Restoration of a 1963 Alfa Romeo 101.12 Sprint Coupe

March 5, 2010

Beginning just after World War I Alfa Romeo designed and built cars to compete in the most trying road races in history – the Targa Florio on the back roads of Sicily and the Mille Miglia, which was a thousand-mile race from Brescia to Rome and back.

The first "Mille" event was run in 1927 and from 1928 to 1947 Alfas virtually dominated when in 1948 the mantle was passed on to Ferrari. Ferrari started with Alfa Romeo as a driver in 1920 and in the 1930s ran the company's racing team. After World War II Ferrari started on his own with some of Alfa's engineers.

In the immediate post-war period Alfa decided to supplement the building of high-priced cars with the introduction of the Giulietta series with a coupe, open sports car and small sedan – all based upon the same platform and drive train. Designed by one of the most successful racing teams in history the series were intended to be relatively high-production cars that would win the 1300 cc class. They, and particularly the Sprint coupe, did win class and on the endurance races even winning a couple of classes above.

Coachmaker, Bertone designed and built the Sprint with production beginning in late 1954 and with minor variations continuing until 1964. In rallying and road racing the Giulietta series were consistently successful.

The design was the first modern sports car with a stiff chassis and a compliant, but well-controlled suspension. It was intended for fast travel over any kind and condition of road. In the 1956 Mille Miglia the Sprint won its 1300 class and right up to and beating the 2-liter Maserati. The only cars ahead were 4.5 L Ferraris and 3.0 L Mercedes and a prototype OSCA.

Beginning in 1965, Bob had enjoyed Alfa Romeos as daily drivers as well as many years of “track days”.

Five years ago he returned to the mark with a 1962 Giulietta Spider, which is the open sports car. In Graphite Grey and Red interior it was in very good condition and the engine and drive train were up-graded.

On the quip that it would be nice to have a coupe on the colder days, Bob started looking for a Sprint in early 2009 and most of the good ones on offer were Red. In September one dismantled for restoration was found in San Jose and it was shipped to Auto Restore in Vancouver. Work began in late October.

The first picture show the Sprint in White as it arrived at the shop. The body is straight and the interior is a mess.

The second photo shows it after it was stripped and mounted on a dolly for the trip for the media-blast used to get rid of old paint, rust and sound-deadening asphalt. Media used was pulverized brick and talc, which revealed perforations in the passenger floor wells. These will be patched with new steel.

The third picture shows it after body prep and paint, which is Midnight Blue. The engine was dated as 1967 and not original to the car. Another engine and the five-speed transmission have been rebuilt and up-graded. The rearend has been sent to England for a rare 4.3 ring and pinion set and modern limited slip differential.

David Ledlin at Auto Restore heads up the re-build.

April 27, 2010

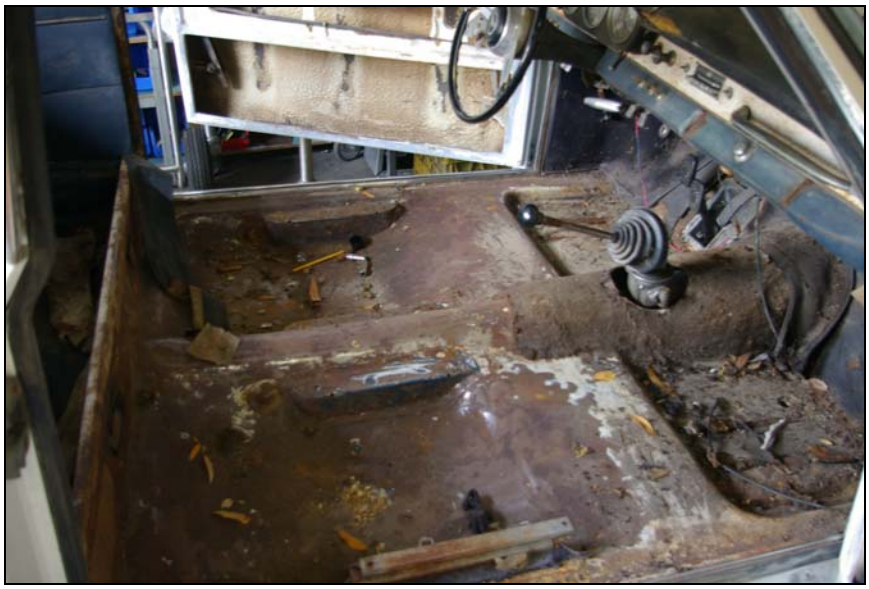
Performance depends upon acceleration, speed, handling and braking. Alfa featured the biggest and best drum brakes ever built for a light sports car. For a few years these were superior to disc brakes.

