



INSTRUCTION TO SERVICE

ITS: 5482	
SECTION:	284 Electrical Panels
WRITTEN BY:	K. Baziuk
SUBJECT:	Replace Thermal Breaker with Magnetic Breaker.

ITS5482

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PROCEDURE:

1. Turn the main battery disconnect switch to the “OFF” position.
2. Gain access to the rear panel. See Figure 1.

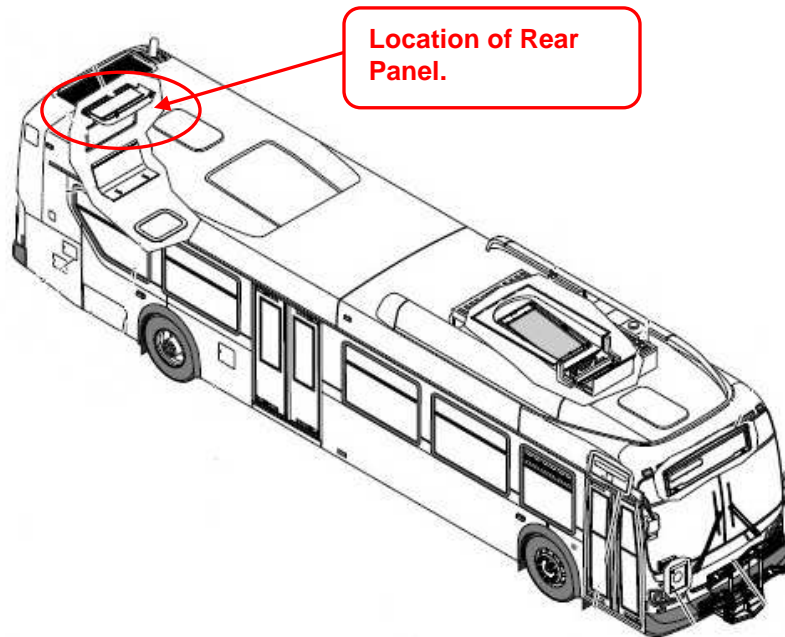


FIGURE 1. Location of Rear Panel.

3. Find a suitable location on the rear panel to mount breaker bracket, PN: 471028 see Figure 2.

NOTE: There are several SR's as part of the retrofit and they all have different rear panels. It is up to field personnel to determine best location for mounting the circuit breaker bracket assembly.

4. Using the breaker bracket as a template, drill and tap three #10 – 24 UNC holes.
5. Mount the bracket to rear panel using three #10 machine screws, PN: 14S00008 and three flat washers, PN: 50W00000. See Figure 3.
6. Mount the 30A long delay circuit breaker, PN: 172953 to the bracket using two #6 – 32 machine screws, PN: 14S96005 and two flat washers, PN: 50W96000. See Figure 3. Apply decal, PN: 530218 using adhesive spray 77, PN: 170962. Trim to finished size.
7. Remove existing fuse, F6CC.
8. Disconnect the wire harness, coded 99CC71 from the existing 30A circuit breaker, F6CC. Cut off existing terminal ring and replace with terminal ring, PN: 5944912. Connect to replacement 30A breaker using one ¼ inch hex lock nut, PN: 40N04000 and ¼ inch flat washer, PN: 50W04000. Torque to 2.5 ft-lbs (dry). If additional length of wire, PN: 159955 is needed, coded 99CC71, add to existing wire harness using connector PN: 164388 and PN: 164389 and terminals PN: 164606 and PN: 164607.

