



ASN CERTIFICATE NUMBER

**SC 2017-032**

# SAFETY CAGE CERTIFICATE

In compliance with FIA Homologation Regulations for Safety Cages

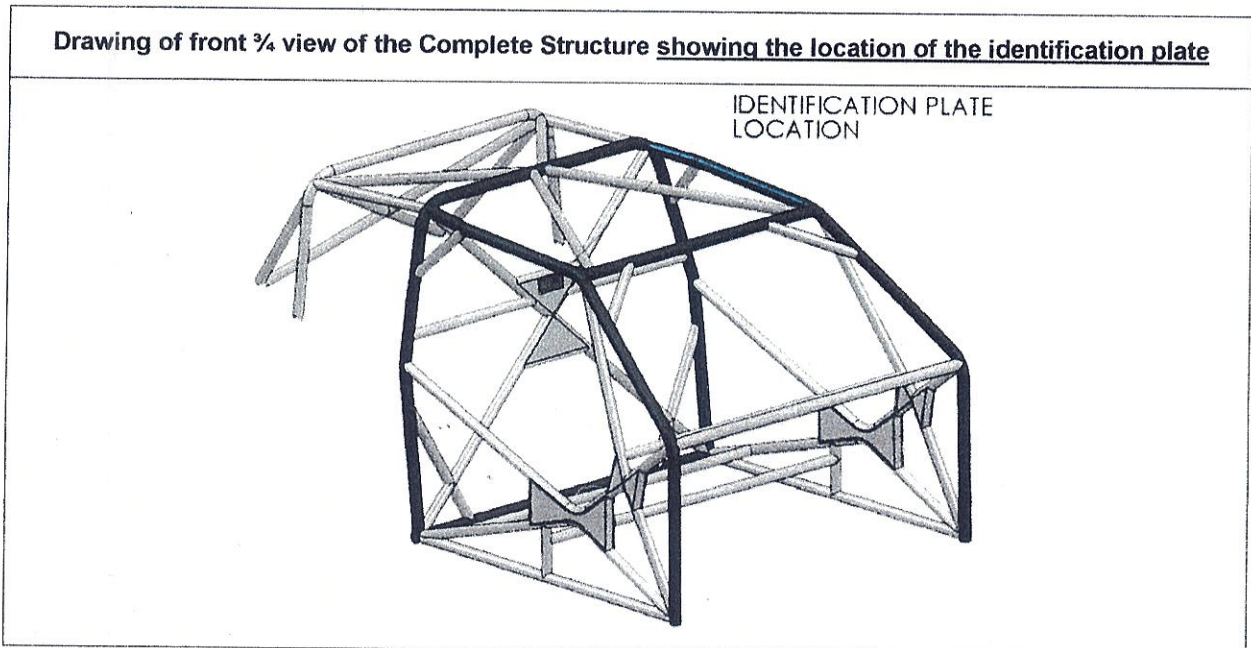
This Certificate is valid only for the Safety Cage bearing the Serial Number shown on Page 9 of 9

|                          |   |
|--------------------------|---|
| Safety Cage Manufacturer | WCT ENGINEERING (PTY) LTD   |
| Address                  | 27 Silverstone Crescent,<br>Kyalami Business Park,<br>KYLAMI. South Africa. |
| Phone n° + Email         | +27 82 562 5194 achim@thompsonracing.co.za                                  |

The structure shown on this form is manufactured for the following vehicle:

|   |            |       |        |                       |      |
|---|------------|-------|--------|-----------------------|------|
| Make  | Volkswagen | Model | Amarok | Year/Model Identifier | 2017 |
| Vehicle Homologation Number(s)*<br>*if applicable |            |       | N.A.   |                       |      |

**Drawing of front ¾ view of the Complete Structure showing the location of the identification plate**

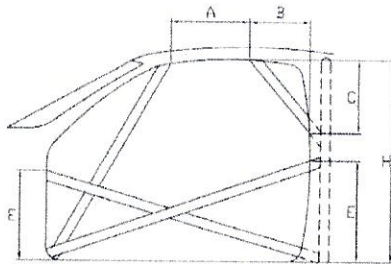


It is accepted by all parties and entities concerned with this document and its content that, in the last resort, the FIA holds full authority to testify to the regulatory validity of this certificate in case of difficulties regarding the application or interpretation of the rules and/or requirements referred to above



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**DETAILS OF STRUCTURE**




A = 561 mm      B = 0 mm  
 C = 0 mm      E = 614 mm  
 H = 1162 mm      (E is highest figure only)

