

# VR-4 Automatic Transmission Flushing Guide

The following guide can be used for VR4's equipped with or without transmission coolers, both variants will be covered in this guide.

## Part's/Consumables required for this service:

- 4x 5L Containers of Mitsubishi Diamond Queen SP III ATF **MR922838**
- 1x Automatic Transmission Filter **MD752072** (Note:: all PFL and some FL VR4's have this Filter)  
(Prior to purchasing **A/T Filter MD752072** check whether your car has this filter fitted, if you have a series 2 Face-Lift VR4)
- 1x Bottle of Automatic Transmission Flush (Optional, but recommended for first time flush)



## Tools required for this service:

- 1/2" Drive Ratchet, 150mm Ext Bar, 250mm Ext Bar.
- 10mm Socket
- 24mm Socket
- Straight Screw-driver
- No2 Phillips Screw-driver
- Pliers – 1x Normal, 1x Needle Nose
- 15 Litre Bucket (preferably White plastic bucket of square orientation) (See Notes)
- Large Funnel with fine mesh filter + Small Funnel (that fits into ATF dips stick tube)
- Filter Removal Tool (solid tin snips, 250mm shifter and hammer)
- Trolley Jack and 2x Floor Stands (4 Floor Stands is ideal)

## Procedure

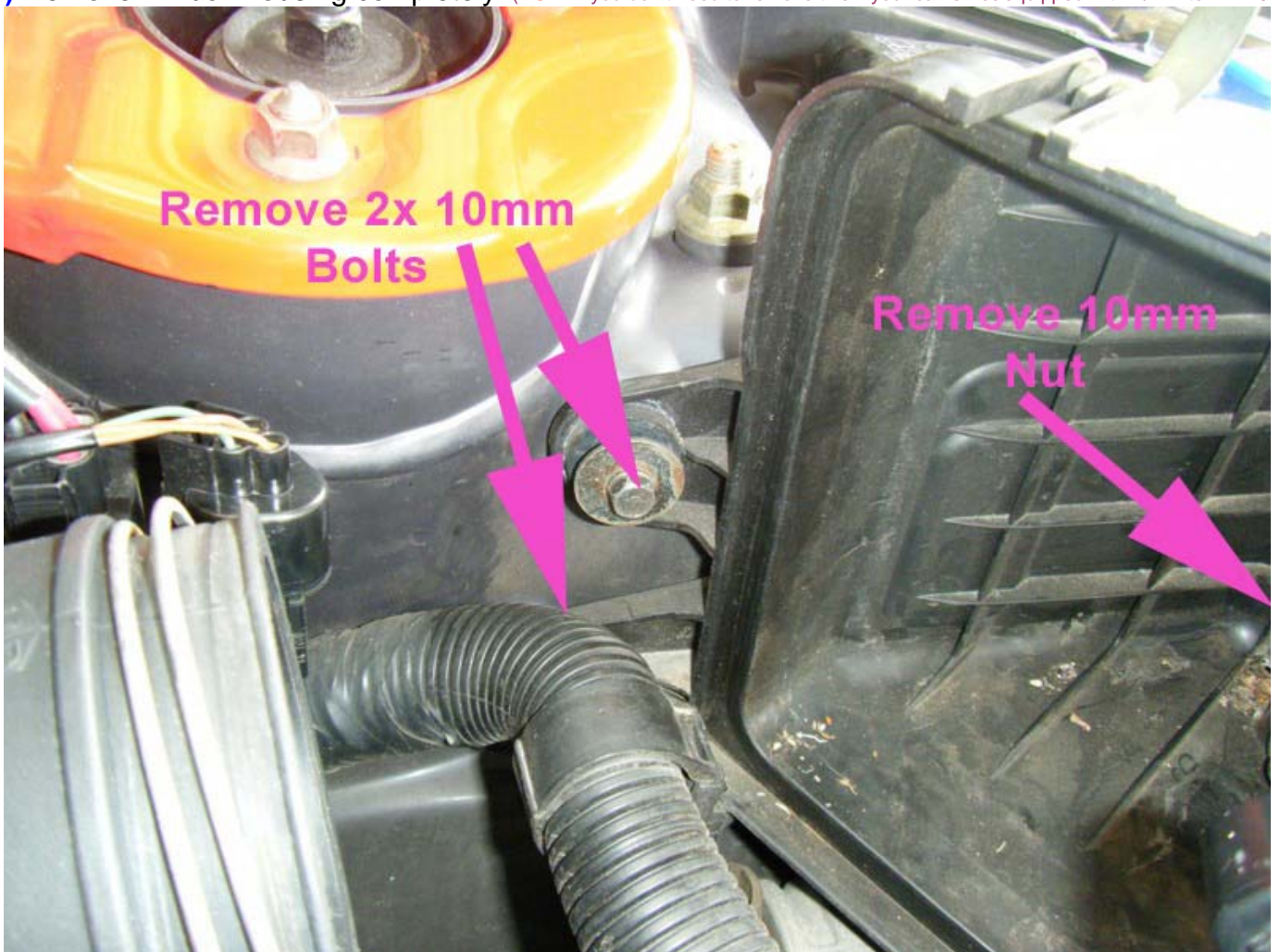
- 1.) Add bottle of Automatic Transmission Flush via A/T Dip Stick tube.
- 2.) Then drive car for 10 minutes to reach normal operating temperature, so that the flush works its way through the transmission.
- 3.) If you have a turbo timer, it's important to **disable this function now**.
- 4.) Jack Car off ground and place 2 Floor Stand's under front of car. (**Suitably** placed under car)
- 5.) Then jack rear wheels off ground, so that the car is level, but all wheels are clearly off the ground. If possible use Floor stands for the rear wheels.
- 6.) Remove Front Passenger Wheel.
- 7.) Turn steering wheel to full Left Lock, then remove keys from ignition to hold wheels pointing at full lock. (This is to allow ease of access to A/T drain plug)
- 8.) Remove Air Box Snorkel.



9.) Remove Cold Side Hose to plenum. (NOTE:: you don't need to remove this if your car is **not** equipped with A/T Filter MD752072)



10.) Remove Air-box housing completely. (NOTE:: you don't need to remove this if your car is **not** equipped with A/T Filter MD752072)



11.) Remove A/T Sump Plug (24mm) located in Passenger Wheel well and Drain Sump (Approx. 6+ Litres)



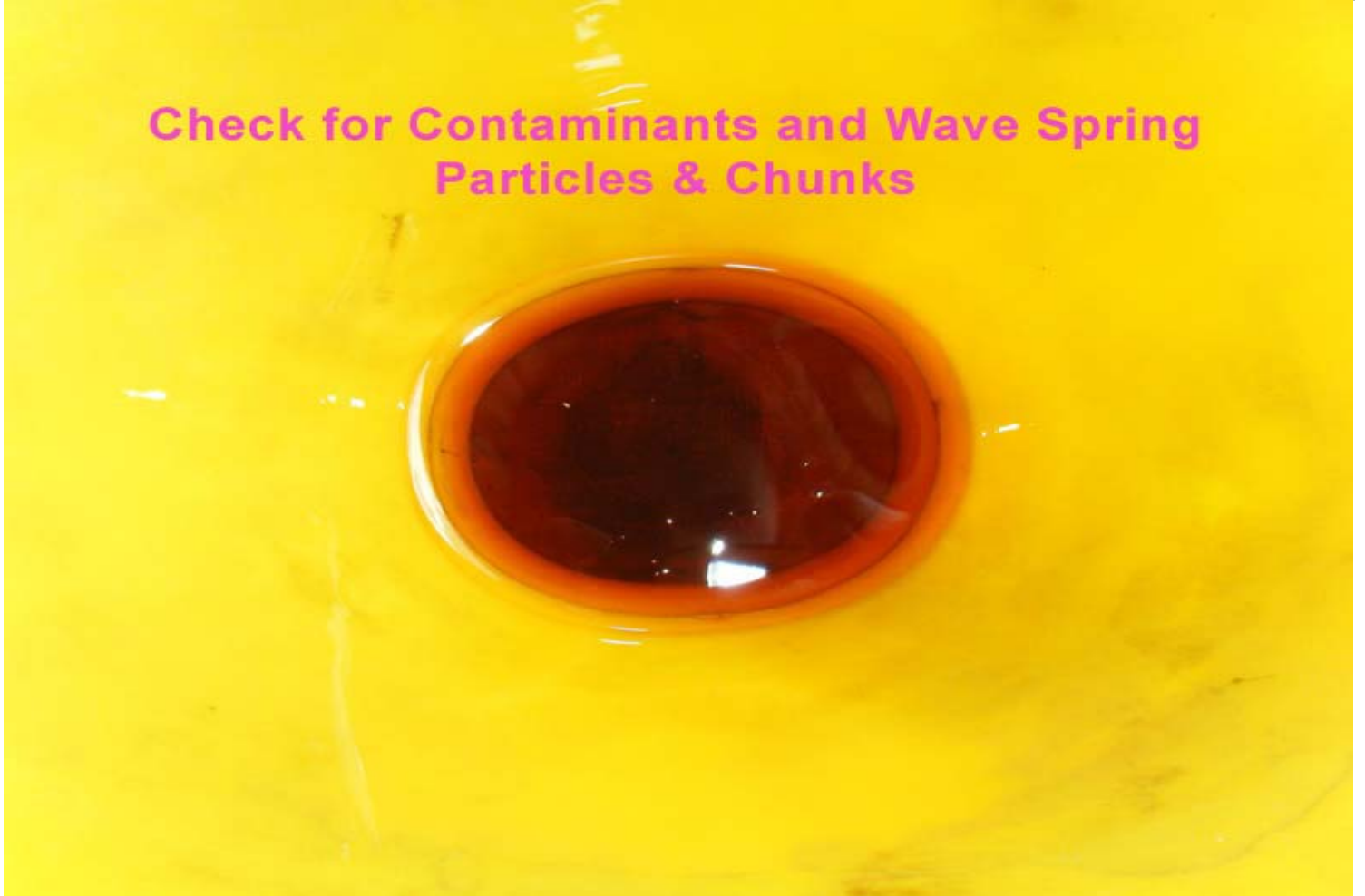
12.) Check Sump Plug magnet for metal shavings



13.) Drain discarded ATF through fine mesh funnel



Check for Contaminants and Wave Spring Particles & Chunks



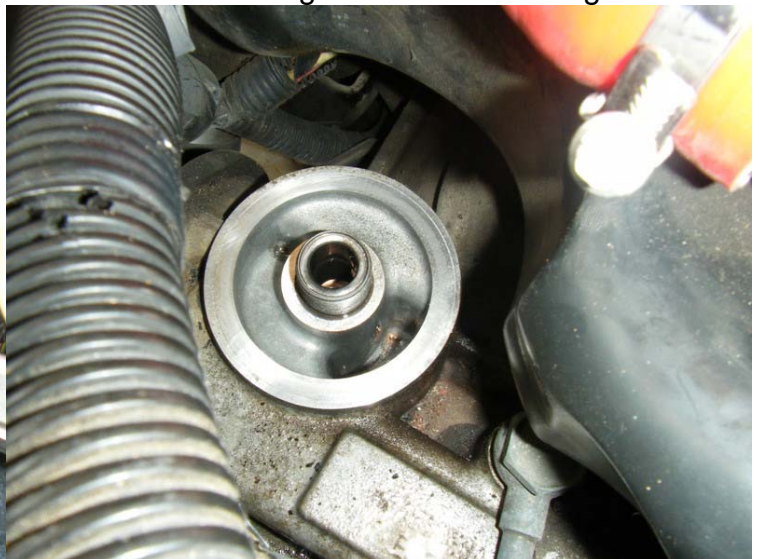
14.) Replace and tighten A/T Sump Plug to 34-Nm

15.) Remove A/T Filter (located under lower radiator hose on top of A/T casing).



It can be difficult to remove Filter, I've found driving a set of solid tin snips through top of filter and use a Shifter to undo the filter while applying downward force on the tin snip, works best. Making sure that you pierce the filter top allowing maximum usable space for turning the shifter.

Wipe Filter flange clean and remove pooled ATF fluid from oil galleries of filter flange.



16.) Smear Filter O-Ring with new ATF prior to refitting



17.) Replace and tighten Automatic Transmission Filter to 14-Nm

MD752072



At this point it's a good idea to inspect wiring insulation wrap for degradation and replace as necessary.



**18.)** Re-fit the air-box remembering to re-attach MAF Harness.



**19.)** Re-attach Cold Side Hose to plenum pipe



At this point it's a good idea to double check all work completed so far is correct, double check all bolts and clamps are attached securely.

## **PART "B"**

From here I'll cover the flushing procedure individually for VR4's without a transmission cooler fitted and for VR4's fitted with a transmission cooler.

I've sourced a couple of photo's (with owners permission) of the standard automatic transmission lines as they are plumbed beside the right hand top side of the radiator, for members that have stock standard VR4's without a transmission cooler.

**Probably the most important thing from this point is that you pay careful attention, and are constantly replacing the ATF that is being pumped out during the flush procedure.**

**WARNING DO NOT ALLOW YOUR TRANSMISSION TO RUN OUT OF TRANSMISSION FLUID IT WILL FARK IT COMPLETELY**