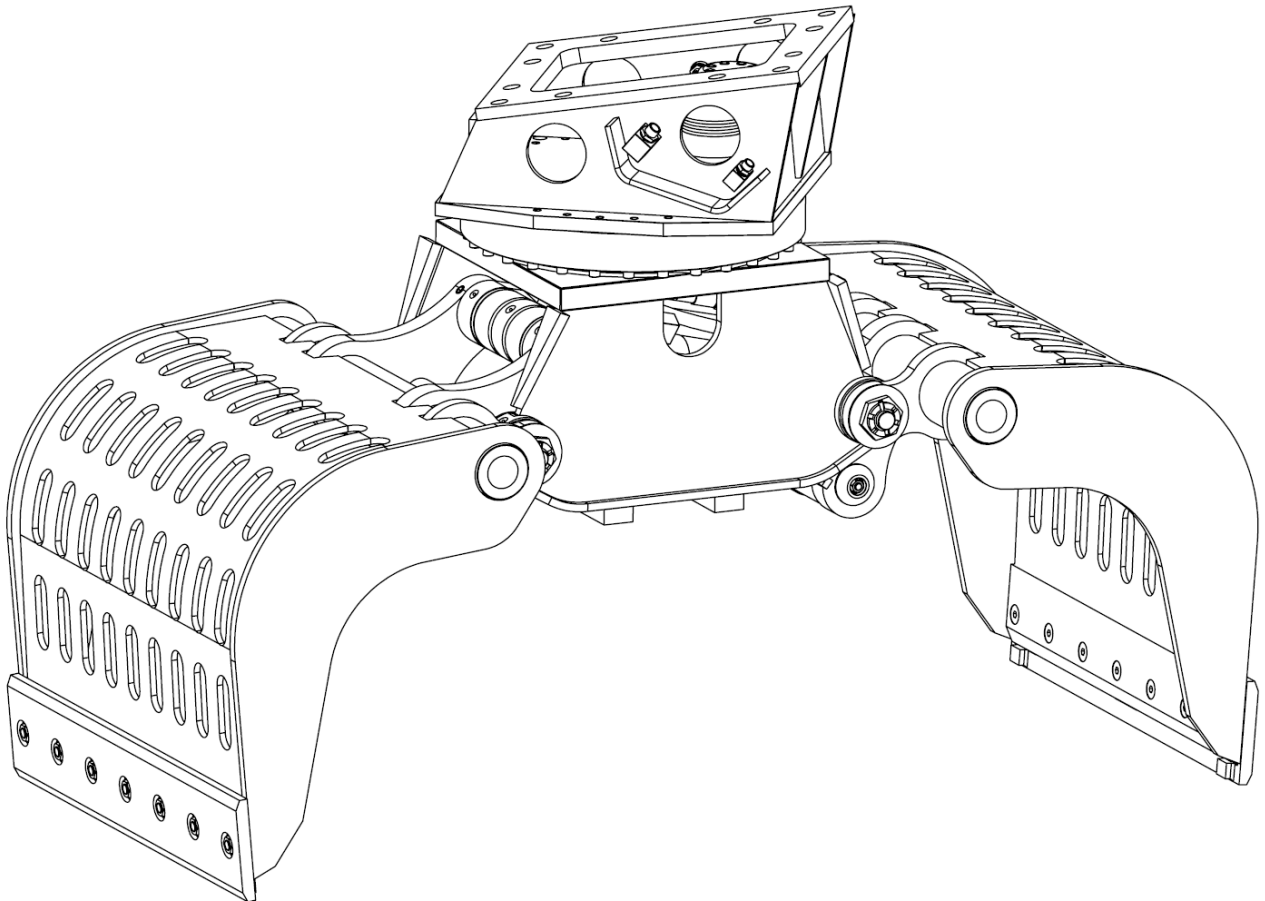


CE Operating and Maintenance Manual



Demolition and Sorting Grab

Type S1202-D

Introduction

Dear User,

The Demolition/Selector grab is a piece of equipment for excavators. The selector grab is available in various weights, capacities and versions and is always a fast and purpose-built selector and demolition device.



It is imperative you read this manual and follow all the instructions given when working with our machinery in accordance with our recommendations.

The Selector Grab products are provided with a CE marking, thereby complying with all the necessary European regulatory safety regulations.

It is essential to follow the safety regulations at all times.

These safety regulations refer to those laid out in this manual, including both the operating instructions for excavators and the safety regulations that apply to the vicinity in which the Selector grab product is being used, maintained and repaired.

Modifications made to the Sorting Grab may only be implemented with the written consent of the manufacturer. Only under these circumstances do the warranty conditions and CE liabilities remain applicable.



Warning

- The excavator with a Selector Grab may only be operated by a qualified person.
- Maintenance and/or repairs may only be carried out by appropriately trained and competent personnel.
- Prevent dangerous work situations. Stay at a safe distance from moving parts.
- Ensure that whilst operating the machinery no other people are within the working vicinity of the excavator with selector grab.
- Maintenance or repair work must only be carried out when the engine is turned off.
- Refer to the safety regulations before starting on any maintenance or repair work.
- Replace defective parts only with original parts from the manufacturer.
- Failure to replace defective parts with original parts from the manufacturer will result in cessation of the entire warranty and CE liability.

