

NORSE

PROFESSIONAL OPERATION MANUAL



SK135 Electric Pressure Washer



Read this manual carefully before use and keep it for future reference. Failure to do so may result in injury, property damage and may void the warranty.

Products covered by this manual may vary in appearance, assembly, inclusions, specifications, description or packaging.

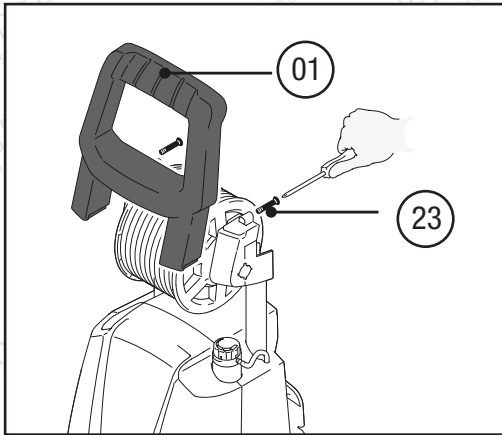
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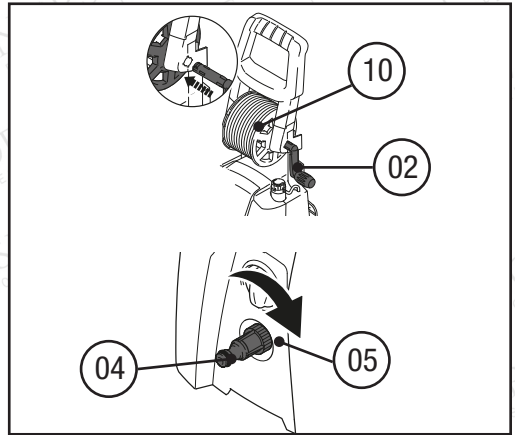
Quick Start Guide



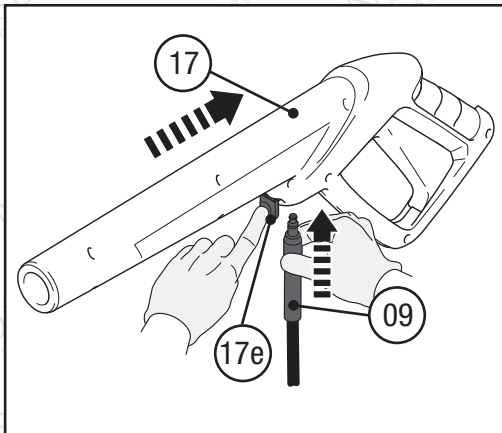
The following steps describe the quickest method to get your pressure washer up and running. However, it is essential you fully read this manual to ensure you are familiar with the general safety features, precautions and functions necessary to operate the product. Failure to do so may result in injury and damage to your washer or personal items.



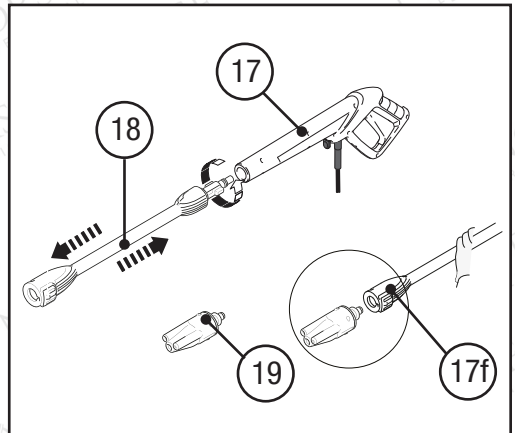
Slide the handle (01) on the reel frame and fix it with two screws (23). Tighten the screws (23) using a suitable screwdriver.



Push the hose reel crank (02) into the opening of the reel (10), ensure it clicks in place. Screw the water hose connector (04) to the water inlet (05).



Push the latch (17e) on the spray gun (17) to open the connecting port and insert the connector of the high pressure hose (9). Release the latch (17e) to lock the hose (09) in place. Check the connection by pulling on the hose. It should not pull out.