All Dimensions ± 5mm

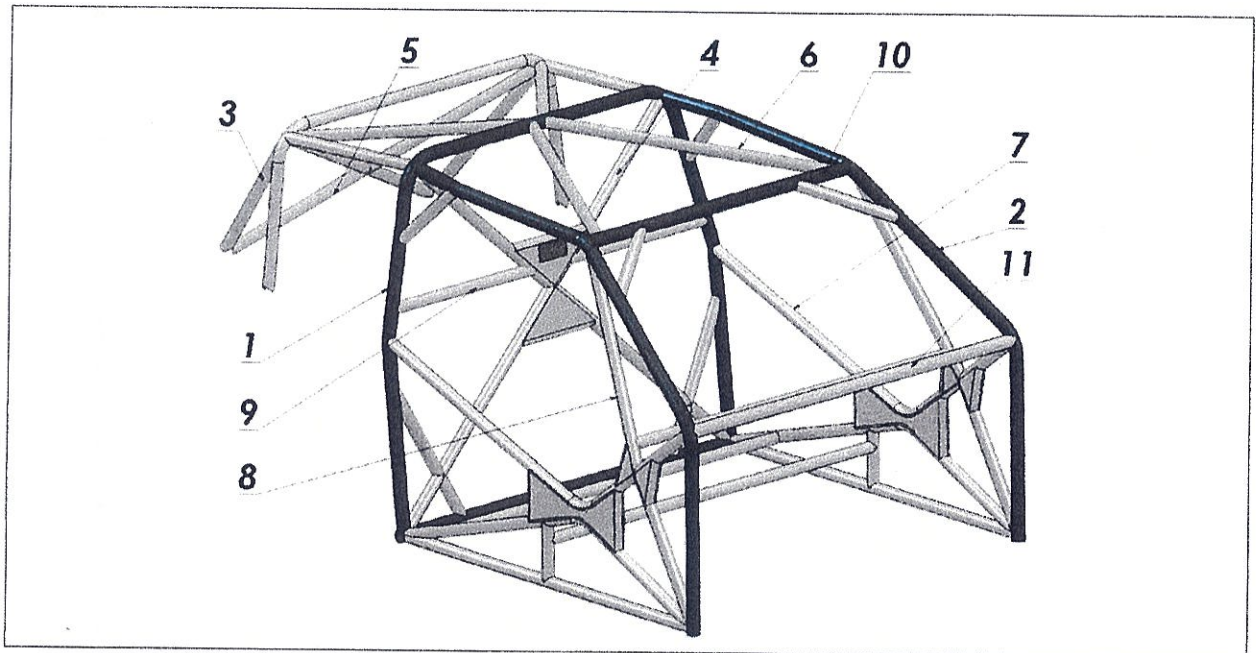
|  |  |
|--|--|
| Method of attachment to Body Shell     | <u>Integrated welded tubular chassis and safety cage</u> |
| Weight of Safety Cage, inc. fastenings | <u>370</u> kg  |

This document is valid only if fully completed and issued as a validated original document by **Motor Sport South Africa** (The issuing ASN).  
 It must be presented, in full, on demand to FIA or ASN delegates or Technical Scrutineers of the Meeting (Competition).  
 The authorisation of this form by the issuing ASN certifies that the structure shown herein complies with the basic strength and configuration requirements of the FIA Homologation Regulations for Safety Cages.  
 It does not certify that the structure complies with the requirements of any particular competition or technical regulations.  
**This certificate becomes invalid if the structure is modified in any way from the design shown herein.**

| FOR THE USE OF THE ISSUING ASN ONLY   |                          |   |
|---|--------------------------|---|
| The issuing ASN, having been satisfied that the Safety Cage design identified in this Certificate has been demonstrated to meet the requirements of the FIA Homologation Regulations for Safety Cages, certifies that the design of the Safety Cage Structure is valid for use, subject to the restrictions listed below, in all events sanctioned by the issuing ASN and International events sanctioned by the FIA. |                          |   |
| Name of Authorising Officer   | W Haddad                 |  |
| Position  | MSA Technical Consultant |   |
| Signed  | <i>W Haddad</i>          |   |
| Date  | 30 . 1 11 2017           |   |
| Remarks/Restrictions (For the use of the issuing ASN only)  |                          |   |
| 1. Mira Safety Cage Certificate 1206376-01<br>2. Welding Certificate<br>3. Material Certificates  |                          |   |



