

<u>YELLOW FLAG</u>: Is for an Incident. No Passing from perpendicular from the first flag until the following green flag past the incident.

- **<u>Single Standing Yellow:</u>** For incidents off course **<u>OR</u>** back up to a waving yellow.
  - **EXCEPTION:** NO FLAG for cars off course making controlled, forward progress OR two or four wheels off track.
- <u>Single Waving Yellow</u>: For incidents on-course <u>OR</u> for safety crews or marshals working outside of barriers regardless of location (Boots on the ground).
- Double Standing Yellow: Full course yellow called for by Race Control. Neutralizing a race.
  - **NOTE:** Corner Station that has the incident, continue to flag appropriately.

**<u>GREEN FLAG:</u>** The track is clear. Displayed Waving

- All Stations for the first lap of a non-race session of the day for each group
- Indicates first station past following a local yellow flag.
  - **NOTE:** Wave green until car causing yellow flag passes along with cars in vicinity.
  - **NOTE:** On Race Restarts, wave green for any cars approaching your station.

**SURFACE FLAG:** Fluid or Debris on course. Displayed Standing for 2 (two) laps unless condition returns to normal prior to the end of the second lap.

• **EXCEPTION:** NO FLAG if surface condition is off-line AND not in danger of being hit.

WHITE FLAG: A slow moving Race Car or Safety Vehicle on the track surface.

- <u>Standing White:</u> Slow race car, moving at 1/3 more than normal speed to about 1/2 speed <u>OR</u> Back-up to Waving White.
- <u>Waving White:</u> Very slow-moving race car, moving at less than 1/3 of normal speed <u>OR</u> moving Safety Vehicle on the track surface.
- <u>NOTE:</u> If a Safety Vehicle goes off the track surface and is moving <u>OR</u> stops on or off the track surface, withdraw the white flag and display the appropriate LOCAL YELLOW FLAG.

**BLUE FLAG:** Advisory, a faster car is approaching or making a pass.

- **<u>Standing (or Rocked)</u>**: Another car is approaching and preparing to pass.
- <u>Waving:</u> Another car is rapidly overtaking <u>OR</u> the driver being overtaken is unaware of the faster car <u>OR</u> is clearly obstructing.

NOTE:

- <u>Practice:</u> NO BLUE FLAG for cars running together for 2 (two) laps.
- <u>Race:</u> Only blue for cars being lapped. Never blue for cars fighting for position.

**<u>RED FLAG</u>**: Stops a session or race. Requested by Race Control. Displayed Waving.

- All cars reduce speed and proceed to pit lane.
- Continue to flag local incident.
- Report passing or unsafe activity.
- Withdraw after the last car enters pit lane.

**<u>COMBINED RED/BLACK FLAG:</u>** Stops a session or race. Requested by Race Control. Displayed Waving

- All cars pull to a safe and controlled stop by the side of the track and await further instruction from Race Control.
- Continue to flag local incident.
- Report passing or unsafe activity.
- Continue to display until told to withdraw by Race Control.



## **INCIDENT CALLS:**

- Call all condition flag changes in real time as they happen.
- Break into sounds bites.
  - o <u>First Bite:</u>
    - Corner Station Location and Flag Condition
    - If applicable, add Contact or Impact in the first bite.
      - Contact: Is with another Car.
      - Impact: Is with a barrier.
    - Reserve using Hard Impact or Hard Contact only if certain car is not going to continue.
    - If applicable, add Track Blockage percentage.
  - Second Bite:
    - Car Number and Location of Car (on/off track, left/right/center, etc.)
      - Do not delay the call if missing the car number.
      - If do not have or cannot see the car number, give additional information about car color, sponsor, type of car.
    - Not important to tell us how it got there, just where it is.
  - o <u>Third Bite:</u>
    - Add additional relevant information.
      - How did the car get there or information relating to the contact?
    - Answer questions Race Control may have.
      - It is OK to tell Race Control to stand by to gather correct information regarding the incident.
  - <u>Clear/Continued:</u>
    - Informs Race Control and other corner stations that the <u>LOCAL YELLOW FLAG</u> incident has ended and all cars either continued <u>OR</u> are in a safe location <u>AND</u> yellow flags have been withdrawn.

## PASSING UNDER YELLOW:

- Report <u>ALL</u> passes under yellow.
  - Including those that may be "give backs".
- Report passes under yellow within one (1) lap.
  - Report even if you do not have all the information, get it in the log.
  - Once you have all the information, complete the report.

## SURFACE CONDITION:

- Report type of debris or fluid.
  - What is it?
  - Is it on-line or off-line?
  - Is it in danger of being hit?
- Report the size of the debris.
  - $\circ$   $\;$  Give dimensions of debris or how wide the fluid line is.
  - Identify what the debris or fluid may be.
- Where did the debris or fluid come from?
  - Car number?



#### **OTHER REPORTS:**

## • Short Cuts:

- All four wheels off to bypass a chicane or the inside apex of a corner.
  - Call if it were to pass another competitor <u>OR</u> suspect a time and/or distance advantage was gained.
- Track Limits vs. Off Course/ Off and On:
  - <u>Track Limits</u>: Is willful driving beyond the racetrack surface to gain time or position advantage.
  - <u>Off Course/Off and On</u>: is inadvertent driving beyond the racetrack surface in order to avoid an incident or recover from driver error.

## • Off Course/Off and On:

- Four Wheels, Not Two Wheels
- Report only if there was a local yellow flag change <u>OR</u> if the car reenter unsafely <u>OR</u> rough ride and suspect damage to the car.
- Track Limits:
  - Instructions will be given in the morning briefing if applicable to the event.
- <u>Safety Vehicles:</u>
  - Report when:
    - Safety Vehicle enters course from station.
    - The first response vehicle arrives at the incident scene.
    - When the Driver is out of the car.
    - When the last response vehicle leaves the scene.

## <u>Contacts and Impacts:</u>

- Report Car numbers and colors
- Contact/Impact site on the car(s)
- Whether there was a position change because of the contact.
- Does the car(s) continue?
- What type of damage to car(s) or barrier?
- Debris field or fluid on-track?
- Slow Cars:
  - Only if a flag changes **OR** possible mechanical problem.
  - Report if car is back up to speed.
- <u>Mechanical:</u>
  - Report smoke, leaks, or odors.
  - Is the track clear?
  - **NOTE:** Only one confirmation is needed for this type of report.
- <u>Pit-In Calls:</u>
  - The Station nearest <u>PIT IN</u> should call.
    - Leader in Pits for Green Flag Pit Stops
    - Cars being observed, penalized, or black flagged into pits.
- Before and Between Sessions
  - Inform Race Control of debris or fluid that may need to be cleaned up.
  - Contact Race Control for approval prior to rotating marshals across track.



## **RACE STARTS:**

- No Flags for Formation Laps unless surface or other conditions warrant.
- Safety Car lights will be turned off during the last formation lap. Call pole sitter around to start.
- Start will call the Green Flag upon display.
  - **NO START**: No flag will be displayed at Start. All corner stations will display <u>Single</u> <u>Standing Yellow</u>, until told to withdraw.
- Passing <u>IS NOT</u> permitted until cars cross the Start Line.

## FULL COURSE YELLOW:

- When requested by Race Control. Safety Car will be dispatched with lights on. All corner stations display **Double Standing Yellow**.
  - **EXCEPTION:** Corner Station that has incident. Continue to flag appropriately.
- Watch for passing and report.
- The Safety Car may wave by cars between the safety car and the overall leader. Race Control will inform corner stations of this occurrence. Waved by cars are not permitted to pass each other.

## FULL COURSE YELLOW SEQUENCE

- Standard FCY:
  - Pits are closed.
  - All cars pack up behind the Safety Car.
  - Cars ahead of their class leader will be passed around the Safety Car
  - Pits are opened to Prototypes first and then GT Cars on the next lap.
  - Cars ahead of their class leader will be waved-by around the Safety Car.
  - <u>GTP Class Split.</u> GTP cars move to the front of the field.
  - Prototype Class Split. LMP2 cars moved ahead of GT field but stay behind the GTP field.
- <u>Short FCY:</u>
  - Pits are closed.
  - All cars pack up behind the Safety Car.
  - Cars ahead of their class leader will be passed around the Safety Car
  - <u>GTP Class Split.</u> GTP cars move to the front of the field.
  - <u>Prototype Class Split.</u> LMP2 cars moved ahead of GT field but stay behind the GTP field.
  - Pits are opened as the field comes back to restart.

