

POSTED ON ISIS

SEP 05 2019

Compliance Dept.

MAILED

SEP 12 2019

Compliance Dept.

# ***SERVICE PROCEDURE***

19512

SEPTEMBER 2019

**SUBJECT:**    **SAFETY RECALL**  
**Starter Circuit on certain 2020 CE school bus**  
**models built 24 April 2019 thru 02 May 2019 with**  
**PSI gasoline or propane engine and C7 Body**  
**Control Module (BCM).**

## **DEFECT DESCRIPTION**

The starter solenoid may cause damage to the starter crank output circuit of the BCM, resulting in an unintended command to crank the engine when the ignition key is in the ON position and the transmission is in the PARK or NEUTRAL position. If the ignition is in the ON position during servicing, the engine could start unexpectedly while someone is working in the engine compartment, which could result in personal injury.

## **MODELS INVOLVED**

This safety recall involves certain CE school bus models built 24 April 2019 thru 02 May 2019 with PSI gasoline or propane engine and C7 Body Control Module (BCM).

## **ELIGIBILITY**

This procedure applies ONLY to vehicles marked in the International® Service Portal™ with Safety Recall 19512. Also complete any other open campaigns listed on the Service Portal at this time.

## **PARTS INFORMATION**

Part Number	Part Description	Quantity
8900286R91	Kit; Jumper Harness	1
306132C1 or Source Locally	Cable Tie Strap; 14-in	As Needed
Source Locally	Wire Loom Tape	As Needed
27384R1 or Source Locally	Screw, Self-Tapping Machine Pan Head #10-16 x ¾ in	1

**8900286R91** contains the following parts:

Part Description	Quantity
Jumper Harness with Relay	1
Single Wire Jumper	1

## **SERVICE PROCEDURE**

**WARNING!** To prevent personal injury, and / or death, or damage to property, 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 either direction.

**WARNING!** To prevent personal injury, and / or death, or damage to property, if the vehicle must be raised, do not work under the vehicle supported only by jacks. Jacks can slip or fall over.

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

**WARNING!** To prevent personal injury, and / or death, or damage to property, allow engine / vehicle components to cool before servicing.

**WARNING!** To prevent personal injury, and / or death, or damage to property, keep flames, sparks, or other heat sources away from vehicle and do not smoke while servicing the vehicle's batteries. Batteries expel explosive gases, which may cause an explosion resulting in personal injury, death, or damage to property. Avoid contact with any heat sources.

**WARNING!** To prevent personal injury, and / or death, or damage to property, remove the ground cable from the negative terminal of the battery box before disconnecting any electrical components. Always connect the ground cable last.

1. Park vehicle on flat surface.
2. Shift transmission to Park or Neutral and set parking brake.
3. Turn vehicle ignition to Key OFF position.
4. Install wheel chocks.
5. Disconnect and isolate ground cable from negative terminal located on main vehicle battery.
6. Unlatch and open hood.

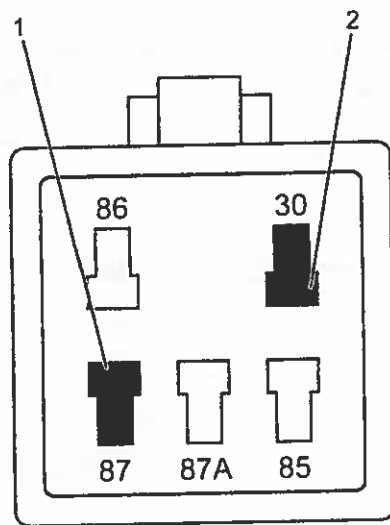


0000461576

**Figure 1. Fuse Relay Panel**

1. Start relay
2. Connector 4003

7. Locate start relay (Figure 1, Item 1) in fuse / relay panel on firewall.
8. Remove connector 4003 (Figure 1, Item 2) by pushing lock down.

