**Engine**
- Volvo TAD551 VE, Tier III (optional TAD571 VE, Tier 4f), 4 cycle, inline 4 cylinder, liquid cooled, electronic controlled
- Vertical canister style lube and main fuel filters and fuel/water separation with manual feed pump attached to engine
- Water in fuel indicator and alarm

**Gross Rating:** 173 hp @ 2200 rpm (129 kW)
- 590 ft lb Torque @ 1100-1500 rpm (800Nm)

**Net Rating:** 153 hp @ 2200 rpm (114 kW)
- 82 gallons (310 L)

**Fuel tank capacity:** 30°

**Controls**
- Two electronic joysticks (hoist and bucket, telescope and swing)
- One rocker switch (tilt) control
- Joysticks mounted on arm pods
- Quick change joystick pattern switch located on instrument panel
- Self-centering joysticks; when controls are released, power for movement disengages and swing and tilt brake set automatically
- Tilting/telescoping steering column
- Hydraulic foot pedal controls braking functions
- Travel speed is regulated with an electronic foot pedal control
- Switch on the FWD/REV selector provides 1st/2nd gear selection
- Independent rocker switches control stabilizers, axle oscillation, park brake and hazard lights

**Boom**
- Two piece triangular telescoping boom
- Adjustable boom rollers with eccentric shafts
- 360° continuous boom tilt
- 105° boom pivot angle
- Auxiliary hydraulics

**Hydraulic System**
- One load-sensing, axial piston pump; oil flow 0-110 gpm (0-435 L/min)
- Tandem gear pump (steering, brake/pilot) 10 gpm (38 L/min), 6 gpm (23 L/min)

- **Electronically operated travel alarm signals**
- **Speed mode selection can also be done while moving**
- **Electronically operated travel alarm signals excavator movement**

**Three Hydraulic Motors**
- Swing, 68 hp (48 kW)
- Tilt, 50 hp (37 kW)
- Propel, 113 hp (84 kW) each

**Operating Pressures:**
- Hoist..........................4,900 psi (331 BAR)
- Tilt..............................4,900 psi (331 BAR)
- Swing..........................4,900 psi (331 BAR)
- Tool.............................4,900 psi (331 BAR)
- Telescope.........................4,900 psi (331 BAR)
- Propel..........................4,900 psi (331 BAR)
- Pilot System..................550 psi (38 BAR)
- Braking & Steering.........2,400 psi (165 BAR)
- Blade & Stabilizers........4,000 psi (277 BAR)

**Filtration System**
- 10 micron return filter
- 10 micron pilot filter
- Fin and tube-type cooler with thermal by-pass and relief valves
- Pressure-compensated, load-sensing valves with circuit reliefs in all circuits

**Undercarriage**
- Both axles are equipped with internal wet-disc type service brakes
- The steering axle is fitted with oscillation lock cylinders

**Transmission**
- ZF Model HL 290

**Drive Motor**
- Rexroth A6 Series, 160cc/Rev

**Minimum Turning Radius:** 25° (7.75 m)

**Tires:** 10 x 20 Super-Lug

**Axles:** ZF Model 3070 (FTF 2090)

**System Monitor**
- Electronic monitor in cab indicates
  - Low hydraulic fluid level
  - High hydraulic fluid temperature
  - System working pressure
  - System pilot pressure

**Operating Temperatures:**
- 1st/2nd Gear

**Operating Conditions:**
- 6.25" (159 mm) stroke
- 4.528" ID, 4.528" rod (115 mm x 115 mm), 10 gpm (38 L/min)
- 6 gpm (23 L/min)

**Operating Pressures:**
- System pilot pressure
- System working pressure
- High hydraulic fluid temperature
- Low hydraulic fluid level
- Reservoir system 65 gallons (246 L)
- Pressurized reservoir with visual oil level gauges

**Fuel Capabilities:**
- 82 gallons (310 L)

**System Specifications**
- **Six Cylinders**
  - One tool: 5.0° ID, 3.0° rod (127 mm x 76 mm), 25.9° (658 mm) stroke
  - Two hoist cylinders: 4.75° ID, 3.35° rod (121 mm x 85 mm), 310° (787 mm) stroke
  - One telescope: 3.75° ID, 2.75° rod (95 mm x 70 mm), 14° (4.27 m) stroke
  - Two single-acting axle oscillation cylinders: 4.528° ID, 4.528° rod (115 mm x 115 mm), 6.25° (159 mm) stroke

**Undercarriage**
- Both axles are equipped with internal wet-disc type service brakes
- The steering axle is fitted with oscillation lock cylinders

**Tires:** 10 x 20 Super-Lug

**Axles:** ZF Model 3070 (FTF 2090)

**Transmission:** ZF Model HL 290

**Drive Motor:** Rexroth A6 Series, 160cc/Rev

**Minimum Turning Radius:** 25° (7.75 m)

**Variable displacement high torque piston motor powers the 2-speed power shift transmission**

**Speed mode selection can also be done while moving**

**Electronically operated travel alarm signals excavator movement**

**Travel speed on flat surface - MPH (kmh):**

<table>
<thead>
<tr>
<th>Gear</th>
<th>Creeper Mode</th>
<th>Standard Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Gear</td>
<td>18 mph (29 kmh)</td>
<td>57 mph (92 kmh)</td>
</tr>
<tr>
<td>Second Gear</td>
<td>63 mph (101 kmh)</td>
<td>12 mph (19.3 kmh)</td>
</tr>
</tbody>
</table>