# INA Installation Guidelines

Schaeffler Thermal Management/538 0360 10
For VW 1.8/2.0 TFSI, engine code EA 888
with longitudinal and transverse engines

**Please follow these Instructions
in the order they are given**

APPLIES ONLY TO TRANSVERSE ENGINES

- Take the engine cover off by removing the three mounting screws and lifting central front section. When it pops loose, remove the engine cover.

- Remove the coolant hose by undoing the hose clamp on the air duct and sliding the end of the hose off.
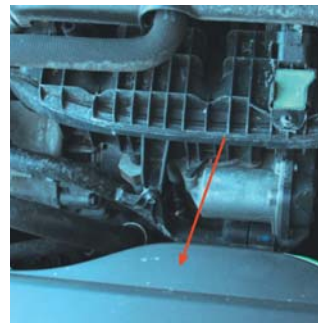
APPLIES TO TRANSVERSE AND LONGITUDINAL ENGINES

- Remove the lower sound insulation. Drain the coolant into a container.

APPLIES ONLY TO TRANSVERSE ENGINES

- Take the charge air hose off of the intercooler and unplug the charge air sensor. Remove the air duct hose mount. Loosen the hose clamp on the throttle valve control unit. Pull the air duct hose down and push it out of the way.

APPLIES ONLY TO LONGITUDINAL ENGINES

- Slide the charge air hose off the throttle value control unit.

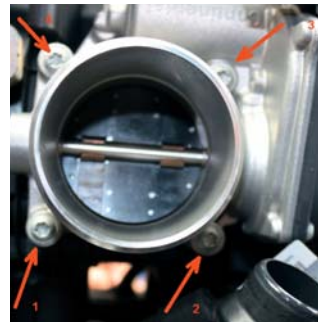- Pull out the charge control plug at the back of the alternator.

APPLIES TO TRANSVERSE AND LONGITUDINAL ENGINES

- Pull out the electric plug connector on the throttle valve control unit.

- Take out the screws of the throttle valve control unit and remove it.
  Important – loosen the back screws first!

APPLIES ONLY TO TRANSVERSE ENGINES

- Unscrew the coolant tube from the intake manifold.

APPLIES TO TRANSVERSE AND LONGITUDINAL ENGINES

- Carefully remove the coolant hoses from the thermal management module (TMM) by raising the retaining clips on the hoses.

- Pull out the electric plug of the TMM by pulling out, then pushing in, the connector lock.

- Unscrew the plug holder below the inlet manifold.
 **Important – unscrew the screws at the back first!**

APPLIES TO TRANSVERSE AND LONGITUDINAL ENGINES

- Remove the timing belt guard at the back of the TMM by loosening its two screws.

- Pull out the oil pressure switch plug using the same method as for the TMM plug.
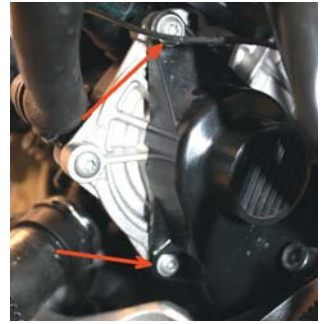
- Completely remove the TMM drive belt. Loosen the mounting screws on the balancer shaft by turning them three times.

  Caution – left-hand thread. Make sure the engine does NOT turn with it (drive shaft disc)!
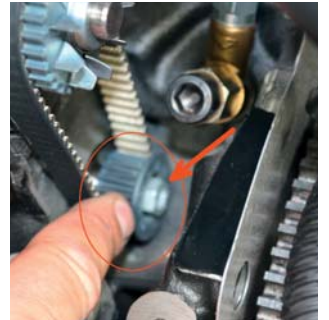
- Remove the screws of the TMM with a T30 Torx key. Then slide the TMM off the oil cooler and lift it carefully out of the engine compartment.

- Replace the drive belt and mounting screws. These are included with the 538 0360 10 set. Tighten the screws using the following torque: **9NM +90°**


- Carefully place the completely assembled TMM (538 0360 10) into the engine compartment. Mount the connecting tube back onto the TMM, and then push the other end onto the oil cooler port.

APPLIES TO TRANSVERSE AND LONGITUDINAL ENGINES

- Snap the TMM into the fixation points on the engine block.
  Tighten the TMM mounting screws in the correct order using 9NM of torque.

- Lay the drive belt onto the TMM and the balancer shaft.
  Tighten the balance shaft cone (9NM +90°).

- **Caution – left-hand thread. Make sure the engine does
  NOT turn with it (drive shaft disc)!**

- Mount the drive belt guard at the back of the TMM, and tighten
  both screws on the TMM to 9NM.

- Remount all engine parts that were removed.

- Mix coolant G13 or G12 according to manufacturer specifications.
  Then fill the cooling system using a pressure flush and fill machine
  that uses between 6–10 bar of pressure.
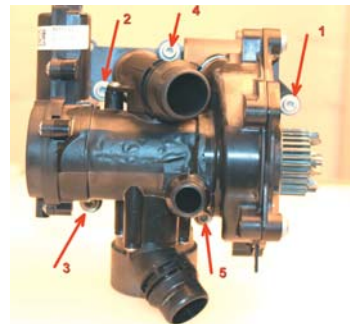
APPLIES ONLY TO LONGITUDINAL ENGINES

- To vent the system, open the valves of the cooling circuit using a
  vehicle diagnostic tester's "Cooling circuit venting" routine.

APPLIES TO TRANSVERSE AND LONGITUDINAL ENGINES

- When the expansion reservoir is filled to Max, screw the lid on. Start the engine,
  set the heating temperature to High and turn off the air conditioning compressor.
  Run the engine at 2000 rpm for 3 minutes.

- Let the engine idle until both of the large coolant hoses are warm to the touch.
  Then run the engine at 2000 rpm for 2 more minutes.

- Turn the engine off and let it cool back down. Once the engine is cool,
  check the coolant level in the expansion reservoir and correct if necessary.
  Put the lower sound insulation back on.