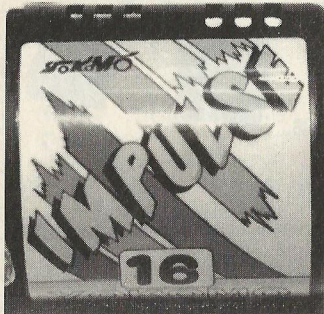
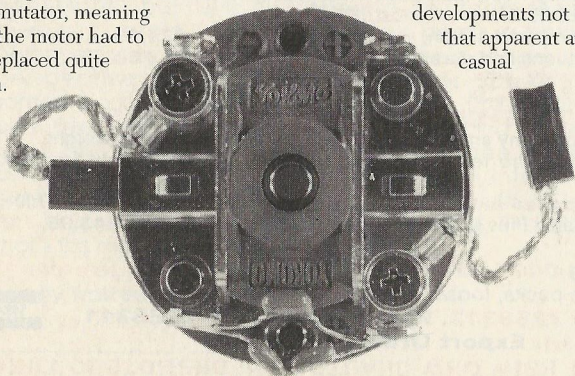


The Yokomo motor has remained virtually unchanged since its introduction in 1982. At the time, the Yokomo was a revelation, with a standard 35 turn

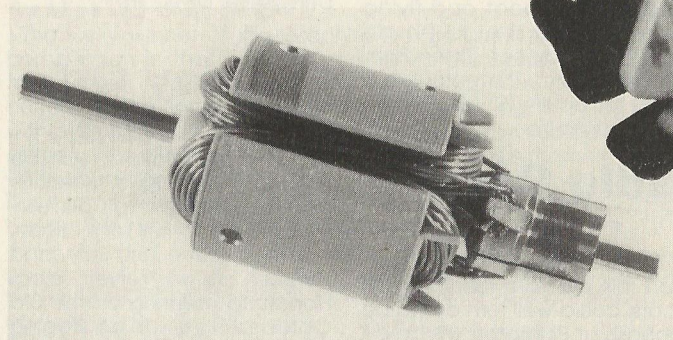


Yokomo churning out 05 modified motor performance, together with a long life span. The 05 motors available prior to the advent of the Yokomo had internal brushes that couldn't be replaced and, as they were totally enclosed they became hot quickly so they wore out at an alarming rate, as did the commutator, meaning that the motor had to be replaced quite often.



Development through the years led to the 'wet' magnets we now regard as an essential, with the actual thickness of the magnets, and therefore the strength of the field produced, being far greater than the originals of eleven years ago.

Various 'tweaks', such as short stack armatures etc, were tried, giving much improved performance in 27 turn form, unfortunately never becoming legal for BRCA meetings, but giving modified motor power for £15! Where were Yokomo to go from there? Well, the new '93 spec motor will soon be in the country, and is quite a radical development



of the Yokomo we all know, so to whet your insatiable appetites for power, here is a preview.

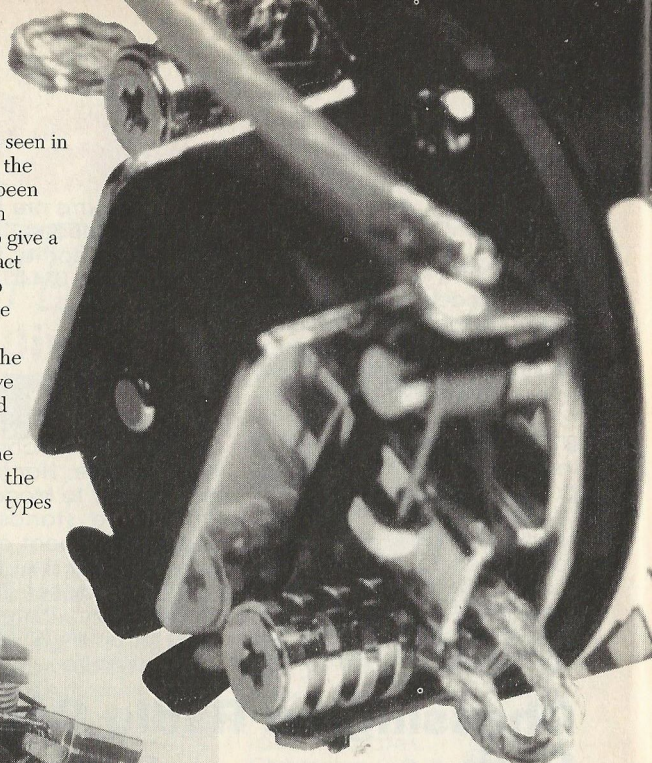
The motor pictured is from the new 'Impulse' range,

Yokomo's own machine wound line up, and is a 16 double.

The magnets are the strongest that this writer has ever felt, trying to turn the shaft without a pinion on is like trying to turn over an ABC i.e. engine, in other words there is a definite increase in the strength of the magnets! The can now has radial cooling slots between the magnets, obviously deemed necessary because the air gap between the armature stack and the magnets is virtually non-existent, but the most interesting change is to the commutator and the positioning of the brushes, both of these developments not being that apparent at a casual

glance.

As can be seen in the photos, the comm has been increased in diameter to give a larger contact area, and to maintain the ratio of switching, the brushes have been turned through 90 degrees. The brushes are the same as the types



## The '93 New Spec Yokomo

used in the previous Yokomo motors, complete with the radius,

but after a few runs, they

bed in nicely to the shape of the large

commutator. Tests

have been

limited so far,

but have

shown that

this new

specification

gives very

large amounts

of torque

indeed, which in

turn allows the

use of a higher gear

ratio than would have

hitherto been run. The

last layer of the armature stack has also had the very ends folded

outwards at 90 degrees, to give a cooling fan effect where it is most

needed, near the brushes.

### The Future?

At RRC we have heard of new developments from other manufacturers, but Yokomo have released their 'evolution' motor first. It will be very interesting to see what the World's specialist motor men make of the new spec armature and can, and, with the 1/12 Euros and 1/10 Off-Road Worlds coming up fast, who will be the first to sprinkle their magic on the new Yokomo? Reedy, Soderquist, McDaniel, Jansen?, many names spring to mind, and all will have their own individual ideas, so the next few months should be quite interesting as their first efforts reach the market place.