**NOTE:** Pass around, wave-by and class split cars must remain in single file; passing within the transitioning group is prohibited

## **RESTARTS:**

- When the Safety Car lights are turned off. Race Control will announce "Lights Out/Flags Down". All posts will withdraw their Double Standing Yellows.
- Corner Stations call the leader (not the Safety Car) around for Start.
- Once Start has called the Green Flag restart, passing <u>MAY</u> begin before the Start/Finish line.
  - **NO RESTART**: No flag will be displayed at Start. All corner stations will display **Double Standing Yellow**, until told to withdraw.
  - **NOTE:** Upon restart, any cars approaching your station wave green for about 10 sec.



For your safety, DO NOT go out from behind a protective barrier on to the course or in a runoff area, without ADVANCE clearance from Race Control.

DO NOT TOUCH OR ASSIST WITH A GTP CAR INCLUDING WHEN THE HV SAFETY LIGHTS ON THE CAR INDICATE THAT THE CAR IS SAFE TO TOUCH. MAINTAIN A MINIMUM 6 FEET FROM GTP CARS.

BEFORE RELEASING ANYONE to a Non-GTP stopped car, advise Race Control if it can be safely moved by marshals. WAIT FOR RACE CONTROL TO RESPOND. ONLY SEND PERSONNEL WITH RACE CONTROL APPROVAL.

Only fight a fire on non-GTP cars when there is no one else to do it. Fires are difficult to put out, and you do not have personal protective equipment to keep you safe. Your safety comes first, then the driver – the car is not the top priority.

IMSA sanctioned series use a variety of fuels and fuel mixtures. Either water or dry-chem extinguishers are acceptable. Do not direct the power stream from a dry-chem extinguisher at a driver's head.

## **GTP Hybrid Information**

The GTP category features hybrid engine technology which incorporates an electric engine component to the car. The hybrid systems are considered High Voltage and operate at 800 Volts. These voltages can create a life-threatening electric shock, but not enough to create arcing. Precautions MUST be taken to ensure your safety and those around you.

## **GTP HV Light Indicators**

HV Safety Light Status	INDICATION	DESCRIPTION	SITUATION
GREEN		High Voltage System OK	CAR SAFE
RED		High Voltage potentially present on the surface of the car	UNSAFE TO TOUCH
OFF		High Voltage System Status Unknown	UNSAFE TO TOUCH



## GTP HV Light Indicators (cont.)



• Light Indicators will automatically extinguish 15 minutes after stopping on course and should be treated as unsafe but not an emergency.

## Signage Indicators of Hybrid Equipped Car

- Black background number plate with a white number on the nose and side of the car.
- Hybrid-Electrified: Located on both End Plates of the Rear Wing above any sponsor logos.



## **Track Services**

- Only Track Services personnel should touch the car during an incident or recovery on-track.
- Track Services have properly trained personnel to work on GTP cars when on-track. Track Service crews have proper PPE equipment including Electrical Gloves, Rubber Mats, and Electrical Hooks to handle any situations as required.

## **Marshal Safety**

- DO NOT TOUCH OR PROVIDE ANY ASSISTANCE WITH A GTP CAR OR DRIVER EVEN WHEN THE HV INDICATOR LIGHTS ARE GREEN. THIS INCLUDES NON-GTP CARS STILL IN CONTACT WITH A GTP CAR.
- Maintain a minimum 6-foot distance from the car.



## Marshal Safety (cont.)

• If a GTP car remains in contact with metal Armco railing, while unlikely, current may transfer and conduct down the rail. If a post has this condition, step away from the wall and maintain a 6-foot distance from the rail until the car is moved from contacting the rail.

## Incident Management-Safe Location (i.e. Orange Overlaps)

Should a GTP stop in a safe location behind barriers, the following information should be provided to Race Control as soon as possible.

- Status of the HV Light Indicators
- Driver Condition
- Maintain 6-foot distance from car.
- Any potentially hazardous conditions
- If necessary, create a 6-foot verbal safety zone around the car should unauthorized personnel approach the car.

#### Incident Management-On Track

Should there be an incident involving a GTP car and the GTP car **WILL NOT CONTINUE**, the following information should be provided to Race Control as soon as possible.

- Status of the HV Light Indicators
- Driver Condition
- Any potentially hazardous conditions

## Driver Exit Protocol

All GTP drivers have been instructed on the proper procedure to exit their cars safely. Should a car stop, and driver is attempting to get out, marshals are **NOT PERMITED** to assist the driver in exiting the car even if the HV Indicator Light is green.

