

RATCHETED E-RING RETENTION DEVICE

ABSTRACT

A wellhead assembly (10) includes an outer tubular wellhead member (12) and an inner tubular wellhead member (16) with a seal pocket (22) between them. A seal ring (30) is located in the seal pocket (22). An annular energizing ring (46) urges the seal ring (30) into sealing engagement with the outer tubular wellhead member (12) and the inner tubular wellhead member (16). A recess (48') is located on an outer diameter of the annular energizing ring (46) or a radially inner diameter of the seal ring (30), and a ratcheted retainer (40) is on the other. A ratchet clip (50') with a clip profile (52) is located within the recess (48'). The recess (48') and the ratchet clip (50') extend less than a full circumferential distance around the outer diameter of the annular energizing ring (46) or the radially inner diameter of the seal ring (30). A retainer profile (42) on the ratcheted retainer (40) selectively engages with the clip profile (52) of the ratchet clip (50').

[FIG. 1]