ATTENTION:
GENERAL MANAGER ❑
PARTS MANAGER ❑
CLAIMS PERSONNEL ❑
SERVICE MANAGER ❑

IMPORTANT - All Service Personnel Should Read and Initial in the boxes provided, right.

SUBARU

QUALITY DRIVEN® SERVICE

SERVICE INFORMATION BULLETIN

APPLICABILITY: 2.0 / 2.5L FA and FB Engines

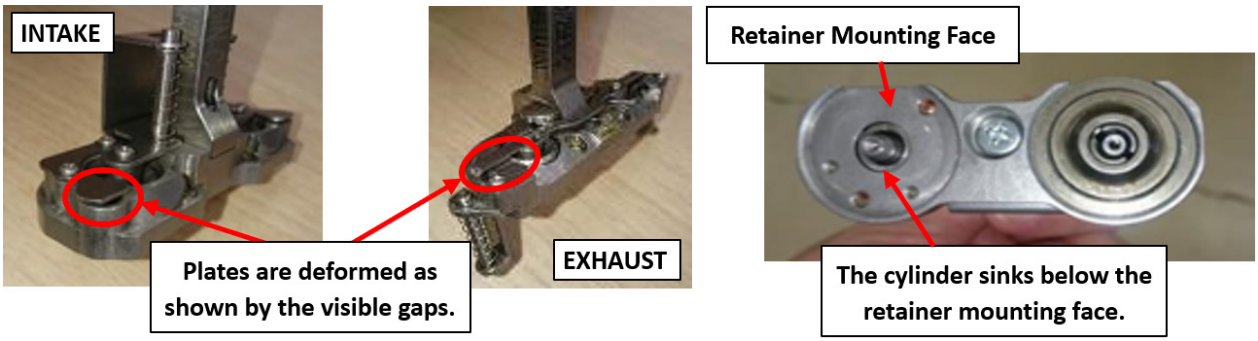
NUMBER: 14-25-20

SUBJECT: Valve Spring Replacement Tools - Service Parts Availability

DATE: 05/05/20

INTRODUCTION:

This Service Information Bulletin announces availability of enhanced service parts to repair and optimize durability of the valve spring replacement (installer) tools used to perform the WTY-84 recall. Commonly reported conditions are shown in the photos below.



PART INFORMATION:

Description	Part Number	Applicable Tool
INTAKE Spring Installer Repair Kit	99851AA200	2.0 / 2.5 IN-C
EXHAUST Spring Installer Repair Kit	99851AA210	2.0 / 2.5 EX-C

These new repair kits are available through the normal parts ordering channels.

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KIT CONTENTS:

INTAKE INSTALLER REPAIR KIT: **99851AA200**


PLATE


SPRING SET (4)


SCREW SET (4)


CYLINDER (2)


REINFORCING PLATE (2)

EXHAUST INSTALLER REPAIR KIT: **99851AA210**


PLATE (2)


SPRING SET (4)


SCREW SET (4)


CYLINDER (2)


SCREW SET:
(BLACK X1, SILVER X1)

SERVICE PROCEDURE / INFORMATION:

INTAKE (WHITE Paint Mark) Spring Installer Tool Repair Procedure Using Kit p.n. 99851AA200:

