



OPERATOR'S MANUAL

JACKAL Track Loader



Model: **SJ1125-34-25KBD**
 SJ1125-34-25KSD
 SJ1125-34-25YMT
 SJ1125-40-25KBD
 SJ1125-40-25KSD
 SJ1125-40-25YMT

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



WARNING

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

- Read this manual completely as well as other manuals that came with your track loader.
- DO NOT operate on steep slopes.
- Under no circumstances should the machine be operated on slopes greater than 10 degrees. ALWAYS FOLLOW OSHA APPROVED OPERATION.
- Before performing any maintenance or service, stop the machine and remove the ignition key.
- Keep hands, feet and clothing away from moving parts.
- Keep others off the track loader (only one person at a time)

REMEMBER - YOUR TRACK LOADER 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:

SJ1125-34-25KBD	with a serial number of	Y0700001 to Y0799999
SJ1125-34-25KSD	with a serial number of	Y0800001 to Y0899999
SJ1125-34-25YMT	with a serial number of	Y0900001 to Y0999999
SJ1125-40-25KBD	with a serial number of	Y1000001 to Y1099999
SJ1125-40-25KSD	with a serial number of	Y1100001 to Y1199999
SJ1125-40-25YMT	with a serial number of	Y1200001 to Y1299999

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

Table of Contents

SECTION 1 - GENERAL INFORMATION.....	1
1.1 INTRODUCTION	1
1.2 DIRECTION REFERENCE.....	1
1.3 SERVICING THE ENGINE AND DRIVE TRAIN COMPONENTS	1
1.4 SYMBOLS.....	2
SECTION 2 - SAFETY INFORMATION	3
2.1 INTRODUCTION	3
2.2 SIGNAL WORDS.....	3
2.3 BEFORE OPERATION CONSIDERATIONS.....	3
2.4 TESTING THE SAFETY INTERLOCK SYSTEM	5
2.5 OPERATION CONSIDERATION.....	5
2.6 SLOPE SAFETY.....	6
2.7 MAINTENANCE CONSIDERATIONS & STORAGE.....	6
2.8 UTILITY LINE SAFETY.....	8
2.9 SAFETY AND INSTRUCTIONAL DETAILS	9
SECTION 3 - SPECIFICATIONS	12
3.1 ENGINE	12
3.2 ELECTRICAL.....	12
3.3 POWER HEAD	13
3.4 HYDRAULIC SYSTEM.....	13
3.5 WEIGHTS AND DIMENSIONS.....	13
3.6 PRODUCTIVITY.....	13
SECTION 4 - OPERATING INSTRUCTIONS	14
4.1 TIGER EYE INSTRUMENT IDENTIFICATION (KUBOTA ONLY)	14
4.2 CONTROLS AND INSTRUMENT IDENTIFICATION TIGER EYE	16
4.3 INFOCENTER DISPLAY.....	18
4.4 INFOCENTER - MAIN DISPLAY	18
4.5 INFOCENTER - MENU DISPLAY	18
4.6 INFOCENTER - DTC - DIAGNOSTIC TROUBLE CODES	20
4.7 INITIAL RUN-IN PROCEDURES	21
4.8 STARTING THE ENGINE	21
4.9 COLD WEATHER START	21
4.10 GROUND TRAVEL AND STEERING.....	22
4.11 LIFT ARM CONTROLS	23
4.12 HILLSIDE OPERATION	23
4.13 PARKING THE TRACK LOADER	23
4.14 AFTER OPERATION.....	23
4.15 MOVING INOPERABLE OR STUCK TRACK LOADER	23
4.16 USING ATTACHMENTS	24

4.17 TRANSPORTING THE MACHINE	26
4.18 LIFTING THE MACHINE	27
SECTION 5 - ADJUSTMENTS	29
5.1 PARKING BRAKE ADJUSTMENT	29
5.2 THROTTLE CONTROL ADJUSTMENT	30
5.3 ALTERNATOR BELT ADJUSTMENT (KUBOTA & YANMAR)	30
5.4 TRACK TENSION ADJUSTMENT	30
5.5 ADJUSTING THE OPERATOR SUSPENSION PLATFORM	31
SECTION 6 - MAINTENANCE	32
6.1 MAINTENANCE CHART - RECOMMENDED SERVICE INTERVALS	32
6.2 GREASE FITTING LOCATION	33
6.3 LIFT ARM SUPPORT	34
6.4 ACCESSING INTERNAL COMPONENTS	35
6.5 HYDRAULIC SYSTEM	36
6.6 ENGINE OIL	37
6.7 ENGINE FUEL SYSTEM	39
6.8 BATTERY	41
6.9 DRIVE SYSTEM MAINTENANCE	42
6.10 COOLING SYSTEM	43
6.11 BODY AND UPHOLSTERY	44
6.12 FLUID CAPACITIES	45
6.13 RECOMMENDED FLUIDS	45
SECTION 7 - ILLUSTRATED PARTS LIST	47
7.1 SCAG APPROVED ATTACHMENTS AND ACCESSORIES	47
CONTROL PANEL KUBOTA	48
CONTROL PANEL YANMAR / KOHLER	50
SHEET METAL COMPONENTS	52
HOOD	54
LIFT ARM ASSEMBLY	58
BRAKE SYSTEM	60
FUEL TANK ASSEMBLY KUBOTA	64
FUEL TANK ASSEMBLY KOHLER	66
FUEL TANK ASSEMBLY YANMAR	68
ENGINE & ATTACHING PARTS KUBOTA	70
ENGINE & ATTACHING PARTS KOHLER	72
ENGINE & ATTACHING PARTS YANMAR	74
PUMPS AND MOTOR ASSEMBLIES	76
VALVE ASSEMBLIES	78
BOOM HOSES	80
LIFT CYLINDER HOSE	82
HOSES	84

Table of Contents

TRACK DRIVE HOSES	86
TRACK ASSEMBLY NARROW	88
TRACK ASSEMBLY WIDE	90
KUBOTA ELECTRICAL.....	92
YANMAR ELECTRICAL.....	94
KOHLER ELECTRICAL	96
ELECTRICAL SCHEMATIC - KUBOTA LH WIRE HARNESS	98
ELECTRICAL SCHEMATIC - KUBOTA RH WIRE HARNESS.....	99
ELECTRICAL SCHEMATIC - KOHLER WIRE HARNESS.....	100
ELECTRICAL SCHEMATIC - YANMAR WIRE HARNESS	101
REPLACEMENT DECALS AND INFORMATION PLATES	102
LIMITED WARRANTY - LOADERS.....	INSIDE BACK COVER

GENERAL INFORMATION

1.1 INTRODUCTION

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

If additional information or service is needed, contact your Authorized 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 track loader. The serial number plate is located on the left side of the machine shown in Figure 1-1.

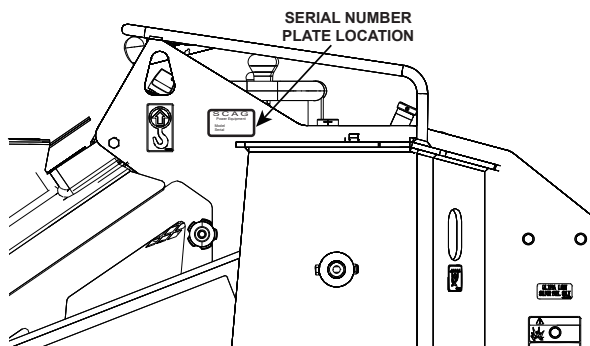


Figure 1-1. Track Loader Serial Number Plate Location

USE ONLY SCAG APPROVED ATTACHMENTS AND ACCESSORIES.

Attachments and accessories manufactured by companies other than Scag Power Equipment or Metalcraft of Mayville must be approved by Scag Power Equipment for use on this machine. See Section 7-1. Any alterations or modifications to the machine, changing performance or durability, or allowing the use of improper or unapproved attachments or accessories will not be covered by warranty.



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 track loader 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.

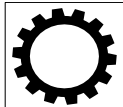
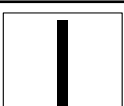
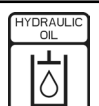
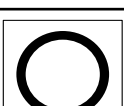
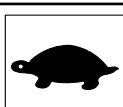
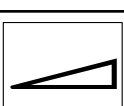
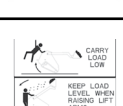
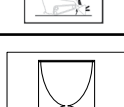
1.2 DIRECTION REFERENCE

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

1.3 SERVICING THE ENGINE AND DRIVE TRAIN COMPONENTS

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

1.4 SYMBOLS

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	Tie Down		Transmission
	Parking Brake		Lift Point
	On/Start		Hydraulic Oil
	Off/Stop		Diesel Fuel Only
	Falling Hazard		Fan Warning
	Fast		Slow
	Continuously Variable - Linear		Watch Power Lines
	Pinch Point		Load Carry
	Pinch Point		High Temp
	Hour meter/Elapsed Operating Hours		CE Mark
	Hot Surfaces		Read Operator's Manual

SAFETY INFORMATION

2.1 INTRODUCTION

Your Jackal™ track loader 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 track loader. The owner/user can prevent and is responsible for accidents or injuries occurring to themselves, other people or property.

READ THIS OPERATOR'S MANUAL FOR THE SAFE OPERATION OF YOUR SCAG TRACK LOADER BEFORE ATTEMPTING TO START YOUR TRACK LOADER. MAKE SURE THAT EVERYONE KNOWS WHERE THE MANUAL IS LOCATED AND KEEP A RECORD OF EACH EMPLOYEE THAT HAS READ THE MANUAL.

A replacement manual is available from your Authorized Scag Power Equipment 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

1. Clear the area of operation of all objects which could interfere with operation of the machine. Objects can cause instability of the track loader.
2. Have the area marked for buried lines; do not dig in marked areas. Have the work area marked by a local service for the approximate location of buried utilities (call 811 in the US, Canada and Puerto Rico; 1100 in Australia nationwide).
3. NEVER allow children to operate this track loader. Do not allow adults to operate this machine without proper instructions.

4. Do not operate when children and/or others are present. Keep children out of the area and in the watchful care of a responsible adult other than the operator. Be alert and turn machine off if a child enters the area.
5. DO NOT allow children to ride or play on the machine, it is not a toy.
6. DO NOT carry passengers.
7. DO NOT operate the machine under the influence of alcohol or drugs.
8. If the operator(s) or mechanic(s) cannot read English, it is the owner's responsibility to explain this material to them.
9. DO NOT wear loose fitting clothing. Loose clothing, jewelry or long hair could get tangled in moving parts. Do not operate the machine wearing shorts; always wear adequate protective clothing including long pants. Wearing safety glasses, safety shoes and a helmet is advisable and is required by some local ordinances and insurance regulations.



WARNING

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

10. Keep the machine and attachments in good operating condition. Keep all shields and safety devices in place. If a shield, safety device or decal is defective or damaged, repair or replace it before operating the machine.
11. Before operating the machine with an attachment, ensure that the attachment is properly installed and that it is a Scag and approved attachment. Read all attachment manuals.



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 auxiliary control is disengaged and the operator is standing on the platform. The interlock system shuts off the engine if the operator leaves the platform with the auxiliary control lever not centered. Never operate equipment with the interlock system disconnected or malfunctioning.

12. Be sure the interlock system is functioning correctly.
13. 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.
14. 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.
15. Keep flammable objects (cigarettes, matches, etc.), open flames and sparks away from the fuel tank and fuel container. Use only approved containers.
16. Equipment must comply with the latest requirements per SAE J137 and/or ANSI/ASAE S279 when driven on public roads.

- NOTE -

If the track loader is driven on public roads, it must comply with state and local ordinances as well as SAE J137 and/or ANSI/ASAE S279 requirements. Contact your local authorities for regulations and equipment requirements.

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

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.

-NOTE-

The machine will not start with the operator off of the platform. For all test procedures listed below, the engine must be started with the operator standing on the platform unless specified otherwise.

WARNING

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

1. Stand on the operator platform in the operating position with the control levers in the neutral position. With the engine running, step backwards off of the operating platform. The engine should stay running.
2. Stand on the operator platform in the operating position, move the drive control lever forward (out of neutral position). With the engine running, step backwards off of the operating platform. The engine should shut off.

2.5 OPERATION CONSIDERATION

1. Know the function of all controls and how to stop quickly.
2. Do not exceed operating capacity. This may cause the machine to become unstable, which may result in loss of control. (See Section 3).
3. Do not step off the platform when lift arms are raised.
4. Always move the track loader with the lift arms in the lowest operation position. Do not travel with the arms in the raised position.

5. When using any attachment, never direct the discharge of material toward bystanders or allow anyone near the machine while in operation.
6. Before attempting to start the engine, disengage auxiliary power, place the drive control lever in the neutral position and engage the parking brake.
7. Start the engine with the operator in the operating position, parking brake is engaged, and the drive lever and auxiliary hydraulic control is in neutral.
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 track loader only in daylight or good artificial light.
11. Take all possible precautions when leaving the machine unattended, such as 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. Keep hands and feet away from moving parts or under the machine.
15. When using attachments, ensure that they are attached correctly. Practice the operation before beginning work.
16. Check the capacity of the attachment in use. Exceeding this limit will cause instability.

DANGER

Use care when using attachments that could allow a load to shift while in use. A shifting load could cause instability.

17. Use care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

DANGER

Use care when carrying objects that are wider than the machine. Contact with other objects could cause instability.

18. NEVER leave the machine running unattended.

2.6 SLOPE SAFETY

Operate the track loader up and down slopes with the heavy end of the machine uphill. Weight distribution changes with attachments. Some attachments make the front of machine the heavy end.

1. Raising the loader arms on a slope affects the stability of the machine. Keep the loader arms in the lowest position when operating on slopes.
2. Operate the track loader on any slope or uneven terrain with caution.
3. Avoid starting or stopping on a slope. If the machine loses traction, proceed slowly, straight down the slope.
4. Use caution when operating on wet surfaces. Reduced traction could cause sliding.
5. 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.

6. Do not remove or add attachments on a slope.
7. Do not park the machine on a hillside or slope.
8. Do not operate the machine near drop-offs, ditches, embankments and bodies of water.

WARNING

DO NOT operate on steep slopes. Never operate across slope. Travel up and down the slope when operating. With loaded bucket, operate with bucket uphill. With an unloaded bucket, operate with the bucket downhill. Under no circumstances should the machine be operated on slopes greater than 10 degrees (See Figure 2-4). ALWAYS FOLLOW OSHA APPROVED OPERATION.

2.7 MAINTENANCE CONSIDERATIONS & 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. Lower implement, set parking brake, stop engine and remove key 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 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 debris, 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 rated for the machine to support components when required.
11. Carefully release pressure from components with stored energy.
12. When performing service which requires arms to be raised, make sure cylinder lock is engaged and secure. See figure 2-1 and Section 6.3.

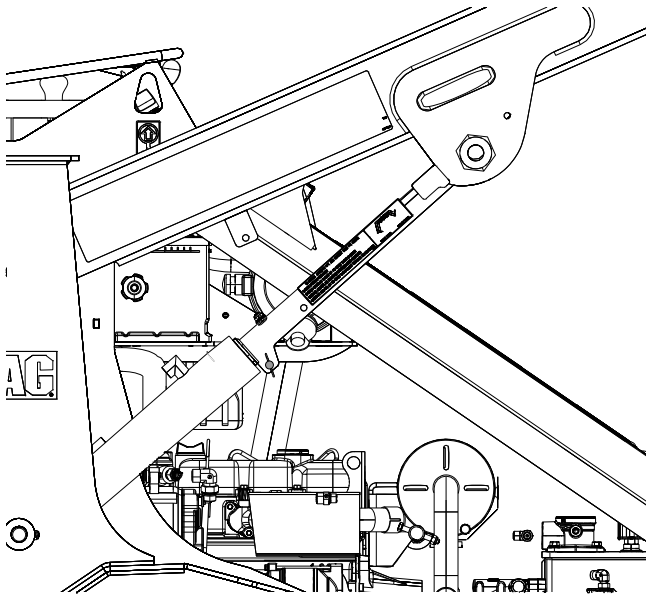


Figure 2-1. Engaged Cylinder Lock



WARNING

Hydraulic fluid is under high pressure. Keep body and hands away from pinholes or nozzles that eject hydraulic fluid under high pressure. Never use hands to check for leaks. If you need service on your hydraulic system, please see your authorized Scag dealer. If hydraulic fluid is injected into the skin, it must be surgically removed within a few hours by a doctor or gangrene may result.

13. Let the engine cool before storing.
14. DO NOT store the machine near an open flame.
15. Shut off fuel while storing or transporting. (See Section 4.4).
16. DO NOT store fuel near flames or drain indoors.
17. Charge battery 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.

18. Transport the track loader 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.
19. Be cautious when loading and unloading onto trailers or trucks. Use only a full width ramp. Ramp angle should be no more than 10 degrees (See Figure 2-4). Back up the ramp and drive down forward. See Figure 4-12.
20. When transporting the track loader, make sure the parking brake is engaged, the engine is off with the key removed.
21. Tie the track loader down securely using straps, chains, or cable. Both front and rear straps must be directed down and outward from machine. Comply with all local ordinances for the trailer and tie-down requirements See Figure 2-2 and 2-3.
22. DO NOT transport with attachment in raised position. Lower attachment when unit is parked or stored unless the cylinder lock is used.

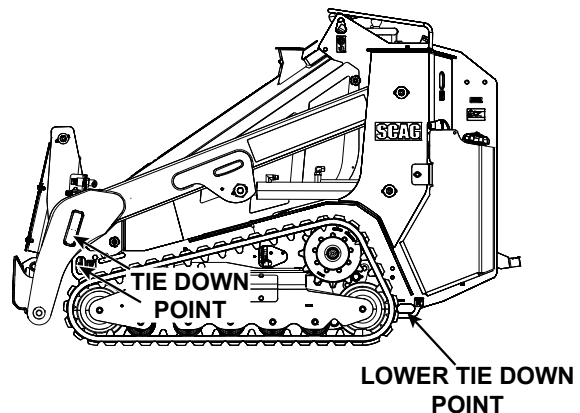


Figure 2-2. Tie Down Points

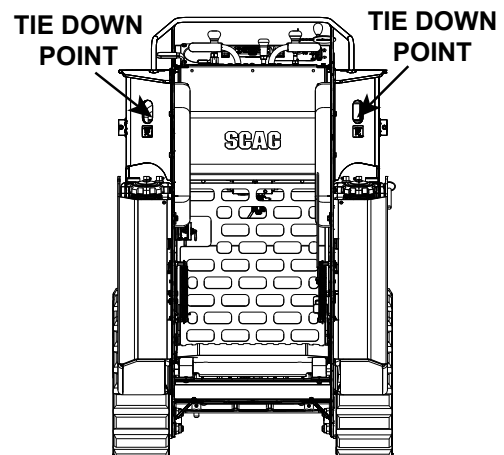


Figure 2-3. Rear Tie Down Points

2.8 UTILITY LINE SAFETY

When operating any earthmoving equipment, operators must provide a safe system of work to manage the significant risks of operating near electrical assets.

If you strike a utility line, do the following:

- Shut off the machine and remove the key
- Remove all individuals from the work area
- Immediately contact the proper emergency and utility authorities to secure the area.
- If you damage a fiber-optic cable, do not look into the exposed light.

DO NOT leave the operator's platform if the machine is charged with electricity. You will be safe as long as you do not leave the platform.

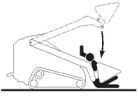
- Touching any part of the machine may ground you.
- Do not allow another individual to touch or approach the machine when charged.
- Always assume the machine is charged if you strike an electrical or communication line. Do not attempt to leave the machine.

Leaking fuel is both flammable and explosive and may cause serious injury or death. Do not smoke while operating machine.

Section 2

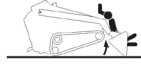
2.9 SAFETY AND INSTRUCTIONAL DETAILS

⚠ DANGER



AVOID DEATH

- Keep out of this area when lift arms are raised
- Attachment can be forced against the ground and cause front of machine to raise
- Disconnecting or loosening any hydraulic tubeline, hose, fitting or part can cause lift arms to drop
- Always use an approved lift arm support device



487711

487711



⚠ WARNING

KEEP FINGERS AND OBJECTS AWAY FROM FAN

487712



⚠ WARNING

HOT SURFACES CAN CAUSE SERIOUS INJURY

- DO NOT TOUCH
- ALLOW TO COOL BEFORE SERVICING

487713



⚠ DANGER

Avoid injury from burns

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

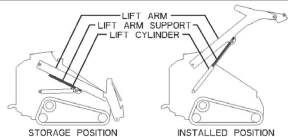
484292

DIESEL FUEL ONLY

484292

TO INSTALL APPROVED LIFT ARM SUPPORT SCAG P/N 453462

1. REMOVE ATTACHMENT FROM LOADER
2. REMOVE RETAINING PIN TO ALLOW LIFT ARM SUPPORT TO REST ON CYLINDER
3. RAISE LIFT ARMS UNTIL LIFT ARM SUPPORT IS POSITIONED AGAINST CYLINDER ROD
4. LOWER LIFT ARMS UNTIL LIFT ARM SUPPORT IS HELD SECURELY BETWEEN LIFT ARM AND CYLINDER



STORAGE POSITION INSTALLED POSITION

487710

⚠ WARNING

TIPPING, LOSS OF LOAD, LOADS FALLING OR LOSS OF VISIBILITY CAN CAUSE SERIOUS INJURY OR DEATH

AVOID DRIVING OVER OBSTRUCTIONS AND UNEVEN TERRAIN



CARRY LOAD LOW

487714

ON



OFF

⚠ WARNING

AVOID INJURY OR DEATH

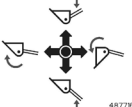
Check for utilities Before digging



Do not dig off bottom with load raised. Do not exceed Rated Operating Capacity.

Read Operation Manual and do not operate unless trained

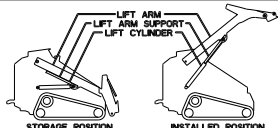
- Do not operate near drop offs and avoid quick turns
- Clear area of children and bystanders
- Follow equipment on slope's on level/under slope



487716

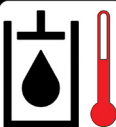
TO INSTALL APPROVED LIFT ARM SUPPORT SCAG P/N 453462

1. REMOVE ATTACHMENT FROM LOADER
2. REMOVE RETAINING PIN TO ALLOW LIFT ARM SUPPORT TO REST ON CYLINDER
3. RAISE LIFT ARMS UNTIL LIFT ARM SUPPORT IS POSITIONED AGAINST CYLINDER ROD
4. LOWER LIFT ARMS UNTIL LIFT ARM SUPPORT IS HELD SECURELY BETWEEN LIFT ARM AND CYLINDER



STORAGE POSITION INSTALLED POSITION

487710



TEMP WARNING



AUX

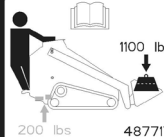
487722

RATED OPERATING CAPACITY (ROC)

1100 LBS

When equipped with 200 lb counterweights

See Operation & Maintenance Manual for more information on the ROC

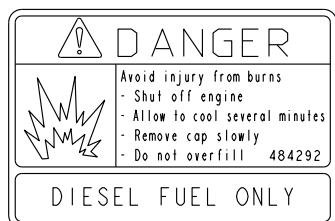


1100 lbs

200 lbs

487717

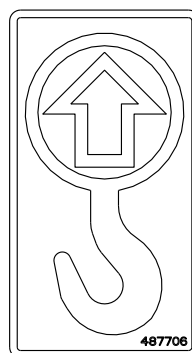
2.9 SAFETY AND INSTRUCTIONAL DETAILS (CONT.)



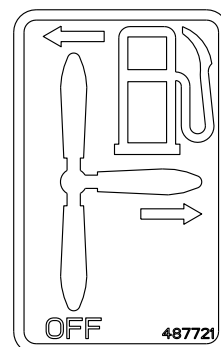
484292



487857



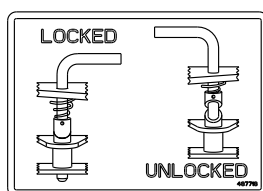
487706



487721



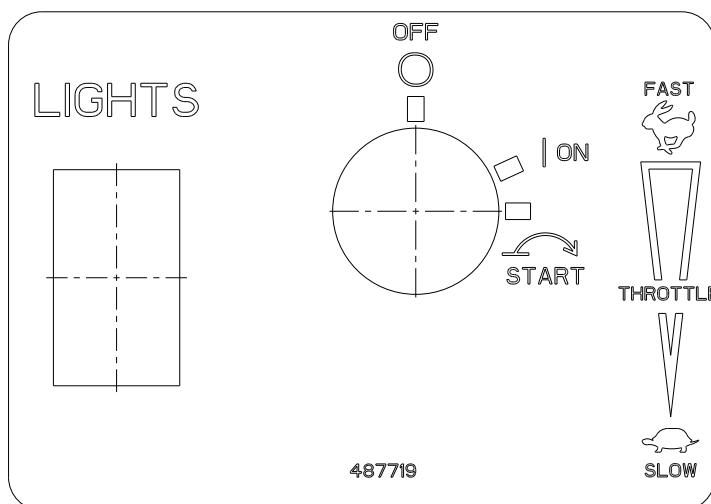
487705



487718



484739



487719

487719

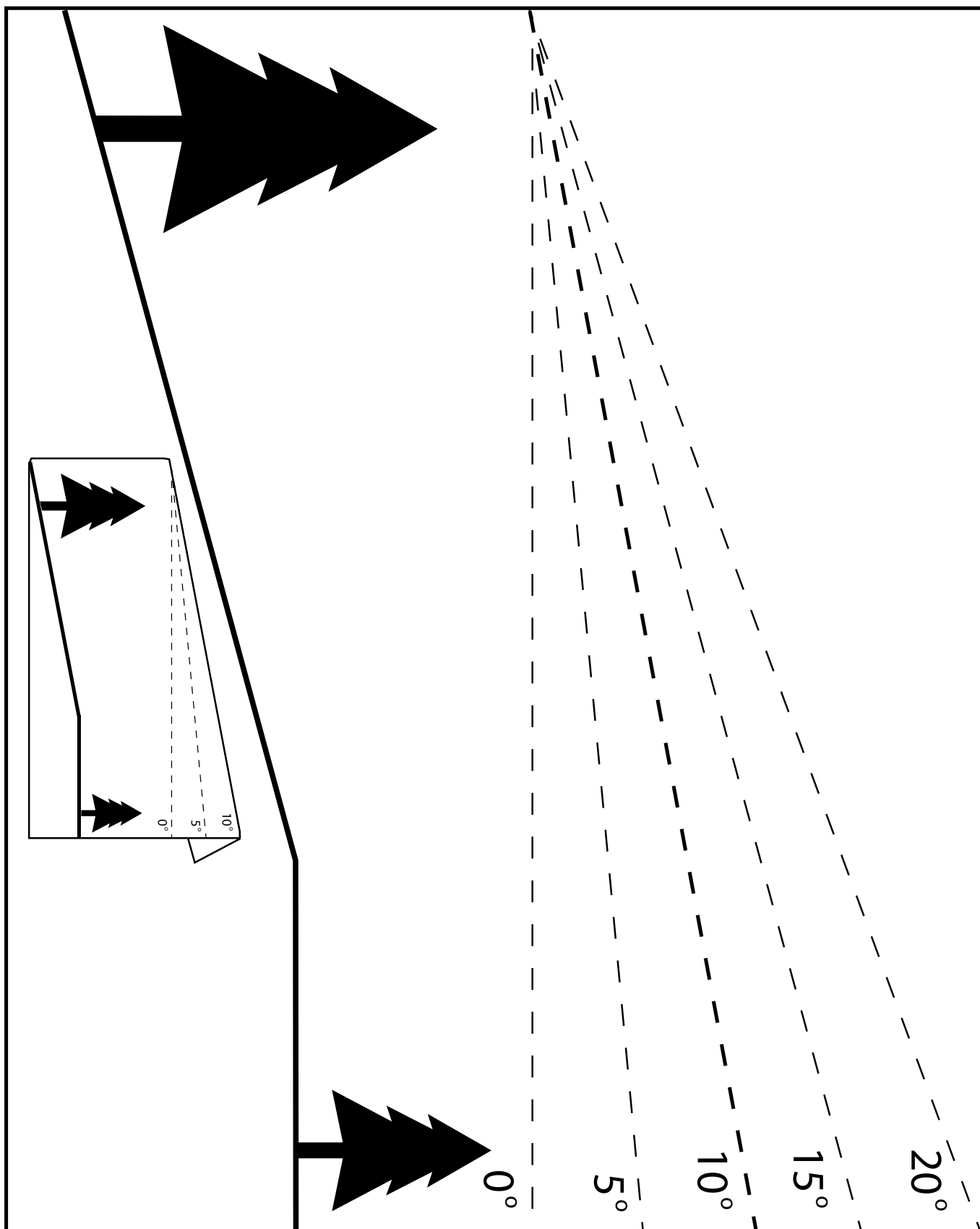


Figure 2-4. Slope Angle Graph

SPECIFICATIONS

3.1 ENGINE

General Type Heavy Duty Commercial Diesel

Brand Yanmar, Kohler, Kubota

Horsepower:

Scag Model SJ100-N-34-25KBD Kubota 24.8 HP

Scag Model SJ100-N-34-25KSD Kohler 24.7 HP

Scag Model SJ100-N-34-25YMT Yanmar 24.7 HP

Scag Model SJ100-W-40-25KBD Kubota 24.8 HP

Scag Model SJ100-W-40-25KSD Kohler 24.7 HP

Scag Model SJ100-W-40-25YMT Yanmar 24.7 HP

Displacement:

Kubota (D1305-E4B) 1.26 L

Kohler (KSD 1403NA) 1.39 L

Yanmar (3TNV80FT-ZMYA) 1.27 L

Type:

Kubota (D1305-E4B) 4-Stroke, 3 Cylinder, Liquid-Cooled

Kohler (KSD 1403NA) 4 Stroke, 3 Cylinder, Liquid-Cooled

Yanmar (3TNV80FT-ZMYA) 4 Stroke, 3 Cylinder, Liquid Cooled

Governor Electronic

Idle Speed:

Kubota (D1305-E4B) 1500 RPM

Kohler (KSD 1403NA) 1200 RPM

Yanmar (3TNV80F-ZMYA) 1100 RPM

Max RPM (No Load):

Kubota (D1305-E4B) 2800 RPM

Kohler (KSD 1403NA) 2600 RPM

Yanmar (3TNV80F-ZMYA) 2600 RPM

Fuel Pump:

Yanmar (3TNV80F-ZMYA) Mechanical Fuel Injection

Kohler (KSD 1403NA) Electronic Fuel Injection

Kubota (D1305-E4B) Mechanical Fuel Injection

Fuel Diesel Fuel with a minimum Cetane rating of 40

Starter Electric Starting with Solenoid Shift

Fan Belt Self-tightening (Kohler only)

3.2 ELECTRICAL

Battery 12 Volt

Charging System Alternator

System Polarity Negative Ground

Instrument Panel Tiger Eye Advanced Monitoring System (Kubota), Key Switch, Throttle Lever

FusesOne (1) 20 Amp and one (1) 50 Amp Resettable (Kubota D1305)

Section 3

3.3 POWER HEAD

Drive System	Track
Hydrostatic Pumps	Tandem 18cc Piston Pump
Drive Wheel Motors	360 cc LSHT
Steering/Travel Control	Pilot Servo
Parking Brake	Mechanical Sprocket Lock
Fuel Tanks	12-Gallon
Travel Speed:	
Forward	4 MPH
Reverse	4 MPH

3.4 HYDRAULIC SYSTEM

Hydraulic Oil Filter	500hr
Hydraulic Reservoir	12-Gallon

3.5 WEIGHTS AND DIMENSIONS

Machine Width	
Scag Model SJ100-N-34-25KBD Kubota	35.5"
Scag Model SJ100-N-34-25KSD Kohler	35.5"
Scag Model SJ100-N-34-25YMT Yanmar	35.5"
Scag Model SJ100-W-40-25KBD Kubota	40"
Scag Model SJ100-W-40-25KSD Kohler	40"
Scag Model SJ100-W-40-25YMT Yanmar	40"
Track Width	7" or 9"
Height	55"
Assembled Weight	3400 lbs.
Operating Capacity	1125 lbs.

3.6 PRODUCTIVITY

Max Lift Capacity (lb.)	1,125
Tipping Capacity (lb.)	3,142
Maximum Bucket Roll Back Angle	25°
Bucket Dump Angle	40°

OPERATING INSTRUCTIONS



CAUTION

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

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

With the key in the on position, before starting the engine, the lights for the Operator Indicator and Hydraulic Auxiliary/Neutral Indicator should be illuminated. This indicates there is an operator on the platform and the auxiliary control lever is in neutral. When both the lights are illuminated, the key can be turned to the start position and the track loader can be started. See Section 2.4. Safety Interlock System. If either 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 (KUBOTA ONLY)

1. **Glow Plug Indicator (Figure 4-1).** The indicator turns on when the key switch is turned to the PREHEAT position. Glow plugs must be preheated for 5 to 10 seconds before starting the engine.
2. **Oil Pressure Indicator (Figure 4-1).** Indicates engine oil pressure. Reference the engine operator's manual for further information.
3. **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.
4. **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.
5. **Operator Indicator (Figure 4-1).** Light will illuminate when the operator is on the platform engaging the operator presence switch.

6. **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.
7. **Hydraulic Auxiliary/Neutral Indicator (Figure 4-1).** Light will illuminate when the steering control lever is in the neutral position.
8. **Water Temperature Indicator (Figure 4-1).** Indicates the operating temperature of the engine. If the engine temperature exceeds the maximum preset value, the indicator will flash and the Park Brake, and Neutral indicator lights will flash in an alternating pattern.

