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BMW CUSTOM MOTORCYCLES

Tobias Ehlers, Germany – BMW R25/3 conversion

Tobias brought this bike back to life after thirty years – not as an ordinary restoration, but in an old-school bobber style, while keeping the original parts. The machine is on the road again as of February 2009.



This bike, built in 1955, was de-registered in 1978.



ENGINE

Designation..	..224/4
Type ..	..Four-stroke single cylinder vertical
Bore x stroke ..	..68 x 68mm (2.67 x 2.67in)
Displacement ..	..247cc
Max power ..	..13hp at 5800rpm
Compression ratio ..	..7.0:1
Valves ..	..OHV
Carburation ..	..1 x Bing-type 1/24/41 or SAWE-type K24 F
Engine lubricating system ..	..Forced feed lubrication
Oil pump ..	..Gear pump

POWER TRANSMISSION

Clutch..	..Single plate, dry
Number of gears ..	..Four
Gearchange ..	..Foot lever (& auxiliary manual lever)
Gearbox ratios ..	..6.1/3.0/2.04/1.54
Final drive ratio ..	..4.16:1 (with sidecar 4.8:1)
Bevel/crownwheel..	..6/25 teeth (with sidecar 5/24)

CHASSIS

Designation..	..225/3
Frame ..	..Closed steel twin loop, welded
Front wheel suspension ..	..Telescopic fork
Rear wheel suspension ..	..Telescopic

DIMENSIONS/WEIGHTS

Length x width x height ..	..2065 x 760 x 730mm
Wheelbase ..	..1365mm/53.74in
Fuel tank capacity ..	..12 litres/2.63 gal/3.17 gal US
Unladen weight with full tank ..	..150kg/330lb
Fuel consumption ..	..Approx 2.9 litres per 100km/ 97mpg/81mpg US
Oil consumption ..	..Approx 0.7 litres per 1000km
Top speed ..	..119kmph/73mph

The gas tank is from a Harley Sportster.



The original suspension is retained.



R25/3 bobber rear end.



ENGINE

Year	1976
Make	BMW
Model	R90S
Displacement	900cc
Builder or rebuilder	Mark
Cases	R90S
Case finish	Smoothed, grit blasted, glass beaded and clear coated
Barrels	R90S
Barrel finish	Black powder coating
Head finish	Grit blasted and then glass beaded
Carburation	Stromberg 97s on home-made manifolds
Air cleaner	Stromberg scoops
Exhaust	Stainless steel by Aad
Mufflers	Stainless steel by Aad

TRANSMISSION

Year	1976 (rebuilt by Mark)
Make	BMW (four-speed with kick-start)

FRAME

Year	2008
Make	Used some oval tapered pieces from a 1951 BMW frame, 60 per cent new
Style or model	Design by Mark
Stretch	6in in the rear
Rake	30 degrees
Modifications	Raised engine mounts, hard-tail, welded together by Ronnie Breuer

FRONT END

Make	Harley Davidson
Model	45in Springer
Mods	Shortened 32mm, rocker nuts home-made in brass

Mark and Aad with their showstopper bike.

BMW CUSTOM MOTORCYCLES

Stellan Egeland, Sweden. www.seservice.se

Stellan's creation, named Harrier, took third place in the metric class, and fourth place in the freestyle class in the 2009 World Championship of Bike Building. The bike was created from a BMW R1200S.

Stellan: "The Harrier is the first bike in SE Service's new line of modern

customs. As with all of our ground-up customs, we have put the focus on visual technique and an exciting riding experience. The purpose of the air scoops on the fuel tank is to supply the space between the muffler and the seat with cooling air, and to give support to the legs while attacking corners."



This is not a show bike, a street fighter or a sports bike. It's the Harrier!

(Courtesy Horst Roesler: www.motographer.de, Frank Sander: www.thunder-media-service.de and www.amdchampionship.com)