

Issue #2 – October 2025

Subject: Lower Engine Containment devices, Arm restraints & Window nets and Transmission & Flywheel Shields – Revised Standards & Compliance Notes

Dear IHRA Australia, Technical Team,

This issue spotlights three critical safety components shaping the future of drag racing compliance:

- Lower Engine Containment Devices – Enhancing track safety through improved oil and debris control.
- Arm Restraints & Window Nets – Reinforcing driver protection in open and enclosed cockpit configurations.
- Transmission & Flywheel Shields – Minimizing risk from drivetrain failures with robust containment solutions.

Lower Engine Containment Devices



General Regulation 5230 – Forced Induction Vehicles

- Applies to: Vehicles that are supercharged, turbocharged, or nitrous oxide injected.

Performance threshold:

- ¼ mile: quicker than 9.00 seconds
- ⅛ mile: quicker than 5.70 seconds

Requirement:

- Must be fitted with a lower engine containment device, belly pan, or both.

Functionality:

- These devices must be capable of collecting oil and debris in the event of engine failure.

Status:

- Mandatory

General Regulation 5240 – Naturally Aspirated Vehicles

Applies to:

- Vehicles that are naturally aspirated.

Performance threshold:

- ¼ mile: quicker than 8.00 seconds
- ⅛ mile: quicker than 5.10 seconds

Requirement:

- Same as above—fitment of a lower engine containment device, belly pan, or both.

Functionality:

- Must be capable of collecting oil and debris.

Status:

- Mandatory



Additional Notes

- The containment system may include an engine diaper, belly pan, or custom-fabricated containment tray.
- These rules are enforced to reduce track contamination, improve safety, and minimize downtime due to clean-up.
- Compliance is checked during technical inspection and may be subject to event-specific enforcement depending on class and sanctioning.

Arm Restraints / Window nets

Here's a detailed breakdown based on the IHRA Australia General Regulations:

Arm Restraints

Applicability:

- Mandatory for all open-bodied vehicles regardless of performance level.

Specification:

- Must meet SFI 3.3 standards.
- Must be attached to both forearms

Purpose:

- Prevent driver's arms from extending outside the vehicle in the event of a crash or rollover.

Installation:

- Must be properly worn and adjusted to limit arm movement beyond the cockpit edge.
- Attached in such a way that egress time is not adversely affected,

Inspection:

- Checked during technical inspection for compliance and wear.



General Reg 2620, Safety, Driver / Rider, Arm restraints

If open vehicle or Funny Car

Mandatory

General Reg 2630, Safety, Driver / Rider, Arm restraints

If open vehicle or Funny Car then attached to both forearms and adjusted so that the driver's arms are retained within space defined by roll cage or shoulder hoop, or as specified by the manufacturer.

Mandatory

General Reg 2640, Safety, Driver / Rider, Arm restraints

Compliant with SFI 3.3

Mandatory

General Reg 2660, Safety, Driver / Rider, Arm restraints

Attached in such a way that egress time is not adversely affected.

Mandatory

Window Nets

General Reg 3200, Safety, Driver, Window Nets

If sedan type with ET faster than 11.00 (1/4 mile) or 7.00 (1/8 mile) then window nets replaced with restraints

Mandatory

General Reg 6310, Safety, Interior, Window Nets

If sedan and ET quicker than 11.00 (1/4 mile) / 7.00 (1/8 mile) and no arm restraints, then ribbon-type net, fitted at driver's window between side and top bars and permanently attached at bottom edge.

Mandatory

General Reg 6320, Safety, Interior, Window Nets

Forward of drivers seating position.

Mandatory

Installation:

- Must be mounted securely on the driver's side window opening.
- Quick-release mechanism must be accessible to the driver.
- Net must cover the entire window opening when deployed.
- Condition: Must be free of damage, fraying, or expired certification.



Additional Notes

- Both arm restraints and window nets are part of IHRA's broader containment strategy, which includes driver restraint systems, roll cages, and helmet standards.
- Failure to comply may result in disqualification or denial of entry at sanctioned events.
- These items are typically reviewed during licensing, chassis certification, and event scrutineering.

Transmission / Flywheel Shield

Transmission shields and flywheel shields are mandatory under IHRA Australia General Regulations for vehicles exceeding specific performance thresholds or using certain driveline configurations.

Here's a detailed breakdown based on the latest IHRA Australia Rulebook:

Transmission Shields

Requirement:

- SFI 4.1 transmission shield is mandatory.

Purpose:

- Protects driver and vehicle from transmission component failure.

Inspection:

- Must be in good condition, properly mounted, and compliant with SFI certification.



