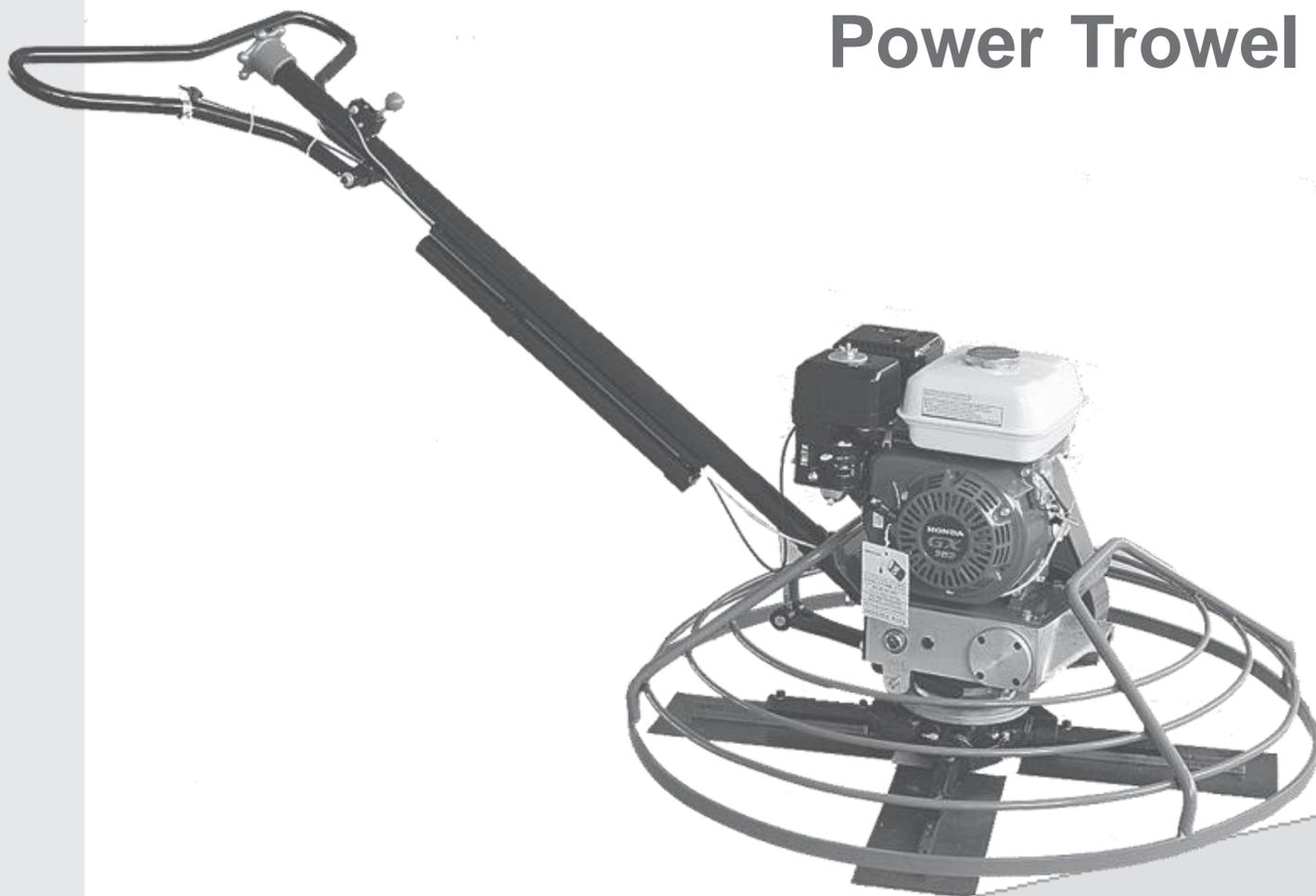


# Operating Instruction and Parts Manual for

**KPT 36/48**

**Walk Behind  
Power Trowel**



**K**  
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**FOREWARD**

- For your own safety and protection from bodily injuries, carefully read, understand and follow the safety instructions in this manual.
- Please operate and maintain your machine in accordance with the instructions in this manual.
- Defective machine parts are to be replaced as soon as possible.
- Keep this owner's manual handy, so you can refer to it at any time.
- No part of this publication may be reproduced without written permission.
- We expressly reserve the right to technical modifications- even without express due notice - which aim at improving our machines or their safety standards.

**FEATURE**

The KPT 36 and the KPT 48 Walk Behind Power Trowels can be used in surface finishing of concrete road, terrace, boatyard, airport and floor etc.

Deadman switch design provide safe. A sophisticated system to protect the operator from an out-of-control spinning handle. When the operator is using a walk-behind power trowel and let go of the safety sensor detects the motion of the handle and stops the engine before the handle reaches a 45-degree rotation. The handle can be adjusted due to the stature of operator, and it offers maximum control and comfort for the operation. The alloy blades which have get heat treatment are worn well. Low center of gravity provides workers with safe and stable operation.

**SPECIFICATION**

**KPT 36**

Weight: 83kg  
 Diameter: 980mm  
 Float pan diameter: 945mm  
 Trowel blade rev: 70r/min~140r/min  
 Overall diameter: 1820×945×980mm  
 Blades: 4  
 Gearbox oil: WA460  
 Gearbox oil capacity: 950ml  
 Power output: 5.5hp  
 Engine type: HONDA GX160  
 Fuel capacity (L): 3.6  
 Engine oil type: Recommended SAE10W-30  
 Engine oil capacity (L): 0.6

**KPT 48**

Weight: 119kg  
 Diameter: 1175mm  
 Float pan diameter: 1180mm  
 Trowel blade rev: 70r/min~140r/min  
 Overall diameter: 2080×1170×1020mm  
 Blades: 4  
 Gearbox oil: WA460  
 Gearbox oil capacity: 950ml  
 Power output: 9/13hp  
 Engine type: HONDA GX270/390  
 Fuel capacity (L): 6/6.5  
 Engine oil type: Recommended SAE10W-30  
 Engine oil capacity (L): 1.1

1. Before starting operation, the operator has to check that all control and safety devices function properly.
2. Always keep unauthorized, inexperienced, untrained people away from this machine.
3. Rotating and moving parts will cause injury if contacted. Make sure guards are in place. Keep hands and feet away from moving parts.
4. The engine must always be stopped before attempting any repair or adjustments. Ignition switch should be off.
5. To avoid slipping and loss of control when starting the trowel, the operator should maintain good footing. It is recommended that the operator wear safety shoes for added protection.
6. Be careful when working around pipes or ducts protruding from the floor or slab edges. If the trowel blades hit such obstacles, damage to the machine or possible operator injury may result.
7. When starting the machine, do not exceed 1/3 throttle position. A higher setting may cause the Centrifugal clutch to engage and the handle to rotate.
8. Be careful not to come in contact with the muffler when the engine is hot, serious burns may result!
9. Over time, the blades will form a sharp edge. Be careful when handling the old blades.
10. Gasoline is extremely flammable, and gasoline vapor can explode. Refuel outdoors, in a well-ventilated area, and keep other flames and sparks away.
11. Do not fill the fuel tank completely. After refueling, tighten the fuel tank cap securely.
12. Before beginning your preoperational checks, be sure the engine is level and the engine switch is in the OFF. The max. gradient of 20° must not be exceeded when the engine working.
13. Don't allow children to operate the engine. Keep children and pets away from the area of operation.
14. After each use your machine should be cleaned to remove any dust and debris from the undercarriage and surrounding components.
15. When the machine start working you should be check the clutch whether or not wear and tear. If the clutch will have 3/4 worn and torn, you must change new clutch-ring.
16. Check that all shields and covers are in place, and all nuts, bolts, and screw are tightened when the machine working. Make sure put the cable while the machine working.

## MAINTENANCE RECORD

**Due to the nature and environment of use, Walk-behind Power Trowels could be exposed to severe operating conditions. Some general maintenance guidelines will extend the useful life of your trowel.**

1. The initial service for your trowel should be performed after 25 hours of use, at which time your mechanic (or authorized repair shop) should complete all of the recommended checks in the schedule below. The chart is handy for keeping a record of the maintenance performed and the parts used for servicing your trowel.
2. Regular service according to the schedule below will prolong the life of the Walk-behind Power Trowel and prevent expensive repairs.
3. Keeping your Walk-behind Power Trowel clean and free from debris is the single most important regular maintenance operation, over and above the checks in the service schedule above, that can be performed. After each use your Walk behind Power Trowel should be cleaned to remove any dust and debris from the undercarriage and surrounding components. Use of a power washer will make clean up quick and easy, especially if a non-stick coating was applied prior to use.
4. In the Service Schedule below, items that should be checked, replaced or adjusted are indicated by "o" in the appropriate column. Not all Walk-behind Power Trowel models include the same features and options and as such not all service operations may have to be performed. For ease of recording place a checkmark (✓) through the "o" when the item is complete. If an item is not required or not complete place an "x" through the "x" in the box.

