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Single Direction Plates

VP 1340A/AW

VP 1550A/AW

VP 1340R/RW

VP 1550R/RW

VP 1135A/AW

VP 1135R/RW

VP 2050A

VP 2050R

VP 2050Y

REPAIR MANUAL



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CALIFORNIA

Proposition 65 Warning:



Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

1. Foreword

This manual provides information and procedures to safely operate and maintain this Wacker model. For your own safety and protection from injury, carefully read, understand and observe the safety instructions described in this manual.

Keep this manual or a copy of it with the machine. If you lose this manual or need an additional copy, please contact Wacker Corporation. This machine is built with user safety in mind; however, it can present hazards if improperly operated and serviced. Follow operating instructions carefully! If you have questions about operating or servicing this equipment, please contact Wacker Corporation.

The information contained in this manual was based on machines in production at the time of publication. Wacker Corporation reserves the right to change any portion of this information without notice.

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2. Safety Information

This manual contains DANGER, WARNING, CAUTION, and NOTE callouts which must be followed to reduce the possibility of personal injury, damage to the equipment, or improper service.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION: Used without the safety alert symbol, CAUTION indicates a potentially hazardous situation which, if not avoided, may result in property damage.

Note: *Contains additional information important to a procedure.*

2.1 Laws Pertaining to Spark Arresters

Notice: State Health Safety Codes and Public Resources Codes specify that in certain locations spark arresters be used on internal combustion engines that use hydrocarbon fuels. A spark arrester is a device designed to prevent accidental discharge of sparks or flames from the engine exhaust. Spark arresters are qualified and rated by the United States Forest Service for this purpose.

In order to comply with local laws regarding spark arresters, consult the engine distributor or the local Health and Safety Administrator.

2.2 Operating Safety



WARNING

Familiarity and proper training are required for the safe operation of equipment! Equipment operated improperly or by untrained personnel can be dangerous! Read the operating instructions contained in both this manual and the engine manual and familiarize yourself with the location and proper use of all controls. Inexperienced operators should receive instruction from someone familiar with the equipment before being allowed to operate the machine.

- 2.2.1 NEVER allow anyone to operate this equipment without proper training. People operating this equipment must be familiar with the risks and hazards associated with it.
- 2.2.2 NEVER touch the engine or muffler while the engine is on or immediately after it has been turned off. These areas get hot and may cause burns.
- 2.2.3 NEVER use accessories or attachments that are not recommended by Wacker. Damage to equipment and injury to the user may result.
- 2.2.4 NEVER operate the machine with the belt guard missing. Exposed drive belt and pulleys create potentially dangerous hazards that can cause serious injuries.
- 2.2.5 NEVER leave machine running unattended.
- 2.2.6 ALWAYS be sure operator is familiar with proper safety precautions and operation techniques before using machine.
- 2.2.7 ALWAYS wear protective clothing appropriate to the job site when operating equipment.
- 2.2.8 ALWAYS wear hearing protection when operating equipment.
- 2.2.9 ALWAYS close fuel valve on engines equipped with one when machine is not being operated.
- 2.2.10 ALWAYS store equipment properly when it is not being used. Equipment should be stored in a clean, dry location out of the reach of children.
- 2.2.11 ALWAYS operate machine with all safety devices and guards in place and in working order. DO NOT modify or defeat safety devices. DO NOT operate machine if any safety devices or guards are missing or inoperative.
- 2.2.12 ALWAYS read, understand, and follow procedures in Operator's Manual before attempting to operate equipment.

2.3 Operator Safety while using Internal Combustion Engines



DANGER

Internal combustion engines present special hazards during operation and fueling! Read and follow warning instructions in engine owner's manual and safety guidelines below. Failure to follow warnings and safety guidelines could result in severe injury or death.

- 2.3.1 DO NOT run machine indoors or in an enclosed area such as a deep trench unless adequate ventilation, through such items as exhaust fans or hoses, is provided. Exhaust gas from the engine contains poisonous carbon monoxide gas; exposure to carbon monoxide can cause loss of consciousness and may lead to death.
- 2.3.2 DO NOT smoke while operating machine.
- 2.3.3 DO NOT smoke when refueling engine.
- 2.3.4 DO NOT refuel hot or running engine.
- 2.3.5 DO NOT refuel engine near open flame.
- 2.3.6 DO NOT spill fuel when refueling engine.
- 2.3.7 DO NOT run engine near open flames.
- 2.3.8 ALWAYS refill fuel tank in well-ventilated area.
- 2.3.9 ALWAYS replace fuel tank cap after refueling.
- 2.3.10 ALWAYS check fuel lines and fuel tank for leaks and cracks before starting engine. Do not run machine if fuel leaks are present or fuel lines are loose.

2.4 Service Safety

**WARNING**

Poorly maintained equipment can become a safety hazard! In order for the equipment to operate safely and properly over a long period of time, periodic maintenance and occasional repairs are necessary.

- 2.4.1 DO NOT attempt to clean or service machine while it is running. Rotating parts can cause severe injury.
- 2.4.2 DO NOT crank a flooded engine with the spark plug removed on gasoline-powered engines. Fuel trapped in the cylinder will squirt out the spark plug opening.
- 2.4.3 DO NOT test for spark on gasoline-powered engines, if engine is flooded or the smell of gasoline is present. A stray spark could ignite fumes.
- 2.4.4 DO NOT use gasoline or other types of fuels or flammable solvents to clean parts, especially in enclosed areas. Fumes from fuels and solvents can become explosive.
- 2.4.5 ALWAYS keep area around muffler free of debris such as leaves, paper, cartons, etc. A hot muffler could ignite them, starting a fire.
- 2.4.6 ALWAYS replace worn or damaged components with spare parts designed and recommended by Wacker.
- 2.4.7 ALWAYS disconnect spark plug on machines equipped with gasoline engines, before servicing, to avoid accidental start-up.
- 2.4.8 ALWAYS keep machine clean and labels legible. Replace all missing and hard-to-read labels. Labels provide important operating instructions and warn of dangers and hazards.

