

# **INSTRUCTION BULLETIN**

No. 340677 Machine: 800, 810 8400, 8410 Published: 09-2006 Rev. 04

# NOTE: DO NOT DISCARD the Parts List from the Instruction Bulletin. Place the Parts List in the appropriate place in the machine manual for future reference. Retaining the Parts List will make it easier to reorder individual parts and will save the cost of ordering an entire kit.

NOTE: Numbers in parenthesis () are reference numbers for parts listed in Bill of Materials.

Installation instructions for kit number 374274

#### **DESCRIPTION:**

This kit contains the parts needed to install the new Ford Power Products 2.5L ICM (ignition control module). The new ICM 1U1L-12A297-DA replaces all currently available ICMs F8JL-12A297-EA, F8JL-12A297-FA and F8JL-12A297-DB.

Jumper harness 1U1L-14N118-BA plugs into the current engine harness, provides a new take out terminal lead for the stand alone MAP sensor, and a RS 232 connection for the laptop interface and crankshaft position sensor.

NOTE: Position the MAP sensor (3) so the vacuum port connection points down and above the source of the manifold vacuum to prevent moisture from collecting in the MAP sensor. Moisture can damage the sensor in ambient temperatures below freezing.

The vacuum source for the MAP must be a dedicated supply.

## SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 1.5 hours)

#### **PREPARATION:**

1. Park machine on a level surface, turn off the machine, remove the key, and set the parking brake.

FOR SAFETY: Before leaving or servicing machine, stop on level surface, set parking brake, turn off machine, and remove key.

2. Disconnect the battery cables from the batteries.



WARNING: Always disconnect battery cables from machine before working on electrical components.

#### INSTALLATION:

- 1. Open the engine covers and/or doors to access the engine.
- 2. Disconnect the main wire harness from the existing ICM and MAP sensor.
- Disconnect the CKS wiring on the main wire harness from the sensor and either cut the CKS wiring off the main wire harness or tape the wiring back against the main wire harness so the CKS wiring does not get tangled with rotating parts.
- 4. Remove the existing ICM from the machine. Save the hardware previously used to mount the ICM. The hardware is needed to mount the new ICM (1) onto the machine.

5. Hold the new ICM (1) into place where the old ICM was located and drill three appropriate sized holes through the existing holes in the new ICM and into the area where the new ICM will be mounted.

NOTE: Drill holes that correspond the diameter of the fasteners used to mount the ICM (1) onto the machine.

- 6. Use the hardware from the old ICM to mount the new ICM (1) onto the machine.
- 7. Hold the MAP sensor (3) near the ICM (1) and drill a hole through the two holes in the MAP sensor and into the machine.
- 8. Use the appropriate hardware to mount the MAP sensor (3) to the machine.

NOTE: Position the MAP sensor (3) so the vacuum port connection points down and above the source of the manifold vacuum to prevent moisture from collecting in the MAP sensor. Moisture can damage the sensor in ambient temperatures below freezing.

- 9. Connect the 10-pin connector on the harness jumper (2) to the existing engine wire harness. Refer to Fig. 2.
- Connect the 23-pin connector on the harness jumper (2) to the new ignition control module (1). Refer to Fig. 2.
- 11. Connect the 3-pin connector on the harness jumper (2) to the MAP sensor (3). Refer to Fig. 2.
- 12. Connect the connector on the harness jumper (2) to the CKP sensor. Refer to Fig. 2.

- 13. Connect one end of the vacuum hose (4) to the MAP sensor (3).
- 14. Connect the other end of the vacuum hose (4) to the vacuum port on the intake manifold.
- 15. Use two clamps (5) to secure the harness jumper (2) and unused connectors to the main wire harness.
- 16. Reconnect the battery cables to the batteries.
- 17. Test machine to ensure it functions properly.

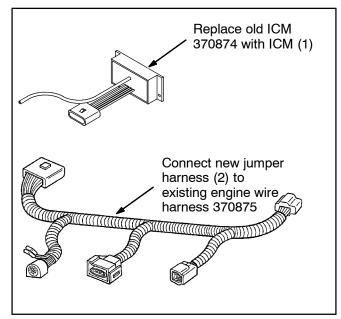
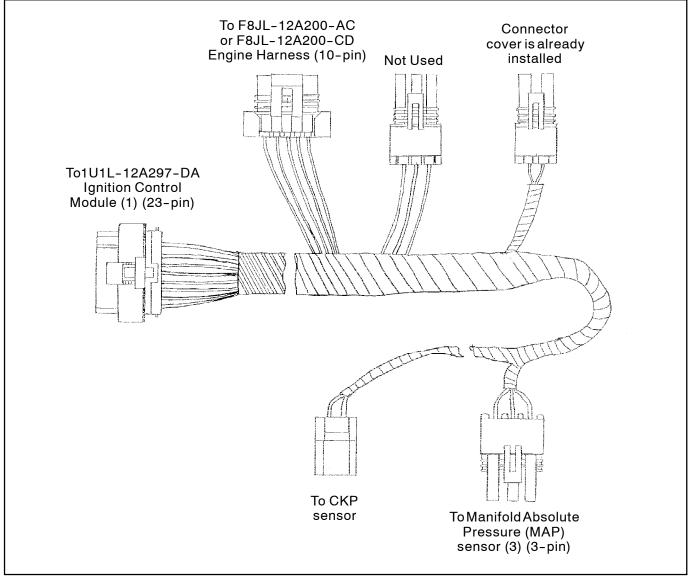


FIG. 1-ICM/Wire Harness Replacement



### FIG. 2-New Jumper Harness

#### Bill of Materials for Module Kit, Ignition-374274

Ref.	TENNANT Part No.	Description	Qty.
1	374275	Module, Control, Ignition	1
2	374276	Harness, Wire, Jumper	1
3	374277	Sensor	1
4	374278	Hose, Vacuum	1
5	374279	Clamp	2

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