PARTS & SERVICE NEWS

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This PARTS & SERVICE NEWS supersedes the previous issue AA00225 dated November 15, 2000. Thus the previously issued Parts & Service News should be discarded.

SUBJECT: IMPROVEMENT OF HYDRAULIC OIL COOLER SYSTEM

PURPOSE: To introduce a modification procedure to prevent hydraulic oil cooler failures.

APPLICATION:
WA800-2 Wheel Loader Serial Number 10501 and up
WA800-2L Wheel Loader Serial Number A20001 through A20019
WA800-2LC Wheel Loader Serial Number A20020 through A20028
WA800-3 Wheel Loader Serial Number 50001 and up
WA800-3LC Wheel Loader Serial Number A50001 through A50012
WA900-1 Wheel Loader Serial Number 10001 and up
WA900-1L Wheel Loader Serial Number A20001 through A20007
WA900-1LC Wheel Loader Serial Number A20008 through A20024
WA900-3 Wheel Loader Serial Number 50001 and up
WA900-3LC Wheel Loader Serial Number 50001 through 50007

FAILURE CODE: 036010

DESCRIPTION: Air cooled oil coolers may have oil leakage on the upper or lower part of the tank due to hydraulic oil pressure spikes causing cracks in the bottom of the tubes. This Parts & Service News introduces replacement parts which will prevent oil pressure spikes from reaching the oil cooler.

Detailed changes:

1. Replace current 33MM reducer flange with a 14MM flange at the return port of the steering valve.
2. Replace solenoid valve to reduce oil flow from 16.8L/min. to 10L/min.
3. Replace the controller to change the software.
   - Eliminate modulation command (improve response time)
   - Eliminate electric current spike
   - Change neutral switch signal detection
   - Modify output current map

PREPARATIONS FOR WORK

IMPORTANT: Please observe all safety and precautionary standards as dictated by the environment and work conditions under which the equipment will be inspected, reworked, and repaired. Consult the "Shop Manual" for the model you are working on and your Komatsu district service manager with any and all questions regarding safety.

1. Park the machine on a flat level surface, lower the boom and bucket to the ground. Shut off the engine and cycle the controls to remove any residual hydraulic pressure from the boom and bucket circuits. Fully apply the parking brake.
2. Place chocks at the front and rear of all wheels to prevent the machine from moving.
3. Install the safety bar on the machine.

4. Remove the key from the start switch and retain it until the repairs are complete. ALWAYS attach the WARNING TAG to the steering wheel or control lever in the operator's cab to alert others that you are working on the machine. These tags are available from your Komatsu distributor. (Part No. 09963-03000)
5. Refer to the appropriate Shop Manual for general tightening torques and general disassembly and assembly procedures.
6. After the modifications have been performed, check the hydraulic fluid level.

1. List of Parts

These parts are required for the modification procedures that follow:

