

JD Manufacturing Inc

309 Butler Ave.
P.O. Box 279
Pine Bluffs WY 82082
307-245-3779 fax 307-245-3480
Jdmanufacturing@yahoo.com

Installation of burner tubes

- 1. Remove existing burner tubes by unbolting the flanges and the hanger brackets at the take out end of the fryer. It helps to block the tubes up with some blocks so they don't fall.**
- 2. Examine the weld between the firewall and the threaded stud plate. *Make sure there is an oil tight seal on all four of the 8-inch penetrations through the firewall. This is very important!**
- 3. Clean all 32 of the threaded stud holes and chase the threads with the provided 5/8-11 tap.**
- 4. Apply Loctite primer #7649 to all of the studs. * Only prime the stud. If you prime both the threaded stud plate and the studs the Loctite sets too fast.**
- 5. Apply Loctite 272 to both the stud and the threaded stud plate, and install the studs. Be sure not to over drive the stud causing a separation between the stud plate and the fryer firewall.**
- 6. Fit the flanges onto the burner tubes with the raised face out. Pay attention to the orientation of the bolt holes and rotate the flanges so they will line up with the studs.**
- 7. Temporarily install the burner tubes with the section of the tube with the recessed cross tube in line with the burner. Use the plated steel nuts. Do not use the stainless lock nuts until the final installation. Make sure the burner end of the tube is in line with the burner, and the flue end of the tube is in line with the flue. Install the tube hanger at the take out end of the fryer. Make sure there is 20 millimeters of pin exposed for expansion. As the tubes heat they need to be able to grow in length.**
- 8. Clamp some angle or timber across the width of the tubes to stress them flat across the width of the fryer. Make the tubes flat to each other.**

- 9. Tack the flanges to the burner tube so they stay oriented to the stud plate.**
- 10. Remove the burner tubes and weld the flanges to the tube.**
- 11. Install the flange gaskets onto the studs.**
- 12. Apply food grade Anti-Seize to the end of the stud.**
- 13. Reinstall the burner tubes. On the final installation use the stainless lock nuts. No washers are necessary. Use a typical star flange torque sequence. Initial torque should be about 30 foot pounds. Final torque should be 160 foot pounds. We use a Snap On MG725 Impact wrench at full torque.**

<https://store.snapon.com/1-2-Drive-Super-Duty-1-2-Drive-Heavy-Duty-Impact-Wrench-P646291.aspx>

- 13. Boil the kettle and re-torque the studs.**