

# Contents

| Contents   | 2     |
|--|-------|
| Maschine no. / type plate                              | 2     |
| Introduction and limitations                           | 3     |
| Declaration of Conformity                              | 4     |
| Before the first engine start and commissioning        | 5     |
| Technical information                                  | 6-7   |
| General information and use                            |       |
| Warranty Repair, repair and service                    |       |
| Safety and Signage                                     | 9-11  |
| Tips and List of Symbols                               | 11    |
| Safety and User Info                                   | 12-15 |
| Image series and descriptions                          | 16-19 |
| Operating the the machine's exterior and memos         | 20-21 |
| Photo series and description of accessories for GasBox | 22-23 |
| Service Plan and Notes                                 | 24    |
| Troubleshooting and memos                              |       |

|                  | n   2M - Industri   2M - Byg 🛄 🔪 |
|------------------|----------------------------------|
| Гуре:            |                                  |
| Production year: | Serial no.:                      |
| Weight:          | Load:                            |

Nameplate located left side steering console ...

# Introduction and limitations

Thank you for buying 2M GROUP's GasBox for killing and other tasks on the farm

In case of doubt, the Danish Manual is the Original Instructions Manual



Please read instruction manuals before using the appliance Please keep these instructions near the machine, for the user lookup Not readable signs on the machine must be replaced with new



All information, pictures and technical of entries in the User's Guide describes the latest version at time of publication.

Questions, please contact the dealer



Killing of mink - Read the separate "Instructions for the killing of mink"

GasBox, a 100% Danish design, is designed for use in the solution of several tasks on the modern farm with mink, Primarily for killing mink, using the Killing Box. Require separate "Instructions for the killing of mink". with 2M-Group A/S, or download it from our website. GasBox is CE marked.

GasBox is a crafted machine used by an attending operator, the machine runs only when activated by the driver. The machine does not run when the machine is started. Speed variator always have to be in the neutral position at engine start. The machine is designed so that unexpected driving avoided and that the driver can not immediately get to the rotating engine parts - air cooler and strap (ag), or get squashed by the machine.

IMPORTANT INFORMATION BEFORE FIRST START - Strips at the control desk / backdrive belay device MUST BE REMOVED before starting the engine. Read INFO page 5 before the first start

Upon receipt from the supplier or the dealer the freewheeling is on, whereby the machine can be pushed and moved - REMEMBER blocks under all four wheels at every parking



■ Reading the instructions is IMPORTANT. It is assumed that the user before use of the machine, read the operating instructions, since knowledge of the instructions is instrumental in making the best use of the machine, as well as good and safe operation at all times

INTENDED USE (by Professionals) are tasks on mink farms, for example, when minks are being killed in the Killing Box (b) throwing the mink in the mailbox (t), distribution of straw using straw module when puppy-/adult animals to be moved using the trap module, or similar tasks in the production on a mink farm. See the image series and descriptions later in the instructions.

The machine must not be used as a pulling means, used to transport people, or live animals other than fur producing animals on farms. GasBox is intended for outside-door use, or in well-ventilated areas, while with the engine exhaust gas discharged, CO



The machine is powered by a 4-stroke gasoline engine are not designed for use by children and persons with physical disabilities that make outlook

and ability to manage the machine more difficult. GasBox must not be used by persons who lack experience or knowledge, before they have received instruction and guidance

GasBox has electric start, easy to operate, operating safe and stable. It has oscillating rear axle and wide wheel. GasBox is in its design functional and require not much space. It has hydraulic tip for quick unloading, for example, killed animals, for further processing, skinning and pelting

At any misuse of the machine, the 2M-Group A/S's warranty, and all operations with the machine, with or without accessories, in this regard will be without liability to the supplier

Failure to comply service plan maintaines the guarantee, and the machine life is extended



The instructions must follow the machine from the sale to third parties

The instructions are an integral part of the machine



Enjoy your job and day



# **Declaration of Conformity**

2M-Group A/S hereby declares that:

| Machine description: | GasBox                   |
|----------------------|--------------------------|
| Model.:              | 801                      |
| Maschine no.:        | See typeplate on Machine |
| Built year.:         | See typeplate on Machine |

are designed, built and CE marked in accordance with the machine Directive 2006/42 / EC of 17 May 2006, and from 1 July 2013 in accordance with the Executive Order no. 693 of June 10, 2013 about interior design, etc. of machines in which the EU Directive 2006/42 / EC included as Appendix 1.

There is the risk assessment used parts, as well as selection and deselection of relative to, the following harmonized standards:

DS/EN 12100-2011, DS/EN 14121-2, and EN 349 + A1:2010

Manufacturer Adress CVR.no. Phone / Email Homepage : **2M-**Group A/S : Vadehavsvej 3, 6852 Billum, DK : 26 01 44 09 : +45 75259998 / post@2m-group.dk : www.2m-group.dk

Dato: See Usermanual, Version no. on the frontpage

Underskrift: Sign. Simon Madsen Director

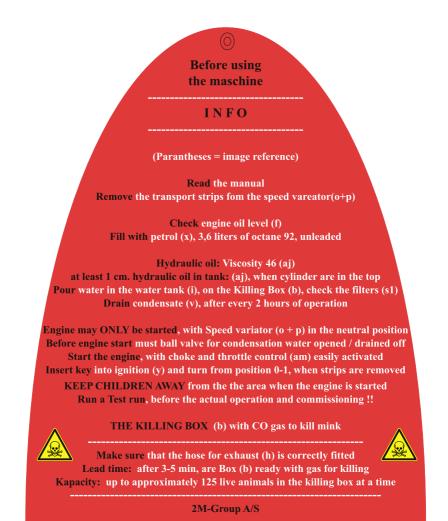
The following employees are authorized to assembly of the technical dossier: Director Simon Madsen together with administrative assistant Arnold Madsen

