GE609

"the end of the Biturbo gremlins"

A "plug and play" replacement for fused relays Italamec 218, Italamec 609, or equivalent.
Compatible with all and only the 5 pins relays with integrated fuse and Italamec type pinout.
Replaces Maserati parts n. 313320135 / 313320106 / 313353106

User manual

Foreword

Dear customer,

After developing the 'Biturbox' fuse box, that made so many Biturbos so much more reliable, we have rebuilt another critical element of our cars: the relays with integrated fuse that were mostly made by Italamec.

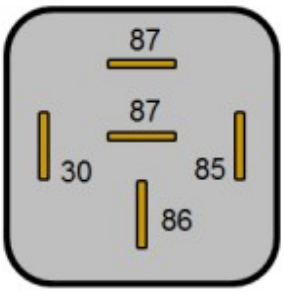
Such relay, in addition to the built-in fuse, has a pin 'mapping' which differs from the ISO standard commonly used by automotive relays. Once the stocks of new parts ran out, replacement became nearly impossible: the GE609 relay was designed with this in mind. We hope that we have made another significant contribution to the reliability of our cars.

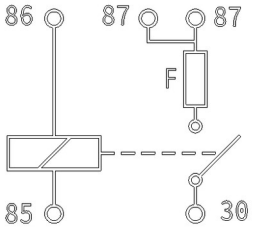
Ing. Maurizio Ferrari, Galileo Engineering

Contents

Description	Quantity
Relay GE609	1
Fuse cover	1
30A fuse	1
Metal bracket	1

Compatible with all relays with integrated fuses whose pinout follows the following diagram





GE609 was not tested on animals, unsurprisingly. No Maserati cars were damaged during testing, either.

What is the GE609 relay

GE609 completely replaces the Italamec 218 and Italamec 609 relays, which differ from each other by the type of fuse fitted: torpedo (218) or blade (609). You may also find some other similar relays made during the years by some other small companies. Italamec was the OEM choice by Maserati.

If the relay to be replaced is of the 218 type with a 'torpedo' fuse, it may be necessary to increase the value of the fuse to the one immediately higher as blade fuses, in fact, are better and more precise: a 5A "torpedo" fuse withstands a current of 10A for at least 60", while a 7.5A blade fuse withstands a current of 10A for between 3" and 10".

In other words, blade fuses operate in a 'window' tighter time/current: work better as they are more reliable and more stringent. In any case, use fuses with the current value indicated in your vehicle manual. With rare exceptions, they will do. If you have already replaced your fuse box with a Biturbox, you know it. If you still haven’t… well you should.

In any case, use fuses with the value as indicated in your vehicle’s owner’s manual. With rare exceptions, they will do fine.

Warranty

Please read the following conditions of sale carefully before purchasing.

The fused relay GE609 reproduces, from the point of view of the electrical circuit, the original circuit diagram of the fused relays used on many Biturbo models, re-engineered to the state of the art of automotive relay technology.

Having said that, it is implied that this product is going to be installed on historic vehicles, with electrical systems that over time may have been altered or aged in a completely unpredictable way. We therefore invite you to pay the utmost attention to ensure that the wiring pertaining to the relay to be replaced was not changed over time.

Therefore, the GE609 relay is covered by a two-year warranty against product defects only. We guarantee the construction quality but the installation and its application on the vehicle system are the sole responsibility of the buyer.

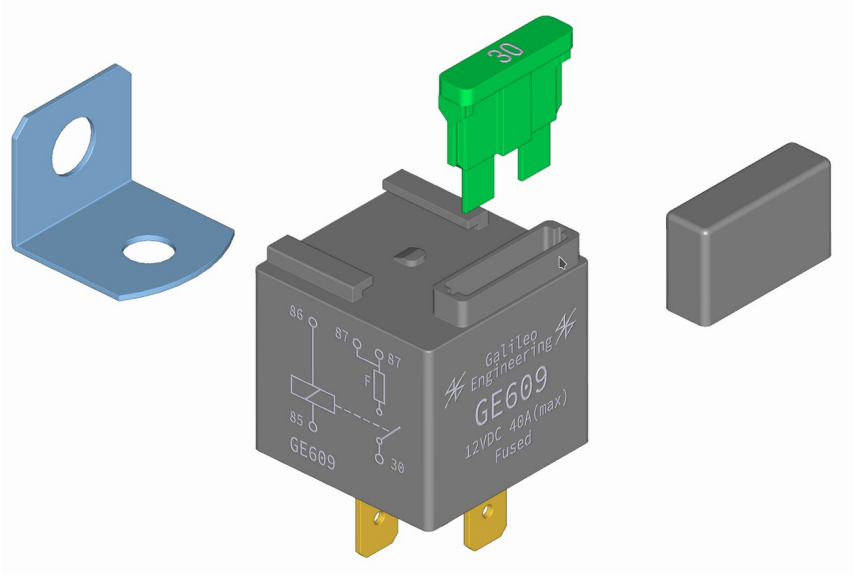
In the event of a complaint, it may be necessary to return the piece for our technical evaluation. In case of ascertained manufacturing defect, we guarantee the replacement of the relay only.

It is understood that in no case the responsibility of Galileo Engineering may exceed the value of the component. Galileo Engineering is not responsible for any consequential damages.

