

Automatic floor cleaning machine

User Manual



HT-461

OWNER'S GUIDE ■


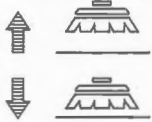
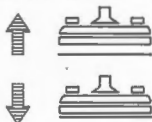






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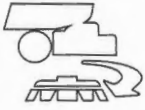
Instructions for safe use

1. Read user manual carefully before use.
2. Ensure that no label falls off.
3. Don't use machine under the inflammable goods and gases circumstance.
4. Don't use acid solution in case it may damage the machine.
5. Control clearing speed of the machine according to the floor types and cleanliness.
6. Don't place the machine on slopes.
7. Power supply shall be cut off when the machine is maintained.
8. Keep electrical equipments dry. Don't use water gun or high pressure water to directly wash the machine. Machine shall be placed in a dry and indoor environment.
9. Lead acid batteries generate gases that can cause an explosion. Keep the sparks and flames away from batteries. Charge the batteries only in an area with good ventilation.
10. When the machine is parked, take out the key and set the brake.
11. Don't use the charger if the power cord is damaged.
12. Don't touch the rotating components on the machine during its operation.
13. Don't use the machine before it is fully assembled.

Meaning of the label on the machine

	Indicate magnetic valve switch
	Indicate brush lift lever
	Indicate suction head life lever
	Indicate vacuum pump switch
	Symbol indicating the charge level of the batteries
	Indicate brake
	Indicate brush motor switch
	Indicate that solution's highest temperature shall be no higher than 50 degrees
	Indicate the adjustment lever at handle assembly height
ON/OFF I/O	Indicate power supply switch

Meaning of the label on the machine



Indicate brush-off switch



Indicate machine fixed position



Indicate suggestions for machine operators to read user manual



Indicate warnings and asking operators to read relevant safe use provisions carefully



Indicate drain pipes of sewage tank

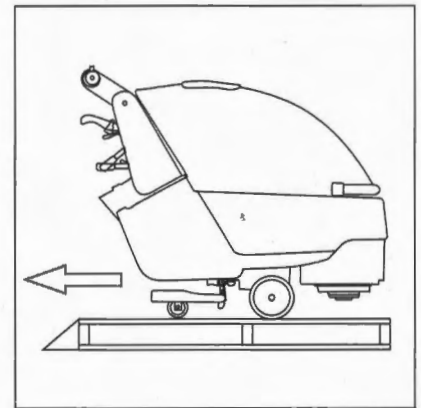
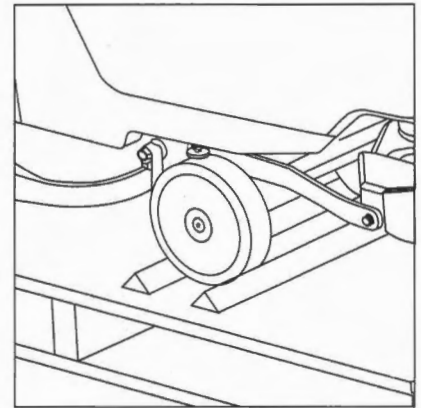
Power supply connection and instructions of machine

1. Unwrap machine package

1. Remove external carton box

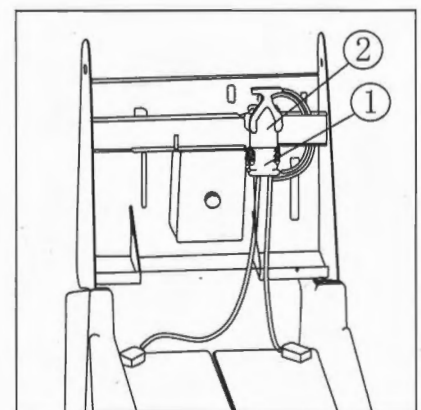
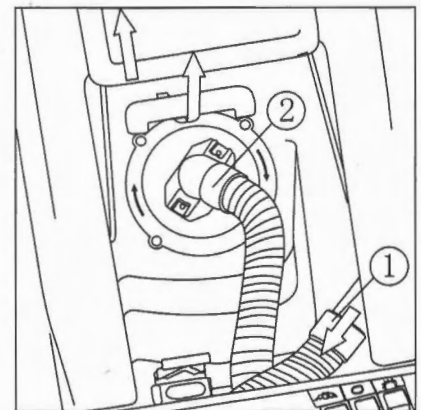
2. Wood wedge and iron hook are used to fix the machine on the base. They must be removed before operating the machine

Put up the slope and pull the machine out from the base.



2. BATTERY INSTALLATION

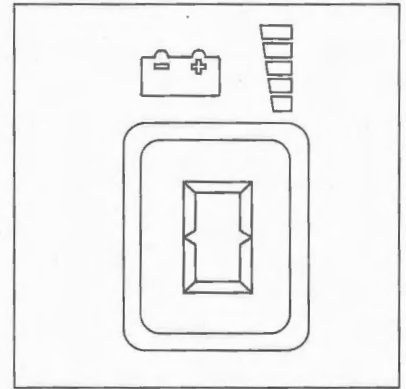
1. The two 12V 135AH batteries fit in the compartment under the recovery tank.
2. Detach the squeegee hose (1) from the recovery tank.
3. Take off vacuum cover (2) by rotating it counterclockwise.
4. Take the recovery tank off and put the batteries in the compartment.
5. Connect the batteries' connector (2) to the machine's connector (1).



