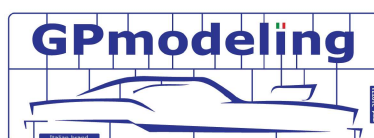
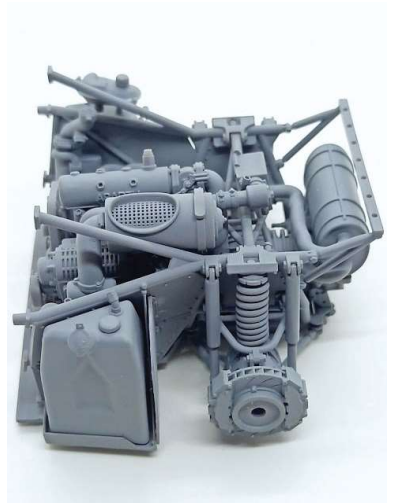
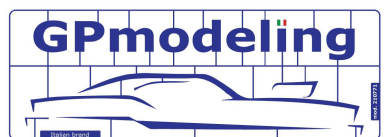
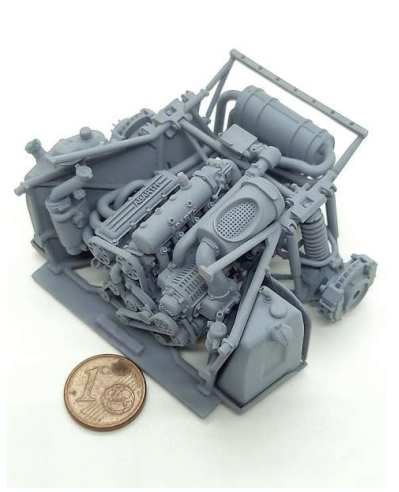
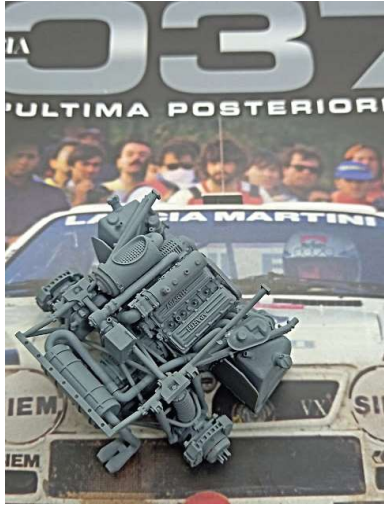




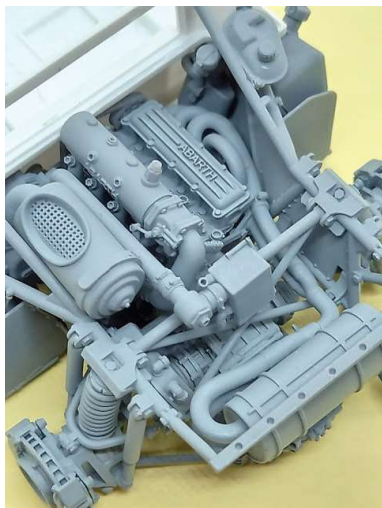
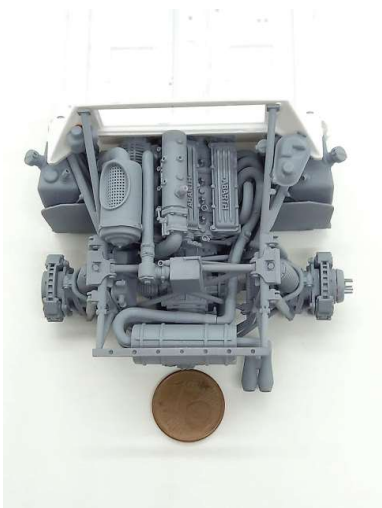
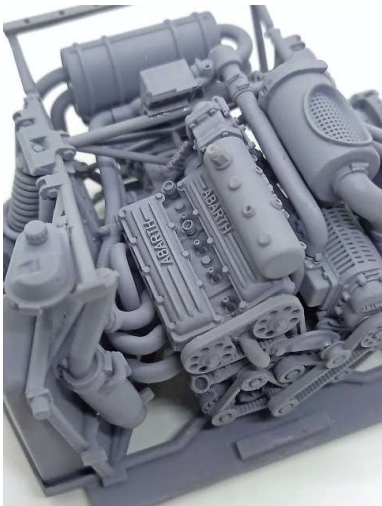
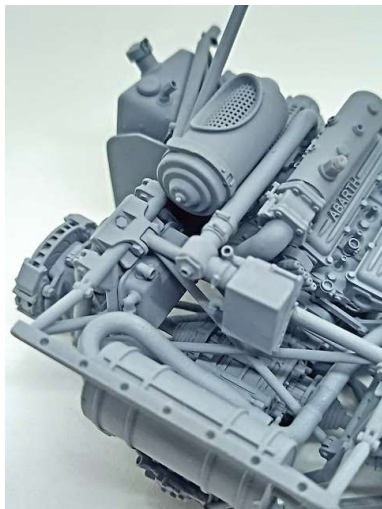
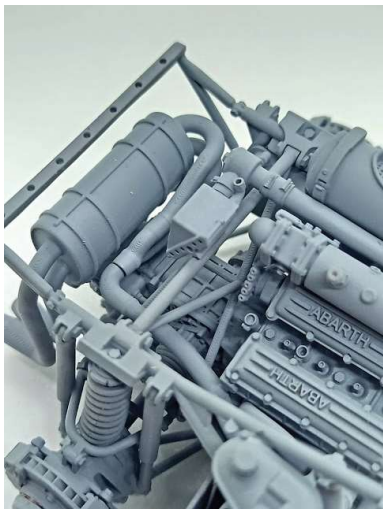
Lancia RALLY 037 EVO 2 - Complete engine HASEGAWA 1/24 kit

