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MAINTENANCE CHART

NOISE EMISSION CONTROL SYSTEM REGULATION

TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED

U.S. Federal law and Canadian provincial laws may prohibit the following acts or the causing there of:

1. The removal or rendering inoperative by any person other than for purposes of maintenance, repair or replacement of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use or
2. The use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

AMONG THOSE ACTS PRESUMED TO CONSTITUTE TAMPERING ARE THE ACTS LISTED BELOW

1. Removal or alteration or the puncturing of the muffler or any engine component which conducts removal of engine exhaust gases.
2. Removal or alteration or the puncturing of any part of the intake system.
3. Replacing any moving parts of the vehicle or parts of the exhaust or intake system, with parts other than those specified by the manufacturer.
4. Lack of proper maintenance.

Section 02 MAINTENANCE

Subsection 02 (MAINTENANCE CHART)

MAINTENANCE CHART

I: Inspect, verify, clean, adjust, lubricate, replace if necessary C: Clean L: Lubricate R: Replace	INITIAL 10 HOURS OR 400 KM (250 M.)	EVERY 25 HOURS OR 1250 KM (800 M.)	EVERY 50 HOURS OR 2500 KM (1600 M.)	EVERY 100 HOURS OR 5000 KM (3100 M.) OR ONCE A YEAR	EVERY 200 HOURS OR 10000 KM (6200 M.) OR TWO YEARS	REFER TO THE SECTION
ENGINE/TRANSMISSION						
Engine/transmission oil level	EVERY INSPECTION					N.A.
Engine/transmission oil and filter	R		R			Maintenance/ Lubrication
Spark arrester				C		
Valve clearance	I			I		
Clutch lever	I		I			
Oil reservoir strainer					C	Lubrication
Engine mount fasteners	I			I		Removal and Installation
Exhaust system	I			I		
Condition of seals	I			I		N.A.
Coolant level	EVERY INSPECTION					
Coolant ①	I		I		R	Cooling System
Radiator cap/cooling system pressure test	I				I	
Radiator condition/cleanliness (radiator fines)	I		I			
Clutch and transmission operation				I		Clutch and/or Transmission
FUEL SYSTEM						
Air filter		C	R			Maintenance/ Lubrication
Fuel lines and connections	I			I		Fuel Circuit
Fuel tank strainer replacement					R	
Carburetor	I			I		Carburetor and Air Intake Silencer
ELECTRICAL						
Spark plugs	I			R		Ignition System
Battery connections	I			I		N.A.
Wiring harness, cables and lines	I			I		Instruments and Accessories
Ignition switch, engine stop switch and start button	I			I		
Lighting system (hi/lo intensity, brake light, head-lamp aiming, etc.)	I			I		
DRIVE TRAIN						
Drive chain lubrication	EVERY INSPECTION					Front Drive and Rear Axle
Drive chain adjustment						
Drive chain protector and roller condition						
Sprockets	I			I		
Wheel bearing	I		I	L		
Rear wheel hub					L	
Rear axle tightness (eccentric axle housing) bolts and brake hub locking nuts	I	I				

Section 02 MAINTENANCE
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STEERING/CONTROL SYSTEMS						
Throttle/housing/cable	I		I			Steering/ Controls System
Handlebar fastener	I			I		
Steering system	I			I		
Tie rod ends	I		I			
Front wheel alignment	I			I		
Choke	I			I		Carburetor and Air Intake Silencer
Tire wear and pressure	EVERY INSPECTION					Maintenance/ Lubrication
Front wheel hub	EVERY INSPECTION					
Wheel nuts and studs	I		I			
Wear and condition of tires	I	I				
SUSPENSION						
Swing arm	I	I				Front Suspension and/or Rear Suspension
Swing arm lubrication	EVERY INSPECTION					
A-arm	I	I + L				
Ball joint boot	I	I				
Ball joint	I	I				
Shock absorber		I				
BRAKE						
Brake fluid front/rear	I	I			L	Hydraulic Brakes
Brake system (discs, hoses, etc.)				I		
Brake pads		I				
Brake line fittings	I	EVERY INSPECTION				
BODY/FRAME						
Engine area	C		C			N.A.
Chassis fasteners			I			
Skid plate and A-arm protectors	EVERY INSPECTION					Body and/or Frame
Seat latch			I			
Frame				I		

N.A.: Not Available

The initial maintenance is very important and must not be neglected.

① Every 50 hours, check coolant strength.

NOTE: Some riding conditions and hauling loads may result in requiring more frequent maintenance. Some items are part of the pre-operation checks and must always be performed prior to operating the vehicle.

