



Quick Start Guide for Decontamination Units

Please note, we make every effort to ensure that the information provided in all our material is accurate and up to date, but, to the extent permitted by law, we do not accept any legal responsibility for any errors, omissions or misleading statements. If you have any questions about any part of this user guide, please do not hesitate to contact SMH direct for more information.

1. Foreword

This quick start guide must be read in conjunction with DCU - UG - UK - v2 which is available at www.smhproducts.com. Please note that any non-observance of this user guide may invalidate any warranty associated with the product.

1.1 The unit

The unit as hired consists of the unit and all fixtures and fittings; and this quick start guide.

1.2 Intended use

SMH Decontamination Units are mobile units incorporating a minimum of a three stage decontamination facility (1 x 'clean' area, 1 x shower area, 1 x 'dirty' area) for use during the controlled removal of asbestos-containing materials (ACMs). They exceed the minimum design criteria for asbestos hygiene units as detailed in HSG 247, *Asbestos: the licensed contractors' guide*, and they exceed the requirements of the HSE's Managing and working with asbestos Control of Asbestos Regulations 2012 Approved Code of Practice, Regulation 23.

DCU+ units include additional facilities, such as a self-contained WC, canteen space, or office spaces.

2. Standard operating procedures

The purpose of the SMH decontamination unit standard operating procedures is to provide guidance for the correct and safe method of use of the units.



All personnel engaged in decontamination must follow the health and safety protocols described in the current legislation and guidance.

2.1 Transport of the unit

We recommend that the following checks are made before any towing journey is begun:

- Is the towing vehicle suitable for the weight and size of DCU to be towed?
- Is the weather/route suitable for towing? For example, high winds or steep inclines could have an adverse effect on towed units.
- Are the tyre pressures correct on both the towing vehicle and the DCU?
- Is the correct number plate displayed on the DCU? – Same number as Towing Vehicle
- Are the 7 core cable and plug undamaged? – Do all lights work?

Once the DCU is coupled to the towing vehicle:

- Is the breakaway cable undamaged and correctly connected to a suitable point on the tow bar or towing vehicle?
- Are all the lights on the DCU undamaged and working correctly?
- Are the jockey wheel and any corner steadies fully wound up and secure?

As soon as possible after the commencement of the journey, check that the brakes react as anticipated.



National towing laws take precedence over any statements made in this user guide.

2.1.1 Procedure for coupling the DCU to the towing vehicle



When towing a DCU, ensure the gas cylinder has been removed from the gas cylinder storage cupboard and that the water tank(s) have been drained. The towing weight of the DCU will be exceeded if gas cylinders are left in the storage cupboard or there is water in the tank.

- Position the towing vehicle beneath the tow hitch of the decontamination unit (DCU).
- Using the jockey wheel, lower the tow hitch coupling onto the towing vehicle's ball hitch by turning the jockey wheel handle clockwise.
- Lift the tow hitch handle as the jockey wheel is lowered onto the towing vehicle ball hitch.
- Ensure that the safety locking mechanism has latched into place; this is indicated by the green indicator on the tow hitch coupling.
- Fully retract the jockey wheel by turning the winder clockwise.
- Release the jockey wheel shaft up into the A-frame and tighten the jockey wheel clamp.
- Attach the safety breakaway from the DCU to the towing vehicles tow hitch.
- Connect the 7 pin plug from the DCU to the towing vehicles 7-pin socket.
- Release the DCU handbrake on the tow hitch coupling.
- Check that all running lights are now operational on the DCU.
- Ensure that all of the corner steadies have been lifted before towing.
- Ensure that all doors and hatches are locked and secure before transit and fit the towing vehicle's registration plate to the registration plate holder on the rear of the DCU.

2.1.2 Procedure for uncoupling the DCU from the towing vehicle

- Apply the handbrake on the DCU. You will then need to remove the safety breakaway cable from the towing vehicle and the 7-pin running light connection from the towing vehicle.
- Release the jockey wheel clamp handle and lower the jockey wheel to the ground, tighten the jockey wheel clamp handle.
- Whilst lifting the coupling handle, turn the jockey wheel handle anti-clockwise to lift the DCU from the tow hitch ball coupling on the towing vehicle.

2.2 Set-up of the unit

- When the DCU is detached from the vehicle, release the handbrake and position the DCU on solid level ground. It is then essential to re-apply the handbrake.
- In order to open the DCU door, use the keypad (the default code is C12XYZ) and then the high and low level utility door locks using the utility door key supplied.
- Remove the DCU entry and exit steps, wheel brace and power supply leads.
- Lower the 4 corner steadies which are situated beneath the unit. Place the wheel brace onto the lowering nut of the corner steady.
- Turn the wheel brace anti-clockwise to lower the legs into position.
- Place the DCU steps at the entry and exit points of the DCU ensuring that they are on stable, level ground.
- Ensure that the DCU has all of the required certification for gas, DOP, electric and clean air; these documents can be found in the certificate holder located on the internal wall or on the rear of the clean end door. If the unit is new, there will not be a clean air certificate.

