

At Wachauring in Austria, we fire up an Austin-Healey 3000 to test vintage sports tyres in 185 R 15.

AVON
RADIAL STEEL

BLOCKLEY
RADIAL

DUNLOP
SPORT CLASSIC

MICHELIN
XVS

PIRELLI
CINTURATO CA 67

RETRO
RC 001

VREDESTEIN
SPRINT CLASSIC

BUDGET TYRES
NO NAME

ARE FRESH TYRES THE SAFE ANSWER?

Old tread designs, new technology - just how good are vintage tyres?
We test seven classic brands and one budget model and discover that old is not always better

■ TYRE TEST Vintage Tyres



WET TESTS

HANDLING WET	
Average speed in km/h	
Vredestein	70,4
Pirelli	70,0
Dunlop	68,9
Michelin	68,4
Avon	64,8
Blockley	62,6
Retro	60,9
Budget tyre	60,6

The Vredestein Klassik Sprint shows the best grip on wet asphalt, but tends to overdo the sportiness and oversteer. The Pirelli Cinturato CA 67 is far easier to handle - and almost as fast. Dunlop and Michelin take the course more slowly, but are always on the right side of safety. But the Big Healey really spins out of control with the budget tyres (sourced from the Internet) and the Retro tyres.



The Healey's rear ends tends to swing out in the wet, so good tyres are essential to keep the car on track.

THE PASSIONATE COLLECTOR



Jetze Visser (left), shown here explaining the cockpit, is the proud owner of the vintage rally car "SMO 745"



Tackling British technology: Jetze knows all the weak points



Done! The test team and the Austin-Healey 3000 afterwards

■ Jetze Visser is familiar with every detail of the racing and rally models factory-fielded by his favourite marque, Austin-Healey. In fact, he has most of them in his personal collection - including our test vehicle with the UK licence plate SMO 745. The genial Dutchman, a youthful 69, answers questions about drivers and rankings from memory. To Jetze, the history of his cars is

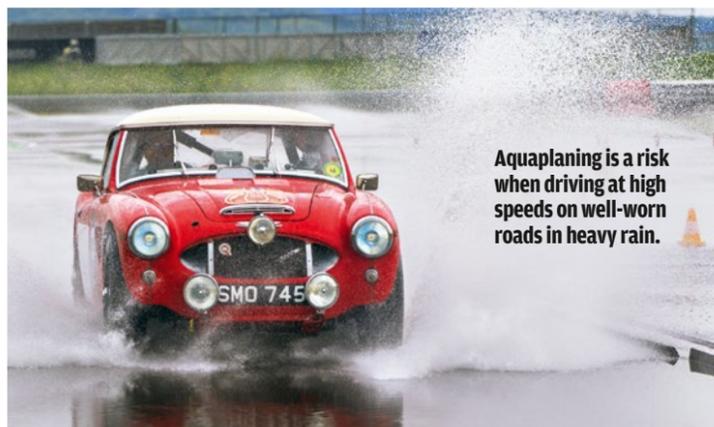
an inseparable part of owning them; he can recount amazing details and has a fund of fascinating anecdotes. Jetze never treats his precious treasures with kid gloves, taking the wheel personally for events like the Tulip Rally and Mille Miglia. His absolute favourite is a green 1962 Healey 3000 MK IIa, in which he notches up over 20,000 kilometres a year.

PHOTOS: ROME SCHMIDT (6), AUTO BILD SYNDICATION

AQUAPLANING

Float speed in km/h	
Dunlop	92,5
Blockley	88,3
Budget tyre	86,8
Michelin	80,4
Pirelli	79,4
Avon	78,2
Vredestein	78,2
Retro	69,5

Aquaplaning is a serious hazard, especially for powerful sports cars with rear-wheel drive. If the tyre grooves are unable to deflect the water fast enough, the vehicle loses contact with the road and goes into a skid. The Dunlop and Blockley tyres proved to offer the best safety reserves for conditions of heavy rain. The Retro RC 001 abandoned all attempts to grip at far lower speeds and turned into a genuinely alarming safety risk in the wet.



Aquaplaning is a risk when driving at high speeds on well-worn roads in heavy rain.