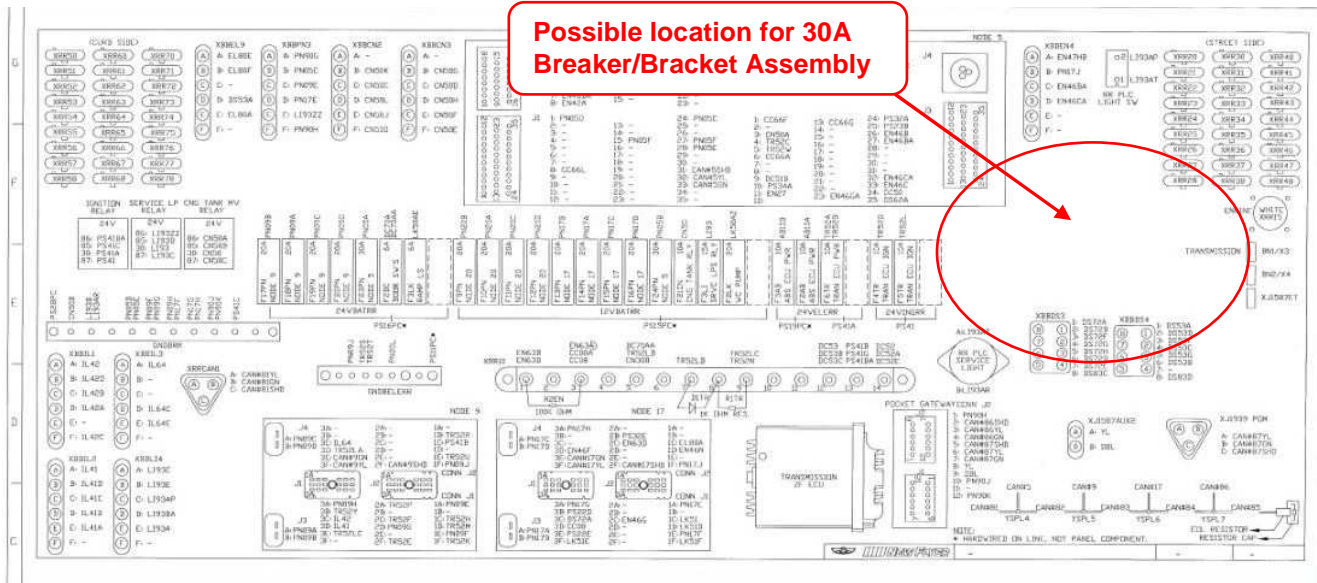


FIGURE 2. From SR1008, possible location of new 30A circuit Breaker.

