AUTOMOTIVE DIESEL ENGINE OIL STANDARD

(JASO M 355: 2021)

APPLICATION MANUAL

May, 2021

JASO Engine Oil Standards Implementation Panel

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NOTICE: As to the quality, performance and marking of a diesel engine oil which has been reported and kept on file using this Automotive Diesel Engine Oil Standard (JASO M 355: 2021) Utilization System, classification and guarantee shall be done at the submitter's judgment and responsibility, and the submitter shall assume liability for such quality, performance and marking.

Hence, it is not intended that the JASO Engine Oil Standards Implementation Panel should guarantee the quality and performance, and the Panel shall not be held liable for the system.

If any problem has occurred concerning the quality, performance and marking, the user of the standard and this system shall solve the problem by him- or herself.

In order to ensure that the Automotive Diesel Engine Oil Standard (JASO M 355: 2021) will be implemented properly, before using the standard and this system, the user is requested to fully understand the contents of this manual.

Note that if the contents of this manual have been changed, such change will be notified through the website of the "JASO Engine Oil Standards Implementation Panel" (http://www.jalos.or.jp/onfile/) and others. Please make sure that you have checked the latest information before submission.

This English langage version shall be only for reference, and the Japanese language version of this manual shall be the official text hereof. If any difference of interpretation occurs between the Japanese and the English versions, the Japanese version shall prevail.

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1. Introduction

This document has been prepared as part of the activities of the JASO Engine Oil Standards Implementation Panel, which was established voluntarily by various types of industrial organizations and academic associations related to engine oils in Japan, to ensure proper implementation of JASO Engine Oil Standards in Japan and overseas. Explained in this document are the procedures, etc. to be taken by lubricant sellers and others for reporting and keeping on file products that meet the requirements of the Automotive Diesel Engine Oil Standard (JASO M 355: 2021) that was established by the Society of Automotive Engineers of Japan, Inc. in accordance with the Standard.

In this document, the term “diesel engine” means a four-stroke cycle engine driven by using light oil as a fuel, and the term "diesel engine oil” means a lubricant for four-stroke cycle diesel engines.

This reporting/on-file system was revised as the application manual through deliberation by the JASO Engine Oil Standards Implementation Panel.

- In 2000, in response to a request for advice that was made by the "Automotive/Lubricant Joint Committee" which is a joint committee of the Petroleum Association of Japan and the Japan Automobile Manufacturers Association, Inc., this reporting/on-file system was drafted by the "JASO 'DX-1' Working Group" which is subordinate to the Engine Oil Sub Committee. With support provided by relevant industrial organizations and academic associations, etc., the "Automotive Diesel Engine Oil Standard" (JASO M 355: 2000) was established as the JASO M355: 2000 application manual.
- In 2005, on the occasion of revision of the Automotive Diesel Engine Oil Standard (JASO M 355: 2005) to which new classifications, DH-2 and DL-1, were added, revision of the application manual was drafted by the "Diesel Oil Working Group" which is subordinate to the "Engine Oil Sub Committee" and the manual was revised as the JASO M355: 2005 application manual.
- On the basis of the alternative engine test procedure proposed in 2012 by a joint task force consisting of members of the Japan Automobile Manufacturers Association and the Petroleum Association of Japan, in 2014, by taking into consideration its compatibility with the previous test standard values, the revised test procedure was issued as the "Automotive Diesel Engine Oils – Detergency Test Procedure (JASO M 336: 2014)." Consequently, the "Automotive Diesel Engine Oil Standard" was also revised as the JASO M 355: 2014 and the manual was revised as the JASO M355: 2014 application manual.
- Also in 2015, the revised test procedure was issued as the "Automotive Diesel Engine Oils – Valve Train Wear Test Procedure (JASO M 354: 2015)." Consequently, the revised standard was issued as the "Automotive Diesel Engine Oil Standard (JASO M 355: 2015)" and the manual was revised as the JASO M355: 2015 application manual.
- In 2017, the "Automotive Diesel Engine Oils - Fuel Economy Test Procedure" (JASO M 362: 2017) was established; a new DH-2F classification was added; a new DL-0 classification proposed by the "PCMO Working Group" which is subordinate to the "Engine Oil Sub Committee" was added; some of the quality standards were changed. In conjunction with these additions and the changes, the revised standard was issued as the "Automotive Diesel Engine Oil Standard (JASO M 355: 2017)." On the occasion of this revision, the manual was revised as the JASO M355: 2017 application manual.
- Furthermore in 2021, the Automotive Diesel Engine Oil Standard (JASO M 355: 2021) was revised due to the addition of a new DL-2 calssification proposed by the "PCMO Working Group" which is subordinate to the "Engine Oil Sub Committee" and some changes of quality standards. On the occasion of this revision, the manual was revised as the JASO M355: 2021 application manual.

2. Purpose of Automotive Diesel Engine Oil Standard (JASO M 355: 2021) Utilization System and Its Operating Organizations

2.1 Purpose

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This system has been established for the purpose of ensuring the conformity of the Automotive Diesel Engine Oil Standard (JASO M 355: 2021) to diesel engine vehicles. Through the implementation of this system by diesel engine oil sellers, criteria for optimum selection when customers purchase diesel engine oils are clarified, and it is expected that the reliability of engines will be improved thereby.

2.2 Operating Organizations

With regard to the utilization of the Automotive Diesel Engine Oil Standard (JASO M 355: 2021), the Diesel Engine Oils Steering Committee (DEO Steering Committee) has been set up on the same level as the existing 2-cycle Oils Steering Committee (2T Steering Committee) and 4-cycle Oils Steering Committee (4T Steering Committee) under the JASO Engine Oil Standards Implementation Panel as shown in Figure 1. Under the DEO Steering Committee, the DEO Technical Committee has been set up which presides over the Valve Train Wear Test Surveillance Panel, the Detergency Test Surveillance Panel, the Fuel Economy Test Surveillance Panel, and the Market Survey Panel. The Technical Committee is presided over by the chairpersons of the Engine Oil Subcommittee as chairperson and vice chairperson, and the leaders of the panels mentioned above take part in the Technical Committee as members, and the Society of Automotive Engineers of Japan, Inc. and the Japan Petroleum Institute participate as liaison members.

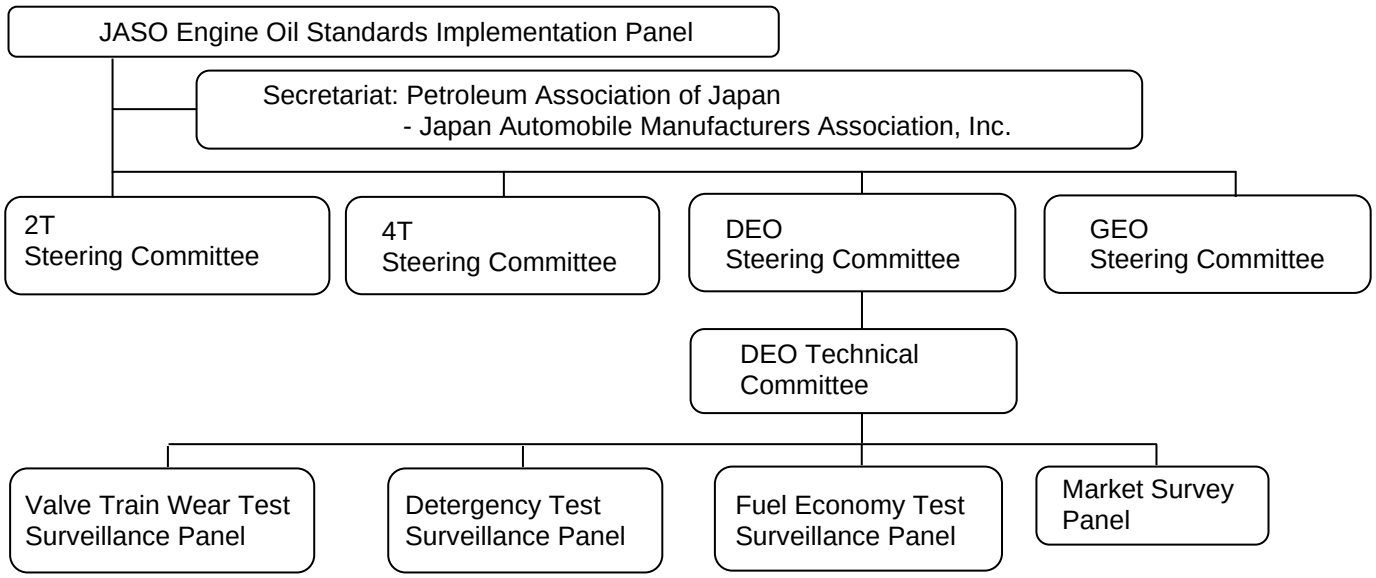

Fig. 1 Operating Organization Chart

The Valve Train Wear Test Surveillance Panel, the Detergency Test Surveillance Panel, and the Fuel Economy Test Surveillance Panel examine measures for solving problems that may be encountered by the users of each test when they actually conduct it. The Market Survey Panel works out a market survey plan when there arises the need to carry out a market survey and analyzes the result of the survey. Each panel is mainly composed of members from automobile manufacturers, petroleum manufacturers, and additive manufacturers, and participation from other industries may be requested where necessary.

