2022 MOTORSPORT AUSTRALIA MANUAL

AUTO TEST

Motorsport

National Khanacross Standing Regulations

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Modified Article	Date of Application	Date of Publication

A capitalised and italicised word in this document is defined in the FIA International Sporting Code (Code) or the National Competition Rules (NCR), including their Appendices.

Any HEADING is for reference only and has no regulatory effect.

A KHANACROSS EVENT IS AN INTRODUCTORY LEVEL AUTOTEST EVENT. THEY OFFER Motorsport Australia Clubs and competitors the opportunity to conduct and take part in autotest level events in which the essential skills of car control and judgement may be practised under controlled conditions.

1. GENERAL

- (a) The National Khanacross Standing Regulations (NKSR) shall apply to each Khanacross event.
- (b) Attachment A of the NKSR shall apply to the Australian Khanacross Championship and to a State Khanacross Championships or Series in conjunction with the relevant State Khanacross Appendices.
- (c) The Supplementary Regulations for a *Khanacross* event must refer to the NKSR.

2. DEFINITIONS - KHANACROSS

2.1 KHANACROSS

As defined in the National Competition Rules.

2.2 AUSTRALIAN KHANACROSS CHAMPIONSHIP

The competition to determine the Australian Khanacross Champion, which shall be conducted as a single event each year.

2.3 COURSE

An individual path, as set by the organisers, which a driver is required to complete, as a test, in the prescribed manner.

2.4 JUNIOR

A Competitor who is not less than 12 years of age and who is less than 18 years of age on the day of the event.

3. THE COMPETITION

The object of a *Khanacross* competition is for each driver to complete each test, of the program of the event, in the prescribed manner, in the shortest possible time, without incurring penalties.

4. EVENT PROGRAM

- (a) Not fewer than four tests must be completed for the event to be valid.
- (b) The running order of all *Competitors* through all tests must be rotated on a system defined in the event regulations based on the number of *Competitors* and the number of *courses*, however no split is to be made within a class. Classes are recommended as an appropriate group for such rotation.

NATIONAL KHANACROSS CODE Last updated: 22/03/2022 1

(c) The ballot for competition numbers must be conducted within each class and those classes must be based on the vehicles, not on the drivers.

5. VEHICLE REQUIREMENTS

5.1 GENERAL REQUIREMENTS

- (a) Each vehicle must comply with Schedule A of the Motorsport Australia Manual and with the Group 4K Regulations.
- (b) Be fitted with a fire extinguisher, compliant with the requirements of a Hand-Held Extinguisher within Schedule H of the Motorsport Australia Manual. (Minimum 900g Capacity AS 1841)
- (c) The Clerk of the Course must rule on the acceptability of any vehicle to compete in the event and on the class in which it shall compete.

5.2 REPLACEMENT VEHICLE

- (a) A driver whose vehicle has broken down may use a replacement vehicle, provided the consent of the Clerk of the Course has first been obtained. The replacement vehicle must undergo scrutiny and should be in the same class as the original vehicle.
- (b) If a vehicle breaks down and can be repaired, the Clerk of the Course may give consent to the competitor to compete the remaining courses out of running order to the rest of the field. In making that decision, the Clerk of the Course must consider maintaining the fairness of the competition. Factors such as changing weather conditions and the event program should be considered. Generally, courses should not be held open after the other competitors have completed that course. Depending on the nature of the repairs, the vehicle may have to be represented for scrutiny. No protest shall be accepted against a decision of the Clerk of the Course in this matter.

5.3 SCRUTINY

- (a) Each competing vehicle must be presented for scrutiny, in an acceptable standard of presentation and condition, before the start of an event.
- (b) Vehicle scrutiny checks shall include the following as a minimum:
 - (i) general occupant safety;
 - (ii) steering;
 - (iii) brake system;
 - (iv) seat belt/safety harness;
 - (v) seat/s;
 - (vi) condition of wheels/tyres; and
 - (vii) security of objects in the cabin.

