



ST32 BV

MAN038.011

🇬🇧 JANUARY 2010



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**CONFIGURE THE KART ACCORDING TO THE GUIDE INSTRUCTIONS
USE SPARE PARTS OF SODIKART ORIGIN**

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You have decided to acquire a SODI chassis. We would like to thank you for choosing the SODI ST32BV.

Your kart has been developed for performance and safety.

It is the outcome of SODIKART's experience and of the latest research at the highest level of competition.

This manual contains instructions for the assembly and the maintenance of your kart, according to the rules of the art.

Safety on a track is a personal and collective matter at the same time: taking care of your ST32BV is the first guarantee of your safety and of the safety of other pilots.

This manual also contains advice about adjustments.

Their purpose is to help you exploiting all the potential of your ST32BV.

Enjoy driving your ST32BV,

The logo for Sodi, featuring the word "Sodi" in a stylized, red, cursive font with a white outline and a slight shadow effect.

SAFETY INSTRUCTIONS

The ST32BV has been designed for leisure and high level competition.

Its design, which complies with the pending rules of the **CIK**, ensures an optimum safety in normal working conditions.



Its high speed and performances imply a proper maintenance.

- **For your safety and the one of other pilots, please thoroughly respect :**
 - The assembly instructions.
 - The adjustment recommendations.
 - The maintenance plan.
- **Please pay especial attention to the instructions or comments to the following symbols below :**

NOTE: Gives useful information.

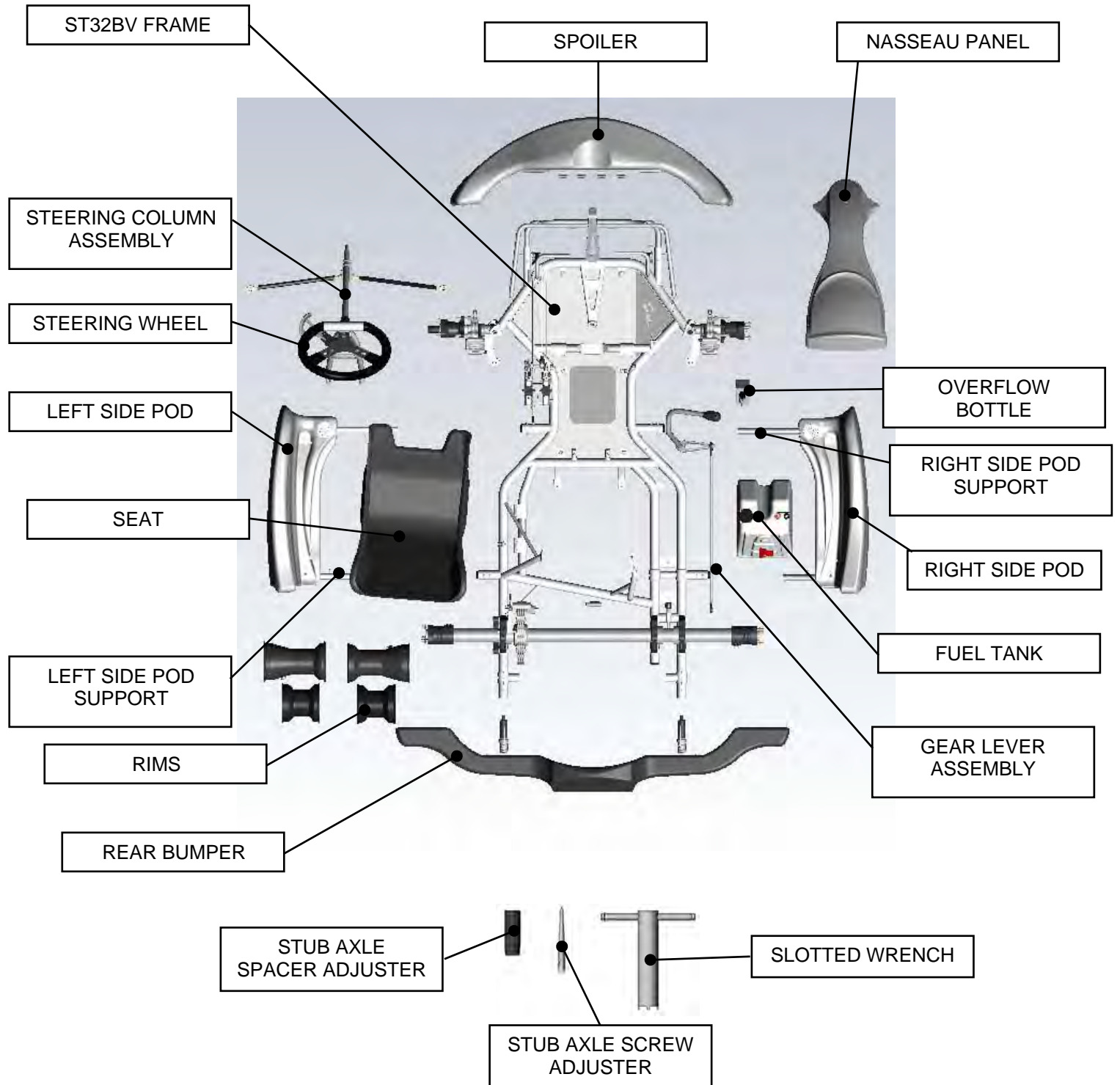
 **ATTENTION**  : indicates a high risk of severe injury if the instructions are not followed.

- Should you not find an answer to your questions in this manual or face any problem, please get advice from the SODIKART distribution network.

 **ATTENTION** 

- ✓ The SODI ST32BV is designed for safety and reliability in normal conditions of use. Before using it, please read this manual and carefully follow the instructions. By not doing so, you might be exposed to a risk of severe, even fatal injury, and your kart might suffer damages.
- ✓ The SODI chassis can only be used on an approved track and by a driver who is in possession of a valid membership card of the go-kart's federation of his own country.
- ✓ Prior to going on the track, please check all points related to safety.
- ✓ In order to avoid fire, put the kart at least one meter away from the buildings. Never leave inflammable objects close to the kart.
- ✓ If fuel has been poured, wipe and wait for vapors to dissipate, before starting the kart.
- ✓ Kids and domestic animals have to be kept away from the kart and the track.
- ✓ Never drive the kart without adequate pilot equipment.

1- GETTING ST32BV OUT OF THE PACKING



NOTE :

Prior to assembling your kart, check the above described elements and familiarize yourself with them.

THE PART NUMBERS OF THE VARIOUS ITEMS CAN BE FOUND IN THE "SPARE PARTS CATALOGUE".

2-TOOLING FOR ASSEMBLY AND ADJUSTMENT

DESIGNATION	DIAMETER		PART NUMBER
- T handle wrench allen key	4mm		OU 911.002
- T handle wrench allen key	5 mm		OU 911.003
- T handle wrench allen key	6 mm		OU 911.004
- T handle wrench allen key	8 mm		OU 911.005
- T handle socket spanner	8 mm		OU 912.004
- T handle socket spanner	10 mm		OU 912.001
- T handle socket spanner	11 mm		OU 912.002
- T handle socket spanner	13 mm		OU 912.003
- Key for slotted round nut	M20	supplied	OU 914.003
- Stub axle spacer adjuster	Hub	supplied	OU 931.007
- Stub axle screw adjuster	Stub axle	supplied	OU 931.006

3- MAINTENANCE PRODUCTS

- Cleaner : (paint - plastics) : LU 832.007
- WD 40 LU 833.003
- Grease for chain LU 822.002

NOTE:

FOR OTHER TOOLS, ACCESSORIES AND EQUIPMENTS PLEASE REFER TO THE ITAKA CATALOGUE.

SEQUENCE OF ASSEMBLY AND INSTRUCTIONS

STEERING COLUMN AND STEERING WHEEL (chapter 4).

FUEL TANK AND OVERFLOW BOTTLE (chapter 5).

SEAT AND STIFFENERS (chapter 6).

KG SODI BODYWORK (chapter 7).

NOTE:

RECOMMENDED TIGHTENING TORQUES:

Do not overtighten screws and bolts

Ø6 = 10 to 12 m.N

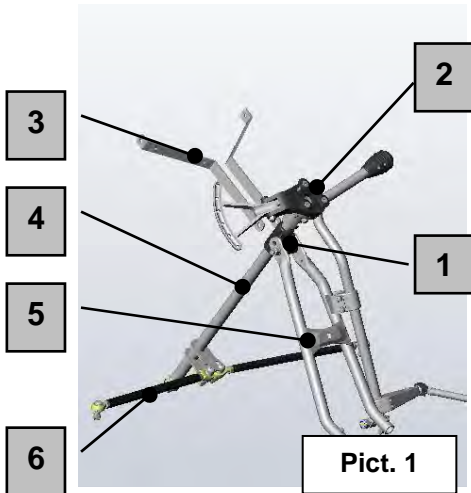
Ø8 = 12 to 24 m.N

Ø10 = 24 to 48 m.N

Screws without bolts are to be blocked with 1 drop of special glue (LU 861.001)

Lubricate rotating parts, ball joints, gas cable

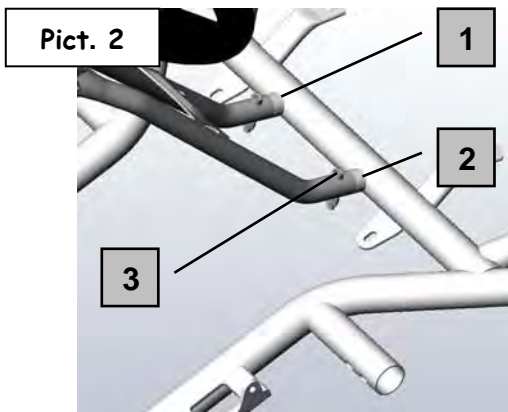
4- ASSEMBLY OF THE STEERING COLUMN AND STEERING WHEEL.



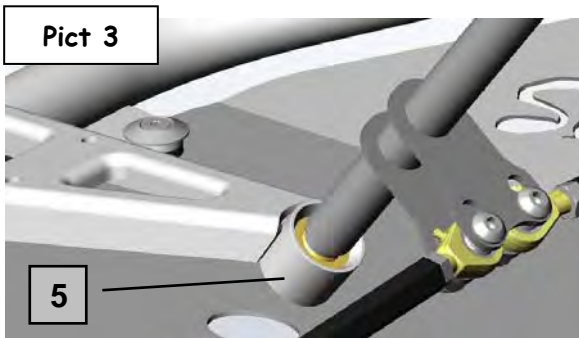
THE SET CONSISTS IN:

- One plastic steering column support (1).
- One steering wheel support (2).
- Two nassau panel supports (3).
- One steering column (4).
- One steering column support (5).
- Two steering tie rods + ball joints (6).
- Raise the set as in picture 1.

4.1 ASSEMBLY OF THE STEERING COLUMN SUPPORT (PIC 2)



- Place the steering column support on the two pins canons (1) and (2).
- Put the screws (3) + nylstop bolts as indicated in picture 2.
- Tighten.



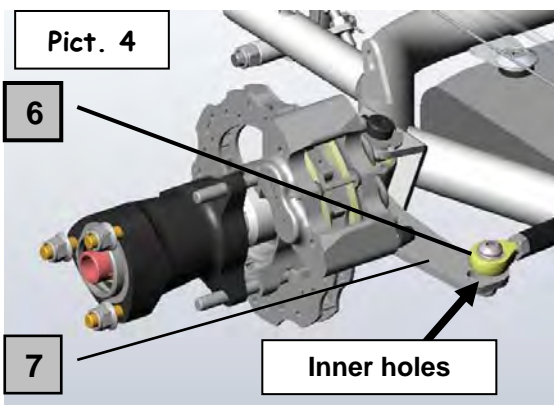
4.2 ASSEMBLY OF THE STEERING COLUMN (PIC 3)

- Insert the threaded end of the steering column in the ball joint (4).
- Place the bolt (5).
- Tighten.

