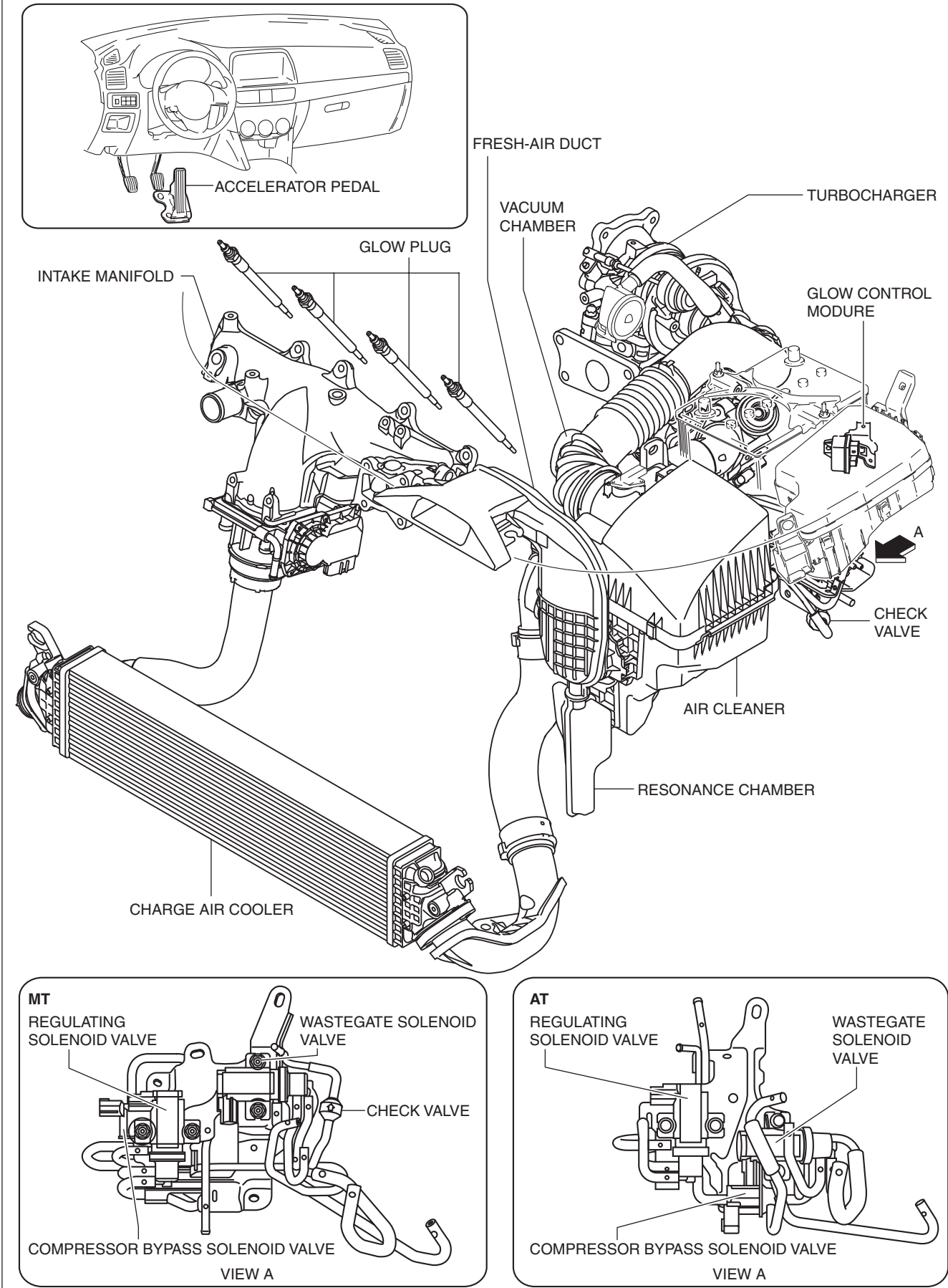

INTAKE-AIR SYSTEM [SKYACTIV-D 2.2]

