

Please route to:

<input type="checkbox"/> Service	<input type="checkbox"/> Init.
<input type="checkbox"/> Sales	<input type="checkbox"/>
<input type="checkbox"/> Parts	<input type="checkbox"/>



No. **99-9**

Date: September 24, 1999

SUBJECT: Storage Procedures

YEAR	MODEL	MODEL NUMBER	SERIAL NUMBER
All	All	All	All

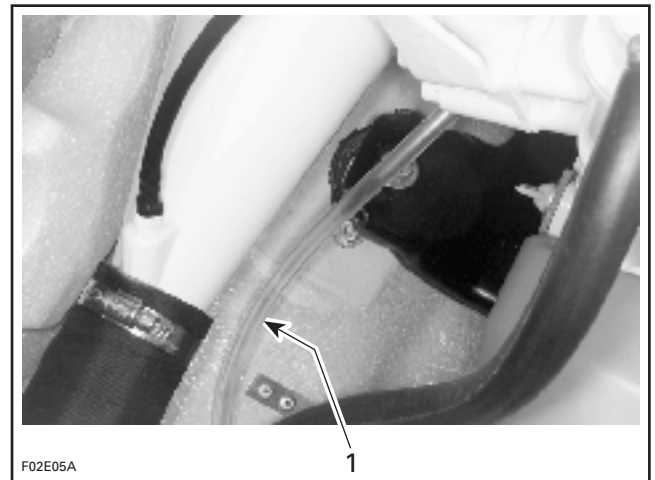
NOTE: Refer to appropriate *Sea-Doo Shop Manual* or *Shop Manual Supplement* when servicing Sea-Doo watercraft.

Engine Draining

Check engine drain hose (lowest hose from engine). Make sure there is no sand or other particles in it and that it is not obstructed so that water can leave the engine. Clean hose and fitting as necessary.

CAUTION: Water in the engine drain hose must be free to flow out, otherwise water could be trapped in the engine. Should water freeze in the engine, severe damage will occur. Always check the engine drain hose for obstructions.

Care should be taken for the GSX RFI, the GTX RFI, the SPX and all models equipped with a 947 engine since water partially remains inside engine and cannot be totally drained. Refer to **Additional Recommended Protection** further in this bulletin.