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EU declaration of compliance for machines (Guideline 2006/42/EC)

Manufacturer ACDE Europe Ltd.
Address Clonminch House, Clonminch Hi-tech Park1
Tullamore
Ireland

Hereby declares that ACDE Europe Ltd.®

Type

S1202-D

Serial number

meets all the required machine guidelines (Guideline 2006/42/EC, as most recently updated) as well as national legislative implementation of this directive.

Attention: Any adjustment that is made to this product without written consent on the manufacturer, makes this declaration void and invalid.

We should draw your attention to the fact that the selector grab product is designed to be assembled with another machine, and that the product, on the grounds of the machine Guide Line, can only be used once the whole machine is in accordance to the conditions laid down by European regulations.

Signed at 's Tullamore,

Date

.....
(signed)

Safety Regulations

The Selector Grab should always be attached to an excavator of the correct weight, class and capacity of machine. Refer to the data information plate on the grab and consult the technical specifications in this manual. When in doubt contact the supplier.

The weight of the grab, increased by the weight of the load being picked up, must never exceed the maximum allowance of lifting power. For further information consult the excavator manual.

It is prohibited for people to be within the rotation range of the machine and grab. Keep in mind that material being lifted that extrude from the grab will enlarge the rotation range.

It is always possible that material can fall out of the excavator's grab. For this reason, never rotate the machinery above people, machines nor vehicles.

Always pick up a long load at its centre of gravity, to prevent the excavator from either rotating or tipping over. It is not permissible to use the grab to hit or pound.

Whilst connecting or disconnecting, lubricating or other maintenance work, the grab must be stable and on a flat surface. Before performing lubricating or other maintenance work the engine should always be shut down.



Warning

Never work on the hydraulic system if the system is still under pressure! Keep hands away from moving parts at all times.

The manufacturer cannot anticipate every possible circumstance that might involve a potential hazard. The warnings in this publication are, therefore, not all-inclusive. If a tool, procedure, work method or operating technique that is not specifically recommended by the manufacturer is used, then you must assure yourself that it is safe for you and others.

You should also ensure that the product will not be damaged or made unsafe by the operation, lubrication, maintenance or repair procedures that you choose.

Terms of Guarantee

The manufacturer provides a warranty of 12 months from the date of delivery.

All defective parts proven to be caused by faults in either manufacture, production or material are covered by the warranty.

Defective parts that are replaced and fall under guarantee become property of the manufacturer. They must be kept available and returned immediately, in complete and unaltered condition, upon the first request from the manufacturer.

Any claim made under guarantee will only be taken into consideration once a written appeal is made to the dealer or manufacturer. This must be done directly after the damage or fault occurs and at least within 24 hours of any irregularities and problems arising.

All claims under conditions of the warranty must contain the following data; the type of machine the product has been mounted on, the serial number of the grab, the record of the defective part(s) and a description of the fault, photographs, copy of the delivery papers and invoice and a copy of the invoice of the piece of equipment concerned.

Minor repairs can be carried out in consultation with the dealer; the necessary parts which fall under the warranty, will be delivered without charge. For larger repairs the grab should be sent to your dealer or manufacturer for repairs or modifications. The work and necessary parts are free of charge. However, transport costs and call-out charges to and from your dealer or manufacturer are not covered.

The manufacturer is not liable for consequential loss caused by a defective Selector Grab (consequential loss to excavators, consequential loss due to a stationary excavator or the suspending of work activity).

Excluded from Guarantee:

- Damage caused by faulty assembly of a machine and or the hydraulic system, improper maintenance without expertise and transport damage.
- Defects resulting from improper repairs and/or maintenance including that carried out by an unauthorised third party.
- Defects arising from neglect or improper execution of preventive maintenance procedures e.g. regular lubrication or greasing.
- Defects to parts which are subject to normal wear like blades.
- Consequential loss caused by failure to replace normal wearing parts in time

N.B. If defective or worn down parts are replaced by non-original parts, the entire warranty and liability will cease to apply.

Procedures to follow before initial use

Before taking the machine into operation and to ensure the good functioning of the apparatus, it is important that the following points are checked and correspond to the technical specifications as shown on the information plate and in the manual.

- The type and weight of the sorting grab must conform to weight and machine class of the intended excavator.
- The oil flow and the pressure for rotating the selector grab should be checked and adjusted.
- Beware: the return pressure of the rotating oil at a continuous level may be at a maximum of 25 bar, and only briefly (maximum of 10% of the working time) at 100 bar.
- The oil flow and pressure of the pinching (opening and closing) of the sorting grab needs to be controlled and adjusted.
- Check if the hydraulic quick release hitch is in good order and screwed on firmly.
- Check if the ball valves and valves are in the correct position
- Check if the connecting pins between the excavator and the sorting grab are well secured, as well as the wedge and the security pin of the quick release hitch system.
- Ensures that the hoses have the correct length and are at no risk of interfering with any of the moving parts. Also make sure they cannot wear or damage because of contact with the grab or material that is moved by the grab.