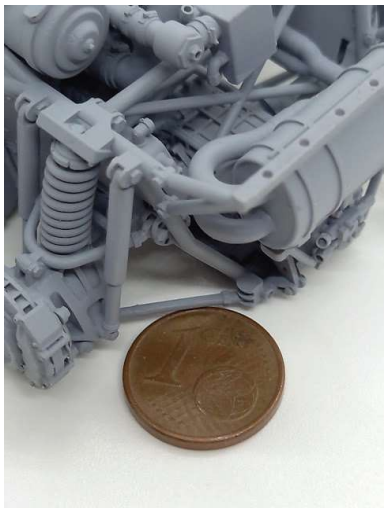
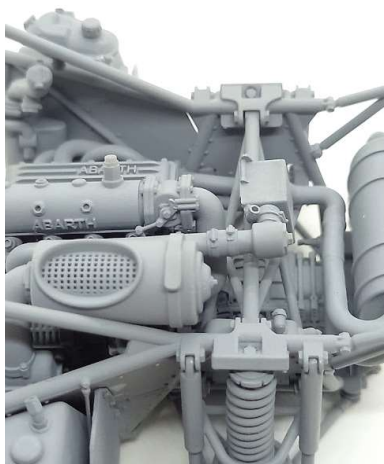
Dear friends, we are proud to bring to your attention our first own project of the Gpmodeling brand - The transkit of the famous EVO 2 Lancia Rally 037 engine, which was specially developed for participation in the 1984 World Rally Championship. Lancia Rally 037 was born in the golden age of rally racing with the sole purpose of replacing the glorious Fiat 131 Abarth group 4, which in 1980 gave Fiat its third designer title. Not an easy task, but it was accomplished. The Lancia Rally became a powerful racing car, first with a carbureted engine and then with an Evoluzione 1 (EVO1) injection engine, which has won many international victories. To remain competitive in the World Rally Championship, the Evoluzione 2 (EVO 2) upgrade was developed for the car. This modernization entailed an increase in engine displacement from 1995 to 2111 cubic meters. cm with a reinforced block, the entire intake system was modified with a new manifold and a new air filter. Its compressed air ventilation system no longer dissipates in a vacuum, but directs the air flow to a new transmission oil cooler, located in a metal box on the center cross members. Then a pump is added to the ZF gearbox to connect the gearbox itself to the radiator (clearly visible in the final part under the muffler). The Evo 2 was rated at 325 hp. At a staggering 8000 rpm. Officially, it was used in the 1984 and 1985 World Championships, and will then was replaced by the S4. In accordance with the homologation rules, Lancia produced only 20 Evo 2 cars of specification 037, all-wheel drive World Rally Cars (serial numbers 400 to 420), of which the car with chassis 411 is widely known, which was expertly driven by Markku Allen, Darrio Serrato, Franco Cunico, Enrico Bertone and Swede Per Eklund. Chassis 411 Evo 2 won the 1985 European Rally Championship, participated in the European and Italian Rally Championships in 15 more races, winning the Colline Oltrepo rally with Filippo Musti and the Citta di Mantova rally with Graziano Rossi. The Evo 2 engine is a part of the iconic cars of the Golden Age. From a modeling standpoint, our transkit can be used with all Hasegawa kits in 1/24 scale. However, these must be cars registered for participation in races held from 01/01/1984. In the period from 01/08/1982 to 12/31/1983 we are talking about EVO 1. The version EVO 1 will be available with the necessary changes soon. Keep in touch with Gpmodeling!









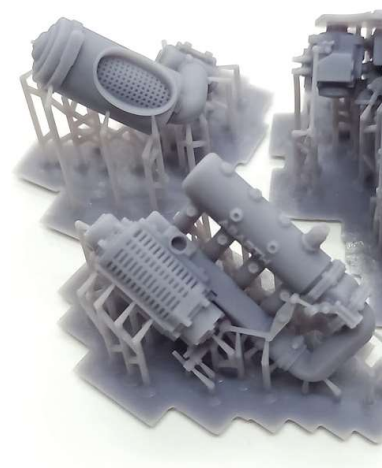


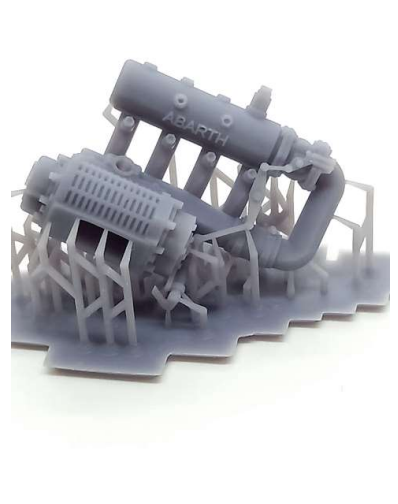
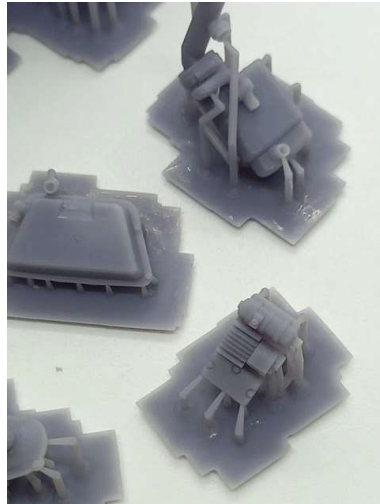




### The TRANSKIT

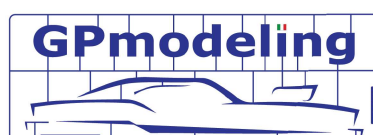
This transkit makes it possible to create the EVO 2 version of the Lancia Rally 037. The various Hasegawa kits on the market do not present any distinction between the two versions except for the possibility of installing the lower part of the rear bumper present only in EVO 1. The transkit is composed of 36 parts (of which, as we shall see, 3 are optional).

