



INSTRUCTION TO SERVICE

ITS: 6178

SECTION:	405-05 Artic Joint
WRITTEN BY:	Dwayne Peters
SUBJECT:	Torque Access Holes

ITS6178

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PROCEDURE:

1. Turn the main battery disconnect switch to the "OFF" position.
2. Raise coach in accordance with the New Flyer Service Manual. A pit can also be used.
3. Remove the four screws securing the center plate on the top of the top center cross beam. Figure 1.



Figure 1: Top plate on the top of center cross beam

4. From under the bus open the bellows to expose the bottom strut bolts. Remove the four bolts holding the aluminum bottom strut. Figure 2.

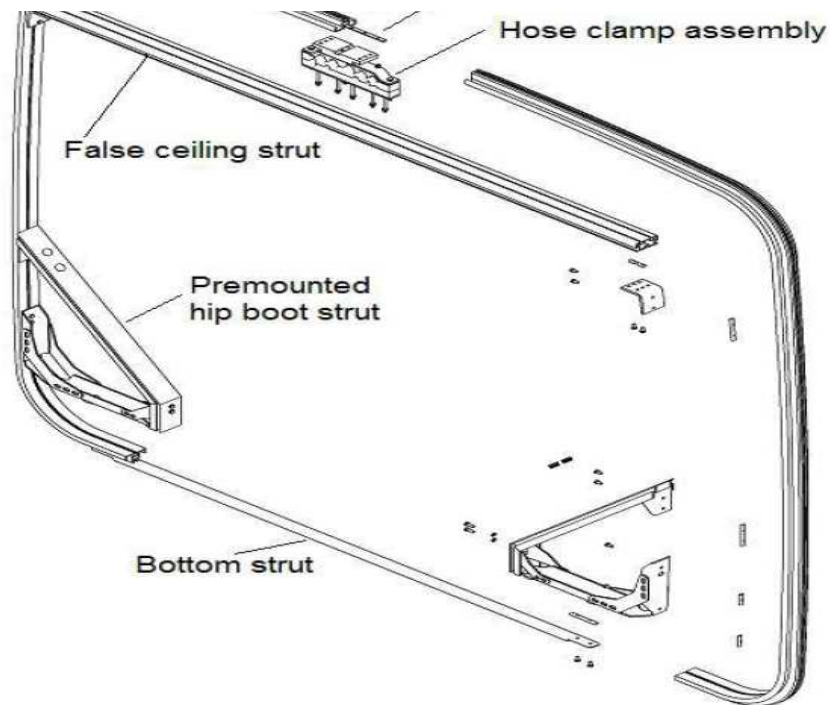


Figure 2: Remove the bottom strut

5. From under the bus support the bellow frame on each side with bottle jacks. Jack just enough to support the weight of the top center cross beam and bellow frame. **DO NOT FORCE**. Figure 3.



Figure 3: Lightly jack the bellow frame

6. From the top, remove the four nuts/bolts securing the top center cross beam to the joint assembly. Figure 4.



Figure 4: Top center cross beam nuts/bolts

7. From under the bus, jack the sides of the bellow frame so the top center cross beam is high enough to place a steel plate between the top center cross beam and yoke plate. (About 1")

8. Place a steel plate on top of the yoke plate in the drilling path to protect the top of the yoke plate and plastic sliders and to catch the drilling debris.

NOTE: When drilling through the drip tray, the drill bit will hit the steel plate. Stop drilling once the drill bit passes through the drip tray so to prevent damage to the top of the yoke plate and plastic sliders.

9. Use a drill guide with an OD the same size as the existing holes in the top center cross beam and place it in the hole and drill a pilot hole into the drip tray. Figure 5.

