


R-Series Rubber Track Loader

Guide to Machine Operation and Maintenance



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Warning! Read and understand this manual before operating any Rubber Track Loader. Failure to follow instructions could result in injury or death.

RC-50/RC-60



Limited Warranty

The warranty herein set forth applies solely to the ASV Rubber Track Loaders manufactured by ASV, Inc. and is in lieu of all other warranties, expressed or implied. No person, agent, or dealer is authorized or empowered to give any other warranty or to assume other liability on behalf of ASV, Inc. Warranty of ASV Rubber Track Loaders is extended to the original purchaser, however, the balance of the unused warranty may be transferred to a second party.

ASV Inc. warrants only the products it manufactures or sells and does not warrant that other products will function properly or will not cause damage when used on an Rubber Track Loader. ASV does not assume liability for indirect, incidental or consequential damages.

ASV will repair or replace, free of charge to the holder of the warranty, any parts defective in material or workmanship under normal use and service and related labor charges. Warranty work must be performed by the selling ASV authorized dealer or agent. The owner is responsible for getting the machine to that selling authorized dealer or agent.

ASV will not reimburse transportation, rental or inconvenience costs. ASV reserves the right to inspect the part prior to any decision involving a warranty claim. In no case shall ASV grant a remedy that exceeds the purchase price of the component or part.

The warranty validation form should be completed at the time of purchase by the dealer and customer. This form should be sent to ASV Inc. by the dealer (by mail or at www.asvi.com) as soon as possible to prevent any delays in warranty claims.

The warranty periods are as follows:

1. For Rubber Track Loaders purchased by a retail customer: One year from date of purchase, with no hour limit.
2. Machines purchased for rental: One year from date of first rental, with no hour limit.
3. Six months from date of sale on batteries, and 50% exchange on remaining six months.
4. Ninety days from date of sale on dealer installed parts and accessories.
5. Engine: warranty for the Perkins diesel engine is separate from ASV Inc's warranty and is described in the separate engine warranty information.

6. Original rubber tracks are covered by a warranty period of 24 months or 1,000 operating hours, whichever occurs first, starting from date of delivery to the first user; tracks are pro-rated after the first 300 hours.

The following will VOID the warranty:

- a. Failure to perform proper maintenance, service, or operating procedures as recommended in the Operators Manual.
- b. Repair by anyone other than an authorized ASV dealer or agent.
- c. Use of improper hydraulic fluid.
- d. Misuse, abuse, neglect, or improper adjustment, accident, or improper application.
- e. Any modification or removal of parts, unless authorized by ASV, Inc.
- f. Removal or mutilation of the Product Identification Number (PIN).
- g. Exceeding the G.V.W. of the machine.

No other warranty or guarantee of any kind is made by ASV, Inc. expressed or implied, statutory, by operation or law, or otherwise, including merchantability and fitness for a particular purpose.

Introduction



Thank you for purchasing an ASV Rubber Track Loader. With this machine you will be able to perform tasks faster and better than any other machine its size. Because of the high performance of the machine, it is imperative that each operator reads and fully understands this operator's manual before attempting to operate the machine.

This manual explains safe and proper operation of Rubber Track Loaders. Failure to follow these written procedures could result in bodily injury, death or damage to the machine. It is the owner's and the operator's responsibility to use common sense when operating this or any other piece of machinery.

At the time of publication, all information, photographs, and illustrations are technically correct.

In this manual *front*, *rear*, *left* and *right* are used to describe locations on the machine. *Front* is considered the attachment end of the machine, the *rear* is the engine end of the machine, *left* is the operator's left side, while sitting in the machine, and *right* is the operator's right side while sitting in the machine.



This Operators Manual contains the words **Warning**, **Caution** and **Note** to emphasize important information. The symbol **!WARNING!** identifies personal safety related information. The symbol **!CAUTION!** identifies unsafe practices that may result in damage to the machine. The symbol **NOTE:** identifies supplementary information which requires special attention.

Machine Specifications

General Dimensions	RC-50	(RC-60)
Height to top of ROPS:	77 in. / 1956 mm	(77 in. / 1956 mm)
Ground clearance:	12 in. / 305 mm	(12 in. / 305 mm)
Max. lift height, at hinge pin:	115 in. / 2921 mm	(115 in. / 2921 mm)
Length of undercarriage:	75 in. / 1905 mm	(75 in. / 1905 mm)
Machine length, w/out bucket:	100 in. / 2540 mm	(100 in. / 2540 mm)
Machine length, with bucket:	128 in. / 3251 mm	(128 in. / 3251 mm)
Machine width:	60 in. / 1524 mm	(60 in. / 1524 mm)

Track Specifications

Track width:	15 in. / 381 mm	(15 in. / 381 mm)
Length of track on ground:	59 in. / 1499 mm	(59 in. / 1499 mm)

Machine Weight

Without bucket (shipping):	5,500 lb / 2495 kg	(5,500 lb / 2495 kg)
With bucket (operating):	6,200 lb / 2812 kg	(6,200 lb / 2812 kg)
Ground pressure:	3.1 psi / 21.4 kPa	(3.1 psi / 21.4 kPa)
Ground contact area:	1,770 in.2 / 1.14 m2	(1,770 in.2 / 1.14 m2)

Specifications are subject to change without notice.

* SAE J818 standards define operating capacities of rubber-tired skid steers (50% tipping load) and tracked loaders (35% tipping load). There are no standards defining the operating capacity of machines equipped with a suspended undercarriage or machines with rubber tracks.

Engine	RC-50	(RC-60)
Model:	Perkins 404C-22	(Perkins 404C-22T)
Type:	4-cylinder diesel	(4-cylinder turbo diesel)
Displacement:	134 in.3 / 2.2 liter	(134 in.3 / 2.2 liter)
Gross HP @ 2800 rpm:	50 hp / 37.3 kW	(60 hp / 44.7 kW)
Torque (peak):	105 ft-lb / 143 Nm	(140 ft-lb / 190 Nm)

Operating Specifications

Operating capacities:		
35% tip load:	1,330 lb / 603 kg	(1,330 lb / 603 kg)
50% tip load:	1,900 lb / 862 kg	(1,900 lb / 862 kg)
Travel speed, max.:	8 mph / 13 km	(8 mph / 13 km)

Auxiliary Hydraulic Pump

Flow, max.:	17.4 gpm / 65.9 lpm	(17.4 gpm / 65.9 lpm)
Pressure:	3,000 psi / 20,670 kPa	(3,000 psi / 20,670 kPa)

Service Refill Capacities

Fuel tank:	15 gal / 56.8 L	(15 gal / 56.8 L)
Hydraulic tank:	8 gal / 30.3 L	(8 gal / 30.3 L)
Engine coolant:	2 gal / 7.5 L	(2 gal / 7.5 L)
Engine oil, including filter:	2.8 gal / 10.6 L	(2.8 gal / 10.6 L)

PIN Location/Safety Warnings



Product Identification Number (PIN)

The machine PIN is located on the left side of the firewall, next to the seat (shown above). Always provide the PIN when contacting the dealer about parts, service, warranty or accessories. No warranty claims will be processed if the PIN number is not given.

OPERATING INSTRUCTIONS

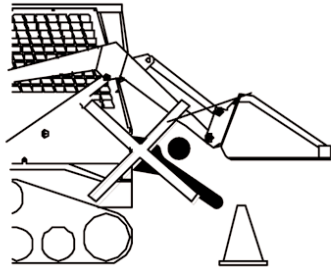
OPERATOR MUST BE IN SEAT
WITH LAP BAR LOWERED BEFORE
MACHINE WILL OPERATE.

ALWAYS WEAR YOUR SEAT BELT.

SEE THE OPERATORS MANUAL
FOR DETAILED INSTRUCTIONS.

0304-302

! DANGER !



KEEP YOUR BODY INSIDE OPERATOR
STATION WHILE OPERATING LOADER

NEVER WORK WITH YOUR ARMS, FEET
OR LEGS BEYOND OPERATOR STATION

0310-169

FAILURE TO FOLLOW INSTRUCTIONS
OR HEED WARNINGS COULD RESULT
IN SERIOUS INJURY OR DEATH

! DANGER !



KEEP OUT OF THIS AREA

LOADER LIFT ARM MUST BE RESTING
ON LOADER STOPS WHEN WORKING
UNDER RAISED LIFT ARM

0310-139

FAILURE TO FOLLOW INSTRUCTIONS
OR HEED WARNINGS COULD RESULT
IN DEATH OR SERIOUS INJURY

Safety Warnings

Fire Prevention

Rubber track loaders have components that operate at high temperatures. The main heat sources are the engine and the exhaust system. The electrical system can also be a source of heat or sparks if damaged or improperly maintained.

