



Alfa Romeo

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DRIVER

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Happy Anniversary!



Bruce Taylor relates how he supports owners of the classic Alfa Romeo Montreal

2017 is the 50th anniversary of Expo 67, the World's Fair at which the Alfa Romeo Montreal concept showcars were exhibited. It is also the 150th anniversary of the Canadian Federation, and the 375th anniversary of Montreal city. So in July 2017 the annual AROC-USA Convention was combined with that of the Alfa Romeo Club of Canada (ARCC) and held in Montreal. The Alfa Montreal was of course the featured car at the meeting, and some special events were organised for Montreal owners.

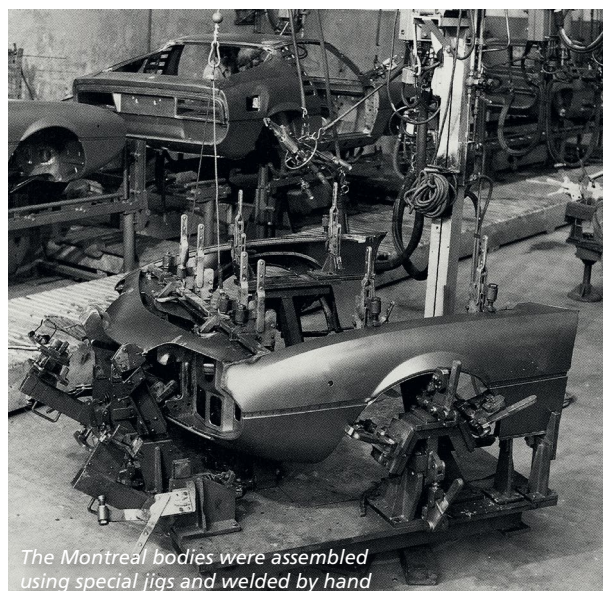
I first visited Montreal in 1960, crossing the Atlantic by a propeller-driven *North Star* aircraft, with stops in the Azores and at Gander for refuelling. In the unpressurized cabin the roar of the plane's four Merlin V12 engines

was deafening, and the spectacle of the flames trailing into the dark night from their individual cylinder exhaust stubs was unforgettable.

Today one can fly direct from London to Montreal in seven hours in a quiet and comfortable jetliner. Likewise, the automobile industry has made remarkable progress in the last half century. The Alfa Montreal bodies were braze welded by Bertone craftsmen, using simple jigs and oxyacetylene hand torches. What a contrast with the highly automated BMW plant at Oxford that I visited last summer! The factory tour there is absolutely fascinating, and I strongly recommend it to anyone at all interested in modern vehicle production.

Six cylinders

In 1969 I was driving a Triumph GT6, which I imported from the UK to Switzerland. The Swiss authorities were rather strict, and initially failed the car because the chassis No. was stamped on a plate that was riveted to the firewall, instead of being stamped on the chassis itself. They also refused to import the car until I removed its GB sticker, not trusting me to do so afterwards! This inflexible attitude was a foretaste of things to come. My Montreal failed one biennial technical inspection after I upgraded the brake hoses from the original rubber to the braided PTFE type, until I could furnish a manufacturer's certificate declaring that these superior aftermarket parts were approved for the vehicle.



The Montreal bodies were assembled using special jigs and welded by hand

The GT6 was a fast little 104hp coupé that suited the new wide-open autoroutes and speed-limit free motoring of the time. The Mont Blanc tunnel had been opened in 1965, and I could sprint from Geneva to Venice in 5 hours, which is still quite a good time in a Montreal today, in spite of the much-improved roads. But it was a very unreliable car, and in addition to numerous other problems it devoured track rod ends voraciously, the Smiths instruments failed repeatedly, the propshaft had to be rebalanced, and the engine seized after less than two years. To their credit, Triumph accepted responsibility for the oil starvation defect which caused that failure, and supplied a replacement engine even though the car's 12-month/10,000km warranty had already expired.

I was first captivated by the Alfa Romeo Montreal when a preproduction model was unveiled at the 1970 Geneva Motor Show. When production cars became available the following year I tried one at a Geneva dealership, and was most impressed with the powerful new GT coupé. But the price tag of 40,450 Swiss Francs was ten times more than the trade-in price that the dealer offered for my GT6. So I came away with only a Montreal sales brochure, which today is something of a collector's item.

Four cylinders

After driving and tinkering with the GT6 for seven happy years, in 1976 I bought one of the first Alfetta GTV 2000s to be imported to Switzerland. The classic 1962cc DOHC Alfa Romeo engine was a blast, and with its balanced weight distribution and de Dion suspension the car's handling was infinitely better than the GT6.