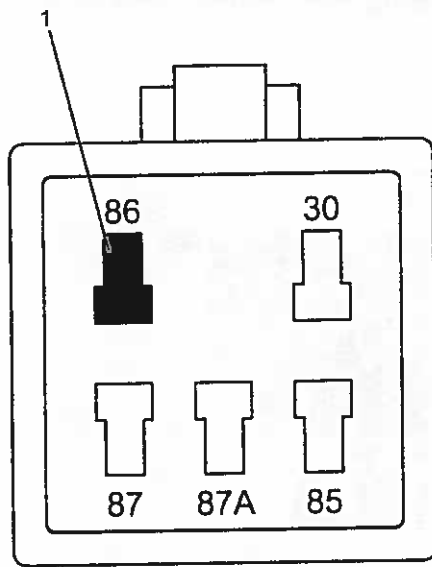


0000461574

**Figure 2. Connector 4003 Face View**

1. Cavity 87
2. Cavity 30

9. Unlock connector and depopulate circuit from cavity 87 (Figure 2, Item 1).
10. Remove relay from new jumper harness.

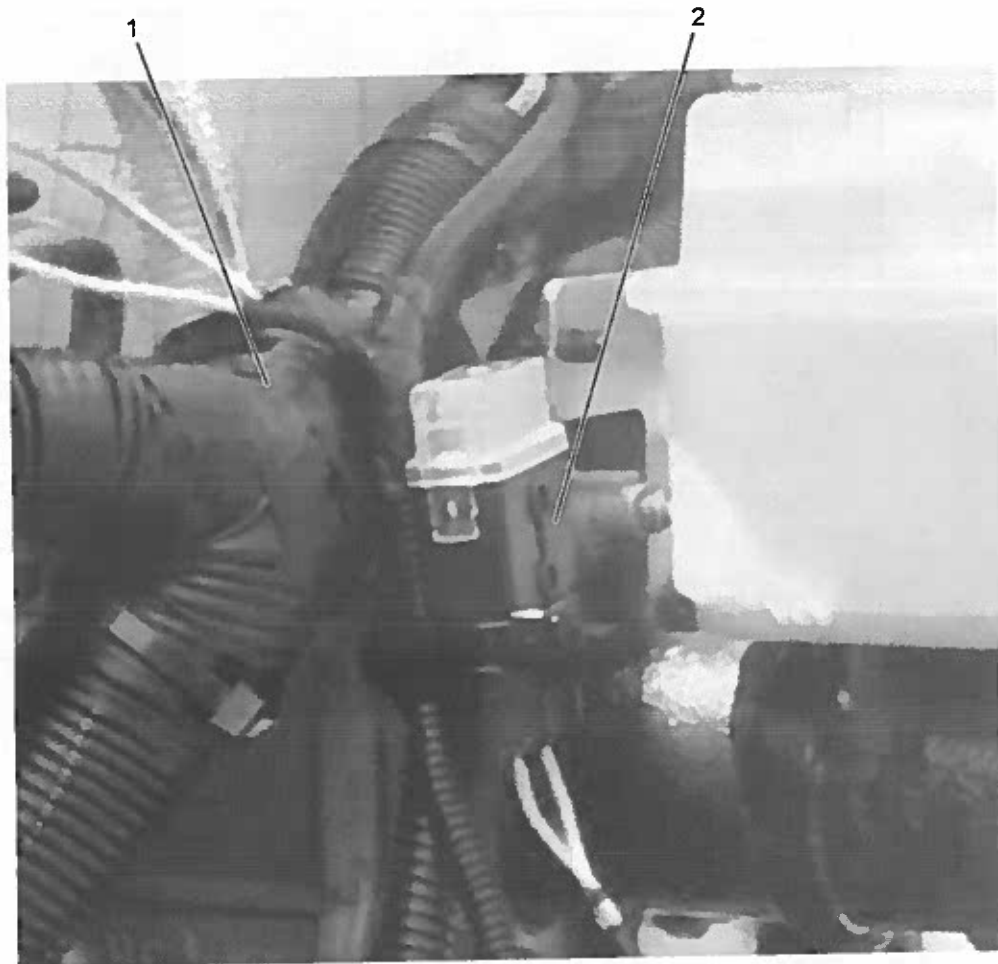


0000461573

**Figure 3. Jumper Harness Relay Connector Face View**

1. Cavity 86
11. Unlock new jumper harness relay connector and remove GREEN plug from cavity 86 (Figure 3, Item 1).
12. Populate cavity 86 of jumper harness relay connector with wire removed in Step 9.
13. Install GREEN terminal lock onto jumper harness relay connector.
14. Populate cavity 87 of connector 4003 (Figure 2, Item 1) with spare GRAY wire from jumper harness relay connector.
15. Remove terminal from cavity 30 of connector 4003 (Figure 2, Item 2). Fold back the wire and, using wire loom tape, cover terminal and secure wire in place.
16. Insert terminal from one end of single wire jumper into cavity 30 of connector 4003 (Figure 2, Item 2).
17. Install GREEN terminal lock onto connector 4003.
18. Insert connector 4003 into start relay on fuse / relay panel.
19. Connect jumper harness connector to relay removed in Step 11.
20. Open fuse / relay panel.

