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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

LUBRICATION AND MAINTENANCE CHART		INITIAL 10 HOURS OR 400 KM	EVERY 25 HOURS OR 1250 KM	EVERY 50 HOURS OR 2500 KM	EVERY 100 HOURS OR 5000 KM OR ONCE A YEAR	EVERY 200 HOURS OR 10000 KM OR TWO YEARS	REFER TO THE SECTION
ENGINE/ TRANSMISSION	Engine/transmission oil level	EVERY RIDE					N.A.
	Engine/transmission oil and filter replacement	✓		✓			02-03
	Spark arrester	✓			✓		
	Valve clearance	✓			✓		
	Oil tank strainer cleaning					✓	03-07
	Engine mount fasteners	✓			✓		03-02
	Exhaust system	✓			✓		
	Condition of seals	✓			✓		N.A.
	Coolant level	EVERY RIDE					
	Coolant replacement					✓	03-03
	Cooling system condition	✓			✓		
	Radiator cap pressure test	✓				✓	
	Radiator condition/cleanliness (radiator fines)	✓		✓			
	Clutch and transmission operation				✓		03-08/ 03-09
	Clutch lever adjustment	✓		✓			02-03
FUEL SYSTEM	Air filter cleaning/draining	✓	✓				02-03
	Air filter and foam replacement			✓			
	Fuel lines and connections	✓			✓		04-02
	Fuel tank strainer replacement					✓	
	Carburetor adjustment	✓			✓		04-03
ELECTRICAL	Spark plug inspection/replacement	✓			✓		05-05
	Battery connections				✓		N.A.
	Wiring harness, cables and lines	✓			✓		05-06
	Condition of ignition switch and start/stop button	EVERY RIDE					
	Condition of lighting system (hi/lo intensity, brake light, etc.)	EVERY RIDE					
	Headlight beam aiming	✓			✓		
DRIVE TRAIN	Drive chain lubrication	EVERY RIDE					06-02
	Drive chain adjustment	EVERY RIDE					
	Drive chain protector and roller condition	EVERY RIDE					
	Sprockets inspection	✓			✓		
	Wheel bearing condition				✓		06-03
	Rear wheel hub lubrication					✓	
	Axle adjustment nut lubrication					✓	
	Rear axle tightness (eccentric axle housing)	✓	✓				

Section 02 MAINTENANCE
Subsection 02 (MAINTENANCE CHART)

LUBRICATION AND MAINTENANCE CHART		INITIAL 10 HOURS OR 400 KM	EVERY 25 HOURS OR 1250 KM	EVERY 50 HOURS OR 2500 KM	EVERY 100 HOURS OR 5000 KM OR ONCE A YEAR	EVERY 200 HOURS OR 10000 KM OR TWO YEARS	REFER TO THE SECTION
STEERING/ CONTROL SYSTEMS	Throttle condition	EVERY RIDE					07-02
	Choke condition	EVERY RIDE					04-03
	Handlebar fastener tightness				✓		07-02
	Steering system mechanism	✓			✓		
	Tie rod ends			✓			
	Steering adjustment	✓			✓		
	Front wheel alignment	✓			✓		07-02
	Tire pressure	EVERY RIDE					02-03
	Wheel mount tightness and stud lubrication	✓			✓		
	Wear and condition of tires	EVERY RIDE					
SUSPENSION	Swing arm condition				✓		08-02/ 08-03
	Swing arm lubrication		✓				
	A-arm lubrication		✓				
	A-arm condition			✓			
	Ball joint boot condition	✓	✓				
	Ball joint free play			✓			
	Shock absorber condition			✓			
BRAKE	Brake fluid level front/rear	EVERY RIDE					09-02
	Brake fluid replacement front/rear				✓		
	Brake system condition (discs, hoses, etc.)				✓		
	Brake pads condition		✓				
	Brake line fittings	EVERY RIDE					
BODY/FRAME	Engine area cleaning			✓			N.A.
	Fastener condition/tightness			✓			10-02/ 10-03
	Skid plate condition	✓		✓			
	Seat latch				✓		
	Frame inspection	EVERY RIDE					
	Vehicle cleaning and protection			✓			

