


- Width across flats of band (12) fastening nut: 7/16 in (11.1 mm)


 **Band (12) fastening nut:**  
**6.3 to 8.3 Nm {0.6 to 0.8 kgm}**

- 2) Install connectors of differential pressure sensor pipes (5) and (6) to differential pressure sensor (19).


★ Push in fitting of connectors until locking sound is heard.

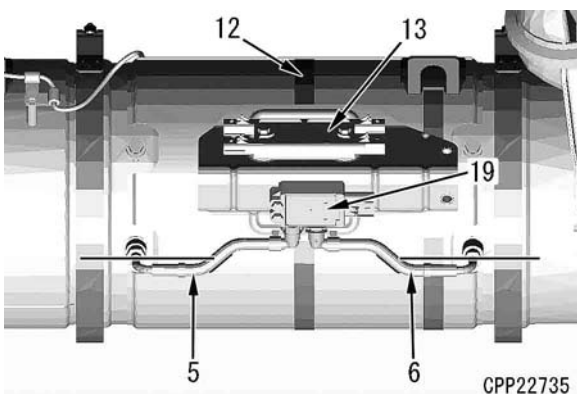
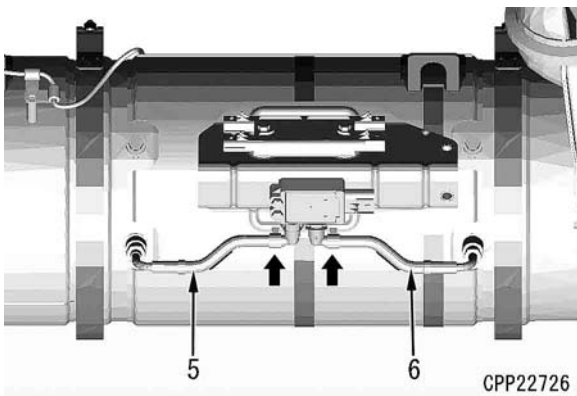
- 3) Install differential pressure sensor pipes (5) and (6).

- Width across flats of the nut for Hi side pipe (5): 11/16 in (17.46 mm)

 **Hi side pipe (5) mounting nut:**  
**24.5 to 36.5 Nm {2.5 to 3.7 kgm}**

- Width across flats of the nut for Lo side pipe (6): 5/8 in (15.88 mm)

 **Lo side pipe (6) mounting nut:**  
**13.6 to 19 Nm {1.39 to 1.9 kgm}**




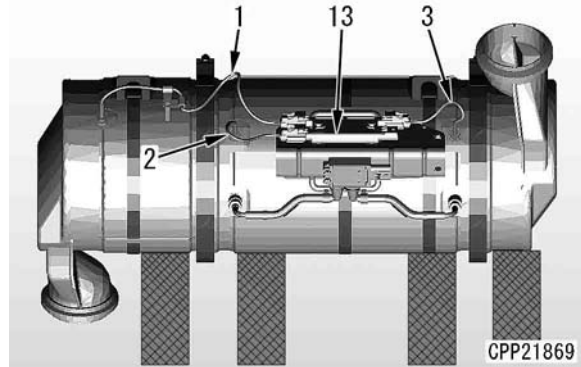
5. Install KDOC outlet temperature sensor (2), and KDPF outlet temperature sensor (3).

- ★ Remove any plugs put on the mounting holes at the removal.
- ★ When installing the temperature sensor, apply seizure prevention compound to thread portion.

 **Thread portion of temperature sensor:**  
**Seizure prevention compound (LC-G)**

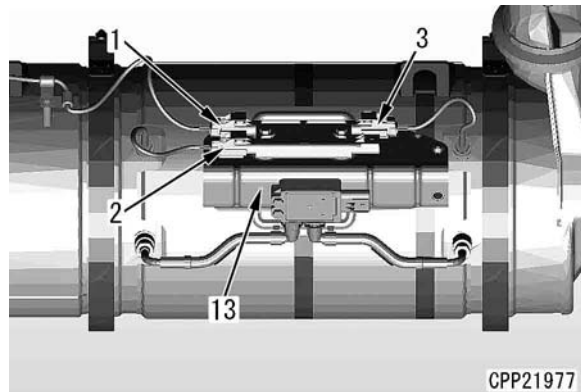
- Width across flats of the nut for temperature sensor: 14 mm

 **Temperature sensor mounting nut:**  
**24 to 36 Nm {2.5 to 3.7 kgm}**



6. Install connectors of KDOC inlet temperature sensor (1), KDOC outlet temperature sensor (2), and KDPF outlet temperature sensor (3) to sensor table (13).

