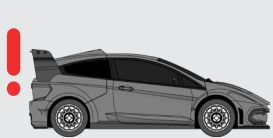


PURPOSE

This work instruction applies to **RALLYCROSS TEAMS** in the garage, paddock or quarantine zone for safely handling of an electric vehicle during the event. The safety procedures for electrical measures and in case of an emergency will be defined by the teams themselves. Interactions with the race car can cause electrical injuries:

electric shock, electric arc, electric discharge as well as chemical risks and the risk of fire

GENERAL INFORMATION



Accident, specific incident or malfunction on the Car.



don't touch the vehicle if situation is unclear



keep safety distance of 1,25m if situation is unclear



contact race control if situation is unclear

HAZARDS



electrical hazards: 800 V high-voltage



risk of fire at the car and surrounding area



risk of battery thermal runaway



chemical risk of hazardous gases



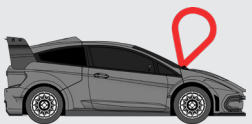
chemical risk of corrosive liquids

PERSONAL PROTECTIVE EQUIPMENT



Protective measures for PPE are described by the teams themselves

EMERGENCY EQUIPMENT - FIRE



internal fire extinguisher



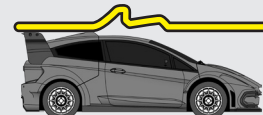
ABC-fire extinguisher
CO2-fire extinguisher

SAFETY EQUIPMENT

GREEN LIGHT

RED LIGHT

green light panel
red light panel



Insulated mat



two pole voltage tester

EMERGENCY EQUIPMENT - CHEMICALS



Nitrile gloves



protective goggles



hexachlorine eye-wash-solution for HF-neutralisation



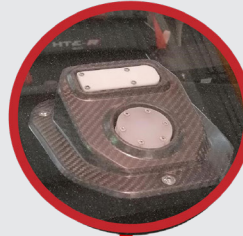
chemical binder

IMPORTANT COMPONENTS ON THE RACECAR

DRIVER MASTER SWITCH (DMS)



READY-TO-MOVE LIGHT



EXTINGUISHER SYSTEM



EMERGENCY STOP SWITCH

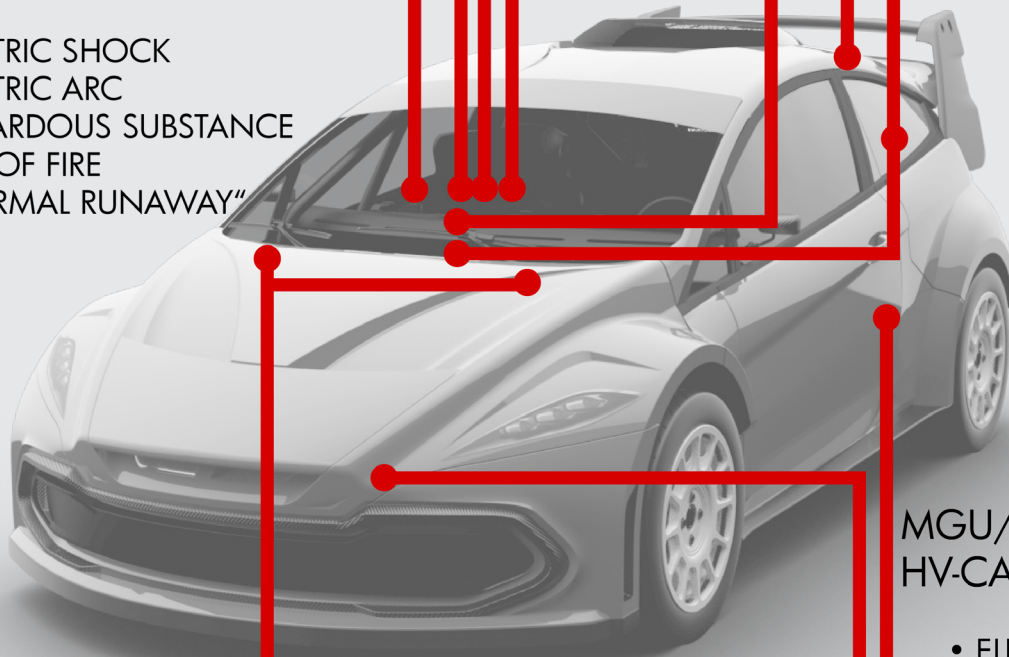


STATUS LIGHT



BATTERY (RESS)

- ELECTRIC SHOCK
- ELECTRIC ARC
- HAZARDOUS SUBSTANCE
- RISK OF FIRE
- "THERMAL RUNAWAY"



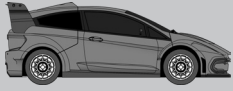
MGU/ INVERTER/
HV-CABLES

- ELECTRIC SHOCK
- ELECTRIC ARC
- RISK OF FIRE

EXTINGUISHER
HANDLES +
NEUTRAL SWITCH



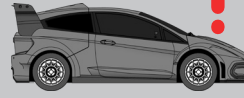
TEAM ACTIVITIES



Evaluating the RESS indicator status lights



Handover of the vehicle in the quarantine zone

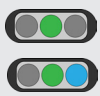


Check of the vehicle before and after the race, after malfunction or accident



Fire extinguishing operations

GREEN LIGHT STATUS



RESS Indicator Status Light is green **PLUS** race control gives the green light



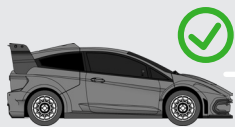
transport the vehicle off the racetrack to the team box

