CONTENTS

Red Brake Warning Indicator Always On 16
Brake Warning Indicator Always On Diagnosis 16
Brakes Lock Up (Grabbing) 17
Brakes Lock Up Diagnosis 17
Excessive Brake Pedal Effort 18
Excessive Brake Pedal Effort Diagnosis 18
Brakes Drag 19
Brakes Drag Diagnosis 19
Brake Noise 20
Normal Noise 20
Abnormal Noise 21
Brake Noise Diagnosis 21
Slow or Incomplete Brake Pedal Return 22
Slow or Incomplete Brake Pedal Return Diagnosis 22

LESSON ONE WORKSTATIONS 23
WORKSTATION 1 25
WORKSTATION 2 26
WORKSTATION 3 28
WORKSTATION 4 30

LESSON ONE-MODULE 2:BRAKE SYSTEM SERVICE

INTRODUCTION TO BRAKE SYSTEM SERVICE 34
SERVICE PRECAUTIONS 35
BRAKE INSPECTION PROCEDURES 36
HYDRAULIC COMPONENT INSPECTION 36
Brake Master Cylinder Reservoir 37
BRAKE ROTOR INSPECTION 38
Rotor Visual Inspection 38
Rotor Runout 40
Rotor Thickness and Thickness Variation 41
BRAKE DRUM INSPECTION 42
Visual Inspection 42
Drum Diameter 43
Barrel Shape Drums 44
Out-of-Round Drums 44
Eccentric Drums 45
Bell-Mouth 45
Tapered Drum 46
DISC BRAKE PAD SERVICE 47
Disc Brake Pad Replacement 50
DRUM BRAKE INSPECTION AND LINING REPLACEMENT 52
DRUM BRAKE LINING SERVICE 53
Drum Brake Component Disassembly 54
Drum Brake Component Reassembly 55
PARKING BRAKE SERVICE 56
Linkage Inspection and Test 56
Rear Drum Brake Parking Brakes 56
Caliper Integrated Parking Brakes 58
Drum-In-Rotor Parking Brakes 59
DRUM BRAKE WHEEL CYLINDERS 60
DISC BRAKE CALIPERS 61