★ Do not install connectors at wrong positions.




7. When replacing differential pressure sensor (19), install it according to the following procedure.

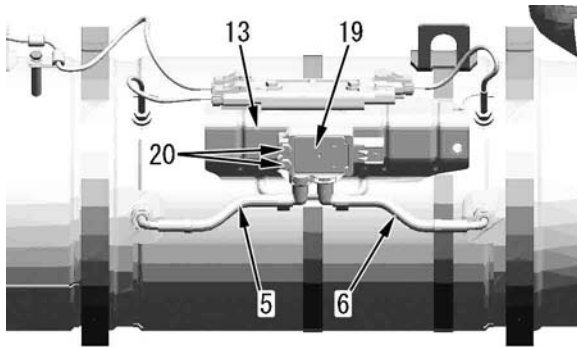
- 1) Tighten mounting bolt (20) of differential pressure sensor (19) lightly.
- 2) Install connectors of differential pressure sensor pipes (5) and (6) to differential pressure sensor (19).

★ Push in fitting of connectors until locking sound is heard.

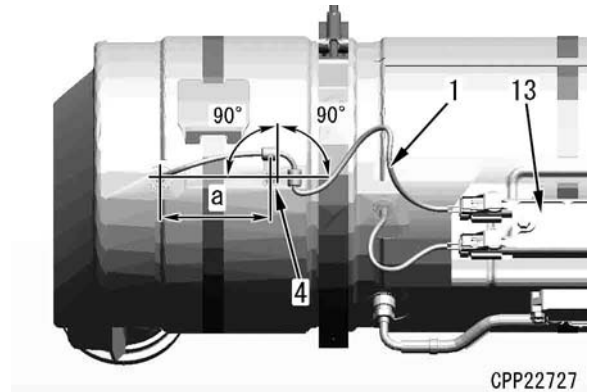
- 3) Tighten mounting bolt (20) of differential pressure sensor (19) to the specified torque.

- Width across flats of differential pressure sensor mounting bolt: 10 mm

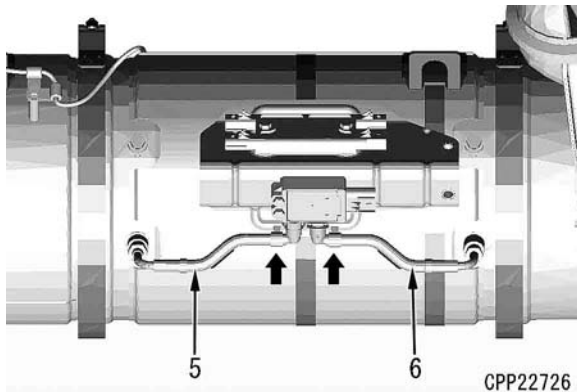
 **Differential pressure sensor mounting bolt:**  
**10.9 to 16.3 Nm {1.1 to 1.7 kgm}**



CPP22740



CPP22727



CPP22726

8. When replacing KDOC inlet sensor (1), install it according to the following procedure.

1) Install KDOC inlet sensor (1) and tighten the nut lightly.

- ★ When installing KDOC inlet sensor (1), apply seizure prevention compound to thread portion.

 **Thread portion of temperature sensor:**

**Seizure prevention compound (LC-G)**

- Width across flats of the nut for temperature sensor: 14 mm

 **Temperature sensor mounting nut:**

**24 to 36 Nm {2.4 to 3.6 kgm}**

2) Install wiring harness clamp (4) for KDOC inlet temperature sensor (1).

- ★ Adjust wiring harness clamp (4) to install as the angle and length (a) shown in the figure.
- Adjusted wiring harness length (a): 115 mm
- Wiring harness clamp mounting angle: 90°

3) Install connector of KDOC inlet temperature sensor (1) to sensor table (13).

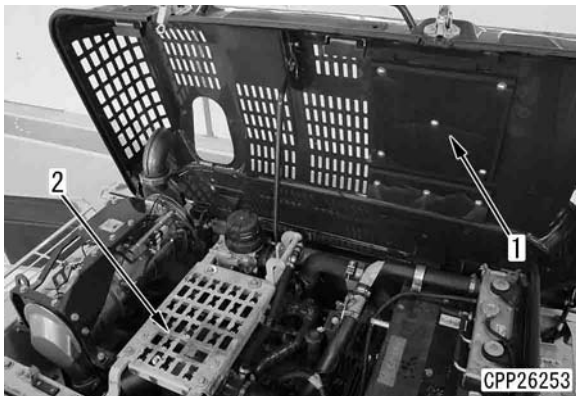
## Removal and installation of KCCV assembly (PC220-A180-924-K-00-A)

**⚠** Turn the battery disconnect switch to the OFF position and remove the key.

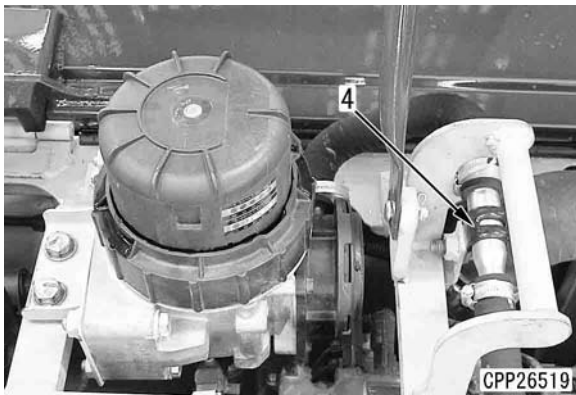
**⚠** After the engine is stopped, its parts are still hot. Accordingly, wait until they have cooled down before starting the work.

### Removal (PC200\_10-A180-520-K-00-A)

1. Open engine hood (1).
2. Remove step (2).



3. Disconnect clamp (4) fastening the tube.

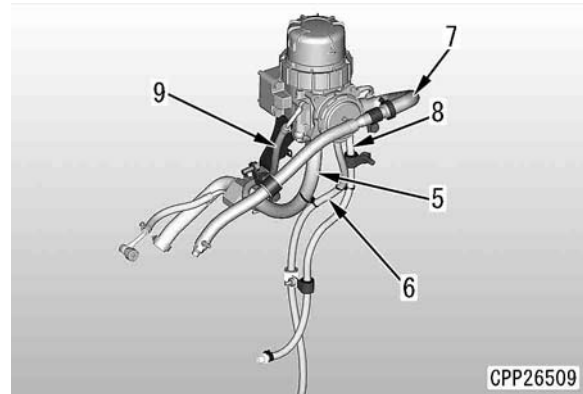


4. Disconnect the clamps of the following hoses first, then disconnect the hoses. [\*1]

- Blowby gas inlet hose (5)
- Oil drain hose (6)
- Blowby gas outlet hose (7)
- Coolant inlet hose (8)
- Coolant outlet hose (9)

★ When disconnecting each hose, take care of dripping oil.

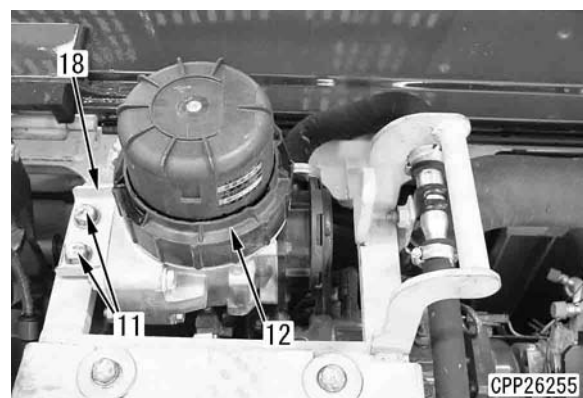
★ Take measures to prevent dirt, dust, etc. from sticking to the disconnected hoses.



5. Disconnect stay (10).

★ The engine hood is not locked any more once the stay is disconnected. So hold the engine hood open using something like rope to prevent it from closing.

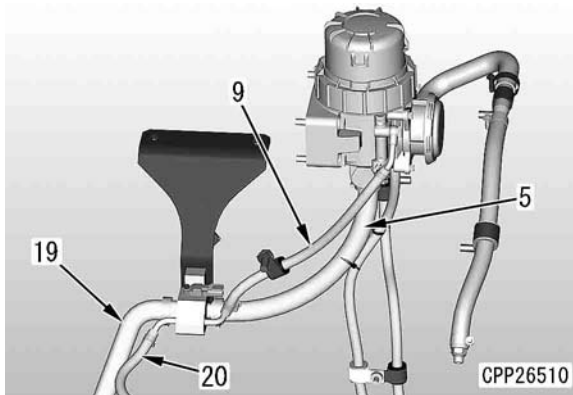
6. Remove two mounting bolts (11) and remove KCCV ventilator assembly (12) and bracket (18) together.
7. Disconnect bracket (18) from KCCV ventilator assembly (12).



