



TheRock's - Jaguar F-Type AWD Transfer Case Fluid Service

As always, this is how I did it and not suggesting you do it this way or any other specific way. Do so at your own risk and in any fashion you choose to do it. This guide is simply in the spirit of offering a method that worked for me. Throughout this document I may reference and include Jaguar documentation and materials where helpful.

Some Notes & Tips First: (Much of this will be similar and pulled from my Transmission Service DIY)

- You DO NOT need to remove your wheels
- It can be done on stands, but a lift will give more clearance.
- Spray all bolts/nuts with PB Blaster or other penetrating oil and let it sit before attempting to remove anything (Overnight is best, but an hour or so will help)
- You may find other suitable fluids, but I used the OEM Shell Transfer Case Fluid TF-0870 (you only need 1 Liter...It takes about .5 Liters to fill)

Helpful Tools / Supplies:

- Various normal and 16 degree wobble extensions, 1/4", 3/8" and 1/2" inch ratchets, Metric sockets, various screwdrivers, Allen/Hex Key (14 MM) Torx bits, PB Blaster, Fluid Pump.

I will summarize the process here and then go through the steps in detail:
**** (THERE ARE TWO APPROACHES...ONE METHOD REMOVING CROSS MEMBER (A) AND ONE METHOD WHERE YOU DO NOT (B)). I will use A or B to denote steps that apply to each method below.**

- Lift and secure vehicle with Lift, Jacks, Stands, etc. **(A & B)**
- Remove the transmission vent panel – You can also remove the middle section, but not required **(A)**
- Support the transmission with a jack or other stand (Can use Transfer Case bottom) if you are going to use the method where you remove the Cross Member. **(A)**
- Continue to gain access by removing the Center Bracket - Cross member, and Transmission mount bolt **(A)**
- Place a Pan and/or cardboard under Transfer Case area **(A & B)**
- **Loosen and remove the FILL plug First!** 14 MM Hex (To be sure you can fill it after draining) **(A & B)**
- Next loosen and remove the drain plug and drain fluid from Transfer Case(14 MM Hex) **(A & B)**
- Allow the Transfer Case to drain for a bit into the catch pan until it stops dripping **(A & B)**
- Re-insert and tighten Drain Plug (44 Lb./Ft) **(A & B)**
- Use a Fluid Pump to insert hose into the Fill Plug, and Fill with OEM Spec Shell Transfer Case Fluid TF-0870 until it overflows from Fill Plug (~ .5 Liters total fill) **(A & B)**

- Tighten Fill plug (44 Lb./Ft) **(A & B)**
- Replace Bracket/Cross member, Transmission mount bolt, and panels **(A)**
- Lower car

Gaining Access:

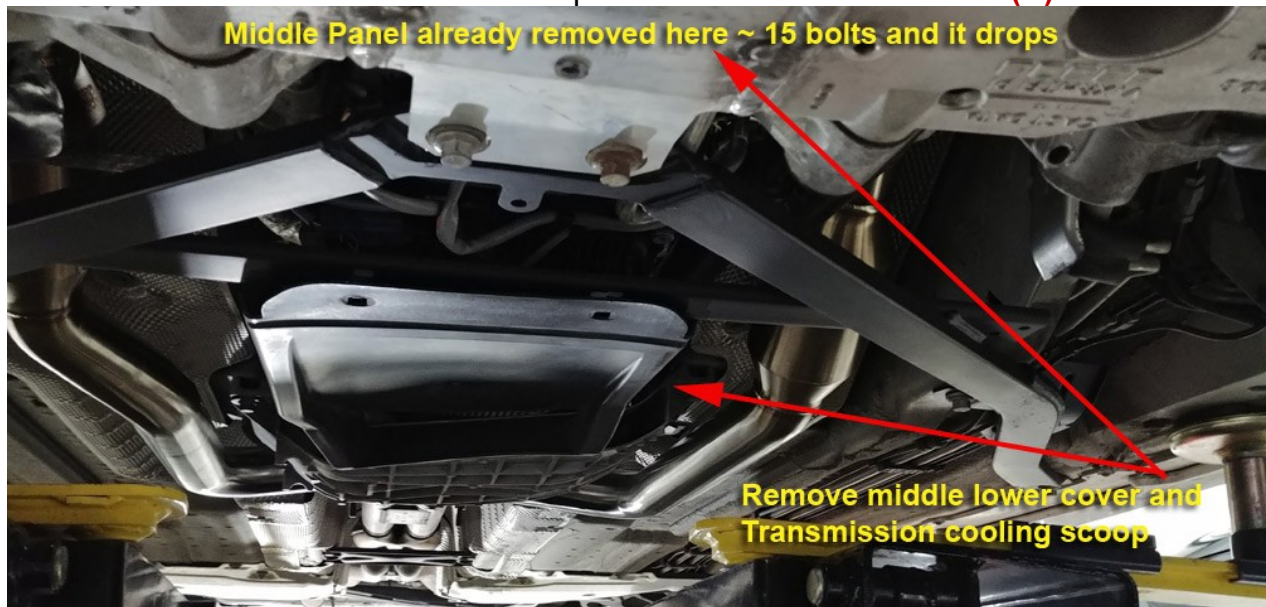
1. Lift and secure the car: (Needs to be level) **(A & B)**



