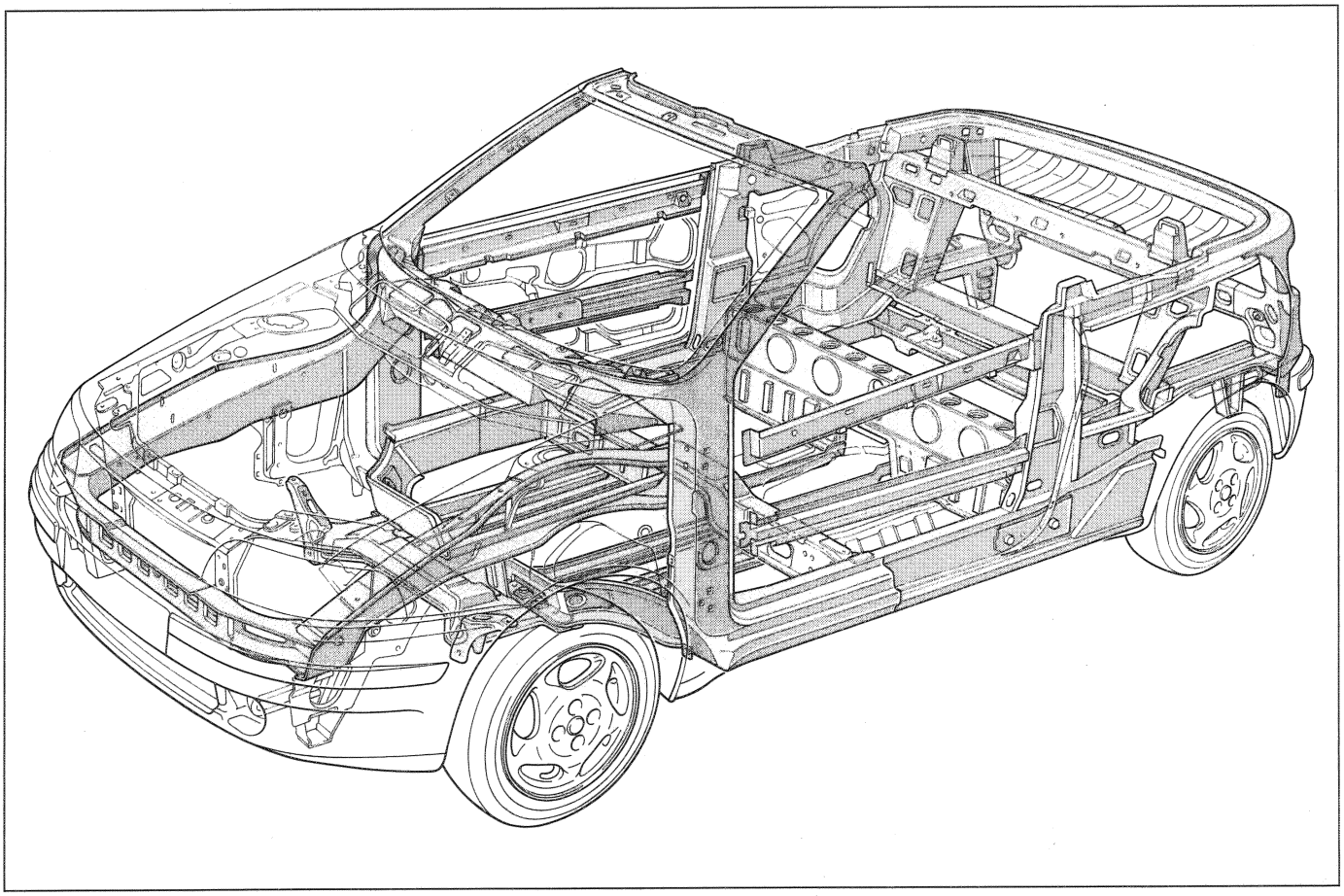
Title	Page
Passive safety	1
Protective treatments	3
Recycling	4
Impact diagnosis	5
Front pillar	6
Tolerances	7

PASSIVE SAFETY

The bodyshell of the Punto Cabrio, where it differs from the saloon version, still has the same objectives, in particular the safety of the passengers in the case of an impact.

The variants involve, above all, the floor panel in the rear part, the side members and the front pillars. These special reinforcements are due to the lack of the rooff panel and the relevant pillars and the need to keep the survival cell intact.

