

# MID BUS

BUSES REGISTERED  
in the Cold  
STATES

505 East Jefferson Street  
Bluffton, Ohio 45817-1398

Phone (419) 358-2500  
Fax (419) 358-2400

OSV-292  
16 pgs.

National Highway Traffic Safety Administration  
Attn: Kelly Schuler, Safety Defect Analyst  
400 Seventh Street, S.W.  
Washington, D.C. 20590  
Fax: 202-366-7882

June 15, 2005

Kelly Schuler,

Please find the following 573 form and the documentation that was sent to us from Specialty Manufacturing. This 573 form is for the Specialty Manufacturing Recall on their "5" Series Stop Arms.

Should you have any questions, please let me know. I will be traveling most of next week, so you can e-mail or call my cell @ 419-615-7301.

Please confirm that you received this information.

Tony Augsburger   
National Sales Manager, Mid Bus Inc.

Safety Defect and Noncompliance Report Guide for Vehicles  
**PART 573 Defect and Noncompliance Report**<sup>3</sup>

On June 16, ~~2004~~<sup>2005</sup>, Mid Bus Inc. [MFR] decided that (a defect which relates to motor vehicle safety)(a noncompliance with Federal Motor Vehicle Safety Standard No. \_\_\_\_\_) exists in the motor vehicles listed below, and is furnishing notification to the National Highway Traffic Safety Administration in accordance with 49 CFR Part 573 Defect and Noncompliance Reports.

Date this report was prepared: June 16, 2005

Furnish the manufacturer's identification code for this recall (if applicable): N/A

1. Identify the full corporate name of the fabricating manufacturer of the vehicle being recalled. If the recalled vehicle is imported, provide the name and mailing address of the designated agent as prescribed by 49 U.S.C. §30164.

Mid Bus Inc.  
Bluffton, OH

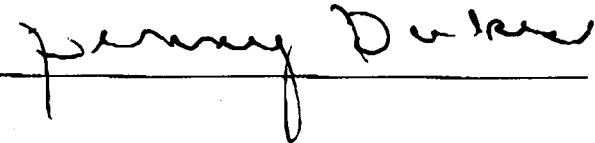
Identify the corporate official, by name and title, whom the agency should contact with respect to this recall.

Penny Dukes  
Warranty Administration

Telephone Number: 419-358-2500 Fax No.: 419-358-2400

Name and Title of Person who prepared this report.

Penny Dukes  
Warranty Administrator

Signed: 

<sup>3</sup>Each manufacturer must furnish a report, to the Associate Administrator for Safety Assurance, for each defect or noncompliance condition which relates to motor vehicle safety.

This guide was developed from 49 CFR Part 573, "Defect and Noncompliance Reports" and also outlines information currently requested. Any questions, please consult the complete Part 573 or contact Mr. Jon White at (202) 366-5227 or by FAX at (202) 366-7882.

**I. Identify the Vehicle Models Involved in the Recall**

2. Identify the Vehicles Involved in the Recall, for each make and model or applicable vehicle line (provide illustrations or photographs as necessary to describe the vehicle), provide:

SC  
Make(s): Guide/Guide XL Model Years Involved: 2002-05 Model(s): GM/Ford/International

Production Dates: Beginning: 1/2002 Ending: 4/2005

VIN Range: Beginning: See Attached Ending: \_\_\_\_\_

Vehicle Type: School Bus Bodystyle: Single Wheel and Dual Wheel

Descriptive information which characterizes/distinguishes the recalled vehicles from those model vehicles not included in the recall:

Buses in the recall have Specialty Mfg. "5" Series Stop Arms.

Make(s): \_\_\_\_\_ Model Years Involved: \_\_\_\_\_ Model(s): \_\_\_\_\_

Production Dates: Beginning: \_\_\_\_\_ Ending: \_\_\_\_\_

VIN Range: Beginning: \_\_\_\_\_ Ending: \_\_\_\_\_

Vehicle Type: \_\_\_\_\_ Bodystyle: \_\_\_\_\_

Descriptive information which characterizes/distinguishes the recalled vehicles from those model vehicles not included in the recall:

Make(s): \_\_\_\_\_ Model Years Involved: \_\_\_\_\_ Model(s): \_\_\_\_\_

Production Dates: Beginning: \_\_\_\_\_ Ending: \_\_\_\_\_

VIN Range: Beginning: \_\_\_\_\_ Ending: \_\_\_\_\_

Vehicle Type: \_\_\_\_\_ Bodystyle: \_\_\_\_\_

Descriptive information which characterizes/distinguishes the recalled vehicles from those model vehicles not included in the recall:

