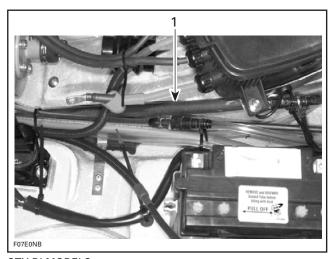
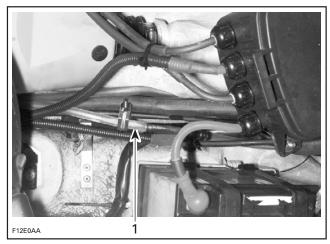
## **Section 02 MAINTENANCE**

Subsection 05 (STORAGE)

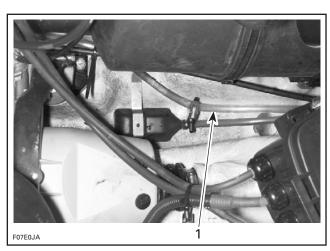


GTX DI MODELS

1. Water outlet hose



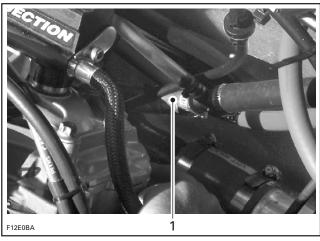
1. Crankcase cooling cover outlet hose



1. Engine cylinder drain hose

#### Hose Disconnection

Disconnect water **INLET** hose at engine between T-fitting and cylinder head fitting.



1. Disconnect this side of the T-fitting

Temporarily install a short piece of hose to replace the one removed.

#### Antifreeze

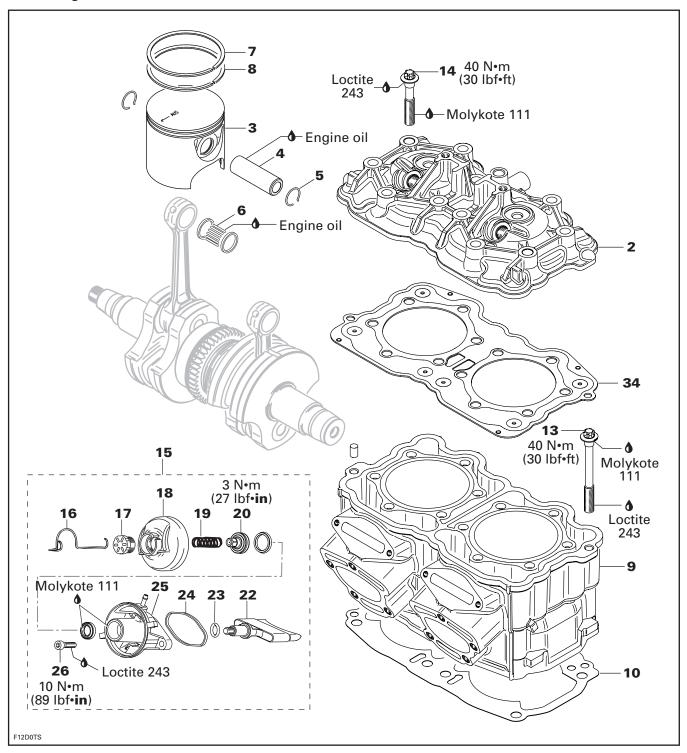
Insert a funnel into the temporary hose and pour antifreeze mix in engine until the colored solution appears at cooling system bleed outlet.



# **Section 04 ENGINE**

Subsection 05 (TOP END)

## 947 DI Engine



04-05-4 SMR2001-010\_04\_05A.FM

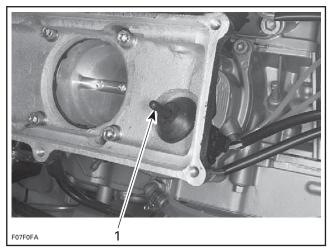
#### **Section 05 ENGINE MANAGEMENT (RFI)**

Subsection 04 (COMPONENT INSPECTION)

# AIR TEMPERATURE SENSOR (ATS)

**NOTE:** When testing the resistance of the air temperature sensor (ATS), it is important to check the ambient temperature. The resistance values for the sensor will be different according to the temperature.

Check the air temperature sensor resistance.

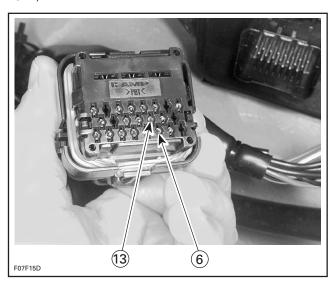


1. Air temperature sensor (ATS)

Disconnect the AMP plug connector number 4 from the MPEM module.

Using a multimeter, check the resistance between terminal 6 (BLACK/WHITE wire) and terminal 13 (WHITE/GREY wire) on the plug connector.

The resistance should be between 2.280 k $\Omega$  and 2.736 k $\Omega$  at temperature of 19°C to 21°C (66°F to 70°F).



If resistance is below specifications, replace air temperature sensor (ATS).

If resistance is above specifications, disconnect the connector of the air temperature sensor and check resistance of wiring harness and terminals between AMP plug connector and ATS sensor connector.

If there is an open circuit, repair or replace the defective wire or terminal.

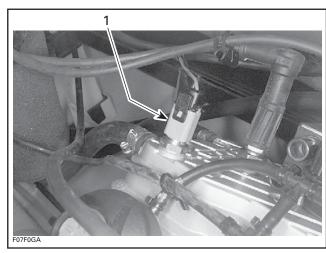
Reconnect the air temperature sensor connector and recheck the resistance between terminal 6 and terminal 13 in the AMP plug connector number 4.

If not within specification, replace the air temperature sensor.

# WATER TEMPERATURE SENSOR (WTS)

#### **Resistance Test**

Check the water temperature sensor resistance.



1. Water temperature sensor (WTS)

Disconnect the AMP plug connector number 4 from the MPEM module.

Using a multimeter, check the resistance between terminal 5 (BLACK/ORANGE wire) and terminal 12 (TAN/ORANGE wire) on the plug connector.

**05-04-8** SMR2001-021\_05\_04A.FM