SCAG POWER EQUIPMENT

OPERATOR'S MANUAL

TURF Tiger II™

Model: **STTII-60GB-25KBD**

Congratulations on owning a Scag grader machine! This manual contains the operating instructions and safety information for your Scag grader machine. Reading this manual can provide you with assistance in maintenance and adjustment procedures to keep your machine 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.

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⚠ 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 machine.
- DO NOT operate on steep slopes. To check a slope, attempt to back up it. 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 machine widths away from slopes, drop offs, ditches, water,retaining walls, avoid any slope exceeding 15 degrees, and do not operate under trees on slopes with the roll bar down.
- DO NOT operate on wet grass. Wet grass reduces traction and steering control.
- Keep all shields in place.
- 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 machine (only one person at a time)

REMEMBER - YOUR MACHINE 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:		
STTII-60GB-25KBD	**with a serial number of**	**Z6800001 to Z6899999**
Always use the entire serial number listed on the serial number tag when referring to this product.		

Table of Contents

GENERAL INFORMATION

1.1 INTRODUCTION

Your machine was built to the highest standards in the industry. However, the prolonged life and maximum efficiency of your machine 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 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 machine. The serial number plate is located between the seat and the controls where shown in Figure 1-1.

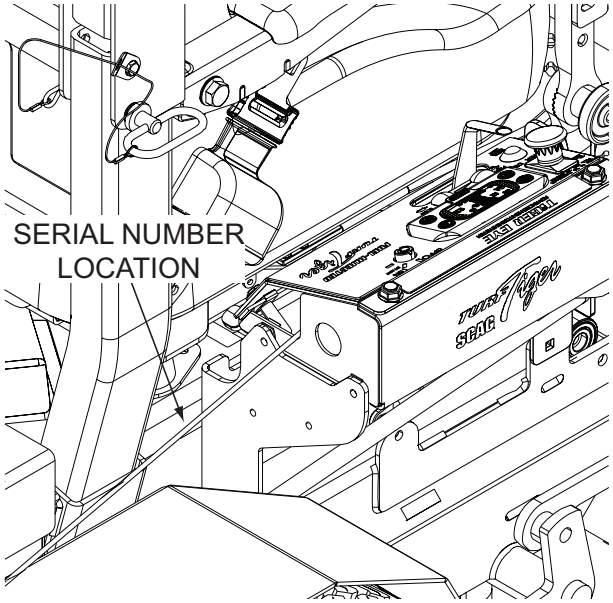


Figure 1-1. Machine Serial Number Plate Location

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. Be aware that using attachments with the machine 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 machine 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.

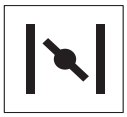
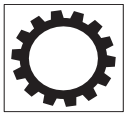
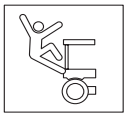
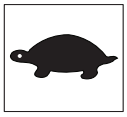
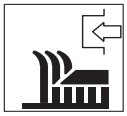
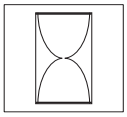
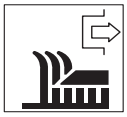
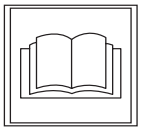
1.2 DIRECTION REFERENCE

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

The detail servicing and repair of the engine and hydraulic pumps is 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 machine 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 machine. 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 MACHINE. 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.

⚠ DANGER

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.

⚠ WARNING

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.

⚠ CAUTION

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 machine. Do not allow adults to operate this machine without proper instructions.
2. DO NOT allow children to ride or play on the machine, it is not a toy.
3. Keep keys stored in a safe location when the machine is not in use; i.e. where they are inaccessible to children.
4. DO NOT carry passengers.
5. DO NOT operate the machine under the influence of alcohol or drugs.
6. If the operator(s) or mechanic(s) cannot read English, it is the owner's responsibility to explain this material to them.
7. 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.

8. 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.
9. 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.
10. 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.
11. DO NOT start the engine until any spilled fuel has been cleaned up or has evaporated.
12. Keep flammable objects (cigarettes, matches, etc.), open flames and sparks away from the fuel tank and fuel container. Use only approved containers.
13. See Section 7.5 ENGINE FUEL SYSTEM for fueling procedure.
14. Equipment must comply with the latest requirements per SAE J137 and/or ANSI/ASAE S279 when driven on public roads.

- NOTE -

If the machine 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.

15. Make sure all hydraulic fluid connections are tight and all hydraulic hoses and lines are in good condition before starting the machine.

⚠ 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 attachment 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 PTO 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.

16. Be sure the interlock switches are functioning correctly.

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. 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 2-5, 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 machine widths away from drop-offs, ditches, retaining walls, water, avoid any slope exceeding 15-degrees, and do not operate 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. Immediately apply the parking brake if you lose steering control while operating. Inspect the machine and correct the problem before continuing to operate.
6. When using any attachment, never direct the discharge of material toward bystanders or allow anyone near the machine while in operation.
7. Before attempting to start the engine, with the operator in the seat, place the steering control levers in the neutral position and engage the parking brake.
8. 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.
9. DO NOT turn sharply. Use care when backing up.
10. Operate only in daylight or good artificial light.
11. Take all possible precautions when leaving the machine unattended, lowering the attachments, setting the parking brake, stopping the engine, and removing the key.

12. Disengage power to the attachments when transporting or when not in use.
13. 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.

14. Transport the machine 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.
15. 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 2-5 to determine approximate slope of the ramp. Back up the ramp and drive down forward.
16. When transporting the machine, 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.
17. Tie the machine down securely using straps, chains, cable, or ropes. Both front and rear straps must be directed down and outward from machine.
18. Use care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.
19. NEVER leave the machine running unattended.

2.6 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.

This machine has been designed for good traction and stability under normal operating conditions. However, caution must be used when traveling on slopes, especially when the ground is wet. Wet ground 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.

⚠ 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.

Lower the roll bar only when absolutely necessary.

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

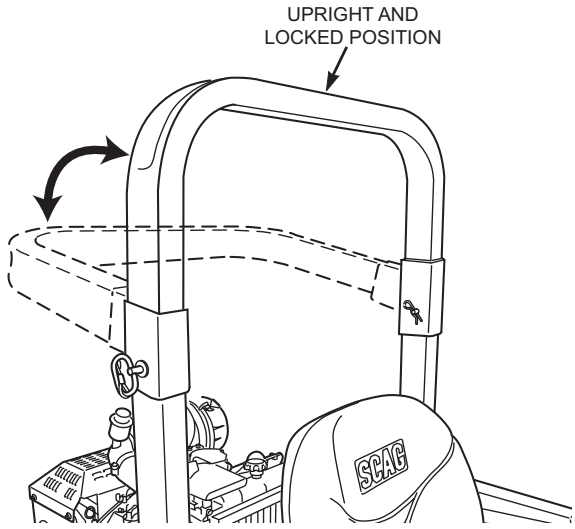


Figure 2-2. Foldable Roll-Over Protection Structure

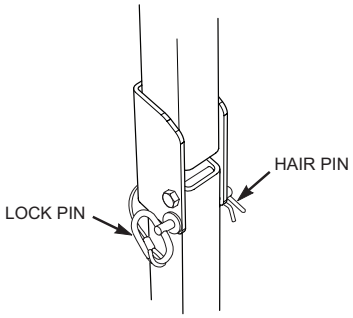


Figure 2-3. ROPS Hinge

The potential exposure of the seat belt to severe environmental conditions make 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 2-4.
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 2-4.
4. Be sure to confirm that the seat belt recoil latch is functioning properly.

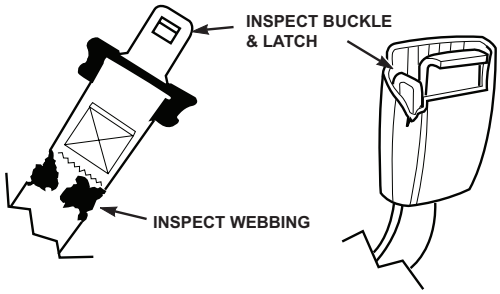


Figure 2-4. Seat Belt Inspection

⚠ 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. 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 2-5, 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.

DO NOT operate 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.

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 2-5, 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.

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.
5. Do not change the engine governor settings or over speed the engine. See the engine operator's manual for information on engine settings.
6. To reduce fire hazard keep the 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. Keep all parts in good working condition. Replace all worn or damaged decals.
10. Use jack stands to support components when required.
11. 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.

12. Let the engine cool before storing.
13. DO NOT store the machine near an open flame.
14. Shut off fuel while storing or transporting.
15. DO NOT store fuel near flames or drain indoors.
16. 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.

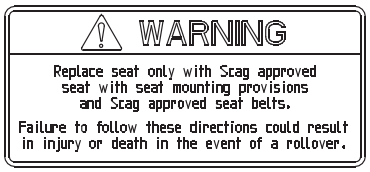
2.8 USING A SPARK ARRESTOR

The engine in this machine (excluding the 35BVAC) 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



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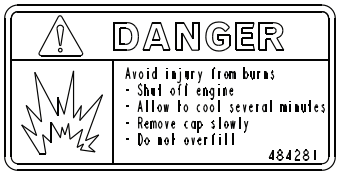

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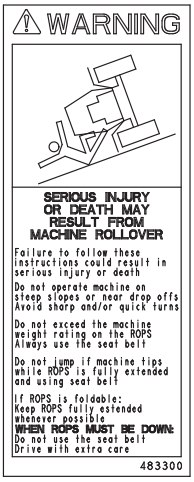

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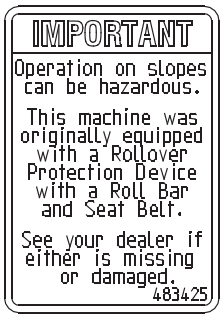

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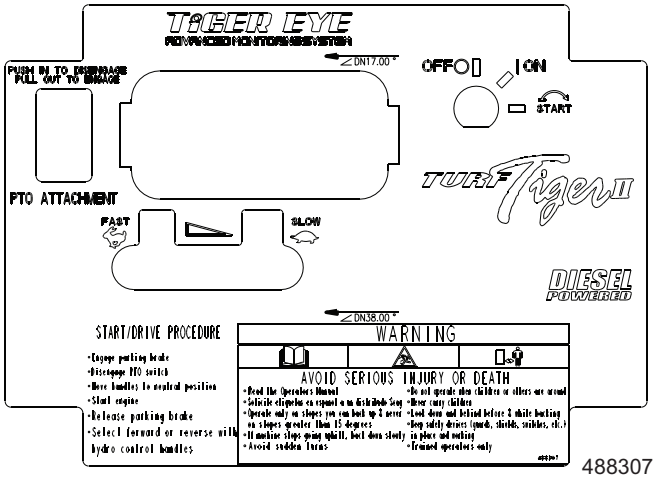

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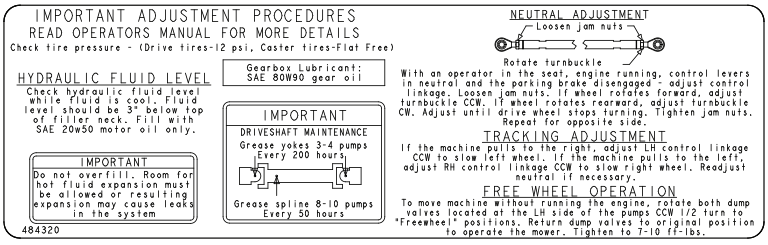

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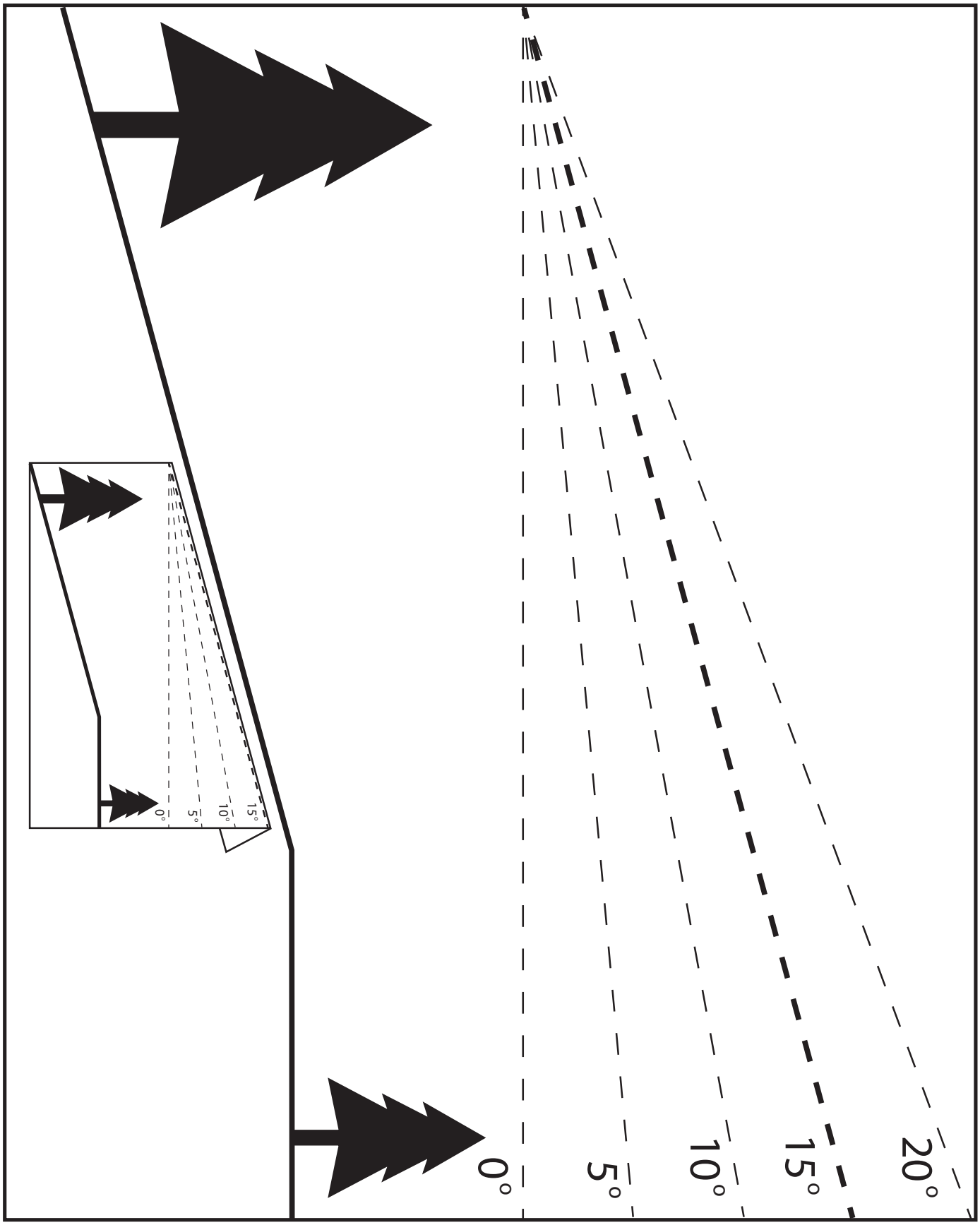


Figure 2-5. Slope Angle Graph

SPECIFICATIONS

3.1 ENGINE

General Type ..... Heavy Duty Industrial/Commercial Diesel
Model:
Scag Model STTII-60GB-25KBD ..... Kubota D902
Displacement:
Kubota 25KBD (D902) 898cc
Type:
Kubota (D902) ..... 4 Stroke Diesel, 3 Cylinder, Horizontal Shaft, Liquid-Cooled
Cylinders ..... Varies
Governor - Diesel Engine ..... Mechanical Type with Variable Speed Control Set At 3670 RPM -Kubota
Idle Speed:
Kubota ..... 1200 RPM
Fuel Pump:
Kubota ..... Injection Pump, Bosch MD Mini Type with In-Line Fuel Filter - Kubota
Fuel - Diesel Engine ..... Diesel Fuel with a minimum Cetane rating of 40
Oil Pump - Diesel Engine ..... Positive Displacement Gerotor™ Oil Pump with Oil Filter - Kubota
Starter ..... Electric Starting with Solenoid Shift
Belts ..... Kevlar cord, Self-adjusting, Self-tightening

3.2 ELECTRICAL

Battery ..... 12 Volt
Charging System ..... Alternator
Charging Output:
Kubota ..... 12 Volt, 40 Amp
System Polarity ..... Negative Ground
Interlock Switches ..... Seat, Neutral Control, Mower Engagement (PTO), Parking Brake
Instrument Panel ..... Tiger Eye Advanced Monitoring System, Key Switch, Throttle Lever, Manual Choke (Gasoline Non-EFI), PTO Switch, Fuses and Check Engine Indicator (31BV, 35BV, 37BV, 40BV, FD851D)
Fuses ..... One (1) 20 Amp (25LP) or Two (2) 20 Amp (FD851D) or and One (1) 5 Amp or One (1) 20 Amp and One (1) 50 Amp Resettable (Kubota D902)

3.3 POWER HEAD

Drive System ..... Hydraulic Drive with Two Variable Displacement Pumps and Two Cast-Iron High Torque Motors
Hydrostatic Pumps ..... Two Hydro-Gear™ 16 cc/rev. Pumps with Dump Valves
Drive Wheel Motors: ..... Two Parker Model TG 18 cu. Inch Cast-Iron High-Torque Motors
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 ..... 13 X 6.50 Four Ply, Flat Free
Tire Pressure:
Front Caster ..... Flat Free
Drive ..... 8 PSI
Fuel Tank ..... 12-Gallon Seamless Polyethylene Tank with Large Opening, Fuel Gauge and Fill Cap
Seat ..... Padded Suspension Seat
Travel Speed ..... Varies - See Below
Forward ..... 0 up to 10 MPH (Diesel Powered Machines)
Reverse ..... 0 up to 6 MPH (Diesel Powered Machines)

-NOTE-

The machine will travel up to maximum rated speed for transport purposes. For best operating performance the forward travel speed should be adjusted depending upon the operating conditions.

3.4 HYDRAULIC SYSTEM

Hydraulic Oil Filter	10 Micron Spin-on Element Type
Hydraulic Reservoir	Nylon; 3 Quart Capacity

3.5 WEIGHTS AND DIMENSIONS

Length	85.5"
Tracking Width	56"
Overall Width	61"
Overall Height w/ROPS up	68"
Overall Height w/ROPS down	46.5"
Operating Weight (approx.)	1496#-1538#
Operating Weight - Kubota Diesel Engine	1709#

PRODUCTIVITY

Operating Width	61"

OPERATING INSTRUCTIONS

⚠ CAUTION

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

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

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 machine 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 Authorized 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 ON position. Glow plug timer will cycle on for approximately 5 seconds as glow plugs preheat. At the end of the cycle, the indicator will turn off. Glow plugs must be preheated 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 (machine deck) switch is in the OFF position.
8. **Hour Meter 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.
12. **Fuse Holders (Figure 4-2).** Two 20-amp fuses and one 5-amp fuse protect the machine's electrical system. To replace fuses, pull fuse out of the socket and install a new fuse.

