



FEDERATION INTERNATIONALE DE L'AUTOMOBILE

XCL1 Main Document

L1-MAIN-AA



Document Information:		Name	Date
Document Title		L1-MAIN-AA	
Written by		Pol Pujol Varela	10/11/2024
Checked by		Pol Pujol Varela	15/08/2024
Approved by		Pol Pujol Varela	27/08/2024
Revision Box:			
Revision	By	Modifications	Date



INDEX

INTRODUCTION	6
Objective	6
Engine Recommendations	6
XCL1 – XCL2 Related Documentation	6
PRELIMINARY NOTICES AND TERMS	7
Documents structure	10
Introduction	10
Main Document	10
Purchase Document	10
Manufacturing Documents	10
Assembly Documents	10
Consulting Documents	10
Setup Document	10
Manufacturing Relevant Comments	11
Laser Cut Manufacutring Process	11
Tube Bending Manufacturing Process	12
Design Program Interface	13
Manufacturing Documents	14
Manufacturing requirements	14
Laser Cutting Manufacturing	14
Export Format	14
CNC Turning Manufacturing	14
Export Format	14
Welding Manufacturing	14
Export Format	14
Tube Bending Manufacturing	15
Export Format	15
Sheet Metal Bending Manufacturing	15
Export Format	15
JIG's Manufacturing	15
Export Format	15
Parts Nomenclature	16
Nomenclature Example	16
References Types:	16
XCL1 Assemblies	17
Subassemblies References Prefix	17
Nomenclature System Explained	18
Part Number Definition	18
Left / Right Definition	18
Welding Drawing Number	18





Tooling Reference	19
Revision System Explained.....	19
Small Modification.....	19
Major Modification.....	19
Manufacturing References	19
Document Title Organization	20
Main Documents Organization.....	20
Document title Organization System.....	20
Purchase Documents Title Organization.....	21
Welding Documents Title Organization.....	21
Assembly Documents Title Organization.....	22
Consulting Documents	22
Setup Documents.....	22
How to Read Purchase Document	23
Document Information:	23
How to read the document	23
How to Read Laser Parts Manufacturing Documents	24
Document Information:	24
How to Read Laser Parts Manufacturing Documents	25
How to Read CNC Manufacturing Documents.....	26
Document Information:	27
How to Read CNC Manufacturing Documents.....	27
How to Read Metal Tube Bending	28
Metal Tube Bending General view.....	28
Document Information:	29
How to read the document	29
How to Read Welding Documents.....	30
Welding Documents Standard Version.....	31
Document Information:	31
How to read the document	32
Welding Document Advance Version	33
JIGS Preparation.....	33
Welding Parts Specification	34
Welding Procedure	34
How to Read Assembly Documents.....	35
Document Information:	36
How to read the document	37
How to Read Laser Parts Consult Documents.....	38
How to Rear CNC Consulting Documents.....	40
How to Read Setup Baseline Document	42
How to Read Seat Position Documents	43
Issues Reporting Form.....	44





INTRODUCTION

Objective

The purpose of this document is to introduce and provide an overview of the XCL1 Manufacturing Documents.

This orientation summary is designed to offer clear and concise explanations on how to locate and understand the various folders within the XCL1 document repository.

Please note, this document is not intended to serve as a comprehensive guideline but rather as a quick reference to essential information, facilitating a smoother navigation and comprehension of the materials provided.

Engine Recommendations

To ensure the long-term viability of the category at an international level and to guarantee consistent vehicle performance across all countries, the following power ranges are recommended for XCL1 vehicles:

FIA Category:

XCL1

Engine Power:

5,5 hp 4,1 kW

Engine Example:

Honda GX200	5,5 hp	4,1 kW
Locin G200F	5,5 hp	4,1 kW
D&M 200-3	6,5 hp	4,8 kW
D&M 270-3	9,0 hp	6,6 kW

In accordance with the established FIA safety regulations, it is mandated that no engine with a power output exceeding 11 kW (kilowatts) should be installed. This directive aims to ensure the integrity, reliability, and performance of all vehicles and equipment.

XCL1 – XCL2 Related Documentation

The XCL1 project, an affordable mini crosscar, has been developed alongside the XCL2 project, with both vehicles sharing a common design philosophy and numerous components. To optimize efficiency and reduce costs, the XCL1 project will utilize some technical documentation from the published XCL2 project.

This collaborative approach enables cost-effective development, streamlines manufacturing processes, and ensures consistency across both vehicles. Sharing components and documentation aligns with our commitment to delivering high-quality, affordable crosscars while maintaining operational efficiency.

Where applicable, the XCL1 documentation will reference existing XCL2 materials to eliminate redundancy while providing stakeholders with precise and accessible information.



PRELIMINARY NOTICES AND TERMS

The publication, reproduction or distribution of this document and associated files within the XCL1 document repository (together the "**Guidelines**"), in whole or in part, without the written permission of the FIA, is prohibited.

Introduction

1. The **Guidelines** set out general informational guidance and illustrative graphics regarding the manufacturing process of affordable Mini Cross Car type vehicles to be used in motor sport competitions around the world. This document has no binding regulatory effect and is provided, at the FIA's discretion, to assist National Sporting Authorities ("**ASN(s)**") and other organisations (the ASNs and other organisations together the "**Third Party(ies)**") involved in organising, promoting, staging or regulating regional and/or national motor sport events ("**Motor Sport Event(s)**").
2. Use of the Guidelines by any Third Party is strictly subject to the Third Party's acceptance of and agreement to comply with these Preliminary Notices and Terms.

Disclaimer

3. The contents of the Guidelines (including general informational guidance in relation to health and safety, sporting or technical matters) taken in isolation may not be suitable or appropriate for each and every Motor Sport Event (which incorporates all of the following activities i) motor sports competitions, practices, tests, reconnaissance's / "recce's" and demonstrations, ii) any associated entertainment, marketing or commercial activities and iii) any engineering, scrutineering, maintenance or other technical activities, and begins from the time the relevant locations where these activities are taking place are made accessible to any persons, and ends when the relevant locations are closed to access or the activities end, whichever occurs later). This is because the Guidelines are derived from good practice in competitions appearing on the FIA International Sporting Calendar which operate within a regulatory and safety environment that does not apply to Motor Sport Events that do not appear on the FIA International Sporting Calendar.
4. It is the full responsibility of Third Parties to ensure that they understand and comply with any relevant obligations or duties relating to health and safety, product design, construction/manufacturing or consumer law which are placed on them under i) any applicable National Sporting Authority requirements, regulations and safety standards ("**ASN Regulations**"), ii) FIA requirements, regulations and safety standards ("**FIA Regulations**") and/or iii) any relevant transnational, national and/or local laws, regulations, directives and decrees passed by the government, a quasi-governmental entity or by any entity which has the same authority as the government in any applicable country or other territory, including all applicable local, state and federal laws, and any industry practices, codes of practice and/or codes of conduct incorporated into any of the foregoing, and all binding court orders, decrees, and any decisions and/or rulings of any competent authority that are relevant ("**Applicable Laws**"). The FIA assumes no responsibility in relation to such understanding or compliance.
5. The Guidelines do not contain any advice or guidance in relation to Applicable Laws, and the FIA makes no representation or warranty that the general informational guidance

within the Guidelines complies with the Applicable Laws applying to a particular Motor Sport Event. Accordingly, it is the full responsibility of Third Parties to i) take appropriate advice and make their own enquiries as to Applicable Laws and any particular local safety requirements or other relevant considerations applying to a Motor Sport Event and ii) to adapt and implement the Guidelines in a suitable and safe manner depending on the circumstances of the particular Motor Sport Event. The FIA assumes no responsibility in this regard.

6. For the avoidance of any doubt, compliance with the Guidelines in isolation does not guarantee the safety of a particular Motor Sport Event or of the participants to a particular Motor Sport Event.
7. If there is any conflict, or any doubt as to a conflict, between the contents of the Guidelines and Applicable Laws, Applicable Laws always take precedence. If it is possible to comply both with Applicable Laws and the Guidelines (subject to all appropriate adaptations as per paragraph 5), Third Parties should endeavor to do so.
8. The FIA does not make any representation or warranty, express or implied, and does not assume any responsibility as to the quality, suitability or fitness for purpose:
 - a. of any equipment, structures, installations, products or facilities that may be referred to within the Guidelines; nor
 - b. as to the applicability or suitability of the Guidelines in relation to a particular Motor Sport Event.
9. All Third Parties are made aware that technology utilised in motor sport vehicles, equipment, structures, installations and products is subject to ongoing change and development, as well as good and best practice evolving over time. As a result, the Guidelines are subject to ongoing review and amendment over time.
10. All Third Parties are made aware of the risks that are inherent in the attendance of any person at or within the vicinity of a Motor Sport Event. Depending on the circumstances of the Motor Sport Event, these risks may include (non-exhaustive): the possibility of incidents (resulting from motor sports or otherwise) resulting in physical and/or mental injury or death; exposure to noise; exposure to / interaction with high voltage or other technical / mechanical equipment; or contracting/spreading communicable diseases.

Limitation & indemnity

11. The FIA disclaims, excludes and limits (to the fullest extent permitted under Applicable Laws) any and all claims, liability, costs, expenses, damages, losses (including but not limited to any direct, indirect, incidental, special, consequential or exemplary damages or losses, property damage, breach of intellectual property rights, breach of contract, loss of profit, loss of reputation or goodwill, use, data or other intangible loss, loss of agreements or contracts, loss of sales of business and all interest, penalties and legal costs) and any personal or mental injury (including nervous shock, disease, disablement and death and any financial losses resulting), sustained by any organisation or person (including Third Parties and their subsidiaries, affiliates, licensors, licensees, agents, co-branders, partners, employees, directors, members, officers, advisors, consultants, representatives, successors and assigns (collectively the "**Representatives**")), howsoever arising from any use or implementation of, or reliance placed on the contents of, the Guidelines by Third Parties or their Representatives, including in relation to:
 - a. statements (including false statements), acts or omissions by the FIA or its Representatives or Third Parties and their Representatives; or



- b. any other negligence, lack of reasonable care, breach of any statutory or other duty or Applicable Laws, careless or wrongful act or wilful default by the FIA or its Representatives or Third Parties and their Representatives.
- 12. Any use or implementation of, or reliance placed on the contents of, the Guidelines by any Third Party or its Representatives is (to the fullest extent permitted under Applicable Laws) strictly subject to acceptance by the Third Party and its Representatives of the following:
 - a. the Third Party and its Representatives agree to waive any rights and/or claims, agree to release, hold harmless and not to sue the FIA or its Representatives in relation to any claims, liabilities, costs, expenses, damages and losses (including those referred to in paragraph 11); and
 - b. the Third Party and its Representatives agree to indemnify the FIA and its Representatives in relation to any and all claims, liabilities, costs, expenses, damages and losses (including those referred to in paragraph 11), and this indemnity shall apply whether or not the FIA has been negligent or is at fault;

in each case arising from the use or implementation of, or reliance placed on the contents of, the Guidelines.

