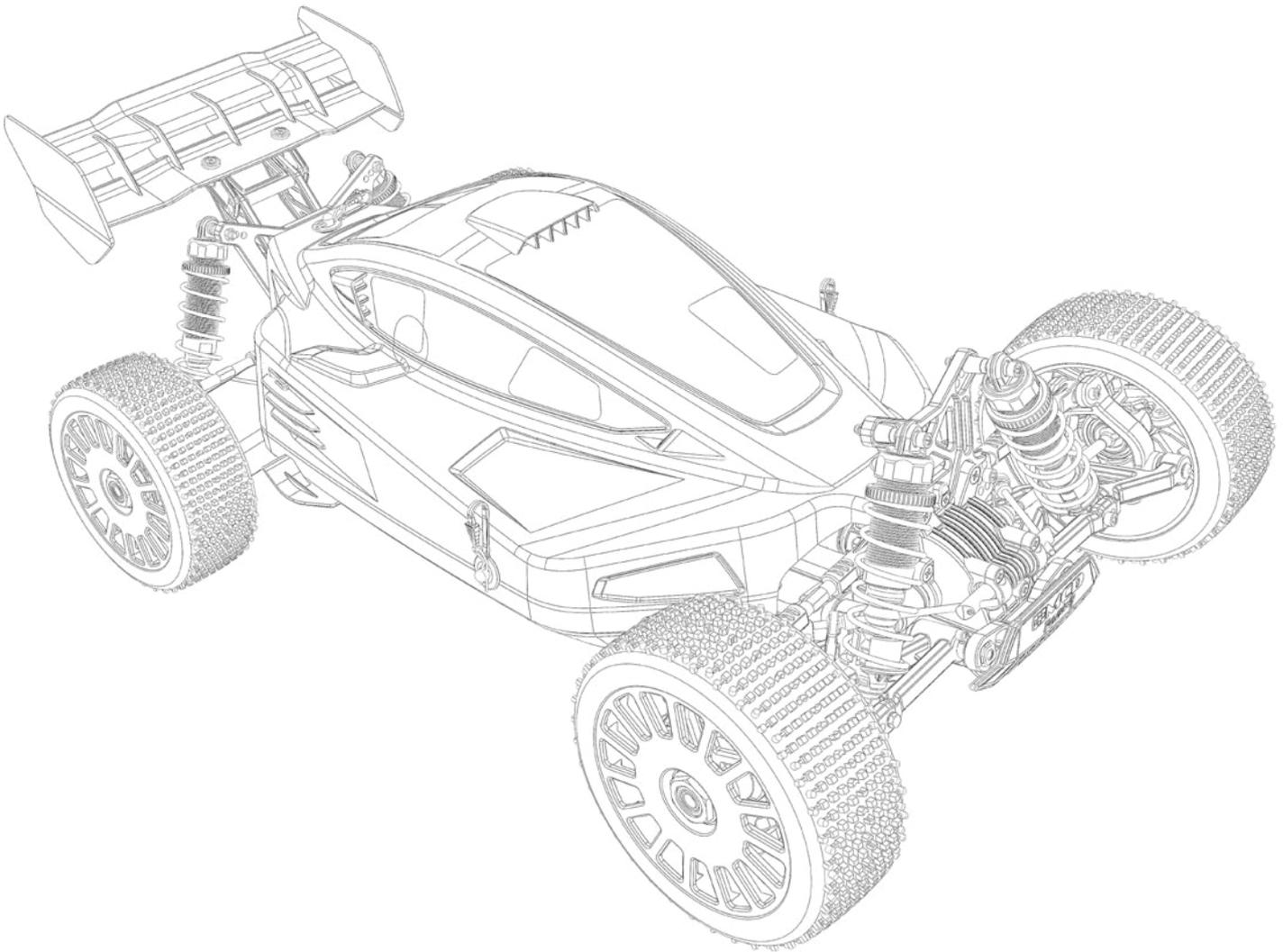




RR5

Factory Team EC Spec

INSTRUCTION MANUAL





Thank You.

Thank you for selecting the race proven MCD. Version 5 is designed to ensure you the best driving experience in the large scale. Technical superiority, unrivaled endurance, terrific 4WD handling and strong emotions are the qualities that have always set MCD apart in the world large scale RC scenario. The same values lie behind the V5, the latest model in the brand, embody the marriage of design and technology, set in the very DNA of any MCD.

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Quick Guide MCD Racing Cars

Warranty and safety precautions

With the purchase of this MCD 1:5 car, your car is under two year warranty starting with the date of purchase. This warranty covers any material or manufacturing faults that might be present at the date of purchase.

This warranty does not cover:

- Ordinary wear and tear.
- Wearable parts like the clutch or gears.
- Damages as a result of misuse by the driver.
- Damages from wrong maintenance procedures .
- Cosmetic damage.

Please consult your local hobby shop first in case of a warranty claim.

In case you decide to send this product for repair, please attach a proof of purchase. Before you send your product to your dealer, we recommend you to consult them first (either via telephone or email) The sender has to pay for shipping costs. Every warranty claim has to be validated by service department first. Dismissed claims are subject to administrative fees (checking and handling) before we send the items back. Repairs that are not covered by warranty have to be paid for in advance. MCD Racing cannot be held responsible for any damages that emerge from or are caused by, directly nor indirect use or misuse of this product or its accessories.

This product should not be considered as a toy and therefore not suitable for children under the age of 14. The engine must not be operated interiors.



IMPORTANT:

Advise your local hobby shop before you first start up the engine, especially considering proper operation and safety precautions. If possible, get a demonstration on how to operate the engine, and make yourself familiar with it.

Only if and when you fully understand its operation, you should start using the engine. Always be sure to operate within the safety guidelines indicated below to avoid damages or personal injury. Never try to modify any part of the engine as this voids the warranty and may lead to damages or personal injury.

Fuel – Safety precautions

Use only minimum 95 Octane gasoline mixed with high quality two-cycle engine oil. Use a 20:1 ratio gasoline to oil. (e.g. 250ml oil mixed with 5lt Fuel)

- Stay away from open fires while fuelling or running the engine. Do not smoke nearby!
- Store the fuel in a well ventilated area, away from heat sources, fire or batteries.
- Always keep the fuel in a clearly marked container away from the reach of children.
- Never handle the engine or the exhaust until they are cooled down. These parts can get up to 170°C when operating.
- In case of eye contact, rinse thoroughly with warm water.
- In case of skin contact, rinse thoroughly with warm water and soap. Do not scrub.
- Never breathe the exhaust fumes as they are poisonous. Never operate the engine in closed spaces.
- If someone is exposed to the exhaust fumes, the person has to be taken out to open air in case of nausea.
- Always store your fuel in a sealed container specifically made for gasoline.

Make sure your car is properly maintained before you start running!

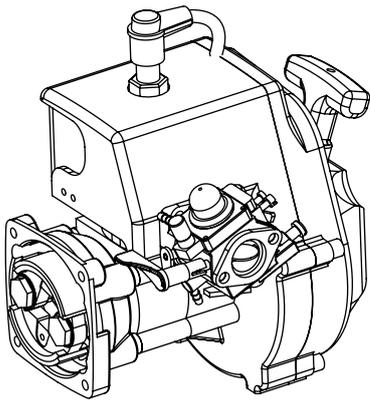
- Check all screws and nuts for a proper and firm seat. Use thread lock, where screws thread into metal.
- Never drive without fully charging batteries for the transmitter and receiver against the risk of a runaway.
- Always check the brake and throttle linkage before you start the engine.
- Be sure the air filter is clean and properly oiled. Never run the engine without an air filter as dust and debris may enter inside and seriously damage the engine.
- Always be sure that there is chain wax inside the CCD Axles.
- Always be sure that there is grease inside the cup joint boots.
- Always be sure that nobody else uses the same frequency.

Operation

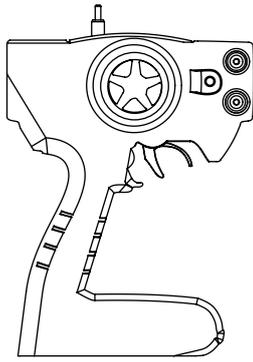
- Exhaust fumes are poisonous. Never operate the engine in closed spaces.
- Break-in procedure should be payed attention.
- Be sure the air filter is clean and well-oiled. Never operate the engine without an air filter attached.
- Check the air filter regularly for eventual damages.
- Use minimum 95 Octane gasoline mixed with high quality two-cycle engine oil.
- Use a 20:1 ratio gasoline to oil. (e.g. 250ml oil mixed with 5lt Fuel)
- Use original engine spare parts only.

The Do's	The Dont's
Switch on the transmitter before starting the engine.	Never run with low batteries.
Drive carefully when there are people around.	Never run your car in wet conditions or on tall grass.
Switch engine off first, and then the transmitter.	Never use chemicals for cleaning your car.
Always check the condition of the batteries before running the engine.	Never run your car without the bodyshell.

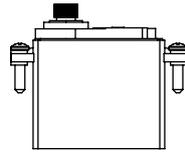
Needed Equipment (not included)



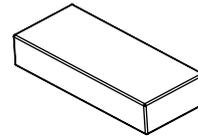
Engine



Transmitter

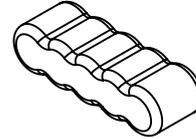


At least 2 Servos
(Minimum capacity: 25kg for steering, 15kg for throttle and brake)

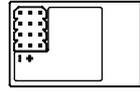


Li-PO/LiFE Battery
(Max dimensions:
127mm x 57mm x h:39mm)

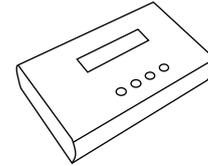
Or



NiMH Battery
(Max dimensions:
127mm x 57mm x h:39mm)



Receiver



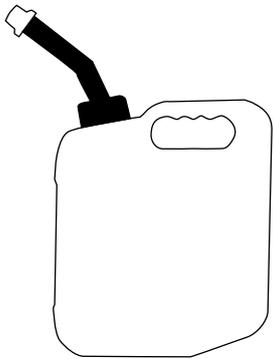
Battery Charger



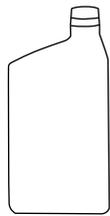
Battery extension wire



Y Wire for double steering servo



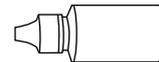
95 or Higher
Octane Gasoline



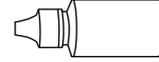
2 Stroke Oil
(High Quality racing
oil recommended)



Shock Oil
(standart 1000cps)



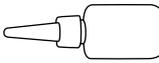
Air Filter Oil



Thread Lock



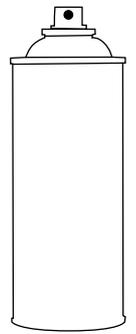
Grease



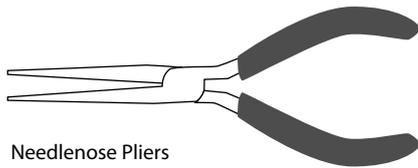
Tire Glue



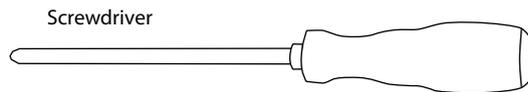
Chain Lube



Polycarbonate
Paint



Needlenose Pliers



Screwdriver



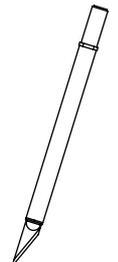
PZ 2



PH 1



Divider



Cutter



Wrench

Sizes: 5.5mm, 7mm, 8mm, 10 mm



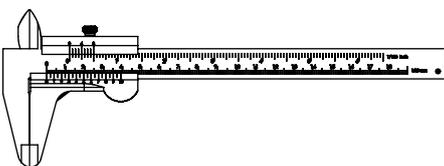
Hex Driver

Sizes: 2mm, 2.5mm, 3mm, 4mm, 5mm



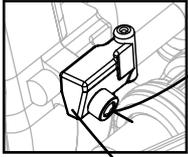
Body Reamer

Recommended Items (not included)



Compass

Mounting the Heat Insulation Plate



1. Screw the bottom bracket on the engine (6307 - 4mm allen wrench)



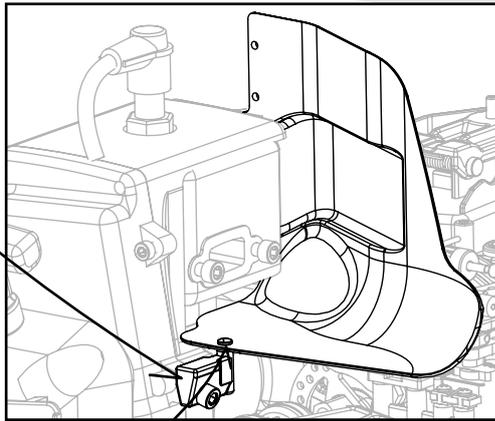
6251
PH1 Self Tap 3x9 mm



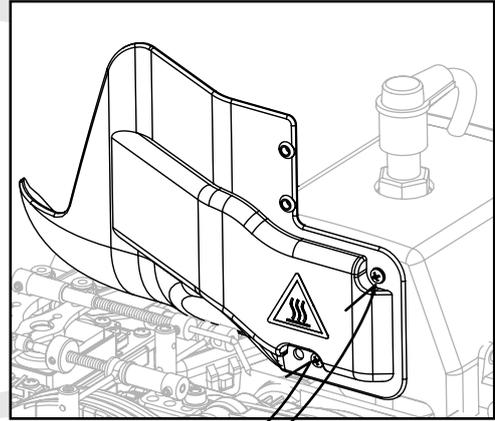
6302
Hex Screw M4x12 mm



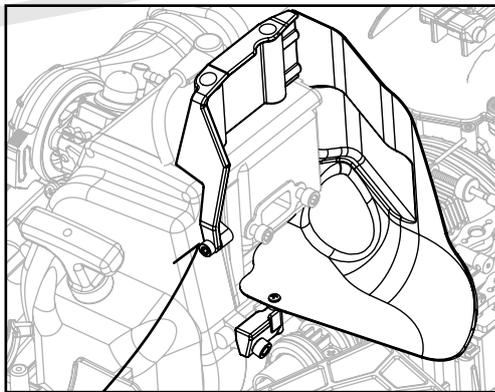
6307
Hex Screw M5x10 mm



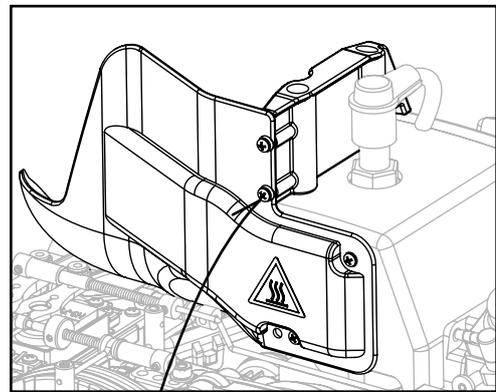
2. Screw the main insulation plate on the bracket. (6251, 6307)



