1/28 2WD indoor RACER READYSET



INSTRUCTION MANUAL

PLEASE READ THIS MANUAL THROUGH THOROUGHLY BEFORE USE



Product Order-No.: JOM280100 - JOM280105







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1. About this Model

Thank you for purchasing this 1/28th scale JR128-R01 2WD indoor Racer Ready Set.

JR128-R01 series models are ultra small high performance 2WD indoor racing cars with a lot of very advanced opportunities for fine tuning and car setup, which you might find very surprising in a car of this very small size.

9 built-in ball bearings, an adjustable ball differential with 64dp fine pitch and a 1S / 3.7V Lipo battery + charger make you really ready to race out of the box.

The cars are already equipped with a 12mm micro servo for steering, a small 2.4 GHz receiver and an ESC (Electronic Speed Controller) running with 1S / 3.7V Lipo batteries, providing 5.5V current for receiver and steering.

Various other commercially available steering servos, micro receivers and micro car ESCs for brushed or brushless motors from other brands can be built in and used in this car. (Attention: Do not use motors with less than 40 turns (40T) togehter with this ESC, to avoid damage of the ESC!)

Ask your dealer for our brushless motor and ESC - system and for our 2S Lipo batteries, if you need 8.4V power supply for your preferred electronics.

The chassis offers the following features:

- Caster-angle at front suspension adjustable in three positions: 1.1°, 2.7°, 4.4°.
- Camber-angle at front suspension left and right adjustable: from 0° to -2.5°.
- Toe-in / Toe-out adjustable at: 0°, +1°, +2°, -1°, -2°.
- Droop limits at front suspension free adjustable.
- Adjustable springs at front suspension.
- Ground clearance front and rear adjustable on 4 levels in steps of 0.7mm.
- Longitudinal damper with spring and droop-spring fully adjustable.
- Cross-dampers with springs for tweak adjustment.
- Rear scale body holder adjustable in height with included washers. Second rear scale body holder for wider scale bodies included.
- Front scale body holder set adjustable to most scale bodies from other brands for wide front and 98mm or 102mm wheelbase.





2. Content of your Box:

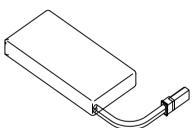
The box of your new JR128-R01 indoor racer contains the following items: Please check the contents of your box on completeness:

Fully assembled Ready to Run JR128-R01 RC Car:

- High Resistance Plastic Chassis
- Jomurema Design GT01 Body
- Adjustable Front Suspension
- Adjustable Rear Suspension
- 9x Ball Bearings
- Ball Differential (V-Groove PN)
- Brushed Standard Motor / 130 Class
- FS-GT2 / 2.4GHz digital proportional Receiver
- 12mm Steering-Servo;
- 1S / 3.7V programmable brushed ESC

Lithium Polymer (Lipo) Battery:

• 1S / 3.7V / 840mAh / 25C Lipo Battery



Miscellaneous Parts and Tools (8 Bags):

- Cross-Screwdriver; Hex-Wrench-1.5mm;
 +3 different plastic Tools
- Front Body-Holder-Adjustment-Set for many other Car Bodies
- Miscellaneous adjustment Parts and Washers
- Steering- Servo-, Rear Body-Holder and Adjustment Parts
 Other Pinions and replacement Gear for Change of Car-Speed

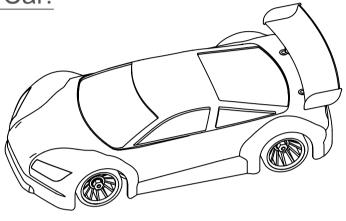
Manuals and Decal:

- Manual for JR128-R01 indoor Racer
- Manual for FS-GT2 / 2.4 GHz digital proportional Radio Control System
- Color Decal for Car Body

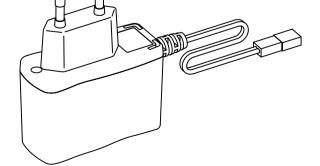
Charger for Lipo Battery:

- 1S / 3.7V / Lipo Charger
- Approx. 1A charging Current

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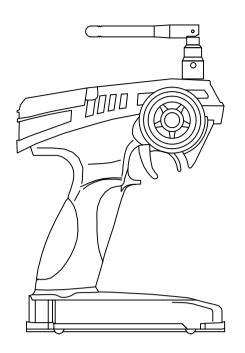


- Steel- and Replacement Parts and Springs for Change of Setup
- O-Rings for Replacement
- Screws for Replacement



CONTENT OF YOUR BOX (2.)





FS-GT2 / 2.4 GHz digital proportional Radio Transmitter:

- Channels: 2channels; Model type: car / boat
- RF power: less than 20dbm; Modulation: GFSK
- Code type: digital; Sensitivity: 1024
- Low voltage warning: yes (less than 9V)
- DSC port: yes (3.5mm); Charger port: yes
- Power: 12vdc (1.5AA*8); Weight: 328g
- ANT length: 26mm;
- Size: 159*99*315mm; Color: black
- Certificate: CE, FCC;

8x AA-Batteries for TX not included!

Something missing or damaged out of your Box?

If you find some items missing or visibly damaged out of your new original box, please contact your dealer. Please describe your problem as clear as possible and add some photos of broken parts for easy and fast clarification.

If your new car does not function properly at your first trial, after having followed all informations and assistances from the manuals, please contact your dealer as well and try to describe the defect as precisely as possible.

In any case your dealer will try his best to help you with your problem as fast as he can and will arrange replacement of broken, defective or missing parts.

Still some questions? Or missing of some informations?

For all kinds of further information regarding technics, adjustment, spare parts and option parts, please check on our website: www.jomurema.com.

All manuals for all our products will be kept available for download on this website.

If you have some open questions which this manual, your dealer or your fellow racers could not answer, please refer to us directly by using the contact form on our website for further clarification.

CONTENT OF YOUR BOX (2.)



3. Safety Precautions:

Please read carefully before assembling and operating your model.



WARNING! This symbol indicates where caution is very important to avoid injury to yourself and others.



PROHIBITED! This symbol points out actions which you should not do to avoid possible damage and accidents.

• We recommend first time builders to seek advice from people with building experience in order to assemble the model correctly and to reach highest possible driving performance.

- For assembling of this kit choose a place out of reach of children.
- Before starting operating this model, take enough safety precautions. You are responsible for assembly and safe operation of this model.
- Even after completing the assembly of this model, keep always its instruction manuals at hand for quick reference.
- It is recommended to take out liability insurance.

• This radio controlled model is not a toy!

This model is suitable for people of 14 years and older.





• The power supply for the product you have purchased is a rechargable Lipo (Lithium Polymere) battery. The power supply of the Radio Transmitter (Tx) for this product can be rechargable AA / Ni-MH batteries, or non rechargebale AA / Alkaline batteries or others. All defect or old batteries which you use with this product must be recycled or disposed of properly according to laws, regulations and standards in your country.

(Alkaline) (Others)



WARNING: CHOKING HAZARD:

Small parts. Not for children under 3 years old.

SAFETY PRECAUTIONS (3.)



Because this product includes small, edgy and sharp parts, store, assemble and operate the product only in areas out of reach of children.

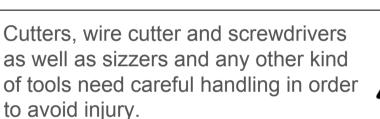


NEVER change polarity of the batteryplugs. This may lead to damage of electronics or damage, leakage or fire of the battery.



NEVER operate the car without car body properly attached. Body protects suspension parts from damage in case of impact.

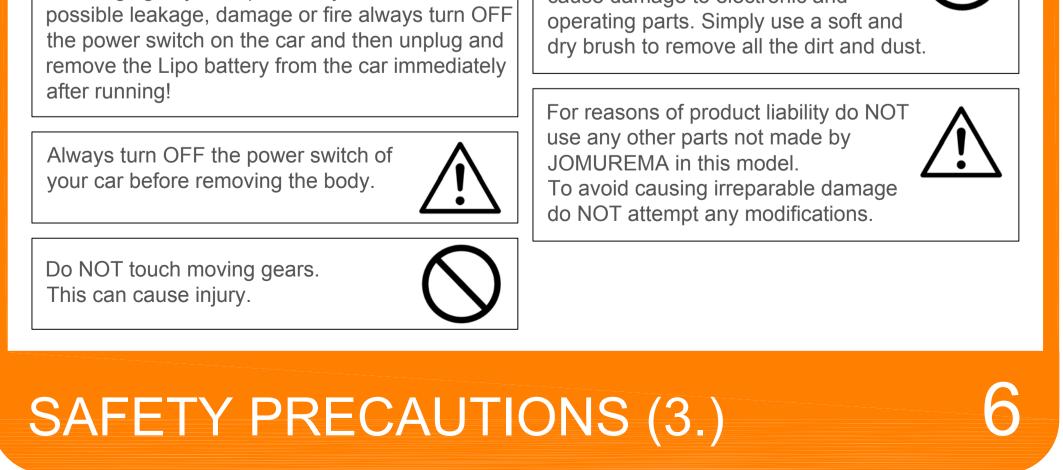
Do NOT operate or store this model in areas with high temperature or high humidity nor under direct sunlight.



The protruding front end of the antenna of your pistol transmitter may be dangerous. Do NOT swing or aim it towards faces.



Even when the power switch of your JR128 racer is turned off there is still a small current flowing. To avoid deep discharging of your Lipo battery with



When starting running you car always switch ON first the Transmitter (TX) and afterwards switch ON the car! When finishing your running session always switch OFF first the car and afterwards switch OFF the Transmitter (TX)! Always unplug and remove the Lipo battery immediately from the car after running!

Do NOT operate this model car on public roads, in crowded places or near children. Neither operate the car when there are pets or any other animals around.



This can cause accidents with injuries.

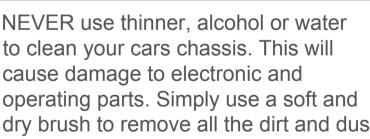
After and during operation the motor and battery will be hot. Do NOT touch them before they have had sufficient time to cool down.



Do NOT operate your car in wet, dusty or sandy conditions, or on soft / thick carpets. Such surfaces or conditions can damage its operating parts.

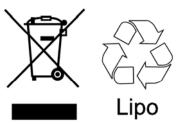


Do not use thinner, alcohol or water to clean your cars body. Best is to wipe it down with a soft, clean cloth, or a dry, soft brush.





