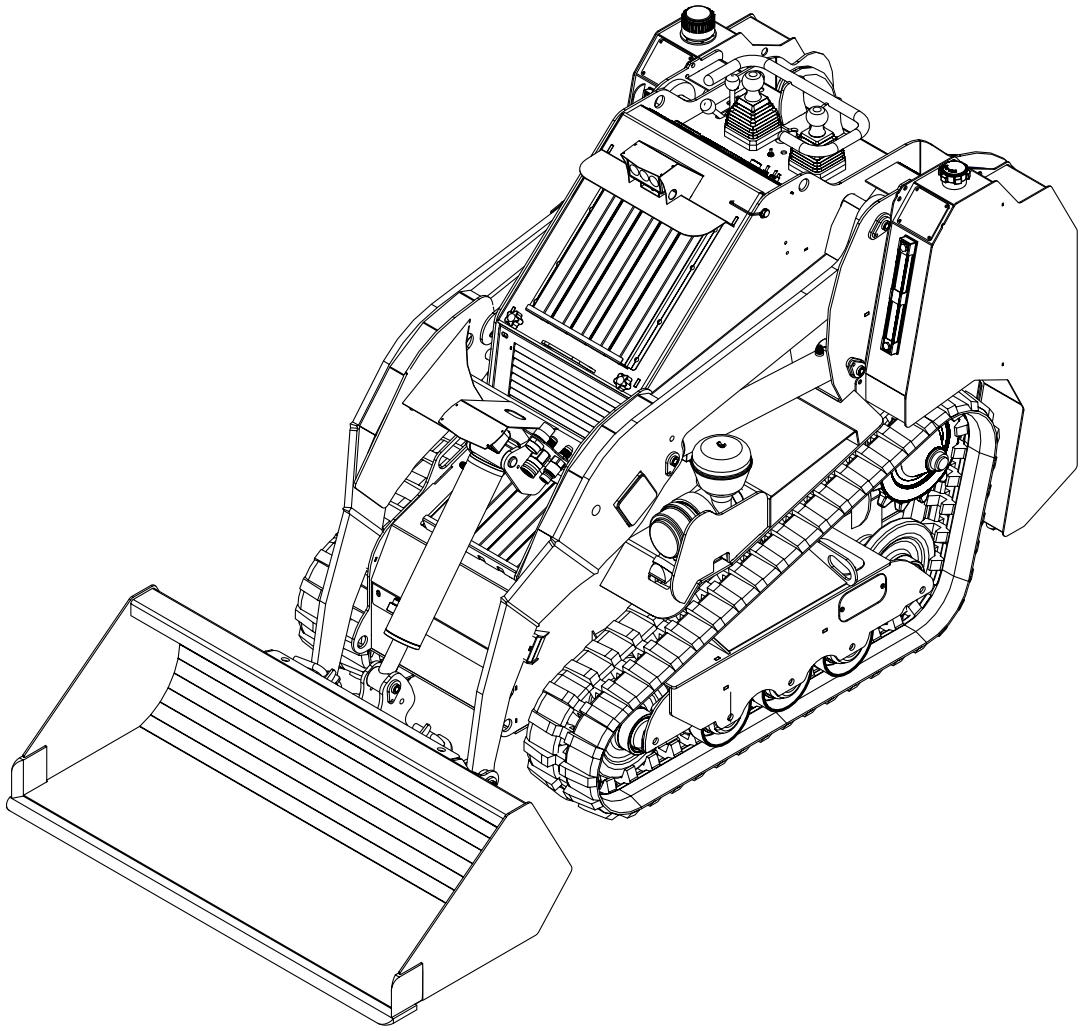


BAUMALIGHT™

# TRL620Y And TRL630Y Tracked Mini Skidsteer

## OPERATOR'S MANUAL

Issue Date: October 2026

**⚠ WARNING**

**Breathing diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.**

**Always start and operate the engine in a well-ventilated area.**

**If in an enclosed area, vent the exhaust to the outside.**

**Do not modify or tamper with the exhaust system.**

**Do not idle the engine except as necessary.**

**For more information go to www.P65Warnings.ca.gov.**

**⚠ WARNING**

**Batteries, battery posts, battery terminals, and related accessories can expose you to chemicals including lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm.**

**For more information go to www.P65Warnings.ca.gov.**




# Service And Instructional Videos

## Find online at baumalight.com/support

Following is a list of videos and documents available on Baumalights website and also on YouTube to help and enhance maintaining the skidsteer. The list below was current at the time this manual was issued. Additional content may be available.

| Activity ID Number | Activity Name | Description | Item Available |
|---|---|---|---|
| 370 | Electrical AUX Plug. | How To Install Electrical Aux Plug. | Video |
| 345 | D007083 Joystick Handle. | How To Install D007083 2 Button Hydraulic Aux Joystick Handle. | Video |
| 248 | Drive Pump Seal. | Replacing Drive Pump Seal. | Video |
| 344 | Drive Motor Ports | Turning Drive Motor Ports Different Direction. | Video |
| 162 | Replacing Seal. | Replacing Drive Motor Seal. | Video |
| 315 | Hydraulic Motor. | Breaking In Replacement Hydraulic Motor Or Pump. | Video |
| 338 | Pressure Lock. | Relieving Hydraulic Coupler Pressure Lock. | Video |
| 339 | Operator Plate. | Adjusting Stiffness Of New Operator Plate. | Video |
| 340 | Floating Platform Retrofit Kit. | Installing New Retrofit Operator Platform. | Video |
| 306 | Weight Kit. | Installing Counterweight Kit (A3 And Newer) (D006852). | Video |
| 305 | Plate Adaptors. | Difference Between Plate And Adaptor Options. | Video |
| 291 | Erratic Driving. | One Side Will Not Stop Driving. | |
| 258 | Changing Oil. | Changing Oil And Oil Filter. | Video |
| 257 | Lofa Panel | Replacing Pin In Lofa Panel Plug. | Video |
| 255 | First Things To Check. | Erratic Driving. | Document |

| Activity ID Number | Activity Name | Description | Item Available |
|---|---|---|---|
| 256 | Lofa Panel. | Troubleshooting Flickering Panel Lights. | Video |
| 254 | Boom Valve. | Adjust Pressure Relief. | Video |
| 250 | Informational Testing Process. | Breakout Force And Tipping Point Testing Process. | Video |
| 246 | Valve Repair. | Install D006744 Spring To Center Kit For Aux Lever. | Video |
| 248 | Drive Pump Seal. | Replacing Drive Pump Seal. | Video |
| 234 | Valve Repair. | Self Leveling Valve Leak. | Video |
| 223 | First Things To Check Machine Does Not Turn | Check If Sprocket Is Spinning - Key Is Sheared | Video |
| 222 | Engine Bogging Down | Preventing Engine From Bogging Down While In Bulldozing Mode | Video |
| 213 | Engine Bogging Down | Trouble With Engine Bogging Down In Bulldozer Mode | Document |
| 214 | Trouble Shooting Movement In Neutral | Mini Skidsteer Moves When Joystick Is In Neutral Or Does Not Drive Straight | Document |
| 205 | Calibrate Tachometer No.2 | Calibrate Tachometer Option 463-00111 | Document |
| 208 | Adjust Ground Speed | Adjust Speed On Drive Pump | Document |
| 202 | Calibrate Tachometer No.1 | Calibrate Tachometer Option 463-1000-35 | Document |
| 195 | Mini Plate Check | Check Plate Adaptor Dimensions | Document |
| 184 | Remove And Install Boom Valve | Boom Valve Replacement | Document |
| 183 | Replacing Drive Motor | Process Of Replacing Drive Motor | Video |
| 169 | First Things To Check | Track Maintenance | Document |
| 163 | First Things To Check | Track Keeps Coming Off | Document |
| 162 | Replacing Seal | Replacing Drive Motor Seal | Video |
| 153 | Valve Repair | Cleaning Stem On Boom Valve | Video |
| 148 | Wheel Motor Seal Replacement | Wheel Motor Seal Instructions | Document |

| Activity ID Number | Activity Name | Description | Item Available |
|---|---|---|---|
| 146 | Trouble Shooting Engine Cooler | First Thing To Check | Document |
| 134 | Changing Bolts On Aux Pump | Replacing Bolts On Auxiliary Pump | Document |
| 117 | Self-Leveling Valve | How To Adjust Self-Leveling Valve | Video |
| 125 | Valve Repair | Spool Valve Parts For D003723 | Document |
| 126 | Valve Repair | 3 Spool Section Valve D003723 | Document |
| 92 | Troubleshooting | Taking Apart Man-On-Board Switch | Video |
| 84 | Trouble Shooting Engine Shut Down | With Flashing Aux 1 Panel Light | Video |
| 83 | Replacing Fuse | Replacing Lofa Panel Fuse | Video |
| 31 | Tips | Starting And Operating Unit | Video |
| 1 | Replace Hydraulic Cooler | Remove Old Cooler | Video |
| 2 | Replace Hydraulic Cooler | Install New Hydraulic Cooler | Video |
| 54 | Troubleshooting | Unable To Lift Boom | Video |
| 19 | Troubleshooting | Unable To Drive | Video |
| 24 | Leaks | Tracing Leaks | Video |
| 13 | Track Maintenance | Install New Track | Video |
| 12 | Track Maintenance | Remove Track | Video |
| 16 | Track Maintenance | Adjust Track Tension | Video |
| 25 | Replacing Drive Pump | Removing Drive Pump | Video |
| 26 | Replacing Drive Pump | Installing New Drive Pump | Video |
| 28 | Valve Repair | Reassembling Float Spool In Boom Valve | Video |
| 29 | Valve Repair | Troubleshooting Sagging Boom | Video |
| 473 | Communicating Measurements. | Why Not To Send Pictures Of Measuring Tapes To Communicate Measurements. | Video |
| 434 | Hydraulic Cylinder. | Replacing Seals On Hydraulic Cylinder. | Video |

| Activity ID Number | Activity Name | Description | Item Available |
|---|---|---|---|
| 418 | Adding New Joystick Handle D007225. | Steps For Adding In Joystick Handle On Boom Valve. | Document |
| 395 | Digital Controller. | How To Use Digital Controller. | Video |
| 421 | Removing Pump. | Steps For Removing Pump. | Document |
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# 1 INTRODUCTION

## 1.1 Overview

Congratulations on your choice of a Baumalight Tracked Mini Skidsteer. This equipment has been designed and manufactured to meet the needs of a discriminating buyer for efficient operation.

Safe, efficient and trouble free operation of your skidsteer requires that you and anyone else who will be operating or maintaining the skidsteer, read and understand this Operator's Manual.

This manual covers the TRL620Y and TRL630Y Baumalight Tracked Mini Skidsteer.. Use the Table of Contents as a guide to locate required information.

Keep this manual handy for frequent reference and to pass on to new operators or owners. Contact your Baumalight dealer if you need assistance, information or additional copies of the manuals.

When this machine is worn out and no longer in use, it should be returned to the retailer or other party for recycling.

OPERATOR ORIENTATION - The directions left, right, front and rear, as mentioned throughout this manual, are as seen from the operator's platform and facing in the direction of travel.

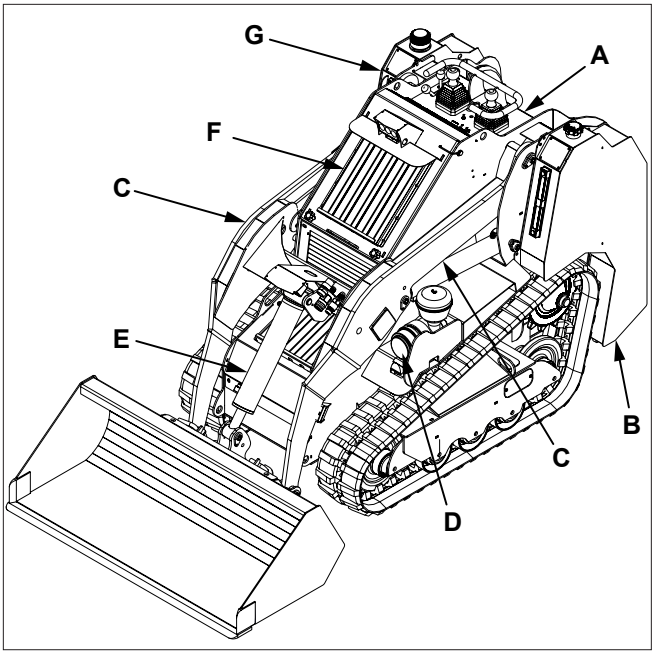
## 1.2 Intended Use And Foreseeable Misuse

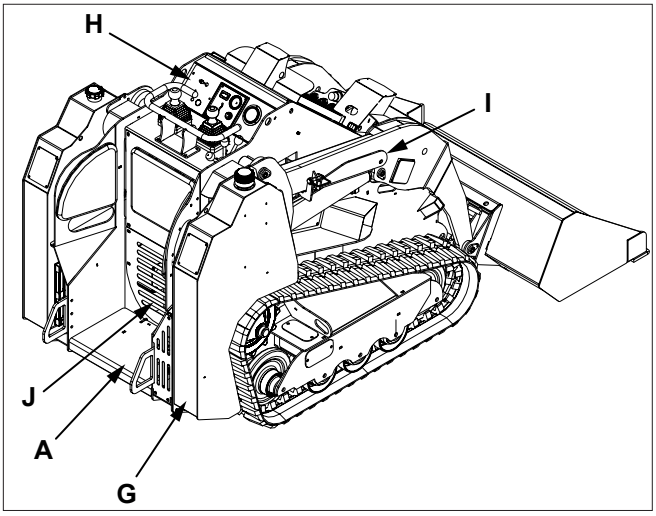
The skidsteer is designed to be used by experienced operators, trained in the safe operation and hazards related to using the skidsteer and the safe use of the skidsteer for the intended purpose. Operators will require personal protective equipment to reduce the risk from some hazards that cannot be completely eliminated or controlled by the design of the skidsteer.

The skidsteer is not designed for use in hazardous atmospheres where there is a risk of fire or explosion due to flammable gases or vapors. Use in hazardous, explosive atmospheres is prohibited.

Serious injury or death of the operator or bystanders may be caused if the skidsteer is misused. Misuse may also cause damage to the attachment skidsteer is carrying.

## 1.3 Components




A. Operators Station
B. Diesel Fuel Tank
C. Lift Arm
D. Engine Air Filter
E. Attachment Tilt Cylinder
F. Hydraulic Cooler Vent Screen
G. Hydraulic Fluid Tank
H. Instrument Panel
I. Lift Arm Lock
J. Engine Radiator Intake

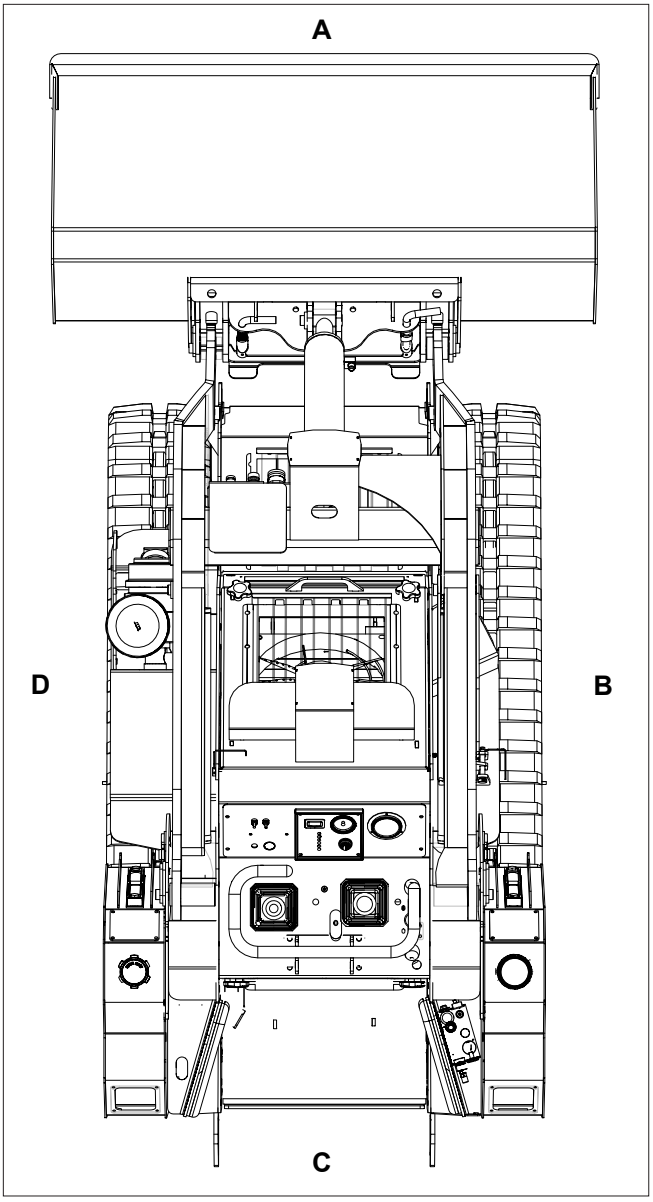
## 1.4 Serial Number Plate

Record serial number and dates in spaces below.