# **BEFORE THE FIRST STARTING AND PUTTING INTO USE**



Any user of GasBox should read the instruction manual, get instruction and make test runs, with and without load, before commissioning

REMEMBER: GasBox can be used with different accessories



# Technical information

### **Base machine (without accessories)**

- Lenght width height : L2120 x W800 x H1000 mm
   Tare weight / max load capacity : 200 kg / 350 kg

# Base machine, with box for killing

- Lenght width height : L2220 x B750 x H1100 mm (without Postbox)
- Throw height in Postbox : 1250 mm (Postbox, on the box for killing mink)

### Other information on accessories

• Killingbox,

| <ul> <li>weight, lenght, width, height</li> </ul> | : 65 kg, L1750 x B640 H570 mm    |
|---|----------------------------------|
| • Straw Bed,                                      |                                  |
| <ul> <li>weight, lenght, width, height</li> </ul> | : 40 kg, L2030 x B980 x H450 mm  |
| Trap module                                       |                                  |
| <ul> <li>weight, lenght, width, height</li> </ul> | : 42 kg, L2260 x B608 x H436 mm  |
| • Postbox,  |                                  |
| <ul> <li>weight, lenght, width, heigh</li> </ul>  | : 8,5 kg, L490 x B428 x H320 mm. |

# Killing of mink

Refer to the separate "Instructions for the killing of mink" - request from 2M-Group A/S

### **Accessories for GasBox**

Accessories: We refer to options / images on the front and to the separate instructions for the accessories which you should request from 2M-Group A/S

# Identification of the machine

• Identification plate with CE Marking (c) attached to the machine on the side of the control panel (a)

### Wheels

- Front : Ø500x120 Wheel Silver / HF249 / Ø15 holes
   Rear wheel : 12 "Caster Silver Block102
- Tyre pressure

• Weehl drive

Transmission

· Hydraulic oil

· Max speed

• Hydraulic tank (aj)

: 45 psi in the front and rear

- : 2WD (front wheel drive)
- : Hydraulic transaxle
- : 4.6 liters in total hydraulic system
- : Viscosity 46
- : Forward and backward, max, 7.2 km/h at full throttle (am) (for reverse drive, sharpened attention)





# Technical information

# Tip on the let

- Hydraulic cylinder
- Hydraulic olie

# Engine

- Engine (ab)
- Tank / filling (x)
- Start system (y)

### Backdrive belay device

• Safety when reversing (q)

- : Handle to tip (u) of the basic framework, and let with attached devices are located on the control box (w)
- : Transmission Tank (oil from the transmission) V46 (aj)
- : 6,7 HP Gasoline engine
- : 3.6 liter (at least Octane 92 unleaded)
- : Electric start ignition key
- : GasBox is equipped with backdrive belay device (q) a affect device ensure, that the machine quickly runs forward (entrapment risk is reduced when reversing)



• Transport brackets (o + p)

### Battery (4.1)

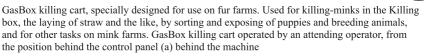
• AGM

- : Upon receipt before engine startup, strips attached on the backdrive belay device (q) during transport, must be removed
- : Closed safe low maintenance : 1 piece 12V 17 / 20Ah



# Generel information

# **Operation - machine with driver going behind the machine**



From the control panel (a) is operated functions, comprising:

- Variable speed by pulling on the right side variator handle (0) driving forward, or
- Variable speed by pulling the left variator handle (p) rear-drive,
- At full throttle on the throttle (am) are speed up to 7.2 km. / Hr. (both directions)
- Tipping, by activation of the handle for tip (u) of the base frame (a + aa)
- Start and stop the engine, the ignition key (y), as well as other techniques (see photo series)
- freewheeling handle (z):
- With the handle pulled out the machine can be moved manually, but will not start

When the variator handles (o + p) are in neutral position, not activated, the machine will not.

The direction of travel is determined by dragging and pulling on the handlebar (the machine has rotating rear wheel and oscillating axle).

GasBox can be used with different equipment in operation - separate use instructions are available

# User information- and signage

Signs on the machine uncovers NOT the need for read the instruction manual

GasBox are motorized and equipped with an AGM battery (af), to use electric start The machine hour meter (y) counts the operating hours at the ignition is switched The battery (af) charges when the machine is in operation, with the engine running - The possible use of charger, recommended charger with max. charging current 4 amp / hours

# Warranty Repair

Warranty repairs performed by prior arrangement with 2M-Group A/S 2M-Group A/S contact on tel .: 0045 75259998 / email: post@2m-group.dk Compliance with the service plan required for warranty repair (keeping warranty in general) The use of non-original spare parts or unauthorized repairs will void the warranty

# **Repair and service**

Annual servicing should be carried out by 2M-Group A/S - Service calls on telephone 75259998 Compliance with the service level guarantee optimum service life and reliability Kontact 2M-Group A/S of contract deals and offers

The engine has rotating parts (ag) under the flap of the engine compartment (d). CAUTION fingers! The engine MUST be stopped by the oil check (f) and filling engine oil (f), and when cover and / or side shields for engine compartment (s) removed for repair and service