**CAUTIONS!** Over time, if the blades will have 3/4 worn and torn, you must change new trowel blades.

## MAINTENANCE SCHEDULE

Routine Service Intervals	Each use	After 1.5 Months or 50 hrs	Each 3 Months or 100 hrs	Each 6 Months or 200 hrs	Each 9 Months or 300 hrs	Each 12 Months or 400 hrs
General Inspection:						
Guards	Check		○	○	○	○
Warning Stickers	Check		○	○	○	○
Test Run	Check Operation			○	○	○
Controls:						
Dead-Man Switch Operation	Check	○	○	○	○	○
Pitch Control Assembly	Check	○	○	○	○	○
	Lubricate		○	○	○	○
Engine:						
Engine oil	Check level	○	○	○	○	○
	Change		○	○		○
Engine Oil Filter	Replace			○		○
Oil Cooler	Clean			○	○	○
Cooling Fins	Clean		○	○	○	○
Air cleaner	Check-clean		○	○	○	○
	Replace					○
Air Intake Line	Check		○			
	Replace					2 yrs
Fan Belt	Check tightness				○	○
	Replace					500 hrs
Valve Clearance	Check-Adjust				○	○
Fuel filter	Check & Clean			○	○	○
	Replace				○	○
Fuel Tank	Clean					500hrs
Engine wiring	Check					○
Drive Train:						
Clutch/Pulley Operation	Check	○	○	○	○	○
Spider plate assembly	Check	○	○	○	○	○
	Lubricate				○	○
V-Belt	Check	○	○	○	○	○
Blades	Check	○	○	○	○	○
Gearbox:						
Gearbox oil	Check level				○	○
	Check	○			○	○
Gearbox Breathers	Check Operation			○	○	○

### OPERATION ELEMENTS

V-belt is driven gearbox by engine, and then transmit torque to trowel and the machine working. The trowels can be adjusted due to the stature of operator through pitch control assembly. Dead man switch designs provide safe and stable operation. Holding the deadman lever before start the engine, and loosening deadman lever the machine will stop working.

### OPERATION (Floating)

When the slab has set sufficiently firm that the operator's footprint leaves a very slight depression on the surface of the slab, it is ready for the floating operation.

Guiding the machine on the slab is very simple; a slight upward lift of the handle causes the machine to travel to the left. Holding the handle in the neutral position, will slowly cause the machine to spin in one spot. Slight downward pressure on the handle causes the machine to travel to the right. Best results are obtained by covering approximately 4" on each turn. In other words, let the machine move right or left, backwards or forwards, approximately 4" with each revolution of the trowels. To fill a hole or cut down hump, move the unit back and forth over the problem area.

Under normal operating conditions the machine should cover as much as 1000 sq. ft. in about 15 minutes. It is recommended that a slight tension on the trowel control cable, (but not a definite tilt), during the floating operation will cause the machine to operate much smoother. After the floated slab has set sufficiently, it is ready for the finishing operation.

**CAUTION!** Do not let the machine stand in one spot on the soft cement. Lift from the slab when the floating operation is complete.

## OPERATION (Finishing)

When starting the finishing operation, never set the trowels up over 1/4" pitch.

After the floating operation, the first thing to do is to remove the floating disc from the blades. Clean the blades, spider plate and disc from cement paste collected during the floating operation. Increase the blade pitch up to a maximum of 1 cm for the first finishing operation and then continue to increase the pitch on the following finishing operations.

Continue the finishing passes until you obtain the desired floor finish. The time required between each finishing pass is again dependent on the weather conditions and water content of the concrete etc. If some areas of the concrete set/harden too fast you may apply a small amount of water using a hand brush as an aid to achieving the finish.

## STARTING & STOPPING PROCEDURE

### 1. Before operation checks

- a. Check the oil level: Before beginning your preoperational checks, be sure the engine is level and the engine switch is in the OFF. Remove the filler cap/dipstick and wipe it clean. Insert and remove the dipstick without screwing it into the filler hole. Check the oil level shown on the dipstick. If the oil level is low, remove the oil filler cap, and fill to the upper limit mark on the dipstick with recommended oil. Screw in the filler cap/dipstick securely.

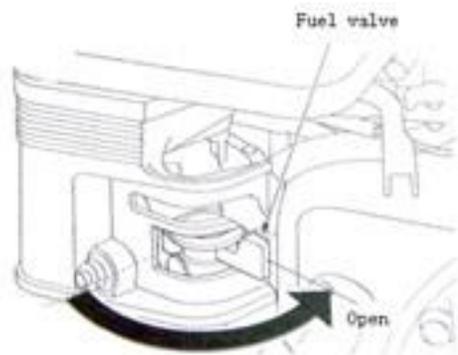
SAE 10W-30 is recommended for general use. The engine is certified to operate on unleaded gasoline with a research octane rating of 90 or higher. Unleaded gasoline produces fewer engine and spark plug deposits and extends exhaust system life. Never use stale or contaminated gasoline or an oil/gasoline mixture. Avoid getting dirt or water in the fuel tank.

- b. Check air filter: Remove the air cleaner cover and inspect the filter. Clean or replace dirty filter elements. Always replace damaged filter elements. If equipped with an oil-bath air cleaner, also check the oil level.

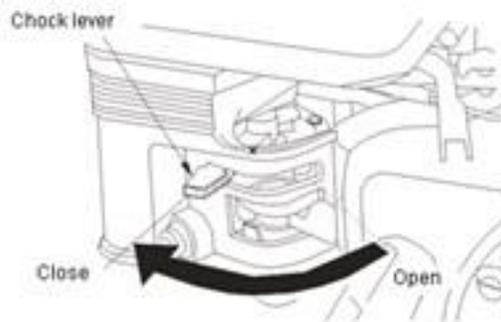
**Notice!** Running the engine with a low oil level can cause engine damage.

### 2. Start engine/Stopping engine procedure

- a. Move the fuel valve lever to the ON position.

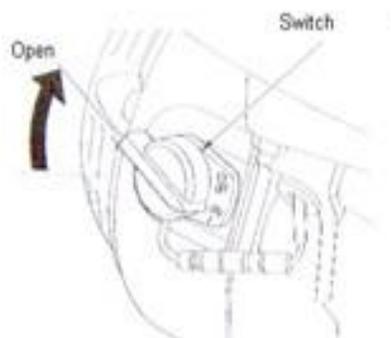
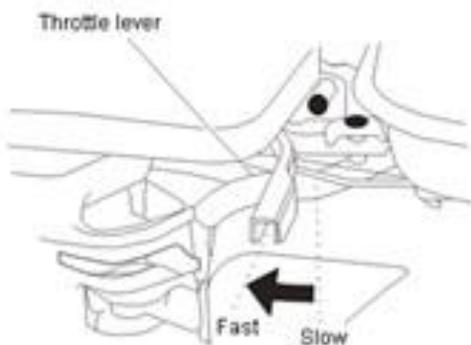


- b. Move the choke lever to the CLOSE position. If the engine is warm or the air temperature is high, move the control lever away from the OPEN position as soon as the engine starts.

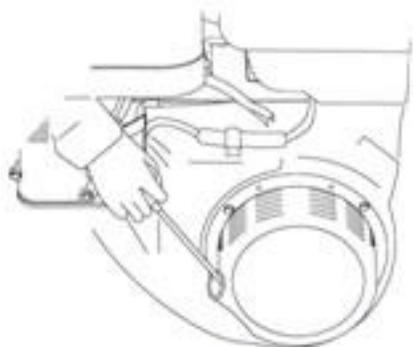


- c. Move the throttle lever away from the SLOW position, about 1/3 of the way to toward the FAST position.

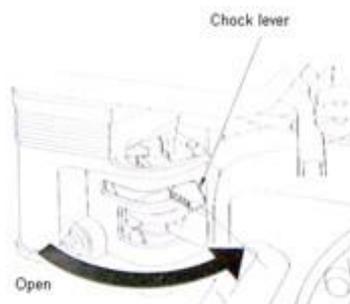
- d. Turn the engine switch to the ON position.



e. Pull the starter grip lightly until you feel resistance, then pull briskly. Return the starter grip gently. **CAUTION!** Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter.

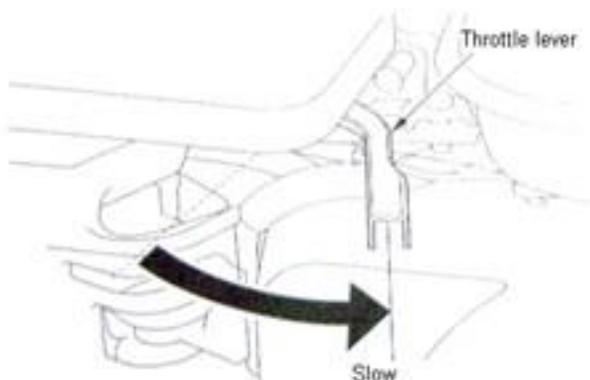


f. If the choke lever or choke rod (applicable types) has been moved to the CLOSED position to start the engine, gradually move it to the OPEN position as the engine warms up.

