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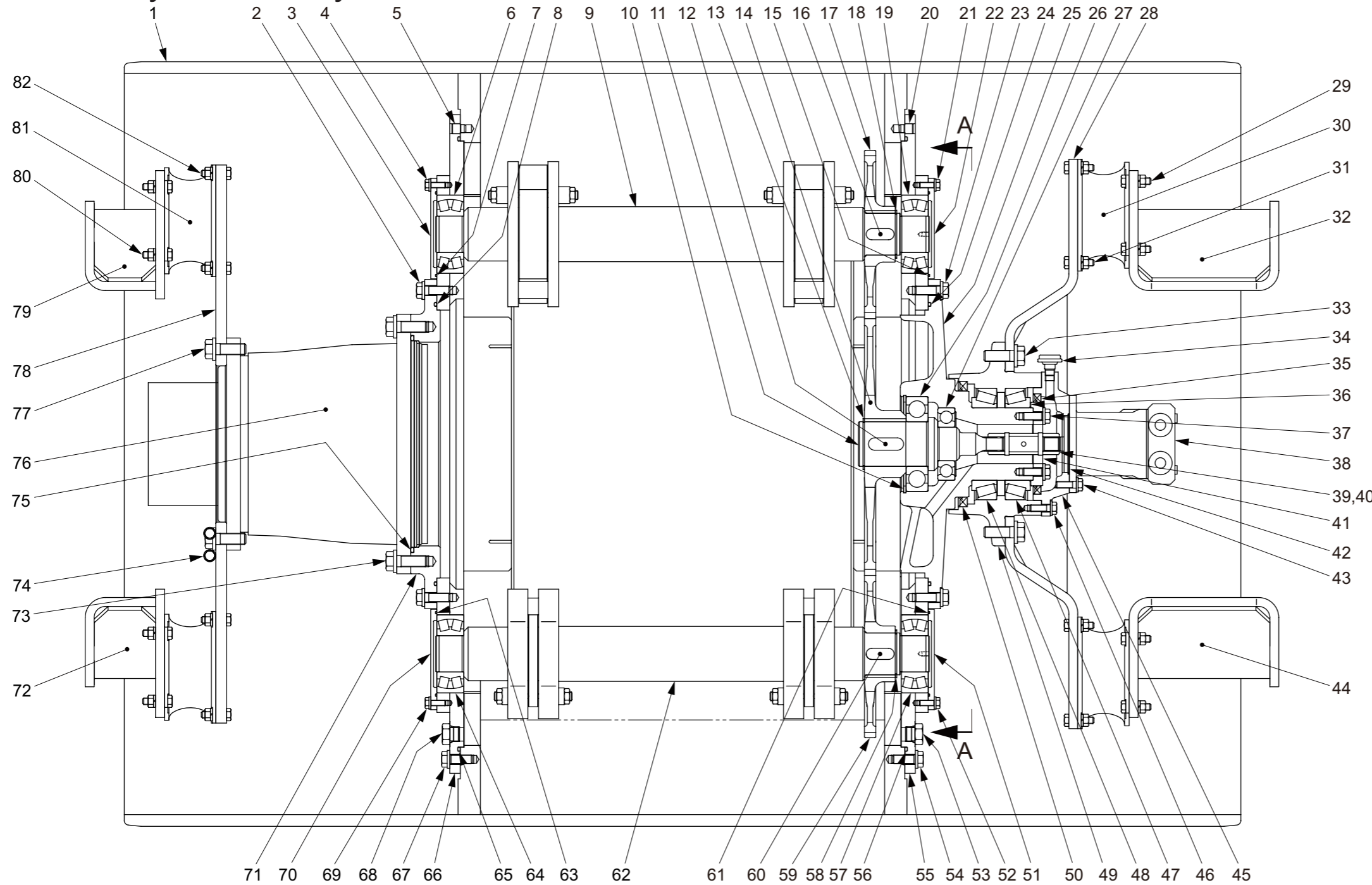
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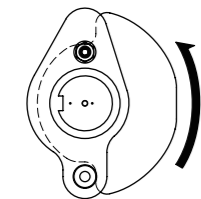
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5. SW850ND- II

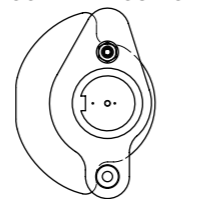
5-1. Vibratory Drum Assembly



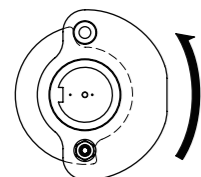
- | | |
|-----------------------|-----------------------|
| (1) Drum | (47) Roller bearing |
| (2) Bolt : M16×50 | (48) Roller bearing |
| (3) Cover | (49) Housing |
| (4) Bolt : M10×30 | (50) Oil seal |
| (5) Pin | (51) Cover |
| (6) Vibrator bearing | (52) Bolt : M10×30 |
| (7) O-ring | (53) Plug |
| (8) O-ring | (54) Bolt : M16×45 |
| (9) Eccentric shaft | (55) Housing |
| (10) Retaining ring | (56) O-ring |
| (11) Shaft | (57) Vibrator bearing |
| (12) Sunk key | (58) Retaining ring |
| (13) Retaining ring | (59) Gear |
| (14) Gear | (60) Sunk key |
| (15) O-ring | (61) O-ring |
| (16) Sunk key | (62) Eccentric shaft |
| (17) Gear | (63) O-ring |
| (18) Retaining ring | (64) Vibrator bearing |
| (19) Vibrator bearing | (65) O-ring |
| (20) Pin | (66) Housing |
| (21) Bolt : M10×30 | (67) Bolt : M16×45 |
| (22) Cover | (68) Plug |
| (23) Bolt : M16×50 | (69) Bolt : M10×30 |
| (24) O-ring | (70) Cover |
| (25) Axle shaft | (71) Housing |
| (26) Ball bearing | (72) Bracket |
| (27) Ball bearing | (73) Bolt : M20× 60 |
| (28) Bracket | (74) Bolt : M10×100 |
| (29) Bolt : M12×45 | (75) O-ring |
| (30) Damper | (76) Propulsion motor |
| (31) Bolt : M12×45 | (77) Bolt : M20×60 |
| (32) Bracket | (78) Plate |
| (33) Bolt : M20×60 | (79) Bracket |
| (34) Breather | (80) Bolt : M12×45 |
| (35) Oil seal | (81) Damper |
| (36) Shim | (82) Bolt : M12×45 |
| (37) Bolt : M14×40 | |
| (38) Vibrator motor | |
| (39) Sleeve | |
| (40) Spring pin | |
| (41) Cover | |
| (42) O-ring | |
| (43) Bolt : M12×40 | |
| (44) Bracket | |
| (45) Cover | |
| (46) Bolt : M12×40 | |



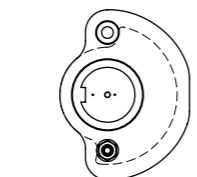
Vibration mode: Normal
Counterclockwise rotation



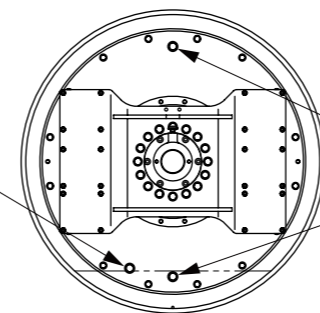
Vibration mode: Horizontal
Clockwise rotation



SECTION A-A



53-3,68-3
(Level plug)



Vibrator motor side

53-1,68-1
(Oil filler plug)


53-2,68-2
(Drain plug)

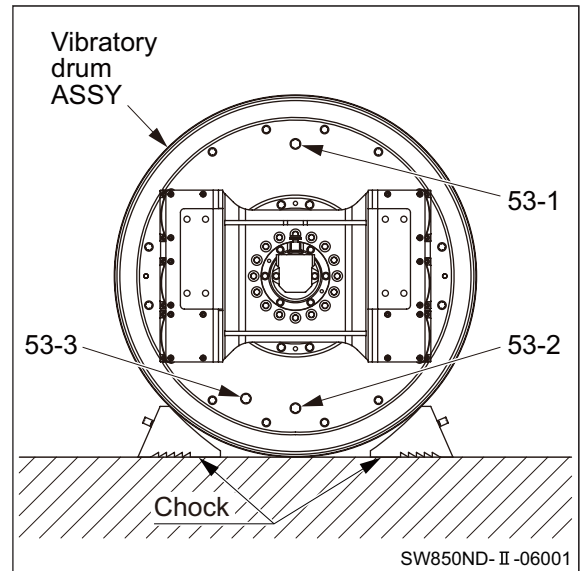
5-2. Disassembly and Reassembly of Vibratory Drum (SW850ND- II)

- Lead line numbers shown in illustrations for the following vibratory drum disassembly and reassembly procedures are constant with part numbers of vibratory drum ASSY shown on page 6-047.

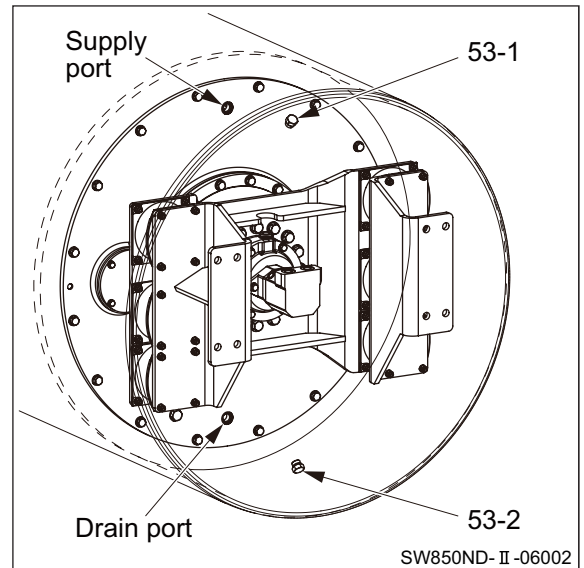
5-2-1. Disassembly of vibratory drum

- 1) Lay vibratory drum ASSY with plugs (53-1), (53-2), and (53-3) positioned as shown on the right.
 - Hold with chocks.

 Vibratory drum ASSY : 3,465 kg (7,639 lbs.)




- 2) Remove plugs (53-1) and (53-2).
 - Drain gear oil.
 - Quantity of gear oil : 75 L (19.8 gal.)
 - Install plugs.

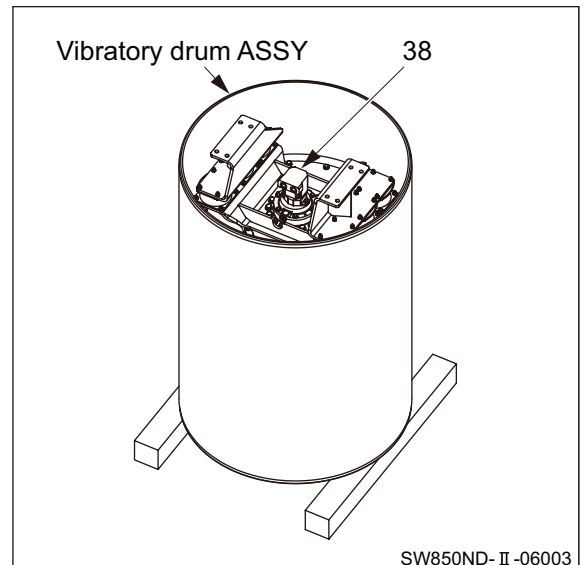


WARNING


- When standing the vibratory drum, use wooden blocks of sufficient strength to securely support the vibratory drum.
- Carry out the work in an unstrained posture using a work stool or the like.

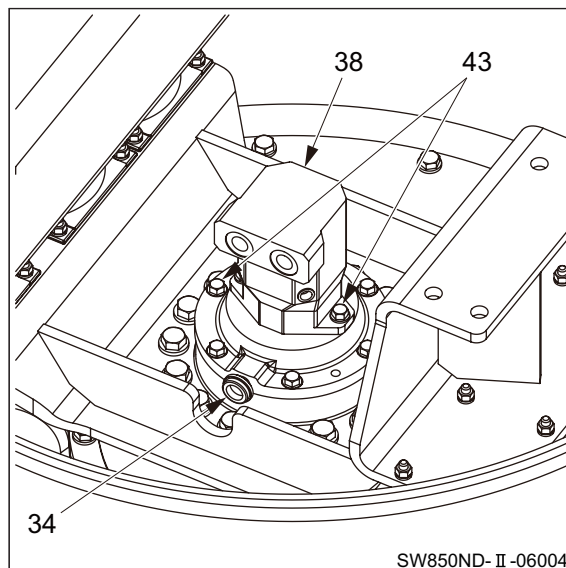
- 3) Stand vibratory drum ASSY with its vibrator motor (38) side facing up.

 Vibratory drum ASSY : 3,390 kg (7,474 lbs.)



- 4) Remove breather (34).
 - Remove bolts (43).
 - Remove vibrator motor (38).

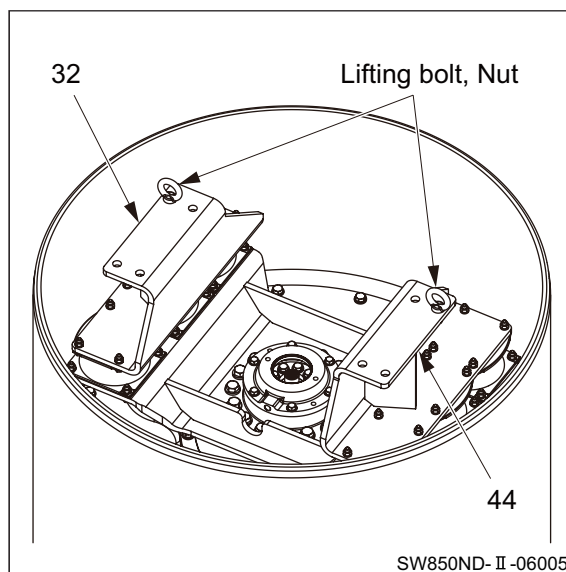
 (38) Vibrator motor : 20 kg (44 lbs.)



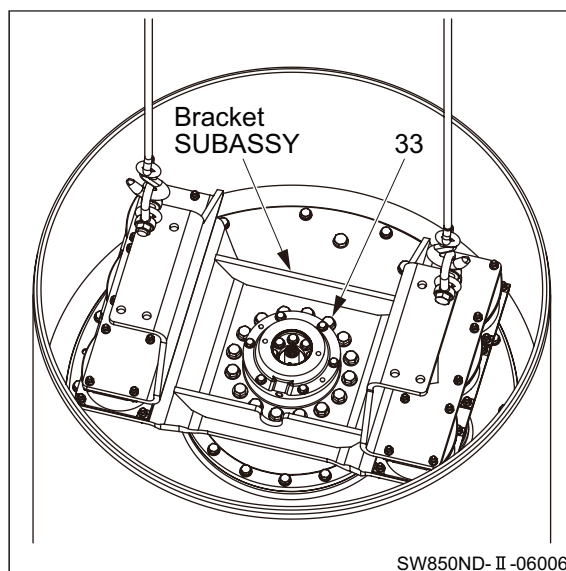
⚠ WARNING

When installing lifting bolts, screw them with nuts.


- 5) Install lifting bolts (M22) to brackets (32) and (44) with nuts.

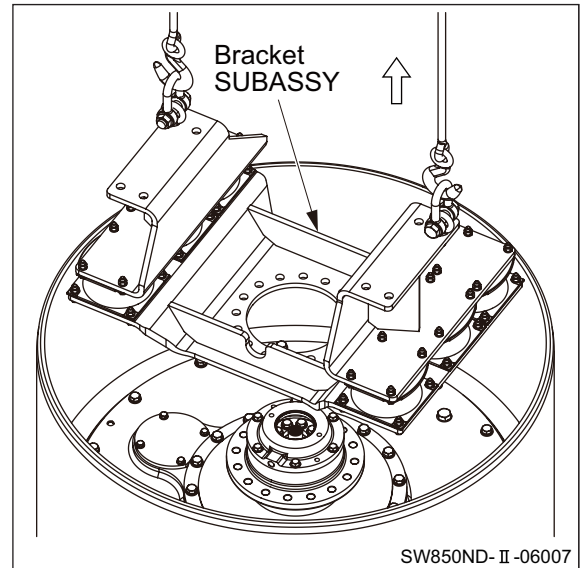


- 6) Remove bolts (33).



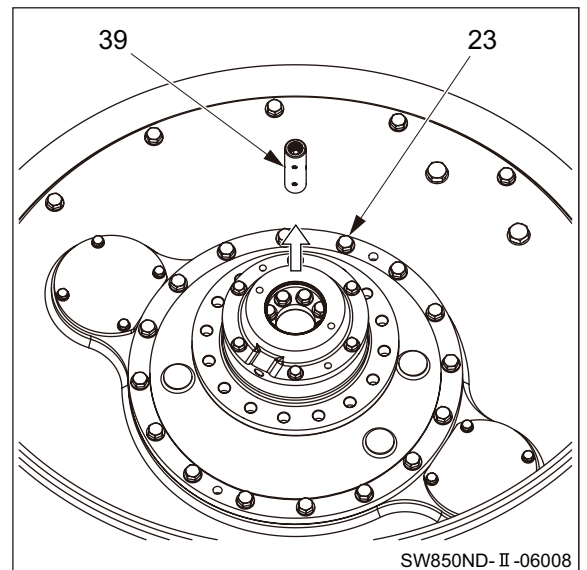
7) Remove bracket SUBASSY.

 Bracket SUBASSY : 235 kg (518 lbs.)

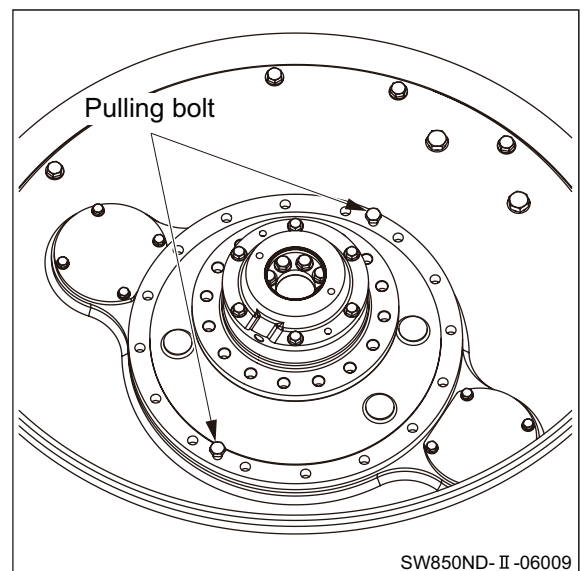


8) Remove sleeve (39).

- Remove bolts (23).



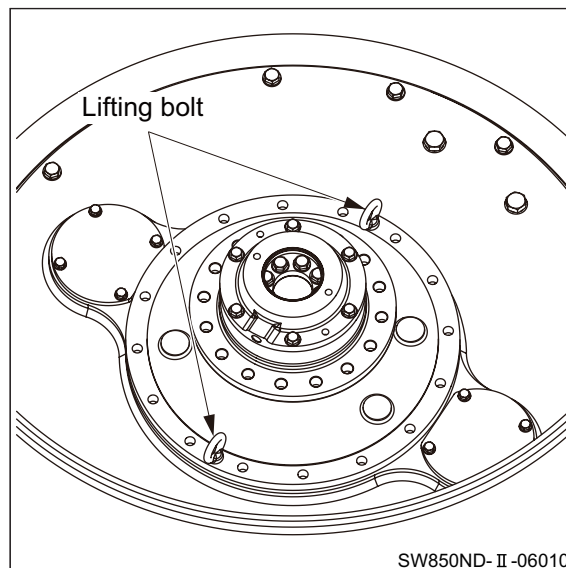
9) Lift axle shaft SUBASSY using two pulling bolts (M16×50).