Safety -

# Transportation, receipt and unpacking

2M-Group A/S delivers GasBox killing cart on its own wheels, with one key - but lashing during transport For transport and delivery on pallet must be placed chocks under the machine's four wheels

When transporting on pallet, lashed the machine securely so it prevent shifting The machine must only be lifted with lifting equipment when it is lashed on pallet The ignition key is not inserted ignition lock (y) upon delivery of the machine Strips attached to the control board (w) at the speed variator (o + p) must be removed before start (z and y)

Read separately INFO on the "Before the first engine start and putting into service", page 5 Read the instructions (instructions must always be available)

# **Other factors - note before each engine start**

Be aware, read the safety instructions and all instructions before hooking and commissioning Be aware, get the instruction of experienced employee before using GasBox killing cart

Attention, check engine and hydraulic oil level before each use of GasBox

Attention, check (x) the refueling (octane 92)

Attention, check condensate (v) - to be drained at least every 2 hours of operation

Attention, replace the water in the cooler (i+j) after every 4-5 hours of operation (cools the exhaust gas) Attention, replace the water from the water cooler (j) of the exhaust system may contain oil particles Attention, water with oil particles must be abolished environmentally correct

Attention, contact service operator if problems arise with GasBox

Please note that starting point, service and repairs performed by authorized repairer

- Service and repair should never be done with the engine running and with GasBox in operation Be aware, before servicing and repairs carried out accessories must be removed from the base frame (aa)

# Use of GasBox box for killing

### Start with the following:

Fill water from the tap to the cooling tank (i) - (to cool the exhaust gas) - check the smoke filters (s1) Wait for sufficient gas concentration in the killing box, approximately 3-5 minutes

Use CO- & CO2-Tester \* (ap) for measuring the gas concentration is sufficient in the killing box

### Additionally:

Ensure that the hose (h) with exhaust gas is fixed to the killing box Ensure that water cooling tank (i) is replaced every 4 - 5 hours of operation (environmentally correct) Ensure that condensate (v) from the exhaust system is drained every 2 hours of operation (Environmentally safe disposal)

Ensure that hatch in the Postbox (t) on killing case (b) working properly

Top cover and hatch for performing tipping operations of killed animals at Killing box (b) is closed with bracket

#### Then:

Insert the key into the ignition (y) - turn the key from position 0-1 and start Start throw (t) of living mink for killing (up to 125 pcs. Mink at a time) Empty Killing box for killed mink through the front-panel door (hydraulic tipping) potential for conveyor \* - Pay attention to the CO when the box is opened The work of the killing has to be done with the wind in your back Never put your head down in the Killing box, where remnants of gas may be present Clean the Killing box regularly and always after daily use. Check smoke filters (s1) Ensure that signage and securing buckle on Killing box is functional. Replace any defective

\* \* Can be purchased as optional extra with 2M-Group A/S - www.2m-group.dk



Page 9





# Safety 🕤

# CO- & CO2-Tester (AP) - see video on our website

This gauge is designed to measure CO- & CO2 concentration of machines for the killing of mink. Can be used for continuous measurement. When using the unit is given adequate gas concentration in the Killing box during the killing process.

For killing the box is filled, under normal circumstances, with sufficient exhaust gas (CO) in about 3-5 minutes for use.

### **Battery** (1 pcs. 12V 17/20Ah)

GasBox supplying electric start with energy from 1 piece AGM Battery The battery is charged when the engine is running and the machine is in operation Keep children away when the battery is replaced and the service The battery must not disassemble, short circuit, fire or expose to heat above 40 degrees Disposal should be to re-use and recycling centers Risk of fire, explosion, hydrogen gas or burns, by the improper disposal

More concerning batteries:

- The possible use of charger recommended max charging current 4 amps
- New battery can be ordered from the manufacturer, 2M-Group A/S
- Waste batteries must be recycled and, as stated, to a recycling / recycling center

# Sale and transfer

**2M**-Group A/S draws attention to that the operating instructions must follow the machine, also in case of sale or transfer to third person

# Disposal

Environmentally correct destruction must be carried out in accordance with regulations of the country in the machine scrapped.

# Noice

Airborne noise<sup>.</sup> A-weighted metering: Normal Operation: Ear protection:

A-weighted sound pressure level exceeds 70dB Made with decibel meters During operation, the machine close to the noise up to 79 dB Ear protection should be used during operation

# Vibrations

Weighted arm-hand level of 3-4 m/s<sup>2</sup> max Weighted arm-hand level 2 m/s<sup>2</sup> simulated operational

# Hot surfaces

The exhaust (ad) in the engine compartment keeps running hot. Touch therefore never the exhaust during operation as this could cause a burn.















Safety 🕤



# Tips for safe driving with GasBox

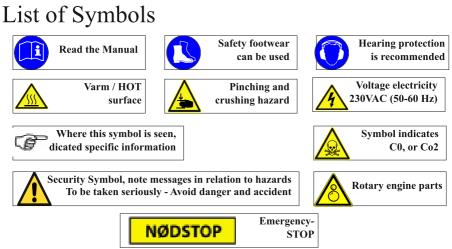
Children and people with physical reduced mobility should not use the machine Avoid body parts under the base frame (a + aa) - is deadly dangerous and bodily injury - Avoid placing hands in between console and mounted accessories (when tipped) Wear appropriate clothing - / shoes and other safety equipment, etc. Verify correct mounting and attachment of accessories, on the frame (a + aa) GasBox has no brakes Can set running on sloping land when coasting (z) is active (pulled out) Operating GasBox killing cart should always be performed with the user behind the control panel (a) Driving with GasBox should never happen · When loading / unloading and, · If people are staying on the side or in front of GasBox and · If properly visibility around GasBox, of operator can not be preserved Drive only on plain bearing surface (avoid loose sand and the like) Charge the battery by charger this should be done dry and warm Electric start only works with charged and operable battery (af) GasBox is not equipped with brakes, so remember wedges or blocks under the wheels when parking Do not position "coasting" (ai) when the machine is "parked" Never use the GasBox killing cart as pulling means Always be alert during operation - keep focus - mobile phone may not be used Periodically check the emergency stop (s) and back drive device (q) See "Guidelines for the killing of minks" which you can order or download at 2M-Group A/S Read the manual

#### Service and interval

Service on the machine must be performed by the supplier, or authorized repairer - see service plan Prior to service and repair is performed, MUST accessories be removed from the base frame (a + aa)

#### **Troubleshooting malfunctions**

Authorized service center should be contacted if the machine is not working properly, and the error can not be corrected





# Safety and User Info



# Transport

• During any form of transportation, as well as operation, the basic frame (a + aa) be immersed on chassis, so the hydraulic cylinder is down

• Transportation must be done on the machine's own wheels, or with the GasBox and lashed out at pallet

• Do not lift the machine with hooks and straps, or by truck, without being firmly fitted and secured to pallet

• Carrier or transporter must ensure that the equipment is securely tied during transport, with blocks under all four wheels

# Before using the machine

• When GasBox killing cart out of the pallet, upon receipt, take care of it from tipping over

- People can be trapped and being crushed

- It may cause serious injury

NOTE the machine has no brakes. Can be pushed when coasting (z) is pulled out (active)\_

• This motorized product may only be used for the purposes that are consistent with the stated instructions

• Users operating the machine shall first apply reading the instructions, try the machine in predictable operating situations, and receive adequate instruction.

• Users must be instructed in how accessories (equipment) installed and removed in the machine base frame. Request or download specific instructions regarding accessories.

• Recommendation:

New users should always test machine where no unauthorized persons are in the area

• The machine must only be used by people over the age of 18 after reading the instructions and received instruction and guidance

• Hydraulic oil level (aj) can be measured with a stick or similar, lowered into the tank (f) when the cylinder (g) are in the top - there must be measurable minimun 1 cm. V46-oil in the tank (aj)

• 2M-Group A/S draw the user's attention to the precautions in this manual

# Operation

Electric start working when the battery (of) is charged and the fuse for ignition lock (y) is OK
Engine can also be started using the recoil starter (k), but beware arm and back when using recoil

• When driving, hands are placed on the handlebars, within brackets (security) on the right and left sides (avoid crushing of hands and fingers)

• Cables, batteries and wires, especially in the engine compartment must be kept free of heating elements, water, acid and other liquids

• The machine should be kept clean and free of oil, dust and dirt that may prevent safe use (safety)

• The machine must not be used by children and people affected by drugs and / or alcohol, or of reduced mobility who may have difficulty with control, management and oversight during operation

• Please note that any visible cables and wires must be attached with strips - check regularly, and during service and repair

• Speed variator (o + p) and handle to tip (u) of the base frame (a + aa) must be at engine start be neutral (ie, not activated)

• If the machine moves with variatorarm in neutral position, see "Troubleshooting" at the end of the instructions

 $\bullet$  When the speed variator is activated (o + p), the machine moves forward or backward

• Speed may varies from 0 - 7,2 km/t.

• Speed must always be tailored environment. Be careful when driving on uneven running surfaces

• Reversing should always be done at low speeds, especially when driving in the vicinity of buildings and similar - stay alert

• Avoid too much gas (am) and hold in this manner suitable low speed when driving backwards. Caution activation of the left speed variator (o)

# Safety and User Info

• Pay particular attention to children and the environment by starting the machine

• Engine start / stop with the key inserted ignition lock (y), even if the start is done with recoil (k)

• Starting the engine .....: Chocker (am) must be activated, give a little gas (am) and start with the key turned 0-1, even if the recoil is used (k)

• When the machine is running forward or backward, the basic framework (a + aa) with accessories to be tipped down

• When parking and unattended must be placed chocks under the wheels. Coasting (z) must not be active - not to be drawn out of its position

• Emergency stop (r). Be aware of the effect and position - test regularly machine emergency

• Variable speed control: The machine stops / slows quickly when variator lever (o + p) released quickly - release the tension in the variator-arms slowly, for slower speed

• STOP: The machine stops / slows down rapidly when the variator lever (o + p) released quickly release the tension in the variator lever for stop, slow

• ENVIRONMENT: ALWAYS keep an eye on the terrain and surroundings when using the machine

• Animals and people can be impacted / run over - ensure sufficient and uninterrupted view

• EXTRA care needed when the machine is backed

• Rear-drive-securing device (q) ensure forward movement by accident when activated when the engine is started

• HANDS ON HANDLEBAR: Hands should always be placed during operation within the protective device on the handlebars when driving

# **Repair og service**

• Any loose nuts and bolts tightened. Check tire pressure and gas hose (h)

• Only authorized repairers should repair and service the machine



• Only savvy professionals should have access to the engine compartment (d), motor (ab) transaxle (ac) and hydraulic system (ak), except for external filling of hydraulic oil (aj), with the base frame tipped down

• Remove ALWAYS key from the ignition (y) prior to service and repair

• Service and repair should only be performed by professional personnel with knowledge of gasoline engines and hydraulic systems

• Use the correct tool for all kinds of repairs and services

• Stop the engine (key off the ignition) intervention on the engine and hydraulic system

• Do not insert fingers into the hole by the dipstick with the engine running - there are rotating engine parts (can cloak fingers)!

