

Racing Lines

No 197 FEBRUARY 2013 \$12.95 (Inc GST)

AUSTRALASIA'S PREMIER RADIO CONTROL CAR MAGAZINE

XRAY T4
WINNER OUT OF THE BOX!
XRAY RAISE THE BAR

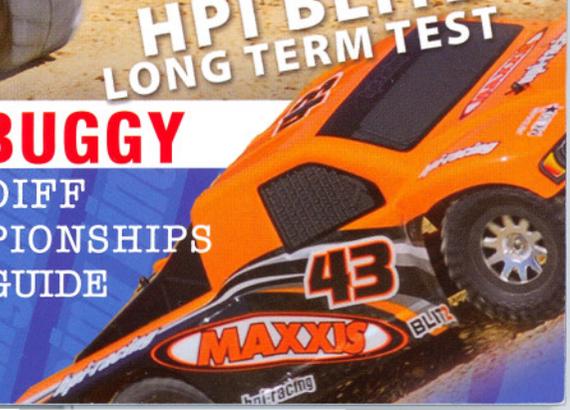


**TRAXXAS
E-MAXX**

**HPI BLITZ
LONG TERM TEST**

FIRST LOOK: XRAY'S EP10 BUGGY

- BUILDING THE B4 BALL DIFF
- NSW GP8 OFF ROAD CHAMPIONSHIPS
- ENGINE TROUBLE SHOOTING GUIDE
- TOWNSVILLE CUP





FIRST LOOK

XRAY JOINS THE EP10 OFF ROAD BATTLE

ALL EYES ARE NOW ON THE EP10 OFF ROAD TRACKS AROUND THE WORLD AS XRAY LAUNCHES THEIR DEBUT BUGGY, THE 4WD XB4

XRAY'S XB4 designer, Juraj Hudy, sums it up best, "to create an all new platform in a new class is the most demanding and difficult task for an RC car designer.

"The benefit is that since you are starting from zero there are no limitations other than your imagination."

Regular readers of the XRAY column will know that Juraj is a man with a passion to design and offer the very best of any product in the market and although our experience with the XB4 so far has been fleeting—Scott Guyatt has whipped it away from us on his way home to Brisbane where he will build and test it and report to us next issue his initial thoughts—we've no doubt Juraj's description of his cars as being premium luxury vehicles will once again be proven spot on.

A bit of background on the

XB4 before we have a more detailed look.

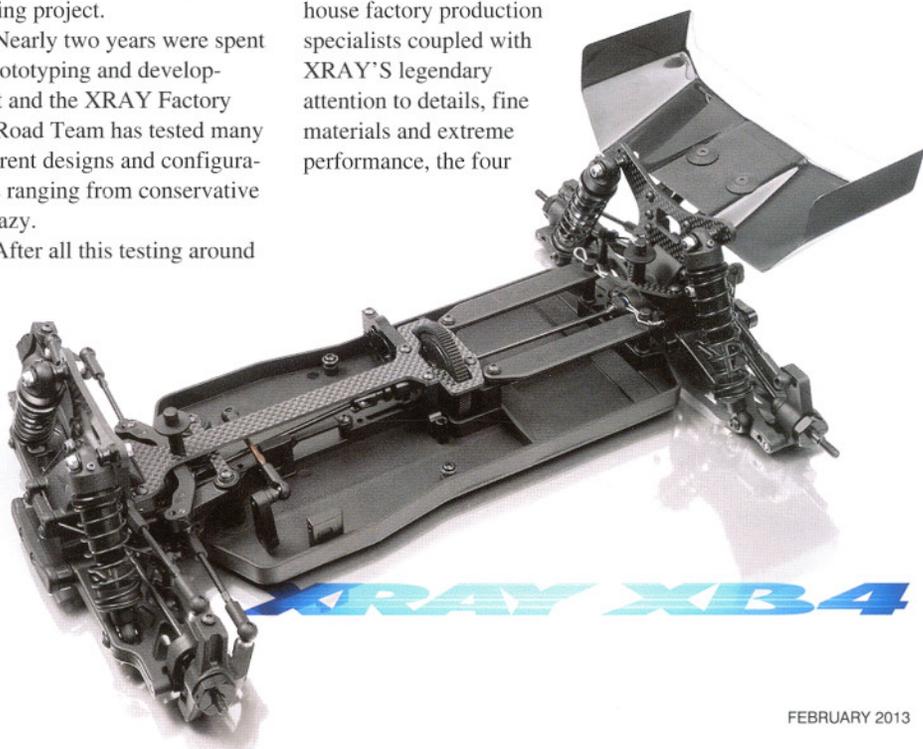
To design and develop this Buggy was an incredibly challenging project.

Nearly two years were spent in prototyping and development and the XRAY Factory Off Road Team has tested many different designs and configurations ranging from conservative to crazy.

After all this testing around

the world in various conditions by some of the world's best drivers and backed up with the craftsmanship of XRAY'S in house factory production specialists coupled with XRAY'S legendary attention to details, fine materials and extreme performance, the four

wheel drive XB4 has laid down the gauntlet to the established players.



