# **OPERATION AND MAINTENANCE MANUAL**

# Automatic Hose reel with Spring







# RAMEX SRL

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Ramex wish thank you for the purchase of a product in its range and invites you to read this manual contains all the information necessary for a proper use of equipment.

The user is required to read the same before use and use in accordance with the instructions contained therein.

The owner's manual and maintenance must be kept available for its proper preservation.

Ramex S.r.l. reserves the right to make changes or modifications to this manual and maintenance without prior notice to customers.

#### EC DECLARATION OF CONFORMITY

(in accordance with II 1.A 2006/42/CE)

#### We RAMEX S.r.I. of:

Via Salvo d'acquisto, 4/a - 42020 Albinea (RE) - ITALIA

I hereby declare that the equipment named below has been designed to comply with the relevant section of the below referenced specifications. The unit complies with all applicable essential requirements of the directives.

Generic designation	Automatic hose reel
Model	AV1000 - AV1100 - AV 1120- AV 1121- AV1200 - AV1300 - AV 3500- AV 3501 - AV 3502 - AV 3503-AV 3550- AV 6000- AV 6001- AV 6002- AV 6003 - AV 6300- AV 6030- AV 6301- AV 815- AV 820 - AV 816 - AV 825 - AV 830- AV 813 - AV 817 - AV 850- AV 1500 - AV 2000 - AV 2200 - AV 2201 - AV2300- AV 3000- AV 4000- AV 4500 - AV 5000- AV 800- AVC 3015 - AVC 3020- AVC 3016 - AVC 3022- AVC 1060- AVC 1070- AVC 1014- AVC1514- AVC1038 - AVC HP - AV 6200- AV 6002 - AV 6000SP- AV 6001SP- AV 2070 - AV 2080 - AV FOOD 1 - AV FOOD 2 - AV 1000 FOOD- AV 2050 - AV 100- AV ATK 1- AV 2050-AV 2055- AV 3500 WE-AV 1100 WE-AV ST 1- AV 1100 BA.
Type	Automatic hose reel with spring
Serial production	
Year of production	2015

In accordance with the following Directive (s):

Machinery Directive 2006/42/EC.

Is in conformity with the applicable requirements of the following documents:

EN ISO 12100:2010 ISO/TR14121-2:2013

#### Declares also

Is by the customer verification and possible adjustment of the property / site and the circumstances in which the product is installed is provided as well as prohibited to make changes of any nature and / or scope of the product.

Model, serial number and year of construction are reported on the label attached to the product manufacturer's letterhead.

The CE plate is attached on the product and gives details of the manufacturer in addition to the above data.

The technical file and consists RAMEX srl as a legal person - Via Salvo d'Acquisto, 4 / a - 42020 Albinea (RE) - ITALY

Legal Representative Mr.Franco Ruozi

Theorisons

Albinea (RE) 01-01-2015

#### Warranty

The duration of the warranty period is of 12 months from date of purchase. The warranty claim extends only to replacement of defective parts. The warranty does not cover misuse of the product. Any tampering or modification of the product will void any warranty claim by the customer.

#### Symbols

The following table shows a brief legend indicating the symbols used (the symbols shown are those most frequently used throughout this booklet and the remaining symbols are still easy to understand).



**DANGER:** Take attention to situations or problems that may affect the safety of persons or injury or death.



**RESTRICTIONS**: Do not run the steps in what will affect the efficiency / security of the system.



**IMPORTANT:** Draws attention to important information of a general nature which do not affect either the personal safety, nor the proper functioning of the system.



CORRECT USE: indicates that the mode of implementation of operations is correct.



INCORRECT OPERATION: Indicates the execution mode of operations is not correct.

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#### 1.1 Description.