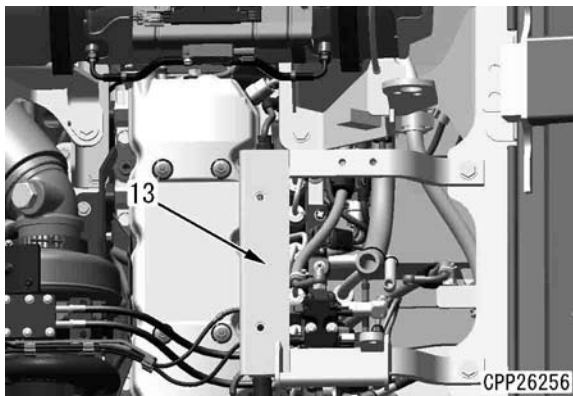
8. When replacing the following hoses, remove them according to the following procedure. [\*1]

- Blowby gas inlet hoses (5) and (19)
- Coolant outlet hoses (9) and (20)

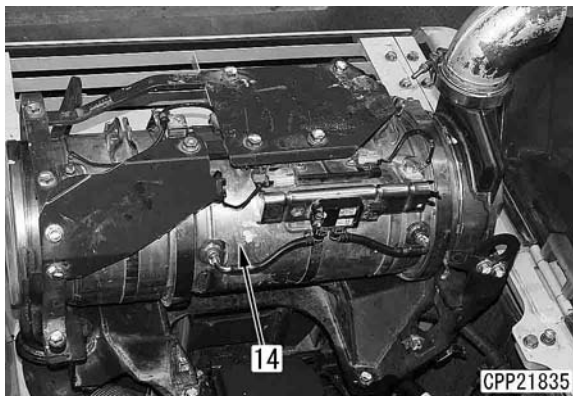
- ★ As replacement of the hoses is difficult with the KDPF in position, it is recommended that the hoses are replaced at the same time of cleaning or replacement of the KDPF.



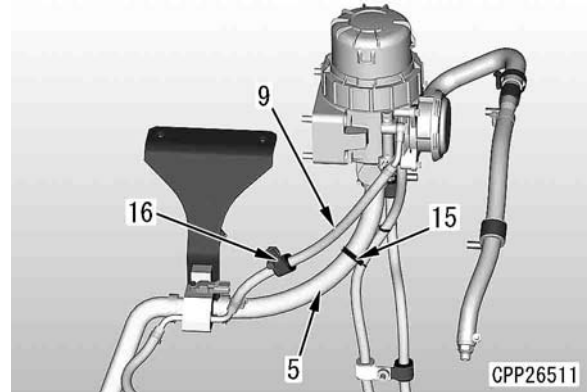
1) Remove bracket (13).



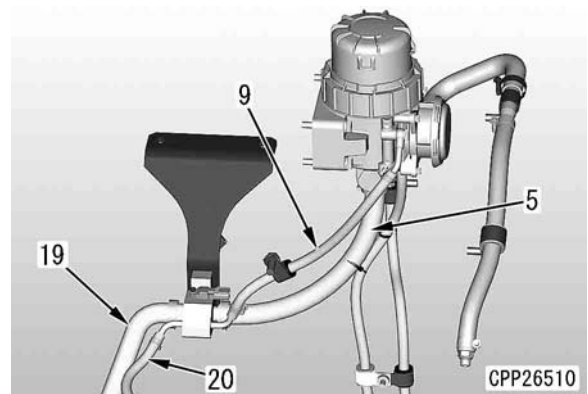
2) Remove KDPF assembly (14). For details, see "Removal and installation of KDPF assembly".



3) Disconnect the KCCV side of KCCV blowby gas inlet hose (5) and outlet hose (3). [\*2]  
4) When replacing coolant outlet hose (9), disconnect hose clamp (16).



5) Disconnect the clamps of hoses first, then remove hoses (5), (9), (19), and (20). [\*3]



### Installation (PC200\_10-A180-720-K-00-A)

Perform installation in the reverse order to removal. [\*1] [\*3]

- ★ Installed dimensions of hoses are shown in the following figure. (The numbers in the figure indicate the clamps.)

