

Bulletin: RJ-23-41  
Revision: B  
Product: 4" Submersible Pump  
Reference: Capacitor  
Date: August 1993

**ATTENTION ALL SERVICE AND PARTS PERSONNEL**

Effective immediately, begin using a 25 Microfarad Capacitor, Red Jacket Part No. 011-661-5, with all 1-1/2 HP submersible pump and motor assemblies. This applies to all models and includes both replacement motors and complete new units.

Our ongoing commitment is to provide top quality Red Jacket Petroleum products with rugged design, equipped to operate in a hostile environment. A key factor in that commitment is improvement when and where appropriate. The following is one of those improvements.

Beginning with date code 40793 (the fourth week of July, 1993), we will be utilizing a 25-microfarad capacitor in all 1-1/2 hp submersible pumps, replacing the 17.5-microfarad capacitor previously used. This capacitor enhancement increases pump efficiency by decreasing current draw by approximately .5 amps. In addition, the starting torque is increased by 40%. This additional torque is especially beneficial in locations where voltage fluctuations (brownouts, etc.) are present as well as applications where enough debris in the tank to possibly cause abnormal drag on the motor.

As you know, these conditions are not new and may be all too common. For this reason we recommend that whenever a service situation is encountered and a 1-1/2 hp motor is the suspected problem, install this new 25-microfarad capacitor prior to considering replacement of the pump/motor assembly. We suggest you obtain an adequate supply of this new capacitor as soon as possible. It is available as a replacement part, No. 111-661-5. We will be issuing a notice in the near future describing a label that will be affixed to each 1-1/2 hp pump motor assembly (UMP) requiring this 25-microfarad capacitor be used. UL approval has been issued for use of this 25-microfarad capacitor **only** with 1-1/2 hp Red Jacket petroleum submersible pumps.

In summary, please take the following actions:

1. Order an immediate stock of Red Jacket 25 MFD capacitors for service vehicles and shop. The part number is 111-661-5.

**WARNING** Per our service bulletin #RJ23-1 dated February, 1986, beginning January 7, 1986, all capacitors used in petroleum pumps contain a self-discharging resistor. This feature is provided to prevent external discharge of the capacitor. Use of a capacitor without this intrinsic safety factor can result in personal injury, possible death and/or substantial property damage. **Purchase and use Red Jacket capacitors only.**

2. Instruct all service personnel that whenever they are servicing a 1-1/2 hp submersible pump with a suspected motor problem, they should try the unit with a new 25 MFD capacitor prior to considering replacement of the pump/motor assembly. This new capacitor improves motor starts, especially in areas where voltages may fluctuate and debris is present inside tanks. Also, whenever replacing a 1-1/2 hp motor they should always install this new 25 MFD capacitor.
3. Inform all parts and service personnel that the 25 MFD capacitor cannot be used in 1/3 and 3/4 hp units. This would violate the UL Listing of the pumps as well as decrease their performance.

Should you have any questions concerning this bulletin, contact the Petroleum Technical Support Group on our toll-free help line, 1-800-262-7539. Please keep this bulletin for future referral.