

# Vehicle inspection and maintenance program in Japan

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**Ministry of Land, Infrastructure, Transport and Tourism, Japan**

<Tokyo, Iwaidabashi crossing (1958)>



- the most congested in Tokyo

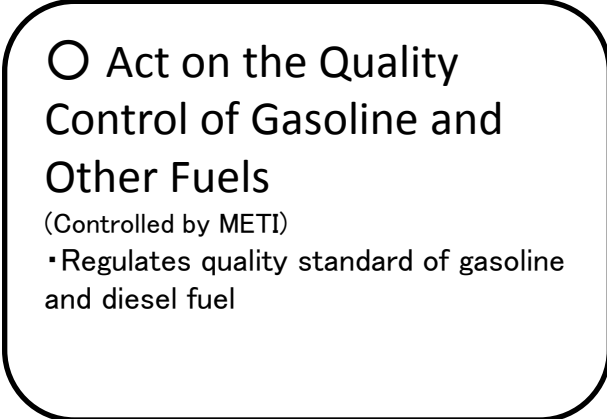
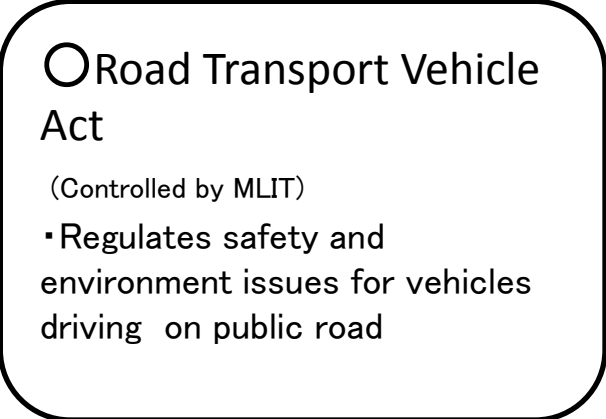
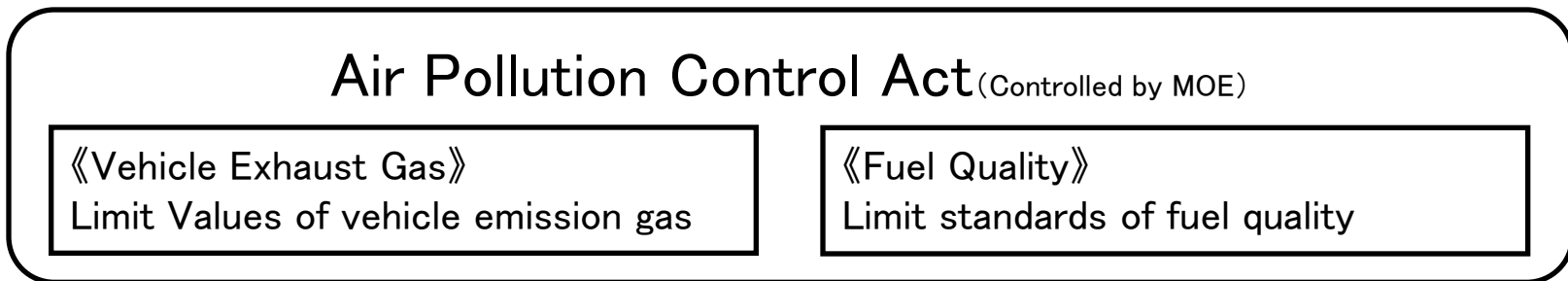
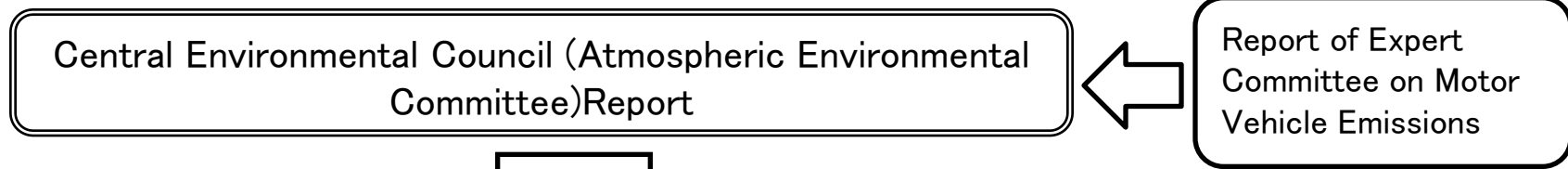
Source) Japan Press Research Institute <http://jpri.kyodo.co.jp/158/>

<Tokyo, Iwaidabashi crossing (2016)>



- limited to pedestrians, bicycles and a number of sightseeing buses from 10 a.m. to 4 p.m. every Sunday and holiday.

Source) Google map <https://www.google.co.jp/>



MOE: Ministry of the Environment  
MLIT: Ministry of Land, Infrastructure, Transport and Tourism  
METI: Ministry of Economy, Trade and Industry

# Air Quality Status in Japan

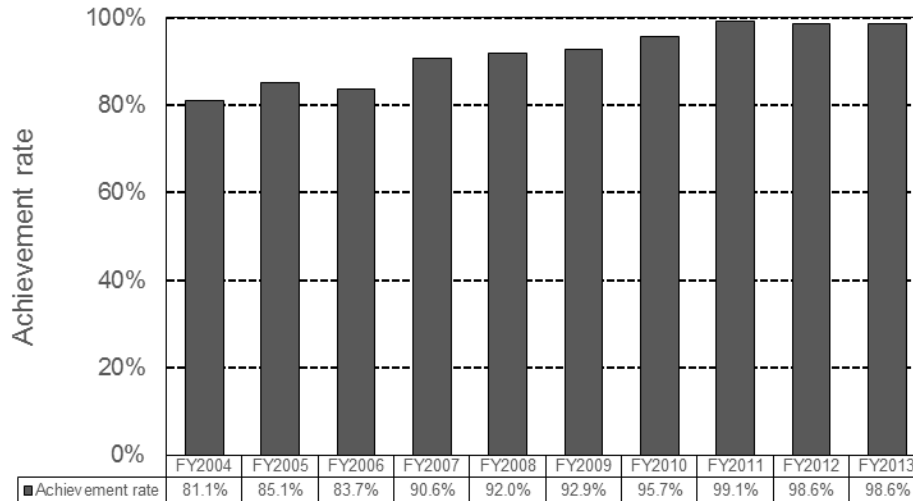
## ● Air quality standards

Air Pollutants	Environmental Quality Standards (EQS)	
SO <sub>2</sub> (Sulfur Dioxide)	Daily average values shall be 0.04 ppm or less	Hourly average values shall be 0.1 ppm or less
CO (Carbon Monoxide)	Daily average values shall be 10 ppm or less	Average of hourly values for any consecutive eight hour period shall be 20ppm or less
SPM (Suspended particulate matter)	Daily average for hourly values shall be 0.10mg/m <sup>3</sup> or less	Hourly average values shall be 0.20mg/m <sup>3</sup> or less
Ox (Photochemical Oxidants)	-	Hourly average values shall be 0.06ppm or less
NO <sub>2</sub> (Nitrogen Dioxide)	Daily average for hourly values shall be within the 0.04-0.06 ppm zone or below that zone	-
PM2.5 (Particulate Matter 2.5)	Daily average values shall be 35 µg/m <sup>3</sup>	Annual average values shall be 15 µg/m <sup>3</sup>

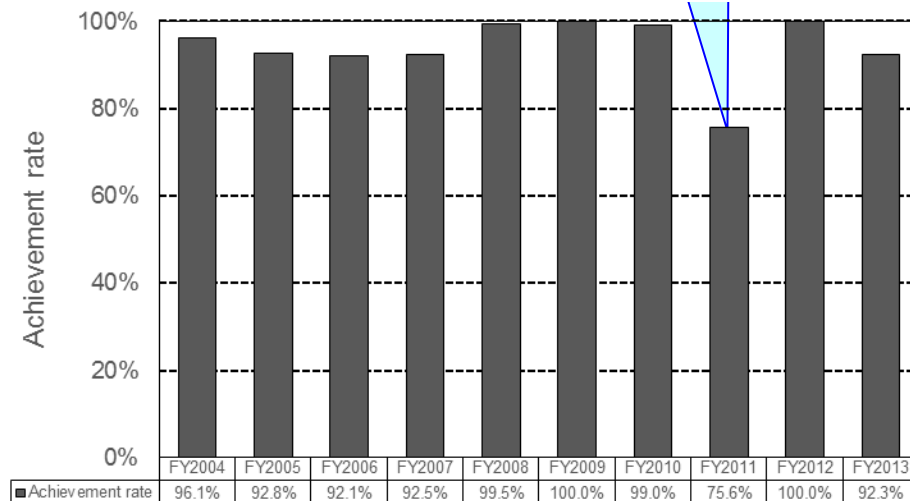
Because of yellow sand

## ● Achievement Status of Air Quality Standards (Areas covered by the NOx/PM Law)

<Nitrogen dioxide (NO<sub>2</sub>) at RAPMSs\*>



<Suspended particulate matter (SPM) at RAPMSs\*>



\*RAPMSs : Roadside air pollution monitoring stations

Source : Ministry on Environment

In FY2014, Environmental quality standards achievement rate for NO<sub>2</sub> is 99.1% and for SPM is 100% for RAPMSs (in FY2013, 98.6% for NO<sub>2</sub> and 92.3% for SPM).

# Vehicle Compliance Systems

Road Transport Vehicle Act provides vehicle compliance systems to ensure the safety and environmental performance of road vehicles.