This manual describes how to use and maintenance for different types of automatic hosereel. Table 1: Types of use of automatic hosereel:

		Produc	ct code			Application
AV 1000	AV 1100	AV 1120	AV 1121	AV 1200	AV 1300	, (ppilod(lott
AV 3500	AV 3501	AV 3502	AV 6000	AV 6001	AV 6003	
AV 815	AV 820	AV 816	AV 825	AV 813	AV 817	
AV 1500	AV 2000	AV 2200	AV 2201	AV 2300	AV 3000	
AV 4000	AV 4500	AV 5000	AV 800	AVC 3015	AVC 3020	Water & Air
AVC 3016	AVC 3022	AVC 1060	AVC 1070	AVC 1014	AVC 1514	17410. 6.711
AVC 1038	AVC HP	AV 6002	AV 6000 SP	AV2070	AV 2080	
AV 100	AV 6300	AV 6301	AV 3503	AV 3550	AV 6030	
AV 830	AV 850	AV 2055	AV ATK 1	AV 6200	AV 6001SP	
AV 2050			•			Air
AV FOOD 1	AV FOOD 2	AV 1000 FOOD				Drinking water and Liquid food on request
			Extension code:			
DF						Diesel
AD						AdBlue®
AG						Mineral oil &
WE						grease
BA						Welding gas
ST 1						Breathing air
011						Steam

For gasoline or other hydrocarbons there are specific hose reel, please contact technical support.

- The products for which the code in the catalog does not contain any extension are made of stainless steel AISI 303/304
- The products for which the code in the catalog shows the final extension 316 are made of stainless steel AISI 316;
- The products for which the code in the catalog shows the final extension FE are made of powder coated steel;
- The products for which the code in the catalog shows the CA final extension are made of steel and treated in electrophoresis;

All main springs inside hosereel are made of steel.

#### Synoptic hosereel.

- ✓ Grey box: open hosereel
- Yellow box : closed hosereel

			Hose dia	ameter			
1/4"	3/8"	1/2"	3/4"	1"	11/4"	1½"	2"
			5 me	ters			
		AVC1070					
			6 met	ters			
			AV ATK 1				
123000	Talky Person		8 met	ters			
				AV 1200			
				AV 2201			
			10 me	ters			
AV C 1060	AV C 1038			AV 9329			AV 2080
AV C 1014				AV 9620			AV FOOD 2
AV C HP				AV 9814			VACUUM AV 2055

Do	oppio Tubo AV	1120					
THE RESERVE			12 m				
				AV 817			
			13 m				
			AV 813	AV 3501			
			AV 1200	AVM 9815			
			AV 2201				
			AVM 9814		1	- 3.04	
			15 m	eters	pell to be	5102/3727	T 1 - 1 1 1 1
	AV 800		AVM 9815	AV 1300		AV 6003	
	AV 815			AV 2300		AV 2070	
	AV 1500			AV 3502		AV 2010	
	AV 1000			AVM 9816			
	AV C 3015			74101 3010			
	AV C 3016						
AVC 1514	AV C 3010						
AVC 1314			47	***			
	1 20 10 10 10 10 10 10 10 10 10 10 10 10 10	T	17 m	elets			100
			AV 817	.4			
		1	18 me	eters			
			AV 1300				
			AV 2300	L			
			20 m				
	AV 1100		AV 3501	AVM 9710	AV 6002		DN 50
	AV 2000		AV FOOD1	AVM 9817			AIR
	AV 2200		AVM 9320				VACUUN
	AV C 3020		AVM 9620				AV 2050
	AV C 3022		AVM 9816				
			AVM 9922				
			23 me	eters	6.7		
	AV 820						
			25 me	eters	-		
AV 816	AV	825	AV 3502	AV 5000			
	AV 3		AVM 9320	AVM 9720			
	AVM 9810		AVM 9620	AV 3503			
	7(1)11 0010		AVM 9817	AV 0000			
			AVM 9923				
			30 me	tore			
AV 830		AVM 9918		AV 6030			
AV 000	X 5 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	WAINI 9910	35 m				
	AV 3	500	AVM 9720	rei 2			
	AVM		AVM 9924				
		AVM 9811					
	41/	1	40 me				
	AV 4000	AV 4500	AV 6001	AV 6501			
		AVM 9919	AVM 9925	AVM 9850			
			43 me	ters			
		AVM 9812				/	
			50 me	ters			
AVM 9810	AVM 9310	AV 6000SP	AV 6501				
AV 850	AVM 9610	AVM9510	AV 6301				
	AVM 9811	AVM 9813	AVM 9851	7			
		AV 3550					
		AVM 9920					
			60 me	ters			
	AV 6000 -	AV 6200	00 1116		1		
	AVM 9812 -						
	AVIVI 3012 -	MAINI 2271	70 me	tore			
AVM 9811			70 me	ters			
A A IAI 90 I I	AVM 9510						
1							
	AVM 9710						