Daily Maintenance

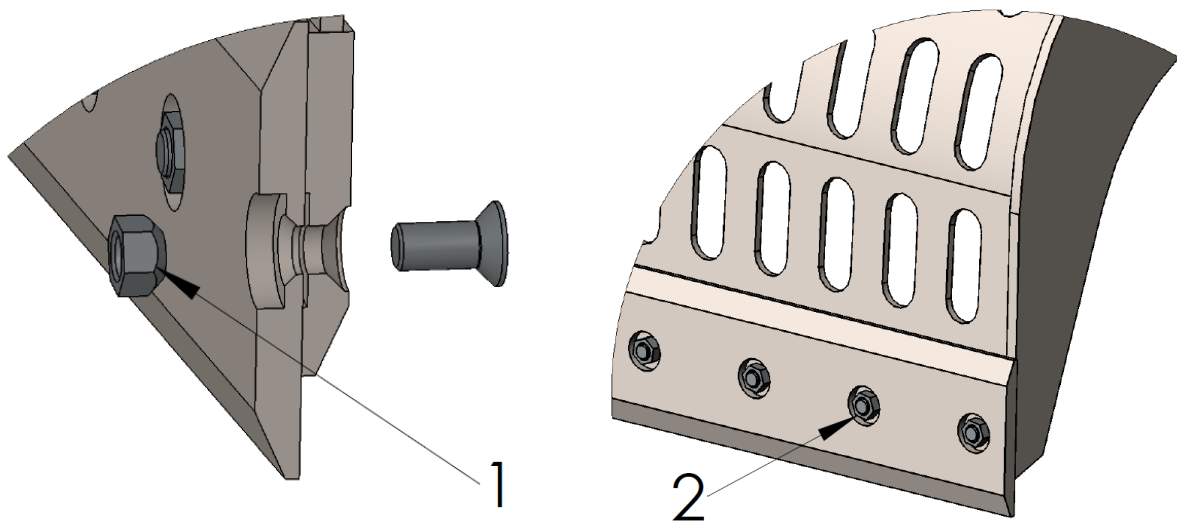
For maintenance work, always place the grab in open position on a flat and stable surface and ensure the excavator cannot move.

During maintenance on the hydraulic system the hydraulic hoses need to be disconnected. Before disconnecting ensure there is no pressure on the hoses. Consult the manual for the excavator.

The grab must be lubricated once every 8 operating hours with the same lubricant recommended for the excavator. For the position of the grease nipples and frequency of lubrication, see the schedule on page 9.

When the cutting blades of the grab shells are worn down to such a degree that the grab can no longer close fully, all work should be suspended immediately and the exchangeable wear blades must be changed or replaced (Note that the wear blades also function as final stop of the cylinder—neglect or excessive wear can lead to damage).

Picture 1 and 2 : Instructions for assembling the wear blades.

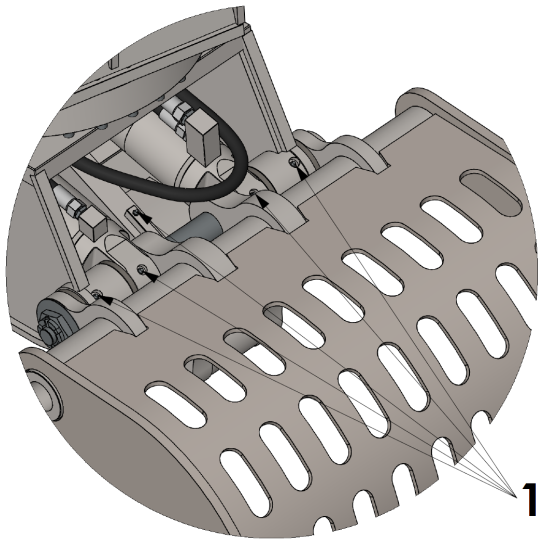


1 = Attention: fix nut with the conical side to the inside

2 = Bolts need to be tightened with a torque as shown in the table (see page 16)

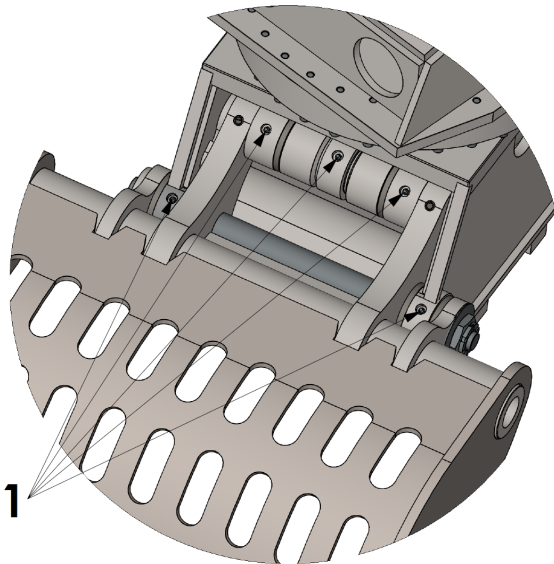
To ensure the wear blades are securely fastened to the shell it is recommended to place some additional spot welding between knives and shell base.