## Design

### Regulations

- Expansion and enforcement of regulations
- International harmonization of vehicle regulations

Safety regulations :  
Engineering Policy Division (MLIT)

Environmental regulations :  
Environmental Policy Division (MLIT)



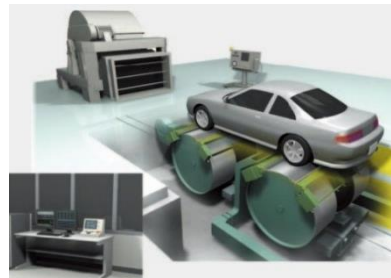
## New vehicles

### Type approval

- Compatibility check with regulation at process of manufacture

Type designation :  
Type Approval and Recall Division (MLIT)

Compatibility check ,  
Technical verification :  
Automobile Type Approval Test Dept. (NALTEC)



### Inspection

- Periodical and unannounced check compatibility with regulation an in-use phase

Inspection system :  
Maintenance Service Division (MLIT)

Compatibility check :  
Inspection office (NALTEC) or Designated garage



## In-use vehicles

### Recall

- Voluntarily implementation by manufacturers

Type Approval and Recall Division (MLIT)



### Check and maintenance

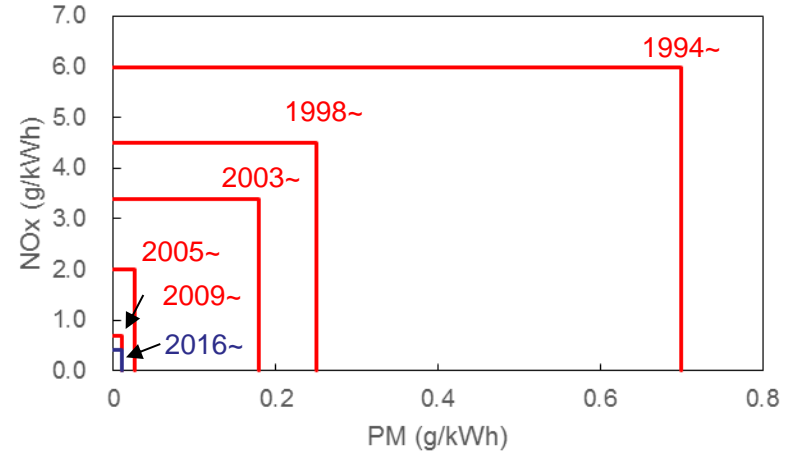
Maintenance Service Division (MLIT)  
Vehicle user ,Garage



# Emission Regulation

## Emission Regulation of Heavy Duty Vehicle

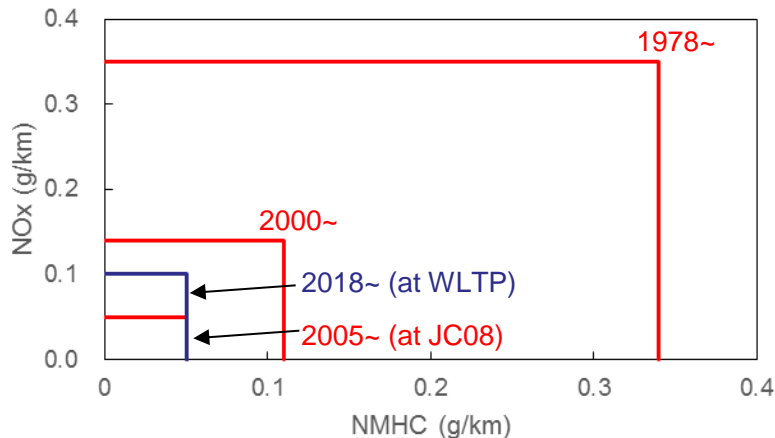
- The current emission limit values are 0.4g/kWh for NOx and 0.01g/kWh for PM, which has been applied.
- More stringent regulation on NOx emissions based on WHTC is scheduled to come into force from Nov. 2016.



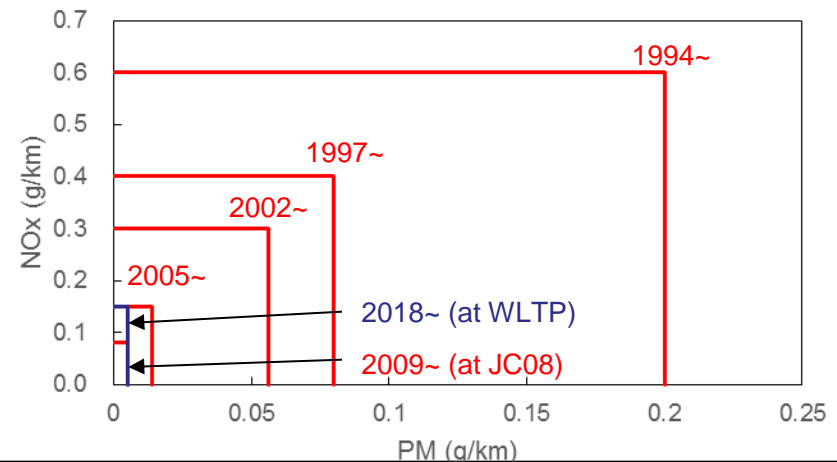
## Emission Regulation of Passenger Vehicle

- The current emission limit values for gasoline PV's has been applied since 2005.
- While the current emission limit values for diesel PV's has been applied since 2009.
- The new regulation for PVs based on WLTC is scheduled to come into force in 2018.

<Gasoline vehicles>



<Diesel vehicles>



Manufacturer

Type Designation System

Application  
(Pre-production)

Document examination

Actual motor vehicle examination  
Exhaust gas performance inspection etc.

Quality management system review

Type Designation

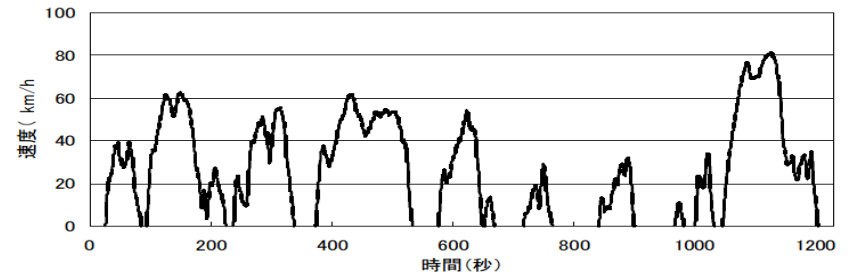
Completion inspection by manufacturer

Initial Inspection (Emission of  
presentation of motor vehicle)

Registration

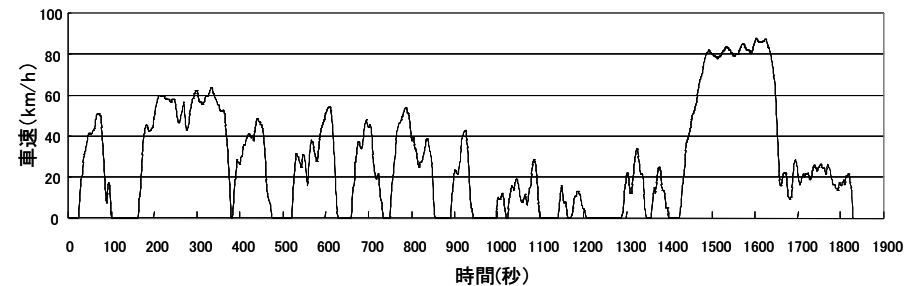
## Test Procedure

Passenger vehicle : JC08 mode



Test by Deteriorated vehicle  
PV:80,000km  
HD:~650,000km

Heavy duty vehicle : JE05 mode



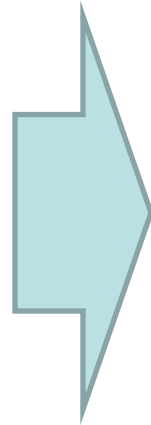
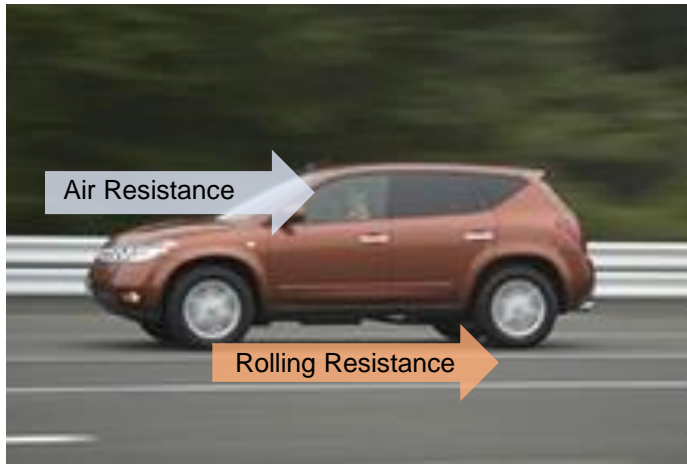


# Emission Test for PVs

- The passenger vehicle emission and fuel efficiency is measured on a chassis dynamometer to ensure the repeatability and equity.
- JC08 Mode, which was developed based on the actual driving conditions, is applied for the emission and fuel efficiency test.