XRAY introduced to the RC car world the concept of Multi-Flex chassis adjustment technology via their XB9 GP8 Buggy.

The aim of this award winning technology is to allow tuning the chassis flex for different track conditions.

The chassis flex is adjusted to suit prevailing track conditions in a matter of seconds.

No matter whether the traction is low, medium or high.

This feature is now available in EP10 Off Road through the XB4.

The Swiss 7075 T6 aluminium backbone and composite chassis plate are firmly mounted together to create a solid framework with each piece playing a distinctive role.

The aluminium backbone provides the car with stability and stiffness while allowing torsional flex along with the lengthwise axis.

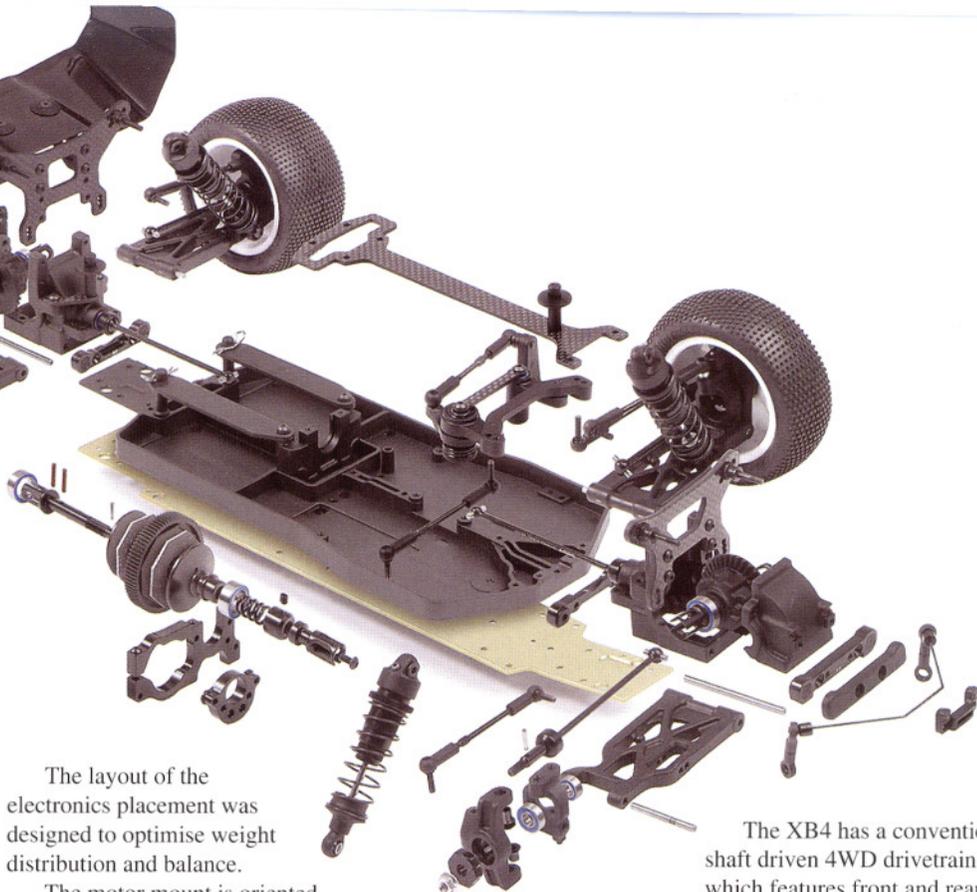
The composite chassis absorbs vibrations and works as the main Multi-Flex element, allowing the changing of flex independently in the front and rear of the car.

The precision engineered and designed composite chassis frame not only enables quick and easy Multi-Flex settings but also houses the main components of the car.

The front, centre and rear drivetrain bulkheads are keyed into this frame while providing locations for all of the required electronics.

The chassis tray design features reinforcement braces in both lengthwise as well lateral directions.

The swept up sides of the bathtub style chassis frame will offer protection to onboard components.



The layout of the electronics placement was designed to optimise weight distribution and balance.

The motor mount is oriented in the front on the right side with servo, speed controller and receiver placed on the opposite side for balance.

To maximise balance both L/R and F/R, a saddle pack battery configuration is adopted with the batteries placed to the rear, between the spur gear and the suspension mounts.

The servo mount is held to the chassis using two screws for easy and fast exchange.

Space has been reserved in front of the motor to allow for an additional cooling fan.

The wires between the motor and electronics are routed via a channel in the centre of the chassis which will ensure they will not interfere with the drive shafts or any other rotating parts.

The motor mount is another smart and innovative solution from XRAY.

The motor is connected to an eccentric mounting plate with the assembly then inserted into an integrated motor holder/drivetrain support.

This allows quick and easy motor rotation to adjust gear mesh and yet clamp securely using only a single screw.

