



XLOT TECHNICAL REGS

STANDARD CATEGORY

1. CARS PERMITTED:

- a. In this category, all NINCO XLOT cars are permitted. Cars must observe set up adjustments as cars are upon leaving factory, with the exception of that which is considered in the following technical regulations.
- b. The cars' minimum weight must be no less than 140 grams, providing it meets with the technical regulations laid down in the present document.

2. OBLIGITARY MODIFICATIONS

- a. No supplementary magnets are allowed in any cars.
- b. Cars must carry numbers on doors and for rally competitions they must carry at least one plaque on the front of the car.
- c. Hubcaps must be fitted to flat bed wheels in cars which come with these wheels as standard.

3. TRANSMISSION

- a. With rear wheels drive, the motor pinion may not mesh directly with the crown of the rear axle, the belt drive system must be maintained and turn simultaneously with the motor pinion.
- b. The type of transmission must be maintained, 4x2 or 4x4, whichever the car has as Standard..
- c. In the case of 4x4 transmission, in order to action the front drive train, a rubber band system is permitted, that is fitted as standard, with the exception of that which is considered in the following technical regulations.

4. BODYSHELLS

- a. The body shell must be made from rigid plastic and be original XLOT material.
- b. The minimum weight of the body shell including cockpit and side supports must be 38 grams for the Porsche 997.
- c. Painting and decoration of body shells are free choice, maintaining the transparent windows if the Standard model carries them. To this end, an increment of 2 grams in the total weight will be tolerated.
- d. Cars must preserve all aerodynamic elements (wings, spoilers,) of the model reproduced.

- e. Fitting and removal of auxiliary lights is allowed as long as it is done so in even numbers, the same goes for aerials. A weight increase of 2-3 grams will be allowed (depending on the number of modifications) in those cases that do not include these elements as Standard.
- f. Removal of windscreen wipers is allowed and also wing mirrors when these elements are independent from the body shell.
- g. Cars must keep original cockpit, only the inclusion or removal of the co-pilot is allowed depending on the type of competition (Rally or Endurance)
- h. Original Body shell fixing system is mandatory.

5. CHASSIS AND SCREWS

Chassis

- a. The one determined by the manufacturer for this model, XLOT V.01
- b. Adjustments that regulate the height of the motor with respect to the chassis and/axles are allowed. As are adjustments which favor a total or partial pivoting action of the motor with respect to the chassis, provided that the motor's final position is at least 1mm away from the rail with all 4 wheels grounded.
- c. The final position of the motor is free choice, provided the minimum height is respected in order to avoid a short circuit.
- d. Both drive trains may be adjusted in height, provided that both chassis and motor are at least 1mm away from the rail with all 4 wheels grounded.
- e. Front drive train may be adjusted for rocking, using the nylon screws.
- f. The chassis support screws may also be adjusted to facilitate play in the body shell without modifying the plastic housing attached to the shell.

Screws

- a. Free choice, however of the same material as the originals in each position.
- b. Washers may be added to any screw position,

6. Motor

- a. Approved motor:
 - Closed box - Compact.
 - XL1
 - 25.750 r.p.m. a 14.8V

No element may be added to motors, nor any electrical, mechanical or electronic component of the same be manipulated to alter performance. with the exception of that which is considered in the following technical regulations.

- b. External anti-parasite electronic components may be removed from those motors that have them as standard. No other element may be removed.
- c. The motor may be covered, on the underside, with tape or similar material.
- d. The motor may only be fixed to the housing with original screws.
- e. The exchange of any parts from different brands or models of motors is strictly forbidden.

7. Guide, Braids and Cables

Guide

- a. Original and Standard fitted only
- b. Positioning to be determined by the manufacturer for this model. Guide arm length may be altered provided it can be done without modifying or perforating the arm.
- c. Spring tension may also be adjusted and arm height with the adjusting screws fitted.

Braids

- a. Free choice.
- b. Cables may be soldered to the braids and to the motor.
- c. Any additives to the braids are prohibited.

Cables

- a. Free choice.

8. Wheels, hubs, pulleys and transmission belts

Wheels

- a. Model and original size must be XLOT.
- b. Nylon hubs are not allowed neither are hubs of similar material.
- c. If the Standard model does not have all four hubs of the same size, this same configuration must be maintained for competing.
- d. When substituting original hubs, a tolerance of +/- 1 mm is allowed in the total width of the drive train.
- e. Flat based hubs, must carry hubcaps, simulating a real hub, a flat based hub are those which are totally flat on the inside, independent of the engraving or the interior shape of the hub.

Pulleys

- a. In cars sold with front transmission via a pulley system, one or two sets of transmission pulley kits may be fitted, independent of the number of pulley kits that come fitted as standard, all kits fitted must be original XLOT equipment.
- b. Pulleys must work and turn with the wheels.

Pulley belt

- a. Original characteristics may not be modified; pulley belts must be standard equipment.
- b. All four wheels must turn freely and touch the track at a flat point and whilst the car is idle.

9. Bushings

- a. Free Choice, provided there is no variation in position or size from original equipment.

- b. Plastic or metal but must be one piece only.
- c. Ball Bearings are allowed, provided they comply with original equipment specifications.

10. Axles Pinions and Crowns

Axles

- a. Free choice and made from a metal composite.
- b. Hollow axles are not allowed. Axles may be cut in length in order to meet regulations.
- c. Fixed pulleys, crowns and hubs must be fixed to the axle and must turn in all instances, together with the axle, as with the 1:1 scale.
- d. Total width of axle + hubs must be the same as the original, there is however a 1mm tolerance.

CAR	REAR DRIVE TRAIN	FRONT DRIVE TRAIN
PORSCHE 997	Min.65mm / Max. 66mm	Min.62mm / Max.65mm
FERRARI 430	Min. 68mm / Max. 69mm	Min. 66mm / Max. 69mm

- e. Both drive trains must maintain their original structure.

Pinions

- a. Original XLOT equipment, 7 or 8 teeth, may be plastic or metal.

Crowns

- a. Original XLOT equipment, 30 or 32 teeth, may be plastic or metal.

11. Tyres

- a. Only store bought tyres are valid, they must also be XLOT and made from black rubber.
- b. Lowering, filing drawing and cutting is allowed provided the tyre totally covers the hub and they turn with the wheel. It must be recognizable as XLOT original equipment.
- c. Knobble tyres are not allowed, neither is the use of any additive.
- d. Tyres may be fixed/glued to the hubs.

12. Homologating new parts

- a. Any new spares launched on to the market will be homologated provided they meet with the present set of rules.
- b. Any technological improvements and /or dubious cases will not be admitted until they have been homologated by NINCO via an annex to these regulations and published at www.nincohobby.es/xlot