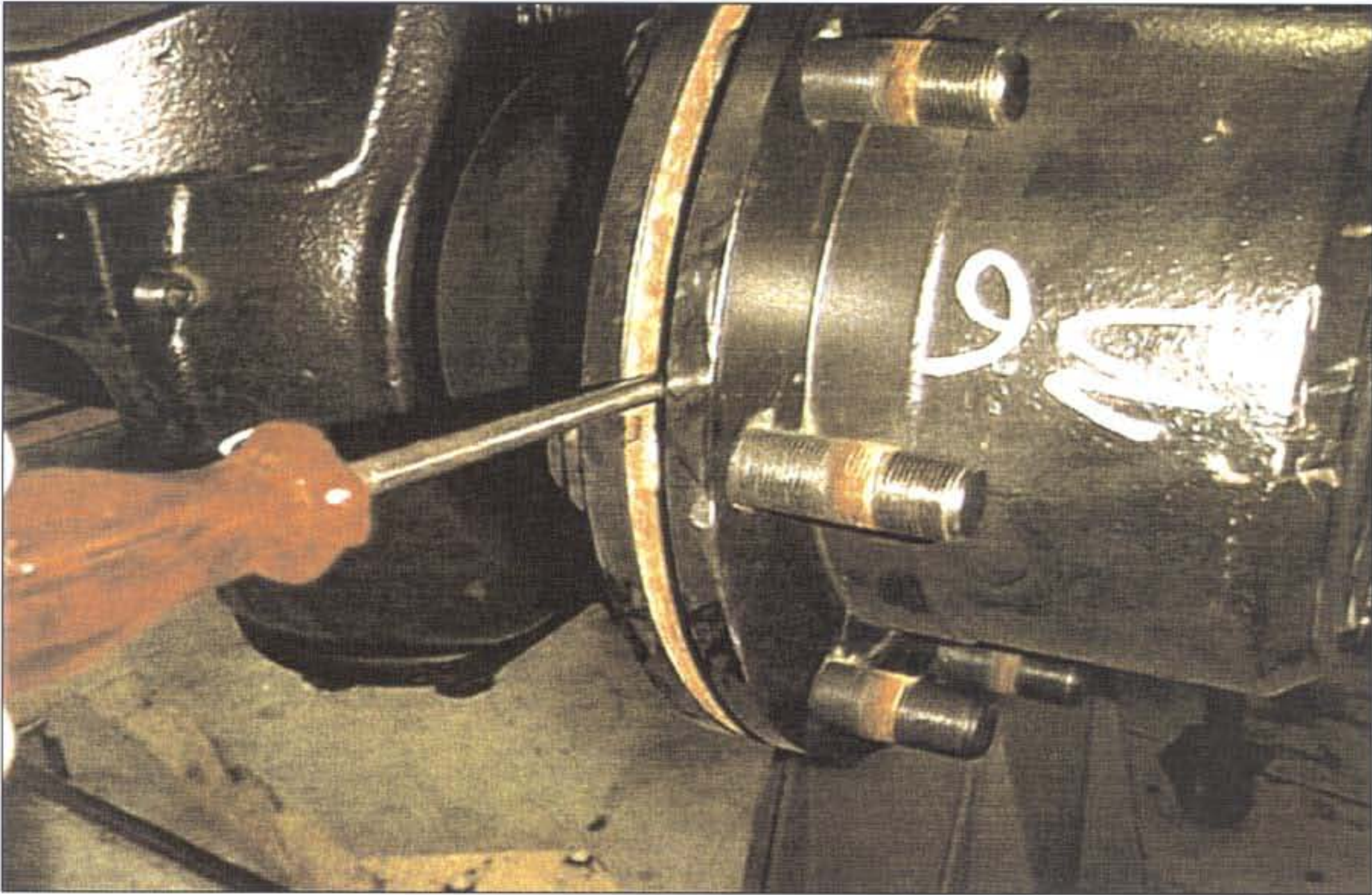


ARDCO FIELD INSTRUCTION

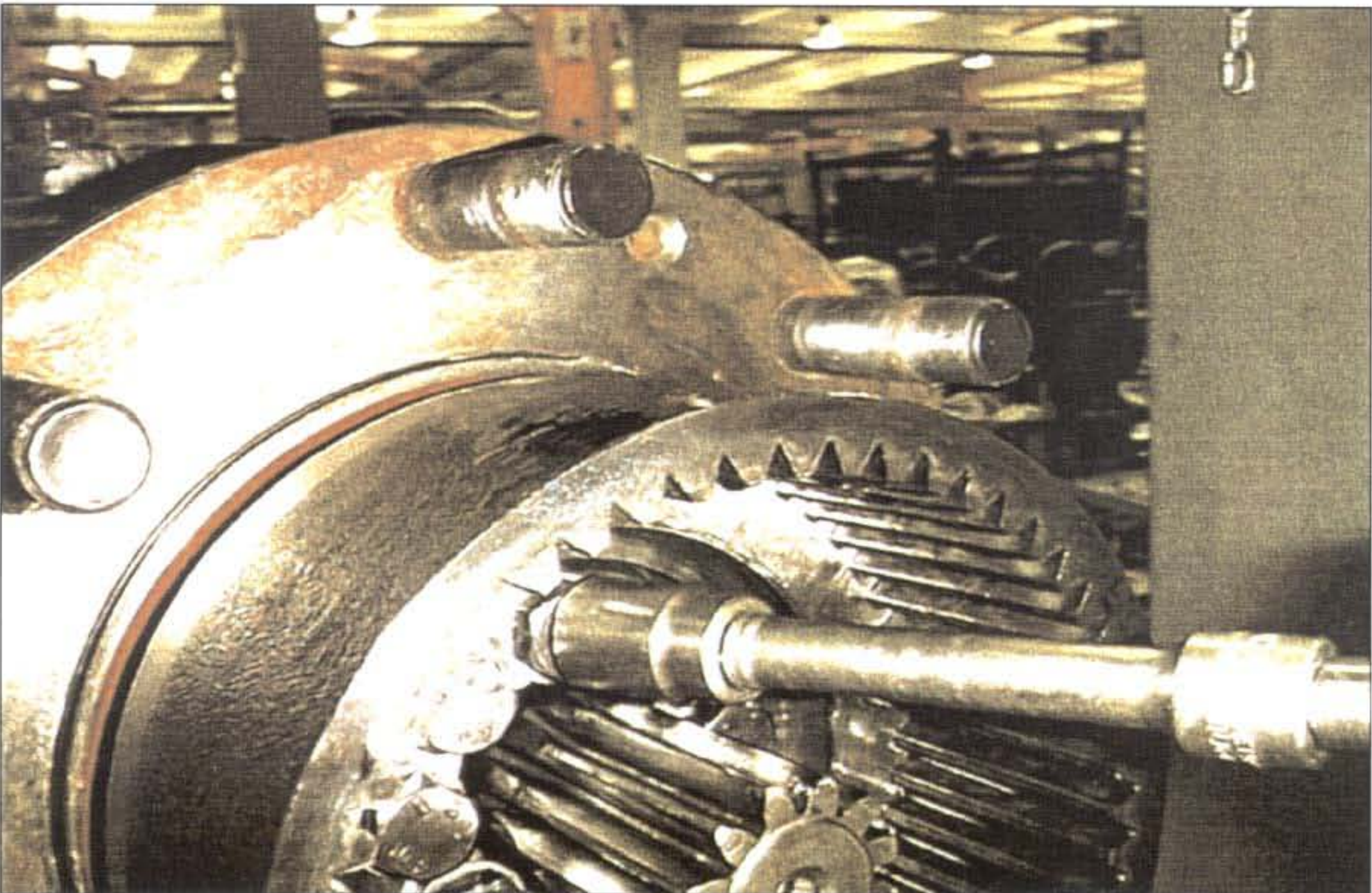
INSTRUCTION TO
UPDATE AXLES TYPE
277 & 279 WITH
REINFORCED SPINDLE

CHC ARCO ITALY

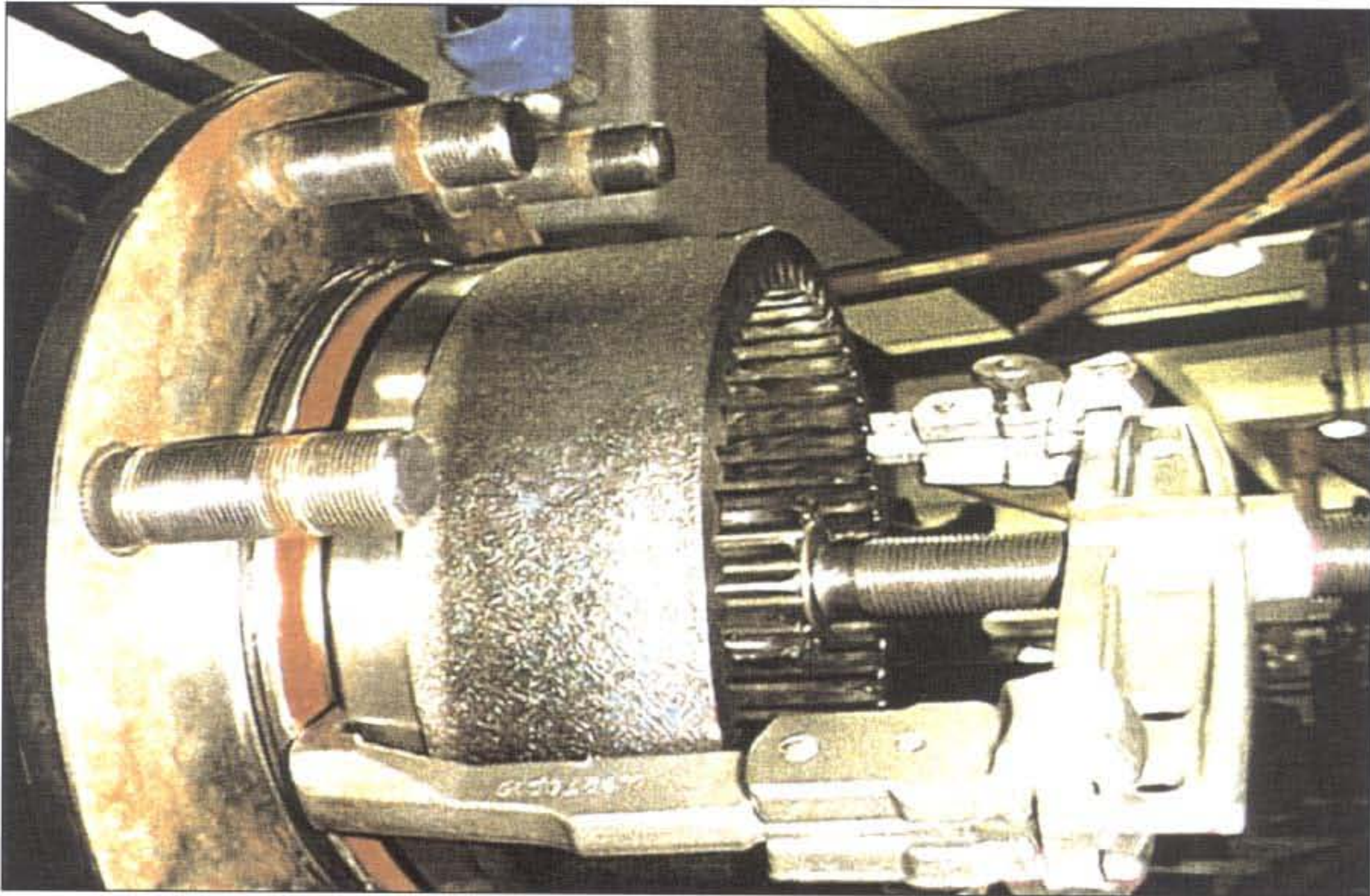
28.09.98



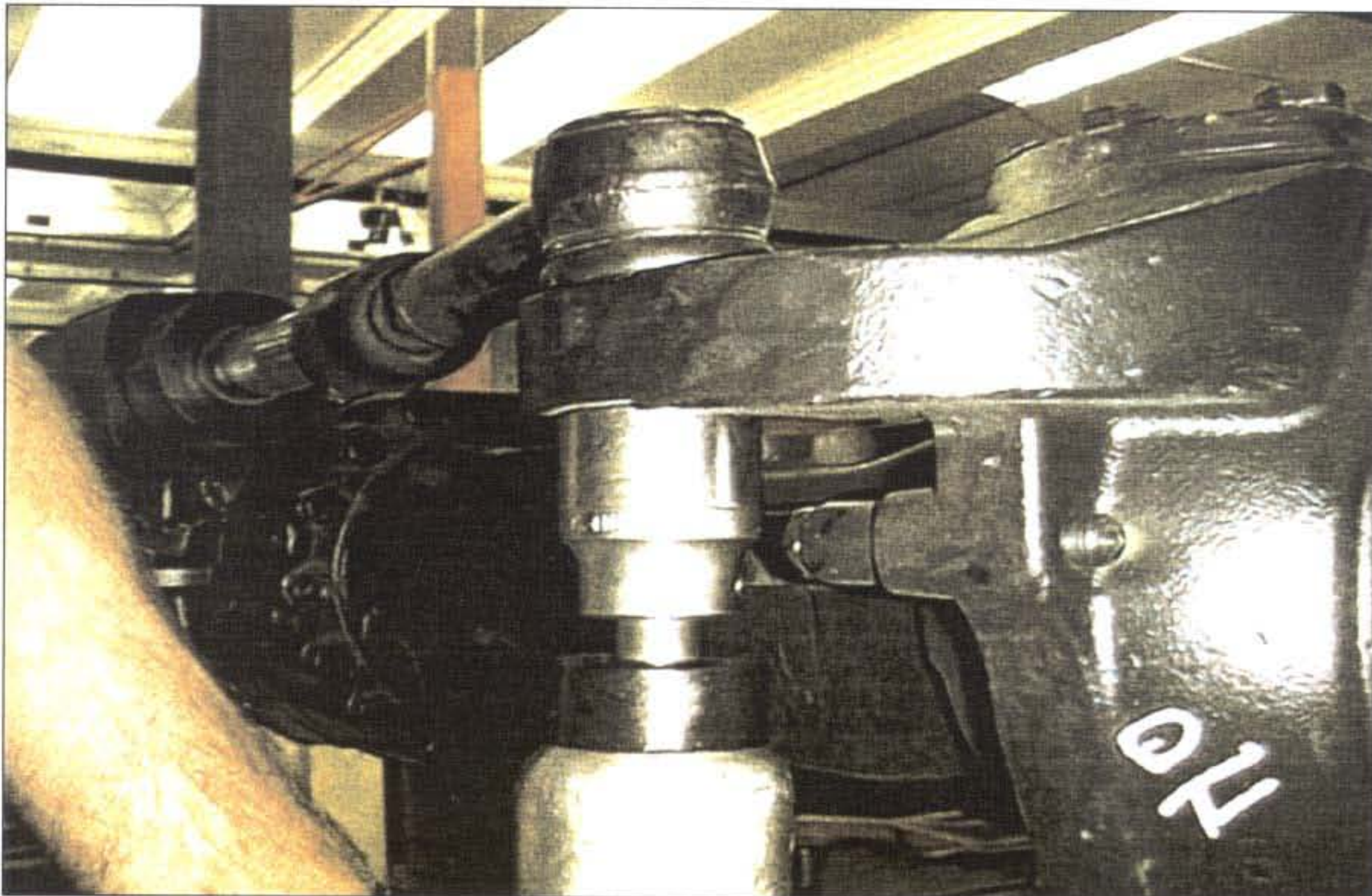
Remove the planet carrier support.



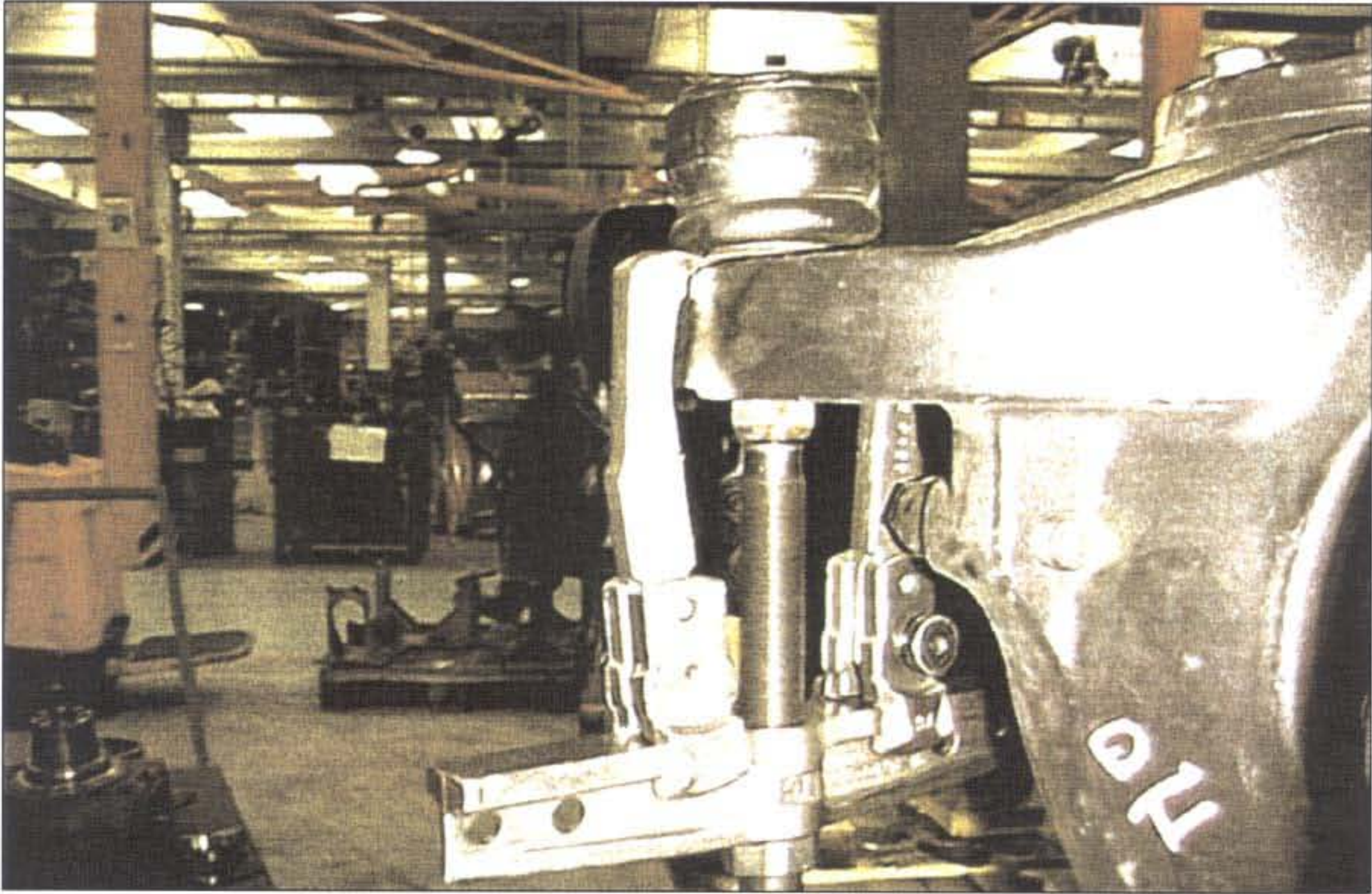
Loosen bolts.