Lubrication Schedule



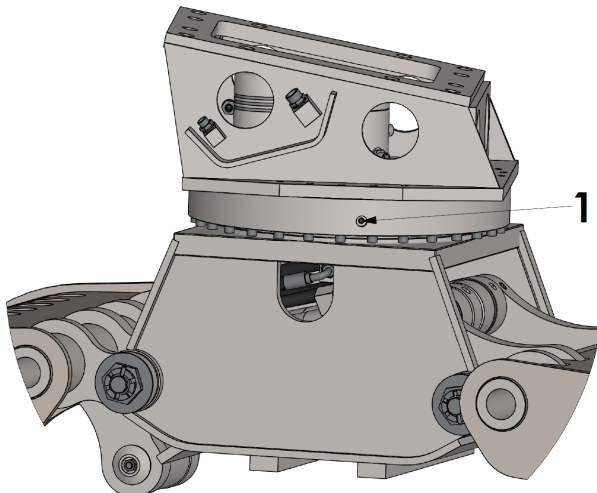
Picture 3: Lubricating pivoting points

1 = Lubricate 1 x per 8 operating hours.



Picture 4: Lubricating pivoting points

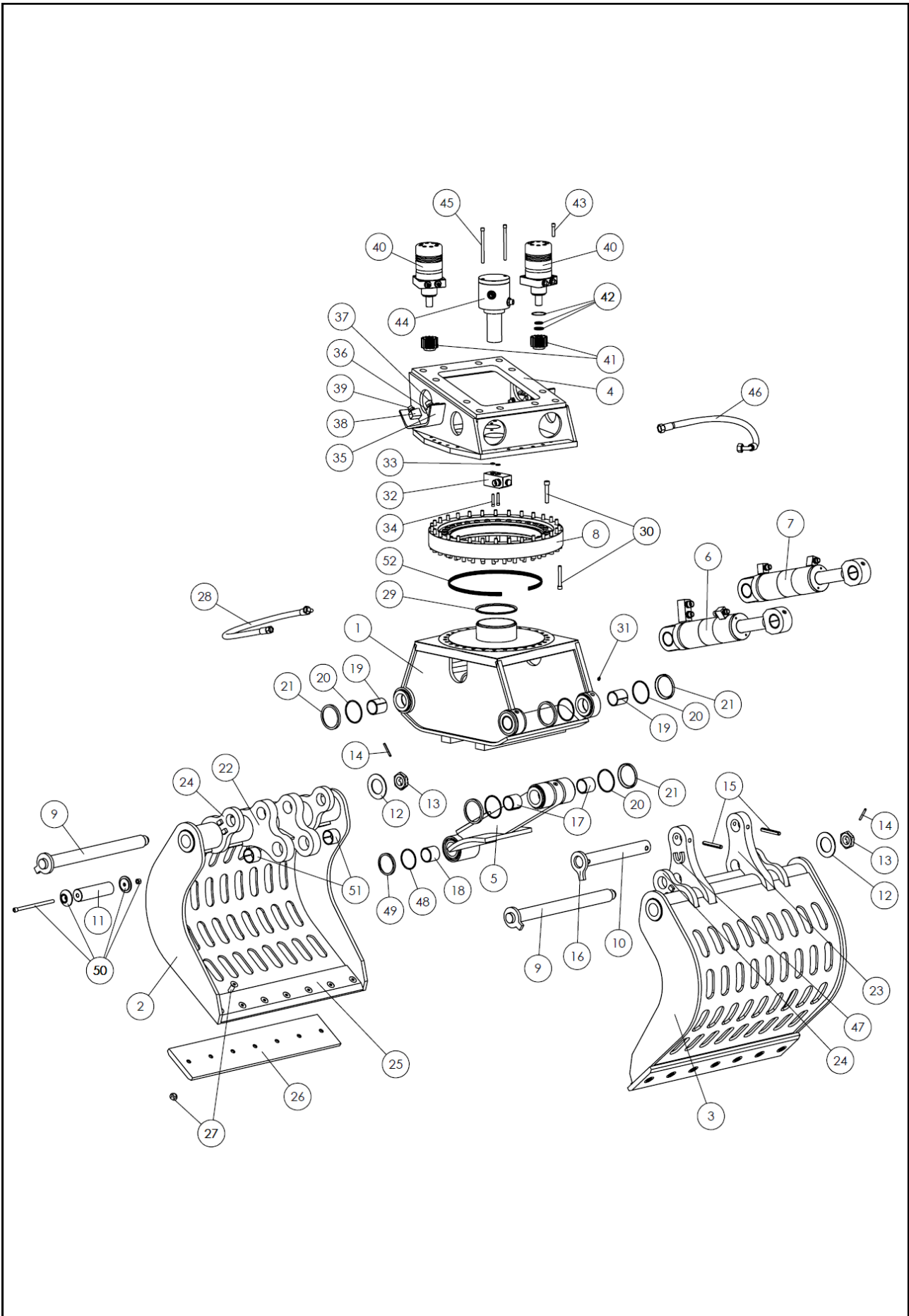
1 = Lubricate 1 x per 8 operating hours.



Picture 5: Lubricating rotator

1 = Lubricate 1 x per 8 operating hours.