Serial Number:_____

Date Of Purchase:_____

## 1.5 Operator Orientation




A. Front
B. Right Side
C. Rear
D. Left Side

## 1.6 OEM Engine

Detailed engine information and warranty can be found in the Yanmar engine manual provided with the skidsteer.

The basic engine warranty is as follows:

- Engine is covered for 2 years from date of original purchase, or 2000 hours, whichever occurs first. For TNV Series Industrial Engines only, an extended limited warranty of 3 years or 3000 engine operating hours, whichever occurs first, is provided for these specific parts only: the cylinder block, cylinder head, crankshaft forging, connecting rods, flywheel, flywheel housing, camshaft, timing gear, and gear case.
- Radiator, engine isolation mounts, muffler and drive couplings are not part of the Yanmar warranty, but are covered by their manufacturer for 1 year. Any non Yanmar supplied parts are not part of the Yanmar warranty and would be covered based on that particular supplier's warranty policies.
- While the engine is under warranty, all claims must be approved by an authorized Yanmar industrial engine dealer or distributor before any work is started. Warranty claims without proper authorization will be denied.

Yanmar highly recommends registering the retail purchaser's information through the website http://www.yanmar.co.jp as soon as possible.

If it is not possible to access the website, please contact the nearest authorized Yanmar industrial engine dealer or distributor.

# 2 SAFETY

## 2.1 Safety Alert Symbol And Safety Words

You must read, understand and follow the instructions given by the operating unit manufacturers, as well as the instructions in this manual.

The safety information in this manual is denoted by the safety alert symbol:



This symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

The level of risk is indicated by the following signal words:

**DANGER**

**DANGER - Indicates a hazardous situation, which, if not avoided, WILL result in death or serious injury.**

**WARNING**

**WARNING - Indicates a hazardous situation, which, if not avoided, could result in death or serious injury.**

**CAUTION**

**CAUTION - Indicates a hazardous situation, which, if not avoided, could result in minor or moderate injury.**

**NOTICE**

**NOTICE - Indicates a situation that could result in damage to the equipment or other property.**

## 2.2 Operational Hazards

**WARNING**

**Prevent death or serious injury.**

**Read and understand this manual before operating the skidsteer.**

**Always stop engine and remove key before leaving operators station.**

**Never allow anyone near the skidsteer during operation.**

**Travel at a safe speed.**

**WARNING**

**Prevent death or serious injury from moving parts.**

**Moving parts can crush and dismember.**

**Do not operate without guards and shields in place.**

**Disconnect and lockout power source before adjusting or servicing.**

**WARNING**

**Use skidsteer only for the designed applications.**

**Any other use may result in personal injury, damage to equipment and may void the warranty.**

**⚠ WARNING**

**Protect from flying debris.**

**Wear proper safety glasses, goggles, or a face shield to protect from flying debris.**

**⚠ WARNING**

**Prevent death or serious injury.**

**Raised unsupported lift arms can fall, resulting in death or serious injury.**

**Never enter the area under raised lift arms.**

Carefully read all safety messages in this manual and on equipment safety signs. Keep safety signs in good condition and replace missing or damaged safety signs.

New components and repair parts must include the current safety decal.

Learn how to properly operate the skidsteer. NEVER operate or work around this equipment without proper instruction, while fatigued or under the influence of alcohol, prescription or non-prescription medication or if feeling ill.

Keep your equipment in proper working condition. Know the regulations and laws that apply to you and your industry. This manual is not to replace any regulations or laws. Additional information may be found at: www.asae.org or www.osha.gov.

If you do not understand any part of this manual, contact your Baumalight dealer.

### Electric Lines And Underground Utilities

Have underground utilities located before beginning work. In the US or Canada, call 811 (US) or 888-258-0808 (US and Canada). Also contact any local utilities that do not participate in the One-Call service. In countries that do not have a One-Call service, contact all local utility companies to have underground utilities located.

**⚠ WARNING**

**Prevent electrocution.**

**Skidsteer and/or attachment coming near or contacting electrical lines can cause electrocution.**

**Electrocution can occur without contact.**

**Keep away from electrical lines.**

The following shall be adhered to when working around electrical lines.

- Any electrical line or overhead line shall be considered to be an energized electrical line unless and until the person owning the line or the electric utility authority indicates that the line is not an energized electrical line.
- If any part of the skidsteer or the attachment contacts an energized electrical line, the operator must not attempt to get off the skidsteer. Warn others to leave the area. Contact utility company to deenergize the line. The operator shall remain at the controls until utility company informs that it is safe to exit the machine.
- Do not return to job site or allow anyone into area until utility company informs that it is safe to do so.

**⚠ WARNING**

**Prevent explosion.**

**Skidsteer and/or attachment contacting a gas line can result in an explosion.**

If you suspect a gas line has been damaged:

- Immediately shut off engine.
- Remove any ignition sources.
- Warn others that a gas line has been damaged and that they should leave the area.
- Leave the area as quickly as possible.
- Immediately call the local emergency phone number and the utility company.
- Do not return to area until given permission by emergency personnel and utility company.

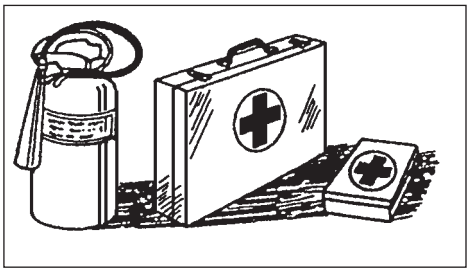
### Prepare For Emergencies

Be prepared in case of emergencies.

Keep a fire extinguisher and first aid kit close to the machine.

Keep emergency phone numbers in your phone.

Know your address so emergency services can locate you if an emergency arises.



### Replace Safety Signs

Replace missing or damaged safety signs.

Safety signs are identified in Section 3 of this manual.

Replacement safety signs are available from your Baumalight dealer.

### Do Not Allow Riders

NEVER lift or carry anyone on the skidsteer.

NEVER use skidsteer as a work platform.

NEVER allow passengers on the skidsteer.

### Lower Operating Speed

Move at slow speeds on rough or uneven terrain.

### Avoid Rollover

The equipment may rollover, resulting in death or serious injury. To help prevent rollover:

- Travel at a slow speed.
- Avoid sharp turns & sudden movement on slopes.
- Carry attachments close to the ground.
- Avoid holes, ditches and other obstructions which may cause equipment to rollover.
- Use caution when operating on slopes and do not operate on excessively steep slopes.
- Do not exceed load capacity of equipment.

### Raised Attachment

**⚠ WARNING**

**Crushing hazard.**

**Raised unsupported lift arms can fall, resulting in death or serious injury.**

**Never enter the area under raised lift arms.**

Raised lift arms or attachment can lower unexpectedly, resulting in death or serious injury.

NEVER enter area under raised lift arms or attachment.

Lower lift arms to ground, engage park brake, shut off engine and remove key before servicing.

### Avoid Loud Noise

**⚠ WARNING**

**Prolonged exposure to loud noise can cause impairment or loss of hearing.**

**Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.**

### Hazards From Modifying Equipment

Do not make any alterations to your skidsteer. Altering the equipment may cause unsafe conditions and may void the manufacturer's warranty.

### Avoid High Pressure Fluids

**⚠ WARNING**

**Pressurized fluids can penetrate the skin.**

**Hydraulic hoses can fail from age, damage and exposure.**

**Use body and face protection while searching for leaks. A tiny, almost invisible leak can penetrate the skin, thereby requiring immediate medical attention.**

**Use wood or cardboard to detect hydraulic leaks, never use your hands.**

Escaping fluid under pressure can penetrate the skin causing serious injury.

Prevent the hazard by relieving pressure before connecting or disconnecting hydraulic hoses. Verify all connections are tight before applying pressure.

Search for leaks with a piece of cardboard or wood. Protect hands and body from high pressure fluids. If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or serious infection may result.

## 2.3 Maintenance Hazards

Before servicing, park machine on a firm and level surface, lower lift arms, engage park brake, remove key and place a “Do Not Operate” tag on control panel. Read and understand this manual.

If you do not understand any part of the manual, contact your Baumalight dealer.

Always wear face and/or eye protection, safety shoes, and other protective equipment appropriate for the job.

Do not make unauthorized modifications. Contact your Baumalight dealer before you weld, cut/drill holes, or make any other modifications.

**⚠ WARNING**

**Moving parts can crush and cut.**

**Keep clear of moving components.**

**Follow lockout procedure before servicing.**

**⚠ WARNING**

**Entanglement hazard.**

**Keep clear of moving components.**

**Wear proper protective equipment appropriate for the job.**

**⚠ WARNING**

**Prevent death or serious injury.**

**Before performing inspections, service or maintenance:**

- **Park machine on firm, level surface.**
- **Lower lift arms to ground.**
- **Engage park brake.**
- **Turn engine off and remove key.**
- **Place “Do Not Operate” tag on control panel.**

**⚠ WARNING**

**Burn hazard.**

**Hot and high pressure hydraulic oil.**

**Allow oil to cool before servicing.**

**⚠ WARNING**

**Crushing hazard.**

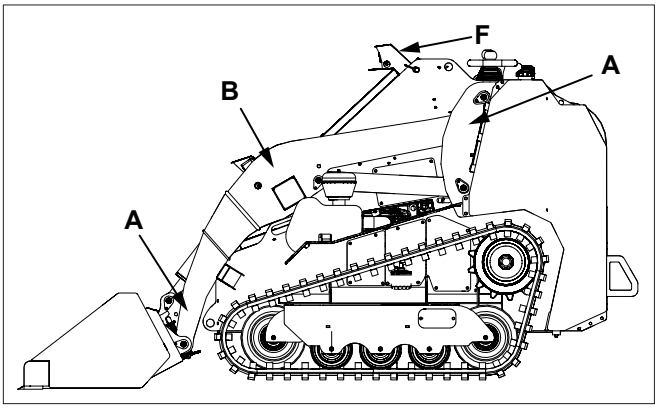
**Raised unsupported lift arms can fall, resulting in death or serious injury.**

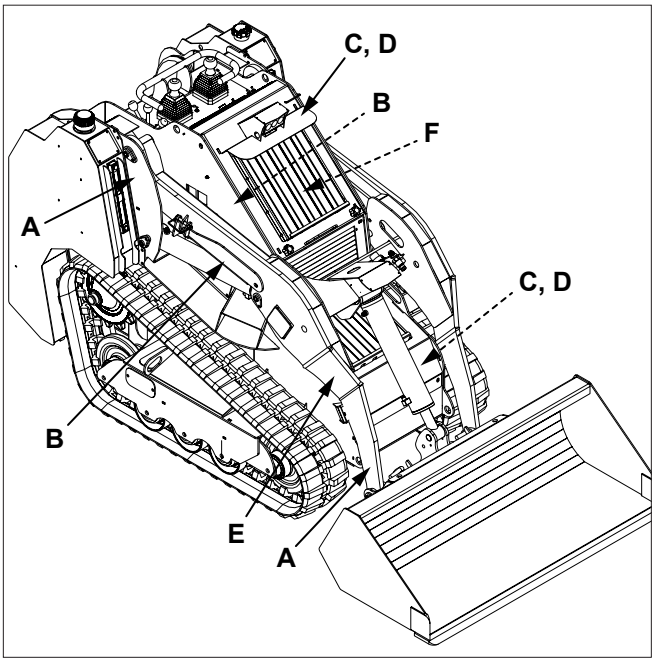
**Never enter the area under raised lift arms.**

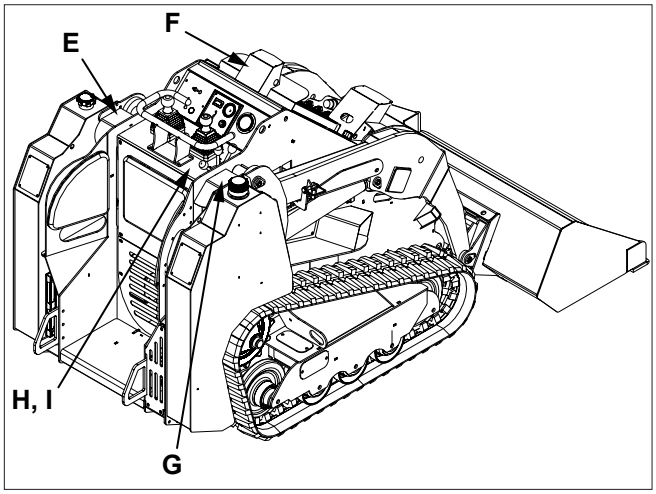
# 3 SAFETY SIGNS

The two and four panel safety decals are pictorial and have a yellow background. The panel with a triangle indicates the potential hazard. The panel without a triangle indicates how to avoid the hazard.

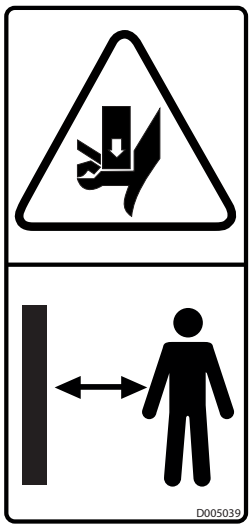
If any of the decals are missing, are damaged, or if you do not understand the decal, please contact your dealer.



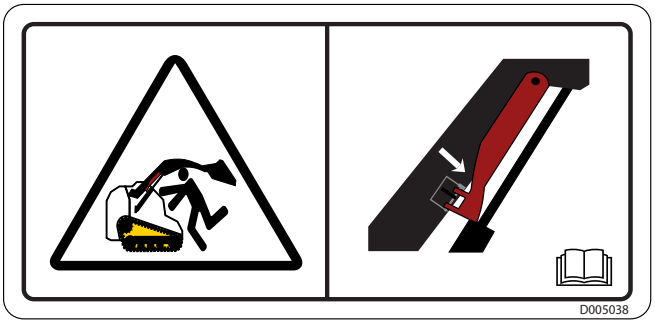



A. D005039 ⚠ WARNING - Pinch point / crush hazard. Do not reach into machine. Keep away from machine.




B. D005038 ⚠ WARNING - Crush hazard. Install service lock.




C. D005262 ⚠ WARNING - P65 warning information.

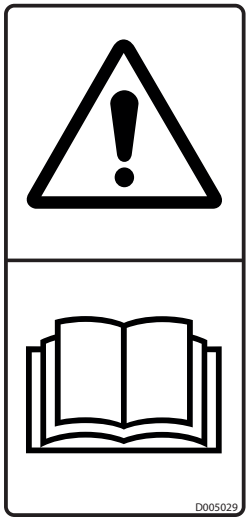
**WARNING:** This product can expose you to chemicals including 1,3-Butadiene and lead, which are known to the state of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

D005262

D. D005030 ⚠ WARNING - Pressurized fluid hazard. Keep away from machine.



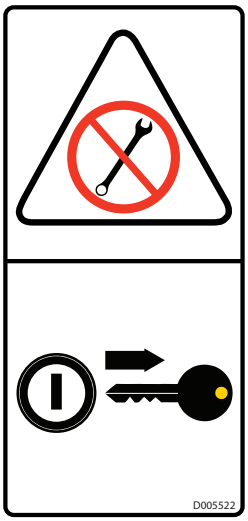

E. D005029 ⚠ WARNING - Read and understand safety signs on the machine and operating instructions in this manual before operating machine.



