces traction and steering control. The Roll-Over Protection System is standard equipment for this machine. See Section 2.6, page 7 of this manual for further details.
2. Stay at least 2 cutting widths away from drop-offs, ditches, retaining walls, water, avoid any slope exceeding 15-degrees, and do not mow under trees on slopes with the roll bar down.
3. To prevent tipping or loss of control, do not start or stop suddenly, avoid unnecessary turns and travel at reduced speed. If tires lose traction, disengage blades and proceed slowly off the slope.
4. Avoid sudden starts when mowing uphill. Sudden starts may cause the machine to tip backwards.
5. Loss of traction may occur when traveling down hill. Weight transfers to the front of the machine and may cause the drive wheels to slip causing loss of braking or steering.
6. Keep tires properly inflated.

4.10 PARKING THE MOWER

1. Park the machine on a flat, level surface only. Do not park the machine on an incline.
2. Place the steering control levers in the neutral position.
3. Disengage the cutter blades.
4. Slow the engine to idle speed.

Section 4

- Engage the parking brake.
- Turn the ignition key to the OFF position and remove the key.

4.11 AFTER OPERATION

- Wash the entire mower after each use. Do not use high pressure spray or direct the spray onto electrical components.

- IMPORTANT -

Do not wash a hot or running engine. Cold water will damage the engine. Use compressed air to clean the engine if it is hot.

- Keep the entire mower clean to inhibit serious heat damage to the engine or hydraulic oil circuit.
- Check the drive belts for proper alignment and any signs of wear. Correct and adjust if necessary.

DANGER

To avoid injury from burns, allow the mower to cool before removing the fuel tank cap and refueling.

- Check the tire pressure. Adjust pressure if necessary. (See Section 7.10.)

4.12 REMOVING CLOGGED MATERIAL

DANGER

ROTATING BLADES

NEVER PUT YOUR HANDS INTO THE DISCHARGE CHUTE FOR ANY REASON!

Shut off the engine and remove the key and only then use a stick or similar object to remove material if clogging has occurred.

- If the discharge chute becomes clogged, shut off the engine and remove the ignition key. Using a stick or similar item, dislodge the clogged material. Then resume normal mowing.

4.13 MOVING MOWER WITH ENGINE STOPPED

To “free-wheel” or move the mower around without the engine running, rotate the dump valves counter-clockwise. See Figure 4-5. Disengage the parking brake and move the mower by hand. When the machine is in the desired position, engage the parking brake and rotate the valves clockwise until they stop. The dump valve levers must be returned to the DRIVE position to drive the mower.

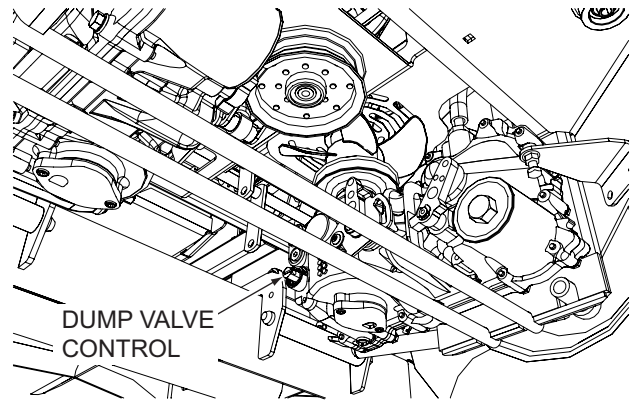


Figure 4-5. Dump Valve Control

4.14 RECOMMENDATIONS FOR MOWING

- Do not mow with dull blades. A dull blade will tear grass, resulting in poor lawn appearance and reduced mowing power.

WARNING

DO NOT operate without Discharge Chute, Mulching Kit, or entire Grass Catcher properly installed.

- The discharge chute must not be removed and must be kept in the lowest position to deflect grass clippings and thrown objects downward. Direct the side discharge away from sidewalks or streets to minimize cleanup of clippings. When mowing close to obstacles, direct the discharge away from the obstacles to reduce the chance of property damage by thrown objects. Do not mow when bystanders are present.
- Cut grass when it is dry and not too tall. Do not cut grass too short (cut off 1/3 or less of existing grass for best appearance). Mow frequently.
- Keep mower and discharge chute clean.

- For best overall cut performance, it is recommended to set the speed control lever in LOW while mowing. (See Section 4.18.)
- When mowing wet or tall grass, mow the grass twice. Set the speed control lever to LOW. Raise the mower to the highest setting for the first pass and then make a second pass to the desired height.
- Use a slow travel speed for trimming purposes.
- Operate the engine at full throttle for best cutting. Mowing with a lower RPM causes the mower to tear the grass. The engine is designed to be operated at full speed.
- Use the alternate stripe pattern for best lawn appearance. Vary the direction of the stripe each time the grass is mowed to avoid wear patterns in the grass.

4.15 ADJUSTING CUTTING HEIGHT

The mower deck can be adjusted from a height of 1-1/4 inch to 5 inches at 1/4-inch intervals. To adjust the cutting height:

WARNING

DO NOT adjust the cutting height with the mower blades rotating. Disengage the power to the cutter blades and then adjust cutting height.

- Disengage the power to the cutter blades.
- Push the cutting height adjustment foot pedal all the way forward using your right foot until it locks in place. See Figure 4-6.

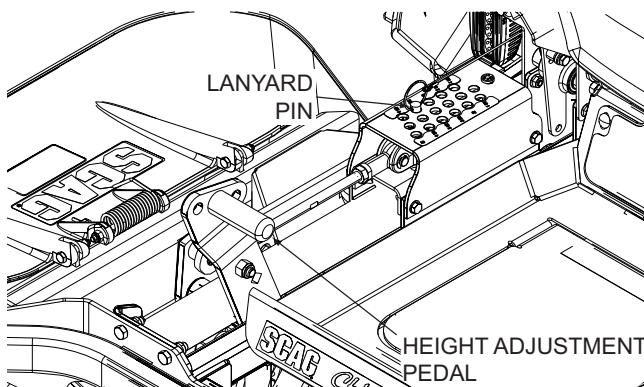


Figure 4-6. Adjusting Cutting Height

- Insert the lanyard pin into the cutting height index at the desired cutting height. Push forward on the deck lift foot lever, hold in place and pull back on the deck release lever. See Figure 4-7. Slowly release the foot pedal. A deck height decal is located on the cutting height index as an aid in adjusting the deck to the desired height. See Figure 4-6.

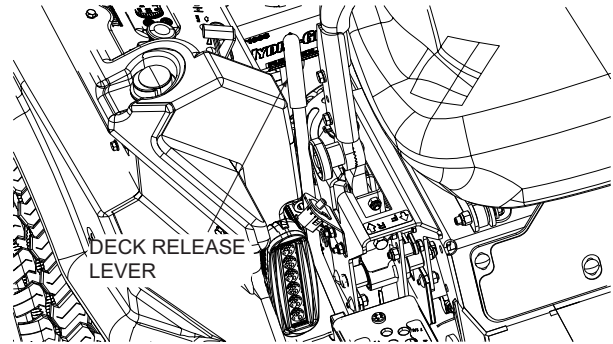


Figure 4-7. Deck Release Lever

4.16 ADJUSTING THE HEIGHT ADJUST PEDAL

- Position the seat to the desired location.
- While in the operator's position without the engine running, push down on the height adjust pedal to check for full function control.
- The height adjust pedal can be located in three (3) different positions for operator comfort and control. See Figure 4-8.

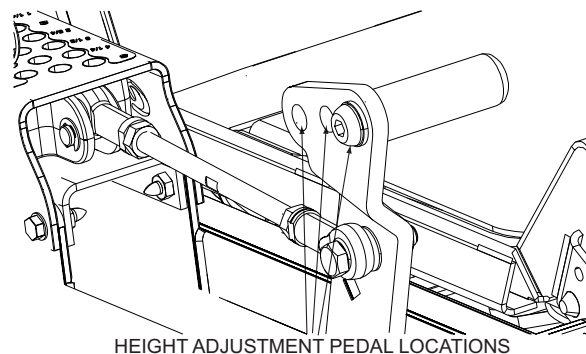


Figure 4-8. Height Adjust Pedal Locations

Section 4

4.17 ADJUSTING THE STEERING LEVERS

1. Position the seat to the desired location.
2. While in the operator's position without the engine running, move both steering levers forward and reverse to check for full function control and comfort.
3. If adjustment of the steering levers is needed, use the following instructions to adjust. See Figure 4-9.
 - A. Loosen the tension knob on the lever assembly.
 - B. Rotate the steering lever forward or backward to achieve the optimum operating position.
 - C. Tighten the tension knob and repeat on the opposite side.
 - D. While in the operator's position, bring the steering levers out of the neutral lock position and check to make sure both levers are even before operating.

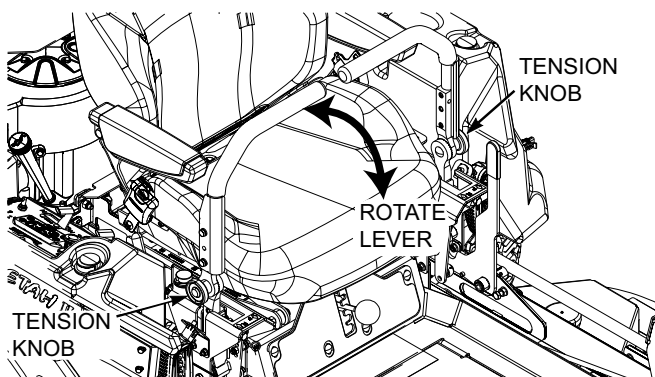


Figure 4-9. Adjusting Steering Levers

4. The control handle can also be adjusted in two different height positions. If necessary, remove the two bolts securing the control handle to the control lever. Install the handle in the desired position.

4.18 SETTING THE SPEED CONTROL

The speed control lever can be set in either LOW or HIGH range. Moving the speed control lever between LOW and HIGH range sets the maximum forward/reverse speed the machine can obtain during operation. See Figure 4-10.

Speed Control Selection Recommendations

LOW Range (Forward Travel Speed = 0 up to 12 mph)
 - Recommended for best overall cutting performance in all conditions.

HIGH Range (Forward Travel Speed = 0 up to 16 mph)
 - Recommended for transport. Although the machine is capable of engaging the mowing deck in HIGH Range, overall quality of cut may suffer. If the material being cut is sparse or dormant, HIGH Range can be selected to "knock down" tall weeds, seed heads, etc. However for best overall cut performance, it is recommended to select LOW Range for mowing.

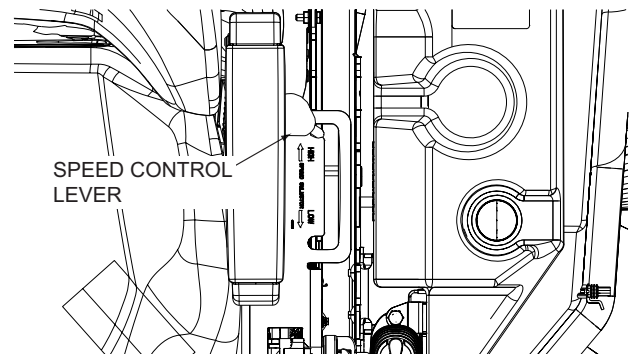


Figure 4-10. Speed Control Lever

4.19 ADJUSTING THE OPERATOR SUSPENSION PLATFORM

The operator suspension platform can be adjusted to optimize operator comfort and ride. Adjust the suspension rate by moving the suspension control lever down to increase (stiffen) or up to decrease (soften) the suspension shock rate. See Figure 4-11.

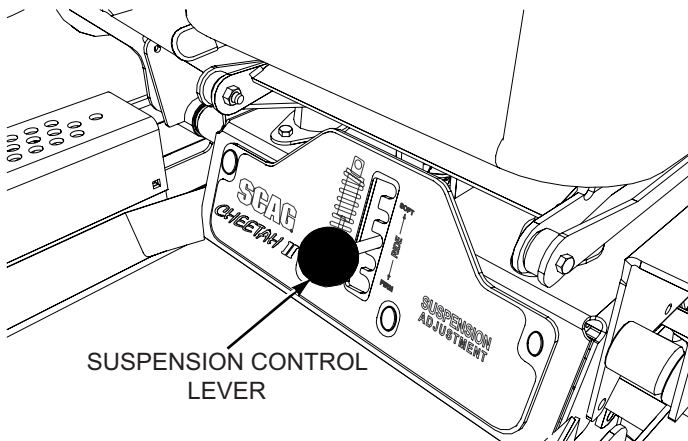
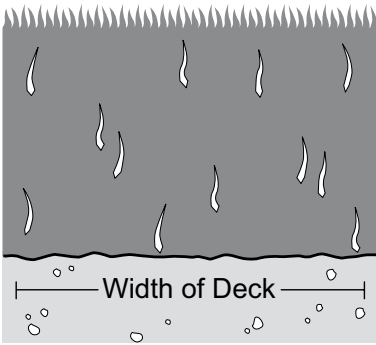
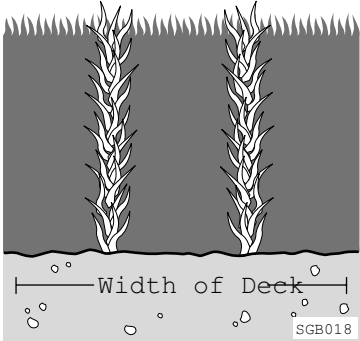
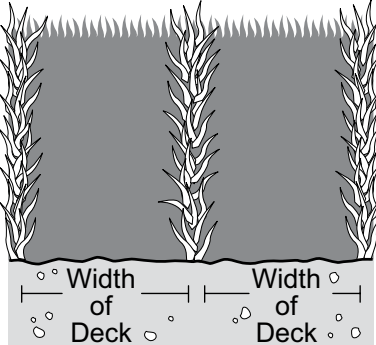


Figure 4-11. Operator Suspension Platform Adjustment

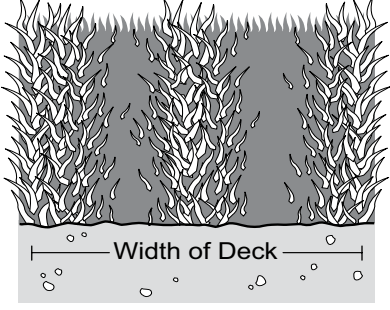
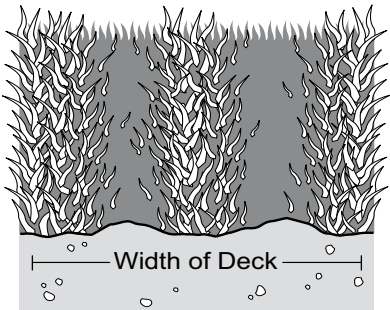
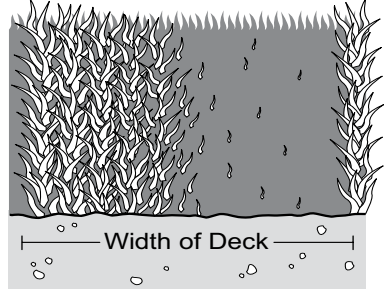
4.20 TOWING (OPTIONAL HITCH ACCESSORY)

1. NEVER allow children or others in or on towed equipment.
2. Tow only with a machine that has a hitch designed for towing. Do not attach towed equipment except at the hitch point.
3. Follow manufacturer's recommendations for weight limit for towed equipment. 250 lbs. maximum towing weight.
4. NEVER tow on slopes. The weight of the towed equipment may cause loss of traction and loss of control.
5. Travel slowly and allow extra distance to stop.
6. Zero-turning with a trailer attached could cause damage to the trailer or mower.

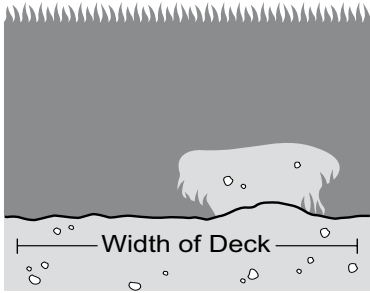
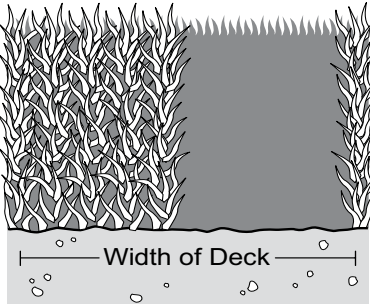
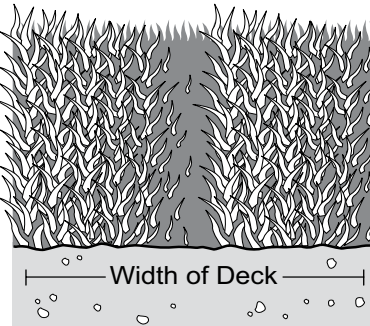
TROUBLESHOOTING CUTTING CONDITIONS

| CONDITION | CAUSE | CURE |
|---|-------------------------------------|-------------------------------------|
| STRINGERS - OCCASIONAL BLADES OF UNCUT GRASS  | Low engine RPM | Run engine at full RPM |
| | Ground speed too fast | Slow speed to adjust for conditions |
| | Wet grass | Cut grass after it has dried out |
| | Dull blades, incorrect sharpening | Sharpen blades |
| | Deck plugged, grass accumulation | Clean underside of deck |
| | Belts slipping | Adjust belt tension |
| STREAKING - STRIPS OF UNCUT GRASS IN CUTTING PATH  | Dull, worn blades | Sharpen blades |
| | Incorrect blade sharpening | Sharpen blades |
| | Low engine RPM | Run engine at full RPM |
| | Belt slipping | Adjust belt tension |
| | Deck plugged, grass accumulation | Clean underside of deck |
| | Ground speed too fast | Slow speed to adjust for conditions |
| | Wet grass | Cut grass after it has dried out |
| | Bent blades | Replace blades |
| STREAKING - STRIPS OF UNCUT GRASS BETWEEN CUTTING PATHS  | Not enough overlapping between rows | Increase the overlap of each pass |

TROUBLESHOOTING CUTTING CONDITIONS (CONT'D)

| CONDITION | CAUSE | CURE |
|---|-----------------------------------|---|
| <p>UNEVEN CUT ON FLAT GROUND - WAVY HIGH-LOW APPEARANCE, SCALLOPED CUT, OR ROUGH CONTOUR</p>  | Lift worn from blade | Replace blade |
| | Blade upside down | Mount with cutting edge toward ground |
| | Deck plugged, grass accumulation | Clean underside of deck |
| | Too much blade angle (deck pitch) | Adjust pitch and level |
| | Deck mounted improperly | See your authorized SCAG dealer |
| | Bent spindle area | See your authorized SCAG dealer |
| | Dull blade | Sharpen blade |
| <p>UNEVEN CUT ON UNEVEN GROUND - WAVY APPEARANCE, HIGH-LOW SCALLOPED CUT, OR ROUGH CONTOUR</p>  | Uneven ground | May need to reduce ground speed, raise cutting height, and/or change direction of cut |
| <p>SLOPING RIDGE ACROSS WIDTH OF CUTTING PATH</p>  | Tire pressures not equal | Check and adjust tire pressure |
| | Wheels uneven | Check and adjust tire pressure |
| | Deck mounted incorrectly | See your authorized SCAG dealer |
| | Deck not level side-to-side | Check for level and correct |

TROUBLESHOOTING CUTTING CONDITIONS (CONT'D)

| CONDITION | CAUSE | CURE |
|--|-------------------------------|---|
| <p>SCALPING - BLADES HITTING DIRT OR CUTTING VERY CLOSE TO THE GROUND</p>  | Low tire pressures | Check and adjust pressures |
| | Ground speed too fast | Slow speed to adjust for conditions |
| | Cutting too low | May need to reduce ground speed, raise cutting height, change direction of cut, and/or change pitch and level |
| | Rough terrain | May need to reduce ground speed, raise cutting height, and/or change direction of cut |
| | Wet grass | Cut grass after it has dried out |
| <p>STEP CUT - RIDGE IN CENTER OF CUTTING PATH</p>  | Blades not mounted evenly | Adjust pitch and level |
| | Bent blade | Replace blade |
| | Internal spindle failure | See your authorized SCAG dealer |
| | Mounting of spindle incorrect | See your authorized SCAG dealer |
| <p>SLOPE CUT - SLOPING RIDGES ACROSS WIDTH OF CUTTING PATH</p>  | Bent spindle mounting area | See your authorized SCAG dealer |
| | Internal spindle failure | See your authorized SCAG dealer |
| | Bent deck housing | See your authorized SCAG dealer |

ADJUSTMENTS

6.1 PARKING BRAKE ADJUSTMENT

WARNING

Do not operate the mower if the parking brake is not operable. Possible severe injury could result.

The parking brake linkage should be adjusted whenever the parking brake lever is placed in the “ENGAGE” position and the parking brake will allow the mower to move. If the following procedures do not allow you to engage the parking brake properly, contact your authorized Scag Power Equipment dealer for further brake adjustments.

1. Position a floor jack under the rear of the machine. Raise the machine and support it to prevent it from falling. Block the caster wheels to prevent the machine from moving.
2. With the brake in the engaged position, check the distance between the notch on the brake actuator rod and pivot bushing on the LH side of the machine. The distance should be 1/8". See Figure 6-1.
3. If the distance is not at the specified measurement, turn the adjustment nut on the brake actuator rod until the 1/8" measurement is achieved. See Figure 6-1.
4. Repeat steps 2-3 on the RH side of the machine.
5. Test the brake.

- NOTE -

If this procedure does not achieve proper brake adjustment, please contact your authorized Scag dealer.

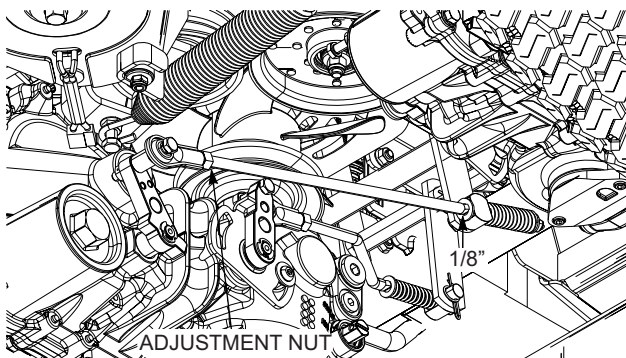


Figure 6-1. Brake Adjustment

6.2 TRAVEL ADJUSTMENTS

Neutral or tracking adjustments will need to be made if:

- A. The steering control levers are in the neutral position and the machine creeps forward or backward (Neutral Adjustment).
- B. The steering control levers are in the full forward position and the mower pulls to one side or the other when traveling in a forward direction (Tracking Adjustment).

NEUTRAL ADJUSTMENT

1. Be sure the dump valve levers are in the run position and the steering control levers are in the neutral lock position.
2. With an operator in the seat, start the engine and disengage the parking brake.
3. Run the engine at full operating speed and check if the machine creeps forward or backwards.
4. If the machine creeps either forward or backward, a neutral adjustment will need to be done.
5. Before making an adjustment, Position a floor jack under the rear of the machine. Raise the machine and support it to prevent it from falling. Block the caster wheels to prevent the machine from moving.
6. To adjust the RH side, make sure the control levers are in the neutral lock position. Then remove the wheel, loosen the jam nut on the control arm, and adjust the control rod until the control plates on the transaxle are centered in neutral. See Figure 6-2.

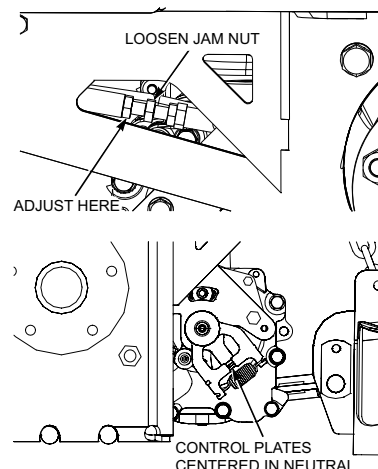


Figure 6-2. Steering Control Linkage Adjustment

Section 6

7. Tighten the jam nuts and repeat for the LH wheel. See Figure 6-2.
8. Operate and test the machine. Actuate the steering control levers forward and reverse several times and return them to the neutral position.
9. Check that the drive wheels remained in neutral and readjust if necessary.
10. Check that the steering control levers hit the stop before the pumps reach full stroke. Adjust as needed.

TRACKING ADJUSTMENT

CAUTION

Stop the engine and remove the key from the ignition before making any adjustments. Wait for all moving parts to come to a complete stop before beginning work.

CAUTION

The engine and drive unit can get hot during operation causing burn injuries. Allow engine and drive components to cool before making any adjustments.

- NOTE -

Before proceeding with this adjustment, be sure that the caster wheels turn plus pivot freely and that the tire pressure in the drive wheels is correct. If the tire pressure is not correct, the machine will pull to the side with the lower pressure.

1. If at full speed the mower pulls right, it is an indication that the left wheel is turning faster than the right wheel. To adjust this condition, proceed as follows:
 - A. Stop the machine and place the steering control levers in the neutral position. Turn the tracking adjustment bolt for the LH pump inward (clockwise). This will cause the control rod to stroke the LH pump less, slowing down the LH wheel. See Figure 6-3.

2. If at full speed the mower pulls left, it is an indication that the right wheel is turning faster than the left wheel. To adjust this condition, proceed as follows:
 - A. Stop the machine and place the steering control levers in the neutral position. Turn the tracking adjustment bolt for the RH pump inward (clockwise). This will cause the control rod to stroke the RH pump less, slowing down the RH wheel. See Figure 6-3.

- NOTE -

If after making the adjustment as outlined in step 2A, the machine creeps forward or backward, perform the neutral adjustment. See Neutral Adjustment on page 27.

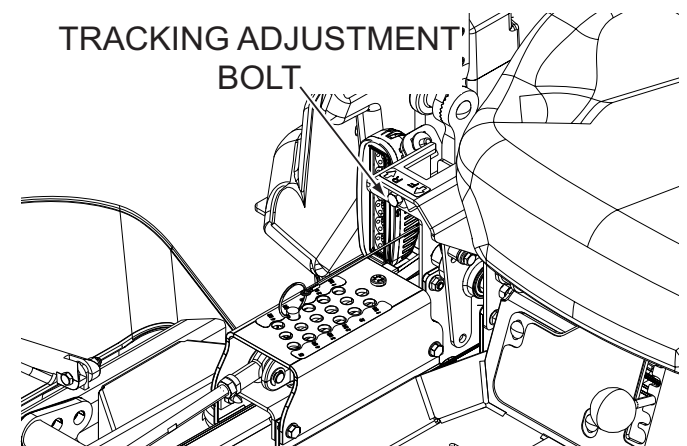


Figure 6-3. Tracking Adjustment

6.3 LOW / HIGH SPEED ADJUSTMENT

The LOW / HIGH speed linkage should be adjusted whenever the lever will not allow the mower to change speeds between LOW and HIGH range. If the following procedures do not allow you to change speeds properly, contact your authorized Scag Power Equipment dealer for further adjustments.

1. Position a floor jack under the rear of the machine. Raise the machine and support it to prevent it from falling. Block the caster wheels to prevent the machine from moving.
2. Position the speed control lever in LOW range.
3. Loosen the jam nut and remove the cotter pin securing the speed control linkage to the speed control rod. See Figure 6-4.
4. Adjust the speed control linkage until speed control arm on the RH axle is against the LOW range stop. See Figure 6-4.
5. Repeat steps for the LH axle.

