

PARTS & SERVICE NEWS

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SUBJECT: REPAIR PROCEDURE OF AIR CONDITIONER COMPRESSOR ADJUSTMENT ROD & PULLEY COVER ON HM300-1

PURPOSE: To introduce modification procedure to prevent occurrence of cracks in the drive belt adjusting rod and in the air compressor pulley cover on HM300-1 articulated dump trucks

APPLICATION: HM300-1 Articulated Dump Trucks, Serial Nos. 1002, 1003, 1005, 1007, 1008, 1010, and 1013

FAILURE CODE: 874AFF

DESCRIPTION:

1. Introduction

Since there is a possibility of occurrence of cracks in the drive belt adjusting rod and in the air compressor pulley cover of the air conditioning system on the HM300-1 articulated dump trucks, implement the modification following the procedures being described in this Service News to prevent occurrence of the above cracks.

2. List of parts

Part No.	Part Name	Purpose of part	Q'ty	Remarks
56D-07-12762 (56D-07-12761)	Bracket (Bracket)	} Replacement	1 (1)	} Replace this part with a new part even when the part of the new part number is being installed to the vehicle.
01010-81030 (01435-01025)	Bolt (Bolt)		4 (4)	
01643-31032 (567-07-73341)	Washer (Bracket)	Addition	4 (1)	
(01435-01035)	(Bolt)	} Unnecessary	(2)	
56D-07-12772 (56D-07-12771)	Bracket (Bracket)		1 (1)	
56D-07-12782 (56D-07-12781)	Bracket (Bracket)	1 (1)		
6140-81-8610 (6150-82-8610)	Rod (Rod)	} Replacement	1 (1)	
56D-07-12791 (56D-07-12790)	Plate (Plate)		1 (1)	
01580-01613 (01580-01411)	Nut (Nut)	2 (2)		
56D-07-12822 (56D-07-12821)	Cover (Cover)	1 (1)		
01010-81025	Bolt	} Addition	1	
01643-31032	Washer		1	

3. Contents of the modification

The following modifications are to be made in order to improve the durability of the tension rod and the pulley cover

① Modification of the tension rod for the air compressor

(1) Reinforcement of the tension rod

The thread size of the tension rod has been changed from M14 to M16.

(2) Reinforcement and improvement of the accuracy of the air compressor mounting frame bracket.

The current air compressor mounting frame bracket of a two-part bolt-on structure with the sheet thickness of t 8 has been changed to a welded integrally structured bracket with the sheet thickness of t 12.

