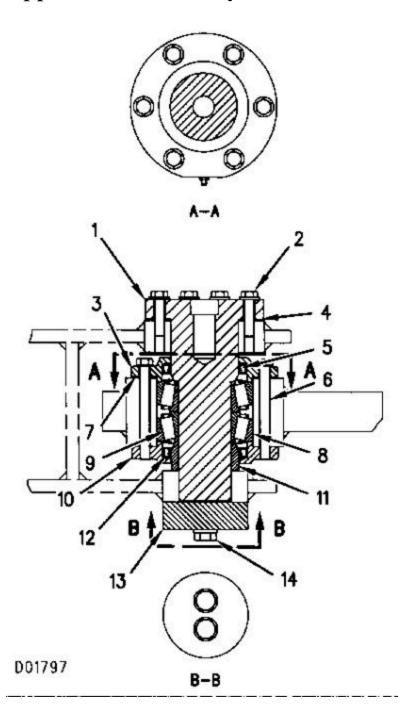
Articulated Hitch Groups

SMCS - 7566

Upper Hitch Assembly Instructions



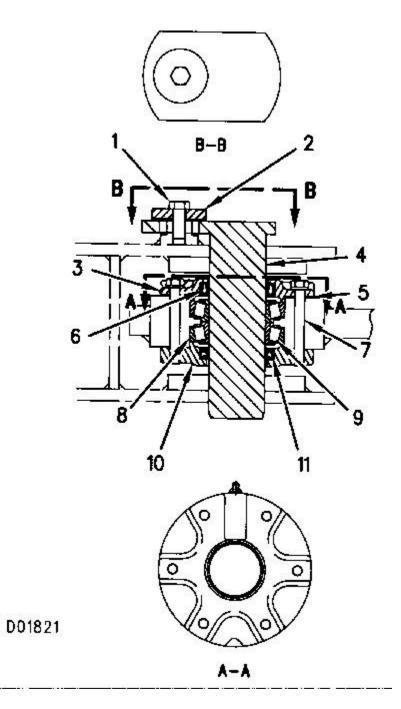
Upper Hitch

- (1) Pin. (2) Bolt and washer. (3) Upper Cap. (4) Shim. (5) Seal. (6) Bolt. (7) Shim. (8) Cup. (9) Cone. (10) Lower Cap. (11) Spacer. (12) Seal. (13) Plate. (14) Bolt and washer.
- **1.** Lubricate seal lips with lubricant being sealed. Position seals (5) and (12) and press seals into caps (3) and (10).
- **2.** Coat all bores with 4C-5592 Anti-Seize Compound.
- **3.** Cool bearing cups (8) to $-75 \pm 5^{\circ}$ C ($-103 \pm 41^{\circ}$ F).
- **4.** Install three bolts (6), equally spaced around lower cap (10).
- **5.** Install cooled lower cup (8) into housing bore. Drive cup down to ensure contact with lower cap.
- **6.** Lubricate cones (9) with oil and install.
- 7. Install cooled top cup and drive down to ensure light contact pressure on cones.
- **8.** Install 2 mm (.080 in) of shim pack (7), upper cap (3), three bolts with washers (6) 120 degrees apart, and tighten bolts an equal amount.
- **9.** Install torquing bolt assembly and tighten.
- **10.** Apply torque wrench to torquing bolt and read torque necessary to rotate cones.
- 11. If torque is within a range of 0.5 to 2.5 N·m (4.4 to 22.1 lb ft), install remaining bolts and tighten.
- **12.** If torque is LESS THAN 0.5 N·m (4.4 in lb) or GREATER THAN 2.5 N·m (22.1 in lb), remove or add shims to provide correct rotating torque.
- 13. Install remaining upper cap bolts and washers.

Upper Hitch Pin Installation Procedure

- **1.** Install spacer (11) in lower cap.
- 2. Install pin (1) through aligned upper hitch bores.
- **3.** Bolt retainer plate (13) with two bolts and washers (14). Tighten bolts.
- **4.** Measure gap 360° around between pin cap plate and upper boss surface.
- **5.** Install two sets of shim halves (4) of equal thickness to fill measured gap.
- **6.** Install all six pin retainer bolts and washers (2) and tighten.

Lower Hitch Assembly Instruction



- (1) Bolt. (2) Washer. (3) Upper Cap. (4) Pin. (5) Shim. (6) Seal. (7) Bolt. (8) Cup. (9) Cone. (10) Lower Cap. (11) Seal.
- **1.** Lubricate seal lips with lubricant being sealed. Position seals (6) and (11) and press seals into caps (3) and (10).
- 2. Coat all bores with 4C-5592 Anti-Seize Compound.
- **3.** Cool bearing cups (8) to -75 ± 5 °C (-103 ± 41.0 °F).
- **4.** Install three bolts (7), equally spaced around lower cap (10).
- **5.** Install cooled lower cup (8) and drive down to ensure contact with lower cup.
- **6.** Lubricate cones (9) with oil and install.

- 7. Install cooled top cup and drive down to ensure light contact pressure on cones.
- **8.** Install 1.5 mm of shim pack (5), upper cap (3) and three bolts with washers (7) 120° apart and tighten bolts to $68 \text{ N} \cdot \text{m}$ (50 lb ft).
- **9.** Install torquing bolt assembly and tighten.
- **10.** Apply torque wrench to torquing bolt and read torque necessary to rotate cones.
- **11.** Add or remove shims as required to obtain a rolling torque of 2.8 N·m (22.1 in lb) to 14.2 N·m (129.7 in lb).
- 12. Install all remaining upper cap bolts with washers and tighten.

Lower Hitch Pin Installation

Install pin assembly through aligned lower hitch bore and lock it in place with bolt (1) and washer (2).