Authorized Field Change



AFC 00908

Date: February, 2001

Subject File: ELECTRICAL

Subject: Addition of a Relay to the Electrical Circuit in IC Bus Models Built Between March 20, 2000 and September 7, 2000 with Hydraulic Brakes

Model: IC Bus

Start Date: 03/20/2000 End Date: 09/07/2000

DESCRIPTION

The brake warning light and buzzer in IC Bus Models built between March 20, 2000 and September 7, 2000 may activate and give a false warning of a hydraulic brake system malfunction. This false warning usually occurs when the vehicle is stopped for an extended period of time with light brake pedal pressure, for an example at a stop sign or stop light. Performing this service procedure will prevent the false warning from occurring.

PARTS INFORMATION

Table 1 Parts Information

Part Number	Description	Quantity
2027580C91	Relay Harness	1
2012557C1	Relay	1

SERVICE PROCEDURE

WARNING – Batteries expel explosive gases. Keep sparks, flames, burning cigarettes or other ignition sources away at all times. Always wear safety glasses and a face shield when working near batteries to prevent personal injury.

- 1. Disconnect the negative cable from the battery.
- 2. Locate and remove the connector from the brake switch.

SERVICE PROCEDURE (CONT.)

- 3. Remove the connector lock and remove the four circuits (90DD, 90C, 70A and 70) from the connector (Figure 1).
- 4. Re-install circuit 90C into connector cavity 1 and circuit 90DD into cavity 2 (Figure 2).
- 5. Re-install the connector lock and the connector to the brake switch.

NOTE – All splices are to be crimped and soldered for optimum electrical continuity and mechanical strength. After soldering, position shrink sleeve over the splice and apply heat to shrink the sleeve securely to the splice and wire.

- 6. Cut off the terminal from circuit 70, strip off 1/2 inch of insulation and splice to harness 2027580C91 wire labeled battery feed, relay terminal 3 (Figure 3).
- 7. Cut off the terminal from circuit 70A, strip off 1/2 inch of insulation and splice to harness 2027580C91 wire labeled load, relay terminal 5 (Figure 3).
- 8. Splice a suitable length of 16AWG wire to harness 2027580C91 wire labeled ground (relay terminal 2). Connect the other end, with a ring terminal, to a good ground location on the instrument panel, circuit 90–GA (Figure 3).
- 9. Locate the splice of circuits 90DD, 90D, and 97M and splice a 16AWG wire of sufficient length to reach and splice to harness 2027580C91 wire labeled ignition (relay terminal 1). Refer to Figures 1, 2, and 3.
- 10. Install relay Part Number 2012557C1 into the relay harness connector. The relay connect can be snapped onto the side of the existing brake warning alarm located on the right hand side of the pedal support bracket. All wires should be routed and clipped using existing routing locations (up through the pedal support bracket and down the pedal to the brake switch). Securely strap the wires to the brake pedal.
- 11. Remove the chassis fuse block bracket from the flasher plate to gain access to the rear of the fuse block.
- 12. Locate fuse F3 and remove circuit 97DK.
- 13. Splice 5 inches of 14 ga. wire to circuit 97DK, route this circuit to fuse F26 and connect it to the fuse with circuit 90C (Figure 1).
- 14. Re-install the fuse block bracket to the flasher plate.
- 15. Re-connect the negative battery cable and test the brake circuit for correct operation.

TEST PROCEDURE

After installing the relay and the circuit modifications as described in this Authorized Field Change Letter, perform the following Test Procedure.

Table 2

Key Position	Procedure/Results	
Off	Press the brake pedal and confirm the electric back up motor operates and the stop lights work.	
Ignition	Verify the brake alarm is sounding and the brake pressure warning light is on. The brake back up motor will also be running.	
Run	With the engine running activate the electronic hand throttle to one of the preset engine speeds. Remove fuse F26 from the chassis fuse block. The hand throttle should deactivate when fuse F26 is removed. Attempt to activate the hand throttle circuit with fuse F26 removed. The hand throttle circuit should not activate. After verifying this procedure re-install fuse F26.	
Run	With the engine running activate the electronic hand throttle to one of the preset engine speeds. Step on the brake pedal and verify the hand throttle circuit deactivates.	
Off	Depress the brake pedal and verify the electric back up motor operates and the stop lights work. This procedure confirms that fuse F26 has been installed correctly.	

3 AFC-00908

TEST PROCEDURE (CONT.)