N.A.: Not Available

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

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

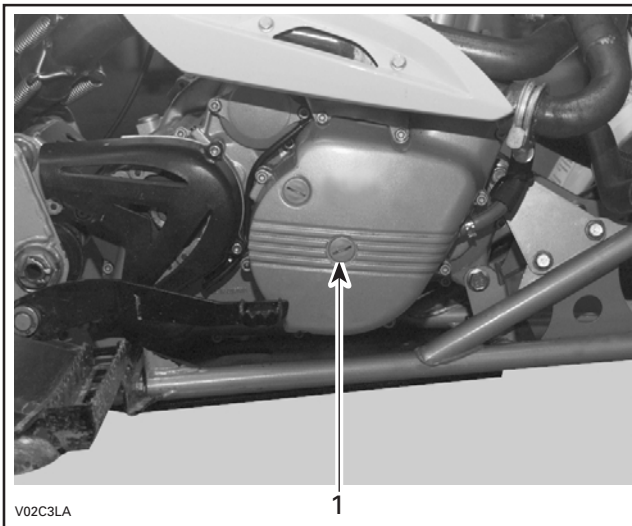
ADJUST VALVE CLEARANCE

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 mm (.004 to .006 in)
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.

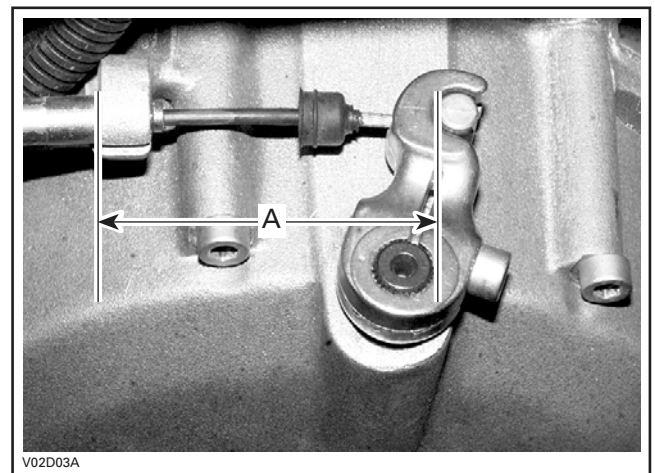
CLUTCH ADJUSTMENT

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 10 N•m (89 lbf•in).

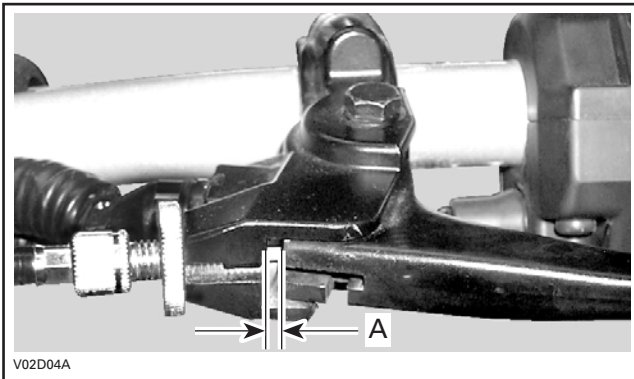


A. 68 to 75 mm (2-11/16 to 2-31/32 in)

Section 02 MAINTENANCE

Subsection 03 (MAINTENANCE/LUBRICATION)

Adjust cable free play.



A. $2 \pm 0.5 \text{ mm}$ ($5/64 \pm 1/64 \text{ in}$)

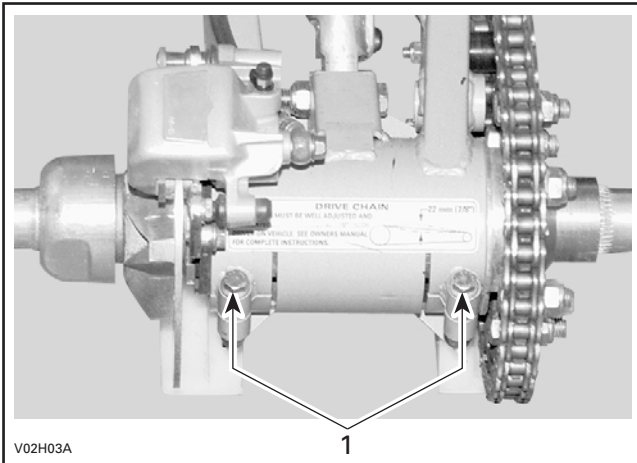
DRIVE CHAIN

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.