 The DCU must not be used if the certification for gas, DOP, electric and clean air is not present.

2.3 Power supply procedures

 Individual units may have power supply procedures that differ from the below. Please ensure you have read any annexes to the User Guide and if you have any questions, please check with SMH before using the unit.

2.3.1 Procedure for installing the gas cylinder

- Open the front spoiler door cupboard (generator door on newer models) and locate the gas installation pipe work.
- Gas cylinders must be installed outside on level ground.
- Examine the flexible low pressure gas hose for any signs of splitting or degrading and to ensure the hose is within its 5 year expiry date.
- Examine the flexible low pressure gas hose for any signs of splitting or degrading and to ensure the hose is within its 5 year expiry date.
- Check that the valve hand-wheel is closed on the gas cylinder by turning it clockwise. Remove the protective plug from the gas cylinder. The cylinder coupling is a left handed thread connection.
- Fit the flexible gas hose bullnose connector to the female valve coupling on the gas cylinder; ensure that the connection is tight and this can be done by using the bottle spanner provided or the correct size spanner.
- Open the valve hand-wheel on the gas cylinder.
- Open the Peglar lever ball valves on the gas supply pipe work to supply the generator and the gas water heater.

- See sections 2.3.3, procedure for a generator supply, and 2.4.2, operating the water heater, below to continue the gas installation.

2.3.2 Procedure for a mains electrical connection

- The DCU 230v 16amp inlet socket can be located either, on the front spoiler, fixed to the A frame below the spoiler, on the offside panel beside the utility cupboard, or inside the utility cupboard.
- Connect the 230v 16amp female trailing coupler to the DCU 230v 16amp inlet socket.
- Connect the 230v 13amp 3 pin plug to a mains supply socket outlet. You can then switch on the power outlet.
- The consumer unit can be found either in the offside wheel arch cupboard or within the personal lockers located inside the clean end of the DCU.
- To test the mechanical operation of the RCD, press the test button mounted on the RCD safety device; the device should trip when the unit is powered.

2.3.3 Procedure for a generator supply

- When the gas supply is turned on, bleed the garrison low pressure regulator mounted on the generator framework by depressing the spring loaded bleed valve; depress the valve for 3 seconds to purge the carburettor.
- Connect the 230v 16amp plug to the generator 230v 16amp outlet socket.
- Ensure that the voltage changeover switch is set to the 110v position before connecting the supply leads.
- Switch on the generator on/off switch located on the rear of the generator (red switch).
- Using the pull cord starting mechanism on the generator, continue to recoil the engine until the generator starts.
- Connect the 230v 16amp female trailing coupler to the 230v 16amp inlet socket.
- Switch the voltage changeover switch to 230v. – Prior to start.
- Test the power connection by performing a RCD operation test as stated in mains supply above.

2.4 Operating the equipment fitted on the DCU

2.4.1 Procedure for filling the water tank

- The fresh water tank is situated within the clean end of the DCU. On older models the tank must be filled from the internal tank fill point
- On the newer models the tank can be filled from both the internal tank fill point and a tank fill point located on the offside of the DCU
- To fill the fresh water tank ensure that the water drain valve is closed, this is located on the offside of the DCU and can be located from the water tank drain off signs fitted within the DCU
- Once drain valve is closed, proceed with filling the water tank

2.4.2 Operating the water heater

- Connect the hose using a 1/2" BSP quick release hose connector to the 1/2" male tap connector mounted to the front of the DCU spoiler.
- Connect the opposite end of the hose to a mains water feed. The water heater requires a minimum of 1bar to operate correctly.
- Ensure that all of the DCU drain-off valves are closed. The valves are located below the spoiler on older units with valves located on the offside of the DCU in front of the wheel arch.
- Turn on the water supply and enter the DCU from the clean end, ensure that the water runs freely from the shower heads by opening the shower tap located on the sink unit or mounted to the shower wall.
- Review 2.3.1, procedure for installing the gas cylinder, before commencing the next section of the water heater set up procedure.
- Open the gas compartment door using the utility door key provided.
- The water heater fitted to current SMH DCU models is a Morco F11e Water Heater.
- Older models may differ. If this is not the water heater fitted on your unit please contact your local branch of SMH for specific information on the heater in your unit.
- The water heater has 2 control knobs and 1 power button.
- Press the button in on the boiler to switch the boiler on. The boiler is then ready to use.
- Select the required power: MAX is 100%, MIN is 50%. We recommend 100% UK Standard.
- Use the temperature control knob to select the desired water temperature.
- Turn off the water heater by pressing the button to the off position.