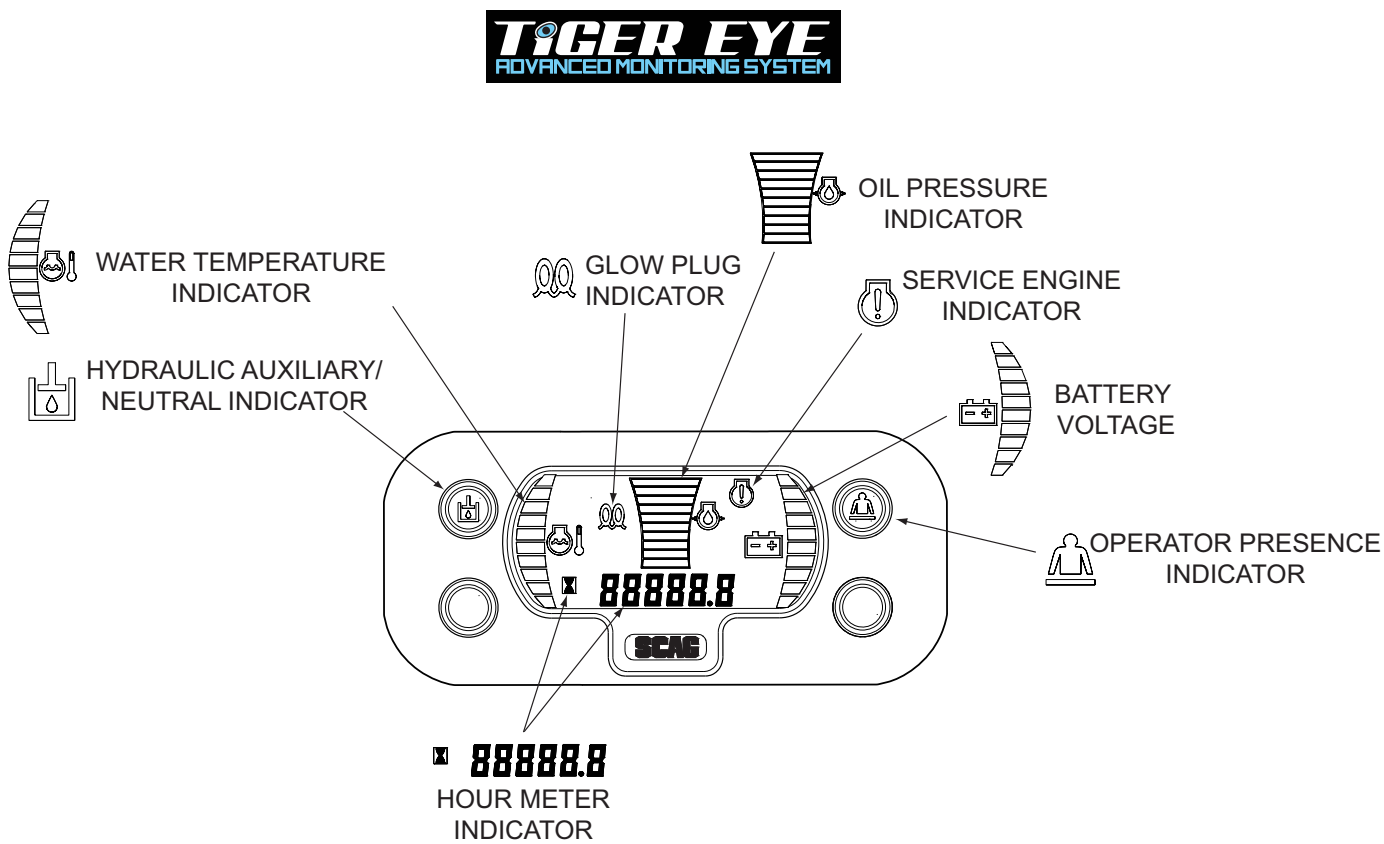


Figure 4-1. Tiger Eye Advanced Monitoring System Kubota

4.2 CONTROLS AND INSTRUMENT IDENTIFICATION TIGER EYE

1. **Ignition Switch (Figure 4-2).** The ignition switch is used to start the engine and has three positions; OFF, ON, and START.
2. **Engine Throttle Control (Figure 4-2).** Used to control the engine speed. Pushing the lever forward increases engine speed. Pulling the lever back decreases engine speed. Full back position is the IDLE position.
3. **Light Switch (Figure 4-2).** Turns working lights on and off.
4. **Float Switch (Figure 4-2).** Allows attachments to follow the contours of the ground when grading.
5. **12V Power Plug (Figure 4-2).** Added power supply for all your worksite needs.
6. **Drive Control (Figure 4-2).** Control direction and speed of track loader.
7. **Auxiliary Hydraulic Control (Figure 4-2).** Operate the auxiliary hydraulics in the forward or reverse direction.
8. **Lift & Tilt (Figure 4-2).** Controls machine lift arms.
9. **Hydraulic High Temperature Warning Light (See Figure 4-2).** Indicates overheating of hydraulic fluid.
10. **Fuse Holders (Figure 4-2).** There is one 20-amp fuse and one 50-amp resettable fuse that protects the loader's electrical system. To replace fuse, pull fuse out of the socket and install a new fuse.
11. **Parking Brake Control (Figure 4-2).** Used to engage and disengage the parking brakes. Move the lever back and lock to engage the parking brakes. Move the lever forward to disengage the parking brakes.
12. **Fuel Shutoff Valve (Figure 4-3).** Located on the left side of the machine on the operators platform. Used to shut off fuel supply to the engine and change fuel supply between the fuel tanks.
13. **Fuel Gauge (Figure 4-2).** Indicates the amount of fuel in the fuel tank.
14. **Lift Arm Safety Support (Figure 4-2).** Necessary to work or move around the machine with the lift arms in the raised position while the controls are unattended.
15. **Dump Valve Control Levers (Figure 4-6).** Located on the hydraulic pumps, used to "free-wheel" the track loader. Rotating the levers clockwise until they stop (closed) allows the unit to move under hydraulic power. The levers must be in this position and torqued to 10 lb.-ft. during operation of the track loader. Rotating the levers counter-clockwise (open) allows the track loader to be moved by hand (free-wheeling). Rotate levers no more than 2 turns.
16. **Mounting Plate (Figure 4-2).** Located at the end of the loader arms to hook up attachments.
17. **Attachment Latch (Figure 4-2).** Secures attachments and accessories to mounting plate.
18. **Auxiliary Hydraulic Connection (Figure 4-2).** Delivers pressurized hydraulic fluid from a hydraulic pump to operate auxiliary equipment or attachments.

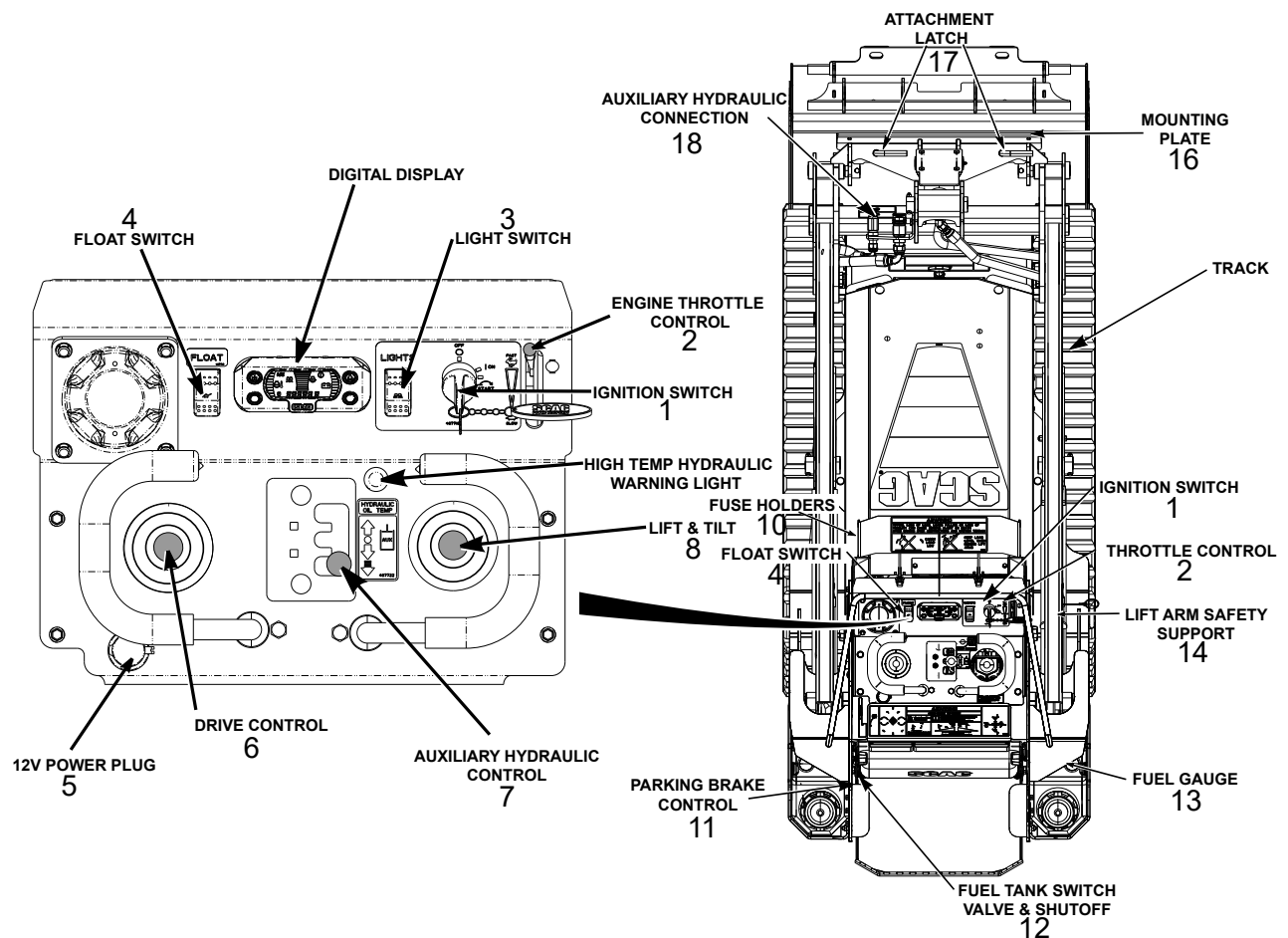


Figure 4-2. Controls and Instruments

4.3 INFOCENTER DISPLAY

The InfoCenter LCD display shows information about your machine, such as the operating status, various diagnostics and other information about the machine (See Figure 4-3). There are three screens to navigate left and right. You can switch between the screens and main information screen at any time by selecting the appropriate directional arrow.

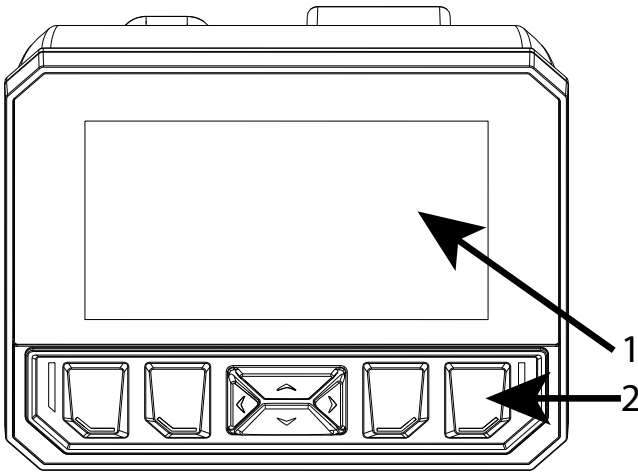


Figure 4-3. InfoCenter Display

1. Display Screen
2. Navigation Buttons

Use the middle button to scroll left and right through screens and up and down through menus.

-NOTE-

The purpose of each button may change depending on what is required at the time. Each button is labeled with an icon displaying its current function.

4.4 INFOCENTER - MAIN DISPLAY

The Main screen of the InfoCenter will provide the user with the current operation status of the machine. See Figure 4-4



Figure 4-4. InfoCenter Main Screen

1. Operator Presence - Illuminated when operator is on the operator platform.
2. Air Filter Restriction Indicator - Check Air Filter (Kohler Only)
3. Warning - Stop Engine (Critical Fault)
4. Glow Plug
5. Auxillary Control Nuetral
6. Check Engine (Non-Critical Fault)
7. Service Interval Due - Check Maintenance Menu for due service.
8. Battery
9. Hour Meter Indicator
10. RPM Gauge
11. Unit Temperature Gauge

4.5 INFOCENTER - MENU DISPLAY

The Menu Display is accessed by pressing the right hand arrow button from the main screen. This menu will provide the user to access the following capabilities: Vehicle Service, Clock Settings, Units Settings, Vehicle Info. Navigate through these options with the up and down arrows. See Figure 4-5.

Section 4

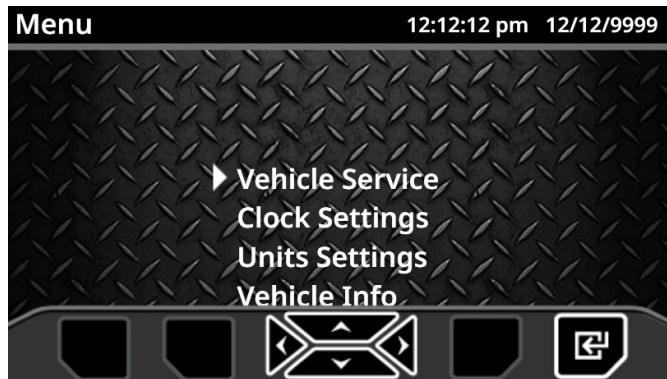


Figure 4-5. Menu Screen

VEHICLE SERVICE

The Vehicle Service menu indicates the time remaining until the service is needed. When service has been completed check the indicator box, the countdown will restart. When service is required there will be a yellow indicator by the type of service to perform. See Figure 4-6. See the operator's manual or dealer for service.

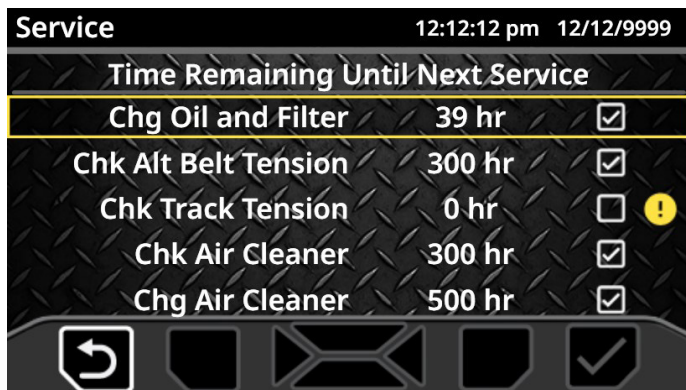


Figure 4-6. Vehicle Service Menu

CLOCK SETTINGS

Navigate the clock and date using the arrow buttons. Select the save button (bottom right) to set time and date. See Figure 4-7.

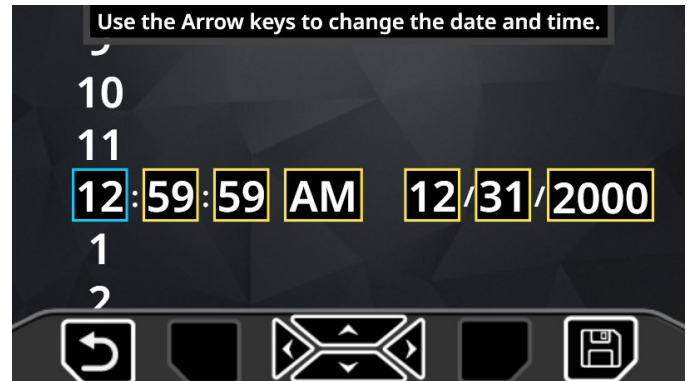


Figure 4-7. Clock Settings

UNITS SETTINGS

The Units Settings menu allows the user to select the Flow Rate Unit and Temperature Unit. See Figure 4-8.

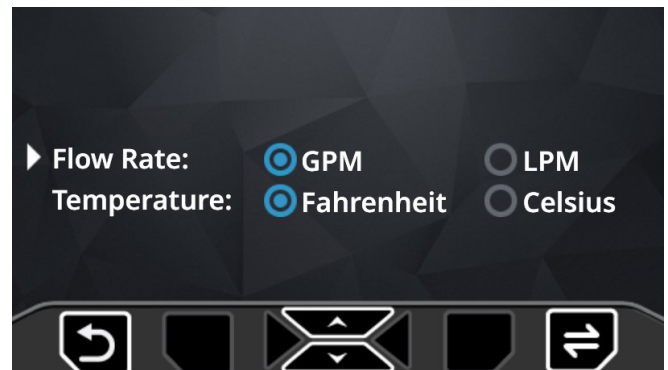


Figure 4-8. Units Settings

VEHICLE INFO

The Vehicle Info menu displays the make and model of the machine, serial number and system software of the machine. See Figure 4-9, 4-10.



Figure 4-9. Vehicle Info Kohler



Figure 4-10. Vehicle Info Yanmar

4.6 INFOCENTER - DTC - DIAGNOSTIC TROUBLE CODES

ACTIVE

The Active DTC display is accessed by pressing the left hand arrow button from the main screen. This menu will provide the user to access the active Diagnostic Trouble Codes on the machine. See Figure 4-11.

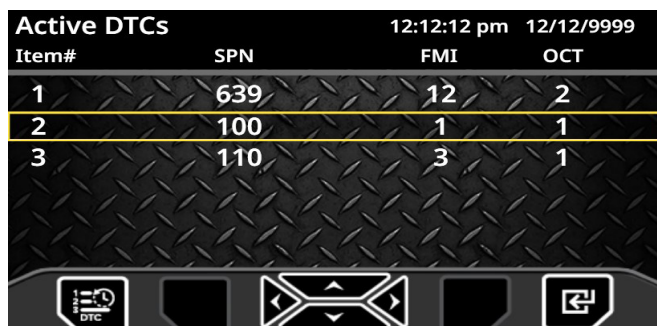


Figure 4-11. Active DTC's

To view the code in detail, navigate through the DTC's using the arrow buttons. Highlight the DTC and push enter (bottom right button). The active code description will display on the screen. See Figure 4-12. Contact your engine manual or dealer for further information.

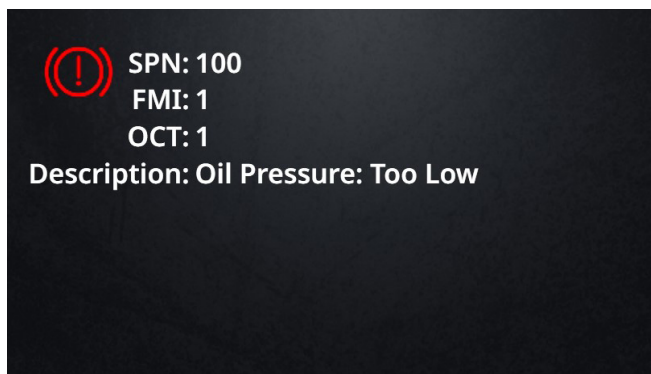


Figure 4-12. DTC Detail

HISTORICAL

The Historical DTC display is accessed by pressing the left hand button from the Active DTC's screen. This menu will provide the user to access the Historical Diagnostic Trouble Codes on the machine. See Figure 4-13.

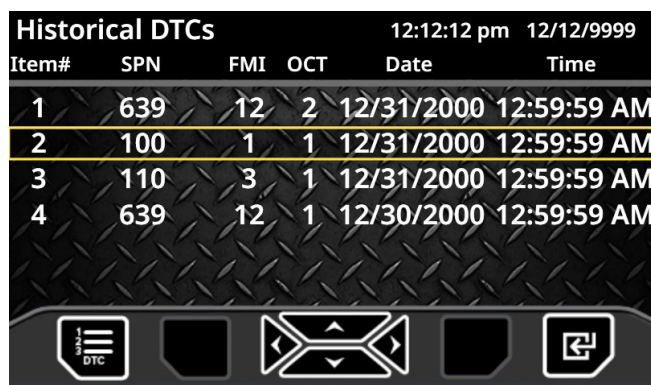


Figure 4-13. Historical DTC's

To view the code in detail, navigate through the DTC's using the arrow buttons. Highlight the DTC and push enter (bottom right button). The code description will display on the screen. See Figure 4-14. Contact your engine manual or dealer for further information.

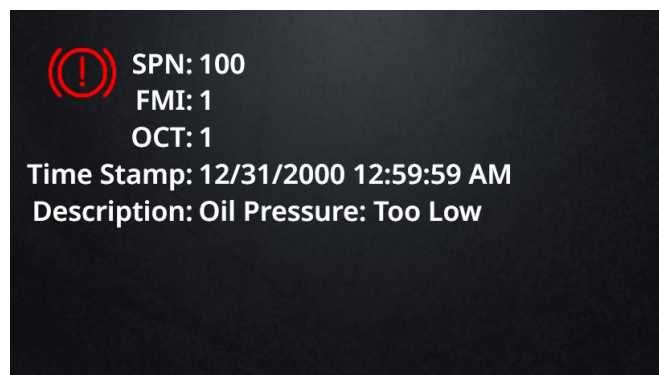


Figure 4-14. Historical DTC Detail

4.7 INITIAL RUN-IN PROCEDURES

FIRST DAY OF USE OR APPROXIMATELY 20 HOURS

1. Inspect the unit before each use for missing or damaged decals and shields. Replace or repair as needed.
2. Check hydraulic oil level in reservoir. (See Section 6.5).
3. Check for loose hardware. Tighten as needed.
4. Check interlock system for proper operation. (See Section 2.4).
5. Check track tension. Adjust tension if necessary. (See Section 5.4).

4.8 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 on the operator's platform, is completely open (left or right fuel tank). See Figure 4-15.

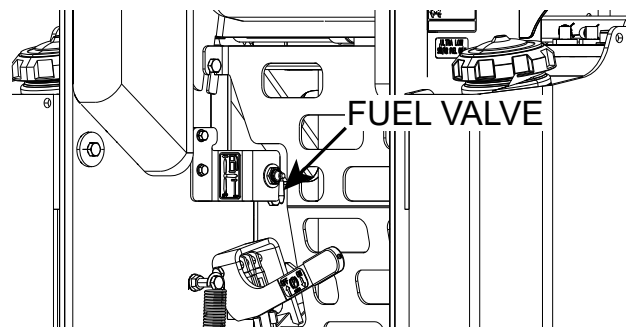


Figure 4-15. Fuel Valve

2. Ensure that the auxiliary control is in the neutral position.
3. Stand in the operating position on the operating platform.
4. Move the engine throttle control to the slow position.
5. Turn the ignition key to the start position and start the engine.
6. Allow engine to warm before operating the track loader.

4.9 COLD WEATHER START

If outdoor temperatures are below 10 degrees Fahrenheit, store the track loader indoors to keep unit warmer and allow ease of starting.

IMPORTANT -

Running the engine at high speeds when the hydraulic system is cold could cause damage to the hydraulic system.

-NOTE-

When operating the engine down to 10 degrees Fahrenheit, use AW 46 hydraulic oil for cold-start improvement.

4.10 GROUND TRAVEL AND STEERING

- IMPORTANT -

If you are not familiar with the operation of a machine with joystick 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 control to obtain a smooth operating action.

Practice operating the track loader until you are comfortable with the controls before proceeding.

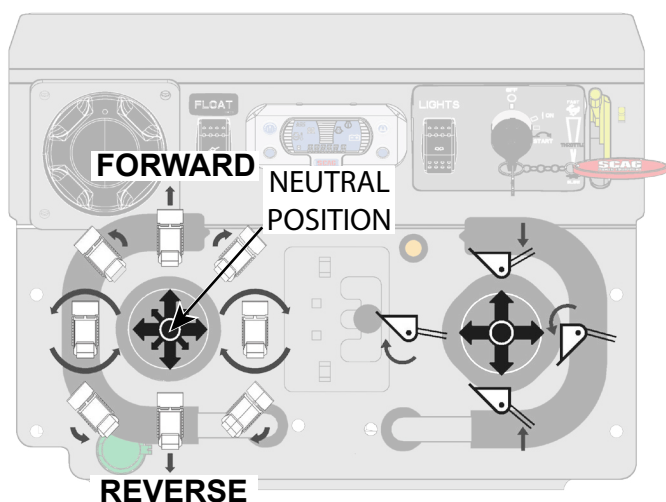


Figure 4-16. Directional Diagram

FORWARD TRAVEL

To travel forward with the track loader, disengage the parking brake and slowly push the drive control lever forward. The further the drive control lever is pushed forward the greater the forward speed will be. To increase the speed, push the drive control lever further forward and to decrease the speed, move the drive control lever back.

To stop the forward travel, allow the drive control lever to return to the neutral position. See Figure 4-16.

To steer the track loader left while traveling forward, diagonally push the drive control lever forward left. The further the lever is pushed left, the quicker the track loader will turn left. See Figure 4-16.

To steer the track loader right while traveling forward, diagonally push the drive control lever forward right. The further the lever is pushed right, the quicker the track loader will turn right. See Figure 4-16.

- NOTE -

Smooth operation of the drive control lever will produce smooth track loader operation. While learning the operation of the drive control, keep the travel speed low.

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 the drive control lever backward out of the neutral position. Keep the travel speed low while traveling in reverse.

To steer the front of the track loader left while traveling in reverse, diagonally pull the steering control lever backward left. The further the lever is pushed backward left, the quicker the front of the track loader will turn left. See Figure 4-16.

To steer the front of the track loader right while traveling in reverse, diagonally pull the steering control lever backward right. The further the lever is pushed backward right, the quicker the front of the track loader will turn right. See Figure 4-16.

To stop the reverse travel, allow the drive control lever to return to the neutral position. If the track loader is to be parked, place the drive control lever and the auxiliary hydraulic control in the neutral position and engage the parking brake.

4.11 LIFT ARM CONTROLS

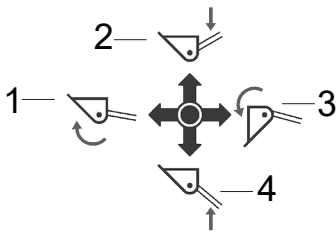


Figure 4-17. Lift & Tilt Controls

Use the Lift & Tilt control lever to control the machine's lift arm and attachments See Figure 4-16, 4-17.

1. To tilt the attachment backward (rollback) move the tilt & lift lever to the left.
2. To lower the attachment move the tilt & lift lever forward.
3. To tilt the attachment forward (dump) move the tilt & lift lever to the right.
4. To raise the attachment move the tilt & lift lever back.

4.12 HILLSIDE OPERATION

WARNING

DO NOT operate on steep slopes. Under no circumstances should the machine be operated on slopes greater than 10 degrees. See Figure 2-4, or use a slope indicator app downloaded to a smartphone to determine approximate slope **ALWAYS FOLLOW OSHA APPROVED OPERATION.**

1. This track loader has been designed for good traction and stability under normal working conditions. However, caution must be used when traveling on slopes or poor ground conditions, such as loose soil, sand, gravel or wet, slippery conditions or uneven surfaces.
2. To prevent tipping or loss of control, do not start or stop suddenly, avoid unnecessary turns and travel at reduced speed. If the machine loses traction, proceed slowly off the slope.
3. Avoid sudden starts when traveling uphill. Sudden starts may cause the machine to tip backwards. Travel with the heavy end of machine uphill.

4.13 PARKING THE TRACK LOADER

1. Park the machine on a flat, level surface only. Do not park the machine on an incline.
2. Place the drive control lever in the neutral position.
3. Slow the engine to idle speed.
4. Engage the parking brake.
5. Turn the ignition key to the OFF position and remove the key.

4.14 AFTER OPERATION

1. Wash the entire track loader 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 track loader clean to inhibit serious heat damage to the engine or hydraulic oil system.

DANGER

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

3. After the track loader has cooled down, fill the fuel tank with fresh, clean ultra-low sulfur diesel fuel.
4. Check the track tension. Adjust tension if necessary. See Section 5.4.

4.15 MOVING INOPERABLE OR STUCK TRACK LOADER

If the machine becomes stuck, pull the machine back into a stable position using either both front tie-down points or both lower rear tie-down points simultaneously. (See Figure 4-22, 4-23).

-IMPORTANT-

Do not pull the machine without putting the dump valves into bypass, otherwise damage to the hydraulic drive or track system will occur.

1. Park the machine on a level surface, engage the parking brake, lower the lift arms.
2. Open the hood of the machine.
3. Loosen dump valves on the hydrostat. See Figure 4-6. Do not loosen more than 2 full turns.
4. Disengage the parking brake
5. Only use tow chains, ropes or straps that are rated at least 1.5 times the machine weight.
6. Pull the machine from the lower rear or front tie-down points (See Figure 4-22 & 4-23). Pull the machine at 1-2 mph. High speed towing will damage the machine.
7. Remember to tighten the dump valves when repairs on the machine have been completed

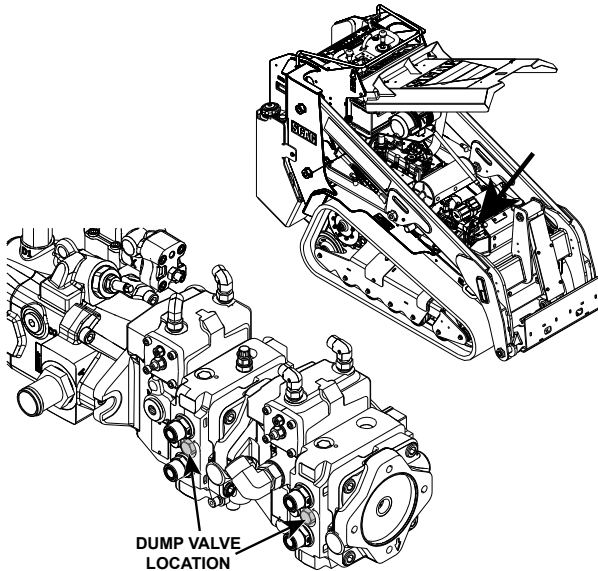


Figure 4-18. Dump Valve Control

4.16 USING ATTACHMENTS

- IMPORTANT -

Only use Scag approved attachments. Attachments can change the stability and operating functionality of the machine.

- IMPORTANT -

Ensure that the mount plate is free of any dirt or debris and that the attachment latch pins engage fully.

INSTALLING AN ATTACHMENT

1. Position the attachment on a level surface. Leave space between the attachment and unit.
2. Start the engine. Ensure parking brake is engaged.
3. Tilt the attachment mounting plate forward.

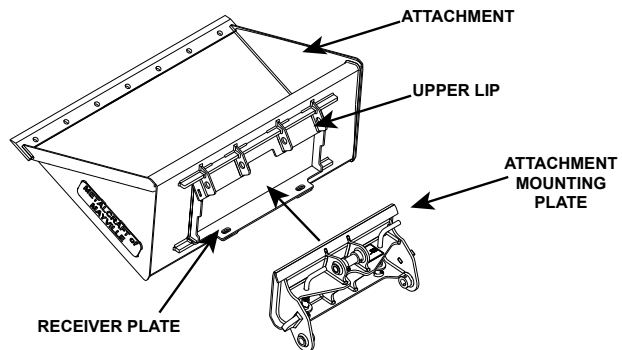


Figure 4-19. Attachment Installation

4. Position the attachment mounting plate into the upper lip of the attachment receiver plate. See Figure 4-19.
5. Raise lift arms while tilting back the attachment mounting plate at the same time.

NOTE

Raise the attachment enough to clear the ground.
Tilt the attachment mounting plate all the way back.

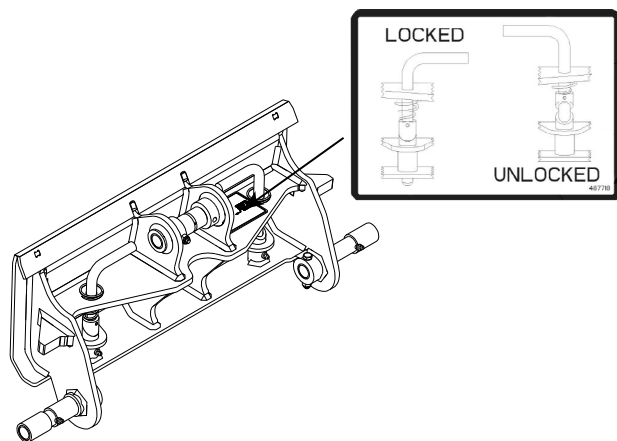


Figure 4-20. Attachment Latching Pins

6. Shut off the engine and remove the key.
7. Engage the attachment latches, ensuring that they are fully seated in the mounting plate. See Figure 4-20.

-NOTE-

The attachment is locked when the pins are both pointed inward.

The attachment is unlocked when the pins are both pointed outward.

-IMPORTANT-

If the pins do not rotate and drop into the engaged position, the mount plate is not fully aligned with the holes in the attachment receiver plate. Check the receiver plate and clean if necessary.

**WARNING**

If the attachment is not fully latched with the attachment latching pins, the attachment could fall off the machine, crushing you or bystanders.

Make sure that the attachment latching pins are fully seated in the attachment receiver plate.

CONNECTING THE HYDRAULIC HOSES

If the attachment requires hydraulics for operation, connect the auxiliary hydraulic hose connection as follows (See Figure 4-21):

1. Shut off the engine and leave the key in the off position.
2. Remove the protective covers from the hydraulic connectors on the machine.
3. Remove dirt and debris from the surface of the male and female couplers on the machine and attachment. Visually check the couplers for corrosion, cracking, damage or excessive wear. If any of these conditions exist, the coupler must be replaced.
4. Turn the key to the on position to unlock the handle.
5. Move the auxiliary hydraulic control lever forward, backward, and back to the NEUTRAL position to relieve pressure at the hydraulic couplers.
6. Push the attachment's male connector (#5) into the machine's female connector (#2).
7. Push the attachment's female connector (#6) onto the machine's male connector (#1).

8. Push the attachment's female case drain connector (#4) onto the machine's male connector (#3) if applicable.
9. Pull on the hoses to make the couplers have connected properly.

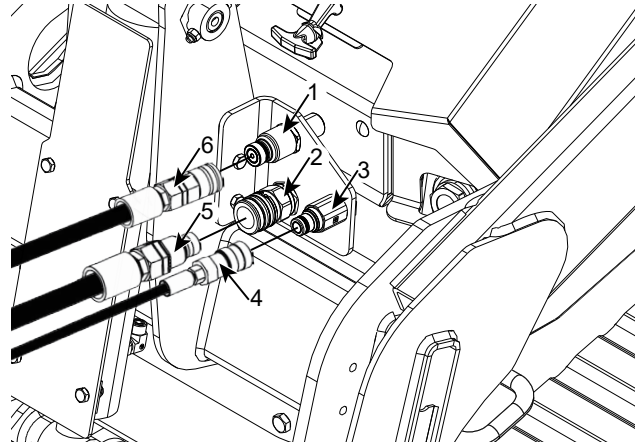


Figure 4-21. Auxiliary Hydraulic Hook-up

DISCONNECTING THE HYDRAULIC HOSES

1. Lower attachment to the ground.
2. Shut off the engine and leave the key in the off position.
3. Turn the key to the on position to unlock the handle.
4. Move the auxiliary hydraulic control lever forward, backward, and back to the NEUTRAL position to relieve pressure at the hydraulic couplers.
5. Push auxiliary hydraulic couplers (#6 & #4) in and hold for a few seconds to release hydraulic pressure.
6. Once the pressure has been released, turn the key to the off position.
7. Pull the collars back on the female couplers to detach the hydraulic hoses from the machine.
8. Clean the coupler caps before replacing.
9. Detach the couplers and replace the coupler caps.

WARNING

Hydraulic fluid escaping under pressure can penetrate skin and cause injury. Fluid injected into the skin must be surgically removed within a few hours by a doctor familiar with this form of injury; otherwise, gangrene may result.

- Ensure that all hydraulic-fluid hoses and lines are in good condition and all hydraulic connections and fittings are tight before applying pressure to the hydraulic system.
- Keep your body and hands away from pinhole leaks or nozzles that eject high-pressure hydraulic fluid.
- Use cardboard or paper to find hydraulic leaks; never use your hands.

CAUTION

Hydraulic coupler, hydraulic lines/valves, and hydraulic fluid may be hot. If you contact hot components, you may be burned.

Wear gloves when operating the hydraulic couplers.

Allow the machine to cool before touching hydraulic components.

Do not touch hydraulic fluid spills.

REMOVING ATTACHMENT

1. Park the machine on a level surface.
2. Lower the attachment to the ground.
3. Shut off the engine and remove the key.
4. If the attachment uses hydraulics, move the auxiliary-hydraulics lever forward, backward, and back to the NEUTRAL position to relieve pressure at the hydraulic couplers.

5. If the attachment uses hydraulics, slide the collars back on the hydraulic couplers and disconnect them.
6. Disengage the quick-attach pins by turning them to the outside. See Figure 4-8.

IMPORTANT

Connect the attachment hoses together to prevent hydraulic system contamination during storage.

7. Install the protective covers onto the hydraulic couplers on the machine.
8. Start the engine, tilt the mount plate forward, and back the machine away from the attachment.

