Subject: Armor AD1 AD2 Controls - Shorts in Safety Circuits from Objects falling on to relay contacts

Sent to: All Elevator Contractors in Scope U1, L1, F1 & Consultants

1. INTRODUCTION

1.1 In the past, a series of accidents or incidents occurred, when elevators moved with doors open, because a fallen screw, washer or a strand of wire had overbridged adjacently located front and back contacts on horizontally mounted relays. Contractors were informed about the hazard and ordered to take specific actions with Director’s Ruling #82/90, covering Klockner-Moeller relays and Safety Alert #136/98, relating to Benedikt+Jager relays.

1.2 In June 2001 an incident occurred when an elevator mechanic observed an elevator move away from the floor with the doors open. The investigation revealed that on this Armor controller a piece of the arc shield from the FF relay had fallen off and landed on and shorted out contacts 1 and 3 of the MG relay which is directly under the FF relay. This effectively shorted out most of the safety circuit and allowed the elevator to run with open doors. (see attached schematic)

2. ORDER TO CONTRACTORS

2.1 Not later than March 1, 2002, contractors shall examine all elevator installations under their maintenance, that are equipped with Armor Model AD1 & AD2 (Louisville) controllers incorporating relays such as FF relay mounted above relay MG.

2.3 On controllers where the potential unsafe condition exists, such as occurrences described in 1.2 above, not later than June 1, 2002 contractors shall securely fasten a shield above relay MG to prevent it’s contacts from being accidentally shorted by falling metal.

2.4 If the required work does not constitute a part of your maintenance contract, and you cannot obtain authorisation from the owner to complete the work, you shall inform this office immediately, indicating the elevator installation numbers so we may issue an order to the owner to have the work completed.

This Director’s Order has been developed in consultation with the TSSA Elevating Devices Council.