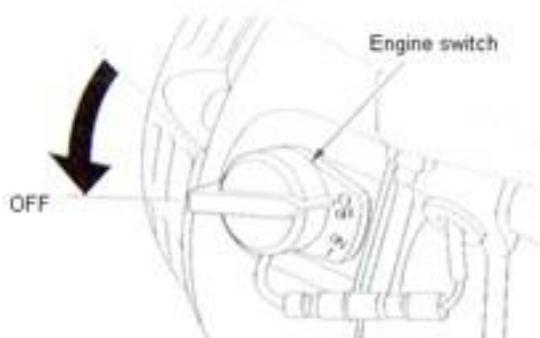


### 3. Stopping the engine

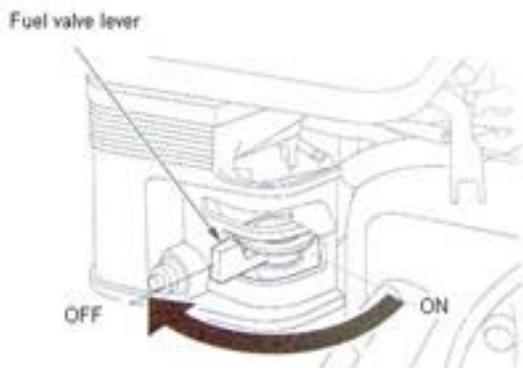
a. Move the throttle lever to the SLOW position.



b. Turn the engine switch to the OFF position.



c. Turn the fuel valve lever to the OFF position.



### 4. Setting engine speed

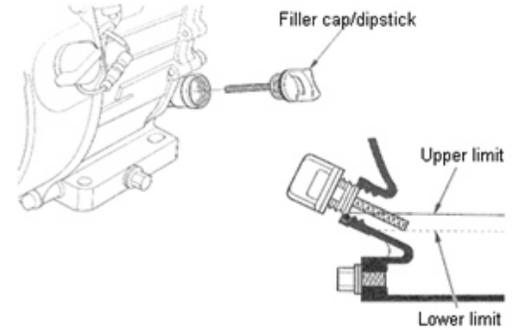
Position the throttle lever the desired engine speed.

## LUBRICATION

### 1. Engine oil level check

Check the engine oil level with the engine stopped and in a level position.

1. Remove the filler cap/dipstick and wipe it clean.
2. Insert and remove the dipstick without screwing it into the filler neck. Check the oil level shown on the dipstick.
3. If the oil level is low, fill to the edge of the oil filler hole with the recommended oil.
4. Screw in the filler cap/dipstick securely.



### 2. Engine oil change

Drain the used oil while the engine is warm. Warm oil drains quickly and completely.

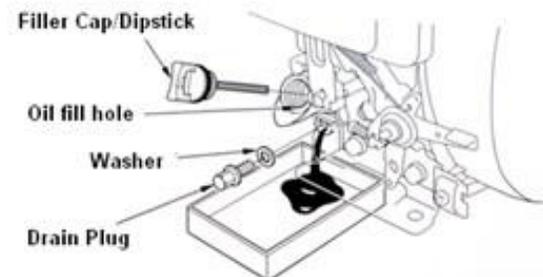
1. Place a suitable container below the engine to catch the used oil, and then remove the filler cap/dipstick, drain plug, and washer.
2. Allow the used oil to drain completely, then reinstall the drain plug, washer, and tighten drain plug securely.

**Notice!** Please dispose of used motor oil in a manner that is compatible with the environment. We suggest you take used oil in a sealed container to your local recycling center or service station for reclamation. Do not throw it in the trash; pour it on the ground, or down a drain.

3. With the engine in a level position, fill to the outer edge of the oil filler hole with the recommended oil.

**Notice!** Running the engine in a low oil level can cause engine damage.

4. Screw in the filler cap/dipstick securely.



## SPARK PLUGS

Recommended spark plugs: BPR6ES (NGK). For good performance, the spark plug must be properly gapped and free of deposits.

**Notice!** An incorrect spark plug can cause engine damage.

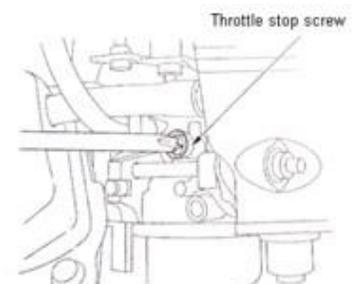
1. Disconnect the spark plug cap, and remove any dirt from around the spark plug area.
2. Remove the spark plug with a 13/16-inch spark plug wrench.
3. Inspect the spark plug. Replace it if the electrodes are worn heavy carbon buildup is found, or if the insulator is cracked or chipped.
4. Measure the spark plug electrode gap with a suitable gauge. The gap should be 0.028-0.031 in (0.70 - 0.80 mm). Correct the gap, if necessary, by carefully bending the side electrode.
5. Check that the spark plug washer is in good condition. Install the spark plug carefully, by hand, to avoid cross-threading.
6. After the spark plug seats, tighten with a 13/16-inch spark plug wrench to compress the sealing washer.
7. When installing a new spark plug, tighten 1/2 turn after the spark plug seats to compress the washer.
8. After the spark plug seats, tighten with a 13/16-inch spark plug wrench to compress the sealing washer. If reinstalling the used spark plug, tighten 1/8 - 1/4 turn after the spark plug seats. If installing a new spark plug, tighten 1/2 turn after the spark plug seats.
9. Attach the spark plug cap.

**NOTICE!** The recommended spark plug has the correct heat range for normal engine operating temperatures. A loose spark plug can overheat and damage the engine. Over tightening the spark plug can damage the threads in the cylinder head.

## CARBURETOR ADJUSTMENT

1. Start the engine outdoors, and allow it to warm up to operating temperature.
2. Move the throttle lever to its slowest position.
3. Turn the throttle stop screw to obtain the standard idle speed.

Standard idle speed: 1440r/min



## AIR FILTER SERVICE

A dirty air filter will restrict air flow to the carburetor, reducing engine performance. If you operate the engine in very dust areas, clean the air filter more often than specified in the MAINTENANCE SCHEDULE.

**WARNING!** Never use gasoline or low flammable point solvents for cleaning the air cleaner element. A fire or explosion could result.

**NOTICE!** Operating the engine without an air filter element, or with a damaged air filter element, will allow dirt to enter the engine, causing rapid engine wear.

1. Remove the wing nut from the air cleaner cover, and remove the cover.
2. Remove the wing nut from the air filter, and remove the filter.
3. Remove the foam air filter element from the paper filter.
4. Inspect both air filter elements, and replace them if they are damage.
5. Paper air filter element: Tap the filter element lightly several times on a hard surface to remove excess dirt, or blow compressed air through the filter element from the inside out. Never try to brush the dirt off; brushing will force dirt into the fibers.
6. Foam air filter element: Clean in warm soapy water, rinse, and allow to drying thoroughly. Or clean in nonflammable solvent and allow to drying. Dip the filter element in clean engine oil, and then squeeze out all excess oil. The engine will smoke when started if too much oil is left in the foam.

## STORAGE

The following steps should be taken to prepare your Walk-behind Power Trowel for extended storage.

1. Close fuel shut off valve.
2. Siphon excess gasoline from tank.
3. Start engine until it stops from lack of fuel. This will use up all the fuel in the carburetor and prevent formation of deposits due to evaporation of fuel.
4. Remove spark plug and pour 2 oz. of SAE-30 or SAE-40 motor oil into the cylinder. Slowly crank the engine 2 or 3 times to distribute the oil throughout the cylinder. This will help prevent rust during storage. Replace spark plug.
5. Store the unit in an upright position in a cool, dry, well-ventilated area.

## TROUBLESHOOTING

### 1. WON'T START

- Throttle fully open
- Hand lever wire broken
- No gas
- Dirty gas
- No oil
- Gas filter plugged
- Gas line plugged
- Hole in gas line
- Gas supply valve turned off
- Dead-man safety switch is off
- Safety switch wire or connectors not making good contact
- Other engine problems (Refer to engine manual)

### 2. STARTS BUT NO HIGH SPEED

- Engine problems
- Throttle lever and connectors loose or out of adjustment
- Throttle cable broken or seized
- Clutch shoes worn

### 3. STARTS AT HIGH SPEED, WON'T SLOW DOWN

- Same as above

### 4. ENGINE WON'T STOP

- Safety switch, wire or connectors not making good contact
- Micro-switch burnt out

### 5. ENGINE STARTS BUT WON'T TURN TROWELS AT ANY SPEED

- Clutch seized
- No weights in clutch
- Wrong belt
- Gearbox seized
- Broken or missing key
  - Clutch seized
  - Pulley
  - Worm gear (countershaft)
  - Main gear
  - Spider plate

**6. TROWELS TURN, ENGINE AT IDLE**

- Idle too fast
- Belt too tight
- Clutch seized
- Pulley out of alignment

**7. TROWELS BLADES WEARING UNEVENLY**

- Spider plate seized
- Arms bent
- Adjusting screws (carriage bolts) incorrectly set
- Floating disc not evenly attached to the blades

**8. MACHINE JUMPS ON FLOOR**

- Concrete hardened on bottom of spider plate
- Trowels unevenly worn/bent
- Spider plate seized
- Spider plate loose
- Trowel arms bent
- Adjusting screws (carriage bolts) incorrectly set
- Main shaft bent

