

CONTROL EQUIPMENT ENGINEERING DIVISION
TEST AND INSPECTION SPECIFICATION
No. 865721 Rev 00

ROUTINE TEST & INSPECTION SPECIFICATION

FOR

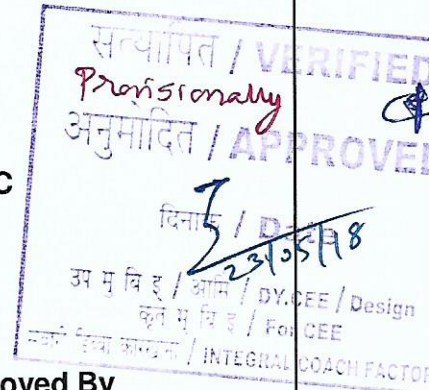
MASTER CONTROLLER (JOYSTICK TYPE)

FOR

TWIN POWER PACK-NEW UNDERSLUNG DETC

FOR

ICF CHENNAI



Prepared By

Checked By

Approved By

Mukesh Modi

Diwaker Kumar

S. K. Rai

Mukesh Modi
(Dy. Engr.)

Diwaker Kumar
Sr.Engr.(D)/CEE

S. K. Rai
DGM(D)/ CEE

Distribution :

1. SWM Testing - 01
2. Office Copy - 01

Date of Rev.00 : 17.05.2018
 Rev. No. :
 Rev. Date :

Despatch Ref : CEE/5.2/US-DETC
 Date : 17.05.2018

DATE	DATE:	DATE:	R E V I S I O N S	17.05.18
APPD: .	APPD.:	APPD.:		PRPD.: MM
				CHKD: DK
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				T&I SPEC. NO. 865721 NO. OF SHEETS.: 05 SHEET NO.-: 01

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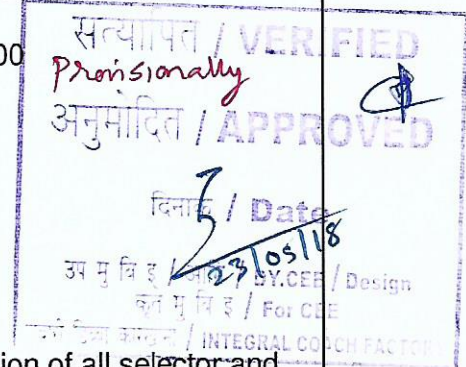
ROUTINE TEST & INSPECTION SPECIFICATION FOR MASTER CONTROLLER(JOY STICK TYPE) FOR TWIN POWER PACK NEW UNDERSLUNG DETC

1.0 Technical Particulars:

- | | | |
|-----------------------------|---|-----------------------------------|
| a. Work Order No. | - | As Applicable |
| b. Customer | - | ICF Chennai. |
| c. Description of Equipment | - | Master Controller(Joy Stick type) |
| d. Quantity | - | As per Work Order |
| e. GA Drg No | - | 25730030102 Rev.00 |
| f. Schematic Drawig No. | - | 35900030175 Rev.00 |

2.0 Physical Check

- 2.1 Visual Check.
- 2.2 All moveable parts shall move freely.
- 2.3 The Master controller shall be operated 20 times in succèssion of all selector and measure the following.



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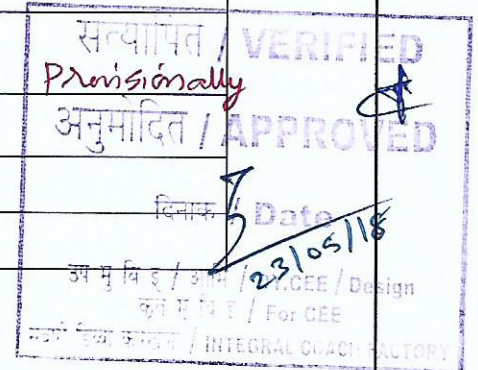
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2.4 Cam Switch Contact Gap shall be between ranges 4-6mm.

2.5 Cam Switch Contact Pressure shall be between 100 to 250 gms.

2.6 Dimensional Check

S. No	DIMENSIONAL CHECK	SPECIFIED DIMENSION AS PER DRAWING 25730030102	AS No.
1.	TOTAL LENGTH	408±1	
2.	TOTAL HEIGHT FROM TOP COVER	143±0.5	
3.	TOTAL WIDTH	216±0.5	
4.	MOUNTING HOLES PCD	386±1	
		194±0.5	



3.0 Mechanical Interlocking

Check that the driving mechanism and mechanical Interlocking of all selector mechanism of Master controller works properly.

S. No.	Mechanical Interlocking between three selectors	
1.	Locking key at "lock" position.	Throttle Hendle(Joy Stick) and Reverse selector knob must be locked

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S. No.	Mechanical Interlocking between three selectors	
2.	Locking key at "unlock" position.	Throttle Handle(Joy Stick) should be free to move from 0-8th Notch and Reverse selector knob should be free to move between F. O .R respectively.
3.	Reverse selector moved either "F" "O" & "R" when locking key must be in unlock position.	Throttle handle(Joy Stick) should be free to move from 0-8th Notch & Vice versa.
4.	Throttle handle(Joy Stick) at "0" position.	Reverse Selector knob should be free to move from "O" to "F" or "R"
5.	Throttle handle(Joy Stick) at any position 1 to 8th Notch	Reverse selector Knob gets locked in either "F" , ' O ' & "R" position.
6.	Throttle handle(Joy Stick) moved towards 1 to 8th Notch & Reverse selector at F or R	Locking Key gets locked in unlock position & can not be removed.
7.	Throttle handle(Joy Stick) moved towards , 1 to 8th position, on release hand the Deadman operation activate and locked.	Deadman handle locked and both deadman switch must be open , NO contact Change to NC contact , NC contact Change to NO contact.
8.	Throttle handle(Joy Stick) return its position "0"	The deadman feature must be reset at any position and both the deadman switch get closed.

सत्यापित / VERIFIED
Provisionally
अनुमोदित / APPROVED

DATE	DATE:	दिनांक	DATE: 17.05.18	R E V I S I O N S	17.05.18
APPD: .	APPD.:	For CEE / Design	APPD: 25/05/18		PRPD.: MM
		For CEE			CHKD: DK
		COACH FACTORY			APPD: SKR
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4.0 Electrical.

4.1 Insulation Resistance:

Insulation Resistance shall be measured with 1000 Volts Meggar on complete Master Controller with switches before and after Dielectric test. IR value shall be more than 200 Mega Ohms.

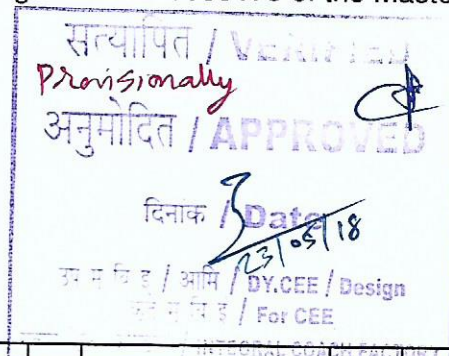
4.2 Dielectric test:

S.No	Test Conducted	High Voltage Value
1.	H.V.test between Aux switch for one minute.	1.5 KV
2.	H.V.test between all Aux Switch shorted and frame for one minute	1.5 KV

4.0 Functional test

Coupler pins connection and cam sequence functionality to be checked & tested as per Cam sequence. Drawing No. 35900030175 of the Master Controller.

Revision History:



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