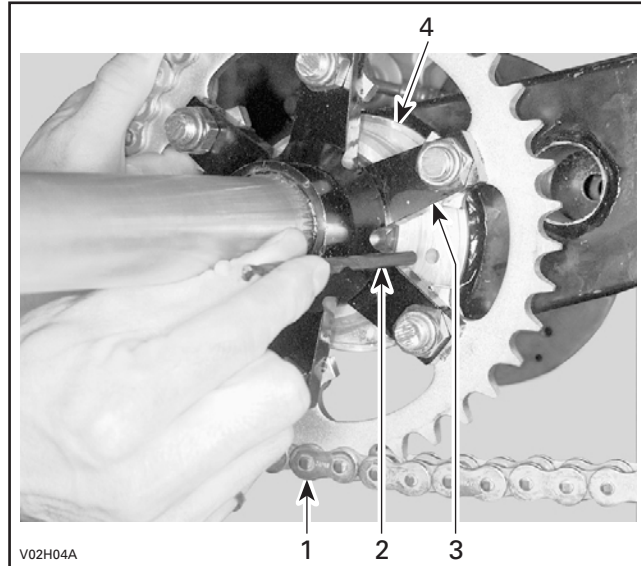
Loosen rear axle lock bolts **no. 12**.



1. Rear axle lock bolts

Insert adjuster lock through rear hub **no. 13** and into eccentric axle housing **no. 6**.

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



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

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 $28 \text{ N}\cdot\text{m}$ ($21 \text{ lbf}\cdot\text{ft}$).

Lift rear of vehicle (without driver), 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.

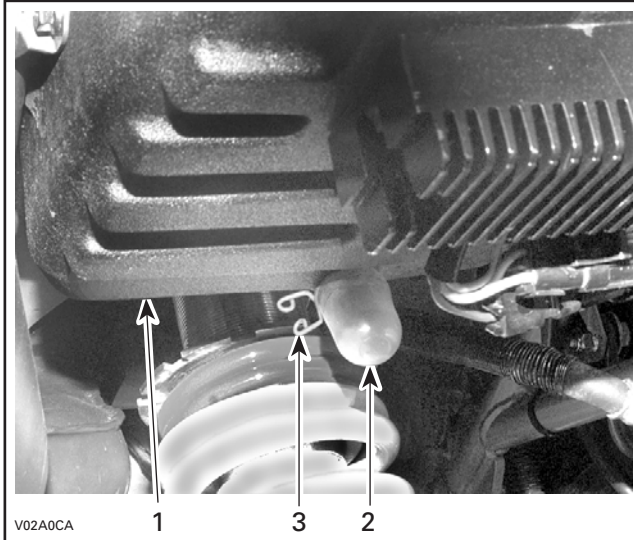
NOTE: Do not brush chain.

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

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

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

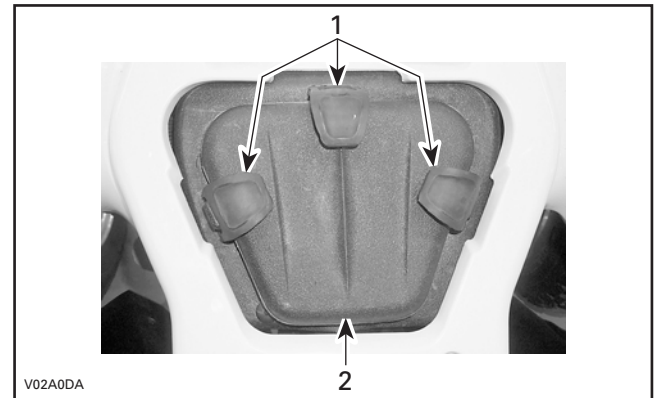
Remove air filter as explained below.

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.

