



INSTRUCTION TO SERVICE

ITS: 6785	
SECTION:	284 Electrical Panels
WRITTEN BY:	Talha Wasif
SUBJECT:	Add relay for Auto Neutral signal to TCM

ITS6785

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PROCEDURE:

1. Turn the main battery disconnect switch to the “OFF” position by accessing it through the fuse box panel on the rear curb side of the bus.
2. Gain access to the rear panel by removing the rear panel cover. See Figure 1 for reference.

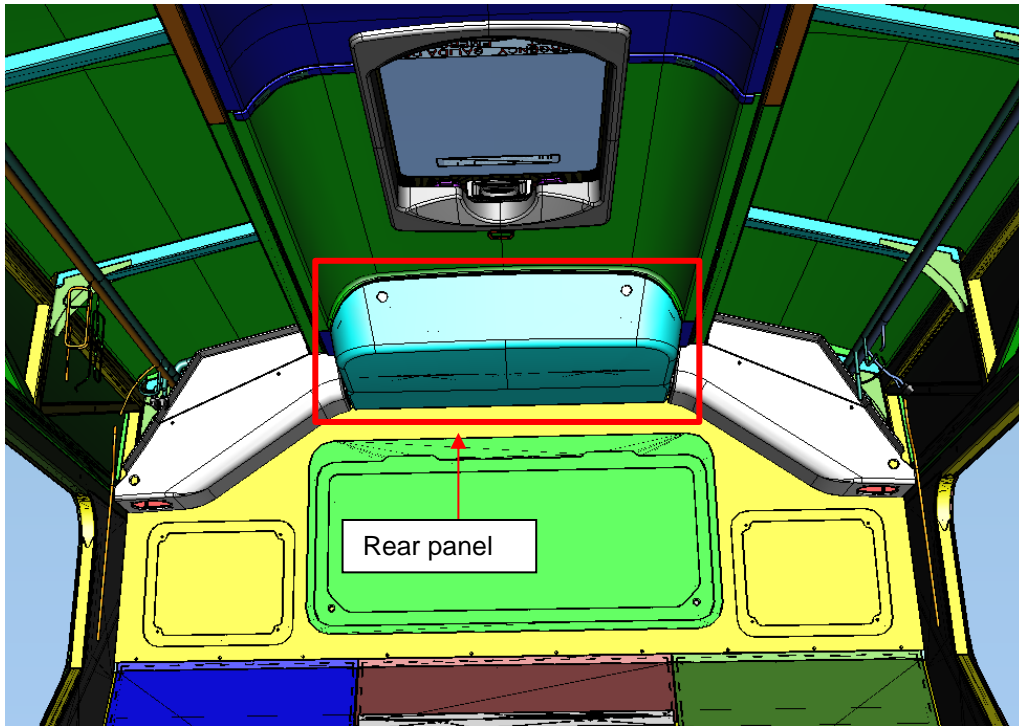


Figure 1: Rear Panel location in the bus

3. Locate connector J2 in Node 15. See Figure 2 for reference.

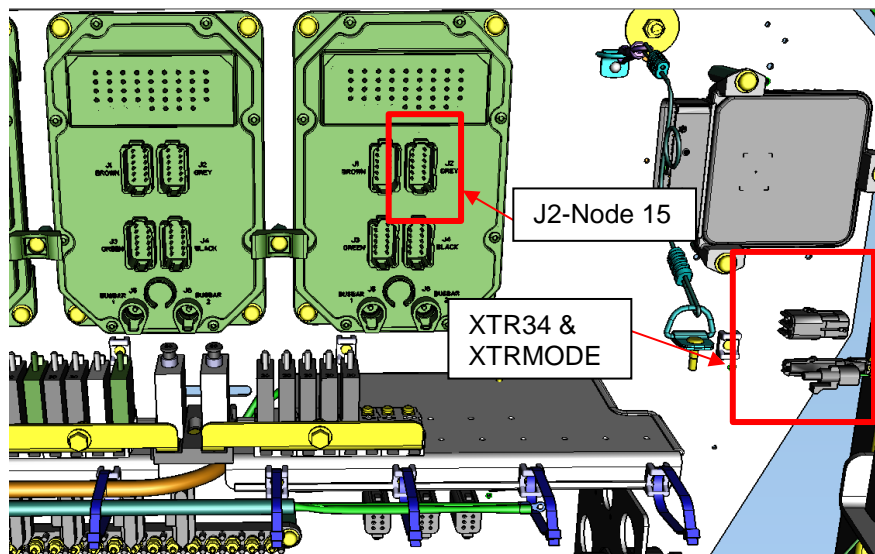


Figure 2: Rear Panel connectors



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4. Remove wire 10TR87B from connector NODE 15-J2 cavity 9. Cut off the terminal and terminate with supplied terminal TERM-BF 1/4 16-12AWG NIN (P/N: 001846).
5. Remove wire 10TR87G from connector NODE 15-J2 cavity 10. Cut off the terminal and terminate with TERM-BF 1/4 16-12AWG NIN (P/N: 001846).