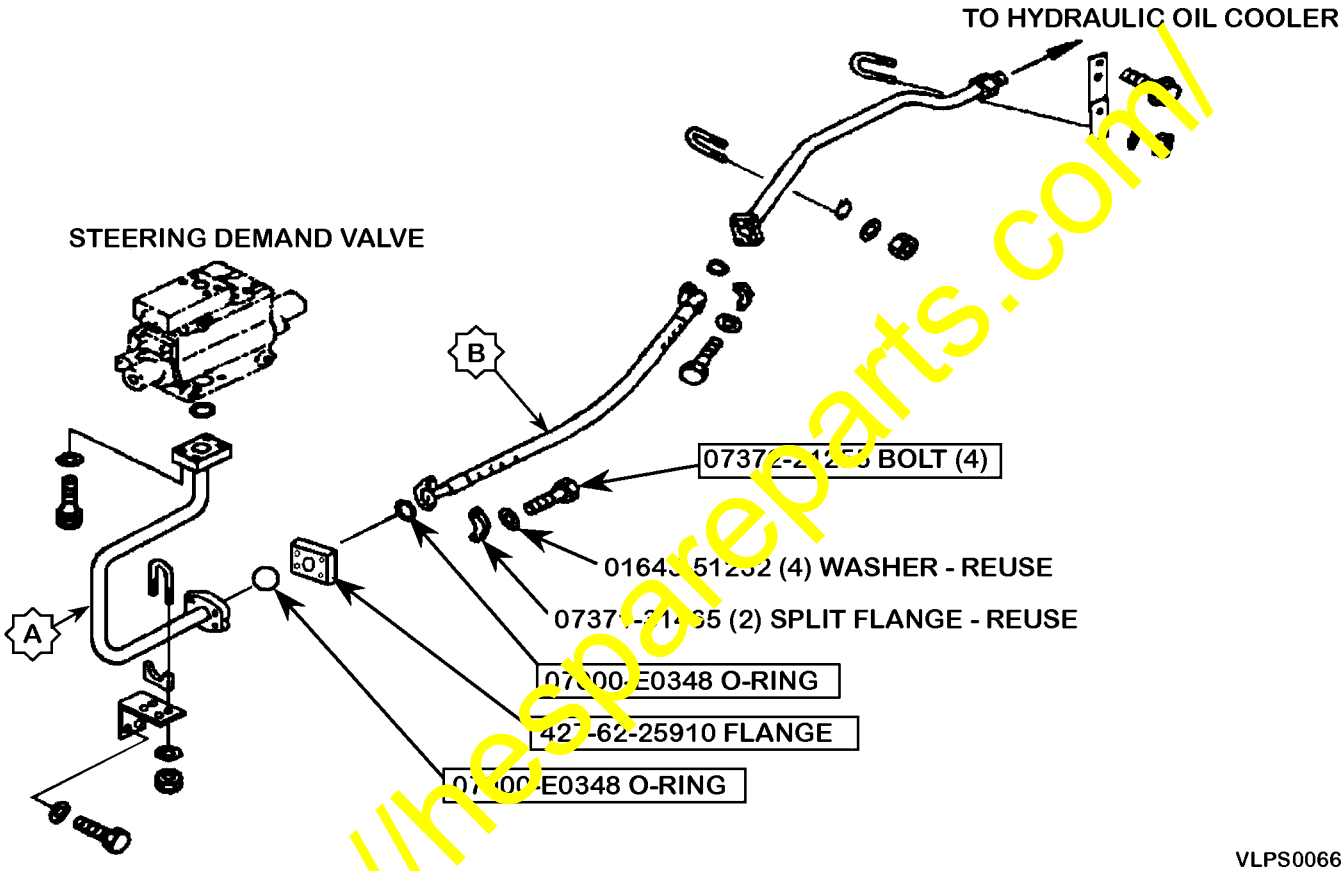
Part Number	Description	Qty.	Notes
01252-40550	Bolt	4	Solenoid valve
01643-51232	Washer	4	Flange (backup)
07000-B1103	O-ring	1	Solenoid valve
07000-E3048	O-ring	2	Flange/hose
07372-21255	Bolt	4	Flange
42660-21100	Valve, Solenoid	1	
42762-25910	Flange	1	
427-S33-1920	O-ring	4	Solenoid valve
7823-48-5002	Controller	1	Used with WA800-2, WA800-2L, WA800-2LC, WA900-1, WA900-1L, and WA900-1LC
	OR		
7823-18-1003	Controller	1	Used with WA800-3, WA800-3LC, WA900-3, and WA900-3LC

The following procedure is for both styles except where noted.

