



news

features

galleries

resources

marketplace



My Profile | Active Users | Help | Search | Google Search

**VWvortex Forums Golf IV & Jetta IV DIY - MKIV VR6** Transmission Removal / Clutch Replacement [Archived]



EMAIL THIS TOPIC TO A FRIEND



FaelinGl Member

DIY - MKIV VR6 Transmission Removal / Clutch Replacement



#### Offline

Member Since 11-27-2004 854 posts

# DIY - MKIV 12v VR6 Tranny Removal / Clutch Replacement

For Clutch replacement or for Lower Timing Chain replacement

Charlotte NC 2000 Jetta VR6, 150k and counting.

The MKIV VR6 transmission removal is required to perform lower timing chain replacement, as well as upgrading or replacing the clutch. To fully understand how the clutch operates, there are some excellent articles in the manual transmission forum, but I will cover the basics before we begin.



In order to take the rotation force provided by the engine and send it to the transmission, we have two basic methods. The first, used in automatic transmissions, is called a Torque Converter. In the torque converter, two impellers (like propepeller blades) are placed inside a chamber filled with fluid. As one impeller rotates, it transfers its energy into the fluid, which also rotates. The force travels through the fluid, and eventually rotates the second impeller. This motion allows the engine to rotate at a different speed while the transmission and wheels catch up.

The second is the use of friction. In a manual transmission, the rotation from the engine ends with the flywheel. The flywheel provides a mating surface between one side of the clutch disc, and on the other side, the pressure plate. So as the flywheel turns, frictional force turns the clutch, which is pressed against the flywheel by the pressure plate. When you step on the clutch pedal, you are seperating the pressure plate from the clutch disc. Since the pressure plate is what keeps the clutch disc pressed against the flywheel, seperating the two reduces the force transferred from the engine to the clutch. To get the force to the transmission, the center of the clutch has a splined shaft that the transmission input shaft goes in to.

A word of note from your friend and mine, Gary (VgRt6):

"When the tranny is out, it's the perfect time to replace the thermostat on a VR6. That job is a real PITA when the tranny is in place."

This is exactly what I did (and you can see why later on in the thread) but it will add a couple of extra hours to your job. Seriously worth it if you have not done it yet. It will fail. And I recommend draining the crack pipe before pulling anything off if you decide to do it by performing step 15 of the T-stat replacement DIY as follows:

"15: Drain the crack pipe. This one is messy. The drain has to be accessed from underneath the car, and is just next to the block where the water pump housing fits. The stock pipe will need a flathead screwdriver and a turn or two, then it pops off. WEAR EYE PROTECTION!!!"

Here's the plug, you can only see it from underneath the vehicle. If you just crack it about a half turn open, a nice steady stream of coolant will come out into your awaiting bucket. Wait 1/2 hour while draining and take a break...MUCH MUCH better then spilling G12 all over your garage floor.



#### Some very important cautions:

PLEASE label all the connectors, parts, and bolts you remove from the vehicle. This will really help when you are ready to put it all back together. Also, some bolts are different lengths but look exactly the same as other bolts. Use whatever labeling scheme works for you, I used about 50 zip-loc bags and a magic marker and some paper.

### Parts Required

- -Moly grease/lubricant (available at your local auto-parts store, also called Spline Lube)
- -New Clutch, pressure plate, throwout bearing(if you are doing this procedure, I recommend replacing regardless of mileage)
- -New Flywheel (optional)
- -Lots of Zip-loc bags (or similar, for labeling)
- -2 Liters of MT-90 or similar manual transmission fluid (or reuse the old fluid)
- -10 new 10 mm triple square flywheel bolts (if removing/replacing the flywheel)
- -6 new 10 mm 12 point pressure plate bolts
- -New bolts for the pendulum (dog-bone) mount if you are replacing them (recommended)

# Tools Required

- -27 mm socket
- -10 mm socket
- -13 mm socket
- -16 mm socket
- -18 mm socket
- -10 mm 12 point socket
- -17 mm allen wrench (optional, but recommended)
- -10 mm Triple Square (12 point) bit
- -12" ratchet extension
- -ratchet
- -Magic Marker
- -Small blade screwdriver
- -Large Vise-grips
- -Spray penetrating lubricant
- -Medium phillips head screwdriver
- -Impact wrench (optional, but HIGHLY recommended)
- -Rubber mallet
- -Two jackstands
- -Two jacks
- -Small blocks of wood

**Note:** I cannot be held responsible if something goes wrong during the performance of this procedure. I have done my best to make it as accurate as possible, but there may be some mistakes. Please use your head when working with the jacks and the engine/transmission combo.

# Before you begin....

- i. Drive the vehicle to a well lit spot and chock the rear tires. You will be here for a couple of hours, so make sure you can leave the car here undisturbed.
- ii. Once the vehicle is parked, raise the hood.
- iii. You may need the radio code for OEM radio if you still have yours since the battery will be disconnected for a while.
- 1. Start by removing some interior components. Perform steps 1.a) through 2.e) of the <u>Starter Motor Grind Fix/Replacement DIY</u>.
- 2.a. Remove the air filter. To do this, unscrew the two phillips head screws at the top of the air box cover. They will not come all the way out.



b. Lift up on the top of the air box cover, and slide the air box off of the retaining clips.



c. Lift up on the air filter to remove it from the air box.



3. Disconnect the MAF air sensor. Insert a screwdriver blade in to the small hole at the end of the connector, pry up gently, and slide the connector off.



4. Using a pair of Vise-grips, open and lock open the clamp connecting the air header to the air box. Leave the clamp opened for now.



5. Slide the air header off the air box cover by rocking the header back and forth and pulling it off the air box cover.



6. Disconnect the plastic hose attached to the air box cover. Squeeze the ribbed sides firmly and pull the hose off.



7. Release the clamp around the outlet of the air box cover by releasing the Vise-grips. At this point you should be able to remove the air box cover.