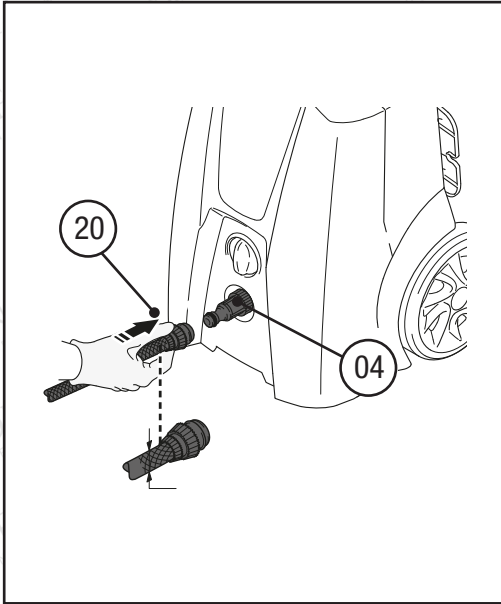


Insert the extension lance (18) into the end of the spray gun (17) by pushing together and turning clockwise at the same time.

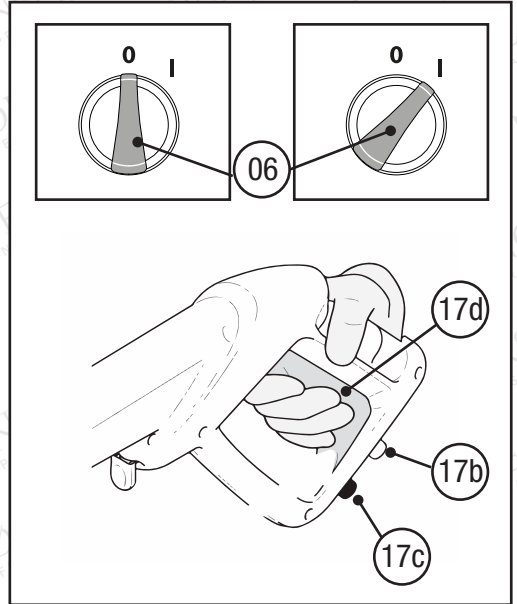
Insert the variable nozzle (19) into the end of the extension lance by pressing the blue button on the end of the extension lance, then press the fixed spray nozzle into the extension lance and turn clockwise until it "clicks into place".



Before starting up the appliance check that the water supply hose is connected properly; use of the appliance without water will damage it; do not cover the ventilation grilles when the appliance is in use.

