



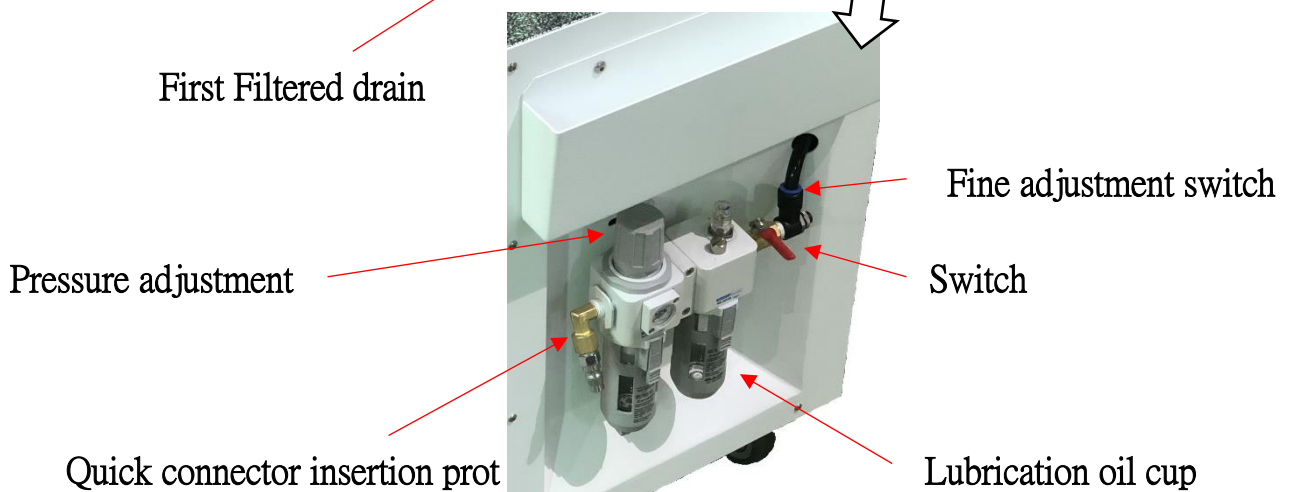
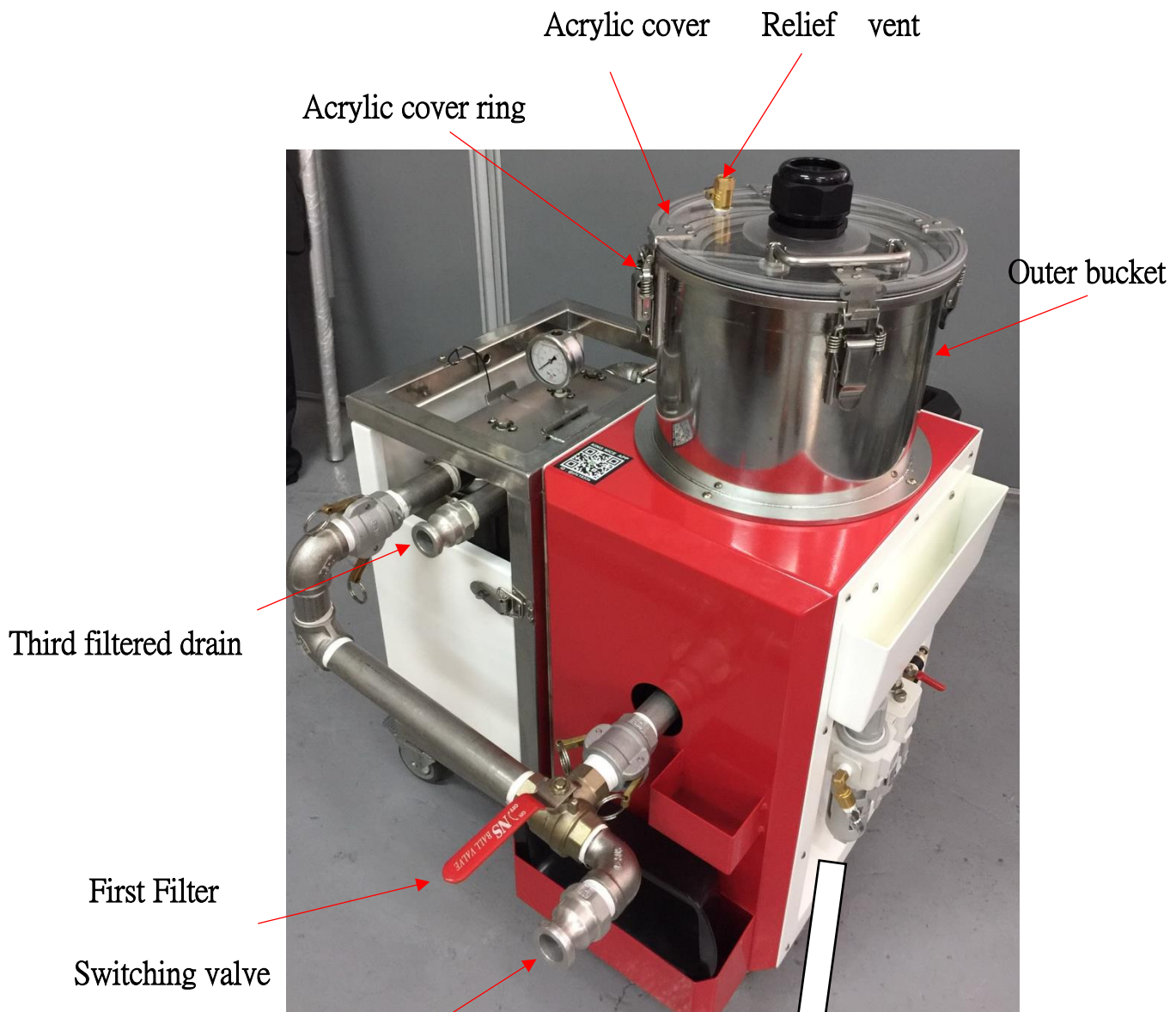
KING NICE Tech . Co.,Ltd