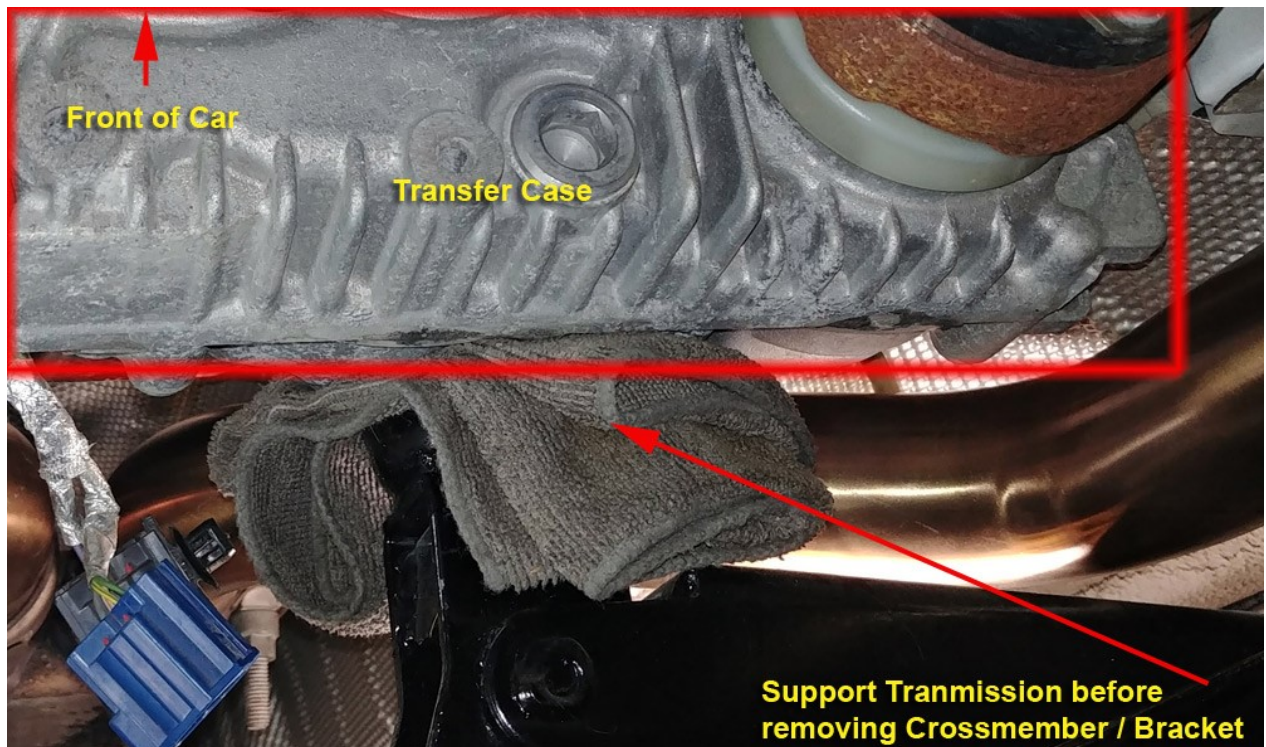
- Next, remove the middle lower panel, by removing the various bolts, and it just drops down, out of the way. You **DO NOT** need to remove the entire cover (front piece). **(A)**



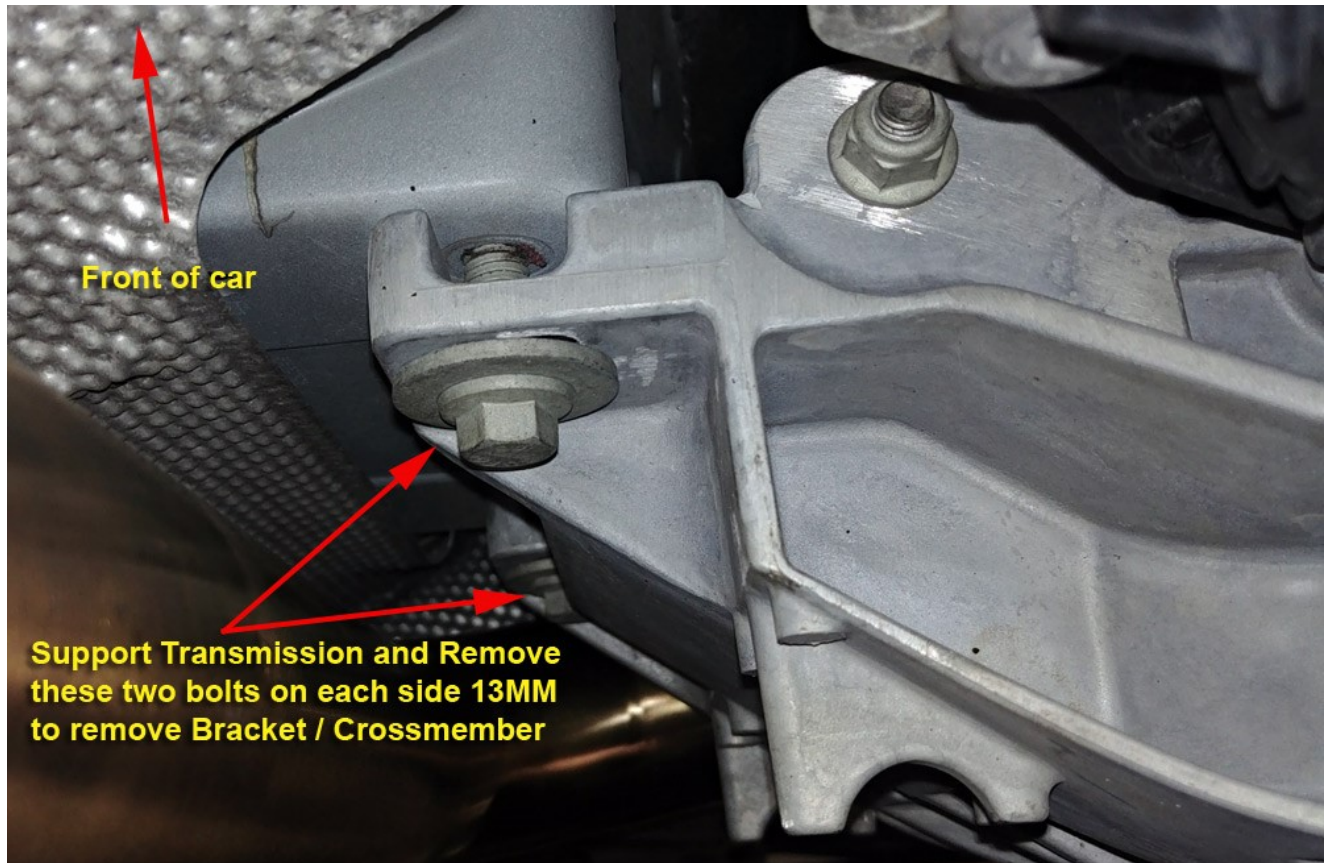
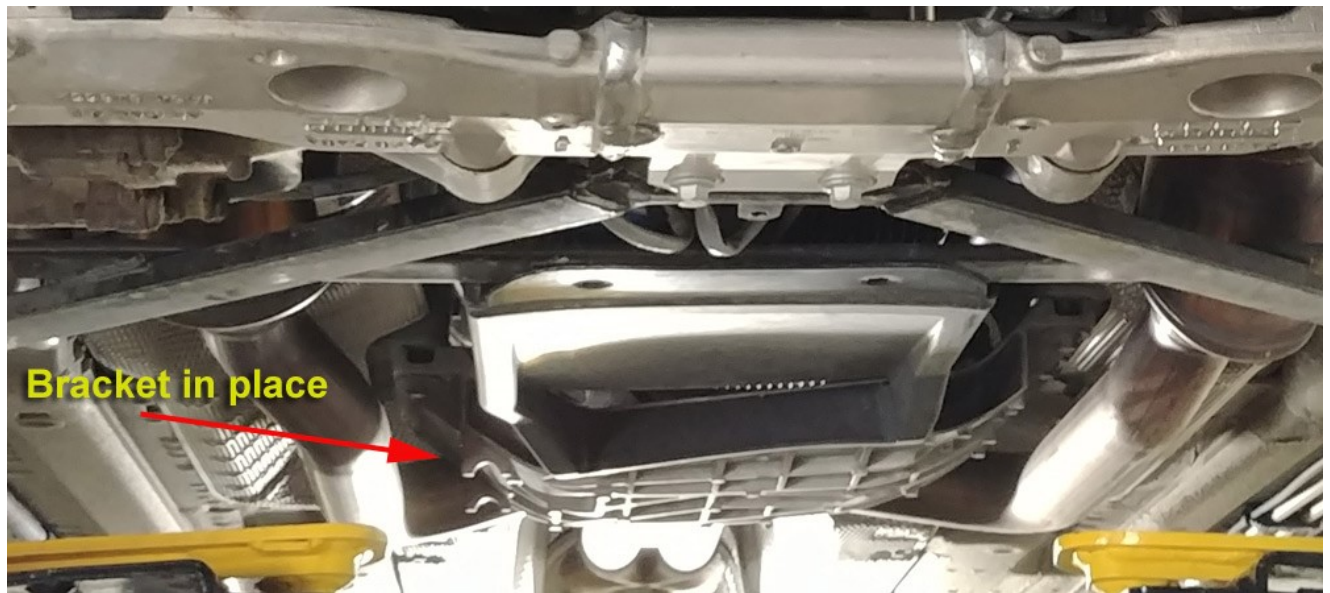
- Remove and slide transmission air scoop forward to remove as shown (A)

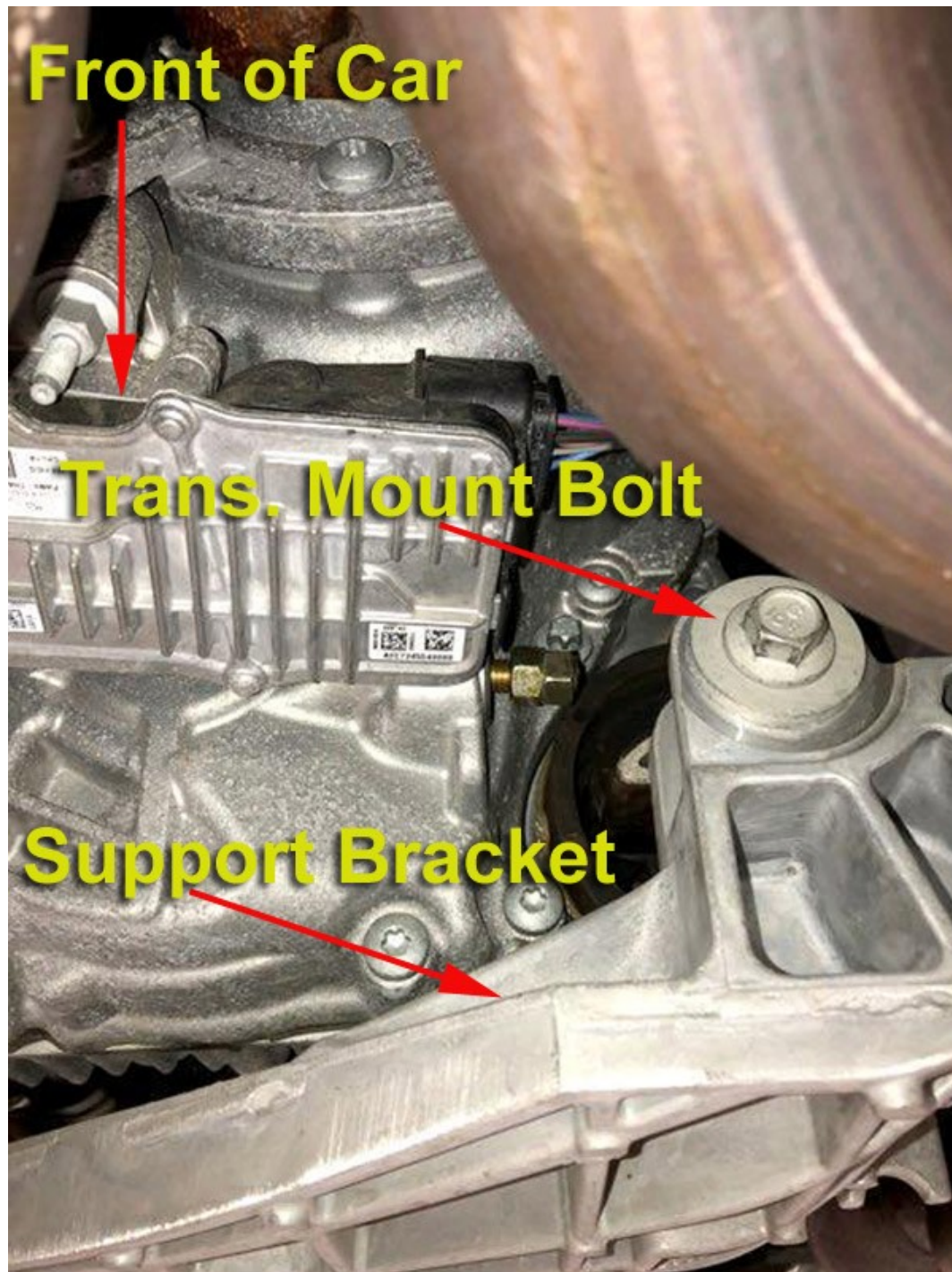


- Support the transmission with a jack or other stand (Can use Transfer Case bottom) (A)

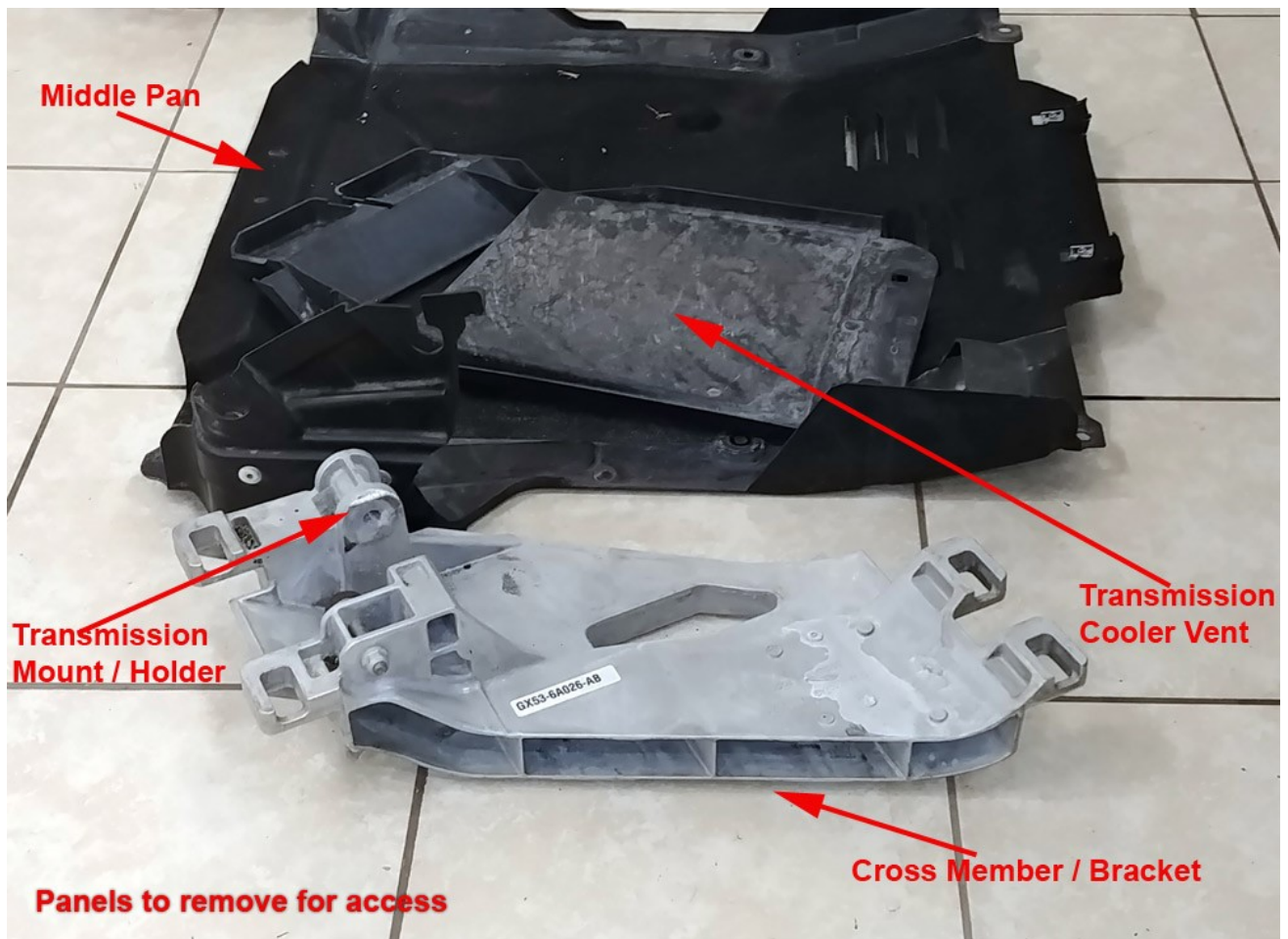


Remove center Cross Member – Bracket and Transmission Mount Bolt: (A)





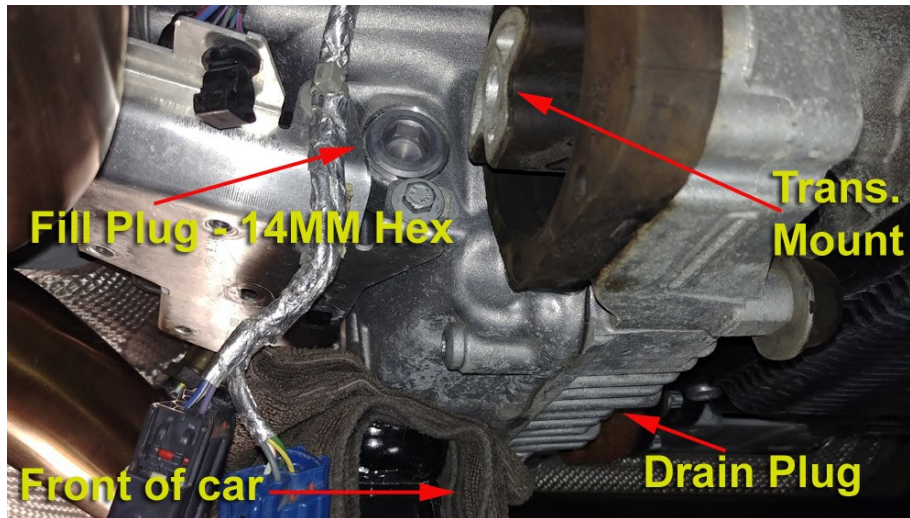
- After Bracket is removed you have good access to the Transfer Case plugs: (A)



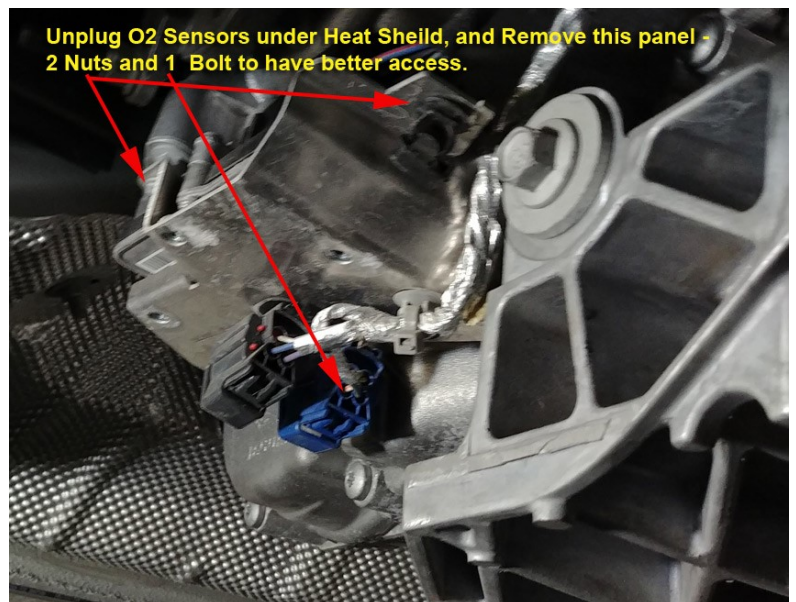
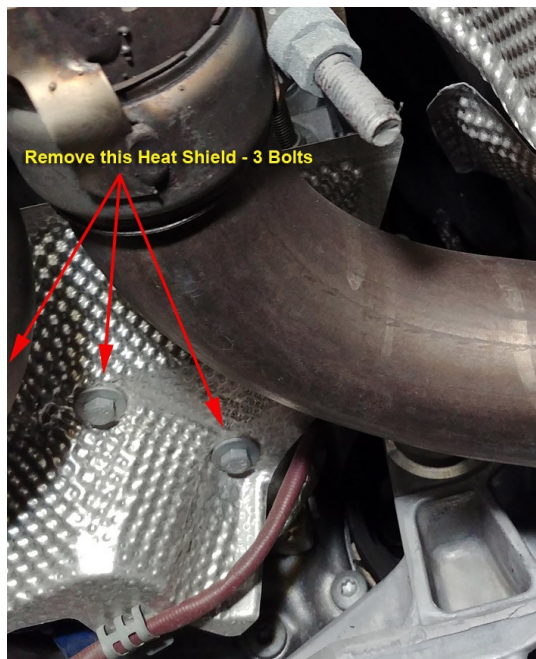
- Now is a good time to place a catch pan and/or cardboard to catch the fluid. (A & B)

