





TECHNICAL BULLETIN: Vehicle Signage - Replace IBC-AVENTRA-0300-00-00-14-920-A-A		Doc Number: 0067-AVT-TB-345
Author: Nuno Saraiva	Position: Field Maintenance Engineer	Date: 14/05/2021

Technical Bulletin Authorisations:	
Checked By	
<div>Signature</div> <div>17/05/2021</div> <div>  </div> <div>Signed by: Garcia del Valle, Guillermo - quibmart</div>	<div>Position</div> <div>Field Maintenance Engineer</div>
Formal Project Review	
Signature	Position
<div>19/05/2021</div> <div>  </div> <div>Signed by: Granger, James - jaqrangle</div>	Engineering Manager
<div>  </div>	Materials Manager
<div>  </div>	Depot Operations Manager
*NOTE: Non Significant Change: One Signatory / Significant Change: Three Signatories	

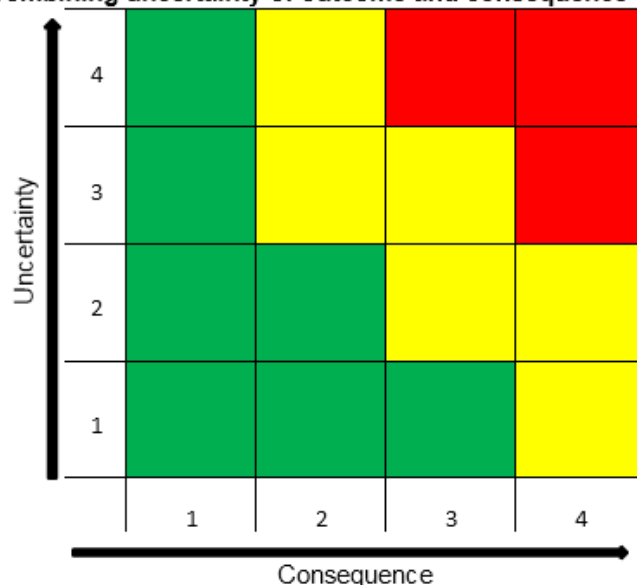
Background / Reason for change

Since the pandemic began MTREL have noticed an increase in customers putting their feet on the seats in front of them (banks of four seats) on the 345 unit.

Secondly, Heathrow Operations have stipulated a requirement to mirror current Class 360 signage regarding PTI concerns.

Fleet :	345
Document Number:	IBC-AVENTRA-0300-00-00-14-920-A-A.

Combining uncertainty of outcome and consequence of failure



Legend	Consequence		Uncertainty	
	1 = Insignificant		1 = Very low	
 	Significant Change		2 = Low	
 	Apply additional Criteria		3 = Medium	
 	Non-significant Change		4 = High	

Initial Assessment	Consequence	2	Uncertainty	2	Risk Level	Green
Note:- If initial risk assessment is in Yellow Band please use Table 1 below to determine whether a change is Significant or Non-Significant						
Mitigations	Installing a proposed "Please keep your feet off seats" label which will help remind customers to be considerate and stop problem behaviour. One Label is proposed for each bank of four seats. These are present in PMS, MS1, MS2 and MS3 cars. Secondly, install a "Mind the gap" label on the interior of the left-hand door leaf in each doorway.					
Final Assessment	Consequence	2	Uncertainty	1	Risk Level	Green
Significant Change	No					

Table 1 (Common Safety Methods Assessment)

NOTE: use only if initial risk assessment falls under “Apply Additional Criteria”, i.e. yellow band

Additionality	Are there any other recent safety related modifications in this area which should be considered in the scope of this CSM RA assessment? If yes then these must be considered in the assessments below.	N/A
Novelty Is the change novel to the railway sector or to Bombardier?	Not novel (similar designs already exist within Bombardier and the railway sector) = 1 Partially novel (parts of the proposed change are new to Bombardier and the railway) = 2 High degree of novelty (completely new to Bombardier and the railway sector) = 3	N/A
Uncertainty of Outcome Is the change complex?	The likelihood that the proposed change, once implemented, will or will not behave as predicted. The change is certain (not complex) = 1 The change has some areas that have a degree of uncertainty = 2 The change is highly complex = 3	N/A
Failure Consequence What is the credible worst-case scenario in the event of failure of the system under assessment?	Insignificant (possible minor injury) = 1 Marginal (multiple minor or single major injury) = 2 Critical (multiple major injuries and /or single fatality) = 3 Catastrophic (multiple fatalities and / or multiple severe injuries) = 4	N/A
Risk Score: Calculate by Multiplying the Scores Above (Novelty x Complexity x Failure Consequence)		N/A
Monitoring & Reversibility	Is it possible and practicable to introduce a system of monitoring that gives sufficient warning early enough to permit effective intervention to prevent or mitigate any hazard arising from the change I have made? (answer ‘No’ if no to either of these points)	N/A
Is the Change Significant Under CSM?	If risk score is < 10 then not significant under CSM (answer = No) If risk score is > 10 & Monitoring & Reversibility = ‘Yes’ then not significant under CSM (answer = No) If risk score is > 10 & Monitoring & Reversibility = ‘No’ then significant under CSM (answer = Yes)	N/A
if the change is classed as “Significant” then a formal CSM risk assessment must be completed to accompany the proposed modification or change.		
Comments/ Justifications:	N/A	


Warranty Review

Warranty affected (Yes/No)	No	If Warranty affected has Supplier agreed changes (Yes/No)	N/A	If Warranty affected has SIM agreed changes (Yes/No)	N/A
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Manuals

Technical Publications manual available (Yes/No)*	Yes	If Yes is manual on Trainmate (Yes/No)	Yes		
*If Yes attach a copy of manual to Section A below, If No Fill in Section B with the Method of completing the task					
Changes to Tooling (Yes/No)	No	Changes to Material (Yes/No)	Yes	Changes to Safety Condition (Yes/No)	No

Customer Approval

Signature	Position	Date
X 	S Wormald Assistant Fleet Engineer	21/05/2021
Customer Comments:		

Applicable Car(s): ALL

Equipment Condition(s)

SAFETY CONDITION 3

NOT TO BE MOVED boards or red flags - Installed

Battery isolation switches - On

High voltage power (pantograph) - Isolated and locked

Brakes - Can be operated

Power doors - Can be operated

Shore air supply - Permitted

Horns - Can be tested



Reference Doc(s) None.

Tools:

Item No.	Description	Part No.	Quantity
1	Spray bottle, 500 ml	Local supply	1
2	3M squeegee	Local supply	1
3	Metal ruler, 30 cm	Local supply	1

Special Equipment:

Item No.	Description	Part No.	Quantity
1	Heat gun	Local supply	1

Supplies:

Item No.	Description	Part No.	Quantity
(1-1)	Label, CCTV	3EER400022-1696	1
(1-2)	Label, crew door lock	3EER400021-7716	1
(1-3)	Label, hi-vis clothing	3EER400018-6147	1
(1-4)	Label, emergency exit	3EER400022-2137	1
(1-5)	Label, locked	3EER400022-1698	3

Item No.	Description	Part No.	Quantity
(1-6)	Label, unlocked	3EER400022-1697	3
(1-7)	Label, cab emergency	3EER400018-8294	1
(1-8)	Label, AWS reset fluorescent	3EER400026-1783	1
(1-9)	Label, footrest setting	3EER400026-9116	1
(2-1)	Label, emergency exit	3EER400022-2137	1
(2-2)	Label, hi-vis clothing	3EER400018-6147	1
(2-3)	Label, crew door lock	3EER400021-6345	1
(2-4)	Label, emergency exit	3EER400031-1307	1
(3-1)	Label, fire extinguisher	3EER400018-6146	1
(3-2)	Label, unit number	3EER400018-6148	1
(3-3)	Label, maximum speed	3EER400018-6150	1
(3-4)	Label, no.1 unit end	3EER400019-1558	1
(3-5)	Label, vehicle number	3EER400018-6149	1
(3-6)	Label, emergency stop	3EER400027-3282	1
(4-1)	Label, danger overhead	3EER400018-6155	4
(4-2)	Label, do not board	3EER400018-6156	12
(4-3)	Label, emergency door	3EER400018-6174	1
(4-4)	Label, emergency door	3EER400018-6175	5
(4-5)	Label, OLE warning line	3EER400015-5031	1
(4-6)	Label, DMS-1	3EER400018-6158	2
(4-6)	Label, DMS-2	3EER400022-3730	2
(4-7)	Label, lifting point	3EER400018-8298	4
(4-8)	Label, lifting symbol	3EER400018-6160	4

Item No.	Description	Part No.	Quantity
(4-9)	Label, Elizabeth line	3EER400022-1237	4
(4-10)	Label, unit number	3EER400018-6159	2
(4-11)	Label, wheel no. 1	3EER400018-6178	1
(4-12)	Label, data panel	3EER400018-6163	1
(4-13)	Label, unit data panel (RLU)	3EER400018-8630	1
(4-13)	Label, unit data panel (FLU)	3EER400018-6161	1
(5-1)	Label, emergency door	3EER400018-6175	6
(5-2)	Label, do not board	3EER400018-6156	12
(5-3)	Label, OLE warning line	3EER400015-5031	1
(5-4)	Label, lifting point	3EER400018-8298	4
(5-5)	Label, PMS-1	3EER400022-3722	2
(5-5)	Label, PMS-2	3EER400022-3728	2
(5-6)	Label, lifting symbol	3EER400018-6160	4
(5-7)	Label, Elizabeth line	3EER400022-1237	4
(5-8)	Label, wheel no. 1	3EER400018-6178	1
(5-9)	Label, danger overhead	3EER400018-6155	4
(5-10)	Label, data panel	3EER400018-6164	1
(5-11)	Label, unit data panel (RLU)	3EER400018-8630	1
(5-11)	Label, unit data panel (FLU)	3EER400018-6161	1
(6-1)	Label, emergency door	3EER400018-6175	6
(6-2)	Label, do not board	3EER400018-6156	12
(6-3)	Label, OLE warning line	3EER400015-5031	1
(6-4)	Label, lifting point	3EER400018-8298	4

Item No.	Description	Part No.	Quantity
(6-5)	Label, MS1	3EER400022-3723	2
(6-5)	Label, MS2	3EER400022-3727	2
(6-6)	Label, lifting symbol	3EER400018-6160	4
(6-7)	Label, elizabeth line	3EER400022-1237	4
(6-8)	Label, wheel no. 1	3EER400018-6178	1
(6-9)	Label, danger overhead	3EER400018-6155	4
(6-10)	Label, data panel (MS1)	3EER400018-6165	1
(6-10)	Label, data panel (MS2)	3EER400018-6166	1
(6-11)	Label, unit data panel (RLU)	3EER400018-8630	1
(6-11)	Label, unit data panel (FLU)	3EER400018-6161	1
(7-1)	Label, emergency door	3EER400018-6175	6
(7-2)	Label, do not board	3EER400018-6156	12
(7-3)	Label, OLE warning line	3EER400015-5031	1
(7-4)	Label, lifting point	3EER400018-8298	4
(7-5)	Label, MS3-2	3EER400022-3726	2
(7-6)	Label, lifting symbol	3EER400018-6160	4
(7-7)	Label, elizabeth line	3EER400022-1237	4
(7-8)	Label, wheel no. 1	3EER400018-6178	1
(7-9)	Label, danger overhead	3EER400018-6155	4
(7-10)	Label, data panel	3EER400018-6167	1
(7-11)	Label, unit data panel (FLU)	3EER400018-6161	1
(8-1)	Label, emergency door	3EER400018-6175	6
(8-2)	Label, do not board	3EER400018-6156	6

Item No.	Description	Part No.	Quantity
(8-3)	Label, OLE warning line	3EER400015-5031	1
(8-4)	Label, lifting point	3EER400018-8298	4
(8-5)	Label, TS(W)	3EER400022-3725	2
(8-6)	Label, lifting symbol	3EER400018-6160	4
(8-7)	Label, wheelchair symbol	3EER400019-9483	6
(8-8)	Label, elizabeth line	3EER400022-1237	4
(8-9)	Label, wheel no. 1	3EER400018-6178	1
(8-10)	Label, data panel (RLU)	3EER400018-6168	1
(8-11)	Label, danger overhead	3EER400018-6155	4
(8-12)	Label, unit data panel (RLU)	3EER400018-8630	1
(8-12)	Label, unit data panel (FLU)	3EER400018-6161	1
(9-1)	Label, emergency door	3EER400018-6104	3
(9-2)	Label, obstructing doors (left)	3EER400019-9318	3
(9-3)	Label, selective door	3EER400021-7610	3
(9-4)	Label, obstructing doors (right)	3EER400019-9320	3
(9-5)	Label, passenger alarm	3EER400018-6097	2
(9-6)	Label, passenger emergency	3EER400020-7410	2
(9-7)	Label, priority seat	3EER400018-6134	3
(9-8)	Label, emergency alarm	3EER400018-6145	2
(9-9)	Label, EDCU position	3EER400021-6343	3
(9-10)	Label, emergency exit	3EER400031-1307	3
(9-11)	Label, door reference	3EER400020-8456	6
(9-12)	Label, emergency exit	3EER400031-1306	3

Item No.	Description	Part No.	Quantity
(9-13)	Label, keep clear of moving doors	3EER400031-0474	6
(9-14)	Label, passenger door interface highlight	3EER400031-0475	6
(9-15)	Label, mind the gap	Client Supply	6
(10-1)	Label, priority seat	3EER400018-6134	2
(10-2)	Label, emergency door	3EER400018-6104	3
(10-3)	Label, emergency alarm	3EER400018-6145	3
(10-4)	Label, obstructing doors (left)	3EER400019-9318	3
(10-5)	Label, selective door	3EER400021-7610	3
(10-6)	Label, obstructing doors (right)	3EER400019-9320	3
(10-7)	Label, passenger alarm	3EER400018-6097	1
(10-8)	Label, passenger emergency	3EER400020-7410	1
(10-9)	Label, EDCU position	3EER400021-6343	3
(10-10)	Label, emergency exit	3EER400031-1307	3
(10-11)	Label, door reference	3EER400020-8456	6
(10-12)	Label, emergency exit	3EER400031-1306	3
(10-13)	Label, keep clear of moving doors	3EER400031-0474	6
(10-14)	Label, passenger door interface highlight	3EER400031-0475	6
(10-15)	Label, mind the gap	Client Issued	6
(11-1)	Label, safety poster	3EER400018-6139	2
(11-2)	Label, DMS-1	3EER400018-6110	2
(11-2)	Label, DMS-2	3EER400022-3720	2
(11-3)	Label, general information poster	3EER400024-1329	2
(11-4)	Label, cab backwall	3EER400020-9503	1
(11-5)	Label, ladder removal	3EER400022-1699	1
(11-6)	Label, cupboard	3EER400018-6101	1