3. On the Automotive Diesel Engine Oil Standard (JASO M 355: 2021)

3.1 Overview of the Standard

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Engine oils conforming to the Automotive Diesel Engine Oil Standard JASO M 355: 2021 are classified into DH-1, DH-2、DH-2F、DL-0, DL-1 and DL-2, and the Standard applies to four-cycle diesel engines.

The DH-1 and DL-0 classification has been developed for use for diesel engines that comply with the requirements for long-term emission control regulations (Euro4 emission control regulations). Engine oils conforming to the requirements for the DH-1 and DL-0 classification (hereinafter called the “DH-1 Oils” and “DL-0 Oils”) have performance such that the deterioration of piston detergency, formation of deposits at high temperatures, foaming, oil consumption due to evaporation oil losses, decrease in shear viscosity, deterioration of oil seals, etc. are suppressed.

The DH-1 and DL-0 Oils can also be used for engines predating the long-term emission control regulations (Euro4 emission control regulations), and they are applicable to cases where light oils of which sulfur content exceeds 0.05% as well on the assumption that the intervals for oil replacement as recommended by the engine manufacturer are observed.

The DH-2, DH-2F, DL-1 and DL-2 classifications have been developed for use for engines equipped with an after-treatment device such as a Diesel Particulate Filter (DPF) or catalyst in order to comply with the requirements for emission control regulations subsequent to the new short-term regulations. Oils conforming to the requirements of there classifications (hereinafter called the “DH-2 Oils”, “DH-2F Oils”, “DL-1 Oils” and “DL-2 Oils”) have excellent applicability to the DPF and catalyst while keeping the same level of performance as that required for the DH-1 classification. Note that because required levels of engine oils differ between those for trucks/buses and those for passenger car classes in terms of engine durability, distance involving oil replacement, fuel economy, etc., the DH-2 and DH-2F classification has been specified for heavy duty uses on trucks/buses and the DL-1 and DL-2 classification for light-duty uses on passenger car classes.

The DH-2 Oils, DH-2F Oils DL-1 Oils and DL-2 Oils are used only in an environment where low-sulfur light oils of which sulfur content is not more than 0.005%.

Note that the DH-2 Oils can be used for engines predating the new short-term emission control regulations as well, on the assumption that low-sulfur light oils of which sulfur content is not more than 0.005% are used and the intervals for oil replacement as recommended by the engine manufacturer are observed.

3.2 Developments That Led to the Establishment of the Standard

In Japan, it is common practice to use the API Service Classification as the quality standard for automotive diesel engine oils. However, partly due to differences between engine designs in Japan and those in the United States, engine oils that better suit the characteristics of engines manufactured in Japan are required. For this reason, special performance is added to a majority of engine oils that are widely used in Japan, such as the strengthening of wear prevention performance of a valve train of the sliding rocker-arm type, so that the engine oils are fit for use on the engines manufactured in Japan. Also, automotive manufacturers in Japan have expressed their desire that new oil quality standards should be established that are fit for the requirements for engines that comply with the emission control regulations in recent years.

In the meantime, in the Asian market where the market share of Japanese cars is high, establishment of quality standards similar to those in Japan are desired, and the SAE Fuel and Lubricant Division Steering Committee for Asia in which Japanese car manufacturers likewise participate and carry out activities has also made a request that the quality standards for automotive diesel engine oils should be established.

In such a context, it was decided to establish quality standards that are fit for the requirements for Japanese diesel engines, and quality standards were established after undergoing the following processes.

- In April 1994, the Engine Oil Subcommittee of the Society of Automotive Engineers of Japan, Inc. started, in collaboration with the Japan Lubricating Oil Society, to develop a test procedure for diesel oil engines using low-sulfur light oils (with a sulfur content of 0.05%), and in March 1998 established

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the detergency test procedure (JASO M 336: 1998) using an engine manufactured by Nissan Diesel Motor (TD25), and then in March 1999 established the valve train wear test procedure (JASO M 354: 1999) using an engine manufactured by Mitsubishi Motors Corporation (currently Mitsubishi Fuso Truck and Bus Corporation) (4D34T4).

- Subsequently in April 1999, the Japan Automobile Manufacturers Association, Inc. and the Petroleum Association of Japan proposed a diesel oil quality standard that specified 11 items in total by using a detergency test procedure, a valve train wear test procedure, a hot tube test procedure, etc. and 9 other test procedures, and therefore its validity was verified through comparison and examination, etc. with the oils on the market, and in October 2000 the Quality Standard (JASO M 355: 2000) was established.
- In diesel engine vehicles conforming to emission control; regulations subsequent to the new short-term regulations which are equipped with after-treatment devices such as the DPF and NOx deoxidization catalyst, in addition to the existing standards, quality standards that specify chemical compositions such as ash, phosphorus, and sulfur contents are required. In April 2003, Japan Automobile Manufacturers Association, Inc. and the Petroleum Association of Japan established, as guidelines, the DH-2 for trucks/buses and the DL-1 for passenger car classes. After the validity of these guidelines was verified, the Automotive Diesel Engine Oil Standard (JASO M 355: 2005) was revised in April 2005 by adding the DH-2 and DL-1 classifications to the existing DH-1 classification.
- On the occasion of the revision of the valve train wear test procedure (JASO M 354: 2005), in the Automotive Diesel Engine Oil Standard (JASO M 355: 2005), the quality standard for the DH-1 classification was also reconsidered.
- The upper limit values of the chlorine content of engine oils that were specified in the DH-2 and DL-1 were reconsidered, and in April 2008 the revised standard was issued as the Automotive Diesel Engine Oil Standard (JASO M 355: 2008).
- Since supply of test engines for the Detergency Test Procedure (JASO M 336: 1998) ended in 2009, based on the alternative engine test procedure proposed by a joint task force consisting of members of the Japan Automobile Manufacturers Association and Petroleum Association of Japan, the revised procedure was issued in April 2012 as JASO M 336: 2014. Concurrently with this revision, the revised standard was issued as the JASO Automotive Diesel Engine Oil Standard (JASO M 355: 2014 by considering compatibility with the previous standard values.
- A period of 15 years elapsed after establishment of the valve train test procedure (JASO M 354: 2006), and considering the stop of supply of the standard oil DV1 and the stop of supply of additives for the standard oil DV2 as well as the stability of supply of test engines, alternative standard oils and the latest engines were specified and the revised procedure was issued as JASO M 354: 2015. Concurrently with this revision, the revised standard was issued as the JASO Automotive Diesel Engine Oil Standard (JASO M 355: 2015 by considering consistency with the previous standard values as well.
- Due to the growing demand for carbon dioxide reduction, "Automotive Diesel Engine Oils - Fuel Economy Test Procedure" (JASO M 362: 2017) was established. Concurrently with this establishment, a specified value for fuel economy was newly set in the JASO M355: 2017 and a new DH-2F classification was specified by adding fuel economy performance to the existing DH-2 classification. In addition, new classification DL-0 which complies with emission regulations before Euro 4 was established as an alternative to API CF-4 standard certification ended in 2008. Concurrently with this revision, the revised standard was issued as the JASO Automotive Diesel Engine Oil Standard (JASO M 355: 2017) by considering compatibility with the previous standard values.

- The following revisions were made in the Automotive Diesel Engine Oil Standard (JASO M 355: 2021).

