Authorized Field Change

NAVISTAR®

AFC 17917

Date: November 2017

Subject File: Uptime Improvements

Subject: Update Instrument Cluster, Body Control Module (BCM), Light Control Module (LCM), Switch Pack Modules, Stalk Shifter Module, Auto Start-Stop Features, Auxiliary Battery Interconnect Cables and Aero Bumper Rock Screen.

Model: Certain International® LT™ Series and International® RH™ Series model trucks.
Start Date: 25 May 2017 End Date: 21 June 2017

DESCRIPTION

Multiple system module updates to mitigate false malfunction indicator light, Engine ECM parameter update, replace auxiliary battery interconnect cables and installation of rock screen retaining clip.

ELIGIBILITY

This procedure applies ONLY to vehicles marked in the International® Service Portal℠ with AFC 17917. Check and complete any other open campaigns also at this time.

TOOLS INFORMATION

Table 1. Tools Information

Tool Number	Tool Description
N/A	EZ-Tech® or EST with Diamond Logic® Builder Software
N/A	Cummins Insite Software
N/A	J1939 Type 2 Adapter

PARTS INFORMATION

Table 2. Parts Information

Part Number	Description	Quantity
4062964C92	Cable, Battery, Negative-Interconnect	1
4062971C92	Cable, Battery, Positive-Interconnect	1
Source Locally	Tie Straps	As Needed
4106286C1	U-Clip Fastener	1

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SERVICE PROCEDURE

WARNING: To prevent property damage, personal injury, and / or death, park vehicle on hard flat surface, turn the engine off, set the parking brake, and install wheel chocks to prevent the vehicle from moving in both directions.

WARNING: To prevent personal injury and / or death, always wear safe eye protection when performing vehicle maintenance.

WARNING: To prevent property damage, personal injury, and /or death, remove ground cable from negative terminal of main battery before disconnecting or connecting electrical components. Always connect ground cable last.

WARNING: To prevent property damage, personal injury, and / or death, keep flames or sparks away from vehicle and do not smoke while servicing the vehicle's batteries. Batteries expel explosive gases.

1. Park on flat surface.

2. Shift transmission to Park or Neutral and set parking brake.

3. Install wheel chocks.

DLB MODULE UPDATE

4. Ensure that current Health Report of the vehicle has been captured.

5. Launch Diamond Logic® Builder (DLB) software and ensure that the vehicle's VIN does not appear in the list of VINs on the Select tab. Delete the VIN if necessary.

NOTE: Use the Nexiq USB link or Nexiq USB Link 2 interface cable for these updates. Other interface cables may increase programming time or may not work at all.

6. With the ignition in the Key ON, Engine OFF position, connect to DLB and let it detect the vehicle's modules.

SERVICE PROCEDURE (CONT.)

