Outline of Model-Based Group Rating System for Voluntary Automobile Insurance

(to be applied to policies commencing on or after January 1, 2025)

> What is the model-based group rating system?

Risk classification factors in voluntary automobile insurance

The frequency and severity of accidents depend on various factors, such as use of automobile (passenger or cargo, private or business, etc.), type of automobile (standard-size, small-size, light-type, etc.), driver's age, and past accident record.

For this reason, various risk classification factors are adopted in voluntary automobile insurance so that premiums differ according to the respective factors, such as use and type of automobile, driver's age, and past accident (claim) record. The model-based group rating system is one of the classification methods.

Model-based group rating system

The model-based group rating system is a scheme for classifying automobiles to be insured according to their risks. From the perspective of voluntary automobile insurance, the risk of each automobile varies with its characteristics, such as body style, structure, equipment, and performance, as well as the characteristics of drivers. To reflect the risk differentials in the premiums, risks of automobiles are assessed according to the model-based groups which are allocated into several classes.

For private standard- and small-size passenger automobile and private light four-wheeled passenger automobile, the classes are set separately for each coverage type, such as bodily injury liability, property damage liability, bodily injury indemnity, and physical damage to the automobile itself.
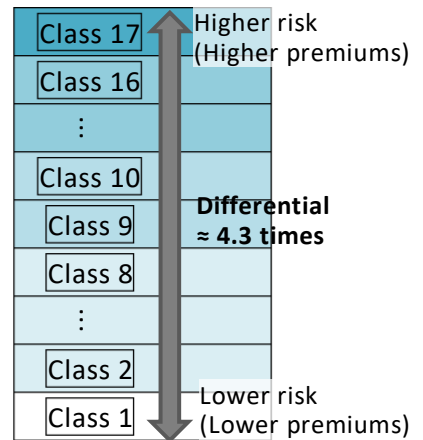
For private standard- and small-size passenger automobile, their models are divided into 17 classes, Classes 1 through 17. The premium is the lowest for Class 1 and the highest for Class 17. The differentials of premium rates between two adjacent classes are approximately 1.1 times. The differential of premium rates between the lowest and highest classes is around 4.3 times.

For private light four-wheeled passenger automobile, the models are divided into seven classes, Classes 1 through 7. The differentials of premium rates between two adjacent classes are approximately 1.1 times. The differential of premium rates between the lowest and highest premium classes is around 1.7 times.
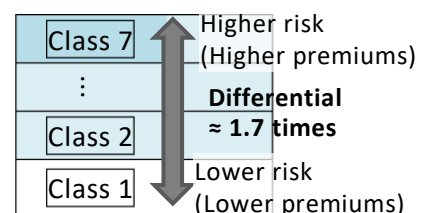
Models (Vehicle models)

A model is an official unit of automobiles that classifies vehicles based on their basic structure and other features. The model is indicated in the vehicle inspection certificate. The "model" mentioned in this document corresponds to a string of characters excluding the identification code regarding automotive exhaust gas regulations and hyphens (-).

(For private standard- and small-size passenger automobile)

Class 17	Higher risk (Higher premiums)
Class 16	
⋮	
Class 10	
Class 9	Differential ≈ 4.3 times
Class 8	
⋮	
Class 2	
Class 1	Lower risk (Lower premiums)

(For private light four-wheeled passenger automobile)

Class 7	Higher risk (Higher premiums)
⋮	Differential ≈ 1.7 times
Class 2	
Class 1	Lower risk (Lower premiums)

<Description of the model on the face of a vehicle inspection certificate (sample for private passenger automobile)>

Example:

Model

ＤＢＡ－ＡＢＣ１２３

The "model" mentioned in this document corresponds to the string of characters enclosed by the red line.

How does the model-based group rating system function?

How are the classes determined?

Every year in January, General Insurance Rating Organization of Japan (GIROJ) reviews whether the actual risk of each model, which is assessed from recent insurance data, corresponds to the allocated class. If the class allocated to a specific model corresponds to the most recent actual risk, the model will remain in the same class; if not, it will be moved to another class.