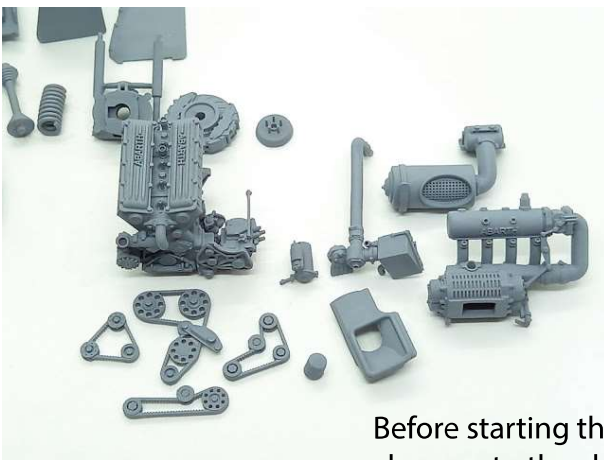




To easily separate the pieces from the print supports, it is necessary to use flat modeling cutters and proceed without haste, cutting one support at a time. When separating the finer parts from the supports you need to be very careful. IN CASE OF BREAKAGE of the piece it can be repaired with cyanoacrylate glue. I advise you to constantly clean the worktop from the supports once removed, otherwise it will be difficult to identify any broken part, especially if small.

The parts, once removed from the print supports, can be finished with sandpaper and possibly filled with any type of modeling putty. One piece of advice I can give is to often clean the areas we are working on with a flat brush and plain water. This will help a lot to eliminate the dust produced by the sandpaper and to clearly see the level of cleanliness achieved. This transkit is made with water-washable light-curing resin. So no chemicals were used (such as isopropyl alcohol or acetone for the post-printing phase) but simple water. If you notice small areas on the pieces or on the supports that appear as "wet" there is no need to be alarmed. They are particles of water left on the piece at the time of polymerization in the UV oven (post-printing phase) which are only superficial and will disappear with a light pass of sandpaper. However, remember that the product is still a resin and therefore all necessary precautions must be used while using the abrasive paper (mask / glasses etc.). The components are assembled with CYANOACRYLIC glue. Do not use modeling or vinyl glue. Once the pieces, or some parts together, have been assembled, before coloring it is a good idea to wash the piece with water and dish soap and dry it. IT IS NECESSARY TO USE A PRIMER for modeling for two reasons. The first is that with the primer the details otherwise not very visible to the naked eye will be highlighted due to the composition of the resin and the second because otherwise the subsequent painting could have adhesion problems.





### THE HASEGAWA KIT: preliminary changes

Before starting the assembly of the transkit it is necessary to make some changes to the chassis of the Hasegawa kit as all the parts of the engine and the trellis will be completely replaced with the resin components. The first operation consists in eliminating the lower slide (base on which the motor rests) and the relative attachment arms.

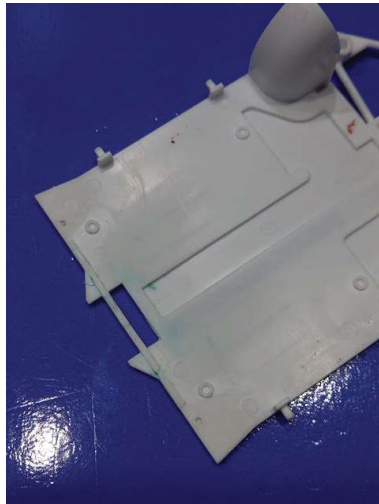
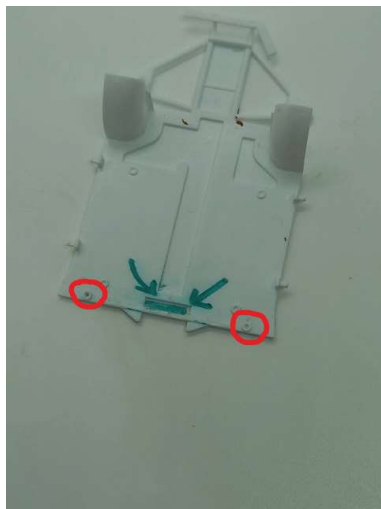
The parts in red must be eliminated while the areas in green (the two triangular wings) are kept

Once the parts are removed, a thin layer of plastic will remain inside the green rectangle highlighted in the following photo which must be eliminated



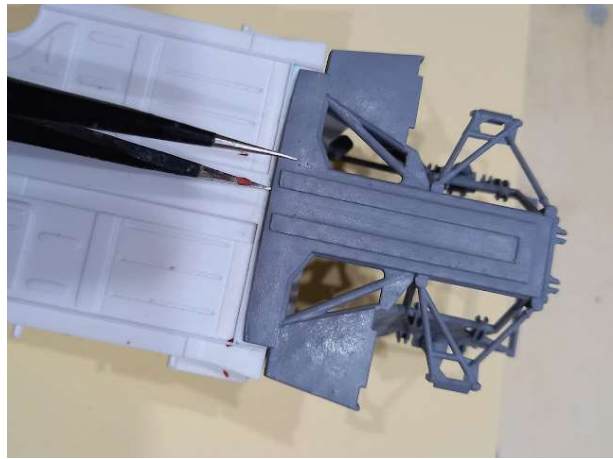
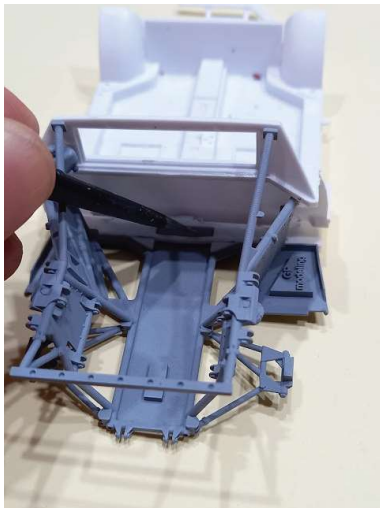


