Minnesota State College Southeast

AUTO 1114: Suspension & Steering Lab

A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: *.*
Lab Hours/Week: 6
OJT Hours/Week: *.*
Prerequisites: None
Corequisites: None
MnTC Goals: None

This course will develop skills the student will need for diagnosis and replacement and alignment of suspension systems needed in the technology of automotive and light duty truck repair. (Prerequisites: AUTO1105, AUTO1106, AUTO1204 or instructor approval) (3 Credits: 0 lecture/3 lab)

B. COURSE EFFECTIVE DATES: 04/27/1998 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. General Suspension and Steering Systems Diagnosis
2. Steering Systems Diagnosis and Repair
3. Suspension Systems Diagnosis and Repair
4. Wheel Alignment Diagnosis, Adjustment, and Repair
5. Wheel and Tire Diagnosis and Repair
D. LEARNING OUTCOMES (General)
   1. Perform safety procedures
   2. Rotate tires
   3. Repack wheel bearings
   4. Complete final exam
   5. Service spindle and steering knuckle
   6. Diagnose steering column problems
   7. Service steering column components
   8. Service ball joints
   9. Replace steering wheel
  10. Service stabilizer bar
  11. Service control arms
  12. Test power steering pump
  13. Service power steering pump
  14. Service recirculation ball power steering gears
  15. Replace steering gear assemblies
  16. Service linkage type power steering unity
  17. Service conventional tie-rod ends
  18. Complete mid-course exam
  19. Service power rack and pinion steering gear
  20. Service torsion bars
  21. Perform tire and wheel balance
  22. Perform off car computer wheel balance
  23. Service idler arm
  24. Identify steering angles
  25. Replace coil springs
  26. Rebuild McPherson strut cartridge
  27. Service modified strut assemblies
  28. Replace McPherson strut cartridge
  29. Perform two wheel alignment
  30. Perform total 4 wheel alignment
  31. Exhibit professionalism

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
   None

F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted