

DART Field Repair: Removal of Support Channels and Brackets		
Work Instructions Revised: 3/21/2014	REVISION: 1	DOCUMENT: WI-080

1.0 PURPOSE

1.1 The purpose of this work instruction is to outline the procedure for performing the removal of Support Channels and Bracket Assemblies on DART 40' and Dart 31' CNG frame assemblies. As a result of an effort by Agility Fuel Systems to attach test instruments, test drive, gather and interpret test data from a 40' bus and 31' bus, and the subsequent approval by DART, these components shall be removed as detailed in this document.

2.0 SCOPE

- 2.1 This work instruction applies to the DART 40' and DART 31' bus program.
- 2.2 DART 40' buses: Remove (4) Support Channels (MDP-1100493) and (8) Bracket Assemblies (MDA-1300100)
- 2.3 DART 31' buses: Remove (2) Support Channels (23905116) and (4) Bracket Assemblies (23905019) on the 4 tank side of the system. **The 2 tank side of the system shall not be modified.**

3.0 ASSOCIATED DOCUMENTS

3.1 Agility drawings: 40' Frame (MDA-1100157), 31' Frame (23906006)

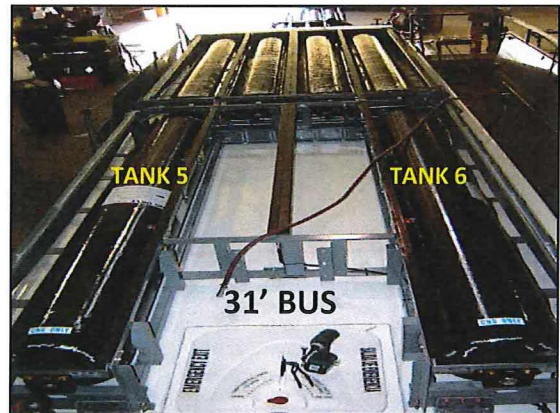
4.0 TOOLS, GAUGES, FIXTURES

4.1 Various hand tools

5.0 GENERAL INSTRUCTIONS

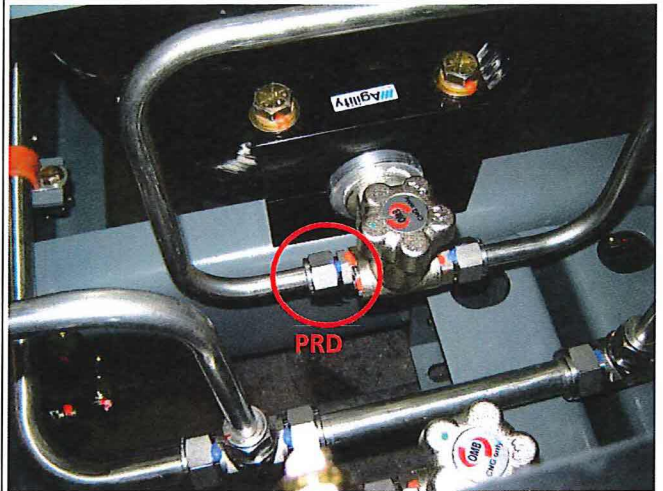
5.1 Close the following tank valves:

- 5.1.1 40' bus: Tank 1 & Tank 2
- 5.1.2 31' bus: Tank 5 & Tank 6



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- 5.2 Make request for bus to be moved to de-fuel station
- 5.3 Connect de-fuel hose & begin defueling of the 4 tank side of the system
- 5.4 Continue de-fueling until the high pressure gauge reads "0" (zero) psi
- 5.5 Loosen the fitting on PRD side of the tank valve to vent fuel from the PRD line for the following tanks:
 - 5.5.1 40' bus: Tank 4 & Tank 5
 - 5.5.2 31' bus: Tank 2 & Tank 3
- 5.6 Close all valves on 4 tanks side of system
- 5.7 Open a tank valve on one of the full tanks
- 5.8 Make request for bus to be moved to work bay
- 5.9 Close all 6 tank valves
- 6.0 Crank bus and allow to run until fuel is gone and the bus stops running



