

## Synopsis



## TOURATECH QD Couplings on R11 series BMW.

QD Couplings allow you to remove your R11xxGS gas tank with just one bolt. Since there's 40psi of pressurized gasoline in the fuel lines, it is much safer to use QD couplings which have a shutoff in each part which releases a tiny amount of fuel, and doesn't allow air into the lines.

With QD couplings, the tank can be removed in about one minute with a 6mm hex and 13mm wrench.

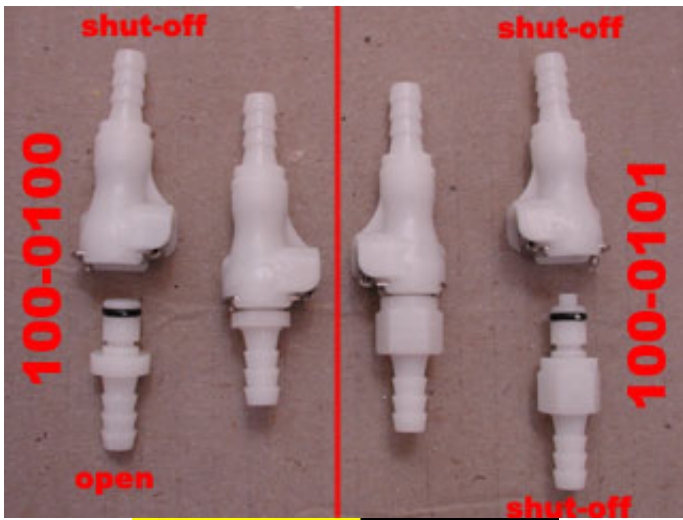
It's better to install the QD couplings with the tank **on the bike** so you get the hose lengths correct. If you want the same size connectors as on the new R1150GS-Adventure, use 2X [100-0108](#). We recommend all R11xx BMWs use the new larger body connectors (either 100-0106 or 100-0108)

**Use these suggestions at your own risk.** These instructions are new and have not been tested by independent installers. Touratech and Touratech-USA assume no responsibility for errors using these suggestions. If you have any doubts about your ability to install the couplings, please contact a professional installer.

Thanks to John Jensen of Seattle for photos and tips.

- 1) **Remove** the seat.
- 2) **Remove** the one bolt which holds the tank on. This allows you to lift the tank a little if you need more room to work.
- 3) **Disconnect** the fuel pump electrical connector.
- 4) **Position the QD couplings against the fuel lines** and mark the amount to be removed.
- 5) **One of the fuel hoses carries residual pressure (up to 40 psi). Wrap a rag around the first cut** of the fuel hose in case it's the pressure side. Be prepared to catch a small spray of gasoline as the initial pressure escapes. (!)
- 6) **Cut out** a section of hose equal to the body length of the QD couplings (less the barbs), then push the QD couplings into the hoses, in opposing directions as shown below.
- 7) **Install** the couplings. We advise that you add some kind of hose clamp. Shown in the photo are BMW hose clamps.





...for Adventure  
Touring Motorcycles  
www.touratech-USA.com

**TOURATECH part numbers:**

**100-0100** has a shutoff in the upper (female part) Lower (male part) is open straight thru. When coupling is disconnected, the upper part stops the flow. The lower part remains open. Some riders like to use this to fill their campstoves.

**100-0101** has a shutoff in both parts. When coupling is disconnected, both ends are shut-off.

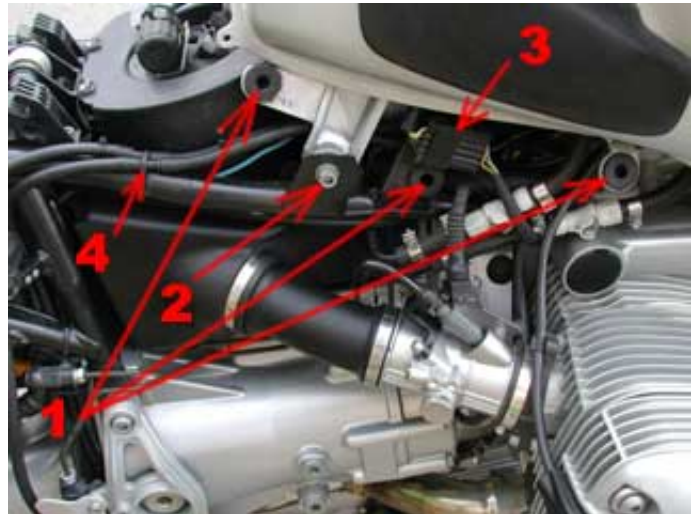
NEW part (R11)

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**100-0106** is the similar to 100-0100 above except larger size for 8mm hose.