(1) Review of high temperature oxidation test

ASTM D6984 (Sequence IIIF) and ASTM D7320 (Sequence IIIG) cited in this standard was not able to be tested because the engine supply was stopped. Since the standard value using ASTM D8111

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(Sequence IIIH) as an alternative test method was decide by API in 2019, it was examined whether it was appropraiate as a quality certification for high temperature oxidation test of JASO M355 and was reviewed.

(2) Addition of the DL-2 classification

A new classification DL-2 compatible with after-treatment devices was added. It was expanded sulfated ash standard value to ACEA C2, C3, C5, while distinguishing it from the DL-1 standard, which specified a low sulfated ash content.

3.3 Test Items and Acceptance Criteria

Table 1 and 2 shows the required performance and acceptance criteria specified in the Automotive Diesel Engine Oil Standard (JASO M 355: 2021).

Some characteristic values that need to be reported at the time of on-file registration are not specified in the Automotive Diesel Engine Oil Standard (JASO M 355: 2021). For these items, refer to Appendix 3.

Note that when carrying out the engine tests and bench tests listed in Table 1, the procedures shown in the Comparison Table in Appendix 2 may be used as alternative test procedures. In this case, which procedure was used for obtaining the result of measurement must be specified on the reporting document, etc.

When the Automotive Diesel Engine Oil Standard (JASO M 355) is revised, it is required to use the latest version. Also, regarding the test procedures specified in the Automotive Diesel Engine Oil Standard (JASO M 355) as well, the latest version of the relevant test procedure shall be used if the year of establishment is not specified. However, regarding JASO M 336 and JASO M 354 as well as the standards cited in these test procedures, the latest version at the time of carrying out the test may be used.

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Table 1 Required Performance and Acceptance Criterion (Quality Standards) Specified in the Automotive Diesel Engine Oil Standard (JASO M 355: 2021)

Items			Unit	Performance Criteria						Test Method
				DH-1-21	DH-2-21	DH-2F-21	DL-0-21	DL-1-21	DL-2-21	
Viscosity Grade				–				XW-30, XW-20		SAE J300
Piston Detergency	WTD(Weighted Total Demerit)		ection demerit evaluation point	740 Max.						JASO M 336
	TGF(Top Groove Fill)		vol%	Report						
	Piston Ring Stickings			All free						
	Deposits on Ring Lands		Merit Rating	Report						
Valve Train Wear Protection	Tappet Wear		μm	11.3 Max.						JASO M 354
Soot Dispersancy	Viscosity Increase (100～150H) @100℃		$mm^2/s/h$	0.2 Max.						ASTM D 5967 (Mack T8A)
High Temperature Oxidation Stability	Viscosity Increase@40℃(60H) or		%	249 Max				–		ASTM D 8111
	Viscosity Increase@40℃(70H)		%	–				181 Max		ASTM D 8111
Fuel Economy (NOTE 2)	average fuel economy improvement rate (NOTE1) (fresh oils)		%	–		3.7 Min.	–			JASO-M362
	sum of average fuel economy improvement rate (NOTE2) (fresh + aged oils (NOTE3))		%	–		6.8 Min.	–			
	Fuel Economy Improvement		%	–				2.5 Min.		CEC-L-054-96
Hot Surface Deposit Control	@280℃		Merit Rating	7.0 Min.						JPI-5S-55
Anti-foaming	Sequence I	Foaming/ Stability	mL/mL	10/0 Max.						JIS K 2518
	Sequence II		mL/mL	50/0 Max.						
	Sequence III		mL/mL	10/0 Max.						
High Temperature Anti-foaming	Sequence IV		mL/mL	–			100/0 Max.			ASTM D 6082
Volatility	Evaporation Loss@250℃		mass %	18.0 Max.			15 Max			JPI-5S-41
Anti-corrosion	Copper		mass ppm	20 Max.						ASTM D 6594
	Lead		mass ppm	120 Max.	100 Max.		120 Max.			
	Tin		mass ppm	50 Max.						
	Discoloration of Copper Coupon after Test @135℃			3Max						ASTM D 130
Shear Stability (NOTE 3)	Kinetic Viscosity of Oil after Test@100℃		mm^2/s	Stay-in-grade of virgin oil viscosity classification in SAE J300				XW-30:8.6 Min. XW-20: Stay-in-grade of virgin oil viscosity classification in J300		ASTM D 6278
Sulfated Ash			mass %	–	1.0±0.1		1.6 Max.	0.6 Max.	0.7 Min. 0.8 Max.	JIS K 2272
Base Number			mgKOH/g	10.0 Min.	–					JIS K 2501 2003 8. ASTM D 4739
				–	5.5 Min.		–			JIS K 2501 2003 8.
				–			8.0 Min.	–		JIS K 2501 2003 9. ASTM D 2896

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Table 1　Required Performance and Acceptance Criterion (Quality Standards) Specified in the Automotive Diesel Engine Oil Standard (JASO M 355: 2021) continuation

Items			Unit	Performance Criteria						Test Method
				DH-1-21	DH-2-21	DH-2F-21	DL-0-21	DL-1-21	DL-2-21	
Phosphorus			mass %	—	0.12 Max		—	0.10 Max		JPI-5S-38
Sulfur			mass %	—	0.5 Max		—	0.5 Max		JIS K 2541-5.
Chlorine			mass ppm	—	150 Max		—	150 Max		JPI-5S-64
Seal Compatibility	NBR (Nitrile)	Hardness Change	Point	−5～+7						ASTM D7216
		Tensile Strength Rate of Change	%	−**TMC1006**～+10						
		Elongation Rate of Change	%	−**TMC1006**～+10						
		Volume Rate of Change	%	−3～+5						
	ACM (Acrylic)	Hardness Change	Point	−5～+8						
		Tensile Strength Rate of Change	%	−15～+18						
		Elongation Rate of Change	%	−35～+10						
		Volume Rate of Change	%	−3～+5						
	FKM (Fluoro)	Hardness Change	Point	−5～+7						
		Tensile Strength Rate of Change	%	−**TMC1006**～+10						
		Elongation Rate of Change	%	−**TMC1006**～+10						
		Volume Rate of Change	%	−2～+5						
	VMQ (Silicon)	Hardness Change	Point	−**TMC1006**～+5						
		Tensile Strength Rate of Change	%	−45～+10						
		Elongation Rate of Change	%	−30～+20						
		Volume Rate of Change	%	−3～+**TMC1006**						
	MAC (Ethylene Acrylic)	Hardness Change	Point	−**TMC1006**～+5						
		Tensile Strength Rate of Change	%	−**TMC1006**～+10						
		Elongation Rate of Change	%	−**TMC1006**～+10						
		Volume Rate of Change	%	−3～+**TMC1006**						

(NOTE 1) The average fuel economy improvement rate is a simple mean value of improvement rates, which are fuel economy test results, for the fresh or aged oil fuel economy of engine oils under test with respect to the fresh oil fuel economy of the base line engine oils at engine oil temperatures of 60°C and 90°C.
(NOTE 2) Sum of the average fuel economy improvement rates for fresh and aged oils.
(NOTE 3) Aged oil after 200-hr operation, which was obtained according to the JASO M 336 or JASO M 354, shall be used.
(NOTE 4) Shear stability shall be specified only for multi-grade oils.
(NOTE 5) A value +/-TMC1006 shall be specified with the result of the reference test using TMC1006.

3.4　On the Filing of an Oil conforming to the Standard, the Effective Period of On-File, and the Indication of Classification of the Standard

The first dates when classification indication is allowed, the last dates when a new reporting is accepted, and the on-file termination dates for engine oils conforming to the Automotive Diesel Engine Oil Standard (JASO M 355: 2005), the Automotive Diesel Engine Oil Standard (JASO M 355: 2008), the Automotive Diesel Engine Oil Standard (JASO M 355: 2014), the Automotive Diesel Engine Oil Standard (JASO M 355: 2015), the Automotive Diesel Engine Oil Standard (JASO M 355: 2017) and the Automotive Diesel Engine Oil Standard (JASO M 355: 2021) shall be as follows:

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The on-file termination date for engine oils conforming to the JASO M 355: 2015 standard for which a reporting was made by March 31, 2018 shall be March 31, 2022. The first date when this classification indication is allowed for engine oils conforming to the JASO M 355: 2021 standard shall be October 1, 2021.

As to the reported (on-file) engine oils conforming to the JASO M 355: 2015 and the JASO M355: 2017 standards, re-registration is not required in this revision. On-file registration and indication will be continued and valid until the termination dates indicated in the table below.

