# **2026 FORMULA 1 POWER UNIT SPORTING REGULATIONS**

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## **Convention:**

Pink Text: changes from Issue 5, as approved by the WMSC on 11/06/2024

Green text: Comments and Explanations (non-regulatory)

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#### **ARTICLE 1: GENERAL PROVISIONS**

## 1.1 Regulatory Framework

In order to be eligible to homologate a Power Unit in the 2026-2030 period, a Power Unit Manufacturer ("PU Manufacturer") must observe, during the 2022-2025 period, these 2026 Power Unit Sporting Regulations.

In their present form, these Sporting Regulations contain only matters related to the PU Manufacturers. In due course, the 2026 Sporting Regulations will be extended to include the complete Sporting Regulations necessary for Competitors and Power Unit Manufacturers.

The Articles included in this edition will be consequentially re-numbered and adjusted at the FIA's discretion, while not affecting the fundamental content or the provisions.

#### 1.2 Definitions

Parameters not otherwise defined in these Sporting Regulations, shall be assumed to have the definition provided in the 2022 FIA Formula 1 Sporting Regulations.

## 1.3 Initial scope and perimeter of these Sporting Regulations

- 1.3.1 In their present form, these Sporting Regulations primarily regard matters related to the Power Units that will be used in the FIA Formula 1 World Championship starting from 2026. In due course, they will be extended to include the complete Sporting Regulations necessary for Competitors and Power Unit Manufacturers.
- 1.3.2 The Articles that will be added during this process, any consequential re-numbering of the Articles already included, or any re-organisation of this document will not be subject to the approval by the Power Unit Manufacturers, provided that the matters affecting the Power Unit do not get altered.
- 1.3.3 Any missing provision or definition in these Sporting Regulations, shall be assumed to be equivalent to the 2022 FIA Formula 1 Sporting Regulations. Should such omission have a significant impact on the operations of PU Manufacturers developing a 2026 Power Unit, Power Unit Manufacturers may ask the FIA for guidance. Such guidance will be communicated to all Power Unit Manufacturers.

#### 1.4 Breaches

In case of any alleged breach of the 2026 PU Sporting Regulations or 2026 PU Technical Regulations committed by a Power Unit Manufacturer and in accordance with the provisions of the FIA International Sporting Code and of the FIA Judicial and Disciplinary Rules, the FIA may, initiate disciplinary proceedings against:

- the Power Unit Manufacturer; and/or
- their Nominated (or works / factory) Competitors, as declared by the PU
  Manufacturer in accordance with Article 1.2.1 of Appendix 5 of the Technical
  regulations; and/or
- all their Customer Competitors, as declared by the PU Manufacturer in accordance with Article 1.2.1 of Appendix 5 of the Technical regulations

In the course of the above proceedings, the FIA may enter into a settlement agreement with the relevant party or parties in accordance with the FIA Judicial and Disciplinary Rules.

#### 1.5 Sanctions

In addition to any of the sanctions listed in the FIA International Sporting Code, the following sanctions may be imposed for breach of the 2026 PU Sporting Regulations or 2026 PU Technical Regulations:

- a. A fine, whose amount will be determined on a case-by-case basis;
- b. A reduction of the Power Unit Test Bench Operating Hours, as defined in § 3.7 of Appendix 1 of the 2026 PU Sporting Regulations and/or further limitations on the ability to conduct Engine Test Bench testing, ERS Test Bench testing or other Testing in respect of Power Units to be homologated for supply to F1 Teams in respect of the Championships taking place from 2026 onwards;
- c. A reduction of the Power Unit Cost Cap amount, as defined in the 2026 PU Financial Regulations;
- d. A deduction of Drivers' Championship and/or Constructors' Championship points awarded to the Nominated Competitor of the relevant Power Unit Manufacturer for the Championship that took place within the Reporting Period of the breach;
- e. A deduction of Drivers' Championship and/or Constructors' Championship points awarded to the Nominated Competitor and to all Customer Competitors of the relevant Power Unit Manufacturer for the Championship that took place within the Reporting Period of the breach;
- f. limitations on the ability to make future upgrades to the specification of the Power Unit that is currently homologated for supply to F1 Teams;
- g. divesting of right for its Power Units to be homologated for supply to F1 Teams in respect of any Championship seasons from 2026 onwards

provided that the penalty specified in Article 1.4(c) shall only be applied with respect to the Full Year Reporting Period (as defined in the 2026 PU Financial Regulations) immediately following the date of the imposition of the sanction (and subsequent Full Year Reporting Periods, where applicable); and provided that the penalties specified in Article 1.4(d),1.4(e) and 1.4(h) cannot be applied prior to 1 January 2026.