Identify the approximate percentage of the production of all the recalled models manufactured by your company between the inclusive dates of manufacture provided above, that the recalled model population represents. For example, if the recall involved Widgets equipped with certain items of equipment from January 1, 1996 through April 1, 1997, then what was the percentage of the recalled Widgets of all Widgets manufactured during that time period. \_\_\_\_\_

**II. Identify the Recall Population**

3. Furnish the total number of vehicles recalled potentially containing the defect or noncompliance.

<u>Model</u>	<u>Year</u>	<u>Number of Vehicles Potentially Involved</u>
buw Guide	2002-2005	1829
suw Guide	2002-2005	151
Guide XL	2002-2005	69
SC	2002-2005	21
TOTAL POTENTIAL		2070

Total Number Potentially Affected by the Recall: 2070

4. Furnish the approximate percentage of the total number of vehicles estimated to actually contain the defect or noncompliance: 76%

Identify and describe how the recall population was determined--in particular how the recalled models were selected and the basis for the beginning and final dates of manufacture of the recalled vehicles:

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**III. Describe the Defect or Noncompliance**

**5. Describe the defect or noncompliance. The description should address the nature and physical location of the defect or noncompliance. Illustrations should be provided as appropriate.**

The non-compliance involves school buses manufactured between January 7, 2002 and April 30, 2005. Only those units with Specialty Mfg. Model "5" Series Stop Arms are involved. Serial between #480380 and 627609.

**Describe the cause(s) of the defect or noncompliance condition.**

In extreme cold weather under certain conditions, the microswitches used internally to position the sign in the open or closed positions may malfunction causing the sign to open or close to an improper position, or to not open at all. Also, it has been determined that the heater section may not be wired in the proper manner causing it not to operate.

**Describe the consequence(s) of the defect or noncompliance condition.**

A malfunction causing the sign to open or close to an improper position or to not open at all. The heater may not operate on the stop arm.

**Identify any warning which can (a) precede or (b) occur.**

No warning will occur.

**If the defect or noncompliance is in a component or assembly purchased from a supplier, identify the supplier by corporate name and address.**

Specialty Manufacturing Company

10200 Pineville Road

Pineville, NC 28134

Phone: 704-889-7518 Fax: 704-889-2760

**Identify the name and title of the chief executive officer or knowledgeable representative of the supplier:**

Eric D. Swanger, PE Engineering Manager

**IV. Provide the Chronology in Determining the Defect/Noncompliance**

*If the recall is for a defect, complete item 6, otherwise item 7.*

**6. With respect to a defect, furnish a chronological summary (including dates) of all the principle events that were the basis for the determination of the defect. The summary should include, but not be limited to, the number of reports, accidents, injuries, fatalities, and warranty claims. See attached letter from Specialty Mfg.**

**7. With respect to a noncompliance, identify and provide the test results or other data (in chronological order and including dates) on which the noncompliance was determined.**

June 8, 2005 - Letter sent by Specialty Mfg.

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June 14, 2005 - Letter received at Mid Bus

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June 16, 2005 - Mid Bus runs population report

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June 16, 2005 - Mid Bus files 573 form to notify NHTSA

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**V. Identify the Remedy**

**8. Furnish a description of the manufacturer's remedy for the defect or noncompliance. Clearly describe the differences between the recall condition and the remedy.**

Specialty Mfg. will send out service kits to end customer and will  
compensate for expenses.

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**Clearly describe the distinguishing characteristics of the remedy component/assembly versus the recalled component/assembly.**

Service kits from Specialty Mfg. is Part No. 005178. New heater switch  
pack, mounting hardware, installation instructions, service completion  
card.

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**Identify and describe how and when the recall condition was corrected in production. If the production remedy was identical to the recall remedy in the field, so state. If the product was discontinued, so state.**

See attached letter from Specialty Mfg.

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**VI. Identify the Recall Schedule**

**Furnish a schedule or agenda (with specific dates) for notification to other manufacturers, dealers/retailers, and purchasers. Please, identify any foreseeable problems with implementing the recall.**

June & July - Build data base of units involved

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August 2005 - Begin mailing letters to customers/Dealers

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Sept 2005 - Ship kits based on availability of kits from Specialty Mfg.