3. Screw the main insulation plate directly on the engine. You don't need to drill. (6251)



4. Screw the spark plug protection on the engine. (6302)



5. Screw the spark plug protection on the main insulation plate. (6251)



Optional Barracuda G Performance Exhaust.(7506)



You can only mount the standart exhaust shown on the picture.
CY F-260

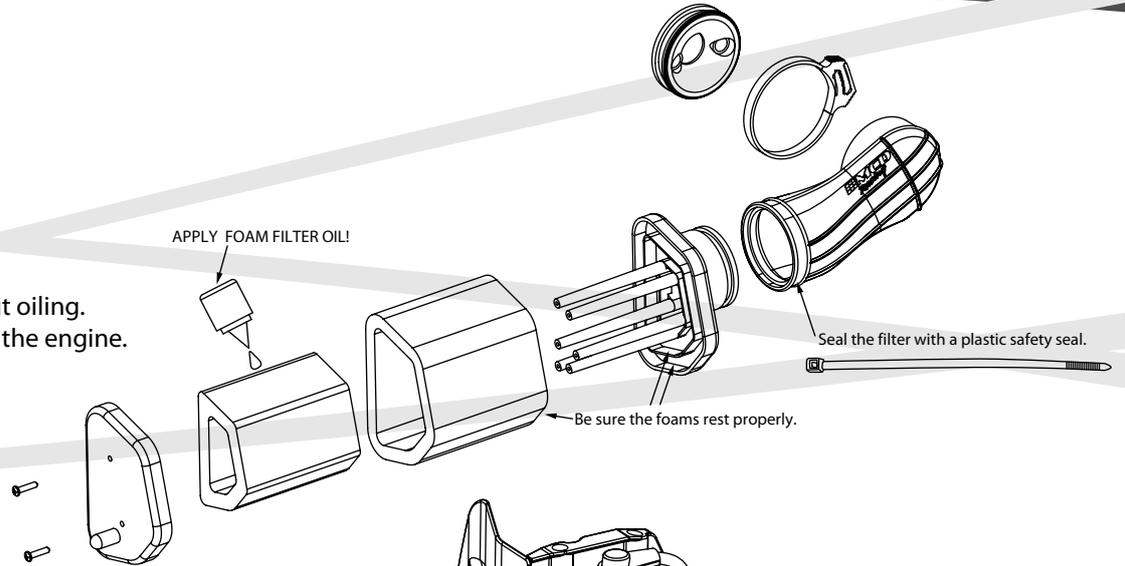


Air Filter

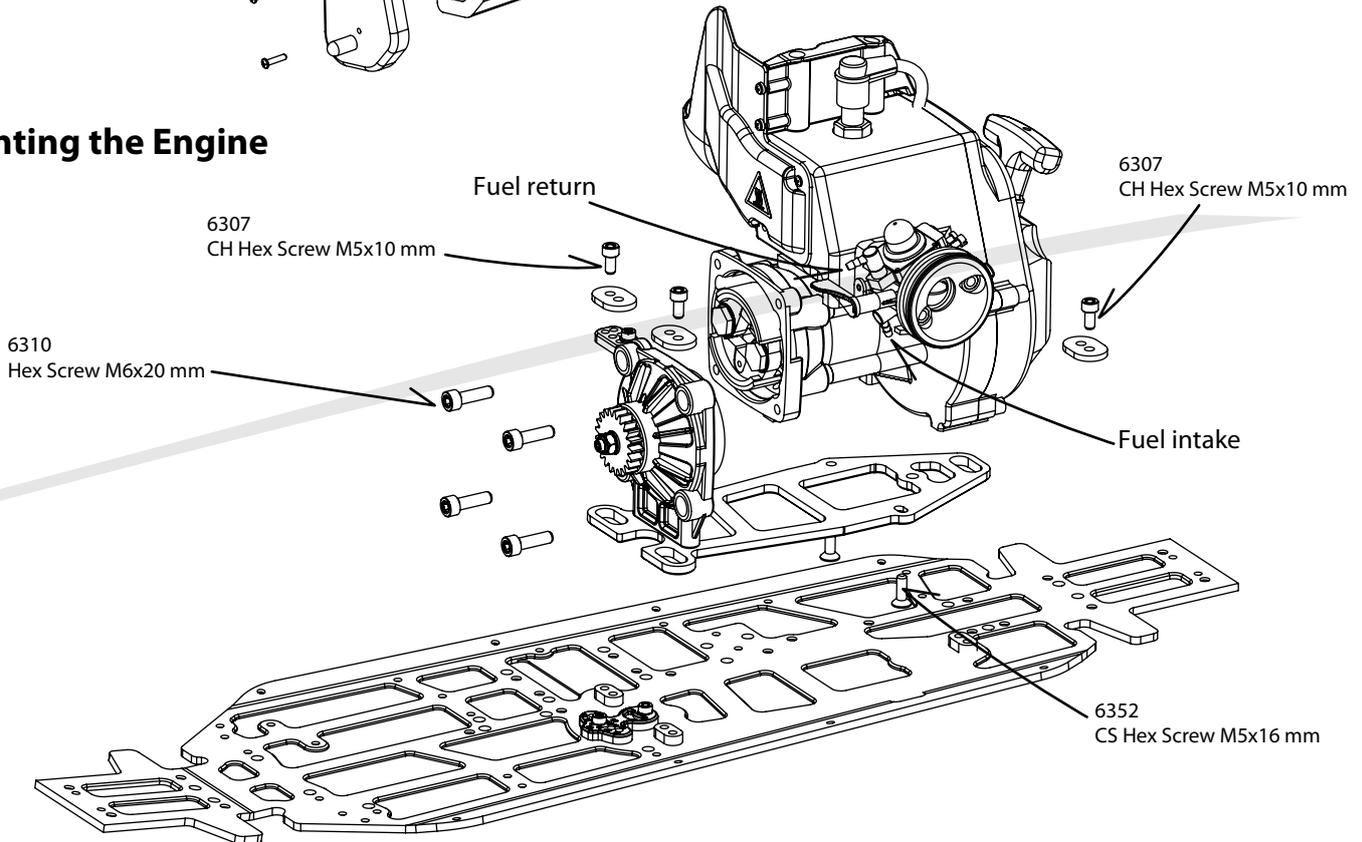


Warning!

Do not use the air filter without oiling.
Dust and particle can damage the engine.



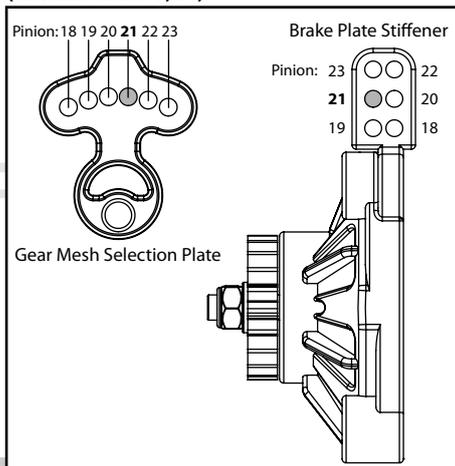
Mounting the Engine



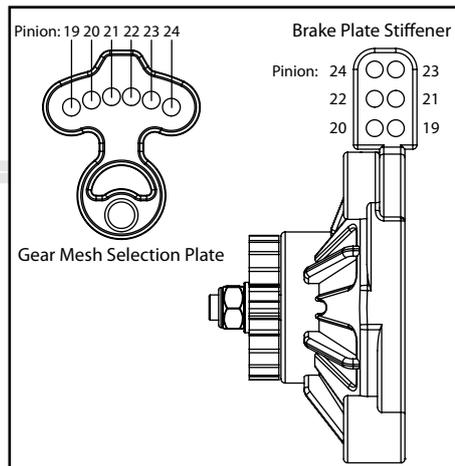
Adjusting the Gear Ratio

When adjusting the gear ratio, depending on the main gear, set the Gear Mesh Selection Plate and the Brake Plate Stiffener according to figures shown below.

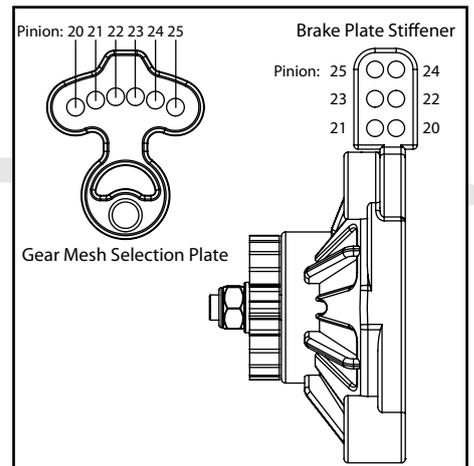
Default Gear set: Main: 64T, Pinion: 21T
(default ratio: 9,14)



Main Gear: 63T



Main Gear: 62T



Throttle and brake linkage

The throttle/brake servo controls both linkages and serves two purposes: 1. The throttle linkage controls the amount of air that goes in to the engine and therefore controls engine rpm. 2. When the throttle linkage stops at idle, the brake linkage engages.

Installing the throttle linkage

1. Turn on your radio first.
2. Check if servos are functioning.
3. Be sure the servo turns on correct direction. (Throttle direction: CCW, Brake direction: CW. As shown beside. **Reverse** if direction is not correct!)
4. Install servo horn.
5. Make sure you adjust neutral position as shown in **Figure A**. If necessary correct the neutral position from the sub trim menu on your transmitter.
6. Cut the engine cover from the spot indicated in **Figure B**.
7. After completing the previous steps connect linkage as indicated in **Figure A**.
8. After adjusting the neutral position install the throttle linkage as indicated in **Figure C**.
9. Make sure you leave a 0,2mm gap in between the "linkage stopper" and "linkage plastic" as indicated in **Figure A**.

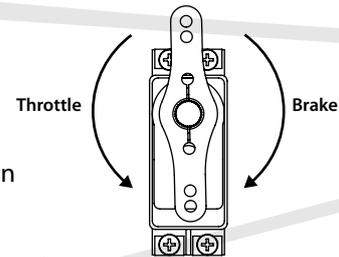


Figure A

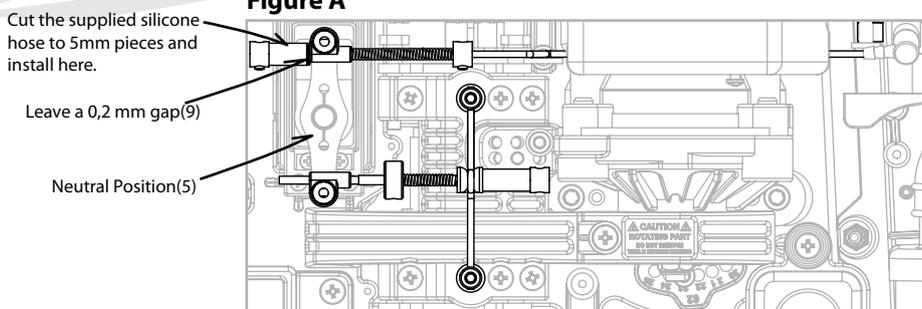


Figure B

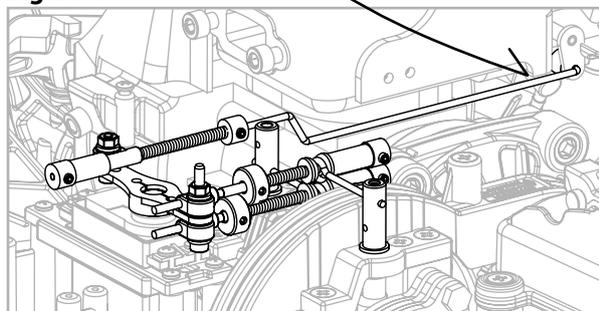
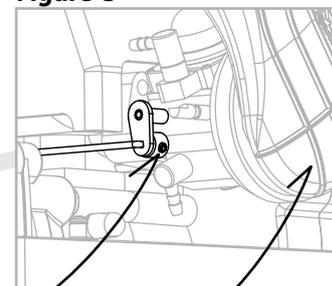


Figure C



Screw from here(8) Rotate the air filter up.

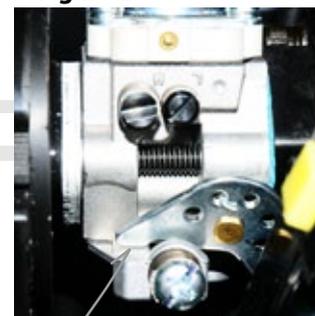
10. Reduce the throttle end point adjustment(EPA) around %50 from the transmitter.
11. Apply full throttle from the trigger. (**Figure D**)

Figure D



12. Hold full throttle on the transmitter then increase throttle EPA slowly until there is 0,2mm gap left between the parts shown in **Figure E**.
13. After this setting leave the throttle to neutral position.