2. Modification Procedure

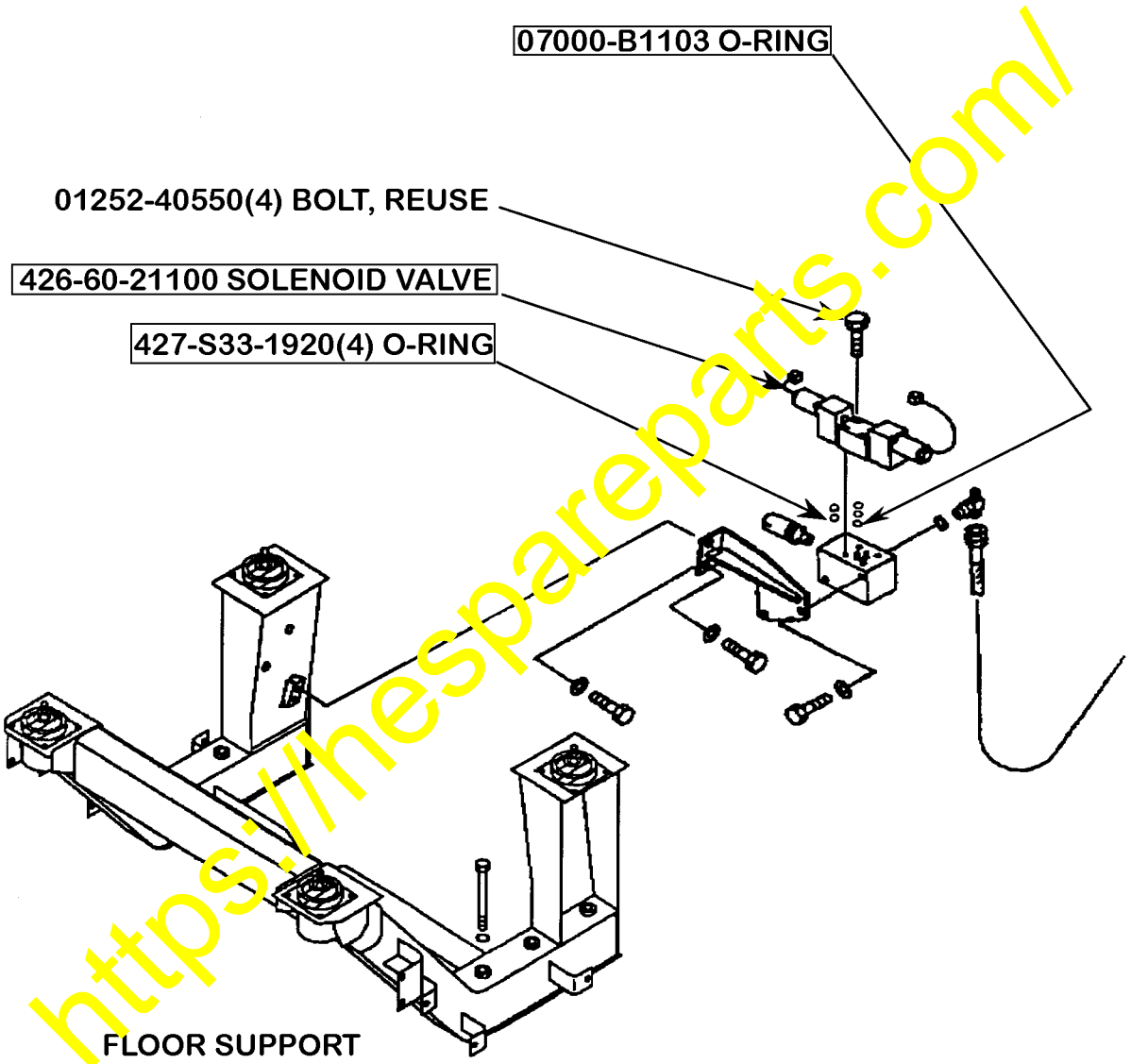
A. Add the flange into the return line of the steering valve piping.

a. Disconnect hose B from tube A.
b. Install the new o-ring on the flange, install flange then reassemble hose B to tube A. Reuse existing split flanges and washers with new bolts for hose installation.

