

Lovejoy Senior Lab Off-Site Learning Packet Day 2

Instructor Michael Lovejoy

Date 2019-2020

Program/Class SR AST

Period 1 - 4

State Indicator/Competency

5.5.5. Inspect and replace pitman arm, relay rod (centerlink/intermediate), idler arm and mountings, and steering linkage damper.

Instructional Objective(s)

1. Student will be able to identify suspension system vocabulary with 80 percent accuracy.

Materials

Handout: Activity Sheet #81: Suspension Systems
Internet

Method of Instruction

Individual Work

Activities

1. Individual Work

Student will use internet to match the suspension system vocabulary with the description on Activity sheet #81.

Assessment

Informal: Students will receive 10 points for completing assignment.

-This assignment will be graded and count for a homework grade.



Activity Sheet #81

SUSPENSION SYSTEMS

Name _____ Class _____

Directions: Match the words on the left to the descriptions on the right. Write the letter for the correct word on the line provided. For the terms that you are not certain of, use the glossary in your textbook.

- | | | |
|---------------------------|-------|---|
| A. Chassis | _____ | Steel rod wound into a coil |
| B. Suspension | _____ | Spring with a smooth ride that allows for heavier carrying capacity too |
| C. Rigid axle | _____ | Automatic suspension that keeps the car body level during all driving conditions |
| D. Independent suspension | _____ | Type of suspension system in which only one wheel will deflect |
| E. Coil spring | _____ | When the wheel moves up as the spring compresses |
| F. Variable rate spring | _____ | Weight not supported by springs |
| G. Torsion bar | _____ | The group of parts that includes the frame, shocks and springs, steering parts, tires, brakes, and wheels |
| H. Overload spring | _____ | A group of parts that supports the vehicle and cushions the ride |
| I. Sprung weight | _____ | A suspension design that incorporates the shock absorber into the front suspension |
| J. Unsprung weight | _____ | When hydraulic fluid becomes mixed with air |
| K. Compression or jounce | _____ | Also called aeration |
| L. Rebound | _____ | Straight rod that works as a spring |
| M. Short/long arm (SLA) | _____ | Found on heavy trucks |
| N. Shock absorber | _____ | An additional spring that only works under a heavy load |
| O. Shock ratio | _____ | Weight supported by springs |
| P. Aeration | _____ | Suspension leveling system that keeps the vehicle at the same height when weight is added to parts of the car |
| Q. Cavitation | _____ | When the wheel moves back down after compression |



- | | | |
|-------------------------------|-----|---|
| R. Gas shock | ___ | Suspension design that uses two control arms of unequal length |
| S. MacPherson strut | ___ | Dampens spring oscillations |
| T. Adaptive suspension system | ___ | The difference between the amount of control on compression and extension |
| U. Active suspension | ___ | Pressurized to keep the bubbles from forming in the fluid |