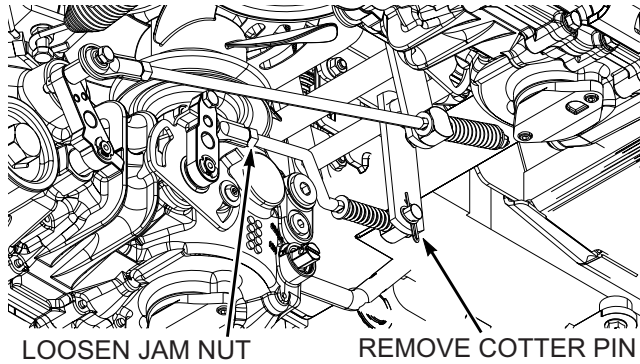


Figure 6-4. Speed Control Adjustment

6.4 THROTTLE CONTROL AND CHOKE ADJUSTMENTS

These adjustments must be performed by your authorized Scag Power Equipment dealer to ensure proper and efficient running of the engine. Should either need adjustment, contact your authorized Scag Power Equipment dealer.

6.5 BELT ADJUSTMENT

WARNING

Before removing any guards, shut the engine off and remove the ignition key.

All drive belts are spring loaded and self-tensioning, however after the first 2, 4, 8 and 10 hours of operation, the belts should be checked for proper alignment and wear. Thereafter, check the belts after every 40 hours of operation or weekly, whichever occurs first.

WARNING

If the pump drive belt fails, steering control will be lost which could result in serious injury or death. Replace the pump drive belt as needed or every 400 hours / 2 years, whichever occurs first.

6.6 BELT ALIGNMENT

Belt alignment is important for proper performance of your Scag mower. If you experience frequent belt wear or breakage, see your authorized Scag Power Equipment dealer for belt adjustment.

6.7 CUTTER DECK ADJUSTMENTS

Cutter deck level, pitch and height are set at the factory. However, if these adjustments should ever need to be made, the following procedures will aid in obtaining the proper cutter deck adjustment.

- NOTE -

Before proceeding with the cutter deck adjustments, be sure that all tires are properly inflated.

CUTTER DECK LEVEL

The cutter deck should be level from side-to-side for proper cutting performance. To check for level, be sure that the mower is on a flat, level surface, the tires are properly inflated and the cutter deck is set at the most common cutting height that you will use. On the RH side of the machine, check the distance from the top of the cutter deck to the floor. Next check the distance from the top of the cutter deck to the floor on the LH side of the machine. Both measurements should be the same. If the two measurements are different, the cutter deck level must be adjusted as follows:

1. If the cutter deck is lower on one side, loosen the elastic stop nuts securing the deck level links on the front and rear of the lower side. See Figure 6-5.

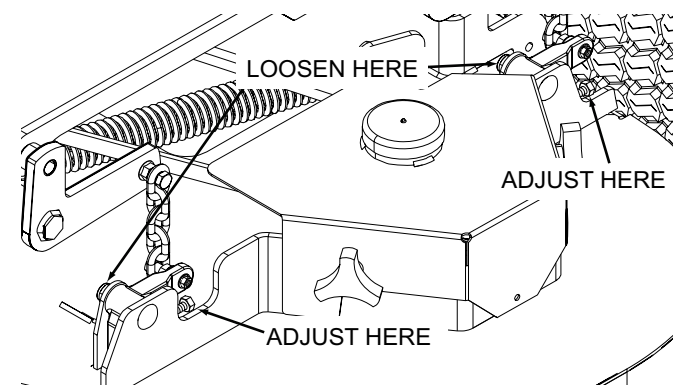


Figure 6-5. Cutter Deck Level Adjustment

2. Turn the adjustment bolts on the front and rear deck level links clockwise until the cutter deck is level between both sides. See Figure 6-5
3. Tighten the two (2) elastic stop nuts to secure the cutter deck in the proper position.

Section 6

CUTTER DECK PITCH

The pitch of the cutter deck should be equal between the front and rear of the cutter deck for proper cutting performance. To check for proper deck pitch, be sure that the mower is on a flat, level surface and the tires are properly inflated.

Check the distance from the top of the cutter deck to the floor at the rear RH side of the cutter deck directly behind the cutter deck hanging chains. Next check the distance from the top of the cutter deck to the floor at the front RH side of the cutter deck directly in front of the cutter deck hanging chains. The measurement at the front of the cutter deck should be the same as the rear of the deck. Make these measurements at the LH side of the cutter deck also. If the measurement at the front of the deck is not the same, the cutter deck pitch must be adjusted as follows:

1. Loosen the elastic stop nuts securing the deck level links on the front of the cutter deck on both sides. See Figure 6-6 and 6-7.

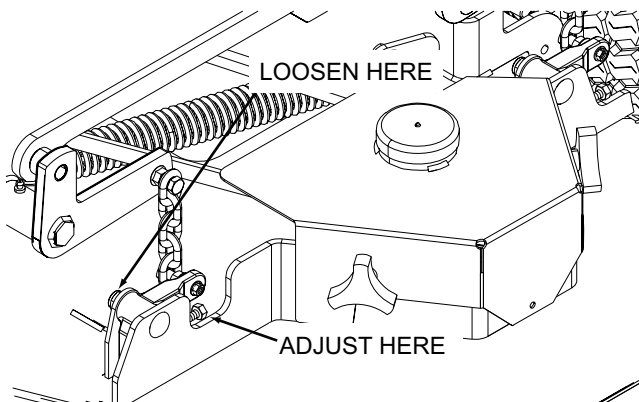


Figure 6-6. Cutter Deck Pitch Adjustment

2. Turn the adjustment bolts on both sides either clockwise to raise or counter-clockwise to lower the front of the cutter deck until the measurements are equal. Tighten the elastic stop nuts.

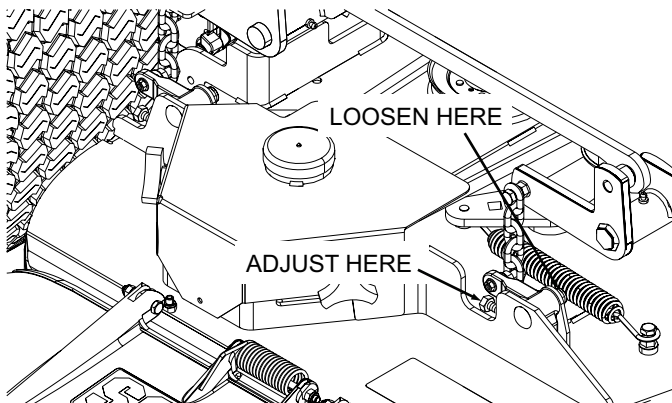


Figure 6-7. Cutter Deck Pitch Adjustment

- NOTE -

To prevent the cutter deck from teetering, all four (4) cutter deck hanging chains must have tension on them. If all four chains do not have tension on them and the deck teeters, you must re-adjust the cutter deck as outlined in the procedures above. All measurements should be taken from the top edge of the deck as the deck has an uneven bottom edge.

CUTTER DECK HEIGHT

The cutter deck height adjustment is made to ensure that the cutter deck is cutting at the height indicated on the cutting height index gauge. To check for proper deck height, be sure that the mower is on a flat, level surface and the tires are properly inflated.

1. Check the cutter deck cutting height by placing the lanyard pin in the 4-1/2" position on the cutting height index. Release the deck from the transport position and allow the deck to move to the 4-1/2" cutting height position.
2. Check the measurement from the floor to the cutter blade tip. If the measurement is not at 4-1/2", an adjustment can be made using the deck height control rod.
3. Loosen the jam nuts on both ends of the deck height control rod. See Figure 6-7.

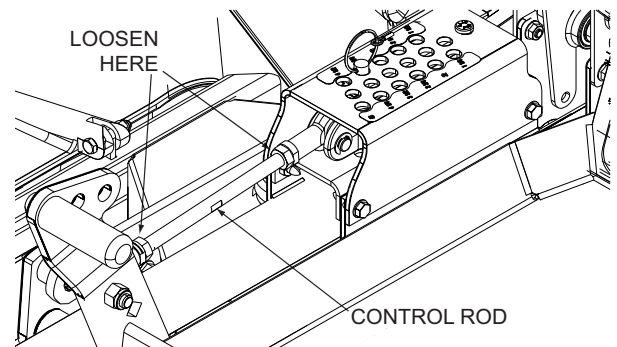


Figure 6-8. Cutter Deck Height Adjustment

4. Turn the control rod (See Figure 6-7) until the measurement from the floor to the cutter blade tip is at 4-1/2". Tighten the jam nuts on the control rod.

- NOTE -

If an adjustment had to be made, be sure that the cutter deck can easily be locked into the transport position.

6.8 CUSTOM-CUT BAFFLE ADJUSTMENT (EXCLUDES REAR DISCHARGE)

The Custom-Cut Baffle is designed to deliver optimum airflow and superior cutting performance in any type of grass. The Custom-Cut Baffle can be raised or lowered to precisely tailor the deck's performance for the type of grass being cut. The baffle can be set in seven (7) different positions for optimum performance.

A. 3-1/2" or 3-3/4" Position - (See Figure 6-9). For very tall, wiry or tough-to-cut grass.

B. 4" (factory setting), 4-1/4" or 4-1/2" Position - (See Figure 6-9). For general purpose cutting. This gives the best mix of cutting performance in all types of grass.

C. 4-3/4" or 5-1/4" Position - (See Figure 6-9). Placing the baffle in either the 4-3/4" or 5-1/4" setting will enhance fall cutting (leaf pickup) and reduce cutter deck "blowout".

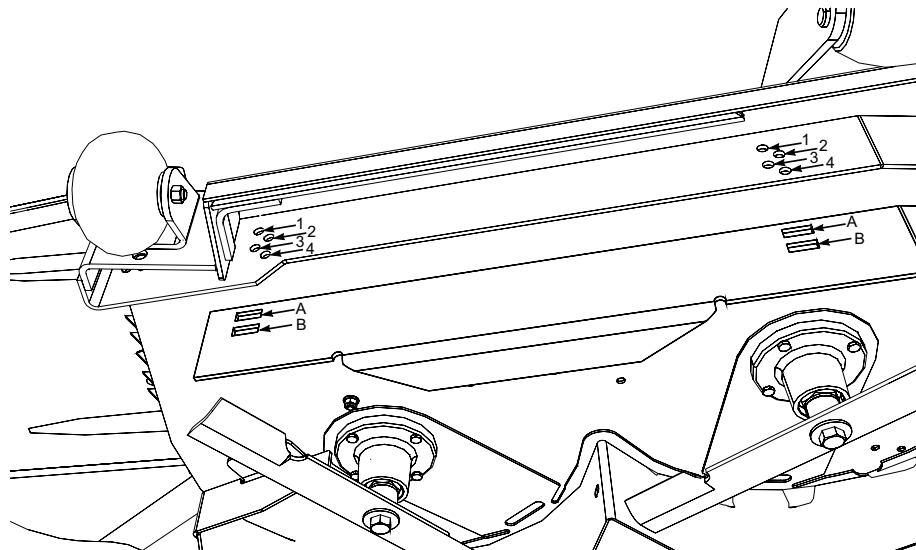
To adjust the Custom-Cut Baffle height:

1. Place the cutter deck in the transport position.
2. Remove the hardware securing the Custom-Cut Baffle to the cutter deck.

- NOTE -

Hardware location used in the illustrations are for reference only. Location of hardware may vary depending on cutter deck size.

3. Move the Custom-Cut Baffle to desired position. See Figure 6-8.
4. Reinstall the mounting hardware. Torque hardware to 39 ft-lbs.



Custom-Cut Baffle Adjustment

| Mounting Slot Selected | Mounting Hardware Location | | | |
|------------------------|----------------------------|--------|--------|--------|
| Slot "A" | Hole 1 | Hole 2 | Hole 3 | Hole 4 |
| Height (inches) | 3-3/4" | 4-1/4" | 4-3/4" | 5-1/4" |
| Slot "B" | Hole 2 | Hole 3 | Hole 4 | |
| Height (inches) | 3-1/2" | 4" | 4-1/2" | |

Figure 6-9. 7-Position Custom-Cut Baffle Adjustment

Section 6

6.9 ADJUSTING THE STEERING DAMPERS

The steering dampner adjustment can be made to increase or decrease the dampening affect for smooth, precise steering control. There are three locations on the steering control levers that allow the operator to adjust the dampening affect of the steering control based on cutting conditions.

1. **Top Mounting Location (Figure 6-10).** Used for the highest dampening affect on the steering controls.
2. **Middle Mounting Location (Figure 6-10).** Used for average dampening affect on the steering controls.
3. **Bottom Mounting Location (Figure 6-10).** Used for the lowest dampening affect on the steering controls.

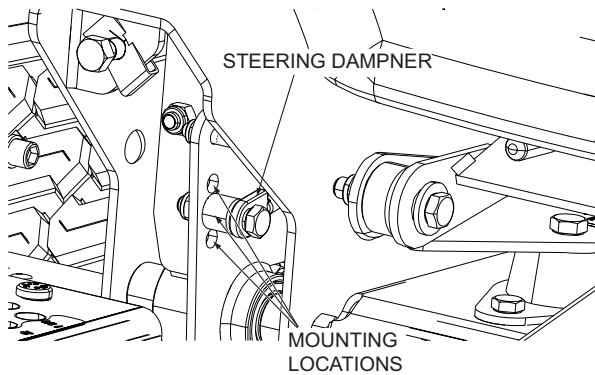


Figure 6-10. Steering Dampner Adjustment

6.10 ELECTRIC CLUTCH ADJUSTMENT

The electric clutch serves two functions in the operation of the mower. In addition to starting and stopping the power flow to the cutter blades, the clutch also acts as a brake to assist in stopping blade rotation when the PTO is switched off or the operator presence circuit is interrupted.

When the clutch is disengaged, the air gap between the armature and rotor must be adjusted to fifteen thousandths of an inch, 0.015, for proper operation. The airgap adjustment is made at three bolts on the clutch. There are three inspection windows, one next to each adjusting bolt. See Figure 6-10.

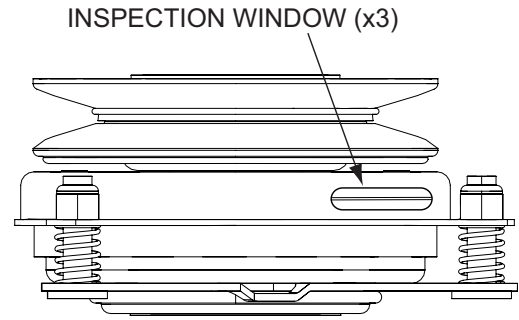


Figure 6-11. Clutch Air Gap Adjustment

1. Locate the inspection windows on the clutch.
2. Place a 0.015 feeler gauge in the slot between the rotor and the armature.
3. Tighten or loosen the adjusting bolt as needed to acheive the 0.015 inch airgap. See Figure 6-11. Perform this operation at all three inspection windows.

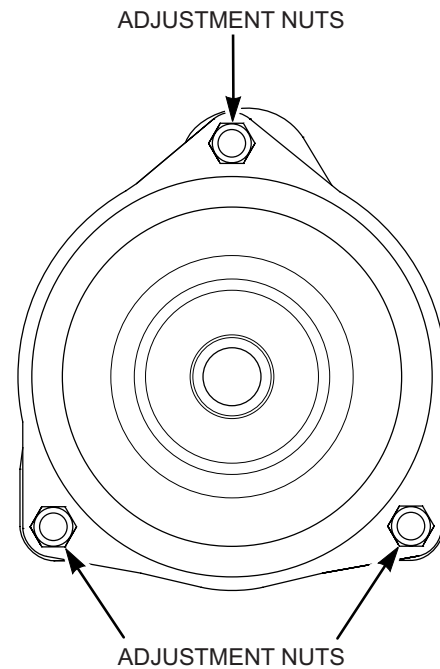


Figure 6-12. Clutch Air Gap Adjustment

This adjustment should be done every 500 hours of operation or annually, whichever comes first. In cases where the machine is heavily used, airgap settings should be checked more often.

If the air gap is too narrow, the clutch armature may drag when disengaged, resulting in premature failure.

If the air gap is too wide, the clutch may be slow to engage as the magnet must pull the armature in from a greater distance.





MAINTENANCE

7.11 MAINTENANCE CHART - RECOMMENDED SERVICE INTERVALS

| HOURS | | | | | | | PROCEDURE | COMMENTS |
|---------------------|---|----|----|-----|-----|-----|---|--|
| BREAK-IN (FIRST 10) | 8 | 20 | 40 | 100 | 200 | 500 | | |
| X | | | | | | | Check all hardware for tightness | |
| X | | | | | | | Check hydraulic oil level | See paragraph 7.3 |
| X | | | | | | | Check all belts for proper alignment | See paragraph 7.8 |
| X | | | | | | | Change engine oil and filter | See paragraph 7.4 |
| | X | | | | | | Check hydraulic fittings and hoses for leaks | Use extreme caution when checking the hydraulic hoses. See paragraph 2.7 |
| | X | | | | | | Check engine oil level | See paragraph 7.4 |
| | X | | | | | | *Clean mower | See paragraph 7.11 |
| | X | | | | | | Check condition of blades | See paragraph 7.9 |
| | X | | | | | | Apply grease to fittings | See paragraph 7.2 |
| | X | | | | | | Check tire pressure | See paragraph 7.10 |
| | X | | | | | | Inspect seat belt for wear or damage | See paragraph 2.6 |
| | X | | | | | | Check the operator interlock system | See paragraph 4.3 |
| | | X | | | | | Change engine oil and filter | See paragraph 7.4 |
| | | | X | | | | Check battery and clean battery posts and cables | See paragraph 7.7 |
| | | | X | | | | Inspect pump drive belt. Replace every 400 hours or 2 years, whichever occurs first | See paragraph 6.5 & 7.8 |
| | | | X | | | | Check belts for proper alignment | See paragraph 7.8 |
| | | | | X | | | Check conditions of fuel lines | |
| | | | | X | | | Apply grease to fittings | See paragraph 7.2 |
| | | | | X | | | Change engine oil | See paragraph 7.4 |
| | | | | X | | | Drain hydraulic system and replace hydraulic oil (initial change) | Use SAE 20W50 Motor Oil. See paragraph 7.3 |
| | | | | X | | | *Clean air cleaner element | See paragraph 7.6 |

* Perform these maintenance procedures more frequently under extreme dusty or dirty conditions

GREASE FITTING LUBRICATION Lubricant Interval

-  Spindle Grease
(40 Hours/Weekly)
-  Chassis Grease
(100 Hours/Bi-monthly)
-  Chassis Grease
(200 Hours/Monthly)
-  Chassis Grease
(500 Hours/Yearly)

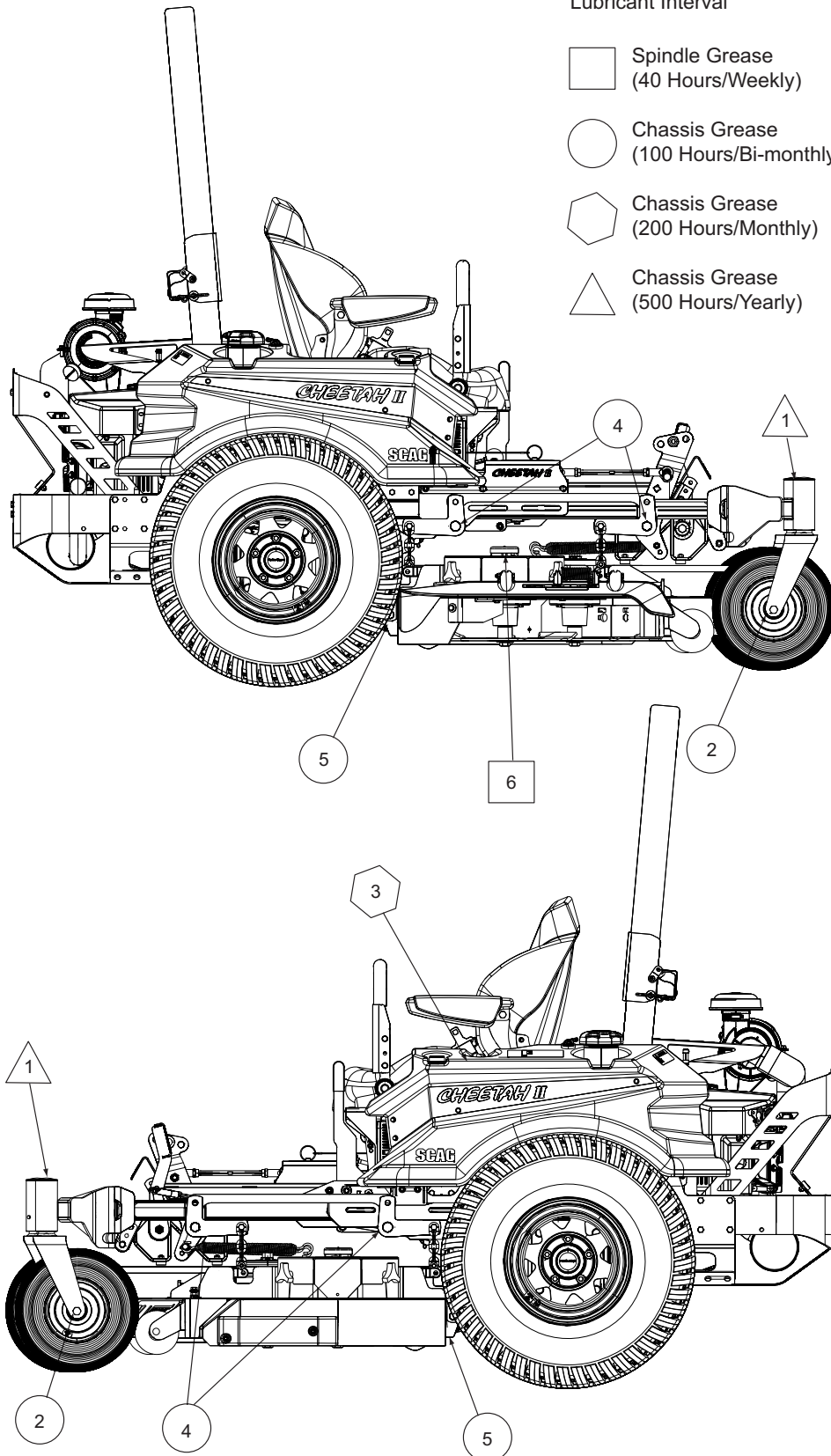


Figure 7-1. Lubrication Fitting Points

Section 7

7.13 HYDRAULIC SYSTEM

A. CHECKING HYDRAULIC OIL LEVEL

The hydraulic oil level of **both** expansion tanks should be checked after the first 10 hours of operation. Thereafter, check the oil after every 200 hours of machine operation or monthly, whichever occurs first.

- IMPORTANT -

If the oil level is consistently low, check for leaks and correct immediately.

1. Wipe dirt and contaminants from around the hydraulic level indicator window.
2. Visually check the level of hydraulic oil. Hydraulic oil must be within the center of the wide portion of the indicator window when the machine is cold. See Figure 7-2. If the fluid is low, add 20W50 oil (Scag p/n 486255 - 1 Quart or p/n 486254 - 1 Gallon). DO NOT overfill; (overfilling the oil reservoir may cause oil seepage around the cap area).

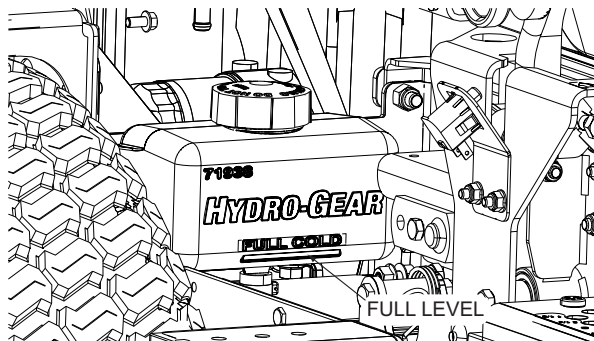


Figure 7-2. Hydraulic Oil Reservoir

B. CHANGING HYDRAULIC OIL AND FILTER

The hydraulic oil should be changed after the first 100 hours of operation. Thereafter, the hydraulic oil should be changed every 500 hours or annually, whichever occurs first. The oil should also be changed if the color of the fluid has become black or milky. A black color and/or a rancid odor usually indicates possible overheating of the oil, and a milky color usually indicates water in the hydraulic oil.

- IMPORTANT -

The hydraulic oil should be changed if you notice the presence of water or a rancid odor to the hydraulic oil.

1. Park the mower on a level surface and stop the engine.
2. Position a floor jack under the rear of the machine. Raise the machine and support it to prevent it from falling. Block the caster wheels to prevent the machine from moving.
3. Place a suitable container (capable of holding 6 quarts) under the RH hydraulic axle assembly. Remove the cover over the hydraulic reservoir located on the LH fuel tank. Remove the fill cap from the reservoir and the drain plug from the bottom of the RH hydraulic axle assembly. See Figure 7-3. Allow the fluid to drain into the container and properly discard it.

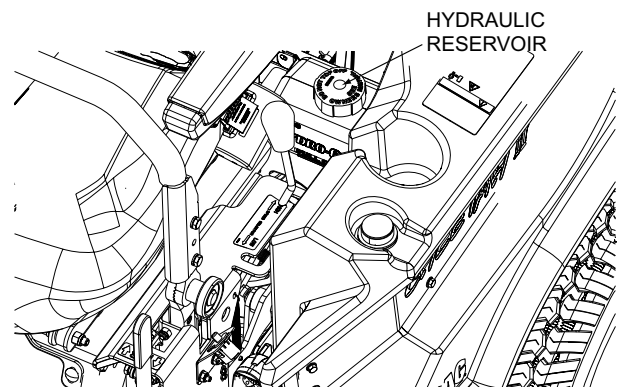


Figure 7-3. Hydraulic Oil Filter and Drain Plug

4. Re-install the drain plug, torque to 32 to 42 in/lbs and remove the hydraulic filter assembly from the RH hydraulic axle.
5. Place the container (capable of holding 6 quarts) under the LH hydraulic axle assembly. Remove the drain plug from the bottom of the LH hydraulic axle assembly. See Figure 7-3. Allow the fluid to drain into the container and properly discard it.

6. Re-install the drain plug and remove the hydraulic filter assembly from the LH hydraulic axle.
7. Install new hydraulic filters in the RH and LH hydraulic axles.
8. Remove the purge port plug next to the inlet fitting on both axles. See Figure 7-4.

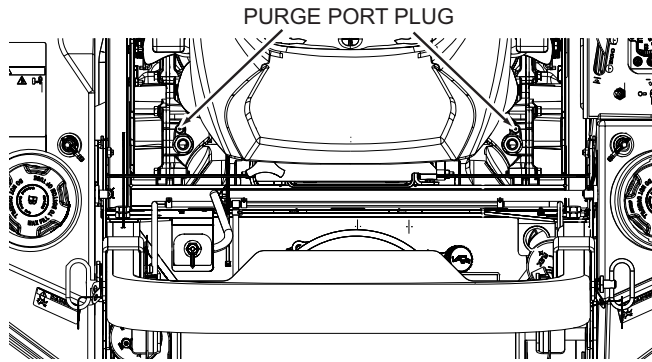


Figure 7-4. Axle Purge Port Plugs

9. Fill **both** hydraulic reservoirs with 20w50 oil (Scag p/n 486255 - 1 Quart or p/n 486254 - 1 Gallon) until the oil just appears at each axle purge port. Approximately 10 quart capacity. Reinstall the purge port plugs and torque to 32 to 42 in/lbs.

-NOTE-

Each axle will fill with oil using approximately 5 quarts of oil. Reinstall the purge port plugs and fill the hydraulic expansion reservoir to the proper level as explained in Section 7.3.

10. Replace the reservoir fill cap and cover.
11. Start the engine and operate the steering control levers forward and backward for two minutes to purge the air out of the hydraulic system. Check the oil level in the reservoir. If necessary, add oil to the reservoir.

7.14 ENGINE OIL

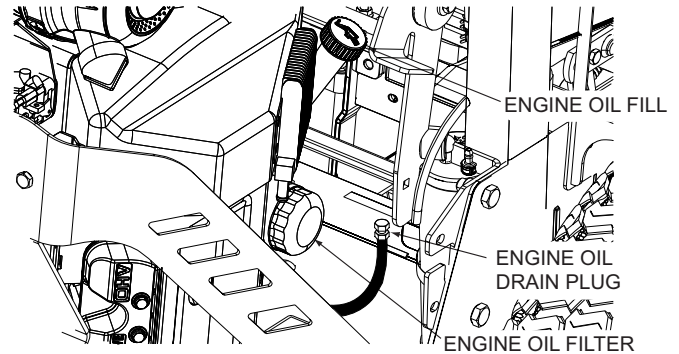


Figure 7-5. Engine Oil Fill/Dipstick, Filter and Drain Locations

A. CHECKING ENGINE CRANKCASE OIL LEVEL

The engine oil level should be checked after every 8 hours of operation or daily as instructed in the Engine Operator's Manual furnished with this mower.

B. CHANGING ENGINE CRANKCASE OIL

After the first 20 hours of operation, change the engine crankcase oil and replace the oil filter. Thereafter, change the engine crankcase oil after every 100 hours of operation or bi-weekly, whichever occurs first. Refer to the Engine Operator's Manual furnished with this mower for instructions.

C. CHANGING ENGINE OIL FILTER

After the first 20 hours of operation, replace the engine oil filter. Thereafter, replace the oil filter after every 200 hours of operation or every month, whichever occurs first. Refer to Engine Operator's Manual for instructions. See Figure 7-4.

Section 7

7.15 ENGINE FUEL SYSTEM

DANGER

To avoid injury from burns, allow the mower to cool before removing the fuel tank cap and refueling.

A. FILLING THE FUEL TANKS

Fill to the bottom of the filler neck insert (approximately 8 gallons per fuel tank indicating Full (F) on the fuel gauge) at the beginning of each operating day. See Figure 7-6. Do not overfill. Use clean, fresh unleaded gasoline with a minimum octane rating of 87 and a maximum of 10% Ethanol.

DO NOT use E85 Fuel. Using E85 Fuel will cause severe damage to the engine.

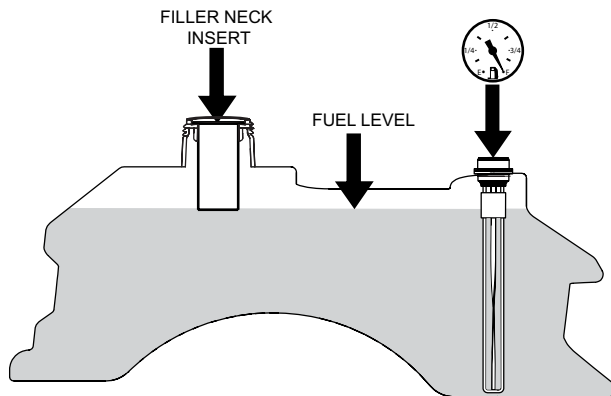


Figure 7-6. C.A.R.B. / EPA Phase 3 Fuel Level

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

1. Extinguish all cigarettes, cigars, pipes and other sources of ignition.
2. Use only an approved gasoline container.
3. Never remove the gas cap or add fuel with the engine running. Allow the engine to completely cool before fueling.
4. Never fuel the machine indoors or in an enclosed trailer.
5. Never store the machine or fuel container where there is an open flame, spark or pilot light such as on a water heater or other appliances.

6. Never fill containers inside a vehicle or on a truck or trailer bed with a plastic liner. Always place containers on the ground away from your vehicle before filling.
7. Remove the machine from the truck or trailer and fuel on the ground. If this is not possible, then refuel the machine with a portable container, rather than from a gasoline dispenser nozzle.
8. Keep the nozzle in contact with the rim of fuel tank or container opening at all times until fueling is complete. Do not use a nozzle lock-open device.
9. If fuel is spilled on clothing, change clothing immediately and wash affected skin.
10. DO NOT start the engine until any spilled fuel has been cleaned up or has evaporated.
11. Replace gas cap and tighten securely. Tighten the fuel cap until it ratchets.

B. REPLACING IN-LINE FUEL FILTER ELEMENTS

The engine fuel filter should be replaced after every 500 hours of operation or annually, whichever occurs first. See Figure 7-7.

1. Close the shut-off valve.
2. Remove and replace the engine fuel filter. Open the fuel shut-off valve.

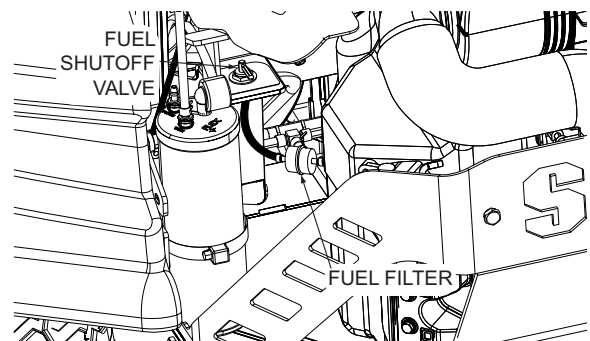


Figure 7-7. Fuel Filter

7.16 ENGINE AIR CLEANER

A. CLEANING AND/OR REPLACING AIR CLEANER ELEMENT

For any air cleaner, the operating environment dictates the air cleaner service periods. Inspect and clean the air cleaner element after every 100 hours of operation or bi-weekly, whichever occurs first and replace the element if required.

- NOTE -

In extremely dusty conditions it may be necessary to check the element once or twice daily to prevent engine damage.

1. Release the two latches securing the air cleaner cover to the air cleaner assembly and remove the cover. Set aside.
2. Remove the air cleaner and inspect.
3. Clean or replace the air cleaner and foam pre-cleaner as recommended by the engine manufacturer.
4. Replace the air cleaner cover and be sure to snap the two latches closed.

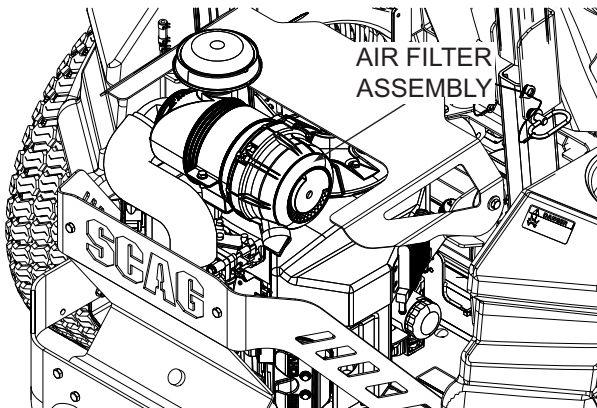


Figure 7-8. Air Filter Assembly

7.17 BATTERY

! WARNING

Lead-acid batteries produce flammable and explosive gases. To avoid personal injury when checking, testing or charging batteries, **DO NOT** use smoking materials near batteries. Keep arcs, sparks and flames away from batteries. Provide proper ventilation and wear safety glasses.

! WARNING

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

! WARNING

Electric storage battery fluid contains sulfuric acid which is **POISON** and can cause **SEVERE CHEMICAL BURNS**. Avoid contact of fluid with eyes, skin, or clothing. Use proper protective gear when handling batteries. **DO NOT** tip any battery beyond 45° angle in any direction. If fluid contact does occur, follow first aid suggestions below.

BATTERY ELECTROLYTE FIRST AID

External Contact — Flush with water.

Eyes — Flush with water for at least 15 minutes and get medical attention immediately.

Internal — Drink large quantities of water. Follow with Milk Of Magnesia, beaten egg, or vegetable oil. Get medical attention immediately. In case of internal contact, DO NOT give fluids that would induce vomiting.

Section 7

A. CHARGING THE BATTERY

Refer to the battery charger's manual for specific instructions.

Under normal conditions the engine's alternator will have no problem keeping a charge on the battery. If the battery has been completely discharged for a long period of time, the alternator may not be able to recharge the battery, and a battery charger will be required.

DO NOT charge a frozen battery. It may explode and cause injury. Let the battery warm before attaching a charger.

Whenever possible, remove the battery from the mower before charging and make sure the electrolyte covers the plates in all cells.

| |
|--|
|  <h2 style="margin: 0;">WARNING</h2> |
| <p>BATTERIES PRODUCE EXPLOSIVE GASES. Charge the battery in a well ventilated space so gases produced while charging can dissipate.</p> |

Charging rates between 3 and 50 amperes are satisfactory if excessive gassing or spewing of electrolyte does not occur or the battery does not feel excessively hot (over 125°F). If spewing or gassing occurs or the temperature exceeds 125°F, the charging rate must be reduced or temporarily stopped to permit cooling.

B. JUMP STARTING

1. The booster battery must be a 12 volt type. If a vehicle is used for jump starting, it must have a negative ground system.
2. When connecting the jumper cables, connect the positive cable to the positive battery post, then connect the negative cable to the negative battery post.

7.18 DRIVE BELTS

All drive belts are spring-loaded and self-tensioning, however after the first 2, 4, 8 and 10 hours of operation, the belts should be checked for proper alignment and wear. Thereafter, check the belts after every 40 hours of operation or weekly, whichever occurs first.

- NOTE -

If you experience frequent belt wear or breakage, see your authorized Scag service center for belt adjustment.

| |
|--|
|  <h2 style="margin: 0;">WARNING</h2> |
| <p>If the pump drive belt fails, steering control will be lost which could result in serious injury or death. Replace the pump drive belt as needed or every 400 hours / 2 years, whichever occurs first.</p> |

7.19 CUTTER BLADES

A. BLADE INSPECTION

1. Remove the ignition key before servicing the blades.
2. Raise the mower deck to the highest position. Place the lanyard pin in the highest cutting height position to prevent the cutter deck from falling.

| |
|--|
|  <h2 style="margin: 0;">WARNING</h2> |
| <p>Always wear proper hand and eye protection when working with cutter blades.</p> |

3. Check the cutter blades for straightness. If the cutter blades appear bent, they will need to be replaced.
4. Check the cutter blades for wear. If any part of the cutter blade is worn to 1/2 its original thickness, replace the cutter blade.

| |
|---|
|  <h2 style="margin: 0;">WARNING</h2> |
| <p>Do not attempt to straighten a bent blade, and never weld a broken or cracked blade. Always replace it with a new blade to assure safety.</p> |

5. Check the cutter blades for gouges. If there are gouges on the top or bottom surfaces of the cutter blade, replace the cutter blade.
6. If a blade cutting edge is dull or nicked, it should be sharpened. Remove the blades for sharpening. See "Blade Replacement".

- NOTE -

Keep the blades sharp. Cutting with dull blades not only yields a poor mowing job, but slows the cutting speed of the mower and causes extra wear on the engine and the blade drive by pulling hard.

B. BLADE SHARPENING

- NOTE -

If possible, use a file to sharpen the blade. Using a wheel grinder may burn the blade.

- NOTE -

DO NOT sharpen the blades beyond 1/3 of the width of the blade. See Figure 7-9.

1. Sharpen the cutting edge at the same bevel as the original. See Figure 7-9. Sharpen only the top of the cutting edge to maintain sharpness.

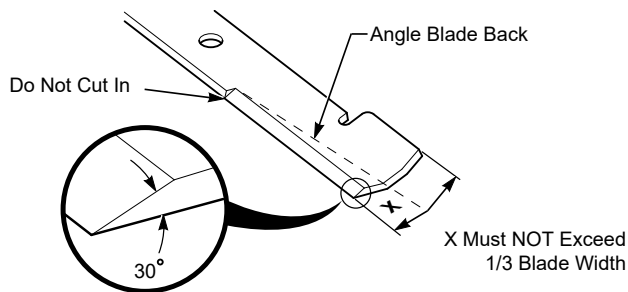


Figure 7-9. Blade Sharpening

2. Check the balance of the blade. If the blades are out of balance, vibration and premature wear can occur. The cutter blades should be balanced to 1-1/2 oz-in. See your authorized Scag dealer for blade balancing or special tools, if you choose to balance your own blades.

C. BLADE REPLACEMENT

! WARNING

Always wear proper hand and eye protection when working with cutter blades.

1. Remove the ignition key before replacing the blades.
2. Raise the mower deck to the highest position. Place the lanyard pin in the highest cutting height position to prevent the cutter deck from falling.
3. Secure the cutter blades to prevent them from rotating, (use the optional Blade Buddy tool P/N 9212, to assist in securing the cutter blades), remove the nut from the blade attaching bolt. Remove the cutter blade, bolt and spacer from the spindle shaft. See Figure 7-10.

- NOTE -

The front of the machine will have to be raised slightly to remove the blade bolt from the cutter spindle.

! CAUTION

Inspect the cutter blade spacer(s) and washer for wear and/or cupping. Replace the worn parts. Worn spacer(s) and/or washer will not allow proper tightening of the cutter blade and can lead to cutter blade failure, personal injury or property damage.

4. To install the new cutter blade, put the flat washer onto the blade bolt and slide the bolt into the hole in the cutter blade.

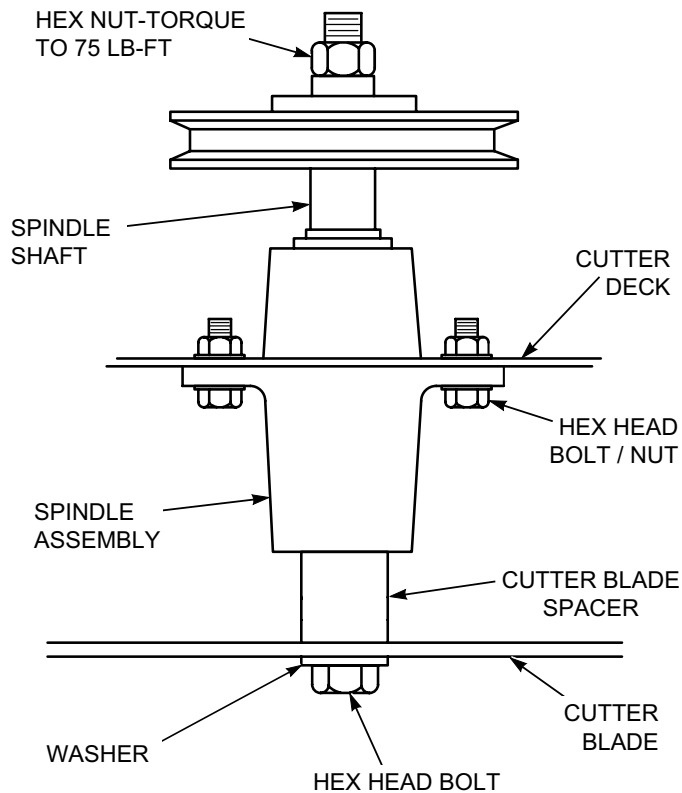


Figure 7-10. Blade Replacement

- NOTE -

Be sure that the blade is installed with the lift wing toward the top.

5. Install the spacer onto the blade bolt and insert the bolt into the cutter spindle shaft.
6. Install the hex nut to the blade bolt at the top of the cutter spindle. Secure the blades from rotating and torque to 75 lb-ft. See Figure 7-10.

7.20 TIRES

Check the tire pressures after every 8 hours of operation or daily.

| | |
|---------------|-----------|
| Caster Wheels | Flat Free |
| Drive Wheels | 12 PSI |

7.21 BODY, DECK, AND UPHOLSTERY

CAUTION

Do not wash any portion of the equipment while it is hot. Do not wash the engine; use compressed air.

1. After each use, wash the mower and cutter deck. Use cold water and automotive cleaners. Do not use pressure cleaners.
2. Do not spray electrical components.
3. Use a mild soap solution or a vinyl/rubber cleaner to clean the seat.
4. Repair damaged metal surfaces using Scag touch-up paint available from your authorized Scag dealer. Wax the mower for maximum paint protection.

ILLUSTRATED PARTS LIST

8.1 SCAG APPROVED ATTACHMENTS AND ACCESSORIES

Attachments and accessories manufactured by companies other than Scag Power Equipment are not approved for use on this machine.

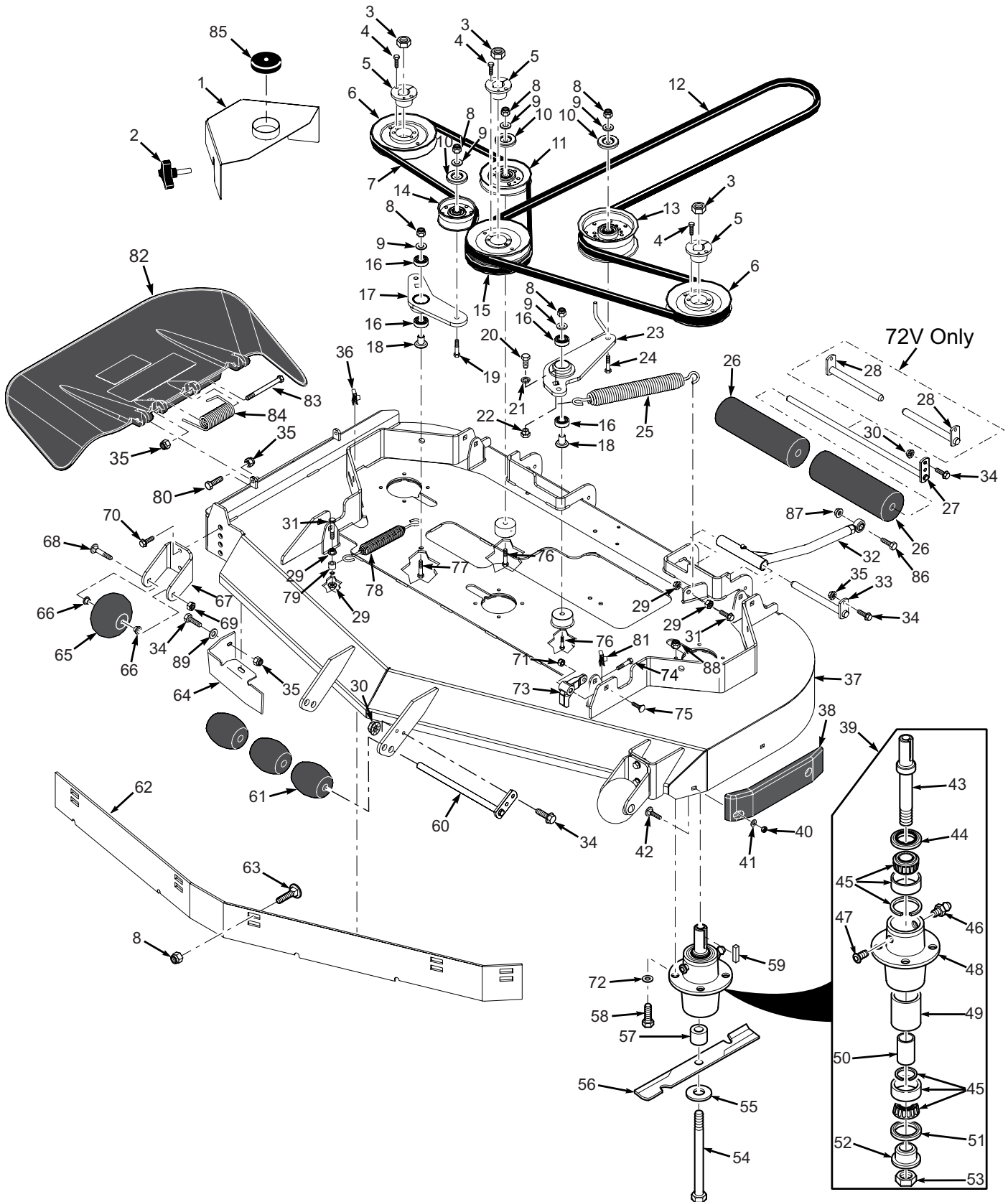
Scag approved attachments and accessories:

| <u>Accessories</u> | <u>P/N</u> |
|-----------------------------------|------------|
| <u>Grass Collection Systems</u> | |
| GC-3B Three-Bag catcher | 901S |
| GC-CS "Clam Shell" catcher | 901T |
| Install Kit for SCZ-61V | 901X |
| <u>Mulching Accessories</u> | |
| Mulch Plate (61) | 9288 |
| Mulch Plate (72) | 920F |
| Hurricane Plus Mulch System (61) | 9285 |
| Hurricane Plus Mulch System (72) | 920E |
| <u>Micellaneous</u> | |
| Blade Buddy | 9212 |
| Trailer Hitch | 9242 |
| Tiger Stripe Kit (61/72) | 923G |
| -Install Kit (61/72) | 921W |
| Chrome Wheel Cover (12") | 920J |
| Tiger Eye Air Filter Monitor | 922U |
| OCDG, Electric (61 Velocity Plus) | 925D |
| OCDG, Electric (72 Velocity Plus) | 925J |

| <u>Accessories</u> | <u>P/N</u> |
|--------------------------------|------------|
| <u>Scag Premium Lubricants</u> | |
| Chassis Grease | 486257 |
| Spindle Grease | 486258 |
| Hydraulic System Oil (1 gal) | 486254 |
| Hydraulic System Oil (1 qt) | 486255 |

