

# Introduction to Automobile Service Task List Version 1.2

## 1. Preparation and Documentation

## A. <u>Preparing Vehicle for Service</u>

Task 1 – Repair Order

Identify information needed for the service requested on a repair order.

Task 2 – Vehicle Protection Equipment

Identify purpose and demonstrate proper use of fender covers, floor mats and other vehicle protection equipment.

Task 3 – Pre-Service Evaluation

Conduct an appropriate pre-service evaluation and report or note any concerns not already on the repair order.

Task 4 – TPMS

Determine the presence of a Tire Pressure Monitoring System (TPMS).

Task 5 - Wheel Locks

Determine the presence of wheel locks.

Task 6 – Air Suspension

Determine the presence of an air suspension system.

Task 7- Instrument Panel

Check operation and status of instrument panel warning lights and gauges.

Task 8- Hybrid Vehicle Safety

Identify service and safety considerations for hybrid vehicles.

# B. Locating Information

Task 1 – Vehicle Identification Number (VIN)

Locate and use the VIN.

Task 2 – Vehicle Information Decals

Locate and use vehicle information placards, decals, tags, as required.

Task 3 – Service Information

Locate and use paper and electronic manuals.

Task 4 – Service Bulletins

Locate and use technical service bulletins (TSBs).

Task 5 – Material Safety Data Sheets (MSDS)

Locate and use material safety data sheets (MSDS).

# C. \_Tools and Equipment

Task 1 – Tool/Equipment Usage

Identify tools and equipment and their appropriate usage in automotive applications.

Task 2 – Fastener Identification

Identify standard and metric designation.

Task 3 – Floor Jacks and Jack Stands

Identify and use proper placement of floor jacks and jack stands.

Task 4 – Vehicle Lifts

Identify and use proper procedures for safe lift usage.

Task 5 – Service Pits

Identify and use proper procedures for safe pit usage.

Task 6 – Shop Ventilation

Use proper ventilation procedures for working within the shop area.

Task 7 – Handling Fluids

Use proper handling procedures for automotive fluids.

Task 8 – Cleaning and Lubrication

Use proper chemicals for cleaning and lubrication.

## D. Preparing Vehicle for Customer

Task 1 – Vehicle Delivery

Ensure vehicle is prepared to return to customer per company policy (floor mats, steering wheel cover, etc.).

Task 2 – Maintenance Indicators

Reset maintenance indicators.

Task 3 – Instrument Panel

Verify status of instrument panel warning lights and gauges.

Task 4 – Document Services

Complete documentation on services performed.

# 2. Fluids, Filters, Belts and Hoses Inspection and Service

## A. Underhood (Part 1)

Task 1 – General Inspection

Inspect underhood area for leaks, damage, and unusual conditions.

Task 2 – Fluid Types

Determine fluid type requirements and identify fluid.

Task 3 – Engine Oil

Check engine oil level and condition; service as required.

Task 4 – Engine Coolant

Check engine coolant level and condition; service as required.

### B. Underhood (Part 2)

Task 5 – Power Steering Fluid

Check power steering fluid level and condition; service as required.

Task 6 - Brake Fluid

Check brake fluid level and condition; service as required.

Task 7 – Hydraulic Clutch Fluid

Check hydraulic clutch fluid and condition; service as required.

#### Task 8 - Windshield Washer Fluid

Check windshield washer fluid level and condition; service as required.

### Task 9 – Automatic Transmission Fluid

Check automatic transmission fluid level and condition; service as required.

## C. Undercar

### Task 1 – General Inspection

Inspect undercar area for leaks, damage, and unusual conditions.

### Task 2 – Differential/Transfer Case Fluid

Check differential/transfer case fluid level; note unusual conditions; service as required.

### Task 3 – Manual Transmission Fluid

Check manual transmission fluid level; note unusual conditions; service as required.