General Reg 3680, Safety, Flywheel Protection, Shield

If flywheel shield is required, then formed or fabricated from 6mm (1/4 inch) steel and covers area from 25mm (1 inch) in front of the flywheel to 25mm (1 inch) behind the clutch and pressure plate.

Mandatory

General Reg 3690, Safety, Drivetrain, Flywheel Protection, Shield

If flywheel shield is required, then bolted to bellhousing.

Forbidden

General Reg 3700, Safety, Drivetrain, Flywheel Protection, Shield

If flywheel shield is required, then secured to frame or chassis.

Mandatory

General Reg 3710, Safety, Drivetrain, Flywheel Protection, Shield

If flywheel shield is requested, then removed to be inspected during technical inspection.

Mandatory

General Reg 3720, Safety, Drivetrain, Flywheel Protection, Shield

Engine is Porsche or Volkswagen and normally aspirated and gasoline and slower than 10.99 seconds (1/4 mile) and no flywheel shield.

Allowed

General Reg 3730, Safety, Drivetrain, Flywheel Protection, Shield

If Porsche or Volkswagen engine faster than 11.00 seconds (1/4 mile) or using nitrous oxide injection or turbocharging or supercharging and no protective bellhousing of steel or titanium is commercially available and not using a ballistic blanket compliant with SFI4.1 or an SFI-compliant flywheel shield from another application then flywheel shield installed and made of steel plate at least 1/4 inch thick, securely mounted to the frame or frame structure and completely surround the bellhousing 360 degrees.

Mandatory

General Reg 3760, Safety, Drivetrain, Transmission, Auto – Protection

If vehicle is dragster, altered or funny car and is fitted with automotive-based, automatic transmission, then fitted with ballistic blanket or external protective shield or transmission case that complies with SFI 4.1.

Mandatory

**General Reg 3770, Safety, Drivetrain, Transmission, Auto – Protection**

If vehicle fitted with a transmission brake and is fitted with automotive-based, automatic transmission, then fitted with ballistic blanket or external protective shield or transmission case that complies with SFI 4.1.

Mandatory

General Reg 3780, Safety, Drivetrain, Transmission, Auto – Protection

If vehicle is supercharged, turbocharged or nitrous oxide injected and quicker than 11.00 (1/4 mile) / 7.00 (1/8 mile) and is fitted with automotive-based, automatic transmission, then fitted with ballistic blanket or external protective shield or transmission case that complies with SFI 4.1

Mandatory**General Reg 3790, Safety, Drivetrain, Transmission, Auto – Protection**

If vehicle is quicker than 10.00 (1/4) / 6.50 (1/8mile), and is fitted with automotive-based, automatic transmission, then fitted with ballistic blanket or external protective shield or transmission case that complies with SFI 4.1

Mandatory**General Reg 3800, Safety, Drivetrain, Transmission, Auto – Protection**

If ballistic blanket fitted, then approved by SFI.

Mandatory**General Reg 3810, Safety, Drivetrain, Transmission, Auto – Protection**

If external protective shield fitted, then aluminium minimum 6 mm (1/4 inch) or 3mm (1/8 inch) steel.

Mandatory**General Reg 3820, Safety, Drivetrain, Transmission, Auto – Protection**

If external protective shield fitted, then securely mounted, using two steel straps which pass under the transmission and are 25 mm wide and 3 mm thick

Mandatory**General Reg 3830, Safety, Drivetrain, Transmission, Auto – Protection**

If external protective shield fitted, then provides protection for 180 degrees (pan rail to pan rail).

Mandatory**General Reg 3840, Safety, Drivetrain, Transmission, Auto – Protection**

If external protective shield fitted which complies to SFI 4.1, then installation complies with manufacturer's specifications.

Mandatory**General Reg 3850, Safety, Drivetrain, Transmission, Auto – Protection**

If transmission case that complies to SFI 4.1 fitted, then installation complies with manufacturer's specifications.

Mandatory**General Reg 3860, Safety, Drivetrain, Transmission, Auto – Protection**

If ballistic blanket fitted or external protective shield, then removed during technical inspection.

Mandatory**Additional Notes**

- Shields must be securely mounted and not interfere with driveline operation.
 - These components are reviewed during Technical Inspections and event scrutineering.
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Enforcement & Education

All IHRA Australia Technical Inspectors are empowered to:

- Conduct random audits at events.
- Request documentation or manufacturer specs.
- Remove non-compliant vehicles from competition pending rectification.

Closing Notes

These revisions are part of our broader initiative to unify IHRA Australia's technical policies and elevate our safety culture. Your diligence, consistency are instrumental in upholding these standards.

For questions or clarification, contact:

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Stay sharp, stay safe, and thank you for your continued excellence.

IHRA Australia Technical Department

Legacy through safety. Precision through inspection.