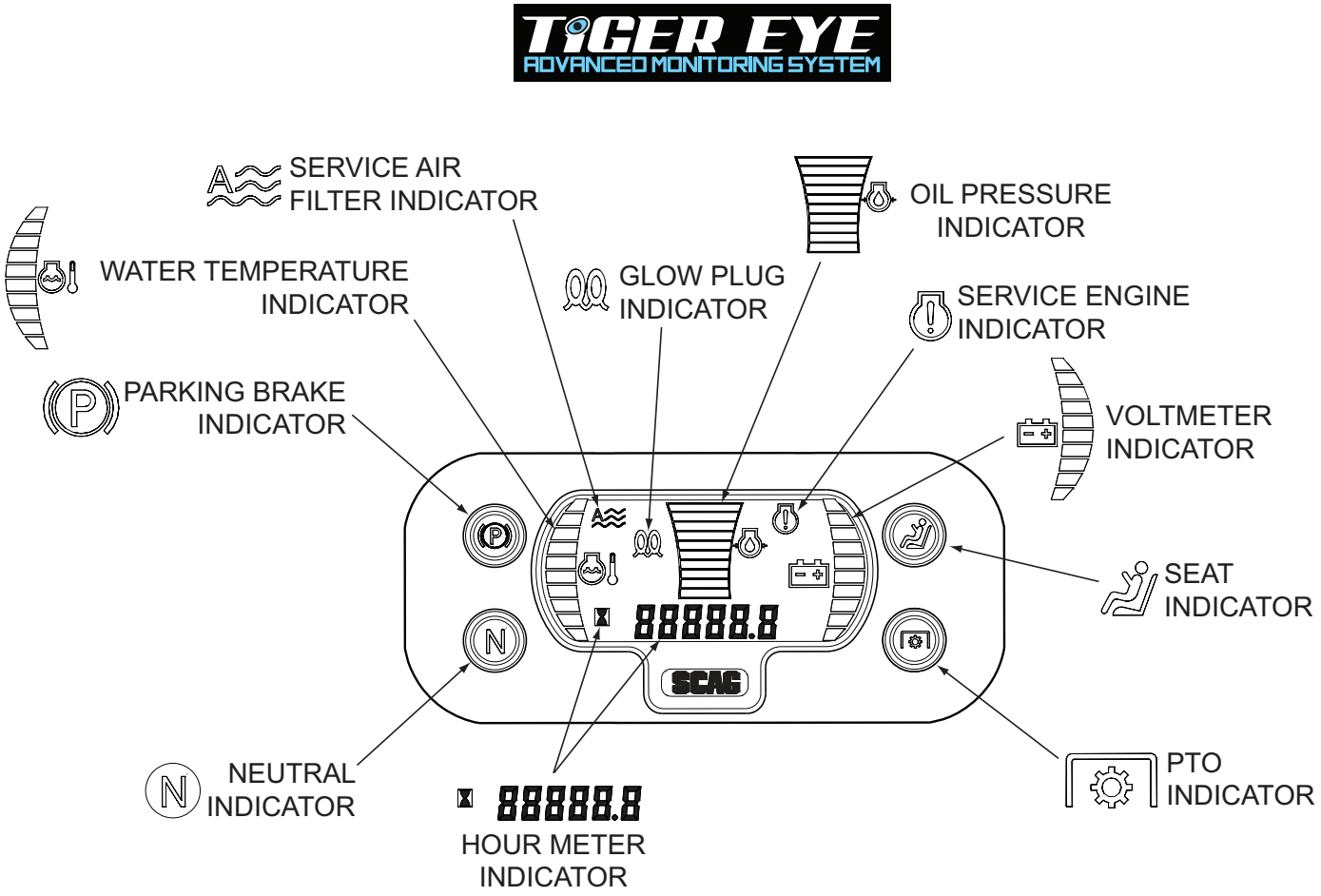


Figure 4-1. Tiger Eye Advanced Monitoring System

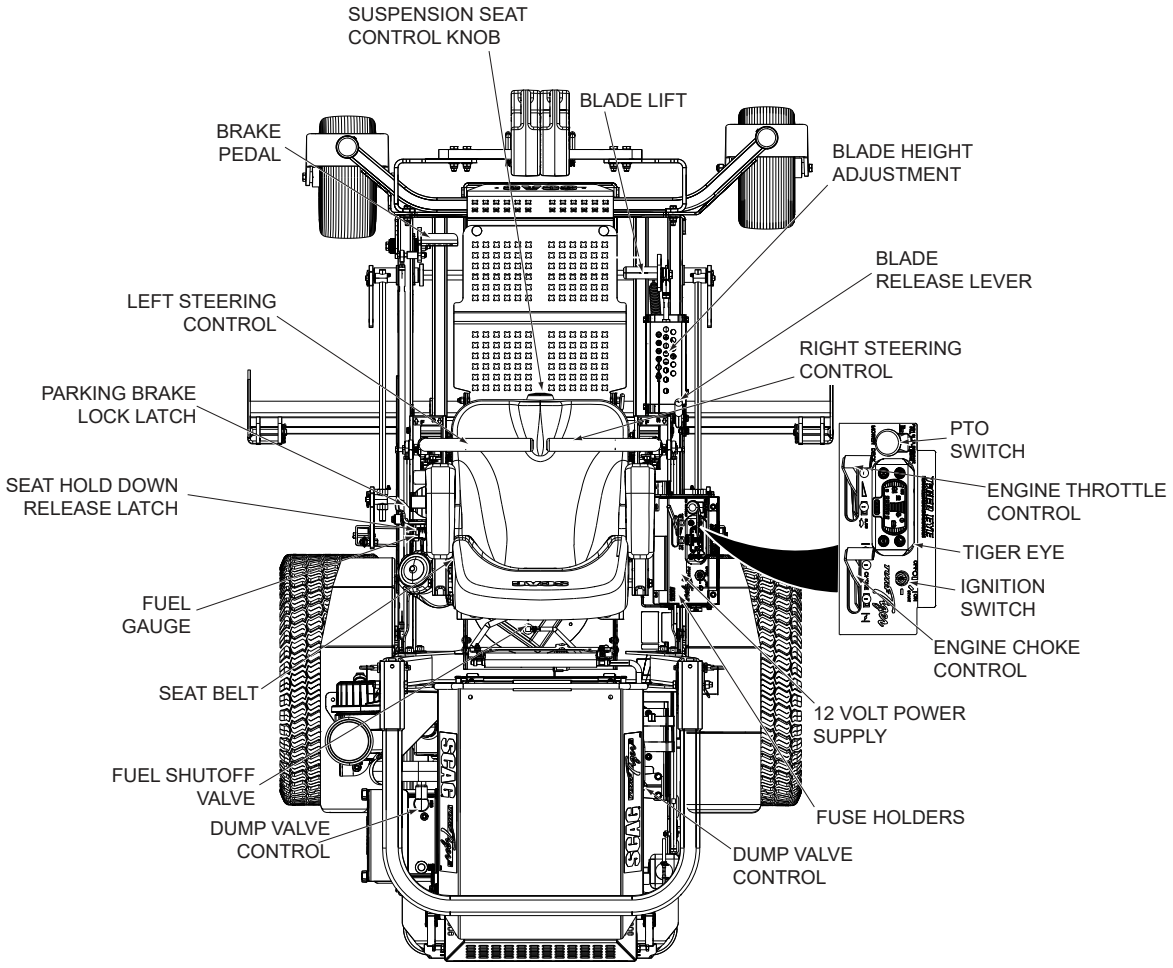


Figure 4-2. Controls and Instruments

4.2 CONTROLS IDENTIFICATION

1. **Ignition Switch (Figure 4-2).** The ignition switch is used to start the engine and has three positions; OFF, ON, and START.
2. **PTO Switch (Figure 4-2).** Use to engage and disengage the attachment system. Pulling up on the switch will engage the attachment. Pushing down on the switch will disengage the attachment.
3. **Engine Choke Control, Carbureted Engine Only (Figure 4-2).** Use to start a cold engine.
4. **Engine Throttle Control (Figure 4-2).** Use 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 operating position.
5. **Left Steering Control (Figure 4-2).** Use to control the machine's left wheel when traveling forward or reverse.
6. **Right Steering Control (Figure 4-2).** Use to control the machine's right wheel when traveling forward or reverse.
7. **Brake Pedal (Figure 4-2).** Depressing the brake pedal applies the brake.
8. **Parking Brake Lock Latch (Figure 4-2).** Use to lock the parking brake in the engaged position. Fully depress the brake pedal and pull the parking brake lock latch back to lock the parking brake in the engaged position. See Figure 4-3. Fully depress the brake pedal forward to disengage the parking brake lock latch, then release the brake pedal to disengage the brake. See Figure 4-4.

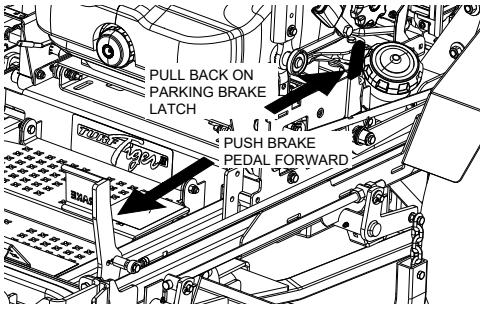


Figure 4-3. Engaging Parking Brake

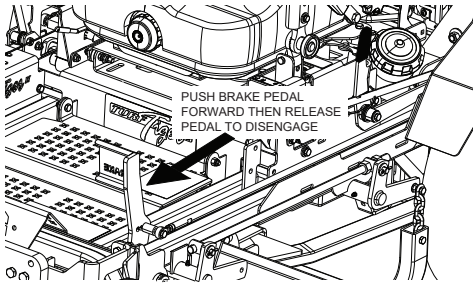


Figure 4-4. Releasing the Parking Brake

9. **Fuel Tank Gauge, Gasoline & Diesel Models Only (Figure 4-2).** Indicates the amount of fuel in the fuel tank.

10. **Dump Valve Control Levers (Figure 4-2).** Located on the left and right side of the machine, used to “free-wheel” the machine. Move the levers forward until they stop allows the unit to move under hydraulic power. Move the levers back and towards the engine allows the machine to be moved by hand (free-wheeling). See Figure 4-5.

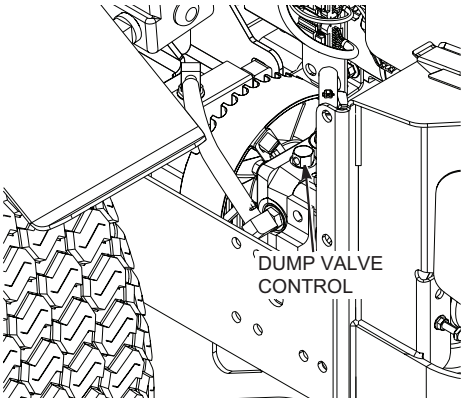


Figure 4-5. Dump Valve Control

11. **Deck Lift Foot Lever (Figure 4-2).** Use to raise and lower the attachment. Push full forward to lock in the transport position.

12. **Operating Height Adjustment (Figure 4-2)**. Use to set the attachment at the desired operating height.

13. **Attachment Release Lever (Figure 4-2)**. Use to lock the attachment in the transport position. Push the foot pedal forward and pull back on the release lever to release the attachment for normal operation.

14. **Seat Suspension Control Knob (Figure 4-2)**. Use to select the optimum suspension rate based on the operator.

15. **Seat Belt (Figure 4-2)**. Use to secure the operator. Seat belt must be worn at all times when the ROPS is in the upright and locked position.

16. **Seat Hold Down Release Latch (Figure 4-2)**. Located behind the seat. Use to secure the seat in the operator's position. Release the latch to gain access under the seat.

17. **Fuel Shutoff Diesel Models (Figure 4-2).** Located under the seat on top of the fuel tank. Use to shut off fuel supply to the engine. Rotate the valve counter clockwise to supply fuel from the tank to the engine. Rotate the valve clockwise to shut off the fuel supply to the engine.

18. **12 Volt Power Supply (Figure 4-2).** Located on the side of the control panel. Fused 12 volt DC power supply used to power accessories rated at 5 amps or less.

4.3 SAFETY INTERLOCK SYSTEM

The machine is equipped with a safety interlock system that prevents the engine from starting unless the PTO 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 PTO engaged and the parking brake not engaged.

⚠ WARNING

Never operate the machine 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 6.4.)
3. Check hydraulic oil level in reservoir. (See Section 6.3.)
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 6.9.)

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, (Gasoline & Diesel Models) is fully open. (See Section 6.5.). LP Powered Machines - Make sure the fuel valve is completely open on the LP tank.
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. Move the engine throttle control to about half engine speed.
7. Gasoline Carbureted Units Only - If the engine is cold, choke the engine as needed if equipped.
8. Diesel Powered Units Only - Turn the ignition key to the on position until the glow plug indicator located in the *Tiger Eye* display goes out.

9. 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.
10. Allow engine to warm before operating the machine.

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 machine until you are comfortable with the controls before proceeding to operate.

FORWARD TRAVEL

To travel forward with the machine, disengage the parking brake, pull levers inward out of the neutral lock position, raise the grader blade lift control lever to transport position, making sure that the tractor does not contact the grader blade 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 machine left while traveling forward, pull the left steering lever back. The further the lever is pulled back, the quicker the machine will turn left.

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

- NOTE -

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

- IMPORTANT -

Do not travel forward over a curb. The machine 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 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 machine 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 machine 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 machine will turn right.

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

4.8 ENGAGING THE ATTACHMENT

1. Set the throttle at about 3/4 speed. Do not attempt to engage the drive at high speed as this shortens the electric clutch life — use only moderate engine speed when engaging the drive.
2. Engage the drive by pulling out on the yellow switch, located on the instrument panel, to the engage position. See Figure 4-6.

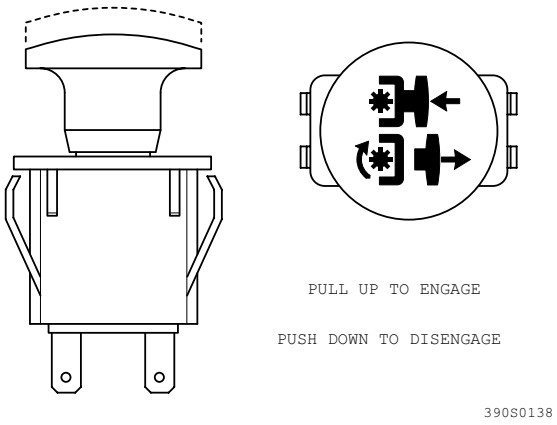


Figure 4-6. Attachment Engage Switch

- NOTE -

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

3. To disengage the drive, push the switch in to the disengage position.

4.9 HILLSIDE OPERATION

⚠ WARNING

DO NOT operate on steep slopes. To check a slope, attempt to back up it. 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 2-5, Page 11 to help determine approximate slope of area to be mowed. ALWAYS FOLLOW OSHA APPROVED OPERATION.

1. This machine has been designed for good traction and stability under normal conditions. However, caution must be used when traveling on slopes, especially when the ground is wet. Wet ground reduces traction and steering control. The Roll-Over Protection System is standard equipment for this machine. See Section 2.6.
2. Stay at least 2 machine widths away from drop-offs, ditches, retaining walls, water, avoid any slope exceeding 15-degrees, and do not operate 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 proceed slowly off the slope.
4. Avoid sudden starts when traveling 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 MACHINE

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 PTO.
4. Slow the engine to idle speed.
5. Engage the parking brake.
6. Turn the ignition key to the OFF position and remove the key.

4.11 AFTER OPERATION

1. Wash the entire machine 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.

2. Keep the entire machine clean to inhibit serious heat damage to the engine or hydraulic oil circuit.

3. 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 machine to cool before removing the fuel tank cap and refueling.

4. After the machine has cooled down, fill the fuel tank with fresh, clean fuel at the end of every day of operation. See Engine Owner's Manual for proper octane requirements.
5. Check the tire pressure. Adjust pressure if necessary. See Section 7.11.

4.12 MOVING MACHINE WITH ENGINE STOPPED

To “free-wheel” or move the machine around without the engine running, rotate the dump valve levers counter-clockwise. See Figure 4-7. Disengage the parking brake and move the machine by hand. When the machine is in the desired position, engage the parking brake and rotate the levers clockwise until they stop. The dump valve levers must be returned to the DRIVE position and torqued to 10 lb.-ft. to drive the machine.

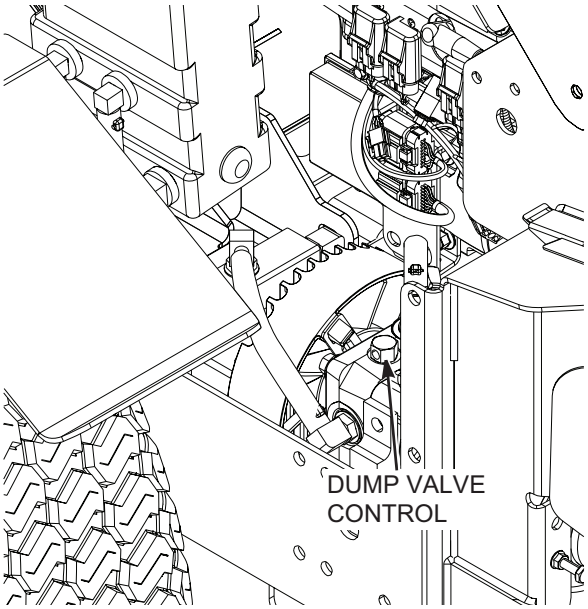


Figure 4-7. Dump Valve Control

4.13 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.

   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.

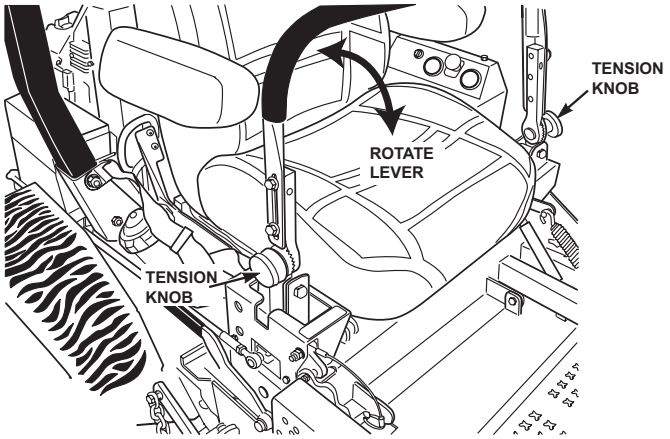


Figure 4-8. Adjusting Steering Levers

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

4.14 ADJUSTING THE HEIGHT ADJUST PEDAL

1. Position the seat to the desired location.
2. While in the operator's position without the engine running, push down on the height adjust pedal to check for full function control.
3. The height adjust pedal can be located in three (3) different positions for operator comfort and control. See Figure 4-11.

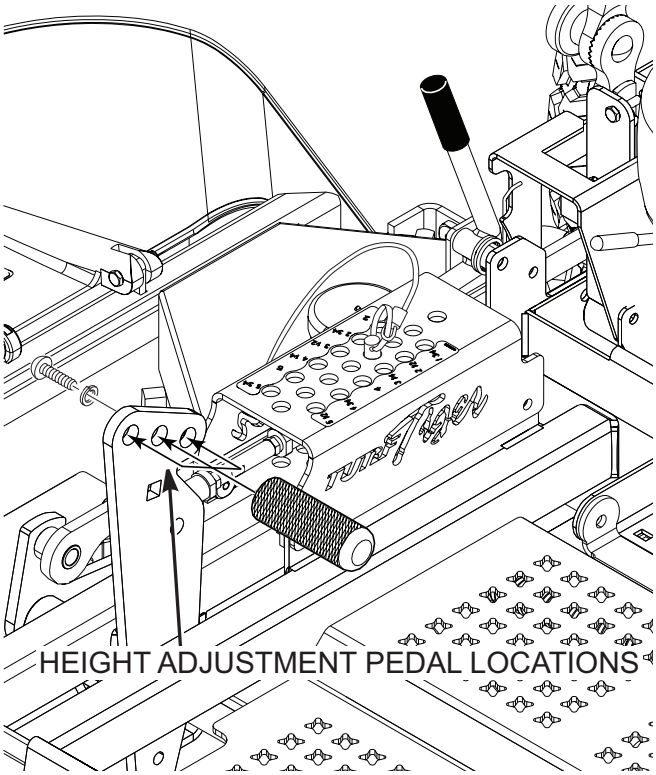


Figure 4-9. Height Adjust Pedal Locations

4.15 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 machine.

4.16 GRADER BLADE OPERATIONS

Lower the grader blade to the ground. Reduce your speed when travelling over rough and hilly terrain. Avoid quick or sharp steering corrections. Take extra care to ensure that the grader blade doesn't come in contact with obstacles such as trees, buildings, or fences. Only use the grader blade in areas you are familiar with and those that are free of debris and unseen objects. In the event you do strike an object, stop the grader blade and tractor immediately to inspect and make necessary repairs before resuming operation.

Blade 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 blade adjustments, be sure that all tires are properly inflated.

GRADER BLADE LEVEL

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

1. Loosen the jam nut on both adjusting rods. See Figure 4-12.

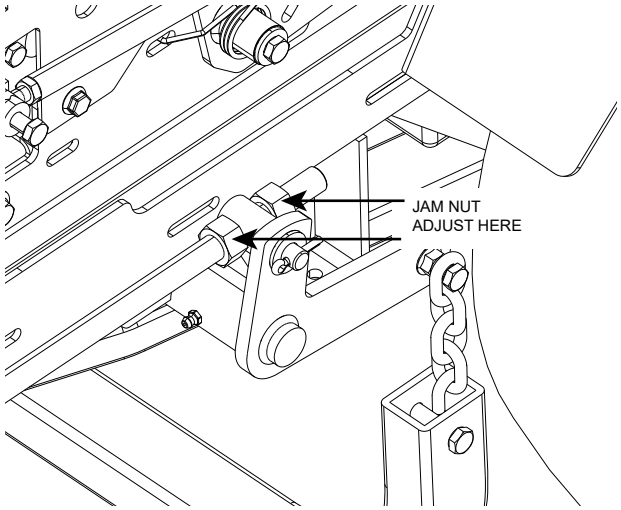


Figure 4-10. Grader Blade Level Adjustment

2. Using a wrench on the jam nut turn the adjusting rods until the proper height is obtained on both the RH and the LH side of the grader blade. Tighten both jam nuts. See Figure 4-12.

- NOTE -

To prevent the grader blade from teetering, both (2) attachment hanging chains must have tension on them. If all the chains do not have tension on them and the blade teeters, you must readjust the blade as outlined in the procedures above.

GRADER BLADE PITCH

The pitch of the grader blade can be adjusted for grading performance. To change blade pitch, be sure that the machine is on a flat, level surface and the tires are properly inflated.

1. Remove the top bolts on the blade bracket. See Figure 4-13.
2. Pivot bracket (up, down and center) to desired pitch.
3. Reinstall bolts and tighten nuts on the top and bottom.

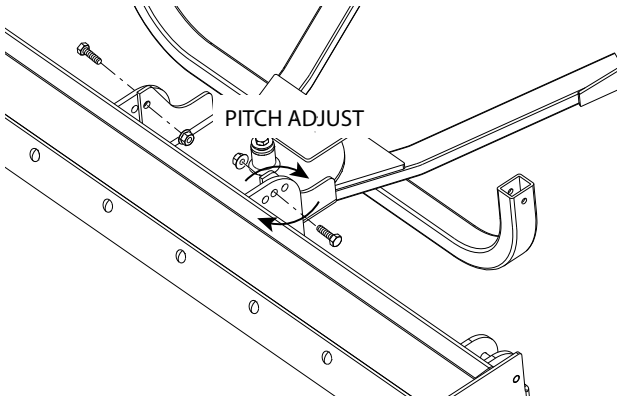


Figure 4-11. Grader Blade Pitch Adjustment

GRADER BLADE HEIGHT

The machine deck can be adjusted from a height of 0 inches to 6.0 inches. To adjust the operating height:

1. Push the height adjustment foot pedal all the way forward using your right foot until it locks in place. See Figure 4-12.