3. Technical Data

3.1 VP 1340A/AW, VP 1550A/AW

		VP 1340A/AW 0009027 0009028	VP 1550A/AW 0009031 0009032
Plate			
Weight	kg (lbs.)	VP 1340A: 74 (163) VP 1340AW: 76 (168)	VP 1550A: 83 (184) VP 1550AW: 86 (190)
Water Tank Capacity	l (qts.)	3.8 (4.0)	7.6 (8.0)
Exciter Speed	rpm	5800 ± 100	
Exciter Lubrication	ml (oz.)	240 (8) Automatic transmission fluid Dextron III/Mercon or equivalent	
Dimensions	mm (in.)	588 (23) x 400 (16) x 886 (35)	588 (23) x 500 (20) x 886 (35)

	VP 1340A/AW 0009027 0009028	VP 1550A/AW 0009031 0009032
Engine		
Engine Make	Honda	
Engine Model	GX 160 K1 QX2	
Rated Power	kW (Hp)	4.1 (5.5)
Spark Plug	NGK BPR 6ES	
Electrode Gap	mm (in.)	0.7-0.8 (0.028–0.031)
Engine Speed - full load	rpm	3600 ± 100
Engine Speed - idle	rpm	1600 ± 100
Air Cleaner	type	Dual element
Engine Lubrication	oil grade	SAE 10W30 SG or SF
Engine Oil Capacity	ml (oz.)	600 (20)
Fuel	type	Regular unleaded gasoline
Fuel Tank Capacity	l (qts.)	3.7 (3.9)
Valve Clearance (cold)		
Inlet:	mm (in.)	0.15 (0.006)
Outlet:		0.20 (0.008)

3.2 VP 1340R/RW, VP 1550R/RW

		VP 1340R/RW 0009029 0009030	VP 1550R/RW 0009033 0009034
Plate			
Weight	kg (lbs.)	VP 1340R: 74 (163) VP 1340RW: 76 (168)	VP 1550R: 84 (185) VP 1550RW: 87 (191)
Water Tank Capacity	l (qts.)	3.8 (4.0)	7.6 (8.0)
Exciter Speed	rpm	5800 ± 100	
Exciter Lubrication	ml (oz.)	240 (8) Automatic transmission fluid Dextron III/Mercon or equivalent	
Dimensions	mm (in.)	588 (23) x 400 (16) x 886 (35)	588 (23) x 500 (20) x 886 (35)

		VP 1340R/RW 0009029 0009030	VP 1550R/RW 0009033 0009034
Engine			
Engine Make		Robin	
Engine Model		EY20OYD4540	
Rated Power	kW (Hp)	3.7 (5.0)	
Spark Plug		NGK BR6HS or Champion RL86C	
Electrode Gap	mm (in.)	0.6-0.7 (0.020-0.030)	
Engine Speed - full load	rpm	3600 ± 100	
Engine Speed - idle	rpm	1600 ± 100	
Air Cleaner	type	Replaceable dry type, paper element with foam precleaner	
Engine Lubrication	oil grade service class	Above 40° F (4° C) use SAE 30 Between 15° F (-9° C) and 40° F (4° C) SAE 20 Below 15° F (-9° C) SAE 10W30 SF or SE	
Engine Oil Capacity	ml (oz.)	600 (20)	
Fuel	type	Regular leaded or unleaded gasoline	
Fuel Tank Capacity	l (qts.)	3.8 (4.0)	
Valve Clearance (cold)			
Inlet:	mm (in.)	0.1 (0.004)	
Outlet:		0.1 (0.004)	

3.3 VP 1135A/AW

		VP 1135A 0009057	VP 1135AW 0009058
Plate			
Weight	kg (lbs.)	62 (137)	65 (143)
Water Tank Capacity	l (qts.)	3.8 (4)	
Exciter Speed	rpm	5800 ± 100	
Exciter Lubrication	ml (oz.)	207 (7) Automatic transmission fluid Dextron III/Mercon or equivalent	
Dimensions	mm (in.)	521 (21) x 350 (14) x 884 (35)	

		VP 1135A 0009057	VP 1135AW 0009058
Engine			
Engine Make		Honda	
Engine Model		GX 120 K1 QX	
Rated Power	kW (Hp)	3.0 (4.0)	
Spark Plug		NGK BPR 6ES BOSCH WR 7DC	
Electrode Gap	mm (in.)	0.7-0.8 (0.028–0.031)	
Engine Speed	rpm	3600 ± 100	
Air Cleaner	type	Dual element	
Engine Lubrication	oil grade	SAE 10W30 SG or SF	
Engine Oil Capacity	ml (oz.)	600 (20)	
Fuel	type	Regular unleaded gasoline	
Fuel Tank Capacity	l (qts.)	2.5 (2.6)	

3.4 VP 1135R/RW

		VP 1135R 0009071	VP 1135RW 0009251
Plate			
Weight	kg (lbs.)	60 (132)	
Water Tank Capacity	l (qts.)	3.8 (4)	
Exciter Speed	rpm	5800 ± 100	
Exciter Lubrication	ml (oz.)	207 (7) Automatic transmission fluid Dextron III/Mercon or equivalent	
Dimensions	mm (in.)	521 (21) x 350 (14) x 884 (35)	

		VP 1135R 0009071	VP 1135RW 0009251
Engine			
Engine Make		Robin	
Engine Model		EY15	
Rated Power	kW (Hp)	2.6 (3.5)	
Spark Plug		Champion RL95YC, NGK PBPR-4HS, or Denso W14FPRUL	
Electrode Gap	mm (in.)	0.7-0.8 (0.030-0.040)	
Engine Speed - full load	rpm	3600 ± 100	
Engine Speed - idle	rpm	1600 ± 100	
Air Cleaner	type	Replaceable dry type, paper element with foam precleaner	
Engine Lubrication	oil grade service class	Above 40° F (4° C) use SAE 30 Between 15° F (-9° C) and 40° F (4° C) SAE 20 Below 15° F (-9° C) SAE 10W30 SC or higher	
Engine Oil Capacity	ml (oz.)	600 (20)	
Fuel	type	Regular leaded or unleaded gasoline	
Fuel Tank Capacity	l (qts.)	2.8 (3.0)	
Valve Clearance (cold)			
Inlet:	mm (in.)	0.1 (0.004)	
Outlet:		0.1 (0.004)	

3.5 VP 2050A

		VP 2050A 0009087
Plate		
Weight	kg (lbs.)	103 (230)
Exciter Speed	rpm	5800 ± 100
Exciter Lubrication	ml (oz.)	296 (10) Automatic transmission fluid Dextron III/Mercon or equivalent
Dimensions	mm (in.)	588 (23) x 500 (20) x 884 (35)

		VP 2050A 0009087
Engine		
Engine Make		Honda
Engine Model		GX 160 K1 QX2
Rated Power	kW (Hp)	4.1 (5.5)
Spark Plug		NGK BPR 6ES
Electrode Gap	mm (in.)	0.7-0.8 (0.028–0.031)
Engine Speed - full load	rpm	3600 ± 100
Engine Speed - idle	rpm	1600 ± 100
Air Cleaner	type	Dual element
Engine Lubrication	oil grade	SAE 10W30 SG or SF
Engine Oil Capacity	ml (oz.)	600 (20)
Fuel	type	Regular unleaded gasoline
Fuel Tank Capacity	l (qts.)	3.7 (3.9)
Valve Clearance (cold)		
Inlet:	mm (in.)	0.15 (0.006)
Outlet:		0.20 (0.008)