If a driver IS IN DISTRESS AND CANNOT EXIT under their own power, Call Race Control with an ALERT/EMERGENCY over the radio net. DO NOT ATTEMPT TO ASSIST THE DRIVER IN ANY SITUATION EVEN IF THE HV INDICATOR LIGHT IS GREEN.

## ERS Fire Safety

GTP Batteries are in a fireproof housing inside the car. Should a thermal runaway occur, there is a "Douse" port located on the car specifically to fight this type of fire. Track Services has fire extinguishers equipped with special nozzles to attach to the "douse" port. The standard Fire Extinguishers on post **ARE NOT EQUIPPED WITH THE SPECIAL NOZZLE FOR THE "DOUSE" PORT.** 

#### Avoid breathing in smoke as a fire may produce hazardous fumes.

## DO NOT ATTEMPT TO FIGHT ANY FIRES ON GTP CAR REGARDLESS OF HOW SMALL THE FIRE MAY BE OR IN A LOCATION AWAY FROM THE ENGINE COMPARTMENT. CALL FOR TRACK SERVICES.



#### Car stopped / engine running:

• Car position and class color are displayed.

## Car stopped / engine stalled:

• Brackets flashing alternating red and green.

## Car stopped / engine restarted:

• Circulating ring of dashes alternating red and green

## Car stopped / engine restarted / car continued:

• Display returns to car position and class color.

## During and after pit stop:

• Displays wheel stop length in purple until ten seconds after car crosses the pit exit loop.

#### Full Course Yellow (FCY):

• Car position with yellow background when car crosses first timing loop after declaration

#### **Green from FCY:**

• Car position and class color after car crosses first timing loop after clearing FCY.

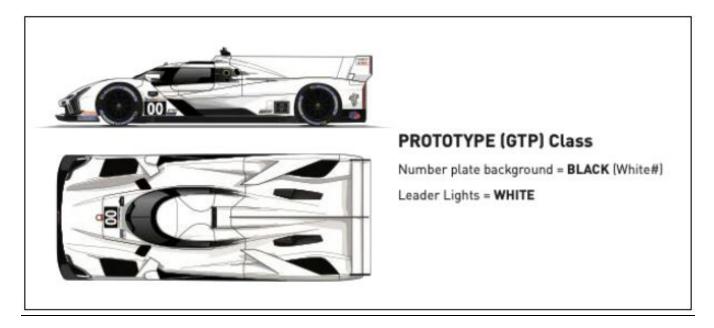
#### Lost connection to Timing and Scoring position data:

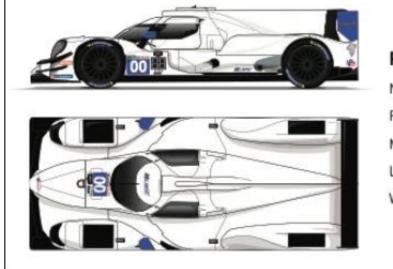
• Car number is displayed in class color in WeatherTech and two blue hash marks in Michelin Pilot Challenge



# **Multi-Class Racing Quick Reference**

## WeatherTech Championship





# PROTOTYPE (LMP2) Class

Number plate background = **BLUE** (White#) Rear Wing Endplates = **BLUE** Mirror = **BLUE** Leader Lights = **BLUE** Windscreen = **BLUE** 



## WeatherTech Championship (cont.)

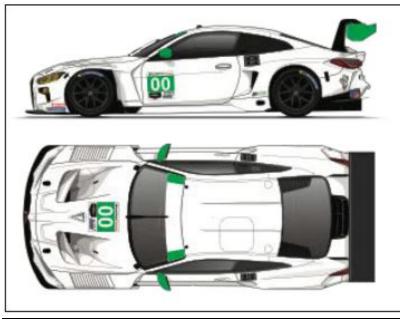


## GTD PRO Class

Number plate background = **RED** (White#) Rear Wing Endplates = **RED** Mirror = **RED** 

Leader Lights = RED

Windscreen = RED White center primary car Black center second car



# GTD Class

Number plate background = GREEN (White#)