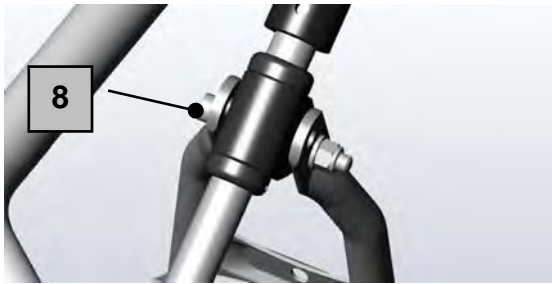
4.3 ASSEMBLY OF THE TIE-RODS (PIC 4)

After cutting the tie-wrap maintaining the stub axles:

- Place the ball joints (6) above the stub axle arm (7).
- Insert the screw in the outer hole of the stub axle arm.
- Place the washer on top of the ball joint and insert the screw.
- Place the bolt and tighten.



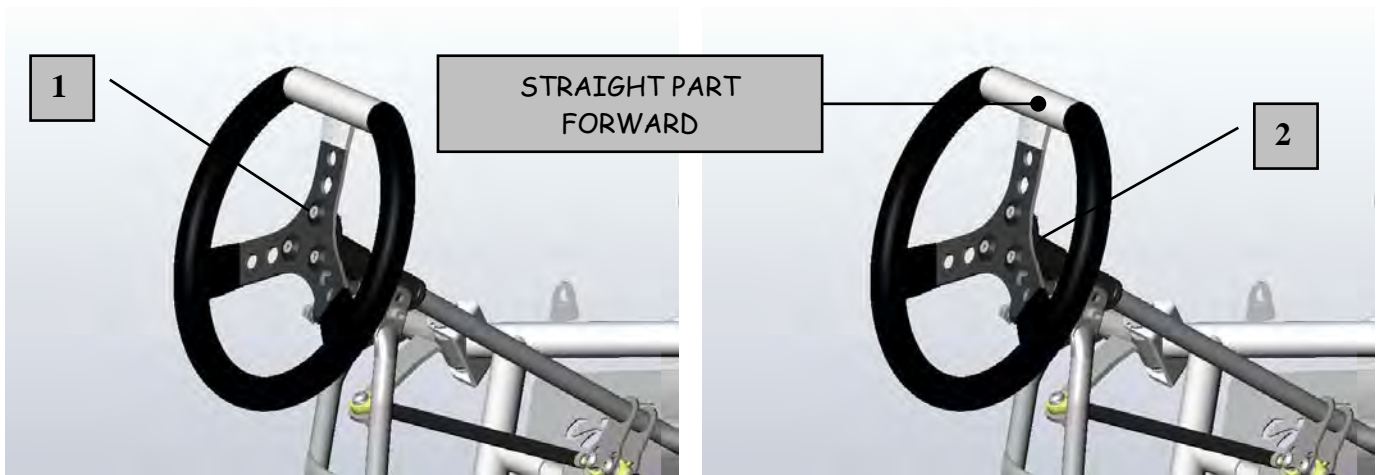
4.4 TIGHTENING THE PLASTIC STEERING COLUMN SUPPORT.



After completing the above steps :

- Tighten the screw (8).

4.5 ASSEMBLY OF THE STEERING WHEEL.



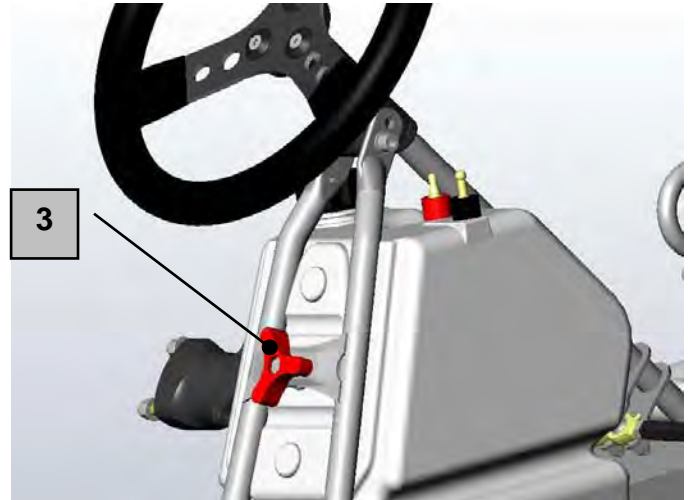
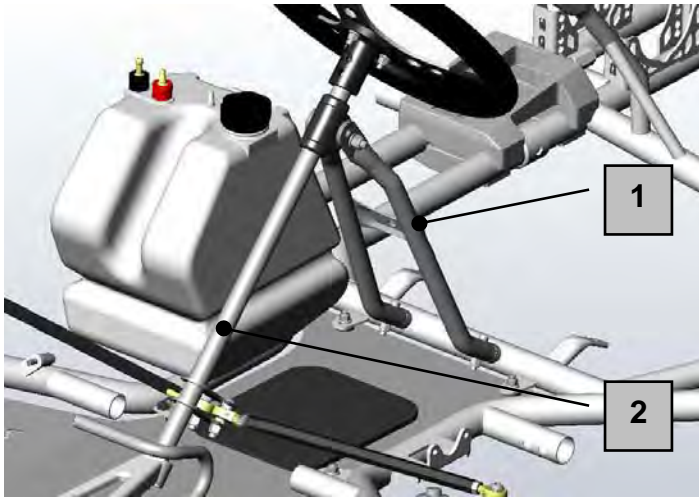
- Tighten the steering wheel (1) with the 3 screws, on the steering wheel support (2).
- Tighten the steering wheel support on the steering column.

Check: once the steering system is assembled, please check that the steering wheel is free to make a quarter of a turn right and left.

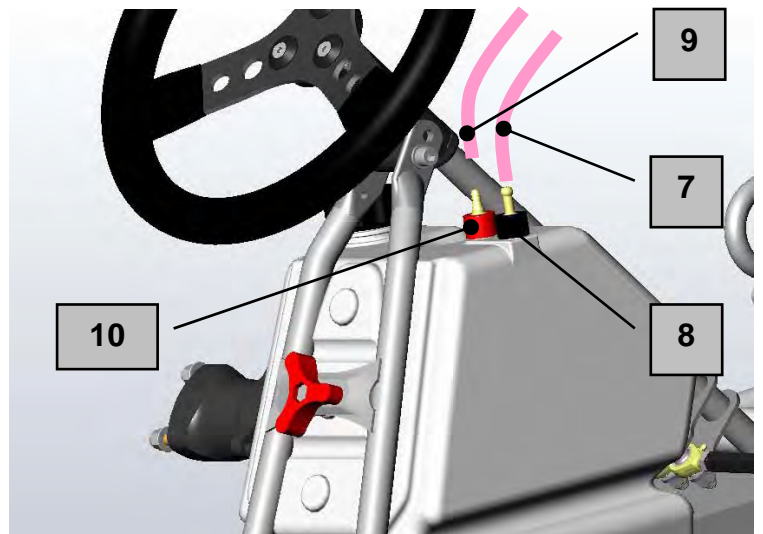
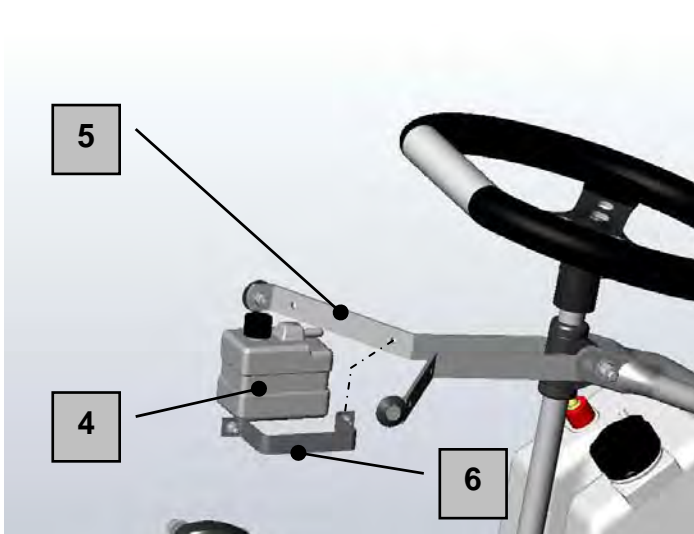
⚠ ATTENTION ⚠

- ✓ A bad assembly or a bad adjustment of the steering system can lead to accidents. Systematically check the tightening of the system and its adjustment.

5- ASSEMBLY OF THE FUEL TANK AND OF THE OVERFLOW BOTTLE.



- Insert the fuel tank between the steering column support (1) and the steering column (2) (see pictures)
- Tighten with the fly nut (3)

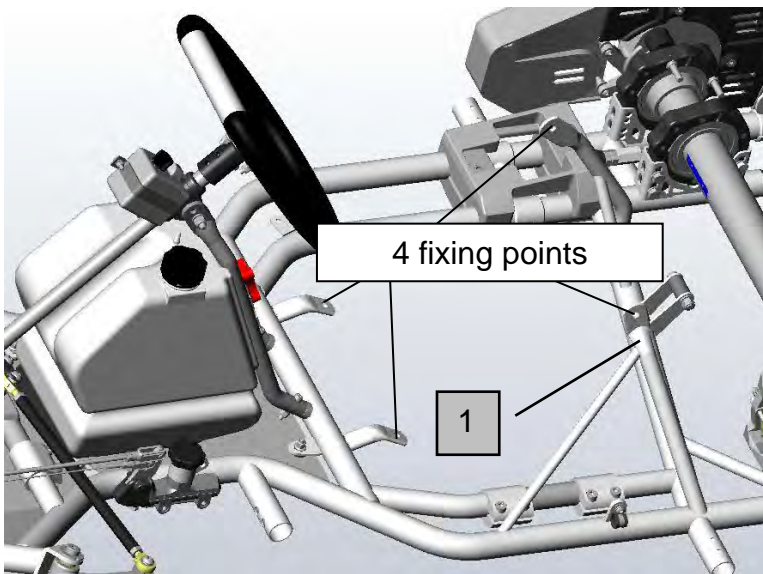


- Put the overflow bottle (4) on the nassau panel support (5) with the overflow bottle stand (6).
- Connect the overflow bottle hose (7) to the return (8).
- Connect the petrol tank hose (9) to the red plug (10).

NOTE:

- CHECK THE PRESENCE OF THE DIVER UNDER THE RED PLUG.

6-ASSEMBLY OF THE SEAT AND SEAT STIFFENERS.



