

This document is an English translation of an original Japanese document. If there are any discrepancies between this document and the original Japanese document, the original Japanese document prevails.

Subaru's Countermeasures to Prevent Recurrence of Nonconforming Final Vehicle Inspection Works (Summary)

1. Eliminate Nonconforming Final Vehicle Inspections

(1) Immediate halt the practice of Pre-Certification Inspectors conducting final vehicle inspections and using seals of other persons

Subaru Corporation ("Subaru"), in accordance with the report instruction by the Ministry of Land, Infrastructure, Transport and Tourism ("MLIT") on September 29, 2017, conducted an internal investigation. Such investigation revealed that, at Subaru, workers who were not yet officially certified as final inspectors ("Pre-Certification Inspectors") were conducting final vehicle inspections after they were judged by the onsite manager to have acquired sufficient knowledge and skills necessary to conduct final vehicle inspections for the relevant process ("Judgment of Having 100% Proficiency") and that when a Pre-Certification Inspector engaged in final vehicle inspections, such worker would use a spare seal lent to him/her by an officially certified final inspector.

On October 3, Subaru ceased assigning Pre-Certification Inspectors to the final vehicle inspection process on all final vehicle inspection lines. In addition, on October 6, Subaru destroyed all spare certification seals lent to Pre-Certification Inspectors, and prepared a ledger for more rigorous management of the use of the seals of final inspectors. Further, from October 6, the practice of final inspectors individually managing their own seals was discontinued, and all seals are being managed by foremen. A foreman stores, under lock and key, all seals of final inspectors under his/her supervision, and hands them out to each final inspector when starting work.

(2) Urgent Follow-up on Past Education Procedures

Since the report Subaru received from Nagashima Ohno & Tsunematsu (the "Report") finds inadequacies in education procedures as part of qualification standards for final inspectors and in education necessary for certification, Subaru held additional training for, and gave comprehension tests to, the final inspectors who had undergone such procedures. All of the relevant final inspectors passed the comprehension tests, confirming that they had the knowledge required of final inspectors.

(a) Education as part of qualification standards

Subaru's internal rules stipulate that persons not qualified as auto mechanics must complete the prescribed qualification training, which consists of taking classes on basic vehicle structure, and on vehicle inspection methods and practical training. According to the Report,

This document is an English translation of an original Japanese document. If there are any discrepancies between this document and the original Japanese document, the original Japanese document prevails.

the qualification training was implemented partially in education for workers new to the inspection sections, but such training was not carried out for the prescribed number of hours as required under internal rules.

The purpose of the above training is for candidates to acquire basic automotive knowledge equivalent to that required of a class 3 auto mechanic, and to gain a general understanding of inspection methods used by final inspectors and of Subaru's inspection processes and equipment. Subaru's internal rules stipulate that the number of hours for such training is 80 in total. About five days were allocated to such training, but it was not possible to confirm whether the qualification training was implemented for the prescribed number of hours, because the five-days-training included contents other than the prescribed qualification training and because no records were kept of the number of hours of qualification training.

As an urgent countermeasure, Subaru held additional training and comprehension tests for the 43 final inspectors not qualified as class 3 auto mechanics on the requisite qualification standards. The training and tests were held on December 7, 8, 9, 11, and 12.

(b) Education necessary for certification

The Report finds that education necessary for certification, regardless of whether a candidate has qualifications as an auto mechanic, was not necessarily sufficient, and Subaru implemented measures to address inadequacies.

(i) Education regarding laws and regulations relating to final inspection work

Education necessary for certification regarding laws and regulations relating to final inspection work was not carried out for the number of hours required for such education under internal rules. As an urgent countermeasure, Subaru held training and comprehension tests, focusing on understanding the role of the vehicle model designation system and the importance of final inspections as work mandated by the government. The training and tests were held on November 25, 27, and 28 and December 4, and were completed by the 291 final inspectors assigned to the final vehicle inspection process. The comprehension tests were designed to be as difficult as the final examinations that must be passed in order to be certified as a final inspector.

(ii) Education regarding internal rules for final inspection work and equipment and tools used for final vehicle inspection work

Education necessary for certification regarding internal rules for final inspection work and equipment and tools used for final inspection work was not carried out for the number of hours required for such education under internal rules. As an urgent countermeasure, Subaru held training and comprehension tests regarding internal rules for final inspection work and

This document is an English translation of an original Japanese document. If there are any discrepancies between this document and the original Japanese document, the original Japanese document prevails.

internal rules regarding equipment and tools used for final vehicle inspection work. The training and tests were held on December 7, 8, 9 and 11, and were completed by the 290 final inspectors assigned to the final vehicle inspection process. The comprehension tests were designed to be as difficult as the final examinations that must be passed in order to be certified as a final inspector, and had more questions than such final examinations.

(iii) Knowledge and understanding of final inspections

Instructions were given to reaffirm the importance of the vehicle model designation system and the role of final inspection work. The final inspectors were instructed that they must seriously and appropriately conduct final vehicle inspections. They were also instructed about the expected standards of conduct and knowledge and understanding of final vehicle inspection.

2. Improvement of Final Vehicle Inspection Procedures

The Report finds that Pre-Certification Inspectors were conducting final vehicle inspections and that such practice was not found in internal or external audits. To prevent recurrence of such matters, Subaru has implemented the following measures to clearly distinguish final inspectors from other employees and enhance the transparency of final inspection work.

(1) Stricter Management of the Final Vehicle Inspection Process

Since each final inspector reached the Judgment of Having 100% Proficiency for different processes, onsite managers decided the daily assignments of each final inspector to the final vehicle inspection process for which such inspector was qualified to take charge of, and record such assignment on a board in a form visible from outside. Having determined that it was necessary to thoroughly manage whether final inspectors reached the Judgment of Having 100% Proficiency for the relevant process, manage the seals of final inspectors and their use, and record such matters, Subaru created and now displays a list of processes that each final inspector is qualified to take charge of, which specifies each inspector's proficiency for each inspection process, together with a chart of daily assignments to final vehicle inspection processes. Before starting work each day, final inspectors assigned to inspection processes receive their seals from a foreman and affix the stamps of their seals on the final vehicle inspection process assignment chart. Displaying these charts enables third parties to check that final inspectors have been assigned appropriately, and leaves a record of such assignment. These measures were implemented on October 30.

(2) Clearer Distinction of Equipment and Facilities Used in Final Vehicle Inspection Process

Spaces used for final vehicle inspection process were distinguished from those for other processes by using "Kanban" boards. The paint colors of factory floors were changed to

This document is an English translation of an original Japanese document. If there are any discrepancies between this document and the original Japanese document, the original Japanese document prevails.

enable outsiders to more clearly distinguish spaces used for final vehicle inspections as notified to MLIT. For some spaces where both final vehicle inspection and assembly processes are carried out, paint colors different from the above are used to clearly indicate which processes are carried out in each part of the factory floors. These measures were implemented on November 27.

In addition, final inspectors continue to wear blue badges indicating “final inspector,” and the color of the caps and helmets worn by final inspectors was changed to red, enabling them to be distinguished even from a distance. These measures were implemented on November 27.

Only name plates of final inspectors used to be displayed at the entry to each final vehicle inspection process, and there were no ID photos in the plants. Subaru updated the name plates with ID photos of all final inspectors permitted to work on the relevant process, and such plates of the final inspectors working at the relevant process are displayed each day, so that anyone can check whether the process assigned to a final inspector matches the processes the relevant final inspector can take charge of. These measures were implemented on November 27.

In the interim, final vehicle inspection processes would be managed by more thoroughly tracking the processes each final inspector is qualified to take charge of and with the paper-based systems that final inspectors affix the stamps of their seals on the final vehicle inspection process assignment charts. In the future, Subaru will enhance the traceability of final vehicle inspection processes by replacing the current final inspector identification system using the name plates and ID photos and the current paper-based seal management with a new IT-based system utilizing biometrics and barcodes. Plans for the improved system will be developed by the end of March 2018.

In the future, improvement plans will be developed, which include the computerization of the finished vehicles quality assurance slips. Records of final inspectors such as training history and processes for which they are qualified to take charge of are currently managed in the factory floor workplace. In future they will be linked with HR systems in the aim of better management. In the long term, assembly processes will be modified so that final vehicle inspection processes will be separated from the assembly processes, and sufficient space will be secured for final vehicle inspection processes so that they are not affected by production changes. With these measures to eliminate the risk of final vehicle inspection work being conducted outside of the final vehicle inspection processes, Subaru aims to have optimal final vehicle inspection lines that reflect the importance of final vehicle inspection work.

This document is an English translation of an original Japanese document. If there are any discrepancies between this document and the original Japanese document, the original Japanese document prevails.

(3) Clearer and More Transparent Process for Pre-Certification Training

Employees under pre-certification training need individual guidance from trainers until they reach the Judgment of Having 100% Proficiency. To clarify such training processes, internal rules were revised to stipulate that, during the training period, a trainer formally certified as a final inspector must judge the trainee's proficiency, and only the trainer could use the seal. These measures were implemented on November 17.

Although the Report does not specifically address training methods, it was decided to adopt different cap/helmet colors and badges for trainees and certified final inspectors, enabling anyone to clearly distinguish trainees from certified final inspectors. These measures were implemented on December 4.

Training methods will be also altered to focus on off-line training in order to ensure transparency at the trainee stage. For tester lines, where training can only be conducted by using line facilities, test vehicles will be prepared specially for training purposes to provide for individualized in-line training. Specific training content will be considered, including the use of facilities on non-work days. In the long term, Subaru will consider constructing special facilities for training purposes.

3. Improve the Final Inspector Certification Procedures

(1) Review of Internal Rules regarding Certification for Final Inspectors

There were four (4) Pre-Certification Inspectors as of October 1, 2017. One of the reasons for this was the existence of internal rules that allowed for a self-serving interpretation at the factory workplace level.

Subaru's upper-level internal rules state, "Final inspectors shall conduct the final vehicle inspection processes for which they are responsible and bear responsibility for the assessment results," and it is stipulated that final vehicle inspections are to be conducted by, and remain the responsibility of, the final inspectors themselves. Based on these upper-level internal rules, the internal rules governing final inspectors certification procedures required as a certification standard, that each trainee shall engage in "support work" for the prescribed period of time, depending on whether qualifications as an auto mechanic were possessed and the type of qualification. Under Subaru's internal rules, however, the specific content of "support work" set forth in internal rules was not defined. Accordingly, it appeared that the scope of "support work", which was originally intended to be conducted under the supervision of a final inspector, was broadened and that operations were conducted on the premise that unsupervised final vehicle inspection work by Pre-Certification Inspectors was included within the scope of "support work."

This document is an English translation of an original Japanese document. If there are any discrepancies between this document and the original Japanese document, the original Japanese document prevails.

We have therefore incorporated the process of Judgment of Having 100% Proficiency, which used to be informal factory workplace rules, into internal rules as a formal procedure. In addition, we will clarify the scope of “support work,” and change the system so that records are kept in standardized training logs so that the department in charge can manage whether the requisite period of “support work” has been fulfilled.

Further, we codified as formal internal rules the placement of final inspectors to inspection lines and the recording and posting of a final vehicle inspection process assignment chart. The structure of internal rules regarding final inspectors will be further reviewed, including consultation with the MLIT, and we will work to revise them, including training, so that they align with the objectives of the final vehicle inspections system.

(2) Review of Final Inspector Certification

As a result of a thorough investigation, the Report found that, of the 291 final inspectors engaging in final vehicle inspections (total inspections and sampling inspections) as of October 4, 2017, 24 employees were certified upon completion of work processes other than final vehicle inspection that would be difficult to interpret as constituting “support work,” a requirement for certification. Accordingly, we have revoked the certifications of these employees. In addition, the Report found that three (3) employees did not fulfill the prescribed period of time for “support work.” The deficiencies regarding such requisite period of time is moot as of the present time because they are qualified as an auto mechanic.

We also at this time revoked the final inspector certifications of the employees who no longer engaged in final vehicle inspections. Going forward, we will narrow down the scope of “support work,” will not issue final inspector certification to employees who do not directly conduct final vehicle inspections, and will incorporate these changes into our internal rules.

(3) Enhanced Monitoring related to Appropriate Implementation of Final Examination

The Report found that at least in some of the final examinations there were inappropriate actions, including giving the final examination questions and answers to the test-takers in advance. Accordingly, for the abovementioned re-training comprehension test, we took appropriate measures that include having internal third-party departments (Internal Audit Dept., Legal Dept. and External Relations Dept.) serve as test monitors.

Regarding final examinations for certification in upcoming fiscal years as well, we will consider continuing appropriate measures such as third-party management and monitoring.

(4) Revisions to Training Curriculum and Certification Examination Content

Regarding training and education necessary for certification, we will clearly stipulate the

This document is an English translation of an original Japanese document. If there are any discrepancies between this document and the original Japanese document, the original Japanese document prevails.

number of hours in accordance with the training curriculum which we should teach, conduct comprehensive tests after training is conducted, and keep records of the training.

