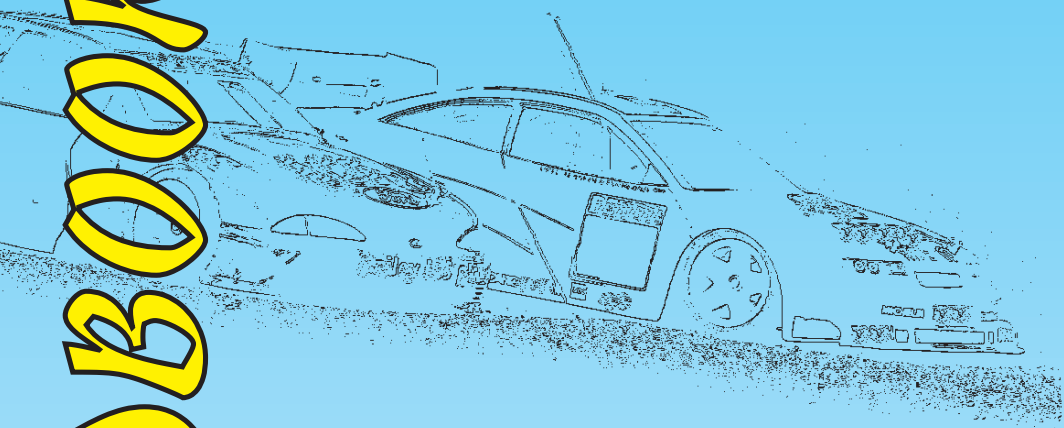


HANDBOOK 2009



Appendix 9



*European Federation of
Radio-Operated
Model Automobiles*

APPENDIX 9

PROCEDURE FOR BODY-APPROVAL (1/8 TRACK, 1/10 TRACK, ELECTRIC TRACK & LARGE SCALE)

1. Any manufacturer, who wishes to submit a bodyshell for homologation must first contact the EFRA Treasurer who will invoice them the required amount and forward to them, together with the invoice, the EFRA Bodyshell Homologation Form. Sanction Fee will be set at the EFRA Annual General Meeting.
 - 1.a. Bodies for 1:10th, 1:8 class and Electric Track.

Anyone who wishes to have a body tested and homologated must submit 2 samples before December 1st to the body homologation officer.
Bodies will be checked and verified between December 1st and february 28th and will be put on the EFRA webpage for publication on March 1st.
After publication no other bodies will be added to the list before the end of the running year.
2. All manufacturers must submit the following to the EFRA Homologation Officer (DO NOT SEND BODY SHELL TO THE TREASURER):
 - a) The completed EFRA Homologation Form
 - b) Pictures of original 1/1 car body from two of the following three elevations.
 - top
 - front end
 - rear end
 - side
 - c) Any other information that may be necessary
e.g. Race results for real car races
Manufacturers data for production cars
 - d) TWO examples of the model body from the final tool with all character lines and other elements present. This will be retained for referral. All wings custom designed for the body must be included.
 - e) For Large Scale models it is only necessary to send 1 (one) example of the body shell. Drawings and photographs will be retained by the Homologation Officer as proof of the homologation. Bodyshell must be clearly marked (stamped or engraved) with the homologation number.
 - f) All Bodies currently on the EFRA approved list will remain legal for five years or earlier removed.
3. Upon receipt of the above items, the Manufacturer will receive a confirmation from the Homologation Officer with the date of receipt. If any of the above items are missing, or photographs or other data are considered by the Homologation Officer to be of insufficient quality, homologation will be refused. The reason for refusal will be given.
4. Within one month of confirmation of receipt, subject to confirmation from the EFRA Treasurer that the sanction fee has been paid, the Homologation Officer will either:-
 - a) Approve the body, when the model body is an acceptable representation of the original.OR
 - b) Refuse homologation, when the differences from the original are too great.

If the body shell is refuse the reason for refusal will be stated.

Each homologated body will have an unique EFRA number, even if the same type of bodyshell is already approved for a different manufacturer. The EFRA number must be set in an area immediately adjacent to the cockpit, preferably in front of the windscreen. Body homologation number must be visible at time of technical inspection. Therefore manufacturers must place the number in an area of the body which will not be cut out.(Bonnet in front of the driver, front spoiler, windscreen)

All shells with separate customised wings must have the homologation number moulded into all parts of the wing as well as the body. The wing must be submitted for homologation at the same time as the body for which it is intended to be used. The wing may only be used with the shell with which it was homologated.