MAINTENANCE/LUBRICATION

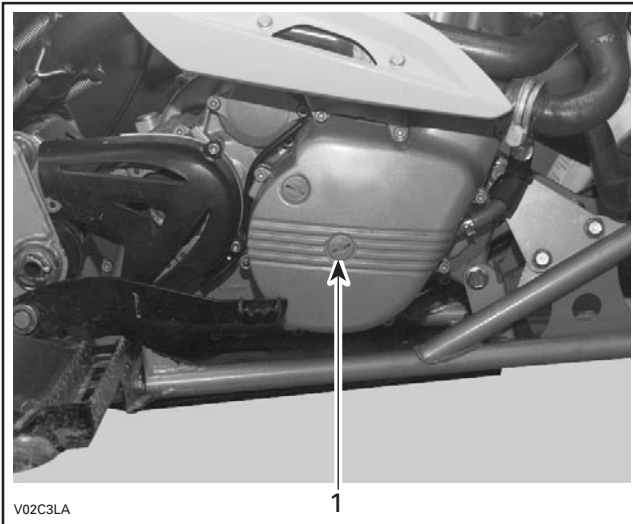
ADJUST VALVE CLEARANCE

Removal

Remove:

- fuel tank
- valve cover
- spark plugs.

Unfasten centre screw plug to right of engine housing cover.



RH SIDE OF VEHICLE

1. Remove this screw plug

Move crankshaft into TDC setting with an Allen key. Use feeler gauge to check valve clearance and change adjusting plates if necessary.

VALVE CLEARANCE mm (in)	
SERVICE LIMIT	
Exhaust	0.10 to 0.15 (.004 to .006)
Intake	

Note down valve clearance recorded.

Unfasten socket head screw beside support for oil return and secure crankshaft with the crankshaft locking bolt (P/N 529 035 617).

NOTE: Check tightness with the allen key.

To adjust valves, remove the camshaft bridges and the camshafts.

Remove adjusting plates, blow clean with compressed air.

Installation

NOTE: Before installation, check thickness of adjusting plates with micrometer.

For installation, reverse the removal procedure.

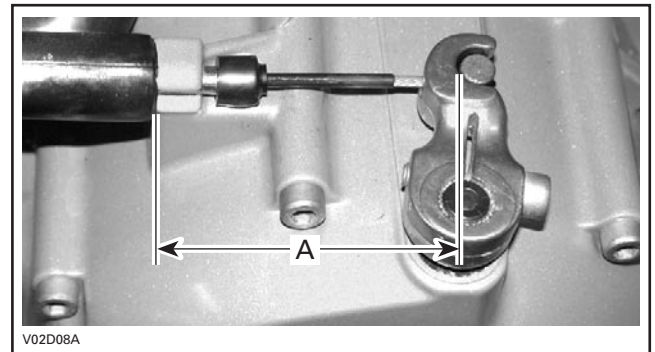
CLUTCH ADJUSTMENT

Loosen cable tension.

Adjust clutch release mechanism.

The release lever must locate on the spline in such a way that dimension A is obtained. See the following illustration.

NOTE: If necessary, unscrew the Allen socket screw and withdraw release lever. Replace the lever at the appropriate position then tighten socket screw to 19 N•m (14 lbf•ft).

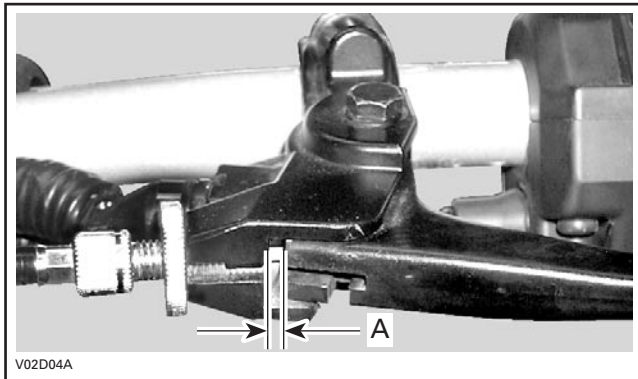


A. 68 to 75 mm (2-11/16 to 2-31/32 in)

Section 02 MAINTENANCE

Subsection 03 (MAINTENANCE/LUBRICATION)

Adjust cable free play.