KN-V160 FILTRATION SEPARATION SYSTEM
OPERATION & MAINTENANCE

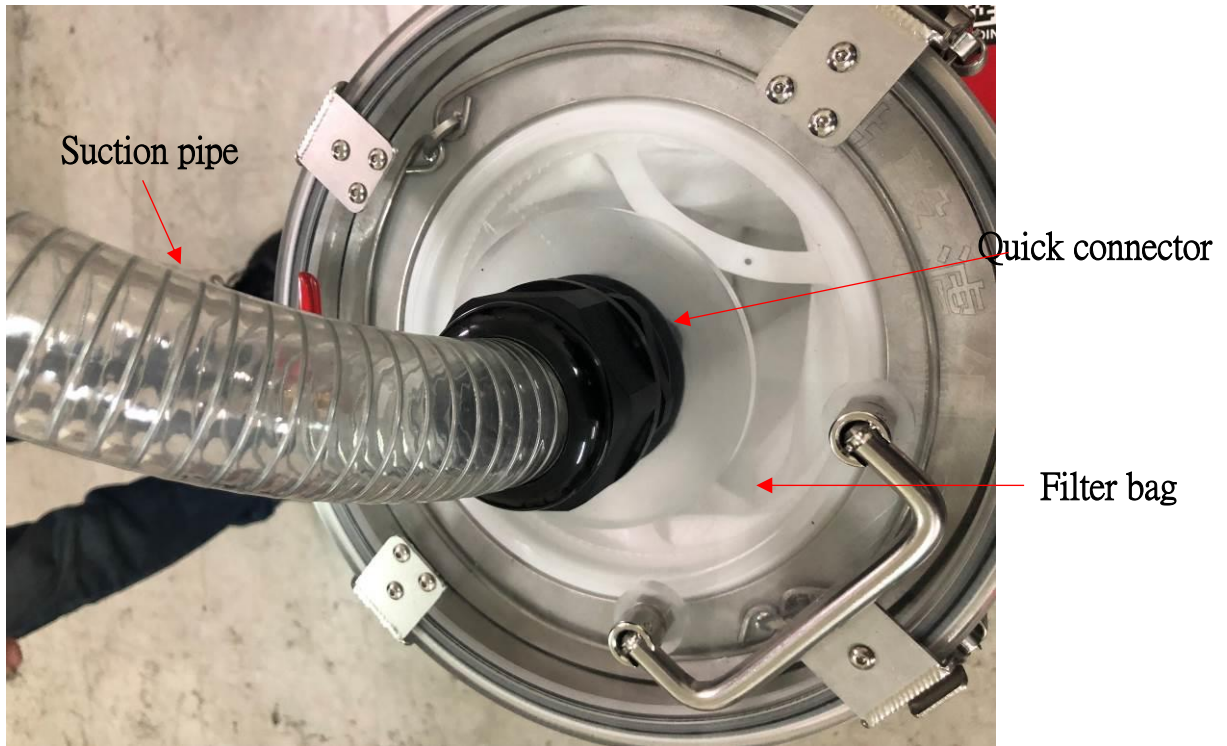
1



Names of parts and functions 1 (principal part)



Names of parts and functions 2 (Filter)



Names of parts and functions 3 (water outlet)

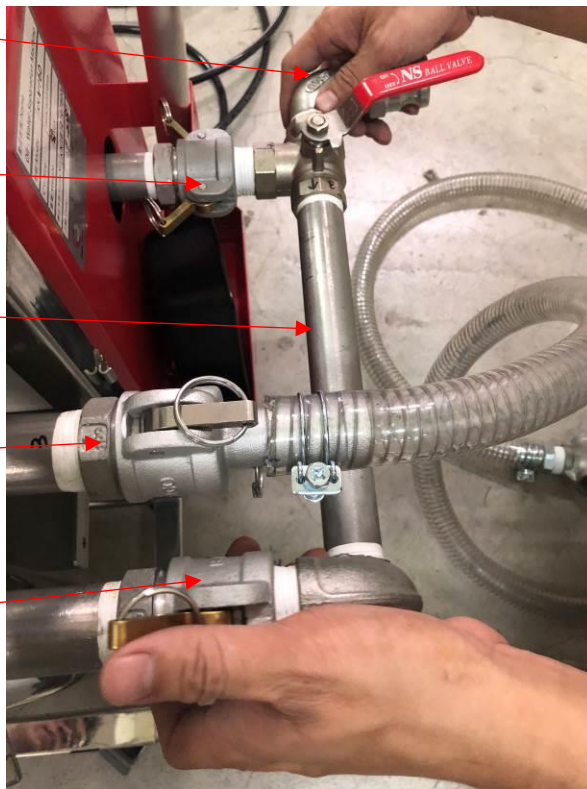
First filtered outlet

Quick connect female 1

Quick connect

Third filtered drain

Quick connect female 2



Buckle