5. The homologation period lasts for five years, after which the body may be resubmitted, provided it still satisfies all regulations concerning the individual body class and is still in use.
6. The manufacturer may, if he wishes send a preliminary example of the model body to the Homologation Officer for interim advice. The body need not be taken from the final tool but all character lines and other details must either be moulded on or marked on the body in pen. Photographs etc. must be enclosed as in the full homologation procedure. The Homologation Officer will give a non-prejudicial opinion on whether the body would be homologated in finished form. If he decides that the body would not be approved, he may, if he wishes, give specific reasons. A fee to cover expenses will be charged for this service. Fee to be set at the EFRA Annual General Meeting.
7. Once approved, the tool must not be modified in any way. Should the tool be modified, the EFRA number must be filled in and an example of the modified body submitted to the Homologation Officer for full re-submission.
8. All information and examples of 1/8 scale bodies sent to the Homologation Officer will be retained during the homologation period of five years. All examples of large scale bodies sent to the Homologation officer will be sent back to the manufacturer with the homologation number engraved in. The manufacturer has to retain the example body during the homologation period of five years. If the Homologation Officer suspects that a body has been modified post- homologation he may anonymously purchase an example of the body for checking. If he finds that the body has been modified it will be immediately removed from the approved lists.
9. All bodies currently on the EFRA approved list will remain legal for five years from date of homologation.
10. EFRA Homologation Officer:

1:8 Scale Homologation:	Gerhard Binder Schönbrunnerstr. 159 A-1120 Wien Austria
1:4 Scale Homologation:	Wolfgang Stumpf Franz Josefsring 16 A-2500 Baden Austria
1:5 Scale Homologation:	Wolfgang Petermann

- Am Ried 9
D-61273 Wehrheim/Ts.
Germany
Gerhard Binder
Schönbrunnerstr. 159
A-1120 Wien
Austria
- 1:10 IC Scale Homologation:
- Electric Track Homologation:
- Gerhard Binder
Schönbrunnerstr. 159
A-1120 Wien
Austria
11. Special Homologation rules for 1:8 scale.
The body must be a replica from an original race car.
Cars must have raced in either Sports Can Am classes, Proto-type, Group-C, Le Mans, American Le Mans or GT1/GT2 classes.
Once homologated by the homologation officer the name of the body can be changed to a name or production reference from the manufacturer. This name or reference will be used at the EFRA body list.
The rear of the body after the rear axle is free and does not have to be within the measurements of the original.
The following differences from the original are allowed;
Side dams on the model after the rear axle may not be higher than 40 mm.
Side dams from the front axle till the rear axle may have the following dimensions;
From front axle over the first 150mm, not higher than 8 mm and not more than 20 mm over the next 100mm.
Behind the driver the body may be adapted to suit fuel tank. Driver may be moved slightly to the front or to the left or right to avoid conflicts with tank.
Driver may not be cut because of fuel tank opening.
All bodies will have the EFRA number engraved into the body at such a place that it is visible all the time.
For minor changes the body will get an extension on the number, for instance, EFRA2004001 will be EFRA2004001A after the changes. After a second change it will be EFRA2004001B.
All changes must be submitted to the homologation officer and need to be accepted by EFRA and will be charged with 40% of the original homologation fee. Different bodies with the same number are not possible.
After 5 years a body will disappear from the list unless the manufacturer asks for a license for another period of 5 years. The fee for an extra period is 40% of the normal homologation fee.
Bodies must be presented to the homologation officer latest end of February and will be published on a list on March 31st the latest.
12. **1:4**
At the moment, all bodysHELLS can be used

13. **1:5 Touring Cars**
Updated list from 25th of February 2008:

No.	Type	Manufacturer	Country	Date	Category
5030/97 am	Honda Accord 2,0 '99	Bergonzoni	I	18.06.06	Class 2
5033/00 am	Honda Accord 2,0 '00	FG	D	14.03.06	Class 2
5035/00 am	Alfa Romeo 156 2.0 '99	PMT	I	18.03.06	Class 2
5043/04	Alfa Romeo 156 2,0 ETCC	Bergonzoni	I	11.07.04	Super 2000
5044/04	SEAT Toledo Cupra 2.0 ETCC 04	Ferretti	I	31.07.04	Super 2000
5045/04	Honda Accord Euro R ETCC 04	Killam	USA	24.10.04	Super 2000
5046/05	Honda Accord 2,0 '02	DELTA Plastic	I	19.04.05	Class 2
5047/05	PEUGEOT 406 Coupé STCC 03	DELTA Plastic	I	19.04.05	FIA STC
5048/06	JAS Honda Accord ETCC 04	GENIUS	I	26.01.06	Super 2000
5049/06	JAS Honda Accord WTCC 05	Ferretti	I	14.03.06	Super 2000
5050/06	JAS Honda Accord ETCC 04	Vögele	D	10.04.06	Super 2000
5051/06	BMW 320si WTCC 06	Killam	USA	07.05.06	Super 2000
5052/06	BMW 320si WTCC 06	TRT-Technik	D	04.06.06	Super 2000
5053/06	Alfa Romeo 156 2,0 WTCC 06	FG	D	18.06.06	Super 2000
5054/06	Alfa Romeo 156 2,0 WTCC 06	Bergonzoni	I	18.06.06	Super 2000
5055/07	SEAT Leon WTCC 07	Bergonzoni	I	11.04.07	Super 2000
5056/07	Alfa Romeo 156 2,0 WTCC 07	GENIUS	I	02.12.07	Super 2000
5057/08	BMW 320si WTCC 07	GENIUS	I	17.02.08	Super 2000
5058/08	BMW 320si WTCC 07	A. Rossi	I	17.02.08	Super 2000

Up-dated
11 January 2009

am = aerodynamic modifications available