

# PARTS & SERVICE NEWS

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(C) Page 1 of 4	

**SUBJECT:** INTRODUCTION OF O-RINGS ASSEMBLY KIT ON TRANSMISSION ECMV

**PURPOSE:** To introduce newly registered O-rings as spare parts to use for transmission ECMV

**APPLICATION:** HD255-5 Dump Tracks  
 WA500-3 Wheel Loaders  
 PW128UU-1 Hydraulic Excavators } All Serial Numbers

**FAILURE CODE:** 15S1AA

**DESCRIPTION:**

1. Introduction

This Service News will introduce newly registered O-rings which are component parts of the ECMV ass'y, as spare parts to use for repair of oil leakage from the O-ring section of the transmission ECMV ass'y or when overhauling is being made.

2. List of parts

Part No.	Part Name	Q'ty	Remarks
712-85-16510	O-ring	1	
712-85-16520	O-ring	1	
712-85-16530	O-ring	1	
712-85-16140	O-ring	1	

The above parts are the spare O-rings applicable to:  
 ECMV ass'y 712-85-15301 and 711-85-16301 for the HD255-5  
 ECMV ass'y 711-85-16101 for the WA500-3  
 ECMV ass'y 21J-15-15101 for the PW128UU-1

3. Locations of the O-rings

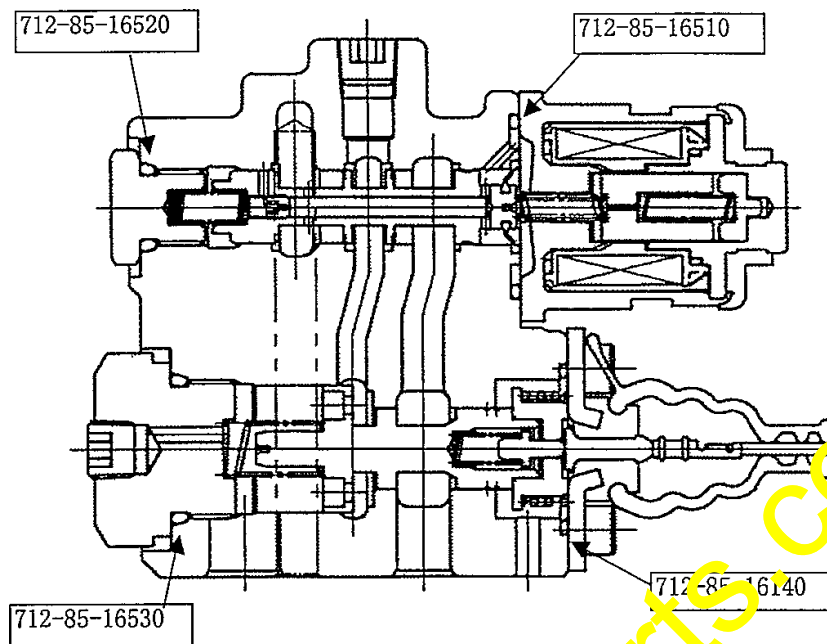


Fig. 1 Cross sectional view of the ECMV ass'y

4. Replacement procedure for the spare O-ring

- (1) The performance of the ECMV ass'y is being guaranteed by most appropriate combinations and selections of the internal parts before shipment from the factory. Therefore, if any other parts than the O-rings are replaced, the performance of the ECMV ass'y becomes imperfect and speed shifting shocks and time lags will occur. So, never replace any other parts than the O-rings. When it becomes necessary to replace other parts than the O-rings, replace the complete ECMV ass'y.
- (2) To reassemble the disassembled sections, tighten them with the following tightening torque:

