

# Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

## 2013 Toyota Highlander Service and Repair Manual

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<b>Model Year Start:</b> 2021	<b>Model:</b> Supra	<b>Prod Date Range:</b> [07/2020 -     ]
<b>Title:</b> B46 (COOLING): COOLANT PIPE (for Front Side): REMOVAL; 2021 - 2025 MY Supra [07/2020 -     ]		

## REMOVAL

## CAUTION / NOTICE / HINT

**CAUTION:**

- Hot fluids.
  - Risk of scalding!
  - Conduct all work in the vehicle wearing appropriate personal protective equipment only.
- Hot surfaces.
  - Risk of burning!
  - Perform all work only on components that have cooled down.

**NOTICE:**

Collect and dispose of emerging fluids. Observe country-specific waste disposal regulations.

## PROCEDURE

**1. REMOVE FRONT SUSPENSION MEMBER LOWER PROTECTOR**

Click here [INFO](#)

**2. REMOVE NO. 2 AIR CLEANER HOSE**

Click here [INFO](#)

**3. REMOVE CYLINDER BLOCK COVER**

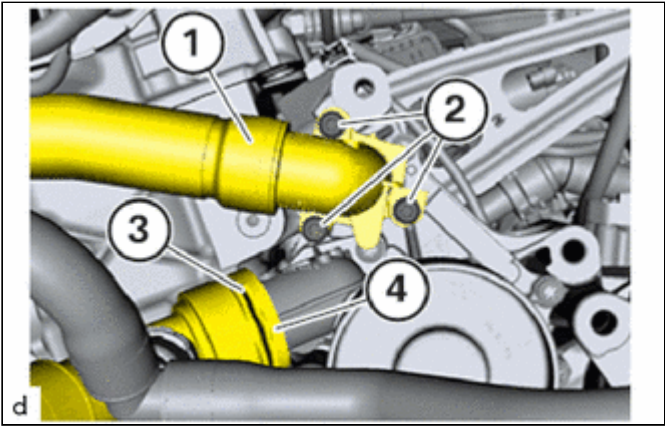
Click here [INFO](#)

**4. DRAIN ENGINE COOLANT (for High Temperature)**

Click here [INFO](#)

**5. REMOVE WATER INLET**

(a) Loosen T30 bolts (2).



(b) Remove the No. 2 water by-pass hose (1) and tie it to the side.

(c) Unlock retaining clip (3).

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Title: B46 (COOLING): COOLANT PIPE (for Front Side): INSTALLATION; 2021 - 2025 MY Supra [07/2020 - ]		

INSTALLATION

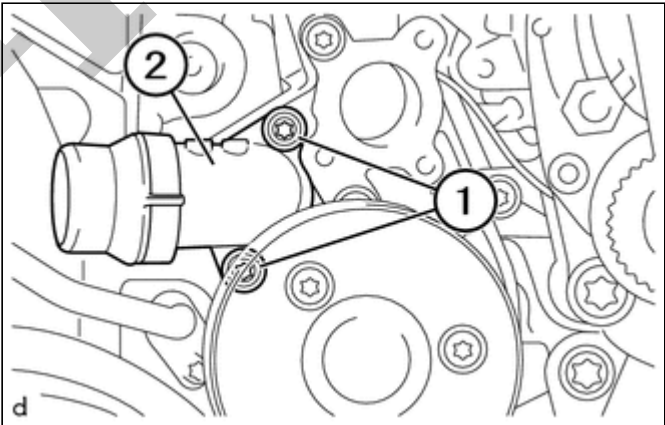
PROCEDURE

1. INSTALL WATER INLET

(a) Replace water inlet O-ring (1).



(b) Position the water inlet (2).



(c) Tighten down T30 bolts (1).

Torque:  
10.5 N·m {107 kgf·cm, 8 ft·lbf}

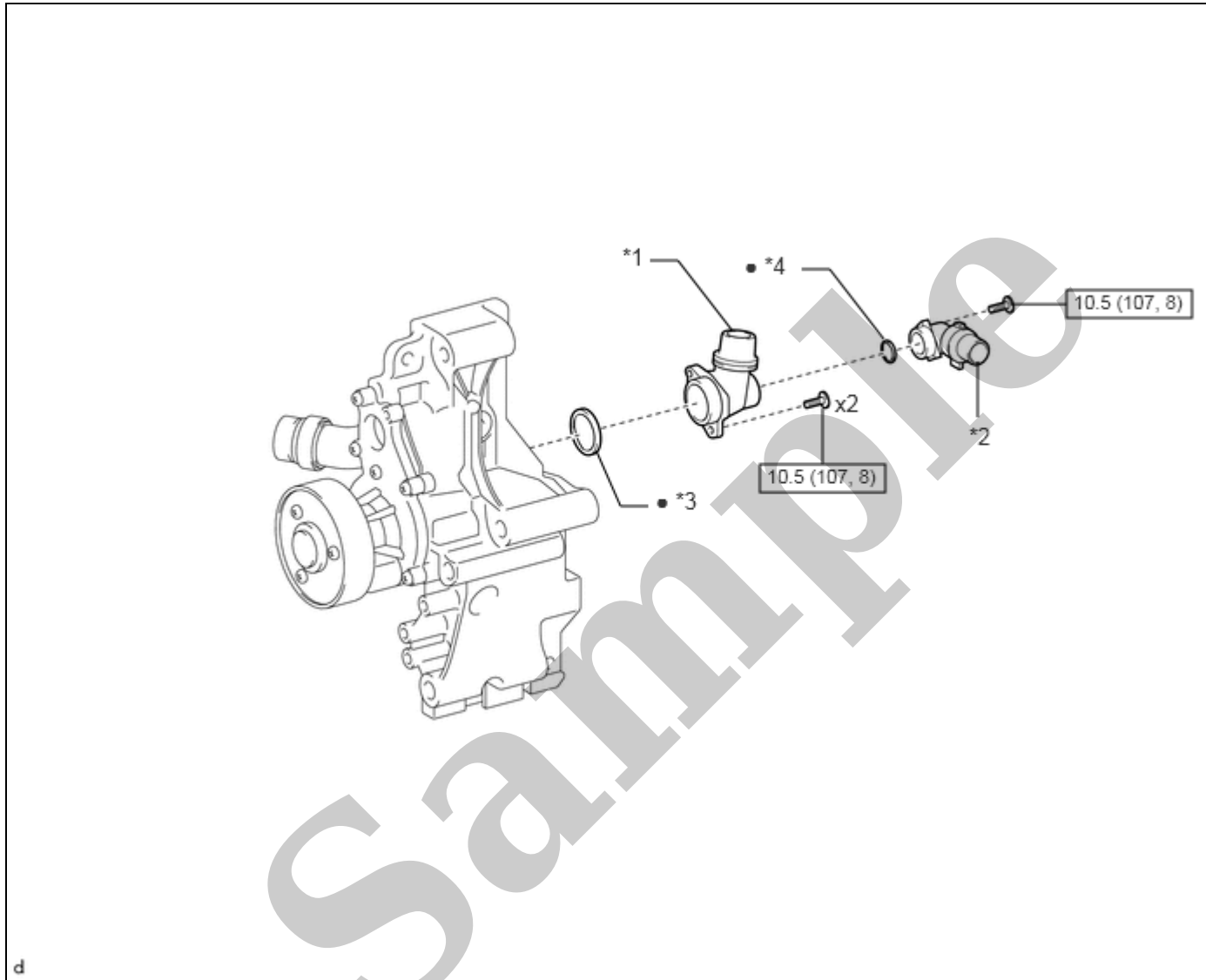
(d) Connect and lock the No. 1 radiator hose (4).

(1) Retaining clip (3) must latch audibly into place.

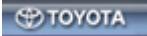
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<b>Title:</b> B46 (COOLING): COOLANT PIPE (for Rear Side): COMPONENTS; 2021 - 2025 MY Supra [07/2020 -       ]		

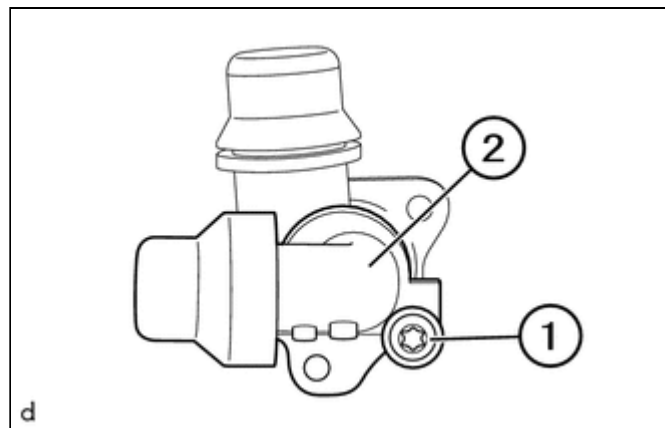
COMPONENTS

ILLUSTRATION



*1	NO. 2 WATER BY-PASS PIPE	*2	NO. 3 WATER BY-PASS PIPE
*3	NO. 2 WATER BY-PASS PIPE O-RING	*4	NO. 3 WATER BY-PASS PIPE O-RING
	N*m (kgf*cm, ft.*lbf): Specified torque	•	Non-reusable part





(d) Guide out and remove the No. 3 water by-pass pipe (2).



Sample