Installation Instructions

Exhaust Manifold MX-5 ND

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Editer:	Nico Hafner	**Vehicle:**	Mazda MX-5 ND

Scope of delivery:

- 1x Exhaust manifold fitting MX-5 ND
- 1x catalytic converter pipe fitting MX-5 ND

Warning:

Please read this instruction before installation and get in touch with the work on the car! Ideally, have the installation done by a professional workshop. Tighten all screws with the torque recommend by the manufacturer. The assembling company is liable for installation mistakes. In case of manufacturing defects, the corresponding components will be replaced without any costs within the warranty period.

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Preparation:

- Park the vehicle, switch off the engine and let the engine cool down
- Open the hood
- Remove the underbody tray and the struts from the front until the cross strut

Removing the old exhaust header:

- Loosen the connection between manifold and catalytic converter
- Push the exhaust system backwards to get the catalytic converter away from the manifold´s studs
- Loosen the heat shield of the exhaust manifold and remove it
- Remove the bracket that is mounting the manifold to the engine
- Disconnect the connector of the lambda sensor that is fitted in the exhaust manifold
- Loosen the upper nut of the right engine mount and tilt the engine to the left side of the vehicle
- Loosen the nuts of the connection of the manifold to the cylinder head
- Lift the exhaust manifold upwards out of the engine bay

Swapping the lambda sensor to the new exhaust manifold:

- Remove the lambda sensor from the old manifold
  - ➔ In case this doesn´t get loose, try to heat up the manifold around the lambda sensor
- Fit the lambda sensor in the new exhaust manifold and tighten it (Tightening torque according to manufacturer´s advice 29-54 Nm)
- Possibly you can wrap the new manifold with heat protection

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Installing the new exhaust manifold:

- Replace the exhaust manifold gasket
- Place the new manifold in the engine bay and place it safe on the studs in the cylinder head
- Tighten the nuts that attach the manifold to the cylinder head (Tightening torque according to manufacturer´s advice 43-64 Nm)
- Plug in the lambda sensor connector
- Place the engine back on the engine mount and tighten the upper nut (Tightening torque according to manufacturer´s advice 33-45 Nm)
- Replace the gasket between manifold and catalytic converter
- Line up the flange of the new catalytic converter pipe with the flange of the old catalytic converter pipe
- Mark the cutting spot on the old pipe (the spot where the new pipe narrows, because you´ll push the new pipe into the old mid-silencer)
- Cut off the old pipe in the marked spot
- Disconnect the rear lambda sensor placed in the old pipe
- Remove the lambda sensor and place it in the new pipe
- Push the new catalytic converter pipe into the mid-silencer
- Place the exhaust catalytic converter on the studs of the manifold
- Tighten the nuts that attach the manifold to the catalytic converter (Tightening torque according to manufacturer´s advice 38-52 Nm)
  - ➜ Ideally you weld the connection between catalytic converter pipe and mid-silencer. If you choose to use the delivered clamp, make sure you´ll have enough space between clamp and the cross brace underneath the car

Final work:

- Install the underbody tray and the struts you removed earlier
- Start the engine and check for any leakage of the exhaust system

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