2.4.3 Operating the fresh water tank pump system

Refer to 2.3, power supply procedures, and 2.4.1, procedure for filling the water tank, before continuing through the next section.

- Enter the DCU through the clean end and proceed into the shower compartment.
- The water tank pump switch and waste pump switch are located on the shower cubicle wall and are identified by the operating stickers fitted
- Turn on the water tank switch
- The water tank pump is controlled by a pressure switch that activates when the taps are closed. Open the shower tap inside the DCU to ensure that the pump system is in operation

2.4.4 Operating the waste water pump system

The waste water system removes contaminated water from the shower cubicle and dirty end.

- Remove the waste water drain hose from the nearside utility cupboard and feed it into a suitable drain. Where suitable drainage is unavailable, you will need to use waste water collection tanks.
- Check that a 10" clean water filter has been installed into the water filter bottle and that the gauze filter is not clogged.
- The waste water control switch can be located in the shower cubicle; it is installed on the shower wall and can be identified by the operating guidance labels.
- When the shower system is in use, ensure that the waste water pump has been activated.

2.4.5 Operating the Negative Pressure Unit (NPU)

The negative pressure unit is located in the dirty end of the DCU beneath the bench seat.

- Remove the filter plate by unclipping the over centre clips.
- Place the cover plate where it will not cause an obstruction, underneath the bench seat.
- Plug the NPU into the 230v 16amp socket outlet provided and the unit will activate.
- The NPU pre-filter should be changed at least daily to prevent any failure to the NPU.

2.4.6 Operating the heating system

- The DCU heating system can be manually operated; an oil filled radiator is situated in the clean end of the DCU and has an adjustable thermostat.
- In the rear of the unit there is a tube heater mounted beneath the bench seat. This is set at a fixed temperature and is non-adjustable.
- The tube heater can be switched off from the consumer unit feeding the electrical installation and is clearly marked to which circuit supplies the tube heater (consumer unit located in offside wheel arch or internal personal lockers).
- This can also be isolated by disconnecting the plug from the heater socket.
- Mains supply sockets are situated within the personal lockers of the DCU. The supply sockets are to be used for charging powered respirators only.

2.5 Shut down of the unit

- ✓ Following the correct procedure is not only important to ensure the safe shutdown of your unit – it will also extend the life of your unit, avoiding unnecessary damage and potentially costly repairs.

2.5.1 Procedure for water heater drain down/frost protection

- Turn off the mains water supply stopcock.
- Disconnect the 1/2" hose connector from the 1/2" male tap connector on the front spoiler.
- Open all of the hot and cold shower valves and the sink taps.
- Open all of the hot and cold drain valves (refer to 2.4.2, operating the water heater, for the correct positioning of the valves).

2.5.2 Procedure for shutting down the NPU

- Seal the NPU using the transit cover plate to prevent fibre release during transportation.

2.5.3 Procedure for draining the water storage tank

- Ensure the water storage tank is fully drained by opening the water drain cock.

2.5.4 Return of the unit after rental

DCUs must be returned clean and free from any dust or debris, in a decontaminated state, i.e. with a full clearance certificate and a clean pre-filter fitted to the NPU, and without damage.

Any customer returning a unit in an unsuitable state as deemed by the receiving SMH branch will be liable to additional charges.

2.6 Maintenance

2.6.1 Procedure for changing water filters

- ⚠ Filters should be changed under controlled conditions by a qualified, competent person wearing full PPE and RPE. Filters must be disposed of in accordance with local regulations for the removal of asbestos-containing materials and within any site-specific method statements.

- ✓ It is a requirement of SMH Products that only liquid soap is to be used with the shower facilities in our DCUs; the use of bars of soap can cause a blockage in the water filter cartridge.

- Regular checks of the waste water filter should be undertaken to prevent the failure of the waste pump system.
- Ensure that the water filter is immersed in water and remove the filter bottle from the filter bottle bracket; turn the bottle anti-clockwise and unscrew the bottle from the bracket.
- Remove the filter bottle 'O' ring, located in the recess of the internal bottle housing.
- Empty the contents of the waste water bottle into a red asbestos bag and follow your company procedures to dispose of asbestos containing materials.
- Fit a new water filter and replace the filter bottle 'O' ring.
- Screw the water filter bottle back onto the filter bottle bracket, the bottle must have a tight seal between the bottle holder flange and 'O' ring seal to prevent any air leaking into the pump system.

2.6.2 Procedure for changing NPU pre-filters



Filters should be changed under controlled conditions by a qualified, competent person wearing full PPE and RPE.
 Filters must be disposed of in accordance with local regulations for the removal of asbestos-containing materials and within any site-specific method statements.

- Cut the old pre-filter out of the NPU.
- Fit a new pre-filter into the NPU and seal it with PCL tape.
- Place the dirty pre-filter in a red asbestos bag and follow your company procedures to dispose of asbestos containing materials.

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