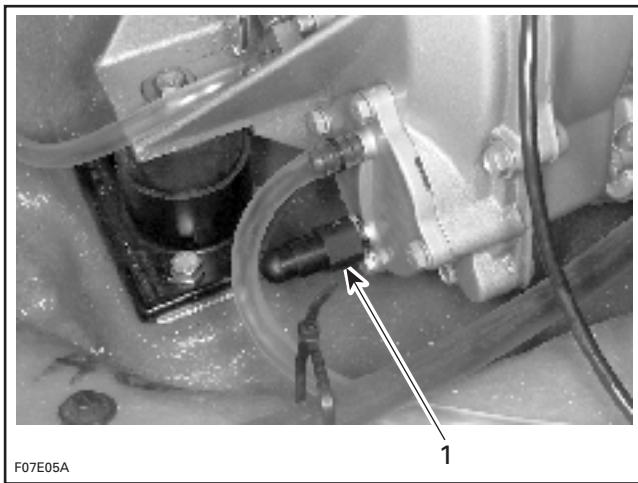


TYPICAL

1. Engine drain hose

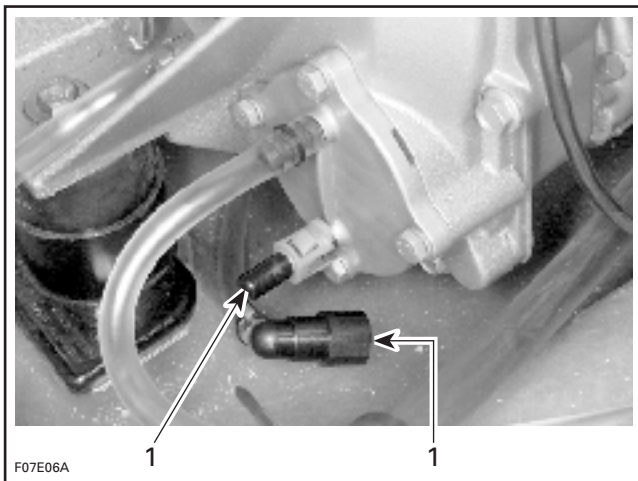
GTX RFI and GSX RFI Models

Disconnect the water supply hose used to cool the magneto. It features a quick coupling type fitting. Press both tabs and pull fitting to disconnect hose which is located at the bottom of the magneto cover near the engine support.



1. Disconnect this hose

Water should flow out the fitting (magneto cooling circuit) and hose (crankcase heat exchanger).



1. Make sure water flows out of fitting and hose

Reconnect water supply hose to magneto heat exchanger.

Fuel System

Add Sea-Doo fuel stabilizer (P/N 413 408 600 or equivalent) to the fuel tank to prevent fuel deterioration and, if so equipped, carburetor gumming. Follow the manufacturer's instructions for proper use.

On RFI models, fill up fuel tank completely. Ensure there is no water inside fuel tank.

CAUTION: Should any water be trapped inside fuel tank, severe internal damage will occur to the fuel injection system.

NOTE: Fuel stabilizer should be added to the fuel before engine lubrication, to ensure that the carburetor, if so equipped, is protected against varnish deposits.

Verify fuel system. Check fuel lines and carburetor, if so equipped, for leaks. Replace damaged hoses or clamps if necessary.

⚠ WARNING

Fuel is flammable and explosive under certain conditions. Always work in a well ventilated area. Do not smoke or allow open flames or sparks in the vicinity. Always wipe off any fuel spillage from the watercraft. Always turn the fuel valve to OFF position except RFI models.

Cooling System Flushing

Flush the cooling system with fresh water to prevent salt, sand or dirt accumulation from clogging up water passages.

For proper procedure, refer to *Shop Manual*, FLUSHING AND LUBRICATION section.

Engine Internal Protection

Engine must be lubricated to prevent corrosion on internal parts.

Start the engine first then immediately open the water tap.

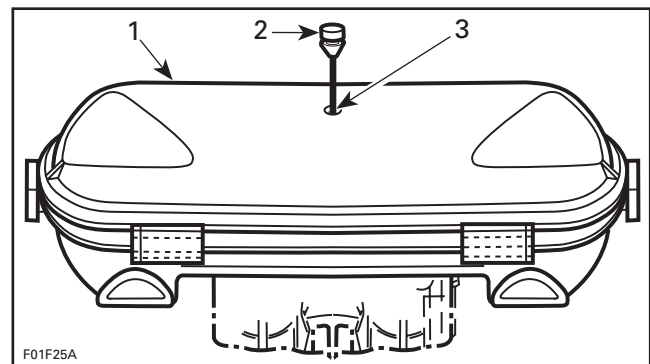
Run the engine about 3 minutes at a fast idle around 3500 RPM.

CAUTION: Never run engine longer than 5 minutes. The drive line seals have no cooling when watercraft is out of the water.

Remove plug from air intake silencer cover.

Lubricate the engine to prevent corrosion on internal parts by spraying BOMBARDIER LUBE (P/N 293 600 016) through the hole provided on the air intake silencer cover.

On models equipped with 947 engine, detach air silencer and spray BOMBARDIER LUBE directly into carburetors.



1. Air intake silencer
2. Remove plug
3. Spray BOMBARDIER LUBE here

Lubricate the engine for one minute. After approximately half a minute, close fuel valve to run engine out of fuel and turn off water flow to the engine.

CAUTION: When engine begins to run irregularly because of fuel starvation, immediately stop water flow before engine dies. Severe engine damage could result if not done in this order.