Exploded View S1202-D TOTAL



Partslist S1202-D TOTAL

Part nbr.	Qty	Description	Order part nbr.
1	1	Welded main frame construction	S1202D.001
2	1	Shell left (Short lever)	S1202D.002
3	1	Shell right (Long lever)	S1202D.003
4	1	Welded rotator frame construction	S1202D.004
5	1	Welded linkage construction	S1202D.005
6	1	Hydraulic cylinder right (4 connecting ports)	S1202D.006
7	1	hydraulic cylinder left (2 connecting ports)	S1202D.007
8	1	Slewing ring	S1202D.008
9	2	Main hinge pin	S1202D.009
10	1	Linkage axis Ø60mm (top / long)	S1202D.010
11	1	Linkage axis Ø60mm (under / short)	S1202D.011
12	2	Disk spring	S1202D.012
13	2	Castellated nut M48	S1202D.013
14	2	Spline pin 8mm x 70 (secure on M48)	S1202D.014
15	4	Spline pin 16mm x 120 (secure linkage axis long)	S1202D.015
16	2	Lock plate linkage axis Ø60mm	S1202D.016
17	2	Bearings linkage top	S1202D.017
18	2	Bearings linkage under	S1202D.018
19	4	Bearings main frame	S1202D.019
20	10	O-ring Metal Seal (Ø120mm)	S1202D.020
21	10	Metal Seal (Ø120mm)	S1202D.021
22	2	Shell hinge Short	S1202D.022
23	2	Shell hinge long	S1202D.023
24	4	Shell hinge support	S1202D.024
25	2	Fixed blade	S1202D.025
26	1 set	Exchangeable wear blades (2 pieces)	S1202D.026
27	1 set	Blade bolt / nut M20 (14 pieces)	S1202D.027
28	1 set	Hose kit main frame (4 pieces.)	S1202D.028
29	1	V-ring (central ring)	S1202D.029

