PART C
COMPLETING THE INSTALLATION

1. On the non-drive side place the medium spacer (KL5) with the large diameter steel washer and 8mmX1.0 crank bolt. (only tighten the crank bolt until snug). This will insure that the non-drive setting is maintained during installation.

2. Put a thin coat of RC 680 loctite on all remaining contact areas ie. (outside non-drive side bearing, inside and outside of drive side bearing, inside edge of the bottom bracket shell, and drive side of the spindle where bearing will seat). From the non-drive side insert the spindle through the bottom bracket shell. Place the outer bearing onto the spindle on the drive side. Install the main screw (KL1) into the spindle until snug. See figure 3.

3. Slide on the large spacer with shoulder (KL4) with its shoulder facing away from the bottom bracket shell.

Note: if you are setting the bottom bracket for Shimano XTR you will need to place the spacer (KL4) with the shoulder facing into the bottom bracket shell. This will inset the drive side bearing 3mm.

4. Slide on the bronze thrust washer and then thread on the tightening nut. See figure 3.

5. While holding the main screw stationary with an 11mm wrench, rotate the tightening nut until both spacers meet the frame, Now, remove the tool.

6. Clean off all excess loctite. Turn the spindle by hand to insure free rotation.

7. To check proper spacing and chainline, place the cranks on the spindle and tighten. Remove the cranks and allow the loctite to cure for 24 hours at room temperature (70° F) before installing cranks.

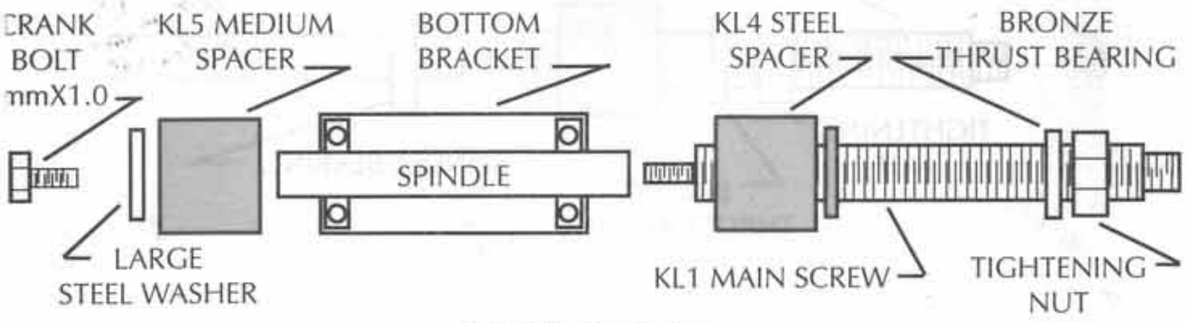

FIGURE 3

KLEIN

BOTTOM BRACKET TOOL SET

#60872

PART A
REMOVAL OF SPINDLE AND BEARINGS

1. Remove the crank arms. Record the current bottom bracket settings by measuring the total spindle length and the non-drive side setting. This is measured from the bottom bracket shell to the end of the spindle.

2. On the non-drive side, place spacer (KL6) over the spindle followed by the large diameter steel washer and the 8mmX1.0 crank bolt. (only tighten the crank bolt finger tight)

3. On the drive side thread the main screw (KL1) into the spindle . Note: it is important to maintain a well lubricated main screw during the entire procedure. Place the Steel tube (KL3) up against the bottom bracket shell, then on top of this, place the larger spacer (KL4) with its shoulder in the tube. Next slide over the bronze thrust washer and thread on the nut. See figure 1.

4. Hold the main screw in place with an 11mm wrench and thread the tightening nut towards the bottom bracket. This continued action will extract the entire unit.

