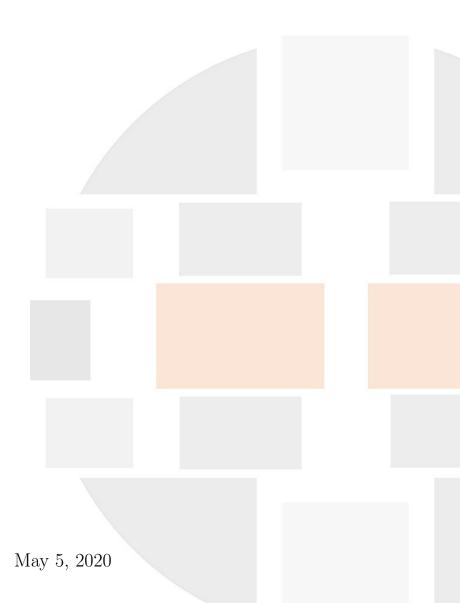


## FORMULA STUDENT XXX CAR NUMBER 81 - INVICTUS 2020

# Cost report: Supporting material file





# Contents

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#### Introduction

#### Nomenclature

#### Summary

#### AE - Aerodynamics

#### AE\_A0100 Front Wing

AE_01001	Main Airfoil FrontWing	m	1
AE_01002	2nd Airfoil FrontWing	m	2
AE_01003	EndPlate Ext FrontWing	b	2
AE_01004	EndPlate Int FrontWing	b	2

#### AE\_A0200 Rear Wing

AE_02001	Main Airfoil RearWing	m	1
AE_02002	2nd Airfoil RearWing	m	1
AE_02003	3rd Airfoil RearWing	m	1
AE_02004	EndPlate Rearwing	b	2

#### AE\_ A0300 Wings/Endplate Fixation

AE_03001	Fixation FW Airfoil 1	m	2
AE_03002	Fixation FW Airfoil 2	m	4
AE_03003	Fixation RW Airfoil 1	m	2
AE_03004	Fixation RW Airfoil 2 & 3	m	4
AE_03005	languette alu	m	50
AE_03006	languette acier	m	8

#### AE\_A1100 FrontWing Attach System

AE_11001	Aluminium Truss	m	2
AE_11002	Integrated Profile	m	2
AE_11003	Chape haut	m	0
AE_11004	Chape bas	m	0
AE_11005	languette 2 trous avant	m	0

#### AE\_A1200 FrontWing Reinforcement System

_	Q		v
AE_12001	Cable & Tension system	b	2
AE_12002	Chape	m	2
AE_12003	Liaison Chape-Cable	b	2
AE_12004	Liaison Endplate-Cable	m	2

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#### ${\tt AE\_A2100} \quad \textbf{RearWing Attach System}$

AE_21001	Aluminium Truss	m	2
AE_21002	Interface	m	4
AE_21003	Integrated Profile	m	2
AE_21004	Chape intérieure	m	2
AE_21005	Chape extérieure	m	2
AE_21006	languette 2 trous arrière	m	2

#### ${\tt AE\_A2200} \quad \textbf{RearWing Reinforcement System}$

AE_22001	Cable & Tension system	b	2
AE_22002	Chape	m	2
AE_22003	Liaison Endplate-Cable	m	2

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## Part I

# AE - Aerodynamics

AE_A0100	Front Wing
AE_A0200	Rear Wing
AE_ A0300	Wings/Endplate Fixation
AE_A1100	FrontWing Attach System
AE_A1200	FrontWing Reinforcement System
AE_A2100	RearWing Attach System
AE_A2200	RearWing Reinforcement System

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# AE\_A0100 Front Wing

id	part	description	m/b	qty
AE_01001	Main Airfoil FrontWing		m	1
AE_01002	2nd Airfoil FrontWing		m	2
AE_01003	EndPlate Ext FrontWing		b	2
AE_01004	EndPlate Int FrontWing		b	2