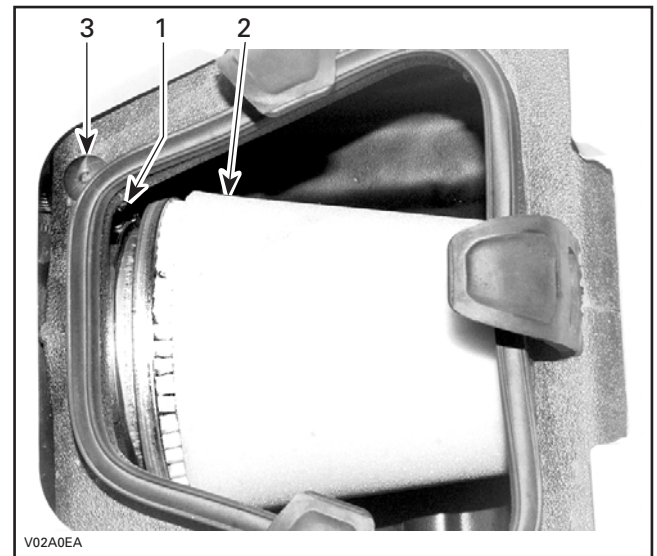
Remove seat.

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

Clean inside of air box.

Wash air filter and foam with warm water and a mild detergent as necessary.

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.

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

Section 02 MAINTENANCE

Subsection 03 (MAINTENANCE/LUBRICATION)

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.

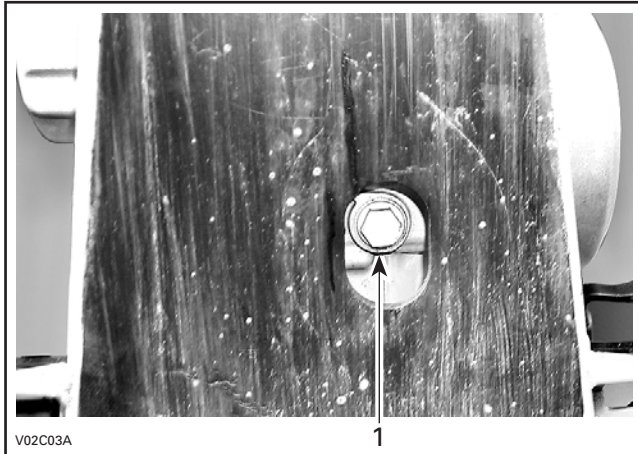
Remove dipstick.

Clean the drain plug area.

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

Place a drain pan under the engine drain plug area.

Unscrew drain plug.

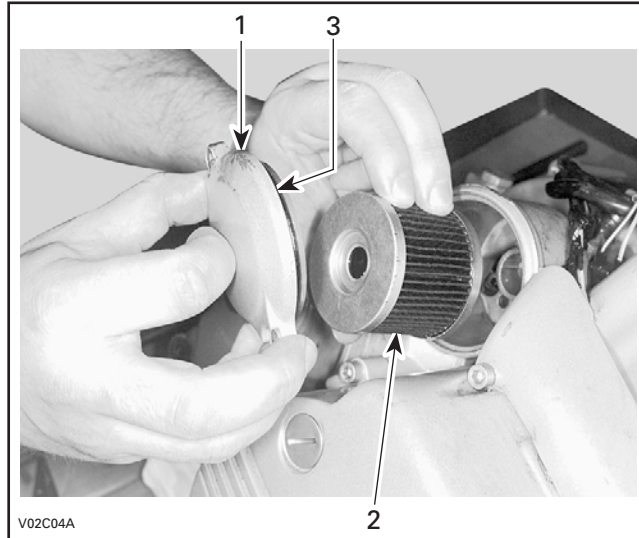


1. Oil drain plug

Wait a while to allow oil to flow out of oil filter.
Reinstall drain plug. Torque to 20 N•m (15 lbf•ft).

Remove oil filter and replace by a new.

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



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 40 N•m (30 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. **Don't use synthetic or semi-synthetic oil.** They affect the clutching calibration.

Start engine and let idle for a few minutes.

Check if the RED indicator lamp stay ON. If yes, 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.