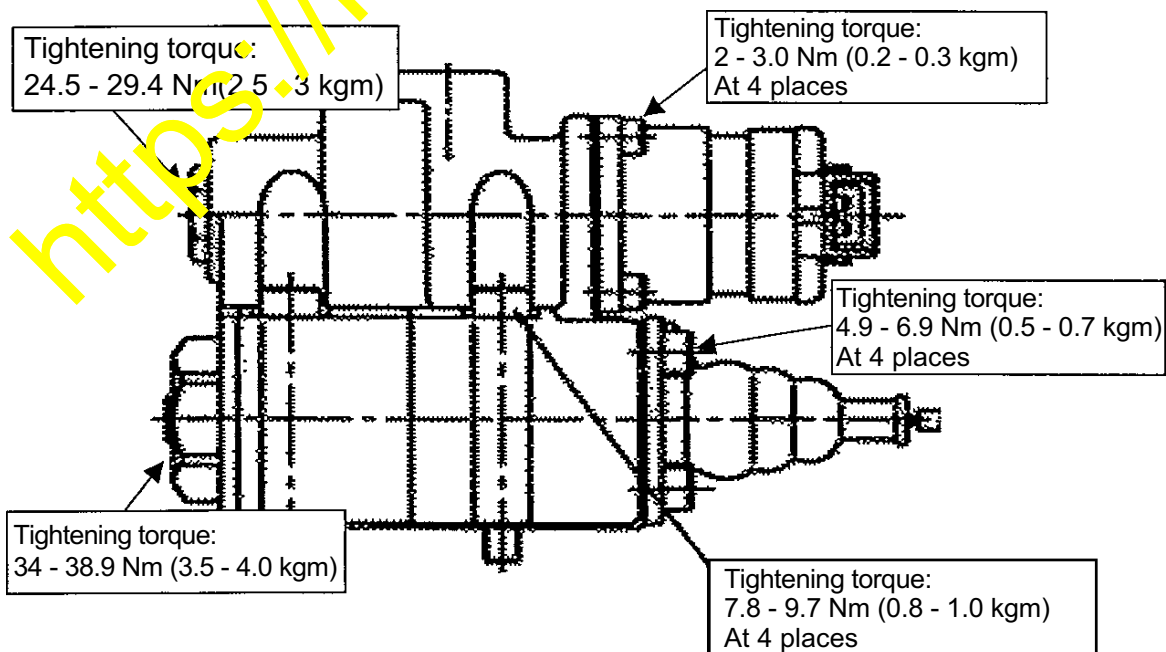


Fig. 2 Sketch drawing of the ECMV ass'y

## 5. Others

Refer to the following explanations regarding the method to prevent occurrence of entry of foreign substance when replacing the ECMV.

## [Removal]

- (1) Before removing the ECMV, wash the area of the ECMV completely using a spray detergent and, after that, blow off the dirt by use of an air nozzle.
- (2) Disconnect the connectors of the wire harness connecting to the ECMV which is to be replaced. When disconnecting the solenoid side connector, a certain skill is necessary and refer to Fig. 3 indicated below and to the given explanations.  
When disconnecting the fill switch side connector, pull it away while pushing the projection positioned in the central section with a finger.  
(Note) If you pull the harness wire with force, the connector may be broken.
- (3) Loosen the four mounting bolts of the ECMV and remove the ECMV from the valve seat. (Refer to Fig. 4.)

While joggling toward the directions marked "A", pull it out toward the direction marked "B".