The second set of photos show the left front suspension with the enormous brake drum with helical cooling fins. These were 13.5 inches in diameter and 3.5 inches wide. The highest performing models include three leading shoes, a set up not used by any other manufacturer. The swept area of the brakes was greater than on the 3-liter Ferraris, as well as on the Mercedes 300 SLR.

The second, third and fourth pictures show the front suspension as cleaned up and replaced.

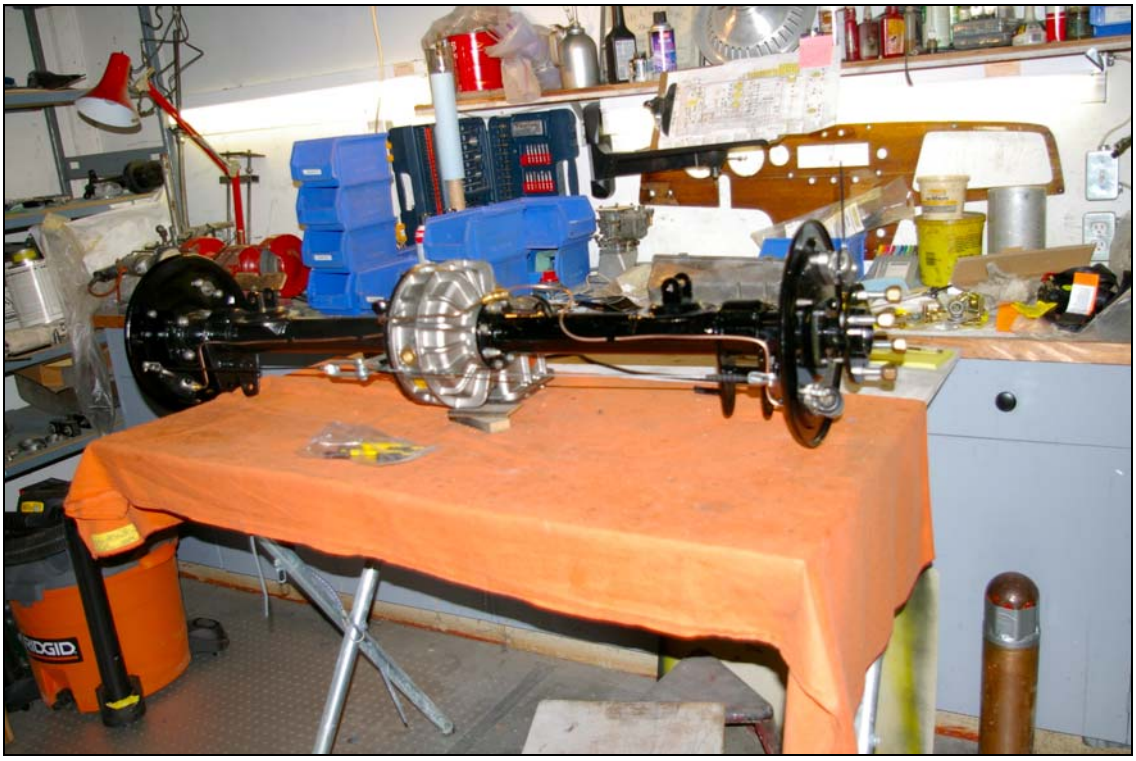
April 27, 2010

The next picture shows the interior with some hand-scraping prior to the media-blast. The following picture shows the same area after the blast and paint. It also shows the metal segments used to replace the rusted out parts of the floor. This will be coated with "Bullet-Proof" paint that is as tough as its name. All metal underneath was treated as well.



October 29, 2010

Restoration of the rear axle included changing the final drive ratio from 5.12, which is too short for a two liter engine, to a 4.56. I had hoped to get a 4.3 but the manufacturer could not guarantee that it would be quiet enough when not on a race track.