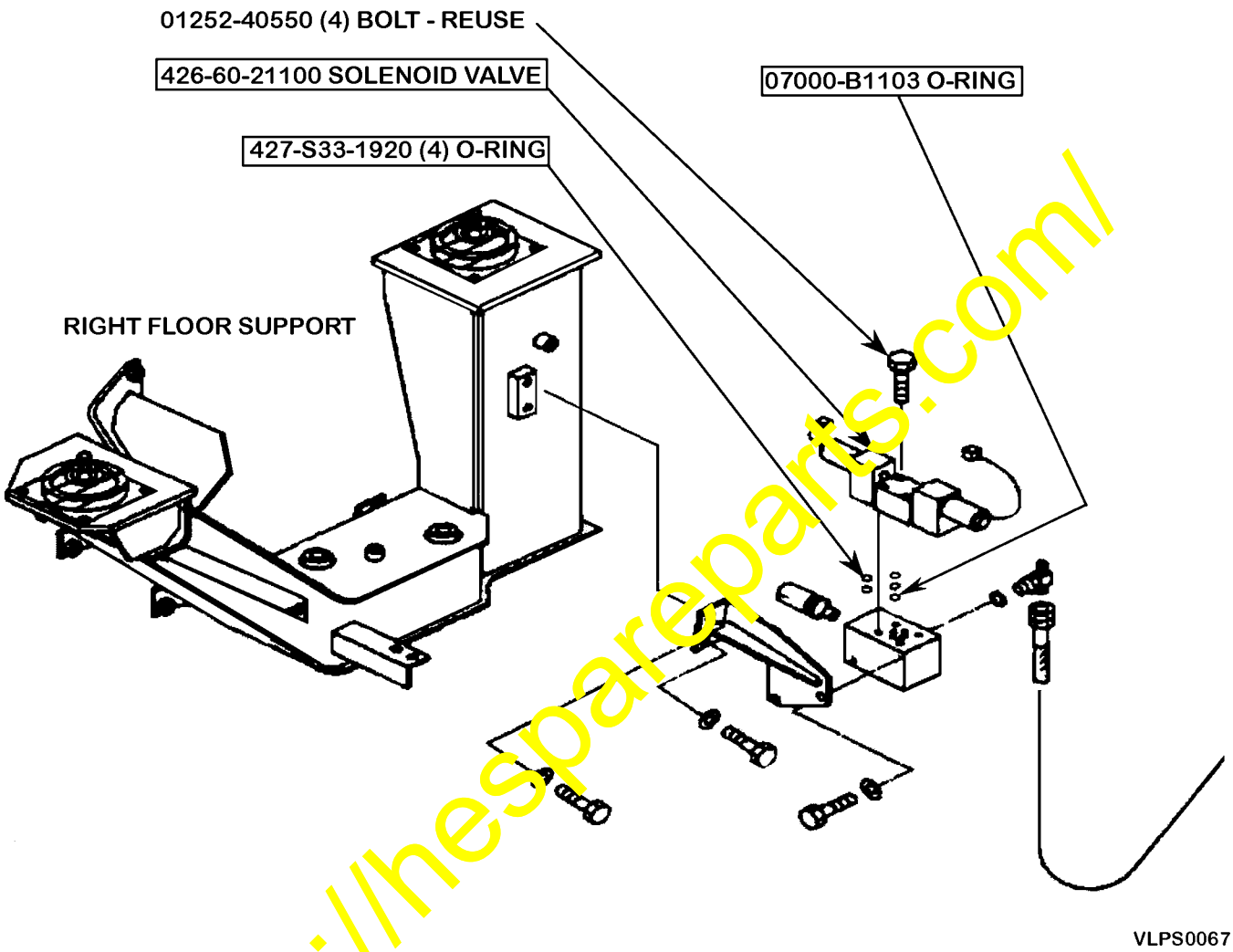


B. Replace the solenoid valve.
   a. Disassemble and remove the existing solenoid valve assembly (427-S33-1911).
   b. Install new solenoid valve (426-60-21100) using o-rings (427-S33-1920 and 07000-B1103) and bolts (01252-40550).

THE FOLLOWING ILLUSTRATION IS FOR THE WA800-2, WA800-2L, WA800-2LC, WA900-1, WA900-1L, andWA900-1LC.