8. Remove the one additional bolt holding the air box inlet in place with a 13 mm socket.



9. Slide the air box out of the engine bay by pulling it to the passenger's side and lifting it up and out.



10. Remove the circlip holding the gate selector cable in place by lifting up on the raised tab with a small blade screwdriver and sliding the clip off.



11. Locate the shifter weight retaining nut.



12. While holding the shifter weight, remove the retaining bolt with a 13 mm socket and extension.



13. Spray a little penetrating lubricant into the spline area of the shifter weight. While it is settling, note that there is one thicker spline then the others. This ensures the shifter weight goes in only one way. Also see the white guide rail on the left side. This provides rotational guidance for the shift weight.



14. Once the spray has settled for a few minutes, wiggle the shifter weight back and forth to slide it off the spline. This is a shot with the weight removed and the white plastic guide rail exposed.



15. Remove the connector for the reverse light indication. The connector is rather difficult to get to, but it will come out.



16. Unclip the power steering hose attached to the black metal bracket.



17. Remove the three 13 mm bolts holding the black metal bracket in place. It is still attached to the transmission selector cables; leave them attached.



18. Slide the gate selector cable out of the transmission connection. Note the plastic sleeves on either side of the shaft. Remove these as well.



19. Located towards the rear of the transmission, find the heat shielding bag that encloses the vehicle speed sensor(VSS). Unsnap the two snaps that close the bag, and slide it up the cable.



20. Remove the connector from the VSS. Again, this may be difficult to get to.

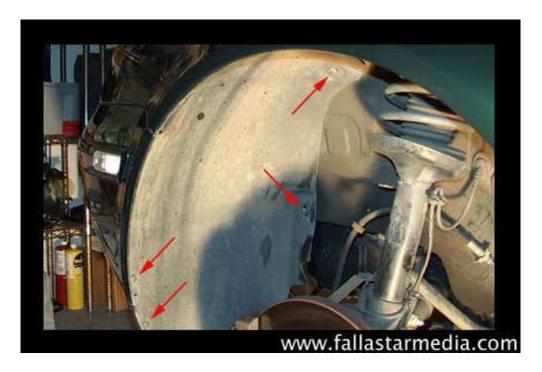


- $21.\ \mbox{Now you are ready to get underneath the vehicle.}$  Raise the front end of the vehicle and remove the front wheels.
- 22. Remove the center splash guard by performing step 3 of the VR6 12V Oil Change DIY.
- 23. Remove the driver's side splash guard by inserting a long blade screwdriver into one of the slots on on the star shaped washer. Then unscrew the washer, and it will work the guard off of the stud in the frame. There are two of these washers for the guard. Once removed, the guard will drop right out.





24. Remove the driver's side fender well piece by unscrewing the 10 or so Torx-25 screws at the front and the back of the well. Once removed, the plastic piece should fall right out.





25. Remove the starter motor by performing steps 3.a) to 5.b) of the  $\underline{\text{Starter Motor Grind Fix/Replacement DIY.}}$ 

26. Remove the two 16 mm bolts holding the black support member in place. The bolt on the left actually has a nut, so do not forget to remove and bag it as well.



27. Remove the two bolts holding the slave cylinder in place with a 13 mm socket.



28. Carefully slide the slave cylinder out of the transmission. Do NOT depress the clutch pedal while the slave cylinder is removed, or you risk rupturing the rubber boot. The base of the slave cylinder is plastic, so be gentle as you remove it.



29. Locate the white plastic heat shield protecting the passenger's side CV joing. Remove the two bolts holding the plastic shield in place with a 13 mm socket.



30. You can see the passenger's side CV joint here. It is held to the transmission output flange by 6 twelve point bolts. This 12 point bit is commonly called a Triple Square bit, and is found in your local auto parts store. Remove the six 10 mm twelve point bolts, and the passenger's CV joint should separate from the transmission. If you have an extra person, it helps if they step on the brakes while removing the bolts. I had a lot of trouble removing these bolts until I got an impact wrench. Then they came right out.



Modified by FaelinGL at 4:36 AM 7-9-2006

Modified by FaelinGL at 7:23 PM 7-9-2006

Modified by FaelinGL at 1:43 AM 7-13-2006

Modified by FaelinGL at 11:52 PM 7-19-2006

Tired of getting ripped off at the STEALERSHIP?
Step by step MKIV DIY Video DVD's are HERE!
50% off for Vortex Members!!!
Email me at contact@fallastarmedia.com

**FaelinGL** Member Re: DIY - MKIV VR6 Transmission Removal / Clutch Replacement (FaelinGL) >>

<u>« »</u> 1:35 AM 7-9-

#### Offline

Member Since 11-27-2004 854 posts

Charlotte NC 2000 Jetta VR6, 150k and counting.



31. Secure the passenger's side CV joint out of the way with some wire.



**Note:** Steps 32 through 34 are OPTIONAL, but again, HIGHLY recommended. You will spend many hours trying to get the passenger's side transmission output flange past the flywheel, but after removing the flange, the transmission came right out. However, in order to remove the flange, you must first drain the transmission.

32. Place a drip pan underneath the transmission and remove the 17 mm allen bolt under the transmission. This will drain all the transmission fluid. Once drained, reinstall the bolt until it is tight.



33. Locate the 5 mm conical bolt holding the passenger's side transmission output flange in place. While holding the output flange, or having someone step on the brakes, remove the conical bolt. The output flange has a spring on the inside, and should pop right out. Be gentle when removing the flange, as it has two sealing surfaces to keep the transmission fluid in.



34. Repeat steps 30 and 31 for the driver's side CV joint.





35. Remove the pendulum mount (aka: dog-bone) by unscrewing the two 18 mm bolts connecting the mount to the transmission. The engine/transmission may swing down about an inch, so be prepared for it to move once the bolts are removed. Then remove the two 16 mm bolts holding the mount to the frame.