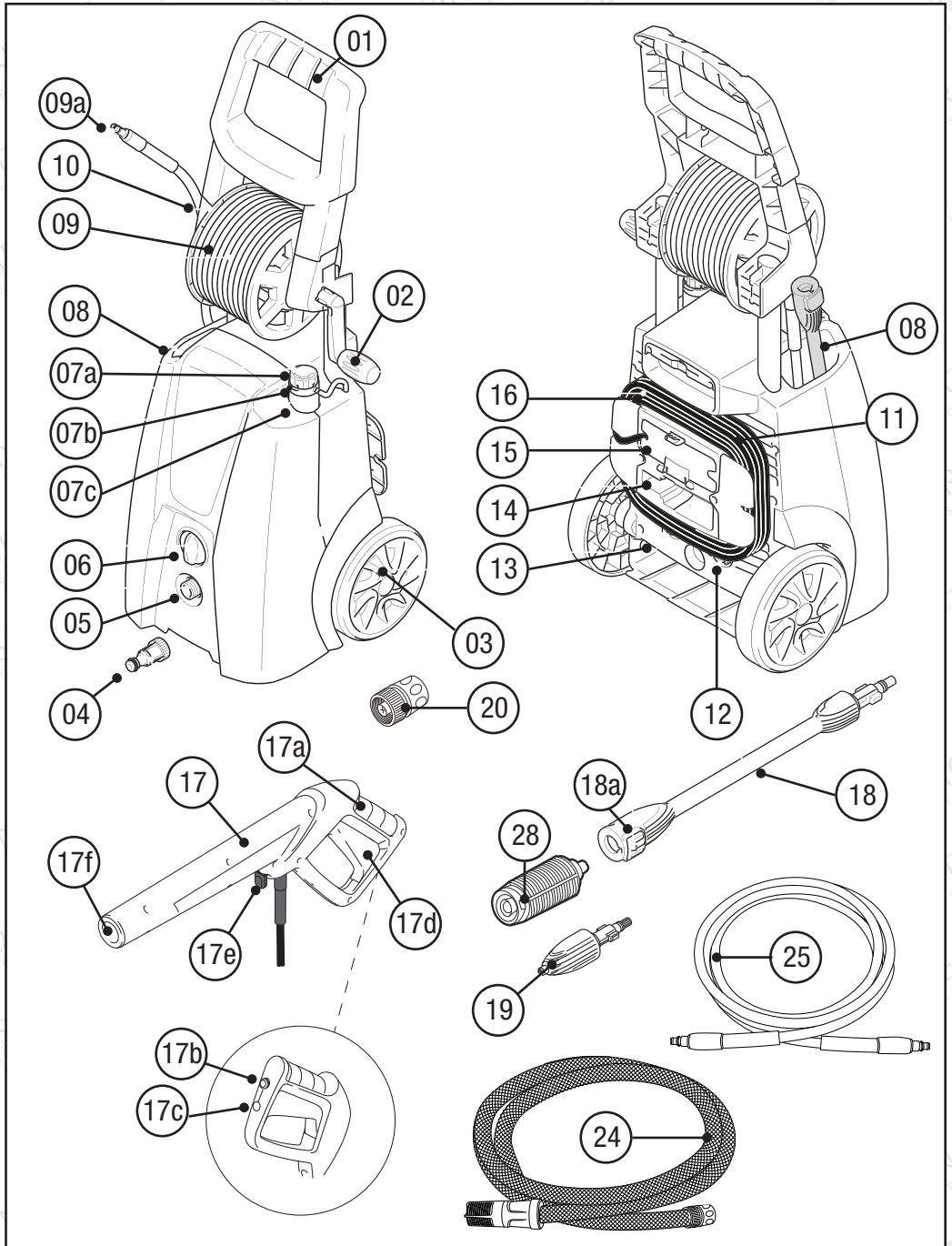


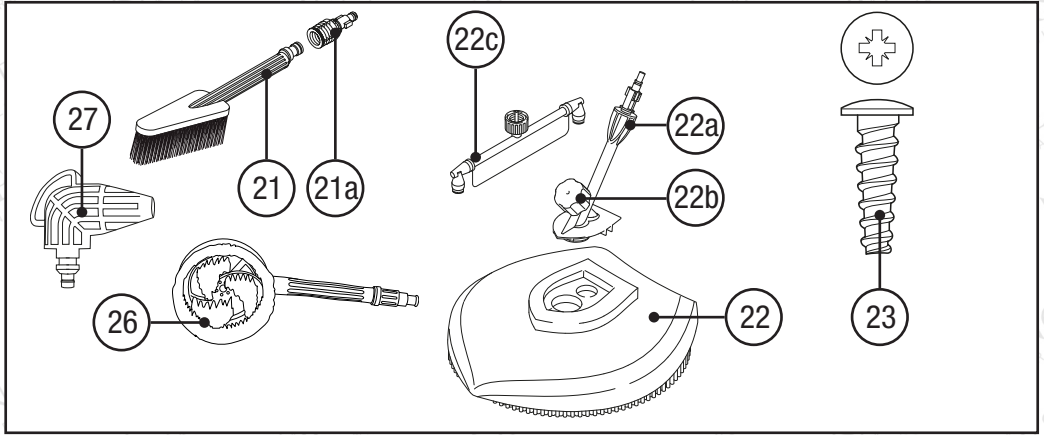
Screw the quick hose connector (20) on to your garden hose and slide onto the quick connector filter (04), it will “click” into place.



1. Make sure the on/off switch (6) is on “0” (off)
2. Insert the plug into a socket.
3. Turn the on/off switch (6) to “I” (on).
4. Deactivate the trigger lock by pressing the deactivate button (17b).
5. Press the trigger (17d), a water jet sprays out of the nozzle.
6. Release the trigger (17d) to stop the water outlet.
7. After use, activate the trigger lock pressing the activate button (17c) to lock the trigger in its off-position.
8. Turn the on/off switch (6) to “0”.