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**VII. Furnish Recall Communications**

**9. Furnish a final copy of all notices, bulletins, and other communications that relate directly to the defect or noncompliance and which are sent to more than one manufacturer, distributor, or purchaser. This includes all communications (including both original and follow-up) concerning this recall from the time your company determines the defect or noncompliance condition on, not just the initial notification. *A DRAFT copy of the notification documents should be submitted to this office by Fax (202-366-7882) for review prior to mailing.***

**Note that these documents are to be submitted separately from those provided in accordance with Part 573.8 requirements.**

Mr. Tony Augsburger  
National Dealer Manager  
Mid-Bus Corporation  
505 East Jefferson St.  
Boston, OH 45817

June 8, 2005

Subject: Defect Information Report relating to certain model stop arms shipped to Mid-Bus Corporation between January 1, 2002 and March 1, 2005.

NHTSA Campaign Number: 05E-032

Dear Mr. Augsburger:

This letter is being sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Specialty Manufacturing Co. has determined that a defect that relates to motor vehicle safety exists in certain model 5-series stop arms manufactured between January 1, 2002 and March 1, 2005.

#### Description of Defect

SMC has received reports that in extremely cold weather under certain conditions, the microswitches used internally to position the sign in the open and closed positions may malfunction, causing the sign to open or close to an improper position, or to not open at all. Also, it has been determined that the heater section may not be wired in the proper manner, causing it not to operate. To date, no accidents or injuries have occurred as a result of this phenomenon. In nearly 100% of the occurrences this phenomenon is intermittent, and ceases to exist once the vehicle is no longer exposed to the extremely cold weather.

#### Identifying Suspect Parts

The suspected stop arms are Specialty Manufacturing 5-series stop arms identified (by unit id tag) with the first part number digit of "5" manufactured between January 7, 2002 and March 1, 2005, and bearing serial numbers in the range between 480380 and 627609. Stop arms should be monitored during extremely cold weather situations to determine if they exhibit this phenomenon. If so, Specialty Manufacturing should be contacted by one of the methods outlined below.

States that are NOT included in this program are:

Alabama	Florida	Mississippi	Texas
Arizona	Georgia	North Carolina	
Arkansas	Hawaii	Oklahoma	
California	Louisiana	South Carolina	

### Remedy Program

The solution is to retrofit the stop arms in the field with a replacement switch pack that includes switches that are not as sensitive to extreme cold weather and to inspect the heater wiring for proper installation. If wiring is not in place, the replacement switch pack should be properly wired upon installation. For each stop arm experiencing the malfunction, Specialty will provide (free of charge) a service kit (part number 005178) that includes a new heated switch pack, mounting hardware, installation instructions, and a service completion registration card. Installation of the switch pack and inspection of the heater wiring can be accomplished in 10 minutes. Specialty will reimburse installers of the switch pack \$10.00 for each switch pack installed. Reimbursement for installation will take place after the service registration card has been filled out and returned to Specialty Manufacturing via postage paid service card. For customers repairing multiple buses, a faxed list of bus vin#'s and stop arm serial numbers will be accepted as an alternative to the postage paid service card. The fax should include the installer's name, address and phone number in addition to the bus information. If the reimbursement check is to be made out to someone other than the installer, this should be noted on the fax. The information should be faxed to: (704)-889-2760, ATTN: Customer Service. Parts that are removed during service should be discarded.

### Availability of Service Kits

Service kits will be available 06/30/2005 and may be obtained by contacting Specialty Manufacturing by one of the two following methods:

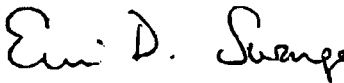
1. Contact Specialty Manufacturing customer service at 1-800-951-7867. The customer service representative will require the shipping information and stop arm serial number.
2. Online at [www.specmfg.com/products\\_bus\\_1.html](http://www.specmfg.com/products_bus_1.html) and select the page entitled "5-series stop-arm switch campaign". Enter shipping information and unit serial numbers. Service kits will be shipped with 2 – 3 business days.

For bulk shipment of service kits (for warehouse distribution) please contact the customer service department of Specialty Manufacturing.

