

Project title	Class 150 Relay Replacement
Client name	Angel Trains Ltd

SCOPE/OBJECTIVE

AEGIS have undertaken various obsolescence projects for Angel Trains. Two, three car Class 150/0 were originally built as prototypes and have recently been transferred to Northern's Newton Heath depot. These units have some differences compared with the rest of the Class 150 fleet operated by Northern, including the arrangement of the relays used for the train control circuits.

HOW WE HELPED

AEGIS carried out a concept design for their replacement with modern, plug-in relays mounted on pre-wired and pre-tested panels. This permits the existing relays to be removed from the cab back wall and body-end cupboards and quickly replaced with the new assemblies ensuring minimum downtime for the vehicles.

OUTCOME

In addition, the existing auxiliary water heaters in the underframes of each car on the two Class 150/0 units used for heating the saloons, are also obsolete. AEGIS created a modification instruction and new electrical schemes and wiring diagrams to be used to enable the replacement of the old water heaters with an efficient, modern type of water heater which will allow commonality of spare parts across the Class 150 fleet.