Parts guide



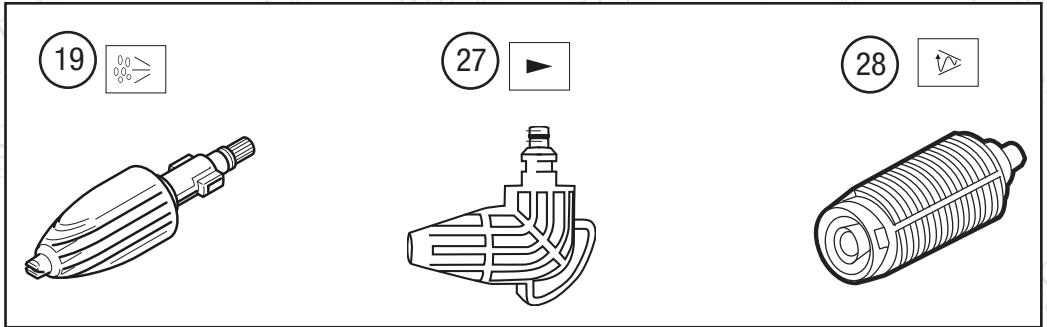


1. Handle
2. Hose reel crank
3. Wheel
4. Quick connector filter
5. Water inlet
6. On/off switch
7. Detergent tank
 - a. Regulator
 - b. Cap
 - c. Container
8. Storage compartment (lances)
9. High pressure hose
 - a. O-ring
10. Hose reel
11. Air vents
12. Cleaning needle
13. Lubricant tube (certain models)
14. Storage compartment (variable nozzle)
15. Storage compartment (plug)
16. Power cord with plug
17. Spray gun
 - a. Grip
18. Lance extension
 - a. Lock button
19. Detergent nozzle
20. Quick hose connector
21. Triangle brush
 - a. Adaptor
22. Patio brush
 - a. Angle connector
 - b. Regulator
 - c. Rotating nozzle
23. Screw ST4.8*16mm (x2)
24. Filtered hose
25. Fiber extension hose
26. Rotary brush
27. 90° turbo nozzle
28. 20° fixed nozzle

Nozzle / Patio brush



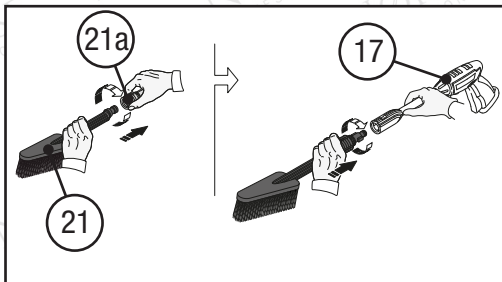
WARNING! Never use the variable nozzle and patio brush without the lance extension – danger of injury!



19 - The detergent nozzle creates the correct pressure for detergent to draw and mix, applying an even mix.

27 - The 90° turbo nozzle angles a powerful rotating jet for hard to reach areas.

28 - The 20° fixed nozzle is used for general cleaning purposes with a focused and powerful spray.

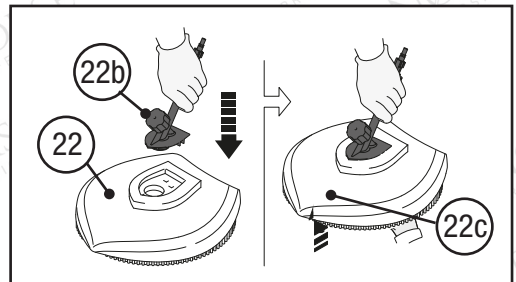


The **triangle brush** is specially designed to clean rims and the wheel of vehicles.

Screw the adaptor (21a) on the triangle brush (21).

Then align the tongues of the adaptor (21a) with the grooves of the spray gun (17) and insert it.

Securely fit the accessory by turning it clockwise and let it lock into place.

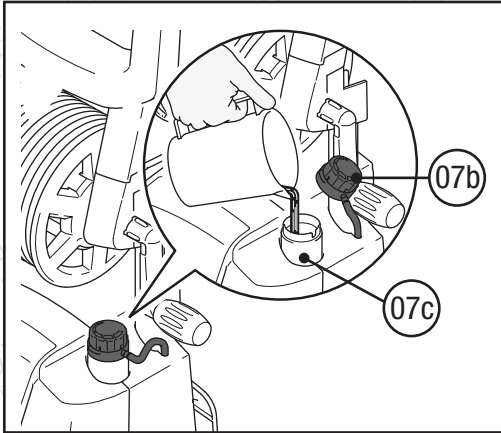


Align the angle connector to the top of the patio brush (22) and the rotating nozzle (22c) to the bottom side. Screw the rotating nozzle (22c) on the thread of the angle connector. Tighten it well. Attach the angle connector (22a) to the lance extension. (18)

