

# THERMOSTAT INSTALLATION PROCEDURE

## on

### JOHN DEERE Yanmar Engine MODEL: 3TNV82A

This procedure outlines the tools, parts and sequential steps necessary to perform the Scheduled Maintenance Task of replacing a THERMOSTAT. The Yanmar 3TNV82A is used in a variety of JD applications, always check your particular application for correct replacement part numbers, a 2004 John Deere 790 Compact Utility Tractor was used to illustrate the steps.

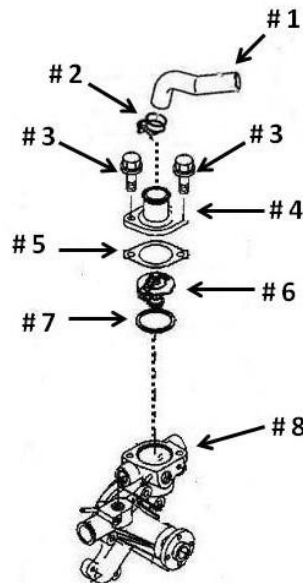
The '04 790 Operator's Manuals (OMLVU15440) calls for a THERMOSTAT replacement every Two Years or 2000 Hours along with a complete coolant flush and replacement.

**Total Elapsed Time: 30 Minutes**

#### Items Needed:

- Ratchet Wrench with 10mm and 12mm Sockets
- Torque Wrench rated 26 ft-lb and accommodates 12mm Socket
- Collection Pan and Bucket
- Funnel
- Scraping Device
- Clean shop rags
- John Deere COOL-GARD® PRE-DILUTED SUMMER COOLANT (TY16036), COOL-GARD® CONCENTRATED SUMMER COOLANT (TY16034) or equivalents.

#### Illustrated Parts Breakdown (IPL)



KEY	PART NO.	PART NAME	QTY	REMARKS
1	M805092	HOSE	1	
2	TY22467	HOSE CLAMP	1	
3	19M7867	BOLT	2	M8 X 25
4	CH15535	COVER	1	
5	M805834	GASKET	1	
6	M811034	THERMOSTAT	1	
7	M805835	GASKET	1	
8	n/a	Upper Portion of Water Pump		Mounting Surface for COVER

NOTE: Prior to creating this procedure a complete flush and replacement of the factory coolant had been performed using COOLGARD® PRE-DILUTED SUMMER COOLANT (TY16036) and therefore those steps are not included in this task.

NOTE: Prior to commencing this procedure HOSE (KEY # 1) was inspected for cracks and wear. I check for deterioration by squeezing the HOSE and found it was not overly hard, brittle, soft or swollen. Following this inspection it was determined a replacement was not necessary and therefore the HOSE was not included as a Replacement Part.

## REPLACEMENT PARTS



## CAUTION ! ! ! !

**Shut off engine and allow to cool prior to commencing this Procedure. The radiator will be hot and can burn skin. Built-up pressure may cause explosive release of coolant when the radiator cap is removed**

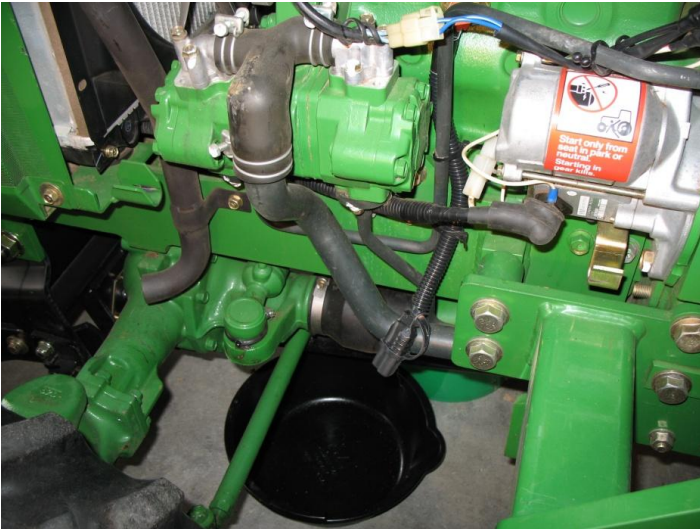


**Engine Coolant is highly toxic and even a small amount can kill your dog or cat. If you suspect your pet has had ANY exposure to antifreeze, get to a vet right away.**



***Keep your pets safe.....***

## PREPARE SITE

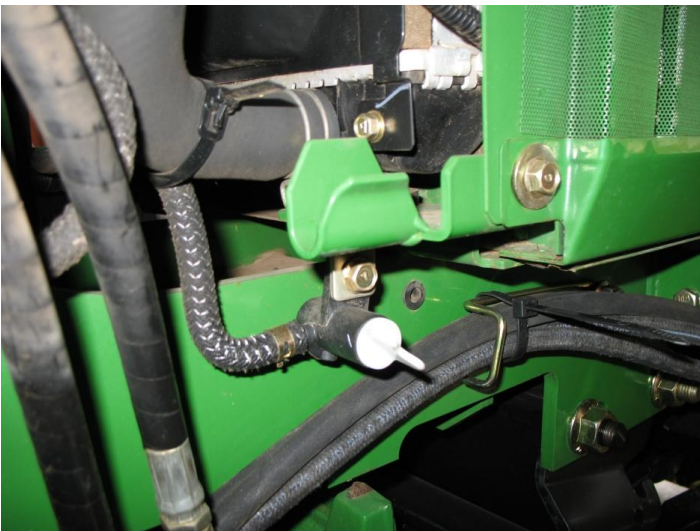


- Prepare for the possibility of Coolant Spillage by placing an appropriate collection pan under the Engine and below the Water Pump area.

## STEP 1 DRAIN COOLANT

**CAUTION ! ! ! Do not remove the Radiator Cap unless the Radiator and the Engine are cool enough to touch with bare hands.**

- Raise hood and latch open.
- Slowly loosen the RADIATOR Cap to the first stop to release all pressure. Remove and retain RADIATOR CAP.



- Remove Right Side Panel to expose RADIATOR PETCOCK



- Position Funnel and collection pan below RADIATOR PETCOCK
- OPEN RADIATOR PETCOCK slowly and continue to hold petcock until approximately 2 Quarts of Coolant has drained into collection pan.
- CLOSE RADIATOR PETCOCK

**- END OF STEP 1 -**

## **STEP 2 ACCESS THERMOSTAT**



**Note:** The HOSE CLAMP (IPL KEY # 2) Assembly has a combination Phillips Hex Head Bolt. Due to space constraints I have called for a RATCHET WRENCH.

- Using RATCHET WRENCH with 10mm SOCKET, loosen HOSE CLAMP (IPL KEY # 2) that holds HOSE (IPL KEY # 1) on COVER (IPL KEY # 4).