CIRCUIT

Lap time in seconds	
Dunlop	11,42
Vredestein	11,43
Pirelli	11,76
Michelin	11,88
Budget tyre	12,24
Avon	12,49
Blockley	12,63
Retro	12,85

On the artificially watered track, our test Healey notched up the fastest lap times when fitted with the Dunlop and Vredestein. They delivered the best grip in the wet, plus good solid cornering force. Pirelli and Michelin are likewise safe choices for rain-wet roads. But watch out for the tyres at the bottom end of our chart. They are surly and sluggish in responding to steering commands and understeer prematurely on corners.



Fast lap times around the circuit are a guarantee of good grip in wet conditions.

All braking tests were performed on a VW Golf with ABS to ensure maximum reproducibility. The tests soon sorted out the top ranks from the also-rans, leaving no room for doubt. Premium brands Vredestein, Pirelli, Dunlop and Michelin all turned in braking distances of around 50 metres - a respectable achievement. However, the smaller names squandered vital safety reserves. Extra braking distances of up to 15 metres (that's more than three car lengths!) are unacceptable.

BRAKING WET

from 100 km/h, in metres	
Vredestein	49,5
Pirelli	49,7
Dunlop	51,8
Michelin	51,8
Avon	58,9
Blockley	62,0
Budget tyre	65,5
Retro	66,5



Braking distances were measured using a Golf; the differences could be felt clear as day in the Healey.

Pat Moss was a great woman - and an extremely fast one.

The sister of racing legend Stirling Moss and wife of top rally driver Erik Carlsson, she was one of the first women to carve out a successful reputation in motorsports in the 1950s and 60s. She won her first European Ladies' Rally championship in 1958 and had scooped the title four more times by 1965. Pat took the wheel for companies including MG, Morris, Ford and Saab, but her big breakthrough came in the Liège-Rome-Liège Rally.

Driving an Austin-Healey 3000, she gave a spectacular performance and reached fourth place overall, creating a sensation in the exclusively male motorsports scene of the time. For Pat, then just 24, it must have been like playing with fire; the Big Healey, with its powerful,

high-torque six-cylinder engine and low weight on the leaf-suspension rear axle, was infamous for its unpredictable and tail-happy behaviour. After the race, Pat gave full rein to her love-hate relationship with the scarlet works racer with the white roof, unceremoniously dubbing it "The Pig".

Today, 60 years later, this very same Healey 3000 lines up at the start at the Wachauing in Austria, a small but perfectly formed circuit in the environs of Vienna. Fast lap times are still a goal to be aimed for - but unlike Pat Moss, who had to beat her male rivals in their Jaguars, MGs and Lotuses, this time the main aim isn't to cross the line ahead of the pack. Today we're on the hunt for the best tyre design for vintage sports cars. At the same time, we want to find out whether classic tyres that ►

DRY TESTS



The Healey 3000 earned the name of "The Pig" for its unpredictable behaviour.

In the Healey, any drive-by noise is drowned out by the sound of the engine



PHOTOS: ROME SCHMIDT (3), ADAC

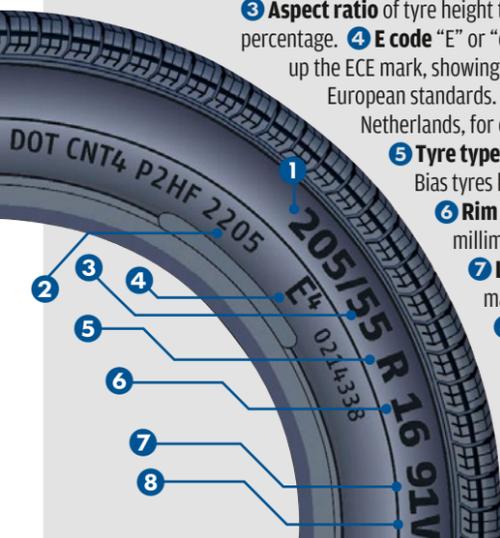
DRIVE-BY NOISE	
at 80 km/h, in dB(A)	
Michelin	78,2
Blockley	78,4
Vredestein	78,4
Retro	78,5
Budget tyre	78,6
Pirelli	78,8
Avon	78,9
Dunlop	80,7

A VW Golf was likewise used to measure drive-by noise for the eight vintage tyres. Our equipment showed only minor differences at 80 km/h with the engine switched off; on the standard surface of the measurement track, only the Dunlop Sport Classic was slightly louder. But in the Healey's cockpit, such subtle variations are drowned by the roar of the engine.