4.17 TRANSPORTING THE MACHINE

1. Transport the track loader using a heavy duty trailer or truck with a load rating greater than the weight of the machine. Ensure the trailer or truck has all of the necessary lighting and markings as required by laws, codes, and ordinances. Secure a trailer with safety chains.
2. Be cautious when loading and unloading onto trailers or trucks. Use only a full width ramp.
3. Always back on and drive off a trailer. See 5, 6 & 7 for exceptions.)
4. When transporting the track loader, make sure the auxiliary hydraulic control is in neutral lock, the engine is off with the key removed, the parking brake is engaged and the tracks have been blocked.

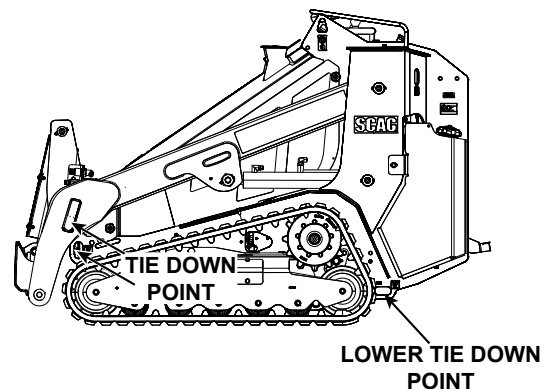


Figure 4-22. Tie Down Points

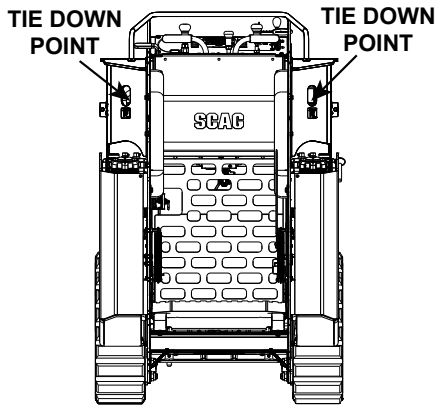


Figure 4-23. Upper Rear Tie Down Points

5. Load the machine onto the trailer with the heavy end up the ramp, carrying loads low, as shown in Figure 4-24, 1.
6. If the machine has a full, load-bearing attachment (e.g., bucket) or a non-load-bearing attachment (e.g., trencher), drive the machine forward up the ramp. (See Figure 4-24, 1).
7. If the machine has an empty, load-bearing attachment or no attachment, back the machine up the ramp. (See Figure 4-24, 2)
8. Lower the loader arms all the way down.
9. Use the metal tie-down loops on the machine to securely fasten the machine to the trailer or truck with straps, chains, cable, or ropes. Refer to local regulations for tie-down requirements. See Figure 4-22, 4-23.



WARNING

DO NOT use upper rear tie down points to tow or remove a stuck machine. This could cause the machine to tip over rearward.

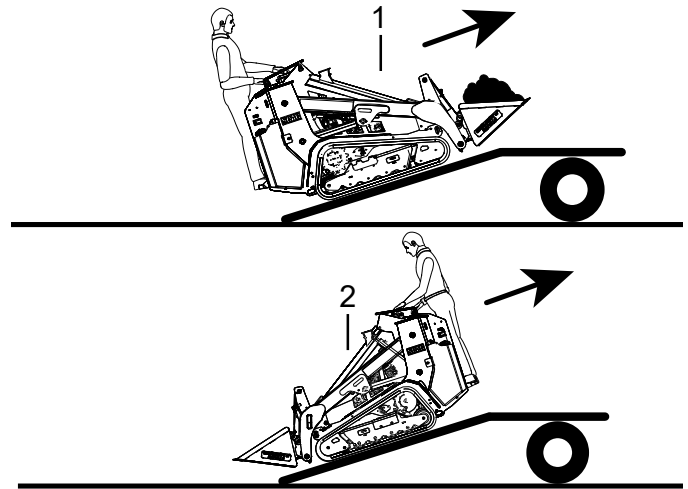


Figure 4-24. Loading Trailer

4.18 LIFTING THE MACHINE

The machine has lift points that can be used to lift the machine. Read the following safety points and instructions for safely lifting the machine.

1. Secure chains or lifting straps, that are rated for the weight of the machine and attachment, to the lift point locations.
2. Attach the chains or straps to an overhead hoist.
3. Slowly lift the machine only as high as required and move the machine slowly to the desired location.

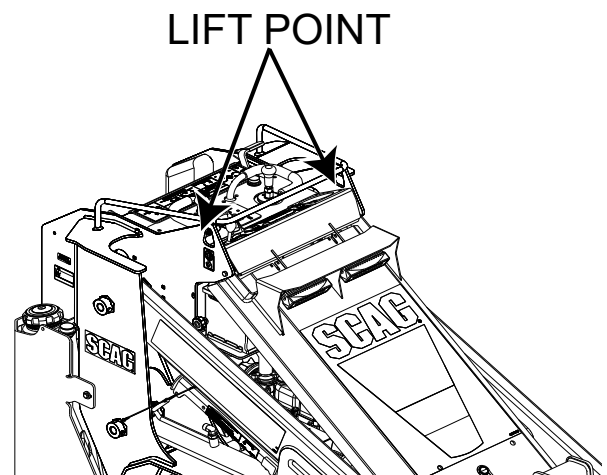


Figure 4-25. Lift Points

**DANGER**

To avoid serious injury or death:

- Do not lift the machine if it exceeds the maximum rated capacity of the hoist and attaching hardware.
- See specifications for attaching hardware and choose hardware suitable for the weight, size and configuration of the machine.
- Assess the center of gravity of the machine. Lift the machine so that it remains horizontal.
- Do not enter and do not allow others to enter the working area under the suspended machine. Do not move the suspended machine over people.
- Always inspect the attaching hardware (chains, hooks, straps and master links) before each use. Do not use any worn or damaged attaching hardware.
- Do not use attaching hardware, including chains, hooks and master links, in extreme temperature or other environmental conditions that exceed the manufacturer's specifications.
- Machine disengagement can cause severe injury or death. The use of a hook with a safety latch or other master link device does not preclude inadvertent detachment of a slack sling load from the hook or master link. Visual verification of proper hook or shackle engagement is required in all instances.
- Comply with all Federal, State and Local regulations and safety standards before lifting the machine.
- Make sure the lifting chains, lifting straps, hooks and master links are strong enough to withstand the load being lifted.
- Be sure that the hooks used have safety latches.
- Before lifting, make sure attachments are properly attached to the machines quick hitch mount plate.

ADJUSTMENTS

5.1 PARKING BRAKE ADJUSTMENT

WARNING

DO NOT operate the track loader if the parking brake is not operable. Possible severe injury could result.

The parking brake should be adjusted whenever the engaged parking brake does not hold the unit properly or does not allow the machine to move freely when disengaged. If the parking brake cannot be adjusted properly, contact your Authorized Scag Power Equipment Dealer for further brake adjustments.

- NOTE -

Be sure to check the parking brake on both sides of the unit.

1. Park the machine on a flat, level surface, and lower the loader arms.
2. Shut off the engine and remove the key.
3. With the brake lever disengaged position, check the brake shaft pin and ensure that the brake shaft pin clears the track sprocket. See Figure 5-3.
4. Re-engage the parking brake.
5. With the machine running make a slight forward/reverse motion of both sides until audible park brake pin engagement is detected. Visually confirm.
6. If the brake shaft does not clear the track sprocket, adjust as needed. Loosen the nuts on the parking brake cable adjuster and then turn the adjuster until the cable is taught, not tight. See Figure 5-1.
7. With the parking brake engaged, check the adjustment. Repeat as needed.
8. Tighten nuts.

- NOTE -

If this procedure does not achieve proper brake adjustment, please contact your Authorized Scag Dealer.

NOTE -

Ensure the parking brake pin area is free of debris and the pins are greased.

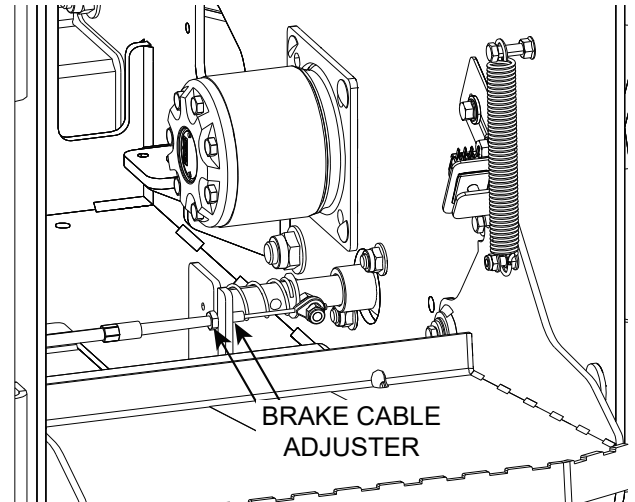


Figure 5-1. Brake Adjustment Location

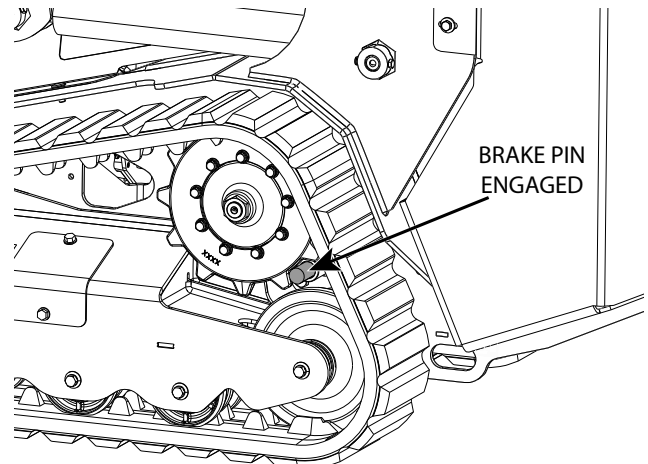


Figure 5-2. Brake Engaged

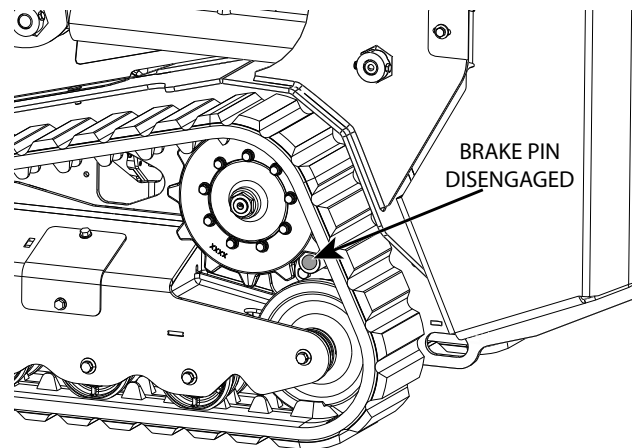


Figure 5-3. Brake Disengaged

5.2 THROTTLE CONTROL ADJUSTMENT

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

5.3 ALTERNATOR BELT ADJUSTMENT (KUBOTA & YANMAR)

Kohler drive belts are self-tensioning, however after the first 50 hours of operation, all belts should be checked for proper alignment and wear. Thereafter, check the belts after every 50 hours of operation or weekly, whichever occurs first.



WARNING

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

Kohler drive belts are self-tensioning, however before each use or daily check the alternator-belt condition and tension. For Kubota and Yamar engines, proper tension of the belt allows 9 mm (.35") of deflection when a force of 10 kg (22 lb.) is applied on the belt midway between the pulleys. If the deflection is not 9 mm (.35"), adjust as necessary as instructed in the Engine Operator's Manual furnished with this track loader.

1. Loosen the alternator-mounting bolt. See Figure 5-4.
2. Increase or decrease the alternator-belt tension and tighten the bolt.
3. Check the deflection of the belt again to ensure that the tension is correct.

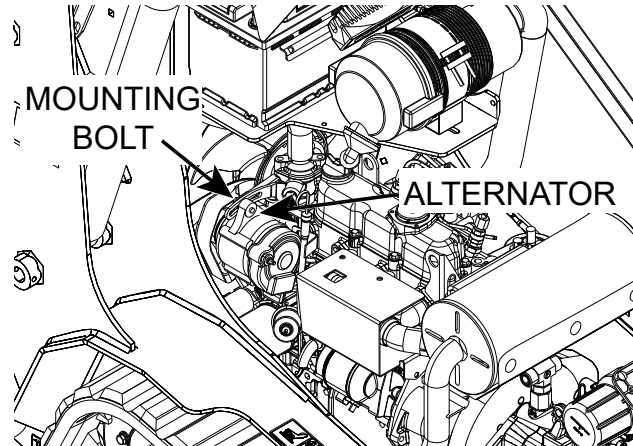


Figure 5-4. Alternator Location

5.4 TRACK TENSION ADJUSTMENT

-IMPORTANT-

The following procedure should be performed with the machine on a flat, level surface, the loader arms completely lowered and the machine turned off.

To check the track tension you will need to lift the weight off the tracks by raising the front of the machine with the bucket down force. The proper sag from the bottom in the track should measure 3/8" from the bottom of the track pad to the bottom of the middle track roller. See Figure 5-5 & 5-6.

1. Measure the sag in the middle of the track with a tape measure.

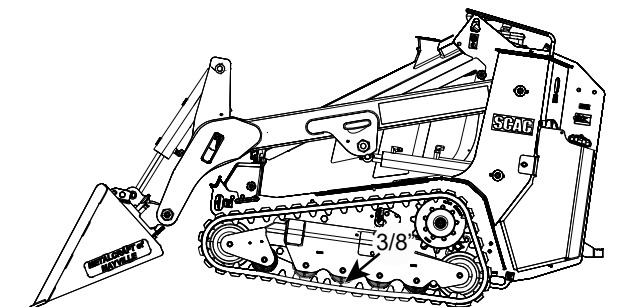


Figure 5-5. Track Tension Adjustment

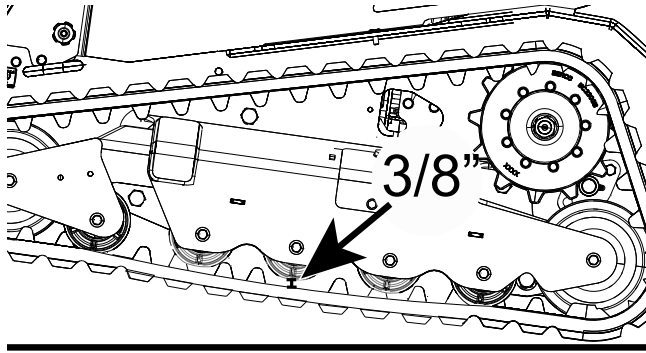


Figure 5-6. Track Sag Measurement

If the sag is more than 3/8" then the track needs to be adjusted tighter.

1. Loosen the bolts and remove the track support cover. See Figure 5-7.

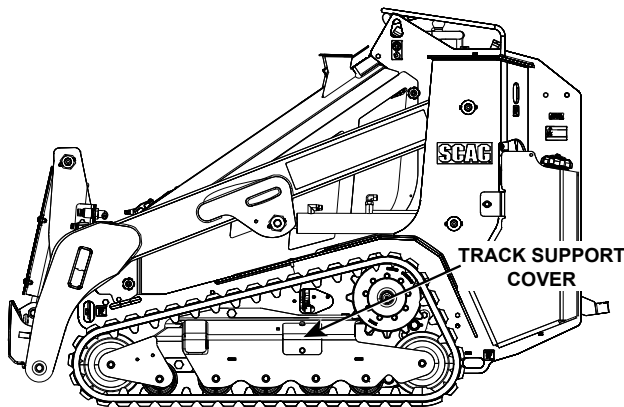


Figure 5-7. Track Support Cover

2. Wipe grease zerk clean with a rag.
3. Use a grease gun to pump grease into grease zerk until the sag in the track measures 3/8". See Figure 5-7.
4. Clean up any excess grease.
5. Repeat procedure for the other track.
6. Install the cover and tighten the bolts.

If the sag is less than 3/8" then the track needs to be adjusted looser.

1. Using a 9/16" wrench, loosen the bolts and remove the track support cover. See Figure 5-7.
2. To loosen the track, use a 3/4" wrench to turn the large hex insert counterclockwise. Grease will extract during this process.
3. Check for 3/8" sag; adjust as needed.
4. Clean up any excess grease.
5. Repeat procedure for the other track.
6. Install the track support cover and tighten the bolts.

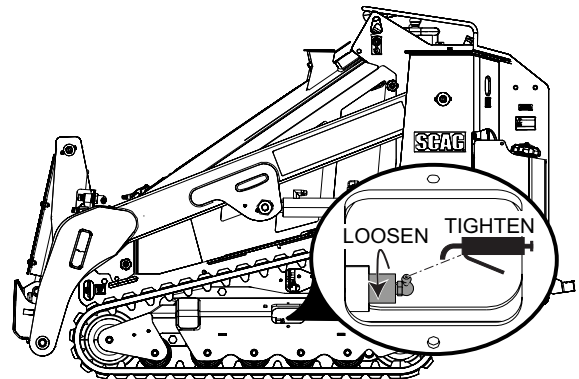


Figure 5-8. Track Tension Adjustment

5.5 ADJUSTING THE OPERATOR SUSPENSION PLATFORM

The operator suspension can be adjusted to optimize the operator comfort and ride. Adjust the suspension rate by moving the mounting position of the rubber isolators back to increase (stiffen) or forward to decrease (soften) the ride. See Figure 5-8.

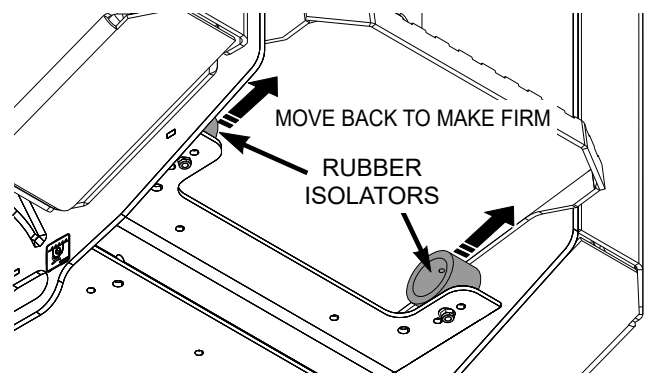


Figure 5-9. Operator Suspension Platform Adjustment

MAINTENANCE

6.1 MAINTENANCE CHART - RECOMMENDED SERVICE INTERVALS

HOURS							PROCEDURE	COMMENTS	PAGE
10	50	100	150	200	250	500			
Daily							Check all hardware for tightness		
Daily							Check Fuel Level		
Daily							Check Water Separator		40
Daily							Inspect & Replace Hydraulic Hoses	Replace as needed.	
X							Check Hydraulic Oil Level		36
X							Check Engine Oil Level		37
X							Check Coolant Level		43
X							Grease Grease Zerk	Every 10 hrs. and more frequent as needed.	33
	X						Check Air Cleaner Element*	Change as needed.	40
		X					Check Alternator Belt Tension	Check the belt every time when replacing the engine oil/oil filter and adjust as necessary.	30
	X						Check Track Tension	Adjust as needed.	30
Varies by Engine							Change Engine Oil	See Engine Manufacture Manual	38
Varies by Engine							Change Engine Oil Filter	See Engine Manufacture Manual	38
					X		Change Air Cleaner Element*	Clean as needed, change every 250 hrs.	40
					X		Change Fuel Filter	Change every 250 hrs.	39
				X			Adjust Alternator Belt	Adjust every 200 hrs. as needed.	30
						X	Change Hydraulic Return Filter	Change every 500 hrs.	37
						X	Change Hydraulic Oil	Change every 500 hrs.	37
Yearly							Change Hydraulic Tank Breather	Change every year.	
Every 2 years							Change Coolant	Change every 2 years.	

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

6.2 GREASE FITTING LOCATION

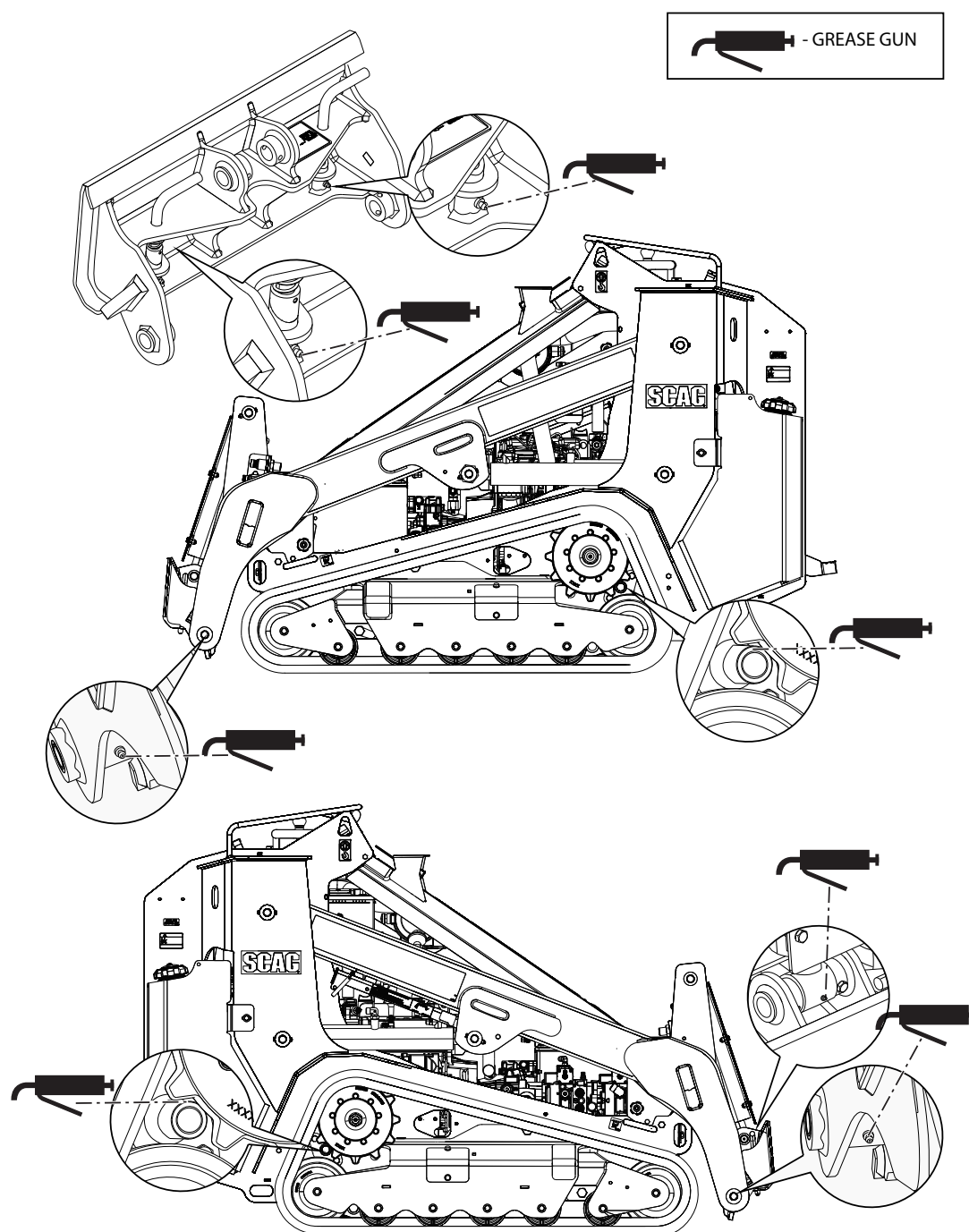


Figure 6-1. Lubrication Fitting Points

6.3 LIFT ARM SUPPORT

WARNING

The loader arms may lower when in the raised position, crushing anyone under them. Install the cylinder lock before performing maintenance that requires raised loader arms.

INSTALLING LIFT ARM SUPPORT

Some maintenance will require lift arms to be raised.

1. Start the engine.
2. Remove any attachment and raise lift arms to the maximum height. See Figure 6-2.

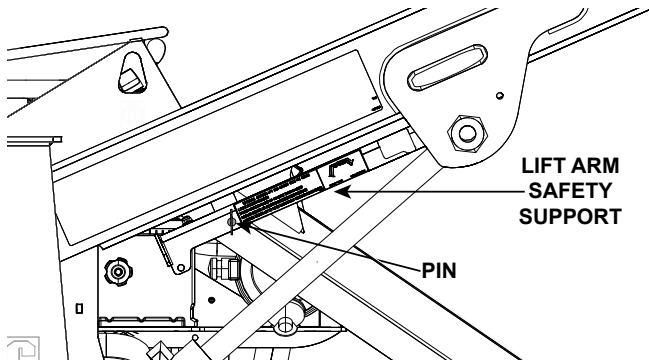


Figure 6-2. Lift Arm Safety Support

3. Shut off the engine and remove the key.
4. Remove the retaining pin to allow the lift arm safety support to rest on the cylinder. See Figure 6-3.

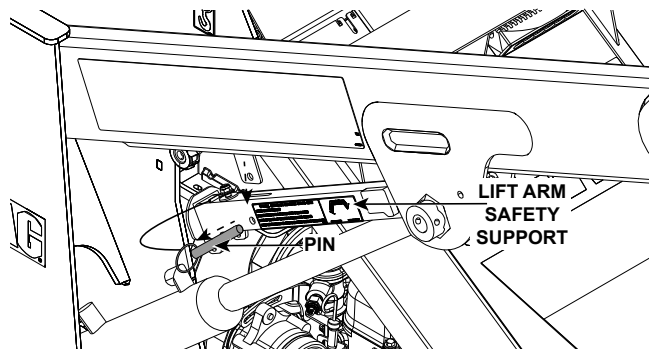


Figure 6-3. Cylinder Safety Pin

5. Insert retaining pin into lower hole. See Figure 6-4.

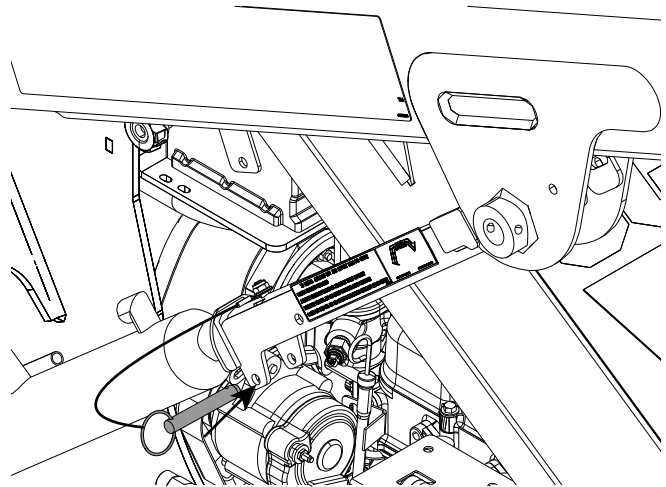


Figure 6-4. Positioning Cylinder Safety Lock

6. Lower lift arms until lift arm safety support is held securely between lift arm and cylinder. See Figure 6-5.

-IMPORTANT-

When lowering lift arms from fully raised position with the engine off, the oil reservoir can become overfilled, causing oil to escape out of the breather. Whenever possible, have the engine running and operator in the operator station before lowering the lift arms. If engine is stopped, lower lift arms slowly to prevent oil from purging.

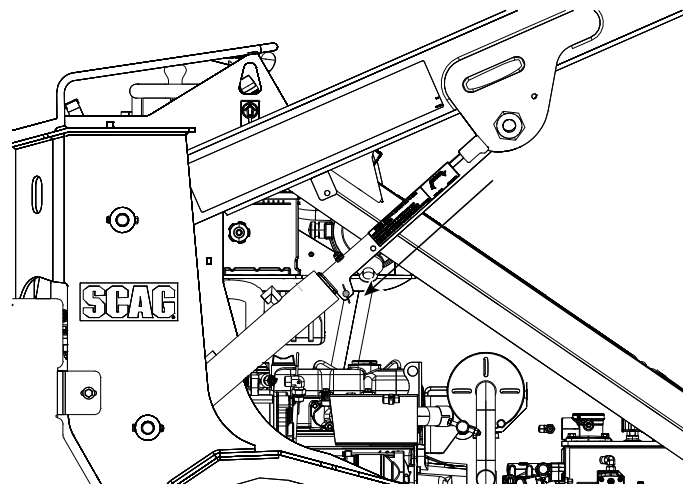


Figure 6-5. Securing Cylinder Safety Lock

REMOVING AND STORING LIFT ARM SUPPORT

1. If the hood is open, close it.
2. Start the engine.
3. Raise the lift arms to the fully raised position.
4. Shut off the engine and remove the key.
5. Remove the pin securing the lift arm safety support while staying clear of the lift arms and attachment.
6. Place the lift arm safety support on the post on the side of the machine and secure with the pin.
7. Lower the lift arms.

IMPORTANT

Remove the cylinder lock from the cylinder lift rod and fully secure it in the storage position before operating the machine.

6.4 ACCESSING INTERNAL COMPONENTS

A. HOOD

WARNING

Before removing any covers, hoods, and screens, shut the engine off, remove the ignition key, and allow the engine to cool to avoid personal injury.

OPENING & CLOSING THE HOOD

1. Remove the draw latch. See Figure 6-6.
2. Lift upward on hood to open. Gas shock will hold hood open in place.

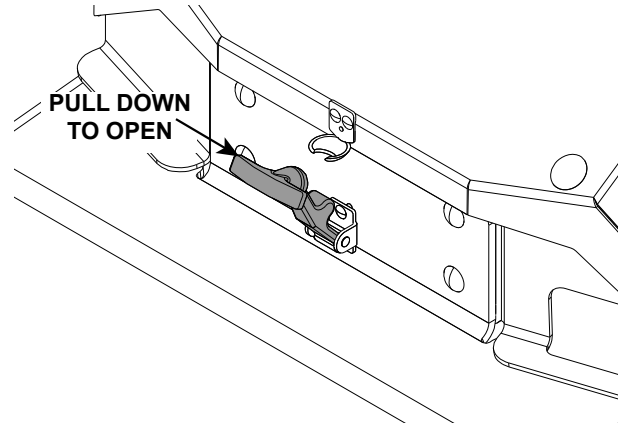


Figure 6-6. Open Hood Latch

CLOSING THE HOOD

1. Lower the hood and secure it closed with the rubber tie-down latch. See Figure 6-7.

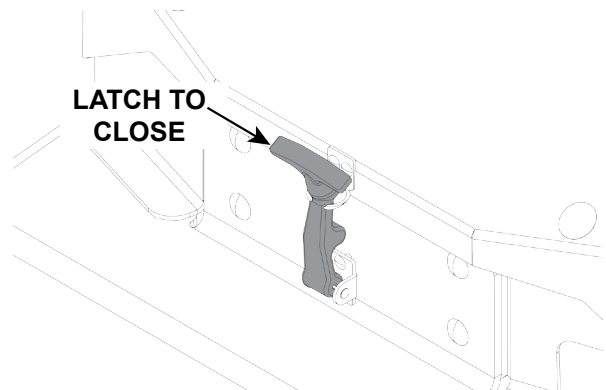


Figure 6-7. Closed Hood Latch

B. REMOVING SCREENS

REMOVING SIDE SCREEN

To remove the side screen panel:

1. Loosen the two (2) knobs securing the screen panel. See Figure 6-8.
2. Lift upward to remove the screen panel.

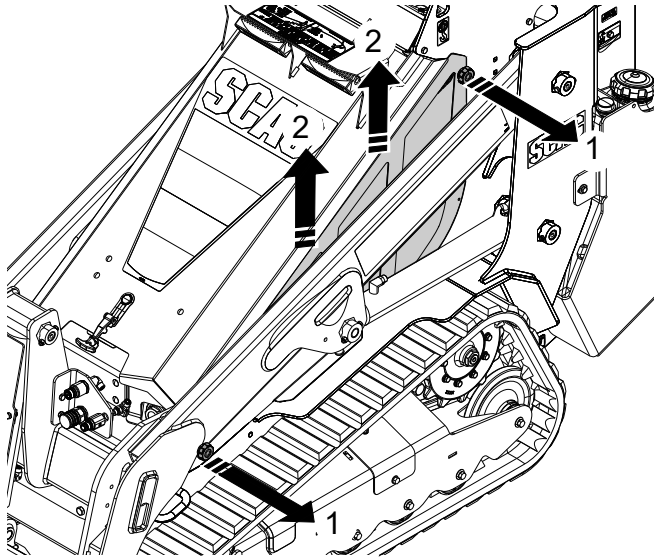


Figure 6-8. Side Screen Removal

REMOVING REAR SCREEN

To remove the rear screen panel:

1. Loosen and remove the two (2) knobs securing the screen panel. See Figure 6-9.
2. Lift upward to remove the cushion bracket. See Figure 6-9.
3. Lift upward to remove the rear screen inlet panel. See Figure 6-9.

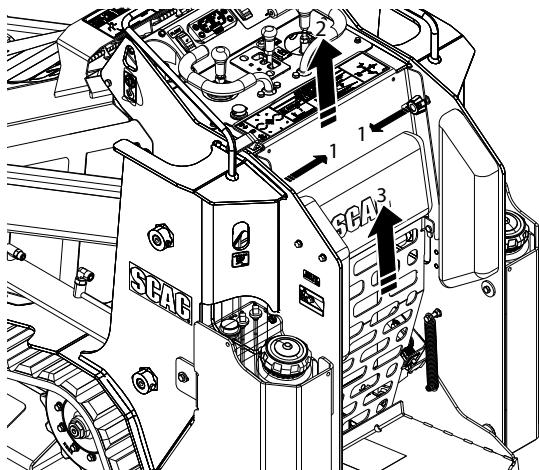


Figure 6-9. Rear Screen Removal

6.5 HYDRAULIC SYSTEM

-IMPORTANT-

When lowering lift arms from fully raised position with the engine off, the oil reservoir can become overfilled, causing oil to escape out of the breather. Whenever possible, have the engine running and operator in the operator station before lowering the lift arms.

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 10 hours of machine operation.

- IMPORTANT -

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

1. Park the machine on a level surface, engage the parking brake, lower the lift arms and roll attachment back.
2. Check oil level in the sight glass. See Figure 6-10.
3. Visually check the level of hydraulic oil. Hydraulic oil sight gauge must show oil level. If the fluid is low, add hydraulic oil. Remove dust and debris from hydraulic tank and hydraulic tank cap.
4. Fill to the center of the sight glass. DO NOT overfill; (overfilling the oil reservoir may cause oil seepage around the cap area).
5. Clean the fill cap and install it onto the reservoir.

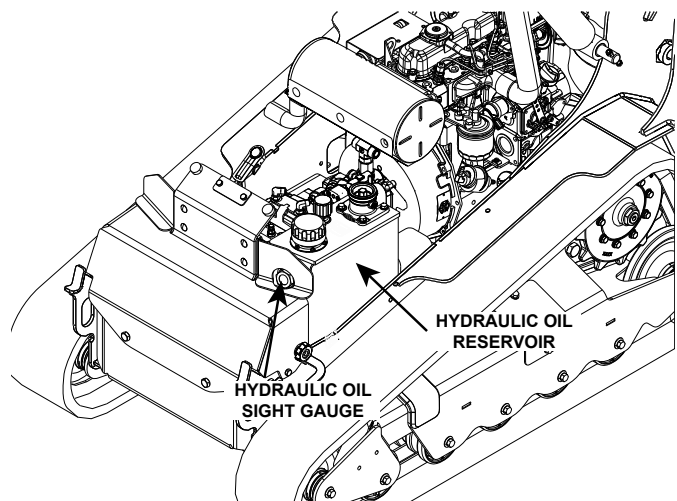


Figure 6-10. Hydraulic Oil Reservoir

B. CHANGING HYDRAULIC OIL

The hydraulic oil should be changed after every 500 hours. 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, engage the parking brake, **lower the lift arms** and roll attachment back.
2. Shut off the engine, remove the key, and allow the engine to cool.
3. Open the hood and remove side panels.
4. Place a suitable container under the hydraulic oil drain plug. See Figure 6-11. Remove the fill cap from the reservoir and the drain plug from the front of the hydraulic tank. See Figure 6-11. Allow the fluid to drain into the container and properly discard it.