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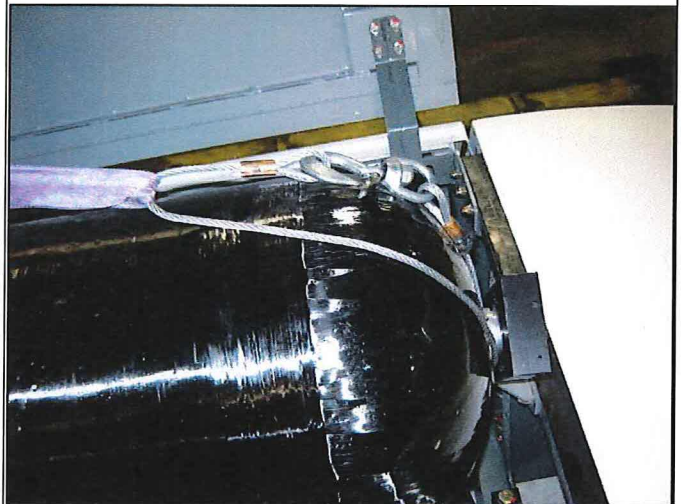
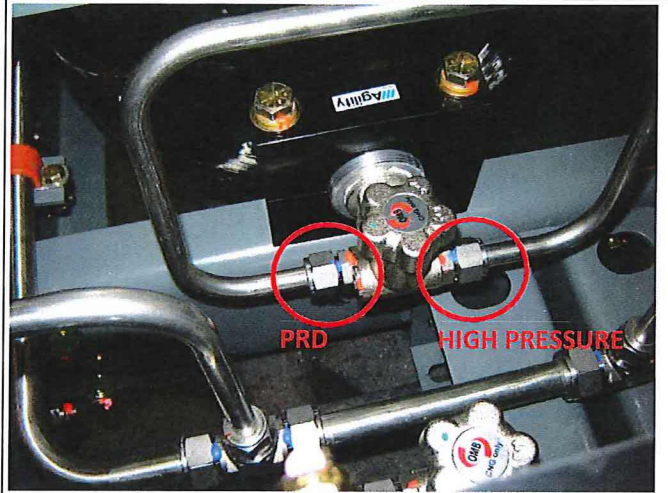
7.0 For the 2 inner tanks on the 4 tank side of the system, perform the following:

7.1 Disconnect the High Pressure line and PRD line from the tank valve

7.1.1 Remove fasteners for the tank neck blocks

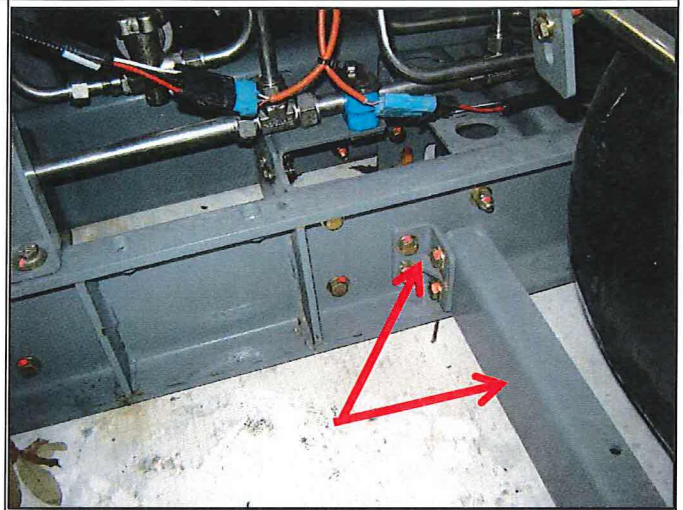
7.1.2 Attach two wire cable assemblies and two 4' long lifting straps to the tank

