FT4949 Fault Code 1242 CEL No Accelerator Pedal Response NYCT

Technical writer name

Manual section

16

Devanand

First Level Parts (100% of 415 vehicles)							
Material	Part Number	QTY					
TEFZEL CABLE TIES	N56339	5					
Second Level Parts (5% of 415 vehicles)							
Material	Part Number	QTY					
DT SERIES ORANGE MATING SEAL	N8950060	1					
CONNECTOR DT 12POS ESEAL M	N83365	2					
CONNECTOR SPLICE SEAL 4X3 BLK	N38291-04	1					
CONNECTOR WEDGELOCK GRN	N92382	2					
PLUG, SEALING DEUTCH CONN	562288	6					
SOLID GOLD FEMALE	562887	16					
CONNECTOR SPLICE SEAL 6X2 BLK	N38291-06	1					
SOLID GOLD EXTENDED FEMALE	562888	2					
BOOT DT PLUG 12-WAY	N75513	2					
Note:							

Nb hours Level 1	1.33 hr
Nb hours Level 2	0.67 hr

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Disposal of	parts	
Removed parts are:		When the retained check box is check, the parts must be retained
Discarded Retained		and returned in accordance with the usual warranty procedure to
Х	-	be reimbursed,

Shop Supply (100% of 415 vehicles)						
Material Part Number QTY						
QD CONTACT CLEANER	N8910848	0.8 oz				
TUBING HEATSHRINK DUAL WALL	N82227-02	2 inches				

N11681 ss to 562288, N31233-03 ss to 562887, N31233-02 ss to 562888

Note:

N8910848 (QD CONTACT CLEANER)

1 ea = 16 oz (473.2 ml) can 0.8 oz (23.7 ml) / bus 332.0 oz (9818.4 ml) for 415 buses 20.75 ~ 21 Cans for the entire campaign

N82227-02 (TUBING HEATSHRINK DUAL WALL)

1 ea = 4 feet (48 inches) tube 2 inches / bus 830 inches for 415 buses 17.29 ~ 18 tubes for the entire campaign

Client	Order	Road nu	mbers	V	N	QTY	Lang.	Customer	Target market	Plant	Config moteur	Model	NR	R1
New York City Transit - New York	L958	5439	5442	S92J9G9775533	S92J9G9775631	4	E	NYCT	US	PLB	TD	60	х	
New York City Transit - New York	L959	5443	5443	S92J0H9776118	S92J0H9776118	1	E	NYCT	US	PLB	TD	60	х	
New York City Transit - New York	LB59	5444	5484	S92J7H9776195	S92J6H9776379	41	E	NYCT	US	PLB	TD	60	х	
New York City Transit - New York	LA23	5485	5530	S92J5J9776380	S92J6J9776517	46	E	NYCT	US	PLB	TD	60	х	
New York City Transit - New York	LB29	5531	5566	S92J9J9776687	S92J6J9776873	36	E	NYCT	US	PLB	TD	60	х	
New York City Transit - New York	LB99	5567	5602	S92J2J9776935	S92J5K9777000	36	E	NYCT	US	PLB	TD	60	х	
New York City Transit - New York	LA73	8504	8507	L82J8J9776445	L82J8J9776476	4	E	NYCT	US	PLB	TD	40	х	
New York City Transit - New York	LA76	8508	8633	L82J9J9776924	L82J8K9777144	125	E	NYCT	US	PLB	TD	40	х	
New York City Transit - New York	LB78	8526	8526	L82J3K9776984	L82J3K9776984	1	E	NYCT	US	PLB	TD	40	х	
New York City Transit - New York	LC32	8634	8754	L82JXK9777145	L82J5K9777277	121	E	NYCT	US	PLB	TD	40	х	

Jean-Nicolas Fournier Discralean-Nicolas Fournier Discralean-Nicolas fournier@volvo.com, c=CA Discralean-Nicolas fournier@volvo.com, c=CA Discralean-Nicolas fournier@volvo.com, c=CA Discralean-Nicolas fournier@volvo.com





MQR 7621-2121

Accelerator Pedal Not Responding (1242 Fault Codes)
FT4949 Field Instruction – Splice Connectors Modification (Rev03)

September 16, 2020





A) VEHICLE PREPARATION

STEPS:

- 1. Park the vehicle on an even surface with transmission on neutral (N) and apply the parking brake.
- 2. Set the Master Control Switch in STOP position (see figure 1).
- 3. Before starting any work on the vehicle, make sure that the vehicle is completely and securely stationary.
- 4. Disconnect the starting circuit on the control box at the rear of the vehicle and place the battery disconnect switch in OFF position.
- Disconnect the battery negative (chassis ground) cable to eliminate the risk of an electrical short circuit that could damage the engine ECM. (Follow your internal safety procedure before disconnecting battery cables).

