**1. Engine Components**  
  • **Engine Diagnostics**  
    – **Labour Hours:** 1.0  
    – **Description:** Perform a complete diagnostic of the engine using onboard diagnostics (OBD) tools, visually inspect engine internals, verify sensor outputs, and assess performance issues.  
    – **Steps:** Read fault codes, perform visual inspection, confirm issues with test drives.

  • **Spark Plug Replacement**  
    – **Labour Hours:** 1.2  
    – **Description:** Remove worn spark plugs, check and adjust gap settings, and install new plugs.  
    – **Steps:** Access the engine, remove ignition coils, extract spark plugs, and install replacements with proper torque.

  • **Timing Belt Replacement**  
    – **Labour Hours:** 3.5  
    – **Description:** Remove engine covers, align timing marks, remove the old belt, and install a new timing belt along with tensioner adjustment.  
    – **Steps:** Remove ancillary components, set timing marks, remove belt, install new belt, and test for correct alignment.

  • **Cylinder Head Gasket Replacement**  
    – **Labour Hours:** 4.0  
    – **Description:** Disassemble parts of the engine to access the cylinder head, remove the old gasket, prepare surfaces, and install a new gasket.  
    – **Steps:** Remove valve cover and cylinder head bolts, clean surfaces, install new gasket, reassemble components.

  • **Engine Rebuild**  
    – **Labour Hours:** 10.0  
    – **Description:** Full teardown of the engine, cleaning and inspection of all internal components, replacement of worn parts, and complete reassembly.  
    – **Steps:** Remove engine from vehicle (if necessary), disassemble, clean, inspect, replace components, reassemble, and test.

**2. Transmission System**  
  • **Transmission Fluid Change**  
    – **Labour Hours:** 2.0  
    – **Description:** Drain old transmission fluid, replace the fluid filter (if applicable), and refill with the correct type and amount of fluid.  
    – **Steps:** Lift vehicle, drain fluid, remove and replace filter, refill and check fluid levels.

  • **Transmission Filter Replacement**  
    – **Labour Hours:** 1.5  
    – **Description:** Access the transmission, remove the old filter, and install a new one to maintain proper fluid flow.  
    – **Steps:** Remove transmission pan, replace filter, reattach pan with new gasket.

  • **Clutch Replacement**  
    – **Labour Hours:** 3.0  
    – **Description:** For manual transmissions, remove the transmission assembly, replace the clutch disc and pressure plate, and reassemble.  
    – **Steps:** Remove transmission, extract clutch assembly, install new components, and re-mount transmission.

  • **Transmission Diagnostics**  
    – **Labour Hours:** 1.5  
    – **Description:** Test for transmission issues such as slippage, erratic shifting, and read diagnostic codes to pinpoint faults.  
    – **Steps:** Use diagnostic scanner, monitor performance data, and record error codes.

  • **Transmission Rebuild**  
    – **Labour Hours:** 8.0  
    – **Description:** Disassemble the transmission completely, inspect internal components, replace worn parts, and reassemble with precise alignment.  
    – **Steps:** Remove transmission, disassemble components, replace faulty parts, clean all surfaces, reassemble, and test operation.

**3. Suspension and Steering System**  
  • **Suspension Inspection**  
    – **Labour Hours:** 0.5  
    – **Description:** Conduct a visual and functional inspection of shocks, struts, springs, and bushings for signs of wear or damage.  
    – **Steps:** Check for oil leaks, assess physical damage, and note alignment issues.

  • **Shock Absorber Replacement (per shock)**  
    – **Labour Hours:** 1.5  
    – **Description:** Remove and replace worn shock absorbers to restore ride quality.  
    – **Steps:** Unbolt the old shock, remove mounting hardware, install new shock with correct orientation, and torque fasteners.

  • **Steering Rack Replacement**  
    – **Labour Hours:** 3.0  
    – **Description:** Remove the defective steering rack and install a new unit to ensure precise steering control.  
    – **Steps:** Remove tie rods, detach rack mounting bolts, extract old rack, install new rack, and adjust alignment.

  • **Wheel Alignment**  
    – **Labour Hours:** 1.0  
    – **Description:** Adjust the vehicle’s alignment settings (camber, caster, and toe) to ensure proper tire wear and handling.  
    – **Steps:** Use alignment equipment to measure angles, adjust as necessary, and perform a test drive.

  • **Control Arm Replacement**  
    – **Labour Hours:** 2.0  
    – **Description:** Replace worn control arms and associated bushings to restore suspension geometry.  
    – **Steps:** Remove fasteners, detach the old control arm, install the new arm, and ensure proper alignment.

