



# Application Data

## Support Bushings

*For boom on utility trucks*

### Description

A boom is attached to the rear of certain trucks used by utility and tree trimming companies. Sometimes a bucket is attached to the end of the boom to enable workers to change streetlights, fix wires, trim trees, etc. In other instances, earth-drilling augers are attached or the boom is used to set light or telephone poles in place.

### Material

AMPCO® 18, AMPCO 18-23 and AMPCO 45  
Aluminum bronze

### Advantages

Ampco continuous cast and extruded alloys are used as support bushings in two locations on the boom. Because of the heavy loads imposed when the boom is extended, the superior physical properties offered by these high-strength Ampco alloys are required. The load positions can vary depending upon the use placed on the boom.

One company originally designed a unit using cast iron bushings against a hardened steel pin. This worked satisfactorily on the prototype used for demonstration purposes because the operator handled the unit carefully and exercised good maintenance practices in keeping the bushings lubricated.

As soon as production models were in service, galling occurred because field operators were not as careful. At first, an Ampco alloy was specified for only one of the two bushings but when the remaining bushing continued to gall, it too was replaced. Now both bushings are providing trouble-free service.

Several manufacturers of this type of truck are also using AMPCO 18-23 continuous cast worm gears in the turning mechanism of the boom.

The consistent superiority of Ampco alloys over commercial bronze is due, in part, to the distribution of alloy microstructure, often referred to as the "Ampco-Phase". Only Ampco alloys offer this metallurgical advantage.