We reviewed the contents of past examination questions and found that they were too heavily weighted to questions focusing on memorization of detailed figures and terminology, and that as a percentage there were too few questions on understanding of the importance of the final inspection, such as the significance of the vehicle model designation system and the fact that final vehicle inspections are entrusted to us by the government.

Going forward, we will incorporate questions that gauge understanding of the significance and importance of final vehicle inspection and the vehicle model designation system, comprehension of internal rules related to the final vehicle inspection and of internal rules related to the equipment used in final vehicle inspections. We will revise the questions to make it possible to appropriately determine whether the trainee has acquired knowledge necessary for properly and accurately conducting final vehicle inspections. The training curriculum for final inspectors will incorporate contents as described above to enhance the recognition of the importance of final vehicle inspections and normative consciousness.

(5) Changing the Awareness of Final Inspectors

The Report found that there was insufficient understanding of the public interest in, and importance of, final inspection work and a factory floor culture of excessive focus on technical skills.

Although we recognize the importance of inspection skills at the final inspection work we will change the factory floor culture by making inspectors understand why it is necessary to acquire knowledge on laws and rules related to final vehicle inspections and on the equipment used for the final inspection through conducting repeated training on the public interest in, and importance of, final vehicle inspections as stated above.

4. Personnel Management for Final Inspectors

(1) More Stringent Management of Final Inspector Certification

Final inspectors are currently appointed by the General Manager of the Manufacturing Quality Control department and approved by the General Manager of the Quality Assurance department (Chief Inspection Engineer). Going forward we would consider having the Human Resources department handle the entire process to ensure that employees engaged in final vehicle inspections are properly managed.

(2) Rigorous Personnel Management for Final Inspectors

We will incorporate rules related to the creation of personnel plans specifically for final

This document is an English translation of an original Japanese document. If there are any discrepancies between this document and the original Japanese document, the original Japanese document prevails.

inspectors into Production Planning & Management department rules. Such plan will make it possible to secure adequate number of final inspectors for final vehicle inspection lines in accordance with these rules even if there is an abrupt change, etc. in production plans. This will be implemented beginning with production in January 2018.

5. Promotion of Company-wide Understanding of the Importance of Final Vehicle Inspections

As is indicated in the Report, there was the factory floor culture of excessive focus on technical skill at the factory workplace and insufficient respect for internal rules, through what may be called a self-serving interpretation, and plant executives and managers, and Head Office managers had for many years left final vehicle inspections up to the factory workplace. We recognize these as the root cause of the present situation and will conduct the following training and awareness-raising activities.

We will conduct company-wide training activities to communicate the importance of final vehicle inspections, which have been entrusted to us by the government, and enhance the understanding of employees. In addition, we will also incorporate the internal reporting system (compliance hotline) into the training and reinforce the ability to identify problems at the factory workplace. Such training enhancements will start with the aforementioned training for current final inspectors and will be steadily extended to all employees of the Gunma Plant.

In addition, we will mandate that all automobile-related executives and all related managers receive training on laws and regulations, and modify the training curriculum to include the significance of final vehicle inspection works, as well as the importance of the vehicle model designation system and of complying with the system.

Further, we will send continuous messages from top management on compliance overall, including final vehicle inspection system. The first message was a news bulletin dated November 10 that sought to raise the awareness of all employees. We will also create opportunities for Subaru executives to regularly make visits to the site of final vehicle inspection works to review how final inspections are conducted and will watch and monitor the progress of countermeasures to prevent recurrence overall.

6. Reinforcement of Organizational Systems Related to Final Vehicle Inspections

We will reinforce the effectiveness of the Quality Assurance department related to the final vehicle inspection works. Going forward, employees of the Quality Assurance department will make visits to the factory workplace and the functions of the department related to final vehicle inspection will be strengthened. We will establish a system whereby the department immediately implements corrective measures if inappropriate cases are discovered.

This document is an English translation of an original Japanese document. If there are any discrepancies between this document and the original Japanese document, the original Japanese document prevails.

Specifically, as of December 1, 2017, we removed the operation related to final vehicle inspections from the Quality Assurance section and created the new highly specialized Conformity Of Production (“COP”) Supervision section in order to reinforce the final vehicle inspection functions of the Quality Assurance department. The COP Supervision section is made up of personnel capable of formulating internal rules based on laws and regulations, who are well-versed in the practices of final vehicle inspections, and the operation related to final vehicle inspections were transferred to this section. Regarding the authority and roles of the section, it will handle systematic maintenance of internal rules, including maintenance of the training system and internal rules for final inspectors, as well as an auditing function for internal operation related to final vehicle inspections.