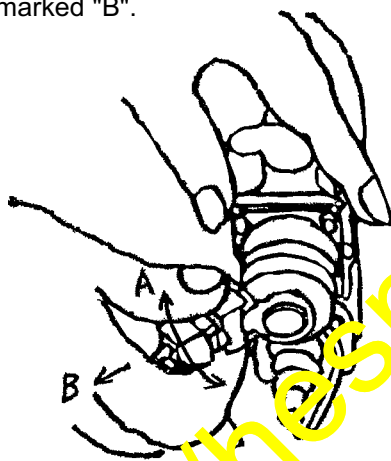


Fig. 3

How to disconnect the solenoid side connector

Mounting bolts at 4 places:  
Tightening torque: 7.8-9.8 N·m  
{0.8 - 1.0 kgm}

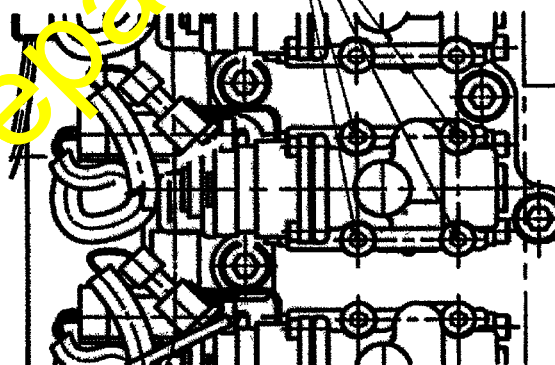
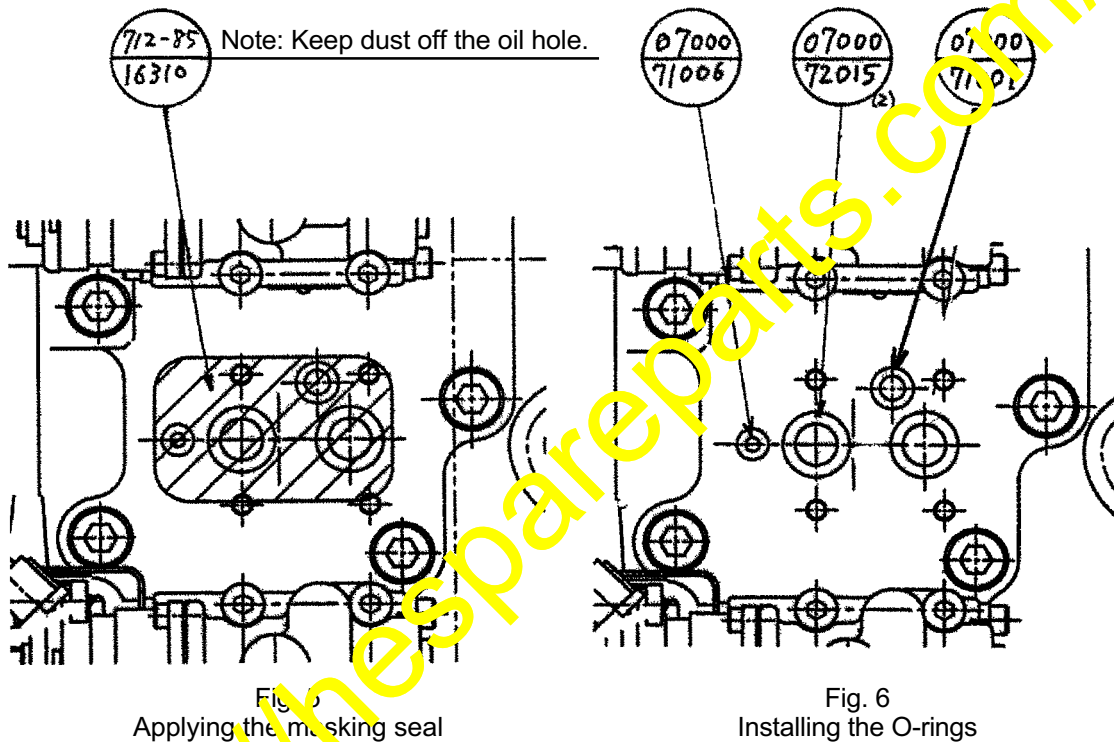


Fig. 4

ECMV mounting bolts

[Washing the mounting surface of the ECMV on the valve seat]

- (1) For protection of the mounting surface of the ECMV on the valve seat, prepare masking seal (712-85-16310) and, immediately after removing the current ECMV, remove the four O-rings at once and apply the masking seal over the mounting surface of the ECMV on the valve seat. (Refer to Fig. 5.)  
(Also, cover the oil hole of the removed ECMV by use of masking tape, etc., so that dust may not enter into the oil hole.)
- (2) While pushing the masking seal which has been applied onto the valve seat surface, remove remaining paint in the area of the mounting surface of the ECMV on the valve seat using a metallic spatula and, after that, wipe the surface by use of wiping paper.



[Installation]

- (1) Remove the masking seal which has been applied to the mounting surface of the ECMV on the valve seat to protect the mounting surface.  
Re-check to make sure that dust is not adhering to the mounting surface.
- (2) After setting 4 pcs. of new O-rings (1 pc. of 07000-71006, 1 pc. of 07000-71009 and 2 pcs. of 07000-72015) onto the valve seat surface (refer to Fig. 6), install the ECMV by use of 4 pcs. of ECMV mounting bolts.  
Tightening torque should be 7.8 - 9.8 Nm (0.8 - 1.0 kgm)  
(Refer to Fig. 4 on page 3.)
- (3) Connect the wire harness to the ECMV.
- (4) After installing the valve cover make sure that the wire harness is not interfering with the valve cover.