F. D005031 ⚠ WARNING - Wear personal protective equipment appropriate for the job.




G. D005522 ⚠ WARNING - Remove key before performing service.




H. D005942⚠ WARNING - Do not drive or reverse at high speeds with a raised boom, make sure to lower the boom when picking up speed.




I. D005943⚠ WARNING - Do not reverse downhill or drive uphill. Drive downhill and reverse uphill.



# 4 OPERATION

## 4.1 Preparation For Use

Operator must be properly trained and understand operator's manual before using equipment. Do not allow untrained or unqualified people to operate this equipment.

It is your responsibility to operate this equipment safely. You must be familiar with the equipment and all safety practices before use.

Have underground utilities located before working. In the US or Canada, call 811 (US) or 888-258-0808 (US and Canada). In countries that do not have a One-Call service, contact all local utility companies to have underground utilities located.

Inspect equipment before operating. Repair or replace any worn or damaged parts. Replace missing or damaged safety shields and safety signs.

Keep bystanders away from work area.

Always wear protective equipment appropriate for the job.

Do not operate, work on or around this machine while under the influence of alcohol, drugs or if feeling ill.

Keep clear of moving equipment at all times.

Stop engine before leaving operators station.

## 4.2 Utility Locating

### Electrical Line

Have underground utilities located before beginning work. In the US or Canada, call 811 (US) or 888-258-0808 (US and Canada). In countries that do not have a one call service, contact all local utility companies to have underground utilities located.

**⚠ WARNING**

**Prevent electrocution.**

**Skidsteer and/or attachment coming near or contacting electrical lines can cause electrocution.**

**Electrocution can occur without contact.**

**Keep away from electrical lines.**

The following requirements shall be adhered to when working around electrical lines.

- Any electrical line or overhead line shall be considered to be an energized line unless and until the person owning the line or the electrical utility authority indicates that the line is not an energized electrical line.
- If any part of the skidsteer or the attachment contacts an energized electric line, the operator must not attempt to get off the skidsteer. Contact utility company to deenergize the line. The operator shall remain at the controls until utility company informs that it is safe to exit the machine.
- If any part of the skidsteer or the attachment contacts an energized electrical line, warn others to leave the area. Do not return to jobsite or allow anyone into area until utility company informs that it is safe to do so.

### Gas Line

Have underground utilities located before beginning work. In the US or Canada, call 811 (US) or 888-258-0808 (US and Canada). In countries that do not have a one call service, contact all local utility companies to have underground utilities located.

**⚠ WARNING**

**Prevent explosion.**

**Skidsteer and/or attachment contacting a gas line can result in an explosion.**

If you suspect a gas line has been damaged, take the following actions.

- Immediately shut off engine.
- Remove any ignition sources.
- Warn others that a gas line has been cut and that they should leave the area.
- Leave the area as quickly as possible.
- Immediately call the local emergency phone number and the utility company.
- Do not return to area until given permission by emergency personnel and utility company.

## 4.3 Before Operation

Before operating, check fuel level, engine oil level, engine coolant level and hydraulic fluid level. Test operation of operator on board switch.

**⚠ WARNING**

**Prevent explosion.**

**Diesel fuel can cause an explosion or fire. Do not refuel with engine running or near open fire. Never allow fuel, engine oil or hydraulic fluid to spill on hot machine components.**

**Clean up spilled fuel or oils immediately.**

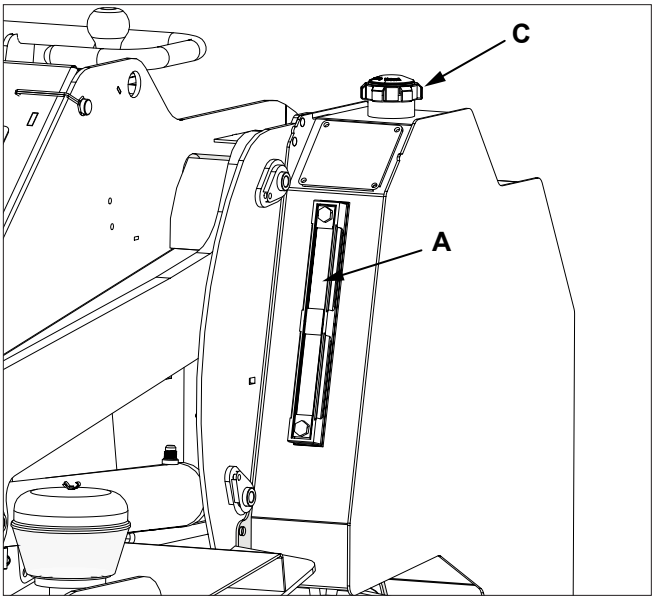
### Test Operator On Board Safety Switch

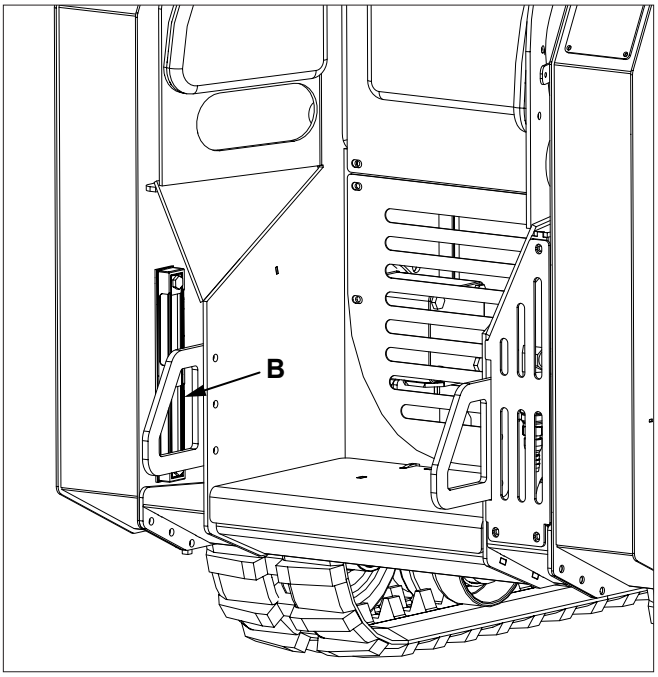
Before operation, test operator on board safety switch to verify it is functioning correctly.

1. Stand on operators platform and start engine. Do not disengage park brake.
2. Step off operators platform. The drive and boom functions should be disabled if functioning correctly. If drive and boom functions are not disabled, switch engine off and contact a Baumalight dealer. Do not operate skidsteer if operator on board switch is not functioning correctly.

## Fill Fuel Tank

1. Skidsteer must be parked on a level surface, lift arms fully lowered, engine stopped and key removed.

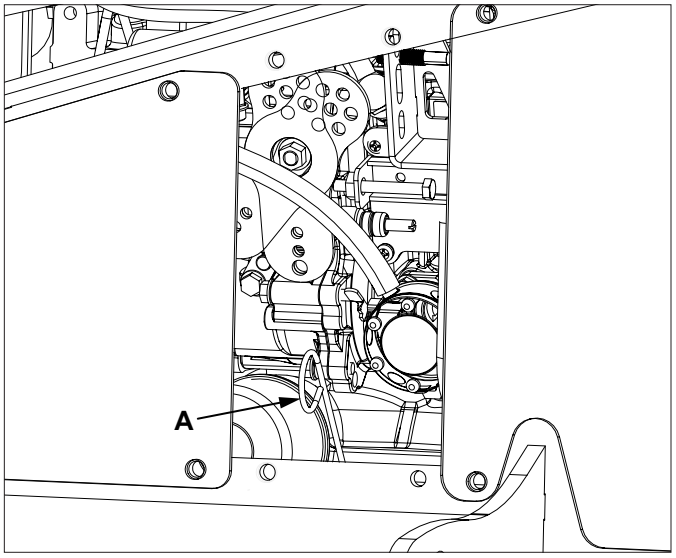


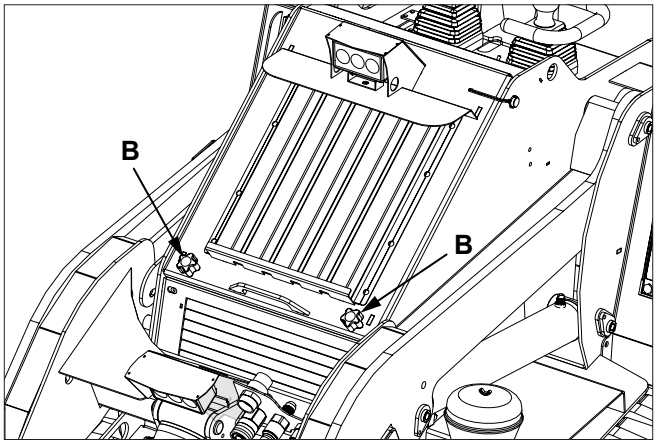

2. Check fuel level in upper level sight glass (A) and lower level sight glass (B).
3. Clean area around fuel tank filler neck.
4. Remove cap (C) from filler neck and add diesel fuel as needed.
5. Install cap (C) on filler neck.

## Check Engine Oil Level

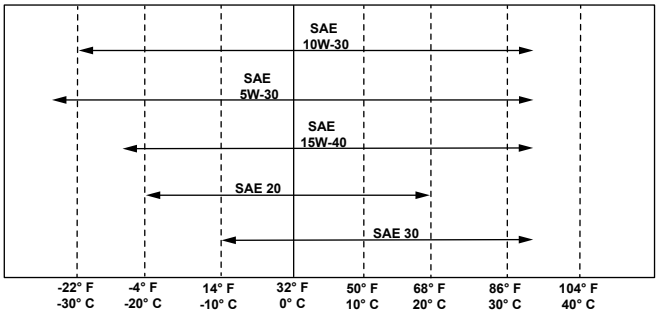
1. Skidsteer must be parked on a level surface, lift arms fully lowered, engine stopped and key removed.
2. Remove second engine side panel from the front on left side of skidsteer.
3. Clean around oil dipstick (A).




4. Pull out dipstick (A) and wipe metal end clean.
5. Slide dipstick fully into dipstick tube.
6. Pull dipstick out and look at metal end.
7. If oil level is low, loosen knobs (B) and tilt hydraulic cooler up. Engage pin to hold cooler in up position.
8. Clean around oil filler cap and remove cap (C).



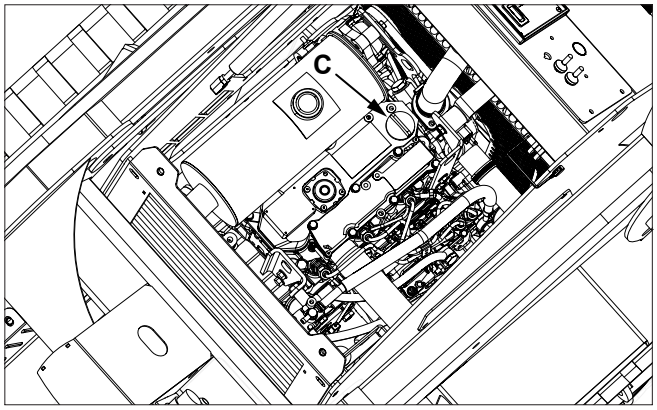

The OEM engine manufacturer specifies the oil be API service categories CD, CF, CF-4, CI-4 or higher. Change the type of engine oil according to the ambient temperature.




When using oil of different brands from the previous one, be sure to drain all the previous oil before adding the new engine oil. Refer to the OEM engine manual for detailed oil information and recommendations.

9. Slowly pour oil into the valve cover to raise oil level to the F (full) mark.

| NOTICE |
| --- |
| **Prevent engine damage.**<br><br>**Do not overfill crankcase.** |




10. Replace filler cap and dipstick.
11. Install engine side panel.
12. Close hydraulic cooler and tighten knobs (A).

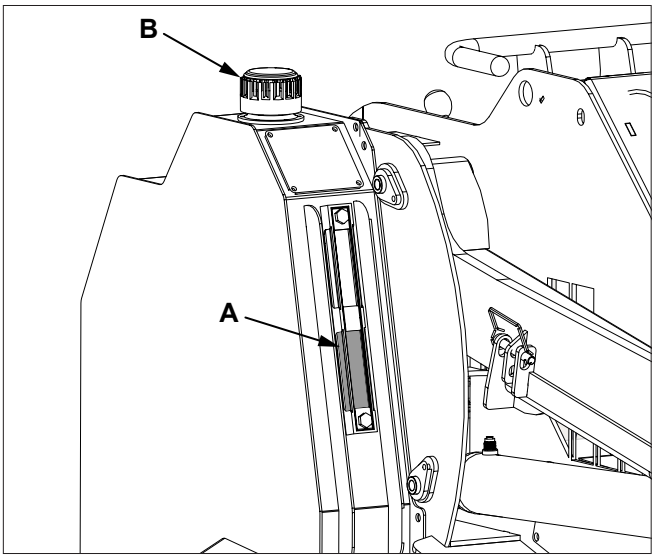
## Check Hydraulic Fluid Level

Check hydraulic fluid level before the engine is first started and every 10 hours. See below for recommended hydraulic fluid.

AW46: 32° to 95° F (0° to +35° C)
AW32: 14° to 68° F (-10° to +20° C)
MV22: -47° to 77° F (-44° to +25° C)

Attachments can raise or lower the hydraulic fluid level. If a new attachment is connected, hydraulic fluid needed to fill the lines, cylinders or motor will lower the hydraulic tank fluid level. Check fluid level each time a different attachment is connected.

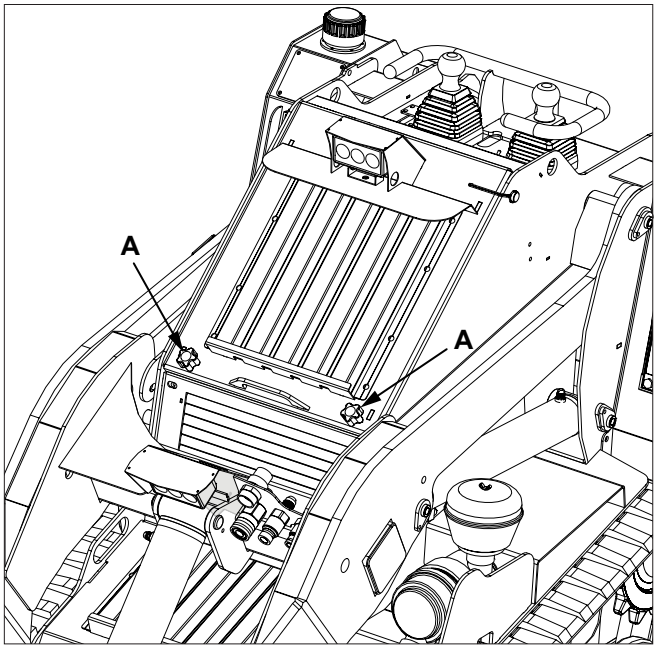
1. Skidsteer must be parked on a level surface, lift arms fully lowered, engine stopped and key removed.




2. Check fluid level in sight glass (A). Hydraulic fluid should fill approximately 50% of the sight glass. If the level is low, add enough fluid to raise it to the proper level.
3. Clean the area around the filler neck of the hydraulic tank.
4. Remove the cap (B) from filler neck and add hydraulic fluid as needed.
5. Install the cap (B) on filler neck.

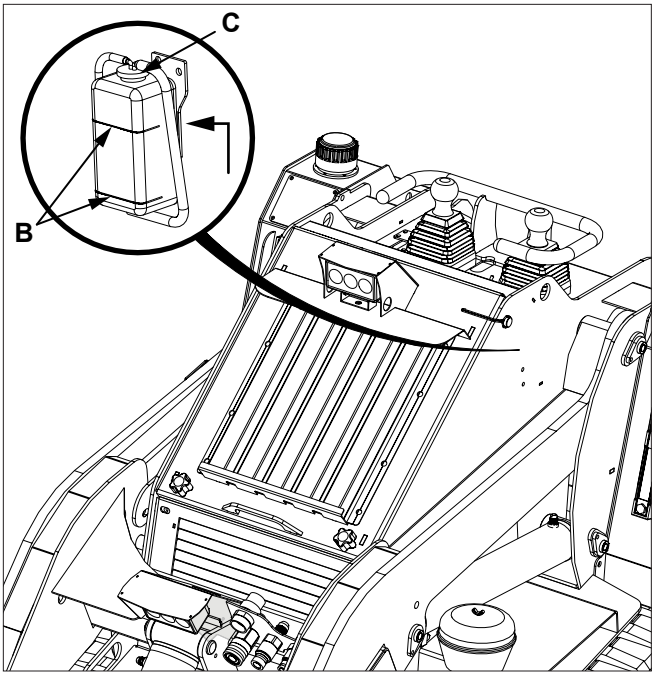
## Check Engine Coolant Level

1. Skidsteer must be parked on a level surface, lift arms fully lowered, engine stopped and key removed.
2. Loosen knobs (A) and tilt hydraulic cooler up. Engage pin to hold cooler in open position.