**100-0108** is the similar to 100-0101 above except larger size (it is same as the OEM connectors on the R1150GS Adventure except in white)

The flow is open when the couplings are connected.



**With QD connectors, here's all it takes to remove the tank:**

**Remove the seat.**

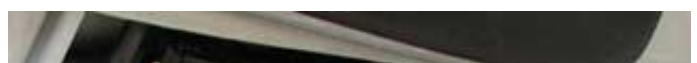
**Remove the black plastic sidecover.** A little grease/vaseline/dielectric grease in these rubber grommets **(1)** helps to remove this cover.

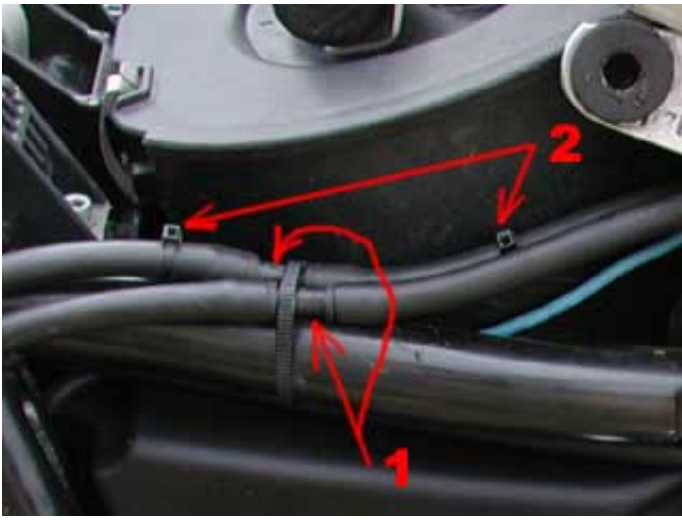
This one 8mm bolt **(2)** holds the tank on.

**Disconnect** the fuel pump electrical connector **(3)**.

**Disconnect** the vacuum lines at this connection **(4)**. See photo below.

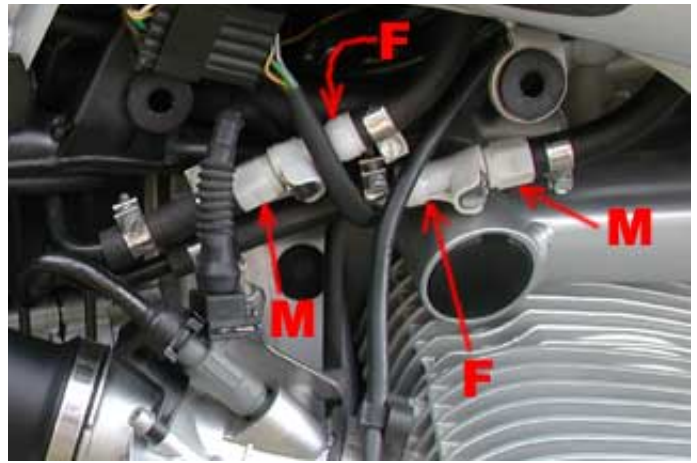
**Lift** the tank off the motorcycle.





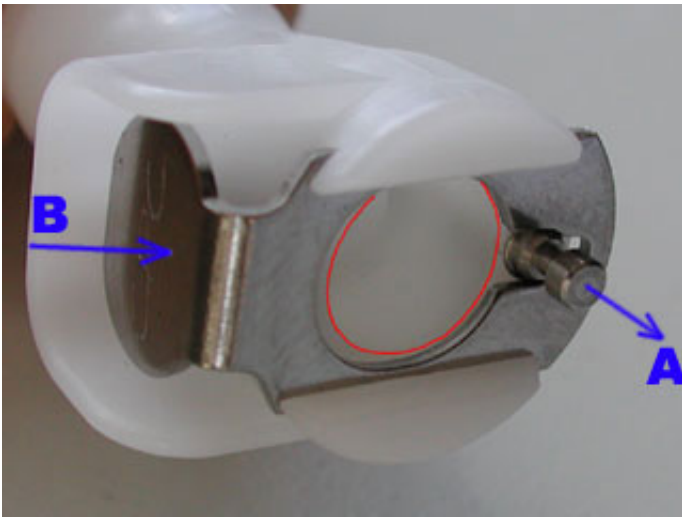
1) **Couplings** for vacuum hoses. Separate the hoses by pulling them off the couplings.

