



Motor Sports House, Riverside Park, Colnbrook, Slough SL3 0HG

SAFETY ROLL BAR CERTIFICATE

BLOCK CAPITALS

Manufacturer SAFETY DEVICES Roll bar model No/Designation E01X
 Address 30 REGAL DRIVE, SOHAM, CAMBS CB7 5BE

Car/s for which roll bar is designed:

Make/s LOTUS
 Model/s ELAN
 F.I.A. Homologation No/s
 Weight of Car/s lbs. lbs. lbs.
 kgs. kgs. kgs

ROLL BAR SPECIFICATION

Main tube Dia. 1.5 ins. 38 mm. Brace/s Dia. 1.5 ins. 38 mm.
 Thickness .064 ins. 1.6 mm. Thickness .064 ins. 1.6 mm.
 Type of welding MIG Weight of total assembly 38 lbs 17 kgs
 Type of material STEEL Material Specification BS632314 CFS 3BK
 Type of mounting BOLTED INTO VEHICLE

DECLARATION BY DESIGNER for Roll Bars not complying with F.I.A. design details

I declare the the roll bar described has been *

- (a) ~~tested under my personal supervision~~
- (b) ~~shown by my own stress calculations~~
- or (c) ~~shown by stress calculations carried out under my personal supervision~~

to meet the strength requirements specified in current F.I.A. regulations. In addition, I declare that all details of the roll bar design including joints, moutings and attachments are also in conformity with these regulations.

*Delete as appropriate

Date 8.7.93 Signature *[Signature]* Name JOWITT
 Professional Qualifications *Engng CEng FRAE FIEE FIOA MIMechE MSAE*

Acceptable signatories must be a Corporate Member of the Royal Aeronautical Society or the Institution of Civil, Mechanical or Structural Engineers.

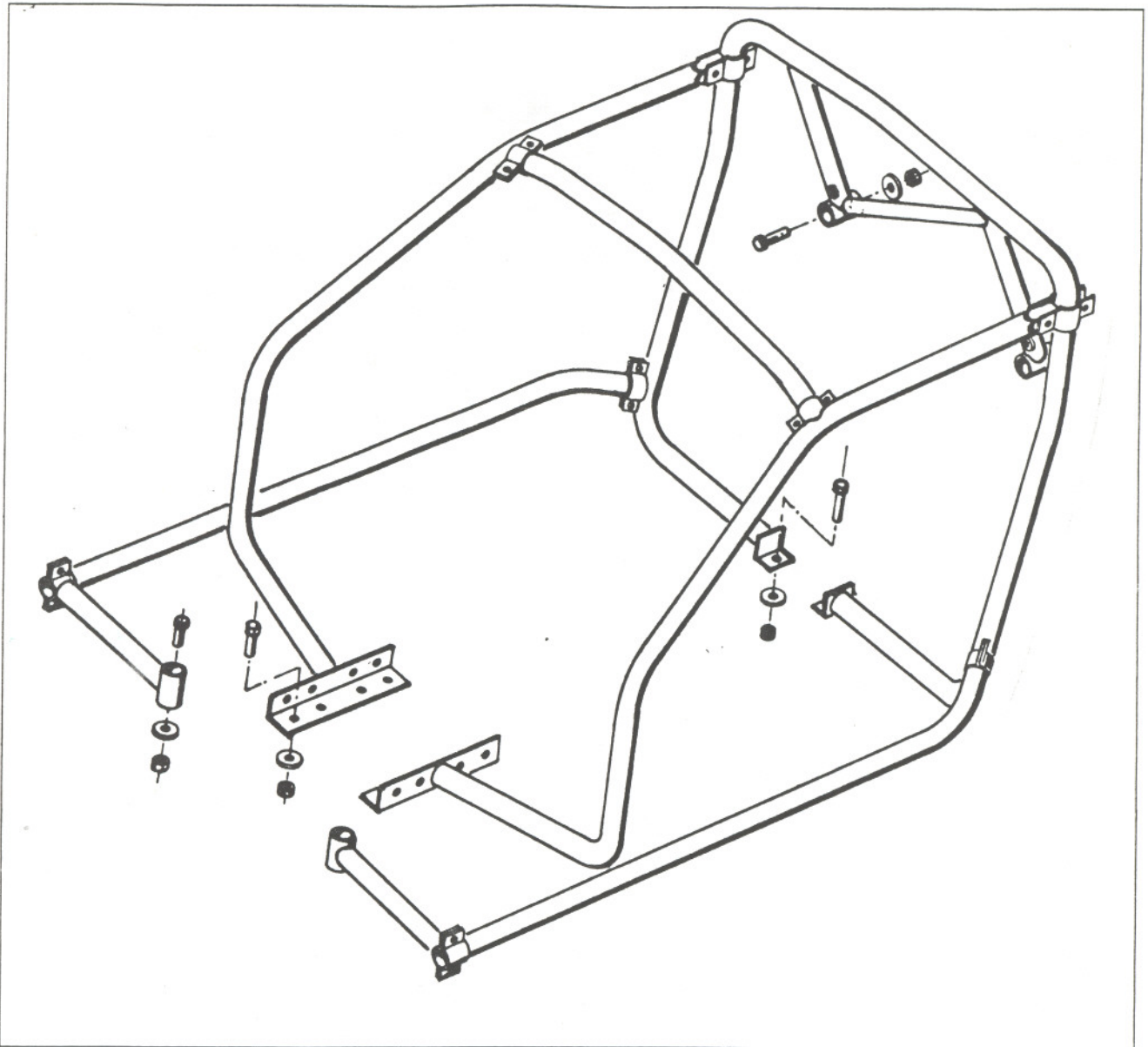
DECLARATION BY MANUFACTURER

I declare that the roll bar described is in conformity with the F.I.A. regulations as to design.

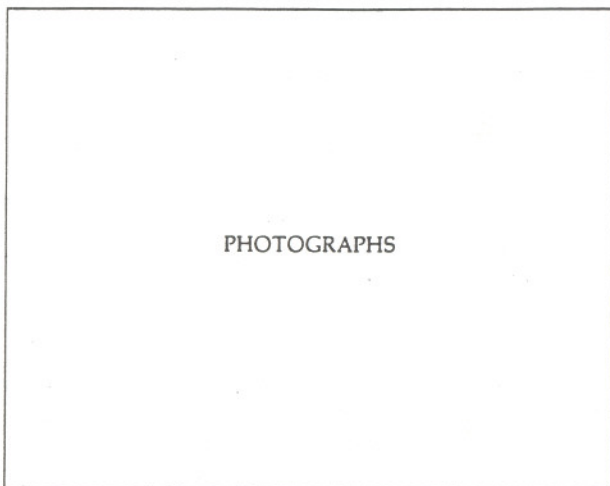
Date 29.6.93 Signature *[Signature]* Name F J YOUNG
 Status PRODUCTION ENGINEER

THIS CERTIFICATE BECOMES INVALID IF THE ROLL BAR STRUCTURE IS MODIFIED IN ANY WAY FROM THE DESIGN OVERLEAF

NOT VALID UNLESS PERFORATED WITH RAC MSA SEAL



Drawing of roll-bar to include detailed drawings of all joints and mountings. Tube dia and wall thickness must be specified.