Before you start

Make sure that your package contains the following:

1 relay
1 complimentary 30A fuse
1 fuse cover
1 metal bracket



Should any of the above be missing, please contact us.

It is always best practice to check the latest version of the manual.

Before installation

Please pay attention to the following

Disconnect the negative wire of the battery before attempting any work on your car.
Do not reconnect it until all work is done and verified.

May the Force <u>not</u> be with you!

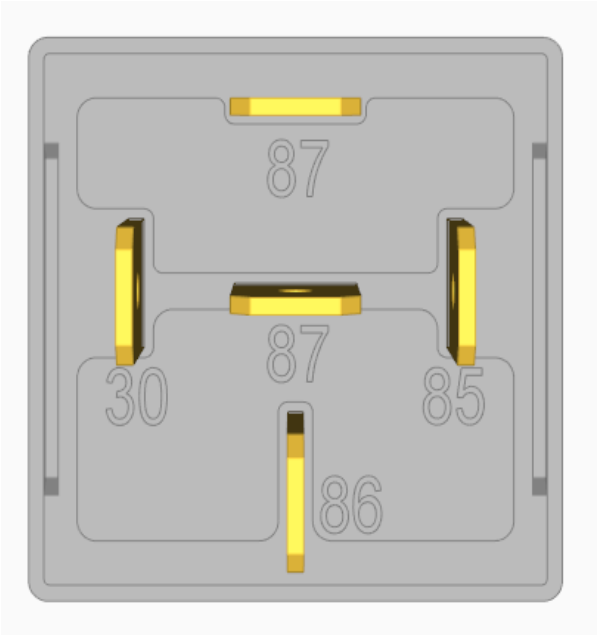
I'm not a Jedi, or at least I haven't found out yet. The proof is, almost every time I used force while attempting a repair, I broke something or managed to hurt myself. Force is never required when installing the 609 relay. So if you feel the need to use it, unless your name is Skywalker, stop and observe the situation to figure out what's wrong.

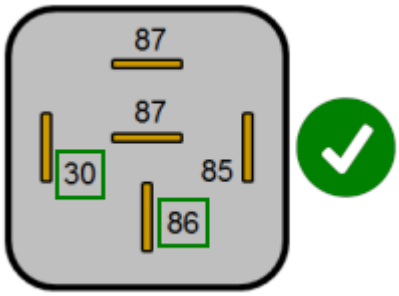
Installation

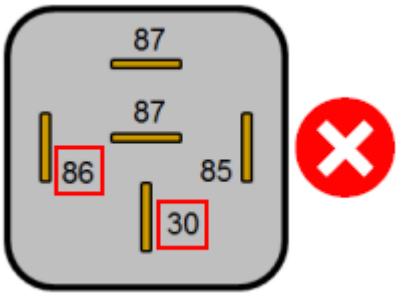
GE609 comes with a complimentary 30A fuse. Check in your vehicle's manual for the correct value of the fuse for the relay you are about to replace and, if necessary, remove the protective cap, replacing the 30A fuse with one of the same value as indicated in your vehicle's manual.

Remove the old relay.

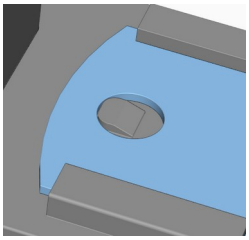
Verify that the pinout of the removed relay is compatible with that of the GE 609: look at the relay from the side of the pins and note the numbers that identify them. They must correspond to this diagram:







Once the old relay is removed, it is good practice to check the condition of any of the female faston into which the GE609 will be inserted. In particular, check that there are no traces of burns or short circuits.



Use of the fixing bracket is optional. If necessary, insert it in the appropriate guides until the retaining hook enters completely into the hole in the bracket.

Insert the relay, and cover the fuse with the cap.

Testing

Reconnect your battery’s negative (ground).

Verify that whatever device is attached to the newly installed GE609 performs like it should.

Troubleshooting

Replacing the relay is a rather simple operation, and in general it shouldn’t pose any trouble if you have paid attention to what has been explained up to here. However, if the service corresponding to the relay does not activate as it should, check the following:

- Did you reconnect the battery?
- Is the fuse good? If it is not, replace it with one of the correct value and try again.
- If you have already replaced the fuse once and notice that it blows again immediately, carefully check that the service protected by the fuse has not shorted. The fuse serves to protect your vehicle's system and should never be replaced with something that alters its protective function (such as a wire or a nail).
- If the fuse blows after some time that the relay has been activated, it may be necessary to use one of the immediately higher rating than the one you fitted for the reasons described on page 3. Only do this if you know Ohm's law. If you are wondering what this law is, take the car to an auto electrician before carrying out maneuvers that alter the electrical system.
- Did you check whether the old relay had a compatible pinout? Was it of the same type as the GE609?
- If you believe that the GE609 is at fault, after checking the fuse, check the relay. Using a 9V battery bring the poles in contact with pins marked 85 and 86 (polarity doesn’t matter). You should hear the relay ‘click’. At this point, as a further test, check electrical resistance between pins 87 and 30. When the relay is energized there must be continuity between said pins.

All good? You’re now ready to enjoy your car!

The paper box that contained your GE609 may be recycled as paper.

Need help?

Press the large friendly orange button

and contact us at this address:

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