**LABELLED DRAWING OF THE SAFETY CAGE STRUCTURE SHOWING ALL TUBING DIMENSIONS**



| All Dimensions $\pm 0.1\text{mm}$ |           | Show location of each type on drawing |                        |                |                       |                   |
|-----------------------------------|-----------|---------------------------------------|------------------------|----------------|-----------------------|-------------------|
| Tube / Member                     | Label     | Grade of Steel                        | External Diameter (OD) | Wall Thickness | Min. Tensile Strength |                   |
| Main Rollbar                      | <u>1</u>  | <u>25CrMo4</u>                        | 45 mm                  | 2,5 mm         | 816                   | N/mm <sup>2</sup> |
| Lateral Rollbar                   | <u>2</u>  | <u>25CrMo4</u>                        | 45 mm                  | 2,5 mm         | 816                   | N/mm <sup>2</sup> |
| Backstays                         | <u>3</u>  | <u>25CrMo4</u>                        | 40 mm                  | 2,0 mm         | 816                   | N/mm <sup>2</sup> |
| Main rollbar Diagonal members     | <u>4</u>  | <u>25CrMo4</u>                        | 40 mm                  | 2,0 mm         | 816                   | N/mm <sup>2</sup> |
| Backstay Diagonal members         | <u>5</u>  | <u>25CrMo4</u>                        | 40 mm                  | 2,0 mm         | 816                   | N/mm <sup>2</sup> |
| Roof Reinforcements               | <u>6</u>  | <u>25CrMo4</u>                        | 40 mm                  | 2,0 mm         | 816                   | N/mm <sup>2</sup> |
| Doorbars                          | <u>7</u>  | <u>25CrMo4</u>                        | 40 mm                  | 2,0 mm         | 816                   | N/mm <sup>2</sup> |
| Windscreen Pillar Reinforcements  | <u>8</u>  | <u>25CrMo4</u>                        | 40 mm                  | 2,0 mm         | 816                   | N/mm <sup>2</sup> |
| Harness Bar                       | <u>9</u>  | <u>25CrMo4</u>                        | 40 mm                  | 2,0 mm         | 816                   | N/mm <sup>2</sup> |
| Front rb                          | <u>10</u> | <u>25CrMo4</u>                        | 45 mm                  | 2,5 mm         | 816                   | N/mm <sup>2</sup> |
| Front rb, lower                   | <u>11</u> | <u>25CrMo4</u>                        | 40 mm                  | 2,0 mm         | 816                   | N/mm <sup>2</sup> |
|                                   |           |                                       | mm                     | mm             |                       | N/mm <sup>2</sup> |
|                                   |           |                                       | mm                     | mm             |                       | N/mm <sup>2</sup> |
|                                   |           |                                       | mm                     | mm             |                       | N/mm <sup>2</sup> |
|                                   |           |                                       | mm                     | mm             |                       | N/mm <sup>2</sup> |

|                                      |      |                     |
|--------------------------------------|------|---------------------|
| Total length of all tubes < 40 mm OD | 0 mm | <b>15 m maximum</b> |
|--------------------------------------|------|---------------------|



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PHOTO 1  
FRONT ¼ VIEW OF CAGE