⚠ WARNING

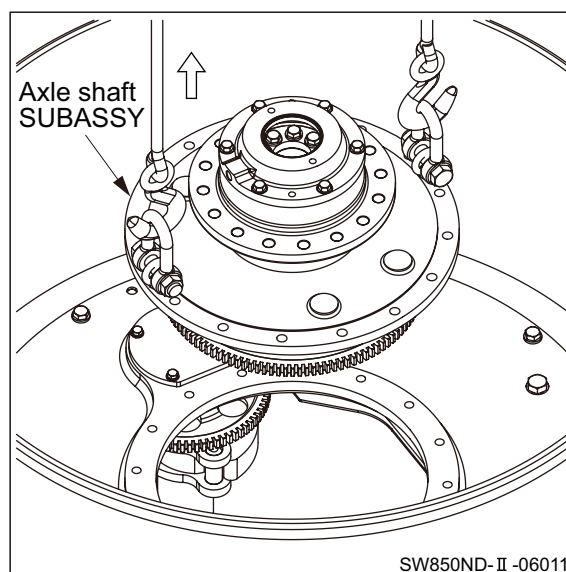
When attaching lifting bolts, screw in the threads fully before using.

10) Install lifting bolts (M16).

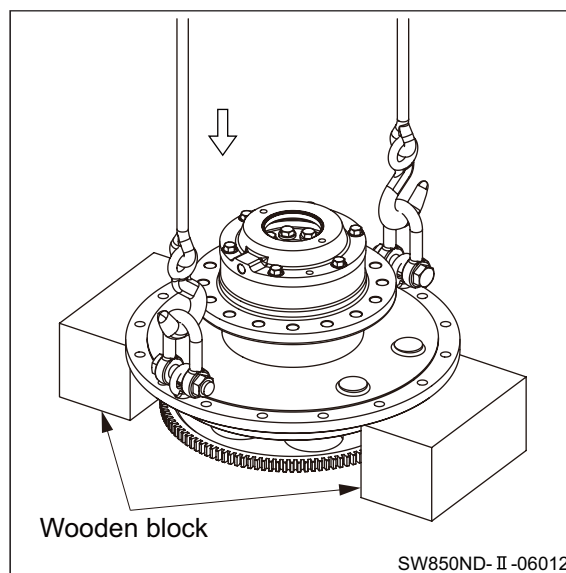


11) Remove axle shaft SUBASSY.

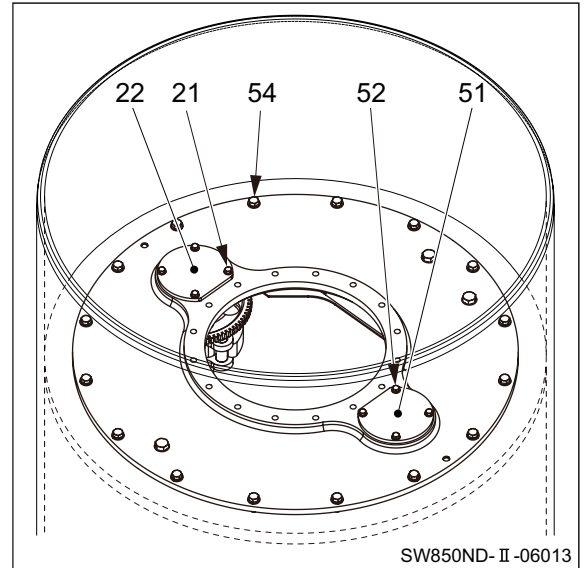
 Axle shaft SUBASSY : 185 kg (408 lbs.)



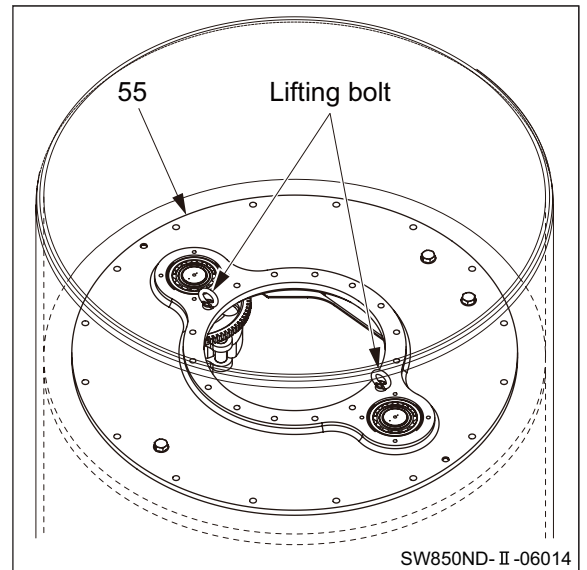
12) Put axle shaft SUBASSY on wooden blocks.
(To step (28))



- 13) Remove bolts (21) and (52).
- Remove covers (22) and (51).
 - Remove bolts (54).



- 14) Install lifting bolts (M16) to housing (55).

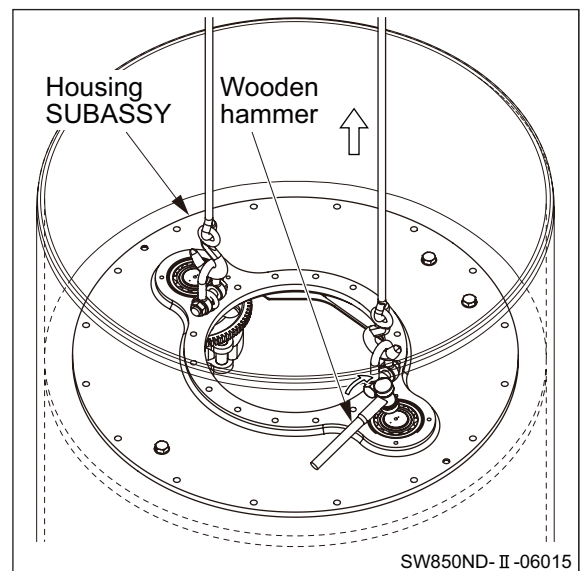


- 15) Remove housing SUBASSY.

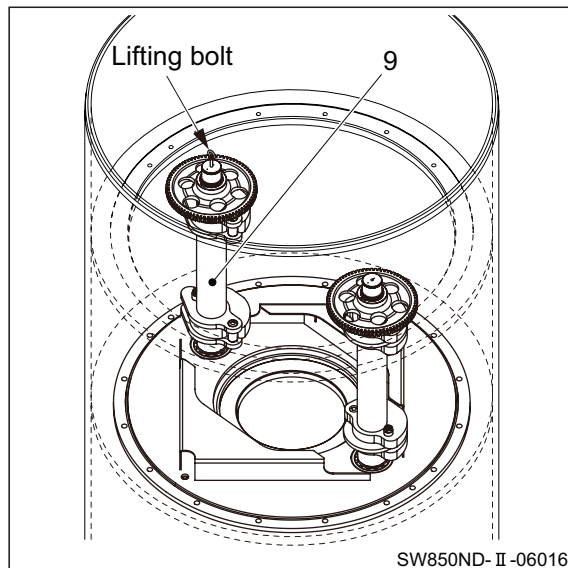
J_{k9} Axle shaft subassembly : 225 kg (496 lbs.)

(NOTICE)

- In order not to lift eccentric shaft together with housing SUBASSY, tap on the eccentric shaft ends alternately with a wooden hammer during lifting.



16) Install a lifting bolt (M8) to eccentric shaft (9).



⚠ WARNING

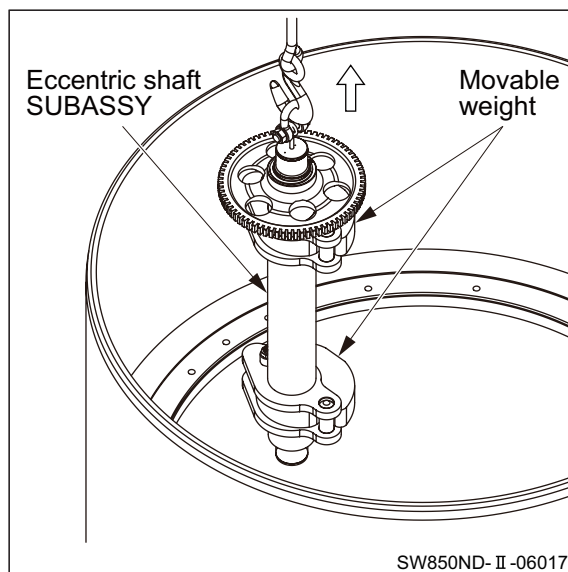
Take care not to get your fingers caught in movable weights.

17) Remove eccentric shaft SUBASSY.

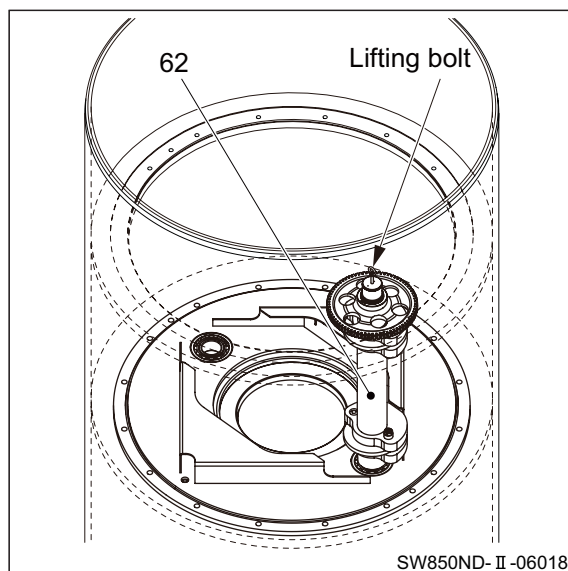
\mathfrak{J}_{kg} Eccentric shaft SUBASSY : 95 kg (209 lbs.)

(NOTICE)


- Put the movable weight at its outmost position.



18) Install a lifting bolt (M8) to eccentric shaft (62).

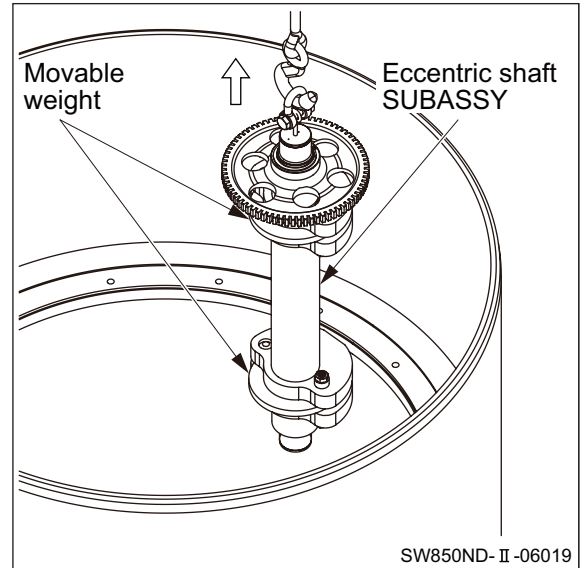


19) Remove eccentric shaft SUBASSY.

 Eccentric shaft SUBASSY : 95 kg (209 lbs.)

(NOTICE)

- Put the movable weight at its outmost position.




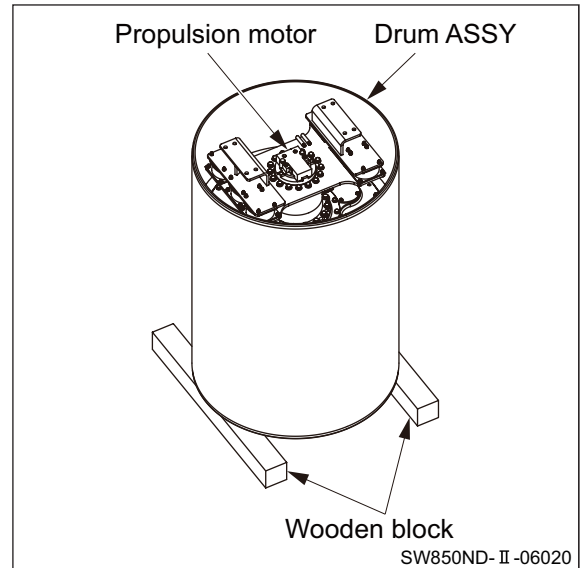
SW850ND- II -06019

⚠ WARNING

Be careful because reversing the drum involves risk. Confirm that the surrounding area is safe, and work in a natural, unstrained posture.

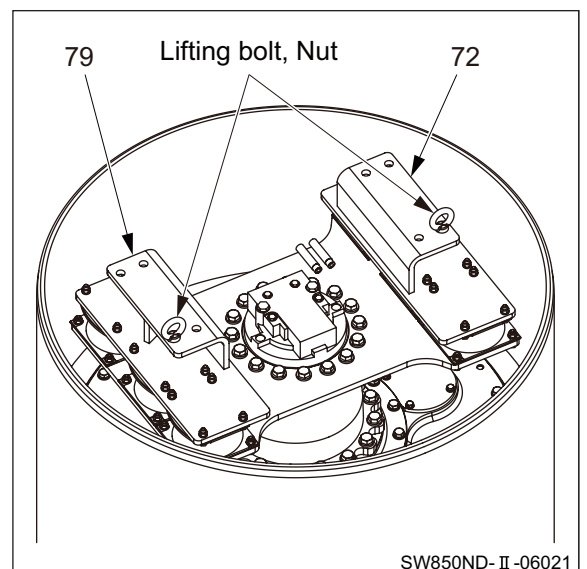
20) Reverse drum SUBASSY.

 Drum SUBASSY : 2,530 kg (5,578 lbs.)



SW850ND- II -06020

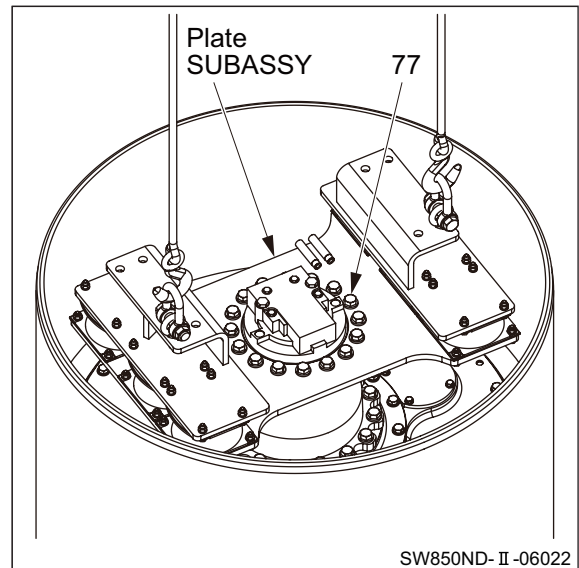
21) Install lifting bolts (M22) to brackets (72) and (79) with nuts.



SW850ND- II -06021

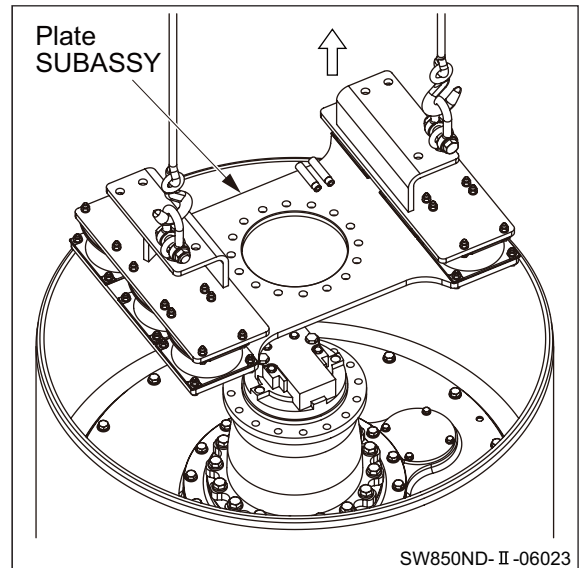
22) Lift plate SUBASSY.

- Remove bolts (77).



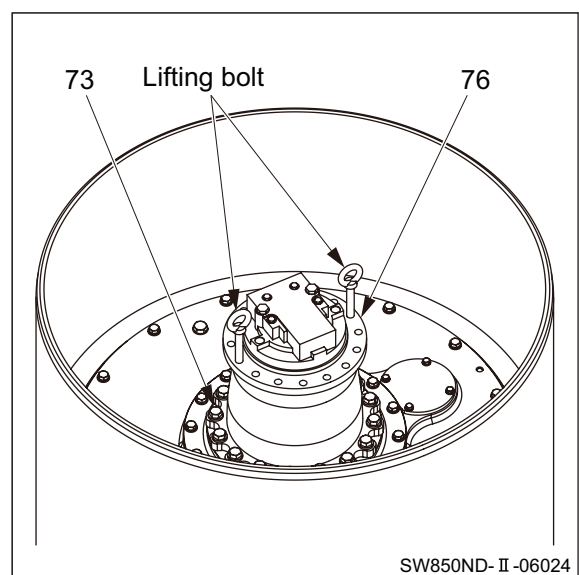
23) Remove plate SUBASSY.

\mathfrak{J}_{kg} Plate SUBASSY : 190 kg (419 lbs.)




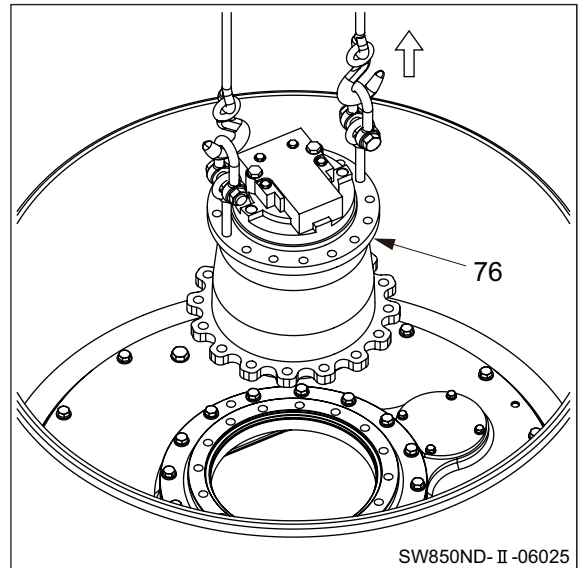
24) Install lifting bolts (M20) to propulsion motor (76).

- Remove bolts (73).



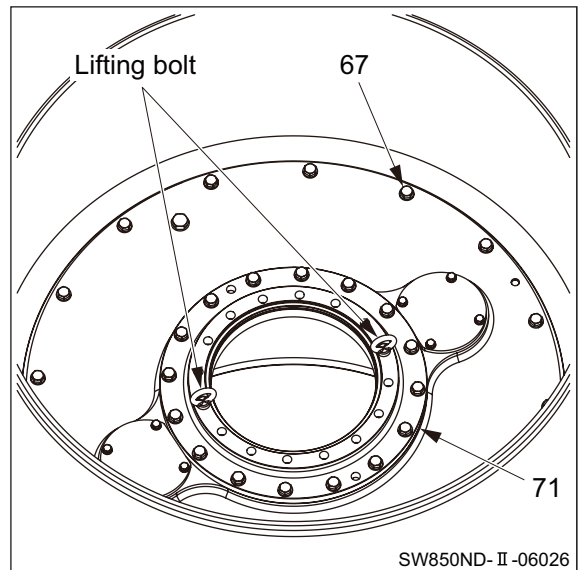
25) Remove propulsion motor (76).