The Cabrio version has passed the crushing test with flying colours, in accordance with the strictest international standards, thanks to the front pillar which is reinforced with a special large tubular element (⌀ 36 mm; thickness 4 mm) made from a highly resistant material.



P3M01AM01

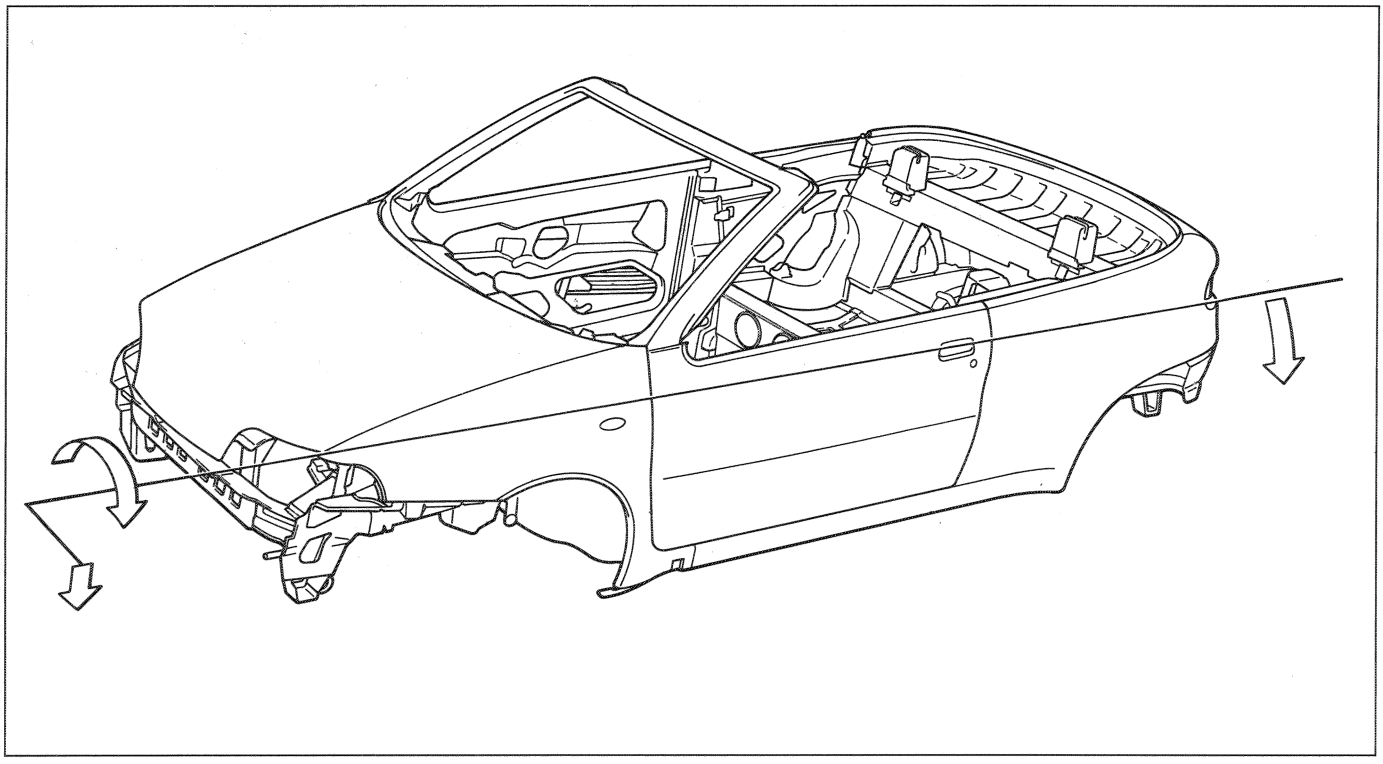
70.

All the special reinforcements on the bodyshell make it possible to leave the torsional and bending rigidity values unaltered.
These high rigidity values are translated into advantages, namely:
- less vibrations;
- less noise;
- improved driveability;
- greater resistance to breaking caused by the use of the vehicle over particularly uneven road surfaces;
- compact sensation of the vehicle;
- improvement of the overall qualities of the vehicle over time.

Air-Bags and seat belt pre-tensioners can be fitted, on request, for all versions.