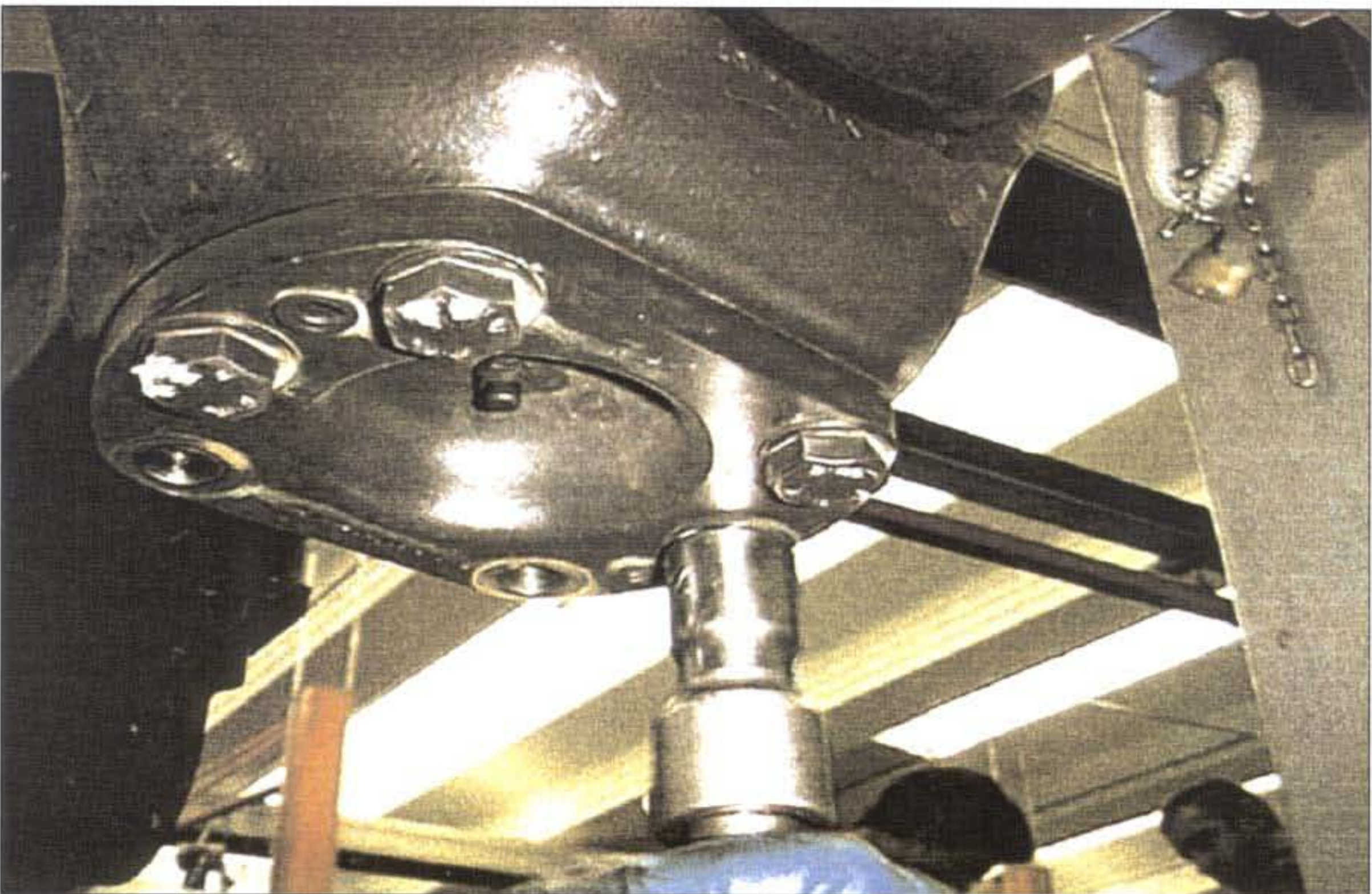
Remove the ring gear, use a puller.



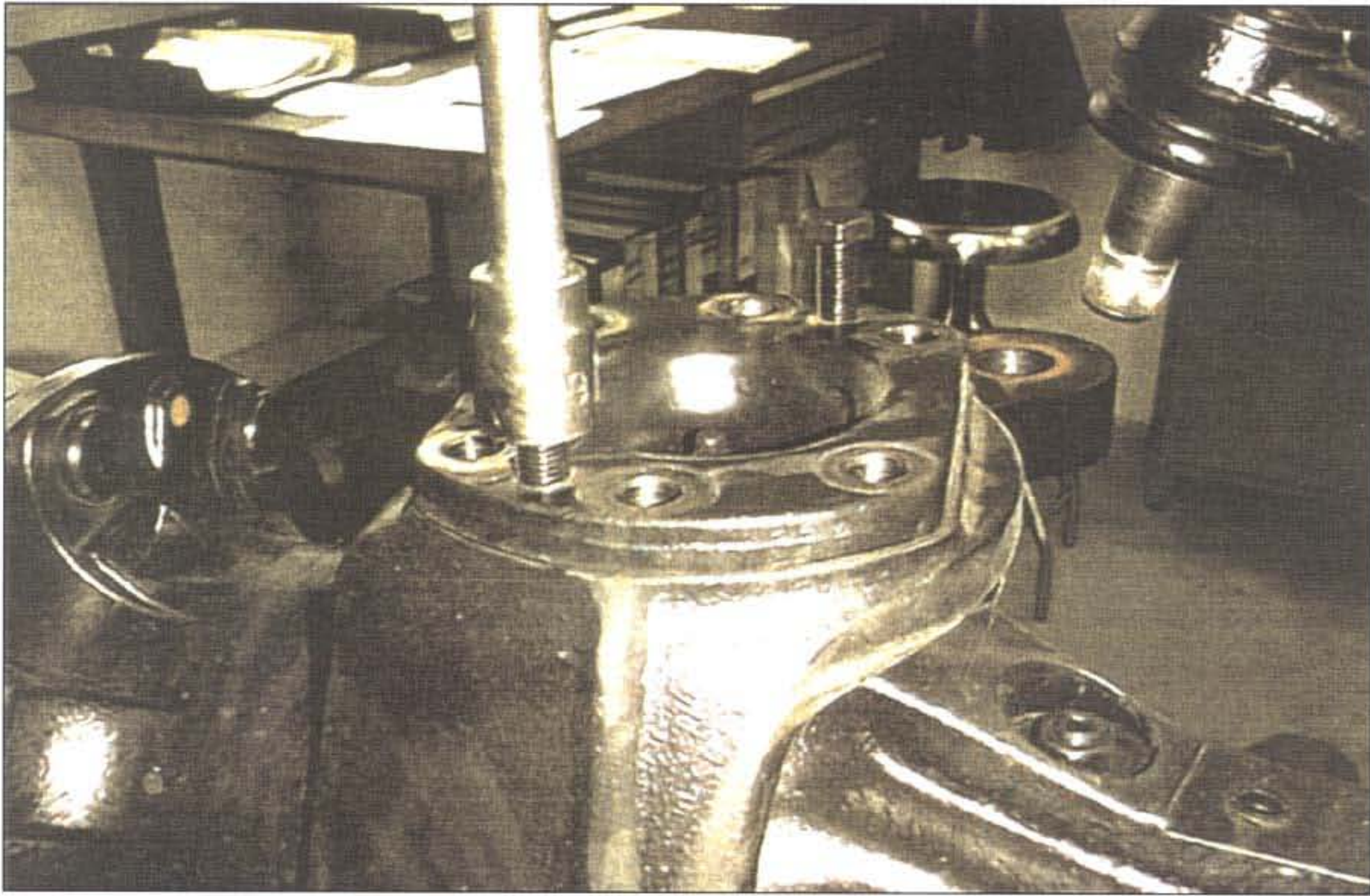
Loosen the nut. Remove the nut.



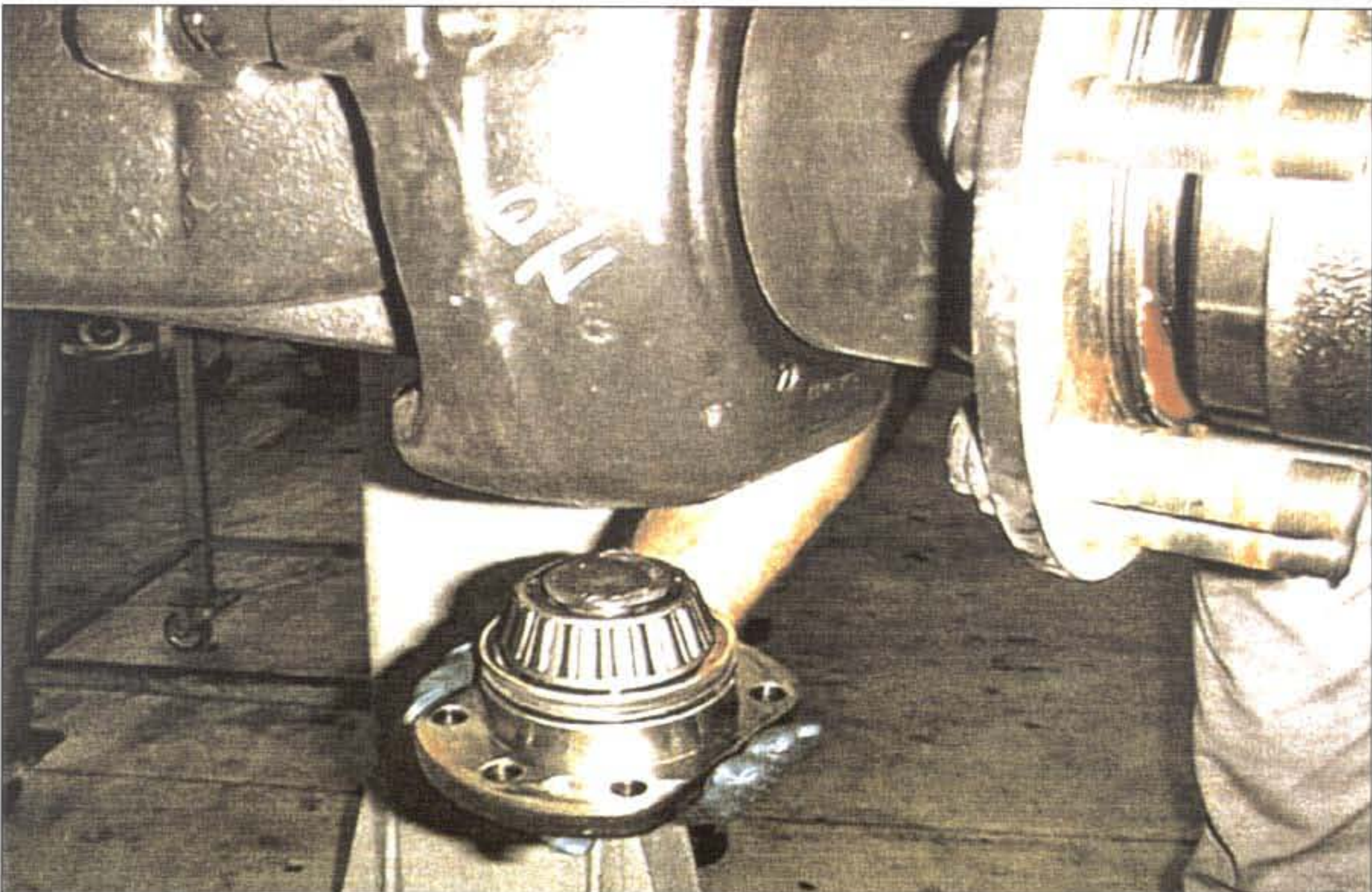
Use puller to remove tie rod ball joint or as an alternative, hit threaded end with a 32-48 oz (.9 - 1.5 kg) "Brass" hammer.