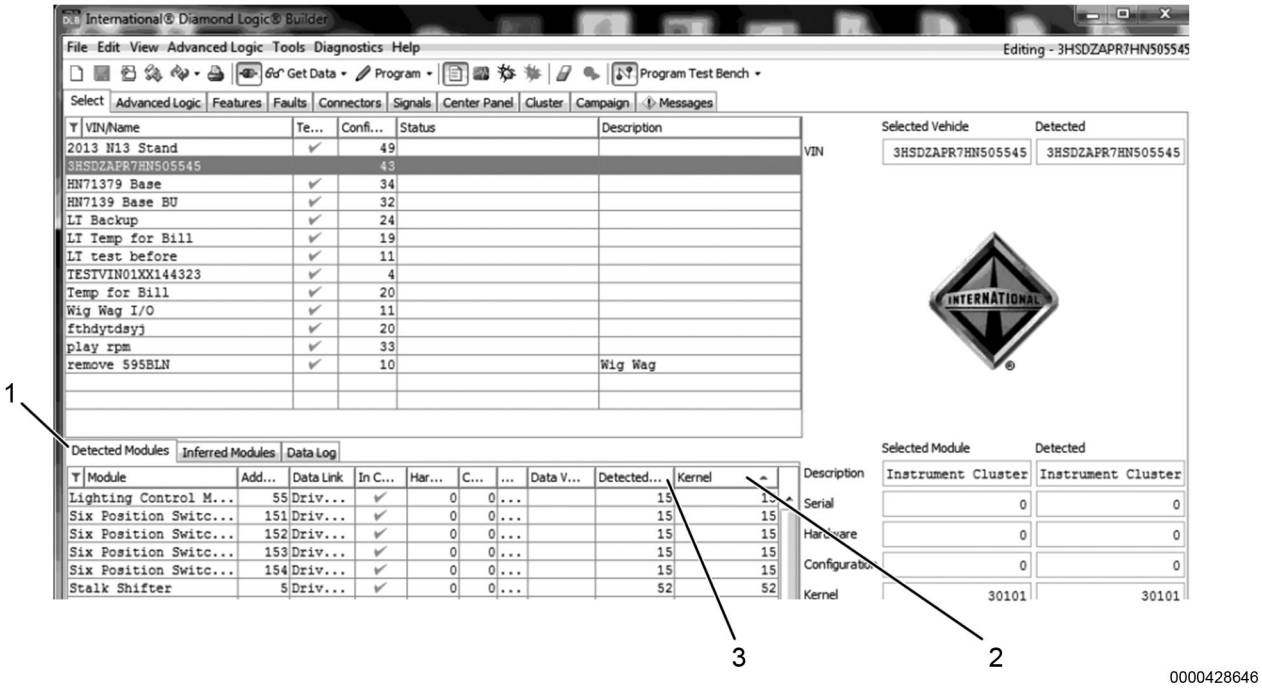

Figure 1. Detected Modules: Before Update

1. Detected Modules tab
2. Column headings
3. Detected and Kernel columns

NOTE: Only modules that are installed on the connected vehicle will show up on the Detected Modules tab.

NOTE: There may be as many as five switch packs installed on the vehicle. Ensure that all installed switch packs are detected.

NOTE: Vehicles equipped with Stalk Shifter: If stalk shifter is not communicating with the data link or in a non-programmable state before or after performing this update, remove the Transmission Shifter Fuse for 5 seconds, then reinstall to restore module communication.

7. Select the Detected Modules tab (Figure 1, Item 1) to see the kernel information for this vehicle.

8. If the Detected Kernel and Kernel columns are not displayed, enable their display by right clicking on any column heading (Figure 1, Item 2) and then selecting these columns in the right-click menu.

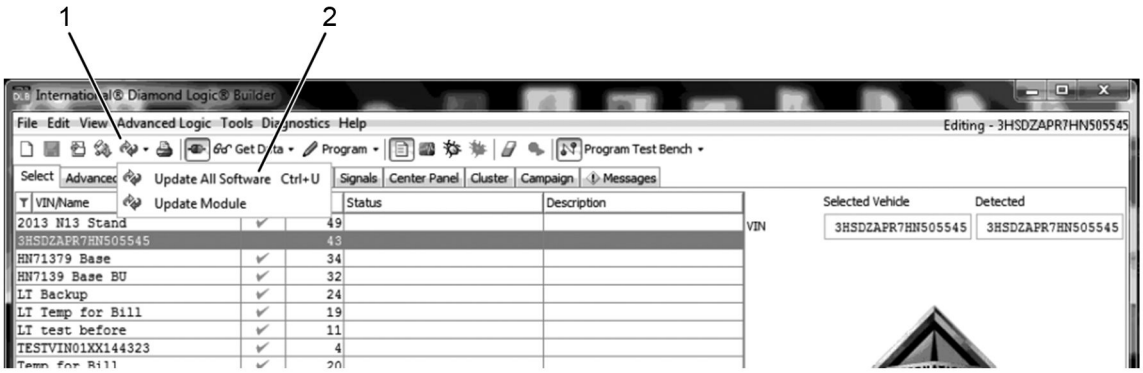

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Figure 2. Update All

1. Update All icon
2. Update All Software

9. Click the Update All icon in the toolbar (Figure 2, Item 1) and select the Update All Software option (Figure 2, Item 2). DLB will update the versions displayed in the Kernel column to the latest versions available.