7.1.3 Using DART hoist, lift tank and set on top of adjacent tank



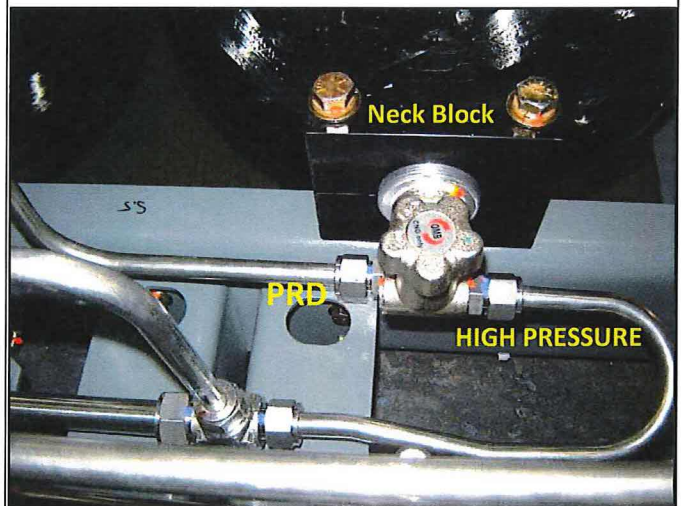
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- 7.2 **40' bus: perform the following:**
- 7.2.1 Remove (4) Support Channels and (8) Bracket Assemblies
 - 7.2.2 These components are present on both sides of the system
- 7.3 **31' bus: perform the following:**
- 7.3.1 Remove (2) Support Channels and (4) Bracket Assemblies
 - 7.3.2 These components are present on the 4 tank side of the system
 - 7.3.2.1 The 2 tank side shall not be modified.



- 7.4 At this point, prior to re-install of tanks, perform the following:
- 7.4.1 Rust treatment, paint touch-up and Sikaflex application per WI-077
- 7.5 Install the tanks that were removed
- 7.6 Install fasteners to secure the neck blocks and torque to 90 ft-lbs. Apply torque seal
- 7.7 Re-connect all fittings for high pressure lines & PRD lines

**REFERENCE WI-077:
DART FIELD REPAIR
RUST TREATMENT, PAINT TOUCH-UP & SIKAFLEX-221**



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- 7.8 **Perform the following for 40' bus & 31' bus:**
 - 7.8.1 40' bus: open valve for Tank 1
 - 7.8.2 31' bus: open valve for Tank 5
- 7.9 Use "Snoop" to check for leaks at re-connected fittings
 - 7.9.1 Repair leaks as required
- 7.10 Make request for bus to be moved to fueling station
 - 7.10.1 Open all tank valves
 - 7.10.2 Re-fuel bus to 3600 psi
- 7.11 Perform leak check at connections using "Snoop"
 - 7.11.1 Repair leaks as required