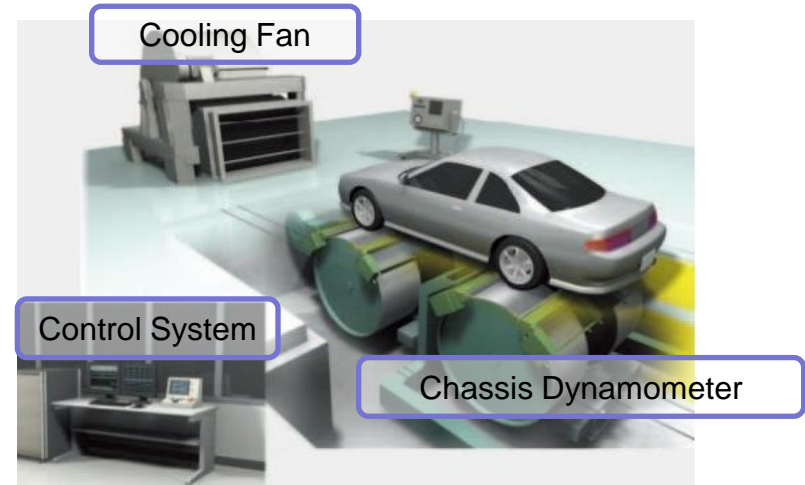
## 1. Road Load Measurement

Measure road load resistance, consisting of air and tire rolling resistance etc., on road



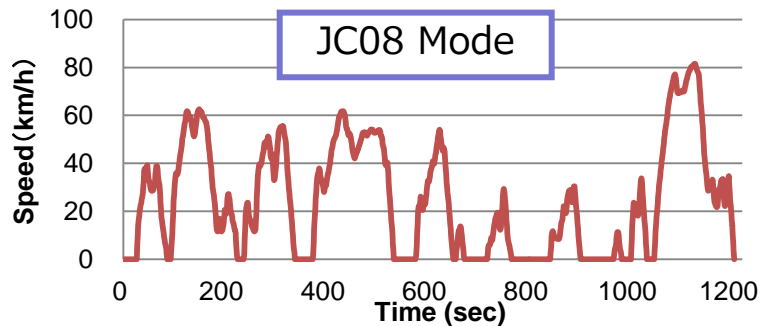
## 2. Chassis Dynamometer Load Setting

Set the load equal to measured road load resistance on a chassis dynamometer



## 3. Emission/Fuel Efficiency Measurement

Soaking at  $25 \pm 5^\circ\text{C}$  for from 6 to 36 hrs



Cold Start and Hot Start JC08 Mode tests are conducted.

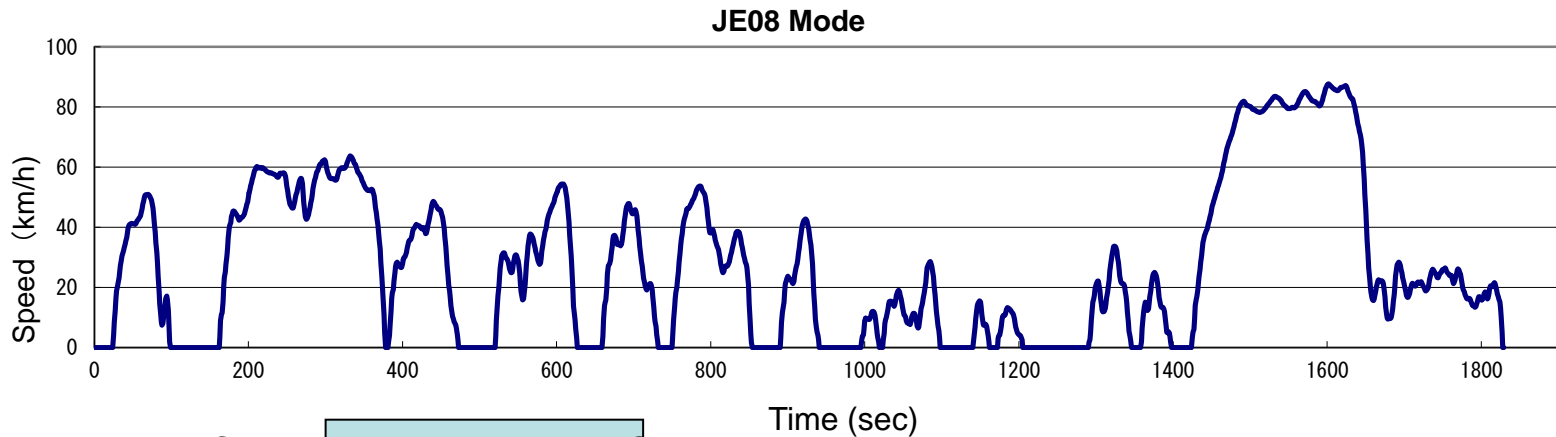
Weighted Average of Cold (25%) and Hot (75%)

JC08  $\text{km/L}$

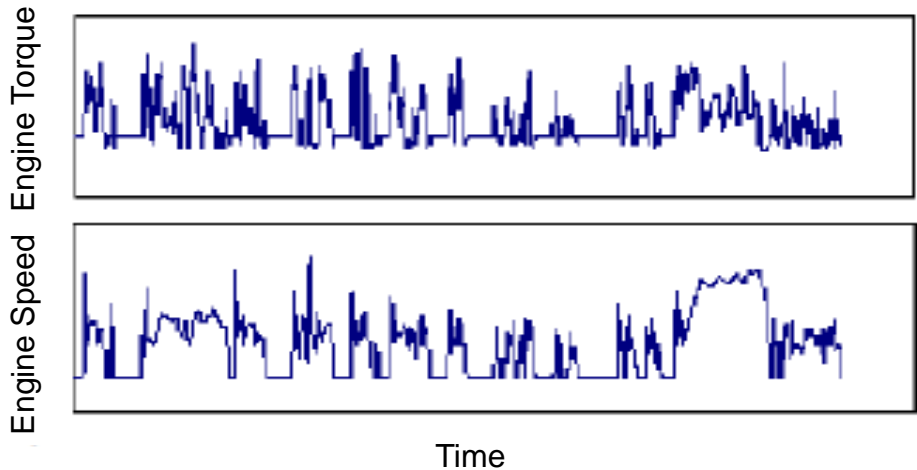


# Emission Test for HDVs

- The heavy duty vehicle emission is measured on an engine dynamometer.
- JE08 Mode is converted to Engine Torque and Engine Speed based on the standard vehicle specifications and engine dynamometer test is conducted with the torque and speed charts.



