

Authorized Field Change

NAVISTAR[®]

AFC 12917

Date: July 2013

Subject File: Engine

Subject: Deaeration Tank Hose Re-Route

Model: TranStar[®] 8600, LoneStar[®], ProStar[®], WorkStar[®] 7600, PayStar[®] 5500, 5600, and 5900 SBA
 Start Date: 01 September 2009 End Date: 16 July 2011

Model: TranStar[®] 8600, LoneStar[®], ProStar[®], WorkStar[®] 7600, PayStar[®] 5500, 5600, and 5900 SBA
 Start Date: 17 July 2011 End Date: 17 November 2011

Engine Family: MaxxForce[®] 11 and 13

DESCRIPTION

Certain TranStar[®] 8600, LoneStar[®], ProStar[®], WorkStar[®] 7600, PayStar[®], 5500, 5600, and 5900 SBA models with MaxxForce[®] 11 and 13 engines may experience low coolant light illumination. In some vehicles, the low coolant light has been temporarily disabled. This AFC describes the procedure to re-route the deaeration tank hose to prevent this occurrence and update the engine parameters to re-enable the low coolant light.

PARTS INFORMATION

Table 1. Parts Information for Models Built 1 September 2009 Through 16 July 2011

Part Number	Description	Quantity
8000935R92	TranStar [®] , ProStar [®] Service Kit	1
8000936R92	5900 SBA Service Kit	1
8000937R91	WorkStar [®] Service Kit	1
8000938R92	5500, 5600 Service Kit	1


Table 2. Parts Information for Models Built 17 July 2011 Through 17 November 2011


Part Number	Description	Quantity
2611704C91	Cap and Clamp	1


Table 3. Tools Required


Tool Number	Description
KL5007NAV	Navistar Coolant Management Tool


SERVICE PROCEDURE


 **WARNING:** Park vehicle on hard flat surface, turn the engine off, set the parking brake, and block the wheels to prevent the vehicle from moving in both directions. Failure to do so may result in property damage, personal injury, and / or death.

 **WARNING:** Always wear safe eye protection when performing vehicle maintenance. Failure to do so may result in personal injury and / or death.

 **WARNING:** Keep flames or sparks away from vehicle and do not smoke while servicing the vehicle's batteries. Batteries expel explosive gases. Failure to do so may result in property damage, personal injury, and / or death.

 **WARNING:** Allow the engine to cool before attempting to remove the radiator or deaeration tank cap. Always insulate the cap by wrapping it with a thick, heavy cloth. To prevent personal injury or death from scalding water or steam, do not pull the pressure cap off immediately when it has been loosened to the first notch. Pause momentarily to allow time for excess pressure to release through the overflow tube.

 **WARNING:** To prevent personal injury or death, do not let engine fluids stay on your skin. Clean skin and nails using hand cleaner using soap and water. Wash or discard clothing and rags contaminated with engine fluids.

 **WARNING:** Remove the ground cable from the negative terminal of the battery box before disconnecting any electrical components. Always connect the ground cable last. Failure to do so may result in property damage, personal injury, and / or death.

Procedure for Models Built 01 September 2009 Through 16 July 2011

1. Bring truck into shop and park on flat surface.
2. Shift transmission to Park or Neutral, set parking brake, and turn front wheels fully to right side.
3. Install wheel chocks.
4. Unlatch and open hood.

SERVICE PROCEDURE (CONT.)

5. Place a suitable container under vehicle to contain any possible coolant spills.
6. Wait until engine has cooled and slowly remove pressure cap to relieve any pressure prior to working on vehicle.
7. Using Coolant Management Tool, drain coolant level below coolant level sensor.

