Quality Products for All Phases of Surface Preparation Phone: 626-792-8211 • Fax: 626-792-8574 E-Mail: mail@hutchinsmfg.com • http://www.hutchinsmfg.com

# TIMING INSTRUCTIONS

# MODELS #2000, #8620, and #4920

- 1) With the front of the tool to your left, turn timing gear counter-clockwise, all the way.
- 2) Insert last tooth of sector (to the right) into the timing gear.
- 3) Insert sector stud and line up with timing plate hole.
- 4) Insert and tighten screw.
- 5) Turn gear to make sure it turns freely.

# INSTALLING SPRING-LOADED COUNTERWEIGHT

- 1.) Turn tool upside down to expose gears with front of tool away from you.
- 2.) Turn gear on the right side of the motor block counter-clockwise all the way.
- 3.) Place spring in the hole in the end of the counterweight provided for it.
- 4.) Insert the open end of the spring onto the dowel pin in the front end plate and lower the counterweight (flat side down) into the forward guide.
- 5.) Slide it forward until the second tooth on the front of the counterweight is lined up between the two pinion gears.
- 6.) Lay the counterweight down between the pinion gears. \*Note: The part of the gasket that hangs below the motor block on the front and rear should both be pressed down toward the outside, (front & rear).
- 7.) Before installing drive shoe, make sure the counterweight will travel the full stroke. This may be done by holding the front of the counterweight down in the motor housing with your left thumb while pushing the rear of the counterweight forward with your right thumb. It should travel forward until the second tooth of the rear of the counterweight is between the two motor shaft gears; if it does, the 1242 is timed correctly. Release the forward push on the 1242 and let it return to starting position. At this time make sure the wear strips, (#1207S) and the front and rear lubricator pads, (#1213A) are in place.
- 8.) The drive shoe, (Part#1204) can now be installed by placing the gear rack of the shoe toward the front of the motor block until the second tooth on the rear of gear rack is between pinion gears. Slide the drive shoe down the pinion gears until it is flat against the wear strips. Push front of drive shoe toward the rear to make sure that you have a full travel of the shoe without hitting the motor block.
- 9.) Install siderail screws through the siderails loosely until all are started into motor unit and front and rear. Then tighten front and rear screws first while holding side rail tight against drive shoe, then tighten remaining screws.

Quality Products for All Phases of Surface Preparation Phone: 626-792-8211 • Fax: 626-792-8574 E-Mail: mail@hutchinsmfg.com • http://www.hutchinsmfg.com

#### TIMING INSTRUCTIONS

Models #8623, #8624, #8625, #2011, #2023, #2024, #2025

- 1.) With the front of the tool to your left, turn timing gear clockwise, all the way.
- 2.) Insert last tooth of sector (teeth toward you) into the timing gear.
- 3.) Insert sector stud into timing plate hole and tighten sector screw.
- 4.) Turn gear to make sure it turns freely.

# **INSERTING SIDE COUNTERWEIGHTS**

- 1.) With the front of the tool to your left, turn timing gear clockwise, all the way.
- 2.) Insert side counterweight (with teeth toward block) to left side of the counterweight slot as far as it will go. Counterweight teeth will engage with vertical gear teeth.
- 3.) Place counterweight guide into recess over counterweight. Hold it in place with your fingers while you put the counterweight in the opposite side, the exact same way toward the front of the tool.
- 4.) Hold both counterweights in place with one hand and turn the timing gear with the other hand to make sure the side counterweights will allow a full stroke of the pistons in the motor block. (The counterweight should travel the length of the slot and end up at the same distance from the end on both sides. If not, repeat the above procedures).

# INSERTING LOWER COUNTERWEIGHT

- 1.) Turn tool upside down to expose gears with front of tool away from you.
- 2.) Turn gear on the right side of the motor block clockwise all the way.
- 3.) Insert spring into hole of 1242-2 counterweight. Put open end of spring onto the screw in the center of rear end plate with the 1242-2 flat side down (the side with 2 flat squares), toward the 1241-1 guides at the rear. Compress the spring and slide 1242-2 toward the rear until the second tooth on the rear of the counterweight is between pinion gears. Lay the counterweight down until it is flat against the guides front and rear. Hold in place and push counterweight toward the rear. If it stops with the second tooth on the front of the counterweight between the pinion gears it is timed correctly. Make sure 1207-1 wear strips are in place.
- 4.) Place front of drive shoe even with front of tool. Third tooth of gear rack will slip onto center outside diameter of pinion gears. Drive shoe will lay down against wear strips 1207-1s. Hold shoe in place and slide rear of shoe forward. If it stops even with rear, it is correct. Install side rail screws through side rails loosely. Tighten front and rear screws first while holding side rail against drive shoe. Tighten remaining screws.
- 5.) Test tool.