A. 3.5 ± 0.5 mm ($9/64 \pm 1/64$ in)

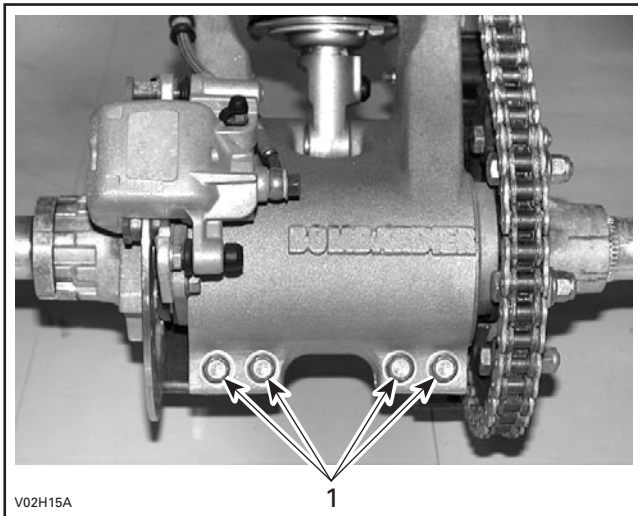
DRIVE CHAIN

Adjustment

NOTE: Always adjust drive chain with the driver, or equivalent weight, installed on the vehicle.

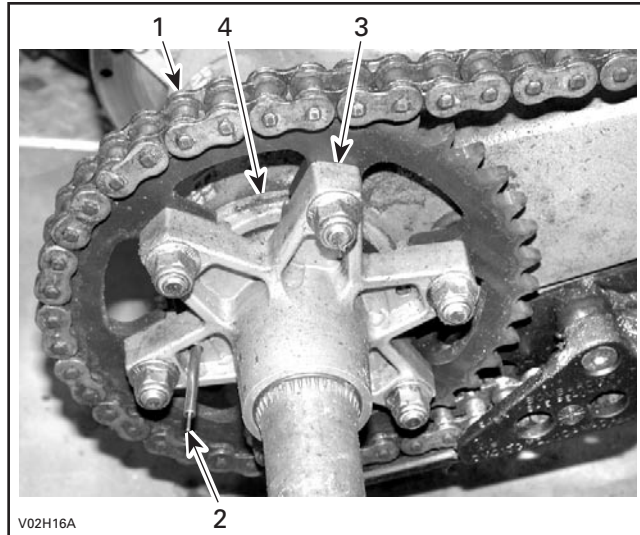
Select a level surface and set transmission to NEUTRAL.

Loosen rear axle lock bolts.



1. Rear axle lock bolts

Insert adjuster lock through rear hub and into eccentric axle housing.

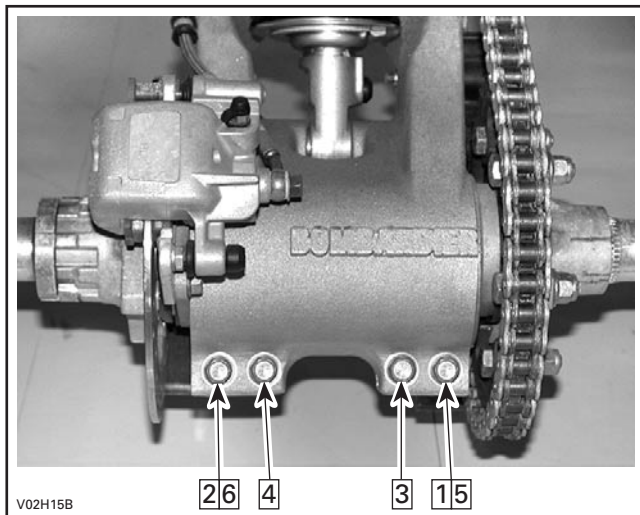


1. Drive chain
2. Adjuster lock
3. Sprocket hub
4. Eccentric axle housing

Turn the axle forward to increase or backward to decrease chain slack.

NOTE: Correct chain slack adjustment is 19 to 25.4 mm ($3/4$ to 1 in) at midway between sprockets.

Tighten the rear axle lock bolts to $23 \text{ N}\cdot\text{m}$ ($17 \text{ lbf}\cdot\text{ft}$). Use the following sequence to tighten the rear axle lock bolts correctly.



Lift rear of vehicle (without driver or equivalent weight), by the frame or by the bumper, and recheck the chain slack. The chain slack should be 44.5 to 51 mm ($1\text{-}3/4$ to 2 in). If not, redo the drive chain adjustment.

Lubrication and Cleaning

CAUTION: Never wash the chain with a high pressure washer or gasoline. Damage to the O-ring will result, causing premature wear and drive chain failure.

Clean the side surfaces of the chain with a dry cloth.

