



INSTRUCTION TO SERVICE

ITS60378		March 23, 2022
SECTION:	292-Electrical Harness	
WRITTEN BY:	Aditya Gadepalli	
SUBJECT:	Alternator Ring Terminal Rework	
ISSUE:	The ring terminal connected to the indicator light terminal on the back of the Delco alternator could be corroded and cause intermittent issues.	
SUMMARY:	Changing the ring terminal to a more weather friendly part on the indicator light terminal will either resolve or prevent the intermittent issue. This ITS provides the steps to discard the existing terminal and crimp a new better version terminal.	

ITS60378

Ref. NHTSA Recall No.	Ref. Transport Canada Recall No.
Not Applicable	Not Applicable

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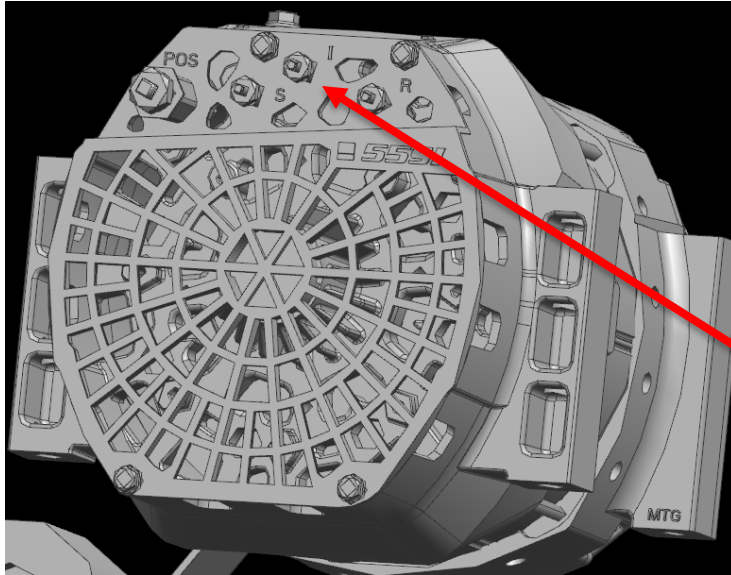
PROCEDURE:

1. Set park brake and chock wheels.
2. Turn the main battery disconnect switch to the "OFF" position.
3. Open the engine door.



Open engine door

4. Locate wire ID 0208 behind the top alternator connected to the stud "I". Remove and save the nut securing the wire.
5. Cut and discard the ring terminal on wire 0208.



Cut the ring terminal on wire ID 0208 connected to stud "I"

6. Crimp 4" of 18 AWG black wire, MCI P/N: 19-11-1251, to the 0208 wire using splice connector, MCI P/N: 19-11-3775, and heatshrink, MCI P/N: 19-11-1465.



Crimp 4" black wire using splice connector and heatshrink

NOTE: Follow instruction in step 14 to crimp wire using splice connector.

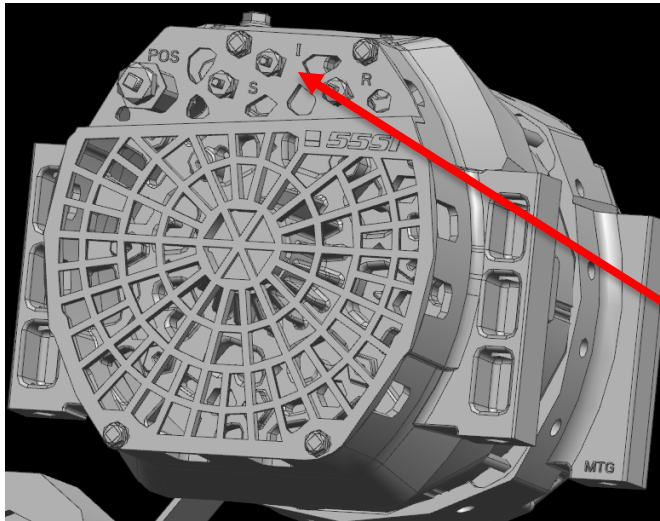
7. Crimp #10 ring terminal, MCI P/N: 19-11-402, to the other end of the added wire using heatshrink, MCI P/N: 19-11-1465.