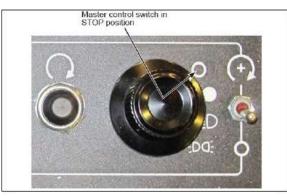


Figure 1 – Master Control Switch in STOP Position





MQR 7621-2121 – Accelerator Pedal Not Responding Bill Of Materials

LEVEL 1:

ITEM	M NOVA PN MFG PN		DESCRIPTION	MANUFACTURER	QUANTITY	
1	N56339	T120R6TZK2	TEFZEL CABLE TIES	HellermanTyton	5	
2	N82227-02	ATUM-4.5/1.5-0-STK	TUBING HEAT SHRINK DUAL WALL	TE / Raychem	2 Inches	

LEVEL 2:

ITEM	NOVA PN	MFG PN	DESCRIPTION	MANUFACTURER	QUANTITY
1	N/A	1010-020-1206	DT SERIES ORANGE MATING SEAL	TE / Deutsch	1
2	N83365	DT06-12SB-C015	CONNECTOR 12WAY DEUTSCH	TE / Deutsch	2
3	N38291-04	DT04-12PB-P030	CONNECTOR CAP SPLICE SEALED BLK	TE / Deutsch	1
4	N92382	W12S-P012	CONNECTOR WEDGE LOCK GRN	TE / Deutsch	2
5	N11681	114017	CAVITY PLUG	TE / Deutsch	6
6	N31233-03	0462-201-1631	DEUTSCH TERMINAL SOCKET - 16 GOLD	TE / Deutsch	16
7	N38291-06	DT04-12PB-P026	CONNECTOR CAP SPLICE SEALED BLK	TE / Deutsch	1
8	N31233-02	0462-221-1631	DEUTSCH TERMINAL SOCKET - 16 for drain	TE / Deutsch	2
9	N75513	DT12S-BT	BOOT DT PLUG 12-WAY	TE / Deutsch	2





MQR 7621-2121 – Accelerator Pedal Not Responding

Splice Connectors Modification

Field Instruction Field connectors configuration. Follow the same logic for a 2- or 3-way splice connectors configuration.

- 1. Lift and secure the vehicle onto the safety stands.
- 2. Locate the splice connectors cluster (see figure 2).
- 3. Remove the bolt that retains all splice connectors and then remove the upper splice connectors (see figure 3).

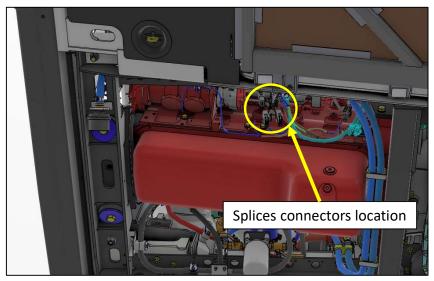


Figure 2 – Splice Connectors Cluster Location

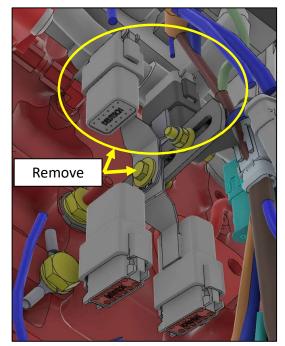


Figure 3 – Splice Connectors Location





4. Move the 2 lower splice connectors with wire entry already facing down so that they are positioned and reassembled at the single tie mount location (see figures 4, 5 & 6). Before fastening, ensure that the mounting hardware parts stacking is the same as on figures 5 & 6.

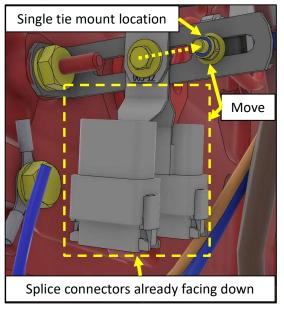


Figure 4 – Splice Connectors with Wire Entry Already Facing Down

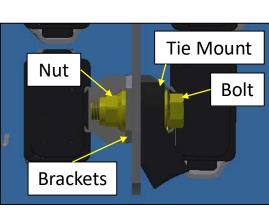


Figure 5 – Brackets Installation (Top View)

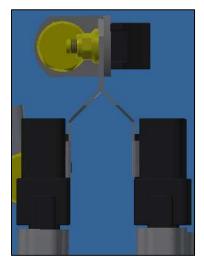


Figure 6 – Brackets Installation (Side View)





- 5. Move the upper splice connectors and inspect the terminals, seals and wedge locks for signs of corrosion (see figure 7).
 - a) Move away the grey boot.
 - b) Remove the connector cap and the connector wedge lock.
 - c) Inspect the connector cap jumper, the terminals and the seals.
- 6. If no sign of corrosion is found, then go to step 8.
- Else if there are some signs of corrosion, go to step 11 and/or step 12 (depending on affected splice connectors).
- 8. Clean all parts thoroughly with contact cleaner.
- 9. If the connector mating seal is worn, damaged or missing, replace it with a new seal (Deutsch P/N 1010-020-1206).
- Extract the drain wire terminals of splice connector SC95N (see figure 8 for the terminal positions) and add 25mm of heat shrink tubing P/N N82227-02 over the extended terminal crimp area (see figure 9 on next slide).