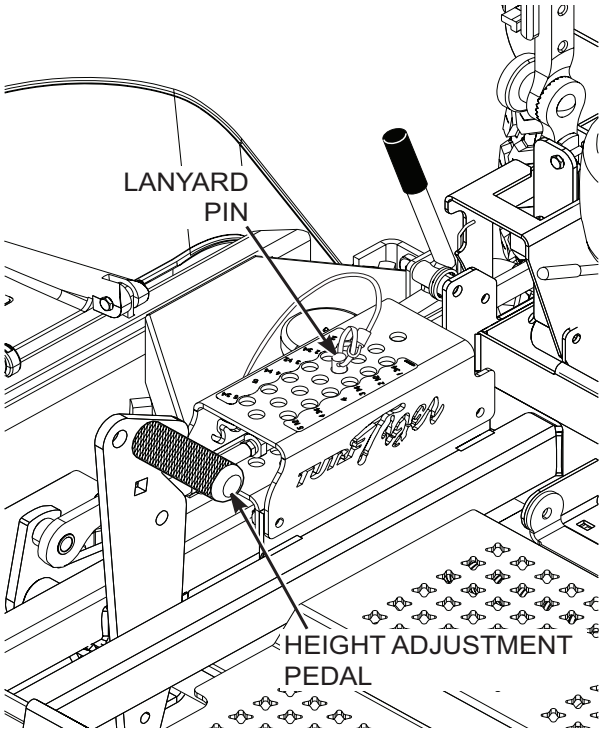


Figure 4-12. Adjusting Operating Height

2. Insert the lanyard pin into the operating height index at the desired operating height. Push forward on the foot lever, hold in place and pull back on the release lever. See Figure 4-13. Slowly release the foot pedal. See Figure 4-12.

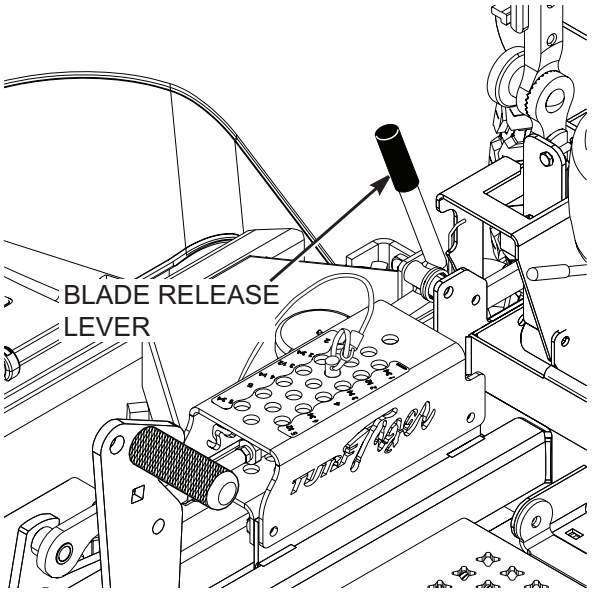


Figure 4-13. Attachment Release Lever

GRADER BLADE SIDE ADJUSTMENT

To move material to the sides adjust the grader blade.

1. Remove grader blade pin by pulling up. See Figure 4-15.
2. Position the grader blade 10° or 20° to the left or right position and reinsert the pin.

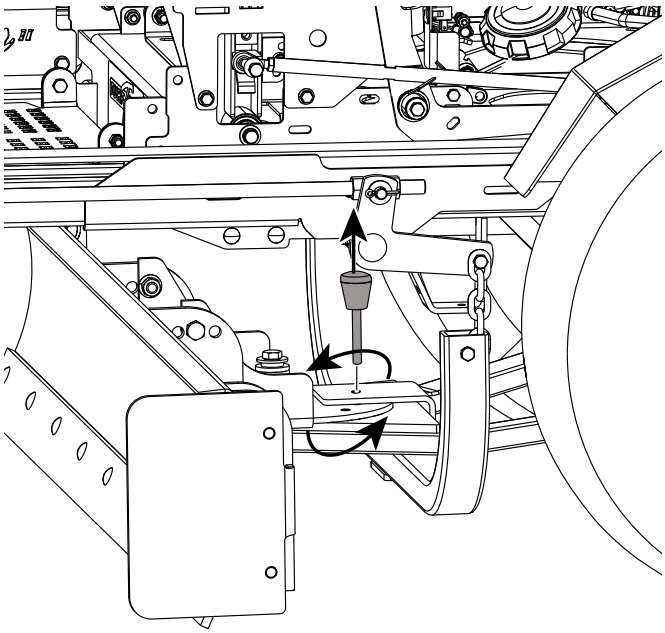


Figure 4-14. Grader Blade Adjustment

4.17 REMOVING GRADER BLADE END CAP

Removable grader blade ends help carry and deposit material.

1. Remove the quick pin from the grader blade end cap. See Figure 4-15.
2. Pull the end cap out of the grader blade.

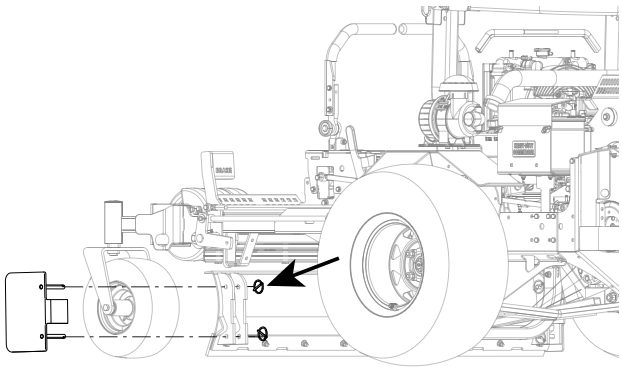


Figure 4-15. Grader Blade Adjustment

ADJUSTMENTS

5.1 PARKING BRAKE ADJUSTMENT

⚠ WARNING

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

The parking brake linkage should be adjusted whenever the parking brake lock latch is placed in the “ENGAGE” position and the parking brake will not prevent the machine from moving. If the following procedures do not allow you to engage the parking brake properly, contact your Scag dealer for further brake adjustments.

1. Park the machine on a flat surface and block the caster wheels to prevent the machine from moving. Remove the ignition key.
2. Engage the parking brake. Fully depress the brake pedal and pull the parking brake lock latch back to lock the parking brake. See Figure 6-1.
3. Loosen the jam nut at the front of the brake linkage. See Figure 6-2.
4. With the parking brake in the locked position, turn the adjustment nut until the brake spring has an overall length of 2". See Figure 6-2.
5. Repeat steps 3 and 4 on the other side of the machine.
6. Test the parking brake.

- NOTE -

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

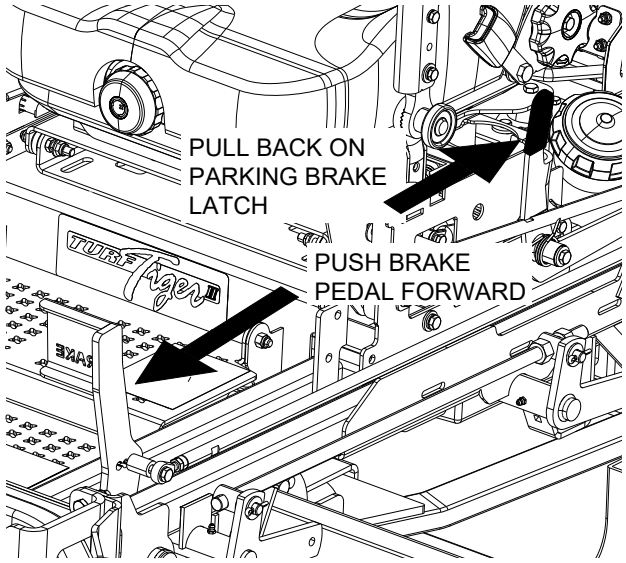


Figure 5-1. Brake Adjustment

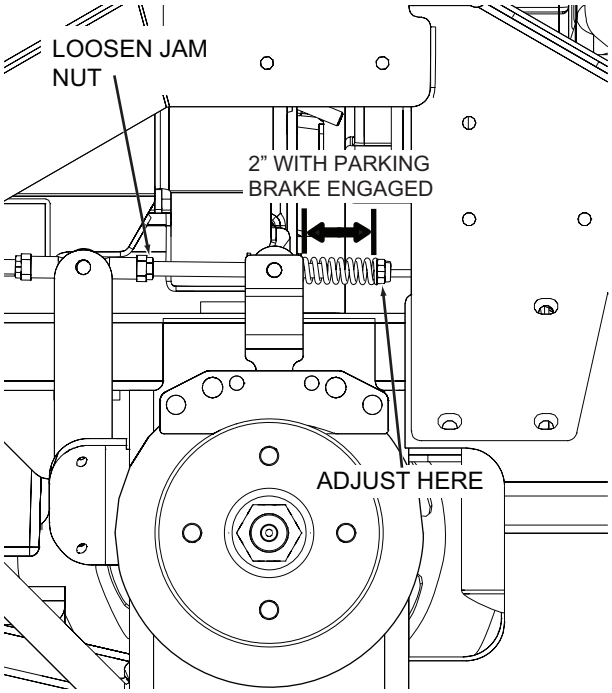


Figure 5-2. Brake Rod Adjustment

5.2 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. See Neutral Adjustment (next procedure).

B. The steering control levers are in the full forward position and the machine pulls to one side or the other when traveling in a forward direction. See 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. Adjust the RH wheel by loosening the jam nuts on the steering control rod and turning the rod until the drive wheel turns in the forward direction. Turn the rod back until the drive wheel stops moving. Turn the rod an additional 1/2 turn. See Figure 6-3.

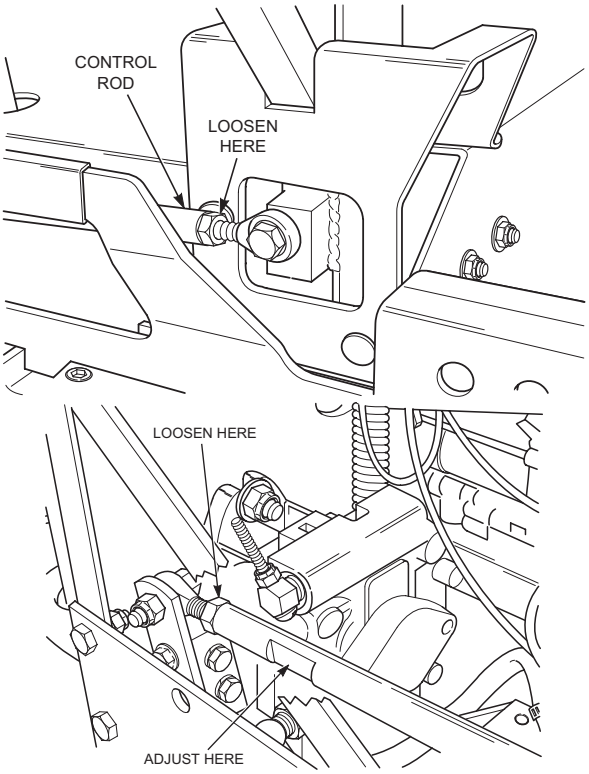


Figure 5-3. RH Steering Control Rod Adjustment

5. Tighten the jam nuts and repeat for the LH wheel. See Figure 6-4.

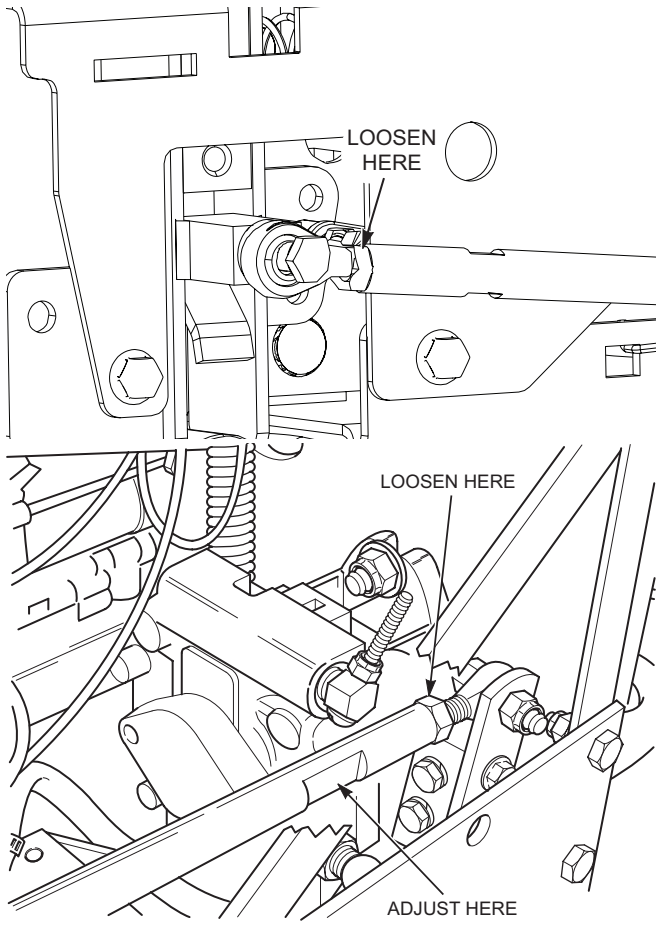


Figure 5-4. LH Steering Control Rod Adjustment

6. Actuate the steering control levers forward and reverse several times and return them to the neutral position.
7. Check that the drive wheels remained in neutral and re-adjust if necessary.
8. 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 machine 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. Loosen the lock nuts securing the ball joints at each end of the LH steering control rod. Rotate the control rod to lengthen the rod and tighten the lock nuts. This will cause the control rod to stroke the LH pump less, slowing down the LH wheel. See Figure 6-4.

   - NOTE -

   If after making the adjustment as outlined in step 1A, the machine creeps forward or backward, perform the neutral adjustment. See Neutral Adjustment.

2. If at full speed the machine 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. Loosen the lock nuts securing the ball joints at each end of the RH steering control rod. Rotate the control rod to lengthen the rod and tighten the lock nuts. 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.

5.3 THROTTLE CONTROL AND CHOKE ADJUSTMENTS

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

5.4 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.

5.5 BELT ALIGNMENT

Belt alignment is important for proper performance of your Scag machine. If you experience frequent belt wear or breakage, see your Authorized Scag Power Equipment service center for belt adjustment.

MAINTENANCE

6.1 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 Section 6.3
X							Check all belts for proper alignment	See Section 6.8
X							Check coolant level	See Section 6.10
	X						Check hydraulic fittings and hoses for leaks	Use extreme caution when checking the hydraulic hoses. See Section 2.7
	X						Check LPG fuel system for leaks	See Engine Owners Manual
	X						Check engine oil level	See Section 6.4
	X						*Clean machine	See Section 6.11
	X						Apply grease to fittings	See Section 6.2
	X						Check tire pressure	See Section 7.11
	X						Inspect seat belt for wear or damage	See Section 2.6
	X						Check the operator interlock system	See Section 4.3
	X						Check coolant level	See Section 6.10
		X					Change engine oil and filter	See Section 6.4
			X				Check battery electrolyte level clean battery posts and cables	See Section 6.7
			X				Inspect pump drive belt. Replace every 400 hours or 2 years, whichever occurs first	See Section 6.8
			X				Check belts for proper alignment	See Section 6.8
				X			Apply grease to fittings	See Section 6.2
				X			Change engine oil	See Section 4.4
				X			*Clean air cleaner element	See Section 6.6
				X			Check condition of fuel lines	

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

6.1 MAINTENANCE CHART - RECOMMENDED SERVICE INTERVALS (CONT'D)

HOURS						PROCEDURE	COMMENTS
BREAK-IN (FIRST 10)	8	40	100	200	500		
				X		Apply grease to fittings	See Section 6.2
				X		Check hardware for tightness	
				X		Change engine oil filter	See Section 6.4
				X		Check hydraulic oil level	See Section 6.3
					X	Replace engine fuel filter	See Section 6.5
					X	Drain hydraulic system and replace hydraulic oil	Use SAE 20W50 Motor Oil. See Section 6.3
					X	Replace hydraulic oil filter	See Section 6.3
					X	Change coolant	See Section 6.10

6.2 LUBRICATION

GREASE FITTING LUBRICATION CHART (SEE FIGURE 6-1)

LOCATION	LUBRICATION INTERVAL	LUBRICANT	NO. OF PLACES
1 Caster Wheel Pivot *	500 Hours/Yearly	Chassis Grease	2
2 Caster Wheel Bearings	100 Hours/Monthly	Chassis Grease	2

+ Compatible Greases: Scag Premium Chassis Grease p/n 486257
Scag Premium Spindle Grease p/n 486258

* PROCEDURE: Remove grease cap, part number 484195. Remove plug, part number 482028-01, and install grease zerk. Apply grease to the fitting until new grease appears at the top of the caster extension. Remove the grease zerk and reinstall the plug. Reinstall the grease cap. Special tool, part number 47007, is recommended for use in the installation of the grease cap.

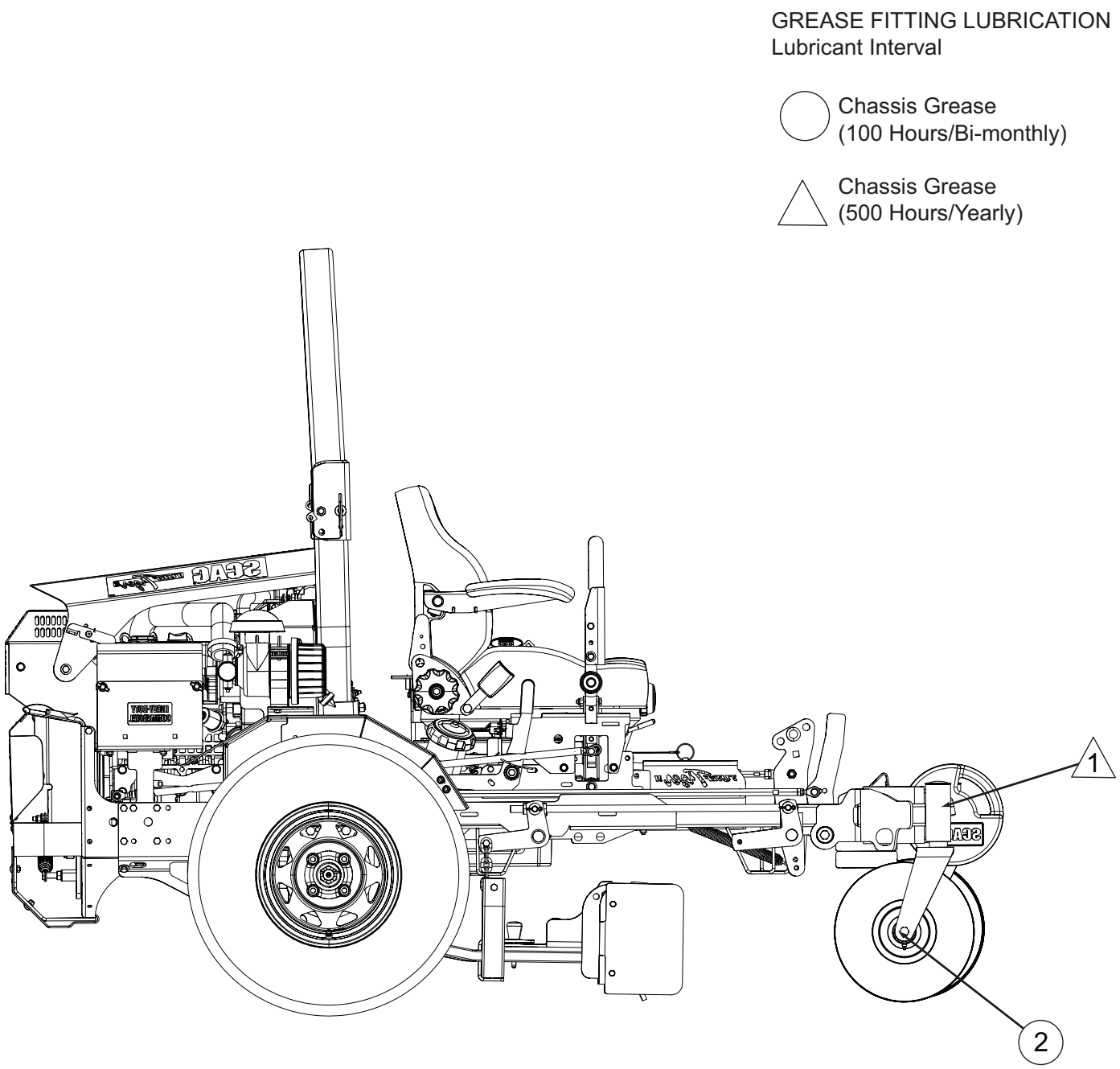


Figure 6-1. Lubrication Fitting Points

6.3 HYDRAULIC SYSTEM

A. CHECKING HYDRAULIC OIL LEVEL

The hydraulic oil level 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 reservoir cap. Remove the cap from the hydraulic oil reservoir.
2. Visually check the level of hydraulic oil. Hydraulic oil must be at least 3" inches from top of the filler neck. If the level cannot be determined visually, use a clean tape measure to check the level. 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).
3. Clean the fill cap and install it onto the reservoir.

