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Section 02 MAINTENANCE
Subsection 02 (MAINTENANCE CHART)

MAINTENANCE CHART

SYSTEM	PART/TASK	10-HOUR OR 500 km (300 m.) INSPECTION (to be performed by dealer)	WEEKLY OR EVERY 240 km (150 m.)	MONTHLY OR EVERY 800 km (500 m.)	ONCE A YEAR OR EVERY 3200 km (2000 m.)	STORAGE (to be performed by dealer)	PRESEASON PREPARATION (to be performed by dealer)	REFER TO THE FOLLOWING SUBSECTIONS	
								IN THIS SUPPLEMENT	2003 SKI-DOO SHOP MANUAL ZX SERIES (P/N 414 200 042)
	Rewind Starter and Rope					I,L,C	I		Subsection 04-09
	Engine Nuts and Screws	I			I	I		Subsection 02-03: See TOP END	
	Exhaust System	I		I		I		Subsection 02-03: See ENGINE REMOVAL	
	Engine Lubrication					L		Subsection 02-03	
	Cooling System	I			I		I	Subsection 03-06	
	Coolant	I				R		Subsection 03-06	
	Condition of Seals					I	I	Subsections 03-02 and 03-03	
	RAVE Valves				C			Subsection 02-03: See ENGINE REMOVAL	
	Throttle Cable	I			I	I	I	Subsection 03-05	
	Injection Oil Filter			I		R		Subsection 03-05	
	Oil Injection Pump	A			A		A	Subsection 03-05	
	Fuel Filter						R		Subsection 02-04
	Fuel Lines, Fuel Rail and Connections	I				I	I	Subsection 04-03	
	Fuel Injection System (visual inspection)				I				
	Throttle Body Bores and Throttle Plate						C	Subsection 02-04	
	Air Filter			C			C		Subsection 02-04
	Drive Belt	I	I				I		Subsection 05-02
	Drive and Driven Pulleys	I		I	C	I	C		Subsections 05-03 and 05-04
	Tightening Torque of Drive Pulley Screw	I			I		I		Subsection 05-03
	Driven Pulley Preload	I			I	I			Subsection 05-04
	Brake Fluid	I	I			R	I		Subsection 05-06
	Brake	I	I			I	I		Subsection 05-06

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								IN THIS SUPPLEMENT	2003 SKI-DOO SHOP MANUAL ZX SERIES (P/N 414 200 042)
	Drive Chain Tension	A		A		A			Subsection 05-07
	Chaincase Oil	I		I		R	I		Subsection 05-07
	Drive Axle End Bearing**	L		L		L			Subsection 07-04
	Steering and Front Suspension Mechanism Lubrication**	A,I,L		A,I	L	A,I,L			Subsections 08-02 and 08-03
	Wear and Condition of Skis and Runners	I	I			I			Subsection 08-03
	Suspension **	I		I,L		I,L			Section 07: See appropriate subsection
	Suspension Stopper Strap				I	I			Section 07: See appropriate subsection
	Track	I		I		I			Subsection 07-05
	Track Tension and Alignment	A	AS REQUIRED						
	Spark Plugs*	I		I			R		Subsection 06-03
	Battery	I		I		I	I		Subsection 06-04
	Headlight Beam Aiming				A		A		Subsection 09-02
	Wiring Harnesses, Cables and Lines	I		I		I			Subsection 09-02
	Operation of Lighting System (HI/LO beam, brake light, etc.) Test Operation of Engine Cut-Out Switch and Tether Cut-Out Switch	I	I				I		<i>Operator's Guide</i>
	Rags in Air Intake and Exhaust System					R	C		Subsections 02-03 and 02-04
	Engine Compartment	C		C		C			Subsection 02-03
	Vehicle Cleaning and Protection	C		C		C			Subsection 02-03

A = ADJUST

I = INSPECT (clean, inspect, repair, adjust and lubricate)

L = LUBRICATE

R = REPLACE

C = CLEAN

* 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.

**Lubricate whenever the vehicle is used in wet conditions (wet snow, rain, puddles).

STORAGE

GENERAL

Proper snowmobile storage is a necessity during the summer months or when a vehicle is not being used for more than one month.

Refer to storage column from MAINTENANCE CHART jointly with the present storage procedure in order to cover each and every aspect of the snowmobile storage procedure. Any worn, broken or damaged parts should be replaced.

WARNING

Unless otherwise specified, engine should be turned off for storage procedure.

VEHICLE CLEANING

To facilitate the inspection and ensure adequate lubrication of components, it is recommended to clean the entire vehicle.

Remove any dirt or rust.

To clean the entire vehicle, use only flannel cloths or equivalent.

CAUTION: It is necessary to use flannel cloths or equivalent on windshield and hood to avoid damaging further surfaces to clean.

