



TECHNICAL BULLETIN 050622

Changes to Valve Plate Assemblies for AC1 and AC2 Direct Drive compressor assemblies.

AC1 assemblies on F280, E150, C270, B230X-BOAT and previous single head, direct drive models.

AC2 assemblies on F390, E250, C390, CTD390, B340X-BOAT and previous dual head, direct drive models.

The following changes have been made to **Valve Plate Assemblies** for Brownie's Third Lung direct-drive compressor assemblies produced since June, 2005, beginning with serial number 12039.

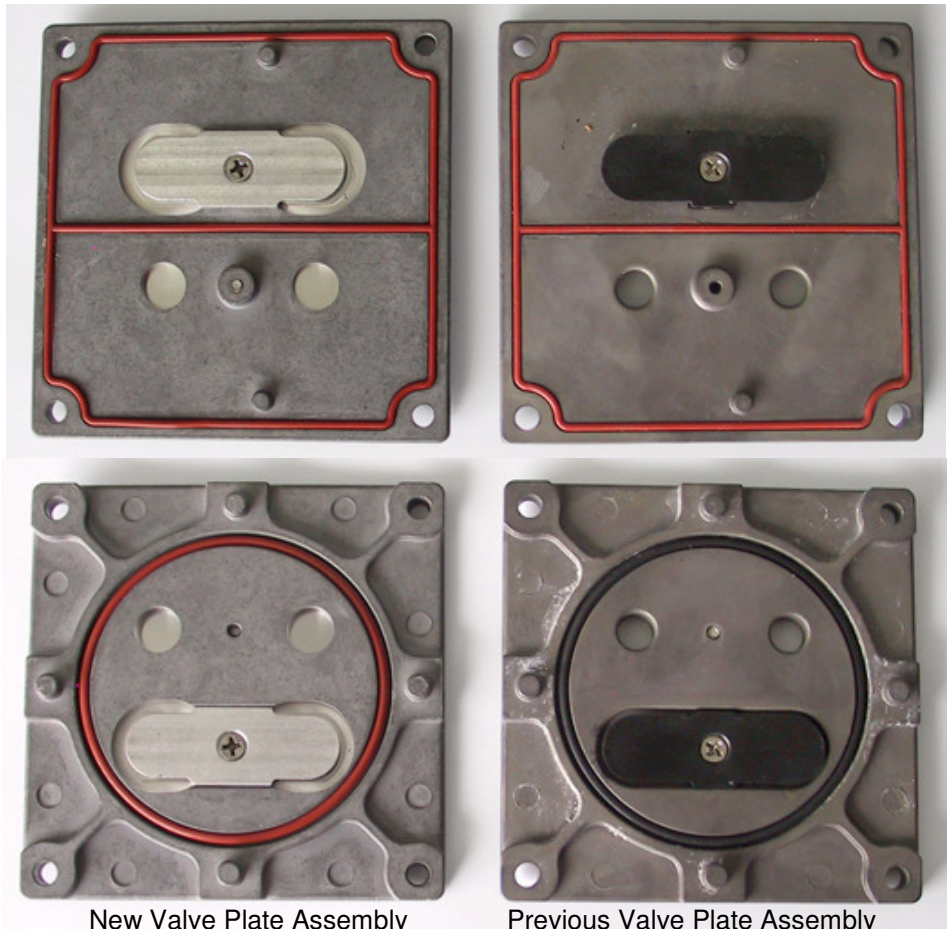
1. Increased diameter of 4 port holes
2. Removed material around the outflow side of the port hole
3. Valve restraint material is now aluminum, changed from high temperature plastic
4. Changed flapper valve design (see below)

These changes are designed to increase airflow and provide greater service life of the valve components.

The new flapper valves and restraints are NOT backward compatible with the previous valve plate design.

Compressors requiring service to replace flapper valves and/or restraints will be required to also replace the valve plate to accommodate the new parts.

For your convenience, we have produced a single part number for a preassembled valve plate assembly (including the valve plate, flapper valves, valve restraints, screws, round o-ring, square o-ring), AC-VPA.



New Valve Plate Assembly

Previous Valve Plate Assembly

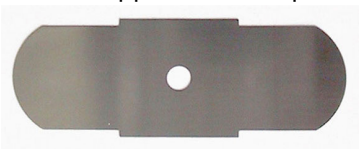
Revisions to Rebuild Kits

Brownie's will now offer 2 versions of compressor head rebuild kits. One kit is required per compressor head.

BTL-DDRB1 includes cylinder sleeve, piston cup, cap screw, 4 "new design" flapper valves, 2 restraint screws, round o-ring, square o-ring
This set is one of multiple components included in Care Kits CK-280, CK-280R, CK-390, CK390R as of June 15, 2005.

BTL-DDRB2 includes cylinder sleeve, piston cup, AC-VPA valve plate assembly
This set should be sold to all customers with system serial numbers prior to 10239. After installation of this kit, the customer can continue future services with the BTL-DDRB1.

New flapper valve shape



Previous flapper valve shape