In some work environments, flammable items such as leaves, straw, and brush cutting debris may come in contact with these items. It is very impor-

tant that flammable items be removed often from close proximity to these high temperature items. If debris is allowed to accumulate, a fire may result posing a risk to the operator and the machine. A fire can cause machine damage, severe injury, or even death.

Overheat Prevention

The radiator/oil cooler must be inspected for signs of clogging and cleaned daily or more often as needed to prevent the engine and hydraulic system from overheating

Listed are a set of precautionary tasks that should be performed daily or more often if necessary. Repair or replace worn or damaged components as needed to ensure safe machine operation.

Precautionary Tasks

- With the engine off and cool, clean dirt/debris from the radiator/oil cooler, engine compartment, exhaust system, attachments and other areas where there may be hot or rotating parts. Remove the belly pans and pressure wash these items and all surrounding areas until clean.
- Check battery, fuse box, electrical wiring and connections for damage or looseness.
- Check fuel and hydraulic lines/hoses for leaks or damage. Never use bare hands to check for leaks. Pressurized fluid can penetrate skin and cause injury or even death.



WARNING

If instructions to safely install lift arm brace are not followed injury or death could result.

NEVER GO BENEATH UNSECURED LIFT ARMS

1. Remove any attachment from the machine.
2. Have an second person remove the lift arm brace.
3. Raise the lift arms.
4. Have the second person place the lift arm brace onto the top side of the cylinder ram.
5. Install the retaining pins using the holes labeled with the arrows.
6. Slowly lower the lift arms until they contact the brace.
7. Reverse these steps to disengage the lift arm brace

0201-752

!WARNING!

- **Never use ether or any other aerosol type starting aid to start the engine.**
- **Always stop the engine and allow the machine to cool before adding fuel.**
- **Never smoke or allow open flame near the machine while refueling.**

Operating Capacity

Operating Capacity

The operating capacity is a percentage of the machine's tipping load. Tipping load refers to the amount of weight required to tip the machine forward when applied to the center of gravity of the standard dirt bucket.

This rating is calculated with the machine on level ground and the bucket attachment installed, curled and raised until at its furthest point from the machine in the lift arm travel path.

The Rated Operating Capacity is then calculated as 35% of the tipping load for

traditional track loaders and 50% of the tipping load for wheeled skid steer loaders. ASV publishes both figures for reference and comparison.

NOTE: SAE J818 standards define operating capacities of rubber-tired skid steers (50% tipping load) and tracked loaders (35% tipping load). There are no standards defining the operating capacity of machines equipped with a suspended undercarriage or machines with rubber tracks.

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WARNING

KEEP HANDS AND FEET AWAY FROM TRACK AREA WHEN MACHINE IS IN MOTION. SERIOUS INJURY COULD RESULT!

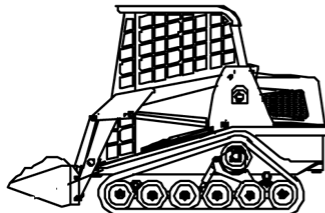
! WARNING !

Brush cutting, mowing, or other operations, that can cause flying debris, can be a fire hazard. With the engine off and cool, inspect and clean engine compartment, and other areas where there may be hot or rotating parts. This should be performed as often as needed to prevent combustion of this debris. Failure to do so could result in a fire, causing injury, death or severe machine damage.

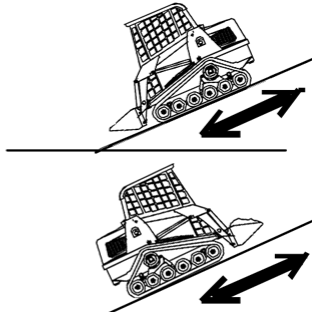
0201-265

! WARNING !

0304-306



CARRY LOAD LOW. DO NOT EXCEED RATED OPERATING CAPACITY. LOAD, UNLOAD, TURN ON LEVEL GROUND.



TRAVEL UP AND DOWN HILL WITH HEAVIEST END OF LOADER UPHILL.

FAILURE TO FOLLOW INSTRUCTIONS OR HEED WARNINGS COULD RESULT IN INJURY OR DEATH

Gross Vehicle Weight

The GVW (Gross Vehicle Weight) of the RC-50 or RC-60 should not exceed 8,500 lbs. This weight does not include an operator, but does include any accessories, attachments or material being carried. Operating the machine in excess of the GVW will void the warranty (see page 2).

Machine Controls

Loader and Drive Controls

The RC-50 and RC-60 have two hydraulic pilot joystick controls. These two joysticks are used to control machine speed and direction as well as lift arm, bucket, and attachment functions. Joystick A (photo right) is used to control the lift arms, bucket, and to engage the float function. To activate the float function, move the joystick fully forward in a quick motion. The joystick will then be held in detent by the magnet attached to the joystick base. Pull back quickly to disengage. Joystick B controls the direction and speed of the machine.

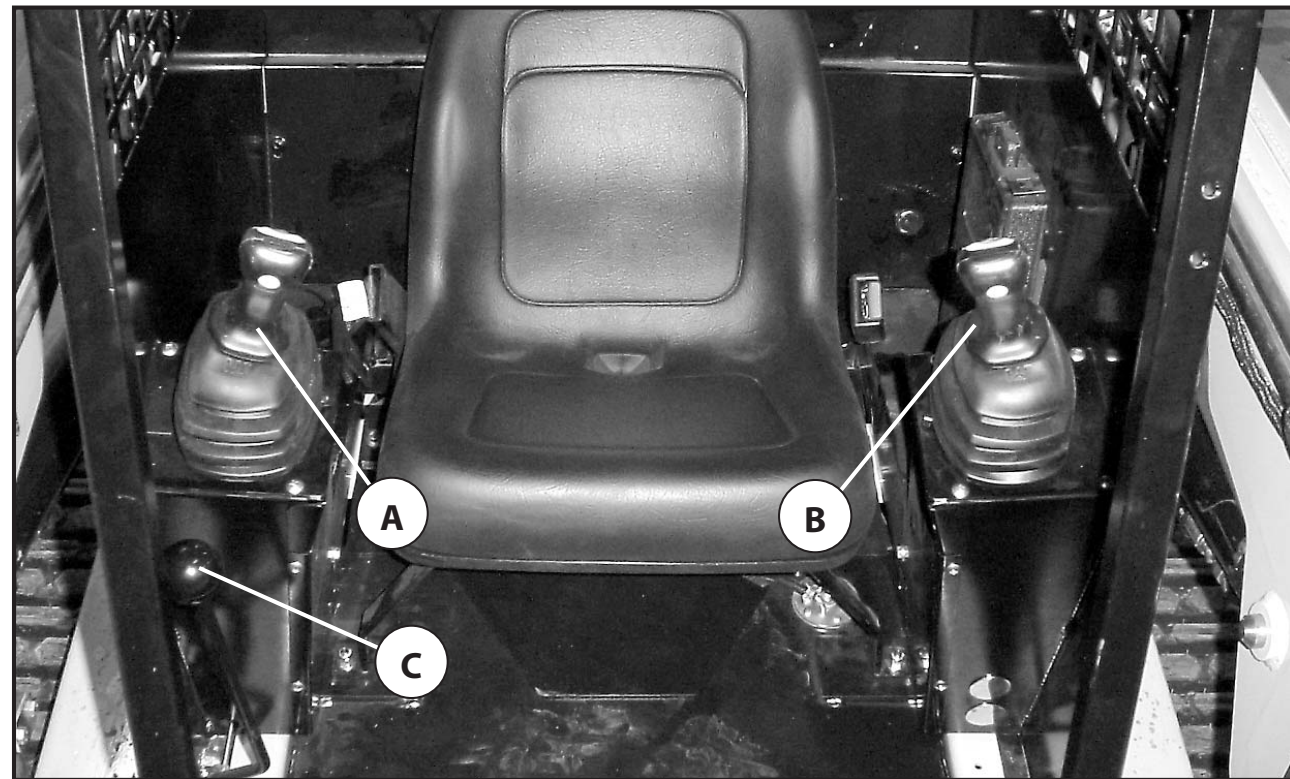
Control Options

Machines are available with a "Case" style control configuration. Machines equipped in this manner use similar joysticks, but operate using a different pattern to control machine function. In this pattern, joystick A controls both the

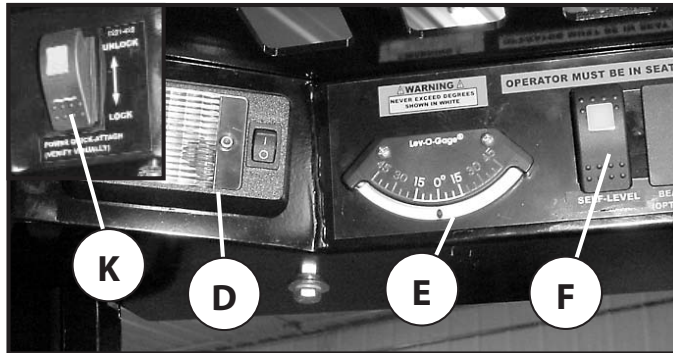
right track and the bucket curl and dump functions. Joystick B controls the left track, lift arm, and float functions. The float function does not have a detent position in this configuration and must be manually held in position while operating with float engaged.

