



INSTALLATION INSTRUCTIONS

Unitronic Crank Pulley Upgrade for 3.0 TFSI®

UH009-BTA / UH010-BTA

Unitronic recommends that you read through the entire installation instructions prior to beginning the installation to familiarize yourself with the included components, tools required, and procedures involved with the installation.

DISCLAIMER: Unitronic recommends that a Unitronic Authorized Dealer or other qualified and trained professional should perform the installation of this product.

Unitronic Installation Instructions are also available in digital format, if you prefer. Please visit the corresponding product page for a link to download the digital Installation Instructions. www.getunitronic.com

It is recommended to confirm all parts are present prior to beginning the installation.

PACKING LIST:

PART NUMBER	DESCRIPTION	QUANTITY INCLUDED
UH010-BT0	Unitronic Crank Pulley for 3.0TFSI	1
UH013-BT0	7PK1300 Belt	1
UH014-BT0	Crankshaft Pulley Bolts	8

RECOMMENDED TOOLS NEEDED:

- Hoist / Jack / Jack stands
- T25 Torx
- T30 Torx
- Flathead screwdriver
- Small pick
- 16mm socket
- 3/8" or 1/2" ratchet
- 10mm triple square
- Torque wrench
- Angle grinder with course grit grinding disc



NOTE:

Please see also Unitronic's installation guide for UH004-BTA if you are installing this along with a Unitronic Supercharger drive pulley.

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- 1** Raise the vehicle using a lift/hoist or a floor jack with jack stands and remove both front wheels and open the hood.
- 2** Remove the small engine cover by pulling upwards. (See Fig. A)
- 3** Remove the T25 & T30 Torx screws attaching the belly pan to the front bumper and underbody braces and remove the belly pan from the vehicle. (See Fig. B)
- 4** Remove the T25 Torx screws and plastic retaining clips on each front fender liner. (See Fig. C & D)
- 5** Pull the fender liner back and remove the all four (4) of the 10mm bolt from the front bumper cover on both sides. (See Fig. E)
- 6** Remove the four (4) T30 Torx bolts holding the upper radiator cover and remove the cover. (See Fig. F)
- 7** Remove the two (2) T25 Torx bolts holding the air guide in place and remove it. (See Fig. G.)
- 8** Remove the outer two (2) T25 Torx bolts, located near the headlights, holding the upper bumper cover in place. (See Fig. H)



FIG. A

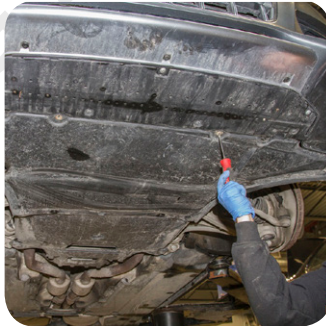


FIG. B

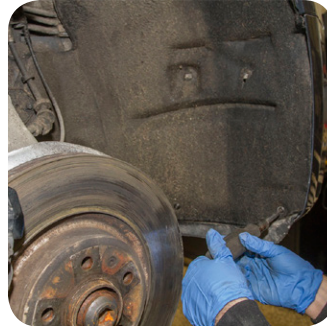


FIG. C



FIG. D



FIG. E



FIG. F



FIG. G

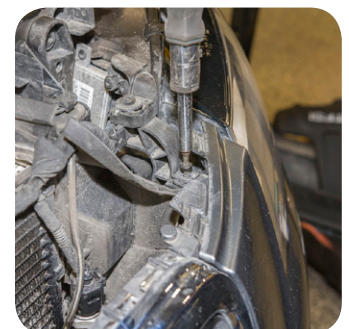


FIG. H

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- 9** Carefully pull outwards on either side of the bumper cover to release the bumper cover. Be sure to unplug the fog lights and any other electrical accessories, like parking sensors, if your vehicle is equipped as such. (See Fig. I)
- 10** Unscrew the coolant reservoir cap to release pressure from the system (See Fig. J) and remove the coolant bleed hose from the coolant reservoir using a small pick or flat head screwdriver. (See Fig. K)
- 11** Carefully remove the plastic air ducts on either side of the front of the vehicle by pulling the sides outward (See Fig. L) to align the bolts with the larger openings in the air ducts for the secondary radiator. This will allow you to remove the air duct once bolts are aligned with larger openings. (See Fig. M)
- 12** Next, remove the two (2) 16mm bolts on each side, holding the radiator support to the frame rails. (See Fig. N & O) Using the long bolt provided with your Unitronic Supercharger Pulley Removal Tool Kit (UH005-BT0, sold separately), replace the two stock bolts, one at a time, with the long bolts to ensure the radiator support can be placed in the "service position". (See Fig. P & Q)