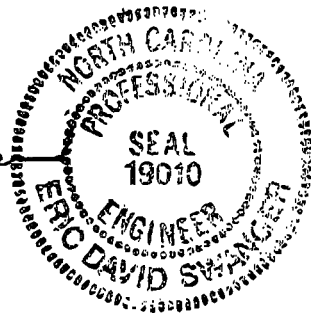
To aid in the launch of the recall campaign, I have included sample owner letters for "cold" and "non-cold" states, and a copy of the 005178 switch pack installation instructions. When available (06/30/05) samples of 005178 will be shipped under separate cover.

We regret any inconvenience this situation may have caused you or your customers. If you need additional information in order to start the campaign, please do not hesitate to contact me. Thank you in advance for your continued efforts to help keep our children safe.

Thank you,



Eric D. Swanger, PE  
Engineering Manager  
Specialty Manufacturing Co.



Encl: Sample "cold" customer letter  
Sample "non-cold" customer letter  
005178 Instruction sheet

- Tools needed:**
- 5/16" socket and corresponding ratchet with 3" extension.
  - 11/32" socket
  - small snap ring pliers
  - 3/4" wrench
  - razor knife or equivalent
  - Flat head screwdriver

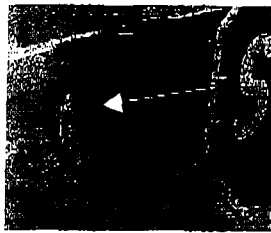
**To replace the 5-series microswitch plate subassembly:**



1. Remove 1/4" nut on the existing cam shaft.



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



5. Remove the cover by using a flat bladed screwdriver to pry it off.



6. Remove the cam shaft and set aside



7. Remove (2) 11/32" nuts holding microswitch plate in position. DO NOT unscrew the four 1/4" nuts holding the microswitches to the microswitch plate. The entire assembly will come out as one unit, so it won't be necessary to disassemble individual microswitches.



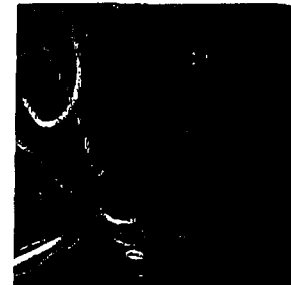
8. Using snap ring pliers, carefully swing hinge to one side, exposing snap ring (on bottom side of base) which holds camshaft bushing in stoparm base. Remove snap ring and set aside. Carefully cut the wire ties.



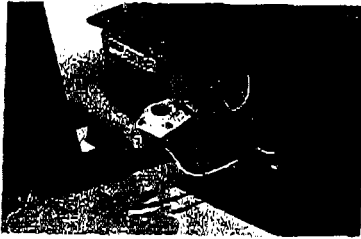
9. Remove 11/32" nut on the relay and remove black ground wire



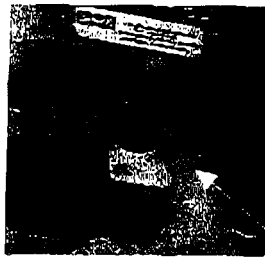
10. Swap wires over from old microswitch plate to new microswitch plate.



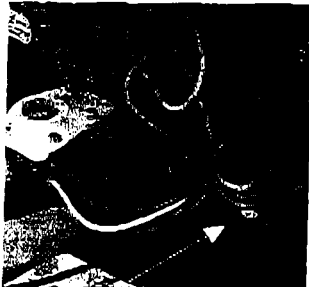
11. Reattach black ground wire to relay with 11/32" nut



12. Put new microswitch plate into position and replace (2) 11/32" nuts. Reinstall snap ring on bottom side of base.



13. With stop arm in the CLOSED position, put cam back into place. Make sure the cam is positioned with marking facing outward as shown in picture above. After camshaft stud just engages hinge arm, carefully depress top outside switch button (this is switch with green and brown wire) then press camshaft on through hinge until it seats. Install Cam Shaft nut and torque to 10-12 ft-lbs.



14. Make sure there is a drain hole in the bottom of your unit. If there is none- drill a hole.

15. Heater inspection and electrical connection- In order for the new switches to operate properly, the heater must be wired to a 12v source that is controlled by the ignition switch. Inspect bus heater wiring to verify. If heater is not connected to the ignition circuit, there are two possible wiring configurations to achieve this:

- a) on full size buses, route the yellow wire from the heater into the electrical access panel located just in front of the stop arm. In this panel connect the heater to a switched electrical circuit such as "IGNITION ASSY"
- b) On "cutaway" buses, use the snap connector included with the switch kit to connect the yellow wire from the heater to the double red wire in the stop arm. After doing this, the red wire (12v+) coming into the stop must be reconnected to a switched ignition source.



