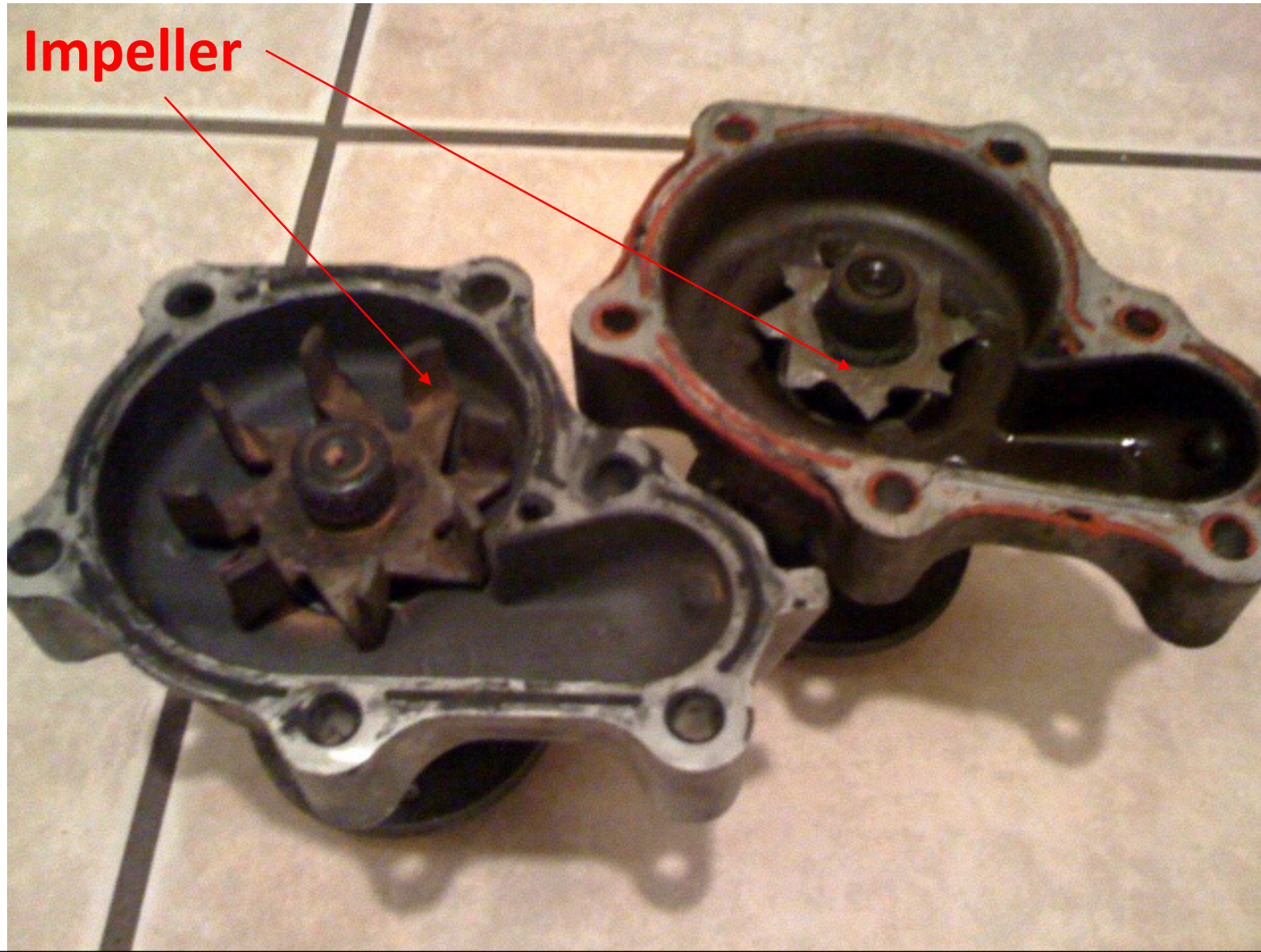


# AutoShack Weekly Tip



- The water pump circulates coolant through the engine's cooling system to keep the engine at safe operating temperatures. The job of that water pump is akin to that of the heart in the body.
- In today's tip we discuss some of the symptoms and causes of water pump failure.
- We also talk about some practices that negatively affect water pump life.
- The most common effect of unchecked water pump failure is head gasket and cylinder head damage.
- If you have changed a head gasket on your vehicle before, then perhaps your water pump was not working properly.
- Of course other cooling system problems can cause the same effects but water pump failure is by far the most common culprit.

Internal view of 2 different water pumps. The spiky looking component called the impeller drives the coolant through the engine.



- **How can I tell my water pump is failing?**

- Leaking of coolant on garage floor or parking spot.
- Leaking coolant may not always be noticeable but a slightly elevated engine temperature usually indicates a slow water pump leak.
- Sometimes elevated engine temperatures without leaks are due to a bad thermostat.
- Replacing a thermostat is cheaper than replacing a water pump to make sure a faulty thermostat is ruled out first.

- **What causes water pump failure ?**

- **Rust** can cause water pump failure. Avoid using water as coolant. Water does not contain rust arrestors to protect the engine and water pump.
- **Contaminated coolant** causes water pump failure. Flush your cooling system about every 2 years to control contamination levels.
- **Mixing different coolant colors** can also damage a water pump. Avoid mixing different coolant colors. Mixing forms sludge that can damage water pump and engine. For instance sludge can reduce the effectiveness of the water pump's impeller and also block coolant passages.

- Click the links below to visit/contact us to learn more about us and how we might be able to assist you.
  - t: +1-517-962-0616
  - e: [autoshackghana@autoshackghana.com](mailto:autoshackghana@autoshackghana.com)
  - w: [www.autoshackghana.com](http://www.autoshackghana.com)
  - mw: m.autoshackghana.com
- A majority of the tip topics are suggested by others based on their experiences.
- Consider helping others to benefit from your experiences by suggesting a topic for our tip bank based on your car troubles, experiences or observations.

# CREDITS

✓ Water pump photo: [www.AR15.com](http://www.AR15.com)