**4. Braking System**  
  • **Front Brake Reline**  
    – **Labour Hours:** 1.0  
    – **Description:** Resurface or replace the front brake rotors to ensure effective braking.  
    – **Steps:** Remove wheel, detach brake caliper, machine or replace rotor, and reinstall components.

  • **Rear Brake Reline**  
    – **Labour Hours:** 1.0  
    – **Description:** Similar procedure as the front brakes applied to the rear brakes.  
    – **Steps:** Remove wheel, inspect and reline or replace rotor, and reassemble.

  • **Brake Bleeding**  
    – **Labour Hours:** 0.5  
    – **Description:** Remove trapped air from the brake lines to restore braking efficiency.  
    – **Steps:** Open bleeder valves, pump brakes until clear fluid is observed, and close valves.

  • **Brake Pad Replacement**  
    – **Labour Hours:** 1.5  
    – **Description:** Replace worn brake pads and inspect associated hardware for wear.  
    – **Steps:** Remove caliper, extract old pads, insert new pads, and re-secure caliper.

  • **Caliper Service/Replacement**  
    – **Labour Hours:** 1.2  
    – **Description:** Service (clean and lubricate) or fully replace brake calipers if they show signs of sticking or leaking.  
    – **Steps:** Remove caliper, inspect seals and slides, perform necessary service or replace unit, and reinstall.

**5. Electrical and Lighting System**  
  • **Battery Replacement**  
    – **Labour Hours:** 0.5  
    – **Description:** Remove the depleted battery and install a new one, ensuring all connections are secure.  
    – **Steps:** Disconnect terminals, remove battery, install new battery, and reconnect terminals with correct polarity.

  • **Headlight/Tail Light Replacement**  
    – **Labour Hours:** 0.7 (per light)  
    – **Description:** Replace burnt-out bulbs or entire light assemblies to restore proper illumination.  
    – **Steps:** Open light housing, remove old bulb or assembly, insert new part, and test functionality.

  • **Wiring Inspection/Repair**  
    – **Labour Hours:** 1.5  
    – **Description:** Trace electrical circuits to identify faulty wiring or connections; perform repairs or soldering as needed.  
    – **Steps:** Use wiring diagrams, inspect harnesses, repair exposed wires, and test circuits.

  • **Alternator Replacement**  
    – **Labour Hours:** 2.0  
    – **Description:** Remove the failing alternator and install a new unit to ensure proper charging of the battery.  
    – **Steps:** Disconnect battery, remove drive belt, unbolt the alternator, install new alternator, and reassemble.

**6. Fuel System**  
  • **Fuel Pump Replacement**  
    – **Labour Hours:** 2.0  
    – **Description:** Access the fuel pump (commonly located in or near the fuel tank), disconnect the old pump, and install a new one.  
    – **Steps:** Relieve fuel system pressure, remove access panels or fuel tank (if required), replace pump, and test for leaks.

  • **Fuel Filter Replacement**  
    – **Labour Hours:** 1.0  
    – **Description:** Locate and replace the fuel filter to ensure clean fuel delivery to the engine.  
    – **Steps:** Access the filter housing, remove the old filter, install a new one, and re-secure housing.

  • **Injector Cleaning/Replacement**  
    – **Labour Hours:** 1.5  
    – **Description:** Remove fuel injectors, clean deposits or replace faulty units to maintain engine efficiency.  
    – **Steps:** Remove intake components as necessary, extract injectors, clean using ultrasonic or replace, and reinstall.

  • **Fuel Tank Inspection**  
    – **Labour Hours:** 0.5  
    – **Description:** Visually inspect the fuel tank for signs of corrosion, leaks, or physical damage.  
    – **Steps:** Remove access panel if needed, inspect interior and exterior, and record findings.

  • **Fuel Line Replacement**  
    – **Labour Hours:** 1.5  
    – **Description:** Remove old, worn fuel lines and replace them with new, manufacturer-specified lines.  
    – **Steps:** Detach fuel lines from connections, remove worn sections, install new lines, and test system integrity.

**7. Cooling System**  
  • **Radiator Replacement**  
    – **Labour Hours:** 2.5  
    – **Description:** Remove the existing radiator, disconnect all hoses and mounting hardware, and install a new radiator.  
    – **Steps:** Drain coolant, remove radiator, install new unit, reattach hoses, and refill coolant.

  • **Water Pump Replacement**  
    – **Labour Hours:** 2.0  
    – **Description:** Replace the water pump to ensure efficient coolant circulation through the engine.  
    – **Steps:** Remove ancillary parts obstructing access, unbolt old pump, install new pump, and test operation.

