



## INSTALLATION INSTRUCTIONS

### Unitronic 3" Turbo-Back Exhaust System for Golf® R® UH021-EXA

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](http://www.getunitronic.com)

It is recommended to confirm all parts are present prior to beginning to remove the OEM exhaust system.

#### PACKING LIST:

PART NUMBER	DESCRIPTION	QUANTITY INCLUDED
UH004-EX1	Unitronic 3" Downpipe Section for 2.0 TFSI®/TSI®	1
UH004-EX2	Unitronic 3" Cat Section for 2.0 TFSI/TSI	1
UH001-EX4	Unitronic 3" Adjustable Link	1
UH003-EX5	Unitronic Mid-Pipe Section for MK5/6 AWD	1
UH001-EX6	Unitronic Muffler Section for MK5/6 AWD	1
UH001-EX0	Unitronic 3" V-Band Clamp	4
UH002-EX7	Unitronic 3" Seal Rings	4

#### RECOMMENDED TOOLS NEEDED:

- Jack Stands & Floor Jack (or vehicle lift)
- 22mm Oxygen Sensor wrench
- 11mm socket
- 13mm socket
- 14mm socket
- 16mm socket
- 10mm triple square socket
- Locking Pliers
- Ratchet
- 8" or 12" Pry-Bar
- PB Blaster, WD-40, Liquid Wrench, or any other penetrating oil.



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**1** Secure your vehicle safely on jack stands to gain access to the underside of your vehicle and open your hood. It's recommended to disconnect the negative terminal from the battery, too.

**2** From underneath the vehicle, use Penetrating Oil to soak the downpipe studs/nuts, o2 sensors, and slip clamp connection between the downpipe and cat-back sections.

**NOTE:** We recommend you do this first to ensure penetrating oil has ample time to penetrate through any rust or corrosion, by the time you're ready to loosen the nuts. For added ease, spray the studs/nuts multiple times throughout the initial steps.

**3** Disconnect the MAF sensor connector (located at the top, passenger side of the engine cover). **(See Fig. A)**

**4** Unclip the two (2) clips holding the top of the turbo inlet pipe to the engine cover/intake tubing and separate turbo inlet pipe to engine cover/intake tube. **(See Fig. B)**

**NOTE:** When removing the turbo inlet pipe from intake tube, ensure that you do not lose or damage the two o-rings used to seal the connection.

**5** Using locking pliers, release tension from the clamp holding the air inlet from the airbox/engine cover **(See Fig. C)** and remove air inlet from airbox/engine cover to allow airbox/engine cover removal. **(See Fig. D)**

**6** Remove the airbox/engine cover from the engine by pulling upwards to release it from the retaining posts. There are four (4) retaining posts located roughly at the corners of the engine cover. **(See Fig. E)**

**7** Unplug the primary o2 sensor connector located near the brake master cylinder on the driver side of the engine bay and remove wire from retaining clip on firewall



FIG. A



FIG. B



FIG. C



FIG. D



FIG. E



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**8** Using a 22mm o2 sensor wrench, remove the primary (Upper) o2 sensor from the stock downpipe. **(See Fig. F)**

**NOTE:** Please ensure the sensor probes of the o2 sensors are not contaminated with grease, etc. Contaminating the o2 sensor may negatively influence its functionality.

**9** Remove the two (2) upper downpipe flange nuts using a 16mm socket and ratchet. **(See Fig. G)**

**10** Unbolt the two (2) bolts holding the subframe grommet bracket to the vehicles subframe using a 13mm socket and ratchet. **(See Fig. H)**. Using a pry bar, remove the red grommets from the downpipe hangars.