 (76) Propulsion motor : 215 kg (474 lbs.)



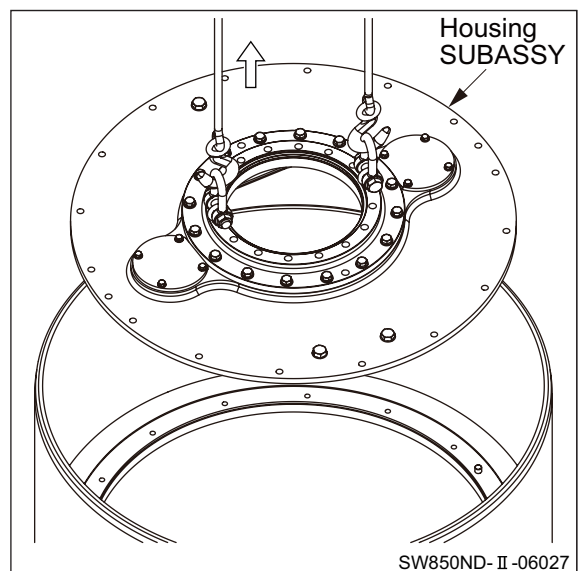
26) Install lifting bolts (M20) to housing (71).

- Remove bolts (67).



27) Remove housing SUBASSY.

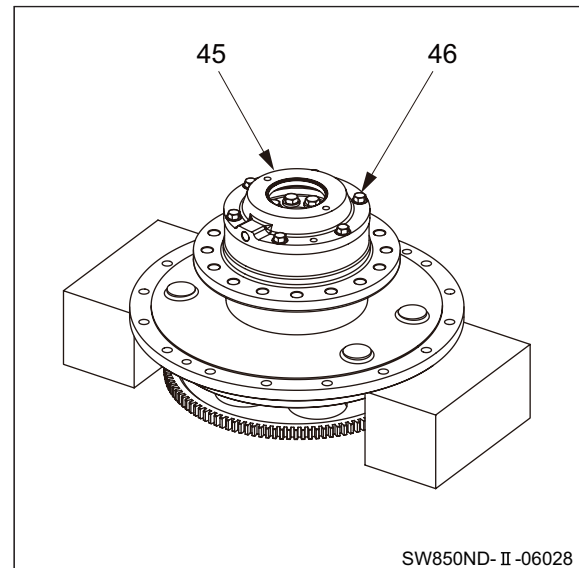
 Housing SUBASSY : 275 kg (606 lbs.)



28) Disassembly of axle shaft SUBASSY

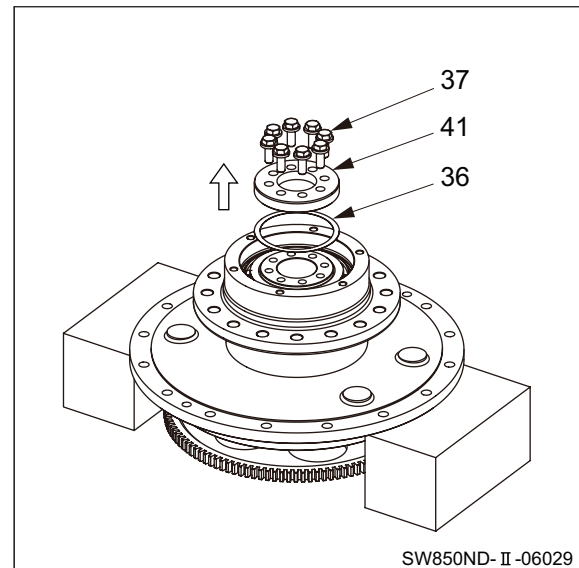
(From step (12))

- Remove bolts (46).
- Remove cover (45).



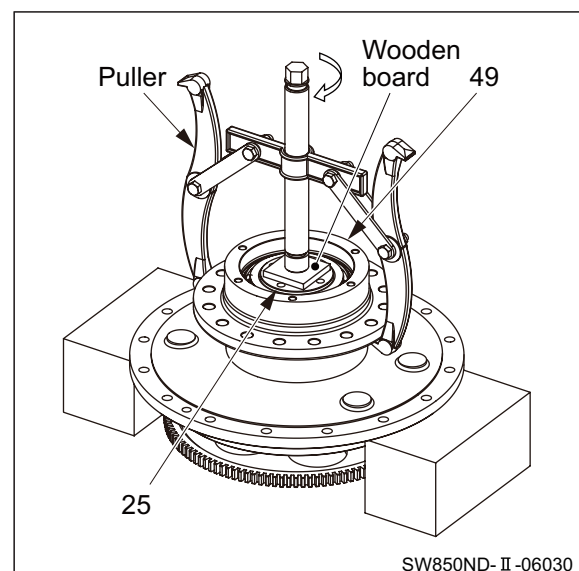
29) Remove bolts (37).

- Remove cover (41).
- Remove shim (36).

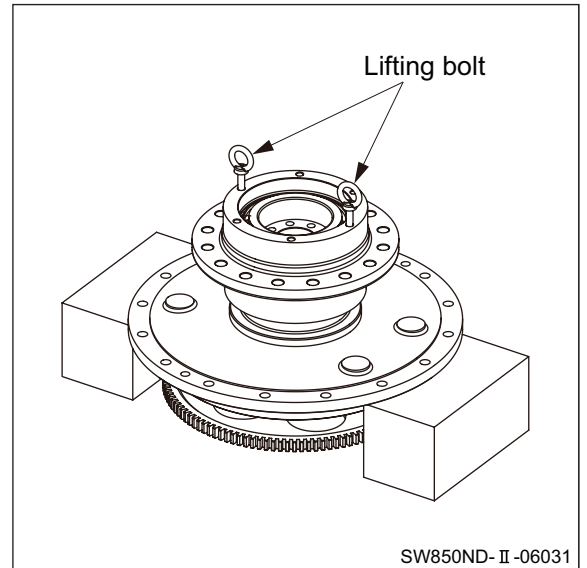


30) Put a piece of wooden board on end of axle shaft (25).

- Set a puller on housing (49).
- Remove housing SUBASSY with roller bearing from axle shaft SUBASSY.

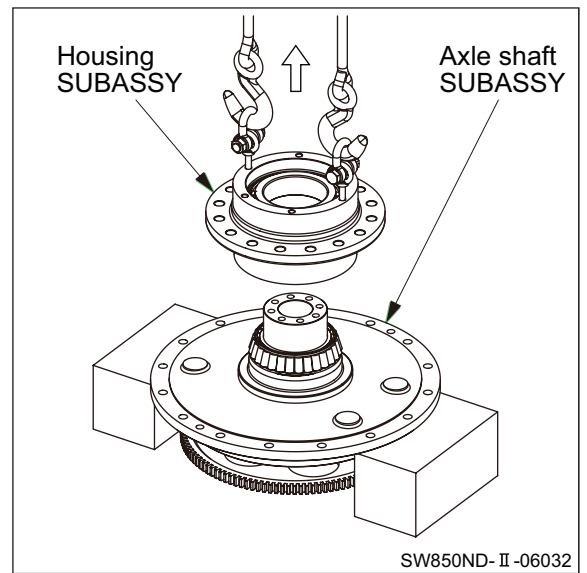


31) Install lifting bolts (M12).



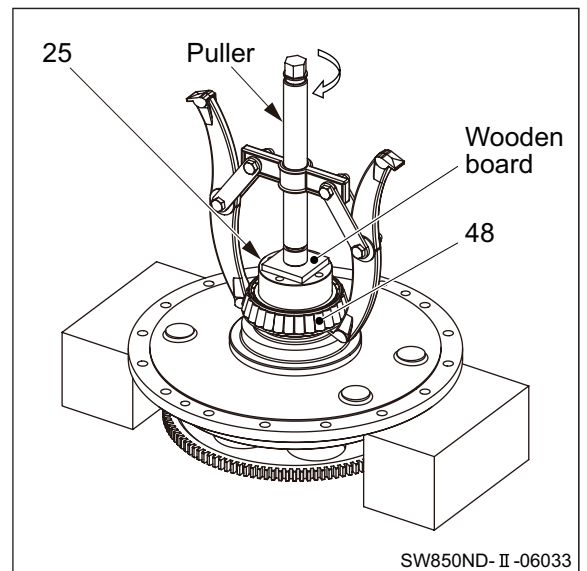
32) Remove housing SUBASSY from axle shaft SUBASSY.

\mathfrak{J}_{kg} Housing SUBASSY : 45 kg (99 lbs.)




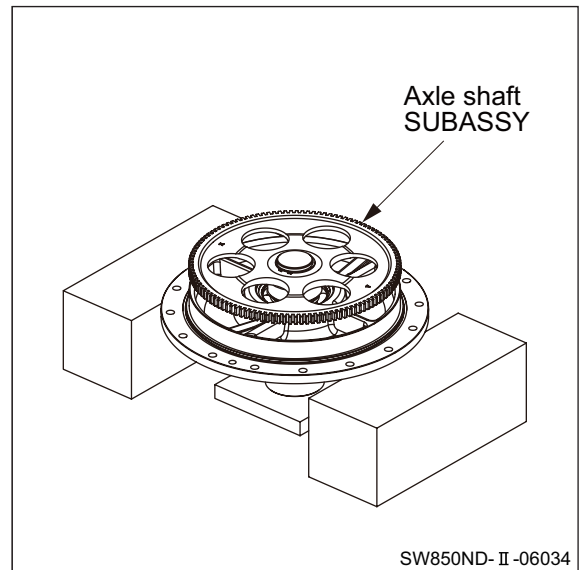
33) Put a piece of wooden board on end of axle shaft (25).

- Set a puller on roller bearing (48) inner race.
- Remove roller bearing inner race from axle shaft SUBASSY.



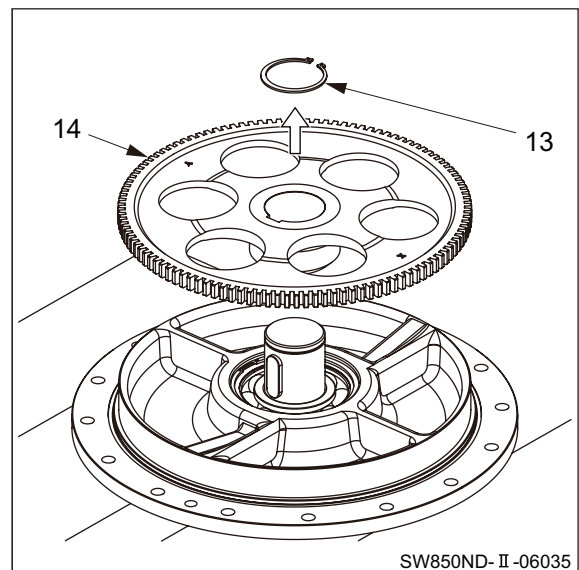
34) Reverse axle shaft SUBASSY.

 Axle shaft SUBASSY : 125 kg (276 lbs.)



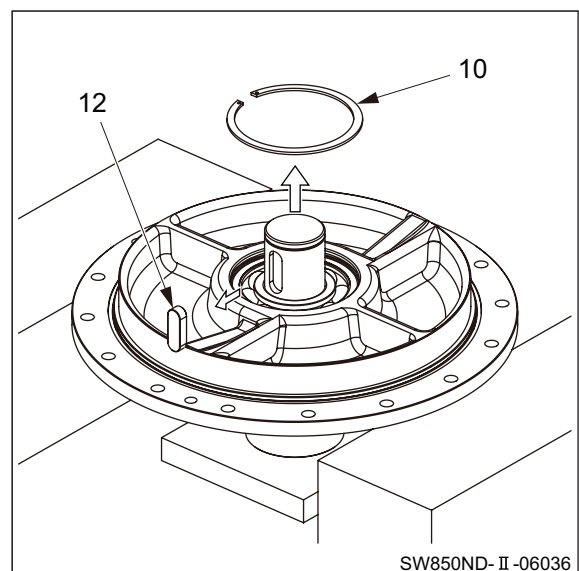
35) Remove retaining ring (13).

- Remove gear (14).




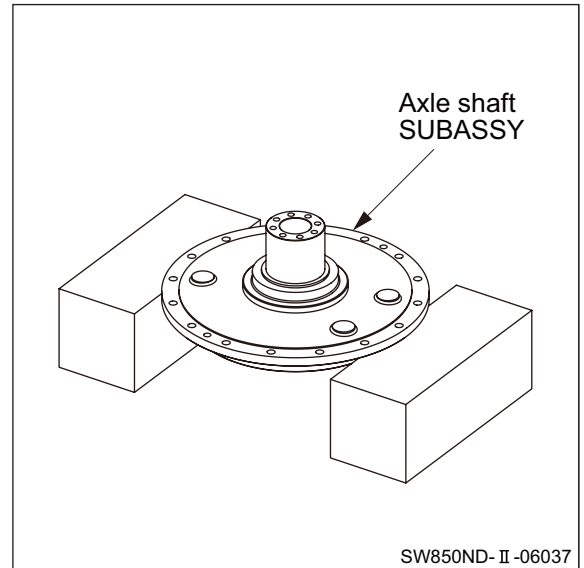
36) Remove sunk key (12).

- Remove retaining ring (10).

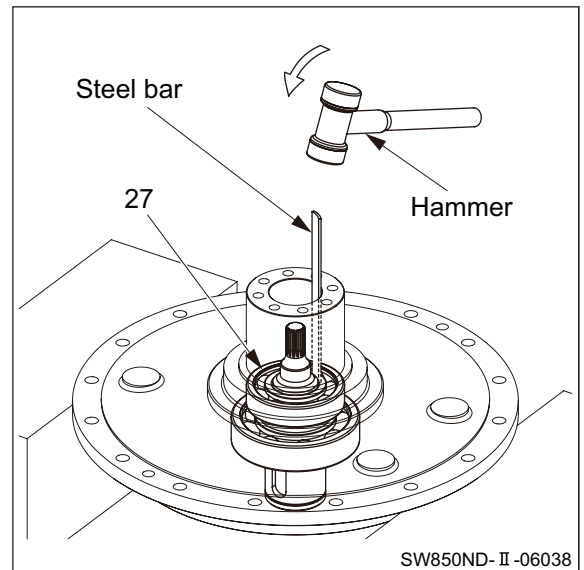


37) Reverse axle shaft SUBASSY.

 Axle shaft SUBASSY : 105 kg (231 lbs.)



38) Strike on ball bearing (27) inner race by using a steel bar, and remove shaft SUBASSY.




5-2-2. Reassembly of vibratory drum

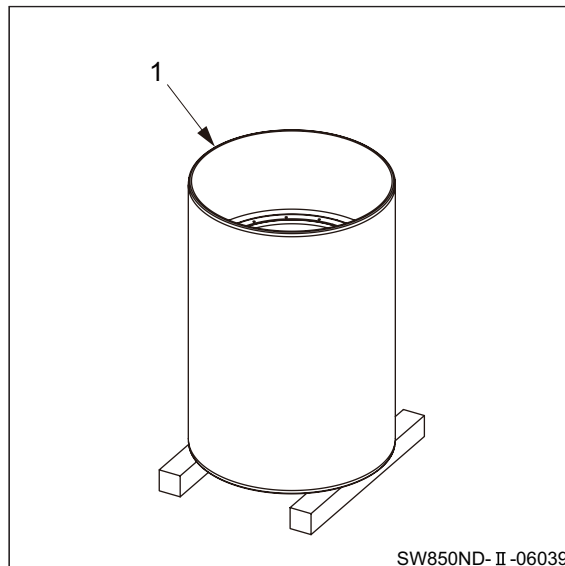
- Before reassembling, clean disassembled parts well and check that there is no abnormality.

WARNING

- When standing the drum, use wooden blocks of sufficient strength to securely support the drum.
- Carry out the work in an unstrained posture using a work stool or the like.

- 1) Lift drum (1) with a crane and put it in an upright position.

 (1) Drum : 1,840 kg (4,056 lbs.)



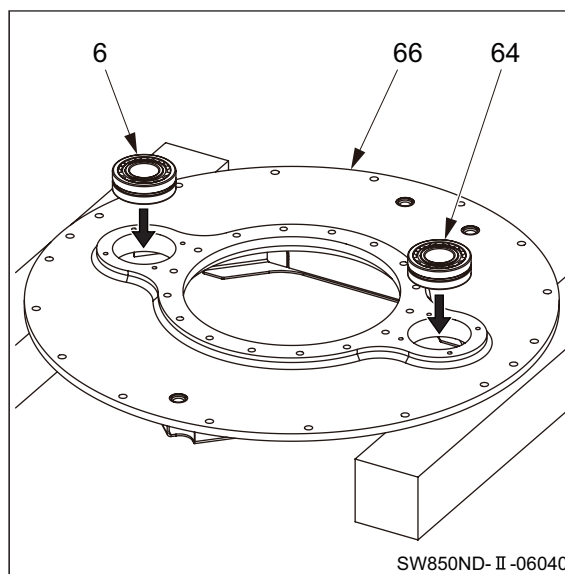
- 2) Reassembly of housing SUBASSY

2-1) Apply a coat of gear oil to housing (66) at where bearings will be press-fitted.

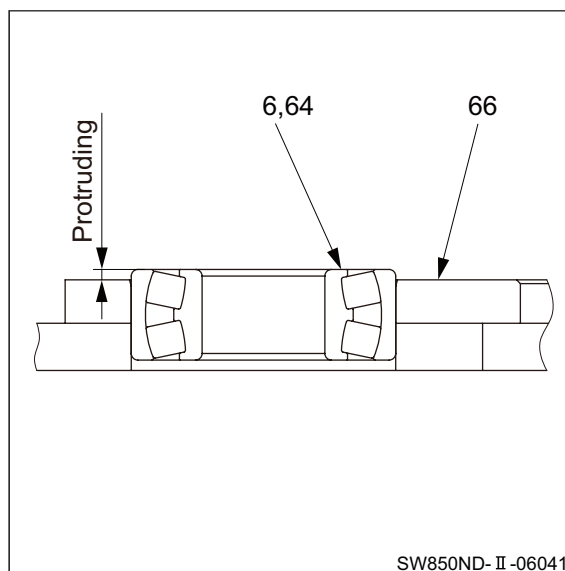
- Drive vibrator bearings (6) and (64) into housing.

(NOTICE)

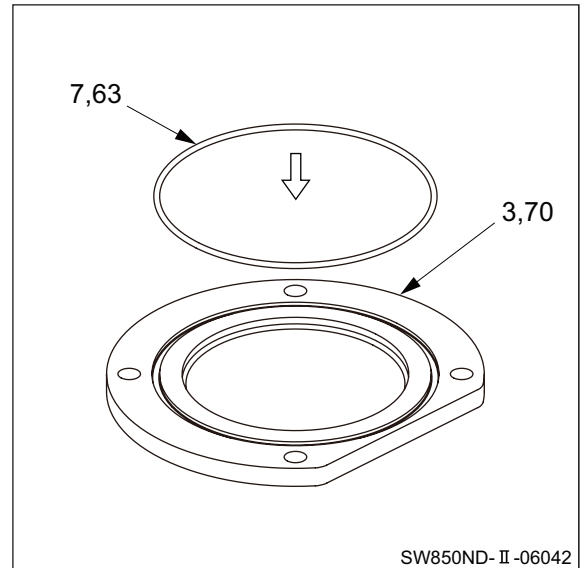
- Take care not to damage the bearings when installing them.



