
SECTION HEADING

AUTO 1131: Brakes

Description

Brakes explains service of automotive brake systems. Included will be diagnosis of problems, system theory and repair, machine procedures, customer satisfaction and safety.

Credits

3

Prerequisite

None

Corequisite

None

Topics to be Covered

1. Brake system operation
2. Hydraulic brakes
3. Drum brakes
4. Disc brakes
5. Power boosters
6. Parking brake systems
7. Antilock brake systems

Learning Outcomes

1. Identify brake system components and configuration
2. Describe, inspect, diagnose, and repair hydraulic brake systems.
3. Describe, inspect, diagnose, and repair drum brake systems.
4. Describe, inspect, diagnose, and repair disc brake systems.
5. Identify components of the brake power assist; and check pedal travel to verify proper power booster operation.
6. Check parking brake system components for wear, binding, and corrosion; clean, lubricate, adjust and/or replace as needed.
7. Remove, clean, inspect, repack, and install wheel bearings; replace seals; install hub and adjust bearings.
8. Identify traction control/vehicle stability control system components and describe operation.
9. Comply with personal and environmental safety practices associated with clothing; eye protection; hand tools; power equipment; proper ventilation; and the handling, storage, and disposal of chemicals/materials in accordance with local, state, and federal safety and environmental regulations
10. *The required outcomes follow the Auto Service Technician (AST) model of the Board of the National Institute for Automotive Service Excellence (ASE)

Credit Details

Lecture: 1

Lab: 2

OJT: 0

MnTC Goal Area(s): None