



How to change lambda  
sensor on **TOYOTA**  
**Alphard / Vellfire II**  
**(AH20)** – replacement  
guide

## SIMILAR VIDEO TUTORIAL



This video shows the replacement procedure of a similar car part on another vehicle

### Important!

This replacement procedure can be used for:

TOYOTA Alphard / Vellfire II (AH20) 3.5, TOYOTA Alphard / Vellfire II (AH20) 3.5 4WD

The steps may slightly vary depending on the car design.

This tutorial was created based on the replacement procedure for a similar car part on: TOYOTA Yaris II Hatchback (XP9) 1.3 VVT-i (SCP90\_)

REPLACEMENT: LAMBDA SENSOR – TOYOTA  
ALPHARD / VELLFIRE II (AH20). LIST OF THE TOOLS  
YOU'LL NEED:



- Wire brush
- WD-40 spray
- All-purpose cleaning spray
- Electronic spray
- High-temperature ceramic grease
- Torque wrench
- Flare nut wrench #22
- 22-mm oxygen sensor socket
- Thread tap
- Ratchet wrench
- Flat screwdriver
- Nippers
- Crimping pliers
- Heat gun
- Fender cover

**Buy tools**

Replacement: lambda sensor – TOYOTA Alphard / Vellfire II (AH20).  
 AUTODOC experts recommend:

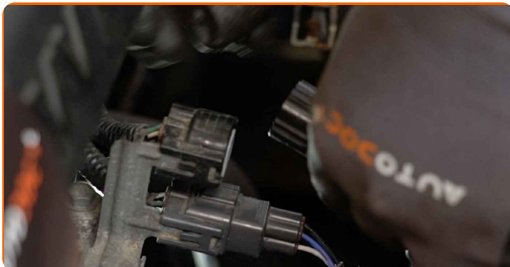
- After replacing the oxygen sensor, clear the trouble code from the electronic control unit and let the ECU adapt itself to the new sensor.
- All work should be done with the engine stopped.
- Please note: all work on the car – TOYOTA Alphard / Vellfire II (AH20) – should be done with the engine switched off.

**CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:**

**1** Open the hood.

**2** Use a fender protection cover to prevent damaging paintwork and plastic parts of the car.

**3** Detach the oxygen sensor connector.



**4** Unfasten the clamp to release the oxygen sensor wiring harness. Use a flat screwdriver.



**5** Clean the oxygen sensor fastener. Use a wire brush. Use WD-40 spray.



**6** Unscrew the oxygen sensor fastener. Use a flare nut spanner #22. Use a ratchet wrench.



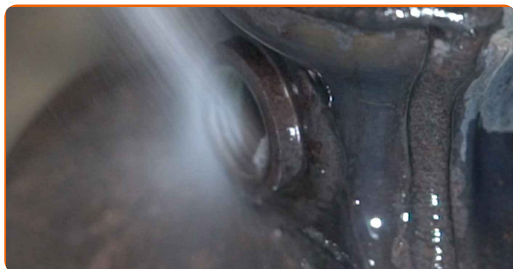
**7** Remove the oxygen sensor.



**8** Cut the thread for the new oxygen sensor. Use a thread tap. Use a ratchet wrench.



**9** Clean the oxygen sensor mounting seat. Use all-purpose cleaning spray.



Replacement: lambda sensor – TOYOTA Alphard / Vellfire II (AH20).  
Professionals recommend:

- In this case, the connector needs to be removed from the old oxygen sensor and installed on a new one.

**10** Cut off the connector from the old oxygen sensor. Use nippers.

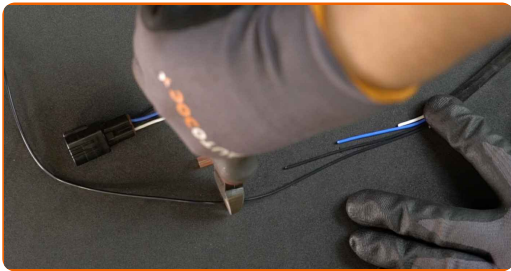


**11** Shorten the wires of the old oxygen sensor connector in such a way that each successive wire is shorter than the previous one. Use nippers.



**12**

Shorten the wires of the new oxygen sensor in a corresponding way. Use nippers.

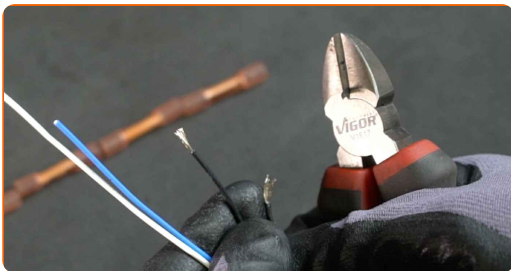


Replacement: lambda sensor – TOYOTA Alphard / Vellfire II (AH20).  
AUTODOC experts recommend:

- Follow the colour coding of the wires. If it does not match, see the manufacturer's instructions for the correct connection order.

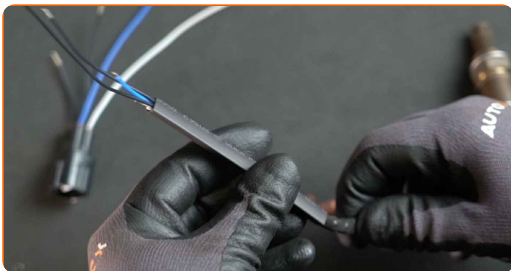
**13**

Strip the wires of the connector and the new sensor. Use nippers.



**14**

Place the heat shrink tubing on the oxygen sensor wiring.



**15** Using solder sleeves, splice the oxygen sensor wires with the connector wires according to the colour coding.



**16** Crimp the solder sleeves. Use crimping pliers.



**17** Shrink the heat shrink tubes of the solder sleeves. Use a heat gun.



**18** Slide the heat shrink tubing you put in place earlier over the wire connection.





**19** Shrink the heat shrink tube. Use a heat gun.



**20** Treat the thread of the new oxygen sensor. Use high-temperature ceramic grease.



**21** Install the new oxygen sensor.



**22** Tighten the oxygen sensor fastener. Use a 22-mm oxygen sensor socket. Use a torque wrench. Tighten it to 40 Nm torque.



**23** Treat the oxygen sensor connector. Use dielectric grease.



**24** Attach the oxygen sensor connector.



**25** Fasten the oxygen sensor wiring with the clamp.



**26** Switch on the ignition.

**27** Run the engine for a few minutes. This is necessary in order to make sure that the component operates properly.

**28** Shut off the engine.

**29** Switch off the ignition.

**30** Remove the fender protection cover.

**31** Close the hood.

**WELL DONE!** 

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