

# Fitting Instructions for MFK20080 VDJ7# Transmission Handbrake



# **Important Information**

This instruction booklet can be used standalone for the above stated conversion but we would also recommend having a workshop manual for your vehicle and for the engine/transmission you are installing to cover any factory torque / installation settings to complete the installation.

The instruction booklet describes the required modifications (if any) and installation process in order for our kit to fit and work properly. These instructions **make no assumption** on whether additional changes need to be considered or made. It is highly possible that other aspects of your vehicle and/or third party products, eg. Engine, transmission etc. will have an impact on all that is required for you to achieve your desired outcome.

Marks 4WD Adaptors do not and cannot take responsibility for knowing everything that may impact on your conversion. Before beginning any work, thoroughly work through the sequence of changes, work and potential impact of your conversion. You must ensure you completely understand all the factors that may impact on achieving your desired results.

MFK20080 V 1.4 Aug 2021 www.marks4wd.com Page 1

### 1 - Disassembly

Fitment is easiest done on a hoist.

Remove factory bashplate, rear tailshaft and handbrake cable.

Drain transfer case oil (24mm socket)

Remove output shaft nut and then remove output flange (30mm socket)

The O-ring behind the output flange nut will be reused





Remove black wiring plug from high/low switch and remove M8 bolt which secures the plug bracket to the transfer case



Loosen high/low switch with a 27mm spanner and carefully remove switch without damaging wiring





Remove top blank plug (24mm socket)

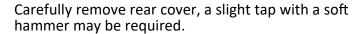
Remove M8 bolt from speedo drive blank and carefully remove blank/speedo drive.





Remove 9 x M10 bolt which secure the transfer case rear cover.

Take note of the bolt locations as they are different lengths.



Use caution when removing cover as bearing preload shims may fall out.





The output shaft spacer collar and shims will be reused

MFK20080 V 1.4 Aug 2021

### 2 - Preparation

Clean rear housing gasket surface on rear of transfer case



Clean the new Marks 4wd MFC20082 rear cover and carefully install the new output seal supplied into the housing with a press or similar





## 3 - Assembly

Apply a small amount of bearing grease to the bearing preload shims to help hold them in position when installing the new rear cover.

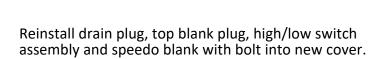
Clean surface and ensure 2x location dowels are in position.

MFK20080 V 1.4 Aug 2021 www.marks4wd.com Page 5

Apply Threebond gasket sealer to the new cover plate and carefully install onto the transfer case



Reinstall cover bolts in their correct holes, use Loctite 263 thread locker and torque to 37Nm evenly



Make sure the high/low switch is plugged in and bracket is bolted down.



Carefully remove seal flange from output flange with a suitable prybar, work slowly around the edge as this will be reused.



MFK20080 V 1.4 Aug 2021

Using a press remove factory tailshaft studs



Apply Loctite 680 retaining compound to knurled area on new studs.



Carefully press new studs into output flange.



Finish by pressing on original seal flange



MFK20080 V 1.4 Aug 2021

Place handbrake backing plate assembly onto transfer case with cable linkage on the right hand side of vehicle.

Use Loctite 263 on supplied bolts and torque to 100Nm



Place a small amount of oil onto rear output seal and flange area to prevent dry startup damage.



Place speedo drive gear onto output flange and reinstall onto output shaft



Make sure factory O-ring is positioned correctly and torque nut to 127Nm

Refill transfer case with oil.



MFK20080 V 1.4 Aug 2021

Install handbrake drum and rotate adjuster hole in drum to the 9 o'clock position.

Install tailshaft reusing original fixings to factory torques.

Using a flat blade screw driver turn adjuster wheel towards the left until the drum can no longer be turned by hand.

Now turn the adjuster wheel towards the right about 8-10 clicks or until the shoes no longer contact the



Place protective conduit on the handbrake cable and 'P' clip to chassis rail

Reuse factory handbrake cable bracket, saddle clamp and rubber floor seal from old cable.



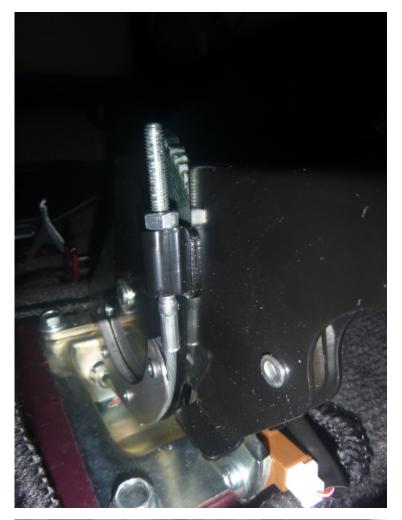
MFK20080 V 1.4 Aug 2021 www.marks4wd.com Page 9

Reconnect handbrake cable to handbrake handle and adjust as per picture



Depending on vehicle you may need to open up the handbrake guide as circled above

Check for leaks and install new bash plate (if supplied) with factory bolts and supplied U clamp.





Adjust outer cable on right hand side of drum. Free play in cable to be maintained and drum should spin freely.

MFK20080 V 1.4 Aug 2021 www.marks4wd.com Page 10

# 4 - Road test

Road test vehicle, test handbrake, check for leaks and readjust shoes/cable.

### **Terms and Conditions**

Thank you for purchasing this product manufactured by Marks 4WD Adaptors. Components supplied in this kit are designed and machined for a specific conversion only as outlined in this guide. Modifications to or substitution for any of the components without the written consent of Marks 4WD Adaptors will void any possible warranty or return privileges.

The following instructions are intended as a guide and only for Marks 4WD Adaptors kits. If you do not fully understand the steps, modifications or changes required to complete the conversion, contact our sales department for more information. We recommend that you purchase a service manual pertaining to your vehicle for specific torque values, wiring diagrams and other related information.

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MFK20080 V 1.4 Aug 2021 www.marks4wd.com Page 11