If the actual risk of a model is assessed to be lower (higher), that model will be moved one or two classes below (above), depending on the degree of risk.
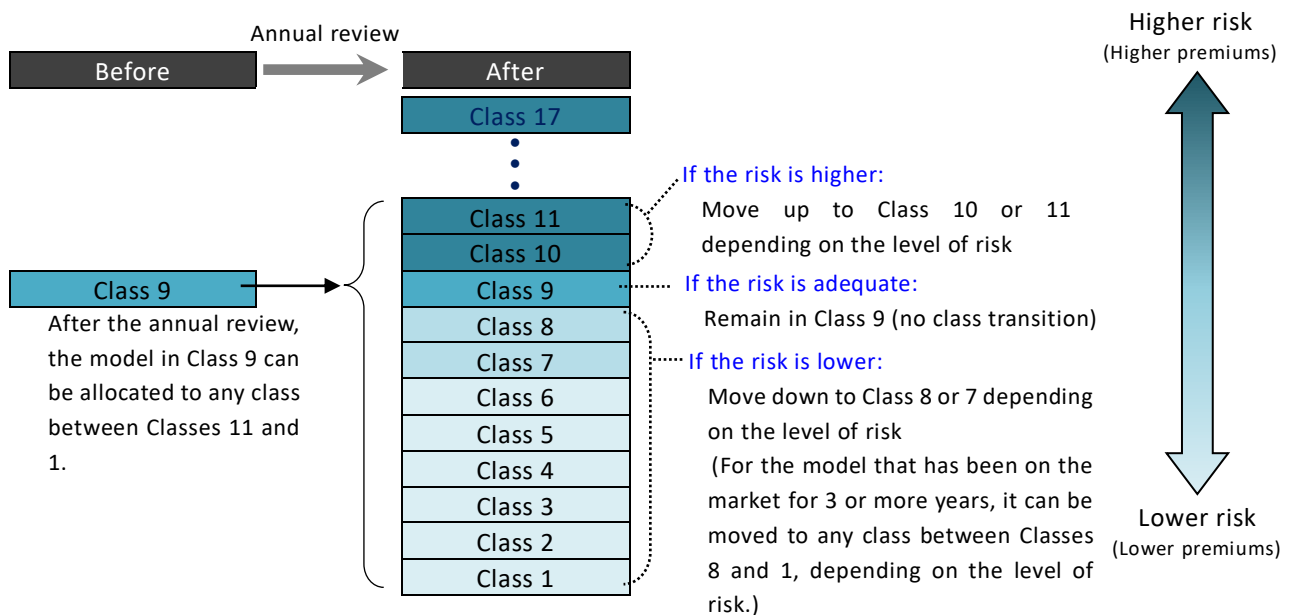
Exceptionally, regarding the models that have been on the market for 3 or more years, and for which sufficient insurance data have been accumulated, if the data show that the model is exposed to lower risks, it may be shifted down by more than two classes.

As for newly launched models, since the accumulated insurance data is not enough to assess the risks, for private standard- and small-size passenger automobiles, they are allocated to classes according to engine displacement, vehicle's price, launch date, etc.; for private light four-wheeled passenger automobiles, all models will be allocated to Class 4.

In order to evaluate the risks more accurately, the model-based group rating system is complemented by other risk classification factors such as "whether the vehicles are equipped with autonomous braking system (AEB)" and "the length of time after initial registration of the vehicle."

Examples of class transitions after the annual review

■ In case of the model of a private standard- and small-size passenger automobile* that is previously allocated to Class 9

Annual review

| Before | → | After |

Higher risk
(Higher premiums)

Class 17
•
•
•

Class 11
Class 10

If the risk is higher:
Move up to Class 10 or 11 depending on the level of risk

Class 9

Class 9
Class 8
Class 7
Class 6
Class 5
Class 4
Class 3
Class 2
Class 1

After the annual review, the model in Class 9 can be allocated to any class between Classes 11 and 1.

If the risk is adequate:
Remain in Class 9 (no class transition)

If the risk is lower:
Move down to Class 8 or 7 depending on the level of risk
(For the model that has been on the market for 3 or more years, it can be moved to any class between Classes 8 and 1, depending on the level of risk.)

Lower risk
(Lower premiums)

* The same kind of annual review is conducted for private light four-wheeled passenger automobiles (7 classes).

Frequently Asked Questions (FAQ)

Q1   **Do all the insurance companies follow the classes determined by GIROJ?**

A1   The classes provided by GIROJ are components of Reference Loss Cost Rates. Each insurer is given the discretion to decide whether or not to adopt the classification.

Q2   **Why is the annual re-classification necessary?**

A2   Since the actual risk of each model, which is based on insurance data, changes constantly in accordance with the social environment, the allocated classes may not always remain appropriate. GIROJ reviews and reallocates the classes annually to ensure that the classification reflects the latest trend in the occurrence of accidents and that the policyholders' premium burdens are fairly determined.

Q3   **Why is the model-based group rating system applied only to private standard- and small-size passenger automobile and private light four-wheeled passenger automobile?**

A3   Such types of automobiles account for a large portion of the automobiles in use. Moreover, each model has various features, such as body style, structure, equipment, and performance. The insurance data show different risk profiles by models.