Throttle

The throttle (C) controls engine rpm. Use a lower rpm for work that requires delicate operation of the machine. Use higher rpm when faster travel speed, higher horsepower, or more flow is required.



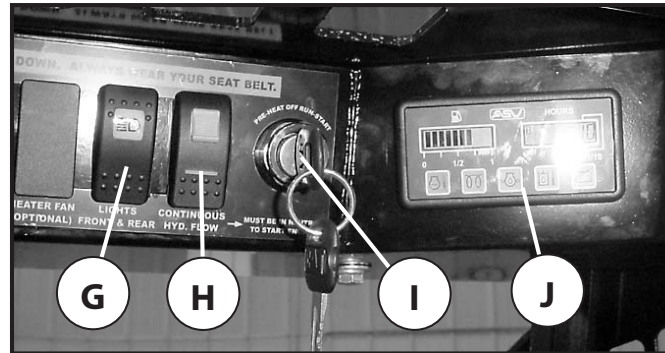
Gauges / Warning Lights



Dash Panel

The dash panel (photos above) is located for easy visibility. The dash panel includes:

- D - Dome light
- E - Slope indicator
- F - Self leveling switch
- G - Lights, front and rear
- H - Continuous flow switch
- I - Ignition, glow plugs
- J - Gauge/warning light panel
- K - Hydraulic Q/A switch (RC-60)
- L - Fuel level gauge
- M- Service hour meter
- N - Engine coolant temp. warning

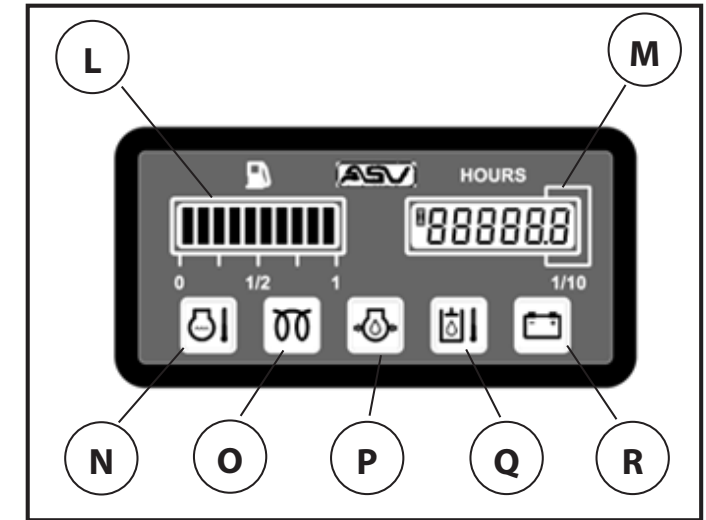



- O - Glow plug operation
- P - Engine oil pressure warning
- Q - Hydraulic oil temp. warning
- R - Battery low voltage warning

If the battery low-voltage light (R) illuminates, drive the machine to a suitable location and shut the engine off. Diagnose the problem and make needed repairs before continuing to operate.

The glow plug operation light (O) illuminates only when the key switch is turned to engine pre-heat, showing normal operation.

Also included in the gauge/warning light panel is a fuel level gauge (L) and a service hour meter (M).



**!CAUTION!**

Should the engine coolant temperature, engine oil pressure or hydraulic oil temperature light illuminate during normal machine operation, shut the machine down immediately. Diagnose the problem and make needed repairs before continuing to operate.

Machine Operation

Pre-Start Checklist

Before operating a Rubber Track Loader, inspect the machine. Look for any loose or worn parts. This inspection will help avoid machine damage or personal injury during operation.

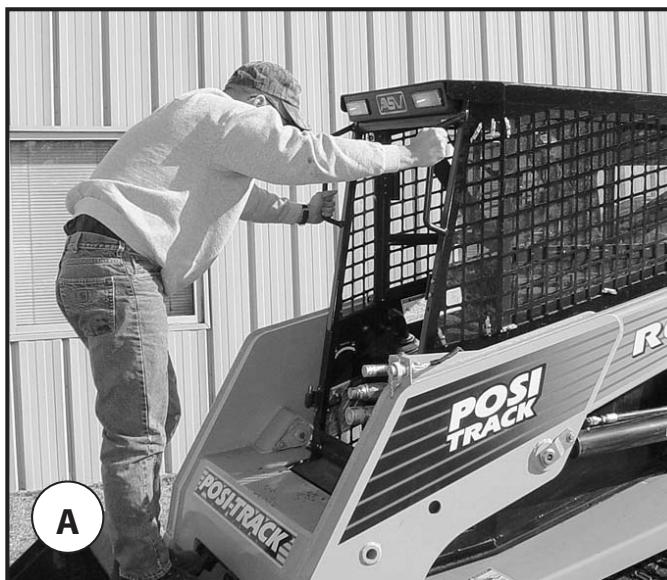
Check for proper:

1. Track tension;
2. Fluid levels;
3. Fan belt tension and condition;
4. Hoses (no visible signs of wear);
5. Fittings (no leaks);
6. Battery cables;
7. Controls for neutral.

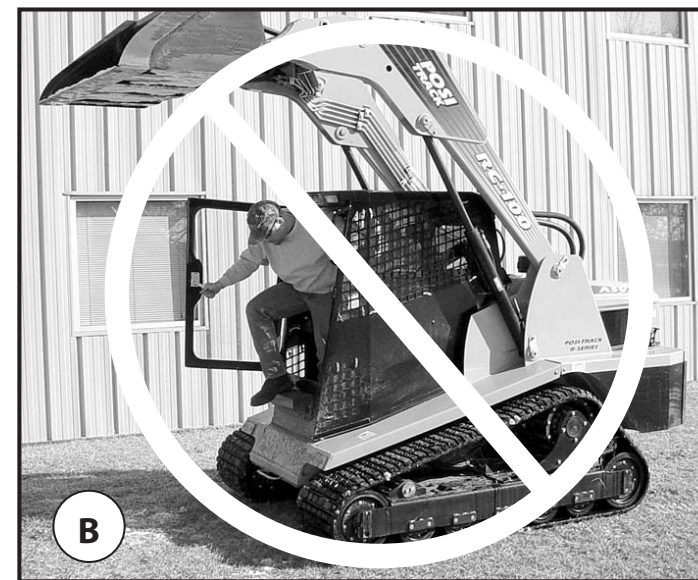
Starting Procedure

Before starting the engine, perform the pre-start checklist then proceed with the following procedure:

1. Enter machine with lift arms all the way down. Maintain a three-point contact with the machine (photo A).
2. Fasten seat belt, and lower lap bar into position.



3. Starting with the throttle in the SLOW position, push the throttle 1/3 the way open.
4. Turn the ignition key to the left for 6 seconds to "pre-heat" the engine. While pre-heating, the glow plug operation light will illuminate.
5. Turn the ignition key to the right to start the engine.
6. Run the engine at low idle for 3 to 5 minutes to warm up the engine.
7. Set throttle to desired rpm.



!WARNING! Entering or exiting the vehicle under raised lift arms could cause serious injury or death. Never allow anyone to be underneath raised, unsecured lift arms (photo B).

NOTE: The parking brake is automatically engaged when the engine is turned off, the operator is not in the seat or the lap bar is raised.

Machine Operation

Operating on Slopes

Operators should exercise extreme caution while operating on any slope. Never exceed the recommended maximum slope angle of 15 degrees. While operating on a slope, do not make sudden changes in speed or direction. Always move with the attachment in the lowest position possible and proceed slowly and with caution.