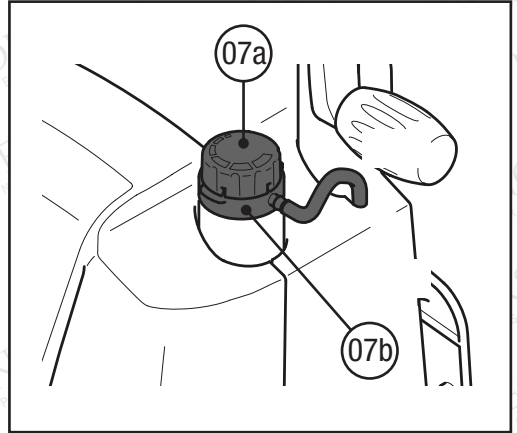
Detergent

Use the detergent setting to apply detergent. Some cleaning tasks can be completed with water alone, but for most tasks the removal of dirt becomes more effective if a detergent is used.

NOTE: Only use mild, environmentally friendly detergents. Never use aggressive chemicals, abrasive detergents or similar to avoid damage to your health, the product and the environment.



Unscrew the cap (7b) to open the tank (7c) and fill with suitable detergent



Screw the cap back onto the tank.
Adjust the detergent flow with the regulator (7a) on the cap (7b)



WARNING! Avoid skin contact with detergents, in particular contact with eyes! If detergent gets in your eyes flush your eyes with clean water and seek immediate medical attention!

The following cleaning procedure will ensure that you achieve the most beneficial results in the shortest amount of time.

- **Surface preparation**

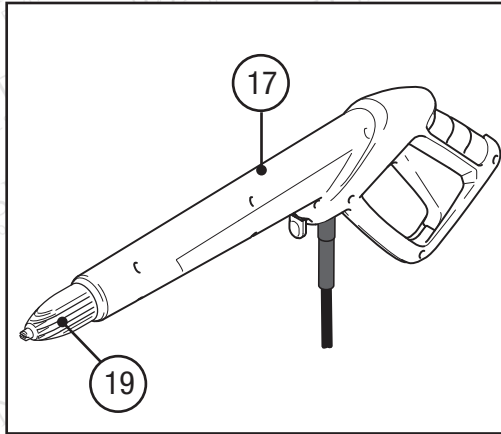
Clear the working area and make sure that all windows and doors are closed tightly. Make sure that all plants and trees adjacent to the cleaning area are protected by a drop cloth.

- **Initial high pressure rinse**

The next step is to spray the cleaning surface with water to clear off any dirt or grime that may have collected on the surface. If you use detergent, this will allow your detergent to attack the dirt that has worked its way into the cleaning surface. Before triggering the gun, adjust the variable nozzle to a wide spray pattern and slowly adjust to the desired spray pattern. This will help you avoid applying too much pressure to the surface that could cause damage.

- **Detergent application**

Only use detergents formulated for pressure washers. Test the detergent in an inconspicuous area before use. Follow the manufacturer's label directions for mixing the correct concentrations of detergent to water.

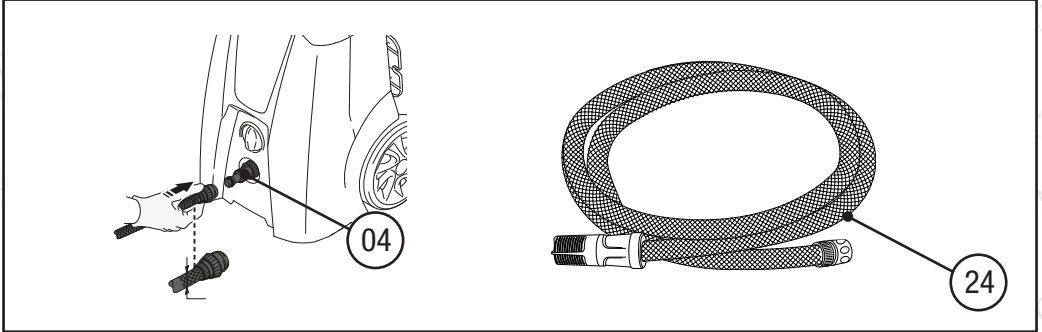


1. Unscrew the top of detergent applicator and fill with detergent.
2. Put the top of detergent applicator back on.
3. Attach the detergent nozzle to the spray gun.
4. Apply the detergent so it thoroughly covers the cleaning surface. Apply from bottom to top to prevent the detergent from sliding down and streaking.
5. Allow the detergent to remain on the surface for a few minutes. This is a good time to use a brush to lightly scrub heavily soiled areas. Never allow detergent to dry on the cleaning surface.
6. Remove detergent applicator from gun and replace with the lance.
7. Rinse detergent from surface.
8. Rinse the detergent applicator with clean water following each use.
9. Final rinse. Make sure you thoroughly rinse the surface and that all detergent has been removed.