# Hazards and risks

• Charging the battery (of) with charger: Charge must be dry and warm, not in moist areas - turn off line voltage at source, often by wall socket or by relay, before the poles removed from the battery.

- Contact an authorized service center for servicing and repair the machine when the motor does not work after trying the troubleshooting
- The machine is powered by a gasoline engine, but is not designed to be used by children!
- Do not touch the battery while it is being charged while it is connected to the mains (230V AC)
- People need to keep an appropriate distance when the machine is raised in relation to transport, or on its own wheels loading it on trucks

• Unauthorised people must not staying in the area where GasBox used

# Safety and User Info

• People must not remain on the machine with the engine running and during operation or driving

• Do not leave the machine with the key inserted ignition lock (y) and / or with base frame (a + aa) tipped up

• The machine may only be operated behind the control panel (a). Take care when reversing (can be seriously injured)

• The machine should never be left and / or parked on sloping land, with no security at all four wheels - push free-wheeling lever (z) in!

• The battery must not come near open flame or excessive heat, as this may result in an explosion

• Be aware that body parts can be clamped between accessories, on-mounted base frame (a + aa), and the console front (w). The space of only 25mm (aa)

• Be aware that body parts can be clamped between the base frame and chassis by nedtipning. Intervals of less than 30mm, with sunken base frame (aa)

• Machinery (d) and internal console (a) is enclosed spaces that the user should only be opened by appointment with the repair and / or producer, or when changing spark plugs and air filter

• EXTRA care necessary when driving on anything but smooth and solid surface

• Do not drive over uneven and sloping land (terrain> 5 degrees)

• The machine could tip over, with or without load, on uneven / sloping land

• Be particularly vigilant when driving on sloping land - you can lose control

• Never drive near the pits, there will be danger of falling

• Reversing general: Can stumble and get caught. Always be aware of all driving range and terrain

• Hydraulic system includes among others. tubes with high fluid pressure (hydraulic oil)

• High pressure (hydraulic) can cause bodily harm, by rupture or hydraulic hoses. Seek immediate medical attention if people get hurt!

• There should not be run with acid or other hazardous fluids in / on mounted attachments, or on the machine base frame (a + aa)

• Utilsigtet personophold i operatør-området, kan forårsage alvorlige uheld

• PAY SPECIAL attention: NEVER place hands / arms between the dump body / mounted accessories and console (a), only 25 mm

• Entrapment Hazard: The machine can tip over if unloading is done by while driving

# Your attention !

• 2M-Group A/S draw your attention to ALL safety precautions and instructions in its entirety!

# Particular risk

• Base frame is tipped up and down by the hydraulic system under high pressure

• Body parts can be crushed and the damage can be very serious and, at worst, one can die.

• The dangers are always present in any of the machine's life stages, especially when using dump trucks, running backwards

• Service must be respected and repair must be done without delay, when identified irregular operation, including failure of the hydraulic system

# Scrapping of the machine

D

Please note that the machine contains environmentally hazardous machine parts, oils etc. to be disposed in accordance with applicable environmental legislation

• The oils are very harmful for the environment and must be disposed of in accordance with local environmental regulations

• Contact your nearest recycling station for questions and advice about safe destruction and disposal



# Safety and User Info

# Accessories

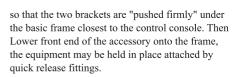
• GasBox is used using various accessories. See images series

• Se særskilt "Tilbehørs-Datablade" for nærmere beskrivelser, billeder og vejled-ninger for tilbehør og montage deraf

# Mounting on base frame

• Killing Box, straw module trap module is easily mounted on GasBox's base frame - Quick instructions are here - BEWARE, fingers and hands, which may be crushed!

1) Slide the box along the base frame



2) Removing the box. The box lifted clear of the quick-change fittings on the bottom of the front edge. Gently lift the front edge, pull the box back and remove it from the base frame.

3) Installation and Removal is easier when two people perform the task jointly, due to weight and volume of accessories. Always install with an empty box.

# -Electrical circuit diagram Zoom in for reading Request to PDF version

# Other memos

READ instructions: The instructions must be be placed on a user known place. It is assumed that the user read the instructions



Prior to any commencement of operation hydraulic oil level (aj) be checked

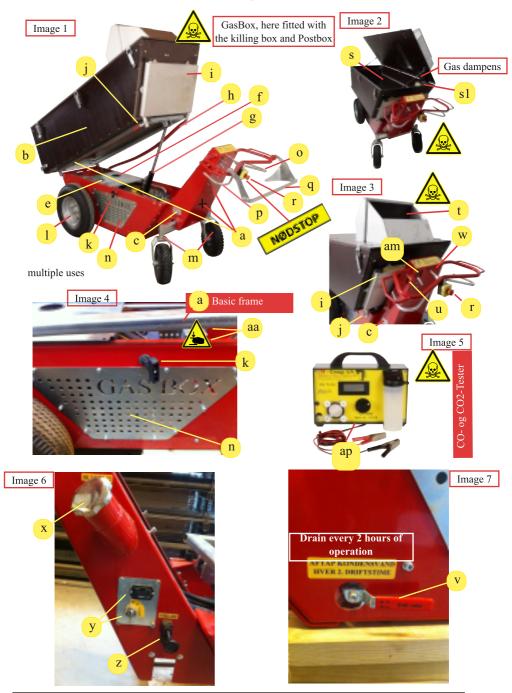
Do not overload. See maximum load capacity of the machine's type plate, and thereby avoid serious injury to body and other legmesdele