At the same time, we will change to a corporate culture that properly abides by its own rules by working to establish internal rules that incorporate the opinions of final inspectors at the factory workplace to ensure that such final inspectors can fully understand the rules and engage in the final vehicle inspections.

Further, as part of the background to this issue, we understand that in the process of formulating and revising rules at the factory workplace level, there was insufficient confirmation and understanding of related laws and regulations and related internal rules. Going forward, this new section will therefore verify the structure of internal rules related to final vehicle inspections and review whether consistency between internal rules are maintained. When it is necessary to review consistency with laws and regulations related to final vehicle inspections, the section will also review the applicable laws and regulations by utilizing outside resources, such as attorneys and consultants.

7. Reinforcement of Auditing System

As to the root cause of why final vehicle inspections were conducted by Pre-Certification Inspectors, the Report found that the supervisory and audit functions of internal management divisions were inadequate. Final vehicle inspections in the manufacturing process are the responsibility of the Manufacturing Quality Control department, and audits of the final vehicle inspection process are self-checks conducted on the reporting line by the Inspection Sections (which is the factory floor for the final inspectors). There was previously no record of audits being conducted on final vehicle inspections by a third party, except vehicle model designation audits, etc. conducted once every two years by the MLIT.

Therefore, in addition to the self-checks, going forward, we will build a multilayered audit system by which internal audits are conducted by the aforementioned new organization and audits are conducted by the Head Office’s Internal Audit Department. We will improve the relevant function including staffing of each lead management department so that this multilayered audit system is continually implemented.

This document is an English translation of an original Japanese document. If there are any discrepancies between this document and the original Japanese document, the original Japanese document prevails.

- Self-audits: Results of self-audits by the Manufacturing Quality Control department are reported to the Chief General Manager of the Quality Assurance Department after approval by the Chief General Manager of the Gunma Plant.
- Internal audits: Audits by the new organization in the Quality Assurance Department on the final vehicle inspection procedures
- Internal Audit Department audits: Audits by the Head Office's Internal Audit Department on the above self-audits and internal audits

Internal audits to date had audit items to confirm conformance, but going forward audit items will be added for identifying latent risks and will be conducted in combination with audits without advance notice. To identify latent risks, we will modify our audits method for example by narrowing audit items down to a single theme and conducting a penetrating audit on that theme. Regarding audit findings, they will be conveyed to the responsible department and the department will follow up on the creation and implementation of improvement measures. Audit findings will be summarized and reported by the Chief General Manager of the Manufacturing Division to the Automotive Business Execution Meeting.

8. Promotion of Communication between Factory Workplace and Managers and with Management Divisions

The Report found that information had not been appropriately shared in the Inspection Sections between “administrative workers” in the position of Section Chief or higher, who had no practical work experience on the factory floor, and this department’s factory floor workers in the position of Group Chief or lower, who had practical work experience. To correct this situation, Subaru will place two people at the Section Chief level for final vehicle inspections at the two factories. Regarding their roles, one will be tasked with management of the section overall and one will be responsible for incorporating the opinions of the factory workplace, and through this, we will improve communication between the factory floor employees and managers.

In addition, we will create increased opportunities for communication between the Quality Assurance Department, which establishes internal rules and submits reports to the MLIT, and the Manufacturing Quality Control department, which handles final vehicle inspections. Specifically, we will ensure that the status of the “factory floor” is accurately grasped, and that, if there are requests, they will be incorporated into internal rules in audits by the Quality Assurance Department of the Manufacturing Quality Control department, and in the process of giving feedback and following up on the findings.

9. Continuing Follow-up on Implementation of the Measures to Prevent Recurrence

This document is an English translation of an original Japanese document. If there are any discrepancies between this document and the original Japanese document, the original Japanese document prevails.

The above countermeasures to prevent recurrence will be achieved through the following system and shared with the entire company.

- Overall responsibility: Jun Kondo, Chairman (Chief Quality Officer), Subaru Corporation

Progress responsibility: Toshiaki Tamegai, Chief General Manager, Manufacturing Division (Chief General Manager, Gunma Plant). Overall responsibility for the implementation of countermeasures to prevent recurrence

- Progress control responsibility: Atsushi Osaki, Chief General Manager, Quality Assurance Department. Monitoring of implementation of countermeasures to prevent recurrence
- Reporting frequency/recipients: Reports will be made to the Automotive Business Execution Meeting every month and to the Board of Directors approximately every quarter.

*Plan to report to the MLIT once every three months.

[End]