

## CONTENTS

Page

### PART I – LOCOMOTIVE DATA AND DESCRIPTION

1. Engine	1
2. Main generator and traction motors	2
3. Auxiliary generator	2
4. Battery	3
5. Control system	3
6. Brake system	5
7. Class 13 locomotives – General	7
8. Air and vacuum connections	7
9. Isolating cocks	8
10. Release valves and cocks	8
11. Meters and gauges fitted	9
12. Governors	9
13. Class 13 locomotives – indicator lights	10
14. Controls in the driving compartment	10
15. Locomotive overspeed device	11
16. Fire equipment	12
17. Colour identification of pipes	12
18. General dimensions	13

### PART 2 – PREPARATION AND DISPOSAL DUTIES, DRIVING INSTRUCTIONS

1. Preparation duties for a locomotive which has been stabled for more than 24 hours, or after maintenance	14
2. Daily preparation in service	15
3. Starting the engine	16
4. To stop the engine	16
5. Brake tests	16
6. Moving the locomotive	21
7. Brake instructions	24
8. Disposal duties	27
9. Towing the locomotive	28
10. Cooker	28

### PART 3 – FAULT FINDING

1. Location and effect of fuses rupturing	29
2. Changing fuses	30

## CONTENTS(Continued)

	Page
3. Guide to fault conditions	31
Driving compartment instrument readings	
4. Fault charts:	
1. Engine will not start – will not turn when master key is moved to the START position	33
2. Engine will not start – turns but does not fire OR stops immediately after firing	35
3. Power is lost or cannot be regained (vacuum and/or air pressures NORMAL)	37
4. Power is lost or cannot be regained (vacuum and/or air pressures NOT NORMAL)	39
5. High coolant temperature	41