

Marks 4WD Adaptors

Installation Instructions for MFK2800IU, MFK2800GQ & MFK2800GU Speedometer Correction Unit

Important Information

Please take care when installing this product as connecting it incorrectly could result in damaging/destroying the unit. You may require a workshop manual for your vehicle to verify wiring details.

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 your instructions, workshop manual and parts to make sure you completely understand all the factors that may impact your setup.

This speedometer correction unit allows you to enter your OEM tyre size and then your new tyre size, it will then work out the adjustment required. As all tyres are different you can trim the program to suit your vehicle/tyres. You can also adjust by a percentage if you prefer.

To suit:

- Nissan GQ Patrol
- Nissan GU Patrol
- All other vehicles fitted with a INDUCTIVE TYPE electronic speedometer



MFK2800IU Universal Wiring Instructions

Step 1 – The wires will need to be run to the VSS on the transfer case – you will need to drill a 25mm hole in the firewall/transmission tunnel or possibly use an existing one. Make sure the loom is protected with the supplied grommet. **Note:** Make sure any burrs around the hole are removed.

Step 2 – Connect the **BLACK** wire to a reliable earth

Step 3 – Connect the **RED** wire to a positive (+) ignition supply

Step 4 – Locate and cut the pulse wires leading from the VSS to the speedo

Note: As it is hard to determine which pulse wire is which you may find you need to reverse the wires if the led on the front of the unit doesn't flash when you test drive the vehicle.

A rule of thumb we use is if one wire is coloured connect it to the GREEN wire and the other is BLACK connect to the BLACK wire – depending on vehicle this may or may not work but it is a good starting point

Step 5 – Connect the **LIGHT GREEN** (labelled 'Input from VSS') wire to one of the pulse wires on the VSS (previously cut in step 4)

Step 6 – Connect the **BLACK** (labelled 'Input from VSS') wire to the other pulse wire on the VSS (previously cut in step 4)

Step 7 – Connect the **YELLOW** (labelled 'Output to Speedo') wire to one of the pulse wires leading to the speedo (previously cut in step 4)

Step 8 – Connect the **YELLOW/BLACK** (labelled 'Output to Speedo') wire to the other pulse wire leading to the speedo (previously cut in step 4)

Step 9 – Use cable ties to secure the supplied loom over the top of the transmission, make sure the loom cannot get caught in the front driveshaft or any linkages.

MFK2800GQ Nissan Patrol GQ Instructions

The MFK2800GQ is supplied with a loom that has two genuine Nissan plugs fitted

Step 1 – Using a 25mm hole saw drill a hole through the transmission tunnel to allow the loom to exit the cabin. **Note:** Make sure any burrs around the hole are removed.

Step 2 – Feed the loom through the 25mm hole and fit the grommet to prevent any water leaks.

Step 3 – Connect the **BLACK** wire to a reliable earth

Step 4 – Connect the **RED** wire to a positive (+) ignition supply

Step 5 – Locate the VSS plug leading to the speedo. You should find it near the front of the gearbox on the right hand side of the gearbox in the transmission loom.

Step 6 – Unplug the connectors and plug in the corresponding plugs in the supplied loom.

Step 7 – Use cable ties to secure the loom over the top of the transmission, make sure the loom cannot get caught in the front driveshaft or any linkages.

MFK2800GU Nissan Patrol GU Instructions

The MFK2800GU is supplied with a loom that has two genuine Nissan plugs fitted

Step 1 – Using a 25mm hole saw drill a hole through the transmission tunnel to allow the loom to exit the cabin.

Note: Make sure any burrs around the hole are removed.

The position of the hole as shown in the picture below should be about 200mm forward of the M6 bolt.

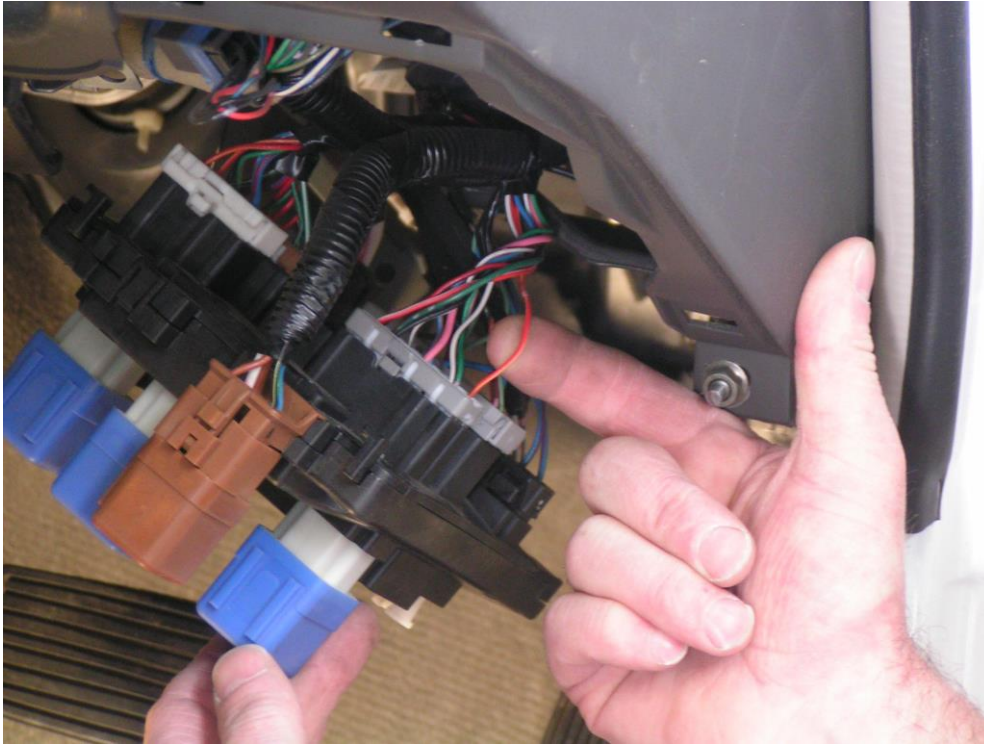


Step 2 – Feed the loom through the 25mm hole and fit the grommet to prevent any water leaks.

Step 3 – Connect the **BLACK** wire to a reliable earth

Step 4 – Connect the **RED** wire to a positive (+) ignition supply.

The photo below shows the ignition wire (Red/orange) located at the fuse box in a 2003 model 3lt turbo diesel



Step 5 – Locate the VSS plug leading to the speedo. You should find it on top of the transfer case on the right hand side in the transmission loom.

Step 6 – Unplug the connectors and plug in the corresponding plugs in the supplied loom.

Step 7 – Use cable ties to secure the supplied loom over the top of the transmission, make sure the loom cannot get caught in the front driveshaft or any linkages.

Programming the Unit

Note: You must enter data into program 2 and choose a program to run before switching the ignition off

Use one of the methods below to program your unit

1. Programming metric tyre sizes – (eg. 265/75r16)
 2. Programming imperial tyre sizes – (eg. 31 x 10.5 r15)
 3. Programming by a percentage (%) change
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1: Set metric tyre sizes eg. 265/75 r16

Enter the OEM (original) tyre size fitted to your vehicle

- Press the (Sel) key to continue
- Use the ↑ arrow until the desired tyre width is reached – press (Sel) to save & continue
- Use the ↑ arrow until the desired tyre profile is reached – press (Sel) to save & continue
- Use the ↑ arrow until the desired rim diameter is reached – press (Sel) to save & continue

Enter new tyre size – new tyre size can be entered in either metric or imperial size

For metric use above method or for imperial use the method in Section 2

Once you have entered your new tyre size select 'Choose program' and press ↑ arrow, 2 will flash, press (Sel) to run that program.

2: Set imperial tyre sizes eg. 31 x 10.5 r15

Enter the OEM (original) tyre size fitted to your vehicle

- Press the (Sel) key to continue and then the ↓ arrow to get into imperial sizes
- Use the ↑ arrow until the desired tyre diameter is reached – press (Sel) to save & continue
- Use the ↑ arrow until the desired rim diameter is reached – press (Sel) to save & continue

Enter new tyre size – new tyre size can be entered in either imperial or metric size

For imperial use above method or for metric use the method in Section 1

Once you have entered your new tyre size select 'Choose program' and press ↑ arrow, 2 will flash, press (Sel) to run that program.

3: Set percentage adjustment

- Press the ↑ arrow
- The unit will jump to Program 2 – use the ↑ & ↓ arrows to get to the preferred percentage (%)
- Press (Sel) to save

- This adjustment can be done live while on the move

Once you have reached the desired percentage select 'Choose program' and press ↑ arrow, 2 will flash, press (Sel) to run that program.

Once you have set your unit as above you will need to test drive the vehicle and compare your speedometer with a GPS. As all tyres are slightly different (brand, wear, etc) you might need to 'Trim' the program slightly to get the speedo reading where you want it.

For details on how to 'Trim' your unit see the following page

Note: We recommend giving yourself a few km/h safety margin, eg 98km/h GPS - 100km/h speedometer

Other Programming Options

Full Reset

If you want to perform a full reset and start your setup from the beginning make sure the ignition is off, press and hold both the ↑ & ↓ arrows while turning the ignition on, the screen will display 'Full Reset?'

Release arrows, press and hold (Sel) for 2 seconds and release.

Main Menu Options

Choose program -

This option allows you to select the program you want to run.

Press (Sel) and then use the ↑ & ↓ arrows to navigate to the program you want to run and press the (Sel) key.

Trim -

With this option you can adjust or 'Trim' the saved tyre selection.

Press (Sel) on Trim (Wait until the screen displays % adjustment) Use the ↑ & ↓ arrows to get to the desired adjustment – this adjustment is live so can be done live while on the move.

Once the adjustment is correct press (Sel) and either (Sel) again to save or another button to exit without saving.

New -

You can add up to 5 programs (including OEM tyre size.)

Press (Sel) on New and add programs as per page 4 of the instructions.

Clear -

If you have changed your tyres or just want to erase a specific program use this option.

Press (Sel) on Clear, use the ↑ & ↓ arrows until the desired program number is flashing and press (Sel)

Show -

This function allows you to view both (if used) the tyre size and then the percentage adjustment of each program you have saved.

Press (Sel) on Show, use the ↑ & ↓ arrows until the desired program number is flashing.

The percentage change will be displayed a few seconds after you scroll onto a program.

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 tasks, contact our sales department for more information.

We recommend that you purchase a service manual pertaining to your vehicle and the engine/transmission you are fitting for specific torque values, wiring diagrams and other related information.

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