



WARNING: During installation place power switch in the off position and disconnect from power source to avoid accidental starting of the tool and or personal injury!

PREPARING COLLET ASSEMBLY: Extensive testing found collets rarely seat squarely when tightened. Box D shows the resulting WHIP which increases run-out and vibration as the bit is extended. While all run out cannot be removed, safe operation requires your collet seats as squarely as possible. Remove the collet from the spindle. Inspect the outer surface of the collet and the inner taper of the spindle for any *burrs, scratches, dirt*. **Clean thoroughly!** Collet assemblies seat most accurately when lubricated. Place a thin film of motor oil or preferably STP® motor oil treatment onto the inner surface of the spindles taper and the outer surface of the collet. Collets #2 and #3 require disassembly. Pull #2 collet out of the nut using needle nose pliers with a paper towel folded between jaws (*the paper towel protects collet*). To assemble #2 spring collets, stand collet on bench, place nut on top and tap with hammer locking collet nut to collet. To disassemble #3 collets remove the snap ring separate collet from the nut. Inspect, clean, lubricate and *reinstall snap ring before use*. Reinstall the cleaned and lubricated collet into spindle.

CAUTION: Installing extension into unlubricated collet can result in excessive run out!

INSTALLING EXTENSION: Seating your collet squarely may take multiple attempts. Install extension into collet and begin hand tightening collet nut. As the collet seats in the spindle, move the extension back and forth Box C. Continue to move extension back and forth as you finger tighten the collet. When finger tightening is no longer possible, use wrench and tighten collet securely. **NOTE:** installing a bit into the extension may aid in the back and forth movement. With the collet securely tightened install 1/2" round over or similar bit centered over set screw Box A, into extension and secure with included allen wrench. Prepare a board any width and length with one end tapered to 1/2" blunt end. Place board on table top, align edge of bit to touch board. By hand rotate bit until only one cutter edge touches board. Secure board to table with clamp or weight. By hand rotate bit to align opposite cutting edge to board. Use feeler gauge or note paper (paper is .003 thick) between cutter edge and board to measure run-out. Unlock bit and rotate aligning opposite edge over set screw and re check. Bits may run better when rotated 180° in extension. Use ink marker to mark best position on bit over the set screw. For max performance work for .009 or less run-out. If run-out cannot be brought to .009 or less, or satisfactory to run your selection of router bits, replace your routers collet. **Never measure run-out off bits bearing.**

VIBRATION TEST: For vibration test, use the power cord to start and stop router. Be prepared to disconnect power if excessive vibration is present. Set routers variable speed to slowest setting. Start router and slowly advance speed to MAX RPM for installed bit. Try rotating the bit 180°. If vibration remains remove and reinstall the extension.

RETIGHTEN THE ROUTERS COLLET AFTER FIRST USE!

WARNING: Never operate extension if vibration is present! Run bit at lowest max rpm!

1/4" REDUCTION SLEEVE : Install reduction sleeves with the through slot either side of set screw shown Box B. For easier removal leave reduction sleeve 1/4" - (6mm) out. To remove stuck sleeve bend end of paper clip Box B. Insert clip into sleeve and pull out.

SPACING ROUTER: Although rare some bits may not lower far enough to make full use of their profile. A 1/2" to 3/4" plywood or particle board spacer may be cut out and bolted between the router and table, or a large platform spacer can be secured to the table top.

MAINTENANCE: Under extreme load the locking wedge is designed to automatically tighten onto the bit's shaft. If this occurs a slight burr will be left on the bit's shaft. Use a metal file to gently remove only the burrs raised edge. Under normal use the locking wedge can leave a slight impression in the shank of some router bits. This will not affect the accuracy or performance of the extension or bit.

Periodically lubricate the extensions 1/2" bore with a dry lube or light oil.

WARNING: OPERATE ALL ROUTER BIT'S AT RECOMMENDED SPEEDS FAILURE TO DO SO CAN RESULT IN EQUIPMENT FAILURE AND OR PERSONAL INJURY!

| | Bit Diameter | Max RPM |
|--|---------------------------------|---------------------------|
| Xtreme Extension MAXIMUM SPEEDS: | 1/8" to 1" (3 to 25mm) | ---- 24,000 to 18,000 rpm |
| | 1 1/4" to 2" (30 to 50mm) | ---- 18,000 to 16,000 rpm |
| | 2 1/4" to 2 1/2" (55 to 65mm) | ---- 16,000 to 12,000 rpm |
| | 2 3/4" to 3 1/2" (70 to 90mm) | ---- 12,000 to 10,000 rpm |

WARNING: Never Exceed Maximum RPM FLUSH TRIM BIT'S - 20,000 to 22,000 rpm