36. Support both the engine and the transmission with jacks. Use a piece of wood to even out the load. Make sure both jacks are supporting some of the weight.

This is also your opportunity to verify nothing else is connected to the transmission. Tie up any cables, wires, or connectors so they are out of the way.





**Note:** This step will remove the transmission support from the frame! Only the jack will be supporting the weight of the transmission.

37. Unscrew the two 18 mm transmission mount bolts. Make sure the jack is supporting the weight before you remove them fully.



38. Locate the three bolts on the driver's side of the transmission. These three secure the transmission to an intermediate metal piece. You will need to lower the engine/transmission a bit to access these bolts. Start by lowering the engine jack a bit, then lower the transmission jack a bit, and repeat until you can see the three bolts.



39. Here the engine/transmission is lowered enough to access the three bolts. Remove them with a 16 mm socket.



40. Once the three bolts are removed, remove the intermediate metal piece by pulling it up and away. You may need to lower the engine/transmission a touch more to get it out.



41. Now you are ready to start seperating the engine from the transmission. Start with the combo bolt near the top of the transmission. Remove the 13 mm nut

connecting the ground strap to the combo bolt and slide off the ground strap. Then remove the  $18\,$  mm combo bolt.



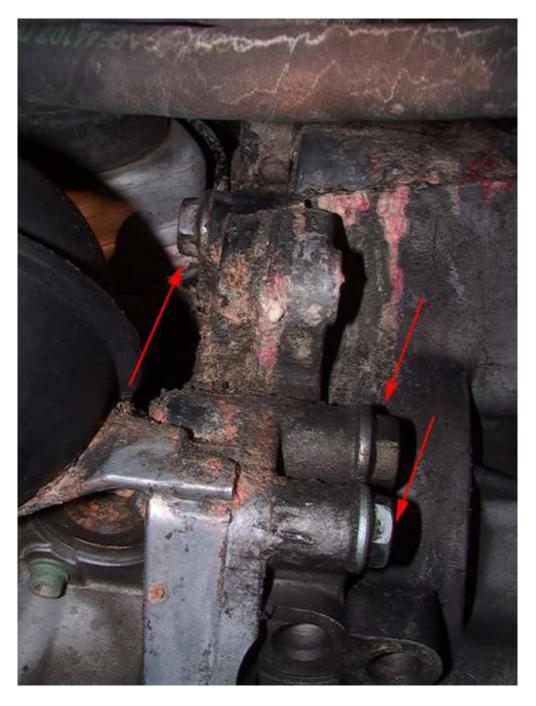
42. Remove the other 18 mm combo bolt towards the front of the transmission, still on the top. I swear it is underneath this mess of rubber and pipe, to the right of the starter motor socket.



43. This is a better view of the second 18 mm combo bolt.



44. Looking at the front of the engine/transmission, remove the two 18 mm and one 16 mm bolts. If yours looks like this, you may want to call MJM at this point and express-mail a crack pipe and T-stat housing kit.



45. Remove the two 16 mm bolts towards the rear of the engine/transmission, near the passenger's side CV joint. Note: The output flange is not removed in this picture, disregard this discrepancy.



46. Remove the last 16 mm bolt on the bottom of the connecting the engine and the transmission. I do not have a picture of this bolt, but it is the farthest one down on the transmission.

47. The transmission will not immediately seperate from the engine because the transmission input shaft is still inside the flywheel. To seperate the two, give the mating joint a couple of raps at each segment. Then gently work the transmission off of the engine. Remember, the jack is your friend. It will support the weight of the transmission for you, but it cannot move the transmission. Seperate the two just a little bit for now.



48. Remove the transmission from its place in the engine bay. Easier said then done. The best advice I can offer is to raise the engine to a little below its normal ride height. Work the black A/C line until it is above the transmission, and lower the transmission jack a bit. Slide the transmission off a bit, and lower the jack a bit more. You will need to turn the transmission counterclockwise to get it around the subframe, and then it will drop right down. If you are

relatively strong, you can bench the transmission (it weighs about 80 pounds) and work it out. Use the jack as a resting point when you are tired. This could take a while, so if you need to take a break, make sure the transmission is supported and rest for a bit.



- 49. Finally out! While out, take the opportunity to clean things up. Remove the clutch fork by unclipping the metal retaining clip at the bottom. Press the metal fingers up and out of the hole in the fork. Then slide the fork off of the transmission input shaft along with the throwout bearing.
- 50. Once the fork is out, clean the input shaft. Remove any dirt or corrosion products, and apply a light coat of moly grease to the input shaft. You want to grease both the splined part AND the smooth part of the shaft. This allows the throwout bearing to glide easily on the shaft. Also apply a thin film of moly grease to the fork pivot at the bottom of the transmission.
- 51. Replace the old throwout bearing on the fork with the new one. This is very easy to do, you will see how once you get the fork out. Once replaced, reinstall the fork. You may find it easier to remove the retainer spring from the fork pivot, install the spring into the fork, and press the retainer onto the pivot.
- 52. Check the operation of the new throwout bearing. It should slide very easily on the input shaft.
- 53. Remove the pressure plate and clutch disc by unscrewing the six 10 mm 12 point bolts. Then use a medium screwdriver and slowly work the pressure plate out. Be careful, because once the pressure plate comes out, the clutch disc will fall out as well.
- 54. Perform this step **ONLY** if you need the flywheel removed, ie: for timing chain replacement or if installing an upgraded flywheel. Remove the ten 10 mm triple square bolts holding the flywheel to the engine output flange. An impact wrench is really useful here. If you are using a breaker bar, you will need someone to hold the crank pulley with a 27 mm socket to prevent the engine from rotating.

-----

At this point, the transmission, the pressure plate, the clutch disc, and the flywheel are all removed. The following steps are for reinstallation of the above components.

-----

Tired of getting ripped off at the STEALERSHIP?