But build quality was mediocre, the electrics were unreliable and the body, built from imperfect recycled steel, rotted through from the inside in less than seven years. After this experience, I changed to driving Honda Preludes and vowed never to buy another Alfa, even though the factory claimed that these problems had been solved in later cars.

Eight cylinders

But the Alfa virus is not so easily laid low, and I was finally lucky enough to acquire an excellent metallic brown 1972 Montreal that became available in the Geneva area. In fact many Montreals have survived the years very well, since they were fabricated before the unfortunate recycled steel episode, and the bodywork was treated on an advanced finishing line that had been set up by Bertone in October 1970.

The Montreal is a wonderful classic car to drive, but I soon found that detailed technical information about it was hard to come by. As a result, the car was considered a complex and temperamental automobile that is difficult and expensive to keep in good running order. Local Alfa dealerships were of little help, and were mainly interested in selling new models.



A preproduction Montreal was unveiled at the 1970 Geneva Motor Show



The Montreal's quadcam 90° V8 develops 200hp at 6500rpm

The Montreal's Spica mechanical fuel injection system is not generally very well known. When my car initially failed an emissions test, the garage inspector started to unscrew the air filter cover. "Why are you doing that?" I asked. "To adjust the carburettors" was the mechanic's reply! To help other owners, I've detailed engine tuning instructions for the system in this article:

www.alfamontreal.info/AROC.pdf

Also, my wife Jennifer and I had to keep our other cars for family drives, because the rear seat in the Montreal is really only

suitable for luggage, despite the car being homologated as a 2+2 in some countries. This is especially true of the late 1975 Montreals, which have an even narrower rear seat squab to allow the driver's seat to be moved further back for additional legroom. From May 1973, all the engines were fitted with a Marelli distributor having a different advance characteristic, and a Spica injection pump having a modified cam profile for improved emissions. The static ignition timing for these engines, which are distinguished by an 'S' in the engine No., is retarded by 11° compared

Wider 16-inch Compomotive wheels change the style of the Montreal



Bertone fitted some Montreals with leather upholstery



The Montreal V8 is redlined at 7000rpm

with the data given in the Owner's Manual, which wasn't updated after 1971. But there were very few other changes during the six year Montreal production run, and when choosing a car its condition is more important than its year of manufacture.

When buying a Montreal, it's important to check that there is no 'mayonnaise' in the oil reservoir. This would be symptomatic of failure of the bearing of the idler shaft that drives the coolant pump, requiring removal of the engine for an expensive repair. Oil dilution by fuel could indicate leakage in the Spica pumping elements, requiring an overhaul of the injection pump or its replacement by carburettors.

Maintenance

When I first enquired about spare parts at the main Fiat Auto centre in Geneva, the storeman replied "Montreal? Is that a Lancia?" Today NOS parts for the car are becoming rather scarce, and at present some items, such as rear window glass, are virtually unobtainable. But a growing number of suppliers are making reproduction parts for the car, some of which (such as PTFE-faced chain guides) are actually better than the original components.

Only a few parts, such as the oil filter, door handles and steering wheel, are directly interchangeable with other classic Alfas. Although the Montreal is a 105-series car, there are many differences of detail from the less powerful 4-cylinder models, such as ventilated brake discs, stronger propshaft bearings, twin fuel pumps, a larger differential cooler, and a ZF S5-18/3 gearbox. With the exception of some Bosch electrics and small components, such as standard SKF bearings, Lodge 2HL sparkplugs, sensors, and the Spica and alternator drive belts, the 2593cc V8 engine parts are mostly unique.

The clutch slave cylinder is another example. The Montreal version has a longer stroke than the standard one, and there can be problems with new or worn clutch discs if the more readily obtainable shorter 105 part is fitted as a replacement. Even the troublesome Spica thermostatic actuator (TA) differs from that fitted to US-bound 4-cylinder Alfas, since the Montreal version has a right-angle elbow to clear the air filter box. For the same reason, the Shankle 'Sure-start' manual mixture enrichment device is not compatible, but original TAs can be rebuilt with a corrosion-resistant plunger that is less likely to leak. The barometric compensator is reliable, and the engine has performed satisfactorily when crossing the Rocky Mountains in Colorado at an altitude of 12,000ft.

In the Montreal, the calibrated orifice which controls the fuel pressure is located in the return inlet to the fuel tank, not directly at the outlet of the Spica pump as in 4-cylinder systems. The orifice directs the recirculated fuel tangentially

into the base of a centrifuge cylinder to promote devaporisation and cooling. As well as the filters, it's important to check that all the fuel hoses and clamps are in good condition. Since the electric pumps circulate fuel at a very high rate, a leak in the engine compartment will result in a disastrous fire.

One advantage of the RHD Montreals is that the worm-and-roller ZF steering box in these cars is more robust than the recirculating-ball Burman type fitted to the LHD model. However, stronger reproduction steering boxes are now available from several sources. To reduce the flexing that can lead to fatigue fractures, it can be a wise idea to weld reinforcing plates to the chassis members to which the steering box is attached. The Bosch capacitor discharge ignition units are also prone to failure. Since these are built from classic discrete components they are usually repairable, and alternatively more modern contactless ignition systems can be fitted if originality is not a concern.

The Montreal is often criticised by the motoring press for its soft suspension and inadequate braking, but these defects are easily rectified. I chose to install the Harvey Bailey Engineering handling kit for the car, which included four new springs and front and rear anti-roll bars, as well as Bilstein shocks all round. Several performance brake kits are available for the Montreal, and a simple but very effective upgrade can be made just by replacing the front callipers with the 4-piston ones fitted to some early BMW E23 7-series cars.

It took several years to discover little by little how the Montreal was put together, track down what factory information existed for the car, and reverse engineer some of the parts that were not documented. How could this useful information be shared with other Montreal owners?

Montreal website

In my job at CERN the dissemination of information was always important, and the lab is quite large. (Up to 13,000 people now work on-site every day). So in the late 1970s I had started making my professional documentation available to other physicists and engineers on the central mainframe via exec files. As international networking grew, CERN opened external TCP/IP connections, which allowed me to make the information available to users in other countries by anonymous FTP from a Unix system. Then in 1989 my colleague Tim Berners-Lee invented the World Wide Web, and created the very first web server. Tim put a computer in the corridor outside my office with a card saying, "Something new – try this!". I did, and was hooked immediately. Tim's vision, creativity, and untiring efforts led to the web becoming the truly international, seamless, non-proprietary information facility that we enjoy today.



Almost 200 RHD Montreals were manufactured



The Montreal has scored many race and rally successes

In 1993, CERN put its web software in the public domain, and the web began to take off. After creating several websites for my work, I began to think that this new medium could be useful for classic car enthusiasts, too. So in 1996 I made a few private hobby websites, including one devoted to the Alfa Romeo Montreal:

www.alfamontreal.info

At first I hosted the Montreal website on a small personal computer, and as the traffic grew I migrated it to a GeoCities server. As more and more people visited the website, GeoCities had to block it frequently to keep the monthly traffic level within the allowed limit. So in January 2002, I moved it to a paid server run by Yahoo Website Services. Website traffic kept growing and in December 2005 I upgraded it again to a Yahoo Small Business server, which supported monthly traffic of 200GB. Then in April 2016 I migrated all the 3000+ files to an even higher performance Hoststar server in Switzerland. Since the counter was reset in June 1996, the Montreal Website has received over 650,000 visits from Alfisti in over 130 countries. I'm still updating and expanding it as I learn more about this interesting car, and I hope that this will make

the information increasingly useful to Alfa Romeo Montreal enthusiasts everywhere.

Montreal books

More than a century ago, the poet José Martí said that in his lifetime every man should plant a tree, make a child, and write a book. Having done the first two more than once, and encouraged by the popularity of the Montreal website, I set out to find a publisher for a book about the Alfa Romeo Montreal. This was not easy. Books can only be printed if they are commercially viable, and the first question a publisher asks is "How many of these cars were produced?" Unfortunately fewer than 4000 Montreals were built!

To their great credit, Veloce Publishing finally took the risk of publishing a quality 320-page hardcover for the small niche market of Montreal owners and potential owners. This *Essential Companion* book is about buying, maintaining and improving the car, and contains much technical information and many practical tips. It also contains information about Montreal history, production, racing, meetings, reviews, drawings, art, special tools, paint finishes, models, prices and service providers. I

was delighted when it was commended by Christopher Reitz, the Director of Alfa Romeo Centro Stile, and voted 'Best Book of 2008' by Classic & Sports Car Magazine.

Encouraged by this, Veloce agreed to publish a second book in 2009 – a non-technical pictorial tribute to the Montreal, that is addressed to a wider readership of classic car enthusiasts. After the *Essential Companion* sold out, Veloce published a limited additional run of 500 copies, which also allowed me to correct the errors in the first edition. I hope that these two books may help owners get the best from their cars, and show other discerning classic car enthusiasts that the Alfa Romeo Montreal is a hidden treasure well worth seeking.