6. CLASSES

6.1 CLASSES

- (a) For Club and non Championship or Series events competing vehicles may be divided into 'production' and 'specials' classes and may be further subdivided by such criteria as the engine capacity of the vehicle, drive arrangement or tyre type such as the use of rally, All-Terrain, Mud and Snow or radial road tyres. Classes for each *Khanacross* event must be detailed in the event regulations. Alternatively, the classes established for the AKC may be used at any *Khanacross* event.
- (b) Classes for production two-wheel drive vehicles must be subdivided on the basis of the engine specification and/or capacity.
- (c) A class may be provided for production four-wheel drive vehicles, which must be driven in the fourwheel drive mode throughout the competition. This class may be further divided.
- (d) A class for Specials must only contain two-wheel drive vehicles. 4 Wheel Drive Specials are prohibited.
- (e) The multiplication factors for supercharged and rotary engines are as per Classification of Automobiles of the Motorsport Australia Manual.

7. ENTRIES

7.1 ENTRY CONDITIONS

- (a) Each driver in a Khanacross event must hold at least a current Motorsport Australia Speed or Junior Speed licence. For Competitor licence requirements refer to the General Regulations of the Motorsport Australia Manual.
- (b) Each driver is allowed only one entry.
- (c) Entries must be accepted in accordance with the NCR.
- (d) The standard entry form must be used whenever practicable.

8. DRIVERS

8.1 CONDITIONS

- (a) Each driver must, while competing, wear at least a lap sash seat belt (Type C), in compliance with Schedule I of the Motorsport Australia Manual
- (b) Each driver must wear a helmet in compliance with the requirements for a *Khanacross* in Schedule D of the Motorsport Australia Manual.
- (c) Each Driver must wear apparel in compliance with the requirements for a *Khanacross* in Schedule D of the Motorsport Australia Manual.
- (d) Each driver of a vehicle to which no windscreen is fitted must wear adequate eye protection in accordance with the requirements for Goggles or Visor in Schedule D of the Motorsport Australia Manual.
- (e) The minimum age for a driver in a *Khanacross* competition is 12 years.
- (f) The Clerk of the Course must ensure that each Driver maintains control of their vehicle. The Clerk of the Course may cease the competition of a *competitor* who is not driving in a controlled manner.

9. EVENT PROCEDURE

9.1 COURSE DIAGRAM

Event organisers may provide a diagram of each course for inspection by drivers prior to each run.

9.2 CONVOY RUN

A convoy run may be held before the start of competition on that *course* to permit each *Competitor* to familiarise themselves with the *course*. If a convoy run is held it will be led by the Clerk of the Course or their nominee and will not exceed 20 km/h. *Competitors* will follow the lead car. Other *Competitors* may be carried as passengers during the convoy run, provided the vehicle provides proper accommodation for such passengers.

NOTE: It is each *Competitor's* responsibility to participate in the convoy run. Missing the convoy run is not justification for the granting of a re-run.

9.3 COURSE/TEST COMPLETION

- (a) A vehicle must complete the full distance of each *course*/test and must do so under its own power.
- (b) A vehicle may retrace an incorrect path taken in completing the required *course*/in which case the attempt shall be accepted as valid.

9.4 MOVEMENT OF VEHICLES BETWEEN EACH COURSE/TEST AND PIT AREA

A speed limit of 10 km/h must apply in the pit area and when proceeding between each *course*/test. Failure of a driver to respect this limit may lead to exclusion from any further competition on the day. The imposition of this penalty will be at the discretion of the Clerk of the Course.

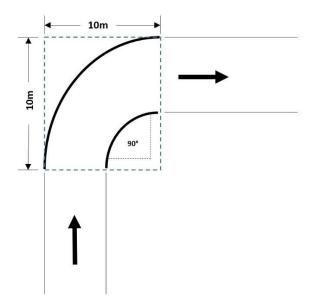
10. EVENT LAYOUT

10.1 COURSE

Each *Course* must not exceed 2km in length. No straight section of the *course* may exceed 100 metres in length without a turn of 90° or more, otherwise there must be a course garage, in which each competing vehicle must stop, before continuing the *course*. The 90° turn must pass through an established area of a maximum

of 10m x 10m (refer diagram 1). The *Competitor* should not normally be required to reverse while competing, at the Clerk of the Course's discretion. Markers shall clearly define the correct *course* to be taken.