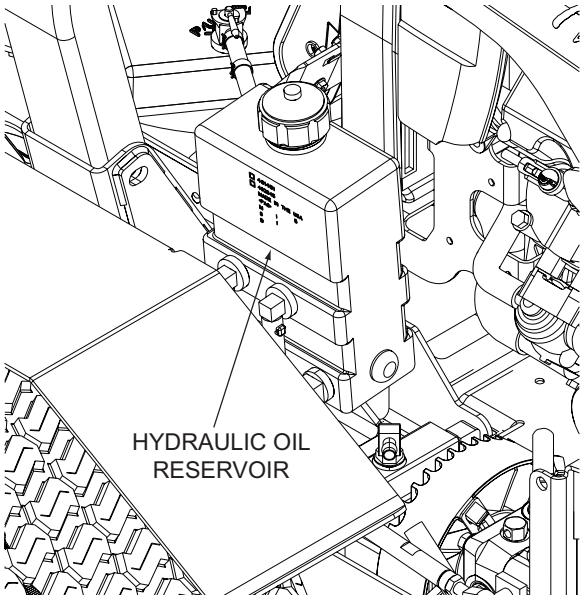


Figure 6-2. Hydraulic Oil Reservoir

B. CHANGING HYDRAULIC OIL

The hydraulic oil should be changed after 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 machine on a level surface and stop the engine.
2. Place a suitable container under the hydraulic oil filter. Remove the fill cap from the reservoir and the drain plug from the bottom of the drain tee fitting on the filter base. See Figure 6-3. Allow the fluid to drain into the container and properly discard it.

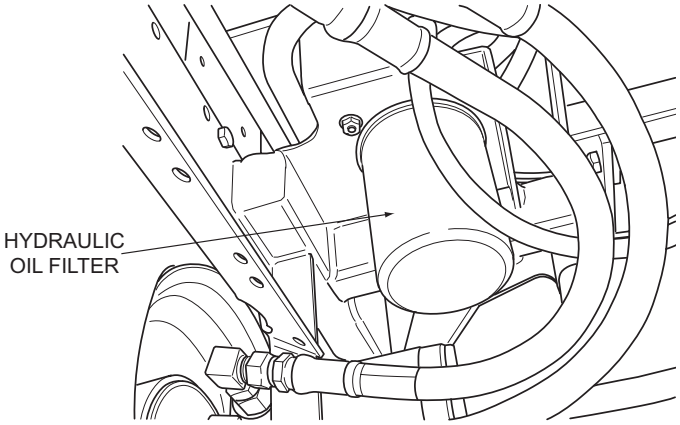


Figure 6-3. Hydraulic Oil Filter

3. Re-install the drain plug into the tee fitting and be sure it is tight.

- NOTE -

Before refilling the hydraulic oil reservoir the hydraulic oil filter should be changed as outlined in Procedure C "Changing Hydraulic Oil Filter Element."

4. Fill the reservoir to 3-1/4" inches from the top of the filler neck with 20W50 oil (Scag p/n 486255 - 1 Quart or p/n 486254 - 1 Gallon).

5. Replace the reservoir fill cap. Start the engine and drive forward and backward for two minutes. Check the oil level in the reservoir. If necessary, add oil to the reservoir.

C. CHANGING HYDRAULIC OIL FILTER ELEMENT

The hydraulic oil filter should be changed after every 500 hours of operation or annually, whichever occurs first.

1. Remove the oil filter element and properly discard it. See Figure 6-3. Fill the new filter with clean oil and install the filter. Hand tighten only.
2. Run the engine at idle speed with the speed control lever in neutral for five minutes.
3. Check the oil level in the hydraulic tank. It must be 3" inches from the top of the filler neck. If necessary, add SAE 20W50 oil (Scag p/n 486255 - 1 Quart or p/n 486254 - 1 Gallon).

6.4 ENGINE OIL

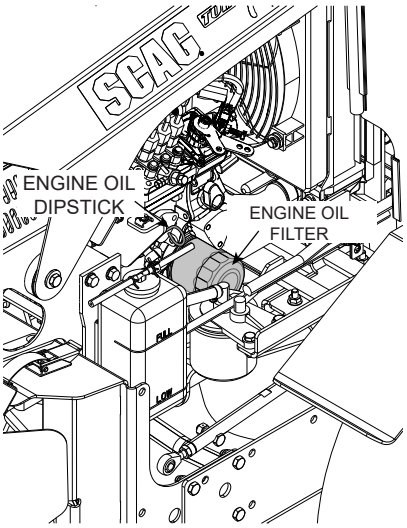


Figure 6-4. Engine Oil Fill/Dipstick & Filter Location \

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 machine. Refer to the Engine Operators Manual for details regarding your specific engine.

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. See Figure 6-5. Refer to the Engine Operator's Manual for instructions regarding your specific engine.

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. See Figure 6-4. Refer to the Engine Operator's Manual for instructions regarding your specific engine.

6.5 ENGINE FUEL SYSTEM

⚠ DANGER

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

A. FILLING THE FUEL TANK

Fill the fuel tank at the beginning of each operating day to within one inch below the filler neck. Do not overfill. Use clean, fresh diesel fuel with a minimum cetane rating of 40.

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 6-5.

1. Close the shut-off valve.
2. Remove the two clamps securing the fuel filter to the fuel hose. Remove the fuel filter.
3. Install a new fuel filter. Be sure it is installed in the proper direction. Secure to the fuel hose using the two clamps.
4. Open the fuel shut-off valve.

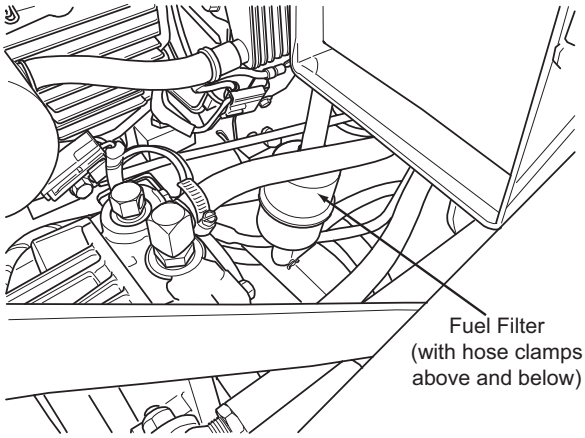


Figure 6-5. Fuel Filter

6.6 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. See Engine Owner's Manual for service information.

- NOTE -

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

1. Unhook the clamps securing the air cleaner cover to the air filter canister. Remove the air cleaner cover and 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 latches closed.

6.7 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.

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 machine before charging and make sure the electrolyte covers the plates in all cells.

⚠ WARNING

BATTERIES PRODUCE EXPLOSIVE GASES. Charge the battery in a well ventilated space so gases produced while charging can dissipate.

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.

6.8 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 Power Equipment service center for belt adjustment.

⚠ 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.

6.9 TIRES

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

Caster Wheels	Flat Free
Drive Wheels	8 PSI

6.10 COOLING SYSTEM (LIQUID-COOLED MACHINES ONLY)

⚠ WARNING

To avoid burns, always allow the engine to cool before removing the radiator cap.

A. CHECKING COOLANT LEVEL

The coolant level should be checked before each day of operation.

1. Remove the radiator cap by turning it slowly counterclockwise to the first stop and allow any pressure to be released. Push down on the cap and turn counterclockwise to remove.
2. Visually check the coolant level. The coolant level should be up to the bottom of the filler neck as shown in Figure 6-6. Add a mixture of coolant and soft water as needed.

- NOTE -

Refer to the coolant manufacturer's instructions for the proper coolant mixture ratio.

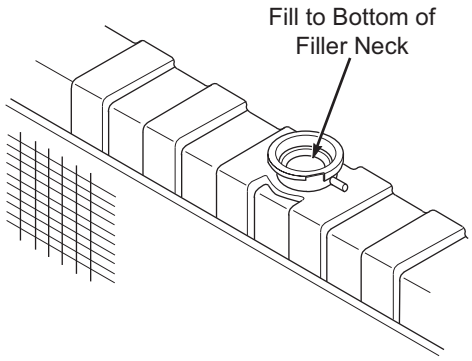


Figure 6-6. Coolant Level

3. Replace the radiator cap. Push down on the cap and turn clockwise until it stops.

- NOTE -

The cooling system should be flushed and the coolant replaced every 500 hours of operation or annually. See your Scag dealer for proper coolant replacement.

B. CLEANING THE RADIATOR DEBRIS SCREEN

After each day of operation, remove and clean the radiator debris screen.

⚠ CAUTION

To avoid personal injury, always wear safety glasses when using compressed air.

1. Pull the debris screen up to remove.
2. Clean the debris screen with compressed air or a water hose.

- NOTE -

Check the radiator for excessive debris and clean with compressed air. Never spray a hot engine with water, use only compressed air to remove debris.

3. Re-install the debris screen to the radiator.

C. CHECKING THE FAN BELT TENSION (LIQUID-COOLED ENGINES ONLY)

Periodically check the fan belt tension. The belt should deflect 1/2" with 10 pounds of pressure. See your Authorized Scag Power Equipment Dealer if the belt is in need of adjustment or replacement.

6.11 BODY 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 machine and attachment. 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 machine for maximum paint protection.

NOTES

ILLUSTRATED PARTS LIST

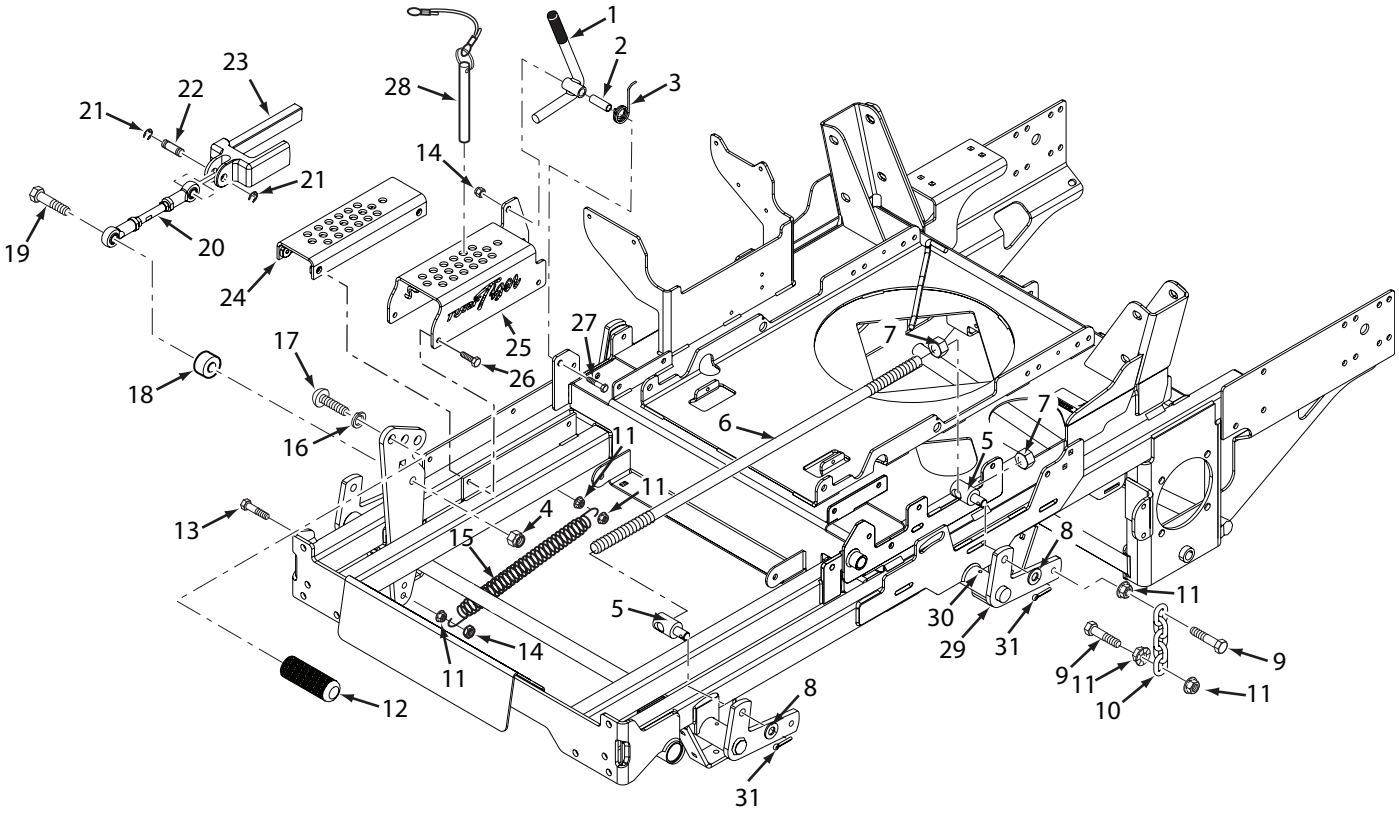
7.1 SCAG APPROVED ATTACHMENTS AND ACCESSORIES

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

Scag approved attachments and accessories:

Accessories	P/N
Micellaneous	
LED Light Kit	923Y
Trailer Hitch	9242
Tiger Bumper	9256
Chrome Wheel Cover (12”)	920J
Tiger Eye Air Filter Monitor	922U
Scag Premium Lubricants	
Chassis Grease	486257
Hydraulic System Oil (1 gal)	486254
Hydraulic System Oil (1 qt)	486255

STTII ATTACHMENT CONTROLS

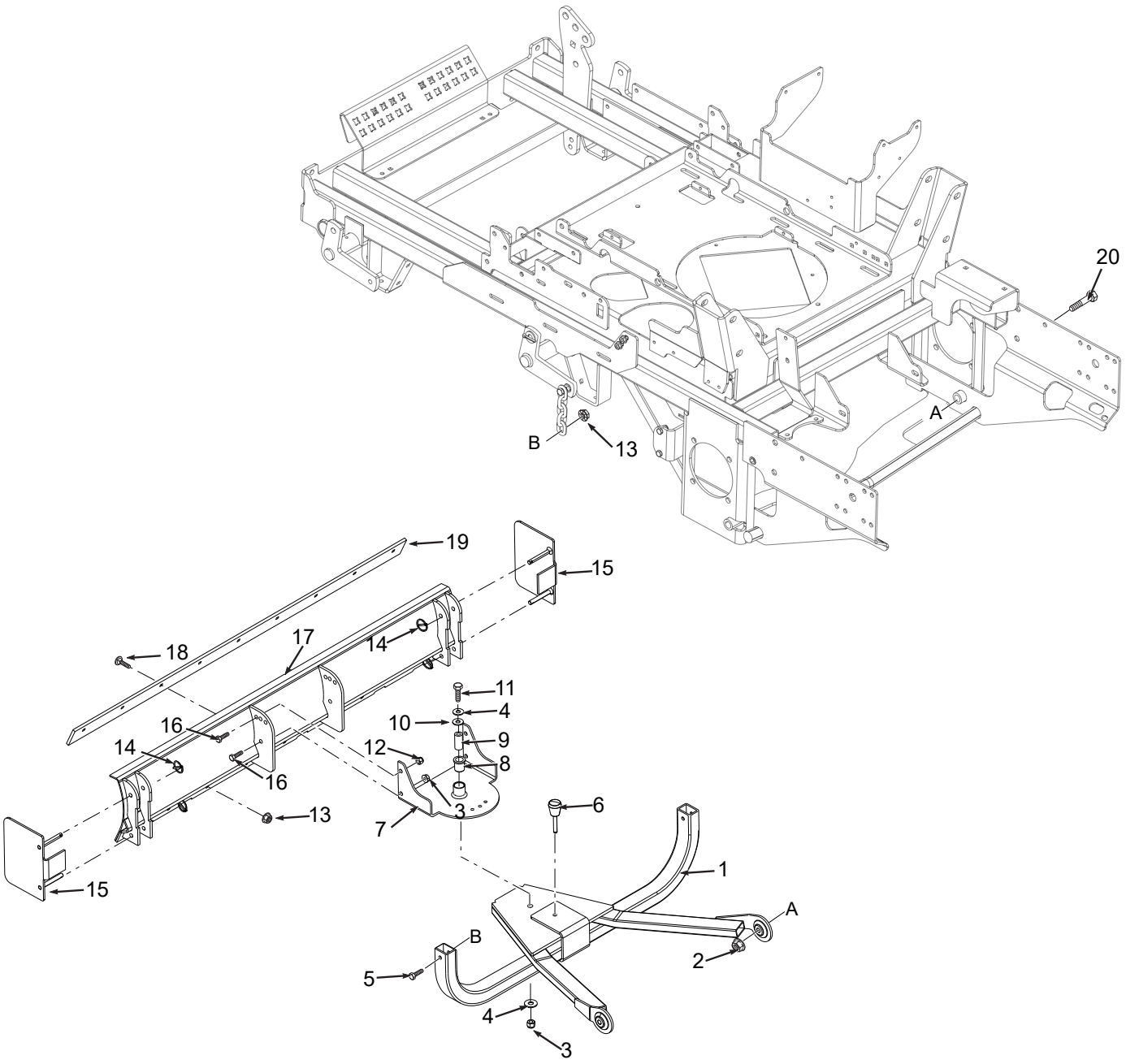


STTII ATTACHMENT CONTROLS

Ref. No.	Part No.	Description
1	462856	Deck Latch Weldment w/Grip
	481477	Grip
2	43668	Spacer, Deck Latch
3	484191	Spring, Torsion Lever Return
4	04021-07	Hex Locknut, 1/2 - 13
5	431300	Swivel Joint RH
	431301	Swivel Joint LH
6	463705	Deck Lift Rod Assy, STT-GB
7	04020-09	Hex Nut 5/8-11
8	04040-07	Washer, Ansi Plain Type A 1/2
9	04001-20	Bolt, Hex Head 3/8-16 x 1-1/2”
10	48540	Chain
11	04019-04	Nut, Serrated Flange 3/8-16
12	424504	Pedal, Foot
13	04001-136	Bolt, Hex Head 3/8-16 x 1-1/2” Grade 8
14	04021-05	Nut, Center Lock 3/8-16
15	486474	Spring, Ext. Deck Lift
16	04030-07	Lock washer, 5/8”
17	04108-04	Cap screw, 5/8-11 x 1-1/2”
18	43508	Spacer
19	04001-72	Bolt, Hex Head 1/2-13 x 2”
20	482534	Linkage, Deck Lift
21	04050-18	Retaining Ring, 1/2” Ext. “E”
22	43487	Pin, Deck Lift
23	462872	Slide Assembly (INCL. #20,21,22)
	485570	Slide, Height Adjust
24	453099	Weldment, Lower Cutting Height
25	428237	Adjustment Bracket, Cutting Height Upper
26	04006-02	Bolt, Hex Head 5/16-18 x 1-1/4”
	04013-03	Bolt, Hex Head 5/16-18 x 3/4” (Outside Rear)
	04019-03	Nut, Serrated Flange 5/16-18 (Outside Rear)
27	04001-46	Bolt, Hex Head 3/8-16 x 2-1/4”
28	483345	Ring Pin Assy., w/Lanyard
29	452744	Lift Bell crank, LH Rear
	452745	Lift Bell crank, RH Rear
*	04041-14	Flat washer, 1”, 1.062 x 1.5 x .0478 (Rear Bell crank Mounting)
*	04050-08	Ret Ring 1” (Rear Bell crank Mounting)
30	48114-04	Grease Fitting 1/4-28 Self Tap
31	04061-07	Cotter Pin 3/16 X 1

