







TECHNICAL BULLETIN TECH-04-2022

MAZDA 2.2L TWO STAGE INSTALLATION KITS OPTIONS

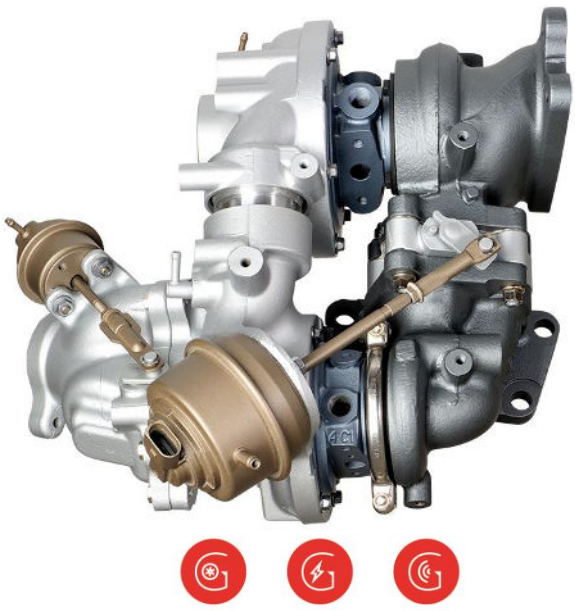
21TH APRIL 2022

Garrett
ADVANCING MOTION

MAZDA 2.2L TWO STAGE INSTALLATION KITS OPTIONS

Dear Customer, please note that new versions of the installation kits have been introduced for the Mazda 2.2L two stage.

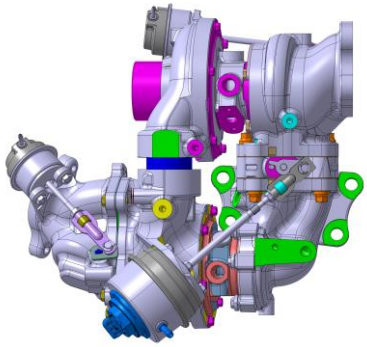
- 810358-5005S
  - Fully assembled 2 Stage turbochargers
- 810356-5001S - **NEW**
  - HP Turbocharger - Model GT1238Z (bottom turbo)
- 810357-5003S - **NEW**
  - LP Turbocharger - Model GT1752S (top turbo)
- 906760-5001S - **NEW**
  - HP Turbocharger with Turbine bypass valve
    - HP Turbocharger with Turbine bypass valve, actuator, studs, nuts and gaskets
- 898981-5001S - **NEW**
  - Turbine bypass valve kit
    - Turbine bypass valve with studs, actuator, cold de-coupler, retaining ring (for rod end), nuts and gaskets
- 898982-5001S - **NEW**
  - Compressor bypass valve kit
    - Compressor bypass valve with actuator, bolts and gasket



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810358-5005S

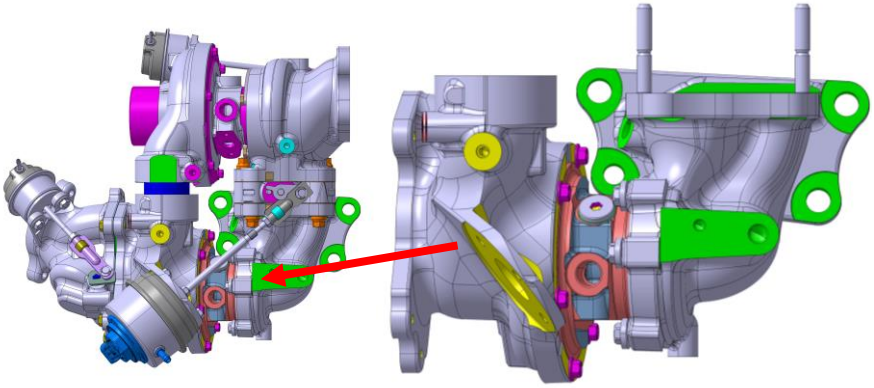
Fully assembled 2 Stage turbochargers



810356-5001S

HP Turbocharger GT1238Z

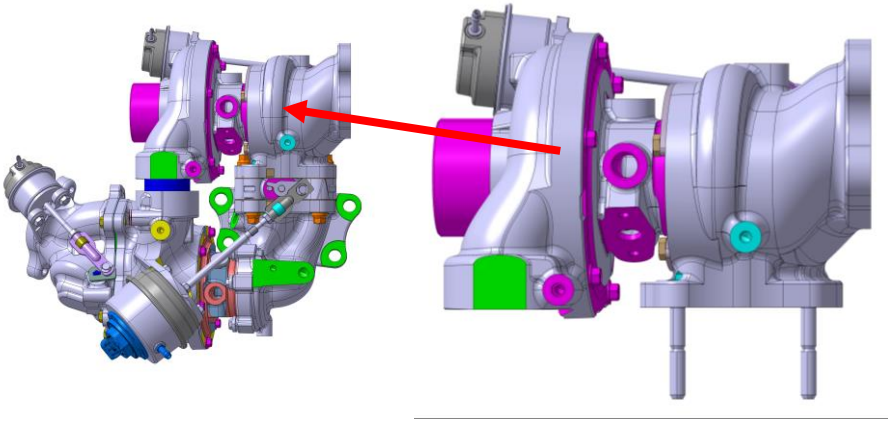
- bottom turbo



810357-5003S

LP Turbocharger GT1752S

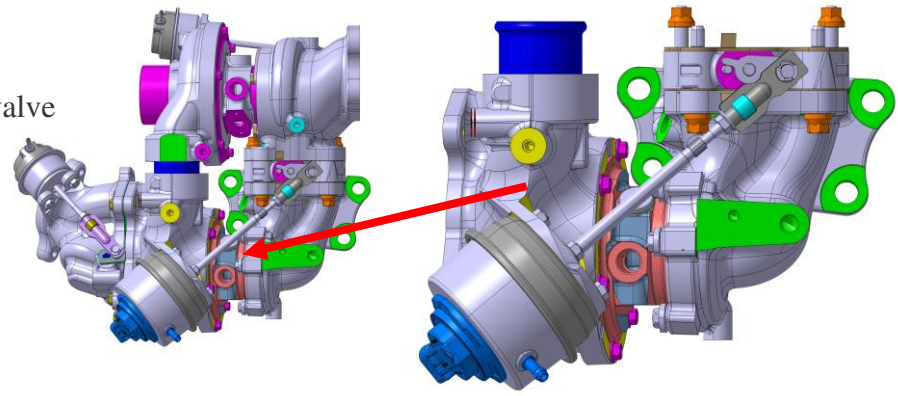
- top turbo



906760-5001S

HP Turbocharger with Turbine bypass valve

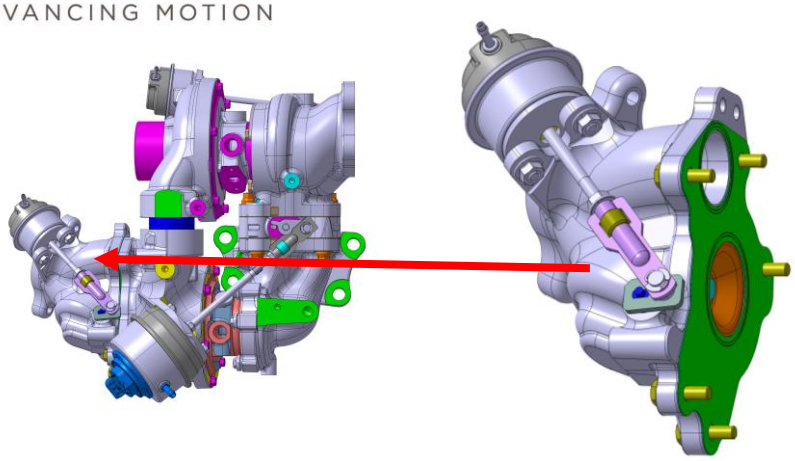
- 1 pc HP Turbocharger GT1238Z
- 1 pc Turbine bypass valve
- 4 pcs HP & LP turbine inlet studs
- 4 pcs HP & LP turbine inlet nuts
- 1 pc Hot gasket (HP turbo side)
- 1 pc Hot gasket (LP turbo side)
- 1 pc Retaining ring (for rod end)
- 1 pc Cold decoupler



898982-5001S

Compressor bypass valve kit

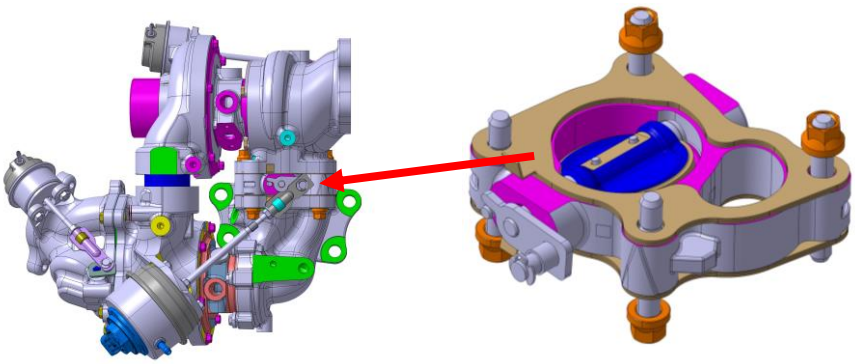
- 1 pc Compressor bypass valve assy
- 5 pcs Bolt
- 1 pc Cold gasket



898981-5001S

Turbine bypass valve kit

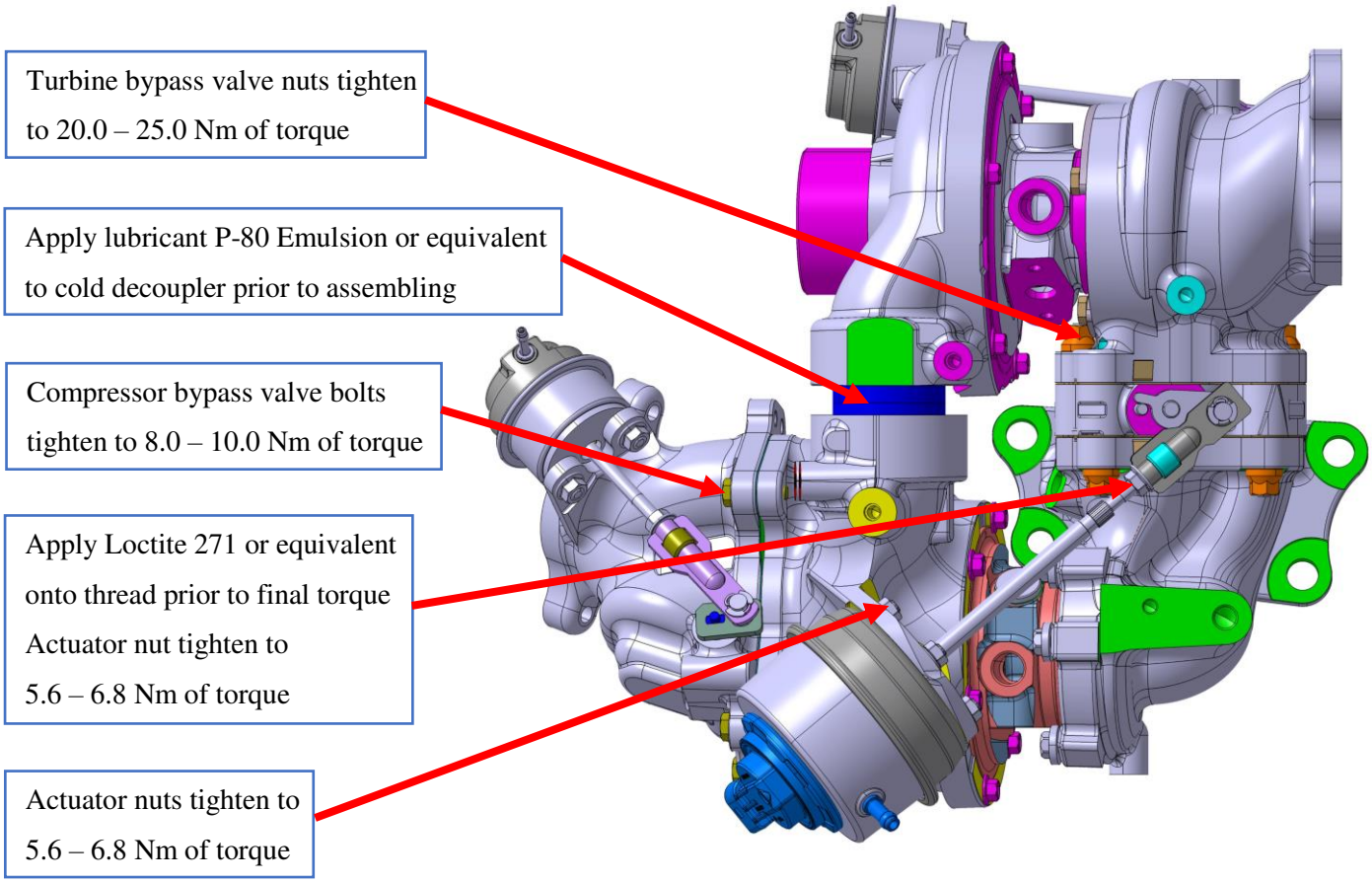
- 1 pc Turbine bypass valve
- 4 pcs HP & LP turbine inlet studs
- 4 pcs HP & LP turbine inlet nuts
- 1 pc Hot gasket (HP turbo side)
- 1 pc Hot gasket (LP turbo side)
- 1 pc Actuator.
- 3 pcs Nut
- 1 pc Retaining ring (for rod end)
- 1 pc Cold de-coupler.



Turbine bypass valve actuator calibration procedure

- Rod-end length setup
    - Go to mechanical hard stop (valve closed) by applying vacuum 600 ± 5 mBar and set stroke to 0 = to Fully Closed Hard stop – mechanical hard stop when bypass valve is fully closed
    - Apply vacuum 372 ± 5 mBar and adjust rod end to set stroke to 0.5 ± 0.1 mm
    - Apply torque on Rod-end nut (5.6 – 6.8 Nm)
- Rod-end length re-checking
    - Apply vacuum 600 ± 5 mBar again and reduce vacuum till stroke is 0.5 ± 0.1 mm
    - Confirm vacuum is 372 ± 10 mBar

Installation instruction



Please distribute this information to all in your company who may need it.

Best Regards,
IAM Technical specialist support team.
Garrett – Advancing Motion