#### **ARTICLE 2: POWER UNIT SPORTING MATTERS**

## 2.1 Power Unit usage

- 2.1.1 The only Power Unit that may be used at a Competition during the 2026-2030 Championship seasons is a Power Unit which is constituted only of elements that were in conformity, at the date they were introduced in the race pool, with the latest submitted and approved homologation dossier as defined in Appendix 4 of the Technical Regulations.
- 2.1.2 In each Championship Season, unless a driver drives for more than one (1) Competitor (see Article 2.1.7 below), and subject to the additions described below, each driver may use no more than:
  - 3 engines (ICE): an engine, for the purposes of this Article, will be considered to be all the components respectively listed as "ICE" and "INC" in the "PU Element" and "Sealed Perimeter" Columns in Appendix 3 of the Technical Regulations.
  - 3 turbochargers (TC): a turbocharger, for the purposes of this Article, will be considered to be all the components respectively listed as "TC" and "INC" in the "PU Element" and "Sealed Perimeter" Columns in Appendix 3 of the Technical Regulations.
  - 3 exhaust sets (EXH): an exhaust set, for the purposes of this Article, will be considered to be all the components respectively listed as "EXH" and "INC" in the "PU Element" and "Sealed Perimeter" Columns in Appendix 3 of the Technical Regulations. The four elements constituting an Exhaust set, deemed to be the left-hand primaries, right-hand primaries, left hand secondary, right hand secondary, will be considered separately for the purposes of this Article.
  - 2 energy store and control electronics units: an energy store and control electronics unit, for the purposes of this Article, will be considered to be all the components respectively listed as "ES" and "INC" in the "PU Element" and "Sealed Perimeter" Columns in Appendix 3 of the Technical Regulations.
  - 2 MGU-K: MGU-K, for the purposes of this Article, will be considered to be all the components respectively listed as "MGUK" and "INC" in the "PU Element" and "Sealed Perimeter" Columns in Appendix 3 of the Technical Regulations.
- **2.1.3** Each driver will be permitted to use an additional unit for each of the Power Unit elements listed in Article 2.1.2 in the following conditions:
  - a. In 2026
  - b. If the Power Unit used is supplied by a PU Manufacturer who has not supplied Power Units in 2026 and is in its first year of supplying Power Units.
- 2.1.4 Ancillary components, included in the Sealed perimeters defined in Article 2.1.2, are subject to the following additional provisions:
  - a. In addition to the provisions of Article 2.1.2 and 2.1.3, two additional such components may be used per Championship Season for each driver.
  - b. Within the limits of (a), such components may be transferred between sealed elements of each driver without incurring a penalty.

The components covered by the provisions of this Article are listed in table 1 of Appendix 3 of the Technical Regulations.

Details regarding the means of sealing these components or, if this is deemed not feasible, the means of identifying them, must be provided in the PU Homologation Dossier (Appendix 4 of the Technical Regulations) and must be approved by the FIA.

- 2.1.5 The FIA may authorise or mandate the replacement of a SSPUC component included within the perimeter of one of the elements defined in Articles 2.1.2 and 2.1.4, for safety, policing or reliability reasons.
- 2.1.6 The FIA may increase, at its sole discretion, the number of permitted components specified in Article 2.1.4 for SSPUC components in the event of a genuine reliability issue making it impossible to cover the Championship season with the number of components initially specified. The criticality of the reliability issue requiring this action will be determined after consultation with the relevant SSPUC Supplier and all PU Manufacturers. The change of permitted number of such components will be communicated by the FIA to all PU Manufacturers and will be valid until the end of the current Championship.
- **2.1.7** If a driver is replaced at any time during the Championship his replacement will be deemed to be the original driver for the purposes of assessing Power Unit usage.
- 2.1.8 Should a driver use more Power Unit elements than the numbers prescribed in Articles 2.1.2, 2.1.3 and 2.1.4 of any one of the elements during a Championship, a grid place penalty will be imposed upon him at the first Competition during which each additional element is used. Penalties will be applied according to the following table and will be cumulative:
  - a. The first time an additional element is used: Ten grid place penalty.
  - b. The next times an additional element is used: Five grid place penalty.

Any of the elements listed in this Article 2.1 will be deemed to have been used once the car's timing transponder has shown that it has left the pit lane.

During any single Competition, if a driver introduces more than one of the same Power Unit element, which is subject to penalties, only the last element fitted may be used at subsequent Competitions without further penalty.

2.1.9 After consultation with the relevant Power Unit Manufacturer the FIA will attach seals to each of the relevant elements of the Power Unit prior to them being used for the first time at a Competition in order to ensure that no significant parts can be rebuilt or replaced.

Within two hours of the end of the post-race parc fermé additional seals will be applied to all used ICE, TC and MGU-K elements in order to ensure that they cannot be run or dismantled between Competitions. The sealing method must be agreed with the Technical Delegate.

Upon request to the FIA these additional seals will be removed 24 hours before the start of the next Competition at which the Power Unit elements are required. All such Power Unit elements must remain within the Competitor's designated garage area when not fitted to a car and may not be started at any time during a Competition other than when fitted to a car eligible to participate in the Competition.

