Using the Railmaster with Marklin locos

In Information Centre for March 1985, R.B. of Sydney presented a rather interesting solution to the problem of

Information Centre . . . ctd

running Marklin AC operated locos with the Railmaster controller.

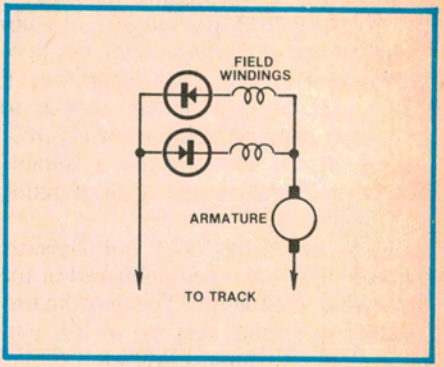
However, it would appear that there is a simpler solution. All that is necessary to convert the loco to DC operation is to place a diode in series with each of the two field windings as shown in the circuit, and disconnect everything else.

Best of all is the fact that this method completely eliminates the jerky and totally unrealistic reversing changeover caused by the application of 24V to the track to operate the reversing solenoid.

Note that the field windings have opposite senses which is necessary with AC operation to permit rotation in either direction (using a mechanical reversing switch inside the loco). Only one field winding is in use at any given time.

For DC operation, the two diodes select one or the other field windings, depending on the polarity applied to the track. The back EMF generated by the operational winding will be blocked by the diode, but operation of the loco is nonetheless quite smooth.

As the motor appears to perform equally well on either AC or DC, I would dearly like to know why Marklin have chosen the relatively complex AC arrangement with its associated cumbersome reversing solenoid, particularly as nearly all other makes of locos and controllers run on DC. (A.H., Morley, WA.)



• Thank you for your letter. Your solution is delightfully simple and will no doubt be received with much interest by Marklin operators. Incidentally, while the back-EMF may be blocked by one of your diodes, it will be conducted by the other and so the feedback feature will work.