FIG. I



FIG. J



FIG. K

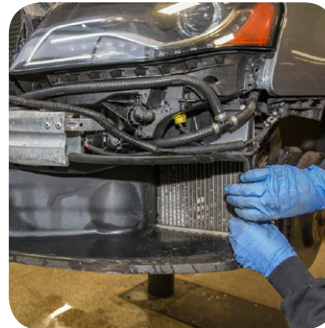


FIG. L

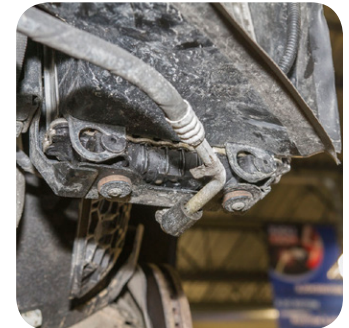


FIG. M



FIG. N



FIG. O



FIG. P



FIG. Q



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- 13** Remove the two (2) T30 Torx bolts holding the radiator support to the fenders and unclip the headlight harness from radiator support.
- 14** Pull the radiator support forward into service position onto the longer bolts you installed in an earlier step, to ensure space is made for the following steps.
- 15** Make note of how the supercharger drive belt is routed around the pulleys, as you'll need to re-install this at a later step.
- 16** Remove the plastic cover on the tensioner pulley and use a 16mm socket with wrench to release tension from the belt and remove the belt.
- 17** Remove tension on the accessory belt using a 17mm socket and unloop the accessory belt from the alternator pulley.
- 18** We suggest that you mark the crankshaft orientation with a marker before removal for your reference. It's often hard to see the TDC markings on the crank pulley with the front end in service position, so you can choose to transfer this mark over to Unitronic's Crank Pulley, so you can visually orient yourself from the bottom of the car.
- 19** Using a 10mm triple square, remove the 8 crankshaft bolts and remove the crank pulley.
- 20** Locate the Unitronic Crank Pulley (UH013-BT0) and orient yourself to the TDC (Top Dead Center) marking, which is indicated by the Unitronic "U" logo. (See Fig. R)
- 21** Line up the Unitronic Crank Pulley in the proper orientation using the TDC marking on the crank pulley. As mentioned in Step 18 above, it may be difficult to orient yourself, so you can refer to the marking you made on the stock crank pulley, transfer the marking over onto the Unitronic Crank Pulley, so you can visually orient yourself from the bottom of the car.
- 22** Before installing the crankshaft bolts, observe the post on the front of the engine block, as it will interfere by just a few millimeters. Using your angle grinder or very abrasive scotchbright pad, remove the extra material from the post to allow for sufficient clearance to the crank pulley and belt. (See Fig. S)



FIG. R

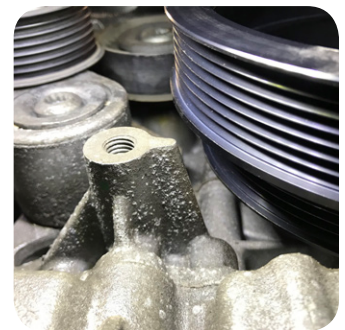


FIG. S



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- 23** Using the eight (8) supplied crankshaft bolts (UH014-BT0) affix the Unitronic Crank Pulley to the crankshaft. Be sure to place your accessory belt in place around the pulley prior to inserting the bolts. Tighten crankshaft bolts in a star pattern to 25 Nm + 1/4 turn.
- 24** Re-install both the accessory and supercharger drive belts in the manner they were removed.
- 25** Complete the installation by re-assembling your vehicle in the reverse order that you've disassembled it. You can use this guide in reverse order for reference.

CONGRATULATIONS! You have successfully installed Unitronic's Crank Pulley Upgrade!

