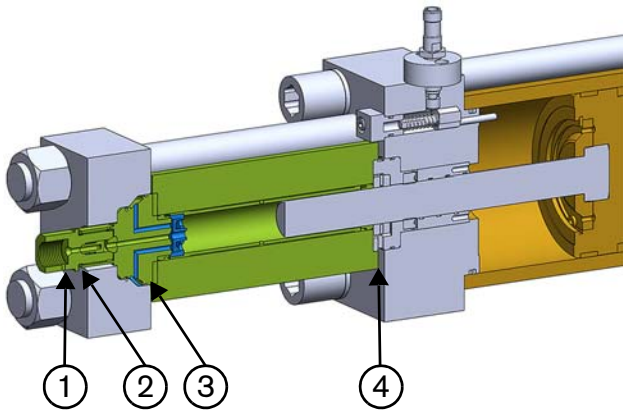
## Leaks

Make sure that the tubing, water fittings, and quick disconnects inside and outside of the pump are not leaking.

Damage to the high-pressure water seals and the hoops is the most common cause of water leaking from the intensifier. Water dripping from the high-pressure cylinder shows that the seals will soon require changing. One drip every few strokes means that the seals should be watched. More than 1 drip with each stroke means that the seals in that high-pressure cylinder should be changed at the first opportunity.

Weep holes throughout the high-pressure water system let water escape from leaking parts. Leaks can mean that there is a faulty part, loose fitting, or damaged seat. Failure to correct the problem can result in damage to the mating fittings.

Look for leaks at both ends of the high-pressure cylinder.




**1** Output adapter weep hole

**2** High-pressure seat weep hole

**3** Static seal leak point

**4** Dynamic seal housing weep hole

| Water leak from | Possible cause |
|---|---|
| Output adapter weep hole | ▪ A fitting on the high-pressure water tubing is not tight enough.<br>▪ The tubing end is cracked or damaged.<br>▪ The output adapter has failed. |
| High-pressure seat weep hole | ▪ The output adapter is loose.<br>▪ The high-pressure poppet seat has failed.<br>▪ The seat face of the check valve is cracked.<br>▪ The check valve O-ring closest to the output adapter has failed. |
| Static seal leak point | ▪ A high-pressure seal has failed.<br>▪ The check valve O-ring closest to the high-pressure seal has failed. |
| Dynamic seal housing weep hole | A high-pressure seal has failed. |

| Hydraulic fluid leak from | Possible cause |
|---|---|
| Dynamic seal housing weep hole | ▪ The rod seal has failed.<br>▪ The O-ring or O-ring backup on the seal housing has failed. |
| Anywhere on the intensifier | An O-ring has failed. |

A leaking high-pressure seal in the intensifier can force water past the rod seal and into the hydraulic fluid. Hydraulic fluid contaminated with water has a milky appearance. Contaminated hydraulic fluid can damage the hydraulic pump.

Water can only enter the hydraulic system if the weep holes on the dynamic seal backup and the seal housing are blocked. Make sure that the weep holes are free of debris while doing maintenance on the intensifier.

Replace the hydraulic fluid and examine all of the parts, including the inside of the hydraulic fluid tank, the hydraulic hoses, and seals. Refer to page 92 for instructions. It could be necessary to drain and flush out other areas such as the shift valve, hydraulic manifolds, and the hydraulic pump.

## Short seal life

If the high-pressure water seals have a short life, take these actions.

- Make sure that the mating surfaces are smooth and free of debris.
- Repair or replace the high-pressure cylinder and plunger.
- Make sure that the water quality is within satisfactory ranges. Refer to the Water quality section, which begins on page 182.
- Examine the ends of the high-pressure cylinder for cracks.
- Replace the high-pressure water seals and hoops.
- Replace the high-pressure cylinder.

If the high-pressure seal backups have a short life, make sure that the plunger bearing is not worn.