Item No.	Description	Part No.	Quantity
(11-7)	Label, general information	3EER400018-8579	1
(12-1)	Label, emergency door	3EER400018-6104	3
(12-2)	Label, emergency alarm	3EER400018-6145	3
(12-3)	Label, obstructing doors (left)	3EER400019-9318	3
(12-4)	Label, selective door	3EER400021-7610	3
(12-5)	Label, obstructing doors(right)	3EER400019-9320	3
(12-6)	Label, passenger alarm	3EER400018-6097	2
(12-7)	Label, passenger emergency	3EER400020-7410	2
(12-8)	Label, priority seat	3EER400018-6134	3
(12-9)	Label, EDCU Position	3EER400021-6343	3
(12-10)	Label, door Reference	3EER400020-8456	6
(12-11)	Label, emergency exit	3EER400031-1306	3
(12-12)	Label, emergency exit	3EER400031-1307	3
(12-13)	Label, keep clear of moving doors	3EER400031-0474	6
(12-14)	Label, passenger door interface highlight	3EER400031-0475	6
(12-15)	Label, please keep your feet off seats	Client supplied	4
(12-16)	Label, mind the gap	Client supplied	6
(13-1)	Label, priority seat	3EER400018-6134	3
(13-2)	Label, emergency door	3EER400018-6104	3
(13-3)	Label, emergency alarm	3EER400018-6145	3
(13-4)	Label, obstructing doors (left)	3EER400019-9318	3
(13-5)	Label, selective door	3EER400021-7610	3
(13-6)	Label, obstructing doors (right)	3EER400019-9320	3
(13-7)	Label, passenger alarm	3EER400018-6097	1
(13-8)	Label, passenger emergency	3EER400020-7410	1

Item No.	Description	Part No.	Quantity
(13-9)	Label, EDCU position	3EER400021-6343	3
(13-10)	Label, door reference	3EER400020-8456	6
(13-11)	Label, emergency exit	3EER400031-1306	3
(13-12)	Label, emergency exit	3EER400031-1307	3
(13-13)	Label, keep clear of moving doors	3EER400031-0474	6
(13-14)	Label, passenger door interface highlight	3EER400031-0475	6
(13-15)	Label, mind the gap	Client supplied	6
(13-16)	Label, please keep your feet off seats	Client supplied	4
(14-1)	Label, safety poster	3EER400018-6140	2
(14-2)	Label, PMS-1	3EER400022-3713	2
(14-3)	Label, identifier no. 1	3EER400019-1537	1
(14-4)	Label, general information poster	3EER400024-1329	2
(15-1)	Label, emergency door	3EER400018-6104	3
(15-2)	Label, emergency alarm	3EER400018-6145	3
(15-3)	Label, obstructing doors (left)	3EER400019-9318	3
(15-4)	Label, selective door	3EER400021-7610	3
(15-5)	Label, obstructing doors (right)	3EER400019-9320	3
(15-6)	Label, passenger alarm	3EER400018-6097	2
(15-7)	Label, passenger emergency	3EER400020-7410	2
(15-8)	Label, priority seat	3EER400018-6134	3

Item No.	Description	Part No.	Quantity
(15-9)	Label, EDCU position	3EER400021-6343	3
(15-10)	Label, door Reference	3EER400020-8456	6
(15-11)	Label, emergency exit	3EER400031-1306	3
(15-12)	Label, passenger door interface highlight	3EER400031-0475	6
(15-13)	Label, keep clear of moving doors	3EER400031-0474	6
(15-14)	Label, emergency exit	3EER400031-1307	3
(15-15)	Label, mind the gap	Client supplied	6
(15-16)	Label, please keep your feet off seats	Client supplied	4
(16-1)	Label, priority seat	3EER400018-6134	3
(16-2)	Label, emergency door	3EER400018-6104	3
(16-3)	Label, emergency alarm	3EER400018-6145	3
(16-4)	Label, obstructing doors (left)	3EER400019-9318	3
(16-5)	Label, selective door	3EER400021-7610	3
(16-6)	Label, obstructing doors (right)	3EER400019-9320	3
(16-7)	Label, passenger alarm	3EER400018-6097	1
(16-8)	Label, passenger emergency	3EER400020-7410	1
(16-9)	Label, EDCU position	3EER400021-6343	3
(16-10)	Label, door reference	3EER400020-8456	6
(16-11)	Label, emergency exit	3EER400031-1307	3
(16-12)	Label, passenger door interface highlight	3EER400031-0475	6
(16-13)	Label, keep clear of moving doors	3EER400031-0474	6
(16-14)	Label, emergency exit	3EER400031-1306	3
(16-15)	Label, mind the gap	Client supplied	6
(16-16)	Label, please keep your feet off seats	Client supplied	4
(17-1)	Label, safety poster	3EER400018-6140	2
(17-1)	Label, safety poster	3EER400018-6140	2
(17-2)	Label, MS1	3EER400022-3714	2

Item No.	Description	Part No.	Quantity
(17-2)	Label, MS2	3EER400022-3718	2
(17-3)	Label, identifier no. 1	3EER400019-1537	1
(17-4)	Label, general information poster	3EER400024-1329	2
(17-5)	Label, fire extinguisher	3EER400020-8766	1
(17-6)	Label, fire extinguisher	3EER400020-8771	1
(18-1)	Label, emergency door	3EER400018-6104	3
(18-2)	Label, emergency alarm	3EER400018-6145	3
(18-3)	Label, obstructing doors (left)	3EER400019-9318	3
(18-4)	Label, obstructing doors (right)	3EER400019-9320	3
(18-5)	Label, passenger alarm	3EER400018-6097	2
(18-6)	Label, passenger emergency	3EER400020-7410	2
(18-7)	Label, priority seat	3EER400018-6134	3
(18-8)	Label, selective door	3EER400021-7610	1
(18-9)	Label, EDCU position	3EER400021-6343	3
(18-10)	Label, door reference	3EER400020-8456	6
(18-11)	Label, passenger door interface highlight	3EER400031-0475	6
(18-12)	Label, emergency exit	3EER400031-1307	3
(18-13)	Label, keep clear of moving doors	3EER400031-0474	6
(18-14)	Label, emergency exit	3EER400031-1306	3
(18-15)	Label, please keep your feet off seats	Client supplied	4
(18-16)	Label, mind the gap	Client supplied	6
(19-1)	Label, priority seat	3EER400018-6134	3
(19-2)	Label, emergency door	3EER400018-6104	3
(19-3)	Label, emergency alarm	3EER400018-6145	3

Item No.	Description	Part No.	Quantity
(19-4)	Label, obstructing doors (left)	3EER400019-9318	3
(19-5)	Label, obstructing doors (right)	3EER400019-9320	3
(19-6)	Label, selective door	3EER400021-7610	1
(19-7)	Label, passenger alarm	3EER400018-6097	1
(19-8)	Label, passenger emergency	3EER400020-7410	1
(19-9)	Label, EDCU position	3EER400021-6343	3
(19-10)	Label, door reference	3EER400020-8456	6
(19-11)	Label, emergency exit	3EER400031-1306	3
(19-12)	Label, keep clear of moving doors	3EER400031-0474	6
(19-13)	Label, passenger door interface highlight	3EER400031-0475	6
(19-14)	Label, emergency exit	3EER400031-1307	3
(19-15)	Label, mind the gap	Client supplied	6
(19-16)	Label, please keep your feet off seats	Client supplied	4
(20-1)	Label, safety poster	3EER400018-6140	2
(20-2)	Label, MS3-1	3EER400022-3715	2
(20-2)	Label, MS3-2	3EER400022-3717	2
(20-3)	Label, identifier no. 1	3EER400019-1537	1
(20-4)	Label, general information poster	3EER400024-1329	2
(21-1)	Label, emergency door	3EER400018-6104	3
(21-2)	Label, emergency alarm	3EER400018-6145	3
(21-3)	Label, obstructing doors (left)	3EER400019-9318	3
(21-4)	Label, obstructing doors (right)	3EER400019-9320	3
(21-5)	Label, passenger alarm	3EER400018-6097	2
(21-6)	Label, passenger emergency	3EER400020-7410	2

Item No.	Description	Part No.	Quantity
(21-7)	Label, priority seat	3EER400018-6134	2
(21-8)	Label, selective door	3EER400021-7610	1
(21-9)	Label, call for aid	3EER400020-7411	2
(21-10)	Label, call for aid	3EER400018-6144	2
(21-11)	Label, wheelchair space	3EER400018-6124	2
(21-12)	Label, EDCU position	3EER400021-6343	3
(21-13)	Label, wheelchair ramp	3EER400018-8455	1
(21-14)	Label, door reference	3EER400020-8456	6
(21-15)	Label, emergency exit	3EER400031-1306	3
(21-16)	Label, emergency exit	3EER400031-1307	3
(21-17)	Label, cupboard	3EER400018-6101	1
(21-18)	Label, unlock rotate C	3EER400026-0814	2
(21-19)	Label, unlock rotate AC	3EER400026-0813	5
(21-20)	Label, keep clear of moving doors	3EER400031-0474	6
(21-21)	Label, passenger door interface highlight	3EER400031-0475	6
(21-22)	Label, mind the gap	Client Issued	6
(22-1)	Label, priority seat	3EER400018-6134	3
(22-2)	Label, emergency door	3EER400018-6104	3
(22-3)	Label, emergency alarm	3EER400018-6145	3
(22-4)	Label, obstructing doors (left)	3EER400019-9318	3
(22-5)	Label, obstructing doors (right)	3EER400019-9320	3
(22-6)	Label, selective door	3EER400021-7610	1
(22-7)	Label, passenger alarm	3EER400018-6097	1

Item No.	Description	Part No.	Quantity
(22-8)	Label, passenger emergency	3EER400020-7410	1
(22-9)	Label, call for aid	3EER400020-7411	2
(22-10)	Label, call for aid	3EER400018-6144	2
(22-11)	Label, wheelchair space	3EER400018-6124	2
(22-12)	Label, EDCU position	3EER400021-6343	3
(22-13)	Label, cupboard	3EER400018-6101	2
(22-14)	Label, door reference	3EER400020-8456	6
(22-15)	Label, emergency exit	3EER400031-1306	3
(22-16)	Label, keep clear of moving doors	3EER400031-0474	6
(22-17)	Label, passenger door interface highlight	3EER400031-0475	6
(22-18)	Label, emergency exit	3EER400031-1307	3
(22-19)	Label, unlock rotate C	3EER400026-0814	2
(22-20)	Label, unlock rotate AC	3EER400026-0813	5
(22-21)	Label, mind the gap	Client Supplied	6
(23-1)	Label, safety poster	3EER400018-6140	2
(23-2)	Label, TS(W)	3EER400022-3716	2
(23-3)	Label, identifier no. 1	3EER400019-1537	1
(23-4)	Label, general information poster	3EER400024-1329	2
(23-5)	Label, pull doors apart	3EER400018-6106	4
(23-6)	Label, wheelchair	3EER400022-1700	1
(23-7)	Label, saloon emergency	3EER400019-9324	1

Consumables:

Item No.	Description	Part No.	Quantity
1	Cleaner, Loctite 7070	400-0680-29	A/R
2	Cleaner, chemical surface	400-0111-64	A/R
3	Lint-free cloth	400-0520-16	A/R
4	Cleaner, mild detergent	3EEC200000 -5528	A/R
5	Scotch masking tape 3434, 25 mm wide	Local supply	A/R
6	Chinagraph pencil	Local supply	1

**WARNING****SAFETY**

IF THE CORRECT PERSONAL PROTECTIVE EQUIPMENT IS NOT WORN, PERSONAL INJURY COULD OCCUR.

THE LOCAL DEPOT PROCEDURES FOR THE UTILISATION OF PERSONAL PROTECTIVE EQUIPMENT MUST BE OBEYED.

**WARNING****ELECTROCUTION****RISK OF ELECTROCUTION.**

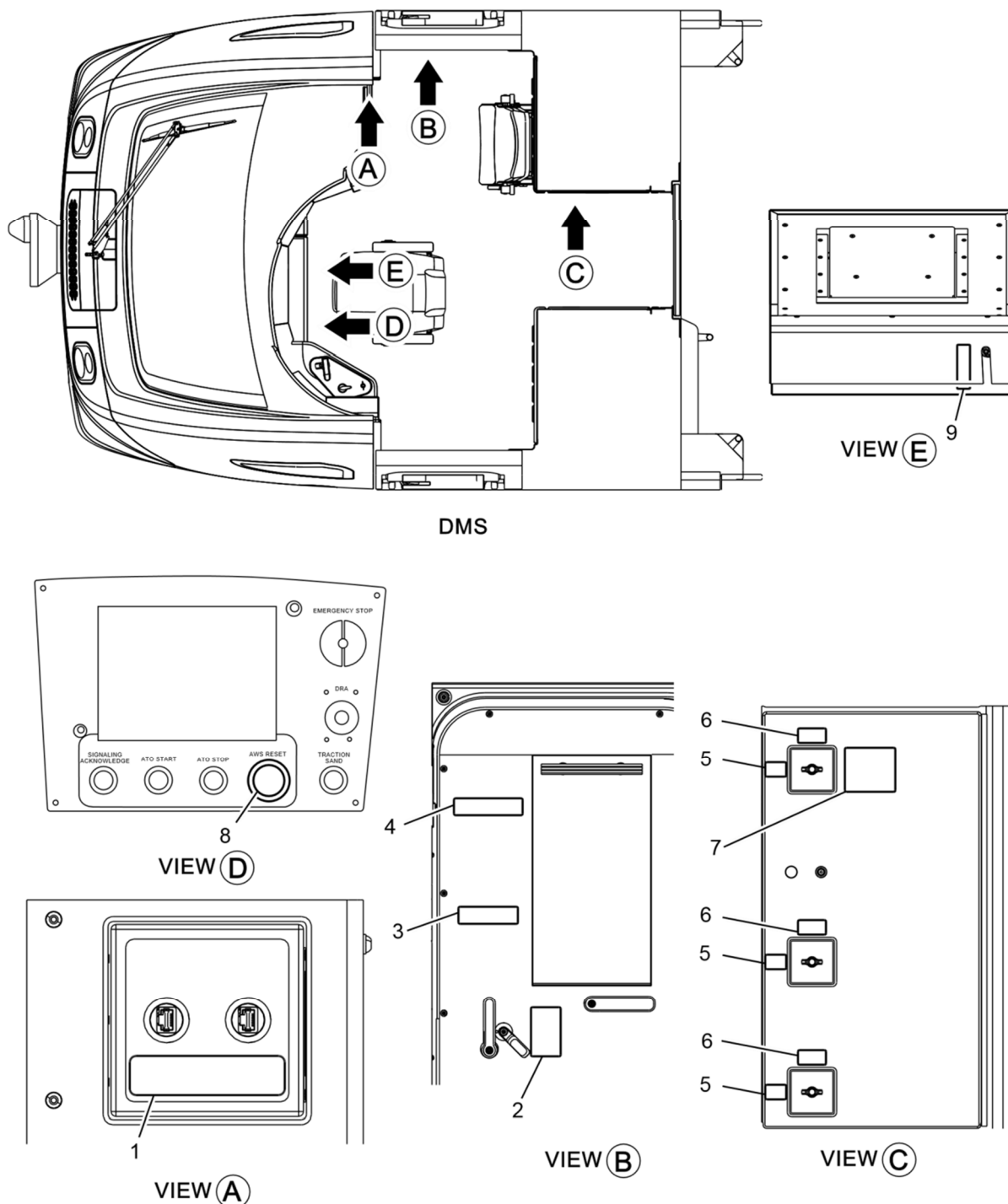
ALL OF THE ELECTRICAL ISOLATIONS MUST BE DONE IN ACCORDANCE WITH THE LOCAL DEPOT PROCEDURES.
FAILURE TO DO SO CAN CAUSE INJURY TO PERSONNEL.

**WARNING****ENTRAPMENT**

THE SPACE BETWEEN THE VEHICLES IS A TRAP HAZARD WHICH CAN CRUSH PERSONNEL.

