

Exhaust Primer Trouble Shooting Guide

PROBLEM	CAUSES	SUGGESTED CORRECTION
PUMP FAILS TO PRIME OR LOSES PRIME	AIR LEAKS	CLEAN AND TIGHTEN ALL SUCTION CONNECTIONS. CHECK CONDITION OF HOSES AND HOSE GASKETS. CLOSE ALL PUMP DRAINS. CHECK PACKING GLAND FOR PROPER ADJUSTMENT. RUN DRY VACUUM TEST AS FOLLOWS: A) CONNECT SUCTION HOSE TO PUMP AND CAP END. B) DRAIN PUMP. CLOSE ALL DISCHARGE AND DRAINS. C) ENGAGE PRIMER AND DRAW A VACUUM, PREFER 20-22". SHUT OFF PRIMER. D) IF VACUUM DROPS MORE THAN 10" HG. IN 10 MINUTES, EXCESSIVE LEAKAGE IS PRESENT. WITH ENGINE SHUT OFF, AIR LEAKS ARE SOMETIMES AUDIBLE.
	DISCHARGE CHECK VALVE LEAKS.	REMOVE DISCHARGE CHECK VALVES AND REPAIR OR REPLACE.
	Primer venturi dirty or plugged.	Remove primer throat and clean carbon from primer jet and throat.
	IMPROPERLY ADJUSTED PACKING.	SEE STUFFING BOX ADJUSTMENT SECTION
PUMP FAILS TO PRIME OR LOSES PRIME CONTINUOUSLY.	SUCTION WHIRLPOOL.	PUMPING LARGE VOLUMES WITH SUCTION HOSE TOO SHALLOW IN WATER SUPPLY CAN CAUSE WHIRLPOOLS, ALLOWING AIR TO BE DRAWN INTO PUMP, LOSING PRIME. PLACE SUCTION HOSE DEEPER, OR LESSEN VOLUME BEING PUMPED.
	HIGH POINT IN SUCTION LINE.	LOWER SUCTION HOSE BELOW PUMP SUCTION, IF NOT POSSIBLE, REPRIMING SEVERAL TIMES MAY BE NECESSARY TO REMOVE AIR LOCK.
	TOO HIGH OF A SUCTION LIFT.	SOMETIMES TOO HIGH OF A LIFT IS NOT OBTAINABLE EXCEPT AT LOW ALTITUDES WITH THE BEST OF EQUIPMENT. TRY TO KEEP THE LIFT AS LOW AS POSSIBLE.
	PLUGGED SUCTION STRAINER OR SCREEN.	CLEAN DEBRIS OUT OF STRAINER AND SCREEN. SET UP SUCTION WITH FLOATING STRAINER TO AVOID DEBRIS ON BOTTOM OF DRAFTING WATER SUPPLY.
	WORN IMPELLERS AND SEAL RINGS.	RE MACHINE OR REPLACE WORN IMPELLERS AND SEAL RINGS TO MEET W. S. DARLEY SPECIFICATIONS.

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