

MiniVol TAS High Efficiency Pump Rebuild Instructions

- Remove socket cap screws (7/64" drive size) from both upper and lower head assemblies (x8)
- 2. Separate upper (blue) and lower (silver) head exposing the pump valve. **Make note of orientation.**
- 3. Replace pump valve with same orientation. Set aside.
- 4. Remove pump yoke cover by removing pan head screws (x2)
- 5. Next remove both set screws (.050" drive size) that fasten the cam to the motor shaft.
- 6. Remove the cam from the shaft.
- 7. The yoke, upper and lower pistons along with the diaphragm can now be freed from the pump frame.
- 8. Remove flat head screws from either side of the yoke.
- 9. The upper and lower piston can now be separated and the diaphragm replaced.
- 10. DO NOT OVERTIGHTEN flat head screws when replacing pistons/diaphragm on yoke.
- 11. Follow instructions in reverse order

| KEY | DESCRIPTION | PART # | REQ | |
|-----|------------------------------|---------|-----|---|
| | Pump Assembly, 12V, complete | 108-000 | | |
| 1 | Frame | 108-001 | 1 | |
| 2 | Head-Lower | 108-002 | 2 | |
| 3 | Head-Upper | 108-003 | 2 | |
| 4 | Diaphragm | 108-004 | 2 | $ \frac{2}{2} $ $ \frac{3}{4} $ $ \frac{4}{2} $ $ \frac{1}{1} $ $ \frac{1}{1} $ $ \frac{1}{1} $ $ 1 $ $ 1 $ |
| 5 | Valves | 108-005 | 2 | |
| 6 | Socket Cap Screw | 901-004 | 8 | |
| 7 | Hose Barb | 108-007 | 4 | |
| 8 | Piston-Upper | 108-008 | 2 | |
| 9 | Piston-Lower | 108-009 | 2 | |
| 10 | Yoke | 108-010 | 1 | |
| 11 | Cam | 108-011 | 1 | |
| 12 | Motor | 108-012 | 1 | |
| 13 | Bearing | 108-013 | 1 | |
| 14 | Retainer | 108-014 | 1 | |
| 15 | Socket Set Screw | 108-015 | 1 | |
| 16 | Flat Head Screw | 106-010 | 2 | |
| 17 | Cover | 108-017 | 1 | 12 |
| 18 | Socket Cap Screw | 108-018 | 6 | |
| 19 | Pan Head Screw | 301-005 | 2 | |