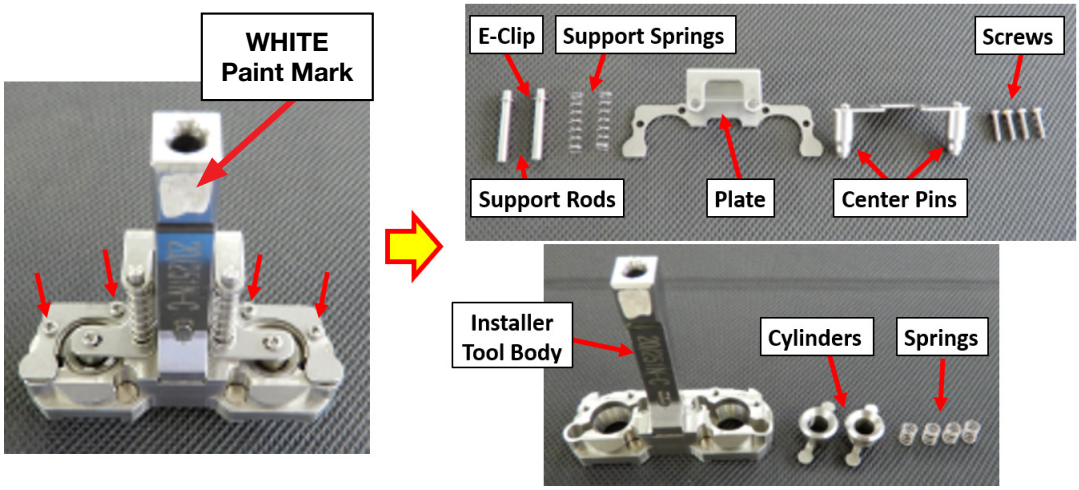
- The original cylinders, springs and plate (with minor deformations) can be straightened and reused although, new parts are included in the kit to use when required.
- Instructions for how to straighten / repair the components are described below.
- Select the appropriate repair procedure according to the installer tool component conditions.
- Store any unused new repair parts in a safe place for future use as necessary.

(1) Disassembly of the INTAKE Spring Installer Tool:

(a) Remove the 4 Philips screws and disassemble the INTAKE installer tool.

CAUTIONS:

- Be careful not to lose the support rods their support springs or cylinder springs.
- Do not remove the E-clips from the support rods.



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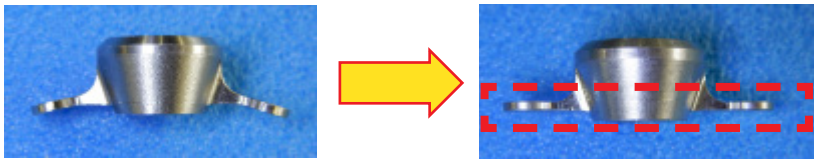
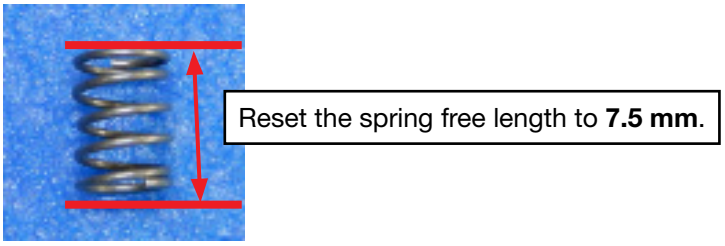
(b) IMPORTANT NOTE: When reusing a removed cylinder, spring and / or plate, perform the repairs below following the applicable procedure below before reassembly.

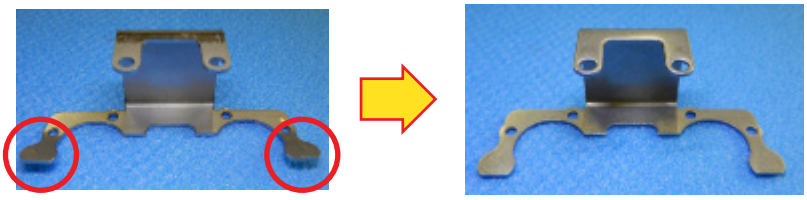
- **Repairing the Cylinder: CAREFULLY** straighten the cylinder as shown in the figure below using pliers, etc. so the "ears" are horizontal, parallel to each other and not twisted. Both ears are bent on the left photo and shown after straightening on the right.



- **Repairing the Spring: CAREFULLY** correct the deformation and reset the length. The length must be adjusted to a free length of 7.5 mm or replaced if the deformation cannot be corrected.