(3) Reinforcement of the hinge bracket

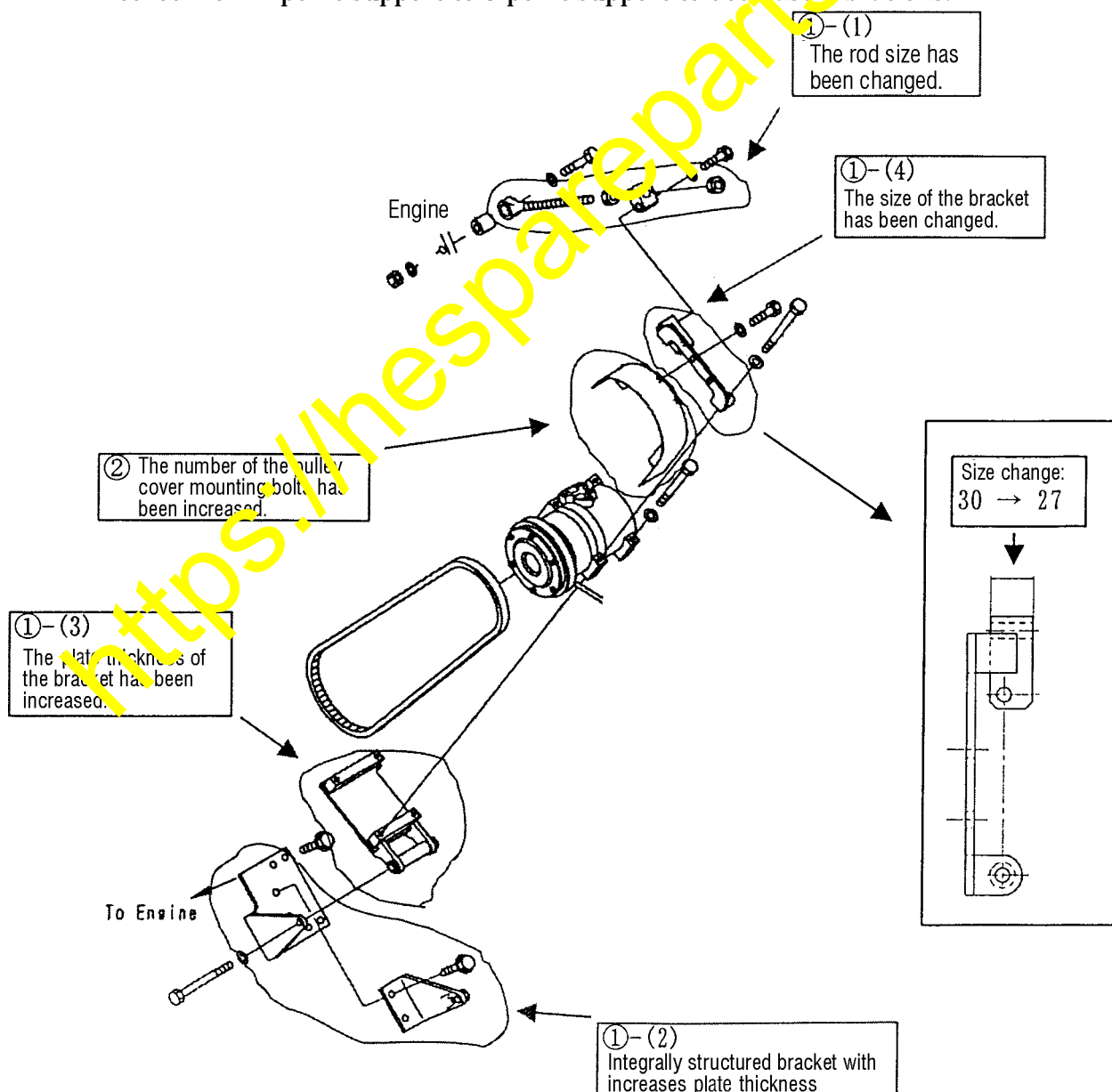
The plate thickness of the hinge section of the hinge bracket has been changed from t 9 to t 12.

(4) Changing the rod mounting position

To match the rod mounting surface on the engine side and the same on the air compressor side, the size of the bracket has been changed.

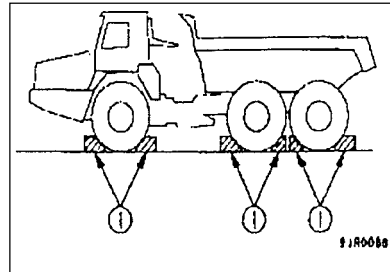
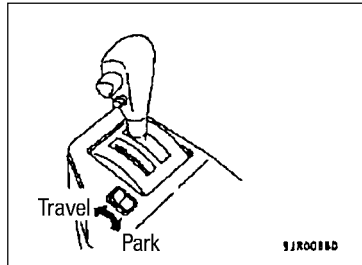
② Modification of the air compressor pulley cover

The number of the mounting bolts has been increased to modify the supporting method from 2-point support to 3-point support to decrease vibrations.



4. Preparations before starting the modification work

- 1) Park the vehicle on a flat place and apply the parking brake.
- 2) Stop the engine.
- 3) Insert chocks underneath each tire.
- 4) Read the Operation and Maintenance Manual carefully before starting the modification work.