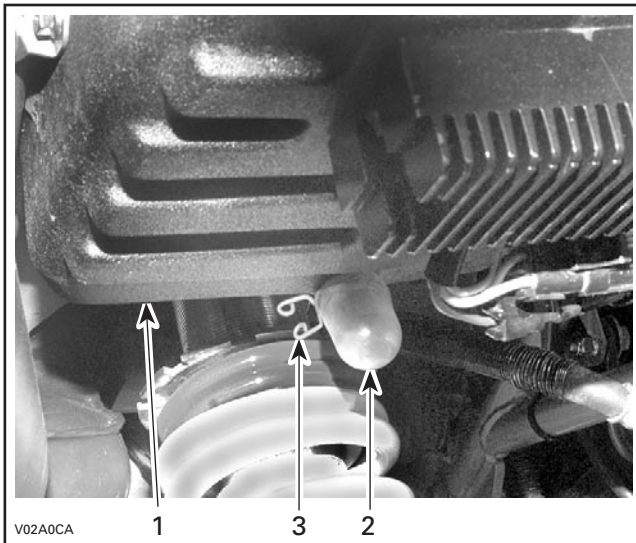
NOTE: Do not brush chain.

Lubricate only with the approved O-ring chain lubricant. Other commercial chain lubricants may contain solvent which could damage the O-rings.

AIR FILTER CLEANING/DRAINING

Air Filter Box Draining

Periodically inspect air filter box drain plug for liquid or deposits. Refer to the MAINTENANCE CHART.



- 1. Air filter box
- 2. Drain plug
- 3. Clamp

NOTE: If vehicle is used in dusty area, inspect more frequently than specified in MAINTENANCE CHART.

If liquid/deposits are found, squeeze the clamp and remove. Pull drain tube out.

CAUTION: Do not start engine when a liquid is found in the drain tube.

When liquid/deposits are found, air filter must be inspected/dried/replaced depending on its condition.

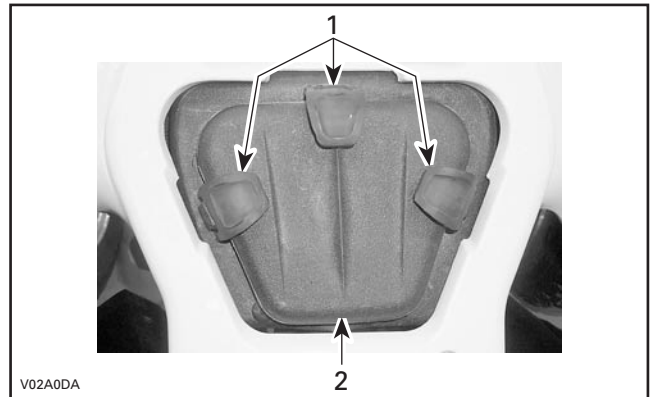
Remove air filter as explained below.

Air Filter Removal

CAUTION: Never remove or modify any component in the air box. Always use genuine parts or suitable equivalent when replacing air filter and foam. The engine carburation is calibrated to operate specifically with these components. Otherwise, engine performance degradation or damage can occur.

Remove seat.

Release latches and remove air filter box cover.

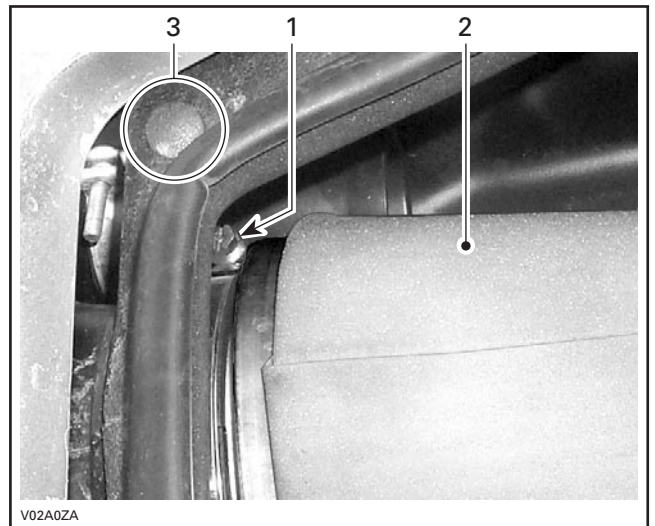


- 1. Latches
- 2. Air filter cover

Remove screw driver cap, push inside of air box.

Loosen screw on clamp and remove filter.

Remove foam.



- 1. Clamp
- 2. Air filter and foam
- 3. Screw driver cap

Pour cleaning solution (P/N 293 600 059 or an equivalent) into a bucket. Put the filter in to soak.

While filter soaks, clean inside of air box.

Section 02 MAINTENANCE

Subsection 03 (MAINTENANCE/LUBRICATION)

Rinse air filter and foam with warm water.

Squeeze foam to remove excess water. Let dry air filter and foam thoroughly.

If air filter element or foam is dirty, replace with a new one.

NOTE: Slight dust may be cleaned using a low-pressure airgun. Blow compressed air backward of operating air flow.

When the filter is dried, re-oil with air filter oil (P/N 293 600 058 or an equivalent).