Governing law & jurisdiction

- 13. The Guidelines and any dispute or claim (including non-contractual disputes or claims) arising out of or in connection with the Guidelines or their subject matter or formation, shall be governed by and construed in accordance with the laws of France.
- 14. The courts of France shall have exclusive jurisdiction to settle any dispute or claim (including non-contractual disputes or claims) arising out of or in connection with the Guidelines or their subject matter or formation.
- 15. Any matters relating to investigation and enforcement of FIA Regulations are subject to the jurisdiction of the internal judicial and disciplinary bodies of the FIA.

Documents structure

Introduction

To fulfil this project, we split the document into the different phases of the manufacturing process. These types are:

- Main Document
- Purchase Document
- Manufacturing Document
- Assembly Document
- Consulting Document
- Setup Document

Main Document

The aim of this document is to guide and recap all the necessary information to connect the rest of documents in one. It contains extra valuable information and comments about the manufacturing and assembly process of the XCL1.

Purchase Document

This document focuses on consolidating all essential components into a single, comprehensive piece of writing. It is designed to assist the ASN by providing examples of suppliers and offering a preliminary solution tailored to their needs. This document serves as a recommendation and a helpful guide to make informed purchasing decisions.

Manufacturing Documents

This part of the project is designed to provide a complete set of manufacturing folders, organized by specific techniques and ready for immediate submission to the production team. It also includes detailed welding instructions to ensure manufacturers fully understand the requirements and specifications of the components, facilitating a smoother production process and enhancing the overall quality of the final product.

Assembly Documents

The document aims to provide the ASN Manufacturer a guideline on how to assemble the basics car's components.

Consulting Documents

The aim of this document is to provide a quick overview and a guide with each piece reference for the manufacturing phase. This document is recap of all the manufacturing references in a visible format for a quick overview.

Setup Document

Here, we provide a clear documentation to start working on developing the car.

Manufacturing Relevant Comments

Laser Cut Manufacturing Process

It is crucial, for a correct assembly process, to ensure that the reference numbers on the laser-cut parts are clearly visible and correctly marked. Each part must be easily identifiable to prevent errors during the process and streamline the workflow.

Part Identification:

Verify that all laser-cut parts have their reference numbers clearly marked. These references are essential for matching each part to its corresponding position in the assembly.

Marking and Verification:

If any of the parts is missing a reference number, mark them accurately based on the technical drawings before starting the assembly. Use permanent, legible markers or labels that can withstand handling during the construction process.

Avoiding Delays:

Ensuring proper part identification helps avoiding delays in the assembly process. Missing or unclear reference numbers can lead to confusion, misplacement of parts, and a slowdown in the manufacturing timeline, ultimately causing delays in the overall assembly of the jigs.

By maintaining clear and accurate reference numbers on all parts, you can ensure a smooth and efficient assembly process, minimizing the risk of errors and delays.



Tube Bending Manufacturing Process

Using the proper bending radius is crucial for the correct manufacturing phase. Any issue with the bending radius can cause significant problems in the jig assembly, potentially rendering all the tubes unusable and causing delays in the manufacturing process.

Correct Bending Radius:

Ensure that the bending radius specified in the technical drawings is strictly adhered during the manufacturing process.

Use appropriate tools and techniques to achieve the required and accurate bending radius.

Inspection and Verification:

Conduct inspections to verify that the bending radius of each tube meets the specified requirements.

Measure and check each bend for accuracy and consistency before proceeding with the assembly.

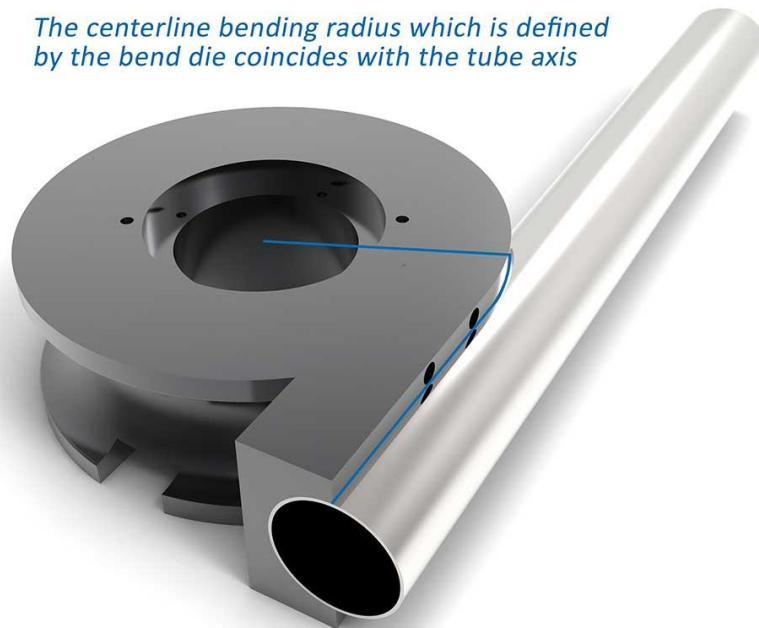
Avoiding Manufacturing Delays:

Any deviation from the specified bending radius can lead to misalignment and improper fit of the tubes in the jig, resulting in unusable components.

Ensuring the correct bending radius helps maintaining the integrity of the jig assembly, preventing delays and rework.

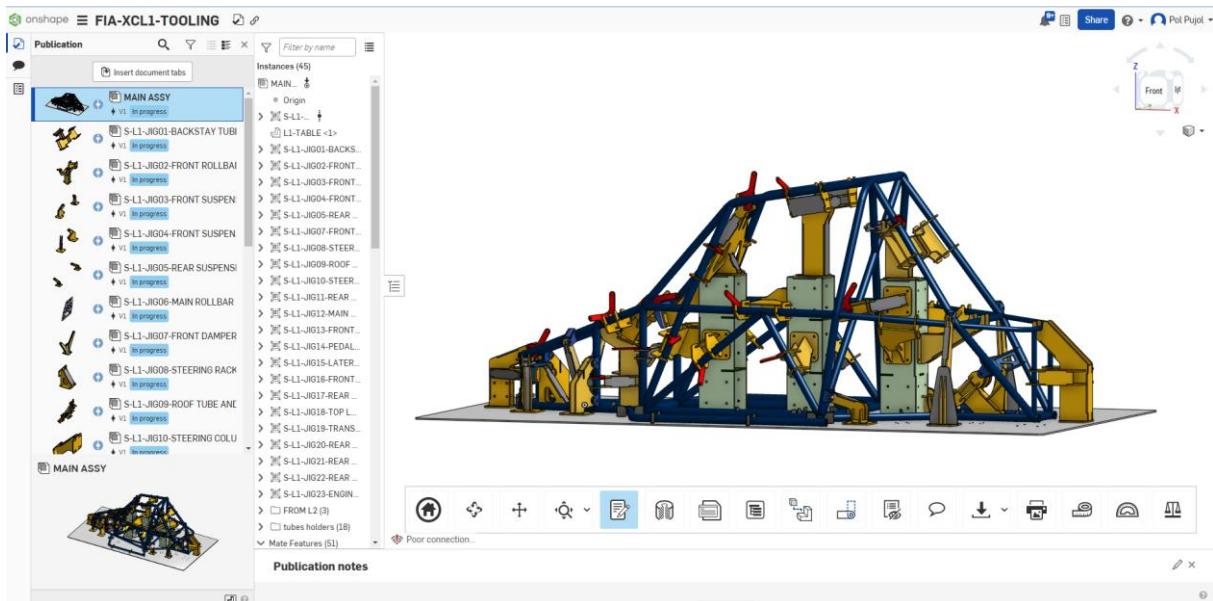
By adhering to the specified bending radius and performing meticulous inspections, you can ensure the correct assembly of the jigs and maintain the efficiency of the manufacturing process.

The centerline bending radius which is defined by the bend die coincides with the tube axis



Design Program Interface

The CAD program Onshape is used to design this project. Onshape is a cloud-based CAD software that enables real-time collaboration and seamless design processes. It is used directly from a web browser, without the need of local software installations. This tool provides comprehensive capabilities for modelling, drawing, and assemble. It is accessible from any device with internet connection.



A user-designer interface has been created within Onshape to ensure the correct assembly of the car. This cloud-based interface is accessible via internet connection and a web browser, with access restricted to authorized ASN manufacturers.

Throughout the documentation, links are provided to access various car systems. These links allow users to:

- Measure parts accurately*
- Create section views*
- Generate exploded views*
- Check part names and details*
- Consult the general shape of the components*

This tool facilitates a dedicated communication between the designer and the user through a simple and clean interface, ensuring a streamlined and efficient assembly process.



Manufacturing Documents

Manufacturing requirements

To conclude correctly the manufacturing process, the essential parts regarding this process have been documented separately dividing it by each manufacturing step:

- Laser Cut Manufacturing
- CNC Turning Manufacturing
- Welding Manufacturing
- Tube Metal bending Manufacturing
- Sheet Metal bending Manufacturing
- JIG's Manufacturing

Laser Cutting Manufacturing

Laser cutting is a precise and efficient process that uses a high-powered laser beam to cut, engrave, or mark various materials, typically metals, plastics, and wood. The laser beam is focused through a lens or guided by mirrors, and its intense heat melts, burns, or vaporizes the material along the cutting path.

Export Format

We export the files in .dxf format with a 1:1 scale, and if the parts are bended also in .pdf drawing for a correct export. This document will come with an Excel file recap piece to fulfil the manufacturing requirements

CNC Turning Manufacturing

CNC (Computer Numerical Control) turning is a subtractive manufacturing process where a rotating workpiece is shaped by a stationary cutting tool. The CNC lathe machine, controlled by computer programs, precisely removes material from the workpiece to create cylindrical or conical shapes with high accuracy.

Export Format

We export the blueprints in .dxf and .pdf formats with all the necessary information required. Also, the .step files of all the parts are attached.

