H612237 2015. 10

OPERATION MANUAL & PARTS LIST

SOOSAN DEMOLITION & SORTING GRAB SRG SERIES

SRG 100
SRG 200
SRG 250
SRG 400

CE

SOOSAN

Contents

OPERATION MANUAL

PART LIST

OPERATION MANUAL

SOOSAN DEMOLITION & SORTING GRAB

⚠ DANGER

SERIOUS INJURY OR DEATH COULD RESULT FROM THE
IMPROPER REPAIR OR SERIVICE OF THIS DEMOLITION & SORTING GRAB.
REPAIRS AND / OR SERVICE TO THIS DEMOLITION & SORTING GRAB MUST ONLY
BE DONE BY AN AUTHORIZED AND CERTIFIED DEALER.

Model	
Serial Number	
Year of Construction	

SOOSAN

CE

EC Declaration of Incorporation
according to EC Machinery Directive 2006/42/EC

We herewith declare, Soosan Heavy Ind. Co., Ltd.
of
109-2, Songsan-Ri, Yanggam-Myeon,
Hwaseong-Si, Gyeonggi-Do, 445-933,
REPUBLIC OF Korea

that the following machine complies with the appropriate basic safety and health requirements of the EC Directive(2006/42/EC) based on its design and type, as brought into circulation by us. In case of alteration of the machine, not agreed upon by us, this declaration will lose its validity.

The machinery is incomplete and must not be put into service until the machinery into which it is to be incorporated has been declared in conformity with the provisions of the Directive.

Technical documentation for the machinery is maked by :
Place : Soosan Heavy Ind. Co., Ltd
109-2, Songsan-Ri, Yanggam-Myeon, Hwaseong-Si, Kyunggi-Do, Korea
Position : Manager, R&D team
Name : Lee, Young-dong

The technical documentation for the machinery is available from :
Name : SOOSAN HEAVY INDUSTRIES CO., LTD EUROPE
Adress : Ohmweg 18,3208 ke, Spijkenisse, Netherlands

Machine Description : Construction Machinery (not appendix Ⅳ)
(Hydraulic Grab)

Machine Type :

Serial Number :

Applicable EC Directive : EC Machinery Directive (2006/42/EC)

Applicable Harmonized
Standards : EN ISO 12100-1:2003
EN 982/A1:2008
CEN/TS 13778 : 2004
EN ISO 12100-2:2003
EN ISO 14121-1:2007

Applicable National Technical Standards And Specifications :
Weight(kg) :
Crushing Force (ton) :
Max Working Press(bar) :

Date/ Authorized Signature :

Title of Signatory :

⚠ DANGER

DO NOT OPERATE THE DEMOLITION & SORTING GRAB UNLESS THE FOLLOWING SAFETY INSTRUCTIONS HAVE BEEN THOROUGHLY READ AND UNDERSTOOD!
READ THIS MANUAL BEFORE INSTALLING, OPERATING OR MAINTAINING THIS EQUIPMENT.
THE MANUAL IS WRITING IN KOREAN BASICALLY AND LATER IT WILL BE TRANSLATED INTO ENGLISH.
ANY OTHER LANGUAGE WILL BE SERVICED ON REQUEST.

> Flying debris form the demolition & sorting grab or other material may cause serious or fatal injury to the operator. Personal protection equipment must be used.

> Flying debris demolition & sorting grab or other materials may cause serious or fatal injury to bystanders. Never operate the grab when bystanders are in the working area.

> On machines/carriers, the demolition & sorting grab can enter the operator's compartment under specific demolition & sorting grab position. Make sure that suitable impact shields are used when operating the demolition & sorting grab with this type of equipment.

> Do not operate the demolition & sorting grab unless all safety decals described in this manual are in place. The decals must be inspected periodically to ensure that all wording is legible. The decals must be replaced if illegible. Replacement decals can be obtained from your authorized Soosan Distributor.

> When operating the demolition & sorting grab ear, eye and breathing protection must be used at all times.

> The demolition & sorting grab will become very hot during operation. Allow time for demolition & sorting grab to cool down before touching demolition & sorting grab parts.

If this machine is transferred, be sure to attach this manual to the machine.
For safety, common items are described "SAFETY PRECATUIONS", and others are

mentioned in the succeeding pages.

SOOSAN

PREFACE

We appreciate your purchasing a Soosan Demolition & Sorting Grab.

The Demolition & Sorting Grab, designed and built to provide durable operation under any working conditions, has been developed by Soosan's excellent engineering techniques with accumulated experiences for many years. Without proper hand ling, regular inspection and maintenance, however, the machine fails to display its full capacity, resulting in various troubles of machine parts.

This publication should be carefully read prior to installation and operation in order to prevent any mishandling of Demolition & Sorting Grab.

We guarantee that a faithful compliance of the instruction will contribute to the best operation condition.

Customers are, therefore, required to keep in mind that the company is not responsible for troubles caused by not following our guidelines or not using genuine parts.

Soosan Heavy Industries Co., Ltd.

01. Safety Precautions.

This manual contains safety, operation, and routine maintenance instructions. It doesn't contain service disassembly and service assembly instructions. If needed, complete service disassembly and service assembly instructions are contained in manual which can be ordered from your Soosan Demolition & Sorting Grab authorized and certified dealer.

Please read the following warning.

⚠ DANGER

Serious injury or death could result from the improper repair or service of this grab. Repairs or service to this grab must only be done by an authorized and certified dealer.

Most of the accidents are caused by disregarding the basic rules of operation inspection or repair, or by neglecting the inspection before operation. Many accidents can often be avoided by recognizing potentially hazardous situations before an accident occurs. Before operating, inspecting or repairing this machine, be sure to read and fully understand the preventive methods and warnings described on the machine or in this manual. If not, never operate, inspect or repair this machine

Safety labels and messages are classified as follows so that the users can understand the warnings on the machine or in this manual.

⚠ DANGER	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations
⚠ WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠ CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury, It may also be used to alert against unsafe practices.
NOTICE	Signs used to indicate a statement of company policy directly or indirectly related to the safety of personal or protection of property.

The safety messages including the preventive measures to avoid danger.

For safety, common items are described in "SAFETY PRECAUTIONS", and others are mentioned in the succeeding pages.

Soosan cannot anticipate every possible circumstance that might involve a potential hazard on operation, inspection or repair. Therefore the warnings in this manual are not all inclusive. If an operation, inspection or repair not described in this manual is used, you must take measures for safety by yourself.

⚠ DANGER

Observe the cautions and take a preventive measure for safety

The Soosan SRG Series will provide safe and dependable service if operated in accordance with the instructions given in this manual. Read and understand this manual, any decals and tags attached to the grab before operation. Failure to do so could result in personal injury or equipment damage

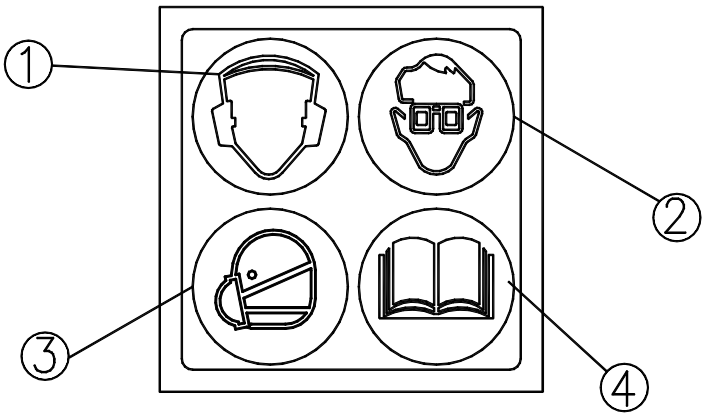
- Operate the grab in accordance with all laws and regulations which affect you, your equipment, and the worksite.
- Do not operate the grab until you have read this manual and thoroughly understood all safety, operation and maintenance instructions.
- Do not operate the grab until you have read the carrier equipment manual and thoroughly understood backhoe or excavator or similar equipment used to operate the grab. The word "carrier", as used in this manual, means a backhoe or excavator or similar equipment used to operate the grab.
- Know the limits of your equipment.
- Before starting a work, Check the prohibitions, cautions and working processes in a working site with the field overseer, Observe all of them strictly.
- Wear such protective tools as a helmet, safety shoes, etc. to perform a work.
  Make use of the protective glasses, earplugs, gloves and other protective tools if necessary.
- Establish a training program for all operators to ensure safe operation. Do not operate the grab unless thoroughly trained or under the supervision of an instructor. Become familiar with the carrier controls before operating carrier and grab. While learning operate the grab and carrier, do so at a slow pace. If necessary, set the carrier
- We will not assume the responsibility of the accident or trouble caused by modification without permission (including disassembly and repair) and of the secondary damage compensation.
- Each section of the machine is overheated just after running. If you touch it by bare hand, a burn or unexpected accident will be caused.
  When checking or repairing the hydraulic system or when replacing the oil or filter or when checking the cooling water, make sure that the temperature of each section is normal in advance.
- Examine the topographical or geographical condition and the road status of a working site. Make sure that there is no danger and then perform the work.
- The operator must not operate the grab or carrier if any people are within the area where they may be injured by flying debris or movement of the equipment.
- Before working, make sure that the machine is stationary and that there is no person around the machine.
- Don't move the boom and excavator during working.

- If you put your hand or arm into the movable sections, an accident of "being caught" or "being cut" may occur. Be very careful.
- When trouble has occurred, inform the supervisor of it. Don't operate the machine until repair is ended.
- The owner of the machine must carry out periodical inspection to ensure the safety for operation.
- These parts are liable to the material change, abrasion or deterioration as with the passage of time. If a problem is found before the proper using time, repair or replace the part.
- Usually arrange everything in the working place and keep the place clean and dry
- The inner pressure is usually applied to the hydraulic system. Before supplying or draining the oil in the hydraulic system or before removing the hydraulic parts stop the engine and release the inner pressure.
- Stop the engine before attempting to make any repairs, adjustments or servicing to either the carrier or the grab
- Do not modify this grab in any manner.
- Use only grab parts manufactured by Soosan. Usage of grab rod produced by another manufacturer may damage the grab and will void the warranty.
- To avoid personal injury or equipment damage, all grab repair, maintenance and service must only be performed by authorized and properly trained personnel.
- Keep this manual with the grab.
- If you do not understand how to operate safely your grab, contact an authorized Soosan Dealer for assistance.
- Do not operate this equipment if you are taking medication which may affect your mental judgement or physical performance.
- Do not operate this equipment if you are under the influence of drug or alcohol.

1.1 Sticker List & Part Code.

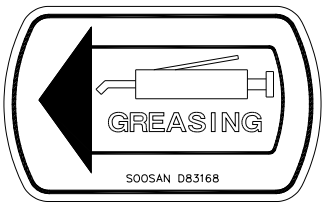
■ Warning sticker (D83 166)

1) Use hearing protection
2) Use eye protection
3) Use breathing protection
4) Use the manual before use



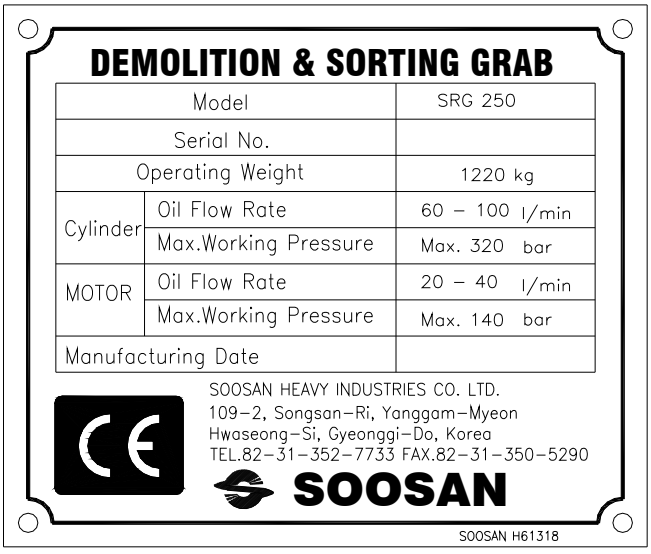
■ Greasing Sticker (SOOSAN H31 200)

GREASING



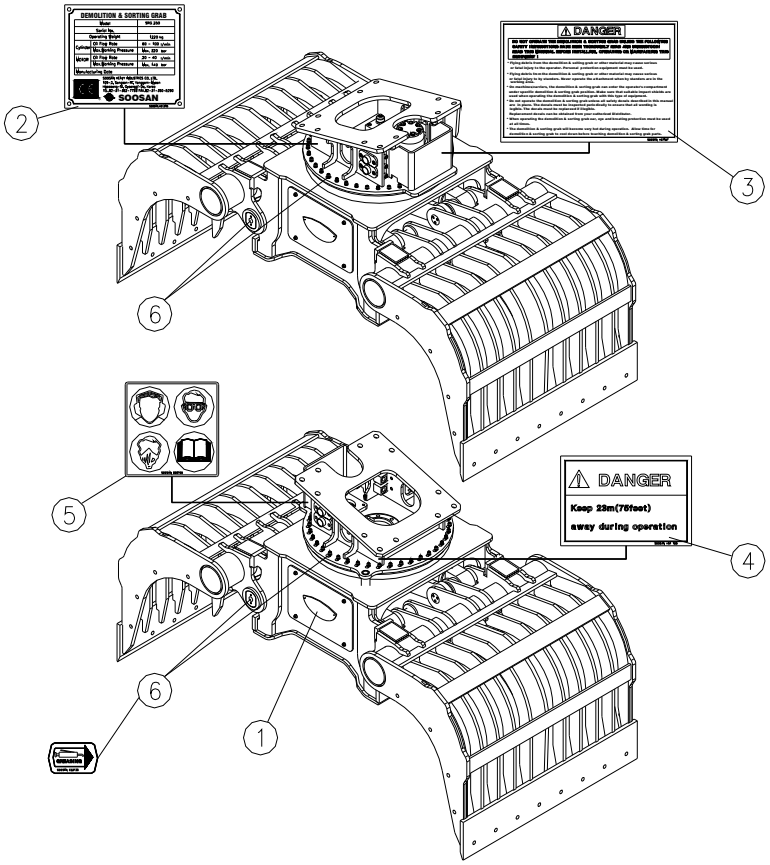
1. Fill cavity with recommended grease.
2. Grease whenever pin looks dry.
3. Failure to comply with these instruction can result in damage to demolition & sorting grab and will void the warranty

■ Specification Plate(For Example SRG250)



■ SRG100~SRG400

No.		–	1	2	3	4	5	6
STICKER NAME		STICKER SET	MODEL LOGO	SPECIFICATION STICKER	DANGER STICKER	DANGER STICKER	WARNING STICKER	GREASING STICKER
SRG100	PARTS No.	P61 031	P61 424	P61 425	P61 197	H61 198	D83 166	H81 223
SRG200		H71 031	H71 292	H71 293	H61 197	H61 198	D83 166	H81 223
SRG250		H61 031	H61 317	H61 318	H61 197	H61 198	D83 166	H81 223
SRG400		H31 033	H31 430	H31 431	H31 197	H61 198	D83 166	H81 223



Local safety regulations.

Enter any local safety regulation here, keep these instructions in an area accessible to the operator and maintenance personnel.

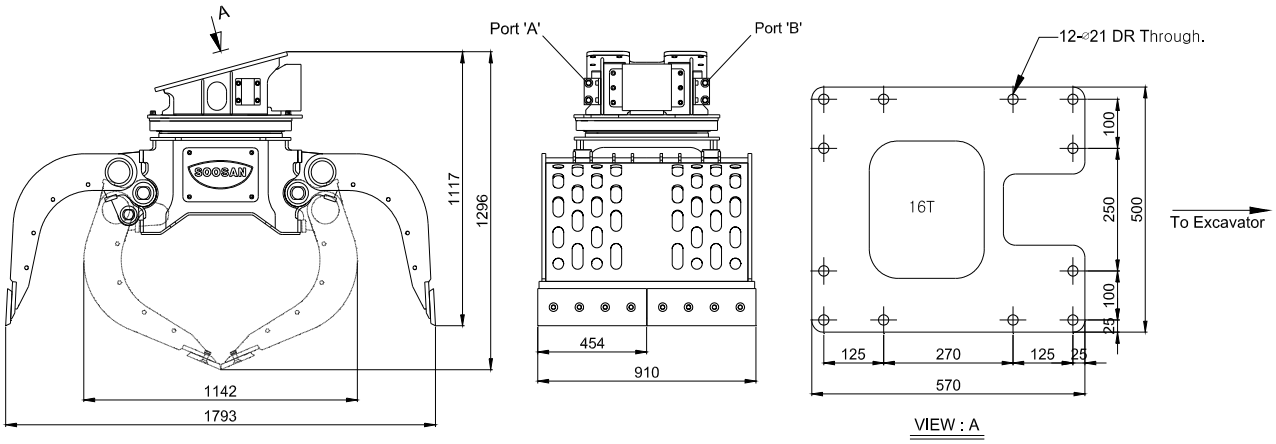
02. Standard Specification

DESCRIPTION		UNIT	SRG100	SRG200	SRG250	SRG400
Weight		kg(lb)	750(1653)	1158(2553)	1220(2690)	1800(3968)
Overall width		mm(in)	910(35.8)	1040(40.9)	1080(42.5)	1350(53.2)
Overall height	Open	mm(in)	1117(43.9)	1284(50.6)	1302(51.3)	1534(60.4)
	Close	mm(in)	1296(51)	1485(58.5)	1539(60.6)	1805(71.1)
Overall length	Open	mm(in)	1793(70.6)	2080(81.9)	2183(85.9)	2429(95.6)
	Close	mm(in)	1142(44.9)	1255(49.4)	1373(54)	1514(59.6)
Shell volume(V)		l(gal)	380(100.4)	500(132.1)	650(171.7)	950(251)
Max. closing force		ton(kN)	3.5(34)	5(49)	6(59)	7(69)
Cylinder	Max. working pressure	bar(psi)	300(4351)	320(4641)	320(4641)	320(4641)
	Required Oil Flow	lpm(gpm)	40~80(11~22)	60~100(16~26)	60~100(16~26)	100~180(26~47)
Rotating Motor	Max. working pressure	bar(psi)	140(2031)	140(2031)	140(2031)	140(2031)
	Required Oil Flow	lpm(gpm)	20~40(5~11)	20~40(5~11)	20~40(5~11)	20~40(5~11)
Connecting thread – cylinder		–	G 1/2"	G 1/2"	G 1/2"	G 3/4"
Connecting thread – rotating		–	G 1/2"	G 1/2"	G 1/2"	G 1/2"
Hose size hydraulic – (nominal ID)		mm(in)	12(1/2)	12(1/2)	12(1/2)	19(3/4)
Hose size rotating mechanism – (nominal ID)		mm(in)	12(1/2)	12(1/2)	12(1/2)	12(1/2)
Suitable Excavator		ton(lb)	8~15 (17600~33000)	10~18 (22000~40000)	13~19 (28600~42000)	24~35 (53000~77000)