* = Item Not Shown

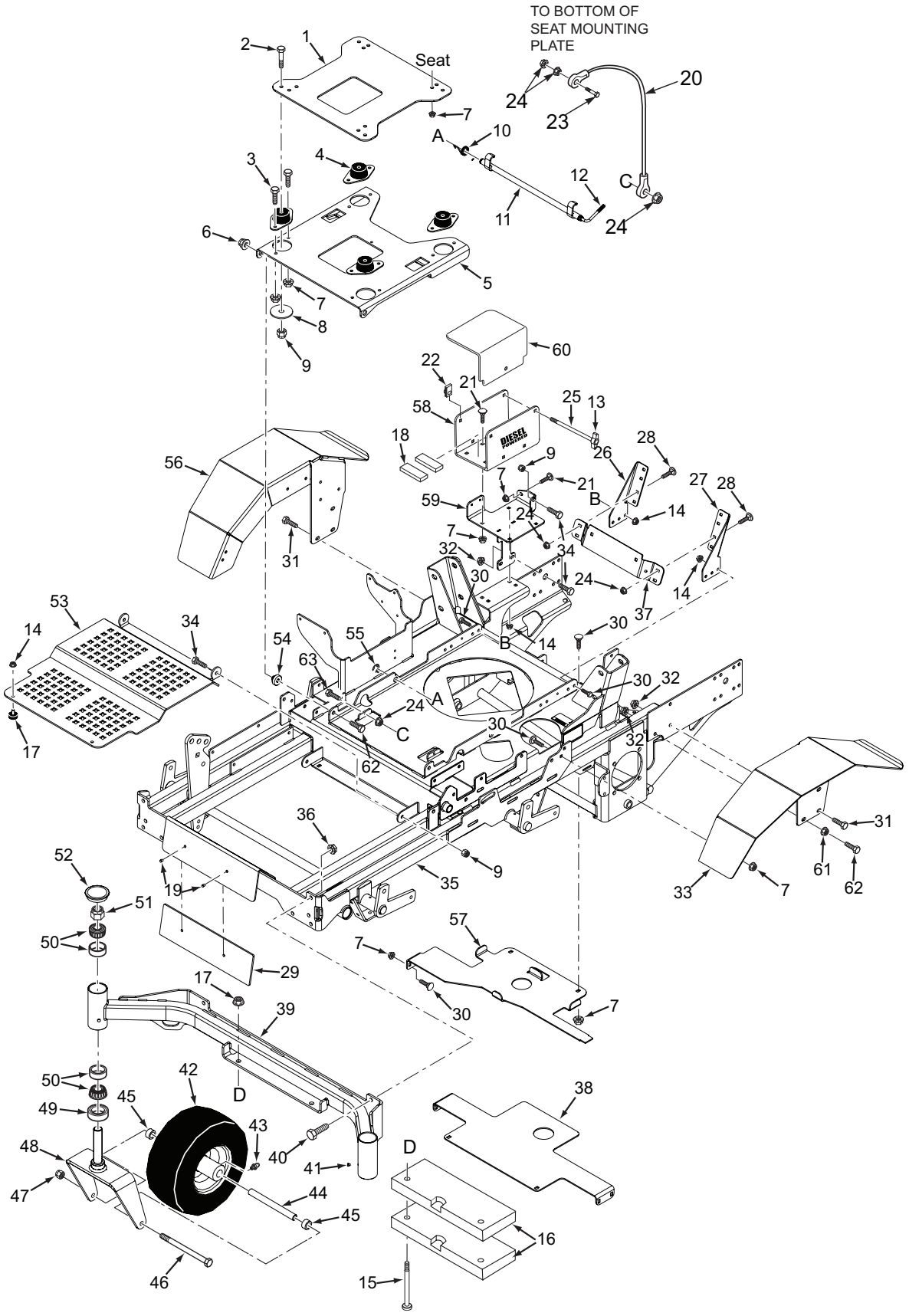
STTII GRADER BLADE ATTACHMENT



STTII GRADER BLADE ATTACHMENT

Ref. No.	Part No.	Description
1	453569	Grader Frame WLMT
2	04021-13	Hex Lock Nut 5/8-11
3	04021-07	Hex Lock Nut 1/12-13
4	04040-13	Washer 1/2
5	04001-05	Hexhead Capscrew 1/4-20 UNC X 2.00
6	487102	Pin Assy, Swivel Lock
7	453572	Pivot Plate WLMT
8	483453-02	Bearing Plastic
9	43710	Sleeve, Deck Left Pivot
10	424636	Spacer
11	04001-145	Hexhead Capscrew 1/2-13 UNC X 3.50
12	04019-06	Nut, Serrated Flange Hexhead 1/2-13
13	04117-02	Locknut w/Flange Elastic Stop, 3/8-16
14	04066-02	Quick Pin
15	453573	End Cap WLMT
16	04001-70	Hexhead Capscrew 1/2-13 UNC X 1.25
17	453536	Blade Scraper
18	04003-53	Carriage Bolt, 3/8-16 X 1.50 LG
19	488168	Wear Edge, Grader Blade
20	04001-79	Hexhead Capscrew 5/8-11 UNC X 4.50

STTII SHEET METAL COMPONENTS

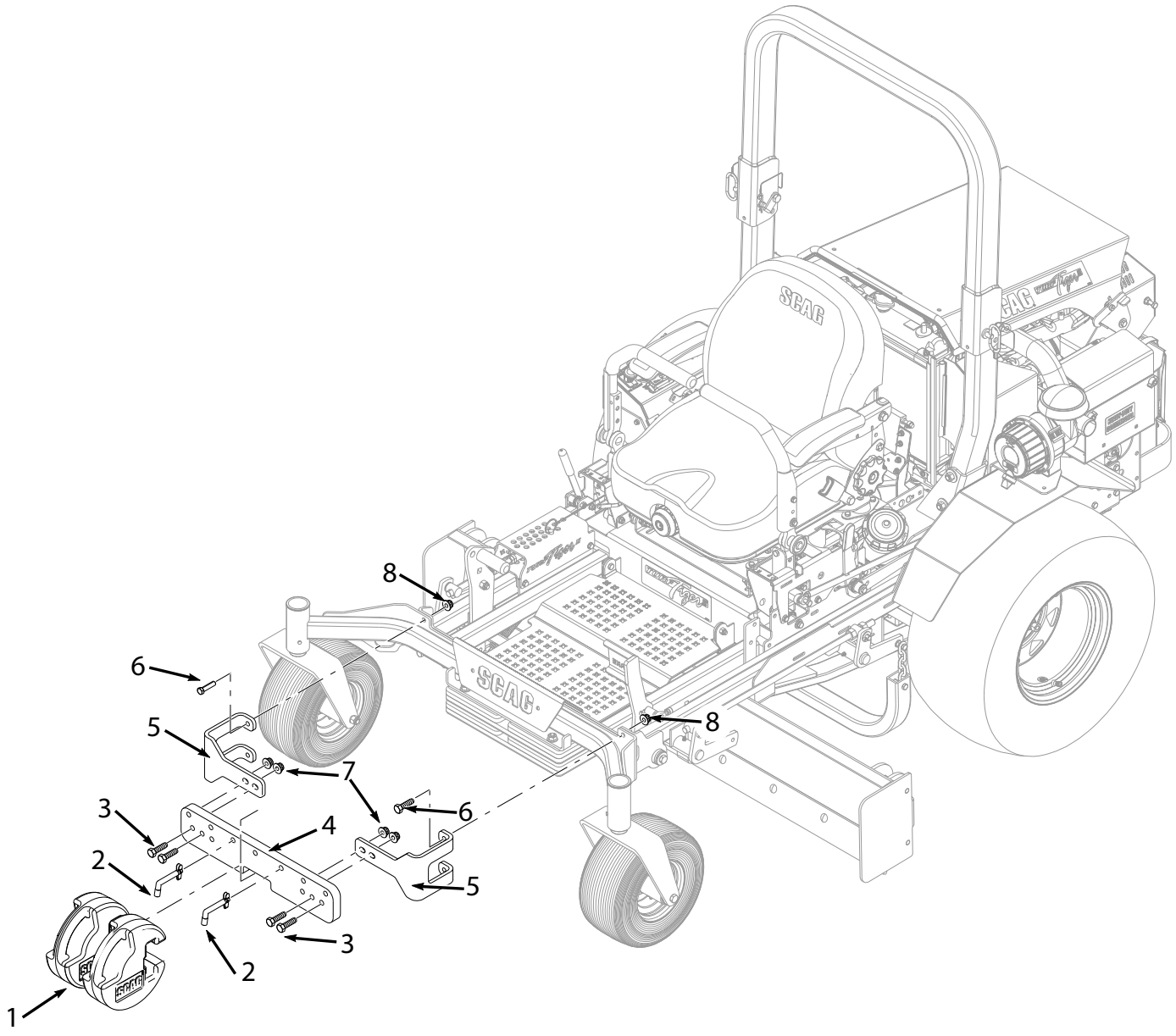


STTII SHEET METAL COMPONENTS

Ref. No.	Part No.	Description
1	463224	Mounting Plate, Seat w/Decal
2	04001-46	Bolt, Hex Head 3/8-16 x 2-1/4”
3	04001-08	Bolt, Hex Head 5/16-18 x 3/4”
4	484148	Isolator, Seat
5	463225	Seat Mounting Plate, Lower w/Decals
6	04117-02	Nut, Flange Elastic Stop Nut, 3/8-16
7	04019-03	Nut, Serrated Flange 5/16-18
8	04041-38	Flat washer, 3/8-.406 x 2.25 x .1875
9	04021-09	Nut, Elastic Stop 3/8-16
10	485599	Spring, Seat Latch
11	462841	Lever Assy., Seat Release (incl. #12)
12	484341	Grip
13	485698-01	Knob, 1/4” Wing
14	04019-03	Nut, Serrated Flange 5/16-18
15	04014-06	Cap screw, Hex socket 1/2-13 x 4”
	04001-52	Cap screw, Hex head 1/2-13 x 2.5”
16	41020	Weight (x2 61V-KBD)
17	04019-06	Nut, Serrated Flange 1/2-13
18	48661	Pad, Rubber
19	04090-03	Pop Rivet, 3/16 x .402
20	48566	Seat Stop Cable
21	04003-12	Bolt, Carriage 5/16-18 x 3/4”
22	04110-01	U-Nut, 1/4-20
23	04001-59	Bolt, Hex Head 1/4-20 x 1-1/4”
24	04019-02	Nut, Serrated Flange 1/4-20
25	04001-221	Bolt, Hex Head 1/4-20 x 8”
26	428197	Mounting Bracket, Cooler - RH
27	428196	Mounting Bracket, Cooler - LH
28	04003-02	Bolt, Carriage 1/4-20 x 3/4”
29	428191	Backing Plate
30	04003-12	Bolt, Carriage 5/16-18 x 3/4”
31	04017-27	Bolt, Hex Head Serrated Flange 3/8-16 x 1”
32	04132-02	Threaded Insert, 3/8-16
33	452733	Fender, LH
34	04001-19	Bolt, Hex Head 3/8-16 x 1”
35	463223	Mainframe Assy., w/Decals
36	04117-05	Nut, 7/16-14 Flange Elastic Stop
37	4291240	Bracket, Carbon Canister
38	428023	Front Support, Fuel Tank
39	453103	Caster Support Weldment - 61V
40	04001-28	Bolt, Hex Head 7/16-14 x 1-1/4”

Ref. No.	Part No.	Description
41	482028-01	Plug, Grease Hole
42	9278	Wheel Assembly (incl. #43)
	482621	Bearing
	482622	Seal
43	48114-07	Grease Fitting
44	43583	Sleeve, Caster Wheel
45	43584	Spacer, Caster Wheel
46	04001-167	Bolt, Hex Head 1/2-13 x 9-1/2”
47	04021-07	Nut, Elastic Stop 1/2-13
48	453110	Yoke Weldment
49	481025	Seal, 2” O.D. x 1.625 Bore
50	48668	Bearing Assembly
51	04021-20	Nut, Jam 1” - 14
52	484195	Cap, Grease
53	428025	Foot Plate
54	431013	Sleeve, Seat Base Mounting
55	04050-01	Retaining Ring, .625 Ext. “E”
56	452734	Fender, RH
57	428024	Rear Support, Fuel Tank
58	463320	Battery Box w/Decal (Diesel Only)
59	453112	Battery Bracket Weldment (Diesel Only)
60	428257	Cover, Battery (Diesel Only)
	481780	Insulation, Battery Cover (Not Shown)
61	04019-04	Nut, Elastic Stop 3/8-16
62	04001-20	Bolt, Hex Head 3/8-16 x 1-1/2”

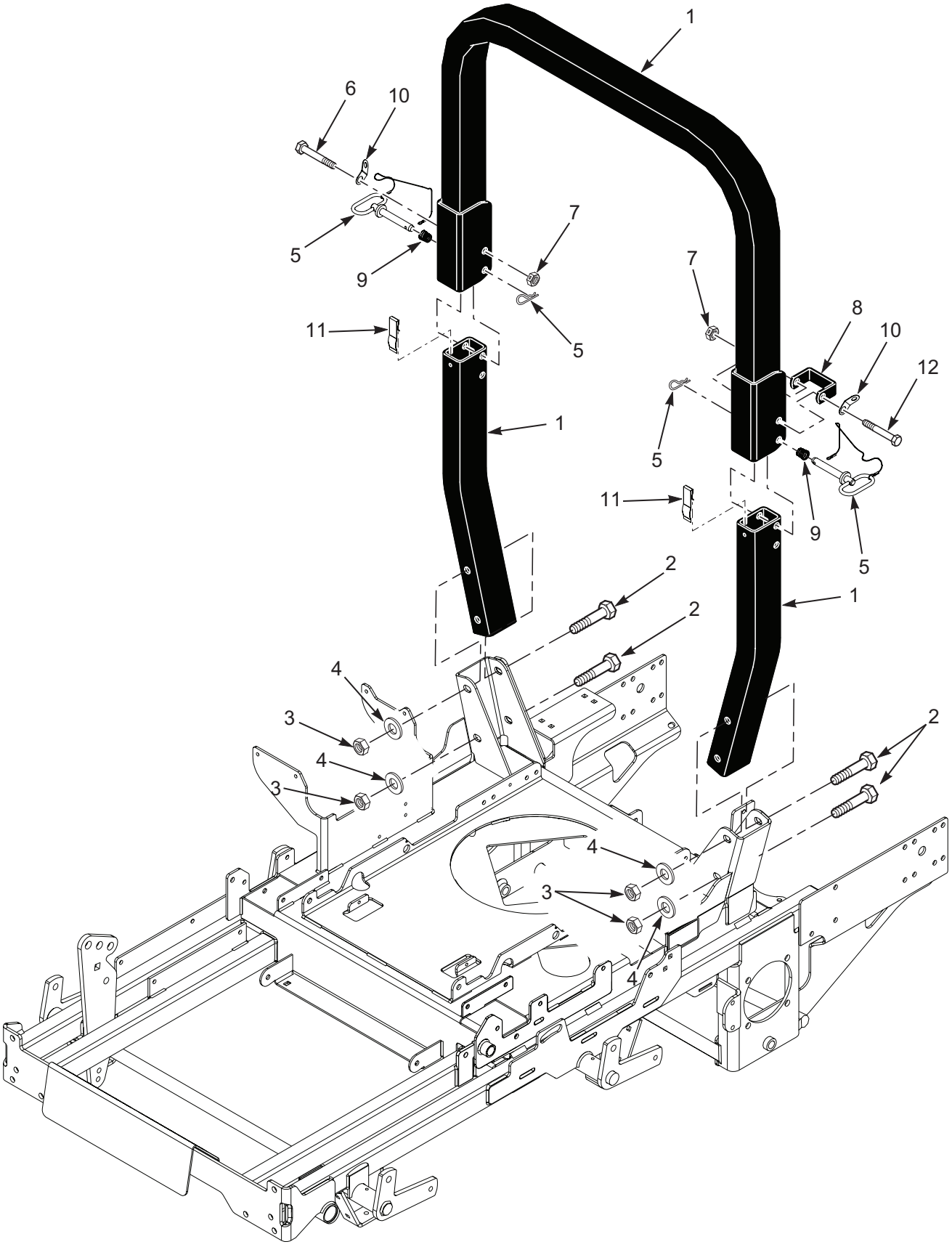
STTII GB FRONT WEIGHTS



STTII GB FRONT WEIGHTS

Ref. No.	Part No.	Description
1	484758	GC Weight (qty 2)
2	485172	Weight Retention Pin
3	04001-153	Cap Screw, Hex Head - 1/2-13 UNC X 2.25
4	426093	Weight Bar
5	427351	Weight Bar Bracket
6	04001-117	Cap Screw, Hex Head - 7/16-14 UNC X 1.75
7	04117-04	Locknut w/Flange Elastic Stop 1/2-13
8	04117-05	Locknut w/Flange Elastic Stop 7/16-14

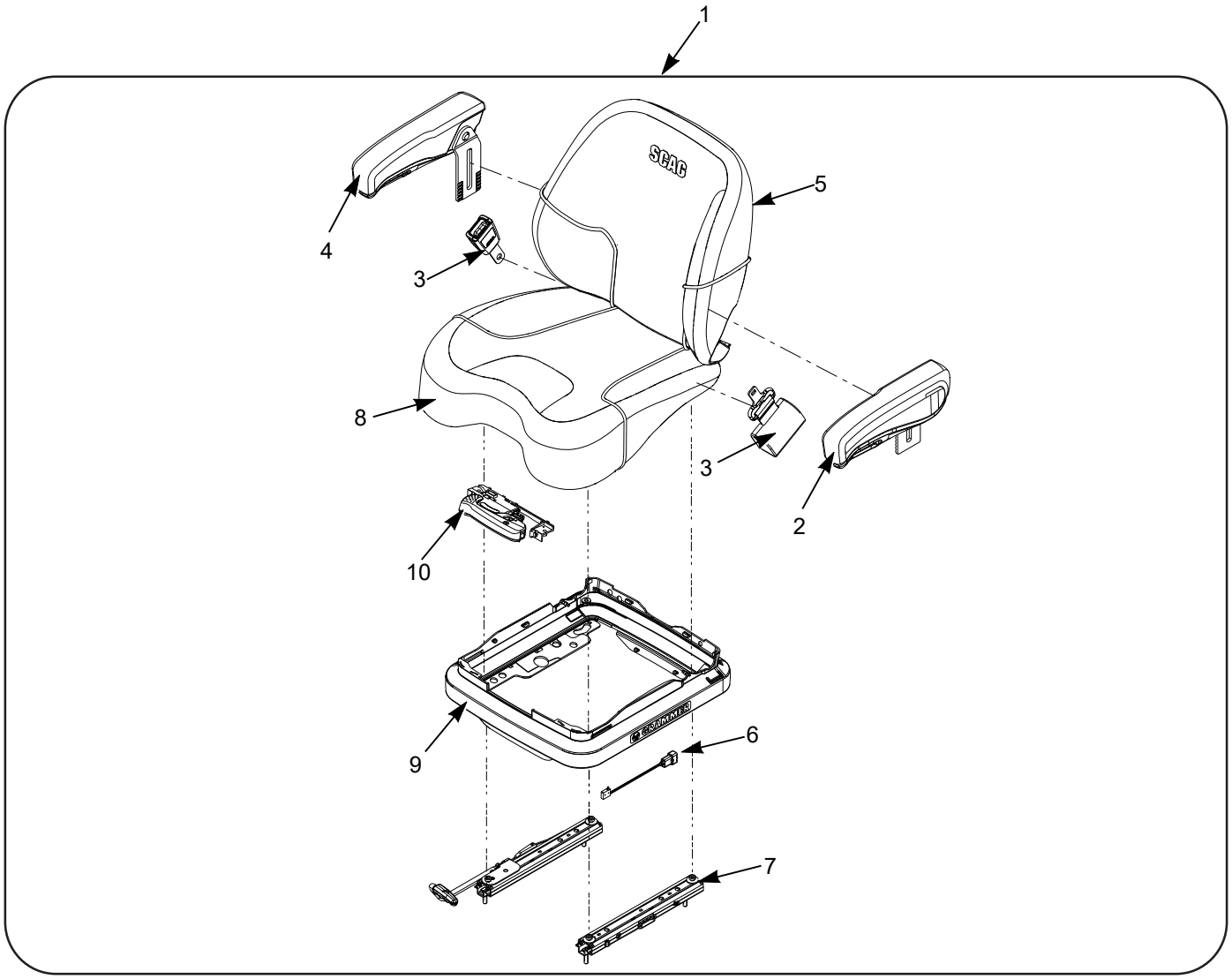
STTII ROLL-OVER PROTECTION STRUCTURE



STTII ROLL-OVER PROTECTION STRUCTURE

Ref. No.	Part No.	Description
1	462210	STT, ROPS Assembly
2	04001-194	Bolt, Hex Head 1/2-13 x 4-1/4”
3	04021-19	Nut, Center Lock 1/2-13
4	04040-13	Flat washer, 1/2-.562 x 1.375 x .109
5	484168	Pin Assembly, ROPS Hinge (incl. #9, #10)
6	04001-90	Bolt, Hex Head 1/2-13 x 3-1/4”
7	04021-07	Nut, Elastic Stop 1/2-13
8	426952	Stop, ROPS
9	484170	Spring, ROPS
10	484169	Clip, ROPS
11	484167	Spring, ROPS
12	04001-163	Bolt, Hex Head 1/2-13 x 3-3/4”