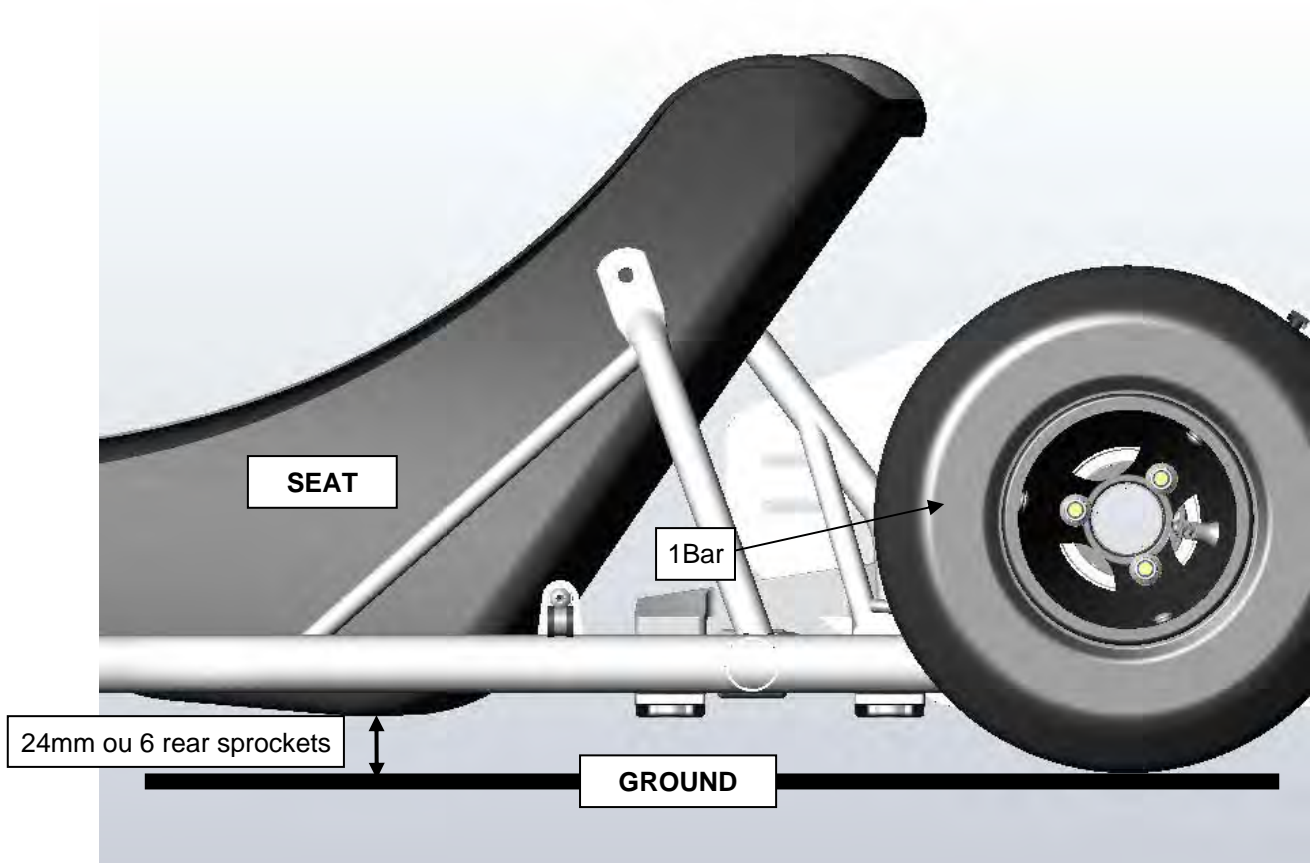
Measurements given below correspond to the standard adjustment of the seat, recommended by SODIKART, for the ST32BV.

Get the seat supports (1) closer, or wider, depending on the seat size.

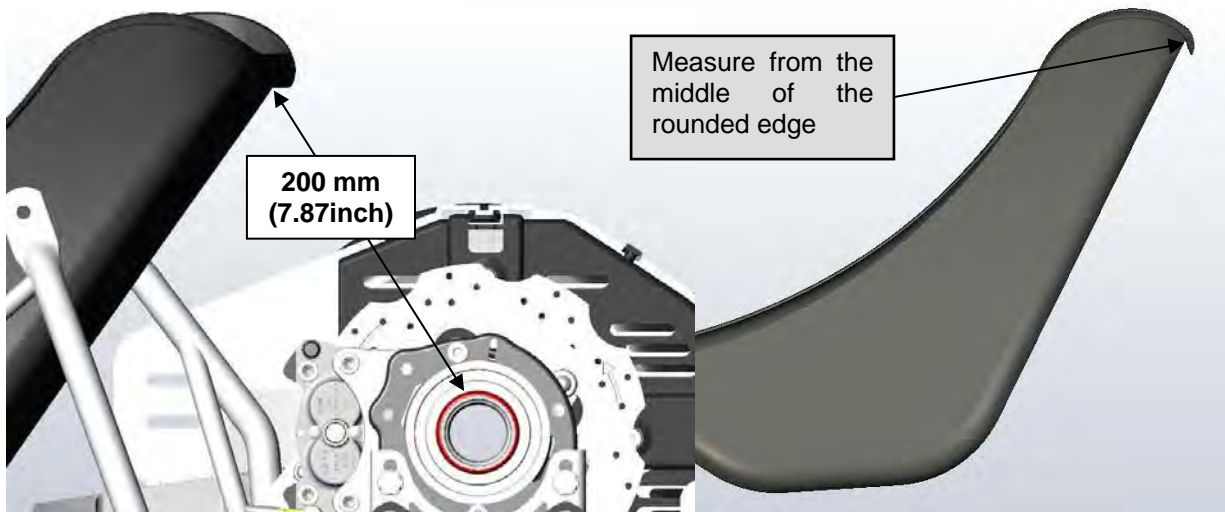
Use the shims of the seat fixing kit to get a good fit.

- The washers of the seat fixing kit comply with CIK/FIA and with your local national rules.

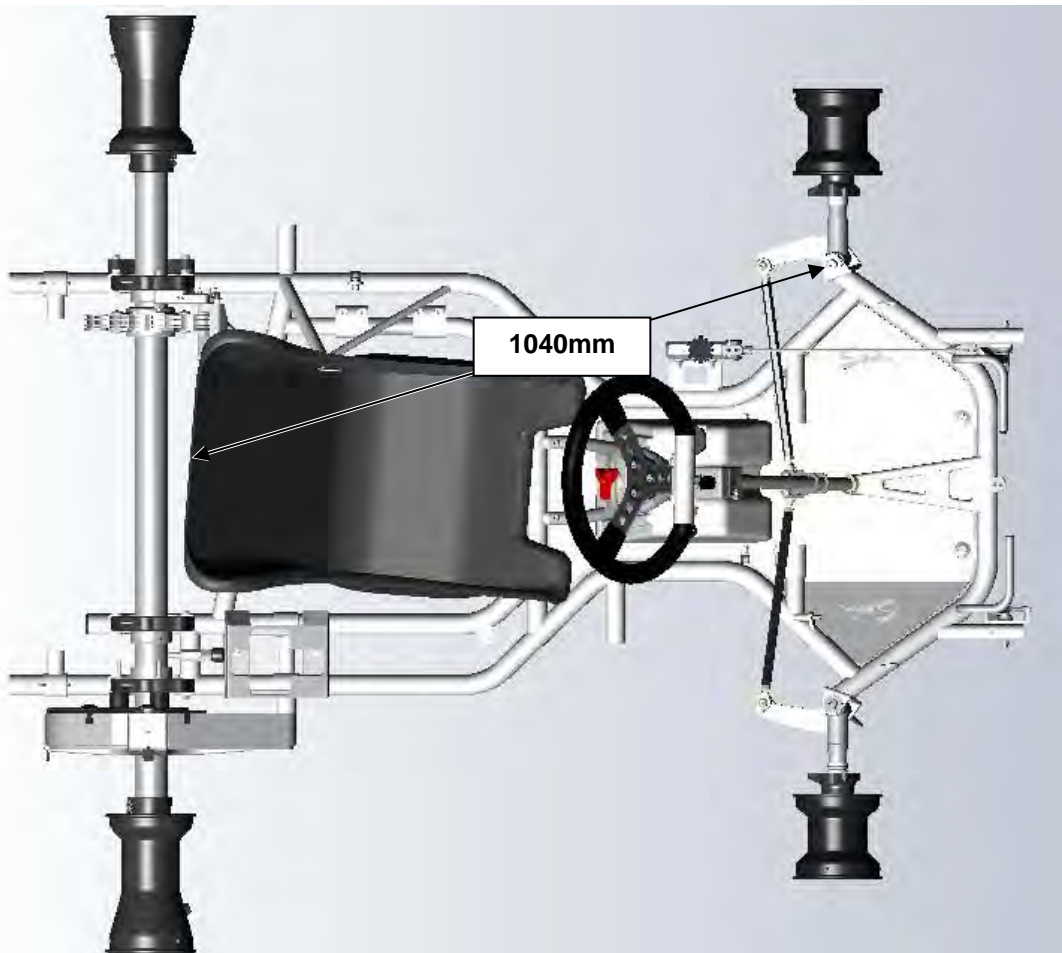
6-1 GROUND CLEARANCE



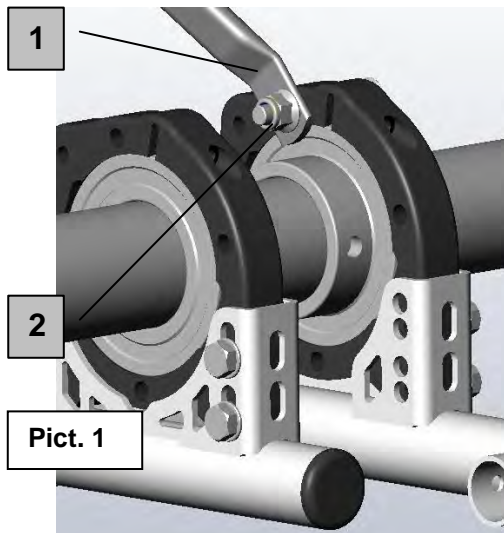
6-2 DISTANCE BETWEEN THE REAR AXLE AND THE MIDDLE OF THE ROUND REAR EDGE OF THE SEAT.



6-3 DISTANCE BETWEEN THE AXIS OF THE LEFT SIDE STUB AXLE FORK AND THE MIDDLE OF THE REAR ROUNDED EDGE OF THE SEAT.



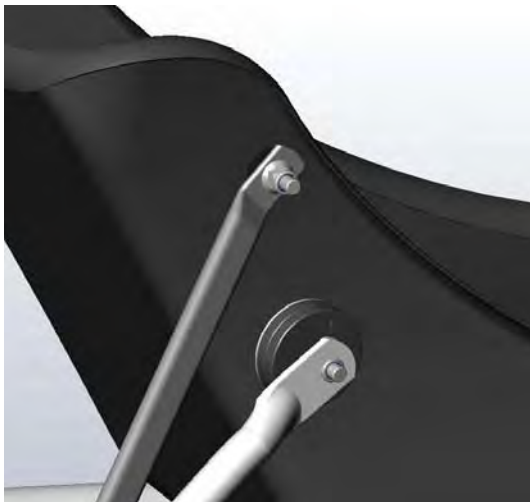
6-4 ASSEMBLY OF THE SEAT STIFFENERS.



ASSEMBLY OF THE LOWER END (PIC 1)

- 1- Put the seat stiffener lower end (1) in place.
- 2- Put the bolt (2) in place and pre-tighten.

For screws and bolts references, refer to the ST32BV spare parts catalogue



ASSEMBLY OF THE UPPER END (PIC 2)

5. Place the upper end of the stiffener.
 6. Make sure there is no contact with the exhaust system and with any part of the engine.
- If necessary, slightly bend the stiffener.
7. Drill a 8.5 mm diameter hole in the seat.
 8. Place one screw + conical washer.
 9. Tighten both upper and lower end.

For screws and bolts references, refer to the ST30 / ST32 spare parts catalogue

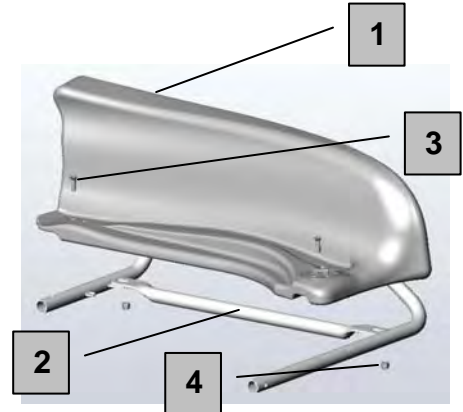
FOR OTHER TYPES OF STIFFENERS, PLEASE REFER TO THE ST32BV SPARE PARTS CATALOGUE OR TO THE ITAKA CATALOGUE

7- ASSEMBLY OF THE KG BODYWORK.

7-1 ASSEMBLY OF THE SIDE POD ON ITS SUPPORTS

- Place the side pod (1) on the side pod support (2).
- Place the screws (3) through the side pod (1) and the side pod support (2).
- Tighten the assembly with the nuts (4).

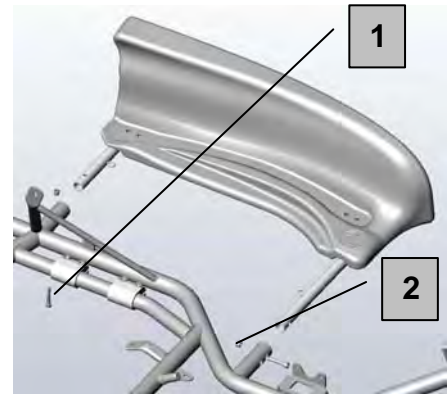
Refer to the ST32BV spare parts catalogue for the bolting.



7-2 ASSEMBLY ON THE FRAME

- Check that the bushings are pushed in the frame.
- Insert the side pod assembly into the bushings.
- Tighten with the screws (1) and the nuts (2).

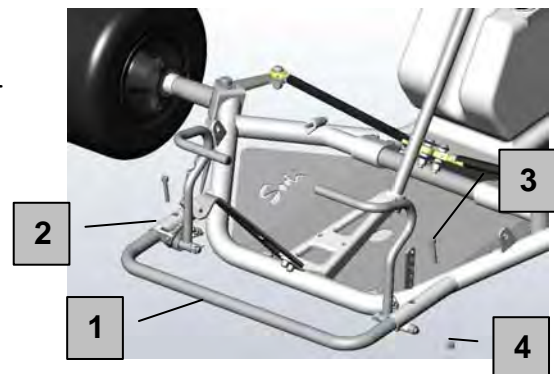
Refer to the ST32BV spare parts catalogue for the bolting



7-3 ASSEMBLY OF THE SPOILER LOWER SUPPORT ON THE FRAME

- Insert the spoiler lower support (1) into the front cross member of the frame (2).
- Tighten with the screws (3) and the nuts (4).

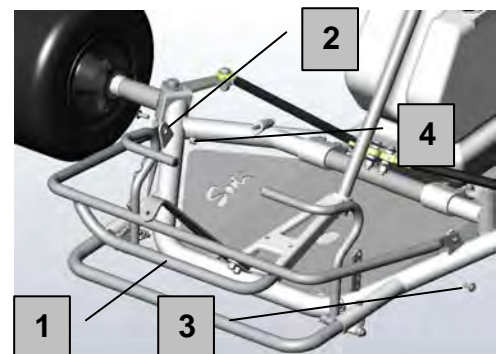
Refer to the ST32BV spare parts catalogue for the bolting



7-4 ASSEMBLY OF THE SPOILER UPPER SUPPORT ON THE FRAME

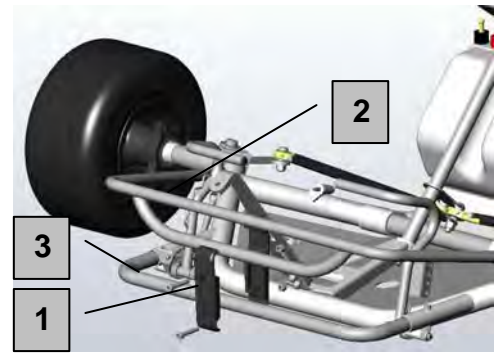
- Place the spoiler upper support (1) on the outer face of the lug (2).
- Tighten with the screws (3) and the nuts (4).

Refer to the ST32BV spare parts catalogue for the bolting

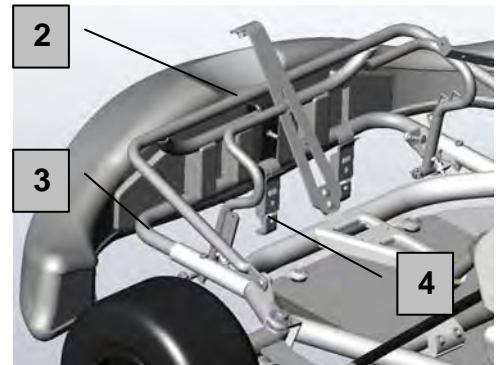


7-5 ASSEMBLY OF THE SPOILER

- Assemble the spoiler fixation kit (1) between the spoiler upper support (2) and the spoiler lower support (3) with two screws and two nuts.



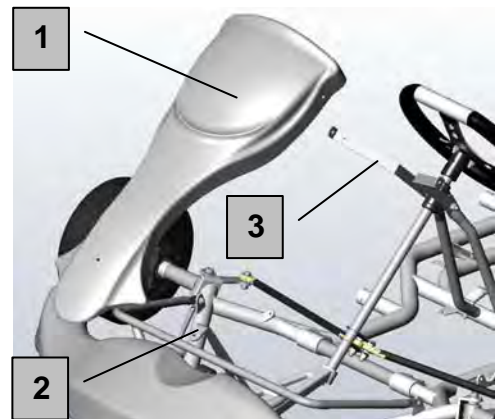
- Place the flanges (4) between the spoiler support (2) and (3), then lock.



Refer to the ST32BV spare parts catalogue for the bolting

7-6 ASSEMBLY OF THE NASSEAU PANEL

- Tighten the nasseau panel (1) on its supports (2) and (3) with screws, nuts, and washers.



Refer to the ST32BV spare parts catalogue for the bolting

8- STARTING YOUR ST32BV

SAFETY INSTRUCTIONS TO THE PILOTS

WARNING

YOUR KART CAN ONLY BE DRIVEN ON A TRACK APPROVED BY CIK/FIA, OR YOUR LOCAL FEDERATION AND BY A DRIVER WHO IS IN POSSESSION OF A VALID MEMBERSHIP CARD OF THE GO-KART'S FEDERATION OF HIS OWN COUNTRY.

PILOT PROTECTION

Before going on the track, the pilot must wear the following protections:

- Integral helmet: CIK/FIA approved, fitting the pilot head size, with tightened strap and closed visor. Refer to CIK/FIA regulations (**compulsory**).
- Suit: CIK / FIA level 1 or level 2 approved. (**compulsory**)
- Gloves. (**compulsory**)
- Neck protection : CIK/FIA approved (**compulsory**)
- Rib protection: fitting pilot's size and seat (recommended).
- Rain suit: with water tight fasteners (recommended when necessary).

CHOOSE THOSE EQUIPMENTS WITHIN THE CIK / FIA APPROVED ONES OF THE ITAKA CATALOGUE

DRIVING IS FORBIDDEN TO ANY PILOT:

- Wearing a scarf because of risk with rotating parts.
- With long hair coming out of the helmet.
- With wide floating clothes.
- With health problems, not compatible with high speed driving.
- Under the influence of drugs and (or) alcohol.

ATTENTION

- ✓ For your safety and the safety of other pilots, strictly follow the above instructions: not doing so may lead to severe, even fatal injuries.
- ✓ Be aware that some medicines reduce your ability to drive

9- STANDARD ADJUSTMENTS OF THE ST32BV



	DRY	WET
STUB AXLE HEIGHT		
FRONT TRACKING WIDTH	<p>2 rings inside (10mm)</p>	<p>2 rings inside (20mm)</p>
REAR TRACKING WIDTH		
REAR AXLE POSITION	<p>TOP</p>	<p>TOP</p>
POSITION OF MASSES		
POSITION OF EXCENTRICS		
POSITION OF STEERING TIE RODS ENDS		
DOUBLE LATERAL CRADDLE / REAR TORSION BAR	<p>REMOVE the double lateral craddle. REMOVE the torsion bar.</p>	<p>PLACE the double lateral craddle. PLACE the torsion bar horizontally.</p>

FOR TYRE PRESSURES, REFER TO TABLE CHAP 14-2

10- ADJUSTMENT OF FRONT WHEELS

10.1 ADJUSTMENT OF FRONT TRACKING WIDTH

The adjustment of the front width is realized with several spacers (1 spacer of 15mm, and 3 spacers of 5mm for each stub axle.), and 3 hubs type (short hub: 60mm, long hub: 80mm or extra-long hub: 100mm).

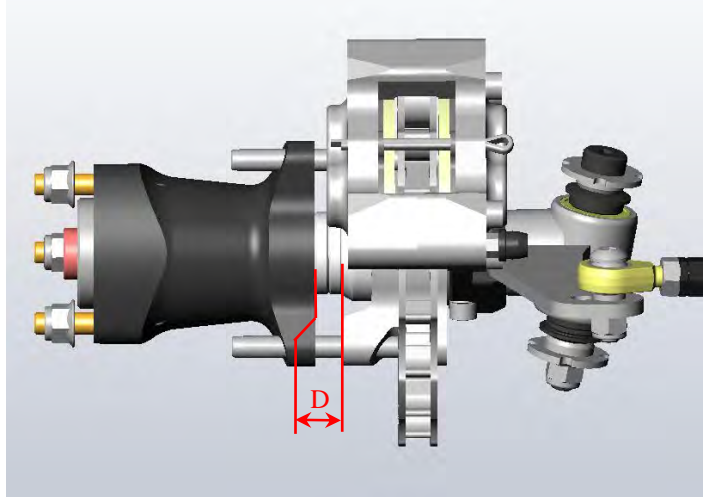
The wider the front is widened, the harder the steering is hard, and the narrower the front is narrows, the easier the steering is easy.

DRY TRACK

We advise you to adjust the front with two spacers of 5mm inside (D=10mm), and use the long hubs: 80mm.

If you wish increase the grip of front, it suffice to increase the width of the front with spacers.

With the front brake on your chassis, the adjustment of the front is limited. Place a maximum of 20mm of spacers inside. (D max=20mm). Use extra-long hubs: 100mm on wet track.

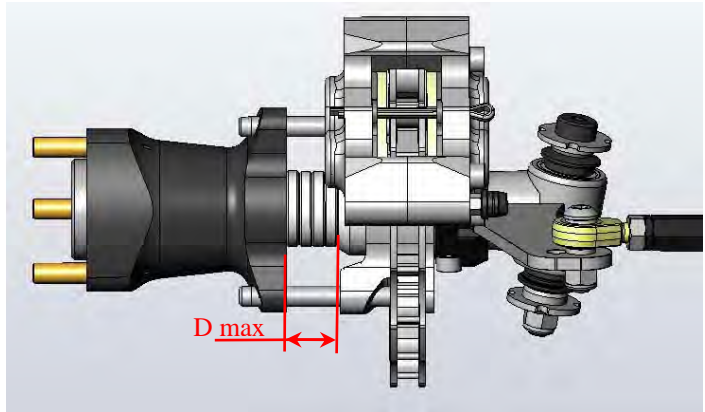


WET TRACK

We advise you to adjust the front with one spacer of 15mm and one spacer of 5mm inside (D=20mm), and use the long hubs: 80mm.

If you wish increase the grip of front, it suffice to increase the width of the front with spacers

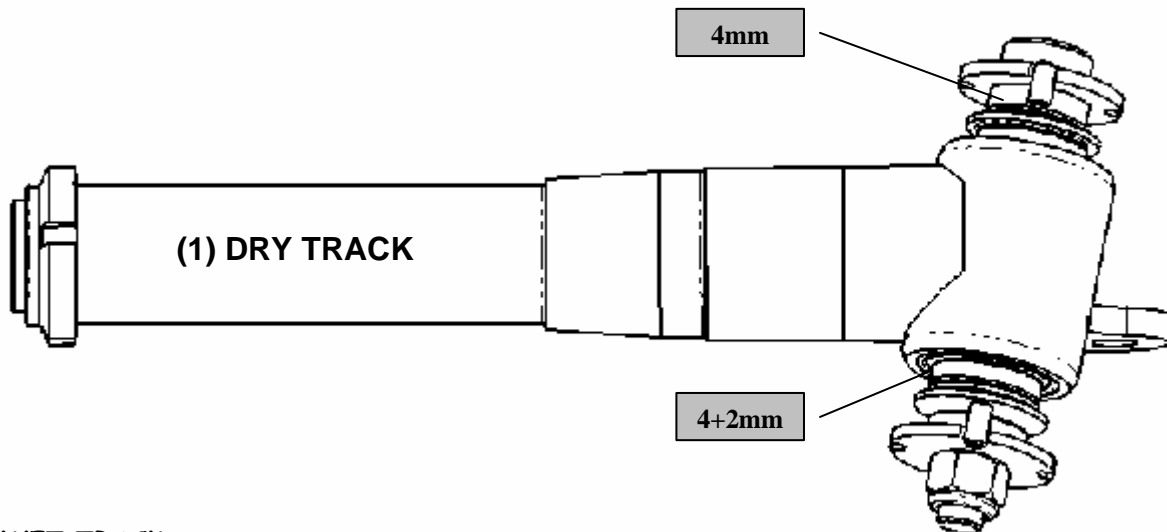
With the front brake on your chassis, the adjustment of the front is limited. Place a maximum of 20mm of spacers inside. (D max=20mm). Use extra-long hubs: 100mm on wet track.



10.2 ADJUSTMENT OF FRONT WHEEL HEIGHT

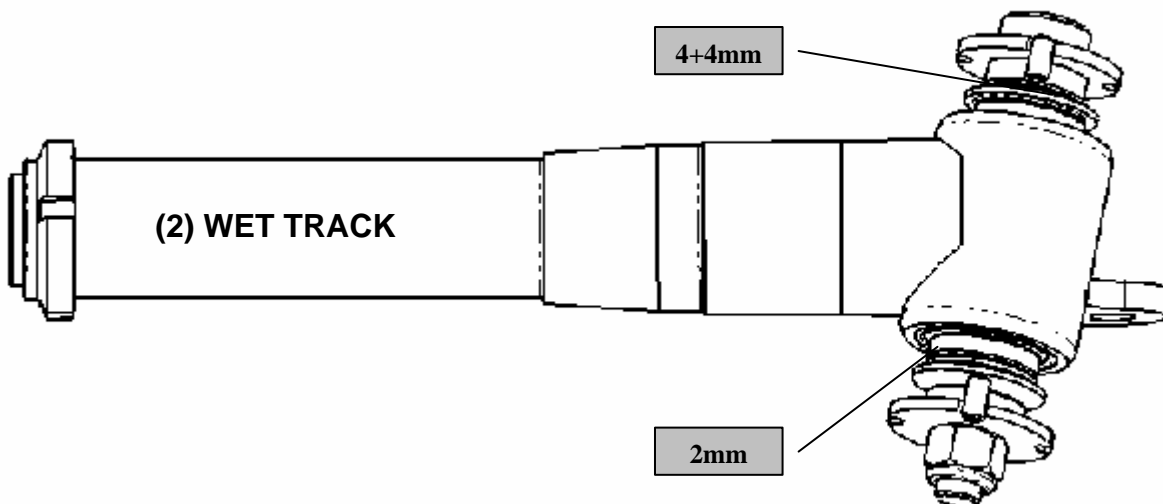
DRY TRACK

- Place one 4mm spacer on top and one 4 mm + one 2 mm spacer at the bottom (1).



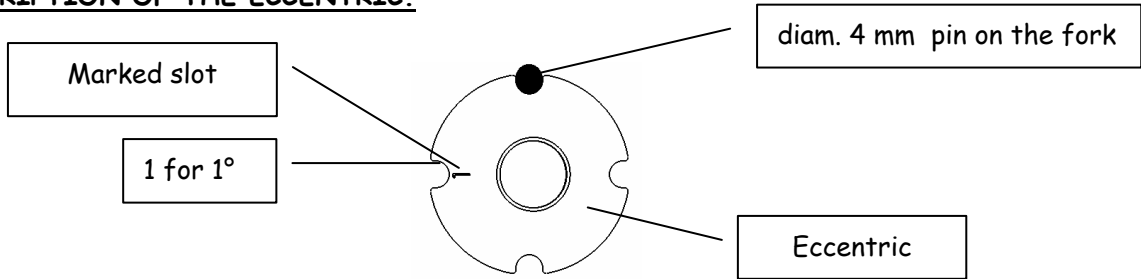
WET TRACK

- Place one 4 mm + one 4 mm spacers on top, and one 2 mm spacer at the bottom (2).
- The adjustment of dry track (1) can be suitable for wet track.

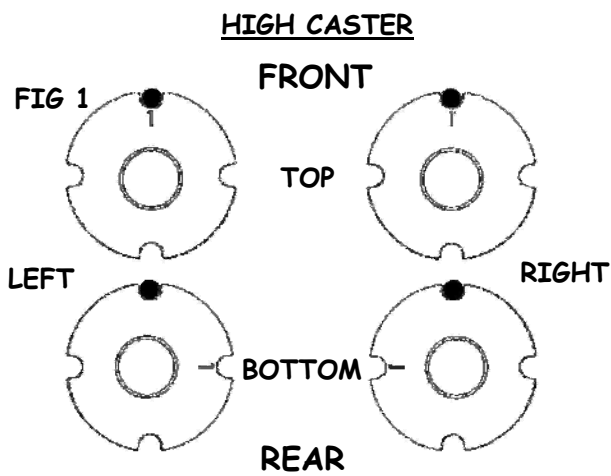


10.3-ADJUSTMENT OF THE CAMBER AND OF THE CASTER

DESCRIPTION OF THE ECCENTRIC.

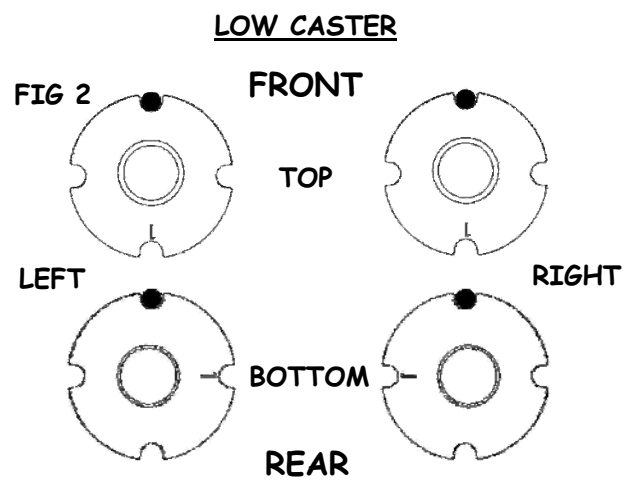


ADJUSTMENT OF THE CASTER



Eccentrics on top:

The mark is positioned in front of the Ø4 mm pin.
(Towards the front of the chassis)



Eccentrics on top:

The mark is positioned on the opposite side of the Ø4 mm pin.
(Towards the rear of the chassis).

STANDARD ADJUSTMENT (fig 1)

- 1° eccentrics place in high caster position (fig 1).

INCREASE THE CASTER (fig 1)

- 2° eccentric in high caster (fig 1) position.
In extreme conditions, use 3°, 4° or more eccentrics.

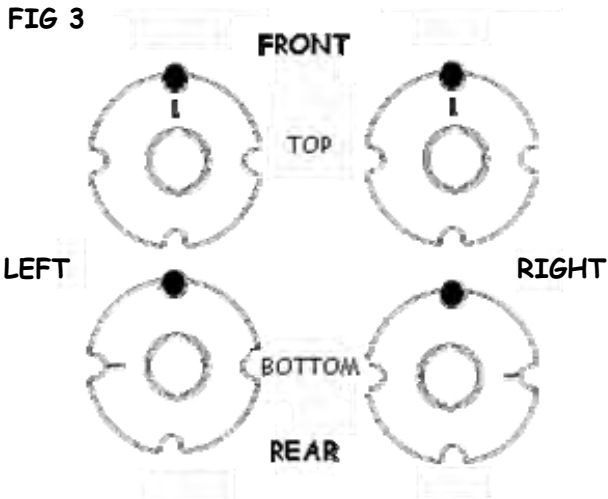
REDUCE THE CASTER (fig 2)

- 2° ou 3° eccentric (even more in extreme conditions) in low caster position.

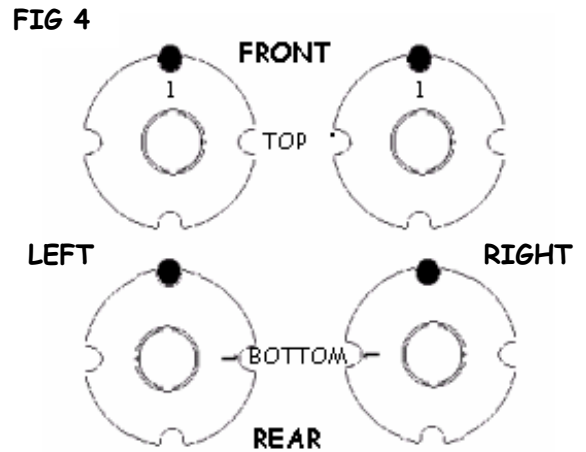
ADJUSTMENT OF THE CAMBER

USE THE ECCENTRICS AT THE BOTTOM:

MORE POSITIVE



MORE NEGATIVE



Eccentrics at the bottom:

- The mark is positioned towards the outside of the chassis.

Eccentrics at the bottom :

- The mark is positioned towards the inside of the chassis.

STANDARD ADJUSTMENT (Corresponds to fig4)

INCREASE THE CAMBER (fig 4)

- Use the same position fig 4 and change the eccentric of 1° by the eccentric of 2°.