Protection against fire

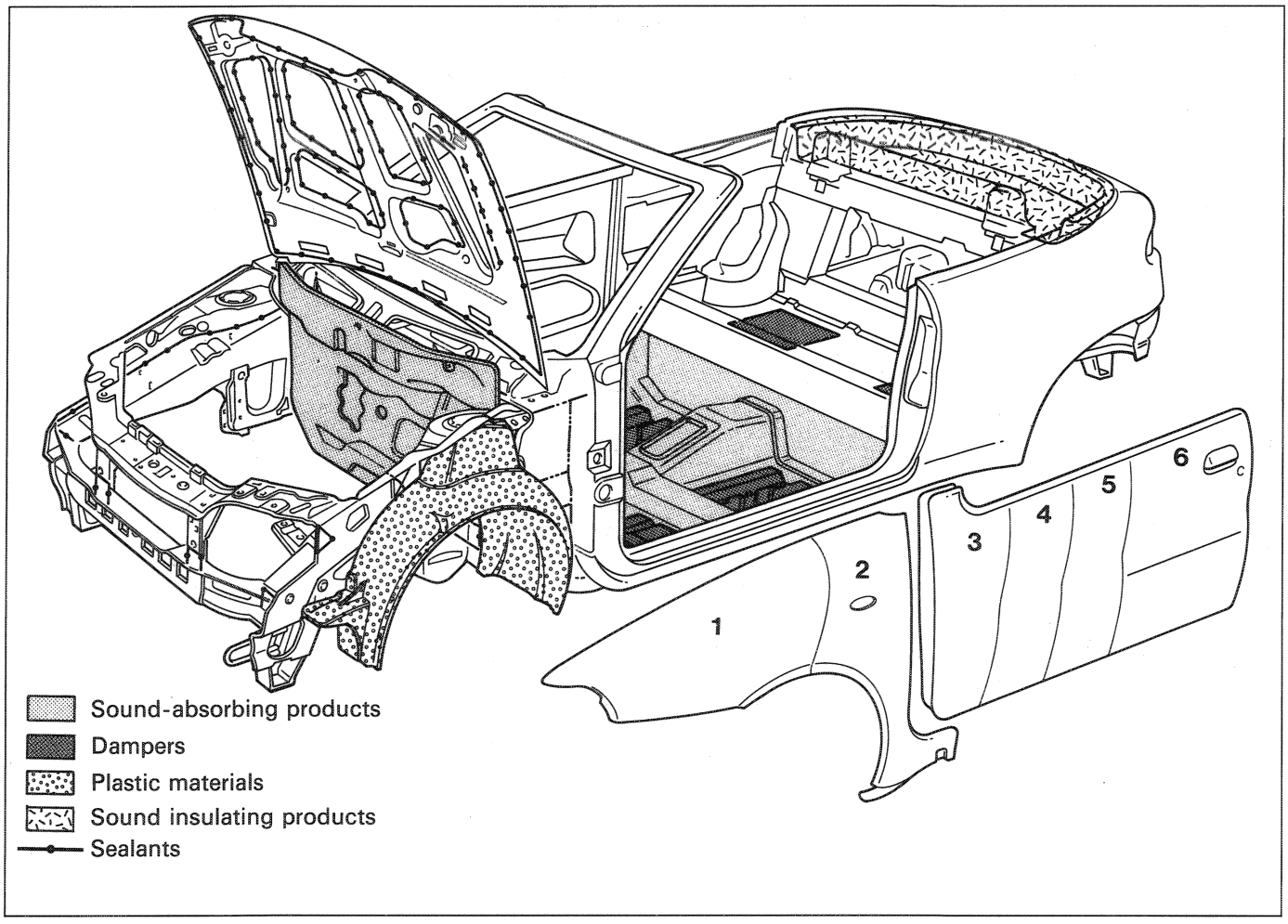
The measures taken on the vehicle against the risk of fire consist of:
- adopting metal fuel pipes;
- fitting a fuel anti-reflux inertia system, including a electric fuel pump and one-way valve on the appropriate pipe;
- introducing an automatic door release system in the case of an impact, for all versions equipped with electric central locking;



