

Field Servicing of Coupler Cylinder Relief Valves

Date: 01-05-12

Effects these cylinders:

71-121-115-1 Effective after batch 76168

71-231-120-1 Effective after batch 81827

71-341-130-1 Effective after batch 81828

71-781-105-2 Effective after batch 21127

Tools required

Open end spanners
Allen Keys

Hydraulic Pressure Gauge 0-3500psi(0-250Bar)

Process:

To reset or adjust relief valves fitted to Wedglock couplers already in service, the supply pressure to extend the cylinder must be increased. Once relief valve is adjusted to correct range, then supply pressure must be reset to recommended pressure.

Procedure Steps:

1. **Clean Product**
2. **Install Pressure Gauge at Cylinder**
3. **Increase Control Valve EXT pressure**
4. **Reset Cylinder Pressure Relief Valve**
5. **Reset Control Valve EXT pressure**
6. **Remove Pressure Gauge**

1. Clean Product:

To reduce risk of hydraulic contamination; thoroughly clean all dirt and debris from around control valve, hydraulic cylinder and hoses.

2. Install Pressure Gauge at Cylinder:

Attach hydraulic pressure gauge to alternate "EXT" port **[C2]** on coupler cylinder, tighten fitting to 20-22 Nm.

3. Increase Control Valve "EXT" pressure:

To reset extend - pressure control valve **[F1]** to its highest pressure, firstly loosen lock nut **[Y]** using open end spanner, then using Allen key, wind adjusting screw **[Z]** in (clockwise) until it stops. Control valve is now set to highest pressure.

4. Reset Cylinder Pressure Relief Valve:

To reset cylinder relief valve **[A]**, cylinder must be in extended position with hydraulic pressure applied. Firstly loosen lock nut **[E]** using open end spanner, then using Allen key, wind adjusting screw **[D]** clockwise or anti-clockwise until the pressure gauge is reading 2600-2800 PSI / 185 bar; once set use open end spanner to tighten the relief valve lock nut **[E]** to torque setting 20 Nm, *[1/2 flat turn from finger tight.]*

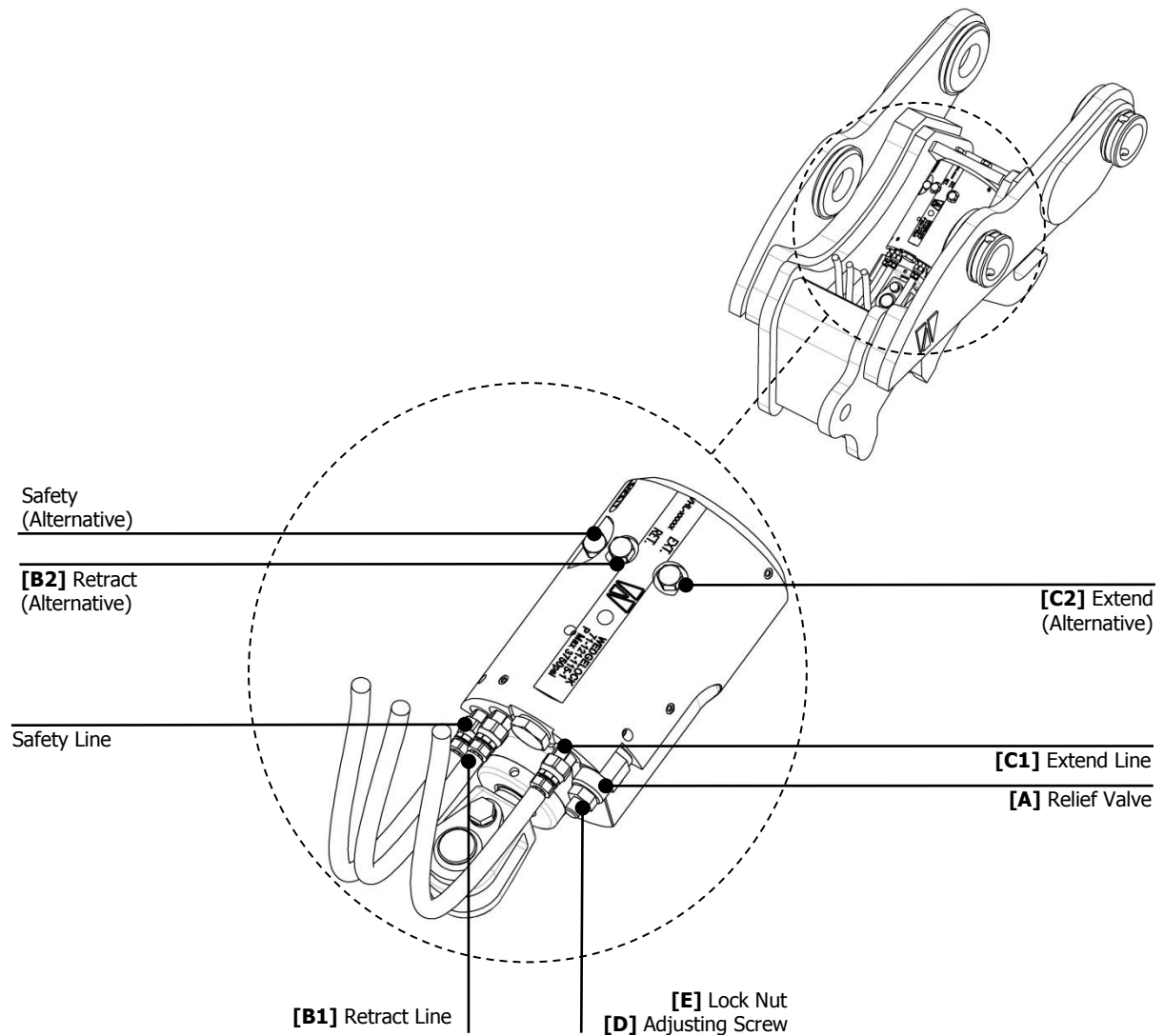
5. Reset Control Valve EXT pressure:

Now reset extend – pressure control valve to deliver correct operating pressure. While applying pressure to extended cylinder, use Allen key to adjust pressure control valve **[F1]** wind adjusting screw **[Z]** out (anti-clockwise) until the gauge is reading 1700-1800 PSI / 120 bar. Once set, use open end spanner to tighten the control valve lock nut **[Y]** to torque setting 20 Nm, *[1/2 flat turn from finger tight.]* Retract safety pressure control valve should be set to 3600-3800psi / 250bar using above procedure.

6. Remove Hydraulic Pressure Gauge:

Ensure area around cylinder is still clean, undo fitting and remove pressure gauge and reinstall plug to alternate retract port **[C2]**; ensure plug is tightened to torque setting 20-22 Nm, *[1 flat turn from finger tight.]*

Cylinder Relief Valve:



Pressure Control Valve:

