

# PARTS & SERVICE NEWS

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**SUBJECT:** INTRODUCTION OF THE IMPROVED VALVE MECHANISM PARTS FOR DURABILITY

**PURPOSE:** To introduce improved parts with increased durability for use with  $\phi$ 140 type engines

**APPLICATION:**  $\phi$ 140 Type engines  
(Include 12V140)

**FAILURE CODE:** A420CA

**DESCRIPTION:**

1. Introduction

This Service News will introduce an improved lever ass'y for use at the time of overhauling, which is effective to increase the parts life of the cam shaft and the roller.

Therefore, use the new parts for parts replacement when making overhauls of the engines.

2. List of parts

Part No.	Part Name	Q'ty	Remarks
6210-41-2011 (6210-41-2010)	Lever Ass'y (Lever Ass'y)	6 (6)	12 pcs. are necessary in case of 12 V  } Component parts of 6210-41-2011
6210-41-2341 (6210-41-2340)	Roller (Roller)		
6210-41-2351 (6210-41-2350)	Pin (Pin)		

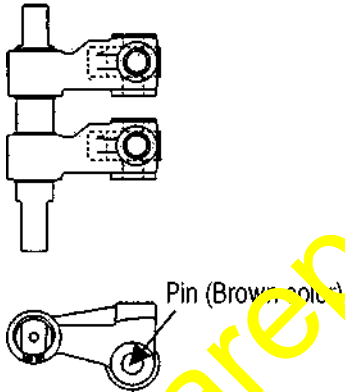
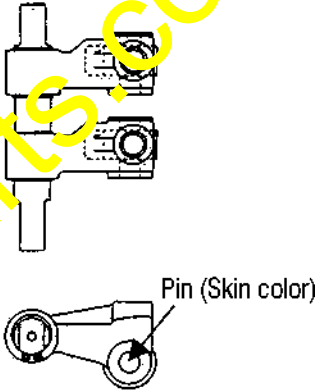
3. Details of the modification

(1) Modification of the roller

By changing the outer shape of the roller, the contact surface pressure with the cam shaft has been reduced and the parts life of the cam shaft has been increased.

(2) Modification of the pin

By changing the material of the pin, the wear resistance of the pin has been improved. (Since the backlash of the roller by worn pin will be reduced, the parts life of the cam shaft will be increased.)

Part name	New part	Current part
Lever ass'y	<p>6210-41-2011</p>  <p>Pin (Brown color)</p>	<p>6210-41-2010</p>  <p>Pin (Skin color)</p>
Roller	<p>6210-41-2341</p> <p>Improved parts with reduced bearing pressure</p>	6210-41-2340
Pin	<p>6210-41-2351</p> <p>High strength brass</p>	<p>6210-41-2350</p> <p>Free-cutting phosphate bronze</p>

4. When replacing these parts

When replacing the aforementioned parts at the times of overhauling, etc., refer to the Engine Shop Manual.

(The installation method for the lever ass'y is the same as that for the current lever ass'y.)