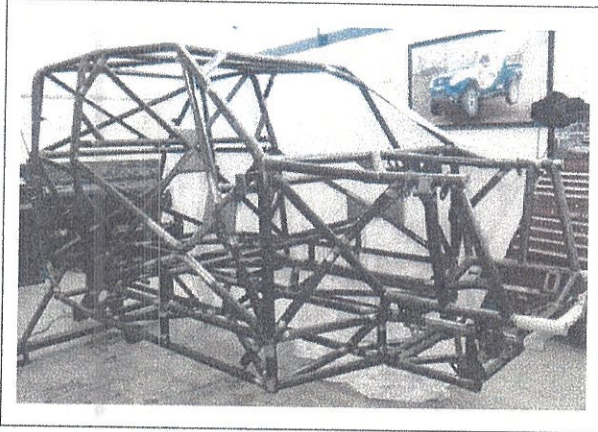


PHOTO 2  
REAR ¼ VIEW OF CAGE



PHOTO 3  
VIEW FROM SIDE OF CAR

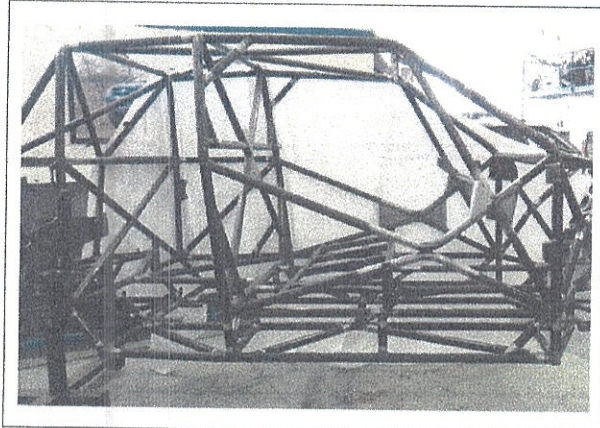


PHOTO 4  
MAIN ROLLBAR TO FLOOR ATTACHMENT



PHOTO 5  
REAR BACKSTAY TO BODYSHELL ATTACHMENT

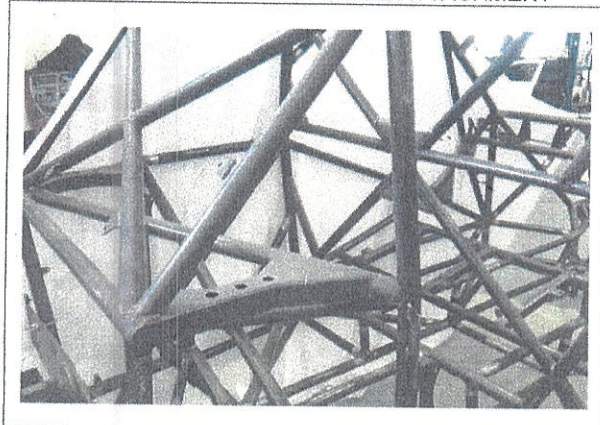
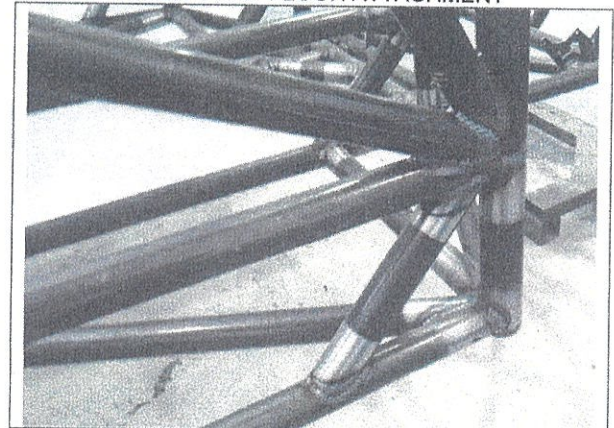


PHOTO 6  
FRONT ROLLBAR TO FLOOR ATTACHMENT

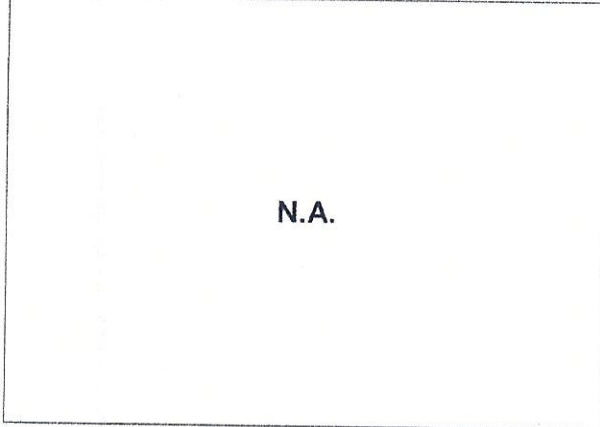




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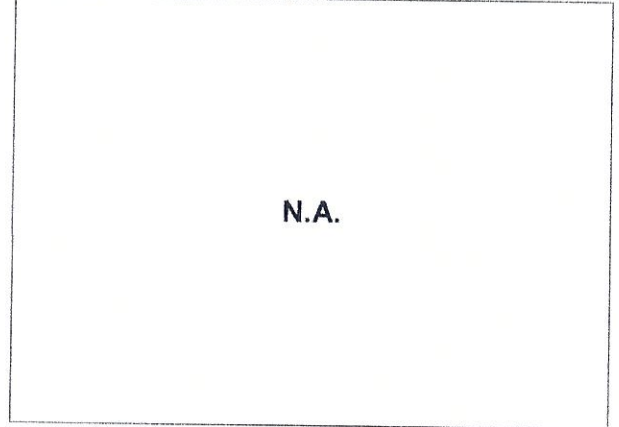
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**PHOTO 7**  
FRONT ROLLBAR TO "A" PILLAR ATTACHMENT