**9. PITCH CONTROLS WILL NOT OPERATE BLADES**

- Cable broken or out of adjustment
- Pressure plate assembly contaminated with concrete debris
- Slot screw missing (under-side of handle)
- Spider plate seized
- Pressure plate and/or yoke arm broken or badly worn
- Hand crank adjuster malfunctioning

**10. BELT WEARING RAPIDLY**

- Belt is too tight
- Wrong belt/defective belt
- Gearbox seizing
- Pulley out of alignment
- Clutch sticking

**11. OIL LEAKS**

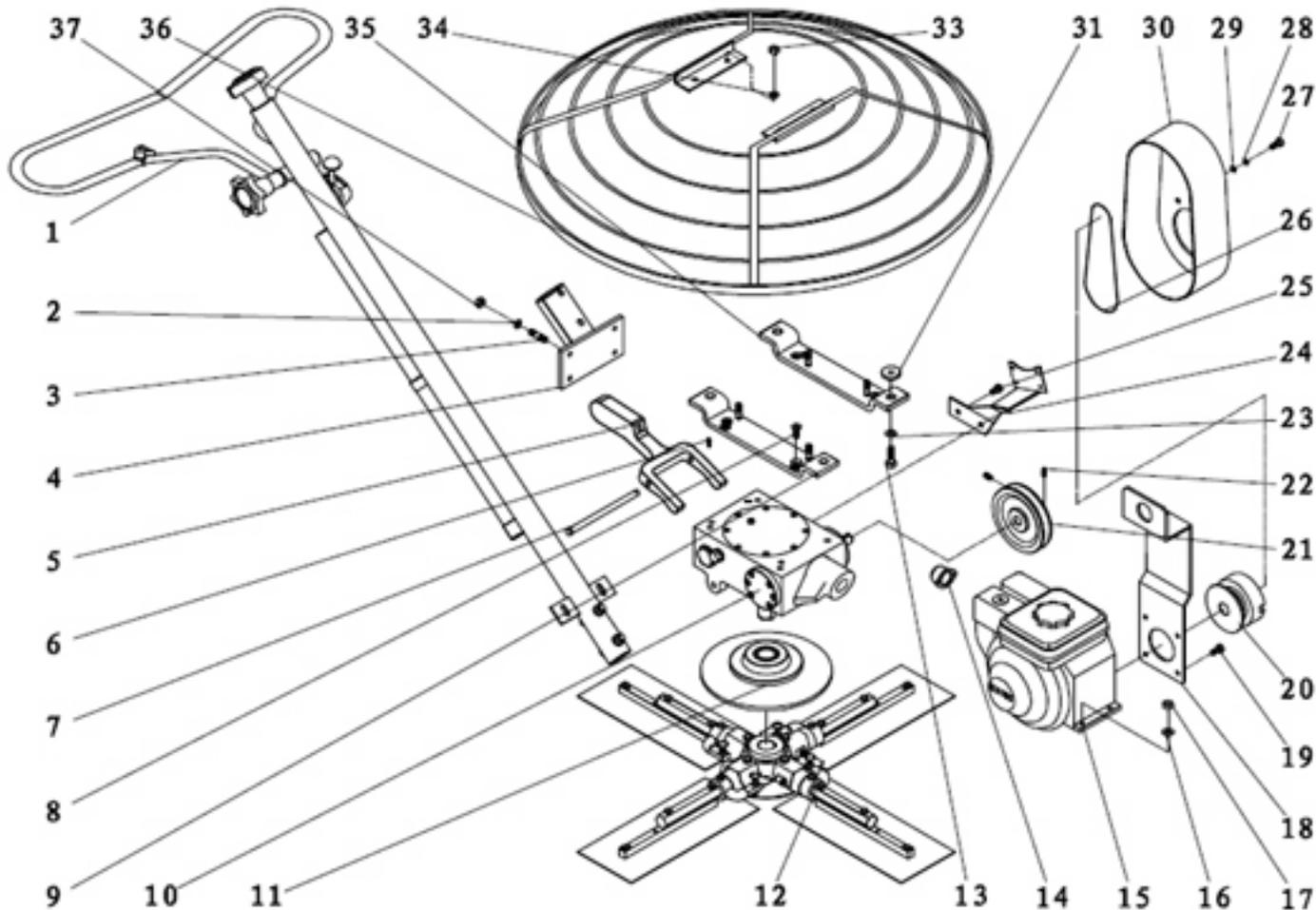
- a. Top of gearbox**
  - Gearbox seal worn
  - Engine leaks
  - Too much oil in gearbox
- b. At main shaft or countershaft**
  - Shaft and/or seal worn
  - Retaining screw(s) loose

**12. TROWEL BLADES WILL NOT TURN**

- Yoke arm broken
- Key sheared
- Gearbox malfunction

**Diagram - 36**

1. Walk-behind power trowel assembly



**KPT 36 Power Trowel Part List**

Item	Part No.	Part name	Qty
1	36001	Handle assembly	1
2	36002	Washer 10	4
3	36003	Stud M10×45	4
4	36004	Handle bracket	1
5	36005	Yoke arm	1
6	36006	Retaining ring	1
7	36007	Pin	1
8	36008	Screw M10×25	7
9	36009	Mounting rails I	1
10	36010	Gearbox assembly	1
11	36011	Pressure plate assembly	1
12	36012	Spider plate assembly	1
13	36013	Bolt M10x45	4
14	36014	Releaser hood	1
15	36015	Engine GX160	1
16	36016	Washer 8	4
17	36017	Lock Nut 8	4
18	36018	Hoist hook	1
19	36019	Bolt 5/16"×20	4
20	36020	Clutch A	1
21	36021	Pulley	1
22	36022	Screw M8×16	2
23	36023	Washer 10	4
24	36024	Belt-mounting plate	1
25	36025	Bolt M8×16	2
26	36026	Belt A-27	1
27	36027	Bolt M6×20	4
28	36028	Gasket 6	2
29	36029	Washer 6	2
30	36030	Belt guard	1
31	36031	Shock mount	4
33	36033	Lock NutM10	4
34	36034	Washer 10	4
35	36035	Mounting rails II	1
36	36036	Guard ring	1
37	36037	Lock NutM10	4