**11** Unbolt the front portion of the passenger side lower plastic cover. **(See Fig. I)** using a 13mm socket and ratchet to access the o2 sensor connector. Temporarily disconnect the sensor. **(See Fig. J)**

**12** Loosen the two (2) 13mm nuts on the stock slip clamp holding the downpipe and cat-back sections together using a 13mm socket and ratchet. **(See Fig. K)**



FIG. F



FIG. G



FIG. H



FIG. I



FIG. J



FIG. K





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**13** Remove the catalytic converter heat shield bolts to loosen the drive shaft and downpipe and gain more access. **(See Fig. L)**

**14** Loosen the three (3) 10mm triple square bolts holding the front of the driveshaft. **(See Fig. M)**

**15** Loosen the three (3) 10mm triple square bolts holding the rear of the driveshaft. **(See Fig. N)**

**16** Carefully remove the driveshaft from the vehicle, as it is now fully unbolted. **(See Fig. O)**

**17** Removing the remaining two (2) bolts on the downpipe flange and slide out the stock downpipe. **(See Fig. P)**

**18** Locate the Unitronic 3" Downpipe Section (UH004-EX1) and gasket, and re-install the Unitronic downpipe into the turbo discharge flange and secure the two (2) lower nuts. Using a 14mm socket tight the nuts at 25 ft/lbs. **(See Fig. Q)**

**19** Re-install the driveshaft, starting with the front connection and secure the three (3) bolts using your 10mm triple square. **(See Fig. R)**

**20** Slide the rear portion of the driveshaft into place and secure the three (3) bolts using your 10mm triple square. Torque to 45 ft/lbs. **(See Fig. S)**



FIG. L



FIG. M



FIG. N



FIG. O



FIG. P



FIG. Q

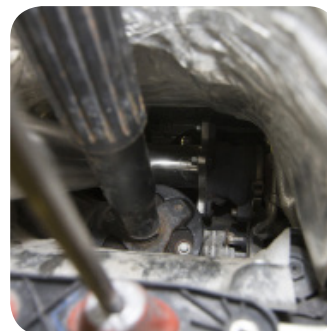


FIG. R

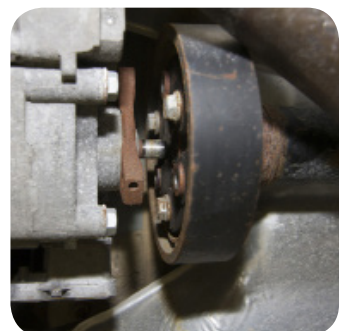


FIG. S



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**21** Re-install the heat shield and ensure the driveshaft and heat shield are secured. **(See Fig. T)**

**22** Next, locate the Unitronic 3" Cat Section (UH004-EX2), one 3" V-Band clamp (UH001-EX0) and one 3" Seal Ring (UH002-EX7) and align the sealing ring in the proper groove on the v-band flange and secure the clamp to make a sealed connection with the two v-band flanges making a proper seal. Use 11mm socket to tight V-Band at 7 ft/lbs. **(See Fig. U)**

**23** Re-install the o2 sensors in their appropriate positions and ensure they are well connected.

**24** Next, locate and remove the vacuum hose from the rear exhaust valve. **(See Fig. V)**

**25** Using your pry-bar, remove the rear exhaust hanger right above the right exhaust tip from the rubber mount. You may want to use some penetrating oil to assist in a smooth removal from the rubber hanger. **(See Fig. W)**

**26** Next, remove the exhaust hanger from the second rubber mount on the muffler section. **(See Fig. X)**

**27** Remove the middle hanger from the rubber mount on the mid-pipe section. **(See Fig. Y)**

**28** And finally, remove the final front exhaust hanger from the rubber mount. You may now remove the stock cat-back from the vehicle. **(See Fig. Z)**

