



TECHNICAL BULLETIN 010

24/02/2006

VAG 1.8 20V / SYNCHRONOUS DRIVE / PARTS INFO

EXPLANATION:

Originally the VAG 1.8 20V engines were equipped with OE belt 058109119A/058109119D (5425XS - 152 teeth), a tensioner pulley 058109243B and a thermal compensating actuator⁽¹⁾ 058109479 (old system).

Having durability issues it was decided to reengineer the synchronous drive system and to use an OE belt 058109119B / 058109119C (5492XS - 153 teeth) together with a hydraulic actuator⁽²⁾ 058109479B and a new tensioner pulley 058109243E (new system see further: Fig. 1).

Together with the small idler, this makes up our K025492XS and covers 95% of the belt related applications.

In order to cover the remaining 5% we made a kit looking a lot like the K025492XS, but it differs in reality. The difference lies in the tensioner pulley. Further explanation is given below.

Note:

The old system is no longer available on OES level. It is strongly recommended to replace the entire system with the new system (Fig. 1) when the original timing belt needs replacement. Please make sure that parts of the old and new system are not being interchanged in order to avoid engine damage.



BULLETIN

GATES REFERENCE:

5425XS, 5492XS its related kits.

MAKE:

AUDI
VOLKSWAGEN

MODEL:

A4, A6, Cabrio, Passat.

MOTOR:

1.8 20v, 1.8 20v T.

MOTOR CODE:

ADR, AEB, AFY, AJL, ANB, APT, APU, ARG,
ARK, AVV, AWT.

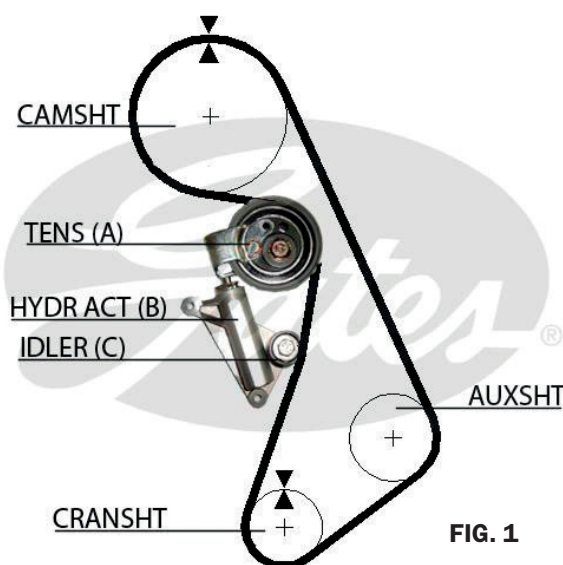


FIG. 1

- (A) Tensioner 058109243D
or 058109243E
(B) Hydraulic Actuator
058109479B
(C) Idler 058109244

(1) Uses a wax element to compensate for different thermal expansion of engine and belt
(2) Uses oil as damping fluid



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TENSIONER PULLEY DIFFERENCES

Please note there is a small but very important visual difference between the 2 tensioner pulleys!

At first sight tensioner pulley 058109243D (Fig. 3) used in K03/K045492XS and 058109243E (Fig. 2) used in K01/K025492XS are identical. The difference between the two is the thickness of the washer on the backside of the tensioner pulley. This defines the distance to the engine.

Interchanging these two parts leads to misalignment and causes premature belt failure. In case of doubt, always check if the tensioner pulley, to be replaced, has the same washer thickness as the replacement part.

Washer 6mm thick

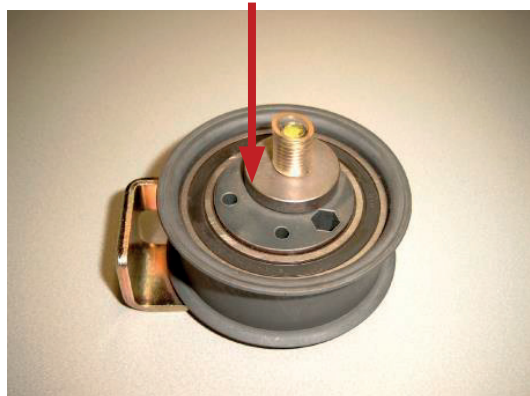


FIG. 2

OE 058109243E

Washer 3mm thick



FIG. 3

OE 058109243D

COMPOSITION AND APPLICATIONS

OES KIT 058198479 - K025492XS

| | OE ref. 058198479 | K025492XS | K015492XS |
|--------------------|-----------------------------|-----------|--------------|
| Belt | 058109119C | included | included |
| Tensioner (A) | 058109243E | included | included |
| Hydr. actuator (B) | 058109479B | included | not included |
| Idler (C) | 058109244 D (not in OE kit) | included | included |

If the car is still equipped with the old system, only the complete kit K025492XS can be used.

K015492XS is a 'light' version without the hydraulic actuator and is a less expensive alternative, as some competitors offer. Gates recommends to use the complete kit K025492XS.



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OES KIT 058198479A - K045492XS

| | OE ref. 058198479A | K045492XS | K035492XS |
|--------------------|-----------------------------|-----------|--------------|
| Belt | 058109119C | included | included |
| Tensioner (A) | 058109243D | included | included |
| Hydr. actuator (B) | 058109479B | included | not included |
| Idler (C) | 058109244 D (not in OE kit) | included | included |

If the car is still equipped with the old system, only the complete kit K045492XS can be used.

K035492XS is a 'light' version without the hydraulic actuator and is a less expensive alternative, as some competitors offer. Gates recommends to use the complete kit K045492XS.

For both kit applications check our online catalogue: <http://www.gatesautocat.com>

HOW TO READ AND DECODE THE CHASSIS NUMBER OF THE VAG GROUP?

The chassis/VIN number in the car has 17 positions:

| | | | | | | | | | | | | | | | | | | |
|-----------|----|----|----|----|----|----|----|----|---|---|---|---|---|---|---|---|---|-----------|
| Position: | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | = pos. |
| Sample: | W | V | W | Z | Z | Z | 6 | Y | X | Y | U | 0 | 0 | 0 | 0 | 0 | 1 | = vin nr. |

In our catalogue only the last 11 positions are mentioned, start counting from the last digit:

| | | | | | | | | | | | |
|-----------|----|----|---|---|---|---|---|---|---|---|---|
| Position: | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| Sample: | 6 | Y | - | Y | - | 0 | 0 | 0 | 0 | 0 | 1 |

Position 10 and 11, refer to the vehicle model: 6Y = Fabia, 5K = Golf VI.

Position 9 is not important for the VIN identification and is mostly shown as "-" in the Gates catalogue.

Position 7 can be "-" or a figure. In case it is a figure it is part of the VIN number.

Position 8 indicates the model year by 1 character as follows:

| | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|
| 1978 = 8 | 1983 = D | 1988 = J | 1993 = P | 1998 = W | 2003 = 3 | 2008 = 8 | 2013 = D |
| 1979 = 9 | 1984 = E | 1989 = K | 1994 = R | 1999 = X | 2004 = 4 | 2009 = 9 | 2014 = E |
| 1980 = A | 1985 = F | 1990 = L | 1995 = S | 2000 = Y | 2005 = 5 | 2010 = A | 2015 = F |
| 1981 = B | 1986 = G | 1991 = M | 1996 = T | 2001 = 1 | 2006 = 6 | 2011 = B | 2016 = G |
| 1982 = C | 1987 = H | 1992 = N | 1997 = V | 2002 = 2 | 2007 = 7 | 2012 = C | etc... |