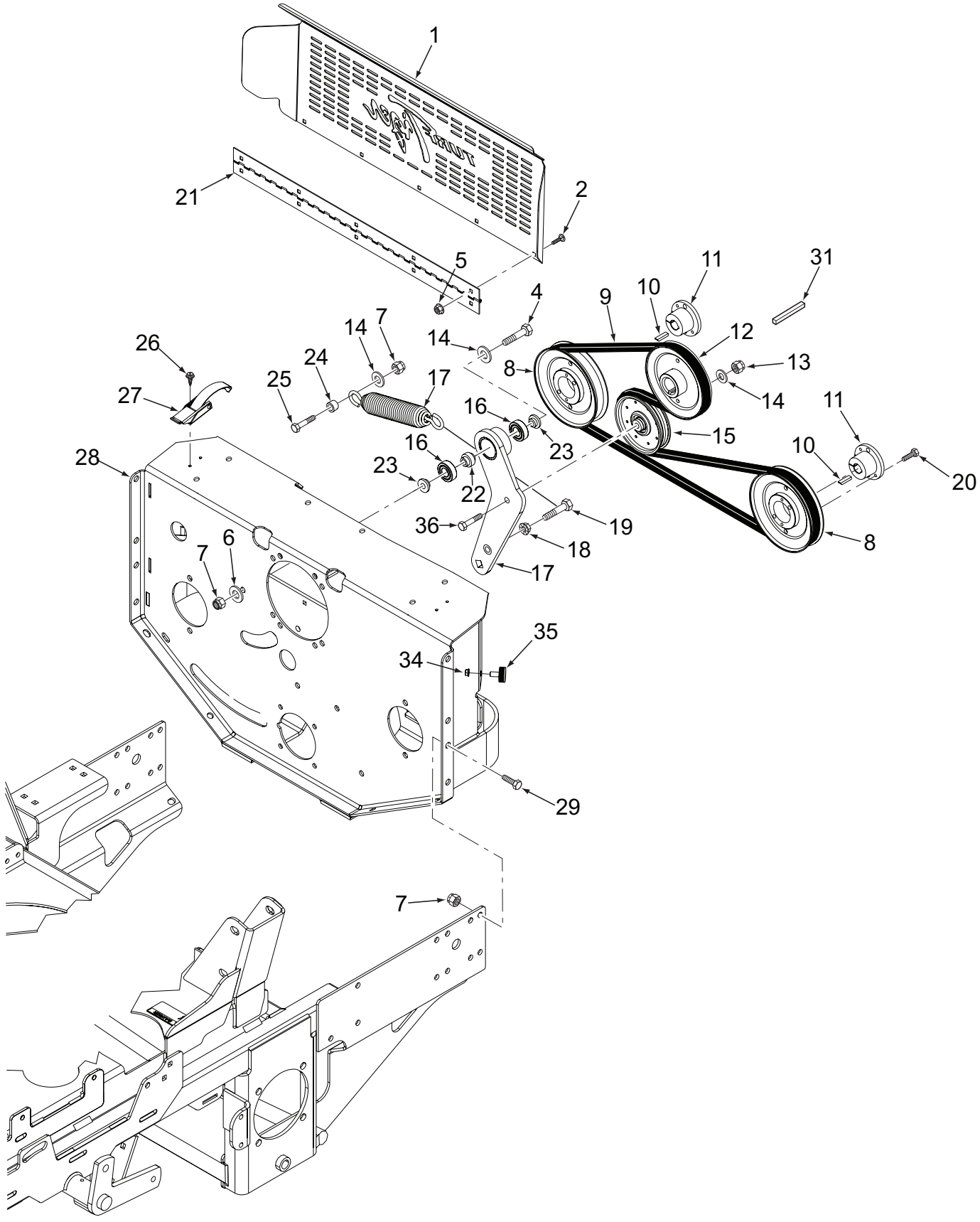
STTII SUSPENSION SEAT



STTII SUSPENSION SEAT

Ref. No.	Part No.	Description
1	487704	Suspension Seat Assembly w/seat belt
2	488347	Armrest Kit, LH (Hardware Included in Kit)
3	488345	Seat Belt Kit (Hardware Included in Kit)
4	488348	Armrest Kit, RH (Hardware Included in Kit)
5	488342	Cover, Back Cushion
6	488369	Seat Switch
7	488343	Track Kit (Hardware Included in Kit)
8	488341	Cover, Seat Cushion
9	488344	Bellows (Track Cover)
10	488346	Weight Adjustment

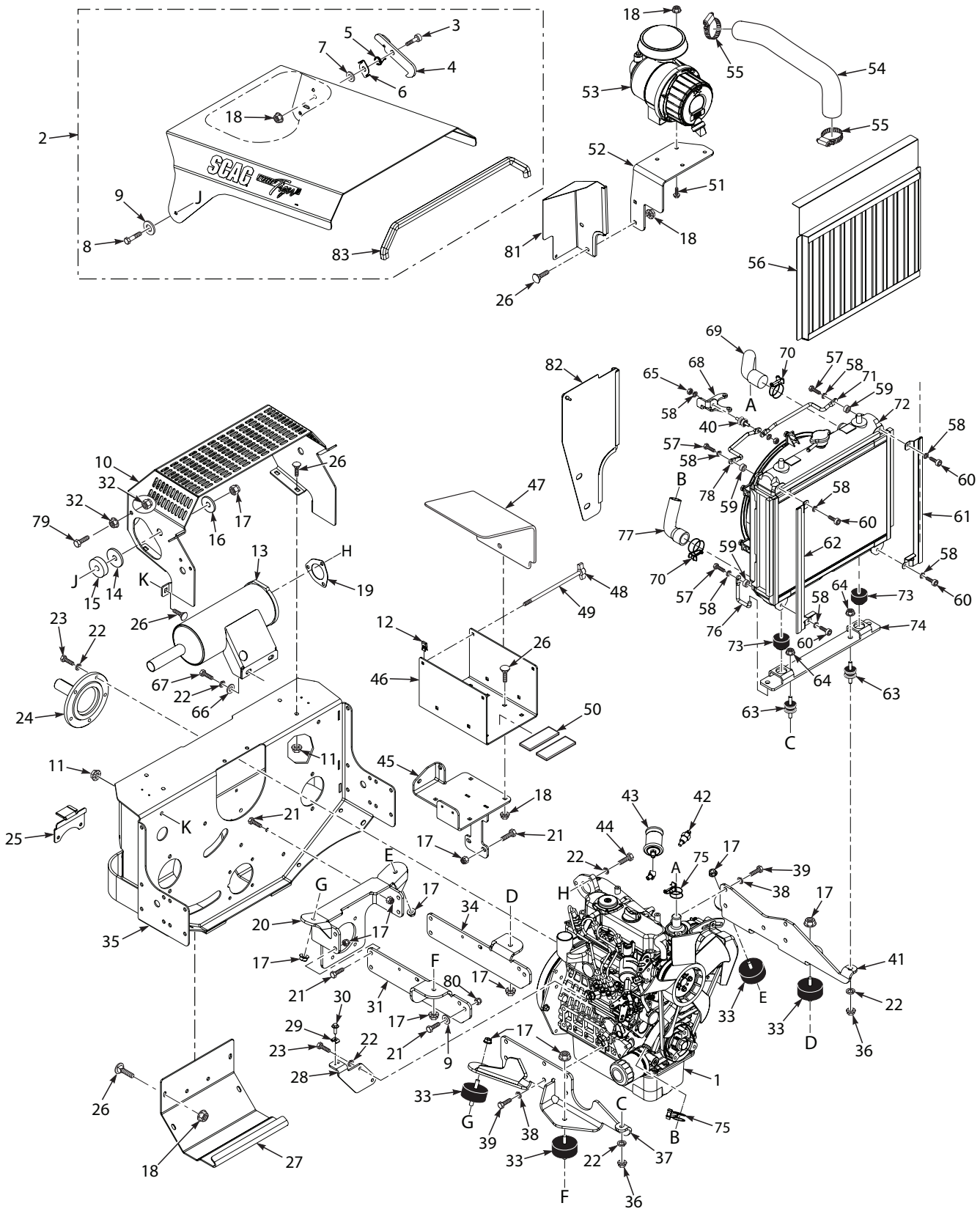
STTII DRIVE COMPONENTS



STTII DRIVE COMPONENTS

Ref. No.	Part No.	Description
1	427106	Cover, Rear
2	04003-07	Bolt, Carriage 1/4-20 x 1/2”
3	04003-02	Bolt, Carriage 1/4-20 x 3/4”
4	04001-22	Bolt, Hex Head 3/8-16 x 2-3/4”
5	04019-02	Nut, Serrated Flange 1/4-20
6	04041-11	Flat washer, 3/8-.406 x 1.50 x 7 Gauge
7	04021-09	Nut, Elastic Stop 3/8-16
8	482745	Pulley, 6.35 O.D. (Diesel Engine)
9	485928	Belt, STTII Pump Drive (Diesel Engine)
10	04063-27	Key, 5mm x 5mm x 30mm
11	481884	Tapered Hub, 17mm Bore
12	483829	Pulley, 5.67 O.D (Kubota Diesel Only)
13	04021-05	Nut, Center Lock 3/8-16
14	04043-04	Flat washer, 3/8-.391 x .938 x .105 HD
15	483214	Pulley, Idler 4”
16	48224	Bearing
17	484754	Spring Pump Drive
18	04019-06	Nut, Serrated Flange 1/2-13
19	04001-185	Bolt, Hex Head 1/2-13 x 2” Grade 8
20	04001-172	Bolt, Hex Head 1/4-20 x 1” Grade 8
21	481531	Hinge, Belt Cover
22	431050	Spacer, Bearing
23	431049	Spacer, Controls
24	431051	Spacer, Spring Anchor
25	04001-20	Bolt, Hex Head 3/8-16 x 1-1/2”
26	04011-11	Screw, #10-32 x .563 Shake proof
27	481309	Latch, Hood
28	452886	Pump Mounting Plate Weldment (Diesel)
29	04001-19	Bolt, Hex Head 3/8-16 x 1”
30	04030-05	Lockwasher, 7/16”
31	04102-03	Bolt, Hex Head 7/16”
32	04063-23	Key, 1/4 x 1/4 x 3-1/4”
33	04001-170	Bolt, Hex Head 3/8-16 x 2-1/2” Grade 8
34	04019-03	Nut, Serrated Flange 5/16-18
35	481284	Bumper, Rubber
36	04001-21	Bolt, Hex Head 3/8-16 x 1-3/4”

STTII ENGINE & ATTACHING PARTS - KUBOTA DIESEL



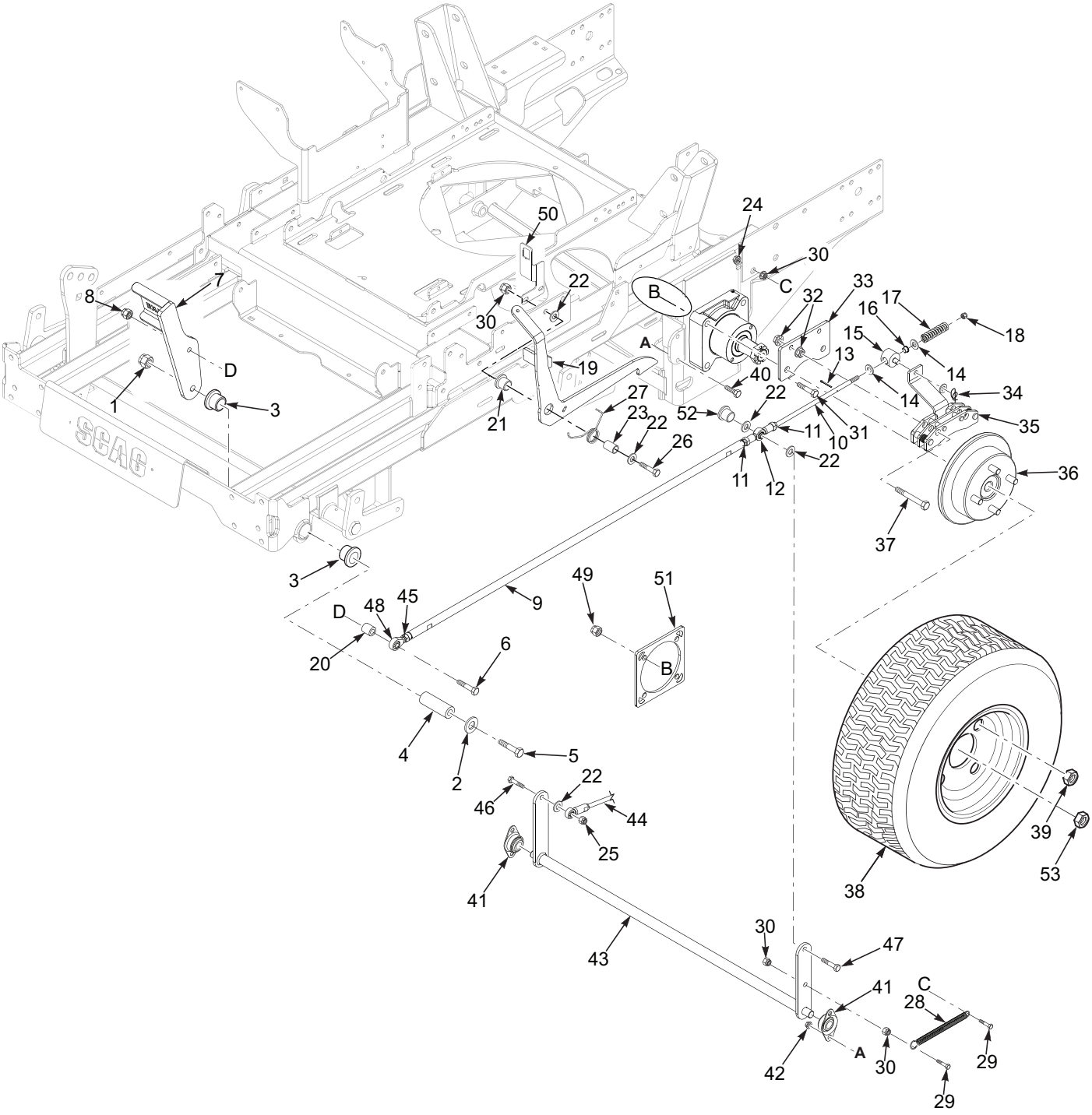
STTII ENGINE & ATTACHING PARTS - KUBOTA DIESEL

Ref. No.	Part No.	Description
1	485749*	Engine, D902 - Kubota
2	462917	Hood Assy., STTII (Kubota Diesel)
3	04009-07	Bolt, Shoulder 5/16-18 x 1/2”
4	424633	Latch, Hood
5	483507	Spring, Hood Latch
6	424634	Lock, Hood Latch
7	04040-05	Flat washer, 3/8-.406 x .812 x .065
8	04001-21	Bolt, Hex Head, 3/8-16 x 1-3/4”
9	04041-07	Flat washer, 3/8-.391 x .938 x .105
10	427561	Guard, Muffler
11	04117-01	Nut, Flange Elastic Stop Nut, 5/16-18
12	04110-01	U-Nut 1/4-20
13	483811	Muffler, Kubota
14	483471	Disc, Anti-Friction
15	43740	Spacer, Hood
16	04041-11	Flat washer, 3/8 (.406 x 1.50 x 7 Ga.)
17	04021-09	Nut, Elastic Stop 3/8-16
18	04019-03	Nut, Serr. Flng. 5/16-18
19	483387	Gasket, Muffler
20	424452	Plate, Rear Engine Mount
21	04001-19	Bolt, Hex Hd. 3/8-16 x 1”
22	04030-03	Lock washer, 5/16” Spring
23	04002-12	Bolt, Metric Hex Hd. M8-1.25 x 20mm
24	482334	Stub Shaft, (Kubota)
25	426054	Bracket, Belt Guide
26	04003-12	Bolt, Carriage 5/16-18 x 3/4”
27	427071	Cover, Rear
28	424485	Bracket, Control Mount
29	424580	Clamp
30	04011-06	Screw, Self Tapping
31	427137	Plate, Engine Mount RH
32	04019-04	Nut, Serr. Flng. 5/16-18
33	483351	ISO Mount
34	427136	Plate, Engine Mount LH
35	452886	Pump Mounting Plate Weldment
36	04025-02	Nut, Metric Hex M8-1.25mm
37	452792	Mounting Bracket Weldment RH
38	04030-05	Lock washer, 7/16” Spring
39	04002-10	Bolt, Metric Hex Hd. M10-1.25 x 25mm
40	484069	ISO Mount, Upper Radiator
41	452791	Mounting Bracket Weldment LH
42	483360	Sender Unit, Water Temperature
43	481811	Sender Unit, Oil Pressure
44	04002-01	Bolt, Metric Hex Hd. M8-1.25 x 30mm
45	453112	Battery Bracket Weldment

Ref. No.	Part No.	Description
46	463320	Battery Box w/Decal
47	428257	Cover, Battery
	481780	Insulation, Battery Cover (Not Shown)
48	485698-01	Knob, 1/4” Wing
49	04001-221	Bolt, Hex Head 1/4-20 x 8”
50	48661	Rubber Pad
51	04017-17	Bolt, Hex Head Serr. Flng 5/16-18 x 1”
52	427140	Bracket, Air Cleaner Mount
53	485322	Air Filter Assembly (Enginaire p/n 67150)
54	484697	Hose, Air Intake
55	48136-25	Clamp, 2-3/4” Max. Dia.
56	463423	Debris Screen Assembly (With Upper Foam)
57	04002-20	Bolt, Metric Hex Hd. M6-1.0 x 30mm
58	04030-02	Lock washer, 1/4” Spring
59	43714	Spacer, Radiator
60	04106-01	Capscrew, Metric M6-1.0 x 16mm
61	424623	Debris Screen Track RH
62	424624	Debris Screen Track LH
63	483928	ISO Mount, Lower Radiator
64	04111-04	Nut, Metric Serr. Flng. M8 x 1.25
65	04025-01	Nut, Metric Hex M6 x 1
66	04040-04	Flat washer, SAE 5/16 (.344 x .688 x
67	04002-03	.065”)
68	**	Bolt, Metric Hex Hd. M8-1.25 x 25mm
69	**	Mount, Hose - (Kubota p/n 1G930-72191)
70	**	Hose, Upper - (Kubota p/n 1G952-72851)
71	**	Clamp, Large - (Kubota p/n 09318-89030)
72	**	Brace, LH - (Kubota p/n1G960-72141)
		Radiator Assy - (Kubota p/n 1G952-72001)
73	**	Includes Items #40, #63 and #68 thru #78
74	**	Cushion, Radiator - (Kubota p/n 1G952-72181)
75	**	Brkt, Rad Mount - (Kubota p/n 1G952-72151)
76	**	Clamp, Small - (Kubota p/n 09318-89039)
77	**	Mount, Lwr Rad - (Kubota p/n 1G952-30821)
78	**	Hose, Lower - (Kubota p/n 1G952-72941)
79	04001-21	Brace, RH - (Kubota p/n 1G960-72131)
80	04117-02	Bolt, Hex Head, 3/8-16 x 1-3/4”
81	463417	Nut, Elastic Stop Flange, 3/8-16
	481017-03	Heatshield Assembly, Air Filter
	486388-03	Trim Seal
82	463418	Edge Trim, Trim Lock
	486388-03	Heatshield Assembly, Engine
	481017-03	Edge Trim, Trim Loc
	485846	Trim Seal
83	481017-02	Bumper, Plug

* Not available through Scag.
** Available through the engine manufacturer.

STTII BRAKE COMPONENTS

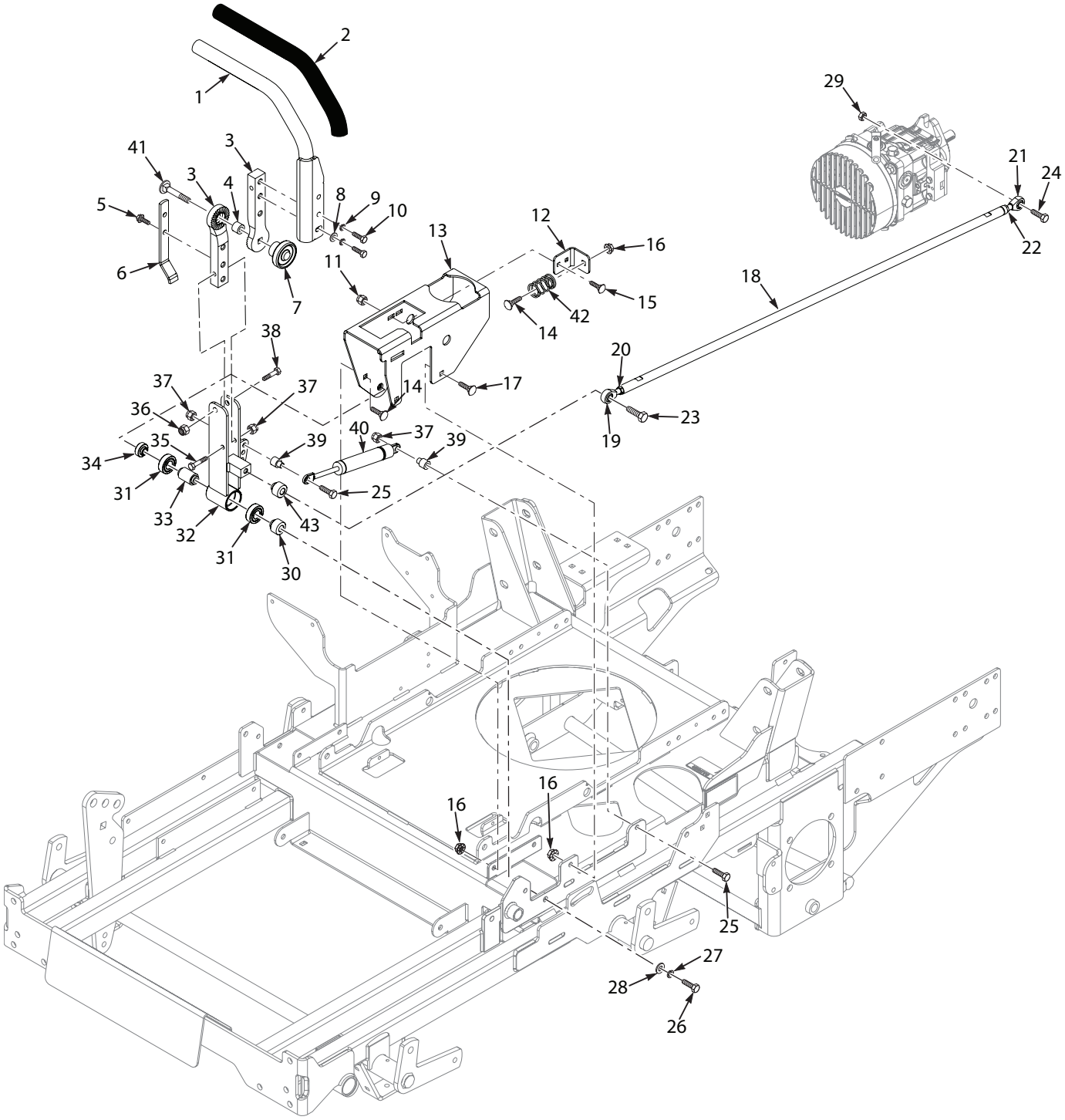


STTII BRAKE COMPONENTS

Ref. No.	Part No.	Description
1	04021-07	Nut, Elastic Stop 1/2-13
2	04040-13	Flat washer, 1/2-.562 x 1.375 x .109
3	483453-03	Bearing
4	43872	Sleeve, Brake Pivot
5	04001-194	Bolt, Hex Head 1/2-13 x 4-1/4”
6	04001-22	Bolt, Hex Head 3/8-16 x 2-3/4”
7	453055	Foot Pedal, Brake
8	04021-09	Nut, Elastic Stop 3/8-16
9	486523	Link, Brake
10	486524	Linkage Assy., LH Brake (incl. #9, 11 - 18,45,48)
	462844	Linkage Assy., RH Brake
11	04020-25	Nut, Jam 3/8-24 UNF
12	486491	Rod End w/Trunion
13	04061-02	Cotter Pin, 3/32 x .75
14	04040-05	Flat washer, 3/8-.406 x .812 x .065
15	462452	Swivel Assy., Brake (incl. #16)
16	483453-23	Bearing
17	484535	Spring, Brake
18	04021-18	Nut, Elastic Stop 3/8-24 Grade 8
19	463174	Brake Handle w/Grip (includes #21)
	481548	Grip
20	43572	Spacer
21	483453-14	Bearing
22	04041-07	Flat washer, 3/8-.391 x .938 x .105
23	431105	Pivot, Brake Lever
24	04132-02	Threaded Insert, 3/8-16
25	04021-05	Nut, Center Lock 3/8-16
26	04001-31	Bolt, Hex Head 3/8-16 x 2-1/2”
27	486485	Spring, Torsion, Brake Handle
28	485831	Spring, Brake Return
29	04001-136	Bolt, Hex Head 3/8-16 x 1-1/2” Grade 8
30	04019-04	Nut, Serrated Flange 3/8-16