PHOTOGRAPHS

(Signed)

A handwritten signature in black ink, appearing to be 'R. J. ...', written over a horizontal line.

RAC MSA GROUP 1 SCRUTINEER

(Countersigned)

A handwritten signature in black ink, appearing to be 'R. W. ...', written over a horizontal line.

RAC MSA Ltd

THE RAC MSA ACCEPT THAT THIS DOCUMENT HAS BEEN COMPLETED IN ACCORDANCE WITH THE REGULATIONS.

Amendment No: 1



MSA CERTIFICATE NUMBER :

1114

SAFETY CAGE CERTIFICATE

Certified Amendment

This certificate is extended to cover variants manufactured from the following material:

Grade: **T45** Tensile strength: **700-900 N/mm²**

All other details remain the same.

Name of Authorising Officers	John Ryan	Joe Hickerton	The MSA logo, consisting of the letters 'MSA' in a large, bold, serif font with a stylized arrow pointing upwards and to the right.
Position	Technical Executive	Technical Administrator	
Signed	A black ink signature of John Ryan, consisting of several sweeping, horizontal strokes.	A blue ink signature of Joe Hickerton, consisting of a vertical line followed by a horizontal line.	
Date	<u>17 December 2015</u>	<u>17 December 2015</u>	

SAFETY CAGE CERTIFICATE

Certified Amendment

Drawings illustrated within this document have been created using original historic images, so all optional members should be assumed as close representations only.

Certificate extended to cover the following roll cage model numbers/designations:

E1 - E01 - E001 - E001a

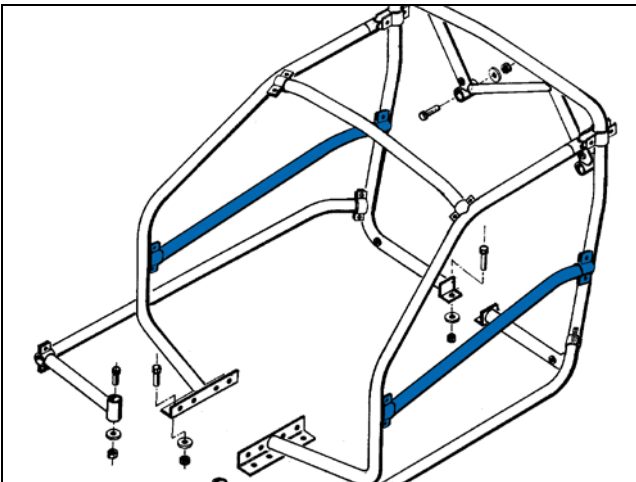
The following alternative options are certified (all models):

Tube dimensions:

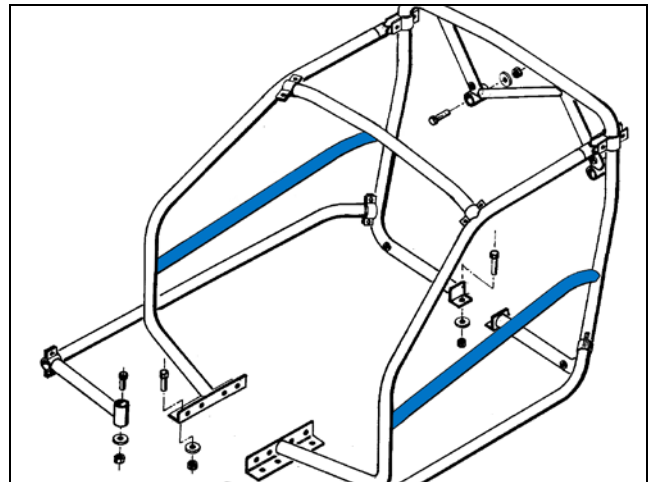
Harness bar: 38.1mm (1½") x 2.64mm (12g)

All other optional members highlighted below: 38.1mm (1½") x 1.63mm (16g)