AVM 9	9813		
Water to the same		80 meters	
AVM 9812	AVM 9850		
		100 meters	
AV 6	300		
AVM 9813 AVM 9	9921		
		150 meters	
AV 6	500		

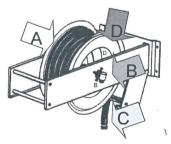
Extension after code: For example: AV1000 400 means hose reel AV 1000 with sealing 400 bar

Code after model	Description
400	Swivel joint ½" sealing 400 bar
600	Swivel joint 1/2" sealing 600 bar
DF	With sealing for diesel (for gasoline or other hydrocarbons there are specific hose reel, please contact technical support.
AD	With flow path and swivel in stainless steel for AUS 32 (AdBlue®)
AG	With sealing for oil and grease
WE	For welding gas (Oxygen + Acetylene)
BA	For breathing air
ST 1	For steam

## 1.2 Residual risks and security stickers.

The illustration shows the areas at greatest risk, with its present stickers indicating the residual risk and the main components of the system, as indicated below.

Stickers on the product								
Be careful not to force spring container	<u>^</u>							
Use personal protective equipment								
Hose installation instruction								



	Main components and residual risks	
Α	Pressure parts	
В	Fluid inlet	
C	Fluid outlet	

### 1.3 Uses not allowed



Always follow the use specified in Table 1.

#### 2 Specification

The following table shows the essential technical characteristics of the different models.



The working pressure of the hose must not exceed the values shown in Table 2.

### 2.1 Dimensions, weights and connections.

Table 2:

Medel	Swivel joint dia.	joint Maximum hose lenght							joint Maximum	n hose le	Maximum pressure	Weig ht	Packing	Swivel bracket
	pollici	1/8	3/8"	1/2"	3/4"	1"	1"1/4 1" ½ 2"	Bar	kg	cm				
AV1000	1/2"		15	15				200	13	28x60x53	ST 15			
AV1100	1/2"		20	20				200	17	28x60x53	ST 20			
AV1120	n.2 x			10				200	17	28x60x53	ST 20			
AV1121	1/2" + 1/4"			20				200+10	17	28x60x53	ST 20			
AV1200	1"				12	8		80	17	28x60x53	ST 20			
AV1300	1"				18	15		80	22	46x56x65	ST 22			
AV3500	1/2"		35	35				200	28	33x61x65	ST 30			
AV3501	1"				20	13		80	28	33x61x65	ST 30			
AV3502	1"				25	15		80	29	33x61x65	ST 30			
AV3503	1"				35	25		80	32	60x60x60				
AV3550	1/2"		60	50				200	47	33x61x65	ST 30			
AV6000	1/2"		60	60				200	50	60x60x60				
AV6001	1"				40	30		80	50	60x60x60	,			
AV6030	1"					30		80	50	60x60x60				
AV6200	1/2"		60	60				200	50	60x60x60				
AV6300	1/2"	10	100	100				200	65	60x60x60	v			
AV6301	1"				50			80	65	60x60x60				
AV815	1/2"		15	15				200	13	28x60x53	ST 15			
AV820	1/2"		23	20				200	13	28x60x53	ST 15			
AV816	1/2"	25						200	13	28x60x53	ST 15			
AV825	1/2"		-	25				200	18	28x60x53	ST 20			
AV830	1/2"	30						200	20	28x60x53	ST 20			
AV850	1/2"	50						200	30	46x56x53	ST 20			
AV813	1"		5 %		13	8		80	14	28x60x53	ST 20			
AV817	1"				17	12		80	14	46x56x65	ST 21			
AV1500	1/2"		15	15				200	13	28x60x53	ST 15			
AV2000	1/2"		20	20				200	17	28x60x53	ST 20			
AV2200	1/2"		20	20				200	20	33x53x61	ST 20			