4. About Lipo batteries:



JR128-R01 - RTR

4.1: General Instructions and Tips about LiPo Batteries:

- Always use a charger made to charge LiPo packs
- Double check that the settings for the lithium polymer charger are correct for the pack being charged. This includes the cell count, as well as the current settings. In general, most lithium polymer batteries should be charged to no more than 4.2 volts per cell or depleted to less than 3.0 volts per cell.
- Ensure that charging leads are connected correctly. Reverse charging can lead to cell damage or fire or explosion.
- Always charge LiPo batteries on surfaces that won't catch fire such as cement, steel, ceramic or stone. Wooden tables and carpeted floors are not recommended charging surfaces.
- Do not charge batteries near flammable products or liquids.
- Never charge a LiPo battery while inside your model or other electronic devices. If it catches fire it can lead to total destruction of the item it is being charged in.
- LiPo batteries should be charged within a temperature range of 0°C to 50°C. Batteries charged outside this temperature range may experience leakage, heat generation or cell damage.
- Never leave a charging lithium polymer battery pack unattended.
- Do not charge inside an automobile, especially while driving.
- Do not store batteries inside an automobile.
- If unsure of the charge rating, never charge a lithium polymer battery pack at a rate over 1C (1 x the battery packs rated capacity).
- Never charge a LiPo pack that has ballooned or swelled due to over / under charging or from a crash.
- Never charge a lithium polymer battery pack that has been punctured or damaged in a crash.
- Never, under any circumstances let the positive and negative battery leads touch each other. It can lead to cell ballooning, cell damage or fire or an explosion.
- Have a fire extinguisher near the charging area or a large bucket of dry sand.
 Do not try to extinguish with water.
- If you notice your LiPo battery pack is swelling, stop the charging process immediately, put the battery in a safe container and observe it for 15 minutes.
- Always charge your Lipo battery packs in a Lipo charging safe bag.

ABOUT LIPO BATTERIES (4.)





4.2: LiPo Battery Handling & Storage:



- Keep LiPo battery packs WELL out of reach of children.
- Do not put battery packs in pockets or bags where they can short circuit.
- Do not store or transport batteries where they can come into contact with sharp or metallic objects.
- Do not store your LiPo pack in extreme temperatures below 0°C or above 50°C.
- Always store your LiPo pack in a safe and non flammable container away from flammable objects. A LiPo Sack or metal / ceramic storage container is best.
- Always store your LiPo's partially charged. They will maintain their performance levels over time and there's no need to cycle them unless stored for periods longer than 3-6 months. When storing batteries for such extended periods, store at a half charged state.
- Do not immerse the battery in water or allow the battery to get wet.
- Do not dispose of in fire or heat.
- When mailing or shipping LiPo batteries, always ship them at a 30% charged state for safety reasons.
- To dispose of a LiPo battery, strictly follow your municipal battery disposal guidelines.
- Finally, always follow the safety instructions and charging guidelines for lithium polymer battery packs. These are there for not only the longevity of the battery pack, but also for your safety.

ABOUT LIPO BATTERIES (4.)



5. Quick Start:

Carefully unpack all items from your box and check for completeness, comparing the content with the listing from page 3 and 4 of this manual.

Please follow precisely the step by step description here below for starting running and having fun with your new model car:

STEP 5.1: Charging of the 1S / 3.7V / 25C / 840 mAh Lipo Battery, included in this set:

ATTENTION: Read page 7 & 8 of this manual (about Lipo batteries) well before starting your first charging procedure.

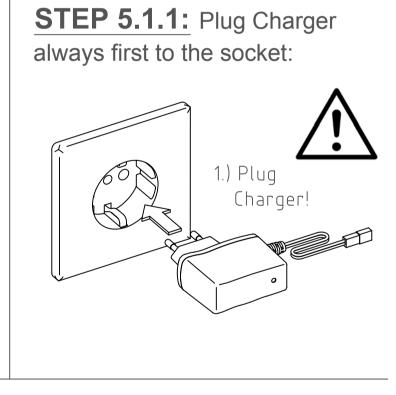
Before running your model for the first time, charge your 1S Lipo Battery with the included charger from this box. For any further charging cycles follow the same charging instruction.

Plug the charger always first to the socket (STEP 1.1) and afterwards plug the Lipo Battery to the charger (STEP 1.2). Red light on the charger shows you, that your Lipo battery is charging.

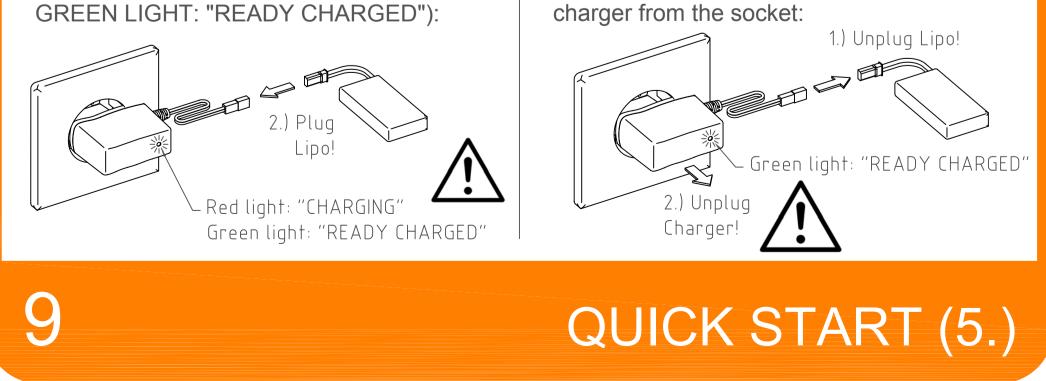
When the red light on your charger changes into green your battery is fully charged and should be unplugged immediately from the charger after the full green light has appeared.

After having unplugged the Lipo battery from the charger, unplug charger from the socket.

STEP 5.1.2: After plugging Charger to the socket, plug Lipo Battery to the Charger. (RED LIGHT on charger: "CHARGING";



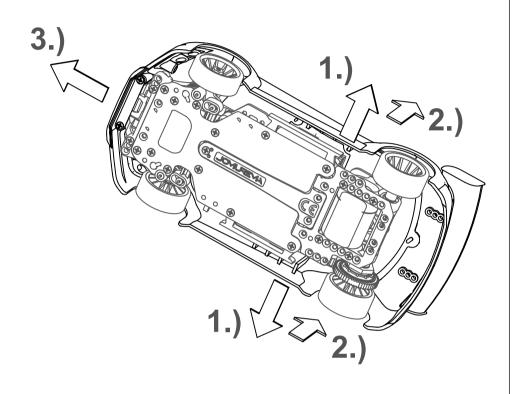
STEP 5.1.3: After light on charger has changed to green unplug the Lipo battery immediately from the charger. Then unplugg



STEP 5.2: Check the car for easy running wheels, rear shaft and ball differential:

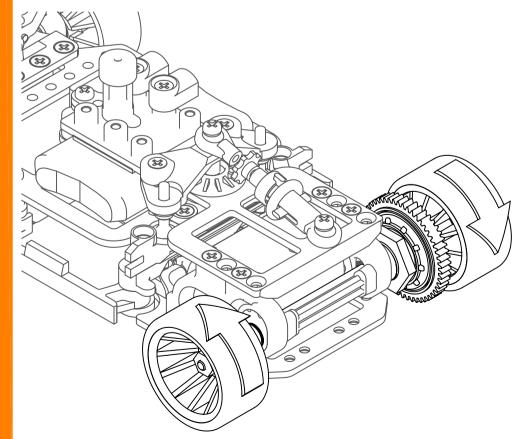
STEP 5.2.1: Remove the body from the car:

RC-RACING-CAR TECHNOLOG

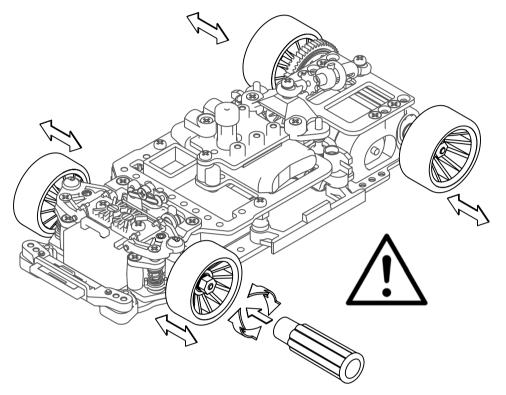


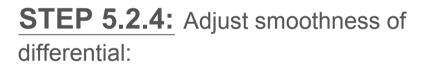
STEP 5.2.3: Check rear wheels for easy opposite side rotation of differential:

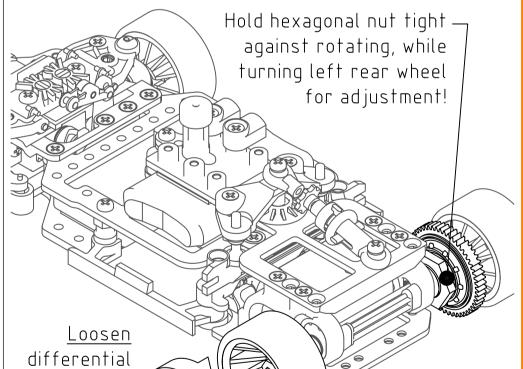
- If opposite side rotation of rear wheels is going <u>too hard</u>, slightly **loosen** the differential.
- If differential <u>slips while accelerating</u> the car, slightly <u>tighten</u> the differential.



STEP 5.2.2: Check all 4 wheels for small axial play and free easy rotation movement:





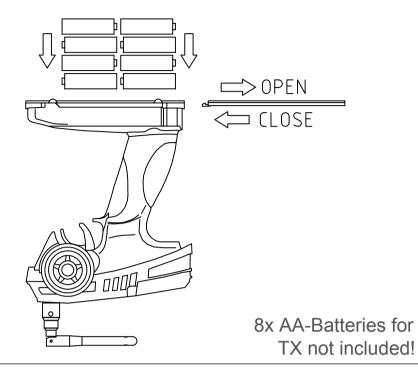


irrerential		
by turning		
left rear		
wheel	>	
clockwise!	A	<u>Tighten</u>
	Ð	differential
		by turning left
		rear wheel
		counter-clockwise!





