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NTL CLASS 323 INTERIOR REFRESH INSTALLATION MODIFICATION PROCEDURE

Issue: 1Draft3

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2. INTRODUCTION

This modification procedure is written to provide instructions for the interior refresh of 17 Class 323 Porterbrook units that are being transferred from West Midlands Railway to Northern Trains Limited.

2.1 Scope

This document is applicable to the following units and vehicles:

	DMS(A)	PTS	DMS(B)
323202	64002	72202	65002
323203	64003	72203	65003
323205	64005	72205	65005
323206	64006	72206	65006
323207	64007	72207	65007
323208	64008	72207	65008
323209	64009	72209	65009
323210	64010	72210	65010
323212	64012	72212	65012
323213	64013	72213	65013
323217	64017	72217	65017
323218	64018	72218	65018
323219	64019	72219	65019
323220	64020	72220	65020
323241	64041	72341	65041
323242	64042	72342	65042
323243	64043	72343	65043

Table 1: Unit/Vehicle Numbers

2.2 Sequence of Work

Except where specified otherwise, the Supplier is free to select the sequence in which jobs are carried out. However, if the chosen sequence incurs additional cost as a result of duplication of work, these additional costs shall be borne by the supplier.

If a test is repeated, it should start from an appropriate point earlier in the sequence to include all of the testing affected by the rectification work. If a suitable point earlier in the sequence cannot be determined, the whole test should be repeated from the start.

2.3 Standard Definitions

Within this document, any of the terms used from the following list shall be regarded as having the definition stated.

TERM	DEFINITION
CAUTION	Advice that failure to carry out an operation could result in material damage to the product, but has no safety consequence.
CHANGE	Remove the original and fit a new or overhauled part or assembly in its place.
CHECK	Determine a particular nominated condition before, during or after repair, e.g. completeness, security, position.
CLEAN	Take off all dirt and deposits.
DEFECT/ DEFECTIVE	Any fault or faults in a component or assembly, which may prevent the component or assembly from fulfilling its designed purpose.
DISMANTLE	Take to pieces.
THE ENGINEER	Reference within this and all related documents to the Engineer shall identify the authorised agents of the Director of Engineering Services at Porterbrook Leasing Company Ltd.
EXAMINE	Determine general condition before repair, e.g. wear, cracks, splits, leaks, scoring, corrosion, distortion, looseness.
GAUGE	Determine a nominated dimension by using suitable measuring equipment, e.g. ruler, micrometer, callipers, feeler gauge, or Go/No-Go gauge.
INSPECT	Determine conformity to required standards during and after repair.
NOTE	Means that special attention is being drawn to some technical point because it might not be obvious even to skilled technicians.
OVERHAUL	Do what is necessary to make a component re-usable, i.e. dismantle, strip, clean, examine, fit new parts, repair, re-assemble, test and inspect as required (does not include rewinding or renewal).
RE-ASSEMBLE	Put together.
RECORD	Put down in writing the result of any specified examination, test or inspection.
RECTIFY	To set right (does not include rewinding or renewal).



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TERM	DEFINITION
REFIT	Put back and reconnect.
REMOVE	Disconnect and take off.
RENEW	Remove and scrap the original part and provide a new part in its place.
REPAIR	Restore an original part to the required condition, e.g. by hand tooling, machining, building up, welding, patching, bending and setting, heat treating, re-securing, etc. (does not include rewinding or renewal).
REPORT	Convey to the Engineer the condition of the item examined.
STRIP	Take off covering, e.g. paint, polish, fabric.
SUPPLIER	Reference within this and any related documents to the Supplier shall identify an organisation which is contracted to Porterbrook Leasing Company and their authorised agents for the purpose of undertaking a specified task.
TEST	Prove correct operation by specified trial.
WARNING	Advice relating to health or safety which includes:
	 Advice that failure to carry out an operation correctly could significantly affect the health or safety of persons using the railway.
	 Highlighting a hazard that could significantly affect the health or safety of a person or persons undertaking the task, or others in the vicinity.

NOTE: Where in the job description the phrase "Repair or Renew" is referred to, it means that the cheaper of the alternatives must be adopted.



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2.4 Supplier's Responsibilities

<u>Safety</u>

When working to this specification, it is the responsibility of the Supplier to ensure that all relevant local and mandatory safety instructions are strictly followed. This shall include, where applicable, adherence to Industry Standards, Railway Industry Standards, Railway Group Standards and legislation.

Condition on Release

The condition of the vehicle and all components and systems on completion of overhaul and repairs shall be such that the safety of public and staff alike is not endangered and that any risk has been fully assessed and minimised to become as low as reasonably practicable. If any doubt exists, remedial action shall be taken by the Supplier.

Railway Group Standards and Railway Industry Standards

Railway Group Standards issued by RSSB are mandatory, and all applicable Railway Group Standards and Railway Industry Standards shall be adhered to, irrespective of whether they are specifically referenced in this document. The Supplier shall advise the Engineer if any requirement of a Railway Group Standard or Railway Industry Standard conflicts with any requirement of this document or any subsidiary document.

Materials and Components

It is the responsibility of the Supplier to ensure that all repaired components and systems conform to the standards authorised and agreed for the specific contractual use. If the Supplier becomes aware that the contractual issue of a document is not the latest issue, he shall advise the Engineer who will determine whether the revised issue is to be implemented for the contract.

The Supplier shall not carry out any design changes or change any processes or materials detailed in this prescriptive specification without the approval of the Engineer. Requests for changes will be managed in accordance with ACOP/EC/01006.

Where a component is required to be cleaned, unless otherwise stated, it is the responsibility of the supplier to identify the most suitable method, which will ensure that the component is not in any way damaged.

Whenever it is necessary to remove or isolate a faulty or redundant cable the work must be carried out in accordance with Technical Procedure CR/TP1084.