DIAGRAM 1



- (a) Courses must be designed to ensure that competing vehicles do not exceed 100km/h at any time during the tests and that the risk generated by vehicle speed is acceptable given the circumstances of the event.
- (b) The *course* shall be denoted by suitable markers or arrows. These should be placed so that they are easily seen by *Competitors*, especially if the event is to be run at night. All arrows should be placed approximately 1.2 metres above the ground.
- (c) Each course may be used as a test more than once and in each direction during an event.
- (d) Bunting, if used, should not be affixed to course markers.

11. GARAGES

11.1 START/FINISH GARAGES

- (a) The Start/Finish garages may be the same garage or two separate garages. In either case each garage shall be four metres wide and 10 metres long. All starts will be standing starts and all finishes shall be within the finish garage.
- (b) All garages will have a minimum of eight flags or other suitable markers.
- (c) The finish line shall extend across the front of the finish garage of each course and shall extend four metres either side.

11.2 COURSE GARAGE

- (a) Course garage/s of four metres wide and 10 metres long may be placed in the course and each Competitor is required to stop in each garage.
- (b) A penalty, as per Article 15.2, will be applied if the *Competitor* does not stop.

12. METHOD OF SCORING

12.1 PLACINGS AND PENALTIES

(a) Placings must be decided on the aggregate of elapsed times on the tests completed, plus any penalties. The winner/s must be the driver/s having the lowest aggregate, including any penalties, at the completion of the event. In the case of equal scores, the tied *Competitors* must be declared joint winners.

- (b) If any error is detected in timing equipment or timing method, which gives reason to doubt the validity of *Competitors*' times in a test, the requirements of Article 14 will apply.
- (c) If the primary system of timing should fail to record a *Competitor*'s time, then the *Competitor* must be offered the choice of a re-run or the average of the manual back-up times used. If any penalty was incurred on the initial run, then only the manual back-up times can be offered.

13. METHOD OF TIMING

13.1 TIMING

- (a) Timing must be to .01 of a second and recorded in writing.
- (b) If manual timing is used, it must be conducted using two manually operated stopwatches each operated by a different official. The two times must be recorded, and the average of those times shall be the *Competitor*'s elapsed time for the test. Should one of the manual times be judged inaccurate then the Clerk of the *Course* shall consider whether a re-run is justified or whether the other time alone should be offered or enforced in order to obtain a fair result in the competition. In this regard the Clerk of the *Course* is entitled to consider the one accurate time recorded as the manual back-up time when enforcing Article 14.1(c).
- (c) When automatic timing is used at least two manually-operated stopwatches must be used as backup. All the times so determined must be recorded separately and must be used if failure of the automatic equipment occurs, so that the event can continue.
 - (i) Should it be necessary to use back-up timing then the average of the two recorded back-up times shall be used.
- (d) The elapsed time for each driver who completes the test must be recorded. Any penalty/ies incurred must be recorded separately. A driver's time card must be issued to each driver and have the time and penalties recorded on it at each test.
- (e) Timing must commence when the leading point of the car crosses the designated start line and must cease when the leading point of the car crosses the designated finish line. The designated finish line must be not less than 500mm and not more than one metre behind the front of the finish garage.

14. RE-RUNS

14.1 PROCEDURE FOR RE-RUNS

- (a) Re-runs of a test, whether for an individual or for the whole field, are to be avoided unless that re-run is the only means of ensuring a fair result for all concerned.
- (b) Individual re-runs may be authorised only by the Clerk of the Course whose decision shall be based on the degree of control the driver could reasonably be expected to have over the circumstances which support the *Competitor's* claim for a re-run (e.g. a dog on the test area). The Clerk of the Course must ensure that the time-keeper and other officials of the test concerned are notified of any authorised re-run.
- (c) Should a timing equipment malfunction be discovered during a driver's attempt at a test the driver should be allowed to complete the test, then action taken as provided for in Article 13.1(c).
- (d) Should difficulty be encountered with either automatic or manual timing equipment, correct operation should be verified without repeated attempts being made by the competing driver/s. If necessary, a non-competing driver shall be used to check the operation of equipment.
- (e) Each driver must be advised as soon as possible if any error is detected in timing equipment or timing method which gives reason to doubt the validity of the field's times in a test. In such a case, the Clerk of the Course will decide whether:
 - (i) the test concerned will be abandoned, providing that the program will still then contain at least the requisite minimum number of tests; or
 - (ii) the original test will be re-run with restored or alternative equipment; or
 - (iii) the test will revert to manual timing for all Competitors as provided for in Article 13.1.