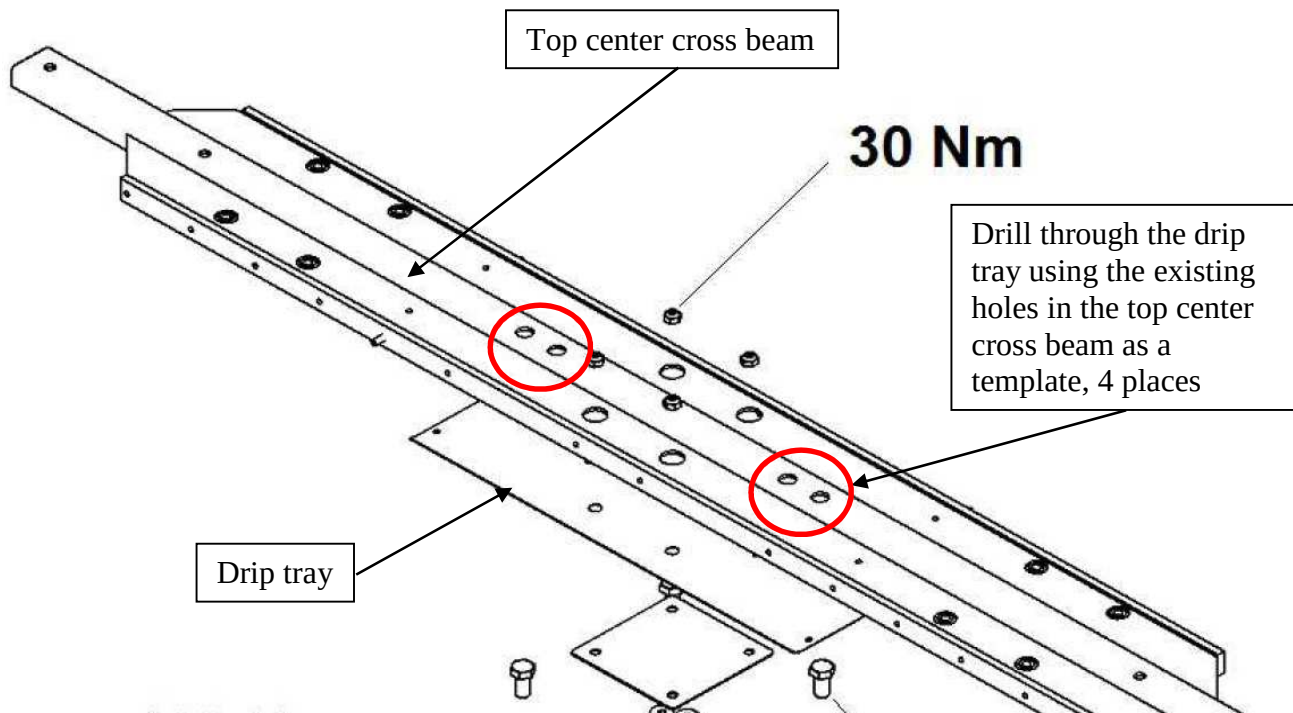


Figure 5: Top center cross beam and drip tray

10. Continue drilling the drip tray while increasing the size of the drill bit until the max drill size of .75"
11. Repeat steps 9 and 10 for the remaining 3 holes.
12. Remove all sharp burrs from bottom of the drip tray from the four drilled holes.
13. Clean all drilling debris.
14. Lower the jacks and align the four holes in the top cross beam with the four holes in the joint assembly.
15. Install the four bolts and four lock nuts finger tight.
16. From under the bus remove the bottle jacks and reinstall the bottom strut and bolts and torque to 7 FT-LB.
17. Close the bellow openings.
18. Torque the four lock nuts to 22 FT-LB.
19. Reinstall the top cover plate ensuring the seal is in place and tighten the four screws.
20. If necessary, lower coach in accordance with the New Flyer Service Manual.
21. Turn the main battery disconnect switch to the "ON" position

LABOUR ESTIMATE

	Operation	Men	Hours	Labour Time M X HR
1	Drill access holes in the ATG drip tray	1	1.0	1.0