

## 2025 FIA F4 CHINESE CHAMPIONSHIP SUPPLEMENTARY TECHNICAL REGULATIONS

## 2025东鹏特饮国际汽联F4方程式锦标赛技术补充规则

NO.	Not allowed to change:	Regulations	
序号	锁定技术规格	规格	
1	Damper springs front and rear 前后减震器弹簧	mandatory 1000/800 锁定为前1000lb/in 后800lb/in	见图1 picture1
2	Antiroll bar 防倾杆	mandatory Ø11 front and rear, position free 前后锁定为 Ø11, 位置可以调整	见图2、3 picture2、3
3	Gear ratios 齿比	fixed (the ones in the catalogue) 锁定 (详见车辆技术目录)	见图4 picture4
4	Master-cylinders diameters 刹车制动油壶直径	fixed (the ones that are standard in the catalogue) 锁定 (车辆技术目录中标准直径)	
5	Brake pads 刹车片	the ones in the spare parts catalogue 备件目录中标准刹车片	
6	Brake disc 刹车盘	the ones in the spare parts catalogue (The minimum thickness of the brake disc is 17.8mm) 备件目录中标准刹车片 (刹车盘最低厚度最低值是 17.8mm)	
7	Fix suspension bracket positions on the gearbox 固定在变速箱上的悬挂支架位置	you can refer to the user manual for the standard 标准位置可参考用户手册	
8	Turbo 涡轮	fixed (the ones in the spare parts catalogue) 锁定 (备件目录上的标准涡轮)	
9	Fuel 燃油	Officially designated sponsored fuel 官方指定赞助燃油	
10	Coolant 制冷液	According to FIA regulations, only pure water can be 按照国际汽联规定只能使用纯净水作为冷却液	
11	Heat protection 隔热保护	Its only allow to add heat protection in contact with the exhaust pipe, maximum thickness 5mm(not allow for airbox, air pipes, etc...) 只允许在排气管上增加保护装置, 保护装置必须与排气管贴合, 保住装置厚度不得大于5mm (不允许在进气风箱、进气管路等增加隔热保护)	
12	Additional sensors and GPS 额外的传感器和GPS	Any additional sensors and GPS is not allowed 不允许安装任何额外的传感器和GPS	
NO.	Setup open (teams allowed to setup) :	Regulations	
序号	开放选项 (车队允许更改的设定)	规格	
1	Camber 外倾角		见图5 picture5
2	Castor 后倾角		见图6 picture6
3	Toe 前束角		见图7 picture7
4	Ride height: minimum 26mm 车身高度: 车身最低离地间隙为26mm	minimum 26mm 车身最低离地间隙为26mm	
5	Dampers clicks and preload 避震阻尼和承载		见图8 picture8
6	Antiroll bar positions 防倾杆位置		见图9、10 picture9、10
7	Brake balance 刹车比例		
8	Pedalbox position 踏板位置		
9	Front wing angle 前定风翼角度		
10	Rear upper wing angle 后尾翼上导风板角度		
11	Hiding water radiator with tape if cold 如果温度过低可以使用胶带遮盖水箱		

Front and rear suspension springs are common sizes.

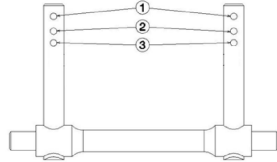
Part Number		F.41.14.022	F.41.14.024	F.41.14.026	
Stiffness	lbs/inch	600	800	1000	
Stiffness	N/mm	106	141	176	

Standard are 1000 at the front and 800 at the rear.

图1 picture1

3.6.2 FRONT ANTI-ROLL BAR STIFFNESS

ARBØ	Stiffness at the wheel versus Position (Standard is Ø11)			N/mm
	1	2	3	
Ø11	95	70	52	
Ø14	228	166	123	

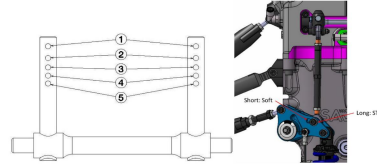


Here the anti-roll bar rate graph from the different anti-roll bar diameters and positions.

