



# ARCC UPDATE

March 2009

## *Thirty Years with an Alfetta*

by George Beston, Cobourg

I've already written a couple of pieces on my Alfetta during the last year. The first one described the 30 year ownership of my Alfetta Berlina; the second gave the details of the engine setup which I have found to be very satisfying. In this third and final instalment I'll provide an overview of other projects I've done over the years. The end result is that I have what is still a pretty humble vehicle in the world of Alfa Romeos, but the personal satisfaction I have obtained from sticking with the Alfetta and overcoming its issues has been well worth the effort. It now gets a lot of positive reaction from Alfisti and the general public due to its rarity and good condition.



### *Brakes*

The Alfetta has reasonably good brakes for a car of its weight. (BTW the scales at my closest landfill transfer station say that with fuel and driver, the Alfetta weighs 1250 kg, or 2,750 lbs. I estimate "dry" weight at 2400 to 2500 lbs.) I wouldn't describe Alfetta brakes as totally problem free, but they've been very reliable. I like to think that the use of DOT 5 silicone brake fluid has had a lot to do with the callipers never seizing up on me. In days gone by, I've found that the front rotors had a tendency to warp with hard use such as lapping days, and to avoid that, I found it was wise to drive around a paddock at low speed for a few minutes

rather than just park it after a cool down lap. It should be noted that turning Alfetta rotors doesn't seem to be an option. Out of the box, they're at the minimum 10 mm thickness. At present I'm using slotted and grooved rotors purchased from IAP and they have worked very well.

The rear brakes are difficult to access, being inboard and having the callipers located at the top of the rotors. This also makes it mighty difficult to see what you're doing even to replace pads. Rotor to brake pad clearance must be adjusted for new pads due to the integrated parking brake feature. This is an exercise that demands a lot of patience, and coping with threads that are right- or left- handed depending on which calliper is being worked on. It's one of those activities I would need to do on a regular basis to get comfortable with it.

I only have one nagging issue with the brakes and that is some slight brake dragging from the rear at times. The only cure I have found is to avoid using the parking brake. Unfortunately, this is not always possible. The problem has persisted with both the original callipers and a set of rebuilt callipers from IAP. If anyone has an idea on this, let me know!

### *Suspension*

Early in its life, my Alfetta had problems with front wheel bearings. They would get awfully noisy, and at one point the driver's side inner bearing spun on the spindle. It seems that in Alfa's zeal to reduce unsprung weight durability was sacrificed to some degree. The cure was a set of steering knuckles and hubs from a 1978 Alfetta GT. The bearing size in the later part increased from 26 to 28 mm. Since changing over to the larger spindles and bearings, I have re-packed them a number of times, and there have been no failures or any sign of wear problems.

Other items that have been replaced in the front suspension include ball joints, tie rod ends and bushings, but only after substantial use.

The OE Boge shock absorbers were replaced a few years ago with Koni (red) shocks. I'm very happy with the Konis, but can't really tell if they've made

the ride or handling measurably better than new OE shocks would have.

The only modification I've made to the suspension is lowering the front end by about 1.25". I understand that USA-spec. cars had a slightly higher ride height from the factory than Euro cars in order to conform to bumper height requirements. Fortunately, Alfa's elegant vernier style adjustment of ride height with the torsion bars and mounts is relatively easy once you get the idea of it. I definitely prefer the look of the lowered front end. I just wish it was that easy and inexpensive to adjust rear ride height. I have fitted aftermarket "Sport" springs which lowered the ride height a small amount.



### ***Wheels and Tires***

After seeing them on current Alfa sedans in Germany back in about 1983, I found a way to save up for a set of Ronal A1 wheels. In hindsight I should have looked a little harder and bought them in the 15x7 size rather than the 14x6.5s that I have on the car, because tire choices are now really limited for 14 inch rims. I think they're a great looking rim and suit Alfettas to a T.

I've been using 215/60 tires on the Alfetta for a number of years now. They look great on the back, but I think they're a little overpowering for the shape of the front end of the Alfetta. I need new tires again and will probably opt for 195/65 tires all around unless I can find a source that makes a suitable style and tread pattern of tire in both sizes, i.e. 195/65 for the front and 215/60 for the rear wheels.

### ***Drive Shaft***

This part of Alfettas and all 116-series Alfas is the most notable point of difference from the earlier 105/115 and 101 series Alfas. Because the drive shaft is attached to two components (engine and transaxle) that do not move with the suspension, there is no need for a sliding yoke or universal joints. Instead the transaxle Alfas use rubber couplings to take up minor deflections which would cause a lot of

vibrations in a drive shaft that is always operating at engine speed.