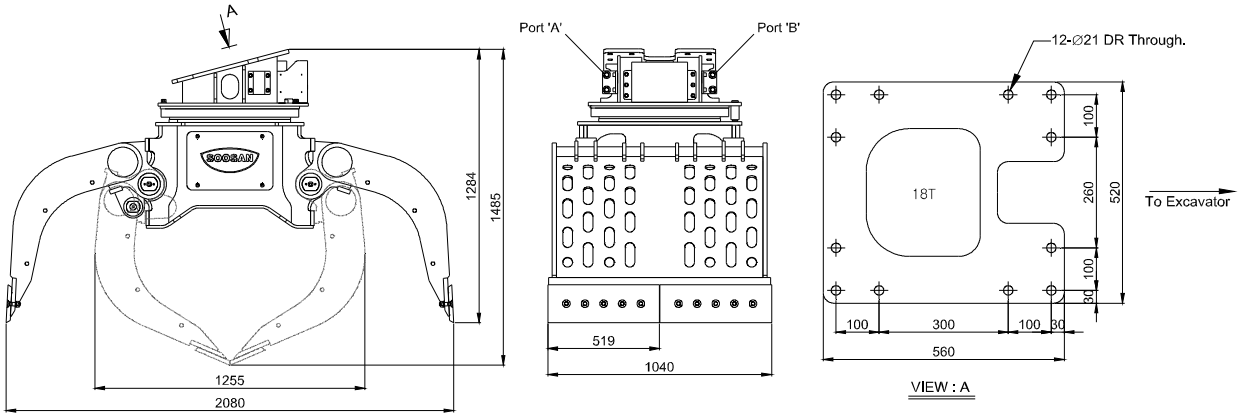
* The above specifications are subject to change without prior notice for the quality enhancement.

03. External Dimension

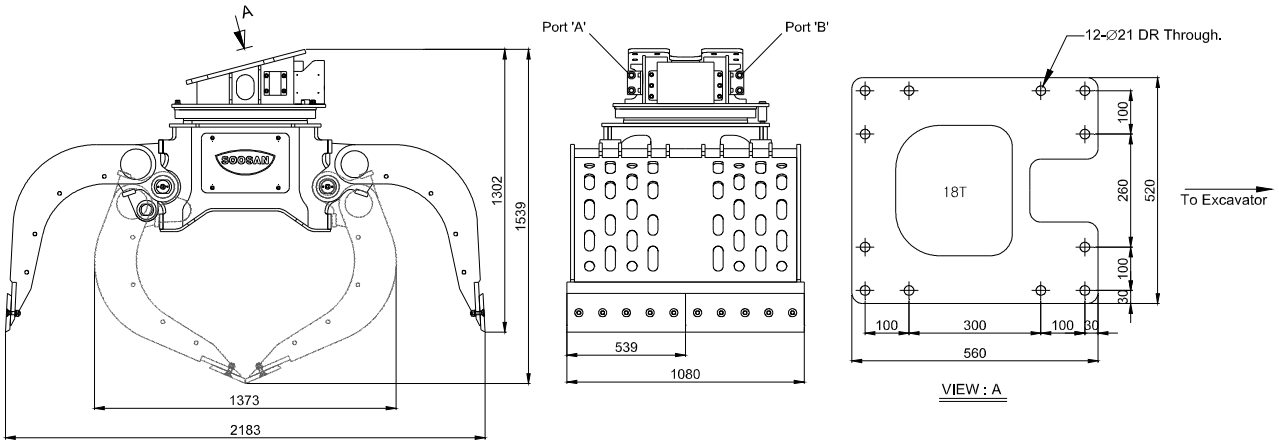
3.1 SRG 100



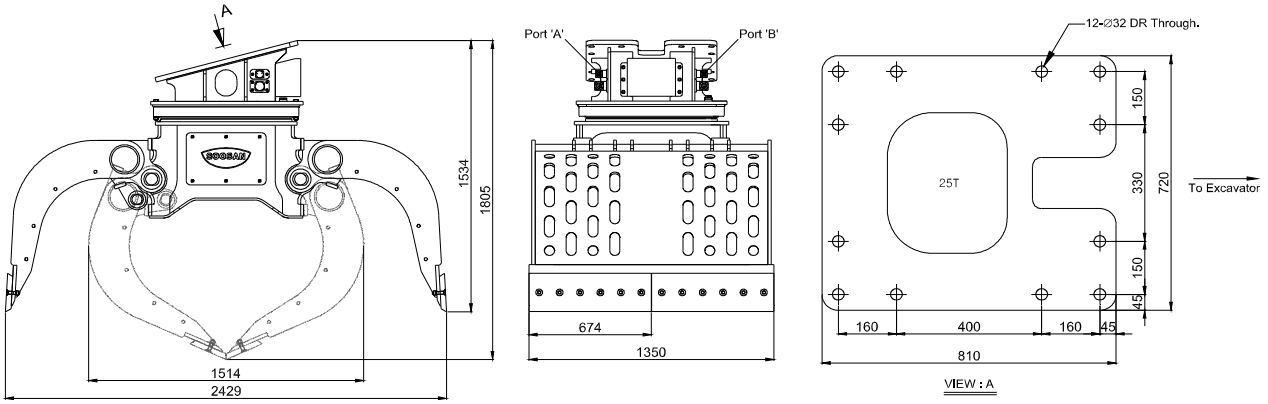
3.2 SRG 200



3.3 SRG 250



3.4 SRG 400



04. Preparation for Installation and Operation

4.1 Checking before installation instructions

⚠ CAUTION

CHECK THE "SPECIFICATIONS" SECTION OF THIS MANUAL TO DETERMINE CORRECT EXCAVATOR SIZES AND HYDRAULIC PRESSURE, HYDRAULIC FLOW IF HYDRAULIC PRESSURE, HYDRAULIC FLOW ARE EXCEEDED, THE HYDRAULIC GRAB WARRANTY IS VOID

⚠ CAUTION

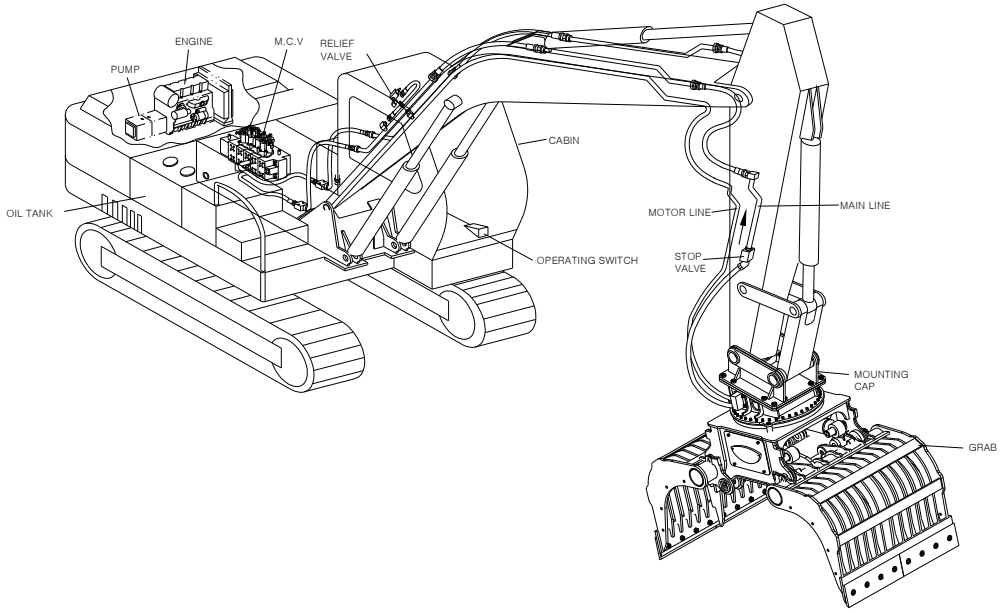
THE CONTAMINATED PART MUST BE CLEANED WITH NO DELAY.
HYDRAULIC OIL OR LIGHT OIL IS HIGHLY RECOMMENDABLE.

⚠ CAUTION

THE CIRCUIT RELIEF SETTING PRESSURE IS NOT FIXED.
BUT, IT WILL BE ADJUSTED BY PUMP CAPACITY.

- Since Soosan's Grab operates with various kinds of hydraulic construction machines, it should be installed after our serviceman's check of carrier to display its full performance. Necessary preparations prior to installation and operation of the Grab are following.

4.2 Installation



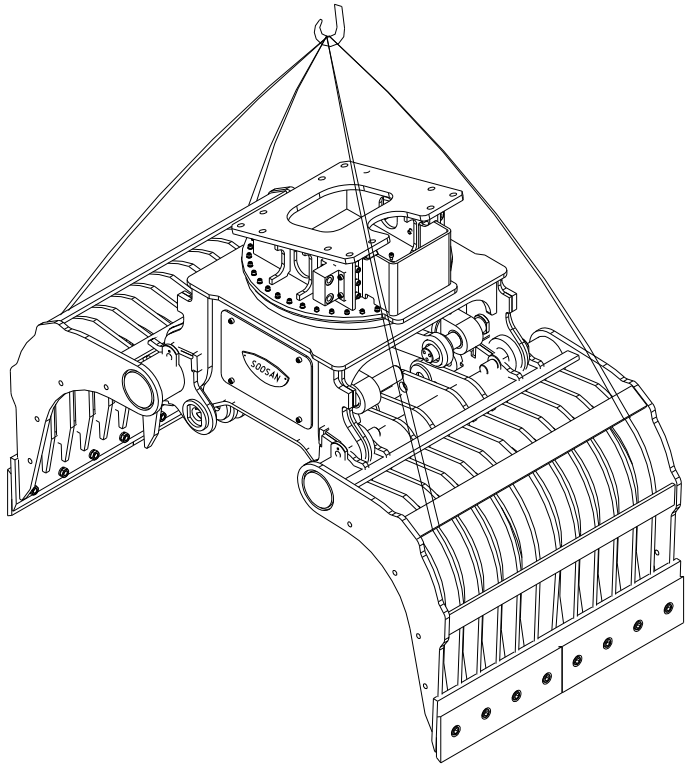
■ Lifting instructions of Demolition & Sorting Grab

⚠ WARNING

Lifting wires and devices must be approved of a weight of 2500kg.
Faulty lifting devices can cause the demolition & sorting grab to move unpredictably or drop.
Incorrect handling can result in crush injuries.

Most countries have regulations concerning lifting, lifting wires, and lifting devices.

- Only the right type of lifting device with sufficient lifting capacity should be used. No other devices than specified lifting devices should be used for lifting the equipment of their components. Do not use, for instance, a loader for lifting.
- The weight of the load must be known, and the rated lifting capacity must be exceeded.
- Lifting should be planned so that the load need not be moved over people or places where people may be present.
- Make sure that the lifting device is in good condition.
- Lifting wires and chains should be checked regularly. Discarded wires must be marked clearly and disposed of without delay.
- Check wires with several ropes must not be twisted. Lifting ropes must be fixed according to the manufacturer's instructions.
- Check proper fastening and balance of the load at first lifting it up only a few centimeters. Continue lifting when you make sure that the load is properly fixed and in balance.
- Never stand or work under a hanging load.
- Do not estimate lifting capacity on the basis of stability.
- Do not move a load over persons.
- Take care that the load does not bump into anything.
- It's absolutely forbidden to carry persons on the load.



4.3 Hydraulic pipe lines for exclusive use

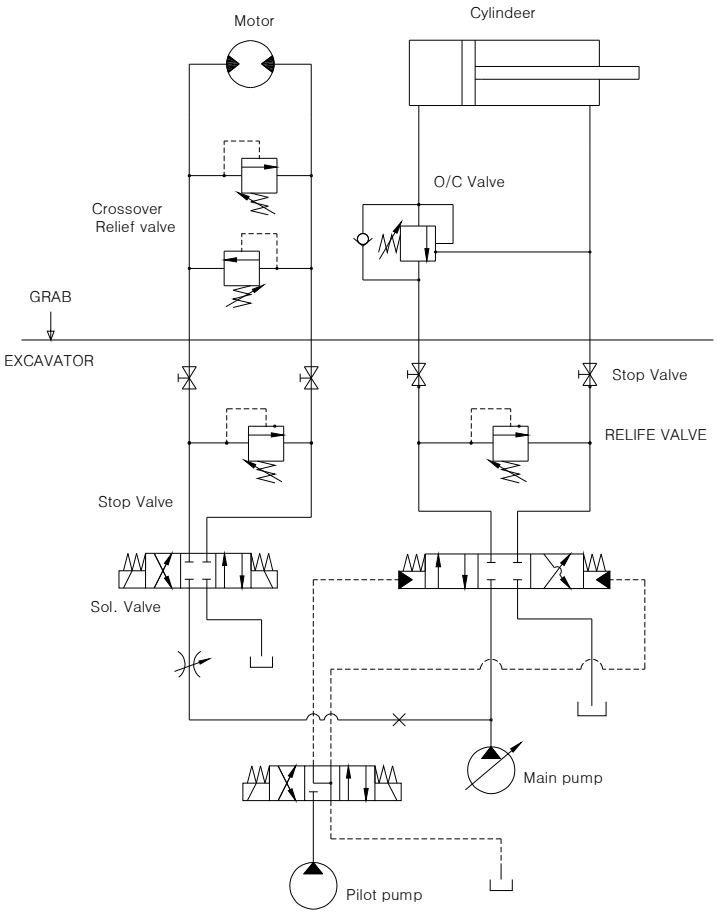
Operation of the demolition & sorting grab requires installation of hydraulic pipe lines for exclusive use of the demolition & sorting grab. As hydraulic pipe lines vary depending on base machines, our service engineer must first check hydraulic pressure, oil capacity, pressure loss and other conditions of the base machine before installing hydraulic pipe lines. Use only genuine parts in case of replacement because hydraulic pipe lines(hoses, pipes and fittings) are made of materials carefully selected in consideration of durability.

⚠ WARNING

THE HYDRAULIC SYSTEM TO THE BASE MACHINE MUST BE CHECKED BY AN AUTHORIZED SOOSAN SERVICE ENGINEER BEFORE FIRST USE AND AFTER ANY MODIFICATIONS.

⚠ WARNING

MAKE SURE THAT THE DEMOLITION & SORTING GRAB VALVE OF HYDRAULIC SYSTEM IS PROPERLY SET.



4.4 Grab mounting procedure

1. Place the grab on the ground (or wood block) with blocking to the keep the grab level for installation.
2. Remove the bucket or there attachment follows the manufacturer's recommended procedure. Be careful not to contaminate the hydraulic system by plugging the hydraulic hoses.
3. Operate the excavator into proper position, ling the excavator's arm (second boom) into the top bracket pivot the grab.
4. Pin the excavator's arm and grab top bucket pivot together.
5. Operate bucket cylinder to adjust the hole of bucket linkage to proper position where the second linkage pin can be inserted insert pin.
6. Connect the hydraulic hoses to the manifolds (or fitting) located on each side of the top. Top bolts or cap to the proper torque.

⚠ CAUTION

When installation is completed, fully extend excavator bucket cylinder to curl grab, cheek for interference, contact factory of authorized dealer if any interference occurs.

7. Lift the boom and slowly try the grab open and close function, watch for hydraulic oil leakage. Observe flow rate and pressure range or the warranty will become void.

4.5 Grab removal procedure

1. Position the grab in the flat ground.

⚠ CAUTION

Trapped hydraulic pressure may be present after base machine is turn off.
Extreme caution must be taken when removing hydraulic hoses because possible injury of death could result.

2. Disconnect the hydraulic hoses

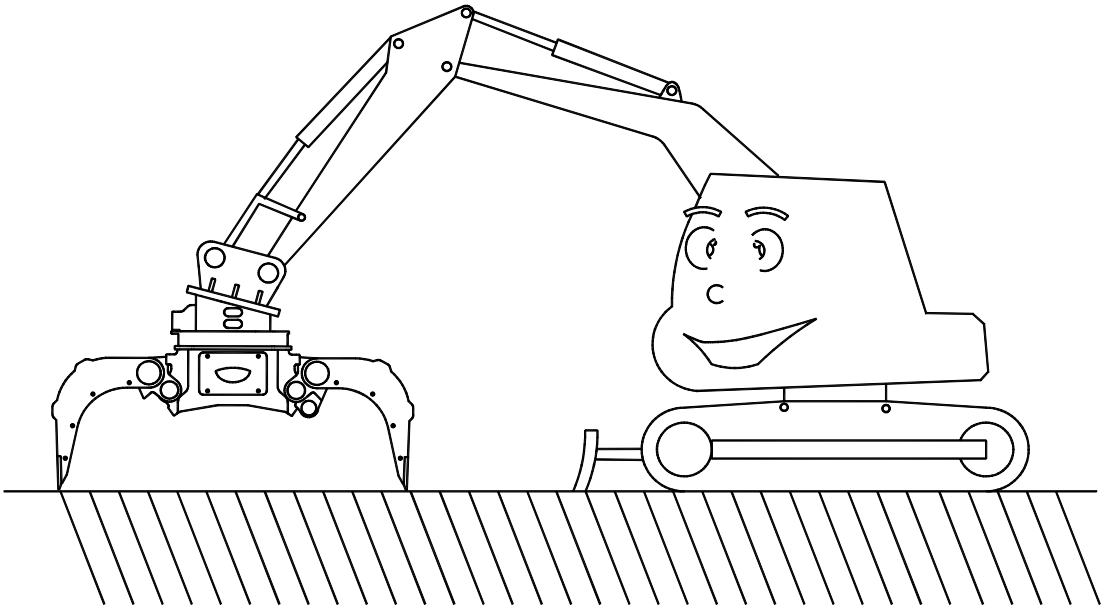
⚠ CAUTION

Be careful not to contaminate the hydraulic system by plugging the hydraulic hoses.