Pins highlighted in red also need to be removed as they will no longer be needed and create an obstacle. At the end of the operations the hasegawa chassis will look like this:



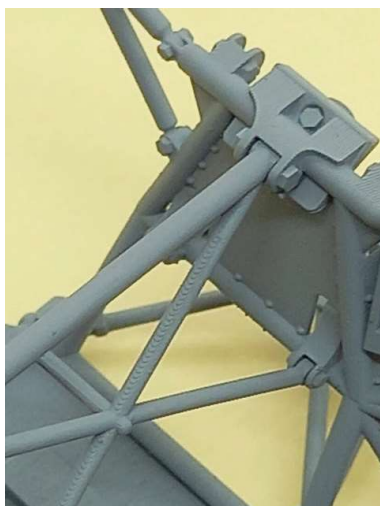
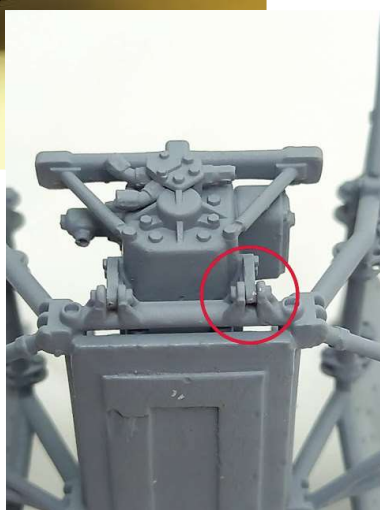
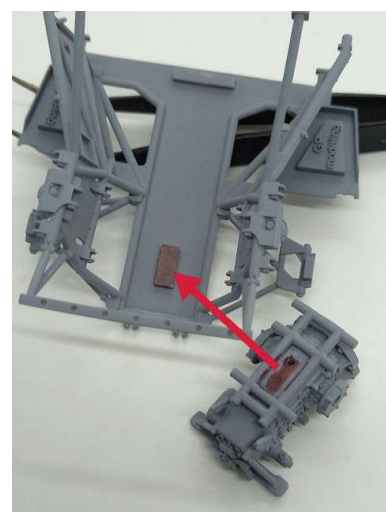
Once the print supports have been removed from the new frame, it is important to remove any imperfections under the tabs indicated in the photo. For reasons of structural strength, I preferred to print a few tenths of a millimeter more in this area. With a file proceed as illustrated (also by thinning the plastic on the hasegawa kit where the circular pins removed were previously positioned). Now you can check the positioning of the new frame. Don't worry if the frame tends to flex slightly inward after the print media is removed. Due to the size of the tubes and the shape of the workpiece this is normal. Indeed, the elasticity of the resin will be essential during the various stages of work. Once all the components have been installed, the frame will take the correct shape. In the lower part of the frame there is a rectangular pin which serves to give the right position to the piece. The frame must be installed as in the following photo using the rectangular pin and the two small lateral joints. Furthermore, the two holes in the kit will be used as a reference and further anchoring the pipes. The frame will be fixed permanently with glue only at the end of the construction. To remove the piece, simply exert a slight pressure on the rectangular pin and pull outwards. As we said the elasticity of the resin allows you to install and remove the part without problems. When the engine is positioned, it will no longer be possible to have access from the top and, to remove the rear axle, you will have to proceed from underneath with great caution so as not to damage any color. Another change to be made is the drilling on the bodywork of the filler vents as they will be replaced by the resin parts. Caps will not be used as in the hasegawa kit but it will be the petrol tanks, as in reality, that protrude out of the bodywork. For hole dimensions refer to the new tank.