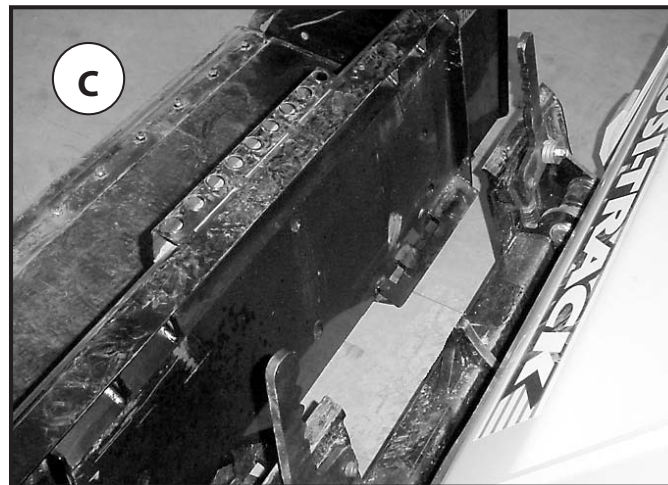
When turning to go uphill on a slope, the following technique should be used:

1. Stop the machine.
2. Back down the slope, gently turning until the front of the machine is facing the desired direction.
3. Drive forward.

Manual Quick-Attach (RC-50/60)

Fastening Attachments

With both levers on the quick-attach interface in the “up” position, drive towards the attachment with the top edge of the quick-attach tipped forward (photo C). Hook the top edge of the quick attach under the upper lip of the attachment interface. Raise the lift arms up slightly and then curl the quick-attach until it is fully mated with the attachment. Turn the engine off and exit the machine. Secure the attachment by pushing the levers downward (photo D).



To confirm engagement:

1. Raise the lift arms slightly.
2. Tilt the attachment downward.
3. Visually verify that the locking pins can be seen through the bottom of the mating interface.



!WARNING! Carry load low. Do not exceed rated operating capacity. Load, unload, turn on level ground.

Travel up and down hill with heaviest end of machine uphill. Failure to follow instructions or heed warnings could result in injury or death.



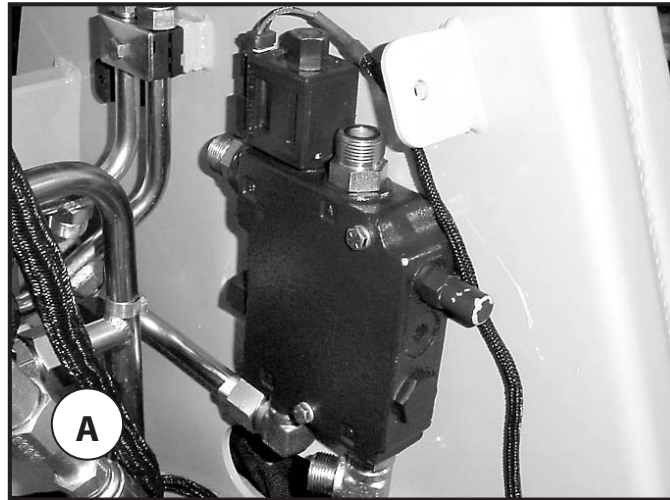
Machine Operation

Hydraulic Quick Attach (RC-60/optional)

The RC-60 is available with a hydraulic quick attach mechanism. This feature allows an operator to fasten or unfasten attachments without exiting the machine. To use this feature, make sure the switch is in the unlocked position, then follow the instructions on page 11 that describe the process of fastening the attachment to the quick attach up to the point of locking it in place. Once the attachment is in place, move the switch to the lock position, then confirm engagement by following steps 1-3.

Self Leveling

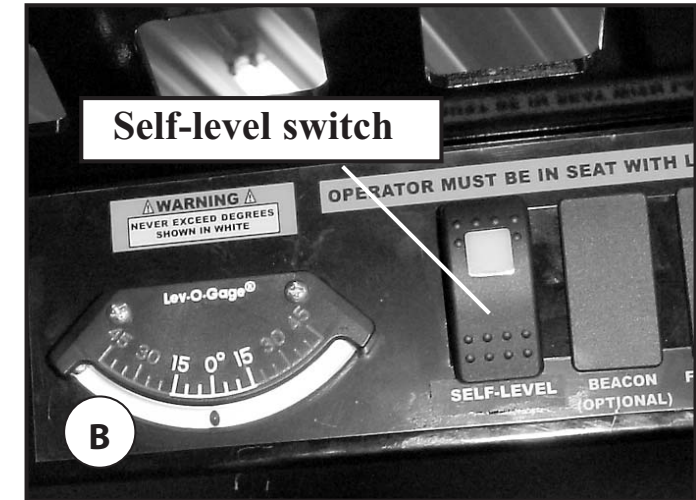
The RC-60 is equipped with a self-leveling loader valve (photo A). This feature is also commonly referred to as “bucket positioning”. This function maintains the position of an attachment throughout the upward cycle of the lift arms.



Note: The self-leveling feature works on the upward cycle only. The operator must position the attachment manually on the downward cycle.

The self leveling feature can be turned on or off with the switch located on the dash panel (photo B).

The self-leveling system does not automatically level your attachment. When activated, it works to keep the attachment in the same relative position



throughout the upward cycle of the lift arms. For example, if you have a bucket full of dirt that is fully curled at ground level, the self leveling system will maintain the position of the bucket during the lift cycle to prevent spilling as the lift arms are raised.

Note: During the upward cycle, the self-leveling function can be overridden by operating the tilt or curl functions of the joystick.

Machine Operation

Auxiliary Hydraulics

The RC-50 and RC-60 models come equipped with an auxiliary hydraulic gear pump. This pump has a maximum rating of 17.44 gpm.

To operate, connect the attachment to the two quick couplers (photo C). To release any pressure in the system, press the button labeled 1 in photo C.

The auxiliary hydraulics can be engaged intermittently or continuously depending on the requirements of the attachment being utilized.

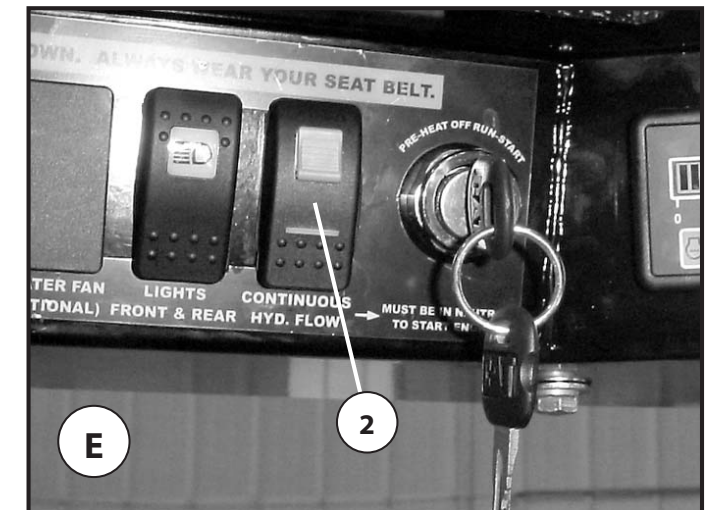
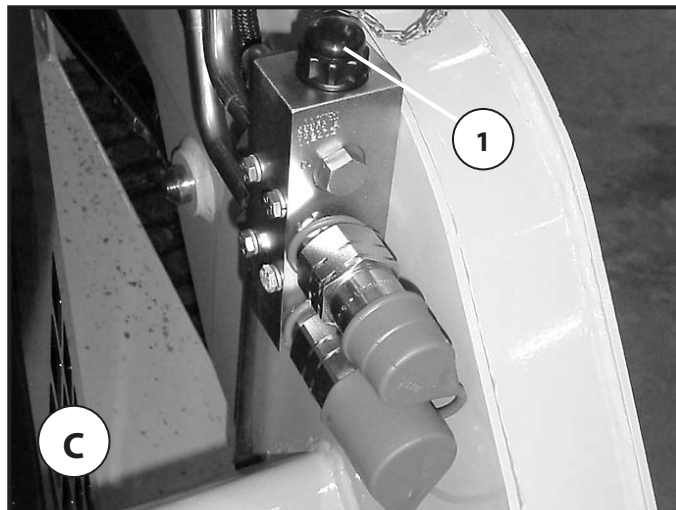
To engage the hydraulic flow intermittently, activate the toggle-type switch on the top of the right joystick, photo D. Intermittent function is ideal for attachments such as grapple buckets and dozer blades.