Pre-use preparation

3. CHARGE BATTERIES

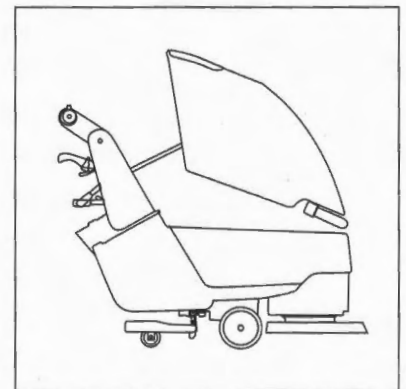
NEVER ALLOW THE BATTERIES TO RUN COMPLETELY DOWN, Recharge them within a few minutes after the battery indicator starts blinking. Never leave the batteries completely discharged, even if the machine is not being used.



WARNING! When charging the batteries, follow all the instructions provided with the manual and battery charger.

WARNING! Lead acid batteries generate gases that can cause an explosion. Keep sparks and flames away from batteries.
NO SMOKING!

WARNING! To prevent an explosion, charge the batteries good ventilation.



4. When charging the batteries, take the recovery tank off, keep it lifted by supporting it with the prop as shown in figure.

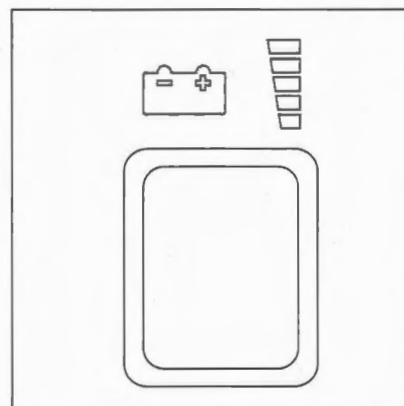
Turn the key to the OFF position.

Make sure the receptacle charger is connected to the electrical ground.

Pre-use preparation

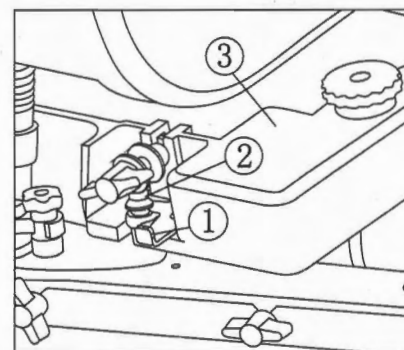
5. BATTERY INDICATOR

The battery indicator is a red light, it is constantly on The batteries are sufficiently charged. The signal light all blink when it is necessary to recharge the batteries.



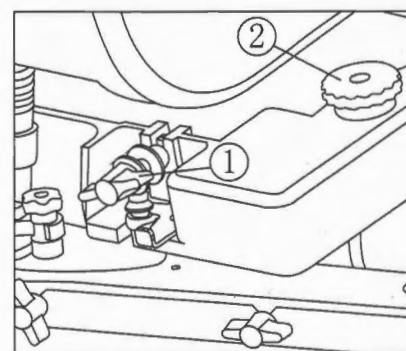
6. Assembly of suction head.

It is shown as the assembly suction head in the drawing. Lift the handle of suction head and push the connector.(1), let the pin pass through the holes on the support. Then loosen the connector and let it get stuck in the slot of the pin. Afterward, connect suction head and hose. Hose shall be placed on the right to the lifting steel wire rope of the suction head.



7. Adjustment of Suction Head's Height

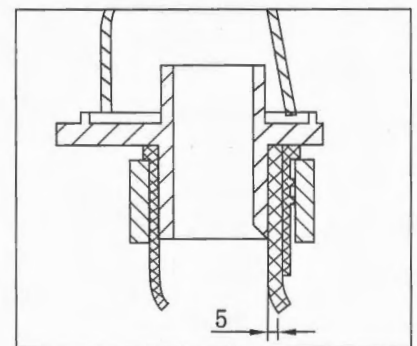
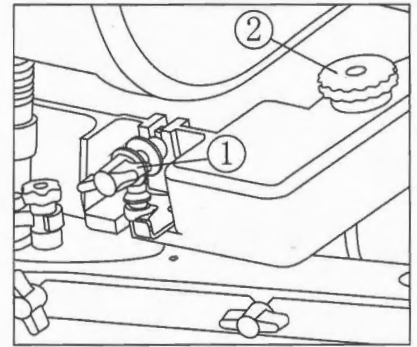
Height of the suction head shall be adjusted according to the wear of the rubber strip. Rotate the hand wheel anticlockwise (1), the suction head will be lifted, otherwise it will drop. During adjustment, two hand wheels, which situate on both left and right, shall be adjusted simultaneously, so as to make sure that suction head will be in parallel with floor.