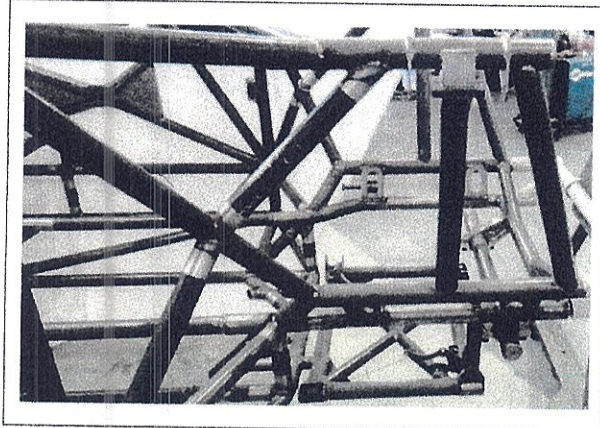
**N.A.**

**PHOTO 8**  
MAIN ROLLBAR TO "B" PILLAR ATTACHMENT

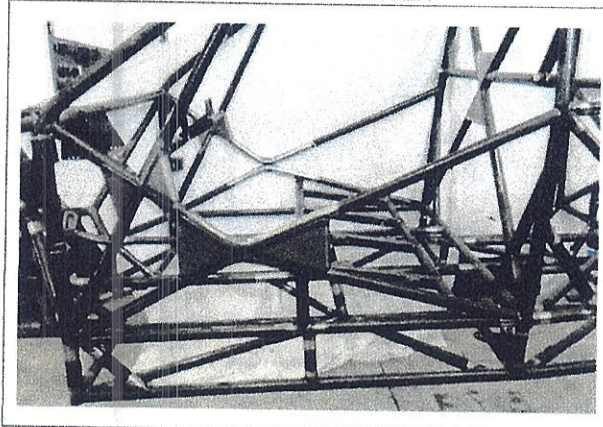


**N.A.**

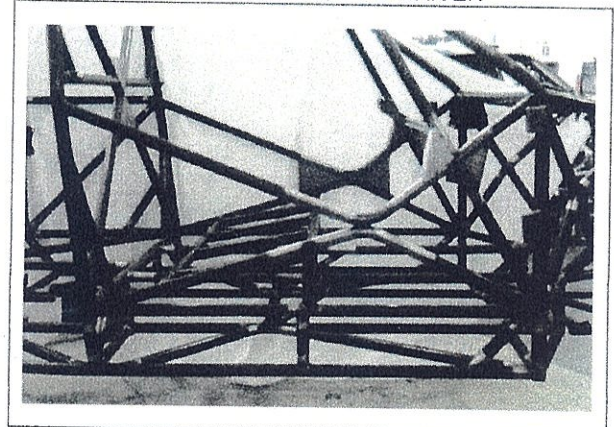
**PHOTO 9**  
ATTACHMENT TO FRONT SUSPENSION



**PHOTO 10**  
ANTI-INTRUSION DOORBAR - DRIVER



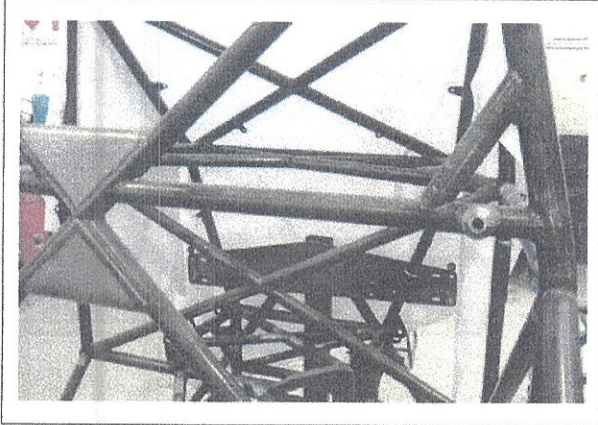
**PHOTO 11**  
ANTI-INTRUSION DOORBAR - CO-DRIVER





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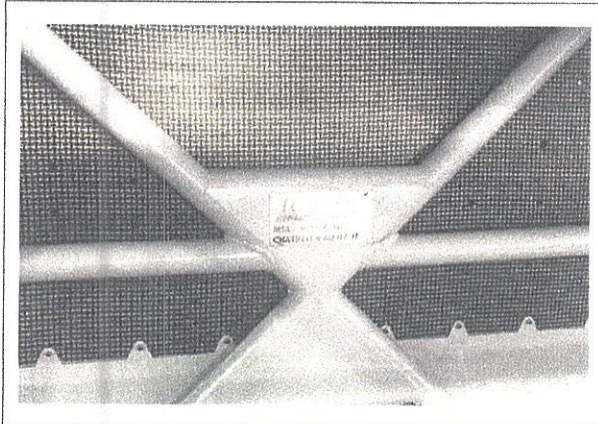
**PHOTO 12**  
SHOULDER HARNESS ATTACHMENT – DRIVER



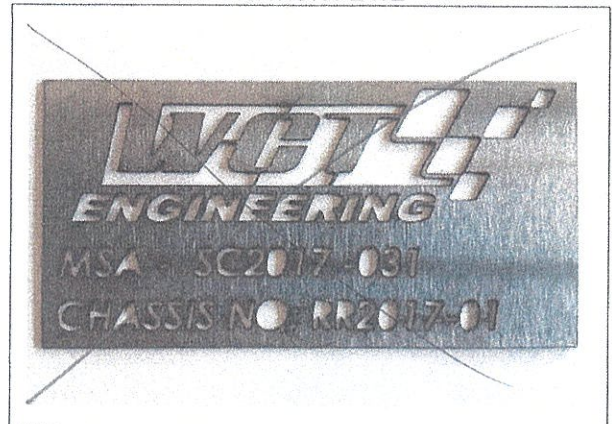
**PHOTO 13**  
SHOULDER HARNESS ATTACHMENT – CO-DRIVER