Converted to Torque and Speed  
Based on Standard Vehicle Specifications



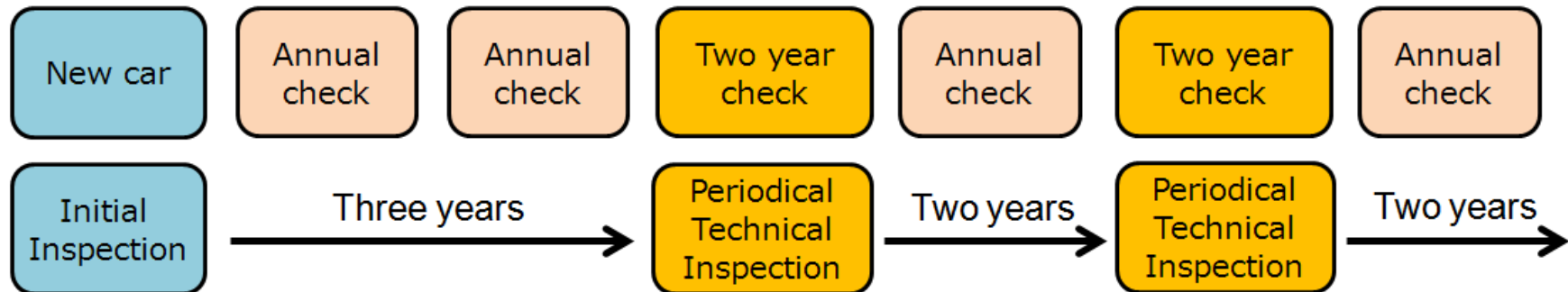
Engine Dynamometer for HD Engines



## Overview of Vehicle Inspection in Japan

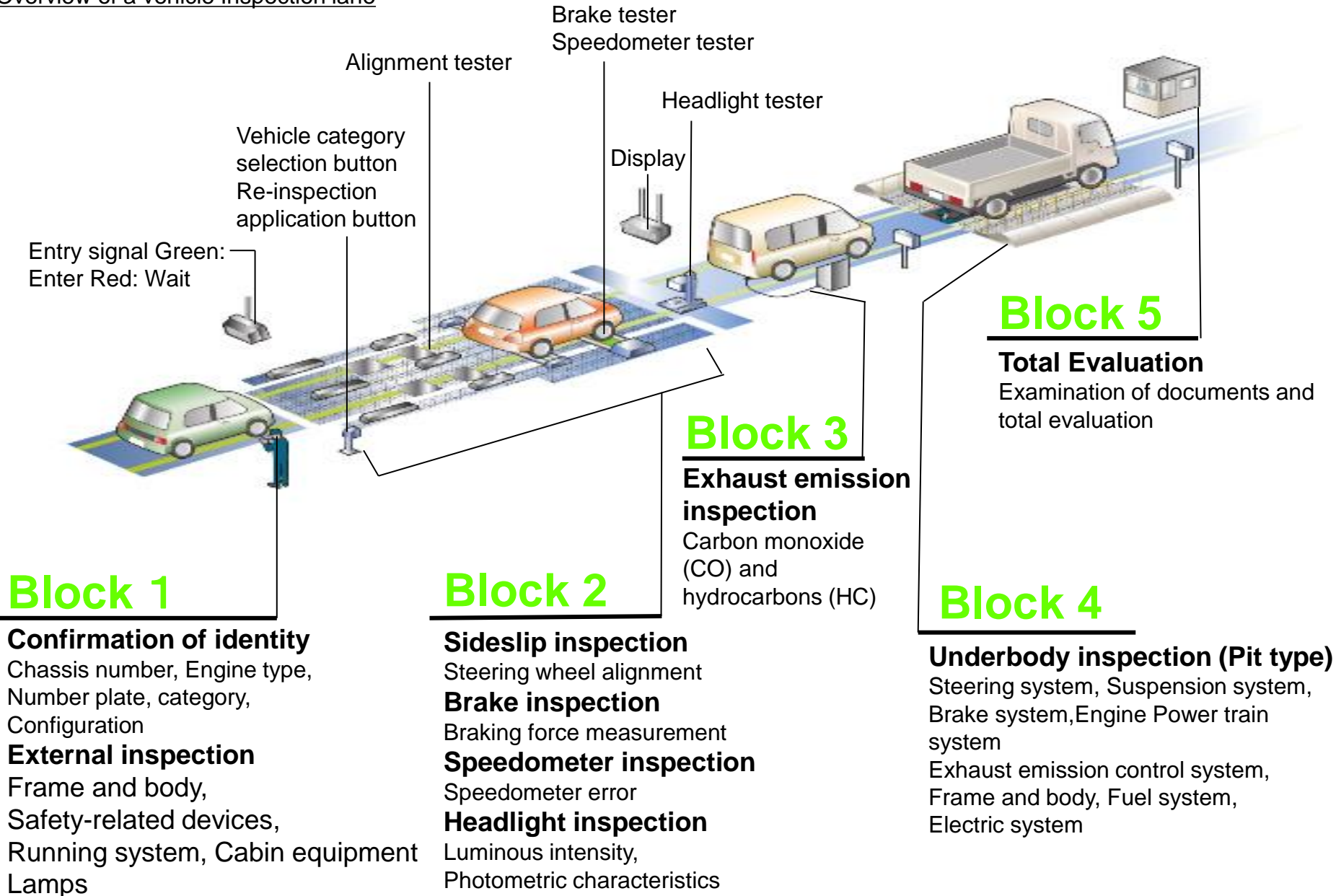
- Vehicle user needs to have an annual check and the two-year check in accordance with law.
- And needs to equip check and maintenance record book in car and to write down the result of check and maintenance.
- If user detects a malfunction by checks, user need to maintains the vehicle by himself or brings to the designated or approved garages to maintain the vehicle to meet a regulations.
- In case of passenger car, user need to have a periodical technical inspection every two years except after initial inspection of new car.

### ■ The Cycle of Checks and periodical technical inspection



※This chart is a cycle for Passenger cars and motorcycle (<250cc)

## Overview of a vehicle Inspection lane





## Diesel Smoke



## Proximity Stationary Noise



## Exhaust Emission



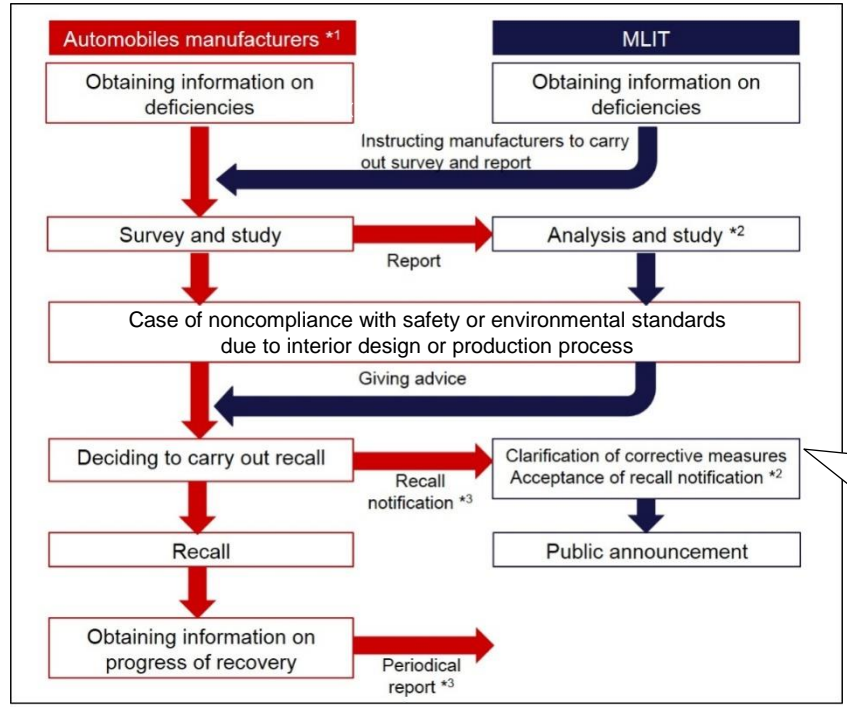
## Underbody



# Recall System

In the case of noncompliance with safety or environmental regulations, due to inferior design or the production process, vehicle manufacturers must conduct recall with beforehand notification to MLIT.

## Flow of recall notification



## Transition in number of recall

Year	FY 2012	FY 2013	FY 2014
Number of reported automobile recall cases	308	303	355
(Internal number related to emission)	20	11	14
Number of automobiles subject to recall	5,612,979	7,978,639	9,557,888

If manufacture do not carry out the recall, MLIT will recommend the manufacture to carry out the recall. If the manufacture neglect the recommendation, MLIT will disclose the negligence and order to carry out the recall\*3.

\*1: MLIT performs the guidance and supervision by carrying out the audit for the manufacturers which obtain type certificate.  
 \*2: MLIT requests the NALTEC to conduct technical verification if necessary.  
 \*3: Violation Penalty : imprisonment of not more than one year or a fine of not less than 3,000,000 yen, and/or a corporate fine of not more than 200,000,000 yen


**The Manufacture has to recall if the use of defeat device has been found.**


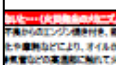



# Invasive Check and Maintenance

In the case of non-compliance with safety or environmental regulations, due to carelessness check or faulty maintenance by vehicle user and/or maintenance business, MLIT make special announcement or guideline for user and/or garages.

## バス火災事故防止のための 点検整備のポイント



 <p>ボイラ(大気汚染の防止) 乗客及び乗務員の安全のために点検整備が必要です。</p>	 <p>ボイラ(大気汚染の防止) 乗客及び乗務員の安全のために点検整備が必要です。ボイラからの排煙防止、排気中や乗客及び乗務員の安全のために点検整備が必要です。</p>
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1. エンジンルームに火を触れさせたりしないでください。2. 排気管が折れたら直ちに修理してください。



### 車に乗るのに点検整備 やってないの？

えっポント!

安全確保と乗客安全には、クルマの点検整備が必須です

### ストップ!! ザ・車輪脱落事故

大型車の車輪脱落事故ゼロへ

車輪の脱落は、路上障害や他の交通の妨げとなるばかりでなく、歩行者や他の車両の安全にも影響を及ぼす。適切な点検により、正しい点検・整備の取組をお願いします。

確認項目	確認の目的	点検のポイント	ボイルの点検目安
タイヤの空気圧	走行中の安定性、制動性の確保	タイヤの空気圧を規定値に調整する	ボイルの空気圧を規定値に調整する
タイヤの摩耗	走行中の安定性、制動性の確保	タイヤの摩耗を点検し、必要に応じて交換する	ボイルの摩耗を点検し、必要に応じて交換する
タイヤの破損	走行中の安定性、制動性の確保	タイヤの破損を点検し、必要に応じて交換する	ボイルの破損を点検し、必要に応じて交換する

国土交通省 3月21日  
平成27年12月25日

公益社団法人 日本バス協会会長 殿

国土交通省自動車整備部

乗用自動車の緊急点検の実施及び保守管理の徹底について

標記については、平成26年3月7日付国土交通省305号「乗用自動車の保守管理の徹底について」及び平成26年11月21日付国土交通省225号「乗用自動車の緊急点検の実施について」により、高速自動車走行専用道路を走行する自動車検査業者などに対して、乗客・乗員の安全に際する事故防止の取組を促しているところですが、また、三菱ふそうトラック・バス株式会社は、乗客・乗員の安全に際し、バス車輌に対する点検整備の徹底等を中心とするホームページ上で公表するとともに、同社製の大型バス(MS型、MSB型)の乗用者に対してスマートフォンやタブレットにより点検整備の必要性について説明してきたところであり、今後、中型バス(MMX型、MJ型)についても同様の取組を進める予定としています。

しかしながら、平成27年11月12日に茨城県内の東北自動車道において、東北自動車道管内の関野バス(三菱・FUSO・MS86MP(平成16年製)ハンドルの操作不能となり、中央分離帯に突進し、乗客7名が負傷する事故が発生しました。事故原因については、既述通りですが、乗客の突進時からの乗客よりハンドル操作不能となった可能性が考えられるところです。

当該事故を受け、東北自動車道では、第1期の上り専用車線減速帯を設けて、管内自動車検査業者に対し、乗客用自動車(バス)の緊急点検の実施及び保守管理の徹底を図るよう働きかけましたところですが、

これまで、乗客・乗員の保守管理についての取組を進めてきたにもかかわらず、当該事故の原因は、乗客の突進時からの乗客よりハンドル操作不能により、同様の事故が発生したことに起因して発生しました。

つきましては、同様の事故の再発防止を図るため、下記より乗客・乗員の安全に際する緊急点検を実施し、必要な整備事項は整備を行う等、乗用自動車の保守管理について徹底を図るよう乗客用自動車検査業者等に対して働きかけようとしてまいります。

なお、本件については、第1期及び第2期4号より地方整備局自動車検査部長及び商研協会事務局長等に対し通知したとおりとなります。

100-8782

4751

国土交通省自動車検査部

技術安全部整備課

〒100-8782 東京都千代田区千代田3-15-5 4階

自動車の定期点検整備のご案内について

乗用自動車の定期点検整備のご案内について

乗用自動車の定期点検整備は、乗客及び乗務員の安全のために実施する必要があります。乗客及び乗務員の安全を確保するためには、乗用自動車の定期点検整備を実施することが必要です。乗客及び乗務員の安全を確保するためには、乗用自動車の定期点検整備を実施することが必要です。

2年点検の代表的な点検項目
ボイルの空気圧
ボイルの摩耗
ボイルの破損
ボイルの異音
ボイルの異臭
ボイルの異色
ボイルの異臭
ボイルの異色
ボイルの異臭
ボイルの異色

# Regulation for Type Approval and PTI

Type approval play a key role in technical specialty compliance. PTI perform the confirmation of not broken in deterioration or faulty maintenance mainly than rigorous inspection.