Pre-use preparation

8. Adjustment of inclination of suction head

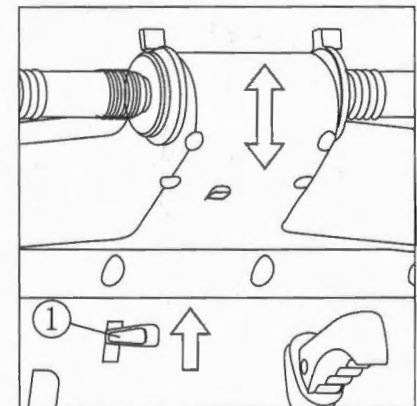
Ring operation the rear squeegee blade is most efficient when tilted back about 5 millimeters along its whole length increase the blade bending in the central part, tilt the squeegee body backward by turning the adjuster (1) counter-clockwise. Subsequently, turn the adjuster (1) clockwise to increase the bending at the sides of squeegee blade.



9. Adjustment of Handle's Height

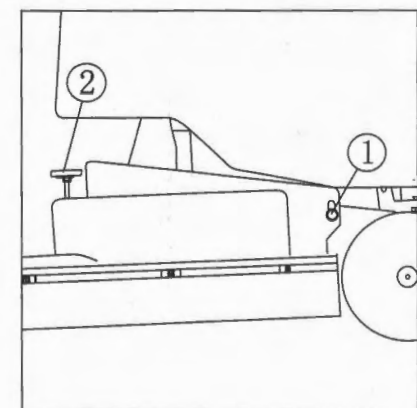
The handle has three adjustable positions.

Lift the lever (1), turn the handle into a proper position and then loosen the lever to lock the handle.



10. Installation of Anti-splashing Cover

Install the anti-splashing cover and locknut (1) according to the instructions. Height of the anti-splashing cover will be adjusted by the knob (2).



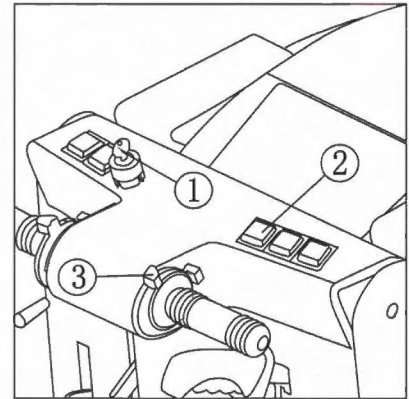
Pre-use preparation

11. Installation of the Brush

Take brush control lever, place the brush under its base and align it to the large belt pulley. Lay down brush base, rotate power supply switch (1), connect power supply, press brush switch (2), and push the lever (3). Finally the brush will be installed on the machine after the motor is rotated.

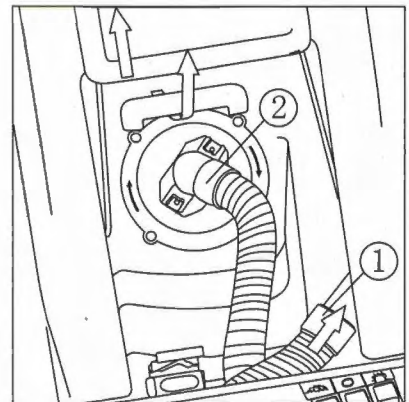


Warning! In installing the brush, please don't place any articles or stand beside the brush.



12. Sewage Tank Inspection

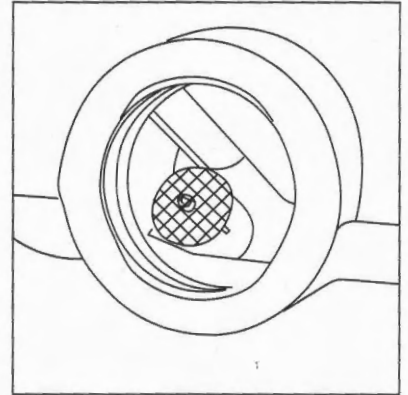
1. Directly align the slot and rotate clockwise the cap to shut it down. Ensure that vacuum motor hose and suction head hose are connected properly.
2. Ensure that drain plug of the water hose in front of the sewage tank has been closed and screwed tightly.



Pre-use preparation

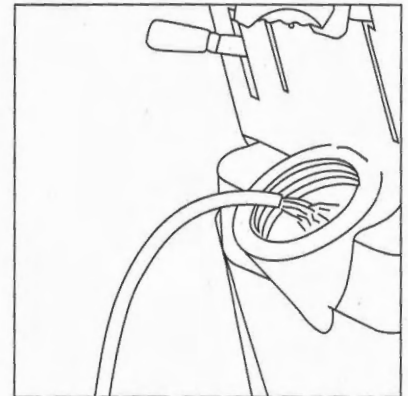
13. Solution Tank Inspection

Unscrew water filling nozzle cap and ensure that the filter located in the left bottom is properly installed.