Standard	Year of Issuance of the Standard	First date when Classification Indication is allowed	Last date when a New Reporting is Accepted	On-file Termination Date
M355-2005	2005	October 1, 2005	July 31, 2008	September 30, 2019
M355-2008	2008	August 1, 2008	March 31, 2016	September 30, 2019
M355-2014	2014	October 1, 2014	March 31, 2017	September 30, 2020
M355-2015	2015	October 1, 2015	March 31, 2018	March 31, 2022
M355-2017	2017	October 1, 2017	March 31, 2022	
M355-2021	2021	October 1, 2021		

Regarding the indication of classification of the standards, the year described in the classification shall not be indicated. DH-1-21 shall be indicated as DH-1, DH-2-21 shall be indicated as DH-2, DH-2F-21 shall be indicated as DH-2F, DL-0-21 shall be indicated as DL-0, and DL-1-21 shall be indicated as DL-1, and DL-2-21 shall be indicated as DL-2.

4. Selection of Test Organization

4.1 General

In the Automotive Diesel Engine Oil Standard (JASO M 355: 2021), the requirements are specified concerning various engine tests, bench tests and physical/chemical properties. For on-file (to be described later), it is required to report the results of tests conducted by a test organization. That is, the test results are valid only under if the following requirements are satisfied.

4.2 JASO Engine Test (M 336 and M 354 and M 362)

As to the JASO M 336 (Automotive Diesel Engine Oils - Detergency Test Procedure), the JASO M 354 (Automotive Diesel Engine Oils - Valve Train Wear Test Method), and the JASO M 362 (Automotive Diesel Engine Oils - Fuel Economy Test), it is required to submit results of tests that have been carried out by a test organization providing test accuracy specified in each test method.

In submission of the test results, it is also required to include results of a standard oil test which has been carried out by a test organization for the engine test concerned. The standard oil test result data to be included shall be the latest test result attained within a period of one year from the start date of test of oil to be registered, and shall meet test acceptance criteria as indicated in Form 4a-b , Form 4b-b and Form 4e-b of Appendix 3.

And a test organization which has no rater certified by Japan Petroleum Institute (JPI) like oversea test organizations shall participate the rating symposium that JPI sponsors, because the piston deposit rating is specified in JPI-5S-15 (Ground Diesel Engine Piston Rating Method) for piston detergency test procedure (JASO M 336). Therefore the member who is certified or recommended as a rater by

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JPI shall conduct the piston rating.

Conduct the confirmation test using the standard oil DD8 or DV4 listed in the table below for any of the following conditions:

- New installation of N04C engine bench
- Relocation or modification of N04C engine bench
- A year has passed since the last confirmation test was run using the standard oil. However, if a test site owns multiple N04C engine benches then confirmation test shall be conducted on either one of the engine bench. The conditions shall be as follows.
  - The N04C engine bench that conducts the confirmation test shall be changed in turn every year.
  - The N04C engine bench that does not conduct the confirmation test shall maintain the test precision equivalent to the confirmation testing for the candidate testing.

- If a test site that has multiple engine benches installs a new engine bench, then conduct a confirmation test using a standard oil even though the site's confirmation test is still valid.

Further, it's specified below as well as the above conditions about the application of the standard oils for JASO M 336 or JASO M 354.

For confirmation test using standard oils, such as DD8 (JASO M336 standard oil) and DV4 (JASO M354 standard oil), conduct tests separately for each standard oils

4.3 ASTM Engine Test (ASTM D 5967 and D7156, and D 6984 and D7320 and D8111 and D8048)

As to Soot dispersancy test (Mack T-8A and 8E:ASTM D 5967, T-11:ASTM D7156) and high-temperature oxidation stability test , Sequence IIIF and IIIF HD:ASTM D6984, Sequence IIIG:ASTM D7320, Sequence IIIH:ASTM D8111, Volvo T-13:ASTM D8048) for engine oils, it is required to conform to the ACC Product Approval Code of Practice specified by ACC (the American Chemistry Council). For the purpose of submitting test results, the tests must be conducted in one of test organizations certified by the ASTM Test Monitoring Center in accordance with the ACC Product Approval Code of Practice.

4.4 CEC Engine Test (CEC-L-54-T-96)

As to fuel economy test for diesel engine oils (CEC-L-54-T-96), it is required to conform to the ATIEL Code of Practice specified by ATIEL (the Association Technique de L'Industrie Europeanne des Lubrifiants, EEIG). For the purpose of submitting test results, the test must be conducted in one of test organizations certified by CEC in accordance with the ATIEL Code of Practice.

4.5 Bench Test

As to the JPI-5S-55-99 (Hot Tube Test, HTT), ASTM D 6594 (Standard Test Method for Evaluation of Corrosiveness of Diesel Engine Oils), ASTM D 6278 (Shear Stability Test), CEC-L-39-T-96 (Evaluation of Oil-Elastomer Compatibility), ASTM D 7216 (Evaluation of Oil-Elastomer Compatibility), defoaming characteristic, volatility, Base Number and other physical/chemical properties to be reported for on-file, any test organization may be selected under condition that accuracy specified for each test method is satisfied.

4.6 Public Information on Test Organization

Test organizations that can carry out JASO engine tests in request from an outside party (if disclosure is allowed) are publicized at the Web site of the JASO Engine Oil Standards Implementation Panel (http://www.jalos.or.jp/onfiles/) or through any other means. When the disclosure is desired, enter

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necessary data in the Application Form of Notification of Desired Consignee Test Laboratory (Appendix 1) and submit it to the JASO Engine Oil Standards Implementation Panel. Inquiries or test requests to the publicized test organizations shall be made directly by each Standard user, i.e., the JASO Engine Oil Standards Implementation Panel will not provide mediation between each Standard user and the publicized test organizations.

5. Standard Application Procedures (Reporting, On-Filing)

5.1 General

Each oil seller or supplier using the Automotive Diesel Engine Oil Standard (JASO M 355:2021) through this system shall ensure that each product subject to reporting has such required performance, etc. as stipulated in the Automotive Diesel Engine Oil Standard (JASO M 355:2021) by confirmation, in accordance with the guidance of this Manual, of a test organization designated by this Manual and shall use the Standard application procedures for each product brand and for each prescription as described in subsequent sections of “Reporting and On-Filing” and “Custody and Submission of Test Data.”

This system is for each user of the Standard to give a public notice of the conformity of the user’s product with the Standard, on its own responsibility, by way of on-filing of a product together with its test data, and is not for this system or the Panel to certify or acknowledge the conformity of any product with the Standard. Each user of this system shall fully understand such nature of the system. Each user shall be careful so as not to cause misunderstanding by end users including consumers, and is required to make a sincere effort to maintain the conformity with the Standard of the said product on the market.

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5.2 Procedure Flow Chart

The outline of the reporting and on-filing procedure is shown in Figure 2.