Step by step MKIV DIY Video DVD's are HERE! 50% off for Vortex Members!!! Email me at contact@fallastarmedia.com

**FaelinGL** 

Member

Re: DIY - MKIV VR6 Transmission Removal / Clutch Replacement (FaelinGL) >>



#### Offline

Member Since 11-27-2004 854 posts

Charlotte NC 2000 Jetta VR6, 150k and counting.



- 55. Reinstall the flywheel by aligning it to the engine output flange. There is one bolt hole that is offset a little bit from the rest to guarantee the flywheel is installed properly. Once you have aligned this one bolt hole, install all 10 bolts finger tight. Using a diagonal tightening pattern, tighten the flywheel bolts to 44 ft-lbs plus 1/4 of a turn. You will need someone else to hold the crank pulley with a 27 mm socket while you are tightening the bolts.
- 56. Reinstall the clutch disc. You will need to center it on the flywheel so that the transmission input shaft slides onto the clutch disc properly. The easiest way to do this is to find a socket (metric or standard) that fits into the center of the disc and into the center of the flywheel. Then, place the clutch disc onto the face of the flywheel with the socket pressed into the flywheel. The clutch disc will sag until the pressure plate is installed, so don't worry right now if the alignment is
- 57. Reinstall the pressure plate. The pressure plate will align only one way with the dowels on the engine and allow you to install all six bolts. When you have found the proper orientation of the pressure plate, press it onto the dowels. Gently tap around the edges on the pressure plate with a rubber mallet to press the plate flush against the engine. When installing the screws, it is important at first to tighten the six screws only finger tight. 58. Once the pressure plate screws are installed finger tight, re-align the clutch disc. Use the socket to press the clutch disc in the appropriate direction until the hole in the clutch disc is perfectly aligned with the hole in the flywheel. Once you are satisfied with the centering, torque the pressure plate bolts in a diagonal pattern to 10 ft-lbs.
- 58. Reinstall the transmission. Again, easier said then done. You will need to lift the transmission up into the engine bay and align the input shaft so it slides into the clutch and the dowels on the engine line up with those on the transmission. Don't forget to bring the black A/C line underneath the transmission.
- 59. Once the transmission is flush with the engine, reinstall the bolts you removed holding the engine/transmission together. Hopefully, you labeled them so that you know exactly which bolt goes where. Torque the 16 mm bolts to 30 ft-lbs, and the 18 mm bolts to 60 ft-lbs.
- 60. Reinstall the ground strap to the top combo bolt and tighten the 13 mm nut to 15 ft-lbs.
- 61. Reinstall the intermediate metal piece to the side of the transmission. Torque the 16 mm bolts to 37 ft-lbs.
- 62. Jack up the engine/transmission until you can install the two 18 mm transmission mount bolts. With the mount faces flush (ie: no preload), torque the 18 mm bolts to 74 ft-lbs.
- 63. Remove the wire holding the driver's side CV joint in place and slide the CV into the transmission output flange. Reinstall the 6 triple-square bolts into the flange, tightening diagonally to 52 ft-lbs. I found it very useful to have a friend press the brakes when I applied the torque, and released when I needed to move to another bolt. I also numbered each bolt on the flange itself so I knew in what order to tighten each.
- 64. With the brake applied, slide the passenger's side output flange into the socket. Reinstall the 5 mm conical bolt while pressing in on the flange. You will need to compress the spring quite a bit in order to get the bolt to catch. Torque the conical bolt to 18 ft-lbs.
- 65. Repeat step 63 for the passenger's side CV joint and output flange.
- 66. Reinstall the dog-bone mount. The 18 mm bolts are torqued to 30 ft-lbs, and the 16 mm bolts are torqued to 15 ft-lbs. (add an extra 1/4 of a turn if you are installing new bolts for both the 18 mm and 16 mm bolts)
- 67. Refill the transmission by removing the 17 mm bolt at the front of the transmission and adding gear oil until it begins to drip out of the bottom of the hole. Then reinstall the 17 mm bolt and turn clockwise until tight.



- 68. Reinstall the white plastic heat shield and tighten the two 13 mm bolts to 26 ft-lbs.
- 69. Gently reinstall the slave cylinder into the transmission. You will have to press it in, but make sure that the shaft is straight when you tighten the bolts. Torque the 13 mm bolts to 18 ft-lbs.
- 70. Reinstall the black support member and tighten the 16 mm bolts to 18 ft-lbs.
- 71. Reinstall the starter motor by performing steps 7.a) through 7.e) of the <u>Starter Motor Grind Fix/Replacement DIY.</u>
- 72. Reinstall the plastic piece into the driver's side fender well and secure it with the 10 Torx-25 screws.
- 73. Reinstall the driver's side splash guard by tightening the star washers with the long blade screwdriver.
- 74. Reinstall the center splash guard by tightening the four Torx-25 screws.
- 75. Reinstall the front wheels and torque them to 90 ft-lbs. Once the wheels are installed, lower the front of the vehicle.
- 76. Reinstall the connector for the VSS. This is the one on the rear of the transmission, with the heat shielded baq.
- 77. Install the heat shielded bag by sliding the bag on top of the sensor and snapping the snaps into place.
- 78. Lightly lubricate the inside of the white plastic sleeves from the gate selector cable shaft with a Q-tip. Then, slide the plastic sleeves into their appropriate spots in the shaft and slide the gate selector cable shaft into its place in the transmission.
- 79. Reinstall the black metal bracket to the back of the transmission and tighten the three 13 mm bolts to 18 ft-lbs.
- 80. Slide the power steering hose back into its clip on the black metal bracket.
- 81. Reinstall the connector for the reverse light indication towards the shifter weight spline.