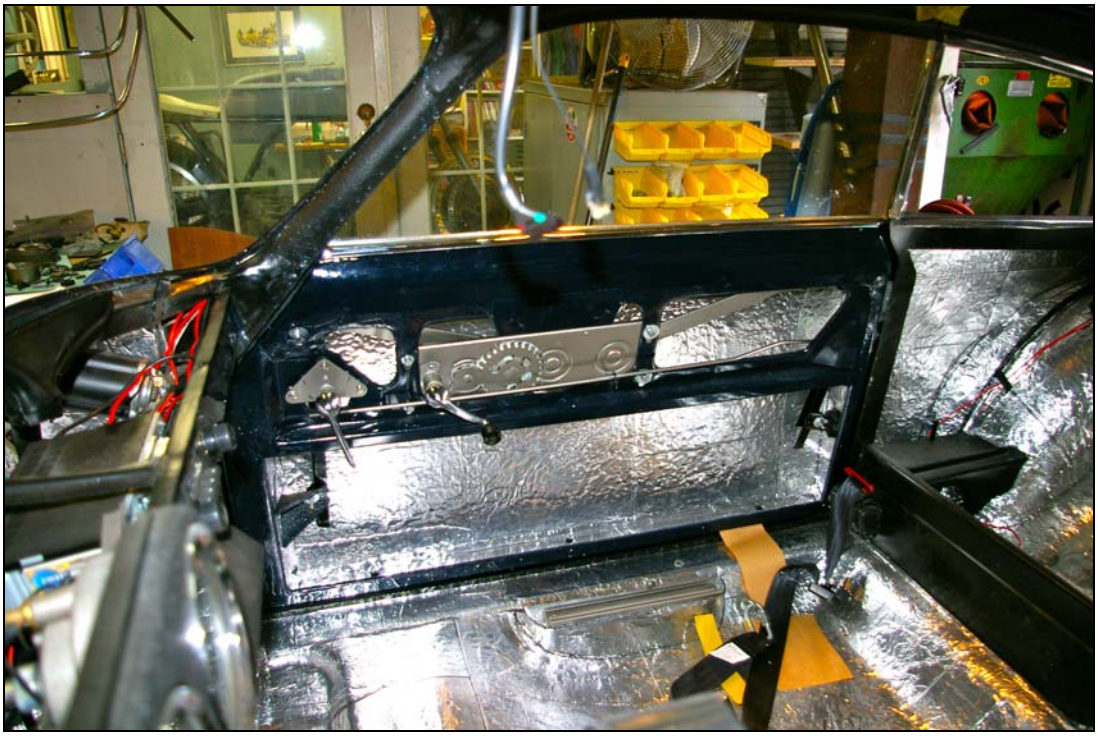


Also, the latest limited slip is installed and set up for highway use.

The gearbox has taller ratios for first, second and third, with fifth keeping the tall .79 ratio.

Considering the final drive ratio, gearing should be very good for climbing mountain roads.

Fortunately the backing plates needed to fit the “big” brakes to were found and the rest of the work was cosmetic.



Interior metal has been covered with Hushmat which reduces noise and heat transfer. Note the restoration of the window-winding mechanism.

November 15, 2010

The first shot shows the Sprint as it arrived at the shop. The previous owner had stripped the car and painted it white. The old Fergat steel wheels are only for moving it around.

The front view shows the project with the engine and gear box removed.

Similar view with engine, grill and headlights installed. The plating shop did an outstanding job.

Three-quarter front shot shows the new wheels, which are replicas of the original “works” magnesium ones built for competition. These are of modern structural design and in aluminum weigh some three pounds less than the standard steel wheels. Magnesium replicas are available but at prohibitive cost.

November 23, 2010

Dave Ledlin rolling the Sprint for transportation to the upholstery shop.

He also found a set of 1963 British Columbia plates.

Almost ready to go.

November 29, 2010

At Phoenix Upholstery in North Vancouver. Proprietor Dave Gallagher enjoys explaining that the last Alfa he did was the 1939 2900 from the Collier collection in Florida.