Properly reinstall removed parts in the reverse order of their removal.

BOLTS, FASTENERS AND NUTS

Check bolts, fasteners and nuts at the regular intervals.

Check that all bolts and nuts are tightened to the proper torque.

ENGINE OIL AND FILTER

Oil and Oil Filter Change

WARNING

The engine oil can be very hot. Wait until engine oil is warm.

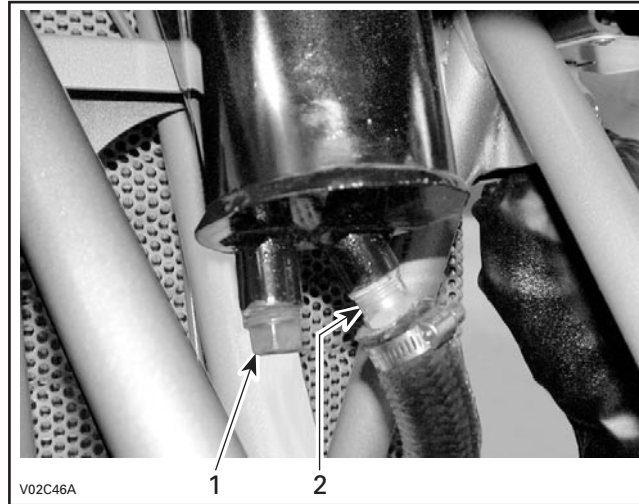
NOTE: Oil and filter are to be replaced at the same time. Oil change should be done with a warmed up engine.

Ensure vehicle is on a level surface.

Remove dipstick.

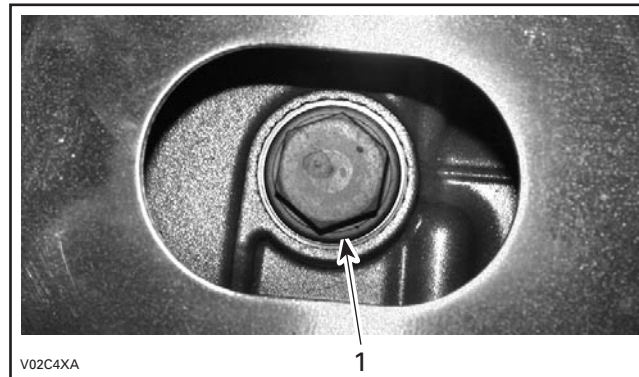
Clean the reservoir drain plug area.

Drain all oil from oil tank by removing oil tank drain plug. Wipe out any oil spillage.



1. Oil tank drain plug
2. Oil tank strainer

Place a drain pan under the engine drain plug area. Unscrew engine drain plug.



1. Oil drain plug

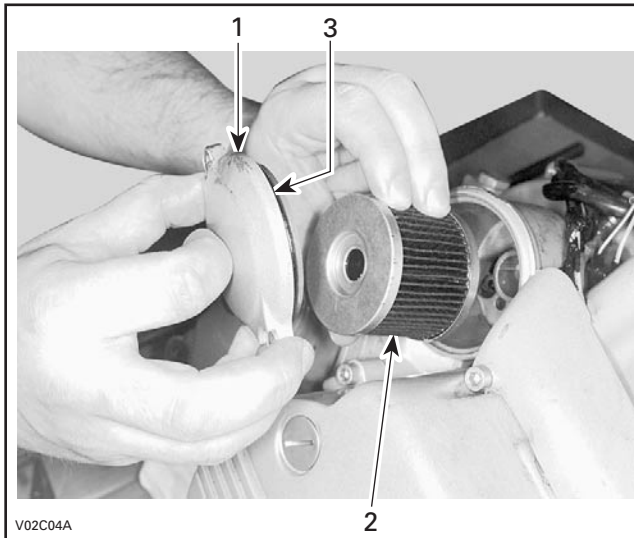
Wait a while to allow oil to flow out of oil filter.

Clean and reinstall oil tank drain plug. Torque to 20 N•m (15 lbf•ft).

Unscrew oil filter cover.

Remove oil filter and replace by a new.

NOTE: Check and change the O-ring, if necessary.



TYPICAL — RH SIDE OF ENGINE

1. Oil filter cover
2. Oil filter
3. O-ring

Wipe out any oil spillage on engine.

Inspect gasket on engine drain plug and replace as necessary. Clean gasket area on engine and drain plug then reinstall plug. Torque to 30 N•m (22 lbf•ft).

Refill oil tank at the proper level with the recommended oil. Refer to TECHNICAL DATA for capacity.

NOTE: The same oil lubricates both engine and transmission. **Do not use synthetic oil, other than Bombardier brand name, any semi-synthetic oil or any special additives.** They affect the clutching calibration.

