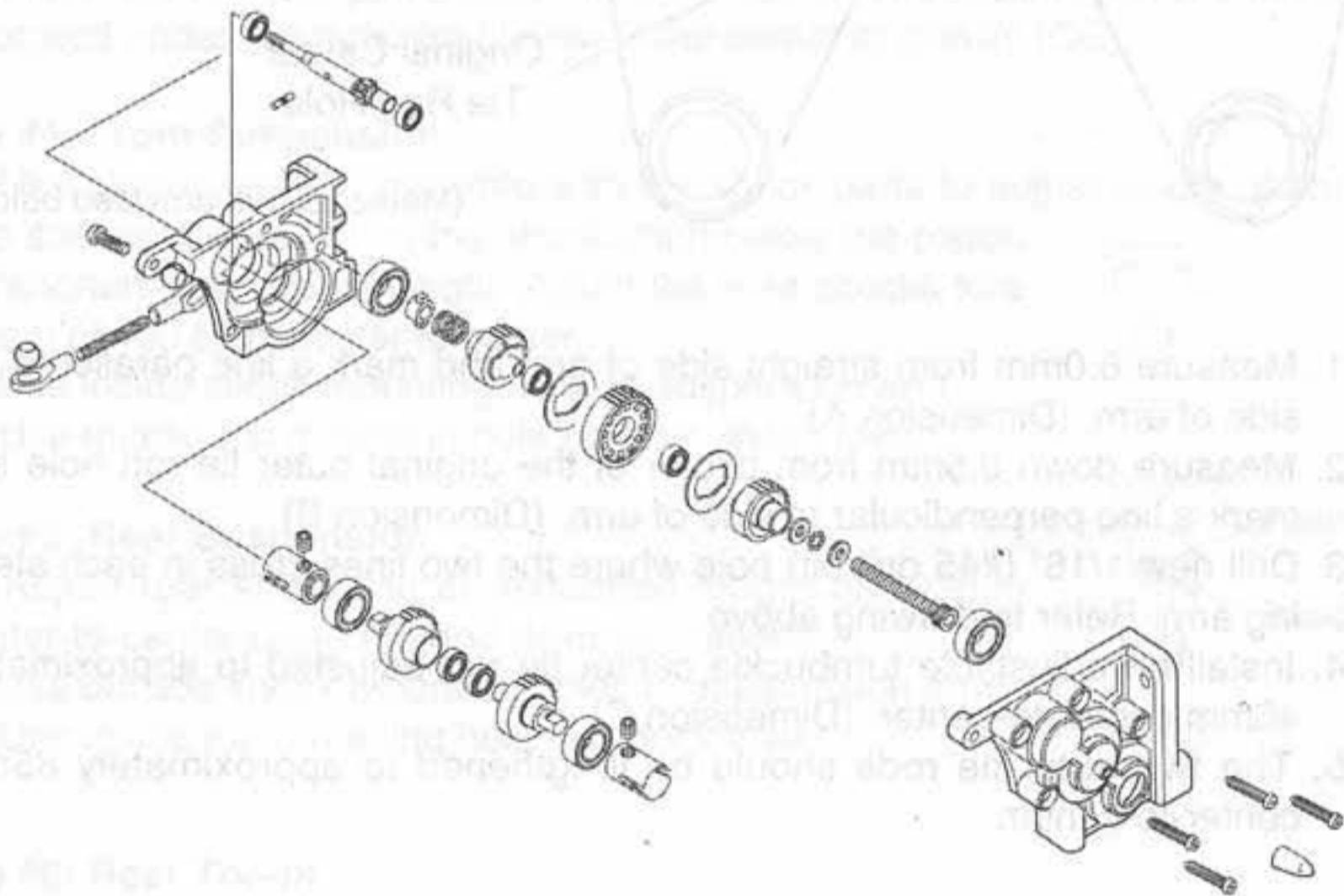


KYOSHO®

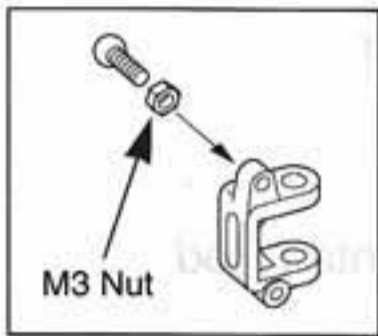
The First Name In Gas Off-Road Racing

RACING TEAM TIPS

Outlaw Rampage Pro™



Setup and Tuning
Tips From Kyosho
Race Team Drivers



Note: Increased steering may cause slight interference between the wheels and the suspension components. If this occurs, trim or file the interfering parts slightly to maintain proper clearance. To prevent the wheel from hitting the pivot ball, remove the M3 nut and thread the pivot ball in until enough clearance for the ball cup is allowed.

