Subject: GD45 Dover Machine Gear Mounting Bolt Failure

Sent to: All Elevator Contractors in Scope U1, F1 and Consultant

1. BACKGROUND

1.1 We have been informed by Dover Corporation (Canada) Limited that one of Dover GD45 machines had a complete gear mounting failure. The six 5/8" dia mounting bolts broke below the head, allowing the bolts to move out of their mounting holes of the gear and the spider. As a consequence of this condition, the solid connection between the Drive Sheave and the Worm Shaft was lost. It appears, according to the Department of Government Services and Lands of Newfoundland who first reported the incident, that the bolts had the radius machined off at the shank below the head to fit the holes.

1.2 The subject Dover machine type GD45 identification is stamped in the machine enclosure. This machinery has been used for the following duties:

   - Roping 1:1, speed 200 ft/min, capacity 2500 lb
   - Roping 2:1, speed 100-125 ft/min, capacity 5000 lb

2. ORDER TO CONTRACTORS MAINTAINING THE SUBJECT TYPE MACHINES

2.1 Contractors shall examine the subject machines for loose or broken bolts that connect the gear to the spider.

2.2 If any bolts are found broken or loose, contact Mr Joe Corr of Dover Corporation (Canada) Limited by phone at (905) 949-6700 or fax at (905) 949-6718 to order the replacement hardware and to obtain instructions for the retrofit.

2.3 If, the required work does not constitute a part of your maintenance contract, and you cannot obtain authorization from the elevator owner to complete this order, you shall notify this office immediately, in writing (to the attention of John Murphy - Chief Inspector re. Bulletin #137/98), indicating the installation numbers of the relevant elevators so that we may issue an order to the owner have the work completed.

C. E. Vlahovic, Chief Engineer  
J. Murphy, Chief Inspector