

PARTS & SERVICE NEWS

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Page 1 of 7

SUBJECT: MODIFICATION PROCEDURE OF DUMPING BODY HEATING EXHAUST PIPE ON HM350, 400-1

PURPOSE: To introduce modification procedure to improve the body heating exhaust pipe on HM350-1 and HM400-1 articulated dump trucks
<For Body heating spec. vehicles only>

APPLICATION: HM350-1 Articulated Dump Trucks, Serial Nos. 1006, 1015, 1016
(Only the cover, P/N 56B-02-11731 is to be changed on the Serial Numbers 1015 and 1016)
HM400-1 Articulated Dump Trucks, Serial Nos. 1005, 1006,
1011, 1013, 1027

FAILURE CODE: 0130MV

DESCRIPTION:

1. Introduction

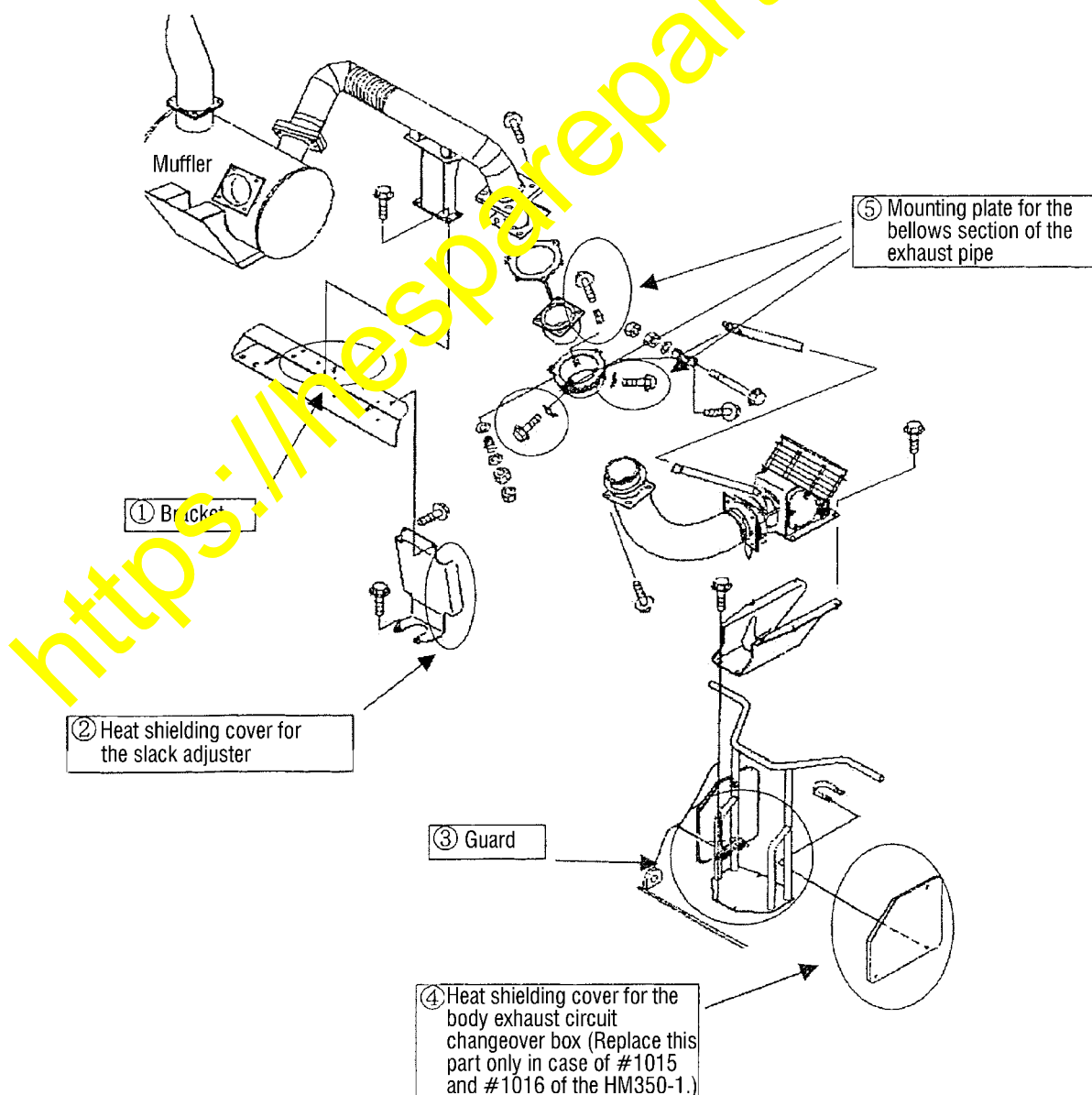
With the HM350-1 and HM400-1 articulated dump trucks, the exhaust pipe connecting between the muffler and the inlet port to the body may cause interference while steering operations are made or when the vehicle body is swayed. To prevent occurrence of the aforementioned interference, implement the modification being introduced in this Service News.