Welding Manufacturing

Welding Manufacturing use energy to melt the material and weld the two metallic materials. MIG uses a continuous wire feed and TIG uses a non-consumable tungsten electrode to produce the weld.

Export Format

A .pdf format document will be shared with the materials and dimension needed to complete the parts needed.



Tube Bending Manufacturing

Tube bending is a manufacturing process used to form metal tubes into specific shapes and angles without compromising their structural integrity. This is achieved through various methods, such as rotary draw bending, mandrel bending, and roll bending.

Export Format

We export the files in .pdf, .dxf and step format. The car is designed to be banned in all one one plane expect the some FIA specific tubes.

Sheet Metal Bending Manufacturing

Sheet metal bending is a process that involves deforming a flat sheet of metal along a straight axis to create a desired angle or shape. This is typically done using tools like press brakes, bending machines, or rollers.

Export Format

We export in .dxf and .pdf format. Usually, the same laser part supplier has to bend the same parts. All the parts to bend are previously laser cut

JIG's Manufacturing

In Jig Manufacturing we will make sure to explain how to correctly assemble all the car jigs by proving a detailed description on how to proceed to put together and prepare one chassis JIG.

Export Format

All the JIGS will be exported following the big laser cut method, and we will assembly them by hand with the help of online documents.



Parts Nomenclature

Nomenclature, the systematic naming of project elements, is crucial for the efficient organization and management of any project. A well-defined and consistent nomenclature system ensures clear communication, reduces confusion, and enhances collaboration among team members. Standardized naming conventions make it easy to retrieve and reference files, track progress, and manage versions, ensuring everyone works with the most current information.

Nomenclature Example

L1-FU-001-AA

Project Name - Subassembly Prefix - Part Number - Revision

Nomenclature is the baseline for organization. A clear understanding of the nomenclature helps teams move faster and more efficiently, allowing them to focus on their tasks without unnecessary delays or misunderstandings. By providing a common framework, nomenclature aligns everyone's efforts, facilitating smoother workflows and better project outcomes.

The actual nomenclature bases on levels and versions, starting with the Project Name in this case XCL1, and shortened to L1. Following by the Subassembly Prefix previously explained, the part numbers are defined in the CAD assembly and the posterior Part Number Revision.

References Types:

For special necessities, we also incorporate additional annotations, such as Left and Right comments, detailed welding drawings, or unique tooling identifiers, to further enhance traceability. These supplementary elements ensure that any specific requirements or adjustments are clearly documented and easily identifiable, facilitating accurate replication and consistent quality in production processes.

L1-FU-001-AA

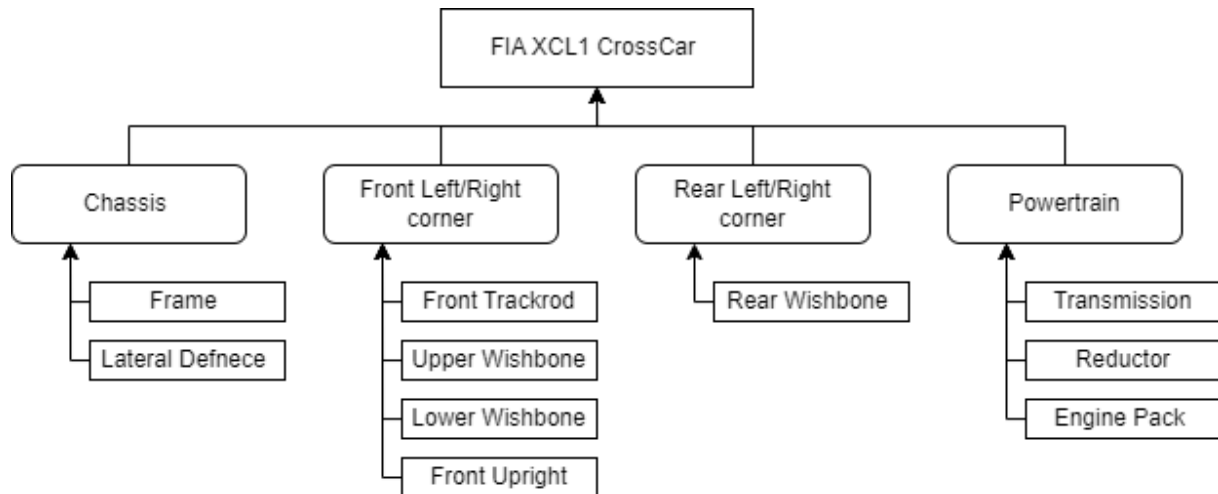
L1-FU-001-L-AA

L1-FU-001-WLD-AA

L1-JIG01-001-AA

XCL1 Assemblies

In this section, we resume the four different car assemblies defined by nomenclature. Having a good overview helps finding the different names and car parts better. XCL1 Assembly:



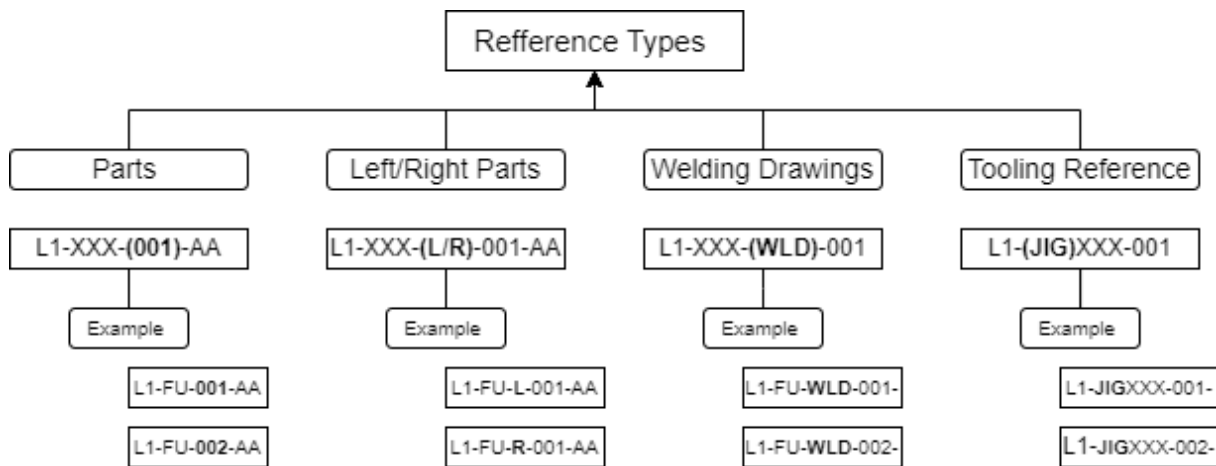
Subassemblies References Prefix

A definition of each subassembly Prefix is basic to have a correct understanding of total meaning of each reference. Here, we define the prefix of each subassembly of the car.

ASSEMBLIES	SUBASSEMBLIES	SUBASSEMBLY PREFIX
Front Left/Right corner	Front trackrod	L1-FTR
	Front upper wishbone	L1-FUW
	Front lower wishbone	L1-FLW
	Front upright	L1-FU
Rear Left/Right corner	Rear Suspension System	L1-RSS
Powertrain	Transmission	L1-TRA
	Engine supports	L1-ENS
Chassis	Frame	L1-FRM

Nomenclature System Explained

Inside the Reference system we have different types of references, for different types of requirements or uses, like Jigs, Drawings or welding documents:



Part Number Definition

L1-FU-001-AA

Project Name - Subassembly Prefix - **Part Number** – Revision

The Part Number defines the number of the part we are working. By starting from zero each time, a new subassembly is used. The numbers start from 001 up to 999.

Left / Right Definition

L1-FU-001-L-AA

Project Name - Subassembly Prefix - Part Number -Left- Revision

In case the part is different in left or right side, we will add a L for Left and R to Right Parts.

Welding Drawing Number

L1-FU-01-WLD-AA

Project Name -Subassembly Prefix- Part Number- **Welding Document**–Revision

WLD (Welding Drawings) will be added to the Welding documents. This will allow us to provide multiple drawings of the same welded subassembly in a clear way.



Tooling Reference

L1-JIG01-001-AA

Project Name – **JIG Number** - Part Number – Revision

For the Tooling references, we add the code JIG Number to now is a manufacturing tooling, with Jig we are talking about and inside the JIG number we have the part Number

Revision System Explained

L1-FU-001-AA

Project Name - Subassembly Prefix - Part Number – **Revision**

During the engineering, manufacturing, and product development, it is crucial to track changes of parts or components. A well-structured revision system ensures that modifications are documented, traceable, and easily understood. The -AA format is one such system, where the revision code consists of two letters, each representing different types of changes: major and minor. All the Parts Numbers will start with -AA. In case of any modification, the letter will change.

Small Modification

If it is a small modification and does not affect any other parts of the assembly, just a part update we update the second letter from

Small Modification= -AA to-AB

The next letter will be consecutive, following an alphabeting order until reaching to AZ.

Major Modification

If it is a major modification or it has an affect any other part of the assembly, the front letter with be update to the next in the alphabet to make sure no interference is created.

Major Modification= -AA to-BA

The next letter will be consecutive following the alphabet until arrive to ZA.

Manufacturing References

To create double references in the stock system is recommended to just add the reference until the part number, and always keep the last version in stock. If the Version is added to the stock software each time the part is updated, it is also needed to update the stock system.

L1-FU-001-AA

L1-FU-001





Document Title Organization

The Document Title Organization is based on the same Part Reference system procedure. The aim of this piece is to organize all the documents and files in a way that it is easy to understand, manufacture and update in case of problems.

Main Documents Organization

It is basic to understand the Part Numbers reference systems and the Documents reference systems as they are not the same. The parts numbers are based on final parts details. Whereas, the documents title organization is all information folders put together. The actual numbers of documents are:

Purchase Documents
Manufacturing Document
Welding Documents
Explosion Views Documents
Consulting Documents
Setup Documents

Document title Organization System

The aim of this part is to explain how the names of the folders are organized and structured. For that we take the example of the Manufacturing Documents:

L1-CUT-01-JIG-AA

Project Name – **System Prefix- Folder Number – Folder Prefix** - Revision

The systems are based to know with manufacturing system is based, laser cut, CNC Machining or Purchase document, the number of folder in case we have different folders for different orders and the revision number



Purchase Documents Title Organization

Purchase document as prefix (PUR), Document 001- General Document and Revision AA.