Names of parts and functions 4 (Replace the filter)

Acrylic magnetic block



Filter bucket when installing canister, relying on acrylic magnetic block



Names of parts and functions 5 (Filter switching)

★ First Filter



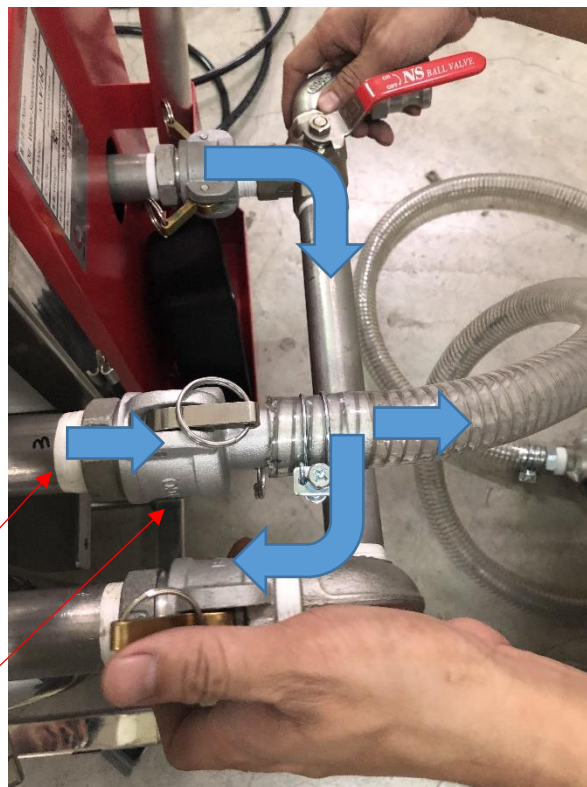
Drainage

The switching valve handle is downward, and the liquid is discharged directly from the right outlet without passing through the filter.