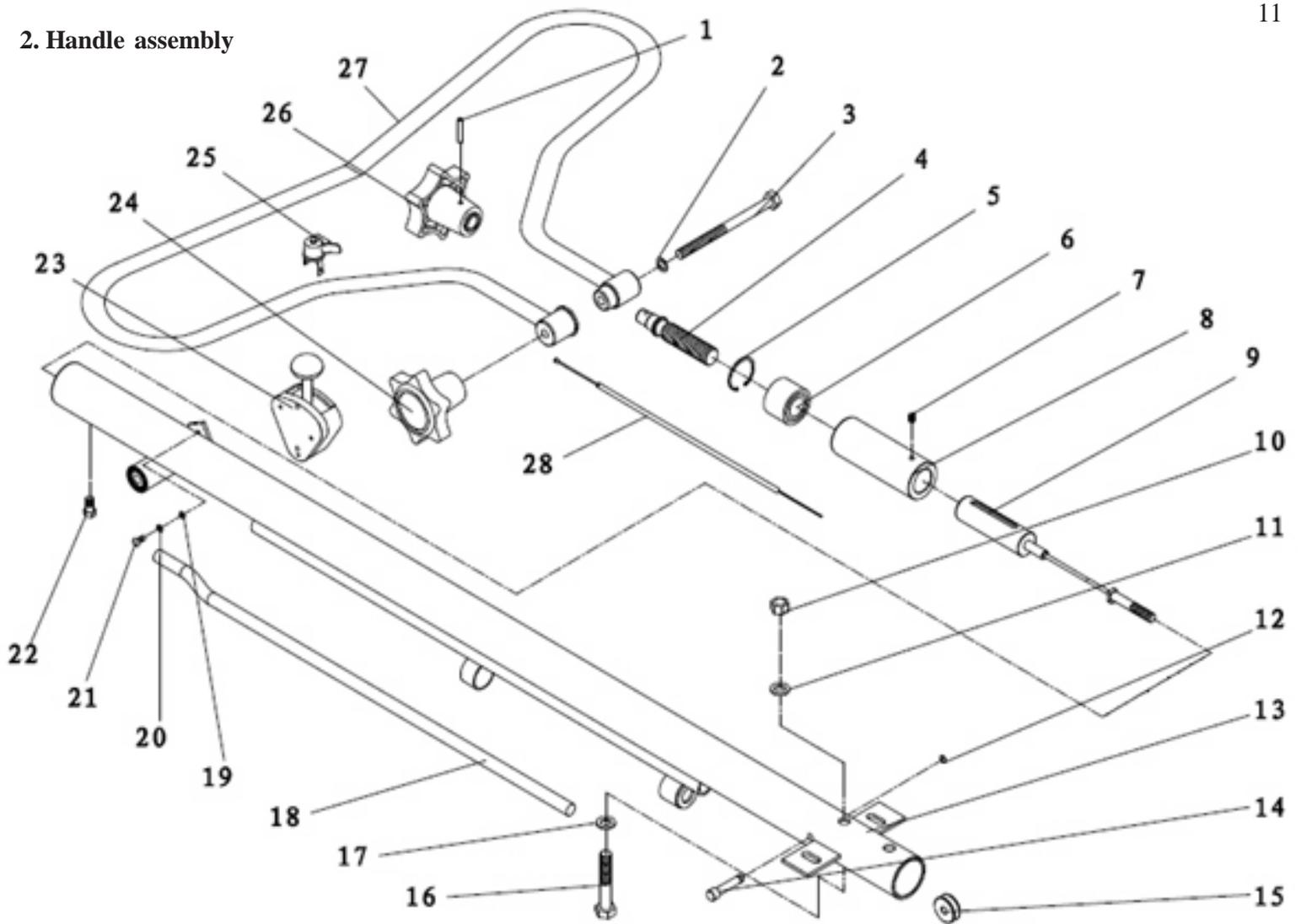
**Handle Part List**

Item	Part No.	Part name	Qty
1	36201	Pin 5×35	1
2	36202	Gasket 10	1
3	36203	Bolt M10×200	1
4	36204	Threaded rod	1
5	36205	Retaining ring 35	1
6	36206	Bearing 51203	1
7	36207	ScrewM6×8	1
8	36208	Bushing	1
9	36209	Throttle cable	1
10	36210	Lock Nut M12	2
11	36211	Washer 12	2
12	36212	Retaining ring 8	1
13	36213	Rigid handle	1
14	36214	Pin	1
15	36215	Pulley	1
16	36216	Bolt M12×80	2
17	36217	Gasket 12	2
18	36218	Carry bar	1
19	36219	Washer 5	2
20	36220	Gasket 5	2
21	36221	Screw M5×12	2
22	36222	Bolt M8×12	1
23	36223	Deadman switch	1
24	36224	Wheel I	1
25	36225	Throttle control	1
26	36226	Wheel II	1
27	36227	Handle	1
28	36228	Cable-throttle 1	

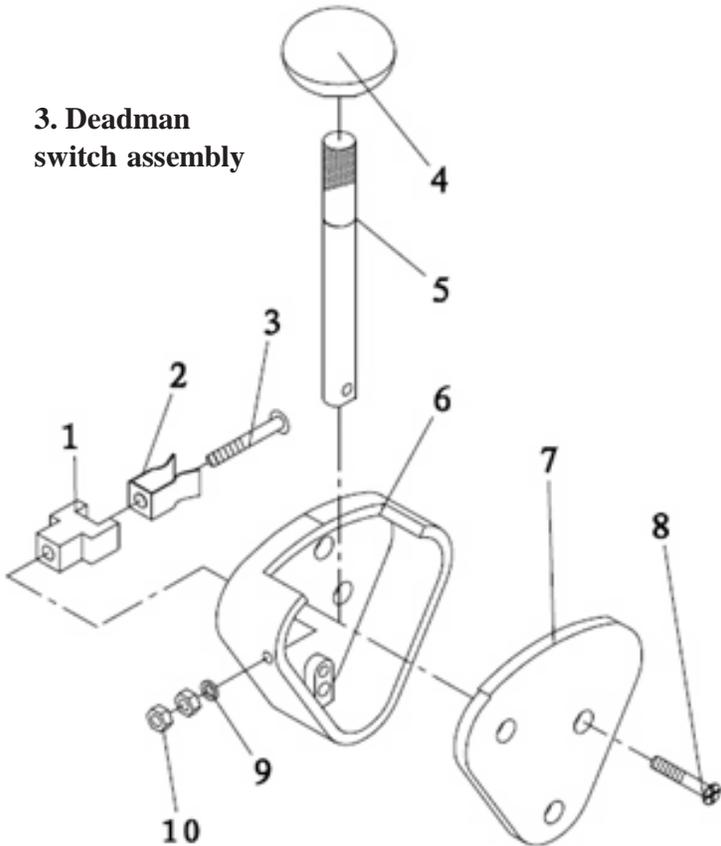
**Deadman Switch Part List**

Item	Part No.	Part name	Qty
1	36301	Washer	1
2	36302	Washer	1
3	36303	Screw M4×30	1
4	36304	Sphere	1
5	36305	Lever	1
6	36306	Switch box	1
7	36307	Switch cover	1
8	36308	Screw M4×25	3
9	36309	Washer 4	2
10	36310	Nut M4	2

