

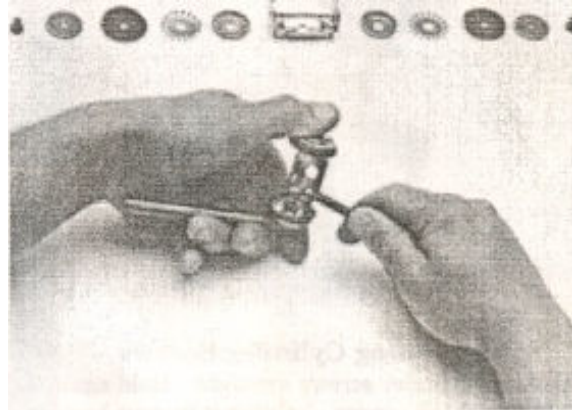


HAMBY DAIRY SUPPLY

Instructions for Surge Pulsator

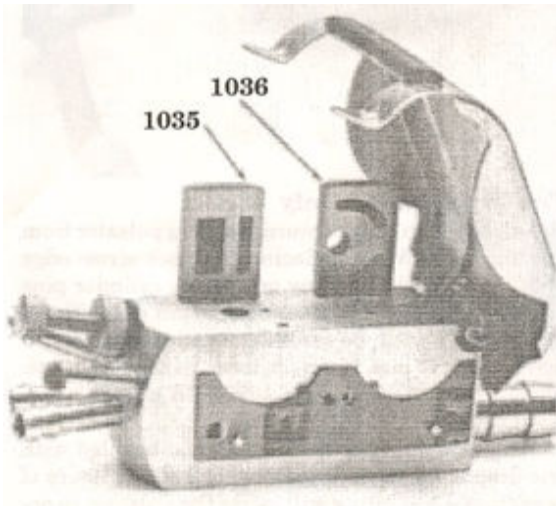


Cylinder and 180 Grit Paper with Glass
Resurface cylinders on 180 grit paper to clean base of cylinder and to check for seal of base to gasket and block.

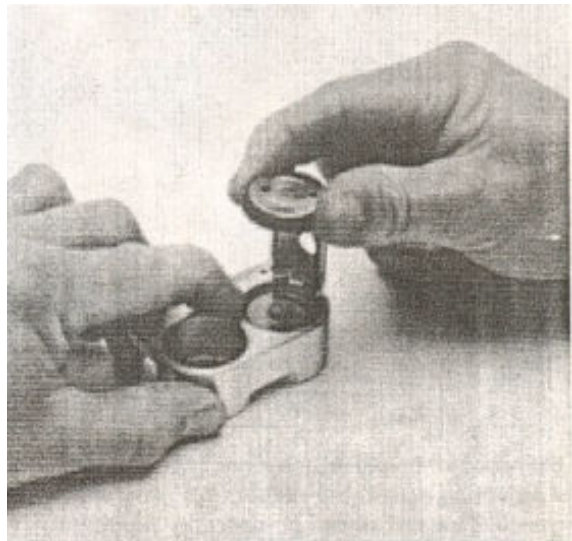


Assembly of Valve Carrier

- Select 4 leathers for each pulsator. Check for defects.
- Select 4 thin flanged washers for each pulsator. Check for defects.
- Inspect the 4 S.S. Spring washers.
- Assemble as above, tighten washer screws.



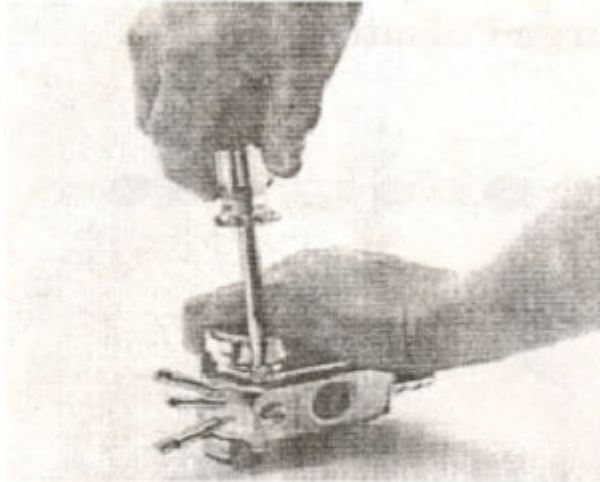
For assembly, place front and rear valves on block as pictured. ("S" pulsator uses two 10305 valves with large ports toward the adjusting screw.)