14. Solution

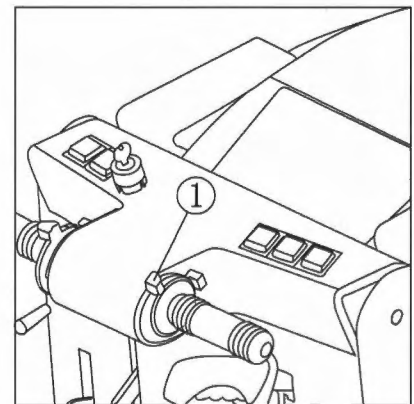
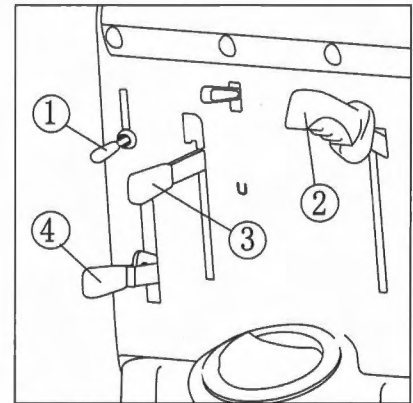
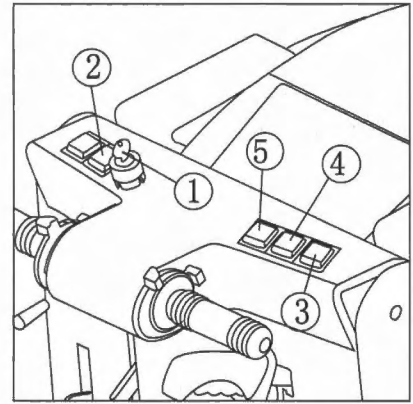
Add clean water with temperature not higher than 50°C/122°F into the solution tank. Excessive amount of froth will be generated, which damage the vacuum motor, if too much detergent is added into the sewage tank. Therefore, if it is necessary to add detergent, one must add as few as possible.



WARNING! Always use low foaming detergent. Adding antifoam liquid into the recovery tank before clearing will also help prevent foaming. **NEVER USE PURE ACID**

Operation

1. Connect power supply switch (1). Red signal lamp (2) will be lit up.
2. Press magnetic valve switch (3)
3. Press vacuum motor switch (4)
4. Press brush motor switch (5)
5. Adjust lever (1) and the flow of water. Water can moisturize ground evenly, but the flow of water shall not be too strong in case water may splash to anti-splash cover. The flow of water depends on types and cleanliness of floor and the cleaning speed of the machine.
6. Lay down the lever (2) and brush to the ground.
7. Lay down suction head lever (3).
8. Check whether brake handle has already loosened (4).
9. Push lever forward (1). Brush starts to work and the machine begins to clean the floor.



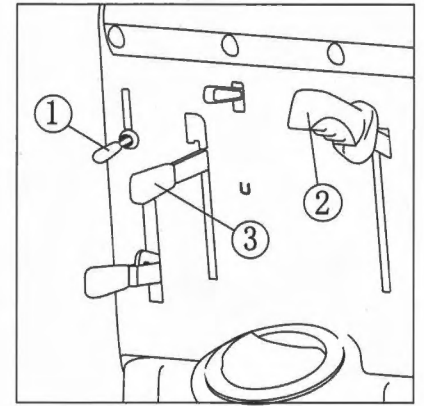
Steps for ending the work

1. Prior to maintaining the machine, please follow the operational steps.

1. Press the lever (1) and turn off water valve

2. Lift the lever (2) and brush

2. Lift the lever (3) and suction head. If the lever is not lifted when the machine is being transported or stored, the rubber strip on the suction head will be damaged



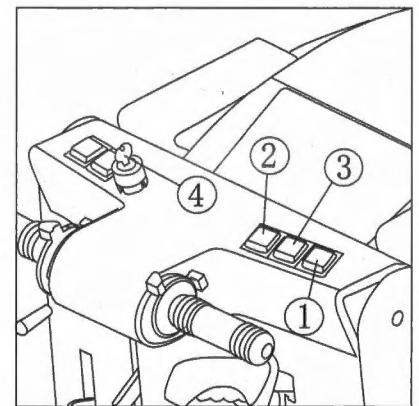
3. Turn off magnetic switch (1)

4. Turn off brush switch (2)

5. Turn off vacuum switch (3)

6. Turn off power supply switch (4)

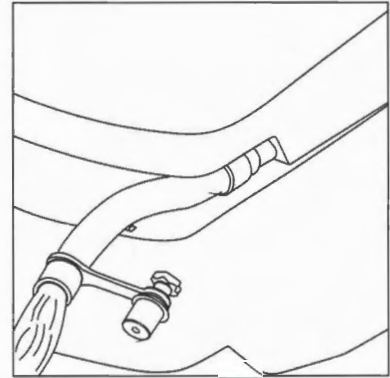
7. Move the machine to the sewage discharge point and then brake.