Start engine and let idle for a few minutes.

Check if the RED indicator lamp stays ON. If so, stop engine and bleed system by removing oil filter and bleeding screw. See procedure below.

Ensure oil filter area, hose and drain plug areas are not leaking.

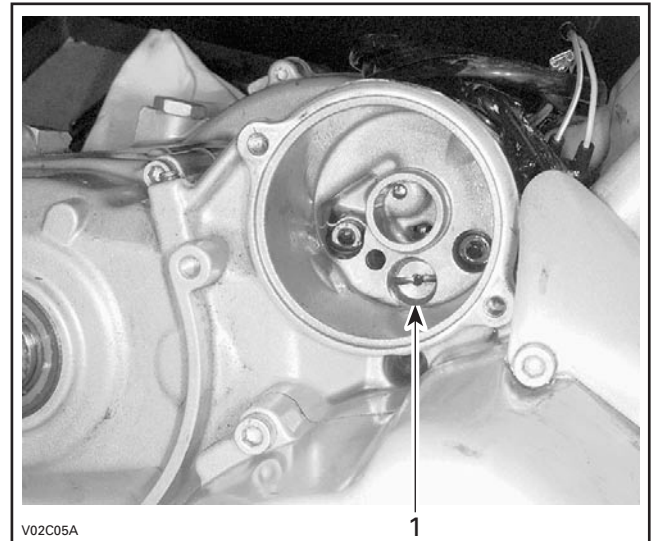
Stop engine and check oil level. Refill as necessary.

Dispose oil as per your local environmental regulations.

Bleeding Engine Oil Circuit

Remove oil filter.

Unfasten pressure bleeding screw.



BEHIND OIL FILTER

1. Bleeding screw

Unscrew and remove one spark plug.

Turn engine using starter until oil emerges in filter chamber.

Tighten pressure bleeding screw. Torque to 25 N•m (18 lbf•ft).

Install oil filter.

SPARK ARRESTER

The muffler must be periodically purged of accumulated carbon. See the MAINTENANCE CHART.

Removal

WARNING

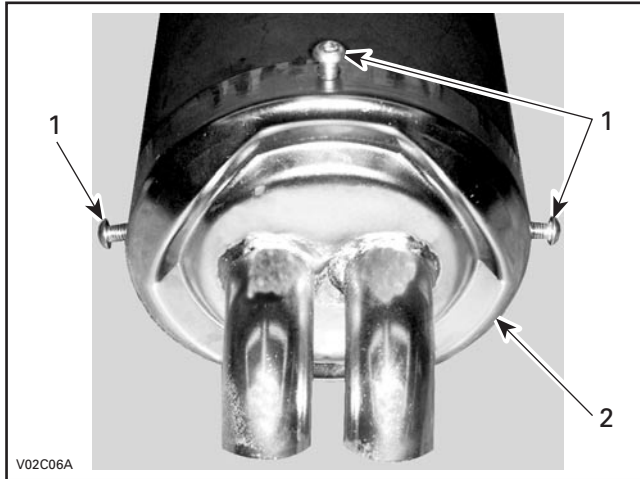
Never perform this operation immediately after the engine has been run because exhaust system is very hot. Wear eye protection and gloves. Respect all applicable laws and regulations.

Section 02 MAINTENANCE

Subsection 03 (MAINTENANCE/LUBRICATION)

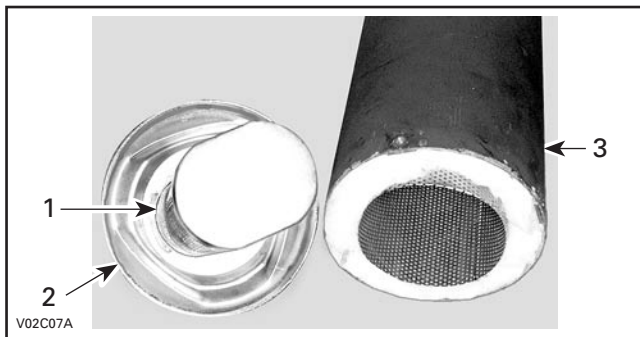
Remove:

- the screws retaining the spark arrester to the muffler



1. Screws
2. Spark arrester

- spark arrester and sealant joint



1. Spark arrester
2. Sealant joint
3. Muffler

- inner grill with wool.

Remove all carbon deposit in the muffler.

Remove carbon deposits from the spark arrester using a brush.

NOTE: Use a soft brush and be careful to avoid damaging spark arrester.

Installation

For installation, reverse the removal procedure, paying attention to the following details:

Check:

- wool and change if it deteriorate
- the spark arrester condition, it must be free of breaks and holes. Replace if necessary.