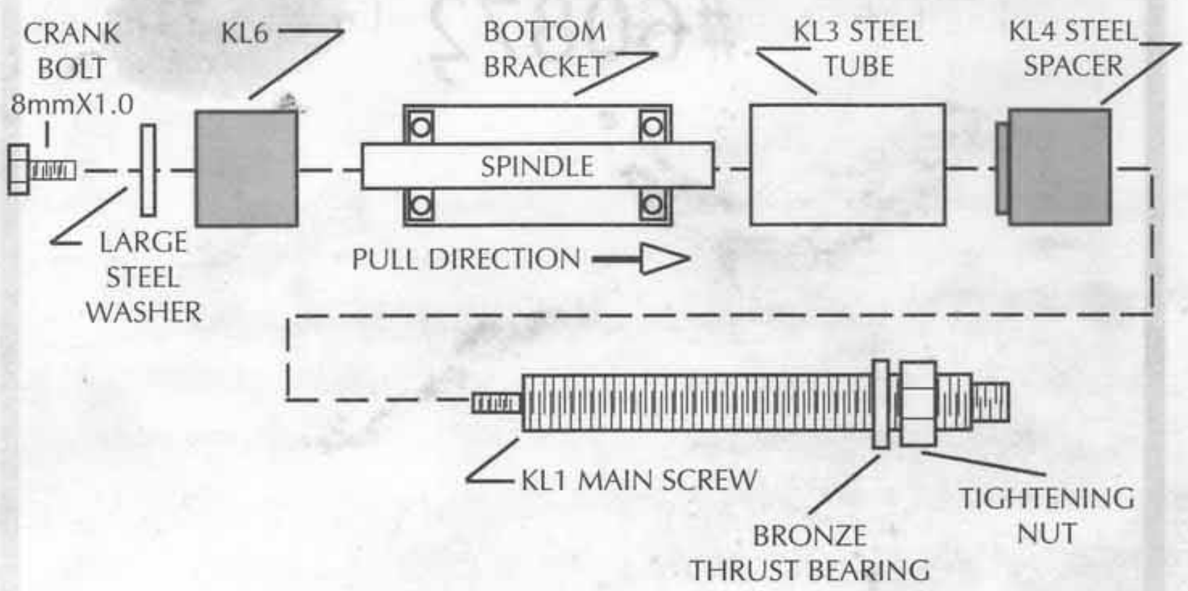

FIGURE 1

PART B
INSTALLATION OF THE NON-DRIVE SIDE BEARING ON THE SPINDLE

1. **We recommend that the bearings be replaced each time the bottom bracket is extracted.

2. Clean the spindle, bearings (inside and outside), and the inside of the bottom bracket shell. For this we suggest acetone, trichlorethylene, or similar compounds. We do not recommend any paint thinner, gasoline, or similar compounds. These will leave an oily film. Once clean, avoid any contact with your hands. Important: be very careful to avoid contact of cleaning chemicals with the frame finish.

3. Installing the non-drive side bearing onto the spindle. First you should know what the non-drive side setting should be (the measurement from the end of the spindle to the outer edge of the bottom bracket shell). Place a thin coat of RC 680 loctite on the I.D. of the bearing. Also coat the spindle where the bearing will seat. Slide the bearing onto the spindle. Thread the main screw (KL1) into the spindle. Then place the medium spacer (KL5) and the bronze thrust washer over the main screw (KL1) and thread on the tightening nut. See figure 2.

4. Rotate the tightening nut pushing the spindle bearing onto the spindle up to its proper setting.

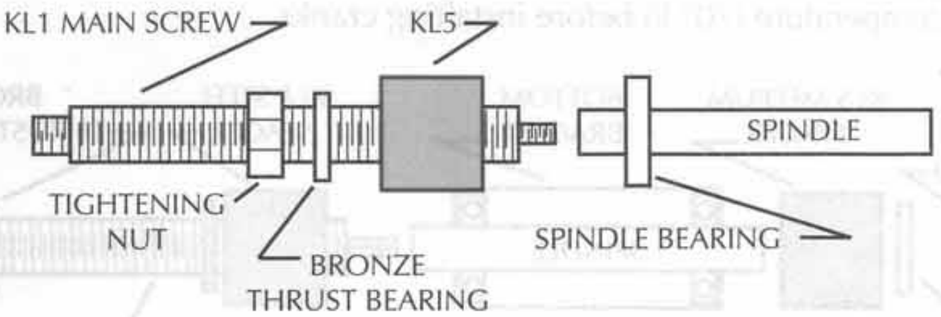

FIGURE 2