

THE R90S MODEL

Introduced on the 50th Anniversary of BMW Motorrad

It has been said the R90S is to BMW Motorrad as the Mercedes 300SL Gull Wing is to Mercedes Benz. They are both iconic.

“FIRSTS” FOR BMW With the Introduction of the R90S:

Designed by a designer, Hans Muth, not engineers
900 cc engine (up from 750 cc)
5 speed trans, was 4
Dual front disc brakes
No fork gaiters, the fork tubes were exposed for visual appeal
No stays on the front fender, again for visual appeal
Steering damper
Separate tachometer and speedometer in same housing
Polished float bowls
Seat cowl
Smoked paint (Silver Smoke only in '74, Tourist Trophy Silver Smoke & Daytona Orange in '75 & '76). Daytona Orange was meant to mimic the sunrise at Daytona Beach.
Factory fairing
First Superbike win, at Daytona in 1976, then won “Superbike Championship” for the full year
Only model with Del’Orto carburetors

Visual Differences For the 1974 R90S Compared to Later Model Year R90Ss:

The '74 had many nice features compared to later R90Ss, the main driver being to keep down costs. This was never stated but note the differences from '74 to later, many are cheaper alternatives. But these changes are not easy to note, one really must look hard to notice the differences.

/5 handlebar controls, in looks only; the wiring was unique for this year and different from the previous /5 models
Aluminum gas cap, later chrome casting
Smaller diameter front axle
Aluminum turn signal bodies

Hand levers curved with finger detents, anodized, they naturally turn purple with age

Seat was "smooth", fewer indentations compared to later

Chromed right rear lower shock mount, an acorn nut

Speedo/tach read "0" for neutral, later "NEUTRAL"

Five position ignition switch versus three later

Carb to airbox clamps had dull finish, later were chromed

Smooth swingarm black plastic covers, later crinkle finished

Brake master cylinder diameter went from 16 to 17 mm for '76

Brake caliper went from 38 to 40 mm for '76

Tape stripes (wallpaper), painted stripes came in '75 & '76

Mirror stalks smaller diameter and curved (more elegant)

White line around the speedo and tach glass diameter, inside the glass

Solid discs, later drilled in a 3/2 pattern then 2/2 pattern

More chrome fasteners than later

Last year for kick starter being standard

Some early fairings had two holes in the bottom as access for removing the headlight bezel

Early throttle tubes were bent, later were straight

Later transmission cases had exterior "lines" added for strength, getting ready for the 1,000 cc engine

Early front axles had one pinch bolt versus 2 later

Horns had a chrome center, later flat black

Not all these "visuals" were strictly for the '74 model as "running changes" were the norm.

As parts were used up newer style parts were installed. Sometimes...

NOTES:

There is no such thing as "always" or "never" in the R90S world. As soon as you say that, it always seems an exception pops up.

Even when an original owner says, "I picked up my R90S from the dealer, so I know mine is how it came from the factory." What about transit damage? Did the dealer alter the bike or fix a problem before turning it over to the original owner? Did the dealer swap parts to please another customer? Is your memory that good after 45 years? How many owners has your bike had?

After the Superbike win at Daytona in 1976 on Daytona Orange bikes, it is documented that some customers had dealers take off their TT Silver Smoke parts and install Daytona Orange parts. So maybe your Daytona Orange bike was originally TT Silver Smoke? BMW "might" be able to verify that as some records were lost.

And because the current O-fish-ul BMW parts fiche says so (say at Max BMW), that is NOT necessarily how BMW assembled R90Ss originally.

And BMW made numerous other running changes to the starter, alternator, trans, front end, really everywhere. The '76 model is thought of as the best example since it had all the upgrades.

The transmission in the '74 model: Oak Okelson's frank advice was to swap it out for the trans from a later year as it was not a good transmission, however many are fixed and soldier on.

When BMW employees first saw the Daytona Orange color they referred to it derisively as "egg yoke".

Which color is the best? TT Silver Smoke is Elegant, and Daytona Orange is Stunning, per Rob & Mac 🍹

SO: Daytona Orange for going to the beach, TT Silver Smoke for the opera 🍷

Some R90Ss had cloisonné (enamel) emblems, some did not.

Early fairings had two holes in the bottom for access to remove the headlight bezel.

R90Ss came with 3 keys; metal, with large black round fob, folding gray plastic.

The very last of the R90Ss had flush gas caps like the /7 models, and for years replacement gas tanks had flush caps, which upset owners.

Upgrades to consider:

R75 rear drive w/matching R75 speedo & tach (better acceleration), 14 mm brake master cylinder with 40 mm calipers (optimal braking ratio), 1,000 cc kit from Siebenrock, Nikasil coating of cylinders from Powerseal USA, trans "shift kit", "cush drive" driveshaft, chrome plated stainless spokes for longevity and originality, higher output alternator (up to 600 watts), kick starter, Nippondenso starter motor (stronger, less draw), Kat Dash instrument lights, but of course the sky is the limit.

The R90S almost did not see the light of day; Bob Lutz is considered the Father of the R90S, see the book "BMW R90S" by Ian Falloon, page 33.

Interesting R90S article below (previously sent via email)

<https://www.rideapart.com/articles/248625/the-bike-that-saved-bmw-again-online-find-panjo-edition/>

Mac Kirkpatrick

drbeemer73@gmail.com

PA SuperTech, Boyertown, PA
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