21. Using self-tapping screw, mount jumper harness relay to an open location near start relay.
22. Close fuse / relay panel.

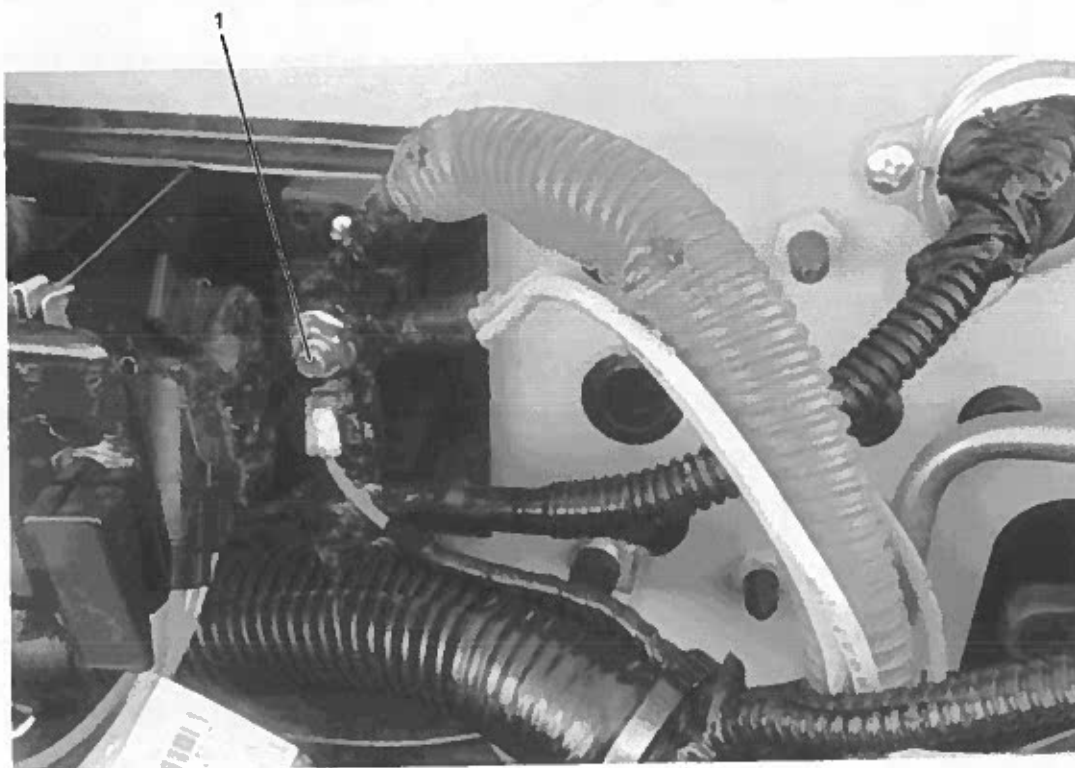


0000461578

**Figure 4. Location for Maxi Fuse**

1. Main engine harness
2. Maxi fuse

23. Locate maxi fuse (Figure 4, Item 2) of jumper harness and secure to main engine harness (Figure 4, Item 1) using two cable tie straps.



0000401579

**Figure 5. Mega Fuse Terminal and Nut**

1. Mega fuse nut

24. Remove upper mega fuse nut (Figure 5, Item 1).
25. Connect eyelet of RED wire in jumper harness to upper mega fuse terminal (Figure 5, Item 1).
26. Install mega fuse nut. Using a torque wrench, tighten to 100 lb-in (11.3 N•m).