3.6 VP 2050R

		VP 2050R 0009088
Plate		
Weight	kg (lbs.)	103 (230)
Exciter Speed	rpm	5800 ± 100
Exciter Lubrication	ml (oz.)	296 (10) Automatic transmission fluid Dextron III/Mercon or equivalent
Dimensions	mm (in.)	588 (23) x 500 (20) x 778 (31)

		VP 2050R 0009088
Engine		
Engine Make		Robin
Engine Model		EY20OYD4540
Rated Power	kW (Hp)	3.7 (5.0)
Spark Plug		NGK BR6HS or Champion RL86C
Electrode Gap	mm (in.)	0.6-0.7 (0.020-0.030)
Engine Speed - full load	rpm	3600 ± 100
Engine Speed - idle	rpm	1600 ± 100
Air Cleaner	type	Replaceable dry type, paper element with foam precleaner
Engine Lubrication	oil grade service class	Above 40° F (4° C) use SAE 30 Between 15° F (-9° C) and 40° F (4° C) SAE 20 Below 15° F (-9° C) SAE 10W30 SF or SE
Engine Oil Capacity	ml (oz.)	600 (20)
Fuel	type	Regular leaded or unleaded gasoline
Fuel Tank Capacity	l (qts.)	3.8 (4.0)
Valve Clearance (cold)		
Inlet:	mm (in.)	0.1 (0.004)
Outlet:		0.1 (0.004)

3.7 VP 2050Y

		VP 2050Y 0009089, 0009090
Plate		
Weight	kg (lbs.)	113 (250)
Exciter Speed	rpm	5800 ± 100
Exciter Lubrication	ml (oz.)	296 (10) Automatic transmission fluid Dextron III/Mercon or equivalent
Dimensions	mm (in.)	588 (23) x 500 (20) x 884 (35)

		VP 2050Y 0009089
Engine		
Engine Make		Yanmar
Engine Model		L48EE
Rated Power	kW (Hp)	3.5 (4.7)
Engine Speed - full load	rpm	3600 ± 100
Engine Speed - idle	rpm	1600 ± 100
Air Cleaner	type	Replaceable dry type, paper element
Engine Lubrication	oil grade	SAE 10W30 SAE 20W40 - CC/CD rated
Engine Oil Capacity	ml (oz.)	800 (27)
Fuel	type	No. 2 Diesel - cetane > 45
Fuel Tank Capacity	l (qts.)	2.5 (2.7)
Valve Clearance (cold)	mm (in.)	0.15 (0.006)

		VP 2050Y 0009090
Engine		
Engine Make		Yanmar
Engine Model		L40AE-D
Rated Power	kW (Hp)	3.1 (4.2)
Engine Speed - full load	rpm	3600 ± 100
Engine Speed - idle	rpm	1600 ± 100
Air Cleaner	type	Replaceable dry type, paper element
Engine Lubrication	oil grade	SAE 10W30 SAE 20W40 - CC/CD rated
Engine Oil Capacity	ml (oz.)	800 (27)
Fuel	type	No. 2 Diesel - cetane > 45
Fuel Tank Capacity	l (qts.)	2.5 (2.7)
Valve Clearance (cold)	mm (in.)	0.15 (0.006)

4. General

4.1 Application

This plate is designed for compacting loose, granular soils, gravel, and paving stones. It is intended to be used in confined areas and areas next to structures such as walls, curbs, and foundations. Plates equipped with water tanks can be used for compacting asphalt.

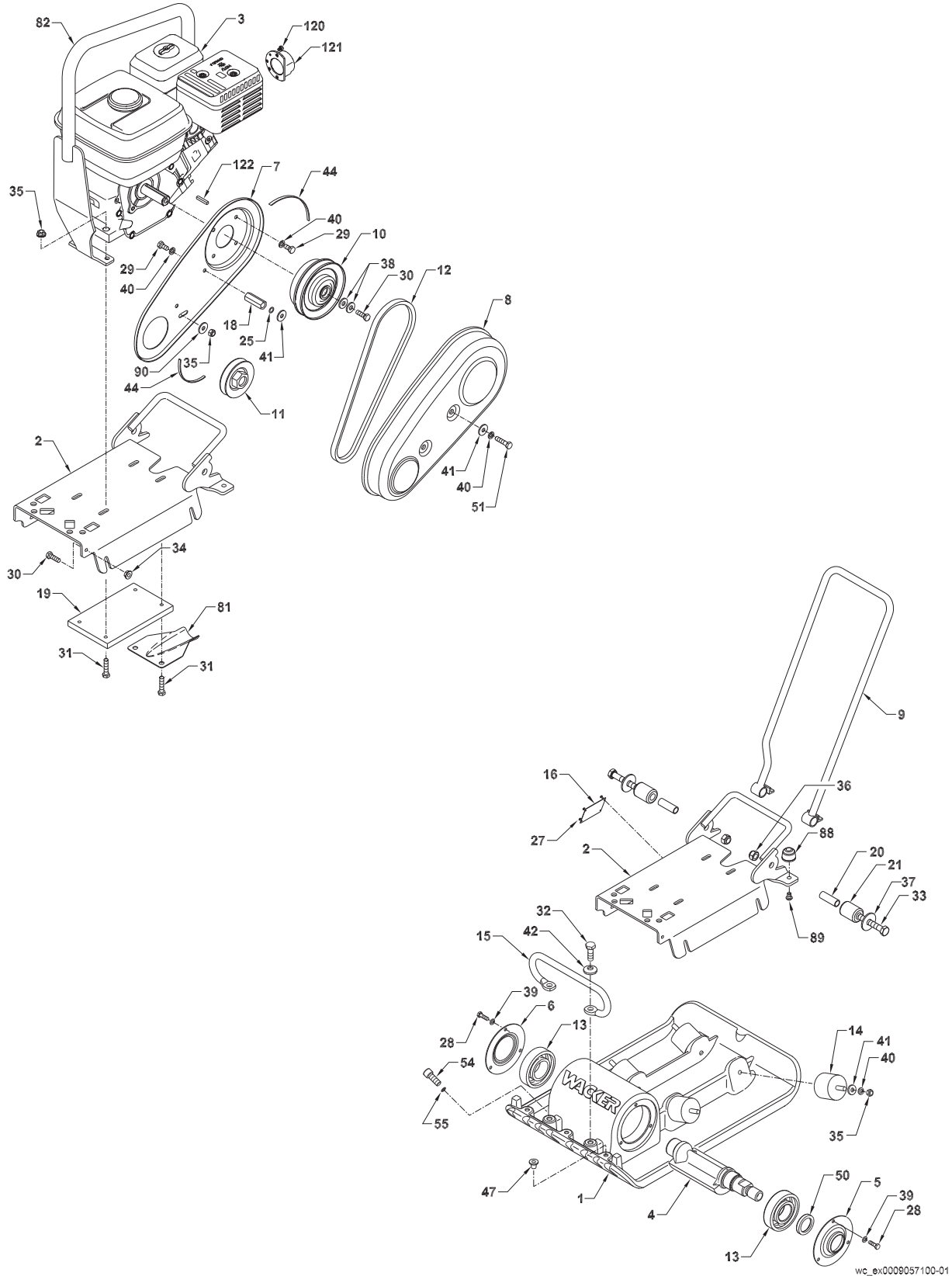
This plate is not recommended for compacting cohesive soils with a heavy clay content. For cohesive soil, use a vibratory rammer or sheepfoot roller.