★ 1+2 Channel Filtration



The switching valve handle is turned to the right, three channels of filtration, and the liquid is discharged through the filter from the left outlet.



Drainage

Quick connect female hose

Installation Procedure

1. Please install the suction hose into the suction pipe quick connector (black) (as shown below)



2. Connect the drain hose to the corresponding drain (one or three drains) (as shown below)



3. Please add three-point combination lubricant (ISO oil type ISO-VG32 oil cup capacity is recommended) (as shown below)



4. Install the compressed air duct with the quick connector into the quick connector insertion port and adjust the pressure to 5KG/CM² - 7KG/CM² (as shown in the red circle below)



5. When using a non-woven filter, open the acrylic cover, insert the non-woven filter into the standard

stainless steel filter and fasten the acrylic buckle. (As shown below)



Operation instructions

1. Please fasten the acrylic top cover and the outer barrel with the buckle.
2. Install the compressed air duct with the quick connector into the quick connector insertion port to adjust the pressure to .

Within the range of 5KG/CM²- 7KG/CM².

3. Please close the exhaust valve.

(When the exhaust valve or acryl ring is not closed, the unit will not be able to properly draw liquid).

4. When clearing the bottom mud or filtering, please switch the valve handle to the downward direction and connect the drain hose to a filtered outlet.

5. Please turn on the pump switch.

6. Lift the suction tube and move it to the water tank to be cleaned for cleaning.

7. At the end, lift the suction pipe and turn off the pump actuation switch after the drain is no longer draining water.

8. When performing three filtrations, please fasten the female head 1 and fasten the female 2 retaining ring to loosen, and then connect the quick connecting connecting rod.

9. Open the door ring and loosen the second and third canister retaining rings. Remove the filter can and insert the filter.

((Filtering configuration of the first filter bag (coarse filtration), second (medium filtration), third (fine filtration))

Recommended configuration

20um Coarse filtration (filter bag) → 1um Medium filtration (filter bag) → 0.5um Fine filtration (filter)

OR

1um Coarse filtration (filter bag) → 1um Medium filtration (filter bag) → 0.1um Fine filtration (filter)

(The detailed filter selection depends on the actual situation of the customer site, the configuration will be different, you can ask the installer when you transfer the aircraft.

Configuration method)

12. When installing the canister, place the canister against the acrylic magnet and lock the canister retaining ring.

13. After the second and third canisters are locked, replace the quick-connecting crossbars with the mechanical device and fasten the quick-connecting females 1 and 2.

14. Switch the switching valve handle to the right, install the outlet hose to the three filter outlets, close the door and fasten the door buckle.

15. Please open the pump actuation switch. Adjust the pump actuation fine adjustment switch to make the pump speed slower for precision filtration.

(PS. Slower pump speed helps to intercept fine particles in the liquid, and the filtering effect is better)

16. Place the suction pipe in the water tank to be filtered for filtration.

17. At the end, lift the suction pipe and turn off the pump switch after the drain is no longer draining water.

18. When replacing the filter, please turn on the pump to discharge the liquid from the drain hose.

19. Please check if there is pressure on the pressure gauge on the canister. If there is still pressure, please install the quick-connect female drain to

A filter outlet, the switch valve handle is slowly switched to the lower pressure release, and the next action can be performed when the pressure is completely removed.

PS. If there is residual pressure in the machine, the pressure must be completely removed before the filter can be removed or the quick connect bar can be removed.