A) (0004	42	1			10	0	1	80	20	33x53x61	ST 20
AV2201	1"	-		-	12	8	-		24		ST 22
AV2300	1"	-	05	05	18	15	-	80	26	46x56x65 46x56x65	ST 30
AV3000	1/2"		25	25	-	-		200			51 30
AV4000	1/2"	-	40	10	-		-	200	32	46x56x65	-
AV4500	1/2"			40		0.5	-	200	34	46x56x65	OT 50
AV5000	1"			1.5	30	25		80	40	55x55x62	ST 50
AV800	1/2"		15	15			-	200	12	28x60x53	ST 15
AVC3015	1/2"		15	15			-	200	14	33x53x61	ST 25
AVC3020	1/2"		20	20	-		-	200	21	33x53x61	ST 26
AVC3016	1/2"		15	15		+	-	200	14	33x53x61	ST 27
AVC3022	1/2"	10	20	20	+	-	-	200	21	33x53x61	ST 28
AVC1060	1/4"	10 1⁄4"						20	9	30x40x41	
AVC1070	1/2"			5				10	9	30x40x41	
AVC1014	1/4"	10						20	7	24x36x38	Included
AVC1514	1/4"	15 1⁄4"						20	7	24x36x38	Included
AVC1038	3/8"		10					20	7	24x36x38	Included
AVCHP	1/2"	10 ½"						100	10	24x36x38	Included
AVATK1	1"	7.4		1	6			80	15	28X60X53	
AV6002	1"1/4						20 1"1/4	10	55	60x60x60	
AV6003	1"1/2						15 1"1/2	10	55	60X60X60	
AV6000	1/2"			50	+		1 1/2	200	60	60x60x60	
SP AV6001	1"				30			80	60	60X60X60	
SP	<u> </u>			-	- 00	-	15				
AV2070	1"1/2						1"1/2	10	60	60x70x80	
AV2080	2"					10	10 2"	10	60	60x70x80	
AVFOOD1	1"				20	-	1	10	28	33x61x65	
AVFOOD2	2"						10 2"	10	65	65x70x80	
AV2050	DN 50						20 DN 50	Vacuum	40	60x70x80	
AV2055	2"						10 DN 50	Vacuum	35	50X70X80	
AV100	1/2"	1,5 1/8						10	1	20x20x10	-
AVM9000	1/2"		20	20				200	6	30x40x41	
AVM9002	1/2"		20	20				200	8	30x40x41	
AVM9310	1/2"		50	35				200	12	33x53x61	
AVM9320	1"				20	10		80	12	33x53x61	
AVM9510	1/2"		70	50				200	13	33x53x61	
AVM9520	1"				35	20		80	13	33x53x61	
AVM9610	1/2"		50	35				200	14	33x53x61	
AVM9620	1"				20	10		80 '	14	33x53x61	
AVM9710	1/2"		70	50				200	15	33x53x61	
AVM9720	1"				20	10		80	15	33x53x61	
AVM9810	1/2"		35	25				200	10	33x53x61	
AVM9811	1/2"		50	35				200	10	33x53x61	
AVM9812	1/2"		60	43				200	11	46x56x65	
AVM9813	1/2"		70	50				200	11	46x56x65	
AVM9814	1"				15	10		80	10	33x53x61	
AVM9815	1"				20	15		80	10	33x53x61	