Q4   **Are different models but with similar performance level assigned the same class?**

A4   All the classes are determined by the actual risk of each model based on insurance data. The actual risk is affected not only by differences in safety performance and other standards but also by the factors such as differences in user profiles for each model. Therefore, even though two vehicles have similar performance levels, their classes may differ, if their user profiles differ. For example, the vehicle models of OEM vehicles (those produced by a manufacturer and sold by others under their brands) vary from one manufacturer to another, and different classes may be allocated to them according to factors such as user group differences among the models.
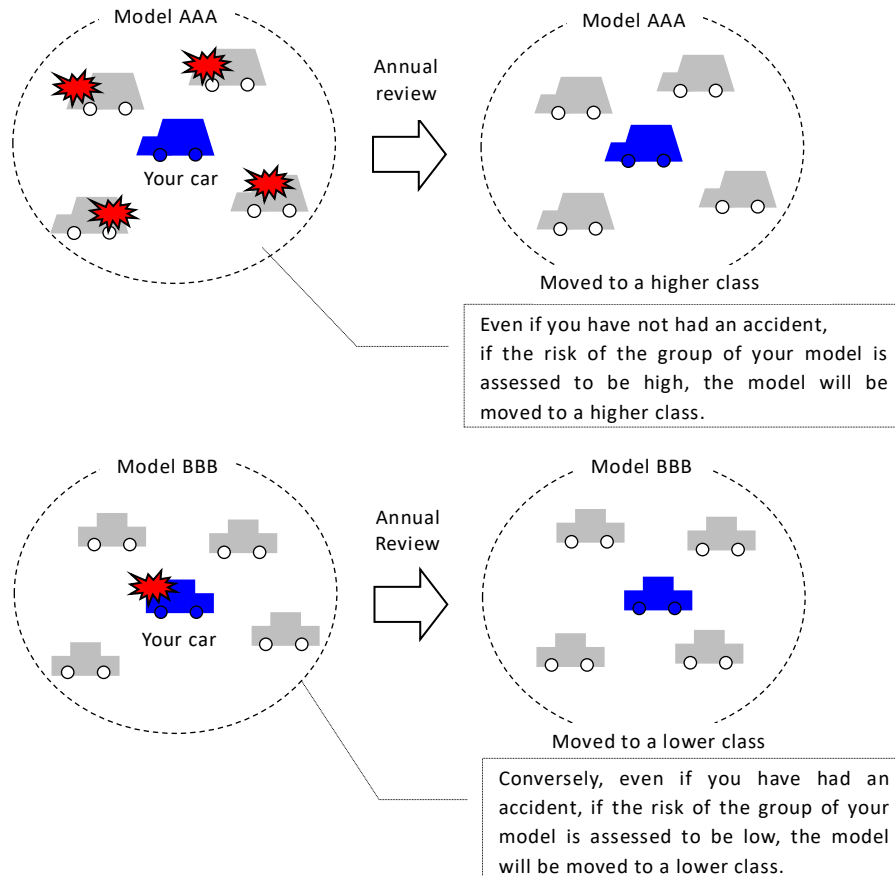
A5   The premium differs between high- and low-risk groups in this system, which aims to ensure that the policyholders' premium burdens are fairly determined. If the risk could be assessed individually for each policyholder, the premium would be fairer. However, it would not be possible to collect sufficient data, nor would the insurance system work properly.

For this reason, policies are classified in accordance with several factors, such as vehicle use/type, driver's age, and past accident (claim) record, and premiums are differentiated for the respective groups. However, even if such factors are adopted for classification, risks still differ among different vehicle models.

Therefore, "models" are adopted as a risk classification factor for premium rates for voluntary automobile insurance, because vehicles of the same model are considered to be owned by a group of users with relatively similar risk characteristics, as the body style, structure, equipment, and performance of a vehicle reflect the users' use and needs.

The classes are reviewed by assessing the risk level of each class. If the risk of model-based vehicle group is assessed to be high, that model will be moved up to a higher class, even if an individual vehicle of that group has not been involved in any accident; at the same time, in a reverse situation, it can be moved down to a lower class.

Model AAA

Your car

Annual review

Model AAA

Moved to a higher class

Even if you have not had an accident,
if the risk of the group of your model is assessed to be high, the model will be moved to a higher class.

Model BBB

Your car

Annual Review

Model BBB

Moved to a lower class

Conversely, even if you have had an accident, if the risk of the group of your model is assessed to be low, the model will be moved to a lower class.

Q6   **Are vehicles in higher classes dangerous?**

A6   The classes are determined by the actual risk based on insurance data, and risks are affected by human factors, such as the user profiles. Therefore, a vehicle allocated to a higher class does not necessarily mean that the vehicle itself is dangerous.

Q7   **Why does the premium discount for AEB only apply to the models that have been on the market less than 3 years?**

A7   In recent years, vehicles equipped with advanced driver assistance systems (ADAS) to support safe driving have become widespread. Particularly, autonomous emergency braking (AEB) is one of the most effective technologies for reducing traffic accidents. The risks of automobiles vary with their characteristics, such as body style, structure, equipment, and performance, as well as user profiles. The model-based group rating system assesses these risks from insurance data according to the models and reflect the differentials in the premiums.

For the models for which sufficient insurance data have accumulated, they are allocated to the classes that correspond to their actual risk levels by the annual review. Thus, the risks of these models are appropriately evaluated, including the effectiveness of AEB, based on the insurance data. In contrast, for the models that have been on the market for a short time, insurance data may not have accumulated sufficiently, so the effectiveness of AEB's risk reduction may not be properly evaluated. Therefore, as a complementary measure for the model-based group rating system, we offer a premium discount for the vehicles equipped with AEB, if their model was released within the past 3 years.