L1-PUR-01-GEN-AA

Project Name – **System Prefix- Folder Number – Folder Prefix** - Revision

If a second Purchase Document is needed, it can be created with code 02 with folder prefix name Bodywork and add all the necessary components that need to be purchased for that specific assembly system.

Manufacturing Document Title Organization

The manufacturing documents are crucial to understand the whole system. This document is needed to manufacture all the car, which requires different techniques and different folders. For that reason, these different folders contain sub folders that are organized in different ways. For this case, we based it on this system:

L1-CUT-01-JIG-AA

Project Name – **Manufacturing System - Folder Number – Folder Prefix**-Revision

In the Manufacturing Folders we add the Manufacturing System and split each manufacturing technique by folders and car systems. The actual manufacturing systems are:

Laser Cutting + Sheet Metal Bending
CNC Machining
Metal Tube Bending
JIG Manufacturing

CUT
CNC
TBD
JIG

With this Simple system is possible to determine in a fast way where the document comes from and the order to send it to manufacturer.

Welding Documents Title Organization

Following the previous structure, the welding documents folders will be organized with the prefix WLD as the final parts.

L1-FWL-WLD-AA

Project Name – **Folder Prefix - Welding Document** -Revision





Assembly Documents Title Organization

The assembly document follows the same basic organization structure:

L1-ASS-01-ERG-AA

Project Name – **Assembly System** – **Folder Prefix**-Revision

Consulting Documents

The consulting documents will be organized following the next pattern:

L1-CON-CAD-AA

Project Name – **Assembly System** - **Folder Prefix**-Revision

In the Consulting documents Files Folders, we organize different folders based on car systems. The current consulting documents files for manufacturing systems are:

Laser Parts Help Document
CNC Parts Help Document

LAS
CNC

Setup Documents

The Setup documents will be organized by the following items:

L1-SET-01-SET-AA

Project Name – **Assembly System** - **Folder Number** – **Folder Prefix**-Revision

In the Setup Documents, we organize different folders based on car systems. The current help files for manufacturing systems are:

Setup Main Document
Seat Driver Position Document

SET
SDP



How to Read Purchase Document

The aim of this document is to consolidate all essential components into a single, comprehensive document. It is designed to assist the ASN by providing examples of suppliers and offering a preliminary solution tailored to their needs. This document serves as a recommendation and a helpful guide for making informed purchasing decisions.

Title:		L1-PUR-001-AA									
Excel information		Date:						Autor:			
Drawn:		12/11/2024						LifeLife GmbH		D. Muller	
Reviewed:		20/11/2024						LifeLife GmbH		Pol Pujol	
Project:		XCL1 Xcross Car Level 1 V1									
Revision:		AA									
Manufacturer:											
These documents are the property of FIA & LifeLife GmbH, distribution is prohibited without the written consent of FIA or LifeLife GmbH											
Number of cars:		1		Attention the last column is automatically updated							
References		Company Name		Contact Web		Contact Mail		Contact Tel		Component Name	
										Comment	
										Unit cars	
										Total Units	
Pedalbox											
RPR0009		RACINGPEDALBOXES		www.racingpedalboxes.com		info@racingpedalboxes.com		+34 688 81 54 58		Pedalbox SMG (black colour)	
										1	
										1	

Document Title Information

The title of the document indicates is the Purchase document.

L1-PUR-01-GEN-AA

Project Name – **System Prefix- Folder Number – Folder Prefix** - Revision

Document Information:

The header of the document recaps the essential and relevant information for a proper follow up document. This document is just a tentative of the original parts. If some parts are added, they can be modified and can work as a baseline for the final Purchase document.

This information will be key to avoid future errors

Title:		L1-PUR-001-AA									
Excel information		Date:						Autor:			
Drawn:		12/11/2024						LifeLife GmbH		D Muller	
Reviewed:		20/11/2024						LifeLife GmbH		Pol Pujol	
Project:		XCL1 Xcross Car Level 1 V1									
Revision:		AA									
Manufacturer:											
These documents are the property of FIA & LifeLife GmbH, distribution is prohibited without the written consent of FIA or LifeLife GmbH											



How to read the document

The document is designed to export on manufacturing based on car quantities. The Number of cars to produce will multiply the parts needed by car according to the total numbers of cars you want to manufacture.

The document is separated by parts, Assemblies and sectors. Inside each apart, we are able to find the necessary information.

Document Information:

Part References
Company Name
Contact Web
Contact Mail
Contact Tel
Component Name
Car Units

External Company Reference
External Company Name
External Company direction
External Company mail address
External Company contact detail
Part Name in our system
Total of units needed by car





Number of cars:	1	Attention the last column is automatically updated						
References	Company Name	Contact Web	Contact Mail	Contact Tel	Component Name	Comment	Unit cars	Total Units
XXX-AA-XX-AA	XXXXXXXXXX	www.XXXXXXXXXX.com	info@XXXXXXXX.com	00XX XXX XXX XXXX	AAAAA	AAAAA	1	1
XXX-AA-XX-AA	XXXXXXXXXX	www.XXXXXXXXXX.com	info@XXXXXXXX.com	00XX XXX XXX XXXX	AAAAA	AAAAA	1	1
XXX-AA-XX-AA	XXXXXXXXXX	www.XXXXXXXXXX.com	info@XXXXXXXX.com	00XX XXX XXX XXXX	AAAAA	AAAAA	1	1

How to Read Laser Parts Manufacturing Documents

The aim of this document is to organise all Laser cuts references into groups in a way to simplify the ASN Manufacturing process. This document serves as a recommendation guideline to build the cars.

Title:		L1-CUT-04-PARTS-AA						
Excel information		Date:						
Drawn:		11/09/2024	LifeLive GmbH Pol Pujol					
Reviewed:		17/07/2024	LifeLive GmbH Pol Pujol					
Project:		XCL1 XCross Car Level 1						
Revision:		AA						
Manufacturer:								
These documents are the property of FIA & LifeLife GmbH, distribution is prohibited without the written consent of FIA or LifeLife GmbH								
Number of cars:		7	Attention the last column is automatically updated					
References	Material	Comment				Thickness	Unit cars	Total Units
TRANSMISSION BRACKETS								
L2-TRA-001-AA	STEEL	TRANSMISSION MOUNTING BRACKET				10mm	2	14
L2-TRA-002-AA	STEEL	TRANSMISSION TENSOR MOUNT BRACKET				5mm	4	28
L2-TRA-003-AA	STEEL	TRANSMISSION CALIPER WELDED MOUNT				5mm	2	14
FRONT LOWER WISHBONE								
L2-FLW-001-AA	ST52	FRONT LOWER WISHBONE DAMPER MOUNT				4mm	4	28
REAR BRAKE DISC								
L2-RBD-001-AA	ST52	REAR BRAKE DISC				6mm	1	7

Document Title Information

The title of this document recaps all the relevant information for a proper organization and order during the manufacturing process. Understanding the meaning and the order is basic.

L1-CUT-01-JIG-AA

Project Name – **Manufacturing System** - **Folder Number** – **Folder Prefix**-Revision

In the Manufacturing Folders we add the Manufacturing System to split each manufacturing technique by folders and car systems. The actual manufacturing systems are:

Laser Cutting + Sheet Metal Bending
CNC Machining
Metal Tube Bending

CUT
CNC
TBD

Document Information:

The header of the document recaps all the essential and relevant information for a proper follow up statement. It contains the name, drawer, revision date and proper revision code. This information will be key to avoid future errors.





Excel information	Date:			
Drawn:	11/09/2024	LifeLive GmbH	Pol Pujol	
Reviewed:	17/07/2024	LifeLive GmbH	Pol Pujol	
Project:		XCL1 XCross Car Level 1		
Revision:	AA			
Manufacturer:				
These documents are the property of FIA & LifeLive GmbH, distribution is prohibited without the written consent of FIA or LifeLive GmbH				



How to Read Laser Parts Manufacturing Documents

On top of the document, we have the number of cars to manufacture. By adding the total of cars you want to manufacture, it will automatically add the total of units, hence, the final quantity. This works really well in production but in Jigs Production is not necessary for standard users.

In the next line, we define internal reference system material, we add a comment on the part name, we specify the thickness of the material, and we conclude with the unitary units. **The material is open following the countries availabilities.**

By following the names, we have the car system. Inside this slot we find the references of that specific system. By repeating that slots, we complete the document.

Number of cars:	7	Attention the last column is automatically updated			
References	Material	Comment	Thickness	Unit cars	Total Units
TRANSMISSION BRACKETS					
L2-TRA-001-AA	STEEL	TRANSMISSION MOUNTING BRACKET	10mm	2	14
L2-TRA-002-AA	STEEL	TRANSMISSION TENSOR MOUNT BRACKET	5mm	4	28
L2-TRA-003-AA	STEEL	TRANSMISSION CALIPER WELDED MOUNT	5mm	2	14
FRONT LOWER WISHBONE					
L2-FLW-001-AA	ST52	FRONT LOWER WISHBONE DAMPER MOUNT	4mm	4	28
REAR BRAKE DISC					
L2-RBD-001-AA	ST52	REAR BRAKE DISC	6mm	1	7
L2-FRONT UPRIGHT					
L2-FU-004-AA	ST52	FRONT UPRIGHT CALIPER MOUNT	4mm	2	14
L2-FU-005-AA	ST52	CALIPER MOUNT TOP RIENFORCEMENT	4mm	2	14
L2-FU-006-AA	ST52	CALIPER MOUNT LOWER RIENFORCEMENT	4mm	2	14
L2-FU-007-AA	ST52	STEERING ARM TOP BRACKET	4mm	2	14
L2-FU-008-AA	ST52	STEERING ARM BOTTOM BRACKET	4mm	2	14
L2-FU-009-AA	ST52	OUTER RIENFORCEMENT	4mm	2	14
L2-FU-010-AA	ST52	INNER RIENFORCEMENT	4mm	2	14
TRANSMISSION					
L1-TRA-T54-D	ST52	Rear Sproket	6mm	1	7
L1-TRA-001-AA	ST52	Rear Disc Adapter	6mm	1	7
L1-TRA-002-AA	ST52	Rear Brake calliper Adapter	5mm	1	7

A single sheet of materials is used, when possible, to reduce to the minimum the number of material plates. It is not allowed to change the thickness of any laser cut document.





How to Read CNC Manufacturing Documents

The aim of this document is to organise all the CNC Manufacturing Documents into groups in a way to simplify the ASN Manufacturing process.