Ref. No.	Part No.	Description
31	04001-190	Bolt, Hex Head 1/2-13 x 2-3/4”
32	04019-06	Nut, Serrated Flange 1/2-13
33	428482	Mounting Bracket, Brakes
34	04069-01	Pin, Rue Cotter - 3/8
35	485595	Brake Caliper
36	462808	Wheel Hub w/Disc
37	04001-87	Bolt, Hex Head 1/2-13 x 4”
38	485607	Wheel Assy., 26 x 9.5-12 (52V)
	481659	Rim w/ Valve Stem (52V)
	485608	Tire, 26 x 9.5-12 (52V)
	486159	Wheel Assy., 26 x 12-12 (61V & 72V)
	481851	Rim w/Valve Stem (61V & 72V)
	486162	Tire, 26 x 12-12 (61V & 72V)
39	04028-02	Wheel Nut, 1/2-20
40	04001-08	Bolt, Hex Head 5/16-18 x 3/4”
41	48796	Bearing, Self Aligning - 5/8 I.D.
42	04021-10	Nut, Elastic Stop 5/16-18
43	453094	Bellcrank Weldment, Brake Actuator
44	462844	Linkage Assy., RH Brake (incl. #13 - #18)
45	04020-26	Nut, 3/8-24 UNF LH Jam
46	04001-32	Bolt, Hex Head 3/8-16 x 1-1/4”
47	04102-14	Bolt, Hex Head w/ Patch 3/8-16 x 1-3/4”
48	482585	Rod End, Male - LH, 3/8-24 Thread
49	04021-19	Nut, Lock, 1/2-13
50	428092	Bracket, Brake Switch
51	423279	Plate, Motor Backing
52	431094	Bushing, Brake
53	48680	Nut, Castle 1”- 20 UNEF

STTII STEERING COMPONENTS

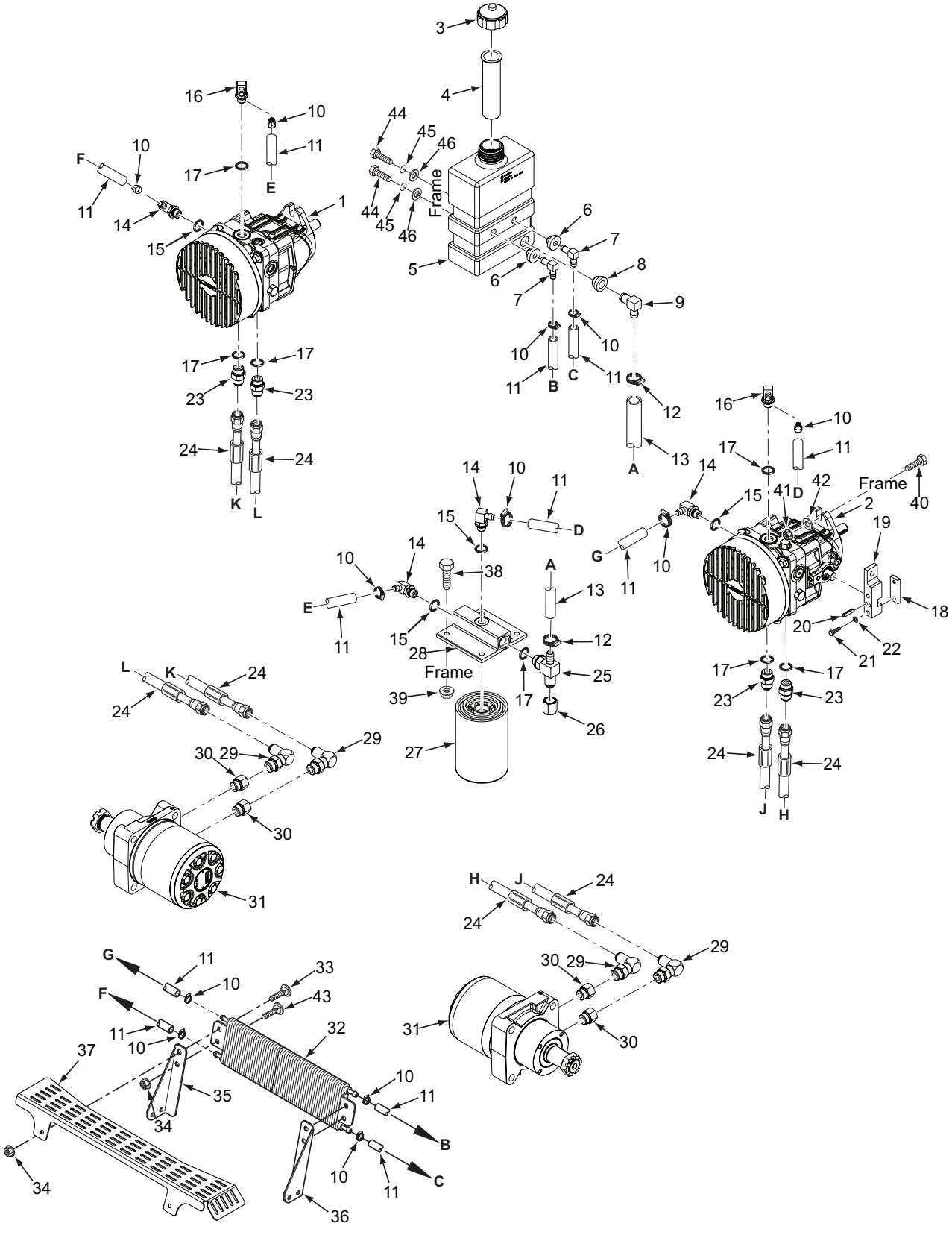


STTII STEERING COMPONENTS

Ref. No.	Part No.	Description
1	462804	Handle Bar w/Grip - LH (INCL #2)
	462805	Handle Bar w/Grip - RH (INCL #2)
2	484376	Grip, Control Lever
3	461938	Pivot, Control Lever (INCL #4,5,6,7,41)
4	483250	Spacer, Rubber
5	04017-16	Bolt, Hex Head Serrated Flange 5/16-18 x 3/4”
6	423491	Actuator, Switch
7	483269	Knob, Control Handle
8	04040-15	Flat washer, 5/16-.375 x .875 x .083
9	04030-03	Lock washer, 5/16
10	04001-09	Bolt, Hex Head 5/16-18 x 1”
11	04117-03	Nut, Flange Elastic Stop 1/4-20
12	427108	Mounting Bracket, Spring Return
13	463221	Control Plate w/Decals LH
	463222	Control Plate w/Decals RH
14	04003-12	Bolt, Carriage 5/16-18 x 3/4”
15	04003-02	Bolt, Carriage 1/4-20 3/4”
16	04019-03	Nut, Serrated Flange 5/16-18
17	04013-03	Cap screw, Flange 5/16-18 x 3/4”
18	486479	Linkage Assy., Pump Control (incl. #19 - #22)
19	482585	Rod End, Male - LH
20	04026-26	Nut, 3/8-24 UNF LH Jam
21	482586	Rod End, Male - RH
22	04020-25	Nut, 3/8-24 UNF Jam
23	04001-21	Bolt, Hex Head 3/8-16 x 1-3/4”
24	04001-32	Bolt, Hex Head 3/8-16 x 1-1/4”
25	04001-11	Bolt, Hex Head 5/16-18 x 1-1/2”
26	04001-152	Bolt, Hex Head 3/8-16 x 4-1/4”
27	04030-04	Lock washer, 3/8”
28	04041-07	Flat washer, 3/8-.391 x .938 x .105
29	04021-05	Nut, Center Lock 3/8-16
30	43607	Spacer, Controls
31	48224	Bearing

Ref. No.	Part No.	Description
32	452718	Control Lever Weldment, RH
	452717	Control Lever Weldment, LH
33	43600	Spacer, Bearing
34	431024	Spacer, Controls
35	04001-17	Bolt, Hex Head 5/16/-18 x 2”
36	04021-09	Nut, Elastic Stop 3/8-16
37	04021-10	Nut, Elastic Stop 5/16-18
38	04001-45	Bolt, Hex Head 3/8-16 x 2”
39	43602	Spacer, Dampener
40	484151	Dampener
41	04003-05	Bolt, Carriage 3/8-16 x 1-1/2”
42	485970	Return Spring, Control Arm
43	43123	Spacer, Cam Pivot

STTII HYDRAULIC SYSTEM - DUAL CORE COOLER



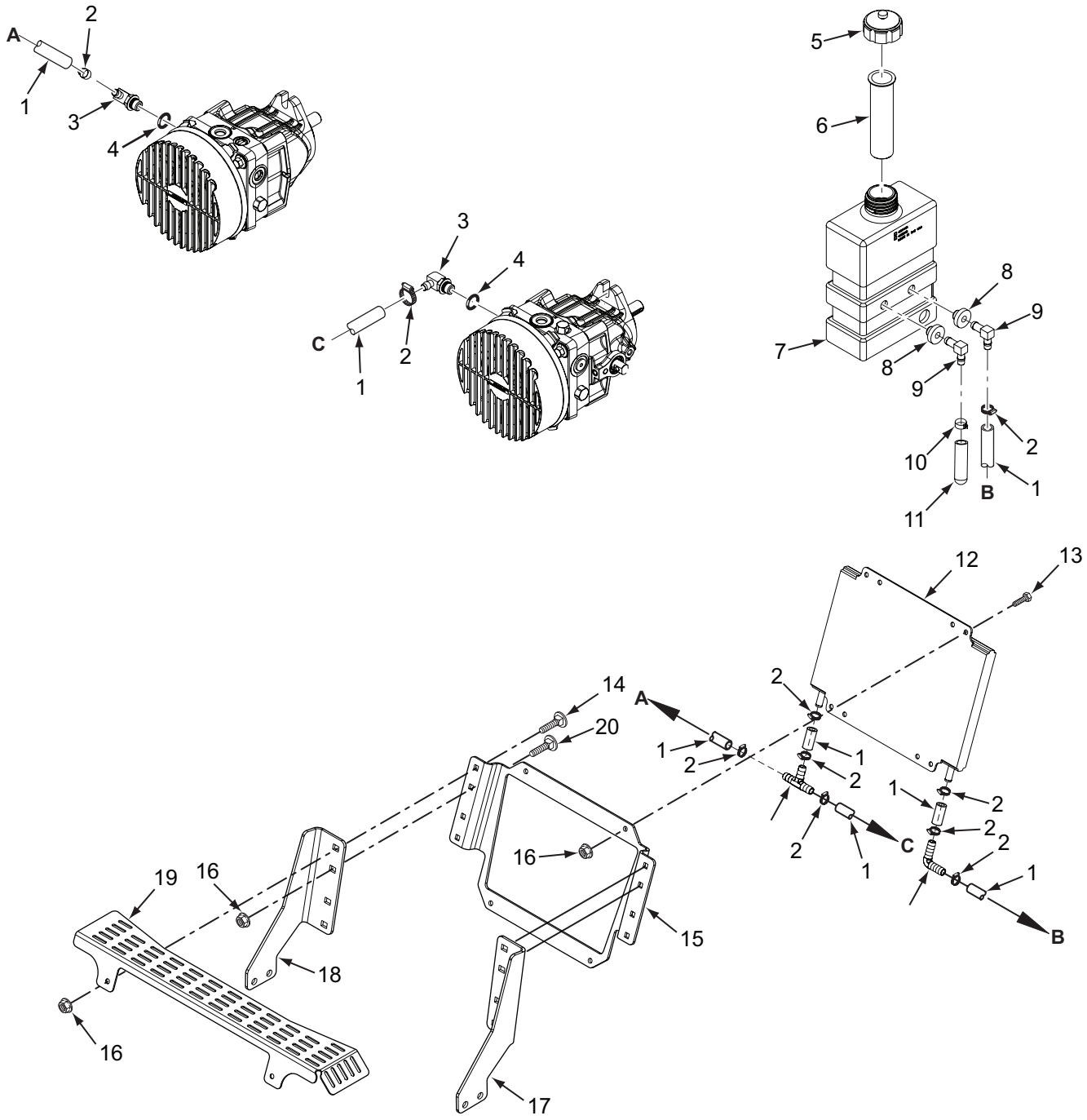
STTII HYDRAULIC SYSTEM - DUAL CORE COOLER

Ref. No.	Part No.	Description
1	483100	Pump, RH w/Fan
	462954	Pump, RH w/Fan (25LP Only)
2	483101	Pump, LH, w/Fan
3	481164	Cap, Hydraulic Tank
4	481507	Insert, Filler Neck
5	463046	Hydraulic Tank Assy., STTII (incl. #4, #6 - #9)
6	482571	Bushing, .56 Dia. Viton
7	482572	Fitting, 90 Degree - .38 Hose
8	482573	Bushing, .78 Dia Viton
9	482574	Fitting, 90 Degree - .50 Hose
10	48136-13	Clamp, Hose
11	48811	Hose, 3/8 Pushlock (order by inch)
12	48136-05	Clamp, Hose
13	48351	Hose, 1/2 Pushlock (order by inch)
14	482266-01	Elbow, 90 Degree - 9/16 O-Ring (incl. #15)
15	48603-06	O-Ring, 9/16-18 Thread
16	482266-02	Elbow, 90 Degree - 3/4 O-Ring (incl. #17)
17	48603-02	O-Ring, 3/4-16 Thread
18	422694	Plate, Pump Control Clamp
19	485969	Block, RH Pump Control
	485968	Block, LH Pump Control
20	04060-09	Pin, 7/32 x 1”
21	04001-04	Bolt, Hex Head 1/4-20 x 1-1/2”
22	04030-02	Lock washer, 1/4
23	48572-06	Fitting, Union 3/4-16 JIC X O-Ring (incl. #17)
24	484458	Hose Assembly
	485767	Hose Assembly (Diesel Only)
25	482477	Tee Fitting, 3/4 - O-Ring (incl. #17)
26	48571-02	Cap, JIC
27	48758	Filter, Spin-On
28	482417	Filter Head Assembly

Ref. No.	Part No.	Description
29	48350-05	Elbow, 90 Degree - 5/8 Tube
30	48938-02	O-Ring Bushing, 5/8 Tube
31	484108	Wheel Motor, Parker TG - 18ci.
32	482505	Cooler, Transmission
33	04003-02	Bolt, Carriage 1/4-20 x 3/4
34	04019-02	Nut, Serrated Flange 1/4-20
35	428197	Mounting Bracket, Cooler - RH
	428209	Mounting Bracket, Cooler - RH (Diesel)
36	428196	Mounting Bracket, Cooler - LH
	428210	Mounting Bracket, Cooler - LH (Diesel)
37	*428252	Screen Guard, Kohler EFI (LP)
	*428199	Screen Guard, Briggs & Stratton 31BV
	*428200	Screen Guard, B&S 37BV-EFI & 40BV-EFI
38	04001-09	Bolt, Hex Head, 5/16-18 x 1”
39	04019-03	Nut, Serrated Flange, 5/16-18
40	04001-20	Bolt, Hex Head, 3/8-16 x 1-1/2”
41	04021-09	Nut, Lock, 3/8-16
42	04043-04	Flat washer, 3/8
43	04003-07	Bolt, Carriage, 1/4-20 x 1/2”
44	04001-08	Bolt, Hex Head 5/16-18 x 3/4”
45	04030-03	Lock washer, 5/16
46	04040-15	Flat washer, 5/16, .375 x .875 x .083

* Air Cooled Models Only.

STTII HYDRAULIC SYSTEM - SINGLE CORE COOLER

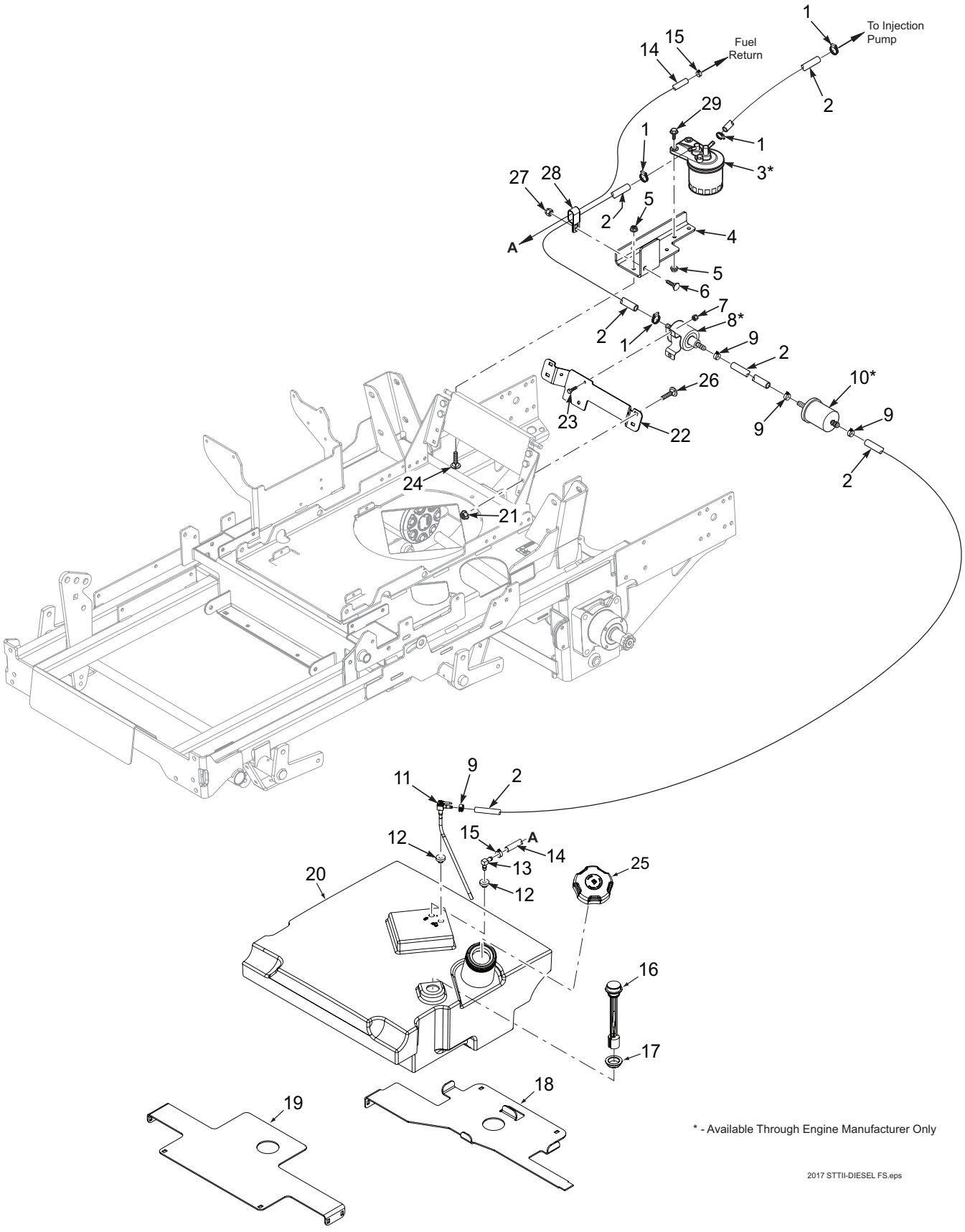


STTII HYDRAULIC SYSTEM - SINGLE CORE COOLER

Ref. No.	Part No.	Description
1	48811	Hose, 3/8 Pushlock (order by inch)
2	48136-13	Clamp, Hose
3	482266-01	Elbow, 90 Degree - 9/16 O-Ring (incl. #15)
4	48603-06	O-Ring, 9/16-18 Thread
5	481164	Cap, Hydraulic Tank
6	481507	Cap, Hydraulic Tank Insert, Filler Neck
7	482572	Hydraulic Tank Assy., STTII (incl. #4, #6 - #9)
8	482571	Bushing, .56 Dia. Viton
9	482572	Fitting, 90 Degree - .50 Hose
10	48059-01	Clamp
11	484352-03	Cap Plug, .375 x 1.50
12	484317	Cooler, Transmission - Single Core
13	04001-01	Bolt, Hex Head 1/4-20 x 3/4”
14	04003-02	Bolt, Carriage 1/4-20 x 3/4
15	428492	Mounting Bracket, Oil Cooler (air cooled)
	428524	Mounting Bracket, Oil Cooler (liquid cooled)
16	04019-02	Nut, Serrated Flange 1/4-20
17	428196	Mounting Bracket, Cooler - LH
18	428197	Mounting Bracket, Cooler - RH
19	*428252	Screen Guard, Kohler EFI (LP)
	*428199	Screen Guard, Briggs & Stratton 31 & 35BV
	*428200	Screen Guard, Briggs & Stratton 37BV-EFI & 40BV-EFI
20	04003-07	Bolt, Carriage, 1/4-20 x 1/2”

NOTE - Components not shown are the same as the Dual Core Cooler Hydraulic System shown on the previous page.
* Air Cooled Models Only.