***Note:*** *Expansion tank is mounted above the engine radiator.*

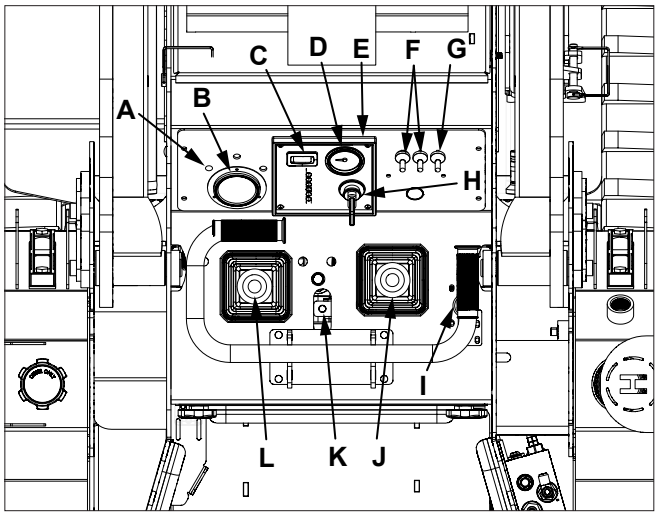
3. Check coolant level in expansion tank. Coolant should be between indicator marks (B).
4. If coolant level is low, remove expansion tank cap (C).
5. If expansion tank is empty, check coolant level in radiator.
6. Lift tank approximately 1 in. (25 mm) and remove from skidsteer.




7. Add a premixed coolant or a 50/50 mix of water and anti-freeze to proper level.
8. Install tank and cap.
9. Close hydraulic cooler.

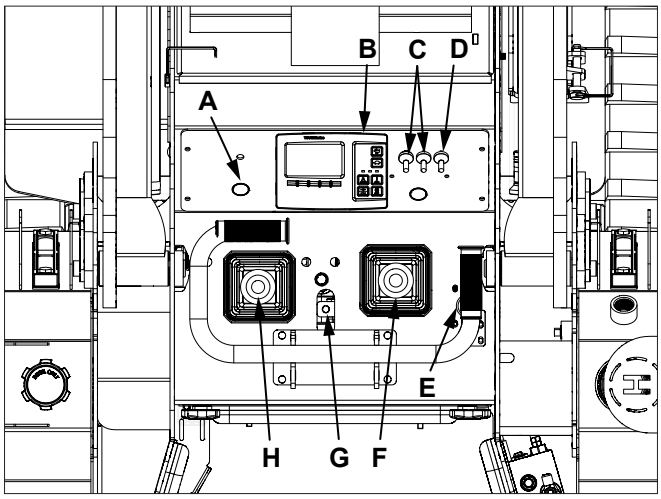
## 4.4 Machine Controls

### Skidsteers Equipped With Analog Control Panel



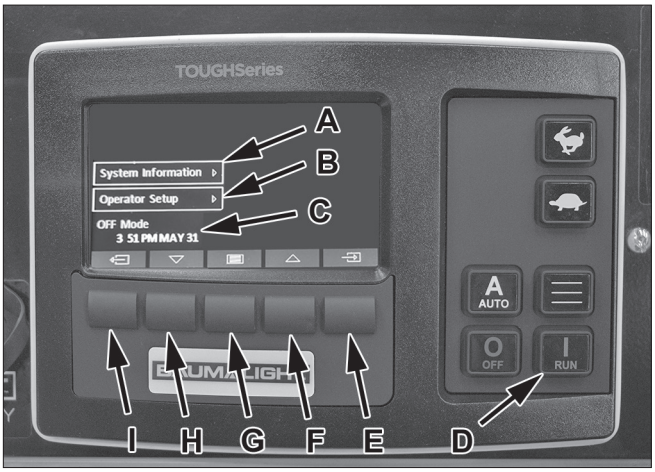

A. Altitude Compensation Lamp
B. Hydraulic Fluid Pressure
C. Hour Meter
D. Engine Tachometer
E. Engine Control Panel
F. Lights
G. Park Brake On/Off
H. Two-Speed Control - TRL630Y
I. Ignition Switch
J. Engine Throttle
K. Boom Joystick
L. Auxiliary Hydraulic Control
M. Drive Joystick

### Skidsteers Equipped With Digital Control Panel




A. Display Power Switch
B. Engine Control Panel
C. Lights
D. Park Brake On/Off
E. Engine Throttle
F. Boom Joystick
G. Auxiliary Hydraulic Control
H. Drive Joystick

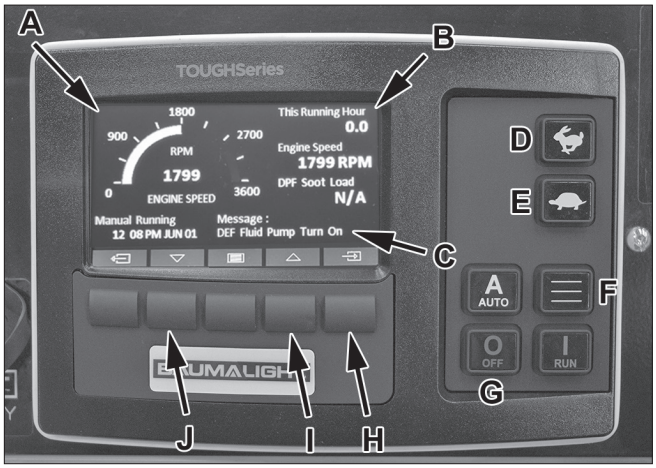
## Digital Control Panel - With Engine Off




***Note:*** *The auto button is not functional in this application.*

A. System Information - Press to view firmware version, serial number and events log.
B. Operator Setup - Press to view/edit display options,date and time settings.
C. Date Stamp.
D. Run - Press to start engine.
E. Enter Key/Select.
F. Scroll Up - Press to scroll up the menu.
G. Enter Settings Menu.
H. Scroll Down - Press to scroll down the menu.
I. Back Key - Press to go back one function.

## Digital Control Panel - With Engine On




***Note:*** *The auto button is not functional in this application. The rabbit/turtle buttons D and E are functional on the TRL630Y only.*

A. Engine RPM
B. Scrolling Engine Parameters
C. Event Message
D. Two-Speed - Press to select high speed.
E. Two-Speed - Press to select low speed.
F. Display Toggle - Press to show only the battery voltage, engine temperature and hydraulic oil temperature. Press H to continue scrolling.
G. Off - Press to stop engine.
H. Lock/Auto Scrolling Parameters (Changes back to show all parameters).
I. Scroll Up - Press to scroll up the engine parameters.
J. Scroll Down - Press to scroll down the engine parameters.

### Engine Throttle

Move the control rearward to increase the engine speed and forward to decrease speed.

### Park Brake

Move switch forward to engage the park brake. Move switch rearward to release park brake.

## Drive Joystick

It is recommended to make gradual sweeping turns.

Push joystick forward (A) to move skidsteer forward.

Pull joystick rearward (C) to move skidsteer rearward.

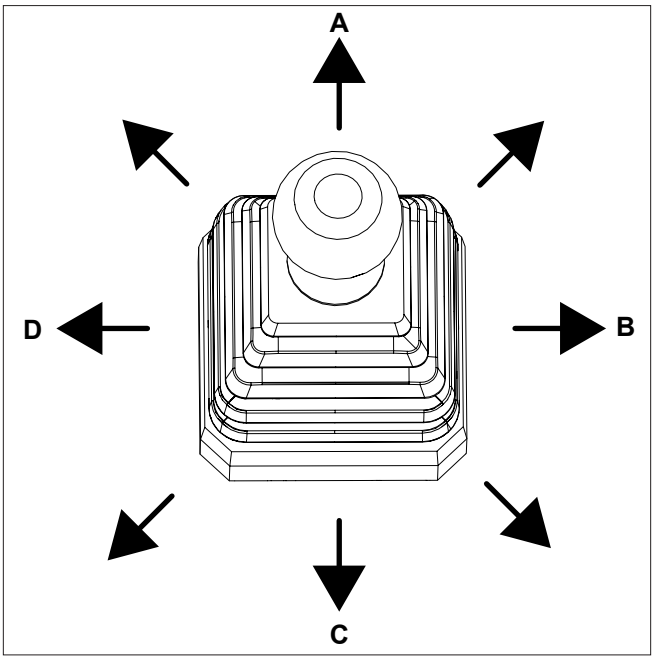
For gradual turns, push joystick forward/left or forward/right and skidsteer will slowly turn left or right. Pull rearward for reverse.

For tight turns, move joystick closer to right (B) or left (D) but never straight to (B) or (D) as there is a neutral zone to protect the engine from stalling on a surface with excessive traction.

Full throttle may be desired for experienced operators; inexperienced operators should not try to make tight turns.

The farther you move the joystick in any direction, the faster the skidsteer will move in that direction.

Release joystick or move to the center neutral position to stop movement.




## Boom Joystick

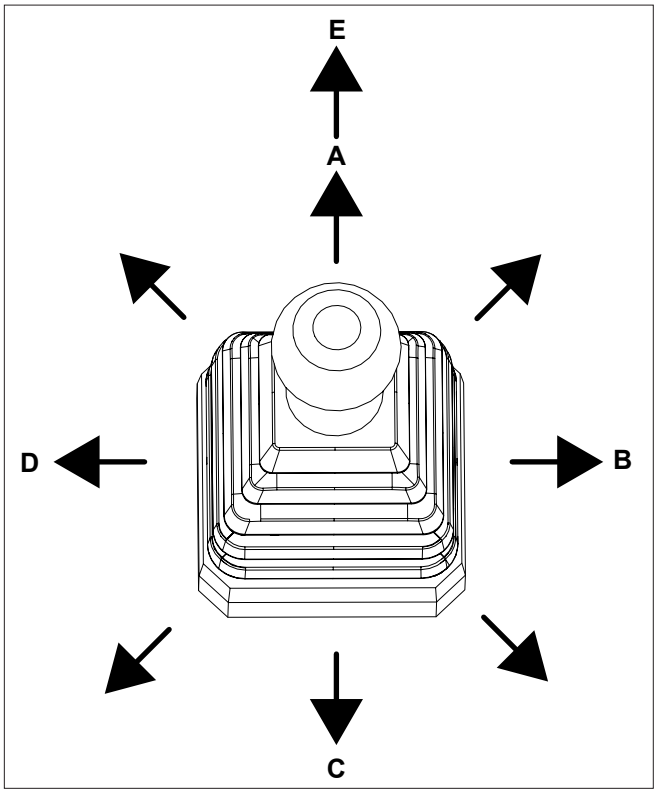
Move joystick forward (A) to lower lift arms.

Move joystick to the right (B) to tilt attachment forward.

Move joystick rearward (C) to raise lift arms.

Move joystick to the left (D) to tilt attachment back.

Push joystick fully forward into detent position (E) to allow a bucket or blade to follow the contour of the ground.



### Key Switch

Key switch has three positions: off, run, and start.

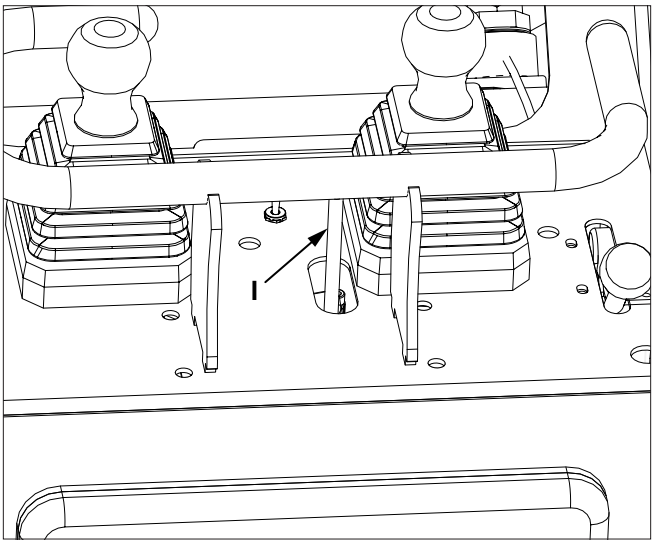
Rotate the key to the start position to start engine.

Release key when engine starts and it will move automatically to the run position.

Rotate key to off position to stop engine.

### Auxiliary Hydraulic Control

Auxiliary hydraulic control (I) provides a continuous hydraulic flow to attachment. Center position is off/locked. Move control forward for flow in one direction or rearward for flow in the other direction.




### Engine Preheat

Engine preheat is automatically controlled by the Lofa control panel.

Refer to OEM engine manual for detailed instructions.

## 4.5 Start And Stop Engine

**⚠ WARNING**

**Carbon monoxide hazard.**

**Always start and operate the engine in a well-ventilated area.**

**If in an enclosed area, vent the exhaust to the outside.**

**For more information go to www.P65Warnings.ca.gov.**

### Start Engine - Above 40° F (4° C)

1. Verify all controls are in neutral.
2. Move throttle lever to low-medium position.
3. Lofa Control Panel - Turn ignition switch to start position until engine starts. Release ignition switch when engine starts.

   Digital Control Panel - Move display power switch to on position. Press run button once, engine automatically preheats (if programmed) and then starts right after. If the engine doesn't start within 5 seconds of cranking, it will rest and retry. Three no start attempts would result in a crank failure.
4. Allow engine to run for 5 minutes to warm up.

***Note:*** *If Altitude Compensation lamp is illuminated after startup, a sensor has determined that the altitude is 2624 ft (800 m) or more. Fuel injection amount is decreased to control exhaust smoke. Because of the reduction in fuel, output is also decrease. Only apply medium to low load when operating at high altitudes.*

5. Move the throttle lever to desired setting.

### Start Engine - Below 40° F (4° C)

***Note:*** *This start procedure is for skidsteers equipped with Lofa engine control panels. Skidsteers equipped with digital control panels use the Start Engine - Above 40° F (4° C) regardless of ambient temperature.*

1. Verify all controls are in neutral.
2. Move throttle lever to medium position.

***Note:*** *Attempting to start a cold engine while standing on operators platform will draw more battery power since the drive and boom functions are enabled.*

3. While standing off of operators platform, turn ignition switch to run position for approximately 8 seconds to activate pre-heat.
4. When pre-heat lamp goes off, turn ignition switch to off.
5. Turn and hold ignition switch in the start position to begin cranking engine over. Never hold ignition switch in the start position for longer than 8-10 seconds. Engine should begin to run after about 3 seconds.
6. Release ignition when engine begins to run. If engine stalls, turn and hold ignition switch in the start position again to re-start.

**NOTICE**

**Prevent engine damage.**

**Do not turn ignition switch in the start position while engine is running or sputtering during a cold startup.**

If engine stalls a few times after releasing ignition switch, it may help to keep ignition switch in the start position a few seconds longer than normal to help engine along. Release ignition switch when engine starts.

7. Allow engine to run for 5 minutes to warm up.

***Note:*** *If Altitude Compensation lamp is illuminated after startup, a sensor has determined that the altitude is 2624 ft (800 m) or more. Fuel injection amount is decreased to control exhaust smoke. Because of the reduction in fuel, output is also decrease. Only apply medium to low load when operating at high altitudes.*

8. Move the throttle lever to desired setting.

### Stop Engine

1. Lower lift arms to ground.
2. Move controls to neutral position.
3. Engage park brake.
4. Run engine at low idle for five minutes.
5. Turn ignition switch to stop and remove key.