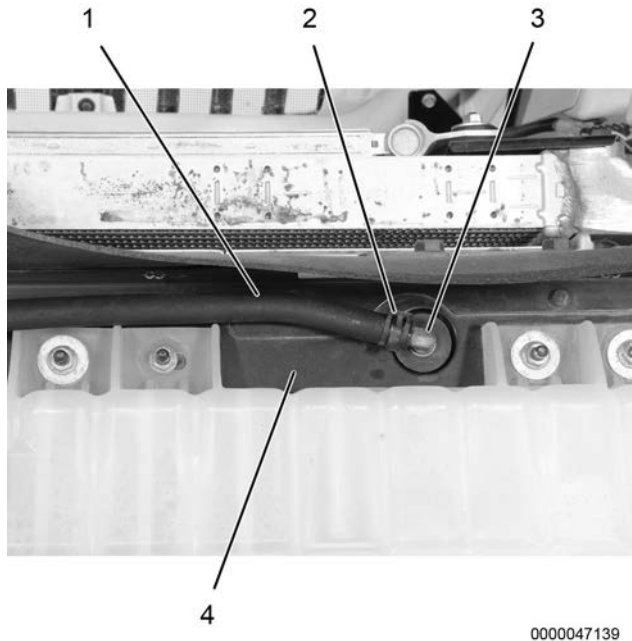
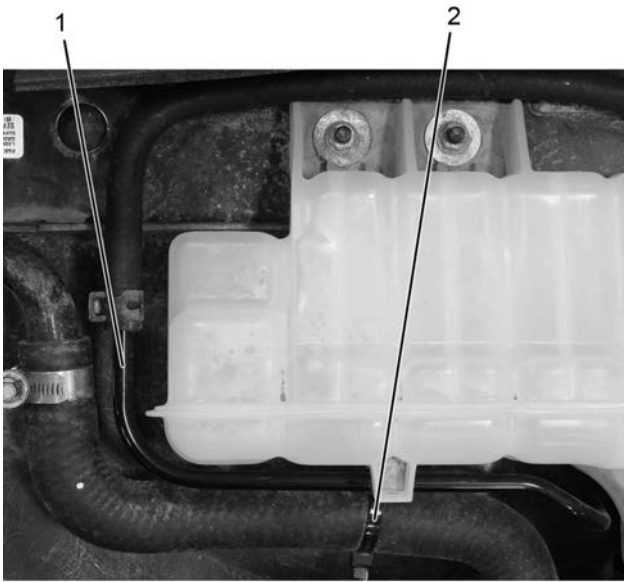


Figure 1. High Temperature Radiator.

1. Hose
 2. Clamp
 3. Fitting
 4. High temperature radiator
8. Remove clamp (Figure 1, Item 2) and hose (Figure 1, Item 1) from fitting (Figure 1, Item 3) located on top of high temperature radiator (Figure 1, Item 4).

SERVICE PROCEDURE (CONT.)



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Figure 2. Coolant Pipe Assembly.

1. Coolant pipe
2. Cable tie strap and push pin (push pin not shown)

NOTE: Coolant pipe will not be reused.

9. Remove cable tie strap from push pin (Figure 2, Item 2) securing coolant pipe (Figure 2, Item 1) to coolant hose and deaeration tank.

SERVICE PROCEDURE (CONT.)