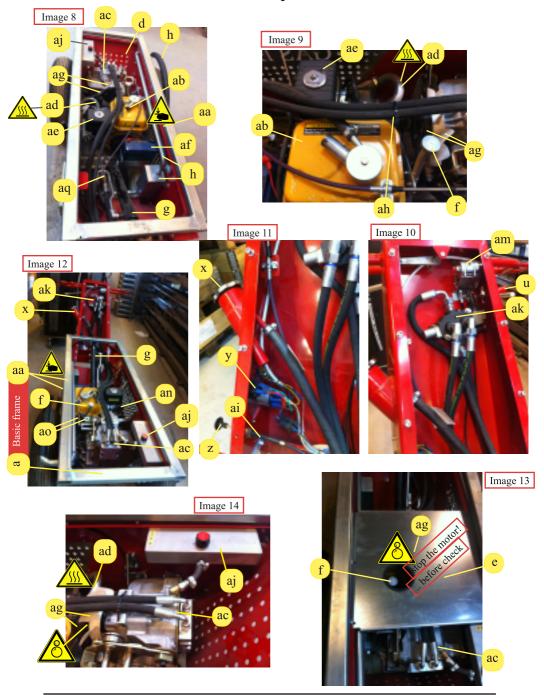


#### Image Descriptions A - Z Notat - a) basic machine with a console and base frame (GasBox) Conveyor can be purchased as an - b) killing box with hatch for unloading (delivered with GasBox) optional extra (for transport to drum) - C) label with the year of production, etc. - See Image G - D) engine compartment - E) cover plate over the engine compartment - F) Dipstick: Check engine oil level - min. of 1 cm. on the dipstick - G) hydraulic cylinder for the tip of the base frame - H) exhaust system - / gas, killing box with smoke filter (s!) - also filters out soot in the smoke filter (s1) - I) water tank for permeation (cooling) of exhaust gas - J) drain cock to replace the water (every 4 - 5 hours of operation) - K) recoil (if electric start does not work) - L) wheels ø500x120 - drive wheels - M) 12" fork wheel w/oscillating shaft (all-wheel tire pressure 45 psi - N) side shields for engine compartment - O) speed variator - forward drive - P) speed variator - rear-drive - Q) device for reversing (so that the machine moves forward) - R) emergency stop (stop motor and the machine's propulsion) - S) open top door to the killing box - S1) - smoke filters in the killing box (see Service Plan) - T) Postbox with trapdoor to throw living mink for killing - U) handles for tip of the base frame and let (up and down) - W) control desk nameplate / info - V) drain the condensate from the box (h) every 2 hours of operation - X) filling petrol (unleaded octane 92) - Y) electric starter / ignition fuse + hour meter (when switched on) - Z) freewheel lever (pulled out, the machine can be pushed/pulled) **Image Descriptions AA - AN** - aa) entrapment hazard - CAUTION throughout the base frame - ab) engine to GasBox (fuel tank) - ac) transaxle - hydraulic motor - ad) exhaust (becomes extremely hot) - ae) air filter in the carburator - af) battery for electric start - ag) rotating air cooler and drive belt - beware of fingers - ah) strips the hose, etc.. - Must be belted in engine compartment - 1 cm oil in the hydraulic tank, with - ai) coasting cable (inside the console) cylinder (g) in top - aj) hydraulic oil tank with filling - V46, min. 1 cm. oil in the tank - ak) hydraulics for the tip and driving back and forth (inside look) am) chocke and gas for motor revolution - an) spark plugs - ao) Rod Cable for coasting and adjusting spring - ap) CO- and CO2 -Tester - (control gas concentration) - CO- and C02 -Tester is optional extras aq) Ball valve for blocking the hydraulic cylinder - when the tip of GasBox do not is used



