

# MULTIPLEX MODULES DISCONNECTION PROCEDURE PRIOR TO WELDING

	PROCEDURE NO: PR060041	REVISION 02 2013-04-08
Material:	N/A	
Equipment(s):	Phillips-head screwdriver Ratchet handle 3/8" socket Electric tape Long nose pliers	
Reference schematics:	N/A	
Safety rules:	- Wear safety goggles - Set the battery master switch to the OFF position first	
Recommendations:	This procedure should be performed by qualified persor	nnel only.
		Effective
Revision 00 : New proced	ure for cooling 2007	
Revision 02 : Added: batt	ery equalizer data connection (PRIME).	

	SECTION 1 H3 Coaches & VIP	
1.00	Location: Main power compartment and dashboard. Set the battery master switch to the OFF position. Place the ignition switch to the OFF position.	
1.05	Location: Main power compartment Trip rear junction box circuit breakers CB2, CB4, CB6 Push the red button to open the circuit	<image/>

1.10	Location: Main power compartment Remove the protective cover	
	WARNING LIVE WIRE This 12-volt terminal remains energized Disconnect the electronic ground terminals from the stud.	
	Using electric tape, insulate the 2 largest gage wires. Make sure the ring terminals do not touch each others and the vehicle body. Note : With disconnection of the electronic ground terminals, disconnecting the engine ECM, transmission TCM and the dashboard electronic components (telltale module, HVAC module, radio, control head) is not required.	

1.15	Location: Main power compartment	5
	Disconnect the electronic modules :	
	Disconnect I/O A, I/O B modules	(Bib-Ja -
	Disconnect C397	
	Disconnect connector C717	
	Disconnect 3 connectors from I/O B	
	and I/O A modules.	
	Disconnect data connector on equalizer	
1.20 *	Location: Front electrical compartment	
	<b>VIP + COACH:</b> Disconnect the I/O A, I/O B, ABS, master ID, VECU, CECM, BERU, Volvo Link, Gsecu modules.	

VIP: Disconnect all keyless module connectors. Disconnect 3 connectors from I/O B and I/O A modules	
Disconnect 4 connectors from the ABS module	
Disconnect connector from master ID	

Disconnect 3 connectors from VECU	
Disconnect 3 connectors from CECM	



1.25	Location: Pneumatic accessory panel inside right console Remove the access panel on the right console (R.H. side of dashboard) Disconnect both I/O B modules	
1.30 *	Location: Condenser Compartment Disconnect connector A 137	
1.35	Location: Evaporator compartment Remove the protective cover and disconnect I/O B module	

1.40	Kidde Automatic Fire Detection and Suppression System (optional)	
	Disconnect C466	
	Kidde AFSS module is located on the lateral control panel.	
1.45	When all the previous steps are done, you can do welding on the vehicle.	ENSURE THAT THE WELDING GROUND RETURN CLAMP IS WELL SECURED AND MAKES A GOOD ELECTRICAL CONTACT WITH A LARGE METALLIC AREA OF THE CHASSIS LOCATED NEAR THE WELDING POINT AS MUCH AS POSSIBLE.
1.50	When welding is completed, reconnect all the modules. Make sure that the connectors locking tab are well engaged!	BE CAREFUL TO MAKE THE PROPER CONNECTIONS, IF NOT, SOME SYSTEMS OR COMPONENTS MAY NOT BE USABLE.

	SECTION 2 X3 Coaches, X3-45	5 VIP & XLII Bus Shells
2.00*	Location: Rear Electrical Panel and Dashboard Set the battery master switch to the OFF position (X3 Coaches only) Place the ignition switch to the OFF position.	
2.05*	Location: Rear Junction Panel Lift cover, trip circuit breakers CB2-CB4-CB6 located on junction panel.	
	Push the red button to open the circuit	HI-AMP NATERONOP NATERONOP

2.10*	Location: Rear Electrical Panel Disconnect the electronic ground terminals from this stud. Use electric tape; make sure that cables do not touch each others and the vehicle body. Note : With disconnection of the electronic ground terminals, disconnecting the engine ECM, transmission TCM and the dashboard electronic	
2 15*	radio, control head) is not required.	
2.15	Disconnect the electronic modules:	
	Disconnect all I/O A, I/O B modules.	
	Disconnect C717 Disconnect 3 connectors from each I/O A module	
	Disconnect 3 connectors from each I/O B module	<image/>

2.15.2	Location: battery compartment: Disconnect data connector on equalizer	VANNER BATTERY EQUALIZER

2.20 *	Location: Front Electrical Compartment	
	<b>VIP + BUS:</b> Disconnect the I/O A, I/O B, ABS, master ID, VECU, CECM, BERU, Volvo Link, Gsecu modules.	
	VIP : Disconnect all keyless module connectors	
	Disconnect 3 connectors from I/O B and I/O A modules	
	Disconnect 4 connectors from the ABS module	
	Disconnect connector from master ID	



Location:	Front Electrical Compartment Disconnect connector A 108 from Gsecu module (OPTION)	

2.30	Location: Pneumatic accessory panel inside right console Remove the access panel on the right console (R.H. side of dashboard) Disconnect both I/O B modules	
2.40	Location: Condenser Compartment Disconnect connector A 137	

2.50	Location: Evaporator Compartment Disconnect A 54 module located inside the evaporator compartment, on the door.	
2.60	When all the previous steps are done, you can do welding on the vehicle.	ENSURE THAT THE WELDING GROUND RETURN CLAMP IS WELL SECURED AND MAKES A GOOD ELECTRICAL CONTACT WITH A LARGE METALLIC AREA OF THE CHASSIS LOCATED NEAR THE WELDING POINT AS MUCH AS POSSIBLE.
2.70	When welding is completed, reconnect all the modules. Make sure that the connectors locking tab are well engaged!	BE CAREFUL TO MAKE THE PROPER CONNECTIONS, IF NOT, SOME SYSTEMS OR COMPONENTS MAY NOT BE USABLE.