- 2-2) Stop driving in vibrator bearings (6) and (64) when they come to a position slightly protruding from the boss surface of the housing (66) to avoid driving in too much.

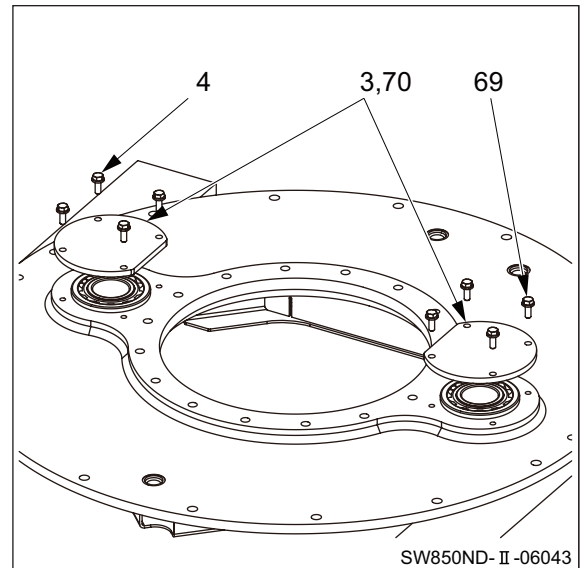


- 2-3) Apply grease to O-rings (7) and (63).
 • Install O-rings to covers (3) and (70).



SW850ND- II -06042

- 2-4) Apply a coat liquid packing to housing SUBASSY at where covers (3) and (70) will be installed.
 • Place covers while making sure to orient them in the correct direction.
 • Install four bolts (4), four bolts (69) to press in bearings (6) and (64).



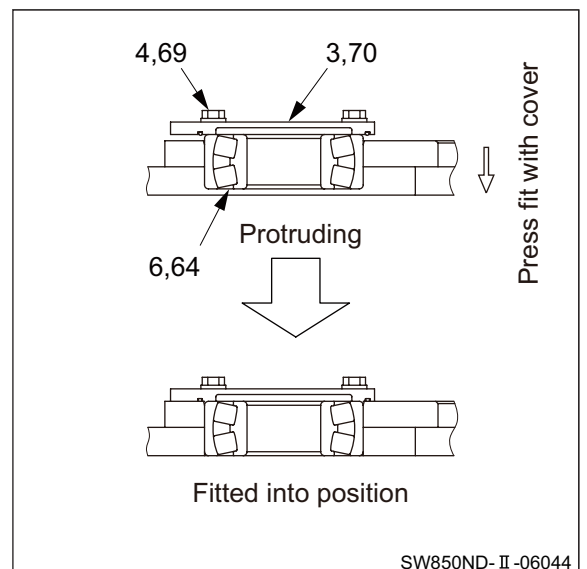
SW850ND- II -06043

(NOTICE)

- Take care not to let O-ring to protrude from its groove.
- Bolts are treated with thread-locking fluid. Use new thread-locking fluid treated bolts for installation.

- 2-5) Press in and secure bearings (6) and (64) with covers (3) and (70).

 (4) and (69) Bolts M10×30 : 59 N·m (44 lbf·ft)

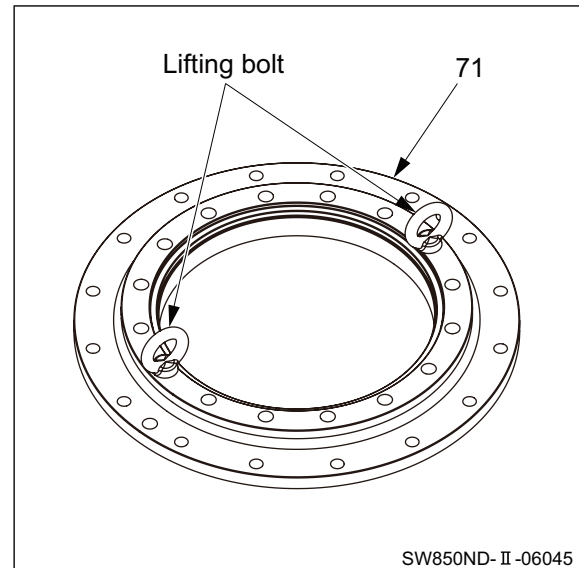


SW850ND- II -06044

⚠ WARNING

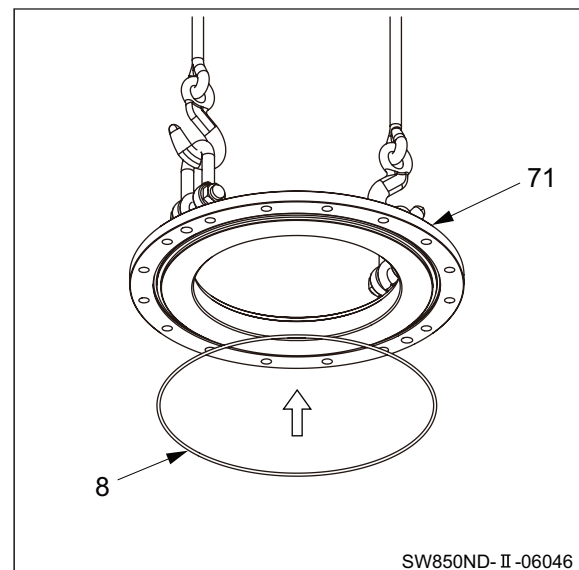
When installing lifting bolts, screw in the threads fully before using.

2-6) Install lifting bolts (M20) to housing (71).



2-7) Lift housing (71).

- Apply grease to O-ring (8).
- Install O-ring to housing.



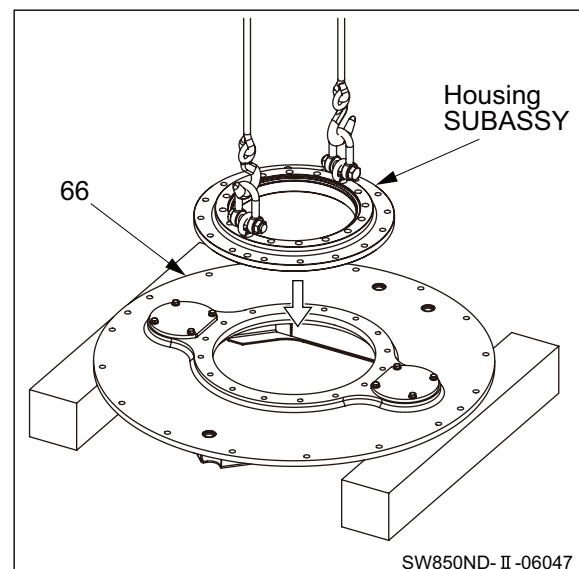
2-8) Apply a coat of liquid packing to housing (66) at where housing SUBASSY will be installed.

- Lower housing SUBASSY on mounting surface of housing.

\mathfrak{J}_{kg} Housing SUBASSY : 45 kg (99 lbs.)

(NOTICE)

- Take care not to let O-ring to protrude from its groove.



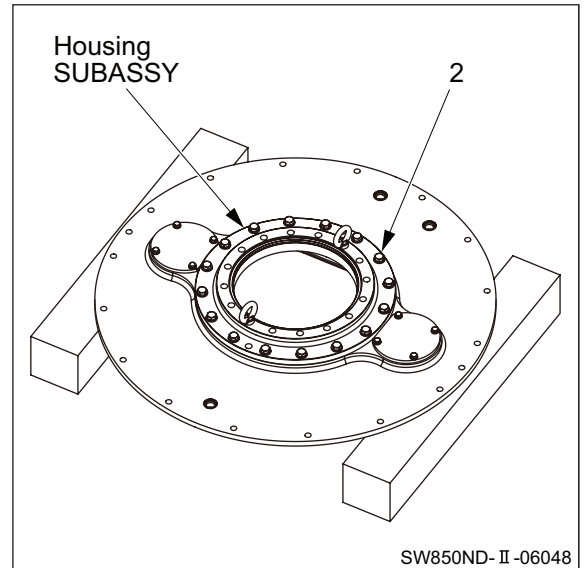
2-9) Secure housing SUBASSY with sixteen bolts (2) and washers.



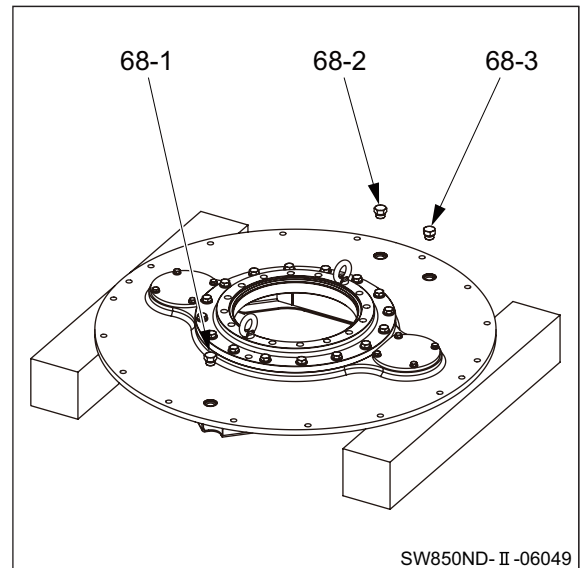
(2) Bolts M16×50 : 265 N·m (195 lbf·ft)

(NOTICE)

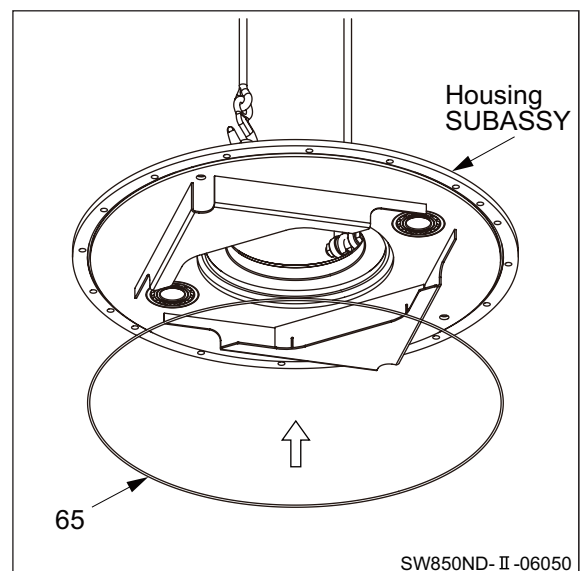
- Bolts are treated with thread-locking fluid. Use new thread-locking fluid treated bolts for installation.



3) Apply grease to O-rings for plugs (68-1), (68-2), and (68-3).
• Install plugs.



4) Lift housing SUBASSY.
• Apply grease to O-ring (65).
• Install O-ring.

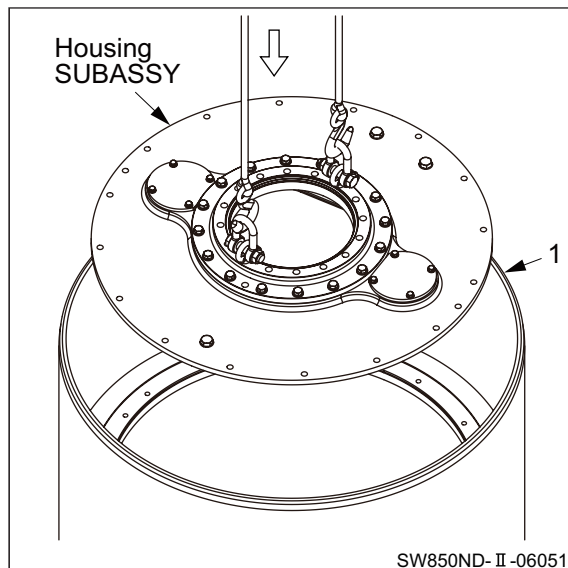


- 5) Lower housing SUBASSY on mounting surface of drum (1).

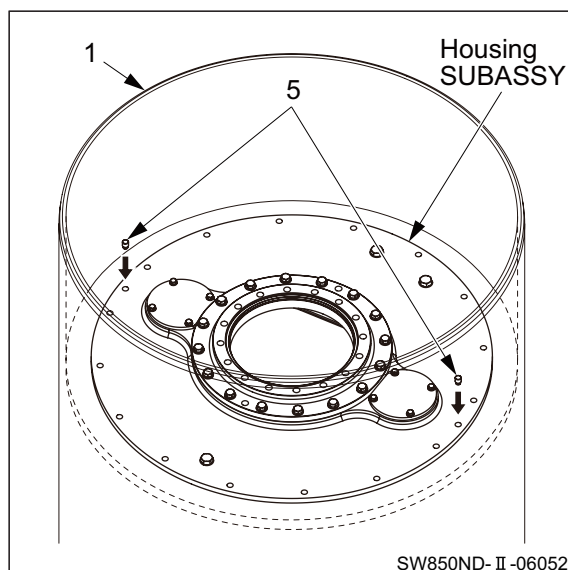
 k_g Housing SUBASSY : 275 kg (606 lbs.)

(NOTICE)


- Take care not to let O-ring to protrude from its groove.



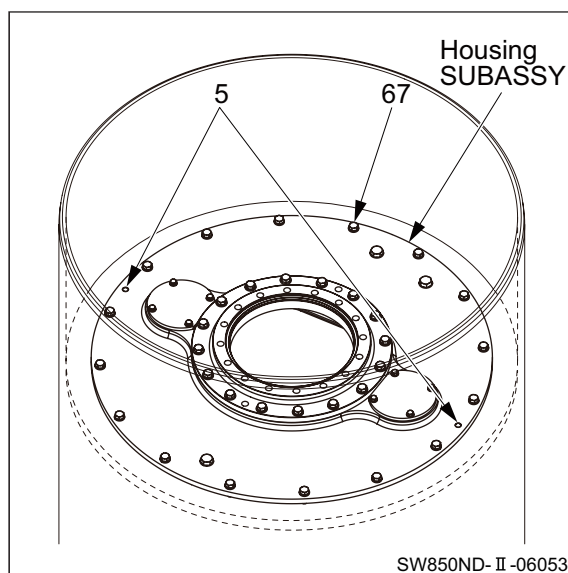
- 6) Drive in two locating pins (5) for housing SUBASSY and drum (1) temporarily.



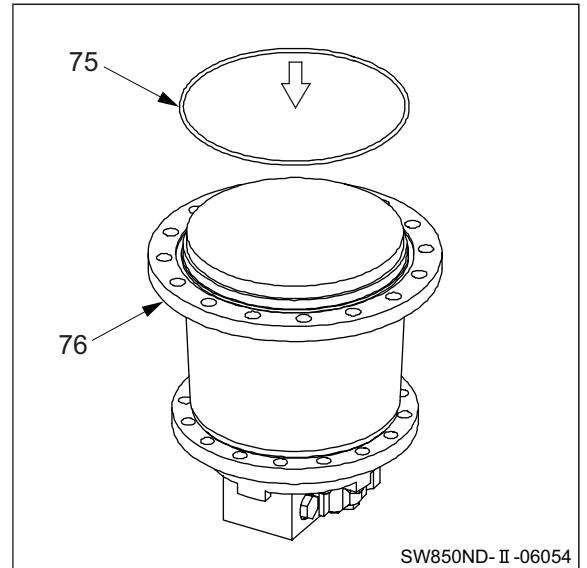
- 7) Secure housing SUBASSY with sixteen bolts (67) and washers.

 $N\cdot m$ (67) Bolts M16×45 : 265 N·m (195 lbf·ft)

- Drive in locating pins (5) again.



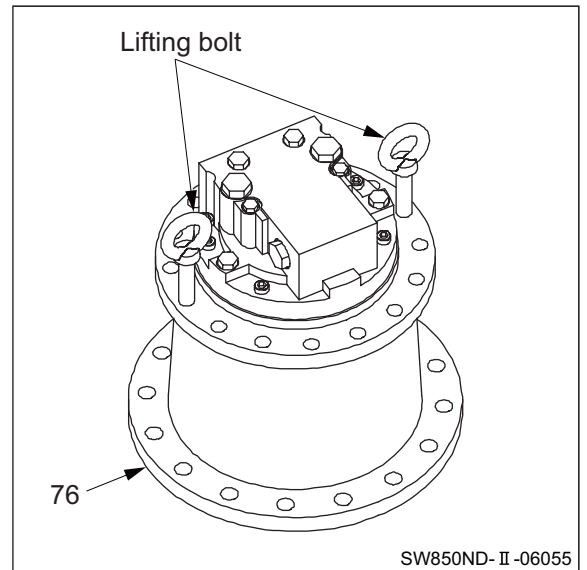
- 8) Apply grease to O-ring (75).
 • Install O-ring to propulsion motor (76).



- 9) Reverse propulsion motor (76).

\mathcal{J}_{kg} (76) Propulsion motor : 215 kg (474 lbs.)

- Install lifting bolts (M20).



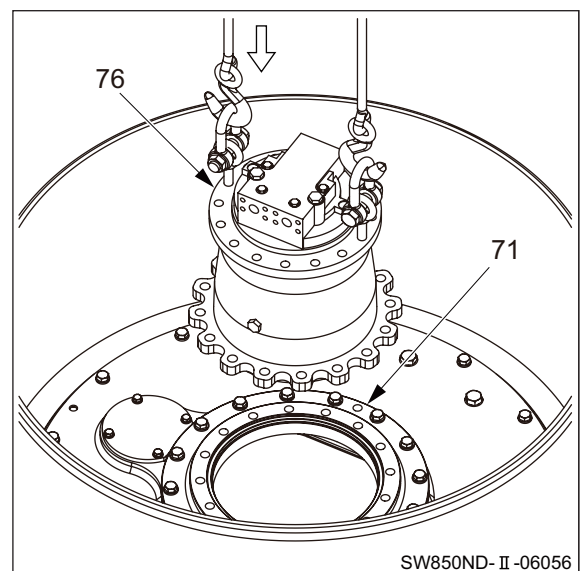
- 10) Apply a coat of liquid packing to propulsion motor (76) at where housing (71) will be installed.

- Lower propulsion motor on mounting surface of housing.

\mathcal{J}_{kg} Propulsion motor SUBASSY : 215 kg (474 lbs.)

(NOTICE)

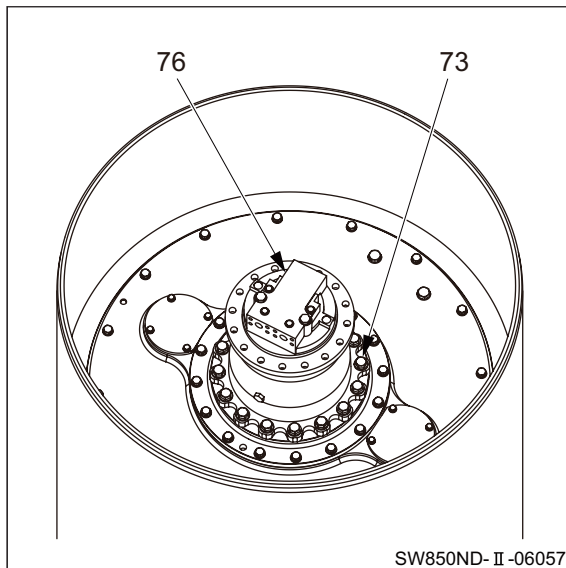
- Take care not to let O-ring to protrude from its groove.