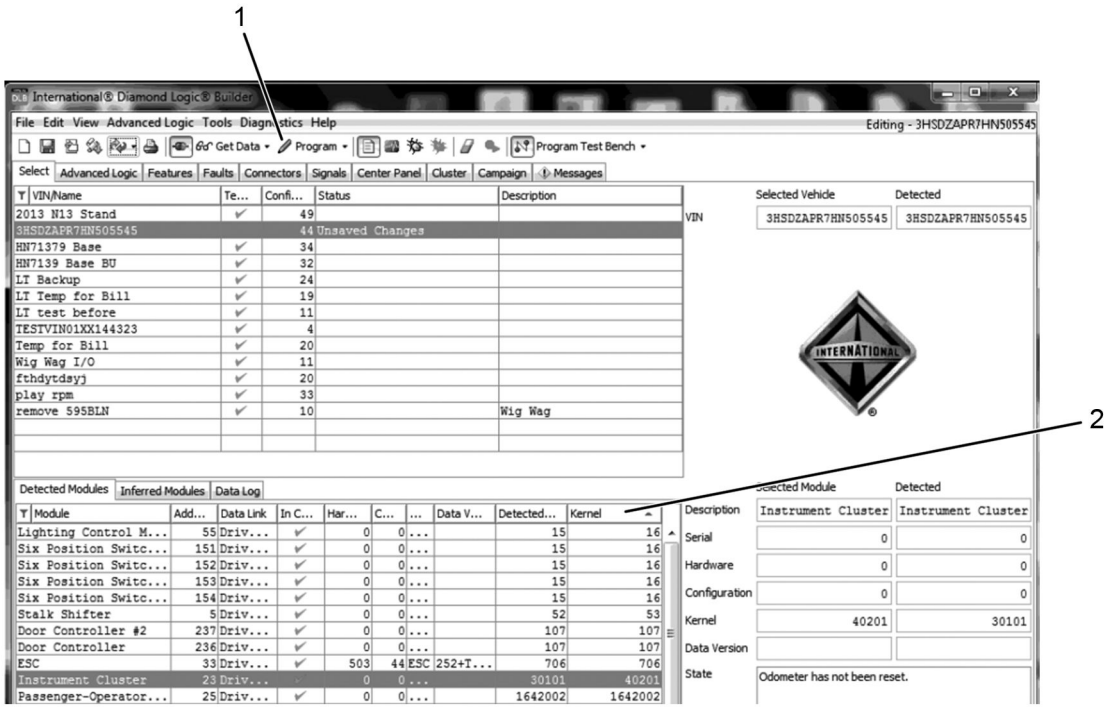

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Figure 3. Detected Modules: After Update

1. Program icon
2. Kernel column

NOTE: Depending on the number of modules to be programmed, programming could take as long as 60 minutes, during which time the headlights will turn on and off several times. Connecting a battery charger and / or disconnecting the headlights is recommended. Also ensure that your EZ-Tech® battery has sufficient charge to last for the entire procedure.

NOTE: Kernel versions shown in this document's figures are examples only. The actual kernel version that is current when an update is performed may vary.

10. Once the versions in the Kernel column (Figure 3, Item 2) have been updated, click the Program icon (Figure 3, Item 1) in the toolbar.

11. At this point, several messages regarding programming of the body controller may be displayed. Respond to these prompts in the same way you would during normal body controller programming.

12. Once programming begins, DLB will indicate programming status in the status bar at the bottom of the window. Programming may take up to 60 minutes, depending on how many modules are being updated.