So, PTI regulation should be simple and easy to check it.

## New Vehicle Type Approval

Driving mode emission test

Deterioration test

OBD system test

Off cycle emission test

evaporative emission test

Idle test, Smoke test

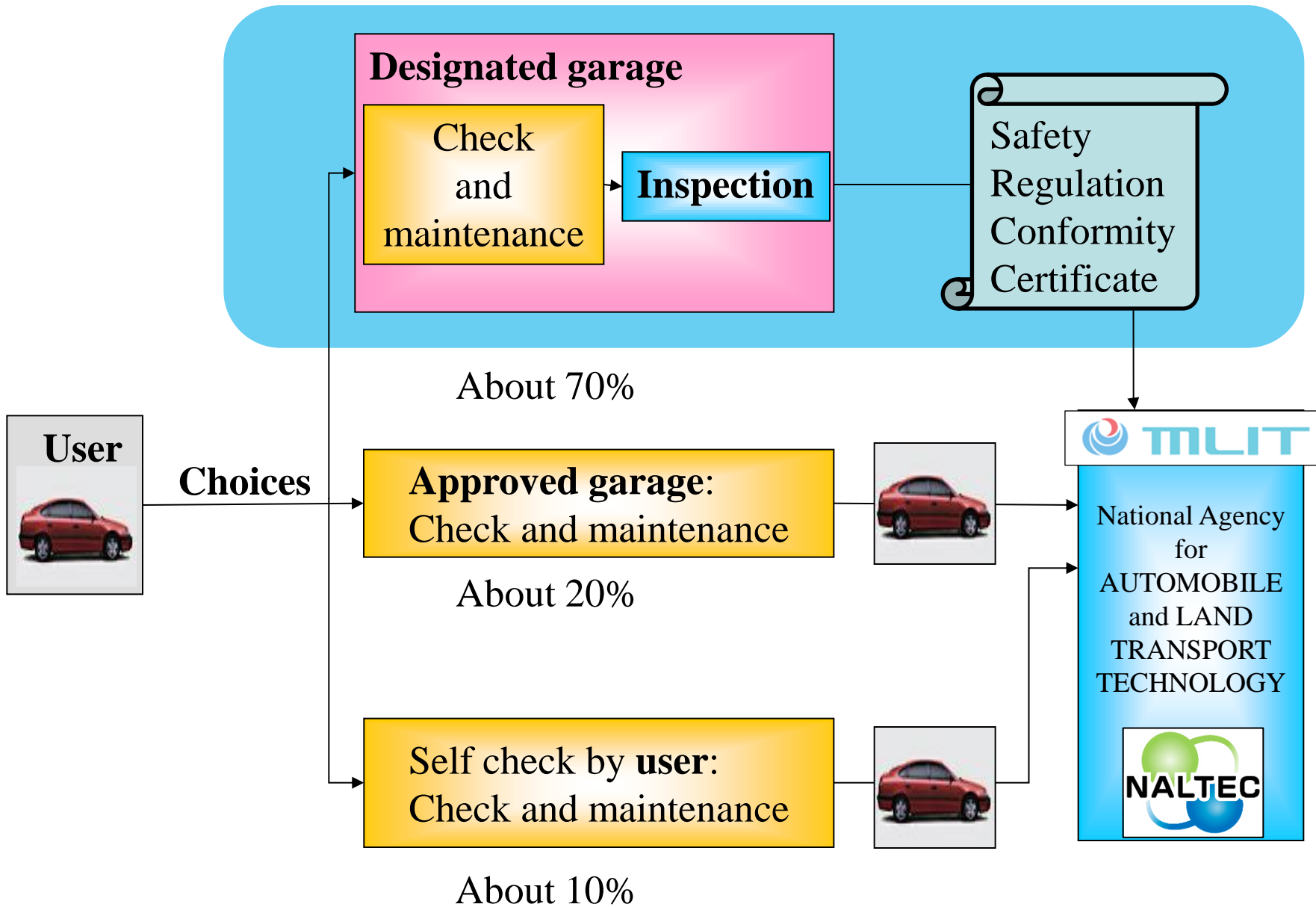
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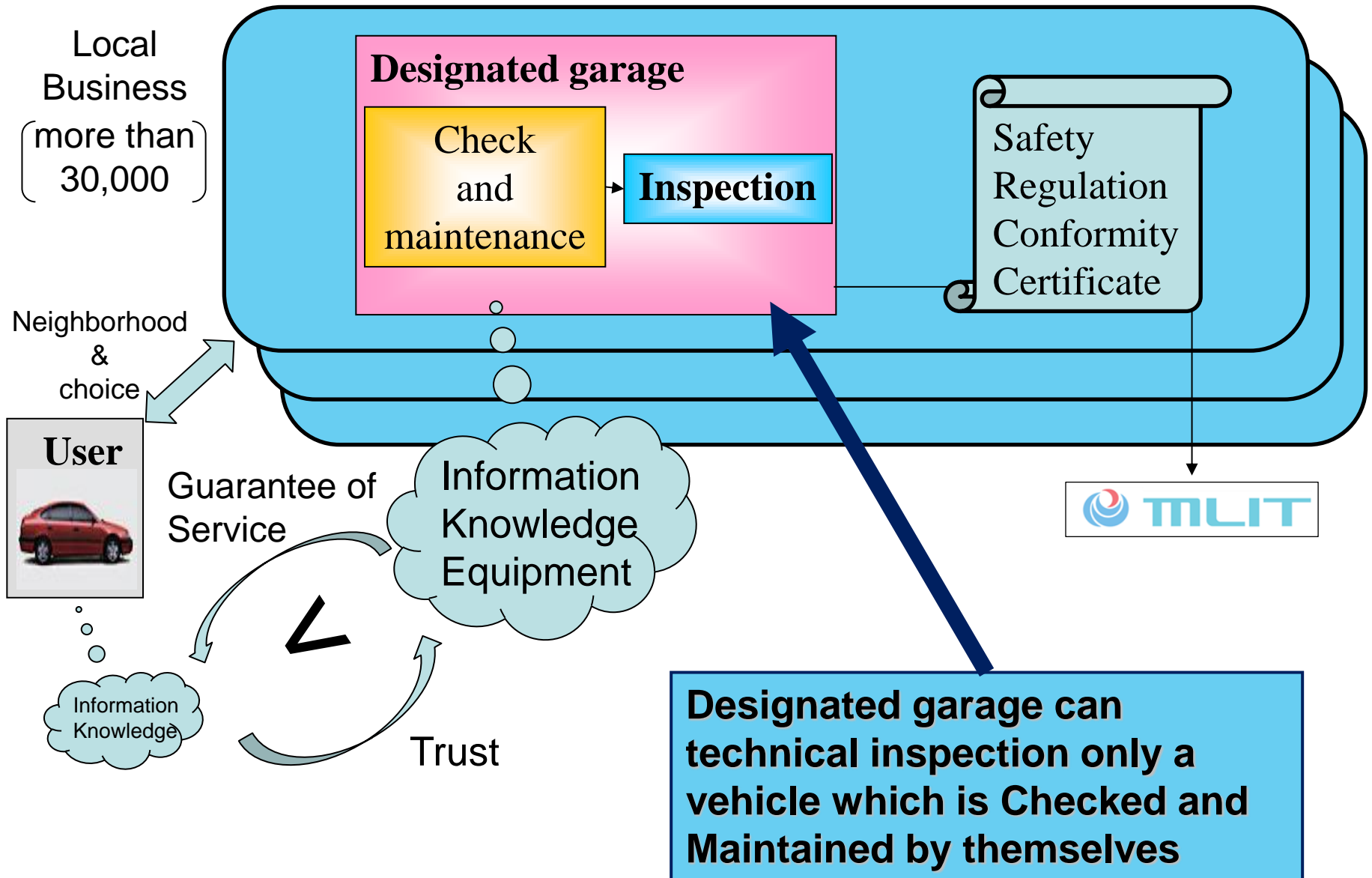
## In-use Vehicle Periodic Technical Inspection

Idle test, Smoke test

No broken check







## Maintenance-Related Business

- Lubricant oil change
- Tire change etc.  
(except disassembling service)

## Vehicle Disassembling maintenance Business

About 92 thousand garages  
(approved garages)

- Maintenance of engine, brake, etc.