6. To install the AUTO NTRL RLY begin by installing the BASE-RELAY SOCKET (P/N: 001325) on the breaker panel as shown in Figure 3. Mount the base using SCREW MACHINE NO 10 PN HD (P/N: 14S00006) and WASHER FLAT SS 10 (P/N: 50W00000). Then install the RELAY 24V SPDT (P/N: 106614) on to the base.

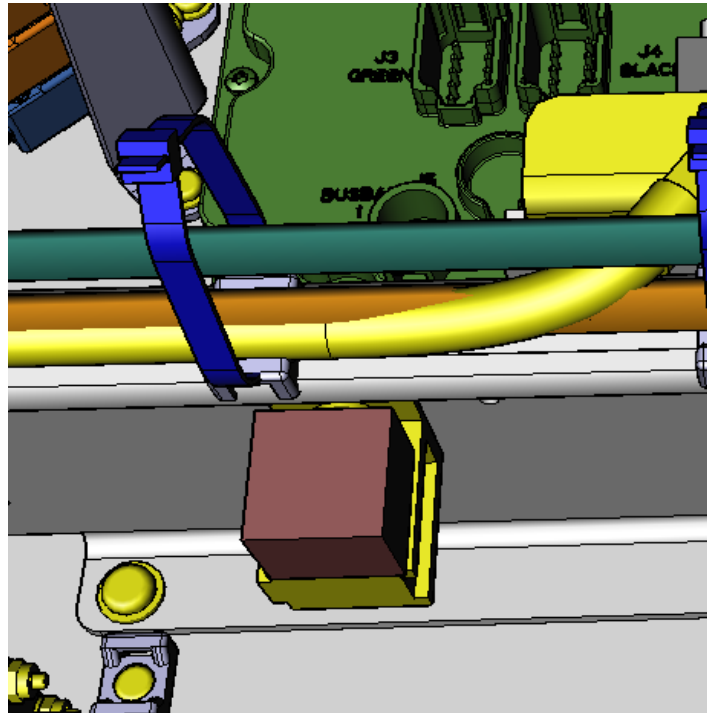


Figure 3: Relay Installation

7. Install "F2TR", BREAKER 2A ETA MAN (P/N: 218992) on 24VBATRR as shown in Figure 4.
8. Gain access to supplied HRNS-JUMPER REAR PANEL (P/N: 726572). Locate AUTO NTRL RLY, terminal strip GNDBRR, breaker F2TR and connector NODE 15-J2. Refer to the wiring diagram shown in Figure 4 and the schematic in Figure 5.
9. Insert the appropriate end of wire 99TR87AB into relay AUTO NTRL RLY-86 and the other end into connector Node 15-J2 cavity 10.
10. Insert the appropriate end of wire 99TR87AC to breaker F2TR and insert the other end into connector Node 15-J2 cavity 9.
11. Insert the appropriate end of wire 99TR87AA into relay AUTO NTRL RLY-85 and connect other end to terminal strip GNDBRR. Remove all dielectric grease and torque the connector to 9 FT-LBS (DRY). Reapply dielectric grease to the connection.
12. Insert the wire 99TR87G into relay AUTO NTRL RLY-30.

13. Insert the wire 99TR87B into relay AUTO NTRL RLY-87.

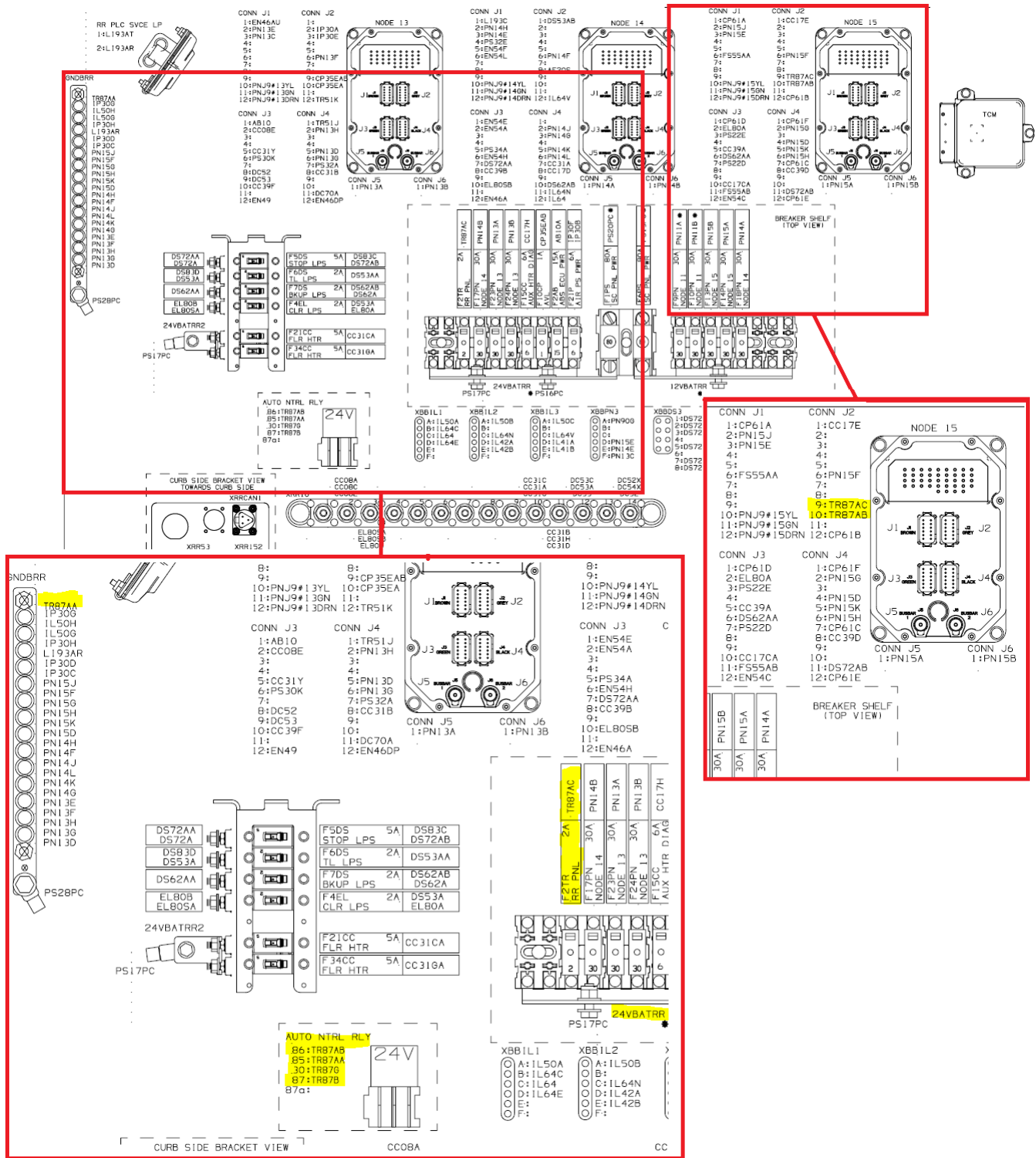


Figure 4: Rear Panel Wiring Diagram

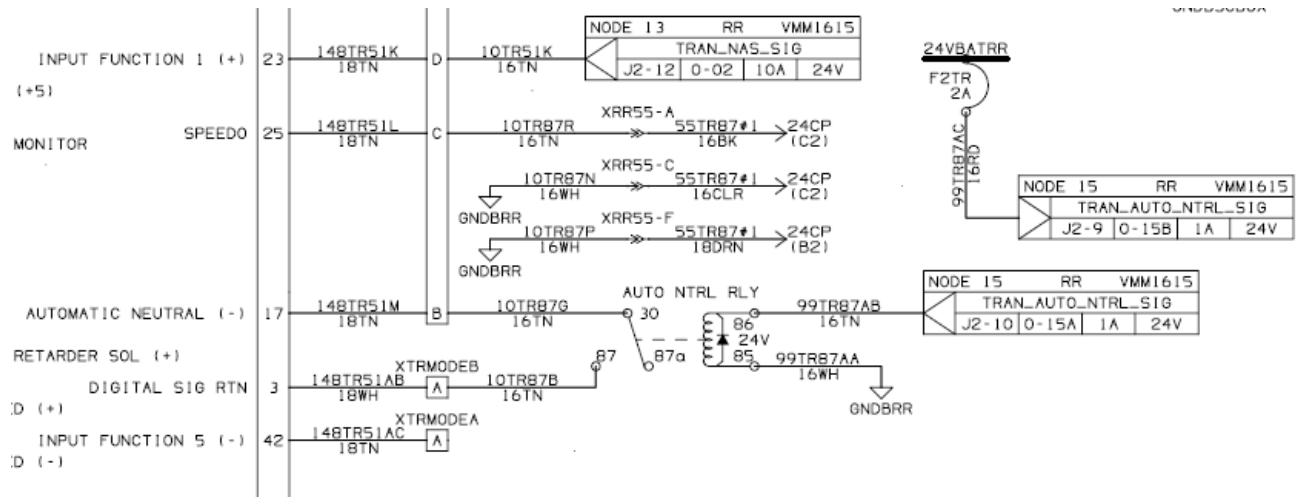


Figure 5: AUTO NTRL RLY schematic

14. Route all wires neatly alongside the existing harness in the real panel. Use tyraps (P/N: 5958112) to secure the harness.
15. Locate the appropriate decal from the table below and install it on the rear panel cover using ADHESIVE-SPRAY 77 (P/N: 170962).

SR	Decal Part Number
2079	655496
2105	655496
2119	655496
2174	684722
2175	696003
2176	695288
2142	695288
2074	655490
2075	655502

16. Remove all tools and debris and bring the bus back into operating condition.



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LABOUR ESTIMATE