Figure E



Leave a 0,2 mm gap while on full throttle(12)

14. The throttle linkage is assembled and alignment is done. Check if the linkage is functioning properly.

Installing the brake linkage

During operation the brake pads wear over time causing weakening of the brakes. In order to compensate you should extend the brake linkage by turning it.

1. Make sure you assemble the brake linkages with the dimensions as indicated below.
2. Connect the upper linkage to the front brake and the bottom linkage to the rear brake as indicated in **Figure F**.

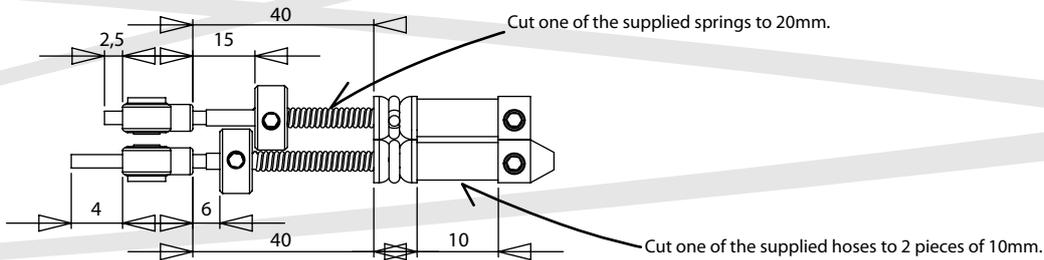
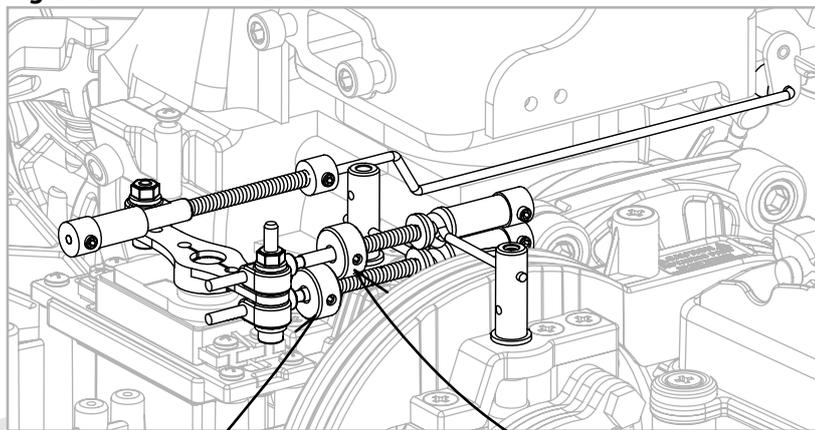


Figure F



Rear brake adjustment collar.

Front brake adjustment collar.

Adjust the brake bias 55% front and 45% rear.

3. After the linkages are installed, switch on your radio and reduce the brake end point from the transmitter EPA menu to %30.
4. Apply full brake from the trigger and hold.
5. By moving the car back and forth with your hand, start slightly increasing EPA to approx. %50 until the brakes lock.
6. If it doesn't lock at %50 turn back to the step 1 and re-adjust.
7. After the brakes are functioning properly adjust the brake bias by using the collars as indicated in **Figure F**.
8. After the step 7 is complete your brake set-up is finished.

Optional rear brake servo installation

Requires advanced programmable mixing 3 channel radio. Check your transmitters manual to adjust.

Install the linkage in this side if double servo is used.
Install the linkage in this side if single servo is used.

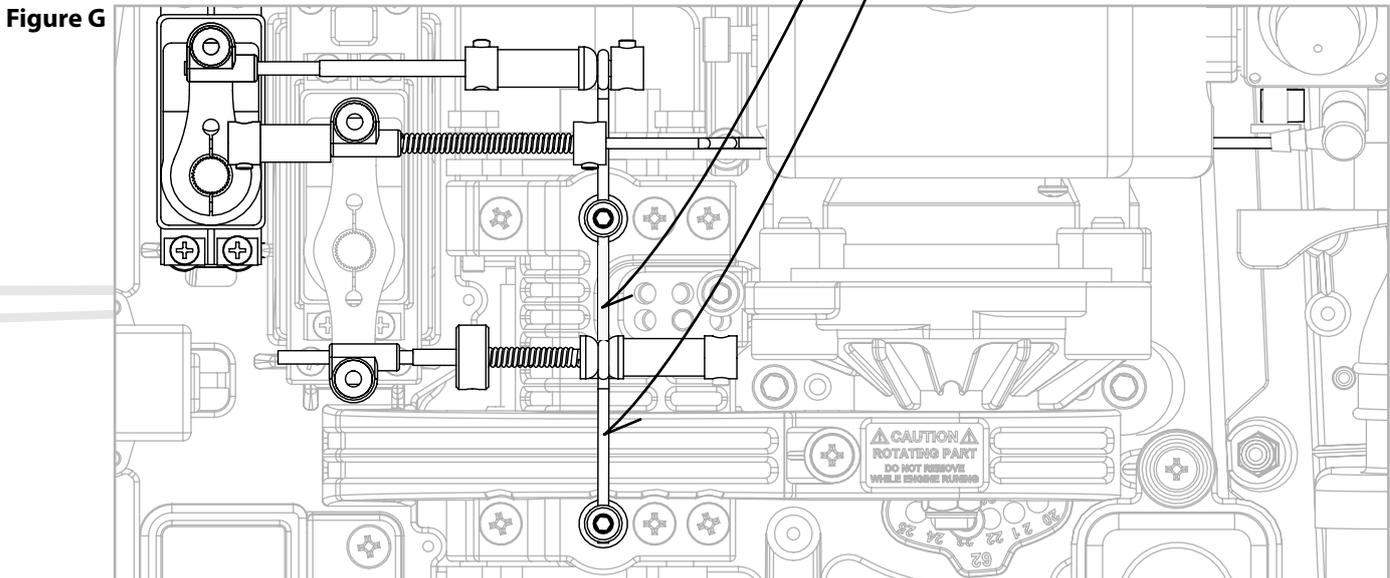


Figure G

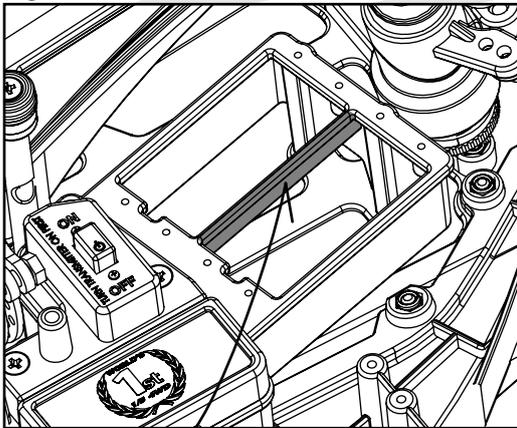
Steering servo installation.

You can use single or double steering servos on this car. We recommend using large scale 30x60mm min of 25kg/cm torque servos.

Steering single-servo installation.

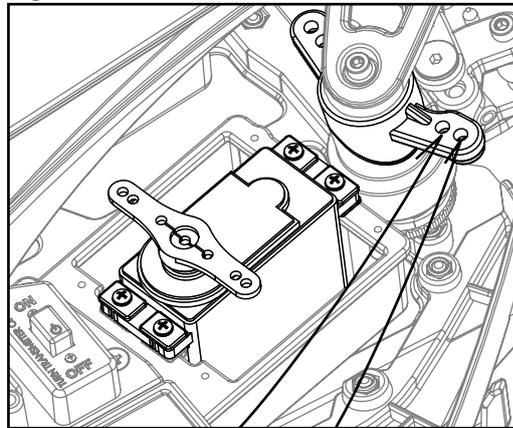
1. Cut the beam with a diagonal pliers as indicated in **Figure H**.
2. Install servo as shown in **Figure I**.
3. Insert a 4 mm round pin and lock the Ackerman plate to prevent steering as shown in **Figure L**. Servo saver will be locked in the central position.
4. Turn on the radio and install the double horn to neutral position. Perpendicular to servo case.
5. Set steering EPA to approx. %70.
6. Set from the sub trim menu the distances from "the servo horn" to "servo saver" equal at both sides as shown in **Figure J**. You can use a divider to measure the distance. (**Figure K**)
7. Assemble the linkages supplied in the accessory bag and adjust them to same lengths measured in step 6.
8. Install the assembled linkages to the outer holes on the servo saver as indicated in **Figure I** and **Figure J**.
9. Remove the round pin inserted in step 3.
10. Adjust steering EPA to max. possible left then max. possible right from the transmitter. The servo should stop turning when the steering reaches its maximum travel.
11. After step 10 is completed your steering single servo installation and set-up is finished.

Figure H



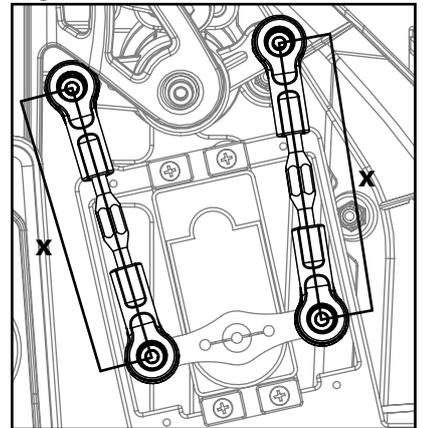
Cut the beam with diagonal pliers(1).

Figure I



Inner hole Outer hole

Figure J



Connect the servo arms to the outer holes.

Steering double-servo installation.



Caution!

Double-servo installation is critical and should be handled carefully. If not installed properly the servos will work against each other and damage themselves.

1. Install servos as shown in **Figure L**.
2. Insert a 4 mm round pin and lock the Ackerman plate to prevent steering as shown in **Figure L**. Servo saver will be locked in the central position.
3. Turn on the radio and install the single horns to neutral position as shown in **Figure L**.
4. Set steering EPA to approx. %70.
5. Measure the **distance A** shown in **Figure L** with a divider.
6. Set from the sub trim menu, the servo 1 horn distance to servo saver inner hole(**distance B**) is equal to **distance A**.
7. Repeat step 6 for servo 2 **distance C** and check if the **distance B** has remained same.
Distances may change during sub trim. Remove the horns of servo 1 and servo 2 and swap them then repeat step 5,6 and 7.
Make sure the distances A, B and C are equal!
8. Assemble the linkages supplied in the accessory bag with the same length with **distance A**.
9. Install the assembled linkages to the inner hole on the servo saver for faster response (make sure the **distance D** is equal to the servo horn **distance E** as shown in **Figure L**).
10. Remove the round pin inserted in step 2.
11. Adjust steering EPA to max. possible left then max. possible right from the transmitter. Be sure the servo stops turning before the steering reaches its maximum travel.
12. After step 11 is completed your steering single servo installation and set-up is finished.

Figure K

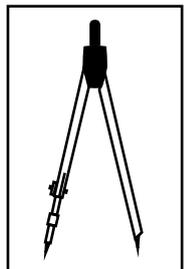
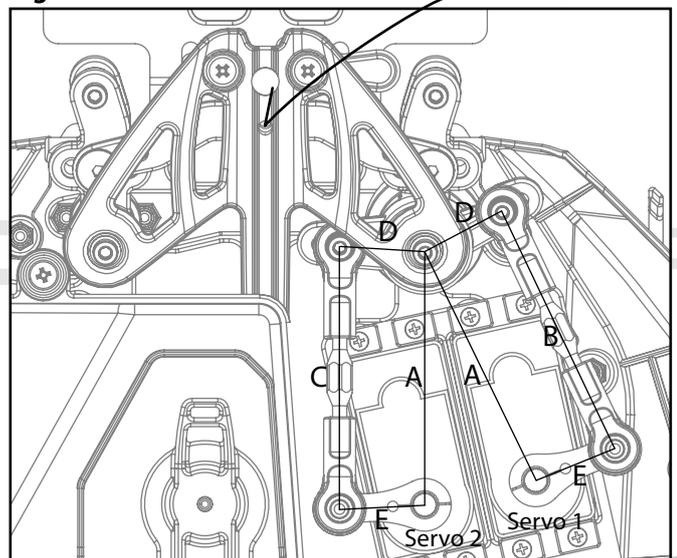


Figure L



Insert a 4 mm round pin and lock the ackerman plate to prevent steering(3,2).

Starting the Engine

Preparing fuel

Fill the fuel tank. Use only minimum 95 Octane gasoline mixed with high quality two-cycle engine oil. Use a 20:1 ratio gasoline to oil. (e.g. 250ml oil mixed with 5lt Fuel)

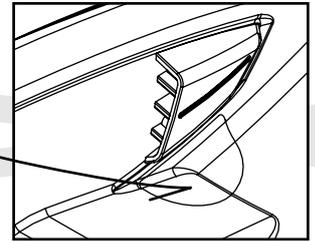
Shutting the engine off

- Push engine stop switch **E** shown in **Figure M**. (Cut the body from the indicated area in order to access the switch when the body is mounted. See page 12)



Caution!

Be sure you understand all engine instructions before attempting to start the engine. Turn on the transmitter first, then the receiver before starting the engine.



Carburetor default settings

Slight adjustments of the carburetor might be needed depending on the external factors such as mixture, spark plug, muffler and environmental factors (air pressure, humidity and temperature). Fine-tuning idle and full throttle settings will only work after the engine is fully broken in. The factory settings provide a rich mixture that results in a significant blue smoke from the exhaust.

