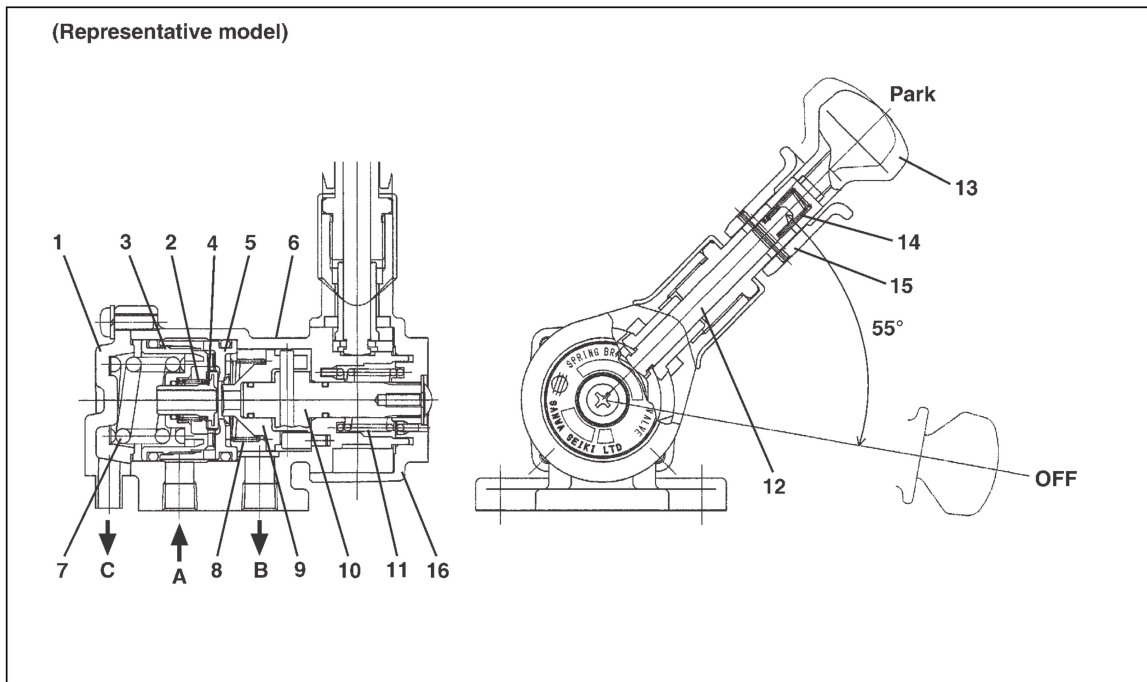


## PARKING BRAKE (WHEEL PARKING)

### SPRING BRAKE CONTROL VALVE

#### DESCRIPTION

EN01E09901120704002001

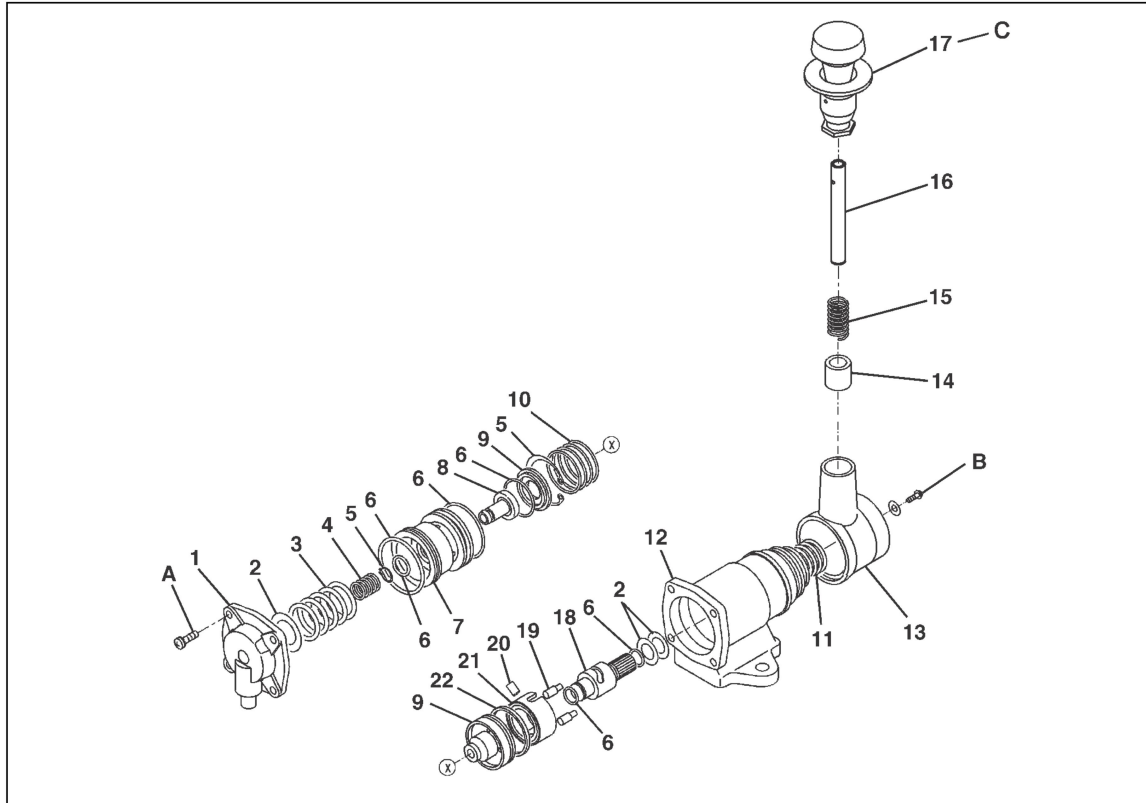


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|    |                   |    |                                       |
|----|-------------------|----|---------------------------------------|
| 1  | Body cover        | 11 | Handle return spring (If so equipped) |
| 2  | Feed valve spring | 12 | Pull rod                              |
| 3  | Piston            | 13 | Knob                                  |
| 4  | Feed valve        | 14 | Compression spring                    |
| 5  | Valve seat        | 15 | Release knob                          |
| 6  | Valve body        | 16 | Handle body                           |
| 7  | Piston spring     | A  | Inlet                                 |
| 8  | Valve spring      | B  | Outlet                                |
| 9  | Cam               | C  | Exhaust (PARK)                        |
| 10 | Cam holder        |    |                                       |

## COMPONENT LOCATOR

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|    |                                       |    |                    |
