

## SHOP TALK

**Subject:** ISC Valve/Throttle Plate Cleaning  
(Idle Speed Control valve)

**Date:** February 20, 2004

**Applicability:** Drivability - Idle surge, whistling

**Number:** 07-02-03



If you encounter a drivability concern such as idle surging or whistling, it may be caused by carbon buildup on the Idle Speed Control valve. If this occurs, it is not necessary to replace the ISC valve. Cleaning the ISC valve could correct the condition. To clean an ISC valve, please perform the following procedure.

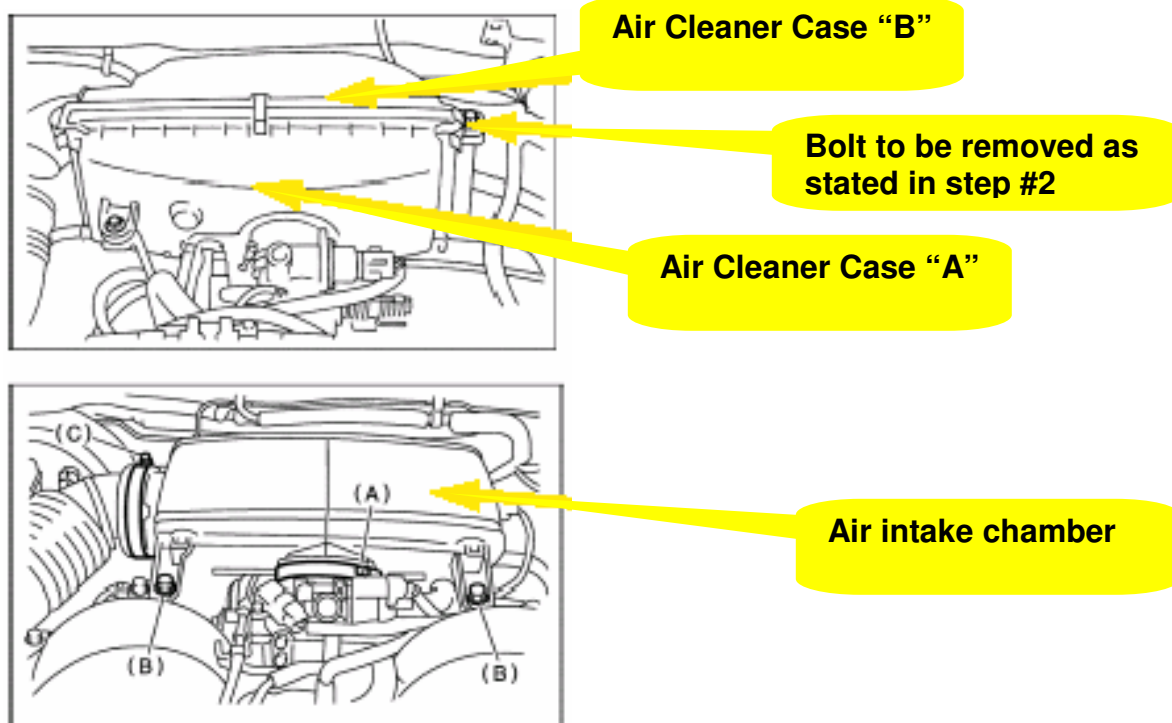
**Cleaning Procedure: NA Vehicles - NOTE: See charts below for vehicle applicability.**

- 1) Warm up engine.
- 2) On 2.2L/2.5L engines only, remove the bolt that attaches air cleaner case "B" to the bracket. Undo the clips (3) that hold together air cleaner case "B" to air cleaner case "A". Remove air cleaner case "B" and the air cleaner element and set aside. (On all 3.0L H6, remove the entire air intake chamber).
- 3) Start the car and maintain engine speed between 1000-1500 rpm.
- 4) Spray engine cleaner (GM Part # 12345089 GM Top Engine Cleaner or equivalent) toward the upper air-stream of the throttle chamber and into the ISC port hole and around the throttle plate for approximately 10 seconds.
- 5) Stop engine and let sit for 3 minutes.
- 6) Restart the engine and maintain 1000 to 1500 rpm's.
- 7) Spray engine cleaner on the upper air-stream of the throttle chamber for approximately 10 seconds.
- 8) Turn engine off.
- 9) Reinstall air cleaner element and air cleaner case "B".
- 10) Operate car between 1000-2000rpms until no white smoke appears through tailpipe.
- 11) Turn ignition switch off and clear memory.