Crimp #10 ring terminal using heatshrink

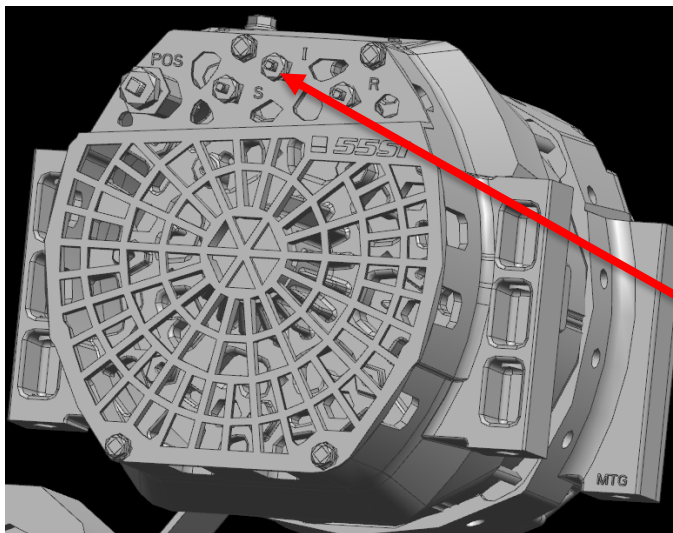
NOTE: Follow instruction in step 15 to crimp ring terminal.

8. Re-install the modified 0208 wire to the "I" stud using existing hardware and torque the nut to 15-25 In-Lbs.



Connect the modified wire to stud "I" and torque to 15-25 In-Lbs

9. Locate wire ID 0207 behind the bottom alternator connected to the stud "I". Remove and save the nut securing the wire.
10. Cut and discard the ring terminal on wire 0207.



Cut the ring terminal on wire ID 0208 connected to stud "I"

11. Crimp 4" of 18 AWG black wire, MCI P/N: 19-11-1251, to the 0207 wire using splice connector, MCI P/N: 19-11-3775, and heatshrink, MCI P/N: 19-11-1465.



Crimp 4" black wire using splice connector and heatshrink

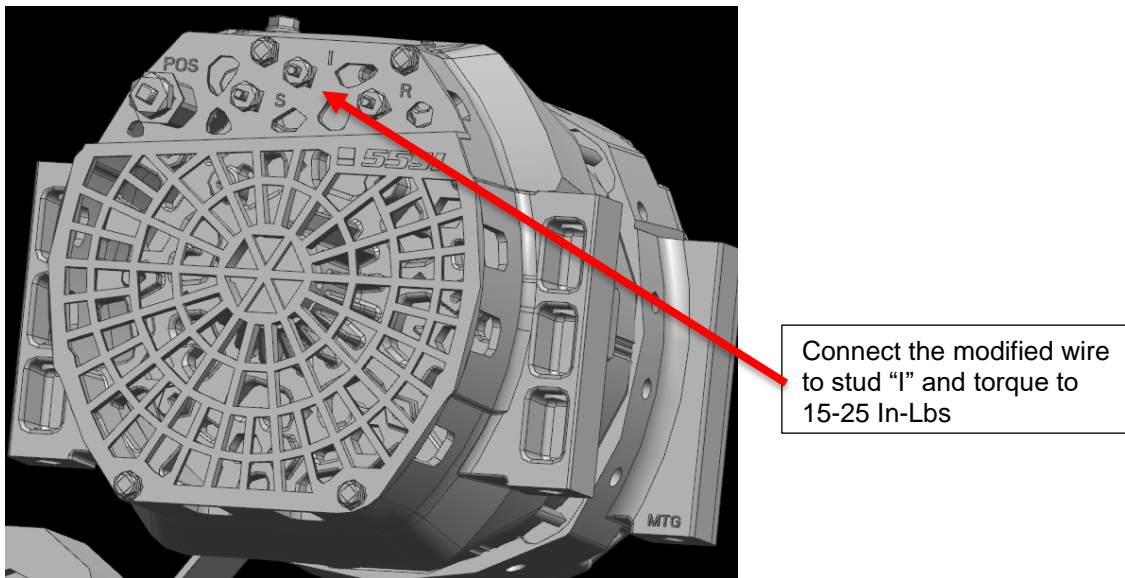
NOTE: Follow instruction in step 14 to crimp wire using splice connector

12. Crimp #10 ring terminal, MCI P/N: 19-11-402, to the other end of the added wire using heatshrink, MCI P/N: 19-11-1465.