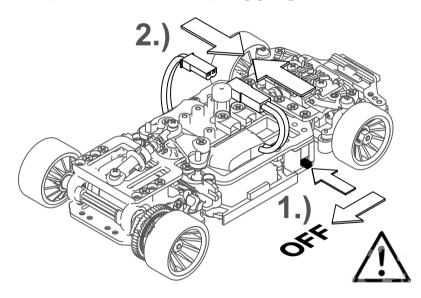
STEP 5.3: Put 8x AA batteries into your FS-GT2 Radio Transmitter (TX):



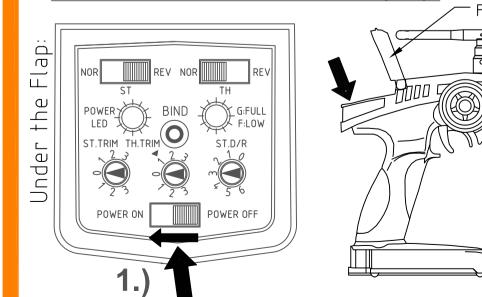
STEP 5.5: Plug the Lipo cable to

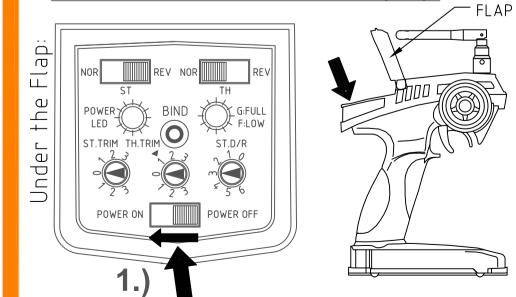
the ESC connector cable: Always

check "ON - OFF" switch to be in "OFF" position before plugging.

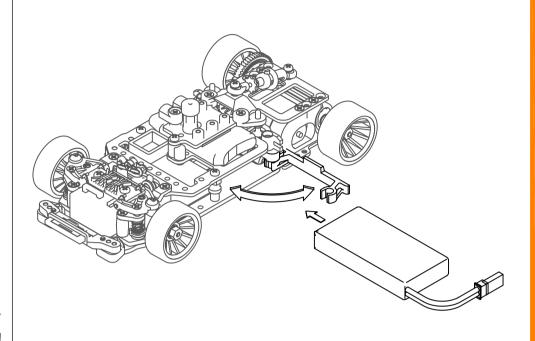


STEP 5.7: Switch on your **FS-GT2** Radio Transmitter (TX):

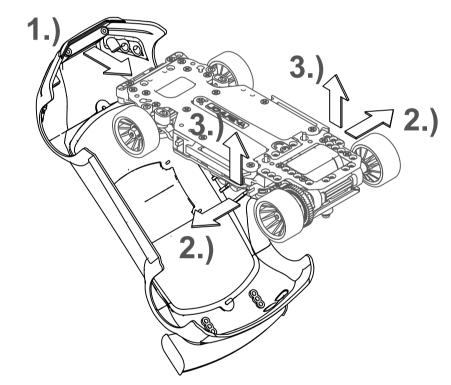




STEP 5.4: Put the fully charged Lipo Battery into the car:

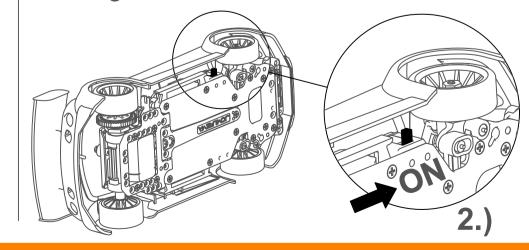


STEP 5.6: Fix body on the car:



STEP 5.8: Switch on the car:

You will hear a double sound from the ESC and see a red light on the "RX" through the front window of the car!



QUICK START (5.)

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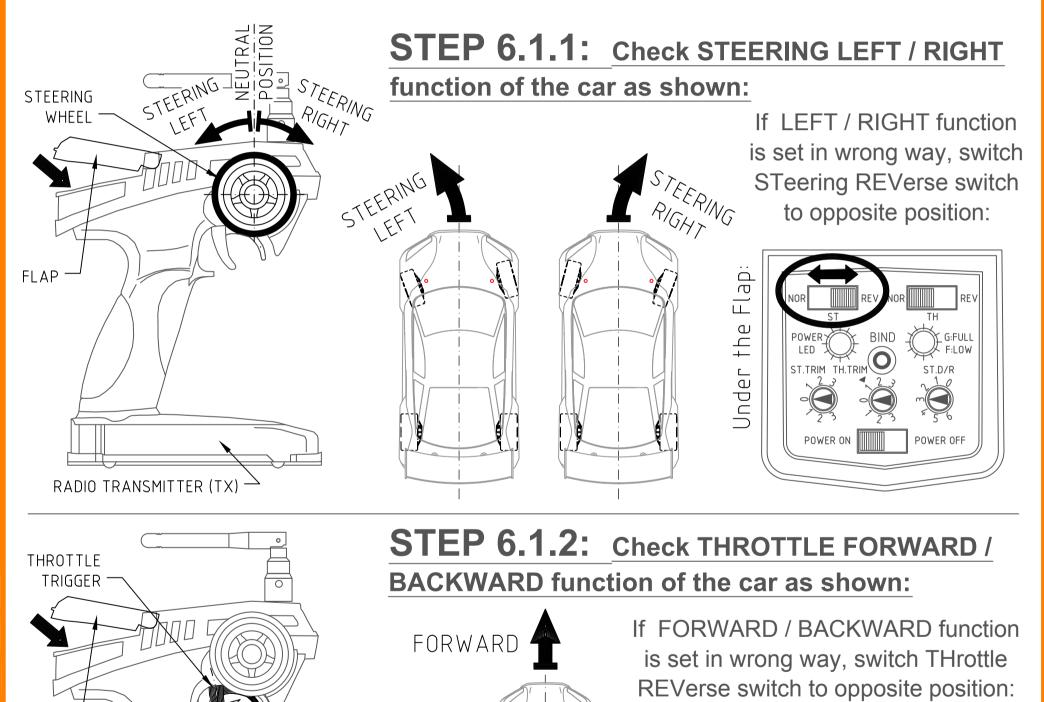


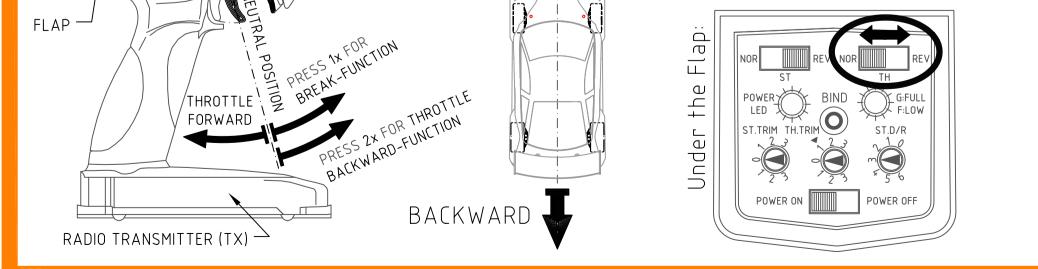
6. Function & Adjustment:

With the switched on Radio Transmitter and the switched on Car from Step 5.7 & 5.8 from the previous chapter "Quick Start", check all functions of your Car before driving for the first time:

Please follow precisely all steps of this function check, and if necessary do some adjustments as described in this chapter:

6.1: BASIC FUNCTIONS OF THE CAR:



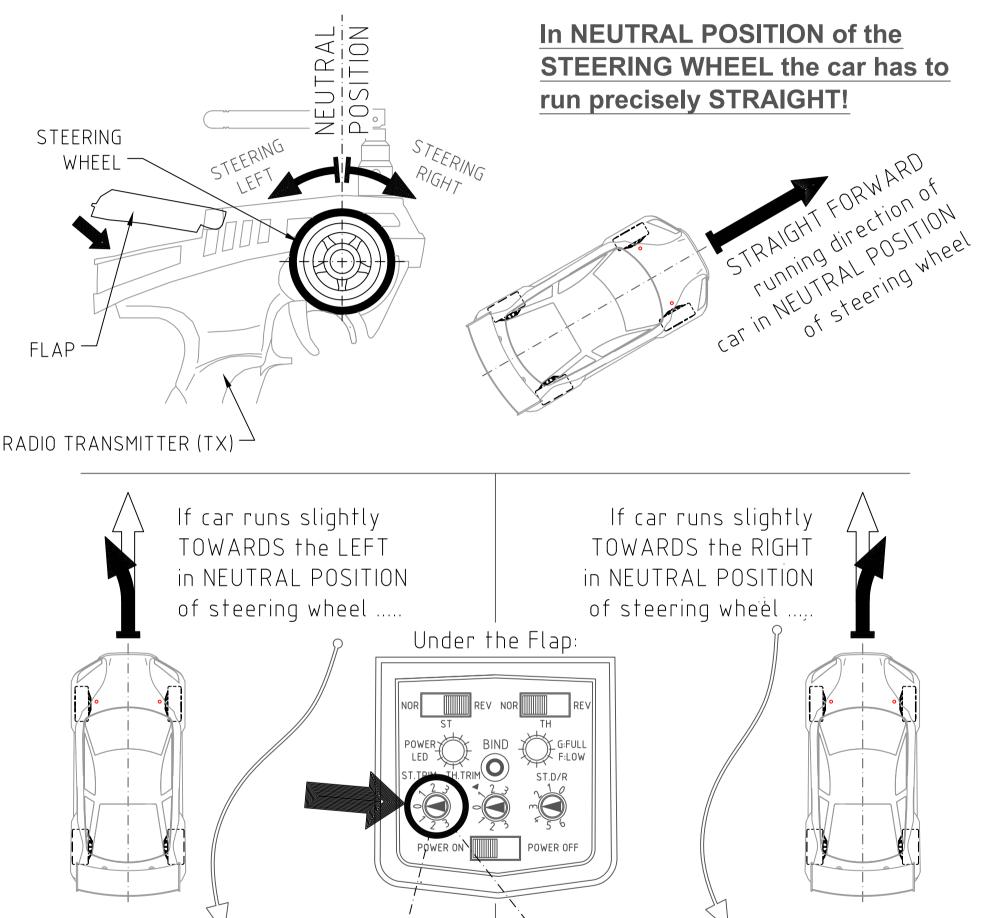


FUNCTION & ADJUSTMENT (6.)

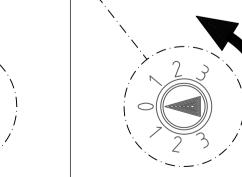


6.2: FINE TRIMMING OF CAR FUNCTIONS:

STEP 6.2.1: Fine Trimming of STEERING:



..... TURN STeering TRIM knob SLIGHTLY CLOCKWISE until car runs PRECISELY STRAIGHT.



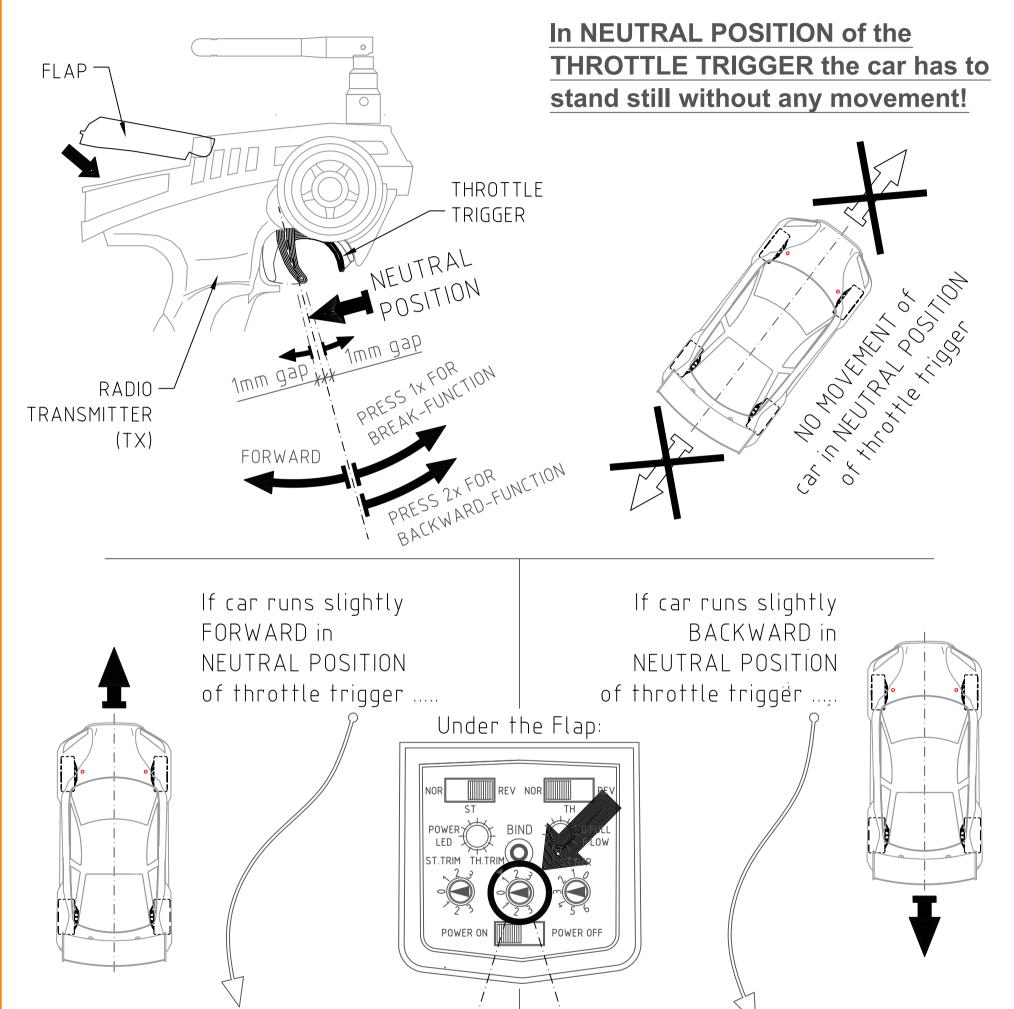
TURN STeering TRIM knob SLIGHTLY COUNTERCLOCKWISE until car runs PRECISELY STRAIGHT.



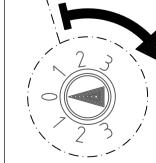




STEP 6.2.2: Fine Trimming of THROTTLE:



... TURN THrottle TRIM knob SLIGHTLY COUNTERCLOCKWISE until car stopps completely & adjust about 1mm gap from neutral position for forward & backward function.



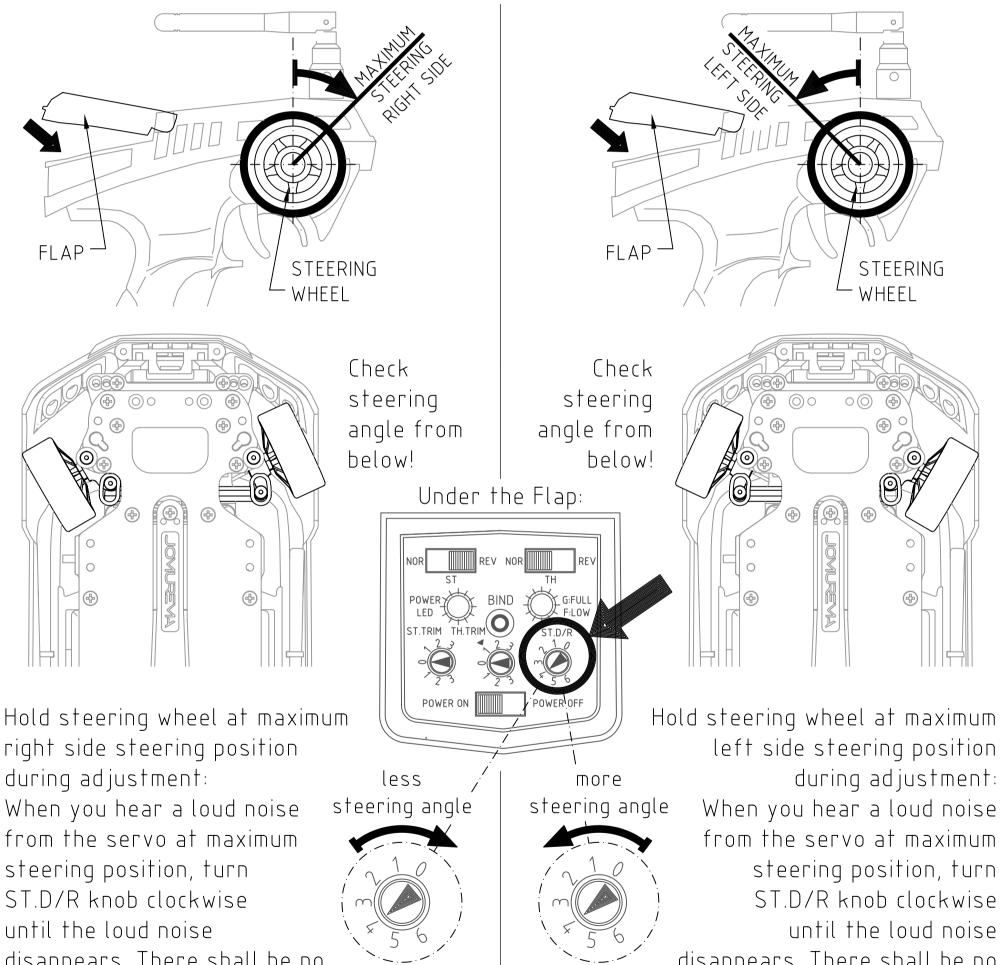
... TURN THrottle TRIM knob SLIGHTLY CLOCKWISE until car stopps completely & adjust about 1mm gap from neutral position for forward & backward function.





STEP 6.2.3: Adjustment of Maximum Steering Angle LEFT / RIGHT (STeering Dual Rate: ST.D/R):

At RIGHT and LEFT MAXIMUM POSITION of the STEERING WHEEL adjust MAXIMUM STEERING ANGLE of WHEELS: without loud noise of steering servo in the car at the maximum endpoints:



from the servo at maximum steering position, turn ST.D/R knob clockwise until the loud noise disappears. There shall be no loud noise of servo audible after adjusting maximum left and right steering position.

disappears. There shall be no loud noise of servo audible after adjusting maximum left and right steering position.

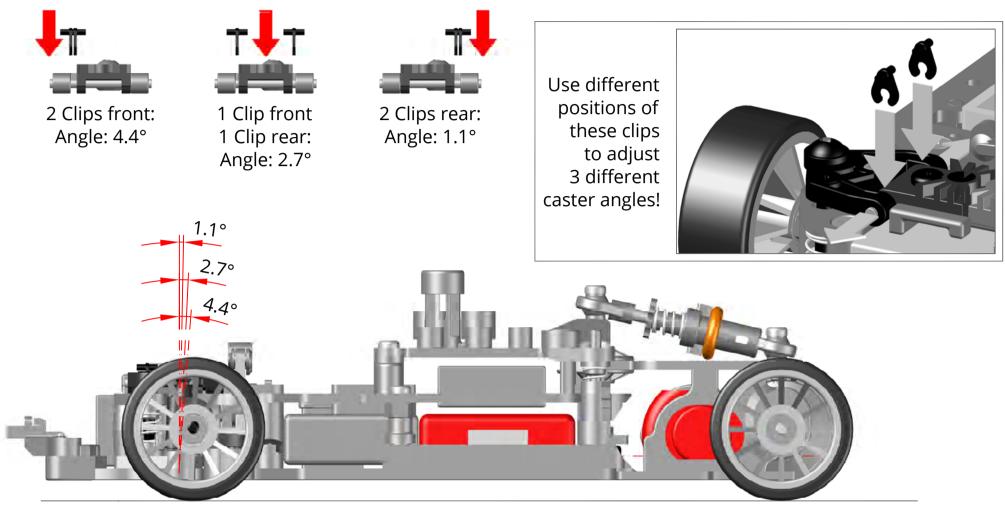
15 FUNCTION & ADJUSTMENT (6.)

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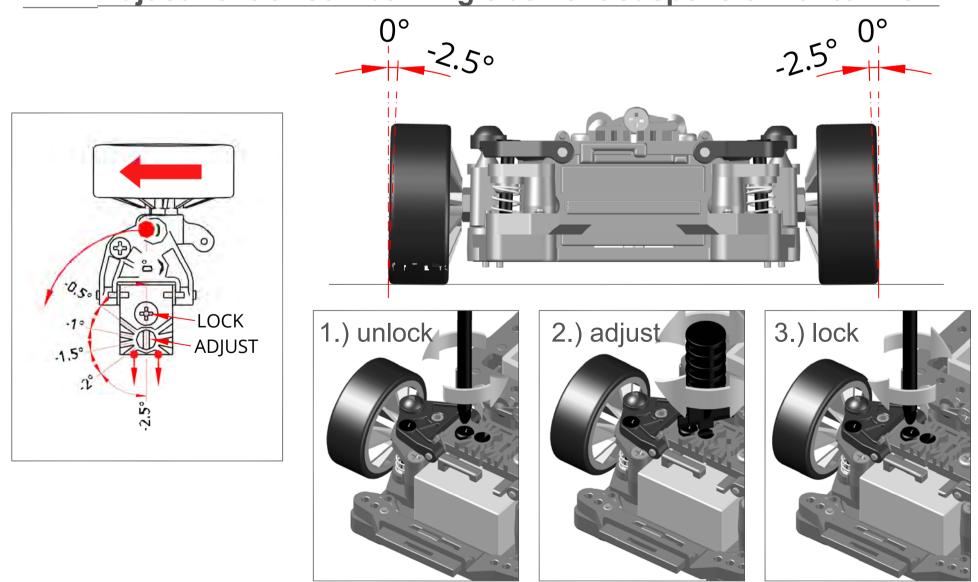


7. Setup Changes:

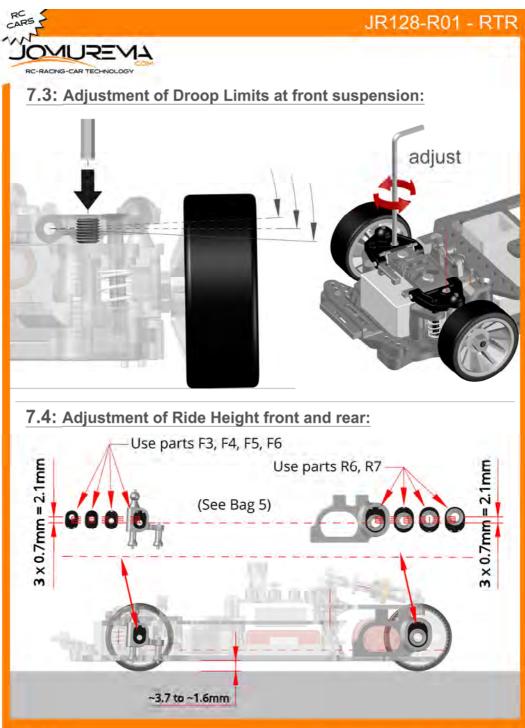
7.1: Adjustment of Caster Angle at front suspension:



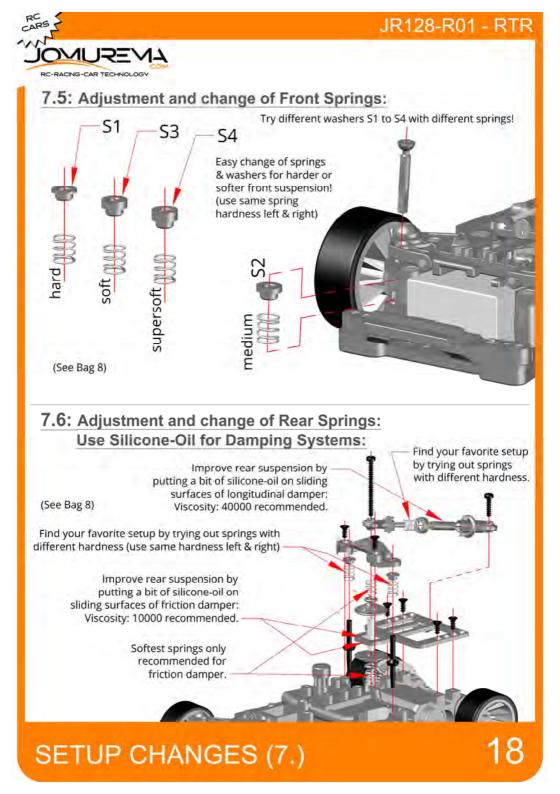
7.2: Adjustment of Camber Angle at front suspension: 0° to -2.5°:

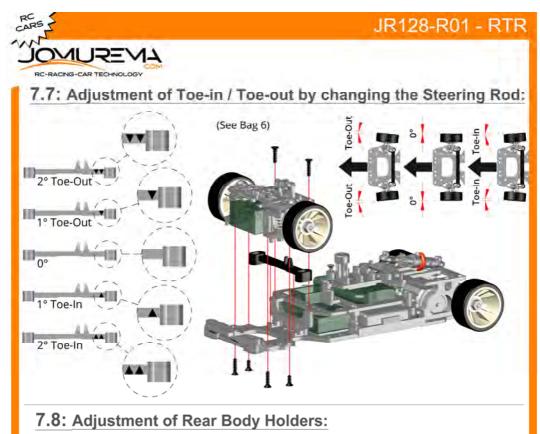


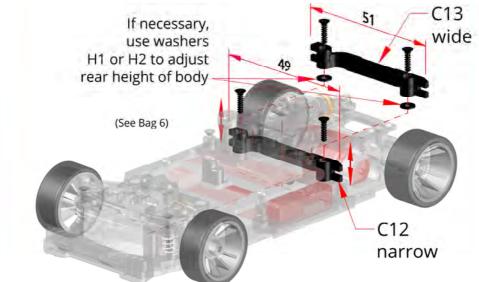
SETUP CHANGES (7.)



SETUP CHANGES (7.)







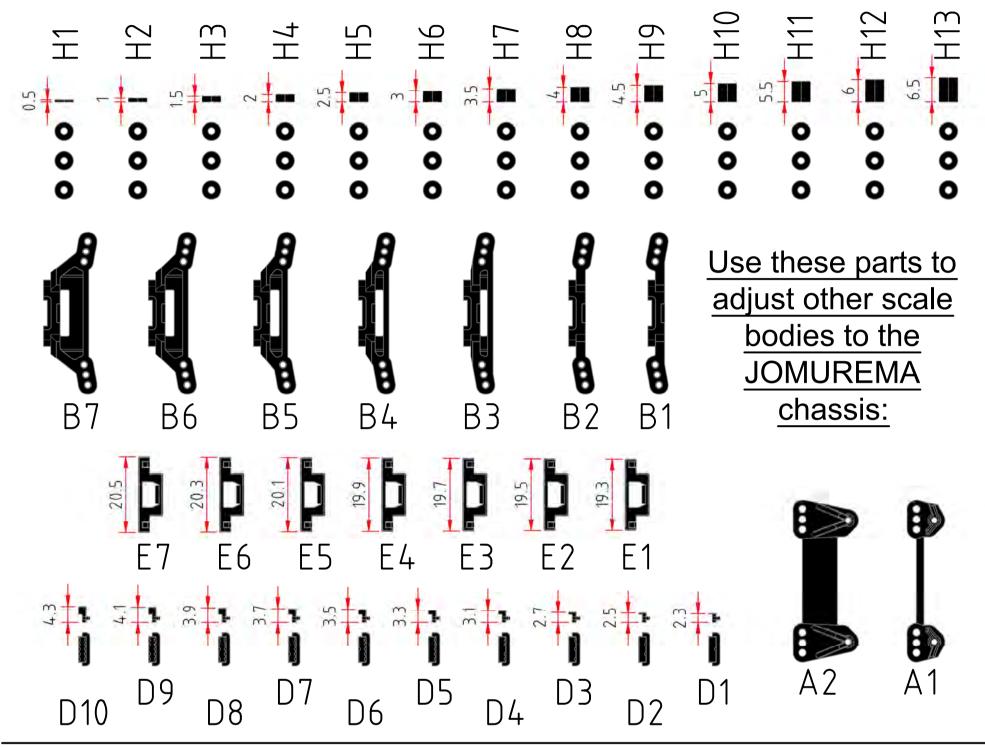
SETUP CHANGES (7.)

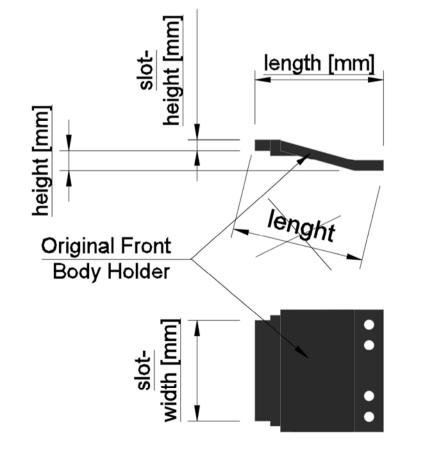


ATTENTION: only scale bodies for wide front setup with 98mm or 102mm wheelbase can be fitted!!!

JR128-R01 - RTR

8. Fix Scale-Bodies from other Brands





STEP 1

To choose all correct Parts:

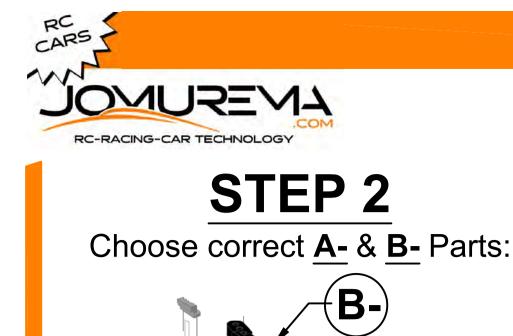
Take the measurements shown here on the left in mm from the original front-body-holder of the Scale-Body, which you want to adjust to the JOMUREMA chassis!

EXAMPLE:

length: 28mm / height: 7mm slot height: 3.7mm / slot width: 20.3mm

FIX OTHER SCALE-BODIES (8.)







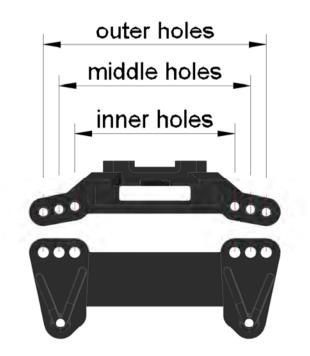
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EXAMPLE:

With body holder <u>length</u> of your scale body = <u>28mm</u>, take parts <u>A1</u> and <u>B7</u> and use <u>inner</u> holes for screwing in last step!

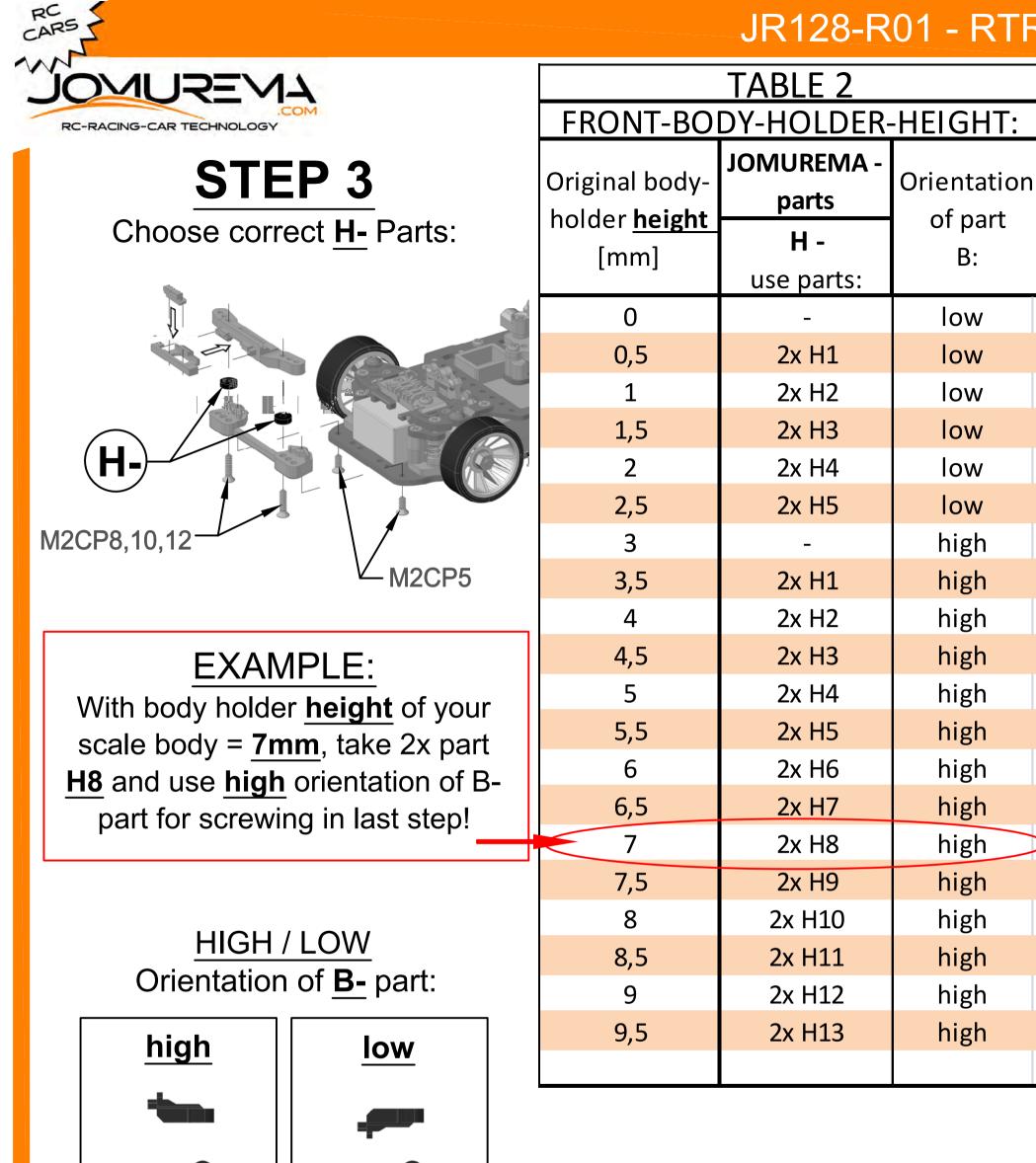
INNER / MIDDLE / OUTER holes to use for screwing:



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TABLE 1			
FRONT-BODY-HOLDER-LENGTH:			
Original body- JOMUREMA - parts			
holder length	A -	В-	Holes to use
[mm]	use part:	use part:	for screwing:
19	A1	B1	inner
19,5	A1	B1	middle
20	A1	B1	outer
20,5	A1	B2	inner
21	A1	B2	middle
21,5	A1	B2	outer
22	A1	B3	inner
22,5	A1	B3	middle
23	A1	B3	outer
23,5	A1	B4	inner
24	A1	B4	middle
24,5	A1	B4	outer
25	A1	B5	inner
25,5	A1	B5	middle
26	A1	B5	outer
26,5	A1	B6	inner
27	A1	B6	middle
27,5	A1	B6	outer
28	A1	B7	inner
28,5	A1	B7	middle
29	A1	B7	outer
29,5	A2	B3	inner
30	A2	B3	middle
30,5	A2	B3	outer
31	A2	B4	inner
31,5	A2	B4	middle
32	A2	B4	outer
32,5	A2	B5	inner
33	A2	B5	middle
33,5	A2	B5	outer
34	A2	B6	inner
34,5	A2	B6	middle
35	A2	B6	outer
35,5	A2	B7	inner
36	A2	B7	middle
36,5	A2	B7	outer







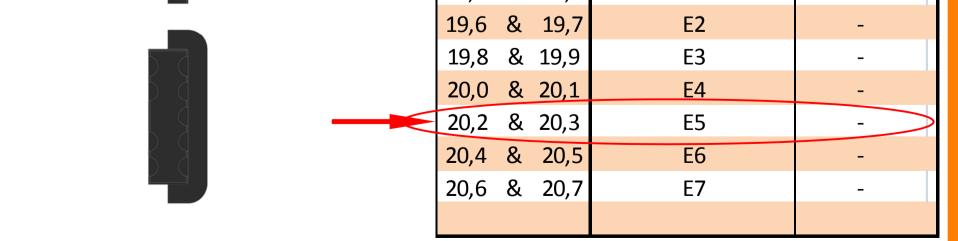


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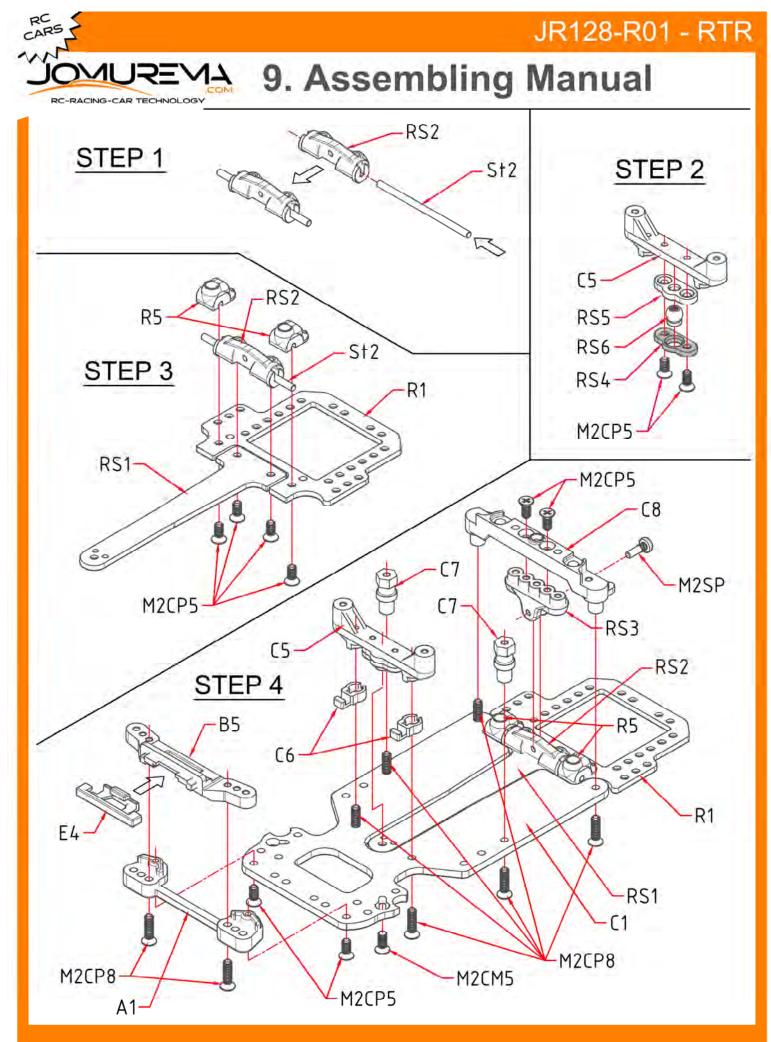
RC-RACING-CAR TECHNOLOGY	-
STEP 4 Choose correct D- & E- parts:	0
(D -)	
(E-)-/	
M2CP8,10,12	
V_M2CP5	
EXAMPLE:	
With body holder slot-height of	
your scale body = 3.7mm and	
slot-width = 20.3mm, take	
part D8 and E5 for assembling!	
point <u></u> anna <u></u> non accommung.	
EXTENSION DIRECTION	
of overstanding nose of D- part:	
always up!	
	0

TABLE 3			
FRONT-BODY-HOLDER-INSERT:			
Original body- holder <u>slot-</u> <u>height</u> [mm]	JOMUREMA - parts D - use parts:	Extension direction:	
2,1	-	up	
2,2	-	up	
2,3	D1	up	
2,4	D1 (D2)	up	
2,5	D2	up	
2,6	D2 (D3)	up	
2,7	D3	up	
2,8	D3 (D4)	up	
2,9	D4	up	
3	D4 (D5)	up	
3,1	D5	up	
3,2	D5 (D6)	up	
3,3	D6	up	
3,4	D6 (D7)	up	
3,5	D7	up	
3,6	D7 (D8)	up	
3,7	D8	ир	
3,8	D8 (D9)	up	
3,9	D9	up	
4	D9 (D10)	up	
4,1	D10	up	

TABLE 4			
FRONT-BODY-HOLDER-CLIP:			
Original body-	JOMUREMA - parts	Position	
holder <u>slot-</u>	Ε-	according B-	
<u>width [</u> mm]	use parts:	Part	
19,4 & 19,5	E1	-	