For safety reasons, the committed ES and PU-CE may be used between competitions provided the absolute DC electrical power is below 5kW. Exceptionally and solely for safety reasons, the FIA in its sole discretion may grant permission to a competitor to run a used unit without restricted conditions. In case permission is provided, the FIA will inform the other PUMs.

If any of the FIA seals are damaged or removed from the relevant components within the Power Unit after they have been used for the first time those parts may not be used again unless they were removed under FIA supervision.

**2.1.10** The parts listed as "EXC" in Column 5 of Appendix 3 of the Technical Regulations may be changed without incurring a penalty under Article 2.1.8 of these Sporting Regulations. If changing any of these parts involves breaking a seal this may be done but must be carried out under FIA supervision. Any parts changed may only be replaced by parts homologated in accordance with Appendix 4 of the Technical Regulations.

## 2.2 PU Manufacturer Factory Shutdown Periods

**2.2.1** All PU Manufacturers must observe two shutdown periods:

- a) The first period of fourteen (14) consecutive calendar days during the months of July and/or August. If two consecutive Events during this period are separated by only seventeen (17) days a shutdown period of thirteen (13) consecutive calendar days must be observed.
- b) The second period, only from 2023, of nine (9) consecutive calendar days starting on the 24 December.
- 2.2.2 For the period 2022-2025, the shutdown periods for PU Manufacturers who have homologated Power Units for the 2022-2025 Championships must be concurrent between the two Power Unit programmes (2022-2025, and 2026-2030).
- 2.2.3 If a PU Manufacturer or affiliate to a PU Manufacturer has factories based in countries where law and/or unions impose a different closing week, these factories may replace one week out of two weeks of the shutdown period specified in Article 2.2.1a) by the locally imposed week and have their second shutdown period specified in Article 2.2.1b) starting no later than 31 December. PU Manufacturers affected by this must make a declaration to the FIA that the staff concerned will not be permitted to transfer to work in the country that isn't shutdown during these periods.
- **2.2.4** For each year, PU Manufacturers must notify the FIA of their intended shutdown periods within thirty (30) days of the start of the Championship of that year.
- 2.2.5 During the shutdown periods no PU Manufacturer or affiliate to a PU Manufacturer may carry out or instruct a third-party supplier to carry out any of the following activities for or on behalf of the PU Manufacturer:
  - a. Any work activity by any employee, consultant or sub-contractor engaged in design, development or production (excluding any work activity to be undertaken at the circuit in preparation for the Event immediately following the shutdown periods).
  - b. Operation or use of any test bench except as specifically permitted by Article 2.2.6. During the shutdown periods no occupancy hours nor operation hours may be incremented neither unrestricted test bench hours for projects connected to Formula One.
  - c. Operation or use of any computer resource for simulations except as specifically permitted by Article 2.2.6.
  - d. Production or development of Power Unit parts, test parts, car parts, or tooling.
  - e. Sub-assembly of Power Unit parts or assembly of Power Units.
- **2.2.6** During the shutdown periods the following activities will not be considered a breach of the above:
  - a. The assembly or servicing (but not manufacture) of Power Units for running show cars.
  - b. Work on any test bench or computer resource for the purposes of maintenance or modifications to the facility (at the exclusion of any activity defined as Restricted Power Unit Testing or as Commissioning in Appendix 1 of these Sporting Regulations).
  - c. Any activity the sole purpose of which is supporting projects unconnected to Formula One, subject to the written approval of the FIA.
  - d. Any activity the sole purpose of which is the maintenance of factory facilities.
  - e. Any activity the sole purpose of which is the maintenance of factory IT networks and associated systems.
  - f. Any activity relating to the loading, unloading, and preparation of sea freight, with the exception of power unit components or assemblies.
  - g. Any activity the sole purpose of which is staff wellbeing or entertainment.

- **2.2.7** Each Power Unit Manufacturer must notify its suppliers of the dates of its shutdown periods and must not enter into any agreement or arrangement with the intention of circumventing the prohibition on the above activities.
- 2.2.8 For 2022 the period until twelve months after confirmation of entry by the FIA, the provisions of this Article 2 will not apply to New PU Manufacturers, as defined in Appendix 5 of the Technical Regulations.

#### APPENDIX 1: POWER UNIT TEST BENCH RESTRICTIONS

#### 1. Definitions

- **2022 PU**: Power Unit designed to comply with the 2022-2025 Technical Regulations
- **2026 PU**: Power Unit under development, intended to comply with the 2026-2030 Technical Regulations, including any preliminary components or work leading to that ultimate goal.

#### 2. Power Units Test Benches

2.1 Restricted Power Unit Testing of Power Unit elements may only be carried out using Test Benches as defined in Articles 2.2, 2.3, 2.4, 2.5, 2.6 and 2.7 of this Appendix, collectively referred to as Power Unit Test Benches (**PUTBs**).