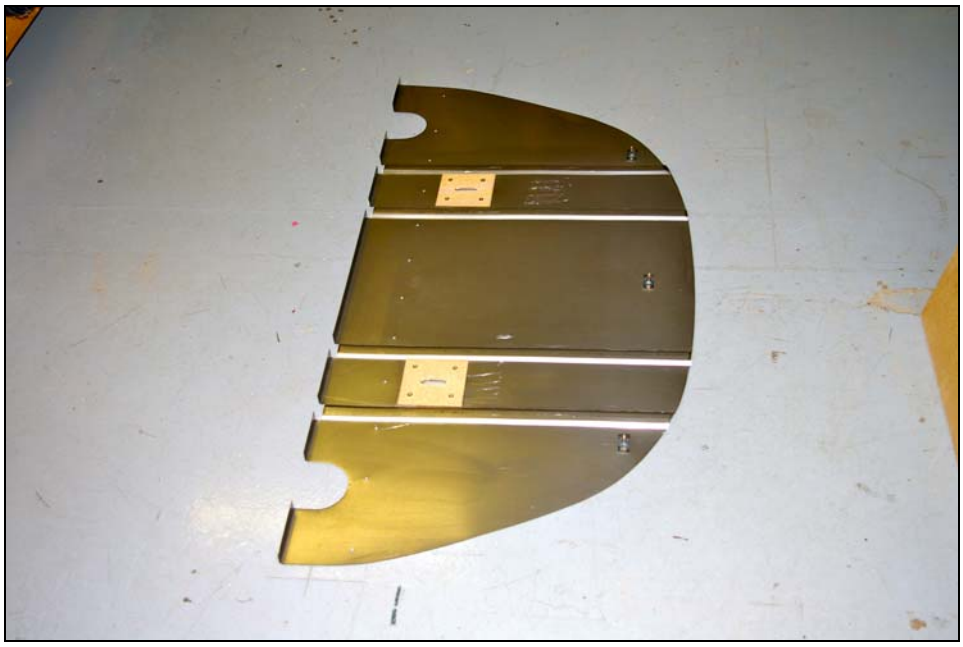
These two pics show the correct "snakebite" headliner.

More of a rear-view of the headliner. Could not find one more rear quarter window so two of Lexan have been made and will be installed once the interior is finished.

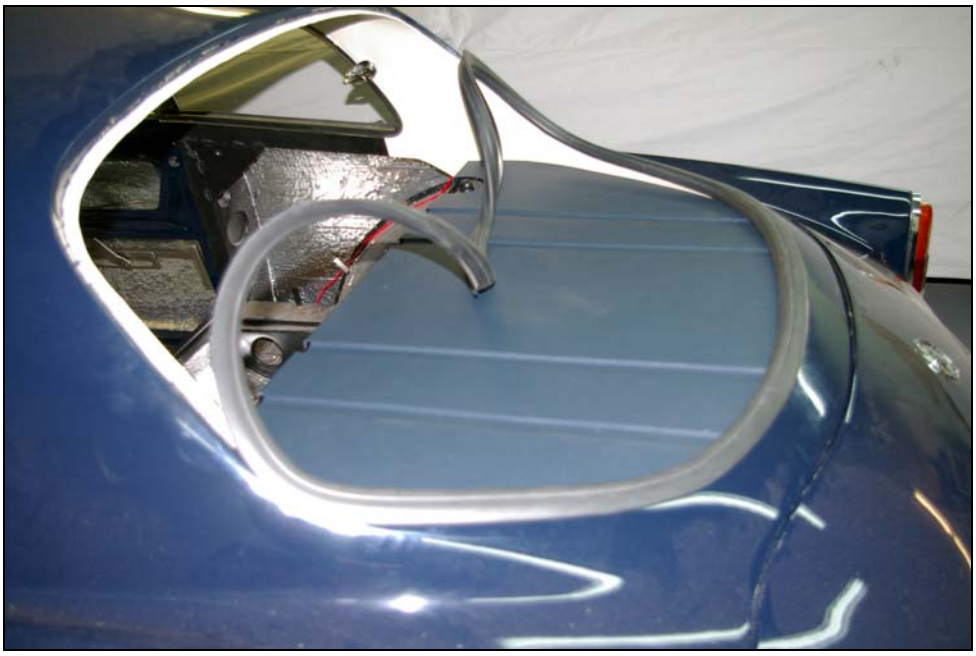
A triangle of 3/8" steel was TIG welded to the bottom window frame and the B pillar. This is drilled and threaded to secure the bolt for the top fastener of the three-way seatbelt.

December 1, 2010

The new rear shelf was made by RX Autoworks. The slots accommodate leather straps used to secure luggage placed behind the seats. Sprints were also intended as grand tourers.



Shelf as covered and installed.



Door panel is finished.

Rear Quarter Panel.

December 6, 2010

Dash panels are covered.

Floor with felt over the Hushmatt.

Rear quarter panel.