

The purpose of this document is to inform of the local rules that shall apply to 2016 Student Formula Japan. Any additional local rules that become necessary shall be posted on the JSAE website as they become available. These local rules are valid for the 2016 Student Formula Japan only.

2016 Student Formula Japan, Rules Committee

For both Japanese and overseas teams

J2016-20 Scatter Shield (refer to rule EV2.1.3 of 2016 FSAE®)

The gap between the hole of the motor casing and the scatter shield is allowed. As for the hole on a vertical surface to rotation axis, the scatter shield is unnecessary.

J2016-21 Ready-To-Drive-Sound (refer to rule EV4.13, EV4.13.1 to EV4.13.5 of 2016 FSAE®)

The car doesn't have to make a Ready-To-Drive-Sound.

J2016-22 Charging (refer to rules EV8.2.2 of 2016 FSAE®)

Accumulators do not need to be removed from the car for charging. However, the indicator in accordance with EV 3.3.9 must be visually confirmed when the charging connectors are plugged / unplugged. Structurally EV 3.2.4 is still applicable.

J2016-23 Relaxation of Rules for EV Chargers (refer to rule EV8.3 of 2016 FSAE®)

Teams may be exempted from complying with the three rules described below if all of the following conditions are satisfied: The Standard Charging Procedure and Charging Abnormality Procedure documents shall be submitted at the same time as the Electrical System Form, team members shall be fully trained in the application of these two documents to charging operations, these team members shall constantly monitor the state of charging while in possession of these documents, and these team members shall be capable of taking the appropriate measures if an abnormality occurs during charging.

(1) The interlock function related to the connection state of connectors described in EV8.3.3 of 2016 FSAE®

(However, the method used to confirm the connection state of the charger and accumulator shall be clearly stated in the Standard Charging Procedure document.)

(2) The function to turn off the charger using the AMS described in EV8.3.5 of 2016 FSAE®

(However, it shall be possible to visually confirm the detection state of the AMS at all times. In addition, the abnormality types of AMS, judgment methods, and charging stop methods shall be listed in the Charging Abnormality Procedure document.)

(3) The function to turn off the charger using the IMD described in EV8.3.7 of 2016 FSAE®

(However, it shall be possible to visually confirm the detection state of the IMD at all times. In addition, the abnormality types of IMD, judgment methods, and charging stop methods shall be listed in the Charging Abnormality Procedure document.)

J2016-24 Failure Modes and Effects Analysis (FMEA) (refer to rule EV9.2.1 of 2016 FSAE®)

Only No.14 to 30 described on "FMEA" sheet of "2016_Failure Modes and Effects Analysis_Template.xls" are applicable.

J2016-25 Relaxation of Rules for First Year Vehicle (refer to rule A6.8 and S6.15 of 2016 FSAE®)

As for EV Category, teams may use their frame constructed for the 2015 Student Formula Japan Electric event if the frame meets or is modified to meet the applicable FSAE 2016 frame rules (Section T3 or Section AF), then penalties described in S6.15 are not applicable.

However as for ICV Category, the car still must have a completely new frame at least.

J2016-26 Tractive-system-active light (TSAL) (refer to rules EV4.12.1, EV4.12.2, and EV4.12.3 of 2016FSAE®)

The TSAL is permitted to have multiple systems to satisfy the two functions (a and b) defined in rule EV4.12.2 of 2016FSAE®. In addition, the power supply of the TSAL drive circuit for the two functions (a and b) must satisfy the requirements described in Table 1 below. However, it is not necessary to synchronize the flashing of multiple TSAL illuminations.

Table 1 OK/NG Judgment for TSAL Drive Circuit Power Supply

Tractive system (TS) voltage →	Max. DC 60 V or Max. AC 25 V RMS		Exceeds DC 60 V or Exceeds AC 25 V RMS	
	From GLVS	From TS	From GLVS	From TS
TSAL drive circuit power supply → Illumination timing ↓				
a. Illuminate when an accumulator isolation relay (AIR) is closed	OK	OK	OK	OK
b. Illuminate when the voltage outside the accumulator containers exceeds DC 60 V (exceeds AC 25 V RMS)	-	-	NG	OK

J2016-27 Submission of the ESF or FMEA (refer to rules EV9.3 and EV9.4 of 2016FSAE® and rule 11 of SFJ)

Re-submission of the Electrical System Form (ESF) or Failure Modes and Effects Analysis (FMEA) may be requested multiple times to ensure that these materials achieve a sufficient degree of completion. In the event that re-submission is required, a maximum of fifty (50) negative points will be penalized depending on the degree of completion of these materials at the final deadline. However, the combined penalty due to the degree of completion and due to the late submission defined in rule EV9.4 of 2016FSAE® shall not exceed fifty (50) negative points in total. In addition, the order of the Electrical Technical Inspection shall be determined based on the degree of completion of the ESF and FMEA, as well as the order in which the documentation is received.