NOTES

61V & 72V CUTTER DECKS

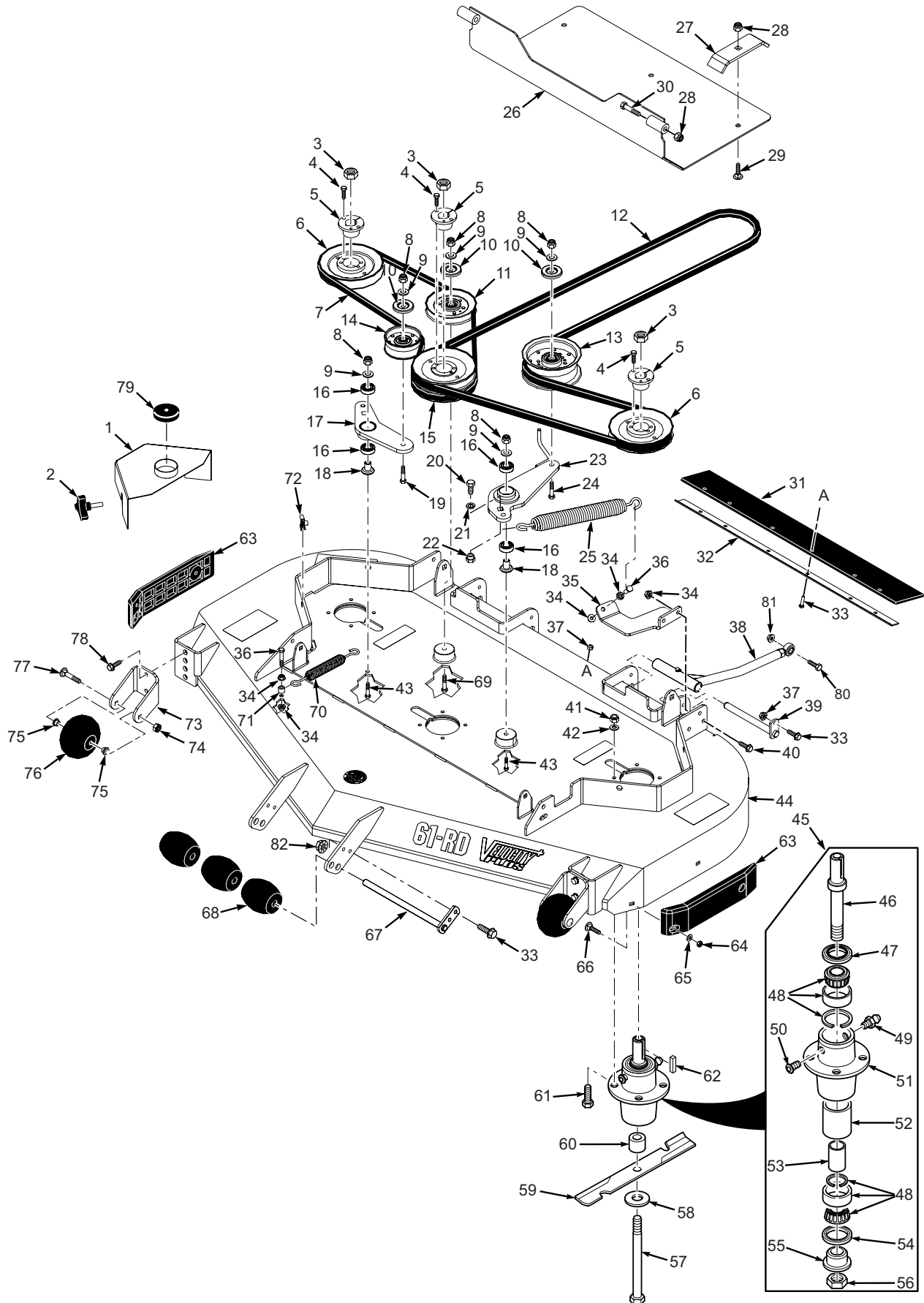


61V & 72V CUTTER DECKS

| Ref. No. | Part No. | Description | 61 | 72 | Ref. No. | Part No. | Description | 61 | 72 |
|----------|-----------|--|----|----|----------|-----------|--|----|----|
| 1 | 463194 | Belt Cover, LH (INCL 85) | x | | 46 | 48114-04 | Grease Fitting | x | x |
| | 463195 | Belt Cover, RH (INCL 85) | x | | 47 | 48677 | Relief Fitting, Spindle | x | x |
| | 462409 | Belt Cover, 72V | | x | 48 | 43644 | Spindle Housing | x | x |
| 2 | 481625-01 | Knob w/Stud | x | x | 49 | 43312 | Spacer, Outside | x | x |
| 3 | 04020-09 | Nut, 5/8-11 UNC | x | x | 50 | 43296 | Spacer, Inside | x | x |
| 4 | 04001-172 | Bolt, Hex Head 1/4-20 x 1" | x | x | 51 | 481025 | Seal, Bottom | x | x |
| 5 | 48926 | Tapered Hub, 1.125" Bore | x | x | 52 | 43297 | Spindle Bushing | x | x |
| 6 | 483286 | Pulley, 6.32" Dia. | x | | 53 | 481035 | Nut, Special 1-1/16 - 18 | x | x |
| | 484050 | Pulley, 7.50" Dia. | | x | 54 | 04001-41 | Bolt, Hex Head 5/8-11 x 9-1/2" | x | x |
| 7 | 483157 | Belt | x | | 55 | 04043-06 | Flatwasher, 5/8-.688 x 1.75 x .134 HD | x | x |
| | 484159 | Belt | | x | 56 | 482881 | Cutter Blade, 21" | x | |
| 8 | 04021-09 | Nut, Elastic Stop 3/8-16 | x | x | | 482882 | Cutter Blade, 24-1/2" | | x |
| 9 | 04043-04 | Flatwasher, 3/8-.391 x .938 x .105 | x | x | 57 | 43590 | Spacer, Spindle Bottom | x | x |
| 10 | 424367 | Dust Shield | x | x | 58 | 04001-176 | Bolt, Hex Head 5/16-18 x 1-3/4" Grade 8 | x | x |
| 11 | 48181 | Pulley, Idler | x | x | 59 | 04063-08 | Key, 1/4 x 1/4 x 2" | x | x |
| 12 | 483741 | Belt, Deck Drive | x | | 60 | 45944 | Shaft Weldment | x | x |
| | 484088 | Belt, Deck Drive | | x | 61 | 482295 | Wheel, Anti-Scalp | x | x |
| 13 | 483210 | Pulley, 5" Idler | x | x | 62 | 424841 | Baffle, Flange - 61V | x | |
| 14 | 486045 | Pulley, 3-1/2" Idler | x | x | | 424917 | Baffle, Flange - 72V | | x |
| 15 | 483287 | Pulley, 6.32" Dia. Double Groove | x | | 63 | 04003-23 | Bolt, Carriage 3/8-16 x 1" | x | x |
| | 484051 | Pulley, 7.50" Dia. Double Groove | | x | 64 | 424209 | Baffle, Turbo - 61V | x | |
| 16 | 48224 | Bearing | x | x | | *425625 | Discharge Baffle 61V | x | |
| 17 | 461946 | Idler Arm Assy. (incl. #16) | x | x | | 424856 | Baffle, Turbo - 72V | | x |
| 18 | 43689 | Pivot, Idler | x | x | | *423958 | Discharge Baffle 72V | | x |
| 19 | 04001-31 | Bolt, Hex Head 3/8-16 x 2-1/2" | x | x | 65 | 481632 | Wheel, Anti-Scalp | x | x |
| 20 | 04001-27 | Bolt, Hex Head 7/16-14 x 1" | x | x | 66 | 48100-15 | Bushing, .376 ID Oilite | x | x |
| 21 | 04030-05 | Lockwasher, 7/16" Spring | x | x | 67 | 422478 | Bracket, Anti-Scalp Wheel | x | x |
| 22 | 43686 | Boss, Spring Anchor | x | x | 68 | 04003-26 | Bolt, Carriage 3/8-16 x 4" | x | x |
| 23 | 462269 | Idler Arm Assy. (incl. #16) | x | x | 69 | 04021-05 | Nut, Center Lock 3/8-16 | x | x |
| 24 | 04001-54 | Bolt, Hex Head 3/8-16 x 3" | x | x | 70 | 04017-27 | Bolt, Hex Head 3/8-16 x 1" Serrated Flange | x | x |
| 25 | 483246 | Spring, LH Cutter Deck | x | x | 71 | 04021-11 | Nut, Elastic Stop 7/16-14 | x | x |
| 26 | 48038 | Guide Roller | x | x | 72 | 04030-03 | Lock Washer, 5/16 | x | x |
| 27 | 451118 | Shaft Weldment | x | | 73 | 485528 | Lever, Deck Level | x | x |
| 28 | 45944 | Shaft Weldment | | x | 74 | 04107-05 | Bolt, 3/8-16 x 2-1/2" w/Patch | x | x |
| 29 | 04019-04 | Nut, Serrated Flange 3/8-16 | x | x | 75 | 04003-42 | Bolt, Carriage 7/16-14 x 2-1/4" | x | x |
| 30 | 04117-01 | Nut, Lock Elastic Stop, 5/16-18 | x | x | 76 | 04001-54 | Bolt, Hex Head 3/8-16 x 3" | x | x |
| 31 | 04001-136 | Bolt, Hex Head 3/8-16 x 1-1/2" Grade 8 | x | x | 77 | 04001-46 | Bolt, Hex Head 3/8-16 x 2-1/4" | x | x |
| 32 | 462225 | Pusharm Assy., LH | x | x | 78 | 483703 | Deck Spring | x | x |
| | 462226 | Pusharm Assy., RH | x | x | 79 | 43063 | Spacer | x | x |
| 33 | 451240 | Rod Weldment, Pusharm | x | x | 80 | 04001-12 | Bolt, Hex Head 5/16-18 x 1-3/4" | x | x |
| 34 | 04001-09 | Bolt, Hex Head 5/16-18 x 1" | x | x | 81 | 04110-03 | U-Nut, 3/8-16 | x | x |
| 35 | 04021-10 | Nut, Elastic Stop 5/16-18 | x | x | 82 | 461846 | Discharge Chute Assy. 61V | x | |
| 36 | 04110-04 | U-Nut, 3/8-16 | x | x | | *462477 | CA Discharge Chute Assy. | x | |
| 37 | 463243 | Cutter Deck w/Decals | x | | | 462132 | Discharge Chute Assy. 72V | | x |
| | 463244 | Cutter Deck w/Decals | | x | | *462478 | CA Discharge Chute Assy. | | x |
| 38 | 483176 | Wear Pad | x | | 83 | 04001-154 | Bolt, Hex Head 5/16-18 x 4-3/4" | x | x |
| | 483174 | Wear Pad | | x | 84 | 483378 | Spring, Discharge Chute | x | x |
| 39 | 461663 | Spindle Assembly | x | x | 85 | 484368 | Cap, Spindle | x | x |
| 40 | 04021-04 | Nut, Center Lock 5/16-18 | x | x | 86 | 04001-128 | Bolt, Hex Head 5/8-11 x 3/2" | x | x |
| 41 | 04040-04 | Flatwasher, 5/16-.344 x .688 x .065 | x | x | 87 | 04021-23 | Nut, Centerlock, 5/8-11 | x | x |
| 42 | 04003-12 | Bolt, Carriage 5/16-18 x 3/4" | x | x | 88 | 04021-22 | Nut, Lock Elastic Stop, 5/16-18 | x | x |
| 43 | 43589 | Shaft, Spindle | x | x | 89 | 04040-15 | Flat Washer, 5/16 - .375 x .875 x .083 | x | x |
| 44 | 481024 | Seal, Top | x | x | | | | | |
| 45 | 481022 | Bearing Assembly | x | x | | | | | |

* = California Models Only (not shown)

61RD CUTTER DECK

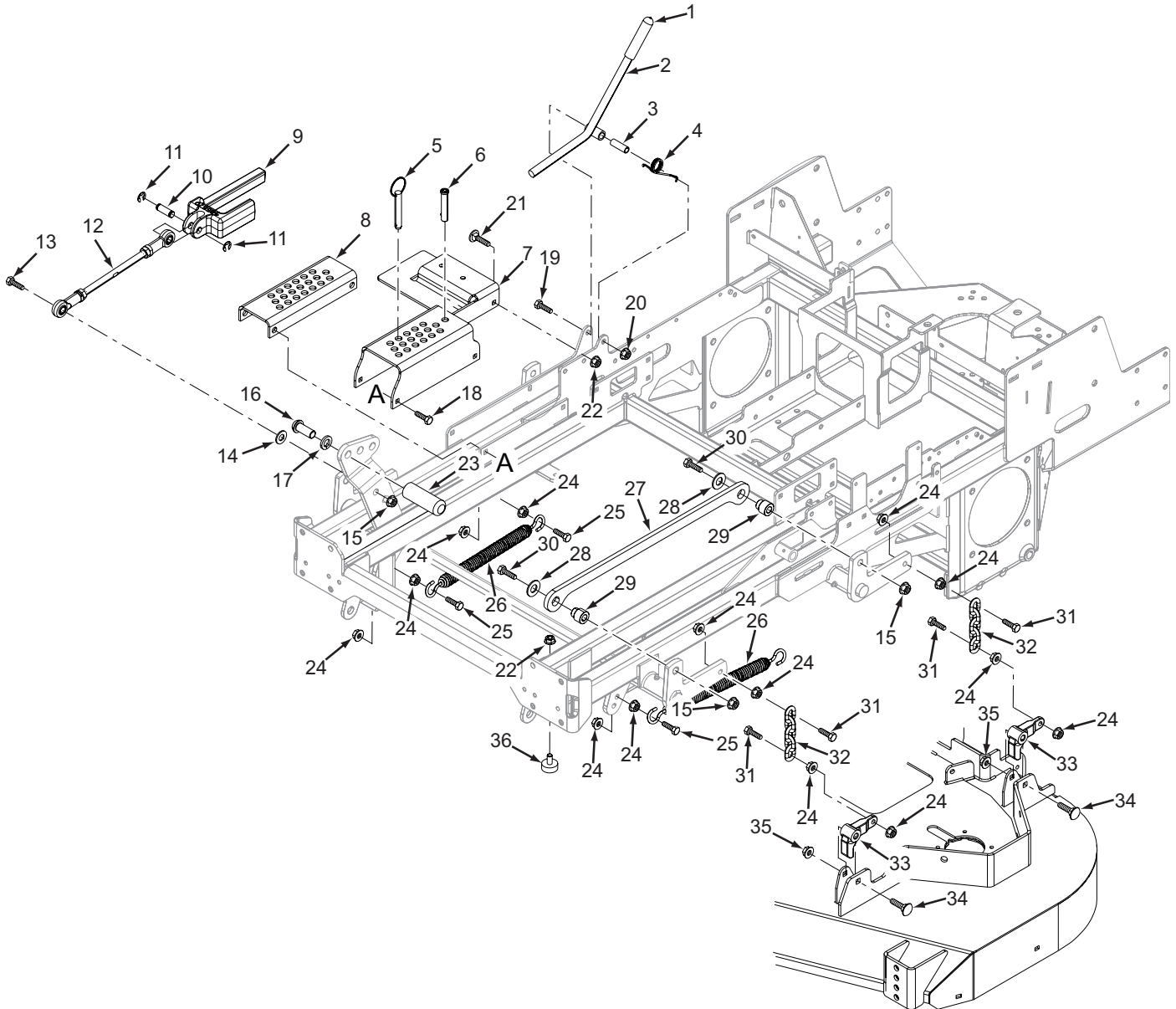


61RD CUTTER DECK

| Ref. No. | Part No. | Description |
|----------|-----------|--|
| 1 | 463194 | Belt Cover, LH 61V |
| | 463195 | Belt Cover, RH 61V |
| 2 | 481625-01 | Knob w/Stud |
| 3 | 04020-09 | Nut, 5/8-11 UNC |
| 4 | 04001-172 | Bolt, Hex Head 1/4-20 x 1" |
| 5 | 48926 | Tapered Hub, 1.125" Bore |
| 6 | 483286 | Pulley, 6.32" Dia. |
| 7 | 483157 | Belt |
| 8 | 04021-09 | Nut, Elastic Stop 3/8-16 |
| 9 | 04043-04 | Flatwasher, 3/8-.391 x .938 x .105 |
| 10 | 424367 | Dust Shield |
| 11 | 48181 | Pulley, Idler |
| 12 | 483741 | Belt, Deck Drive |
| 13 | 483210 | Pulley, 5" Idler |
| 14 | 486045 | Pulley, 3-1/2" Idler |
| 15 | 483287 | Pulley, 6.32" Dia. Double Groove |
| 16 | 48224 | Bearing |
| 17 | 461946 | Idler Arm Assy. (incl. #16) |
| 18 | 43689 | Pivot, Idler |
| 19 | 04001-31 | Bolt, Hex Head 3/8-16 x 2-1/2" |
| 20 | 04001-27 | Bolt, Hex Head 7/16-14 x 1" |
| 21 | 04030-05 | Lockwasher, 7/16" Spring |
| 22 | 43686 | Boss, Spring Anchor |
| 23 | 462269 | Idler Arm Assy. (incl. #16) |
| 24 | 04001-54 | Bolt, Hex Head 3/8-16 x 3" |
| 25 | 483246 | Spring, LH Cutter Deck |
| 26 | 452341 | Weldment, Debris Shield |
| 27 | 425897 | Mounting Bracket, Shield |
| 28 | 04021-10 | Nut, Elastic Stop 5/16-18 |
| 29 | 04003-38 | Bolt, Carriage 5/16-18 x 1-1/2" |
| 30 | 04001-13 | Bolt, Hex Head 5/16-18 x 2-3/4" |
| 31 | 484557 | Pad, Rubber |
| 32 | 425899 | Retaining Plate, Pad |
| 33 | 04001-09 | Bolt, Hex Head 5/16-18 x 1" |
| 34 | 04019-04 | Nut, Serrated Flange 3/8-16 |
| 35 | 425335 | Spring Mount, SMCZ |
| 36 | 04001-136 | Bolt, Hex Head 3/8-16 x 1-1/2" Grade 8 |
| 37 | 04021-10 | Nut, Elastic Stop 5/16-18 |
| 38 | 462225 | Pusharm Assembly, LH |
| | 462226 | Pusharm Assembly, RH |
| 39 | 451240 | Rod Weldment, Pusharm |
| 40 | 04001-19 | Bolt, Hex Head 3/8-16 x 1" |
| 41 | 04021-22 | Nut, Elastic Stop 5/16-18 Grade 8 |
| 42 | 04030-03 | Lockwasher, 5/16" |
| 43 | 04001-54 | Bolt, Hex Head 3/8-16 x 3" |
| 44 | 463245 | Cutter Deck Assembly w/Decals SCZII-61RD |

| Ref. No. | Part No. | Description |
|----------|-----------|--|
| 45 | 461663 | Spindle Assembly |
| 46 | 43589 | Shaft, Spindle |
| 47 | 481024 | Seal, Top |
| 48 | 481022 | Bearing Assembly |
| 49 | 48114-04 | Grease Fitting |
| 50 | 48677 | Relief Fitting, Spindle |
| 51 | 43644 | Spindle Housing |
| 52 | 43312 | Spacer, Outside |
| 53 | 43296 | Spacer, Inside |
| 54 | 481025 | Seal, Bottom |
| 55 | 43297 | Spindle Bushing |
| 56 | 481035 | Nut, Special 1-1/16 - 18 |
| 57 | 04001-41 | Bolt, Hex Head 5/8-11 x 9-1/2" |
| 58 | 04043-06 | Flatwasher, 5/8-.688 x 1.75 x .134 HD |
| 59 | 482881 | Cutter Blade, 21" |
| 60 | 43590 | Spacer, Spindle Bottom |
| 61 | 04001-176 | Bolt, Hex Head 5/16-18 x 1-3/4" Grade 8 |
| 62 | 04063-08 | Key, 1/4 x 1/4 x 2" |
| 63 | 483176 | Wear Pad |
| 64 | 04021-04 | Nut, Center Lock 5/16-18 |
| 65 | 04040-04 | Flatwasher, 5/16-.344 x .688 x .065 |
| 66 | 04003-12 | Bolt, Carriage 5/16-18 x 3/4" |
| 67 | 45944 | Shaft Weldment |
| 68 | 482295 | Wheel, Anti-Scalp |
| 69 | 04001-46 | Bolt, Hex Head 3/8-16 x 2-1/4" |
| 70 | 483703 | Deck Spring |
| 71 | 43063 | Spacer |
| 72 | 04110-04 | U-Nut, 3/8-16 |
| 73 | 422478 | Bracket, Anti-Scalp Wheel |
| 74 | 04021-05 | Nut, Center Lock 3/8-16 |
| 75 | 48100-15 | Bushing, .376 I.D. Oilite |
| 76 | 481632 | Wheel, Anti-Scalp |
| 77 | 04003-26 | Bolt, Carriage 3/8-16 x 4" |
| 78 | 04017-27 | Bolt, Hex Head Serrated Flange 3/8-16 x 1" |
| 79 | 484368 | Cap, Spindle |
| 80 | 04001-128 | Bolt, Hex Head, 5/8-11 x 3 1/2" |
| 81 | 04021-23 | Nut, Centerlock, 5/8-11 |
| 82 | 04117-01 | Nut, Lock Elastic Stop, 5/16-18 |

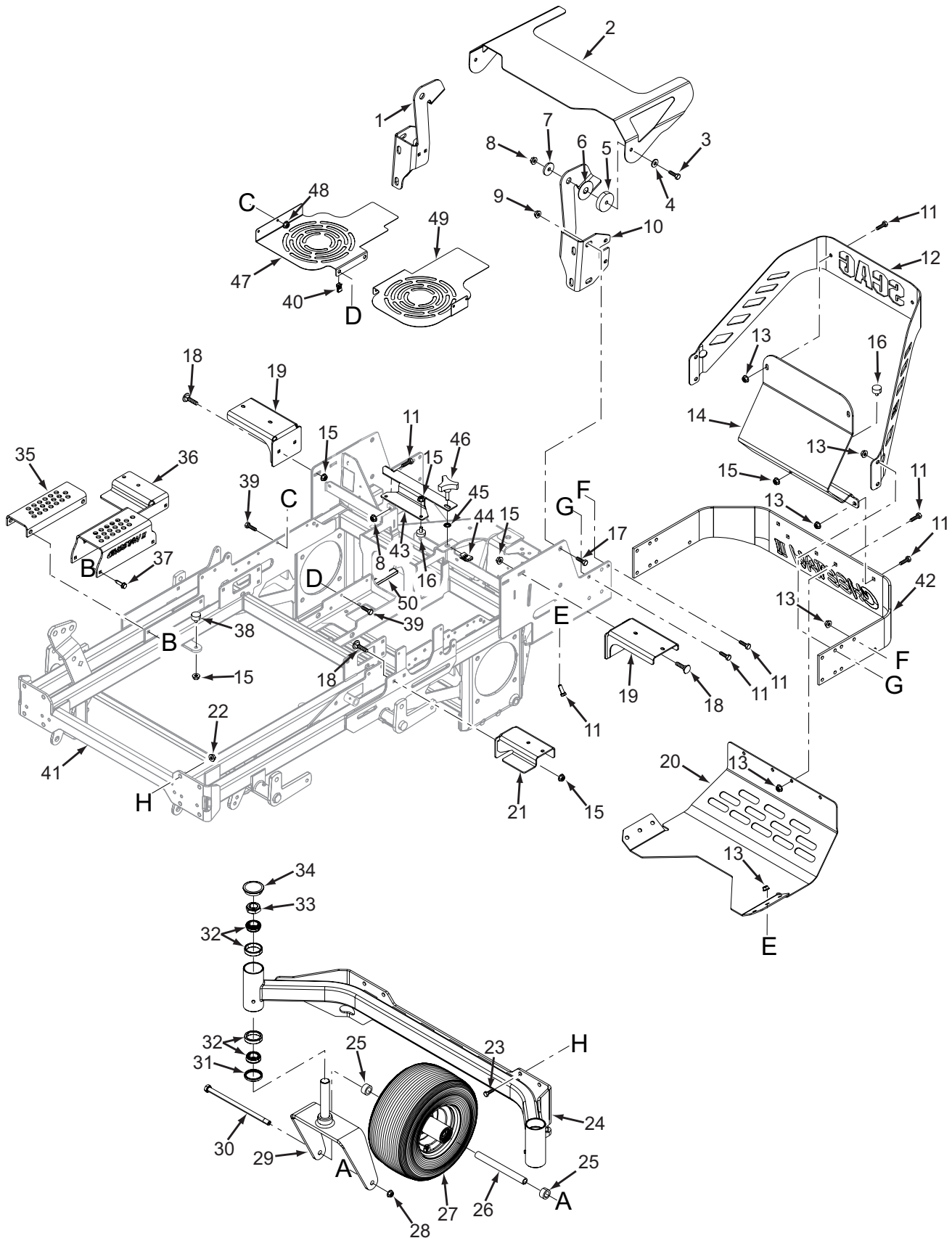
CUTTER DECK CONTROLS



CUTTER DECK CONTROLS

| Ref. No. | Part No. | Description |
|----------|-----------|--|
| 1 | 481477 | Grip, Deck Latch |
| 2 | 462253 | Deck Latch Assembly w/Grip |
| 3 | 43668 | Spacer, Deck Latch |
| 4 | 484191 | Spring, Torsion Return Lever |
| 5 | 483345 | Ring Pin Assembly w/Lanyard |
| 6 | 04059-01 | Pin, Locking |
| 7 | 463235-G | Adjustment Bracket, Upper Cut Height (Scag Gold) |
| | 463235-B | Adjustment Bracket, Upper Cut Height (Black) |
| 8 | 452408 | Adjustment Bracket, Lower Cut Height |
| 9 | 462883 | Slide, Height Adjustment Assembly (INCL. 10,11,12) |
| 10 | 43487 | Pin, Deck Lift |
| 11 | 04050-18 | Retaining Ring, 1/2" External "E" |
| 12 | 484141 | Linkage, Deck Lift |
| | 481765 | Rod End, 1/2-20 RH Female |
| | 481766 | Rod End, 1/2-20 LH Female |
| | 04020-27 | Nut, 1/2-20 UNF Jam |
| | 04020-28 | Nut, 1/2-20 UNF LH Jam |
| 13 | 04001-72 | Bolt, Hex Head 1/2-13 x 2" |
| 14 | 04040-07 | Flatwasher, 1/2-.531 X 1.062 X .095 |
| 15 | 04021-07 | Nut, Lock Elastic Stop, 1/2-13 |
| 16 | 04108-04 | Bolt, 5/8-11 x 1-1/2" |
| 17 | 04030-07 | Lock Washer, 5/8 Spring |
| 18 | 04006-02 | Bolt, 5/16-18 x 1-1/4" |
| 19 | 04001-22 | Bolt, 3/8-16 x 2-3/4" |
| 20 | 04021-09 | Nut, Lock Elastic Stop, 3/8-16 |
| 21 | 04003-12 | Bolt, Carriage, 5/16-18 x 3/4" |
| 22 | 04019-03 | Nut, Serrated Flange, 5/16-18 |
| 23 | 424504 | Pedal, Foot |
| 24 | 04019-04 | Nut, Serrated Flange, 3/8-16 |
| 25 | 04001-136 | Bolt, 3/8-16 x 1-1/2" |
| 26 | 481598 | Spring, Deck Lift |
| 27 | 428214 | Link, Deck Lift |
| 28 | 04040-13 | Flat Washer, 1/2- .562 x 1.375 x .109 |
| 29 | 431018 | Pivot, Deck Link |
| 30 | 04001-153 | Bolt, 1/2-13 x 2-1/4" |
| 31 | 04001-20 | Bolt, 3/8-16 x 1-1/2" |
| 32 | 482628 | Chain Assembly (INCL. 24,31) |
| 33 | 485528 | Lever, Deck Level |
| 34 | 04003-42 | Bolt, Carriage 7/16-14 x 2-1/4" |
| 35 | 04021-11 | Nut, Elastic Stop, 7/16-14 |
| 36 | 481284 | Bumper, Rubber |

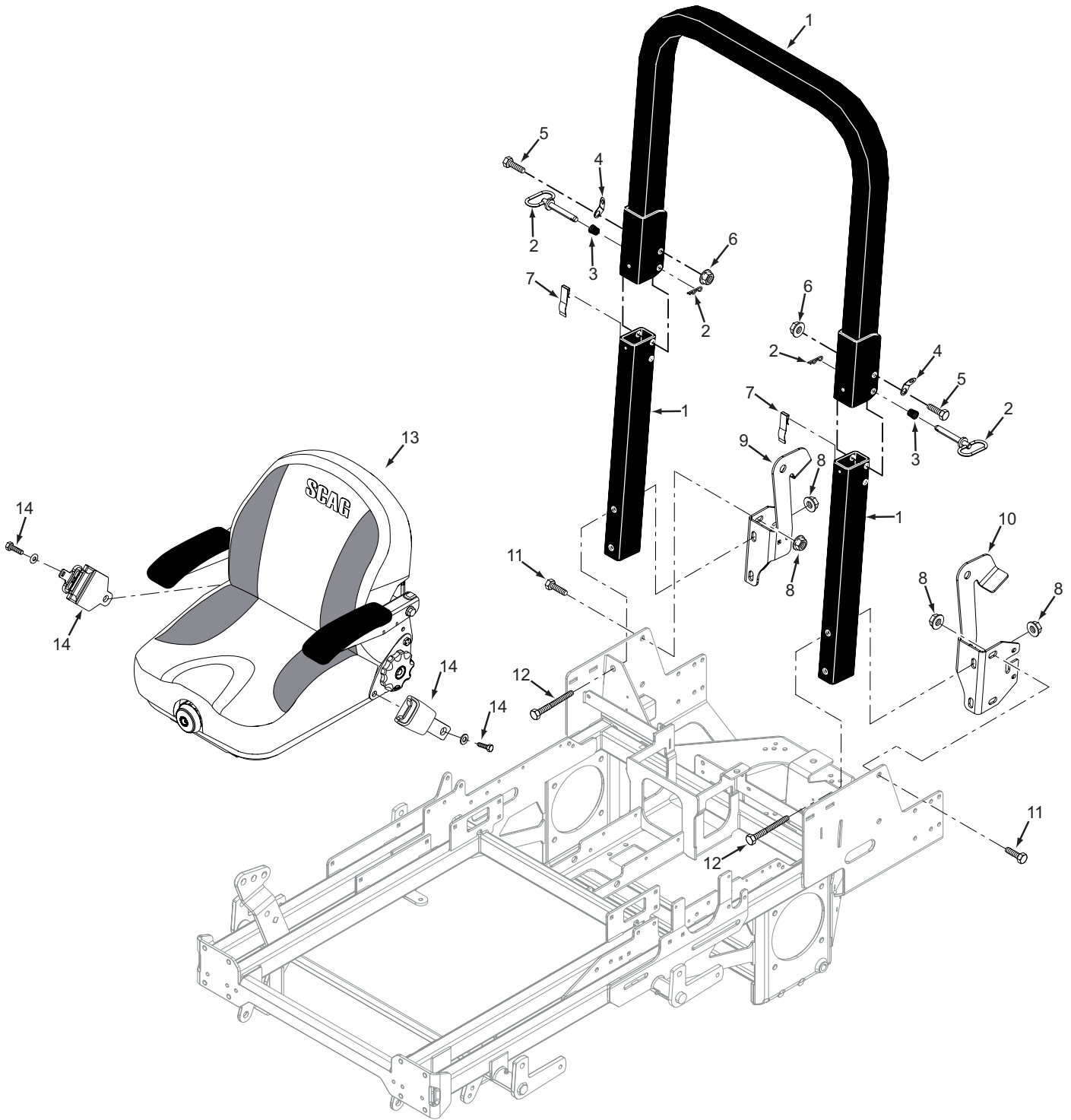
SHEET METAL COMPONENTS



SHEET METAL COMPONENTS

| Ref. No. | Part No. | Description |
|----------|-----------|--|
| 1 | 427178 | Rops Mounting RH |
| 2 | 428312 | Hood, SCZII |
| 3 | 04001-21 | Bolt, 3/8-16 x 1-3/4" |
| 4 | 04041-07 | Flat Washer, 3/8 - .391 x .938 x .105 |
| 5 | 43740 | Spacer, Hood |
| 6 | 483471 | Disc, Anti Friction |
| 7 | 04041-11 | Flat Washer, 3/8 - .406 x 1.5 x 7 Ga |
| 8 | 04021-09 | Nut, Lock Elastic Stop, 3/8-16 |
| 9 | 04117-04 | Nut, Lock Flange Elastic Stop, 1/2-13 |
| 10 | 427177 | Rops Mounting LH |
| 11 | 04001-19 | Bolt, 3/8-16 x 1" |
| 12 | 428202-G | Engine Cover, Sides (Scag Gold) |
| | 428202-B | Engine Cover, Sides (Black) |
| 13 | 04019-04 | Nut, Serrated Flange, 3/8-16 |
| 14 | 428333-G | Engine Cover, Rear (Scag Gold) |
| | 428333-B | Engine Cover, Rear (Black) |
| 15 | 04019-03 | Nut, Serrated Flange, 5/16-18 |
| 16 | 481284 | Bumper, Rubber |
| 17 | 04001-70 | Bolt, 1/2-13 x 1-1/4" |
| 18 | 04003-12 | Bolt, Carriage, 5/16-18 x 3/4" |
| 19 | 428261 | Mounting Bracket, Fuel Tank Rear |
| 20 | 428292-G | Skid Plate, Rear (Scag Gold) |
| | 428292-B | Skid Plate, Rear (Black) |
| 21 | 428233 | Mounting Bracket, Fuel Tank Front |
| 22 | 04117-05 | Nut, Lock Flange Elastic Stop, 7/16-14 |
| 23 | 04001-28 | Bolt, 7/16-14 x 1-1/4" |
| 24 | 452193-G | Caster Support 61V (Scag Gold) |
| | 452193-B | Caster Support 61V (Black) |
| | 452194-G | Caster Support 72V (Scag Gold) |
| | 452194-B | Caster Support 72V (Black) |
| 25 | 43584 | Spacer, Caster Wheel |
| 26 | 43583 | Sleeve, Caster Wheel |
| 27 | 9278 | Caster Wheel Assembly (Scag Gold) |
| | 924C | Caster Wheel Assembly (Black) |
| | 482621 | Bearing |
| | 482622 | Seal |
| 28 | 04021-07 | Nut, Lock Elastic Stop, 1/2-13 |
| 29 | 453110 | Yoke Weldment |
| 30 | 04001-167 | Bolt, 1/2-13 x 9-1/2" |
| 31 | 481025 | Seal, 2" OD x 1.625 Bore |
| 32 | 48668 | Bearing 1" DIA |
| 33 | 04021-20 | Nut, Lock Jam Elastic Stop, 1"-14 |
| 34 | 484195 | Grease Cap |
| 35 | 452408 | Bracket, Lower Cutting Height |
| 36 | 428228 | Bracket, Upper Cutting Height |
| 37 | 04006-02 | Bolt, 5/16-18 x 1-1/4" |
| 38 | 484201 | Bumper, Rubber |
| 39 | 04017-05 | Bolt, Serrated Flange, 1/4-20 x 3/4" |
| 40 | 04110-01 | U-Nut, 1/4-20 |
| 41 | 463242-G | Frame w/ Decals (Scag Gold) |
| | 463242-B | Frame w/ Decals (Black) |
| 42 | 428206-G | Bumper, Rear (Scag Gold) |
| | 428206-B | Bumper, Rear (Black) |
| 43 | 428236-G | Cover, Battery Box (Scag Gold) |
| | 428236-B | Cover, Battery Box (Black) |
| 44 | 04110-03 | U-Nut, 3/8-16 |
| 45 | 04024-02 | Nut, Push-On - 3/8 Thd |
| 46 | 481625-01 | Knob w/ Stud, 3/8-16 x 1-1/4" |
| 47 | 425300-G | Fan Cover, RH (Scag Gold) |
| | 425300-B | Fan Cover, RH (Black) |
| 48 | 04019-02 | Nut, Serrated Flange, 1/4-20 |
| 49 | 425299-G | Fan Cover, LH (Scag Gold) |
| | 425299-B | Fan Cover, LH (Black) |
| 50 | 48661 | Pad, Rubber |