Use a 22mm socket to remove the capscrews on the top and bottom king pins.

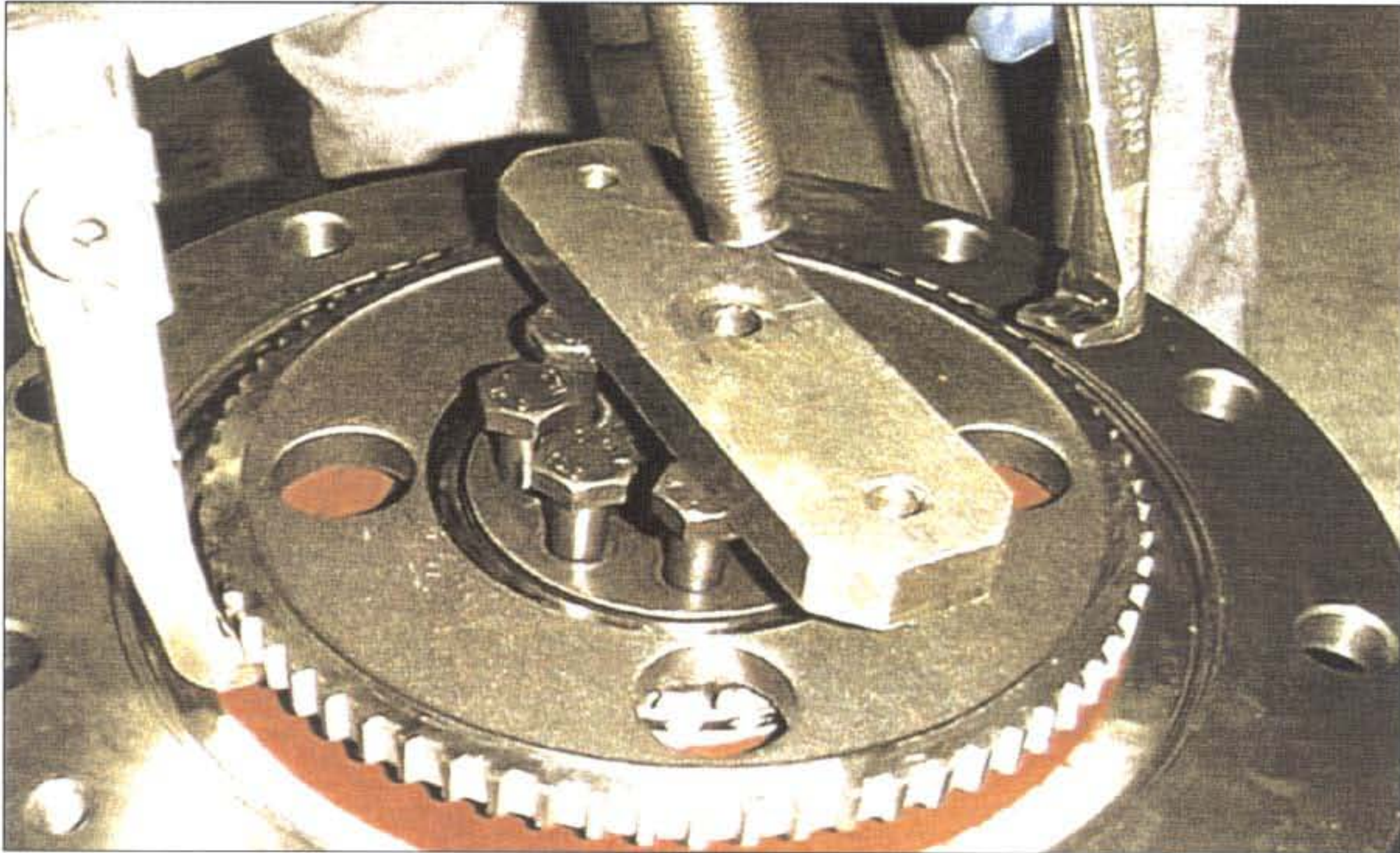


Use the threaded holes to remove the king pins, if the holes are damaged or rusted a brass hammer can be used to loosen the unit and two pry bars used to remove it.

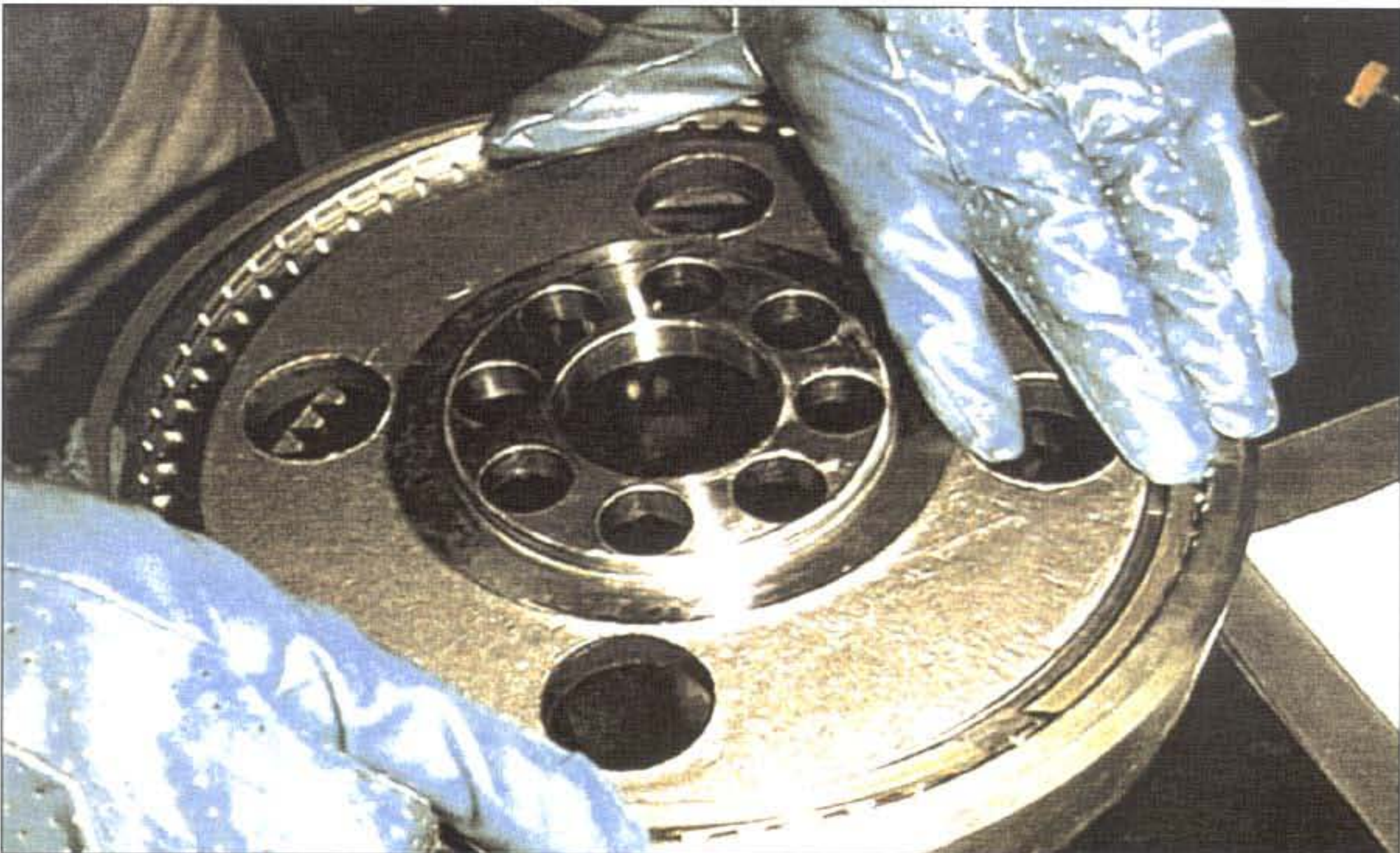


King pin disassembled.

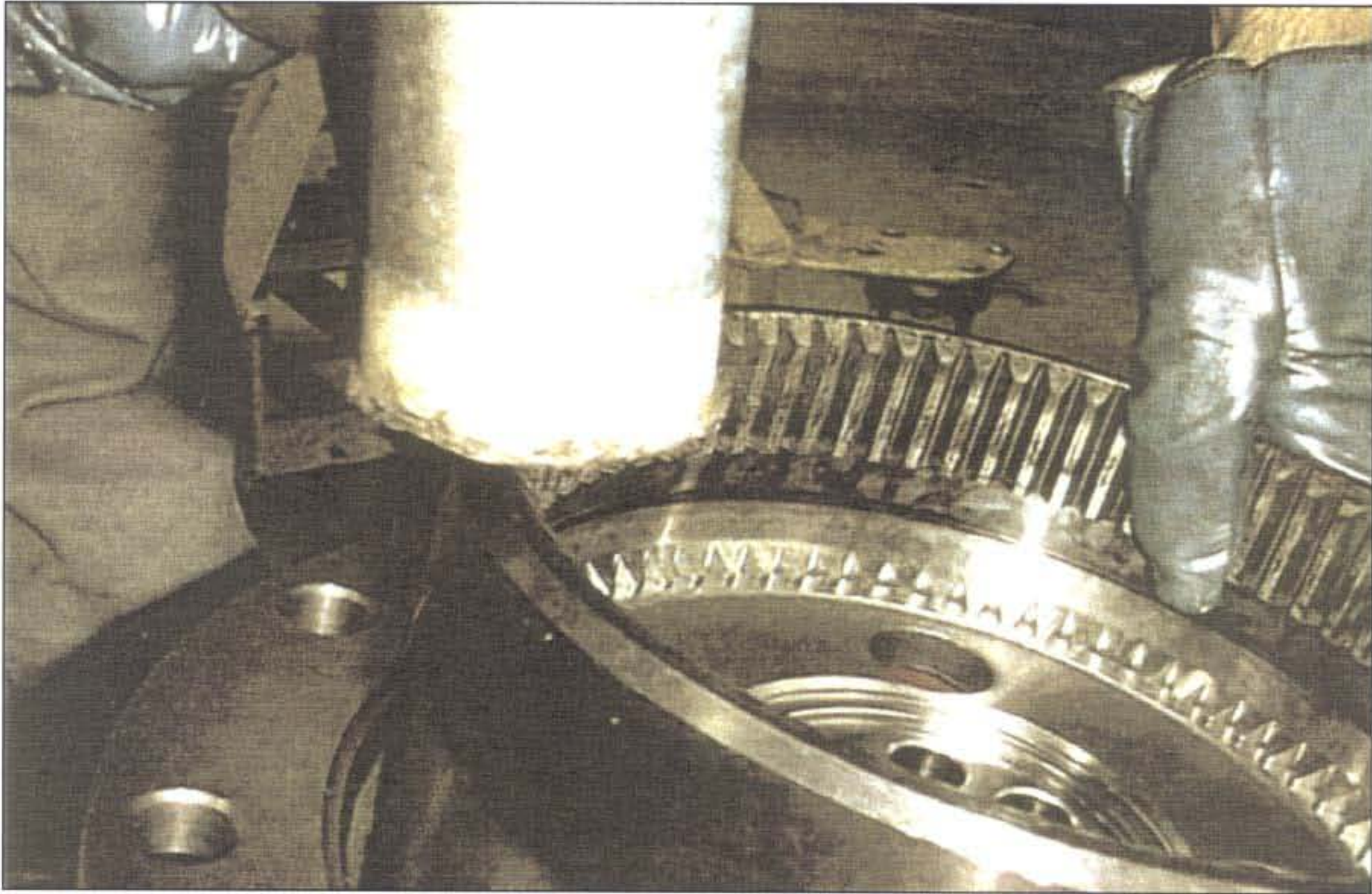
ASSEMBLING



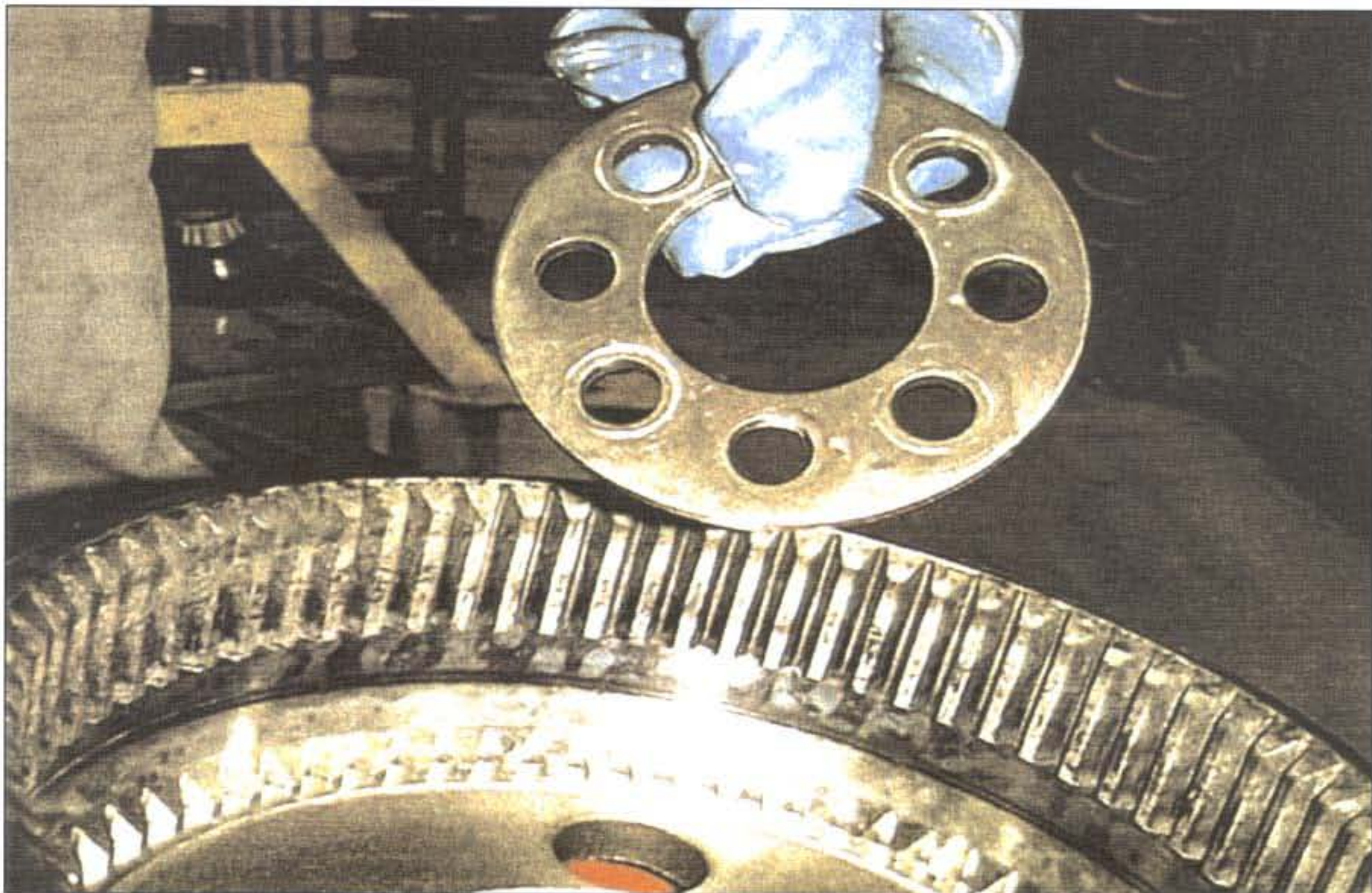
Remove the ring gear support from the kit, use a puller.
This may also be accomplished using two large pry bars.



Assemble the support on the ring gear and install the snap ring.



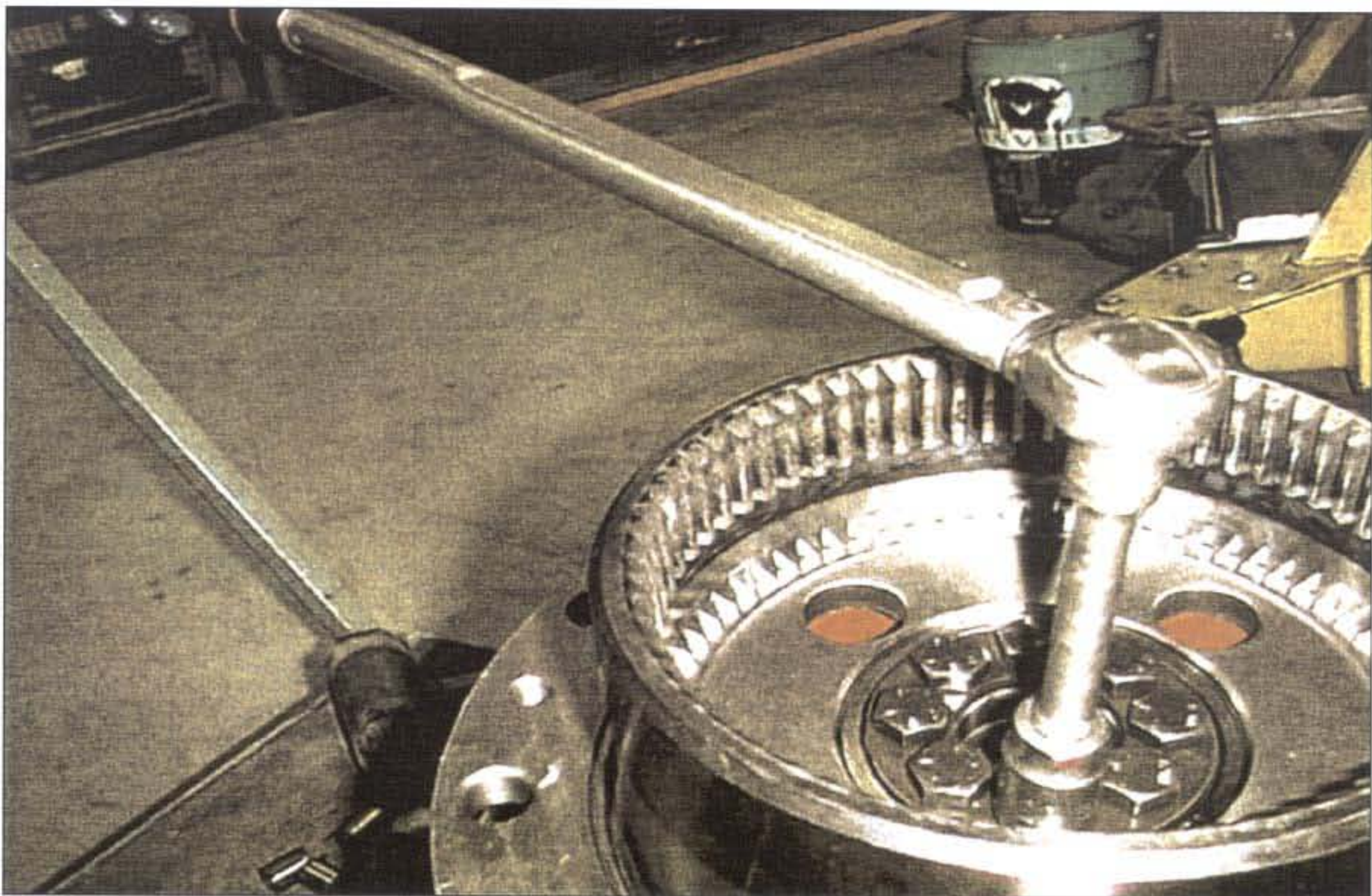
Assemble the ring gear and support. Be careful not to damage or move the shims out of position.