Title:	XCL1-CNC-01-COM-AA					
Excel information	Date:					
Drawn:	26/11/2024	LifeLife GmbH	M.Guelila			
Reviewed:	26/11/2024	LifeLife GmbH	Pol Pujol			
Project:	XCL1 XCross Car Level 1					
Revision:	AA					
Manufacturer:						
These documents are the property of FIA & LifeLife GmbH, distribution is prohibited without the written consent of FIA or LifeLife GmbH						
Number of cars:	1	Attention the last column is automatically updated				
New Reference	Comment			Unit car	Material	Total Units
L2-COM-001-AA	M14 RODEND SPACER			23	25CrMo4	23
L2-COM-003-AA	M12 RODEND SPACER			4	25CrMo4	4
L2-INS-001-AA	M14-Insert for 25 X 2 tube			14	25CrMo4	14
L2-INS-002-AA	M12 INSERT FOR 20 X 2 TUBE			4	25CrMo4	4

Document Title Information

The title of this document recaps all the relevant information for a proper organization and order during the manufacturing process. Understanding the meaning and the order is basic.

XCL1-CNC-01-COM-AA

Project Name – **Manufacturing System** - **Folder Number** – **Folder Prefix**-Revision



Document Information:

The header of the document recaps all the essential and relevant information for a proper follow up document. It contains name, drawer, revision date and proper revision code. This information will be key to avoid future errors

Title:	XCL1-CNC-01-COM-AA				
Excel information	Date:				
Drawn:	26/11/2024	LifeLife GmbH	M.Guelila		
Reviewed:	26/11/2024	LifeLife GmbH	Pol Pujol		
Project:	XCL1 XCross Car Level 1				
Revision:	AA				
Manufacturer:					
These documents are the property of FIA & LifeLife GmbH, distribution is prohibited without the written consent of FIA or LifeLife GmbH					

How to Read CNC Manufacturing Documents

On top of the document, we have the numbers of cars to manufacture. By adding the total of cars you want to manufacture, it will automatically add the total of units, hence, the final quantity. This works well in production but in Jigs Production is not necessarily in standard users

On the next line, we define internal reference system material, we comment on the part name, we specify the thickness of the material and conclude with the unitary units. **The material is open following the countries availabilities.**

Number of cars:	1	Attention the last column is automatically updated		
New Reference	Comment	Unit car	Material	Total Units
L2-COM-001-AA	M14 RODEND SPACER	23	25CrMo4	23
L2-COM-003-AA	M12 RODEND SPACER	4	25CrMo4	4
L2-INS-001-AA	M14-Insert for 25 X 2 tube	14	25CrMo4	14
L2-INS-002-AA	M12 INSERT FOR 20 X 2 TUBE	4	25CrMo4	4

How to Read Metal Tube Bending

The aim of this document is to guide how to read the Metal tube Bending documents.

Document Title Information

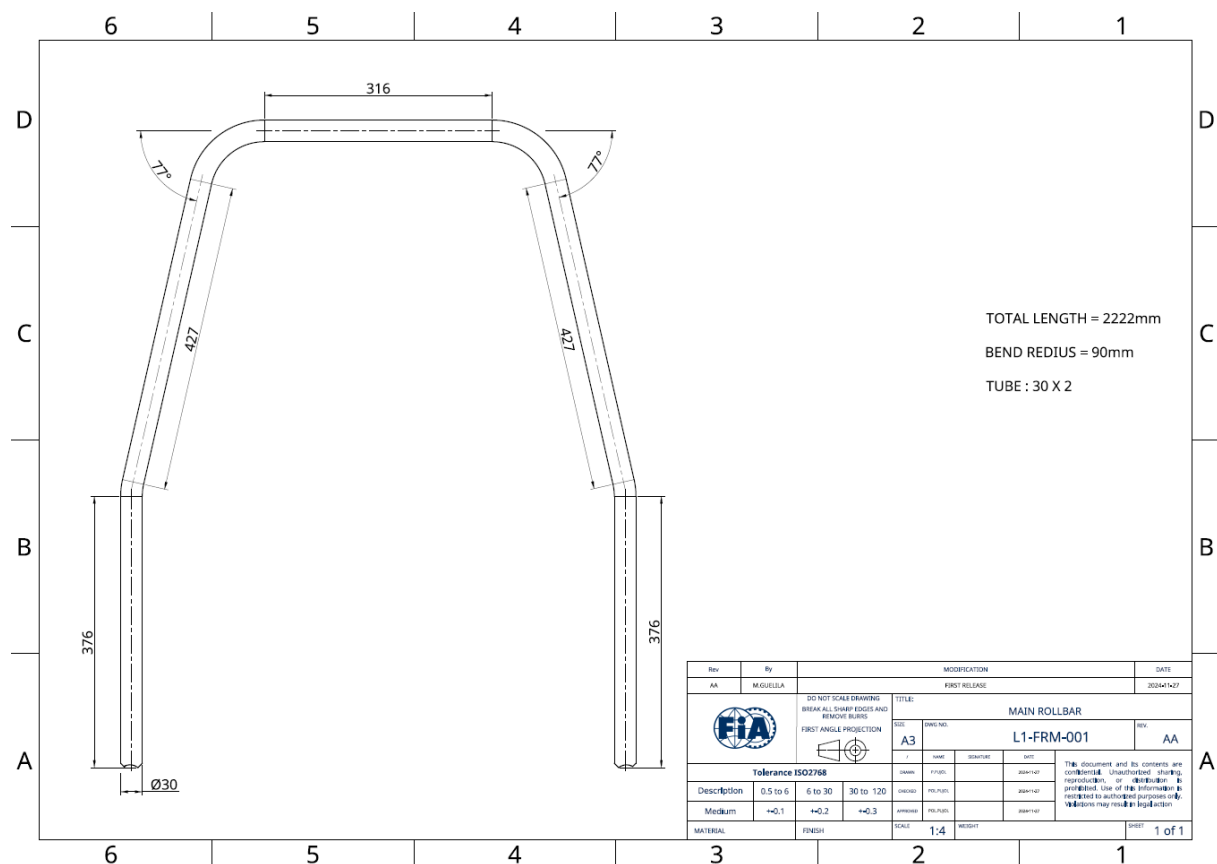
All the manufacturing documents follow the same structure but will be split according to the system complexity and number of extra comments.

L1-MTB-01-FRM-AA

Project Name – **Metal Tube Bending** - Folder Number – Folder Prefix-Revision

Metal Tube Bending General view

This document contains all the necessary information to manufacture the part included in that document.





Document Information:

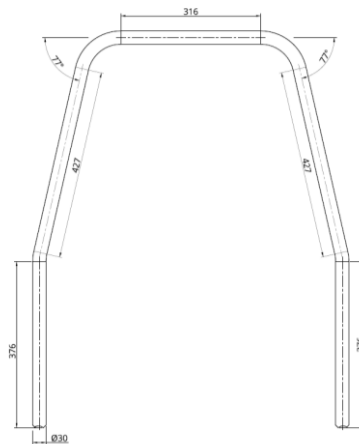
The header of the document recaps all the essential and relevant information for a proper follow up document. Title indicates the System or Part name, and it is followed by the Revision. The drawing revision will come with a short explanation of the changes in the upper case.

The tolerance box defines the baseline of those accepted based on the ISO 2768. Scale, Finish and weight will be affected only if the necessary. Scale will be mandatory in all the cases and the number of the sheets will indicate the total number of drawings for that folder.

Rev	By	MODIFICATION				DATE
AA	M.GUELILA	FIRST RELEASE				2024-11-27
		DO NOT SCALE DRAWING BREAK ALL SHARP EDGES AND REMOVE BURRS FIRST ANGLE PROJECTION 		TITLE:		MAIN ROLLBAR
				SIZE	DWG NO.	
		A3		L1-FRM-001		REV. AA
Tolerance ISO2768			NAME	SIGNATURE	DATE	This document and its contents are confidential. Unauthorized sharing, reproduction, or distribution is prohibited. Use of this information is restricted to authorized purposes only. Violations may result in legal action
		DRAWN	P.PUJOL		2024-11-27	
		CHECKED	POL.PUJOL		2024-11-27	
Description	0.5 to 6	6 to 30	30 to 120	APPROVED	POL.PUJOL	2024-11-27
Medium	+/-0.1	+/-0.2	+/-0.3			
MATERIAL		FINISH		SCALE	1:4	WEIGHT
				SHEET 1 of 1		

How to read the document

The main info is recap in the measurement information. The Radius of bending, the tube diameter and the total tube length are noted in all documents.



The total length is an approximate of the total length. Take some safety factor in some end to ensure a correct assembly.





How to Read Welding Documents

The aim of this document is to guide how to read the Welding documents. In the welding documents we will find two types of documents:

- Welding Document Standard Version
- Welding Document Advance Version

Document Title Information

Both types of documents will follow the same structure but will be split according to the system complexity and number of extra comments.

L1-FLW-WLD-AA

Project Name – **Folder Prefix - Welding Document** -Revision

Inside the welding documents we will find:

-Welding Document Advance Version:

Main Roll Bar Manufacturing Documents	MRB
Chassis Manufacturing Document	FRAME
Transmission Manufacturing Document	TRA
Front Uprights Manufacturing Document	FUPR
Rear Uprights Manufacturing Document	RUPR