Remove the old sealant joint and replace by a new one. Use ULTRA COOPER sealant (P/N 293 800 090).



Be sure that insulating material is in place when inserting grill.

Align grill properly in bottom of muffler shell.

TIRES AND WHEELS

⚠ WARNING

When the tires are replaced, never install a bias tire with a radial tire. This combined application may create handling and/or stability problems.

Do not mix tires of different size and/or design on the same axle.

Front tire pairs or rear tire pairs must be the identical model and manufacturer.

For unidirectional tread pattern, ensure that the tires are installed in the correct direction of rotation.

The radial tires must be installed as a complete set.

Severe injury or death can result if you do not follow these instructions.

Tire Pressure

⚠ WARNING

Tire pressure greatly affects vehicle handling and stability. Under pressure may cause tire to deflate and rotate on wheel. Overpressure may burst the tire. Always follow recommended pressure. Since tires are low-pressure types, a manual pump should be used.

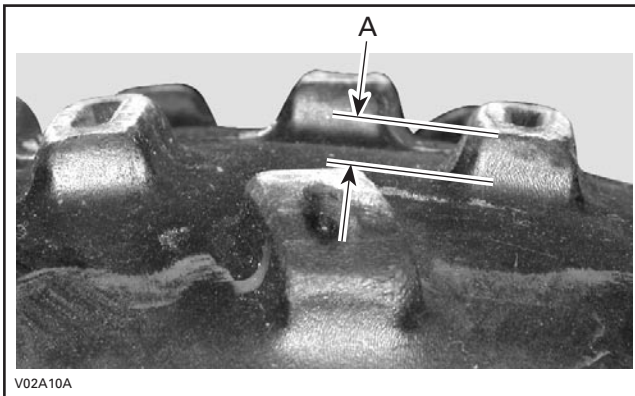
Check pressure when tires are cold before using the vehicle.

NOTE: Tire pressure changes with temperature and altitude. Recheck pressure if one of these conditions has changed.

TIRES PRESSURE		
RECOMMENDED	FRONT	REAR
	35 kPa (5 PSI)	35 kPa (5 PSI)
MINIMUM	21 kPa (3 PSI)	21 kPa (3 PSI)

Tire/Wheel Condition

Check tire for damage and wear. Measure thread height. It should be 4 mm (5/32 in) minimum. Replace if damaged or worn.



TYPICAL

A. 4 mm (5/32 in)

NOTE: Do not make a tire rotation. The front and rear tires have a different size. Besides, these tires are directional and their rotation must be kept in a specific direction for proper operation.

Wheel Removal

Untighten nuts then lift vehicle where needed. Place a support under vehicle. Remove nuts then withdraw wheel.

At installation, it is recommended to apply anti-seize lubricant on threads. Gently tighten nuts in a criss-cross sequence then apply a final torque of 53 N•m (39 lbf•ft).

ENGINE AREA

Check in the engine area, for leak or other damage. Clean mud, leaves, etc. from engine area.

STORAGE/PRESEASON PREPARATION

STORAGE

If the ATV is to be stored for an extended period of time more than 1 month, be sure to thoroughly check the vehicle for needed repairs and have them performed.

FUEL STABILIZER

A fuel stabilizer (P/N 413 408 600) can be added in fuel tank to prevent fuel deterioration and avoid draining fuel system for storage. Follow manufacturer's instructions for proper use.

If above fuel stabilizer is not used, drain fuel system including fuel tank and carburetor.

CAUTION: Fuel stabilizer should be added prior to engine lubrication to ensure carburetor protection against varnish deposit.

ENGINE LUBRICATION

Engine internal parts must be lubricated to protect them from possible rust formation during the storage period.

Proceed as follows:

Place the vehicle on blocks to raise all four tires off the ground.

Start the engine and allow it to run at idle speed until the engine reaches its operating temperature.

Stop the engine.

Change engine oil and filter. Refer to the section MAINTENANCE/LUBRICATION.

Remove air box cover, air filter and foam to spray storage oil (P/N 413 711 600) into carburetor bore.

Restart engine and run at idle speed.

Inject storage oil until the engine stalls or until a sufficient quantity of oil has entered the engine (approximately half a can).

Remove spark plugs and spray storage oil into cylinder. Press start button, 1 or 2 seconds maximum, to lubricate cylinder.

Stop the engine and remove the battery. Store it in dry and cool place out of the sun.

Turn the fuel valve to OFF and drain carburetor.

Reinstall the spark plugs, foam, air filter and air box cover.

WARNING

This procedure must only be performed in a well-ventilated area. Do not run engine during storage period.

RAGS IN AIR INTAKE AND EXHAUST SYSTEM

At storage preparation, block air intake inlets and exhaust system outlets using clean rags.