## Designated garage

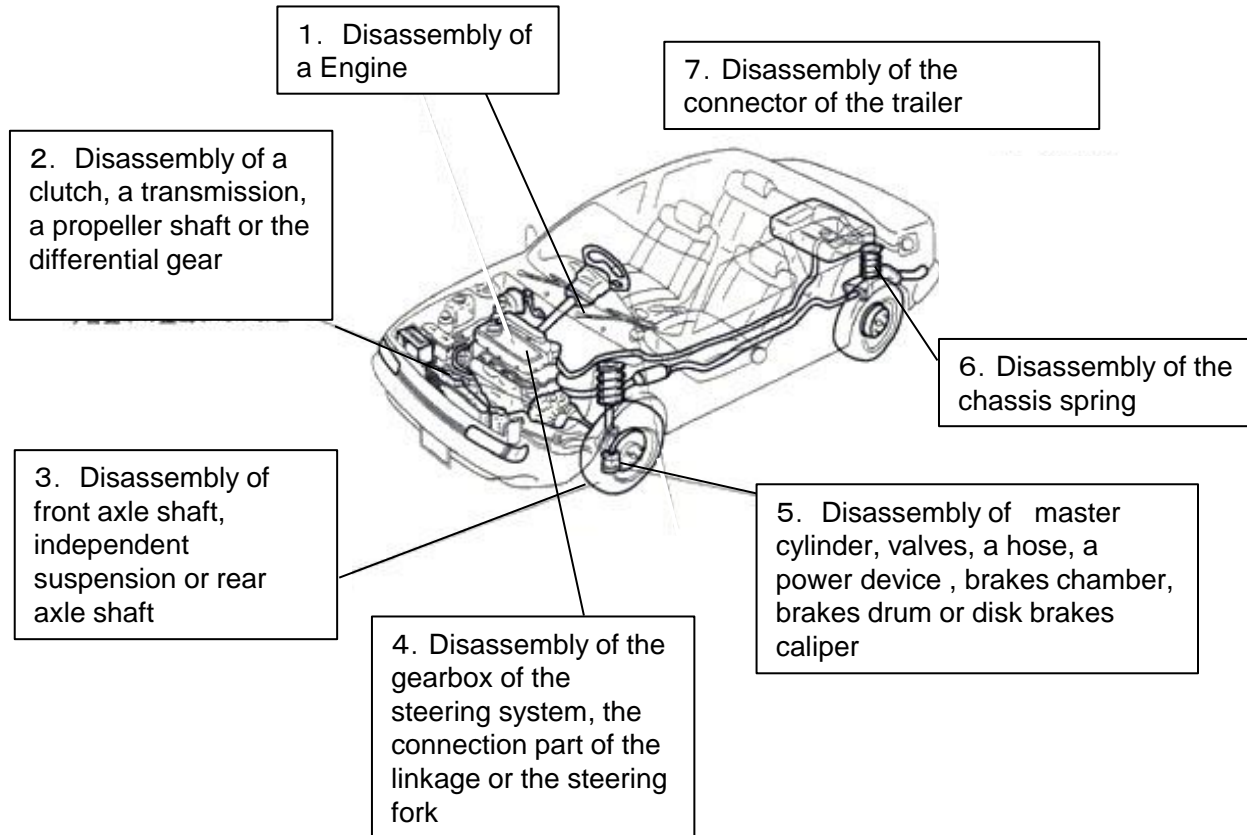
About 30 thousand garages

- Private PTI service

- In order to ensure that checks and maintenance such as periodical ones are carried out properly, it is imperative for motor vehicle maintenance businesses to have the necessary expertise and skills on structure and devices of motor vehicles and special equipment.
  
- For this reason, following systems are established by the Road Vehicles Act.
  - ① Approval system of motor vehicles disassembling maintenance businesses
  - ② Designation system of motor vehicle Maintenance businesses (out of those approved)

- The “disassembling maintenance” means specific repairs or modifications whereby the vital parts directly related to safety of a motor vehicle, such as engine, power train system, running system, control system, brake system, suspension system and connecting system, are disassembled.
- A person who wants to run a motor vehicle disassembling repair business is required to obtain approval from the Director-General of the District Transport Bureau (regional branch of MLIT) (hereinafter referred to as “DTB” ).
- The criteria of approval are established by MLIT, concerning facilities, equipment and staff.

Vehicle maintenance business consist of wide diversity of services. Japanese authorities distinguish garages carrying out following activities between others, control them, and admit to involve periodic technical inspection.



Formal signboard

Maintenance or modification of motor vehicle performed with engine ;



Maintenance or modification of motor vehicle performed with master cylinder, valves, hoses, pipes, booster, brake chamber, brake drum or disc brake calipers of brake system;





Utilizing the private business capacities, the Director-General of the DTB gives designation to garages on request when:

- ① They have been approved as a motor vehicle disassembling maintenance business and;
- ② They are in compliance with the criteria concerning superior maintenance service and ability to carry out inspections.

A designated garage shall issue the Safety Regulation Conformity Certificate to a user of a motor vehicle when :

- ① The garage conducted the prescribed checks and carried out necessary maintenance accordingly and;
- ② The garage conducted a completion inspection, by which the motor vehicle was confirmed to be in conformity with the Safety Regulations.

To present the Safety Regulation Conformity Certificate to the Local Land Transport Office of the DTB enables the user to get the Motor Vehicle Inspection Certificate renewed without presenting the motor vehicle concerned.

	Approved garage	Designated garage
Total number of mechanics	2 or more	4 or more
Chief engineer (Qualified 2nd class or higher mechanics)	1 or more	1 or more
Motor vehicle inspectors (who should be appointed from chief engineers who have completed the required course)	—	1 or more
Qualified mechanics (who passed the mechanic qualification test)	1 or more (Ratio of qualified: 1/4 or more)	2 or more (Ratio of qualified: 1/3 or more)

(Note: The requirements related to space in this table are those to be applied to the garages serving for usual size cars.)

	Approved garage	Designated garage
Indoor work space	Work space for maintenance: 32 square meter or more (4m * 8m or more)	Work space: 64 square meter or more
	Work space for checks: 32 square meter or more (4m * 8m or more)	
	Work space for repairing parts: 8 square meter or more	Work space for repairing parts: 8 square meter or more
Completion inspection site	—	Enough space to conduct completion inspections
Motor vehicle park space	16.5 square meter or more	19.2 square meter or more (it should also be equal to or more than “indoor work space * 0.3”)
Equipment for service and inspection	27 items ex. Jack, Torque wrench, Circuit tester	38 items (including 27 items required for Approved garage) ex. Headlamp Tester, Brake Tester, Speed meter Tester

(Note: The requirements related to space in this table are those to be applied to the garages serving for usual size cars.)

Kind of Subject Device		Engine	Power train system	Running system	Control system	Brake system	Suspension system	Coupling Device	
Working Machines, etc.									
Working machines	(1) Press	○	○	○	○	○	○	○	In the cases where the subject motor vehicles for disassembling repair business for small-sized motor vehicles are small-sized two-wheeled motor vehicles, those enumerated in Items(1), (3) and (4) shall be excluded.
	(2) Air compressor	○	○	○	○	○	○	○	
	(3) Chain block	○						○	
	(4) Jack	○	○	○	○	○	○	○	
	(5) Vice	○	○	○	○	○	○	○	
	(6) Charger	○						○	
Working Tools	(1) Slide caliper	○	○	○	○	○	○	○	
	(2) Torque wrench	○	○	○	○	○	○	○	
Checking Instruments & Devices	(1) Circuit tester	○	○	○	○	○	○	○	<p>1. In the cases where the subject motor vehicles for disassembling repair business for ordinary-sized motor vehicles are large-sized special motor vehicles with caterpillar tracks, those enumerated in Items (9) through (12) shall be excluded.</p> <p>2. In the cases where the subject motor vehicles for disassembling repair business for small-sized motor vehicles are small-sized three-wheeled motor vehicles and small-sized two-wheeled motor vehicles, and small-sized three-wheeled motor vehicles, those enumerated in Items (9) through (11) shall be excluded.</p> <p>In the cases where the subject motor vehicles are small-sized two-wheeled motor vehicles, those enumerated in Items (9) through (11) and (13) shall be excluded.</p> <p>3. In the cases of a place of business where the work of checking gasoline-fueled and LPG-fueled engines is not performed, those enumerated in Items (14) and (15) shall be excluded. In the cases of a place of business where the work of checking internal-combustion engines is not performed, those enumerated in Items (3), (6), (14) and (15) shall be excluded.</p>
	(2) Hydrometer	○							
	(3) Compression gauge	○							
	(4) Handy vacuum pump	○	○		○	○			
	(5) Engine tachometer	○	○		○				
	(6) Timing tester	○							
	(7) Thickness gauge	○	○	○	○	○		○	
	(8) Dial gauge	○	○	○	○	○	○		
	(9) Toe-in gauge			○	○		○		
	(10) Camber & caster gauge			○	○		○		
	(11) Turning radius gauge			○	○		○		
	(12) Tire gauge			○	○				
	(13) Vehicle inspection device	○	○	○	○	○	○		
	(14) Carbon monoxide (CO) measuring device	○							
	(15) Hydrocarbon (HC) measuring device	○							
Tools	(1) Wheel puller			○		○			In the cases where the subject motor vehicles for disassembling repair business for small-sized motor vehicles are small-sized two-wheeled motor vehicles, those enumerated in Items (1) and (2) shall be excluded.
	(2) Bearing race puller		○	○		○			
	(3) Grease gun or Chassis lubricator	○	○	○	○	○	○	○	
	(4) Parts cleaning tank	○	○	○	○	○	○	○	

Remarks: Mark “○” indicates that a place of business where the devices enumerated in Item “Kind of Subject Device” are removed and subjected to disassembling repair shall be equipped with the working machines, etc., enumerated in the relevant columns.