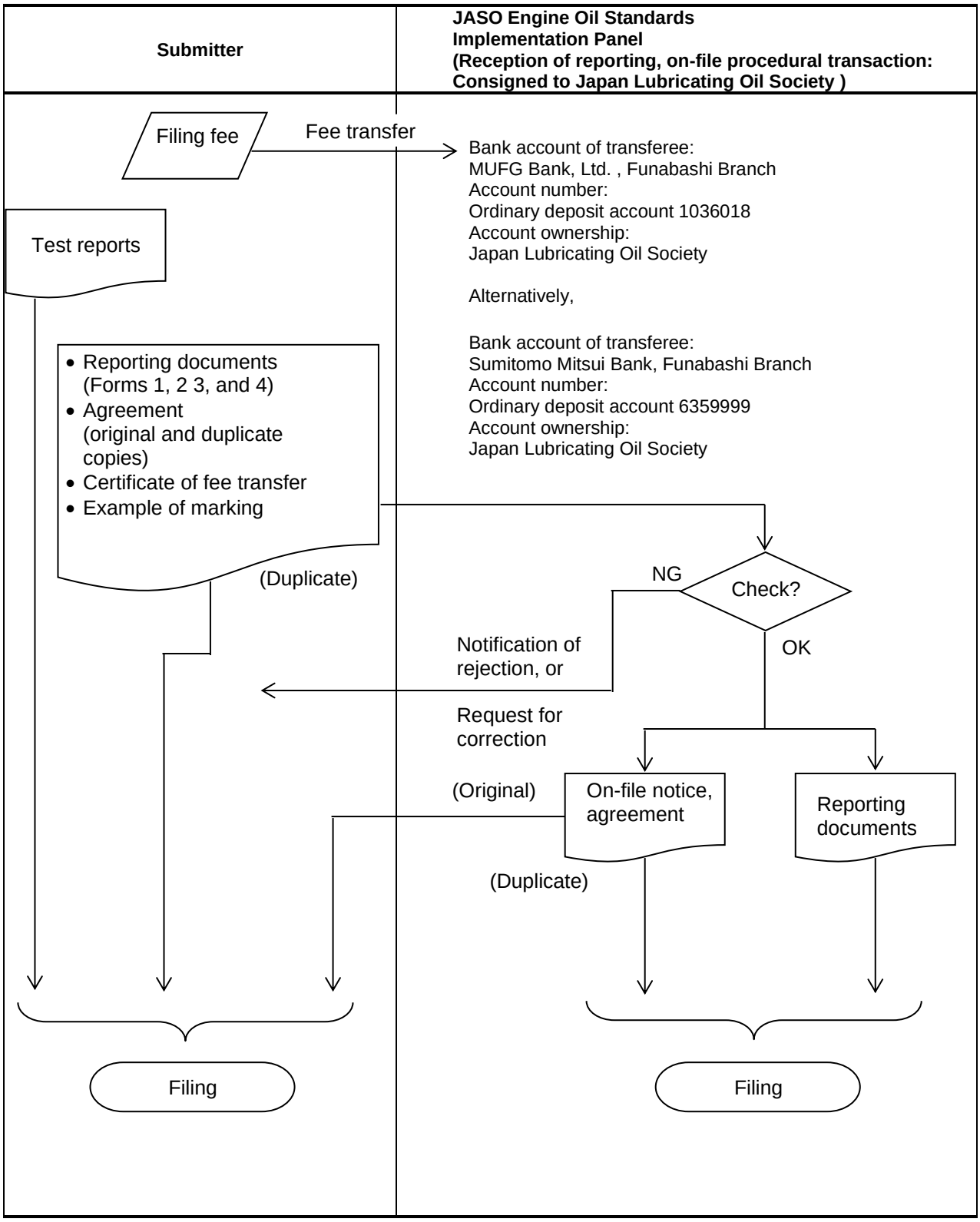

Fig. 2 Procedure Flow Chart for Reporting and Filing

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5.3 Reporting and On-Filing

Prior to on-filing, the submitter shall transfer a filing fee indicated in Appendix 1 to the specified bank account of the JASO Engine Oil Standards Implementation Panel. Thereafter, the submitter shall prepare the reporting documents (forms 1, 2, 3 and 4 in Appendix 3) and enter necessary data in form B of the original and duplicate copies of the notice and agreement documents (Appendix 4). Together with a certificate of a filing fee, the submitter shall send the reporting documents to the JASO Engine Oil Standards Implementation Panel. Note that transactions for receipt of reporting and on-filing are to be consigned to the Japan Lubricating Oil Society. Therefore, the reporting documents and the filing fee certificate shall be sent to the address shown below:

Address: 2-16-1 Hinode, Funabashi, Chiba
273-0015 Japan
Japan Lubricating Oil Society
c/o Business Department

Any cost required for transferring a filing fee to the specified bank account shall be borne by the submitter. Note that the reporting documents and the filing fee will not be returned after reception. If a change in the amount of filing fee is made, it will be communicated by the JASO Engine Oil Standards Implementation Panel through related associations.

At the time of reporting, the submitter shall submit to the JASO Engine Oil Standards Implementation Panel a representative example of performance classification marking on the diesel engine oil product container and an entire product label (design allowable). (Refer to 6 - Marking.)

5.4 Custody and Submission of Test Data

JASO engine test reports (basic data for reporting) shall be prepared in a format specified in the JASO Standard, and the submitter shall maintain responsibility for the JASO engine test reports. Further, data of ASTM engine and bench test results shall also be maintained by the submitter. The period of maintenance of test results and reports shall be until the submitter cancels on-file of the product concerned.

The submitter shall submit the test reports as promptly as possible upon receipt of a request for them from the JASO Engine Oil Standards Implementation Panel.

5.5 Documents Check

Upon receipt of reporting documents, the JASO Engine Oil Standards Implementation Panel shall check:

(1) whether all the necessary items have been entered.

(2) whether infrared absorption spectral data has been attached in the specified format.

(3) whether engine oil performance data has been entered as specified.
Further, the JASO Engine Oil Standards Implementation Panel shall check:

(4) against the specified values as to the bench test characteristic items for which the specified values have been determined.

(5) against the criteria of acceptance as to the JASO and ASTM engine test results.

Further, the JASO Engine Oil Standards Implementation Panel shall check the performance classification documents and product labels for any improper points or unclear expressions.

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If any improper or inadequate item is found, the JASO Engine Oil Standards Implementation Panel shall return a notice of on-file rejection (with information on reasoning) to the submitter or it shall request the submitter to make a correction.

If all the documents are satisfied, the JASO Engine Oil Standards Implementation Panel shall send an on-file notice to the submitter and put its copy into a file of the reporting documents.

5.6 Oil Code

An oil code shall be determined by the submitter and recorded by the JASO Diesel Engine Oil Standards Implementation Panel.
Each oil code shall be set up in the format shown below:

D	○○○	△△△	□□□
(1)	(2)	(3)	(4)

(1) Category code (one alphabetic capital letter):
"D" shall be assigned to a diesel engine oil product.

(2) Country number (three digits):
An international telephone country number of a nation where the submitter resides or the diesel engine oil is manufactured.
(Example: Japan: 081, USA: 001, England: 044, ...)

(3) Seller code (three alphabetic capital letters):
Any three alphabetic capital letters desired by the submitter (e.g., Hino: HNM, JXTG Nippon Oil & Energy Corporation: JXE, ...)
Basically one submitter shall use one seller code, but also multiple codes are allowed.
However there is only one case that one submitter can use multiple codes, that is the case when a submitter keep the existing code with such as merger or inheritation of brand and also JASO Engine Oil Standards Implementation Panel approve that.

If a seller code desired by the submitter has already been used by any other submitter, the JASO Engine Oil Standards Implementation Panel may request a change of the seller code to prevent duplication.

(4) Control number (three digits):
A voluntary control number to be assigned by the submitter arbitrarily. It is not allowed for one submitter to assign the same control number followed by same seller code to different products or different trial products.

For reference, examples of assigned oil codes are shown in Appendix 6. When the registered oil meets two or more quality standards for the DH-1, DH-2, DH-2F, DL-0, and DL-1 classifications, the submitter can register the oil by using one oil code. However, with one oil code, all the performance classifications for the registered oil must be indicated. For reference, examples of performance classification marking are shown in Appendix 7.

5.7 Disclosure of On-File Information

For promotion and public recognition of the Automotive Diesel Engine Oil Standard (JASO M 355: 2021), and diesel engine oil products, the JASO Engine Oil Standards Implementation Panel will publicize

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product names, submitter names, viscosity grades, oil codes and classifications of on-file products through such communication media as the Internet according to the Standard.

JASO Engine Oil Standards Implementation Panel will announce the information disclosed to the submitter before disclosure. If the information is incorrect in those the submitter has submitted, the submitter shall notice the correction in written materials as soon as possible.

JASO Engine Oil Standards Implementation Panel does not have any responsibilities on the loss and the damage of submitters caused by the information which has been agreed between JASO Engine Oil Standards Implementation Panel and submitters.

5.8 On-File Maintenance

If continuation of on-file of the product concerned is desired on and after January 1 of the year subsequent to the year of on-file, the submitter (requesting continuation of on-file) shall notify the JASO Engine Oil Standards Implementation Panel by the end of February of the subsequent year as to the amount of on-file maintenance fee, which is to be calculated according to the sales quantity (from January to December of the preceding year) in the method specified in Appendix 3. Upon notification from the submitter requesting continuation of on-file, the JASO Engine Oil Standards Implementation Panel will check it and send an invoice to the submitter requesting continuation of on-file. After receiving the invoice, the submitter requesting continuation of on-file shall promptly transfer an on-file maintenance fee to the specified bank account of the JASO Engine Oil Standards Implementation Panel. Any cost required for transfer of the on-file maintenance fee to the specified bank account shall be borne by the submitter. Note that the on-file maintenance fee will not be returned once received by the JASO Engine Oil Standards Implementation Panel.