The air intake tubes are located under fuel tank cover.

NOTE: Remove those rags at preseason preparation.

VEHICLE CLEANING AND PROTECTION

Wash and dry the vehicle then remove any dirt or rust.

CAUTION: Never use a high pressure washer to clean the vehicle. USE LOW PRESSURE ONLY (like a garden hose). High pressure can cause electrical or mechanical damages.

To clean the vinyl or plastic parts, use a flannel cloth with Bombardier Vinyl & Plastic Cleaner (P/N 413 711 200).

CAUTION: It is necessary to use flannel cloths on plastic parts to avoid damaging surfaces. Never clean plastic parts with strong detergent, degreasing agent, paint thinner, acetone, products containing chlorine, etc.

To clean the entire vehicle, including metallic parts, use Bombardier Cleaner (P/N 293 110 001 (400 g) or 293 110 002 (4 L)) or an equivalent like Simple Green® from Sunshine Markers Inc., available at hardware stores or at automotive parts retailer.

CAUTION: Do not use Bombardier Cleaner on decals, plastic parts or vinyl.

Inspect the vehicle and repair any damage. Touch up all metal spots where paint has been scratched off. Spray all metal parts with BOMBARDIER LUBE (P/N 293 600 016).

Section 02 MAINTENANCE

Subsection 04 (STORAGE/PRESEASON PREPARATION)

NOTE: Protect the vehicle with a cover to prevent dust accumulation during storage.

CAUTION: The vehicle has to be stored in a cool and dry place and covered with an opaque tarpaulin. This will prevent sun rays and grime from affecting plastic components and vehicle finish.

COOLANT DENSITY

Test the density of the coolant using an antifreeze hydrometer.

NOTE: Follow manufacturer's instructions for proper use.

A 50/50 mixture of antifreeze and distilled water will provide the optimum cooling, corrosion protection and antifreeze protection.

Do not use tap water, straight antifreeze or straight water in the system. Tap water contains minerals and impurities which build up in the system. Straight water or antifreeze will cause the system to freeze.

Change coolant if necessary.

Section 02 MAINTENANCE
Subsection 04 (STORAGE/PRESEASON PREPARATION)

PRESEASON PREPARATION

SYSTEM	PRESEASON OPERATIONS	TO BE PERFORMED BY		REFER TO
		CUSTOMER	DEALER	
ENGINE/ TRANSMISSION	Test Run Vehicle. Check Clutch and Transmission Operation		✓	N.A.
	Engine Oil and Filter Oil Replacement ①	✓		Maintenance/ Lubrication
	Coolant Replacement and Pressurization of System		✓	Cooling System
	Condition of Seals		✓	N.A.
	Spark Arrester		✓	Maintenance/ Lubrication
	Exhaust System Condition		✓	Removal and Installation
	Rags Removal (intake and exhaust) ②	✓		Maintenance/ Lubrication
FUEL SYSTEM	Fuel Line and Connectors Condition		✓	Fuel Circuit
	Carburetor Adjustment		✓	Carburetor and Air Intake Silencer
	Throttle and Choke Cable Inspection/Adjustment		✓	
	Air Filter Cleaning/Replacement	✓		Maintenance/ Lubrication
ELECTRICAL	Spark Plug Replacement ③	✓		Ignition System
	Battery Condition/Charging and Installation		✓	Starting System
	Starter Connections and Routing		✓	
	Operation of Lighting System	✓		Instruments and Accessories
DRIVE TRAIN	Drive Chain Lubrication	✓		Rear Axle
	Drive Chain Adjustment	✓		
	Drive Chain Protector Condition	✓		
	Sprockets Inspection	✓		
STEERING/ CONTROL SYSTEM	Steering System Inspection and Adjustment		✓	Steering/Controls System
	Handlebar Fastener Tightness		✓	
	Wheel Tightness		✓	
	Tire Pressure	✓		Maintenance/ Lubrication
	Tire Condition		✓	
SUSPENSION	Suspension System Inspection		✓	Front/Rear Suspension
	A-Arm Lubrication	✓		
	Bearing Condition		✓	
	Swing Arm Condition		✓	
BRAKES	Brake Fluid Change		✓	Hydraulic Brakes
	Brake Condition		✓	
BODY/FRAME	Frame and Skid Plate Condition		✓	Body and/or Frame
	Seat Latch		✓	

N.A.: Not available

- ① Replace oil and filter only if it has not been previously performed at the storage.
- ② Remove rags in intake and exhaust that were installed at the storage.
- ③ Before installing new spark plugs at preseason preparation, it is suggested to burn excess storage oil by starting the engine with the old spark plugs. Only perform this operation in a well-ventilated area.