4.2 Periodic Maintenance Schedule

	Daily before starting	After first 20 hrs.	Every 2 weeks or 50 hrs.	Every month or 100 hrs.	Every year or 300 hrs.
Check fuel level.	•				
Check engine oil level.	•				
Inspect fuel lines.	•				
Inspect air filter. Replace as needed.	•				
Check and tighten external hardware.	•				
Check and adjust drive belt.		•	•		
Clean air cleaner elements.			•		
Inspect shockmounts for damage.			•		
Change engine oil.		•		•	
Clean cooling system.				•	
Clean sediment cup / fuel filter.				•	
Check and clean spark plug.				•	
Check and adjust valve clearance.					•
Change exciter oil.					•

5. Baseplate

5.1 Exploded View - VP



wc_ex0009057100-01

Parts List

Ref.	Description	Qty	Ref.	Description	Qty
1	Baseplate 35mm	1	32	Screw M10x25	2
2	Console	1	33	Screw M12x75	2
3	Engine	1	34	Nut-lock BM8	1
4	Shaft-exciter	1	35	Nut-lock M8	4
5	Cap-end w/hole	1	36	Nut-lock M12	2
6	Cap-end w/o hole	1	37	Washer	2
7	Beltguard-back	1	38	Washer 5/16	2
8	Beltguard-front	1	39	Washer-lock	6
9	Guide-handle	1	40	Washer-lock B8	4
10	Clutch-centrifugal	1	41	Washer B8.4	4
11	Pulley-exciter	1	42	Washer-lock	2
12	Belt-V A30	1	44	Kit-molding	1
13	Bearing-ball	2	47	Plug-cap #1, tapered	3
14	Shockmount	4	50	Seal-shaft	1
15	Handle-lifting	1	51	Screw M8x35	2
16	Nameplate	1	54	Screw M12x25	1
18	Mount-beltguard	2	55	Seal-ring 12x18	1
19	Console-bar	1	81	Drain-oil	1
20	Bushing-handle	2	82	Handle-lift cage	1
21	Bushing-handle, rubber	2	88	Shockmount	2
25	O-Ring	2	89	Screw M8x12 ISO7380	2
27	Screw #3-48x5/32	4	90	Washer-steel, flat	1
28	Screw M6x12	6	120	Screw, tapping 4x8	2
29	Screw M8x16	6	121	Baffle-muffler, complete	1
30	Screw M8x25	2	122	Key A5x5x33	1
31	Screw M8x55	4			

Recommended Tools

Allen Wrench: 6 mm, 14 mm	Gear Puller
Socket: 1/2 in., 1-1/4 in., 13 mm, 19 mm	Torque Wrench
Open End Wrench: 13 mm, 19 mm	Arbor Press
Screwdriver	Oil: Automatic transmission fluid (Dextron III, Mercon or equivalent)

*** Assembly Notes**

Ref.	Sealant Loctite (Omnifit)	Torque Nm (ft.lbs.)	Ref.	Sealant Loctite (Omnifit)	Torque Nm (ft.lbs.)
5	S10		33	---	38 (28)
6	S10		34	S5	20 (15)
14	S3	38 (28)	35		20 (15)
28	S3	8 (6)	51	---	20 (15)
29		20 (15)	54	S3	20 (15)
30	S3	20 (15)	89	S3	20 (15)
32	S3	49 (36)			20 (15)

** in.lbs.

5.2 Guide Handle - VP

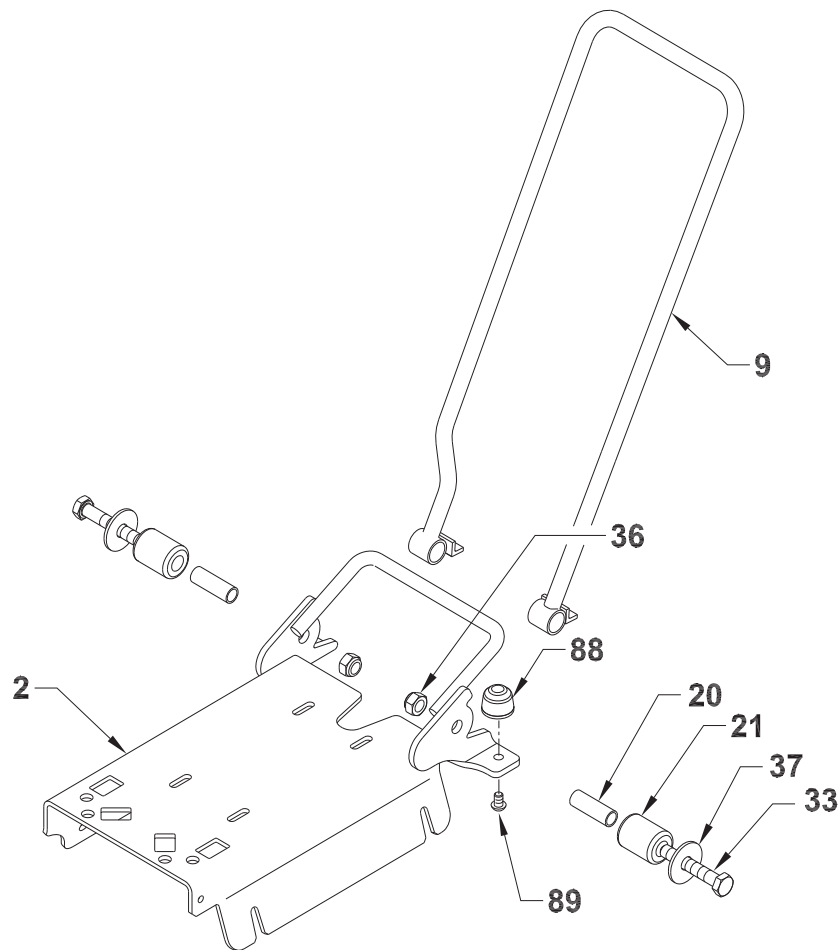
See Graphic: *wc_gr000690*

Removal:

- 5.2.1 Remove locknuts (36) and screws (33) on each side of machine and remove guide handle assembly (9).
- 5.2.2 Remove washers (37) and bushings (20 and 21) from handle. Press bushings from handle if necessary.
- 5.2.3 Replace shockmounts (88) if they appear cracked or damaged. Use a channel-lock pliers to unscrew shockmounts from console (2).