Since the publication of the books, the Montreal has become more widely understood and appreciated, and prices have been rising steadily. In January 2014, red 1971 Montreal AR1425803 was auctioned by Gooding & Co in Scottsdale, Arizona, for a remarkable \$176,000. The car had been offered for \$49,000 on 'Bring A Trailer' in August 2011. In Europe, Montreals are much more plentiful than in the US, and at the Silverstone Race Retro Classic Car Sale in February 2017 a sound car was sold for a more affordable £41,625. – Still well above the *Classic Cars* valuation of £15,000 for a 'top-notch' UK Montreal back in September 2009.

Meetings

In Europe, Montreal meetings have been organised in a different country every year since 1987. The 24th meeting, which was held in Switzerland, was attended by 121 participants with 61 Montreals from 13 countries:

www.alfamontreal.info/meet.pdf

This year's meeting will be held in the Rotterdam area from 14 to 17 September, and a contingent of UK Montreals is expected to participate. Rotterdam is only 300km from Calais by road, and alternatively there are regular direct ferry services to Holland from Harwich, Hull and Newcastle. All Alfisti are welcome, even if you're not lucky enough to drive a Montreal! Full information is available at:

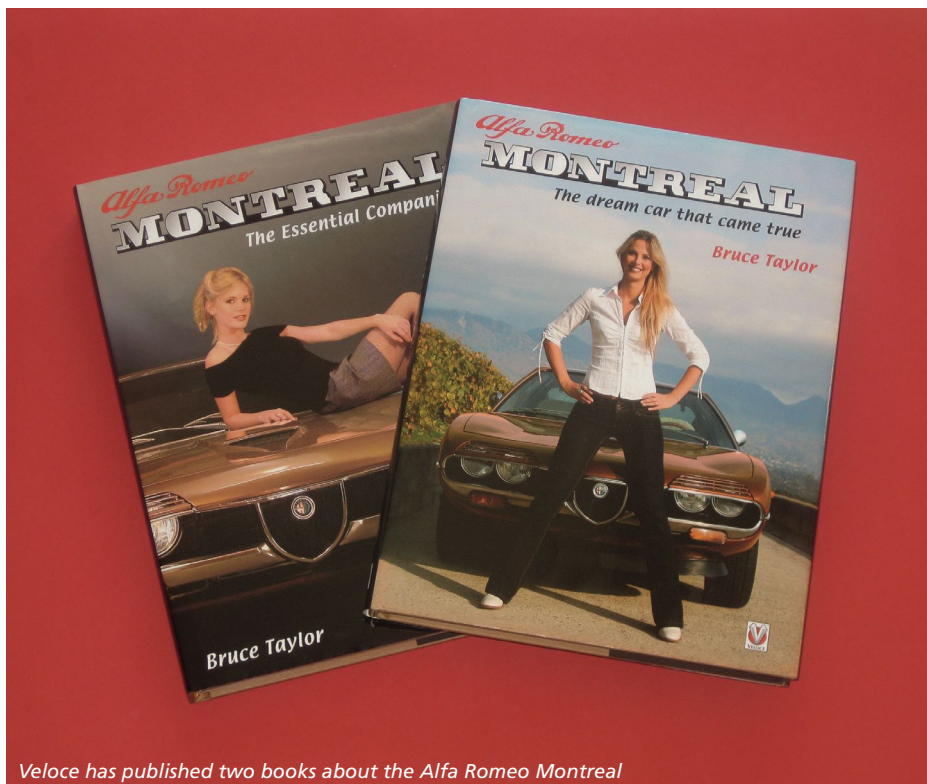
www.alfamontreal.info/index.html#meetings

(Note that as this is a large web page, you may have to be patient while it loads completely)

In past years, the European Montreal Meetings have been held in countries as widely separated as Portugal (2009) and Finland (2011). It is planned to hold the 2018 meeting at a location on the West Coast of Scotland, and details will be given on the Montreal website in due course.

Bruce Taylor

*Photos courtesy Automobilismo Storico,
Alfa Romeo, Centro Documentazione,
Bertone Carrozzeria, Ron Avery,
Ralph Ortiz, Hannes Paling, Patrick Poltera,
Scott Slavin, Bruce Taylor, Thorsten Weigl*



Veloce has published two books about the Alfa Romeo Montreal



Shooting '70s-style cover photos for the Montreal books was a lot of fun



European Montreal meetings are held in a different country every year