Procedures for ending the work

8. Loosen the knob to discharge sewage

9. Wash the sewage tank, buoy and filter with clean water

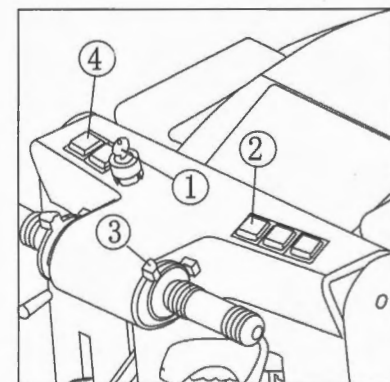
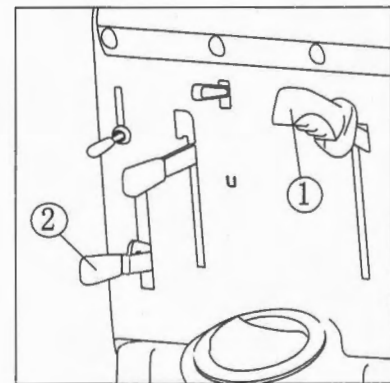


10. Clean suction head

11. Dismantle brush

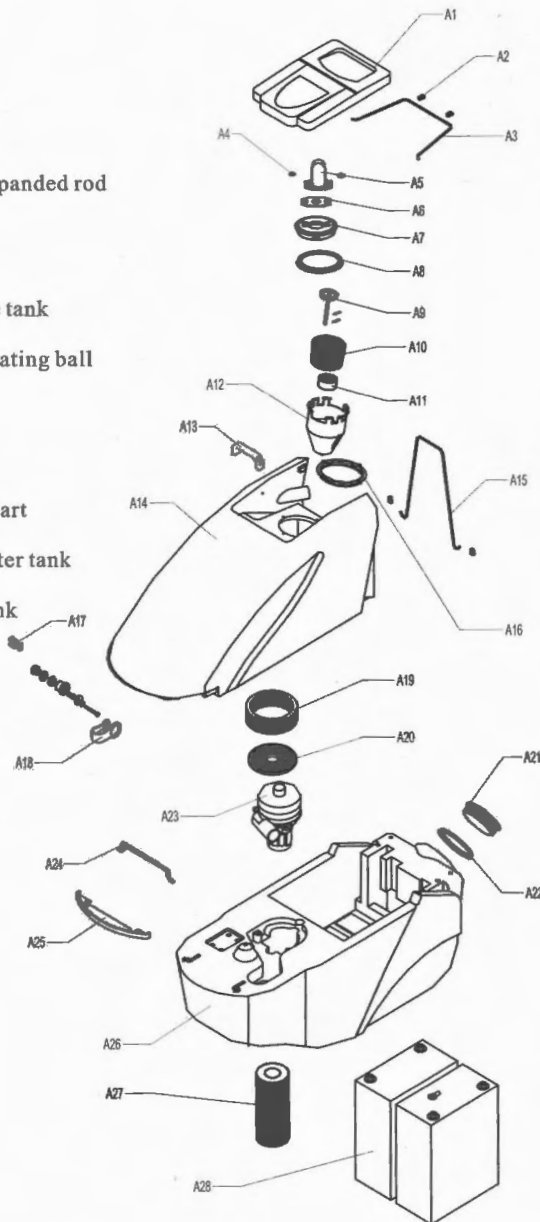
The machine has the automatic device for dismantling brush

1. Lift brush lever (1) and then brake (2) .
2. Turn on power supply switch (1), connect brush switch (2), connect brush releasing switch (4), move the lever forward (3), loosen the lever afterward and then the brush will fall off automatically.