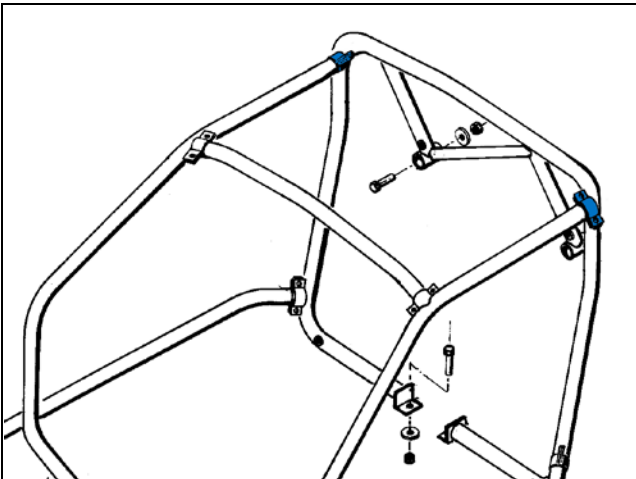
OPTION 1 BOLTED DOORBARS



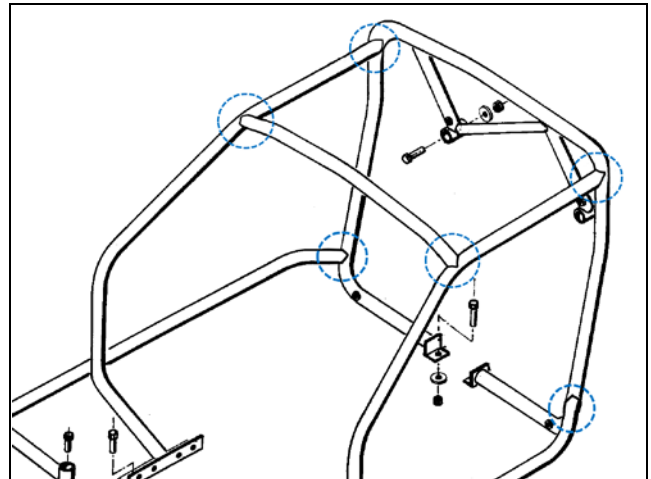
OPTION 2 WELDED DOORBARS



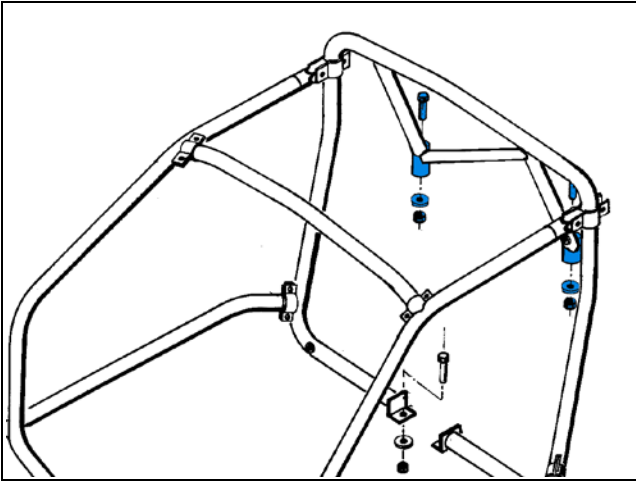
OPTION 3 SADDLE BRACKET FRONT LEG JOINTS



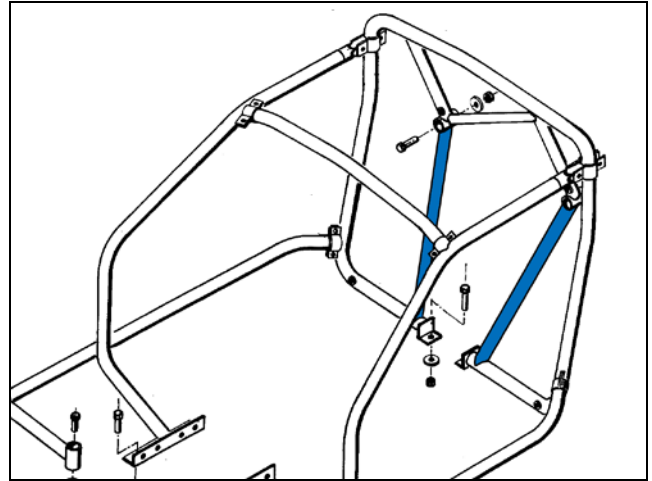
OPTION 4 WELDED CAGE JOINTS



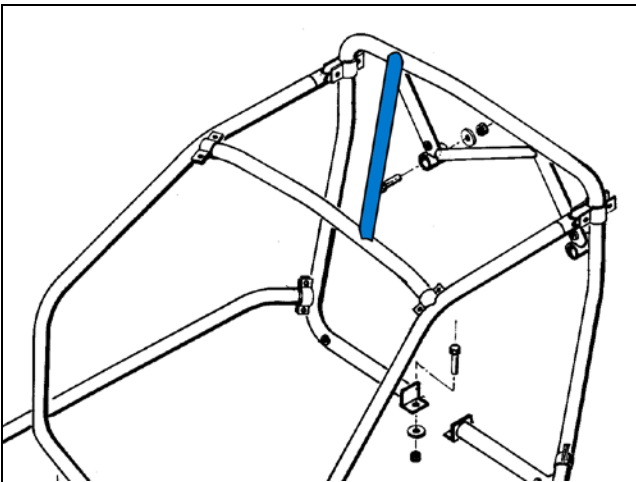
OPTION 5 ALTERNATIVE BACKSTAY MOUNTING



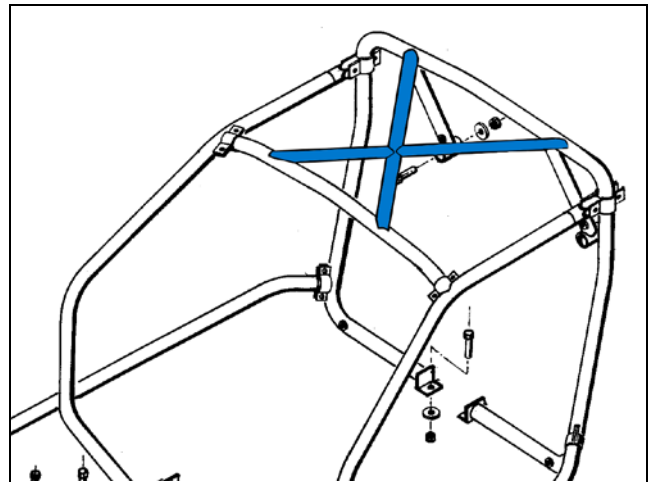
OPTION 6 LOWER BACKSTAYS



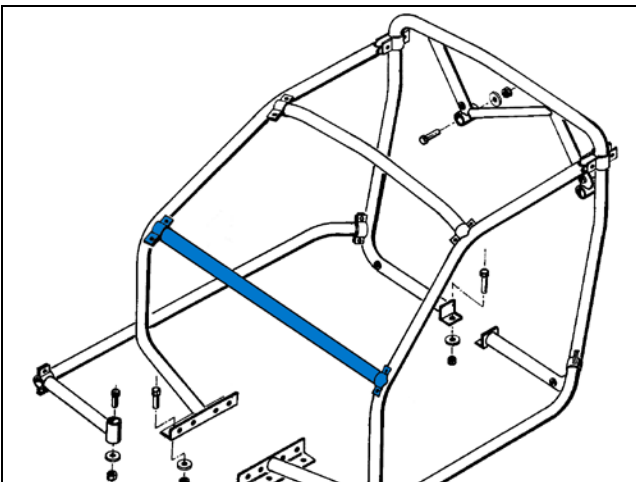
OPTION 7 SINGLE ROOF DIAGONAL



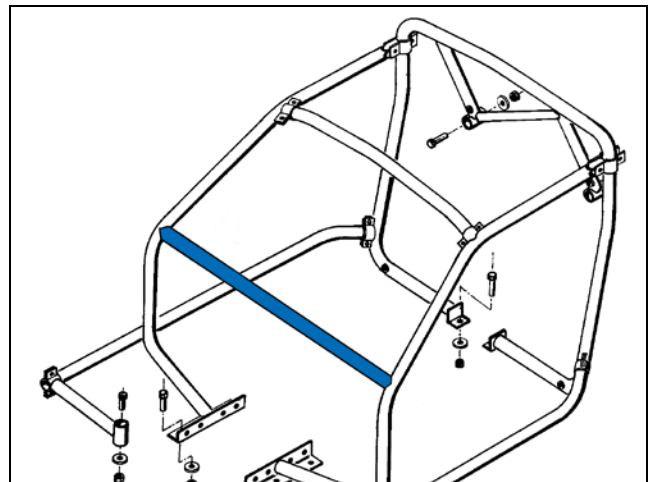
OPTION 8 CROSS ROOF DIAGONALS



OPTION 9 BOLTED DASH BAR

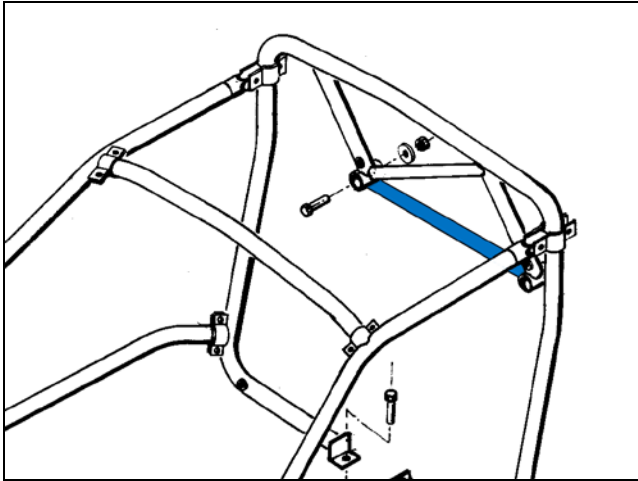


OPTION 10 WELDED DASH BAR

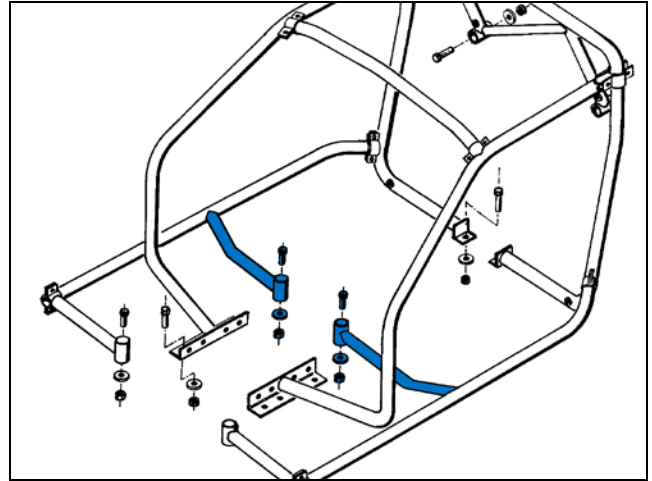


Amendment 2

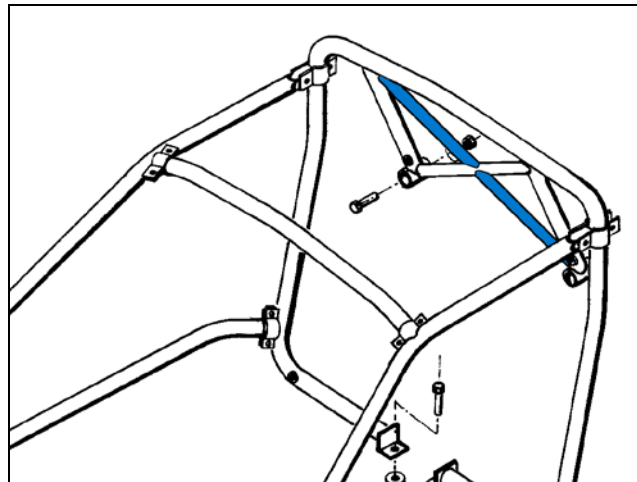
OPTION 11 HARNESS BAR



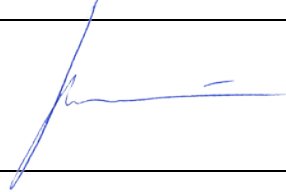


OPTION 12 LOWER BRACING



OPTION 13 BACK STAY CROSS DIAGONAL



Name of Authorising Officers	John Ryan	Joe Hickerton	
Position	Technical Director	Technical Manager	
Signed			
Date	05 July 2018	05 July 2018	

SAFETY CAGE CERTIFICATE

Certified Amendment

Drawings illustrated within this document have been created using original historic images, so all optional members should be assumed as close representations only.

The following alternative options are certified (all models):

Tube dimensions:

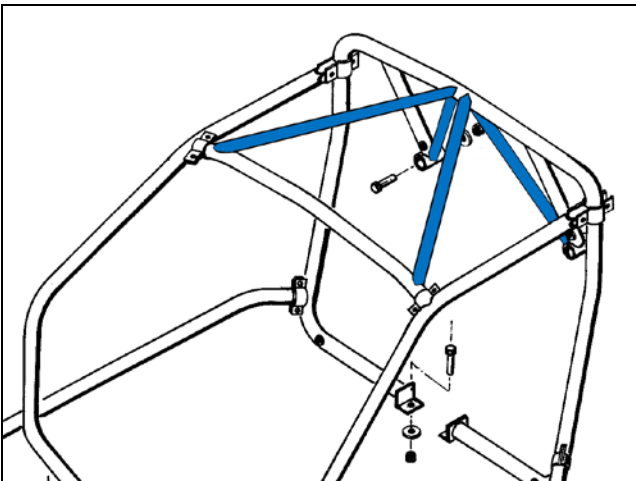
Harness bars 38.1mm (1½") x 2.64mm (12g)

Front triangulation: 31.75mm (1¼") x 1.63mm (16g)

All other optional members highlighted: 38.1mm (1½") x 1.63mm (16g)