2. List of parts

Part No.	Part Name	Purpose of part	Q'ty	Remarks		
56C-46-11562 (56C-46-11561)	Bracket (Bracket)	Replacement	1 (1)	To be used for the HM400-1 only		
56B-02-11562 (56B-02-11561)	Cover (Cover)		1 (1)			
56B-60-11912 (56B-60-11911)	Guard (Guard)		1 (1)		To be used for the HM350-1 only	
56C-61-11911 (56C-61-11910)	Guard (Guard)		1 (1)		To be used for the HM350-1 only	
56B-02-11732 (56B-02-11731)	Cover (Cover)		2 (2)		Replace these parts only in case of #1015 and #1016 on the HM350-1	
56B-02-11275 (56B-02-11274)	Tube (Tube)		1 (1)		Consumable part	
56B-02-11850 (56B-02-11850)	Ring (Ring)		1 (1)			
56B-02-11324 (56B-02-11323)	Plate (Plate)		3 (3)			
01010-81020 (01435-01016)	Bolt (Bolt)		Additional		6 (3)	
01643-31032	Washer				6	
56B-02-11591 (56B-02-11591)	Gasket (Gasket)	Replacement	1 (1)	Consumable part		

3. Contents of the modification

- ① Modification to prevent occurrence of interference between the bellows section of the exhaust pipe and the bracket
To secure necessary clearance from the bellows section of the exhaust pipe by making a cutout in the section of the bracket where interference can occur.
- ② Modification to prevent occurrence of interference between the bellows section of the exhaust pipe and the heat shielding cover for the slack adjuster
To secure necessary clearance from the bellows section of the exhaust pipe by deleting the folded section of the cover where interference can occur.
- ③ Modification to prevent occurrence of interference between the bellows section of the exhaust pipe and the guard
To secure necessary clearance from the bellows section of the exhaust pipe by shortening the height of the column pipe for the guard.
- ④ Modification to prevent occurrence of interference between the bellows section of the exhaust pipe and the heat shielding cover for the body exhaust circuit switching box
To secure necessary clearance from the bellows section of the exhaust pipe by changing the shape of the cover.
- ⑤ Modification to prevent occurrence of loosening of the fastening bolts for the mounting plate for the bellows section of the exhaust pipe
To prevent occurrence of loosening of the fastening bolts by changing the quantity of the mounting plate fastening bolts from 1 bolt to 2 bolts.



4. Preparations to make before starting the modification work

- 1) Park the vehicle on a flat place and insert checks underneath respective tires.
- 2) Raise the body and insert the safety pins (both of the LH and RH pins).
- 3) Never start disassembly work while the temperatures of the engine and the exhaust pipe are still high.