2M-Group | Tlf. 75 25 99 98 | www.2m-group.dk | post@2m-group.dk

#### Image Descriptions A - Z Notat - a) basic machine with a console and base frame (GasBox) Conveyor can be purchased as an - b) killing box with hatch for unloading (delivered with GasBox) optional extra (for transport to drum) - C) label with the year of production, etc. - See Image G - D) engine compartment - E) cover plate over the engine compartment - F) Dipstick: Check engine oil level - min. of 1 cm. on the dipstick - G) hydraulic cylinder for the tip of the base frame - H) exhaust system - / gas, killing box with smoke filter (s!) - also filters out soot in the smoke filter (s1) - I) water tank for permeation (cooling) of exhaust gas - J) drain cock to replace the water (every 4 - 5 hours of operation) - K) recoil (if electric start does not work) - L) wheels ø500x120 - drive wheels - M) 12" fork wheel w/oscillating shaft (all-wheel tire pressure 45 psi - N) side shields for engine compartment - O) speed variator - forward drive - P) speed variator - rear-drive - Q) device for reversing (so that the machine moves forward) - R) emergency stop (stop motor and the machine's propulsion) - S) open top door to the killing box - S1) - smoke filters in the killing box (see Service Plan) - T) Postbox with trapdoor to throw living mink for killing - U) handles for tip of the base frame and let (up and down) - W) control desk nameplate / info - V) drain the condensate from the box (h) every 2 hours of operation - X) filling petrol (unleaded octane 92) - Y) electric starter / ignition fuse + hour meter (when switched on) - Z) freewheel lever (pulled out, the machine can be pushed/pulled) **Image Descriptions AA - AN** - aa) entrapment hazard - CAUTION throughout the base frame - ab) engine to GasBox (fuel tank) - ac) transaxle - hydraulic motor - ad) exhaust (becomes extremely hot) - ae) air filter in the carburator - af) battery for electric start - ag) rotating air cooler and drive belt - beware of fingers - ah) strips the hose, etc.. - Must be belted in engine compartment - 1 cm oil in the hydraulic tank, with - ai) coasting cable (inside the console) cylinder (g) in top - aj) hydraulic oil tank with filling - V46, min. 1 cm. oil in the tank - ak) hydraulics for the tip and driving back and forth (inside look) am) chocke and gas for motor revolution - an) spark plugs - ao) Rod Cable for coasting and adjusting spring - ap) CO- and CO2 -Tester - (control gas concentration) - CO- and C02 -Tester is optional extras aq) Ball valve for blocking the hydraulic cylinder - when the tip of GasBox do not is used



2M-Group | Tlf. 75 25 99 98 | www.2m-group.dk | post@2m-group.dk

# Operation / exterior of the machine + engine compartment

# Image 1 og 4

The machine is started with the key in the ignition (y) - exit 0 > 1 (note the hour meter that counts the engine operating hours)

The machine must when driving and tipover be operated behind the control console (w) - Read the instruction manual and see signs on the machine

It is assumed that the machine and the motor been made running order, according to the INFO operation manual start - see page 5

The control panel consists of speed variator (o and p) for driving device for driving backwards (q) and emergency stop (s), handle tip (u), choke and gas (am) (see also manage security on the handlebars)

Drag Wheels (l), and fork wheel with oscillating rear axle absorbs shocks and bumps when driving in the terrain

The basic framework (a and aa) has space for accessories, here with box for killing mink (b). Base frame / hydraulikcyl inner (g) is raised and lowered with handle for tipover (u)

Stricter attention when / if panel (e) of the engine compartment (d) dismounted in order servicing Service and repair should be performed by qualified personnel based on safe operation and The water in the water tank (i) for permeation of gases must be replaced through the drain cock (j) every 4 - 5 hours of operation. The water must be collected and removed environmentally friendly (oil particles)

# Image 2

Killing The box (s) open for ventilation and cleaning, remember, control smoke filter (s1)

# Image 3

Box for killing mink (b) with attached Postbox (t) with hatch for throw mink

Image 3 shows the control console (w) with emergency stop (s) - here without device for reversing which can be found on the machine CE Mark / type plate (c) on the control console, Information Signage (w)

# Image 5

At the start and after every 2 hours of operation, condensate must be drained from the exhaust  $\left(v\right)$ 

# Image 6

Petrol Filling octane 92 (x), Ignition, with key Electric Start (y), Coasting lever (z) pulled out and the machine can then be pushed

# Image 7 og 11 - 13

Be aware. Engine compartment (d) with cover plate (s). The cover plate depreciation shield key areas and the rotating engine parts in the machine's engine compartment.

Common user / operation service includes:

- Checking and topping up the engine oil (f)
- Checking and topping up the hydraulic oil (aj)
- Change the air filter (ae)
- Replace belt (ag) by rotating air cooler (ag)
- Cleaning and change of spark plugs (an)
- General cleaning of the machine
- Buckle and fasten screws, bolts, cables
- Regulate adjustable spring by rod cable (ao)

Always stop the engine and remove the key in the ignition, before servicing and repairs be carried out

Cover plate (s), and possible side plates (k) when changing the air filter, spark plugs and belt removed with allen key - Remember to refit before engine restarts

Annual inspection is recommended performed by an authorized repairer for safe operation and warranty on the motor and machine

# Image 8

The motor (different models) can be replaced. The engine (ab) is located under the cover plate (s) to the engine compartment, for shielding of eg hot surfaces (ad) and strongly rotating engine parts - air cooler and strap (ag)

# Image 9 og 10

Cover at steering console can be removed with umbraco key. Disassembly should only be performed by any user to change a fuse in the ignition (y) - engine must be stopped

|              | — <u>2M-</u> Group A/S | Page 21 |  |
|--------------|------------------------|---------|--|
| Own Comments |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |
|              |                        |         |  |

# **GasBox - Accessories & Options**

... GasBox, killing box and hatch in front for unloading killed mink



### **Options with GasBox**

- Killing box with throw for killing mink
- Postbox, to throw living mink
- Carbon monoxide Killing with CO by means of 4-stroke engine
- CO- and CO2 -Tester for measurement of gases
- Straw module for mini big bales and more
- Trap Module for animal movement
- Variable speed from 0 to 7.2 km / h
- Reliable, popular with easy operation

GasBox killing vehicle has been designed and built to operate with different accessories depending on the tasks to be carried out on the farm, such as the killing of mink, movement of animals, laying of straw, testing of gases inside the killing boxes and GasUnit, over the farm in different seasons in a year of operation

### Image A GasBox killing box

- A GasBox killing box with tipped base frame, with the box for killing mink and open hatch in front for unloading of killed Mink, using the hydraulic tip. The hatch opens when killed mink are unloaded for further processing, for transportation to "conveyor belt and drum"
- A Be aware, the possibility of crushing between the base frame and chassis
- A Be aware, the possibility of crushing between consoles and accessories when base frame is tipped down

