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Spacesaver wheel and tyre for an RV8

John Bolt provides details of the spacesaver wheel and tyre he has used on his RV8. (Aug 09)



Outer face of the wheel with the four stud holes slightly countersunk to suit the tapered face of the wheel nuts. (Photo: John Bolt)

Following the useful V8NOTE344 contributed by David Waterton in January 2006, I searched for a Saab spacesaver wheel for my RV8. The wheel you need is from a Saab Classic made between 1979 and 1986. It's a **4J x 15"** rim stamped with the Saab part number **8942088**. This wheel has the correct four stud configuration for the RV8. The tyre I have fitted is a **Pirelli Spare Tyre 125/80 R15 95M** with a speed restriction of 50mph (80kph).



Two modifications are necessary. First you need to fit a half inch (1.30cm) thick spacer on the inside face of the

wheel hub - it can be tack welded - because without the spacer the wheel does not clear the front brake caliper on an RV8. The spacer is made to fit over the hub of the axle so the difference between the thickness of the standard wheel when located on the wheel studs and that of the space saver wheel with the ½" spacer fitted to the inside face is 5mm, so there is a reduction in the length of the exposed thread of the wheel studs of only 5mm short. The wheel nuts have 30mm of thread with the standard wheel so you have 25mm of thread on the stud with the spacesaver. As the spacesaver wheel has a maximum speed of 50 mph I felt that this was a safe trade off for the loss of 5mm of thread on the nut. The second small modification is you need to very slightly countersink the stud holes on the outer face of the wheel to suit the tapered face of the RV8 wheel nuts. The tyre pressure recommendation on the wall of the tyre is 62psi.



Inside face of the spacesaver with the spacer tack welded to the wheel. Note, spacer is made to fit over the hub of the axle. (Photo: John Bolt)

As the profile of the spacesaver tyre is different to the standard 205/65 15 VR tyres fitted to my RV8, two concerns arise – the comparative gearing effect and ride height. From the table alongside the ride height

Tyre	Width mm	Ratio %	Rim size in	Revs per mile	Revs/mile variance %	Tyre plus wheel radius mm	Radius variance mm	Radius variance %
Standard tyre	205	65	15	791.15	0.00%	323.75	0.00	0.00%
Spacesaver 90	125	90	15	845.33	6.85%	303.00	-20.75	-6.41%
Spacesaver 85	125	85	15	863.13	9.10%	296.75	-27.00	-8.34%
Space save e 80	125	80	15	881.70	11.45%	290.50	-33.25	-10.27%

Variances comparing each spacesaver to the standard wheel and tyre



variance is 33.25mm (1.31 inches) or 10.27% lower than standard. The revolutions per mile increase from 791.15 to 881.70 or 11.45% with the spacesaver so the gearing effect when a spacesaver is fitted to a rear wheel is an acceptable trade off for boot space gained against a small speedometer error. After all the spacesaver is only a temporary spare designed to get you home or to the nearest tyre repairer or supplier.

Alternative spacesaver tyres are available with higher aspect ratios which reduce both the ride height and gearing variances, so with a 125/90 R15 tyre the ride height is lower by only 20.75mm (0.82 inches) or 6.41% and the gearing increases by a lower 6.85%.

The reduced ride height when the spacesaver wheel and tyre combination is fitted to the front wheel hub is barely noticeable. (Photo: John Bolt)

Robert Crowson posted a note on the V8BB of the spacesaver he had sourced and used: "I use a Saab space saver. It is the one with the part number **8942088** stamped between the stud holes. I bought mine via the internet from one of those sites where you fill in what you want and scrap yards that can help contact you. The guy who sold me it, in Derby I think, had a couple more but this was a couple of years ago and I cannot remember his name. I believe the Saab in question is a Saab 90 Classic, however I only quoted Saab and the 8942088 number and he knew what it was. The wheel size is **4J/11 X 15E55**. I paid £22 including carriage. Once you have found a wheel you need to make or have made a 20mm spacer as the offset of the wheel is different and without the spacer it will foul the steering. There are a number of tyres that will fit. I have a Continental **125/90 R15** which is used on some small/medium Volvos. This was the tallest I could find so that it wouldn't look too lobsided when fitted . . . it doesn't. The price of the tyre was £47 fitted. If anyone wants a photo I will take one and send it.



Spacesaver fitted as a temporary rear wheel replacement. (Photo: John Bolt)