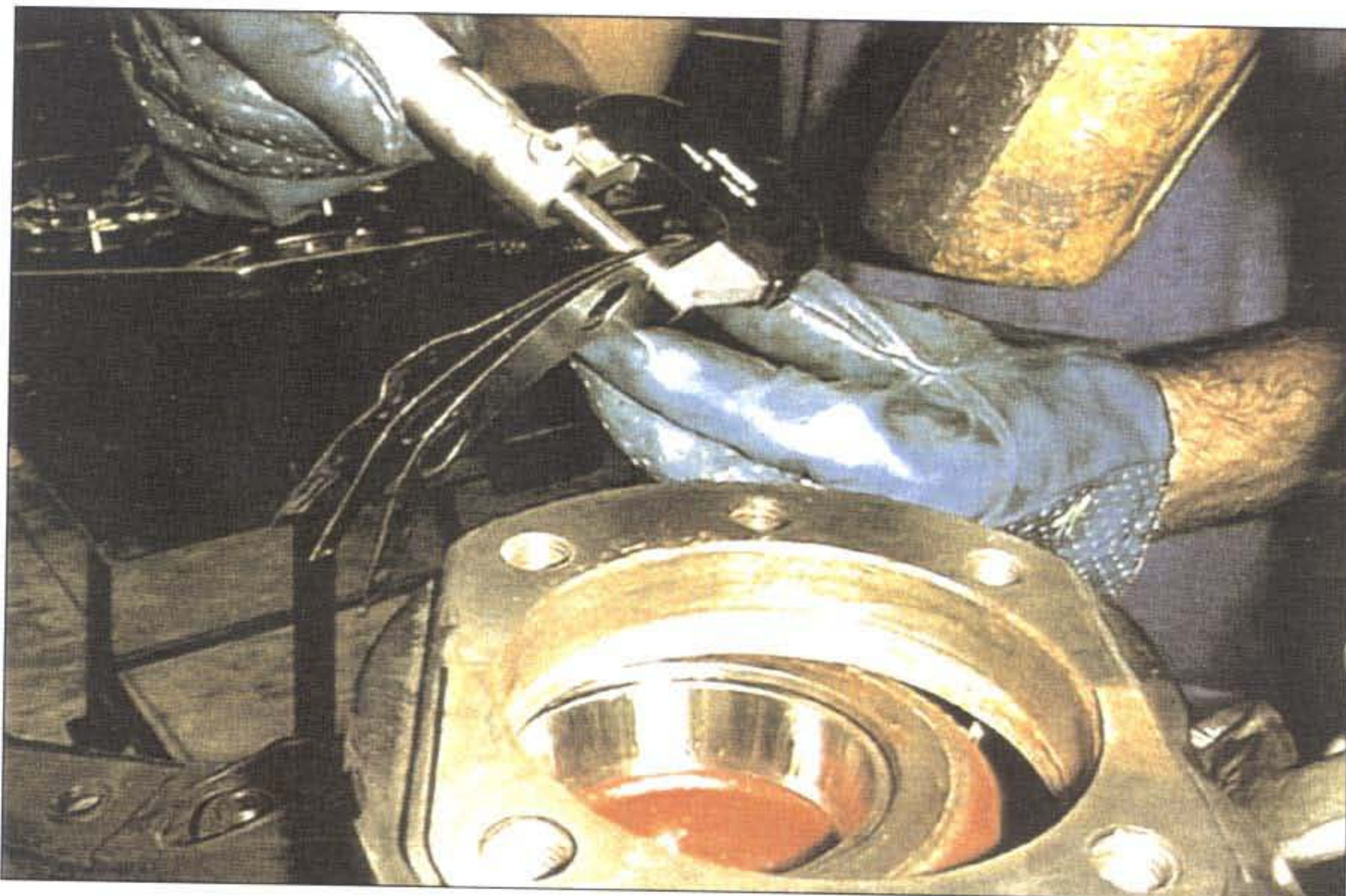
Install the security washer in position.



Use Loctite 270 on capscrews.



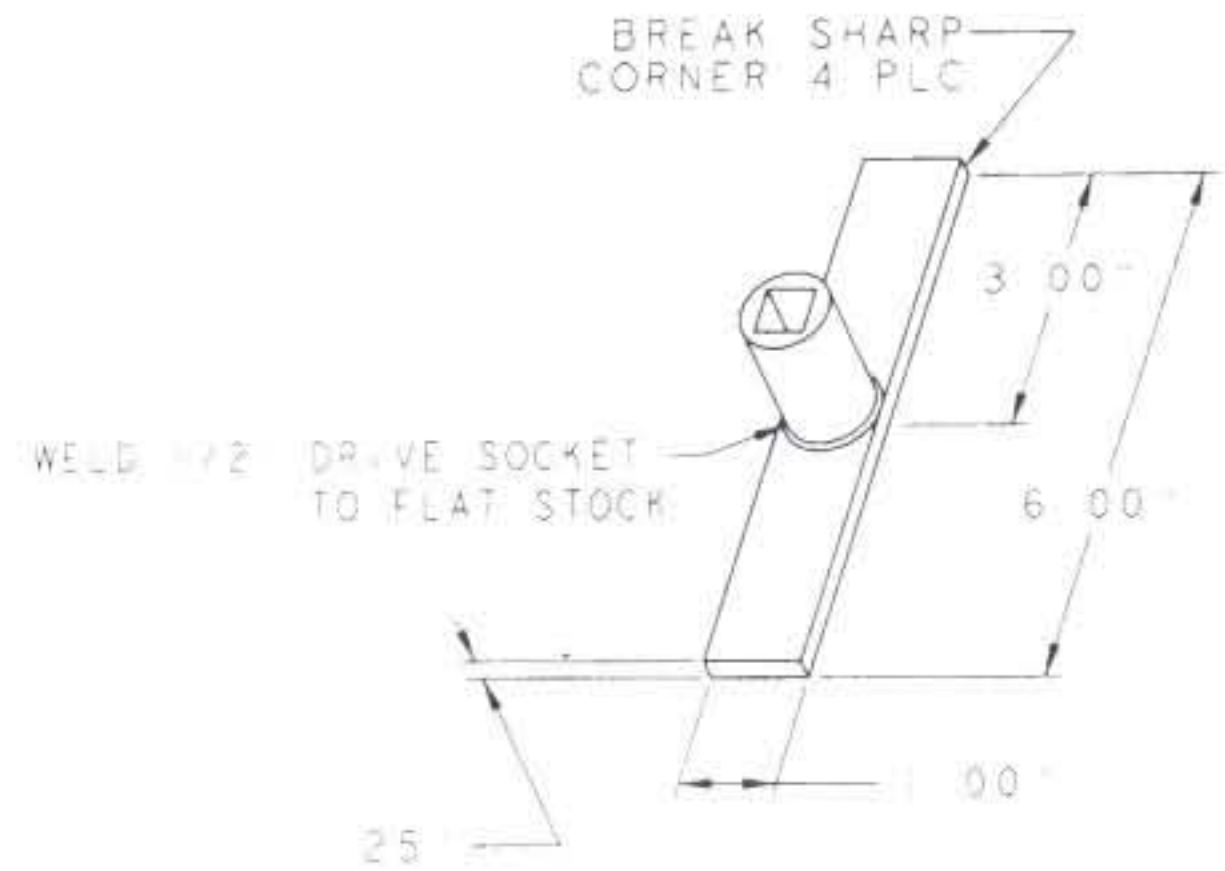
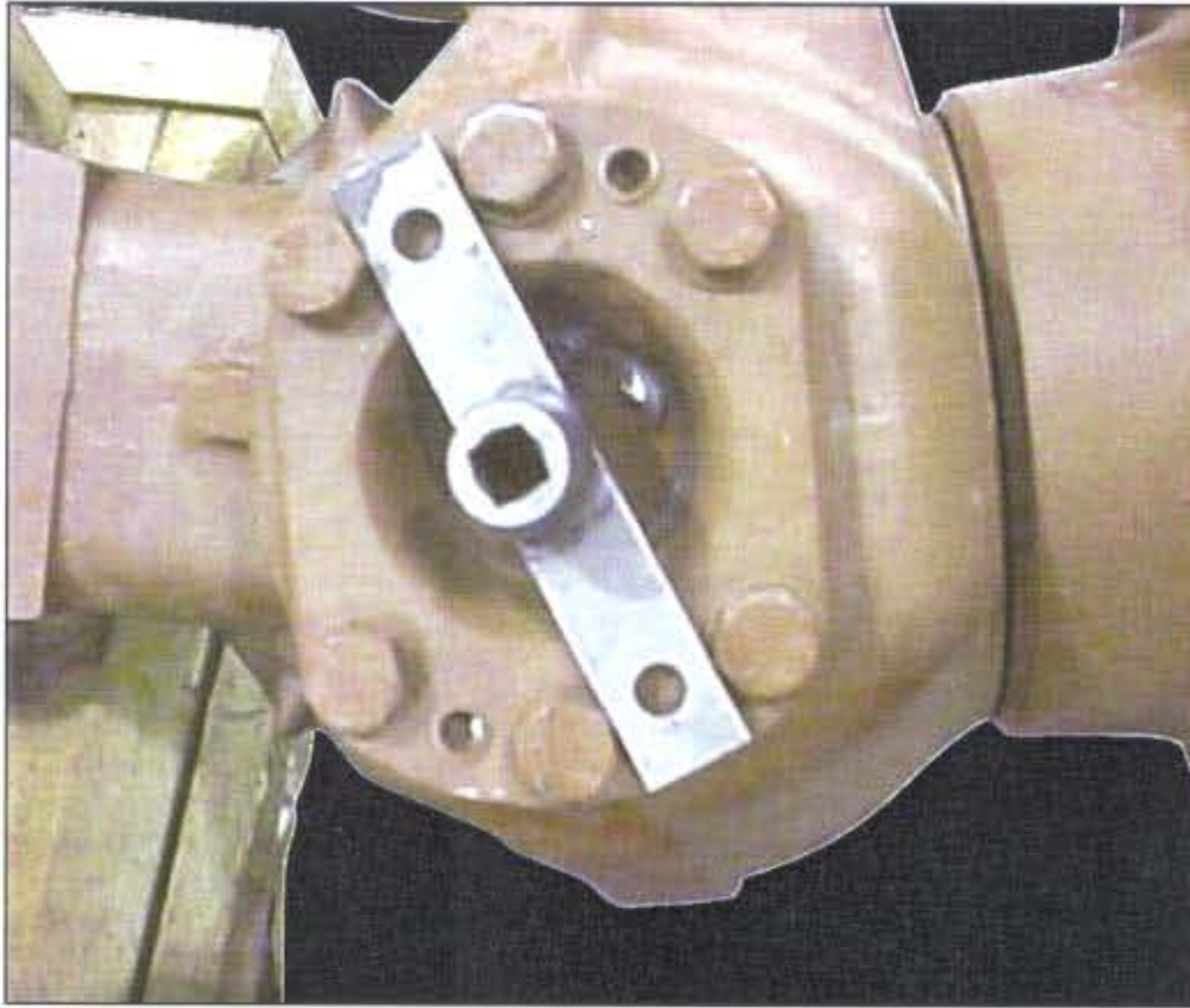
Tighten the capscrews to 160 - 170 ft-lbs (220 - 230 Nm).



Measuring shims for bearing preload.