LEAVE THIS SECTION UNSEALED

16. 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.**

Test the stop arm assembly to make sure it functions correctly.

*If further help is needed, contact the engineering department at Specialty Manufacturing.*

Ω End of Document Ω

**OWNER'S LETTER (non-cold states)**

**Dear Specialty Manufacturing Customer:**

This letter is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Specialty Manufacturing has determined that a defect that relates to motor vehicle safety exists in some 5-series stop arms manufactured between January 1, 2003 and March 1, 2005. All stop arms manufactured during these dates will have a serial number between 480380 and 627609.

**Reason for Recall**

In certain areas of the country during extremely cold weather under certain conditions, the microswitches used internally to position the sign in the open and closed positions may temporarily malfunction, causing the stop arm to open or close to an improper position, or to not open at all. Also, it has been determined that the heater section of the switch pack may not be connected in the proper manner.

States where these temperatures and conditions can occur in the winter include:

Alaska	Minnesota	Vermont
Colorado	Missouri	Virginia
Connecticut	Montana	Washington
Delaware	New Hampshire	West Virginia
Iowa	New Mexico	Wisconsin
Idaho	Nevada	Wyoming
Illinois	New Jersey	Nebraska
Indiana	New York	North Dakota
Kansas	Ohio	
Kentucky	Oregon	
Maine	Pennsylvania	
Maryland	Rhode Island	
Massachusetts	South Dakota	
Michigan	Utah	

If your Specialty Manufacturing equipped school buses are not in service in one of these states, the stop arms will not have to be repaired. However, if your school buses are to driven in any of the above states, you should monitor monitor the stop arm performance as outlined below.

Additionally, federal regulations require that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

### **What Specialty Manufacturing Will Do**

For each stop arm experiencing this malfunction, Specialty will provide (free of charge) a service kit which includes a new switch pack, mounting hardware, and installation instructions. Installation of the switch pack can be completed in 10 minutes. Specialty will reimburse installers of the switch pack \$10.00 for each switch pack installed.

### **What You Should Do**

You should monitor your school buses to determine if this phenomenon occurs. If so, you should record the serial number of each stop arm which demonstrates the occurrence and contact Specialty Manufacturing for a service kit by one of the following methods:

Call toll free: 1-800-951-7867 ext. customer service

Go online to: [www.specmfg.com/products\\_bus\\_1.html](http://www.specmfg.com/products_bus_1.html) and select the page entitled "5-series stop-arm switch campaign.

Enter the information provided. A service kit will be shipped to you within 3 – 5 business days.

Each service kit will include a service record completion card which must be filled out completely and returned to Specialty Manufacturing for installation reimbursement.

Thank you in advance for your cooperation in our efforts to keep our children safe.

**OWNER'S LETTER (cold states)**

Dear Specialty Manufacturing Customer:

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States where these temperatures and conditions can occur in the winter include:

Alaska	Minnesota	Vermont
Colorado	Missouri	Virginia
Connecticut	Montana	Washington
Delaware	New Hampshire	West Virginia
Iowa	New Mexico	Wisconsin
Idaho	Nevada	Wyoming
Illinois	New Jersey	Nebraska
Indiana	New York	North Dakota
Kansas	Ohio	Tennessee
Kentucky	Oregon	
Maine	Pennsylvania	
Maryland	Rhode Island	
Massachusetts	South Dakota	
Michigan	Utah	

According to our records, your Specialty Manufacturing equipped school buses may be in service in one of these states.

Additionally, federal regulations require that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

### **What Specialty Manufacturing Will Do**

For each stop arm experiencing this malfunction, Specialty will provide (free of charge) a service kit which includes instructions, mounting hardware, a service completion card, and a new switch pack that includes switches that are not as sensitive to extremely cold weather. During installation of the service switch pack, the heater wiring should be inspected for proper installation. Installation of the switch pack can be completed in 10 minutes. Specialty will reimburse installers of the switch pack \$10.00 for each switch pack installed. Reimbursement for installation will take place after the postage paid service registration card has been filled out and returned to Specialty Manufacturing. Parts that are removed should be discarded.

### **What You Should Do**

You should monitor your school buses to determine if this phenomenon occurs. If so, you should record the serial number of each stop arm which demonstrates the occurrence and contact Specialty Manufacturing for a service kit by one of the following methods:

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