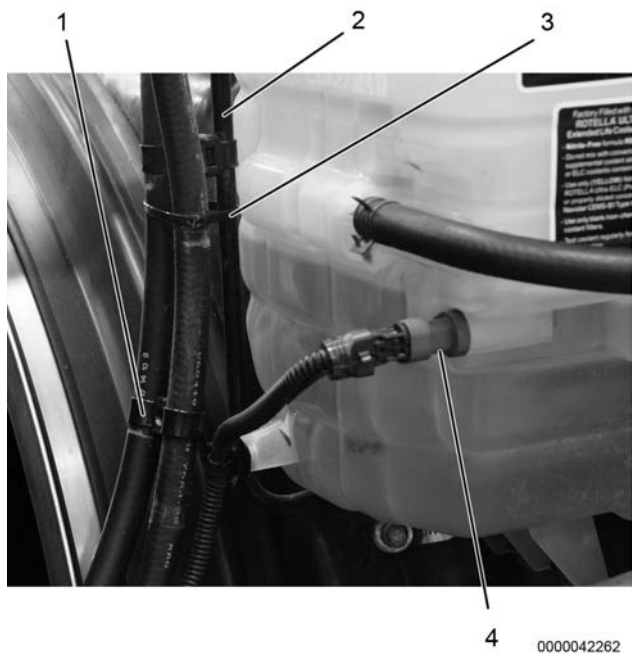
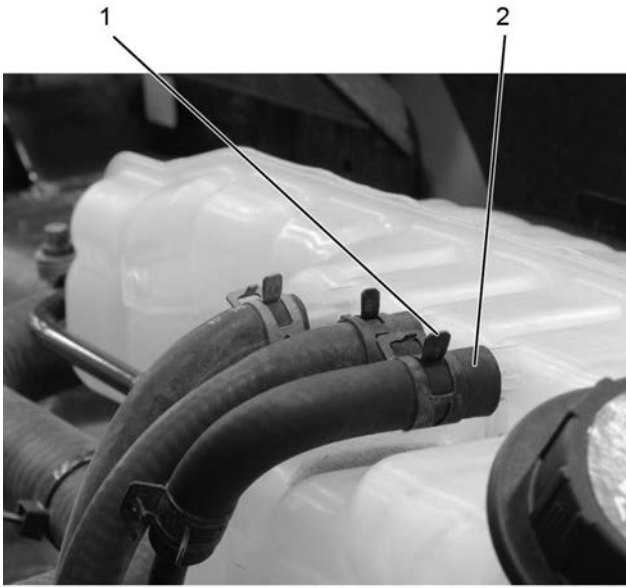


Figure 3. Coolant Pipe.

1. Push pin
2. Coolant pipe
3. Cable tie strap
4. Coolant level sensor

10. Remove push pin (Figure 3, Item 1) and cable tie strap (Figure 3, Item 3) securing coolant pipe (Figure 3, Item 2) to deaeration tank.

SERVICE PROCEDURE (CONT.)



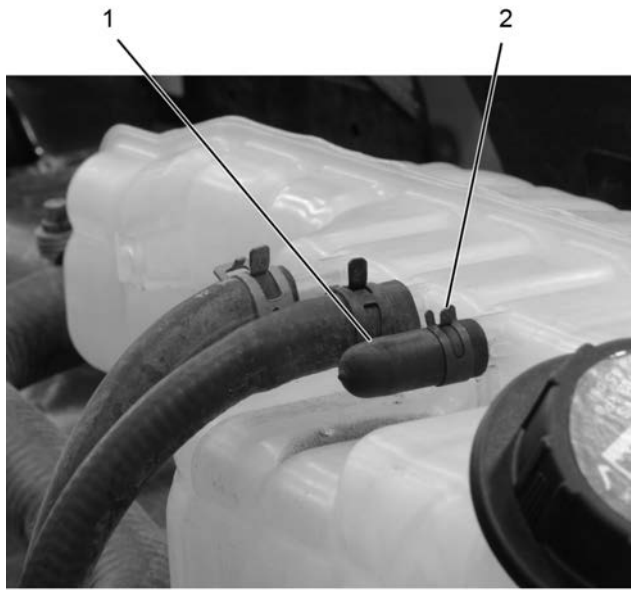
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Figure 4. Hose and Clamp Assembly.

1. Clamp
2. Hose

11. Remove clamp (Figure 4, Item 1) securing hose (Figure 4, Item 2) to deaeration tank. Discard clamp, hose, and coolant pipe.
12. After discarding coolant pipe, restore tie straps and push pin.

SERVICE PROCEDURE (CONT.)



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Figure 5. Cap and Clamp Assembly.

1. Cap
2. Clamp

13. Install cap (Figure 5, Item 1) and clamp (Figure 5, Item 2) supplied with kit. Do not reuse old clamp.

SERVICE PROCEDURE (CONT.)