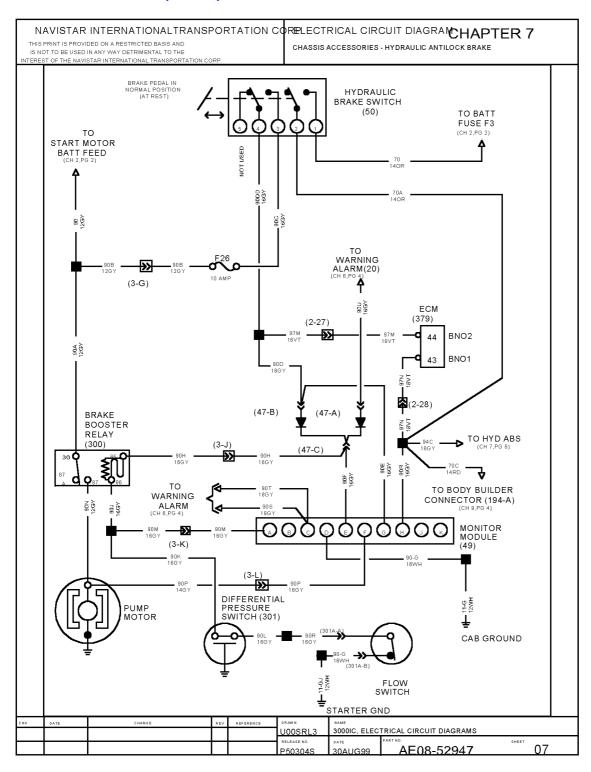


Figure 1 Brake Switch Circuit Before Revision

AFC-00908 4

TEST PROCEDURE (CONT.)

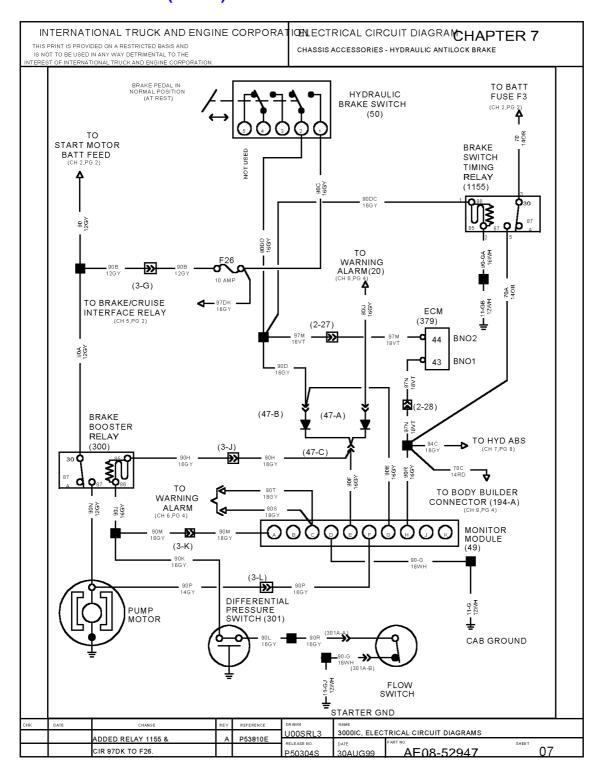


Figure 2 Brake Switch Circuit After Revision

5 **AFC-00908**

TEST PROCEDURE (CONT.)

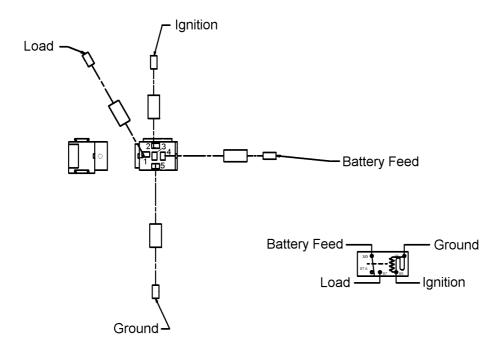


Figure 3 Relay Harness

AFC-00908 6

Operation number must appear on all claims.

Table 3 Labor Information

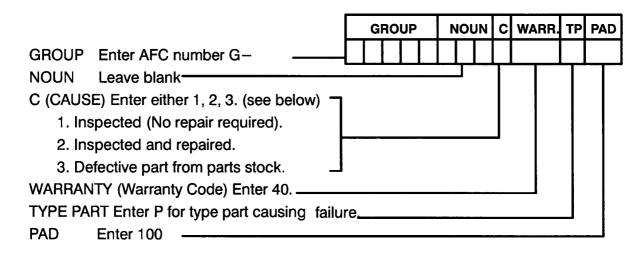
Operation No.	Description	Time
A40-00908-1	Install Relay Harness	1.0 Hr.

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 G-00908.

It is important that the 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.

To assure this important improvement is made in a timely manner, all claims for G-00908 activity must be submitted by February 28, 2002 or within the normal warranty period for the vehicle, if after February 28, 2002.



Distribution: All except J-81 Reproduction: Not required.

7 **AFC-00908**