



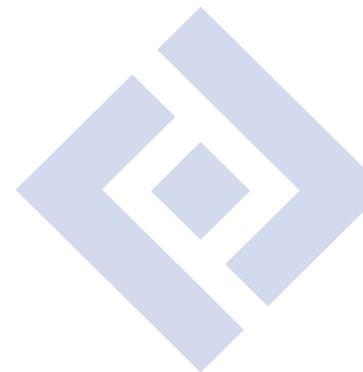
**RAVO**  
FAYAT GROUP

# RAVO 5 iSeries Option Book North-America



[ravo.fayat.com](http://ravo.fayat.com)

# RAVO 5 iSERIES OPTION BOOK



## INTRODUCTION

This option book is a guideline for choosing options on the RAVO 5 iSeries. Most of the available options are included, but should you require any other optional equipment you can always send a request to the RAVO Sales desk (Your Export Sales Manager or Sales Support Contact). Please submit with this request a short business plan for this option (expected costs, numbers, market potential, etc.).

### Factory options

All the options in this book are factory options, which means that they are installed at the machine in the production line.

### Guidelines ordering

Since most options require special attention when building the sweeper you are kindly requested to keep in mind the following guidelines when ordering a sweeper with options:

#### 12 weeks before delivery date

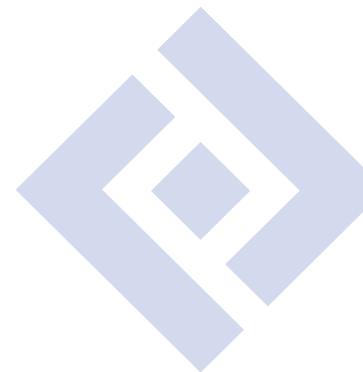
- Container
- Speed

#### 10 weeks before delivery date

- All other options

Should you have any other requirements or requests, don't hesitate to ask the RAVO Sales desk.

# RAVO 5 iSERIES OPTION BOOK



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### OPTION BOOK DETAILS

**RAVO 5 iSeries**  
Version 2.0  
Release date: 01-07-2016

All technical details and pictures  
in this list are subject to change  
without prior notice



# 1 BASIC SWEEPER 5 iSeries

**Basic Sweeper 5 iSeries in 26 MPH including Tier 3 engine with tipping container and wide wall tires in the rear. This is the basis to start configuring your sweeper. To start configuring your sweeper you always need to select this option. This is the standard 5 iSeries without any options. This means that the sweeper has:**

## Iveco Tier 3 engine

This IVECO engine in Tier 3 / Stage III standard is an industrial engine, used for road construction machines and is very robust. It does not need Ad Blue.

### Characteristics

- 4 Cylinders in line diesel cycle
- Max power 141 HP @ 2200 rpm
- Max torque 413 lb. ft. @ 1600 rpm
- Minimum starting temperature without auxiliaries 5° F
- Dry weight (standard configuration) 904 lbs.

## Tipping Container

This container is suitable for any sweeping job. Its size and compaction rate ensure that the capacity is enough for normal sweeping, but also suitable for leaf season, road construction, etc.

### Characteristics

- Tipping angle of 58 °
- Tipping height of 34 inch
- Gross capacity of 6.5 Yard<sup>3</sup>
- Net capacity of 6 Yard<sup>3</sup> (According to DIN 05-55-624-02-A)
- Container side plates and interior, bottom and roof are made of stainless steel
- Rear door and inner fan housing are made of Corten steel and are painted
- Outer fan housing is made of aluminium and painted in grey

*N.B. This container is the biggest available in the market and can be an excellent knock out in tenders*

## Other standard items

- Travel speed of 25 MPH
- 159 litre water tank
- Hydro pneumatic suspension in front
- Bridgestone tires in front and Wide Wall Tires in rear
- Drum brakes in front, disc brakes in rear
- Inspection door retainers stainless steel
- Gutter brush angle adjustment right
- Step mounted on brush system
- 12 V plug inside the cabin
- Coated suction line & suspended swivel wheel
- LED work light package (brushes, cabin & container)
- Suction nozzle camera & second monitor
- Rear view camera
- RAVO's unique maintenance friendly brush system :
  - 2 brushes of 35 inch (wide sweeping)
  - Sweeping width of 95 inch
- Dual tires
- License plate holder
- Climate control
- Steel cover in rear door
- Easy liftable grid



**Picture:** RAVO 5 iSeries in 26 MPH configuration with tipping container



## 3 CONTAINERS

There are two kinds of containers available, the earlier mentioned tipping container and the container dump. The containers have a robust interior and a modern exterior made out of a scratch resistant plastic called ABS. The RAVO 5 iSeries is standard equipped with a tipping container and can optionally be equipped with a container dump.

### Option Number

3.1 Container Dump

#### 3.1 Container Dump

This container has been developed to empty the container in a container at a height of 61 inch. The container lifts vertically as a whole and a push out plate empties it. This container has been specially designed to dump in containers and low bed trucks

#### Characteristics

- Tipping angle of 58 °
- Tipping height of 34 inch
- Gross capacity of 5.5 Yard3
- Net capacity of 5 Yard3 (Due to push out plate mounted inside the container)
- Container side plates and interior, bottom and roof are made of stainless steel
- Rear door and inner fan housing are made of Corten steel and are painted
- Outer fan housing is made of aluminium and painted in grey





## 5 PAINT

RAVO uses its own colour code which is for a minimum of at least 96% equal to the RAL colour with the same code. The RAVO sweeper comes standard with a white container & cabin (RAVO 9900) and a grey chassis (AC 147). However, customization of the color scheme of the sweeper according to the wishes of the final customer is possible with these options.

### Option numbers

- 5.1 Paint Cabin
- 5.2 Paint Container Panels
- 5.3 Paint Chassis

#### 5.1 Paint Cabin

If you would like to have your cabin in a different colour than Standard White RAVO 9900, please specify the desired RAL colour.

#### 5.2 Paint Container Panels

If you would like to have your container panels in a different colour than Standard White RAVO 9900, please specify the desired RAL colour.

#### 5.3 Paint Chassis

If you would like to have your chassis in a different colour than Standard Grey RAVO 147, please specify the desired RAL colour.

*N.B. For the Cabin and Container Panels 2-tone colours are also possible on request*



*Pictures: Various paint combinations are possible*



## 6 DUST REGULATION SYSTEM

Recently EUnited launched new dust emission measurements and standards. The new emission norm is divided into 3 groups; 1-Star, 2-Star and 3-Star. Since RAVO constantly strives to be a product and market leader we have decided to exclusively qualify for the 3-Star certification. This means that the standard machine has not been measured and is therefore not officially labeled. New RAVO sweepers can optionally be certified with the 3-Star label equipped with a special dust package.

### Option numbers

6.1 PM 10

#### 6.1 PM 10

By having this package installed on the machine the dust emission just meets the PM 10, meaning there is still some noticeable emission. This option has been developed for tenders within the PM 10 qualification requirements.





## 7 BRUSH SYSTEM

The Brush carriage of RAVO sweepers is one of the features which makes a RAVO unique compared to any competitor. It is a pulled, spring-loaded system, meaning that the pressure is constant and when a curb is hit, the brush will automatically fold in. For normal sweeping jobs the standard brush system has proven to do an excellent job, however to make the sweeper more effective in gutters, on pavements, etc. some of below options are advisable.

### Option numbers

- 7.1 Independent brush lifting
- 7.2.2 Gutter brush angle adjustment left and right
- 7.4.1 Third brush / Weed cutter (incl option 7.4.4 third brush double angle adjustment)
- 7.4.2 Preparation third brush
- 7.4.3 Third brush quick release system

*N.B. Some operators enjoy being able to sweep backwards since it makes it easier to sweep cul-de-sacs*

### 7.1 Independent brush lifting

When only one side of the road needs to be swept, this option avoids wear on the other brush. With one switch in the cabin either the left or the right brush can be lifted when that part of the road does not need to be swept.

*N.B.: Especially in combination with the gutter brush angle adjustment option this is can be a valuable option to prevent brush wear*

### 7.2.2 Gutter brush angle adjustment left & right

When a machine without third brush is ordered, this option is excellent to clean the gutters along the left and right hand side of the road.





### 7.4.1 Third brush / Weed cutter (incl option 7.4.4 third brush double angle adjustment)

The third brush is a powerful extra brush mounted in front of the machine which increases the sweeping with of the 5 iSeries up to 3.6 yard. The Maximum reach from the front bumper is up to 2.14 yard. This option is excellent to sweep pavements, shoulders, cut weeds in gutters, etc. Also since more and more municipalities have prohibited the use of chemicals against weeds this option makes the sweeper extra versatile.



*N.B. When ordering this option the option: Gutter brush angle adjustment should be reconsidered since the third brush is excellent for cleaning gutters.*

### 7.4.2 Preparation third brush

When a third brush will be ordered at a later stage, or one from another machine will be used, this option makes sure all the necessary hydraulics are available to mount the third brush.



### 7.4.3 Quick release system third brush

When sweeping with the third brush is not always necessary this is a good option. This option includes a rack to store the third brush and the mounting (or de-mounting) on the machine only takes a couple of minutes. In this way one third brush can for example be used for more than one machine.

### 7.4.4 Third brush double angle adjustment

For more functionality RAVO has developed the double angle adjustment option for the third brush. With this option the brush can be tilted in all 4 ways making it possible to sweep the debris of the street, for example leaves back in the bushes.



## 8 HEAVY DUTY SUCTION LINE

All below options are recommended when working in road construction, sandy and gravel conditions or when in Spring sweeping the materials that have been spread by salt/sand spreaders against ice on the road. These options prevent the suction line from wear and are therefore recommendable when sweeping in above mentioned conditions.

### Option numbers

- 8.1 Heavy duty fan (Borium)
- 8.4.4 Coated suction tube extension plate (inside the container, not on CD version)

### 8.1 Heavy duty fan (Borium)

This fan made out of Borium steel is recommendable when sweeping in sandy areas or working in road construction. It is resistant against sand and gravel and will last 2 to 3 times longer than the standard aluminium fan. Its tensile strength is 1350 N/mm<sup>2</sup> and the hardness (Brinell) is minimal 400 HB

### 8.4.4 Coated suction tube extension plate

The stainless steel plate inside the container is often forgotten as part of the suction line but under some circumstances it is advisable to order the Linatex coated suction tube extension plate to avoid this plate from wearing out quickly.



## 9 SILENT OPTIONS

The Benefits of the silent options are:

- Silent sweeping in urban areas (important when sweeping at night or early in the morning )
- Less wear on the suction pipe and fan
- Reduced fuel consumption

*N.B. Please be aware that there is a difference in the measuring distance for the LwA in North America and the rest of the world.*

### Option numbers

9.1 Silent stage 1

#### 9.1 Silent stage 1

This options reduces the LwA to 75 dB by mounting the following items:

- Coulisse dampers in rear door
- Bottom plate under the engine compartment
- Absorbing material under the container





## 10 WATER OPTIONS

There are various water options available to increase the sweeping time and to reduce dust

### Option numbers

- 10.1 High pressure water pump with spray gun mounted right hand side
- 10.2 Water recycling system

#### 10.1 High pressure water pump with spray gun mounted right hand side

This option consist out of a high pressure water pump with a capacity of 4 gallon @ 2,175 PSI a minute, mounted behind the cabin and a stainless steel reel with a rubber hose of 11 yards and spray gun. This option can be used to clean the sweeper (container) but also street furniture.



#### 10.2 Water recycling system

This option consists of filters mounted at the rear door which makes it possible to recycle water. The container can be filled with 264 gallon of water and during sweeping this water is circulated from the container to the suction nozzle and back. This will result in a more efficient usage of the water in the water storage tanks, since fresh water is now only needed for the nozzles at the brushes. Another good side effect of this option is the reduction of the amount of dust coming out of the container. This because all dirt that is being swept first passes the water in the container resulting in hardly any fine dust.



# 11 WANDER HOSE

A wander hose makes the sweeper extra versatile, with this option difficult to reach places can be cleaned as well as dustbins.

**Option number**

11.1 Wanderhose mounted on rear door

**11.1 Wanderhose mounted on rear door**

This option consists out of a Wanderhose mounted on the rear door with a diameter of 8 inch. This hose is suitable for vacuuming leaves and other light and small dirt. This option includes a mounting rack on the rear door of the container.

*N.B. This option is not available in combination with option extra Watertank*





# 12 ERGONOMICAL AND SAFETY OPTIONS

Although the 5 iSeries has already been designed for maximum driver’s comfort and safety, various options make the cabin even more comfortable and safe.

**Option numbers**

- 12.1 Air suspended driver seat
- 12.2 Driver seat and passenger seat with 3 point safety belt
- 12.4 Heated Mirrors
- 12.5.1 LED Beacon (front and back)
- 12.9 Console with storage

**12.1 Air suspended driver seat**

When sweeping on cobble stone roads or for long transport distances this is an option that will be appreciated by operators. The air suspended seat will absorb shocks from poor road conditions.

**12.2 Driver seat and passenger seat with 3 point safety belt**

In some countries a 3 points seat belt is required, if so please select this option

**12.4 Heated mirrors**

Especially for cold weather conditions this is an essential option. It ensures visibility at all times.

**12.5.1 LED Beacon (front and back)**

Replaces the standard beacon with a LED beacon

**12.9 Console with storage**

This is a steel console mounted in the middle of the cabin with extra storage place.



*Pictures: Console with storage*



*Pictures: Air suspended driver’s seat and heated mirrors*



# 13 CAMERA SYSTEMS

Due to its large panoramic windscreen the RAVO 5 iSeries offers excellent visibility on the road but the camera options can add extra safety in crowded areas. Every RAVO comes standard with a rear view camera and a suction nozzle camera. However, RAVO offers another camera to increase visibility.

## Option numbers

13.3 Blind spot camera on left hand side of cabin

### 13.3 Blind spot camera on left hand side of cabin

The blind spot camera shows the operator what is happening right next to the left hand side of the machine.



## 14 WHEELS AND TIRES

Different jobs and different speeds require different tires. Select below the wheels and /or tires you require. The 5 iSeries is standard equipped with Bridgestone tires in front and Wide Wall tires in rear.

### Option numbers

14.2 Spare wheel front

14.4 Spare wheel rear for dual tires, 1 piece



**14.2** *Spare wheel front*



**14.4** *Spare wheel rear for dual tires*



# 15 ACCESSORIES

Every RAVO 5 iSeries is build according to the customer's specific wishes and needs. In this chapter some of the most common requested options are listed. For other options, request your Sales Manager for the possibilities.

## Option numbers

- 15.3 Jack 5 Ton
- 15.4 Toolbox (Mounted in front of the passenger's seat)
- 15.5 Mounting rack on rear door of the container
- 15.6 Air deflection plate

### 15.3 Jack 5 Ton

To lift the machine on the spot to change a wheel, this Jack (capacity: 5 Ton) is an excellent tool.

### 15.4 Toolbox (Mounted in front of the passenger's seat)

This toolbox provides the driver with the right tools to carry out small repairs on the spot.

### 15.5 Mounting rack on rear door of the container

To mount various things on the rear door like signs, tools, etc. this is a good option. It consists out of two rails on which sign boards or hooks and holders can be mounted.

*N.B When ordering the Wanderhose (option 11.1) ) this option is automatically included.*

### 15.6 Air deflection plate

The air deflection plate is mounted underneath the air outlet at the rear door and prevents exhaust air from blowing straight to the ground.