

Operation & Maintenance Manual

Parts Book No. : a099-0073

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S&J EQUIPMENT INC.

Foreword

It is important that you read and understand this manual before using SJ hydraulic hammer for the first time, so as to avoid errors and breakdowns through incorrect usage.

This manual includes

- Important safety instructions
- Operating instruction for the hydraulic hammer
- Maintenance instructions for the hydraulic hammer
- Aids to troubleshooting

This manual describes how to handle the hydraulic hammer at site, and should therefore always be kept in the document compartment of the carrier machine. Responsibility for observation of these safety instruction lies at all times with the operator, i. e. with you.

Some photographs or illustrations in this publication may show details that differ from your particular hydraulic hammer. For example, a bracket may have been removed for the purposes of illustration.

SJ's policy of continuing improvements and upgrading of product designs may have caused changes to your hydraulic hammer, which are not included in this publication.

Note that safe operation of the hydraulic hammer is only guaranteed if genuine SJ spare parts are used.

When you need spare parts or some information concerning maintenance of your hammer, you should contact your local SJ dealer.

We assure you of our continuous support, and our aim of guaranteed customer satisfaction.

We wish you every success with your SJ hydraulic hammer.

Table of contents



Foreword

1. Safety information

- 1.1. Basic safety information
- 1.2. Preparation for safe operation
- 1.3. Safety information on safe operation
- 1.4. Safety information on maintenance

2. Warranty

- 2.1. Hydraulic hammer
- 2.2. A criterion on claim for chisel

3. Configuration and ordering information

- 3.1. Main components
- 3.2. Ordering and after-sales service information

4. Standard specifications of Hydraulic hammer

- 4.1. Markings and labels
- 4.2. External dimension
- 4.3. Hydraulic hose nipple

5. Technical specifications

6. Mounting

- 6.1. Attaching the adapter to the hydraulic hammer
- 6.2. Mounting the hydraulic hammer on the carrier
- 6.3. Mounting the hydraulic hammer on the carrier in hydraulic aspects
- 6.4. Dismounting the hydraulic hammer from the carrier

7. Fitting/removing the chisel

- 7.1. Fitting the chisel
- 7.2. Removing the chisel

8. Adjusting the pressure adjust valve

Table of contents



9. Operating the hydraulic hammer

- 9.1. Hydraulic oil
- 9.2. Working in high and low outside temperatures
- 9.3. Grease
- 9.4. Gas
- 9.5. Safe operating rules

10. Selecting the right chisel

11. Maintenance

- 11.1. Checking and replacing the wear parts
- 11.2. Screw tightening
- 11.3. Checking gas pressure in the accumulator/back head and charging
- 11.4. Checking and replacing the through bolts
- 11.5. Checking the bottom of the piston


12. Troubleshooting

13. Dismounting the hydraulic hammer

- 13.1. Dismounting from the carrier
- 13.2. Short periods of non-use
- 13.3. Long periods of non-use
- 13.4. Cleaning the hydraulic hammer

14. Care and maintenance timetable

1. Safety information

This manual describes the correct usage of the product and safety instructions. Important instructions in this manual are marked with this symbol . When you see this symbol in the manual or on the product, you must be alert to the possibility of injury or death. Be sure to observe the instruction in the safety message. The safety messages in this manual do not describe all the possibilities that could cause personal injury/ death, or damage to the product. It is the operator's responsibility to observe the safety instructions and regulations.

Remember! Safety is up to you.

Safety Alert Symbol


The Safety Alert Symbol represents that ATTENTION is required. If you see this mark in this manual or on the products, never fail to read and observe the associated instructions.



Signal words

The words "DANGER", "WARNING", "CAUTION" or "IMPORTANT" appearing with the above Safety Alert Symbol indicate the degree of risk or hazard. All four degrees of risk indicate that safety is involved. Observe the precautions indicated whenever you see the Safety Alert Symbol, no matter which signal word appears next to the symbol.