#### 2.2 Single-Cylinder Dynamometer

A Single-Cylinder Dynamometer is a test bench facility cell where a fired engine with only one cylinder representative of a Formula 1 engine can be tested. In addition to test bench components, this bench may include and is limited to the following Power Unit and car components:

- a. Items listed as "ICE" in column "PU ELEMENT" the table of Appendix 3 of the Technical Regulations
- b. The clutch and clutch actuation system.
- c. Fuel, engine oil and PU related liquids other than fuel and engine oil.

A Single-Cylinder Dynamometer must consist of a single mechanical input motor/absorber connected either directly, or through a test bench gearbox, to the single cylinder ICE output shaft.

### 2.3 Power Unit Dynamometer

A Power Unit Dynamometer is a test bench facility cell where a fired engine, with more than one cylinder with or without all or part of the ERS system, representative of a Formula 1 Power Unit can be tested. In addition to test bench components, it may include and is limited to the following Power Unit and car components:

- a. Items listed as one of "ICE", "EXH", "TC", "MGUK", "ES" or "PU-CE" in column "PU ELEMENT" of table 1 of Appendix 3 of the Technical Regulations
- b. The clutch and clutch actuation system.
- c. Fuel, engine oil and PU related liquids other than fuel and engine oil.
- d. Secondary charge air coolers.
- e. The PU intake upstream of compressor inlet up to and including the air filter.
- f. Additional items required for this test bench at the sole discretion of the FIA.

A Power Unit Dynamometer must consist of a single mechanical input motor/absorber connected either directly, or through a test bench gearbox, to the ICE output shaft. A pair of identical single mechanical input motors/absorbers coupled by means of a test bench splitter gearbox having a single connection to the single ICE output shaft will be considered compliant with this requirement.

## 2.4 Power Train Dynamometer

A Power Train Dynamometer is a test bench facility cell where a Power Unit, a Formula One car gearbox and certain car components can be tested together. In addition to test bench components, it may include and is limited to the following Power Unit and car components:

- a. All Items listed in Article 2.3 of this Appendix.
- b. A Formula One car gearbox
- c. Driveshafts and any components associated with their operation (such as joints, grease and housings).
- d. Heat exchangers for gearbox oil and accessories associated with their operation (including but not limited to housings, tubes, pipes, hoses, supports, brackets and fasteners).
- e. Heat exchangers and their associated accessories (including but not limited to housings, tubes, pipes, hoses, supports, brackets and fasteners).
- f. A representation of the surfaces of the chassis rearward of  $X_{pu}$ = -900.
- g. Bodywork or close representations of bodywork associated with the air intake and exit of heat exchangers and compressor inlet provided that this is for the sole purpose of representing air flow into or out of heat exchangers or the compressor inlet.
- h. Bodywork or close representation of bodywork and heatshields rearward of  $X_{pu}$  = -760 or the rearmost surface of the seatback bulkhead, and for the sole purpose of representing the Power Unit thermal environment.
- i. Fuel system excluding the fuel tank which must be of a specification which cannot be used on a Current Car.
- j. Exhaust tailpipe.
- k. Hydraulic components listed in items 58 (ICE-mounted hydraulic pump) and 61 (Hydraulic system other than servo valve(s) and actuator(s)) of table 1 of Appendix 3 of the Technical Regulations.
- I. Additional items required for this test bench at the sole discretion of the FIA.

A Power Train Dynamometer must consist of a pair of identical single mechanical input motors/absorbers. A test bench splitter gearbox that connects two dyno motors/absorbers with a single ICE output shaft may be used in place of item b. above.

A Power Train Dynamometer may also be owned by the "Works" Competitor supplied with the Power Units by the PU Manufacturer.

Non-works customer Competitors may use the PU Manufacturer's Power Train Dynamometer, or own or rent such a facility. Any testing for a non-works customer Competitor is defined by Article 4 of this Appendix.

#### 2.5 Full Car Dynamometer

A Full Car Dynamometer is a test bench facility cell where a complete Power Unit and car are tested together, except under the provisions of 2.9d) below, in order to test the Power Unit and the car systems. Selected components may be removed or replaced only to permit the mounting of the car on the dynamometer and reliable operation, subject to the prior approval of the FIA.

A Full Car Dynamometer must consist of a minimum of two single mechanical input motors/absorbers and may have up to one for each wheel of the car.

A Full Car Dynamometer may also be owned by the "Works" Competitor supplied with the Power Units by the PU Manufacturer.