## 4.6 Attachments

**NOTICE**

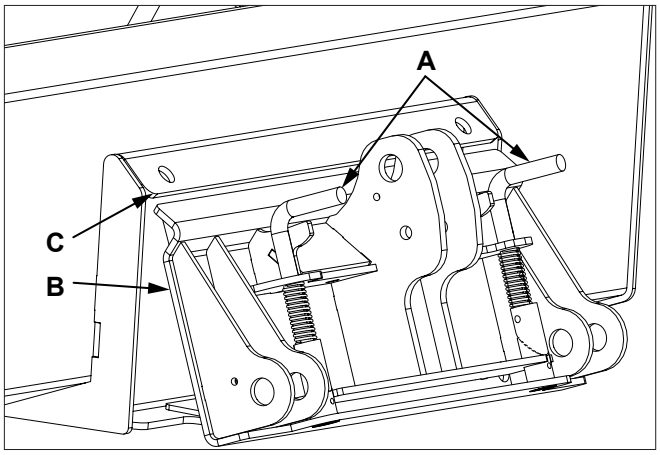
**Use only Baumalight approved attachments.**

**Attachments can change the stability and the operating characteristics of the skidsteer.**

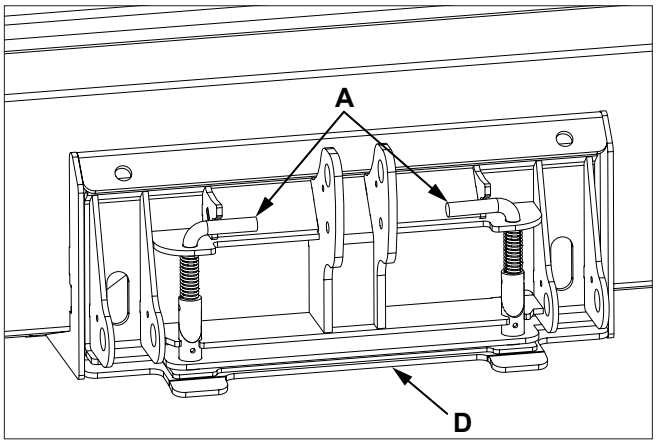
**The warranty of the skidsteer may be voided if used with unapproved attachments.**

### Connect Attachment

1. Before connecting the attachment, verify that the mount plates are free of any dirt or debris and that quick attach pins (A) rotate freely and are in the disengaged position as shown.
2. Start engine.
3. Tilt the mount plate (B) forward.
4. Position mount plate into the upper lip (C) of the attachment receiver plate.




5. Raise the lift arms while tilting back the mount plate at the same time. The attachment should be raised enough to clear the ground, and the mount plate should be tilted all the way back.
6. Engage park brake and stop engine.
7. Engage the quick attach pins (A). Verify that pins are fully seated in the attachment receiver plate (D). If the pins do not rotate to the engaged position, the mount plate is not fully aligned with the holes in the attachment receiver plate. Check the receiver plate and clean it if necessary.




**⚠ WARNING**

**Prevent death or serious injury.**

**Attachment could fall off of the skidsteer if pins are not fully seated through attachment mount plate.**

**Verify quick attach pins are fully seated in the attachment mount plate.**

### Connect Hydraulics

**⚠ WARNING**

**Pressurized fluids can penetrate the skin.**

**Hydraulic hoses can fail from age, damage and exposure.**

**Use body and face protection while searching for leaks. A tiny, almost invisible leak can penetrate the skin, thereby requiring immediate medical attention.**

**Use wood or cardboard to detect hydraulic leaks, never use your hands.**

**⚠ WARNING**

**Burn hazard.**

**Hot and high pressure hydraulic oil.**

**Allow oil to cool before touching components.**

If the attachment requires hydraulics for operation, connect hydraulic hoses as follows:

1. Engage park brake and stop engine.
2. Remove protective covers from hydraulic couplers. Verify that hydraulic connectors are clean.
3. Move auxiliary hydraulic lever into forward detent position and connect male connector into female connector on the skidsteer.
4. Move auxiliary hydraulic lever into rearward detent position and connect female connector onto male connector on the skidsteer.
5. If attachment has a case drain hose, connect hose to case drain coupler on skidsteer.
6. Confirm that connections are secure by pulling on the hoses.

### Disconnect Attachment

1. Lower attachment to the ground
2. Engage park brake and stop engine.
3. Disengage quick attach pins by turning them to the outside.
4. If attachment uses hydraulics, move the auxiliary hydraulics lever forward, back and forth, and back to neutral to relieve pressure at hydraulic couplers.
5. If attachment uses hydraulics, disconnect hydraulic couplers.
6. Install protective covers on hydraulic couplers.
7. Start engine, tilt the mount plate forward, and back skidsteer away from the attachment.

## 4.7 Transporting

**WARNING**

**Prevent serious injury or death.**

**Do not operate or drive the skidsteer on roadways.**

**WARNING**

**Tip over hazard.**

**When loading onto a trailer, back onto trailer for better weight balance to avoid tip over.**

1. Raise attachment slightly off ground.
2. Travel at a reasonable and safe speed.

When transporting the skidsteer on a trailer, use the following procedure:

1. Lower lift as low as possible.
2. Back skidsteer onto trailer.
3. Lower lift arms to trailer deck.
4. Engage park brake and stop engine.
5. Secure skidsteer to trailer with the proper size and load rated tie downs.

## 4.8 Lift Arm Lock

**WARNING**

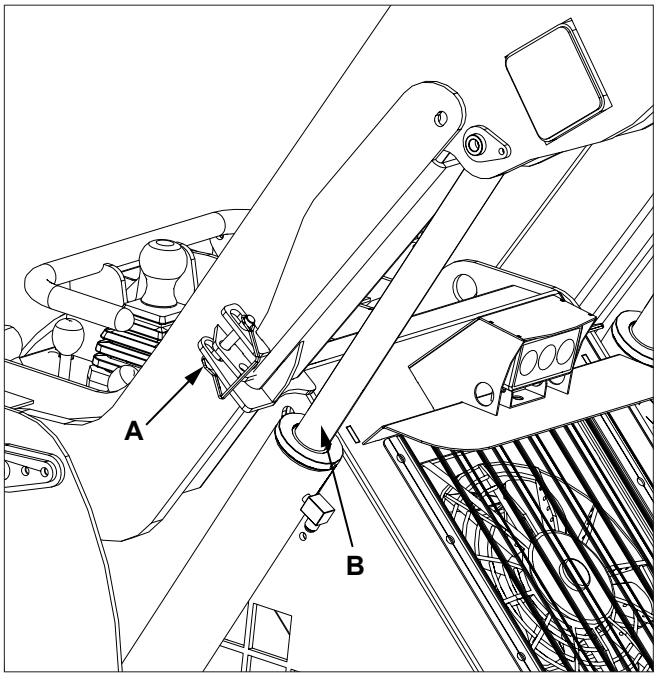
**Crushing hazard.**

**Raised unsupported lift arms can fall, resulting in death or serious injury.**

**Never enter the area under raised lift arms.**

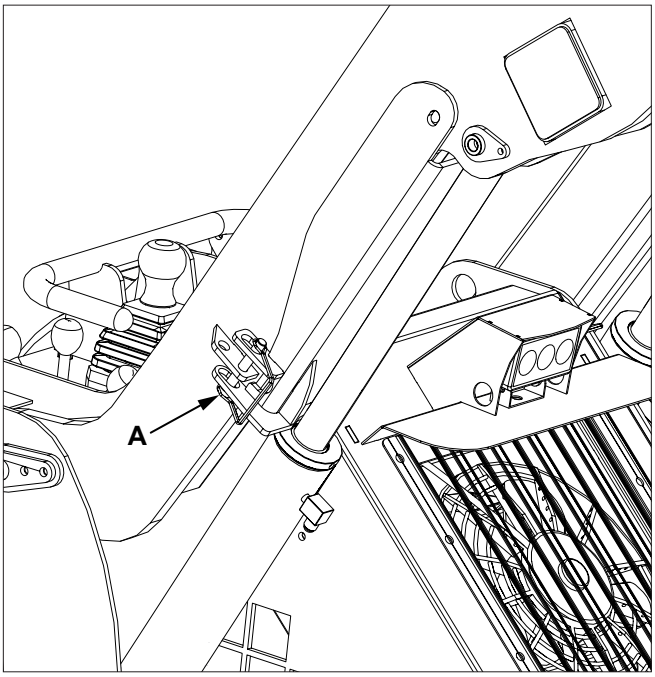
### Engage Lift Arm Lock

1. Start engine.
2. Verify the area is clear of bystanders and obstructions, and fully raise lift arms.
3. Engage park brake, shut off engine and remove key.
4. Remove quick lock pin (A) and pivot lift arm lock down until resting on cylinder ram (B).




*Lift Arm Lock Disengaged*

5. Install quick lock pin (A) in lower hole as shown in Lift Arm Lock Engaged illustration.




*Lift Arm Lock Engaged*

6. Lower lift arms until lift arm lock is tight against cylinder barrel.
7. Stop engine and remove key.

### Disengage Lift Arm Lock

1. Start engine.
2. Verify the area is clear of bystanders and obstructions.
3. Fully raise lift arms.
4. Shut off engine and remove key.
5. Pivot lift arm lock up and attach to lift arm with quick lock pin (A) in upper hole as shown in Lift Arm Lock Disengaged illustration.
6. Lower lift arms to ground.
7. Shut off engine and remove key.

## 4.9 First Time User Tips

First, operate all functions in a clear area with throttle at low idle to get a good feel for the controls.

Move the skidsteer slowly until you have a better feel how much the unit can take.

Each operator must experiment to find a technique that works for them in their application.

## 4.10 Operation

### Slope Operation

Operate up and down slopes with the heavy end of the skidsteer uphill. Some attachments, no attachment or an empty bucket will make the rear of the skidsteer the heavy end. A full bucket will make the front of the skidsteer the heavy end.

Most attachments will make the front of skidsteer the heavy end.

Raising lift arms on a slope will affect stability. Keep lift arms in the lowered position when on slopes.

Remove rocks, tree limbs, etc from the work area. Watch for holes, ruts, or bumps.

Attachments will change the stability and the operating characteristics of the skidsteer. Contact your dealer to verify attachment is compatible with your skidsteer.

Do not make sudden changes in speed or direction.

Avoid starting or stopping on a slope. If the skidsteer loses traction, slowly move straight down the slope. Avoid turning on slopes. If turning is necessary, turn slowly and keep the heavy end of the skidsteer uphill.

Do not operate near drop off or ditches.

When parking on a hillside or slope, lower attachment to the ground and engage park brake.

### General Operation

1. Start engine.
2. Disengage park brake.
3. Pull joystick to raise attachment slightly off the ground.
4. Move throttle to desired position.
5. Operate drive control to move skidsteer.
6. When operation is completed, lower lift arms to place attachment on the ground.
7. Move throttle to low idle position.
8. Engage park brake.
9. Move all controls to neutral position.
10. Allow engine to run for five minutes to cool down.
11. Turn ignition to stop position and remove key.

**⚠ WARNING**

**Crush hazard.**

**Operation on a slope can result in machine tip over.**

**Carry attachments low and operate with the heavy end uphill.**

**See Slope Operation in this section.**

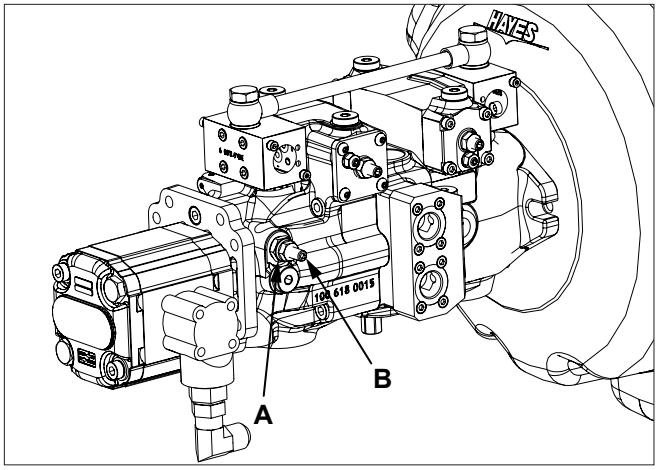
### Two-Speed Operation - TRL630Y Only

On skidsteers with an analog control panel, toggle momentary switch on panel to select low speed or high speed. Skidsteer will switch to low speed when the operator steps off the operator platform and when
the parking brake is cycled off then on.

On skidsteers with a digital control panel, press turtle button to select low speed or rabbit button to select high speed. Skidsteer will switch to low speed when the operator steps off the operator platform and when the parking brake is cycled of then on.

## 4.11 Adjust Ground Speed/Drive Power

The ground drive hydraulic pump is factory set to deliver a equal balance between ground speed and drive power. If more speed/less power, or less speed/more power from the factory setting is desired, use the following steps to adjust pump.




**⚠ WARNING**

**Prevent death or serious injury.**

**Before performing adjustments:**

- **Park machine on firm, level surface.**
- **Lower lift arms to ground.**
- **Engage park brake.**
- **Turn engine off and remove key.**
- **Place "Do Not Operate" tag on control panel.**

1. Operate skidsteer to bring hydraulic fluid to normal operating temperature.
2. Lower attachment to the ground.
3. Engage park brake, shut off engine and remove key.
4. Open/remove covers to access hydraulic pump.

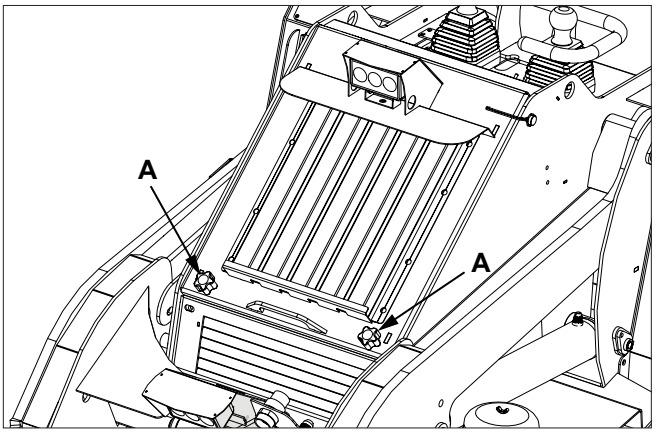
***Note:*** *Increasing ground speed will reduce the drive power and may result in the engine stalling under load conditions. Adjust in small increments until desired speed/power is achieved.*

5. Hold hex screw (B) and loosen locknut (A).
6. Hold locknut (A) with wrench and rotate hex screw (B) clockwise to increase ground speed, or counter clockwise to decrease ground speed..
7. Hold hex screw (B) and tighten locknut (A), close/install covers and test operation.

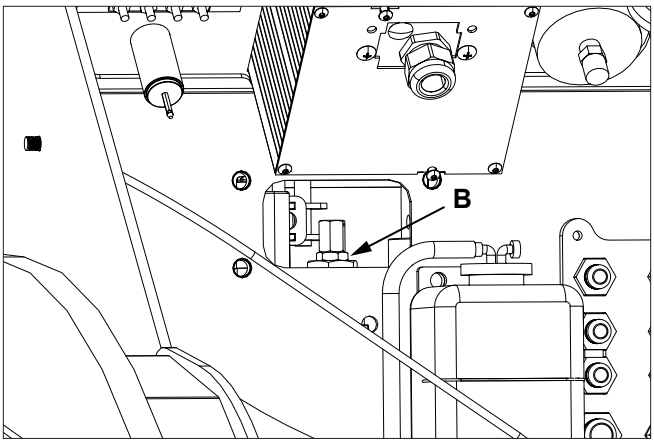
## 4.12 Adjust Hydraulic Relief Valve

If engine stalls when simultaneously pushing into a pile and raising boom, relief valve may need to be adjusted.

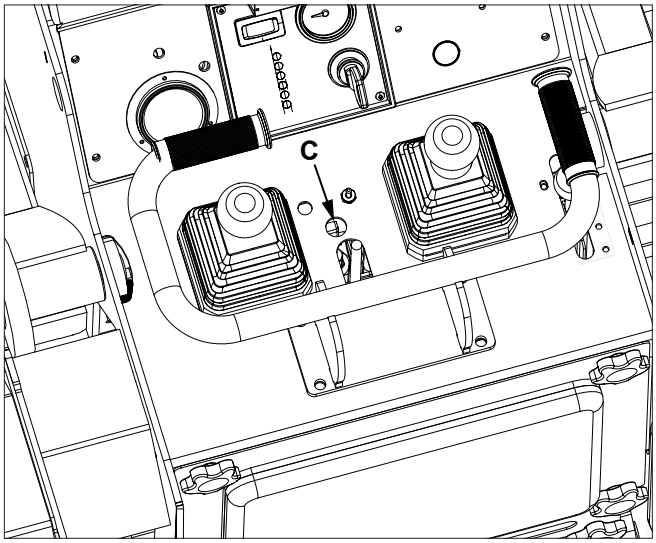
1. Loosen knobs (A) and pivot hydraulic oil cooler upward. Engage pin to hold cooler in open position.