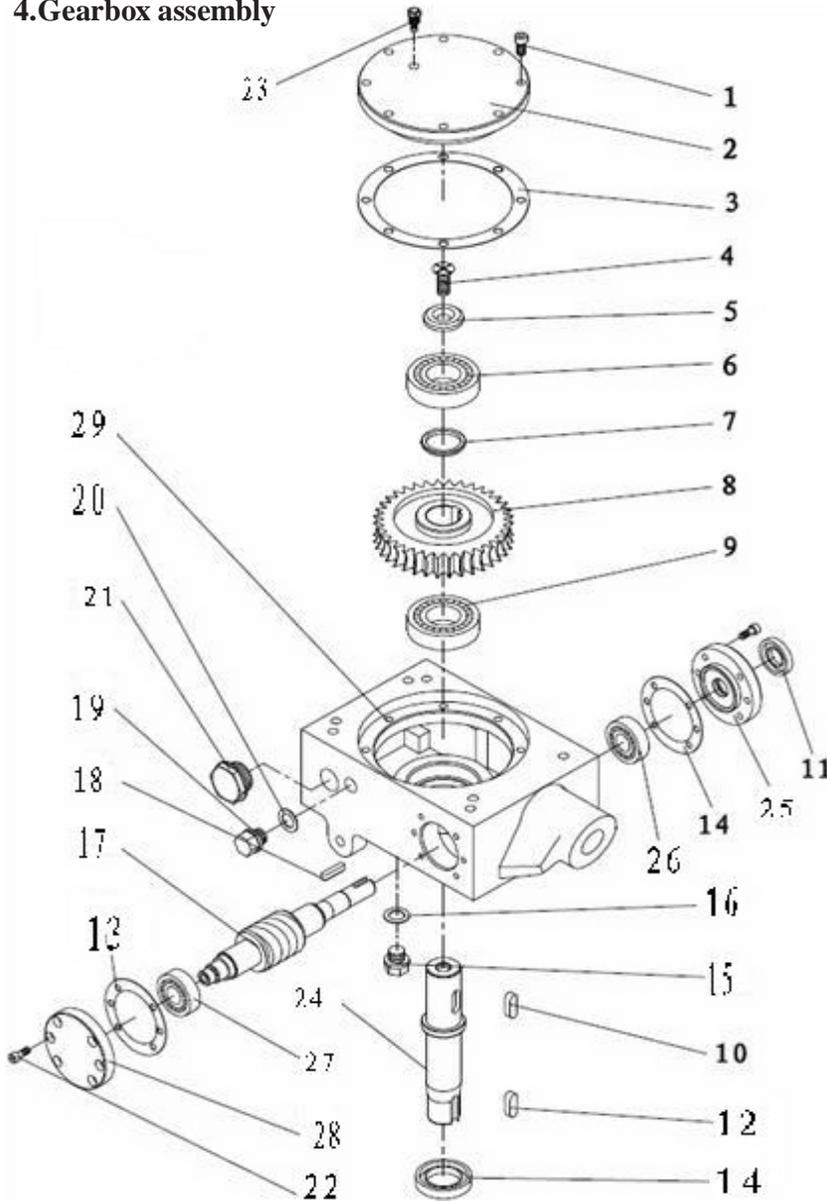
## 2. Handle assembly



## 3. Deadman switch assembly



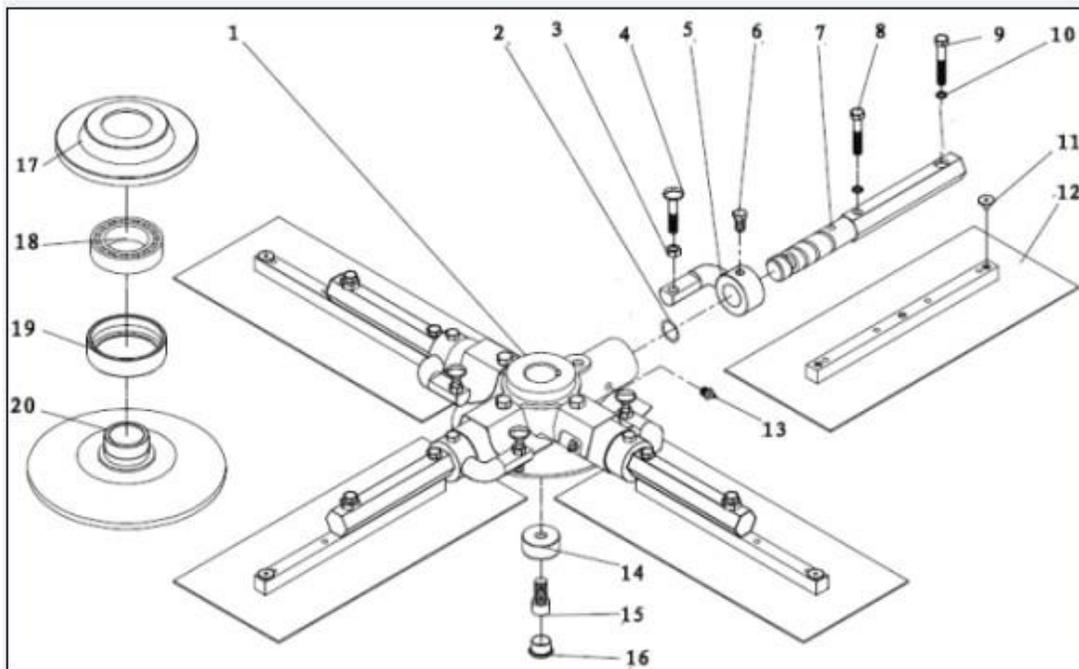
4. Gearbox assembly



Gearbox Part List

Item	Part No.	Part name	Qty
1	36401	Screw M8x16	8
2	36402	Large Flange	1
3	36403	Large-Flange washer	1
4	36404	Screw M12x25 LF	1
5	36405	Washer	1
6	36406	Bearing 30207	1
7	36407	Spacer	1
8	36408	Worm Gear	1
9	36409	Bearing 207	1
10	36410	Key 10x8x28	1
11	36411	Oil Seal NAK20x40x7	1
12	36412	Key 10x8x28	1
13	36413	Washer	Some
14	36414	Oil Seal NAK35x54x8	1
15	36415	Drain plug M16x1.5	1
16	36416	Washer 16(Cu)	1
17	36417	Worm Shaft	1
18	36418	Key 6x6x32	1
19	36419	Fill plug M16x1.5	1
20	36420	Washer 16(Cu)	1
21	36421	Sight Plug	1
22	36422	Screw M6x16	12
23	36423	Relief Valve	1
24	36424	Main Shaft	1
25	36425	End Cap	1
26	36426	Bearing 30304	1
27	36427	Bearing 304	1
28	36428	Flange	1
29	36429	Gearbox	1

5 Spider plate assembly



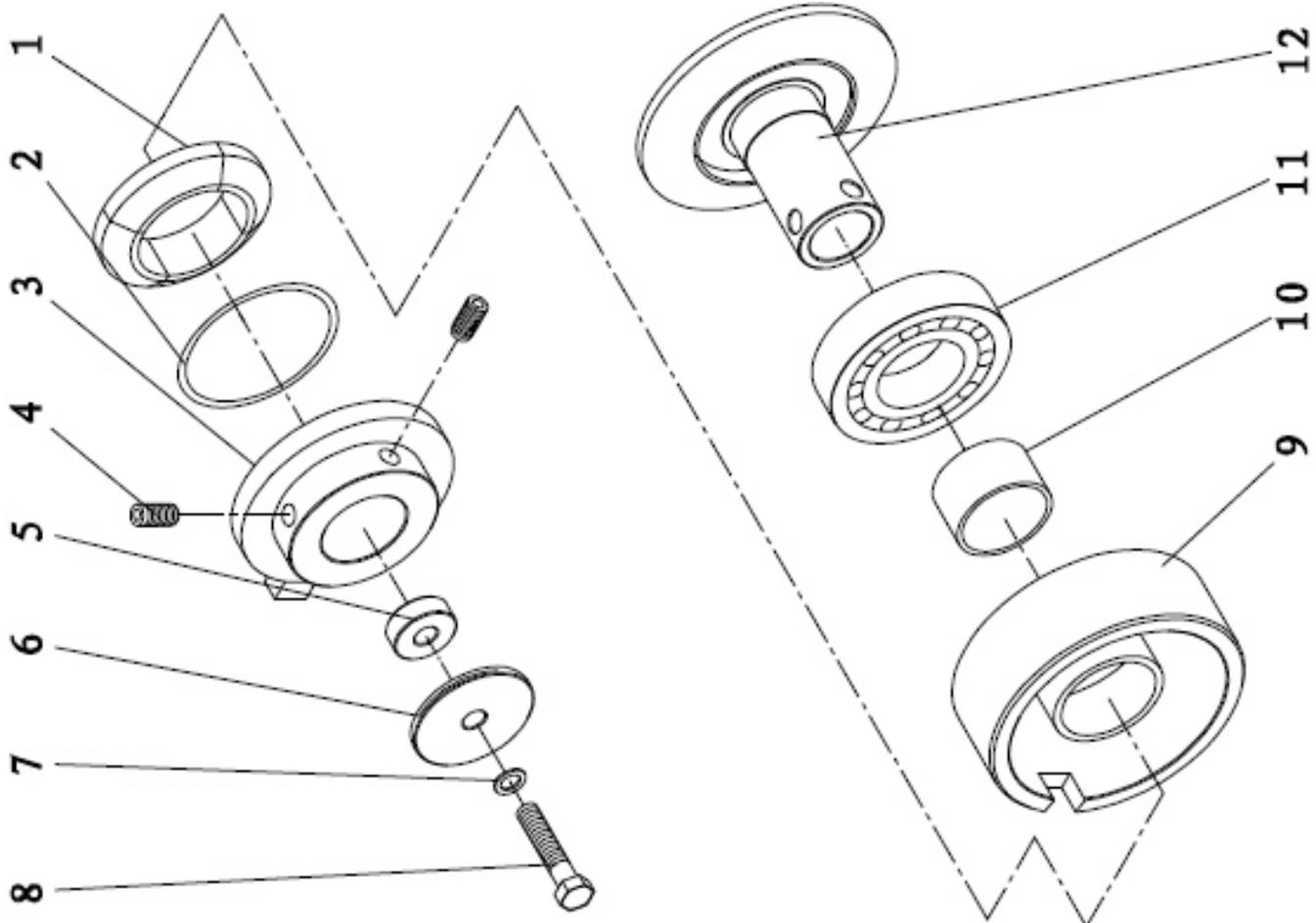
### Spider Plate Part List

Item	Part No.	Part name	Qty
1	36501	Spider plate	1
2	36502	O-ring 30×2.4	4
3	36503	Nut M8	4
4	36504	Carriage bolt	4
5	36505	Lift lever	4
6	36506	Bolt M8×16	4
7	36507	Trowel arm	4
8	36508	Bolt M8×40	4
9	36509	Bolt M8×50	4
10	36510	Gasket 8	8
11	36511	Bushing	4
12	36512	Trowel blade assembly	4
13	36513	Grease fitting M8x1	4
14	36514	Retainer	1
15	36515	Screw M12×25	1
16	36516	Cap plug	1
17	36517	Pressure plate cap	1
18	36518	Bearing 51209	1
19	36519	Bushing	1
20	36520	Pressure plate	1

### Clutch Part List

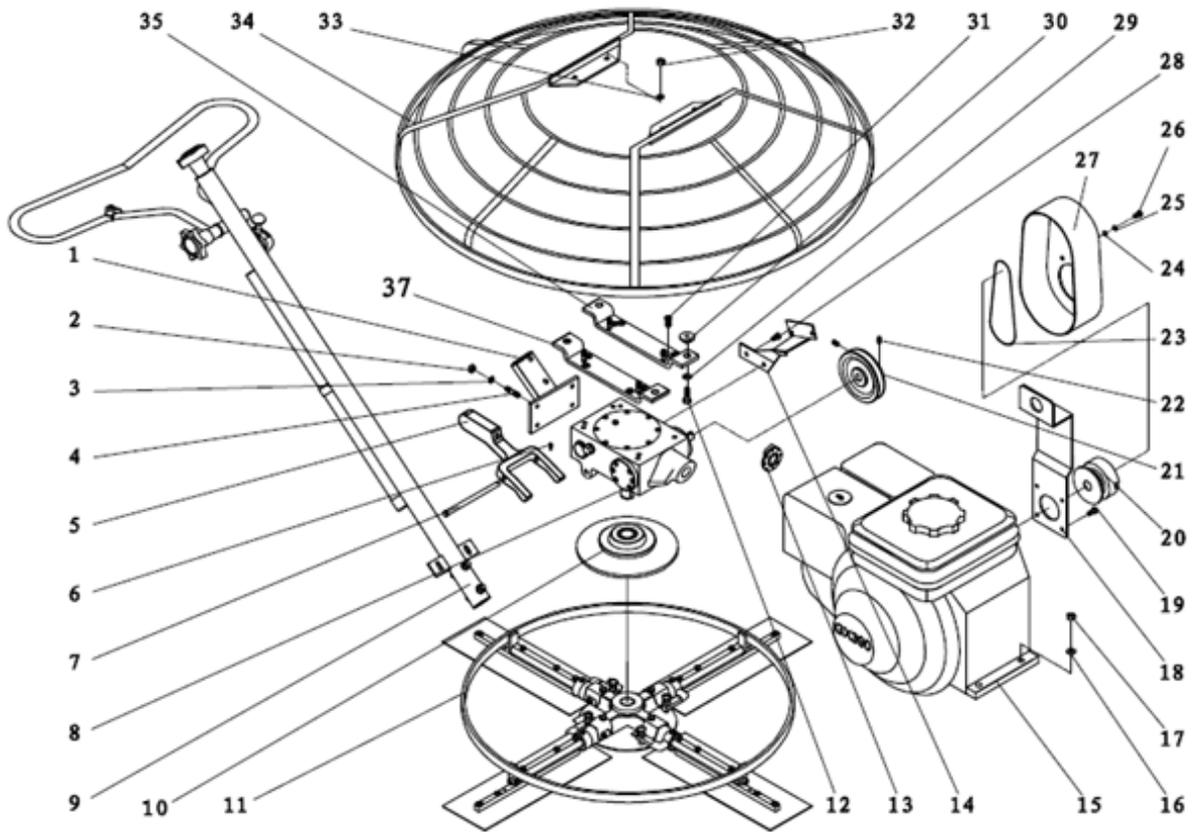
Item	Part No.	Part name	Qty
1	36601	Clutch-ring	4
2	36602	Spring	1
3	36603	Cover	1
4	36604	Screw M8×16	2
5	36605	Bushing	1
6	36606	Spacer	1
7	36607	Gasket 8	1
8	36608	Bolt 5/16"×40	1
9	36609	Friction Wheel A	1
10	36610	Lubrication bearing	1
11	36611	Bearing	1
12	36612	Friction Wheel A	1

