



**UNITED  
TECHNOLOGIES  
CARRIER**

Commercial Division  
Carrier Corporation

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## SERVICE BULLETIN

SUBJECT:

**19SERIES COMPRESSOR MOTOR STARTER WIRING**

SUPERSEDE  
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### PURPOSE:

To recommend a preventive procedure for reducing potential problems with aluminum-to-copper connection.

### MACHINES AFFECTED

19 Series compressor motor starters with aluminum wiring.

### INFORMATION

Many motor starters are field wired with aluminum power leads. When untreated aluminum wire is connected to copper starter terminals, a chemical reaction will occur between the copper and aluminum. Anyone involved in the installation of aluminum wire should be aware that the chemical reaction can cause corrosion which will lead to overheating at the connection and eventual burnout.

### PROCEDURE

To prevent a chemical reaction, according to the recommendations of aluminum wire suppliers, a grease should be applied to the wire before connecting it to copper lugs. One grease recommended is Penatrox, available from most electrical supply houses in five-ounce tubes or eight-ounce squeeze bottles, No. P8A. Also, where possible, special aluminum-to-copper connectors should be used.