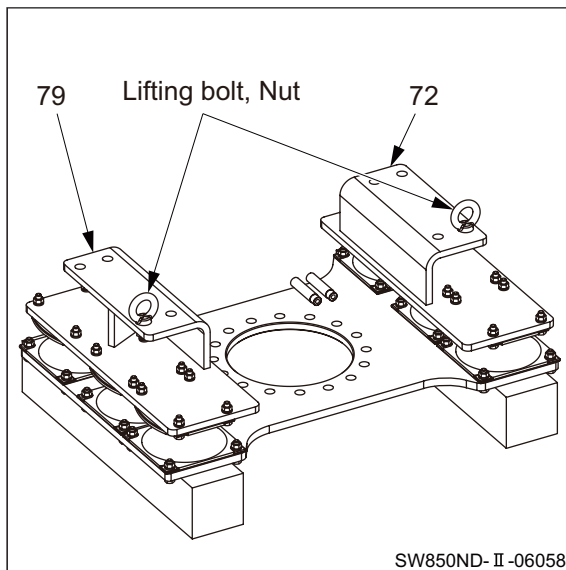
11) Secure propulsion motor (76) with sixteen bolts (73) and washers.



(73) Bolts M20×60 : 539 N·m (398 lbf-ft)



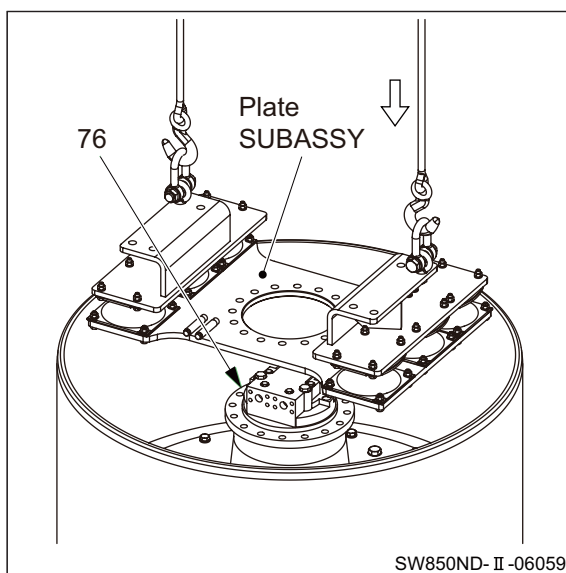
12) Install lifting bolts (M22) to brackets (72) and (79) with nuts.



13) Lower plate SUBASSY on mounting surface of propulsion motor (76).

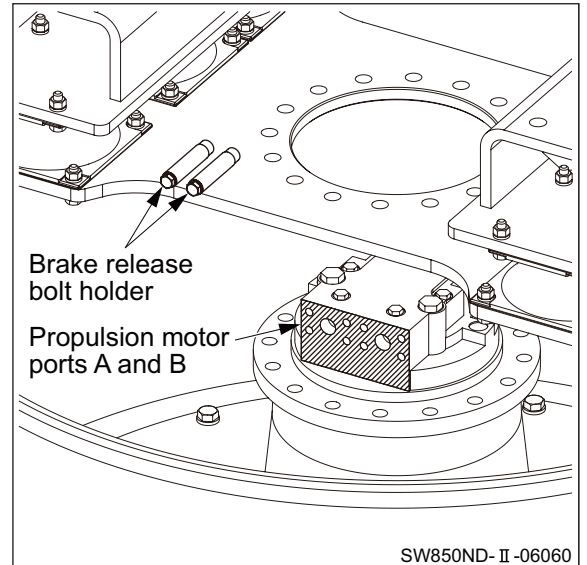


Plate SUBASSY : 190 kg (419 lbs.)




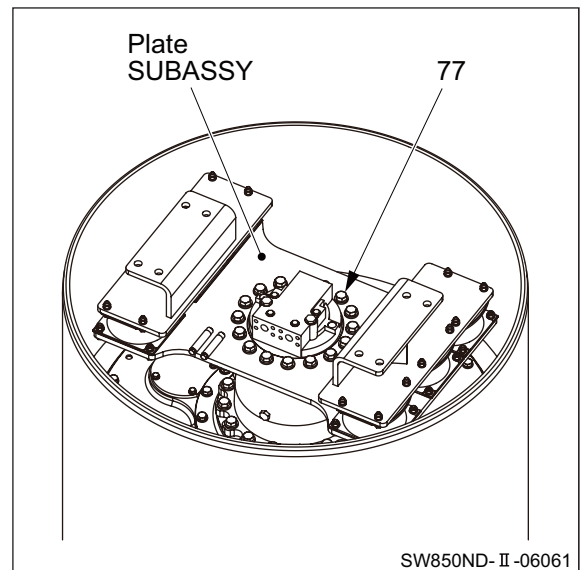
(NOTICE)

- The recess of the plate (at the side where brake release bolt holders are attached) must be parallel with the side of the propulsion motor which have ports A and B.



14) Secure plate SUBASSY with sixteen bolts (77) and washers.


 (77) Bolts M20×60 : 539 N·m (398 lbf·ft)

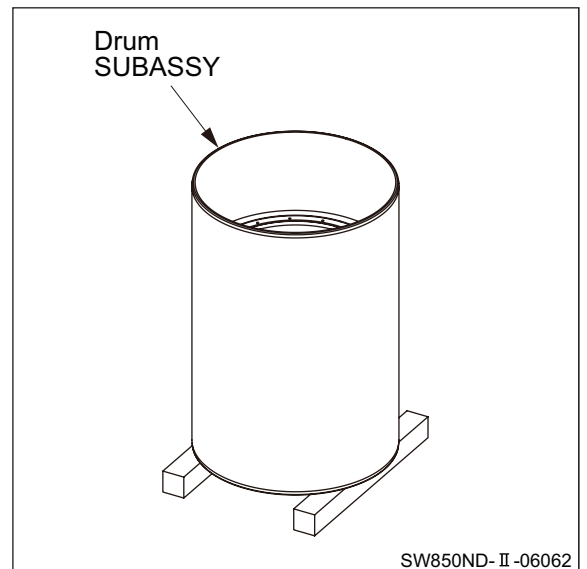


⚠ WARNING

Be careful because reversing the drum involves risk. Confirm that the surrounding area is safe, and work in a natural, unstrained posture.

15) Reverse drum SUBASSY.

 Drum SUBASSY : 2,530 kg (5,578 lbs.)



⚠ WARNING

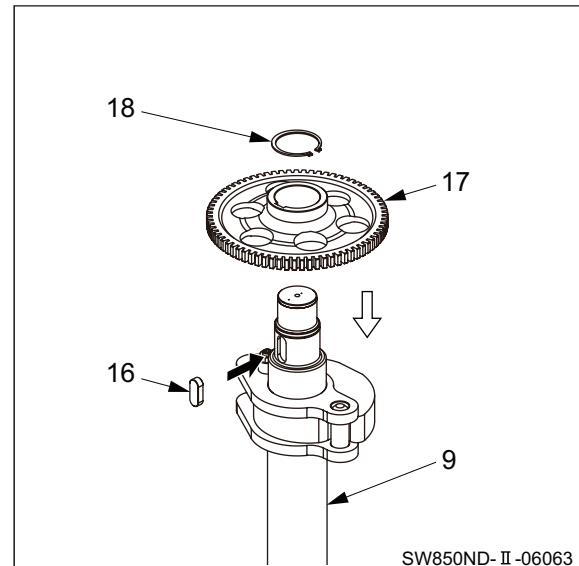
Wear heat resistant gloves when handling heated parts to avoid burns.

16) Heat up gear (17) by using a ring heater or the like.

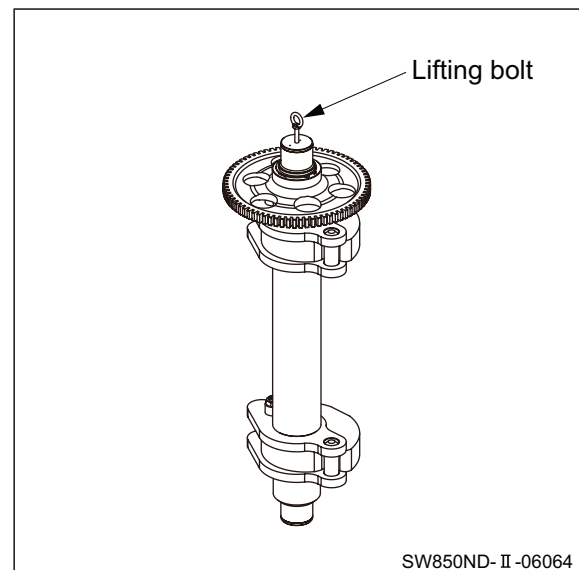
- Drive sunk key (16) into eccentric shaft (9).
- Install heated gear.
- Install retaining ring (18).

(NOTICE)

- Make sure that the retaining ring is fitted completely in its groove.



17) Install a lifting bolt (M8).

**⚠ WARNING**

Take care not to get your fingers caught in movable weights.

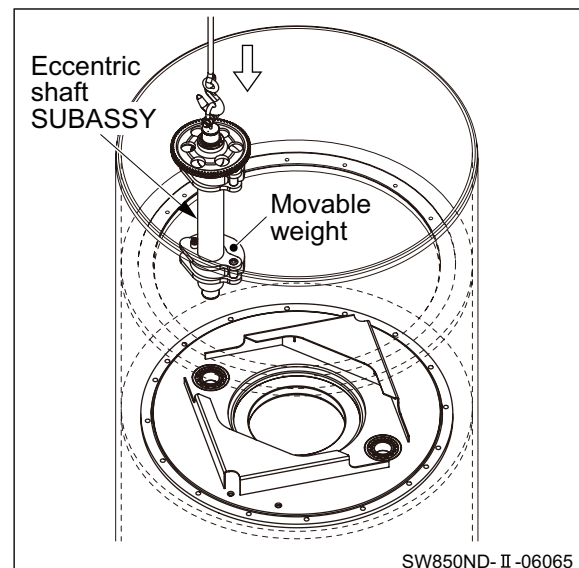
18) Apply a coat of gear oil to eccentric shaft SUBASSY at where bearing will be installed.

- Install eccentric shaft SUBASSY.

\mathfrak{J}_{kg} Eccentric shaft SUBASSY : 95 kg (209 lbs.)

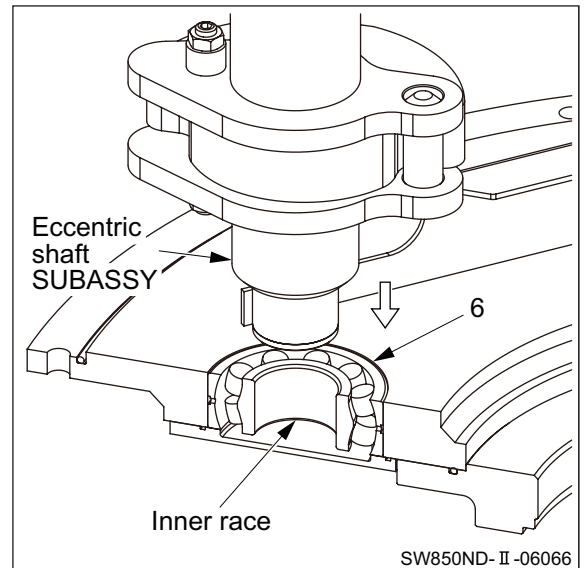
(NOTICE)

- Put the movable weight at its outmost position.



(NOTICE)

- Insert eccentric shaft SUBASSY into vibrator bearing (6) while taking care not to tilt vibrator bearing inner race.
- After inserting the eccentric shaft SUBASSY into the bearing, lay the eccentric shaft SUBASSY against the inner wall of the drum so that it will not fall down.

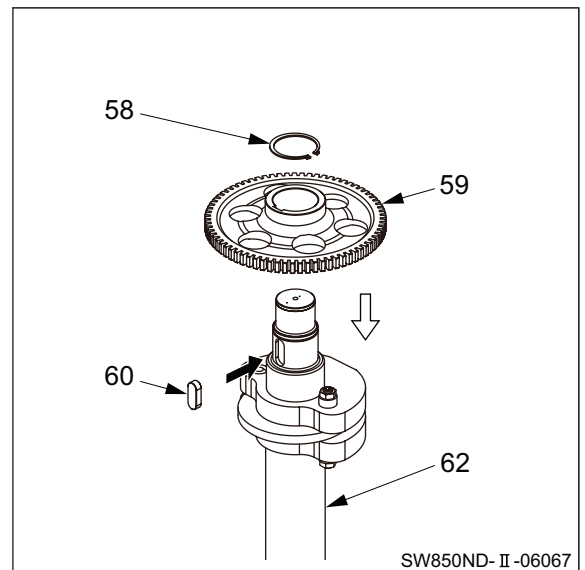


19) Heat up gear (59) by using a ring heater or the like.

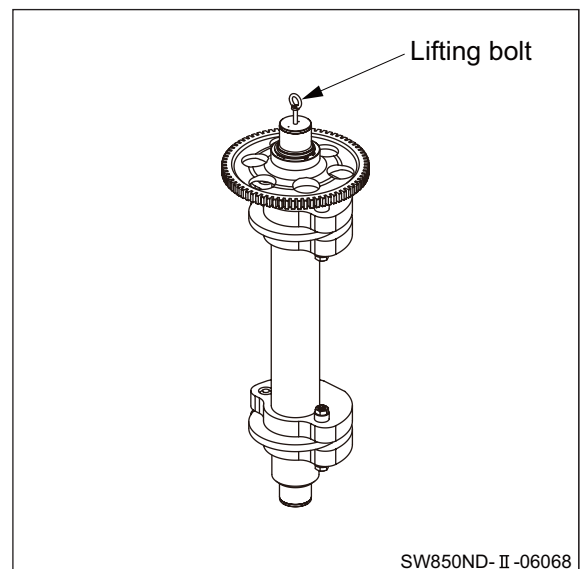
- Drive sunk key (60) into eccentric shaft (62).
- Install heated gear.
- Install retaining ring (58).

(NOTICE)

- Make sure that the retaining ring is fitted completely in its groove.




20) Install a lifting bolt (M8).



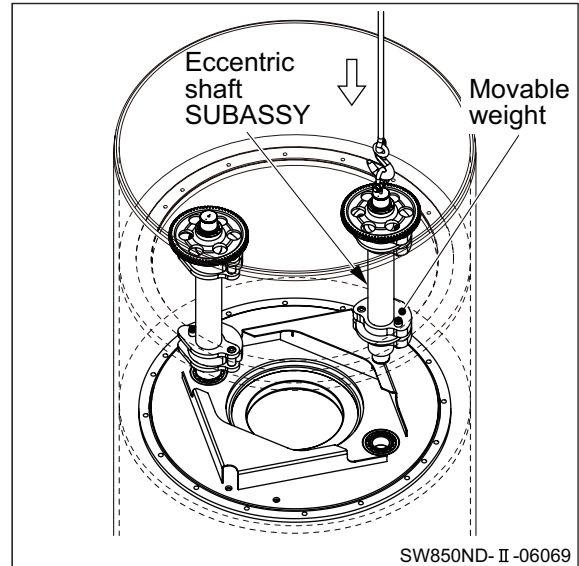
21) Apply a coat of gear oil to eccentric shaft SUBASSY at where bearing will be installed.

- Install eccentric shaft SUBASSY.

 Eccentric shaft SUBASSY : 95 kg (209 lbs.)

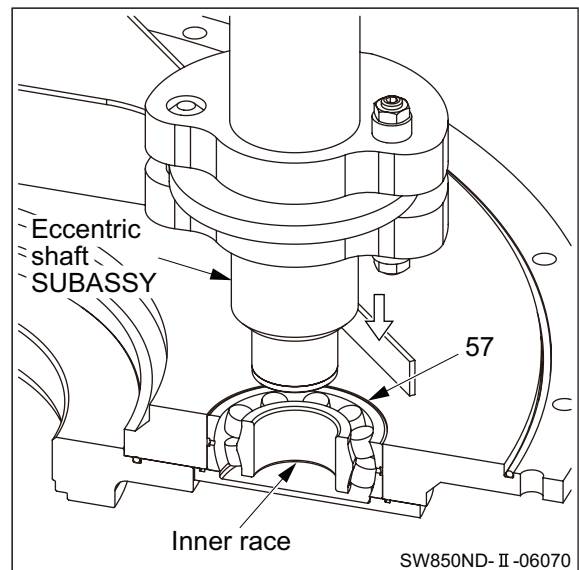
(NOTICE)

- Put the movable weight at its outmost position.



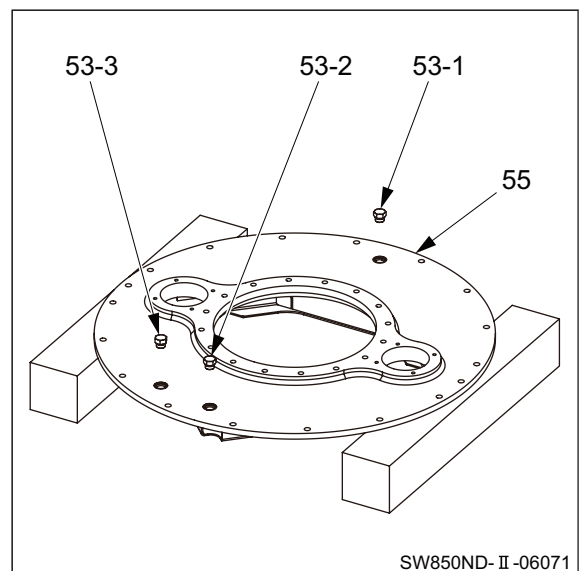
(NOTICE)

- Insert eccentric shaft SUBASSY into vibrator bearing (57) while taking care not to tilt vibrator bearing inner race.
- After inserting the eccentric shaft SUBASSY into the vibrator bearing, lay the eccentric shaft SUBASSY against the inner wall of the drum so that it will not fall down.

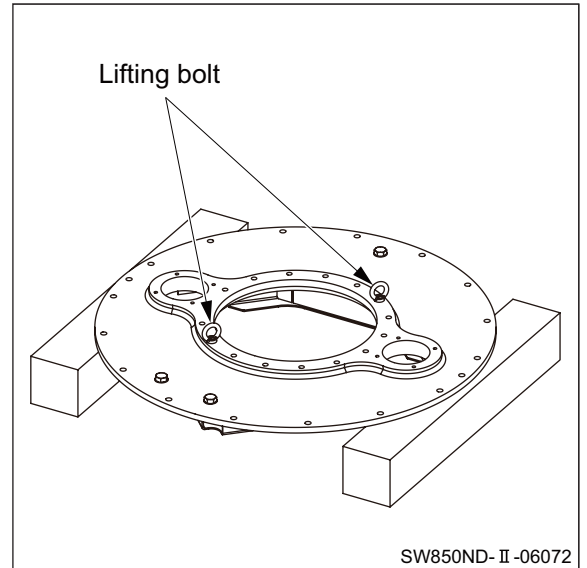


22) Apply grease to O-rings for plugs (53-1), (53-2), and (53-3).

- Install plugs to housing (55).



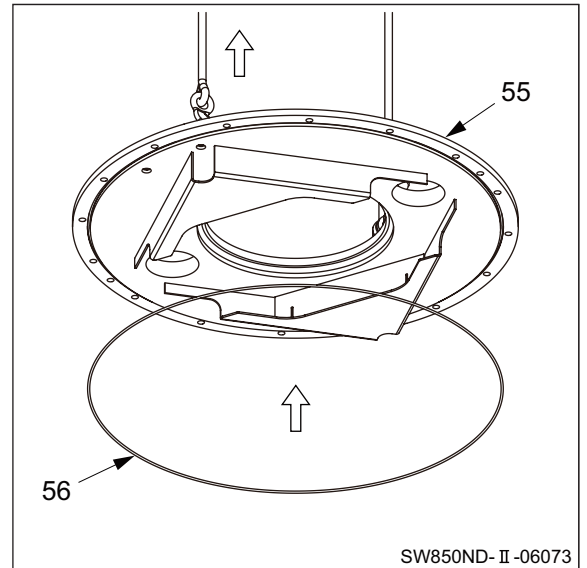
23) Install lifting bolts (M10).