REDUCE THE CAMBER (fig 3)

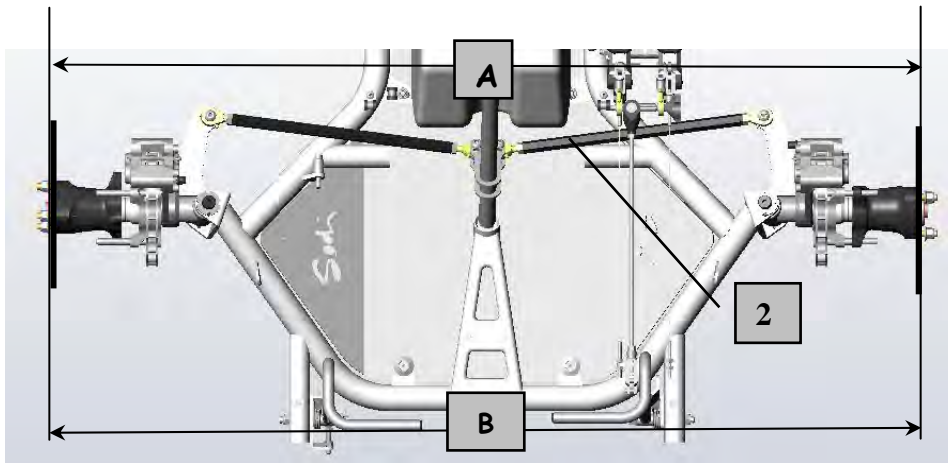
- Use position fig 3.

**FOR HIGH DEGREES ECCENTRICS TO BE USED IN EXTREME CONDITIONS,
REFER TO THE ITAKA CATALOGUE**

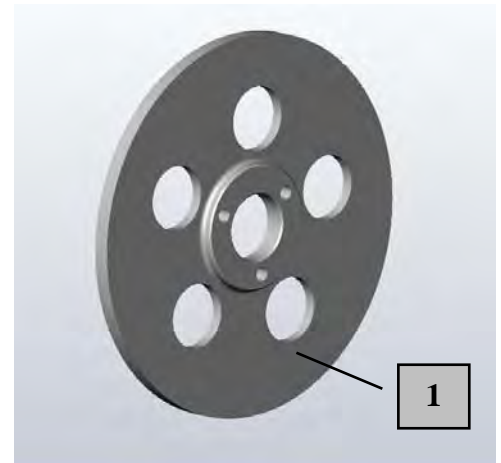
NOTE:

- Some negative camber generally improves the performances of the ST32BV.

10.4 ADJUSTMENT OF PARALLELISM



1. Lay the kart on a trolley.
2. Place the adjustment tool (1) (refer to the ITAKA catalogue).
3. Loosen the lock nuts on each tie rod (2).
 - **Attention:** on the stub axle side, lock nuts are right hand; on the steering column side, lock nuts are left hand.
4. Position the steering wheel in the axis of the kart.
5. **Measure A and B with a tape. Adjust the tie rods until you get $A=B$ with a tie rod length on the right side 1.5mm bigger than the tie rod length on the left side.**
6. When $A=B$ the parallelism is perfect. Tighten the 2 lock nuts on each tie rod (2).
7. Remove the adjustment tool (1).



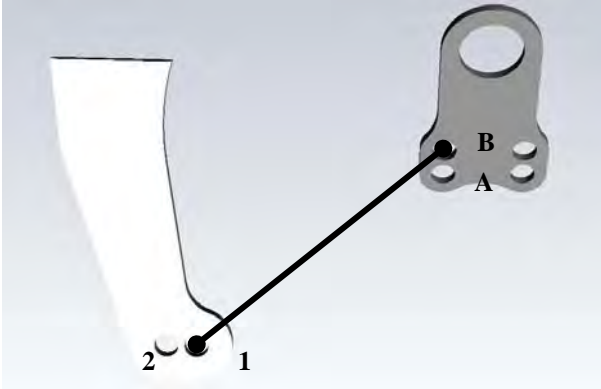
NOTE:

- On wet track, recommended adjustment: $B+7\text{mm}$ than A
- Do not forget to tighten the 2 lock nuts on the tie rods; otherwise the parallelism will be lost in a few minutes.
- Any time you work on the front wheels, check the parallelism. Do the same after shocks.

⚠ ATTENTION ⚠

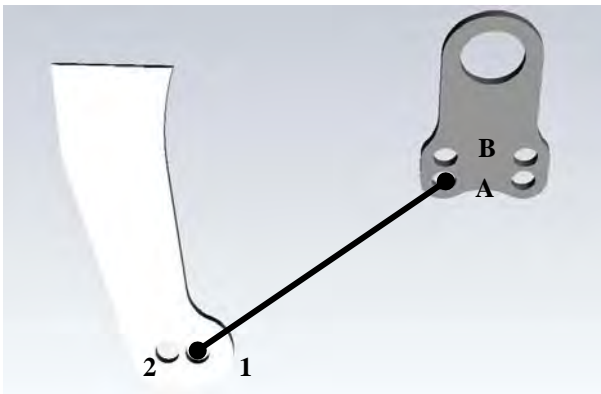
- ✓ Never drive with badly tightened wheels: it may lead to severe, even fatal injuries.
- ✓ Make sure that each ball joint penetrates at least 5 threads in the tie rods.

10.5- ADJUSTMENT OF TIE RODS



ADJUSTMENT B-1

- Standard adjustment.



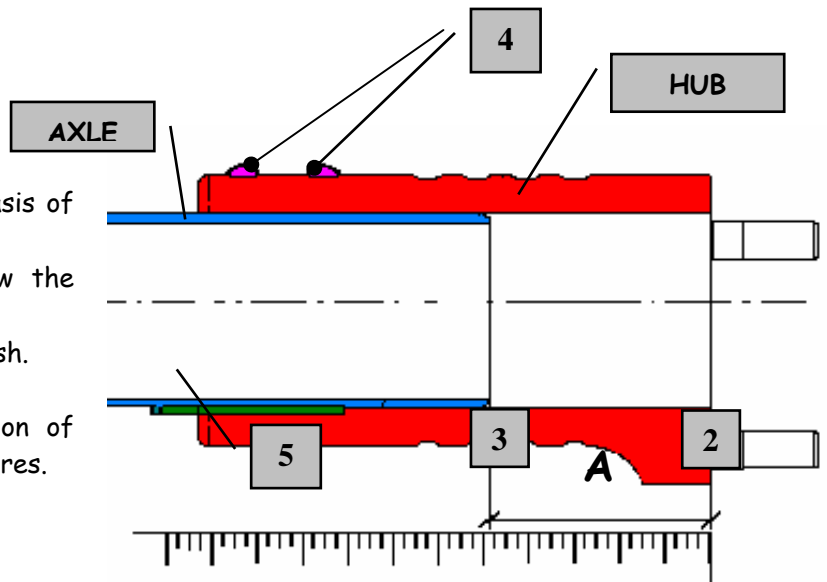
ADJUSTMENT A-1

- Recommended in wet conditions.

11- ADJUSTMENT OF REAR WHEELS

11-1 ADJUSTMENT OF HUBS

1. Lay the kart on a trolley.
2. Remove the two wheels.
3. Measure the distance **A**, from the basis of the hub to the axle edge.
4. Loosen the CHC (4) screws to allow the sliding of the hub on the axle.
5. Slide the hub up to the position you wish.
6. Tighten and block the CHC (4) screws.
7. Mount the wheels; mind the direction of rotation indicated on the side of the tires. Tighten the bolts and block.



NOTE:

- A rear tracking width is measured from the outside of the rims (left and right).
- A wider rear tracking width tends to increase sliding. Too narrow a rear tracking width may lead to a bumpy chassis.

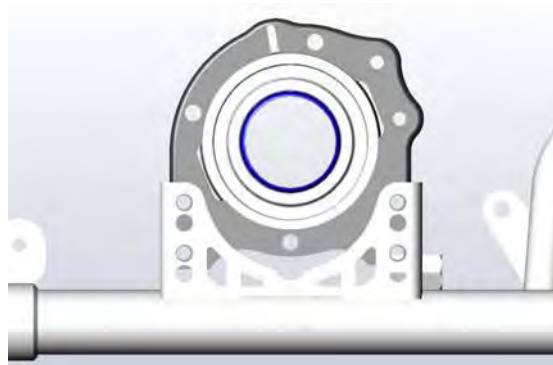
⚠ ATTENTION ⚠

- ✓ Badly tightened wheels may lead to severe, even fatal injuries.
- ✓ Check the hub key (5) is correctly positioned.
- ✓ Never position the hubs beyond the maximum allowed width: it may lead to severe or even fatal injuries.
- ✓

11-2 POSITION OF REAR AXLE

- A large ground clearance means more grip.
- A low ground clearance means more sliding.

In most conditions, the correct axle position is the low ground clearance one. This corresponds to a high position of the axle , relative to the frame.



11-3 TYPE OF AXLE

The stiffness of the axle plays an important part in the behavior of the kart.

AXLE DIAMETER 50, STANDARD (STIFF) Q 30 Available in the ITAKA catalogue.

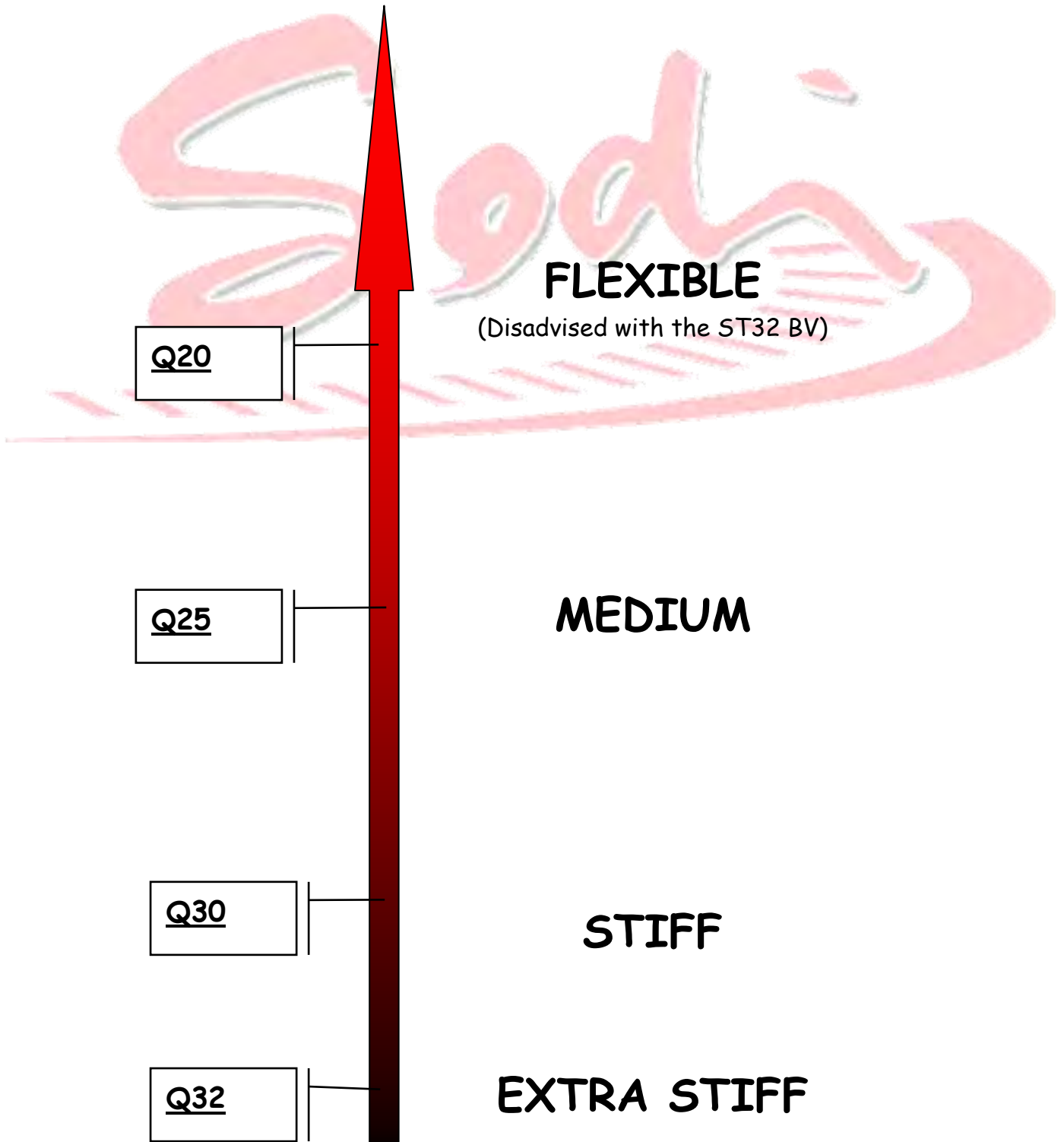
AXLE DIAMETER 50, MEDIUM Q 25 Available in the ITAKA catalogue.

- A flexible axle suits high grip conditions (Heat and (or) gum on the track).
- A stiff axle suits low grip conditions (rain, humid track, cold with little gum track).

In order to get the best out of the ST32BV, do not hesitate to test different stiffness of axle.

To guide your trials, see table next page.

AXLES *Sodi* DIAMETER 50



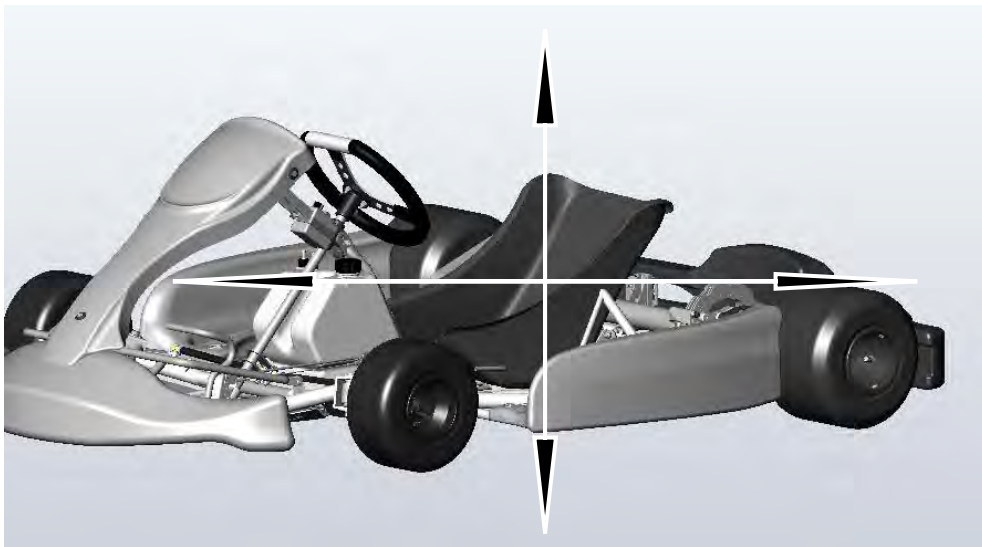
12- ADJUSTMENT OF SEAT

POSITION OF THE SEAT

The position of the center of gravity has also a key influence on the behavior of the kart. One can monitor this center of gravity by changing the position of the seat.

You will find the best position of the seat, adapted to your size and weight, by trial-and error.

We recommend you to bear in mind the following:



SEAT MOVED FORWARD:

Gives more grip on the front wheels; more sliding of the rear wheels.

SEAT MOVED BACKWARDS:

Less grip on the front wheels; more grip on the rear wheels.

SEAT LOWER:

Less grip (front and rear wheels); to try on very high grip conditions.

SEAT HIGHER:

Increases the grip; to be tried in wet conditions.

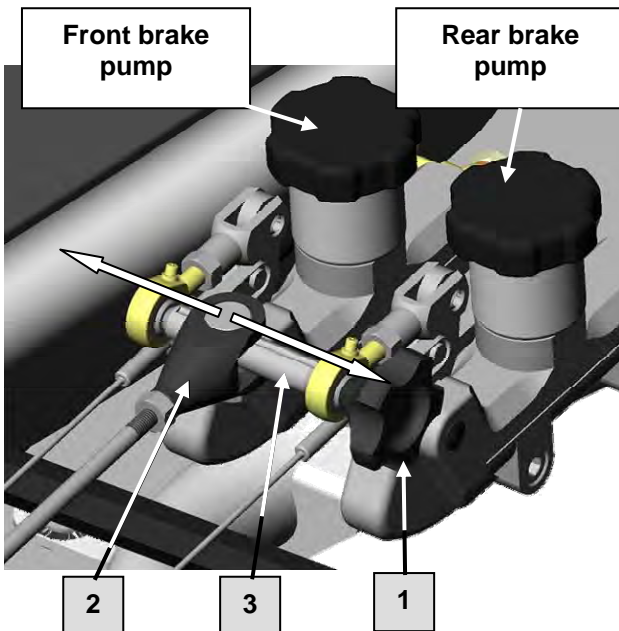
Always use a seat tightener. One on the left hand side and one on the right hand side give an optimal performance on almost all types of tracks.

13-ADJUSTMENT OF THE BRAKE DISTRIBUTOR

THE BRAKE DISTRIBUTOR ALLOW TO MONITOR THE BRACKING POWER BETWEEN THE FRONT AND REAR BRAKES.

STANDARD ADJUSTMENT

- The brake distributor is positioned on the middle of the axle (3). This adjustment corresponds to the standard setting for the distributor of the braking power between the front and the rear brakes.



MORE BRAKING POWER ON THE FRONT BRAKES

- 1- Turn the handle (1) toward anti-clockwise direction.
- 2- The brake distributor (2) move toward the front brake pump.
- 3- The go-kart will brake more with the front brakes.

MORE BRAKING POWER ON THE REAR BRAKES

- 1- Turn the handle (1) toward clockwise direction.
- 2- The brake distributor (2) move toward the rear brake pump.
- 3- The go-kart will brake more with the rear brake.

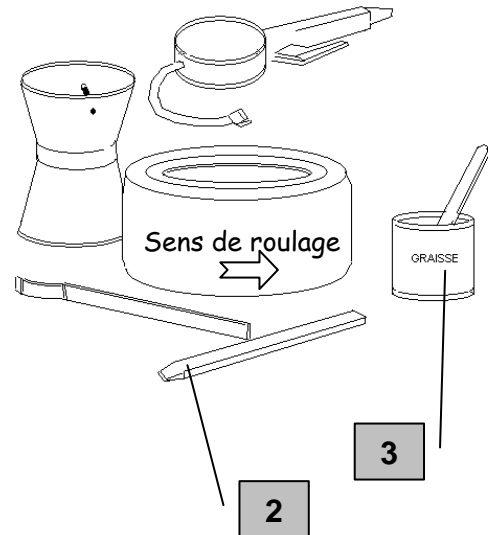
⚠ ATTENTION ⚠

- ✓ The brake system is a key safety item of the kart. Regularly check all its components. In case of doubt, do not drive before fixing the problem.
- ✓ Bad maintenance of the brakes can lead to severe, even fatal injuries.
- ✓ Never repair a break system on your own; return it to SODIKART through your local dealer.

14- TYRES

14-1 CHANGING THE TYRES:

1. Lay the kart on a trolley.
2. Lay the wheel on the tire removal tool (OU942.002)
3. Once the edges of the tire are separated from the rim on both sides, remove the tire with the tool (2).
4. Put grease (3) (LU823.003) on the edges of the new tire.
5. Install the tire on the rim; mind the direction of rotation.
6. Inflate to let the tire get its position on the rim.
7. Adjust the pressure according to table next page, with the manometer (OU943.002).



⚠ ATTENTION ⚠

- ✓ Check the direction of rotation on the sides of the tire.
- ✓ Never inflate above 4 bars: there is a risk of severe injury due to potential failure of the rim.

14-2 TABLE OF THE RECOMMENDED TYRE PRESSURES (in bar).

SLICK TYRES			PRESSURES			
			COLD 20°		WARM	
CATEGORIES	BRAND	TYPE	FRONT	REAR	FRONT	REAR
KF1 – SLICK SOFT	BRIDGE	YKA	0.55	0.55	0.75	0.75
KF1 – SLICK MEDIUM	BRIDGE	YKB	0.55	0.55	0.75	0.75
KF3 –SLICK HARD	BRIDGE	YKC	0.55	0.55	0.80	0.80
KZ125	VEGA	FH	0.65	0.70	0.85	0.90
X30	MGS	X	0.65	0.70	0.85	0.90
ROTAX MAX	BRIDGE	YJM	0.65	0.70	0.85	0.90
ROTAX MAX Euro challenge	MOJO	D2- D3	0.65	0.70	0.85	0.90
NATIONALE	DUNLOP	SL3	0.65	0.70	0.85	0.90
WET TYRES			COLD 20°		WARM	
KF1	BRIDGE	YKP	1.00	1.00	1.10	1.10
KF3	BRIDGE	YKP	1.00	1.00	1.10	1.10
KZ125	VEGA	W5	1.00	1.00	1.10	1.10
X30	VEGA	W5	1.00	1.00	1.10	1.10
ROTAX MAX	BRIDGE	YFD	1.20	1.20	1.30	1.30
ROTAX MAX Euro challenge	MOJO	W2	1.00	1.00	1.10	1.10
NATIONALE	DUNLOP	SL3	1.00	1.00	1.10	1.10

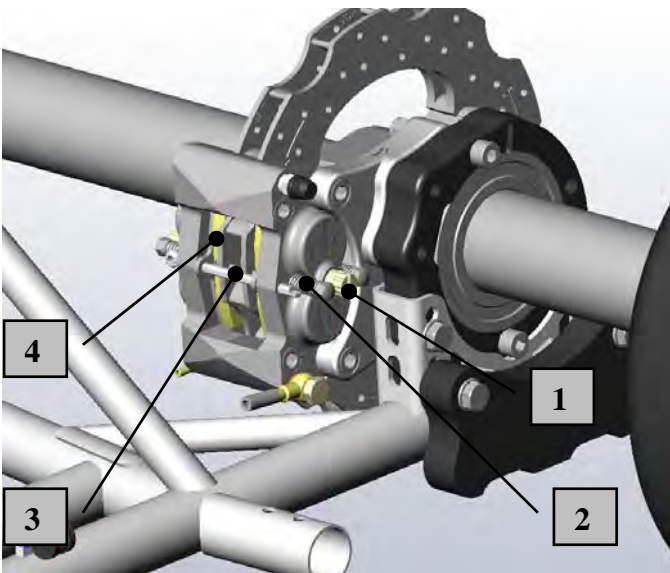
WET CONDITIONS:

- Little water: slightly drop the pressure from the recommended value.
- Much water: increase the pressure from the recommended value.

⚠ ATTENTION ⚠

- ✓ Systematically check the rims. If one of them shows damages, change it. Not doing so could lead to severe or even fatal injuries.
- ✓ Never drive with worn or damaged tires. It could also lead to severe or even fatal injuries.
- ✓ Use recommended pressures.
- ✓ Never inflate above 4 bars.

15- CHANGING BRAKE PADS



- Unscrew the piston adjustment screw to its back stop (1).
- Remove the 4 screws with springs (2).
- Remove: the safety pin (3).
- Remove the pads; insert the new ones (4).
- Insert the safety pin (3).
- Place the 4 screws with springs with drop of glue.
- Tighten the screw (1) until the pads touch the disk; unscrew (1) by one and one quarter of a turn to get the gap between the pads and the disk.