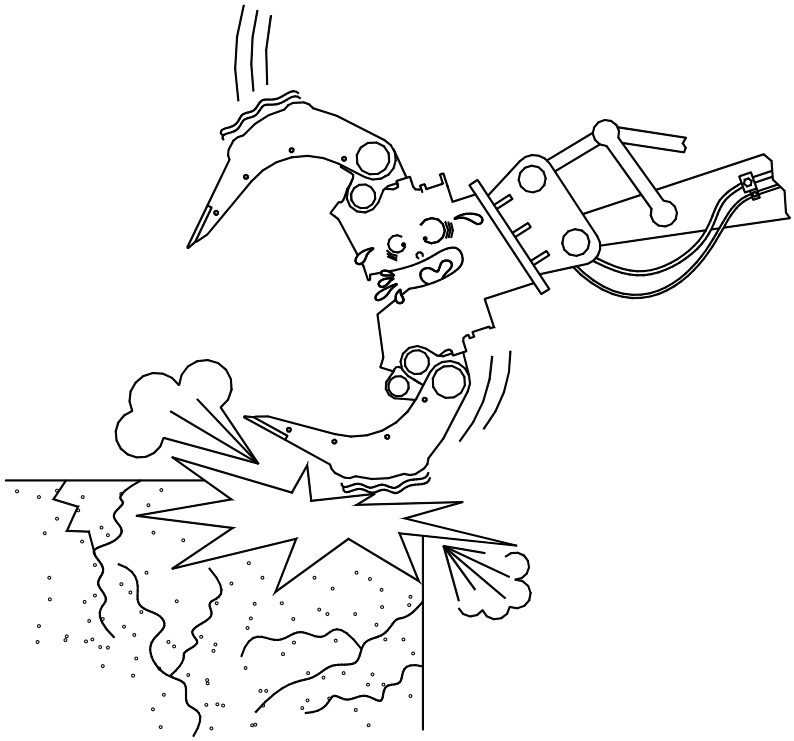
3. Removing the bucket cylinder pin from the grab mounting bracket.
4. Remove the arm pin of the excavator from the grab mounting bracket

05. Precautions for safe operation.

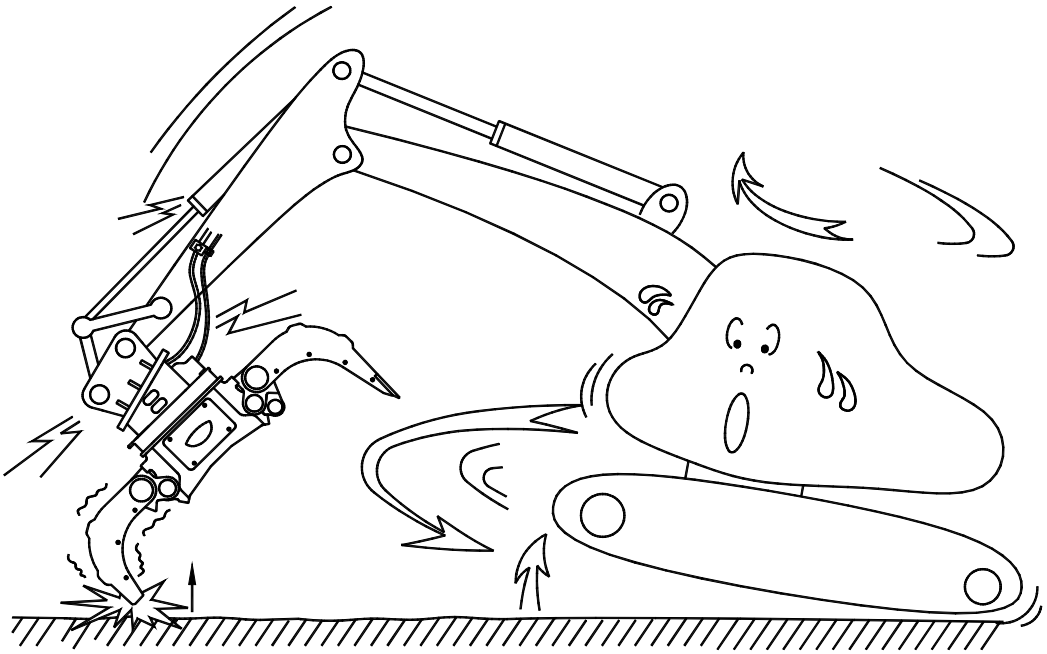
[1] Check the excavator position in stable.



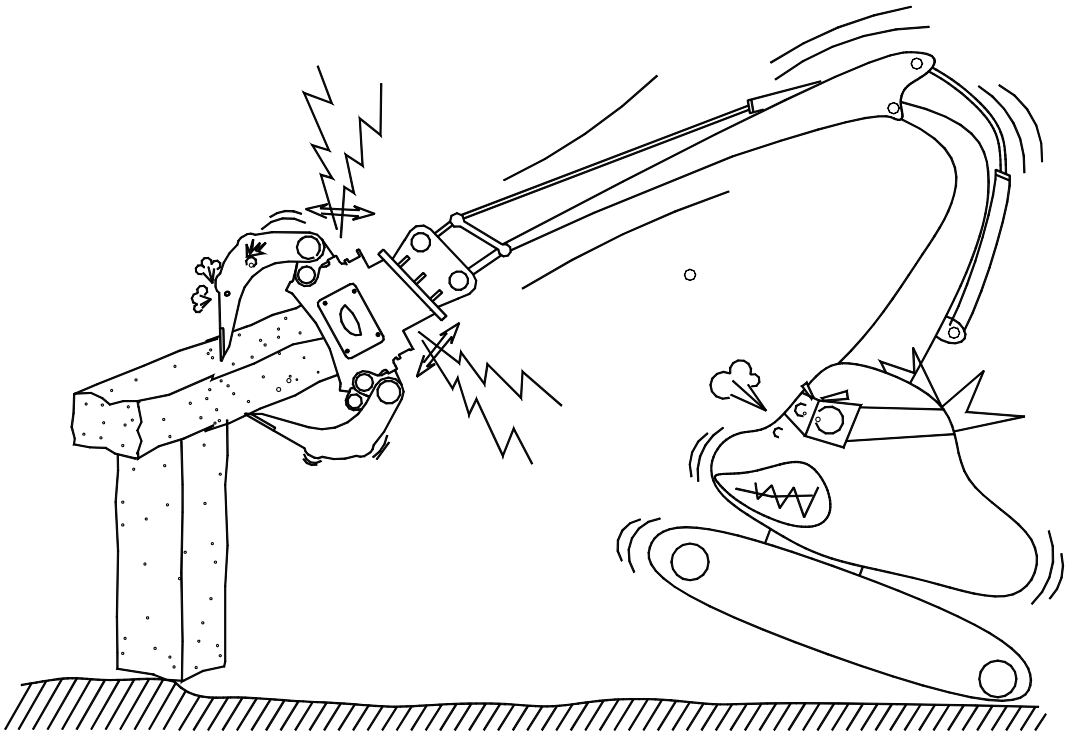
[2] Do not allow the grab to drop and strike a material or against the side of on object because the grab and excavator may be damaged.



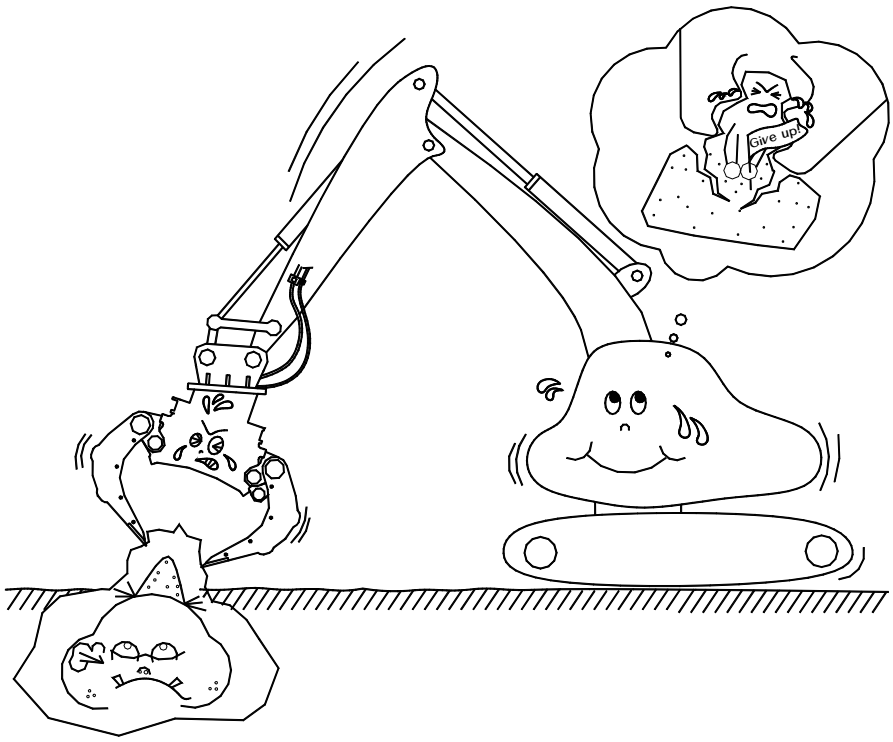
[3] Perform the crushing operation by utilizing the grab and crushing force. Do not move the grab in all directions with a material gripped with the left right grab tooth? Because an unreasonable force may be applied to each part of grab.



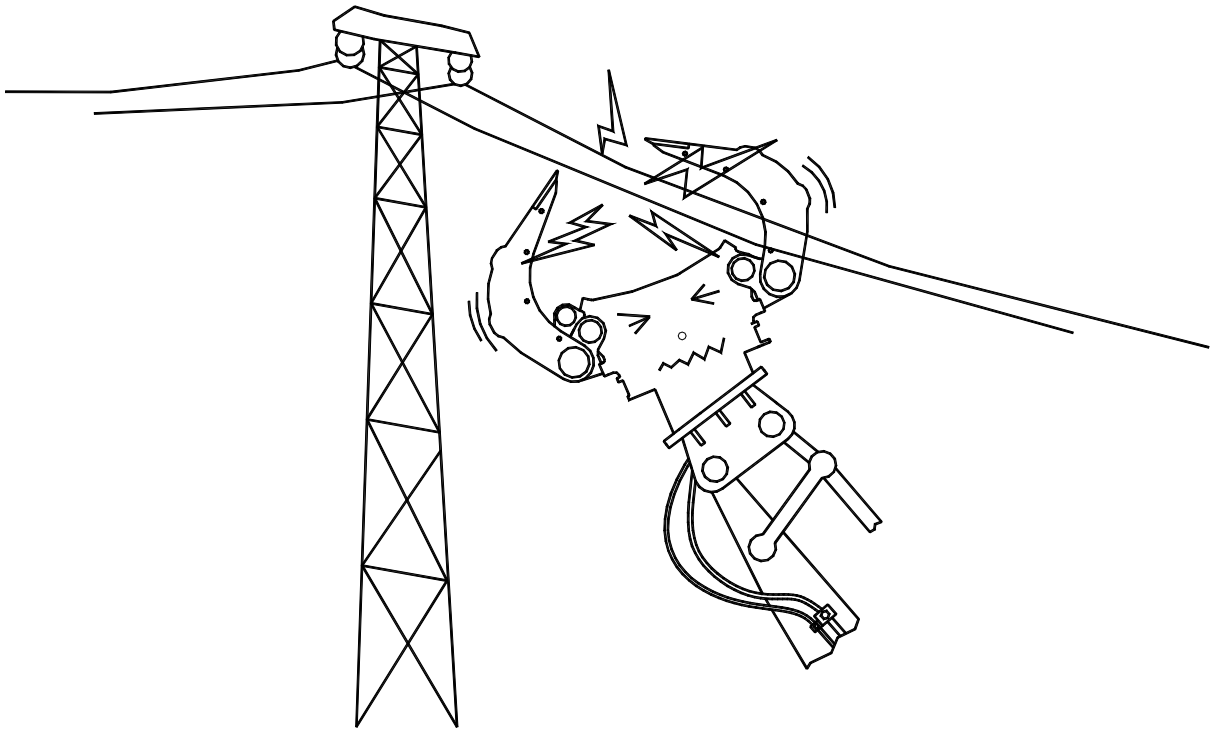
[4] Do not twist or rotate the beams and pillars in order to demolish, with the ROTATION-MOTOR, because, the ROTATION-MOTOR and swing bearing will be damaged.
Use only the ROTATION-MOTOR to direction setting.



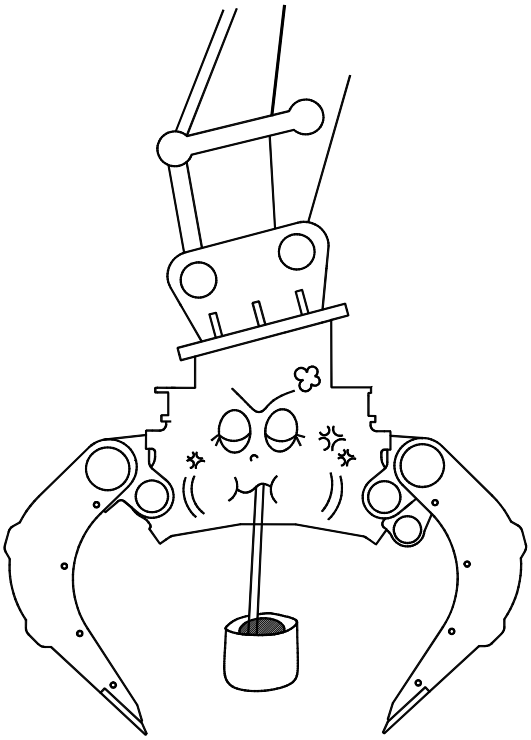
[5] Operation the grab beyond equipment's power shorts the lift of the grab.



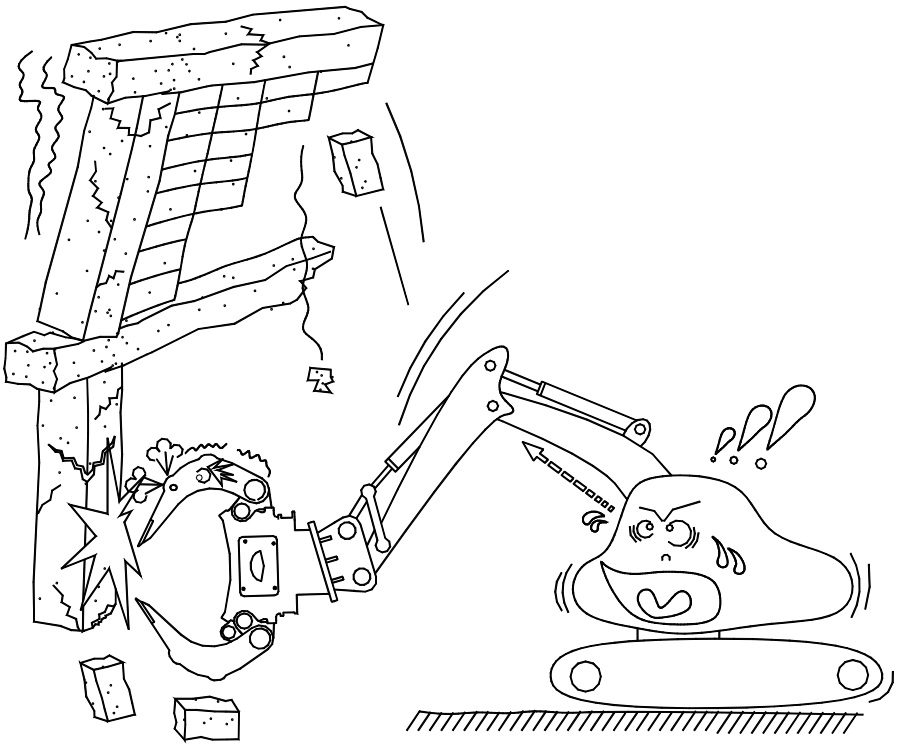
[6] Beware of electric contact Keep the grab away from electrical wires.



[7] Lubricate the swing bearing, grab-pins, cylinder-pins and especially link-pins etc.
(Lubricate the link-pins, grab-pins, cylinder-pins and especially link-pins. etc



[8] Because of the danger of collapse demolish building row the upstairs.
Always make sure elevated work areas have proper local strength



06. Maintenance

6.1 Daily Maintenance Checks

- Check the grab and, Main Body, Top Frame for damage wear and deformation.
- Check for hydraulic leaks all fittings and hoses replace any detective hoses.
- Check the pins and bushes for wear and damage replace of necessary.
- Check for loose and missing bolts, nut, Tighten or replace as needed.
- Apply grease to the fitting in the bush parts each motor, Grease as needed through the work day.
- Check the planetary gear oil level.
- Before working check if the pinion is loosened and re-tighten the bolts which are coated with thread.