Competencies

All work must be carried out by staff assessed as competent in accordance with the principles of ORR Railway Safety Publication 1 "Developing and Maintaining Staff Competence".



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Engineering Changes

The Supplier shall not carry out any design changes or change any processes that may be detailed in this performance specification without the approval of the Engineer. Requests for changes will be managed in accordance with ACOP/EC/01006.

Record of Engineering Changes

Design information, (held by the Supplier), must be updated for all modifications and any information held in PADS, in accordance with ACOP/EC/01007, shall be updated also. The fit, form and function modification status must be visibly recorded on the component. The Supplier shall inform the Engineer of any errors or omissions identified during their review and implementation of this document.

Tightening of Threaded Fasteners

Where a torque loading is specified, nuts shall only be tightened by means of a calibrated torque wrench. If the Supplier considers that any joint where torque loadings are not specified is critical, he shall consult the Engineer. Except where otherwise specified, threads are not to be lubricated but a thin film of corrosion inhibitor can remain on the threads.

It is essential to check that all bolts, in a multi-hole fixing, carry their allocated proportion of the load. Unless otherwise specified, they shall first be tightened in a staggered pattern from the centre outwards and subsequently re-tightened in the same sequence (refer to Figure 1). This second tightening is necessary since bolts may lose tension when adjacent bolts are tightened.



Figure 1: Typical Tightening Sequences

Unless otherwise specified, slotted or castellated nuts shall subsequently be over tightened if necessary, to align the next slot to allow for the insertion of split cotter pins. Under no circumstances shall nuts be eased back.

All fasteners that are torque tightened are to be identified by a permanent pen lining through the "flat" of the nut or bolt head. The lining should continue through the threads and onto the chassis (see Figure 2 for typical illustration).



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Lining through the flat of the nut onto the threads and through to the chassis

Figure 2: Typical Marking of Torque Tightened Fasteners

Prevailing Torque Nuts

Where prevailing torque nuts of the bent beam type or nylon insert type are used, at least two complete threads of the bolt must protrude through the nut. However, under no circumstances may a nylon insert type nut be used on a bolt that is cross-drilled in threaded section.

Protection of Components

When disconnected and out of service, all electrical, hydraulic and pneumatic connections shall be sealed to prevent ingress of foreign matter.

Pipes shall be protected from ingress of dirt during cutting, bending, welding or installing. Threaded fittings shall be checked for burrs or metal slivers, which shall be removed if found, before fitting into pipe bores.

Rubber components shall be protected from contamination with cleaning agents when cleaning is undertaken. They shall not be contaminated with lubricants or rust inhibitors.

Joint faces shall be clean and free from damage or burrs before assembly.

No PTFE thread sealing tape may be used within the components or in any test stand pipework that is not protected by adequate filtration. Alternative sealing material for pipework is Loctite 572 or Loctite 542. It is preferred that no PTFE thread sealing tape is used in air supply pipework to test rigs.

Condition of Components on Arrival at Supplier's Works

The component drawings and specifications provided to the Supplier are believed by the Engineer to represent the current state of the components, subject to normal wear and tear in service.

Should any component be found not to drawing, or to have any non-standard or additional components fitted, the Supplier shall immediately advise the Engineer, who will determine whether the component is to be returned to standard.

3. VEHICLE PREPARATION

3.1 Vehicle Preparation

- 3.1.1 Make sure the vehicle is scotched before any maintenance on the vehicle is started.
- 3.1.2 Check for any existing damage in the areas where modifications are to be carried out.
- 3.1.3 Disconnect all electrical shore supplies.
- 3.1.4 Isolate the electrical supply.
- 3.1.5 Complete Appendix A Handover To Modification Team Certificate.

3.2 Incoming Materials

3.2.1 Make sure a secure area for all incoming materials is set up next to the vehicle.



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4. PTS – VEHICLE PREPARATION

NOTE: All items that are being stripped to be powder coated must be removed from the vehicle.

4.1 Seat Preparation

Refer to IG6607 and IS6515.

4.1.1 Seat Cushions

- 4.1.1.1 Remove the cushions from all the seats and send for refurbishment in accordance with document PB/23/022/002.
- 4.1.1.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.1.2 Seat Shell and Pedestals

- 4.1.2.1 Remove the seat shells and pedestal assemblies and send for refurbishment in accordance with document PB/23/022/002.
- 4.1.2.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.1.3 Tip-Up Seats

- 4.1.3.1 Remove the tip-up seats, retain all the fixings and send for refurbishment in accordance with document PB/23/022/002.
- 4.1.3.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.2 Wheelchair Backstop Frame



Figure 3: Wheelchair Backstop Frame



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- 4.2.1 Refer to Figure 3. Remove the wheelchair backstop frame fixings from the floor for both wheelchair backstop frames.
- 4.2.2 Remove and retain the wheelchair backstop frame fixings from the draughtscreen on the vestibule side.
- 4.2.3 Remove both wheelchair backstop frames and send for refurbishment in accordance with document PB/23/022/002.
- 4.2.4 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.3 Heater Grille





Figure 4: Heater Grille

- 4.3.1 Refer to Figure 4. Remove the heater grilles on each side of the UAT area and retain all fixings.
- 4.3.2 Protect the area ready for the vehicle to be painted.
- 4.3.3 Refer to Step 8.1.4 for the heater grilles to be deep cleaned.
- 4.3.4 Complete Appendix B Modification and Testing Sign-Off Sheet.



