

WHILE WORKING ON LOCOMOTIVE

- Provide “MAN AT WORK” board at both side of the loco.
- During schedule, place thick paper in CK1 & CK2 contactor and keep MB1 & MB2 Circuit breaker in off position
- Be careful while working on the locomotive.
- Always wear helmets and boots while working on locomotive.
- Do not wear loose clothes, slippers, brace-lets etc.
- After Initial Testing, shut down the Engine and Keep battery knife switch in “off” position before doing any work on locomotive.
- Do not leave any tool, cotton cloth or any other foreign material on the locomotive.
- Count all the tools and keep them in a proper tool bag.
- Hand lamp working voltage should not be more than 72 Volts.
- Regularly check the condition of hand lamp lead and its wire.
- Drain air pressure before removing any pneumatic equipment.
- Always, discharge the meggered circuit to ground with the help of flexible insulated wire after meggering.
- If OHE is above diesel locomotives roof, please ensure Switch off OHE Supply before climbing/ accessing to the roof of the locomotive.
- Place the proper wheel skids on both end wheels.
- During shed shunting ensure speed should not be more than 5 Kmph.

- Prior to start the loco shout loudly “KHBARDAR” and ring the bell three times and ensure no person is working in Radiator room and Expresser room.
- Always use ladder provided in loco for accessing to the roof of the locomotive.
- Clean the hands and sole of the shoes to avoid slipping before climbing on the ladder.
- After completion of the work, the concerned supervisor satisfying himself all staff, tools, ladder etc. has been removed.

WHILE WORKING UNDER TRUCK OF LOCOMOTIVE

- Ensure that locomotive is in Shut down condition for electrical side work
- Provide proper wheel skids on both side of the loco, and apply loco Hand brakes before going in loco under truck.
- Do not drop oil/ grease in pits as staff may slip and get injured.
- Do not leave released brake blocks and other hardware inside the pits.
- Isolate bogie-isolating cocks before working on brake gears.



OTHER IMPORTANT SAFETY PRECAUTIONS

- Keep fire extinguishers ok and sand buckets with full of sand at various locations in the shed, which are vulnerable to fire.
- First aid box shall be available at proper places.
- Electric shock treatment instructions shall be displayed at various places if required.
- All the pits having dead ends should be provided with proper buffer stoppers.
- Check safety slings regularly for EOT cranes.
- Carry out D.P. test and ultrasonic testing of lifting assets like tackles, safety sling hooks, anchors & pins etc. periodically.
- Ensure that no staff is present on the locomotive and in the vicinity of loco movement and warn staff for the movement of loco before taking movement of loco.
- Use goggles while doing chipping or grinding works.
- Only an authorized person should do gas welding/ arc welding work. They should keep water bucket and fire extinguishers.
- Use hand gloves, welding safety goggles/ safety screen and safety shoes of proper quality while carrying out welding works.
- Carry out complete check of cutting torch, cylinder regulators and hosepipes for their proper condition before starting the gas welding work.
- Use spark lighters to light the torch of gas welding.
- Use spindle keys for opening / closing the valves of gas cylinders.

- Protect the torch nozzle from dust, dirt, oil, grease etc. to avoid backfire.
- Keep the cutting plant and the gas cylinders away from inflammable substances.
- Do not use petrol and kerosene while welding work is being done.
- Only an authorized person should operate overhead crane.
- Crane drivers should frequently use crane horn / buzzer to alert people working on shed floor.
- Do not leave any foreign material or nut bolts etc. on the crane and its pathway.
- Provide safe guards all around while testing rotating machines or high voltage, high current equipments.
- Earth all electrical fittings, equipments machines and plants.
- Do not use earth wire as a neutral wire.
- Do not renew a blown fuse until satisfied on the cause of its blowing.
- Clearly display switchgear layout of the electric supply. Staff working on shed floor should be aware of the switch to be isolated in case of emergency
- Work like loco body lifting/ lowering, handling of bogies/ Alternators/ other heavy equipments by EOT cranes should be carried out under proper supervision.

- Secure all the locking bolts of top cover of VPI plant properly before starting vacuum pressure impregnation (VPI) process.
- Ensure proper working and regular calibration of thermostats/ temperature controllers provided on varnish baking ovens.
- Ensure working of air circulating fans and periodic cleaning of air inlet and exhaust outlet in sheds. Ensure working of Exhaust fans in Batter section.
- Do not leave any material on the path ways of the shed and do not drop grease or oil.
- Keep concentration on job while working with sharper tools.
- Use nose mask while doing dust-blowing work.
- Follow the local safety instructions issued time to time for your's and other's safety
- Safety related slogans should be displayed at various places.

SAFETY TIPS FOR ELECTRICAL APPLIANCES

- ☞ Follow the manufacturer's operating and safety instructions.
- ☞ Never extinguish electric fire by water
- ☞ Prefer single phase/ two phase, 3 wire system in house wiring including grounding wire running along the wiring.
- ☞ Use standard ISI approved wires, cables for wiring or testing equipments.

- ☞ Provide ISI approved quality products i.e. ELCBs, MCBs, Switches, Holder, Connector etc.
- ☞ Prefer 3 pin plug / socket with third pin effectively connected to the earth.
- ☞ Phase always be connected to the MCBs /fuse/ switches.
- ☞ Avoid jointing and loose connection in wiring. Provide insulation tape on joint or cuts on the wire.
- ☞ Each and every branch circuit should be protected through MCBs/fuse wire of standard rating.
- ☞ Ensure earthing wire running along the wiring is connected to each and every appliance as well as to the system earthing and earth pit.
- ☞ Avoid direct insertion of lead wire without male plug in the socket.
- ☞ Switch off mains supply or unplug an appliance before doing cleaning or repairing work.
- ☞ Avoid handling of any electrical appliance with wet hands / floor.
- ☞ Never try to touch and feel leakage of current. Use a current tester or other appropriate method.
- ☞ Never try to open or repair an machine. Call authorized person.
- ☞ Never bypass any protection arrangement provided in machines/apparatus as well as supply system.

- ☞ Don't plug/ unplug a machine/apparatus without switching off it.
- ☞ Don't connect more electrical equipments at one point.

GENERAL SAFETY

- ☞ All the staff are expected to be alert on duty and wear the prescribed uniform at all times.
- ☞ Always wear the personal protective equipments etc, issued by Railway.
- ☞ While crossing tracks, look-out for loco movement on either sides and then cross.
- ☞ Riding / Driving of Two Wheelers/Four Wheelers in Loco movement area is prohibited.
- ☞ Be watchful while moving under crane area when EOT cranes are in operations.
- ☞ Use of cell Phones during working on locomotive is prohibited.
- ☞ While walking on bays, watch your steps for slip hazard.
- ☞ Do not venture to operate machines, materials handling equipments like Fork lift Trucks, Battery operated Trucks which are not familiar to handle.
- ☞ Never stand on the footsteps of the loco while the loco on move.

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The information given in this pamphlet is only for guidance.
If you have any suggestion or comment, please write to:
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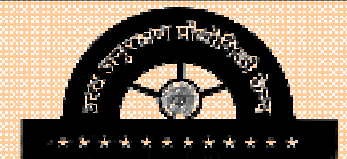
GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

SAFETY AT WORK PLACE In Diesel Sheds

CAMTECH/2013/M/Dsl/SAFETY/1.0

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