

VEHICLE RECALL

G- 05516

G- 05517

September 2005

**SUBJECT: SAFETY RECALL (U.S., EXPORT)
SPECIALTY MANUFACTURING CO. 5 Series Electric
Stop Arms on certain 3800 chassis, and CE, FE, and
RE School Buses built between 01/07/2002 and
06/22/2005**

DEFECT DESCRIPTION

The micro switch that controls the stop arm position can malfunction intermittently in operating conditions below 32 degrees F. This condition may cause the stop arm to open or close to an improper position, or not open at all. Vehicles that include a stop arm switch heater may not have the heater wire connected. This condition may result in the same failure mode. This defect could increase the likelihood of vehicles passing a stopped school bus and striking pedestrians in the vicinity of the stopped bus, which could result in **personal injury or death**.

MODELS INVOLVED

This safety recall involves certain Specialty Manufacturing Co. electric stop arms on 3800 bus chassis, and CE, FE and RE School Buses built between 01/07/2002 and 06/22/2005. The stop arms involved in this recall are **5-series** manufactured between January 7, 2002 and March 1, 2005, with serial numbers between **480380 and 627609**.

Stop arms on buses operated in states in **Table 1** are included in **Recall 05516**. If a bus is operated in one of these states, and is within the suspect date and s/n range, then this repair **needs to be performed**.

Stop arms on buses operated in states in **Table 2** are included in **Recall 05517**. If a bus is operated in one of these states, then this repair **need not be performed** unless a customer has experienced a problem with a unit in the suspect date and s/n range or the vehicle is also to be operated in a cold weather state.

TABLE 1 – Recall 05516 – Cold Weather States				
Alaska	Kansas	Montana	Ohio	Virginia
Colorado	Kentucky	New Hampshire	Oregon	Washington
Connecticut	Maine	Nebraska	Pennsylvania	West Virginia
Delaware	Maryland	Nevada	Rhode Island	Wisconsin
Idaho	Massachusetts	New Jersey	South Dakota	Wyoming
Illinois	Michigan	New Mexico	Tennessee	
Indiana	Minnesota	New York	Utah	Dist of Columbia
Iowa	Missouri	North Dakota	Vermont	

TABLE 2 – Recall 05517 – Warm Weather States			
Alabama	Florida	Mississippi	Texas
Arizona	Georgia	North Carolina	
Arkansas	Hawaii	Oklahoma	
California	Louisiana	South Carolina	

PARTS INFORMATION

Customers have been asked to verify the stop arm serial number(s) prior to making an appointment for repairs. You must also verify the stop arm serial number against the range provided, and then order the replacement kit directly from Specialty Manufacturing Co. Specialty will ship the repair kit directly to you at no charge. International will reimburse you a handling fee when you submit a warranty claim (refer to “Warranty Claims” section below). You must provide the VIN of the bus being repaired as well as the serial number or numbers of the stop arms to Specialty. Please contact Specialty Manufacturing by one of the following methods to obtain a repair kit:

Call Toll free: 1-800-951-7876 ext. customer service
 Go online to: http://www.specmfg.com/products_bus_5seriesform.html

The replacement part does not require a heater, so the repair will only require part replacement and a minor wiring change within the stop arm itself. Additional wiring within the bus body will not be required.

SERVICE PROCEDURE



To avoid property damage, personal injury, or death when servicing the vehicle, park on a flat level surface, set the parking brake, turn the engine off and chock the wheels.



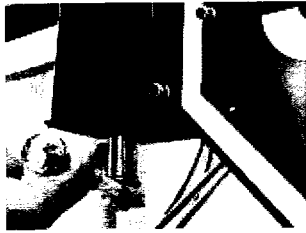
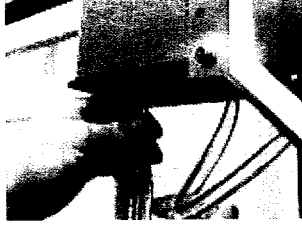

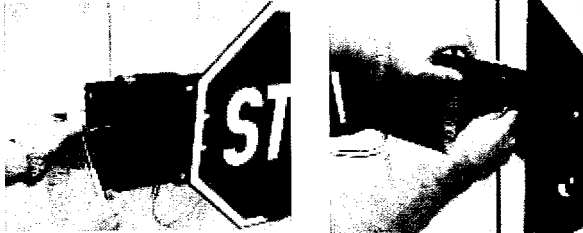
To avoid electrical shock and potential damage to vehicle electrical components, always disconnect the battery prior to performing vehicle maintenance or service.

