

Vadodara, Date: 10th May 2021

To,
Dy. CEE / D&D-I
Chittaranjan Locomotive Works
Chittaranjan, West Bengal.

Kind Attention: Shri. S.S.Yadav

Our Ref: IR..CLW.20210510.0602

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TRANSPORTATION
**Bombardier Transportation India
Private Limited**
(erstwhile Bombardier Transportation
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Registered Office: As above

Subject: Issue with M/s BTIPL make three phase drive propulsion equipment

Ref.: CLW letter no. C-D&D/T/24, Vol-VII dated 17th Mar 2021

Dear Sir,

In reference to the subject, we would like to update following status for issues reported for IGBT based 3-Phase Drive propulsion Equipment.

No.	Description	Bombardier Comment (2021-05-05)
a	The time of auto Flasher is not proper, it shouldn't be more than 60 sec.	Same will be implemented in next release of software.
b	Wrong sensing of All TM as defective in case of Pinion Breakage	As per our analysis this problem happens only at starting time, during running condition only single motor will be isolated in case of mechanical damage. Detailed investigation is ongoing with the support from shed.
c	Loco failing due to invalid wheel diameter	A solution was already implemented in earlier release, however further improvement will be implemented in next release of software.
d	Bogie isolation during regenerative braking with DC link voltage too High	A solution is already implemented in software Package 1.3.9.1 and seen reduction in failures. Investigation is ongoing for further improvements.
e	In case of Bogie isolation monitoring of corresponding Trafo pressure / temp signal is not masked leading to Main power OFF	Solution will be implemented in next release of software.
f	Loco failing due to Time out DC link charge B1/B2 message	This issue is not seen in PRP SET locos. This issue is reported in MICAS locomotives and only in push pull mode. We are supporting CLW to solve this issue and make necessary updates in MICAS software.

g	While Panto Bouncing, low pressure message of SR/ Trafo needs to be cleared	Detailed investigation is ongoing with the support from shed.
h	if DCUL feedback fault, message logged then Traction bogie isolated.	Detailed investigation is ongoing with the support from shed/CLW.
i	VCB tripping with catenary voltage out of limits in many locos	Solution will be implemented in next release of software.
j	During push Pull TE/BE not responding due to wheel diameter issue but respond with BPCS.	This issue is not seen in PRP SET locos. This issue is reported in MICAS locomotives and only in push pull mode. We are supporting CLW to solve this issue and make necessary updates in MICAS software.
k	During Push Pull self hold mode remain active for 20 min in place of 100 min.	This issue is not seen in PRP SET locos. This issue is reported in MICAS locomotives and only in push pull mode. We are supporting CLW to solve this issue and make necessary updates in MICAS software.
l	Energy parameters for setting is not editable.	Energy parameters are editable according to Annexure-1 procedure.

We request you to approve our next release of software package (1.4.0.4) so that we can avoid above issues in locomotives.

Thanking you and assuring our best services and attention always.

Sincerely,
For Bombardier Transportation India Private Ltd.

Chirayu Patel
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Enclosures:

- 1) Annexure-1: Procedure to edit energy parameters in BTIPL make propulsion system
- 2) Annexure-2: Release note for software (1.4.0.4)

Annexure 1: Procedure to edit Energy Parameters

We have provided a provision to edit Energy parameters on DDU and values set can be observed on DDU only.

Step 1:

Go to Maintenance screen and type Password 654321 and press Enter.

The screenshot shows the DDU Maintenance screen with the following details:

- Navigation Bar:** Home, Operation, **Maintenance** (highlighted), Diagnostic, Active Fault.
- System Parameters:**
 - TE/BE Bogie1: 0.0 kN
 - TE/BE Bogie2: 0.0 kN
 - Vcat: 25.0 kV
 - Ipri: 24.40 A
 - Loco Speed: 0.0 kmph
 - BATTERY: 110.0 V
- Buttons:** Panto UP, VCB ON, and a train icon labeled 'M NAP7HL 32569'.
- Password Entry:** A field labeled 'Enter Password' with a masked input '*****' and a numeric keypad (0-9, CLR, <--).
- Bottom Status Bar:**
 - Simulation Status: OFF
 - FLG1: 590, SLG1: 7300, ALG1: 40000
 - FLG2: 590, SLG2: 7300, ALG2: 40000
 - TE/BE DEMAND: 0.0 kN, Slave FLG1: 590
 - Brake Indicators: Inactive Wheel Slip, Inactive Sanding, Released Loco Brake, Applied Train Brake, Applied Parking Brake, Released Emerg. Brake, Released Vigilance Emerg.

