

DIGITALLY ENCODED SECURITY SYSTEM (D.E.S.S.)

GENERAL

SYSTEM DESCRIPTION

The following components are specially designed for this system: ECM, D.E.S.S. key (inside tether cord cap) and engine cut-off switch.

This system allows the engine to reach pulley engagement speed only if a D.E.S.S. key is installed on engine cut-off switch and the key is recognized as valid by the ECM.

The D.E.S.S. key contains a magnet and a ROM chip.

- The magnet closes the reed switch inside the engine cut-off switch. It is the equivalent of a rotary mechanical ignition switch.
- The ROM chip owns a unique digital code. It is the equivalent of the tooth-pattern cut on a conventional ignition key.

The D.E.S.S. system is quite flexible. Up to 8 D.E.S.S. keys may be programmed in the memory of the ECM using the B.U.D.S. software. The keys can also be erased individually.

NOTE: If desired, a D.E.S.S. key can be used on another vehicle equipped with the D.E.S.S. It only needs to be programmed on that vehicle.

D.E.S.S. Beeper Codes

When a tether cord cap is installed on the engine cut-off switch and the ECM wakes up, it identifies the D.E.S.S. key. The D.E.S.S. signals will be issued according to the key recognition. See table.

| D.E.S.S. SIGNAL | | DESCRIPTION | COMMENT |
|-------------------------------------|-----------------------|-------------------------------------|---|
| BEEPER | DISPLAYED MESSAGE (1) | | |
| 2 shorts beeps | SKI-DOO | Welcome message, good key | Working D.E.S.S. key. Vehicle can be driven. It allows engine to rev above 3000 RPM. |
| 2 short beeps repeating slowly | CHECK KEY | Unable to read key (bad connection) | Make sure the tether cord cap contacts are free of dirt, snow or ice. Reinstall tether cap and restart engine. Vehicle can not be driven. |
| Short beeps repeating rapidly | BAD KEY | Invalid key or key not programmed | Use the proper key for this vehicle or have the key programmed. Vehicle can not be driven. |
| (1) Only available on premium gauge | | | |

PROCEDURES

D.E.S.S. KEY

D.E.S.S. Key Programming

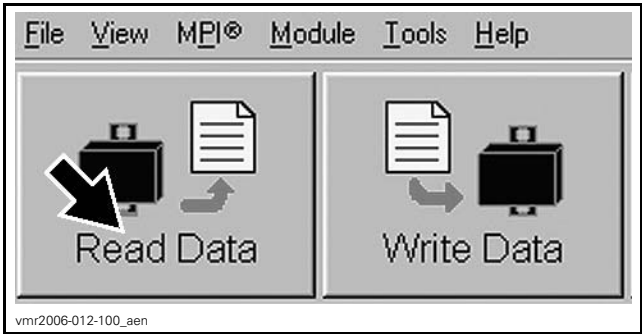
Use the latest applicable B.U.D.S. version available on BOSSWeb.

Carry out the proper connections to use B.U.D.S. Refer to *COMMUNICATION TOOLS AND B.U.D.S.* subsection.

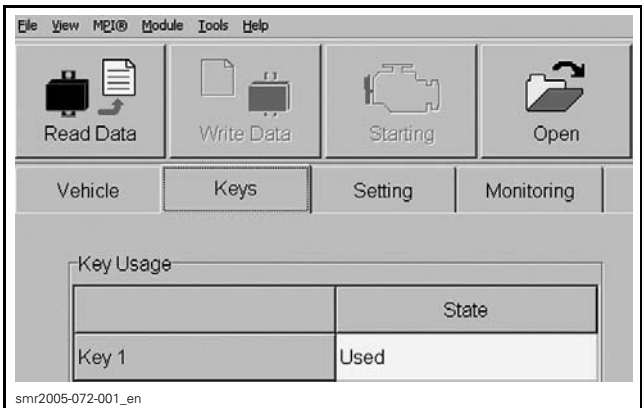
Start B.U.D.S. and login.

Read the ECM by clicking the **Read Data** button.

Subsection XX (DIGITALLY ENCODED SECURITY SYSTEM (D.E.S.S.))

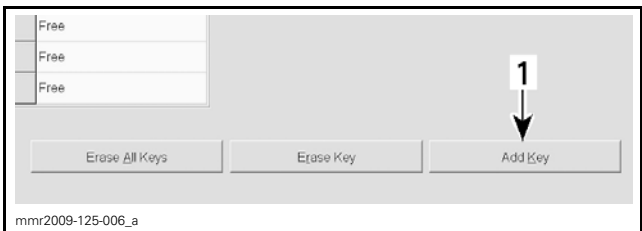


Click on **Keys** tab.



Adding a Key

- 1. Install the **NEW** tether cord cap (D.E.S.S. key) **(to be programmed)** on engine cut-off switch.
- 2. Click on **Add Key** button at bottom of screen.



1. Click on this button

- 3. Strictly follow all instructions displayed by B.U.D.S. according to model.

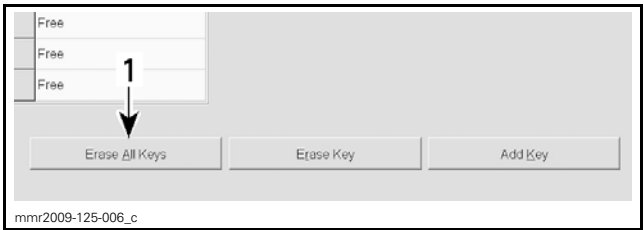
NOTE: If the following window pops up, rock the tether cord cap on the engine cut-off switch to make a good contact until window disappears.



- 4. A new window will confirm the new key has been saved in the PC computer.
- 5. When done, write the changes to the ECM. Refer to *WRITING CHANGES IN ECM* in this subsection.
- 6. To program any other key, restart the complete *ADDING A KEY* procedure from step 1.
- 7. Ensure the newly programmed key(s) work on the vehicle.

Erasing all Keys

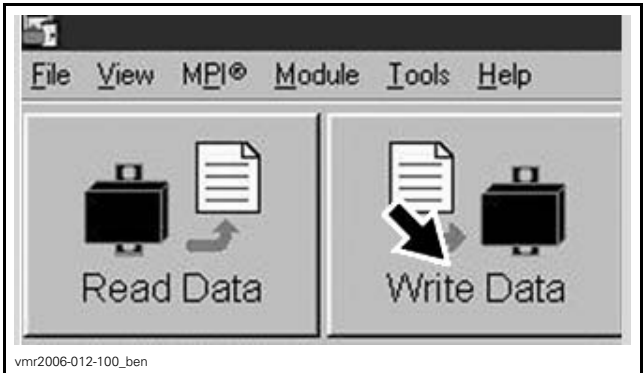
- 1. Click on **Erase All Keys** button at bottom of screen.



- 1. Click on this button
- 2. When done, program at least a new key in the ECM.
- 3. Write the changes to the ECM. Refer to *WRITING CHANGES IN ECM* in this subsection.
- 4. Ensure the erased keys do not work anymore on the vehicle (if possible) and ensure the newly added key(s) work.

Writing Changes in ECM

Save the changes in the ECM by clicking the **Write Data** button.



BEEPER

The beeper is integrated in the multifunction gauge and cannot be replaced alone.
If the beeper does not sound when starting engine, check the beeper operation. Refer to *LIGHTS, GAUGE AND ACCESSORIES*.