6.2 General Maintenance

- Replace if hydraulic cylinder's seals and rotary joint's seals are worn out or if the seals are used over one year.
- When replacing a part, use genuine Soosan parts.

6.2.1 ROTATOR MAINTENANCE.

The rotator is capable of 360 degree continuous Rotations for easy, accurate crushing at all angles. The rotator is to be used only as positioning features not as a means of bending or breaking material; use of rerotation feature for any other purpose may damage the rotation components and may compromise the attachment's warranty. The rotation periodic maintenance requirements include maintaining proper bolt torque and lubrication,
These items are detailed below.

6.2.2 BOLT TORQUING

The bolts connecting the swing bearing are important maintenance area. After the first eight hours of use the bolt must be retorqued bolt be retorqued only once and them must be replaced if they loosen due to fatigue caused by stretching the bolt drug torquing if the bolts continue to loosen contact the dealer or factory. These bolts shall be inspected daily and replaced after 1,500 hours or 12 months.

6.2.3 SWING BEARING LUBRICATION

Rotating attachment in storage should be lubricated at lease every six months.
Equipment operating free quietly in extreme environments should be lubricated at least every eight hours. If old grease is noted to be in good. Condition and free of contamination, conversely, if the old grease is contaminated or deteriorated the interval will be shortened. The interval may be extended

6.2.4. LUBRICATION PROCEDURES.

Swing Bearings Are equipped with 1 to 4 grease fittings, depending upon model used.
The grease fittings will be located either on the outside of the bearing or on the upper head side plate. It is recommended to rotate bearing while greasing in order to uniformly distribute the grease and the most effectively flush out the old grease and contaminants.
The swing bearing should be turned through two full revolutions while greasing through any one fitting. Continue greasing until clean grease can be felt exiting at the seals.

6.3 Grab Storage

- Block the grab up off the ground using wood block.
- Grease the pins and machined bores of the mounting bracket of the attachment. Then apply a generous amount of grease to shear blades, cylinder rod and all other exposed and unpainted surfaces.

6.4 Regular Demolition & Sorting Grab Inspection and Maintenance

⚠ CAUTION

Regular inspection is essential for keeping Demolition & sorting grab operating in the best condition consult with the Soosan service station for regular inspection and maintenance. Customers are recommended to contact the service station for inspection within six months after delivery.

07 Trouble Shooting

TROUBLE	CAUSE	REMEDY
Cylinder do not operate	– Electric shortage – Sticking in solenoid valve – Working fluid(oil) do not flow – Damage of seal of center – Damage of seal of cylinder	– Check battery or electric wire connect wire – Repair solenoid spool or replace with new one. – Check the piping (turn on stop valve) – Replace damaged seal – Replace damaged seal
Motor do not operate	– Electric shortage – Sticking in solenoid valve – Motor damage – Breaking of pinion or motor – Too low brake pressure	– Check battery or electric wire connect wire – Repair solenoid spool or replace with new one. – Repair or replace with new one Replace with new one – Adjust brake valve pressure.
Oil leakage from cylinder	– Seal damage	– Replace with new one
Oil leakage from rotary joint	– Seal damage	– Replace with new one
Oil temperature too high	– The failure of an excavator cooling system. – The failure of a return line.	– Ask service station for base machine service. – Ask our service station for repair

08. Hydraulic Oil

8.1 Selection of Oil

Selection of hydraulic oil determines the efficiency of the grab performance.
Please consult with our service station under following conditions.

(1) When used in special regions where climate is severe (extremely cold or hot weather)
(2) When recommended brands of hydraulic oil are not available
(3) When hydraulic oil supplied for the base machine differ from the recommended one.

■ Hydraulic Oil and Grease
Recommended for Hydraulic Grab by Soosan

LUBE & SPEC / Manufacturer	HYDRAULIC OIL			GREASE (MOS2)
	SUMMER	WINTER	ALL SEASON	
	ISO VG 46	ISO VG 32	ISO VG 46	NLGI No2
MOBIL	MOBIL DTE 25	MOBIL DTE 24	MOBIL DTE 15M	MOBIL GREASE SPECIAL
	MOBIL SHC 525 *			MOBILITH SHC 220 *
	MOBIL EAL SYNDRAULIC 46 **			
LG-CALTEX	RANDOHD 46	RANDO HD 32	NEW RANDO HD CZ	MOLYTEX EP2
BP	ENERGOL HP46	ENERGOL HP32	ENERGOL HP46	–
SHELL	TELLUS 46	TELLUS 32	TELLUS T 46	RETINAX HDX-2

★: Synthetic Lubricant
★★: Environmentally Friendly Synthetic Lubricant

8.2 Oil Contamination

Contaminated oil results in malfunctions of the grab as well as the base machine and causes damage to parts. Pay special attention to oil contamination.
Contaminated oil should be changed without delay. When changing oil, thoroughly wash oil tank, cylinder and pipes. Cleaning or replacing oil filter also requires check for oil contamination.

※ Replacement of filter : after first 50 hours and every 100 hours thereafter
※ Replacement of hydraulic oil : every 500 hours

⚠ WARNING

Hydraulic oil Temperature and viscosity
Do operate the grab at oil temperatures from 20℃/68℉ to 80℃/176℉.
Operation at higher temperatures can damage the internal components of the grab and carrier there will result in reduced grab performance.

8.3 Criteria of Oil Contamination and Malfunction

(General Analysis)

Analysis Item	Criteria	Causes and Effects when exceed the criteria
Adhesiveness	Within±10% (40℃ cst)	Adhesiveness rarely decreases because of hydraulic oil. Entry of different kind of oil may reduce the adhesiveness which contributes to rising oil temperature , wear and scratch of bearing and gear and malfunction of hydraulic oil.
Oxidizing Level	Less than 0.3 (mg KOH/g)	Use of lubricating oil in a long period or in a high temperature (above 60℃) will oxidize it. Oxidizing level rises as oxidization proceeds. Sludge will be produced during the process and it leads to malfunction, corrosion and ageing.
Moisture	Less than 0.1(%)	Moisture causes rust, wear and scratch. Moisture of 0.3% goes considerably rusty and moisture of 0.5% occurs the damage of machine.

8.4 Criteria of Malfunction by Hydraulic Oil Color

(Simple discrimination by ASTM color)
Hydraulic oil turns black as the grab fails to display best performance. The old oil is assumed to be contaminated when there is a visual difference between the old new oil color and functions begin to deteriorate when hydraulic oil turns darker than the new oil color (ASTM number) by more than two.

MAINTENANCE FOLLOW-UP

In order to follow the maintenance of a demolition &sorting grab, a maintenance card presented below can be used

SOOSAN

DEMOLITION & SORTING GRAB SERVICE CARD NO._____

Equipment S/No._____

Model type S/No._____

SERVICE IMFORMATION

Purpose of the service		Serviceman	
Service Date		Engine working hours	

Replaced parts			Part inspection				
Qty	Description	Part No.	Description	S/No.	Repaired	Replaced	OK
			Cylinder		☐	☐	☐
			Motor		☐	☐	☐
					☐	☐	☐
					☐	☐	☐
					☐	☐	☐
					☐	☐	☐
					☐	☐	☐
					☐	☐	☐
					☐	☐	☐
					☐	☐	☐
					☐	☐	☐
					☐	☐	☐

Percussion mechanism tested ☐

Rotation mechanism tested ☐

Remarks

PARTS LIST

SOOSAN DEMOLITION & SORTING GRAB

SOOSAN

FOREWORD

This parts list is composed of all parts of SRG Series Grab.
If you want to order parts, write down the followings and contact near service center.

a. Model Name :
b. Model Serial No. :
c. Parts No. and Parts Name :
d. Quantity :
e. Customer's Name and Address :

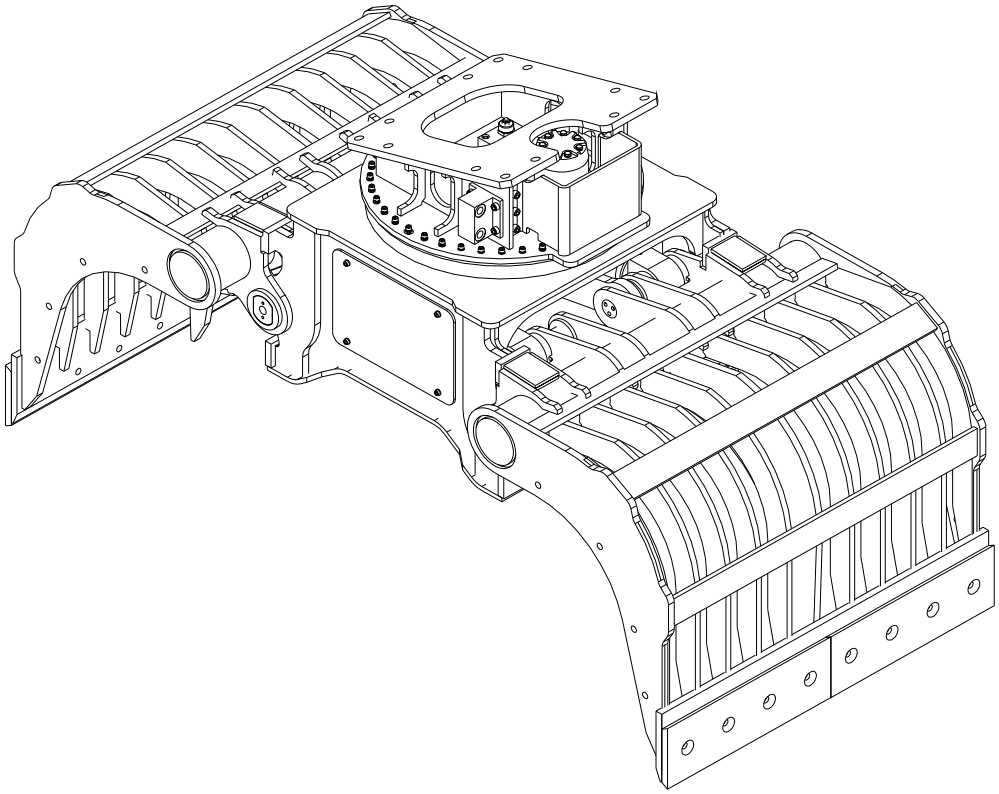
Please use genuine parts of SOOSAN to maintain the machine performance as a new one.
Take notice that SOOSAN won't guarantee the defects which may occur by using different parts from SOOSAN genuine parts.

⇢ For the contents of this parts list, alteration is reserved without prior notice for the future improvement.

SOOSAN HEAVY INDUSTRIES CO., LTD.

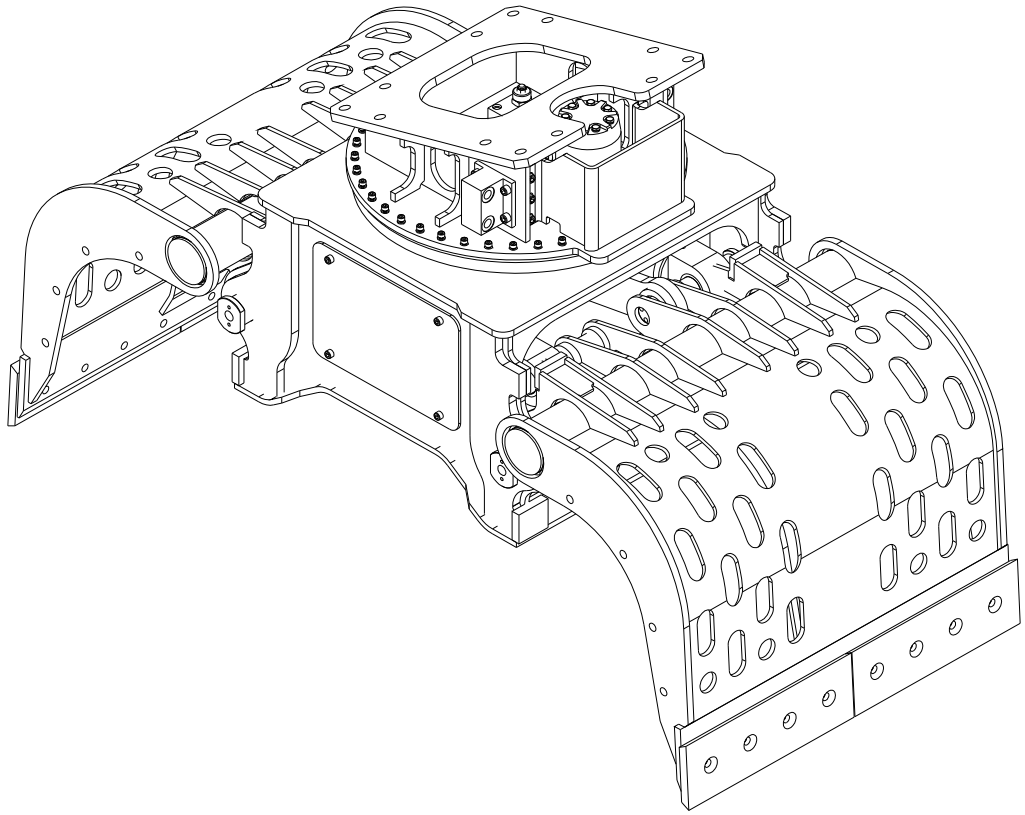
01. GRAB ASSEMBLY

1.1 SRG 100 , SRG 250 , SRG 200 , SRG 400 GRAB (R JAW)



Item No.	SRG 100	SRG 200	SRG 250	SRG 400	Q'ty	Part Name	Remark
	Part No	Part No	Part No	Part No			
1	P61 002	H71 002	H61 002	H31 005	1	SRG100/200/250/400	
1-1	P61 004	H71 004	H61 003	H31 003	1	Grab Assembly	
1-2	P61 031	H71 031	H61 031	H31 033	1	Sticker Set	
1-3	P61 041	H61 041	H61 041	H31 040	1	Spare & Articles Supplied	
1-4	P61 051	H61 051	H61 051	H31 051	1	Tool Set	

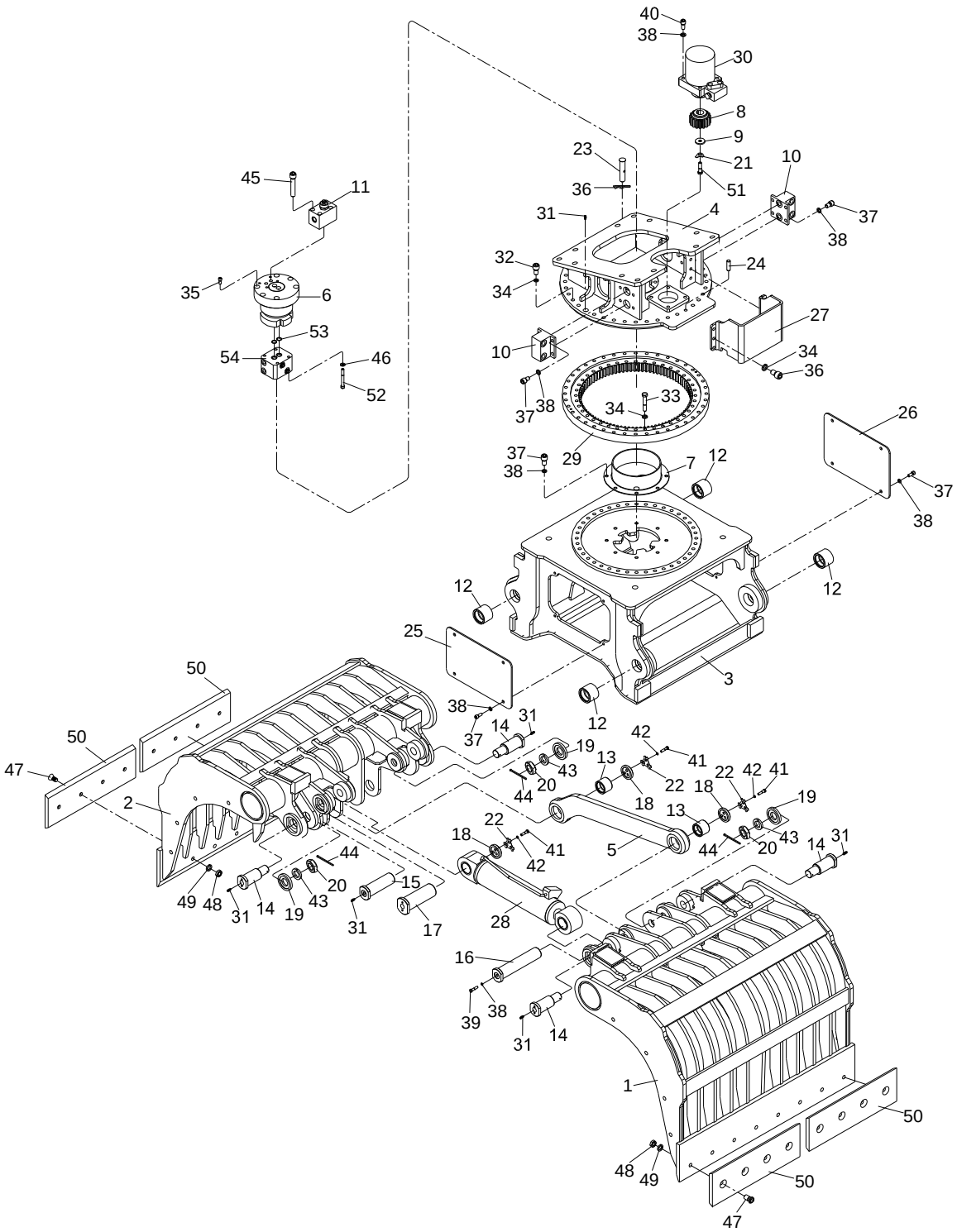
1.2 SRG 100 , SRG 250 , SRG 200 , SRG 400 GRAB (P JAW)



