



INSTRUCTION TO SERVICE

ITS: 6085	
SECTION:	Chassis
WRITTEN BY:	Kevin Robinson
SUBJECT:	MiDI - Remove and replace the harness bracket on the steering column.

ITS6085

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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.
3. Tilt the steering wheel down to ensure a clear area for rework.
4. Remove the harness from the existing bracket and move it to a safe location.
5. Place the new bracket next to the existing bracket and note the location of the new bracket on the column.
6. Protect the driver’s area against damage from grinding and welding.
7. Push the steering column boot down as far as possible and secure it out of
8. Remove the existing bracket from the bus by grinding it off
9. Clean the steering column of paint and remaining weld left behind from the original bracket.

⚠ WARNING: BEFORE WELDING disconnect battery cables, ECUs for engine, transmission, electronic level control, ABS, destination signs, all multiplex modules (6), the ZR-32 module in the dash, DEF control module, radios, and any other sensitive electronics.

10. Clean the new bracket of any oils and rust and tack it into place.
11. Test fit the harness and ensure everything will operate properly.
12. Finish-weld the new bracket in place and grind excess weld and any splatter off of the column so it is smooth.
13. Paint the steering column flat black
 - a. Mask off column, boot, and area to prevent overspray
 - b. Prime and paint the column flat black.



Figure 1: New bracket installed – welding complete, finish painting yet to be done.



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14. Reconnect components previously disconnected for welding.
15. Reconnect the harness to the steering wheel and test for functionality. Secure to the back of the
16. Remove tools and debris and return the bus to service condition.
17. Turn the main battery disconnect switch to the "ON" position.

Appendix A

WELDING PROCEDURE

1. Remove old weld by grinding as required. Oxy-acetylene torches must not be used.
2. Area enclosed by welded zone plus 2" either side to be cleaned to base metal by wire brush, removing all grease, oil, rust and scale from surfaces to be joined.
3. Disconnect battery cables when welding. Also disconnect ECUs for engine, transmission, electronic destination signs, ABS, articulated joint (black box and pressure sensors) and VCM.
4. Temperature of steel parts to be welded must be at or above 68°F (20°C) before welding.
5. All welds to be made with E7018, low hydrogen welding rods. Gas metal arc welding (semi-automatic) may be used where practicable, provided AWS A5.18 standard E70S-3 or E70S-6 wire is used, with argon-carbon dioxide shielding gases.
6. Welder shall meet qualifications for "all position" welding as per AWS D1.1 or CSA W59 standard qualification for metal arc welding.



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LABOUR ESTIMATE

	Operation	Men	Hours	Labour Time M X HR
1	MiDI - Remove and replace the harness bracket on the steering column.	1	3.0	3.0

PARTS REQUIRED

Item	Part Number	Description	Qty. per Coach	Units	Notes
1	6461977	BRACKET – HORN	1	EA	