

# The Lubricant Performance and Service Classification Maintenance Procedure — SAE J1146 NOV80

SAE Information Report  
Completely Revised November 1980

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Society of Automotive Engineers, Inc.  
400 COMMONWEALTH DRIVE, WARRENDALE, PA. 15096



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**THE LUBRICANT PERFORMANCE AND SERVICE  
φ CLASSIFICATION MAINTENANCE PROCEDURE—  
SAE J1146 NOV80**

**SAE Information Report**

Report of the Fuels and Lubricants Technical Committee, approved June 1976, completely revised November 1980.

The Lubricant Performance and Service Classification is designed to keep abreast of changing requirements by redefining existing, adding new, or declaring as obsolete lubricant categories with automotive application. To accomplish such action expeditiously requires close coordination among the appropriate societies (API or NLGI, ASTM and SAE)<sup>1</sup>. This procedure is to be used for engine oils, transmission fluids, axle/manual transmission lubricants and greases as currently defined by SAE J183, J311, J308, J310, and J1285. Other classifications within the scope of the SAE Fuels and Lubricants Technical Committee will be included as the need arises.

Although it is neither possible nor desirable to develop rigid operating rules, the following guidelines are recommended:

1. Any individual, company, or society can request changes in, or additions to, the lubricant categories. Such requests shall be referred to SAE (Fuels and Lubricants Technical Committee).

2. SAE shall inform both API and ASTM of the request and ask for a member from each to serve on an SAE Task Force to study the request. These API and ASTM representatives shall reflect the viewpoints of their respective societies.

3. The SAE Task Force shall consider whether the request is consistent with the overall classification objectives which include:

(a) Consideration of the technical requirements and needs of the market place.

(b) Retention of flexibility.

(c) Avoidance of unnecessary and unsound changes or proliferation.

(d) Discouragement of the use of obsolete categories.

4. The SAE Task Force shall recommend acceptance or rejection of the request with the concurrence of both the API and ASTM representatives. If they recommend acceptance of the request an interim designation will be assigned for reference until such time as the final consumer language and designation is defined. The recommendation of the Task Force shall be forwarded to API and ASTM. The Task Force shall consider the following guidelines in their deliberations:

(a) Criteria for justifying establishment of a new category include the following:

1. A reasonable existing or potential market for a lubricant of the proposed category.

2. A service, engine, or requirement not covered by existing categories.

3. A significant difference in performance capability (either increased or decreased) of newly developed lubricants compared to that of previously available lubricants.

(b) Revisions may be necessary in user language of existing categories to accommodate changes in manufacturer recommendations and classification obsolescence. Changes such as updating existing test techniques may be desirable, provided they do not result in significant performance differences.

(c) Revised or new categories must be describable by suitable tests; if suitable techniques are not available, they must be developed. New tests may be suggested by any individual or company, or they may be developed by groups such as CRC or ASTM.

A coordination guide for category changes is included. This Task Force shall have the additional responsibility of developing a specific coordination guide and monitoring and expediting, if necessary, the progress of the

development of the proposed category through the respective societies. Any significant deviation from this specific coordination guide shall be reported to the respective committee(s).

5. SAE shall letter ballot the Task Force recommendation for a new, revised, or obsolete category. A negative ballot, as determined by normal SAE policy, would reject the requested revision. An affirmative ballot would initiate a request from SAE: (1) to ASTM to select or develop any needed test techniques and to develop performance criteria; and (2) to API to develop the user language including that deemed necessary to discourage the use of obsolete categories.

6. ASTM shall appoint a Task Force that includes at least one representative from API and one from SAE to select test techniques and to develop performance criteria.

(a) Criteria considered in selecting test techniques shall include:

1. Correlation with service.

2. Precision.

3. An adequate supply of test parts.

4. Availability of reference lubricants and test fuel(s).

(b) The development of performance criteria shall include such factors as:

1. Correlation of laboratory and field data.

2. Performance of reference lubricants.

(c) Selection of test techniques and performance criteria shall consider the availability of laboratory and vehicle tests data.

1. Ideally, data should be available from more than one equipment manufacturer, lubricant type, and lubricant performance level.

2. If an inadequate or marginal data bank exists, requests for further data will be made to all concerned and particularly to the group(s) requesting the new category.

7. ASTM shall letter ballot the test techniques and performance criteria. A negative ballot, as determined by normal ASTM policy, would result in reconvening the ASTM Task Force to resolve the problem. If the problem cannot be resolved, ASTM will advise SAE and request further direction. The results of an affirmative ballot would be sent to both API and SAE.

8. API shall appoint a Task Force that includes at least one representative from ASTM and one from SAE to develop user language and designation.

9. API shall letter ballot the user language and designation. A negative ballot, as determined by normal API policy, would result in reconvening the API Task Force for further study and development for rebalancing. The results of an affirmative ballot would be sent to ASTM and SAE. If either society is opposed to the user language or designation, API shall be notified and representatives of the three societies will convene to resolve the differences.

10. The SAE Task Force shall issue a final report for inclusion in the SAE Handbook upon approval of the Fuels and Lubricants Technical Committee and the General Materials Council.

Any revisions to this J1146 procedure will be considered by a Task Force to be formed by the SAE Fuels and Lubricants Technical Committee Chairman and consisting of members from the respective societies. Any recommendations of this Task Force must be approved by SAE and the other societies represented.

<sup>1</sup>The following committees are responsible within the respective societies:

API—Marketing Department Fuels and Lubricants Committee

ASTM—Committee D-2 Technical Division B

NLGI—Board of Directors

SAE—Fuels and Lubricants Technical Committee

For the sake of brevity API shall be used throughout this document; however, NLGI shall apply to grease-related references.

The φ symbol is for the convenience of the user in locating areas where technical revisions have been made to the previous issue of the report. If the symbol is next to the report title, it indicates a complete revision of the report.