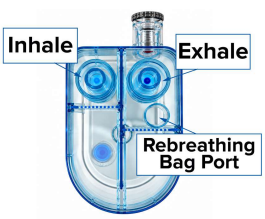
CIRCLE CIRCUIT

INSTRUCTION MANUAL

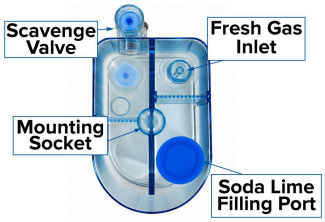
1. INTENDED USE

The EICKEMEYER® Circle Circuit is a reusable soda lime canister for use in closed-circuit or semi-closed-circuit breathing systems during veterinary anaesthesia. It removes carbon dioxide (CO_2) from exhaled gas and is intended for appropriately trained veterinary professionals, primarily for small-animal patients.

2. PRODUCT IDENTIFICATION AND CONNECTIONS



FRONT VIEW



REAR VIEW

Front/patient side: INHALE and EXHALE ports, rebreathing-bag connection. Rear/machine side: 22 mm mounting socket, Fresh Gas Inlet (FGI) and soda-lime fill port (blue bung). The scavenging valve and scavenging connection are at the top.

3. SODA LIME

The absorber accommodates approximately 470 g of soda lime, depending on the product and bulk density. Use commercially available veterinary or medical soda lime suitable for anaesthetic breathing systems. Replace soda lime in accordance with the soda lime manufacturer's instructions and exhaustion indicators.

4. INSTALLATION

1. Mount the absorber on the compatible 22 mm mounting post using the rear mounting socket.
2. Connect the machine fresh-gas supply to the FGI.
3. Connect the breathing circuit to the INHALE and EXHALE ports.
4. Connect the rebreathing bag using the supplied elbow.
5. Connect SCAVENGE to a suitable anaesthetic-gas scavenging system using the supplied 30/22 mm adapter.

5. SCAVENGING VALVE

The scavenging valve is manually operated. Open or close it according to the requirements of the anaesthesia procedure and the veterinarian's clinical requirement.

Approximately one complete turn is required between fully closed and fully open. The valve may rotate slightly more than one complete turn. Do not force the valve once it reaches its mechanical stop.

When open, the integrated pressure-relief function provides controlled resistance to scavenging flow and helps maintain slight positive pressure. The relief function is approximately 1–2 cmH_2O.

6. PRE-USE LEAK CHECK

Each absorber is leak-tested during manufacture. Before use, check the complete assembled breathing circuit:

1. Use the oxygen flush function to fully inflate the rebreathing bag.
2. Block the INHALE and EXHALE connections with suitable closed-end connectors or dead-end circuit tubing.
3. Stop oxygen flow and observe the bag for 90 seconds.

The bag should remain substantially inflated. If significant deflation occurs, identify and correct the leak before use. A suitable leak-detection solution may be used on accessible external joints.

7. REMOVING USED SODA LIME

1. Close the scavenging valve and disconnect the absorber.
2. Remove the blue silicone bung.
3. Tip used soda lime into a suitable plastic waste bag and seal securely.
4. Dispose of used soda lime according to the veterinary facility's waste procedures.

8. MAINTENANCE AND STORAGE

Perform the following maintenance after each shift of use:

1. Open the breathing-system ports and scavenging valve.
2. O_2 flush function may be used to allow oxygen to pass through the absorber for several seconds to assist drying.
3. Disconnect the absorber and wipe visible moisture from ports and external connections.
4. Do not wash or immerse the absorber in water.

When not in use,

1. leave the scavenging valve in the open position.
2. store the absorber in a clean, dry and well-ventilated area.

Inspect the absorber regularly for cracks, damage, mould, deterioration or leakage.

9. INSPECTION AND REPLACEMENT

The internal INHALE and EXHALE valves are not user-serviceable. Before each use, inspect the absorber for cracks, damage, deterioration, or leakage.

Do not use the absorber if any defect or leakage is present, or if it appears unsuitable for safe operation.

EICKEMEYER® recommends consideration of replacement after 6–12 months of service, depending on frequency of use, environmental conditions, and handling.

Continued use beyond this period may be appropriate if the absorber remains in good physical condition and functions correctly during normal operation.

Important!
Use suitable soda lime; ensure all connections are secure; perform a pre-use leak check; do not use a cracked, damaged or leaking absorber. For appropriately trained veterinary professionals.

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