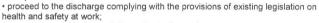
AVM9816	1"			25	20		80	11	46x56x65
AVM9817	1"			30	25		80	11	46x56x65
AVM9850	1/2"	100	80				200	12	60x60x60
AVM9851	1"			50	35		80	12	60x60x60
AVM9918	1/2"	45	30				200	10	60x60x60
AVM9919	1/2"	60	40				200	11	60x60x60
AVM9920	1/2"	75	50				200	12	60x60x60
AVM9921	1/2"	100	60				200	13	60x60x60
AVM9922	1"			20	15		80	10	60x60x60
AVM9923	1"			25	18		80	11	60x60x60
AVM9924	1"			35	22		80	12	60x60x60
AVM9925	1"			40	28		80	13	60x60x60
AVM2090	2"					20 2"	10	40	60x70x80

#### 2.2 Noise.

The value of output noise (sound pressure level) is limited (<70 dBA). It remains to the supervisor check the level of noise exposure for each worker.

- 2.3 Environment working condition: temperature between 5°C to 40°C.
- 3 Delivery, shipping and installation.
  - 3.1 Delivery.

The operator must:





 check the integrity of components and devices. If needed contact immediately our local dealer.

#### 3.2 Shipping.

These goods must be carried out strictly according to the following rules:

- apply the existing legislation on health and safety (in particular as regards the total weight);
- remove any other devices that may constitute a hindrance;
- in case of manual lifting firmly grasp the system, while for systems with the greatest weight to use forklift or suitable harness:
- keep operators interested in the process of being moved to safe distance.



 In the case of transport by vehicle make sure the degree of stability before moving.

#### 3.3 Installation.

- The installation must be performed by skilled technicians.
- The installation of the hose and the spring can be found as described in the section on maintenance.
- Do not place the hosereel near sources of heat or flame.
   Keep a safe distance from power cables under tension.
   The heavest labeled he installed in a position which not
  - The hosereel should be installed in a position which not danger to the operators (eg shearing, lightning, or fall).
  - Ensure in advance the consistency of the wall where hosereel have to be installed.



· Assess in advance the total weight of the product (hosereel+hose+fluid) you are installing both the fitting hardware and for the lifting.

#### Hose reel installation 3.3.1



- When lifting, use appropriate lifting harness or suitable:
- · Strictly follow the existing legislation on work safety.
- Insert wall anchor bolts in all the holes of the hosereel support/base.

#### The operator must follow these rules:



- The hose reel should be attached to the wall by means (eg bolts) adequate and properly sized to the weight of the product and to the stress that this could be put in operation by the operators.
- The hose reel plate is designed with 13 mm diameter holes.
- The anchor bolts can therefore lead screws with maximum diameter of 12 mm.



The connection to the swivel joint (hosereel inlet) must be made through the use of a flexible hose.

#### Safety

#### 4.1 Working environment.



- Keep the product far from flames.
- Do not install the product in places where there are risks of explosion and fire.
- The hosereel should be installed at a location which does not pose a danger to the
- Make advance of the resistance and the characteristics of the wall on which the product is fixed.
  - Use appropriate anchor bolts to the wall depending on the type and structure of the
  - Assess the overall weight of the product always being installed for the fixing method for the type of lifting equipment to be used as an aid.
  - Use the product in conditions of adequate lighting.



The areas of work must be well ventilated and meet regulatory requirements on hygiene and safety at work.

#### 4.2 Preliminary checks.



- Keep a safe distance in voltage electric cables;
- In the case where there are live cables is recommended to give the hosereel a special casing.

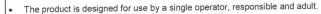


Place connection line in position would not constitute a hindrance to other operators.

#### 4.3 Use.



Once you disengages the mechanical latch from the rack, you need to drive back (keeping on hand) the hose during the roll-up to avoid a rapid and uncontrolled movement of the reel.





- All visitors don't use the product must maintain a safe distance during the working phases.
- The user should always wear appropriate protective equipment during use of the product (ie, gloves, overalls, shoes, sunglasses);
- Before using the product, you must always get the MSDS of the material used and follow the advice contained within it.