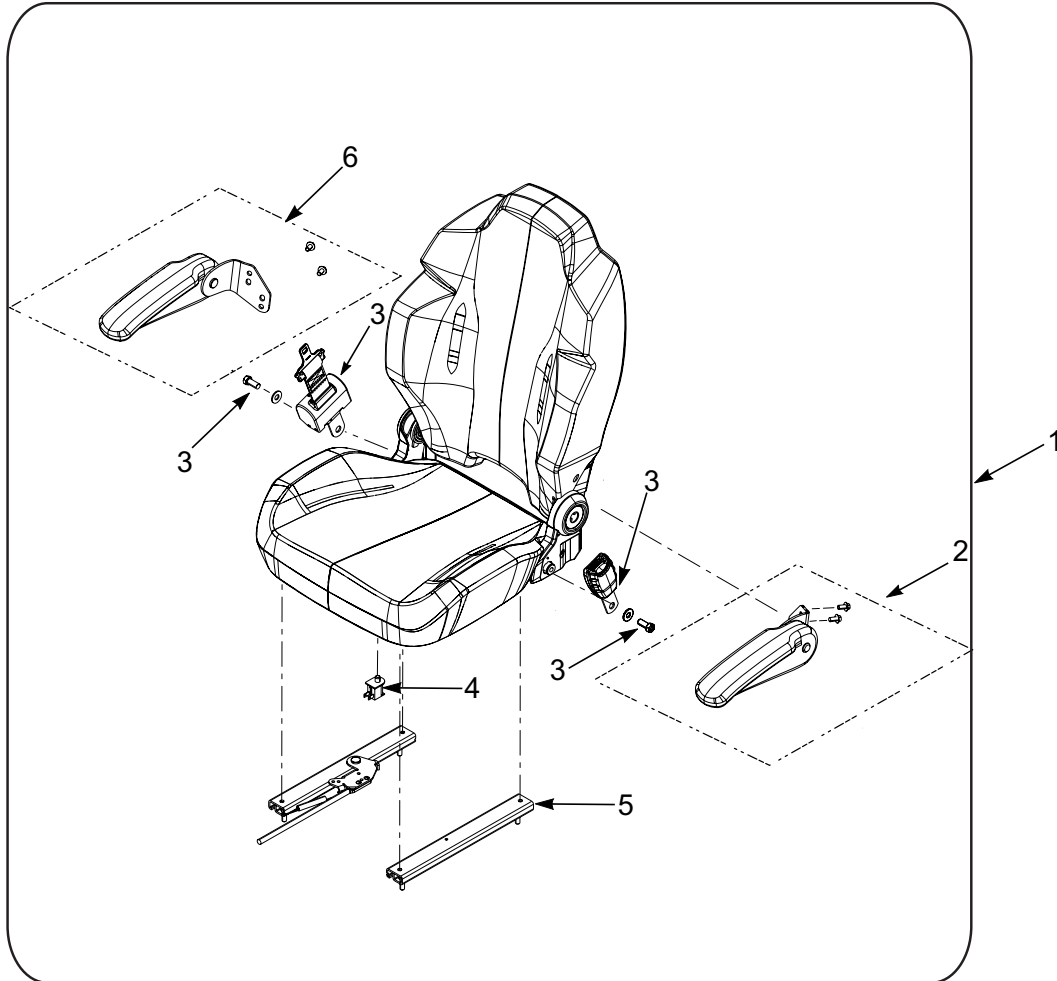
SCZII ROLL-OVER PROTECTION STRUCTURE



SCZII ROLL-OVER PROTECTION STRUCTURE

| Ref. No. | Part No. | Description |
|----------|-----------|--|
| 1 | 462246 | ROPS, Foldable SCZII |
| 2 | 484168 | Pin Assembly (incl. #3, #4) |
| 3 | 484170 | Spring, ROPS |
| 4 | 484169 | Clip, ROPS |
| 5 | 04001-90 | Bolt, Hex Head 1/2-13 x 3-1/4" |
| 6 | 04021-07 | Nut, Elastic Stop 1/2-13 |
| 7 | 484167 | Spring Clip, ROPS |
| 8 | 04117-04 | Nut, Lock Flange Elastic Stop, 1/2-13 |
| 9 | 427178 | Rops Mount RH |
| 10 | 427177 | Rops Mount LH |
| 11 | 04001-70 | Bolt, Hex Head 1/2-13 x 1-1/4" |
| 12 | 04001-194 | Bolt, Hex Head 1/2-13 x 4-1/4" |
| 13 | 486591 | Seat Assembly, Suspension (INCL 14) |
| | 487076 | Seat Assembly (INCL 14) |
| 14 | 484717 | Seat Belt Kit, Retractable, Suspension |
| | 487274 | Seat Belt Kit, Retractable |

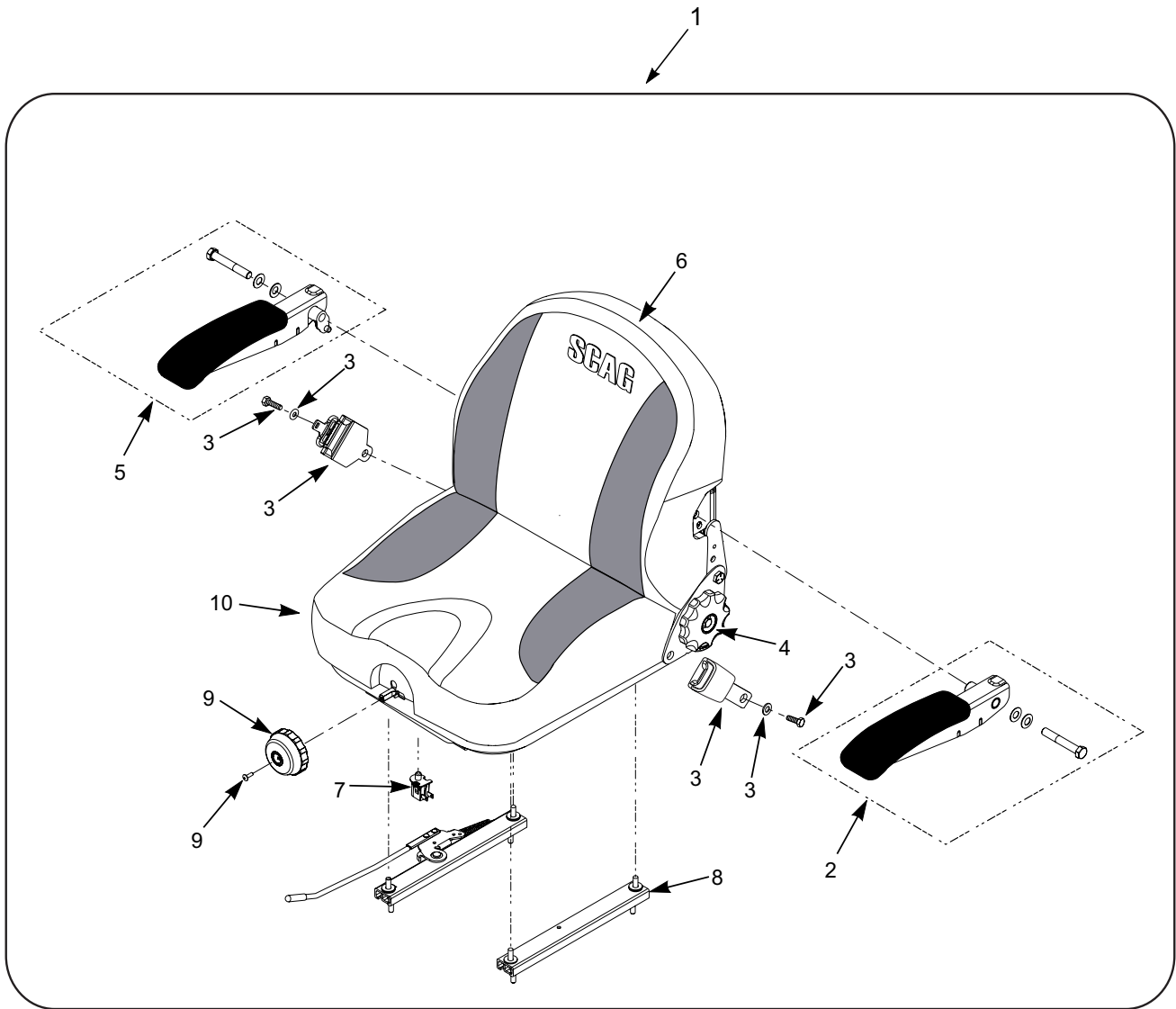
SCZII SEAT ASSEMBLY



SCZII SEAT ASSEMBLY

| Ref. No. | Part No. | Description |
|-----------------|-----------------|-----------------------|
| 1 | 487076 | Seat Assembly - SCZII |
| 2 | 487272 | Armrest Kit, LH |
| 3 | 487274 | Seat Belt Kit |
| 4 | 481638 | Switch, N/O |
| 5 | 487275 | Track Kit |
| 6 | 487273 | Armrest Kit, RH |

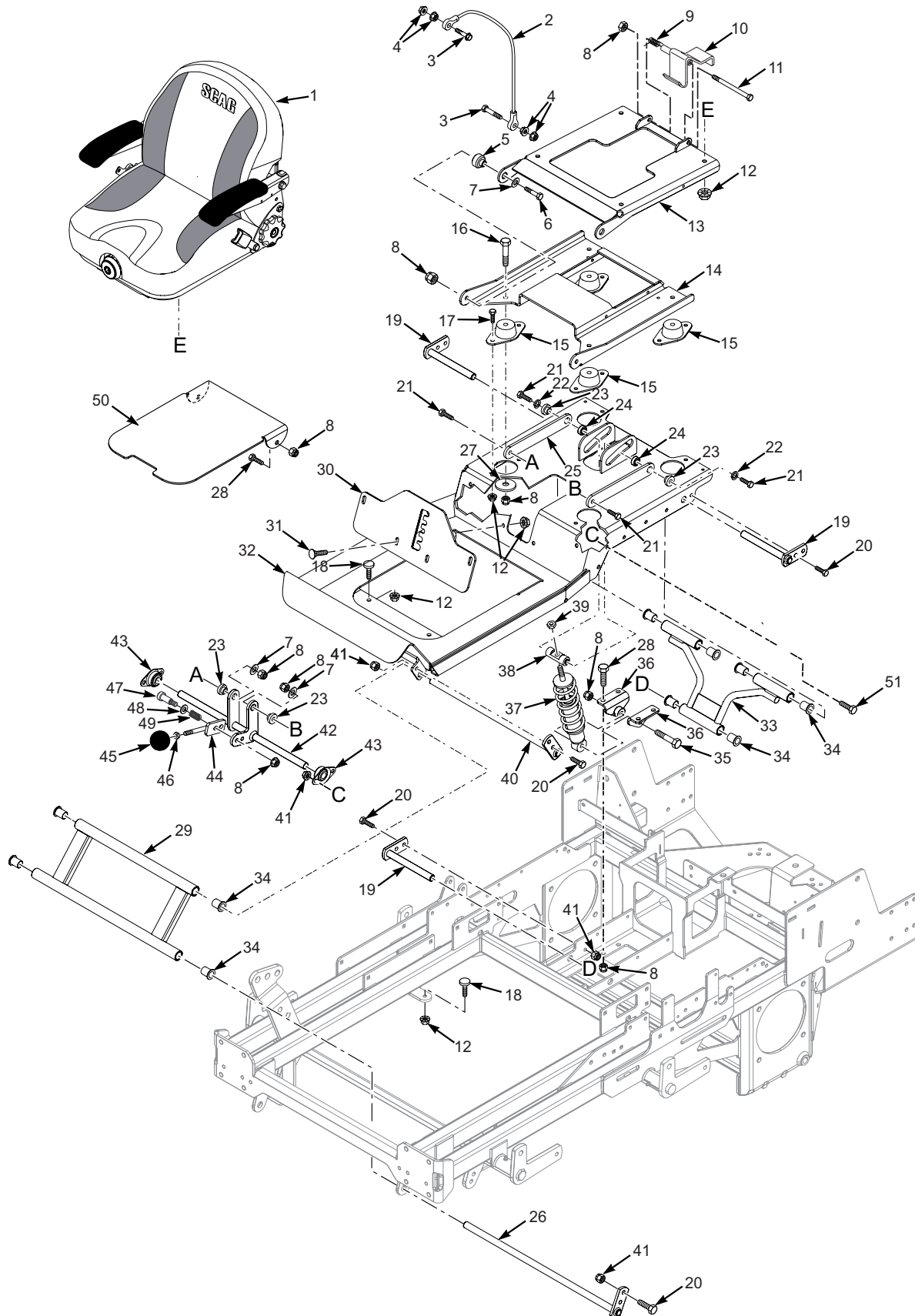
SCZII SUSPENSION SEAT ASSEMBLY



SCZII SUSPENSION SEAT ASSEMBLY

| Ref. No. | Part No. | Description |
|----------|----------|---|
| 1 | 486591 | Suspension Seat Assembly w/seat belt |
| 2 | 484709 | Armrest Kit, LH |
| 3 | 484717 | Seat Belt Kit |
| 4 | 485652 | Recliner Knob Kit |
| 5 | 484710 | Armrest Kit, RH |
| 6 | 486596 | Cover, Back Cushion |
| 7 | 481638 | Seat Switch |
| 8 | 485594 | Track Kit, (Includes Handle Kit p/n 485717) |
| 9 | 484714 | Suspension Knob Kit |
| 10 | 486597 | Cover, Seat Cushion |
| 11 | *484719 | Bellows (Track Cover) |

SCZII SUSPENSION SYSTEM

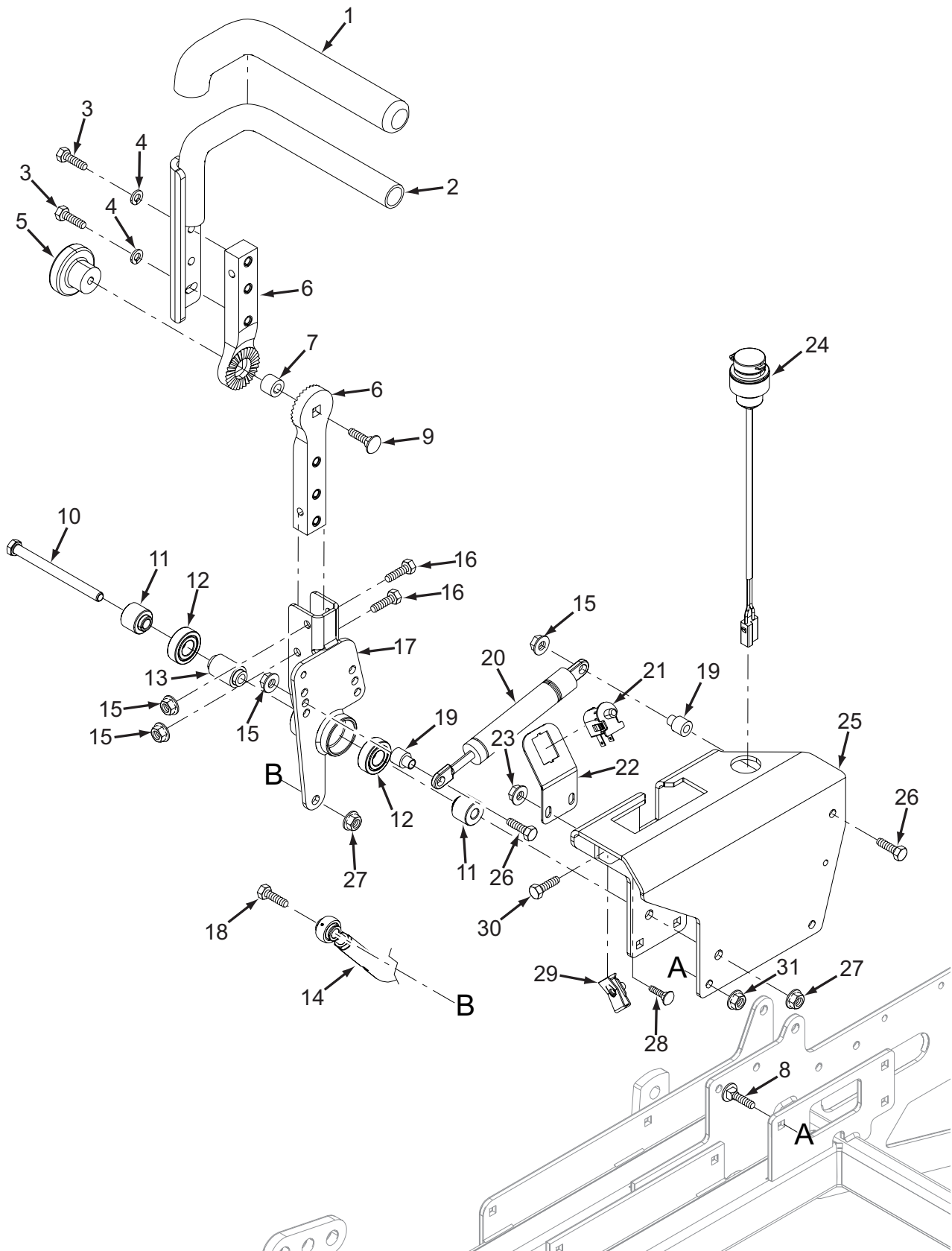


SCZII SUSPENSION SYSTEM

| Ref. No. | Part No. | Description |
|----------|----------------------|--|
| 1 | 486591 487076 | Seat Assembly, Suspension Seat Assembly |
| 2 | 483559 | Cable, Seat Stop |
| 3 | 04001-59 | Bolt, Hex Head 1/4-20 x 1-1/4" |
| 4 | 04019-02 | Nut, Serrated Flange 1/4-20 |
| 5 | 43606 | Sleeve, Seat Base Mount |
| 6 | 04001-45 | Bolt, Hex Head 3/8-16 x 2" |
| 7 | 04041-07 | Flatwasher, 3/8-.391 x .938 x .105 |
| 8 | 04021-09 | Nut, Elastic Stop 3/8-16 |
| 9 | 483371 | Spring, Seat Latch |
| 10 | 452143 | Latch Weldment, Seat |
| 11 | 04001-100 | Bolt, Hex Head 3/8-16 x 6" |
| 12 | 04019-03 | Nut, Serrated Flange 5/16-18 |
| 13 | 463238-G 463238-B | Seat Plate Weldment (Scag Gold) Seat Plate Weldment (Black) |
| 14 | 463236-G 463236-B | Seat Mounting Plate w/Decal (Scag Gold) Seat Mounting Plate w/Decal (Black) |
| 15 | 484148 | Isolator, Seat |
| 16 | 04001-46 | Bolt, Hex Head 3/8-16 x 2-1/4" |
| 17 | 04001-08 | Bolt, Hex Head 5/16-18 x 3/4" |
| 18 | 484201 | Bumper, Rubber |
| 19 | 452152 | Shaft Weldment, Rear Op. Platform Pivot |
| 20 | 04001-09 | Bolt, Hex Head 5/16-18 x 1" |
| 21 | 04001-20 | Bolt, Hex Head 3/8-16 x 1-1/2" |
| 22 | 04030-04 | Lockwasher, 3/8" Spring |
| 23 | 43086 | Bushing |
| 24 | 484035 | Bearing |
| 25 | 425257 | Link, Suspension Seat Tensioner |
| 26 | 452150 | Pin Weldment, Op Platform Lower Pivot |

| Ref. No. | Part No. | Description |
|----------|----------------------|--|
| 27 | 04041-38 | Flatwasher, 3/8-.406 x 2.25 x .188 |
| 28 | 04001-19 | Bolt, Hex Head 3/8-16 x 1" |
| 29 | 463231 | Suspension Pivot Assembly, Front |
| 30 | 463239 | Bracket, Suspension Adjustment w/Decal |
| 31 | 04003-04 | Bolt, Carriage 5/16-18 x 1" |
| 32 | 463237-G 463237-B | Seat Mounting Base w/Decal (Scag Gold) Seat Mounting Base w/Decal (Black) |
| 33 | 462212 | Suspension Pivot Assembly, Rear |
| 34 | 483453-14 | Bearing |
| 35 | 04001-22 | Bolt, Hex Head 3/8-16 x 2-3/4" |
| 36 | 452154 | Mount Weldment, Shock |
| 37 | 484032 | Shock Absorber, Suspension |
| 38 | 484150 | Mount, Suspension Shock |
| 39 | 04021-18 | Nut, Elastic Stop 3/8-24 Grade 8 |
| 40 | 452151 | Pin Weldment, Op Platform Upper Pivot |
| 41 | 04021-10 | Nut, Elastic Stop 5/16-18 |
| 42 | 452107 | Pivot Weldment, Suspension Tensioner |
| 43 | 48796 | Bearing, Self Align 5/8" ID |
| 44 | 452106 | Adjustment Lever, Suspension |
| 45 | 484010 | Knob |
| 46 | 04020-12 | Nut, Jam 3/8-16 |
| 47 | 04009-11 | Bolt, Shoulder 3/8 x 1" |
| 48 | 04040-05 | Flatwasher, 3/8-.406 x .812 x .065 |
| 49 | 483601 | Spring |
| 50 | 428164-G 428164-G | Cover, Foot Plate (Scag Gold) Cover, Foot Plate (Black) |
| 51 | 04001-08 | Bolt, 5/16-18 x 3/4" |

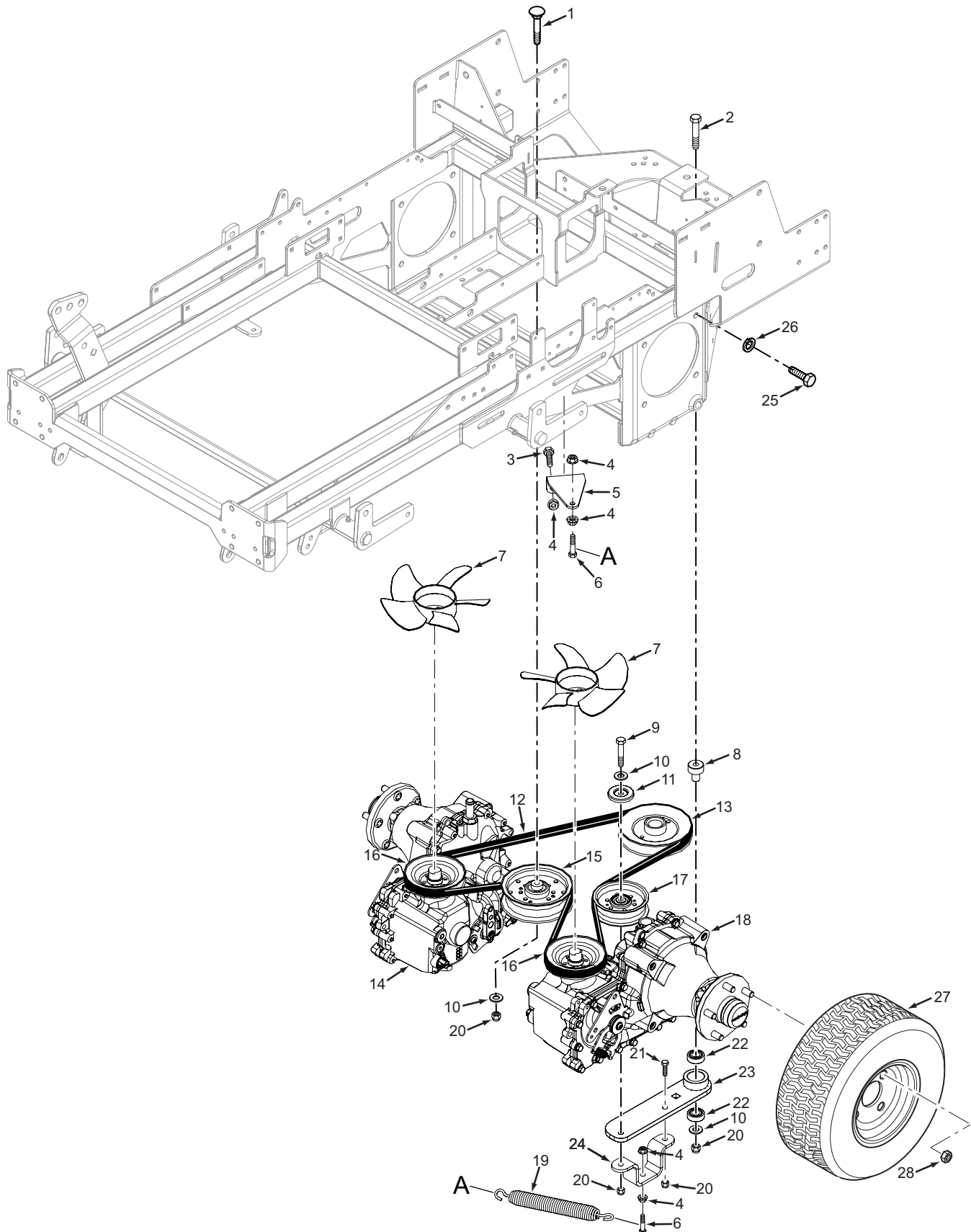
SCZII STEERING COMPONENTS



SCZII STEERING COMPONENTS

| Ref. No. | Part No. | Description |
|----------|----------|--|
| 1 | 484376 | Grip, Control Lever |
| 2 | 462805 | Handlebar w/ Grip RH |
| | 462804 | Handlebar w/ Grip LH |
| 3 | 04001-09 | Bolt, 5/16-18 x 1" |
| 4 | 04030-03 | Lock Washer, 5/16 |
| 5 | 483269 | Knob, Control Handle |
| 6 | 483238 | Pivot, Control Lever |
| 7 | 483250 | Spacer, Rubber |
| 8 | 04003-12 | Bolt, Carriage, 5/16-18 x 3/4" |
| 9 | 04003-05 | Bolt, Carriage, 3/8-16 x 1-1/2" |
| 10 | 04001-23 | Bolt, 3/8-16 x 4-1/2" |
| 11 | 43607 | Spacer, Controls |
| 12 | 48224 | Ball Bearing, Neutral Ret. |
| 13 | 43600 | Spacer, Bearing |
| 14 | 486555 | Steering Link Assembly, SCZII |
| | 486608 | Turnbuckle, 3/8-24 |
| | 486609 | Rod End, Male Trunion, 3/8-24 |
| | 486610 | Rod End, Female Trunion, 3/8-24 |
| | 04020-26 | Nut, 3/8-24 LH Jam |
| | 04020-25 | Nut, 3/8-24 Jam |
| 15 | 04021-10 | Nut, Lock Elastic Stop, 5/16-18 |
| 16 | 04001-12 | Bolt, 5/16-18 x 1-3/4" |
| 17 | 453077 | Pivot Weldment, Control Arm RH |
| | 453076 | Pivot Weldment, Control Arm LH |
| 18 | 04001-20 | Bolt, 3/8-16 x 1-1/2" |
| 19 | 43602 | Spacer, Pump Dampener |
| 20 | 484193 | Dampener, SCZII |
| 21 | 481638 | Switch, N/O |
| 22 | 425905 | Mounting Bracket, Neutral Switch |
| 23 | 04117-03 | Nut, Lock Flanged Elastic Stop, 1/4-20 |
| 24 | 485568 | Power Plug, 12V |
| 25 | 463234 | Control Plate w/ Decals RH |
| | 463233 | Control Plate w/ Decals LH |
| 26 | 04001-11 | Bolt, 5/16-18 x 1-1/2" |
| 27 | 04021-09 | Nut, Lock Elastic Stop, 3/8-16 |
| 28 | 04003-02 | Bolt, Carriage, 1/4-20 x 3/4" |
| 29 | 04110-03 | U-Nut, 3/8-16 |
| 30 | 04107-03 | Bolt, 3/8-16 x 1-1/4" w/ Lock |
| 31 | 04019-03 | Nut, Serrated Flange, 5/16-18 |