To engage the hydraulic flow continuously, activate the 3-position switch on the dash panel, labeled 2 in photo E. Continuous function is ideal for attachments such as snow blowers, brush cutters or backhoes.

Note: Moving either switch from one position to the other has the effect of reversing flow through the auxiliary hydraulic circuit.

Note: The continuous flow switch must be in its neutral position in order to start the engine.

Note: The continuous flow auxiliary switch has a small orange locking switch that must be disengaged before the switch will activate.

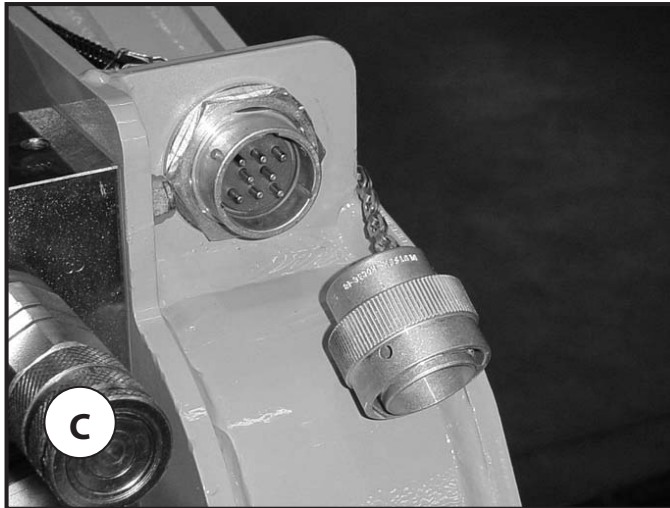
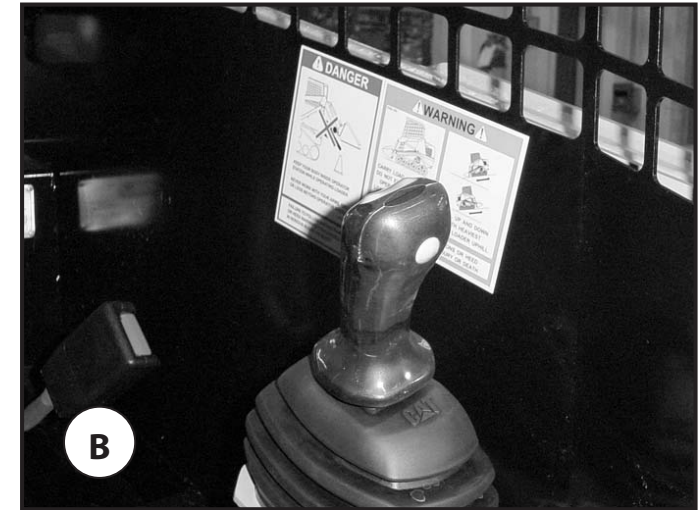


Machine Operation

Electric Attachment Control

Attachments for the RC-50 and RC-60 are controlled by pressing various buttons on the machines joysticks. Most attachments are controlled hydraulically, but some require both hydraulic and electrical inputs. The snow blower for instance needs both hydraulic and electric input to function. The 4 buttons on the left joystick (photos A, B) send electrical current to the receptacle on the lift arms (photo C). ASV Posi-Tool attachments that require electrical inputs have a matching receptacle.

Note: The electrical receptacle is not necessarily compatible with other brands, use ASV approved attachments for proper function.

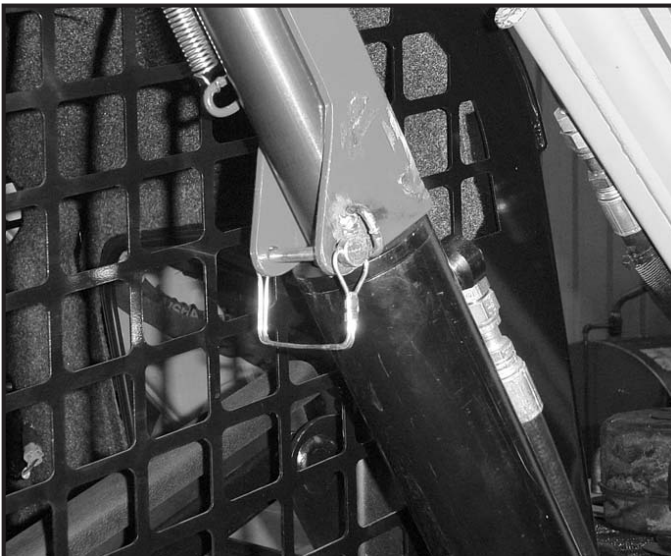


Machine Operation

Lift Arm Brace

When the lift arms must be left in the “up” position, the lift arm brace must be used. To engage:

1. Remove any attachment from the machine and park the machine on flat, stable ground.
2. Have a **second person** release the retaining pins from the lift arm brace on the fender and remove the brace.
3. Raise the lift arms high enough where the brace can be installed.



4. Have the **second person** place the lift arm brace onto the top side of the cylinder ram and install the retaining pins.
5. Slowly lower the lift arms onto the brace until the lift arms stop.

To disengage:

1. Raise the loader until the lift arms are free from the brace.
2. Have a **second person** remove the retaining pins and remove the brace.



3. Lower the lift arms all the way down.
4. Replace the lift arm brace to the fender brackets and install the retaining pins.



!WARNING! Two people must perform this procedure. Never place your body under unsecured lift arms as bodily harm or death could result!

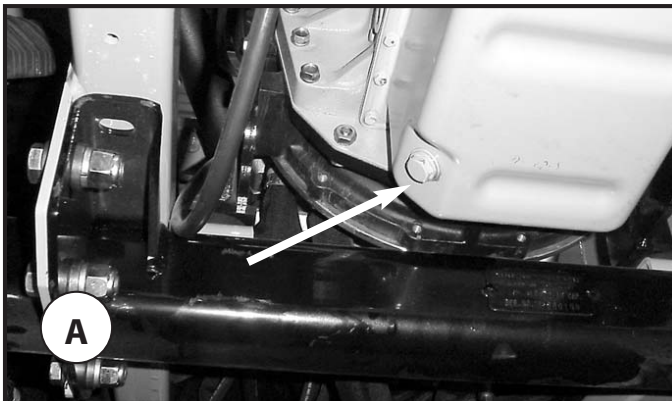
Machine Maintenance

Engine Oil and Filter Change

The normal oil change interval is every 500 hours or one year; whichever comes first. Engines, which are operated under severe conditions, may need the oil changed every 250 hours or every six months, whichever comes first. Severe conditions include: high temperatures, continuous high loads, and dusty conditions.

To change the oil and filter:

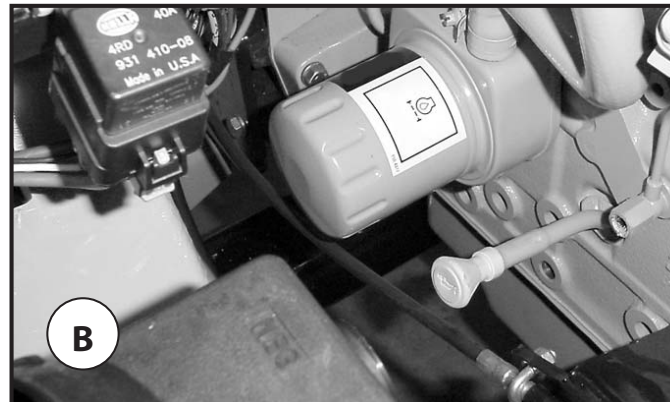
1. Run engine for a few minutes to warm the engine oil.
2. Remove the drain plug from the bottom of the engine, photo A.



3. Drain oil into suitable container.
4. Remove engine oil filter (photo B), make sure gasket is also removed. It may be necessary to remove the rear skid plate.
5. Put some fresh oil on the new filter gasket and install new filter.
6. Tighten to specifications on filter label.
7. Reinstall drain plug. Using oil filler spout (photo C), refill engine to capacity with oil as specified.