- 82. Slide the shifter weight into the spline, aligning the thicker spline with the slot in the shifter weight. Install the 13 mm nut and torque it to 18 ft-lbs.
- 83. Reinstall the circlip on the gate selector cable shaft by sliding it on, ensuring it locks into place.
- 84. Slide the air box into the engine bay, with the air intake and rubber damper sliding into the right side of the air box. Install the rear 13 mm bolt and tighten it until tight.
- 85. Reconnect the smaller black plastic hose into the airbox cover by sliding it onto the cover until the snaps lock it into place.
- 86. Open and lock open the clamp on the air box cover with a pair of vise-grips, and slide the air header pipe onto the air box cover. When the header is fully installed onto the cover, release the clamp.
- 87. Install the air filter into the air box, and slide the rear hooks of the air box cover into the air box. Then tighten down the air box cover with the phillips head screwdriver until tight.
- 88. Reconnect the MAF connector and reinstall the interior components by performing steps 7.f) to 7.j) of the <u>Starter Motor Grind Fix/Replacement DIY.</u>
- 89. Before you start the car and take it for a test drive, go through all the gears to make sure that each engages properly. Also make sure the clutch pedal feels proper. Then, start the car and take it for a very slow test drive. You will need about 500 miles to break in the new clutch.

That's it! Please let me know with any mistakes or corrections. Congratulate yourself on completing a very intense DIY.

Mike

Modified by FaelinGL at 7:27 PM 7-9-2006

# Tired of getting ripped off at the STEALERSHIP? Step by step MKIV DIY Video DVD's are HERE! 50% off for Vortex Members!!! Email me at contact@fallastarmedia.com

**bryan burnick** Member Re: DIY - MKIV VR6 Transmission Removal / Clutch Replacement (FaelinGL) >>

« » 1:36 AM 7-9-2006 Reply

VOLKSWAGEN

\*\*Racing\*\*

#### Offline

awesome DIY, all i need now is the \$\$ for a new clutch/flywheel

Member Since 9-16-2005 1879 posts

http://www.youtube.com/watch?v=kVJj5CdC8Bkhttp://www.putfile.com/bryanburnickhttp://www.villagehobbycentre.com/jokes.html

birmingham al 1999.5 jetta vr6

**(4)** 

cdkirgis

Member

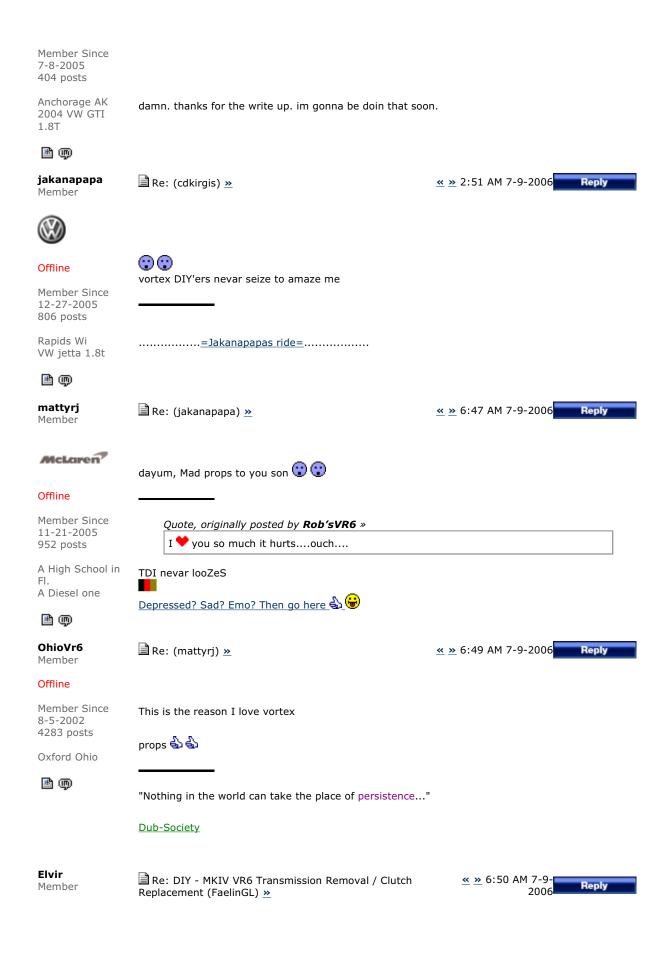


<u>« »</u> 1:39 AM 7-9-2006

VOLKSWAGEN

\*\*Racing\*\*

Offline





#### Offline

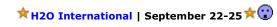
awsome, great job man!, now go do the 1.8T

Member Since 10-18-2004 6297 posts

Elvir

Durty Durty GA I drive a Mini Cooper Inspired, Vtech badged, hampster powered, VW shiftered, one wheel drive, Geo!





I cannot help but think a curious event is this life of mine.  $\widehat{igoplus}$ 





**1.8TIM** Member Re: DIY - MKIV VR6 Transmission Removal / Clutch Replacement (Elvir) >





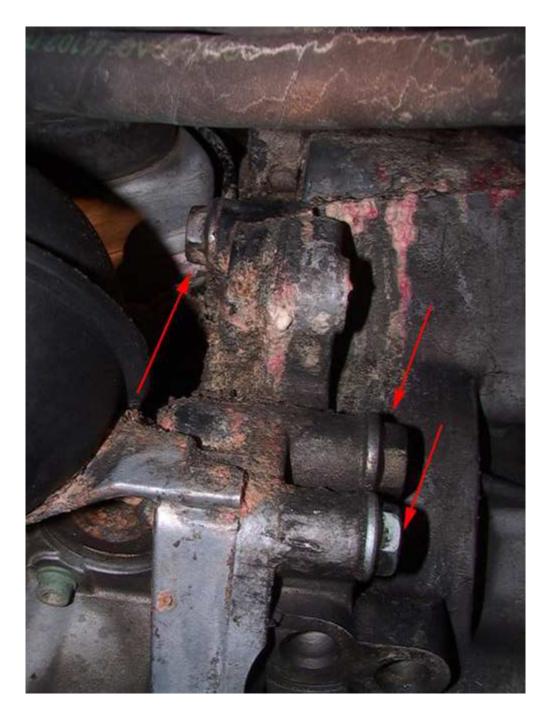
## Offline

Member Since 3-28-2002 4360 posts

QUEENS NY 2003 SS GRAY GTI 1.8T







looks like either racoon or cat meat all over there.