15. PENALTIES

15.1 PENALTIES

There base penalties applicable to each test, which then become the time recorded for the penalised driver in lieu of that which was recorded, are:

- (a) Plus five (5) seconds which means that five seconds must be added to the time recorded by that driver on that test for each infringement.
- (b) Slowest time plus five (5) seconds which must be calculated in accordance with the following:
 - (i) Adding five seconds to the slowest time recorded by a driver who completed that test correctly and without a penalty being applied; or
 - (ii) Where the slowest time plus five seconds exceeds double the fastest time recorded by a driver who completed that test correctly and without a penalty being applied, the penalty time to be applied will be double the fastest time.
- (c) Slowest time plus ten (10) seconds which must be calculated in accordance with the following:

15.2 APPLICATION OF PENALTIES

The application of penalties must be as follows for each infringement:

	Penalty Condition	Penalty Applied
(i)	Wrong direction	Slowest time plus five (5) seconds
(ii)	Any other action that can be deemed as incorrectly completing that <i>course</i> (such as reversing after exceed the limits of a garage)	Slowest time plus five (5) seconds
(iii)	Failure to complete a test	Slowest time plus five (5) seconds
(iv)	Running out of order (without the prior approval of the Clerk of the Course)	Slowest time plus five (5) seconds
(v)	Failing to stop completely within a mid-course garage	Slowest time plus five (5) seconds
(vi)	Failing to stop completely at the finish of a test	Slowest time plus five (5) seconds
(vii)	Finish a test with the car stopped but completely outside the garage	Slowest time plus five (5) seconds
(viii)	Finishing a test with part of the car outside the garage boundaries (plus the penalty for striking any flag/marker	Plus five (5) seconds plus any flag/marker strike
(ix)	Striking a <i>cour</i> se flag/marker (including garage boundary flag/marker)	Plus five (5) seconds per flag/marker
(x)	Failure to attempt a test	Slowest time plus ten (10) seconds

NOTES:

- (a) In the situation referred to in Article 15.2 (d) (ix) *Striking a course flag/marker*, the Judge of Fact for that test must rule whether penalty 15.2(d) (i) *Striking a course flag/marker*, or penalty 15.2(d) (ii) *incorrect completing that course*, is the appropriate penalty.
- (b) Prior to a driver being issued a penalty under Article 15.2 (x) Failure to attempt a course, the event officials must make full effort to call them to the starting line. The officials may discharge this responsibility by calling the driver twice by competition number and name throughout the pit area/s. A driver who, having presented themselves at a course fails to start his competition run at that course within one minute of being requested to do so by the timekeeper or their assistant, shall be deemed to have failed to attempt the course.
- (iii) A penalty of exclusion may also be imposed for infringements of the NKSR and for other offences prescribed by the *NCR*.

16. DUTIES OF OFFICIALS

16.1 CLERK OF THE COURSE

There must be one Clerk of the Course of the event, who will be held ultimately responsible for the conduct of the event. Their duties are defined in the *NCR*. They may have Deputy Clerk/s of the Course for the discharge of their duties. In particular the Clerk of the Course;

- (a) must act as controller of the functions of all officials of the event and shall co-ordinate their activities;
- (b) shall be responsible for decisions concerning the running of the competition, particularly those relating to safety, eligibility, timing and interpretation of the *Standing Regulations*;
- (c) shall give rulings on re-runs and on changes of vehicles;
- shall complete and provide to Motorsport Australia report dealing with any reportable matters arising from the Event;
- (e) must prepare a written report containing the information necessary for the Stewards of the Event to prepare their reports;
- (f) must ensure that all officials are fully briefed on their duties and on the use of equipment in their charge and on all the regulations relevant to the tests over which they have control; and
- (g) must also ensure that all tests are laid out in the correct manner and to the requisite dimensions, and that no natural or artificial features create a hazard to *Competitors*, officials or spectators.