**Install shims, tighten the capscrews to 90 - 91 ft-lbs (122 - 123 Nm)
axle 279, 140 - 145 ft-lbs (190 - 193 Nm) axle 277.**

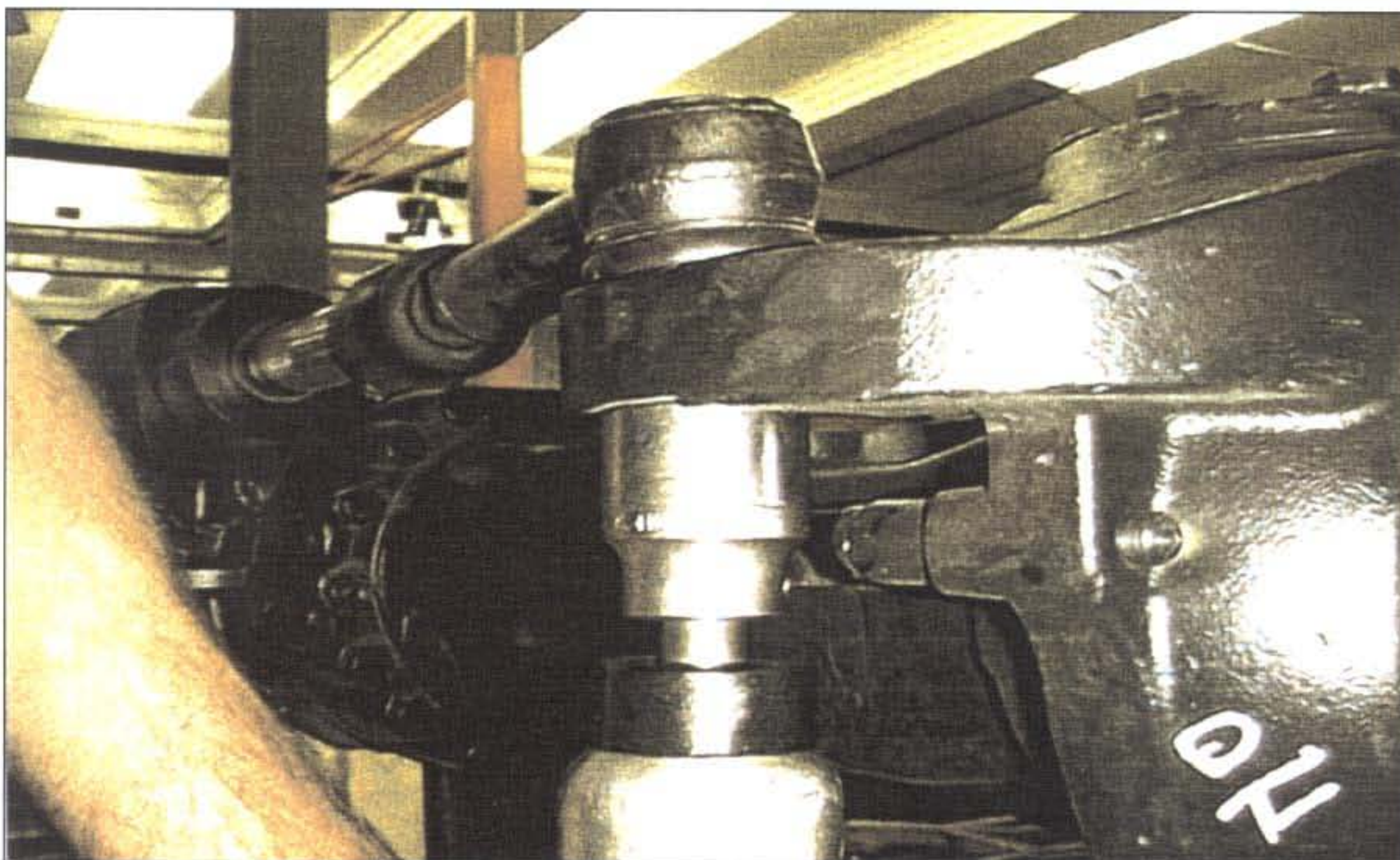


Check torque to rotate using a tool like the one shown or an alternative.

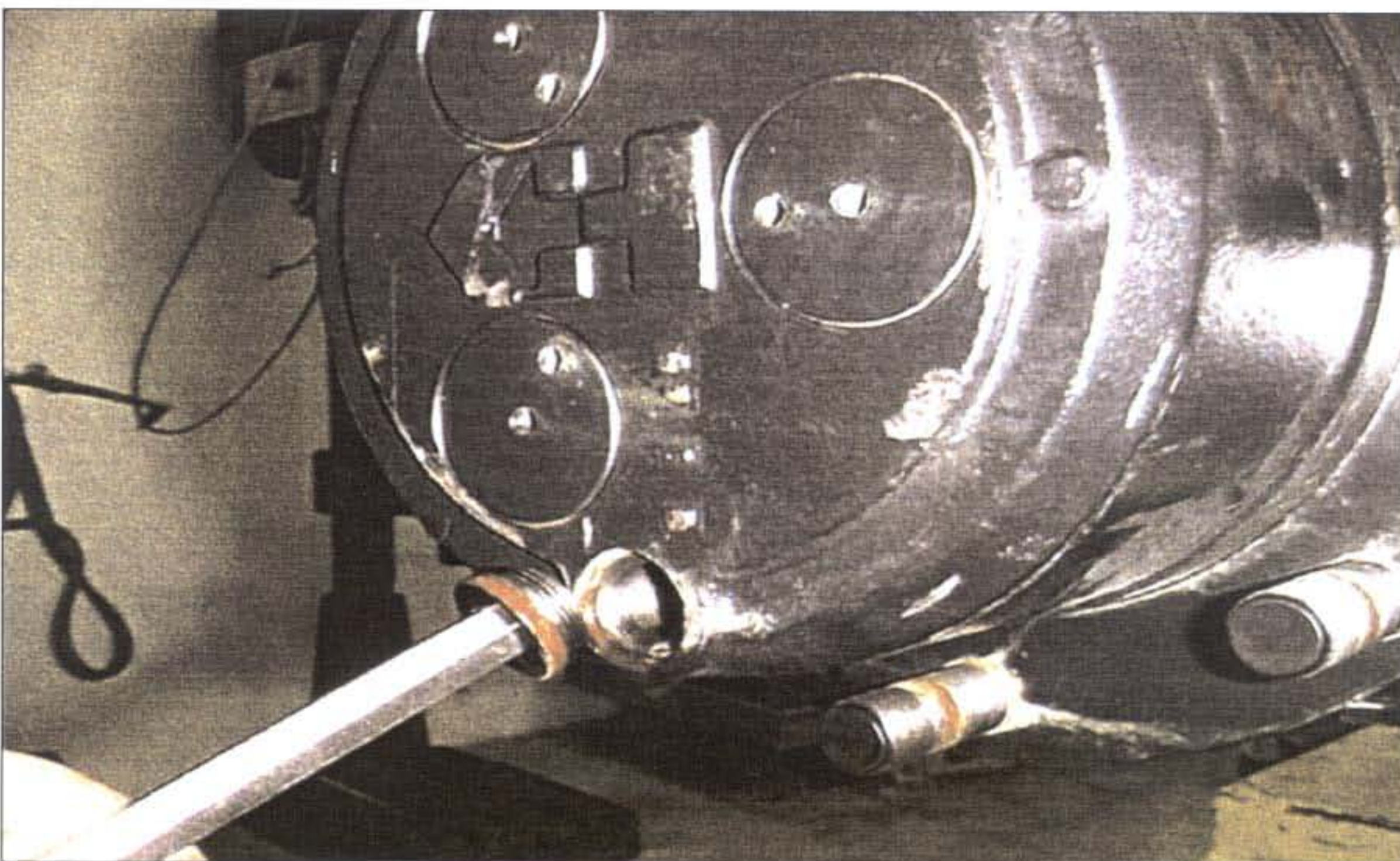


Torque to rotate for the 277 axle is 15 - 17 ft-lbs (21 - 23 Nm) and 11 - 12.5 ft-lbs (15 - 17 Nm) for the 279 axle. This *must* be checked with the tie rod end disconnected. Rotate the unit back and forth at least 4 times before taking reading. Use the highest recorded reading.
Note: If the required torque is out of specification the shim thickness will have to be changed. Install a thicker shim to lower the torque reading, a thinner shim to raise the torque reading.

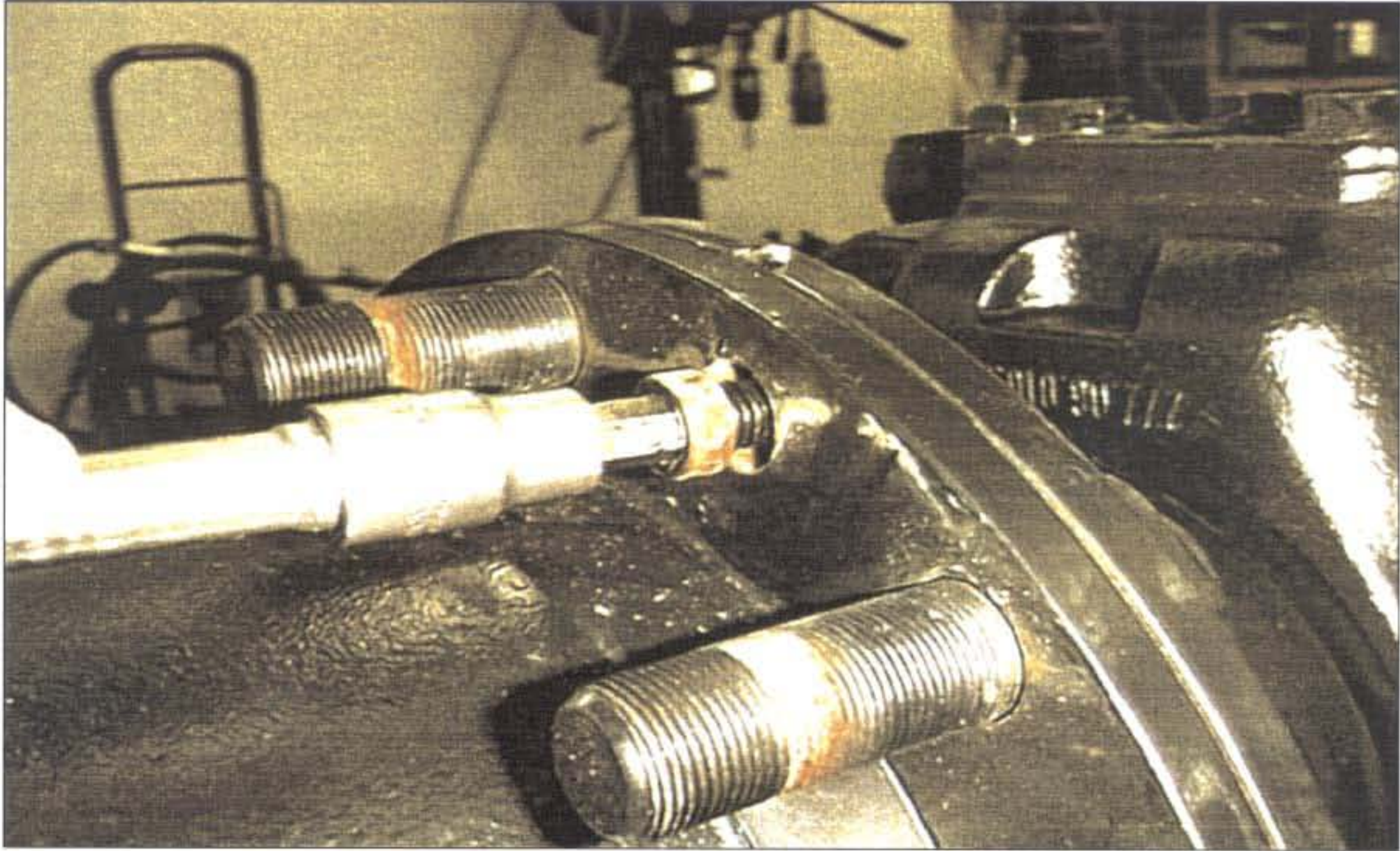
ASSEMBLY



Install tie rod end and tighten to 192 - 207 ft-lbs (260 - 280 Nm).

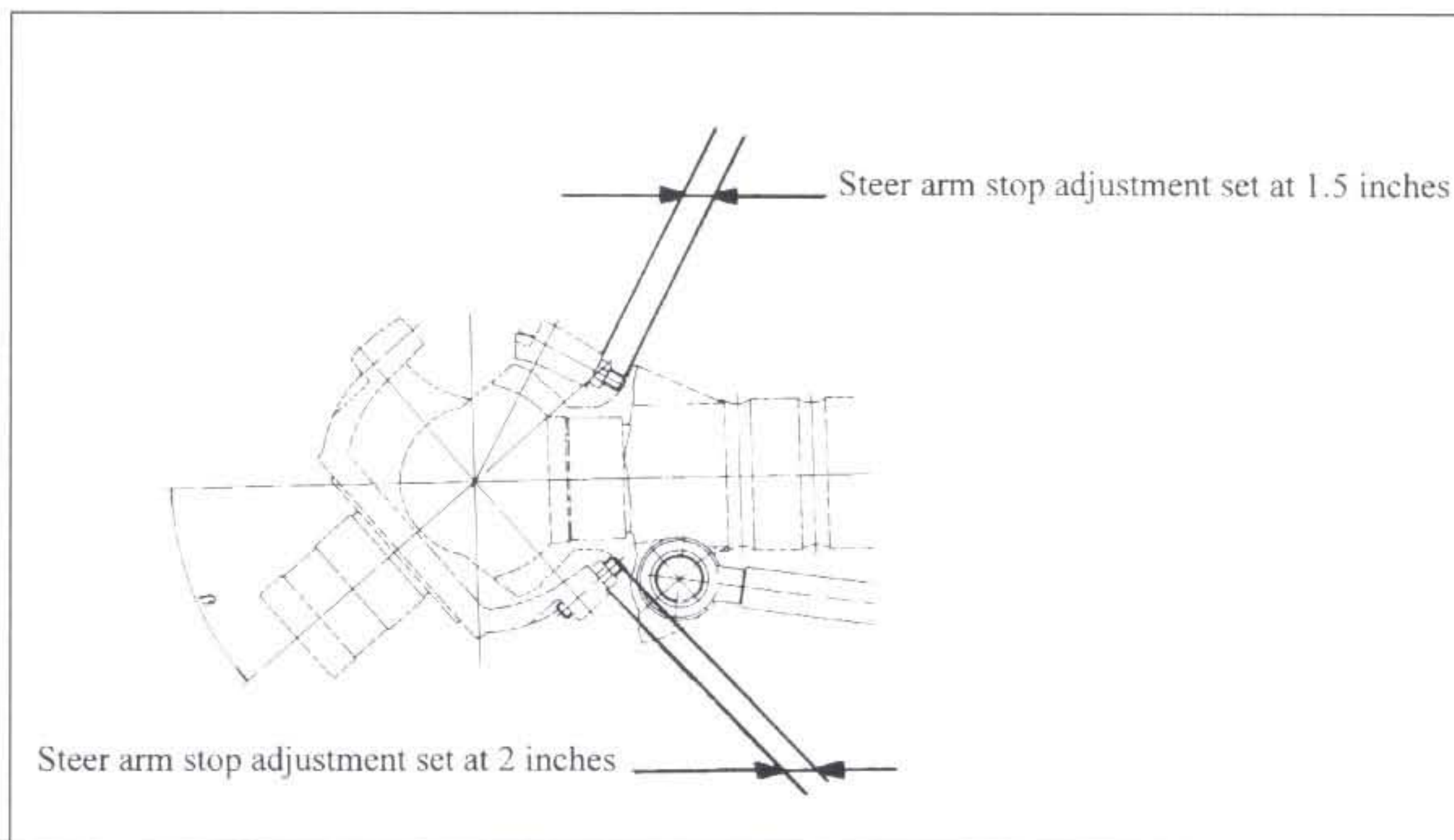


Install fill/drain plug. Use 12mm allen, tighten to 30 - 35 ft-lbs. (41 - 47 Nm).



Install the planet cover retaining screws. Use 10mm allen, tighten to 18 - 20 ft-lbs. (24.4 - 27.1 Nm).

STEER ARM STOP ADJUSTMENT



ARCO UPDATE 2



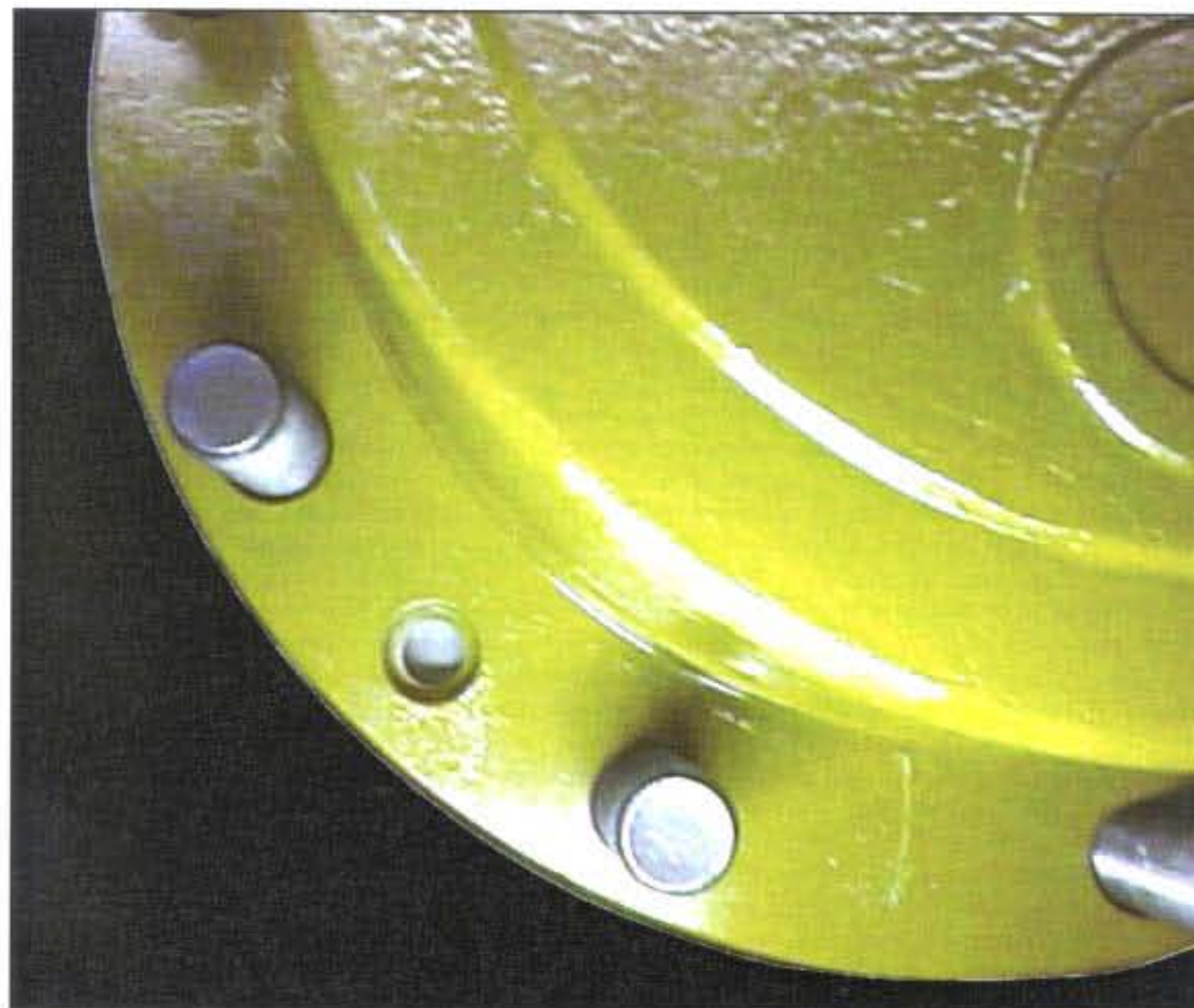
***Align a planet cover hole with a threaded hole in the hub flange.**



***Insert cover bolt as shown and tighten.**



*** Rotate the cover until the cover bolt is at 12 o'clock. The arrows at 5 and 7 o'clock are the holes that will be drilled and tapped. The cover holes at five and seven o'clock can be used as a template.**



*** Use a 13mm or 1/2 inch transfer punch or equivalent tool to locate and punch hole centers. Drill hole with letter drill (Y) or 13/32" as an alternative. Tap hole with 12mm x 1.75 tap. Blow out holes before installing bolts, make sure no chips are on planet cover mating or sealing surfaces when assembling.**



***Install bolts and to tighten to 18 - 20 ft-lbs (24.4 - 27.1 Nm).**