## ASSEMBLY OF PARTS

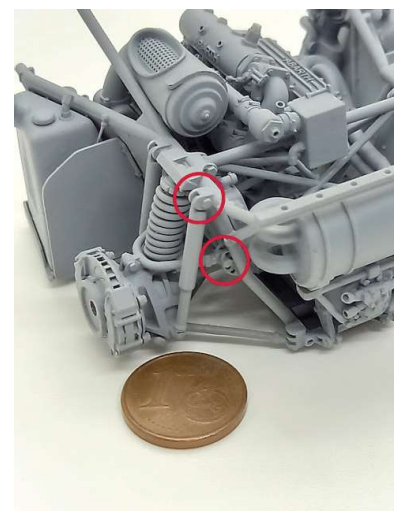
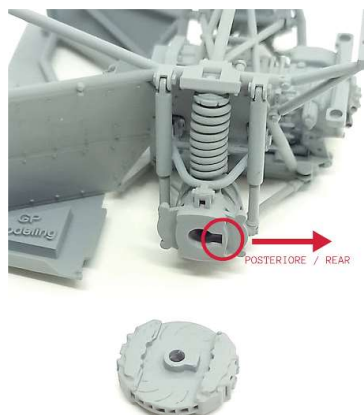
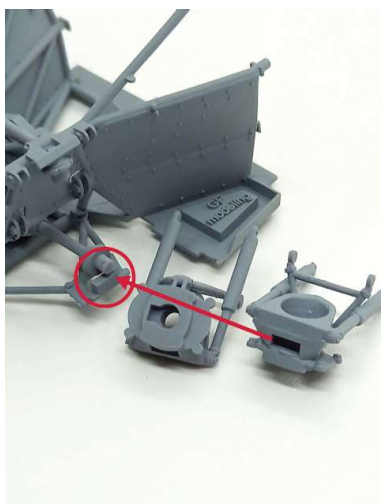
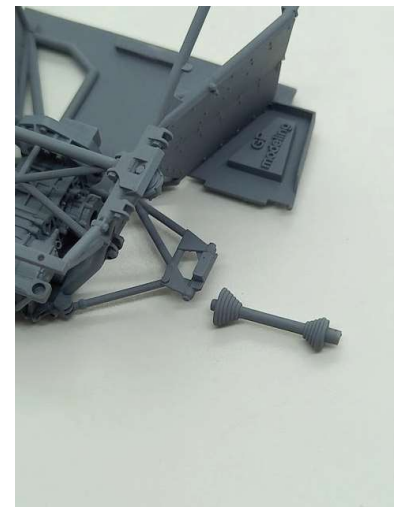
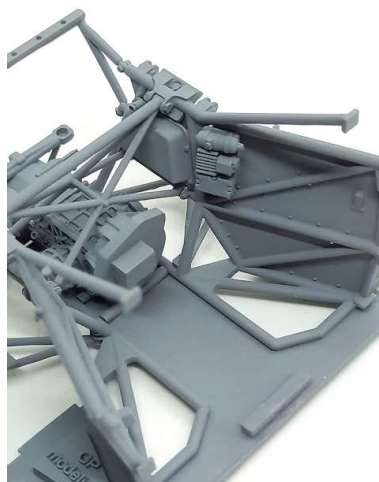
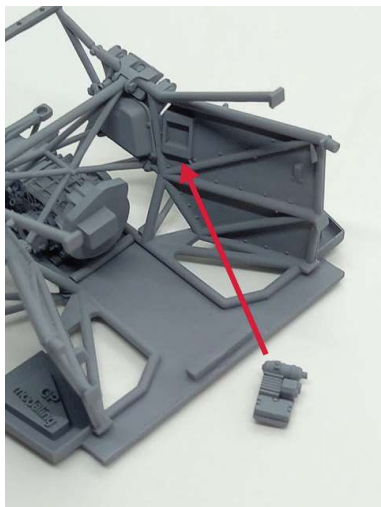
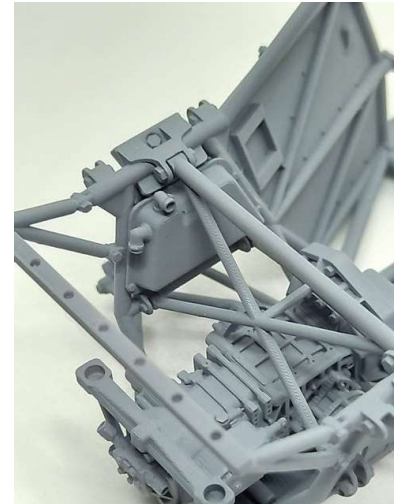
Construction begins with attaching the gearbox to the frame. It is the starting point with a precise reference in order to guarantee a correct development of the project. On the frame there is a rectangular pin (colored red in the photo) on which the gearbox will be positioned. The small hole that you see in the gearbox was only used to insert a support to spread the airbrush primer. The two attachment plates (highlighted in the red circle) also have their precise position. Another key part to give the kit the correct shape is the central reinforcement frame with crossed tubes. Also in this case the flexibility of the resin will allow us to install the piece without problems. Once positioned on one side it will be sufficient to apply a slight force on the opposite side to obtain the right positioning. **ATTENTION:** the subframe has a precise orientation. The part marked with a small protuberance must face the front of the vehicle! It is now possible to install the fiberglass tank in the shape of a trapezoid which is positioned on the left side of the frame. In this case there are no joints. But the shape of the piece itself indicates where it needs to be placed as highlighted in the photos below. The panel with the coil and the control units instead has its own reference pin so the choice is mandatory.

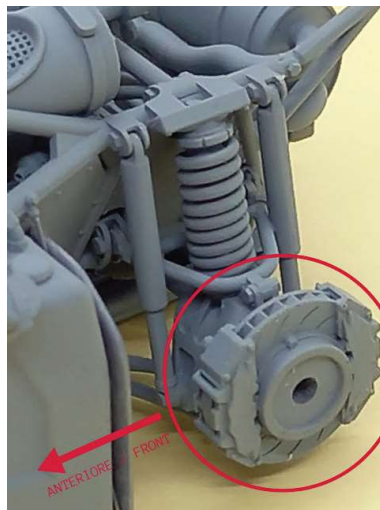




## BRAKE GROUP

The suspension / brake unit is made up of 3 distinct parts plus an additional fourth part for optional use. In fact, there are the wheel hub (right and left mirrored and which have a precise orientation), the shock absorber spring, the brake disc including the two calipers (also to be oriented in the correct way) and an optional bottom with the studs. fixing the rim if you want to represent the vehicle without a rim. If, on the other hand, you install the wheel, the bottom must not be used. The hub has three joints for correct positioning. The first is the lower one suitable for connecting it to the arms of the trapezoid as in reality. Then there are the joints of the double m shock absorber stem and those of the "U" -shaped bar. First of all, however, the drive shafts must be installed by positioning them as shown in the photo (the larger boot must be connected to the gearbox). It is also advisable to insert the spring (without glue) on the hub before positioning it. If you want to present the car without the wheel, you can use the caseback. It is advisable to glue it to the brake disc before coloring and fill the joint.