Failure to do so may cause personal safety problems when liquid splashing is serious. Please be sure to perform it thoroughly.

Please fast connect the female head 1, fast connect the female 2 buckle to relax, and fast connect the connecting rod to remove.

14. Place the water tray under the canister and open the drain valve below the canister until there is no residual liquid in the canister.

11-17 action execution



NOTE

1. When cleaning the inner tub, do not use hard objects to clean the inner bucket filter. If the stainless steel filter is damaged, it is not covered by the warranty.
2. Please use the oil as recommended. Add three-point combination lubricant. If the oil is not added, the pump will be damaged. Within the warranty.
3. When the device is used to suck the cutting chips, when the cutting fluid fills the end surface of the inner barrel, it means that the inner barrel filter has been blocked. Please prepare
Stop dumping the chips, please do not let the chips fill the end surface of the inner barrel. When the inner barrel pressure is too large, the acrylic cover will be damaged.
The low performance of the buckle and the blockage of the suction pipe chip indirectly affect the efficiency of the device cleaning.
4. When the inner tank filter is clogged or the suction pipe end is clogged with chips, the pumping frequency will be slow. Please clean the inner drum filter or
After the chips at the end of the pipe are sucked, let the device be operated again. Do not let the pump run under excessive pressure for a long time.
Lead to shortened life of pump diaphragms and parts.
5. Please confirm that the air pressure source has a pressure of 5KG/CM²- 7KG/CM². If the pressure is too small or too large, the pump's action suction will be insufficient.
The filter drum is not effective in drying the chips or sediment or causing damage to the pump.
6. This device is suitable for the transportation of liquids and entrained particles of general oily or aqueous cutting fluids. It is not suitable for dry type. For particle transportation, please check with the original manufacturer if it is used for liquid transportation other than the above.
7. The position of the display is recommended to be within 2 meters of the side of the tank to avoid affecting the suction and discharge efficiency.
8. Be sure to fix it securely during installation. The device may be dumped, dropped or abnormally operated, which may cause personal injury.
9. Do not modify the unit as it may cause personal injury due to abnormal movements.
10. Not familiar with the device or related personnel, etc., do not perform the decomposition, assembly and maintenance of the device, etc.
Proper action may cause injury to people and equipment.
11. During the operation of the device, do not touch the built-in parts by hand or body (such as piping, connectors, adjustment of the mounting position of the main body, etc.)
Dropping of the product, abnormal movements, etc. may cause personal injury.
12. If there is residual pressure in the machine, the pressure must be completely removed before the filter can be removed or the quick connect bar can be removed.
Failure to do so may cause personal safety problems when liquid splashing is serious. Please be sure to perform it thoroughly.
13. Pumping for a long time and rapid operation will result in shortened diaphragm life in the pump.

Pump precautions



Pump air supply

Do not connect the air pressure source above 8KG/CM².

1. Please use the pressurized air pressure within the regulations.
2. The size of the air supply line should not be smaller than the size of the air inlet switch of the unit to avoid affecting the workload due to insufficient air volume.

Pump exhaust

1. The device will be able to operate in the water, but it is necessary to pay attention to whether the exhaust port is higher than the horizontal plane.
2. When the machine is used for dangerous, flammable or toxic gases, pay attention to whether the exhaust position is safe.
3. Workplaces should avoid gases such as steam, solvents, acidic alkaline, etc., which enter the pumping pressure chamber and may reduce the service life of internal wear parts.

Pump focus

This pump is driven by air pressure and must be turned off before decomposing the pump.

The reason why the pump has a problem and cannot be driven;

Problem 1 pump inlet and outlet blockage

Check 1 Remove the pump outlet pipe and remove the blockage before testing.

Problem 2 Air pressure is too low or air flow is too small

Check 2 Check that the air line fittings are unblocked, whether the air pressure is higher than the outlet line pressure, and whether the fitting is damaged or not.

Problem 3 transport liquid precipitation hardening

Check 3 Decomposition Pump Check the inside of the pump. If there is hardening or foreign matter in the chamber, remove it and reassemble the pump for testing.