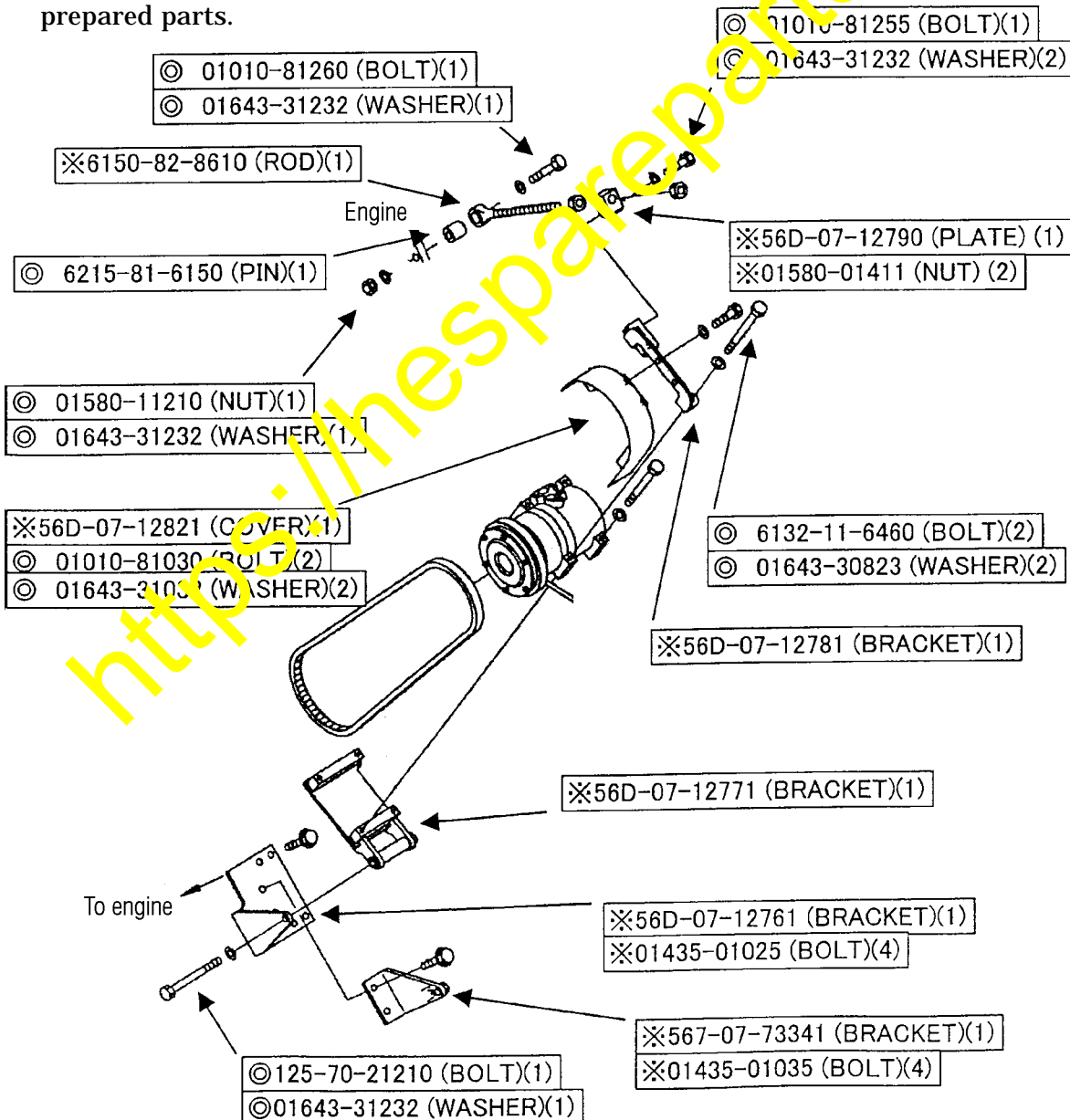
5. Modification procedure

5-1. Disassembly procedure

Remove the parts marked ⊙ and ※ in the figure below.

Since the parts marked ⊙ are being reused when installing the improved parts, be careful not to lose them nor damage them.

Parts marked ※ are to be replaced with the newly prepared parts.