Stop the engine.

Reinstall the plug in air intake silencer cover (except models equipped with a 947 engine).

Propulsion System

Jet Pump

Lubricant in impeller shaft reservoir should be drained out and the reservoir cleaned.

Refill with Sea-Doo jet pump synthetic oil (P/N 293 600 011). Refer to CAPACITIES section from Technical Data of appropriate *Shop Manual* for proper quantity.

CAUTION: Use only SEA-DOO jet pump oil or equivalent synthetic gear oil, otherwise component service life could be reduced. Do not mix oil brands or types.

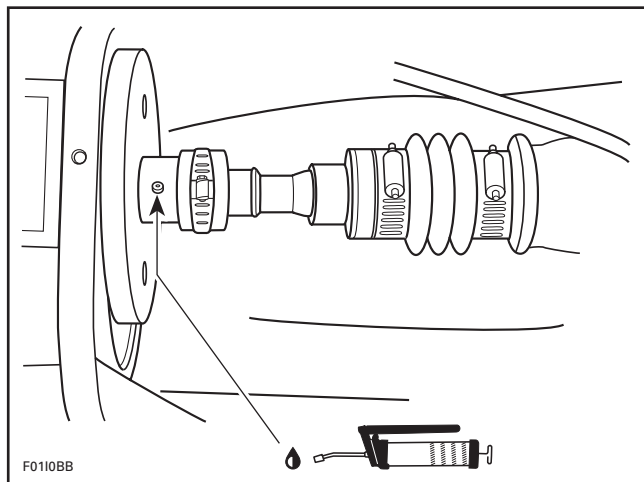
PTO Flywheel

All Models Except XP Limited, 1999 GTX Limited and 1999 GSX Limited

Remove PTO flywheel guard.

Lubricate PTO flywheel at grease fitting with synthetic grease (P/N 293 550 010).

CAUTION: Do not lubricate excessively. Immediately stop when a slight movement is noticed in the rubber boot.



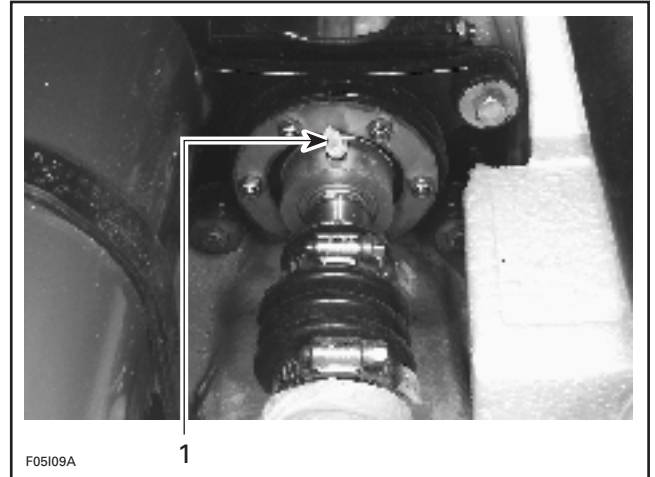
ALL MODELS EXCEPT XP LIMITED

CAUTION: Never leave any clothing, tool or other objects near PTO flywheel and seal carrier.

Seal Carrier

XP Limited (except model year 1999)

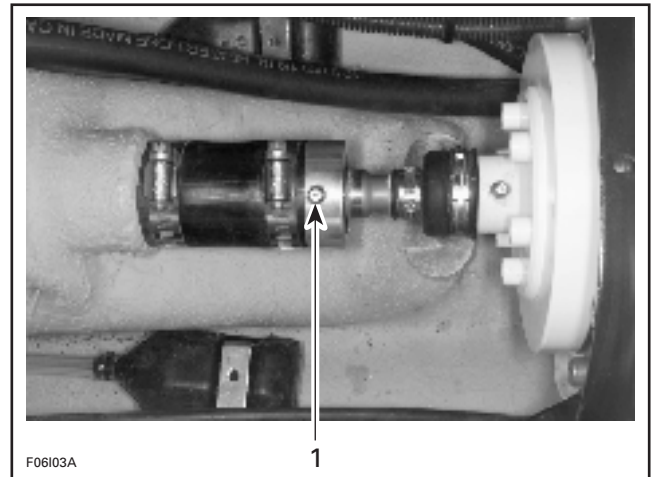
Lubricate mid bearing of drive system at seal carrier grease fitting with synthetic grease. Stop lubricating when grease is just coming out of seal.