2. Remove access cover on rear of engine compartment and loosen jam nut (B) on boom valve with 17 mm wrench.




3. Insert 5 mm hex wrench down through access hole (C) on control panel and into hex screw on boom valve.




4. Hold locknut (B) with wrench and rotate hex adjustment screw 1/4 turn counter clockwise. Tighten locknut (B), install cover, close oil cooler, start engine and test operation.

5. Repeat step 4 again until engine does not stall when pushing into a pile and raising boom.

6. For using other attachments, you will need to set relief back to 3000 psi for maximum performance for those attachments.

# 5 SERVICE AND MAINTENANCE

We design many of our products using industry-standard parts that are widely available from local supply stores.

Many replacement parts such as bearings, belts, seals, touch-up paint and cutting teeth can often be found through local suppliers, not just from Baumalight.




## 5.1 Safety

**⚠ WARNING**

**Prevent death or serious injury.**

1. **Park machine on firm, level surface.**
2. **Engage park brake.**
3. **Verify all controls are in neutral.**
4. **Stop engine and remove key.**

**⚠ WARNING**

**Prevent death or serious injury.**

**Raised unsupported lift arms can fall, resulting in death or serious injury.**

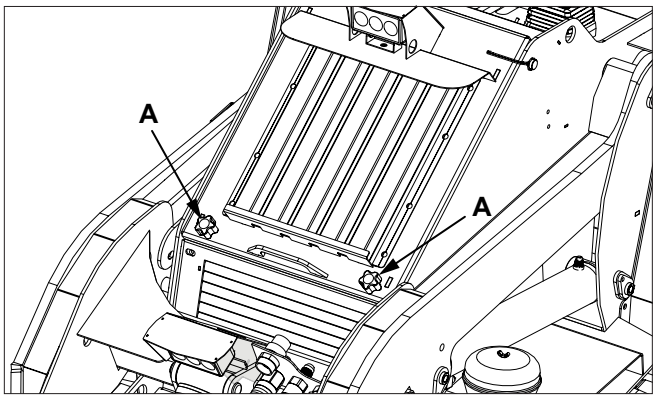
**Never enter the area under raised lift arms.**

Refer to the engine OEM manual for detailed operation, service interval and maintenance information.

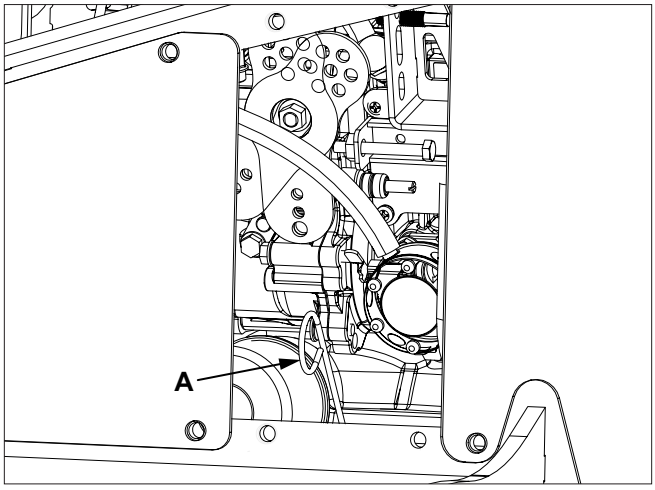
## 5.2 Daily Or Every 10 Hours

### Check Engine Oil Level

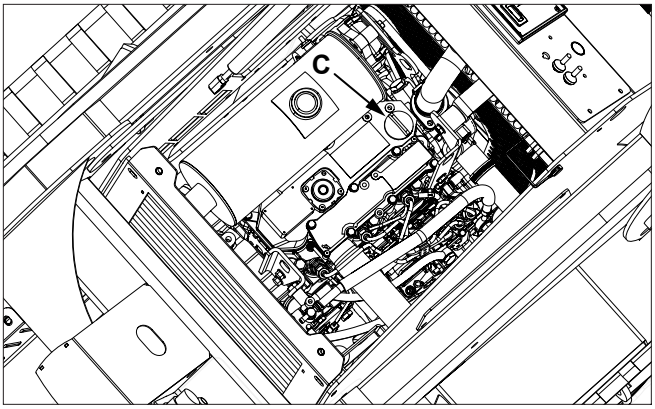
1. Skidsteer must be parked on a level surface, park brake engaged, lift arms fully lowered, engine stopped and key removed.
2. Loosen knobs (A) and pivot hydraulic oil cooler upward. Engage pin to hold cooler in open position.
3. Remove second engine side panel from the front on left side of skidsteer.




4. Clean around oil dipstick (B).

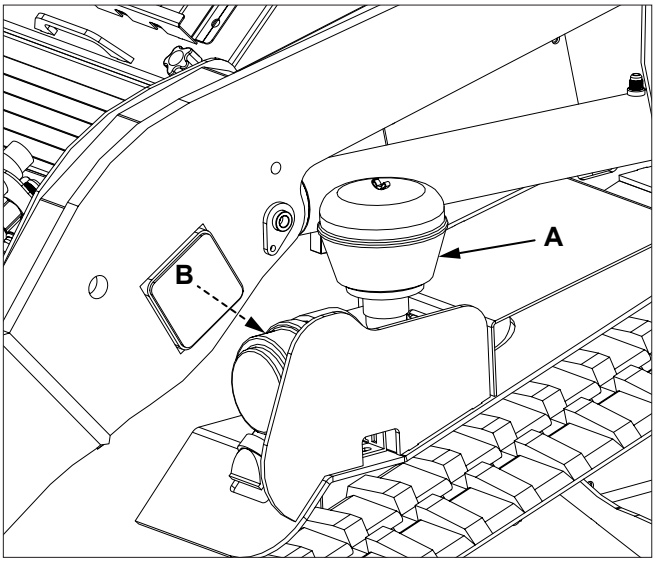



5. Check oil level on dipstick (B). Oil level should be at full mark on dipstick. Add OEM specified engine oil as necessary through fill port (C) on valve cover.




## Check Engine Air Filter And Precleaner

Check air filter pre cleaner (A) and air filter (B) before startup and every 10 hours. Remove and clean as needed.




## Check Hydraulic Hoses

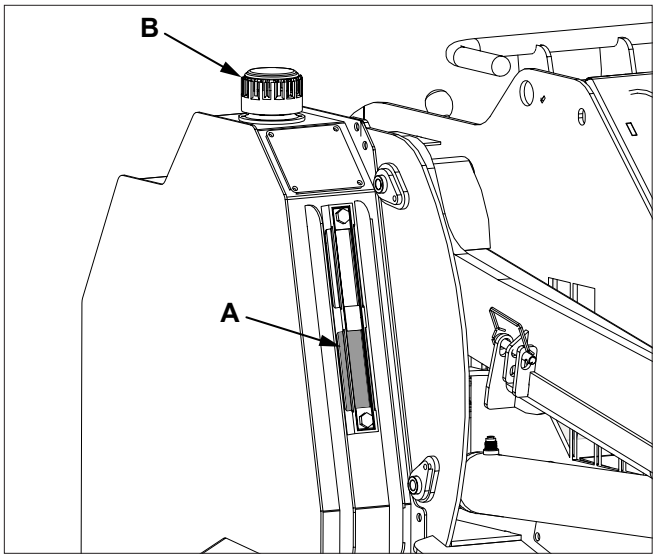
1. Skidsteer must be parked on a level surface, park brake engaged, lift arms fully lowered, engine stopped and key removed.
2. Check hydraulic hoses for wear and damage before startup and every 10 hours. Replace worn or damaged hoses.

## Check Park Brake Operation

Check park brake operation before startup and every 10 hours or more often when conditions warrant.

## Check Hydraulic Fluid Level

1. Skidsteer must be parked on a level surface, park brake engaged, lift arms fully lowered, engine stopped and key removed.

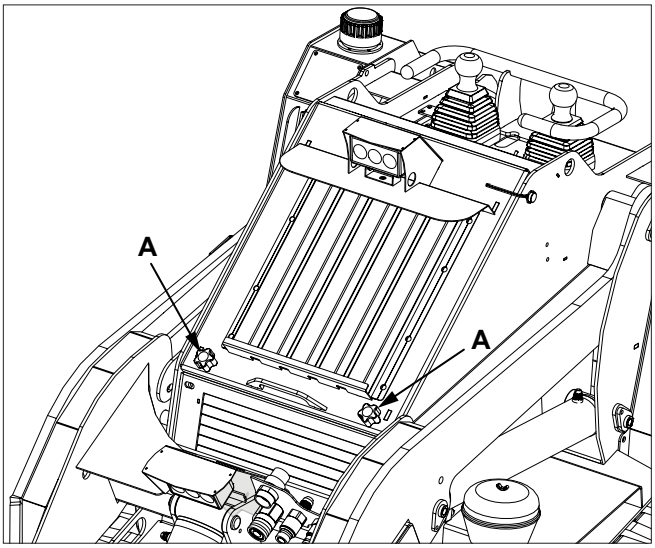



2. Check fluid level in sight glass (A). Hydraulic fluid should fill approximately 50% of the sight glass. If the level is low, add enough fluid to raise it to the proper level. See below for recommended hydraulic fluid.

   AW46: 32° to 95° F (0° to +35° C)
   AW32: 14° to 68° F (-10° to +20° C)
   MV22: -47° to 77° F (-44° to +25° C)
3. Clean the area around the filler neck of the hydraulic tank.
4. Remove the cap (B) from filler neck and add hydraulic fluid as needed.
5. Install the cap (B) on filler neck.

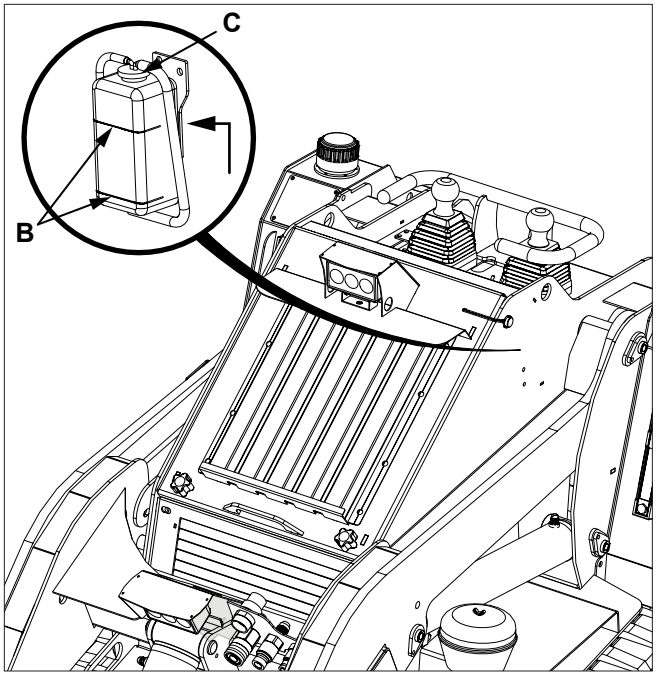
## Check Coolant Level

1. Skidsteer must be parked on a level surface, park brake engaged, lift arms fully lowered, engine stopped and key removed. Allow engine to cool to ambient temperature.
2. Loosen knobs (A) and pivot hydraulic oil cooler upward. Engage pin to hold cooler in open position.

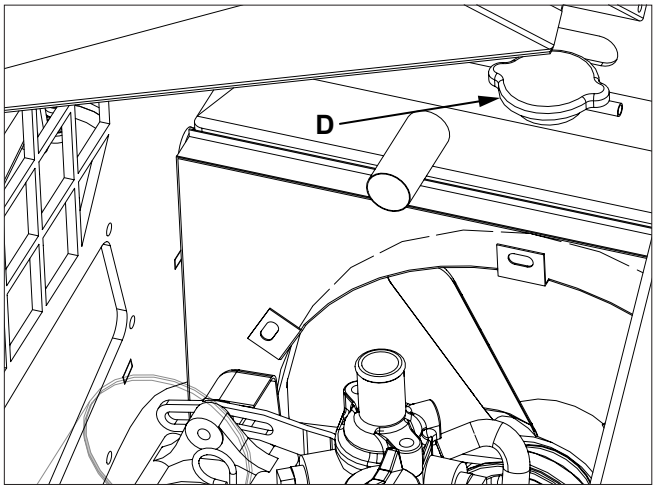



***Note:*** *Expansion tank is mounted above the engine radiator.*

3. Check coolant level in expansion tank. Coolant should be between indicator marks (B).
4. If coolant level is low, remove expansion tank cap (C).
5. Lift tank approximately 1 in. (25 mm) and remove from skidsteer.



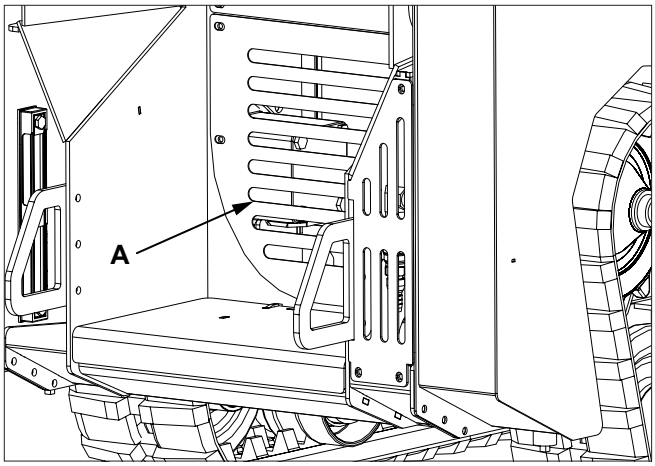

6. Add a premixed coolant or a 50/50 mix of water and anti-freeze to proper level.
7. Install tank and cap.
8. Close hydraulic cooler.
9. If expansion tank is empty, check coolant level in radiator. Remove radiator cap (D) to check coolant level. Maintain coolant level at bottom of filler neck.

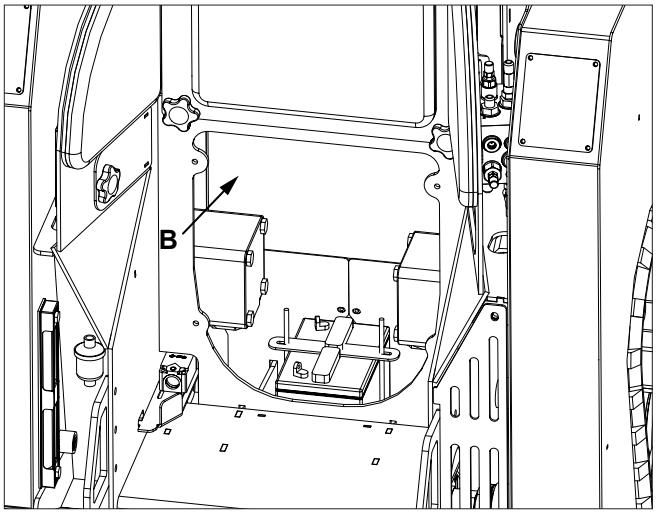


## Check Radiator Intake Screen And Radiator

Remove and check engine radiator intake screen (A) and radiator (B) for dirt and debris before startup and every 10 hours.

Clean with compressed air or spray wash if required.