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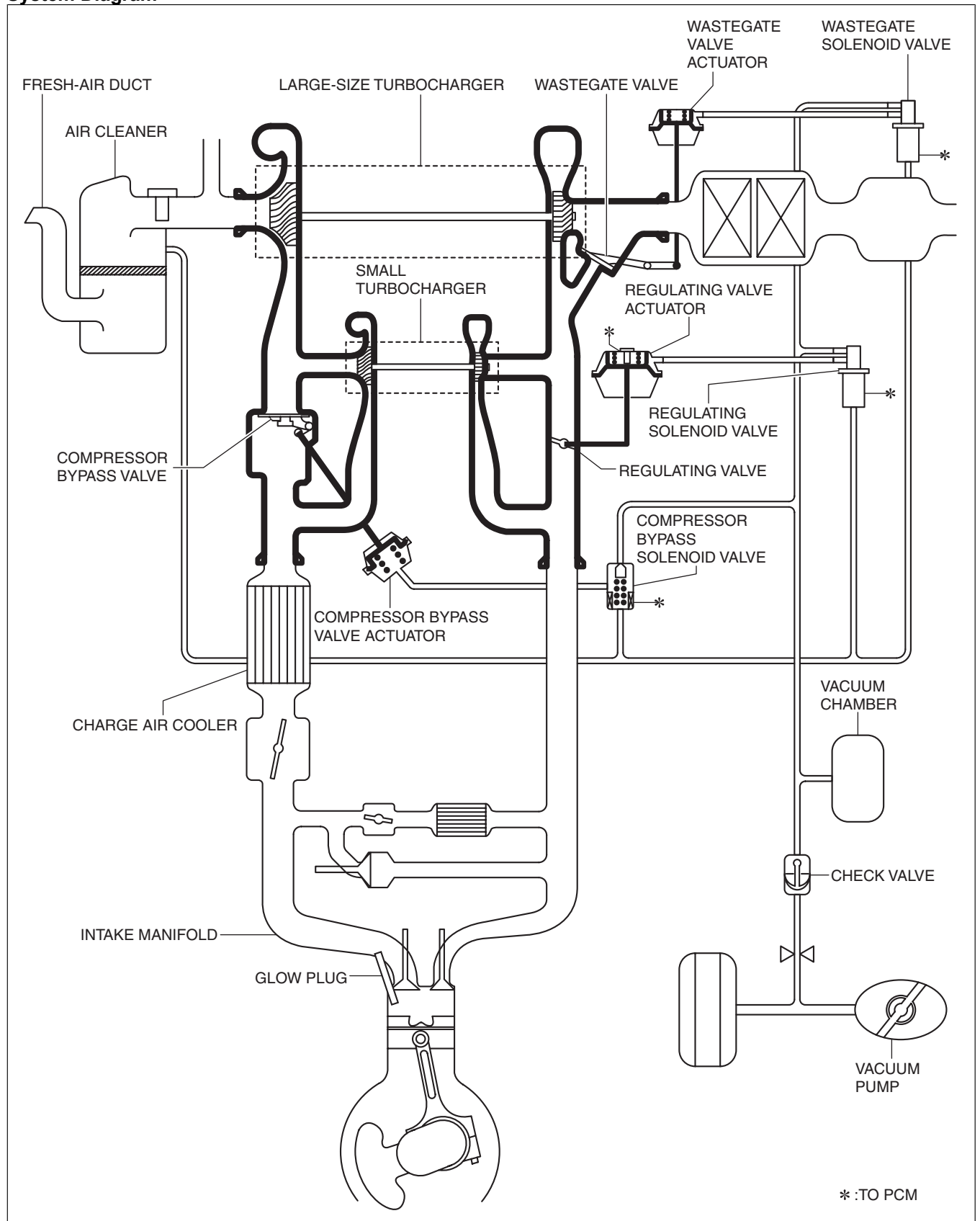
Purpose, Outline

- A vacuum pump has been adopted which supplies stable vacuum to the power brake unit.
- With the adoption of the two-stage air charging system, efficient, high air-charging is obtained in all driving ranges. As a result, low emissions, low fuel consumption, high torque, and high response are realized.