## ○ Duty of Disassembling Repair Businesses (article 90)

Disassembling Repair Businesses have to meet the point which they maintained to safety and environmental regulation

Authorities audit a problem garage and impose an administrative punishment on them by a score decided depending on a misconduct.

### 【example of penalty point for Approved Garage】

Part of maintenance does not meet regulation	10 points /vehicle (accident related 30points /vehicle)
apparent defect of maintenance	10 points /vehicle (accident related 30points /vehicle)

### 【administrative penalty criterion】

More than 10 penalty points: business-suspension

example: 10~19 points 10 Days

20~29 points 15 Days etc.

More than 180 points: decertification of business

# Audit Designated Garage

Authorities audit a designated garage regularly and inspect financial activity and documents established in a law.

If there are problem, Authorities impose an administrative punishment on them by a score decided depending on a misconduct.

## 【example of penalty point for Designated Garage】

- Pass PTI of illegal modified vehicle 45points/vehicle  
(more than 5 vehicles: decertification of PTI-business)
- Apparent defect of maintenance and/or inspection 20 points /vehicle  
(accident related 30points /vehicle)
- No inspection at PTI: decertification of PTI-business

### 【administrative penalty criterion】

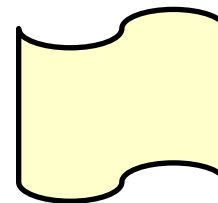
- More than 20 penalty points: PTI-suspension  
example: 20~29 points 15 Days  
30~39 points 20 Days etc.
- More than 360 points: decertification of PTI-business



Check & Maintenance



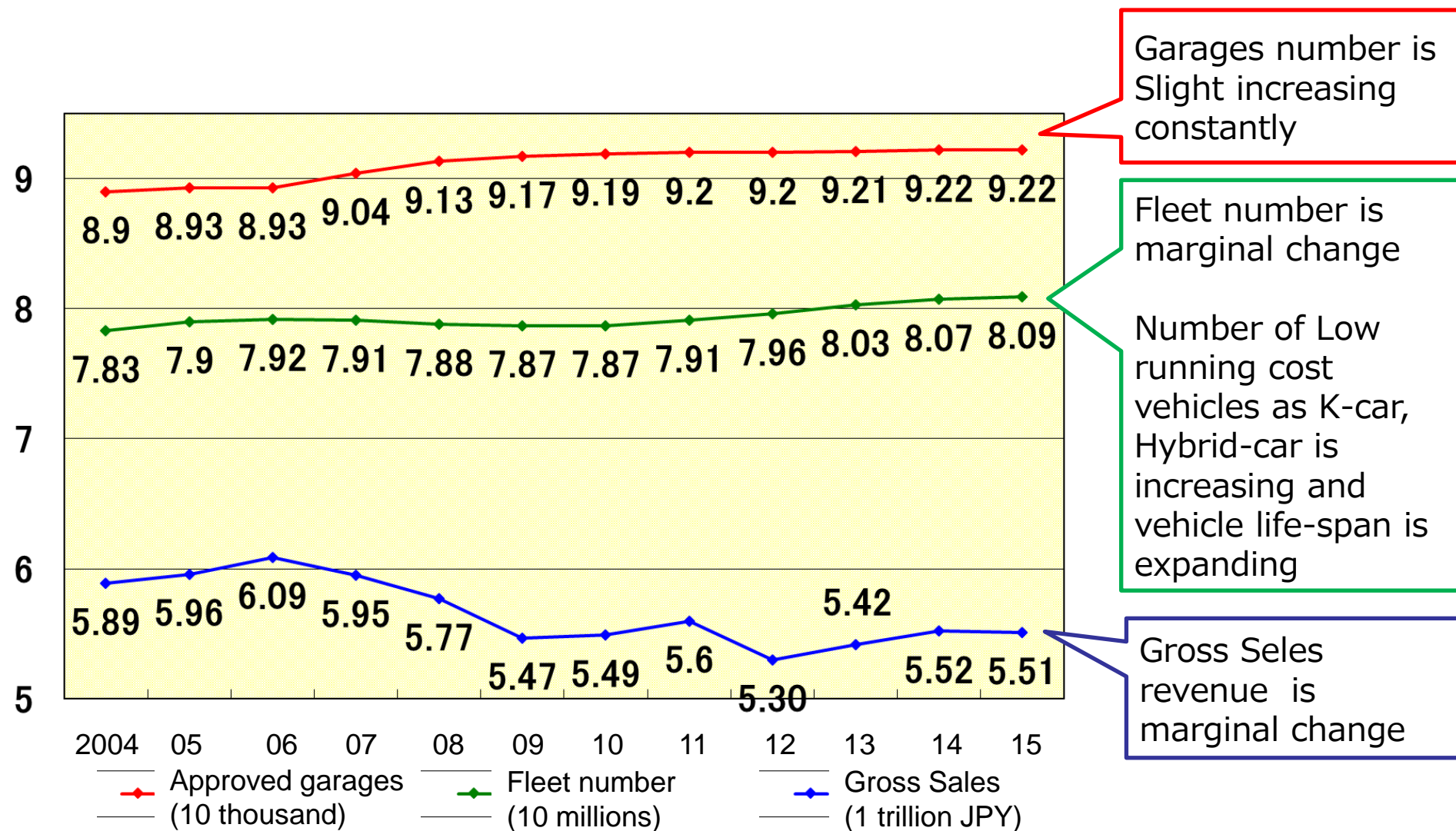
Inspection



Safety Regulation Conformity Certificate



Local MLIT Office

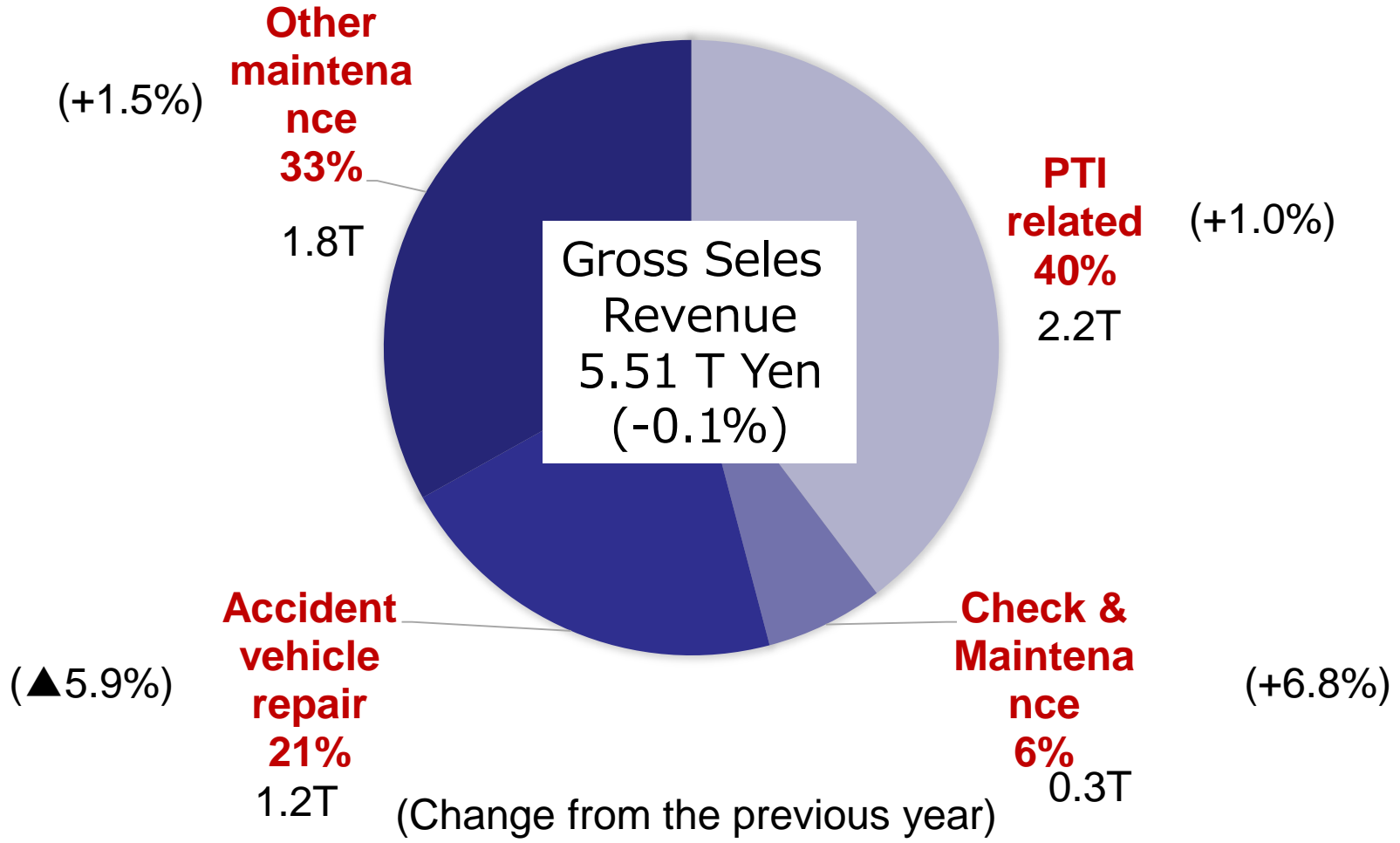




# Detailed Maintenance Sales Revenue

PTI related sales is the biggest sales category of the maintenance business, and brings stable demand.