Item No.	SRG 100	SRG 200	SRG 250	SRG 400	Q' ty	Part Name	Remark
	Part No	Part No	Part No	Part No			
1	P61 002	H71 002	H61 002	H31 005	1	SRG100/200/250/400	
1-1	P61 450	H71 340	H61 410	H31 460	1	Grab Assembly	
1-2	P61 031	H71 031	H61 031	H31 033	1	Sticker Set	
1-3	P61 041	H61 041	H61 041	H31 040	1	Spare & Articles Supplied	
1-4	P61 051	H61 051	H61 051	H31 051	1	Tool Set	

02. BODY ASSEMBLY

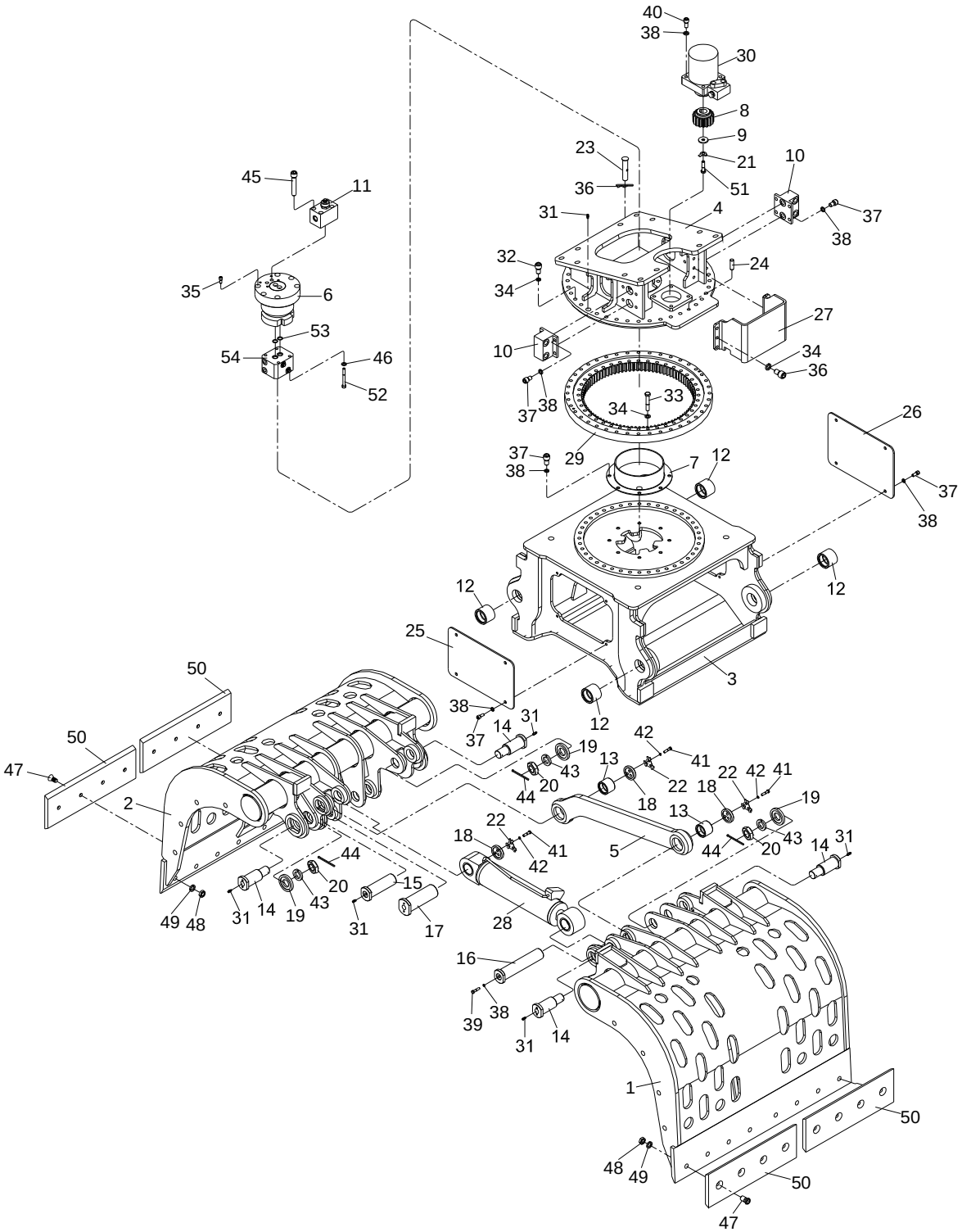
2.1 BODY Assembly (SRG 100-R JAW)



Item No.	SRG100 Part No.	Q'ty	Part Name	Remark
–	P61 004	1	GRAB ASSEMBLY	
1	P61 428	1	JAW–RH	
2	P61 429	1	JAW–LH	
3	P61 356	1	MAIN BODY	
4	P61 357	1	TOP BODY	
5	P61 358	2	LINK	
6	P61 343	1	ROTARY JOINT ASSEMBLY	
7	P61 359	1	OIL BATH	
8	P61 360	1	PINION	
9	H81 137	1	PINION END	
10	P61 340	2	CONNECTOR	
11	P61 348	1	O/C VALVE	
12	P61 361	4	BUSH(A)	
13	P61 362	4	BUSH(B)	
14	P61 363	4	PIN(A)	
15	P61 364	2	PIN(B)	
16	P61 365	2	PIN(C)	
17	P61 366	2	PIN(D)	
18	P61 367	6	WASHER(A)	
19	P61 368	4	WASHER(B)	
20	H61 176	4	NUT	
21	H81 139	1	LOCK WASHER	
22	P61 369	6	LOCK PLATE	
23	P61 370	1	STOP PIN	
24	H61 180	2	FIX PIN	
25	P61 371	1	COVER(A)	
26	P61 372	1	COVER(B)	
27	P61 373	1	COVER(C)	
28	P61 374	2	CYLINDER ASSEMBLY	
29	P61 375	1	SWING BEARING	
30	P61 201	1	MOTOR & VALVE	
31	2700402	8	GREASE NIPPLE	
32	4010096	24	SOCKET BOLT	
33	4002243	24	HEX. BOLT	
34	4211013	48	SPRING WASHER	
35	4010094	6	SOCKET BOLT	
36	4320009	1	R–PIN	
37	4010075	30	SOCKET BOLT	
38	4211012	36	SPRING WASHER	
39	4002200	2	HEX. BOLT	
40	4010082	4	SOCKET BOLT	

Item No.	SRG100 Part No.	Q'ty	Part Name	Remark
41	4002149	18	HEX. BOLT	
42	4211010	18	SPRING WASHER	
43	4211022	4	SPRING WASHER	
44	Z001257	4	SPLIT PIN	
45	4010070	4	SOCKET BOLT	
46	4211011	4	SPRING WASHER	
47	4090118	16	WRENCH BOLT	
48	4101215	16	HEX. NUT	
49	4211014	16	SPRING WASHER	
50	P61 347	4	TIP	
51	H81 138	1	PINION BOLT	
52	4010072	4	SOCKET BOLT	
53	2851017	2	O-RING	
54	P61 341	1	T/JOINT BLOCK	
-	P61 431	1	OIL PIPING	

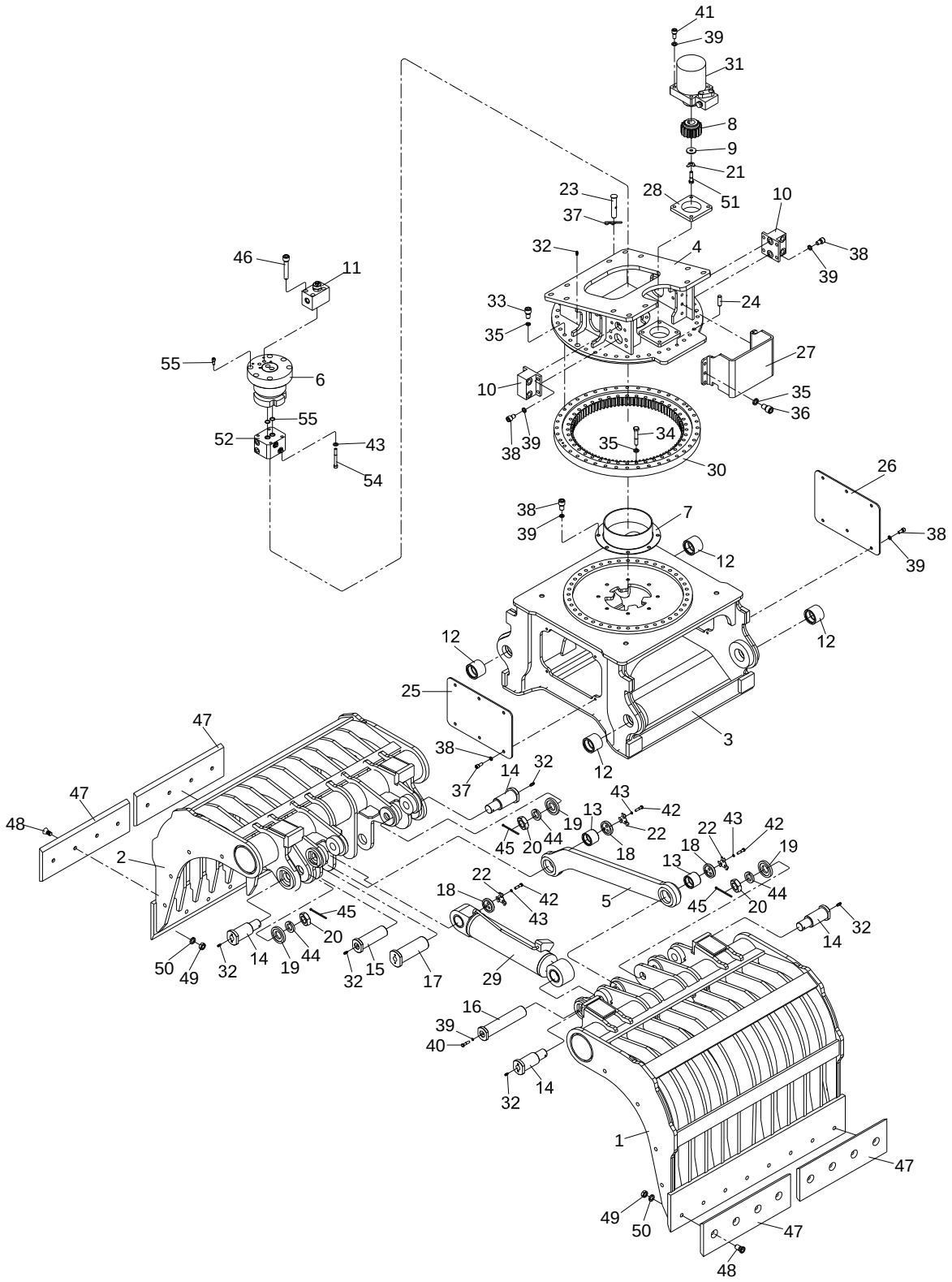
2.2 BODY Assembly (SRG 100-P JAW)



Item No.	SRG100 Part No.	Q'ty	Part Name	Remark
–	P61 450	1	GRAB ASSEMBLY	
1	P61 451	1	JAW-RH	
2	P61 452	1	JAW-LH	
3	P61 356	1	MAIN BODY	
4	P61 357	1	TOP BODY	
5	P61 358	2	LINK	
6	P61 343	1	ROTARY JOINT ASSY	
7	P61 359	1	OIL BATH	
8	P61 360	1	PINION	
9	H81 137	1	PINION END	
10	P61 340	2	CONNECTOR	
11	P61 348	1	O/C VALVE	
12	P61 361	4	BUSH(A)	
13	P61 362	4	BUSH(B)	
14	P61 363	4	PIN(A)	
15	P61 364	2	PIN(B)	
16	P61 365	2	PIN(C)	
17	P61 366	2	PIN(D)	
18	P61 367	6	WASHER(A)	
19	P61 368	4	WASHER(B)	
20	H61 176	4	NUT	
21	H81 139	1	LOCK WASHER	
22	P61 369	6	LOCK PLATE	
23	P61 370	1	STOP PIN	
24	H61 180	2	FIX PIN	
25	P61 371	1	COVER(A)	
26	P61 372	1	COVER(B)	
27	P61 373	1	COVER(C)	
28	P61 374	2	CYLINDER ASSEMBLY	
29	P61 375	1	SWING BEARING	
30	P61 201	1	MOTOR & VALVE	
31	2700402	8	GREASE NIPPLE	
32	4010098	24	SOCKET BOLT	
33	4002243	24	HEX. BOLT	
34	4211013	48	SPRING WASHER	
35	4010094	6	SOCKET BOLT	
36	4320009	1	R-PIN	
37	4010075	30	SOCKET BOLT	
38	4211012	36	SPRING WASHER	
39	4002200	2	HEX. BOLT	
40	4010082	4	SOCKET BOLT	

Item No.	SRG100 Part No.	Q'ty	Part Name	Remark
41	4002149	18	HEX. BOLT	
42	4211010	18	SPRING WASHER	
43	4211022	4	SPRING WASHER	
44	Z001257	4	SPLIT PIN	
45	4010070	4	SOCKET BOLT	
46	4211011	4	SPRING WASHER	
47	4090118	16	WRENCH BOLT	
48	4101215	16	HEX. NUT	
49	4211014	16	SPRING WASHER	
50	P61 347	4	TIP	
51	H81 138	1	PINION BOLT	
52	4010072	4	SOCKET BOLT	
53	2851017	2	O-RING	
54	P61 341	1	T/JOINT BLOCK	
-	P61 431	1	OIL PIPING	

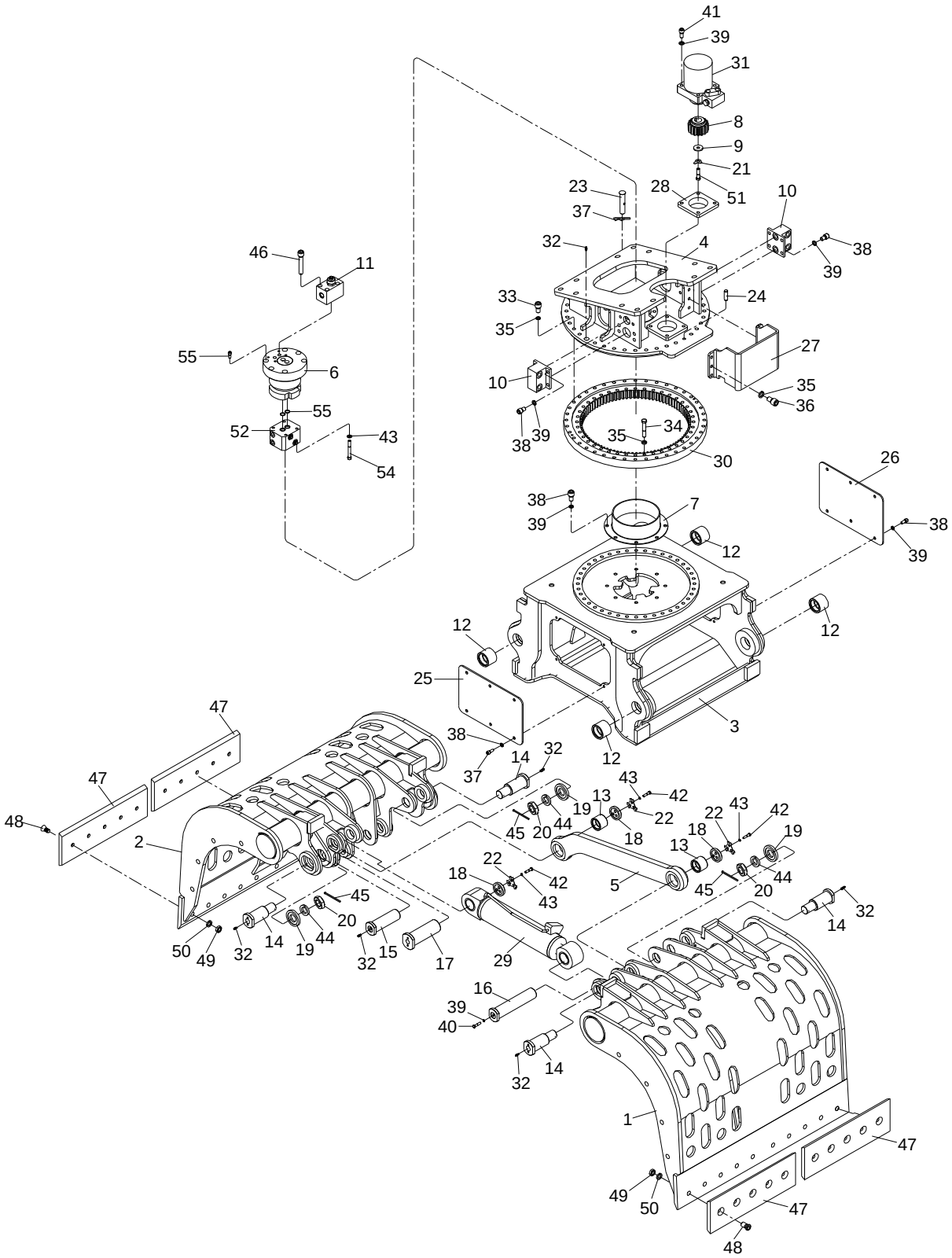
2.3 BODY Assembly (SRG 200, 250-R JAW)