The above makes it sound like it should be a simpler system. Unfortunately, it's not! As with every transaxle-equipped vehicle I can think of, the complexity of the driveshaft area is much increased compared to front-transmission cars. This hurts a do-it-yourself enthusiast because it makes things like dropping a drive shaft and working on it (a very doable exercise on a Spider) much more difficult. Alfa went to a lot of effort to keep the shaft properly centered, hence the use of alignment pins in the couplings between driveshaft sections, and spherical joints where the sections meet end-to-end. I've taken my Alfetta's driveshaft out and put it back in on one occasion. I don't plan on trying it again! For someone who believes that us enthusiasts should figure it out and do it ourselves, it's a big change of heart to admit that some things should be left to experienced professionals.

The rubber couplings are definitely service items. I've gone through two or three sets over the years. The last time they were changed, they came out in pieces, so I'll be keeping a closer watch on them from now on. The smoothness imparted by the new couplings was a welcome improvement. The driveshaft will be getting some professional attention soon to replace the hanger bearing which is a getting little growly.

### ***Transmission***

Alfetta transmissions have a reputation for balky shifting. In my experience this has shown up as difficulty in getting the transmission out of the gear it's in under some circumstances. I've never had a problem finding the destination gear. This issue has subsided over the years, apparently an example of something that can get better with wear. Two other things have helped; changing to synthetic 75W90 gear lube in the transaxle and using a technique borrowed from big rig driving called "loading the stick". This involves applying a slight pressure to the gearshift lever as the clutch is being disengaged. This initiates the actual shift at the instant the drive load is removed from the gears. Using this technique, balky shifting just doesn't happen any more.

Second gear synchromesh is something I'm a little careful of for the first few miles of a drive, but otherwise all the synchros work as they should.

### ***Clutch***

In 30 years and 120,000 miles, I've only replaced the clutch once – at about 45,000 miles. Track days and hard driving may have been the cause of a

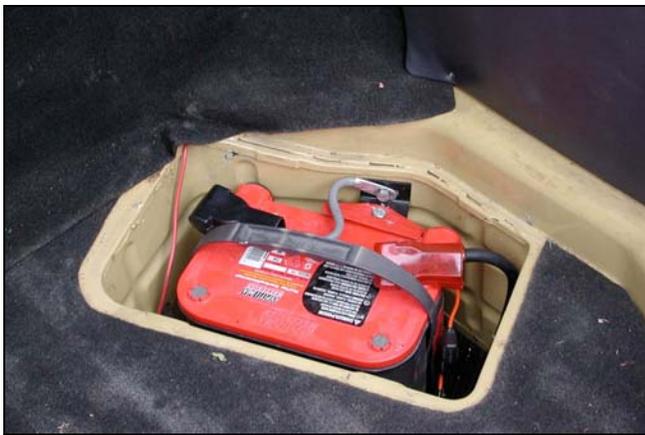
cracked pressure plate, which made the clutch slip and necessitated the replacement.

### ***Bodywork***

A number of opportunities have come up to make some subtle changes to the bodywork on the Alfetta. The most noticeable change has been the replacement of the original rubber-covered bumpers. This was brought on by the originals getting a little ugly due to rust attacking the steel structure. This in turn caused odd splits and lumps in the rubber. The best I could do was to obtain front and rear bumpers intended for a European 1978 Sport Sedan and adapt them by fabricating some suitable bumper mounts, and making a few other modifications.

Other changes include removing the OE license plate light housing from the body. I was never fond of its blocky ALFA ROMEO script. The Euro Alfettas made do without this and used license plate lights mounted in the bumper, so I've followed that example.

A number of years ago, I took advantage of the battery box built into the trunk of 116.33 Alfettas, but only used by the factory on air conditioned cars. I moved the battery back there from the engine compartment. It frees up a little space and puts the weight of the battery in a more favourable position.



This Alfetta has had one paint job. Despite being garaged or stored indoors all of the time, rust occurred at the lower corners of the windshield and rear window, the bottom rear corner of the driver's door and the left rear quarter panel just behind the wheel. Fortunately all of the rusted areas were accessible and could be repaired properly.

I thought that matching the unusual Piper Yellow colour could be an issue. The folks at the body shop had no problem at all with that, and matched the colour perfectly.

I've never been thrilled with the inexpensive sunroof that I had installed by an auto glass store.

It was necessary to get sufficient cabin ventilation in hot weather. Fortunately, it is very effective and has never given any trouble. A more sophisticated sun roof has been on my to-do list for quite a while.

The OE sealed beam headlights have been replaced with Hella halogen lamps in all four pots. They're very strong, and I have to be careful with high beam use in order to avoid annoying anyone.

### ***The future!***

The Alfetta is a good car to just drive and enjoy. That doesn't keep me from fantasizing about what could be. The single change that would give the most benefit is more power! A twin-spark engine from an Alfa 75 would drop right in and an Alfa V6 should also fit in there without too much difficulty. Other interesting possibilities include modern 4 cylinder engines from other manufacturers. Consider what a General Motors Ecotec turbocharged engine would do for my driving fun. Say, wasn't that engine originally developed by the GM Europe / Fiat Power Train group during the short lived GM / Fiat alliance?