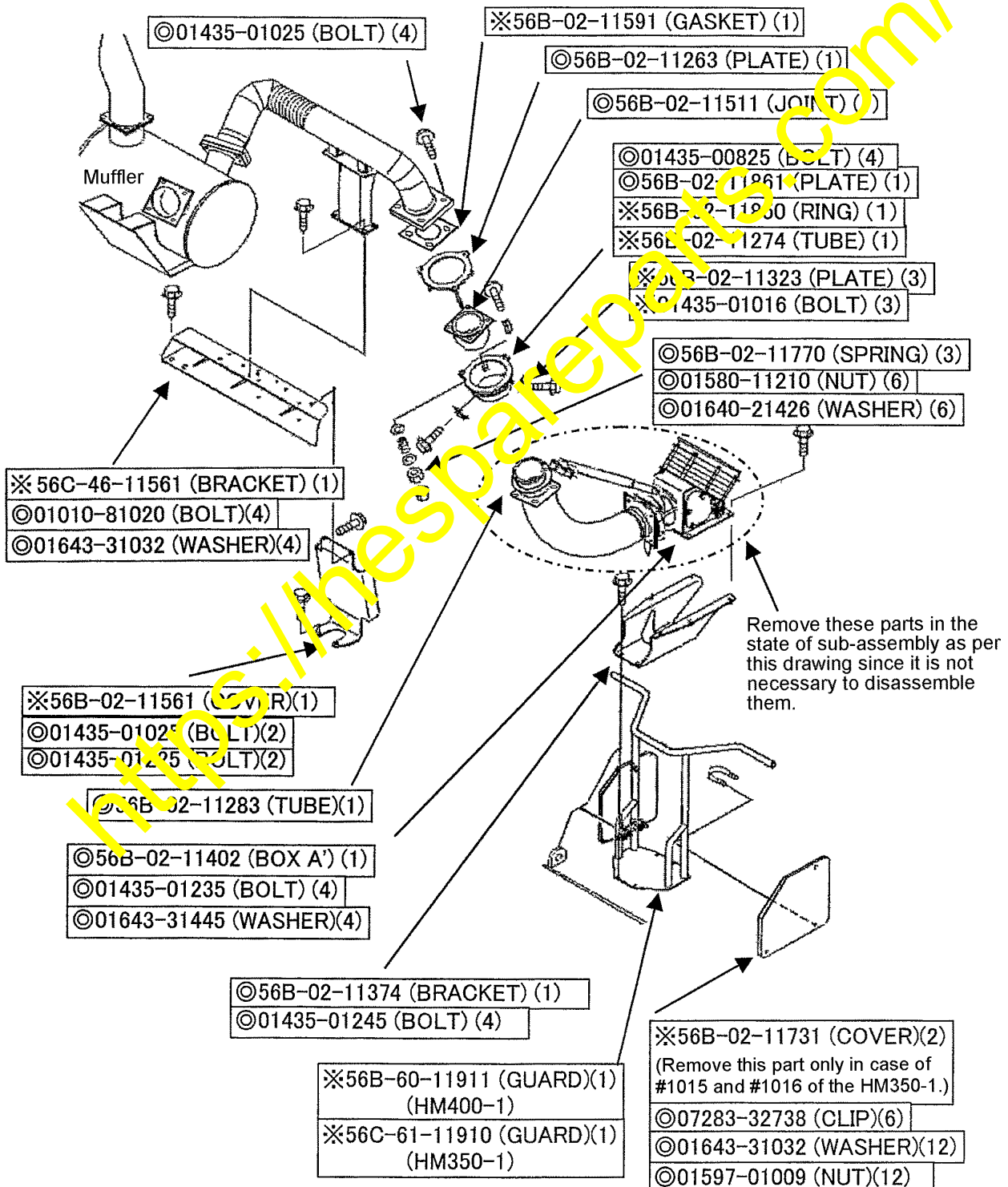
5. Modification procedure

5-1. Disassembly procedure

Remove the parts marked ⊙ and ※.

Since the parts marked ⊙ are being reused when installing the improved parts, be careful not to lose them or damage them.

Parts marked ※. are to be replaced.