ADJUSTMENTS: the adjustment of the gap between the disk and the pads is done with the screw (1). The standard gap is 1 mm.

⚠ ATTENTION ⚠

- ✓ The brake system is a key safety item of the kart. Regularly check all its components. In case of doubt, do not drive before fixing the problem.
- ✓ Bad maintenance of the brakes can lead to severe, even fatal injuries.
- ✓ Never repair a brake system on your own; return it to SODIKART through your local dealer.

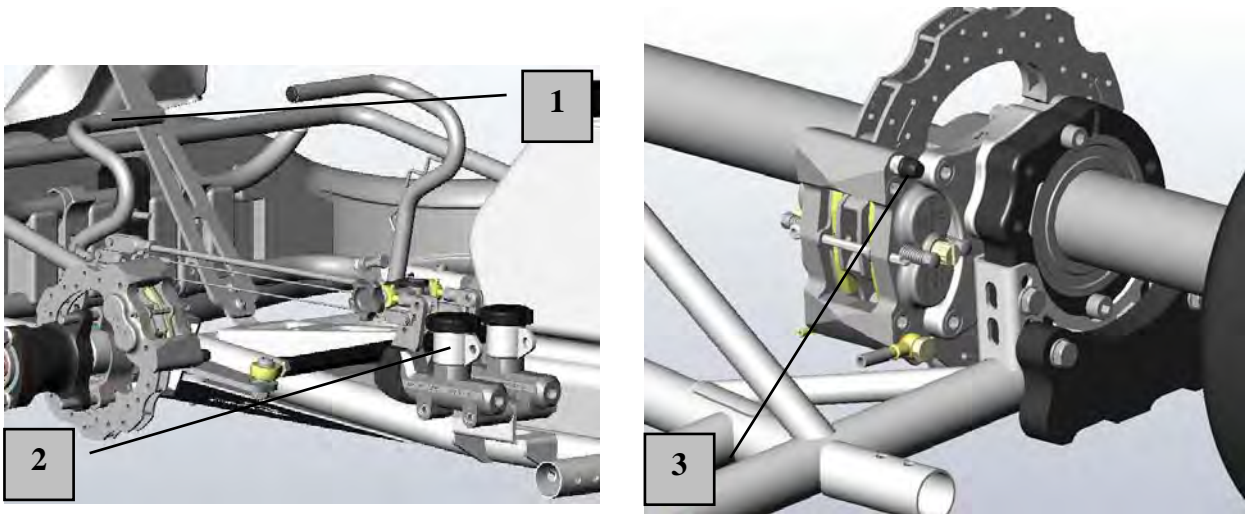
Two types of brake pads are available:

- Racing red (Origin brake pads) - Réf. PC0351.040
- Céram black - Réf. PC0351.030

16- BLEEDING THE BRAKE SYSTEM

- 1- Take a petrol hose and put it on the bleed screw (3).
- 2- Press the brake pedal (1) and maintain the pressure.
- 3- Open the bleed screw (3); liquid and air bubbles come out.
- 4- Close the bleed screw (3).
- 5- Release the brake pedal.
- 6- Fill the brake liquid tank with DOT 4 only (Ref. LU842.013).
- 7- Make sure the maximum level is (2).

Repeat operations 3 to 8, until the brake pedal becomes hard.



NOTE:

- The brake system must be regularly checked: level of brake fluid, cover of the fluid reservoir, state of screws and bolts.
- If the brake fluid becomes black, bleed and change it.
- Bleed and change the brake fluid after each brake pads replacement.
- The gap between the brake disk and the brake pads is 1mm.

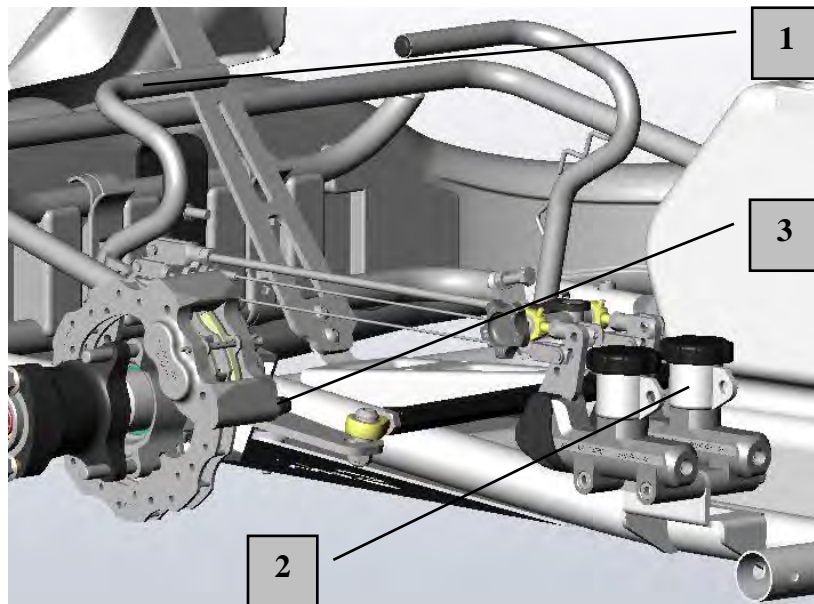
⚠ ATTENTION ⚠

- ✓ Use brake liquid DOT 4 only.
- ✓ Don't use DOT 5, it can damage the seal and cause a lost of braking power.

16-2 FRONT BRAKES:

- 1- Take a fuel hose and place it on bleeding plug (3).
- 2- Press the brake pedal (1) and maintain the pressure.
- 3- Loosen the bleeding plug (3).
- 4- Air and liquid go out..
- 5- Tighten the bleeding plug (3).
- 6- Do not brake.
- 7- Fill the brake fluid tank (2) with the brake liquid DOT4 (ref: LU842.013).
- 8- Fill the brake fluid tank (2) up to the maximum mark.

Proceed the same way 3 to 8 times until the pedal become hard.



PROCEED THE SAME WAY FOR THE OTHER FRONT BRAKE

NOTE:

- We advise you to bleed and change the brake liquid after each changing of brake pads.
- The gap between the brake disk and the brake pads is 0.5mm
- The brake system must be regularly checked: level of brake fluid, cover of the fluid reservoir, fixation of brake pads, centering and tightening of the brake disk, mechanical link between pedal and master cylinder, and state of screws and bolts.
- If the brake liquid becomes old, bleed and change the liquid.

17- CLEANING THE CHASSIS

- The cleaning of the chassis and its components is to be done with a special cleaning product (refer to the ITAKA catalogue). Do not use the product on brake pads and brake calipers.

Avoid products which are not recommended in the ITAKA catalogue. They may be too aggressive and damage painted and coated areas, plastic parts as well as gaskets.

1. Protect the break calipers and the brake disk with a dry piece of cloth.
2. Spray the whole kart with the cleaning product, and let it act for 30 seconds.
3. Wipe the frame and the components with a dry cloth.

NOTE:

- Clean your kart on a regular basis: it is a good way to check it and detect damages, if any.

ATTENTION

- ✓ Spray cleaning product on brake pads or brake caliper may reduce the braking ability partially or totally, and can lead to a serious accident.
- ✓ If any doubt, drive carefully the first laps, and test the brakes until the braking ability becomes normal.

18- MAINTENANCE RECAP:

Screws and bolts (general):

- Before each use, check the state of the screws and bolts. Pay a special attention to the ones directly linked to the safety of the kart :
- Stub axle screw.
- Steering tie rods ball joint screws.
- Front and rear wheels bolts.
- Rear wheel hub screws.
- Engine support screws.
- Seat screws.
- Damaged screws and bolts have to be changed.

Steering:

- Check the tightening torque of the steering column support.
- Check the tightening torque of the stub axle screw.
- Check the parallelism.

Body work:

- Check the various body work components: make sure they are free of damages such as cracks, likely to propagate when driving.
- Check the fixings of the body work components: make sure they are not loose or damaged.
- When replacing a body work component, make sure the screws and bolts are put in the right direction (as original).

Tires:

- Pay a special attention to the assembly of the tires.
- Make sure the direction of rotation is correct, as indicated on the sides of the tires.
- Check the wear of the tires. The wear indicator should always be visible.
- Damaged tires must be changed.
- Check the pressures before driving, according to recommendations (table page 29).

Brake system

- Check the brake system before going on the track: fluid level, fluid color, brake pads wear, and brake pads gap.
Ensure the system is tight by pressing the brake pedal: once the pads are in touch with the disk, the pedal should not move any further.

19- TROUBLE SHOOTING.

Brakes do not work:

1. Is the pedal working correctly (not blocked)?
2. Is the cap of the fluid reservoir tight?
3. Is the level of the brake fluid correct?
4. Are the hoses correctly connected?
5. Are the break pads worn out?
6. Is the caliper correctly tightened on its support?

The brake pads permanently touch the disk:

1. Is the brake fluid old or black?
2. Is the brake disk correctly aligned?
3. Is the caliper well tightened on its support?
4. Is the brake pedal free to rotate around its axis?
5. Is the brake pads gap correct?

The steering is hard.

1. Are the screws of the stub axles tightened with the right torque?
2. Is the caster too high?

The steering of the kart is not precise.

1. Is the parallelism OK?
2. Are the steering tie rods bent?
3. Is the plastic steering column support well tightened?
4. Is the steering column support well tightened on the frame?

The kart tends to go to the right or to the left.

1. Is the parallelism OK?
2. Are the pressures of the tires OK (left vs. right)?
3. Are the tires diameter equal (middle and sides)?
4. Are the two block nuts of the steering tie rods well tightened?
5. Are the tie rods bent?

TRACK: _____ **DATE:** _____
PILOT: _____ **TRIAL:** _____ **TIME:** _____

TRACK: _____
 State of the track: _____ °C

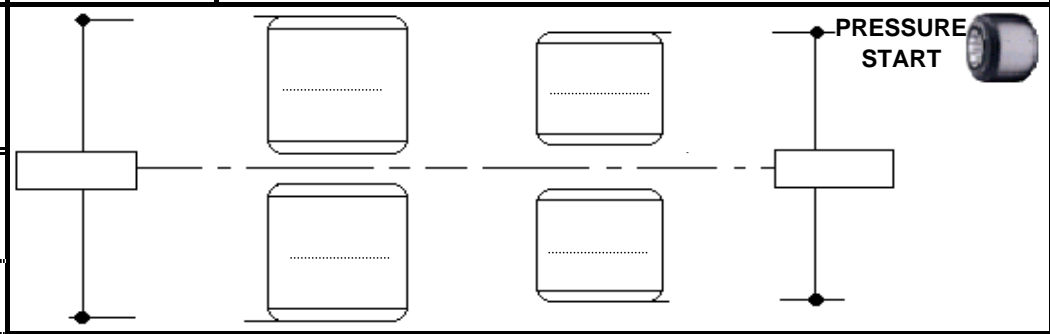
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CHASSIS:
 Stub axle height : _____
 Caster and camber : _____
 Parallelism : _____
 Seat position : _____ Height : _____ Dist- axle : _____ Dist- fork : _____
 Masses : _____
 Axle type : _____
 Stiffeners : _____

ENGINE:
 carburator type : _____
 Adjustments : _____
 Exhaust type : _____ Length: _____
 Gear ratio : _____ Chain length : _____

NOTES:

TRIAL TIMES Tyre type: _____ Diameter: _____



LAP	Partial 1	Partial 2	Partial 3	Partial 4
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

