



ENGLISH

RANGE SERVANT[®]

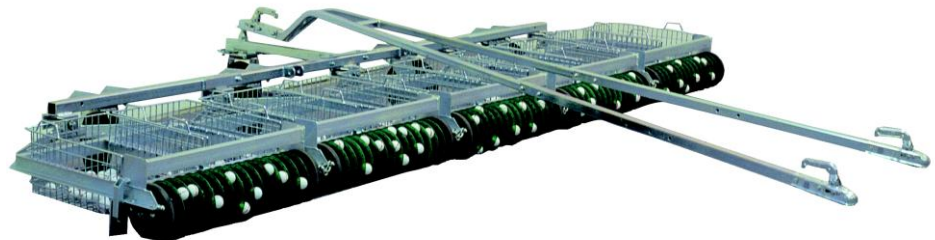
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INSTRUCTION MANUAL

FOR

HEAVY DUTY

BALL PICKER



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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.

This instruction book contains all the information you need to fully understand how to use and care for the equipment.

Read through it and make sure you understand the Instruction Manual before trying to operate the picker. Not following this advice could result in personal injury or damage to the machine. In many cases it is also a condition for being able to claim against the Range servant's guarantees. Everyone who will be using the machine must read the instructions thoroughly.

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

The picker 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 representative.

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. THE MANUFACTURER DISCLAIMS LIABILITY FOR ANY COMMITMENTS BEYOND THE 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 Identification

Please contact Range Servant for more information on your picker. You will find the details on the conveniently located Product Identification plaque on the machine, which is clearly visible, and displays the following details:

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

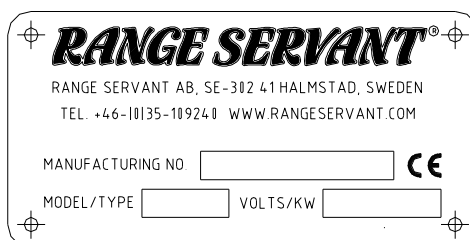


Figure 1: Product identification Technical data

General	3-Gang	5-Gang	7-Gang
No. of sections	3	5	7
Capacity [balls]	2,400	4,000	5,600
Recommended speed of operation approx.) [mph]	6-8	6-8	6-8
Dimensions:			
Height (approx.) [mm] /([in])	440 (17)	440 (17)	440 (17)
Width (approx.) [mm] /([in])	2600 (102.4)	4300 (169.3)	6000 (236.2)
Length (approx.) [mm] /([in])	1350 (53)	1350 (53)	1350 (53)
Approx. total weight with Multiflex discs, empty [kg]/[lbs]	165/365	265/585	490/1,080
Approx. total weight, with Multiflex discs, fully loaded [kg]/[lbs]	275/605	449/990	747/1,650
Approx. total weight with Rubber discs, empty [kg]/[lbs]	203/450	337/745	-
Approx. total weight, with Rubber discs, fully loaded [kg]/[lbs]	313/690	521/1,150	-
Operating Conditions:			
Operating Temperature [°C] /([°F])	-10 / +50 (+14/ +122)		

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

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 picker 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 picker, including assembly and dismantling, even if such risks do arise as a result of predictable abnormal situations.

Accessories and spare parts not approved by Range Servant 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.

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 machine may 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.

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 Section Technical data chapter 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.

Maintenance

2.4 General

Taking proper care of the picker contributes to longer service life and safer operation. If it is checked regularly, malfunctions and breakdowns can be minimised. The tips below only apply to the most common malfunctions and the causes of these.