  • **Coolant Flush**  
    – **Labour Hours:** 1.0  
    – **Description:** Drain old coolant from the system and replace with new, pre-mixed coolant to prevent overheating.  
    – **Steps:** Drain coolant, flush system if needed, and refill with correct mixture.

  • **Thermostat Replacement**  
    – **Labour Hours:** 1.0  
    – **Description:** Remove the thermostat housing, replace the thermostat, and reassemble the housing to maintain optimal engine temperature.  
    – **Steps:** Remove housing, extract thermostat, install new thermostat, and reassemble with a new gasket.

  • **Heater Core Replacement**  
    – **Labour Hours:** 3.0  
    – **Description:** Access and replace the heater core (often requiring dashboard disassembly) to restore cabin heating functionality.  
    – **Steps:** Disassemble dashboard components, remove old heater core, install new core, and reassemble.

**8. Exhaust System**  
  • **Muffler Replacement**  
    – **Labour Hours:** 1.5  
    – **Description:** Remove the damaged muffler, inspect exhaust piping, and install a new muffler ensuring proper alignment.  
    – **Steps:** Lift vehicle if needed, unbolt muffler, replace with new unit, and secure all connections.

  • **Catalytic Converter Replacement**  
    – **Labour Hours:** 2.0  
    – **Description:** Remove the faulty catalytic converter and install a new one to comply with emissions standards.  
    – **Steps:** Safely lift the vehicle, remove converter, install new unit, and verify mounting.

  • **Exhaust Manifold Repair**  
    – **Labour Hours:** 2.5  
    – **Description:** Repair cracks or damage in the exhaust manifold via welding or by replacing sections if necessary.  
    – **Steps:** Inspect manifold, determine repair method (welding or replacement), perform repair, and test for leaks.

  • **Exhaust System Inspection**  
    – **Labour Hours:** 0.5  
    – **Description:** Conduct a thorough inspection of the entire exhaust system for leaks, rust, or damage.  
    – **Steps:** Visual and sound check along the exhaust route.

  • **Oxygen Sensor Replacement**  
    – **Labour Hours:** 1.0  
    – **Description:** Locate and replace the oxygen sensor to ensure the engine runs efficiently and meets emissions standards.  
    – **Steps:** Identify sensor location, remove faulty sensor, install new sensor, and clear error codes.

**9. Drivetrain System**  
  • **Differential Service**  
    – **Labour Hours:** 2.0  
    – **Description:** Drain the old differential fluid, inspect gear conditions, and refill with new fluid.  
    – **Steps:** Remove fill and drain plugs, drain fluid, inspect for wear, and refill with manufacturer-specified fluid.

  • **CV Joint Replacement**  
    – **Labour Hours:** 2.5  
    – **Description:** Remove the worn CV joint from the axle, and install a new one to restore proper drive function.  
    – **Steps:** Remove axle nut, detach joint, replace with new unit, and reassemble components.

  • **Axle Replacement**  
    – **Labour Hours:** 3.0  
    – **Description:** Remove damaged axles and install new axles ensuring proper fitment and alignment with suspension components.  
    – **Steps:** Remove necessary suspension parts, extract axle, install new axle, and secure with proper hardware.

  • **Driveline Diagnostics**  
    – **Labour Hours:** 1.5  
    – **Description:** Test the driveline for abnormal vibrations, noises, or irregular power transfer.  
    – **Steps:** Conduct road tests, monitor vibrations, and use diagnostic tools for precision.

  • **Transfer Case Service**  
    – **Labour Hours:** 2.0  
    – **Description:** Service the transfer case in 4WD/AWD systems by replacing fluid and inspecting internal components.  
    – **Steps:** Drain old fluid, inspect gears, refill with new fluid, and test system functionality.

**10. Body and Interior Components**  
  • **Door Repair/Replacement**  
    – **Labour Hours:** 1.5  
    – **Description:** Adjust door alignment or replace damaged door panels, hinges, or latches.  
    – **Steps:** Inspect door fitment, remove damaged components, install new parts, and adjust for proper closure.

  • **Window Motor Replacement**  
    – **Labour Hours:** 1.0  
    – **Description:** Remove door panels to access and replace a faulty window motor, ensuring smooth operation.  
    – **Steps:** Remove interior trim, disconnect old motor, install new motor, and test window movement.

  • **Seat Repair/Replacement**  
    – **Labour Hours:** 1.5  
    – **Description:** Repair upholstery, mechanical adjustments, or completely replace the seat unit.  
    – **Steps:** Inspect seat integrity, remove seat (if required), repair or install new seat, and secure mounting.

  • **Interior Trim Repair**  
    – **Labour Hours:** 1.0  
    – **Description:** Repair or reattach broken or detached interior trim elements, ensuring aesthetics and functionality.  
    – **Steps:** Remove damaged trim, prepare surface, install new or repaired trim pieces.