### 6 Clutch assembly

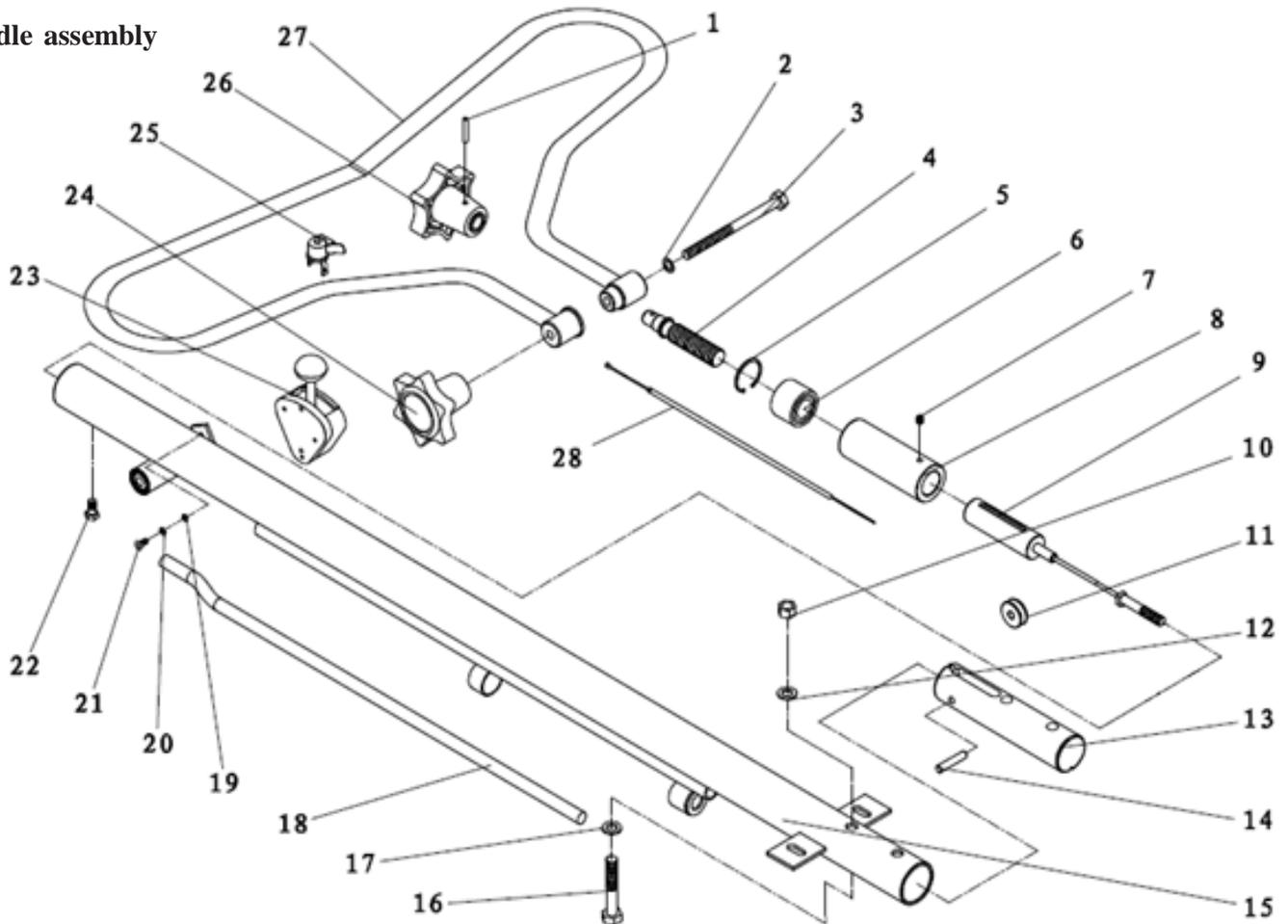


## Diagram - 48

### 1. Walk-behind power trowel assembly



### 2. Handle assembly



**KPT 48 Power Trowel Part List**

Item	Part No.	Part name	Qty
1	46001	Handle bracket	1
2	46002	Lock Nut M10	4
3	46003	Washer 10	4
4	46004	Stud M10×45	4
5	46005	Yoke arm	1
6	46006	Retaining ring	1
7	46007	Pin	1
8	46008	Gearbox assembly	1
9	46009	Handle assembly	1
10	46010	Pressure plate assembly	1
11	46011	Spider plate assembly	1
12	46012	Bolt M10×35	4
13	46013	Releaser hood	1
14	46014	Belt-mounting plate	1
15	46015	Engine GX270	1
16	46016	Washer 10	4
17	46017	Lock Nut M10	4
18	46018	Hoist hook	1
19	46019	Bolt 5/16 ×20	4
20	46020	Clutch B	1
21	46021	Pulley	1
22	46022	Screw M8×16	2
23	46023	Belt B28	1
24	46024	Washer 8	2
25	46025	Gasket 8	2
26	46026	Bolt M8×16	2
27	46027	Belt guard	1
28	46028	Bolt M8×16	2
29	46029	Washer 10	4
30	46030	rubber mat	4
31	46031	Screw M10×20	8
32	46032	Lock Nut M10	4
33	46033	Washer 10	4
34	46034	Guard ring	1
35	46035	Mounting rails	1
37	46037	Mounting rails	1

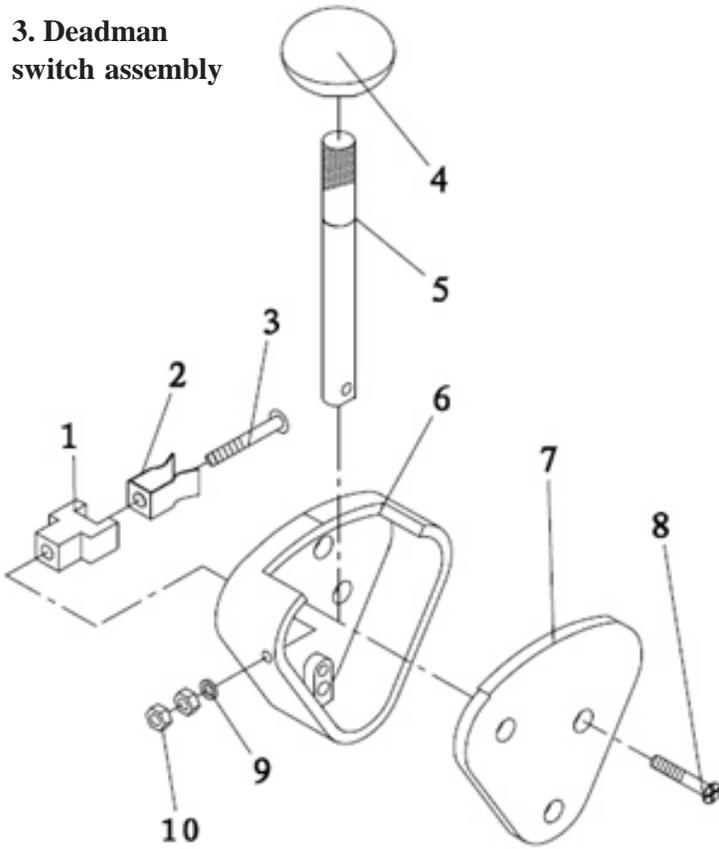
**Handle Part List**

Item	Part No.	Part name	Qty
1	46301	Pin 5×35	1
2	46302	Gasket 10	1
3	46303	Bolt M10×200	1
4	46304	Threaded rod	1
5	46305	Retaining ring 35	1
6	46306	Bearing 51203	1
7	46307	Screw M6×8	1
8	46308	Bushing	1
9	46309	Throttle cable	1
10	46310	Lock Nut M12	2
11	46311	Washer 12	2
12	46312	Retaining ring 8	1
13	46313	Rigid handle	1
14	46314	Pin	1
15	46315	Pulley	1
16	46316	Bolt M12×80	2
17	46317	Gasket 12	2
18	46318	Carry bar	1
19	46319	Washer 5	2
20	46320	Gasket 5	2
21	46321	Screw M5×12	2
22	46322	Bolt M8×12	1
23	46323	Deadman switch	1
24	46324	Wheel I	1
25	46325	Throttle control	1
26	46326	Wheel II	1
27	46327	Handle	1
28	46328	Cable-throttle 1	

