

PARTS & SERVICE NEWS

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SUBJECT: REAR SUSPENSION PIN REMOVAL TOOLS

PURPOSE: To provide tooling information and usage to the field for aiding in the removal of rear suspension pins.

APPLICATION: Komatsu Electric Drive Dump Trucks:
 730E: AFE47-A & Up, A30079 & Up;
 830E: AFE32-A & Up, AFE50-A & Up, A30544 & Up;
 930E: AFE48-A & Up, A30019, A30026 & Up

FAILURE CODE: 5A43FR

DESCRIPTION:

Some maintenance personnel may experience difficulty when attempting to remove rear suspension pins. A set of removal tools has been developed to aid in the removal of the pins. Refer to Table 1 for tool quantities and part numbers. It is also recommended that rear suspension pins be reworked as shown in Figure 2, or new pins be purchased to aid in future pin removal. The reworking of the pin consists of the addition of two threaded holes to the inboard end of the pin. The part numbers for the new pins containing the extra set of threaded holes are as follows:

730E.....EK1327

830E.....EK1326

930E.....EJ2846

TABLE 1. TOOL LIST FOR SUSPENSION PIN REMOVAL

Part Number	Description	Quantity
EJ2847	Pin Removal Tool	2
EJ2848	Cylinder	1
EJ2849	Hand Pump	1
EJ2850	Shackle*	2
MM0093	Capscrew** (M16 x 2 x 70 mm)	4
VN2707	Capscrew*** (.625-11 UNC x 2.75 in.)	4

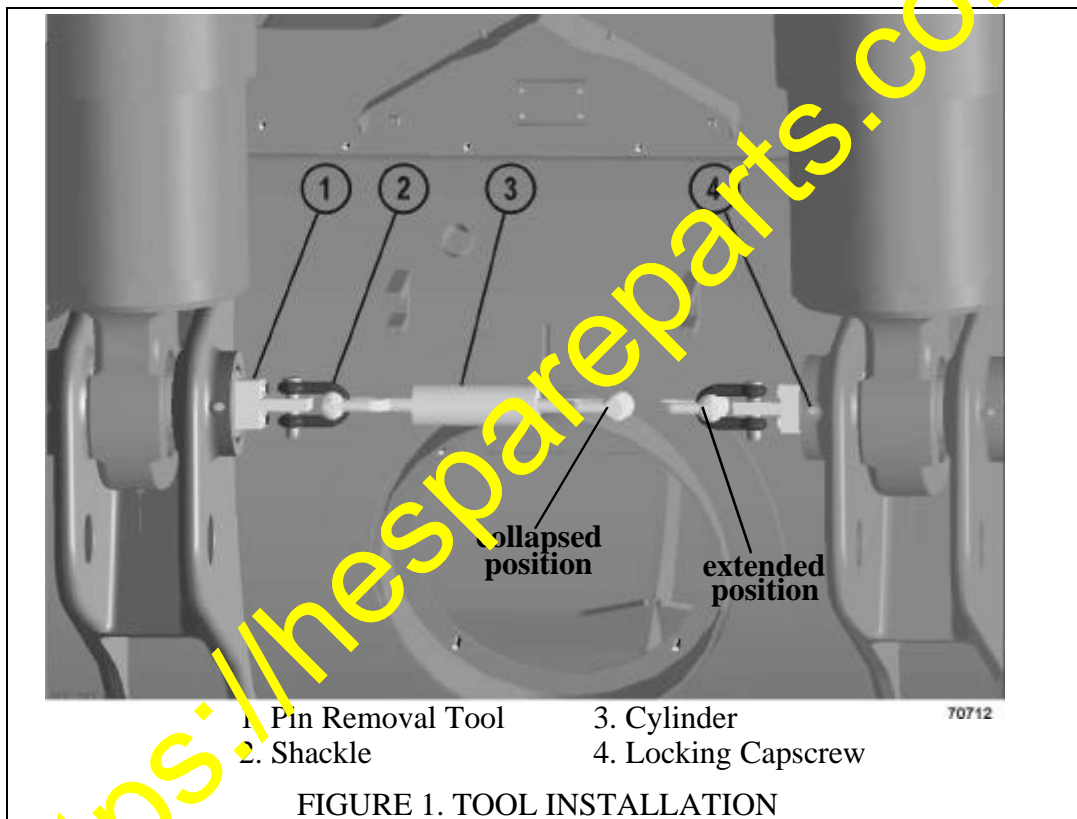
* 730E's require the use of 3 shackles to compensate for the larger distance between pins.

**For use on 730E's and 930E's.

***For use on 830E's.

Removal Procedure

1. Refer to Section "H", *Suspensions*, in the shop manual for preliminary information on removal of the rear suspension cylinders. Note proper methods of supporting the truck frame and suspension cylinder during removal of suspension cylinders.
2. Remove locking capscrew (4, Figure 1) from the lower suspension pin that is to be removed. The locking capscrew on the remaining cylinder must remain installed.
3. Install pin removal tool (1) to each lower pin using the appropriate capscrews listed in Table 1. Tighten the capscrews to a torque of **177 ± 17 ft.lbs (240 ± 24 Nm)**.
4. Attach both shackles (2) to cylinder (3). (730E's require the use of 3 shackles to compensate for the greater distance between pins.)



5. Attach each shackle to pin removal tools (1), as shown above.
6. Apply pressure to the cylinder using the hand pump.



Do not exceed 10 tons of force when applying pressure to the cylinder. Damage to the tool or suspension components may result, as well as personal injury to maintenance personnel.

7. When the cylinder reaches the end of its stroke, remove one of the shackles from the cylinder and connect the cylinder shackle directly to the pin removal tool. This is necessary to pull the pin the remaining distance.
8. Remove the pin from the lower mounting.
9. Remove the upper pin using conventional methods.
10. Remove the cylinder from the truck.
11. If it is necessary to remove the remaining rear suspension cylinder, insert the pin back into the lower mounting and secure using the locking capscrew.
12. Follow steps 1 - 10 for removal of the remaining cylinder.

Installing Pins During Installation of Suspension Cylinders

1. As noted earlier, upper pins must have 2 threaded holes at both ends of the pin for future pin removal tool usage. Install new pins or rework the existing pins per Figure 2. New pin part numbers are listed on page 1.
2. Lubricate all pin to bearing and pin to sleeve contact surfaces with Anti-Seize Compound. Lubricating the pin surfaces aids in removal and installation, as well as prevention of rust and corrosion.
3. Refer to the shop manual for proper installation procedures.
4. After installing each pin into the suspension mounting, install a pin removal tool onto the pin. Use the tool in conjunction with a large pipe wrench or other suitable device to align the locking capscrew holes.
5. Complete suspension cylinder installation according to shop manual procedures.