24) Lift housing (55).

\mathfrak{J}_{kg} (55) Housing : 215 kg (474 lbs.)

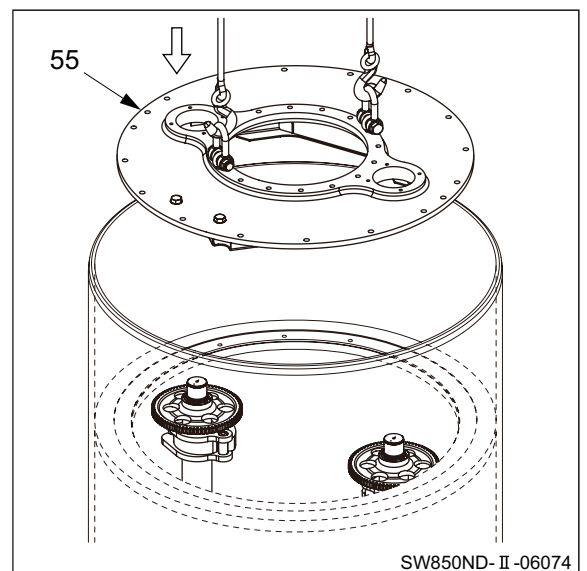
- Apply grease to O-ring (56).
- Install O-ring to housing.



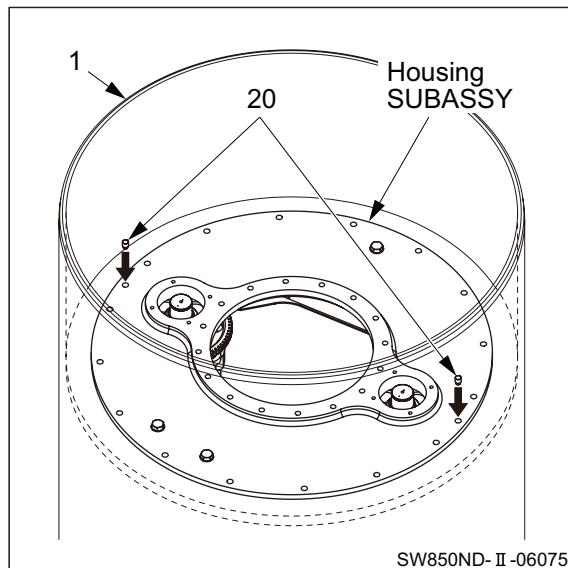
25) Lower housing (55) on mounting surface of drum.

(NOTICE)

- Take care not to let O-ring to protrude from its groove.



26) Drive in two locating pins (20) for housing SUBASSY and drum (1) temporarily.

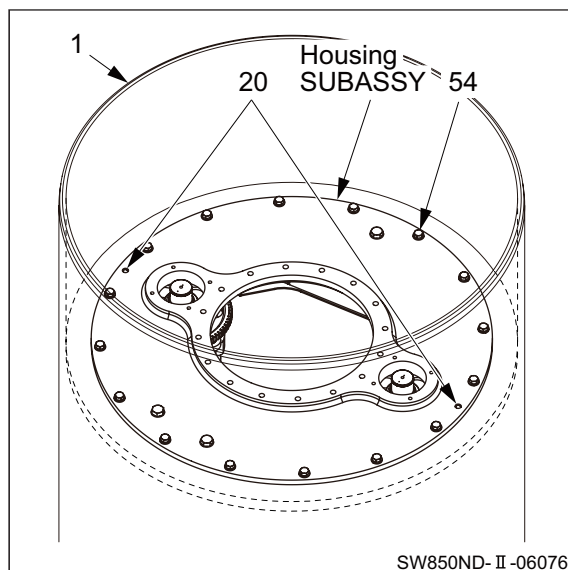


27) Secure housing SUBASSY to drum (1) with sixteen bolts (54) and washers.



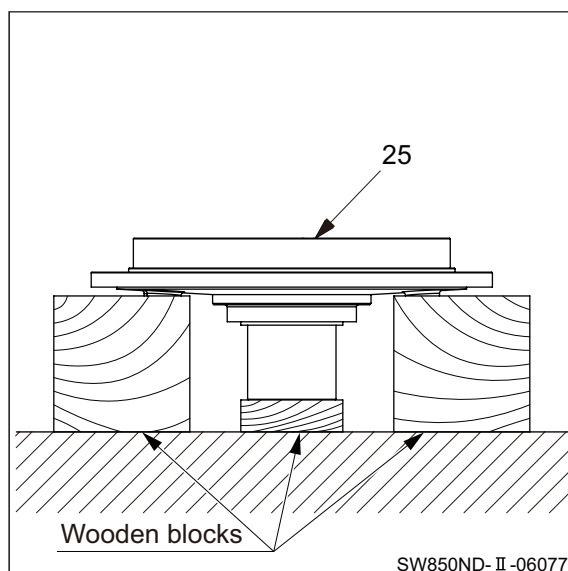
(54) Bolts M16×45 : 265 N·m (195 lbf·ft)

- Drive in locating pins (20) again.



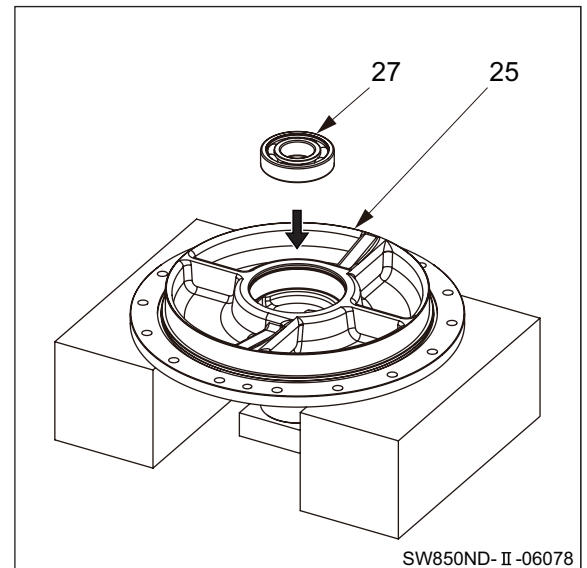
28) Reassembly of axle shaft SUBASSY

28-1) Fix axle shaft (25) with wooden blocks.



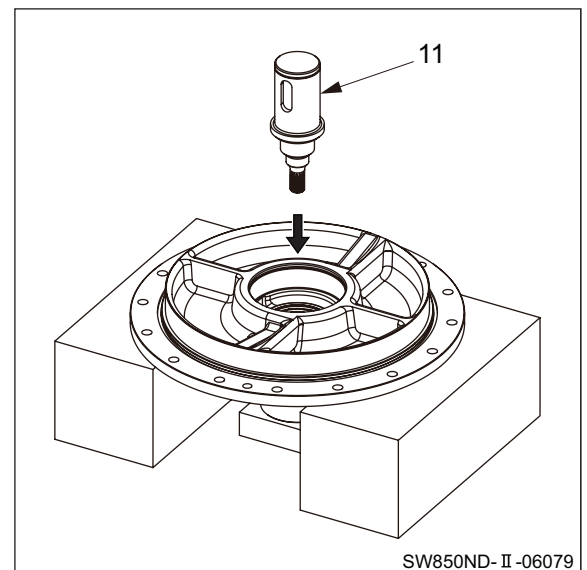
28-2) Apply a coat of gear oil to axle shaft (25) at where bearing will be press-fitted.

- Drive ball bearing (27).



28-3) Apply a coat of gear oil to bearing mounting surface of shaft (11).

- Drive in shaft.

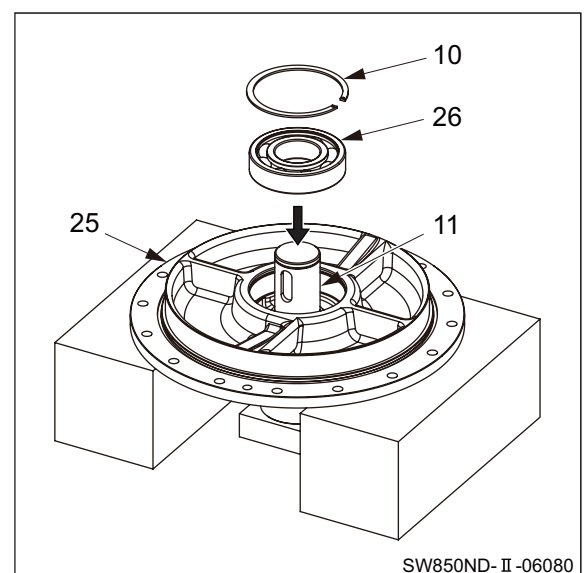


28-4) Apply a coat of gear oil to axle shaft (25) at where bearing will be press-fitted and to drive shaft (11) at where bearing will be installed.

- Drive ball bearing (26).
- Install retaining ring (10).

(NOTICE)

- **Make sure that the retaining ring is fitted completely in its groove.**

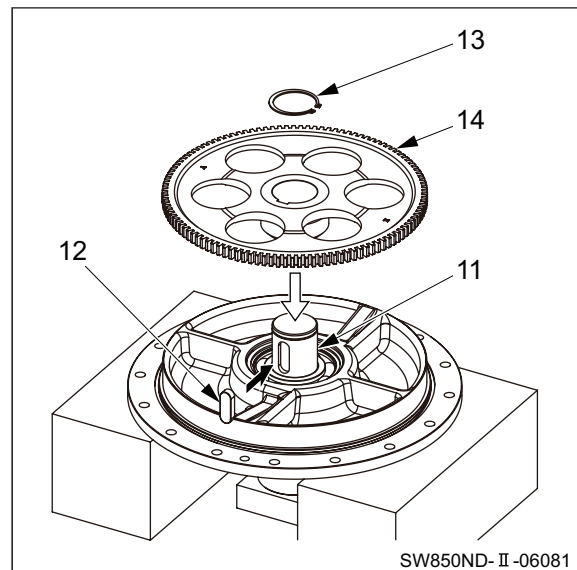


28-5) Heat up gear (14) by using a ring heater or the like.

- Drive sunk key (12) to shaft (11).
- Install heated gear.
- Install retaining ring (13).

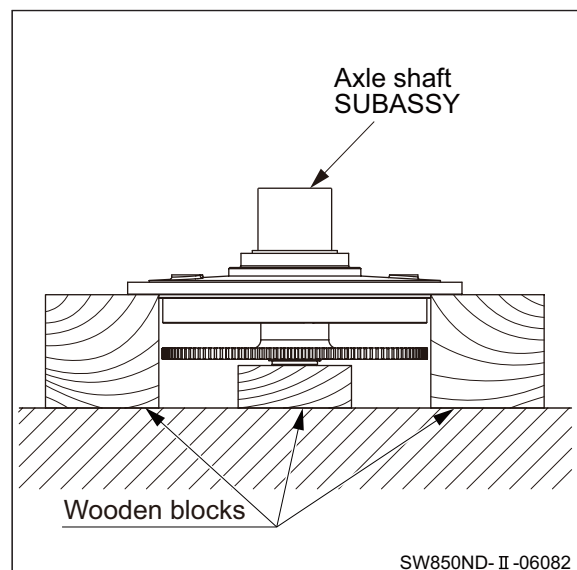
(NOTICE)

- **Make sure that the retaining ring is fitted completely in its groove.**



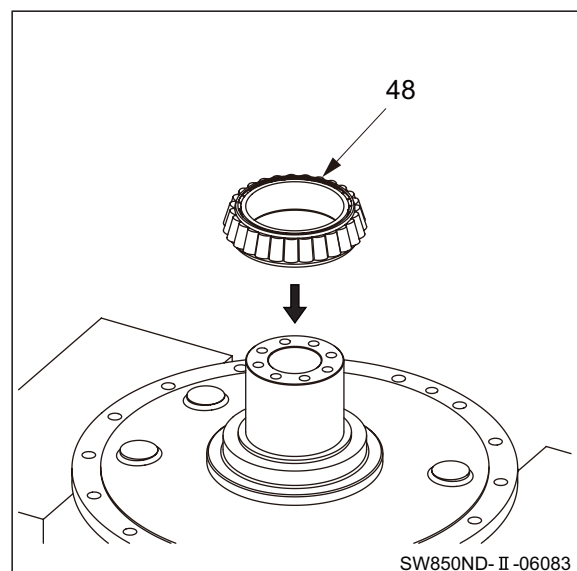
28-6) Reverse axle shaft SUBASSY.

\mathfrak{J}_{kg} Axle shaft SUBASSY : 125 kg (276 lbs.)



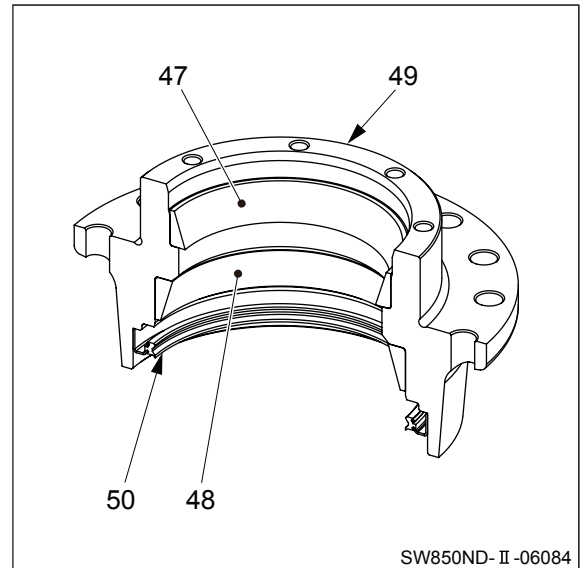
28-7) Heat up roller bearing (48) inner race by using a ring heater or the like.

- Apply a coat of gear oil to axle shaft at where bearing inner race will be press-fitted.
- Drive in heated roller bearing inner race.
- Apply sufficient amount of lithium-based grease to rollers of roller bearing inner race.

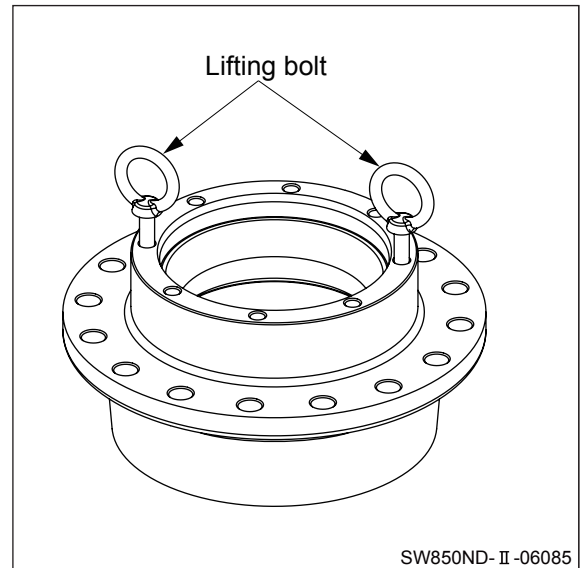


28-8) Apply a coat of gear oil to housing (49) at where bearing outer races will be press-fitted.

- Drive roller bearings (47) and (48) outer races into housing.
- Apply liquid packing to periphery of oil seal (50).
- Drive in oil seal.
- Apply grease to lip of oil seal.

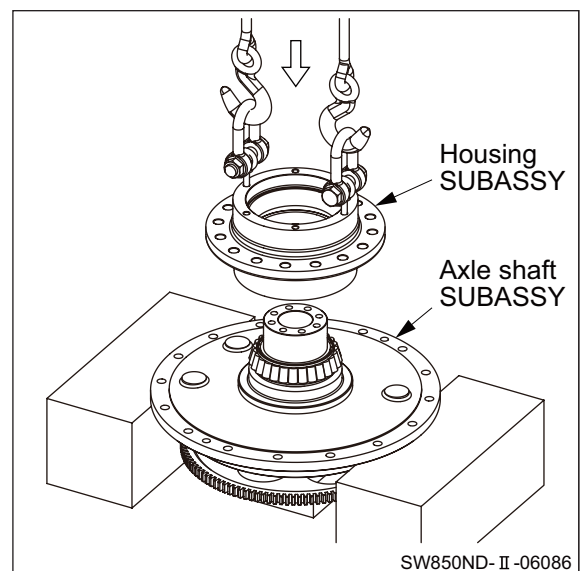


28-9) Install lifting bolts (M12).



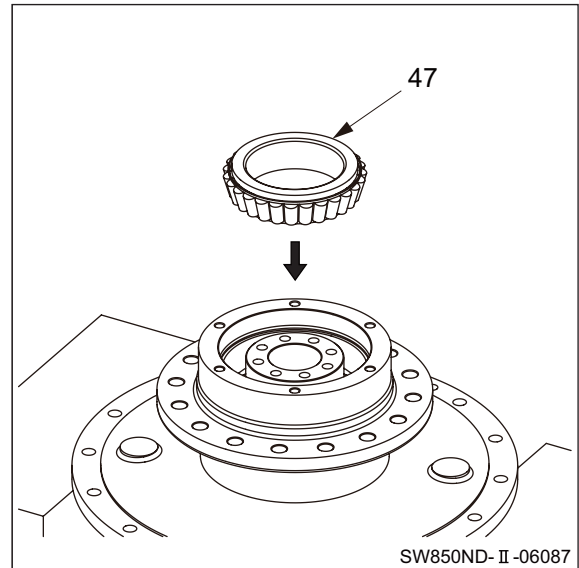
28-10) Install housing SUBASSY to axle shaft SUBASSY.

\mathfrak{J}_{kg} Housing SUBASSY : 40kg (88 lbs.)



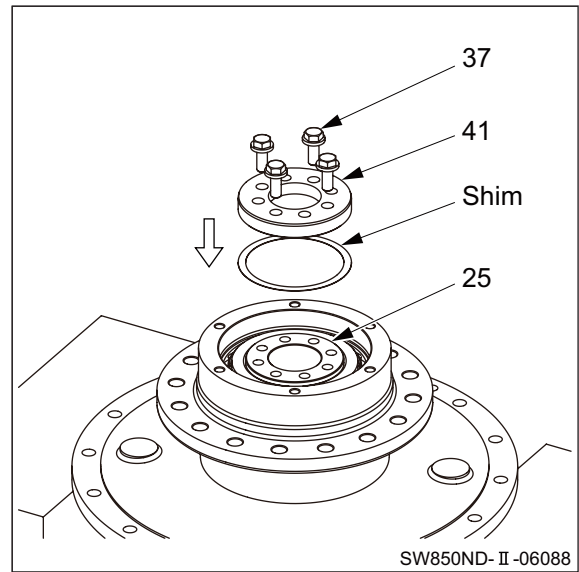
28-11) Apply sufficient amount of lithium-based grease to rollers of roller bearing (47) inner race.

- Drive in roller bearing inner race until rollers come in contact with outer race.



28-12) Preload adjustment of roller bearing

- ① Install a shim of about 1 mm (0.04 in.) and secure cover (41) to axle shaft (25) with four bolts (37) and washers.