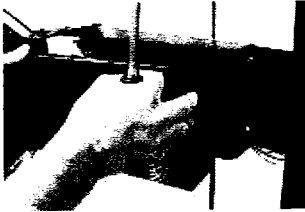



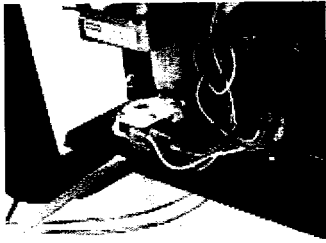
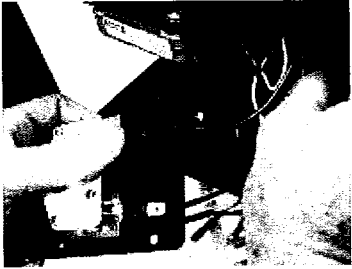






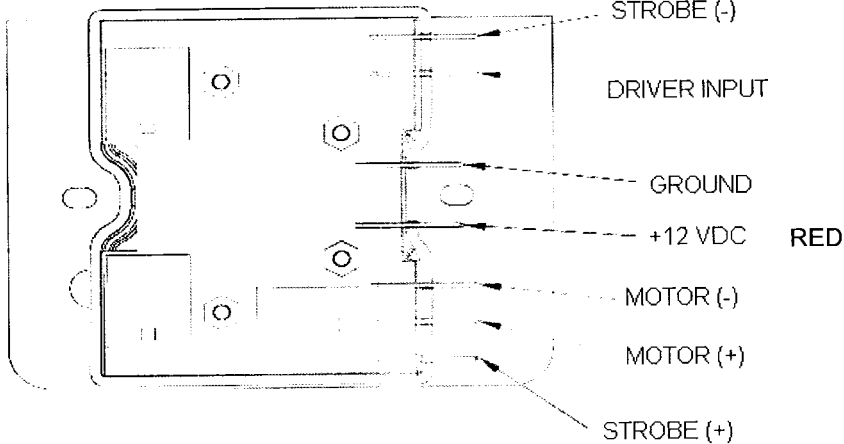

To prevent serious eye injury, always wear safe eye protection when you perform vehicle maintenance or service.

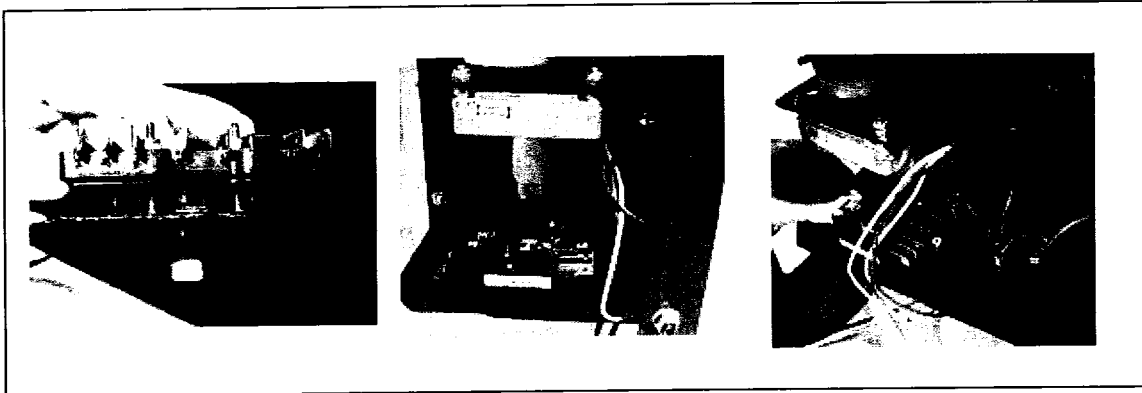
NOTE: The stop arm serial number is readily visible on the stop arm box once you move and hold the stop sign in an open position away from the stop arm mechanical box. With the battery disconnected, the stop arm can be easily moved away from the mechanical box. With the battery connected, there is more resistance moving the arm, and holding the stop arm in an open position may result in a ratcheting noise, but will not harm the stop arm. Older stop arms will continue to make a noise until the cam shaft is moved (see replacement instructions) or the stop arm is released. Newer stop arms will quit making the noise after a few seconds. If the stop arm has strobe lights, they may flash until the cam shaft is removed (step 2 of replacement instructions).