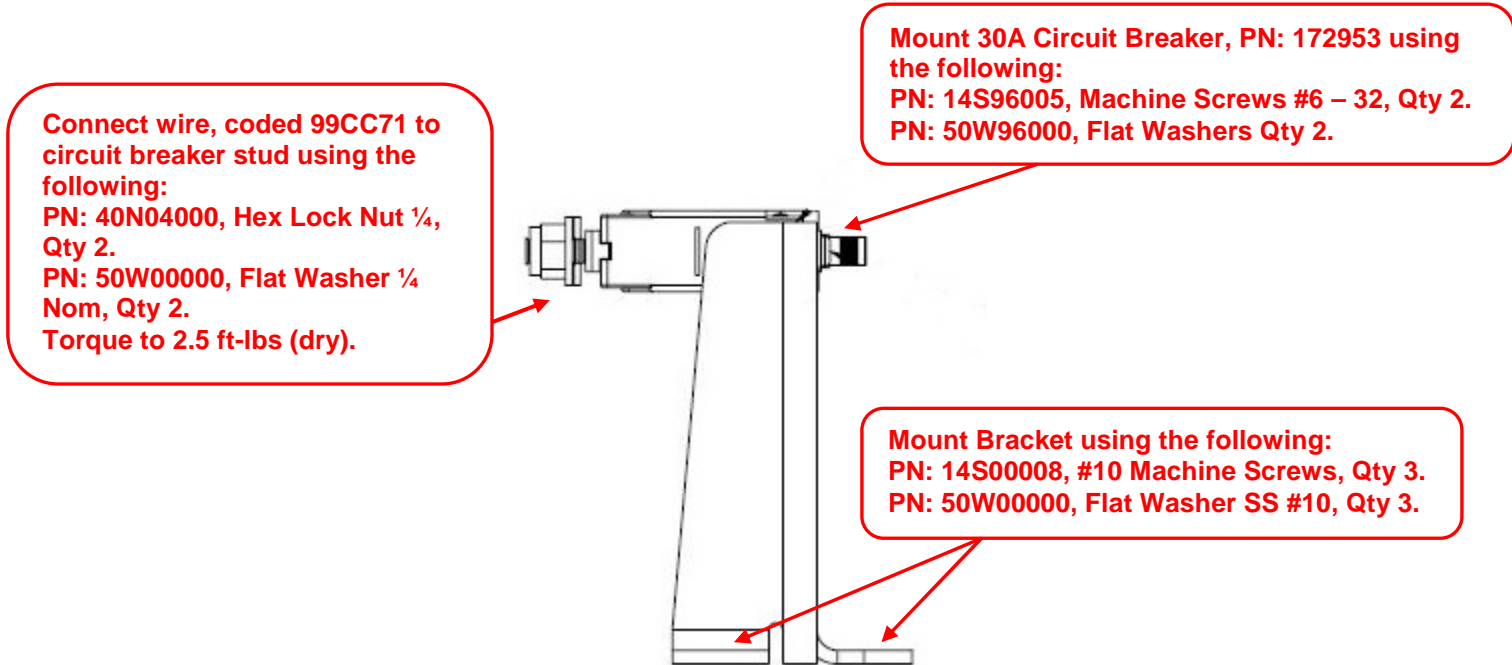


FIGURE 3. 30A Long Delay Circuit Breaker Mount, PN: 471028.



NEW FLYER

9. Using a pre-determined length of wire, PN: 159955, coded 99CC71A, attach a terminal, PN: 5944912 and connect to replacement 30A breaker using one ¼ inch hex lock nut, PN: 40N04000 and ¼ inch flat washer, PN: 50W04000. Torque to 2.5 ft-lbs (dry). Attach terminal PN: 5944912 to other end of wire and connect to 24VBATRR Busbar. Torque bolt to 9 ft-lbs (dry).
10. Add Dielectric grease, PN: 8111767 to electrical connections.
11. Turn the main battery disconnect switch to the “ON” position.



LABOUR ESTIMATE

	Operation	Men	Hours	Labour Time M X HR
1	Replace Thermal Breaker with Magnetic Breaker.	1	1.0	1.0

PARTS REQUIRED

Item	Part Number	Description	Qty. per Coach	Units	Notes
1	172953	BREAKER-30A LONG DELAY	1	EA	
2	14S00008	WASHER FLAT SS 10	3	EA	
3	50W00000	SCREW-MACHINE #10 X 1/2	3	EA	
4	14S96005	SCREW MACHINE #6-32 X 5/16 LG	2	EA	
5	471028	BRACKET- BREAKERS	1	EA	
6	40N04000	NUT- HEX- LOCK- 1/4	2	EA	
7	50W04000	WASHER- FLAT ¼ NOM	2	EA	
8	50W096000	WASHER FLAT SS NO.6	2	EA	
9	159955	WIRE-10GA RED GXL	3	FT	Coded 99CC71A
10	5944912	TERM-R 1/4 10-12AWG IN	2	EA	
11	5944910	TERM-R #8 10-12AWG IN	1	EA	
12	164388	CONN-1CCT SHR DTHD	1	EA	
13	164389	CONN-1CCT TWR DTHD	1	EA	
14	530218	DECAL-AUX COND PWR	1	EA	
15	170962	ADHESIVE-SPRAY 77	0.01	EA	
16	164606	PIN -10 – 8 GA DEUTSCH	1	EA	
17	164607	SOCKET -10 8 GA DEUTSCH	1	EA	
18	8111767	LUBRICANT NYK-77	0.01	EA	



SPECIAL TOOLS REQUIRED					
Item	Part Number	Description	Qty. per Coach	Units	Notes
		NO SPECIAL TOOLS REQUIRED			