- **Shut down**

1. Make sure all detergent is flushed from the system.
2. Turn off the motor.
3. Turn off the water supply.
4. Trigger the gun to de-pressurise the system.
5. After each use, wipe all surfaces of the pressure washer with a clean, damp cloth.

Drawing from a barrel



First ensure the machine is switched off before connecting / disconnecting any hoses or attachments. Instead of attaching the hose from pump to tap, use the supplied hose and filter set placing the filter end in the water supply.

It is advised that the water supply is on the same level as the washer. If you struggle to get initial suction, remove the outlet hose from the pump and try drawing again - this reduces the pressure on the pump making it easier to draw. Once flowing, turn engine off and reconnect outlet hose before re-starting.

General cleaning

Distance from Cleaning Surface

Another factor that determines the impact force of the water is the distance from the spray nozzle to the cleaning surface

Angle to the Cleaning Surface

When spraying water against a surface, maximum impact is generated when the water strikes the surface head on. However, this type of impact tends to cause dirt particles to embed in the surface, thereby preventing the desired cleaning action.

The optimum angle for spraying water against a surface is 45 degrees.

Avoid Damaging Surfaces

Damage to surfaces occurs because the impact force of the water exceeds the durability of the surface. Never use a narrow high impact stream or a turbo / rotary nozzle on a surface that is susceptible to damage.

The surest way to avoid damaging surfaces:

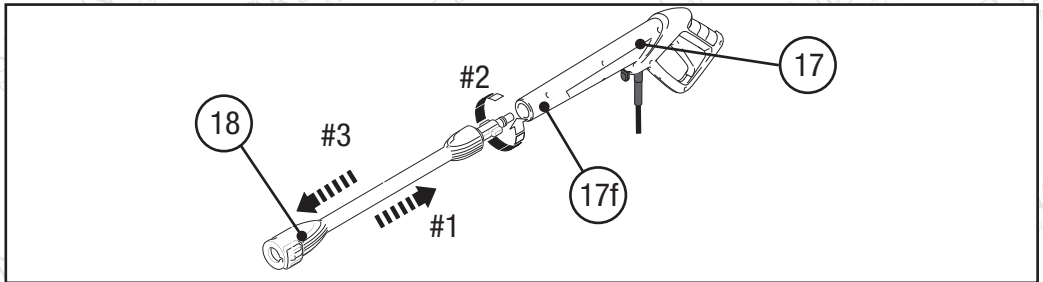
1. Adjust the variable nozzle to a wide spray pattern.
2. Place the variable nozzle approximately 4-5 feet from and 45 degrees to the cleaning surface.
3. Vary the spray pattern, spray angle and the distance to the cleaning surface until optimum cleaning efficiency is achieved without damaging the surface.

Looking After your Product

1. This pressure washer is not meant to pump hot water. Never connect to a hot water supply.
2. Never operate the unit for more than one minute without spraying water. This will cause a heat build-up that can damage the pump.
3. Only use the nozzles supplied with the machine.
4. Never store the pressure washer outdoors or where it could freeze. The pump will be seriously damaged. Any components with water left inside will also be damaged, e.g. the pressure gun.
5. Release the trigger when changing the spray pattern. Failure to do so could result in damage.
6. Do not operate the pressure washer with the inlet water screen removed. Be sure to keep the screen clear of debris and sediment.
7. Make sure you clean the machine every three months and inspect the filter and the nozzle prior to every use, ensuring there is no debris that may impair use.