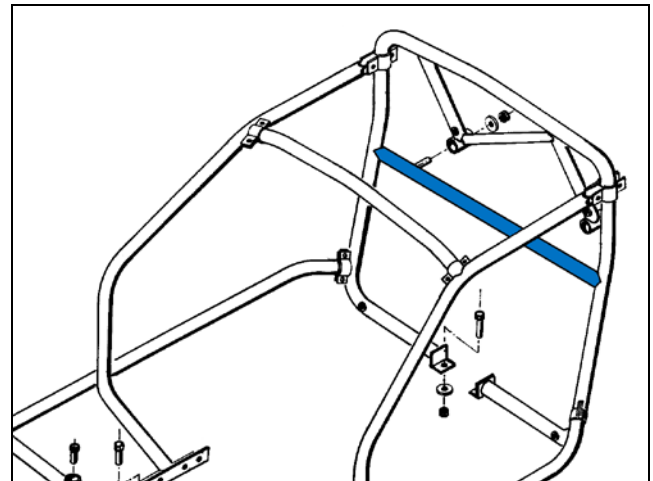
OPTION 14

V BRACING IN ROOF AND BACKSTAYS



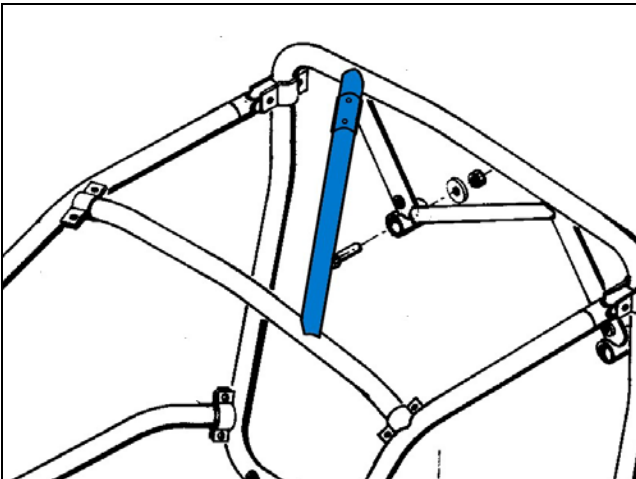
OPTION 15

MAIN HOOP HARNESS BAR



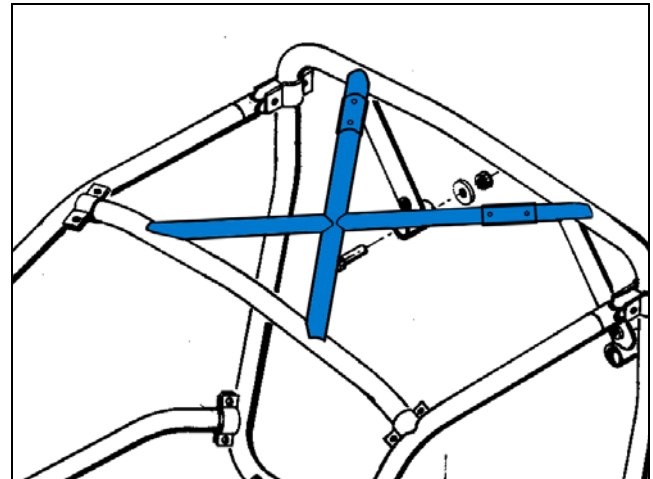
OPTION 16

REMOVABLE SINGLE ROOF DIAGONAL

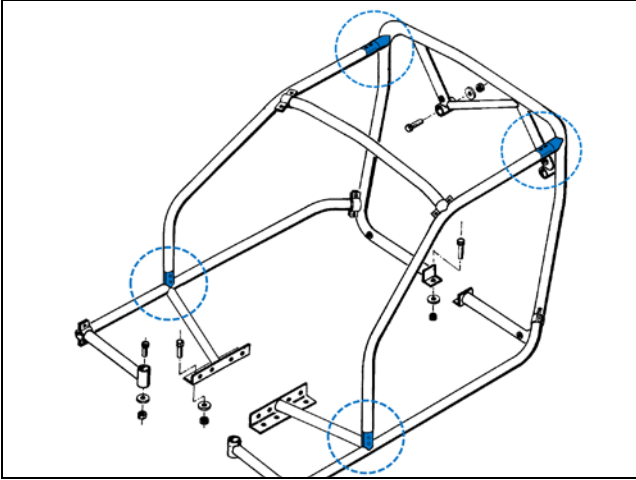


OPTION 17

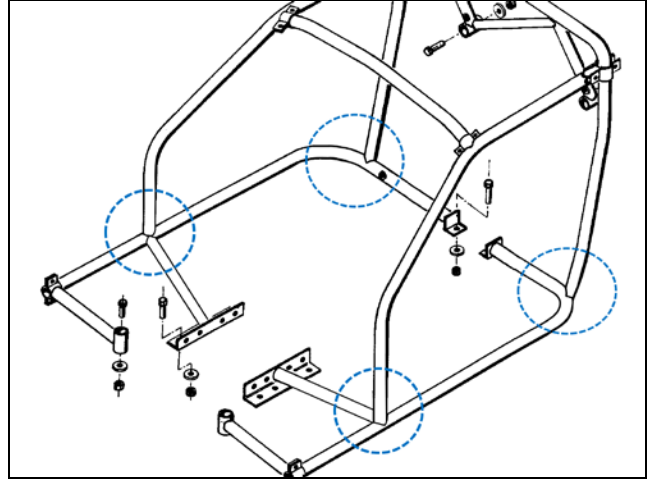
REMOVABLE CROSS ROOF DIAGONALS



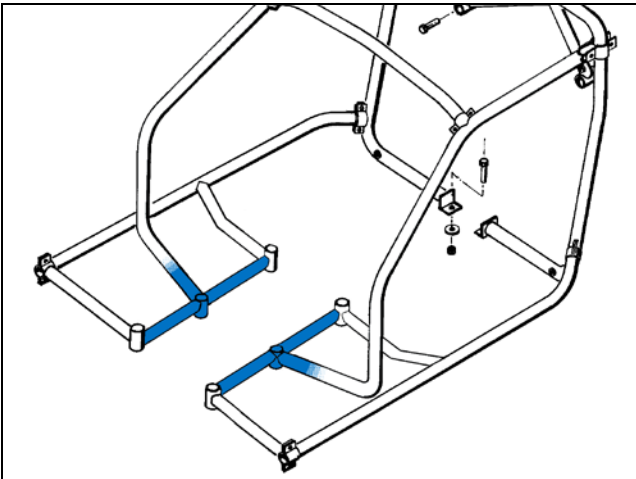
OPTION 18
FRONT LEG REMOVABLE LAP JOINTS