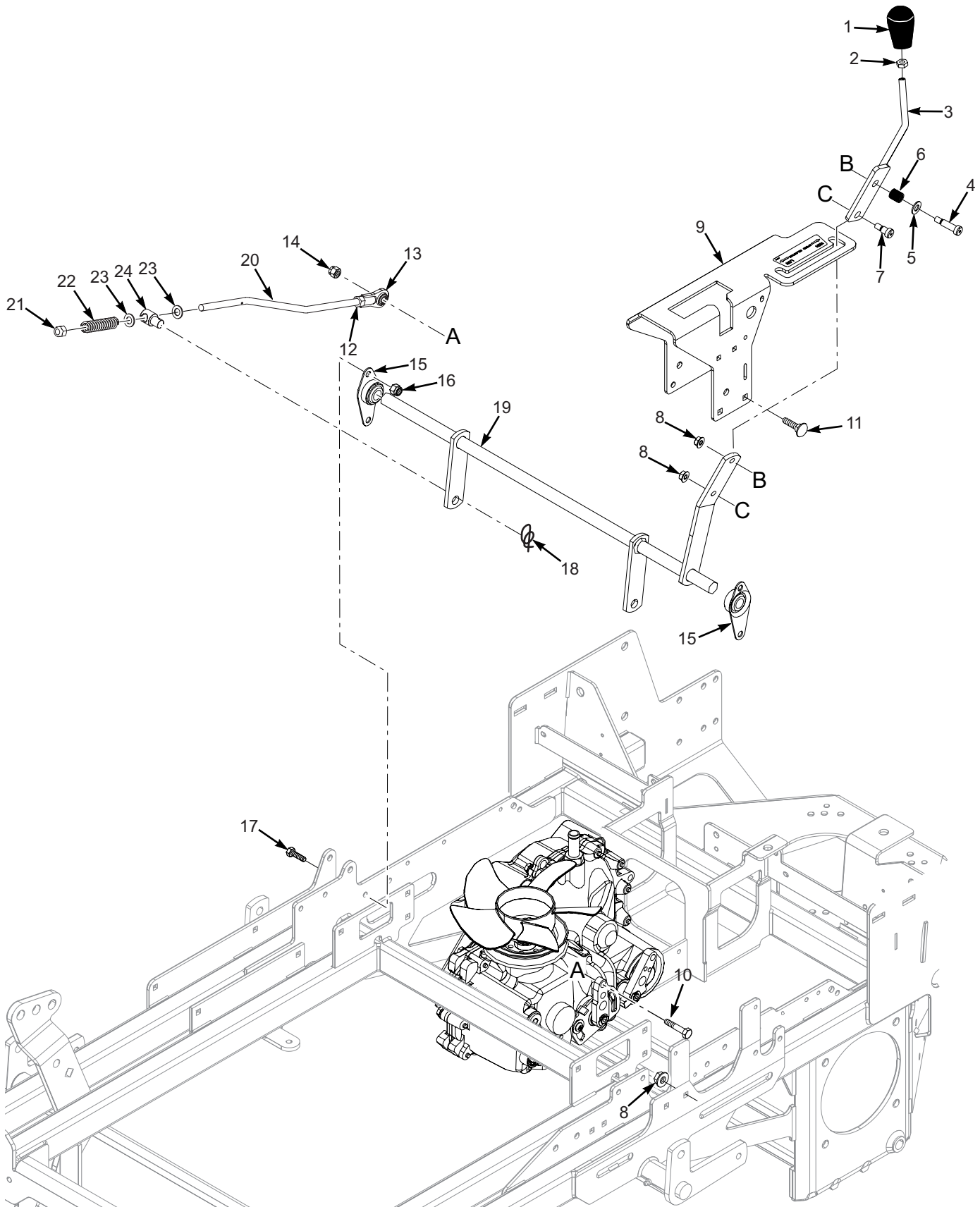
SCZII DRIVE SYSTEM COMPONENTS



SCZII DRIVE SYSTEM COMPONENTS

| Ref. No. | Part No. | Description |
|----------|-----------|---|
| 1 | 04003-21 | Bolt, Carriage 3/8-16 x 2-1/2" |
| 2 | 04001-54 | Bolt, Hex Head 3/8-16 x 3" |
| 3 | 04001-19 | Bolt, Hex Head 3/8-16 x 1" |
| 4 | 04019-04 | Nut, Serrated Flange 3/8-16 |
| 5 | 425385 | Mounting Bracket, Spring - Idler Arm |
| 6 | 04001-136 | Bolt, Hex Head 3/8-16 x 1-1/2" Grade 8 |
| 7 | HG71906 | Kit, Fan / Pulley |
| 8 | 43504 | Pivot, Idler Long |
| 9 | 04001-22 | Bolt, Hex Head 3/8-16 x 2-3/4" |
| 10 | 04043-04 | Flatwasher, 3/8-.391 x .938 x .105 HD |
| 11 | 424367 | Dust Shield |
| 12 | 483165 | Belt, Pump Drive |
| 13 | 484098 | Pulley, 5.80" Dia. - 1.125 Bore |
| 14 | 483798 | Transaxle, RH |
| 15 | 483215 | Pulley, 5" Dia. Idler |
| 16 | HG71906 | Kit, Fan / Pulley |
| 17 | 484128 | Pulley, 4" Dia. Idler |
| 18 | 483797 | Transaxle, LH |
| 19 | 484202 | Spring, Idler Arm |
| 20 | 04021-09 | Nut, Elastic Stop 3/8-16 |
| 21 | 04001-32 | Bolt, Hex Head 3/8-16 x 1-1/4" |
| 22 | 48224 | Bearing |
| 23 | 462259 | Idler Arm Assembly (incl. # 22) |
| 24 | 425386 | Mounting Bracket, Idler |
| 25 | 04001-70 | Bolt, Hex Head 1/2-13 x 1-1/4" |
| 26 | 04030-06 | Lockwasher, 1/2" Spring |
| 27 | 484024 | Wheel Assembly, 24 x 12-12 4-Ply (5-Hole) - (Scag Gold) |
| | 487422 | Wheel Assembly, 24 x 12-12 4-Ply (5-Hole) - (Black) |
| | 484023 | Rim w/Valve Stem (Scag Gold) |
| | 487423 | Rim w/Valve Stem (Black) |
| | 481852 | Tire, 24 x 12-12 4-Ply |
| 28 | 04028-02 | Lug Nut, 1/2-20 |

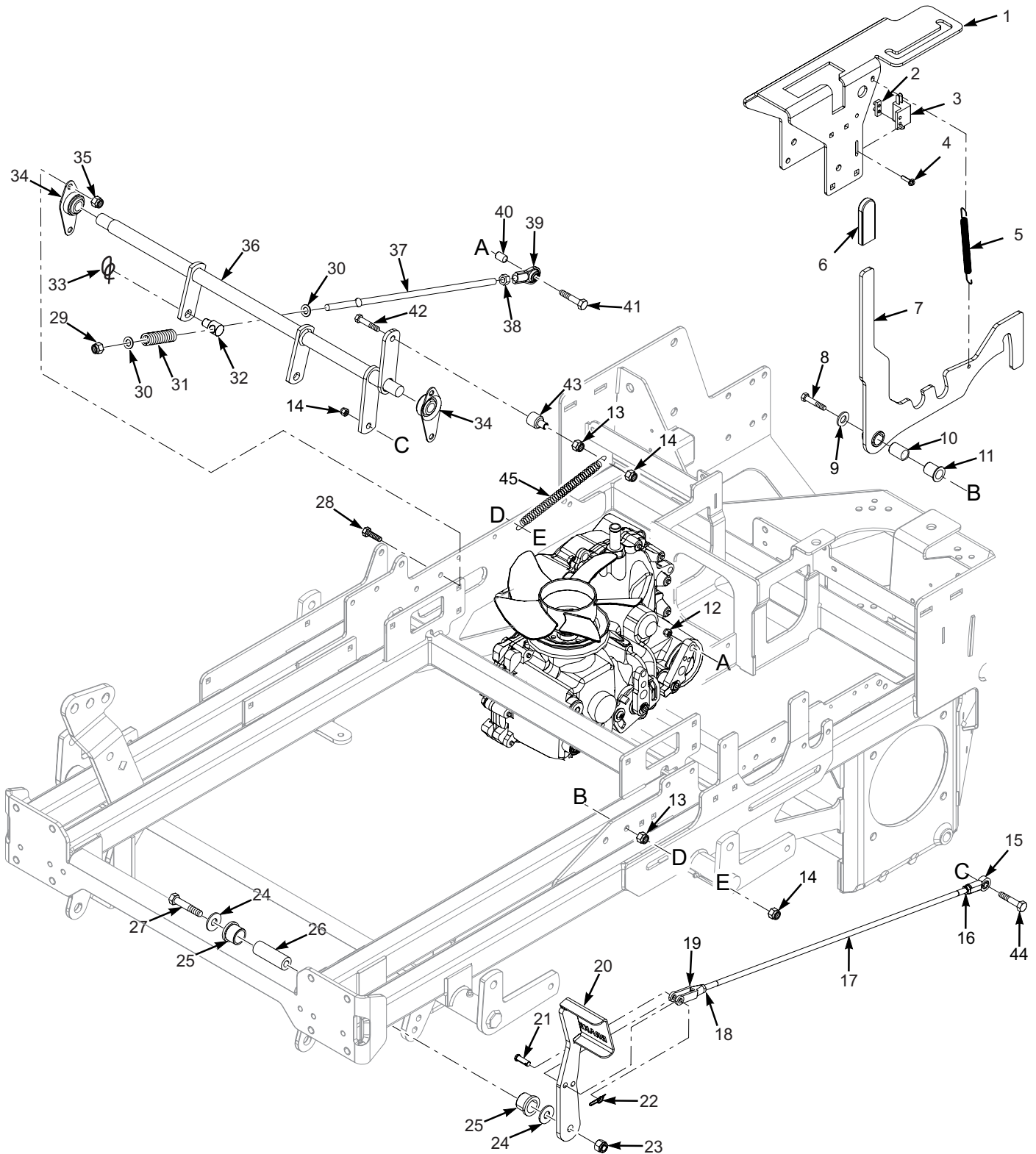
SCZII SPEED CONTROL COMPONENTS



SCZII SPEED CONTROL COMPONENTS

| Ref. No. | Part No. | Description |
|----------|----------|---|
| 1 | 484093 | Knob, Soft Touch |
| 2 | 04020-12 | Nut, Jam 3/8-16 UNC |
| 3 | 453097 | Lever Weldment, Speed Control SCZII |
| 4 | 04009-11 | Bolt, Shoulder 3/8 x 1" |
| 5 | 04040-05 | Flatwasher, 3/8-.406 x .812 x .065 |
| 6 | 483601 | Spring, Speed Control |
| 7 | 04009-14 | Bolt, Shoulder 3/8 x 3/8" |
| 8 | 04019-03 | Nut, Serrated Flange 5/16-18 |
| 9 | 463233 | Control Weldment w/ Decals |
| 10 | 04001-10 | Bolt, Hex Head 5/16-18 x 1-1/4" |
| 11 | 04003-12 | Bolt, Carriage, 5/16-18 x 3/4" |
| 12 | 04020-14 | Nut, 3/8-24 UNF Jam |
| 13 | 484177 | Rod End, 3/8-24 |
| 14 | 04021-04 | Nut, Lock Center Lock, 5/16-18 |
| 15 | 484149 | Bearing, Self Align |
| 16 | 04117-01 | Nut, FLG HH Elastic Stop 5/16-18 |
| 17 | 04001-08 | Bolt, Hex Head 5/16-18 x 3/4" |
| 18 | 04069-02 | Pin, Rue Cotter 1/2" Dia. |
| 19 | 453066 | Speed Control Bellcrank Weldment |
| 20 | 486500 | Speed Linkage Assembly (INCL. 12,13,21,22 |
| 21 | 04021-27 | Nut, Elastic Stop 3/8-24 |
| 22 | 484175 | Spring |
| 23 | 04041-45 | Flatwasher, 3/8-.376/.380 x .734 x .063 |
| 24 | 485317 | Bushing, Pivot |

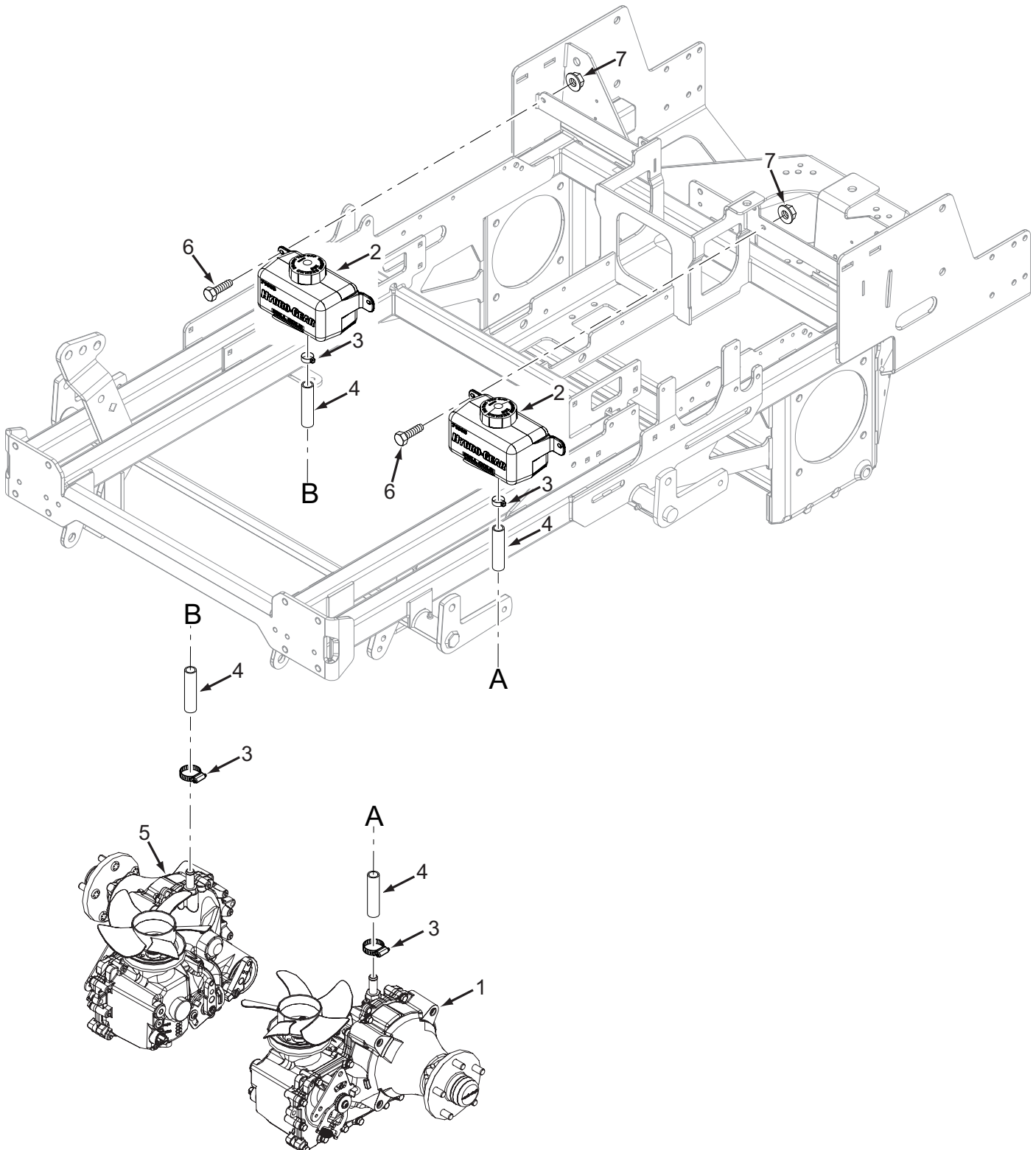
SCZII BRAKE COMPONENTS



SCZII BRAKE COMPONENTS

| Ref. No. | Part No. | Description |
|----------|-----------|--|
| 1 | 463233 | Control Weldment w/ Decal |
| 2 | 422373 | Plate, Threaded |
| 3 | 486616 | Switch, N/C |
| 4 | 04010-12 | Screw, #10-32 x .75 |
| 5 | 483600 | Spring, Brake |
| 6 | 482102 | Grip, Brake Lever |
| 7 | 463192 | Brake Lever w/ Grip |
| 8 | 04001-31 | Bolt, 3/8-16 x 2-1/2" |
| 9 | 04043-04 | Flat Washer, 3/8 - .391 x .938 x .105 |
| 10 | 431047 | Pivot, Brake Lever |
| 11 | 483453-14 | Bearing, .625 ID |
| 12 | 04021-04 | Nut, Lock Center Lock, 5/16-18 |
| 13 | 04021-05 | Nut, Lock Center Lock, 3/8-16 |
| 14 | 04021-09 | Nut, Lock Elastic Stop, 3/8-16 |
| 15 | 48544 | Rod End, 3/8-24 LH Thd |
| 16 | 04020-26 | Nut, 3/8-24 LH Jam |
| 17 | 486575 | Brake Rod Assembly (INCL. 15,16,18,19) |
| 18 | 04020-25 | Nut, 3/8-24 Jam |
| 19 | 48343-04 | Clevis, 3/8-24 |
| 20 | 453138 | Brake Pedal |
| 21 | 04064-02 | Clevis Pin, 3/8 x 1.06 |
| 22 | 04069-01 | Pin, Rue Cotter - 3/8 Dia |
| 23 | 04021-07 | Nut, Lock Elastic Stop, 1/2-13 |
| 24 | 04040-13 | Flat Washer, 1/2- .562 x 1.375 x .109 |
| 25 | 483453-03 | Bearing, 1" ID |
| 26 | 43872 | Sleeve, Brake Pivot |
| 27 | 04001-194 | Bolt, 1/2-13 x 4-1/4" |
| 28 | 04001-08 | Bolt, 5/16-18 x 3/4" |
| 29 | 04021-27 | Nut, Lock Elastic Stop, 3/8-24 |
| 30 | 04041-45 | Flat Washer, 3/8 - .376/.380 x .734 x .063 |
| 31 | 484182 | Spring, Lower Brake |
| 32 | 485317 | Bushing, Pivot Slide |
| 33 | 04069-02 | Pin, Rue Cotter - 1/2" Dia |
| 34 | 484149 | Bearing, Self Align |
| 35 | 04117-01 | Nut, Lock Flange Elastic Stop, 5/16-18 |
| 36 | 453067 | Brake Linkage Weldment |
| 37 | 485321 | Brake Linkage Assembly (INCL. 29,30,31,32,38,39) |
| 38 | 04020-14 | Nut, 3/8-24 |
| 39 | 484177 | Rod End, 3/8-24 Thd 5/16 Bore |
| 40 | 43749 | Spacer, V-link |
| 41 | 04001-195 | Bolt, 5/16-18 x 2-1/2" |
| 42 | 04001-22 | Bolt, 3/8-16 x 2-3/4" |
| 43 | 43503 | Pivot, Idler - Short |
| 44 | 04001-26 | Bolt, 3/8-16 x 1-1/4" |
| 45 | 481343 | Spring, Hopper Door |

SCZII HYDRAULIC SYSTEM



SCZII HYDRAULIC SYSTEM

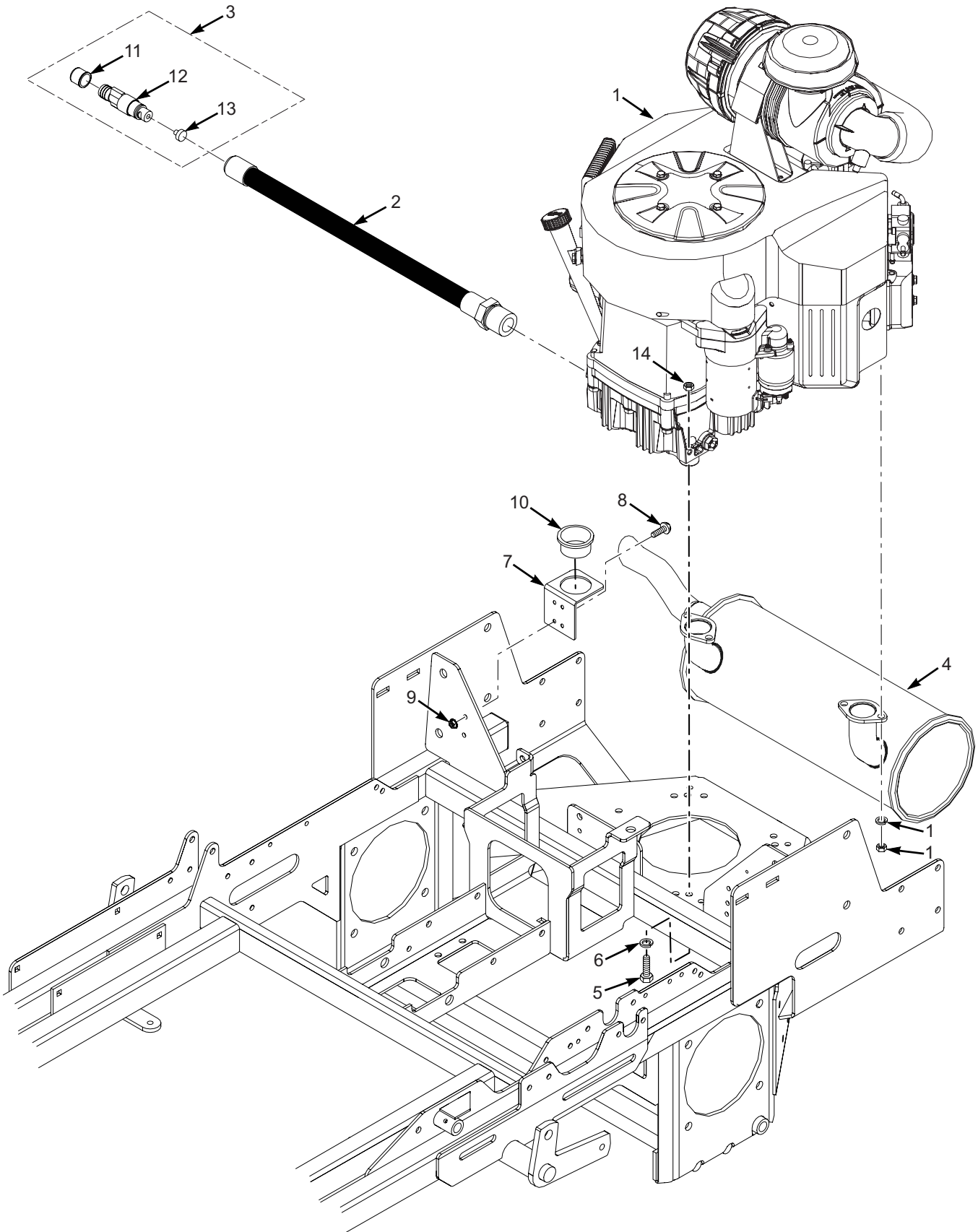
| Ref. No. | Part No. | Description |
|----------|----------|------------------------------------|
| 1 | 483797 | Transaxle, LH |
| 2 | 486568 | Hydraulic Tank, 1,000 ml |
| 3 | 48136-16 | Clamp, 1" Max Dia. |
| 4 | 48504 | Hose, 5/8 Pushlock (order by inch) |
| 5 | 483798 | Transaxle, RH |
| 6 | 04001-01 | Bolt, 1/4-20 x 3/4" |
| 7 | 04019-02 | Nut, Serrated Flange, 1/4-20 |