Installation:

- 5.2.1 Install shockmounts (88) on console.
- 5.2.2 Install handle on console using washers (37), bushings (20 and 21), locknuts (36) and screws (33). Tighten screws to 38 Nm (28 ft.lbs.).



wc_gr000690

5.3 Drive Belt

See Graphic: *wc_gr000714*

Removal:

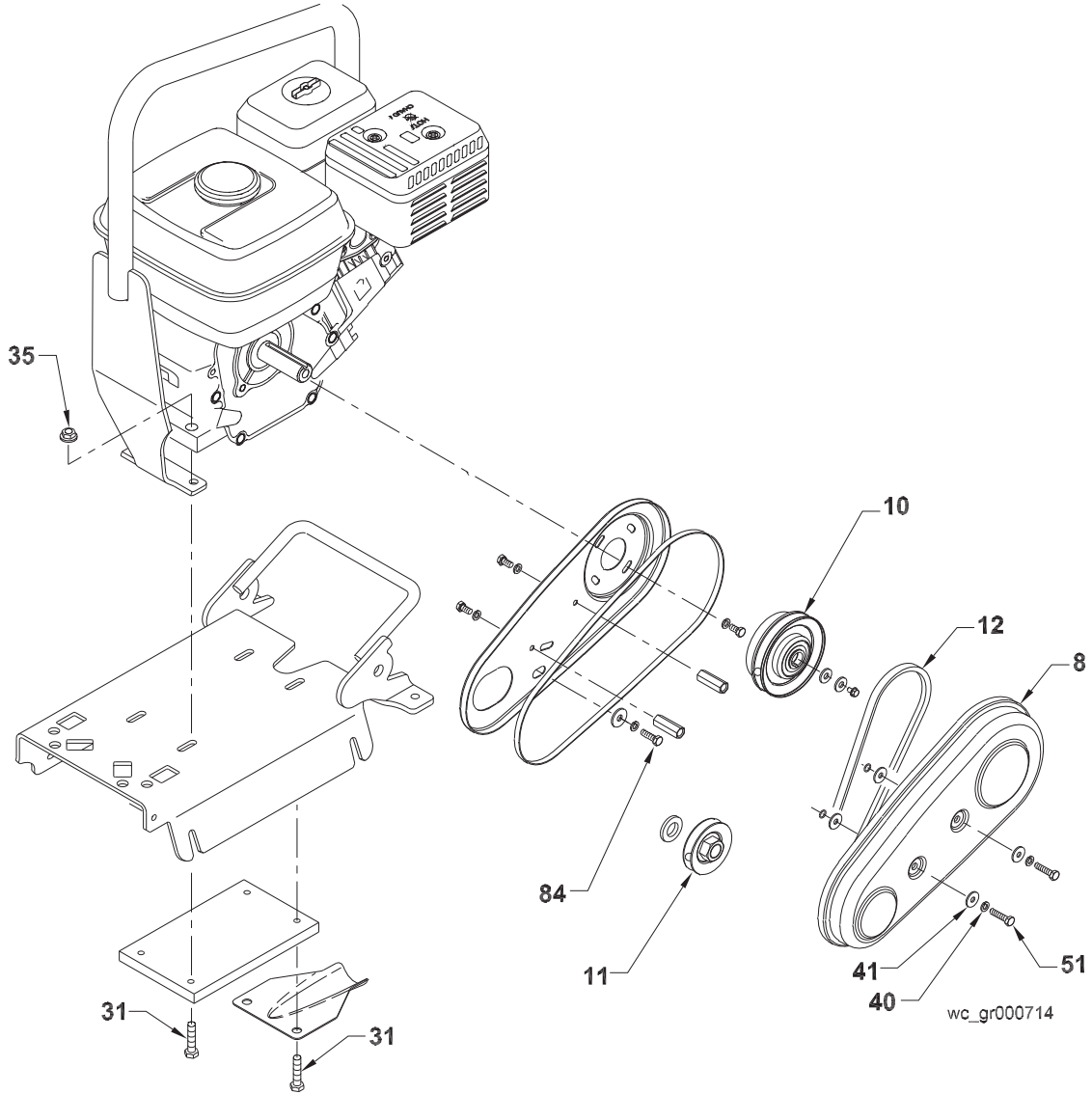
- 5.3.1 Remove screws **(51)** and washers **(40 and 41)** to remove beltguard **(8)**. Keep screws captive in the belt guard.
- 5.3.2 Loosen the four nuts **(35)** which hold the engine to the console, and the screw **(84)** which holds the beltguard back to the console.
- 5.3.3 Slide the engine forward to loosen the belt. Remove belt **(12)**.

Installation:

- 5.3.1 Install belt on exciter pulley.
- 5.3.2 Slide the engine backward (towards the handle) to tighten the belt. Adjust the belt so that it deflects 6–8 mm (1/4–3/8 in.) when pressed midway between the belt pulleys.
- 5.3.3 Tighten the four nuts **(35)** which hold the engine to the console, and the screw **(84)** which holds the beltguard back to the console.
- 5.3.4 Make sure that the clutch pulley **(10)** and the exciter pulley **(11)** are in alignment. Place a straight edge against the exciter pulley **(11)** and move the engine so that the two pulleys are parallel.
- 5.3.5 Install screws **(51)** and washers **(40 and 41)** to reattach beltguard **(8)**. Torque all nuts and screws to 20 Nm (15 ft.lbs.) as you reassemble the machine.

Adjustment:

On new machines or after installing a new belt, check the belt tension after first 20 hours of operation. Check and adjust the belt every 50 hours thereafter.



5.4 Engine

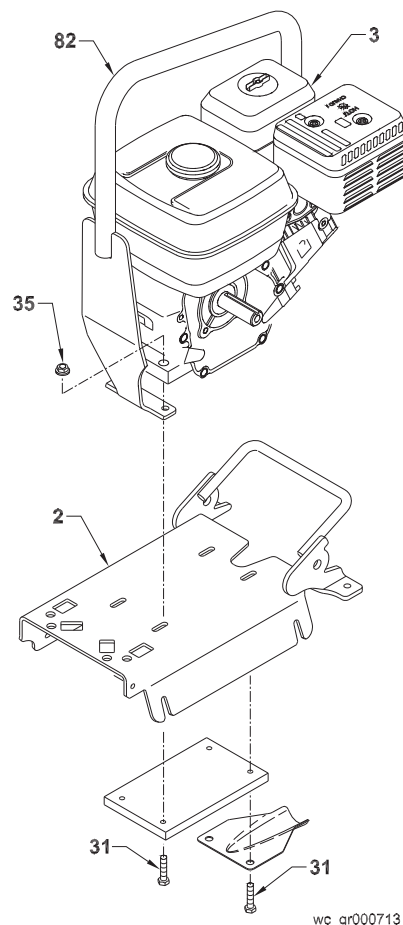
See Graphic: *wc_gr000713*

Removal:

- 5.4.1 Remove drive belt as described in Section *Drive Belt*.
- 5.4.2 Remove 4 screws (31) and 4 lock nuts (35).
- 5.4.3 Carefully lift the frame (82) and engine (3) from the console.
- 5.4.4 If necessary, remove clutch from engine as described in Section *Clutch*.

