Repetition was stressed as the most effective way to approach the instruction of practical experience. The other situation that was apparent was that some students are very familiar with the actual service or repair procedure, but are unable to diagnose and determine when the work should be performed.

Some theoretical background is necessary, especially due to the now mandatory certification tests. Some of the best mechanics in the field were never formally educated and though they have the practical experience and knowledge, they are unable to pass a written examination.

- 3. To gain practical experience (hands-on), in diagnosing and troubleshooting of transmissions, test stands may be used. The student must, however, also be familiar with the removal and replacement operations. Automatic transmission students must be able to remove and replace the unit, but minor repair operations must be emphasized since these are the marketable skills.
- 4. It was suggested that Basic Refrigeration should be a pre-requisite to Automotive Air Conditioning.
- 5. It was mentioned that some automotive servicing courses may be offered before the program was fully approved. In response to this, the concept of permissible cross-working in certain certifiable areas was brought up. With this in mind, the three most beneficial courses to start with would be:
  - a) Brakes
  - b) Front End & Steering
  - c) Engine Tune-Up & Emissions
- 6. With regard to the trouble-shooting and diagnosis problem the service write-up form was presented. The student must decide what is wrong with the vehicle and go through the whole write-up procedure including estimates, parts, etc.
- 7. Mr. Ronald Dillingham said that Sears has a co-op program with high schools and would be interested in using college students also on a part-time work/part-time school basis. They are especially in need of tune-up and front end workers. They would work with a certified mechanic unless and until they were certified themselves.
- 8. Regarding certification testing, Mr. Eschenburg mentioned that if 20 or more students were interested, the Nationals Institute would set up a testing center on campus.
- 9. Mr. Eschenburg also stressed the need for support information from active automotive service-related people, either in writing or by personal appearances before the necessary committees and the Board of Trustees.
- 10. Members of the committee recommended that the target for the implementation of this program should be September of 1979. The committee was appraised that they would be involved in the development, implementation and evaluation of the program.



## AUTOMOTIVE SERVICE ADVISORY COMMITTEE MEETING MINUTES

DATE:

Thursday, February 15, 1979

TIME:

2:30 p.m.

PLACE:

Auburn Hills Campus

Building "B", Room 217 Conference Room

PRESENT:

Joseph Burdzinski, Ex-Officio

Ronald Dillingham

Eric Dolin

Harvey Eschenburg, Ex-Officio

Thomas Harris Kenneth Hausauer Arthur Hursh

Wonne Nielsen, Ex-Officio

Lawrence Pennefather, Ex-Officio

David Rhodes

Bill Rose, Ex-Officio Marion Rice, Ex-Officio

1. The general consensus was that it seems that most automotive classes are geared toward the teaching of the theoretical aspects of the operation and maintenance of engines with limited emphasis on servicing. This area, as far as major engine repairs are concerned, is not a highly marketable one. Engine repair classes should only be directed toward those things that are actually needed in the field such as brakes, transmissions, front ends, repair and tune-ups. There is a definite need for an Engineering Technician Program that would require highly investigative-type teaching as is now done in the Oakland Community College Automotive Engineering Program.

It was brought up that the engine area also includes a fuel system, ignition system, and cooling system at the very least. This area should be dealt with mainly with a theoretical approach as opposed to a practical approach.

2. The need for an Automotive Servicing Program would provide a "hands-on" training in a structured situation. Eric Dolin, an Oakland Community College automotive student, expressed the complaint that the TEA 111 Automotives I course that he had been enrolled in had included too much lab work with no specific structure or guidance. It was agreed that the theoretical aspect of training is very important, but a service person may know all the theory and still not be able to handle the actual work.

- 11. Another item of interest to the committee was the facility in which these courses would be implemented. Dr. Rose indicated that the facility is being up-dated to accommodate some phases of the Automotive Servicing Program as well as other on-going programs. The building changes would be shared with committee members at the next meeting.
- 12. The committee re-emphasized the need of Oakland Community College developing and implementing a practical Automotive Servicing Program. Members indicated that these courses should be taught in such a manner that graduating students will have marketable skills in the automotive servicing area. For example, a brake course should include a number of practical experiences of actually repairing brake problems on a number of automobiles. As was stated earlier, repetition is necessary if a person is to become skillful in repairing brakes. Each phase of service repair should be treated in this manner. Mr. Harvey Eschenburg indicated that the Automotive Servicing Program is being developed with this concept in mind. We will have a service of specific servicing-type courses that will prepare individuals in specific skills that are marketable.
- 13. It was decided that the next meeting would probably be held toward the end of March, 1979.