In case the idle-mixture needle L or the main needle H were accidentally altered, turn the setting screws H and L clockwise as far as they will go. Afterwards, turn the H screw 1 hour 30mins +- 5mins turns counter-clockwise and the L-screw 1 hour 10mins +- 5mins counter-clockwise. (As explained in **Figure O** below)

Figure N

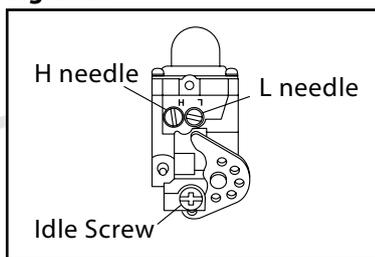
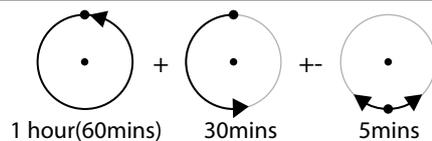


Figure O

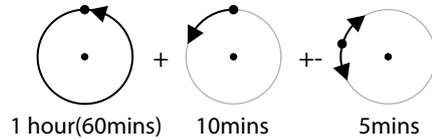
H Needle:

1Hour 30mins
+- 5mins



L Needle:

1Hour 10mins
+- 5mins



Starting the engine

The engine is provided with an integrated fuel pump to get fuel to the carburetor. The carburetor features a manual pump (B) with a transparent cover to see the fuel flow. Follow the steps below to start the engine.

1. Pump the primer bulb on the carburetor (**B** in **Figure M**) until it is filled.
2. Set the choke lever (**A** in **Figure M**) as shown.
3. Pull the starter cord 3 times **slowly** for the fuel to get in the cylinder. (Do not pull the cord fast and more than 50-60cm)
4. Set the choke lever as shown.
5. Pull the starter cord rapidly 5-6 times until the engine starts. (Do not pull the cord more than 50-60cm)
6. When the engine starts, set the idle if its too high (vehicle moves at idle) or too low (engine stops running from the idle screw shown in **Figure N**).
7. If the engine does not start set the carburetor to default settings as indicated above.

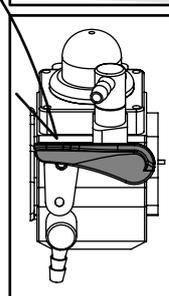
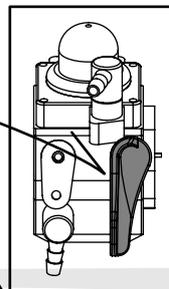
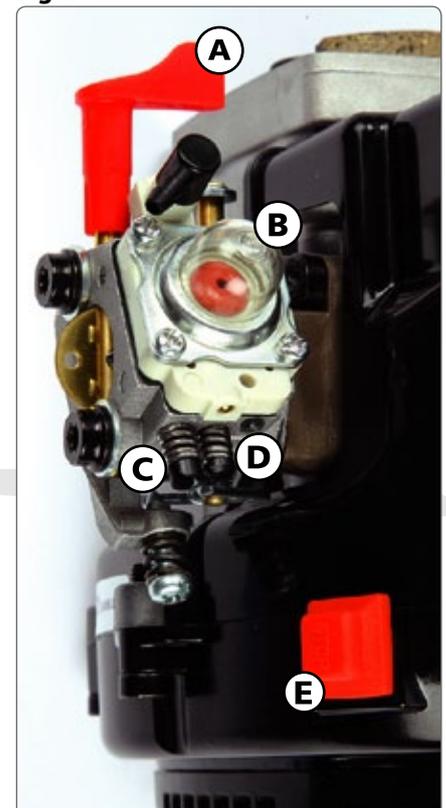


Figure M



Caution!

- Pulling the pull-start cord to its full length can damage the pull starter.
- Pull about 50-60cm of the cord. (first try slowly with the ignition disengaged)
- Never apply too much force to the pull-start mechanism.

Caution!

The mixture gets too rich if too much fuel enters the crankcase or the choke stays closed for too long. This causes the engine to stall. In this condition, the pull-start can only be operated with considerable force. Do not try to start the engine, but rather drain the excess fuel to prevent damage on the engine or the pullstart mechanism. Proceed as outlined below:

- Take out the spark plug and let the electrode dry
- Fully open the choke
- Pull the starter cord several times. CAUTION: fuel may spatter from the combustion chamber and catch fire, and if contacted irritate your eyes and skin.
- Reassemble the spark plug.
- Start the engine again.

Setting the idle-mixture needle L

- Let the engine warm up.
- If the engine responds weak when throttle is pulled, the idle-mixture is too lean.
- Richen the mixture as you slowly turn the idle-mixture needle counter-clockwise by 5 min increments. (As indicated in **Figure O** on the previous page)
- If the engine responds to throttle input with stuttering and smoke plumes from the exhaust, the idle-mixture is too rich.
- Lean the mixture as you slowly turn the idle-mixture needle clockwise by 5 min increments.

Setting the mixture-needle H for WOT

- Prop the car and let the warmed up engine run at full throttle for a short duration.
- Lean the mixture as you slowly turn the mixture needle H clockwise by 5 min increments.
- Richen the mixture as you slowly turn the mixture needle H counter-clockwise by 5 min increments.
- We recommend a setting slightly on the rich side to prolong the engine life.

Caution!

The mixture must not be set too lean under any circumstances! Engine lubrication solely depends on the oil contained in the fuel. Too little fuel in the mixture leads to overheating and piston squeezing due to lack of lubrication. During operation, a lightly blue smoke trail should be visible. Otherwise, immediately stop the engine and richen the mixture accordingly. Also make sure that the cylinder is cooled enough with fresh air to avoid overheating. Spark plugs are subject to wear, especially during break in. Always keep spare plugs of the CMR 7H class at hand. An unsuitable spark plug will make the engine run rough and hamper carburetor settings. Check spark plugs for visual defects and proper electrode clearance.

Break-in procedure

The engine performs best after a short break-in period due to the engines internal parts manufacturing methods. During this break-in, the piston's and liner's surfaces mate each other for best performance and best break-in possible. Break in the engine by driving for around 1 tank of fuel before full throttle may be applied.

Toe Setting

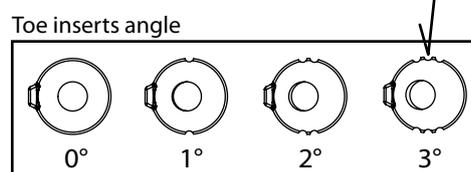
Toe-in:

Mount the toe inserts pointing the direction that the hubs will be installed (L or R) as shown beside.
e.g. If the hub will be installed on the left side, the inserts should be pointing L for toe-in.

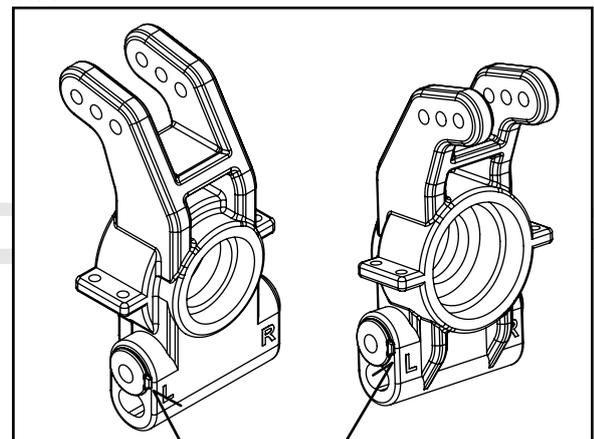
Toe-out:

Though not used frequently if toe-out desired in the rear, simply swap left and right hubs. You will obtain same amount of toe-out.

The toe angle can be changed by replacing the inserts with the desired angle. The degree which defines the toe-angle can be noticed by the sign on the inserts as indicated in the figure below.

