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Application Note

Modifications to *EBI* Track 200 TI21 Tuning Unit and ETU T1/T2 Connections and Trackside Wiring Recommendations

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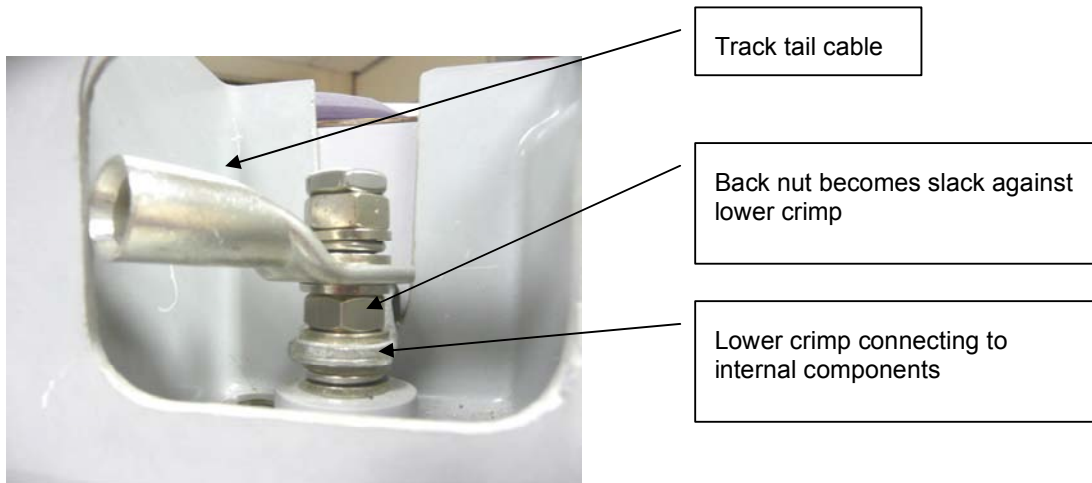
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1 INTRODUCTION¹

TI21 Tuning Units and ETUs are known to be prone to connection problems at the T1/T2 terminals where the track tails are terminated onto the unit. Investigation has shown that the termination arrangements for the 10mm tail cable crimp can become slack owing to the 'Back nut' becoming loose (see Photo 1). The resulting loose connection causes degradation in performance, often leading to right side failure.

Photo 1: T1/T2 Termination Arrangement



For new build Tuning Units and ETUs, Bombardier have altered the terminal arrangement to remove the 'Back nut' and these units are identified by mod strike as follows:

New build TU with modification = mod strike 3

New build ETU with modification = mod strike 4

¹ The illustrations in this application note are clearest when viewed in colour.

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Photo 2: New Build T1/T2 Termination Arrangement



This application note contains:

- Instructions detailing how to modify the terminal arrangement of earlier TUs and ETUs to eliminate the slack back nut problem.
- Recommendations for Tuning Unit trackside wiring which will optimise pole/zero performance.

2 REVISION HISTORY

Issue					
From	To	Date	Reason for Change	ECR No	Sig.
-	1	22/01/09	First issue	6-2862	JPS
1	2	7/08/09	Preferred rail connections added as ref 4 in section 6. Fig 2 in section 6 altered to show both tail cables within the four foot.	6-4181	AM
2	3	13/01/12	New build photo added in section 1. Fig 2 replaced by illustration from generic Manual.	6-30238	

3 TERMINOLOGY

EBI Track 200 TI21	Bombardier brand name for the TI21 audio frequency track circuit
ETU	EBI Track 200 TI21 End Tuning Unit
TU	EBI Track 200 TI21 Tuning Unit