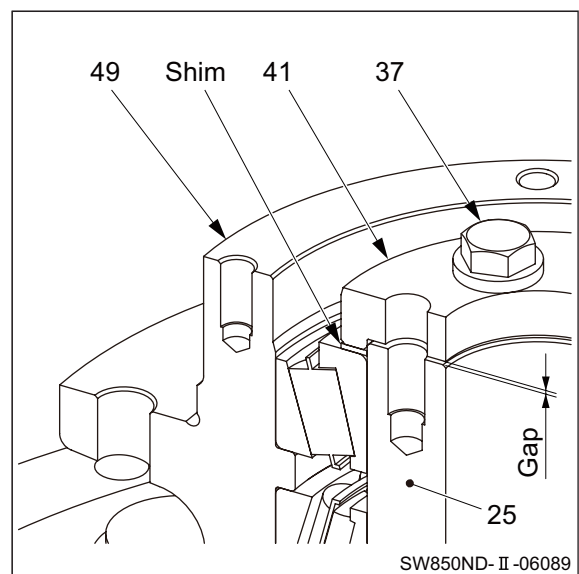


- ② A gap will remain between end of axle shaft (25) and inside of cover (41).

- Tighten bolts (37) to a torque of 108 N·m (80 lbf·ft).
- Give housing (49) two to three turns.
- Tighten bolts to a torque of 108 N·m (80 lbf·ft) again.
- Repeat this work several times until tightening torque of bolts no longer fluctuates.

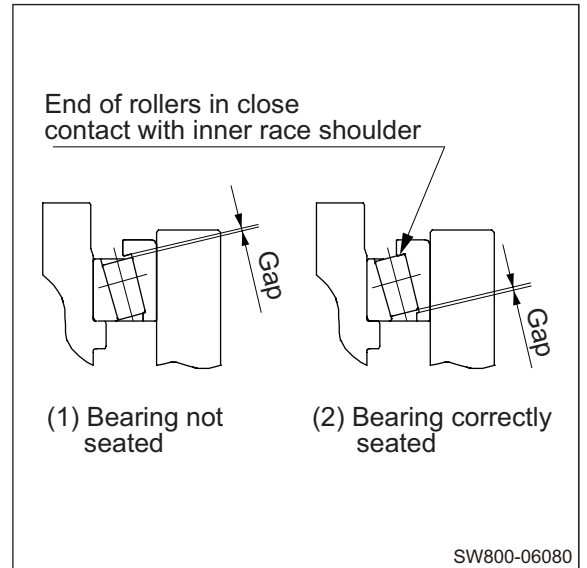
(NOTICE)

- **Tighten the bolts alternately in diagonal directions.**



(NOTICE)

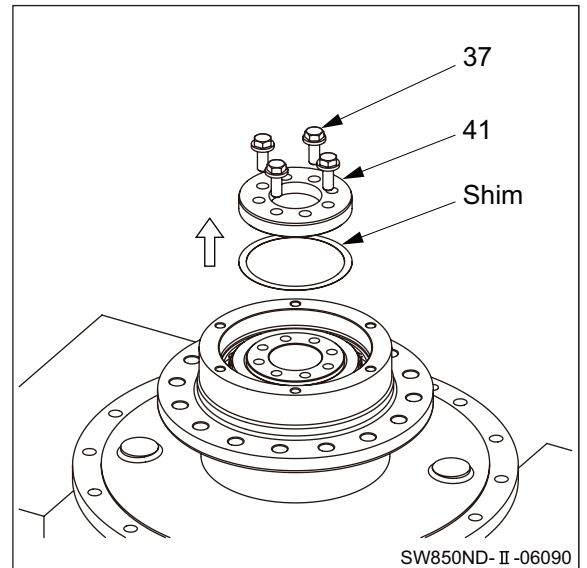
- Push in the inner race while rotating the bearing. Otherwise, even strongly trying to push the inner race, the bearing rollers will not be pushed up and therefore bearing will not be seated.



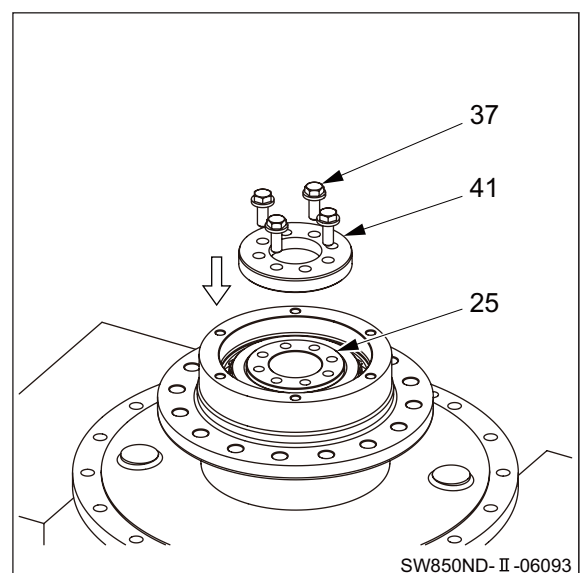
- ③ Remove bolts (37).
- Remove cover (41).
- Remove shim.

(NOTICE)

- Do not turn the housing after the cover is removed.

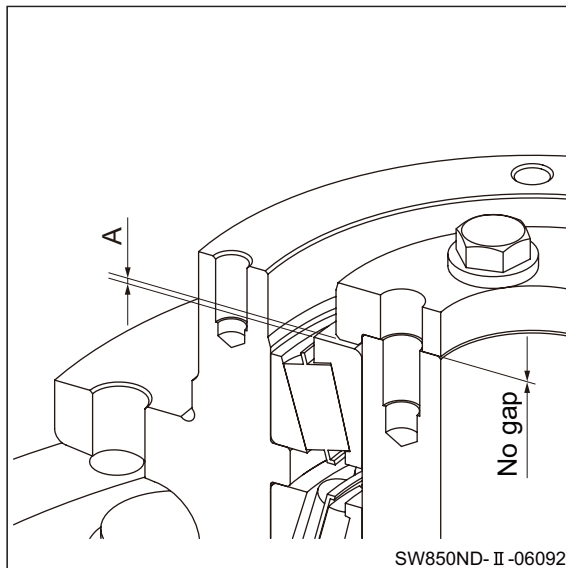


- ④ Without inserting shim, install cover (41) to axle shaft (25) with four bolts (37) and washers.

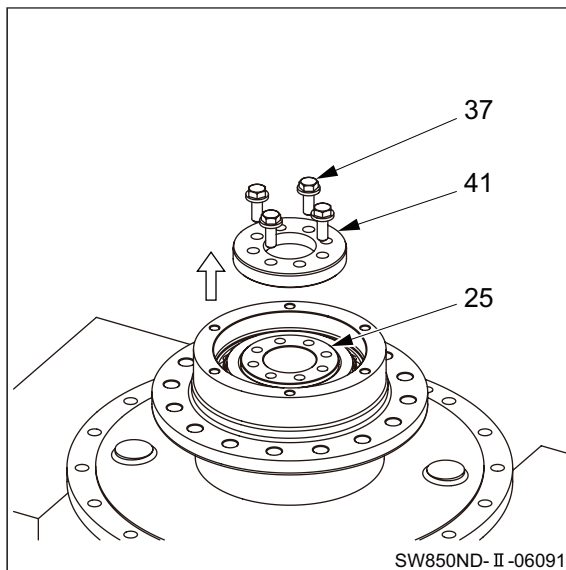


⑤ Using a thickness gauge, measure clearance “A”.

★ Preload adjusting shim thickness = $A + 0.1 \text{ mm (0.004 in.)}$



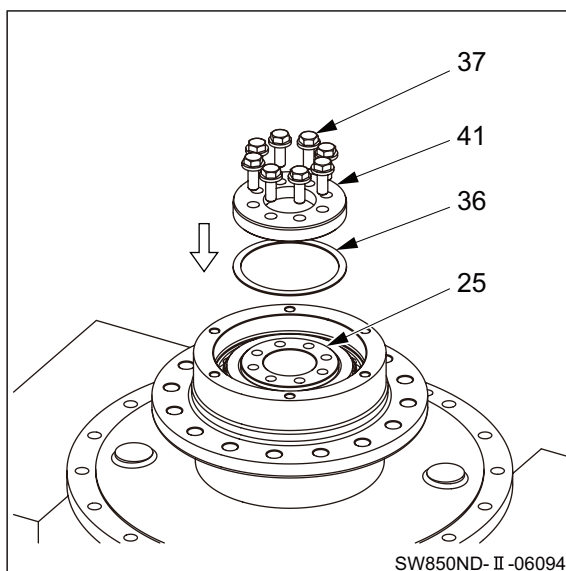
⑥ Remove bolts (37).
 • Remove cover (41).



⑦ Install shim (36) of preload adjusting shim thickness = “ $A + 0.1 \text{ mm (0.004 in.)}$ ”.
 • Secure cover (41) to axle shaft (25) with eight bolts (37) and washers.

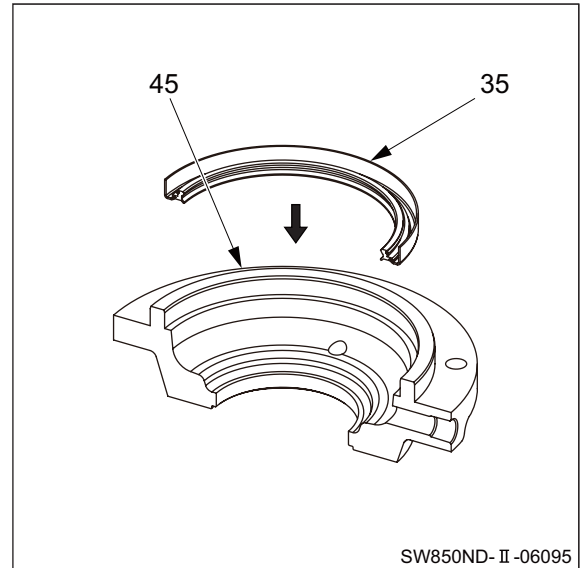


(37) Bolts M14×40 : 167 N·m (123 lbf·ft)



28-13) Apply liquid packing to periphery of oil seal (35).

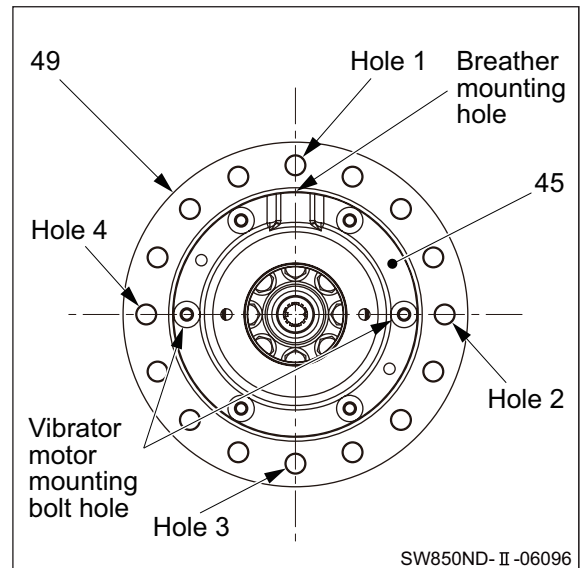
- Drive in oil seal to cover (45).
- Apply grease to lip of oil seal.



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(NOTICE)

- The four holes in housing (49), breather mounting hole in cover (45), and vibrator motor mounting bolt holes must be arranged as shown on the right.



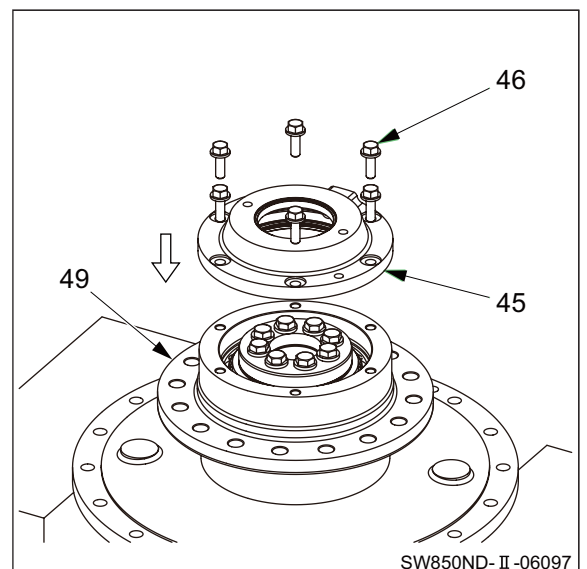
SW850ND- II -06096

28-14) Apply a coat liquid packing to housing (49) at where cover (45) will be installed.

- Secure cover to housing with six bolts (46) and washers.

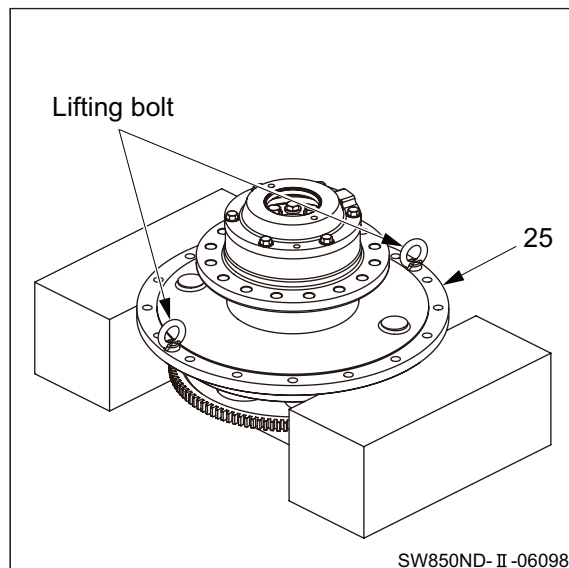


(46) Bolts M12×40 : 108 N·m (80 lbf·ft)




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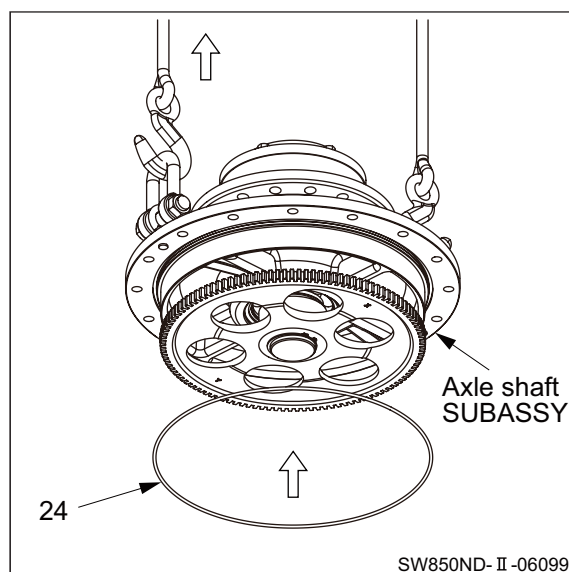
29) Install lifting bolts (M16) to axle shaft (25).



30) Lift axle shaft (25).

 Axle shaft SUBASSY : 185 kg (408 lbs.)

- Apply grease to O-ring (24).
- Install O-ring.

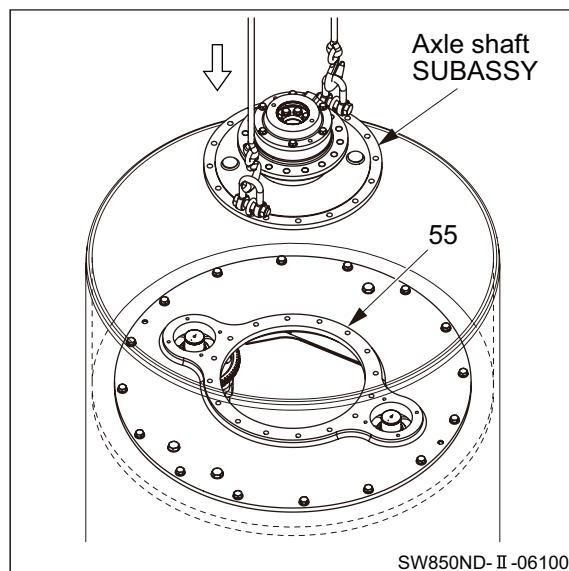


31) Apply a coat of liquid packing to housing (55) at where axle shaft SUBASSY will be installed.


- Lower axle shaft SUBASSY on mounting surface of housing.

(NOTICE)

- Take care not to let O-ring to protrude from its groove.

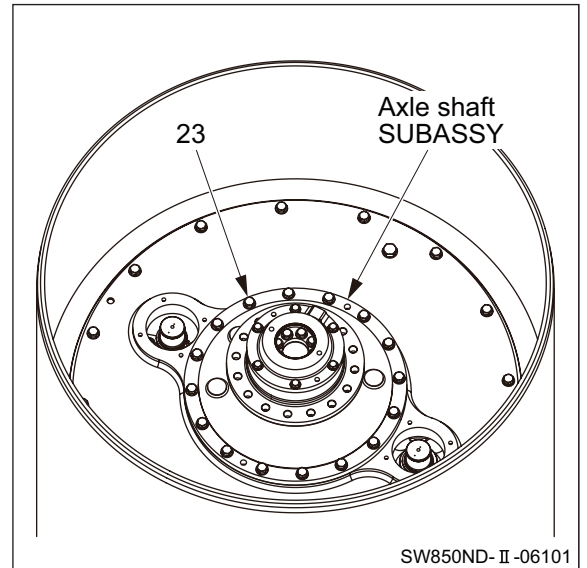


32) Secure axle shaft SUBASSY with sixteen bolts (23) and washers.

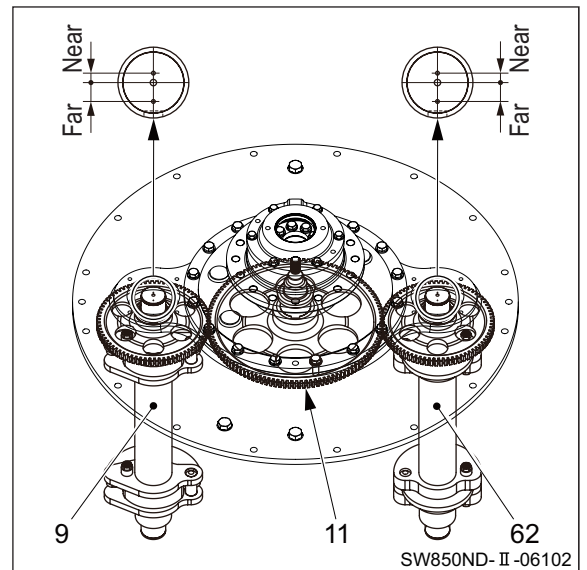
 (23) Bolts M16×50 : 265 N·m (195 lbf·ft)

(NOTICE)

- Bolts are treated with thread-locking fluid. Use new thread-locking fluid treated bolts for installation.

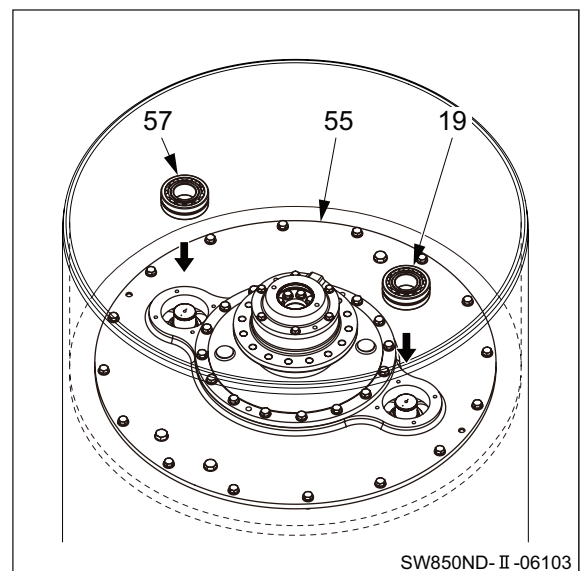


33) Make sure that punch marks on shaft (11) of eccentric shafts (9) and (62) are as shown right.