P3M02AM01

BODYSHELL AND PROTECTIVE TREATMENTS

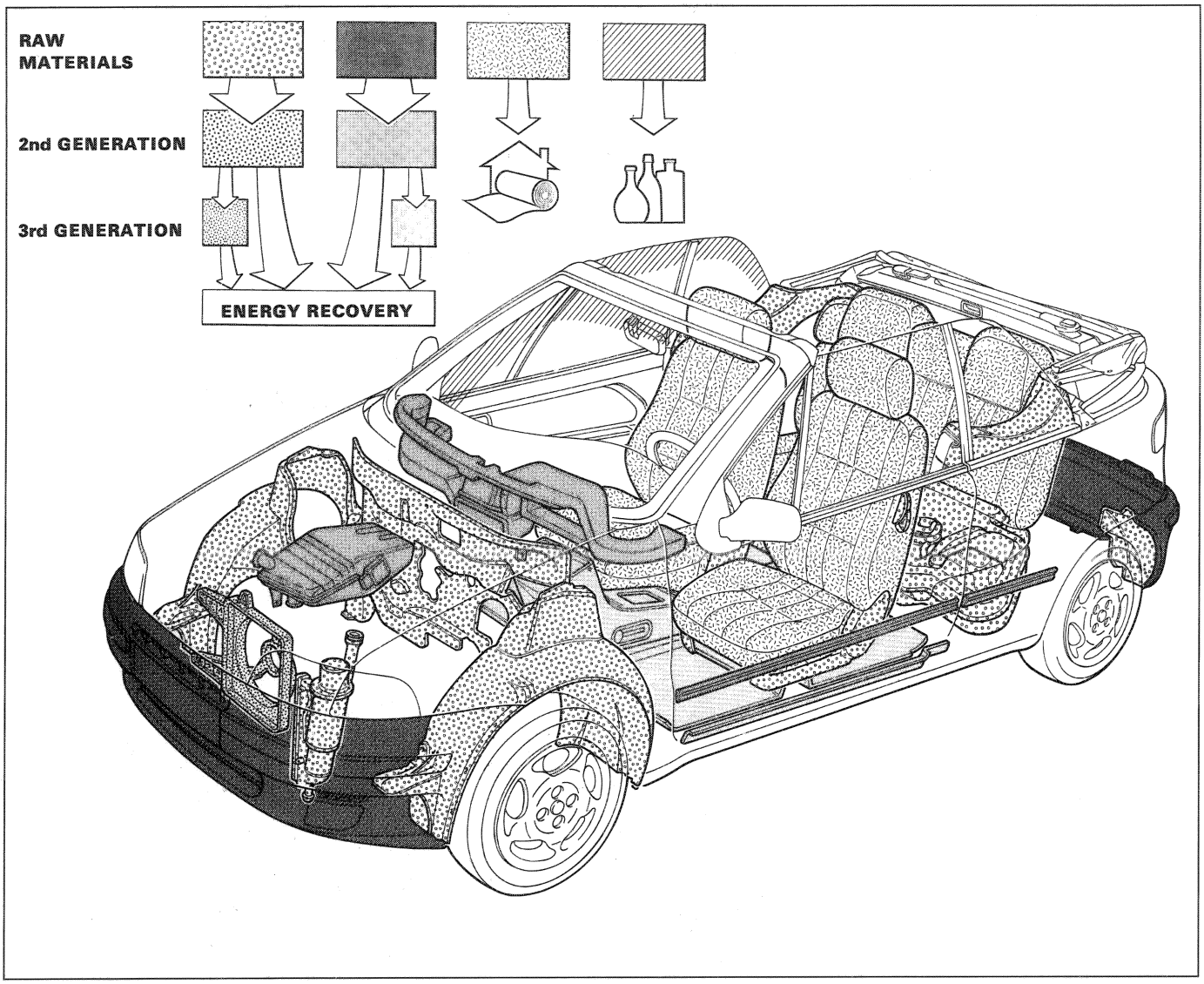
The choice of materials which make up the bodyshell is designed to reach a standard of excellence in terms of quality in order to offer a quality product which is durable.
60% of the weight of the bodyshell is made from galvanized metal. Out of this 60%, 75% are twin galvanized steel panels. As far as the outer panels are concerned, 90% are twin galvanized.
After assembly, the bodyshell undergoes a series of treatments which are aimed at protecting it from grease, oxidation and corrosion (Bonderizing).
The next process is cataphoresis in which the bodyshell is immersed in an electro-conductive solution which contains particles of paint in suspension.
All the join lines are also sealed to prevent the penetration of corrosive agents.
The interior comfort is ensured through the perfection of the bodyshell;
- reinforcements at the anchorage points for the various components (dashboard, seats, etc. to prevent creaking);
- sound-proofing of the body panels through the application of thermo-meltable products.
- application of linings under the dashboard and floor which are sound-absorbent and insulataing.



