



**DALMIA CEMENT (B) LIMITED – CEMENT PLANT
ARIYALUR
ELECTRICAL MANUAL**



Issue No. 01	Rev. No: 01	Effective Date: 07.07.2017	ELEC/SOP/047
Issued By: M.R		Approved By: HOD - ELECTRICAL	
SOP for Trouble shooting in travel drive clutch			

Scope : Trouble shooting in live panel for control scheme only

Responsibility : Engineer/Electricians

Accountability : Electrical Manager

PPE:

1. Nose mask
2. Goggles
3. Safety shoes
4. Safety helmet
5. Rubber hand gloves

Tools:

1. Test lamp
2. Insulated tools
3. Multi meter
4. Line Tester

Hazards:

Risk Associated

Electrical Shock
Minor body injury
Electrocution (Fatal)
Electrical Flash
Electrical Fire

Mitigating Measures

Tested Electrical Rubber Hand Gloves
Safety shoes, gloves, helmet, goggles
Re- fresher Training

Training needs:

1. Emergency preparedness
2. First aid training
3. First aid including CPR training
4. Electrical safety training

Procedure:

1. Use proper PPE.
2. Only Use electrical safety shoes for trouble shooting in live panel and stand on rubber mat.



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3. Use only insulated hand tools.
4. Use tested electrical rubber hand gloves wherever required.
5. Only qualified Technician / Engineer personnel work on clutch.
6. Do not carry out the work in clutch if Place / person are in wet condition.
7. Be alert and keep yourself beside the clutch during opening the clutch cover.
8. After opening the clutch inspect and ensure that there is no live power supply in clutch coil. If required take LOTO and do necessary arrangement for isolation the power supply.
9. Ensure tightness in clutch coil wire connector.
10. Ensure clutch plate gap <0.4mm by peeler gauge.
11. Gap should adjust through adjustable nut.
12. Ensure clutch coil resistance and IR value.
13. After finishing the Job, close covers properly.
14. Switch ON the clutch power supply .
15. Ensure coil voltage 24VDC.
16. If coil volt not came. Then check SMPS and control fuse.
17. If coil voltage 24VDC came, Then should take trial with slow travel drive.
18. Ensure noise, clutch output during slow travel move condition.
19. If nothing observed, then we will take trial through fast travel drive.
20. During fast travel running, slow travel motor should not rotate.
21. If rotate slow drive motor, Then clutch gap should be increased little bit.

Emergency / Emergency Shut OFF:

1. If any injury or electrical shock is there, give First aid and inform to the Safety department or Call Emergency number 3108/9865152222/9750963761.

Records/Annexure:

1. JSA as enclosed below.



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JOB SAFETY ANALYSIS:(JSA)

Job Safety Analysis	Job: Trouble shooting in live panel	Date:	Analysis by: Section engineer	Reviewed by: Section head
Title of employee doing job: Engineer / Electrician	Supervisor: Section Engineer	Department: Electrical	Section: Plant	Approved by: HOD
Reqd./recommended PPE: Tested Electrical rubber hand gloves, Safety shoes, Safety helmet, Safety Goggle				
Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Opening of live panel cover	Body injury	Use suitable tools	Tool may be damaged	Inspect before use
	Panel flash over and Burned injury	Keep yourself beside the panel	Not follow the procedure	Tool box talk/Proper Training
		Wear safety Goggles	Damaged goggles/non standard goggles/ Not wearing Goggle.	Periodic replacement/ Proper training
Trouble shooting	Short circuit.	Use Insulated tools	Insulation may damage.	Inspect before use
		Testing tools to be hold straight	Not follow the procedure	Tool box talk/SOP Training
	Panel flash over and Burned injury	Wear safety Goggles / Electrical glove	Damaged goggles/non standard goggles/ Not wearing Goggle.	Periodic replacement/ Proper training
		Power conductor to be covered by shroud	Failed to inspect or cover	Inspect before start the job