

## **INA Service Info**

## Alternative repair solution for Prince engines

## For a permanently robust front end auxiliary drive

Manufacturer: Citroën

DS MINI Peugeot

Models:

Citroën: Berlingo, C3, C4, C5

DS: 3, 4, 5

MINI: Cooper, Cooper S, John Cooper Works Peugeot: 207, 208, 308, 508, 2008, 5008,

Partner, RCZ

Part no.: 529 0531 10

529 0532 10 538 0466 30

See parts catalogue for current assignment

The Prince engine model is a four-cylinder in-line engine (Figure 1) that was developed by BMW and PSA. The front end auxiliary drive in this engine has two tensioning arms that are equipped with rollers. One of the tensioning arms uses spring force to correctly tension the multi-ribbed belt, while the other decouples and couples the water pump.

Observations from the field indicate that failures in the tensioning arms are generally caused by defective bearings in the rollers. In such cases, replacing the rollers is sufficient provided that no other defects are identified when checking the functionality of the components.

Schaeffler Automotive Aftermarket now offers dedicated multi-ribbed belt kits for this repair. These kits make it possible to replace only the rollers of the respective tensioning arms in conjunction with the multi-ribbed belt, meaning a new repair method is now available as an alternative to completely replacing the tensioning arms.

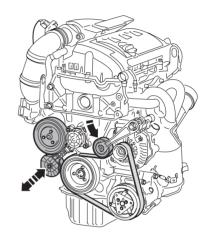


Figure 1: Prince engine (BMW/PSA)

Damage to the rollers on the tensioning arms usually occurs at high mileage. For this reason, it is advisable to consider replacing the water pump and associated pulley when repairing the front end auxiliary drive.

There is a coating on the running surface of the pulley. The friction coefficient of this coating reduces during the course of the operating time, which impairs the performance of the water pump. Installing a new pulley increases the friction coefficient again, so it is advisable to install a new water pump in the system at the same time.

By doing so, the wear reserves of all parts in the front end auxiliary drive that are subject to high strain will be set to the same level. In addition, the bearing of the new water pump will be able to withstand peak loads during the coupling and decoupling process much more reliably.

Please observe the vehicle manufacturer specifications!