.....a...u...t...o...k...r...i...e...g...... **C&M Performance** Home of the World's Fastest FWD VW 9.536 @ 148.6mph

FaelinGL Member

Re: DIY - MKIV VR6 Transmission Removal / Clutch <u>« »</u> 10:20 AM 7-9-Replacement (1.8TIM) »

2006

## Offline

Member Since 11-27-2004 854 posts

Quote, originally posted by 1.8TIM »

looks like either racoon or cat meat all over there.

Charlotte NC 2000 Jetta VR6, 150k and countina.

Mike

Or a leaky T-stat housing for 30k plus miles 🙂





Tired of getting ripped off at the STEALERSHIP?

Step by step MKIV DIY Video DVD's are HERE!

50% off for Vortex Members!!!

Email me at contact@fallastarmedia.com

**Blazing GTI** Member

Re: DIY - MKIV VR6 Transmission Removal / Clutch Replacement (FaelinGL) >>

« » 10:54 AM 7-9-Reply 2006



wow, that's exactly what I needed to see! Thanks for all the excellent pictures, it's greatly appreciated!

Offline

Now I just need to figure out if I can pull it off in a weekend.

Member Since 3-31-2006 41 posts

Quote, originally posted by FaelinGL »

DIY - MKIV 12v VR6 Tranny Removal / Clutch Replacement

Culver City CA 2001 GTI 1.8T

i. Drive the vehicle to a well lit spot and chock the rear tires. You will be here for a couple of hours, so make sure you can leave the car here undisturbed.



couple hours always turns into couple days plus 9 trips to pep boys for me 🙂 🕒





"A good friend will bail you out of jail. A best friend will be in jail with you saying, "That was AWSOME!"

**SPKNGRMN** 

Member

Re: DIY - MKIV VR6 Transmission Removal / Clutch Replacement (Blazing GTI) >>

« » 11:35 AM 7-9-2006



WOW, Mike!! 🐨

Offline

I won't even ask how long it took you to write up this DIY thread.

That's unreal how thorough it is! Job well done 🗳

Member Since 7-24-2002 6421 posts

-Wes- €€€

solo ROGUE stylez Shuffle Up & Deal

Indian Trail/Charlotte NC '02.5 20VT tipMODic

GUCCI sunroof motor covers---->http://forums.vwvortex.com/zerothread?id=2763637 IM me for details 🛳



**LSinLV** Moderator Re: DIY - MKIV VR6 Transmission Removal / Clutch Replacement (SPKNGRMN) >>

« » 11:35 AM 7-Reply 9-2006



Offline

will be added to the DIY's...great stuff!!

Member Since 11-24-2001 18981 posts

Larry

Las Vegas Nevada 00 VW GTI VR6

Proudly Brought to you by Wally The Wonder Llama!!!

Futura Yellow and a verv verv mad snail...

"if you are "ballz-deep", then sadly, you have a small weenie." - My Wife

Forum Rules | FAQ's and New User Guide | Generic OBDII Codes



**VR6** Seige Memher

Re: DIY - MKIV VR6 Transmission Removal / Clutch Replacement (FaelinGL) >>





#### Offline

not looking forward to replacing my clutch, but great DIY, thanks 🗳

Member Since 9-8-2004 1317 posts

Exton/Pottstown o1 gtI vR6



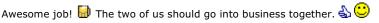


#### VgRt6 Moderator

Re: DIY - MKIV VR6 Transmission Removal / Clutch Replacement (VR6 Seige) >>







## Offline

I'm adding a link to this in my timing chain DIY. Now I don't have to put my own tranny DIY together. Thanks for saving me a ton of work (and likely my marriage too  $\mathfrak{P}$ ).

Member Since 3-7-2002 10548 posts

Do you have any more pics of the removal of the drive flange from the tranny. That almost warrants its own DIY (translate, I want more pics because I'll have to do it eventually 😇 )

Germantown MD 99.5 Jetta GLS VR6



Garv

Now: '99.5 Jetta GLS VR6 (210,000 miles and counting! ... and no CEL!!! (1)

Then: '90 Passat GL 16v - (RIP - i.e., Rest in Pain!!! in a junkyard somewhere you LEMON POS - still loved her though

- \* Free VAG-COM scans in the DC area IM me \*
- \* The Official VgRt6 MKIV/VR6 DIY Thread Master List \*

#### **FaelinGL** Member

Re: DIY - MKIV VR6 Transmission Removal / Clutch Replacement (VgRt6) >>



# Offline

Member Since 11-27-2004 854 posts

Charlotte NC 2000 Jetta VR6, 150k and counting.



# Quote, originally posted by VgRt6 »

Awesome job!  $lac{1}{2}$  The two of us should go into business together.  $rac{1}{2}$ 

I'm adding a link to this in my timing chain DIY. Now I don't have to put my own tranny DIY together. Thanks for saving me a ton of work (and likely my marriage too ᡂ.

Do you have any more pics of the removal of the drive flange from the tranny. That almost warrants its own DIY (translate, I want more pics because I'll have to do it eventually 🐨 )

Larry, thanks for the additions, it has been done. No worries Gary, I got to keep you going to 300k! BTW, did you check your clutch disc very closely? The disc on mine was in excellent condition, however I noticed a hairline fracture running along the metal in the center.

As far as the drive flange, what you see above should do it. After draining the tranny fluid, unscrew the 5 mm conical bolt and slide the flange out. Really, really easy. I would assume the driver's side is exactly the same. Make sure you have someone stepping on the brakes or you are holding the flange so it doesn't turn when you remove the conical bolt.