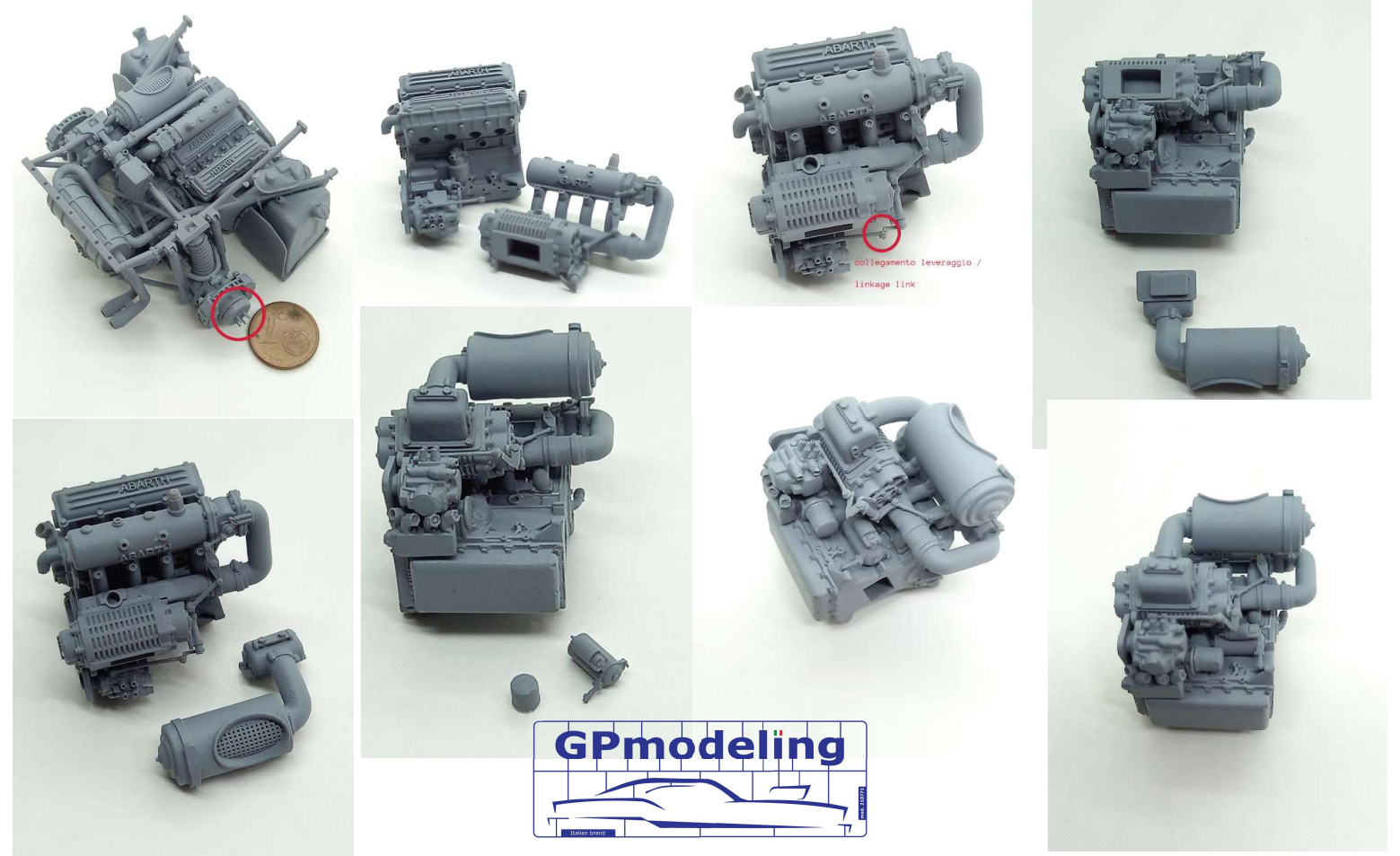


# ENGINE GROUP

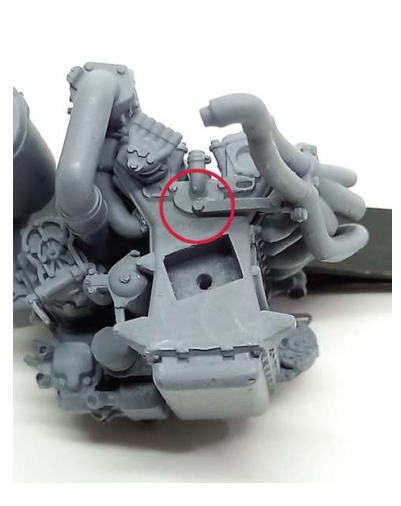
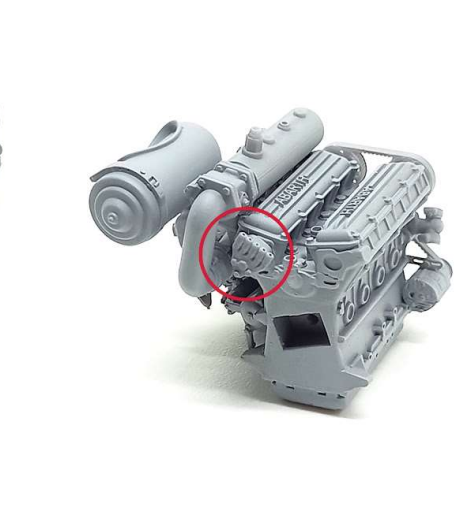
The first component to add to the engine block is the suction / volumex group, a typical element of the EVO 2 version. The connection is forced by 4 pins on the intake manifold which must be inserted into the 4 holes on the left side of the engine head. Pay attention to the linkage of the linkage that connects the petrol injection pump with the I ever mechanism inserted on the volumex which operates the opening of the drum valve. The air filter is then installed. Also in this case there is a joint that constrains the positioning of the parts. The starter motor and oil filter are now installed as shown in the photo. For the pulleys (and related transmission belts) I divided, as in reality, into 4 distinct groups to be inserted with the right sequence:

- 1 head strap (distribution)
- 2 petrol / oil pump belt
- 3 water pump / alternator belt
- 4 belt volumex

The necessary references are printed on the engine block. Note that the crankshaft pulley has two other pulleys above it for a total of three. The motion pulley of the pump group is also superimposed on the return pulley of the head group.