STTII FUEL SYSTEM - KUBOTA DIESEL

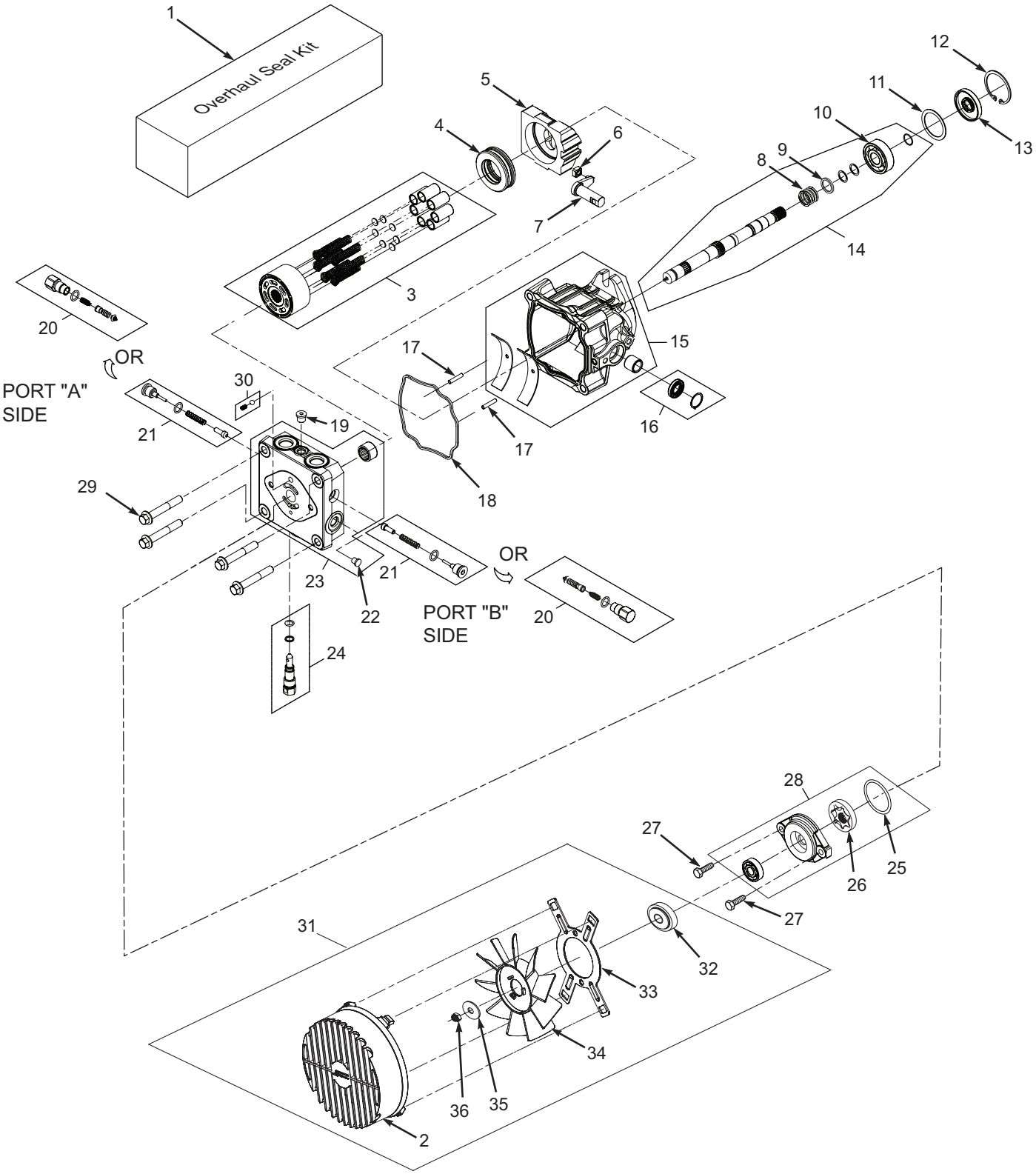


STTII FUEL SYSTEM - KUBOTA DIESEL

Ref. No.	Part No.	Description
1	48136-13	Hose Clamp, 0.69” Dia.
2	483620	** Fuel Hose, 5/16” ID. Non-Perm.
3	*	Fuel Filter, Kubota
4	427164	Bracket, Fuel Filter Mounting
5	04019-03	Nut, Serr. Flng. 5/16-18
6	04003-12	Bolt, Carriage 5/16-18 x 3/4”
7	04021-08	Nut, Hex Elastic Stop 1/4-20
8	*	Fuel Pump, Kubota
9	48059-04	Clamp, Fuel Supply Hose
10	*	Fuel Pre-Filter, Kubota
11	485701	Valve, Shutoff Assy
12	482571	Bushing, 0.56” Dia. Viton
13	485626	Fitting, Return
14	481179	** Fuel Return Hose, 3/16”
15	48059-03	Clamp, Fuel Return Hose
16	485687	Fuel Gauge Assy., 8” (incl. #17)
17	484242	Seal, Fuel Gauge
18	428024	Rear Support, Fuel Tank
19	428023	Front Support, Fuel Tank
20	463149	Fuel Tank Assembly (Incl. #11, 12, 15, 16)
21	04019-02	Nut, Serr. Flng. 1/4-20
22	428225	Mounting Bracket, Fuel Pump
23	04003-02	Bolt, Carriage, 1/4-20 x 3/4”
24	04003-04	Bolt, Carriage 5/16-18 x 1”
25	484294	Fuel Cap
26	04003-02	Bolt, Carriage 1/4-20 x 3/4”
27	04117-01	Nut, Flange Elastic Stop Nut, 5/16-18
28	48030-11	Clamp, Hose
29	04001-09	Bolt, Hex Head, 5/16-18 x 1”
***	485742	Pad, Fuel Tank

* Available Through Engine Manufacturer Only.
** Order by the inch.
*** Item Not Shown

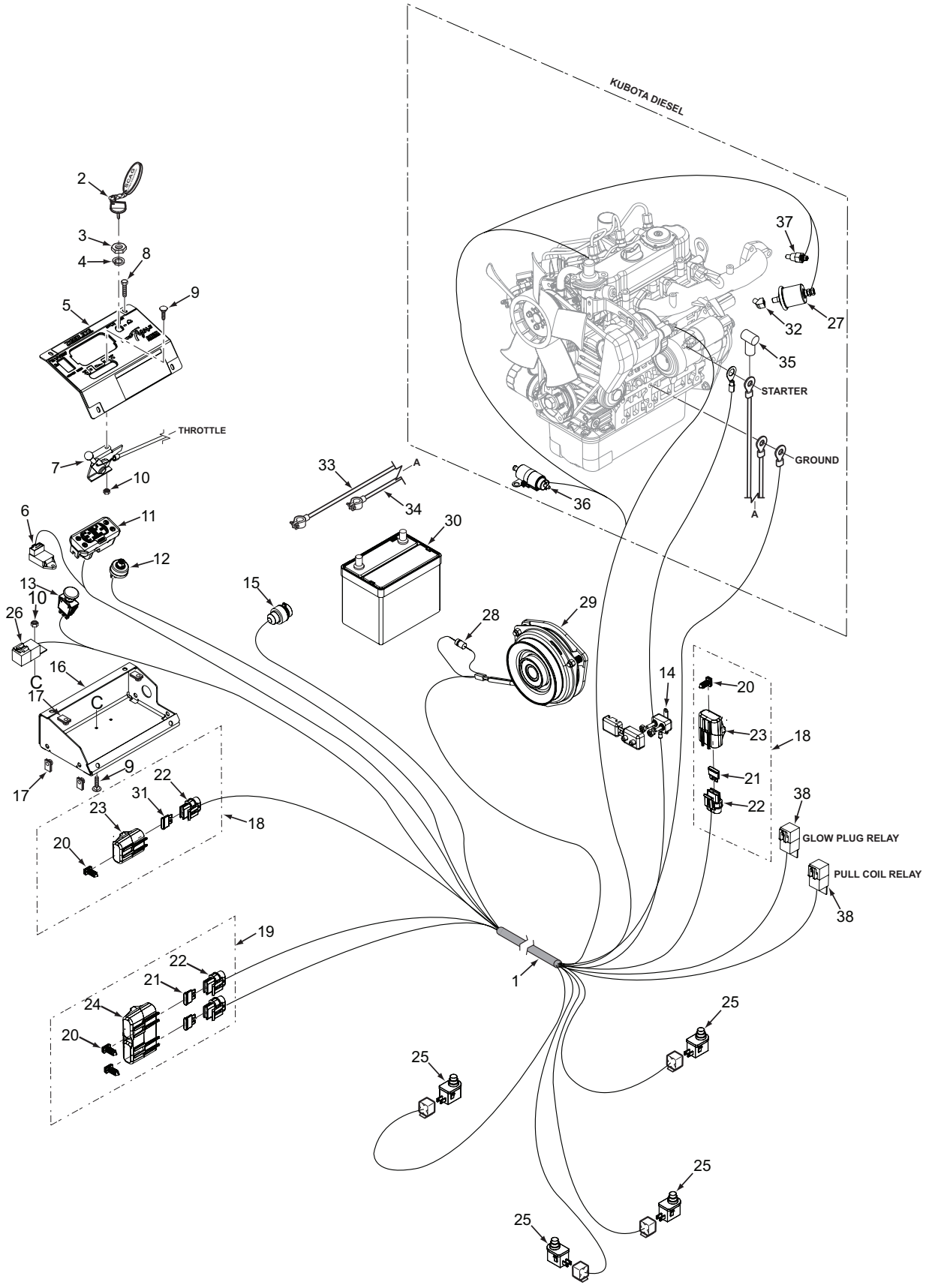
BDP-16A HYDRAULIC PUMP ASSEMBLY with COOLING FAN



BDP-16A HYDRAULIC PUMP ASSEMBLY with COOLING FAN

Ref. No.	Part No.	Description
1	HG70740	Overhaul Seal Kit
2	HG52059	Fan Cover
	485879	Fan Cover w/ Notch (25LP Right Side Pump Only)
3	HG72158	Cylinder Block Kit - 16cc
4	HG51462	Thrust Ball Bearing Assembly
5	HG51436	Variable Swashplate
6	HG2000015	Slot Guide
7	HG2000014	Trunnion Arm
8	HG2000025	Block Spring
9	HG2000024	Block Thrust Washer
10	HG2000032	Shaft Ball Bearing
11	HG2000023	Spacer
12	HG2000038	Retaining Ring
13	HG51092	Seal
14	HG70578	Kit, Pump Shaft (keyed thru taper)
15	HG70738	Housing Kit
16	HG70739	Trunnion Seal Kit
17	HG50641	Pin
18	HG51437	O-Ring
19	HG9005110-7500	Straight Thread Plug
20	HG70743	Shock Valve Kit (.031 Orifice)
21	HG70742	Shock Valve Kit (.024 Orifice)
22	HG9005200-7500	Straight Thread Plug
23	HG70736	End Cap Kit
24	HG2513030	Bypass Valve Kit
25	HG9004100-1430	O-Ring
26	HG50406	Gerotor Assembly (.19 cu.in./rev.)
27	HG50173	Socket Head Cap Screw (M8 x 1.25-25mm)
28	HG70924	Charge Pump Kit (.19 STD. Splined)
29	HG51457	Hex Screw, Flanged Head (M10 x 1.50-65mm)
30	HG70402	Charge Relief Kit
31	HG71287	Fan Kit (incl. items 32, 34, 35, 36)
32	HG51348	Hub
33	HG52016	Bracket, Shroud
34	HG52014	Fan
35	HG52256	Washer
36	HG44809	Nut

STTII ELECTRICAL SYSTEM - KUBOTA DIESEL



STTII ELECTRICAL SYSTEM - KUBOTA DIESEL

Ref. No.	Part No.	Description
1	486514	Wire Harness, STTII-25KBD
2	462069	Key Assy., w/Fob
3	48017-04	Nut, Hex 5/8-32
4	48017-03	Lock washer, 5/8 Internal
5	462930	Instrument Panel w/Decal
6	483399	Timer, Glow Plug
7	483356	Control Cable, Throttle
8	04013-04	Capscrew, 1/4-20 x 3/4”
9	04003-43	Bolt, Carriage 10-24 x 1/2”
10	04021-26	Lock Nut, #10-24
11	484721	Cluster Gauge
12	48798	Key Switch
13	485833	Switch, PTO
14	486588	50 Amp Breaker
15	485568	Power Plug, 12V
16	427541	Base, Instrument Panel
17	04110-01	U-Nut, 1/4-20
18	485739	Single Fuse Assy., Excluding Fuse (incl. #20, 22, 23)
19	483642	Double Fuse Assy. (incl. #20, 21, 22, 24)
20	482588	Clip, Wire
21	48298	Fuse, 20 Amp
22	483629	Fuse Holder
23	483643	Cover, Sealed Single
24	483571	Cover, Sealed Double
25	481638	Switch, N/O
26	483013	Relay
27	481811	Sender Unit, Oil Pressure
28	483958	Diode, 600V - 6A
29	462011	Clutch Assembly, GT3.5
30	*	Battery, 525 CCA
31	485674	Fuse, 5 Amp
32	483433	Elbow, 45 Degree Street
33	481176-15	Battery Cable, 14” Red w/Braid
34	481176-11	Battery Cable, 21” Black
35	481335	Rubber Boot
36	**	Solenoid, Fuel Shut-Off
37	483360	Sender Unit, Water Temp.
38	481826	Relay

* Not available through Scag.
** Available through the engine manufacturer. Reference model and serial number.

REPLACEMENT DECALS AND INFORMATION PLATES

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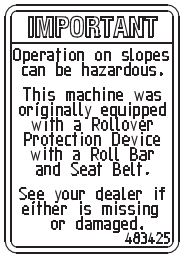

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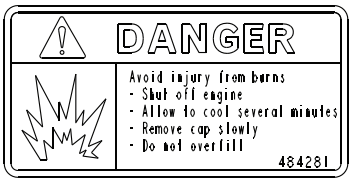

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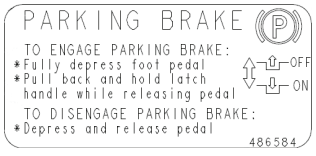

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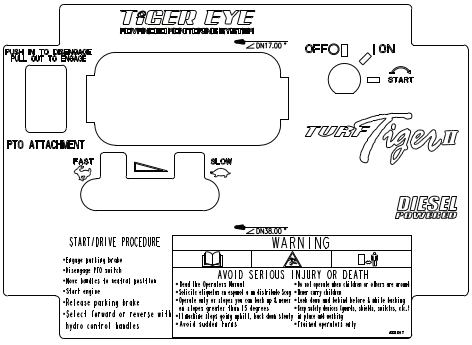

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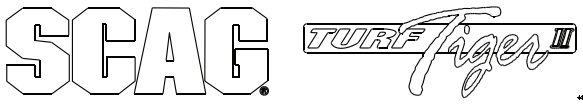

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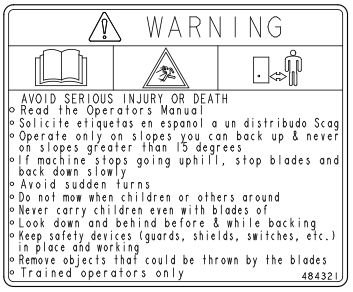

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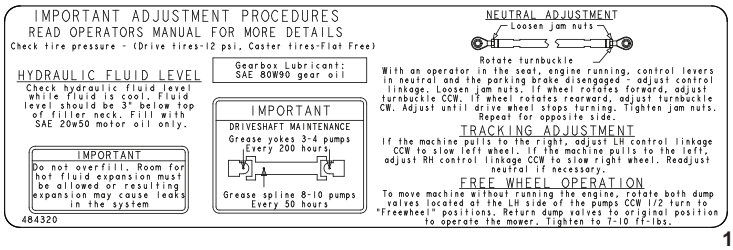

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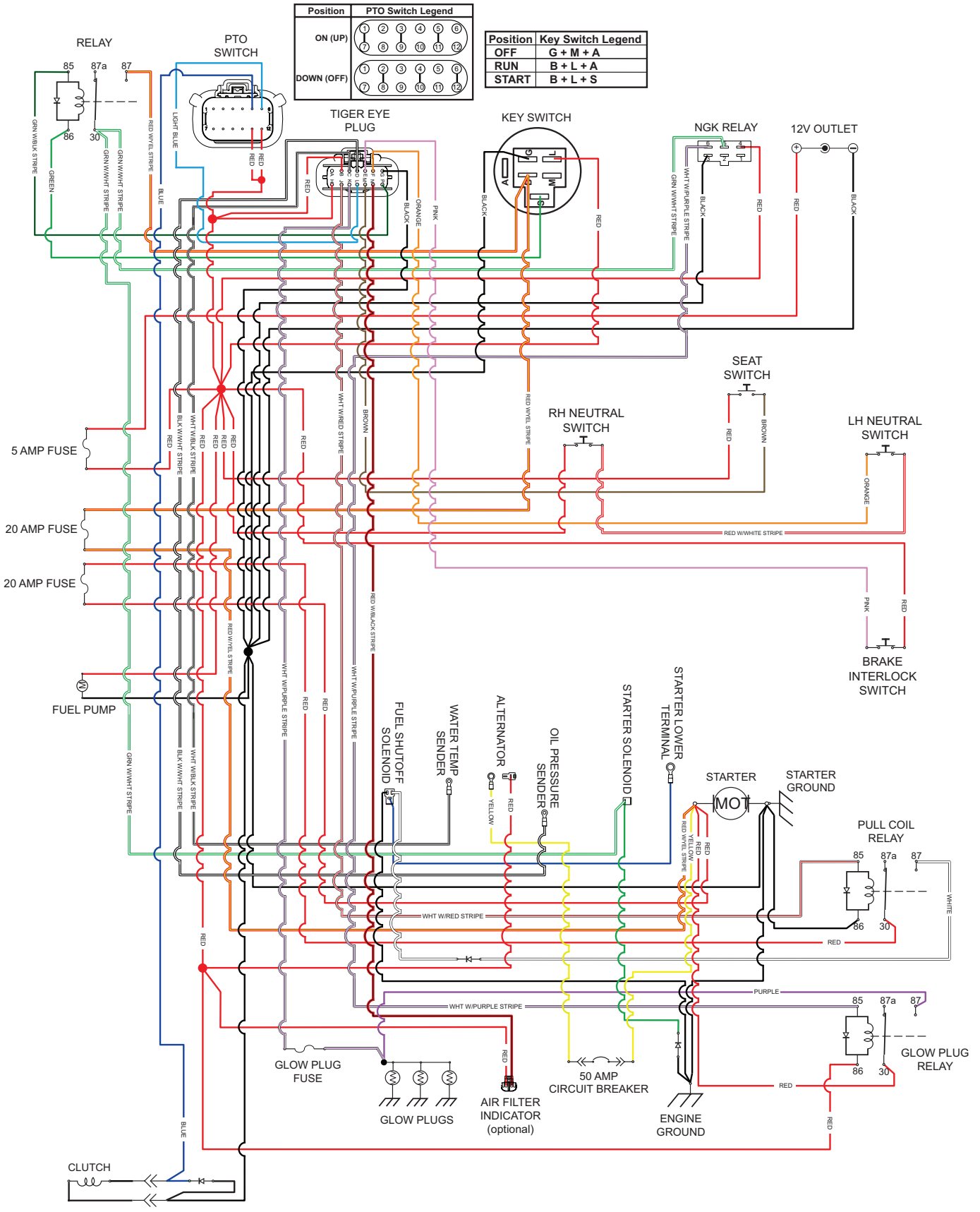
REPLACEMENT DECALS AND INFORMATION PLATES

Ref. No.	Part No.	Description
1	485965	Decal, Instrument Panel - Kubota Diesel
2	483425	Decal, ROPS
3	483633	Decal, Seat Replacement
4	484292	Decal, Fuel Tank - Kubota Diesel
5	486570	Decal, Turf Tiger II
6	481568	Decal, Traction Control
7	486584	Decal, Parking Brake
8	485403	Decal, Metalcraft - USA
9	485700	Decal, Turf Tiger II
10	488307	Decal, Instrument Panel Decal
11	485680	Decal, Hood - STTII
12	481664	Decal, Stripes-RH
13	481663	Decal, Stripes-LH
14	484321	Decal, Fuel Tank Warning
15	484320	Decal, STT Adjustments
16	485685	Decal, Hood - STTII Fuel Injected

ELECTRICAL SCHEMATIC - KUBOTA 25KBD



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.