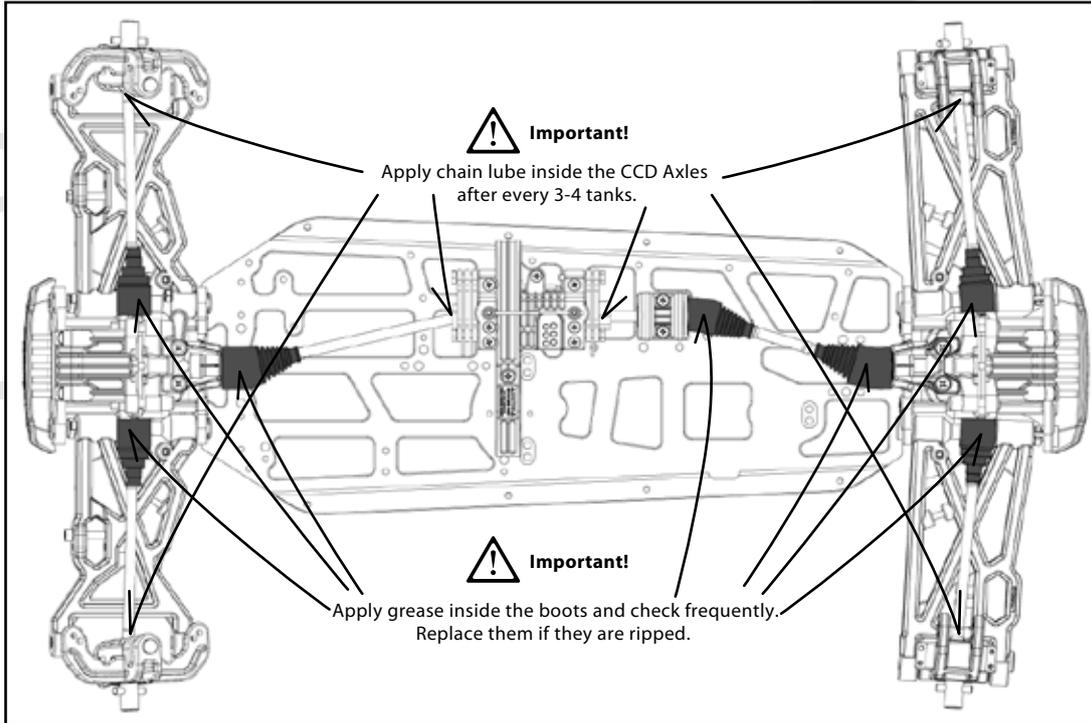


Hub

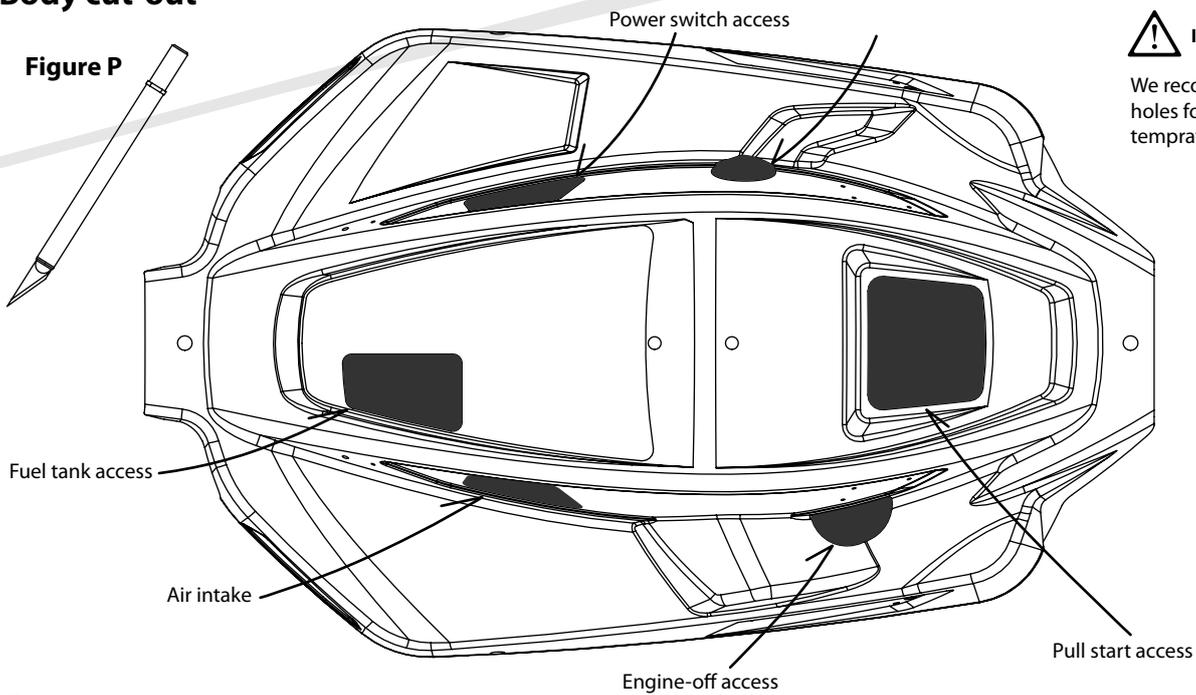


Toe inserts pointing left

Drive-train maintenance

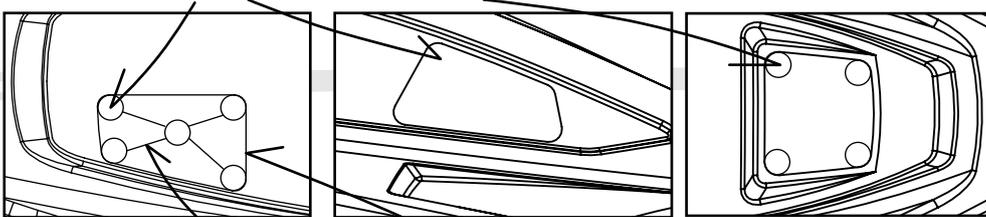


Body cut-out



Cut-out tips

1. Drill holes on the corners before cutting out.

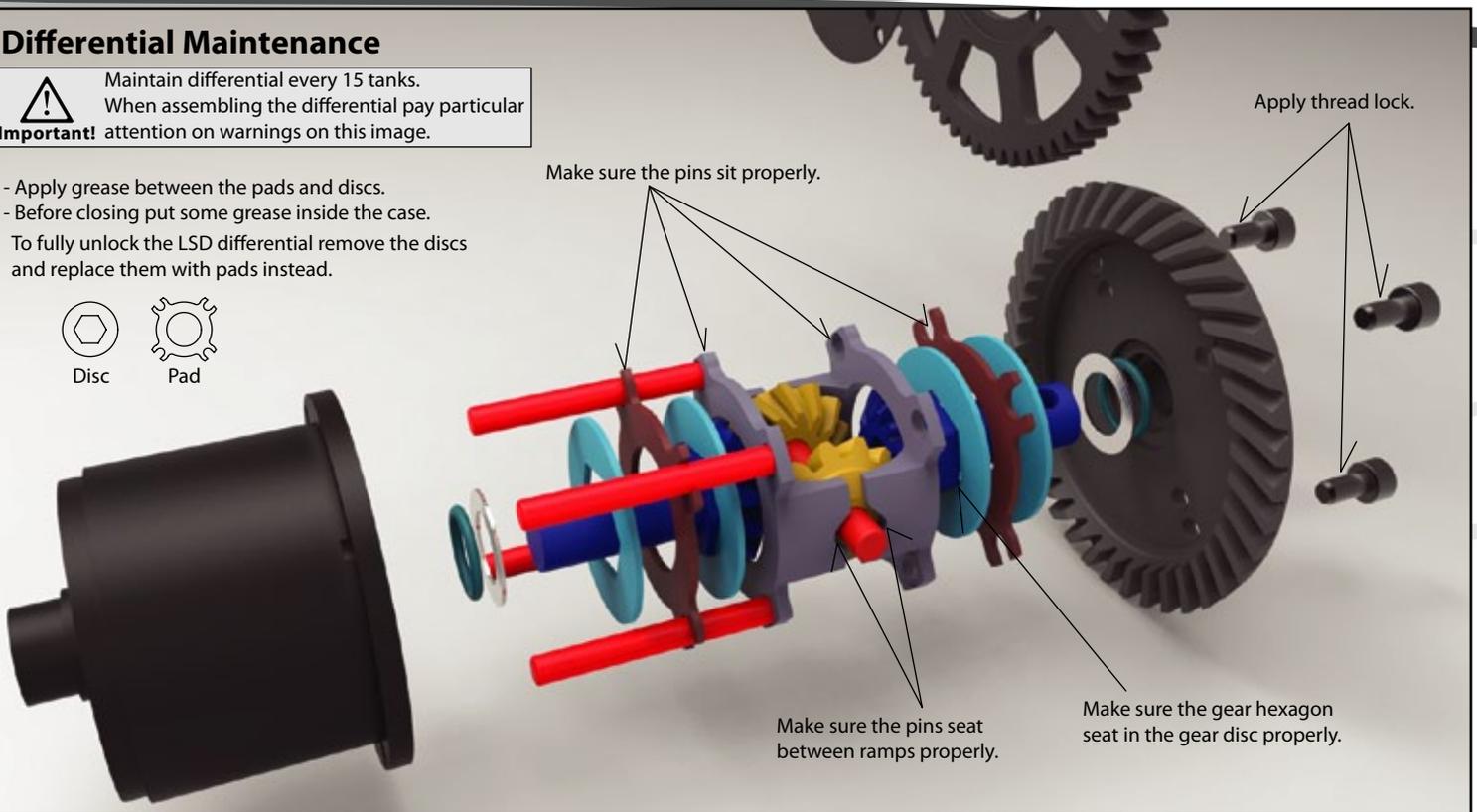
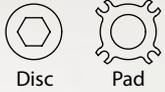


2. Cut the specified lines with PC scissors.
3. Scratch the edges with the cutter tool shown in **Figure P**.
4. Bend and brake the pieces towards inside of the body.
(We recommend to use mechanic gloves during these steps)

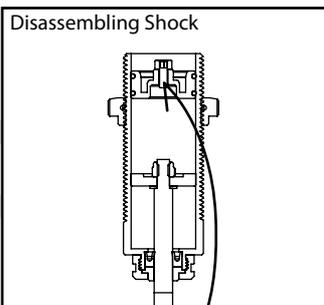
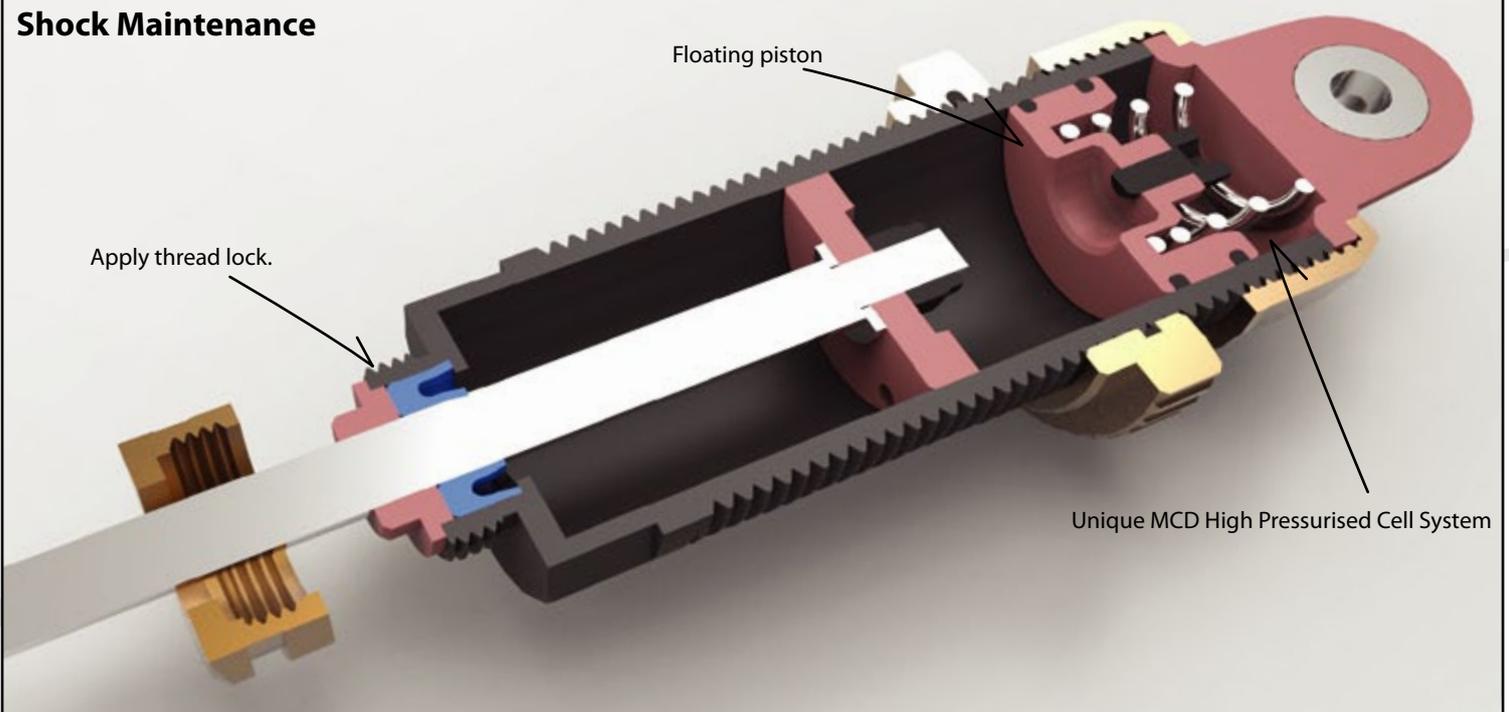
Differential Maintenance

Important! Maintain differential every 15 tanks. When assembling the differential pay particular attention on warnings on this image.

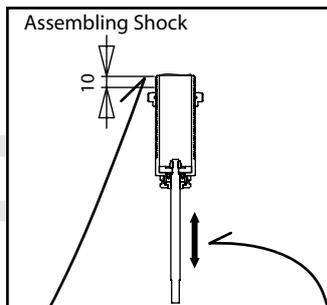
- Apply grease between the pads and discs.
 - Before closing put some grease inside the case.
- To fully unlock the LSD differential remove the discs and replace them with pads instead.



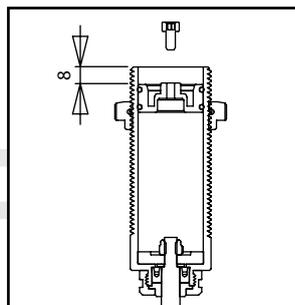
Shock Maintenance



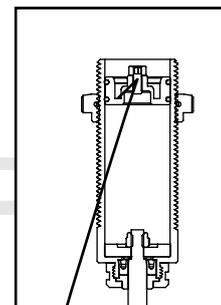
- Remove the lid.
- Remove the screw.
- Rotate the shock upside down and empty oil by pressing the shock shaft.
- Apply force until the floating piston comes out.



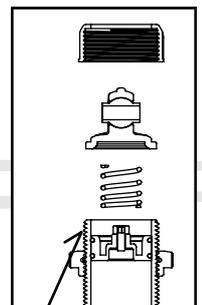
- Fill oil approx. 10mm from the top of the shock body.
- Stroke the shaft up&down approx 20mm for a couple of times.



- Place the floating piston leaving 8mm from the top of the shock body. (The oil will spill) During this step the piston must remain at the bottom.

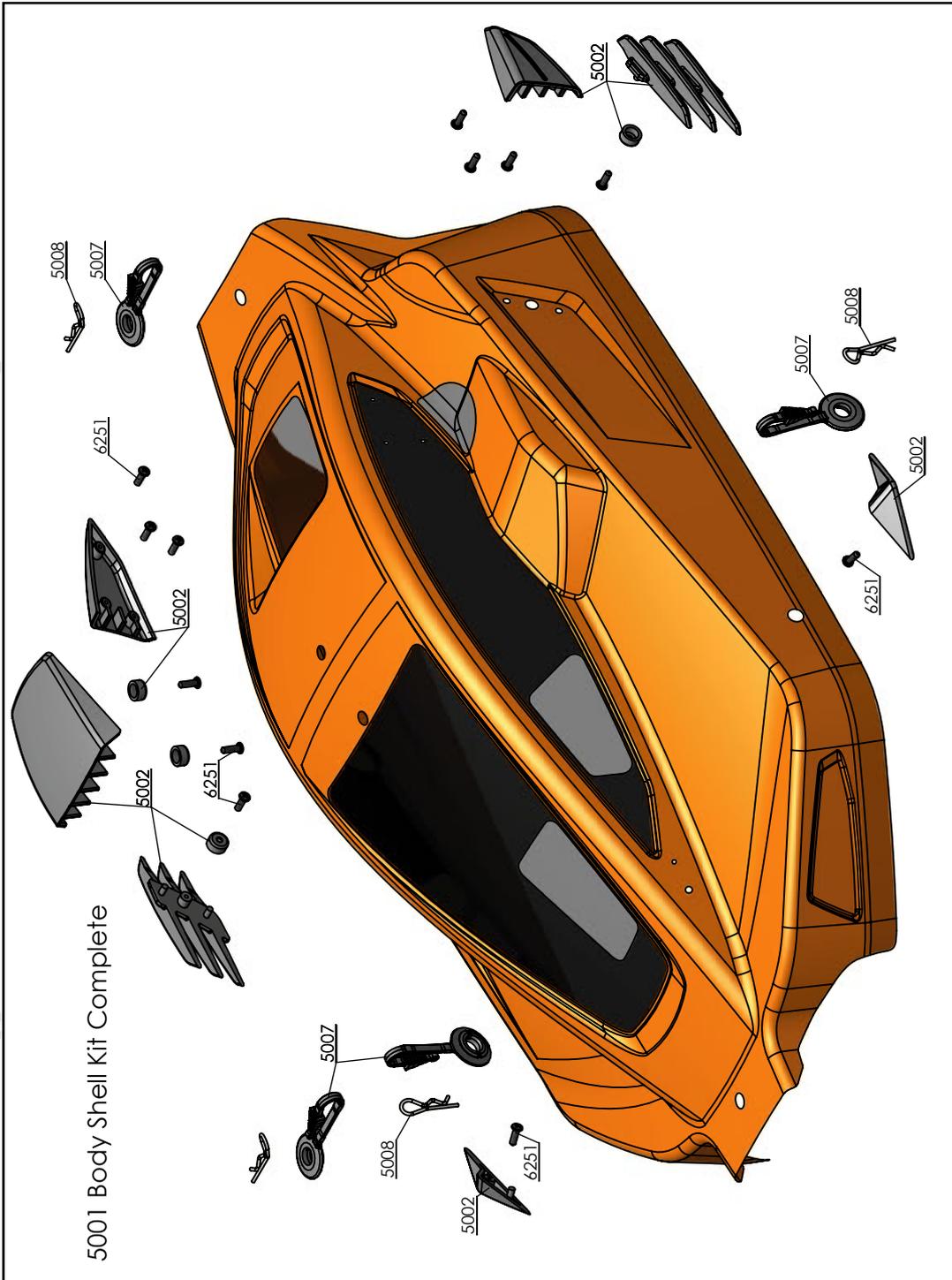
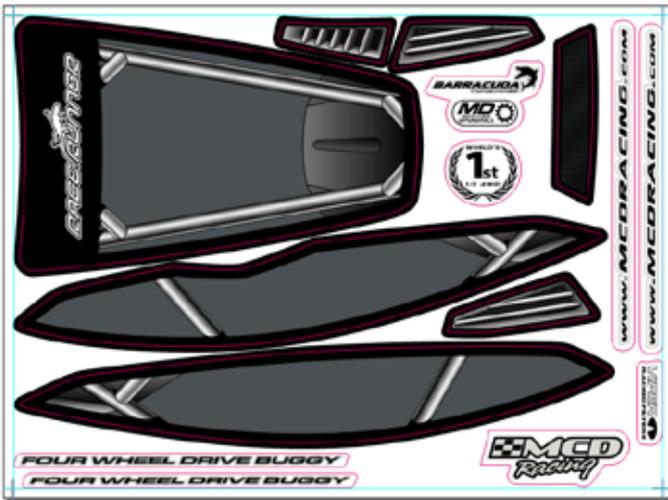


- Set the screw.
- Empty the overflowed oil



- Apply thread lock.
- Close the lid.