To clean the entire vehicle, including bottom pan and metallic parts use Heavy duty cleaner (P/N 293 110 001 (spray can 400 g) or P/N 293 110 002 (4 L)).

CAUTION: Do not use Heavy duty cleaner on decals or vinyl.

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

To remove scratches on windshield or hood use BOMBARDIER Scratch Remover Kit (P/N 861 774 800).

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

Inspect the hood and repair any damage.

Touch up all metal spots with touch-up paint where paint has been scratched off.

Spray all bare metal parts including shock chromed rods with BOMBARDIER LUBE (P/N 293 600 016).

Wax the hood and the painted portion of the frame for better protection. Use a non-abrasive wax.

NOTE: Apply wax on glossy finish only.

ENGINE COMPARTMENT

Keep clean of grass, twigs, cloth, etc. These are combustible under certain conditions.

BATTERY

Remove battery, clean its tray and its exterior surface. Charge battery as explained in BATTERY section.

FUEL STABILIZER

With the new fuel additives, it is critical to use the fuel stabilizer (P/N 413 408 600) (250 mL) to prevent fuel deterioration, gum formation and fuel system components corrosion. Follow manufacturer's instructions for proper use.

Pour fuel stabilizer in fuel tank.

Do not drain fuel system.

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

ENGINE LUBRICATION

NOTE: Be sure to add fuel stabilizer before starting the engine.

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

Section 02 MAINTENANCE

Subsection 03 (STORAGE)

Proceed as follows:

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

WARNING

Ensure the track is free of all particles which could be thrown out while it is rotating. Keep hands, tools, feet and clothing clear of track. Ensure no one is standing in close proximity to the vehicle.

Stop the engine.

Remove air intake silencer to spray storage oil into each throttle body 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).

With the engine stopped, remove the spark plugs and spray storage oil (P/N 413 711 600 for Canada and P/N 413 711 900 for U.S.A.) into each cylinder.

Crank slowly 2 or 3 revolutions to lubricate cylinders.

Reinstall the spark plugs and air intake silencer.

WARNING

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

COUNTERSHAFT LUBRICATION

Driven pulley and brake disc must be floating on the countershaft for efficient operation. Lubricate with anti-seize lubricant (P/N 293 800 070).

CAUTION: Do not lubricate excessively as lubricant could contact and soil brake pads and/or drive belt.

PULLEY PROTECTION

After inspection and interior cleaning of pulleys, spray BOMBARDIER LUBE (P/N 293 600 016) on sheaves. Do not reinstall drive belt.

VEHICLE PROTECTION

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

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

Lift rear of vehicle until track is clear of the ground. Install on a snowmobile mechanical stand.

NOTE: Do not release track tension.

RAGS IN AIR INTAKE AND EXHAUST SYSTEM

Block air intake hole and exhaust system hole using clean rags.

PRESEASON PREPARATION

Proper vehicle preparation is necessary after the summer months or when a vehicle has not been used for more than one month.

Refer to preseason preparation column from MAINTENANCE CHART jointly with the present preseason preparation procedure in order to cover each and every aspect of the snowmobile preseason preparation procedure.

Any worn, broken or damaged parts found during the storage procedure should have been replaced. If not, proceed with the replacement.

WARNING

Unless otherwise specified, engine should be turned off for preparation procedure.

FUEL FILTER REPLACEMENT

The fuel filter is located beside steering column, behind oil injection tank.

Release the fuel pressure of the system. Refer to COMPONENT INSPECTION AND ADJUSTMENT.

Remove the air intake silencer.

Disconnect both ends of fuel filter line.

Unscrew the fuel filter support nut then remove the filter.

THROTTLE BODY CLEANING

Remove the throttle body from vehicle.

Using the Pulley Flange Cleaner (P/N 413 711 809), remove the dirt ejected by the drive belt from the throttle plate and from both throttle body bores. After throttle body installation, adjust throttle and injection oil cables.

AIR FILTER CLEANING

Check that inside of air silencer is clean and dry then properly reinstall the filter.

CAUTION: These snowmobiles have been calibrated with the filter installed. Operating the snowmobile without it may cause engine damage.

RAGS IN AIR INTAKE AND EXHAUST SYSTEM

Remove rags that were installed during storage preparation.

CLEANING OF DRIVE AND DRIVEN PULLEYS

Clean drive and driven pulleys sheaves with Pulley Flange Cleaner (P/N 413 711 809).

CLEANING OF BRAKE DISK

Remove any rust built-up on braking surfaces. Clean brake disk braking surfaces with Pulley Flange Cleaner (P/N 413 711 809).

DRIVE BELT CONDITION

Inspect belt for cracks, fraying or abnormal wear. Replace if necessary. Make sure to install the proper belt with arrow printed on belt pointing front of vehicle.

SPARK PLUGS

Once preseason preparation is done, start engine with the old spark plug(s) to burn excess storage oil. Then, install new properly gapped spark plug(s).