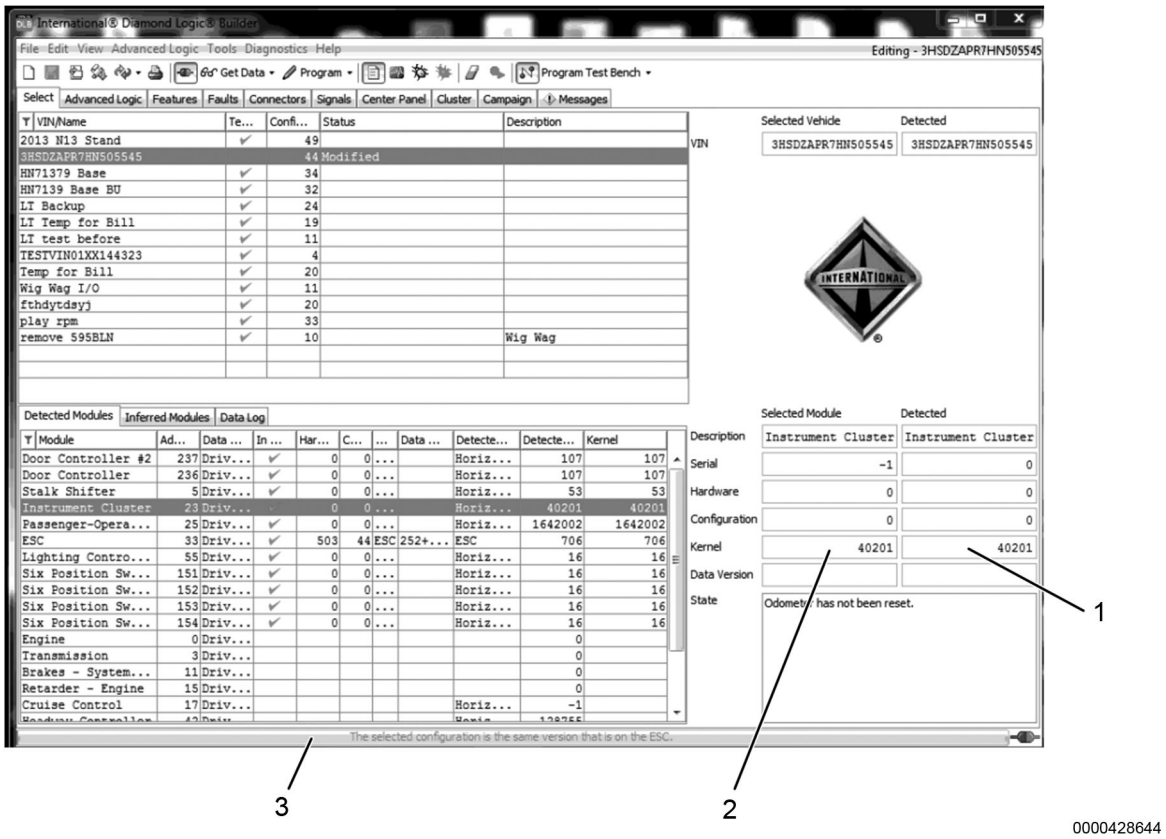

Figure 4. Programming Complete

1. Detected kernel version
2. Selected Module kernel version
3. Status bar

NOTE: During programming, there will not be any prompts that require a technician response. The technician does not need to be present and can perform other tasks while programming is underway.

NOTE: There may be pauses during the update process. Ensure that programming is complete before disconnecting the computer.

13. Verify that programming is complete by selecting each updated module. If the update has been finished for the selected module, the kernel version listed in the Selected Module column (Figure 4, Item 2) will match the version listed in the Detected column (Figure 4, Item 1). Additionally, the status bar at the bottom of the window (Figure 4, Item 3) will display “The selected configuration is the same that is on the ESC.”

14. Disconnect DLB from vehicle by clicking on Disconnect icon, switching vehicle ignition to Key OFF, Engine OFF position, and disconnecting the interface connector from the diagnostic port.

15. Reconnect interface connector to diagnostic port, switch vehicle ignition to Key ON, Engine OFF position and click DLB’s connect icon.

SERVICE PROCEDURE (CONT.)

16. Enter diagnostic mode.

17. Select the Faults tab.

18. Clear any DTCs listed. Refer to the Diamond Logic Builder User Guide for detailed instructions.

NOTE: You may have to invoke the Clear DTCs routine several time to clear all DTCs. Active DTCs will reappear and the issues causing them should be corrected before releasing the vehicle to the customer.

19. Disconnect DLB from vehicle by clicking on Disconnect icon, switching vehicle ignition to Key OFF, Engine OFF position, and disconnecting the interface connector from the diagnostic port.

AUTO START PTO DISABLED

20. Using Cummins Insite equipped computer and J1939 Type 2 Adapter, connect to vehicle 9-pin Diagnostic Link Connector (DLC).