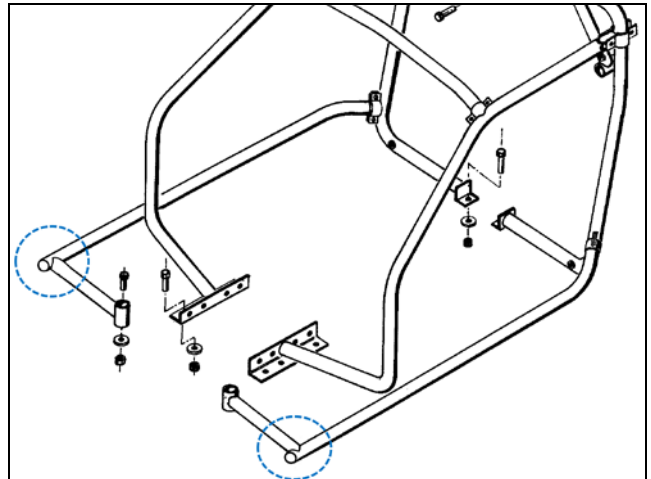
OPTION 19
FRONT LEG AND MAIN HOOP WELDED JOINTS



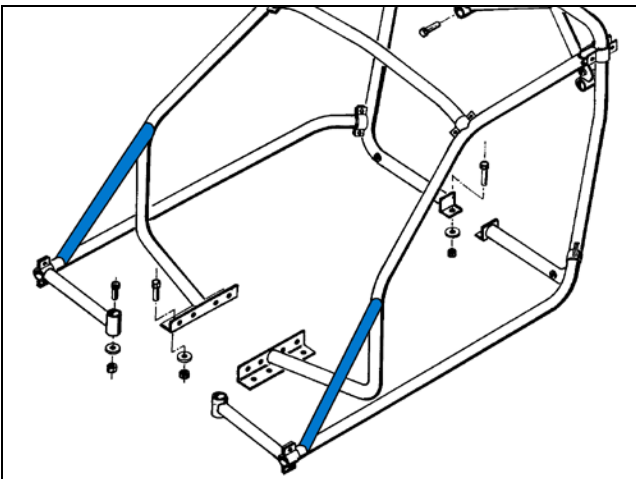
OPTION 20
WELDED LONGITUDINAL TUNNEL BRACE