A TYRE ABC

Tyre sidewalls show more than the manufacturer's name and tyre size. When purchasing, make sure you can identify the production date code

- 1 Tyre width** in millimetres
- 2 Production date** Four figures after the DOT number; the first two are the week, the last two the year of production. Three digits and a triangle were commonly found on tyres before 1999.
- 3 Aspect ratio** of tyre height to tyre width, shown as a percentage.
- 4 E code** "E" or "e" plus country code make up the ECE mark, showing the tyre complies with European standards. "4" stands for the Netherlands, for example.
- 5 Tyre type** "R" stands for radial tyres. Bias tyres have a "D" or "-".
- 6 Rim diameter** in inches or in millimetres for TRX tyres.
- 7 Load index.** Indicates the maximum load of the tyre.
- 8 Speed index** shows the top speed of the tyre (e.g. H = 210 km/h, V = 240 km/h).



HANDLING	
Average speed in km/h	
Dunlop	82,0
Michelin	81,5
Vredestein	80,8
Retro	80,3
Pirelli	80,3
Avon	80,0
Blockley	79,9
Budget tyre	77,1

Dry tests allow our Big Healey to showcase its sporting potential. The best performance was given by the Dunlop, Michelin and Vredestein models, with crisp steering, rear axle stability and even balance. Things got tricky with the no-name tyres; their unpredictable fishtailing kept us guessing behind the wheel and ruled out any chance of driving pleasure.

BRAKING	
from 100 km/h in metres	
Vredestein	39,0
Michelin	40,0
Avon	40,3
Dunlop	40,5
Pirelli	41,5
Retro	42,2
Blockley	42,9
Budget tyre	44,2

Braking distances under 40 metres from 100 km/h could only be dreamed of 60 years ago when bias tyres were the norm. Today's tyres make driving far safer. The Vredestein Sprint Classic had the shortest braking distance, while the no-name tyres took an extra car length to come to a halt, wasting vital safety reserves here too (measured on VW Golf with ABS).

ROLLING RESISTANCE	
in kg/t	
Retro	14,4
Dunlop	13,2
Pirelli	12,4
Budget tyre	12,3
Vredestein	12,1
Michelin	11,9
Avon	10,4
Blockley	10,3

60 years ago, rolling resistance and its effect on fuel consumption were largely ignored. But as the rolling dynamometer revealed, today's classics are also far from perfect. The water-averse Retro RC 001 showed the best fuel economy, at six to eight per cent more than the Blockley Radial.

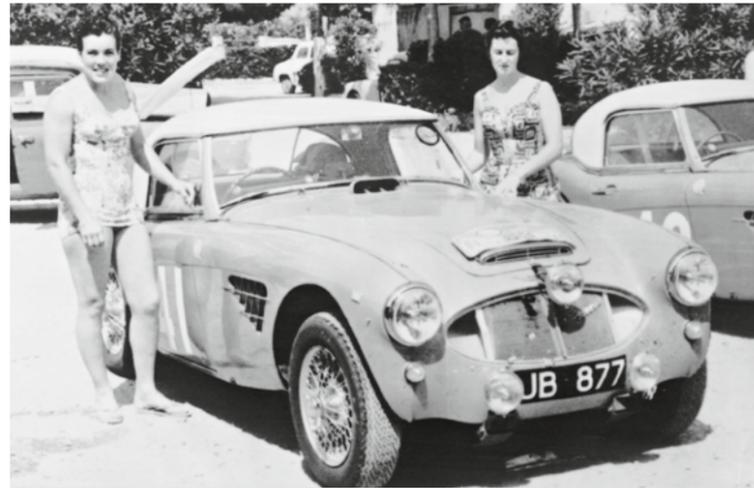


"The Pig" goes wild! The Healey 3000 gets tail-happy on fast corners.