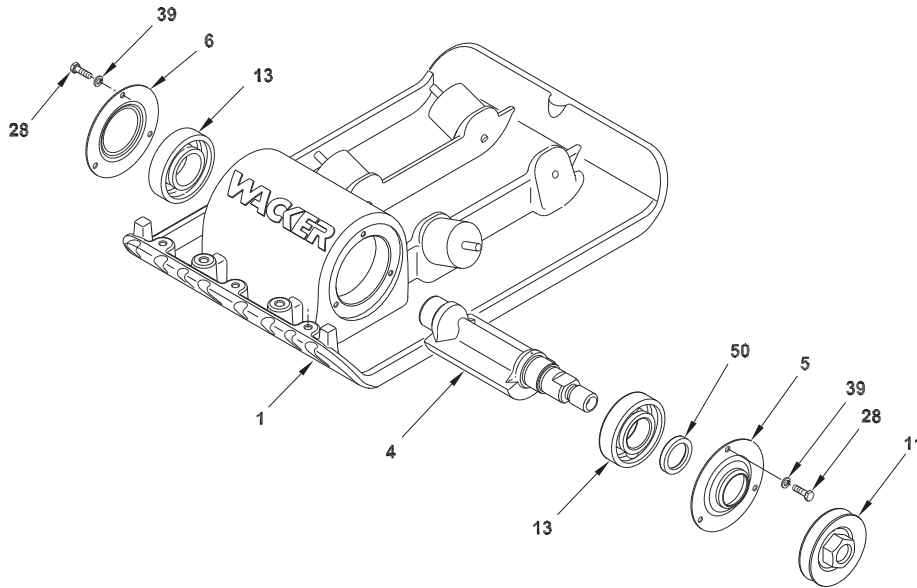
Installation:

- 5.4.1 If removed, install clutch on engine as described in Section *Clutch*.
- 5.4.2 Install engine (3), four screws (31) and four lock nuts (35). Tighten lock nuts to 20 Nm (15 ft.lbs.).
- 5.4.3 Install drive belt and beltguard as described in Section *Drive Belt*.



6. Exciter

6.1 Exciter Exploded View



wc_gr001029

Parts List

Ref.	Description	Qty	Ref.	Description	Qty
1	Baseplate 35mm	1	13	Bearing-ball	2
4	Shaft-exciter	1	28	Screw M6x12	6
5	Cap-end w/hole	1	39	Washer-lock	6
6	Cap-end w/o hole	1	50	Seal-shaft	1
11	Pulley-exciter				

Recommended Tools

Allen Wrench: 6 mm, 8 mm

Socket: 32mm (1-1/4in.)

Wrench: 10 mm

Clutch Removal Tool (Wacker # 0115008)

Impact Wrench

Plastic Mallet

Ref.	Sealant Loctite (Omnifit)	Torque Nm (ft.lbs.)	Ref.	Sealant Loctite (Omnifit)	Torque Nm (ft.lbs.)
5	S10		28	S3	8 (6)
6	S10				

6.2 Exciter

See Graphic: *wc_gr001029*

Disassembly:

- 6.2.1 Remove drive belt as described in Section *Drive Belt*.



Disconnect or remove spark plug to avoid accidentally starting engine when turning pulley. On diesel engines make sure throttle control is completely closed.

- 6.2.2 Exciter pulley (**11**) is assembled to shaft using left hand thread. Use 32 mm (1-1/4 in.) socket on impact wrench and turn pulley clockwise to remove.
- 6.2.3 Remove clutch and backplate as described in Section *Clutch*.
- 6.2.4 Remove three hex head screws (**28**) securing right side end cap (**5**) to exciter housing.
- 6.2.5 Tap opposite end of exciter shaft using a plastic mallet until right side end-cap (**5**) and bearing holder (**13**) breaks free of housing. Before removing exciter shaft, tap shaft back into the exciter to remove the left side end-cap (**6**). Remove left side bearing holder (**13**) and exciter shaft (**4**).

Assembly:

- 6.2.1 Install exciter assembly. Oil bearings (**13**). Install belt side bearing holder first. Apply Loctite 232 (or equivalent) to screw threads (**28**) and secure bearing holders to exciter housing. Torque screws to 8 Nm (6 ft.lbs.).
- 6.2.2 Install clutch and backplate as described in Section *Clutch*.
- 6.2.3 Install exciter pulley (**11**).
- 6.2.4 Install drive belt and beltguard as described in Section *Drive Belt*.
- 6.2.5 Fill exciter with oil, before operating. See *Technical Data* for oil quantity and type.

7. Clutch

7.1 Clutch

See Graphic: wc_gr000766

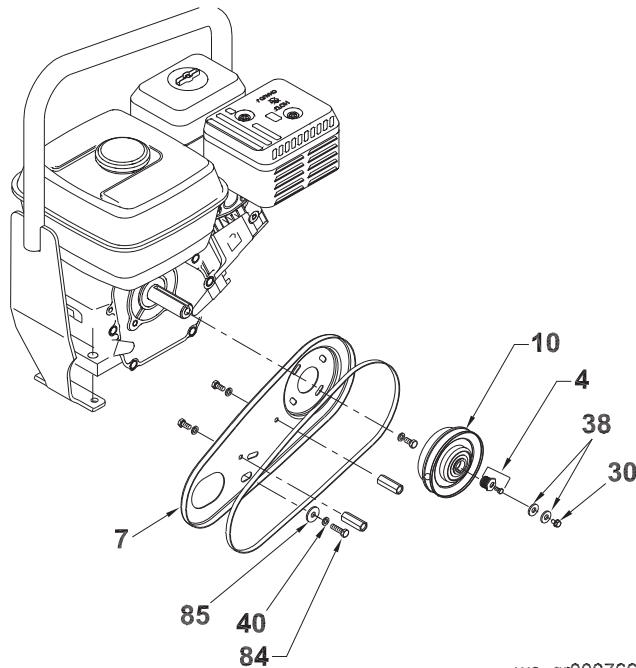
Recommended Tool: Clutch Removal Tool (Wacker # 0115008)

Removal:

- 7.1.1 Remove drive belt as described in Section *Drive Belt*.
- 7.1.2 Remove screw (30) and washers (38) securing clutch (10) to engine shaft. Remove clutch from engine shaft using the clutch removal tool (4). Use care not to damage clutch during removal.
- 7.1.3 If necessary, remove screw (84) and washers (85, 40) to remove beltguard plate (7).