21. Turn key to Key ON, Engine OFF position.

22. Using Insite, access FEATURES AND PARAMETERS screen and expand SAE J1939 MULTIPLEXING section.

PTO On/Off Switch	**Enable**
Source Address	33 - Body Controller
PTO Set / Resume Switch	**Enable**
Source Address	33 - Body Controller

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Figure 5. Cummins Insite – PTO Switches

23. Locate PTO ON / OFF SWITCH and PTO SET / RESUME SWITCH. If necessary, select ENABLE function for both switches and verify source address for both switches are set to 33-BODY CONTROLLER (Figure 5).

24. Disconnect Cummins Insite equipped computer and J1939 Type 2 adapter from vehicle DLC.

EXCESSIVE VOLTAGE DROP

25. Remove deck plate if equipped and remove auxiliary battery box cover.

26. Disconnect and isolate ground cable from main vehicle battery.

SERVICE PROCEDURE (CONT.)

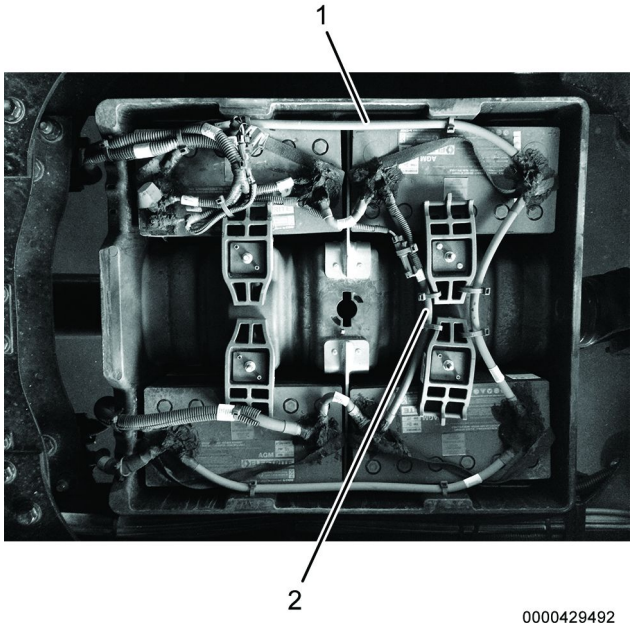

Figure 6. Battery Interconnect Cables

1. Positive interconnect cable
2. Negative interconnect cable

27. Cut tie straps and remove negative battery interconnect cable (Figure 6, Item 2).

28. Cut tie straps and remove positive battery interconnect cable (Figure 6, Item 1).

29. Install new negative battery interconnect cable.

30. Install new positive battery interconnect cable.

31. Using tie straps, secure negative and positive interconnect to same clipping points as cut in Steps 27 and 28.

32. Using a torque wrench, tighten positive battery post nuts to 142 - 177 lb-in (16 - 20 N•m).

33. Using a torque wrench, tighten negative battery post nuts to 142 - 177 lb-in (16 - 20 N•m).

34. Connect ground cable on main vehicle battery.

35. Apply Grafo dielectric grease to positive and negative battery posts.

36. Install battery box cover.

37. Install deck plate if equipped.

SERVICE PROCEDURE (CONT.)