Mike

# Tired of getting ripped off at the STEALERSHIP?

Step by step MKIV DIY Video DVD's are HERE!

50% off for Vortex Members!!!

Email me at contact@fallastarmedia.com

hawaiian5-0 Member

Re: DIY - MKIV VR6 Transmission Removal / Clutch Replacement (FaelinGL) >>





📤 🖒 ...very nicely done..you need to have a few of these for that write up.. 🗟 🗟 🗟 🗟











Member Since 11-29-2005 483 posts

I hate the 1.8T engine

\*The Ohio State University Alum\*

princeville hi 2 bad a\$\$ rides in the 808

Quote, originally posted by Chacolla » your driveway looks like it could be used as a half-pipe for the x-games.



JamieK18T Member

Re: DIY - MKIV VR6 Transmission Removal / Clutch Replacement (Elvir) >>

<u>« »</u> 8:13 PM 7-9-Reply 2006



Quote, originally posted by Elvir »

awsome, great job man!, now go do the 1.8T

Flvir

Offline

Member Since 1-14-2002 4655 posts

not much of difference.

Louisville, KY 01 GTI, 94 Jetta, 87 Jetta Coupe

01 GTI 01 Jetta - R.I.P. 1991 Alfa Romeo 164S 1990 Civic B16A



shadowmilkman Member

<u></u> »

« » 8:19 PM 7-9-2006

VOLKSWAGEN 4Racing

#### Offline

Member Since 3-24-2006 890 posts

u should get an award for that like a little sir name on ur SN so that everyone knows that u know what the hell ur talking about, ur a winner

Bethesda MD 2003, Volkswagen Jetta 24v GLI





**bigmak** Member

Re: (shadowmilkman) »

« » 8:21 PM 7-9-2006

Reply



another great faelin diy guide.

#### Offline

Member Since 1-5-2004 22089 posts

Fairfax / Blacksburg VA mhmm



VgRt6 Moderator



#### Offline

Member Since 3-7-2002 10548 posts

Germantown MD 99.5 Jetta GLS VR6



Mikey, aim: bigmak040 | my site | 42 draft designs | melissa theuriau ♥

(23:29:25) Bellaheather: i'm such a post whore (23:29:30) Bellaheather: i cant stop

🛮 eurogruppe: holland, michigan..... 🗯 Club Whore Status 🖈

Re: DIY - MKIV VR6 Transmission Removal / Clutch Replacement (FaelinGL) >

« » 4:48 AM 7-10-2006 Reply

## Quote, originally posted by FaelinGL »

BTW, did you check your clutch disc very closely? The disc on mine was in excellent condition, however I noticed a hairline fracture running along the metal in the center.

We checked it very closely. My clutch disc had very little visible wear, even at 147k miles. There were no cracks visible (I look for them for a living, so I know what to look for  $\bigcirc$ ). Here's a pic of my clutch disc at 147k miles.



# Quote, originally posted by FaelinGL »

As far as the drive flange, what you see above should do it. After draining the tranny fluid, unscrew the 5 mm conical bolt and slide the flange out. Really, really easy. I would assume the driver's side is exactly the same. Make sure you have someone stepping on the brakes or you are holding the flange so it doesn't turn when you

remove the conical bolt.

So it just slides out easily? Perfect. I heard it was easy, but didn't realize it was that easy. Having that flange out of the way will make removing and installing the tranny 10 times easier! 🔝 🔝

Gary

Now: '99.5 Jetta GLS VR6 (210,000 miles and counting! ... and no CEL!!! (210,000 miles and counting)

Then: '90 Passat GL 16v - (RIP - i.e., Rest in Pain!!! in a junkyard somewhere you LEMON POS - still loved her though (\*\*)

- \* Free VAG-COM scans in the DC area IM me \*
- \* The Official VgRt6 MKIV/VR6 DIY Thread Master List \*

superherosean Member

Re: DIY - MKIV VR6 Transmission Removal / Clutch Replacement (FaelinGL) >>





## Offline



Member Since 2-26-2006 883 posts

That's thirty minutes away. I'll be there in ten.

pj ny 2003 VW GTI VR6

WTB: stock or stubby mirrors. indi or black. http://forums.vwvortex.com/zerothread?id=2790154



# infinityman



Re: DIY - MKIV VR6 Transmission Removal / Clutch Replacement (superherosean) »

will this DIY work the same for the 1.8t (AWP)?



VOLKSWAGEN 4Racing

thumbs up to you mang! 🕹

## Offline

Member Since 9-2-2004 2205 posts

midland mi 2002 GTI 1.8turbo AWP |Polished Montes|Shaved hatch| R/S/S/R tails|APR|3" TB|n75 H|Koni Yellows|GroundControl

Coilover kit|350/325 eibach springs|SPC camber plates|28mm neuspeed rsb|BFI upper rear tie bar|20th recaros|710N DV |10mm/20mm spacers|K&N filter|Audi TT short shift|Prothane dogbone|painted valences|Splitter|Black grill|20th headlights|Hankook RS2's|Stubby|smoked corners/repeaters|shaved painted engine bay|