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4.4 Speaker Panels



Figure 5: Speaker Panel

- 4.4.1 Refer to Figure 5. Remove the four speaker panels.
- 4.4.2 Remove the four speakers, retain all fixings and place into Stores.
- 4.4.3 Refit the four speaker panels and prepare the speaker panels for the vehicle to be painted.
- 4.4.4 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.5 Light Diffusers

- 4.5.1 Remove the light diffusers, retain any fixings.
- 4.5.2 Protect the area ready for the vehicle to be painted.
- 4.5.3 Refer to Step 8.2 to deep clean the light diffusers.
- 4.5.4 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.6 Luggage Rack Grab Rails

- 4.6.1 Refer to II1007. Remove the grab rails from the luggage rack, retain all the fixings.
- 4.6.2 Send the luggage rack grab rails for refurbishment in accordance with document PB/23/022/002.
- 4.6.3 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.7 No.1 and No.2 End Gangway Door Handles

- 4.7.1 Remove the No.1 and No.2 end gangway door handles, retain all fixings.
- 4.7.2 Send the No.1 and No.2 end gangway door handles for refurbishment in accordance with document PB/23/022/002.
- 4.7.3 Complete Appendix B Modification and Testing Sign-Off Sheet.



4.8 Draughtscreen Grab Poles

- 4.8.1 Refer to II1002. Remove the draughtscreen grab poles, retain all the fixings.
- 4.8.2 Send the draughtscreen grab poles for refurbishment in accordance with document PB/23/022/002.
- 4.8.3 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.9 Labels

- 4.9.1 Remove all the interior labels on the vehicle, use a label adhesive remover where required.
- 4.9.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.10 Floor Covering

- 4.10.1 Remove the vinyl flooring.
- 4.10.2 Scrape floor back to the wood or metal.

NOTE: Replace the wood flooring where necessary.

- 4.10.3 Sand the floorboards to remove any traces of adhesive.
- 4.10.4 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.11 Spotlights



Figure 6: Spotlight

- 4.11.1 Refer to Figure 6. Protect the centre of the spotlights ready for the vehicle to be painted.
- 4.11.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.12 PIS Units

- 4.12.1 Protect the PIS units ready for the vehicle to be painted.
- 4.12.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.13 Side Ceiling Panels

- 4.13.1 Prepare the side ceiling panels ready for the vehicle to be painted.
- 4.13.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.14 Centre Ceiling Panels

- 4.14.1 Prepare the centre ceiling panels ready for the vehicle to be painted.
- 4.14.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.15 Low Ceiling Panels

- 4.15.1 Prepare the low ceiling panels ready for the vehicle to be painted.
- 4.15.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.16 Ceiling Panel Trim Strips

- 4.16.1 Prepare the ceiling panel trim strips ready for the vehicle to be painted.
- 4.16.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.17 Internal Antenna

- 4.17.1 Protect the internal antenna ready for the vehicle to be painted.
- 4.17.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.18 Door Pocket and Header

- 4.18.1 Prepare the door pocket and header ready for the vehicle to be painted.
- 4.18.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.19 Luggage Racks

- 4.19.1 Prepare the luggage racks for the vehicle to be painted.
- 4.19.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.20 Luggage Rack Brackets

- 4.20.1 Prepare the luggage rack brackets ready for the vehicle to be painted.
- 4.20.2 Complete Appendix B Modification and Testing Sign-Off Sheet.



4.21 Luggage Rack Panels and End Sections

- 4.21.1 Prepare the luggage rack panels and end sections ready for the vehicle to be painted.
- 4.21.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.22 Call For Aid Housing

- 4.22.1 Protect the call for aid housing ready for the vehicle to be painted.
- 4.22.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.23 Wheelchair Ramp Storage Cupboard

- 4.23.1 Prepare the wheelchair ramp storage cupboard ready for the vehicle to be painted.
- 4.23.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.24 Cupboard Door Outer Surface (Rear of UAT)

- 4.24.1 Prepare the cupboard door outer surface ready for the vehicle to be painted.
- 4.24.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.25 UAT Door

- 4.25.1 Prepare the UAT door and kick plates ready for the vehicle to be painted.
- 4.25.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.26 UAT Exterior Wall

- 4.26.1 Prepare the UAT exterior wall, control pushbuttons, bezels and kick plates ready for the vehicle to be painted.
- 4.26.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.27 Door Control Pushbuttons

- 4.27.1 Protect the interior pushbuttons ready for the vehicle to be painted.
- 4.27.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.28 Door Control Pushbutton Mounting Plate

- 4.28.1 Protect the door control pushbutton mounting plate ready for the vehicle to be painted.
- 4.28.2 Complete Appendix B Modification and Testing Sign-Off Sheet.



4.29 No.1 and No.2 End Gangway Bulkhead Panels

- 4.29.1 Prepare the No.1 and No.2 end gangway bulkhead panels ready for the vehicle to be painted.
- 4.29.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.30 Passenger Counting Sensor





Figure 7: Passenger Counting Sensor

- 4.30.1 Refer to Figure 7. Protect the passenger counting sensors for the vehicle to be painted.
- 4.30.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.31 Draughtscreen Panels

- 4.31.1 Prepare the draughtscreen panels ready for the vehicle to be painted.
- 4.31.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.32 Draughtscreen Moulding

- 4.32.1 Prepare the draughtscreen moulding ready for the vehicle to be painted.
- 4.32.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.33 Door Coving

- 4.33.1 Prepare the door coving ready for the vehicle to be painted.
- 4.33.2 Complete Appendix B Modification and Testing Sign-Off Sheet.



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4.34 Litter Bins



Figure 8: Litter Bin

- 4.34.1 Refer to Figure 8. Prepare the litter bin for the vehicle to be painted.
- 4.34.2 Complete Appendix B Modification and Testing Sign-Off Sheet.



4.35 Fire Extinguisher Door

Figure 9: Fire Extinguisher Cover

- 4.35.1 Refer to Figure 9. Prepare the fire extinguisher door for the vehicle to be painted.
- 4.35.2 Complete Appendix B Modification and Testing Sign-Off Sheet.