# Image B, GasBox for driver, walking behind the machine

- B GasBox have oscillating rear axle (under the console), for easy and safe maneuvering (in any direction) during operation
- B GasBox operated by an driver behind the steering console (run, let there is tipped and more) speed 0 7.2 km/H

#### Image C, GasBox with Postbox

C Mailbox, by inserting hatch for live animals for killing, here attached killing box on GasBox. Also shows GasBox with control console

#### Image D, GasBox with trap module

- D GasBox with trap module. Accessories can be mounted and dismounted easily, with fittings attached to the sides and directly on GasBox base frame
- D Petrol Filling (x) is at GasBox right side of the steering console, the same side with the ignition (y) for machine Key for electric start

#### Image E, GasBox straw let

- E Straw box mounted on GasBox. Used for various operational tasks on the farm, eg the establishment of straw for nest boxes and mink cages
- E Lem in front of killing box for quick unloading of cargo from straw box. Keep closed with brackets when not is used
- E Type plate and CE mark, the left side of the steering console

### Image F, CO- og CO2-Tester

- F CO- and CO2 -Tester. Can be used as shown in a separate video on www.2m-mink.dk to test gases in killing units (killing boxes and GasUnits)
- F The tester / meter is portable and has in-built sound and light alarm, display that indicates when the gas concentration is below the preset
- F CO- and CO2 -Tester (optional) can be mounted directly on the killing box

#### Image G, Conveyor

- G Conveyor used for various tasks in mink farm, including for transport of killed mink, from killing the box for the drum, in connection with the pelting of mink
- G Helps promote and facilitate the killing process and preparation for skinning of mink. The conveyor belt is suitable for small and large fur farms and on mink farms

#### **Options with GasBox:**

Ask for special instructions on accessories

# <u>2M-Group A/S</u>

Serviceplan- / Schedule Maintenance and service is required, see below

Maintenance and service is required, see below

Before the maintenance and / or repair MUST accessories removed from the base frame (a + aa) and the base frame must be lowered. Annual service optimizes performance and reliability, and should be performed by the dealer or manufacturer 2M-Group A/S:

optimizes performance and reliability, and should be performed by the deor manufacturer 2M-Group A/S: Fill with plain water by daily operations start - drain at day's end (frost)

Check the oil level engine

Check the oil level hydraulic tank

Control and test device for reversing for forward drive

Check / replace smoke filter

Oil Change engine

Replace spark plug

Check the air filter

Hydraulic oil change



For warranty repair service must be respected. Documentation may be required. 2M-Group A/S Signs on the machine must be replaced if they become non-readable

|   | daily            | i  |
|---|------------------|----|
|   | daily            | f  |
|   | daily            | aj |
|   | daily            | q  |
| X | daily/<br>20 t.  | s1 |
| X | 20 t./<br>100 t. | f  |
| X | 50 t.            | an |
|   | 50 t.            | ae |
| X | 200 t.           | aj |



interval

Ref.

annual

# Troubleshooting

Be aware, read above under "Other factors - stay alert before each engine start"

#### The starter will not run!

Check the battery power - turn the ignition key (y) 0-1 (starter must operate for electric start) - Otherwise try recoil (k) !! Check fuses - inside the steering console by ignition / starter (y) Kontact 2M-Group A/S

#### The engine will not start!

Check the cooler (i) may be frozen Check to see if the engine can be started with recoil ... Check the spark plug "spark" Check the oil level in the engine - the lack of oil will stop the engine (Oil Alert) Check filling petrol (octane 92) Empty swim -house in the carburetor for gasoline and rinse any dirt Check for proper operation of gas and choke Check the condensate (v) - to be drained from the box at least every 2 hours of operation Kontact 2M-Group A/S

#### The engine is running fine, but the machine can not run or tip!

Is free-running cable (z) loosened (i.e. freewheel lever (z) pulled out)? Stop the engine and check the oil level in the hydraulic oil tank (aj) Stop the engine. Check the V-belt (ag) between the engine and transaxle (under bracket cover for the engine compartment Kontact 2M-Group A/S

Attention, replace plain water in the water cooler (i + j) after every 4 - 5 hours of operation Attention, water which is drained from the water cooler (j) of the exhaust system may contain oil particles Attention, water with oil particles to be eliminated environmentally friendly

#### The machine runs itself, with variator arms in neutral

Check and adjust a spring (ao) by rod cable on gearbox Lubricate bearings at rod cable (ao) on gearbox Kontact 2M-Group A/S

Attention, contact service operator if problems arise with GasBox and book service Attention, service and repair should be performed by authorized repair Service and repairs may be carried out with the engine running and with GasBox in operation Be aware, before servicing and repairs carried out accessories must be removed from the base frame (aa)

# CO-/CO2-Tester

This gauge is designed to measure the CO- or CO2 concentration of machines for killing mink. Can be used for continuous measurement. Using the apparatus to ensure sufficient concentration of gas in the killing box, during the killing process.

The box for killing mink is normally filled with sufficient exhaust gas (CO) in about 3-5 min, and then ready for use.



|          | 2M-Group A/S | Page 26 |
|----------|--------------|---------|
| Comments |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |

|          | 2M-Group A/S | Page 27 |
|----------|--------------|---------|
| Comments |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |
|          |              |         |

#### Link to Homepage: www.2m-group.dk