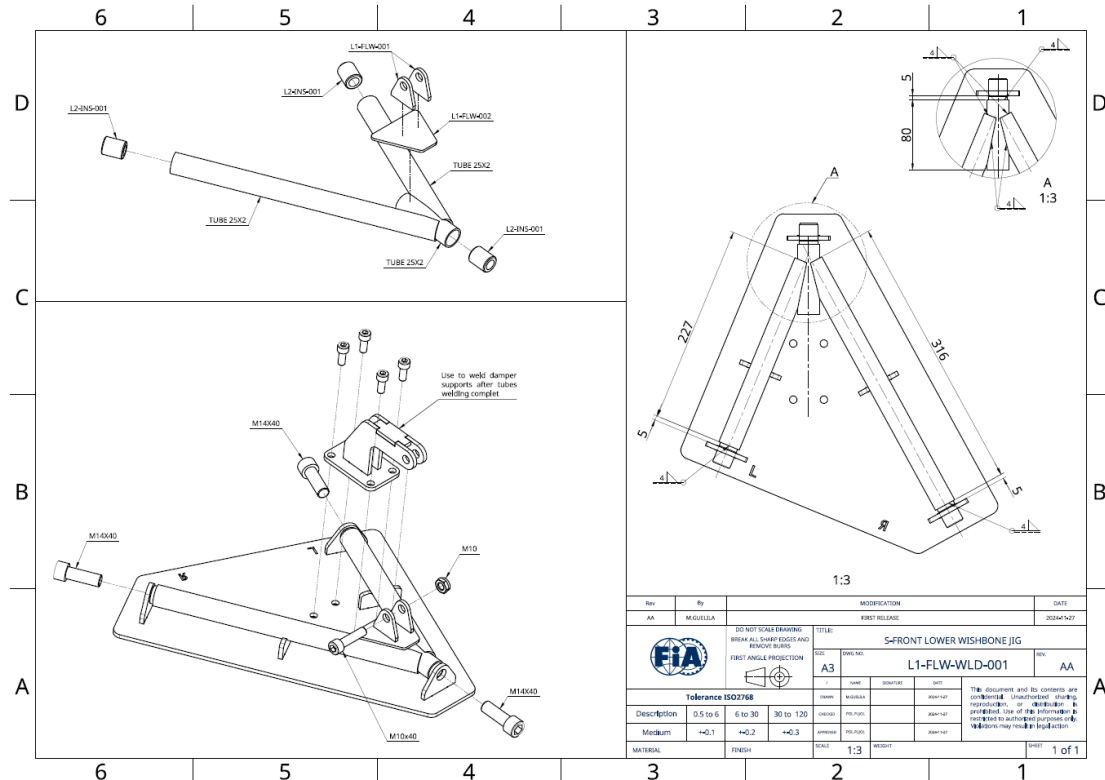
-Welding Document Standard Version :

Front Lower Wishbones Manufacturing Document	FLW
Front Upper Wishbones Manufacturing Document	FUW
Rear Lower Wishbones Manufacturing Document	RLW
Rear Upper Wishbones Manufacturing Document	RUW
Rear TrackRod Manufacturing Document	RTR
Front TrackRod Manufacturing Document	FTR



Welding Documents Standard Version

This document contains all the necessary information to manufacture the part included in that document.



Document Information:

The header of the document recaps all the essential and relevant information for a proper follow up document. Title indicates the System or Part name, and it is followed by the Revision. The drawing revision will come with a short explanation of the changes in the upper case.

The tolerance box defines the baseline of those accepted based on the ISO 2768.

Scale, Finish and weight will be affected only if the necessary. Scale will be mandatory in all the cases and the number of the sheets will indicate the total number of drawings for that folder.

Rev	By	MODIFICATION						DATE
AA	M.GUELILA	FIRST RELEASE						2024-11-27
		DO NOT SCALE DRAWING BREAK ALL SHARP EDGES AND REMOVE BURRS FIRST ANGLE PROJECTION 		TITLE: S-FRONT LOWER WISHBONE JIG				
				SIZE	DWG NO.			REV.
				A3	L1-FLW-WLD-001			AA
Tolerance ISO2768								This document and its contents are confidential. Unauthorized sharing, reproduction, or distribution is prohibited. Use of this information is restricted to authorized purposes only. Violations may result in legal action
Description	0.5 to 6	6 to 30	30 to 120	DRAWN	M.GUELILA	2024-11-27		
				CHECKED	POL.PUJOL	2024-11-27		
Medium	+0.1	+0.2	+0.3	APPROVED	POL.PUJOL	2024-11-27		
MATERIAL		FINISH		SCALE	1:3			WEIGHT
							SHEET	1 of 1



How to read the document

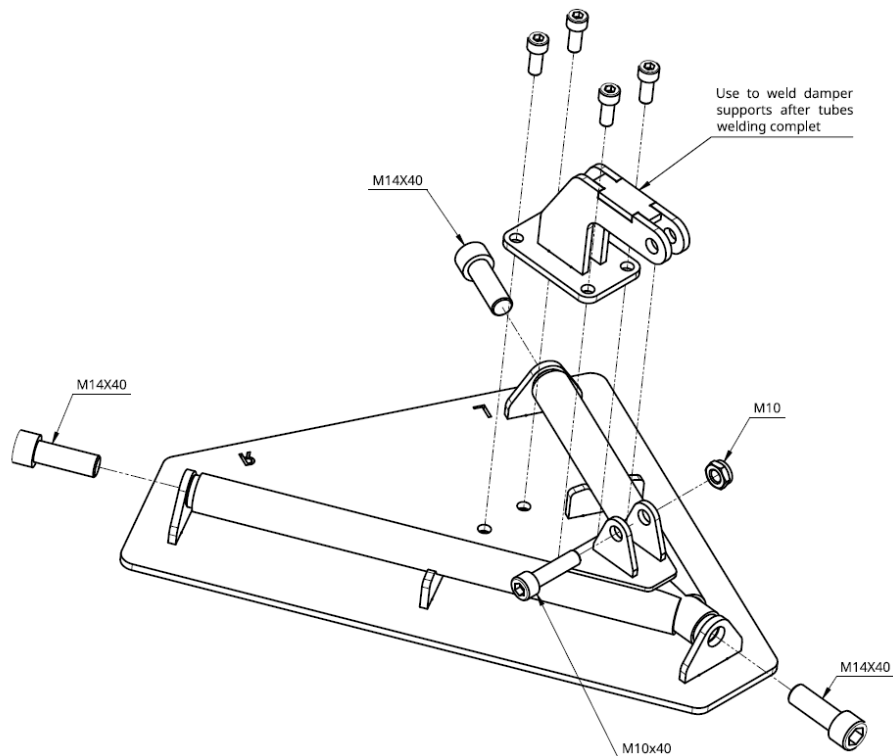
Firstly, we need to check which JIG is needed to manufacture this part. For example, here we have the L2-JIG-40-00, with all the necessary references to weld to it.

X3 M14- Inserts

X1 Tube 25x2mm 880mm

X3 Din 912 M14 X1.5 Bolts

The baseline explanation provides a description on how to assembly each part and indicates where needs to be welded.

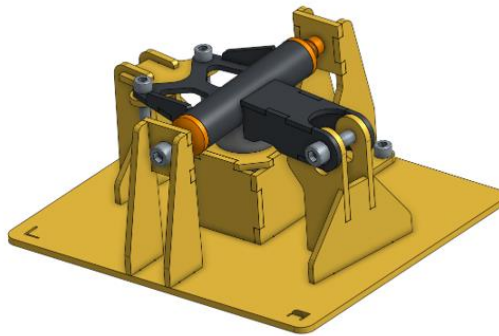


If we need to add extra JIGS, a second picture will be added with the necessary information.
Update Export folder

Welding Document Advance Version

In the advanced welding document, we will find detailed instructions to fully assemble the components. This documentation will contain:

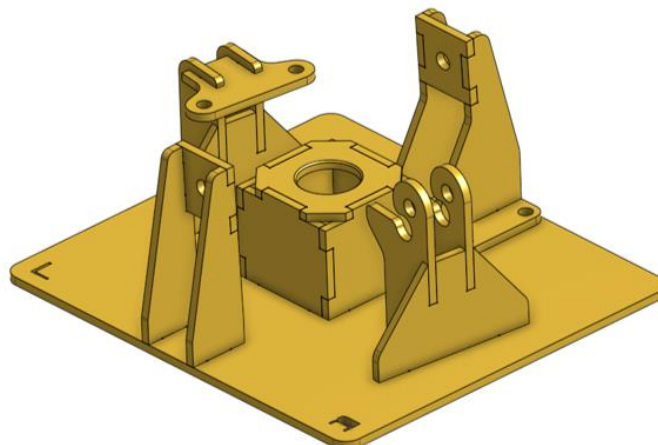
- JIGS Preparation
- Welding Parts Specification
- Welding Procedure



JIGS Preparation

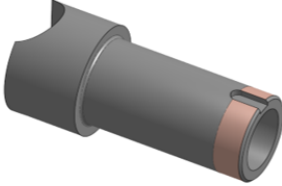
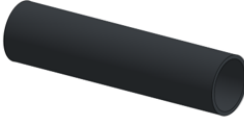
In this section, we will defined which JIG we need to use and the procedure to prepare it. How will work on asymmetrical side and what take in to attention.

JIG-38



Welding Parts Specification

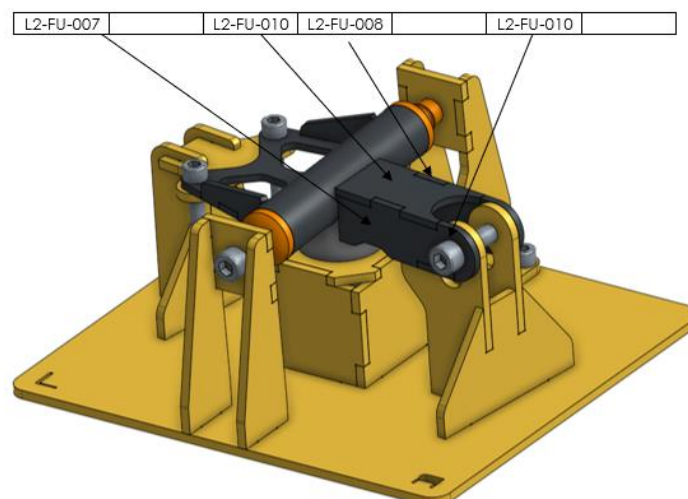
In this section we will define the parts needed to fully assemble one component.