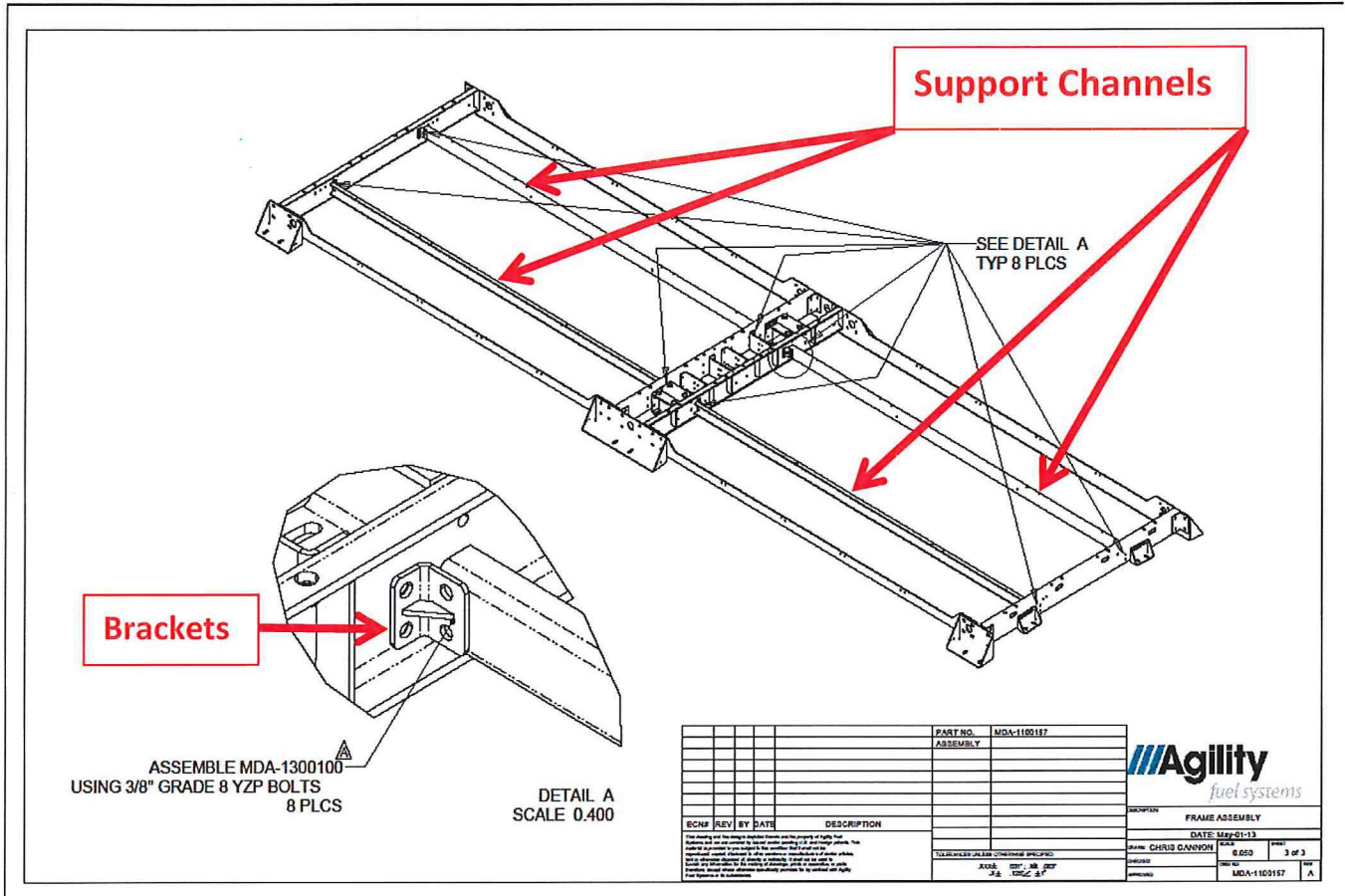


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<p>8.0 For each bus, the following shall also be performed:</p> <p>8.1 Door Latch Stud Modification per WI-078</p> <p>8.2 Installation of new rubber on the <u>frame & doors</u> per WI-081</p> <p>8.2.1 See the NOTES in right hand column.</p> <p>8.2.2 If new rubber has previously been installed, it shall not be removed.</p> <p>8.3 Complete the DATA REPORTING FORM for work performed on the buses</p>	<p>REFERENCE WI-078: DART Field Inspection & Modification for (2) Center Door Latches</p> <p>REFERENCE WI-081: DART Field Repair – Removal of old rubber strips / Install of new rubber strips</p> <p>NOTE 1: For some buses, new rubber has previously been installed on the frame & doors. Reference the information sheet regarding the bus numbers.</p> <p>NOTE 2: For buses repaired by Rush Truck Center, new rubber has previously been installed on <u>doors only</u>. Install new rubber on the frame. Reference the information sheet regarding the bus numbers.</p>
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40' BUS