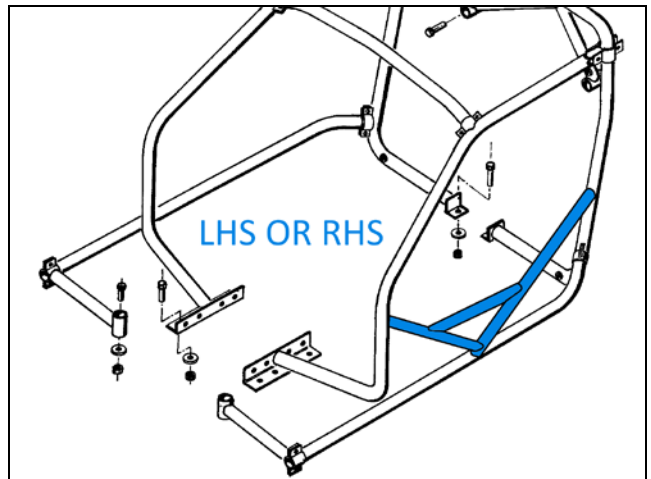
OPTION 21
WELDED FOOT BARS



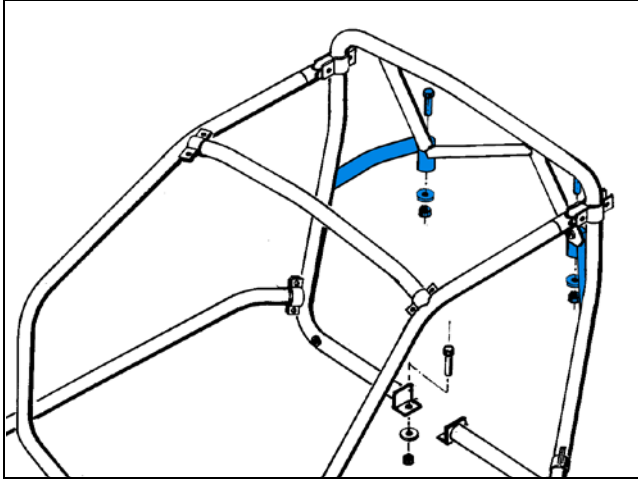
OPTION 22
FRONT TRIANGULATION



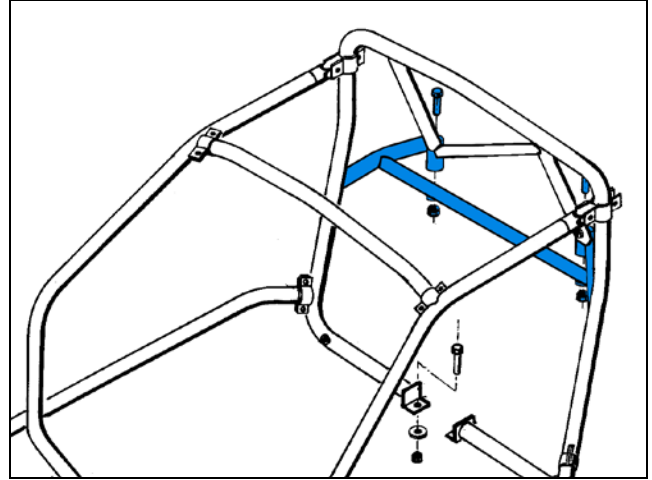
OPTION 23
V DOORBARS



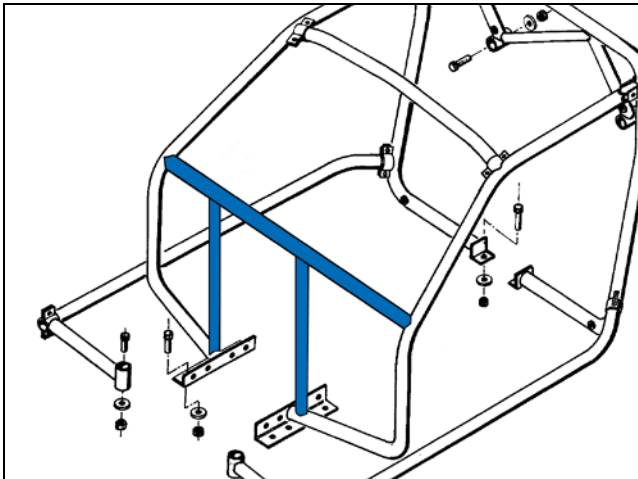
OPTION 24
MID BACKSTAY



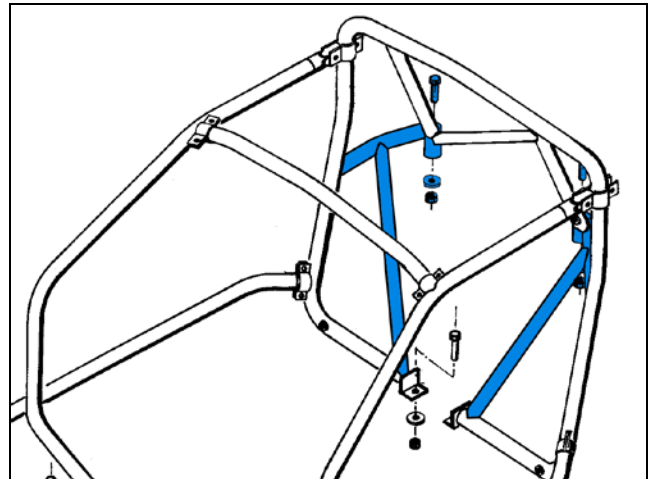
OPTION 25
LOWER BACKSTAY HARNESS BAR



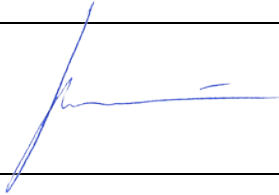


OPTION 26
DASH BAR WITH BRACES



OPTION 27
ALTERNATE LOWER BACKSTAYS



Name of Authorising Officers	John Ryan	Joe Hickerton	
Position	Technical Director	Technical Manager	
Signed			
Date	28 November 2018	28 November 2018	

SAFETY CAGE CERTIFICATE

Certified Amendment



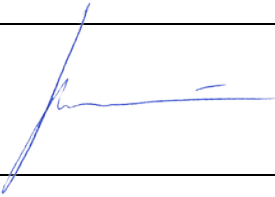
IMPORTANT NOTE:

Options 20, 22 and 26 shown on Amendment 3 are not permitted for FIA Appendix K use.

Roll cages modified for removal of option 22 may feature short 'stubs' as shown below, where the original tube joined the relevant members:

PHOTO 1



Name of Authorising Officers	Ian Smith	Joe Hickerton	
Position	Technical Director	Technical Manager	
Signed			
Date	21 March 2023		

SAFETY CAGE CERTIFICATE

Certified Amendment

This certificate is extended to cover the following roll cage model number/designation:

E001B

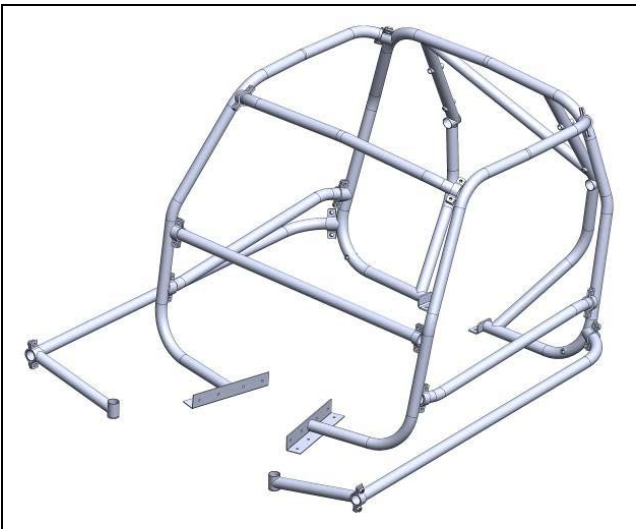
The following options (28 - 36) listed are the only options that may be used under FIA Appendix K regulations.

Tube dimensions:

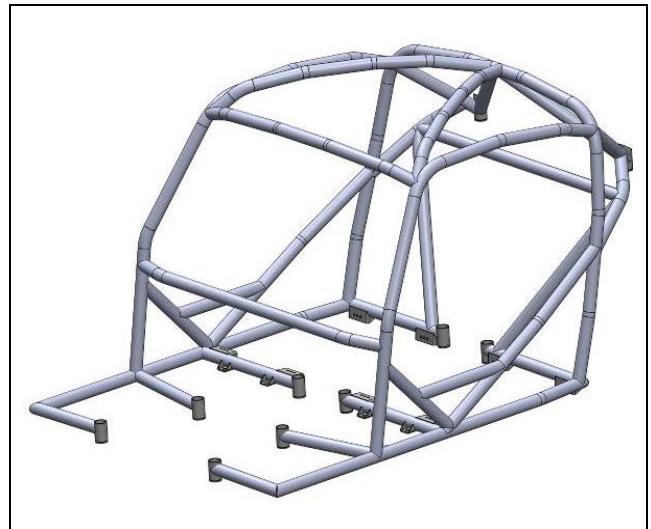
Harness bar: 38.1mm (1½") x 2.64mm (12g)

All other members: 38.1mm (1½") x 1.63mm (16g)