1. Grease fitting

GSX Limited (1997-1998 models only)

Lubricate seal carrier of thru hull fitting.



1. Grease seal carrier

1999 GSX Limited, GTX Limited and XP Limited

These models require no annual lubrication of propulsion system.

Battery

For battery removal, cleaning and storage, refer to the appropriate *Sea-Doo Shop Manual* (ELECTRICAL SYSTEM).

Watercraft Cleaning

Clean the bilge with hot water and mild detergent or with bilge cleaner. Rinse thoroughly. Lift front end of watercraft to completely drain bilge. If any repairs are needed to body or to the hull, touch up paint is available through Bombardier Parts and Accessories Department and Gelcote® repair kits are available contacting Gelcote International LTD (see Service Bulletin 99-3). Replace damaged labels/decals.

Wash the body with soap and water solution (only use mild detergent). Rinse thoroughly with fresh water. Remove marine organisms from the hull. Apply a nonabrasive wax.

CAUTION: Never clean apparent fiberglass and plastic parts with strong detergent, degreasing agent, paint thinner, acetone, etc.

If the watercraft is to be stored outside, cover it with an opaque tarpaulin to prevent sun rays and grime from affecting the plastic components, watercraft finish and dust accumulation.

CAUTION: The watercraft must never be left in the water for storage. Never leave the watercraft stored in direct sunlight.

Anticorrosion Treatment

Wipe off any residual water in the engine compartment.

Spray BOMBARDIER LUBE over all metallic components in engine compartment.

Lubricate the throttle cable with BOMBARDIER LUBE lubricant.

NOTE: A cable luber can be used on throttle cable end to inject BOMBARDIER LUBE lubricant.

The seat should be partially left open during storage. For the XP Limited, leave the hood partially open. This will avoid condensation and possible engine corrosion.

NOTE: If the watercraft is stored outside, always cover it with a tarpaulin. Remove the rear drain plug(s). Tilt the watercraft to the rear so that water can flow out.

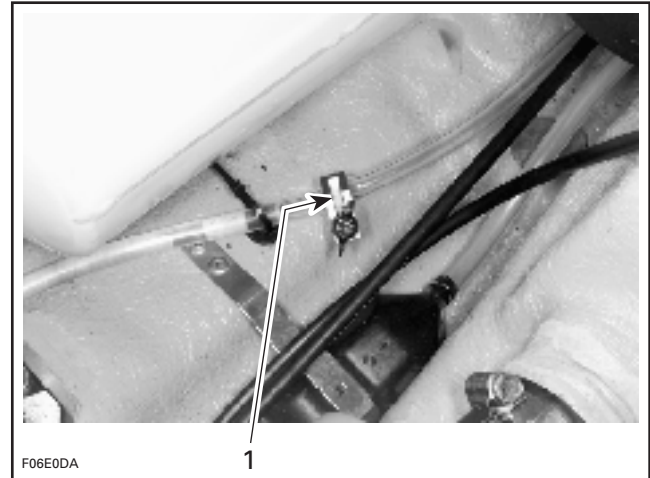
Additional Recommended Protection

In cool regions (where temperature below freezing point may be encountered), antifreeze solution made of 40% water and 60% antifreeze should be added to the cooling system.

CAUTION: Always use ethylene glycol anti-freeze containing corrosion inhibitors specifically recommended for aluminum engines.