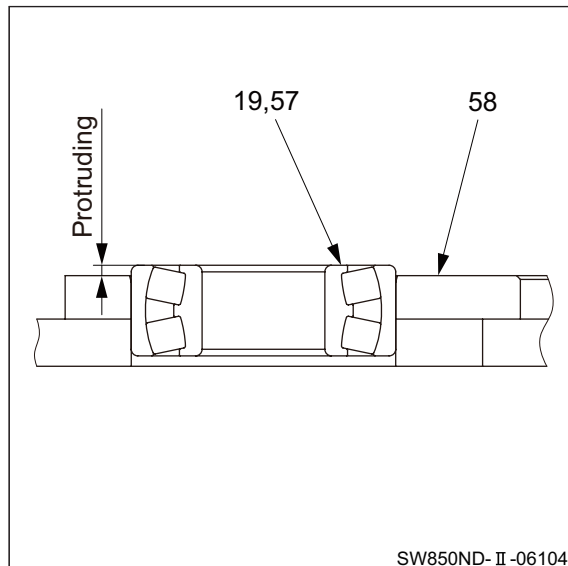


34) Apply a coat of gear oil to housing (55) at where bearings will be press-fitted and to eccentric shafts at where bearings will be installed.

- Drive in vibrator bearings (19) and (57).

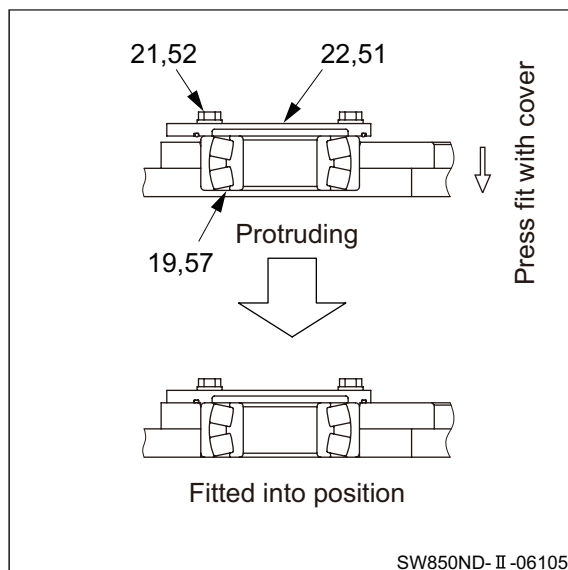


35) Stop driving in vibrator bearings (19) and (57) when they come to a position slightly protruding from the boss surface of housing (58) to avoid driving in too much.

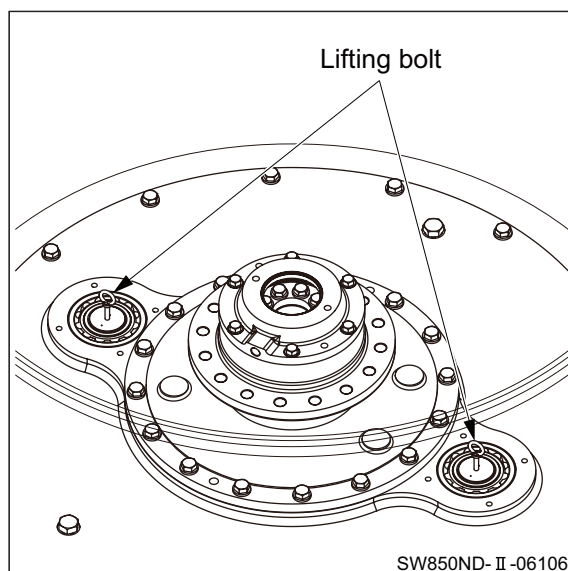


36) Press fit slightly protruding vibrator bearings (19) and (57) into place by securing covers (22) and (51) with four bolts (21), four bolts (52), and washers.

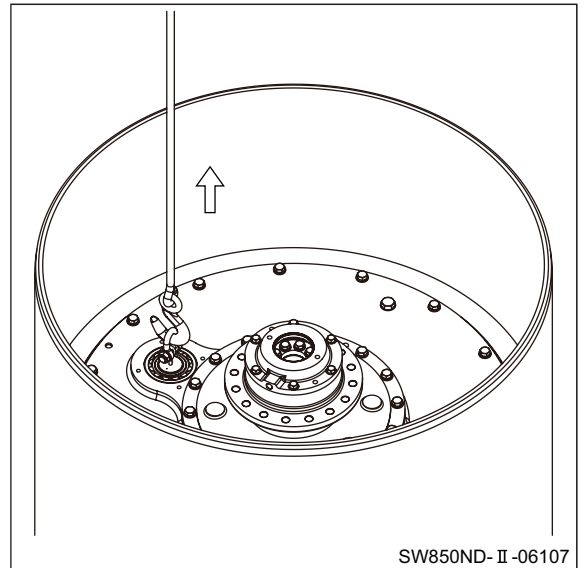
- After press fitting, remove covers to make sure that vibrator bearings are not protruding.



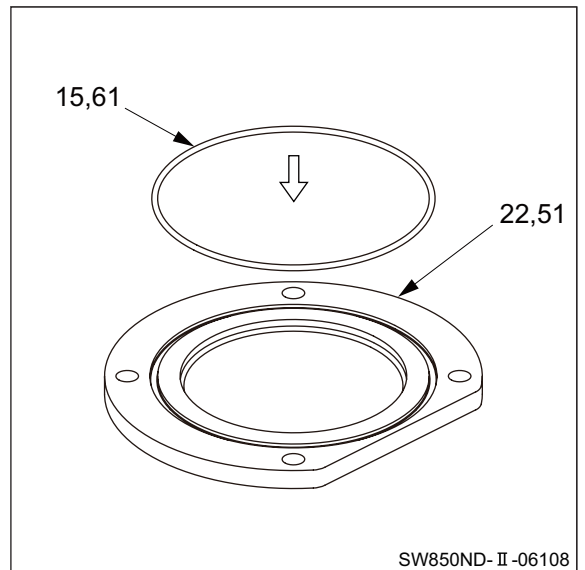
37) Install lifting bolts (M8) to end of eccentric shafts.



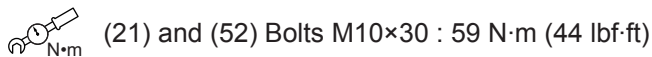
38) Slowly lift eccentric shaft with a crane and check that there is an axial play of 1.6 to 4 mm (0.06 to 0.16 in.).



39) Apply grease to O-rings (15) and (61).
 • Install O-rings to covers (22) and (51).

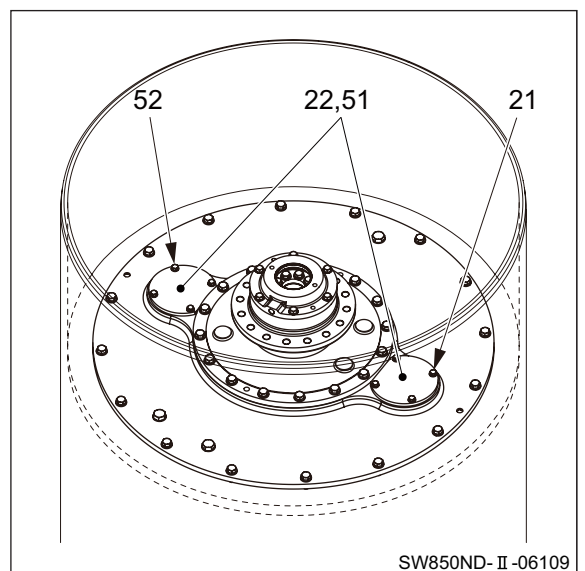


40) Apply a coat liquid packing to housing SUBASSY at where covers (22) and (51) will be installed.
 • Secure covers to four bolts (21), four bolts (52), and washers.

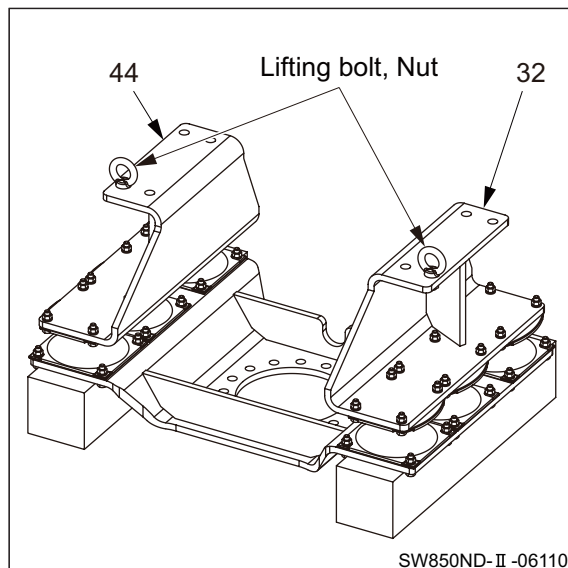


(NOTICE)


- Take care not to let O-ring to protrude from its groove.
- Bolts are treated with thread-locking fluid. Use new thread-locking fluid treated bolts for installation.

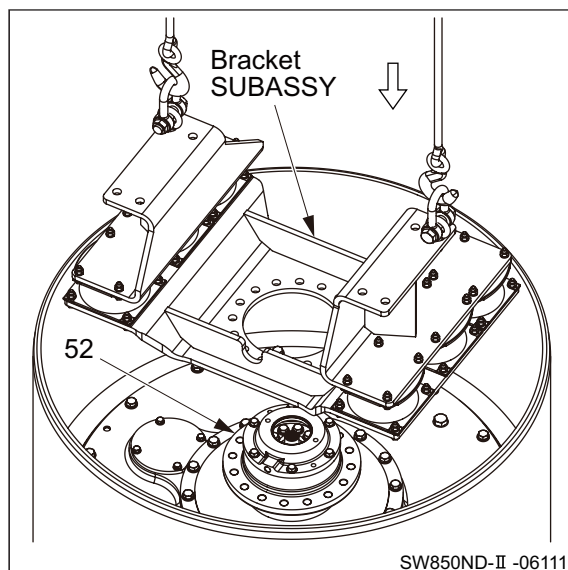


41) Install lifting bolts (M22) to brackets (32) and (44) with nuts.



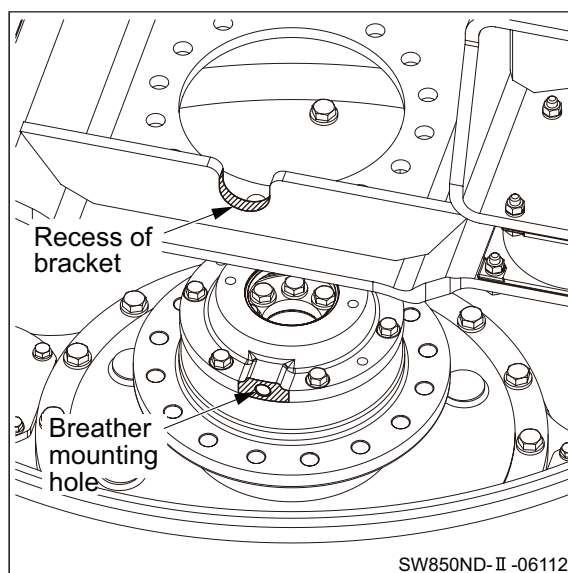
42) Lower bracket SUBASSY on mounting surface of housing (52).

 Bracket SUBASSY : 235 kg (518 lbs.)




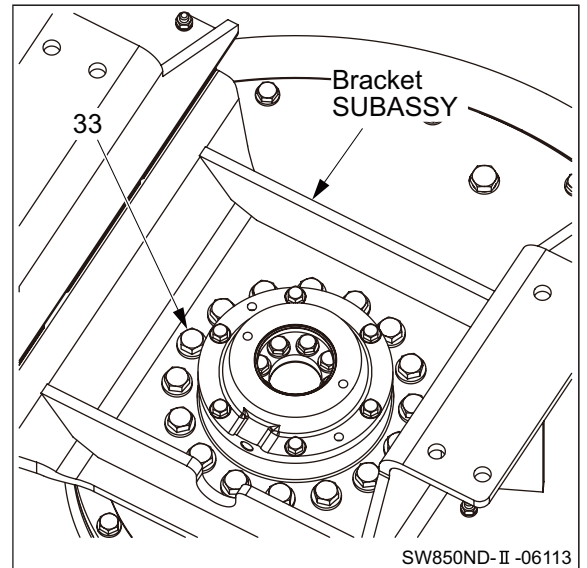
(NOTICE)

- The recess of the bracket must face the same direction as the breather mounting hole in the cover.

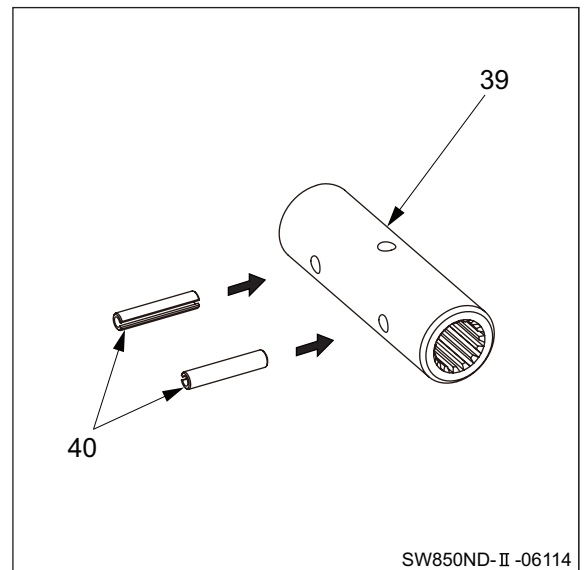


43) Secure bracket SUBASSY with sixteen bolts (33) and washers.

 (33) Bolts M20×60 : 539 N·m (398 lbf·ft)

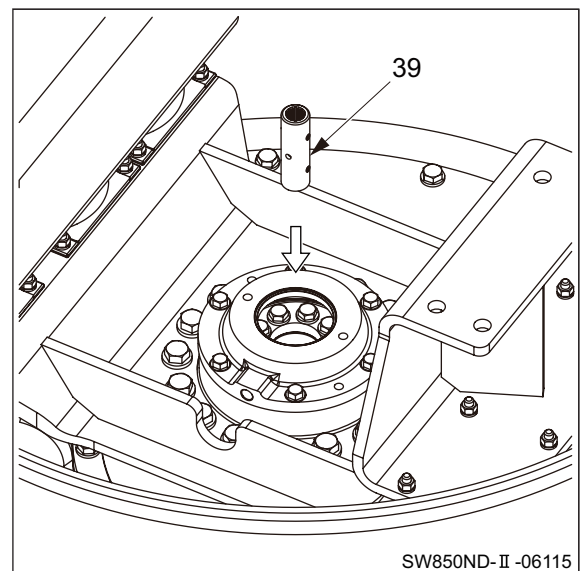


44) Drive two spring pins (40) into sleeve (39).

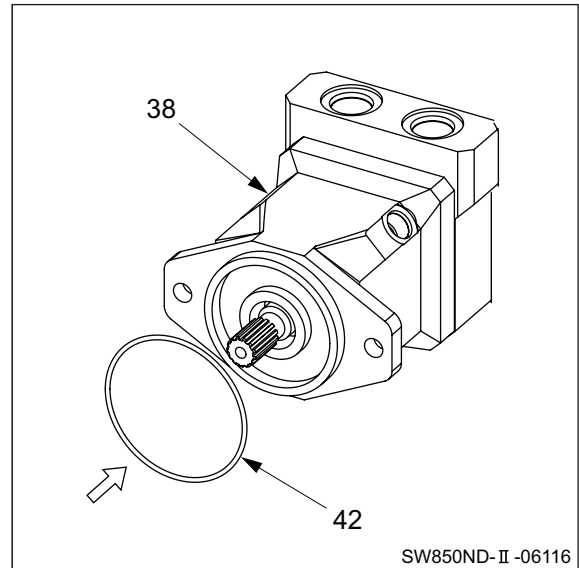


45) Apply molybdenum-based grease to splined portion of sleeve (39).

- Fit sleeve (39) to splined portion on drive shaft end.



- 46) Apply grease to O-ring (42).
- Install O-ring (42) to vibrator motor (38).

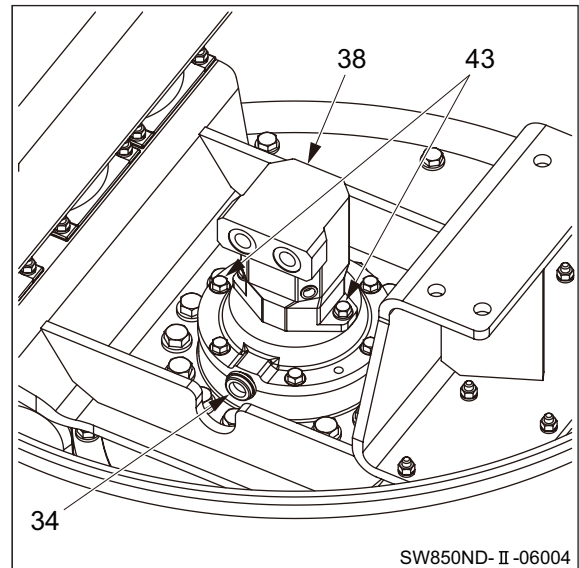


- 47) Wind seal tape around threaded portion of breather (34).
- Install breather (34).
 - Secure vibrator motor (38) to cover (45) with two bolts (43) and washers.

- (38) Vibrator motor : 20 kg (44 lbs.)
- (43) Bolts M12×40 : 108 N·m (80 lbf·ft)

(NOTICE)

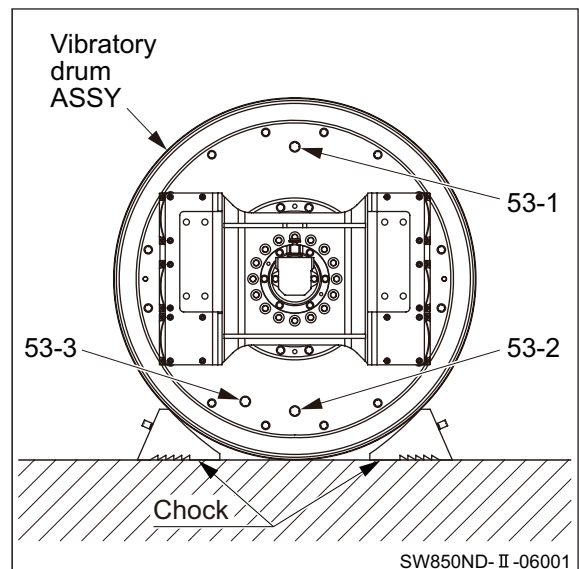
- Take care not to let O-ring to protrude.



- 48) Lay vibratory drum ASSY with plugs (53-1), (53-2), and (53-3) positioned as shown right.

- Hold with chocks.

- Vibratory drum ASSY : 3,390 kg (7,474 lbs.)



- 49) Remove plugs (53-1) and (53-3).
- Supply gear oil from oil supply port.
 - Check that oil drips from gauge port.
 - Quantity of gear oil : 75 L (19.8 gal.)
 - Install plugs.

