University:
Vehicle Number:
Inspection Time Slot:
Vehicle Type: ☐ H2CV ☐ H2HY ☐ FCEV

LOGO PLACEHOLDER	**LOGO PLACEHOLDER**

Used Symbols:
- ○ Inspection check
- △ Team responsibility
- ⊙ Conditional / optional check

Notes:
- This form must stay with the push bar at all times!
- Technical inspection approval voids if inspection sheet is lost.
- If there is a conflict between this form and the official FS rules / Hydrogen Rules, the rules prevail.

PART I: DOCUMENTATION & PRE-CONDITIONS

☐ ITEMS TO BE PRESENTED

1 ◯ Training certificates of all Hydrogen Safety Officers (HSO) presented
2 ◯ Hydrogen System Form (H2SF) submitted and available
3 ◯ Structural Equivalency Spreadsheet (SES) available
4 ◯ Datasheets and certifications for hydrogen components available
5 ◯ Installation and commissioning documentation available
6 ◯ Required tools for hydrogen scrutineering present - this set of tools must stay at SHYTTA during the event
7 ◯ Hydrogen leak detectors (2x) functional and demonstrated
8 ◯ Leak detection spray and test gas available
9 ◯ Hydrogen Tank bleeding equipment available

Inspector Name Date / Time Signature

PART II: HYDROGEN TANK (H_2 TANK OUTSIDE VEHICLE)

☐ TANK / OTD / CERTIFICATION

10 ◯ Hydrogen Tank certification and markings verified
11 ◯ Hydrogen Tank free of visible damage or manufacturer approval provided
12 ◯ OTD mounted directly to Hydrogen Tank
13 ◯ OTD includes OTV and TPRD
14 ◯ Analogue pressure gauge installed between OTD and pressure regulator
15 ◯ Lifting handles present and marked
16 ◯ Hydrogen Tank bleeding connection present and functional
17 ◯ Grid-independent power supply for non-manual valves provided

☐ REGULATION / OVERPRESSURE / LINES

18 ◯ Pressure regulator limits downstream pressure correctly
19 ◯ Overpressure protection provided for all pressure levels
20 ◯ Hydrogen lines suitable for hydrogen and pressure used
21 ◯ Fittings certified and assembled per manufacturer specification
22 ◯ No excess buffering volumes installed

Inspector Name Date / Time Signature

PART III: CHASSIS & POSITIONING (H_2 TANK OUTSIDE VEHICLE)

☐ POSITIONING / SHIELDING / FIREWALL

23 ◯ All hydrogen components located within rollover protection envelope
24 ◯ Firewall between driver and hydrogen components present and sealed
25 ◯ Hydrogen components protected from heat sources (<85 °C or component rating)
26 ◯ No porous materials that may accumulate hydrogen used
27 ◯ Impact protection provided for low-mounted hydrogen components
28 ◯ Structural attachments comply with T3.16 (if applicable)

☐ VENTING / MARKING / GROUNDING

29 ◯ All hydrogen compartments routed to a safe venting location
30 ◯ Venting paths lead outside cockpit, unobstructed and correctly routed
31 ◯ Vent outlets marked and positioned per S5.1.2, 1900mm² cross section (Ø50mm)
32 ◯ Active ventilation (if used) pushes air and is LV powered
33 ◯ All hydrogen components grounded to LV ground
34 ◯ Dedicated grounding tab min. 30x30x2mm for refueling present and marked

☐ H2CV / H2HY ONLY

35 ◯ Injection system rated for pressure and secured
36 ◯ Crankcase ventilation routed to safe location
37 ◯ Scatter shields installed where required

☐ FCEV / H2HY ONLY

38 ◯ Fuel Cell System Container (FCSC) compliant
39 ◯ Active ventilation of FCSC functional
40 ◯ Stack voltage indicator present and functional
41 ◯ HS Measuring Points accessible and labeled
42 ◯ FCCU monitoring functions demonstrated

Inspector Name Date / Time Signature

PART V: SHUTDOWN CIRCUIT & H2SMD (H_2 TANK INSTALLED)

Note: All triggers for the SDC may be tested by the Scrutineers.

☐ SHUTDOWN CIRCUIT

43 ◯ (Activate HS): Triggering the SDC closes the OTV (<2 sec)

44 ◯

☐ H_2 SAFETY MEASUREMENT DEVICE

45 ◯ H2SMD includes tank pressure, tank temperature and low pressure line pressure measurements

46 ◯ No additional functions included

47 ◯ Disconnecting tank temperature sensor triggers SDC

48 ◯ Disconnecting tank pressure sensor triggers SDC

49 ◯ Disconnecting low pressure line pressure sensor triggers SDC

50 ◯ Red H2SMD cockpit indicator light installed, turns on whenever H2SMD triggers the SDC

51 ◯ Manual reset out of driver's reach, turns off indicator light

☐ SHUTDOWN CIRCUIT (EV ONLY)

52 ◯ IMD triggers both the SDC and the H2 SDC

53 ◯ Disconnecting any of the following sensors from FCCU triggers the SDC: FCSC Hydrogen detection, cell voltage, anode stack inlet, cathode stack inlet, coolant conductivity, temperature at stack inlet, temperature at stack outlet, ventilation mass flow

54 ◯ Stack protection diode rated for maximum HS / TS voltage and maximum stack current

55 ◯ Discharge diode rated for maximum HS / TS voltage

56 ◯ (Activate TS + HS): Triggering SDC discharges fuel cell stack below 60 VDC in less than 30 sec

Inspector Name Date / Time Signature

PART VI: FIRST REFUELING

Note: First refueling may take place once all tests (except Noise Test) are complete.

☐ LEAKAGE TEST

54 ◯ list of actions and tests to be performed during first refueling tbd

NON-COMPLIANCE / COMMENTS

Item #	Comment	Inspector

Inspector Name	Date / Time	Signature