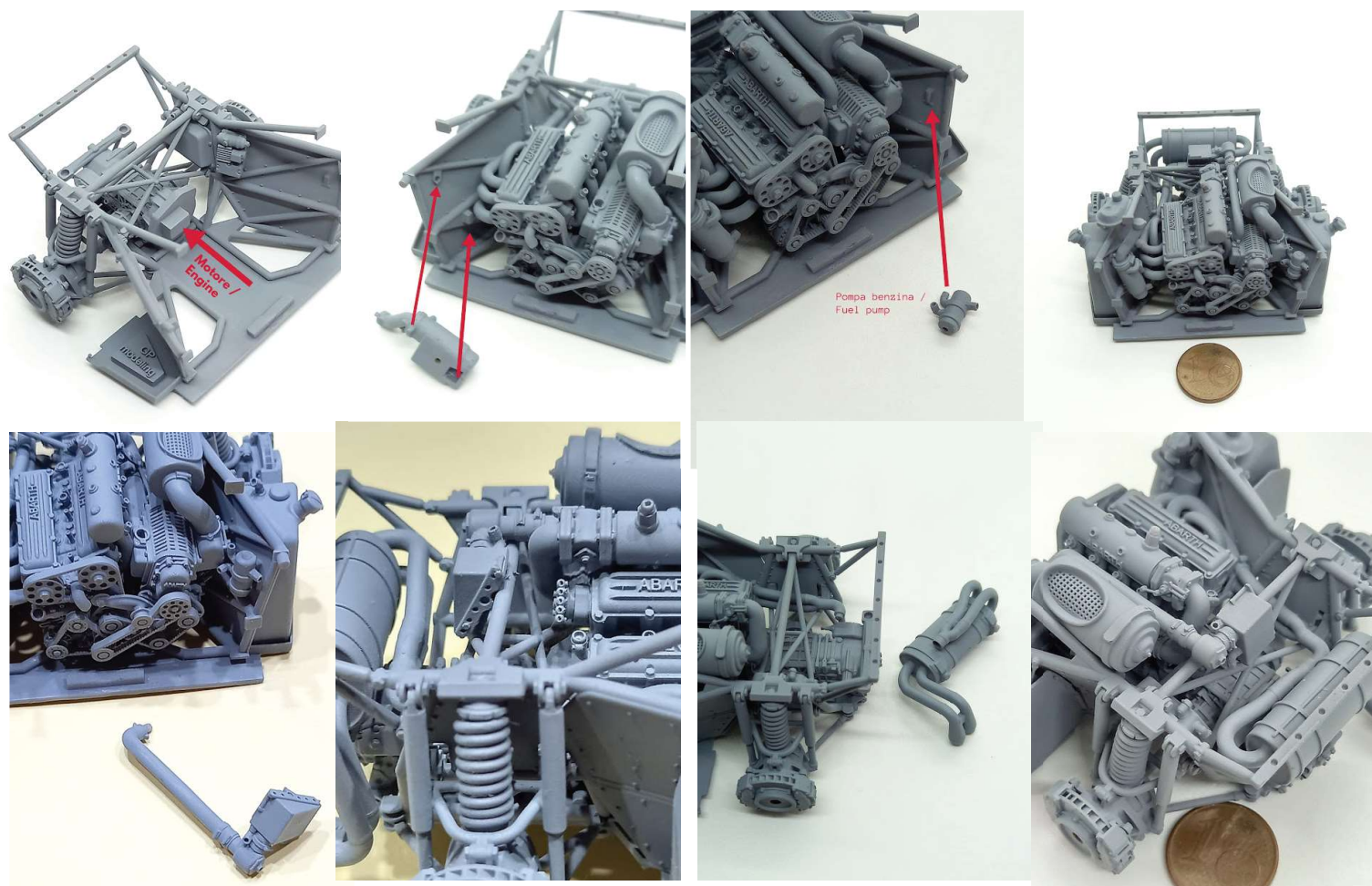
he distributor can now be mounted in its typical inclined position using the appropriate hole  
The exhaust manifold is then installed. In addition to the 4 pins on the manifold and related 4 holes on the engine block, as in reality, there is a bracket that must be connected as shown in the photo.

## ENGINE / GEARBOX CONNECTION

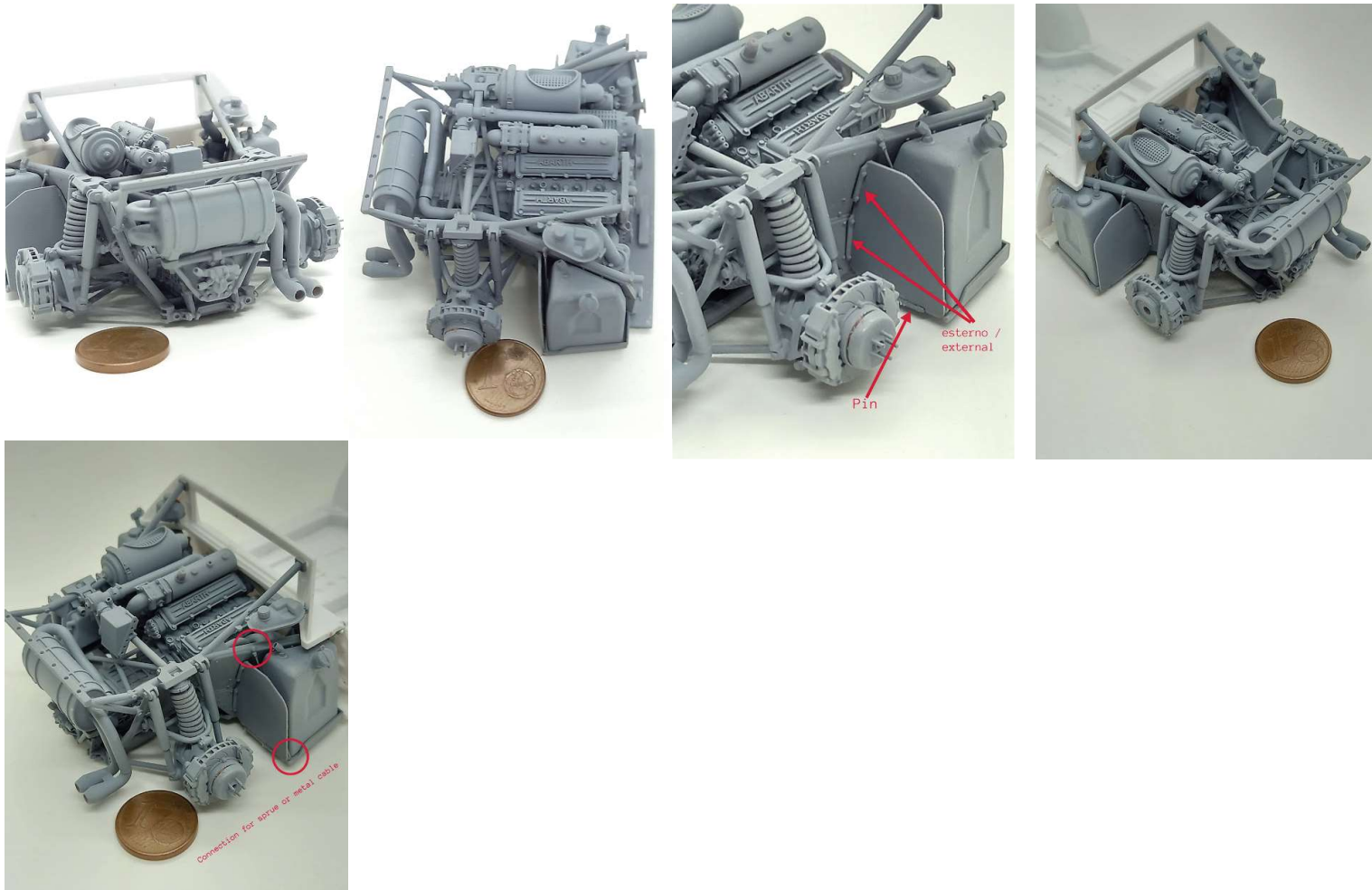
A coupling is provided to connect the engine block to the gearbox which facilitates installation. It will be enough to match the two parts. The joint is slightly oversized to allow for slight adjustments if necessary. It should be noted that the engine is rotated about  $17^\circ$  with respect to the gearbox support plane (as in reality). For this reason, the interlocking in the engine block is also rotated. As always, it is a good idea to check the couplings of the various parts before positioning them definitively. Once the engine block has been aligned and positioned with the gearbox, the oil tank and fuel suction pump are installed in their position. The oil tank has a double joint which binds its position while a support on the frame is provided for the fuel tank pump.

It is time to position the excess compressed air discharge valve produced by the Volumex. When you take your foot off the accelerator, the drum valve closes and to prevent the compressed air produced by the volumex from having a dangerous re-entry into the volumex itself, it is discharged to the outside. While in the EVO1 version the compressed air was simply dispersed, in this configuration the compressed air is conveyed right into the metal box positioned on the central pylons of the frame where inside there is the ZF gearbox oil cooler with the function of cooling down. In the EVO1 the gearbox radiator is absent. The part to be connected to the Volumex has a circular coupling to be inserted in the appropriate hole. Before gluing it, it is advisable to find the right position of the box on the trellis. The back of the box has the ideal shape to fit on the frame tube so just check the correct inclination of the box before gluing everything. The muffler can now be connected to the exhaust manifold through its coupling and to the support bracket above the gearbox using the two reference pins.

You can now install guards in kevlar or petrol tanks. The two pieces are mirror. The fastening lugs should be directed towards the outside i.e. towards the wheel. The shape is designed to adhere precisely to the chassis plates. There are also two printed grafts if you want to install the reinforcing rod to be carried out in hot sprue ironed or with a realistic metal wire (for example, a guitar string).







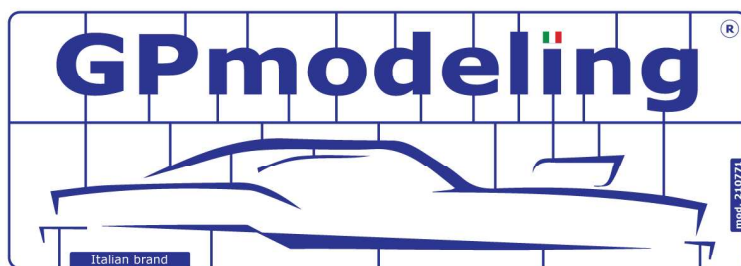
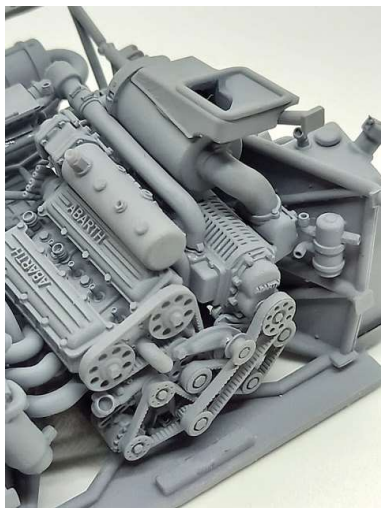
## FUEL TANKS

The two tanks must be positioned correctly using the reference printed on the base. The left tank has a small, low cap absent on the right tank. Since the end of the tanks must be inserted into the car body, it is necessary to permanently lock the transkit to the chassis of the Hasegawa kit. At this point, using vinyl glue or slow drying glue, the tanks are installed and positioned with any small movements until they have perfect correspondence with the body of the kit. Finally, there are the liquid tanks to be installed. The smaller one must be positioned on the left directly on the chassis of the kit in correspondence of the trellis as in the photo. The tank on the right, larger, must be placed on one side on the projection printed on the tube and on the other anchored to the chassis.

The transkit includes a final optional installation piece: the connection between the air intake cylinder and the Lancia's transparent plexi rear window. This link was mainly used for special tests on dirt, however not asphalted.

The model maker will decide whether to use this part based on the car to be made.





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