2.5 Regular maintenance

2.6 Maintenance intervals and instructions

Maintenance intervals:

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

Maintenance intervals and instructions:		1	2	3
1	3, 5 and 7-GANG Unit:			
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, and pinecones 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.		X	
1.3	If artificial fertilizer is used on the driving range, we recommend that the machine be thoroughly cleaned at least once a month.		X	
1.4	Check that all locking nuts are secure and there are no broken discs.		X	
1.5	The Ball Picker must be thoroughly cleaned and washed prior to winter storage. The storage area must be frost-free.			X
1.6	Lubricate the ball fitting on the A-Frame.		X	
1.7	Lubricate the grease fittings on all wheels and swivel castors		X	
1.8	Check and lubricate nuts and bolts, and replace any that are damaged or rusty. Lubricate the grease fitting at where each frame is connected with the cotter pin to the Main Picker Beam			X
1.9	Check the vibration damper and picking discs. Any with cracks or other obvious damage should be replaced.			X
2	The picker's front tire is inflated to max. 2.5 bar or 35 psi pressure		X	
2.1	Lubricate also the joint between the extension beam and the intermediate beam			X

2.7 Troubleshooting and repairs

The picker performs most reliably, but it could malfunction for different reasons. Most malfunctions can be pinpointed by noting any changes in movement, caused by wear and tear or damage.

2.8 Possible malfunctions and what to do

2.8.1 The Ball Picker does not pick up the balls

Check that:

- ◆ All sections are not damaged and properly secured to the beam.
- ◆ All ball baskets are correctly placed in all sections.
- ◆ The picking discs in the rollers are undamaged and securely fastened.
- ◆ The connecting rods are not damaged or bent.
- ◆ The driver of the vehicle maintains the prescribed speed for best performance.
- ◆ The grass on the driving range is not too long so that it covers the balls.

2.8.2 The Ball Picker does not roll properly

Check that:

- ◆ The wheels are not damaged.
- ◆ The roller bearings are not damaged.
- ◆ The ball baskets are not damaged.
- ◆ Nothing has become lodged in the picker roller or on the wheels.
- ◆ The Ball Picker is not damaged, resulting in any of its parts scraping on the ground.

2.8.3 The Balls do not fall into the basket

Check that:

- ◆ The connecting rods are not broken.

2.9 Function tests

After repairs or maintenance have been carried out, check that the machine is functioning properly by test-driving it without balls in the baskets.

3.1.4 Step 4

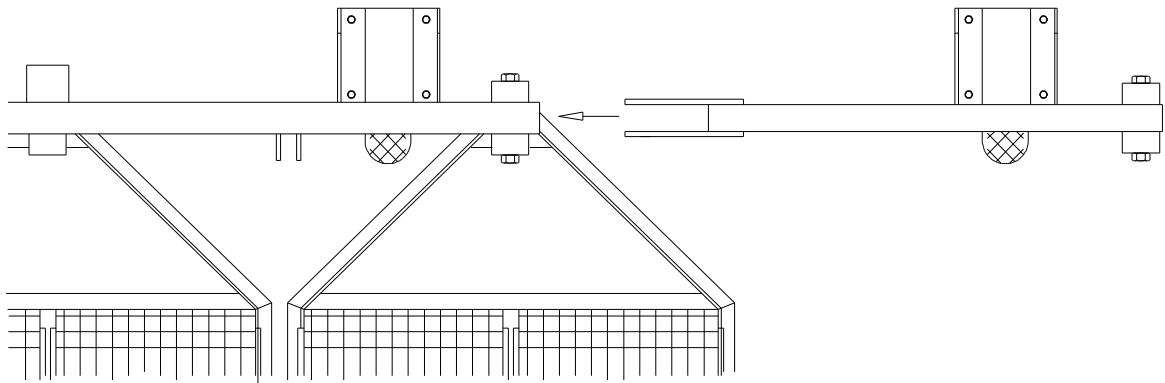


Figure 4: Assembly, step 4a.

For the 5-Gang model push the extension beam into the main beam until the two holes meet. Lock the construction into position by passing a bolt through both holes and fixing it with a nut.

For the 7-Gang model replace the short extension beam with a longer version.