Engine swaps might be a situation in which the transaxle layout could be an advantage. Most engine swaps need some serious engineering to build adaptors to go from one manufacturer's engine to another manufacturer's clutch and transmission. These days, an engine swap usually ends up as double transplant of engine and transmission. In the case of the Alfetta, an engine swap only has to connect the output of the "foreign" engine to a drive shaft. This sounds a lot more feasible, but I couldn't be sure of that without trying it.

Other possible upgrades include removing the fuel tank from its safe but oddly high location above the rear axle, and replacing it with a "well cell", a fuel cell shaped to occupy the spare tire well. This would lower the center of gravity and free up some trunk space. It would also allow me to cut an inspection door into the trunk floor above those rear brakes to facilitate service procedures. With the tank out of the way, I'd cut an access door in the passenger compartment bulkhead to create a pass-through from the trunk as found on many modern cars.

## ***Membership Renewal***

Just a reminder – our membership year ends at February. If you haven't already done so, please renew your membership by filling out the form, writing the appropriate cheque and mailing it to the Club's address.

# Upcoming ARCC Events

## Alfa Romeo Club of Edmonton

Date	Time	Event
May	TBD	Spring road trip
June 10	TBD	Wetaskawin
June 27	TBD	Porsche meet
July	TBD	AROC Convention
August 10	TBD	Rock'n August
August 29	TBD	Concours
Sept. 21	TBD	Fall Colours Run
November	TBD	Italian Dinner
Dec. 13	TBD	Tree Hunt

## Ottawa Chapter

Event schedule under development!

## Toronto Chapter

Date	Time	Event
April 2	7 pm	AGM at MiniGrid
April 18	10 am	Tech Session Pinarello Motori
May 7	7:00 pm	Cruise Night La Paloma
May 10	TBD	Sunday Drive
May 30	10:30 am	Restoration Shop Tour Legendary Motor Cars
June 4	7 pm	Cruise Night La Paloma
June 21	TBD	Vintage Festival/Drive
July 2	7 pm	Cruise Night La Paloma
July 5	TBD	Sunday Drive
July 15-19	TBD	AROC Convention
July 19	TBD	Summer Wine Tour
August 6	7 pm	Cruise Night La Paloma
August 9	TBD	Sunday Drive
August 16	TBD	Picnic, BBQ
September 3	7 pm	Cruise Night La Paloma
Sept. 20	TBD	Fall Tour
October 1	TBD	Cruise Night La Paloma
October 4	TBD	Europa Rally
November 4	TBD	Director's Meeting & Pub Night
December 5	TBD	Holiday Dinner Marino's Restaurant
Feb. 27, 2010	9:30 am	Directors Meeting

## Other Events of Interest

F1 Grand Prix viewings at Veneto Centre

MGCCT Autofest of Classics: British and European car show, June 7, Brampton ON

Grand Prix of Mosport – ALMS – Aug. 27-30

Watkins Glen Vintage Grand Prix Sept 11-13

The Alfa Romeo Alfetta. The sports car for drivers who love company. Racers and nonracers in one car. Race-car handling, too, because it's perfectly balanced. Cost: \$6,997.00.

**Introducing a New Center of Gravity. Alfetta by Alfa Romeo.**

Alfetta. The name itself conjures up memories of Grand Prix victories on the world's most glamorous race-tracks. All the excitement and prestige of one of the great names in Grand Prix racing.

That was Alfetta 158/159, cousin to the Alfa 133, 1975 World Champion of Makes. Now there's a new Alfetta...but it isn't being built for glamorous racetracks. It's being built for you. Alfetta. A car of great beauty and power and the agility one expects only in a racer. A car which represents one of the most important automotive developments in a decade: the world's first truly balanced production automobile.

Gearbox, clutch and flywheel have been moved to the rear. This, together with inboard mounting of the rear disc brakes, has created a new center of gravity—that same center of gravity that helped the original Alfetta dominate Grand Prix racing. Equal weight fore and aft with you, the driver, in the middle—at one with your Alfetta. Another radical feature: the DeDion rear suspension, also borrowed from the original Alfetta, and until now much too costly a system for any but the most expensive cars.

**The Great Transplant**  
Alfetta 158/159  
Reduced weight achieved by locating gearbox in the rear. Alfetta went on to dominate Grand Prix racing.

Quicker, easier steering, race-car handling, maximum traction, and road-holding that will astonish even the most sophisticated driver. Drive it. It becomes a part of you.

With our standard 5-speed gearbox, economical fuel injection, all-aluminum DOHC engine and new low-drag wedge profile, Alfetta delivers a surprising 25 mpg. (EPA highway rating). Safety features include rigid passenger compartment protected by energy-absorbing zones front and rear, 4-wheel power disc brakes with dual circuits.

Alfetta. An attractive new force you should experience soon.

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**Alfa Romeo**

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