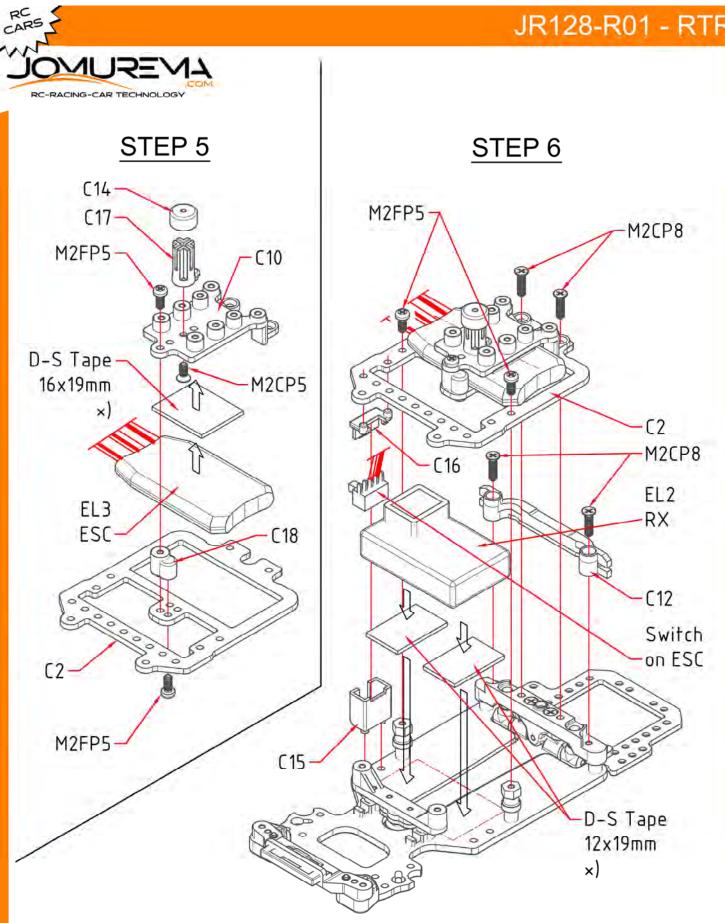
FIX OTHER SCALE-BODIES (8.)



ASSEMBLING MANUAL (9.)

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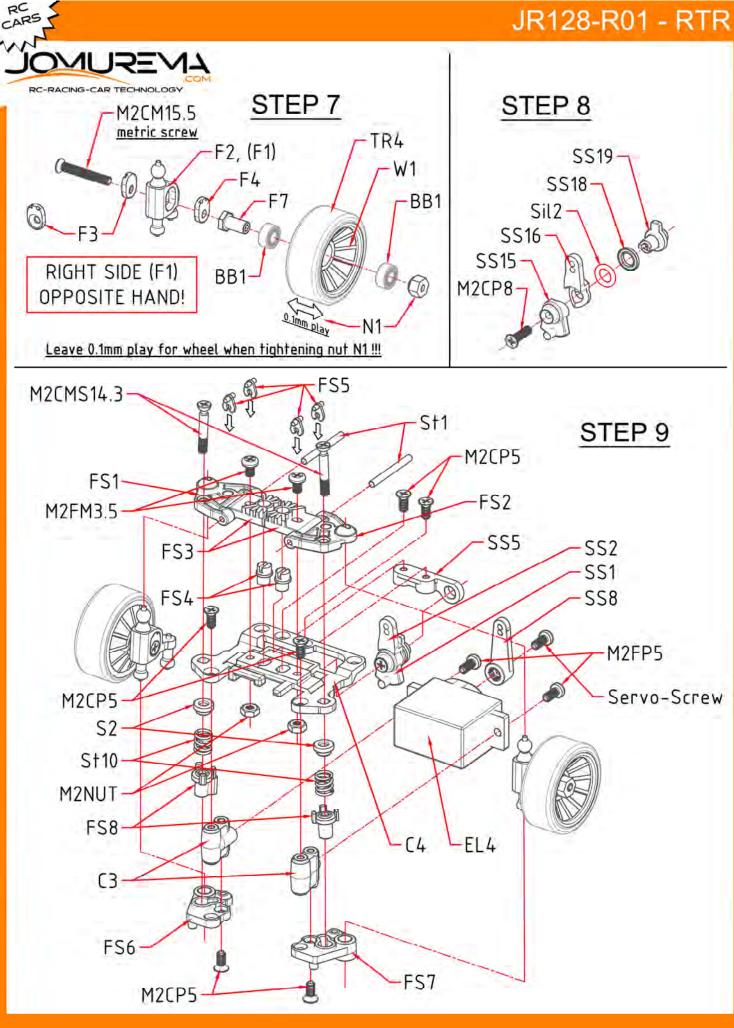


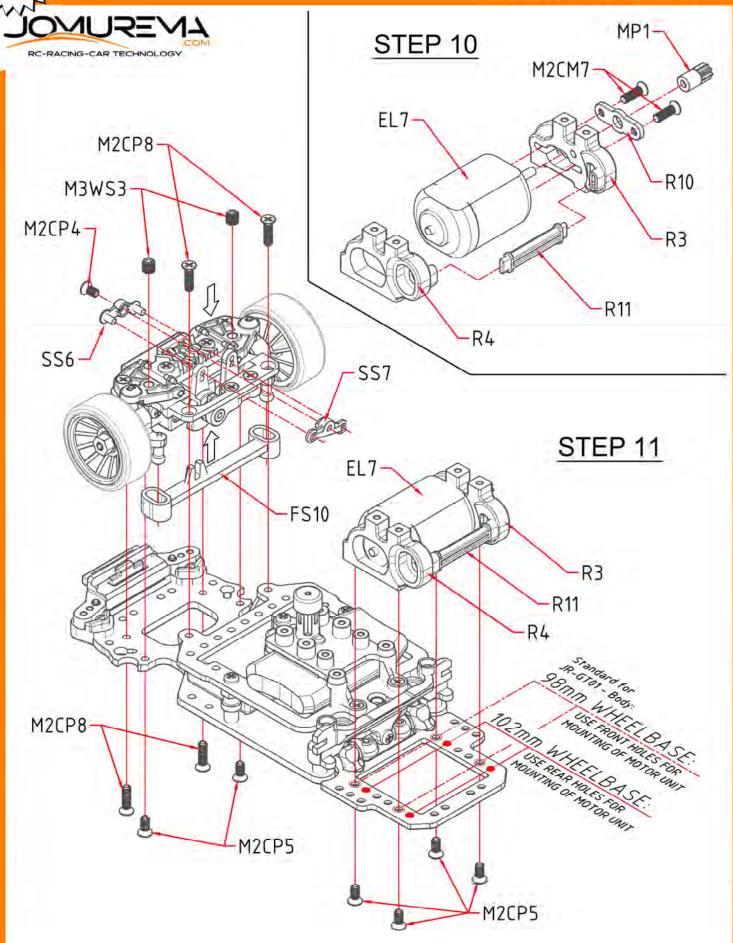


x) D-S Tape Double-Sided Tape

ASSEMBLING MANUAL (9.)