To ensure that the motor will not come loose in a serious crash or if the motor mount is not tightened sufficiently, the motor plate has a bayonet mounting system which prevents it from being dislodged from the motor holder.

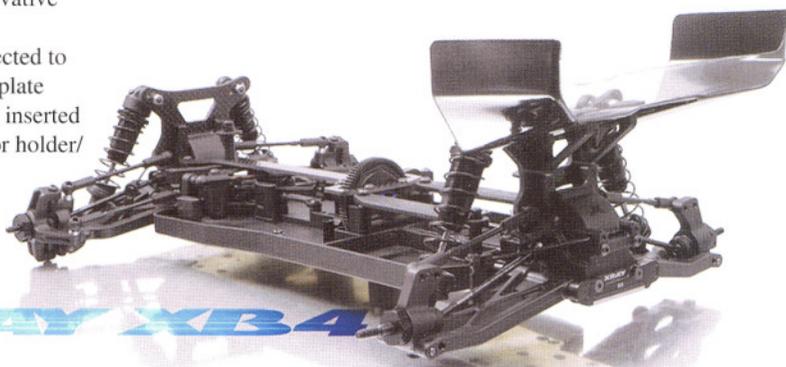
The XB4 has a conventional shaft driven 4WD drivetrain which features front and rear gear differential with adjustable oil viscosity with a 35T crown gear and 14T pinion gear.

There's also a central slip adjustable clutch with an 81T main spur gear.

The internal ratio is 1:2.5.

The front, central and rear driveshafts are CVD style, made from Hudy Spring Steel.

The CVD assembly has a composite safely collar which



XRAY XB4

ensures the mounting pin will never fall out.

The XB4 gear diff ensures increased on power steering which is needed on nearly all types of tracks.

Its internal gears are precision moulded from tough XRAY developed and mixed composite material for longevity and super smooth operation.

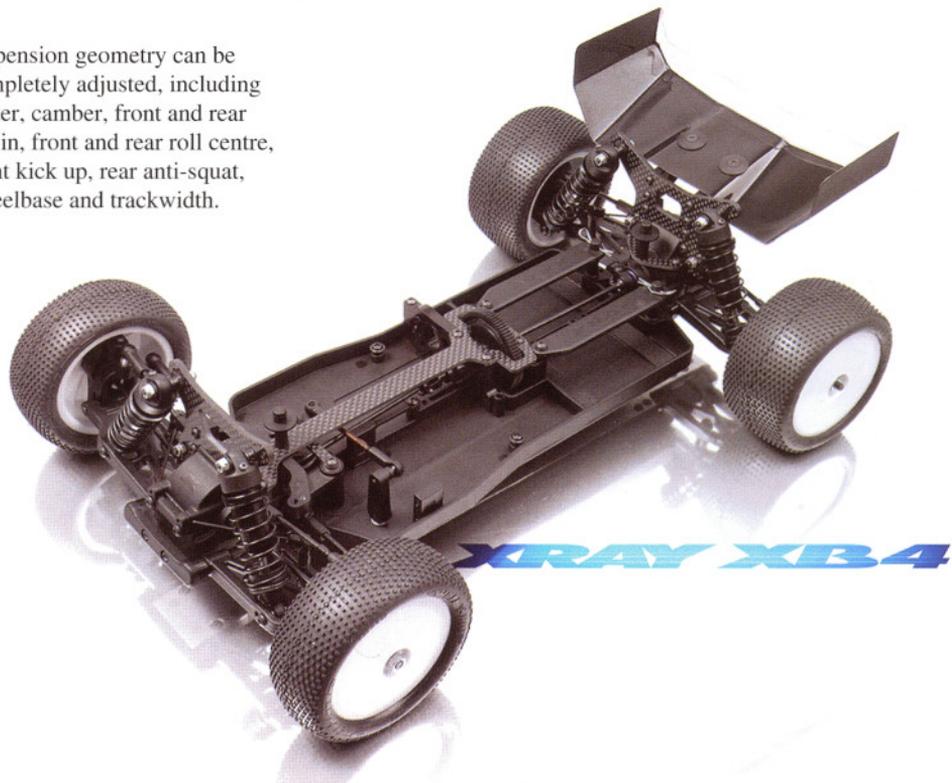
Topping it all off, the diff is virtually maintenance free.

The power of the motor is transferred to the drive train via an adjustable central adjustable slipper clutch.

The ISS Suspension concept found on the XB9 is also part of the XB4 design.

Using eccentric suspension bushings, inserted into aluminium suspension blocks, as well with the additional use of suspension shims, the XB4

suspension geometry can be completely adjusted, including caster, camber, front and rear toe-in, front and rear roll centre, front kick up, rear anti-squat, wheelbase and trackwidth.



VIP SUPPORT

OWNING an XRAY car is an experience on its own for not only will you own one of the best cars in the world, you will also have direct support and service from the XRAY

factory via the most up to date RC website on the internet.

Questions, problems or comments can be directed to the XRAY Support Team or any XRAY Factory Team Driver.