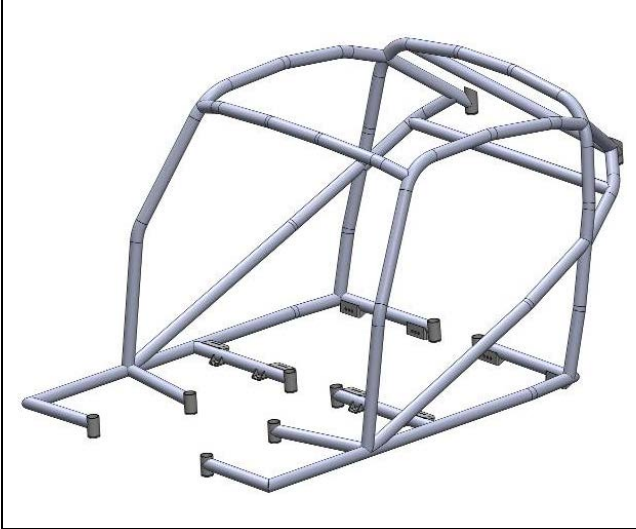
OPTION 28
TYPE 2



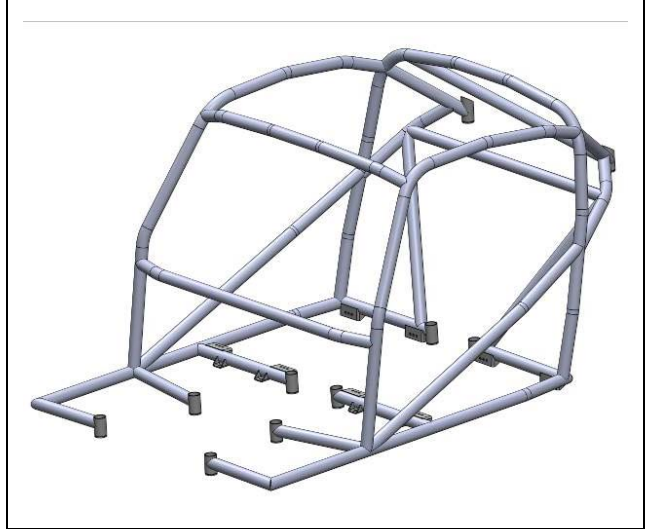
OPTION 29
TYPE 3A



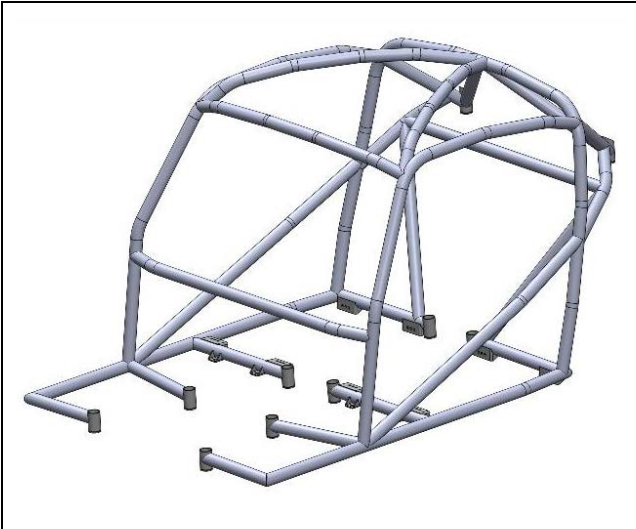
OPTION 30
TYPE 4A



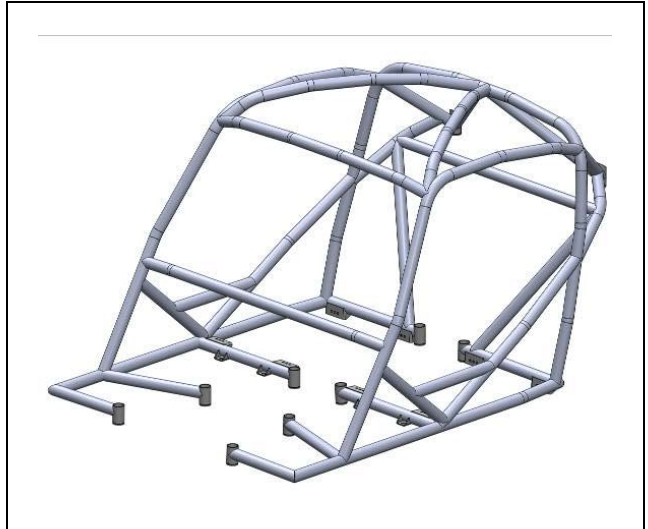
OPTION 31
TYPE 5A



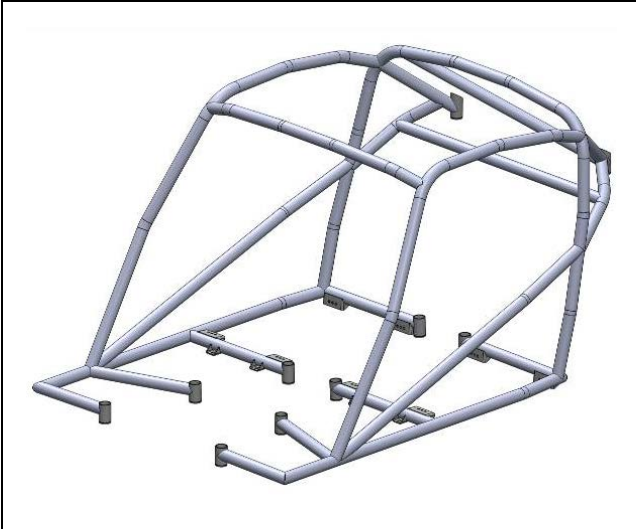
OPTION 32
TYPE 6A



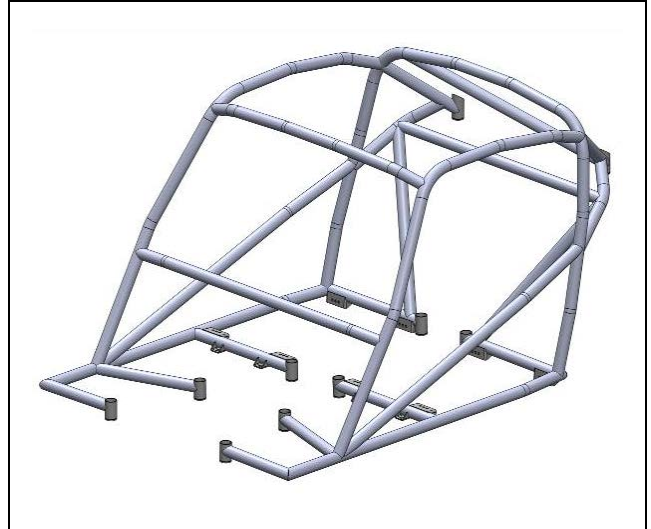
OPTION 33
TYPE 3B



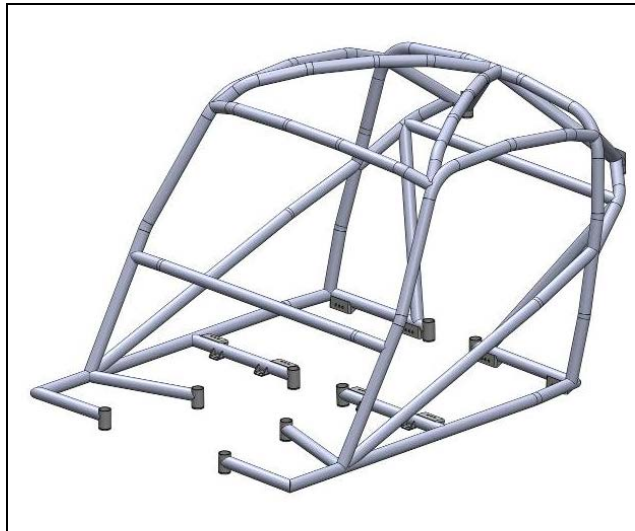
OPTION 34
TYPE 4B



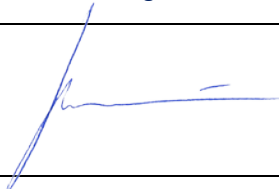


OPTION 35
TYPE 5B



OPTION 36
TYPE 6B



Name of Authorising Officers	Ian Smith	Joe Hickerton	
Position	Technical Director	Technical Manager	
Signed			
Date	21 March 2023		