CHARGING OF N₂ GAS INTO BACK HEAD

(1) Remove gas valve plug

(2) Insert 3-way valve with pressure gauge assembled(Note. 1)

(3) If gas is insufficient, adjust to specified valve(Note. 2)

(4) Adjust the pressure slowly decreasing by using the pressure gauge if gas is sufficient

(5) Tighten gas valve plug (Do not cut O-ring)

NOTE
1) Insert 3-way valve after its handle is fully turned counterclockwise.
2) Turn the 3-way valve handle clockwise slowly. Stop turning it when the needle of the gauge starts to move. If it is turned clockwise too tightly, the valve may easily be damaged. Pay special attention to ensure that the nitrogen gas is not charged excessively.
Chapter 4. Installation & Removal

Conversion table for charging nitrogen gas pressure to back head
[Depends on the temperature of the back head surface]

For SEL-1500-II, SEL-2200-II

<table>
<thead>
<tr>
<th>Back head gas pressure</th>
<th>Ambient Temperature[°C/°F]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 / 32</td>
</tr>
<tr>
<td>kg/cm²</td>
<td>5.9</td>
</tr>
<tr>
<td>psi</td>
<td>84</td>
</tr>
</tbody>
</table>

For SEL-110, SEL-150, SEL-220, SEL-250, SEL-350, SEL-500, SEL-600, SEL-950, SEL-2500, SEL-4000-II

<table>
<thead>
<tr>
<th>Back head gas pressure</th>
<th>Ambient Temperature[°C/°F]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 / 32</td>
</tr>
<tr>
<td>kg/cm²</td>
<td>15.3</td>
</tr>
<tr>
<td>psi</td>
<td>217</td>
</tr>
</tbody>
</table>

Diagram:
- N₂ gas cylinder
- Synflex hose adapter
- Handle
- Exhaust valve
- 3-way valve assembly
- Back head charging valve
INSPECTION AND CHARGING OF N₂ GAS IN ACCUMULATOR

WARNING
- Use special care to handle and store the N₂ gas cylinder as it is a highly pressurised container.
- Use nitrogen gas only.
- See “conversion table for charging N₂ gas pressure to back accumulator”
- Standard accumulator gas pressure 55kg/cm²/780psi, AT20°C/68°F ambient temperature, do not over pressurise accumulator.

Cautions for charging N₂ gas to the accumulator

- Be sure to use the 3-way valve assembly for charging the N₂ gas.
  If charging gas leaks directly from the cylinder, the diaphragm may be broken off.
- If charging for handling N₂ gas to only the accumulator, make sure that the accumulator body and cover are tightened fully.

1) Make sure the cap and valve of the 3-way valve assembly are fully tightened.
2) Remove the cap from the accumulator and tighten the charging valve fully.
3) Check if O-rings are installed to the bushing. Remove the plug and screw in the bushing.
4) Install the bushing to the 3-way valve assembly.
5) Loosen the charging valve gradually. The charging pressure is indicated on the pressure gauge.
6) Close the valve clockwise when the gas pressure is normal. When the gas pressure is higher, repeat loosening and tightening the valve of 3-way valve assembly. The pressure is lowered gradually.
7) Loosen the valve of the 3-way valve assembly to discharge the N₂ gas in the 3-way valve assembly.
8) Remove the 3-way valve assembly and tighten the plug and cap.
CHARGING OF N2 GAS INTO ACCUMULATOR

1) Connect the charging hose to N2 gas cylinder after screwing the bombe adapter onto adapter, nut and installing to the N2 gas cylinder.
2) Connect the 3-way valve assembly to the charging hose after unscrewing the cap on the 3-way valve assembly.
3) Remove the cap from the accumulator and tighten the charging valve fully.
4) Check if O-ring are installed to the bushing. Remove the plug and screw the bushing.
5) Loosen the accumulator charging valve after checking if bushing is installed to the 3-way valve assembly.
6) Turn the handle of the N2 gas cylinder counterclockwise slowly to charge gas.
7) Charge gas in accordance with the conversion table for charging N2 gas pressure to accumulator.
8) Turn the handle of the N2 gas cylinder clockwise to close the cock.
9) Close the accumulator charging valve.
10) Loosen the valve of the 3-way valve assembly to discharge the N2 gas remaining in the charging hose.
11) Remove the charging hose, 3-way valve assembly and bushing and tighten the plug and cap.

Conversion table for charging nitrogen gas pressure to accumulator.
(SEL-1500-II, SEL-2200-II, SEL-2500, SEL-4000-II)

<table>
<thead>
<tr>
<th>Accumulator gas pressure</th>
<th>Ambient Temperature(℃/℉)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 / 32</td>
</tr>
<tr>
<td>kg/cm²</td>
<td>56</td>
</tr>
<tr>
<td>psi</td>
<td>796</td>
</tr>
</tbody>
</table>
**HYDRAULIC PIPE LINES FOR EXCLUSIVE USE**

Operation of the hydraulic breaker requires installation of hydraulic pipe lines for exclusive use of the hydraulic breaker. As hydraulic pipe lines vary depending on base machines, our service engineer must first check the hydraulic pressure, oil capacity, pressure loss and other conditions of the base machine before installing hydraulic pipe lines. Use only genuine parts in case of the need for replacement as hydraulic pipe lines (hoses, pipes and fittings) are made of materials carefully selected in consideration of durability.

**WARNING**

The Hydraulic System to the base machine must be checked by an authorized service engineer before first use and after any modifications.