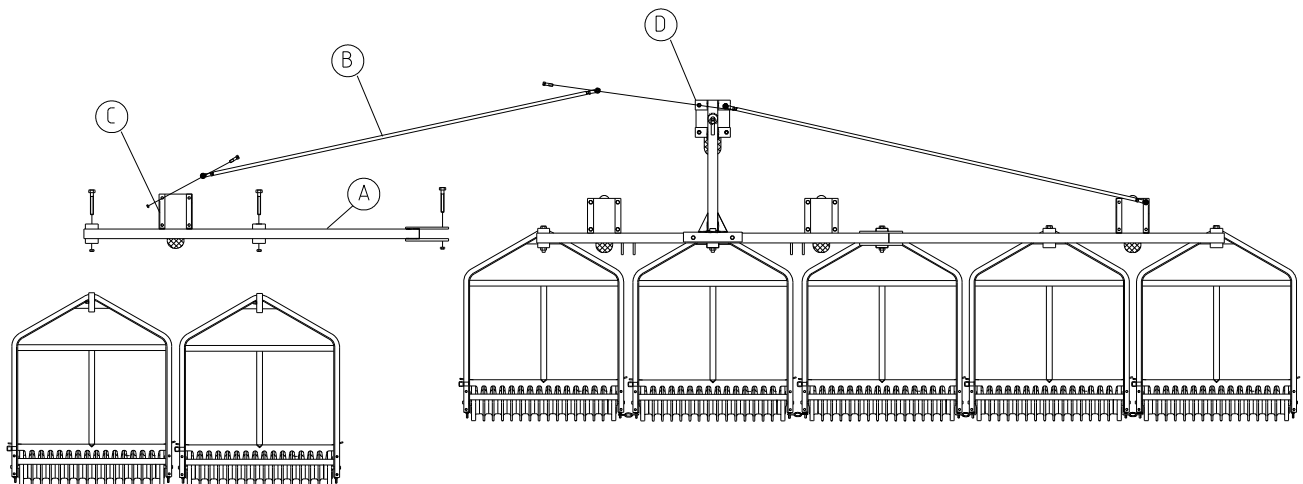


Figure 5: Assembly, step 4b.

1. Bolt the extension beam (see the figure at A) in the middle with an M12x80 bolt and a nut.
2. Finally, the brace (see the figure at B) is attached between the spacer beam (see the figure at D) and wheel mount on the extension beam (see the figure at C). Use an M12x40 socket head cap bolt on the spacer beam and replace the existing bolt on the wheel mount with an M12x40.
3. Attach the extra sections in the extension parts and lock them in place as previously with a chain. Place the baskets in the sections.