integrate the technology of today are able to enhance the dynamism – and, a prime consideration, the safety – of our sportscar model from yesteryear. Seven vintage-style tyres in size 185 R 15 (identical to 185/80 R 15) are lined up in the pit awaiting their turn. Manufacturers Avon, Blockley and Retro preferred tyre

designs that were inspired by role models from the British motorsports scene, while the major premium brands of Dunlop, Michelin, Pirelli and Vredestein took their own vintage tread and sidewall designs and gave them a 21st-century makeover. Our tests also include one of the no-name bargain tyres that can be sourced at

rock-bottom prices on the Internet. However, the only savings to be had with these tyres are on personal safety, as our handling tests on the race-track quickly reveal. As we steer into the long left-hand corner before the home straight, our Healey lives up to Pat's trenchant nickname and goes berserk. After a ▶



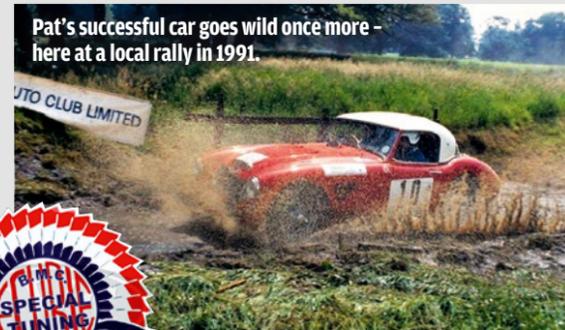
Pat Moss († 2008) was one of the first successful women rally racers – and, with her co-pilot, an unusual sight in this male-dominated world.

PAT MOSS: LIFE AT THE LIMIT

Patricia Moss, born 1934 in Thames Ditton in southern England, sought sporting challenges throughout her life, achieving success as a showjumper before embarking on a career in motorsports. Her first contact with the world of motorsports was through her brother, Formula 1 racing driver Stirling Moss. Aged 19, she began to take part in regional club rallies and later became a works driver for BMC. Her first European Ladies' Rally win came in 1958, with further wins in 1960, 62, 64 and 65. In 1960 she was overall winner in the Liège-Rome-Liège Rally, driving the Austin-Healey 3000. The next year, she came third in the East Africa Rally in a Saab 96. The Royal Automobile Club was forced to change its club rules to honour her as "1960 Driver of the Year" as women were banned from entering its banqueting hall at that time.



In the 1960s motorsports were the exclusive preserve of men, and Pat had to fight for recognition with extreme discipline.



Pat's successful car goes wild once more – here at a local rally in 1991.



Stirling Moss, here at the Pirelli Classic Marathon, relaxing by his successful sister's Healey 3000.

RIDE COMFORT

Driver's subjective impression

Low-profile tyres had not been invented in the 1960s; only Series 80 tyres were available (aspect ratio of tyre height to width: 80 or 82 per cent). This high, elastic sidewall delivered effective intrinsic damping and easily smoothed out most surface bumps. The modern classic tyres in our test offer an outstandingly comfortable, cushioned ride, particularly Michelin and Pirelli, while Avon and the budget no-name tyre are more bone-shaking.



The high sidewalls easily compensate for any unevenness in the road.

SPEED

Dynamometer test

Vintage tyres often face challenging conditions because of their frequent storage periods. We therefore sent all our candidates over to the roller dynamometer for a safety check. All tyres met the legal requirements for the test without fail. However, things got trickier when we upped the ante and tested the tyres under stricter AUTO BILD conditions (at two degrees of camber). In these tests, Avon and Blockley (V tyre approved for speeds up to 240 km/h) failed the new requirements.

Michelin – are far steadier at keeping our 1959 Big Healey grounded.

They still can't transform "The Pig" into a docile lamb – but we're sure that if Pat Moss had had tyres like these, she would have taken the winner's podium far more often.

185 R 15 (185/80R15)	WET					DRY					HOW OUR TESTS WORK	
	Aquaplaning*	Handling*	Circuit	Braking*	Average score	Handling*	Braking*	Ride comfort	Drive-by noise	Rolling resistance	Average score	Passed speed test?
Weighting in %	30	35	10	25		40	30	15	10	5		
Dunlop Sport Classic	1	2	2+	2	2+	1	2	2+	2-	2+	2+	✓
93 W approx. 960 EUR/set	TEST WINNER 2019					Exemplary/1st place					Strengths: precise cornering, good lateral stability and harmonious feel in handling, excellent aquaplaning reserves, short braking distances. Weaknesses: slight oversteering in the wet, slightly louder drive-by noise.	
Michelin XVS	2	2	2	2	2	1	2	1-	2	2-	2+	✓
93 V approx. 1200 EUR/set	TEST WINNER 2019					Exemplary/2nd place					Strengths: balanced, neutral handling and smooth transitioning, short braking distances, good aquaplaning, excellent ride comfort and smoothness. Weaknesses: understeers slightly in the wet.	
Vredestein Sprint Classic	2-	2	2+	2+	2	2+	2+	2	2	2-	2+	✓
91 V approx. 660 EUR/set	TEST WINNER 2019					Exemplary/3rd place					Strengths: harmonious handling with good lateral stability and lots of wet and dry grip, crisp steering and good response, short braking. Weaknesses: limited aquaplaning reserves, slight oversteering in the wet.	
Pirelli Cinturato CA 67	2	2+	2	2+	2+	2	2-	1-	2	2-	2	✓
91 V approx. 1280 EUR/set	TEST WINNER 2019					Exemplary/4th place					Strengths: harmonious, safe handling and excellent lateral stability in the wet, good aquaplaning safety reserves, good smooth, comfortable ride. Weaknesses: tendency to oversteer in dry conditions.	
Avon Radial Steel	2-	4+	3	3-	3	2-	2	3+	2	3+	2-	*-
93 V approx. 1160 EUR/set	TEST WINNER 2019					Recommended with reservations/5th place					Strengths: crisp cornering, balanced handling and short braking distances in the dry. Weaknesses: low lateral stability, serious oversteering and long braking distances in wet, aquaplaning safety reserves only moderate.	
Blockley Radial	1-	4	3	4	3	2-	3+	2-	2	3	2-	*-
91 V approx. 920 EUR/set	TEST WINNER 2019					Recommended with reservations/6th place					Strengths: excellent aquaplaning safety reserves, well-balanced handling in dry conditions. Weaknesses: choppy handling, too little lateral stability and heavy oversteering in wet, long braking distances in wet and dry.	
Retro RC 001	3-	4-	3-	5+	4	2	3+	2	2	2+	2-	✓
93 H approx. 340 EUR/set	TEST WINNER 2019					Not recommended/7th place					Strengths: harmonious handling and comfortable ride in dry conditions. Weaknesses: low lateral stability, poor handling in the wet with heavy oversteering, wet braking distance far too long, inadequate aquaplaning reserves.	
Budget tyre No Name	1-	4-	3+	4-	3-	4+	3	3+	2	2-	3	✓
approx. 280 EUR/set	TEST WINNER 2019					Not recommended/8th place					Strengths: excellent aquaplaning safety reserves. Weaknesses: poor handling with low lateral stability and sluggish steering in wet and dry, braking distances far too long.	

Colour coded scores 1 2 3 4 5 6 * Test passed under ECE but not under stricter AUTO BILD specifications.

TYRE TIMELINES



► **PNEUMATIC TYRES** from the Michelin brothers offer better ride characteristics than the previous solid rubber models. They sweep the market from 1895.



► **RADIAL TYRES** have a carcass design of stable cord plies across the tyre. Introduced in 1946, they improve driving dynamics and overtake bias tyres.

► **LOW PROFILE TYRES**, made by Pirelli from 1959, have lower sidewalls. They deliver better grip in cornering and crisp, sporty steering response.



► **AIRLESS** will be the way to go for the tyres of the future. Michelin's puncture-proof Uptis is scheduled to hit the road on mass market cars from 2024.



little oversteering at the start, the rear axle kicks back sharply as soon as we take our foot off the accelerator, and however frantically we counter-steer, nothing is enough to stop us going into a swerve.

The other seven test tyres take us round the curves of

the Wachauring with a lot more smoothness and safety. However, a further opportunity to separate the wheat from the chaff comes along when the water spray is switched on along the one-kilometre-plus test track. When fitted with Blockley and Retro tyres, the Healey

floats dangerously through the corners without the slightest hint of grip or lateral stability; vital safety reserves are squandered during braking.

By contrast, the modern compounds used by the big-name brands – Dunlop, Pirelli, Vredestein and

SUMMARY

Modern vintage-look tyres help keep the classic car and motorsports scene on the road. They improve driving dynamics and boost driving safety, particularly in the wet. But only half the tyres in our list managed to pass our test with a grade of "exemplary". Best leave the others well alone – in the interests of personal safety.

Dierk Möller

