



DALMIA CEMENT (B) LIMITED
DALMIAPURAM
CPP ELECTRICAL DEPARTMENT



Issue No. 01	Rev. No: 00	Effective Date: 01.03.2016	SOP/CPP/03
Issued By: M.R		Approved By: HOD - CPP	
SOP for AC OUTDOOR FAN SERVICE & MOTOR REPLACING WORK			

Scope : Describe the AC outdoor fan service & motor replacing work

Responsibility : Electrical Engineer

Accountability : Section In-charge

PPE:

1. Goggles
2. Electrical safety Gloves
3. Safety shoes
4. Safety helmet

Tools:

1. Suitable spanner
2. Cutting player
3. Insulated Screw driver
4. Bearing Puller

Hazards:

Risk Associated

Electrical Shock
Minor body injury
Flash over
Equipment damage

Mitigating Measures

Electrical Safety Gloves
Safety shoes, gloves, helmet, goggles

Training needs:

1. Electrical shock recovery Training
2. Emergency preparedness
3. Fire fighting
4. First aid training



**DALMIA CEMENT (B) LIMITED
DALMIAPURAM
CPP ELECTRICAL DEPARTMENT**



Issue No. 01	Rev. No: 00	Effective Date: 01.03.2016	SOP/CPP/03
Issued By: M.R		Approved By: HOD - CPP	
SOP for AC OUTDOOR FAN SERVICE & MOTOR REPLACING WORK			

Procedure:

1. Take the Energy isolation permit & work permit for the particular ac unit feeder as per ELEC/SOP/003.
2. Switch of the power supply MCB/ Switch unplug the power supply cable.
3. Clean the outdoor unit with Hand Blower & Cloth, while cleaning use PPEs like Nose mask, goggles and hand Gloves.
4. Remove the covers with screw driver & spanners.
5. Remove the Fan Leaf with suitable Allen key/screw driver/spanner.
6. Remove the Base fixing bolt/rubber lock/clamp with suitable screw driver/spanner.
7. After removal of the motor from the base frame remove the circlip mounted in the shaft DE & NDE Side.
8. Remove the End shield/ cover by using suitable spanner/screw driver.
9. Check the condition of the Bush/ Bearings conditions.
10. If it is usable conditions reassemble the same & apply suitable lubricant, if not replace the bearings/Bush with suitable puller.
11. Ensure the winding insulation value & resistance is normal.
12. If the Winding is week / failure replace the winding.
13. After fixing the bearings/ Bush fit the end cover/shield with suitable spanner / screw driver
14. Ensure the Free rotation of the Rotor shaft of the motor.
15. Ensure the Connection of the run capacitor in case of single phase motor.
16. Ensure the Winding connections to be connected as per the diagram.
17. Refit the motor in the base frame by using spanner/screw driver.
18. Refit the fan leaf by using spanner/Allen key.
19. Clear the permits as per ELEC/SOP/004.
20. Record all Check point in the concern Check list.



DALMIA CEMENT (B) LIMITED
DALMIAPURAM
CPP ELECTRICAL DEPARTMENT



Issue No. 01	Rev. No: 00	Effective Date: 01.03.2016	SOP/CPP/03
Issued By: M.R		Approved By: HOD - CPP	
SOP for AC OUTDOOR FAN SERVICE & MOTOR REPLACING WORK			

Emergency / Emergency Shut OFF:

1. If electrical shock injury or body injury are there, give First aid and inform to the Safety department or Call Emergency number 222/9865155288/9865177444.

Records/Annexure:

1. Refer work permits certificates.
2. JSA as enclosed below.

JOB SAFETY ANALYSIS :(JSA)

Job Safety Analysis	Job: AC out door fan service & motor replacing work.	Date:	Analysis by:	Reviewed by:
Title of employee doing job: Electrician	Supervisor: Section Engineer	Department: Electrical	Section:	Approved by:
Req'd/recommended PPE: Nose mask, Goggles, Electrical safety Gloves, Cotton Gloves, Safety shoes, Safety helmet				
Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Put on PPE, Take Permit				
Cleaning of Outdoor unit	Eye irritation,	Wear goggles	Damaged goggles/non standard goggles	Periodic replacement
	Respiration problem	Wear Nose mask	Damaged nose mask	Periodic replacement
	Body injury	Wear safety helmet, safety shoes , hand gloves	Tools and material may fall on human body	Without PPE don't perform the job
Short /open the power terminals by open the panel door, Check the tightness of terminals	Electrical shock	Use Electrical safety gloves	Damaged Gloves	Periodic replacement.
	Body injury	Use proper tools	Nonstandard /damaged tools	Training for tools handling/ Periodic replacement
		Wear safety helmet, safety shoes , hand gloves	Tools and material may fall on human body	Without PPE don't perform the job



DALMIA CEMENT (B) LIMITED
DALMIAPURAM
CPP ELECTRICAL DEPARTMENT



Issue No. 01	Rev. No: 00	Effective Date: 01.03.2016	SOP/CPP/03
Issued By: M.R		Approved By: HOD - CPP	
SOP for AC OUTDOOR FAN SERVICE & MOTOR REPLACING WORK			

Check the out Door earthing, close the cover properly.	Body Injury	Wear safety helmet, safety shoes , hand gloves	Nonstandard /damaged tools Tools and material may fall on human body	Without PPE don't perform the job Training for tools handling/ Periodic replacement Without PPE don't perform the job
Clear permit				