Installation:

- 7.1.1 If removed, install beltguard plate (7) using washers (85, 40) and screw (84).
- 7.1.2 Apply Loctite 242 to threads of screw (30). Secure clutch assembly (10) to engine shaft using washers (38) and screw (30). Tighten screw to 20 Nm (15 ft.lbs.).
- 7.1.3 Install drive belt and beltguard as described in Section *Drive Belt*.



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7.2 Clutch Engagement Speed Test

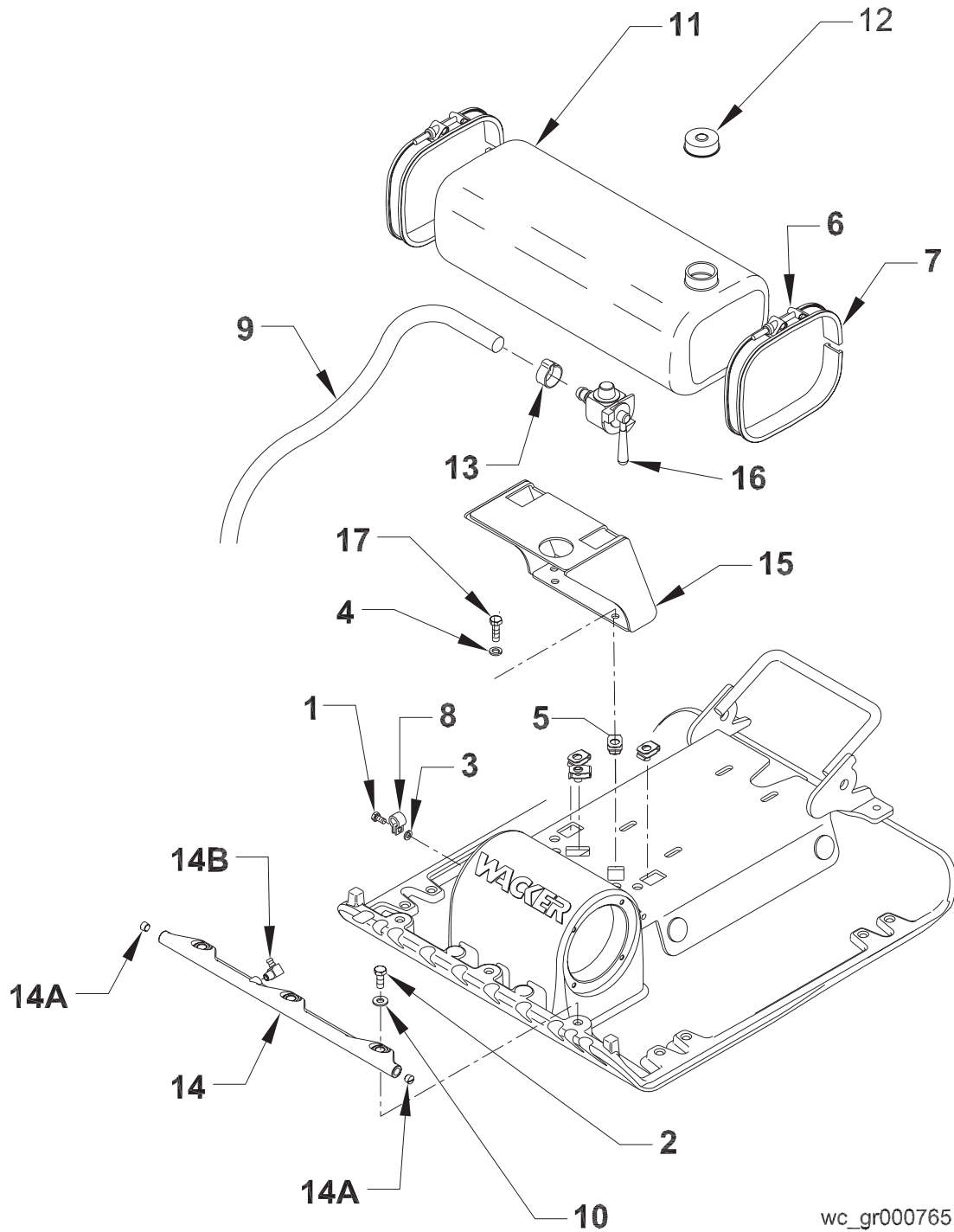


Take care when testing machine with beltguard removed to avoid loose clothing, jewelery, long hair, etc., from getting caught in rotating parts. Replace beltguard after testing and before operating machine.

- 7.2.1 Remove beltguard as described in Section *Drive Belt*.
- 7.2.2 Put machine on a rubber test mat to prevent it from moving.
- 7.2.3 Start engine and allow it to warm up.
- 7.2.4 Pull throttle to full speed. Allow the exciter to reach full speed for a few seconds, then return to idle.
- 7.2.5 Attach tachometer and slowly increase engine speed. Note the engine speed reading when clutch pulley starts to rotate. Correct clutch speed is 2300 ± 100 RPM.
- 7.2.6 If clutch engagement is below 2000 RPM, check for weak springs. If clutch engagement is over 2200 RPM, clutch may be worn and require replacement, or exciter belt may be binding.

8. Water System

8.1 Water System Exploded View - VP



wc_gr000765

Parts List

Ref.	Description	Qty	Ref.	Description	Qty
1	Screw M6 X 12	1	11	Tank-Water	1
2	Screw M8 X 20	3	12	Cap-Water Tank	1
3	Washer-Lock B6	1	13	Clamp-"Pinch-On"	1
4	Washer-Lock	4	14	Manifold-Water Assembly	1
5	Nut-Lock,M8 Clip	4	14A	Plug-Pipe	2
6	Clamp 6-1/2"Nom, T-Bolt	2	14B	Fitting-Elbow	1
7	Molding 3/4"X 15.50", Rubber	2	15	Bracket-Tank Assembly	1
8	Clamp	1	16	Valve-Shutoff	1
9	Hose 3/16" X 13"	1	17	Screw M8X25 DIN933	4
10	Washer-Lock B8	3			

Recommended Tools

Socket: 13 mm, 19 mm

Pliers

Wrench: 13 mm

*** Assembly Notes**

Ref.	Sealant Loctite (Omnifit)	Torque Nm (ft.lbs.)	Ref.	Sealant Loctite (Omnifit)	Torque Nm (ft.lbs.)
2	---	8.1 (6)	17	---	20 (15)

9. Troubleshooting

Problem / Symptom	Reason / Remedy
<p>Plate does not develop full speed. Poor compaction.</p>	<ul style="list-style-type: none"> • Engine throttle control not completely open. • Throttle control not adjusted correctly. • Ground too wet, plate sticking. Allow soil to dry before compacting. • Drive belt loose or worn, slipping on pulleys. Adjust or replace belt. Check that engine mounting bolts are tight. • Exciter bearings binding. Check condition and level of oil in exciter. Add or change oil. • Air filter clogged with dust, reducing engine performance. Clean or replace air filter. • Engine speed too low. Check engine speed with tachometer. Adjust or repair engine to run at correct speed. Refer to engine manual.
<p>Engine running, no vibration</p>	<ul style="list-style-type: none"> • Engine throttle not open. • Drive belt loose or broken. Adjust or replace. • Clutch damaged. Inspect and replace clutch. • Engine speed too low. Check engine speed. • Too much oil in exciter. Adjust oil to correct level.
<p>Plate jumps or compacts unevenly.</p>	<ul style="list-style-type: none"> • Ground surface too hard. • Shockmounts loose or damaged.

