### 8. Diagnostics Chart for Actuator

Check vehicle speed input signal with select monitor.

(At first, confirm that vehicle speed signal is input normally.)

Check operation of actuator.

Repair.

## A: CHECK OPERATION OF ACTUATOR

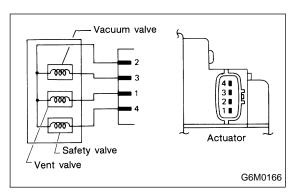
#### DIAGNOSIS:

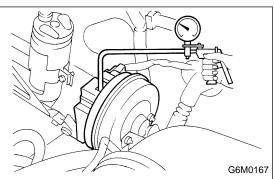
• Sticking of air leaves of actuator, or sticking of valve and actuator diaphragm.

#### TROUBLE SYMPTOM:

• Cannot run at set speed ±3 km/h (±2 MPH).

1. Check for leakage and sticking of actuator valve.	Not OK	Replace the actuator.
ОК	1	
Faulty cruise control module	]	





# 1. CHECK FOR LEAKAGE AND STICKING OF ACTUATOR VALVE

1) Measure resistance of actuator.

- Terminals/Specified resistance:
  - No. 2 No. 1/55  $\Omega$  (Vent valve)
  - No. 2 No. 3/22  $\Omega$  (Vacuum valve)

No. 2 — No. 4/55  $\Omega$  (Safety valve)

2) Check operation of actuator.

(1) Connect  $\oplus$  battery cable to terminal 2 and  $\bigcirc$  battery cable to terminal 1, 3 and 4.

(2) Make sure cable moves smoothly when a vacuum pressure of 40.0 kPa (300 mmHg, 11.81 inHg) is applied to actuator using vacuum pump.

#### Stroke: 35 mm (1.38 in) Movement time: Within 3 seconds

(3) When the battery is removed from condition (2) above, make sure the cable returns to its original position smoothly.

#### Movement time: Within 1.5 seconds

(4) Connect battery to each terminal and check cable movement when vacuum pressure is applied by vacuum pump.

			-				
Vacuum	Terminal No.			Battery		Operation	
pressure	1	2	3	4	$\oplus$	Θ	mode
OFF	—	—	—	—	—	—	—
ON (Vacuum pressure applied.)		0			-0		- Pull
			0			0	
	0					0	
				0		0	
		0			0		Hold
	0					0	
				0		0	
		0			0		Release
				0		0	