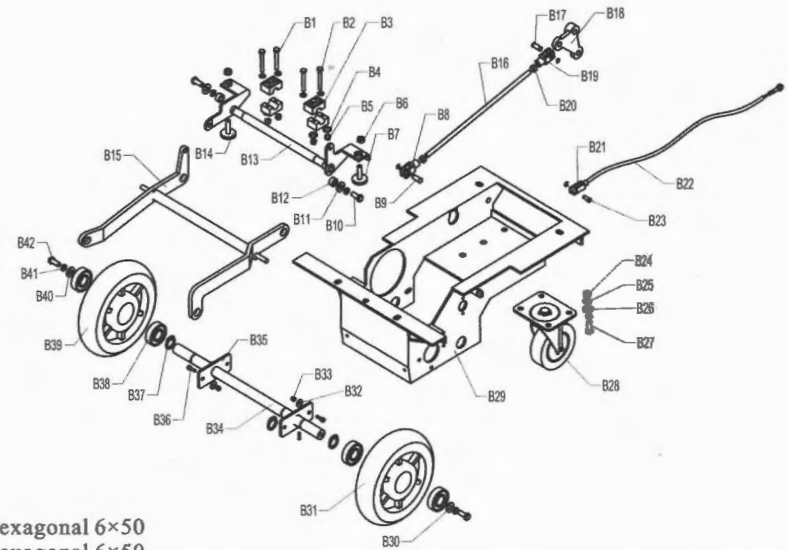
HT-461 Views I

- A1. 461 Top cover
- A2. Code printer
- A3. U-shaped iron(Short)
- A4. CB461-05
- A5. Bent connector
- A6. CB461-05
- A7. CB461 Middle washer
- A8. CB461 Small washer
- A9. CB461 Floating ball expanded rod
- A10. CB-461-02
- A11. X-217#
- A12. Floating ball box
- A13. Plastic handle
- A14. CB461 CB461 Sewage tank
- A15. U-shaped iron(Long)
- A16. Installation ring of floating ball
- A17. Spring clip
- A18. 8 Grey rubber ring
- A19. X-10 Sponge
- A20. X-10 Sponge
- A21. CB-461-01
- A22. CB461 Large rubber part
- A23. Motor
- A24. Supporting iron of water tank
- A25. CB461-15
- A26. CB461 Clear water tank
- A27. X-6 Sponge
- A28. 12V Battery

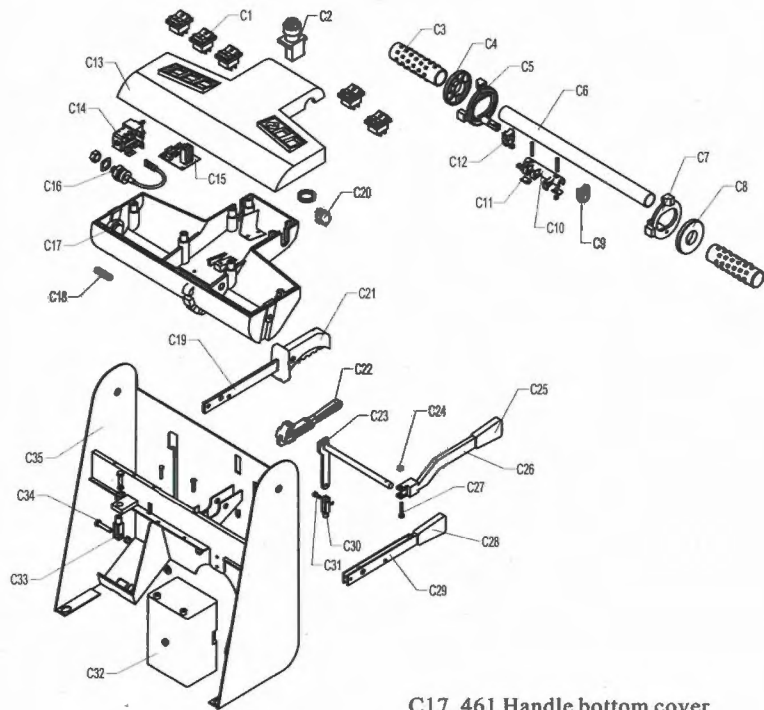


HT-461 Views II

- B1. Hexagonal 6×50
- B2. Hexagonal 6×50
- B3. 461-19#
- B4. Ø6×12×1 Washer
- B5. Tapping nut, M6
- B6. Nut M8
- B7. 8×30 Screw head
- B8. 16×16×42 Square fork
- B9. Bolt Ø8×20
- B10. Hexagonal 8×25
- B11. Washer 8×25×1.5
- B12. 16×8×8 Copper washer
- B13. Shaft
- B14. 8×30 Screw head
- B15. 461 brush lifting bracket
- B16. Wire 8×53
- B17. Ø8×20 Bolt
- B18. 461 triangle shaft
- B19. 16×16×58 Square fork
- B20. Nut M8
- B21. 12×12×42 Square fork
- B22. 461 Lifting for wire drawing
- B23. Bolt Ø6×16
- B24. Tapping nut, M8
- B25. 8 Spring pad
- B26. washer 8×16
- B27. Hexagonal 8×30
- B28. 4-inch foot wheel
- B29. 461 Frame
- B30. washer 8×25×1.5
- B31. 180 wheel
- B32. washer 6×16×1
- B33. Tapping nut, M6
- B34. Wheel shaft
- B35. 461 fixed plate of shank
- B36. Hexagonal 6×20
- B37. 19 Clamp spring
- B38. Bearing 6204
- B39. 180 Wheel
- B40. washer
- B41. 8 Spring washer
- B42. Hexagonal 8×20