- **Repairing the Plate: CAREFULLY** straighten any bent end tabs using pliers or an equivalent tool. Place the plate on a flat surface to confirm it does not rattle which would be an indicator it may still be slightly bent.



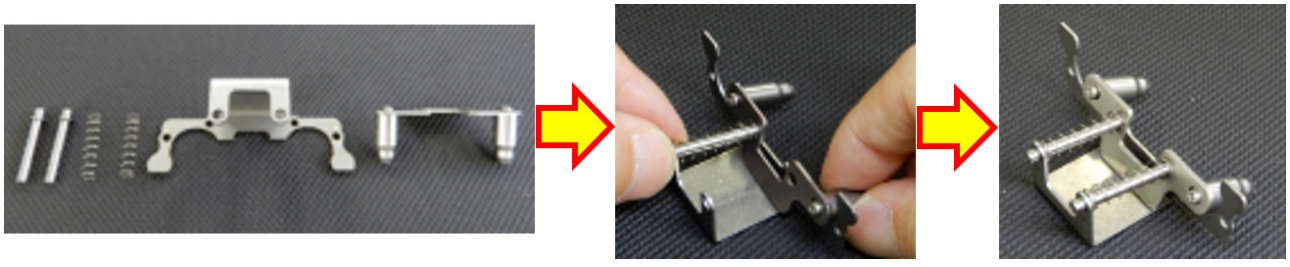
(2) Reassem**bly of INTAKE Spring Installer Tool**:

(a) Confirm all components are thoroughly cleaned before beginning reassembly.

(b) Reassemble the center pins, support rods and support springs as shown in the sequence below into the "plate sub-assembly".

CAUTION:

- When reusing the 2 center pin retaining screws, check for dirt, oil or any debris on the screw threads and clean as necessary before installation. Replace any screws with damaged threads.



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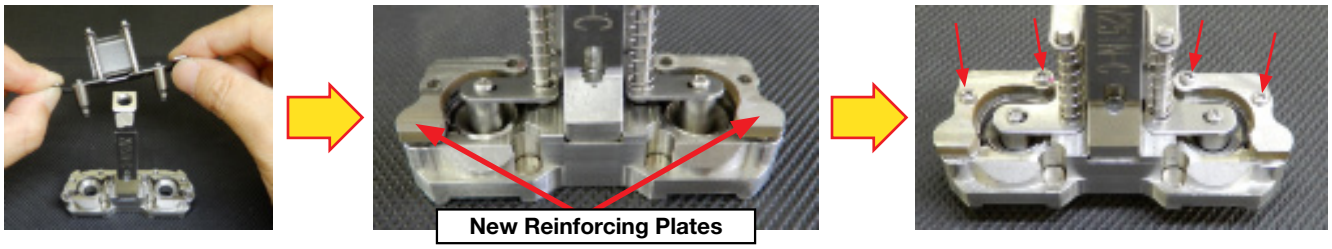
(c) Set the plate sub-assembly back in place on the tool body. Place the 2 new reinforcing plates from the repair kit into their positions as shown below. Secure them to the installer tool body using the 4 new screws included in the kit but do not fully tighten them until after confirming both support rods are installed in their proper positions.



VERY CRITICAL NOTES:

As a result of these repairs, tool strength is improved by installation of a reinforcing plate to prevent tool deformation (INTAKE installer only). Therefore, if proper procedures are not followed such as reversing the installation direction of the keepers, downward force on the intake valve(s) can overcome the air pressure pressurizing the cylinder. This may cause the valve to open allowing air to leak which can result in an increased risk of the intake valve dropping into the cylinder. To avoid this, always pay close attention to the installation direction of the keepers, along with the setting positions of the spring retainer and the valve springs whenever performing this procedure.