**NOTE: Cable tie straps should be placed every 14 in (35 cm).**

27. Using cable tie straps, route and secure wire installed in Step 25.



0000461577

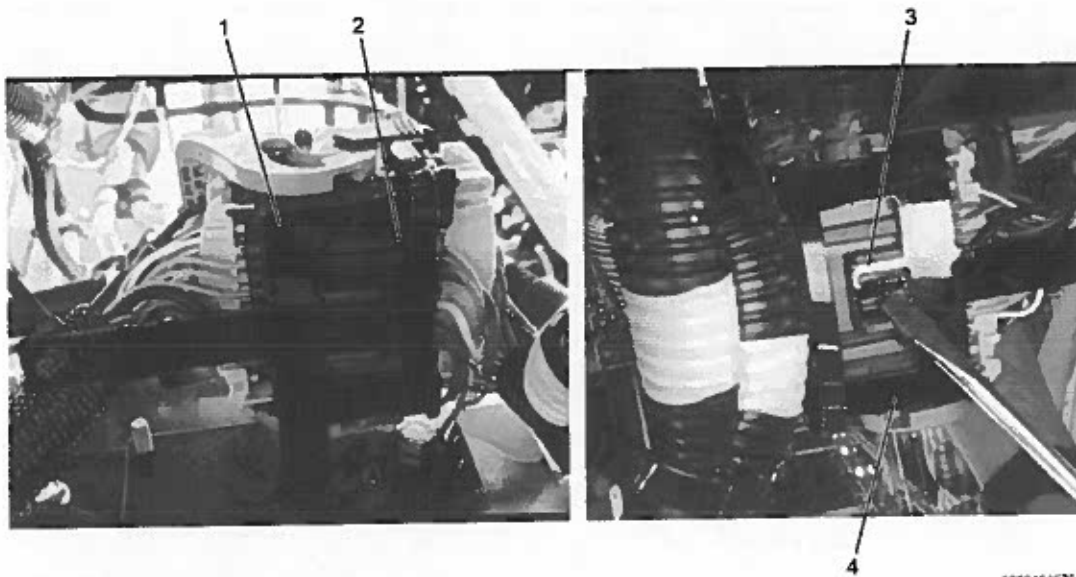
**Figure 6. Ground Terminal and Nut**

1. Ground nut

28. Remove ground nut (Figure 6, Item 1).
29. Connect eyelet of WHITE ground wire of jumper harness to ground stud (Figure 6, Item 1).
30. Install ground nut. Using a torque wrench, tighten to 25 - 30 lb-in (2.8 - 3.3 N•m).

**NOTE: Cable tie straps should be placed every 14 in (35 cm).**

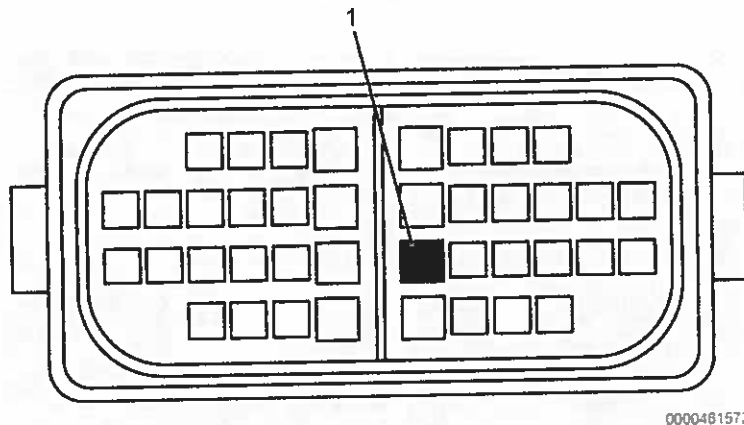
31. Using cable tie straps, route and secure wire installed in Step 29.



**Figure 7. Vehicle Interface Connector**

1. Vehicle interface connector
2. Cable tie strap
3. Engine connector lock
4. Mounting bracket

32. Remove vehicle interface connector cable tie strap (Figure 7, Item 2).
33. Open vehicle interface connector (Figure 7, Item 1).
34. Push vehicle interface connector lock (Figure 7, Item 3) and release vehicle interface connector from mounting block (Figure 7, Item 4).