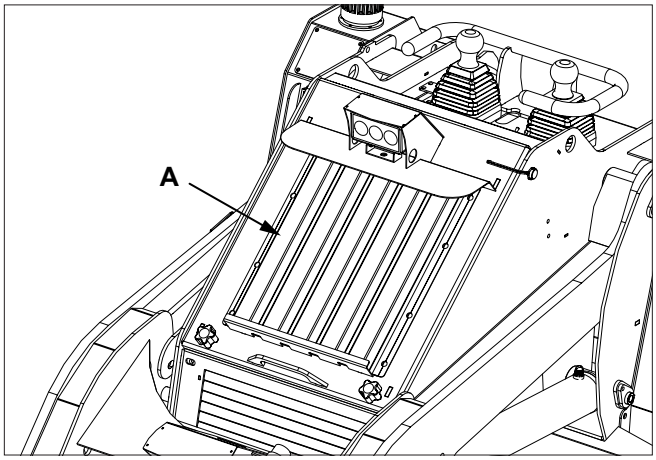



## Check Hydraulic Fluid Cooler

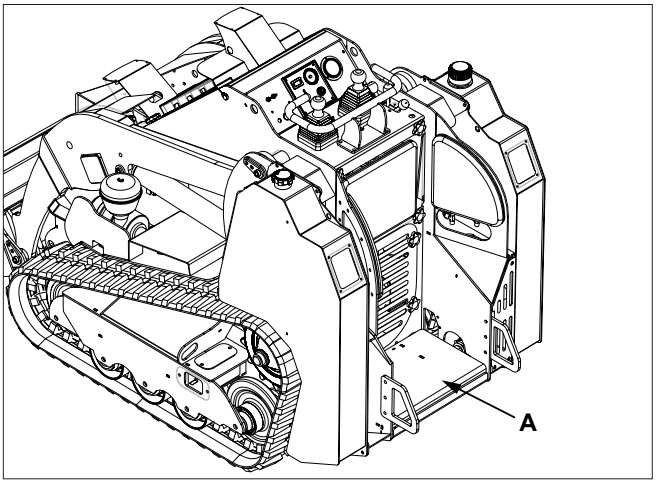
Check hydraulic fluid cooler screen (A) for dirt and debris before startup and every 10 hours.

Clean with compressed air or spray wash if required. Do not damage fins with high pressure air or water.



## Check Operator On Board Safety Switch

1. Lower lift arms to ground, stop engine. Test switch operation before startup and every 10 hours.
2. Stand on operators platform (A) and start engine.




3. Step off operators platform. The drive and boom functions should be disabled if safety switch functioning correctly. If drive and boom functions are not disabled, switch engine off and contact a Baumalight dealer. Do not operate skidsteer if operator on board safety switch is not functioning correctly.

## Inspect Tracks

Lower lift arms to ground, stop engine and remove key. Inspect tracks for wear and damage before startup and every 10 hours.

## General Inspection

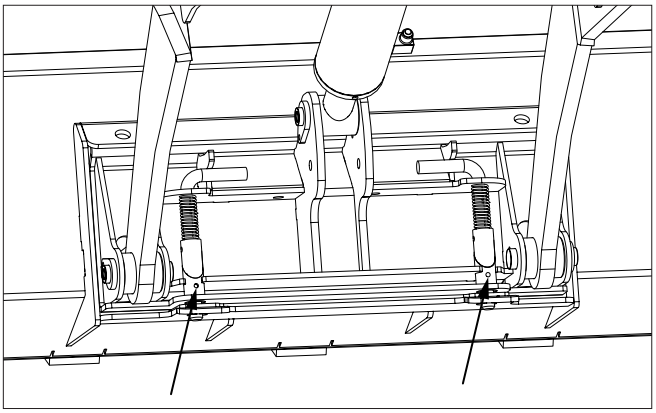
Lower lift arms to ground, stop engine and remove key. Inspect skidsteer for damage and worn parts. Repair or replace parts as needed.

## 5.3 Every 20 Hours

### Lubrication

Skidsteer must be parked on a level surface, park brake engaged, lift arms fully lowered, engine stopped and key removed.

Pump grease into grease into fittings on quick attach latch pins every 20 hours.



## 5.4 Initial 50 Hours

Change engine oil and oil filter after initial 50 hours, then every 250 hours. See Every 250 Hours for procedure.

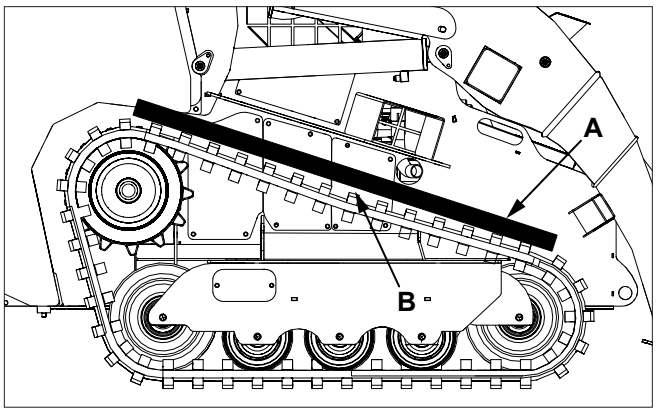
Check and adjust engine cooling fan belt after initial 50 hours, then every 250 hours. See Every 250 Hours for procedure.

## 5.5 Every 100 Hours

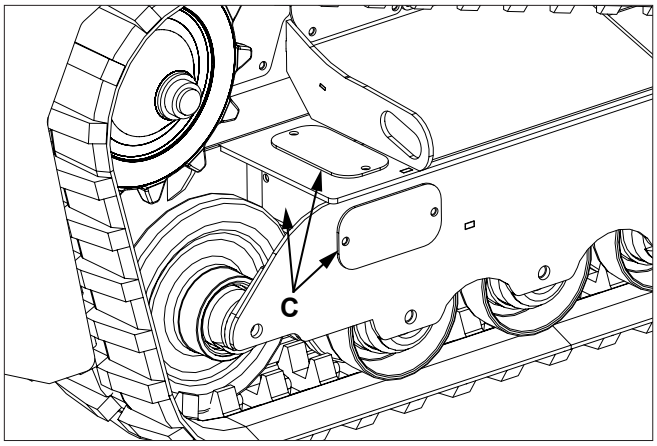
### Track Tension

Check track tension every 100 hours and adjust as needed.

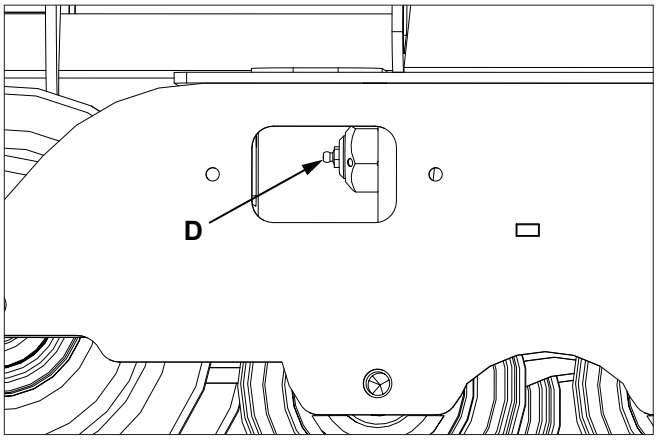
1. Skidsteer must be parked on a level surface, park brake engaged, lift arms fully lowered, engine stopped and key removed.
2. Place a straight edge (A) across top of track as shown.
3. Measure dimension (B) between bottom of straight edge and top of track. Track tension is properly adjusted when dimension (A) is no more than 1 in. (25 mm) when measured near the center of track.




4. If adjustment is necessary follow steps 5-7.
5. Remove one of the three covers (C) to access grease fitting.



6. Pump grease into fitting (D) to adjust track tension so dimension (B) is no more than 1 in. (25 mm). Too much tension will stretch the track.

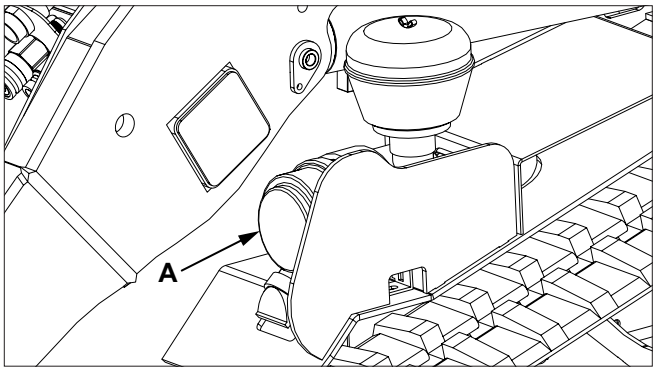



7. Install covers (C).

### Replace Air Filter

Replace air filter every 100 hours if operating in dusty conditions.

1. Skidsteer must be parked on a level surface, park brake engaged, lift arms fully lowered, engine stopped and key removed.
2. Open air filter housing (A) and remove filter element.



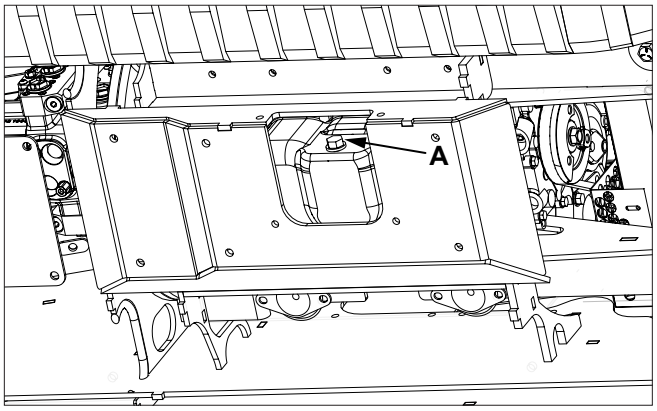

3. Clean inside of housing and end cap with a damp rag.
4. Insert new filter element and install end cap.

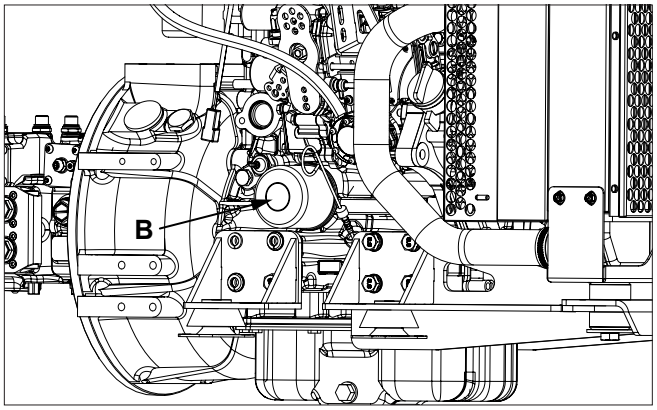
## 5.6 Every 250 Hours

### Change Engine Oil And Filter

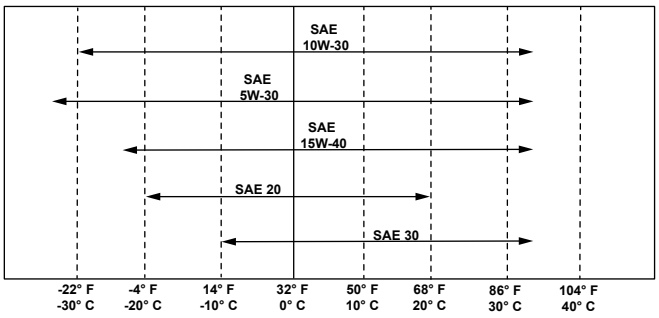
Skidsteer must be parked on a level surface, park brake engaged, lift arms fully lowered, engine stopped and key removed.

Remove oil plug (A), drain engine oil and replace filter (B) every 250 hours. Install plug (A), new filter (B) and proper quantity of engine oil.




The OEM engine manufacturer specifies the oil be API service categories CD, CF, CF-4, CI-4 or higher. Change the type of engine oil according to the ambient temperature.




Refer to the OEM engine manual for detailed oil information and recommendations.

### Check Air Intake Hoses

Check air intake hoses for wear and damage. Tighten clamp if loose. Replace worn, damaged or leaking parts.

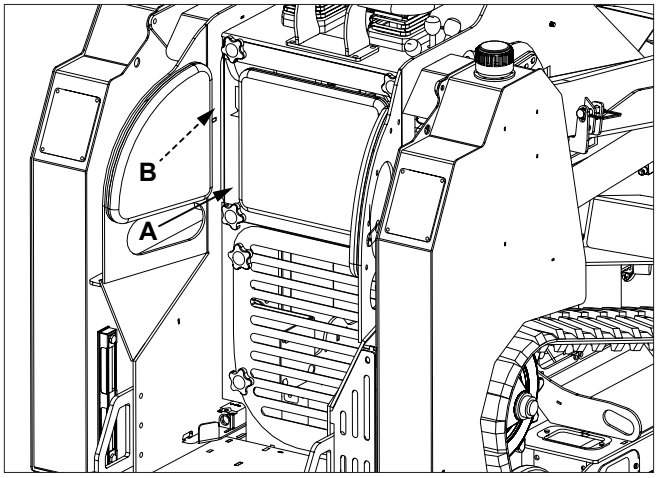
### Check Engine Fan Belt

Skidsteer must be parked on a level surface, park brake engaged, lift arms fully lowered, engine stopped and key removed. Check belt for wear and damage. See engine operators manual.

## 5.7 Every 500 Hours

### Replace Fuel Filter

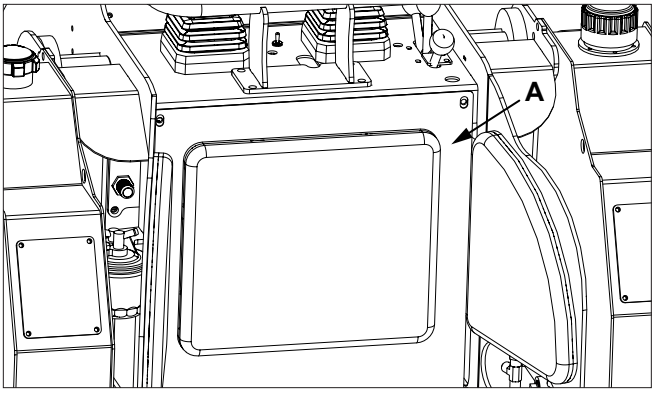
1. Skidsteer must be parked on a level surface, park brake engaged, lift arms fully lowered, engine stopped and key removed.
2. Loosen knobs and remove cover (A).
3. Fuel filter (B) is located behind panel. Replace filter every 500 hours.



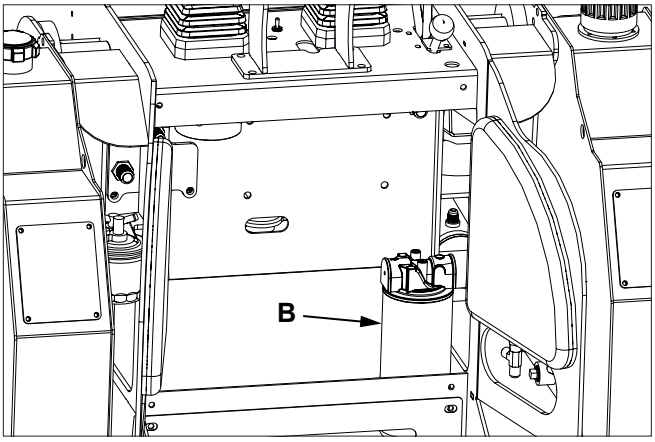

### Replace Hydraulic Filter

Replace hydraulic filter every 500 hours.

1. Skidsteer must be parked on a level surface, park brake engaged, lift arms fully lowered, engine stopped and key removed. Allow hydraulic system to cool to ambient temperature.
2. Loosen knobs and remove cover (A).




3. Close valve between tank and hydraulic filter head.
4. Remove and replace hydraulic filter (B).




5. Install cover (A), open valve and check hydraulic fluid level. Add hydraulic fluid if necessary. AW32 is recommended for general conditions and climates. MV22 is recommended for colder climates.

## 5.8 Every 1000 Hours

### Change Hydraulic Fluid And Filter

Change hydraulic fluid and replace filter every 1000 hours. Change fluid and replace filter every 500 hours if operating in extreme conditions.