5002 - Decal Set



5001 Body Shell Kit Complete

RR5 Decal Set Application



Chassis



Radio Gear Assembled



Parts List

Part No	Product Code	Product Name	Package Count	Part No	Product Code	Product Name	Package Count
01 Wheels & Tyres							
1001	100101P	Wheel Black 15 Spoke 180 mm	2	2601	260101S	Brake Disc	3
1001	100102P	Wheel White 15 Spoke 180 mm	2	2602	260201S	Brake Pad Sinter	3
1002	100201R	Tyre 180 mm Micro Stud Blue Spot 52 sh A	2	2603	260301S	Brake Cam Post	2
1002	100210R	Tyre 180 mm Block Stud Blue Spot 52 sh A	2	2604	260401S	Brake Arm	2
1003	100301P	Tyre Insert Standard for 180 mm	2	2605	260501S	Brake Pad Carrier Screw Set	1
1003	100302P	Tyre Insert Soft for 180 mm	2	2607	260701S	Brake Cam Shaft Thrust Washer	2
1004	100401A	Wheel Nut 24 mm	2	2608	260801S	Brake Linkage	2
02 Brake and Drivetrain							
2001	200101X	F/R LSD Diff. Ass'y 90 Deg Lock	1	2609	260901S	Throttle Linkage	1
2002	200201X	Center LSD Diff. Ass'y	1	2611	261101S	Brake/Throttle Return Spring	3
2003	200301S	F/R Diff. Crown Gear Z39	1	2612	261201S	Brake/Throttle Linkage Adapter Bushing	3
2003	200302S	Front Diff. Crown Overdrive Gear Z37 (Opt.)	1	2613	261301S	Brake/Throttle Linkage Stopper	6
2004	200401S	LSD Diff. Case Steel	1	2614	261401S	Brake Adjuster Collar	2
2005	200501S	LSD Lock Disc	4	03 Suspension and Steering			
2006	200601S	LSD Lock Pad	2	3001	300101P	Front/Rear Wishbone (1 x Front ,1 x Rear)	1
2007	200701S	LSD Lock Ramp 90 Deg.	2	3002	300201P	Front Wishbone Holder Set 8 Deg.	1
2007	200702S	LSD Lock Ramp 120 Deg. (Opt.)	2	3002	300202P	Front Wishbone Holder Set 10 Deg. (Opt.)	1
2007	200703S	LSD Lock Ramp 60 Deg. (Opt.)	2	3003	300301P	Rear Wishbone Holder Set 3T 3S	1
2008	200801S	LSD Internal Gear Set Z12	1	3003	300302P	Rear Wishbone Holder Set 1T 3S (Opt.)	1
2010	201001S	Diff. Solid Lock Bar	1	3004	300401S	Front Wishbone Holder Steel Bracket Set	1
2011	201101S	F/R Diff. Pinion Gear Z13-39	1	3005	300501S	Rear Wishbone Holder Steel Bracket Set	1
2011	201102S	F/R Diff. Pinion Gear Z13-37 (Opt.)	1	3006	300601P	Front and Rear Hub with Toe-Inserts	1
2012	201201S	Center LSD Lid	1	3006	300602P	Toe-Inserts 1-2-3 Deg. (Opt.)	2
2013	201301S	Center Spur Gear Z64	1	3007	300701P	L/R Caster Block Set 10 Deg.	1
2013	201302S	Center Spur Gear Z63 (Opt.)	1	3007	300702P	L/R Caster Block Set 6 Deg. (Opt.)	1
2013	201303S	Center Spur Gear Z62 (Opt.)	1	3008	300801S	Front Hub Pin	4
2014	201401S	Clutch Bell Pinion Gear Z21 Standard	1	3009	300901S	Caster Block Thrust Washer	4
2014	201402S	Clutch Bell Pinion Gear Z20 (Opt.)	1	3010	301001S	F/R Wishbone Hinge Pin	4
2014	201403S	Clutch Bell Pinion Gear Z19 (Opt.)	1	3011	301101P	Wheelbase Adjustment Y-Clips 6.5-7 mm	4
2014	201404S	Clutch Bell Pinion Gear Z18(Opt.)	1	3012	301201S	Rodend Turnbuckle	2
2014	201405S	Clutch Bell Pinion Gear Z22 (Opt.)	1	3013	301301S	Rear Hub Hinge Pin	2
2014	201406S	Clutch Bell Pinion Gear Z23 (Opt.)	1	3201	320101X	Front Shock Absorber Ass'y	1
2014	201407S	Clutch Bell Pinion Gear Z24 (Opt.)	1	3202	320201X	Rear Shock Absorber Ass'y	1
2014	201408S	Clutch Bell Pinion Gear Z25 (Opt.)	1	3203	320301P	Rear Shock Body Composite	2
2015	201501S	F/R Diff. Ball Cup Joint	2	3203	320302A	Rear Shock Body Alloy (Opt.)	2
2016	201601S	Center Diff. Ball Cup Joint	2	3204	320401P	Front Shock Body Composite	2
2017	201701S	Center CCD Cup Joint	2	3204	320402A	Front Shock Body Alloy (Opt.)	1
2018	201801S	Cup Joint O-Clip	6	3205	320501P	Shock Rod Ends/Spring Cup Set	4
2304	230401S	Center Front CCD Shaft	1	3206	320601A	Shock Absorber Upper Lid	2
2305	230501S	Center Rear CCD Shaft	1	3207	320701A	Shock Absorber Lower Lid	2
2306	230601S	F/R CCD Shaft	1	3208	320801A	Shock Spring Preload Collar	2
2307	230701S	Central Lay Shaft	1	3209	320901S	Rear Shock Absorber Shaft	1
2308	230801S	F/R CCD Axle	1	3210	321001S	Front Shock Absorber Shaft	1
2309	230901S	CCD Shaft Barrel	2	3211	321101S	Rear Shock Absorber Spring C=11kg/75mm	2
2310	231001S	Wheel Drive Block 24mm	2	3211	321102S	Rear Shock Absorber Spring C=14.5kg/75mm (Opt.)	2
2311	231101S	Clutch Bell	1	3211	321103S	Rear Shock Absorber Spring C=18kg/75mm (Opt.)	2
2312	231201R	F/R Diff. Ball Cup Joint Boot	4	3212	321201S	Front Shock Absorber Spring C=14kg/65mm	1
2313	231301R	Center CCD Cup Joint Boot	2	3212	321202S	Front Shock Absorber Spring C=17kg/65mm (Opt.)	1
2314	231401R	Central Lay Shaft Boot	2	3212	321203S	Front Shock Absorber Spring C=20kg/65mm (Opt.)	1
				3213	321301S	Floating Piston Spring	2
				3214	321401P	Floating Piston	2
				3215	321501R	Shock Absorber Oil Seal 6x12x6	4
				3216	321601S	Shock Shaft Guide/Piston Set 2x2-3-4-5 Hole	4
				3217	321701R	F/R Shock Absorber Boot	4
				3218	321801A	Tower/Shock Conic Spacer	4

Part No	Product Code	Product Name	Package Count
3401	340101P	Rod End / Body Mount / Linkage Plastic Set	2
3402	340201S	Shock Joint Ball	4
3403	340301S	Tower Joint Ball	4
3404	340401S	Linkage Hub Joint Ball	4
3405	340501S	Steering Joint Ball	4
3406	340601S	Steering Servo Arm Joint Balls (2x3 2x4)	4
3407	340701S	Anti-Roll Bar Upper Joint Ball	4
3408	340801S	Anti-Roll Bar Lower Joint Ball	4
3409	340901S	Shock Lower Screw Left Thread	2
3602	360201A	Anti-Roll Bar Shaft	1
3603	360301S	Anti-Roll Bar Spring 3.5 mm	4
3801	380101P	Composite Servo Saver Set	1
3802	380201A	Ackerman Plate Standard	1
3802	380202A	Ackerman Plate Less (Opt.)	1
3803	380301A	Steering Post	2
3804	380401A	Servo Saver Alloy Body	1
3805	380501A	Servo Saver Wheel Nut	1
3806	380601S	Servo Saver Spring	1
3807	380701S	Ackerman Plate Screw Hardened	2
3808	380801S	Ackerman Plate Thrust Washer Hardened	2
3809	380901S	Steering Post Thrust Washer	2
3810	381001S	Steering Servo Turbuckle	2

04 Chassis, Towers & Guards

4001	400101A	Lightweight 7075 Chassis Anodised	1
4002	400201P	Chassis Composite Side Guard L/R Set	1
4003	400301P	Front/Rear Bumper	2
4151	415101P	Front/Rear Diff. House Set	1
4152	415201P	Center Diff. Holder Set	2
4153	415301P	Brake Plate & Gear Guard	1
4154	415401P	Lay Shaft Carrier Set	1
4155	415501P	Clutch Bell Carrier	1
4158	415801P	Clutch Bell Carrier / Brake Plate Stiffener	2
4301	430101A	Front Tower Lightweight 7075	1
4302	430201A	Rear Tower Lightweight 7075	1
4451	445101P	Front Stiffener	1
4452	445201P	Rear Stiffener Set	1
4601	460101P	Gear Mesh Selection Plate/DiffHouse-Stiffener Spacer2	
4602	460201A	Engine Carrier Plate Lightweight 7075 Anodised	1
4603	460301S	Engine Mount Chassis Slot Inserts 2x M6	3
4604	460401S	Engine Mount Slot Washers	5
4605	460501S	Gear Mesh Selection Plate Thrust Washer	2
4751	475101P	Radio/Servo Tray 30x60mm Futaba/Hitec Std.	1
4751	475102P	Radio/Servo Tray 30x66mm Savox (Opt.)	1
4752	475201P	Radio Tray Covers Set	1
4753	475301P	Standard Size Servo to 30x60 Adapter	3

05 BodyShells & Accessories

5001	500101P	RR5 Body Shell Kit Complete	1
5002	500201P	RR5 Body Shell Composite Accessories	1
5002	500202P	RR5 Body Shell Decal Set	1
5003	500301P	Buggy Rear Wing	1
5004	500401P	Buggy Rear Wing Mounts	1
5006	500601P	Rear Wishbone Mudguards	1
5007	500701P	Body Mount Clip Holder	4
5008	500801S	Body/Tray Clips	10

Part No	Product Code	Product Name	Package Count
06 Bearings, Screw and Related			
6001	600101S	Ball Bearing 687 2RS (7x14x5)	4
6002	600201S	Ball Bearing 689 2RS (9x17x5)	4
6003	600301S	Ball Bearing 6900 2RS 10x22x6	2
6004	600401S	Ball Bearing 6901 2RS 12x24x6	2
6005	600501S	Ball Bearing 6903 ZZ 17x30x7	2
6006	600601S	Ball Bearing 6804 2RS 20x32x7	2
6007	600701S	Ball Bearing 6000 2RS 10x26x8	2
6051	605101S	Roller Pin 4x20 mm	10
6052	605201S	Roller Pin 4x35 mm	5
6053	605301S	Roller Pin 5x24 mm	5
6054	605401S	Roller Pin 5x40 mm	2
6101	610101S	Fuel Tank Cap Ball Set	1
6102	610201S	Drive Ball 6 mm	25
6151	615101S	LSD Diff. Shim 10x16x0.3	10
6152	615201S	Pinion Gear Shim 16x22x1	5
6201	620101S	CS PZ2 Self Tap 4x25 mm	10
6202	620201S	CS PZ2 Self Tap 4x70 mm	10
6203	620301S	CS PZ2 Self Tap 5x30 mm	10
6251	625101S	BH PH1 Self Tap 3x9 mm	25
6252	625201S	BH PH1 Self Tap 3x13 mm	10
6301	630101S	CH Hex Screw M4x8 mm	10
6302	630201S	CH Hex Screw M4x12 mm	10
6303	630301S	CH Hex Screw M4x16 mm	10
6304	630401S	CH Hex Screw M4x25 mm	10
6305	630501S	CH Hex Screw M4x30 mm	10
6306	630601S	CH Hex Screw M4x35 mm	10
6307	630701S	CH Hex Screw M5x10 mm	10
6308	630801S	CH Hex Screw M5x16 mm	10
6309	630901S	CH Hex Screw M5x40 mm	10
6310	631001S	CH Hex Screw M6x20 mm	10
6311	631101S	CH Hex Screw M5x25 mm	10
6312	631201S	CH Hex Screw M3x6 mm	10
6313	631301S	CH Hex Screw M3x12 mm	10
6314	631401S	CH Hex Screw M3x20 mm	10
6351	635101S	CS Hex Screw M4x12 mm	10
6352	635201S	CS Hex Screw M5x16 mm	10
6401	640101S	BH Hex Screw M4x25 mm	10
6402	640201S	BH Hex Screw M6x30 mm	10
6452	645201S	Set Screw M4x4 mm	10
6453	645301S	Set Screw M5x6 mm	10
6454	645401S	Set Screw M5x12 mm	10
6455	645501S	Set Screw M6x6 mm	10
6456	645601S	Set Screw M6x20 mm	10
6501	650101S	Self Lock Nut M3	20
6502	650201S	Self Lock Nut M4	20
6503	650301S	Self Lock Nut M5	20
6504	650401S	Self Lock Nut M6	10
6551	655101S	Plain Washer 4 mm	20
6552	655201S	Plain Washer 5 mm	20
6553	655301S	Plain Washer 6 mm	10
6651	665101S	Snap Ring 1x10 mm	10
6701	670101R	LSD Diff. O-Ring 1.5x10 mm	20