## Task 4 – Brake Hydraulic Lines

Inspect brake lines, flexible hoses, and fittings for leaks, dents, kinks, rust, cracks, bulging or wear.

### Task 5 – Chassis Lubrication

Lubricate driveline, suspension and steering systems.

### Task 6 - Coolant Hoses

Inspect cooling system pipes and hoses for wear, damage, and proper routing.

### Task 7 – Oil and Filter

Change engine oil and filter.

### D. Filters and Drive Belts

#### Task 1 – Fuel Filter

Replace inline fuel filters as applicable.

### Task 2 - Air Filter

Inspect and replace air filter.

## Task 3 - Cabin Air Filter

Inspect and replace cabin air filter.

#### Task 4 - Drive Belts

Inspect, replace and adjust drive belts; inspect tensioners and pulleys.

### Task 5 – Document Services

Document observed damage, unusual conditions, and concerns.

# 3. Suspension, Tire, and Brake Inspection and Service

## A. Suspension Inspection

## Task 1 – Struts and Springs

Visually inspect struts, springs, and related components.

#### Task 2 – Stabilizer Bar

Visually inspect stabilizer bar, bushings, brackets, and links.

## Task 3 – Leaf/Coil/Air Springs and Torsion Bars

Visually inspect springs, torsion bars, and related components.

### Task 4 – Shock Absorbers

Visually inspect shock absorbers and related components.

## Task 5 – CV Boots

Visually inspect constant velocity (CV) axle shaft boots.

### B. Tire (Part 1)

### Task 1 – TPMS

Identify service considerations when equipped with a Tire Pressure Monitoring System (TPMS).

## Task 2 – Nitrogen Inflation

Identify nitrogen-filled tires.

#### Task 3 – Tire Inspection

Inspect tires; inspect spare and mounting system; check and adjust tire pressure.

## Task 4 – Tire Rotation

Rotate tires according to recommendations.

### C. Tire (Part 2)

## Task 5 – Balancing

Balance wheel and tire assembly.

Task 6 – Mounting

Dismount, inspect, and remount tire on wheel.

Task 7 – Repair

Repair tire according to industry standards.

Task 8 – Wheel Installation

Reinstall wheel; torque wheel fasteners to specification.

## D. Brake

Task 1 – Wheel Bearings

Check wheel bearings for play and other signs of wear.

Task 2 – Drum Brakes

Perform a visual inspection of a brake drum system.

Task 3 – Disc Brakes

Perform a visual inspection of a disc brake system.

Task 4 – Parking Brake

Check parking brake operation; check parking brake components for unusual conditions.

Task 5 – Document Services

Document damage, unusual conditions and concerns.

# 4. Body, Battery, Charging and Electrical Systems Inspection and Service

## A. Body

Task 1 – Wiper Blades

Check wiper blades, inserts, and arms; replace wiper blades or inserts

Task 2 – Lubrication

Lubricate door latches and hinges.

Task 3 – Fuel Cap

Inspect fuel cap and seal.

## B. <u>Battery</u>

Task 1 – Charging

Charge battery as needed.

Task 2 – Inspection

Inspect and clean battery hold-downs; repair or replace as needed.

Task 3 – Cleaning

Inspect and clean battery and battery cable clamp connections.

## C. Charging

Task 1 – Testing

Perform battery, starting, and charging system tests using appropriate tester.

Task 2 – Jump Starting

Start vehicle using an auxiliary power supply.

Task 3 – Electronic Memory

Maintain or restore electronic memory functions if required.

## D. Electrical

Task 1 – Fuses

Test and replace fuses; confirm proper circuit operation.

Task 2 – Lamps

Inspect and replace exterior and courtesy lamps.

Task 3 – Document Services

Document damage, unusual conditions, and concerns.

### 5. Quiz

The quiz includes 40 questions that evaluate your knowledge of the tasks covered in Modules 1-4 of this program. You need to achieve a score of at least 80% in order to earn your Certificate of Completion for the ASE Introduction to Automobile Service Program.