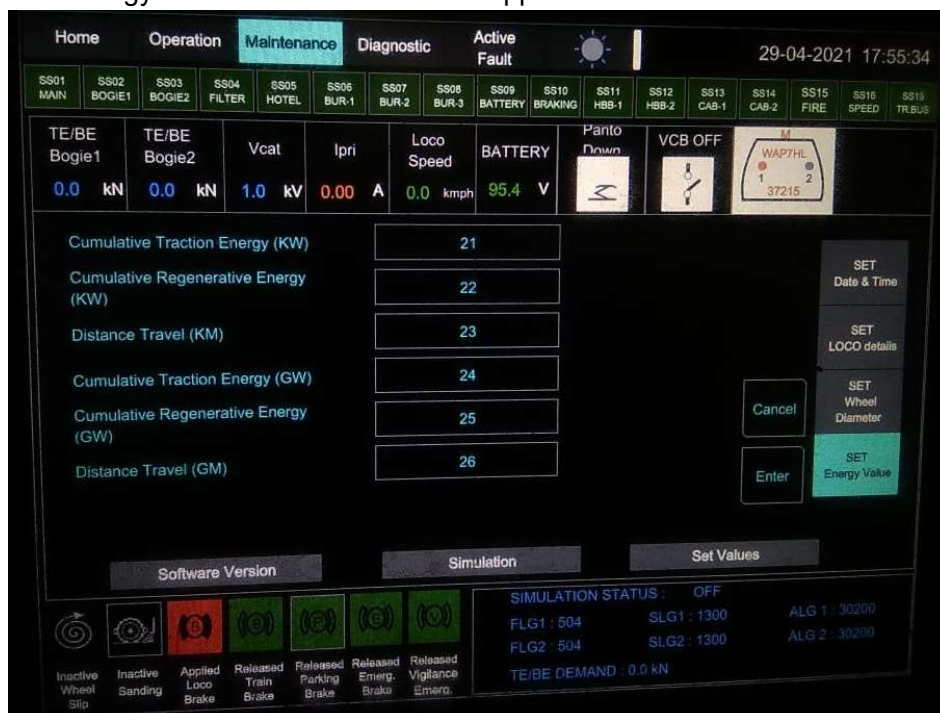
Step 2:

A new window will open, click on set values. This set value screen helps to set Date, time, loco number, Wheel diameter and energy Values.



Step3:

Now click on SET Energy Values. Now a screen will appear where values can be editable.



Step 4:

Click on parameter whose value need to be set. For example, Cumulative Traction Energy (KWH) value to be set as 21, then by clicking on rectangular box, a screen popup and enter value 21. Press Enter.

In similar manner set values for other parameters. Once all parameters are set on DDU screen, click on ENTER. Now VCU update values.



Procedure to see Energy Values set on DDU:

Step 1: Go to Operation screen and click on Energy, values which are set from DDU will be reflected on DDU. These values in operation screen get updated based on energy consumed or regenerated.

Home **Operation** Maintenance Diagnostic Active Fault 29-04-2021 17:55:54

SS01 MAIN SS02 BOGIE1 SS03 BOGIE2 SS04 FILTER SS05 HOTEL SS06 BUR-1 SS07 BUR-2 SS08 BUR-3 SS09 BATTERY SS10 BRAKING SS11 HBB-1 SS12 HBB-2 SS13 CAB-1 SS14 CAB-2 SS15 FIRE SS16 SPEED SS17 TRUSS

TE/BE Bogie1	TE/BE Bogie2	Vcat	Ipri	Loco Speed	M WAPTHL 1 2 37215	
0.0 kN	0.0 kN	1.0 kV	0.00 A	0.0 kmph		

Energy Monitoring		HV Circuit	Brake	BATTERY	Input kW
Cumulative Traction Energy in KWH	21	T. Conv 1&2	Temp	Volts	0.0 Hz
Cumulative Traction Energy in GWH	24	Aux Conv 1,2&3	Pressure	95.6	0.0
Cumulative Regenerative Energy in KWH	22	T. Motor	Route Map	Panto Down	VCB OFF
Cumulative Regenerative Energy in GWH	25	Aux. Sys	Speed Restriction	MR	BP
Cumulative Traction Energy (TRIP) in KWH	0	Energy	Inching Mode	> 6.4 kg/cm2	5.0 kg/cm2
Cumulative Regenerative Energy (TRIP) in KWH	0			BC1 APPLIED	BC2 APPLIED
Distance Travel in KM	23				
Distance Travel in GM	26				
Distance Travel (TRIP) in KM	0				

RESET Trip

SIMULATION STATUS: OFF
 FLG1: 504 SLG1: 1300 ALG1: 30200
 FLG2: 504 SLG2: 1300 ALG2: 30200
 TE/BE DEMAND: 0.0 kN

Inching Inactive Applied Released Released Released Released

Annexure 2: Release note for software 1.4.0.4 release

Software Package 1.4.0.4 Release following are changes:

CCUO:

- 1) The time of auto Flasher updated to 60 sec.
- 2) In case of Bogie isolation monitoring of corresponding Trafo pressure / temp signal is masked.
- 3) Functionality of VCB tripping with catenary voltage out of limits corrected.

CCON:

- 4) Resolved Wheel diameter corruption leading to Bogie isolation.

BUR:

None

HMI:

None

HIGH LEVEL SUMMARY OF SOFTWARE VERSIONS

Device	Software_Package_Baseline_1.4.0.4 Version (421W01BT)	Software_Package_Baseline_1.3.9.6 Version (420W01BT)
CCUO1	1.6.8.15	1.6.8.7
CCUO2	1.6.8.15	1.6.8.7
TCNGW	0.1.0.2	0.1.0.2
DCUL/SPIF	1.0.4.3	1.0.3.5
DCUM	1.0.4.3	1.0.3.5
HMI4G	2.6.12.0	2.6.11.2
BUR1	1.8.2.2	1.8.2.2
BUR2	2.8.2.2	2.8.2.2
BUR3	3.8.2.2	3.8.2.2