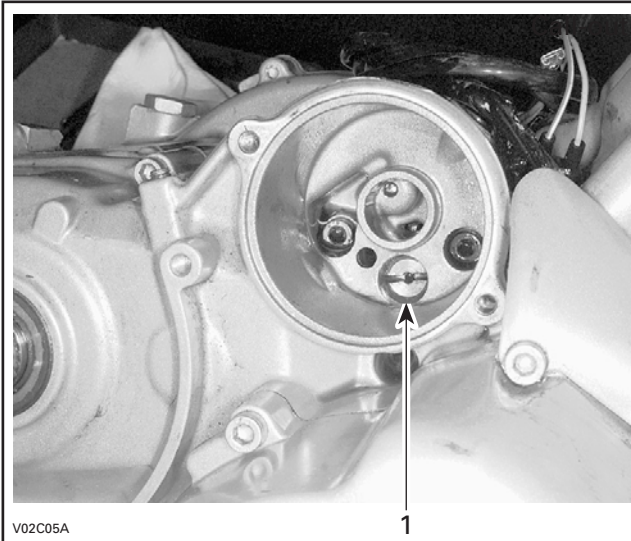
Stop engine and check oil level. Refill as necessary.

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.

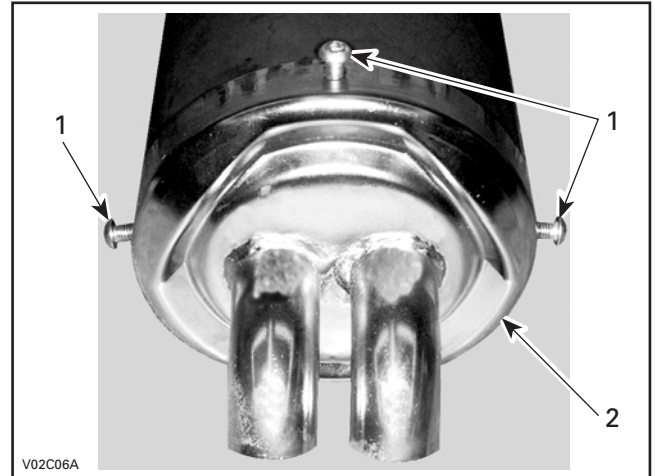
Removal

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.

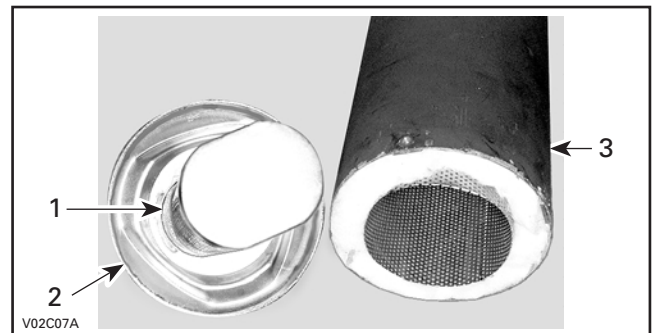
Remove:

- 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.

Section 02

MAINTENANCE

Subsection 03 (MAINTENANCE/LUBRICATION)

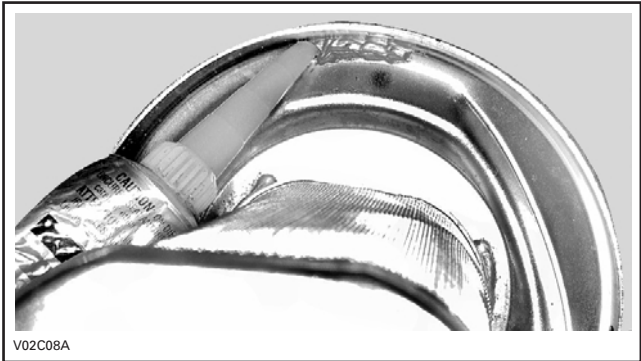
Installation

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 413 710 300).



Be sure that wool is in place when inserting grill. Align grill properly in bottom of muffler shell.

TIRES AND WHEELS

Tire Pressure

CAUTION: Underpressure may cause tire to deflate and rotate on wheel. Overpressure might burst the tire. Always follow recommended pressure. Since tires are low-pressure type, a manual pump should be used.