|----|---------------------------------------|----|--------------------|
| 1  | Body cover                            | 12 | Valve body         |
| 2  | Shim                                  | 13 | Handle body        |
| 3  | Piston spring                         | 14 | Stopper            |
| 4  | Feed valve spring                     | 15 | Compression spring |
| 5  | Retainer ring                         | 16 | Pull rod           |
| 6  | O-ring                                | 17 | Knob sub assembly  |
| 7  | Piston                                | 18 | Cam holder         |
| 8  | Feed valve                            | 19 | Body pin           |
| 9  | Valve seat                            | 20 | Cam holder pin     |
| 10 | Valve seat spring                     | 21 | Cam                |
| 11 | Handle return spring (If so equipped) | 22 | Piston guide       |

### Tightening torque

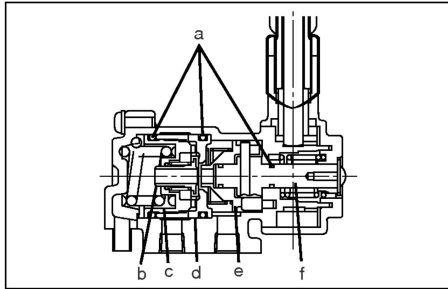
Unit: N·m {kgf·cm, lbf·ft}

|   |                          |   |                          |
|---|--------------------------|---|--------------------------|
| A | 5.4-7.4 {55-75, 4.0-5.4} | B | 3.4-4.9 {35-50, 2.6-3.6} |
| C | 39-49 {398-499, 29-36}   |   |                          |