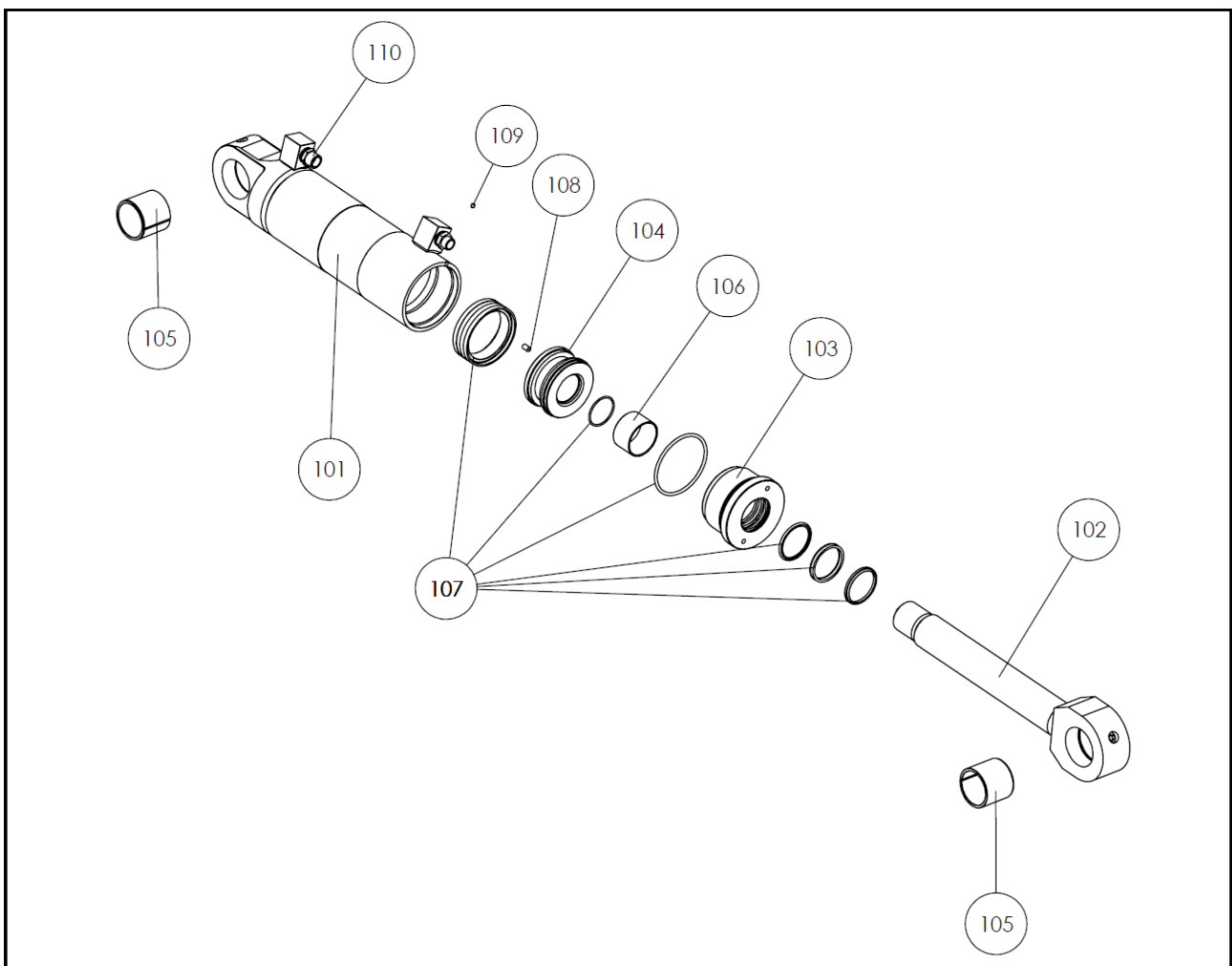
Partslist S1202-D TOTAL

Part nbr.	Qty	Description	Order partn br.
30	1 set	Allen screw (24/30 pieces)	S1202D.030
31	1 set	Lubrication nipple 1/8"G	S1202D.031
32	1	Connector block C.O.D. Ø70mm (60x60x130mm)	S1202D.032
33	1set	O-ring connector block C.O.D. Ø 70mm (2 pcs.)	S1202D.033
34	1 set	Allen screw (2 pieces)	S1202D.034
35	2	Protective cover (connection nipples)	S1202D.035
36	2	Main-connect block (closing/open) function 3/4"G	S1202D.036
37	2	Main-connect nipple (closing/open function)	S1202D.037
38	2	Main-connect block (rotation function) 1/2"G	S1202D.038
39	2	Main-connect nipple (rotation function)	S1202D.039
40	2	Hydraulic motor	S1202D.040
41	2	Gear	S1202D.041
42	1set	Seal kit hydraulic-engine (for 1 motor)	S1202D.042
43	1set	Allen screw + ring Hydraulic motor (set of 8)	S1202D.043
44	1	C.O.D. complete	S1202D.044
45	1set	Allen screw C.O.D. (2 pcs)	S1202D.045
46	1set	Hose kit set head (6 pcs)	S1202D.046
47	2	Locker-U	S1202D.047
48	2	O-ring Metal Seal (Ø106mm)	S1202D.048
49	2	Metal Seal (Ø106mm)	S1202D.049
50	1 set	Locker set (linkage axis under)	S1202D.050
51	2	Bearing shell hinge short	S1202D.051
52	1	Slewing ring seal	S1202D.052

Partslist Cylinder Left S1202-D

Part nbr.	Qty	Description	Order part nbr.
101	1	Cylinder housing (low connector / 2 ports)	S1202D.101
102	1	Piston Rod	S1202D.102
103	1	Cylinder Head	S1202D.103
104	1	Piston	S1202D.104
105	2	Bearing	S1202D.105
106	1	Plain Bearing cylinder nut	S1202D.106
107	1set	Cylinder seal-kit	S1202D.107
108	1	Secure bolt M8 x12	S1202D.108
109	1	Secure bolt M6 x 6	S1202D.109
110	1set	Cylinder nipple-set (2 pcs.)	S1202D.110

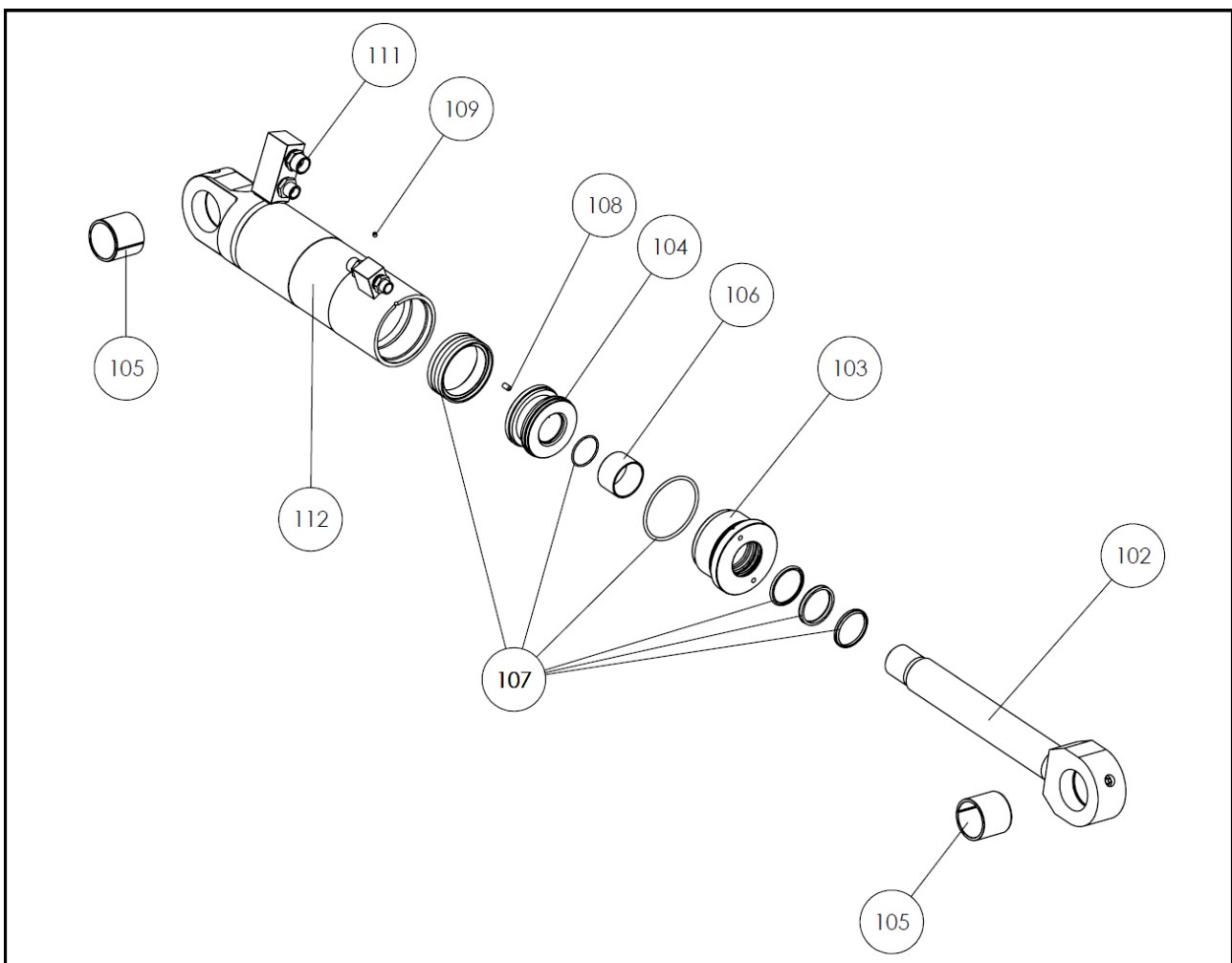
Exploded view Cylinder Left S1202-D



Partlist cylinder right S1202-D

Part nr.	aantal	omschrijving	bestel nummer
112	1	Cylinder housing (low connector / 4 ports)	S1202D.112
102	1	Piston Rod	S1202D.102
103	1	Cylinder Head	S1202D.103
104	1	Piston	S1202D.104
105	2	Bearing	S1202D.105
106	1	Plain Bearing cylinder nut	S1202D.106
107	1set	Cylinder seal-kit	S1202D.107
108	1	Secure bolt M8 x12	S1202D.108
109	1	Secure bolt M6 x 6	S1202D.109
111	1set	Cylinder nipple-set (4 pcs.)	S1202D.111