P3M03AM01

1. Twin galvanized body panel
2. Bonderizing
3. Cataphoresis
4. Primer
5. Colour coat
6. Clear coat

BODYSHELL WITH RECYCLABLE MATERIALS



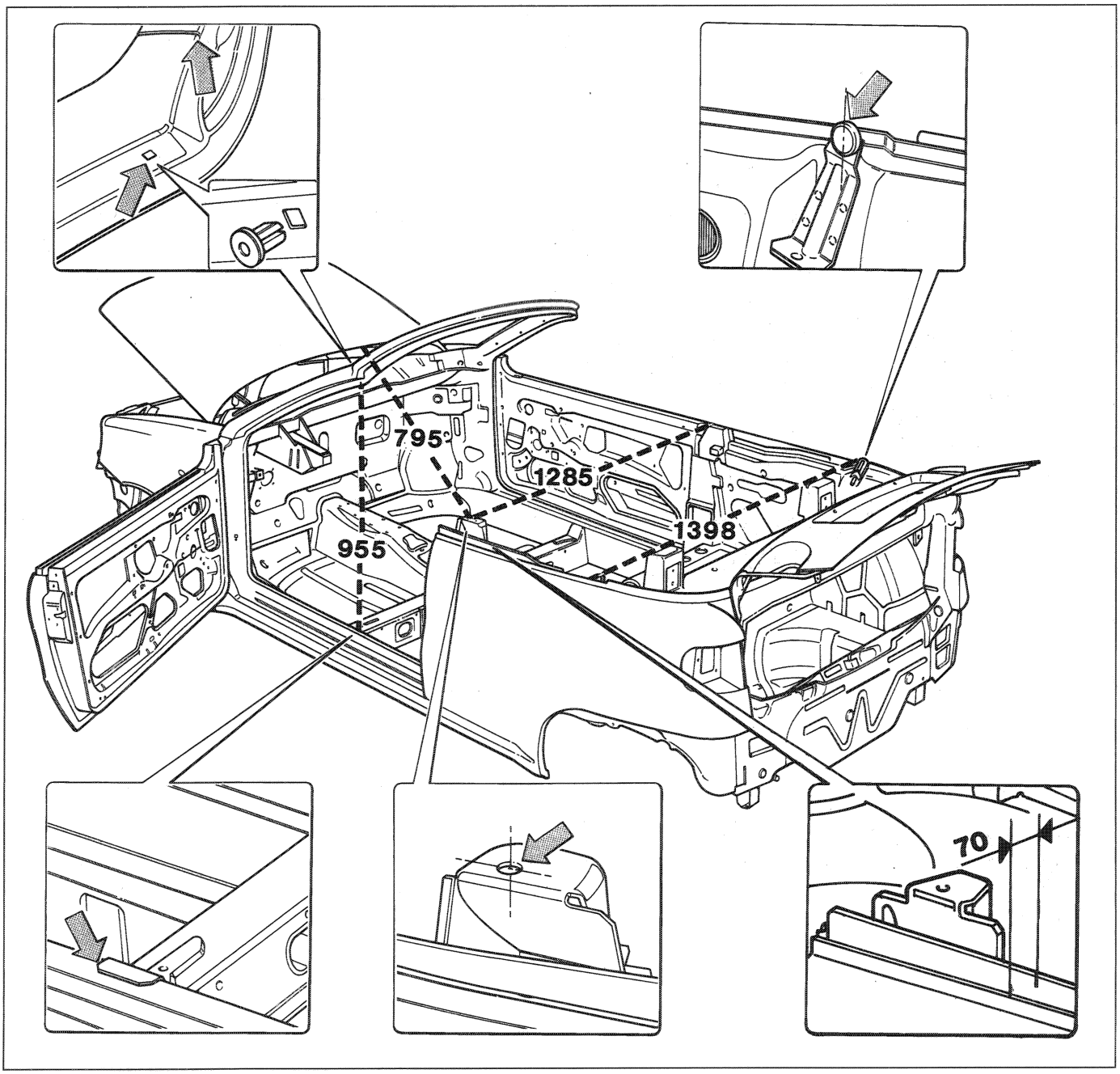
P3M04AM01

On this model all the plastic and rubber components, weighing more than 50 grams, are marked with coded symbols to allow the recognition of the material during recycling.
The F.A.R.E. project (Fiat Auto Recycling) involves the reuse of all the constituent materials, thanks to the cascade sequence of recycling where materials can be reused several times to produce less and less complicated components and the recovery of the energy content as an alternative fuel in blast furnaces in foundries.