## OVERHAUL

EN01E09901120704002003

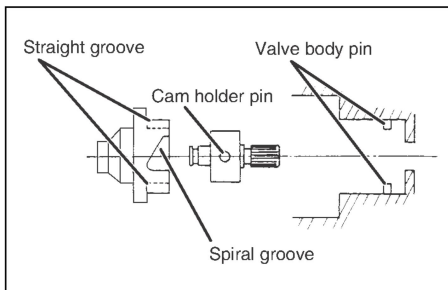
### IMPORTANT POINTS - ASSEMBLY



SHTS099011200003

#### 1. LUBRICATION

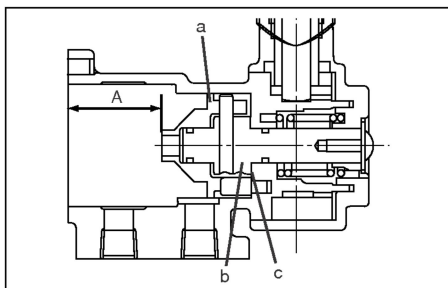
- (1) When assembling the spring brake control valve, replace the feed valve, valve seats and O-rings.
- (2) Apply silicone grease to each sliding surface of the assembly parts, O-rings and O-ring grooves.
  - a. O-ring
  - b. Feed valve
  - c. Piston
  - d. Valve seat
  - e. Cam
  - f. Cam holder



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#### 2. ASSEMBLE THE CAM ASSEMBLY.

- (1) When assembling the cam and cam holder, make sure that the cam holder pin and spiral groove of the cam are aligned.
- (2) When installing the cam assembly to the valve body, the valve body pin and straight groove of the cam must be aligned.



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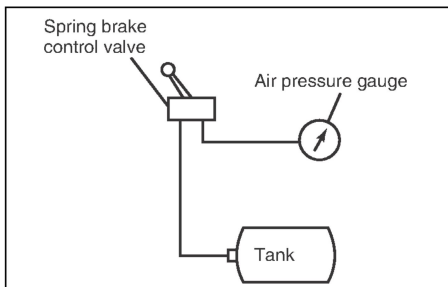
- (3) Adjust dimension "A" with the shim.
 

**Assembly standard: 33.8-34.2 mm {1.331-1.346 in.}**

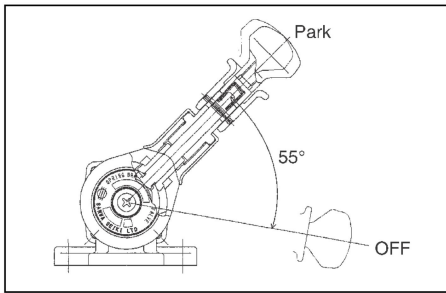
- a. Cam
- b. Cam holder
- c. Shim

#### 3. SPRING BRAKE CONTROL VALVE PERFORMANCE TEST

- (1) First, connect the pressure gauge to the outlet line and apply an air pressure of 980 kPa {10.0 kgf/cm<sup>2</sup>, 142 lbf/in.<sup>2</sup>} to the inlet line.



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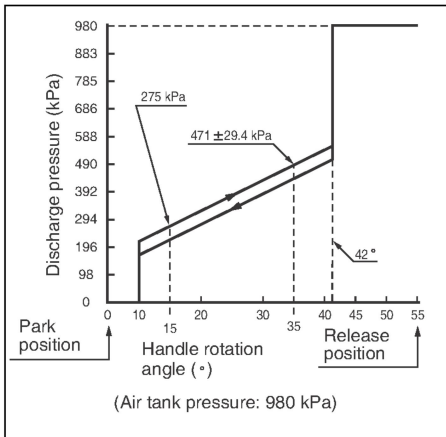
- (2) Move the spring brake control lever towards the OFF position, gradually and confirm that the air pressure in the outlet line meets the characteristic shown in figure.

**Standard:**

| Handle angle: | Outlet pressure: kPa {kgf/cm <sup>2</sup> , lbf/in. <sup>2</sup> } |
|---------------|--|
| 15°           | 275 {2.8, 39.9}  |
| 35°           | 441.6-500.4 {4.6-5.1, 64.0-72.6}                                   |
| Over 42°      | 980 {10.0, 142}  |

**NOTICE**

The characteristic shown is under the inlet pressure of 980 kPa {10.0 kgf/cm<sup>2</sup>, 142 lbf/in.<sup>2</sup>}



- (3) Confirm the following functions.
- The control handle is locked at PARK position.
  - The control handle automatically turn to OFF position when the lever is released at PARK position.