Part Nr.	Part Name	Part picture	Quantity
L2-FU-001	FRONT UPRIGHT AXLE		1
L2-FU-002	Steel Tube 30X2 X 121,5mm +/-1mm		1
L2-FU-003	FRONT UPRIGHT M14 INSERTS		2
L2-FU-004	FRONT UPRIGHT CALIPER MOUNT		1

Welding Procedure

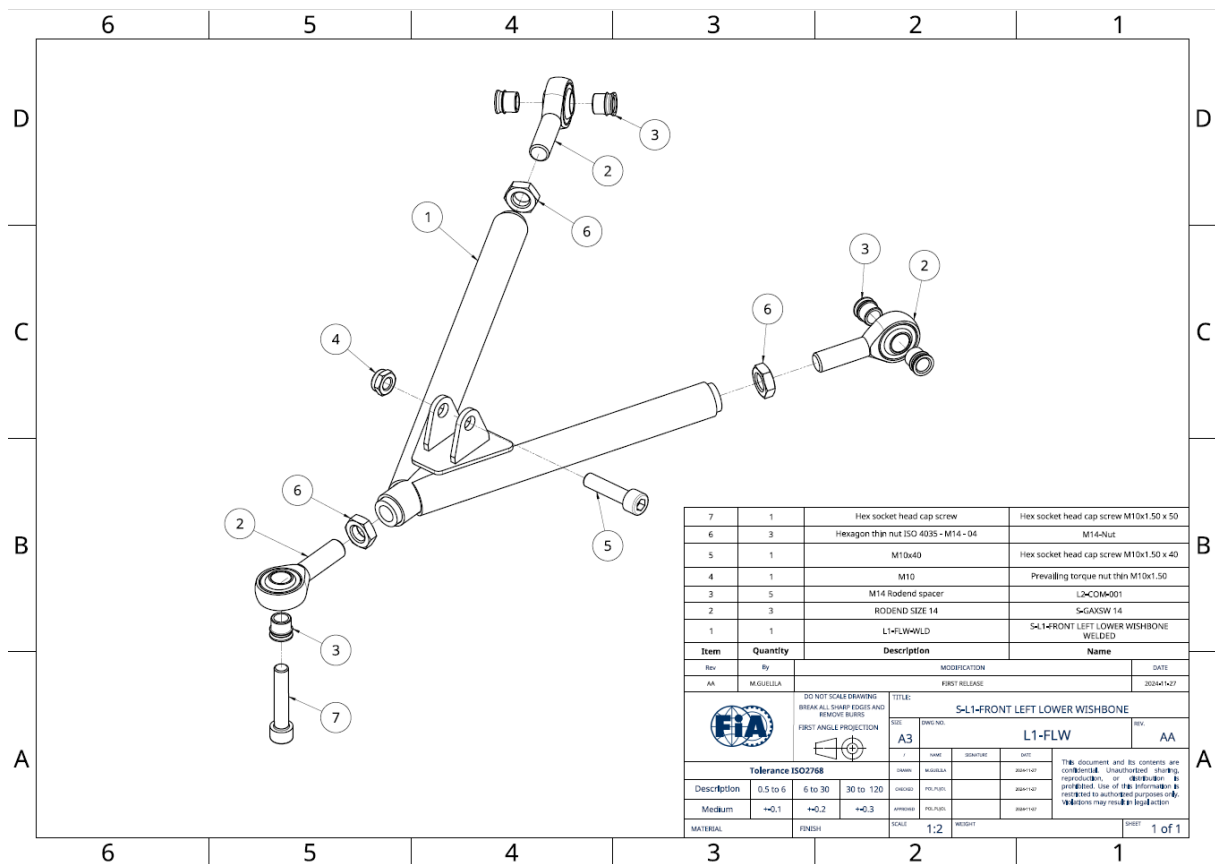
Here, we will define which parts should be assembled first and where to weld.

4- Install the parts **L2-FU-004**, **L2-FU-005** and **L2-FU-006**.



How to Read Assembly Documents

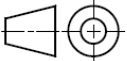
This document contains all the necessary information to assemble the part or system included in the document. It is key to specifying special needs in the document for the correct assembly without problems.





Document Information:

The header of the document recaps all the essential relevant information for a proper follow up document. Title indicates the System or Part name. Followed by the Revision version. All the drawing revision case will come with a short explanation of the changes in the upper case.

7	1	Hex socket head cap screw	Hex socket head cap screw M10x1.50 x 50		
6	3	Hexagon thin nut ISO 4035 - M14 - 04	M14-Nut		
5	1	M10x40	Hex socket head cap screw M10x1.50 x 40		
4	1	M10	Prevailing torque nut thin M10x1.50		
3	5	M14 Rodend spacer	L2-COM-001		
2	3	RODEND SIZE 14	S-GAXSW 14		
1	1	L1-FLW-WLD	S-L1-FRONT LEFT LOWER WISHBONE WELDED		
Item	Quantity	Description	Name		
Rev	By	MODIFICATION	DATE		
AA	M.GUELILA	FIRST RELEASE	2024-11-27		
		DO NOT SCALE DRAWING BREAK ALL SHARP EDGES AND REMOVE BURRS FIRST ANGLE PROJECTION 		TITLE: S-L1-FRONT LEFT LOWER WISHBONE	
		SIZE A3	DWG NO. L1-FLW		REV. AA
Tolerance ISO2768		DRAWN	M.GUELILA	SIGNATURE	DATE
Description	0.5 to 6	6 to 30	30 to 120	CHECKED	POL.PUJOL
Medium	+0.1	+0.2	+0.3	APPROVED	POL.PUJOL
MATERIAL		FINISH	SCALE 1:2	WEIGHT	SHEET 1 of 1
This document and its contents are confidential. Unauthorized sharing, reproduction, or distribution is prohibited. Use of this information is restricted to authorized purposes only. Violations may result in legal action					

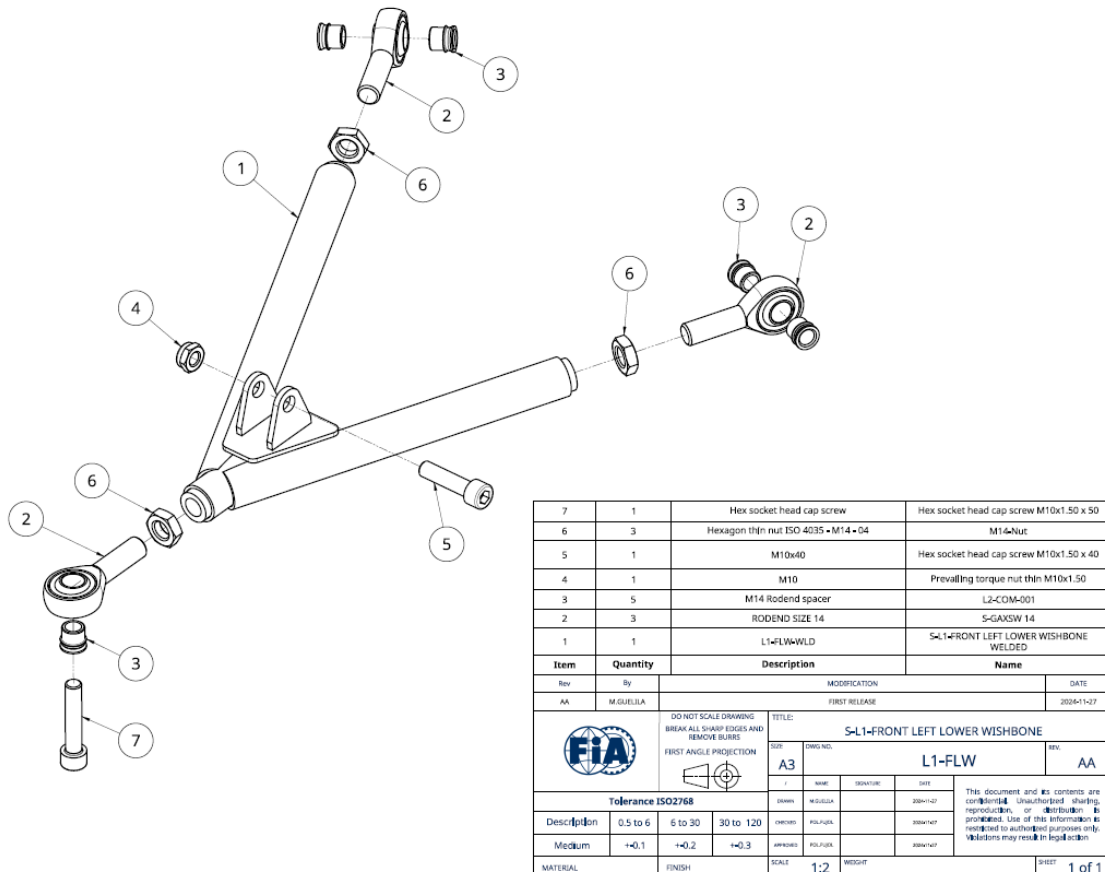
In the top, we added a bill of materials with the item number, the basic description if needed, and a proper reference with the quantity. The Revision box is there if future modifications are needed. The title with the drawing number is the same as the rest of the structure. Revision number will follow the same structure as the rest of the document.

The tolerance box defines the baseline of those accepted based on the ISO 2768. Scale, Finish and weight will be affected only if the necessary. Scale will be mandatory in all the cases and the number of the sheets will indicate the total number of drawings for that folder.

How to read the document

The first main point to check is the bill of materials. We can find it in the lower right side of the document and it contains all the necessary components that are needed to ensure the assembly of all the desired parts or systems.

Once all the parts are ready to assemble, it is necessary to follow the specific instructions to put it together. Later on, we can follow the main instructions to assembly correctly the part.



Extra information can be added to give extra information to the document, like need of glue, or specific parts than usually are forgotten.

For the left and right components, it will be the same document as it is the same part.



How to Read Laser Parts Consult Documents

This document contains all the necessary information to consult the Laser Parts reference without the necessity of the laptop interface.



FEDERATION INTERNATIONALE DE L'AUTOMOBILE

XCL1 Consulting Documents Laser Parts L1-CON-LAS-AA

The header of the document recaps all the essential relevant information for a proper follow up document. Followed by the Revision version. All the drawing revision case will come with a short explanation of the changes in the upper case.

