AUTO 1204: Suspension & Steering Theory

A. COURSE DESCRIPTION

Credits: 2
Lecture Hours/Week: 2
Lab Hours/Week: *.*
OJT Hours/Week: *.*
Prerequisites: None
Corequisites: None
MnTC Goals: None

This course instructs the student in steering component diagnosis and component replacement/adjustment. Emphasis is placed on all components of automotive steering and suspension. (Prerequisites: AUTO1105, AUTO1106, or instructor approval) (2 Credits: 2 lecture/0 lab)

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

C. OUTLINE OF MAJOR CONTENT AREAS

1. Safety Procedures
2. Steering Component and Suspension
3. Diagnosis, Replacement, and Adjustment
D. LEARNING OUTCOMES (General)
   1. Explain safety procedures
   2. Define steering terms
   3. Define Pascals Law
   4. Describe manual rack and pinion function
   5. Describe hydraulic steering systems
   6. Describe coil spring installation procedure
   7. Describe leaf spring installation procedures
   8. Explain static wheel balance
   9. Explain dynamic wheel balance
   10. Describe tire and wheel balance
   11. Describe off car wheel balance
   12. Describe defective tire symptoms
   13. Complete mid-course exam
   14. Identify steering gear types and components
   15. Analyze power steering pump
   16. Describe power steering recirculation ball operation
   17. Analyze power rack and pinion steering gear
   18. Explain linkage type power steering unit
   19. Analyze steering column
   20. Analyze steering column components
   21. Describe steering column problems
   22. Analyze conventional tie-rod ends
   23. Explain steering angles
   24. Analyze steering angles
   25. Analyze different types of wheel alignment
   26. Exhibit professionalism
   27. Complete final exam

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

F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted