

PARTS & SERVICE NEWS

REF NO.	AA01054A
DATE	July 11, 2001

(C)

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This **PARTS & SERVICE NEWS** is superceding AA01054 dated Mar 8, 2001 and should be discarded

SUBJECT: INTRODUCTION OF ASSEMBLY PROCEDURE FOR TRANSMISSION INPUT SHAFT

PURPOSE: To introduce assembly procedures for the input shaft of the transmission assembly

APPLICATION: HD785-3 Dump Trucks, S/N 2040 and up
 HD785-3L Dump Trucks, S/N A3015 and up
 HD785-3LC Dump Trucks, S/N A10144 and up
 330M Dump Trucks, S/N BFP41-A and up, BFP42-A and up and A10190 and up

FAILURE CODE: 153838

DESCRIPTION:

It has been brought to our attention that there are unclear descriptions in the section explaining the assembly procedures for the transmission assembly in the Shop Manual.

This **PARTS & SERVICE NEWS** follows the procedures printed in the Shop Manual.

The assembly method introduced here is the method being employed by our factory. Although the same procedures may not always be followed depending on the regional conditions or the repair contents, follow the procedures introduced here whenever possible.

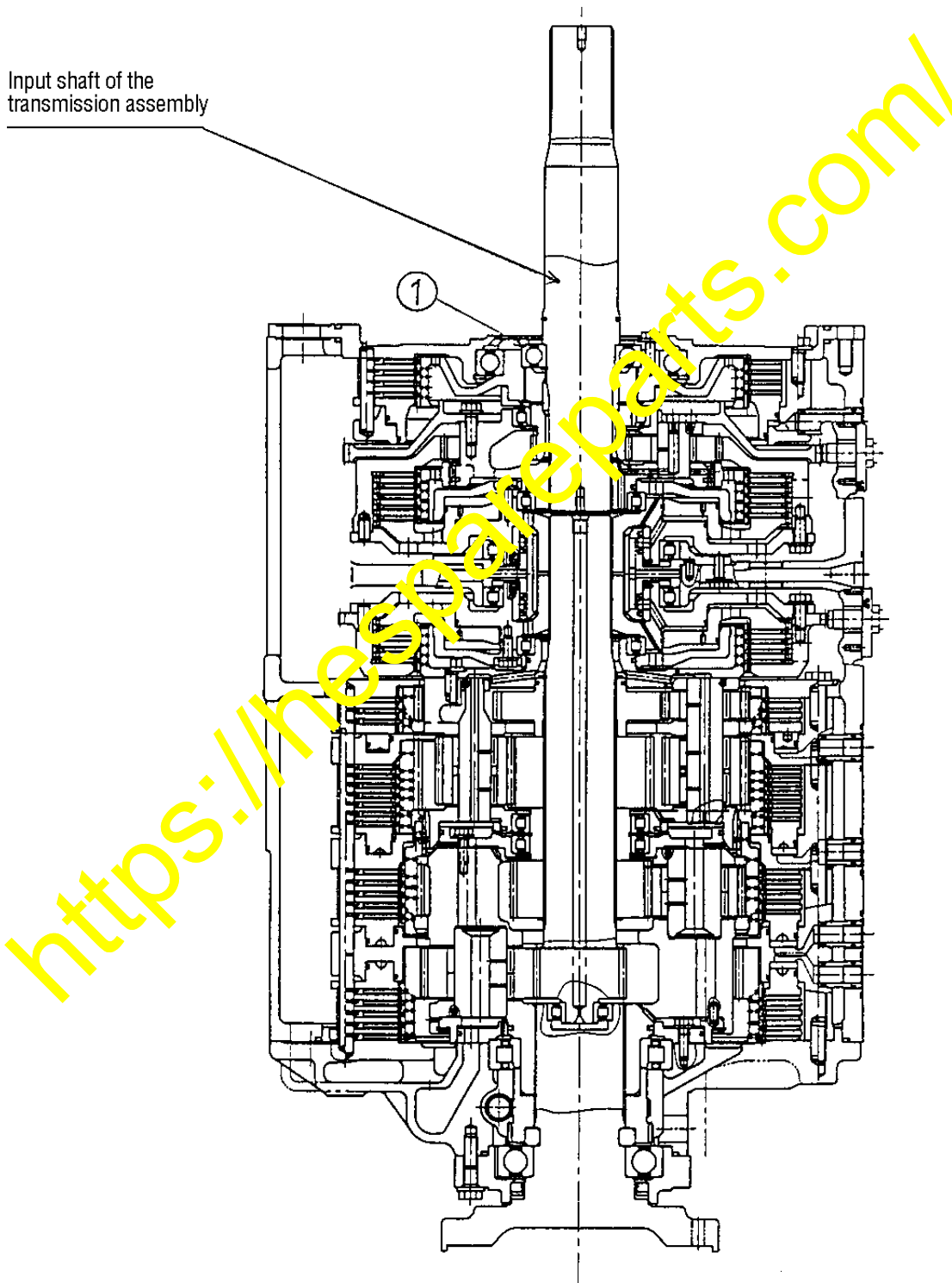
<https://hespareparts.com/>

2. The transmission input shaft section for which assembly procedures are being introduced

This Service News is introducing the detailed assembly procedures for the input shaft section of the transmission assembly. (Refer to Fig. 1.)

Carefully observe the procedures introduced in this document. If not, the bearing (①) will be inclined or may suffer depressive deformation reducing service life of the relevant components.

[Cross-sectional view of the transmission assembly]

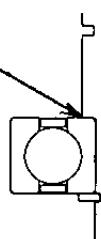


<Fig. 1>

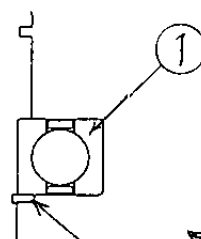
3. Assembly procedures for the input shaft section

- 1) Pre-heat the bearing ① of the input shaft. (Refer to Fig. 2.)
(Heating conditions: Heat the part at 120°C for at least 20 minutes.)
As the aforesaid bearing ①, the bearing 195-15-59110 (long life bearing) can also be used.
- 2) Insert the bearing ① over the input shaft ② and fasten them together using the snap ring ③.
(Refer to Fig. 3.)

Check and make sure there is no gap between the bearing ① and the input shaft ②.

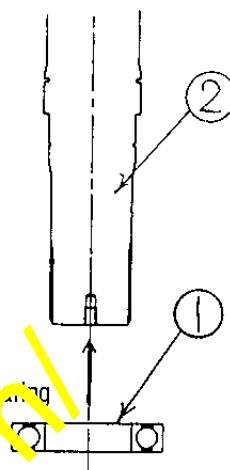


<Fig. 3 (Detail drawing)>

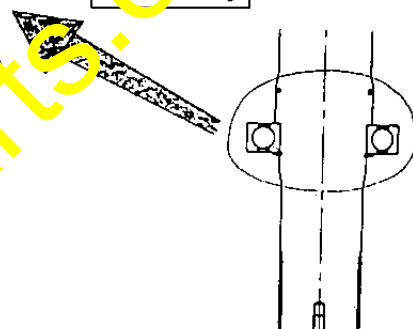


Direction to insert the bearing

Refer to the detail drawing.

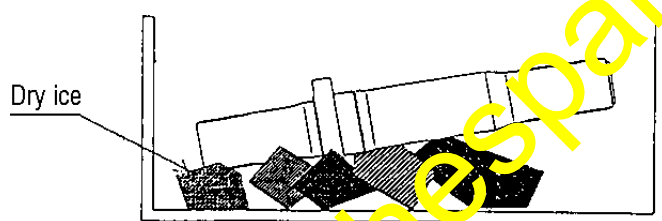


<Fig. 2>



<Fig. 3>

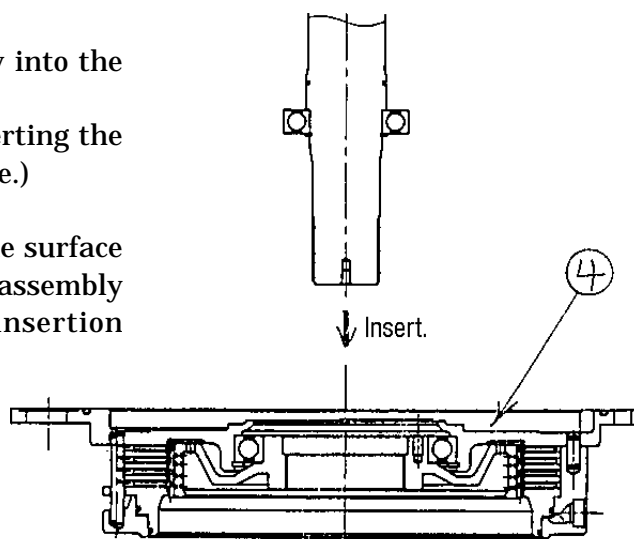
- 3) Chill the input shaft assembly using dry ice.
(Refer to Fig. 4.)
Chilling time: At least 20 minutes



<Fig. 4>

- 4) Insert the chilled input shaft assembly into the clutch assembly ④.
(Note: Do not use a hammer when inserting the input shaft assembly whenever possible.)
(Refer to Fig. 5.)

Lightly apply engine oil or grease to the surface of the section inserting into the clutch assembly of the input shaft to facilitate the insertion work.



<Fig. 5>

- Supporting the input shaft assembly by the plate ⑤, fasten it by tightening the bolts (8 units) ⑥.

Tightening torque: 58.8 – 73.5 Nm (6 – 7.5 kgm)

(Refer to Fig. 6.)

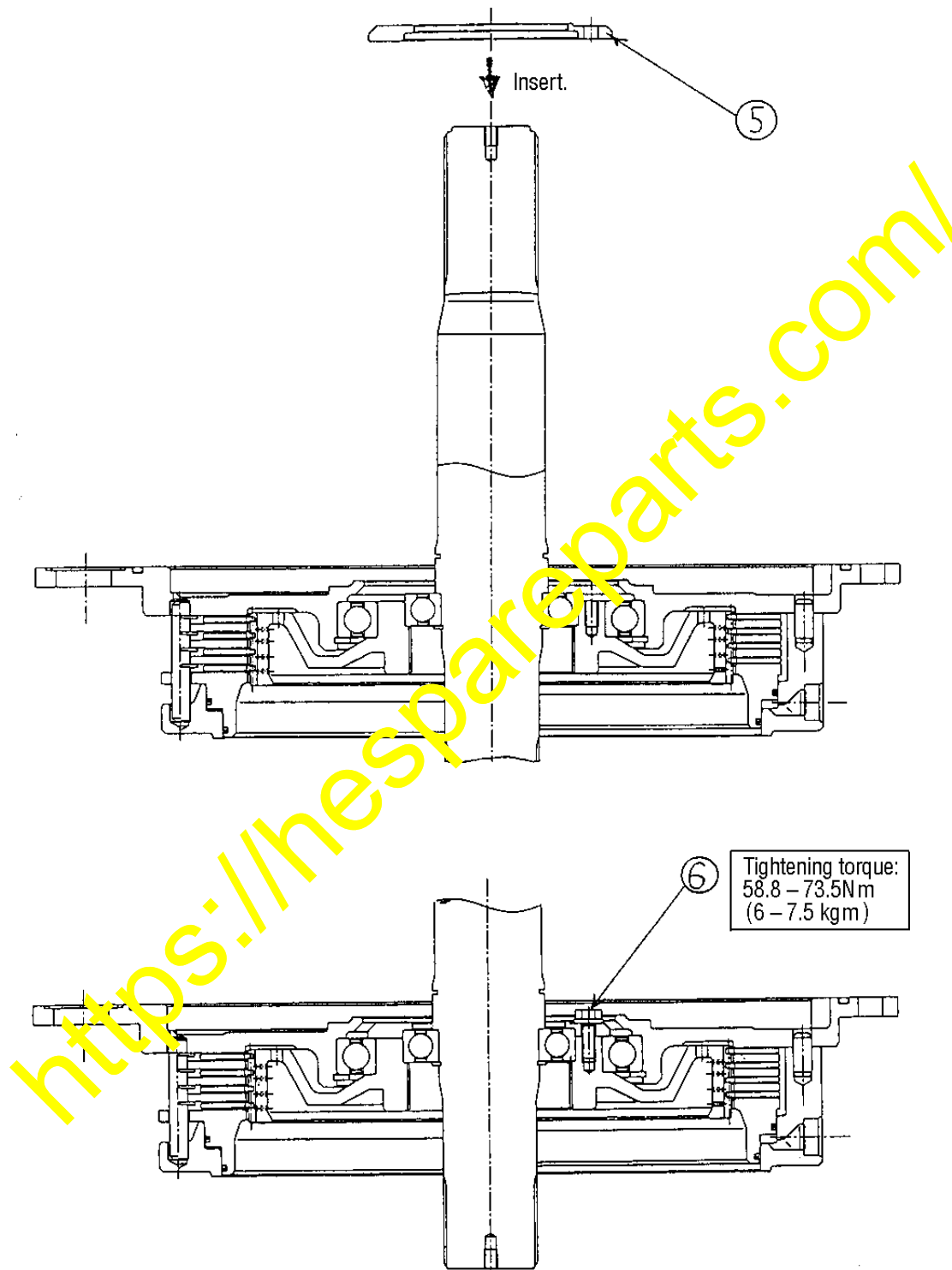


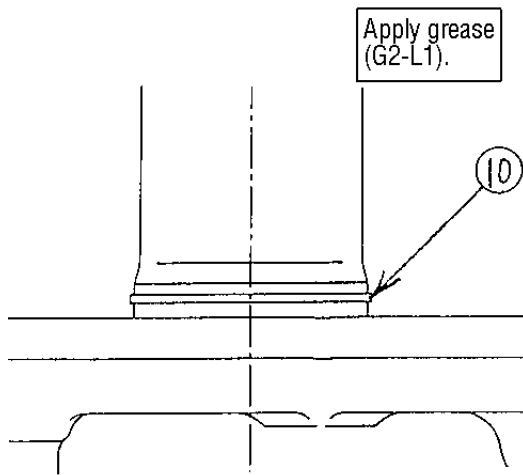
Fig. 6

4. Procedures to connect the torque converter assembly and the transmission assembly

- 1) Place the transmission assembly vertically using blocks. (Refer to Fig. 7.)
- 2) Install the seal ring ⑩ to the input shaft ⑨ of the transmission assembly.

Apply grease (G2-L1) over the surface of the seal ring ⑩ of the input shaft of the transmission assembly and align the seal ring to the center position.

(Refer to Fig. 7 (Detail drawing).)



<Fig. 7 (Detail drawing)>

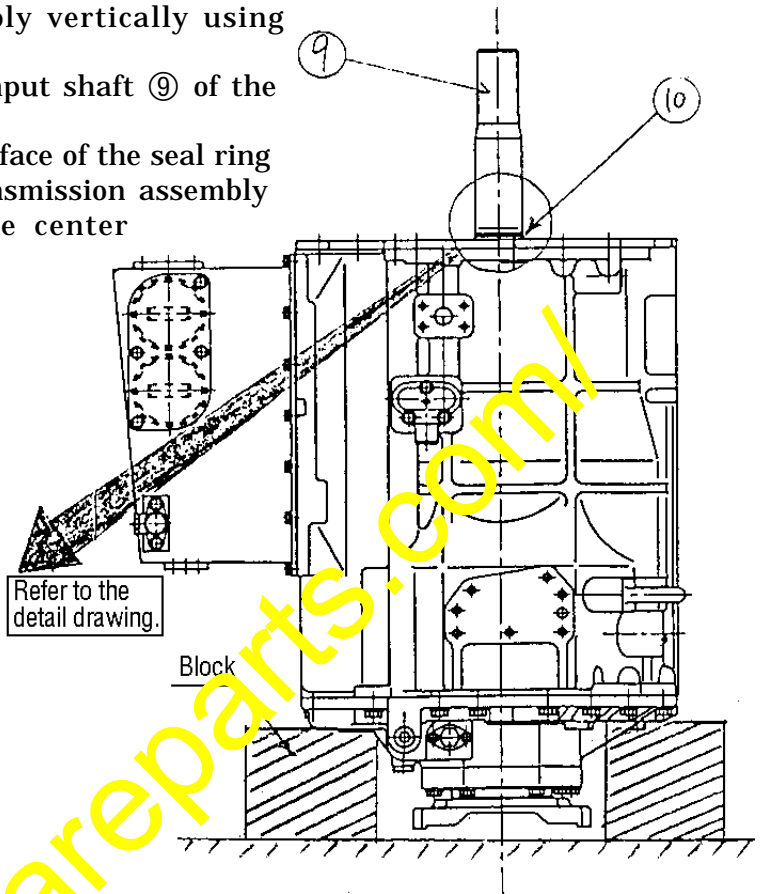


Fig. 7

- 3) Install the hoisting jigs ⑪ and M24 hanging bolts ⑫ to the pump mounting sections (at 3 places) of the torque converter assembly ⑧.

(Refer to Fig. 8.)

Part number of the mounting bolt: 01010-

\triangle 81255-81260 (12 units)

Tightening torque:
98.1 – 122.6 Nm (10 – 12.5 kgm)

For your reference, a drawing for the hoisting jig (⑪) is being attached to this document as the page 7.

Part number of the hanging bolt: 04530-12438

⑫ (3 units)

Mounting bolt (12 units)

Tightening torque:
98.1 – 122.6 Nm
(10 – 12.5 kgm)

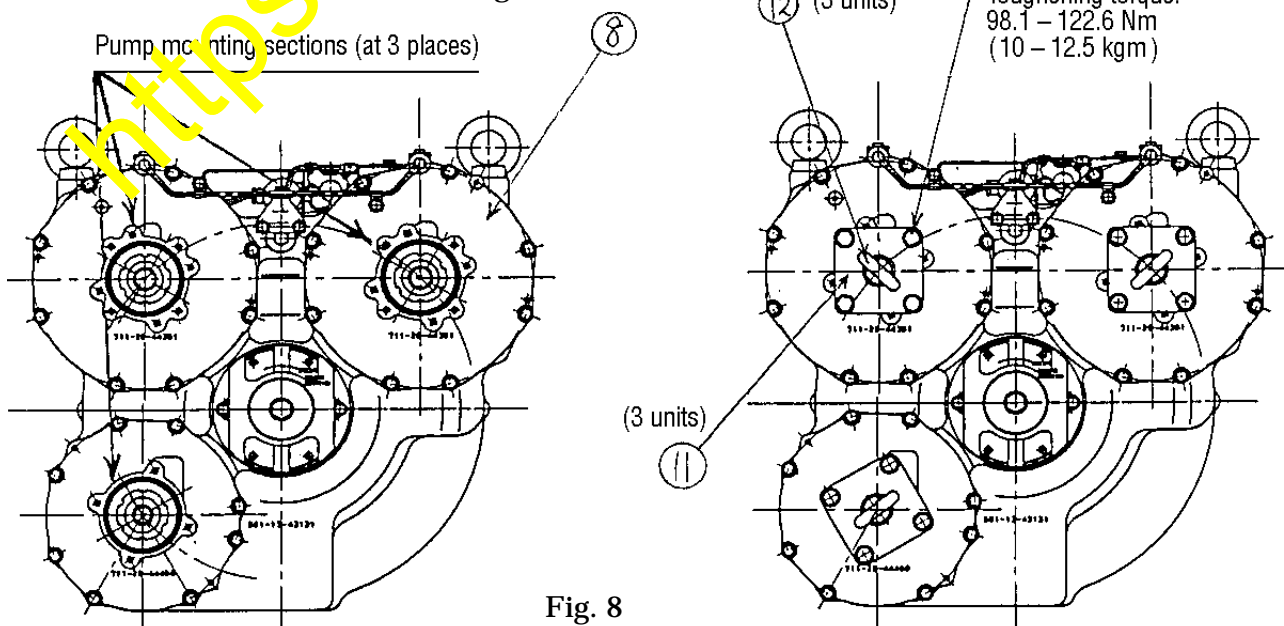


Fig. 8

- 4) Hoist the torque converter assembly ⑧ vertically using the hoisting slings ⑬ and hanging bolts, gradually lower it to connect to the input shaft of the transmission assembly fitting the splined section of the turbine boss ⑭ and that of the input shaft of the transmission assembly.