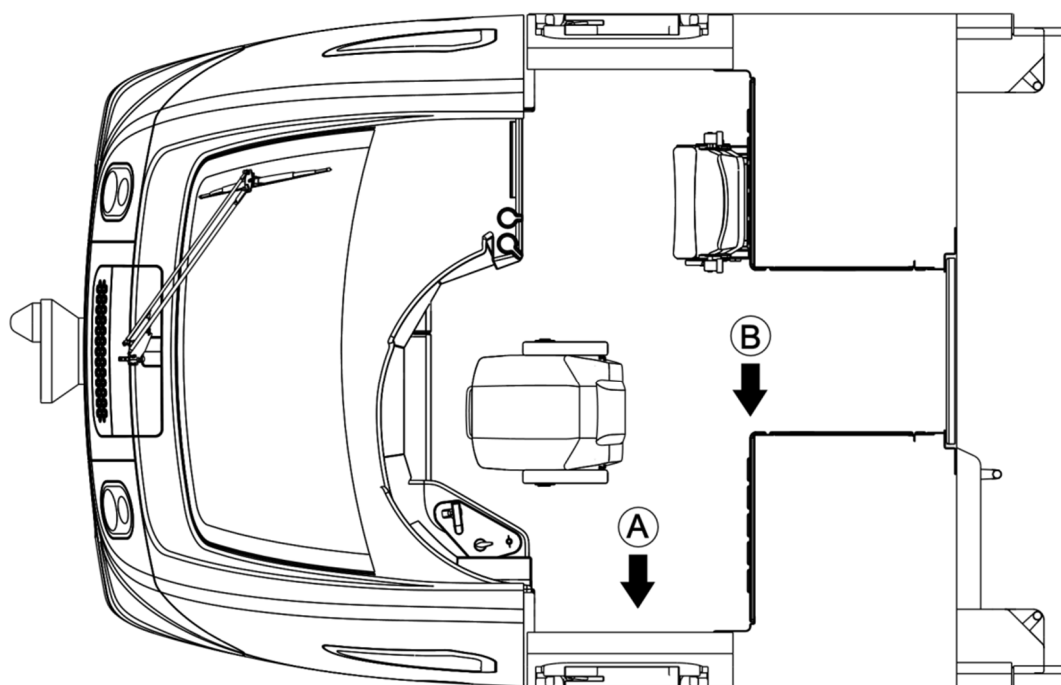
BEFORE ANY WORK IS DONE ON THE TRAIN, MAKE SURE THAT THE WHEEL SCOTCHES ARE INSTALLED. FAILURE TO DO SO CAN CAUSE INJURY TO PERSONNEL.

Activity 1: Removal

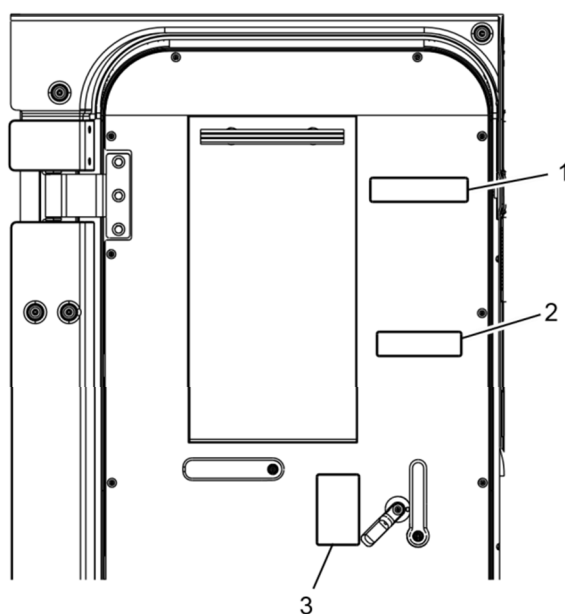


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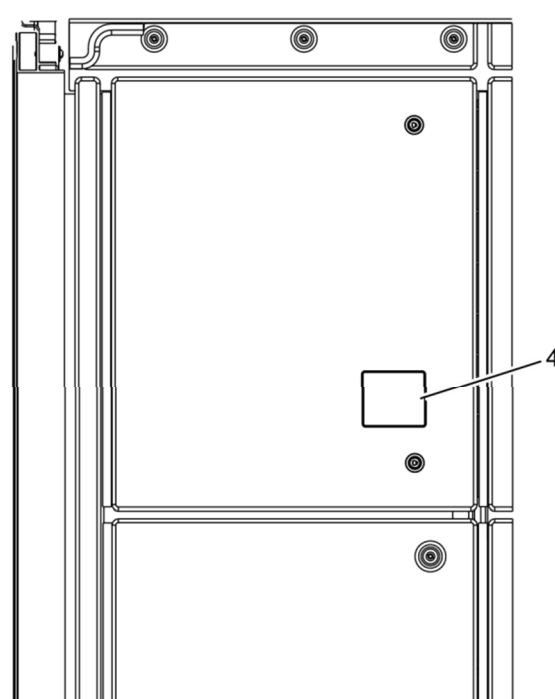
Figure 1 Cab Interior Labels - Right Side (DMS)



DMS



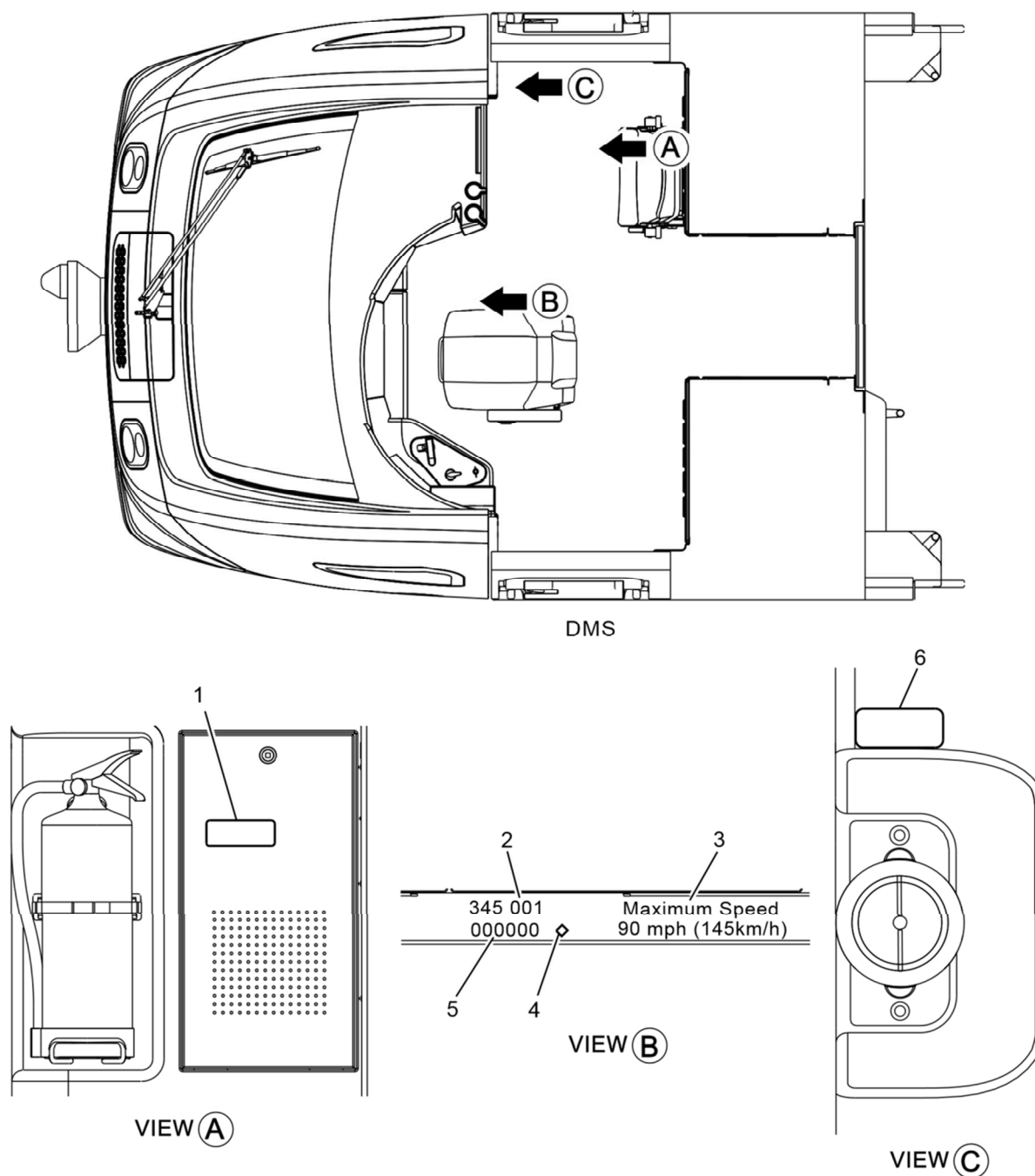
VIEW A



VIEW B

ICN_M-AVENTRA-0300-00-00-00-335-A

Figure 2 Cab Interior Labels - Left Side (DMS)

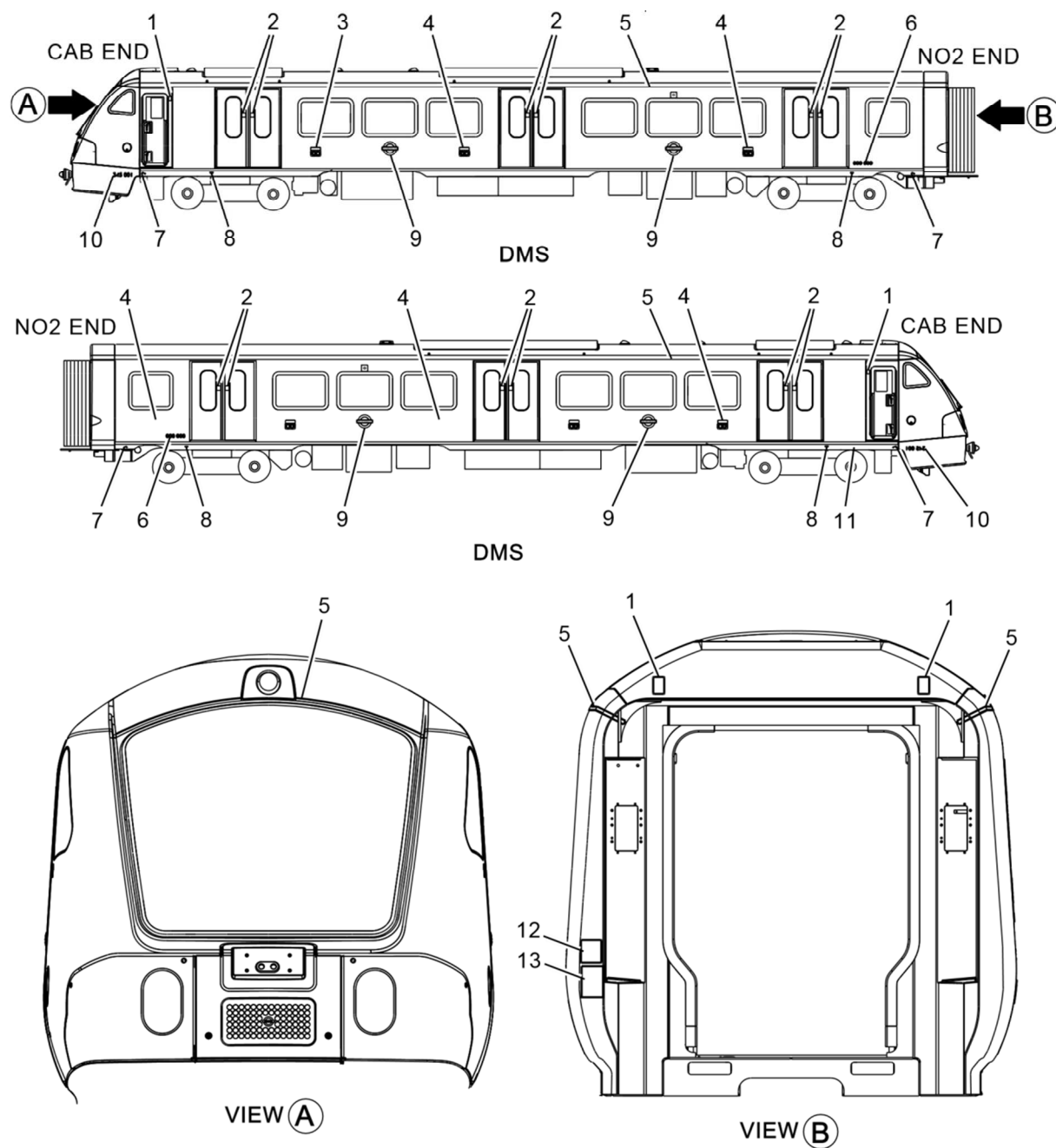


ICN_M-AVENTRA-0300-00-00-00-336-C

Figure 3 Cab Interior Labels - No. 1 End (DMS)

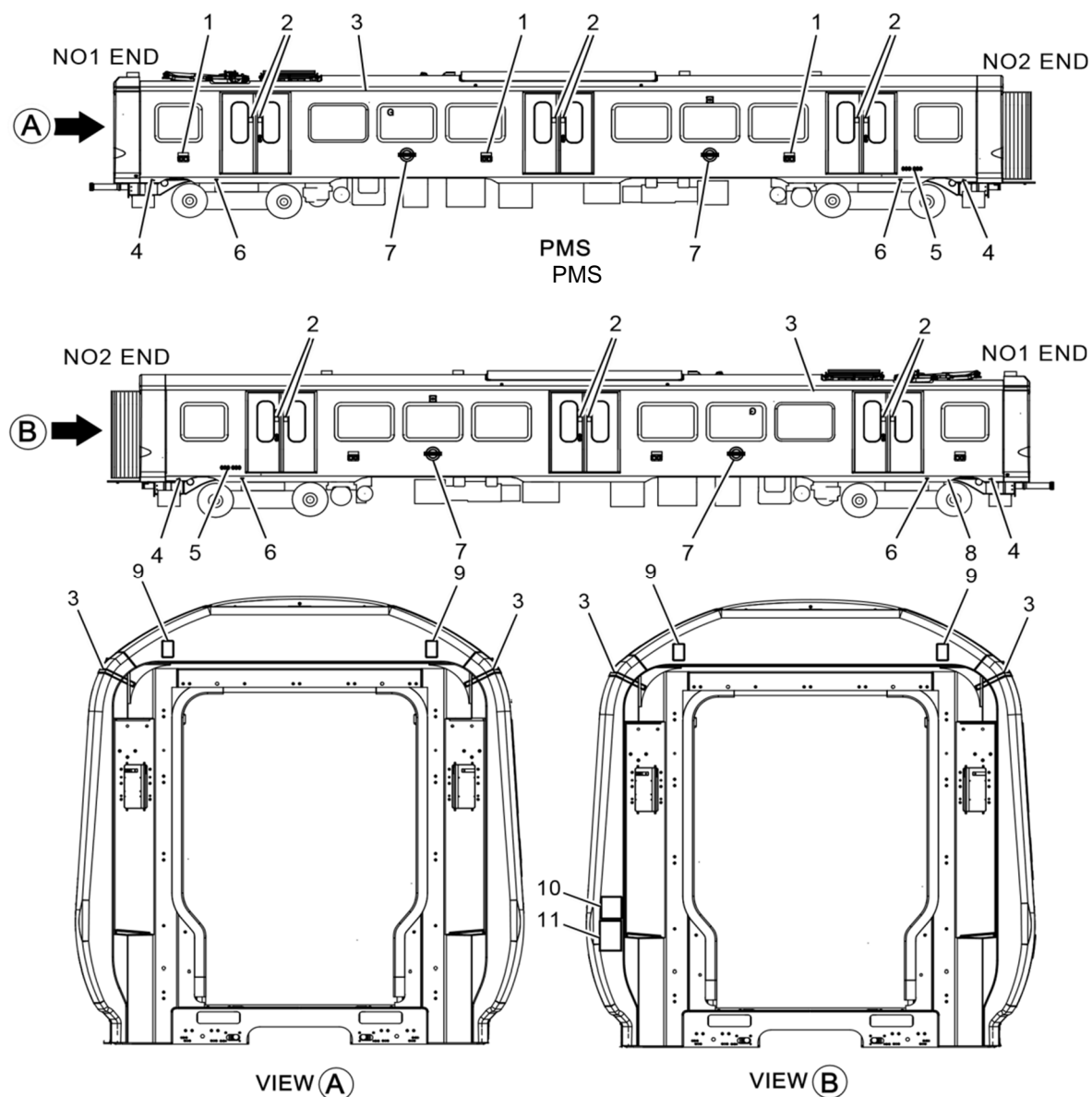
**NOTE**

No. 1 unit end label (3-4) is applicable for DMS-1 car only.