1. The bus may have only a front stop arm or a rear stop arm (California) or both a front and rear stop arm. Confirm that the stop arm is manufactured by Specialty Manufacturing Co and is a **5-series** stop arm (Specialty part number will start with a 5).
2. Confirm the stop arm serial number. The stop arm serial number should be in the range between **480380 and 627609**.
3. Replace the micro switch assembly by following the instructions below.
4. For problems installing the switch assembly, contact Specialty Manufacturing Company at 1-800-957-7867 ext. Customer Service.

		
1. Remove 1/2-20 nut at the bottom of control box w/ 3/4" wrench.	2. Use a screwdriver (or similar tool) to tap the cam shaft back up inside the unit.	3. Using a utility knife, cut the silicone seal on both ends of the stop arm cover.
		
4. Remove screws from both ends of the cover using 5/16" socket.		

	
<p>5. Rotate sign for access & remove cover by using a flat bladed screwdriver to pry it off.</p>	<p>6. Remove camshaft and discard. It is not needed with 5.5 series.</p>
	
<p>7. Remove (2) 11/32" nuts holding micro switch assembly in position. DO NOT unscrew the four 1/4" nuts holding the micro-switches to the micro-switch assembly plate. The entire assembly will come out as one unit.</p>	<p>8. Carefully cut the wire ties.</p>
	
<p>9. Using a flat blade screwdriver, carefully pry the micro switch plate upwards. CAUTION-bushing may break and snap ring will make a loud noise when released. Discard the snap ring and bushing.</p>	<p>10. Remove all wires from micro switch assembly. Black heater wire remains with assy.</p>
	

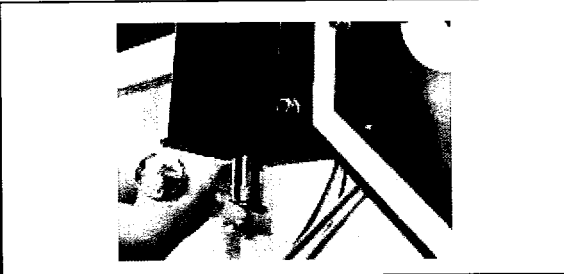
<p>11. Remove the 11/32" nuts on both relays.</p>	<p>12. Disconnect wires from the relays. Discard relays, micro switch assembly & jumper wires – double orange, double black/green, brown & yellow.</p>
	
<p>13. Cut smaller (shorter) wire from the double red & double white pigtail sets.</p>	<p>14. Cut Fast-On end off of BLUE wire, strip end approximately 1/4" & crimp new 1/4" fast-on blade, 004024, included with kit.</p>
	
	
<p>15. Connect leads to new 005150 module as shown on schematic above. Leave two center tabs, +12VDC & GROUND, disconnected until module is fastened down in next steps. The yellow wire is no longer needed and can be tied back.</p>	



