



PART NUMBER

PFR5-4030

DESCRIPTION

BMW F8x M2, M3, M4 DIFF BRACKET

FITTING INSTRUCTIONS



CONTENTS:

1 x Aluminium Bracket 1 x M14 Bolt 1 x T-42 Thread Lock

Please read the complete fitting instructions and check package contents before fitment.

These fitting instructions are to be used as a guide only and in conjunction with a workshop manual.

It is recommended that:

- All work is carried out by a licensed technician.*
- All safety precautions are followed and adhered to.*
- Wheel alignment to be checked and adjusted as required after any suspension work.*
- All fasteners must be tensioned to the manufacturer's torque settings.*

Fitting Instructions:

Section A: Lowering of the subframe

1. Loosen rear wheel bolts slightly.
2. Raise the car on a vehicle lift to gain access to the underside.
3. Remove the exhaust from the downpipe backwards, including the heat shields. When removing the exhaust ensure the weight is supported on a jack. Note, the wires for the exhaust valves on either side need to be unplugged before lowering the exhaust.



4. Remove the plastic body panels and braces.



5. Remove both rear wheels.

6. Remove the brake calipers, supporting them to ensure there is no stress on the brake lines and protect the brake calipers to ensure that they are not damaged during this process.



7. Unplug all sensors that connect the rear subframe to the car and ensure that the hidden earth cable connected to the diff is also disconnected.



8. Remove the two bolts holding the centre prop shaft supporting bracket to allow the rear subframe to be lowered.

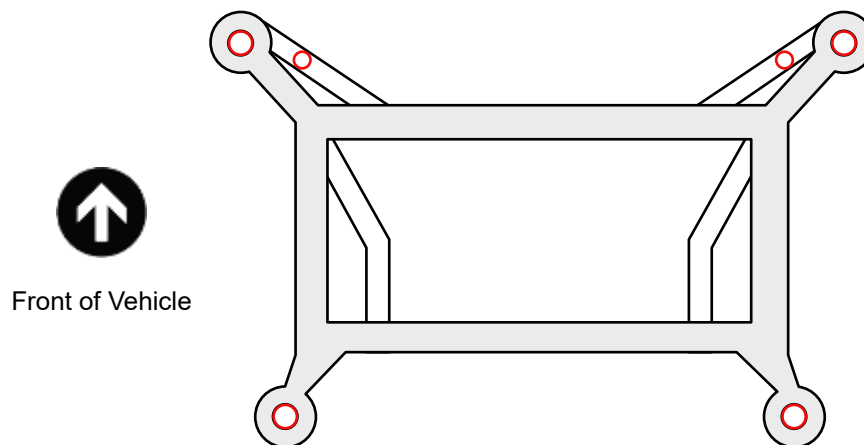


9. Support the rear diff with a padded transmission jack to prevent damaging the rear diff.

You will also need to support each side of the subframe with more transmission jacks, positioned just under the lower control arms.



10. Remove the bolts securing the subframe to the body (see diagram).



11. Lower the subframe carefully until there is enough clear access to the rear diff bush.

Section B: Removal of the OE Bracket

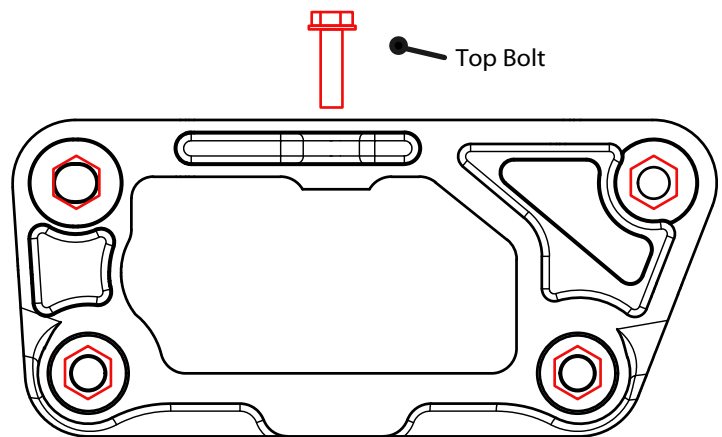
1. Remove the E12 bush damper torx bolt and the damper itself.



2. Remove the bolt from the diff bush.



3. Remove the top bolt from the OE bracket (see diagram).



4. At the front of the diff, loosen the two outer E14 torx bolts that hold the front bracket to the subframe to allow for more movement of the diff.



5. Remove the two lower bolts on the rear of the diff to allow the rear bracket to be removed.
6. Clean any dirt and corrosion from the threaded mounting holes on the diff.



7. Optional: If fitting new Powerflex bushes into both mounting positions, remove the original rubber bush firstly. Alternatively, the bracket can be used with the OE bushes.



Section C: Powerflex Bushes Fitment

1. Clean any dirt and corrosion from the vacant subframe diff mounting holes.



2. Insert the shaped Powerflex PFR5-4026A bush into the rear of the subframe and the flatter B part in from the front of the subframe.



3. Apply some of the supplied grease to the bore of the bush and stainless-steel sleeve and insert the sleeve into the bush.

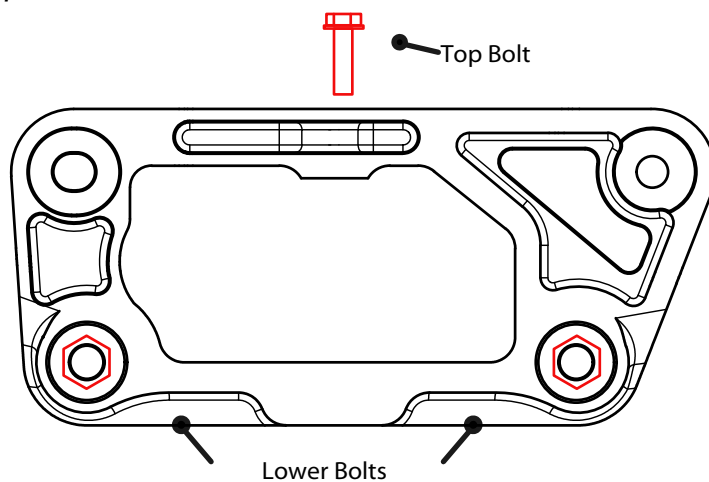
4. Repeat this process for the other mounting hole if using both bushes.

Section D: Powerflex Rear Dual-Mount Diff Bracket Installation

1. Line up the Powerflex Bracket with the mounting holes on the diff.



2. Re-fit the single top bolt and two lower bolts into the bracket with a small drop of the supplied thread lock fluid and tighten to 120Nm using a torque wrench.



3. Raise the diff back into position and re-connect the earth cable.



4. Tighten the front diff bracket mounting bolts to 120Nm using a torque wrench

5. Present the supplied anodized bush washer to the stainless-steel sleeve and shaped bush face, and re-fit the M14 bolts (one supplied, one OE re-used) with a small drop of the supplied thread lock fluid.

6. Some alignment of the diff may be required to get the bolts to start with ease. Do not force them as you may cross-thread the threads in the diff.



7. Torque the left-hand bush nut and bolt to 120Nm and the right-hand bush bolt to 90Nm using a torque wrench.



Section E: Reassembly

1. Refit the rear subframe, propshaft and brakes etc, following all previous removal stages but in reverse.



After installation, cable tie the diff temperature sensor wire, shown in the image above, to the diff oil pan. Ensure that all other sensors, wiring harnesses and bolts are refitted and torqued to the manufacturer's recommended settings.

2. Re-fit the wheels and torque accordingly.

3. Ensure that all 4 wheels are aligned after the installation.