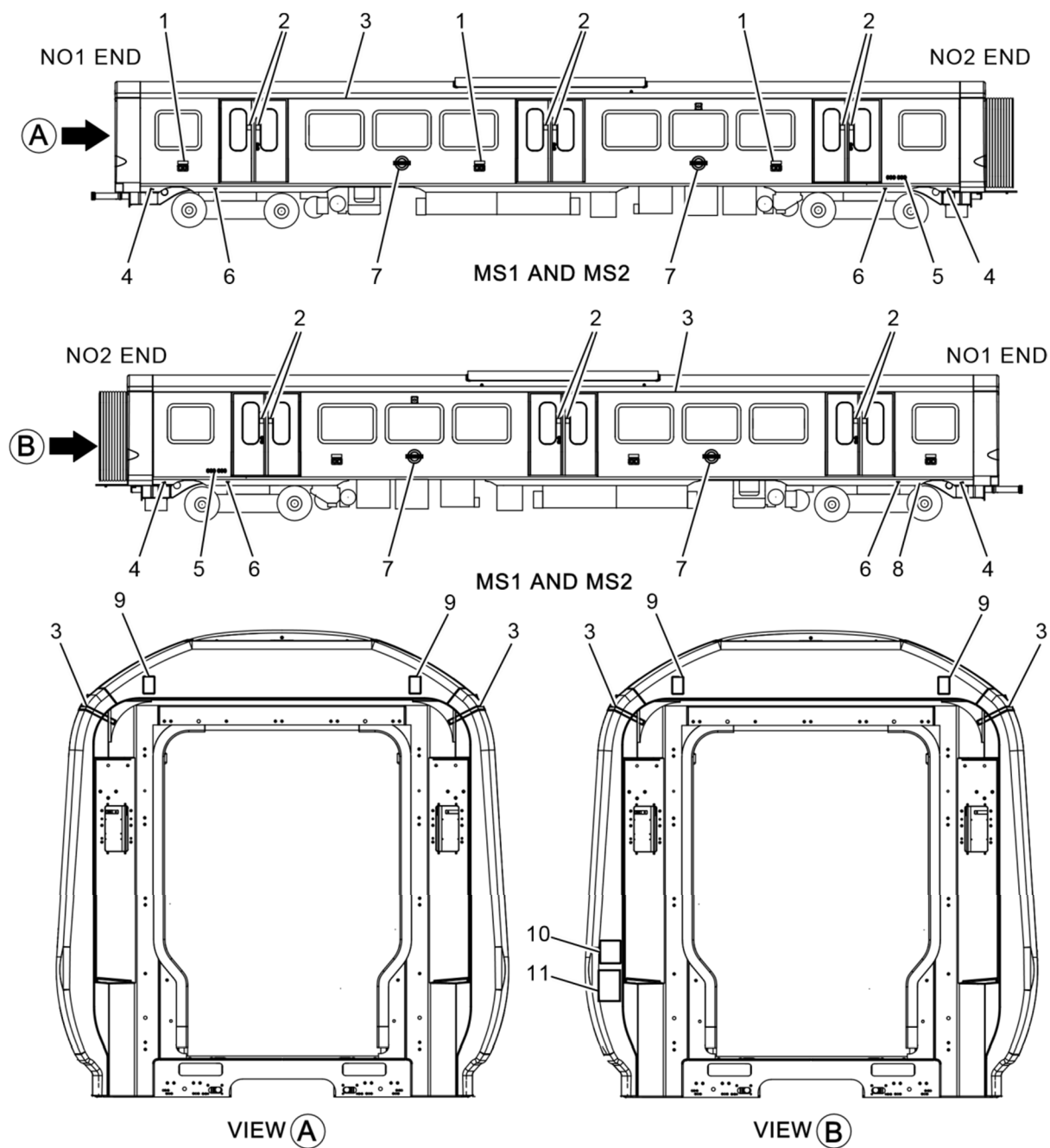
ICN_M-AVENTRA-0300-00-00-329-B

Figure 4 Exterior Labels (DMS)



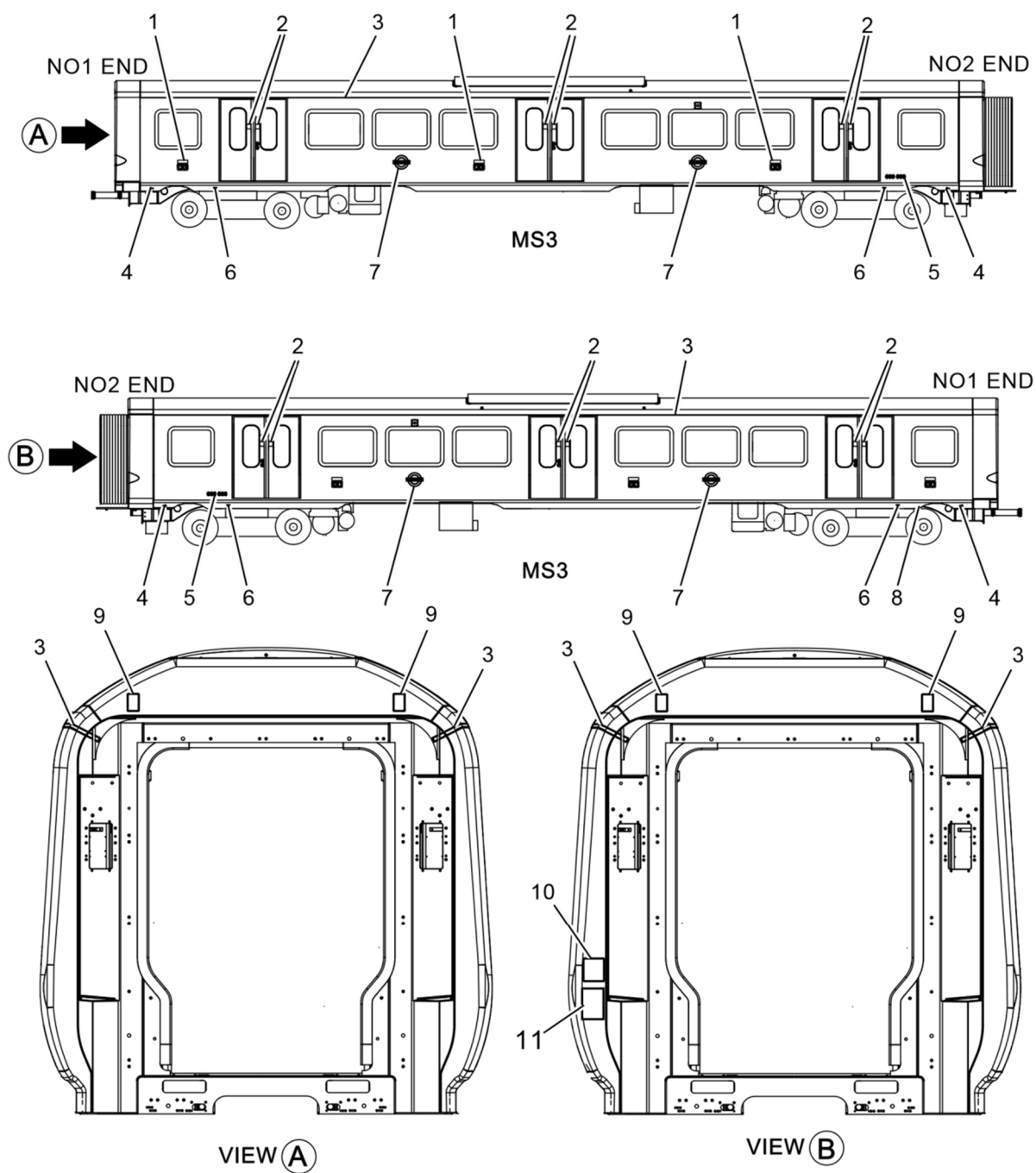
ICN_M-AVENTRA-0300-00-00-00-330-B

Figure 5 Exterior Labels (PMS)



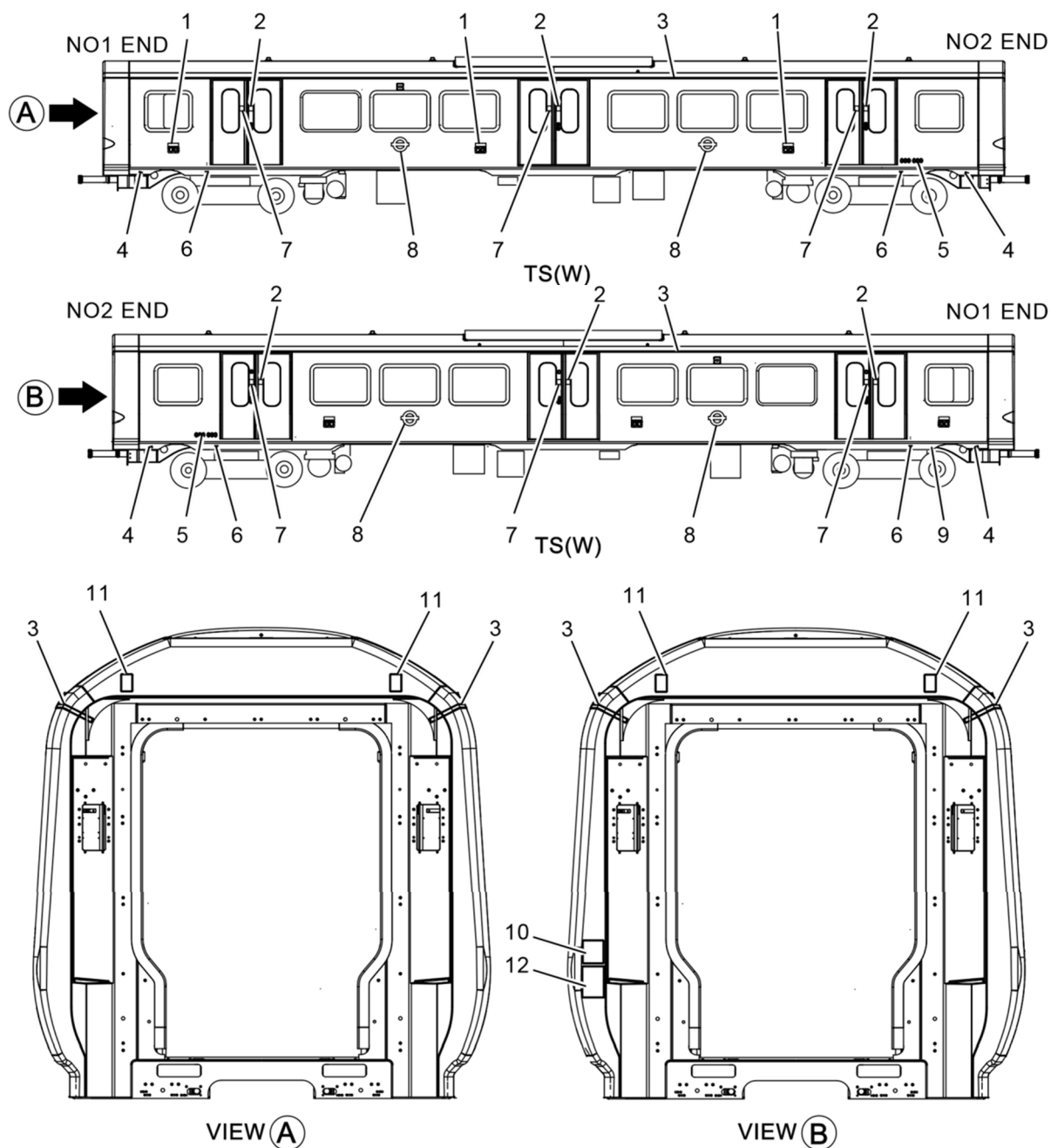
ICN_M-AVENTRA-0300-00-00-00-331-B

Figure 6 Exterior Labels (MS1 and MS2)



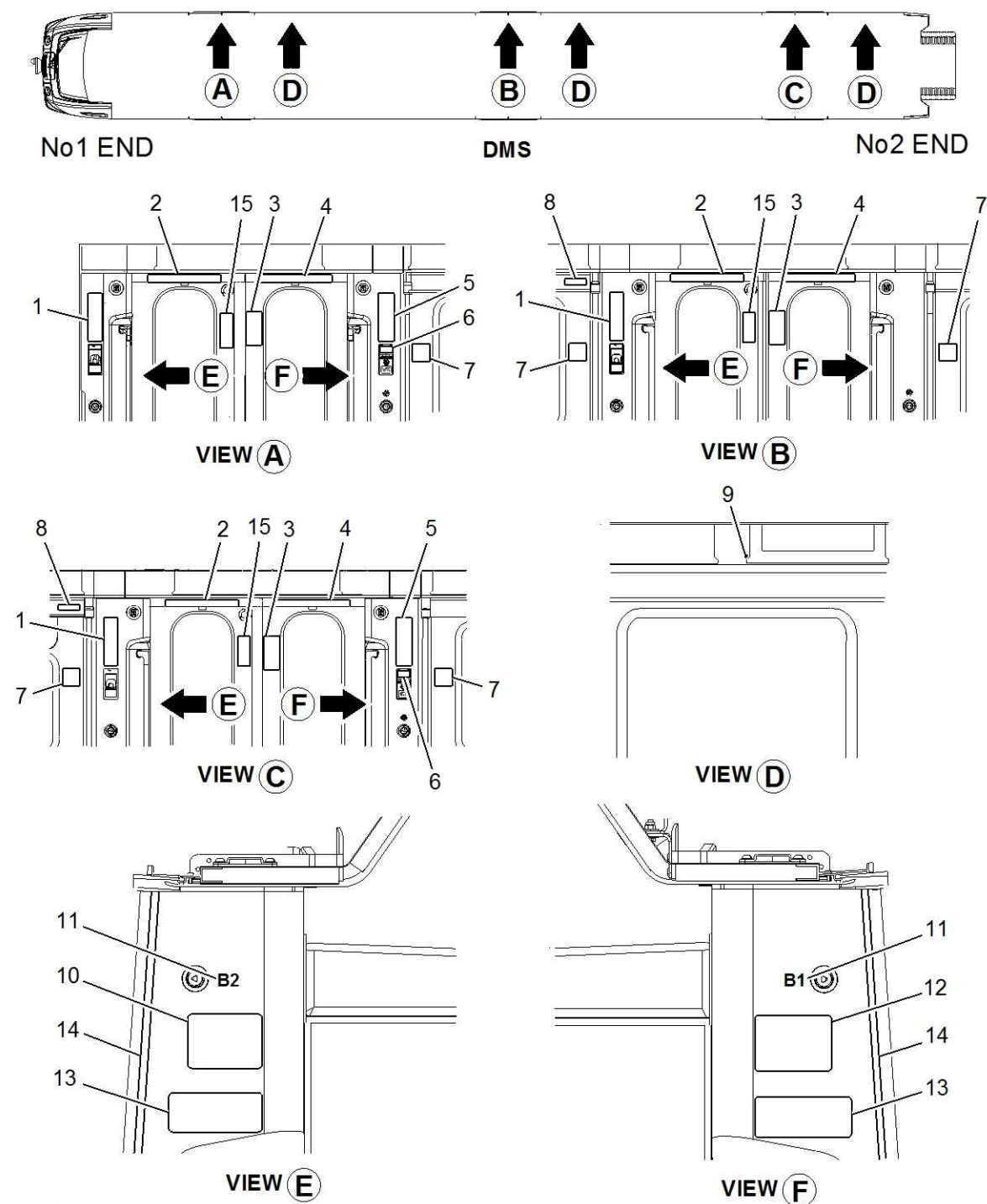
ICN_M-AVENTRA-0300-00-00-00-333-B

Figure 7 Exterior Labels (MS3)



