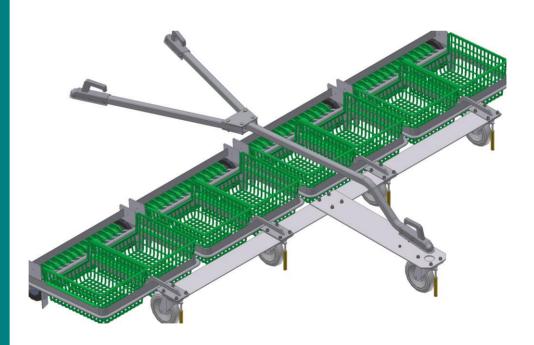


http://www.rangeservant.us

# FOR 'STANDARD DUTY' BALL PICKER



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## 1 General information

#### 1.1 Foreword

Congratulations on your new Range Servant product. You have made a good choice! You have not just decided on an exceptional Ball Picker featuring modern technology that requires little maintenance, but you have also chosen quality. The type of quality we guarantee through modern production technology, careful selection of materials and the dedicated work of all our employees.

The purpose of the Instructions for Use is to make the user familiar with the machine and its use in different situations and for different types of work! The Instructions include all the drawings and diagrams necessary for taking the machine into service and for carrying out maintenance, inspections, function tests and repair as well as any other useful information particularly in regard of safety.

Study the Instructions for Use carefully and make sure you understand them before trying to operate the machine. Not following this advice could result in personal injury or damage to the machine. In many cases, following the instructions is a necessary condition for Range Servants' warranty to be applicable. Every person operating the machine must read these instructions. Everyone who will be using the machine must read the instructions thoroughly.

No part of this book may be reproduced without the written permission from Range Servant.

The machine carries a one-year warranty. Read the warranty conditions carefully and keep them in a safe place. If you have any questions, or if any problems occur, contact your retailer.

#### **ONE-YEAR WARRANTY**

Range Servant hereby warrants the materials and function of the RANGE SERVANT product specified in these Instructions for a period of one year after delivery. This engagement applies to repaired or replaced components for a period of three months. This warranty only applies to the original purchaser. It also only covers parts, which the manufacturer, after inspection, finds to be faulty. Repair or replacement of parts is to be carried out by an authorised representative of the manufacturer. The manufacturer further warrants that the equipment supplied conforms to the accompanying product description. THE WARRANTIES SPECIFIED IN THIS AGREEMENT CONSTITUTE THE MANUFACTURER'S ONLY LIABILITY TO THE BUYER.
MANUFACTURER DISCLAIMS LIABILITY FOR ANY COMMITMENTS BEYOND LIMITATIONS OF THE WARRANTY CERTIFICATE. The manufacturer further disclaims all liability for any commitment that may be given by any unauthorised person in connection with the sale of the equipment. The warranty does not apply to equipment that has been repaired or had parts replaced by any person/company not specifically authorised to do so by the manufacturer. The manufacturer's warranty liability furthermore does not apply in cases where the equipment is misused, damaged by negligence/accident or handled contrary to the accompanying Instructions for Use. Finally, the manufacturer is under no circumstances financially liable for damage that may arise in connection with the sale or repair of the equipment, or injury to a third party in connection with its use.

## 1.2 Technical data

General	2 gang	3 gang	4 gang	5 gang	6 gang
No. of sections	2	3	4	5	6
Capacity (balls)	1600	2400	3200	4000	4800
Prescribed picking rate [km/h] /([mph])	10-13 (6- 8)	10-13 (6- 8)	10-13 (6- 8)	10-13 (6- 8)	10-13 (6- 8)
Dimensions:					
Height [mm] /([in])	445 (17.5)	445 (17.5)	445 (17.5)	445 (17.5)	445 (17.5)
Width [mm] /([in])	1600 (63)	2510 (99)	3380	4230	5081
Length [mm] /([in])	1100 (43.3)	1100 (43.3)	1100 (43.3)	1100 (43.3)	1100 (43.3
Approx. total weight, with plastic discs, fully loaded, [kg]/[lbs]	162/355	229/660	296/650	362/800	428/945
Approx. total weight, with plastic discs, empty, [kg] /[lbs]	86/190	115/255	144/318	172/380	200/440
Approx. total weight, with Multiflex discs, fully loaded, [kg] /[lbs]	168/370	238/525	308/680	377/830	446/980
Approx. total weight, with Multiflex discs, empty, [kg] /[lbs]	92/205	124/275	156/345	187/410	218/480
Operating Conditions:					
Operating Temperature [°C] /([°F])	-10/+50 (+14/+122)				

The manufacturer reserves the right to make amendments without prior notification.