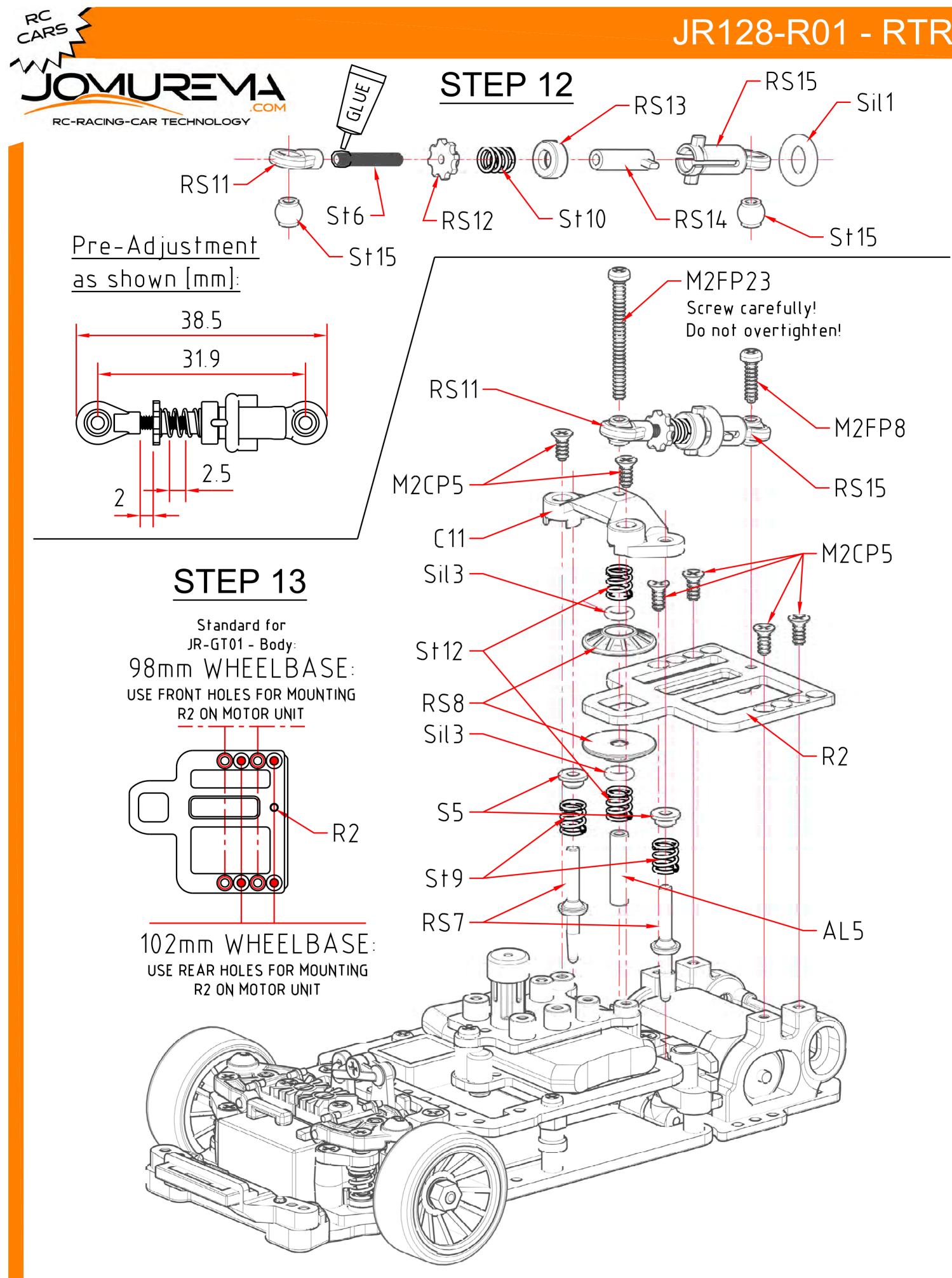
25



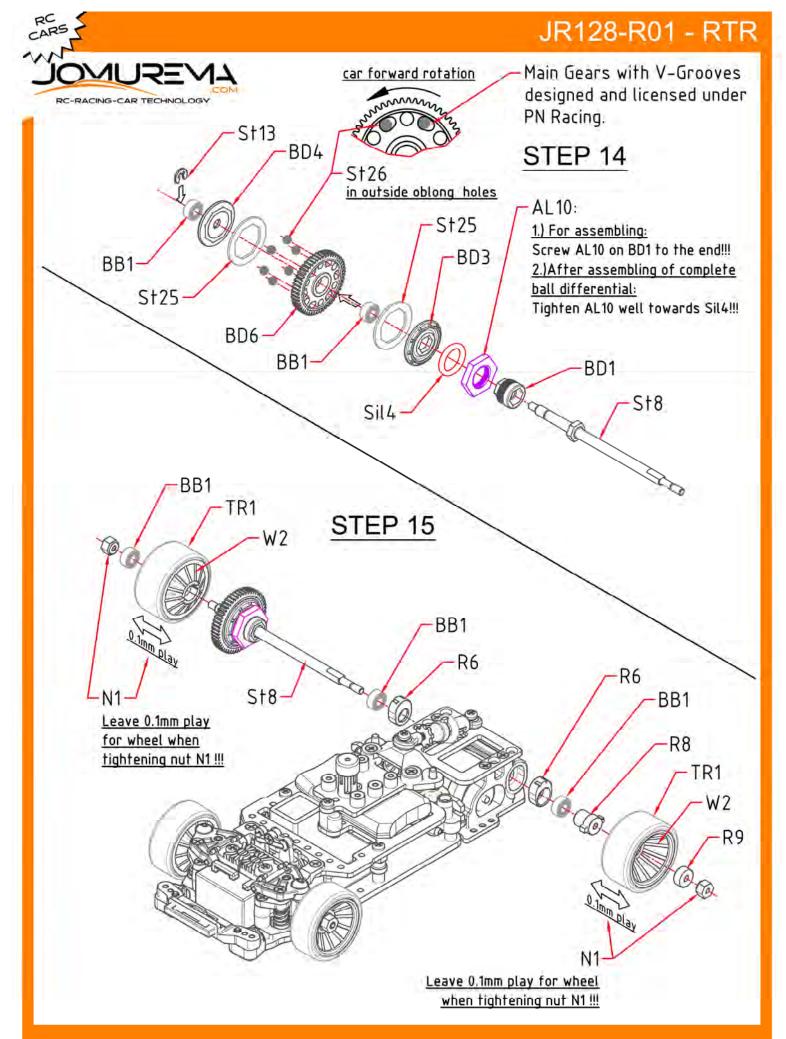


27

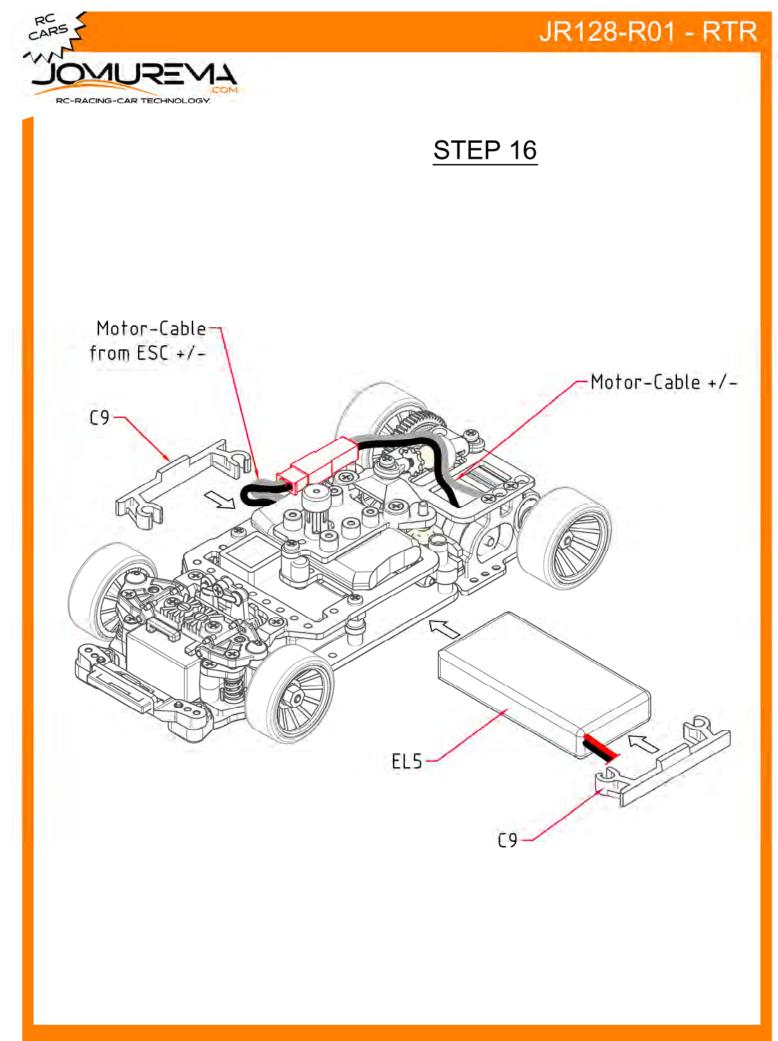
CARS





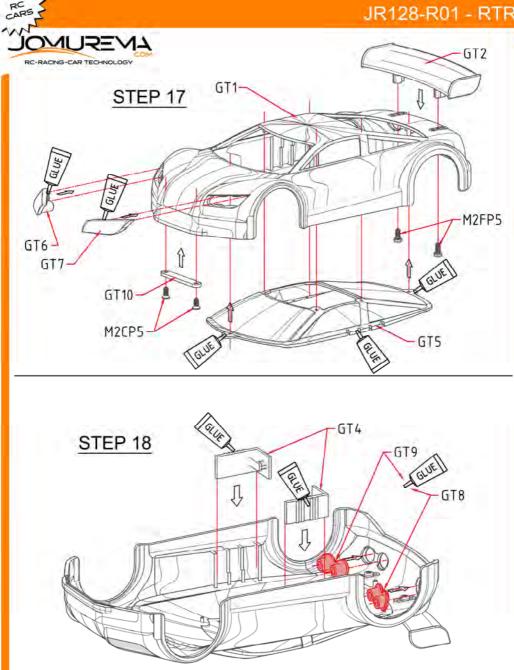






ASSEMBLING MANUAL (9.)

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10. Trouble Shooting:

Problem	Cause	How to solve
Model is not moving.	Chassis or transmitter power switch is not ON.	Switch power ON as per manual step 5.7 & 5.8 on P11.
	Battery or motor are not plugged properly to ESC.	Check proper fit of plugs as per manual step 5.5 on P11 & step 16 on P30.
	Battery has run low.	Change Lipo battery as per manual step 16 on P30 & step 5.5 on P11. Lipo charging, see P9.
	Matching of Transmitter (TX) with Receiver (RX) is cancelled.	Refer to other manual of FS-GT2 Transmitter. Go through matching procedure step 10.01 on P9.
Model loses control.	FORWARD and REVERSE control are opposite.	Change throttle Reverse switch to opposite position as per manual step 6.1.2 on P12.
	LEFT and RIGHT control are opposite.	Change steering Reverse switch to opposite position as per manual step 6.1.1 on P12.
	Battery inside chassis has run low.	Change Lipo battery as per manual step 16 on P30 & step 5.5 on P11. Lipo charging, see P9.
	Green light under the flap on transmitter starts flashing.	Change batteries in Transmitter (TX) as per manual step 5.3 on P11.
	Antennas are not in correct positions.	Straighten up the antenna on the transmitter and on the chassis.
	Problems with other devices using 2.4GHz nearby.	Stop using the other device, or operate model in different area.
	General problems of control.	Choose other area to run your car.
	Vibrations of steering or sounds from the chassis or steering servo.	Little vibrations and low sounds are normal side effects of the electronics. These are no faults. Loud sound of servo: see P15.

TROUBLE SHOOTING (10.)





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Problem	Cause	How to solve
Model is not running straight.	Steering neutral position is not trimmed correctly.	Adjust steering trim as per manual step 6.2.1 on P13.
	Wheel Nuts front and/or rear are too tight.	Adjust little gap of wheels as per manual step 5.2.2 on P10.
Model is not stopping.	Throttle neutral position is not trimmed correctly.	Adjust throttle trim as per manual step 6.2.2 on P14.
Model is running too slowly.	Battery has run low.	Change Lipo battery as per manual step 16 on P30 & step 5.5 on P11. Lipo charging, see P9.
	Wheel Nuts front and/or rear are too tight.	Adjust little gap of wheels as per manual step 5.2.2 on P10.
	Carpet fibres, dirt, dust or other foreign particles are partly covering and blocking gears, wheel shafts or motor shaft.	With power switch in OFF position clean out all dirt, dust, fibre and particles from gears wheel shafts and motor shaft.
	Motor has lost power.	Change to spare motor. Remove left rear wheel and rear shaft (P29). Remove part R4 (P27). Unplug and remove motor. With opposite procedure build in new motor. Attention on well adjusted gear play.
Steering gets very jumpy and unprecise with cracking noises.	Gears in steering servo are broken.	Change to spare servo. Remove SS6, SS7 & front unit (P27). Change servo & servo arm (P26).

Still some questions? Or missing of some informations?

For all kinds of further information regarding technics, adjustment, spare parts and option parts, please check on our website: www.jomurema.com.

All manuals for all our products will be kept available for download on this website.

If you have some open questions which this manual, your dealer or your fellow racers could not answer, please refer to us directly by using the contact form on our website for further clarification.

TROUBLE SHOOTING (10.)



11. Take Notes:

JR128-R01 - RTR

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TAKE NOTES (11.)



1/28 2WD indoor RACER READYSET



INSTRUCTION MANUAL

PLEASE READ THIS MANUAL THROUGH THOROUGHLY BEFORE USE

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