- **Loosen and remove the FILL plug First - 14 MM Hex**

Method **(A)** – Cross Member Removed



Method **(B)** – Cross Member NOT Removed – Need to remove the O2 Sensor wiring heat shield and the panel and)2 plugs underneath for easier access.

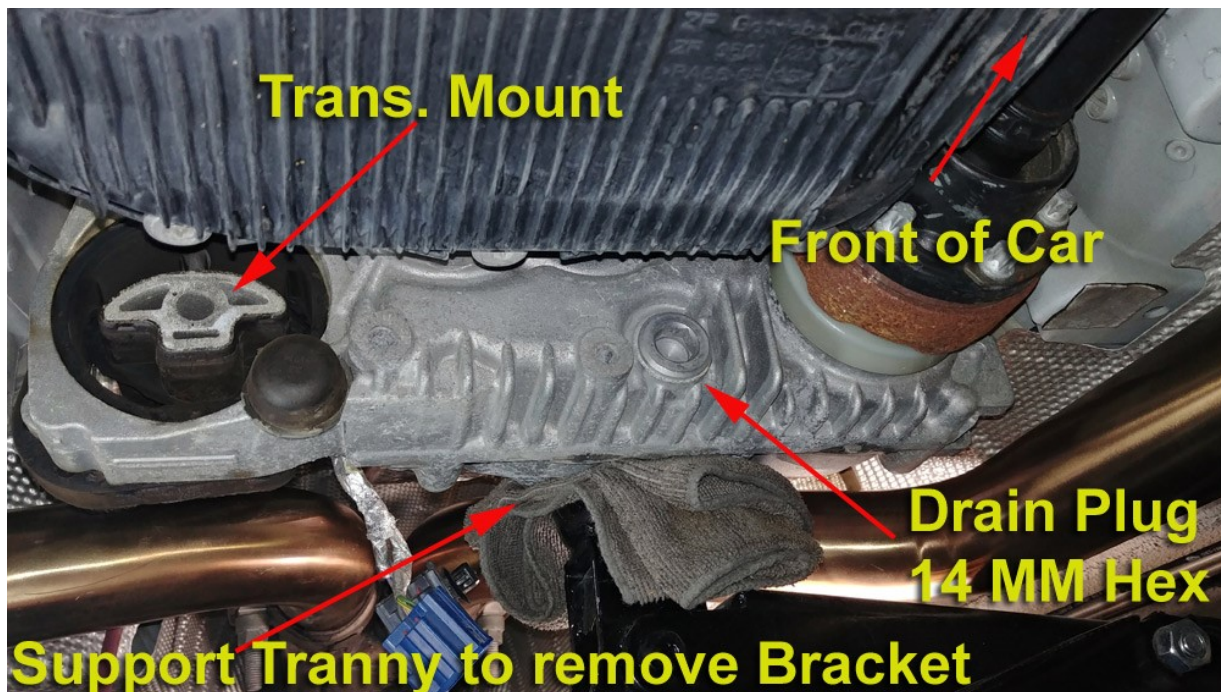


You can now use the bolt and nut method shown here, or long reach tools with 14 MM Hex to reach the Fill plug from the rear of vehicle, over the Cross Member. Be sure not to lose the green rubber seal that is attached to the head of the Fill Plug



Next loosen the drain plug and drain fluid from the Transfer Case. (14 MM Hex)... Once the plug is removed, it will drain about ~ 0.5 liters of fluid. Have the pan ready to catch the fluid.
(A & B)

Method **(A)** – Cross Member Removed

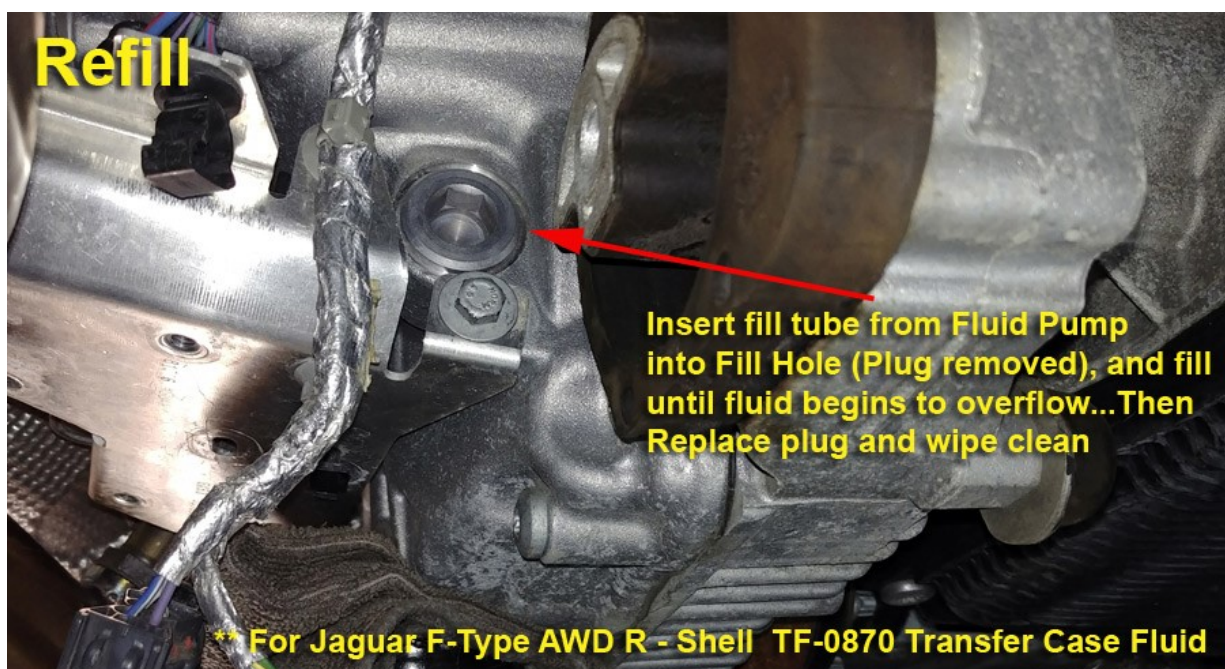
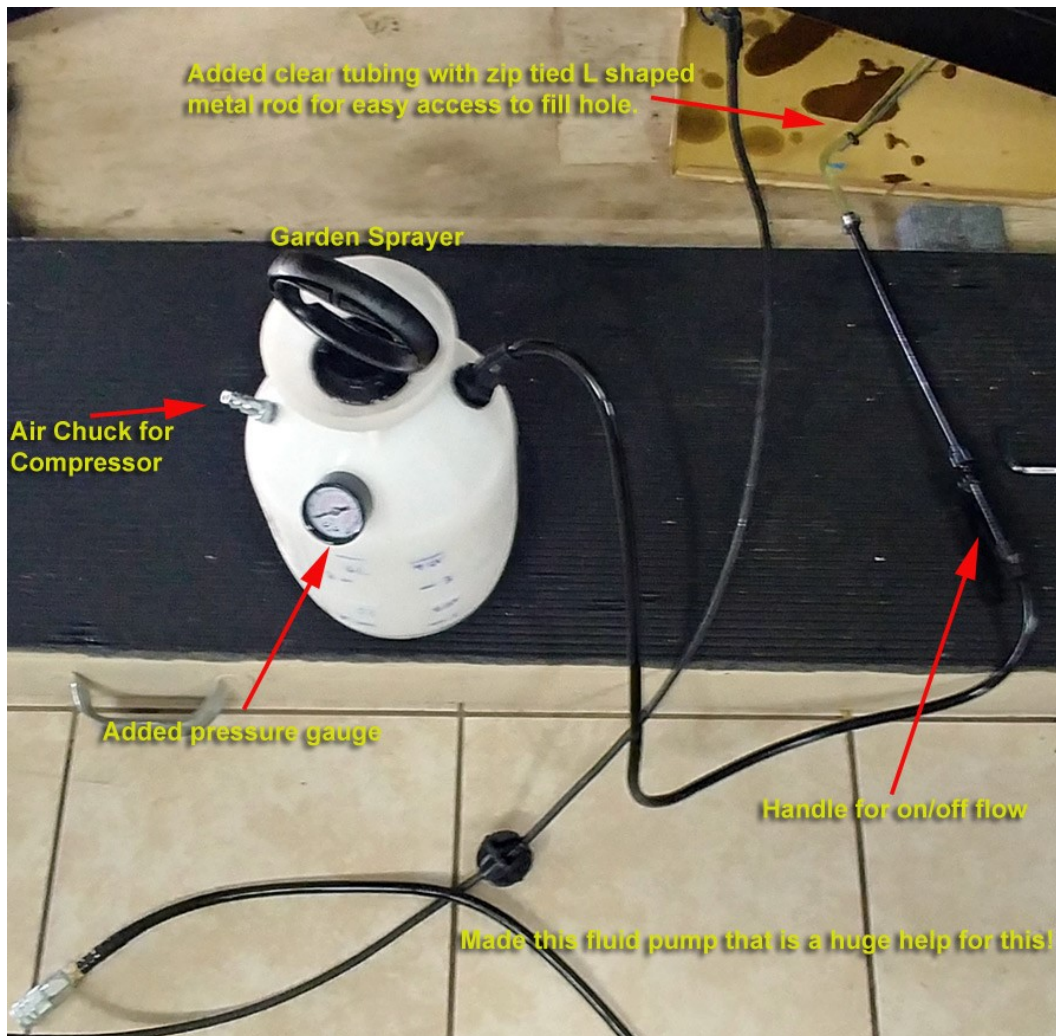


Method **(B)** – Cross Member NOT Removed



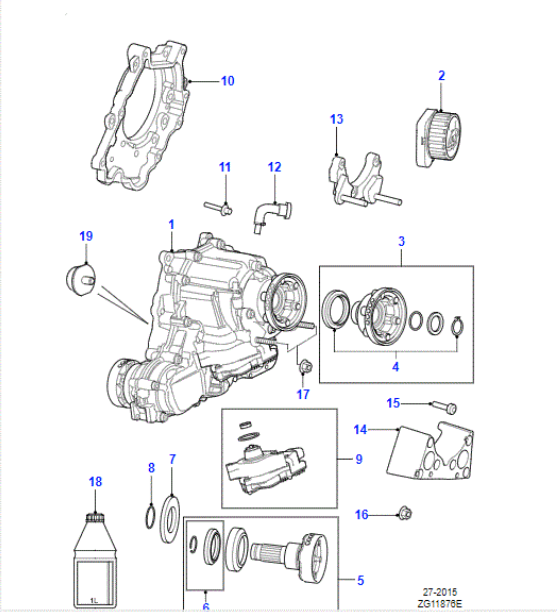
- Once fluid is drained, re-install Drain Plug and torque to (44 Lb./Ft) **(A & B)**

- Open Fill Plug, if you placed plug back earlier, otherwise insert tube in fill hole and fill with fluid until it begins to overflow. Replace Fill plug – Torque to (44 Lb. /Ft). A Fluid pump is needed here. You can make one as shown with a ~\$10 Garden sprayer. **(A & B)**



- Once the Transfer Case is filled and Plugs re-installed, you can replace Bracket/Cross Member and Transmission Mount bolt. The Transmission Mount bolt is very long, and can be difficult to remove and install. A tip, is to loosen the 4 Bracket bolts first (when removing) and then you can tip it to make room for the bolt to come out. Same for re-install. Do the Transmission Mount bolt first, then the four bracket bolts. I also loosened and lowered the right downpipe for more room. **(A)**
- Re-install braces, brackets, covers etc. **(A)**
- Lower car and you are done. **(A & B)**
- Additional Info and Specs:

C2Z25586 - JAGUAR FINAL DRIVE AND TRANSFER CASE OIL



JAGUAR

C2Z25586
Genuine OEM C2Z25586 - Jaguar Final drive and transfer case oil (C2Z25586) part for Xf 2009 - 2015, Xj 2010 > (from V00001), F-type 2014 >. Authentic Jaguar Part.

£63.52 inc VAT | £52.93 ex VAT

Availability: Not available online
This is part 18 on the illustration.

Manufacturer Warranty Minimum of 12 months	Genuine OEM Parts Directly from Jaguar Land Rover
Guaranteed Fitment Built to original specifications	Global DHL Express Delivery Within 3-5 working days

C2Z25586 is not applicable to a Jaguar Classic Vehicle. Please contact your local dealership to enquire about this part.

To locate your nearest Jaguar retailer, click here.

Transfer Case Fluid - Shell TF-0870 (1 Liter)



Transfer Case Fluid - Shell TF-0870 (1 Liter)

Part Number: 00004330563

Notes: 0.85 liter capacity.

Quantity needed: 1

Manufacturer: SHELL S-TEC **(OEM)**



Maintenance



CAUTION:

Use only Shell TF0870 Transaxle fluid. Use of any other fluids may result in a transaxle malfunction or failure.

DESCRIPTION	INTERVALS
Normal maintenance	Change the fluid at 78,000 km (48,000 miles) / 3 year intervals.

Capacities

DESCRIPTION	LITERS
Transfer case	0.50 refill (0.88 pints) (1.06 US pints)
	0.62 from dry (1.09 pints) (1.31 US pints)

Measurement

DESCRIPTION	TOLERANCE
Rear output shaft flange free play	0.16 mm - 0.30 mm

Lubricants, Fluids, Sealers and Adhesives

DESCRIPTION	SPECIFICATIONS
Transfer case fluid	Shell TF0870
Input / output shaft splines grease	Weicon TL7391
Transfer case sealant	Loctite 5970 or equivalent

Torque Specifications



CAUTION:

***New Torx bolts must be installed**

ITEM	NM	LB-FT	LB-IN
Transfer case to automatic transmission bolts	43	32	-
Transfer case fluid fill/level plug	60	44	-
Transfer case fluid drain plug	60	44	-
Transfer case crossmember bolts	48	35	-
Transfer case mounting bush bolt	103	76	-



You are Done!

Take your time...when done...you should have no extra parts if done right! 😊