DANGER!	Indicates imminent hazard if a situation that if not avoided, is very likely to cause death or extremely serious injury. It may also be alert you against areas of the product that may explode if handled or treated carelessly.
WARNING!	Indicates potential of a hazardous situation, or unsafe practice, that if not avoided could result in serious injury or death.
CAUTION!	Indicates potential of a hazardous situation, or unsafe practice, that if not avoided could result in minor or moderate injury.
IMPORTANT!	Indicates potential of a hazardous situation, could cause the product life to be shortened.



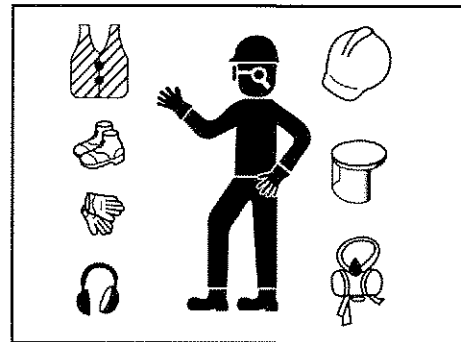
WARNING!
The following instructions are those that should ALWAYS be observed in construction equipment operation.

1.1. Basic safety information

Protect yourself

Operators and service personnel must wear appropriate safety equipment, including hearing protection, respirator, hardhat, safety shoes, eye protection, heavy gloves etc, as required.

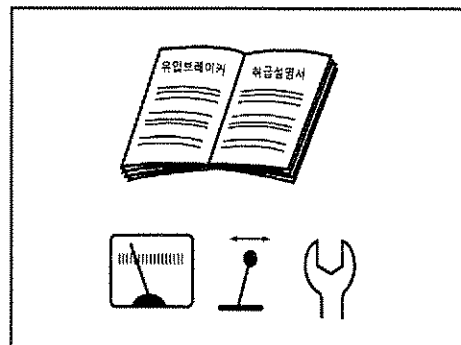
Note : The wearing of loose clothing or any accessories such as neckties, scarves, untied shoe laces, rings, wrist watches or long hair could cause personal injury or death.



Always use the proper tools for inspection or maintenance work, which must only be carried out after ensuring that equipment has been stopped completely, and it is placed suitably in a safe place.

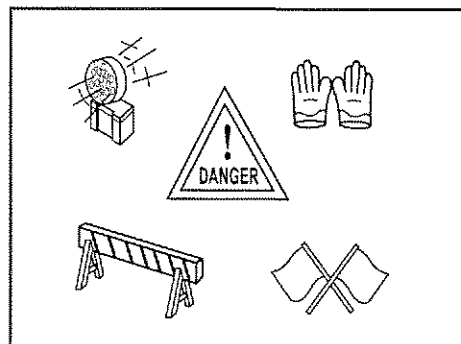
Know your equipment

Never fail to read and understand the safety messages, operation manual and maintenance manual before installing and operation the hammer. Only the operator who has been trained and licensed to operate the carrier and hammer should do so.



Know the work site

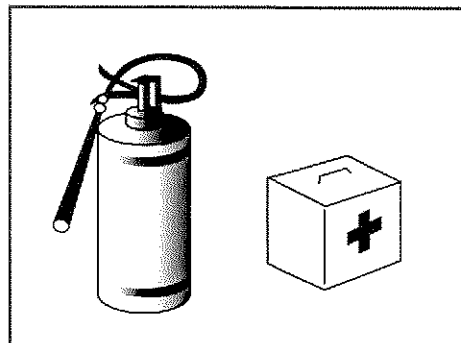
Before beginning operation, check in and around the work site for any unusual conditions that could be dangerous, and prepare the appropriate warnings for safe working. Be careful, particularly when working in the vicinity of electric power lines, gas pipes or other buried services. Pay particular attention to the possibility of people or vehicles that may pass near to the work site.