(Refer to Fig. 9 and Fig. 10.)

Note) When hoisting the torque converter assembly ⑧, always use M24 hanging bolts (3 bolts).

[Cross-sectional view of the torque converter assembly]

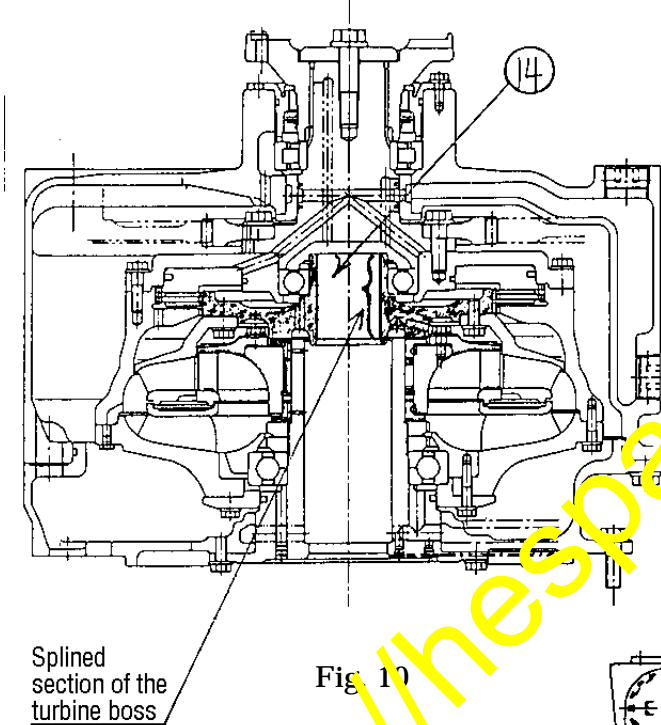
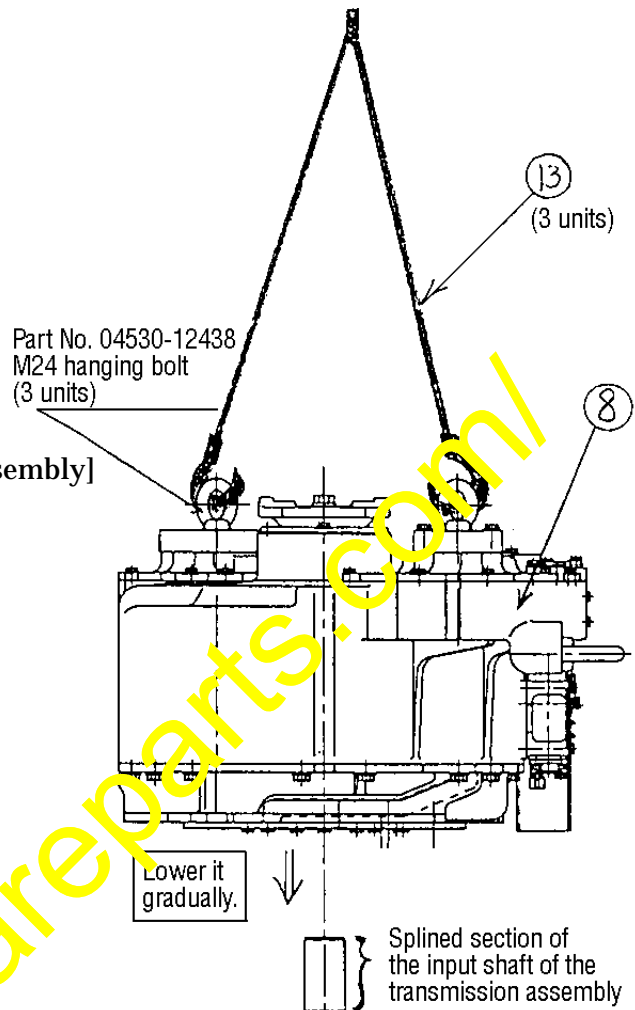


Fig. 10



Part No. 04530-12438
M24 hanging bolt
(3 units)

Lower it gradually.

Splined section of the input shaft of the transmission assembly

Fig. 9

Schematic drawing for special jig