All leathers should be checked for sealing in cylinders before assembly.

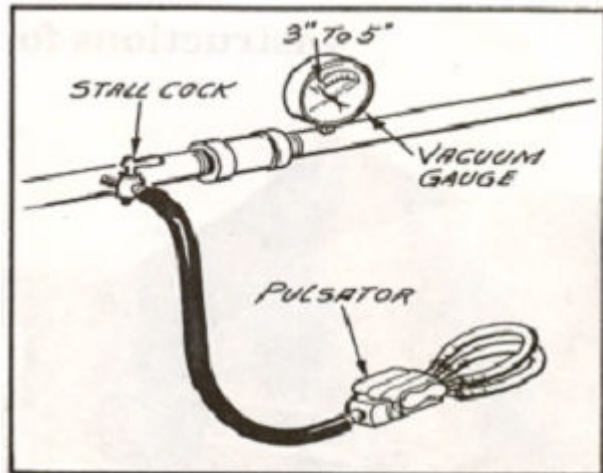


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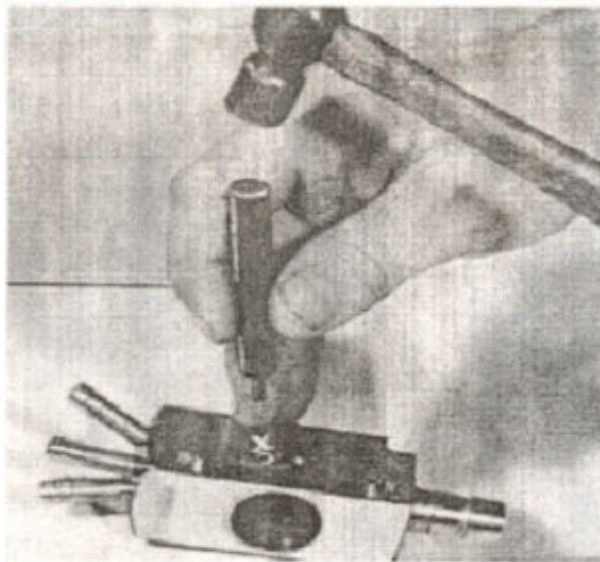
Tightening Cylinder Screws

Make sure cylinder screws are tight. (Hold against bench to tighten screws - holding it in your hand is frequent cause of injury when screw driver slips.) The pulsator should be put together and tested completely dry. (The leathers contain sufficient oil for 40 hours of operation.)



The pulsator should be adjusted to operational speed after which stall cocks should be opened to let the vacuum drop to 3" to 5". Test the pulsators with small air nipples open (less air tubes).

If the valves and valve carriers still move under the above condition, the pulsator is in an efficient operating condition.



If the speed of the pulsator cannot be controlled with the adjusting screw, the regulating screw orifice is oversize. This orifice can be closed by tapping with the retaining pin pinch and 4 oz. hammer. It can be reopened to the proper size by redrilling with the #55 drill.



For "S" Pulsator Only

Retaining Pin may be worn, keeping pulsator from locking on lid. When replacing, lay block across edge of table (to avoid bending or burring cylinder pins or denting side of block) and drive pin out with retaining pin punch. Be careful not to dent block when driving in new one. If pin fits loosely - tap block with punch at (X) ABOVE hole - NEVER at side or toward bottom.

NOTE - the pulsator leathers should be oiled with one drop of oil on each leather for each 40 hours of operation. Over oiling will cause the pulsator to operate inefficiently.

The valves and block require no oil. Oiling these parts will cause dust to gather at the valve and block resulting in excessive wear.