NOTE: The engine will not have to run during this operation.

Install a hose pincher to engine drain hose.

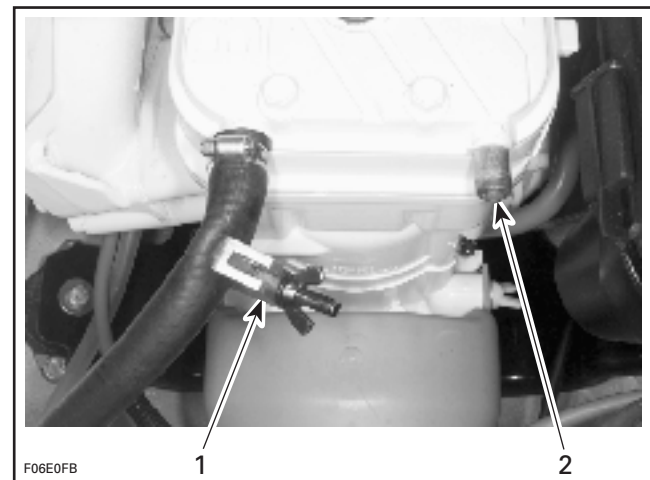


TYPICAL

1. Hose pincher installed on engine drain hose

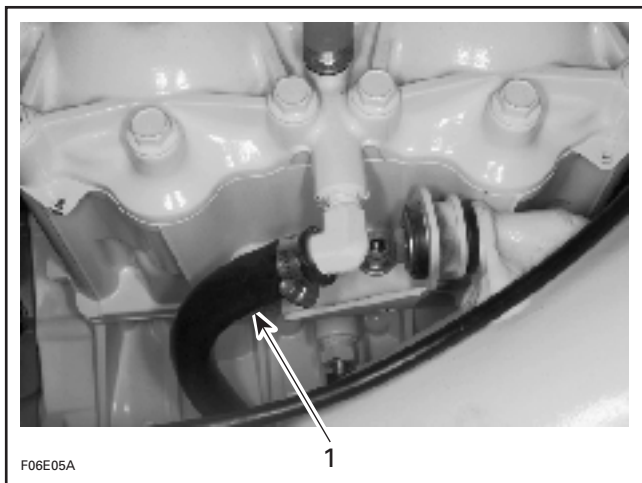
Disconnect engine water return hose from cylinder head.

Install a hose pincher on water inlet hose (except on 947 engine).



717 AND 787 ENGINES

1. Hose pincher
2. Return hose removed



947 ENGINE

1. Disconnect engine water inlet hose

Temporarily install one short piece of hose to engine water outlet fitting.

Insert a funnel into hose. Pour antifreeze mixed with water in the engine until the solution is visible in the water return hose.

Remove temporary hose and reconnect engine water return hose to engine.

Remove hose pinchers.

All Models

Most of the antifreeze will drain out when removing hose pinchers. Use a container to recover it. Dispose antifreeze as per your local laws and regulations.

NOTE: Although antifreeze will mainly drain out, the antifreeze has flowed to mix with water that was possibly trapped in cooling system cavities and thus preventing freezing problems.

Care should be taken for the GTX RFI, the SPX and all models equipped with a 947 engine since water partially remains inside engine and cannot be totally drained.

NOTE: For pre-season preparation, drain antifreeze from cooling system prior to launching boat in water as explained above.

CHECKLIST

OPERATION	✓
Check engine drain hose	
Add Sea-Doo fuel stabilizer	
Verify fuel system	
Flush the cooling system	
Lubricate the engine	
Drain and clean impeller shaft reservoir	
Lubricate PTO flywheel or seal carrier	
Remove, clean and store the battery	
Clean the bilge	
Wash the body	
Spray BOMBARDIER LUBE over all metallic components in engine compartment and on throttle cable	
Add antifreeze solution to the cooling system (in cool regions)	