#### 4.4 Personal protective equipment



 Is liability of the company owner to provide appropriate Personal Protective Equipment and inform the staff on their correct use.



 The operator must always observe the instructions given by the sign shown on the product.



PPE (Personal Protective Equipment) for an operator to use during the operations
of use, maintenance and cleaning are: Workwear, Non-skid shoes, gloves and
glasses.







#### 4.5 Maintenance and after work.



- Do not service when the system is under pressure, or connected to an hose in pressure or an electrical power source.
- When disassembling winder (eg to replace the tube or spring) to pay particular attention to any sudden movement of the roller (risk of crushing of the hands).



During the maintenance phase is recommended to adopt appropriate protective equipment. Do not dispose of any residues in the environment, but stick to the current legislation.

#### 5 Rules of Use.

#### 5.1 Preliminary checks.

Always perform the following checks:



If the hose reel is well fixed to the wall.



Presence of electrical wires under power.

#### 5.2 Using automatic hose reel with spring.



Step 1: grab the hose and proceeds to drive it. During this phase, the mechanical latch disengages from the rack. Move closer to the working area.



Step 2: at the release of the hose the mechanical latch arrest the roll turning and prevent the return, the locking happens every half turn of the roller. When the roll is blocked proceed to use.



Step 3: After use, going closer to the hosereel. The operator can roll up the hose (releasing the latch) by pulling the tube, which will unlock the mechanical lock



Once the latch is released is necessary to drive back (keeping on hand) the hose on the reel to avoid a rapid and uncontrolled movement of the hose.

#### 5.3 Manual hose reel.

Just firmly grasp the handle and rotate the roller, with the other hand it is advisable to drive the hose inside the reel.

#### 5.4 Hose reel with hydraulic motor

For hose reel with hydraulic motor you need to use a control unit with pump (not supplied). Motor features: Maximum speed 486 RPM, torque 23.7 daNm, maximum output 10 kW, maximum pressure drop of 140, maximum flow rate 60 l / min, maximum inlet pressure 175 bar.

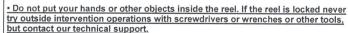
#### 5.5 End of work

We recommend: Place the hose in proper position (storing it inside hosereel) and download the residual pressure in the hose.

#### 6 Maintenance



- Do not service the system when the spring is under tension or when there is residual pressure in the connecting hose. Please download any residual pressure in the hose and store the hose inside the hosereel;
- · Wear appropriate protective equipment.





• Before you install hose verify that the technical characteristics fall between those for the model chosen. Do not force the spring to not carry it out.

#### 6.1 Routine Maintenance.

model	schedule	activities to be carried
All		Check spring tension
	4500	Check wear locking system
	every 1500 hours	Check joints and condition of the hoses
		Check wall mounting

#### 6.1.1 Replacing the hose and the tensioning of the spring.

# Installation instructions: OPEN REEL (with roll in sight) Operations to be performed by trained personnel WARNING: PROTECT YOUR HANDS WITH GLOVES!

- · Make the connection between the hose and hose reel:
- Wrap the hose around the reel turning the reel in the direction indicated by the arrow.
  - Perform the rotation manually protecting hands with gloves;
  - Determine the starting point of the spring work, this position can be found by rotating the reel to the point where it detects the start of the tension of opposition to the rotation of the spring;
- Rotate the reel (number of turning) indicated by the label in the opposite direction to the arrow, taking care to keep the hose attached to reel central band.
- Take out the hose from the roller guide, lock the reel by observation of the latch mechanism:
  - · Fix the hose bumper on the hose.