Tip #2: Servo Saver

Most racers prefer to use the large Kimbrough servo saver (KIMC1001) on their 1/10 gas trucks. If you plan to use this servo saver, it may be necessary to trim the hole in the upper deck slightly to provide clearance.

Tip #3: RX Battery Pack

Most racers use a rechargeable NiCd battery pack in place of the "AA" battery holder supplied with the radio system. The DuraTrax 5-cell 6-volt hump pack (DTXM2001) provides higher voltage for faster servo response and greater torque and is the recommended choice for the Outlaw Rampage Pro. This battery can be mounted to the rear of the shock tower using double-sided tape or velcro and nylon tie straps. This provides additional weight over the rear wheels for improved traction, particularly on loose tracks. The radio receiver can now be relocated under the radio tray to lower the center of gravity (CG).

Tip #4: Front Suspension

A) Use plastic spacers provided with the shock parts to adjust length of shocks. The spacer is installed on the shock shaft below the piston to "shorten" the overall length. Adjust the front shocks to a length of 100.5mm center-to-center.

B) Use inside shock mounting hole on suspension arm.

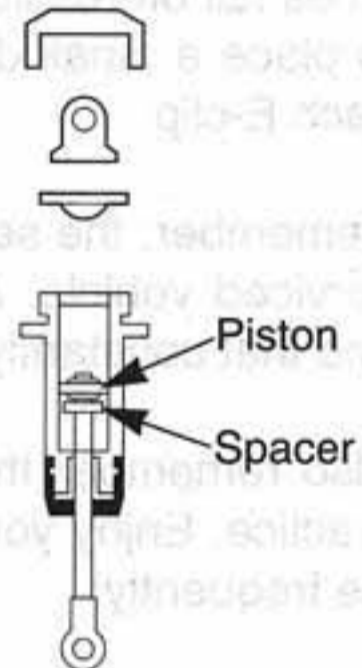
C) Use middle top mounting hole on front shock tower.

Tip #5: Rear Suspension

A) Adjust rear shocks to an extended length of 102mm center-to-center using method described above.

B) Use outside shock mounting holes on suspension arm.

C) Use inside top mounting hole on shock tower.



Tip #6: Rear Toe-In

The 3° rear toe block is recommended. The 5° toe block will provide greater stability on the straights, but reduces speed and steering response.

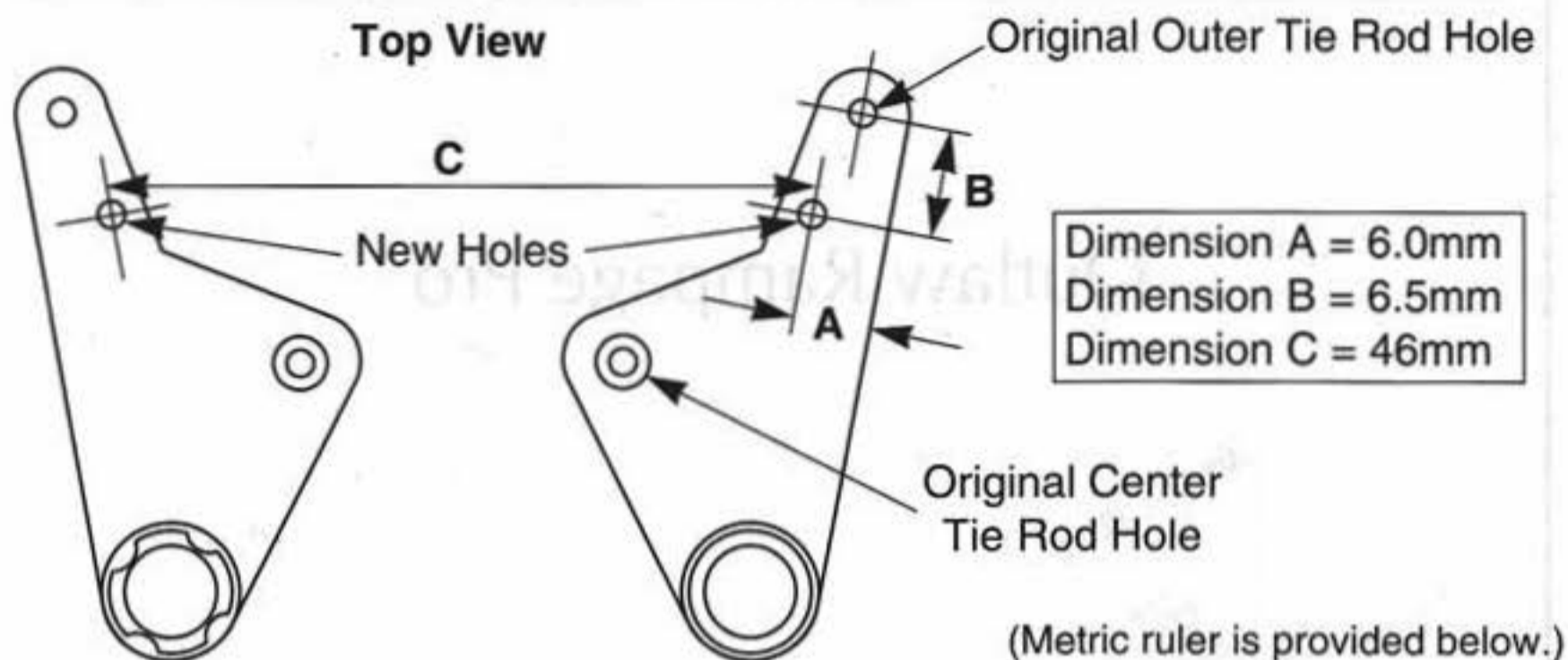
Tip #7: Wheelbase Adjustment

The wheelbase length can be adjusted from 1mm to 4mm in either direction. The instruction manual shows the middle setting with a 2mm spacer on each side of the rear hub carrier. Lengthening the wheelbase will provide greater straight-line stability but reduce steering. Shorter wheelbase will increase steering but reduce stability. Adjust the wheelbase to your driving style or track conditions.

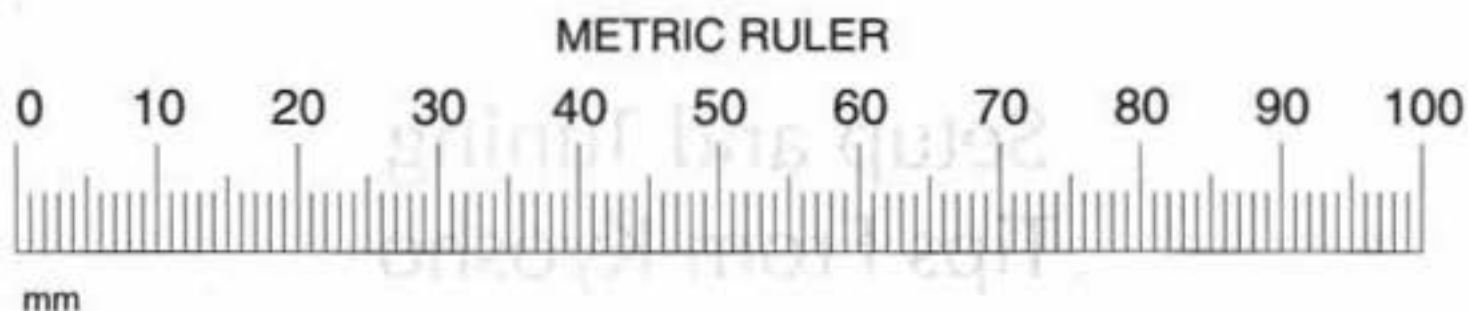
The Outlaw Rampage Pro has been in development for over two years with major input from the Kyosho Race Team. This vehicle has been designed from the ground up as a competitive racing machine right out of the box. However, all race drivers prefer their own personalized "custom" setups or modifications to suit their particular driving style or the track(s) they normally race on. The following tips are a compilation of ideas used by the Kyosho Team Drivers on their personal race trucks.

Tip #1: Steering

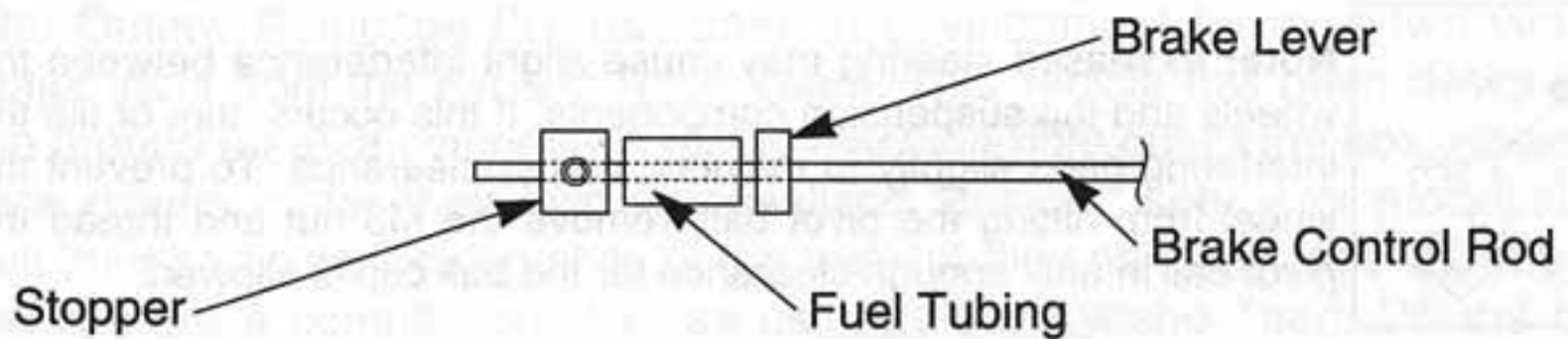
If adjustable "Ackerman effect" is desired to increase steering response, an adjustable center tie rod can be added. See drawing below:



1. Measure 6.0mm from straight side of arm and mark a line parallel to the side of arm. (Dimension A)
2. Measure down 6.5mm from center of the original outer tie rod hole and mark a line perpendicular to side of arm. (Dimension B)
3. Drill new 1/16" (#45 drill bit) hole where the two lines cross in each steering arm. Refer to drawing above.
4. Install an adjustable turnbuckle center tie rod adjusted to approximately 46mm center-to-center. (Dimension C)
5. The two outer tie rods should be lengthened to approximately 85mm center-to-center.



This modification allows adjustment of steering response. Adjusting the center tie rod ("C") shorter will increase steering response. Lengthening it will reduce steering. This modification will also provide greater rigidity in the steering arms.



Tip #8: Brake Adjustment

The stock brake is very effective and will lock the wheels with no problem. However, particularly on a loose track, quick braking can be undesirable. To smooth out the braking action, place a 1/4" long piece of standard diameter fuel tubing between the brake lever and the stopper on the brake control rod. This will provide a more progressive braking action. (GPMQ4131 Fuel Tubing recommended).

Tip #9: Air Filter

The greatest enemy of any model engine is dirt. To help prevent engine damage due to dirt entering the carburetor make sure the air filter is securely attached at all times. An oiled pre-filter such as the DuraTrax Foam Pre-Filter (DTXG2600) is highly recommended. Clean and re-oil the air filter after every race.

Tip #10: Hinge Pin Clips

The small E-clips used to hold the suspension hinge pins in place can sometimes fall off resulting in the hinge pin coming loose. A quick and easy solution is to place a small drop of DuraTrax Shoe Goo (DTXC2460) or silicone sealer to each E-clip.

Remember, the secret to a good running racing vehicle is a well maintained and serviced vehicle. A reliable race vehicle is much more competitive than a fast one that constantly fails due to lack of maintenance.

Also remember that the key to driving success is practice, practice and more practice. Enjoy your new Kyosho racing truck and may you find the winner's circle frequently!

The Kyosho Race Team

OPTIONAL ACCESSORIES

- | | | | |
|----------------|--------------------------------|----------------|-----------------------|
| KYOE8076 | Fuel Filter | DTXP0100 | Fuel Bottle |
| KYOC4885 | Rx Cover – Pink | DTXG1510 | Stage II Head |
| KYOC4886 | Rx Cover – Yellow | DTXG2601 | 2 Stage Filter |
| KYOC4887 | Rx Cover – Green | DTXP0500 | O'Donnell Racing Fuel |
| KYOC4504 | 4-Way Wrench
w/ Locking Jig | | |