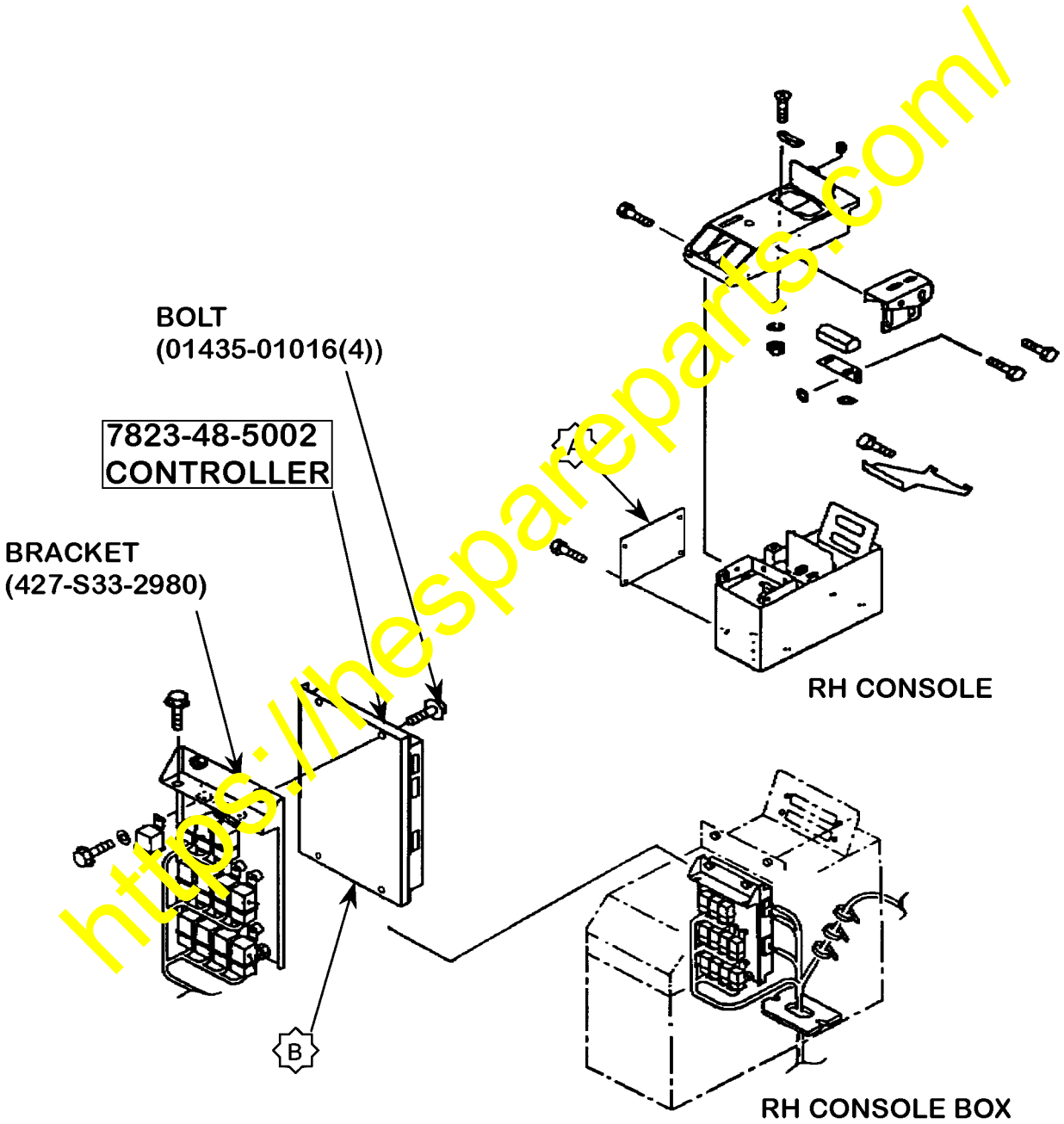


THE FOLLOWING ILLUSTRATION IS FOR THE WA800-3, WA800-3LC, WA900-3, and WA900-3LC.



C. Replace the controller.
   a. Remove cover A from right console box in cab.
   b. Remove the existing controller (7823-18-1002) from bracket B in the right console box.
   c. Install the new controller (7823-18-1003). Use existing hardware.
   d. Install cover A to the right console box.

THE FOLLOWING ILLUSTRATION IS FOR THE WA800-2, WA800-2L, WA800-2LC, WA900-1, WA900-1L, andWA900-1LC.



