

INSTALLATION INSTRUCTIONS

ATRO PARTS
ENGINEERED | DURABLE | RELIABLE
MANUFACTURED IN ST. CLAIR, MISSOURI | U.S.A.

RS20200, RS20201-RIDEWELL SUSPENSION REMANUFACTURER KIT

1. DISASSEMBLE THE SUSPENSION. (RS20200, RS20201, RS20230)

- a.) Mark each swing arm to its position with the compensator beam (1, 2, 3, 4). This will ease the reassembly of the swing arms in the beams.
- b.) Remove the trunnion shaft end caps and pull compensator. Discard the cast iron rings inside the trunnion castings. (RS20200 only).
- c.) Remove the swing arm bolts. These bolts may be tack welded. Tack welds must be removed.
- d.) Remove old springs and overload pads from the swing arms.
- e.) Wire brush all beams and check for cracks. Grind out any cracks and re-weld, if not too severe. If cracks are major, replacement parts may be required.

2. TRUNNION SHAFT. (RS20200)

- a.) Clean the trunnion shaft with a rotary wire brush and solvent to remove rust, dirt, grease, etc.
- b.) The trunnion shaft may show wear in the bushing area. If the wear or grooves do not exceed 3/8" in depth and no cracks appear, the shaft can be reused. If the trunnion castings are not tight on the shaft the castings and shaft should be replaced.
- c.) Check the fit of the trunnion shaft wear sleeve (Part # RS20212) on the shaft. Additional grinding may be required to fit the sleeve over the shaft.
- d.) If the sleeve slides over the shaft. Remove it and apply Loctite 620 to the trunnion shaft from the casting out to 7 1/2". Push the sleeve against the casting tightly and let set until reassembly. **If the sleeve does not slide over the trunnion shaft REMOVE sleeve from shaft end and apply heat to the sleeve ONLY (not the shaft) to expand it and then install.**

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3. COMPENSATOR BEAM.

a.) Redrill the elastomer spring bolt holes located on the compensator beam to 11/16".

DO NOT REDRILL the bolt holes in the spring itself.

b.) Burn out the center bushing sleeve with a torch just enough to allow ATRO's sleeve (Part # RS20214) to be inserted into burnt out area.

c.) With ATRO's center bushing sleeve template (Part # RS10000) bolted to the compensator beam through the two swing arm bushing threaded holes, place center bushing sleeve (Part # RS20214) over cylinder bolted to the center of the template (additional grinding of the burnt hole area may be required to fit center bushing sleeve). Tack weld sleeve in place, remove template, and finish welding around each side of sleeve and internal gussets. Use a cylinder hone tool inside the center bushing sleeve to remove any high spots due to distortion caused by welding.

d.) Lubricate and press ATRO center bushing (Part # RS20216) into new center bushing sleeve. ATRO's center bushing press-in tool should be used (Part # RS11000).

NOTE: Stepped end of bushing fits into casting on trunnion shaft.

e.) Remove any weld splatter from top of inside web with a grinder to allow ease of swing arm assembly.

4. SWING ARM.

a.) Clamp the swing arm on a milling machine table squarely, using the flats of the end bushing bore hole (large hole). Bore the swing arm hole to a diameter of 3.120 - 3.125. The hole centerline should be parallel to the end-bushing hole.

b.) Lubricate and press in swing arm bushings (Part # RS20230) using ATRO's swing arm bushing press-in tool (Part # RS12000).

c.) Lubricate and press in end bushings (Part #EB38000 or EB38001).

d.) Bolt urethane spring (Part #RS20220) and overload spring (Part #20222).

NOTE: Urethane spring (Part #20220) is designed to replace either long or short rubber springs. If a short spring is replaced then the in-board spring guides on the swing arm and inside the compensator beam must be removed to allow the large spring to rest level.

e.) Minor alterations may be required to the overload spring to reassemble swing arm to compensator beam. Call ATRO office if problems occur, (800) 325-6114.

5. REASSEMBLE SUSPENSION.

a.) Replace original thrust washers alongside the swing arm bushings. **MATCH SWING ARMS TO THEIR ORIGINAL POSITION IN THE CORE (swing arms and beam marked with 1, 2, etc. from step one: Disassemble suspension.)** Install swing arms with swing arm bolts into compensator beams. Do not tighten bolts at this time.

b.) Rotate swing arm into position inside the compensator beam.

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