In case that the on-file maintenance fee and calculation method are to be revised, the JASO Engine Oil Standards Implementation Panel will issue notification through the related organizations.

If the submitter requesting continuation of on-file does not transfer the on-file maintenance fee to the specified bank account, the JASO Engine Oil Standards Implementation Panel will judge that the sale of the product concerned has been discontinued. In this case, the on-file of the product concerned may be canceled.

Figure 3 shows a general flow of on-file maintenance procedure.

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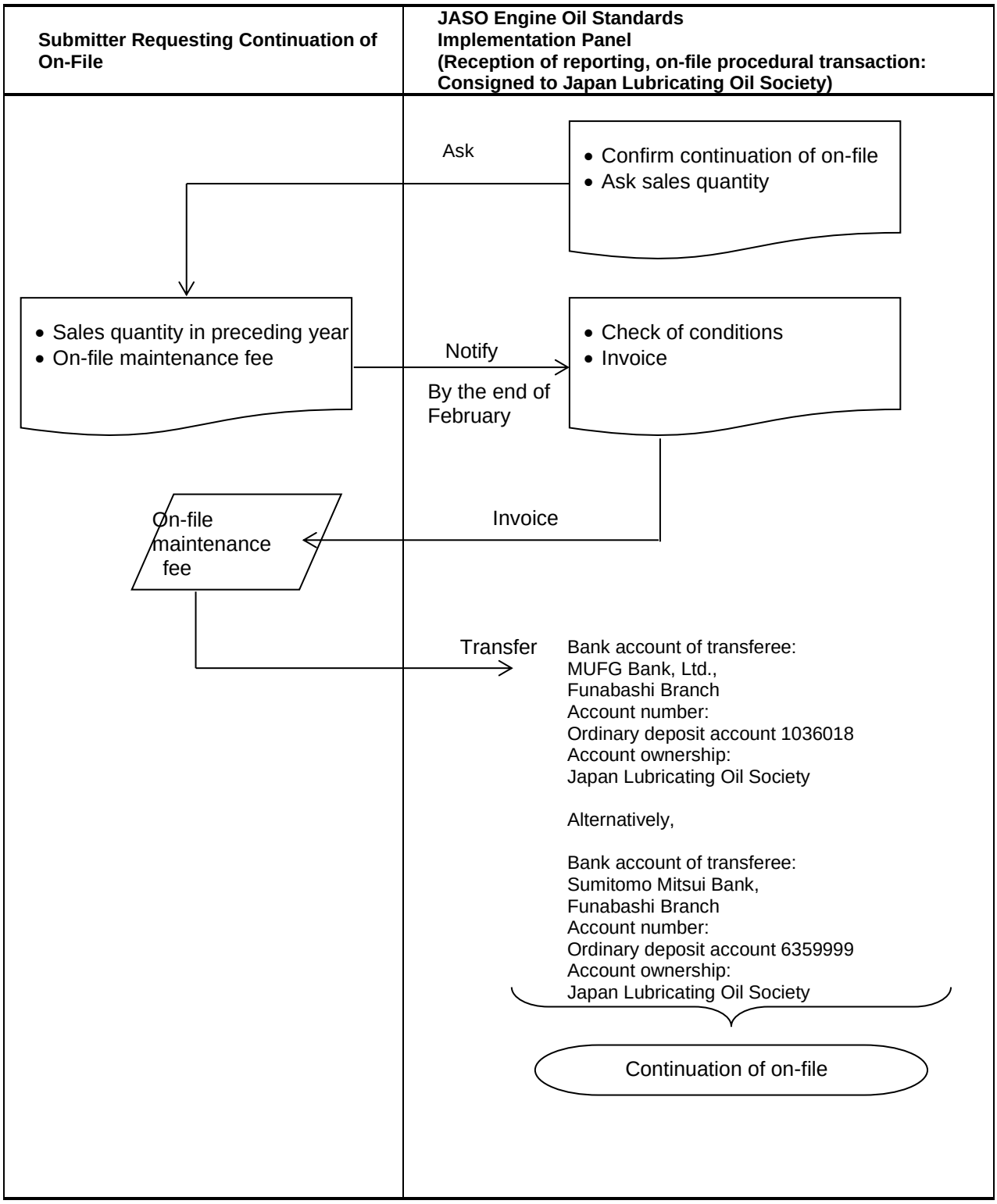

Fig. 3 On-File Continuation Procedure Flow

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5.9 Liability for Product Quality

As to the quality and performance of each diesel engine oil product filed (on file) through this system, classification and guarantee shall be the submitter's responsibility, and the submitter (seller) shall assume liability for the quality of the product concerned.

This system is not intended for the JASO Engine Oil Standards Implementation Panel to provide warranty on quality and performance of engine oil products on file. The JASO Engine Oil Standards Implementation Panel shall not be responsible for any loss or damage which may occur as a result of the use of an engine oil product on file.

If any trouble takes place concerning the quality and performance of an on-file engine oil product, the submitter shall take respond to solve the problem as his own responsibility.

If this system is contradictory to any legal regulations of the country concerned (including local administration regulations), the legal regulations take precedence over this system. Therefore, as to loss or damage arising from the use of this system without regard to inconsistency with legal regulations, the JASO Engine Oil Standards Implementation Panel will not assume any responsibility.

5.10 Information Security

Except for the conditions mentioned in Item 5.7 - Disclosure of On-File Information, the JASO Engine Oil Standards Implementation Panel will not disclose on-file information to a third party without the written permission of the submitter, except if disclosure of on-file information is required as a legislative action by public organizations. Even if submitted or filed information is inadvertently disclosed to a third party, the JASO Engine Oil Standards Implementation Panel will not be responsible for compensation as to any loss or damage due to information disclosure.

If any questions arise regarding a filed product and a party concerned makes reference in writing to the JASO Engine Oil Standards Implementation Panel, it is allowed for the JASO Engine Oil Standards Implementation Panel to inform the questioner as to the on-file status of the diesel engine oil product corresponding to the oil code concerned and the name of the seller concerned. Further, if the questioner desires communication with the submitter, the JASO Engine Oil Standards Implementation Panel will notify the submitter and leave any responses to the submitter. In this event, the JASO Engine Oil Standards Implementation Panel will not take any further action by itself.

5.11 Change in File

In any of the following cases, the submitter shall report to the JASO Engine Oil Standards Implementation Panel in advance. In any of these cases, the submitter shall make necessary payment as specified in Item 5.3 and update the oil code concerned.

(1) Change of the seller code

(2) Change of the company name together with the change of seller code

(3) Change of the product name

(4) Addition/change of the viscosity grade (Reporting is required even if the read-across allowable range shown in Appendix 5 is satisfied.)

(5) Change of the performance classification marking form

In any of the following cases, the submitter shall promptly report to the JASO Engine Oil Standards Implementation Panel. Note that it is not required to pay a on-file fee specified in Item 5.3 or update the oil code concerned in the case of (1) and (2) listed below. The submitter shall make necessary payment

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as specified in item 5.3 but the update of the oil code in not needed concerned in the case of (3) listed below.

(1) Change of the information on communication with the submitter (address, telephone number, etc.) (In this case, it is required to submit documents in forms 5 and 6 shown in Appendix 3.)

(2) Change of any condition other than the viscosity grade within the read-across allowable range shown in Appendix 5
(In this case, it is required to submit reporting documents in forms 5, 6, 7 and 8 shown in Appendix 3.)

(3) Change of the company name (Only when supplier code is same due to company merger or brand inheritance. In this case, it is required to submit documents in forms 5 and 6 shown in Appendix3, original on-file report form and performance classification marking form described by the new company name.)

If another submitter makes a change in an already filed product within the read-across allowable range shown in Appendix 5, it is required to provide on-file according to Item 5.3.

Also, if said submitter makes changes in the files product concerned as to any condition other than the viscosity grade within the read-across allowable range shown in Appendix 5, the contents of the change shall be promptly reported to the JASO Engine Oil Standards Implementation Panel.

Appendix 6 presents examples of reporting and notification.

5.12 Precautions for Submitter

The submitter shall pay particular attention to the following points according to this system.

(1) The quality, performance and marking of the product to be sold shall meet those entered in the on-file documents.

(2) If any questions occur as to the quality, performance and/or marking of the product, the submitter is responsible for any responses.