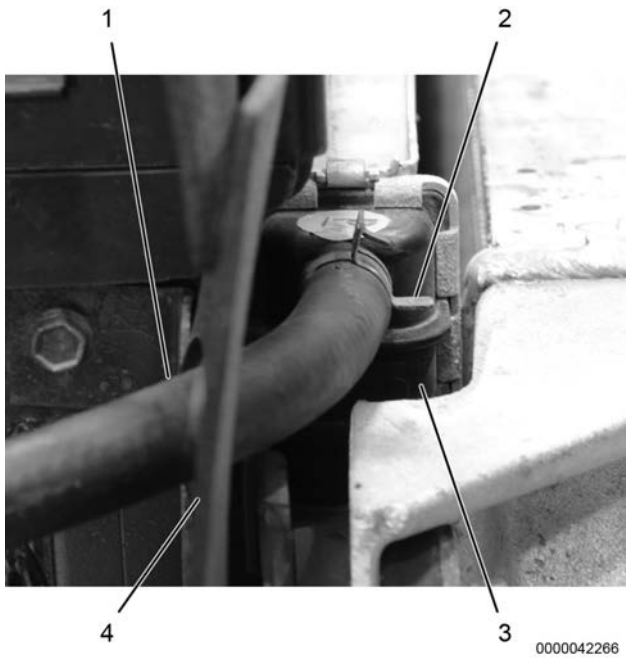
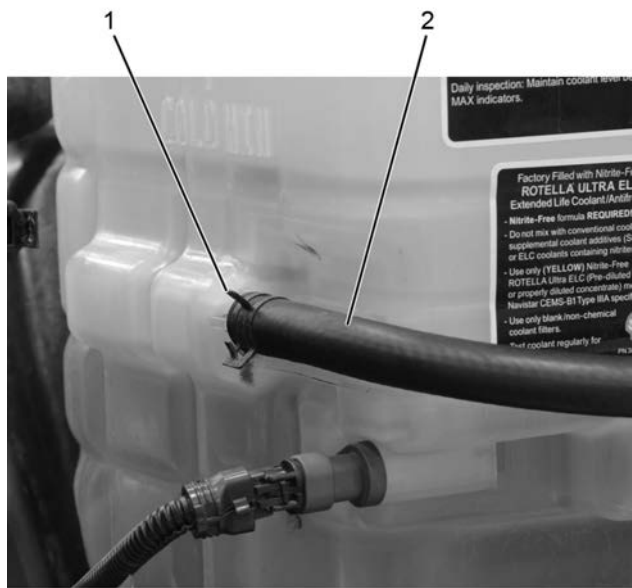


Figure 6. Low Temperature Radiator Connections.

1. Hose
2. Clamp
3. Low temperature radiator
4. Recirculation seal

14. Remove clamp (Figure 6, Item 2) and hose (Figure 6, Item 1) from low temperature radiator (Figure 6, Item 3).

SERVICE PROCEDURE (CONT.)



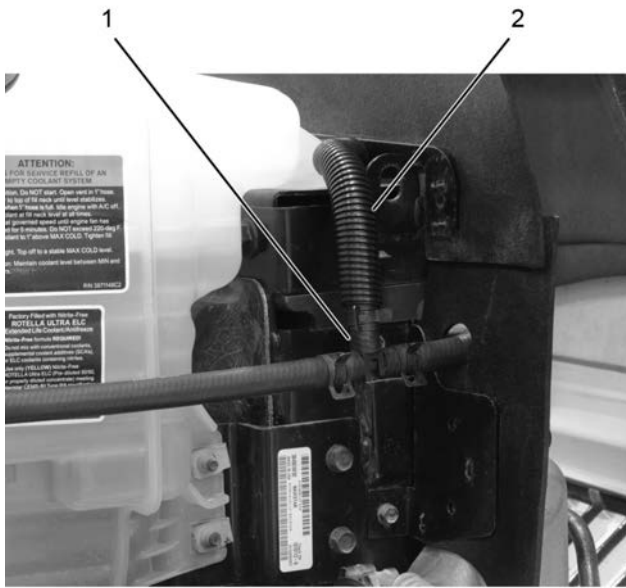
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Figure 7. Hose and Clamp Assembly.

1. Clamp
2. Hose

15. Remove clamp (Figure 7, Item 1) and hose (Figure 7, Item 2) from back of deaeration tank. Discard hose.

SERVICE PROCEDURE (CONT.)



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Figure 8. Single Formed Hose Assembly.