4.36 Inner Leaves of Exterior Doors

- 4.36.1 Prepare the inner leaves of the exterior doors ready for the vehicle to be painted.
- 4.36.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.37 Bodyside Door Mouldings

- 4.37.1 Prepare the bodyside door mouldings on the vertical edge of the draughtscreen ready for the vehicle to be painted.
- 4.37.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.38 Draughtscreen Kick Plates (Vestibule Side)

- 4.38.1 Protect the draughtscreen kick plates ready for the vehicle to be painted.
- 4.38.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.39 Door Header Panel

- 4.39.1 Prepare the door header panel ready for the vehicle to be painted.
- 4.39.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.40 Under Seat Heaters



Figure 10: Under Seat Heater

- 4.40.1 Refer to Figure 10. Protect the under seat heaters ready for the vehicle to be painted.
- 4.40.2 Complete Appendix B Modification and Testing Sign-Off Sheet.



4.41 Seat T-Slot Cover Trim

- 4.41.1 Remove the seat T-slot cover trim and paint.
- 4.41.2 Prepare the area ready for the vehicle to be painted.
- 4.41.3 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.42 Dado Panels

- 4.42.1 Prepare the dado panels ready for the vehicle to be painted.
- 4.42.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.43 Dado Ducting

- 4.43.1 Prepare the dado ducting ready for the vehicle to be painted.
- 4.43.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.44 Waist Rail

- 4.44.1 Prepare the waist rail ready for the vehicle to be painted.
- 4.44.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.45 Window Panels

- 4.45.1 Prepare the window panels ready for the vehicle to be painted.
- 4.45.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.46 Window Panel Trim Strips

- 4.46.1 Prepare the window panel trim strips ready for the vehicle to be painted.
- 4.46.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.47 Rack Mounted Enclosures

- 4.47.1 Protect the rack mounted enclosures for the vehicle to be painted.
- 4.47.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

4.48 No.1 and No.2 End Gangway Door

- 4.48.1 Prepare the No.1 and No.2 end gangway door ready for the vehicle to be painted.
- 4.48.2 Complete Appendix B Modification and Testing Sign-Off Sheet.



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5. DMSA AND DMSB – VEHICLE PREPARATION

NOTE: All items that are being stripped to be powder coated must be removed from the vehicle.

5.1 Seat Preparation

Refer to IG6607 and IS6515.

5.1.1 Seat Cushions

- 5.1.1.1 Remove the cushions from all the seats and send for refurbishment in accordance with document PB/23/022/002.
- 5.1.1.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.1.2 Seat Shell and Pedestals

- 5.1.2.1 Remove the seat shells and pedestal assemblies and send for refurbishment in accordance with document PB/23/022/002.
- 5.1.2.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.2 Driver's and Non-Driver's Seat Preparation

- 5.2.1 Refer to IG6609. Remove the driver's and non-driver's seat and send for refurbishment in accordance with document PB/23/022/002.
- 5.2.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.3 No.1 Cab Door Handle

- 5.3.1 Remove the No.1 end cab door handles, retain all fixings.
- 5.3.2 Send the No.1 end cab door handles and send for refurbishment in accordance with document PB/23/022/002.
- 5.3.3 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.4 No.2 End Gangway Door Handle

- 5.4.1 Remove the No.2 end gangway door handle, retain all fixings.
- 5.4.2 Send the No.2 end gangway door handle and send for refurbishment in accordance with document PB/23/022/002.
- 5.4.3 Complete Appendix B Modification and Testing Sign-Off Sheet.



5.5 Draughtscreen Grab Poles

- 5.5.1 Refer to II1002. Remove the draughtscreen grab poles, retain all the fixings.
- 5.5.2 Send the draughtscreen grab pole and send for refurbishment in accordance with document PB/23/022/002.
- 5.5.3 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.6 Light Diffusers

NOTE: LED lights are to be replaced, refer to PB/MP/2346.

- 5.6.1 Remove the light diffusers and retain any fixings.
- 5.6.2 Protect the area ready for the vehicle to be painted.
- 5.6.3 Refer to Step 9.2 to deep clean the light diffusers.
- 5.6.4 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.7 Luggage Rack Grab Rails

- 5.7.1 Refer to II1007. Remove the grab rails from the luggage rack, retain all the fixings.
- 5.7.2 Send the luggage rack grab rails and send for refurbishment in accordance with document PB/23/022/002.
- 5.7.3 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.8 Labels

- 5.8.1 Remove all the interior labels on the vehicle, use a label adhesive remover where required.
- 5.8.2 Complete Appendix B Modification and Testing Sign-Off Sheet.



5.9 Floor Covering

- 5.9.1 Remove the vinyl flooring.
- 5.9.2 Scrape floor back to the wood and metal.

NOTE: Replace the wood flooring where necessary.

- 5.9.3 Sand the floorboards to remove any traces of adhesive.
- 5.9.4 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.10 Passenger Counting Sensor



Figure 11: Passenger Counting Sensor

- 5.10.1 Refer to Figure 11. Protect the passenger counting sensors for the vehicle to be painted.
- 5.10.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.11 Draughtscreen Panels

- 5.11.1 Prepare the draughtscreen panels ready for the vehicle to be painted.
- 5.11.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.12 Draughtscreen Moulding

- 5.12.1 Prepare the draughtscreen moulding ready for the vehicle to be painted.
- 5.12.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.13 Door Coving

- 5.13.1 Prepare the door coving ready for the vehicle to be painted.
- 5.13.2 Complete Appendix B Modification and Testing Sign-Off Sheet.



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5.14 Litter Bins



Figure 12: Litter Bin

- 5.14.1 Refer to Figure 12. Prepare the litter bin for the vehicle to be painted.
- 5.14.2 Complete Appendix B Modification and Testing Sign-Off Sheet.



