

Mikasa

REVERSIBLE COMPACTOR

MVH-306

SERVICE MANUAL



MIKASA SANGYO CO.,LTD.

410-00903

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1. TOOLS

1. Wrench 10mm 12mm 13mm 14mm 17mm 19mm 22mm 24mm 27mm

Offset wrench/Socket wrench/Adjustable wrench



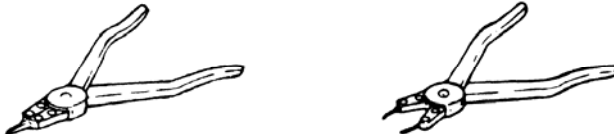
2. Hexagonal wrench 3/16inch
5mm 8mm 10mm 14mm



3. Plier



4. External snap ring plier/Internal snap ring plier(bent type can be also used)



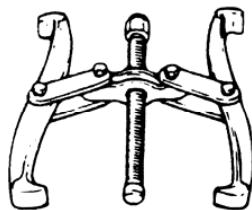
5. Screwdriver, flat and cross



6. Metal and plastic hammers



7. Pulley puller



8. Sealing compound (Loctite 242, 271 and 638)

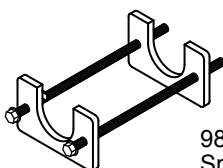


9. Liquid gasket



10. Pressing machine

11. Special jigs for Disassembling/Assembling of Hand Pump



9840-10060
Spring Compression Tool



9840-10040
Disassembling Tool A

9840-10050
Disassembling Tool B

2. INSPECTION PROCEDURE

1. External appearance check

- (1) Installation of parts (loosened screw, defective parts, etc.)
- (2) Damage on machine
- (3) Oil check (level and contamination)
 - a. Engine oil (SAE10W-30 when shipped) (See Table 1 for the capacity)
 - b. Vibrator
 - c. Hydraulic oil (forward and reverse)
- (4) V-belt for proper tension, damage, crack, hardening, etc.
- (5) Shock rubber for damage, crack, fatigue, hardening, etc.

2. Operating test

- (1) Engine
 - Engine speed check (Max. set rpm and idling)
- (2) Traveling
 - a. Check for selection of forward/reverse travel.
 - b. Check for speed of forward/reverse travel.
- (3) Check for abnormal noise during operation.

3. Engine, Oil and V-belt

Table 1

Type	MVH-306DS	MVH-306GH	MVH-306GE
Mounted engine	Yanmar L70AE	Honda GX270	Robin EX270
Set rpm (min ⁻¹)	3600	3600	3600
Fuel tank capacity (Liter)	3.5	6.0	6.1
Engine oil capacity (L)	1.1	1.1	1.1
Vibrator oil capacity (L)	0.6	0.6	0.6
Lubrication oil in use	Engine Oil SAE10W-30		
Vibrator oil replacement interval (hours)	200		
Size and quantity of belt	HDPF5370 x 1	HDPF5360 x 1	HDPF5360 x 1
Compaction speed (m/min)	Forward	0~23	0~23
	Reverse	0~23	0~23
Hydraulic oil	Shell Tellus #46 or equivalent		

4. RULES FOR CONDUCTING SERVICE WORK

1. In order to avoid deficient reassembly, know normal status of installation before removing or disassembling any part. Level check or replacement of vibrator oil should be carried out on level ground.
2. Each time disassembly is made involving oil seal, gasket, packing, o-ring, lock washer or the like, be sure to replace them with new ones.
3. Mating surfaces of vibrator case and compaction plate should be sealed with liquid gasket (Clean and de-grease the mating surfaces thoroughly).
4. Clean the screw before coating with Loctite. For tightening bolts and nuts, use the specified standard torque and bonding agent (Loctite or the like). For such bolts and nuts that are not specified, see Table of Tightening Torque.

NOTE: All the screw in use with this machine are right handed.

Table of Tightening Torque (kgf-cm)

Table 2

Screw diameter	6mm	8mm	10mm	12mm	14mm	16mm	18mm	20mm
Material								
4T(SS41)	70	150	300	500	750	1,100	1,400	2,000
6-8T(S45C)	100	250	500	800	1,300	2,000	2,700	3,800
11T(SCM3)	150	400	800	1,200	2,000	2,900	4,200	5,600
In case counter part is made from aluminum	100	300~350	650~700					

※For indication in SI Unit (International Unit System), use the conversion of 1kgf-cm=9.80665N-cm

5. Disassembly work should be conducted where it is free from dust.
6. Where bonding agent such as Loctite has been in use and screw is hard to loosen, heat it with torch lamp or the like. Such heated bolt must be replaced with new one, which is of high-tension type as specified.
7. Use proper tool in proper manner.
8. Remove (-) battery terminal first before disassembling and connect (-) battery terminal lastly.