1. Tee end
2. Single formed hose

16. Insert end of formed T-hose through recirculation seal (refer to Figure 8). Clamp may need to be removed.
17. Install formed T-hose and clamp on low temperature radiator (refer to Figure 6).

SERVICE PROCEDURE (CONT.)

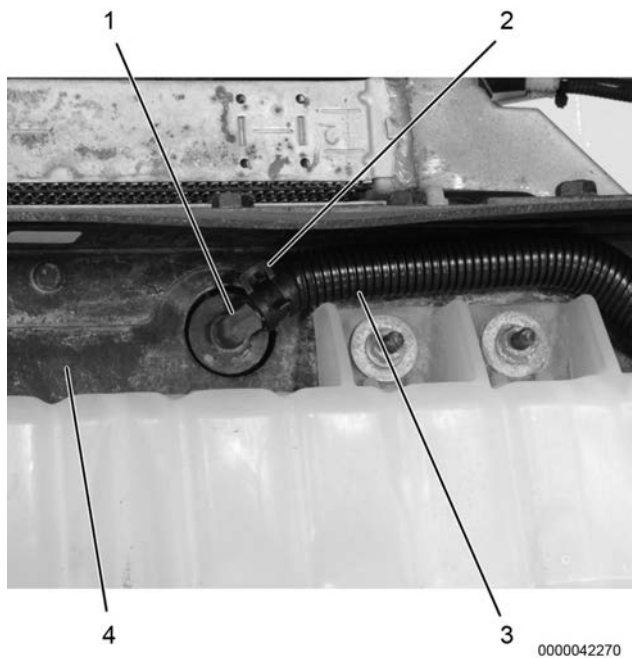
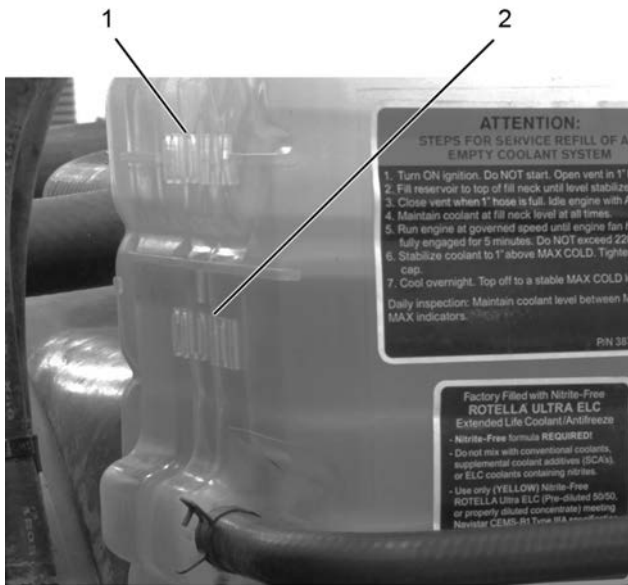


Figure 9. High Temperature Radiator Connections.

1. Fitting
2. Clamp
3. Hose
4. High temperature radiator

18. Turn fitting (Figure 9, Item 1) on top of high temperature radiator (Figure 9, Item 4) to align with single formed hose fitting end (Figure 9, Item 3).
19. Install tee end (Figure 8, Item 1) of single formed hose (Figure 8, Item 2) to fitting on top of high temperature radiator.
20. Install hose and clamp onto fitting on back of deaeration tank.
21. Install coolant previously removed using Coolant Management Tool.

SERVICE PROCEDURE (CONT.)



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Figure 10. Deaeration Tank.

1. MAX line
2. MIN line

22. Measure distance between MIN line (Figure 10, Item 2) and MAX line (Figure 10, Item 1) on deaeration tank.

SERVICE PROCEDURE (CONT.)

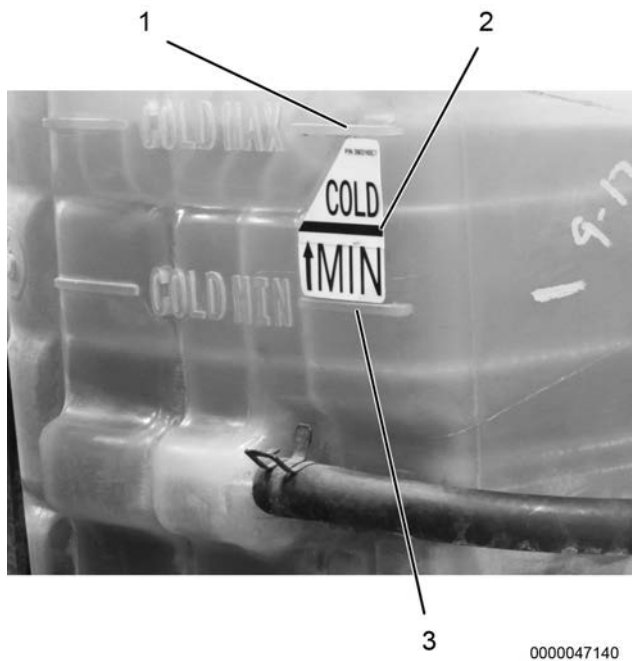


Figure 11. Deaeration Tank Sticker.

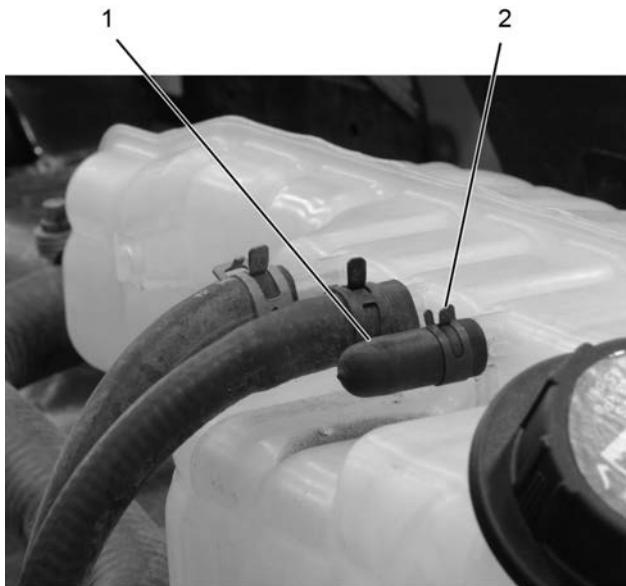
1. MAX line
 2. New MIN line sticker
 3. Old MIN line
- a. If distance measures approximately 2 in (5 cm), clean surface of deaeration tank of any oil or road debris, and install new MIN line sticker (Figure 11, Item 2).
 - b. If distance measures approximately 1.25 in (3.2 cm), installation of new sticker is not required.
23. Start engine to verify proper operation, and no leaks or fault codes are present.
 24. Remove drain pan.
 25. Download parameter template for "77670 - Coolant Level Low Protection Light - Red - 2010 MaxxForce 11 and 13" to desktop. Refer to [IK1200903 – AFC 12917 Deaeration Tank Hose Re-Route Engine Parameter Download Instructions](#) for instructions to download template.
 26. Launch ServiceMaxx™ and log in if prompted.
 27. In ServiceMaxx, click File, then select Open Template.
 - a. Locate template file saved to desktop, select file, and click Open.
 28. Verify parameter 77670 - Coolant Level Low Protection Light - Red is in right-side window and click Program Engine button.
 29. Open NETS and use Get function to obtain engine information, then use Send function to submit information obtained as Change Parameter to update parameter history in Navistar database.

SERVICE PROCEDURE (CONT.)

30. Close and latch hood.
31. Remove wheel chocks.

Procedure for Models Built 17 July 2011 Through 17 November 2011

1. Bring truck into shop and park on flat surface.
2. Shift transmission to Park or Neutral, set parking brake, and install wheel chocks.
3. Unlatch and open hood.



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Figure 12. Deaeration Tank.