Non-works customer Competitors may use the PU Manufacturer's Full Car Dynamometer, or own or rent such a facility. Any testing for a non-works customer Competitor is defined by Article 4 of this Appendix. In the event that a Full Car Dynamometer facility is rented or owned by a non-works customer Competitor and they elect to use this facility solely for the purposes permitted by Article 4.2.1, subject to the prior approval of the FIA, such facility may be used temporarily during maximum four separate periods of up to three weeks each per

calendar year in addition to the Full Car Dynamometer already declared by the respective PU Manufacturer under Article 2.9 d).

#### 2.6 ES Test Bench

An ES Test bench is a test facility cell which can electrically test only the ES or an assembly of ES cells capable of storing a total amount of energy higher than 4MJ or supplying a DC voltage greater than 100V, in isolation. The unit under test must be connected to a dyno battery tester capable of dynamically discharging and charging the ES or the ES cells assembly and may be contained inside of the ESME or a dyno environmental or safety enclosure.

### 2.7 ERS Test Benches

An ERS Test bench is a test facility that can test with an electrical DC current higher than 10A:

- a. The Energy Store (ES) and the MGU-K simultaneously or
- b. The MGU-K and the Control Electronics (CU-K) simultaneously or
- c. The Control Electronics (CU-K) and the Energy Store (ES) simultaneously or
- d. The MGU-K and the Control Electronics (CU-K) and the Energy Store (ES) simultaneously

No more than one of each element (MGU-K, CU-K, ES) can be installed and/or operated for testing within the test facility at any one time.

Any testing of the above components as part of a Power Unit Dynamometer, a Power Train Dynamometer or a Full Car Dynamometer is not considered an ERS Test Bench.

A PU Manufacturer may also have one additional Test Bench to test the Energy Store in isolation (An ES Test Bench).

## 2.8 Requirements for all PUTBs

The following additional requirements apply to all PUTBs:

- a. Each PUTB must operate at a test cell pressure within +/-10mBar of ambient. However, methods to mimic a reduced ambient pressure at the air inlet or exhaust exits are permitted.
- b. Each PUTB must be stationary in space. Furthermore, engine or MGU-K output shafts must be horizontal
- c. There must not be any force actuators or suspension displacement actuators acting on the PUTB and any of the PU elements or car components under test.

Any Test Bench facility designed to emulate one of the PUTBs listed in this Article in such way as to circumvent the restrictions of this Appendix will not be allowed. Any functionality or additional test items required by a PU Manufacturer for one of the PUTBs must be authorised by the FIA at its absolute discretion, and (if accepted) will be communicated to all PU Manufacturers.

## 2.9 Limits on the number of Power Unit Test Benches and Declaration

Before they can be used for Restricted Power Unit Testing each PU Manufacturer must submit, by 1 December of the preceding year, a declaration to the FIA of each PUTB that will be used for the development of the 2026 PU.

These PUTBs must comprise of up to a maximum of:

a) Three Single-Cylinder Dynamometers

- b) Three Power Unit Dynamometers
- c) One Power Train Dynamometer
- d) One Full Car Dynamometer

If a PU Manufacturer does not declare another test bench facility cell as a Power Train Dynamometer according to c) above this Full Car Dynamometer may also be used as a Power Train Dynamometer as described in Article 2.4.

- e) Two ERS Test Benches
- f) One ES Test Bench

This declaration must contain the following information:

- PUTB Name and ID
- Location & ownership
- Usage plan
- Description of its functionality

PU Manufacturers who also have a 2022 PU program, must provide details of the PUTBs used for the 2022 PU, even if they are not intended for 2026 PU development.

For the avoidance of doubt, the above submission must be made for any PUTB, including ones owned by a supplier or another legal entity.

A PU Manufacturer's Existing or Prospective Fuel/Oil Supplier is not permitted to operate a Power Unit Test Bench for the purposes of 2026 PU development or development of fuel and/or oil for the 2026 PU, with the exception of one Single-Cylinder Dynamometer exclusively for the development of fuel and/or oil, provided that it is one of the Single Cylinder Dynamometers declared by the Power Unit Manufacturer to FIA, pursuant to 2.9 a) above.

For the avoidance of doubt, if the PU Manufacturer nominates an Existing or Prospective Fuel/Oil Supplier's Single-Cylinder Dynamometer as one of its allowance of three, it can be used with any type of engine. That engine can only be produced using information from published regulations and Existing or Prospective Fuel/Oil Supplier's Intellectual Property and it may not include any Intellectual Property IP from the PU Manufacturer except permitted by the Technical Regulations Appendix 5 Article 2.2.1b.

In addition, The PU Manufacturer must procure that their Existing or Prospective Fuel/Oil Supplier shall provide full access to engine data, engine design, engine Intellectual Property IP and inspection when requested by the FIA.

Any other Test Benches, which may be deemed to offer similar benefits, must also be declared.