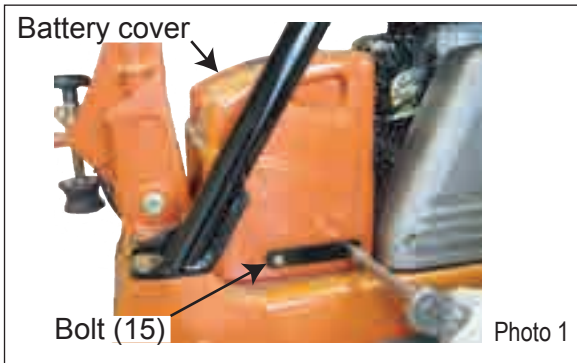
Hydraulic hose tightening torque: Screw size 1/4 380kgf-cm
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5. REMOVING AND RE-MOUNTING

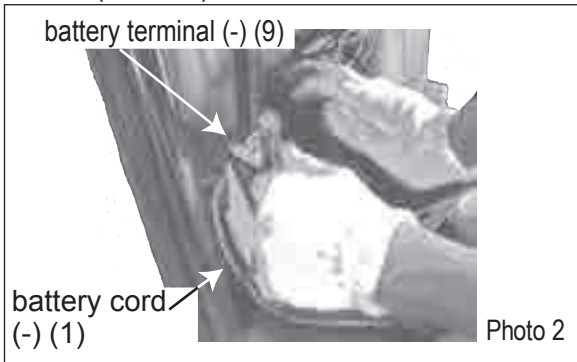
5-1 Removing and re-mounting the battery

(1) Removing the battery

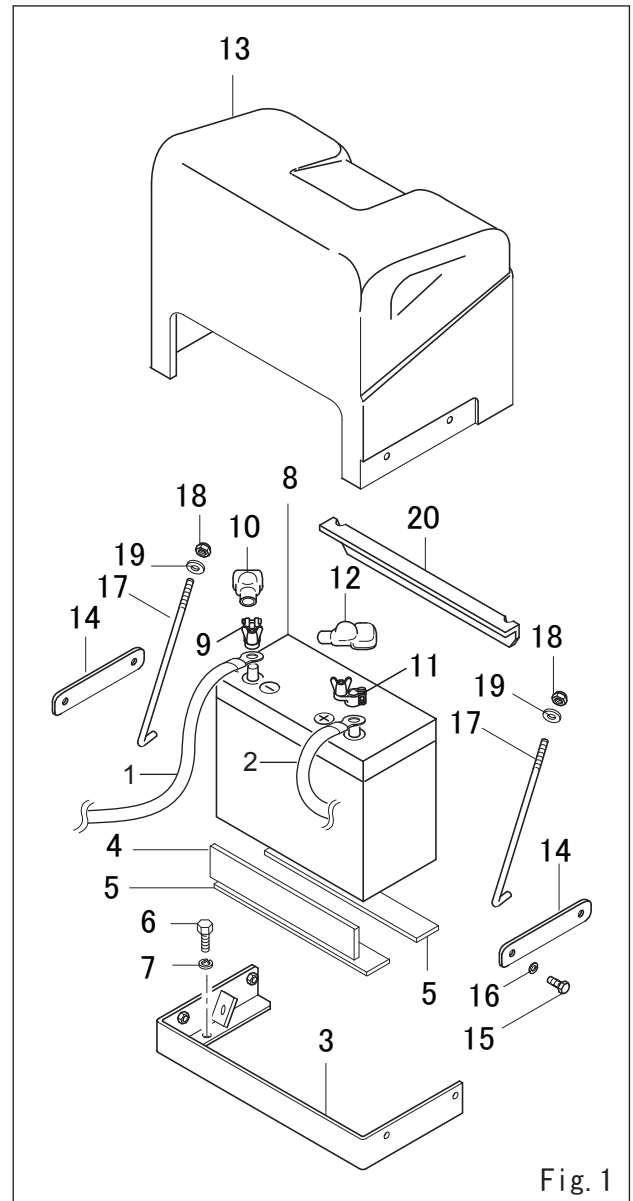
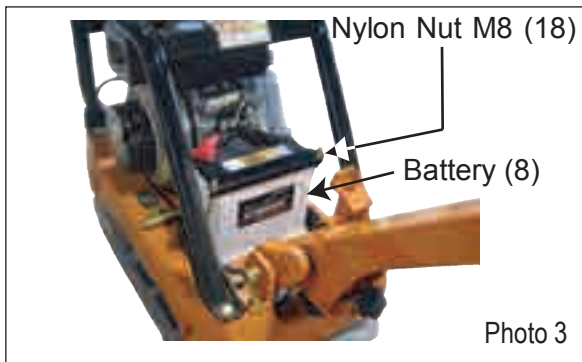
- a. 4 pieces of Bolt (15) unscrewed and take off the Battery cover (13). (Photo 1)



- b. Nut of the battery terminal (-) (9) removed, disconnect the (-) (1) battery cord. Nut of the battery terminal (+) (11) removed, disconnect the (+) (2) battery cord. (Photo 2)



- c. Nylon Nut M8 (18) removed, the battery be taken out from the machine. (Photo 3)



(2) Re-mounting the battery

- a. Reversed procedure is applied for re-mounting of the battery while observing below :
1. When removing cables, use care not to allow short circuiting between (+) and (-) terminal
 2. Connect (+) battery cord to the (+) terminal and (-) cord to the (-) terminal.