AE\_01001 m Main Airfoil FrontWing ()



## $AE_01002 m 2nd Airfoil FrontWing ()$



#### AE\_01003 b EndPlate Ext FrontWing ()



#### AE\_01004 b EndPlate Int FrontWing ()



# AE\_A0200 Rear Wing

Iu	part	description	ш/ б	qıy
id	nart	description	m/h	atv

AE_02001	Main Airfoil RearWing	m	1
AE_02002	2nd Airfoil RearWing	m	1
AE_02003	3rd Airfoil RearWing	m	1
AE_02004	EndPlate Rearwing	b	2



## AE\_02001 m Main Airfoil RearWing ()



## $AE_02002 m 2nd Airfoil RearWing ()$



## AE\_02003 m 3rd Airfoil RearWing ()



#### AE\_02004 b EndPlate Rearwing ()



# ${\tt AE\_~A0300~Wings/Endplate~Fixation}$

id	part	description	m/b	qty
AE_03001	Fixation FW Airfoil 1		m	2
AE_03002	Fixation FW Airfoil 2		m	4
AE_03003	Fixation RW Airfoil 1		m	2
AE_03004	Fixation RW Airfoil 2 & 3		m	4
AE_03005	languette alu		m	50
AE_03006	languette acier		m	8



## AE\_03001 m Fixation FW Airfoil 1 ()



## AE\_03002 m Fixation FW Airfoil 2 ()



## AE\_03003 m Fixation RW Airfoil 1 ()



## AE\_03004 m Fixation RW Airfoil 2 & 3 ()



 $AE_03005 \ m \ languette \ alu \ ()$ 



 $AE_03006 m languette acier ()$ 



# AE\_A1100 FrontWing Attach System

id	part	description	m/b	qty
AE_11001	Aluminium Truss		m	2
AE_11002	Integrated Profile		m	2
AE_11003	Chape haut		m	0
AE_11004	Chape bas		m	0
AE_11005	languette 2 trous avant		m	0



AE\_11001 m Aluminium Truss ()



AE\_11002 m Integrated Profile ()



 $AE_11003 m$  Chape haut ()



 $AE_11004 m Chape bas ()$ 



 $AE_11005 m languette 2 trous avant ()$ 



# AE\_A1200 FrontWing Reinforcement System

id	part	description	m/b	qty
AE_12001	Cable & Tension system		b	2
AE_12002	Chape		m	2
AE_12003	Liaison Chape-Cable		b	2
AE_12004	Liaison Endplate-Cable		m	2



AE\_12001 b Cable & Tension system ()



AE\_12002 m Chape ()



AE\_12003 b Liaison Chape-Cable ()



AE\_12004 m Liaison Endplate-Cable ()



# AE\_A2100 RearWing Attach System

id	part	description	m/b	qty
AE_21001	Aluminium Truss		m	2
AE_21002	Interface		m	4
AE_21003	Integrated Profile		m	2
AE_21004	Chape $int  ilde{\mathbf{A}}$ $\bigcirc$ rieure		m	2
AE_21005	Chape extérieure		m	2
AE_21006	languette 2 trous arriÃ"re		m	2



AE\_21001 m Aluminium Truss ()



 $AE_21002 m Interface ()$ 



 $AE_21003 m Integrated Profile ()$ 



AE\_21004 m Chape  $int\tilde{A}$  ©rieure ()



AE\_21005 m Chape  $\operatorname{ext} \tilde{\mathbf{A}}$  Crieure ()



AE\_21006 m languette 2 trous arri $\tilde{A}$ "re ()



# $AE\_A2200$ RearWing Reinforcement System

id	part	description	m/b	qty
AE_22001	Cable & Tension system		b	2
AE_22002	Chape		m	2
AE_22003	Liaison Endplate-Cable		m	2



AE\_22001 b Cable & Tension system ()



AE\_22002 m Chape ()



AE\_22003 m Liaison Endplate-Cable ()