During a calendar year, the PU Manufacturer may change the PUTBs in use at any time (as limited for each PUTB type by Articles 2.2, 2.3, 2.4, 2.5, 2.6 and 2.7 of this Appendix) in order to allow for any commissioning or decommissioning of PUTBs, a facility relocation or because of any *force majeure* reasons. Such changes of declared PUTBs must be first agreed with the FIA and an updated declaration submitted in order to ensure that no competitive advantage is obtained, and that the intention of the limits imposed in Articles 2.2, 2.3, 2.4, 2.5, 2.6 and 2.7 of this Appendix are not circumvented.

Details of the process for Declaration of PUTBs may be found in the Appendix to these Sporting Regulations.

## 3. Power Unit Test Benches Operational Restrictions

## 3.1 Testing Periods

The usage of PUTBs has an annual limit (defined in Article 3.7 of this Appendix) and is furthermore controlled by five Testing Periods of ten working weeks each. The calendar will be shared by the FIA at the end of the previous year.

## 3.2 PUTB usage monitoring

PU Manufacturers are required to carry out a detailed monitoring and recording of the activity of their PUTBs by using FIA-approved hardware and software. Details of this software and hardware may be found in the Appendix to the Regulations.

Any work carried out for the 2022 PU (defined in Article 1.1) will be considered as work for the 2026 PU, and hence bound by the provisions of this Appendix, unless the PU Manufacturer can demonstrate to the FIA that the work was carried out solely for the development of the 2022 PU. The FIA will issue guidance about the criteria that need to be satisfied and the information that needs to be provided in order to prove this. Such information may include Power Unit parameters (e.g., fuel flow, rpm, power) and a detailed description of the complete BOM of the 2022 PU elements that are being tested. This guidance may be found in the Appendix to the Regulations.

In all cases, and for each PUTB, photographs clearly showing the contents of the PUTB must be captured every 10 minutes on a continuous basis and retained for a minimum of 2 years, and component identification records must be retained to enable the FIA to confirm the Power Unit Test Bench definition and the purpose of testing.

In order to check on the hardware employed by the PU manufacturers and as a means of assuring common application of the restrictions set out in this Appendix, the FIA will arrange for benchmarking inspections of Power Unit Test Benches activities to be carried out from time to time.

PUTB activity records for year N must be retained until the end of year N+2.

## 3.3 PUTB usage declaration

No later than 2 weeks after the end of each Testing Period, each PU Manufacturer must submit a declaration for the testing that took place in the period just ended.

Details about the declaration format, and any information that needs to be supplied, can be found in the Appendix to the Regulations.

## 3.4 Restricted PUTB testing

Restricted PUTB Testing is any testing by a PU manufacturer, or any Related Party of that PU manufacturer, or any agent or sub-contractor of the PU manufacturer or any of its Related Parties, in a test environment of a complete or incomplete 2026 PU, but always including the engine or the ERS, in order to measure the torque produced by this assembly or any parameters related to the function of this assembly.

Restricted PUTB Testing is limited by PUTB Operation Hours and PUTB Occupancy Hours, defined below.

## 3.5 PUTB Operation Hours

For each Power Unit Dynamometer, Power Train Dynamometer and Full Car Dynamometer, the Test Bench Operation hours will be the time when the Engine speed exceeds 7500rpm.

In any Testing Period, the total sum of the Operation Hours of all such PUTBs will be considered as the "ICE Operation Hours" for this period.

For the avoidance of doubt, the following will not count towards the ICE Operation Hours defined above:

- ICE motoring, i.e., any activity done on a PUTB with no ignition and not showing any positive torque for the whole recorded activity.
- Single-Cylinder Dynamometer testing.

For the ERS Test Benches, the Test bench Operation hours will be the time when both of the following conditions apply:

- a. the DC current in or out of the Energy Store (ES), or its emulator, exceeds 10 Amps; and
- b. two or more different elements get tested, as per the requirements of Article 2.7 of this Appendix.

In any Testing Period, the total sum of the Operation Hours of all such PUTBs will be considered as the "ERS Operation Hours" for this period.

## 3.6 **PUTB Occupancy Hours**

The Test Bench Occupancy hours are counted separately for each PUTB, and the cumulative total is considered for the limits defined in Article 3.7 of this Appendix.

For each Power Unit Dynamometer, Power Train Dynamometer or Full Car Dynamometer, its Occupancy hours start being incremented when, for the first time in a calendar day it exceeds 1000rpm, and stop being incremented when it drops below 1000rpm for the last time in the same calendar day.

ICE motoring i.e., any activity done on a PUTB with no ignition and not showing any positive torque for the whole recorded activity, carried out within the same calendar day, but outside the time interval indicated above, will not be counted towards the Occupancy hours of these PUTBs.

In any Testing Period, the total sum of the Occupancy Hours of each such PUTB will be considered as the "ICE Occupancy Hours" for this period.

For each ERS Test Bench, its Occupancy hours start being incremented when, for the first time in a calendar day the DC current in or out of the Energy Store (ES), or its emulator, exceeds 10 Amps, and stop being incremented when this current drops below 10 Amps, for the last time in the same calendar day.