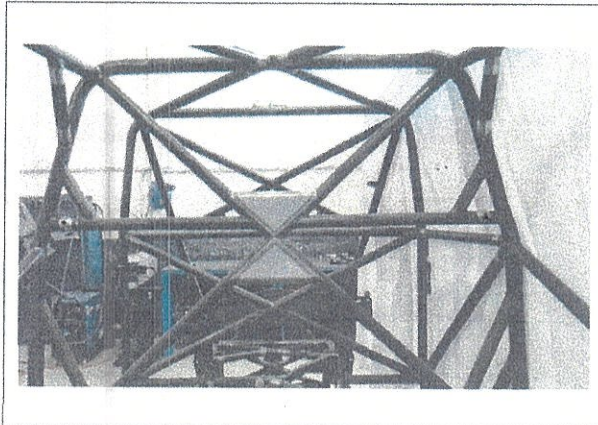
**PHOTO 14**  
LOCATION OF IDENTIFICATION PLATE



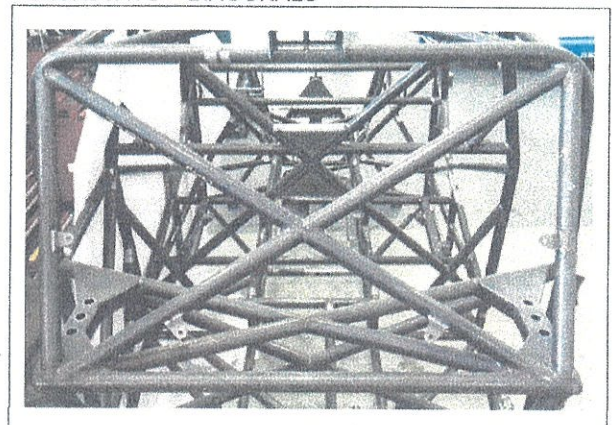
**PHOTO 15**  
DETAIL OF IDENTIFICATION PLATE



**PHOTO 16**  
MAIN ROLLBAR + DIAGONALS + REINFORCEMENT



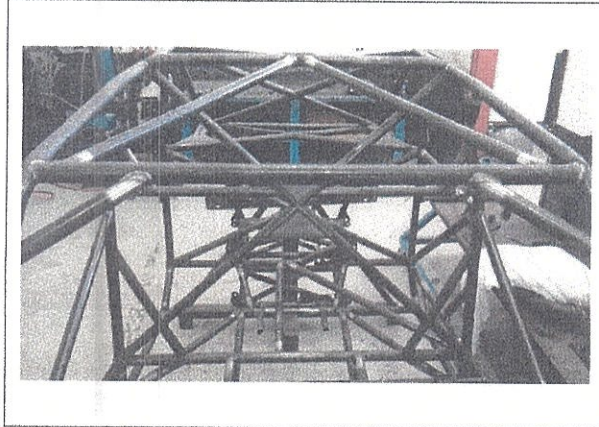
**PHOTO 17**  
BACKSTAYS + DIAGONALS





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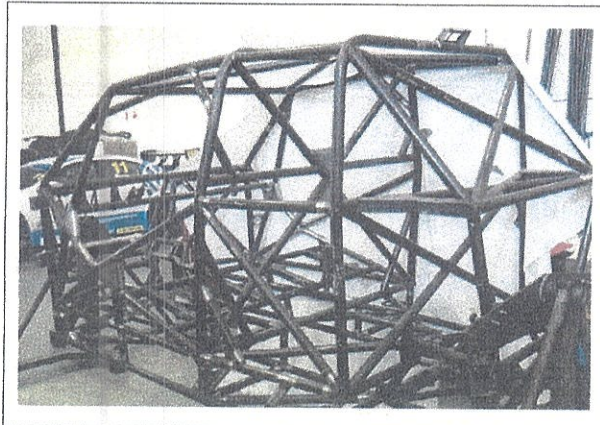
**PHOTO 18**  
FRONT ROLLBAR TRANSVERSE UPPER+ROOF VEE



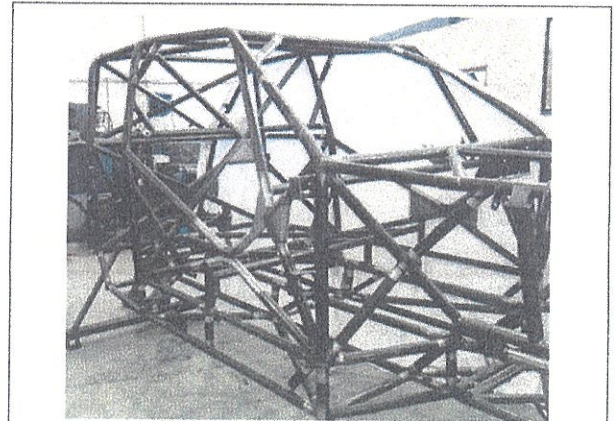
**PHOTO 19**  
FRONT ROLLBAR TRANSVERSE LOWER



