



CUSTOMER SERVICE

## SERVICE BULLETIN #48

April 29, 1985

TO: All Customers  
FROM: Craig B. Neal  
SUBJECT: PUMP APPLICATIONS

New ideas, new applications and new operating conditions often necessitate the adaptation of existing pump designs. One example, "Instantaneous Response" from the power source, has created a very real potential to exceed the design limitations of some pump components. Applications, such as environmental control, street washers, crash trucks, etc., require that the engine power be introduced at idle and then instantly raised to full governed speed, or a "Hot Shift" concept where the pump is quickly engaged at engine speeds well above idle at high electric motor speeds.

It has recently come to our attention that, under certain circumstances, impeller shafts may be subjected to inertial torque well beyond their design limits, resulting in shaft failure. To eliminate the potential for this type of failure, installations should be designed to bring the pump to full load over a period of 3 seconds at a constant angular acceleration. Failure to do so may result in exceeding the design limits and therefore void the warranty on all pump components.

Should you require additional information regarding a particular application, please feel free to contact our Engineering Department.

Yours truly,

Craig B. Neal  
Ass't. Sales Manager

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PRODUCT INFORMATION