GREEN LIGHT

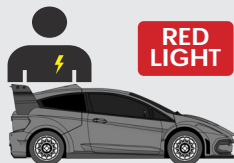


Handover of the vehicle in the team box

RED LIGHT OR UNKNOWN STATUS



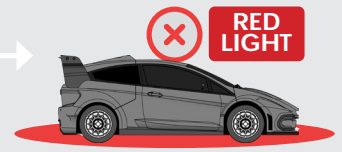
vehicle is safe



RED LIGHT

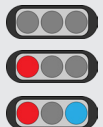
ES put on the red light panel on the car

transport the vehicle off the racetrack to a quarantine zone

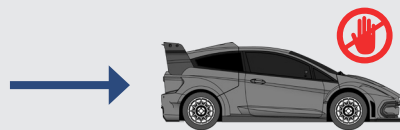


Handover of the vehicle in the quarantine zone

consult electrical specialist (ES)



Indicator Status Light is NOT green

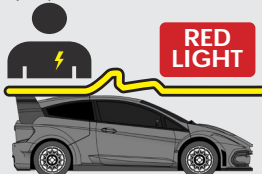


vehicle is unsafe, team reset procedure, if green status return to team box, still red status continue process

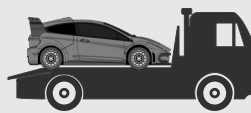
consult electrical specialist (ES)



vehicle is unsafe



ES cover the car with insulated mat and put on the red light panel



transport the vehicle off the racetrack to a quarantine area



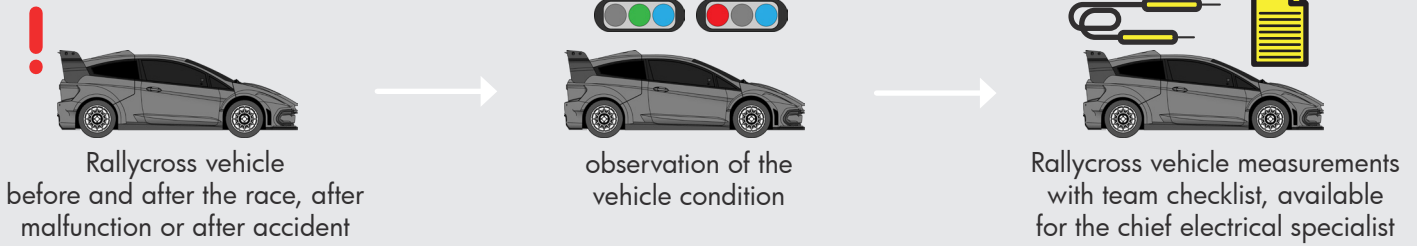
electrical specialist for live line work



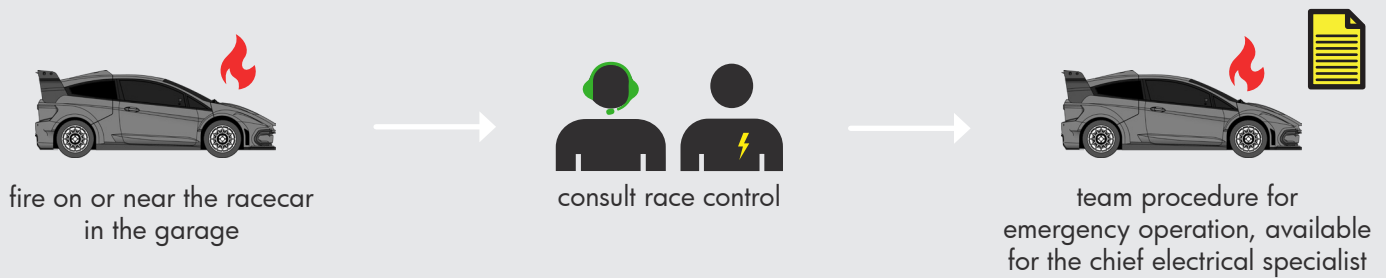
electrical hazards: 800 V high-voltage car

report to race control and team box

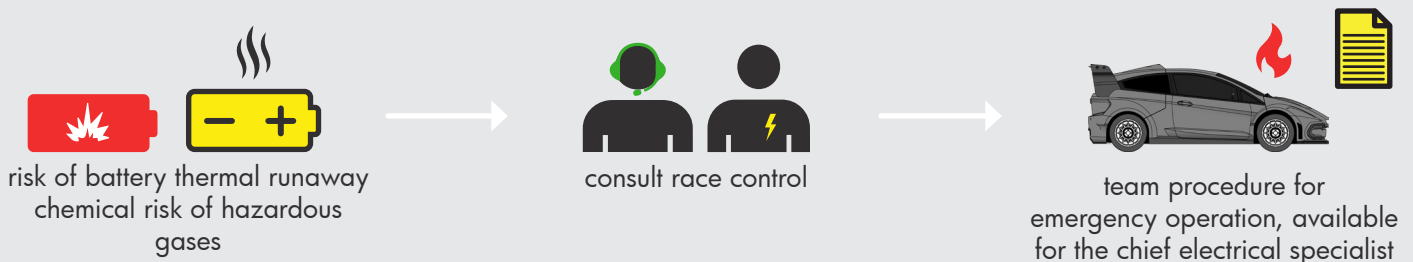
RALLYCROSS VEHICLE CHECK



BEHAVIOUR IN THE EVENT OF FIRE – NOT HV-BATTERY (RESS)



BEHAVIOUR IN THE EVENT OF BATTERY THERMAL RUNAWAY, SMOKE OR FIRE – BATTERY (RESS)



PRECAUTION IN CASE OF CHEMICAL LEAKAGE



FIA RECOMMENDATIONS