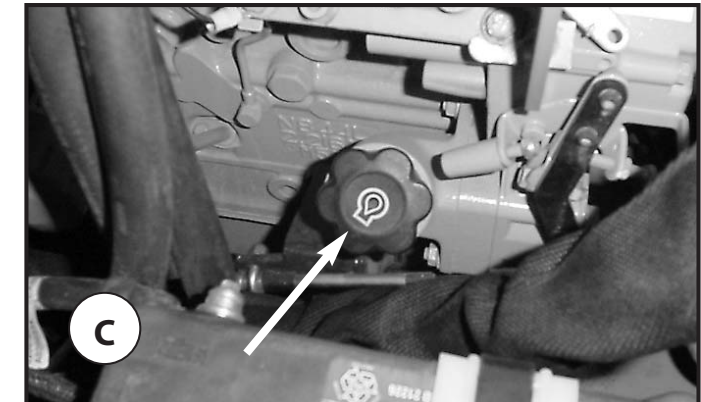
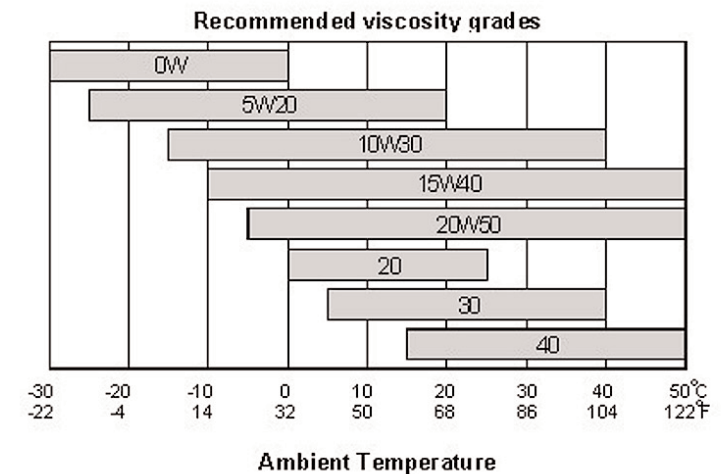
Engine Oil Specifications:

- ASV Posi-Lube™ 10W30 Heavy Duty Engine Oil



You may also use a quality engine oil substitute with the following minimum specification:

- API CH-4 multigrade oil.

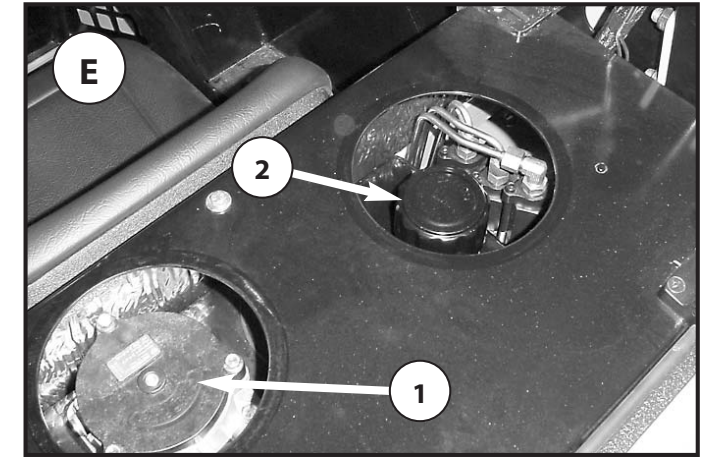


Machine Maintenance

Hydraulic Fluid and Filter Change

The hydraulic fluid should be changed every 500 hours, and the hydraulic filter should be changed every 250 hours. Hydrostatic components require extremely clean oil in order to have a long service life. Extreme caution must be taken when changing the hydraulic fluid. Before beginning the procedure, make sure the machine is in a clean working environment. Precautions should be taken to prevent any debris from entering the hydrostatic system.

1. Remove the middle skid-plate from the bottom of the machine. Locate and remove the hydraulic fluid drain plug (photo D), and drain into suitable container.
2. Locate the hydraulic filter behind the operator's compartment, under the left rubber plug (photo E, item 1).
3. Clean around the filters and remove.
4. Replace the filter with ASV approved filter.



5. Replace the drain plug and skid-plate and fill the hydraulic reservoir (photo E, item 2) with **ASV Posi-Lube Premium All Season MV Hydraulic Oil**, or approved hydraulic fluid such as Chevron Rykon MV. The hydraulic fluid level sight gauge is located on the back of the hydraulic reservoir (photo F).



Machine Maintenance

Fuel Filter Change

The fuel filter (photo A) should be changed every 500 service hours, or as needed. A plugged fuel filter can cause loss of engine power, rough running, or no start.

To change the filter:

1. Clean the outside of the filter thoroughly.
2. Remove the spin-on filter and dispose of properly.
3. Pour diesel fuel into new filter until it is full.
4. Spin new filter in place and tighten.

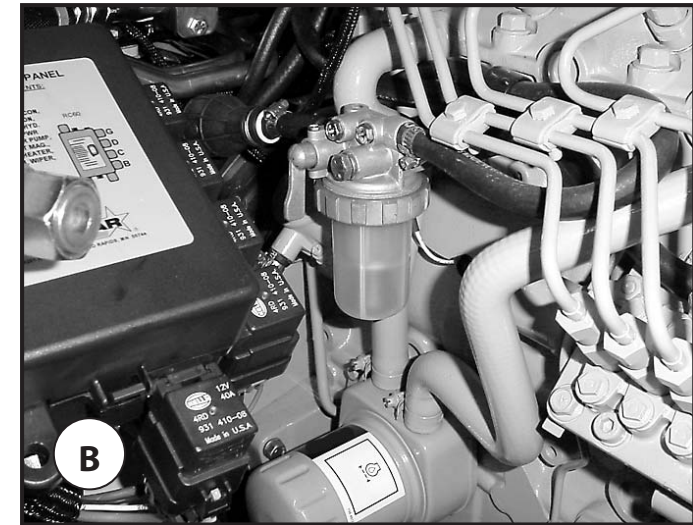
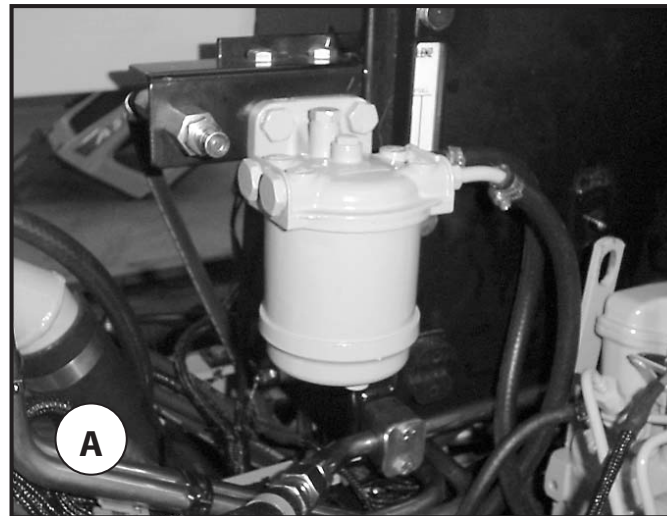
Water Separator

The water separator (photos B, C) consists of a fuel screen, a transparent bowl, a shut-off valve and a red float indicator. In normal fuel, the red float indicator will remain on the bottom of the bowl. When the red indicator is floating, there is water in the bowl. In this case, shut

off the valve (UP position), remove the bowl and dump out the water and inspect the screen for rust and debris.

Fuel Specifications

In North America, diesel fuel, distilled from crude oil, that is identified as No. 1-D or No. 2-D in “ASTM D975” generally meet the proper specifications.



Undercarriages

The undercarriage assemblies typically operate in harsh working conditions. They work in mud, gravel, debris and various other abrasive materials during operation. ASV recommends a daily inspection of the undercarriage assemblies and cleaning if necessary.

Materials that are particularly sticky or abrasive like clay, mud, or gravel should be cleaned from the undercarriages often to minimize component wear. A pressure washer works well for cleaning materials from the undercarriages. At times when a pressure washer is not available, use a bar, shovel or similar device to remove foreign materials.

When cleaning, pay particular attention to the drive motors/sprockets and the front and rear wheels where debris is likely to accumulate. If working in scrap or debris, inspect the undercarriages more often and remove foreign objects that may wrap around or lodge them-



selves between components causing premature wear and damage.

Operation on sand, turf, or other finished surfaces may require less frequent cleaning, but daily inspection is still advised.

Track Tension

Proper track tension is very important for optimum performance and maximum track life. Tracks that are run too loose can cause the track to derail, sometimes causing damage to the track.

During the first 50 hours of operation, the tracks will "break-in", and may require an adjustment.



