

AUTOMOBILE MECHANIC STUDENT INTERNSHIP SKILLS LIST

Provo School District

Repairs and overhauls automobiles, buses, trucks, and other automotive vehicles: Examines vehicle and discusses with customer or with automobile-repair-service estimator the nature and extent of damage or malfunction. Plans work procedure, using charts, technical manuals, and experience. Raises vehicle, using hydraulic jack or hoist, to gain access to mechanical units bolted to underside of vehicle. Removes unit, such as engine, transmission, or differential, using wrenches and hoist. Disassembles unit and inspects parts for wear, using micrometers, calipers, and thickness gauges. Repairs or replaces parts, such as pistons, rods, gears, valves, and bearings, using mechanic's handtools. Overhauls or replaces carburetors, blowers, generators, distributors, starters, and pumps. Rebuilds parts, such as crankshafts and cylinder blocks, using lathes, shapers, drill presses, and welding equipment. Rewires ignition system, lights, and instrument panel. Relines and adjusts brakes, aligns front end, repairs or replaces shock absorbers, and solders leaks in radiator. Mends damaged body and fenders by hammering out or filling in dents and welding broken parts. Replaces and adjusts headlights, and installs and repairs accessories, such as radios, heaters, mirrors, and windshield wipers.

This list is designed to help you obtain considerable information during your internship period. The column on the left will designate various procedures used in your internship you have been assigned. When you have observed a procedure, record the date and have your mentor sponsor initial the square. There is a lot to see and learn. Be sure to ask your mentor to show you as much as he/she can.

SKILL OR PROCEDURE	DATE INITIAL	DATE INITIAL	DATE INITIAL
SHOP ROUTINE			
1. New vehicle service			
2. Installation of accessories			
3. Body service			
4. Keeping shop clean and orderly			
BRAKES			
5. Adjusting			
6. Relining			
7. Repair hydraulic systems			
8. Power operated brakes			
9. Air and vacuum brakes			
CHASSIS			
10. Frames			
11. Steering units			
12. Front suspension systems			

13. Shock absorbers			
14. Springs			
CLUTCH AND TRANSMISSION			
15. Clutches			
16. Standard and automatic transmissions			
17. Overdrive and shift controls			
18. Power takeoff			
REAR AXLE ASSEMBLY			
19. Differential			
20. Universal joints			
21. Drive lines			
22. Rear axle			
POWER PLANTS			
23. Valves			
24. Timing gears and chains			
25. Piston and ring assembly			
26. Bearing and crankshaft			
27. Cylinder reconditioning			
ELECTRIC SYSTEM			
28. Wire and light system alternator			
29. Generator and regulator			
30. Starting motors			
31. Windshield wipers			
32. Instruments and gages			
33. Ignition and battery			
34. Transmission controls			
MOTOR ANALYZING			
35. Carburetors			
36. Fuel systems			

37. Distributors			
38. Troubleshooting			
39. Fuel injectors			
40. Tune-up			
EXHAUST EMISSION CONTROLS			
41. Exhaust analyzers			
42. Catalytic converters			
43. Controls			
44. Pumps			
MISCELLANEOUS			
45. Exhaust systems			
46. Welding			
47. Auxiliary devices			
48. Upholstery repair			
49. Body and structural repair			
50. Installation and maintenance of radio transmitters, receivers or repair such equipment			
51. oil changes			
52. winterization			
53. Anti-freeze changing			
54. Changing windshield wiper blades			
55. Head lights			
56. Tail lights			
57. Lenses			
58. Fuses			
59. Fan belts			
60. Inspect tires			
61. Replace/repair as necessary			
62. Provide battery services to include charging			
63. Installation and removal as required			
64. Shop operations			

65. Service selling			
66. Supervision review			
TRUCK MECHANIC			
FRONT AXLE ASSEMBLIES			
67. Dismantle for repair			
68. Repair or replace worn parts			
69. Align front end for proper steering			
REAR AXLE AND DIFFERENTIAL			
70. Use of proper types of lubrication			
71. Dismantle and clean for repair			
72. Check grease seals			
73. Assemble differential and adjust			
BRAKE REPAIRS			
74. Remove wheels			
75. Remove worn brake shoes			
76. Reline shoes with new lining			
77. Check system and adjust			
CLUTCHES			
78. Remove clutch housing			
79. Remove worn clutch, replace with new assembly			
ENGINES			
80. Remove from truck when necessary			
81. Dismantle for repairs			
82. Check bearings for wear			
83. Fit pistons, rings, rods, and bearings			
84. Reface valves and lock, grind and adjust			
85. Set timing and adjust engine after assembly			

TRANSMISSION REPAIRS			
86. Remove and replace			
87. Clean and examine parts			
88. Install and adjust			
FUEL SYSTEM			
89. Install new parts and adjust carburetors			
90. Repair or replace fuel pumps			
91. Check, repair, install and adjust various components of diesel system			
ELECTRICAL SYSTEM			
92. Repair and adjust distributors			
93. Clean and adjust plugs			
94. Maintain proper condition of storage battery			
95. Repair electrical wiring system			
MISCELLANEOUS REPAIRS			
96. Repair or replace springs, shock absorbers, muffler and exhaust pipes			
97. Remove and replace universal joints, drive shafts			
98. Lubrication, grease, oil, P.M. checks			
99. Wheel balancing			
100. Electrical and gas weld			
101. Sheet metal and body			
102. Tires			
103. Air systems			
104. Accessories rebuilding (electrical and air)			
105. Cooling systems			