HT-461 Views III

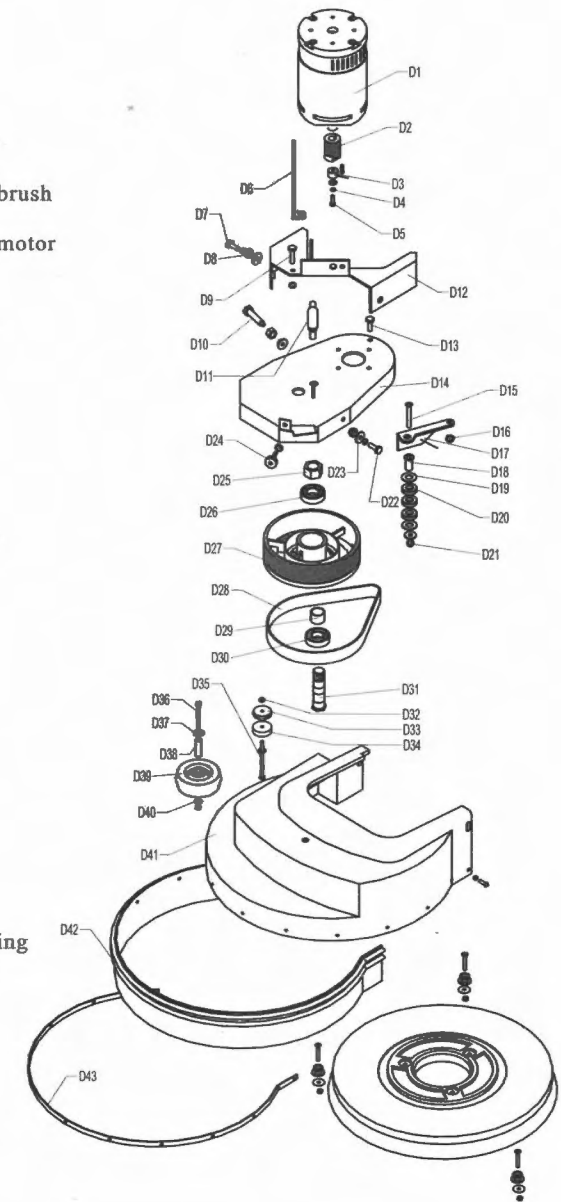


- C1. Switch
- C2. Master switch of key head
- C3. Rubber cover of the handle
- C4. 461-24#
- C5. 461-08-5# right
- C6. Handle tube
- C7. 461-08-5# Left
- C8. 461-21#
- C9. 461-08-1#
- C10. 461-08-6#
- C11. 461-08-3#
- C12. 461-08-2#
- C13. 461 handle top cover
- C14. Fuse
- C15. DC circuit board
- C16. PG9

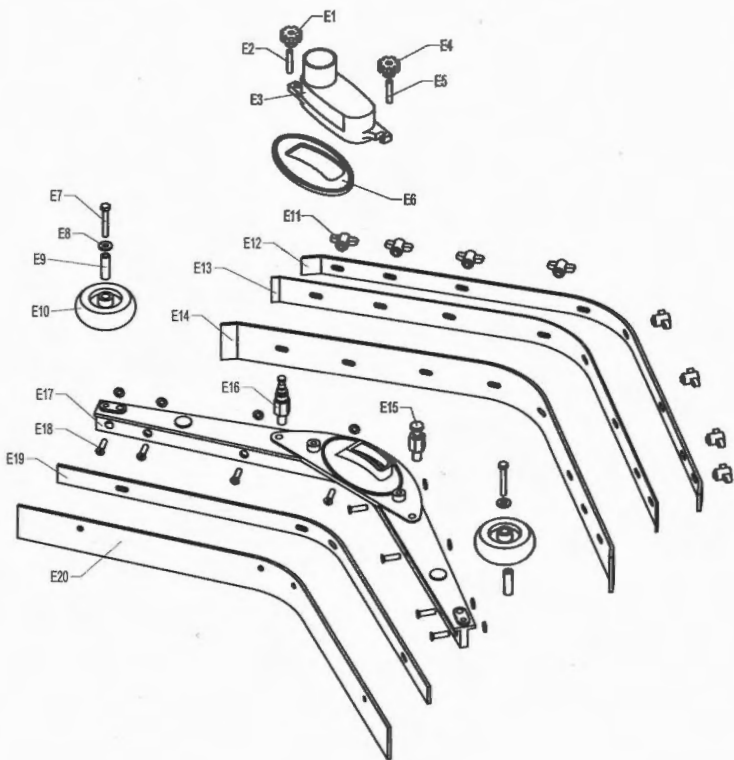
- C17. 461 Handle bottom cover
- C18. Ø20 Wire shield
- C19. 461 Straight iron
- C20. Micro switch
- C21. 461-14#
- C22. 461 Adjustment handle
- C23. 7-shaped shaft
- C24. Tapping nut, M4
- C25. 461-09#
- C26. 461 Lifting handle of water suction head
- C27. hexagonal 4×30
- C28. 461-09#
- C29. Lifting handle for the brush
- C30. 10×10×40 Square fork
- C31. Ø5×14 Screw
- C32. Terminal box
- C33. 12×12×42 Square fork
- C34. hexagonal 6×30
- C35. 461 Bracket holder of the handle