In any Testing Period, the total sum of the Occupancy Hours of each such PUTB will be considered as the "ERS Occupancy Hours" for this period.

If a PUTB test crosses midnight Test Bench Occupancy hours will both stop and start being incremented again from midnight.

## 3.7 Limitations in Restricted PUTB testing

In each year, the limits of PUTB testing for the 2026 PU are summarised in the following table:

Operation hrs / year	2022	2023	2024	2025	2026	2027	2028	2029	2030
New PU Manufacturers after 2026	N-4	N-3	N-2	N-1	N				
2026 PU limit - ICE	300	5400 *			700	400	400	400	400
2026 PU limit - ERS	200	00 3400 *		500	400	400	400	400	

<sup>\*</sup> These limits are cumulative over the three years, 2023, 2024 and 2025

The following provisions and explanatory notes also apply:

a. For ICE testing, the following formula defines the limit in Occupancy Hours:

[ICE Occupancy Hours] = [ICE Operation Hours] x 8

b. For ERS testing, the following formula defines the limit in Occupancy Hours:

## [ERS Occupancy Hours] = [ERS Operation Hours] x 5

- c. Starting from 2026, PU Manufacturers who satisfy the criteria laid out in Article 4 of Appendix 4 of the Technical Regulations for "Additional Development and Upgrade Opportunities" (ADUO), will be granted an additional 30% in ICE Operation Hours in the 12-month period starting a week after the 5<sup>th</sup> Competition in the year when the criteria for ADUO are met.
- d. For the period 2023-2025, each year will have individual Operation and Occupancy limits equal to 40% of the total cumulative allowance for these three years.
- e. From 2026 onwards, each Reporting Period, as defined in Article 3.1 of this Appendix, will have individual Operation and Occupancy limits equal to 24% of the annual limit.
- f. New PU Manufacturers, intending to homologate Power Units for the first time in year N, but in any case, <u>after 2026</u>, will be granted the Operation hours indicated respectively in the N-4, N-3, N-2, N-1 and N columns for each of these years before the year of first homologation of a PU in the Formula 1 Championship.

## 3.8 Unrestricted PUTB testing

The following activity is excluded from the restricted PUTB testing outlined above:

<u>Commissioning</u>: PUTB activity whose only purpose is to test the bench. A test can be considered as commissioning if the following criteria are met:

- a. It must have been declared to the FIA with a minimum of 4 weeks' notice, and approval by the FIA received.
- b. A 2-year-old or more assembly must be used. If such assembly is not suitable for this purpose, another assembly may be used after FIA approval of components and test procedure.
- c. No additional experiments are carried out which would benefit the Power Unit Development.

The following activity may be partially of fully excluded from the restricted PUTB testing outlined above:

<u>FIA Project</u>: Activity on a Power Unit Dynamometer or a Power Train Dynamometer specifically authorised as part of an approved FIA Project as defined in the Power Unit Financial Regulations and at the sole discretion of the FIA, provided any such testing is not contrived to provide any benefit for power unit development save only for minimal and incidental information collected during the test through the operation of the PU according to the FIA Project approval.

#### 3.9 **2022 PU Testing**

Further to the provisions of Article 3.2 of this Appendix, and for the avoidance of doubt, PUTB testing restrictions for the 2022 PU are provided by the 2022-2025 Sporting Regulations, and any definitions, criteria and guidance given in those Sporting Regulations do not apply to the 2026 PU if they contradict definitions given herein.

However, it remains the responsibility of the PU Manufacturer to satisfy the FIA that any 2022 PU work does not in any way contribute to the 2026 PU program.

## 4. Power Unit Test Bench activities affecting PU Manufacturers and Competitors

This Article regards the treatment of PUTB testing within the joint perimeter of a PU Manufacturer and a Competitor to whom it supplies Power Units.

#### 4.1 General Principles

4.1.1 The objective of any provisions affecting PUTB activity is to ensure that no Competitor or PU Manufacturer is at a competitive advantage or disadvantage with respect to other Competitors or PU Manufacturers, with respect to their treatment by the Technical, Sporting or Financial Regulations.

More specifically:

- a. Works Competitors and Customer Competitors shall have equal or very similar testing opportunities, with respect to the development of chassis components that need to be tested on a PUTB.
- b. PU Manufacturers with a higher number of Customer Competitors to whom they supply PUs shall have no advantage with respect to the dyno hour limits outlined in Article 3.7 of this Appendix, when compared to PU Manufacturers with a lower number of Customer Competitors to whom they supply PUs.
- c. Customer Competitors shall have the opportunity to use a fuel that is supplied by a different fuel supplier to that of the Works Competitor using the same Power Units. The testing required for such fuel shall give no advantage or disadvantage to the PU Manufacturer in question.