5.15 Fire Extinguisher Door

- Figure 13: Fire Extinguisher Cover
- 5.15.1 Refer to Figure 13. Prepare the fire extinguisher door for the vehicle to be painted.
- 5.15.2 Complete Appendix B Modification and Testing Sign-Off Sheet.



5.16 Inner Leaves of Exterior Doors

- 5.16.1 Prepare the inner leaves of the exterior doors ready for the vehicle to be painted.
- 5.16.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.17 Bodyside Door Mouldings

- 5.17.1 Prepare the bodyside door mouldings on the vertical edge of the draughtscreen ready for the vehicle to be painted.
- 5.17.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.18 Door Control Pushbuttons

- 5.18.1 Protect then cover the door control pushbuttons ready for the vehicle to be painted.
- 5.18.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.19 Door Control Pushbutton Mounting Plate

- 5.19.1 Protect the pushbutton mounting plate ready for the vehicle to be painted.
- 5.19.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.20 Door Header Panel

- 5.20.1 Prepare the door header panel ready for the vehicle to be painted.
- 5.20.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.21 Under Seat Heaters



Figure 14: Under Seat Heater

5.21.1 Refer to Figure 14. Protect the under seat heaters ready for the vehicle to be painted.



5.21.2 Complete Appendix B - Modification and Testing Sign-Off Sheet.

5.22 Seat T-Slot Cover Trim

- 5.22.1 Remove the seat T-slot cover trim and paint.
- 5.22.2 Prepare the area ready for the vehicle to be painted.
- 5.22.3 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.23 Dado Panels

- 5.23.1 Prepare the dado panels ready for the vehicle to be painted.
- 5.23.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.24 Dado Ducting

- 5.24.1 Prepare the dado ducting ready for the vehicle to be painted.
- 5.24.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.25 Waist Rail

- 5.25.1 Prepare the waist rail ready for the vehicle to be painted.
- 5.25.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.26 Window Panels

- 5.26.1 Prepare the window panels ready for the vehicle to be painted.
- 5.26.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.27 Window Panel Trim Strips

- 5.27.1 Prepare the window panel trim strips ready for the vehicle to be painted.
- 5.27.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.28 Side Ceiling Panels

- 5.28.1 Prepare the side ceiling panels ready for the vehicle to be painted.
- 5.28.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.29 Centre Ceiling Panels

- 5.29.1 Prepare the centre ceiling panels ready for the vehicle to be painted.
- 5.29.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.30 Ceiling Panel Trim Strips

- 5.30.1 Prepare the ceiling panel trim strips ready for the vehicle to be painted.
- 5.30.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.31 Internal Antenna

- 5.31.1 Protect the internal antenna ready for the vehicle to be painted.
- 5.31.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.32 Door Pocket and Header

- 5.32.1 Prepare the door pocket and header ready for the vehicle to be painted.
- 5.32.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.33 No.2 End Bulkhead Panels

- 5.33.1 Prepare the No.2 end bulkhead panels ready for the vehicle to be painted.
- 5.33.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.34 No.2 End Gangway Door

- 5.34.1 Prepare the No.2 end gangway door ready for the vehicle to be painted.
- 5.34.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.35 No.1 End Bulkhead Panels

- 5.35.1 Prepare the No.1 end bulkhead panels ready for the vehicle to be painted.
- 5.35.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.36 Cab Door (Saloon Side)

- 5.36.1 Prepare the cab door saloon side ready for the vehicle to be painted.
- 5.36.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.37 Draughtscreen Panel (Saloon Side)

- 5.37.1 Prepare the draughtscreen panel saloon side ready for the vehicle to be painted.
- 5.37.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.38 PIS Units

- 5.38.1 Protect the PIS units ready for the vehicle to be painted.
- 5.38.2 Complete Appendix B Modification and Testing Sign-Off Sheet.



5.39 Luggage Rack Brackets

- 5.39.1 Prepare the luggage rack brackets ready for the vehicle to be painted.
- 5.39.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.40 Luggage Rack Panels and End Sections

- 5.40.1 Prepare the luggage rack panels and end sections ready for the vehicle to be painted.
- 5.40.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

5.41 Rack Mounted Enclosures

- 5.41.1 Prepare the rack mounted enclosures for the vehicle to be painted.
- 5.41.2 Complete Appendix B Modification and Testing Sign-Off Sheet.



6. PTS - VEHICLE PAINT

- 6.1 Refer to all of Section 4 and paint all the 'prepared ready for painting' items in the PTS vehicles in accordance with document PB/23/022/002.
- 6.2 Complete Appendix B Modification and Testing Sign-Off Sheet.



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7. DMSA AND DMSB - VEHICLE PAINT

- 7.1 Refer to all of Section 5 and paint all the 'prepared ready for painting' items in the DMSA and DMSB vehicles in accordance with document PB/23/022/002.
- 7.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

8. PTS - VEHICLE CLEAN

8.1 Full Vehicle

- 8.1.1 Carefully remove all the materials used to prepare the vehicle for paint.
- 8.1.2 Fully clean the PTS vehicle.
- 8.1.3 Deep clean the under seat heaters.
- 8.1.4 Refer to HH5040. Deep clean the three heater grilles removed from the UAT area and place into Stores retain the fixings.
- 8.1.5 Complete Appendix B Modification and Testing Sign-Off Sheet.

8.2 Light Diffusers

- 8.2.1 Refer to EL0814. Deep clean the light diffusers.
- 8.2.2 Complete Appendix B Modification and Testing Sign-Off Sheet.



9. DMSA AND DMSB - VEHICLE CLEAN

9.1 Full Vehicle

- 9.1.1 Carefully remove all the materials used to prepare the vehicle for paint.
- 9.1.2 Fully clean the DMSA and DMSB vehicles.
- 9.1.3 Deep clean the under seat heaters.
- 9.1.4 Complete Appendix B Modification and Testing Sign-Off Sheet.