Rear Wing Endplates = GREEN

Mirror = GREEN

Leader Lights = GREEN

Windscreen = GREEN

White center primary car Black center second car



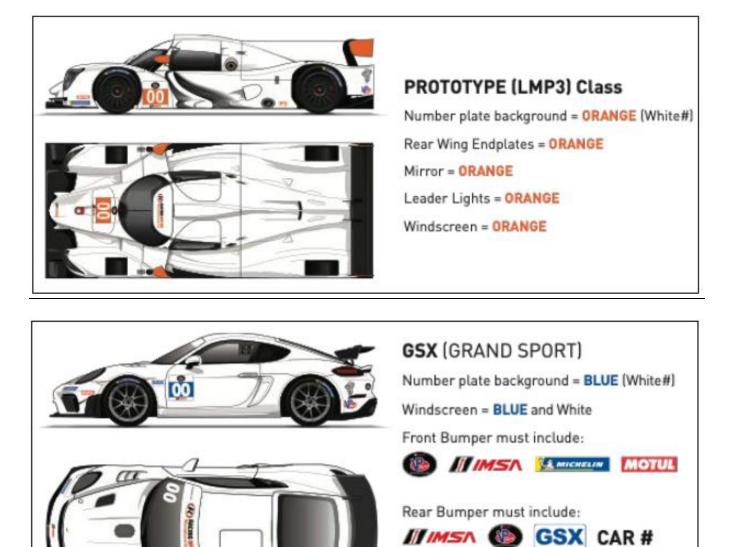
## **Michelin Pilot Challenge**





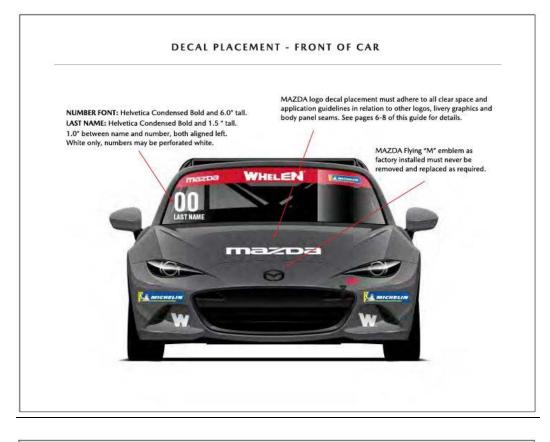


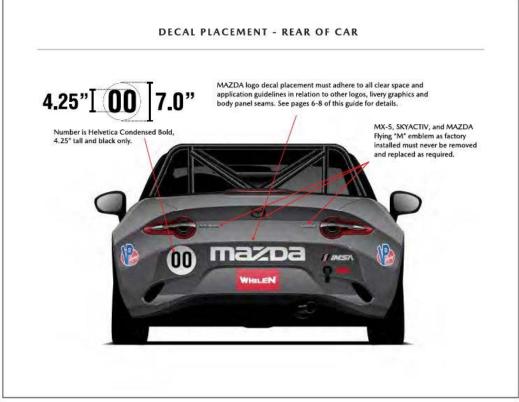
## VP Racing Sportscar Challenge





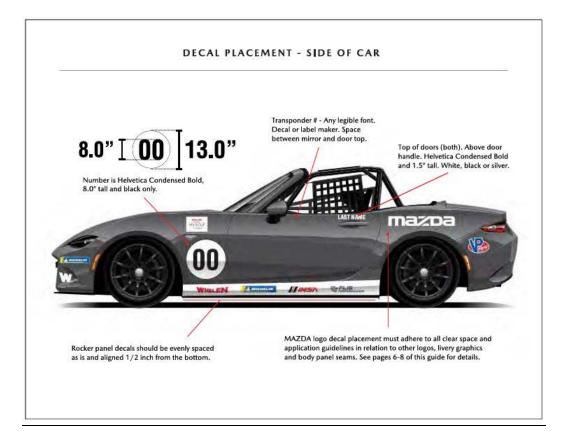
#### <u>MX-5 Cup</u>







MX-5 Cup (cont.)





## Porsche Carrera Cup North America

## **Class Designation Colors:**

- Pro: Orange
- Pro-Am: Green
- Masters: Yellow

#### **Color Locations:**

- Side Mirrors and Rear Wing End Plate fully covered in Class Designation Color.
- Front, Back and Side Car Numbers must be in Class Designation Color.
- Headlights must be covered in translucent version of Class Designation Color.

Lamborghini Super Trofeo

Coming Soon