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Wehmer Dual Wheel Trimmer Maintenance Tips #10

Installing the Shaft and Bearing Assembly *(fine wheel side)*

1. **Unplug your machine,** turn off the **water supply,** and disconnect the plumbing at the machine by unscrewing the **pipe union** # 3154 (the 15/16" nut\ connector in the water supply line).

180183112. Remove the work table and all tools. Remove the work light and safety shield (if installed).

180183168. Undo the seven (7) **housing screws** and take off the **front housing/cover.**

180183224. Remove the fine wheel, using the spanner wrench #3208 (counterclockwise to remove). Make sure that threads on each hub are clean of plaster before trying to turn off the **wheel nut**. Use a wire brush if needed. Also remove the plastic **spacer** between the wheel and the wheel nut.

180183280. Remove the fine wheel **back-up plate (**aluminum or plastic disc behind the wheel). Both back-up plates are secured in place with three (3) Phillips machine screws. Once these screws are removed, the back-up plate should pull off easily. If it does not, apply some penetrating oil around the center hole, and at the union between the plate and the **hub**. Pull outward from the top edge of the plate, rotating 1/8 - 1/4 turn per each pull. Repeat until plate is free. **DO NOT strike the back of the plate with a hammer or pry with a screwdriver, as it may deform the plate and not spin smoothly when the machine is operating.**

180183336. Repeat steps 4 and 5 for the coarse wheel, removing both the wheel and the back-up plate.

180183392. Clean both back-up plates on both sides, scraping off any plaster build-up which could interfere with the balance of the wheel. Also clean the mating surfaces on the wheel-mounting hub.

180183448. You should be looking at two hubs and two **slingers** - the round aluminum flanges which cover the **rubber retainer ring seals** in the belt housing plate. Identify these slingers so that you can return them to their original locations - they're slightly different and not interchangeable.

180183504. Remove the slingers. The left (coarse wheel) slinger is easy; it's only held on by the back-up plate. With the back-up plate removed, it just pulls off. The right slinger is held in place by a black rubber **"O"ring,** seated in a groove in the hub. Carefully remove the "O"ring and pull off the slinger. New slingers may be required if metal is deteriorated, deformed, or if there is excessive dried plaster.

Notice the machined lip in the hub on which the slinger rests. Make sure this lip is clean and free of plaster.

180183560. The **belt housing plate** is next. It is held in place by 12 small screws around its periphery, sealed with silicon glue around the seam. Mark the plate with an “X” in the upper left-hand corner so that you reassemble it in the same orientation. Cut off the silicon and remove the screws. Take off the plate, exposing the **drive belts.**

180183616. Remove the drive belts.

180183617. Remove the right-hand (FINE Wheel) hub. There are two set screw holes in the hub. In each hole **there are two set screws**. The top one must be removed completely to loosen the one underneath. After setscrews are loosened, pull off the hub.

On older hubs, if rust is present on the shaft, a wheel puller may be required to remove the hub. Take out the rubber plug in the center of the wheel to provide access for the puller.

180183618. On machines built prior to 1998, turn the machine around and remove the **retainer ring\ clip** on the back of the fine wheel shaft, as well as the **fiber washer** behind it.

180183619. Turn the machine back so that the inside is facing you. Remove the four (4) Phillips screws holding the **bearing plate retainer** in position. Remove the plate along with the bearing plate washer #3184. Mark a line from the bearing mount (#3183) to the motor mount cavity so that the bearing mount can be reinstalled in exactly the same location.

180183620. Remove **the shaft and bearing** with the nylon **bearing mount** (#3183).

180183621. Disassemble the old shaft and bearing from the bearing mount.

180183622. Press the new bearing into to the bearing mount. At this time, also make sure that all the mating surfaces to which you are installing components are clean and free of plaster residue.

180183623. Place a light film of oil on the back end of the shaft and insert the **bearing mount** with the new shaft and bearing in position, lining up your mark on the bearing retainer plate with the mark on the inside of the motor mount. ***It is essential that the holes in the bearing mount be returned to their original factory mounting positions.***

180183624. Place **washer** #3184 over the bearing, followed by the **bearing retainer plate**. Install and tighten the four screws. Tighten the screws incrementally, alternating cross-positions, while rotating the shaft and feeling for any interference or binding. If you feel any binding, loosen the last screw tightened ad alternate tightening sequence. The shaft must turn freely when all screws are tight.

Note: New shaft and bearing assembly is configured differently from old models. There is no longer a retainer clip on the back end of the shaft. Both retainer clips are located internally, on either side of the bearing.

180183625. Position hub on shaft with set screw location corresponding to the flat on the shaft. Set hub distance on shaft so that the shoulder to which you mount the aluminum back-up plate is 1” (25.4 mm) from the surface of the rear housing to which you mount the belt cover plate.

180183626. Tighten the set screws which hold the hub in place. Insert and tighten the locking set screws.

180183627. To install the belts, slip them both over the coarse wheel hub and onto the motor shaft behind the hub. Now position them fully inside the corresponding grooves on the fine wheel hub. Pull each belt forward as you rotate the coarse wheel hub counter-clockwise, forcing them into the grooves. Make sure the belts are not twisted.

180183628. Run the motor and shaft for ten minutes. At the end of the test run, feel the motor mount on the back of the machine immediately surrounding the fine wheel shaft. If

there is excessive heat, the shaft must be removed and reinstalled.

180183629. Position the the belt cover plate in its original lcation (with your "X" in the upper left hand corner). Reinstall the screws and seal with silicon sealant. *Re-install the rubber plug in the center of the hub with silicon if it was removed earlier.* Install the slingers, back-up discs, and grinding wheels. Rotate the wheels by hand to check that there is no interference between the two grinding wheels.

180183630. Replace the front housing and attach table and accessories.