Both the intake and exhaust ("C") spring installation tools are commonly damaged by improper alignment of either the tool to the spring and retainer or the spring and steel valve spring seat not properly seated down onto the cylinder head / valve guide boss. Often, both are misaligned. Always TAKE THE TIME to ensure these components are properly aligned before using either "C" spring installation tool to compress the spring pair assembly.

EXHAUST (GREEN Paint Mark) Spring Installer Tool Repair Procedure Using Kit p.n. 99851AA210:

- The original cylinders, springs and plates (with minor deformations) can be straightened and reused although, new parts are included in the kit to use when required.
- Instructions for how to straighten / repair the components are described below.
- Select the appropriate repair procedure according to the installer tool component conditions.
- Store any unused new repair parts in a safe place for future use as necessary.

(1) Disassembly of the EXHAUST Spring Installer Tool:

(a) Remove the 4 Philips screws and disassemble the EXHAUST installer tool.

CAUTIONS:

- The push rod mounting screws may be difficult to loosen as a thread locking agent is applied to them during tool assembly. If so, secure the push rod in a vise and **CAREFULLY** remove the screws.

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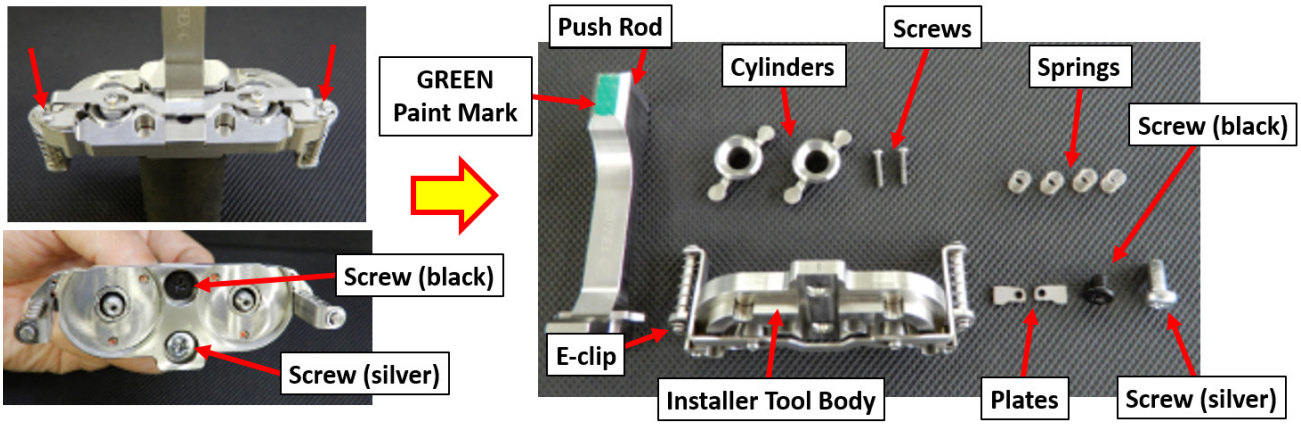
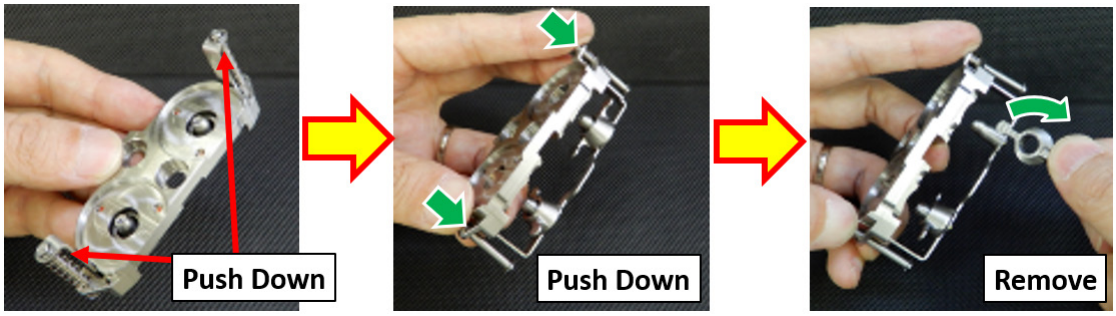
- When securing the push rod in a vise, always protect it with a clean cloth to prevent damage.
- Be careful not to lose the support rods, their support springs or cylinder springs during disassembly.
- Do not remove the E-clips from the support rods.