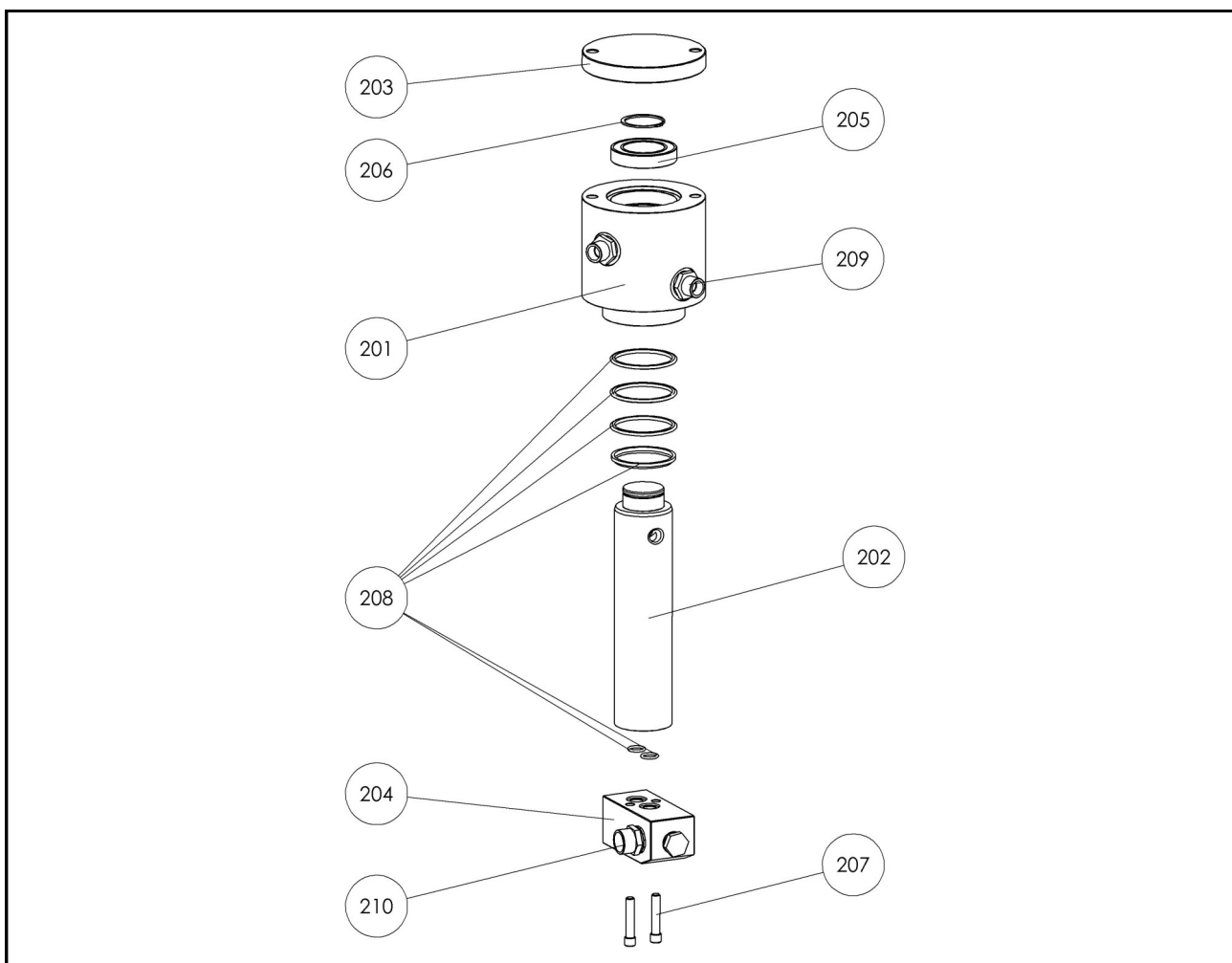
Exploded view cylinder right S1202-D



Partslist C.O.D. S1202-D

Part nbr.	Qty	Description	Order part nbr.
201	1	C.O.D. housing	S1202D.201
202	1	C.O.D. rotor Ø70mm	S1202D.202
203	1	C.O.D. cover	S1202D.203
204	1	Connection Block C.o.d. Ø70mm (60x60x130mm)	S1202D.204
205	1	Bearing	S1202D.205
206	1	Seeger circlip ring	S1202D.206
207	1set	Allen screw kit (2 pcs)	S1202D.207
208	1set	Rotor Seal kit c.o.d. Ø70mm	S1202D.208
209	1set	Connection nipples c.o.d. housing (2 pcs)	S1202D.209
210	1set	Connection nipples c.o.d. connection block (3 pcs)	S1202D.210

Exploded view C.O.D. S1202-D



Torques Specification

Maximum torque specified to bolts on the cuttingblades and rotator of the demolition and sorting grab.

Please consult this listing on diameter, pitch and metric size and maximum torque specified prior to fastening.

Bolt size	Torque (Nm)	Torque (Kg/m)	
	Bolt 10,9	Bolt 10,9	
M8	40 Nm	4 Kgm	
M10	80 Nm	8 Kgm	
M12	130 Nm	13 Kgm	
M12x1,25	110 Nm	11 Kgm	Note ,fine pitch.
M14	200 Nm	20 Kgm	
M16	300 Nm	30 Kgm	
M20	600 Nm	60 Kgm	
M24	1000 Nm	100 Kgm	
M27	1500 Nm	150 Kgm	
M30	2000 Nm	200 Kgm	
M36	3600 Nm	360 Kgm	
M39	4600 Nm	460 Kgm	

Technical specifications : Demolition and sorting grabs

	75D	150D	200D	200D- CW10	400D	450D	500D	600D	800D	900D	1000D
Class excavator	ions	0,7-1,2	1,2-3	2,5-4	3-5	4-6	5-9	10-16	12-18	13-20	15-20
Weight	kg	75	140	240	260	350	400	840	1000	1050	1100
Operating Pressure Max.	bar	300	300	300	300	300	350	350	350	350	350
Operating Pressure Min.	bar	150	150	150	150	150	190	190	190	190	190
Pressure Rotation max.	bar	170	170	170	170	170	210	210	210	210	210
Oil flow max.	l/min.	15	25	35	35	40	90	100	120	120	120
Oil flow Rotation max.	l/min.	5	10	10	10	12	15	25	25	25	25
Width	mm	300	450	500	500	600	700	800	800	900	1000
Spread openend	mm	600	750	1160	1160	1400	1500	1800	1950	1950	1950
Height	mm	600	700	850	850	950	1000	1200	1300	1300	1300
Content	ltr.	30	70	100	100	150	200	400	500	600	700
Closing Force	kn	0,6	15	20	20	23	24	35	46	46	46

	1002D	1100D	1202D	1402D	1702D	1900D	2500D	2700D	3000D	5000D	13000D
Class excavator	ions	16-21	16-25	17-28	20-28	23-30	25-38	28-45	30-50	35-50	45-100
Weight	kg	1170	1400	1500	1600	1750	2000	2500	2700	3000	5000
Operating Pressure Max.	bar	350	350	350	350	350	350	350	350	350	350
Operating Pressure Min.	bar	190	190	190	190	190	190	190	190	190	190
Pressure Rotation max.	bar	210	210	210	210	210	210	210	210	210	210
Oil flow max.	l/min.	120	150	160	170	170	180	200	200	200	300
Oil flow Rotation max.	l/min.	25	35	35	35	35	35	35	35	35	60
Width	mm	1000	900	1000	1200	1200	1200	1200	1360	1500	1800
Spread openend	mm	1950	2100	2100	2100	2250	2250	2230	2230	2460	3000
Height	mm	1300	1500	1500	1500	1500	1650	1700	1750	1800	2000
Content	ltr.	700	750	800	850	900	900	1000	1100	1300	1600
Closing Force	kn	46	55	68	68	80	80	90	90	90	130

Specifications subject to change