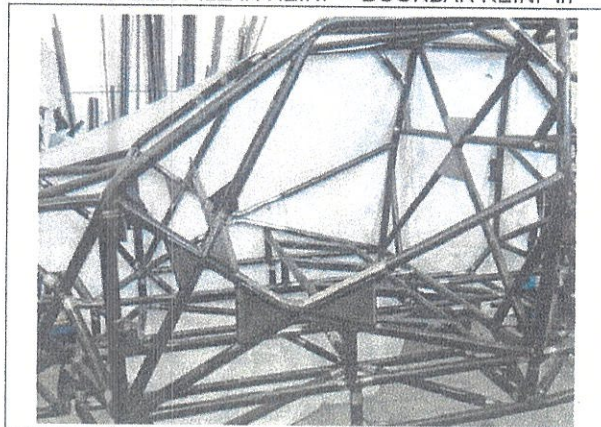
**PHOTO 20**  
LATERAL HALF ROLLBAR lh



**PHOTO 21**  
LATERAL HALF ROLLBAR rh



**PHOTO 22**  
WINDSCREEN PILLAR REINF + DOORBAR REINF lh



**PHOTO 23**  
WINDSCREEN PILLAR REINF + DOORBAR REINF rh





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PHOTO 24  
MAIN ROLLBAR + BACKSTAY ANGLES

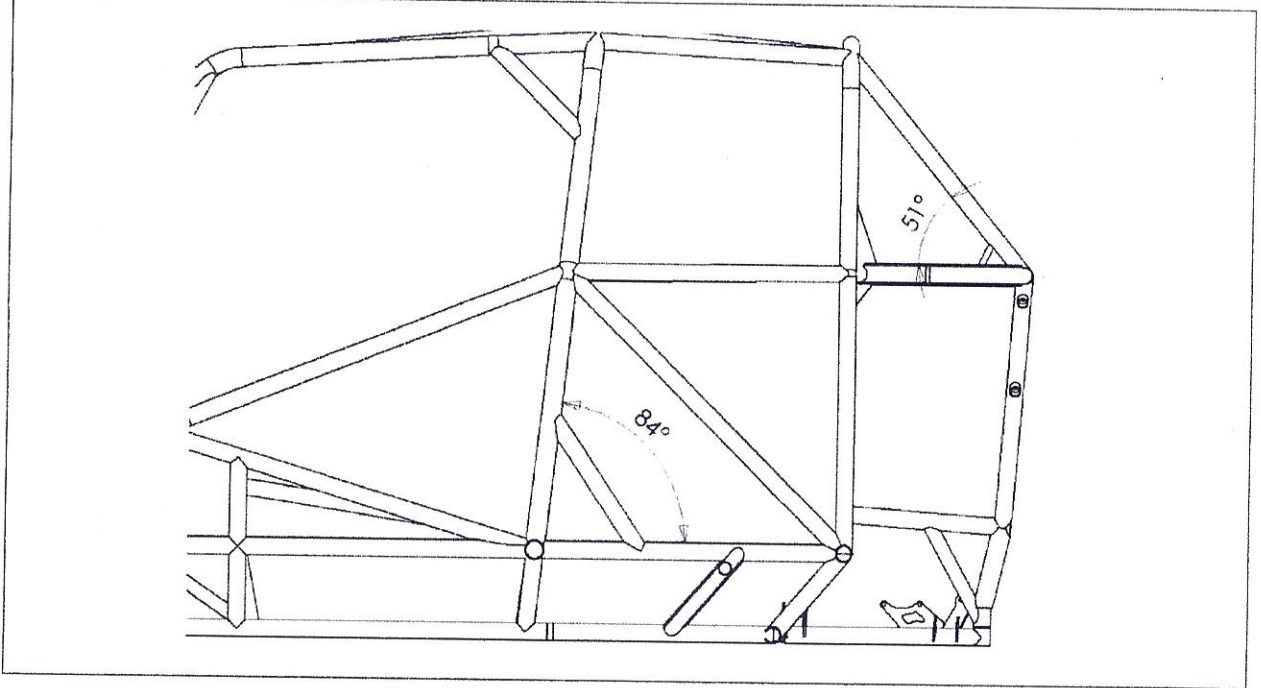
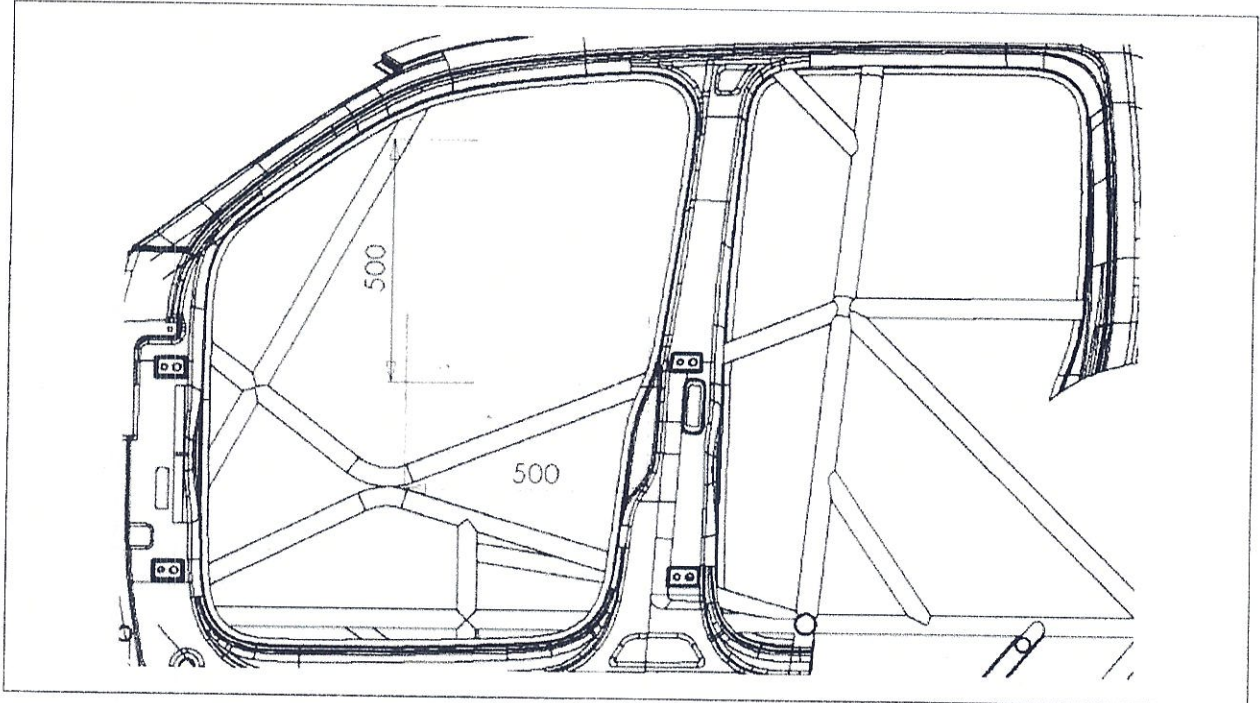