SCZII FUEL SYSTEM

| Ref. No. | Part No. | Description |
|----------|-----------|--|
| 1 | 484243 | Fuel Gauge |
| 2 | 482571 | Bushing, .56 Dia. Viton |
| 3 | 484286 | Fuel Cap, Tethered |
| | 484297 | Fuel Cap w/Tethered - California Models Only (not shown) |
| 4 | 463273 | Fuel Tank Assembly, RH (incl. #1, 2, 5, 6, 22, 23) |
| 5 | 484242 | Grommet |
| 6 | 484553 | Fuel Tube Assembly, RH |
| 7 | 48059-01 | Clamp, Fuel Hose 1/4" ID |
| 8 | 483617 | Fuel Hose, 1/4" Non-Perm (order by inch) |
| 9 | ** | Fuel Filter |
| 10 | 482212 | Valve, Fuel Shut-Off |
| 11 | 428233 | Mounting Bracket, Fuel Tank Front |
| 12 | 484552 | Fuel Tube Assembly, LH |
| 13 | 463272 | Fuel Tank Assembly, LH (incl. #1, 2, 5, 12, 22, 23) |
| 14 | 428261 | Mounting Bracket, Fuel Tank Rear |
| 15 | 04040-15 | Flatwasher, 5/16-.375 x .875 x .083 |
| 16 | 04030-03 | Lockwasher, 5/16" Spring |
| 17 | 04001-08 | Bolt, Hex Head 5/16-18 x 3/4" |
| 18 | 463235-G | Adjustment Bracket, Upper Cut Height (Scag Gold) |
| | 463235-B | Adjustment Bracket, Upper Cut Height (Black) |
| 19 | 427177 | Rops Mounting Bracket LH |
| 20 | 48136-17 | Clamp |
| 21 | 484342 | Carbon Canister |
| | 484366 | Dust Filter, Carbon Canister |
| 22 | 484285 | Grommet, Viton |
| 23 | 484333 | Remote Vent |
| 24 | 48059-02 | Clamp, Fuel Hose 7/32" |
| 25 | 484347 | Hose, 1/4" Vapor Recovery (order by inch) |
| 26 | 48059-02 | Clamp, Fuel Hose 7/32" |
| 27 | 484343-01 | Mender, 1/4 x 3/16 w/.02 Hole |
| 28 | 48059-05 | Clamp, Vapor Recovery Hose 3/16" |
| 29 | 484345 | Hose, 3/16" |
| 30 | 484279-01 | Tube, Fuel Tank Insert |
| 31 | 427178 | Rops Mounting Bracket RH |
| 32 | 428229 | Plate, LH Fuel Tank |
| 33 | 428195 | Plate, RH Fuel Tank |
| 34 | 04017-04 | Bolt, Serrated Flange 1/4-20 x 1/2" |
| 35 | 04015-11 | Screw, 5/16-18 x 3/4" |
| 36 | 486672 | Light Assembly |
| 37 | 48935-02 | Tee, 3/16 x 3/16 x 3/16 Union - Hose Barb |

** Available through the individual engine manufacturer.

SCZII ENGINE & ATTACHING PARTS



SCZII ENGINE & ATTACHING PARTS

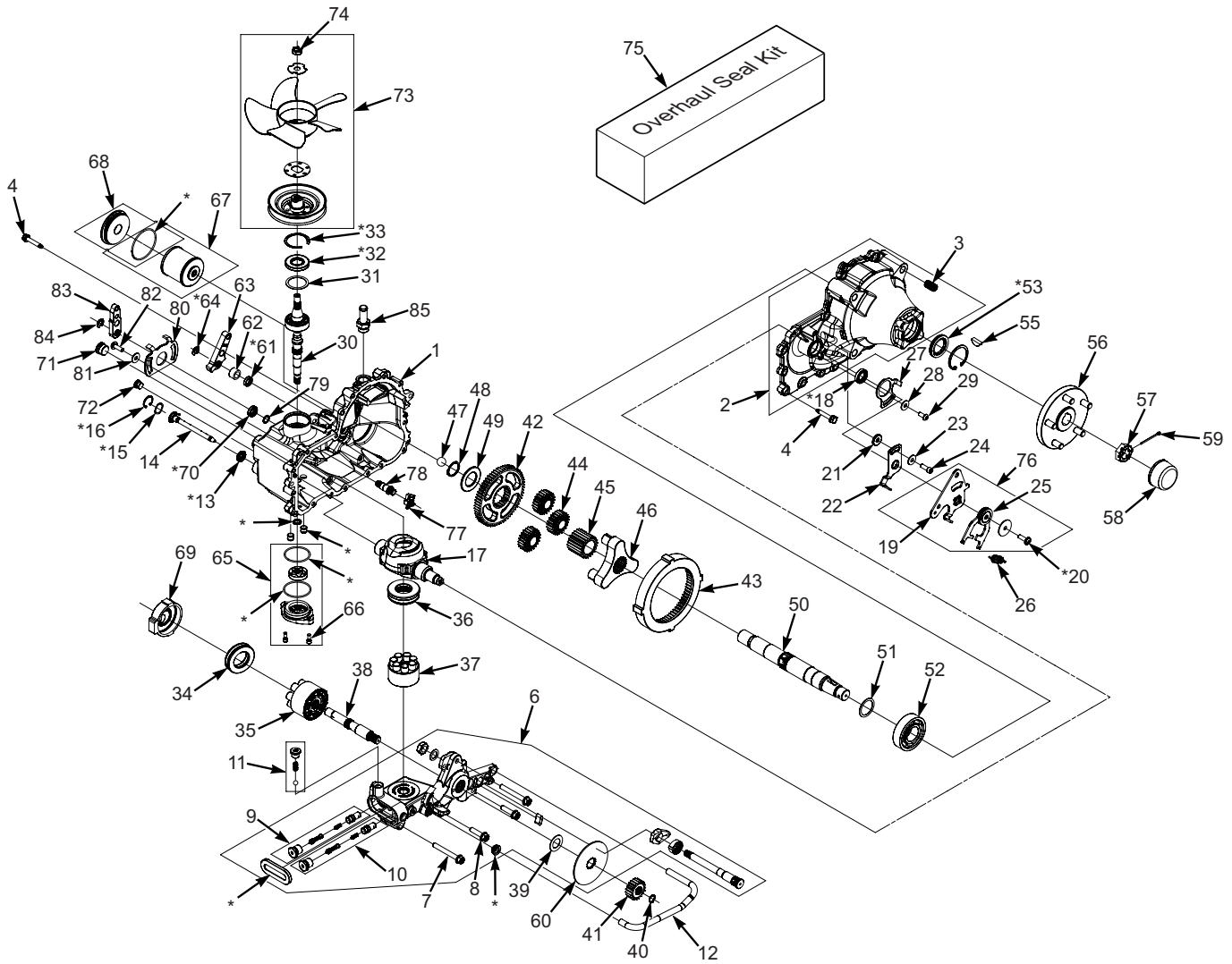
| Ref. No. | Part No. | Description |
|----------|-----------|---|
| 1 | **485033 | Engine, Kawasaki 31FX - (FX921) |
| | **486726 | Engine, Kawasaki 38FX-EFI (FX1000) |
| | **486516 | Engine, Briggs & Stratton 37 BV-EFI (#61A7) |
| | **487604 | Engine, Briggs & Stratton 40BV-EFI (#61G8) |
| | **487294 | Engine, Kohler 38CV-EFI (ECV940) |
| 2 | 484581 | Hose, Oil Drain, Kawasaki (incl. # 3) |
| | 484599 | Hose, Oil Drain, Briggs & Stratton (incl. # 3) |
| | 484597 | Hose, Oil Drain, Kohler (incl. # 3) |
| | ***484706 | Hose, Oil Drain, Briggs & Stratton (incl. # 3) |
| 3 | 484583 | Valve Assembly, Oil Drain |
| 4 | 486648 | Muffler, Kawasaki - FX921 |
| | *486660 | Pipe, Muffler Extension - FX921 |
| | *48633 | Muffler Clamp - FX921 |
| | 486108 | Muffler, Briggs & Stratton - 37 BV-EFI |
| | *486659 | Pipe, Muffler Extension - 37 BV-EFI / 38CV-EFI / 40BV-EFI |
| | *484291 | Clamp, Muffler - 1-3/4" - 37 BV-EFI / 38CV-EFI / 40BV-EFI |
| | 487617 | Muffler, Briggs & Stratton 40BV-EFI |
| | 487293 | Muffler, Kohler - 38CV-EFI |
| 5 | 04001-32 | Bolt, 3/8-16 x 1-1/4" |
| | 04001-20 | Bolt, 3/8-16 x 1-1/2" (37BV-EFI / 38CV-EFI) |
| 6 | 04030-04 | Lockwasher, 3/8" Spring (31FX) |
| 7 | 425975-G | Bracket, Oil Drain Hose (Scag Gold) |
| | 425975-B | Bracket, Oil Drain Hose (Black) |
| 8 | 04010-32 | Screw, #8-32 x 5/8" |
| 9 | 04021-17 | Nut, Elastic Stop #8-32 |
| 10 | 484617 | Bushing, Thick Panel Snap |
| 11 | 484585 | Cap |
| 12 | 48603-12 | O-Ring |
| 13 | 484586 | Seal |
| 14 | 04134-03 | Nut, Lock Flange Top Lock, 3/8-16 (37BV-EFI / 38CV-EFI) |

* Not Shown

** Available through the individual engine manufacturer.

| | | |
|---|--------------------------------|-----------------------------|
| Serial Number Range for SCZII-61V-37BV models produced with produced with Briggs & Stratton 37 BV-EFI Engine | | |
| SCZII-61V-37BV-EFI | with a serial number of | X5500001 to X5500024 |
| Always use the entire serial number listed on the serial number tag when referring to this product. | | |

ZT-5400 TRANSAXLE ASSEMBLY



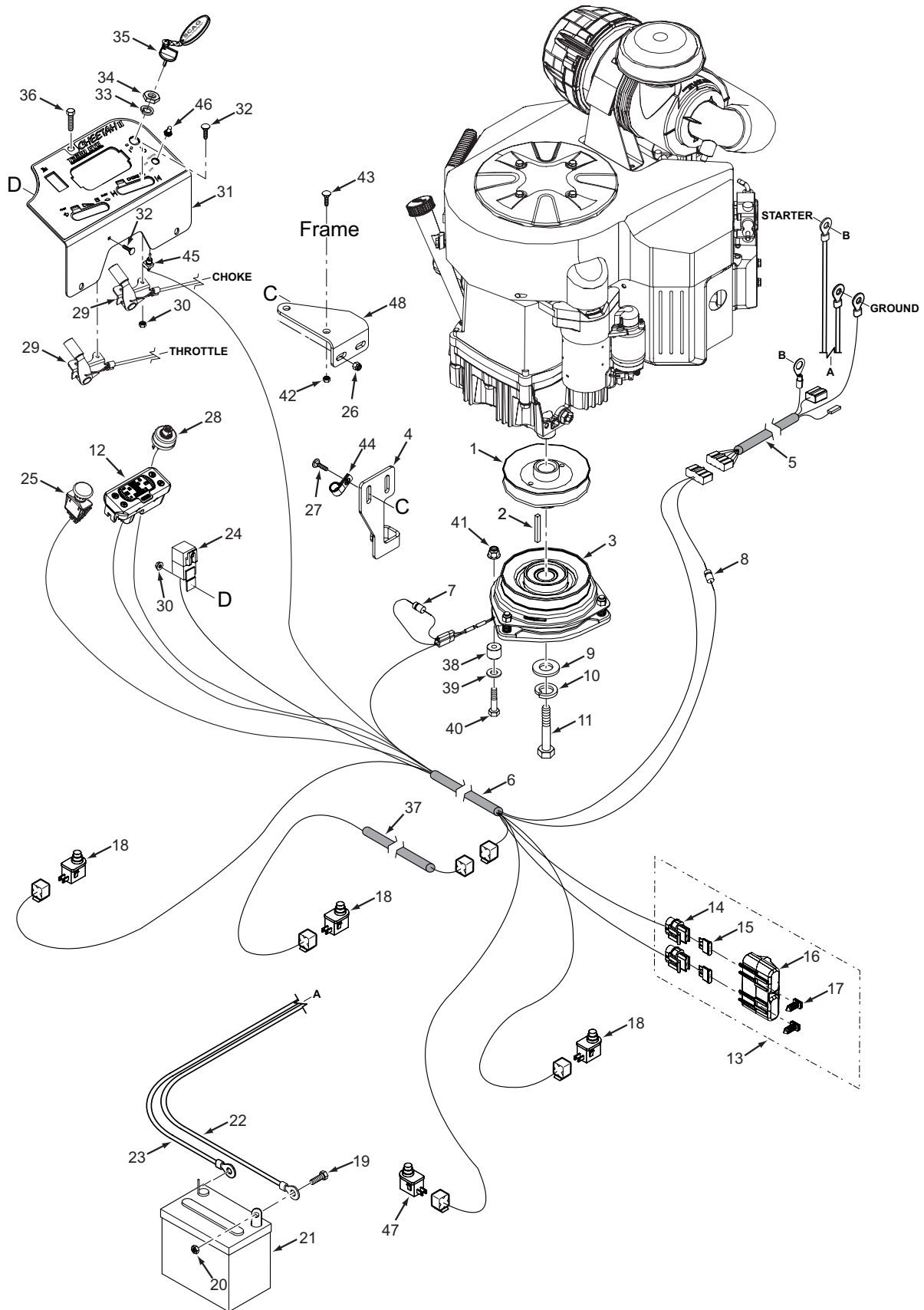
* - Included with Seal Kit Item # 75

ZT-5400 TRANSAXLE ASSEMBLY

| Ref. No. | Part No. | Description |
|----------|----------|--|
| 1 | HG71946 | Kit, Housing Main, LH |
| | HG71947 | Kit, Housing Main, RH |
| 2 | HG71948 | Kit, Housing Side, LH |
| | HG71948 | Kit, Housing Side, RH |
| 3 | HG52973 | Insert, 1/2-13 x 1-1/2" UNC |
| 4 | HG52974 | Screw, Hex Flange 5/16-18 x 1-1/2" |
| 5 | HG50928 | Tube, Sealant |
| 6 | HG71995 | Kit, Center Section, LH |
| | HG71996 | Kit, Center Section, RH |
| 7 | HG52977 | Bolt, Hex Flange 3/8-16 x 3" |
| 8 | HG52137 | Screw, Hex Flange Head 3/8-16 x 1-1/2" |
| 9 | HG71952 | Kit, Shock Valve |
| 10 | HG71952 | Kit, Shock Valve |
| 11 | HG71999 | Kit, Charge Relief |
| 12 | HG52984 | Tube, Filter, LH |
| | HG52983 | Tube, Filter, RH |
| 13 | HG53197 | Seal, Lip 12x 24 x 5 TC |
| 14 | HG71940 | Kit, Bypass Actuator |
| 15 | HG53321 | Spring, Wave |
| 16 | HG53322 | Ring, Retaining, HO-100 |
| 17 | HG52972 | Swash Plate, 16cc. Machined |
| 18 | HG52989 | Seal, Lip 22 x 32 x 7 |
| 19 | HG53222 | Arm, Control, LH |
| | HG53221 | Arm, Control, RH |
| 20 | HG51812 | TWHCS, 5/16-18 x 1" (Patch) |
| 21 | HG52527 | Spacer, .320 x 1.005 x .179 |
| 22 | HG51946 | Arm, Neutral, LH |
| | HG51945 | Arm, Neutral, RH |
| 23 | HG44130 | Washer, .34 x .88 x .06 |
| 24 | HG51616 | SHCS, 5/16-24 x .875 (Patch) |
| 25 | HG52433 | Assembly, RTN Uni-Directional (CCW) LH |
| | HG52434 | Assembly, RTN Uni-Directional (CW) RH |
| 26 | HG51605 | Spring, Extension, RTN - 44lbs |
| 27 | HG53190 | Plate, Stop, LH |
| | HG53189 | Plate, Stop, RH |
| 28 | HG44130 | Washer, .34 x .88 x .06 |
| 29 | HG53519 | HBHCS, 5/16-18 x 3/4" |
| 30 | HG71941 | Kit, Input Shaft |
| 31 | HG51279 | Spacer |
| 32 | HG51280 | Seal, Lip 25 x 52 x 7 TC |
| 33 | HG52650 | Ring, Retaining Internal |
| 34 | HG53341 | Bearing, Thrust 42 x 68 x 16 |
| 35 | HG70082 | Kit, Cylinder Block - 21cc. |
| 36 | HG52991 | Bearing, Thrust 35 x 70 x 22 |
| 37 | HG70735 | Kit, Cylinder Block - 16cc. |
| 38 | HG52992 | Shaft, Motor |
| 39 | HG52993 | Washer, .89 x 1.50 x .04 |
| 40 | HG44145 | Ring, Retaining |
| 41 | HG52994 | Gear, 19T |
| 42 | HG52996 | Gear, 65T |
| 43 | HG52998 | Gear, Ring 68T |
| 44 | HG52999 | Gear, Planet 23T |
| 45 | HG53000 | Gear, Sun 22T |

| Ref. No. | Part No. | Description |
|----------|----------------|----------------------------------|
| 46 | HG53001 | Carrier |
| 47 | HG53002 | Ball, Thrust .75 |
| 48 | HG53003 | Ring, Retaining 1-1/4" |
| 49 | HG53004 | Spacer, Thrust, Axle |
| 50 | HG53005 | Shaft, Axle |
| 51 | HG53006 | Washer, 1.40 x 1.75 x .05 |
| 52 | HG53007 | Bearing, Ball 35 x 80 x 21 |
| 53 | HG53008 | Seal, Lip 1.375 x 2.062 x .250 |
| 54 | HG50859 | Ring, Retaining Internal |
| 55 | HG51796 | Key, Shaft, Axle |
| 56 | HG72039 | Kit, Hub, 5-Bolt |
| 57 | HG51821 | Nut, Hex 1-20 Slotted |
| 58 | HG53724 | Cap, Axle |
| 59 | HG51822 | Pin, Cotter 9/64 x 2" |
| 60 | HG53012 | Rotor, Brake |
| 61 | HG53015 | Seal, .56 x .88 x .19 |
| 62 | HG53356 | Spacer, .57 x .86 x .53 |
| 63 | HG53018 | Handle, Actuating |
| 64 | HG53019 | Ring, Retaining |
| 65 | HG71942 | Kit, Charge Cover |
| 66 | HG9007300-2510 | Screw, 1/4-20 x .625 |
| 67 | HG71943 | Kit, Filter |
| 68 | HG71944 | Kit, Filter Plug |
| 69 | HG53026 | Plate, Motor Swash |
| 70 | HG9008000-0127 | Seal, 15 x 24 x 7 |
| 71 | HG9005110-8700 | Plug, 7/8-14 |
| 72 | HG9005110-5600 | Plug, 9/16-18 |
| 73 | HG71906 | Kit, Fan/Pulley |
| 74 | HG44133 | Nut, Hex 1/2-20 w/Patch |
| 75 | HG73190 | Seal Kit |
| 76 | HG72002 | Kit, RTN Bi-Directional LH |
| | HG72001 | Kit, RTN Bi-Directional RH |
| 77 | HG53028 | Cam, 2-Speed |
| 78 | HG53029 | Shaft, 2-Speed, Bevel |
| 79 | HG53030 | Ring, Retaining External .59" |
| 80 | HG53034 | Arm, Lock Down 2-Speed |
| 81 | HG44130 | Washer, .34 x .88 x .06 |
| 82 | HG53519 | HBHCS, 5/16-18 x 3/4" |
| 83 | HG53193 | Handle, Actuating |
| 84 | HG53019 | Ring, Retaining External .375" |
| 85 | HG53037 | Fitting, 7/8-14 SAE, .625 Beaded |

SCZII ELECTRICAL SYSTEM



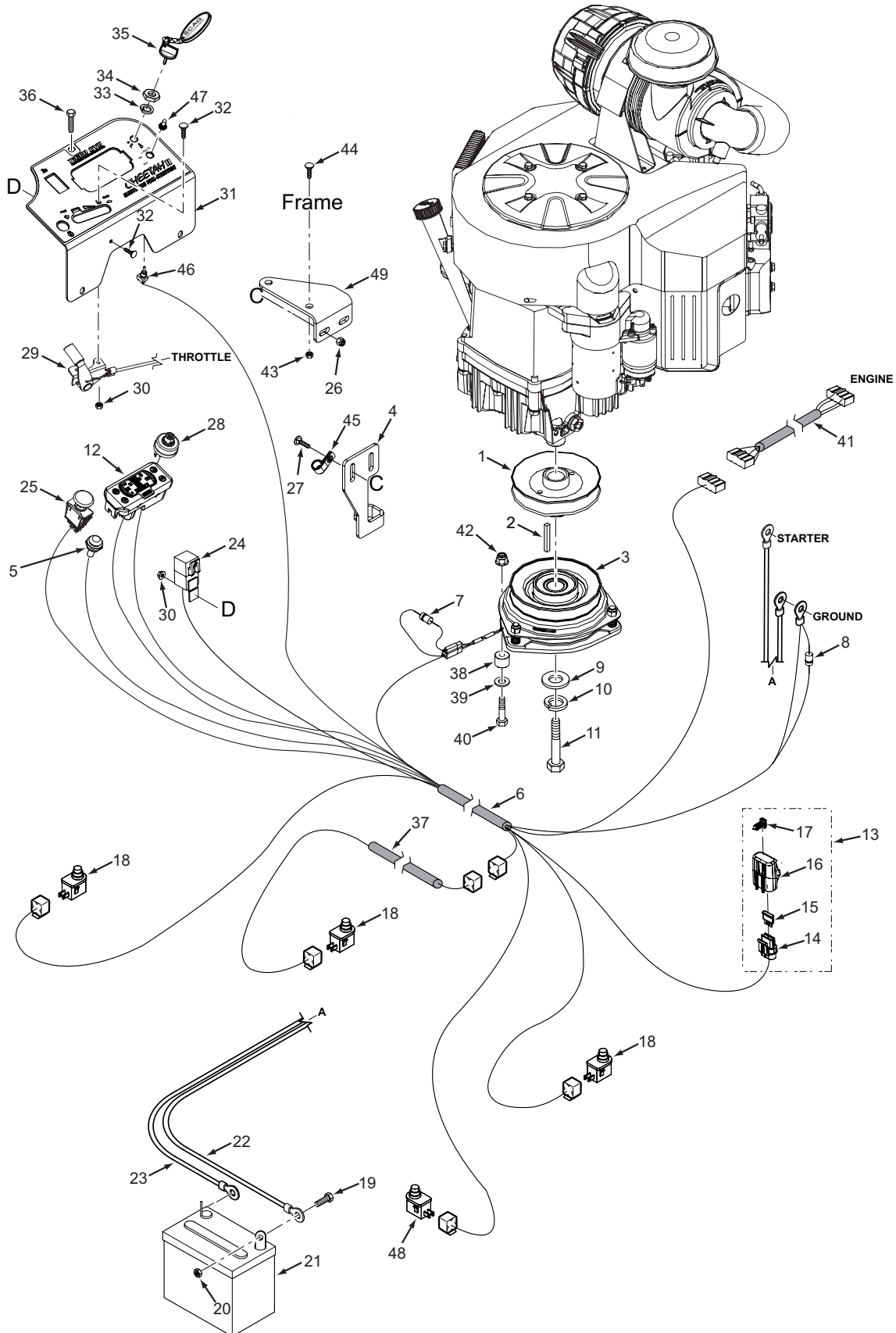
SCZII ELECTRICAL SYSTEM

| Ref. No. | Part No. | Description |
|----------|----------|---|
| 1 | 484098 | Pulley, 5.80 Dia. - 1.125 Bore |
| 2 | 04063-23 | Key, 1/4 x 1/4 x 3-1/4" |
| 3 | 461826 | Electric Clutch w/Tag - GT-5 (FX921) |
| 4 | 426950 | Bracket, Anti-Rotation |
| 5 | 485678 | Wire Harness Adapter, Kawasaki |
| 6 | 486503 | Wire Harness, SCZII |
| 7 | 483958 | Diode, 600V - 6A |
| 8 | 482253 | Diode |
| 9 | 04041-28 | Flatwasher, 7/16-.469 x 1.75 x .25 |
| 10 | 04030-05 | Lockwasher, 7/16" Spring |
| 11 | 04102-03 | Bolt, Hex Head 7/16-20 x 2-1/4" w/Patch |
| 12 | 484721 | Tiger Eye Cluster Gauge |
| 13 | 483642 | Double Fuse Assembly (incl. # 14, 15, 16, 17) |
| 14 | 483629 | Fuse Holder |
| 15 | 48298 | Fuse, 20 Amp |
| 16 | 483571 | Cover, Sealed Double |
| 17 | 482588 | Clip, Wire |
| 18 | 481638 | Switch, N.O. |
| 19 | 04001-44 | Bolt, Hex Head 1/4-20 x 1/2" |
| 20 | 04020-02 | Nut, 1/4-20 |
| 21 | * | Battery |
| 22 | 48029-11 | Battery Cable, 27" Black |
| 23 | 48029-13 | Battery Cable, 25" Red |
| | **48126 | Rubber Boot |
| 24 | 483013 | Relay |
| 25 | 485833 | Switch, PTO - 10 Amp |
| 26 | 04117-01 | Nut, FLF HH Elastic Stop 5/16-18 |
| 27 | 04003-04 | Bolt, Carriage 5/16-18 x 1" |
| 28 | 48798 | Keyswitch w/Hardware |
| 29 | 481544 | Control Cable (Kawasaki FX921 Choke Cable) |
| | 481363 | Control Cable (Kawasaki FX921 Throttle Cable) |
| 30 | 04021-26 | Nut, Elastic Stop #10-24 |
| 31 | 463241 | Instrument Panel w/Decal |
| 32 | 04003-43 | Bolt, Carriage #10-24 x 1/2" |
| 33 | 48017-03 | Lockwasher, 5/8" Internal |
| 34 | 48017-04 | Nut, Hex 5/8-32 |
| 35 | 462069 | Key Assembly w/Fob |
| 36 | 04017-04 | Bolt, Hex Head 1/4-20 x 1/2" Serrated Flange |
| 37 | 484722 | Wire Harness, Operator Platform -SCZII |
| 38 | 431009 | Bushing, UHMW |
| 39 | 04040-15 | Flatwasher, 5/16-.375 x .875 x .083 |
| 40 | 04001-11 | Bolt, Hex Head 5/16-18 x 1-1/2" |
| 41 | 04021-10 | Nut, Lock Elastic Stop, 5/16-18 |
| 42 | 04019-04 | Nut, Serrated Flange, 3/8-16 |
| 43 | 04003-23 | Bolt, Carriage, 3/8-16 x 1" |
| 44 | 48030-09 | Clamp, Cable - 1/2" ID |
| 45 | 483120 | Switch, On/Off |
| 46 | 483121 | Boot, Switch |
| 47 | 486616 | Switch, N/C |
| 48 | 425392 | Bracket, Anti-Rotation |