16.2 TEST OFFICIALS

- (a) In Championship events, for each test there shall be at least one principal timekeeper (two when manual timing is being used), and two back-up timekeepers.
- (b) These officials may also act as starters, recorder and Judges of Fact for that test. Their duties shall include being conversant with the *Standing Regulations* particularly those regulations dealing with the method of timing, Article 15, and with penalties Article 16.
- (c) They shall also be conversant with *NCR* (Duties of the Chief Timekeeper and Duties of a Judge of Fact).

16.3 OBSERVERS

- (a) In each test which requires the entry into a garage by a vehicle, observers must ensure that the vehicle is fully garaged, and that any penalty is applied fairly.
- (b) A garage observer must be placed on the projection of a line drawn across the front of each such garage, to enable observation of any incomplete garage entry.
- (c) Other observers may be appointed by the Clerk of the Course. All observers shall be a Judge of Fact as referred to in the *NCR*.

16.4 SAFETY

- (a) Each Official must ensure that they are in safe positions while the event is in progress, especially near the finish garage.
- (b) For each venue, layout and surface, consideration shall be given to the risk presented by the proximity to the course of areas/enclosures for paddock, pit/s and/or spectators and controls and/or protection systems must be introduced to reduce the risk to these areas and persons to an acceptable level.
- (c) Other safety requirements, such as an area for refuelling, are also to be considered.

16.5 CLUB EVENTS

- (a) For Club Khanacross, the Clerk of the Course is an Essential Official. In addition, an Assistant Clerk of the Course may be appointed to a Club Khanacross. Either the Clerk of the Course or the Assistant Clerk of the Course must of necessity always be on duty or during such time the acting Clerk of the Course must be clearly and readily identifiable.
- (b) The duties of the Secretary of the Event, Chief Timekeeper and Chief Scrutineer may be discharged by the Clerk of the Course or by another suitably qualified Official. While these duties are being discharged by such alternate Official, a Clerk of the Course and his Assistant (where an Assistant Clerk of the Course has been appointed), the Secretary of the Event, the Chief Timekeeper and the Chief Scrutineer may compete at the Event.

(c) Any matter arising from the Event which requires action by the Stewards shall be referred to a stewards' hearing which shall be organised by Motorsport Australia which shall have the standing of a hearing by Stewards of the Event.

16.6 STATE AND NATIONAL EVENTS

At a State or National Championship *Khanacross*, Essential Officials shall be appointed in full accord with the *NCR*.

17. PASSENGERS

17.1 PASSENGERS IN VEHICLES

- (a) A passenger may be carried in a vehicle while competing in a Khanacross except:
 - (i) In the Australian Khanacross Championship; and
 - (ii) Where prohibited in the Supplementary Regulations.
- (b) An inexperienced driver (either *junior* or an adult), may carry an experienced *passenger*, or an experienced driver may carry a *junior* or inexperienced adult *passenger* for the purpose of instruction and guidance in State or Club level events under the following conditions:
 - (i) A request is lodged with and approved by the Clerk of the Course;
 - (ii) The suitability of the *passenger* or the experienced driver is at the discretion of the Clerk of the Course:
 - (iii) Each *passenger* shall complete the Motorsport Australia "Passenger Entry Form" before any test;
 - (iv) Any driver carrying a passenger during competition is not eligible to score points in a State Khanacross Championship event;
 - (v) Only one *passenger* is permitted in the vehicle with the driver at any time during a test; and
 - (vi) Times achieved by a driver with a passenger shall not be used as a basis for the application of penalties to other drivers.
 - (vii) Each *passenger* shall comply with the apparel and safety requirements for the competition during any attempt at a test.

18. SPECTATORS

18.1 SPECTATOR SAFETY

- (a) It is the responsibility of the Clerk of the Course to ensure that all spectators and *Competitors* are restricted to safe areas. To this objective, marshals should be appointed.
- (b) Only appointed officials, persons authorised by the Clerk of the Course and *Competitors* shall be allowed in the competition area.
- (c) Spectators should be excluded from the pit area and, if possible, the area should be supervised by a permanently appointed pit area marshal and assistant/s.
- (d) Animals must not be admitted to the competition or pit areas.

19. SAFETY EQUIPMENT

- (a) The Clerk of the Course must ensure that each event is prepared, organised and staffed to ensure the safety of the event. Consideration should be given to the access to the event venue by emergency services and any heightened fire risk (i.e. dry grass).
- (b) For each *Khanacross* event there shall be:
 - (i) A minimum of a basic first aid kit;
 - (ii) A minimum of a 9kg (or two 4.5kg) ABE powder fire extinguisher complying with Australian Standard AS 1841.5.

