

Delany Products Saber

Trouble Shooting Chart

WHEN	THEN	AND YOU SHOULD
VALVE WILL NOT START TO FLUSH	<ol style="list-style-type: none"> 1) Control stop is shut. 2) Tip of operating stem is worn. 3) Operating stem is too short. 	<ol style="list-style-type: none"> 1) Open control stop. 2) Replace operating stem. 3) Install correct length stem as indicated in parts listings.
VALVE STARTS FLUSHING BUT CLOSSES IMMEDIATELY	<ol style="list-style-type: none"> 1) Diaphragm is ruptured. 2) Valve contains an oversized bypass orifice (pinhole). 3) Tip of operating stem is worn. 4) Seat guide is loose. 	<ol style="list-style-type: none"> 1) Replace diaphragm. Good preventive maintenance includes simultaneous replacement of No. 8 auxiliary seat supplied in same kit. 2) Install diaphragm with correct bypass size from proper kit indicated in parts listing. Valves with 3/4" supply or smaller use larger orifice sizes than valves with 1" supply or larger. Replace No. 8 auxiliary valve seat at the same time. 3) Replace operating stem. 4) Tighten or replace seat guide.
VALVE GIVES TOO SHORT A FLUSH OR TOO LONG A FLUSH	<ol style="list-style-type: none"> 1) Valve needs regulation. 2) Valve has a bypass that is too large. (Flush is too short.) 3) Valve has a bypass orifice that is too small (Flush is too long.) 4) Bypass orifice is partially blocked. (Flush too long.) 5) Tip of operating stem is worn. 	<ol style="list-style-type: none"> 1) Remove No. S125 cover cap. Insert screwdriver and turn No. S127 upper chamber regulating screw counterclockwise for longer flush or clockwise for shorter flush. If valve is equipped with non-hold-open feature, the valve is non-adjustable except by trial and error the timing may be changed with different bypass orifices. 2) Install diaphragm with correct bypass size from proper kit. Replace No. 8 auxiliary valve seat at same time. Step (1) above should be tried first. 3) Install diaphragm with correct bypass size from proper kit. Replace No. 8 auxiliary valve seat at same time. Step (1) above should be tried first. 4) Clean bypass. Hold pinhole up to light. If blocked, pinhole may be cleaned with pin, or air hose. 5) Replace operating stem.
VALVE CONTINUES TO RUN FULL FORCE OR CONTINUES TO RUN BUT ONLY SLIGHTLY	<ol style="list-style-type: none"> 1) Bypass blocked. 2) Foreign object is blocking closing action. 3) Leakage is occurring at the No. 8 auxiliary valve seat due to foreign objects or wearing and /or cracking of the auxiliary valve. 4) Water pressure and/or volume is insufficient to fill upper chamber of flush valve or close the valve. 5) Auxiliary valve head has separated from rod allowing leakage. 6) Slight leakage is present at main valve seat due to minute foreign object embedded in diaphragm. 7) Main valve seat is loose. 	<ol style="list-style-type: none"> 1) Clean as indicated in (4) immediately above. 2) Remove foreign object. Smooth any indentations on under side of diaphragm. If diaphragm is damaged, replace. 3) Remove any foreign objects from No. 8 auxiliary valve seat. Examine seating surface of auxiliary valve for pitting or cutting. Replace as needed with new auxiliary valve. Replace No. 8 part at same time. 4) Increase pressure and/or volume. If several valves are running at one time, pressure may be built up by shutting off all control stops and then opening them again one by one. 5) Replace auxiliary valve and No. 8 auxiliary valve seat. 6) Remove any foreign objects. If diaphragm has been scarred at contact point with main valve seat, replace diaphragm. If main valve seat is scored or pitted, replace. All Delany Valves are equipped with renewable main valve seats. 7) Tighten.
WATER SPLASHES FROM BOWL	The pressure at the fixture is in excess of that set by the fixture manufacturer as an upper limit.	Install a pressure reducing valve in the supply line. Failing this, reduce the volume of water flowing through the flush valve by partially closing the control stop. Then adjust the valve to the proper timing by adjusting the flush with the upper chamber regulating screw.
VALVE WILL NOT PASS ENOUGH WATER TO SATISFACTORILY SYPHON BOWL	<ol style="list-style-type: none"> 1) Control stop not completely open. 2) ¾" Urinal flush valve is installed on a water closet by mistake 3) Insufficient volume of water is being supplied to valve due to low pressure or undersized piping, or both. 	<ol style="list-style-type: none"> 1) Open control stop all the way. 2) Replace with seat guide for valves with a 1" supply or larger. 3) Establish volume of water available by removing entire diaphragm operating assembly from flush valve, replacing cover, and flushing valve. This converts valve into a simple elbow. If adequate flush still cannot be obtained, water pressure or pipe sizes, or both, must be increased.
FLUSHING ACTION IS NOT QUIET ENOUGH	<ol style="list-style-type: none"> 1) High pressure is causing abnormal noise in water supply system. 2) Control stop is not properly adjusted for maximum quietness. 3) Localized roaring noise of fixture may be contributing factor. 	<ol style="list-style-type: none"> 1) Install pressure reducing valve in water supply line. 2) Adjust control stop setting slowly until the flush is quiet. 3) Make quick test to isolate fixture noise from any valve noise. Place cardboard under toilet seat all but covering opening of bowl. Valve noise will then be readily identified. If fixture is noisy, install quiet action bowl.
VALVE LEAKS AT HANDLE	<ol style="list-style-type: none"> 1) No. 222-3 flexer has fatigued and/or ruptured. 2) Non-genuine Delany No. 222-3 has been substituted. 	<ol style="list-style-type: none"> 1) Replace with new No. 222-3 flexer part. Good preventive maintenance includes simultaneous replacement of operating stem. 2) Replace with genuine Delany No. 223-2 Flexer
WATER LEAKS FROM AIR VENTS OF VACUUM BREAKER	<ol style="list-style-type: none"> 1) No. 427A rubber sleeve has ruptured from fatigue. 2) Vacuum breaker is being subjected to excessive back pressure by restrictive urinal or water closet. 	<ol style="list-style-type: none"> 1) Replace No. 427A part. Refer to "How To Service Vacuum Breaker" in the Saber Renewal Parts Folder. 2) Replace with genuine Delany rubber sleeve part, No. 427A