9.2 Light Diffusers

- 9.2.1 Refer to EL0814. Deep clean the light diffusers.
- 9.2.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

10. PTS - MECHANICAL INSTALLATION

10.1 PTS Floor Covering

Refer to IF0200.



Figure 15: Saloon Floor Plan

10.1.1 Trim and lay the vinyl flooring (2) in the saloon areas.

CAUTION: Take care not to tear the vinyl floor when it is being trimmed.

10.1.2 Secure the vinyl flooring in place with adhesive (3), weld rods (4) and sealant (5).



Figure 16: Vestibule Floor Plan

10.1.3 Trim and lay the vinyl flooring (1) in the two vestibule areas.

CAUTION: Take care not to tear the vinyl floor when it is being trimmed.

- 10.1.4 Secure the vinyl flooring in place with adhesive (3), weld rods (4) and sealant (5).
- 10.1.5 Complete Appendix B Modification and Testing Sign-Off Sheet.



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10.2 Wheelchair Backstop Frame



Figure 17: Wheelchair Backstop Frame

- 10.2.1 Refer to Figure 17. Secure the wheelchair backstop frame to the floor and the vestibule draughtscreen with the fixings from Steps 4.2.1 and 4.2.2. Torque to 56Nm.
- 10.2.2 Complete Appendix B Modification and Testing Sign-Off Sheet.
- 10.3 Speaker Panels



Figure 18: Speaker Panel

- 10.3.1 Refer to Figure 18. Install the four speakers into the speaker panels with the fixings from Step 4.4.2.
- 10.3.2 Secure the four speakers panels.
- 10.3.3 Complete Appendix B Modification and Testing Sign-Off Sheet.
10.4 Light Diffusers

- 10.4.1 Install the deep cleaned light diffusers.
- 10.4.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

10.5 No.1 and No.2 End Gangway Door Handles

- 10.5.1 Install the gangway door handle with the fixings from Step 4.7.1.
- 10.5.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

10.6 Draughtscreen Grab Poles

- 10.6.1 Refer to II1002. Install the draughtscreen grab poles with the fixings from Step 4.8.1.
- 10.6.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

10.7 Luggage Rack Grab Rails

- 10.7.1 Refer to II1007. Secure the grab rails to the luggage rack with the fixings from 4.6.1.
- 10.7.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

10.8 Heater Grilles

- 10.8.1 Install the three heater grilles with the fixings from Step 4.3.1.
- 10.8.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

10.9 Seats

10.9.1 Tip-Up Seats

10.9.1.1 Refer to IG6607. Refit the tip-up seats.

10.9.1.2 Complete Appendix B - Modification and Testing Sign-Off Sheet.

10.9.2 Seat Shell and Pedestals

10.9.2.1 Refer to 2117609 and IS6436. Refit the seat shell and pedestals.

10.9.2.2 Complete Appendix B - Modification and Testing Sign-Off Sheet.

10.9.3 Seat Cushions

10.9.3.1 Install the refurbished cushions on to the seats.

10.9.3.2 Complete Appendix B - Modification and Testing Sign-Off Sheet.

10.10Seat T-Slot Cover Trim

10.10.1 Fit the seat T-slot cover trim into position.

10.10.2 Complete Appendix B - Modification and Testing Sign-Off Sheet.

10.11Labels

10.11.1 Refer to drawings 2121588 and 2121590. Install all the interior labels.

10.11.2 Complete Appendix B - Modification and Testing Sign-Off Sheet.



11. DMSA AND DMSB - MECHANICAL INSTALLATION

11.1 DMSA and DMSB Floor Covering



Figure 19: Saloon Floor Plan

11.1.1 Refer to IF0200. Trim and lay the vinyl flooring in the three saloon area.

CAUTION: Take care not to tear the vinyl floor when it is being trimmed.

11.1.2 Secure the vinyl flooring in place with adhesive (3), weld rods (4) and sealant (5).

No.1 END			No.2 END

Figure 20: Vestibule Floor Plan

11.1.1 Trim and lay the vinyl flooring (1) in the two vestibule areas.

CAUTION: Take care not to tear the vinyl floor when it is being trimmed.

- 11.1.2 Secure the vinyl flooring in place with adhesive (3), weld rods (4) and sealant (5).
- 11.1.3 Complete Appendix B Modification and Testing Sign-Off Sheet.

11.2 Light Diffusers

NOTE: LED lights are to be replaced, refer to PB/MP/2346.

- 11.2.1 Install the deep cleaned light diffusers with the fixings from Step 0.
- 11.2.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

11.3 Cab and No.2 End Door Handle

- 11.3.1 Install the cab and No.2 end door handle with the fixings from Steps 5.3 and 5.4.
- 11.3.2 Complete Appendix B Modification and Testing Sign-Off Sheet.



11.4 Draughtscreen Grab Poles

- 11.4.1 Refer to II1007. Install the draughtscreen grab poles with the fixings from Step 5.5.1.
- 11.4.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

11.5 Luggage Rack Grab Rails

- 11.5.1 Refer to II1007. Secure the grab rails to the luggage rack with the fixings from 5.7.1.
- 11.5.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

11.6 Seats

Refer to drawing 2117609 and VOI IS6436.

11.6.1 Seat Shell and Pedestals

- 11.6.1.1 Refer to 2117609 and IS6436. Refit the seat shell and pedestals.
- 11.6.1.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

11.6.2 Seat Cushions

- 11.6.2.1 Install the refurbished cushions on to the seats.
- 11.6.2.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

11.7 Seat T-Slot Cover Trim

- 11.7.1 Fit the seat T-slot cover trim into position.
- 11.7.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

11.8 Driver's and Non-Driver's Seat

- 11.8.1 Refer to IG6609. Install the driver's and non-driver's seat.
- 11.8.2 Complete Appendix B Modification and Testing Sign-Off Sheet.

