Dutchwest (2460, 2461, 2462) Damper Adjustments

Dutchwest Convection '93 Series Service Procedure

1993 AND LATER DUTCHWEST CONVECTION HEATERS
Models 2460 (Small), 2461 (Large), 2462 (Extra-Large)

Adjusting the Damper

For 8 months prior to February of 1994, the series was made with a threaded rod installed in a threaded hole in the inner top as per earlier models. In February of 1994, the thread system that had a tendency to jam was updated to the current system with no threads.

CONDITION: Damper jams fully open or fully closed.

POSSIBLE CAUSES	REMEDY
▪ Damper adjustment is too tight.	➢ Adjust damper. Clean threaded hole in the 'horseshoe' as a precaution.
▪ Tapping chips on steel operating rod or in threaded hole.	➢ Clean rod and thread hole. "Chase" rod threads with 5/8"–11 tpi tap.
▪ Misaligned operating rod.	➢ Clean rod and threaded hole. Use a round file on the hole on the stove's left side to give it more room.

CONDITION: Damper stops (jams) at half-way open.

POSSIBLE CAUSES	REMEDY
▪ Crank and damper have shifted in opposite directions, causing impact at overlapping end.	➢ Centre the crank over the damper with thin "wave" washers. Bevel at the inner faces of the "throw arms" on the crank and the ends of the damper.
▪ Tapping chips in threaded hole jamming.	➢ Remove and clean the threaded operating rod, and clean the threaded hole in the iron wall (the 'horseshoe'). "Chase" the threaded hole with a 5/8"-11 tpi tap, if available.
▪ Misaligned operating rod.	➢ Ream hole in side of stove with round file.

Directions for performing some of the "remedies" are on the following page.

DAMPER REMEDIES

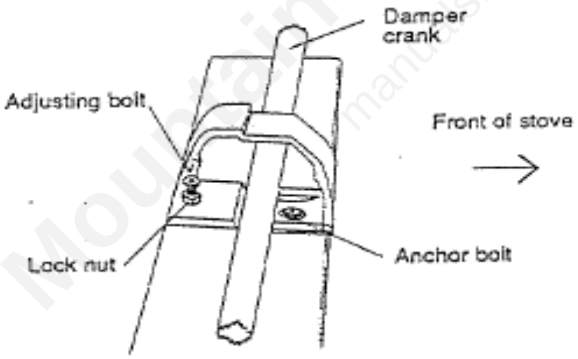
Removing the crank and/or the damper adjuster

- Remove the stove top (one bolt in each corner, no cement to break).
- Remove the ceramic insulator and the catalytic combustor.
- Remove the adjuster's anchor bolt (the bolt nearer the front of the stove). It has a lock nut on the underside of the damper. Get at this through the firebox.

NOTE: The following three steps apply only to stoves which have threads on the steel operating rod where it passes through the inner "horseshoe".

- Use a handle to rotate the crank. Several complete turns will thread the steel operating rod out of the left end of the crank
- Use a wire brush (or a bottle brush) to remove chips from the threaded hole in the inner wall (the 'horseshoe') and from the threads on the steel operating rod.
- Lift the crank and the adjuster out of the stove together, and then slide the adjuster off the crank. Use a 5/8"-11 tpi tap to 'chase' the threads in the 'horseshoe'.
- Slide the operating rod out of the stove's left side.

Figure 1



Beveling the crank and the damper

- Remove the crank and the damper adjuster. Remove the two damper tabs to release the damper.

- Use a grinder or a file to remove material from the crank and edge of the damper as shown in the sketch below. This will eliminate any interference between t he damper and crank.

- Replace all parts. Use automotive "Never-Seize" on all hardware and on the ramp part of the adjuster (where the crank bears against it).

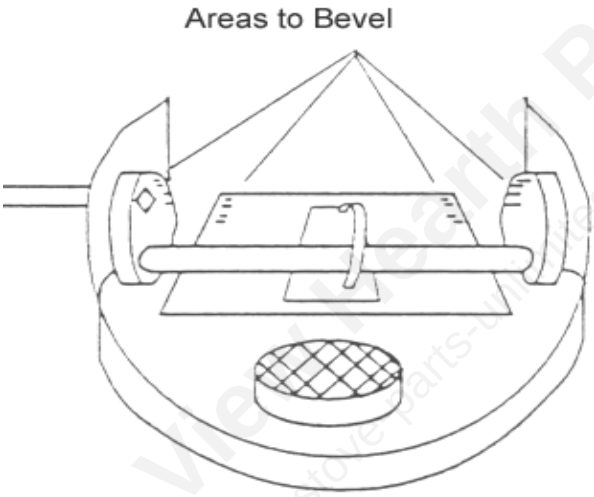


Figure 2