Problem 4 diaphragm rupture

Inspection 4 When there is a large amount of air discharge in the inlet and outlet pipes or if the venting holes are discharged by the conveying liquid, it is possible that the diaphragm is broken. In this case, the pump should be disassembled to check and replace the diaphragm.

Problem 5 Axis ring cover group internal parts wear

Check 5 When the pump is not running smoothly and there is abnormal air leakage at the position of the silencer, there may be damage to the shaft ring cover group. The pump lower shaft ring cover group should be disassembled to check for damage and replacement.

Problem 6 Pneumatic valve is damaged



Check 6 When the pump is not properly stopped, the pneumatic valve may be damaged when it is no longer possible to operate. Remove the pneumatic valve and check whether the internal parts are worn or broken, and replace the damaged parts.

Problem 7 silencer blockage

Inspection 7 Remove the silencer, clean or replace it.

The pump is operating normally but there is no cause of suction or suction.

Problem 1 The pump inlet and outlet pipes are blocked, broken and leaking, and the pipe fittings are faulty. Check the pipe joint of the 1 pump inlet and outlet to remove, open the gas source, please pump the pump, test whether the suction of the pump inlet is normal, if it is normal, the cause of the fault is abnormal if the pipeline or accessories are not normal.

Problem 2 When there is a large amount of air or vent holes in the outlet line to allow the liquid to flow out.

Check 2 This condition may be due to diaphragm rupture or loose outer and outer diaphragm. In this case, the pump should be disassembled to check and replace the diaphragm.

Problem 3 The pump suction line is too long or too deep from the liquid level to exceed the pump suction range.

Problem 4 The pump output line is too far, too high, and the tube loss calculation exceeds the pump fluid pressure.

Problem 5 Air pressure or air flow is insufficient, so that the pump cannot produce normal suction.

Problem 7 The outlet pipe output liquid appears intermittent.

Check 7-1 if the diaphragm is damaged or the inner and outer diaphragms are loose. Check if the diaphragm is replaced.

Check 7-2 to disassemble the check valve and the seat, check if the check valve and the seat are stuck to solid. If it is stuck to the solid, remove it and replace it according to the damage.

Problem 8 The pump has not been used for a long time due to the shutdown, causing the liquid to be transported to precipitate and harden in the internal pipe of the pump body, blocking the internal pipeline of the pump.

Check 8 to decompose the pipeline and the pump, remove the precipitated hardened material, inspect the parts in detail, and replace the parts according to the loss.

Pump maintenance

Note; before disassembling the pump, make sure that the pressure source is off and there is no pressure in the machine.

1. To prevent the work material from hardening and clogging in the pump and pipeline when it is not in use, keep the inside of the pump and the suction hose and the suction cup filter clean at all times. When not in use, please change the water or the appropriate cleaning liquid. To clean the inside of the pump and the pipeline, do not leave liquid in the pipeline for too long.

2. When changing the liquid material, first lift the feeding tube, remove the plugs on both sides, and after the liquid material in the standby body is completely discharged, place the suction cup in the cleaning container (about 5 liters of solvent) to absorb the solvent and put the inside. After cleaning, put the feed suction cup into the liquid bucket of the ready-to-use liquid to suck the liquid material, and then close the return switch and continue to use.

Various material temperature limits;

S.T.P	-29°C ~ 80°C
UPE	+5°C ~ 60°C
Teflon.PTFE	+4.4°C ~ +120°C



Warranty contract documents

The machine KN-V160 contained in this contract is guaranteed by the seller for one year and the parts and maintenance are free of charge. However, if one of the following circumstances occurs, the material cost shall be charged during the warranty period:

1. Improper use causes malfunction or damage.
2. Failure caused by self-modification.
3. Failure after installation or movement or handling.
4. External impact or natural disaster.
5. When purchasing KN-V160 products, the parts will be defective during normal use and warranty period, and we will provide new parts free of charge.
6. The warranty date will be one year warranty from the date of delivery or installation.
7. If the parts are damaged during the warranty period, the parts will be provided free of charge, but shipping and wages are not included (photo reference is required).



日期: _____ 年 _____ 月 _____ 日



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