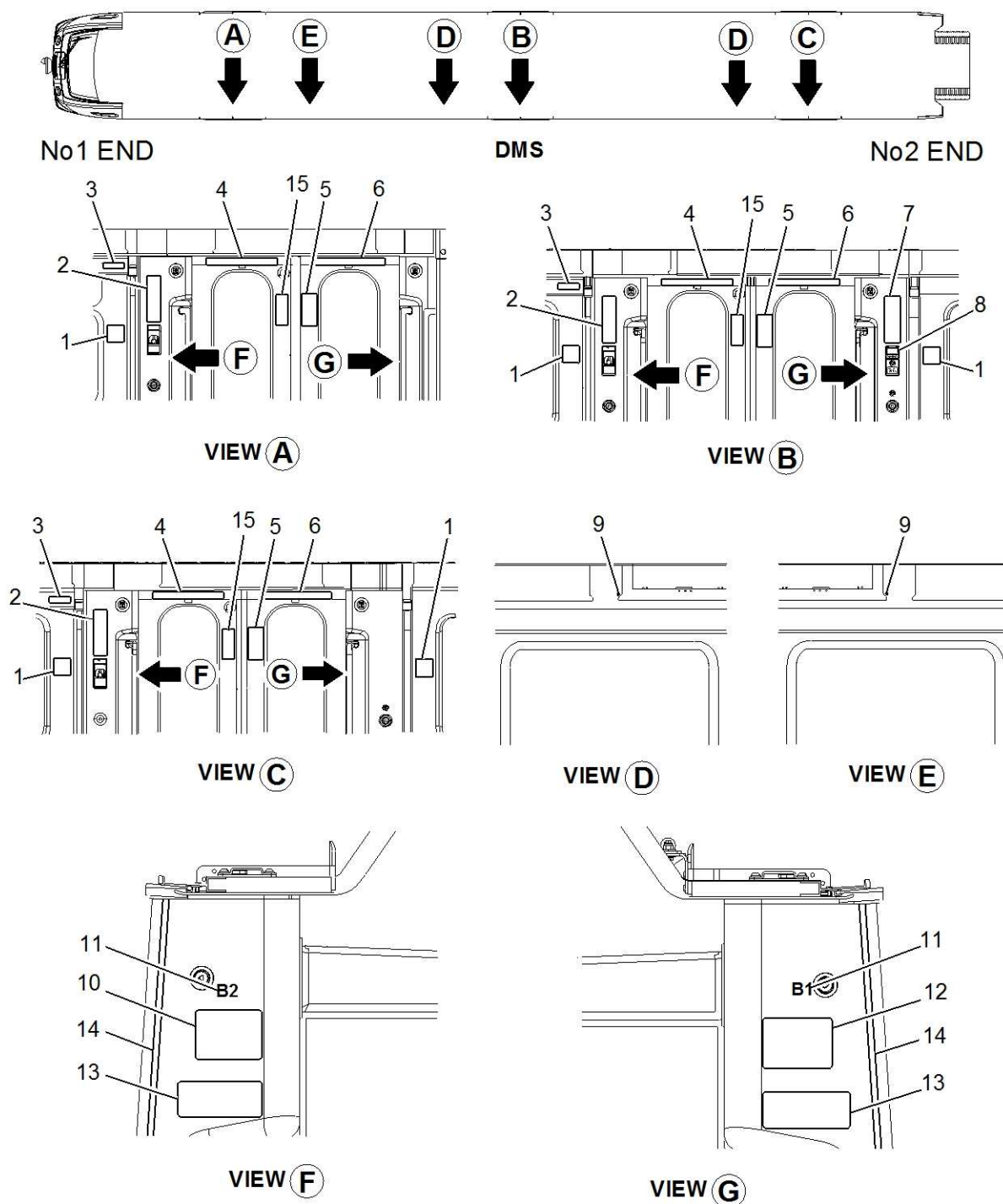
ICN_M-AVENTRA-0300-00-00-00-332-B

Figure 8 Exterior Labels [TS(W)]



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Figure 9 Interior Labels - Right Side (DMS)



ICN_M-AVENTRA-0300-00-00-00-267-D

Figure 10 Interior Labels - Left Side (DMS)

**NOTE**

Record the door reference code of the labels (9-11) and the labels (10-11), replace the labels as per the recorded door reference code.

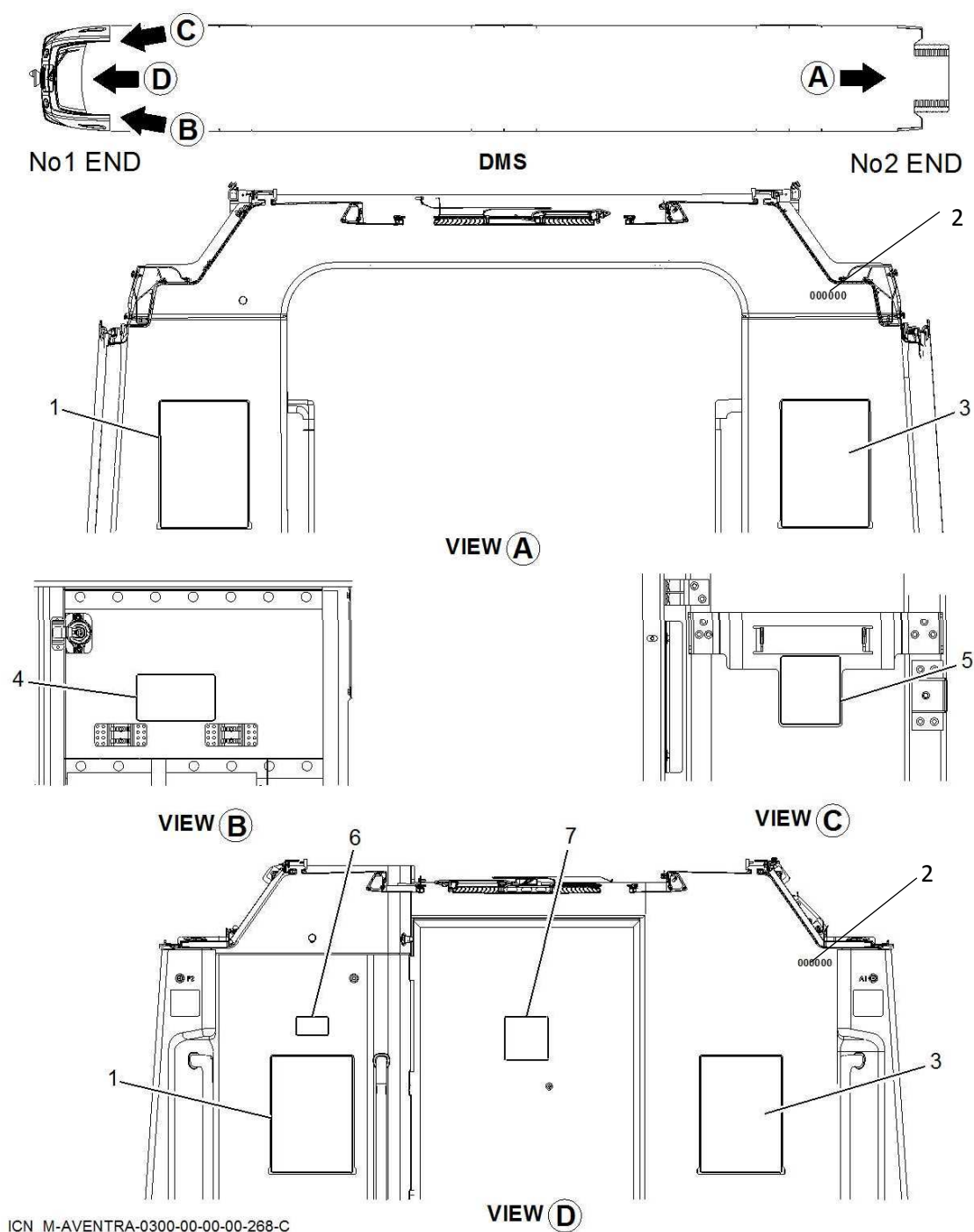
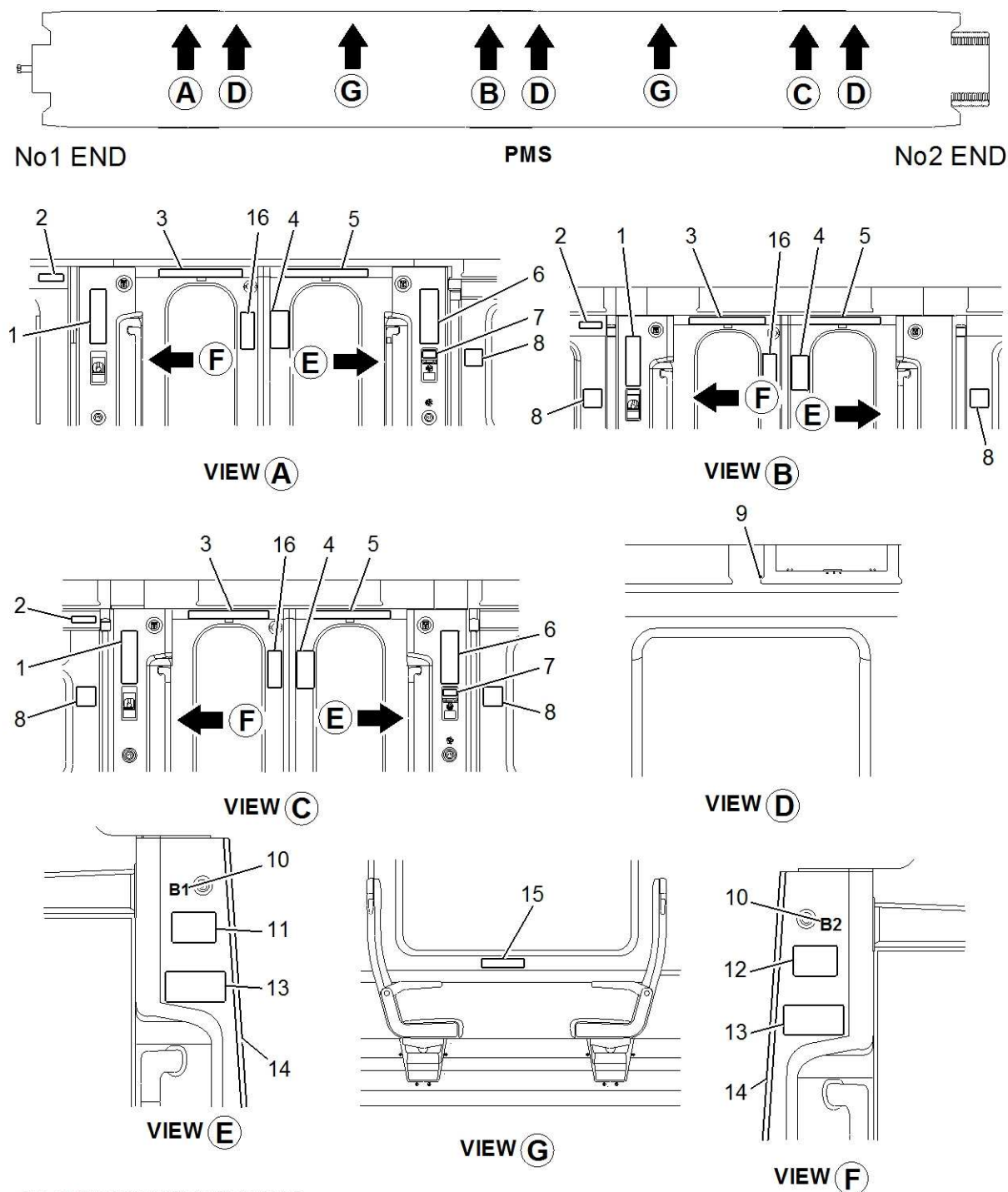


Figure 11 Interior Labels - No. 1 and No. 2 End (DMS)



ICN_M-AVENTRA-0300-00-00-338-D

Figure 12 Interior Labels - Right Side (PMS)