BUMPER ROCK SCREEN

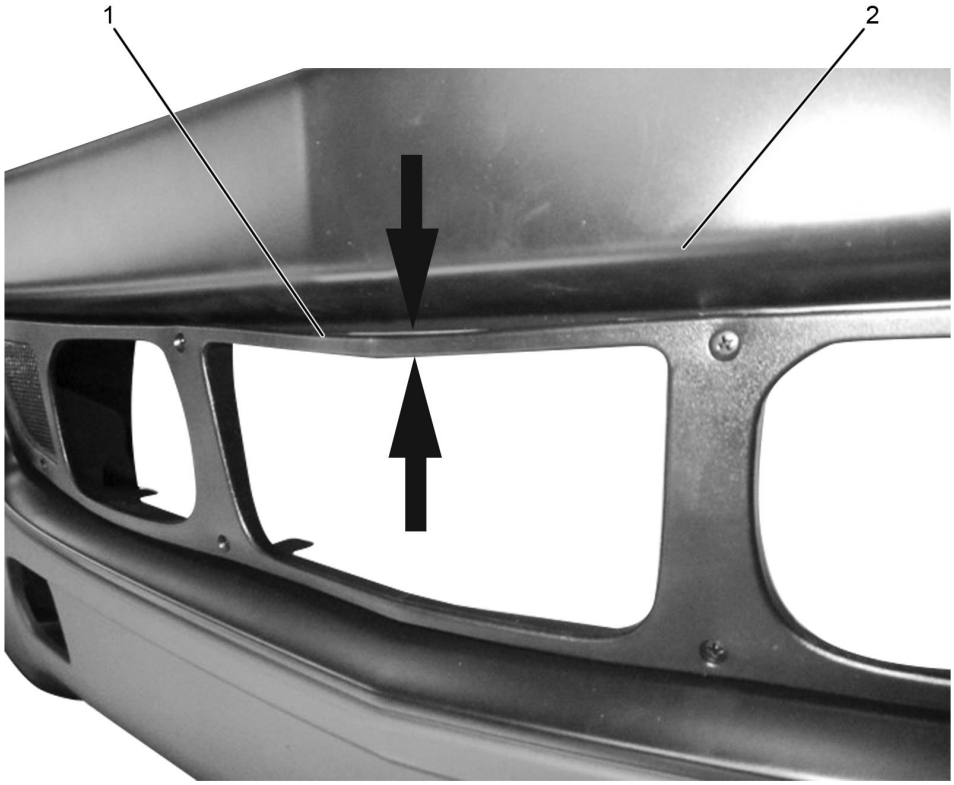

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Figure 7. Rock Screen Radar Frame (Bumper Exterior)

1. Bumper rock screen radar frame
2. Bumper applique

NOTE: Collision avoidance radar may malfunction or cause fault codes if rock screen radar frame blocks the radar signal.

38. Locate center of rock screen radar frame (Figure 7, Item 1) and bumper applique (Figure 7, Item 2).

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Figure 8. Rock Screen Radar Frame with U-Clip Fastener (Bumper Interior)

1. Rock screen radar frame
2. U-clip fastener
3. Bumper applique

39. Align and install U-clip fastener (Figure 8, Item 2) with retaining tab face up to top center area of rock screen radar frame (Figure 8, Item 1), securing radar frame to inside edge of bumper applique (Figure 8, Item 3).

40. Unlatch and open hood.

SERVICE PROCEDURE (CONT.)

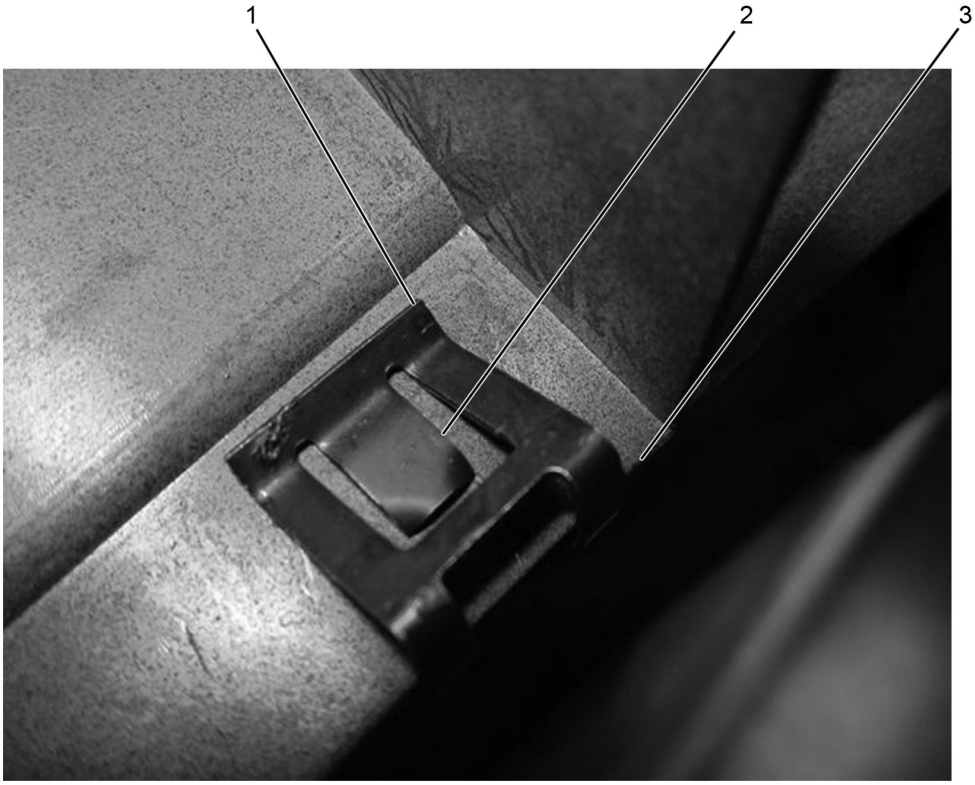

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Figure 9. U-Clip Fastener

1. U-clip fastener
2. Retaining tab
3. Bumper applique

41. Visually inspect the inside bumper to ensure U-clip fastener (Figure 9, Item 1) is oriented with retaining tab (Figure 9, Item 2) face up onto bumper applique (Figure 9, Item 3) and seated fully.

42. Close and latch hood.

43. Remove wheel chocks.

LABOR INFORMATION

Operation number must appear on all claims.

Table 3. Labor Information

Operation No.	Description	Time
A40-17917-1	Uptime Improvements	1.3 hrs

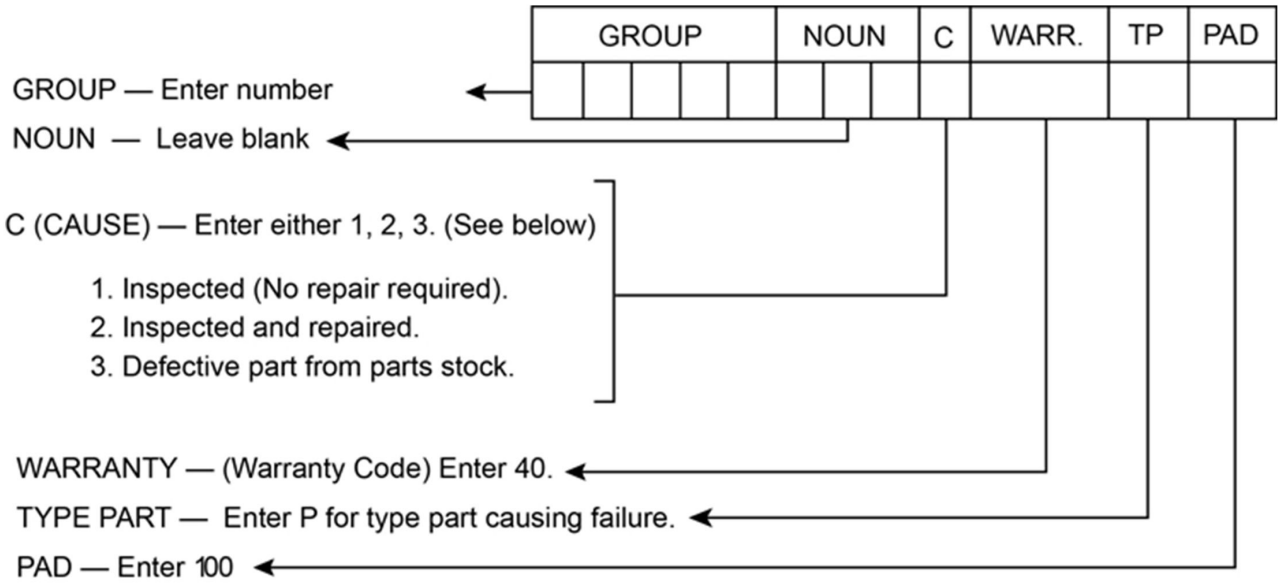
ADMINISTRATIVE PROCEDURE

Expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Authorized Field Change Number 17917.

Section 7 of the Warranty Policy and Procedures Manual contains further information related to the submission and processing of AFC / Recall claims.

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 ensure this important improvement is made in a timely manner, all claims for 17917 activity must be submitted by 17 November 2018 or within the normal warranty period for the vehicle, if after 17 November 2018.



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