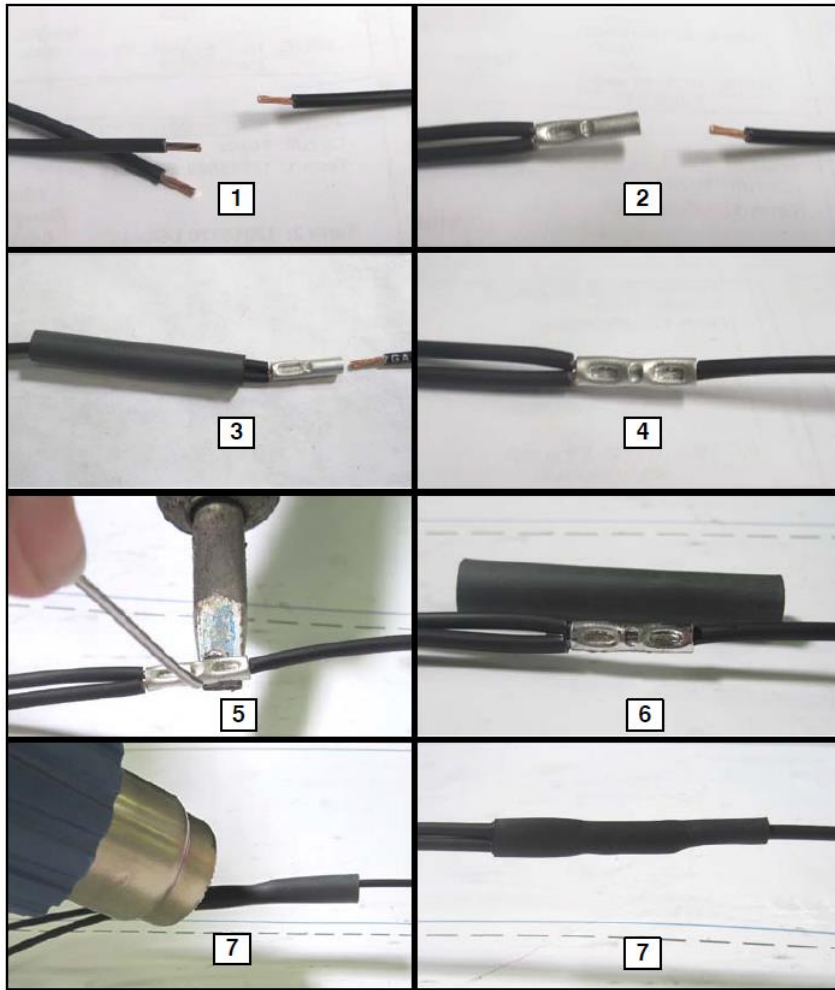


NOTE: Follow instruction in step 15 to crimp ring terminal.

13. Re-install the modified 0207 wire to the "I" stud using existing hardware and torque the nut to 15-25 In-Lbs.



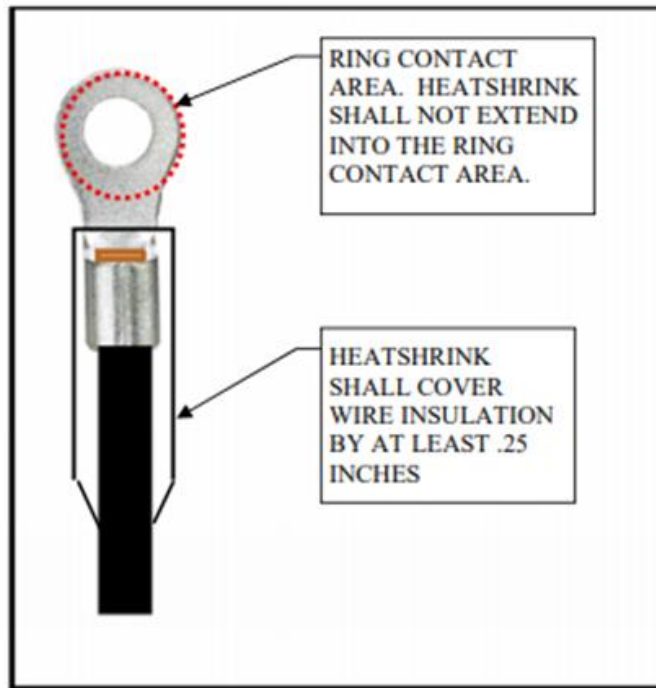
14. Wire Splicing Procedure



ITEM	DESCRIPTION
1	Using wire strippers, strip the wires 0.250 inch.
2	Crimp one wire.
3	Orient and slide the heatshrink over the crimped wire.
4	Crimp the other wire.
5	Solder the center of the crimp joint. Proceed to solder both ends.
6	Orient and center the heat shrink over the butt splice.
7	Using a heat gun, shrink down all the way until the melted glue is visible.

15. Ring Terminal Crimping and Sealing Procedure:

Ring terminal to be crimped, soldered and heat shrink applied as detailed below. The applied heat shrink for non-insulated terminal ends shall not extend into the ring contact area and shall cover wire insulation by at least .25 inches. The ring contact area is defined as the area within the outer terminal ring circumference shown by the red dotted circle in the figure below.





LABOUR ESTIMATE				
	Operation	Number of Technician(s)	Hours	Labor Time T X HR
1	Alternator Ring Terminal Rework	1	0.5	0.5

PARTS REQUIRED					
Item	Part Number	Description	Qty. per Coach	Units	Notes
1	19-11-402	Ring Term_Solistrand #10_22-16 AWG	2	EA	
2	19-11-3775	Splice-Butt,Molex,22-18 AWG	2	EA	
3	19-11-1251	GXL_16AWG_BlK	8	IN	
4	19-11-1465	Heatshrink, 2"	4	EA	

SPECIAL TOOLS REQUIRED					
Item	Part Number	Description	Qty.	Units	Notes
1					