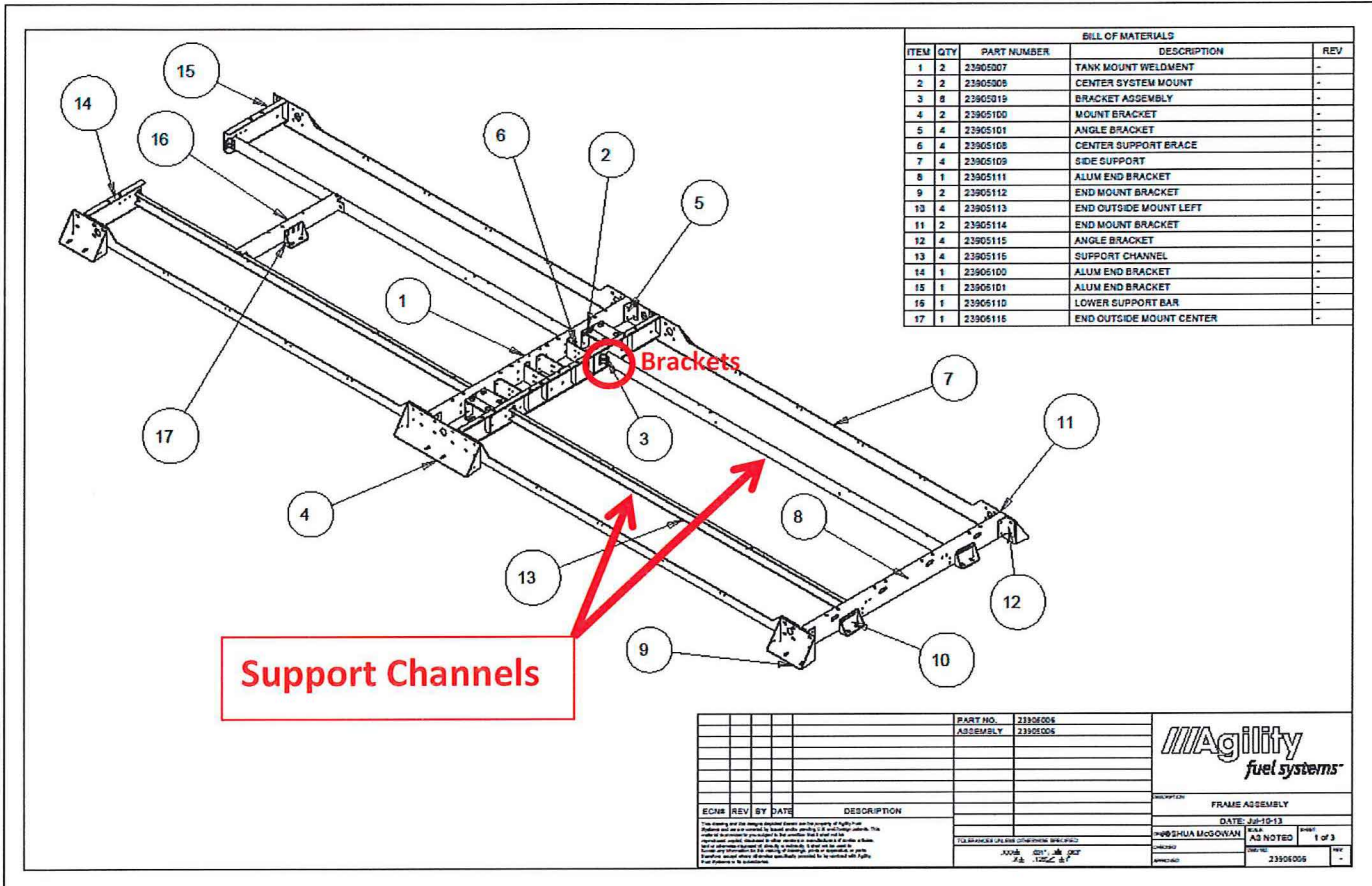


Location of (4) Support Channels MDP-1100493

Location of (8) Brackets MDA-1300100

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31' BUS



Location of (2) Support Channels - P/N 23905116

Location of (4) Brackets - P/N 23905019