Threadlockers and Sealants

Threadlockers and Sealants

Threadlocking adhesives and sealants are specified throughout this manual by a notation of "S" plus a number (S#) and should be used where indicated. Threadlocking compounds normally break down at temperatures above 175°C (350°F). If a screw or bolt is hard to remove, heat it using a small propane torch to break down the sealant. When applying sealants, follow instructions on container. The sealants listed below are recommended for use on Wacker equipment.

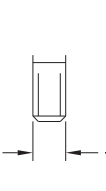
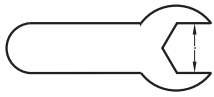

TYPE () = Europe	COLOR	USAGE	PART NO. - SIZE
Loctite 222 Hernon 420 Omnifit 1150 (50M)	Purple	Low strength, for locking threads smaller than 6 mm (1/4"). Hand tool removable. Temp. range, -54 to 149 ° C (-65 to 300 ° F)	73287 - 10 ml
Hernon 423 Omnifit 1350 (100M)	Blue	Medium strength, for locking threads larger than 6 mm (1/4"). Hand tool removable. Temp. range, -54 to 149 ° C (-65 to 300 ° F)	29311 - .5 ml 17380 - 50 ml
Loctite 271/277 Hernon 427 Omnifit 1550 (220M)	Red	High strength, for all threads up to 25 mm (1"). Heat parts before disassembly. Temp. range, -54 to 149 ° C (-65 to 300 ° F)	29312 - .5 ml 26685 - 10 ml 73285 - 50 ml
Loctite 290 Hernon 431 Omnifit 1710 (230LL)	Green	Medium to high strength, for locking preassembled threads and for sealing weld porosity (wicking). Gaps up to 0.13 mm (0.005") Temp. range, -54 to 149 ° C (-65 to 300 ° F)	28824 - .5 ml 25316 - 10 ml
Loctite 609 Hernon 822 Omnifit 1730 (230L)	Green	Medium strength retaining compound for slip or press fit of shafts, bearings, gears, pulleys, etc. Gaps up to 0.13 mm (0.005") Temp. range, -54 to 149 ° C (-65 to 300 ° F)	29314 - .5 ml
Loctite 545 Hernon 947 Omnifit 1150 (50M)	Brown	Hydraulic sealant Temp. range, -54 to 149 ° C (-65 to 300 ° F)	79356 - 50 ml
Loctite 592 Hernon 920 Omnifit 790	White	Pipe sealant with Teflon for moderate pressures. Temp. range, -54 to 149 ° C (-65 to 300 ° F)	26695 - 6 ml 73289 - 50 ml
Loctite 515 Hernon 910 Omnifit 10	Purple	Form-in-place gasket for flexible joints. Fills gaps up to 1.3 mm (0.05") Temp. range, -54 to 149 ° C (-65 to 300 ° F)	70735 - 50 ml
Loctite 496 Hernon 110 Omnifit Sicomet 7000	Clear	Instant adhesive for bonding rubber, metal and plastics; general purpose. For gaps up to 0.15 mm (0.006") Read caution instructions before using. Temp. range, -54 to 82 ° C (-65 to 180 ° F)	52676 - 1 oz.

Threadlockers and Sealants

TYPE () = Europe	COLOR	USAGE	PART NO. - SIZE
Loctite Primer T Heron Primer 10 Omnifit VC Activator	Aerosol Spray	Fast curing primer for threadlocking, retaining and sealing compounds. Must be used with stainless steel hardware. Recommended for use with gasket sealants.	2006124 - 6 oz.

Torque Values

Metric Fasteners (DIN)

	TORQUE VALUES (Based on Bolt Size and Hardness)						WRENCH SIZE			
	8.8		10.9		12.9					
Size	ft.lb.	Nm	ft.lb.	Nm	ft.lb.	Nm	Inch	Metric	Inch	Metric
M3	*11	1.2	*14	1.6	*19	2.1	7/32	5.5	-	2.5
M4	*26	2.9	*36	4.1	*43	4.9	9/32	7	-	3
M5	*53	6.0	6	8.5	7	10	5/16	8	-	4
M6	7	10	10	14	13	17	-	10	-	5
M8	18	25	26	35	30	41	1/2	13	-	6
M10	36	49	51	69	61	83	11/16	17	-	8
M12	63	86	88	120	107	145	3/4	19	-	10
M14	99	135	140	190	169	230	7/8	22	-	12
M16	155	210	217	295	262	355	15/16	24	-	14
M18	214	290	298	405	357	485	1-1/16	27	-	14
M20	302	410	427	580	508	690	1-1/4	30	-	17

1 ft.lb. = 1.357 Nm.

* = in.lb.

1 Inch = 25.4 mm

Torque Values

Inch Fasteners (SAE)

Size	SAE 5		SAE 8		SAE 9		SAE 1927		SAE 1931	
	ft.lb.	Nm	ft.lb.	Nm	ft.lb.	Nm	Inch	Metric	Inch	Metric
No.4	*6	0.7	*14	1.0	*12	1.4	1/4	5.5	3/32	-
No.6	*12	1.4	*17	1.9	*21	2.4	5/16	8	7/64	-
No.8	*22	2.5	*31	3.5	*42	4.7	11/32	9	9/64	-
No.10	*32	3.6	*45	5.1	*60	6.8	3/8	-	5/32	-
1/4	6	8.1	9	12	12	16	7/16	-	3/32	-
5/16	13	18	19	26	24	33	1/2	13	1/4	-
3/8	23	31	33	45	43	58	9/16	-	5/16	-
7/16	37	50	52	71	69	94	5/8	16	3/8	-
1/2	57	77	80	109	105	142	3/4	19	3/8	-
9/16	82	111	115	156	158	214	13/16	-	-	-
5/8	112	152	159	216	195	265	15/16	24	1/2	-
3/4	200	271	282	383	353	479	1-1/8	-	5/8	-

1 ft.lb. = 1.357 Nm.

* = in.lb.

1 Inch = 25.4 mm