Know the rules

Everybody who operates or maintains the equipment should know the meaning of the rules and laws in terms of handling the equipment.

Keep the fire extinguisher and the first aid case in the operator's cabin for emergency use.



1.2. Preparation for safe operation

Mounting the hydraulic hammer requires the presence of an assistant, who must be instructed by the carrier driver, the carrier driver and assistant should agree beforehand on clear hand signals.

The hydraulic hammer should only be mounted on an excavator with sufficient load capacity. Carriers below this weight class will not provide the required degree of stability and could even fall over during hammer use, causing injury and damage.

Carriers above this weight class may apply excessively high mechanical loads to the attachment.

Hammer Model	Carrier Weight (ton)	Hammer Model	Carrier Weight (ton)
SJ - 50	0.8~1.5t	SJ - 600	11.0~15.0t
SJ - 70	1.2~3.0t	SJ - 700	13.0~18.0t
SJ - 100	2.5~4.0t	SJ - 760	16.0~21.0t
SJ - 210	3.0~5.0t	SJ - 800	19.0~26.0t
SJ - 300	4.0~7.0t	SJ - 1200	28.0~40.0t
SJ - 400	6.0~9.0t	SJ - 1500	45.0~55.0t
SJ - 500	7.0~11.0t		

1.3. Safety information on safe operation

Always close the front screen/splinter guard on the driver's cab to protect the driver from flying rock splinters during hammer operations.

The hydraulic hammer may only be used for the applications described in section 1.2.

Please refer to Section 10 of this manual for instructions on how to handle the hydraulic hammer, and also list of applications for which the hydraulic hammer is unsuitable and must not be used.

1.4. Safety information on maintenance

Always follow the instructions described in the manual when performing maintenance work on the hammer.

Pay careful attention to all relevant safety regulations.

Do not rush as most accidents occur when the instructions are not observed. Maintenance work should be performed with the carrier completely stopped, the stop valves shut-off & the carrier on firm and flat ground with all the control levers switched off.

Only the proper tools should be used for maintenance, as use of improper tools may cause personal injury, or damage to parts of the hammer. Use only the lifting points provided and sufficiently strong lifting equipment when lifting the hammer.

2. Warranty

2.1. Hydraulic hammer

The warranty period for **SJ** hydraulic hammers is provided as below.

- **Base warranty:** **SJ's** products and the parts are warranted within six(6) months from the date of delivery to the actual and original buyer, but no more than twelve(12) months from the date of shipment from **SJ's** factory.

- **Limited warranty:** Limited warranty for a period of three (3) months from the date of delivery to the actual or original buyer is applied to the wear parts such as stipulated below.

This warranty does not apply to the replacement of parts due to wear, such as:

*Hydraulic hoses, chisel pin, Wearing plate,
Rubber plugs, bushings, Screws & Bolts, all sealing components.*

- **Extended warranty:** Failure of main items stipulated below, which is warranted for a period of twelve(12) months from the date of delivery to the actual or original buyer, but no more than eighteen(18) months from the date of shipment from **SJ's** factory.

Cylinder, Piston, and Control valve assembly.

- **Warranty will be in effect only if;**

1. The purchaser has the hammer installed and operating in accordance with the published specifications and guidelines.
2. The purchaser does not exceed the hammer published design operating range for hydraulic flow, pressure or recommended carrier class.
3. The purchaser complies with the maintenance schedule in the Operating Manual supplied with each hammer.
4. The purchaser uses replacement parts/ products received from or approved by **SJ**.

This warranty will not cover defects/failures caused by abuse, neglect, misuse, lack of maintenance, accidents or use of the hammer beyond its published design capacity, specifications or recommended applications. And, the manufacturer will, at its option, determine what, if any, defective/faulty components will be accepted for warranty coverage. The manufacturer will, at its option, determine whether to repair or replace components deemed faulty because of defective materials or workmanship.