1. Cap
 2. Clamp
4. Remove and discard cap (Figure 12, Item 1) and clamp (Figure 12, Item 2) attached to coolant deaeration tank.
 5. Install new cap and clamp supplied with kit. Do not reuse old clamp.
 6. Launch ServiceMaxx™ and login if prompted.
 7. Download parameter template for “77670 - Coolant Level Low Protection Light - Red - 2010 MaxxFace 11 and 13” to desktop. Refer to [IK1200903 – AFC 12917 Deaeration Tank Hose Re-Route Engine Parameter Download Instructions](#) for instructions to download template.
 8. Click on parameter file, then Open Template.

9. Verify parameter 77670 - Coolant Level Low Protection Light - Red is in right-side window and click Program Engine button.
10. Open NETS and use Get function to obtain engine information, then use Send function to submit information obtained as Change Parameter to update parameter history in Navistar database.
11. Close and latch hood.
12. Remove wheel chocks.

LABOR INFORMATION

Operation number must appear on all claims.

Table 4. Labor Information

Operation No.	Description	Time
A40-12917-1	Procedure for Models Built 01 September 2009 Through 16 July 2011	0.9 hr
A40-12917-2	Procedure for Models Built 17 July 2011 Through 17 November 2011	0.4 hr

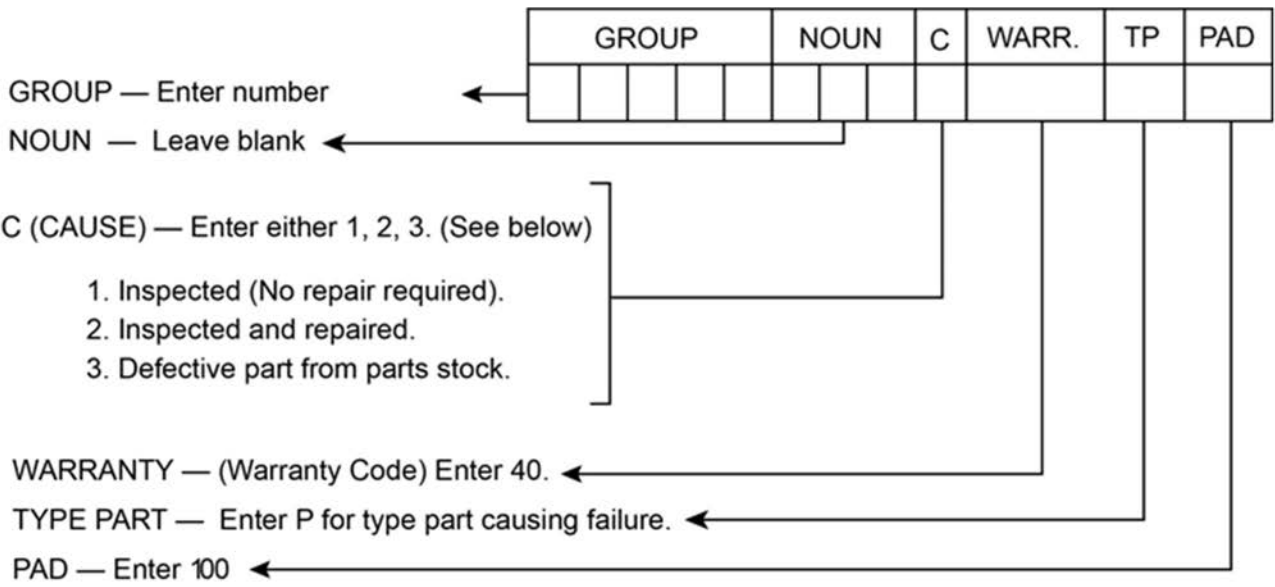
ADMINISTRATIVE PROCEDURE

Expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Authorized Field Change Number 12917.

It is important that the coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Policy Manual, Section 7.1.8.

As with all claim submissions, items acquired locally must be submitted in the "Other Charges" tab. The cost of any bulk items (such as a bag of cable tie straps, roll of wire, barrel of oil, or tube of silicone) should be prorated for the cost of the individual pieces / amount used during each repair.

To assure this important improvement is made in a timely manner, all claims for 12917 activity must be submitted by 31 July 2014 or within the normal warranty period for the vehicle, if after 31 July 2014.



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