

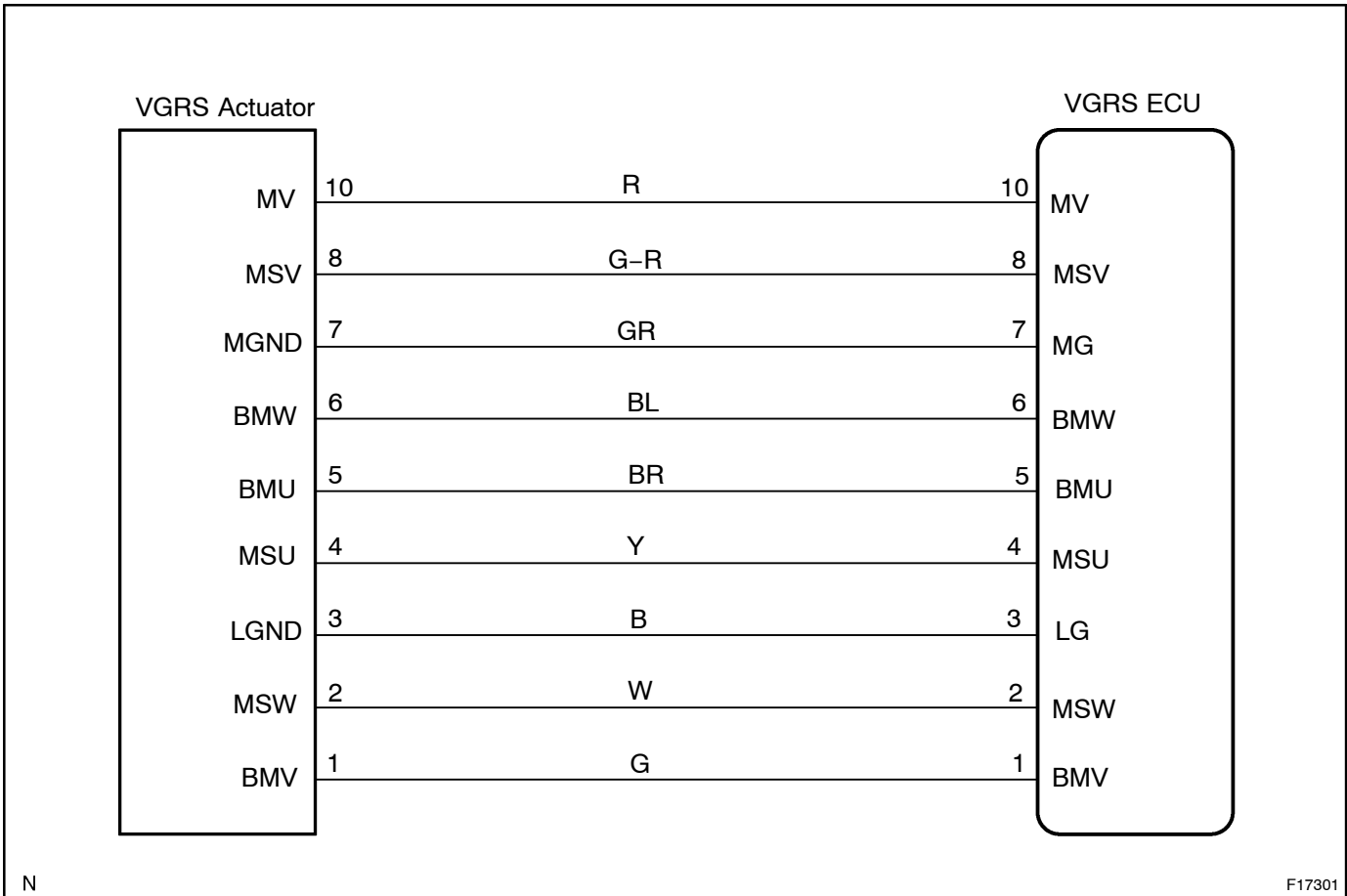
|            |                   |                                  |
|------------|-------------------|----------------------------------|
| <b>DTC</b> | <b>C1522 / 22</b> | <b>VGRS Actuator Malfunction</b> |
|------------|-------------------|----------------------------------|

### CIRCUIT DESCRIPTION

The VGRS ECU drives the actuator based on the steering angle sensor signal and the vehicle speed signal. If the VGRS ECU detects excessive current flowing into the actuator, or a malfunction inside the ECU, it turns on the warning light, records the DTC, and stops VGRS operation.

| DTC No.  | DTC Detecting Condition                                      | Trouble Area                                                                          |
|----------|--------------------------------------------------------------|---------------------------------------------------------------------------------------|
| C1522/22 | The system detects a malfunction in the motor drive circuit. | <ul style="list-style-type: none"> <li>• VGRS actuator</li> <li>• VGRS ECU</li> </ul> |

### WIRING DIAGRAM

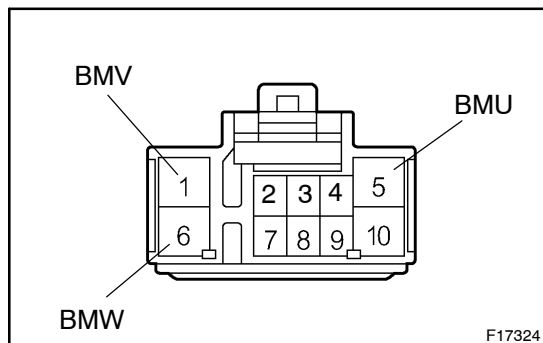


## INSPECTION PROCEDURE

### HINT:

Since only the actuator can be checked in this procedure, if it is normal, the VGRS ECU is at fault.

#### 1 Inspect the VGRS actuator for an open circuit.



#### PREPARATION:

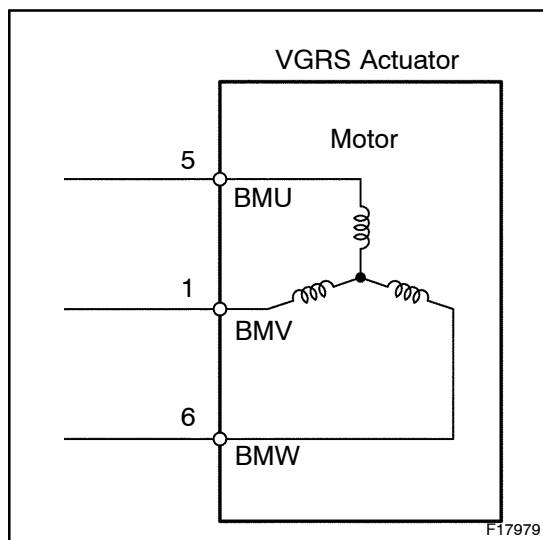
- Turn the ignition switch OFF.
- Disconnect the actuator connector from the VGRS ECU.

#### CHECK:

- Check resistance between terminals of the actuator connector.

#### OK:

| Symbols (Terminals) | Resistance                 |
|---------------------|----------------------------|
| BMV (1) – BMU (5)   | 0.1 $\Omega$ to 1 $\Omega$ |
| BMU (5) – BMW (6)   |                            |



- Check continuity between terminals of the actuator connector and body ground.

#### OK:

| Symbols (Terminals)   | Specified condition |
|-----------------------|---------------------|
| BMV (1) – Body ground | No Continuity       |
| BMU (5) – Body ground |                     |
| BMW (6) – Body ground |                     |

OK

Replace VGRS ECU.

NG

Replace VGRS actuator.