The above principles concern solely the competitive advantage or disadvantage that could be obtained by a PU Manufacturer or Competitor engaged in PUTB activities, and not any commercial arrangements made between PU Manufacturers and Competitors to carry out PUTB activities.

It is acknowledged that perfect achievement of the above objectives may not be possible at all times. The FIA, the PU Manufacturers and the Competitors will engage in good faith discussions to make amendments to these Regulations should it emerge that these objectives are not met.

- 4.1.2 In respect of activities undertaken to test and develop a 2026 PU the following PUTB activities will be considered as being for the "Sole Purpose of Testing Power Units for Performance and Reliability":
  - a. the undertaking of any tests on a Single-Cylinder Dynamometer;
  - b. the undertaking of any tests on a Power Unit Dynamometer, Power Train Dynamometer or ERS Test Bench, provided that the specification of the car components needed for the operation of the test remains of the same specification last used in the previous calendar year or that has been changed in specification no more than once twice per calendar year and with the express permission of FIA; and
  - c. the undertaking of any tests on a Power Unit Dynamometer, Power Train Dynamometer or ERS Test Bench where:
    - the specification of any of the chassis components needed for the operation of the test do not remain of the same specification last used in the previous calendar year and have been changed in specification beyond what is permitted within subclause (b) of this definition; and
    - ii. the specification of any of the Power Unit components needed for the operation of the test do not remain of the same specification last used in the previous calendar year;

for the purpose of this subclause (c) only, the criterion of "Sole Purpose of Testing Power Units for Performance and Reliability" will be considered met only and exclusively in respect of the bill of materials cost of the Power Unit components installed and being tested.

#### 4.2 Additional PUTB testing opportunities for Customer Competitors

For the avoidance of doubt, the provisions of this Article 4.2 regard Competitors using a particular Power Unit but not nominated as a "works/factory" Competitor under the provisions of Article 1.2.1 of Appendix 5 of the 2026 Technical Regulations.

- **4.2.1** Should a PU Manufacturer provide PU's for use during the 2026-2030 Championships to customer Competitors who design any of their own car components, a single quota of 30 additional Operation Hours will be allocated per calendar year and per additional customer Competitor. This quota to be used only during a maximum of six separate periods of up to three weeks each for PUTB testing in combination with a 2026 PU will be allocated per calendar year, and per additional customer Competitor for testing on a Power Train Dynamometer or a Full Car Dynamometer under the provisions of Articles 2.4 and 2.5 of this Appendix. Such tests will only be performed for one or more of the following reasons:
  - a. For the Power Train Dynamometer: approval (sign-off) of the Competitor's components tested
  - b. For the Full Car Dynamometer: confirmation and setup of the overall car systems
  - c. For both types of PUTB: evaluation of the effects of the Competitor's components on the PU's performance and reliability

For any PUTB testing performed under the provisions of this Article to not count towards the limits defined in Article 3.7 of this Appendix for the PU Manufacturer, the PU Manufacturer must be able to demonstrate to the FIA's satisfaction that no 2026 PU development activity is undertaken in conjunction with these tests.

This Article will not apply in 2022, 2023 and 2024.

- **4.2.2** Should a PU Manufacturer provide PU's for use during the 2026-2030 Championships to a customer Competitor who wishes to enter into a supply agreement with an alternative fuel supplier to whom supplies the Works Competitor of the PU Manufacturer, the following additional PUTB testing will be permitted, outside the PU Manufacturers available PUTB hours defined in Article 3.7 of this Appendix:
  - a. Up to 120 additional Operational Hours per year on a Power Unit Dynamometer
  - b. Up to 50 Operational Hours per year on a Single-Cylinder Dynamometer will be accepted for the purposes of this work. An FIA-approved monitoring system, as defined in Article 3.2 of this Appendix must be fitted to monitor this activity.

The following additional provisions apply to this Article:

- c. The provisions of this Article are solely intended to allow customer Competitors to seek alternative fuel suppliers. Under no circumstances will it be accepted that such an alternative fuel supply is organised in such way as to directly or indirectly increase the PUTB testing opportunities for the PU Manufacturer or its main fuel supplier. For any PUTB testing performed under the provisions of this Article to not count towards the limits defined in Article 3.7 of this Appendix for the PU Manufacturer, the PU Manufacturer must be able to demonstrate to the FIA's satisfaction that no 2026 PU development activity is undertaken in conjunction with these tests, other than what is strictly necessary for the tuning of the PU to the characteristics of the fuel used.
- d. No additional PUTB hours will be granted if the alternative fuel supplier also supplies engine oil to the Competitor in question.
- e. If more than one customer Competitors using the same PU enter into an agreement with the same alternative fuel supplier, the additional PUTB hours stipulated in this Article will be shared between those customer Competitors.
- f. For the avoidance of doubt, should the "works/factory" Competitor of the PU Manufacturer change fuel supplier, no additional PUTB hours will be allocated.