  • **Frame Alignment**  
    – **Labour Hours:** 2.5  
    – **Description:** Use specialized equipment to realign the vehicle frame after collisions or damage.  
    – **Steps:** Secure the vehicle, use frame measuring devices, adjust frame positions, and verify alignment.

**11. HVAC System**  
  • **Compressor Replacement**  
    – **Labour Hours:** 2.5  
    – **Description:** Remove a malfunctioning AC compressor and install a new unit, followed by system evacuation and refrigerant recharge.  
    – **Steps:** Recover refrigerant, remove compressor mounting bolts, install new compressor, recharge system.

  • **Blower Motor Replacement**  
    – **Labour Hours:** 1.5  
    – **Description:** Access and replace the blower motor within the HVAC assembly to ensure proper air circulation.  
    – **Steps:** Remove HVAC panel, detach old motor, install new motor, and test airflow.

  • **AC Refrigerant Recharge**  
    – **Labour Hours:** 1.0  
    – **Description:** Evacuate any remaining refrigerant and recharge the system to the manufacturer’s specified level.  
    – **Steps:** Connect refrigerant gauge, evacuate system, recharge with correct refrigerant type, and verify pressure.

  • **AC System Leak Repair**  
    – **Labour Hours:** 2.0  
    – **Description:** Identify leaks in the AC system (hoses, seals, connections) and repair or replace faulty parts.  
    – **Steps:** Use UV dye or leak detector, locate leak, repair or replace damaged parts, and retest.

  • **Heater Control Replacement**  
    – **Labour Hours:** 1.0  
    – **Description:** Replace malfunctioning heater control modules to restore proper cabin temperature management.  
    – **Steps:** Remove control panel, detach faulty module, install new module, and test heater functionality.

**12. Safety and Security System**  
  • **Airbag Replacement**  
    – **Labour Hours:** 1.5  
    – **Description:** Safely remove deployed airbags, recalibrate sensors, and install new airbag units.  
    – **Steps:** Disconnect battery, remove airbag modules, install new airbags, and verify sensor function.

  • **Seat Belt Replacement**  
    – **Labour Hours:** 1.0  
    – **Description:** Replace damaged or frayed seat belts ensuring proper retraction and secure anchorage.  
    – **Steps:** Remove interior panels as necessary, detach old belt, install new belt, and test tension.

  • **Parking Sensor Calibration/Repair**  
    – **Labour Hours:** 0.5  
    – **Description:** Diagnose and calibrate parking sensors to ensure accurate distance measurements.  
    – **Steps:** Test sensor outputs, recalibrate settings, or replace sensor if faulty.

  • **Alarm System Repair**  
    – **Labour Hours:** 1.0  
    – **Description:** Troubleshoot and repair faults in the vehicle’s alarm or security system, including wiring or module replacement.  
    – **Steps:** Run diagnostic tests, identify faults, repair wiring or replace modules.

  • **Safety System Diagnostics**  
    – **Labour Hours:** 0.5  
    – **Description:** Quickly verify that all safety systems (airbags, sensors, seat belts) are functioning as expected.  
    – **Steps:** Perform a system check using onboard diagnostics and visual inspections.

**13. Signaling System**  
  • **Turn Signal Replacement**  
    – **Labour Hours:** 0.5  
    – **Description:** Replace burnt-out turn signal bulbs or entire assemblies to restore signaling functionality.  
    – **Steps:** Remove light housing, replace bulb or assembly, and test signals.

  • **Hazard Light Repair**  
    – **Labour Hours:** 0.5  
    – **Description:** Diagnose and repair issues with hazard lights, ensuring all units flash in unison.  
    – **Steps:** Inspect wiring, replace bulbs if needed, and verify functionality.

  • **Indicator Light Replacement**  
    – **Labour Hours:** 0.5  
    – **Description:** Replace malfunctioning indicator lights on the dashboard or exterior as required.  
    – **Steps:** Remove cover, replace indicator unit, and test illumination.

  • **Wiring Check/Repair for Signals**  
    – **Labour Hours:** 1.0  
    – **Description:** Inspect the wiring related to all signaling systems, repair any faults or corrosion, and secure connections.  
    – **Steps:** Trace wiring paths, identify breaks or corrosion, and perform soldering or replacement.

  • **Bulb Replacement (General)**  
    – **Labour Hours:** 0.3  
    – **Description:** A quick replacement of any small bulbs (e.g., indicator or dashboard lights) as needed.  
    – **Steps:** Remove bulb socket, replace bulb, and reinsert securely.