## 1.3 Description

When you contact Range Servant, please have all the information on your machine to hand. You will find the details on the conveniently located Product Identification plate on the picker, which is clearly visible, easy to read, durable, and displays the following details:

- Manufacturer's name and address
- Serial or type designation
- Serial numbers
- · Year of manufacture



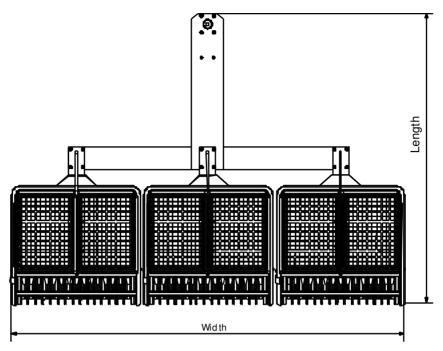


Figure 1: Width of Ball Picker

## 2 Safety Instructions

#### 2.1 General

Safety precautions are a combination of the measures implemented during the design stage and those that must be taken by the user.

The machine is designed to function as intended as far as possible. It is also designed to be adjusted and maintained without causing danger to anyone, when such tasks are carried out under the conditions described in these Instructions.

The purpose of these safety precautions is to prevent all risk of accidents during the expected service life of the machine, including assembly and dismantling, even if such risks do arise as a result of predictable abnormal situations.

Accessories and spare parts not approved by us could lead to personal injury and/or damage to the machine and reduce the reliability of the machine. For safety reasons, use only Range Servant recommended accessories and original spare parts. These accessories and parts are made especially for the machine and also carry our stamp of approval with regard to safety.

Range Servant accessories and original parts, with accompanying expert advice, are available from all Range Servant retailers. Their qualified staff carries out installation and are also kept up-to-date on all technical modifications permitted.

Under no circumstances are we liable for any damage or injury caused by accessories or parts not approved by us or for damage or injury resulting from prohibited technical modifications.

## 2.2 Permitted use

The equipment should only be used for picking up balls on a driving range.

It may only be used when it is assembled and mounted according to these Instructions for Use.

## 2.3 Prohibited use

- Never overload the Ball Picker by filling it with more balls than the capacity listed for the ball baskets in the chapter Technical Data of these instructions.
- Never transport persons or goods on the Ball Picker! This could result in personal injury and damage to the Ball Picker and goods.
- Never use the Ball Picker for long-distance transportation or for transporting anything other than balls picked up on the driving range.
- Should components not recommended by us, or unsuitable spare parts, be used on the machine, this could lead to personal injury and/or machine damage and reduced reliability. From a safety aspect, always choose Range Servant recommended accessories and original spare parts. These accessories and parts are intended for your Ball Picker and are also safety-approved by us.
- Modifications to the mechanical function of the machine may only be carried out after consultation with Range Servant.
- We accept no liability whatsoever for damage or injury caused by accessories and parts not approved by us, or damage or injury resulting from technical modifications.

# 3 Assembly and Maintenance

### 3.1 Maintenance intervals and instructions

Maintenance intervals:

- Every pick-up run
- 2. Every month
- 3. Every season

	Maintenance intervals and instructions:	1	2	3
1	2-, 3-, 4-, 5- and 6-gang.			
1.1	Any objects that could have become lodged between the picking discs should be removed after every pick-up run. These could be broken balls, stones, pine-cones etc., which can damage the discs and/or shorten their service life considerably.	X		
1.2	Hose down the ball baskets and pick-up rollers to remove any gravel or sand that could accumulate and cause corrosion of the metal parts and unnecessary wear and tear on the bearings and picking discs.		Х	
1.3	If artificial fertiliser is used on the driving range, we recommend that the machine be thoroughly cleaned at least once a month.		Х	
1.4	Check that all locking nuts are secure and there are no broken discs.		Х	
1.5	Lubricate the hitches on the A-Frame.		Х	
1.6	Lubricate all grease fittings on wheels and swivel castors		Χ	
1.7	The Ball Picker must be thoroughly cleaned and washed prior to winter storage. The storage area must be frost-free.			Х
1.8	Check and lubricate nuts and bolts, and replace any that are damaged or rusty.			Х
1.9	Check the picking discs. Any with cracks or other obvious damage should be replaced.			Х

# Assembly instructions Standard Duty Ball Picker

## 3.1.1 Assembly Step 1

Place the picker sections on a firm, horizontal surface. Place the wheels, spacer beam and picker beam close by.

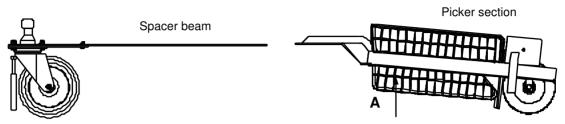


Figure 7: Assembly, step 1

Start off with the centre section.

Raise the front end on the picker section so that it is at the same height as the spacer beam. See Figure 7 at A.