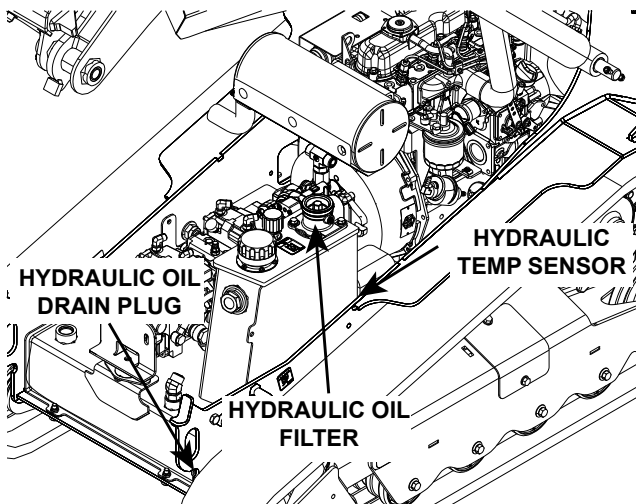


Figure 6-11. Hydraulic Oil Filter and Drain Plug

5. Re-install the drain plug 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."

6. Fill the reservoir until the hydraulic oil level is **CENTERED** in the sight gauge is half full.
DO NOT OVERFILL.
7. Replace the reservoir fill cap. Check the oil level in the reservoir. If necessary, add oil to the reservoir.
8. Run the engine at idle speed with the speed control lever in neutral for five minutes.

-IMPORTANT-

Overfilling the oil reservoir can cause oil to escape out of the breather.

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 6-11.
2. Install the new filter. Torque tight to 10 ft-lb.
3. Run the engine at idle speed with the speed control lever in neutral for five minutes.
4. With the lift arms down and the attachment rolled back, check the oil level in the hydraulic tank through the sight gauge

6.6 ENGINE OIL

A. CHECKING ENGINE OIL LEVEL

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

1. Park the machine on a level surface, engage the parking brake, and lower the lift arms.
2. Shut off the engine, remove the key, and allow the engine to cool.
3. Open the hood.
4. Check the oil and add additional oil as needed. See Figure 6-12.
5. Close the hood.

-IMPORTANT-

Do not overfill the crankcase with oil; if the oil in the crankcase is too high and you run the engine, you may damage the engine.

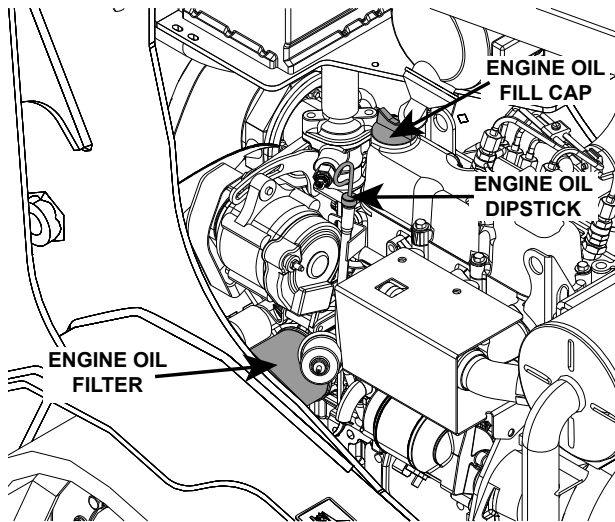


Figure 6-12. Engine Oil Filter/Fill

B. CHANGING ENGINE OIL AND FILTER

Refer to engine owner's manual for engine oil type.



DANGER

Components will be hot if the machine has been running. If you touch hot components, you may be burned. Use care to avoid touching hot components while changing the oil and/or filter.

1. Start the engine and let it run for 5 minutes.

-NOTE-

This warms the oil so that it drains better.

2. Park the machine on a level surface, engage the parking brake, and lower the loader arms.
3. Shut off the engine and remove the key.
4. Open the hood.
5. Support the machine using jack stands.

-NOTE-

Use jack stands rated for your machine.

6. Remove drain cover underneath the track loader. See Figure 6-13.
7. Drain the oil beneath the platform. See Figure 6-13.

8. Torque the drain plug to 34 to 42 ft-lb.
9. Place a shallow pan or rag under the filter to catch oil.
10. Remove oil filter.
11. Clean filter area before installing a new filter.
12. Lubricate the gasket on the new filter with fresh oil.
13. Screw on the filter by hand until tight. Do not over tighten.
14. Remove fill cap and pour in oil. Refer to engine owners manual for amount needed.
15. Check oil level.
16. Replace dipstick and fill cap.
17. Wipe off all oil residue.
18. Close the hood.

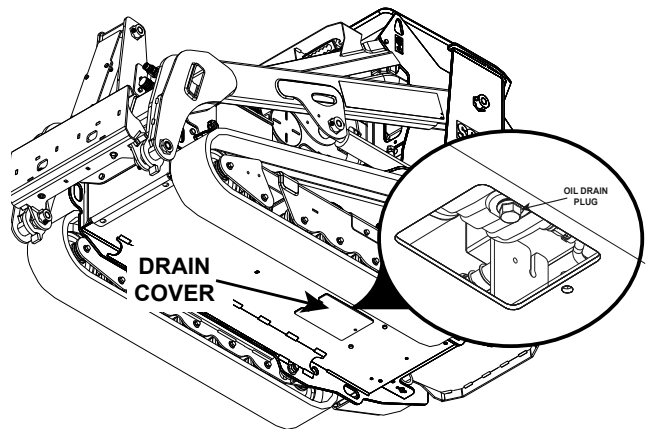


Figure 6-13. Engine Oil Drain Location

6.7 ENGINE FUEL SYSTEM



DANGER

To avoid injury from burns, allow the track loader 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. Do not overfill. Use clean, fresh, ultra-low Sulphur diesel fuel with a minimum Cetane rating of 40.

1. Extinguish all cigarettes, cigars, pipes and other sources of ignition.
2. Use only an approved diesel fuel container.
3. Never remove the fuel cap or add fuel with the engine running. Allow the engine to completely cool before fueling.
4. Never fuel the machine indoors or in an enclosed trailer.
5. Never store the machine or fuel container where there is an open flame, spark or pilot light such as on a water heater or other appliances.
6. Never fill containers inside a vehicle or on a truck or trailer bed with a plastic liner. Always place containers on the ground away from your vehicle before filling.
7. Remove the machine from the truck or trailer and fuel on the ground. If this is not possible, then refuel the machine with a portable container, rather than from a diesel fuel dispenser nozzle.
8. Keep the nozzle in contact with the rim of fuel tank or container opening at all times until fueling is complete. Do not use a nozzle lock-open device.
9. If fuel is spilled on clothing, change clothing immediately and wash affected skin.
10. Replace fuel cap and tighten securely.

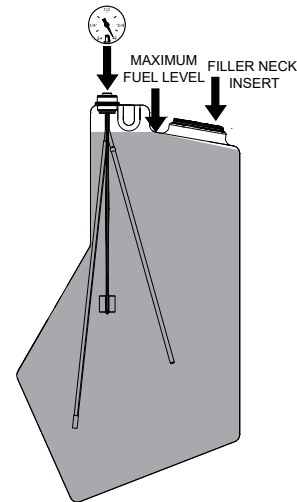


Figure 6-14. Fuel Level

B. REPLACING THE FUEL FILTER

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

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.

C. FUEL SWITCH

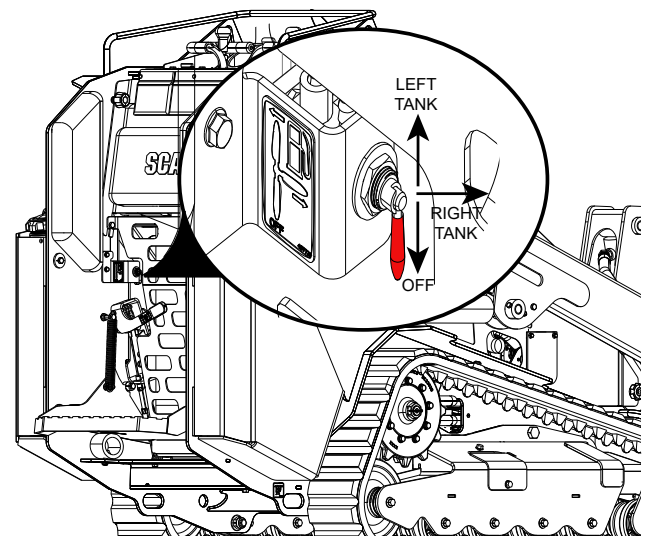


Figure 6-15. Fuel Switch

To use the right tank for fuel, toggle the fuel switch from the off position to the middle position.

To use the left tank for fuel, toggle the fuel switch to the up position.

To shut off fuel supply to the machine, toggle the fuel switch to the down position.

D. DRAINING THE WATER SEPARATOR (YANMAR & KOHLER)

Before each use or daily, drain water and other contaminants from water separator.

1. Park the machine on a level surface, engage the parking brake, and lower the loader arms.
2. Shut off the engine and remove the key.
3. Open the hood.
4. Place a clean container under the water separator.
5. Loosen the drain valve on the bottom of the filter canister and allow the water to drain.
6. When finished, tighten the drain valve.
7. Close the hood.

E. REPLACING THE WATER SEPARATOR FILTER

Replace the water separator filter every 500 hours.

1. Park the machine on a level surface, engage the parking brake, and lower the loader arms.
2. Shut off the engine and remove the key.
3. Open the hood.
4. Clean the area where the filter canister mounts.

Remove the filter canister and clean the mounting surface.

5. Lubricate the gasket on the new filter canister with clean oil.
6. Fill the canister with fuel.
7. Install the filter canister by hand until the gasket contacts the mounting surface, then rotate it an additional 1/2 turn.
8. Close the hood.

ENGINE AIR CLEANER

CLEANING AND/OR REPLACING AIR CLEANER ELEMENT

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

- NOTE -

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

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

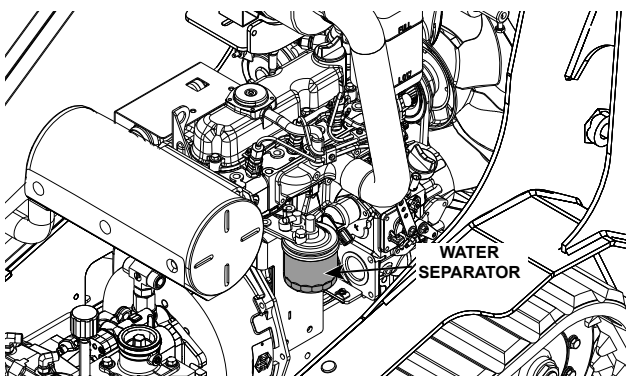


Figure 6-16. Replacing the Water Separator - Kubota

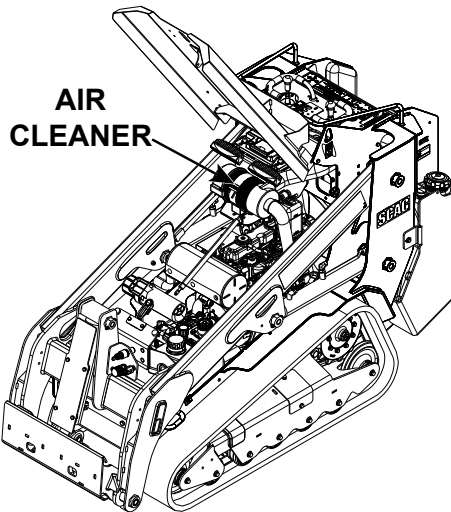


Figure 6-17. Air Cleaner Location

6.8 BATTERY

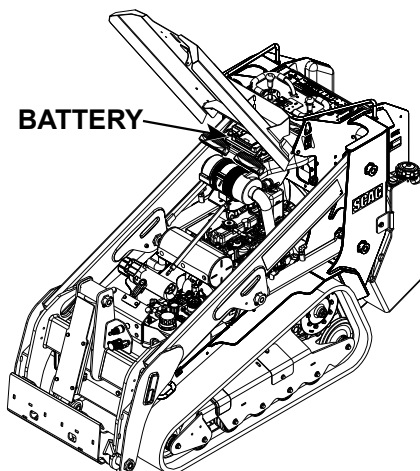


Figure 6-18. Battery Location

! 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 track loader 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, and then connect the negative cable to the negative battery post.

6.9 DRIVE SYSTEM MAINTENANCE

CLEANING THE TRACKS

1. Park the machine on a level surface and engage the parking brake.
2. With the bucket attachment installed and angled downward, lower it to the ground so that the front of the traction unit lifts off the ground a few inches. See Figure 6.19.
3. Shut off the engine and remove the key.
4. Clean the tracks using a water hose or pressure washer.

- IMPORTANT -

Only use high-pressure water on the tracks. Do not use a high-pressure washer to clean the track loader. Pressure washing can damage the electrical system and hydraulic valves or diminish grease.

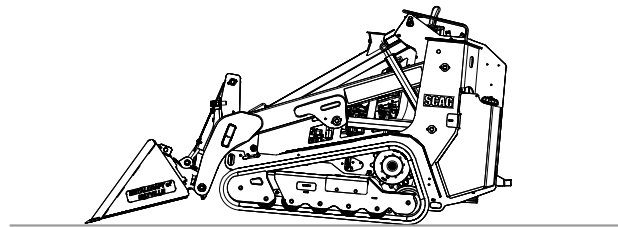


Figure 6-19. Track Cleaning

REMOVING THE TRACKS

1. Remove any attachments.
2. Park the machine on a level surface.
3. Lower the lift arms.
4. Shut off the engine, engage the parking brake and remove the key.
5. Raise the machine off the ground so that the bottom of the track is at least 10.2 cm (4 inches) off the ground. Support the machine using jack stands.

-NOTE-

Use jack stands rated for your machine.

6. Loosen the bolts on the track support cover and remove the cover to access the track tensioner assembly. See Figure 6-20.

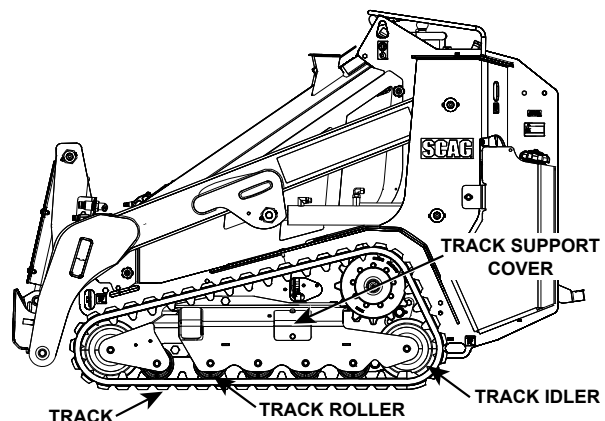


Figure 6-20. Track Support Cover

7. Loosen the cylinder tensioner until all the grease releases to release tension on the track. The tensioner will retract the front track idler allowing slack to remove the track. See Figure 6-21.

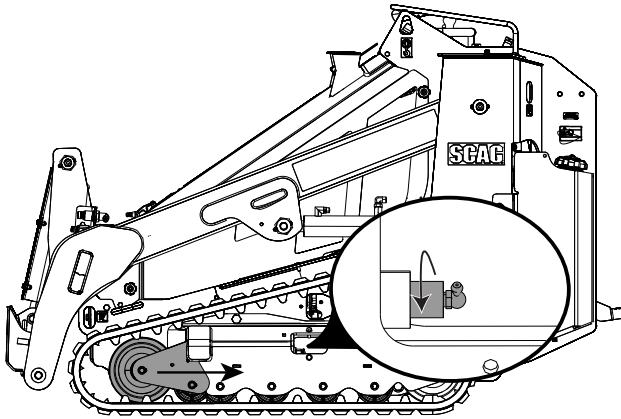


Figure 6-21. Track Tension Release

8. Remove the track from the track frame, track sprocket, and track idler.
9. Repeat the procedure to remove the other track.

INSTALLING THE TRACKS

1. With the track tensioner retracted (See Removing the Tracks #7), wrap the new track around the track frame.
2. Ensure the track is aligned with the rollers, sprocket and idlers.
3. Grease the cylinder tensioner until the front track idler creates tension on the track and the track deflection is 1/4 inch.
4. Install the track support cover and tighten the bolts.
5. Repeat the procedure to replace the other track.
6. Lower the machine to the ground.
7. Drive the machine, then park the machine on a level surface, engage the parking brake, shut off the engine, and remove the key.
8. Verify that the track tension is correct; refer to Section 5.4 Track Tension Adjustment.

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.

- NOTE -

The cooling system should be flushed and the coolant replaced every 2 years. See your Scag dealer for proper coolant replacement.

To check the coolant level in the expansion tank:

1. Park the machine on a level surface, engage the parking brake, and lower the loader arms.
2. Shut off the engine, remove the key, and allow the engine to cool.
3. Open the hood.
4. Check the coolant level in the expansion tank. See Figure 6-22.

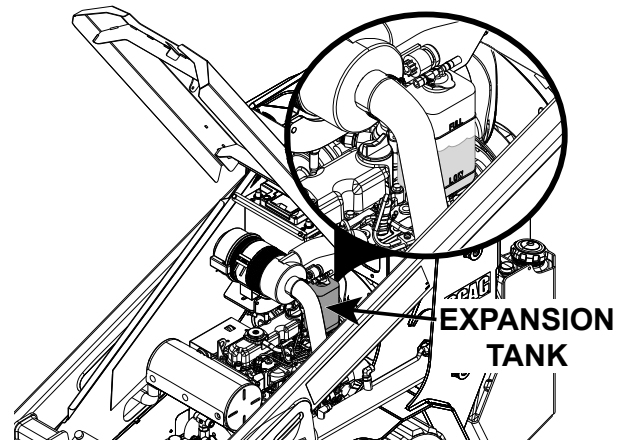


Figure 6-22. Coolant Expansion Tank

-NOTE-

The coolant level should be between the Full and Low line indicator on the expansion tank.

5. If the coolant level is low, remove the expansion tank cap and add coolant.

- NOTE -

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

6. Install the expansion-tank cap.
7. Close the hood.

-IMPORTANT-

DO NOT OVERFILL THE EXPANSION TANK.

B. CLEANING THE RADIATOR

Before each use or daily check and clean the radiator. Remove any buildup of dirt or other debris from the radiator screen with compressed air.

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 track loader. 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 cushions.
4. Repair damaged metal surfaces using Scag touch-up paint available from your authorized Scag dealer. Wax the track loader for maximum paint protection. (p/n 48521, or 484540-01 Cat's Eye Gold) (p/n 486269 Textured Black)

6.12 FLUID CAPACITIES

LUBRICANT/ FUEL	COMPONENT	CAPACITY
Engine Oil	Kubota Kohler Yanmar	6 qt 4 qt 3.5 qt
Coolant	Radiator	X QT
Hydraulic Oil	Hydraulic System	12 gal
Fuel	Fuel Tank	6.5 U.S. gal (24.6 L) /Tank

6.13 RECOMMENDED FLUIDS

LUBRICANT	RECOMMENDATION		
		AMBIENT TEMPERATURE CONDITIONS	VISCOSITY
ENGINE OIL	Kohler	10W-30 (-13°F to 104°F) 10W-40 (-13°F to 122°F) 5W-30 (-22°F to 104°F) 0W-40 (-40°F to 122°F)	API Classification: CI-4 or better SAE
	Yanmar	10W-30	API Classification: SK SAE
	Kubota	10W or 10W-30, 10W-40 (-0°F) 20 or 10W-30, 10W-40 (32°F to 77°F) 30 or 10W-30, 10W-40 (above 77°F)	SAE
	RECOMMENDATION		
GREASE	Scag Premium Chassis Grease p/n 486257		
HYDRAULIC OIL	Grade MV68 Standard AW46 recommended for 10°F cold start		
COOLANT	Antifreeze 50/50 nitrate free red.		

-NOTE-**•Engine Oil**

•Oil used in the engine should have an American Petroleum Institute (API) service classification and should be a proper SAE engine oil according to the ambient temperature of the machine's environment.

•Perform the initial engine oil replacement after first use of the machine.

Kohler: 500 hours (oil + Filter, no break-in required)

Yanmar: 250 hours (50-hour break-in)

Kubota: 200 hours (50-hour break-in)

•Grease

•Perform the initial grease replacement 50 hours after first use of the machine.

•Fuel

•A Cetane number of 40 is a minimum standard. A Cetane number of 50 or greater is preferred, especially for temperatures below -20°C (-4°F) or elevations above 1,500 m (5,000 ft).

•Diesel fuels conforming with ASTM D975 is recommended.

•Ultra low sulfur fuel is mandatory, when machine is operated in US EPA regulated areas.

•No. 2-D is a distillate fuel with lower volatility for engines in industrial and heavy mobile service (SAE J313 JUN87).

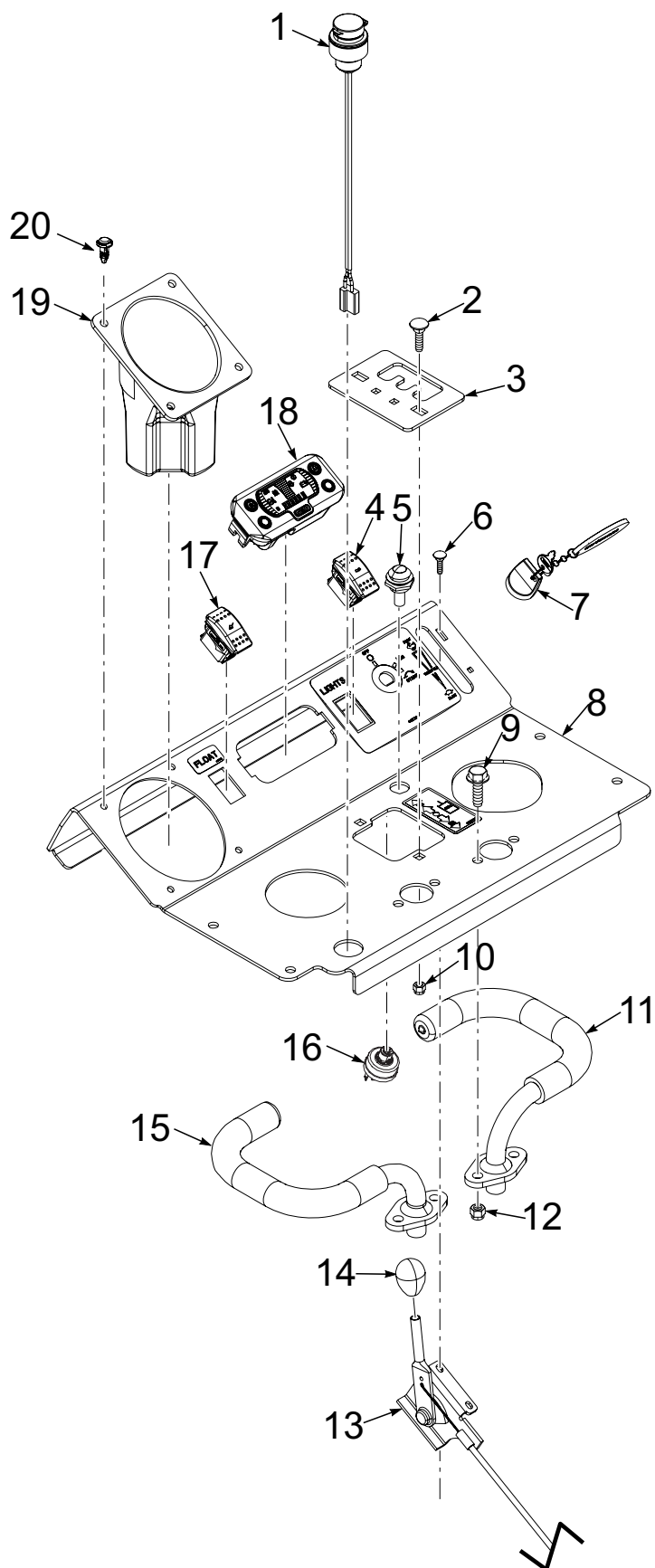
ILLUSTRATED PARTS LIST

7.1 SCAG APPROVED ATTACHMENTS AND ACCESSORIES

Attachments and accessories manufactured by companies other than Scag Power Equipment or Metalcraft of Mayville must be approved by Scag Power Equipment for use on this machine.

<u>Accessories</u>	<u>P/N</u>
Narrow Track Kit	9806
Wide Track Kit	9807
Replacement Bucket - N34 (16H x 25D x 34W)	9808
Replacement Bucket - W40 (16H x 25D x 40W)	9805
Mulch Bucket (22H x 32D x 48W)	9802
Dirt Bucket (16H x 31D x 48W)	9803
Dirt Bucket (16H x 25D x 48W)	9804

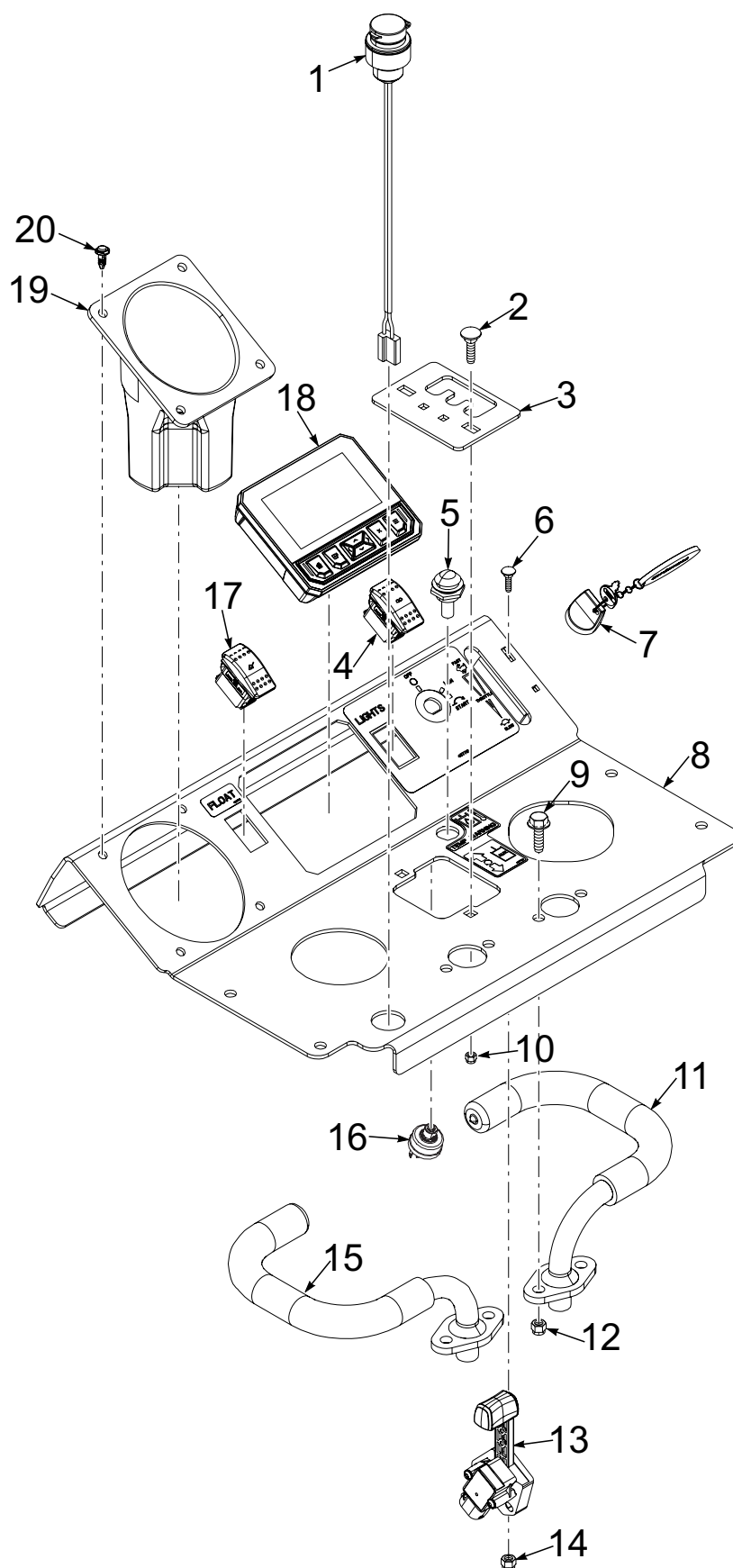
CONTROL PANEL KUBOTA



CONTROL PANEL KUBOTA

Ref. No.	Part No.	Description
1	485568	Power Plug, 12V
2	04003-12	Carriage Bolt, 5/16-18 X .75
3	429607	Bracket, Detent
4	487645	Switch, Lights
5	481182	Indicator Light Assy, Glow Plug
6	04003-43	Carriage Bolt, #10-24 X .50
7	462069	FOB Assy w/Key
8	463613	Instrument Panel Assy
9	04001-19	Capscrew, Hexhead 3/8-16 UNC X 1.00
10	04021-10	Hex Lock Nut, 5/16-18
11	463578	Reference Bar w/Grip - RH
12	04021-09	Hex Lock Nut, 3/8-16
13	483356	Pro-Throttle Control, STT-KBD
14	483533	Knob, Kubota Throttle Control
15	463577	Reference Bar w/Grip - LH
16	48798	Key Switch
17	487646	Switch, Float
18	487833	Display, Jackal - KBD
19	487826	Cup Holder, Molded
20	04136-02	Plastic Push Fastner, .315-.325 X .118-.315

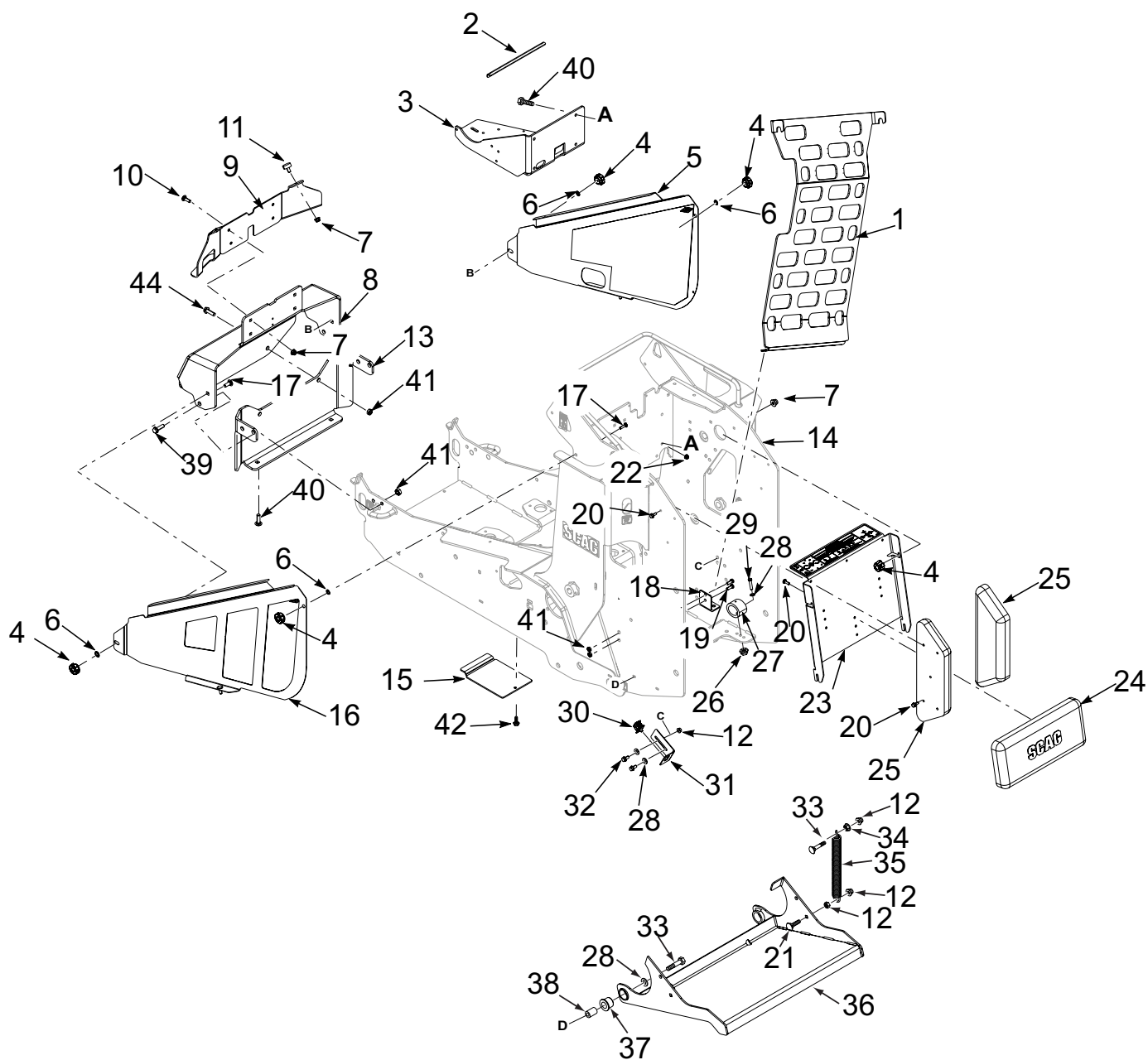
CONTROL PANEL YANMAR / KOHLER



CONTROL PANEL YANMAR / KOHLER

Ref. No.	Part No.	Description
1	485568	Power Plug, 12V
2	04003-12	Carriage Bolt, 5/16-18 X .75
3	429607	Bracket, Detent
4	487645	Switch, Lights
5	481182	Indicator Light Assy, Glow Plug
6	04003-43	Carriage Bolt, #10-24 X .50
7	462069	FOB Assy w/Key
8	487353	Instrument Panel Assy
9	04001-19	Capscrew, Hexhead 3/8-16 UNC X 1.00
10	04021-10	Hex Lock Nut, 5/16-18
11	463578	Reference Bar w/Grip - RH
12	04021-09	Hex Lock Nut, 3/8-16
13	485464	Control, E-Gov Throttle
14	04021-26	Hex Lock Nut, 5/16-24
15	463577	Reference Bar w/Grip - LH
16	48798	Key Switch
17	487646	Switch, Float
18	487751	Display, Jackal -
19	487826	Cup Holder, Molded
20	04136-02	Plastic Push Fastner