	Operation	Men	Hours	Labor Time M X HR
1	Add relay for Auto Neutral signal to TCM	1	1	1

PARTS REQUIRED

Item	Part Number	Description	Qty. per Coach	Units	Notes
1	726572	HRNS-JUMPER REAR PANEL	1	EA	
2	001846	TERM-BF 1/4 16-12AWG NIN	2	EA	
3	001325	BASE-RELAY SOCKET	1	EA	
4	106614	RELAY 24V SPDT	1	EA	
5	14S00006	SCREW MACHINE NO 10 PN HD	1	EA	
6	50W00000	WASHER FLAT SS 10	1	EA	
7	5958112	TYRAP-7.0 BLACK	8	EA	
8	170962	ADHESIVE-SPRAY 77	0.05	EA	
9	218992	BREAKER 2A ETA MAN	1	EA	
10	655496	DECAL-REAR PANEL	1	EA	For 2079/2105/2119
11	684722	DECAL-REAR PANEL	1	EA	For 2174
12	696003	DECAL-REAR PANEL	1	EA	For 2175
13	695288	DECAL-REAR PANEL	1	EA	For 2142/2176
14	655490	DECAL-REAR PANEL	1	EA	For 2074
15	655502	DECAL-REAR PANEL	1	EA	For 2075