IMPACT DIAGNOSIS

In the case of distortion due to an accident, it is extremely important that, after the repairs have been carried out, the distances relating to the symmetry of the upper housing for the bodyshell are correct. If they are not properly aligned then this could adversely affect the correct operation and the seal (air/water) of the hood.

As far as the door housing, windscreen housing and engine compartment measurements are concerned, refer to the Fiat Punto saloon Service Manual (pring no. 506.003/01 - Section 70 - Bodywork).

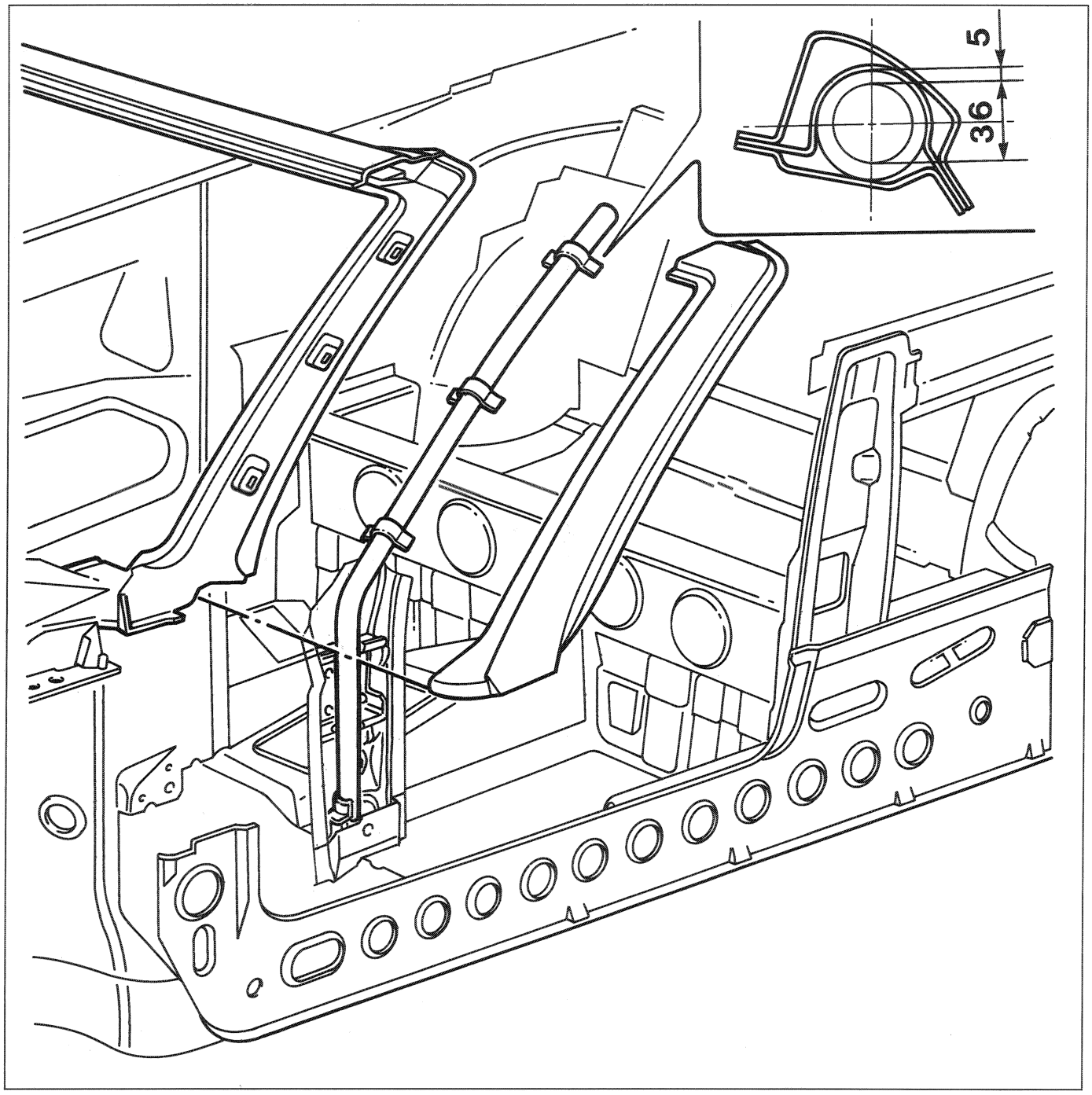


P3M26AM02 P3M26AM01

NOTE *The distances for the housings given are taken from the technical designs and may be subject to a tolerance of about ± 2 mm.*

70.