11.9 Labels

- 11.9.1 Refer to drawings 2121587 and 2121589. Install all the interior labels.
- 11.9.2 Complete Appendix B Modification and Testing Sign-Off Sheet.



12. PTS - VEHICLE CLEAN

- 12.1 Fully clean the PTS vehicle.
- 12.2 Complete Appendix B Modification and Testing Sign-Off Sheet.



13. DMSA AND DMSB - VEHICLE CLEAN

- 13.1 Fully clean the DMSA and DMSB vehicles.
- 13.2 Complete Appendix B Modification and Testing Sign-Off Sheet.



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14. TECHNICAL DATA

Special Tools			
Description	PADS Cat No.		
Scraper	Local Supply		
Sander	Local Supply		
Adhesive Cleaner (Mykal Part No. 67107)	-		



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15. MATERIALS

	Materials (including Lubricants)					
ltem	Description	Qty	OEM Part No.	PADS Cat No.		
1*	Saloon Altro Transflor Tungsten Floor Covering	A/R	Altro Tungsten Fog TUN203001	-		
2*	Vestibule Altro Transflor Tungsten Floor Covering	A/R	Altro Tungsten Arcus TUN20906	-		
3*	Flooring Adhesive	A/R	Altrofix A19	-		
4*	Flooring Weld Rods	A/R	Altro Weldrod	-		
5*	Flooring Sealant	A/R	AltroMastic 100	-		
6*	All Labels are listed on drawings	As Per Drawing	2121587	-		
			2121588	-		
			2121589	-		
			2121590	-		

* indicates 100% renew item



16. REFERENCE DRAWINGS/DOCUMENTS

16.1 Reference Drawings

The table below collates all Reference Drawings listed within this document.

Reference Drawings			
Drawing Number	Drawing Title		
2117609	PRM Seating Layout		
2121587	Emergency & Safety Internal Labels Class 323 DMSA & DMSB CAR		
2121588	Emergency & Safety Internal Labels Class 323 PTS CAR		
2121589	Internal Labels Class 323 DMSA & DMSB		
2121590	Interior Labels Class 323 PTS		

16.2 Reference Documents

The table below collates all Reference Documents listed within this document.

Reference Documents		
Document Number	Document Title	
PB/23/022/002	Northern Class 323 Interior Conversion – Schedule of Finishes	
PB/MP/2346	LED lighting installation	
PBVI323 C6	EL0814 – Light Diffusers – Remove, Clean and Refit	
PBVI323 C6	HH5040 – Bodyside Heaters – Clean, Check Operation and Replace Covers	
PBVI323 C6	IF0200 – Floor Covering	
PBVI323 C6	IG6607 – Tip-up Seat – Examine	
PBVI323 C6	IG6609 – Driver's Seat – Change	
PBVI323 C6	II1002 – Vertical Grab Poles – Inspect	
PBVI323 C6	II1007 – Saloon and Vestibule Grabrails – Inspect	
PBVI323 C6	IS6515 – Passenger Seats – Examine	
PBVI323 C6	IS6436 – Passenger Seats – Refit	



17. REVISION RECORD

The table below summarises any changes introduced in the current issue of this document.

Section	Change	Change Category	Reason for Change
All	New document	Engineering Change	

This Revision Record was last updated on 18 January 2024.

The coding system used in the 'Change Category' column provides at-a-glance information on the type of change as defined thus:

Change Category	Definition
Engineering Change	This change either completes an action from an existing
	Engineering Change or needs to be supported by a new
	Engineering Change.
Clarification	This change has made the document easier to understand.
Correction	This change has corrected an error in the document.
Omission	This change has added information that was previously missing
	from the document.
Editorial	Grammatical and format changes that are not covered by any
	other category. This includes consequential changes that result
	from corrections, clarifications or omissions elsewhere.



18. APPENDIX INDEX

Appendix A	Handover To Modification Team Certificate

- Appendix B Modification and Testing Sign-Off Sheet
- Appendix C Tooling Calibration
- Appendix D Handover Record Sheet



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APPENDIX A HANDOVER TO MODIFICATION TEAM CERTIFICATE

Vehicle No.:

Pre-Existing defects and/or faults (including systems) in modification areas

Handover of Vehicle to Modification Team

Checked By:			
Name (Depot Supervisor)		Data	
Signature		Date	

Accepted By:			
Name (Mod Team)		Date	
Signature		Date	



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APPENDIX B MODIFICATION AND TESTING SIGN-OFF SHEET

Vehicle No.:

Work Completed (Initial appropriate box when work is completed)

Section	Description	PTS	DMSA	DMSB
3.1	Vehicle Preparation			
4	PTS – Vehicle Preparation			
4.1	Seat			
4.1.1	Seat Cushions			
4.1.2	Seat Shell and Pedestals			
4.1.3	Tip-Up Seats			
4.2	Wheelchair Backstop Frame			
4.3	Heater Grille			
4.4	Speaker Panels			
4.5	Light Diffusers			
4.6	Luggage Rack Grab Rails			
4.7	No.1 and No.2 End Gangway Door Handle			
4.8	Draughtscreen Grab Poles			
4.9	Labels			
4.10	Floor Covering			

PID

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Section	Description	PTS	DMSA	DMSB
4.11	Spotlights			
4.12	PIS Units			
4.13	Side Ceiling Panels			
4.14	Centre Ceiling Panels			
4.15	Low Ceiling Panels			
4.16	Ceiling Panel Trim Strips			
4.17	Internal Antenna			
4.18	Door Pocket and Header			
4.19	Luggage Racks			
4.20	Luggage Rack Brackets			
4.21	Luggage Rack Panels and End Sections			
4.22	Call For Aid Housing			
4.23	Wheelchair Ramp Storage Cupboard			
4.24	Cupboard Door Outer Surface (Rear of UAT)			
4.25	UAT Door			
4.26	UAT Exterior Wall			
4.27	Door Control Pushbuttons			