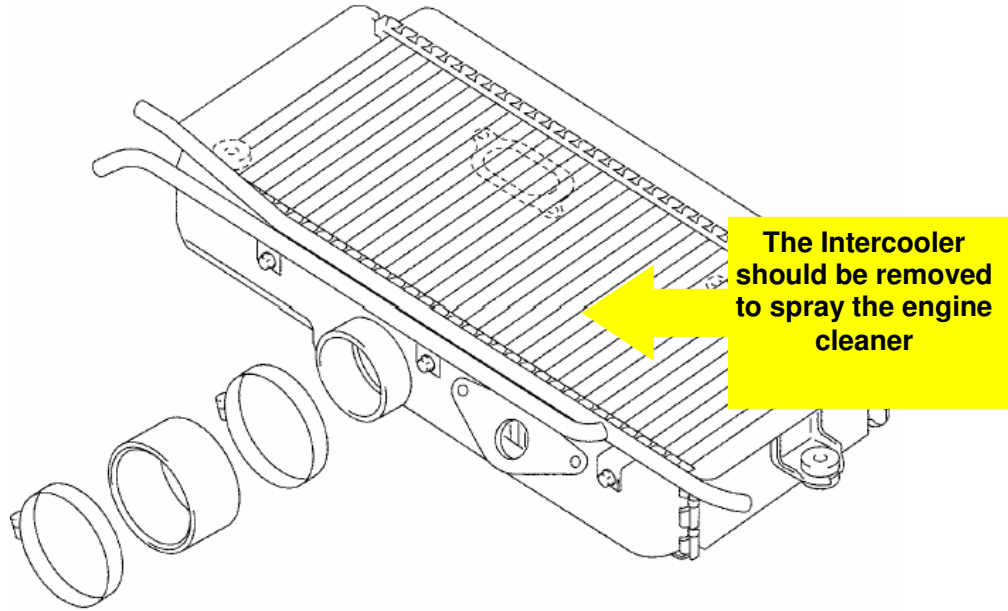
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## **Cleaning Procedure: Turbo Vehicles**

- 1) Warm up engine.
- 2) Remove the intercooler and set aside.
- 3) Disconnect the Mass Airflow sensor connector.
- 4) Cycle the key "on/off" once (to enter "failsafe" mode).
- 5) Start the car and maintain engine speed between 1000-1500 rpm.
- 6) Spray engine cleaner (GM Part # 12345089 Top Engine Cleaner or equivalent) on the upper air-stream of the throttle chamber for approximately 10 seconds.
- 7) Stop engine and let sit for 3 minutes.
- 8) Restart the engine and maintain 1000 to 1500 rpms.



- 9) Spray engine cleaner on the upper air-stream of the throttle chamber for approximately 10 seconds.
- 10) Turn engine off.
- 11) Reinstall intercooler and reconnect Mass Airflow sensor connector.
- 12) Operate car between 1000-2000rpms until no white smoke appears through tailpipe.
- 13) Turn ignition switch off and clear memory.



MY	Model	Engine Type
00-01	Legacy	2.5L
All	Legacy	3.0L
00-01	Impreza	2.2L
02-04	Impreza	2.0 / 2.5L Turbo

This repair may be claimed under the terms of the Subaru Basic New Car Warranty by utilizing the following.

Fail Code	Operation Number	Labour Time
UKW – 42	455 – 272	0.4

Note: the above operation includes select monitor diagnosis, troubleshooting, component testing and road testing.

Subaru Canada, Inc.

Colin Philip – Quality Assurance