Check pressure when tires are cold before using the vehicle.

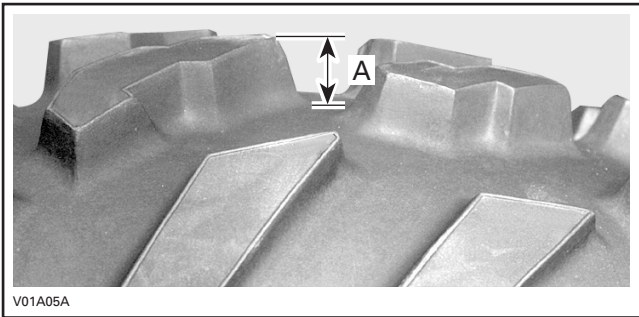
NOTE: Tire pressure changes with temperature and altitude. Recheck pressure if one of these conditions has changed.

For your convenience, a pressure gauge is supplied in tool box.

TIRE 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 52.5 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/PRE-SEASON 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 496 041 100) 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 pre-season preparation.

VEHICLE CLEANING AND PROTECTION

Wash and dry the vehicle.

Remove any dirt or rust.

To clean the plastic parts, use only flannel clothes or Kimtowels® wipers no. 58-380 from Kimberly-Clark.

CAUTION: It is necessary to use flannel cloths or Kimtowels wipers on plastic parts to avoid damaging further surfaces to clean.

To clean the entire vehicle, including metallic parts with a **thick** coat of grease, use Endust® imported by Bristol Myers, available at hardware stores or supermarkets.

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

To clean the entire vehicle, including metallic parts with a **thin** coat of grease, use Simple Green® from Sunshine Makers Inc., available at hardware stores or at automotive parts retailer.

For vinyl and plastic parts, use Vinyl & Plastic Cleaner (P/N 413 711 200 (6 x 1 L)).

Section 02 MAINTENANCE

Subsection 04 (STORAGE/PRE-SEASON PREPARATION)

CAUTION: Never clean plastic parts with strong detergent, degreasing agent, paint thinner, acetone, products containing chlorine, etc.

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).

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.

Section 02 MAINTENANCE
Subsection 04 (STORAGE/PRE-SEASON PREPARATION)

PRE-SEASON PREPARATION

SYSTEM	PRE-SEASON 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	✓		Section 02-03
	Coolant Replacement and Pressurization of System		✓	Section 03-03
	Condition of Seals		✓	N.A.
	Spark Arrestor		✓	Section 02-03
	Exhaust System Condition		✓	Section 03-02
	Rags Removal (intake and exhaust) ②	✓		Section 02-03
FUEL SYSTEM	Fuel Line and Connectors Condition		✓	Section 04-02
	Carburetor Adjustment		✓	Section 04-03
	Throttle and Choke Cable Inspection/Adjustment		✓	
	Air Filter Cleaning/Replacement	✓		Section 02-03
ELECTRICAL	Spark Plug Replacement ③	✓		Section 05-05
	Battery Condition/Charging and Installation		✓	Section 05-04
	Starter Connections and Routing		✓	
	Operation of Lighting System	✓		Section 05-06
DRIVE TRAIN	Drive Chain Lubrication	✓		Section 06-02
	Drive Chain Adjustment	✓		
	Drive Chain Protector Condition	✓		
	Sprockets Inspection	✓		
STEERING/ CONTROL SYSTEM	Steering System Inspection and Adjustment		✓	Section 07-02
	Handlebar Fastener Tightness		✓	
	Wheel Tightness		✓	
	Tire Pressure	✓		Section 02-03
	Tire Condition		✓	
SUSPENSION	Suspension System Inspection		✓	Sections 08-02 and 08-03
	Bearing Condition		✓	
	Swing Arm Condition		✓	
BRAKES	Brake Fluid Change		✓	Section 09-02
	Brake Condition		✓	
	Brake Cable Adjustment		✓	
BODY/FRAME	Frame and Skid Plate Condition		✓	Sections 10-02 and 10-03
	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 pre-season 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.