PHOTO 25  
LATERAL EXIT APERTURES





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|   |           |   |
|---|-----------|---|
| V.I.N. or Chassis Identification Number | V         | X |
| Safety cage identification Number       | RR2017-02 |   |

**MANUFACTURER'S DECLARATION AND DETAILS:**

I declare that the Safety Cage Structure described on this form and fitted to the vehicle described above:

- was constructed and installed in accordance with the specifications and design shown herein.
- has been manufactured so that all aspects of the Safety Cage design, including configuration and strength requirements and welded and demountable joints and mountings, will be in conformity with the requirements of the FIA Homologation Regulations for Safety Cages.
- has been identified by an engraved plate bearing the name or logo of the manufacturer, the ASN Certificate number and a unique manufacturer's serial number.

|                     |   |  |
|---------------------|---|--|
| Manufacturer's Name | <u>WCT ENGINEERING (PTY) LTD</u>  | <p><b>WCT Engineering (PTY) LTD</b><br/>         Reg. 2006/023038/07</p> <p>27 Silverstone Crescent<br/>         Kyalami Business Park<br/>         Johannesburg RSA</p> |
| Address             | <u>27 Silverstone Crescent,</u><br><u>Kyalami Business Park,</u><br><u>Kyalami, South Africa.</u> |  |
| Phone n° + Email    | <u>+27 82 562 5149</u>  |  |
| Signature:          |   |  |
| Name of Signatory#: | <u>STUART THOMPSON</u>  |  |

**MANUFACTURER'S AGENT:** (For Safety Cages installed by an Agent)

The following Agent is authorised to act on the manufacturer's behalf to install this Safety Cage design.

|                  |             |
|------------------|-------------|
| Agent's Name     | <u>N.A.</u> |
| Address          |             |
| Phone n° + Email |             |

**Instructions to the installer of the Safety Cage**