# Black00vr63

Member

Re: DIY - MKIV VR6 Transmission Removal / Clutch Replacement (FaelinGL) >>





#### Offline

Member Since 6-7-2005 558 posts

Sold 03 Gti 1.8T

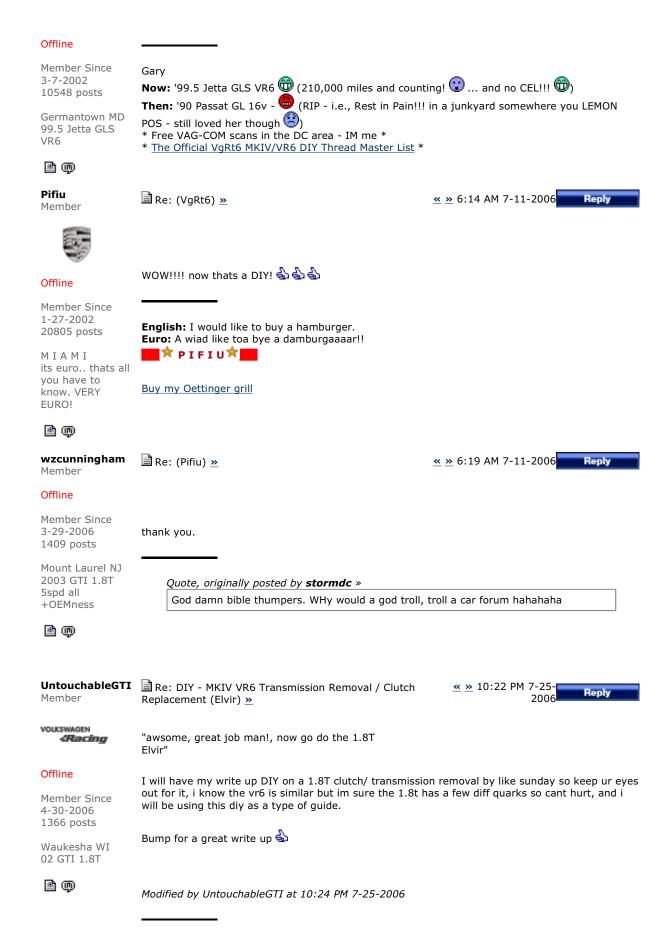
baltimore md 96 Jetta 2.Slow

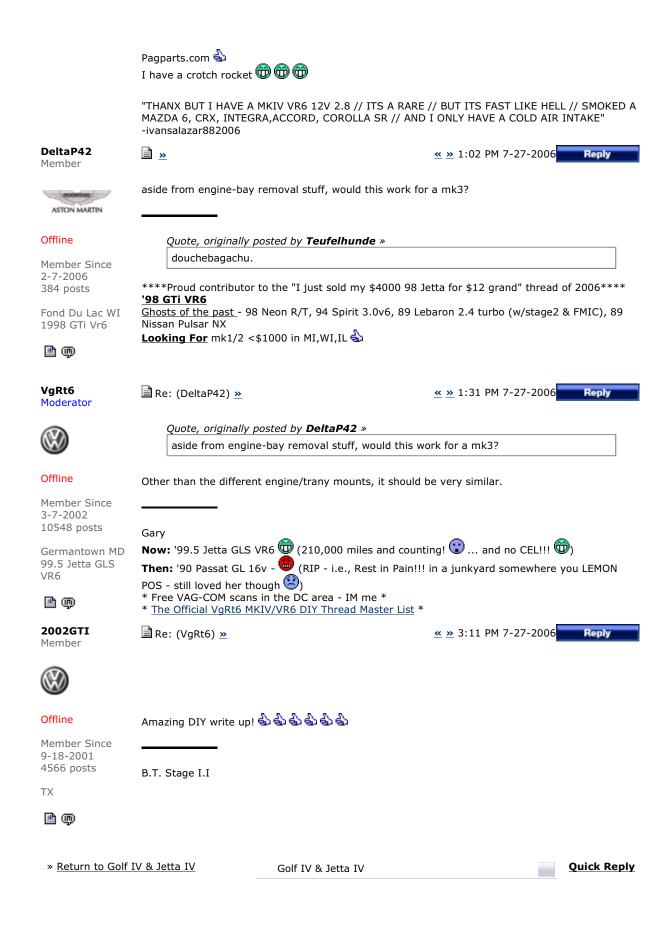
OMG! This is so sweet! I have hoped a DIY would be done before I have to do mine. Thank you so much!

"Representing Deutschland"

Gone 2000 Jetta **(4)** Vdub12 <u></u> « » 5:46 PM 7-10-2006 Member \*\*\*\*ing sweet. Offline Member Since PAGPARTS.COM 2-24-2003 **MEMORYFAB.COM** 11922 posts OPENROADTUNING.COM Down Your Throat **\*** LazyAzn <u>« »</u> 6:01 PM 7-10-2006 Re: (Vdub12) » Reply Member This should be added to the DIY section of the MK4 FAQs and with his other DIY too. Great job Offline Member Since 7-13-2003 1992 8v GTI Project in progress.... The project died Car was sold August 2005 628 posts Kensington MD 1990 8v GTI Project in progress.... The project died Car was sold 2001 GTI VR6 July 2006 🐸 1992 GTI 8V\*\*SOLD\*\* 1990 GTI 2001 VR6 GTI Project in progress... 🙂 8v\*\*SOLD\*\* **\*** • **SPKNGRMN** « » 6:18 PM 7-10-2006 Re: (LazyAzn) » Reply Member Mike **IS** the man!!! Had him over to the house today. He VAGed, scanned, cleared, coilpacked, and multiple others things while he was here. He's local, and you guys can't have him!!! 😈 Offline Member Since 7-24-2002 6421 posts -Wes- €€€ solo**ROGUE**stylez Trail/Charlotte NC Shuffle Up & Deal '02.5 20VT tipMODic GUCCI sunroof motor covers---->http://forums.vwvortex.com/zerothread?id=2763637 IM me for details 🛳 幽卿 VgRt6 Re: (SPKNGRMN) » « » 4:29 AM 7-11-2006 Moderator

This thread was added to the MKIV DIY thread in the transmission section.







**K&L Clutch & Transmission** Twin Disc Rockford PTO Clark Allison Distributor www.klclutch.com

**Clutch Kit Info** Get Info on Clutch Kit from 14 Search Engines Performance in 1 www.info.com/ClutchKit

**SpecRite** Torque Cor www.specr

For advertising information Click **Here** 

Powered by ZeroForum 2.1.2. ©2005 RelyNet, Inc.