4 Replaceable parts

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

4.1 Complete picker

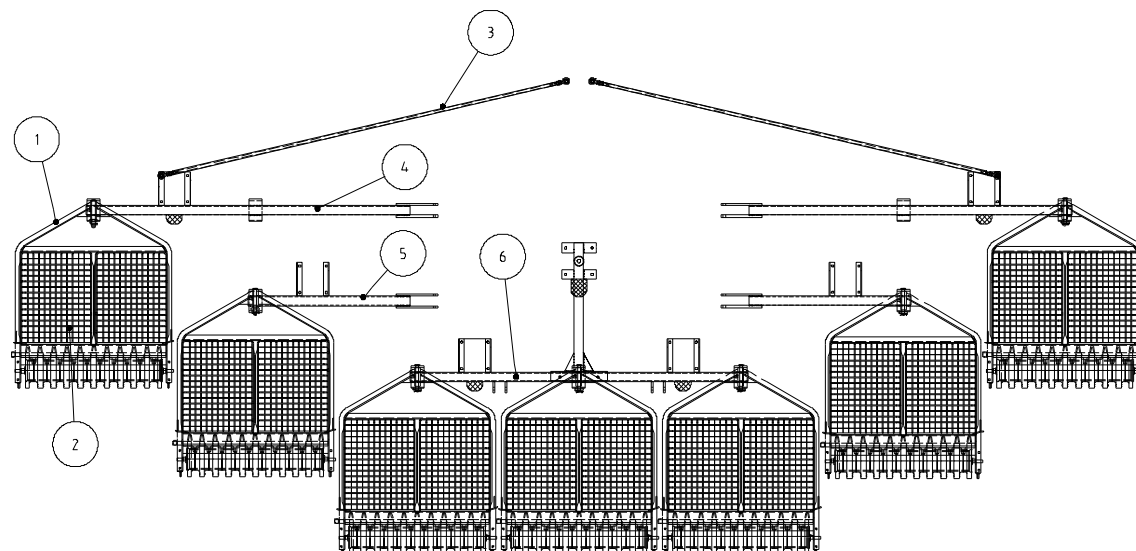


Figure 6: Complete picker, MIDI/MAXI/JUMBO

Pos.	Part No.	Description	3	5	7
1	310060	Complete Multiflex picker section	3	5	7
2	OFM0012	Plastic picker basket or	6	10	14
	300400	Metal picker basket	6	10	14
3	304401	Strut	-	-	2
4	314350	Extension beam, 7-Gang	-	-	2
5	314100	Extension beam, 5-Gang	-	2	-
6	313100	HD Main beam	1	1	1

4.2 Picker section, Multiflex

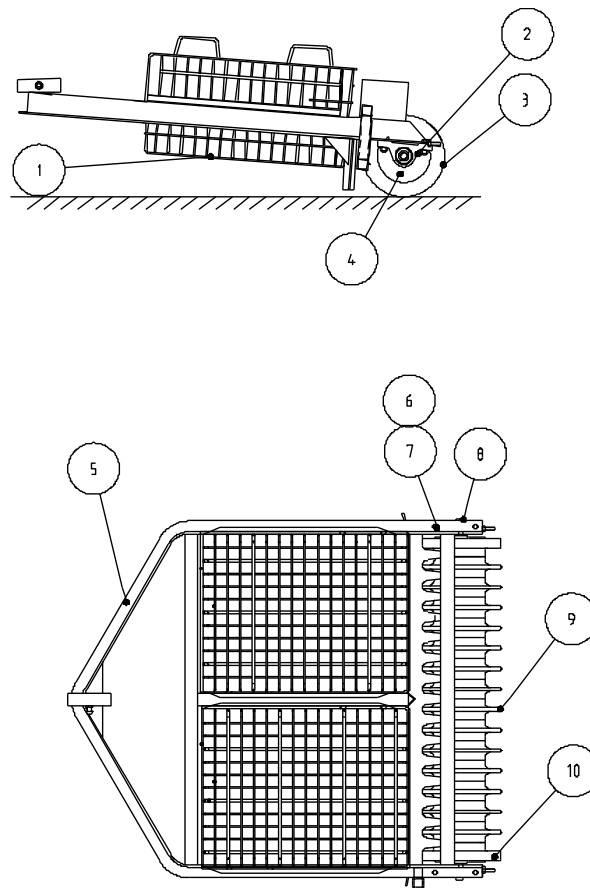


Figure 7: Complete picker section, Multiflex discs

Pos.	Part No.	Description	Quantity
-	310060	Complete picker section	
1	OFM0012	Plastic picker basket or	2
	300400	Metal picker basket	2
2	XXX	No Longer Used	X
3	PDM0094	Complete Roller Multiflex	1
4	PDM0095	End Flange with Sealed Bearing	2
5	310201	Welded frame (Gang)	1
6	01410	Bolt M10 x25	4
7	02102	Locknut M10	4
8	PDM0057	Short Axle	2
9	312052	Multiflex Discs	14
10	302040	Rubber end-disc	2

4.2.1 Complete pick-up roller, Multiflex

4. Picker roller, Multiflex discs (14 Discs per Roller)

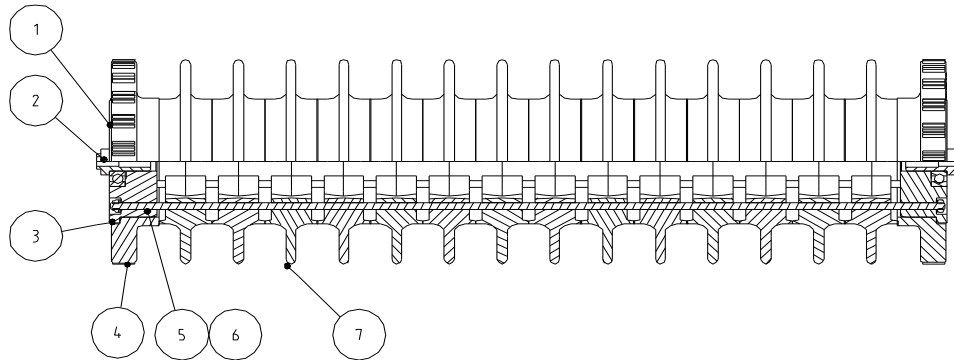


Figure 20: Complete picker roller, Multiflex discs

Pos.	Part Nr.	Description	2 gang	3 gang	4 gang	5 gang	6 gang
1	PDM0094	Complete Multiflex Picker Roller	NA	3	NA	5	NA
2	PDM0057	Short Axle (2 per roller)	NA	6	NA	10	NA
3	PDM0095	SD End Flange with Holes	NA	6	NA	10	NA
4	302040	Rubber End Disc	NA	6	NA	10	NA
5	PDM0077	Independent Rod Smooth	NA	9	NA	15	NA
6	PDM0097	Threaded Rod for Multiflex Roller	NA	9	NA	15	NA
7	PBM0038	Multiflex Disc	NA	42	NA	70	NA

4.3 Main beam and extension beam, 5-Gang

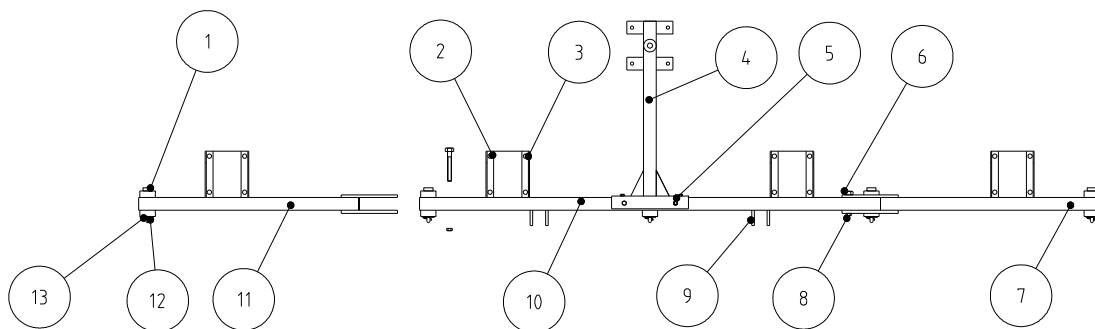


Figure 8: Main beam and extension beam, MAXI

Pos.	Part Nr.	Description	Quantity
1	52310	Bolt for HD Gang to Main Beam	5
2	313170	Left-hand wheel attachment	2
3	313180	Right-hand wheel attachment	2
4	303141	Spacer beam HD	1
5	11350	Bolt	4
6	0123 00	Bolt to extension beam	2
7	314100	Right hand extension beam, complete	1
8	022020	Nut for P/N: 012300	2
9	303160	Attachment for MOP vehicle	4
10	313100	Main beam HD	1
11	314110	Left hand extension beam, complete	1
12	OEA0009	Cotter pin 5x50	5
13	52320	Washer for cotter pin	5