**NOTICE**

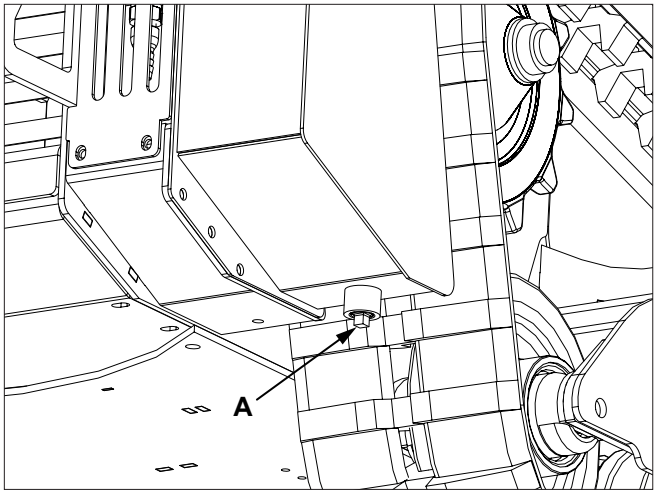
**Dispose of waste properly.**

**Improper disposal of waste can harm the environment.**

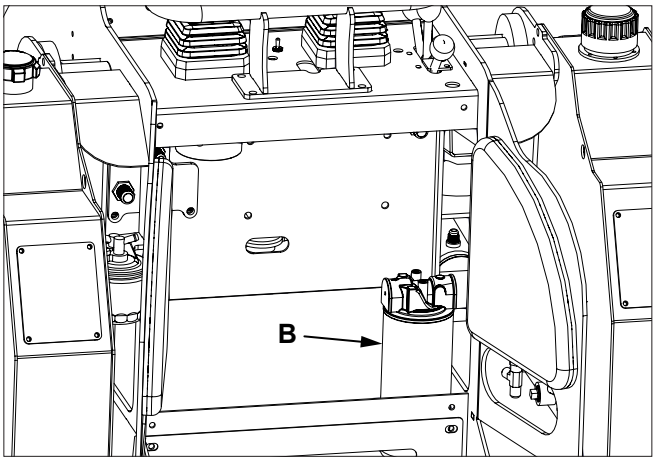
**Use leak proof container when draining fluids. Do not use food or beverage containers.**

**Contact your local environmental or recycling center for the proper way to recycle or dispose of waste.**

1. Skidsteer must be parked on a level surface, park brake engaged, lift arms fully lowered, engine stopped and key removed.
2. Remove drain plug (A) and drain hydraulic fluid into a suitable container. Install plug after draining.

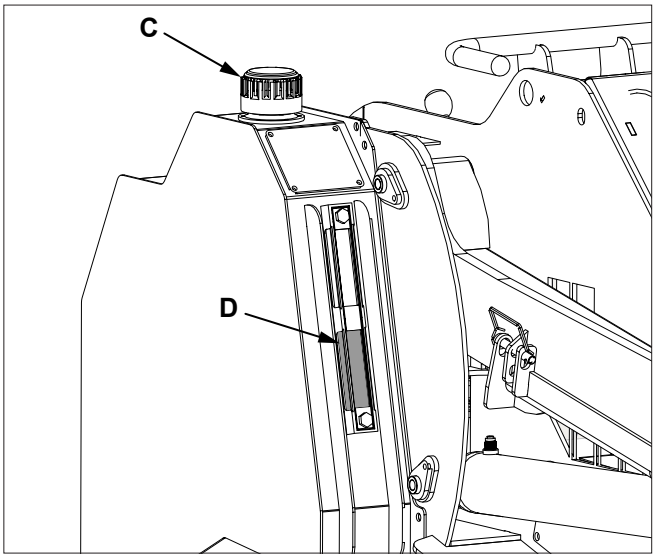


3. Remove cover, remove and replace hydraulic filter (B).




4. Install cover, remove cap (C) and add hydraulic fluid. Hydraulic reservoir capacity is 8.5 gal (32 L). Hydraulic fluid should fill approximately 50% of sight glass (D). See below for recommended hydraulic fluid.

   AW46: 32° to 95° F (0° to +35° C)
   AW32: 14° to 68° F (-10° to +20° C)
   MV22: -47° to 77° F (-44° to +25° C)




## 5.9 As Required

### Check Battery

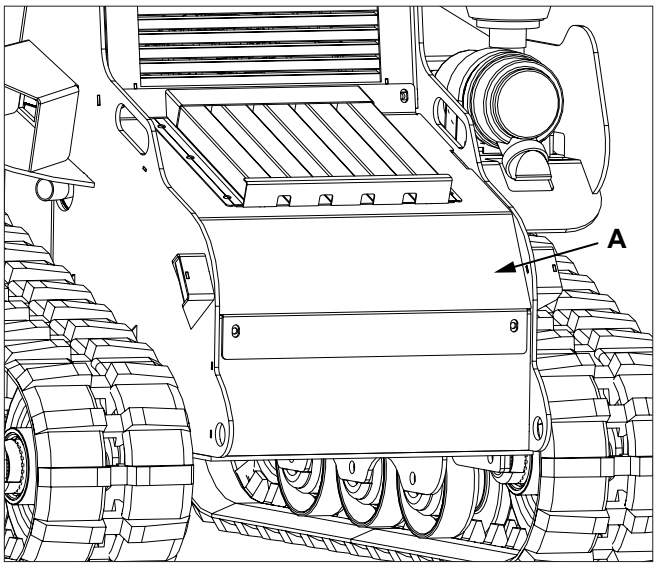
Check battery as needed. Keep battery clean and terminals free of corrosion.

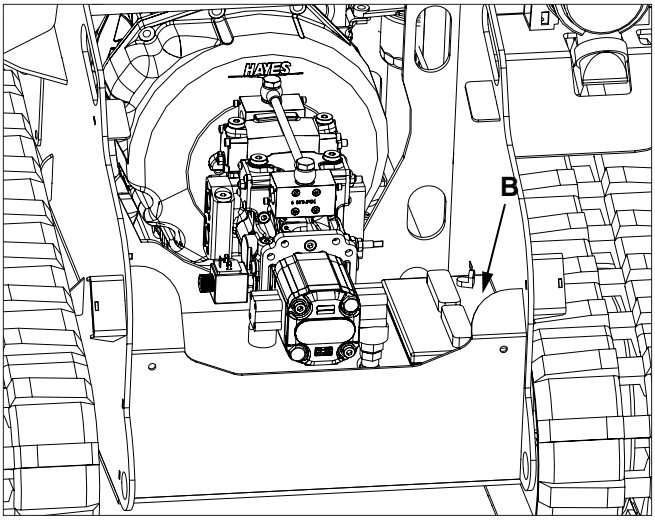
**⚠ WARNING**

**Batteries, battery posts, battery terminals, and related accessories can expose you to chemicals including lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm.**

**For more information go to www.P65Warnings.ca.gov.**

1. Raise lift arms and install lift arm lock. See Lift Arm Lock in Section 4.8.
2. Remove cover (A) to access battery (B).

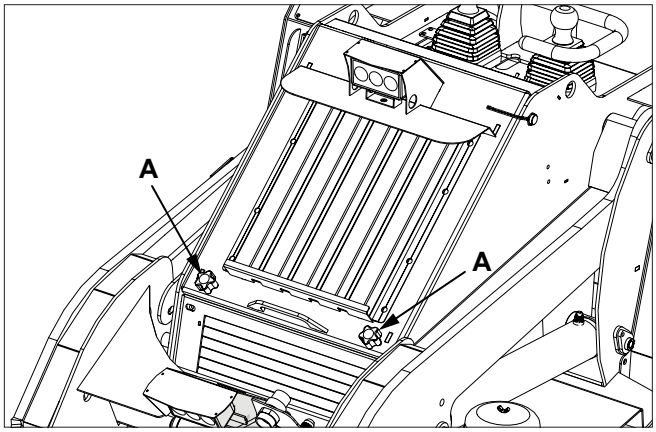




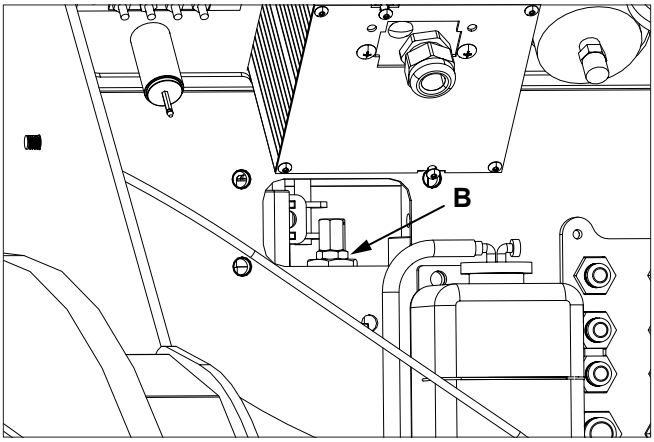

3. Loosen and remove negative (-) battery cable clamp.
4. Loosen and remove positive (+) battery cable clamp.
5. Clean cable clamps and terminals.
6. Check cables for wear, damage or corrosion. Replace cables if necessary.
7. Connect positive (+) battery cable clamp.
8. Connect negative (-) battery cable clamp.
9. Verify battery tie downs are tight.
10. Install cover (A).

## Check And Adjust Auxiliary Hydraulic Pressure

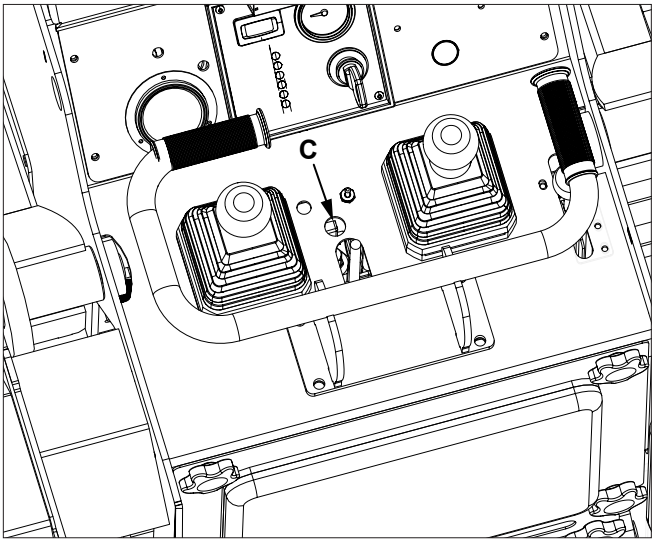
1. Stand on operators platform and start engine.
2. Allow hydraulic fluid to warm up.
3. Increase engine RPM to operating speed.
4. Move joystick to rollback position and observe auxiliary hydraulic pressure on instrument panel gauge. Pressure should be approximately 3000 psi (207 bar).
5. If pressure is low, verify hydraulic fluid is at proper level in tank. If fluid is at proper level, adjust auxiliary hydraulic pressure using the following procedure.
6. Loosen knobs (A) and pivot hydraulic oil cooler upward. Engage pin to hold cooler in open position.



7. Remove access cover on rear of engine compartment and loosen jam nut (B) on boom valve with 17 mm wrench.




8. Insert 5 mm hex wrench down through access hole (C) on control panel and into hex screw on boom valve.



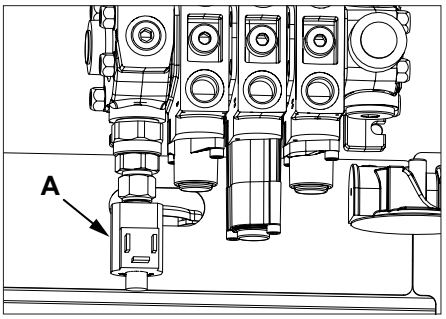

9. Hold locknut (B) with wrench and rotate hex adjustment screw 1/4 turn counter clockwise. Tighten locknut (B), install access cover, close oil cooler, start engine and test operation.

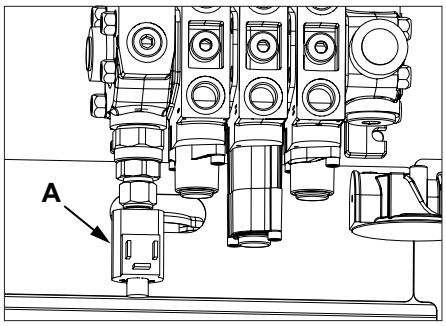
10. Repeat step 9 again if needed.

Test operation. If pressure is still low, contact your Baumalight dealer.

# 6 TROUBLESHOOTING

| PROBLEM | CHECK | SOLUTION |
|---|---|---|
| Engine overheating. | Coolant level low. | Add coolant. |
| | Engine cooler clogged. | Clean cooler. |
| | Engine fan belt slipping. | Tighten belt. Replace belt if damaged. |
| | Air intake restricted. | Replace air filter, check intake system. |
| Hydraulic fluid overheating. | Hydraulic fluid level low. | Add hydraulic fluid. |
| | Hydraulic cooler clogged | Clean cooler. |
| | Hydraulic cooler fan not running. | Check fan operation. Check cooler fan fuse located near the battery. |
| | Hydraulic filter clogged. | Replace filter. |
| | Repeatedly exceeding hydraulic system limits causing hydraulic fluid to flow over relief valve. | Ease up operation, don't exceed limits of the machine. |
| Weak auxiliary hydraulic function on attachment. | Hydraulic filter clogged. | Replace filter. |
| | Engine throttle set too low. | Increase engine speed. |
| | Hydraulic relief valve set too low. | Contact your Baumalight dealer for assistance. |
| Can not connect hydraulic couplers. | Hydraulic pressure lock. | Stop engine and push joystick forward to connect one coupler and pull back to connect the other. Ensure joystick is in neutral position before starting engine. |
| Fuse blown. | Overloaded 12 Volt receptacle. | Unplug load on receptacle. Replace fuse located near the battery. |
| | Solenoid failure. | Test solenoid. Replace solenoid if necessary. Replace fuse. |
| | Damaged or faulty wiring. | Check for worn or damaged wiring. Repair wires or replace harness if necessary. Replace fuse. |
| Engine starts but no other functions operate. | Blown fuse. | Check fuse on circuit from Lofa panel. Replace fuse in harness located behind the Lofa instrument panel in the engine compartment. |
| Engine will not crank over. | Main fuse blown. | Replace main fuse located inside the Lofa instrument panel. Remove instrument panel faceplate to access fuse. |
| | Damaged or faulty wiring. | Check for worn or damaged wiring. Repair wires or replace harness if necessary. |

| PROBLEM | CHECK | SOLUTION |
|---|---|---|
| Engine cranks over but does not start. | Auxiliary hydraulic control turned on. | Turn auxiliary control off. |
| | Battery discharged. | Charge and load test battery. Replace battery if necessary. |
| | Too cold. | |
| | Solenoid failure. | Test solenoid. Replace solenoid if necessary. |
| | Damaged or faulty wiring. | Check for worn or damaged wiring. Repair wires or replace harness if necessary. |
| Unit will not move. | Park brake engaged. | Disengage park brake. |
| | Operator platform not engaged. | Operator must be standing on operator platform. Check operator platform to verify switch is engaging. |
| | Operator on board switch not functioning properly. | Check switch operation. Replace switch if necessary. |
| | Fuse blown. | Check fuse on circuit from Lofa panel. Replace fuse in harness located behind the Lofa instrument panel in the engine compartment. |
| | Check for power to boom valve. | With engine stopped and ignition switch in the on position, check to see if light on boom valve solenoid (A) connector is on. If light is not on, check fuse. If fuse is good, check wiring between boom valve and fuse block.   |

| PROBLEM | CHECK | SOLUTION |
|---|---|---|
| Boom will not raise. | Operator platform not engaged. | Operator must be standing on operator platform. Check operator platform to verify switch is engaging. |
| | Park brake engaged. | Disengage park brake. |
| | Fuse blown. | Check fuse on circuit from Lofa panel. Replace fuse in harness located behind the Lofa instrument panel in the engine compartment. |
| | Check for power to boom valve. | With engine stopped and ignition switch in the on position, check to see if light on boom valve solenoid (A) connector is on. If light is not on, check fuse. If fuse is good, check wiring between boom valve and fuse block.   |

# 7 STORAGE

## 7.1 Storing

1. Store skidsteer in a dry place.
2. Clean skidsteer thoroughly. Dirt will draw moisture and cause rust.
3. Check for loose or missing hardware.
4. Paint parts as necessary.

## 7.2 Remove From Storage

1. Review Operator's Manual.
2. If parts have been replaced, verify they operate properly.

# 8 WARRANTY

To view the warranty, scan the QR Code below, or go to Baumalight.com. From the Support drop down, click on Support, then select Mini Skidsteers. Select Product Warranty.

For parts, specifications and the latest machine information please visit our website.

**www.baumalight.com**

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