(3) As to the quality, performance and marking of the diesel engine oil product filed, the submitter shall provide classification and guarantee on his own responsibility, and information on this responsibility shall be publicized to general consumers through sales channels of the submitter.

If the submitter discontinues sales of the on-file diesel engine oil product, the submitter shall promptly notify the JASO Engine Oil Standards Implementation Panel as to cancellation of on-file.

6. Indication

After receipt of the on-file notice, the submitter shall, on its own responsibility, indicate the oil code concerned and its performance classifications on the product container using the form examples shown in Appendix 7.

When the registered oil meets two or more quality standards for the DH-1, DH-2, DH-2F, DL-0, and DL-1 classifications, the submitter can register the oil for two or more performance classifications and indicate the markings by using one oil code, as shown in the entry examples shown in Appendix 8.

In advertisements or the like, the user of this system shall not use such an expression as will lead to a misunderstanding that the quality/performance of the diesel engine oil concerned has been certified by the JASO Engine Oil Standards Implementation Panel.

As specified in Item 5.3, the user of this system shall send a representative example of performance classification marking and a representative example of an entire product label (design acceptable) to the JASO Engine Oil Standards Implementation Panel.

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7. Market Survey

For ensuring proper interests of consumers and on-file submitters, the JASO Engine Oil Standards Implementation Panel will conduct market survey regarding diesel engine oil products for which on-filing is maintained and check that the Automotive Diesel Engine Oil Standard (JASO M 355: 2021) are used correctly on the market. Therefore, the JASO Engine Oil Standards Implementation Panel may take arbitrary samples of JASO engine oil category DH-1 from the market, examine the performance marking form and quality/performance items specified in the Automotive Diesel Engine Oil Standard (JASO M 355: 2021), and check them against the on-file documents concerned. If any clear discrepancy from the on-file document concerned is found in this market survey, the JASO Engine Oil Standards Implementation Panel may ask the on-file for its reason in writing or make a request for improvement.

The JASO Engine Oil Standards Implementation Panel may disclose the results of market survey in a manner that particular submitter names and oil product names are not identifiable.

8. Use of Standard by Vehicle Manufacturers or Sellers

Any vehicle manufacturer or seller may utilize the Automotive Diesel Engine Oil Standard (JASO M 355:2021), under his own judgment and on his own responsibility. For instance, in owner's manual or any other document, the vehicle manufacturer or seller may indicate a recommended diesel engine oil product to be used by consumers according to the Automotive Diesel Engine Oil Standard (JASO M 355:2021).

In recommending any diesel engine oil product, the user of this system shall not provide such an expression as will lead to a misunderstanding that the quality/performance of the diesel engine oil concerned has been certified by the JASO Engine Oil Standards Implementation Panel (e.g., diesel engine oil certified or assured by the JASO Engine Oil Standards Implementation Panel).

As to the above recommendation, the user of this system shall send a representative example in the owner's manual concerned to the JASO Engine Oil Standards Implementation Panel.

9. Information Available

For details of conditions regarding this system, contact the following organizations.

9.1 Information on Destination Addresses of On-file Documents and On-file Forms

JASO Engine Oil Standards Implementation Panel
2-16-1 Hinode, Funabashi,
Chiba 273-0015 Japan
Japan Lubricating Oil Society
c/o Business Department
Tel : 81-47-433-5181
Fax : 81-47-431-9579
URL : http://www.jalos.or.jp/onfile/

9.2 Information on Test Methods (JASO Standards)

Society of Automotive Engineers of Japan, Inc. (JSAE)
Publishing Team
Publishing, E-NET & Professional Development Group
5 Bancho Center Building 5F
10-2, 5 Bancho, Chiyoda-ku, Tokyo
102-0076 Japan
Tel : 81-3-3262-8215(Direct)

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Fax : 81-3-3261-2204

9.3 Information on Standard Reference Oil

Japan Lubricating Oil Society
Technical Center
2-16-1 Hinode, Funabashi,
Chiba 273-0015 Japan
Tel : 81-47-433-5181
Fax : 81-47-431-9579

9.4 Information on Test Engines and Parts

9.4.1 JASO M 336, JASO M 354 and JASO M 362 (N04C engine/parts)

Hino Motors, Ltd.
Corporate Sales & Marketing Dept.
3-1-1, Hino-dai, Hino-shi, Tokyo 191-8660,
Tokyo 191-8660 Japan
Tel: +81-42-586-5675
Fax: +81-42-586-5222

9.4.2 JPI-5S-55-99 (Hot tube test, HTT)

Nikko Create Co., Ltd.
Ninagawa Factory Industrial Equipment Department
188 Onoguchi machi, Tochigi shi
Tochigi, 323-0065, Japan
Tel: 81-282-20-1170
Fax: 81-282-20-1157

9.5 Information on Overseas Related Test Methods

9.5.1 Information on ASTM Test Methods and Test Implementation Organization

ASTM International
100 Barr Harbor Drive, P.O. Box C700
West Conshohocken, PA 19428-2959, U.S.A.
Tel:(+1)610-832-9585 FAX:(+1)610-832-9555
Website: http://www.astm.org
e:mail: service@astm.org

9.5.2 Information on CEC Test Methods and Test Implementation Organization

Interlynk Administrative Services Ltd
P.O. Box 6475, Earl Shilton
Leicester LE 9 9ZB, United Kingdom
Tel:(+44)1455-821993 Fax:(+44)1455-821994
Website: http://www.cectests.org
e:mail: cecinfo@interlynk.co.uk

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APPENDIX 1

Application Form of Notification of Desired Consignee Test Laboratory

Date on-file (year, month, day) : year, month, day		
Submitter (Company)	Company seal	**Contact address**
Person in charge of on-file Name Seal Department/Section, Title		Name Department/Section Address Tel Fax

Desired engine test to be consigned (Enter "○" for desired test.)		
JASO High Temperature and high Load Detergency Test (JASO M336)		Result data of the latest standard oil test carried out within one year shall be included using forms 4a-b and 4b-b and 4e-b.
JASO Value Train Wear Test (JASO M354)		
JASO Fuel Economy Test (JASO M XXX)		

NOTE:

1. For continuation of the consignment-desired test, the relevant test shall be carried out using standard oil per year and the test result data shall be submitted.
2. The names and addresses of the authorized test laboratories to be selected are publicized at the Panel Web site. A1−
3. For cancellation of on-file of the consignee test laboratory, notification shall be made to the Panel.

To be entered by the JASO Engine Oil Standards Implementation Panel				
Person in charge of receipt:				Seal
Date received (year, month, day):	year,	month,	day	
Receipt number:				
Remarks:				

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APPENDIX 2

COMPARISON TABLE FOR TEST METHODSJIS/JPI Test and ASTM Test

Test Item	Test method	JIS/JPI test No.	ASTM test No.
Density	Oscillating U-Tube Method	JIS K 2249-1：2011	ASTM D 1298
	Hydrometer Method	JIS K 2249-2：2011.	ASTM D 4052
Flash Point(COC)	Cleveland Open Cup Method	JIS K 2265-4-2007	ASTM D 92
Kinematic viscosity		JIS K 2283-2000 5.	ASTM D 445
Viscosity Index		JIS K 2283-2000 6.	ASTM D 2270
CCS viscosity		JIS K 2010-1993 Attachment A	ASTM D 5293
MRV viscosity		JPI-5S-42-2004	ASTM D 4684
High temperature high shear viscosity		JPI-5S-36-2003	ASTM D 4683
Sulfated Ash		JIS K 2272-1998 5.	ASTM D 874
Carbon residue	Conradson Method	JIS K 2270-1:2009.	ASTM D 189
	Micro Method	JIS K 2270-2:2009.	ASTM D 4530
Acid number	Potentiometric Titration Method	JIS K 2501-2003 7.	ASTM D 664
Base number	Potentiometric Titration Method (Hydrochloric Acid)	JIS K 2501-2003 8. (DH-1、DH-2、DH-2F)	ASTM D 4739 (DH-1)
	Potentiometric Titration Method (Perchloric Acid)	JIS K 2501-2003 9.	ASTM D 2896
Volatility	Noack Method	JPI-5S-41-2004	ASTM D 5800
Color	ASTM Color Test Method	JIS K 2580-2003 6.	ASTM D 1500
Ca	ICP Method	JPI-5S-38-2003	ASTM D 5185
Mg			
Zn			
P			
B			
N	Macro Kjeldahl Method	JIS K 2609-1998 3.	ASTM D 3228
	Chemiluminescence Detection	JIS K 2609-1998 4.	ASTM D 4629
	Micro Electricity Titration	JIS K 2609-1998 5.	—
S	Wavelength Dispersive X-ray Fluorescence Spectrometry	JIS K 2541-7-2003	ASTM D 2622
	ICP Method	JPI-5S-38-2003	ASTM D 5185
Anti-foaming	Sequence I,II,III	JIS K 2518-2003	ASTM D 892
High temperature Anti-foaming	Sequence IV(DL-1)	JIS K 2518-2003 Attachment 1	ASTM D 6082