SHEET METAL COMPONENTS

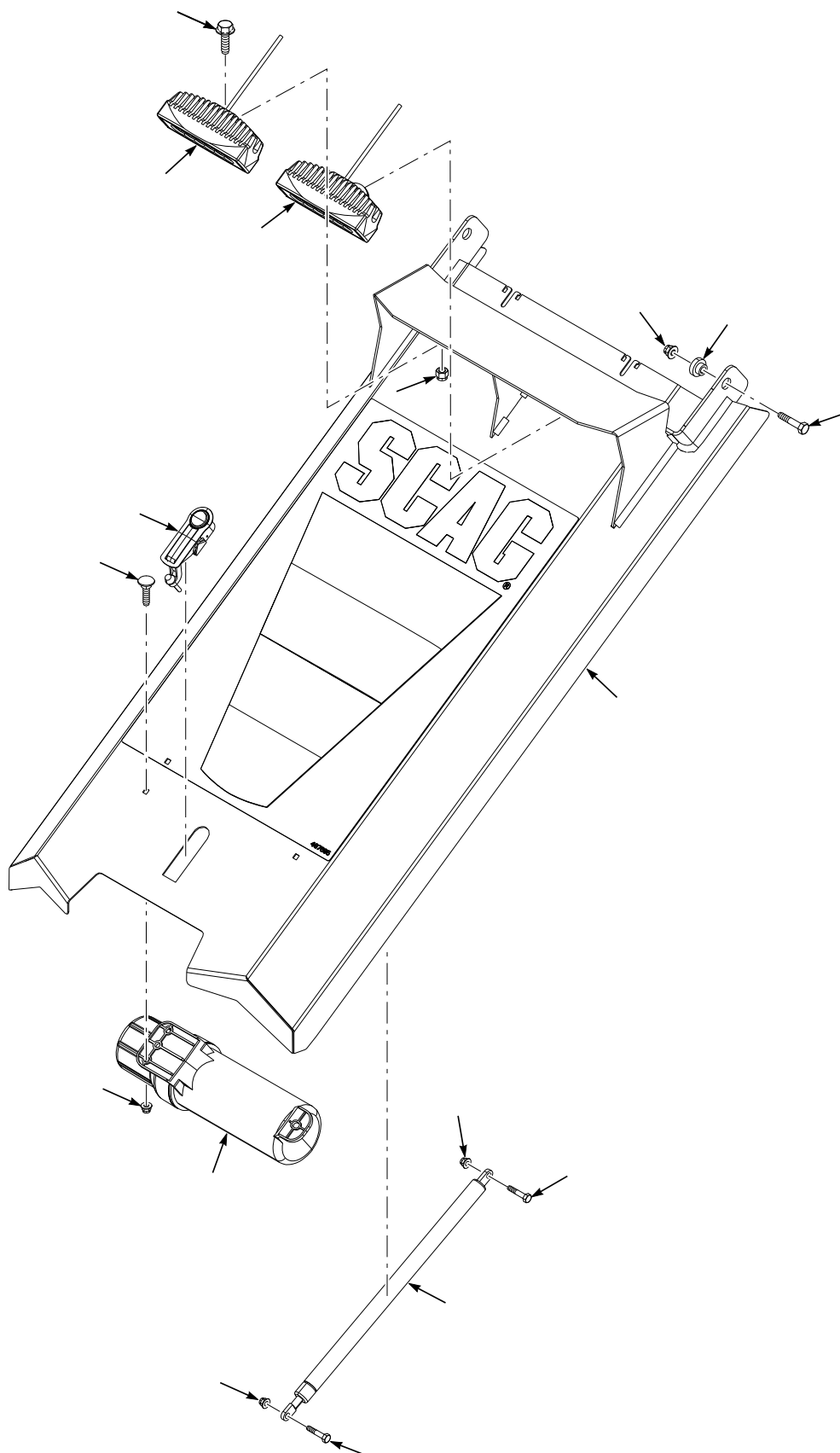


SHEET METAL COMPONENTS

Ref. No.	Part No.	Description
1	429695	Screen Inlet
2	429610	Battery Bracket
3	429827	Battery Support
4	481885-03	Knob 3/8-16
5	453474	Panel Weldment - RH
6	04024-02	Nut, Push-On 3/8
7	04117-01	Locknut W/Flange, Elastic Stop 5/16-18
8	429364	Front Cover
9	429834	Upper Cover
10	04003-04	Carriage Bolt 5/16-18 X 1.00"
11	481284	Bumper, Rubber
12	04023-08	Weld Nut 3/8-16
13	429430	Front Plate
14	463569	Frame W/Decals
15	429831	Drain Cover
16	453473	Panel Weldment - LH
17	04003-23	Carriage Bolt 3/8-16 X 1.00"
18	429352	Cable Bracket
19	04001-19	Capscrew, Hexhead 3/8-16 UNC X 1.00"
20	04017-16	Capscrew, Serrated Flang Hexhead 5/16-18 X .75
21	04003-37	Carriage Bolt 5/16-18 X 1.25 LG
22	04117-02	Locknut W/Flange, Elastic Stop 3/8-16
23	463572	Cushion Bracket W/Decal
24	487595	Front Cushion
25	487608	Side Cushion
26	04019-02	Nut, Serrated Flange 1/4-20
27	486758	Isolator, Footplate
28	04041-07	Washer, Flat 3/8-.391 x .938 x .105
29	04001-21	Bolt, Hex Head 3/8-16 x 1-3/4"
30	487855	Switch, DP NC/NC Two Pole Shorting
31	429351	Switch Bracket, OPC Switch
32	04017-26	Capscrew Serrated Flange HH 3/8-16 X .75
33	04001-45	Capscrew, Hexhead 3/8-16 UNC X 2.00
34	04019-04	Nut, Serrated Flange HH 3/8 - 16
35	48755	Spring
36	463540	Footplate Assembly (Incl. #12, 26, 42)
37	486834	Bearing
38	43572	Spacer
39	04017-28	Capscrew Serrated Flange HH 3/8-16 X 1.25"
40	04003-11	Carriage Bolt 3/8-16 X 1.25 LG
41	04023-08	Weld Nut Pilot 3/8 - 16
42	04017-27	Capscrew Serrated Flange HH 3/8-16 X 1.00"

HOOD

(Y0700001-Y0700499, Y0800001-Y0800499, Y0900001-Y0900499, Y1000001-Y1000499, Y1100001-Y1100499, Y1200001-Y1200499)



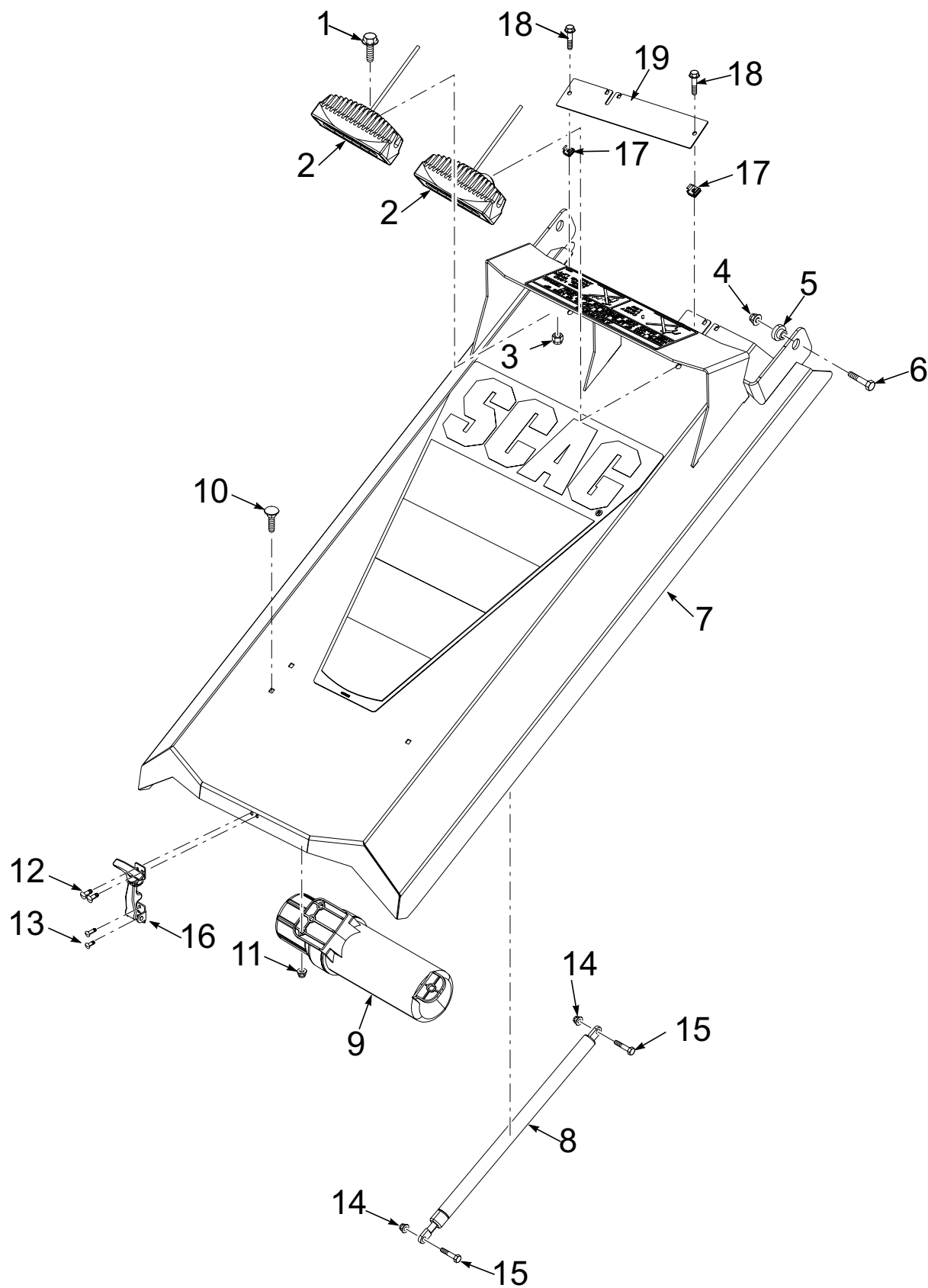
HOOD

(Y0700001-Y0700499, Y0800001-Y0800499, Y0900001-Y0900499, Y1000001-Y1000499, Y1100001-Y1100499, Y1200001-Y1200499)

Ref. No.	Part No.	Description
1	04001-08	Capscrew Hexhead 5/16-18 UNC X .75
2	486672	Worklight, LED
3	04117-01	Locknut W/Flange, Elastic Stop 5/16-18
4	04117-02	Locknut W/Flange, Elastic Stop 3/8-16
5	43086	Bushing
6	04001-20	Capscrew Hexhead 3/8-16 UNC X 1.50"
7	463574	Hood W/Decals
8	487753	Gas Spring, Hood Lift
9	487838	Manual Case
10	04003-02	Carriage Bolt 1/4-20 X .75
11	04117-03	Locknut W/Flange, Elastic Stop 1/4-20
12	04090-03	Rivet
13	04090-01	Rivet
14	04019-03	Nut, Serrated Flange 5/16-18
15	04001-11	Capscrew, Hexhead 5/16-18 UNC X 1.50
16	487816	Rubber Draw Latch

HOOD

(Y0700500-Y0799999, Y0800500-Y0899999, Y0900500-Y0999999, Y1000500-Y1099999, Y1100500-Y1199999, Y1200500-Y1299999)

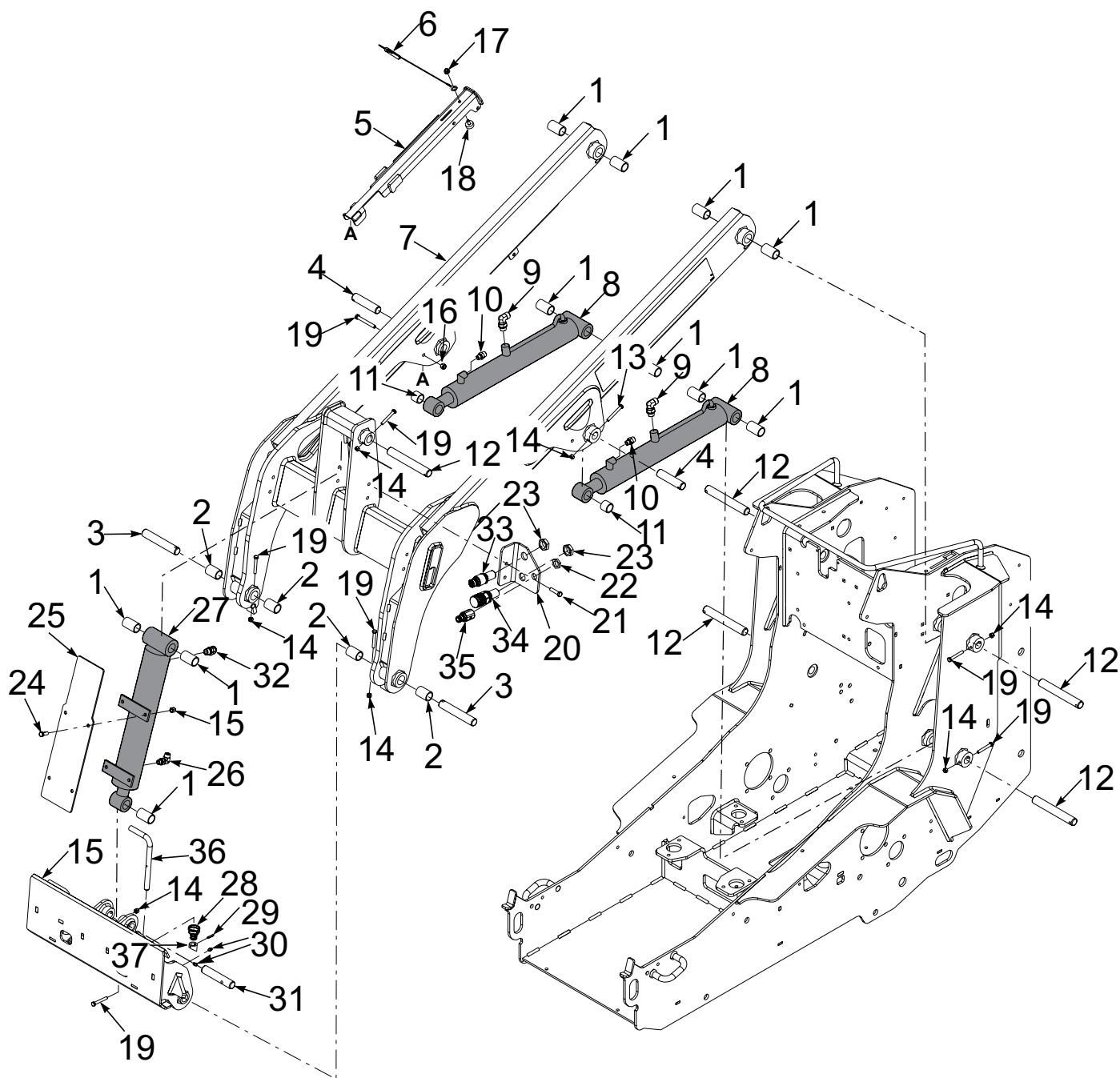


HOOD

(Y0700500-Y0799999, Y0800500-Y0899999, Y0900500-Y0999999, Y1000500-Y1099999, Y1100500-Y1199999, Y1200500-Y1299999)

Ref. No.	Part No.	Description
1	04001-08	Capscrew Hexhead 5/16-18 UNC X .75
2	486672	Worklight, LED
3	04117-01	Locknut W/Flange, Elastic Stop 5/16-18
4	04117-02	Locknut W/Flange, Elastic Stop 3/8-16
5	43086	Bushing
6	04001-20	Capscrew Hexhead 3/8-16 UNC X 1.50"
7	463637	Hood W/Decals
8	487753	Gas Spring, Hood Lift
9	487838	Manual Case
10	04003-02	Carriage Bolt 1/4-20 X .75
11	04117-03	Locknut W/Flange, Elastic Stop 1/4-20
12	04090-03	Rivet
13	04090-01	Rivet
14	04019-03	Nut, Serrated Flange 5/16-18
15	04001-11	Capscrew, Hexhead 5/16-18 UNC X 1.50
16	487816	Rubber Draw Latch
17	04138-01	Cage Nut
18	04017-05	Capscrew, Serrated Flange HH 1/4-20 X .75 LG
19	4200355	Access Panel

LIFT ARM ASSEMBLY

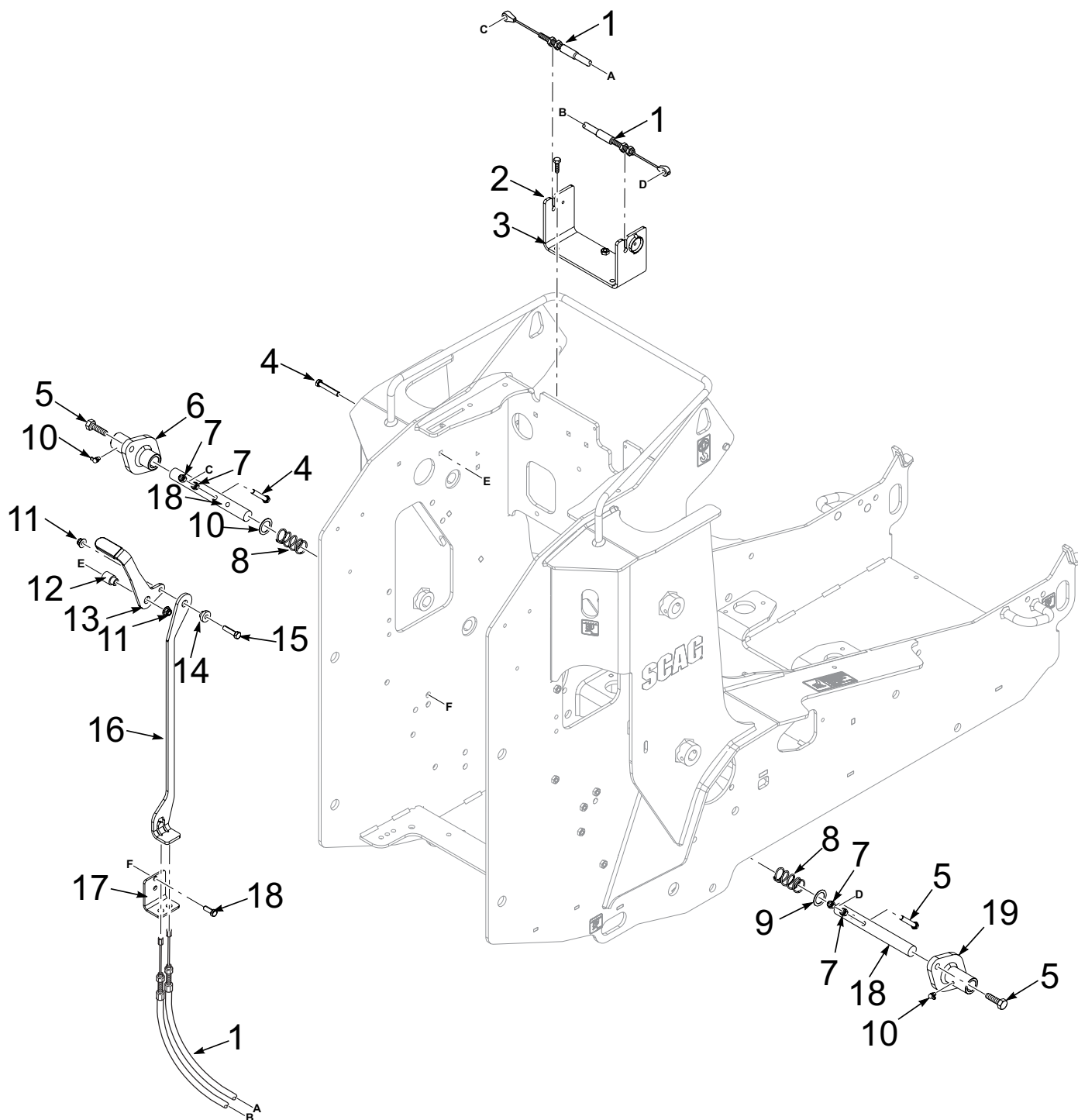


LIFT ARM ASSEMBLY

Ref. No.	Part No.	Description
1	487870-01	Bushing, Steel
2	487564-02	Bushing, Fiber
3	431201-01	Pin, Pivot
4	431201-04	Pin, Pivot
5	463576	Lift Arm Support W/Decals (Incl. #6, 18, 19)
6	487819	Ring Pin Assy W/Lanyard
7	463570	Lift Arm W/Decals & Bushings (Incl. #1)
8	487554	Cylinder, Lift
9	487734-21	Fitting, Orfs to SAE
10	487734-09	Fitting, Orfs to SAE
11	487564-01	Bushing, Fiber
12	431201-03	Pin, Pivot
13	04001-53	Capscrew, Hexhead 5/16-18 UNC X 2.50"
14	04021-10	Hex Lock Nut 5/16-18
15	453435	Attachment Coupler W/Decal
16	04021-09	Hex Lock Nut 3/8-16
17	04117-01	Lock Nut w/Flange, Elastic Stop
18	481284	Bumper, Rubber
19	04001-39	Capscrew, Hexhead 5/16-18 UNC X 2.25"
20	429424	Bracket, Bulkhead
21	04001-20	Capscrew, Hexhead 3/8-16 UNC X 1.50
22	487735-06	Fitting, Reducer Straight
23	04020-42	Hex Nut, 1-14
24	04001-19	Capscrew, Hexhead 3/8-16 UNC X 1.00
25	429423	Bracket, Hose Guard
26	487734-02	Fitting, Orfs to SAE
27	463580	Tilt Cylinder with Bushings
28	487563	Spring, Attach
29	04060-12	Pin, Slotted Spring 3/16 X 1.00"
30	48114-04	Grease Fitting
31	431201-02	Pin, Pivot
32	487734-16	Fitting, Orfs to SAE
33	487649	Coupler Male 1/2
34	487648	Coupler Female 1/2
35	487650	Coupler Male 3/8
36	44263	Latch Attachment
37	431234	Wedge, Lock

BRAKE SYSTEM

(Y0700001-Y0700499, Y0800001-Y0800499, Y0900001-Y0900499, Y1000001-Y1000499, Y1100001-Y1100499, Y1200001-Y1200499)



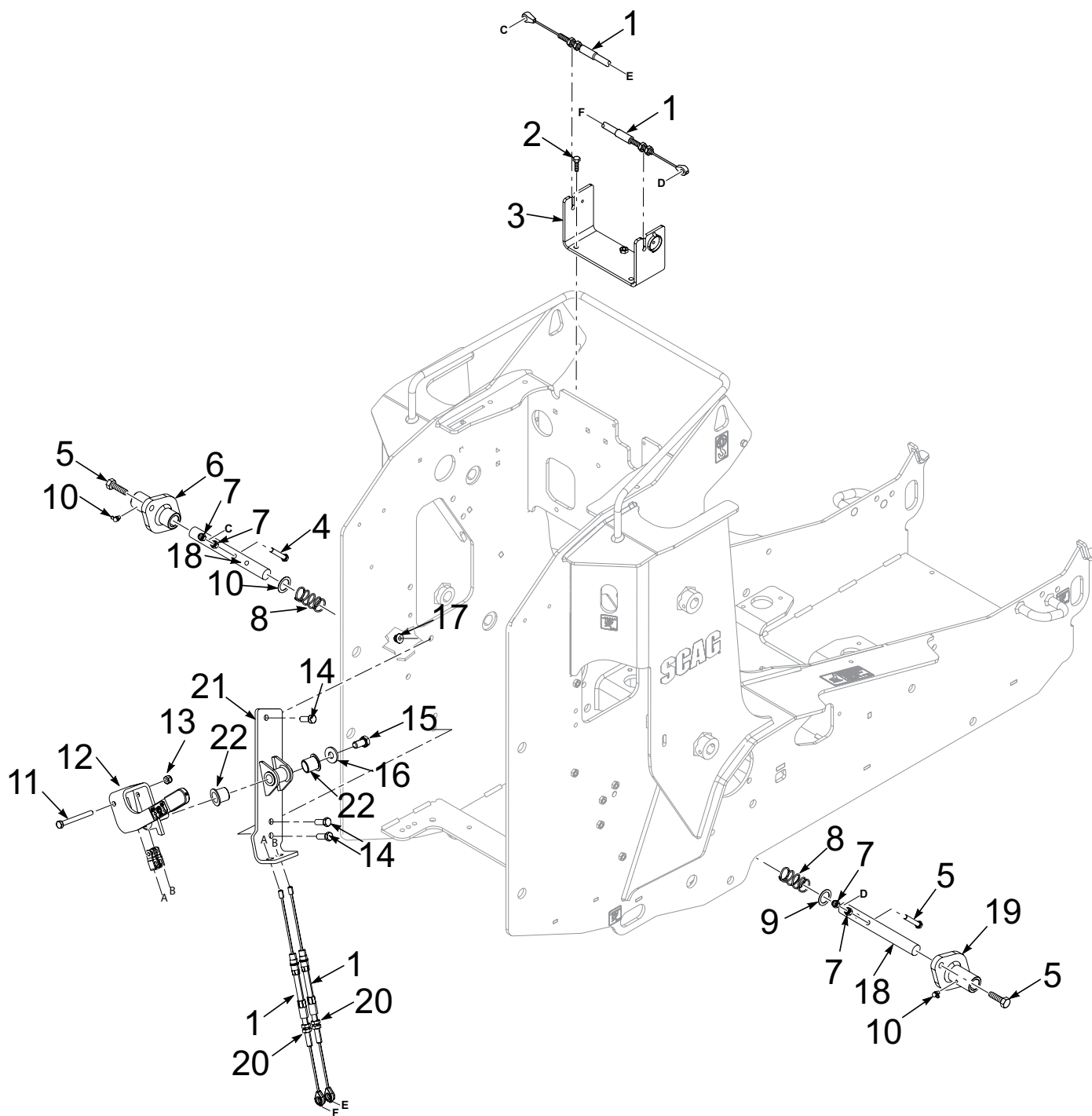
BRAKE SYSTEM

(Y0700001-Y0700499, Y0800001-Y0800499, Y0900001-Y0900499, Y1000001-Y1000499, Y1100001-Y1100499, Y1200001-Y1200499)

Ref. No.	Part No.	Description
1	483341	Cable Assembly
2	04017-27	Capscrew, Serrated Flange Hex Head 3/8-16 X 1.00 LG
3	453488	Park Brake Support WLMT
4	04001-46	Capscrew, Hexhead 3/8-16 UNC X 2.25
5	04001-71	Capscrew, Hexhead 1/2-13 UNC X 1.50
6	453423	Brake Hub Weldment, LH
7	04021-09	Hex Lock, 3/8-16
8	487644	Spring, Brake
9	04041-14	Washer, Flat 1 X 1.062 X 1.5 X 18GA
10	48114-08	Grease Fitting, 90° 1/4 - 28
11	04117-02	Locknut w/Flange Elastic Stop 3/8-16
12	43178	Spacer, Neutral Bearing
13	463615	Brake Lever with Grip
14	43086	Bushing, SPD ADJ Lever
15	04001-20	Capscrew, Hexhead 3/8-16 UNC X 1.50
16	429356	Link, Park Brake
17	429352	Bracket, Cable MTG
18	04001-19	Capscrew, Hexhead 3/8-16 UNC X 1.0
19	453512	Brake Hub Weldment, RH
20	431205	Shaft, Brake

BRAKE SYSTEM

(Y0700500-Y0799999, Y0800500-Y0899999, Y0900500-Y0999999, Y1000500-Y1099999, Y1100500-Y1199999, Y1200500-Y1299999)

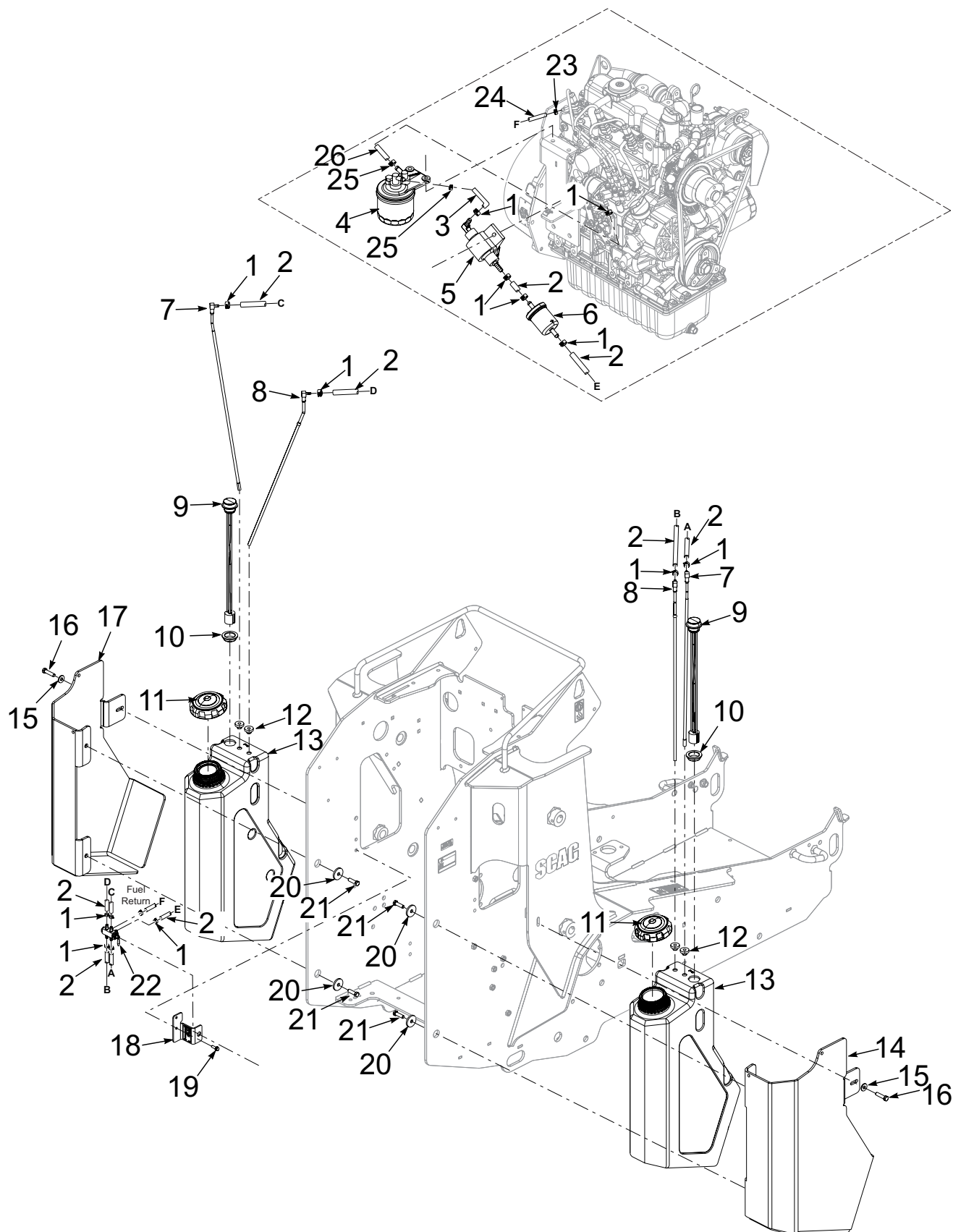


BRAKE SYSTEM

(Y0700500-Y0799999, Y0800500-Y0899999, Y0900500-Y0999999, Y1000500-Y1099999, Y1100500-Y1199999, Y1200500-Y1299999)

Ref. No.	Part No.	Description
1	483341	Cable Assembly
2	04017-27	Capscrew, Serrated Flange Hex Head 3/8-16 X 1.00 LG
3	453488	Park Brake Support, WLMT
4	04001-46	Capscrew, Hexhead 3/8-16 UNC X 2.25
5	04001-71	Capscrew, Hexhead 1/2-13 UNC X 1.50
6	453423	Brake Hub Weldment, LH
7	04021-09	Hex Lock, 3/8-16
8	487644	Spring, Brake
9	04041-14	Washer, Flat 1 X 1.062 X 1.5 X 18GA
10	48114-08	Grease Fitting, 90° 1/4 - 28
11	04001-92	Capscrew, Hexhead 5/16-18 UNC X 3.25
12	463652	Brake Lever w/Grip
13	04021-10	Lock Nut 5/16-18
14	04001-19	Capscrew, Hexhead 3/8-16 UNC X 1.00
15	04001-18	Capscrew, Hexhead 3/8-16 UNC X .75
16	04041-07	Flat Washer 3/8
17	04117-02	Lock Nut w/Flange Elastic Stop 3/8-16
18	431205	Shaft, Brake
19	453512	Brake Hub Weldment, RH
20	04020-25	Hex Nut 3/8-24
21	463654	Brake Hub Assembly
22	483453-05	Bearing

FUEL TANK ASSEMBLY KUBOTA

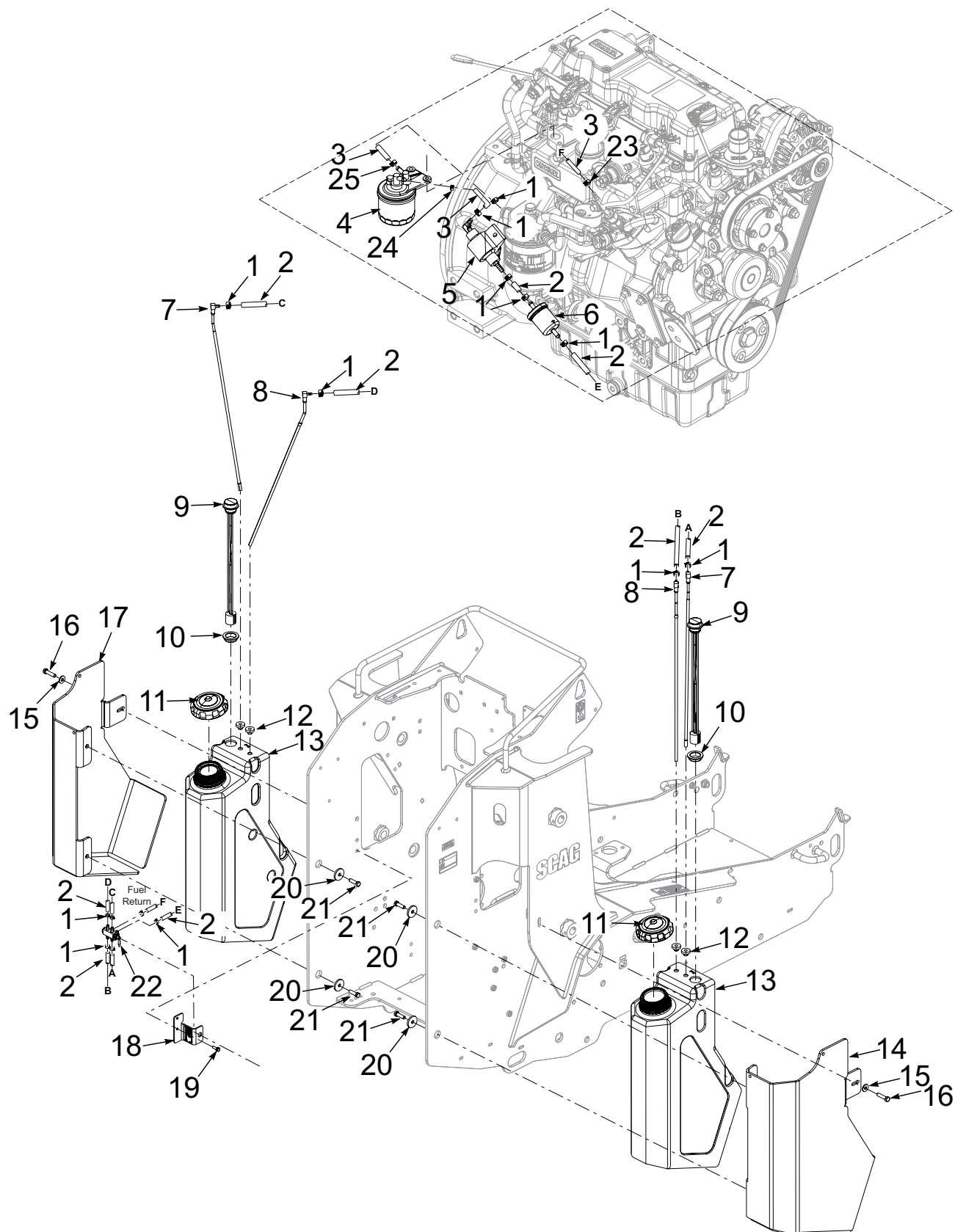


FUEL TANK ASSEMBLY KUBOTA

Ref. No.	Part No.	Description
1	48059-01	Clamp, 1/4"
2	483617	Hose, Fuel Line 5/16" Non-Perm (order by inch)
3	483620	Filter, Fuel Return
4	*	Fuel Filter
5	*	Fuel Pump
6	*	Pre-Filter, Fuel
7	487679	Fuel Tube Assy
8	487688	Return Fitting, 90 Elbow
9	487677	Fuel Gauge Assembly (Incl. #10)
10	484242	Seal, Fuel Gauge
11	484294	Cap, Diesel Fuel Tank
12	482571	Bushing
13	463556	Fuel Tank Assembly (Incl. #7, 8, 9, 12)
14	429608	Bracket, Fuel Tank Cover RH
15	04041-07	Washer, Flat 3/8 12 GA
16	04001-20	Capscrew, Hexhead 3/8-16 UNC X 1.50
17	429326	Bracket, Fuel Tank Cover LH
18	429613	Bracket, Fuel Valve
19	04017-05	Capscrew, Serrated Flange HH 1/4-20 X .75 LG
20	04041-11	Washer, Flat 3/8 7 GA
21	04001-26	Capscrew, Hexhead 3/8-16 UNC X 1.25
22	487628	Valve, Fuel - Double
23	48059-03	Clamp, 3/16"
24	481179	Hose, Fuel Line - 3/16 (order by inch)
25	48059-04	Clamp, 5/16"

* Order through Engine Manufacturer

FUEL TANK ASSEMBLY KOHLER



FUEL TANK ASSEMBLY KOHLER

Ref. No.	Part No.	Description
1	48059-01	Clamp, 1/4"
2	488158	Hose, Fuel Line 1/4" Non-Perm (order by inch)
3	488159	Hose, Fuel Line 5/16" Non-Perm (order by inch)
4	*	Fuel Filter
5	*	Fuel Pump
6	*	Pre-Filter, Fuel
7	487679	Fuel Tube Assy
8	487688	Return Fitting, 90 Elbow
9	487677	Fuel Gauge Assembly (Incl. #10)
10	484242	Seal, Fuel Gauge
11	484294	Cap, Diesel Fuel Tank
12	482571	Bushing
13	463556	Fuel Tank Assembly (Incl. #7, 8, 9, 12)
14	429608	Bracket, Fuel Tank Cover RH
15	04041-07	Washer, Flat 3/8 12 GA
16	04001-20	Capscrew, Hexhead 3/8-16 UNC X 1.50
17	429326	Bracket, Fuel Tank Cover LH
18	429613	Bracket, Fuel Valve
19	04017-05	Capscrew, Serrated Flange HH 1/4-20 X .75 LG
20	04041-11	Washer, Flat 3/8 7 GA
21	04001-26	Capscrew, Hexhead 3/8-16 UNC X 1.25
22	487628	Valve, Fuel - Double
23	48059-02	Clamp
24	48059-04	Clamp, 5/16"

* Order through Engine Manufacturer

This exploded view diagram illustrates the assembly of a SCAG riding lawn mower. The components are organized into three main sections: the engine and fuel system at the top, the fuel tank in the middle, and the chassis and rear deck at the bottom. The diagram uses a consistent numbering system to identify individual parts and sub-assemblies.