#### 3.1.2 Assembly Step 2

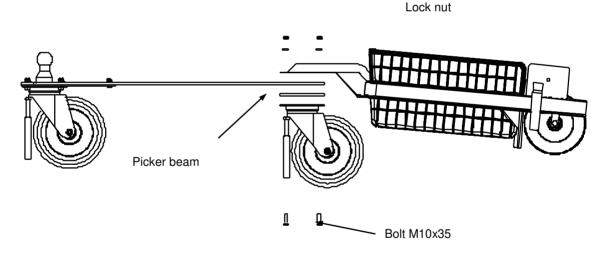


Figure 8: Assembly, step 2

Fit the picker beam, spacer beam and picker section using four M10x35 bolts, in the order shown in Figure 8. Note that the bolts should be fitted from underneath.

## 3.1.3 Assembly Step 3

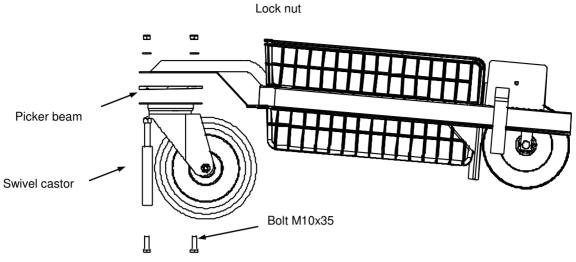


Figure 9: Assembly, step 3

Continue with the rest of the picker sections.

Fit the wheels, picker beam and picker section using four M10x35 bolts.

Order as shown in figure 9. Note that the bolts should be fitted from underneath.

## 3.1.4 Assembly Step 4

Place two ball baskets, with the low side facing backwards, in each picker section. Done!

# 4 Replacement parts

This chapter contains diagrams in accordance with the set-up below. These diagrams detail the names and location of the replacement parts.

# 4.1 Complete picker, Standard Duty, 2 & 4 gang.

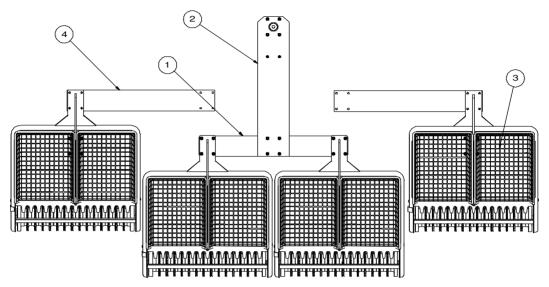


Figure 10: Complete picker, 2 and 4 gang

Pos.	Part No.	Description	2 gang	4 gang
1	PDM0083	SD Main Beam 2 gang and 4 Gang	1	1
2	PDM0078	Spacer beam (Front Flat Extension)	1	1
3	PDM0006	Complete Picker section, Multiflex discs	2	4
4	PDM0084	MAXI Extension Beam (SD Pickers)	-	2
2	PDM0070	Front Ball Attachment for SD Picker	1	1

# 4.2 Complete picker, Standard Duty, 3 & 5 gang.

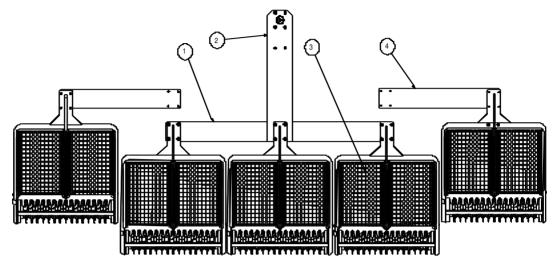


Figure 11: Complete Ball Picker Standard Duty, 3 and 5 gang.

Pos.	Part No.	Description	3 gang	5 gang
1	PDM0063	SD Main Beam for 3 Gang and 5 Gang	1	1
2	PDM0070	Front Ball Attachment for SD Picker	1	1
3	PDM0006	Picker section, Multiflex discs	3	5
4	PDM0084	MAXI Extension Beam (SD Pickers)	-	2
2	PDM0078	Spacer beam (Front Flat Extension)	1	1

# 4.3 Spacer beam, complete without wheel

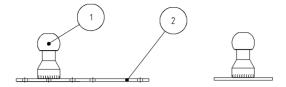


Figure 13: Spacer beam, complete without wheel

Pos.	Part No.	Description	Spacer beam
Fig 13	PDM0070	Front Ball Attachment for SD Picker	1



Figure 14: Spacer beam

Pos.	Part No.	Description	Spacer beam
Fig 14	PDM0078	Spacer Beam (Front Flat Extension)	1