To adjust the track tension:

1. Locate jam nut on track tensioner and clean the threads thoroughly before beginning procedure (photo D).
2. Using a wrench, loosen the jam nut on the track tensioner.
3. After the jam nut is loosened turn the tensioner until the track tension is within specification (photo E).
4. Turn the tensioner the opposite direction to loosen the track.
5. Once proper tension is achieved, retighten the jam nut on the tensioner. If the track tensioner is stiff, you may need to use a pipe on the end of the wrench for more leverage.

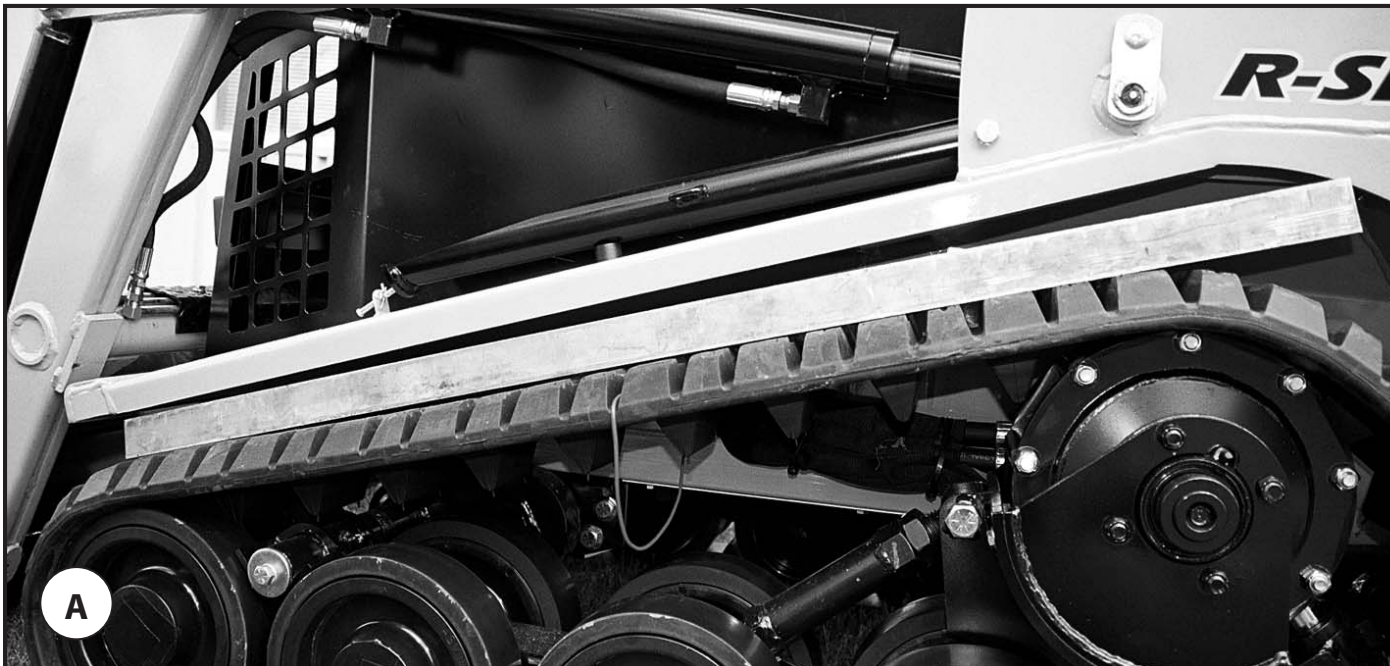
Machine Maintenance

Checking/Adjusting Track Tension

A basic rule to track tension is, the tracks should be tightened only to the point where there is no noticeable sag in the track; the track should never be tightened past this point.

To check track tension:

1. Drive the machine forward 5 feet.
2. Lay a straight edge along the top of the track, between the sprocket and the front idler wheel (photo A).
3. With 90 lb. of weight on the mid-point of the track, the track should have between 1/2 and 3/4 inch of deflection (photo B).



Machine Maintenance

Drive Sprocket Rollers

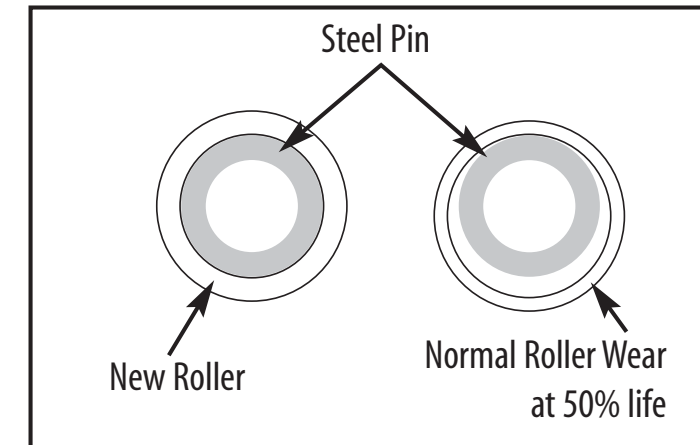
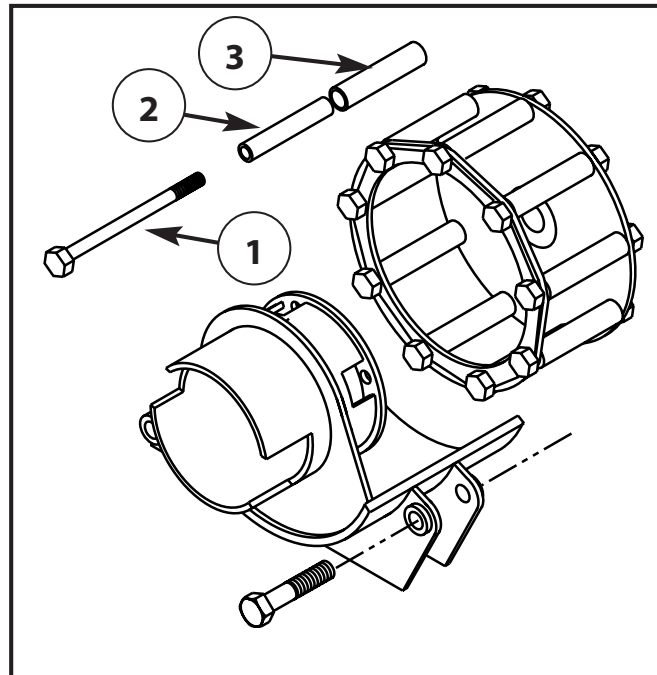
Rubber Track Loaders use rollers on each drive tooth of the two drive sprockets. These rollers help minimize friction between lugs on the track and the sprocket. Sprocket rollers should be treated as wear items that are inspected regularly and replaced as needed.

The rollers rotate on steel pins, limiting wear to the inside of the rollers. As they wear, the rollers become thinner, but will continue to function and perform as long as they are rotating.

Visually inspect rollers every 50 hours and replace any that show signs of cracking or wear-through.

Rollers can be replaced without removing the track. Simply remove the bolt (1) holding the steel pin (2) and the roller (3) in place. Install a new roller

over the steel pin and re-install the pin and roller into the sprocket. Normally, two rollers can be replaced before the sprocket needs to be rotated.



!WARNING!
Make sure the machine is turned off, the key removed and the battery disconnected before performing this procedure.

Machine Maintenance

Air Cleaner

The air cleaner is one of the most important maintenance items on the machine. A poorly maintained air cleaner can seriously shorten the life of the engine.

1. Open the hood and release the latches on either side of the air cleaner, and then remove the cover.
2. Remove the primary element (photo A). The primary element can be cleaned and reused up to five times

but should be changed at least once a year.

3. Remove the secondary element (photo B). The secondary element is not serviceable or washable. The secondary element should be replaced every three cleanings of the primary element.