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Section	Description	PTS	DMSA	DMSB
4.28	Door Control Pushbutton Mounting Plate			
4.29	No.1 and No.2 End Gangway Bulkhead Panels			
4.30	Passenger Counting Sensor			
4.31	Draughtscreen Panels			
4.32	Draughtscreen Moulding			
4.33	Door Coving			
4.34	Litter Bins			
4.35	Fire Extinguisher Door			
4.37	Bodyside Door Mouldings			
4.38	Draughtscreen Kick Plates (Vestibule Side)			
4.39	Door Header Panel			
4.40	Under Seat Heaters			
4.41	Seat T-Slot Cover Trim			
4.42	Dado Panels			
4.43	Dado Ducting			
4.44	Waist Rail			
4.45	Window Panels			



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Section	Description	PTS	DMSA	DMSB
4.46	Window Panel Trim Strips			
4.47	Rack Mounted Enclosures			
4.48	No.1 and No.2 End Gangway Door			
5	DMSA and DMSB – Vehicle Preparation			
5.1	Seat Preparation			
5.1.1	Seat Cushions			
5.1.2	Seat Shell and Pedestals			
5.2	Driver's and Non-Driver's Seat Preparation			
5.3	No.1 Cab Door Handle			
5.4	No.2 End Gangway Door Handle			
5.5	Draughtscreen Grab Poles			
5.6	Light Diffusers			
5.7	Luggage Rack Grab Rails			
5.8	Labels			
5.9	Floor Covering			
5.10	Passenger Counting			
5.11	Draughtscreen Panels			



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Section	Description	PTS	DMSA	DMSB
5.12	Draughtscreen Moulding			
5.13	Door Coving			
5.14	Litter Bins			
5.15	Fire Extinguisher Door			
5.16	Inner Leaves of Exterior Doors			
5.17	Bodyside Door Mouldings			
5.18	Door Control Pushbuttons			
5.19	Door Control Pushbutton Mounting Plate			
5.20	Door Header Panel			
5.21	Under Seat Heaters			
5.22	Seat T-Slot Cover Trim			
5.23	Dado Panels			
5.24	Dado Ducting			
5.25	Waist Rail			
5.26	Window Panels			
5.27	Window Panel Trim Strips			
5.28	Side Ceiling Panels			



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Section	Description	PTS	DMSA	DMSB
5.29	Centre Ceiling Panels			
5.30	Ceiling Panel Trim Strips			
5.31	Internal Antenna			
5.32	Door Pocket and Header			
5.33	No.2 End Bulkhead Panels			
5.34	No.2 End Gangway Door			
5.36	Cab Door (Saloon Side)			
5.37	Draughtscreen Panel (Saloon Side)			
5.38	PIS Units			
5.39	Luggage Rack Brackets			
5.40	Luggage Rack Panels and End Sections			
5.41	Rack Mounted Enclosures			
6	PTS - Vehicle Paint			
7	DMSA and DMSB - Vehicle Paint			
8	PTS - Vehicle Clean			
8.1	Full Vehicle			
8.1.1	Carefully remove all the materials used to prepare the vehicle for paint.			



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Section	Description	PTS	DMSA	DMSB
8.1.2	Fully clean the PTS vehicle.			
8.1.3	Deep clean the under seat heaters.			
8.1.4	Refer to HH5040. Deep clean the three heater grilles removed from the UAT area and place into Stores retain the fixings.			
8.2	Light Diffusers			
9	DMSA and DMSB - Vehicle Clean			
9.1	Full Vehicle			
9.1.1	Carefully remove all the materials used to prepare the vehicle for paint.			
9.1.2	Fully clean the DMSA and DMSB vehicles.			
9.2	Light Diffusers			
10	PTS - Mechanical Installation			
10.1	PTS Floor Covering			
10.2	Wheelchair Backstop Frame			
10.3	Speaker Panels			
10.4	Light Diffusers			
10.5	No.1 and No.2 End Gangway Door Handle			
10.6	Draughtscreen Grab Poles			
10.7	Luggage Rack Grab Rails			

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Section	Description	PTS	DMSA	DMSB
10.8	Heater Grilles			
10.9	Seats			
10.9.1	Tip-Up Seats			
10.9.2	Seat Shell and Pedestals			
10.9.3	Seat Cushions			
10.10	Seat T-Slot Cover Trim			
10.11	Labels			
11	DMSA and DMSB - Mechanical Installation			
11.1	DMSA and DMSB Floor Covering			
11.2	Light Diffusers			
11.3	Cab and No.2 End Door Handle			
11.4	Draughtscreen Grab			
11.5	Luggage Rack Grab Rails			
11.6	Seats			
11.6.1	Seat Shell and Pedestals			
11.6.2	Seat Cushions			
11.7	Seat T-Slot Cover Trim			

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Section	Description	PTS	DMSA	DMSB
11.8	Driver's and Non-Driver's Seat			
11.9	Labels			
12	PTS - Vehicle Clean			
13	DMSA and DMSB - Vehicle Clean			



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COMMENTS



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APPENDIX C TOOLING CALIBRATION RECORD

Vehicle No.:

ТооІ Туре	Serial No.	Calibration Due Date

		Site Supervisor Signature:
List of Tooling Completed By:	Date Completed:	
		Date:



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APPENDIX D HANDOVER RECORD SHEET

Vehicle No.:

Existing known defects with vehicle; agreed faults/defects:

VEHICLE RELEASED BY:

SIGN:	DATE:	
PRINT:	COMPANY:	
VEHICLE ACCEPTED BY:		
SIGN:	DATE:	
PRINT:	COMPANY:	
VEHICLE LOCATION:		
DEPOT:	ROAD:	
RETURN COMPLETED FORM TO:		
Name:		

Job Title: