

Exhaust Drainage System

Manual Tumbler Operation Instruction



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1. Technical data 1. Technical data

Weights

Short reel:

without hose: 23 kg (51 lbs)

with hose and nozzle: 30-40 kg (66-82 lbs)

Wide reel:

without hose: 31 kg (68 lbs)

with hose and nozzle: 40-50 kg (82-110 lbs)

Recommended mounting height

Maximum 6m (20 ft)

Duct connection

160mm (6.3 in)

Recommended airflows

Cars, 75-100mm (3-4) hose: 400-600m³/h (470-700 cfm)

Turcks, 125-150 mm (5-6) hose: 800-1200m³/h (470-700 cfm)

Operating temperature

-10℃ to +50℃ (15 °F to 120 °F) Humidity: < 75% Height above sea level: < 5000m

Hose temperature resistance

Hose NR-CP or NR-B

150 °C (300 °F) continuously

Hose NFE-3:

300 °C (570 °F) continuously

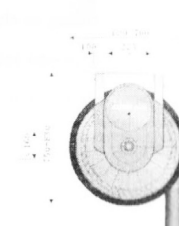
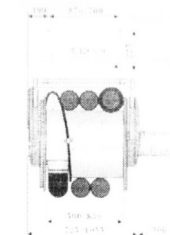
Noise level

Measured according to ISO 11201, < 70 (A)

Material recycling

Reels without hose: 100% weight-%

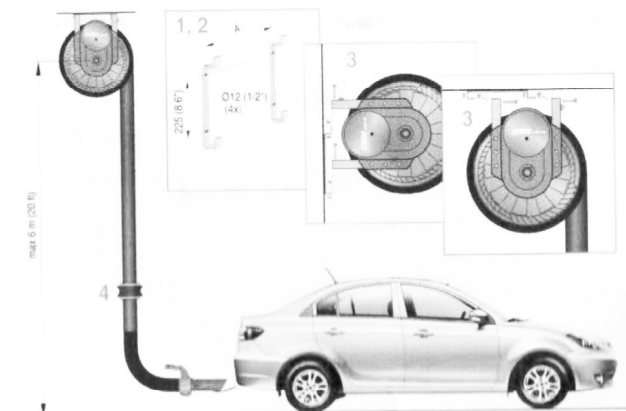
2. Dimensions



3. Mounting instruction

Maximum mounting height for the reel is 6m (see picture).

- (1) Make sure that the surface, on which to mount the reel, is level. Drill 4 holes, using the hole template which comes in the package.
- (2) Fit the mounting brackets in such a way that will make the reel hanging horizontally. Ensure that suitable fixing bolts are used considering the ceiling or wall construction material. The bolts must each stand a tractive force of minimum 6500N.
- (3) Use approved lifting equipment to lift the reel. Fasten the reel in the brackets.
- (4) Fit the hose stop on the hose in such position that the nozzle stops in a desired position when the hose is recoiled.
- (5) All installation, repair and maintenance work must be carried out by qualified personnel using only original spare parts.



Safety lock

WARNING !

Risk of personal injury.

The reel is equipped with a safety lock which should be used during service or repair. Work on the reel, for example when mounting or changing the hose.

NB! When changing the spring the spring power must be completely neutralized (instruction is delivered together with the spare part spring)

Mounting the house

When the reel has been mounted on wall or ceiling, the hose is mounted in the following way (concerning reels delivered without hose only):

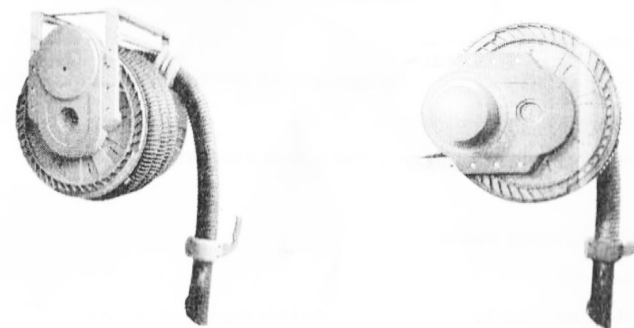
1. Check that the safety lock is pressed down.
2. Fasten the hose with a hose clip on the connecting piece inside the drum.
3. Pull out the safety lock.
4. Let the hose only form one layer on the drum.
5. Fit the hose stop on the hose in such position that the nozzle stops in a desired position when the hose is recoiled.
6. Fit the nozzle.

4. Ratchet device

The reel is fitted with a ratchet device which locks the hose in the desired position.

The ratchet is released when the hose is pulled out slightly further and the hose is then automatically recoiled.

The ratchet is factory set for ceiling mounting of the reel (position A). When mounting the reel on wall, the ratchet must be moved from position A to B. N.B. The ratchet must, after it has been mounted, point towards the centre of the reel.

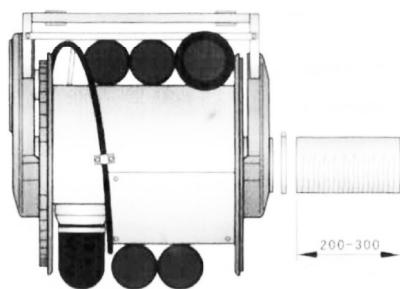


5.Connection duct

The connection hose supplied with the reel, should be used for connecting the reel to duct systems and a central fan. NB! The duct must be fitted with hose clips. Do not drill or fit with screws.

Fan positioning

A suitable fan can be selected from the CARBAO fan range. To avoid leakage in the ducting system the fan should be positioned outdoors or as near the duct outlet in the room as possible



6.Adjustment of spring tension

The reel has factory set basic spring tension which after mounting the reel with house and nozzle could need an adjustment

Note: Do not tension the spring more than is needed to exactly roll the hose

Increasing the spring tension

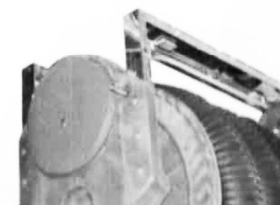
(mounted reel):

1. Make sure that the hose is in place and fully recoiled on the reel.
 2. Use the socket head cap spanner which comes with the reel. Turn in the direction of the arrow as shown in the picture
 3. Tension the spring in small steps and test the coiling operation gradually
- Check that the hose can be fully uncoiled without stretching the spring to its maximum

Decreasing the spring tension

(mounted reel):

1. Make sure that the hose is in place and fully recoiled on the reel.
2. Push the safety catch(A)
3. Remove the house stop and nozzle
4. Remove 1 coil of hose
5. Refit the hose stop and nozzle
6. Draw out the safety catch(A)



7.Applications

CARBAO Exhaust Reel is designed for stationary use only and can, depending on hose diameter, be connected to cars, trucks or other vehicles with similar motor sizes.

The following air flows are recommended.

Reels for cars

75/100 mm(3/4)hose:

400-600m³/h(235-350cfm)

Reels for trucks:

125/150 mm(5/6)hose:

800-1200m³/h(470-700 cfm)

WARNING!

Risk of explosion!

The reel must not be used for other purposes than exhaust extraction

- (5) Gable, swivel side
- (6) Gable, spring side
- (8) Spring
- (9) Spring hub, complete
- (10) Spring side, complete
- (11) Bearing
- (12) Bearing incl. damper
- (13) Suspension brackets, pair
- (14) Ratchet device
- (15) Connecting hose
- (16) Rubber cover/Hose clip
- (17) Hose guide
- (18) Hose stop
- (19) Hose

11. Accessories

Hoses/Nozzles

The Carbao range of hoses and nozzles can meet most different requirements.

Fans

A suitable fan can be selected from the Carbao N or CA series range.

Fan bracket

For mounting the fan on the reel.

On/off switch

Controls the fan when the hose is coiled an uncoiled.

Fan control devices

Transformer

For fan operation.

Automatic damper

Regarding accessories, please contact a Carbao representative for brochures and technical advice.