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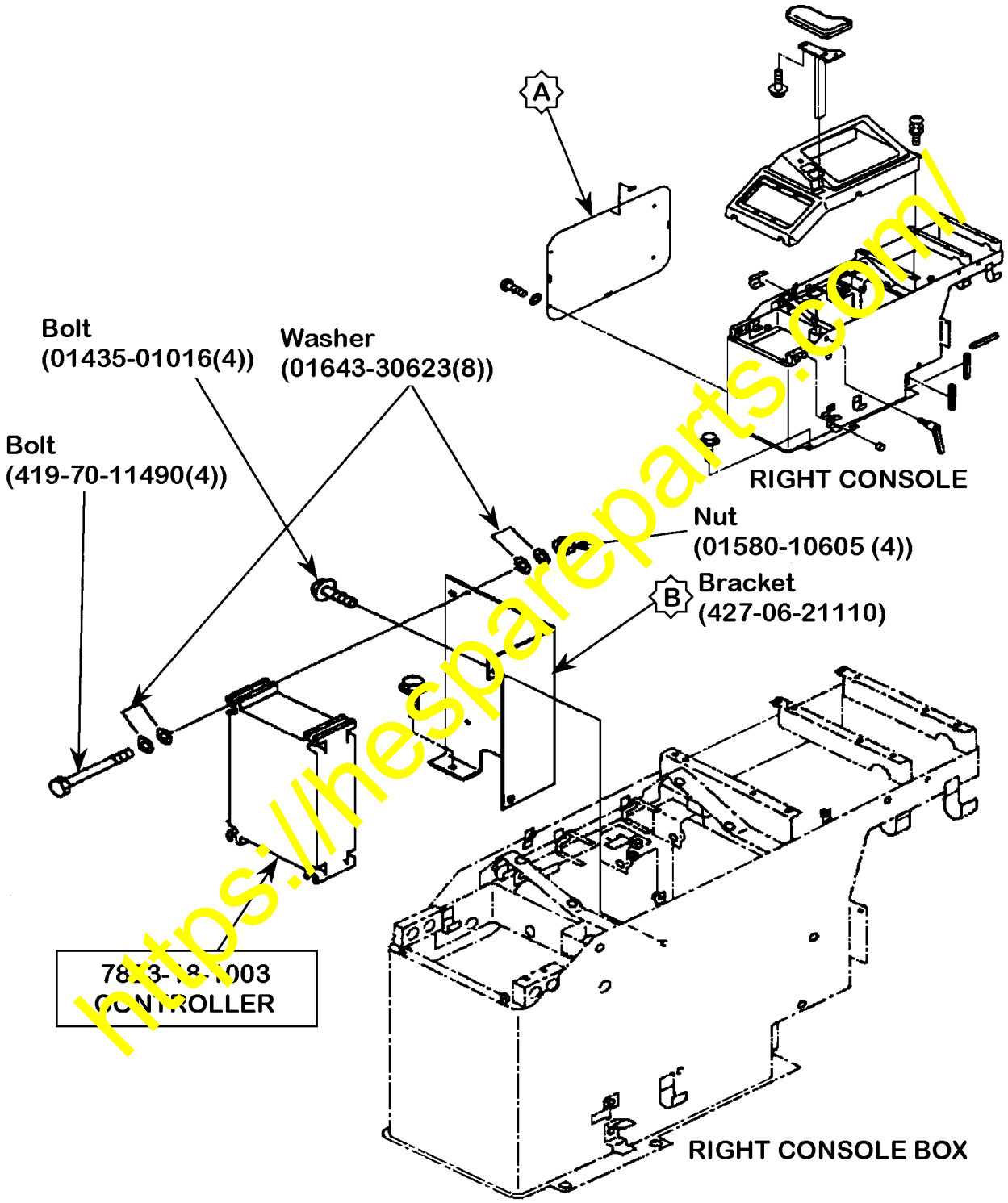
THE FOLLOWING ILLUSTRATION IS FOR THE WA800-3, WA800-3LC, WA900-3, and WA900-3LC.



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D. Performance test after the modification

After the modification, confirm steering performance according to the following criteria:

Item	Test Condition	Units	Engine Setting	Value
Lock to lock steering wheel operating time	• Hydraulic oil temperature: 45-55° C (113-131° F) • Vehicle on level, flat, and dry surface	sec.	Low idle	6.8 max.
			High idle	5.0 max.

NOTE: If the above values are not met using the joystick steering, readjust the joystick steering lever potentiometer and neutral detection switch per the appropriate Shop Manual - Section 20.