2) **Identify** these hoses to prevent you from reattaching them backwards. (In this case, simple zipties around one hose). One is a tank vent and the other is vacuum to the charcoal cannister. If you connect vacuum to the tank the engine won't run very well and if you're persistent in riding your starving motorcycle the vacuum may even collapse your gas tank!



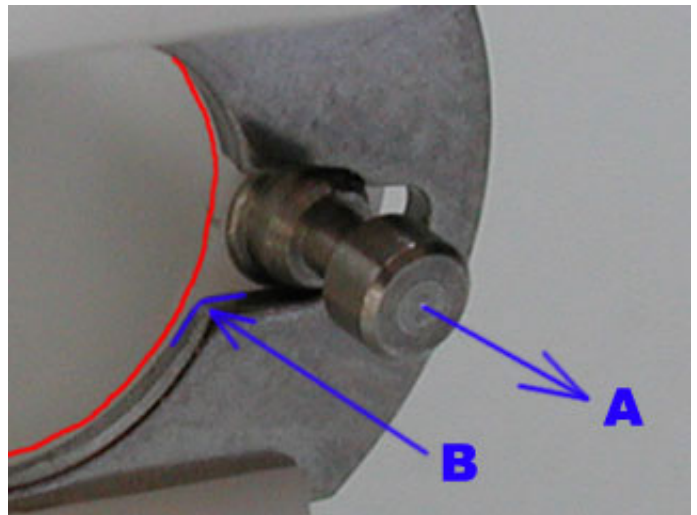
Notice that (F) **Female** and (M) **Male** parts of the QD couplings are opposing so they cannot be assembled backwards.

This model shown ([100-0108](#)) has shutoff valves in each half, so when the QD coupling is disconnected, there is no loss of pressure and no air into the fuel system. Only a tiny drop of gasoline is spilled. Touratech has been using this setup for several years but currently BMW supplies the Adventure with larger size [100-0108](#).



### Before you install your QD couplings:

Don't just cram the two parts together. Where's the romance in that? Take a moment to play with them for awhile. Study them up close for awhile and marvel in their ingenuity.



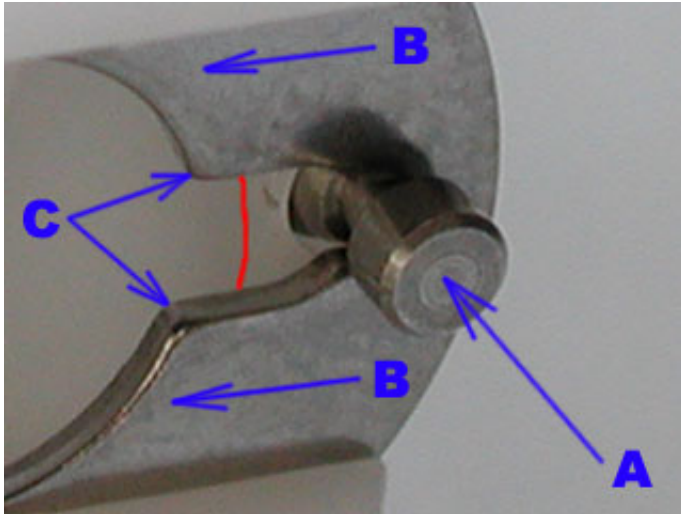
(More details)

Notice that when keeper "A" is out, **these points** ("B") are held clear of the inner diameter, and clear of the sealing o-ring.

If you try to connect the couplings without

BEFORE connecting the couplings, **ALWAYS PUSH** button "B" until you hear the audible "click" of keeper "A" snapping outward, which holds the retainer clear of the o-ring.

setting the retainer as shown, the "points" at "B" can damage the sealing o-ring on the male part.



Test it out:

If you **push keeper "A"** inward (either intentionally or accidentally) the retainer "B" slides to the left. This can happen by bumping keeper button "A" with a wrench (accidentally) while working on the bike.

"C" shows the two 'points' that will chew on the o-ring if you don't cock the retainer first.

Here you can see the 'engagement' that keeps the two coupling parts together. You can also see why you shouldn't cram them together without cocking the mechanism.

**In conclusion:** Even though the couplings connect quite nicely without 'cocking' the mechanism, don't do it - this can damage the o-ring.

Here is the manufacturer's partnumber for the o-rings:

- ("Parker Seal" partno: 2-008V75BR for 100-0100, 100-0101)
- ("Parker Seal" partno: 2-011V75BR for 100-0106, 100-0108)

It's a 'viton' seal which is necessary for use with gasoline.

[http://www.touratech-usa.com/instl/instl\\_100-0101.html](http://www.touratech-usa.com/instl/instl_100-0101.html)