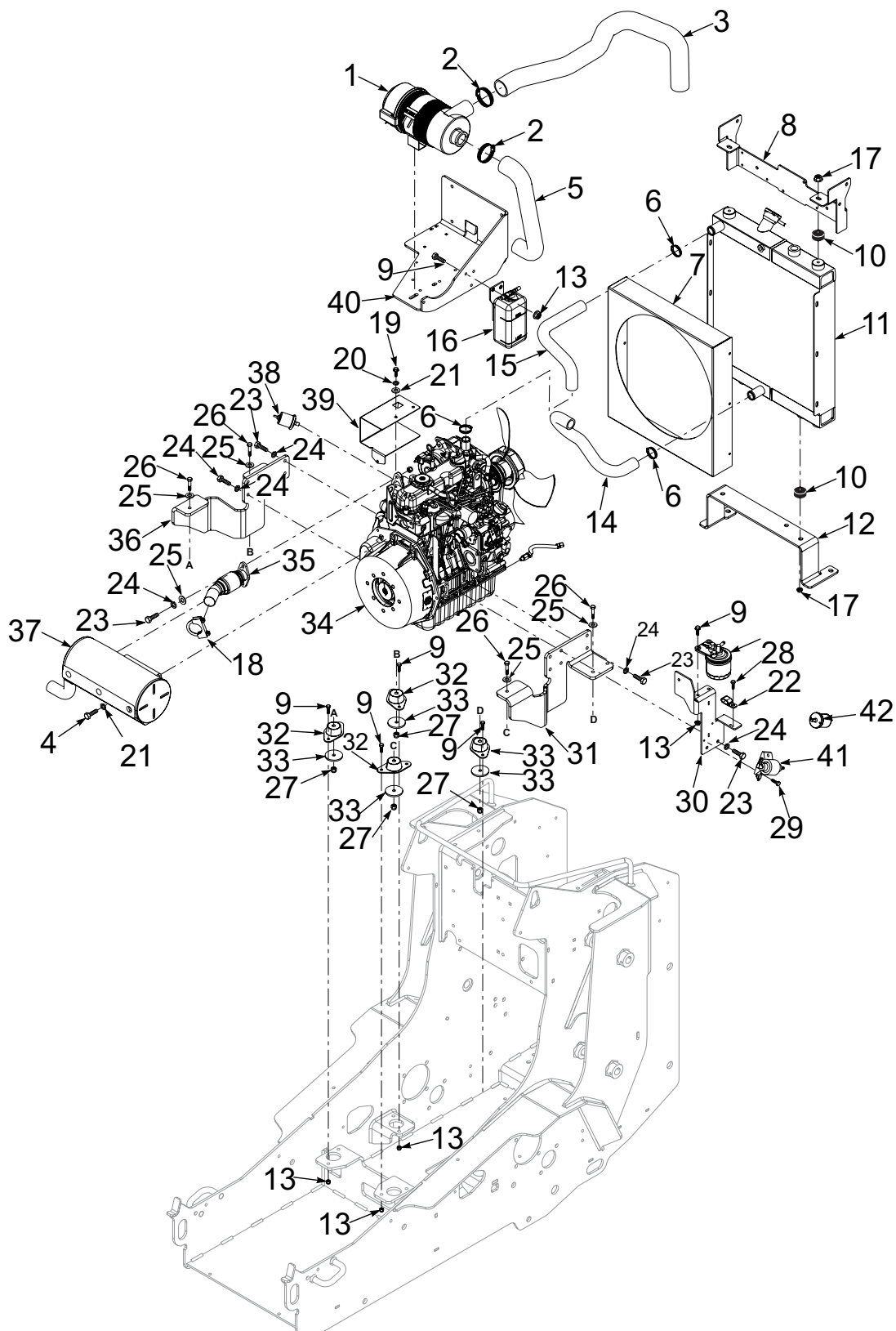
- Engine and Fuel System (Top):** This section shows the engine block, carburetor, and fuel injectors. Key components include:
 - 1:** Various small fasteners, pins, and O-rings used throughout the assembly.
 - 2:** Fuel lines and associated connectors.
 - 3:** A specific fuel line component.
 - 4:** A fuel filter or strainer.
 - 5:** A fuel pump or solenoid.
 - 6:** A fuel line connector or elbow.
 - 7:** A fuel line component.
 - 8:** A fuel line component.
 - 9:** A fuel line component.
 - 10:** A fuel line component.
 - 11:** A fuel line component.
 - 12:** A fuel line component.
 - 13:** A fuel line component.
 - 14:** A fuel line component.
 - 15:** A fuel line component.
 - 16:** A fuel line component.
 - 17:** A fuel line component.
 - 18:** A fuel line component.
 - 19:** A fuel line component.
 - 20:** A fuel line component.
 - 21:** A fuel line component.
 - 22:** A fuel line component.
 - 23:** A fuel line component.
 - 24:** A fuel line component.
 - 25:** A fuel line component.
 - 26:** A fuel line component.
 - 27:** A fuel line component.
 - 28:** A fuel line component.
 - 29:** A fuel line component.
 - 30:** A fuel line component.
 - 31:** A fuel line component.
 - 32:** A fuel line component.
 - 33:** A fuel line component.
 - 34:** A fuel line component.
 - 35:** A fuel line component.
 - 36:** A fuel line component.
 - 37:** A fuel line component.
 - 38:** A fuel line component.
 - 39:** A fuel line component.
 - 40:** A fuel line component.
 - 41:** A fuel line component.
 - 42:** A fuel line component.
 - 43:** A fuel line component.
 - 44:** A fuel line component.
 - 45:** A fuel line component.
 - 46:** A fuel line component.
 - 47:** A fuel line component.
 - 48:** A fuel line component.
 - 49:** A fuel line component.
 - 50:** A fuel line component.
 - 51:** A fuel line component.
 - 52:** A fuel line component.
 - 53:** A fuel line component.
 - 54:** A fuel line component.
 - 55:** A fuel line component.
 - 56:** A fuel line component.
 - 57:** A fuel line component.
 - 58:** A fuel line component.
 - 59:** A fuel line component.
 - 60:** A fuel line component.
 - 61:** A fuel line component.
 - 62:** A fuel line component.
 - 63:** A fuel line component.
 - 64:** A fuel line component.
 - 65:** A fuel line component.
 - 66:** A fuel line component.
 - 67:** A fuel line component.
 - 68:** A fuel line component.
 - 69:** A fuel line component.
 - 70:** A fuel line component.
 - 71:** A fuel line component.
 - 72:** A fuel line component.
 - 73:** A fuel line component.
 - 74:** A fuel line component.
 - 75:** A fuel line component.
 - 76:** A fuel line component.
 - 77:** A fuel line component.
 - 78:** A fuel line component.
 - 79:** A fuel line component.
 - 80:** A fuel line component.
 - 81:** A fuel line component.
 - 82:** A fuel line component.
 - 83:** A fuel line component.
 - 84:** A fuel line component.
 - 85:** A fuel line component.
 - 86:** A fuel line component.
 - 87:** A fuel line component.
 - 88:** A fuel line component.
 - 89:** A fuel line component.
 - 90:** A fuel line component.
 - 91:** A fuel line component.
 - 92:** A fuel line component.
 - 93:** A fuel line component.
 - 94:** A fuel line component.
 - 95:** A fuel line component.
 - 96:** A fuel line component.
 - 97:** A fuel line component.
 - 98:** A fuel line component.
 - 99:** A fuel line component.
 - 100:** A fuel line component.
- Fuel Tank (Middle):** This section shows the fuel tank and its associated components. Key components include:
 - 1:** Various small fasteners, pins, and O-rings used throughout the assembly.
 - 2:** Fuel lines and associated connectors.
 - 3:** A specific fuel line component.
 - 4:** A fuel filter or strainer.
 - 5:** A fuel pump or solenoid.
 - 6:** A fuel line connector or elbow.
 - 7:** A fuel line component.
 - 8:** A fuel line component.
 - 9:** A fuel line component.
 - 10:** A fuel line component.
 - 11:** A fuel line component.
 - 12:** A fuel line component.
 - 13:** A fuel line component.
 - 14:** A fuel line component.
 - 15:** A fuel line component.
 - 16:** A fuel line component.
 - 17:** A fuel line component.
 - 18:** A fuel line component.
 - 19:** A fuel line component.
 - 20:** A fuel line component.
 - 21:** A fuel line component.
 - 22:** A fuel line component.
 - 23:** A fuel line component.
 - 24:** A fuel line component.
 - 25:** A fuel line component.
 - 26:** A fuel line component.
 - 27:** A fuel line component.
 - 28:** A fuel line component.
 - 29:** A fuel line component.
 - 30:** A fuel line component.
 - 31:** A fuel line component.
 - 32:** A fuel line component.
 - 33:** A fuel line component.
 - 34:** A fuel line component.
 - 35:** A fuel line component.
 - 36:** A fuel line component.
 - 37:** A fuel line component.
 - 38:** A fuel line component.
 - 39:** A fuel line component.
 - 40:** A fuel line component.
 - 41:** A fuel line component.
 - 42:** A fuel line component.
 - 43:** A fuel line component.
 - 44:** A fuel line component.
 - 45:** A fuel line component.
 - 46:** A fuel line component.
 - 47:** A fuel line component.
 - 48:** A fuel line component.
 - 49:** A fuel line component.
 - 50:** A fuel line component.
 - 51:** A fuel line component.
 - 52:** A fuel line component.
 - 53:** A fuel line component.
 - 54:** A fuel line component.
 - 55:** A fuel line component.
 - 56:** A fuel line component.
 - 57:** A fuel line component.
 - 58:** A fuel line component.
 - 59:** A fuel line component.
 - 60:** A fuel line component.
 - 61:** A fuel line component.
 - 62:** A fuel line component.
 - 63:** A fuel line component.
 - 64:** A fuel line component.
 - 65:** A fuel line component.
 - 66:** A fuel line component.
 - 67:** A fuel line component.
 - 68:** A fuel line component.
 - 69:** A fuel line component.
 - 70:** A fuel line component.
 - 71:** A fuel line component.
 - 72:** A fuel line component.
 - 73:** A fuel line component.
 - 74:** A fuel line component.
 - 75:** A fuel line component.
 - 76:** A fuel line component.
 - 77:** A fuel line component.
 - 78:** A fuel line component.
 - 79:** A fuel line component.
 - 80:** A fuel line component.
 - 81:** A fuel line component.
 - 82:** A fuel line component.
 - 83:** A fuel line component.
 - 84:** A fuel line component.
 - 85:** A fuel line component.
 - 86:** A fuel line component.
 - 87:** A fuel line component.
 - 88:** A fuel line component.
 - 89:** A fuel line component.
 - 90:** A fuel line component.
 - 91:** A fuel line component.
 - 92:** A fuel line component.
 - 93:** A fuel line component.
 - 94:** A fuel line component.
 - 95:** A fuel line component.
 - 96:** A fuel line component.
 - 97:** A fuel line component.
 - 98:** A fuel line component.
 - 99:** A fuel line component.
 - 100:** A fuel line component.
- Chassis and Rear Deck (Bottom):** This section shows the chassis, rear deck, and associated components. Key components include:
 - 1:** Various small fasteners, pins, and O-rings used throughout the assembly.
 - 2:** Fuel lines and associated connectors.
 - 3:** A specific fuel line component.
 - 4:** A fuel filter or strainer.
 - 5:** A fuel pump or solenoid.
 - 6:** A fuel line connector or elbow.
 - 7:** A fuel line component.
 - 8:** A fuel line component.
 - 9:** A fuel line component.
 - 10:** A fuel line component.
 - 11:** A fuel line component.
 - 12:** A fuel line component.
 - 13:** A fuel line component.
 - 14:** A fuel line component.
 - 15:** A fuel line component.
 - 16:** A fuel line component.
 - 17:** A fuel line component.
 - 18:** A fuel line component.
 - 19:** A fuel line component.
 - 20:** A fuel line component.
 - 21:** A fuel line component.
 - 22:** A fuel line component.
 - 23:** A fuel line component.
 - 24:** A fuel line component.
 - 25:** A fuel line component.

FUEL TANK ASSEMBLY YANMAR

Ref. No.	Part No.	Description
1	48059-01	Clamp, 1/4"
2	483617	Hose, Fuel Line 1/4" Non-Perm (order by inch)
3	*	Filter, Fuel Return
4	*	Fuel Filter
5	*	Fuel Pump
6	*	Pre-Filter, Fuel
7	487679	Fuel Tube Assy
8	487688	Return Fitting, 90 Elbow
9	487677	Fuel Gauge Assembly (Incl. #10)
10	484242	Seal, Fuel Gauge
11	484294	Cap, Diesel Fuel Tank
12	482571	Bushing
13	463556	Fuel Tank Assembly (Incl. #7, 8, 9, 12)
14	429608	Bracket, Fuel Tank Cover RH
15	04041-07	Washer, Flat 3/8 12 GA
16	04001-20	Capscrew, Hexhead 3/8-16 UNC X 1.50
17	429326	Bracket, Fuel Tank Cover LH
18	429613	Bracket, Fuel Valve
19	04017-05	Capscrew, Serrated Flange HH 1/4-20 X .75 LG
20	04041-11	Washer, Flat 3/8 7 GA
21	04001-26	Capscrew, Hexhead 3/8-16 UNC X 1.25
22	487628	Valve, Fuel - Double
23	48059-03	Clamp, 3/16"
24	481179	Hose, Fuel Line - 3/16 (order by inch)
25	48059-04	Clamp, 5/16"
26	483620	Hose, Fuel Line 5/16" Non-Perm (order by inch)

* Order through Engine Manufacturer

ENGINE & ATTACHING PARTS KUBOTA

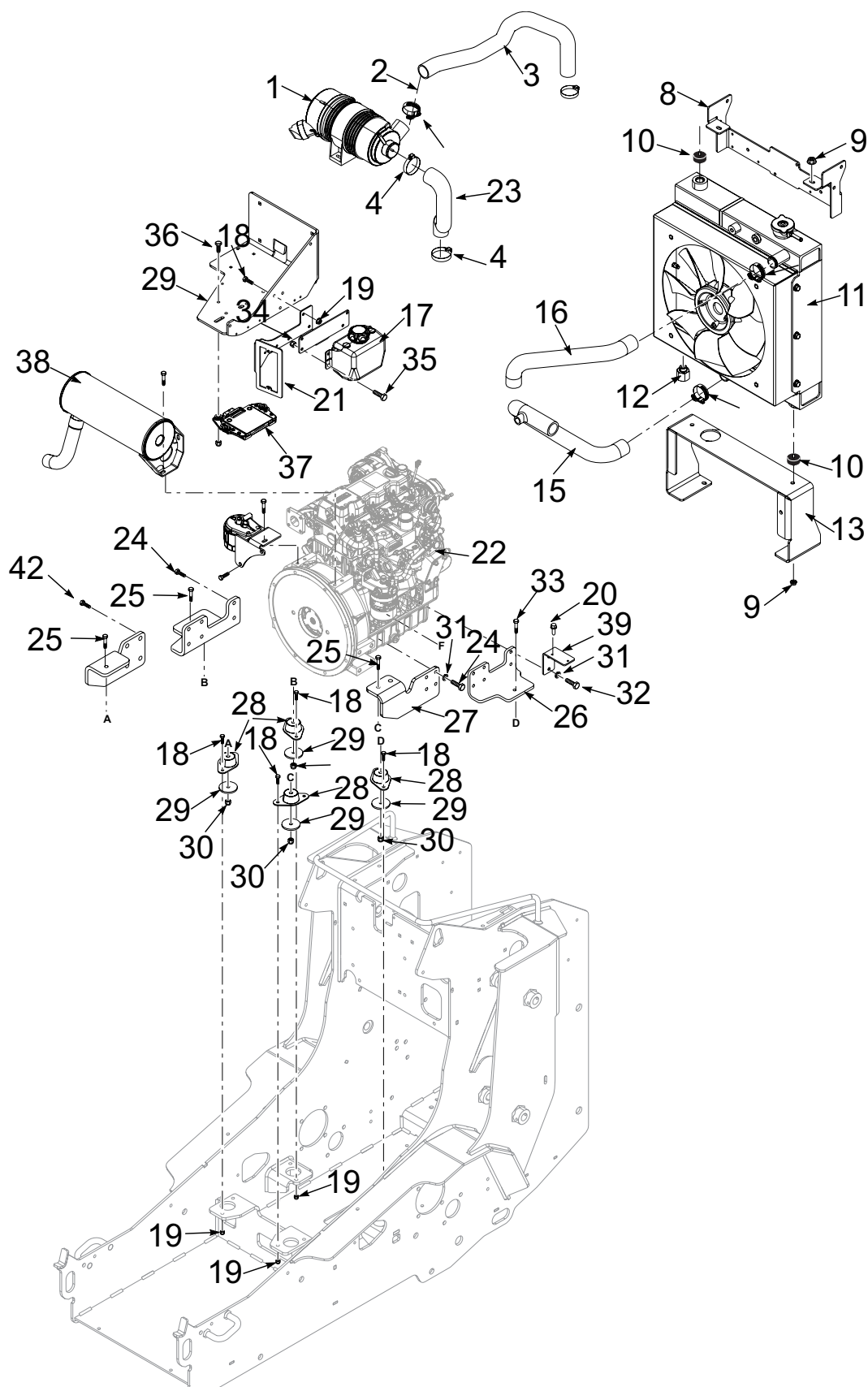


ENGINE & ATTACHING PARTS KUBOTA

Ref. No.	Part No.	Description
1	487939	Air Filter Assembly
2	48136-17	Clamp, 3-1/2" Dia.
3	487607	Hose, Air Cleaner Inlet To Filter
4	04002-03	Metric HH Capscrew M8-1.25 X 25 LG
5	487747	Hose, Air Inlet
6	48136-28	Clamp
7	429402	Shroud, Fan
8	429545	Bracket, Valve Mtg
9	04017-17	Capscrew, Serrated Flange HH 5/16-18 X 1.00"
10	487872	Isolator, Radiator
11	487631	Cooler
12	429401	Bracket, Cooler Support
13	04117-01	Locknut w/Flange Elastic Stop 5/16-18
14	487749	Hose, Water Inlet
15	487748	Hose Water Outlet
16	487940	Tank, Expansion
17	04019-04	Nut, Serrated Flange HH 3/8 - 16
18	48633	Clamp Muffler 1-1/2
19	04002-17	Metric HH Capscrew M8-1.25 X 14
20	04030-03	Lockwasher 5/16
21	04040-04	Washer 5/16
22	424580	Clamp, Casing
23	04002-10	Metric HH Capscrew M10-1.25 X 25 LG
24	04030-05	Lockwasher 7/16
25	04040-05	Washer 3/8
26	04001-22	Capscrew HH 3/8-16 UNC X 2.75"
27	04117-02	Locknut w/Flange Elastic Stop 3/8-16
28	04011-06	Screw, Self Tapping #10-32 X .75
29	04011-14	Screw, Self Tapping 1/4-20 X .720-.780
30	429562	Bracket, Fuel System
31	429514	Support, Engine - LH Front
32	487846	Isolator, Flange Mount
33	04041-38	Washer, Flat
34	487553	Engine, 25 KBD
35	487841	Manifold, KBD
36	429515	Support, Engine - RH Front
37	487746	Muffler, KBD
38	481811	Oil Pressure Sender
39	429830	Heat Shield Exhaust
40	429827	Support, Battery
41	*	Fuel Pump
42	*	Pre-Filter, Fuel

* Order through Engine Manufacturer

ENGINE & ATTACHING PARTS KOHLER

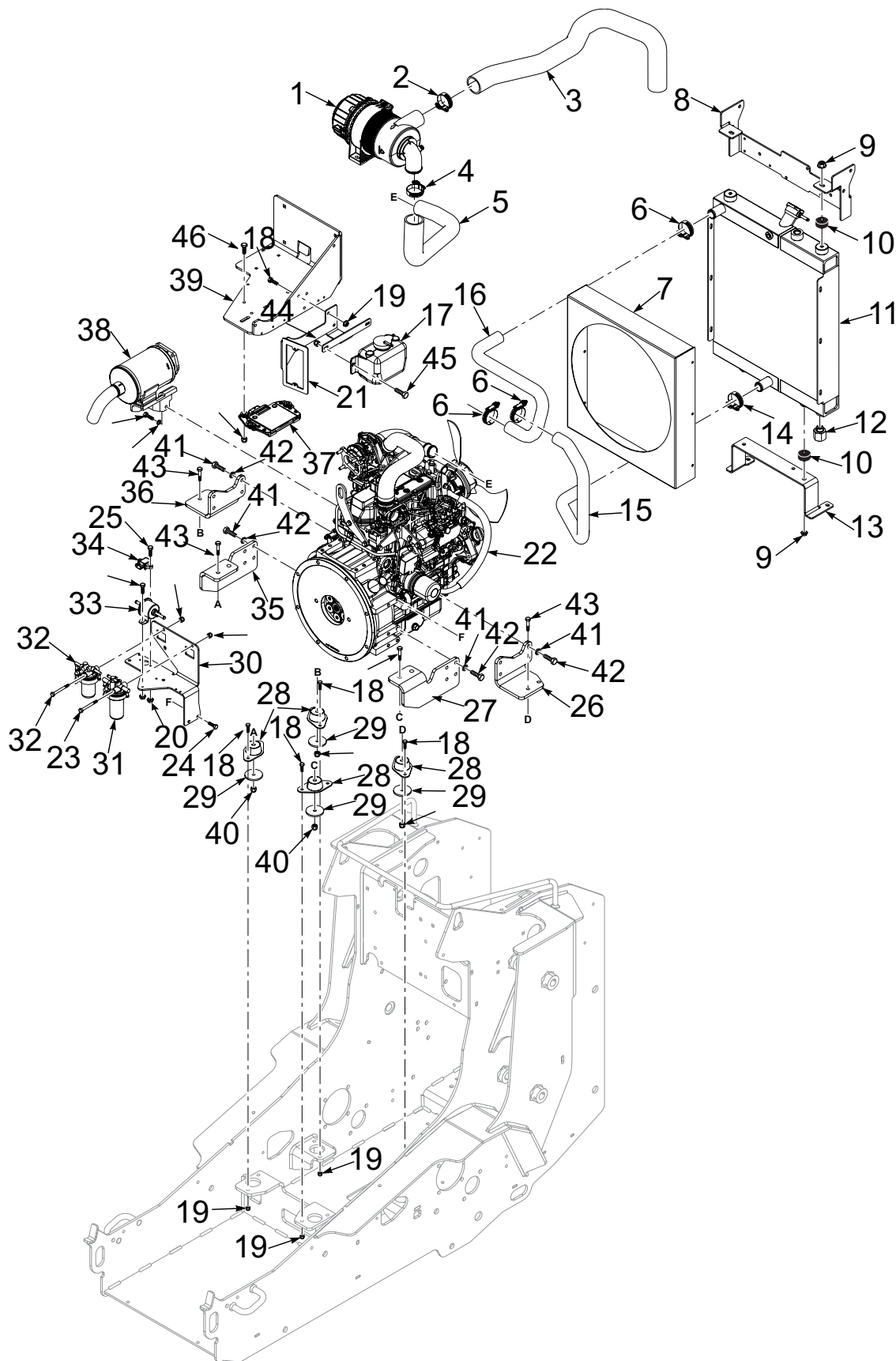


ENGINE & ATTACHING PARTS KOHLER

Ref. No.	Part No.	Description
1	*	Air Cleaner
2	48136-17	Clamp
3	487607	Hose, Air Cleaner Inlet to Filter
4	48136-25	Clamp
5	487869	Hose, Filter to Engine
6	48136-28	Clamp, Hose 2"
7	429783	Shroud, Fan
8	429545	Bracket, Valve Mtg
9	04019-04	Nut, Serrated Flange HH 3/8 - 16
10	487872	Isolator, Radiator
11	487631	Cooler
12	487735-05	Fitting, Reducer - Straight
13	429750	Bracket, Cooler Support
14	429401	Bracket, Cooler Support
15	487868	Hose, Water Inlet
16	487867	Hose, Water Outlet
17	*	Expansion Tank
18	04017-17	Capscrew, Serrated Flange HH 5/16-18 X 1.00"
19	04117-01	Capscrew, Serrated Flange HH #10-32 X .50
20	04011-14	Self Tapping Screw, 1/4-20
21	429451	Bracket, Fuse Box
22	494195	Engine
23	487606	Hose, Engine
24	04008-18	Bolt Serrated
25	04001-22	Capscrew, Hex Head 3/8-16 UNC X 2.75
26	429341	Support, Engine Mtg - Rear LH
27	429343	Support, Engine Mtg - Front LH
28	487846	Isolator, Flange Mount
29	429827	Support, Battery
30	04117-02	Locknut w/Flange Elastic Stop 3/8-16
31	04040-07	Lockwasher 1/2"
32	04002-36	Metric HH Capscrew M12-1.75 X 30 LG
33	04001-22	Capscrew HH 3/8-16 UNC X 2.75"
34	04017-01	Capscrew, Serrated Flange HH #10-32 X .50LG
35	04013-03	Capscrew, Flange HH, 5/16-18 X .750 LG
36	04001-01	Capscrew HH, 1/4-20 UNC X .75
37	*	ECU
38	*	Muffler
39	429533	Bracket Cooler MTG

* Order through Engine Manufacturer

ENGINE & ATTACHING PARTS YANMAR

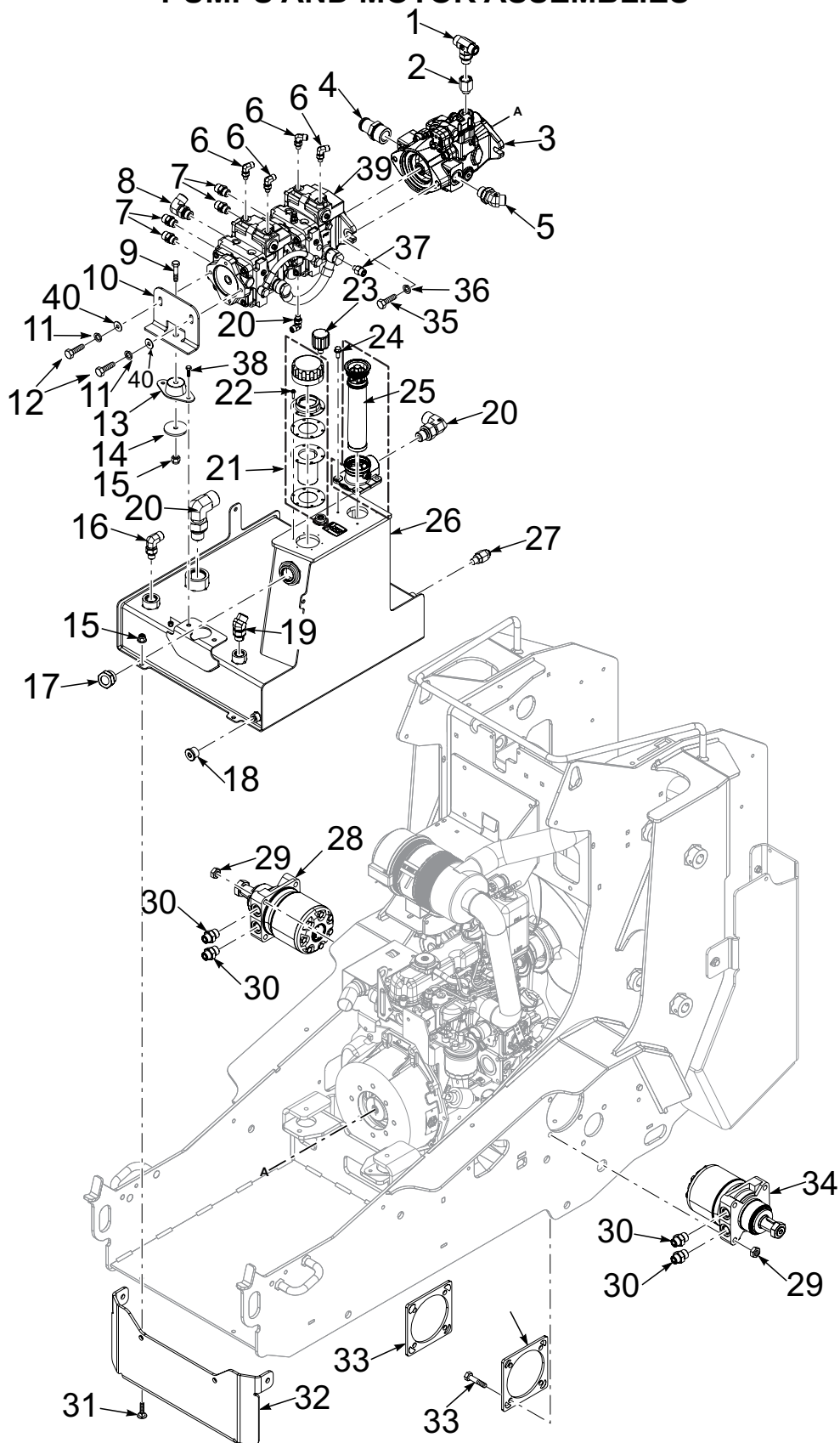


ENGINE & ATTACHING PARTS YANMAR

Ref. No.	Part No.	Description
1	*	Air Cleaner
2	48136-17	Clamp
3	487607	Hose, Air Cleaner Inlet to Filter
4	48136-XX	Clamp
5	487869	Hose, Filter to Engine
6	48136-28	Clamp, Hose 2"
7	429783	Shroud, Fan
8	429545	Bracket, Valve Mtg
9	04019-04	Nut, Serrated Flange HH 3/8 - 16
10	487872	Isolator, Radiator
11	487631	Cooler
12	487735-05	Fitting, Reducer - Straight
13	429401	Bracket, Cooler Support
14	429401	Bracket, Cooler Support
15	487868	Hose, Water Inlet
16	487867	Hose, Water Outlet
17	*	Expansion Tank
18	04017-17	Capscrew, Serrated Flange HH 5/16-18 X 1.00"
19	04117-01	Capscrew, Serrated Flange HH #10-32 X .50
20	04117-03	Capscrew, Serrated Flange HH 1/4-2
21	429451	Bracket, Fuse Box
22	494195	Engine
23	04001-13	Capscrew Hex Head, 5/16-18 UNC X 2.75
24	04002-06	Metric Capscrew Hex Head, M8-1.25 X 16 LG
25	04001-14	Capscrew Hexhead, 1/4-20 UNC X 1.00
26	429426	Support, Engine Mtg - Rear LH
27	429428	Support, Engine Mtg - Front LH
28	487846	Isolator, Flange Mount
29	04041-38	Washer, Flat
30	429828	Bracket, Fuel System Yanmar
31	*	Fuel Filter
32	*	Water Separator
33	*	Pump
34	*	Atmospheric Sensor
35	429429	Support, Engine Mtg - Front RH
36	429427	Support, Engine Mtg - Rear RH
37	*	ECU
38	*	Muffler
39	429827	Support, Battery
40	04117-02	Locknut w/Flange Elastic Stop 3/8-16
41	04030-05	Lockwasher 7/16
42	04002-10	Metric HH Capscrew M10-1.25 X 25 LG
43	04001-22	Capscrew HH 3/8-16 UNC X 2.75"
44	04017-01	Capscrew, Serrated Flange HH #10-32 X .50LG
45	04013-03	Capscrew, Flange HH, 5/16-18 X .750 LG
46	04001-01	Capscrew HH, 1/4-20 UNC X .75