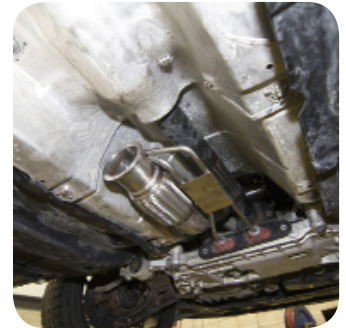


FIG. T



FIG. U



FIG. V

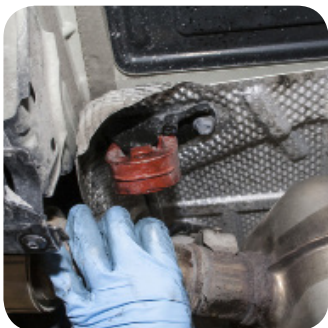


FIG. W



FIG. X

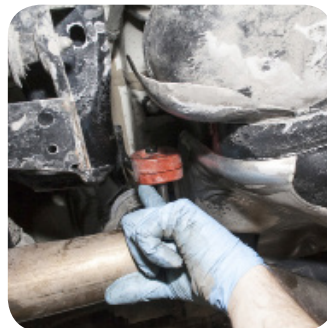


FIG. Y

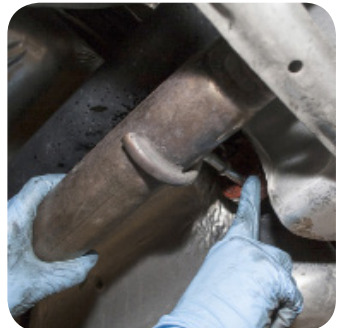


FIG. Z





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### Unitronic 3" Turbo-Back Exhaust System for Golf® R® UH021-EXA

**29** Locate the Unitronic 3" AWD Mid-Pipe Section (UH003-EX5) and start by sliding the front-most hanger into the appropriate rubber mount affixed to the chassis. **(See Fig. AA)**

**30** Next, install the middle hanger into the rubber mount next to the rear differential. **(See Fig. BB)**

**31** Locate the Unitronic 3" AWD Muffler Section (UH001-EX6), one 3" V-Band Clamp (UH001-EX0), and one 3" Seal Ring (UH002-EX7) and install the rear muffler section by starting with mounting the two exhaust hangers into their appropriate rubber mounts affixed to the chassis. **(See Fig. CC) (See Fig. DD)**

**32** Install the Seal Ring and V-Band clamp to connect the mid-pipe and rear muffler together. Use 11mm socket to tight V-Band clamps. Torque to 7 ft/lbs. **(See Fig. EE)**

**33** Locate the Unitronic 3" Adjustable Link (UH001-EX4), two 3" V-band clamps (UH001-EX0) and two 3" Seal Rings (UH002-EX7) and connect the cat section with the mid-pipe section using the sealing rings and v-band clamp. Use 13mm socket to tight exhaust clamp of link **(See Fig. FF)**

**34** Align your tips appropriately and secure the v-band clamps to 7lb-ft of torque. It's very important not to over torque the clamps. Finally, tighten the exhaust clamp in the center of the adjustable link at the same time of tightening and adjusting the v-bands. You should re-check torque specifications on the clamps after a full heat-cycle.

**35** Re-install the top two downpipe flange nuts to secure the downpipe to the turbocharger.

**36** Re-install the top o2 sensor and re-connect appropriately.

**37** Re-install the intake/engine cover.

**CONGRATULATIONS! You have successfully installed Unitronic's Turbo-Back Exhaust System for Golf R!**



FIG. AA



FIG. BB



FIG. CC

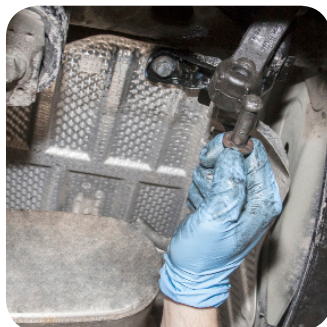


FIG. DD

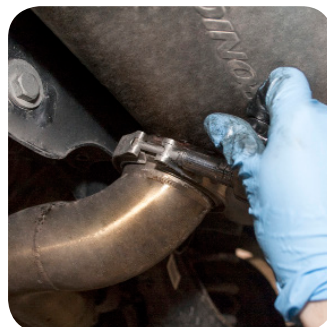


FIG. EE

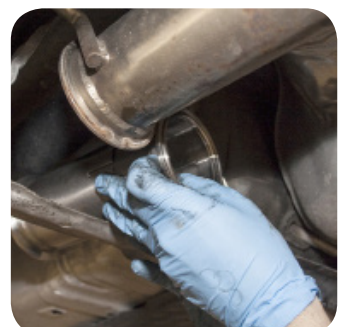


FIG. FF