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. Sho	ock absorbers		
14. Spr	ings		
	CLUTCH AND TRANSMISSION		
15. Clu	tches		
16. Sta	ndard and automatic transmissions		
17. Ove	erdrive and shift controls		
18. Pov	wer takeoff		
	REAR AXLE ASSEMBLY		
19. Diff	erential		
20. Uni	versal joints		
21. Driv	ve lines		
22. Rea	ar axle		
	POWER PLANTS		
23. Val	ves		
24. Tim	ning gears and chains		
25. Pist	ton and ring assembly		
26. Bea	aring and crankshaft		
27. Cyl	inder reconditioning		
	ELECTRIC SYSTEM		
28. Wir	e and light system alternator		
29. Ger	nerator and regulator		
30. Sta	rting motors		
31. Wir	ndshield wipers		
32. Inst	truments and gages		
33. Igni	ition and battery		
34. Tra	nsmission controls		
	MOTOR ANALYZING		
35. Car	rburetors		
36. Fue	el 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. tran	Installation and maintenance of radio smitters, 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	
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	
 Repair or replace springs, shock absorbers, muffler and exhaust pipes 	
 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	