**System Overview**

Users of both on-road and off-road vehicles are under constant pressure to increase productivity and save money while operating in extreme conditions. This constant exposure to the elements along with heavy loads can cause frequent breakdowns to occur. An automatic lubrication system from Bijur Delimon International can reduce costs, increase maintenance intervals and bring more profit to your bottom line.

A series progressive system accurately meters and dispenses lubricant to friction points in a mobile vehicle. As lubricant is introduced to the divider valve, it forces pistons to move back and forth within the valve. Internal pistons cause a preset amount of lubricant to be discharged from each outlet. These on-board systems are ideal for off-road machinery such as loaders, excavators, articulated trucks, graders, etc., as well as transportation vehicles.

<table>
<thead>
<tr>
<th>Application</th>
<th>High Pressure Injector</th>
<th>Series Progressive</th>
<th>Low Pressure Injector</th>
<th>Indirect Injector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>Electric</td>
<td>Electric</td>
<td>Electric/Pneumatic</td>
<td>Electric</td>
</tr>
<tr>
<td>Grease</td>
<td>NLGI grade 000-2</td>
<td>NLGI grade 000-2</td>
<td>NLGI grade 000-0</td>
<td>NLGI grade 000-0</td>
</tr>
<tr>
<td>Adjustable</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓</td>
<td>✓ ✓</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Max Pressure</td>
<td>3600 psi (248 bar)</td>
<td>3600 psi (248 bar)</td>
<td>1450 psi (100 bar)</td>
<td>580 psi (40 bar)</td>
</tr>
</tbody>
</table>

**System Features**

**TTN Progressive Lubricator**
- Large reservoirs allow for extended times between refills
- Optional low grease level and system monitoring capabilities
- Designed to handle a wide range of lubricants
- Unique reservoir design keeps grease free from contaminants
- Integral controller option facilitates quick installations

**Multiport Mobile Lubricator**
- Mixing arm with wedge plate prevents air intrusion
- Compact size
- Simple, robust design ideal for harsh environments

**PVB Mobile Divider Valves**
- Flexible design allows for on-site configurations
- Valves available in sizes ranging from 6 to 20 outlets
- Positive displacement discharge
- One switch monitors complete system
- Valves are corrosion resistant
System at a Glance
Series progressive lubrication systems consist of a lubricator and divider valves to proportion grease to multiple lubrication points. These flexible divider valves are configured during installation, allowing you to match your equipment’s grease requirements with the proper outlet designation.

**TTN Progressive Lubricator**
The TTN Progressive Lubricator is capable of pumping NLGI grade 2 grease at pressures up to 3600 psi (248 bar). The TTN Progressive Lubricator is an automatic, electric lubricator available in either 12 or 24 VDC motor voltages. The lubricator is also available with an integral programmable controller. Inside the reservoir, a spring-loaded bellows forces grease into the pump housing assuring reliable delivery with each lubrication cycle.

**MultiPort Mobile Lubricator**
With a small installation footprint, the 12 or 24 VDC MultiPort Mobile Lubricator is a robust and economical solution for mobile equipment. The lubricator can pump up to NLGI grade 2 grease at pressures up to 3600 psi (248 bar). Inside the reservoir, a mixing arm with wedge plate prevents air intrusion and facilitates proper grease distribution. This lubricator is normally used with the SMDC Controller providing accurate lubrication intervals.

**PVB Mobile Divider Valves**
PVB Mobile Divider Valves accurately meter and dispense lubricant to as many as 20 outlet lines at operating pressures up to 3600 psi (248 bar). Output volumes are fixed at 0.17cc (0.01 cu. in.) per cycle but can be combined with other outlets by using appropriate fittings for larger outputs. Valves are available with cycle indicator pins to provide visual confirmation of system operation. In addition the cycle pin can be fitted with a switch to provide electrical feedback to a system controller.

### Technical Data

**TTN Progressive Lubricator**
- **Reservoir Capacity**: 2, 4 and 8 liter (4, 8 and 16 lb)
- **Grease**: NLGI grade 000-2
- **Relief Valve Setting**: 3600 psi (248 bar), adjustable
- **Discharge/min.**: 8cc (0.5 cu. in.) per element/outlet
- **Outlets**: 3 outlet maximum
- **Operating Temperature Range**: -13°F to 122°F (-25°C to 50°C)

**MultiPort Mobile Lubricator**
- **Reservoir Capacity**: 4 liter (8 lb)
- **Grease**: NLGI grade 000-2
- **Relief Valve Setting**: 3600 psi (248 bar), adjustable
- **Discharge/min.**: 6.4cc (0.4 cu. in.) per element/outlet
- **Outlets**: 3 outlet maximum
- **Operating Temperature Range**: -13°F to 122°F (-25°C to 50°C)

**PVB Mobile Divider Valves**
- **Discharge/Cycle**: 0.17cc
- **Outlets**: 6 to 20
- **Minimum Operating Pressure**: 145 psi (10 bar)
- **Maximum Operating Pressure**: 4350 psi (300 bar)
- **Surface Protection**: Proprietary, 1000-hour salt spray

Refer to the following datasheets:
- Datasheet #35492: TTN Progressive Lubricator
- Datasheet #35577: MultiPort Mobile Lubricator
- Datasheet #35635: PVB Mobile Divider Valve
- Datasheet #46911: SMDC Controller