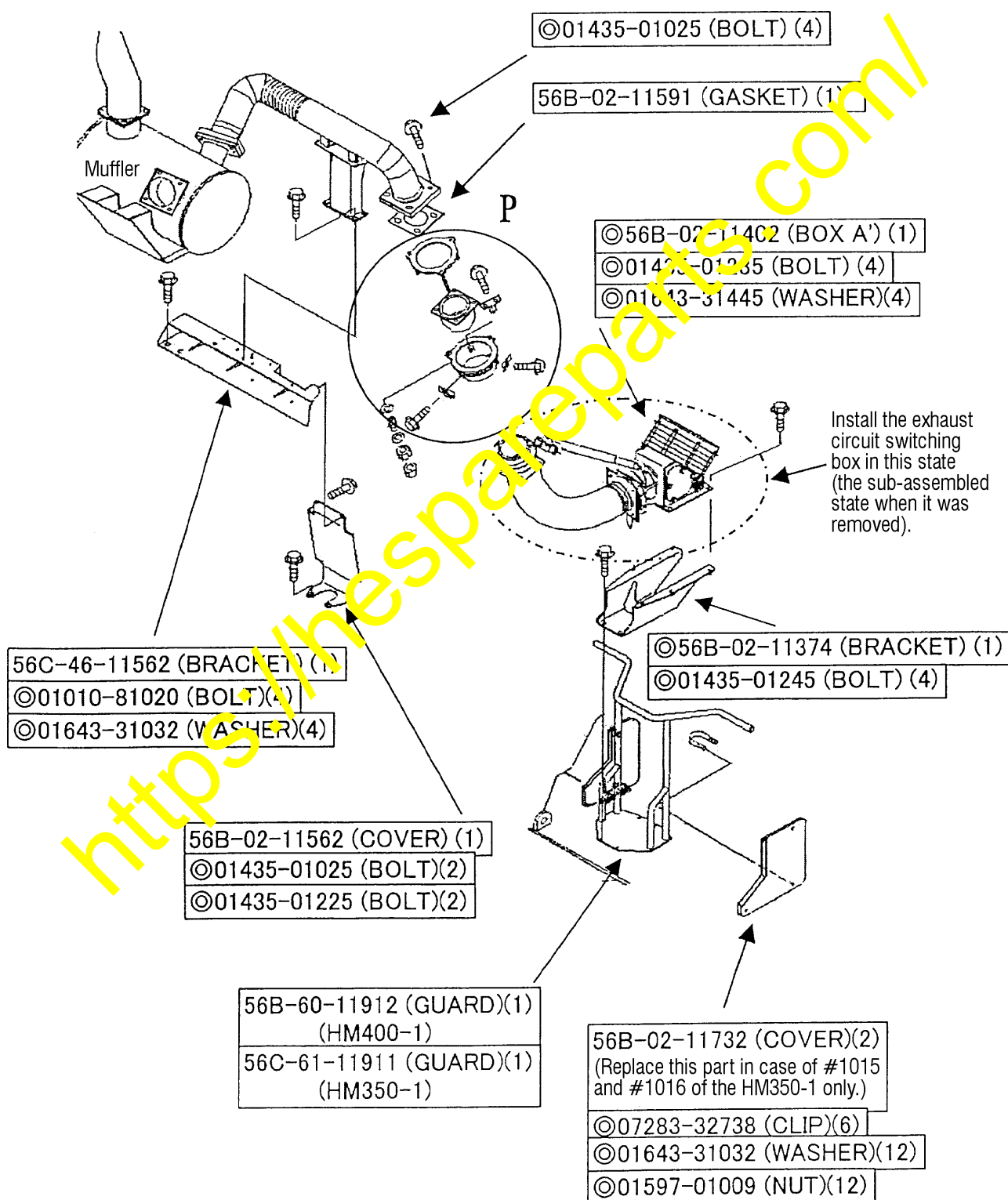


5-2. Installation procedure

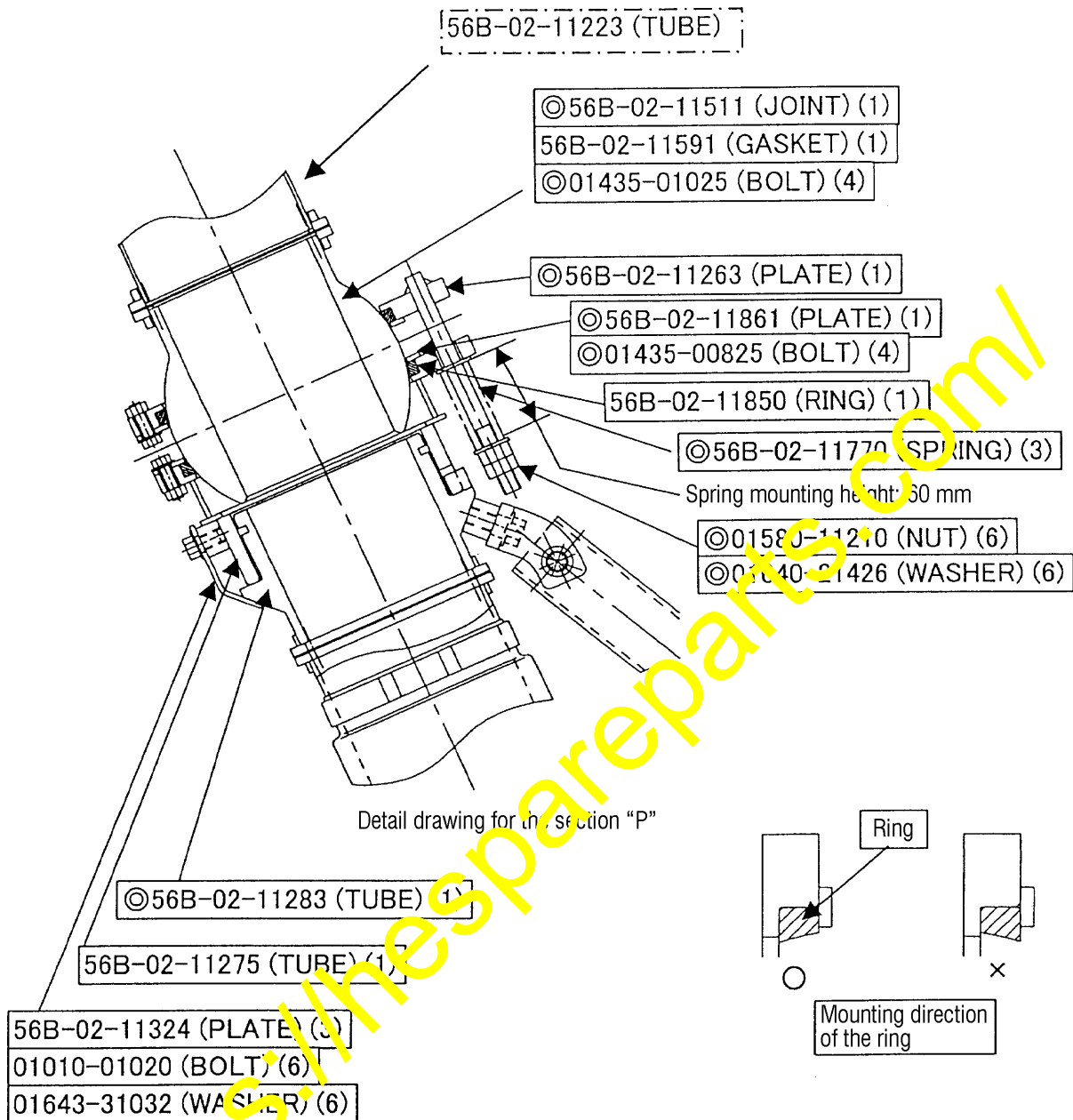
Make the installation work following the procedures being described below.

(Parts marked © are the reused parts.)

- 1) Install the bracket (56C-46-11562) and the cover (56B-02-11562) to the front frame.
- 2) Install the guard (56B-60-11912 in case of the HM400-1 and 56C-61-11911 in case of the HM350-1), bracket (56B-02-11374), cover (56B-02-11732) and the exhaust circuit switching box (56B-02-11402) to the rear frame.



<Detail drawing for installation of the section "P" of the joint>



- 3) Inserting the ring (56B-02-11850) to the flange section of the tube (56B-02-11275), install the plate (56B-02-11861) to hold the ring in position.
Note: Since the ring (56B-02-11850) can be easily damaged, pay sufficient attention when installing it.
- 4) Insert the tube (56B-02-11283) into the tube (56B-02-11275).
- 5) Install the plate (56B-02-11324) to hold the tube (56B-02-11275) in position.
- 6) Install the sub-assembly made out as per the above Sections 3) through 5) to the plate (56B-02-11263) and fasten them by use of the spring (56B-02-11770), nut (01580-11210) and washer (01640-21426).
Note: The spring mounting height should be 60 mm and fasten the spring securely with double nuts.
(If the spring is not mounted at the above dimension, gas leakage or seizure troubles may occur.)
- 7) Install the sub-assembly made out as per the above Sections 6) to the exhaust pipe (56B-02-11224) inserting the gasket (56B-02-11591) between them.

8) Adjustment of the exhaust circuit switching box

- ① Start the engine, raise the body to the upper end and remove the safety pins.
- ② Lower the body and check and confirm that that the flange of the exhaust circuit switching box is being pressed downward by about 35 mm when the body is set to its position and that the flange of the exhaust circuit switching box and the body side flange are aligned.
- ③ In case the stroke is in short or in case the contact surfaces of the flanges are not aligned, loosen the mounting bolt to slide the exhaust circuit switching box toward the rear direction of the vehicle body making use of the slotted shape of the exhaust circuit switching box mounting holes to correct the inalignment.
- ④ After finishing the above adjustment, change the engine revolution from Lo-Idling revolution to Hi-Idling revolution to make sure that gas leakage is not occurring from respective sections.
- ⑤ Make sure that abnormal noise will not occur when the steering is turned toward left and right while the vehicle is in stoppage.