Item No.	SRG 200		SRG 250		Part Name	Remark
	Part No.	Q'ty	Part No.	Q'ty		
–	H71 004	1	H61 003	1	GRAB ASSEMBLY	
1	H71 282	1	H61 247	1	JAW–RH	
2	H71 283	1	H61 248	1	JAW–LH	
3	H61 249	1	←	1	MAIN BODY	
4	H61 250	1	←	1	TOP BODY	
5	H61 251	2	←	2	LINK	
6	P61 343	1	←	1	ROTARY JOINT ASSY	
7	H61 253	1	←	1	OIL BATH	
8	H61 235	1	←	1	PINION	
9	H81 137	1	←	1	PINION END	
10	P61 340	2	←	2	CONNECTOR	
11	P61 348	1	←	1	O/C VALVE	
12	H61 255	4	←	4	BUSH(A)	
13	H61 256	4	←	4	BUSH(B)	
14	H61 257	4	←	4	PIN(A)	
15	H61 258	2	←	2	PIN(B)	
16	H61 259	2	←	2	PIN(C)	
17	H61 260	2	←	2	PIN(D)	
18	H61 261	6	←	6	WASHER(A)	
19	H61 262	4	←	4	WASHER(B)	
20	H61 176	4	←	4	NUT	
21	H81 139	1	←	1	LOCK WAHSER	
22	H61 263	6	←	6	LOCK PLATE	
23	H61 179	1	←	1	STOP PIN	
24	H61 180	2	←	2	FIX PIN	
25	H61 264	1	←	1	COVER(A)	
26	H61 265	1	←	1	COVER(D)	
27	H61 320	1	←	1	COVER(C)	
28	H61 266	1	←	1	MOTOR SPACER	
29	H71 267	2	H61 267	2	CYLINDER ASSEMBLY	
30	H61 187	1	←	1	SWING BEARING	
31	H61 201	1	←	1	MOTOR & VALVE	
32	2700402	12	←	12	GREASE NIPPLE	
33	4010096	36	←	36	SOCKET BOLT	
34	4002243	40	←	40	HEX. BOLT	
35	4211013	82	←	82	SPRING WASHER	
36	4010091	6	←	6	SOCKET BOLT	
37	4320009	1	←	1	R–PIN	
38	4010075	24	←	24	SOCKET BOLT	
39	4211012	30	←	30	SPRING WASHER	
40	4002200	2	←	2	HEX. BOLT	

Item No.	SRG 200		SRG 250		Part Name	Remark
	Part No.	Q'ty	Part No.	Q'ty		
41	4010085	4	←	4	SOCKET BOLT	
42	4002176	18	←	18	HEX. BOLT	
43	4211011	22	←	22	SPRING WASHER	
44	4211022	4	←	4	SPRING WASHER	
45	4310112	4	←	4	SPLIT PIN	
46	4010070	4	←	4	SOCKET BOLT	
47	H71 280	4	H61 332	4	TIP	
48	4090118	16	←	16	WRENCH BOLT	
49	4101215	16	←	16	HEX. NUT	
50	4211014	16	←	16	SPRIING WASHER	
51	H81 138	1	←	1	PINION BOLT	
52	P61 341	1	←	1	T/JOINT BLOCK	
53	4010094	6	←	6	SOCKET BOLT	
54	4010072	4	←	4	SOCKET BOLT	
55	2851017	2	←	2	O-RING	
–	H61 336	1	←	1	OIL PIPING	

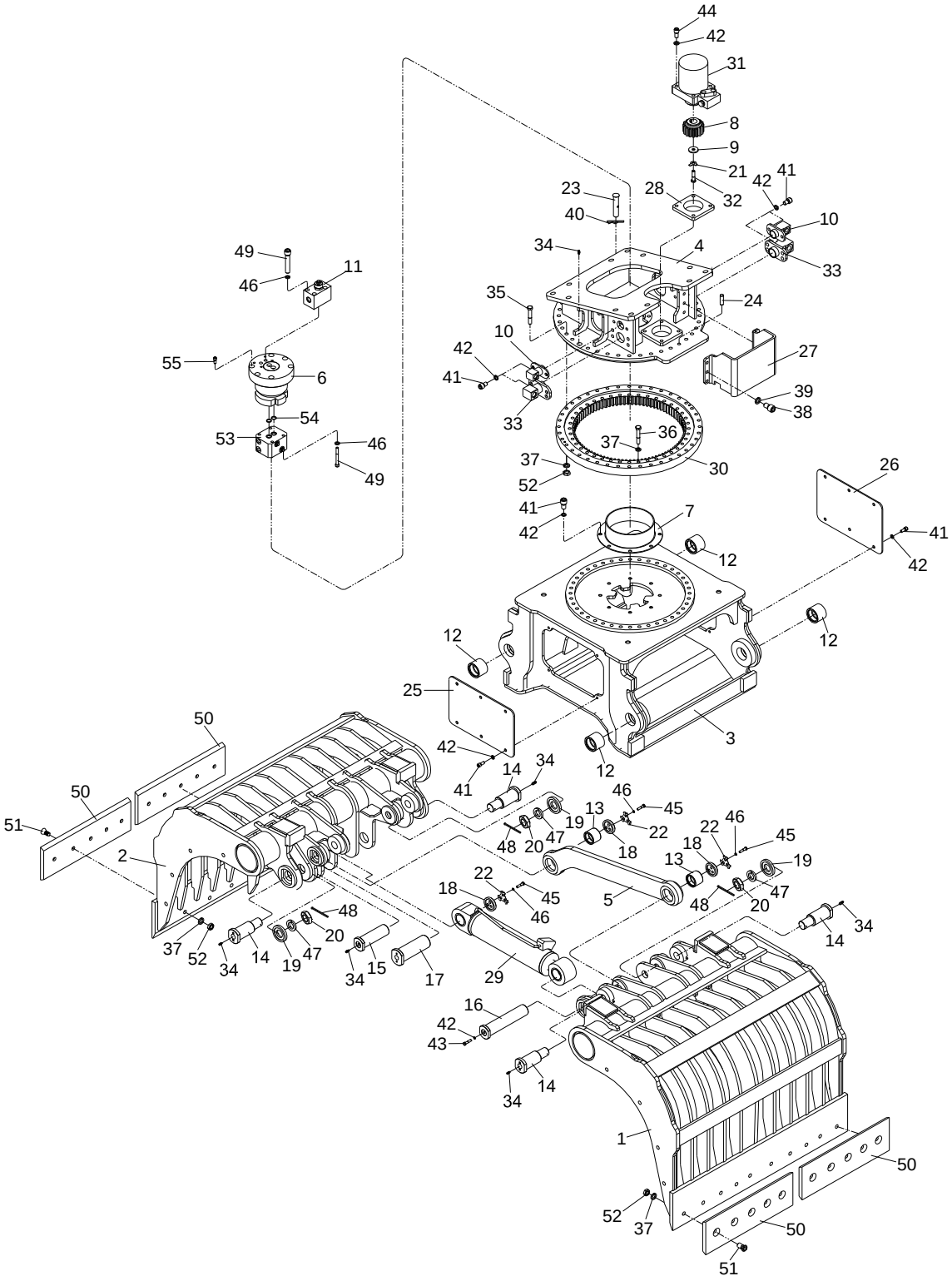
2.4 BODY Assembly (SRG 200, 250-P JAW)



Item No.	SRG 200		SRG 250		Part Name	Remark
	Part No.	Q'ty	Part No.	Q'ty		
–	H71 340	1	H61 410	1	GRAB ASSEMBLY	
1	H71 341	1	H61 411	1	JAW–RH	
2	H71 342	1	H61 412	1	JAW–LH	
3	H61 249	1	←	1	MAIN BODY	
4	H61 250	1	←	1	TOP BODY	
5	H61 251	2	←	2	LINK	
6	P61 343	1	←	1	ROTARY JOINT ASSY	
7	H61 253	1	←	1	OIL BATH	
8	H61 235	1	←	1	PINION	
9	H81 137	1	←	1	PINION END	
10	P61 340	2	←	2	CONNECTOR	
11	P61 348	1	←	1	O/C VALVE	
12	H61 255	4	←	4	BUSH(A)	
13	H61 256	4	←	4	BUSH(B)	
14	H61 257	4	←	4	PIN(A)	
15	H61 258	2	←	2	PIN(B)	
16	H61 259	2	←	2	PIN(C)	
17	H61 260	2	←	2	PIN(D)	
18	H61 261	6	←	6	WASHER(A)	
19	H61 262	4	←	4	WASHER(B)	
20	H61 176	4	←	4	NUT	
21	H81 139	1	←	1	LOCK WAHSER	
22	H61 263	6	←	6	LOCK PLATE	
23	H61 179	1	←	1	STOP PIN	
24	H61 180	2	←	2	FIX PIN	
25	H61 264	1	←	1	COVER(A)	
26	H61 265	1	←	1	COVER(D)	
27	H61 320	1	←	1	COVER(C)	
28	H61 266	1	←	1	MOTOR SPACER	
29	H71 267	2	H61 267	2	CYLINDER ASSEMBLY	
30	H61 187	1	←	1	SWING BEARING	
31	H61 201	1	←	1	MOTOR & VALVE	
32	2700402	12	←	12	GREASE NIPPLE	
33	4010096	36	←	36	SOCKET BOLT	
34	4002243	40	←	40	HEX. BOLT	
35	4211013	82	←	82	SPRING WASHER	
36	4010091	6	←	6	SOCKET BOLT	
37	4320009	1	←	1	R–PIN	
38	4010075	24	←	24	SOCKET BOLT	
39	4211012	30	←	30	SPRING WASHER	
40	4002200	2	←	2	HEX. BOLT	

Item No.	SRG 200		SRG 250		Part Name	Remark
	Part No.	Q'ty	Part No.	Q'ty		
41	4010085	4	←	4	SOCKET BOLT	
42	4002176	18	←	18	HEX. BOLT	
43	4211011	22	←	22	SPRING WASHER	
44	4211022	4	←	4	SPRING WASHER	
45	4310112	4	←	4	SPLIT PIN	
46	4010070	4	←	4	SOCKET BOLT	
47	H71 344	4	H61 414	4	TIP	
48	4090117	20	←	20	WRENCH BOLT	
49	4100217	20	←	20	HEX. NUT	
50	4211016	20	←	20	SPRIING WASHER	
51	H81 138	1	←	1	PINION BOLT	
52	P61 341	1	←	1	T/JOINT BLOCK	
53	4010094	6	←	6	SOCKET BOLT	
54	4010072	4	←	4	SOCKET BOLT	
55	2851017	2	←	2	O-RING	
–	H61 336	1	←	1	OIL PIPING	

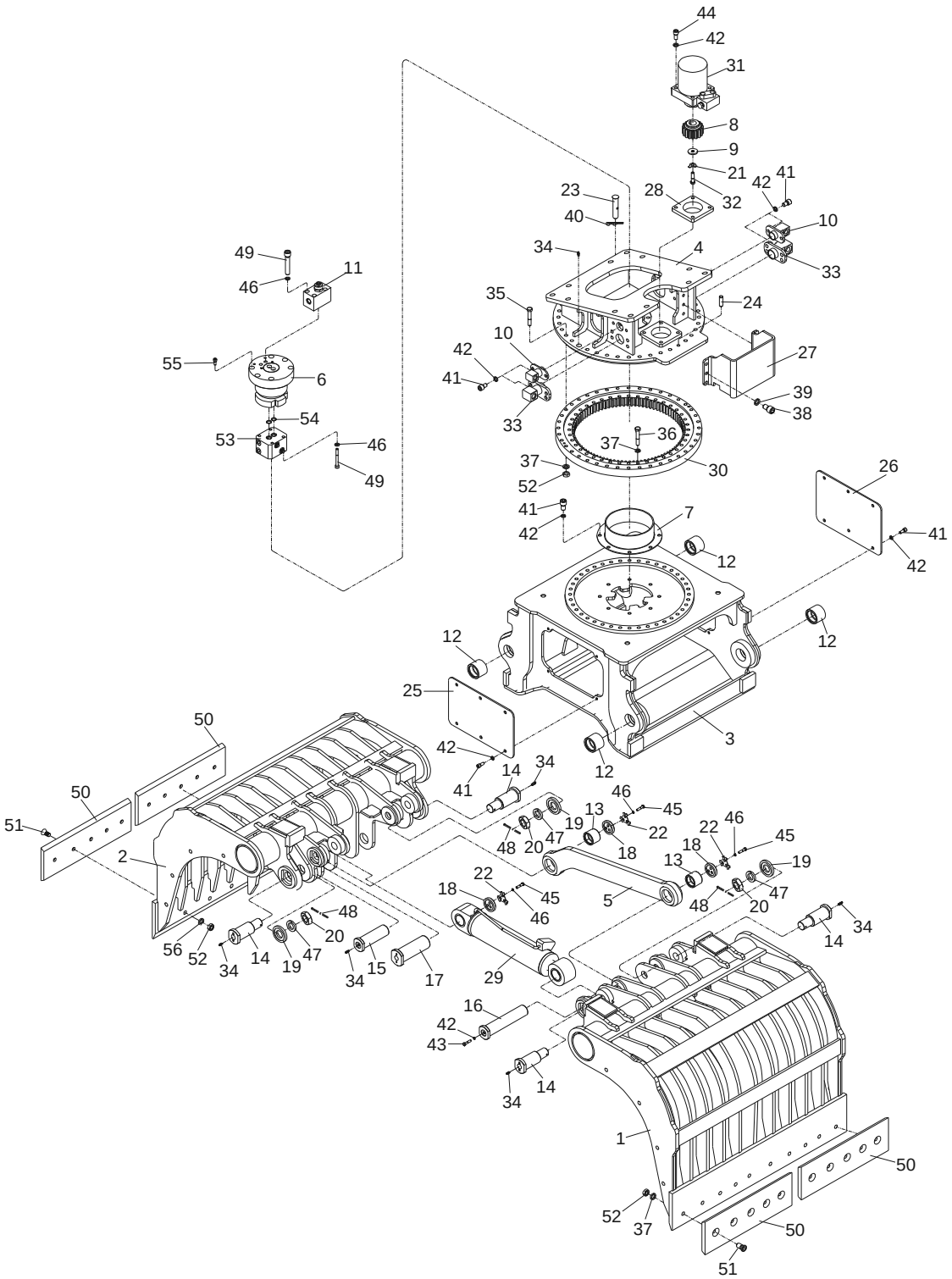
2.5 BODY Assembly (SRG 400-R JAW)



Item No.	SRG400 Part No.	Q'ty	Part Name	Remark
–	H31 003	1	GRAB ASSEMBLY	
1	H31 352	1	JAW–RH	
2	H31 353	1	JAW–LH	
3	H31 354	1	MAIN BODY	
4	H31 355	1	TOP BODY	
5	H31 356	2	LINK	
6	H31 324	1	ROTARY JOINT SET	
7	H31 358	1	OIL BATH	
8	H31 235	1	PINION	
9	H81 137	1	PINION END	
10	H61 164	2	CONNCETOR	
11	H31 330	1	O/C VALVE	
12	H31 360	4	BUSH(A)	
13	H31 361	4	BUSH(B)	
14	H31 362	4	PIN(A)	
15	H31 363	2	PIN(B)	
16	H31 364	2	PIN(C)	
17	H31 365	2	PIN(D)	
18	H31 366	6	WASHER(A)	
19	H31 367	4	WASHER(B)	
20	H31 432	4	HEX. NUT	
21	H81 139	1	LOCK WASHER	
22	H61 263	6	LOCK PLATE	
23	H31 368	1	STOP PIN	
24	H31 180	2	FIX PIN	
25	H31 369	1	COVER(A)	
26	H31 370	1	COVER(D)	
27	H31 371	1	MOTOR COVER	
28	H31 150	1	MOTOR SPACER	
29	H31 372	2	CYLINDER ASSEMBLY	
30	H51 139	1	SWING BEARING	
31	H31 201	1	MOTOR & VALVE	
32	H81 138	1	PINION BOLT	
33	H31 373	2	CONNECTOR–L	
34	2700402	8	GREASE NIPPLE	
35	4002276	34	HEX. BOLT	
36	4002274	40	HEX. BOLT	
37	4211014	94	SPRING WASHER	
38	4010091	6	SOCKET BOLT	
39	4211013	6	SPRING WASHER	
40	4320012	1	SNAP–PIN	

Item No.	SRG400 Part No.	Q'ty	Part Name	Remark
41	4011074	32	SOCKET BOLT	
42	4211012	38	SPRING WASHER	
43	4002202	2	HEX. BOLT	
44	4011085	4	SOCKET BOLT	
45	4002176	18	HEX. BOLT	
46	4211011	26	SPRING WASHER	
47	4211022	4	SPRING WAHSER	
48	4310115	4	SPLIT PIN	
49	4010376	8	SOCKET BOLT	
50	H31 328	4	TIP	
51	4090122	20	WRENCH BOLT	
52	4101215	54	HEX/ NUT	
53	H31 322	1	T/JOINT BLOCK	
54	2851020	2	O-RING	
55	4010095	6	SOCKET BOLT	

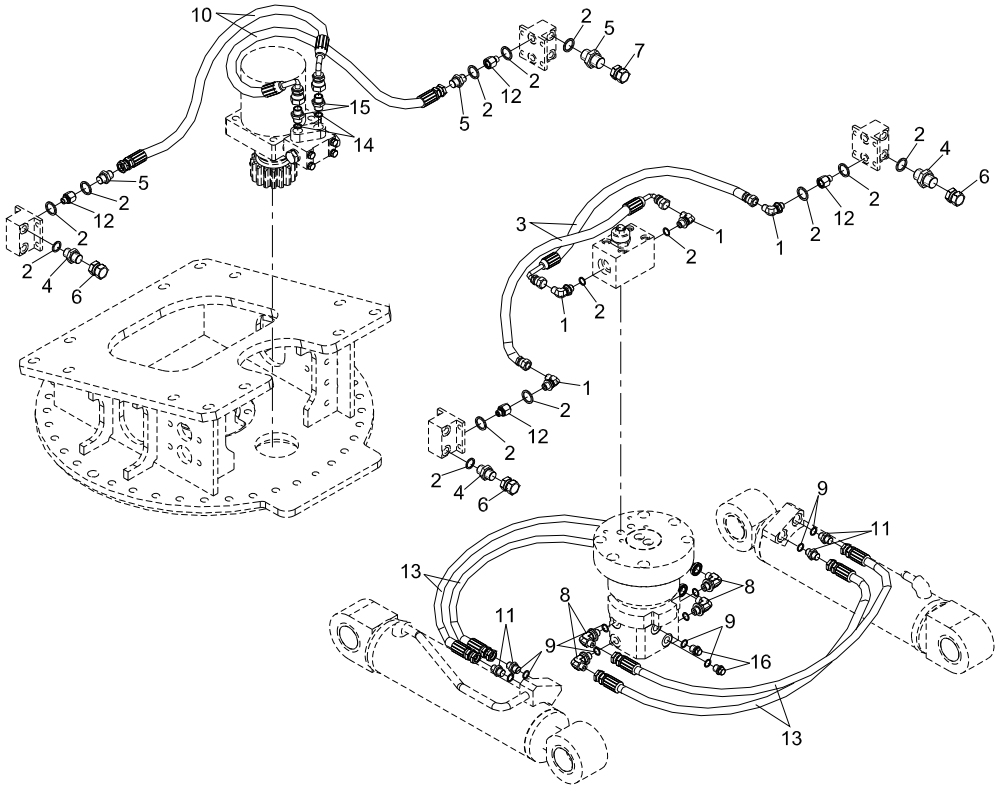
2.6 BODY Assembly (SRG 400-P JAW)