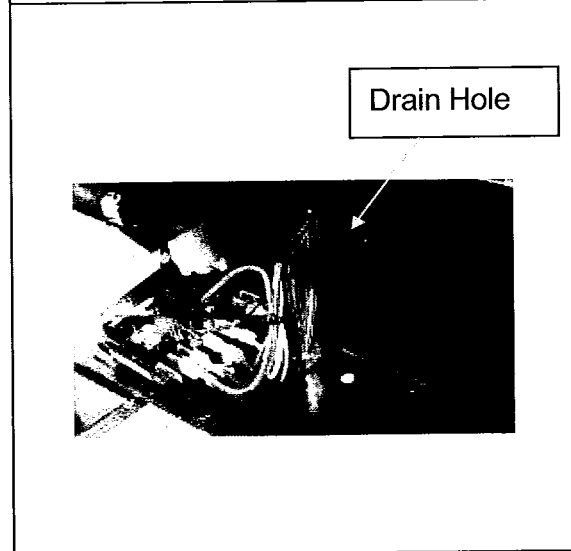
16. Install new 005150 module into position as shown above. Timing mark **MUST** be facing toward the direction of the blade. (Ex. If blade is fully extended, timing mark must be turned to front of unit). Push module shaft through lower hinge hole. Fasten with (2) 11/32" hex nuts from original micro switch assy.



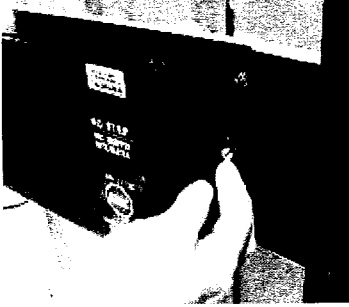
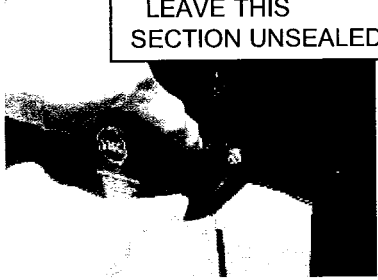
17. Connect +12VDC & GROUND per schematic.



18. Secure with 3/4" nut.



19. Tie wires. If unit does not have drain hole, add one.

	
<p>20. Replace cover. Secure with (2) screws. Reseal both ends of the crossing arm cover with RTV. IMPORTANT! – DO NOT seal approximately 1” of the lower right side of the box. This provides an additional drainage location.</p>	<p>21. Test the stop arm assembly to make sure it functions correctly.</p>
<p align="center">If further help is needed, contact the engineering department at Specialty Manufacturing</p>	

END OF SERVICE PROCEDURE

LABOR INFORMATION

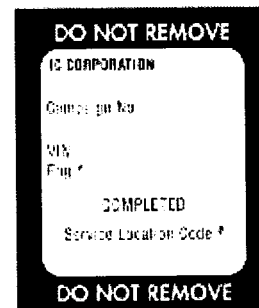
Please use the appropriate labor code based on the recall that the VIN falls within.

Labor Code	Description	Time (hour)
A40-05516-01	Repair 1 stop arm (front only or rear only)	0.4
A40-05516-02	Repair 2 stop arms (front and rear)	0.6
A40-05517-01	Repair 1 stop arm (front only or rear only)	0.4
A40-05517-02	Repair 2 stop arms (front and rear)	0.6

CAMPAIGN IDENTIFICATION LABEL

*Each vehicle corrected in accordance with this campaign **must be** marked with a S00109 Campaign Identification Label.*

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



ADMINISTRATIVE/DEALER RESPONSIBILITIES (U.S. & POSSESSIONS)

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 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.

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.

However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

To avoid having to replace an owner vehicle or refund the purchase price, every effort must be made to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible.

During the recall process, a listing of owner names and addresses will be furnished to the involved dealers to enable dealers to follow up with owners and have the vehicles corrected. You must limit the use of this listing 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.

WARRANTY CLAIMS

Refer to Dealer Warranty Manual for procedures to conduct Recall Campaigns.

You will be reimbursed in the amount of five dollars (\$5.00) for ordering and handling the repair part. This handling fee should be listed in the "Other Charges" section of the warranty claim.

It is important that the Recall Coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Manual, Section 7-1. Special attention should be given to Items 39 through 44:

	GROUP	NOUN	C	WARR.	TP	PAD
GROUP Enter number G—						
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						

ADMINISTRATIVE/DISTRIBUTOR RESPONSIBILITY (EXPORT)

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 from your distributor location.

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

We ask for your full cooperation and follow-up to this important subject matter. If you have any questions or need further assistance, please contact the Regional Service Manager at your regional office.