



Trouble Solution for Overheat

機密文書・複製厳禁
電子ファイル転送厳禁

Tohatsu corporation



Why Overheat is happened??

It is happen when the engine is not properly cooled

The engine will be stopped automatically to prevent overheating when the cooling water reaches approximately 75°C or more



Not enough cooling water
in the engine

Cooling water temperature
reaches 75 degrees

Why Engine stop?

Overheat sensor failure

High speed operation
without nozzle

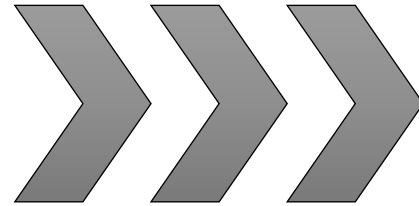
Engine temperature
reaches 75 degrees

Overheat Case 1

Engine stop with no suction operation

Engine left on...

Engine temperature rise...



Overheat!

💡 Solution 💡

▶ Operate with suction and provides sufficient cooling water to the engine

Overheat Case 2

Engine stop with no water discharge operation

Run the engine for a long time with no water discharge

Water temperature rise...



Overheat!

💡 Solution 💡

1. Discharge the heated water in the pump.
2. Suck new water.



The Engine is cooled with fresh water

Overheat Case 3

High speed operation without nozzle

ex) operate with 65mm hose without nozzle



No left water for engine cooling

☞ Problem of Free flow

- No backpressure

⇒ Engine overload

💡 Solution 💡

▶ Use the nozzle

ex) operate with 65mm hose and 23mm nozzle



Water left for engine cooling

☒ When you operate without Nozzle ☒

▶ Use Pumping plate*1

▶ Extend the hoses

▶ Use small diameter hoses

Overheat Case 4

Not enough cooling water in the engine

Not enough cooling water is coming



Check Point

- Water jacket clogs and dirt
- Dirt on the bottom of the muffler
- Dirt on Suction strainer

💡 Solution 💡

- ▶ Flash with clean water after use
- ▶ Open muffler drain*² and remove trash, sand and mud
- ▶ Clean Suction strainer basket
- ▶ Use Floating strainer*³
- ▶ Use Maintenance bucket*⁴

Overheat Case 5

Overheat sensor failure

Do not fall
under Case1 to 4



Overheat sensor failure

☒ How to check ☒

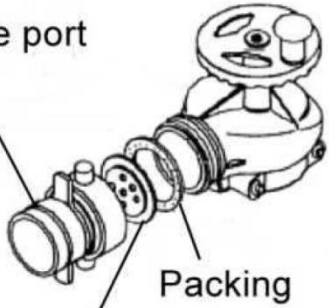
- ▶ Check the overheat sensor reacts in hot water around 80 °C
- ▶ If it not energizing...
⇒ Overheat sensor*5 failure

Sensor malfunctions
when water enters grommet

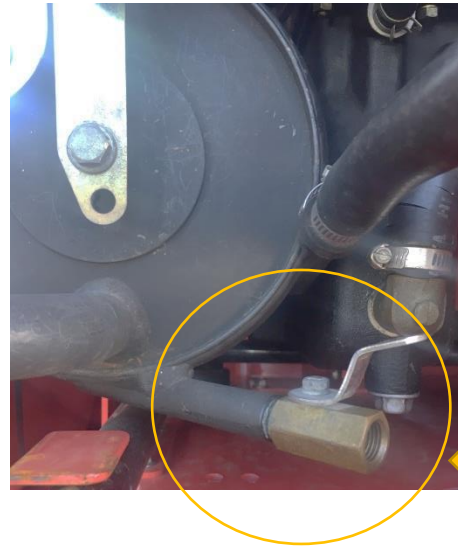
NOTES

*1 Pumping plate

Discharge port adaptor



Pumping plate (standard accessory)



*2 Muffler drain

*3 Floating strainer

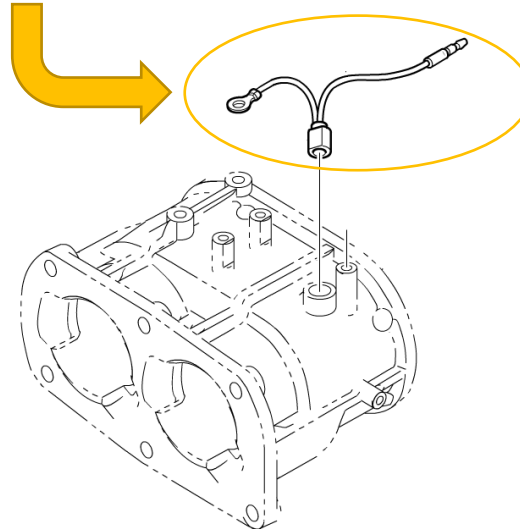


Always turn on the overheat sensor switch !

*4 Maintenance bucket



*5 Overheat sensor





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