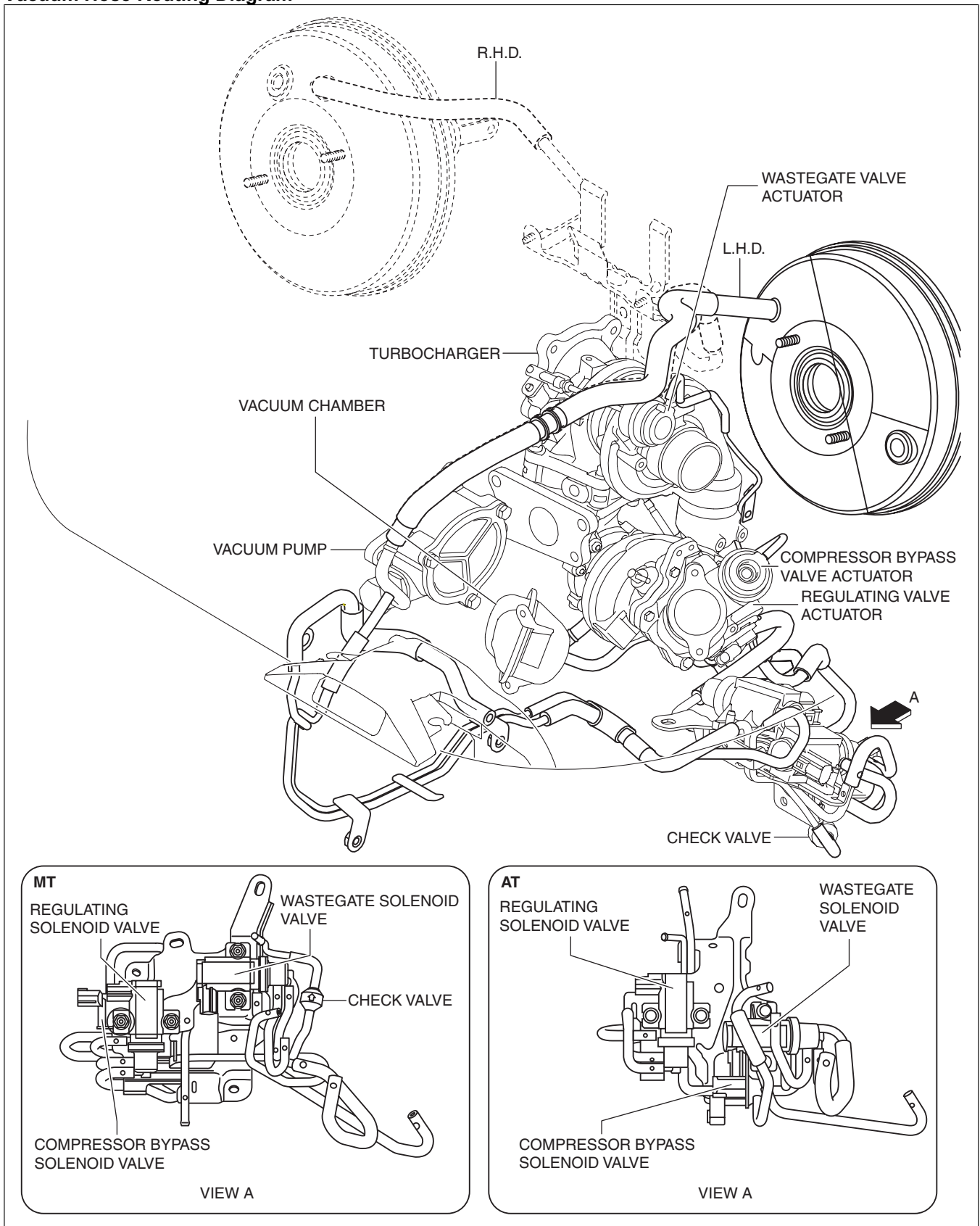
Structural View



System Diagram



Vacuum Hose Routing Diagram



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Structure

- The intake air system consists of the following parts:

Part/System name			Reference
Fresh-air duct			(See FRESH-AIR DUCT [SKYACTIV-D 2.2].)
Resonance chamber			(See RESONANCE CHAMBER [SKYACTIV-D 2.2].)
Air cleaner			(See AIR CLEANER [SKYACTIV-D 2.2].)
Intake manifold			(See INTAKE MANIFOLD [SKYACTIV-D 2.2].)
Air charging system (See AIR CHARGING SYSTEM [SKYACTIV-D 2.2].)	Turboc harger	Compressor bypass valve actuator	(See TURBOCHARGER [SKYACTIV-D 2.2].) (See REGULATING VALVE POSITION SENSOR [SKYACTIV-D 2.2].)
		Compressor bypass valve	
		Wastegate valve actuator	
		Wastegate valve	
		Regulating valve actuator	
		Regulating valve	
		Regulating valve position sensor	
	Compressor bypass solenoid valve		(See COMPRESSOR BYPASS SOLENOID VALVE [SKYACTIV-D 2.2].)
	Wastegate solenoid valve		(See WASTEGATE SOLENOID VALVE [SKYACTIV-D 2.2].)
	Regulating solenoid valve		(See REGULATING SOLENOID VALVE [SKYACTIV-D 2.2].)
	Vacuum chamber		(See VACUUM CHAMBER [SKYACTIV-D 2.2].)
Check valve		(See CHECK VALVE [SKYACTIV-D 2.2].)	
Charge air cooler		(See CHARGE AIR COOLER [SKYACTIV-D 2.2].)	
Glow system (See GLOW SYSTEM [SKYACTIV-D 2.2].)		Glow plug	(See GLOW PLUG [SKYACTIV-D 2.2].)
		Glow control module	(See GLOW CONTROL MODULE [SKYACTIV-D 2.2].)
Accelerator pedal			(See ACCELERATOR PEDAL, KICKDOWN SWITCH [SKYACTIV-D 2.2].)