* Not available through Scag

** Not Shown

SCZII EFI ELECTRICAL SYSTEM



SCZII EFI ELECTRICAL SYSTEM

| Ref. No. | Part No. | Description |
|----------|----------|---|
| 1 | 484098 | Pulley, 5.80 Dia. - 1.125 Bore |
| 2 | 04063-23 | Key, 1/4 x 1/4 x 3-1/4" |
| 3 | 461826 | Electric Clutch w/Tag - GT-5 |
| 4 | 426950 | Bracket, Anti-Rotation |
| 5 | 481182 | Indicator Light Assembly |
| 6 | 486508 | Wire Harness, SCZII-EFI |
| | 486753 | Wire Harness, SCZII-FX-EFI |
| 7 | 483958 | Diode, 600V - 6A |
| 8 | 482253 | Diode |
| 9 | 04041-28 | Flatwasher, 7/16-.469 x 1.75 x .25 |
| 10 | 04030-05 | Lockwasher, 7/16" Spring |
| 11 | 04102-03 | Bolt, Hex Head 7/16-20 x 2-1/4" w/Patch |
| 12 | 484721 | Tiger Eye Cluster Gauge |
| 13 | 485739 | Fuse Assembly (incl. # 14, 16, 17) |
| 14 | 483629 | Fuse Holder |
| 15 | 48298 | Fuse, 20 Amp |
| 16 | 483643 | Cover, Sealed Single |
| 17 | 482588 | Clip, Wire |
| 18 | 481638 | Switch, N.O. |
| 19 | 04001-44 | Bolt, Hex Head 1/4-20 x 1/2" |
| 20 | 04020-02 | Nut, 1/4-20 |
| 21 | * | Battery |
| 22 | 48029-07 | Battery Cable, 18" Black (37BV-EFI / 38CV-EFI) |
| | 48029-11 | Battery Cable, 27" Black (38FX-EFI) |
| 23 | 48029-28 | Battery Cable, 26" Red (w-brade) |
| | **48126 | Rubber Boot |
| 24 | 483013 | Relay |
| 25 | 485833 | Switch, PTO - 10 Amp |
| 26 | 04117-01 | Nut, FLF HH Elastic Stop 5/16-18 |
| 27 | 04003-04 | Bolt, Carriage 5/16-18 x 1" |
| 28 | 48798 | Keyswitch w/Hardware |
| 29 | 481544 | Control Cable (38CV-EFI) |
| | 485464 | Control, E-Gov Throttle (37BV-EFI, 38FX-EFI, 40BV-EFI) |
| | 483533 | Knob, Throttle Control (38FX-EFI) (not shown) |
| 30 | 04021-26 | Nut, Elastic Stop #10-24 |
| 31 | 463240 | Instrument Panel w/Decal |
| 32 | 04003-43 | Bolt, Carriage #10-24 x 1/2" |
| 33 | 48017-03 | Lockwasher, 5/8" Internal |
| 34 | 48017-04 | Nut, Hex 5/8-32 |
| 35 | 462069 | Key Assembly w/Fob |
| 36 | 04017-04 | Bolt, Hex Head 1/4-20 x 1/2" Serrated Flange |
| 37 | 484722 | Wire Harness, Operator Platform -SCZII |
| 38 | 431009 | Bushing, UHMW |
| 39 | 04040-15 | Flatwasher, 5/16-.375 x .875 x .083 |
| 40 | 04001-11 | Bolt, Hex Head 5/16-18 x 1-1/2" |
| 41 | 486139 | Wire Harness Adapter, Briggs & Stratton 37 BV-EFI / Kohler 38CV-EFI |
| 42 | 04021-10 | Nut, Lock Elastic Stop, 5/16-18 |
| 43 | 04019-04 | Nut, Serrated Flange, 3/8-16 |
| 44 | 04003-23 | Bolt, Carriage, 3/8-16 x 1" |
| 45 | 48030-09 | Clamp, Cable - 1/2" ID |
| 46 | 483120 | Switch, On/Off |
| 47 | 483121 | Boot, Switch |
| 48 | 486616 | Switch, N/C |
| 49 | 425392 | Bracket, Anti-Rotation |

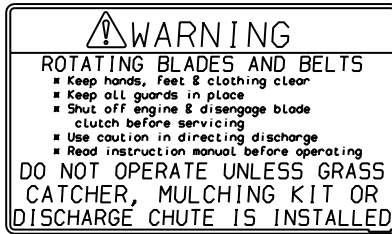
* Not available through Scag

** Not Shown

REPLACEMENT DECALS AND INFORMATION PLATES



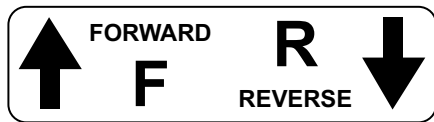
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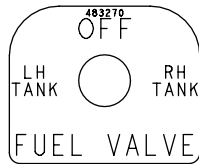
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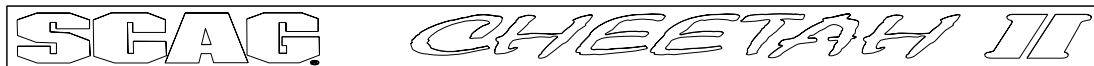
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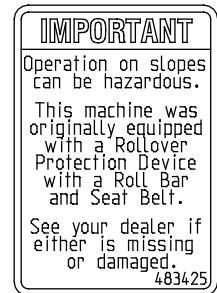
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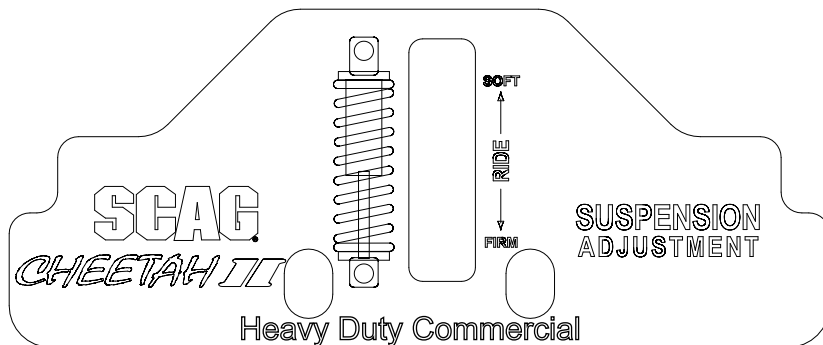
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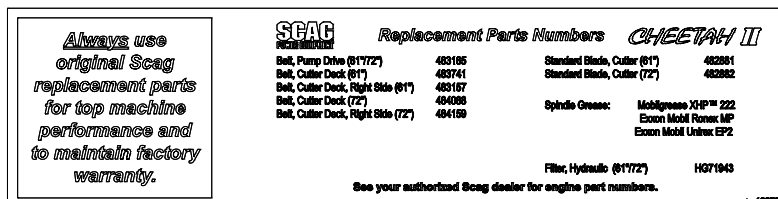
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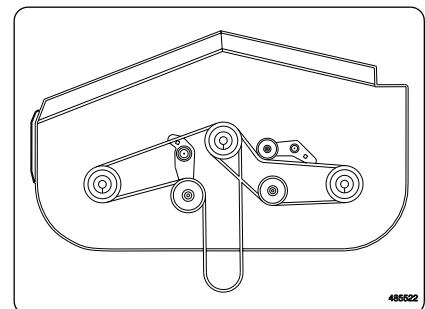
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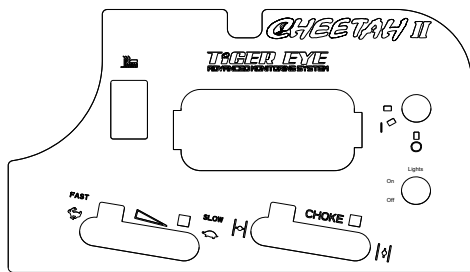
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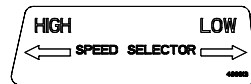
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REPLACEMENT DECALS AND INFORMATION PLATES

| Ref. No. | Part No. | Description |
|----------|----------|--|
| 1 | 483407 | Decal, Spinning Blades |
| 2 | 483406 | Decal, Knives |
| 3 | 483201 | Decal, 61" Velocity Plus |
| | 484574 | Decal, Velocity Plus - 61RD |
| | 483693 | Decal, 72" Velocity Plus |
| 4 | 483633 | Decal, Seat Replacement |
| 5 | 483425 | Decal, ROPS |
| 6 | 482100 | Decal, Traction Control |
| 7 | 483405 | Decal, Warning |
| 8 | 485403 | Decal, Made in USA |
| 9 | 483402 | Decal, Belt Cover |
| 10 | 487419 | Decal, Fuel Shut Off |
| 11 | 487410 | Decal, Scag Cheetah II |
| 12 | 486580 | Decal, Suspension Adjustment |
| 13 | 487420 | Decal, Deck Height - LH |
| 14 | 487421 | Decal, Deck Height - RH |
| 15 | 486510 | Decal, Instrument Panel - SCZII - EFI |
| 16 | 486613 | Decal, Speed Control |
| 17 | 483443 | Decal, Start / Drive |
| 18 | 486612 | Decal, Adjustments - SCZII |
| 19 | 487411 | Decal, SCZII Replacement Parts |
| 20 | 485522 | Decal, SCZII Belt Routing |
| | 485523 | Decal, SCZII Belt Routing 61RD |
| 21 | 486559 | Decal, Scag - Fuel Tank |
| ** | 483900 | Decal, Warning Spark Arrestor (California Models Only - not shown) |
| ** | 01411 | DVD Video, Tips for Safe Operation of Your Scag Zero-Turn Mower |



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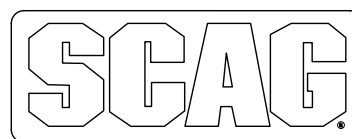
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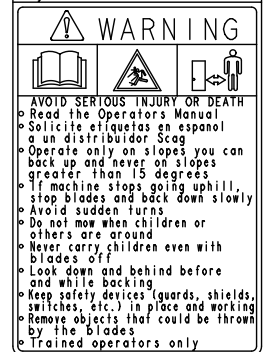
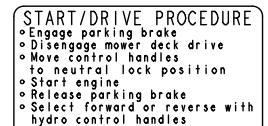
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IMPORTANT ADJUSTMENT PROCEDURES
 READ OPERATORS MANUAL FOR MORE DETAILS
 Check tire pressure: SCZII-61/72 Drive tires-12 psi
 Caster tires-Flat Free.

FREE WHEEL OPERATION
 To move machine without running engine, turn valve on LH & RH transaxles from RUN to BY-PASS. (See operator's manual)

NEUTRAL ADJUSTMENT
 ALIGN TABS

To re-set neutral, have engine off and control levers in neutral. Remove rear wheels. Adjust linkage turnbuckle until tabs on transaxle align. Repeat for opposite side. If wheels still creep after adjustment, see an authorized Scag dealer.

HYDRAULIC FLUID LEVEL
 Check hydraulic fluid level while fluid is cool. Fluid level should be at full cold line on tanks. Fill with 20W50 motor oil only.

IMPORTANT
 Do not overfill. Room for hot fluid expansion must be allowed or resulting expansion may cause leaks in the system.

TRACKING ADJUSTMENT

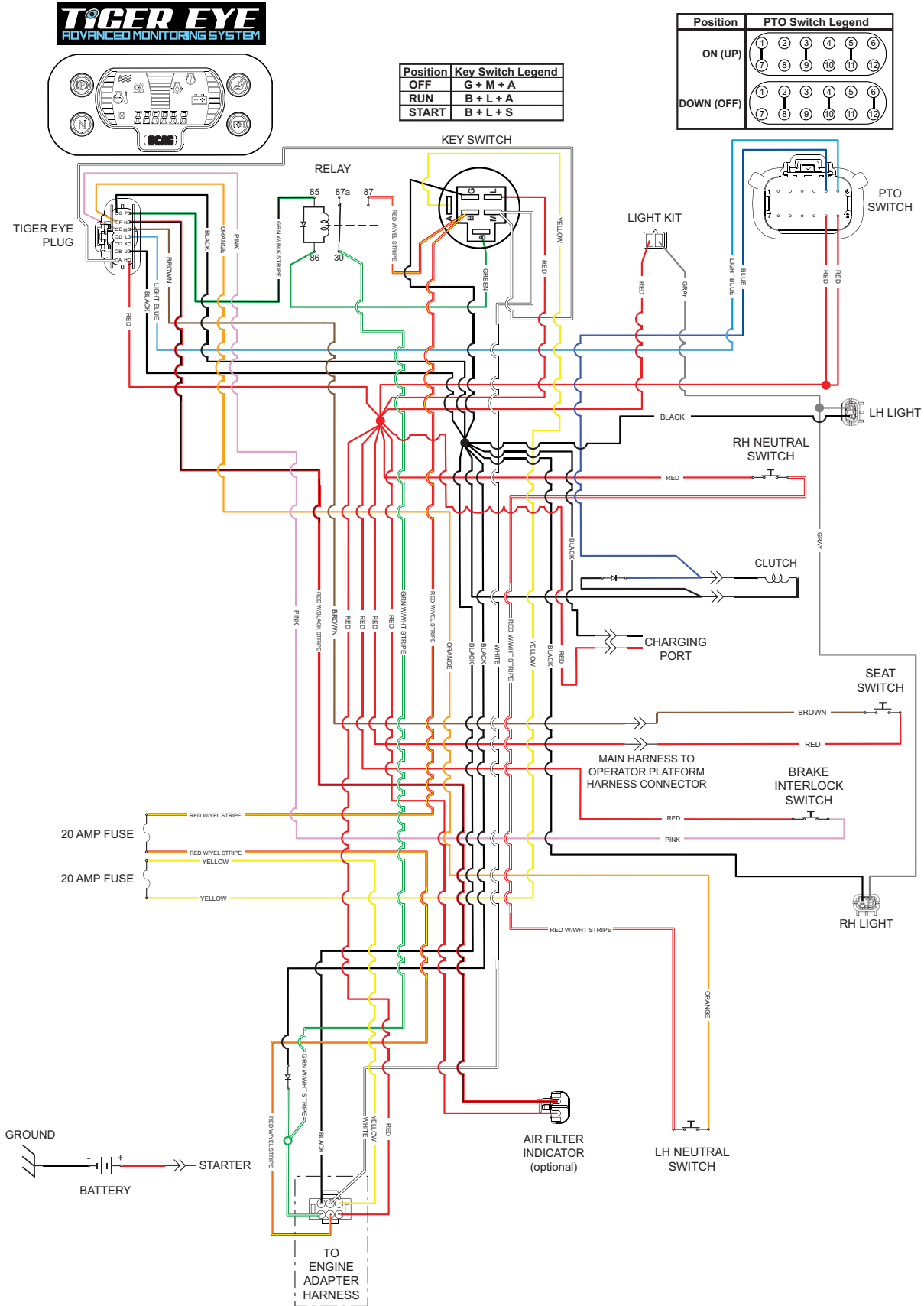
If machine pulls to right, adjust LH control stop bolt CW (Inward) to slow left wheel down. If machine pulls to left, adjust RH control stop bolt CW (Inward) to slow right wheel down.

486612

18

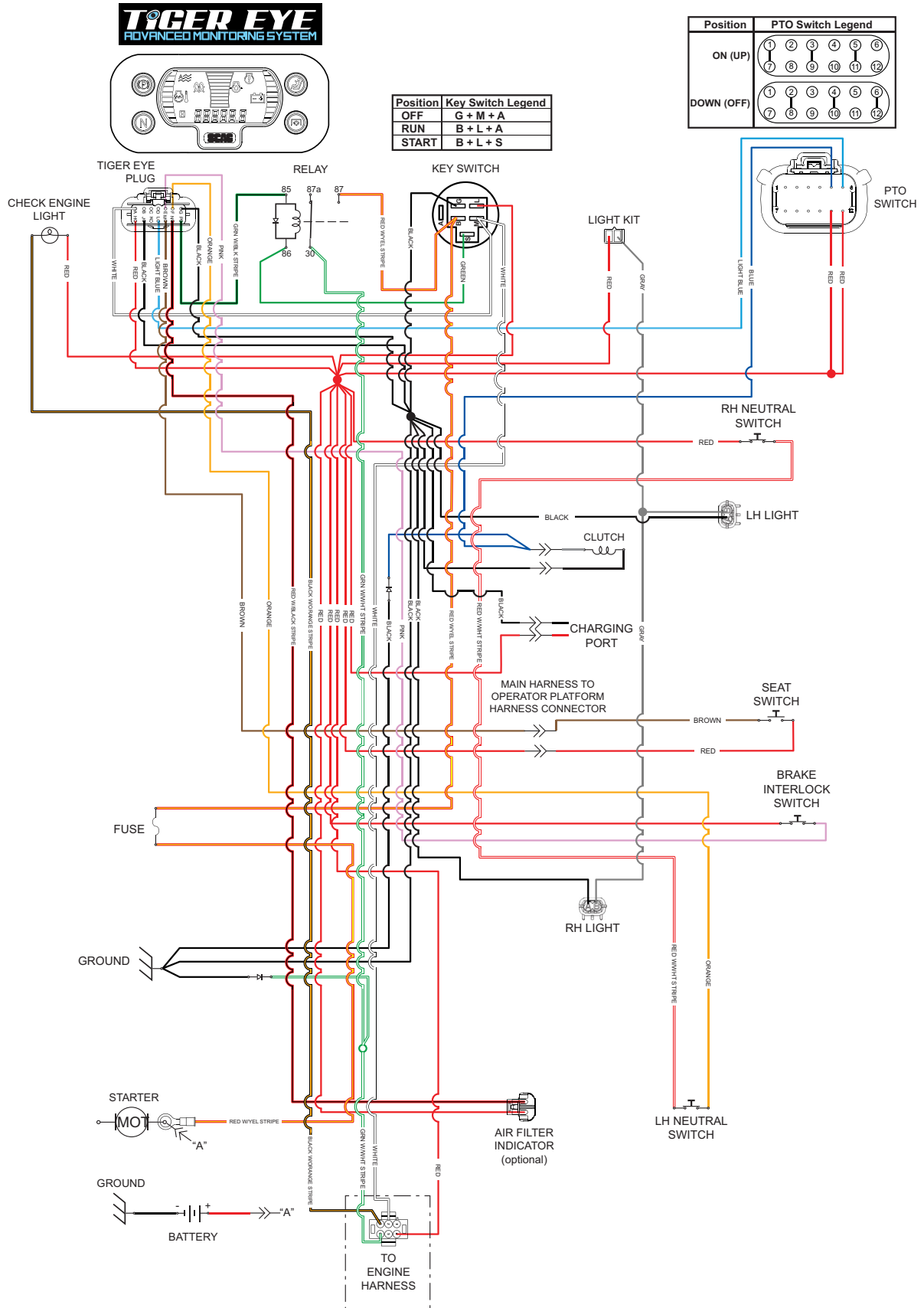
SCZII ELECTRICAL SCHEMATIC

(shown with Key Off, PTO Off, Park Brake Applied, Control Handles in Neutral, Seat Switch Disengaged)

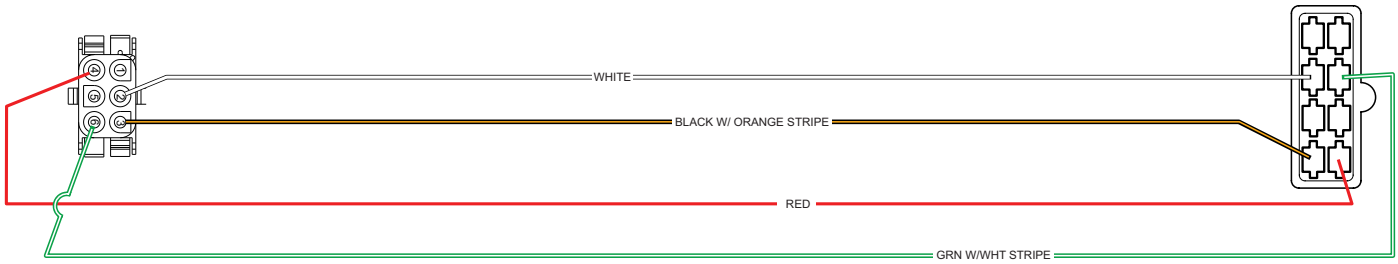


SCZII BV-EFI / CV-EFI ELECTRICAL SCHEMATIC

(shown with Key Off, PTO Off, Park Brake Applied, Control Handles in Neutral, Seat Switch Disengaged)

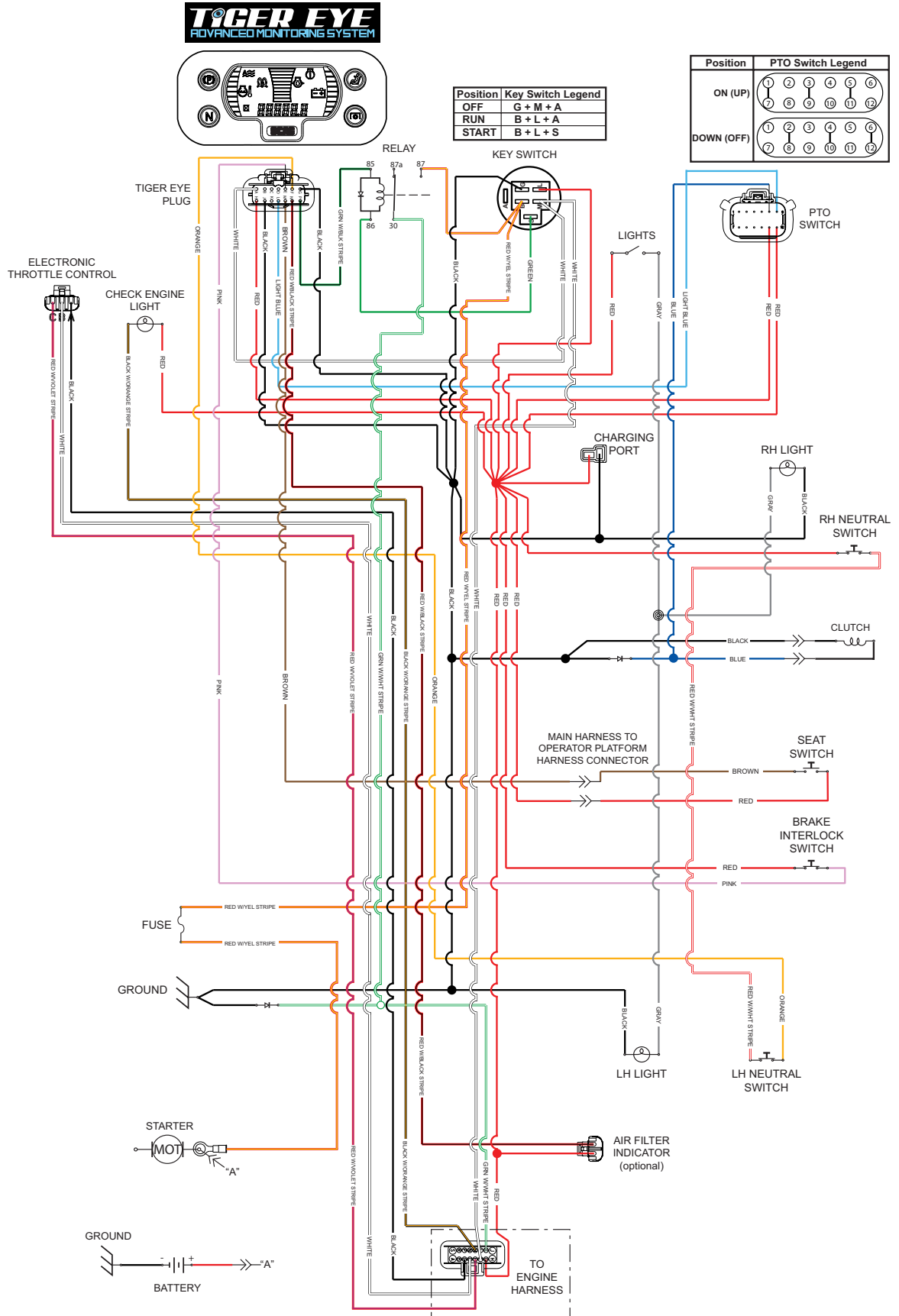


BRIGGS & STRATTON / KOHLER- EFI ADAPTER HARNESS ELECTRICAL SCHEMATIC



SCZII FX-EFI ELECTRICAL SCHEMATIC

(shown with Key Off, PTO Off, Park Brake Applied, Control Handles in Neutral, Seat Switch Disengaged)



LIMITED WARRANTY - COMMERCIAL EQUIPMENT

Any part of the Scag commercial mower manufactured by Scag Power Equipment and found, in the reasonable judgment of Scag, to be defective in materials or workmanship, will be repaired or replaced by an Authorized Scag Service Dealer without charge for parts and labor during the periods specified below. This warranty is limited to the original purchaser provided the product was purchased from an Authorized Scag Power Equipment Dealer and is not transferable. Proof of purchase will be required by the dealer to substantiate any warranty claims. All warranty work must be performed by an Authorized Scag Service Dealer.

This warranty is limited to the following specified periods from the date of the original retail purchase for defects in materials or workmanship:

- Wear items including drive belts, blades, hydraulic hoses and tires are warranted for ninety (90) days.
- Batteries are covered for ninety (90) days.
- Frame and structural components including oil reservoir and oil coolers are warranted for two (2) years (parts and labor) for commercial use or three (3) years / 500 hours (whichever comes first) (parts and labor) for non-commercial use.
- Cutter decks are warranted against cracking for a period of three (3) years. (parts and labor 1st and 2nd year; parts only 3rd year.) The repair or replacement of the cutter deck will be at the option of Scag Power Equipment. We reserve the right to request components for evaluation. This warranty does not cover any mower that has been subject to misuse, neglect, negligence, or accident, or that has been operated in any way contrary to the operating instructions as specified in the Operator's Manual.
- Engines and electric starters are covered by the engine manufacturer's warranty period.
- Major drive system components are warranted for two (2) years (parts and labor) for commercial use or three (3) year / 500 hour (whichever comes first) (parts and labor) for non-commercial use by Scag Power Equipment. (commercial and non-commercial warranty excludes fittings, hoses, drive belts). The repair or replacement of the hydraulic pump or hydraulic motor will be at the option of Scag Power Equipment. This warranty does not cover any mower that has been subject to misuse, neglect, negligence, or accident, or that has been operated in any way contrary to the operating instructions as specified in the Operator's Manual.
- Electric clutches have a Limited Warranty for two (2) years (parts and labor) for commercial use or three (3) year / 500 hours (whichever comes first) (parts and labor) for non-commercial use.
- Spindle assemblies have a Limited Warranty for three years (parts and labor 1st year and 2nd; parts only 3rd year).
- Any Scag product used for rental purposes is covered by a 90 day warranty.

The Scag mower, including any defective part must be returned to an Authorized Scag Service Dealer within the warranty period. The expense of delivering the mower to the dealer for warranty work and the expense of returning it to the owner after repair will be paid for by the owner. Scag's responsibility is limited to making the required repairs and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any Scag mower. "Non-Commercial" use is defined as a single property owner, where the single property is the residence of the owner of the mower. If the mower is cutting more than the owners single property, it is deemed commercial use and the "non-commercial" warranty does not apply. Scag Power Equipment reserves the right to deny and / or void the non-commercial warranty if it believes it to be in commercial use.

This warranty does not cover any mower that has been subject to misuse, neglect, negligence, or accident, or that has been operated in any way contrary to the operating instructions as specified in the Operator's Manual. The warranty does not apply to any damage to the mower that is the result of improper maintenance, or to any mower or parts that have not been assembled or installed as specified in the Operator's Manual and Assembly Manual. The warranty does not cover any mower that has been altered or modified, changing performance or durability. In addition, the warranty does not extend to repairs made necessary by normal wear, or by the use of parts or accessories which, in the reasonable judgment of Scag, are either incompatible with the Scag mower or adversely affect its operation, performance or durability.

Scag Power Equipment reserves the right to change or improve the design of any mower without assuming any obligation to modify any mower previously manufactured. All other implied warranties are limited in duration to the two (2) year for commercial use, three (3) years / 500 hour for non-commercial use or ninety (90) days for mowers used for rental purpose. Accordingly, any such implied warranties including merchantability, fitness for a particular purpose, or otherwise, are disclaimed in their entirety after the expiration of the appropriate two year, three year / 500 hour or ninety day warranty period. Scag's obligation under this warranty is strictly and exclusively limited to the repair or replacement of defective parts and Scag does not assume or authorize anyone to assume for them any other obligation. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Scag assumes no responsibility for incidental, consequential or other damages including, but not limited to, expense for gasoline, expense of delivering the mower to an Authorized Scag Service Dealer and expense of returning it to the owner, mechanic's travel time, telephone or telegram charges, rental of a like product during the time warranty repairs are being performed, travel, loss or damage to personal property, loss of revenue, loss of use of the mower, loss of time or inconvenience. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