图2 picture2

3.6.3 REAR ANTI-ROLL BAR STIFFNESS

ARBØ	Stiffness at the wheel versus Position (Standard is Ø11)										N/mm
	Long point on rocker (MR 0.53)					Short point on rocker (MR 0.44)					
	1	2	3	4	5	1	2	3	4	5	
Ø11	139	110	85	68	51	94	74	58	46	36	
Ø14	307	239	82	142	111	207	161	123	96	75	



Here the anti-roll bar rate graph from the different anti-roll bar diameters and positions.

图3 picture3

Available shims:

Part Number	Description
F.31.14.110	Camber shim 1 mm
F.31.14.111	Camber shim 1.5 mm
F.31.14.112	Camber shim 2 mm
F.31.14.217	Camber shim 4 mm

The standard gearbox build specification is:  
 Differential: no limited slip  
 CWP ratio: 10/31  
 Gear ratios: 1st 12/30  
 2nd 16/30  
 3rd 18/27  
 4th 20/25  
 5th 24/26  
 6th 25/23

Camber setup					
Front Axle					
Position	Angle (°)	Shims (mm)	Shims	mm/0.5°	°/mm
STD	3.5	5	2 + 2 + 1	1.53	0.33
Max	5.1	0	0		
Min	2	9.5	4 + 2 + 1.5		
Rear Axle					
Position	Angle (°)	Shims (mm)	Shims	mm/0.5°	°/mm
STD	2.5	5.5	2 + 2 + 1.5	1.69	0.30
Max	4.1	0	0		
Min	1	10.5	4 + 4 + 1 + 1.5		

图4 picture4

图5 picture5

	Front Castor Angle	Rear Castor Angle
True castor angle (TCA)	= MCA + 7.89°	= MCA - 25.44°
Base settings (TCA)	8.21°	-22.65°
Base set up length, wishbone ball centre to ball centre	557.662m	602.92mm
Ball end length for base set up		

图6 picture6

The Toe can be measured with the following formula:

$$\text{Toe} = B/2 - A/2$$

The correlation between degrees and the value B/2-A/2 is :

B/2-A/2 (mm)	Toe (deg)
18	3
12	2
6	1
0	0
-6	-1
-12	-2
-18	-3

图7 picture7

Damper adjustment:	
Bound :	Rebound:
On damper body	On damper head
turn clockwise = closing = harder	turn clockwise = closing = harder
24 clicks	14 clicks
B0 = fully closed = hard	R0 = fully closed = hard
B12 = mid	R7 = mid
B24 = fully opened = soft	R14 = fully opened = soft

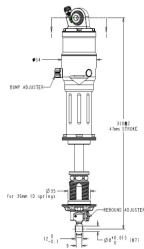
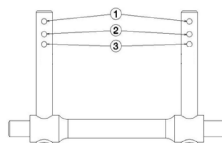


图8 picture8

3.6.2 FRONT ANTI-ROLL BAR STIFFNESS

ARBØ	Stiffness at the wheel versus Position (Standard is Ø11)			N/mm
	1	2	3	
Ø11	95	70	52	
Ø14	228	166	123	

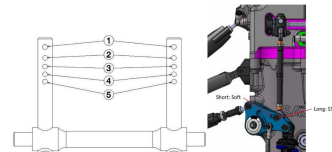


Here the anti-roll bar rate graph from the different anti-roll bar diameters and positions.

图9 picture9

3.6.3 REAR ANTI-ROLL BAR STIFFNESS

ARBØ	Stiffness at the wheel versus Position (Standard is Ø11)										N/mm
	Long point on rocker (MR 0.53)					Short point on rocker (MR 0.44)					
	1	2	3	4	5	1	2	3	4	5	
Ø11	139	110	85	68	51	94	74	58	46	36	
Ø14	307	239	82	142	111	207	161	123	96	75	



Here the anti-roll bar rate graph from the different anti-roll bar diameters and positions.

图10 picture10