Post operation / storage

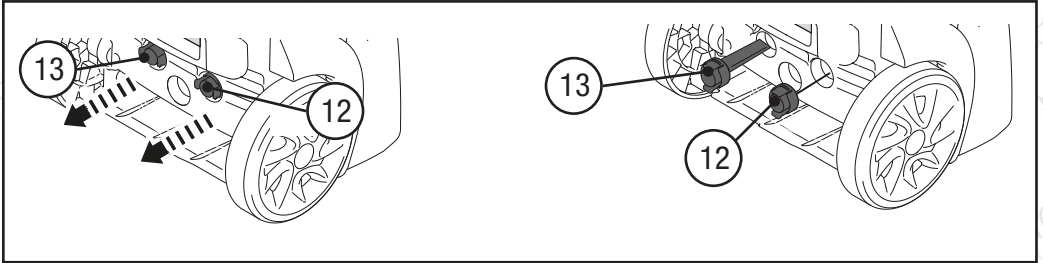
- Do not store the pressure washer outdoors or in a location where it may freeze. Any water left in the machine, gun or any other components will expand if allowed to freeze, causing damage.
- Always turn the motor off before turning the water supply off.
- Never disconnect the hose from machine while the system is pressurized. To de-pressurize, turn the motor off, then turn the water supply off and squeeze gun trigger 2-3 times.



Press the accessory towards the spray gun (17) and turn it clockwise to remove it.

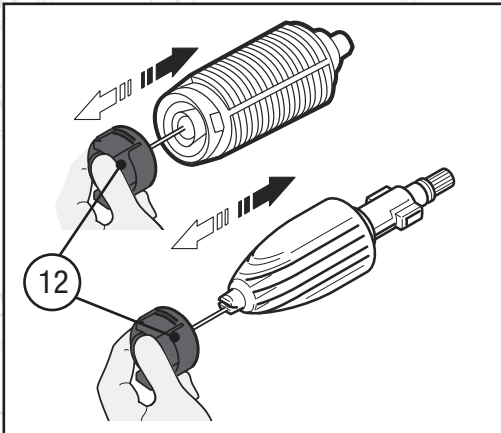
Maintenance

A cleaning needle (12) and lubricant tube (13) are supplied with this product and stored in the back. Fill the lubricant tube with suitable lubricant, e.g. silicone grease.

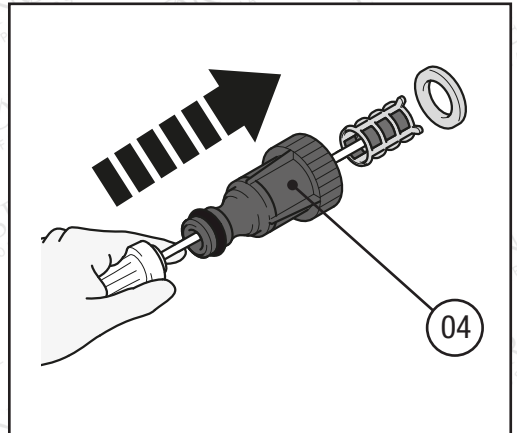


Press the latches together and remove the cleaning needle (12) and lubricant tube (13) from the product

Push the cleaning needle (12) and lubricant tube (13) back into the opening after each use.



Remove any dirt deposits from the nozzle hole using the cleaning needle (12)



Remove the quick connector filter (4) from the water inlet (5). Use a damp tool to disassemble the quick connector filter (4). Rinse the parts with clean water.

Safety Symbols



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



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



Risk of electrocution

Safety and Warning Information



WARNING: When the machine is used, the following precautions should always be considered:

- To reduce the risk of injury, close supervision is necessary when the machine is used near children.
- Follow all safety codes as well as the Occupational Safety and Health Act (OSHA).
- Ensure safety devices are operating properly before using the machine. Do not remove or modify any part of the gun or main unit of the machine.
- Stay alert at all times when using the machine and always hold the gun firmly when operating the machine.
- Do not operate the machine when fatigued, suffering from reduced physical, sensory or mental capabilities or whilst under the influence of alcohol or drugs.
- Keep the operation area clear of all electrical equipment, persons, animals and pets. Do not leave the machine unattended when setup for use. Always engage the trigger safety latch after use.
- Do not point the pressure gun at anyone whilst the unit is connected to a water supply.
- Do not overreach or stand on an unstable support. Keep good footing and balance at all times.
- Use a cleaning agent supplied or recommend by the manufacturer. Always protect your eyes, skin, and respiratory system from detergent use.
- If your eyes (or any other sensitive part of your body) comes into contact with detergent, rinse with plenty of clean water.
- In the event of an accident, switch off the machine, pull the plug from the socket outlet and disconnect the water supply.
- Always wear safety goggles, ear protection and protective clothing even when performing maintenance.
- Never put hands or fingers over the spray tip while operating the unit.
- Never try to stop or deflect leaks with any body part.