Because of contact with vehicle users regularly, PTI has many opportunity of spreading for other business such as vehicle and goods sales and Insurances.

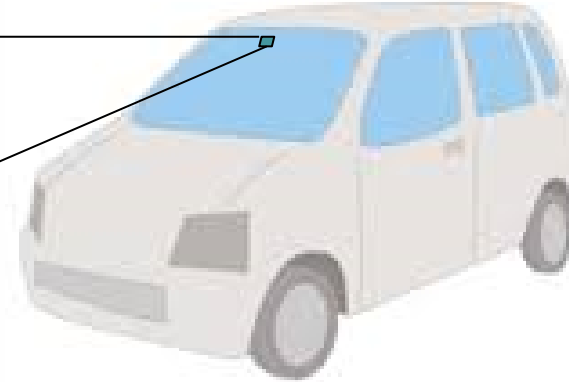


# Inspection badge and change

## Current badge



(3cm Square )



Vehicle which passed PTI, is required to attach an inspection badge on a windshield.

Badge make easy to check PTI expiration from the outside



## New badge

2017.1~



( 4 c m Square )

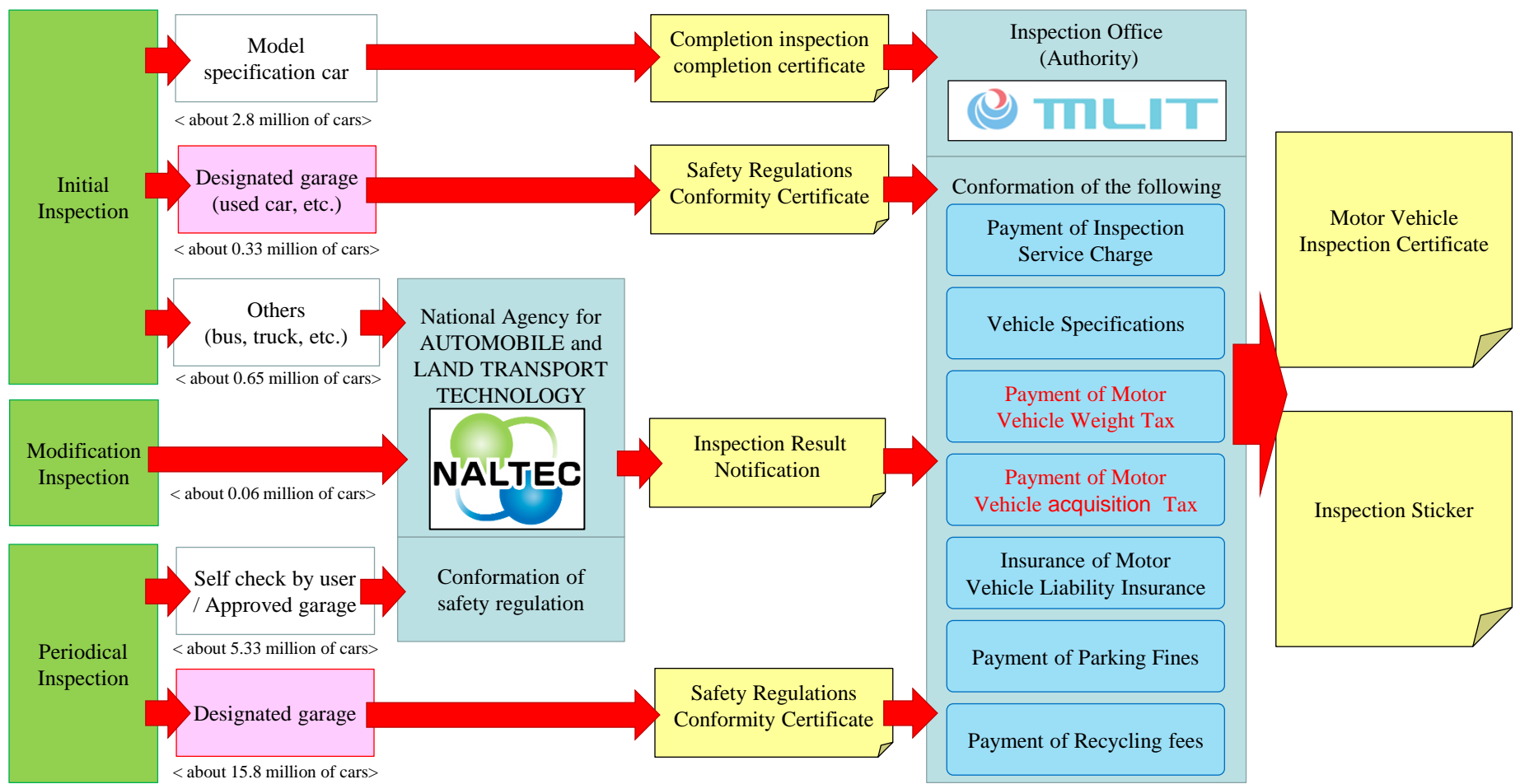
- Maximum size for Motor cycle
- The font and back-color for easy to distinguish from far away
- improve visibility by changing the placement of the number year by year



# Inspection of Motor Vehicles in Japan

- ◆ Inspection of motor vehicle is a system for checking conformity with Safety Regulations for Road Vehicles in order to keep the vehicles in a safe, pollution-free condition.
- ◆ No motor vehicle shall be used for operation unless it has undergone inspection conducted by MLIT and has been issued a valid Motor Vehicle Inspection Certificate according to Article 58 of Road Vehicles Act.

## Vehicle Inspection Flow



\*The amount of cars is as of 2014.

## - Private vehicles

### Eco-car tax reduction (vehicle weight and acquisition taxes)

Vehicle weight and acquisition taxes for eco-friendly vehicles are reduced respectively.

Requirements for tax reduction			Tax reduction rate	
	Exhaust gas performance	Fuel cost performance	Vehicle weight tax	Vehicle acquisition tax
Electric vehicles, fuel cell vehicles, plug-in hybrid vehicles, natural gas vehicles (10% reduction in exhaust gas regulations (NOx) in 2009☆), Clean diesel vehicles (conforming to exhaust gas standards in 2009)			Tax exemption (2nd vehicle inspection: tax exemption)*	Tax exemption
Gasoline-fueled vehicles, hybrid vehicles	75% CO <sub>2</sub> reduction (exhaust gas regulations in 2005) (☆☆☆☆)	Fuel cost standards in fiscal 2020 Achieved a rate exceeding 20%	75% tax reduction	80%tax reduction
		Fuel cost standards in fiscal 2020 Achieved a rate exceeding 10%	50%tax reduction	60%tax reduction
		Fuel cost standards in fiscal 2020 Achieved	25%tax reduction	40%tax reduction
		Fuel cost standards in fiscal 2015 Achieved a rate exceeding 10%		20%tax reduction
		Fuel cost standards in fiscal 2015 Achieved a rate exceeding 5%		

\* For vehicles registered/first inspected before March,2014: 50% reduction at 2<sup>nd</sup> vehicle inspection

Special exception period: From April 1, 2015 to March 31, 2017 (vehicle acquisition tax)

From May 1, 2015 to April 30, 2017 (vehicle weight tax)

### Greening special exception

Tax reduction of Vehicle tax for eco-friendly vehicles  
Tax increase for vehicle used for a certain period or longer






Requirements for tax reduction			Tax reduction rate
	Exhaust gas performance	Fuel cost performance	(For vehicles registered first inspected)
Electric vehicles, fuel cell vehicles, plug-in hybrid vehicles, natural gas vehicles (10% reduction in exhaust gas regulations (NOx) in 2009☆), Clean diesel vehicles (conforming to exhaust gas standards in 2009)			About 75% tax reduction
Gasoline-fueled vehicles, hybrid vehicles	75% CO <sub>2</sub> reduction (exhaust gas regulations in 2005) (☆☆☆☆)	Fuel cost standards in fiscal 2020 Achieved a rate exceeding 10%	About 50% tax reduction
		Fuel cost standards in fiscal 2015 Achieved a rate exceeding 20%	
Diesel vehicles used for longer than 11 years, gasoline-fueled vehicles used for longer than 13 years, etc.*1			About 15% tax increase (every year)

\* 1 Excluding electric vehicles, natural gas vehicles, gasoline-fueled hybrid vehicles, etc.

\* 2 About 10% for certain buses and trucks

Special exception period: From April 1, 2016 to March 31, 2017

# Example of ECO car incentives

	HV			PHV	
Vehicle	TOYOTA PRIUS 	HV Truck TQG-FC9J*A* 	HV BUS QRG-KV290*1 	TOYOTA PRIUS PHV DLA-ZVW35 	PHV BUS SDG-RR7JJCA改 
Price	Approximately ¥3,200,000	Approximately ¥4,500,000	Approximately ¥28,000,000	Approximately ¥3,000,000	Approximately ¥65,000,000
Grant	-	<b>For Commercial</b> ¥380,000	<b>For Commercial</b> ¥1,830,000	<b>For Private</b> 4.8万 <b>For Commercial</b> ¥1,000,000	<b>For Commercial</b> ¥32,500,000
Tax Breaks	¥152,800 (original: ¥162,800) (after: ¥10,000)	¥96,300 (original: ¥140,900) (after: ¥44,600)	¥438,000 (original: ¥606,300) (after: ¥168,300)	¥147,400 (original: ¥157,400) (after: ¥10,000)	¥1,215,500 (original: ¥1,222,500) (after: ¥7,000)

*Thank you for your attention!*