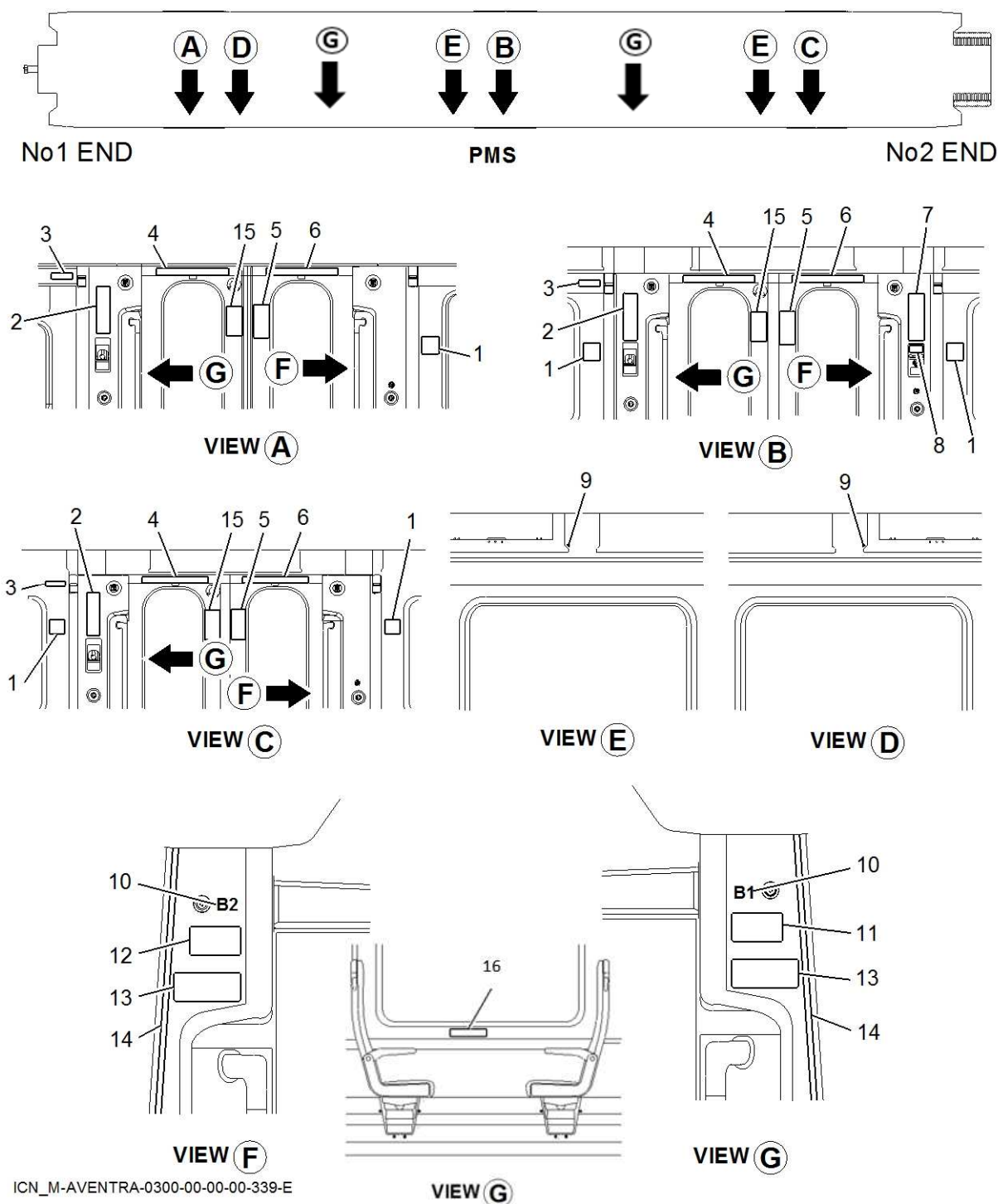
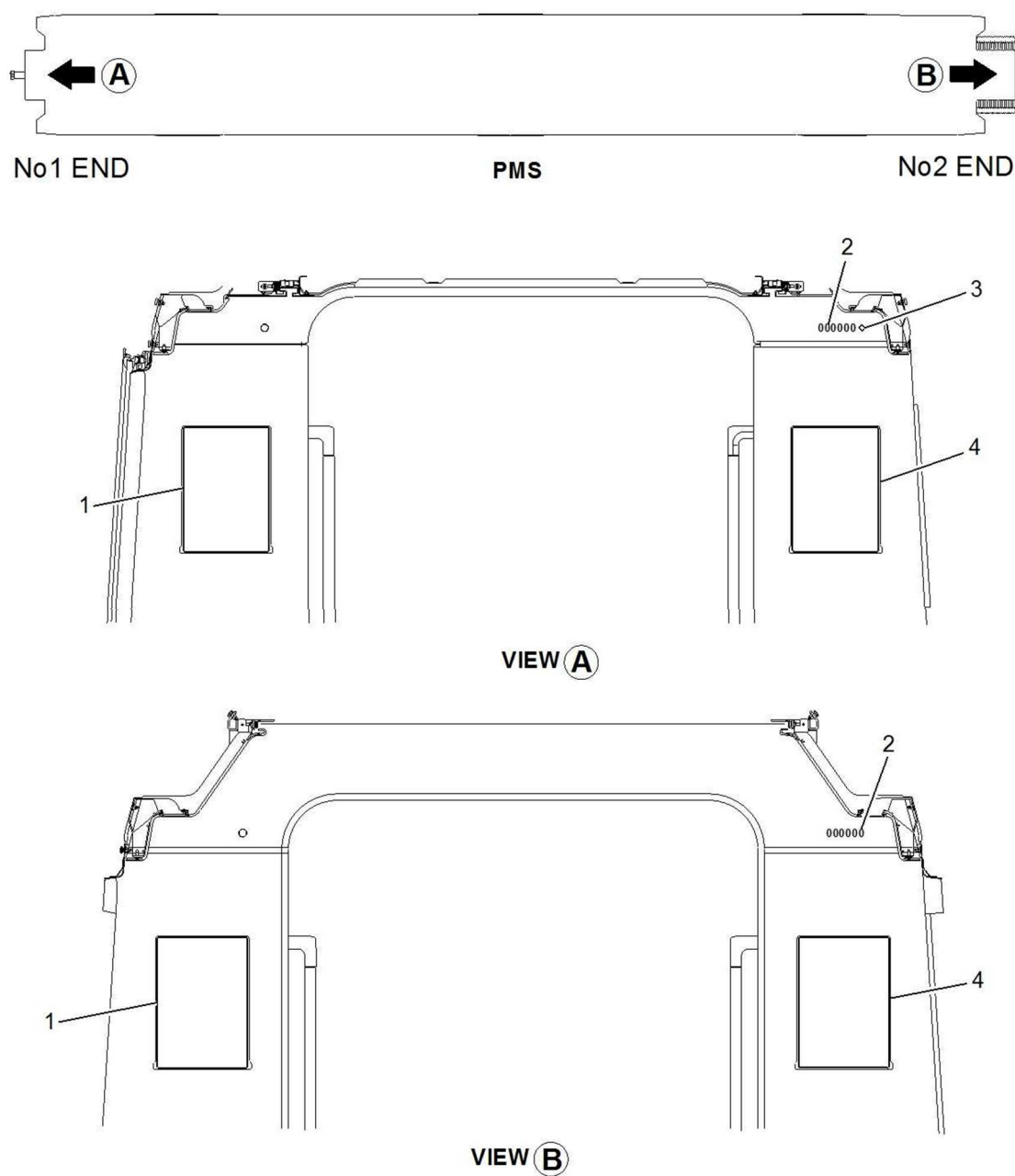


Figure 13 Interior Labels - Left Side (PMS)

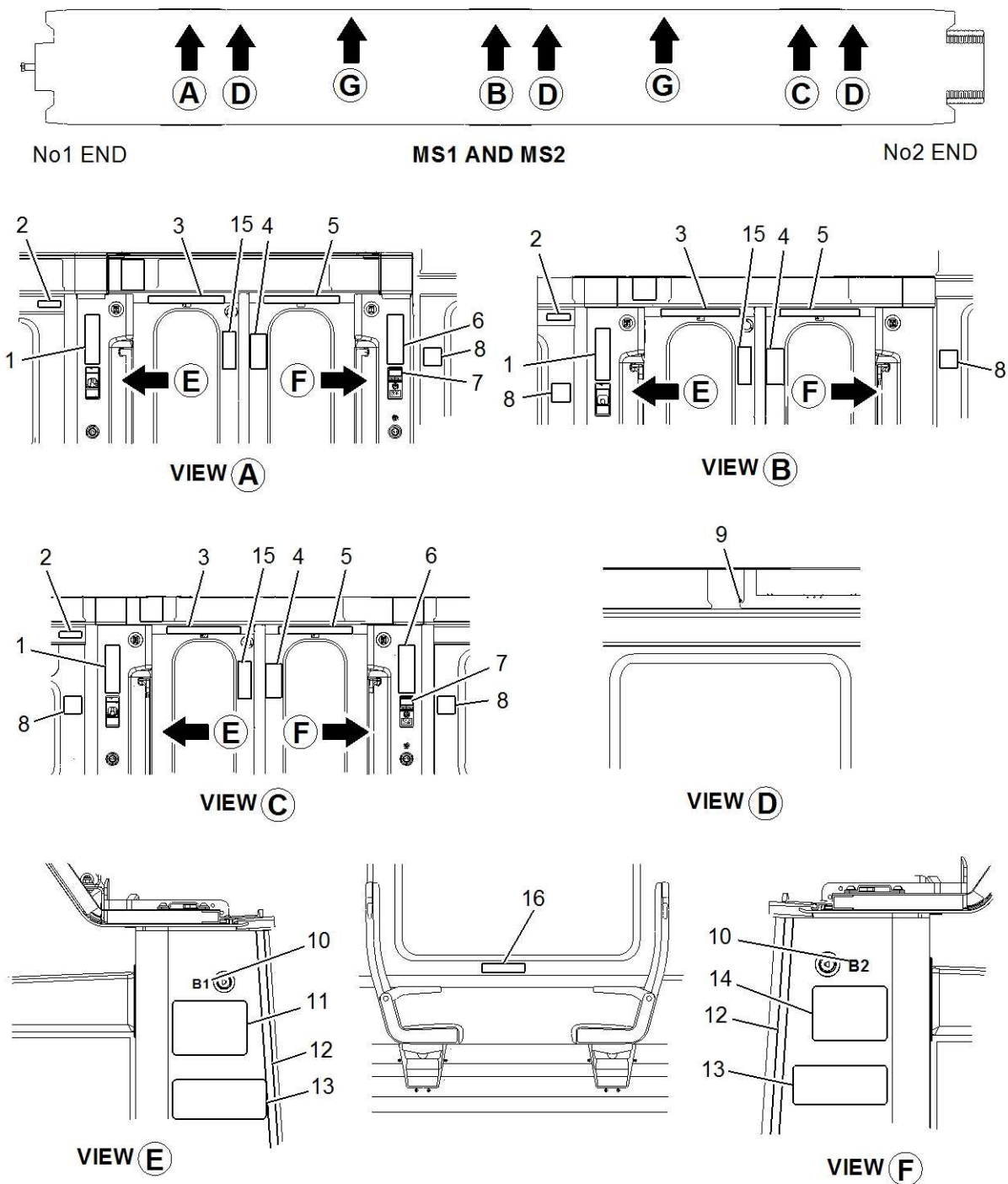
NOTE

Record the door reference code of the labels (12-10) and the labels (13-10), replace the labels as per the recorded door reference code.



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Figure 14 Interior Labels - No. 1 and No. 2 End (PMS)



ICN_M-AVENTRA-0300-00-00-269-D

Figure 15 Interior Labels - Right Side (MS1 and MS2)

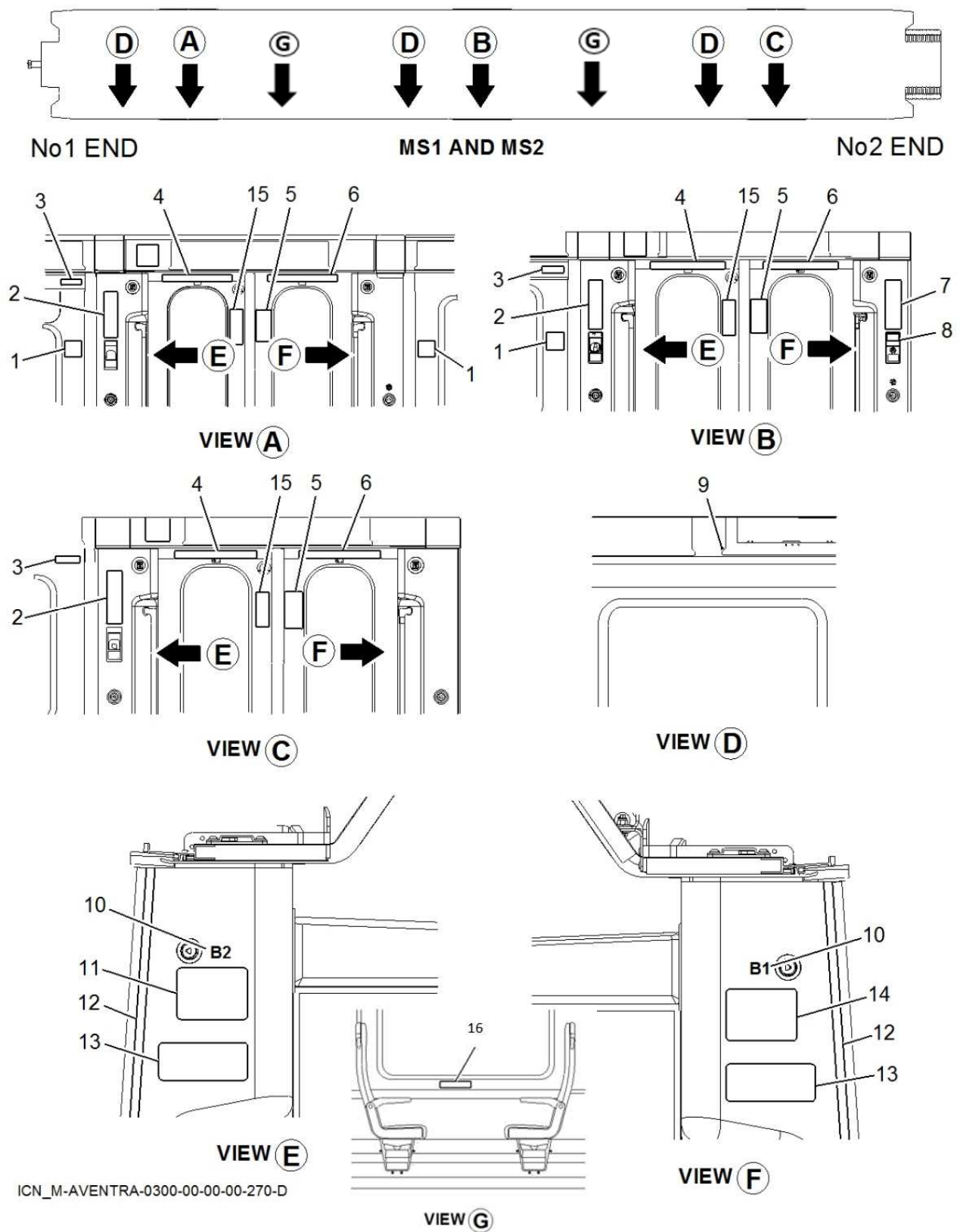


Figure 16 Interior Labels – Left Side (MS1 and MS2)

NOTE

Record the door reference code of the labels (15-10) and the labels (16-10), replace the labels as per the recorded door reference code.

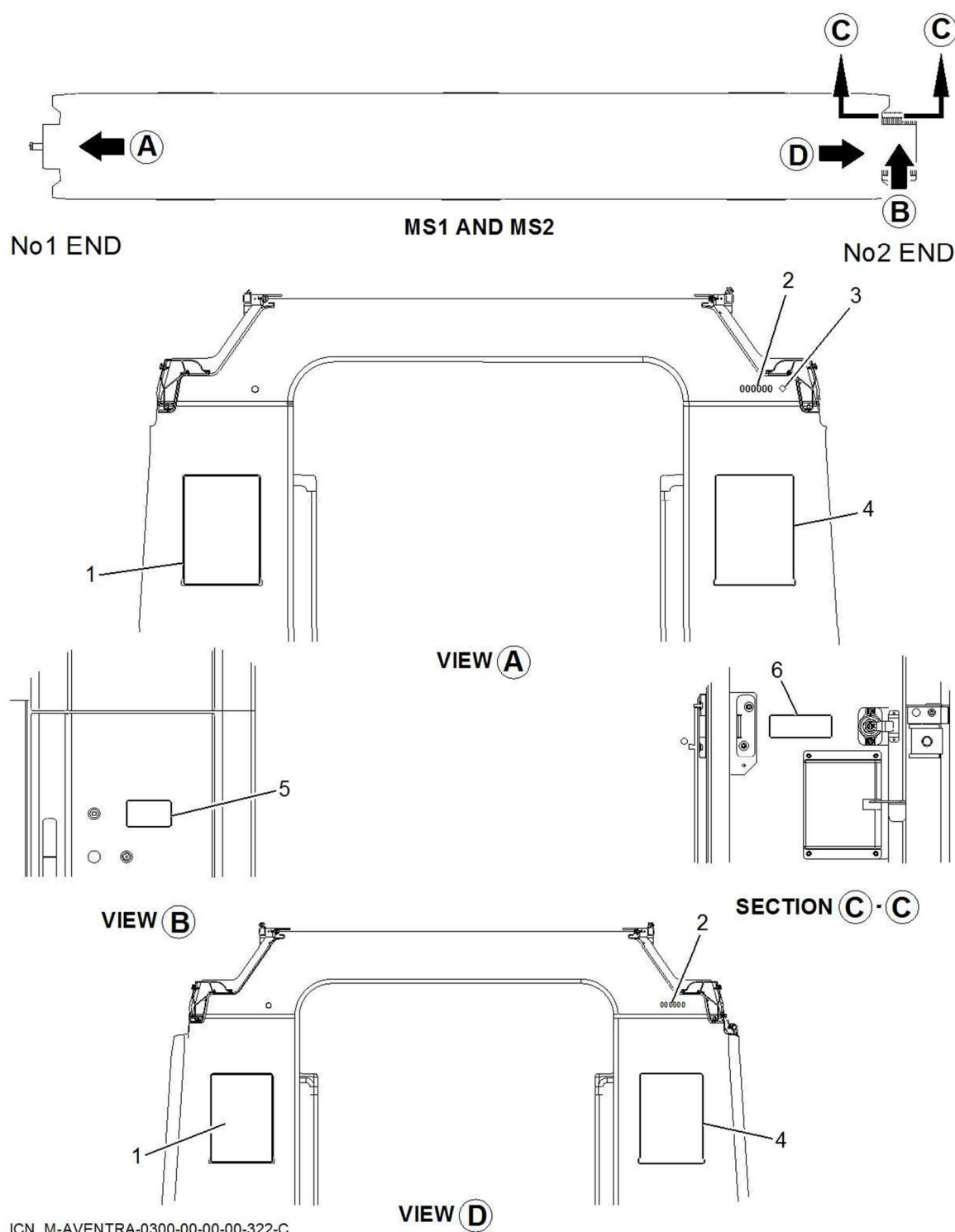
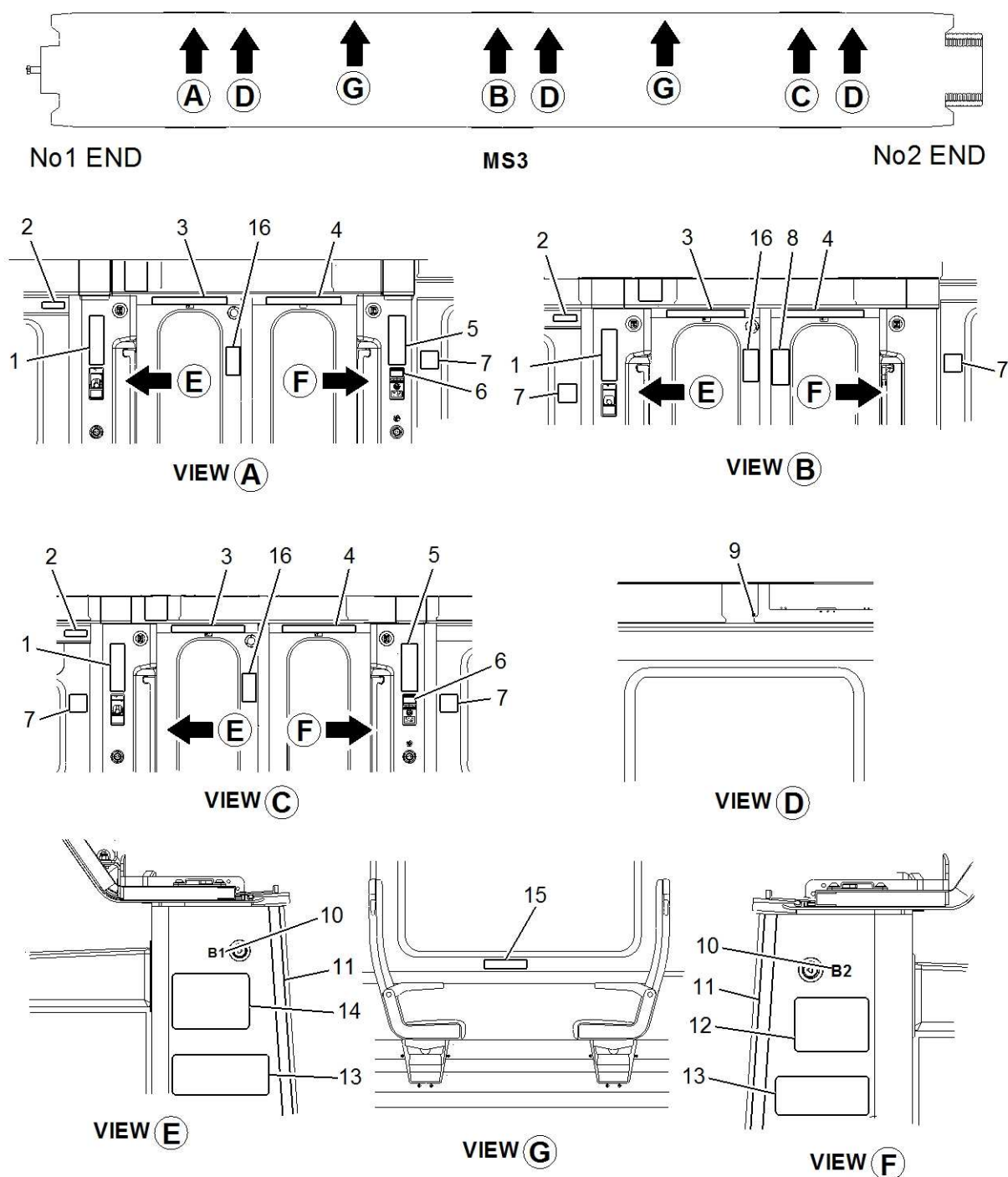
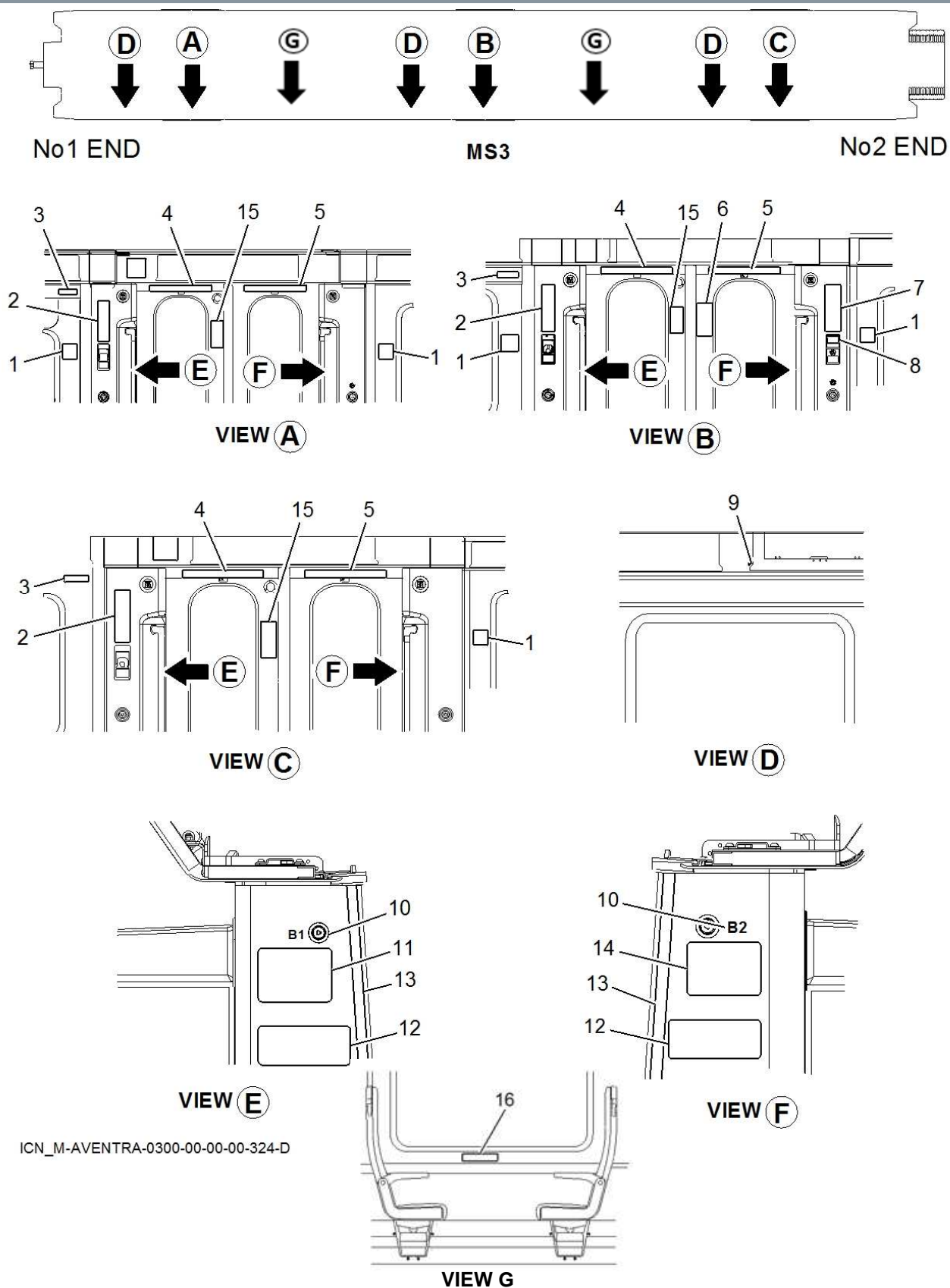


Figure 17 Interior Labels - No. 1 and No. 2 End (MS1 and MS2)



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Figure 18 Interior Labels - Right Side (MS3)

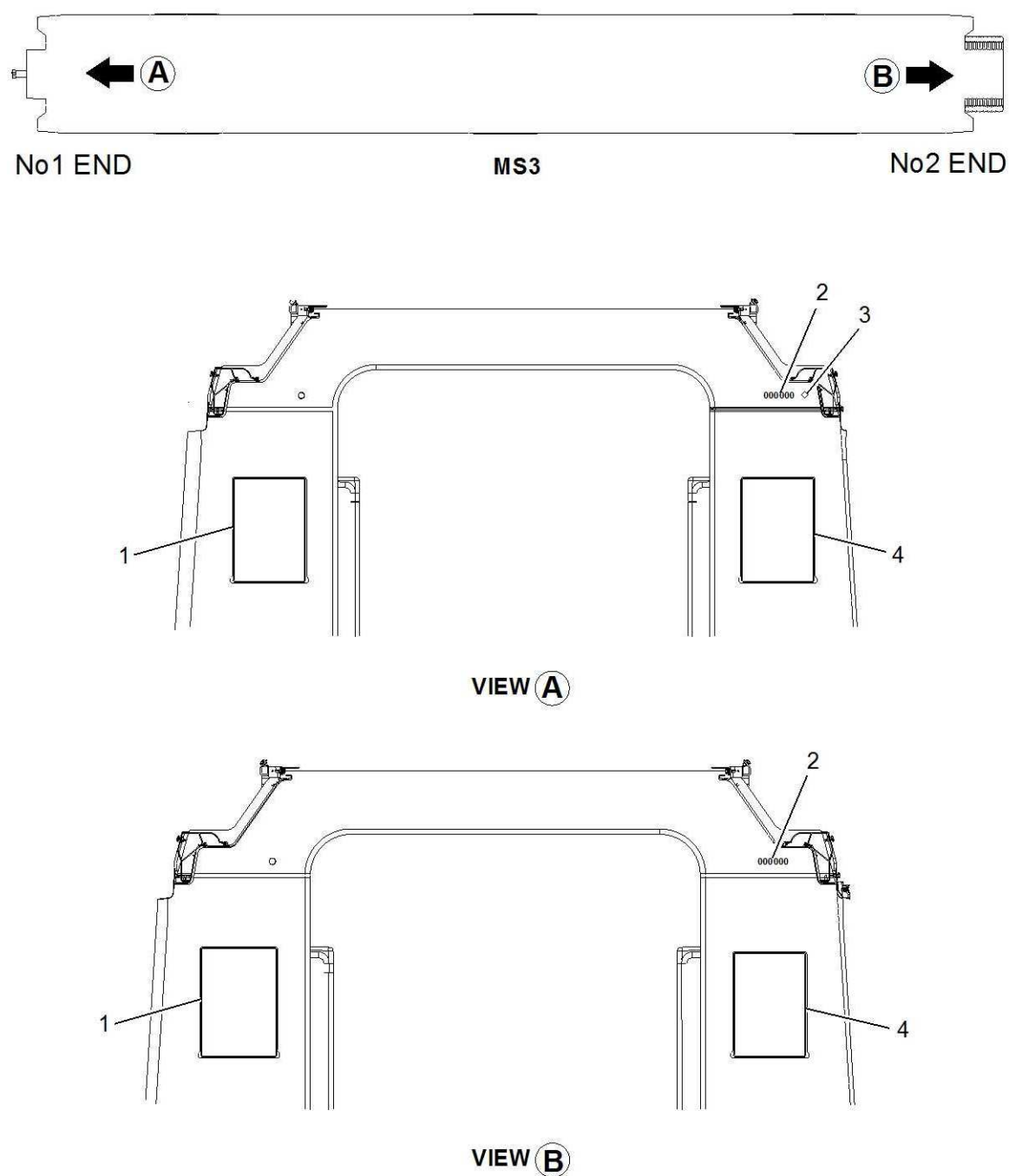


ICN_M-AVENTRA-0300-00-00-00-324-D

Figure 19 Interior Labels - Left Side (MS3)

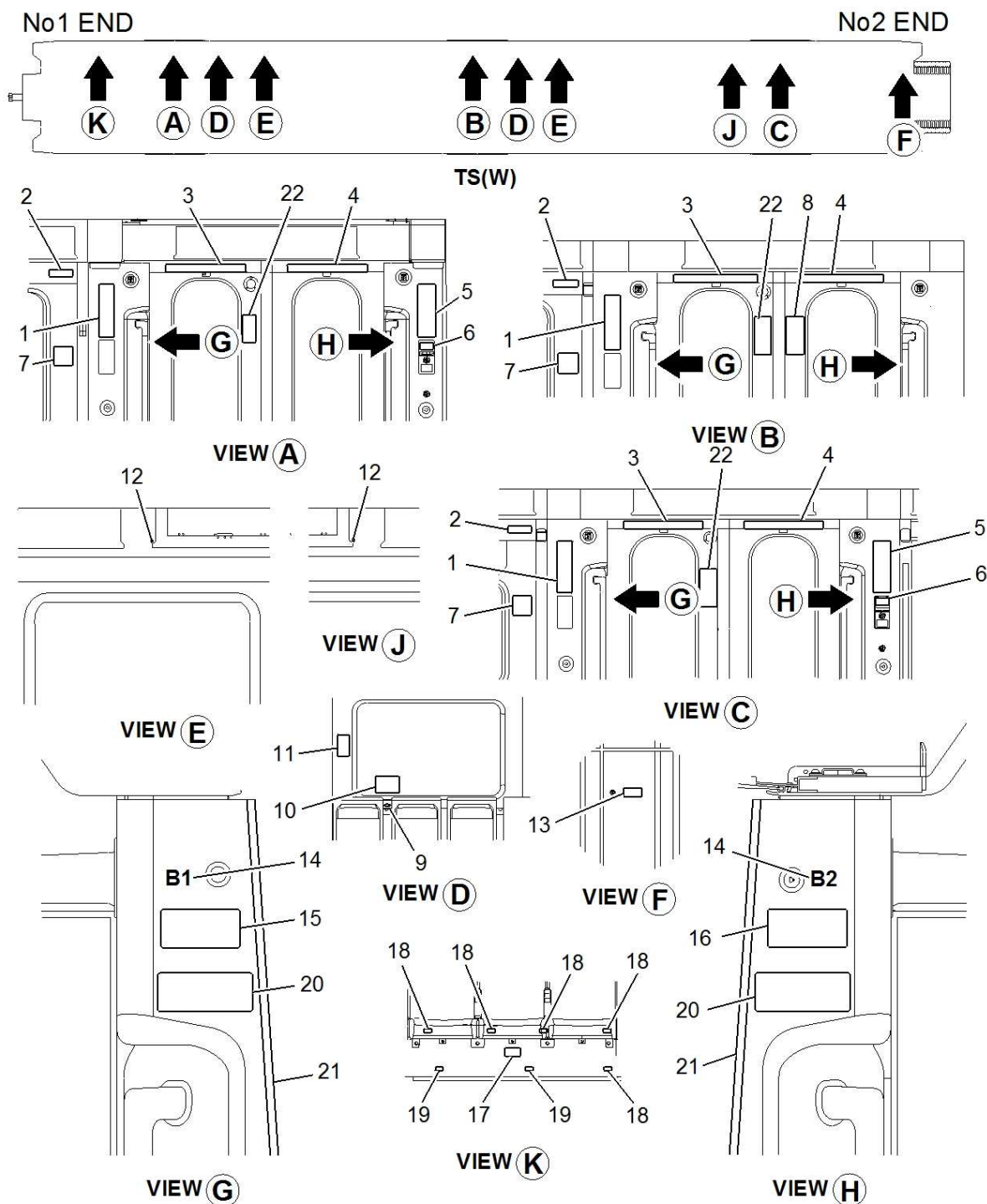
**NOTE**

Record the door reference code of the labels (18-10) and the labels (19-10), replace the labels as per the recorded door reference code.



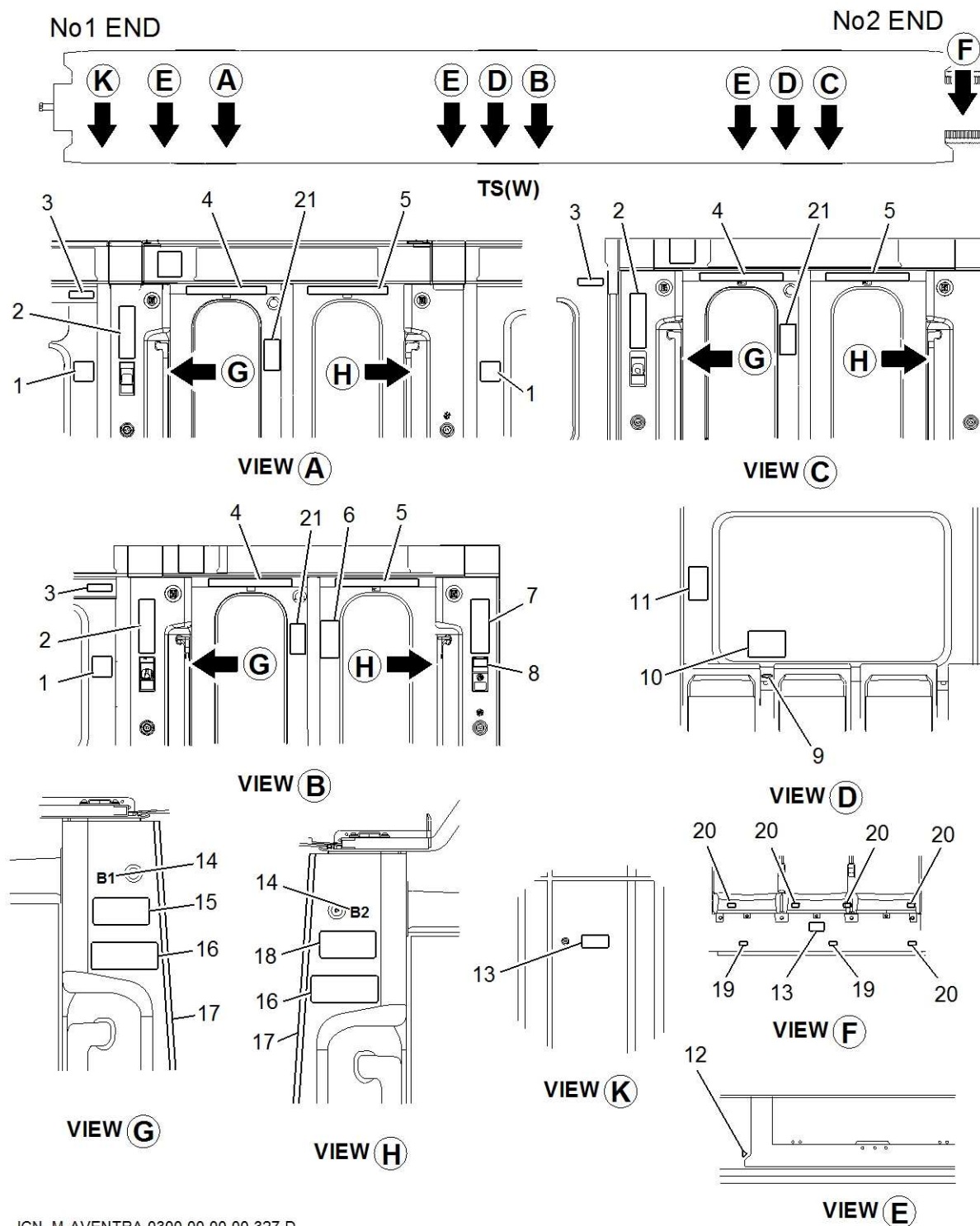
ICN_M-AVENTRA-0300-00-00-00-325-C

Figure 20 Interior Labels - No. 1 and No. 2 End (MS3)



ICN_M-AVENTRA-0300-00-00-00-326-D

Figure 21 Interior Labels – Right Side [TS(W)]

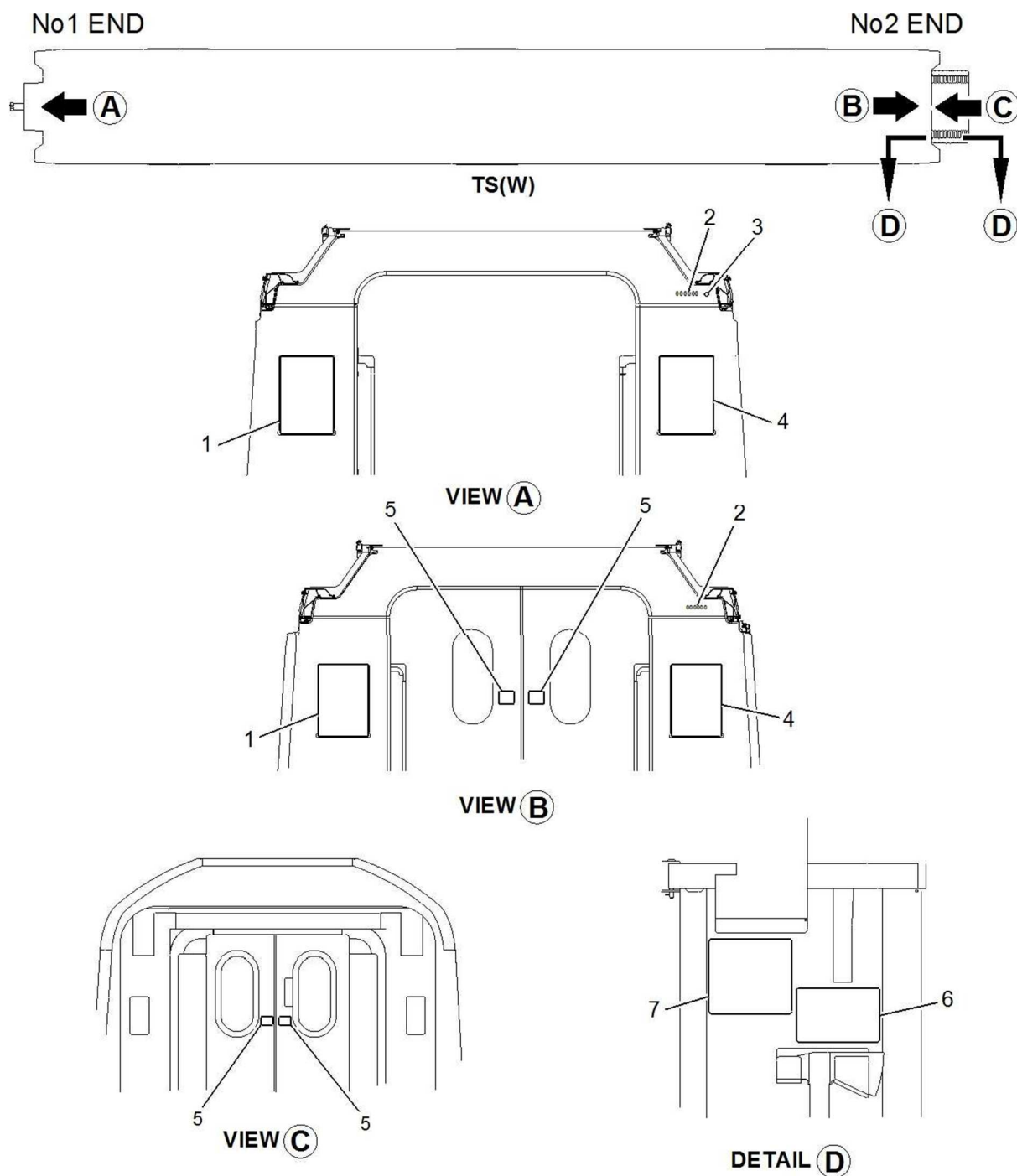


ICN_M-AVENTRA-0300-00-00-00-327-D

Figure 22 Interior Labels – Left Side [TS(W)]

NOTE

Record the door reference code of the labels (21-14) and the labels (22-14), replace the labels as per the recorded door reference code.



ICN_M-AVENTRA-0300-00-00-00-328-C

Figure 23 Interior Labels - No. 1 and No. 2 End [TS(W)]



NOTE

Refer to **Figure 1** to **Figure 3** for location of cab interior labels.

Refer to **Figure 4** to **Figure 8** for location of exterior labels.

Refer to **Figure 9** to **Figure 23** for location of interior labels.

**WARNING****SAFETY****RISK OF PERSONAL INJURY.**

PROTECTIVE GLOVES AND EYE PROTECTION MUST BE WORN AT ALL TIMES. IF THE CORRECT PERSONAL PROTECTIVE EQUIPMENT IS NOT WORN, PERSONAL INJURY COULD OCCUR. THE LOCAL DEPOT PROCEDURES FOR THE UTILISATION OF PERSONAL PROTECTIVE EQUIPMENT MUST BE OBEYED.

**CAUTION****EQUIPMENT DAMAGE**

Do not apply excessive heat to the painted surface.

- 1.1. Set the heat gun at 250 degrees celsius and heat the surface of the old label.

**NOTE**

Heat will reactivate the old adhesive.

- 1.2. Lift the edge of the label, then remove and discard it.

**WARNING****CHEMICALS****CHEMICALS ARE HAZARDOUS.**

BEFORE ANY SUBSTANCE IS USED READ AND UNDERSTAND THE COSHH ASSESSMENT FOR THAT SUBSTANCE. YOU MUST WEAR THE SPECIFIED PERSONAL PROTECTIVE EQUIPMENT. FAILURE TO DO SO CAN CAUSE INJURY TO PERSONNEL.

- 1.3. Use a lint-free cloth made moist with the Loctite 7070 to clean the area of the labels.
- 1.4. Remove all signs of grease and contaminants.
- 1.5. Let the surface dry.

**WARNING****CHEMICALS****CHEMICALS ARE HAZARDOUS.**

BEFORE ANY SUBSTANCE IS USED READ AND UNDERSTAND THE COSHH ASSESSMENT FOR THAT SUBSTANCE. YOU MUST WEAR THE SPECIFIED PERSONAL PROTECTIVE EQUIPMENT. FAILURE TO DO SO CAN CAUSE INJURY TO PERSONNEL.

- 1.6. Spray the premixed washing solution on the cleaned area.

**NOTE**

Put 6 ml (1 teaspoon) mild-detergent into a 500 ml spray bottle, then fully fill the spray bottle with clean tap water and thoroughly mix it.

- 1.7. Use a lint-free cloth to clean the residual water soluble contaminants.

Activity 2: Installation

- 2.1. Use a chinagraph pencil and 30 cm lightweight metal ruler to draw a straight line and to put the lower edge of the label in position.
- 2.2. Draw a straight line from the side edge vertically and put the right edge of the new label in position.
- 2.3. Use a chinagraph pencil and 30 cm lightweight metal ruler to mark the lines on the label relative to the lines marked on the substrate.

**NOTE**

The lines allow the label to be positioned accurately.

- 2.4. Put the label in position on the substrate and align the pencil lines of the label with the marked lines.
- 2.5. Use a 25 mm wide water resistant masking tape across the top of the label to attach it in position.

**NOTE**

Use a 25 mm wide Scotch masking tape 3434 or alternately use any water-resistant masking tape.

**WARNING****CHEMICALS****CHEMICALS ARE HAZARDOUS.**

BEFORE ANY SUBSTANCE IS USED READ AND UNDERSTAND THE COSHH ASSESSMENT FOR THAT SUBSTANCE. YOU MUST WEAR THE SPECIFIED PERSONAL PROTECTIVE EQUIPMENT. FAILURE TO DO SO CAN CAUSE INJURY TO PERSONNEL.

**NOTE**

Put 6 ml (1 teaspoon) mild-detergent into a 500 ml spray bottle, then fully fill the spray bottle with clean tap water and thoroughly mix it.

- 2.6. Lift the label and spray the premixed washing solution onto the chinagraph pencil lines on the substrate.
- 2.7. Use a lint-free cloth to clean all the signs of the chinagraph pencil lines and other visible contaminants.
- 2.8. With the label in lifted position, remove and discard the backing paper from the label.
- 2.9. Put the label in position to the surface.
- 2.10. Use a 3M squeegee tool to remove air from behind the label.
- 2.11. Attach the label firmly in position with the 3M squeegee tool.
- 2.12. Remove the masking tape from the top of the label.
- 2.13. Use a lint-free cloth to make sure that the label is tightly attached to the surface.
- 2.14. Keep the front protective cover of the label in position for 60 minutes, then remove and discard it.
- 2.15. Use the premixed washing solution to clean the areas to remove any signs of pencil marks.
- 2.16. Use a lint-free cloth to clean the area.
- 2.17. Make sure that all the labels are attached with the same method of cleaning and application.

Activity 3: Close-up

- 3.1. Make sure that all tools and equipment are removed from the work area.
- 3.2. Make sure that the work area is clean and free from debris.
- 3.3. Record and report any defects to the team leader/supervisor/manager.

END OF PROCEDURE**Follow-on Tasks**

None.