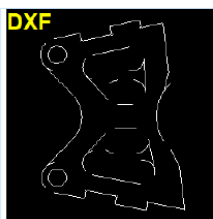


FEDERATION INTERNATIONALE DE L'AUTOMOBILE

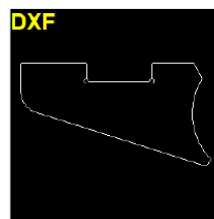
Document Information:		Name:	Date:
Document Title		L1-CON-LAS-AA	
Written by		Pol Pujol Varela	17/11/2024
Checked by		Pol Pujol Varela	27/11/2024
Approved by		Pol Pujol Varela	27/11/2024
Revision Box:			
Revision	By	Modifications	Date

On each page we have a recap of each system with the name of the system, with all his parts, material, thickness and units by car. Down there we have a simple overview of the part geometry to rapidly identify

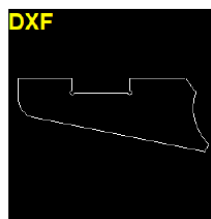
Title:		XCL2-Front Upright			
Excel information		Date:			
Drawn:	25/11/2024	LifeLive GmbH	M. Guelles		
Reviewed:	25/11/2024	LifeLive GmbH	Pai Pujol		
Project:	XCL1 XCross Car Level 1				
Revision:	AA				
Manufacturer:					
These documents are the property of FIA & LifeLive GmbH, distribution is prohibited without the written consent of FIA or LifeLive GmbH					
Number of cars:		1	Attention the last column is automatically updated		
References	Material	Comment		ThicknessUnit cars	Total Units
L2-FRONT UPRIGHT					
L2-FU-004-AA	ST52	FRONT UPRIGHT CALIPER MOUNT		4mm	2 2
L2-FU-005-AA	ST52	CALIPER MOUNT TOP REINFORCEMENT		4mm	2 2
L2-FU-006-AA	ST52	CALIPER MOUNT LOWER REINFORCEMENT		4mm	2 2
L2-FU-007-AA	ST52	STEERING ARM TOP BRACKET		4mm	2 2
L2-FU-008-AA	ST52	STEERING ARM BOTTOM BRACKET		4mm	2 2
L2-FU-009-AA	ST52	OUTER REINFORCEMENT		4mm	2 2
L2-FU-010-AA	ST52	INNER REINFORCEMENT		4mm	2 2



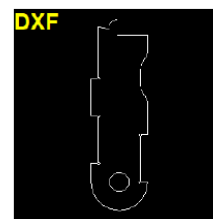
L2-FU-004-AA



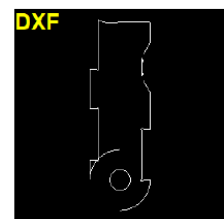
L2-FU-005-AA



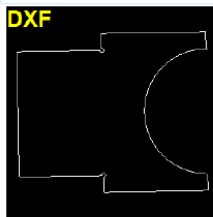
L2-FU-006-AA



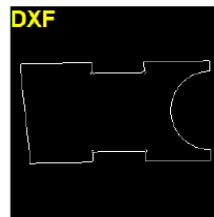
L2-FU-007-AA



L2-FU-008-AA



L2-FU-009-AA



L2-FU-010-AA



How to Rear CNC Consulting Documents

This document contains all the necessary information to consult the CNC Parts reference without the necessity of the laptop interface.



FEDERATION INTERNATIONALE DE L'AUTOMOBILE

XCL1 Consulting Documents CNC Parts

L1-CON-CNC-AA

The header of the document recaps all the essential relevant information for a proper follow up document . Followed by the Revision version. All the drawing revision case will come with a short explanation of the changes in the upper case.



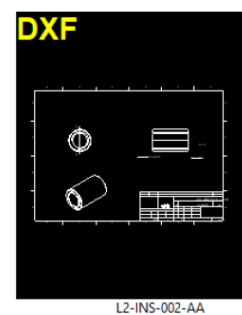
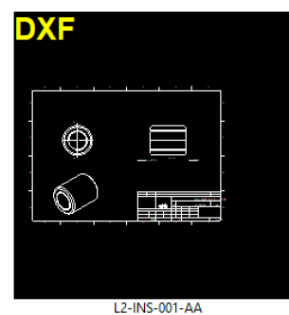
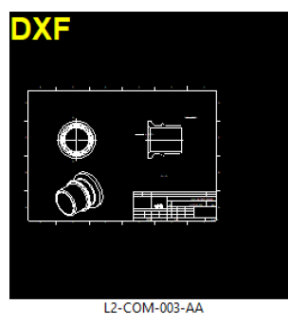
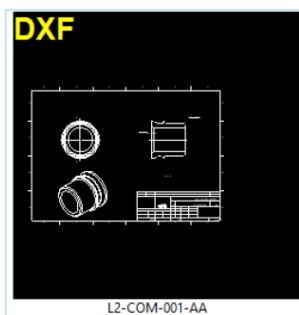
FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Document Information:		Name:	Date:
Document Title		L1-CON-CNC-AA	
Written by		Pol Pujol Varela	20/11/2024
Checked by		Pol Pujol Varela	27/11/2024
Approved by		Pol Pujol Varela	27/11/2024
Revision Box:			
Revision	By	Modifications	Date



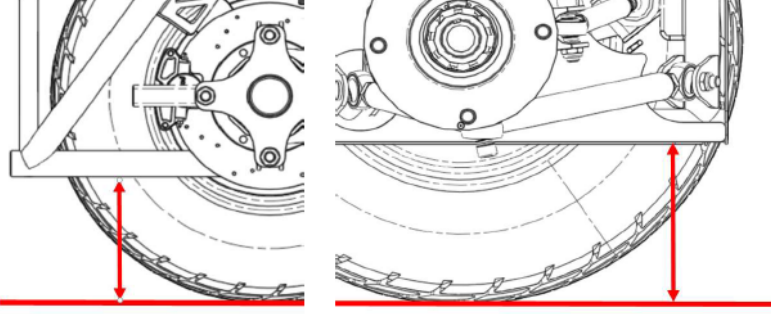
On each page we have a recap of each system with the name of the system, with all his parts, a name comments the units by car and his material.

Title:	XCL1-CNC-01-COM-AA					
Excel information	Date:					
Drawn:	26/11/2024	LifeLife GmbH	M.Guelila			
Reviewed:	26/11/2024	LifeLife GmbH	Pol Pujol			
Project:	XCL1 XCross Car Level 1					
Revision:	AA					
Manufacturer:						
These documents are the property of FIA & LifeLife GmbH, distribution is prohibited without the written consent of FIA or LifeLife GmbH						
						
Number of cars:	1	Attention the last column is automatically updated				
New Reference	Comment			Unit car	Material	Total Units
L2-COM-001-AA	M14 RODEND SPACER			23	25CrMo4	23
L2-COM-003-AA	M12 RODEND SPACER			4	25CrMo4	4
L2-INS-001-AA	M14-Insert for 25 X 2 tube			14	25CrMo4	14
L2-INS-002-AA	M12 INSERT FOR 20 X 2 TUBE			4	25CrMo4	4



How to Read Setup Baseline Document

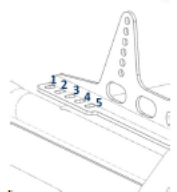
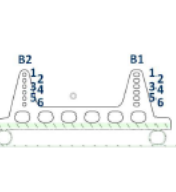
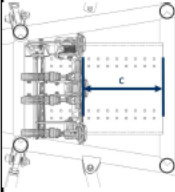
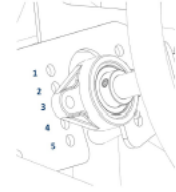
The Setup Document is a general document to note all the car running combinations. A simple baseline document is presented to keep tracking of what is tested on track.

L1-SET01-GEN L1 Setup Document General					
	Title:				
	Circuit:				
	FRONT		REAR		
	LEFT	RIGHT	LEFT	RIGHT	
Geometry					
RIDE HEIGHT	mm				
CAMBER	°				
TOE	mm				
Suspension					
Main spring	N/mm				
Damping					
Caster Front Upper	°				
Transmission					
Gearbox	Gear Ratio	Sprocket:			Wheel Ring:
Tire Reference					
Tyre Pressure	bar				
Weights & Ergonomics					
Minimum weight	Kg	W/O crew			With driver:
Driver Position	DP Number:			SB Number	
Comments:					
How to Measure					
					
Revision: AA 23/11/2024					

Is important to note what is on the car, where and in which conditions. A simple pic explanation is performed to all agree from where needs to be noted the ride hight.

How to Read Seat Position Documents

In case of car renting or different drivers by car, a Driver Position Datasheet is design with the goal to note and save the driving position of each driver. This database also can be used to extrapolate for new drivers reducing the adjusting time on track.

L1 Setup Document Driver Position Datasheet				
Driver Info				
Name:				
Height:				
Weight:				
Date:				
Driver Position Code				
Seat Brand:		Seat Model:		
Car Name	DP	A	B1	B2 C D
A		B		C
Seat Bracket to the Chassis		Seat to the Seat Bracket		Pedalbox to the Chassis
				
ENG 1 Number Number 1 is the front hole and 5 the most rear hole of the support.		ENG 2 Numbers B.1 The Rear support B.2 The Front support		ENG 2 Numbers C.2 Pedalbox Position
FR 1 Numéro Le numéro 1 est le trou avant et le 5 le trou le plus en arrière du support.		FR 2 Numéros B.1 Support arrière B.2 Support avant		FR 3 Numéros D.1 Rear Bolt Position D.2 Front Bolt Height D.3 Rear Bolt Height
Steering to the Chassis				
				
ENG 3 Numbers D.1 Rear Bolt Position D.2 Front Bolt Height D.3 Rear Bolt Height				
FR 3 Numéros D.1 Position boulon arrière D.2 Hauteur boulon avant D.3 Hauteur boulon arrière				
Setbelt Position Code				
Setbelts Brand:		Setbelts Model:		
Car Name	SB	A	B	C
A		B		C
ENG 2 Number Centimeters from the buckle hole to the label seam		ENG 2 Number Centimeters from the buckle hole to the label seam		ENG 2 Number Centimeters from the center of the tube to the seam of the label Max pos.
FR Centimètres du trou de la boucle à la couture de l'étiquette		FR Centimètres du trou de la boucle à la couture de l'étiquette		FR Centimètres du centre du tube à la couture de l'étiquette. Max position
				
This document is the property of FIA and its distribution is prohibited without written permission. Ce document est la propriété de FIA et sa distribution est interdite sans autorisation écrite.				

It is recommended to note it before an event and check after an event.

Issues Reporting Form

The Issue Reporting Form is essential for documenting and addressing project issues effectively. Its purpose is to ensure that problems are communicated clearly, allowing the team to resolve them quickly and maintain project quality. Reporting issues promptly helps prevent delays and improves overall outcomes.

Issue Reporting Form		
Title: 		
Contact Details:		
	Full Name:	
	Email:	
	Country:	
	Date:	
Type of Issue:		
☐ Manufacturing Problem		
☐ Assembly problems		
☐ Documentation Problem		
☐ Others		
In case of others, describe the Sector : 		
Problem Description		
<i>Provide a concise and detailed description of the problem. Include specific details such as relevant references, versions, and any contextual information that helps in understanding the issue.</i>		
Proposal Solution		
<i>Describe a long-term solution that addresses the previously defined issue. Be specific about the steps, processes, or changes needed to resolve the problem effectively.</i>		
Version AA	28/08/2024	

To complete the form, provide your personal information and the date, select the appropriate category for the issue, describe the problem in detail, and propose a possible solution. Once the form is filled out, send it to the project contact person responsible for updates and follow-up actions. Your input is crucial to the project's success.