Item No.	SRG400 Part No.	Q'ty	Part Name	Remark
–	H31 460	1	GRAB ASSEMBLY	
1	H31 461	1	JAW-RH	
2	H31 462	1	JAW-LH	
3	H31 354	1	MAIN BODY	
4	H31 355	1	TOP BODY	
5	H31 356	2	LINK	
6	H31 324	1	ROTARY JOINT SET	
7	H31 358	1	OIL BATH	
8	H31 235	1	PINION	
9	H81 137	1	PINION END	
10	H61 164	2	CONNCETOR	
11	H31 330	1	O/C VALVE	
12	H31 360	4	BUSH(A)	
13	H31 361	4	BUSH(B)	
14	H31 362	4	PIN(A)	
15	H31 363	2	PIN(B)	
16	H31 364	2	PIN(C)	
17	H31 365	2	PIN(D)	
18	H31 366	6	WASHER(A)	
19	H31 367	4	WASHER(B)	
20	H31 432	4	HEX. NUT	
21	H81 139	1	LOCK WASHER	
22	H61 263	6	LOCK PLATE	
23	H31 368	1	STOP PIN	
24	H31 180	2	FIX PIN	
25	H31 369	1	COVER(A)	
26	H31 370	1	COVER(B)	
27	H31 371	1	MOTOR COVER	
28	H31 150	1	MOTOR SPACER	
29	H31 372	2	CYLINDER ASSEMBLY	
30	H51 139	1	SWING BEARING	
31	H31 201	1	MOTOR & VALVE	
32	H81 138	1	PINION BOLT	
33	H31 373	2	CONNECTOR-L	
34	2700402	8	GREASE NIPPLE	
35	4002276	34	HEX. BOLT	
36	4002274	40	HEX. BOLT	
37	4211014	74	SPRING WASHER	
38	4010091	6	SOCKET BOLT	
39	4211013	6	SPRING WASHER	
40	4320012	1	SNAP-PIN	

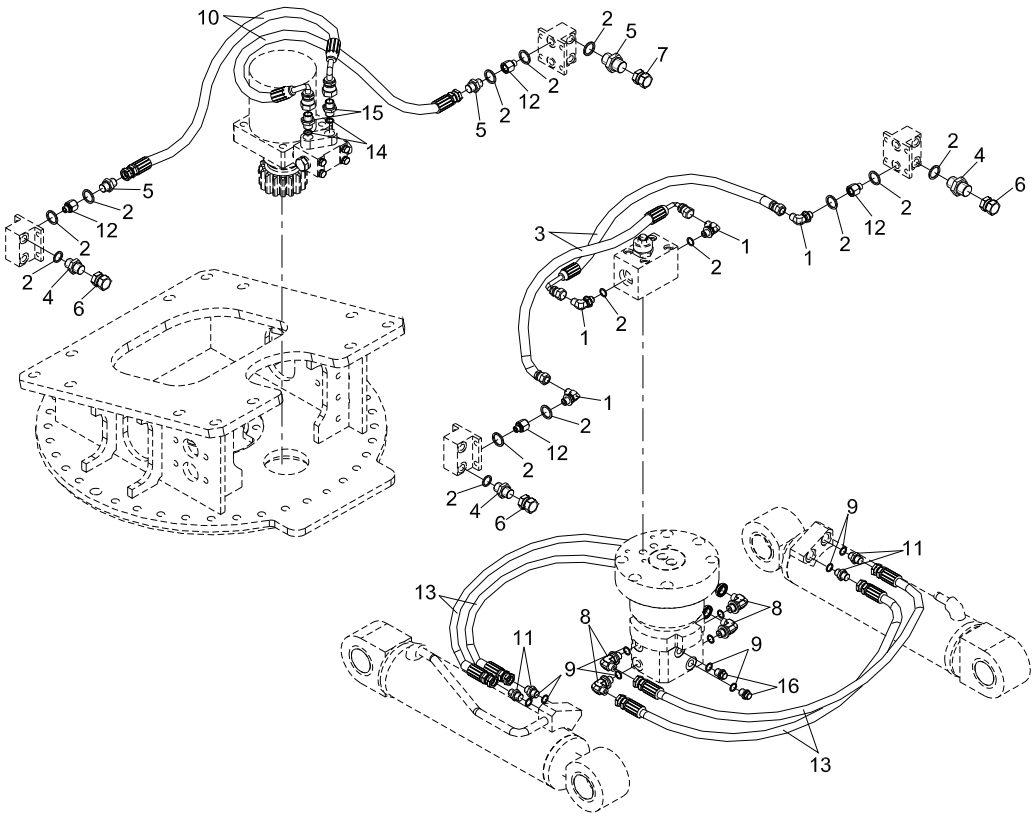
Item No.	SRG400 Part No.	Q'ty	Part Name	Remark
41	4011074	32	SOCKET BOLT	
42	4211012	38	SPRING WASHER	
43	4002202	2	HEX. BOLT	
44	4011085	4	SOCKET BOLT	
45	4002176	18	HEX. BOLT	
46	4211011	26	SPRING WASHER	
47	4211022	4	SPRING WAHSER	
48	4310115	4	SPLIT PIN	
49	4010376	8	SOCKET BOLT	
50	H31 464	4	TIP	
51	4090125	24	WRENCH BOLT	
52	4100217	58	HEX/ NUT	
53	H31 322	1	T/JOINT BLOCK	
54	2851020	2	O-RING	
55	4010095	6	SOCKET BOLT	
56	4211016	24	SPRING WASHER	

2.7 Oil Piping (SRG 100)



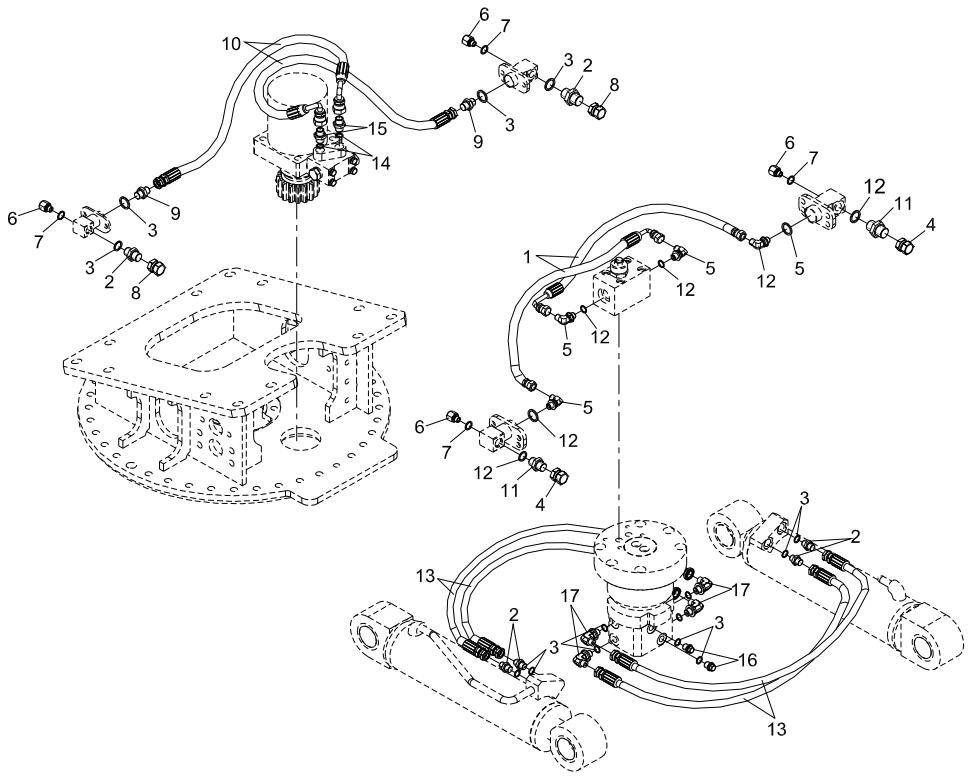
Item No.	Part No.	Q'ty	Part Name	Remark
–	P61 431	1	OIL PIPING	
1	2713107	4	H/LOCK ADAPTER-90	
2	2851017	14	O-RING	
3	2589223	2	OIL HOSE(905/5)	
4	2710308	4	H/ADAPTER-01	
5	2710306	2	H/ADAPTER-01	
6	2715002	4	UNION CAP	
7	2702192	2	HEX HEAD PLUG-01	
8	2713103	4	H/LOCK ADAPTER-90	
9	2851014	10	O-RING	
10	2555125	2	OIL HOSE(905/5)	
11	2710305	4	H/ADAPTER-01	
12	P61 342	4	BUSHING	
13	2684130	4	H/BAND HOSE(5/5)	
14	2858004	2	BONDED SEAL	
15	2710605	2	H/ADAPTER-02	

2.8 Oil Piping (SRG 200, 250)



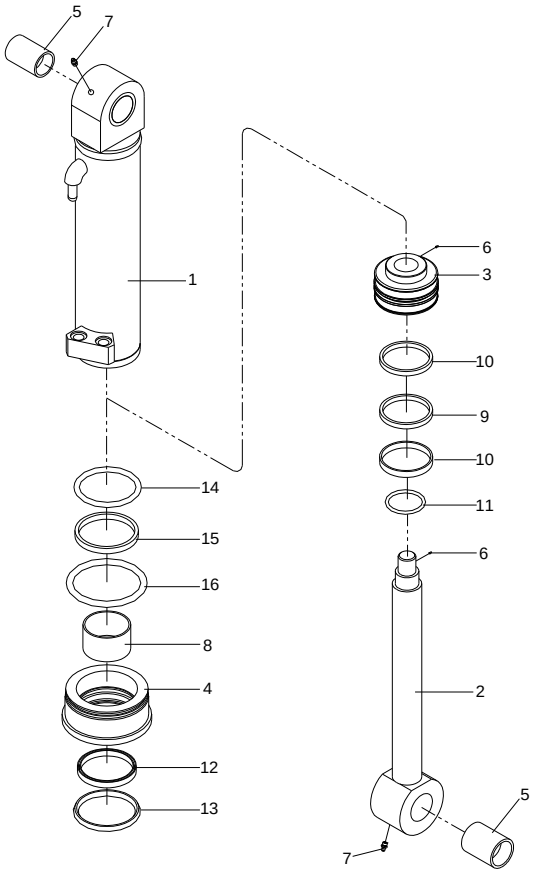
Item No.	Part No.	Q'ty	Part Name	Remark
–	H61 336	1	OIL PIPING	
1	2713107	4	H/LOCK ADAPTER-90	
2	2851017	14	O-RING	
3	2589224	2	OIL HOSE(905/5)	
4	2710308	4	H/ADAPTER-01	
5	2710306	2	H/ADAPTER-01	
6	2715002	4	UNION CAP	
7	2702192	2	HEX HEAD PLUG-01	
8	2713103	4	H/LOCK ADAPTER-90	
9	2851014	10	O-RING	
10	2555125	2	OIL HOSE(905/5)	
11	2710305	4	H/ADAPTER-01	
12	P61 342	4	BUSHING	
13	2684134	4	H/BAND HOSE(5/5)	
14	2858004	2	BONDED SEAL	
15	2710605	2	H/ADAPTER-02	

2.9 Oil Piping (SRG 400)



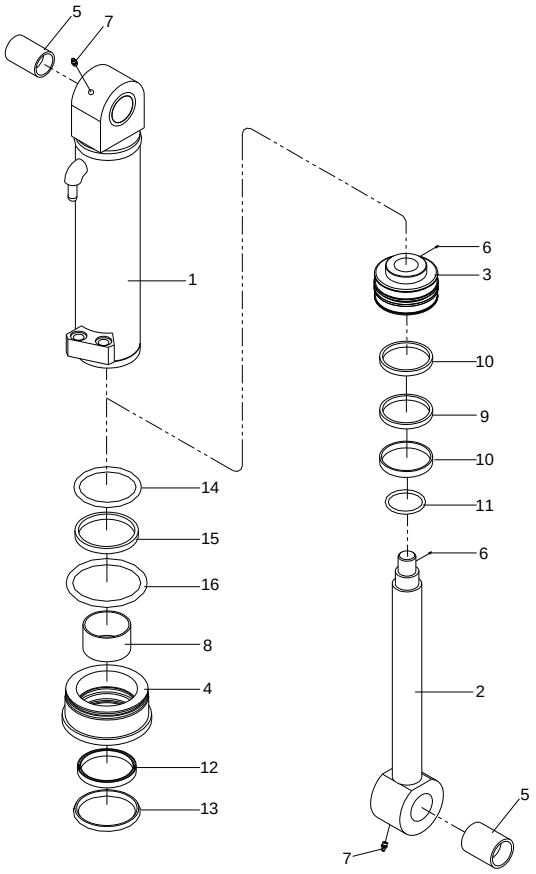
Item No.	Part No.	Q'ty	Part Name	Remark
–	H31 332	1	OIL PIPING	
1	2589329	2	OIL HOSE(905/5)	
2	2710308	6	H/ADAPTER-01	
3	2851017	14	O-RING	
4	2715003	2	UNION CAP	
5	2713109	4	H/LOCK ADAPTER-90	
6	2900201	4	TEST COUPLING	
7	2858002	4	BONDED SEAL	
8	2715002	2	UNION CAP	
9	2710306	2	H/ADAPTER-01	
10	2555126	2	OIL HOSE(905/5)	
11	2710311	2	H/ADAPTER-01	
12	2851022	6	O-RING	
13	2684239	4	H/BAND HOSE(5/5)	
14	2858004	2	BONDED SEAL	
15	2710605	2	H/ADAPTER-02	
16	2702193	2	HEX HEAD PLUG-01	
17	2713109	4	H/LOCK ADAPTER-90	

2.10 Cylinder Assembly(SRG 100, 200)



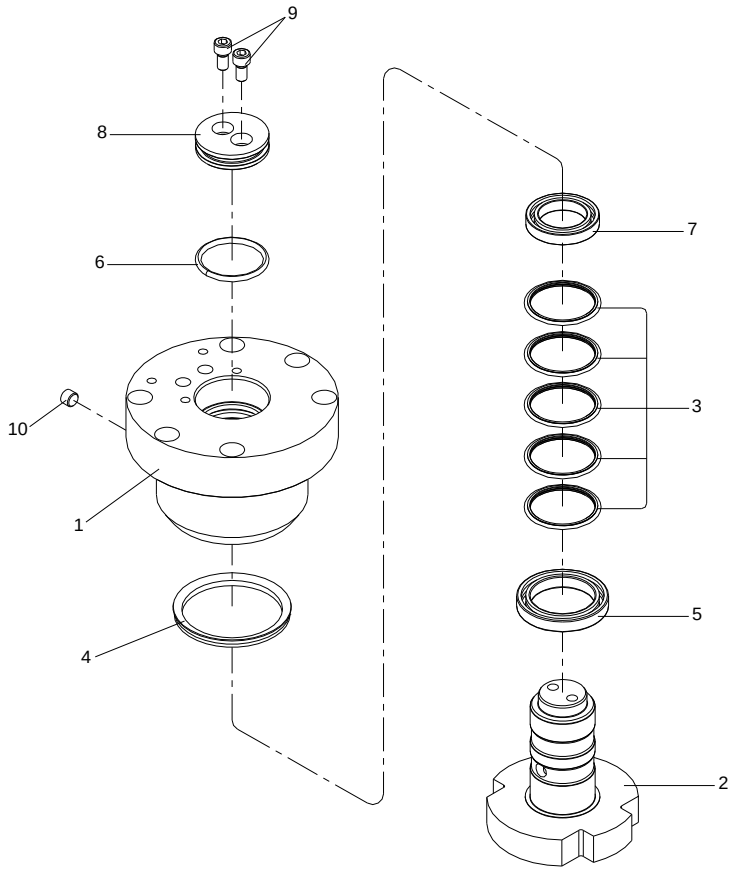
Item No.	SRG 100		SRG 200		Part Name	Remark
	Part No.	Q'ty	Part No.	Q'ty		
–	P61 374	1	H71 267	1	CYLINDER ASSEMBLY	
1	P61 440	1	H71 294	1	TUBE ASS'Y	
2	P61 441	1	H71 295	1	ROD ASS'Y	
3	P61 442	1	H71 296	1	PISTON	
4	P61 443	1	H71 297	1	ROD COVER	
5	P61 444	2	H61 207	2	STEEL BUSH	
6	4040026	1	4040026	1	SET SCREW	
7	2700402	2	2700402	2	GREASE NIPPLE	
8	4600174	1	4600121	1	DU-BUSH	
9	2803013	1	2803011	1	PISTON PACKING	
10	2846826	2	2846824	2	WEAR RING	
11	2851203	1	2851203	1	O-RING	
12	2819068	1	2819066	1	ROD PACKING	
13	2831716	1	2831725	1	DUST WIPER	
14	2851209	1	2851211	1	O-RING	
15	2842304	1	2842306	1	BACK-UP RING	
16	2851210	1	2851212	1	O-RING	