#### Installation instructions: CLOSED REEL (with cover)

Operations to be performed by trained personnel

- WARNING: PROTECT YOUR HANDS WITH GLOVES!
- · Remove the four screws on the left side of the hosereel;
- · Insert the hose on front opening:
- · Make the connection between the hose and hosereel;
- Wrap the hose on hosereel turning the roller in the direction of the arrow through the insertion of a wrench 10 mm hex socket on the plastic hub of the left side of the hosereel:
- The rotation in both directions should be undertaken with caution by the user to prevent loss of the hub from the support.
- · When there is approximately one meter of hose fix the hose bumper;
- Determine the starting point of the spring, this position can be found by rotating the roller (with the hex key) to the point where it detects the start of the tension of opposition to the rotation of the spring;
- Turn the hub (number of turning) indicated by the label in the opposite direction to the arrow, always using the hex key 10 mm, keeping it firmly;
- Always keep a strong grip to the hex key (to avoid rolling the spring and then free rotation of that key) then fix the four screws on the left side of the hosereel.



- Do not put your hands or other objects inside the reel
- An excessive tension spring prevents the complete withdrawal of the hose

To perform these operations follow the instructions on the label on hosereel side.

#### 6.2 Removing the hose:

#### OPEN REEL (with roll in sight)

## Operations to be performed by trained personnel (two operators)

WARNING: PROTECT YOUR HANDS WITH GLOVES!

#### Operators 1+2

- Put hose reel in safety place (even leave it installed)
- Close connection
- · Position yourself safety next the hose reel

#### Operator 1

- Unroll the hose completely
- Lock the ratchet

#### Operator 2

 Tighten the hose reel disk (they should not move), you should not rely on the ratchet. Do not put your hands between sides and roll but keep it on the edges.

#### Operator 1

- · Unscrew the pipe fitting on nipple
- · Restarting with assembly hose, only at hose re-connected the second operator can let go on the roller

#### CLOSED REEL (with cover)

Operations to be performed by trained personnel (two operators)

WARNING: PROTECT YOUR HANDS WITH GLOVES!

#### Operatore 1+2

- Close connections
- Put hose reel in safety place, bringing it on a work bench.
- Position yourself safely next to the hose reel
- · Unroll the hose completely
- Insert hex (allen) dia 10 mm wrench into the hub, keeping firmly the key (to prevent unwinding of the spring and then free rotation of roll) jointly remove the four allen screws on the left side of the hose
- Rotate the hex (allen) key dia. 10 into the hub until the complete discharge of the spring (remember that
  the spring is loaded and dangerous)
- · At spring download unscrew the hose fitting from the nipple.
- · Restarting with assembly hose

#### 6.3 Demolition and Disposal

#### Demolition:

- For the disposal of the unit, perform the following sequence::
  - √ disconnect hose reel from feeding hose;
  - ✓ detach the unit from the wall to which they apply;
  - √ disconnect all hoses;
  - √ separate plastic parts:
  - ✓ disconnect the mechanical parts.



#### Disposal:

 The buyer is responsible for making the proper disposal of materials arising from the sale of industrial equipment in accordance with rules, laws and regulations in your country.

#### **Demolition materials:**

- The product, in its various forms, is made by the following main components whose source material is composed of:
  - ✓ Stainless steel:
  - √ painted steel sheet;
  - √ plastic components;

#### 7 Spare parts

Exploded drawings are available for every hose reel, contact technical support. This drawings are used to identify the different components from which the hose reel is made up and facilitate the client to request any replacement components.

#### 8 Problem Cause Remedy

Problem	Cause	Remedy	Intervento Action
Hosereel blocked	Rack blocked Excessive spring tension	Perform operation set out in paragraph 6.1.1	operator
Hosereel leacking	Detective swivel joint	Replace swivel joint or sealing	Contact technical support
The hose do not roll up automatically (on automatic hosereel)	Spring discharge	Increase tension of the spring (see 6.1.1)	Operator



- DO NOT OPEN THE SPRING CASE. EXTREMELY DANGEROUS!
- CONTACT TECHNICAL SUPPORT

#### 9 Accessories

On request may be provided with a swivel bracket. On Table 2 is shown for each model the code of the swivel bracket.