Part No	Product Code	Product Name	Package Count
6702	670201R	Fuel Tank Cap Viton O-Ring 3x22 mm	2
6703	670301R	Floating Shock Piston O-Ring 1.5x18 mm	10
6704	670401R	Shock Preload Wheel O-Ring 1.5x26 mm	10
6705	670501R	Tune Pipe Holder O-Ring 4x60 mm	5
6751	675101P	Brake Linkage Silicone Hose 5 cm	1
6752	675201P	Fuel Line Hose PU	1

07 Air, Fuel and Exhaust

7001	700101P	Fuel Tank Body	1
7002	700201P	Fuel Tank Lid / Posts Composite Set	1
7003	700301R	Fuel Tank I/O Rubber	2
7004	700401R	Fuel Tank Post Rubber	3
7005	700501S	Fuel Tank Lid Pin / Spring / Clip	1
7251	725101P	Air Filter Body Composite	1
7252	725201P	Air Filter Holder	1
7253	725301P	Carburetor / AirFilter Venturi	1
7254	725401R	Air Filter/ Carburetor L Tube TPE Rubber	1
7255	725501P	Air Filter Foam Standard For Dry	1
7255	725502P	Air Filter Foam For Rain	1
7256	725601P	Air Filter Easy Clamp	1
7501	750101P	Exhaust Holders High Temp Composite	1
7502	750201S	Exhaust Manifold	1
7504	750401R	Exhaust Sealing Rubber	2
7505	750501S	Exhaust / Manifold Spring	6
7506	750601X	Barracuda G Performance Exhaust Set	1
7751	775101P	Air Flow Set	1

DIFFERENTIALS			
FRONT	CENTER	REAR	
LSD	OPEN	SOLID	LSD OPEN
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
LSD Ramp	60°	90°	120°
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SHOCK SPRINGS	
FRONT	REAR
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SOFT	

TYRES	
MICRO-STUD®	<input checked="" type="checkbox"/>

COMPOUND	
F	BS
<input type="checkbox"/>	<input checked="" type="checkbox"/>

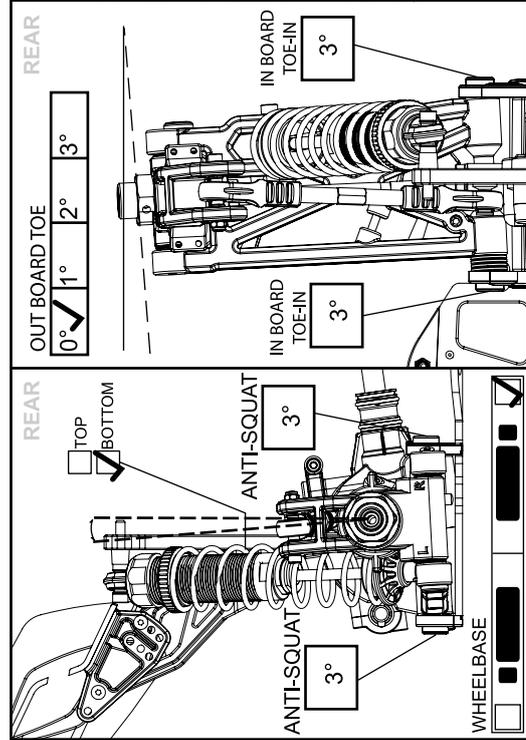
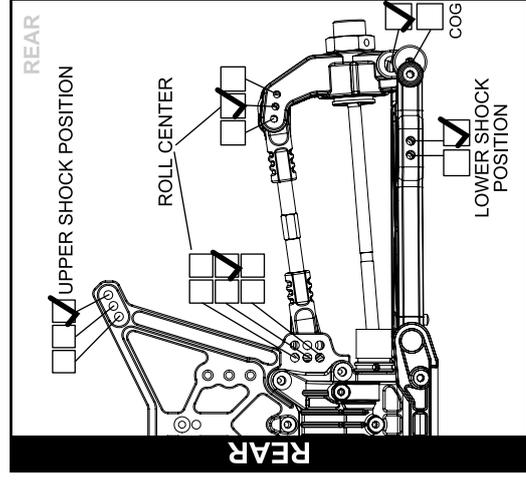
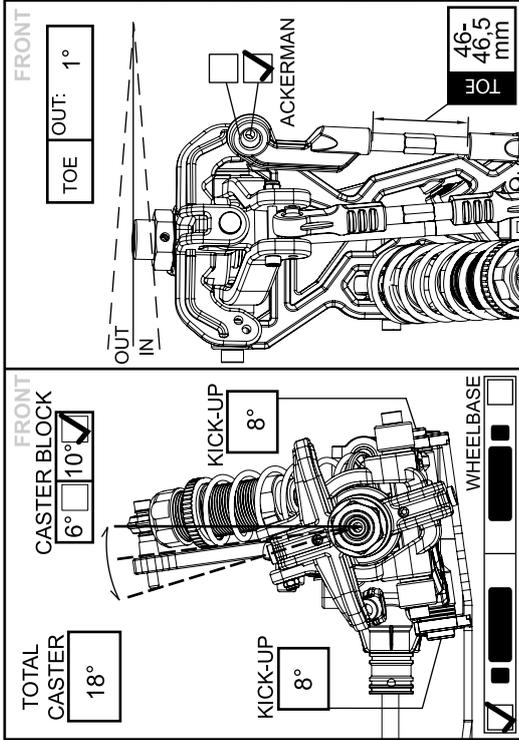
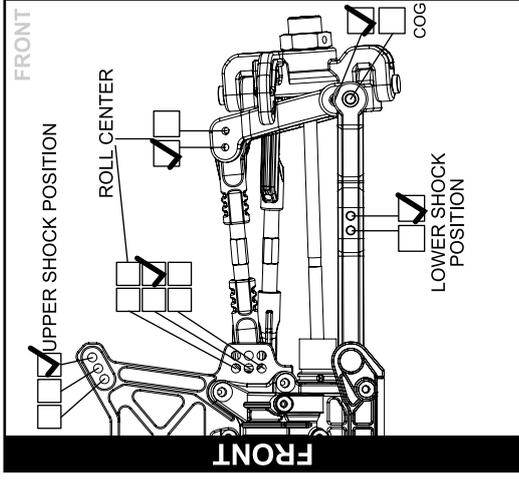
OIL VISCOSITY	
FRONT	1000
REAR	1000

PISTON HOLE SIZES	
FRONT	3x2mm
REAR	4x2mm

ACKERMAN	
short	<input checked="" type="checkbox"/>

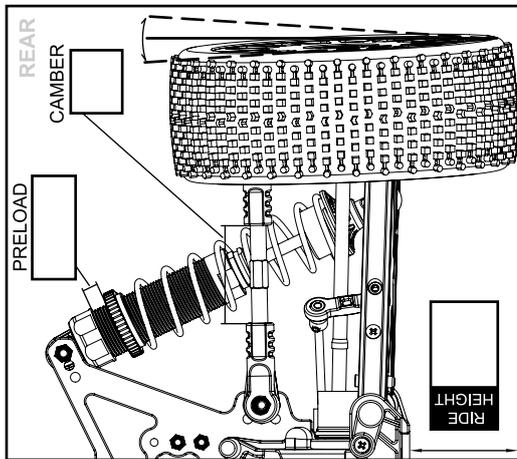
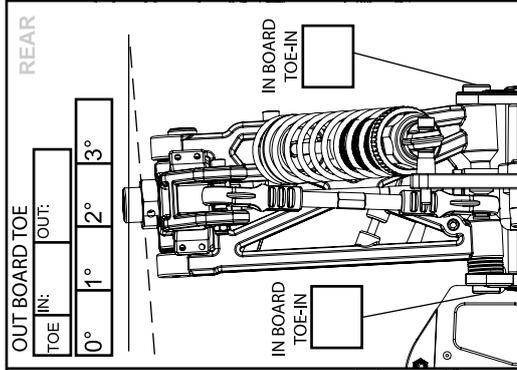
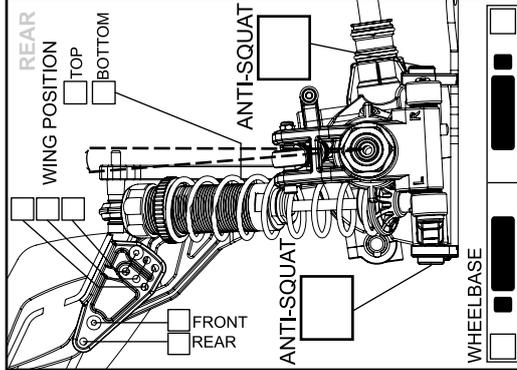
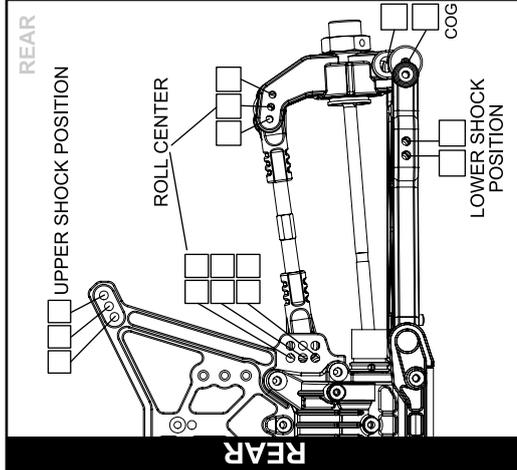
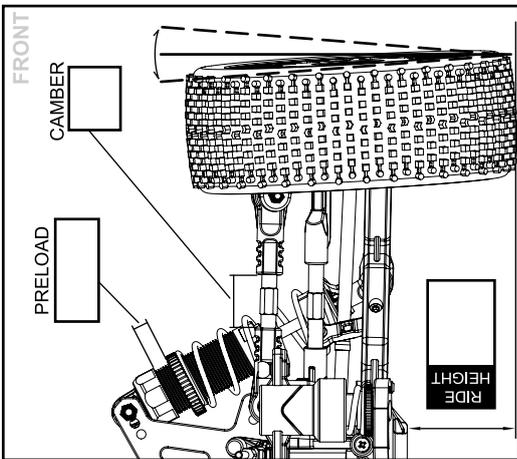
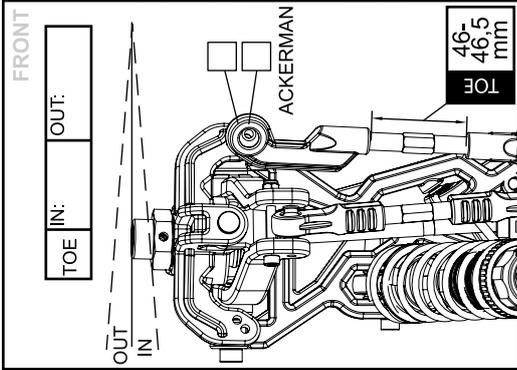
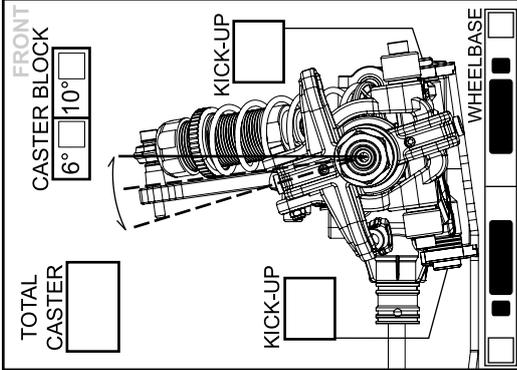
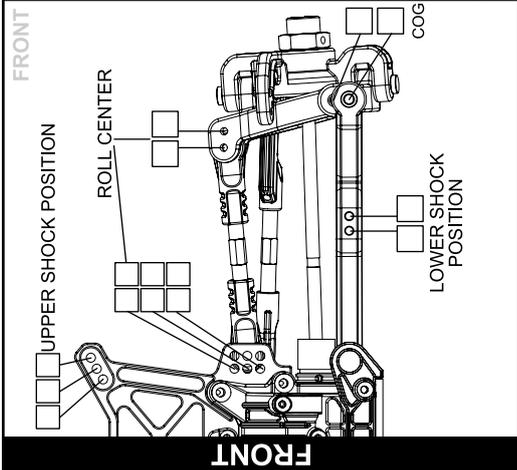
ANTI-ROLL BAR	
FRONT	3,5mm
REAR	3,5mm

TRANSMISSION RATIO		
Final Ratio	Engine	Center Diff
1	7.44	25
2	7.75	24
3	7.88	24
4	8.09	23
5	8.22	23
6	8.35	23
7	8.45	22
8	8.59	22
9	8.73	22
10	8.86	21
11	9.00	21
12	9.14	21
13	9.30	20
14	9.45	20
15	9.60	20
16	9.95	19
17	10.11	19
18	10.67	18



NOTES

NAME: _____
 RACE: _____ DATE:/...../.....