2.11 Cylinder Assembly(SRG 250, 400)



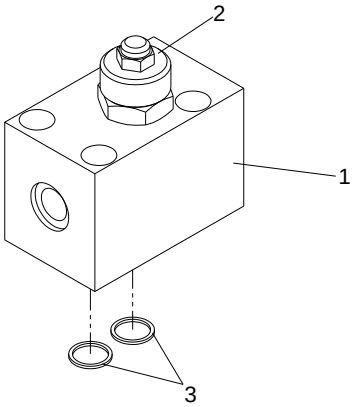
Item No.	SRG 250		SRG 400		Part Name	Remark
	Part No.	Q'ty	Part No.	Q'ty		
–	H61 267	1	H31 372	1	CYLINDER ASSEMBLY	
1	H61 340	1	H31 336	1	TUBE ASS'Y	
2	H61 341	1	H31 337	1	ROD ASS'Y	
3	H61 342	1	H31 338	1	PISTON	
4	H61 343	1	H31 339	1	ROD COVER	
5	H61 207	2	H31 340	2	STEEL BUSH	
6	4040026	1	4040025	1	SET SCREW	
7	2700402	2	2700402	2	GREASE NIPPLE	
8	4600121	1	4600131	1	DU-BUSH	
9	2803012	1	2803014	1	PISTON PACKING	
10	2846825	2	2846827	2	WEAR RING	
11	2851203	1	2851209	1	O-RING	
12	2819066	1	2819069	1	ROD PACKING	
13	2831725	1	2831727	1	DUST WIPER	
14	2851213	1	2851217	1	O-RING	
15	2842307	1	2842309	1	BACK-UP RING	
16	2851214	1	2851218	1	O-RING	

2.12 Rotary Joint Assembly



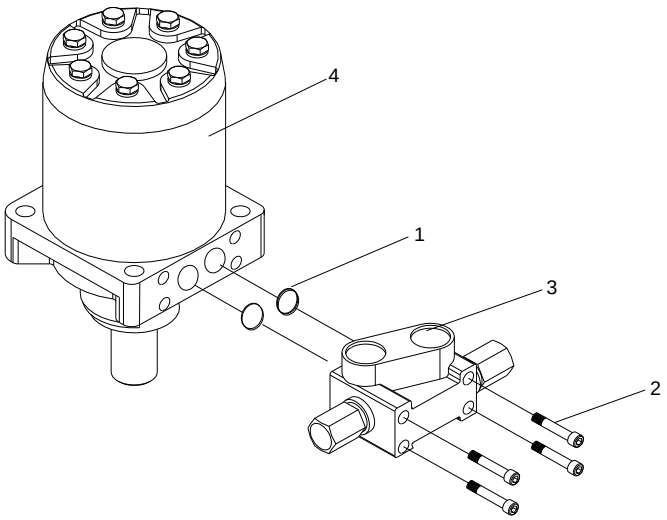
Item No.	SRG 100, 200, 250		SRG 400		Part Name	Remark
	Part No.	Q'ty	Part No.	Q'ty		
–	P61 343	1	H31 324	1	ROTARY JOINT ASS' Y	
1	P61 344	1	H31 325	1	ROTARY HOUSING	
2	P61 345	1	H31 326	1	ROTARY SHAFT	
3	2890034	5	2890032	5	ROTARY SEAL	
4	2890031	1	2890033	1	V-RING	
5	4601250	1	4601270	1	BALL BEARING	
6	2851055	1	2851057	1	O-RING	
7	4602223	1	4602233	1	BALL BEARING	
8	P61 346	1	H31 327	1	HOUSING CAP	
9	4010075	2	4010075	2	SOCKET BOLT	
10	2702222	2	2702223	2	HOLLOW HEX PLUG	

2.13 O/C Valve



Item No.	SRG 100, 200, 250		SRG 400		Part Name	Remark
	Part No.	Q'ty	Part No.	Q'ty		
–	P61 348	1	H31 330	1	O/C VALVE	
1	P61 432	1	H31 329	1	BLOCK	
2	P61 349	1	H31 331	1	C/B V/V	
3	2851018	2	2851023	2	O-RING	

2.14 Motor & Valve



Item No.	SRG 100		SRG 200, 250		SRG 400		Part Name	Remark
	Part No.	Q'ty	Part No.	Q'ty	Part No.	Q'ty		
–	P61 469	1	H61 415	1	H31 465	1	MOTOR & VALVE	
1	2856035	2	2856035	2	2856035	2	O-RING	
2	4011367	4	4011367	4	4011367	4	SOCKET BOLT	
3	H51 331	1	H51 331	1	H51 331	1	RELIEF VALVE	100bar
4	P61 241	1	H61 241	1	H31 241	1	TURQ. MOTOR	

2.15 Spare & Articles Supplied

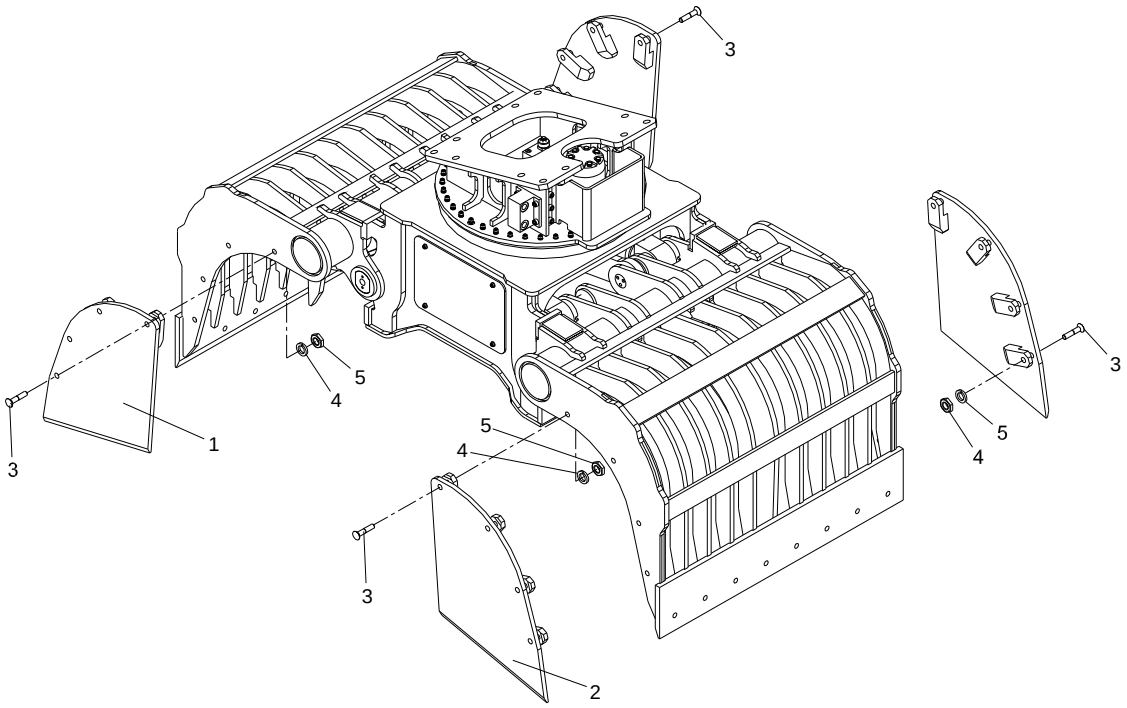
Item No.	SRG 100		Part Name	Remark
	Part No.	Q'ty		
–	P61 041	1	SPARE & ARTICLE SUPPLIED	
1	–	1	SPARE PART SET	
1–1	2850017	2	O–RING	
1–2	2850014	4	O–RING	
1–3	2858004	2	BONDED SEAL	
1–4	2700402	2	GREASE NIPPLE	
2	P61 221	1	ARTICLES SUPPLIED	
2–1	H61 223	1	OPERATION MANUAL & PART LIST	

Item No.	SRG 200,250		Part Name	Remark
	Part No.	Q'ty		
–	H61 041	1	SPARE & ARTICLE SUPPLIED	
1	–	1	SPARE PART SET	
1–1	2850017	2	O–RING	
1–2	2850014	4	O–RING	
1–3	2858004	2	BONDED SEAL	
1–4	2700402	2	GREASE NIPPLE	
2	H61 221	1	ARTICLES SUPPLIED	
2–1	H61 223	1	OPERATION MANUAL & PART LIST	

Item No.	SRG 400		Part Name	Remark
	Part No.	Q'ty		
–	H31 040	1	SPARE & ARTICLE SUPPLIED	
1	–	1	SPARE PART SET	
1–1	2850023	2	O–RING	
1–2	2850017	4	O–RING	
1–3	2858004	2	BONDED SEAL	
1–4	2700402	2	GREASE NIPPLE	
2	H31 221	1	ARTICLES SUPPLIED	
2–1	H61 223	1	OPERATION MANUAL & PART LIST	

03. OPTION

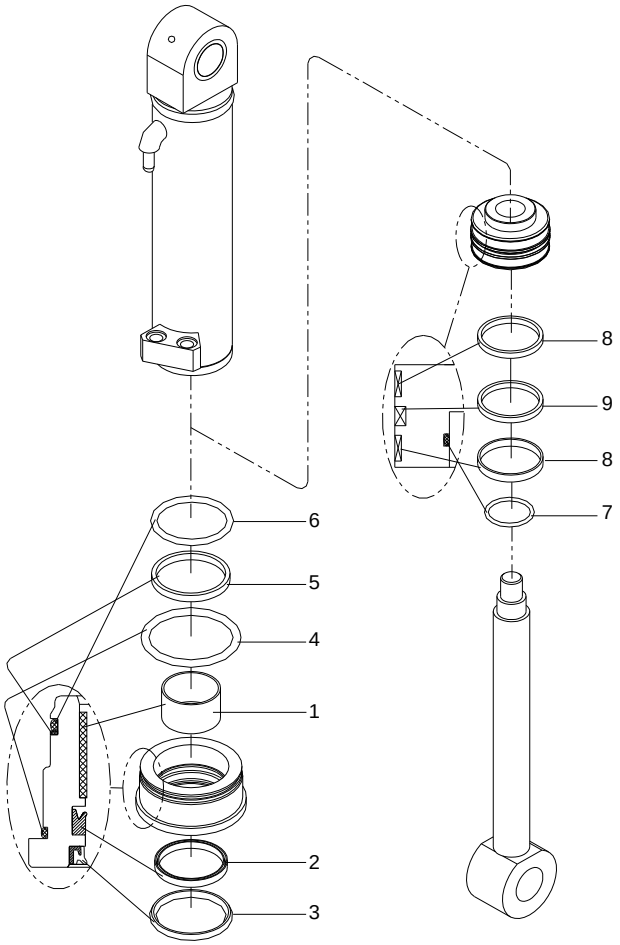
3.1 Side Keeper Set



Item No.	SRG 100		Part Name	Remark
	Part No.	Q'ty		
1	P62 106	2	SIDE KEEPER (A)	
2	P62 108	2	SIDE KEEPER (B)	
3	4090120	16	WRENCH BOLT	
4	4211014	16	SPRING WASHER	
5	4101215	16	HEX. NUT	

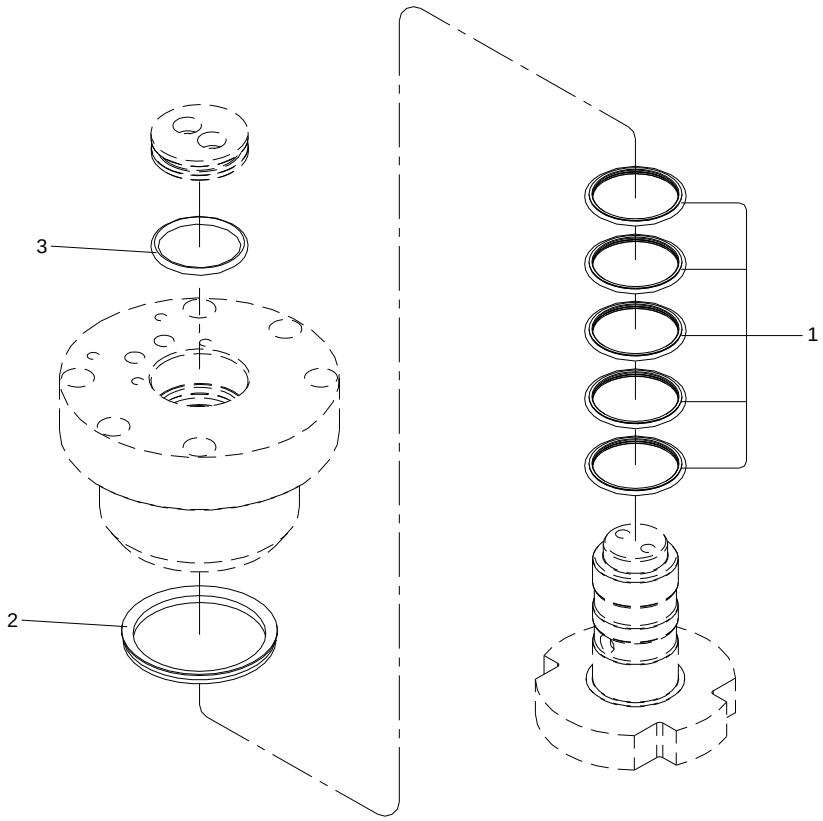
Item No..	SRG 200		SRG 250		SRG 400		Part Name	Remark
	Part No.	Q'ty	Part No.	Q'ty	Part No.	Q'ty		
1	H72 108	2	H62 108	2	H32 106	2	SIDE KEEPER (A)	
2	H72 110	2	H62 110	2	H32 108	2	SIDE KEEPER (B)	
3	4090122	12	4090122	16	4090122	16	WRENCH BOLT	
4	4211014	12	4211014	16	4211014	16	SPRING WASHER	
5	4101215	12	4101215	16	4101215	16	HEX. NUT	

3.2 Seal Kit – C



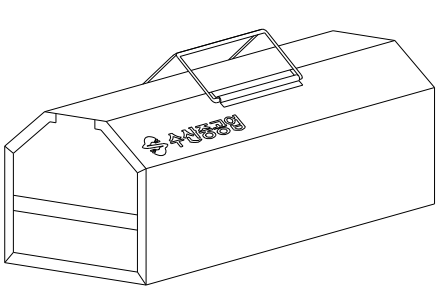
Item No..	SRG 100	SRG 200	SRG 250	SRG 400	Q'ty	Part Name
	Part No.	Part No.	Part No.	Part No.		
–	P62 007	H72 005	H62 007	H32 008	1	SEAL KIT–C
1	4600174	4600121	←	4600131	1	DU–BUSH
2	2819068	2819066	←	2819069	1	ROD RACKING
3	2831716	2831725	←	2831727	1	DUST SEAL
4	2851210	2851212	2851214	2851218	1	O–RING
5	2842304	2842306	2842307	2842309	1	BACK–UP RING
6	2851209	2851211	2851213	2851217	1	O–RING
7	2851203	←	←	2851209	1	O–RING
8	2846826	2846824	2846825	2846827	2	WEAR RING
9	2803013	2803011	2803012	2803014	1	PISTON PACKING

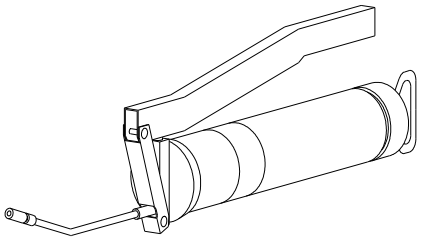
3.3 Seal Kit – R



Item No..	SRG100	SRG200	SRG250	SRG400	Q'ty	Part Name
	Part No.	Part No.	Part No.	Part No.		
–	P62 009	←	←	H32 012	1	SEAL KIT–R
1	2890034	←	←	2890032	5	ROTARY SEAL
2	2890031	←	←	2890033	1	V–RING
3	2851055	←	←	2851057	1	O–RING

3.4 Tool Set





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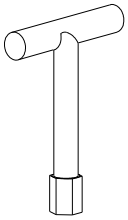
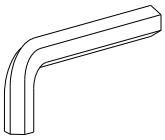
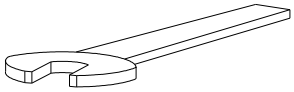


④~⑦



⑧



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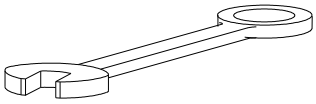

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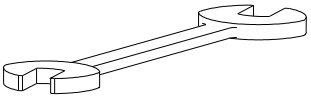

Item No..	SRG 100, 200, 250 Part No.	SRG 400 Part No.	Q'ty	Part Name	Remark
–	H61 051	H31 051	1set	TOOL SET	
1	8290003	←	1	TOOL BOX	
2	8214002	←	1	GREASE GUN	300cc
3	8202130	←	1	T-WRENCH	10mm
4	8202105	←	1	L-WRENCH	8mm
5	8202106	←	1	L-WRENCH	10mm
6	8202107	←	1	L-WRENCH	12mm
7	8202108	←	1	L-WRENCH	14mm
8	8203021	←	1	SINGLE SPANNER	55mm
9	8203158	←	1	RATCHET SPANNER	19mm
10	8203053	←	1	DOUBLE SPANNER	13 X 17mm
11	8203055	←	1	DOUBLE SPANNER	17 X 19mm
12	8203056	←	1	DOUBLE SPANNER	19 X 22mm
13	8203058	←	1	DOUBLE SPANNER	24 X 27mm
14	–	8203062	1	DOUBLE SPANNER	30 X 32mm

Product Recording

Record information about your product in this page.

Demolition & Sorting Grab Model :

Serial Number :

Date of Delivery :

Dealer :

Address :

Phone No : FAX No :

Notes