Go to step 13.

DQT, Kévin Lalancette, **CONFIDENTIAL** Date created: 2020-07-02 Latest update: 2020-09-16



Figure 7 – Examples of Corrosion and Damaged Mating Seal

Splice	Drain Wire Terminal Positions			
SC95N	6	7		

Figure 8 – Drain Wire Terminal Positions





11. Replacement of the corroded / damaged parts of the +MT-SC95N splice connector:

- a) Remove the connector cap.
- b) Using the extraction tool (Deutsch P/N DT-RT1), remove all terminals from the connector.
- c) Cut all the terminals while keeping the maximum possible length.
- d) Insert a new grey boot P/N N75513 over the wires.
- e) On both cables, crimp a new terminal P/N N31233-03 on all wires except for the drain wires (colored insulated wires only).
 - f) Crimp a new terminal P/N N31233-02 on both drain wires.
 - g) Add 25mm of heat shrink tubing P/N N82227-02 over the extended terminal crimp are (see figure 9).
 - h) Insert the following wires into a new connector P/N N92381-03:
 - I. CAB095VP red wire at position 1.
 - II. CAB095VP black wire at position 10.
 - III. CAB095VP white wire at position 4.
 - IV. CAB095VP drain wire at position 7.
 - V. CAB095VS red wire at position 11.
 - VI. CAB095VS black wire at position 2.
 - VII. CAB095VS white wire at position 8.
 - VIII. CAB095VS drain wire at position 6.
 - IX. Wire 95-291 at position 12.
 - X. Wire 95-294 at position 5.
 - i) Insert a cavity plug P/N N11681 at positions 3 & 9.
 - j) Install a new wedge lock P/N N92382 at the splice connector end.
 - k) Insert the connector into a new connector cap P/N N38291-04.

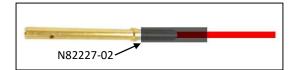


Figure 9 – Heat Shrink Tubing Applied Over Drain Wire Extended Terminal Crimp Area





12. Replacement of the corroded / damaged parts of the +MT-SC95K splice connector:

- a) Remove the connector cap.
- b) Using the extraction tool (Deutsch P/N DT-RT1), remove all terminals from the connector.
- c) Cut all the terminals while keeping the maximum possible length.
- d) Insert a new grey boot P/N N75513 over the wires.
- e) On both cables, crimp a new terminal P/N N31233-03 on all wires.
- f) Insert the following wires into a new connector P/N N92381-03:
 - I. Wire 95-288 at position 3.
 - II. Wire 95-289 at position 10.
 - III. Wire 95-290 at position 2.
 - IV. Wire 95-291 at position 1.
 - V. Wire 95-292 at position 4.
 - VI. Wire 95-293 at position 5.
 - VII. Wire 95-294 at position 6.
 - VIII. Wire 95-371 at position 11.
- g) Insert a cavity plug P/N N11681 at positions 7, 8, 9 & 12.
- h) Install a new wedge lock P/N N92382 at the splice connector end.
- i) Insert the connector into a new connector cap P/N N38291-06.





13. Install the remaining splice connectors with the previously removed hardware inside the left slot of the main mounting bracket (first slot starting from motor side). See figures 10 & 11 for the parts stacking order. Splice connectors support brackets must be placed between the nut and the main mounting bracket.

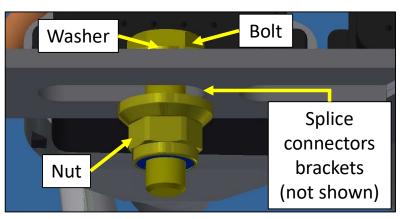


Figure 10 – Hardware Modification

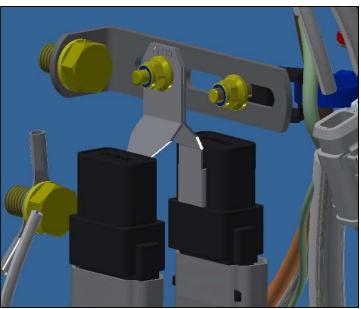


Figure 11 – Left Splice Connectors Securement





- 14. Using blue cable ties P/N N56339, secure the splice connectors wiring to the main harness bundle.
- 15. Confirm that the grey boots cannot slip or easily move down in order to protect the connector wire entries from water, dust or dirt projections.
- 16. Confirm that the throttle pedal is working and then return bus to service.

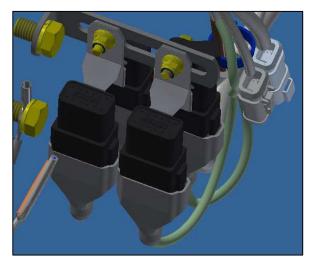


Figure 12 – Final Installation – View 1



Figure 13 – Final Installation – View 2