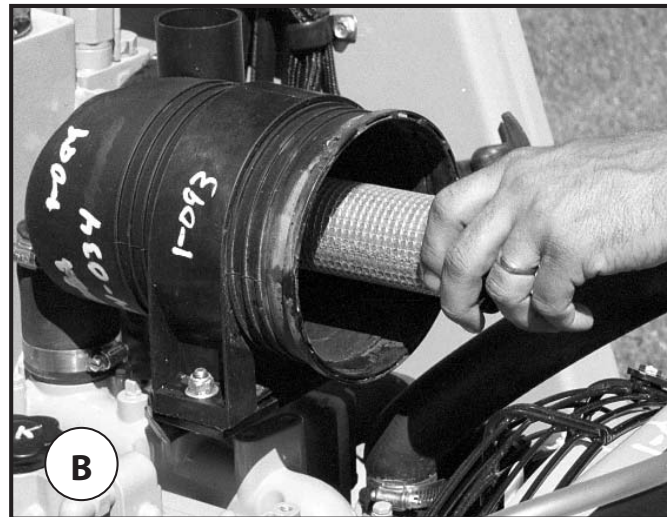
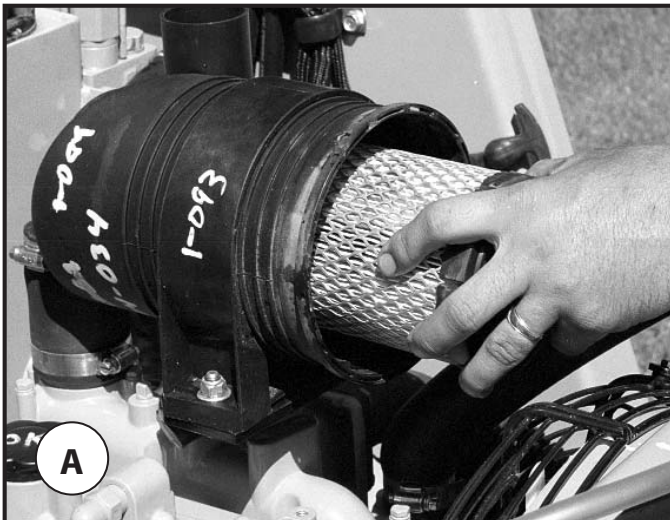


!CAUTION! When working in dusty conditions, the air cleaner elements should be checked and changed more frequently.

NOTE: Do not clean the primary air cleaner element by bumping or tapping. This could damage the seals. Do not use elements with damaged pleats gaskets or seals.

Fuse Box

The fuse box is located on the left side of the engine compartment (photo C). The machine should never be operated with the fuse box cover removed.



Machine Maintenance

Grease Fittings

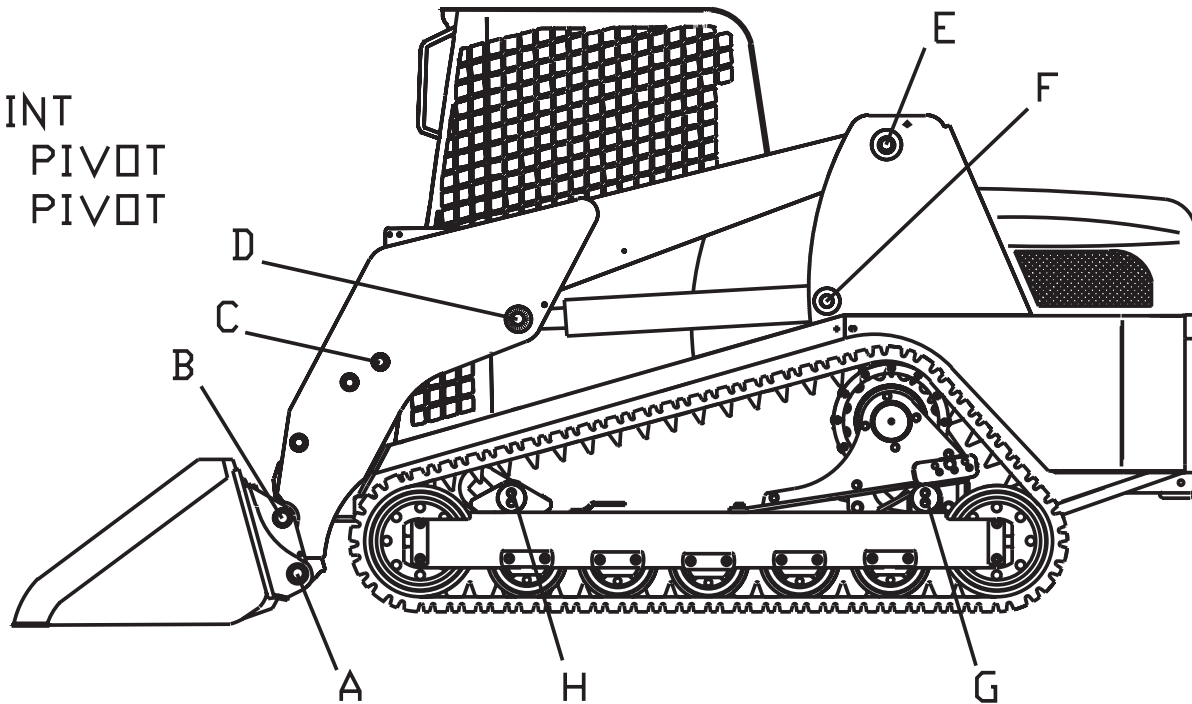
The illustration below shows the location of grease fittings for the left side of the machine. An identical set of fittings

are located on the right side of the machine. These fittings should be lubricated daily.

GREASE FITTING LOCATIONS

- A-QUICK-ATTACH HINGE POINT
- B-QUICK-ATTACH CYLINDER PIVOT
- C-QUICK-ATTACH CYLINDER PIVOT
- D-LIFT CYLINDER PIVOT
- E-LIFT ARM HINGE POINT
- F-LIFT CYLINDER PIVOT
- G-REAR AXLE PIVOT
- H-FRONT AXLE PIVOT

GREASE DAILY



Machine Maintenance

Radiator/oil cooler cleaning

The radiator and oil cooler must be clean to ensure proper operation. Engine and hydraulic system overheating, damage and even failure can result if the radiator/oil cooler is not kept clean. A pressure washer or compressed air nozzle work well to blow debris clear of the fins in the oil cooler and radiator.

***Note:** If hydraulic oil or engine coolant temperature lights illuminate during operation, increase cleaning intervals.*

***Note:** In brush cutting applications check and clean the coolers and chassis often to avoid overheating and prevent fires.*

To clean radiator and oil cooler:

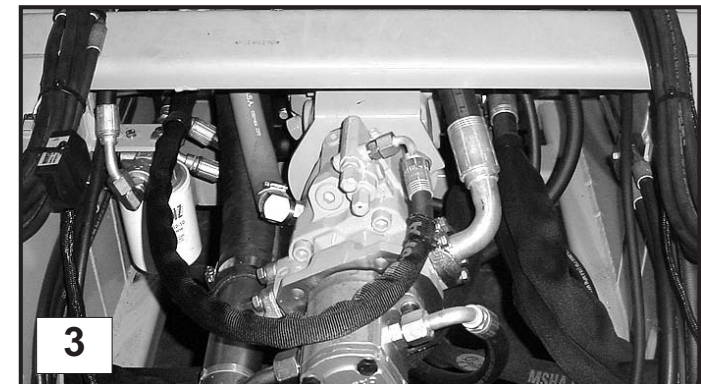
1. Make sure the engine is off, and cool during radiator/oil cooler cleaning procedure.
2. Thoroughly clean radiator/oil cooler prior to operation. Direct spray forward as shown. (fig. 1,2)

***Note:** Make sure water nozzle is at least 12" (8" for air) from the cooler and that the spray is directed straight through the cooler or the cooling fins may be damaged (bent over) which will decrease cooling performance.*

Chassis and engine cleaning

Periodic cleaning of the chassis area beneath the cab and engine compartment are also necessary to maintain safe operation. Clean as necessary. (fig. 3)

1. Remove the belly pans on the underside of the machine.
2. Raise the hood at the rear of the machine.
3. Pressure wash any debris from the engine compartment and chassis area out through the lower opening.
4. Re-install the belly pans and close the hood to complete the cleaning procedure.



Recommended Fluids and Lubricants

When replacing or replenishing the fluids and lubricants in your RC-50 or RC-60 Rubber Track Loader, you can specify ASV Posi-Lube products. This ensures that new fluids and lubricants match those originally installed when your Posi-Track left the ASV factory. Posi-Lube products were developed for, tested and approved by ASV to assure optimum life and performance in all ASV Rubber Track Equipment, when used as recommended.



The ASV Posi-Lube product line includes:

- Heavy Duty Engine Oil, 10W30;
- Premium All Season MV Hydraulic Oil;
- Multi-Purpose EP Lithium Grease;
- Long-Life 50/50 Antifreeze/Coolant;
- Undercarriage Wheel Bearing Lubricant.

Posi-Lube fluids and lubricants are available through your ASV Dealer. If Posi-Lube products are not available, use an approved equivalent, as specified elsewhere in this manual.

Service Log

<u>Hours</u>	<u>Service Performed</u>	<u>Notes</u>

Service Log

<u>Hours</u>	<u>Service Performed</u>	<u>Notes</u>

RC-50/RC-60 Rubber Track Loaders

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