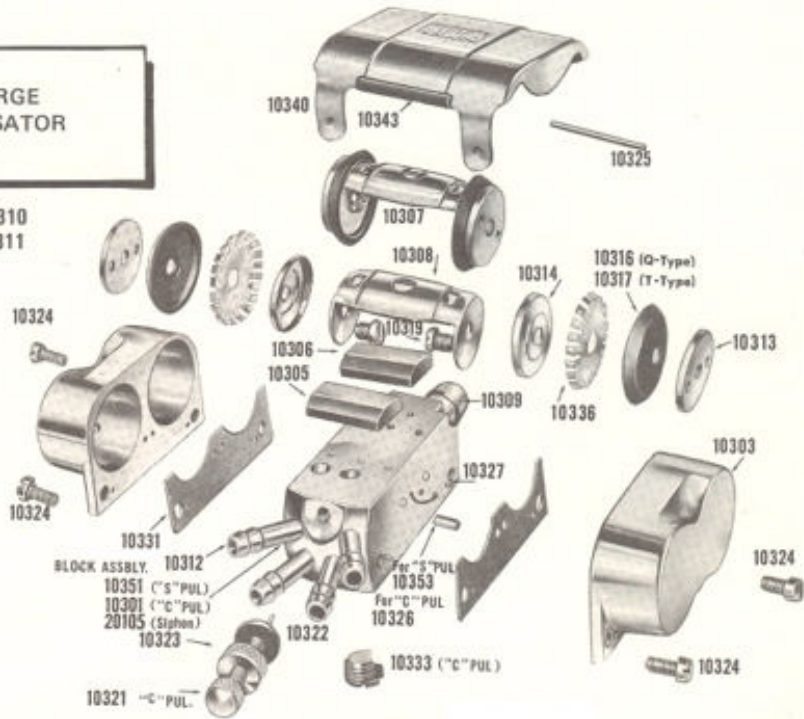


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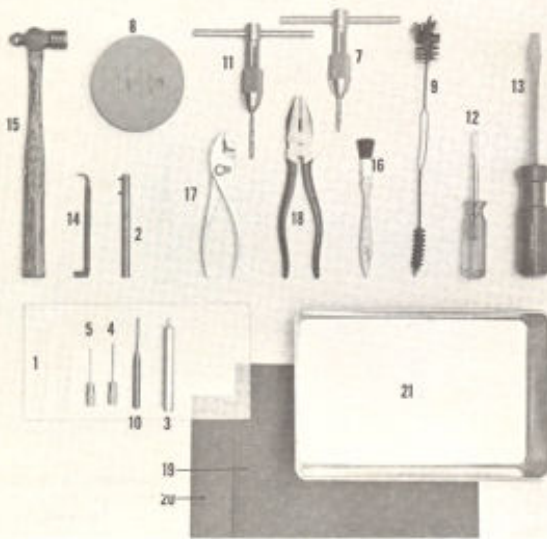
REPAIR OF SURGE PNEUMATIC PULSATOR NO. 10300

Minor Repair Kit - No. 10310
Major Repair Kit - No. 10311

Take the pulsator completely apart as shown. Discard all leathers, thin flanged washers and cylinder gaskets for new.



COMPLETE SET OF TOOLS TO SERVICE THE PNEUMATIC PULSATOR



- 1 5" x 10" Plate Glass-88108
- 2 Pulsator Washer Wrench-88112
- 3 Air Nipple Punch-88113
- 4 #47 Cleaning Drill-88114
- 5 #55 Adjusting Hole Drill-88116
- 6 Pulsator Kit Box-88127 (Not Shown)
- 7 3/16-40 Tap with Hand Chuck-88172
- 8 India Stone-88130
- 9 Cone Seat Brush-10509
- 10 Retaining Pin Punch-88170
- 11 3/16 Drill with Tap
- 12 Screw Driver 6" Long
- 13 Large Blade Screw Driver
- 14 Off set Screw Driver
- 15 4 oz. Ball Peen Hammer
- 16 1/2" Paint Brush
- 17 Regular Pliers
- 18 Electrical Pliers
- 19 180 Grit-Wet or Dry (Carborundum Paper)
- 20 320 Grit-Wet or Dry (Carborundum Paper)
- 21 8" x 12" Cake Pan

Introduce all parts to a cleaning pan containing a good commercial cleaning solvent for thorough cleaning.