20. RESULTS

20.1 PROTOCOL

- (a) Within 120 hours of the completion of the event a dated list of the provisional results must be supplied to:
 - (i) Motorsport Australia
 - (ii) the Stewards
 - (iii) each Competitor
- (b) The results sheet should be in a format which shows the following details:
 - (i) driver and driver's home state and, if possible, club
 - (ii) Competitor number
 - (iii) make and/or model of vehicle
 - (iv) class
 - (v) name of each test
 - (vi) performance of each Competitor in each test by time, including any penalty; and
 - (vii) placings general classification.
- (c) Uniform markings should be used to indicate and identify penalties, e.g.: 1F, 2F etc. Hit Marker, WD, Incorrect Method, DNS (Did Not Start), DNF (Did Not Finish), NFG (Not Fully Garaged).
- (d) In a State Championship event, a list of all championship point scores should be shown separately.
- (e) To be classified as a finisher in an event, a Competitor must attempt at least 50% of the Courses conducted in that event.

21. PROTESTS

Any protest must be in accordance with Part XII and Appendix R of the NCR.

22. PRIZES

The event awards shall be presented as specified in the supplementary regulations for each event. For Australian Khanacross Championship awards see Appendix A.

Attachment A

1. AUSTRALIAN KHANACROSS CHAMPIONSHIP

1.1 CONDITIONS

- (a) The Australian Khanacross Championship must consist only of courses created within the constraints of NKSR Article 11. Event Layout
- (b) motorsport Australia-approved Supplementary Regulations must be available to the State offices of motorsport Australia, to all member clubs and to *Competitors* at least eight weeks before the event. The regulations must satisfy the requirements of the *NCR*.
- (c) The Australian Khanacross Championship may be conducted on a sealed or unsealed surface.
- (d) The diagrams and procedures of the *course*/s to be attempted should be included in the official program for distribution to each *Competitor*.
- (e) Not more than four drivers may be entered to drive the same vehicle. At the Clerk of the Course's discretion this number may be extended for a family unit.
- (f) The event must not include any class for novice drivers. It may include classes for junior and lady drivers. To be eligible to compete in any class for juniors, drivers must be less than 18 years of age on the day of the event. Driver categories are not mandatory, and the entrant may choose not to be included in those categories. Classes for Specials and Production vehicles must be provided, with application of the conditions of Article 2 Classes.

Awards must be presented to the drivers who fill the first six places in the general classification and (g) to first, second and third in each class (subject to more than six entries in the class). Other awards may be made at the discretion of the organisers.

1.2 **Australian Khanacross Rotation Schedule**

2022 Victoria or WA

2. **CLASSES**

Although the Australian Khanacross Championship is an outright event, a competition to determine various class winners may be conducted within that event.

2.1 Classes for the AKC:

(a) The following table details the classes for the AKC:

Α	0 - 1300cc	F	2WD Specials
В	1301cc to 1600cc	G	4WD Production Vehicles
С	1601cc to 2000cc	Н	SXS Vehicles
D	2001cc to 3000cc	MP	Modified 2WD & 4WD Production Vehicles
E	3001cc and over.		

NOTE:

- (i) CLASS F, is for 4H & 2-Wheel Drive 4K Vehicles (2WD Motorkhana and Khanacross Specials)
- (ii) CLASS G, is for 4-Wheel Drive Production Vehicles
- CLASS H is for a vehicle defined as a SXS (Side x Side) within the Off Road Vehicles -(iii) Specific Requirements for Off Road Vehicles section of the Motorsport Australia Manual. A SXS vehicle that is in standard specification as produced by the manufacturer may enter a Khanacross event and compete in this specification. Any modification from the standard specification will require the vehicle to comply with each requirement of the Off Road Vehicles - Specific Requirements for Off Road Vehicles section of the Motorsport Australia Manual, including where relevant the safety cage requirements of Schedule J of the Motorsport Australia Manual.
- CLASS MP. Modified 4-Wheel Drive & 2-Wheel Drive Production Vehicles (iv)