- To remove the cylinders, push down the right and left support rods to gain clearance.



(2) Reassembly of EXHAUST Spring Installer Tool:

(a) Confirm all components are thoroughly cleaned before beginning reassembly.

(b) **IMPORTANT NOTE:** If repairing and reusing the cylinders, springs and / or the plates, repair them in the same manner as described in the INTAKE installer tool instructions (Step 1b) above before starting reassembly.

(c) Reassemble the EXHAUST installer tool in reverse order of disassembly. Always be careful to not mix up the black and silver push rod screws at reassembly.

CAUTION:

- When reusing the 2 center pin or plate retaining screws, check for dirt, oil or any debris on the screw threads and clean as necessary before installation. Replace any screws with damaged threads.

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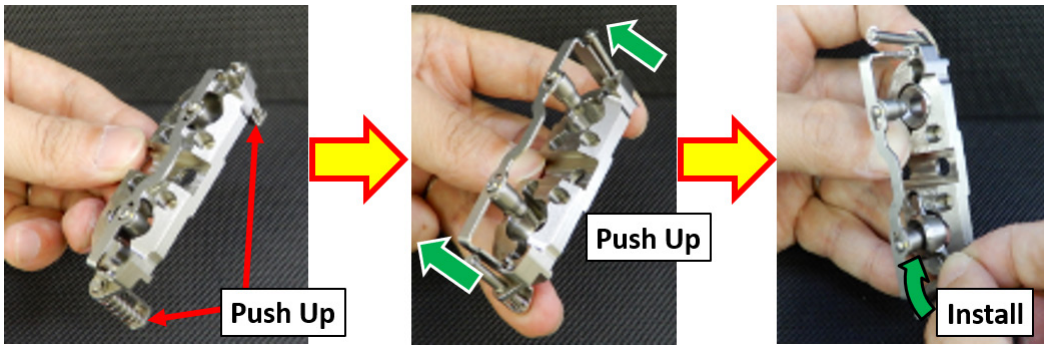
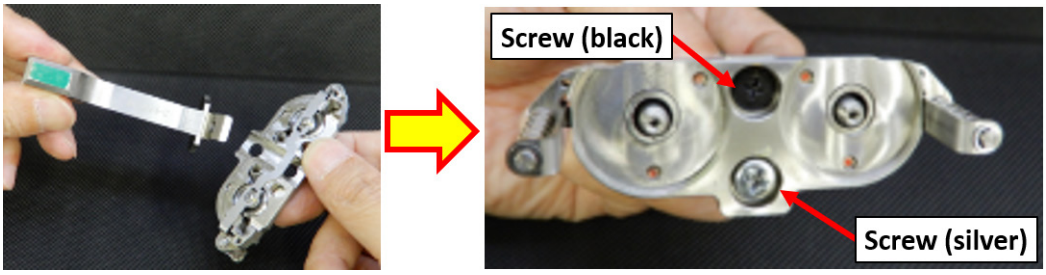
(d) Re install the cylinders by pushing up on both support rods to gain the necessary clearance.



(e) After confirming both screws are in the proper holes remove one at a time and apply blue (medium strength) thread locker to each before final installation and tightening.



IMPORTANT REMINDERS:

- SOA strongly discourages the printing and/or local storage of service information as previously released information and electronic publications may be updated at any time.
- Always check for any open recalls or campaigns anytime a vehicle is in for servicing.
- Always refer to STIS for the latest service information before performing any repairs.