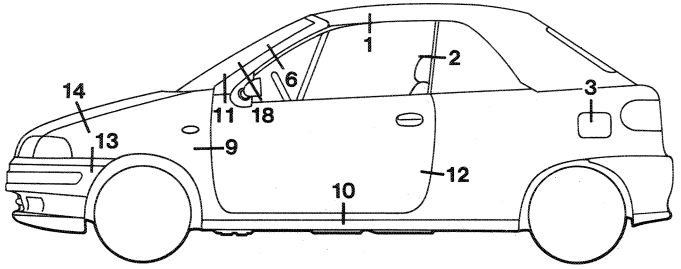
EXPLODED VIEW OF FRONT PILLAR

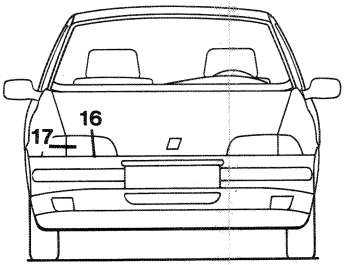


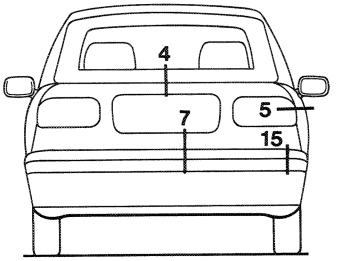
P3M29AM01

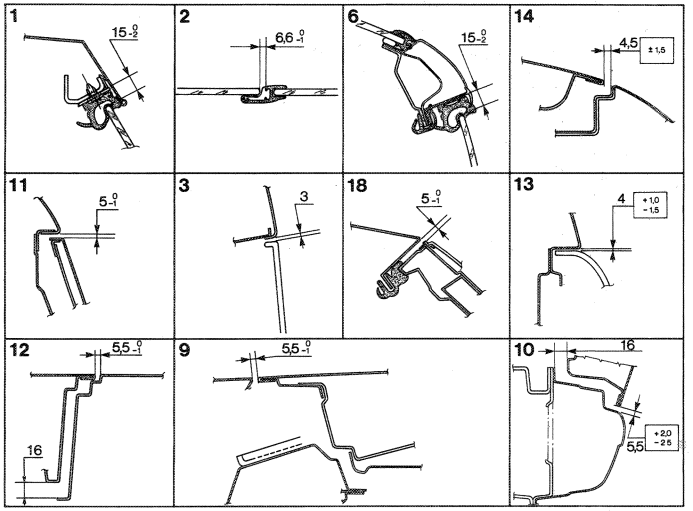
Weld points for front pillar reinforcement with relevant measurements

EXTERNAL ELEMENT TOLERANCES

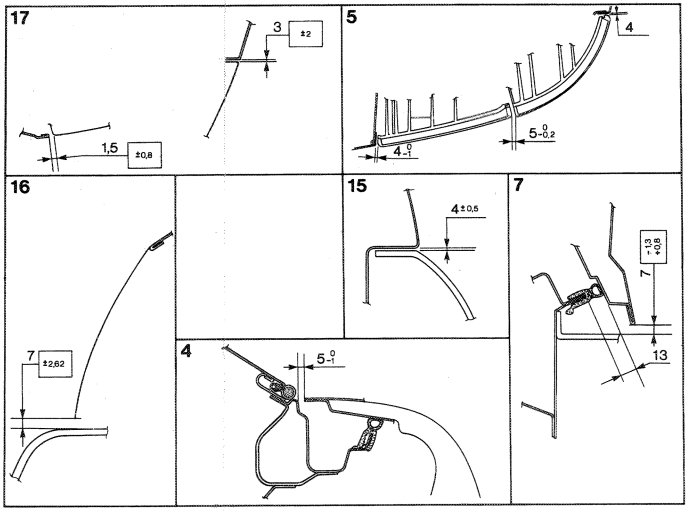








P3M27AM01



P3M27AM02