## 4.3.1 Swivel castor

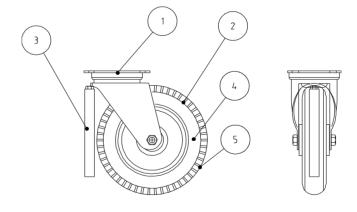


Figure 16: Swivel castor

Pos.	Part No.	Description	2 gang	3 gang	4 gang	5 gang	6 gang
Fig 16	PDA0000	SD Castor complete with Wheel	2	3	4	5	6
1	970053	SD Castor	2	3	4	5	6
2	PDA0006	SD Wheel Complete (tire+ tube)	2	3	4	5	6
3	970056	Deflector peg - ball guide	2	3	4	5	6
4	PDA0005	SD Tube for wheel	2	3	4	5	6
5	PDA0004	SD Tire for wheel	2	3	4	5	6

# 4.4 Picker section, Multiflex discs (flexible polyurethane)

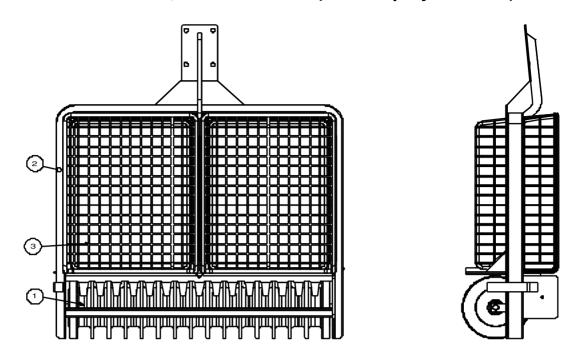


Figure 19: Complete picker section, Multiflex discs

Pos.	Part No.	Description	2 gang	3 gang	4 gang	5 gang	6 gang
-	PDM0060	Complete picker section, Multiflex discs	2	3	4	5	6
1	PDM00094	SD Picker Roller/ No Axles	2	3	4	5	6
1	PDM0096	SD Picker Roller w/Axles	2	3	4	5	6
2	970006	SD Gang (Frame Only)	2	3	4	5	6
3	OFM0012	Plastic Picker Basket	4	6	8	10	12
3	300400	Metal Picker Basket	4	6	8	10	12

## 4.4.1 Picker roller, Multiflex discs (14 Discs per Roller)

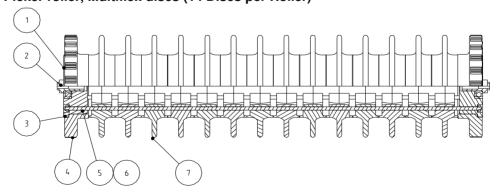


Figure 20: Complete picker roller, Multiflex discs

Pos.	Part No.	Description	2 gang	3 gang	4 gang	5 gang	6 gang
1	PDM0094	Complete SD Multiflex Picker Roller	2	3	4	5	6
2	PDM0057	Short Axle ( 2 per roller)	4	6	8	10	12
3	PDM0095	SD End Flange with Holes	4	6	8	10	12
4	302040	Rubber End Disc	4	6	8	10	12
5	PDM0077	Independent Rod Smooth	6	9	12	15	18
6	PDM0097	Threaded Rod for Multiflex Roller	6	9	12	15	18
3	312052	Multiflex Disc	28	42	56	70	84

# 4.5 A-frame, 2-, 3- and 4-gang.

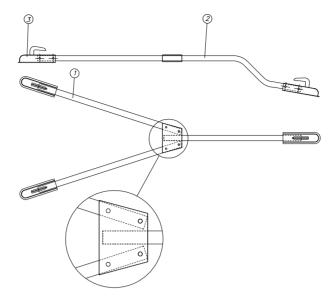


Figure 21: A-Frame, 2-. 3- and 4-gang.

Pos.	Part No.	Description	2 gang	3 gang	4 gang
-	PDM0079	A-frame, complete	1	1	1
1	970010	Extension Arm for SD A-Frame	2	2	2
2	PDM0080	A-Frame, front part	1	1	1
3	305 300	Female Ball Hitch	3	3	3

# 4.6 A-Frame, 5- and 6-gang.

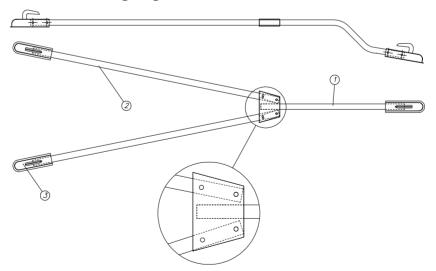


Figure 22: A-Frame, 5- and 6-gang.

Pos.	Part No.	Description	5 gang	6 gang
-	305100	A-Frame complete, 5 and 6 gang	1	1
1	305101	A-Frame, front part	1	1
2	305200	Extension Arm for MAXI SD A-Frame	2	2
3	305300	Female Ball Hitch	3	3