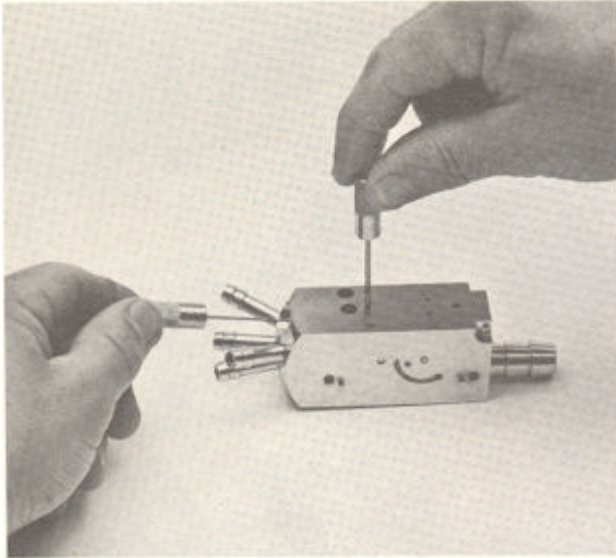
Use the #55 and #47 cleaning drills, 3/16 drill bit with chuck, nipple and cone seat brush and 1/2" paint brush for the

thorough cleaning of all ports, nipples and parts.

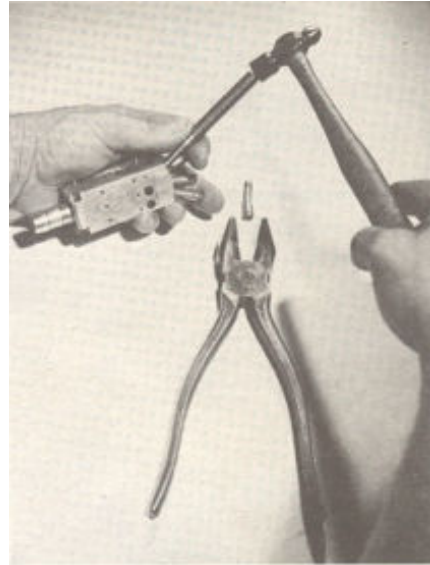
Use the 3/16-40 tap to clean the threads of the adjusting screw port.



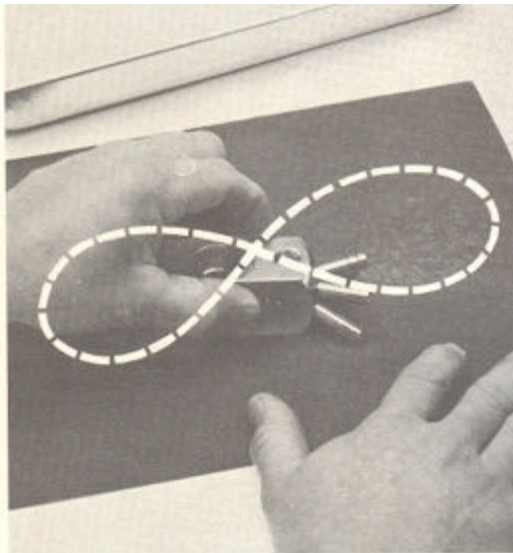
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To efficiently clean the smaller port of the adjusting screw, place the #55 drill in the port as shown in photo above. Place the #47 drill in the vertical converting port. Using both drills at one time will clean the right angle ports completely.



Replace loose or bent small air nipples and gasket pins as needed. (Electrician pliers should be used to remove the gasket pins.)



Use 180 Grit wet or dry carborundum paper on a smooth plate glass. Resurface with a figure 8 motion, dipping the block in solvent to keep it wet while grinding.

The block needs to be resurfaced under the valve only, discount marks on block made by the valve carrier.

Use 320 Grit carborundum paper to polish the block, following the same procedure as above.



Check valves by polishing on the coarse side of the India Stone. When valves are polished, hold the valve to the light and check surface to determine if valve seat will seal.

If the polished valve shows that it will leak around the edges of the ports, replace with a new valve.

When installing new valves, check for any defects by following the above procedure.