4.4 A-Frame with extension pieces

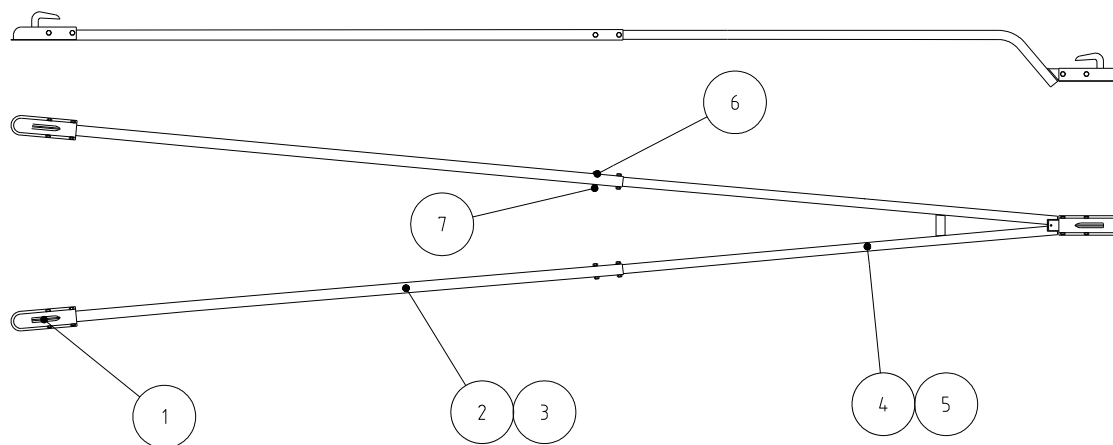


Figure 9: Handles with extension pieces

Pos.	Part Nr.	Description	Quantity
-	305001	A-Frame, complete, MIDI/MAXI	
-	305010	A-Frame, complete; JUMBO	
1	305300	Female Ball Hitch	2
2	305200	Extension arms, MIDI/MAXI	2
3	305210	Extension arms, JUMBO	2
4	305101	A-Frame Front MIDI/MAXI HD	1
5	305401	A-Frame Front JUMBO	1
6	01130	bolt, M10 x60	10
7	02102	Locknut, M10	10

4.5 Wheel Assembly

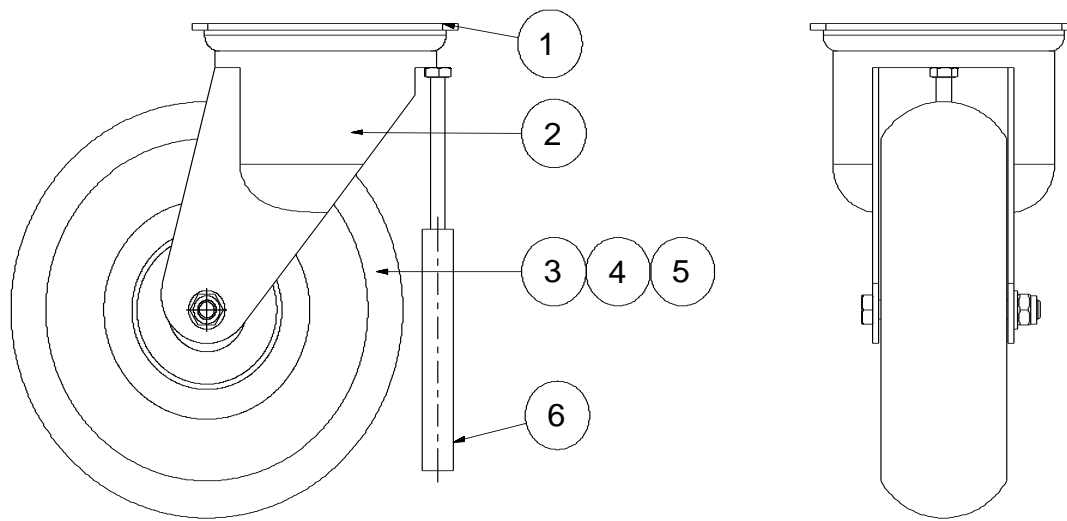


Figure 10: Wheel

Pos.	Part Nr.	Description	Quantity
1	303200	HD Castor with Wheel Complete	1
2	303210	HD Castor (no wheel)	1
3	303220	HD Wheel Complete (with tire and tube)	1
4	303240	HD Tire	1
5	303250	HD Tube	1
6	970056	Ball guide - Deflector	1