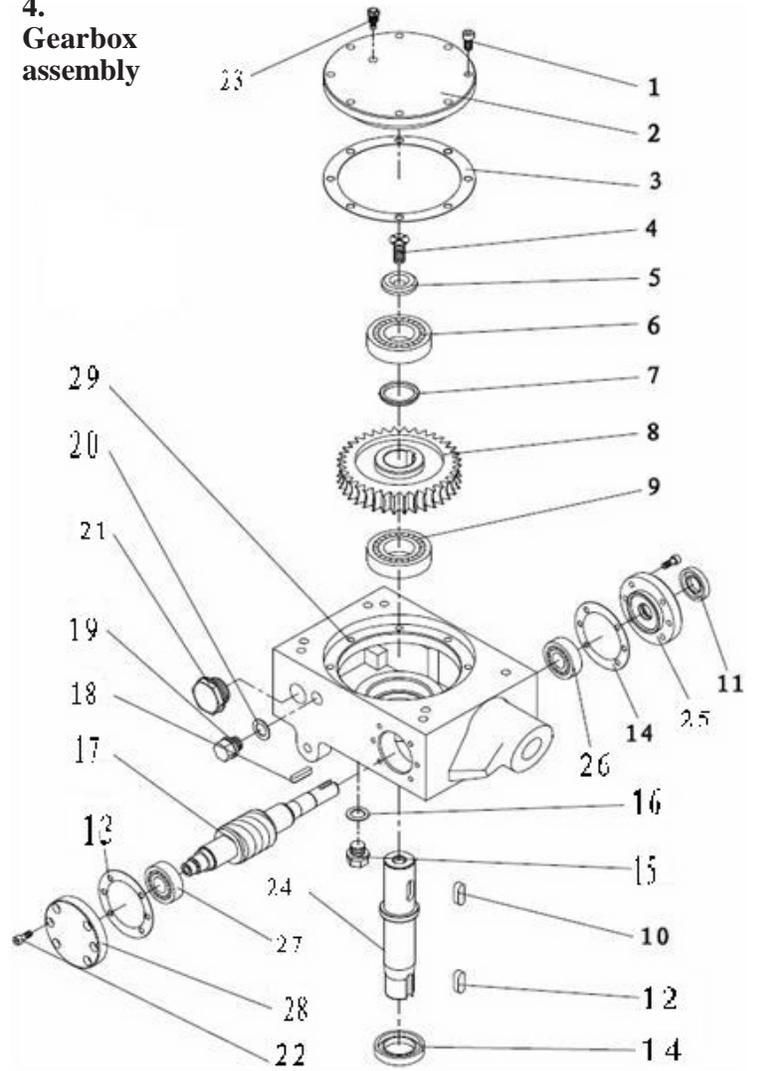
**Deadman Switch Part List**

Item	Part No.	Part name	Qty
1	46401	Washer	1
2	46402	Washer	1
3	46403	Screw M4×30	1
4	46404	Sphere	1
5	46405	Lever	1
6	46406	Switch box	1
7	46407	Switch cover	1
8	46408	Screw M4×25	3
9	46409	Washer 4	2
10	46410	Nut M4	2

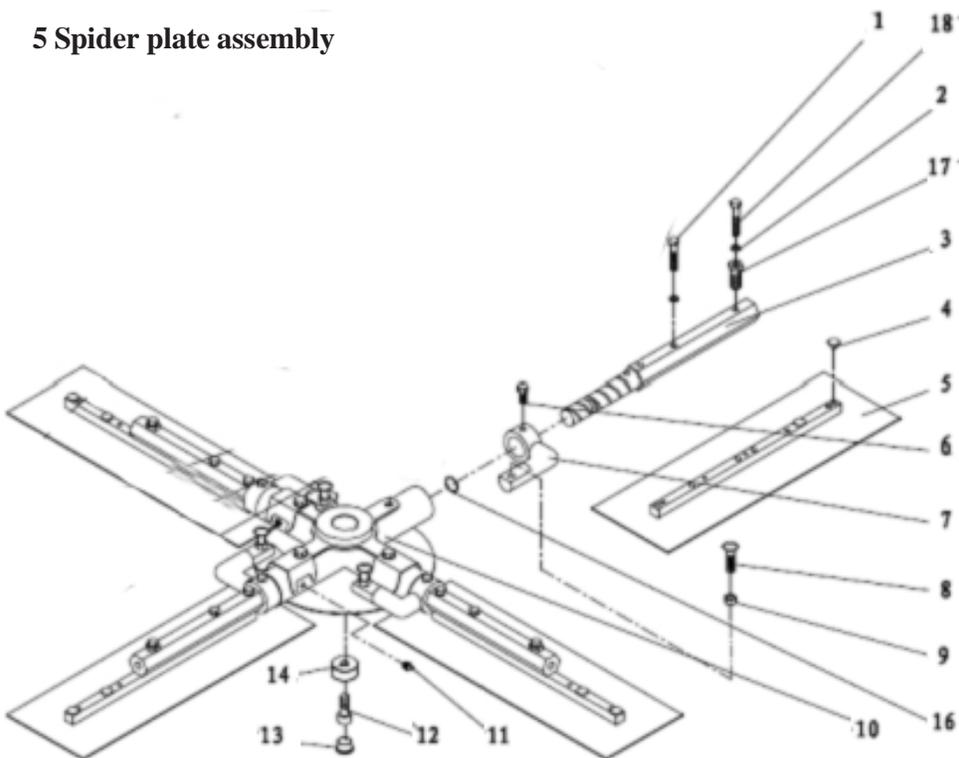
3. Deadman switch assembly



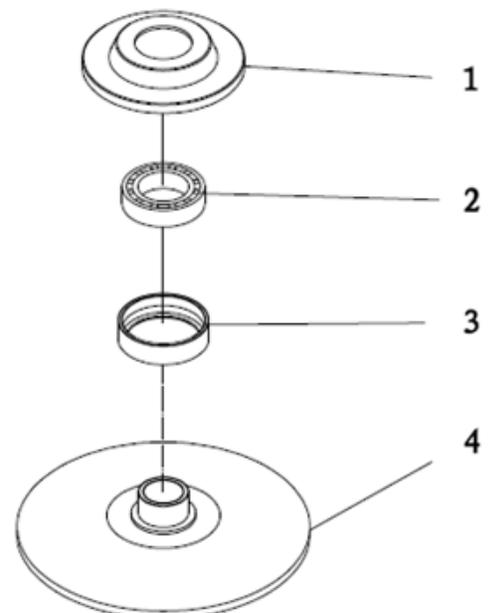
4. Gearbox assembly



5 Spider plate assembly



Pressure Plate



### Gearbox Part List

Item	Part No.	Part name	Qty
1	46201	Screw M8x16	8
2	46202	Large Flange	1
3	46203	Large-Flange washer	1
4	46204	Screw M12x25 LF	1
5	46205	Washer	1
6	46206	Bearing 30207	1
7	46207	Spacer	1
8	46208	Worm Gear	1
9	46209	Bearing 207	1
10	46210	Key 10x8x28	1
11	46211	Oil Seal NAK20x40x7	1
12	46212	Key 10x8x28	1
13	46213	Washer	Some
14	46214	Oil Seal NAK35x54x8	1
15	46215	Drain plug M16x1.5	1
16	46216	Washer 16(Cu)	1
17	46217	Worm Shaft	1
18	46218	Key 6x6x32	1
19	46219	Fill plug M16x1.5	1
20	46220	Washer 16(Cu)	1
21	46221	Sight Plug	1
22	46222	Screw M6x16	12
23	46223	Relief Valve	1
24	46224	Main Shaft	1
25	46225	End Cap	1
26	46226	Bearing 30304	1
27	46227	Bearing 304	1
28	46228	Flange	1
29	46229	Gearbox	1

### Spider Plate Part List

Item	Part No.	Part name	Qty
1	46601	Bolt M8×45	8
2	46602	Gasket 8	12
3	46603	Trowel arm	4
4	46604	Bushing	8
5	46605	Trowel blade assembly	4
6	46606	Bolt M8×16	4
7	46607	Lift lever	4
8	46608	Carriage bolt	4
9	46609	Nut M10	4
10	46610	Spider plate	1
11	46611	Grease fitting	4
12	46612	Screw M12×30	1
13	46613	Cap plug	1
14	46614	Retainer	1
15	46615	Screw M10×16	4
16	46616	-ring 20×2.4	4
17	46617	M8X40	4
18	46618	Bolt M8×40	4

### Pressure Plate

Item	Part No.	Part name	Qty
1	46501	Pressure plate cap	1
2	46502	Bearing 51209	1
3	46503	Bushing	1
4	46504	Pressure plate	1

### Clutch Part List

Item	Part No.	Part name	Qty
1	46701	Clutch-ring	4
2	46702	Spring	1
3	46703	Cover	1
4	46704	Screw M8×16	2
5	46705	Bushing	1
6	46706	Spacer	1
7	46707	Gasket 8	1
8	46708	Bolt 5/16"×40	1
9	46709	Friction Wheel A	1
10	46710	Lubrication bearing	1
11	46711	Bearing	1
12	46712	Friction Wheel A	1

### 6 Clutch assembly