WARNING: The electrical supply connection must be made by a qualified person and comply with IEC 60364-1. The electric supply to this machine should include either a residual-current device / circuit breaker that will interrupt the supply if the current to earth exceeds 30 mA for 30 ms.



WARNING: This is a double-insulated machine so two systems of insulation are provided instead of grounding. No grounding means are provided for a double-insulated machine, nor should grounding means be added to the machine. Servicing a double-insulated machine requires extreme care and knowledge of the system. It should be done only by qualified service personnel. Replacement parts for a double-insulated machine must be identical to the original parts.

WARNING: Do not use an inlet pressure that exceeds the operating pressure of any of the parts (hoses, fittings, etc). Ensure all equipment and accessories are rated to withstand the maximum working pressure of the unit.

WARNING: Never spray flammable liquids or use the pressure washer in areas containing combustible dust, liquids or vapours.

WARNING: Do not spray electrical apparatus and wiring.

WARNING: To ensure machine safety, please only use original spare parts (including nozzles) from the manufacturer or approved by the manufacturer.

WARNING: Make sure the inlet water is maintained between 0.01MPa and 0.4MPa.

WARNING: If the mains cable is damaged it must be replaced by the manufacturer, or its service agent or similarly qualified person to avoid a hazard or injury.

WARNING: Use only extension cords intended for outdoor use and that have an electrical rating equal to or more than the rating of the machine. Examine the cord before using and replace it if damaged. Keep the cord away from heat and sharp edges. It is recommended that you use a cord reel that keeps the socket at least 60mm above the ground.

CAUTION: Keep the hose away from sharp objects. Bursting hoses may cause injury. Examine the hose regularly and replace it if damaged. Do not attempt to repair a damaged hose.

- Never disconnect the high pressure outlet hose from the machine while the system is pressurised. To depressurise machine, turn power and water supply off, then press gun trigger 2-3 times.
- Never operate the machine without all of the components properly connected to the machine (handle, gun / lance assembly, nozzle, etc).
- Never operate the pressure washer with broken or missing parts. Check equipment regularly and repair or replace worn or damaged parts immediately.



WARNING: To reduce the risk of electrocution, keep all connections dry and off the ground. Do not touch the plug with wet hands.



WARNING: Do not use the machine if the supply cord or any important parts of the machine are damaged (e.g. safety devices, high pressure hoses, etc).

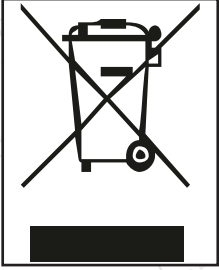
Troubleshooting

Symptom	Possible Cause(s)	Corrective Actions
No detergent suction	1. Detergent tank is clogged	1. Clean detergent tank with warm water
Pressure washer does not start up	1. Unit is pressurised 2. Plug is not connected correctly or electrical supply is damaged / faulty 3. Thermal safety switch has tripped	1. Clean water inlet 2. Check that connections are properly tightened 3. Switch off unit and allow to cool down
Pump does not reach necessary pressure	1. Water inlet is clogged 2. Pump sucking air from hose connections 3. Variable spray nozzle is worn or not correct size 4. Unloader / valves are clogged/ worn	1. Clean quick connector filter 2. Check that connections are properly tightened 3. Call the dealer 4. Call the dealer
Fluctuating pressure	1. Pump is sucking air 2. Clogged nozzle 3. Valves dirty, worn or clogged 4. Water seals worn	1. Check that hoses and connections are tight 2. Clean with tip cleaner 3. Call the dealer 4. Call the dealer
Motor stops suddenly	1. Thermal safety switch has tripped due to overheating	1. Check mains supply voltage corresponds to specifications

Technical Data

Item	SK135
Working pressure	13.5 MPa / 135 BAR / 2000 PSI
Allowable pressure	20.5 MPa / 205 BAR / 3000 PSI
Maximum flow rate	500 Litres / hour
Motor capacity	2400 Watt
Power supply voltage	240V ~ 50HZ
Intake water pressure	Min 0.1MPa / Max 1MPa
Max input temperature	50 °
Dimensions	380 x 355 x 735mm
Weight	16.7 Kg

Disposal Regulations



Do not dispose of electrical machines as unsorted municipal waste, use separate collection facilities. Contact your local government for information regarding the collection systems available. If electrical machines are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being. For transportation safety, the machine should comply with ISTA.

CE Certification

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