* Order through Engine Manufacturer

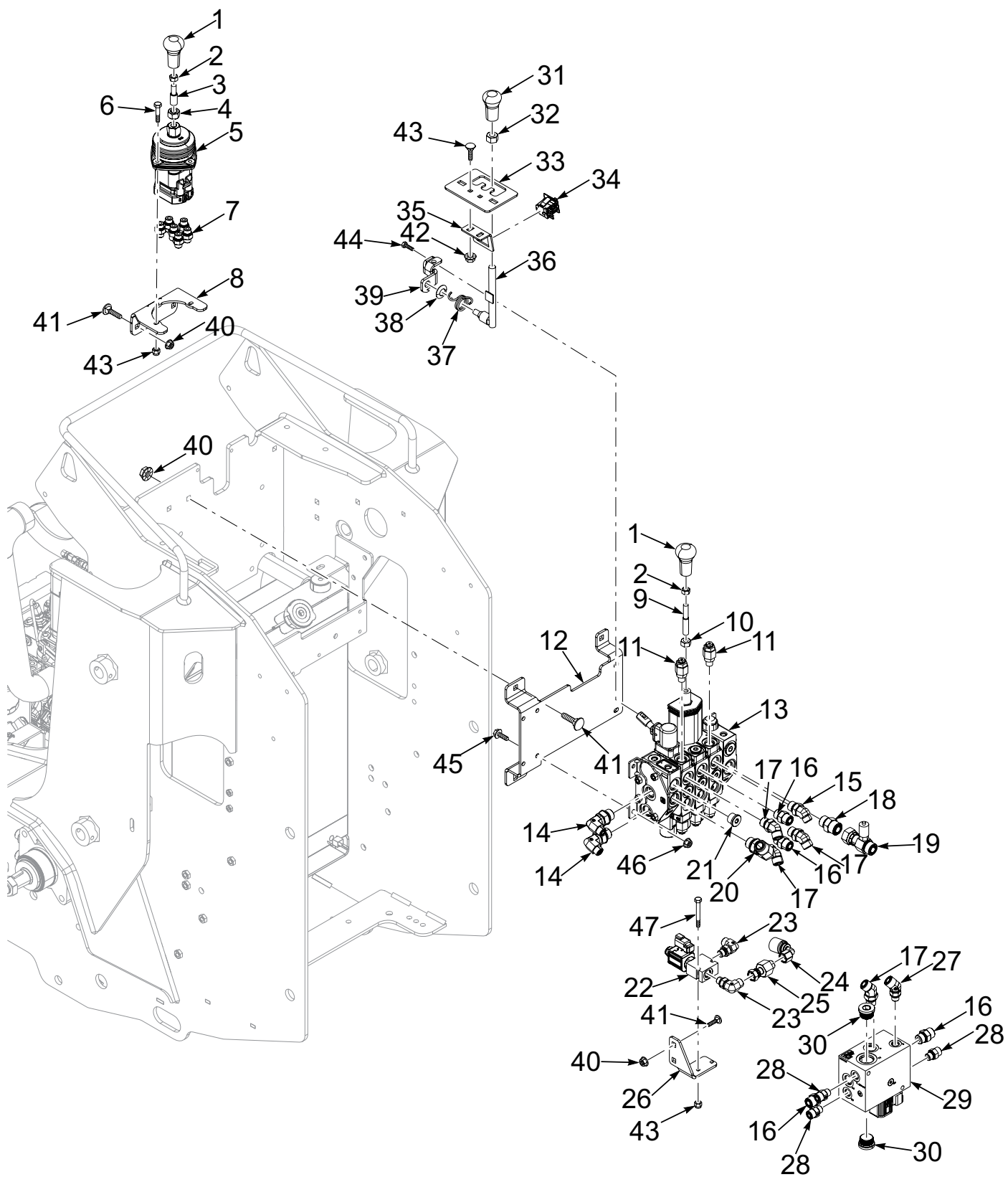
PUMPS AND MOTOR ASSEMBLIES



PUMPS AND MOTOR ASSEMBLIES

Ref. No.	Part No.	Description
1	487734-18	Fitting Orfs to SAE
2	487735-02	Fitting , Reducer-Straight
3	487633	Pump, PIM 28cc
4	481467-04	Connector, O-Ring to Hose Barb
5	487734-24	Fitting Orfs to SAE
6	487734-01	Fitting Orfs to SAE
7	487734-11	Fitting Orfs to SAE
8	487734-05	Fitting Orfs to SAE
9	04001-45	Capscrew, Hexhead 3/8-16 UNC X 2.00"
10	429605	Bracket, Front Pump
11	04030-05	Lockwasher 7/16
12	04002-02	Metric HH Capscrew, M10-1.5 X 30
13	487846	Isolator, Flange Mount
14	04041-38	Washer, Flat
15	04117-02	Locknut W/Flange, Elastic Stop
16	482266-04	Elbow 90 - O-Ring
17	487745	Sight Glass, SAE 16 W/Reflector
18	431213-01	Boss, Weld SAE ORB
19	487734-23	Fitting Orfs to SAE
20	482266-05	Elbow, 90 - O-Ring 1 1/16-12
21	487651	Cap Assy, Hydraulic Sealed
22	04010-12	Machine Screws, #10-32 X .75 LG
23	487820	Breather, Hydraulic
24	04017-16	Capscrew, Serrated Flange HH 5/16-18 X .75 LG
25	487642	Filter, Hydraulic Oil
26	463548	Hydraulic Tank Assy
27	487858	Switch, Oil Temp
28	487744	Wheel Motor, RH
29	04021-19	Hex Lock Nut 1/2 - 13
30	487734-13	Fitting Orfs to SAE
31	04003-11	Carriage Bolt 3/8-16 X 1.25 LG
32	429430	Plate, Front
33	423279	Plate, Motor Backing
34	487637	Wheel Motor - LH
35	04001-234	Capscrew Hex Head 1/2-13 UNC X 1.25
36	04043-05	Washer Flat - Hardened, 1/2
37	487734-10	Fitting Orfs to SAE
38	04017-05	Capscrew Serrated Flange HH 1/4-20 X .75
39	463604	Tandem Pump W/Fittings (Incl. #6, 7, 8, 20, 37)
40	04043-04	Washer Flat - Hardened, 3/8

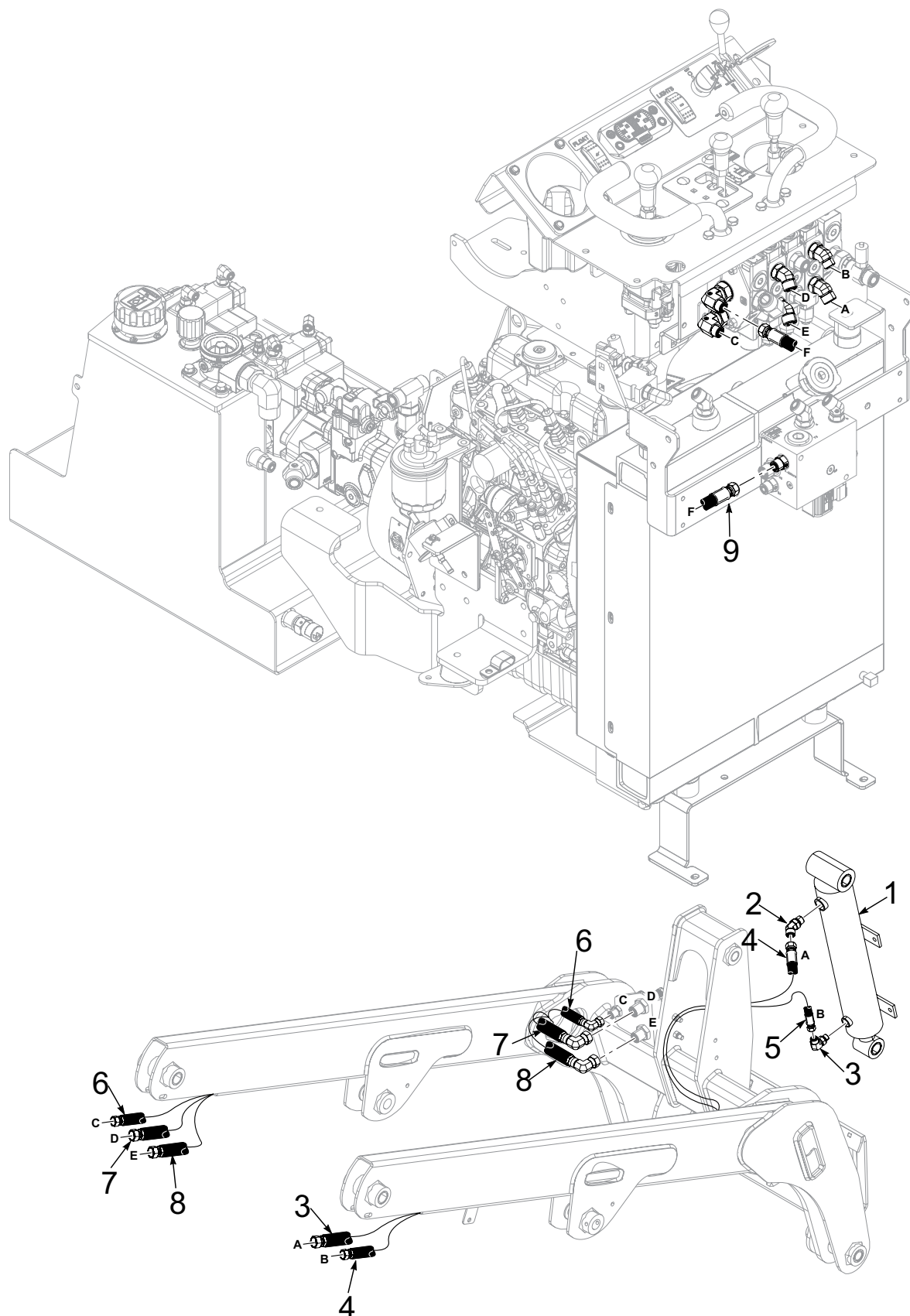
VALVE ASSEMBLIES



VALVE ASSEMBLIES

Ref. No.	Part No.	Description
1	487640-01	Knob Control
2	04020-04	Hex Nut 3/8 - 16
3	44267	Control Lever, Drive
4	04025-06	Nut, Metric Hex M14 X 2
5	487829	Pilot Valve Drive
6	04001-59	Capscrew Hex Head 1/4-20 UNC X 1.25
7	487734-08	Fitting
8	429425	Bracket, Valve MTG
9	44269	Control Lever Boom
10	04020-05	Hex Nut 7/16-14
11	487556*	Port Relief Valve
12	429529	Bracket, Valve MTG
13	463605	Main Valve W/Fittings (Inc. #)
14	487734-03	Fitting, ORFS 90 Degree (6-10 C5OLO)
15	487734-15	Fitting, ORFS 45 Degree (6-8 V5OLO)
16	487734-11	Fitting, ORFS Straight (F5OLO)
17	487734-16	Fitting, ORFS 45 Degree (8 V5OLO)
18	487734-25	Fitting, ORFS Straight (10 F5OLO)
19	487850-02	Fitting, Gage Port Tee
20	487734-05	Fitting, ORFS 90 Degree (10C5OLO)
21	48604-04	Port Plug
22	487641	Valve, Pilot Lockout
23	487734-02	Fitting, ORFS 90 Degree (6 C5OLO)
24	487736-09	Fitting, Female Swivel
25	487850-01	Fitting, Gage Port Tee
26	429454	Bracket, Valve MTG
27	487734-20	Fitting, ORFS 45 Degree (8-6 V5OLO)
28	487734-09	Fitting, ORFS 45 Straight (6 F5OLO)
29	487638	Manifold, Float
30	487844-02	Fitting, Hex Plug SAE
31	487640-02	Knob Control
32	04020-07	Hex Nut 1/2 - 13
33	429607	Bracket, Detent
34	484497	Switch, Double Pole
35	429755	Bracket, Aux Safety Switch
36	453505	Aux Handle Weldment
37	487828	Spring, Torsion Lever Return
38	04032-06	Washer, Curved Spring
39	429598	Bracket, Aux Lever Mount
40	04117-02	Locknut W/Flange Elastic Stop
41	04003-23	Carriage Bolt 3/8-16 X 1.25"
42	04117-03	Locknut W/Flange Elastic Stop, 1/4 - 20
43	04003-02	Carriage Bolt 1/4 - 20 X .75
44	04002-07	Metric HH Capscrew, M8-1.25 X 10
45	04017-16	Capscrew Serrated Flange HH, 5/16-18 X .75
46	04117-01	Locknut W/Flange Elastic Stop, 5/16 - 18
47	04001-04	Capscrew Hex Head 1/4-20 UNC X 1.50

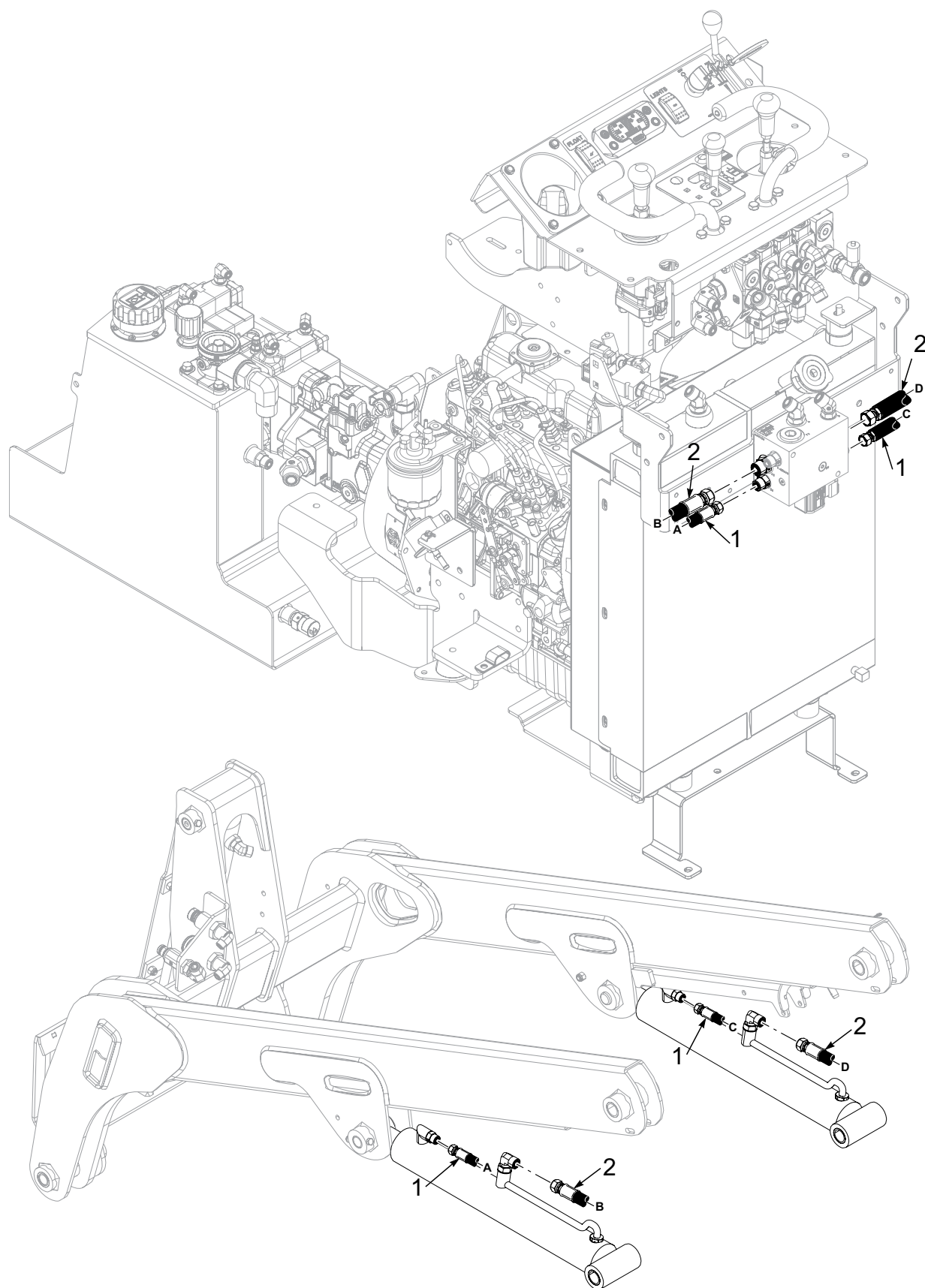
BOOM HOSES



BOOM HOSES

Ref. No.	Part No.	Description
1	463580	Tilt Cylinder W/Bushings
2	487734-16	Fitting, Orfs to SAE 8 V50L0 1/2 X 13/16-16
3	487734-02	Fitting, Orfs to SAE 6 C50L0 3/8 X 9/16-18
4	487769	Hose Assembly 84.75"
5	487770	Hose Assembly 95"
6	487768	Hose Assembly 81", Yellow
7	487766	Hose Assembly 85", Red
8	487767	Hose Assembly 85", Green
9	487776	Hose Assembly 12.5"

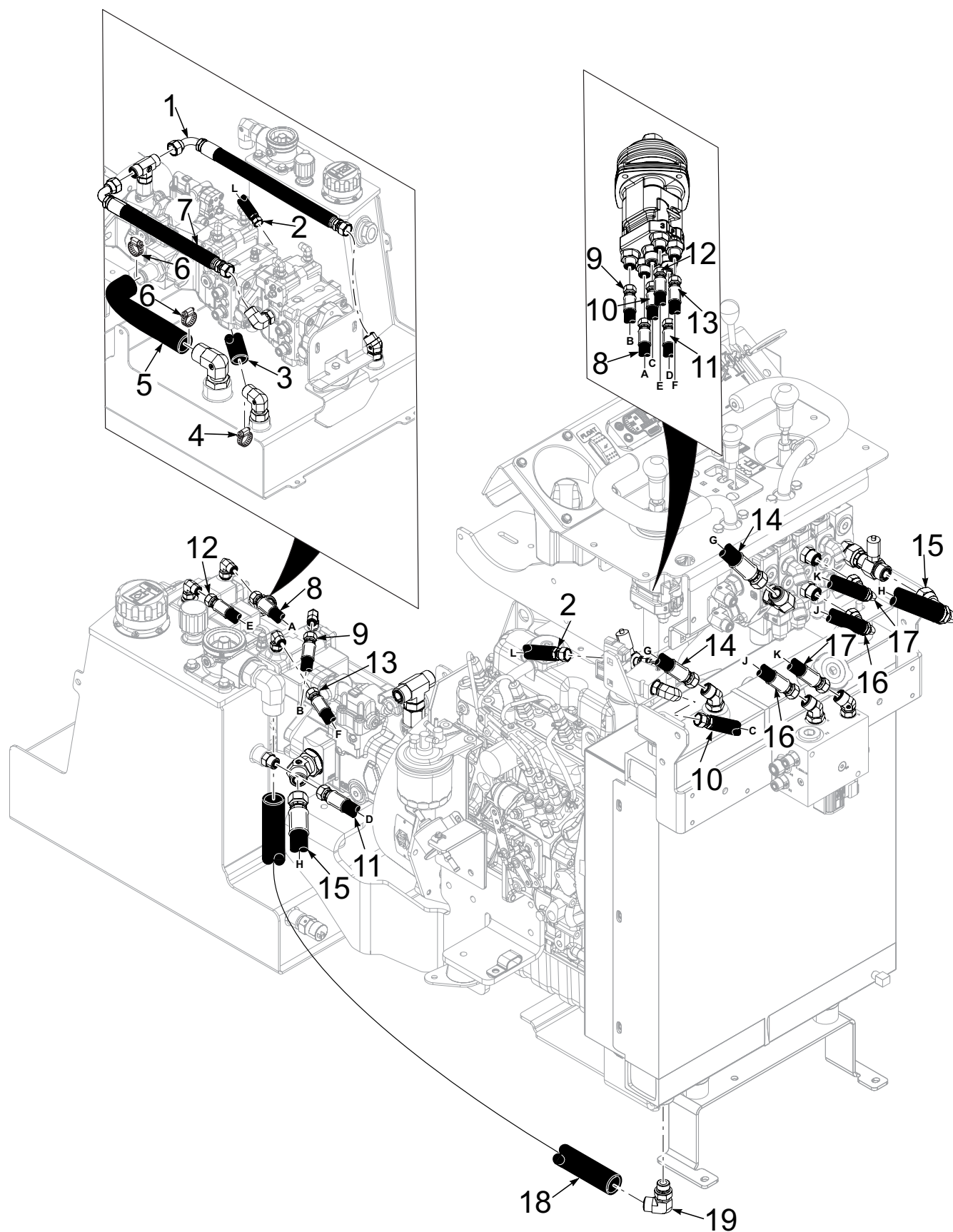
LIFT CYLINDER HOSE



LIFT CYLINDER HOSE

Ref. No.	Part No.	Description
1	487774	Hose Assembly, 27.75"
2	487775	Hose Assembly, 36"

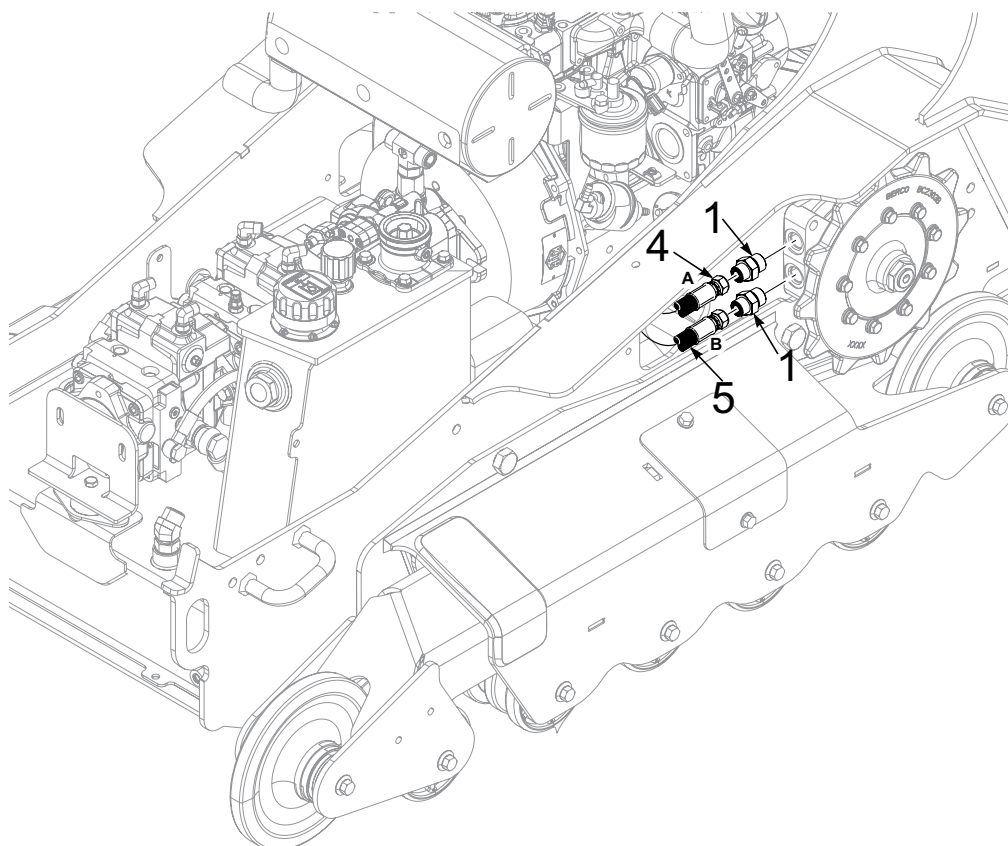
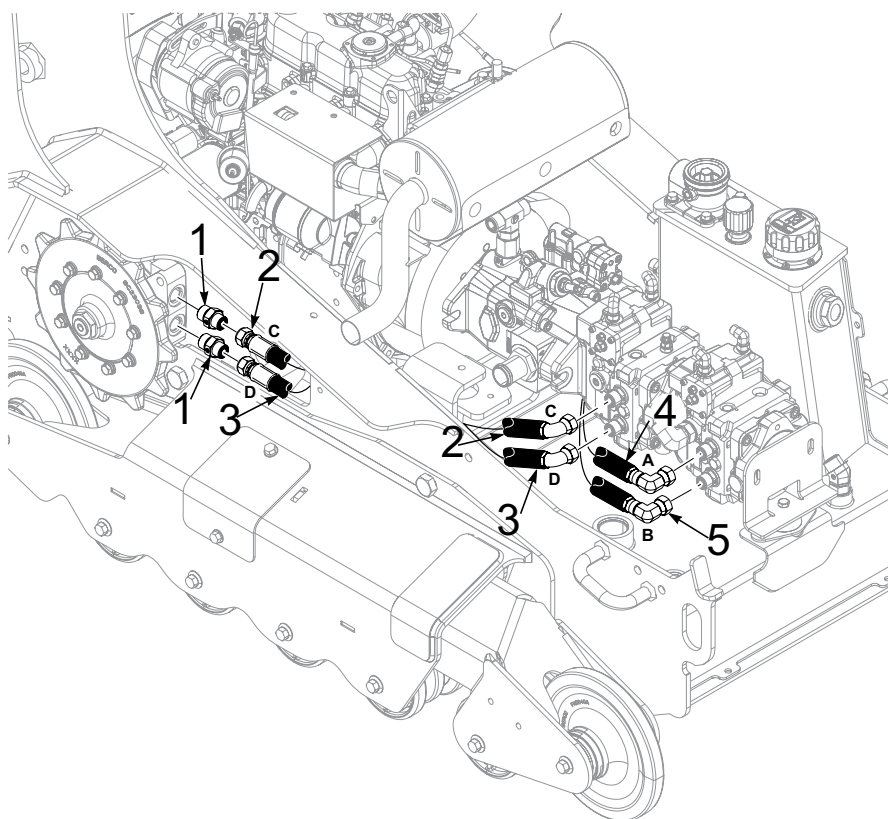
HOSES



HOSES

Ref. No.	Part No.	Description
1	487756	Hose Assembly, 25.75"
2	487765	Hose Assembly, 51.25"
3	487757	Hose Assembly, 12.5"
4	48136-29	Clamp, Hose 1.25"
5	487754	Hose Assembly, 14.5"
6	48136-28	Clamp, Hose 2.0"
7	487760	Hose Assembly, 17.5"
8	487762	Hose Assembly, 59.5"
9	487761	Hose Assembly, 53.25"
10	487763	Hose Assembly, 12"
11	487764	Hose Assembly, 48.5"
12	487885	Hose Assembly, 59.5"
13	487884	Hose Assembly, 53.25"
14	487772	Hose Assembly, 17.25"
15	487755	Hose Assembly, 60.5"
16	487906	Hose Assembly, 18.75", Blue
17	487771	Hose Assembly, 18.75", Purple
18	487777	Hose Assembly, 43"
19	482266-05	Fitting, Elbow 1-1/16 O'Ring x 3/4 Hose

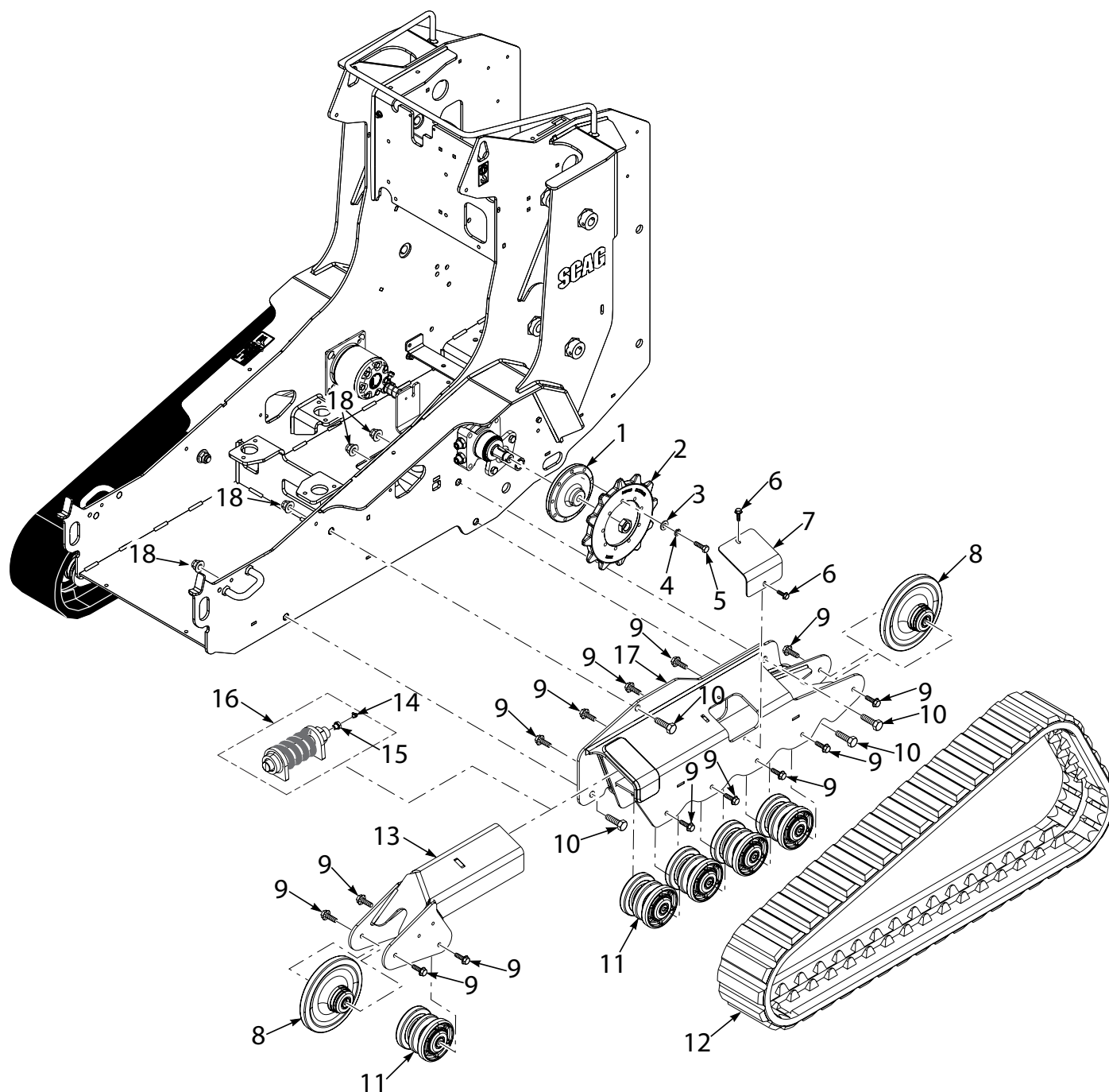
TRACK DRIVE HOSES



TRACK DRIVE HOSES

Ref. No.	Part No.	Description
1	487734-13	Fitting, Orfs to SAE 8-10 F50L0 1/2 X 7/8-14
2	487904	Hose Assembly 29" RH Drive Top, Purple
3	487758	Hose Assembly 29" RH Drive Bottom, Green
4	487905	Hose Assembly 41" LH Drive Top, Yellow
5	487759	Hose Assembly 41"LRH Drive Bottom, Red

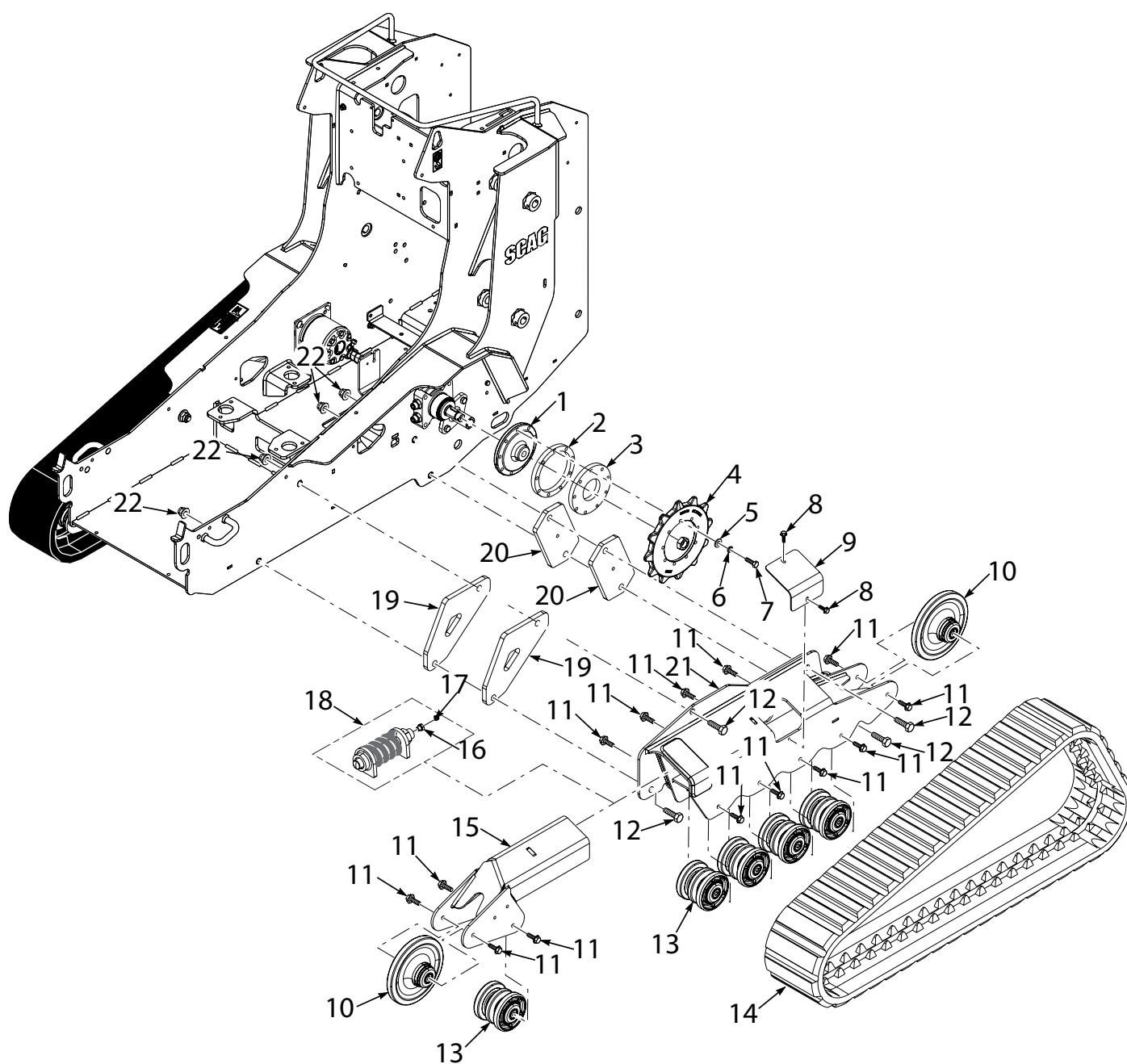
TRACK ASSEMBLY NARROW



TRACK ASSEMBLY NARROW

Ref. No.	Part No.	Description
1	431207	Flange, Sprocket
2	487583	Track, Sprocket
3	04043-07	Washer - Flat 3/8 - .391 X .813 X .086
4	04030-04	Lockwasher 3/8 - .385 X .377 X .680
5	04001-19	Capscrew, Hex Head 3/8-16 UNC X 1.00"
6	04011-22	Screw, Self Tapping 3/8 - 16 x 1.00"
7	429386	Cover, Track Support
8	487559	Idler, Track
9	04018-06	Metric Hex Head Capscrew Serrated Flange M12-1.75 X 30
10	04001-23	Capscrew, Hex Head 3/8-16 UNC X 4.50"
11	487560	Roller, Track
12	487558	Track, 180mm X 72mm
13	453428	Track Yoke Weldment. LH
	453511	Track Yoke Weldment. RH
14	48114-11	Grease Fitting, Straight 1/8 - PTF
15	431230	Grease Insert
16	463599	Track Tensioner Assembly (Incl. #15, 16)
17	453426	Track Carriage Weldment, LH
	453427	Track Carriage Weldment, RH
18	04117-08	Locknut W/Flange, Elastic Stop 3/4-10

TRACK ASSEMBLY WIDE



TRACK ASSEMBLY WIDE

Ref. No.	Part No.	Description
1	431207	Flange, Sprocket
2	429600	Sprocket Spacer, Inner
3	429601	Sprocket Spacer, Outer
4	487583	Track, Sprocket
5	04043-07	Washer - Flat 3/8 - .391 X .938 X 12GA
6	04030-04	Lockwasher 3/8 - .385 X .377 X .680
7	04001-45	Capscrew Hexhead 3/8-16 UNC X 2.00"
8	04011-22	Screw, Self Tapping 3/8 - 16 x 1.00"
9	429386	Cover, Track Support
10	487559	Idler, Track
11	04018-06	Metric Hex Head Capscrew Serrated Flange M12-1.75 X 30
12	04001-232	Capscrew Hexhead 3/4-10 UNC X 3.00"
13	487560	Roller, Track
14	487629	Track, 9"
15	453511	Track Yoke Weldment, RH
	453428	Track Yoke Weldment, LH
16	431230	Grease Insert
17	48114-11	Grease Fitting, Straight 1/8 - PTF
18	463599	Track Tensioner Assembly (Incl. #15, 16)
19	429596	Track Spacer, Front
20	429597	Track Spacer, Rear
21	453426	Track Carriage Weldment, LH
	453427	Track Carriage Weldment, RH
22	04117-08	Locknut W/Flange, Elastic Stop 3/4-10

1.264L

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35.