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APPENDIX 3

Diesel Engine Oil Reporting and On-File Maintenance

Contents

1. Notes on Entries in Report Forms A3-1
2. On-File Reporting Procedure A3-1
3. On-File Maintenance Fee A3-2
4. On-File Change Notification Procedure A3-3

Form 1 : Front sheet of reporting A3-4
Form 2 : Bench test results A3-5
Form 3 : Blending change rule application data A3-10
Form 4 : Engine test results A3-11
Form 5 : Notice of change A3-18
Form 6 : Front sheet for change notification reporting A3-19
Form 7 : For change notification; bench test results A3-20
Form 8 : Blending change rule application data A3-25

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1. Notes on Entries in Report Forms

(1) When entering data in the report forms, refer to the text in the standard application manual.

(2) As to an item concerning any test method without indication of a year (in the report forms), adopt a test method which is the latest version at the time of reporting.

(3) If a marking/sale corresponding to false reporting is made, the authorities concerned may impose a punishment according to the Act Against Unjustifiable Premium and Misleading Representation (Article 4 - Clause 1) or the Act of Prevention of Unfair Competition (Article 2-item 1 - Clause 12).

2. On-File Reporting Procedure

(1) Filing Fee

Filing fee required for
oil item : ¥40,000 per oil item to be filed

(2) Submission and Transfer of Filing Fee

Prior to reporting of oil item to be filed, a filing fee indicated in 2.(1) shall be transferred to the following bank account (per oil item to be filed). At the time of reporting, a certificate of the fee transfer into the bank account and necessary documents shown below shall be prepared and submitted to the panel.

Bank account of transferee:
MUFG Bank, Ltd. , Funabashi Branch
Account number:
Ordinary deposit account 1036018
Account ownership:
Japan Lubricating Oil Society

Alternatively,

Bank account of transferee:
Sumitomo Mitsui Bank, Funabashi Branch
Account number:
Ordinary deposit account 6359999
Account ownership:
Japan Lubricating Oil Society

- Document required for filing

Certificate of filing fee transfer
Form 1 : Front sheet of reporting
Form 2 : Bench test results
Form 3 : Blending change rule application data
Form 4 : Engine test results

Representative example of performance classification marking, and representative example of entire product label (Design figure acceptable)

Entry samples of Forms 1 to 4 are shown in Appendix 8.

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3. On-File Maintenance Fee

As to on-file registration maintenance, a term of one year starts from January 1 and ends with December 31 of the current year.

To maintain on-file registration on and after January 1 of the year subsequent to the year of registration, it is required to pay an on-file maintenance fee. For each registrant, an on-file maintenance fee is calculated as shown below according to the total sales quantity of each registered oil in the previous year.

Total Sales Quantity of Each Registered Oil in the Previous Year	On-File Maintenance Fee
Less than 1,000 kl	¥30,000
1,000 kl or more	To be calculated in increments of ¥30 per kl

- Calculation Example – 1

  In case that on-file registration has been completed October 1, 2021, and 1,250 kl of oil has been sold by December 31, 2021:

  The term of the first year means a period between October 1, 2021 and December 31, 2021, and the term of the second year means a period between January 1, 2022 and December 31, 2022.

  An on-file maintenance fee to be paid in the second year is calculated on the basis of the previous year. In this case, it is determined according to declaration of sales quantity during a period of October 1, 2021 to December 31, 2021.

  Hence,

- Calculation Example – 2

  In case that on-file registration of oil A has been completed on October 1, 2021, 500 kl of oil A has been sold by December 31, 2021, 2,000 kl of oil A has been sold in the year 2022, on-file registration of oil B has been completed on May 1, 2022, and 1,000 kl of oil B has been sold by December 31, 2022: (See Fig. 3.1.)

  Since the total sales quantity of oil A in the year 2021 is 500 kl, an on-file maintenance fee to be paid in the year 2022 is ¥30,000. The total sales quantity of oil in the year 2022 is 3,000 kl, i.e., 2,000 kl of oil A plus 1,000 kl of oil B. Hence, an on-file maintenance fee to be paid in the year 2023 is calculated as indicated below.

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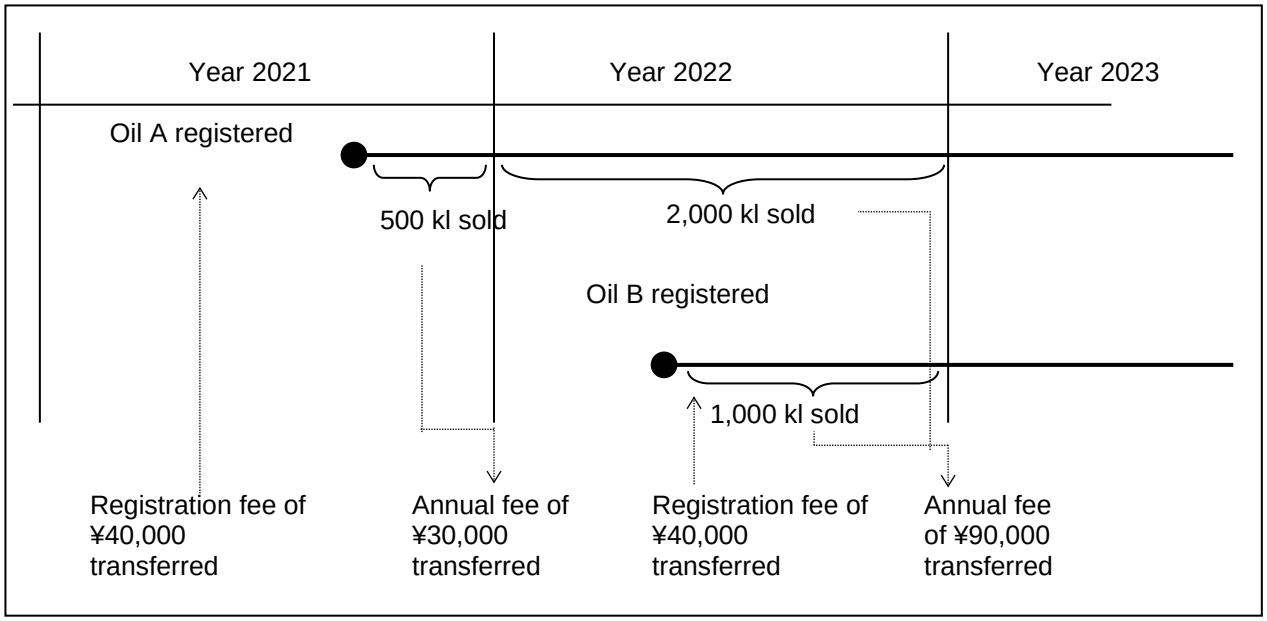

Fig. 3.1 Calculation Example of On-File Maintenance Fee

4. On-File Change Notification Procedure

Where the registrant wants to change the contents described in the on-file report, the following documents shall be prepared even if renewal of the oil code is not required. These documents shall then be submitted to the JASO Engine Oil Standards Implementation Panel. Refer to Item 5.11 in the Standards Application Manual.

(1) To change the contact address of the registrant:

Documents required for notification
Form 5: Notice of change
Form 6: Front sheet for change notification reporting

(2) To change any condition other than viscosity grade within the read-across allowable range indicated in Appendix 3:

Documents required for notification
Form 5: Notice of change
Form 6: Front sheet for change notification reporting
Form 7: For change notification; bench test result data
Form 8: Blending change rule application data

(3) In case of the change of the company name and/or the contact details for the submitter

Prior to submission of the change, a fee ¥40,000 per one submission shall be transferred to the following bank account. At the time of submission a certificate of the fee transfer into the bank account and the following documents shown in 4. and listed below shall be prepared and submitted to the JASO Engine Oil Standards Implementation Panel.

Documents
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