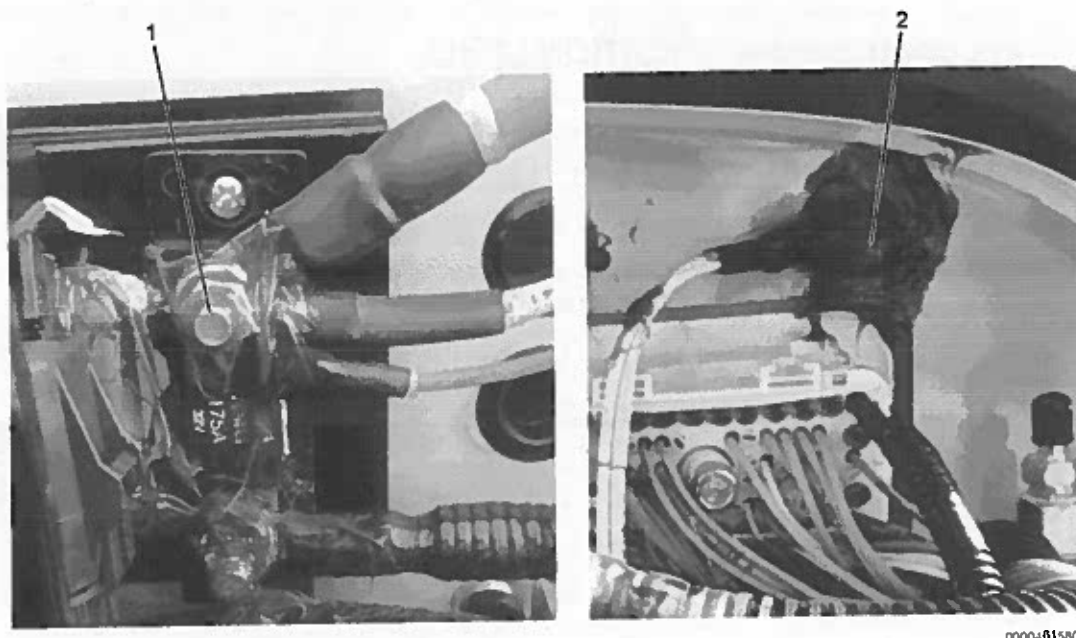
**Figure 8. Vehicle Interface Connector Face View**

1. Cavity C6

35. Remove terminal lock from the vehicle interface connector half with BLUE latch.
36. Locate and remove terminal from cavity C6 (Figure 8, Item 1).
37. Fold back wire and, using wire loom tape, cover terminal and secure wire in place.
38. Insert terminal of single wire jumper into cavity C6 (Figure 8, Item 1) of vehicle interface connector.
39. Install terminal lock onto vehicle interface connector.
40. Reconnect vehicle interface connector halves.
41. Install connector onto its bracket and secure in place using a cable tie strap.

**NOTE: Cable tie straps should be placed every 14 in (35 cm).**

42. Route and secure single wire jumper harness to main engine harness with cable tie straps.



**Figure 9. Terminals**

1. Mega fuse terminal
2. Ground terminal

43. Add dielectric grease and completely cover mega fuse terminal (Figure 7, Item 1) and ground terminal (Figure 7, Item 2) connections to avoid corrosion.
44. Connect ground cable to negative terminal located on main vehicle battery.
45. Start the bus to verify correct installation.
46. Close and latch hood.
47. Remove wheel chocks.

## END OF SERVICE PROCEDURE

### LABOR INFORMATION

Operation Number	Description	Time
A40-19512-1	Install Overlay Harness and Relay	1.0 hr

#### VEHICLE RECALL 19512

© 2019 Navistar, Inc. All rights reserved. All marks are trademarks of their respective owners.

## CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with this campaign must be marked with a CTS-1075 Campaign Identification Label.

Complete the label and attach on a clean surface next to the vehicle identification number (VIN) plate.

DO NOT REMOVE
INTERNATIONAL
Campaign No.
VIN
Eng. #
COMPLETED
Service Location Code #
DO NOT REMOVE

## ADMINISTRATIVE / DEALER RESPONSIBILITIES

### **WARRANTY CLAIMS**

Warranty claim expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Safety Recall 19512.

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.

GROUP	NOUN	C	WARR.	TP	PAD

GROUP — Enter number

NOUN — Leave blank

C (CAUSE) — Enter either 1, 2, 3. (See below)

- 1. Inspected (No repair required).
- 2. Inspected and repaired.
- 3. Defective part from parts stock.

WARRANTY — (Warranty Code) Enter 40.

TYPE PART — Enter P for type part causing failure.

PAD — Enter 100

000004 1910

### **VEHICLE RECALL 19512**

© 2019 Navistar, Inc. All rights reserved. All marks are trademarks of their respective owners.

## **UNITED STATES AND POSSESSIONS**

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle that is subject to a vehicle recall campaign must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within 60 days after a tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within 60 days, the owner may be entitled to replacement with an identical or reasonable equivalent vehicle at no charge, or to a refund of the purchase price less a reasonable allowance for depreciation.

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your dealer location.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list may contain information obtained from state motor vehicle registration records, and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

## **CANADA**

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your dealer location.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list may contain information obtained from state motor vehicle registration records, and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

## **EXPORT**

Export Distributors should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your distributor location.

Export Distributors are to submit warranty claims in the usual manner making reference to this recall number.

Export Distributors are expected to provide full cooperation and follow-up with respect to this important subject matter. If you have any questions or need further assistance, please contact the Regional Service Manager at your regional office.

**NAVISTAR, INC.**