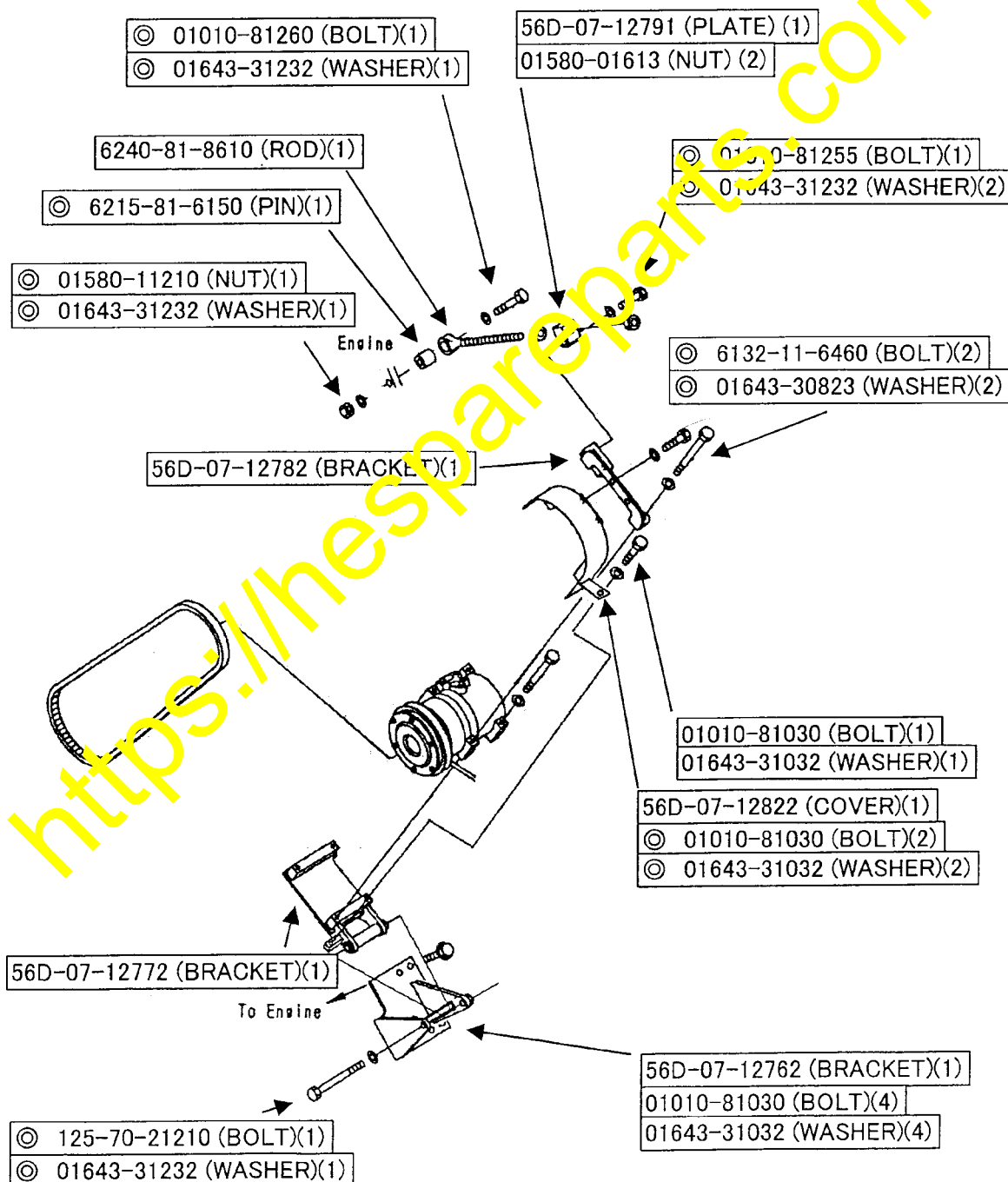
5-2. Installation procedure

Install the parts following the procedure being described below. (Refer to Fig. 2.)

(Parts marked © are reusing parts.)

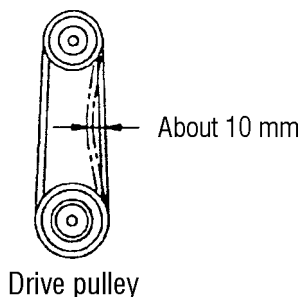
- 1) Install the bracket (56D-07-12762) to the engine.
- 2) Install the bracket (56D-07-12772). Lightly screw-in the mounting bolts (125-70-21210).
- 3) Install the air compressor to the bracket (56D-07-12772).
At this time, install the bracket (56D-07-12782) together using the same mounting bolts.
- 4) Install the rod (6240-81-8610) and plate (56D-07-12791).
At this time, lightly screw-in the mounting bolts (01010-81255).

Note: Although some vehicles are being equipped with the rod and plate of the new part numbers, replace these rod and plate to new parts also.



- 5) Setting the drive belt over the air compressor pulley, adjust the nut (01580-01613) to tighten the belt tension.
(Tighten the belt tension so that the belt will be bent by about 10 mm when the center point of the belt is pressed by a thumb (58.8N{6kgf}).)

Air compressor pulley



- 6) After finishing the belt tension adjustment work, tighten the bolts (125-70-21210) and (01010-81255).
Tightening torque: 98 – 123 N·m {10.0 – 12.5 kgf·m}
- 7) Install the pulley cover (56D-07-12822).

6. Applicable vehicles

HM300-1 (9 vehicles)

	Vehicle model	Serial No.	Destination	Customer's name	Shipment
1	HM300-1	1002	U.S.A.		Mar. 28, '02
2	HM300-1	1003	U.S.A.		Mar. 28, '02
3	HM300-1	1005	U.S.A.		Mar. 28, '02
4	HM300-1	1007	U.S.A.		May 23, '02
5	HM300-1	1008	U.S.A.		May 24, '02
6	HM300-1	1010	U.S.A.		May 27, '02
7	HM300-1	1011	U.S.A.		May 29, '02
8	HM300-1	1012	U.S.A.		May 28, '02
9	HM300-1	1013	U.S.A.		Jun. 7, '02