



TECHNICAL BULLETIN 006

07/11/2005

MULTIPLE / ACCESSORY DRIVE / MICRO-V® BELT - PJ PROFILE

EXPLANATION:

For many years the PJ profile was only used for industrial applications, especially drive belts for washing machines and tumble dryers.

These small Micro-V® belts were also introduced in the automotive industry, where the main applications are radiator ventilator (fan) drives.

Usually the basic engine configuration has 1 fan only, which is mostly electrically driven (system installed on radiator) (Fig. 1).

In case additional cooling is needed (cars with air conditioning, cars with a factory installed tow bar, taxis, etc), a second fan can be installed, in order to pull more cooling air through the radiator. This second fan is often driven by the first (electrical driven) fan using a 2 or 3 ribbed Micro-V® PJ belt.

Most common known are the VAG and Mercedes PJ belts.

These drives are without a tensioner, no specific installation tools required, working like a Micro-V® Stretch Fit™.



BULLETIN

GATES REFERENCE:
2PJxxx, 3PJxxx.

MAKE:
VAG
MERCEDES

MODEL:
Multiple.

MOTOR:
Multiple.

MOTOR CODE:
Multiple.

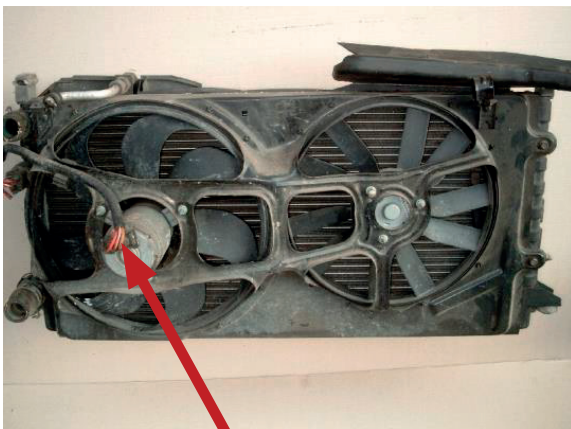


FIG. 1

Electrically driven fan

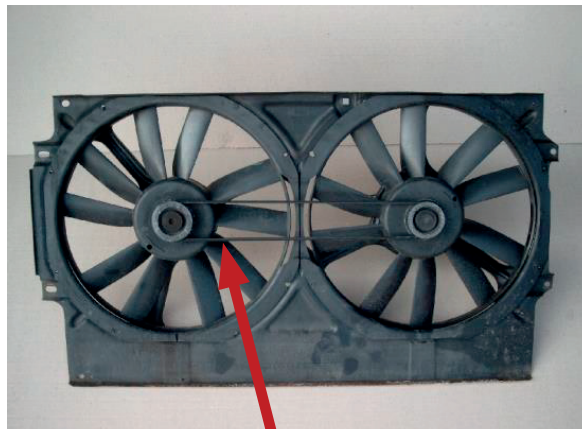


FIG. 2

PJ belt



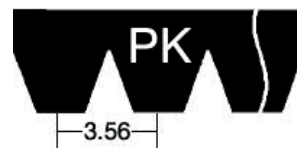
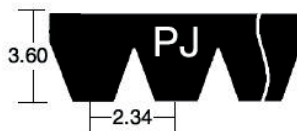
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The main difference between a PK and a PJ belt is the size of the rib profile.

A PJ profile is smaller than a PK profile, the PJ pitch only being 2.34 mm compared to the 3.56 mm PK pitch, while the height is 3.60 mm compared to 4.20 or 4.45 for standard PK belt.



CONCLUSION:

It is clear that a PJ belt cannot transmit the same power as a PK belt, what is not required on its applications. A compact drive is more important in the restricted actual front-end compartment.

Apart from the normal wear, replacement is mainly needed after the bearing of one of the fans has failed, or after an accident (fans are very close to the front-end of the car and even a small impact has consequences for this drive).

Installation of a Micro-V® PJ is effected by simply 'pulling' the belt over the second fan pulley by force, as there is no adjustment on the drive.

For the different sizes available in our Micro-V® programme, and for the most actual overview of their applications, please check the online catalogue.