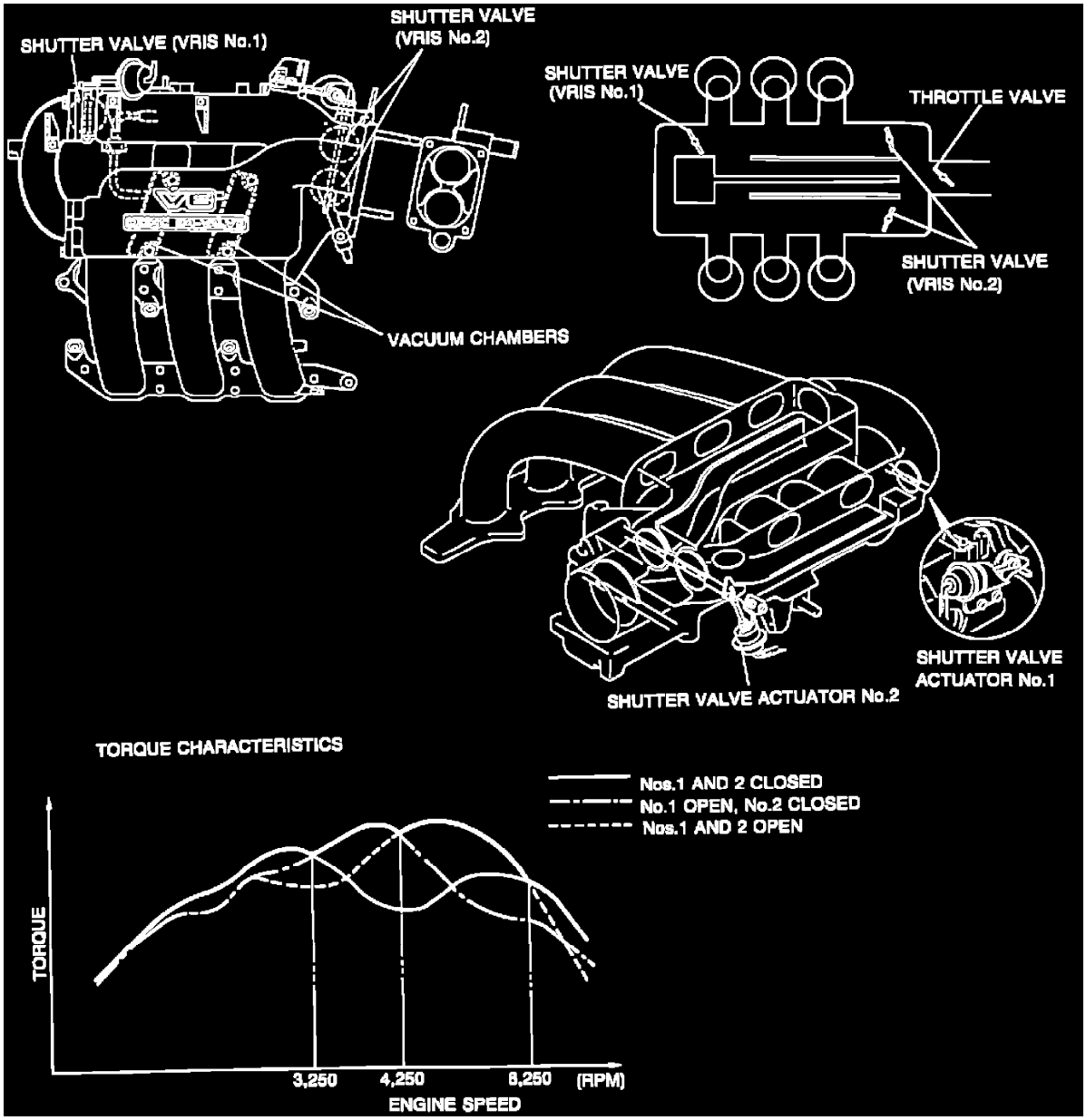
Variable Induction Control Valve: Description and Operation



Variable Resonance Induction System

PURPOSE

Variable Resonance Induction **(VRIS)** System opens and closes shutter valves in the dynamic chamber according to engine speed. This improves charging efficiency by using intake air pressure waves.

LOCATION

Shutter valves and actuators are on dynamic chamber.

OPERATION

Engine speed (rpm)	0—3,250	3,250—4,250	4,250—6,250	6,250—7,500
Shutter valve No.1	Closed	Open	Open	Closed
Shutter valve No.2	Closed	Closed	Open	Closed

VRIS System Operation

Inside of dynamic chamber is divided into two sections, interconnected by two shutter valves and connecting pipes. Two vacuum chambers under the intake manifold left bank supply constant vacuum to VRIS shutter valve actuators during wide-open throttle operation and other low vacuum, low speed situations. System operates in rpm range shown on image chart.