TRACK

SIZE: OPEN MEDIUM TIGHT
 TRACTION: HIGH MEDIUM LOW
 SURFACE: SMOOTH MEDIUM BUMPY
 TYPE: HARD PACKED SOFT DIRT CLAY
 BLUE GROOVE ASTRO TURF GRASS
 CONDITION: DRY DUSTY WET MUD
 TEMPERATURE: AIR: _____ TRACK: _____

DIFFERENTIALS

FRONT	CENTER	REAR
LSD OPEN <input type="checkbox"/>	LSD SOLID <input type="checkbox"/>	LSD OPEN <input type="checkbox"/>
LSD Ramp 60° 90° 120° <input type="checkbox"/>	LSD Ramp 60° 90° 120° <input type="checkbox"/>	LSD Ramp 60° 90° 120° <input type="checkbox"/>

SHOCK SPRINGS

FRONT	REAR
SOFT <input type="checkbox"/>	SOFT <input type="checkbox"/>
MEDIUM <input type="checkbox"/>	MEDIUM <input type="checkbox"/>
HARD <input type="checkbox"/>	HARD <input type="checkbox"/>
OTHER <input type="checkbox"/>	OTHER <input type="checkbox"/>

OIL VISCOSITY

FRONT	REAR
<input type="checkbox"/>	<input type="checkbox"/>

PISTON HOLE SIZES

FRONT	REAR
2x2mm <input type="checkbox"/>	4x2mm <input type="checkbox"/>
3x2mm <input type="checkbox"/>	5x2mm <input type="checkbox"/>

ACKERMAN

ANTI-ROLL BAR

FRONT	THICKNESS	REAR
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TRANSMISSION RATIO

	Final Ratio	Engine	Center Diff
1	7.44	25	62
2	7.75	24	62
3	7.88	24	63
4	8.09	23	62
5	8.22	23	63
6	8.35	23	64
7	8.45	22	62
8	8.59	22	63
9	8.73	22	64
10	8.86	21	62
11	9.00	21	63
12	9.14	21	64
13	9.30	20	62
14	9.45	20	63
15	9.60	20	64
16	9.95	19	63
17	10.11	19	64
18	10.67	18	64

TYRES

MICRO-STUD® F R
 BLOCK-STUD® F R

OTHER: _____

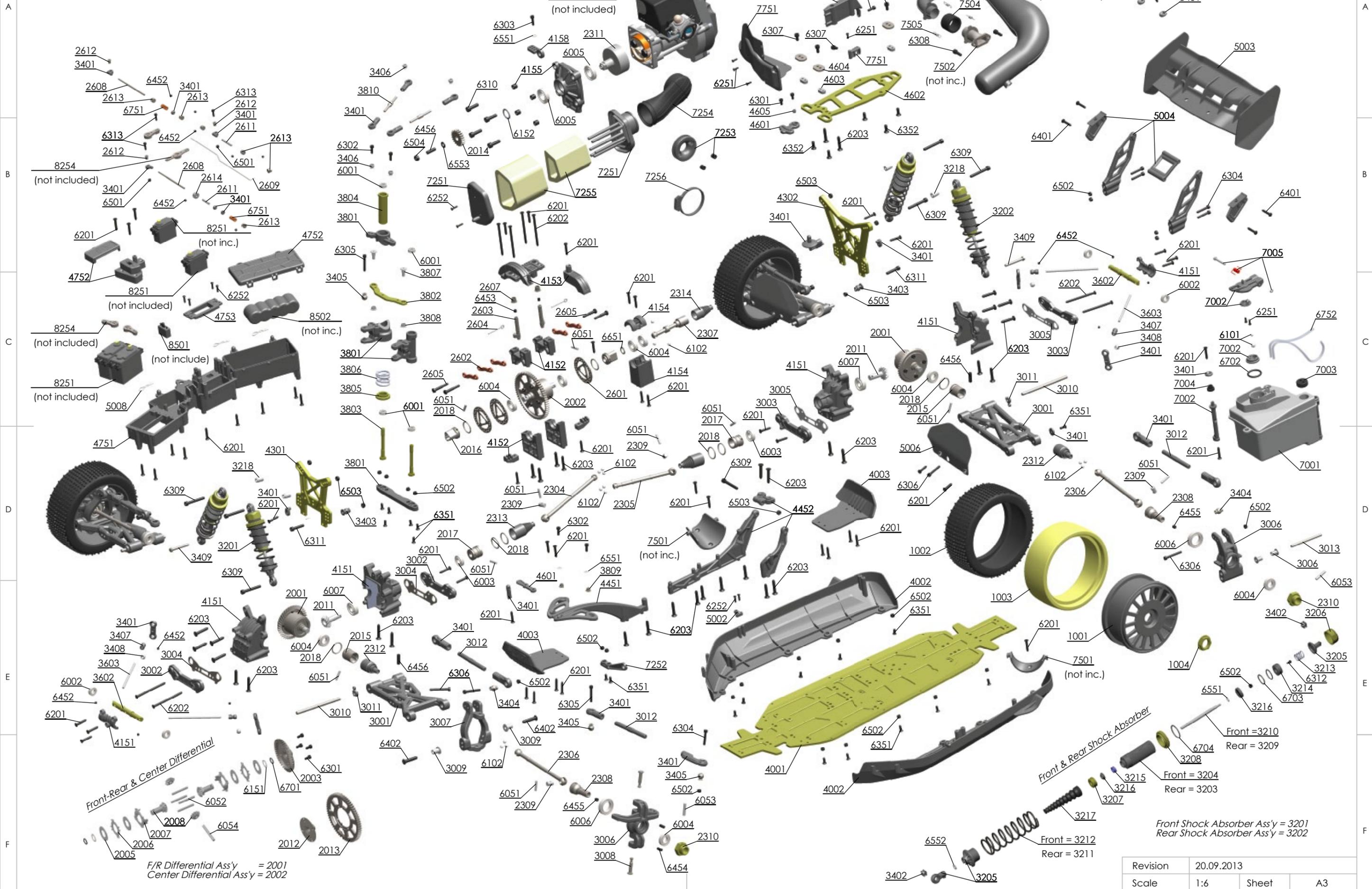
COMPOUND F R
 INSERT F R

POWER UNIT

ENGINE: _____
 CARBURATOR: H L
 PLUG: _____
 OIL: _____
 CLUTCH: _____
 PIPE: _____

POSITION: _____ **BEST LAP:** _____

NOTES



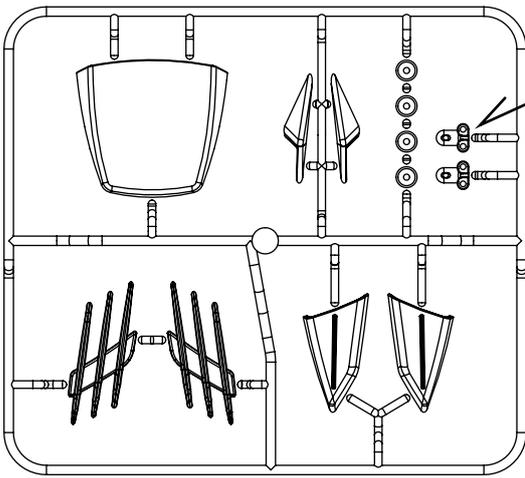
F/R Differential Ass'y = 2001
Center Differential Ass'y = 2002

Front Shock Absorber Ass'y = 3201
Rear Shock Absorber Ass'y = 3202

Revision	20.09.2013		
Scale	1:6	Sheet	A3

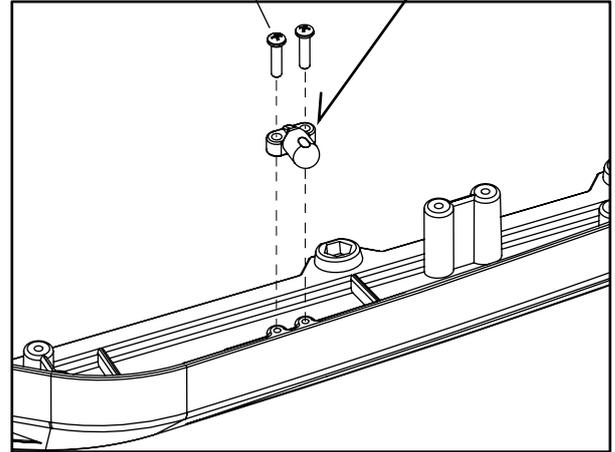
Instruction Manual Additional Info 1.0

Mounting the side body holders.



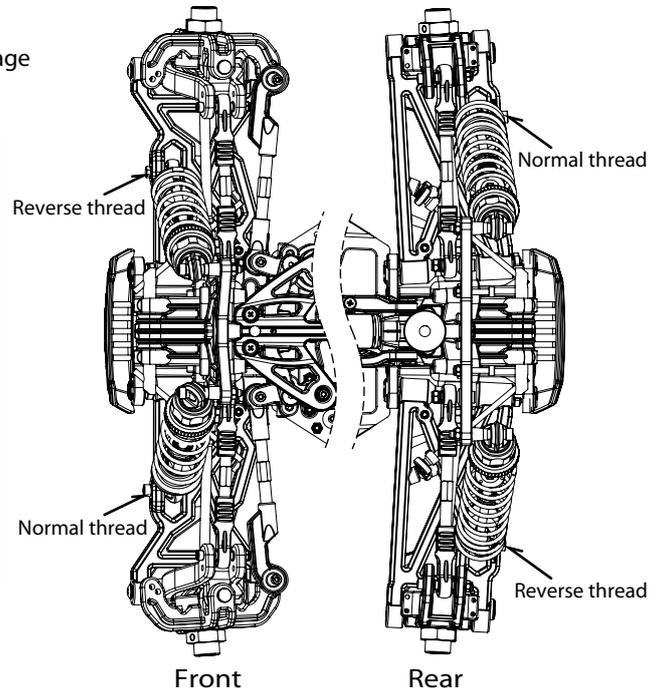
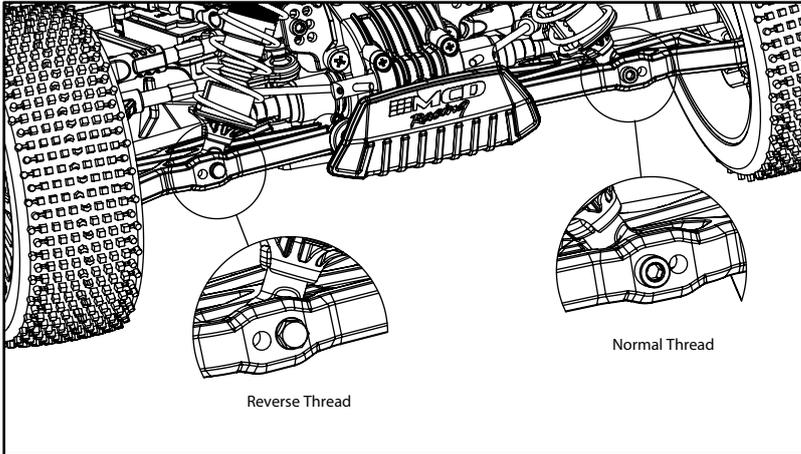
5002 RR5 Body Shell Composite Accessories

Screw the body holders onto each side guard.
(6252 BH PH1 Self Tap 3x13 mm)



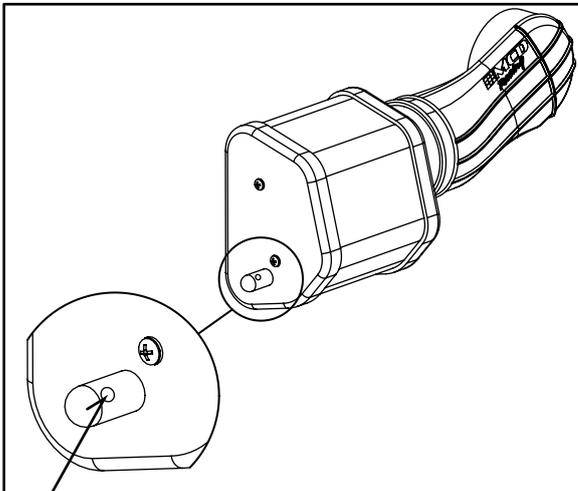
- Drill a hole on the body shell for side body mounts as shown in **Instruction Manual** page 14.

Caution! Reverse threaded shock bolts are used as indicated below. Forcing the bolts towards the opposite direction may damage the thread.



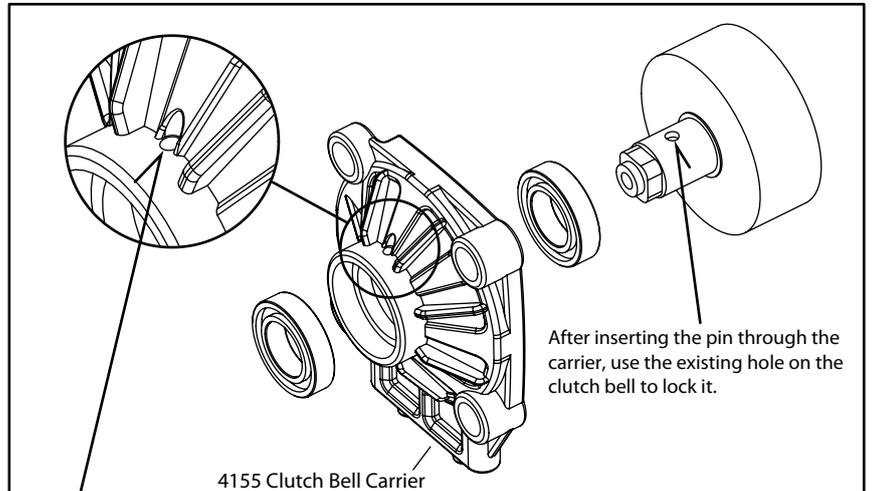
Tips:

Fixing the air filter:



You can drill a 2mm hole to fix the air filter to chassis with a body pin.

Locking the clutch bell:



After inserting the pin through the carrier, use the existing hole on the clutch bell to lock it.

Locking the clutch bell will help changing the gears easier. In order to lock the clutch, drill a 3 mm hole at the spot shown below. This hole will be used to insert a pin that is going to lock the clutch bell. After locking the bell you can easily remove the nuts.



The Winning Experience

We observe the racers and gather information from the tracks, with these information we rapidly develop new race oriented ideas and re-implement them into our race machines. This is the experience behind this cycle that leads us at the championships.