HT-461 Views IV

- D1. 24V Motor
- D2. Driving belt pulley
- D3. Washer Ø6×20
- D4. Washer 6×16×1
- D5. hexagonal 8×20
- D6. Iron bracket
- D7. hexagonal 8×25
- D8. 16×8×8 Copper washer
- D9. hexagonal 8×40
- D10. 12×60 Adjustment screw
- D11. Shaft
- D12. 461 Fixed bracket of the brush
- D13. hexagonal 8×25
- D14. 461 Fixed bracket of the motor
- D15. KCM8×55
- D16. Tapping nut, M8
- D17. 461 Belt adjustment iron
- D18. Ø8×20×35 Shaft
- D19. Ring Ø15×31.5×1
- D20. Bearing 6002
- D21. Tapping nut, M8
- D22. hexagonal 6×20
- D23. Washer
- D24. Nut
- D25. Nut M24
- D26. Axle sheath 24.5×4.5×13
- D27. Pulley 461
- D28. Belt
- D29. Axle sheath 30×21
- D30. Bearing B205
- D31. 461 Center shaft
- D32. Tapping nut, M8
- D33. Washer
- D34. Plastic washer
- D35. hexagonal 6×110
- D36. hexagonal 6×60
- D37. Washer 6×22
- D38. Axle sheath 6×12×40
- D39. TTPR1 wheel
- D40. Tapping nut,
- D41. Brush cover
- D42. 17# Grey anti-collision ring
- D43. 461 Anti-collision sheet



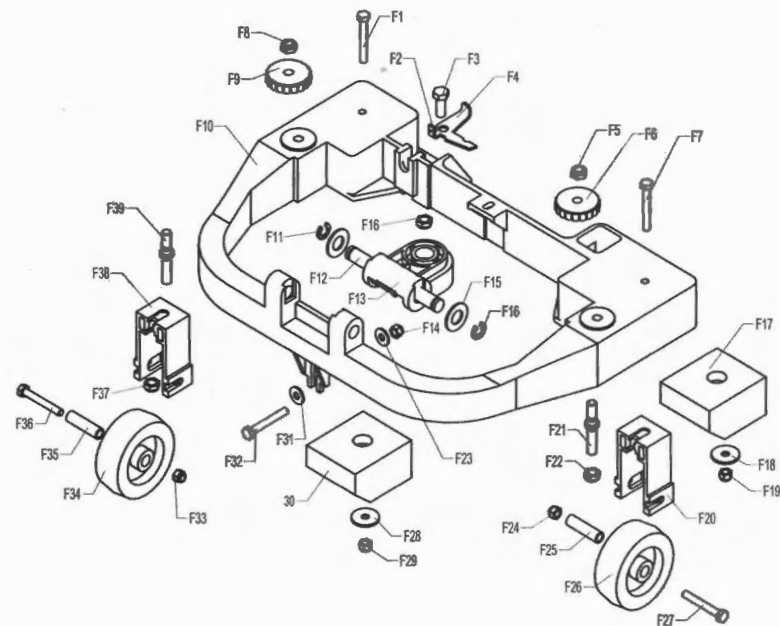
HT-461 Views V



- E1. CB461-14
- E2. Stainless steel screw 6×40
- E3. CB461-06A
- E4. CB461-14
- E5. Stainless steel screw 6×40
- E6. Connection washer
- E7. Hex 6×40
- E8. Washer 6×22×1.5
- E9. Axle sheath 10×31
- E10. 3×1TPP Wheel

- E11. M6 Manually tighten M6 nut
- E12. Briquetted iron of water suction head (long)
- E13. Ultra-16# orange crash bar
- E14. Wiper rubber
- E15. Water Head lever
- E16. Water Head lever
- E17. Main body of the water suction head
- E18. KCM6×20
- E19. Ultra-15 # orange crash bar
- E20. CB461 water Pa iron plates (S)

HT-461 Views VI



- F1. hexagonal 6×25
- F2. Spring
- F3. Hexagonal screw
- F4. 461 Fixed iron of the suction head
- F5. Nut
- F6. 461-20#
- F7. Hexagonal screw
- F8. Nut M8
- F9. 461-02#
- F10. 461 Bracket of the suction head
- F11. Clamp spring
- F12. 461 Parallel square shaft 412×10.5
- F13. 461 Parallel wheel cap
- F14. Tapping nut, M6
- F15. Washer
- F16. Clamp spring
- F17. Small cast iron
- F18. Washer
- F19. Nut

- F20. 461 Parallel wheel rack
- F21. 12×54×M8 Screw
- F22. Nut
- F23. Washer 6×16×1
- F24. Nut
- F25. Axle sheath 10×37
- F26. Gray rubber tire 3×1
- F27. hexagonal 6×50
- F28. Washer
- F29. Tapping nut, M6
- F30. Small cast iron
- F31. Washer 6×16×1
- F32. hexagonal screw
- F33. Tapping nut, M6
- F34. Gray rubber tire 3×1
- F35. Axle sheath 10×37
- F36. 6×50 hexagonal 6×50
- F37. Nut M8
- F38. 461 Parallel wheel rack
- F39. 12×54×M8 Screw