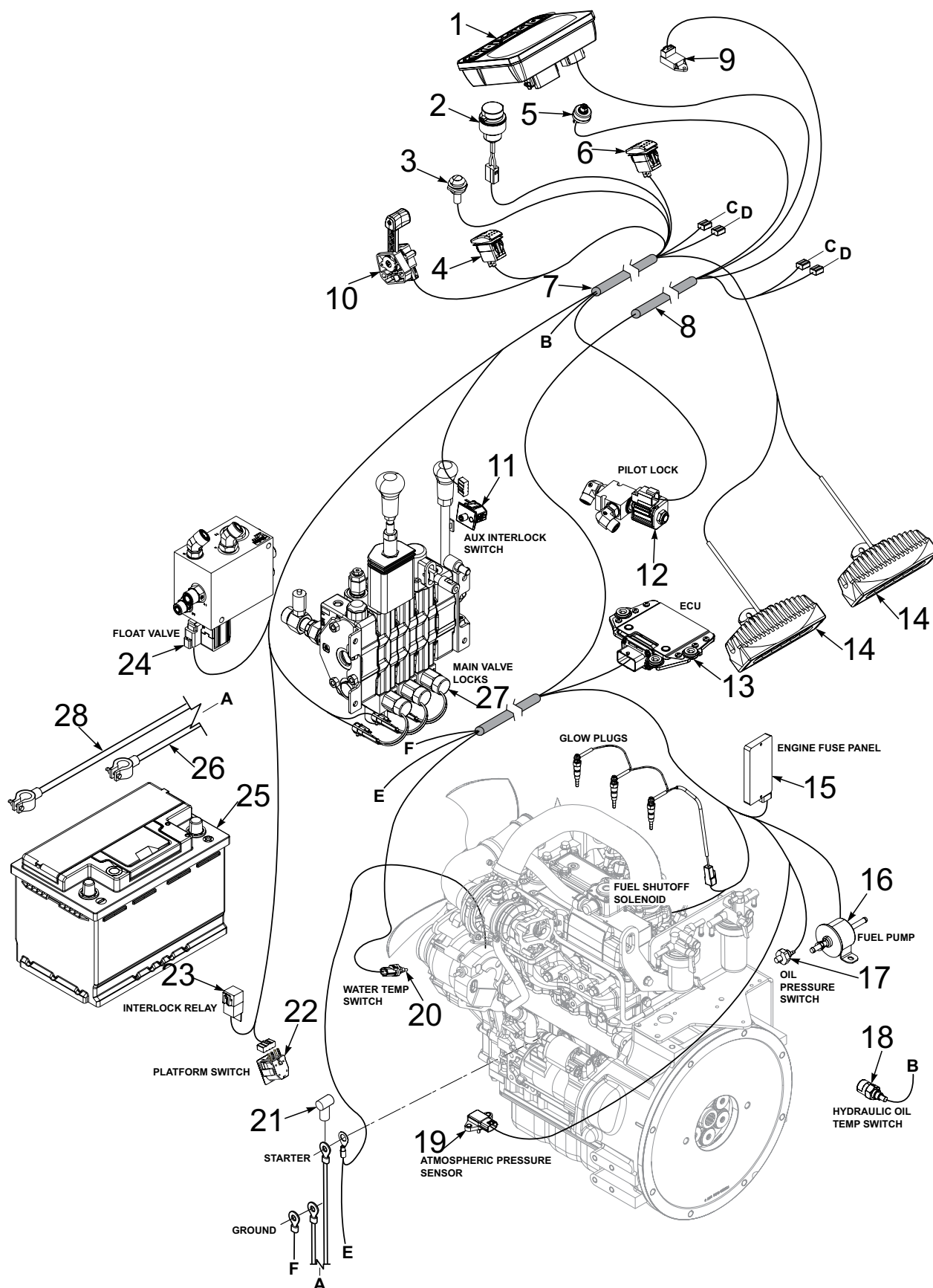
AUX INTERLOCK SWITCH
MAIN VALVE LOCKS
PILOT LOCK
GLOW PLUG RELAY
PULL COIL RELAY
HOLD RELAY
FUEL SHUTOFF SOLENOID
FUEL PUMP
HYDRAULIC OIL TEMP SWITCH
OIL PRESSURE SWITCH
WATER TEMP SWITCH
PLATFORM SWITCH
INTERLOCK RELAY
FLOAT VALVE
STARTER
GROUND

KUBOTA ELECTRICAL

| Ref. No. | Part No. | Description |
|----------|-----------|--|
| 1 | 487833 | Display, Jackal |
| 2 | 485568 | Power Plug, 12V |
| 3 | 481182 | Indicator Light Assembly, Glow Plug |
| 4 | 487645 | Switch, Lights |
| 5 | 48798 | Key Switch |
| 6 | 487646 | Switch, Float |
| 7 | 487643 | Wire Harness |
| 8 | 487750 | Wire Harness |
| 9 | 483399 | Timer, Glow Plug |
| 10 | 484497 | Switch, Double Pole NO/NO, Two Pole Shorting |
| 11 | 487641 | Valve, Pilot Lockout |
| 12 | 486672 | Worklight, LED |
| 13 | 481826 | Relay |
| 14 | 483013 | Relay |
| 15 | * | Solenoid, Fuel Shut-Off, Kubota |
| 16 | * | Fuel Pump, Kubota |
| 17 | * | Hydraulic Temp Switch |
| 18 | 481811 | Oil Pressure Sender |
| 19 | 481335 | Rubber Boot |
| 20 | 483433 | Elbow, 45 Street |
| 21 | 483360 | Sender Unit, Water Temp |
| 22 | 487855 | Platform Switch |
| 23 | 486588 | 50 Amp Breaker |
| 24 | 483013 | Relay |
| 25 | 487836 | Battery, 690CCA |
| 26 | 481176-16 | Battery Cable, 40" Red |
| 27 | 481176-17 | Battery Cable, 45" Black |
| 28 | 487638 | Manifold Float |
| 29 | 463605 | Main Valve W/Fittings |
| 30 | 482588 | Clip, Wire |
| 31 | 483643 | Cover, Sealed Single |
| 32 | 48298 | Fuse, 20 Amp |
| 33 | 483629 | Fuse Holder |
| 34 | 483642 | Double Fuse Assy (Incl. #30, 31, 32, 33) |
| 35 | 485739 | Single Fuse Assy (Incl. #30, 32, 33, 36) |
| 36 | 483571 | Cover, Sealed Double |

* Order through Engine Manufacturer

YANMAR ELECTRICAL

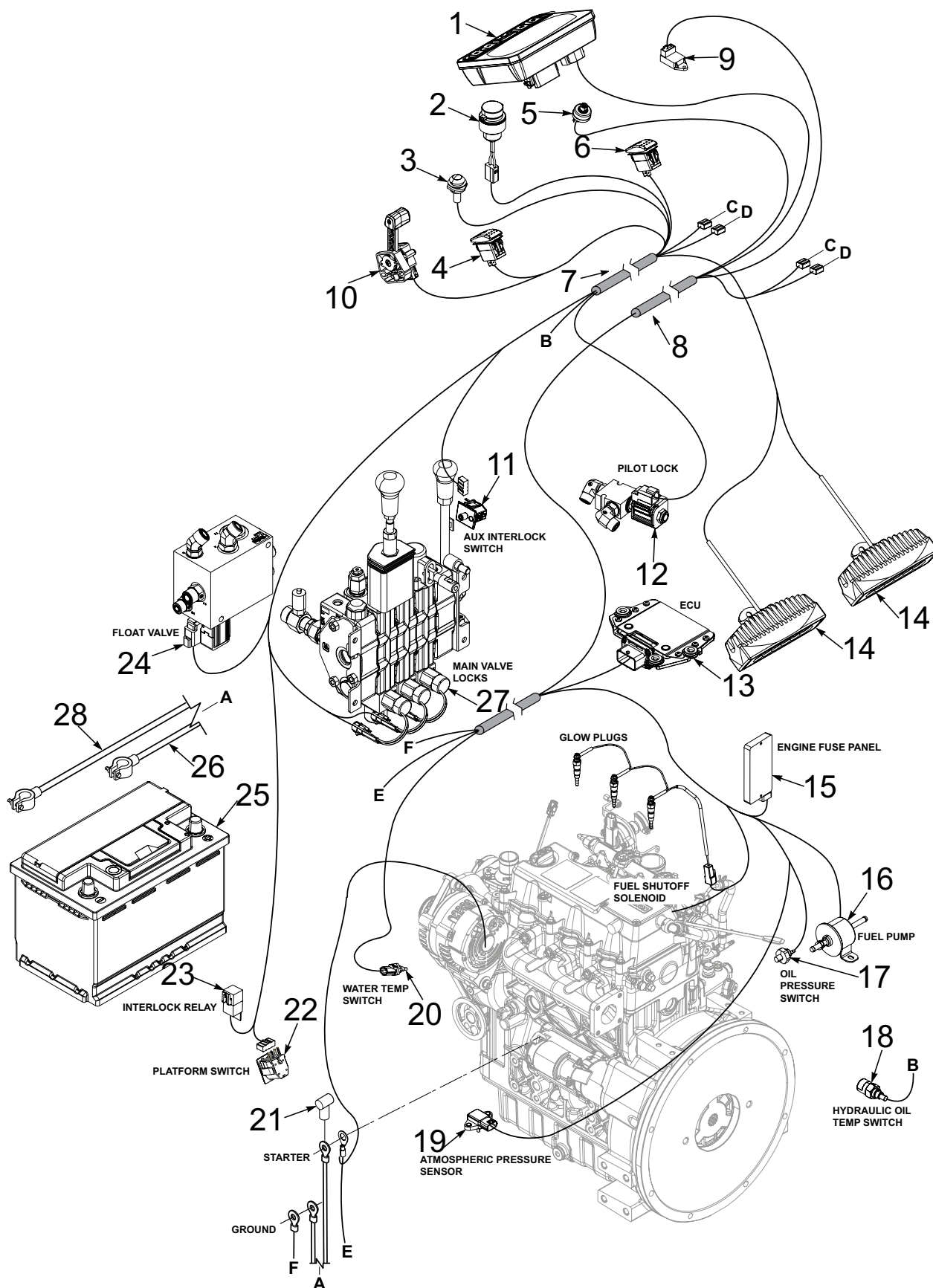


YANMAR ELECTRICAL

| Ref. No. | Part No. | Description |
|----------|-----------|--|
| 1 | 487751 | Display, Kohler / Yanmar |
| 2 | 485568 | Power Plug, 12V |
| 3 | 481182 | Indicator Light Assembly, Glow Plug |
| 4 | 487646 | Switch, Float |
| 5 | 48798 | Key Switch |
| 6 | 487645 | Switch, Lights |
| 7 | * | Wire Harness |
| 8 | * | Wire Harness |
| 9 | 483399 | Timer, Glow Plug |
| 10 | 483356 | Throttle |
| 11 | 484497 | Switch, Double Pole NO/NO, Two Pole Shorting |
| 12 | 487641 | Valve, Pilot Lockout |
| 13 | * | ECU |
| 14 | 486672 | Worklight, LED |
| 15 | * | Engine Fuse Panel |
| 16 | * | Fuel Pump |
| 17 | * | Oil Pressure Switch |
| 18 | * | Hydraulic Oil Temp Switch |
| 19 | * | Atmospheric Pressure Sensor |
| 20 | * | Water Temp Switch |
| 21 | 481335 | Rubber Boot |
| 22 | 487855 | Platform Switch |
| 23 | 483013 | Relay |
| 24 | 487638 | Manifold Float |
| 25 | 487836 | Battery, 690CCA |
| 26 | 481176-16 | Battery Cable, 40" Red |
| 27 | 463605 | Main Valve W/Fittings |
| 28 | 481176-17 | Battery Cable, 45" Black |

* Order through Engine Manufacturer

KOHLER ELECTRICAL

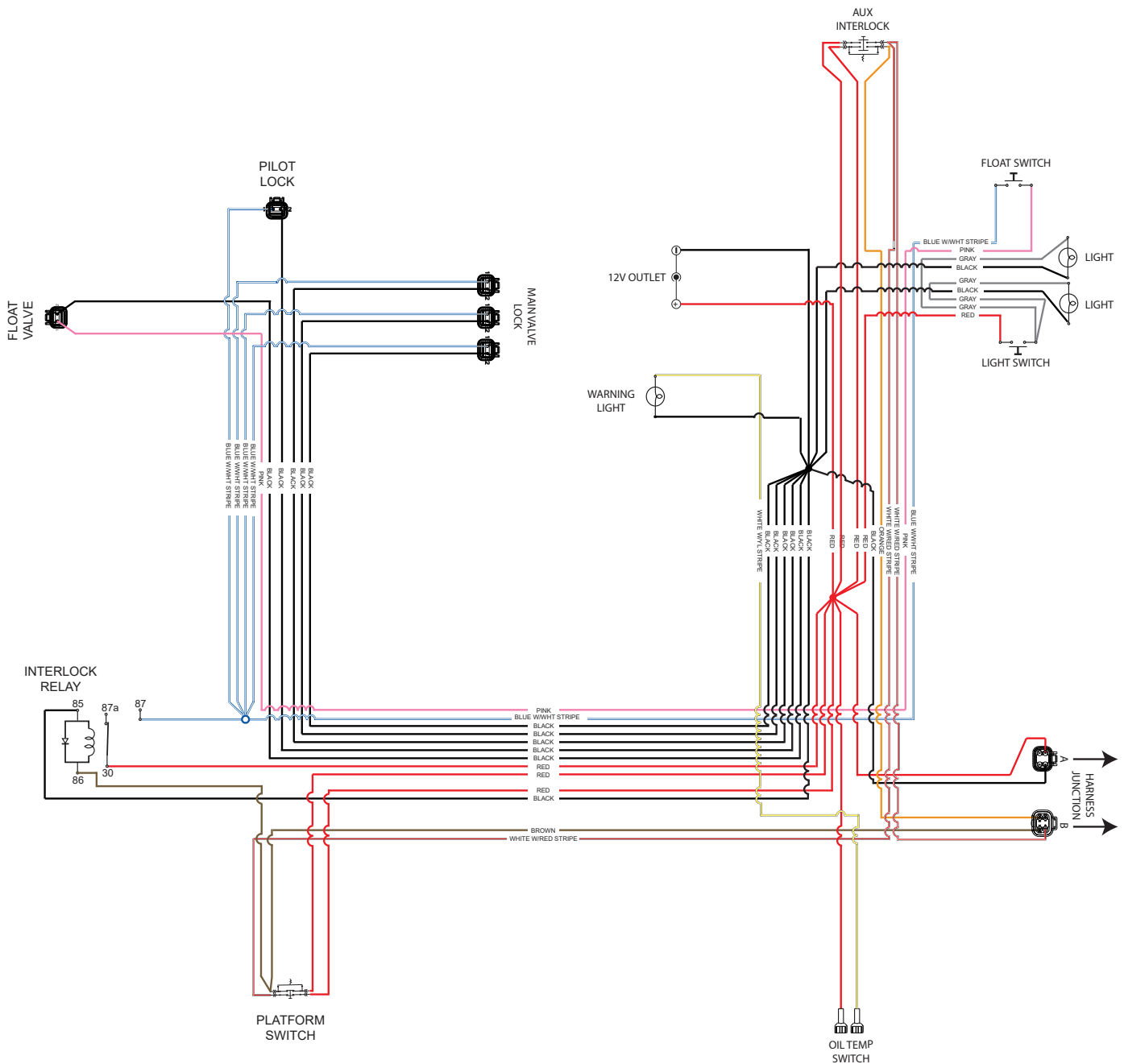


KOHLER ELECTRICAL

| Ref. No. | Part No. | Description |
|----------|-----------|--|
| 1 | 487751 | Display, Kohler / Yanmar |
| 2 | 485568 | Power Plug, 12V |
| 3 | 481182 | Indicator Light Assembly, Glow Plug |
| 4 | 487646 | Switch, Float |
| 5 | 48798 | Key Switch |
| 6 | 487645 | Switch, Lights |
| 7 | * | Wire Harness |
| 8 | * | Wire Harness |
| 9 | 483399 | Timer, Glow Plug |
| 10 | 483356 | Throttle |
| 11 | 484497 | Switch, Double Pole NO/NO, Two Pole Shorting |
| 12 | 487641 | Valve, Pilot Lockout |
| 13 | * | ECU |
| 14 | 486672 | Worklight, LED |
| 15 | * | Engine Fuse Panel |
| 16 | * | Fuel Pump |
| 17 | * | Oil Pressure Switch |
| 18 | * | Hydraulic Oil Temp Switch |
| 19 | * | Atmospheric Pressure Sensor |
| 20 | * | Water Temp Switch |
| 21 | 481335 | Rubber Boot |
| 22 | 487855 | Platform Switch |
| 23 | 483013 | Relay |
| 24 | 487638 | Manifold Float |
| 25 | 487836 | Battery, 690CCA |
| 26 | 481176-16 | Battery Cable, 40" Red |
| 27 | 463605 | Main Valve W/Fittings |
| 28 | 481176-17 | Battery Cable, 45" Black |

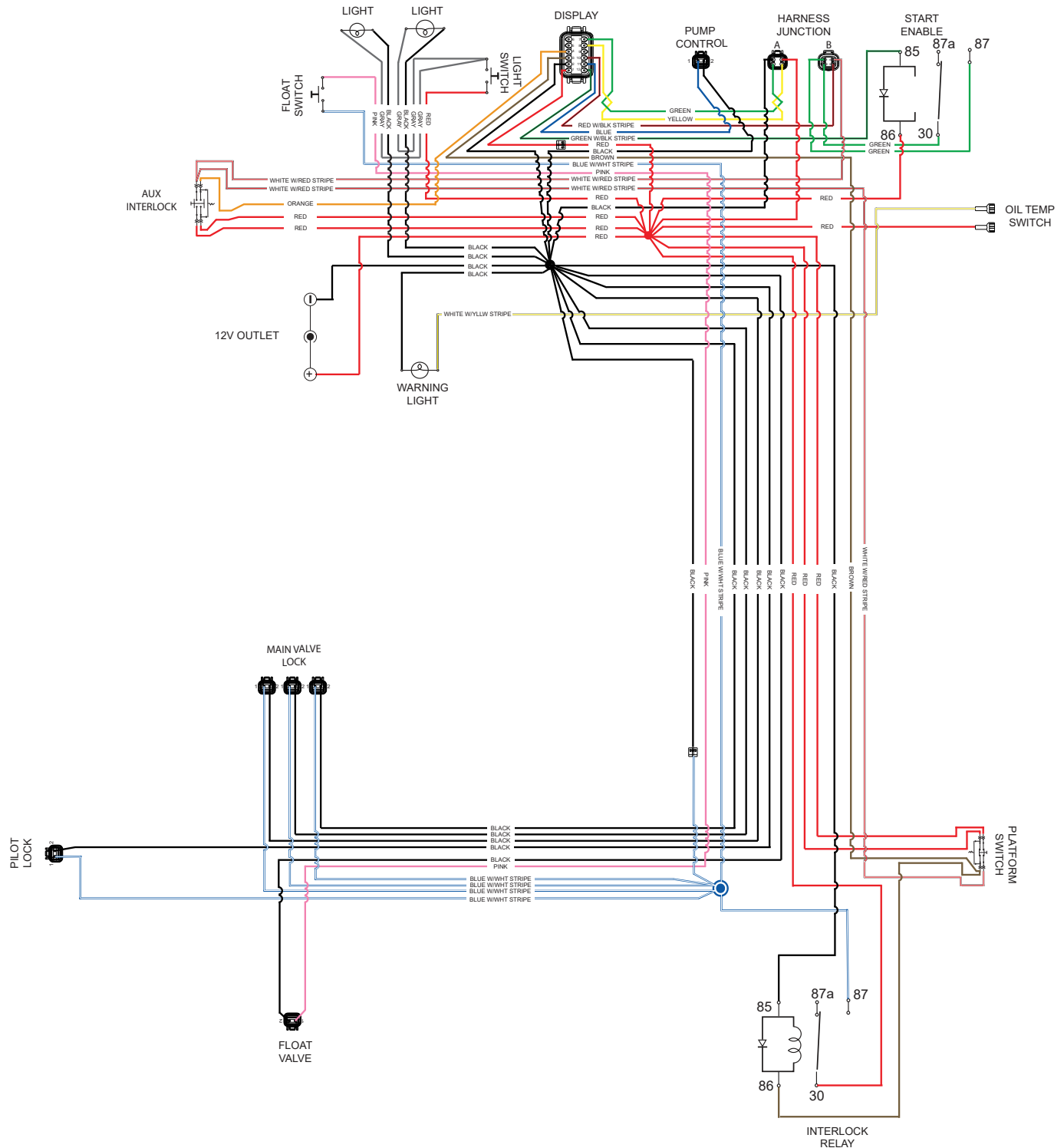
* Order through Engine Manufacturer

ELECTRICAL SCHEMATIC - KUBOTA LH WIRE HARNESS

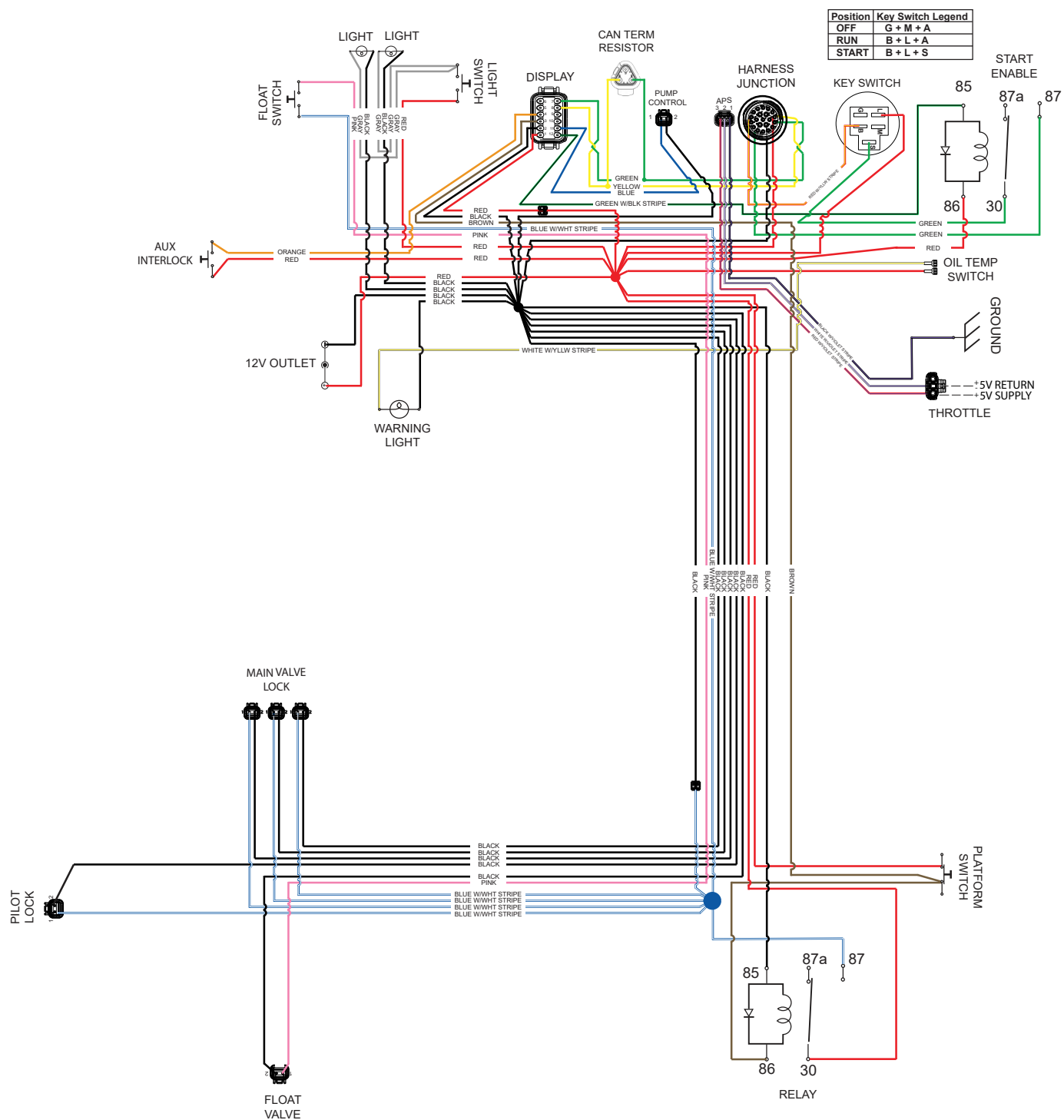


[illegible]

ELECTRICAL SCHEMATIC - KOHLER WIRE HARNESS



ELECTRICAL SCHEMATIC - YANMAR WIRE HARNESS

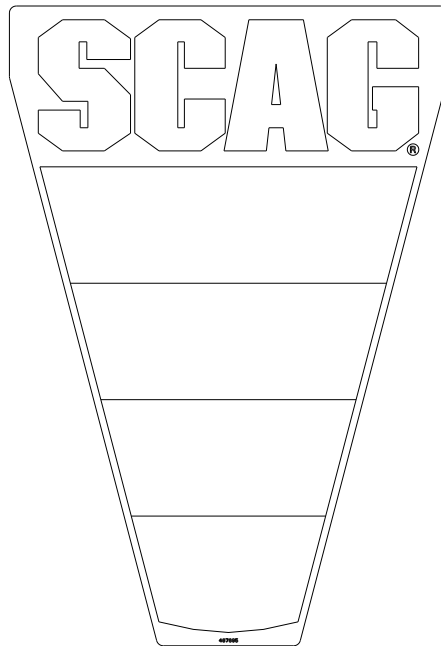


REPLACEMENT DECALS AND INFORMATION PLATES



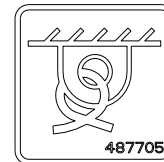
1

48314



4

487695



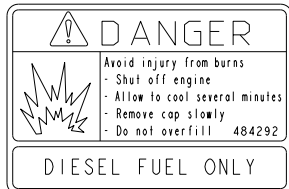
5

487705



7

487707



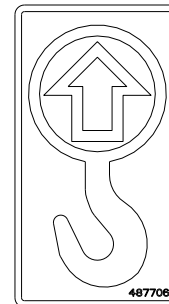
2

484292



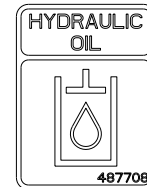
3

484739



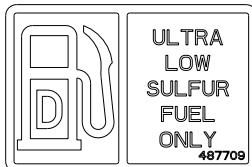
6

487706



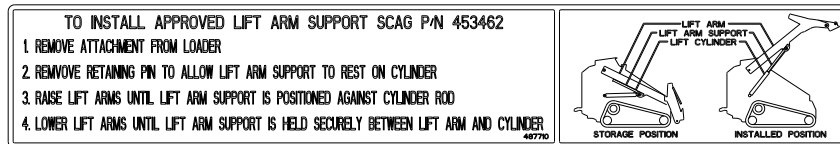
8

487708



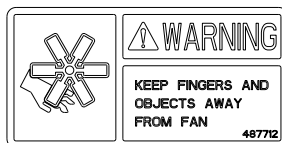
9

487709



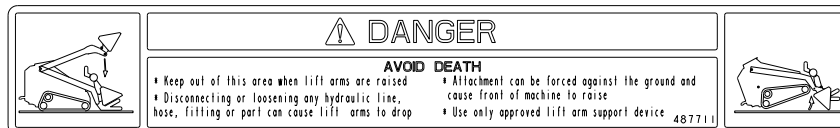
10

487710



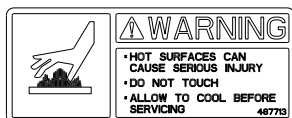
12

487712



11

487711



13

487713



14

487714



15

487715



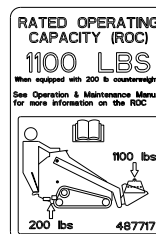
20

487720

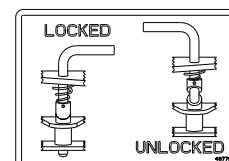


16

487716



17 487717

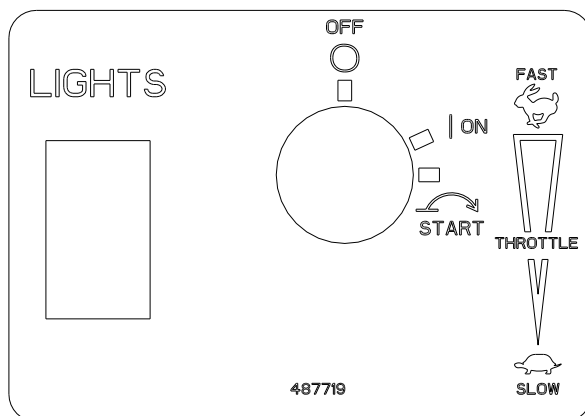


18

487718

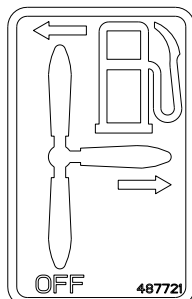
REPLACEMENT DECALS AND INFORMATION PLATES

| Ref. No. | Part No. | Description |
|----------|----------|-------------------------------|
| 1 | 48314 | Decal, Scag Logo |
| 2 | 484292 | Decal, Fuel Tank |
| 3 | 484739 | Decal, Ultra Low Sulfur Fuel |
| 4 | 487695 | Decal, Hood - Scag |
| 5 | 487705 | Decal, Tie Down |
| 6 | 487706 | Decal, Lift Point |
| 7 | 487707 | Decal, Read Operator's Manual |
| 8 | 487708 | Decal, Hydraulic Oil |
| 9 | 487709 | Decal, Deisel Fuel Only |
| 10 | 487710 | Decal, Lift Arm Support |
| 11 | 487711 | Decal, Pinch Points |
| 12 | 487712 | Decal, Fan Warning |
| 13 | 487713 | Decal, Hot Muffler |
| 14 | 487714 | Decal, Stability |
| 15 | 487715 | Decal, Hot Fluid |
| 16 | 487716 | Decal, Controls |
| 17 | 487717 | Decal, Capacity |
| 18 | 487718 | Decal, Locking Pins Support |
| 19 | 487719 | Decal, Instrument Panel |
| 20 | 487720 | Decal, Starting Fluid |
| 21 | 487721 | Decal, Fuel Shutoff |
| 22 | 487722 | Decal, Aux |
| 23 | 487857 | Decal, Float |
| 24 | 487694 | Decal, Jackal |



19

487719



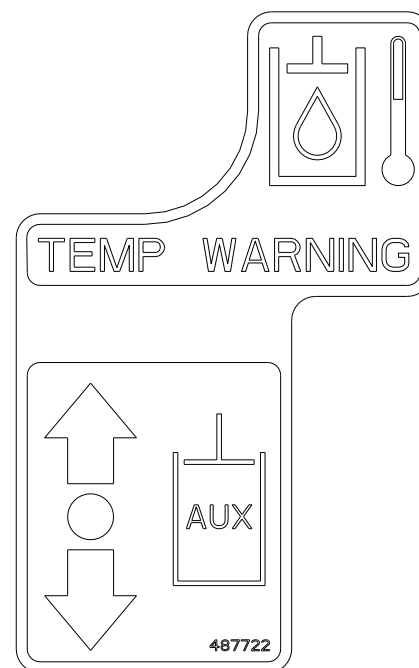
21

487721



23

487857



22

487722



24

487694

LIMITED WARRANTY - LOADERS

Any part of the Scag Jackal track loader 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:

- Other wear items including drive belts, hydraulic hoses, control cables (such as throttle), and tracks 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 one (1) year or 1,000 Hours (parts and labor) including Rental use. This warranty does not cover any track loader 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 one (1) year or 1,000 Hours (parts and labor) including Rental use by Scag Power Equipment. The repair or replacement of the hydraulic pumps, hydraulic motors, hydraulic cylinders, hydraulic manifolds or hydraulic valves will be at the option of Scag Power Equipment. This warranty does not cover any track loader 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.
- For Jackal attachment warranty including buckets, see Attachment Warranty Policy.

The Scag Jackal track loader, including any defective part must be returned to an Authorized Scag Service Dealer within the warranty period. The expense of delivering the track loader 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 Jackal track loader.

This warranty does not cover any loader that has been subject to misuse, abuse, neglect, negligence, or accident, or damage or deterioration due to normal use 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 track loader that is the result of improper maintenance, or to any track loader or parts that have not been assembled or installed as specified in the Operator's Manual. The warranty does not cover any track loader that has been altered or modified, changing performance, durability or to allow the use of improper or unapproved attachments or accessories. In addition, the warranty does not extend to replacements or repairs made necessary due to normal wear, or by the use of parts or accessories which, in the reasonable judgment of Scag, are either incompatible with the Scag Jackal track loader or adversely affect its operation, performance, or durability.

Scag Power Equipment reserves the right to change or improve the design of any track loader without assuming any obligation to modify any track loader previously manufactured. All other implied warranties are limited in duration to the one (1) year or 1,000 Hours (parts and labor) including Rental. Accordingly, any such implied warranties including merchantability, fitness for a particular purpose, or otherwise, are disclaimed in their entirety after the expiration of the one (1) year or 1,000 Hours (parts and labor) including Rental 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 fuel, expense of delivering the track loader to an Authorized Scag Service Dealer and expense of returning it to the owner, mechanic's travel time, telephone or communication 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 machine, 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.