A warranty claim will only be accepted if accompanied by proof of purchase and received within fifteen (15) days of the warranted defect or failure.

For further information refer to the "Warranty & service guide line" provided by **SJ**.

2.2. A criterion on claim for chisel

SJ chisel is manufactured with strict processing & quality management programs from the stage of material procurement. But, its life span can be varied upon jobsite condition, working method or the objects to be broken, etc. Therefore, this criterion is subject to judge a claim and to make long life spans by giving the way of right use.

2.2.1. Impact region to piston

This kind of claim is very unusual and might be caused by not uniformed material or fragile condition after heat-treatment. In this case, SJ will replace it with new one at free of charge.



<Fig. 1>

2.2.2. Plastic deformation on impact region

Very little chance of deformation on the impact point has been shown as heat treatment is processed to suit for each part stress.

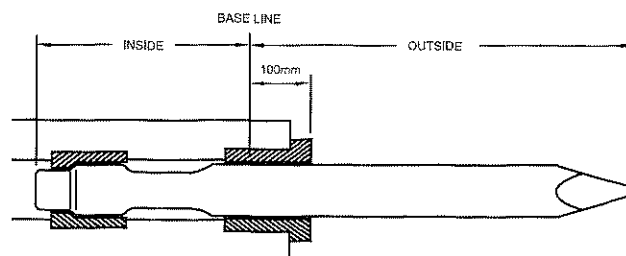
In this case, SJ will replace it with new one at free of charge.



<Fig. 2>

2.2.3. Judgment with inside from the base line

- 1) As you see the Fig.3 & 4, if a claim where its broken position is located inside from the base line is presented, this might be caused by poor material, wrong heat treatment, chisel deformation, etc. In this case, SJ will replace it with new one at free of charge.
- 2) But, due to excessive bending load to the breaker when friction between chisel and front bushing by excessively worn out front bushing has been accumulated, and this friction evidences are shown, then, the operator cannot issue a claim.



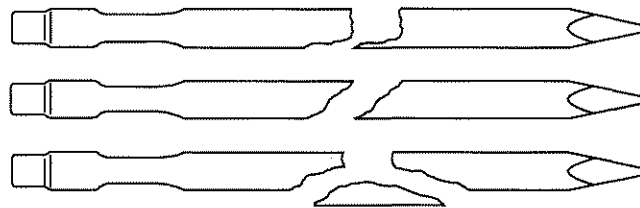
<Fig. 3>



<Fig. 4>

2.2.4. Judgment with outside from the base line

With the Fig. 3, any broken chisel is claimed where the broken point is located outside from the base line, this must be caused by excessive bending stress to the breaker. This kind of bending stress is usually observed in unstable working conditions while the chisel is not very vertical to the target object surface. Refer to Fig.5 below. These cases are not guaranteed by the manufacturer.



<Fig. 5>

2.2.5. Mashed chisel tip.

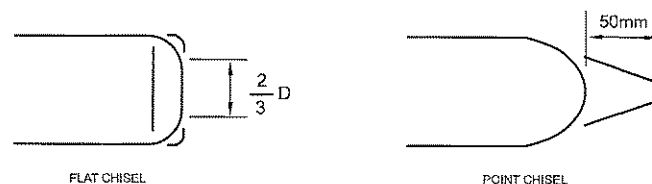
If the breaker operates without breaking the objects or long air breaking jobs, as you see the Fig.6 below, the mashed deformation could be happen. Then, the operator cannot claim it to the manufacturer.



<Fig. 6>

2.2.6. Worn out chisel tip

Worn-out rate and its shapes could be varied upon the kinds of objects and working skill. As you see the Fig.7, if the worn-out tip diameter of flat chisel is below $\frac{2}{3}$ of the chisel diameter, this is regarded as normal operation. For point chisel, in case of new one, the worn-out length is over 50mm, this also be regarded as normal operation.

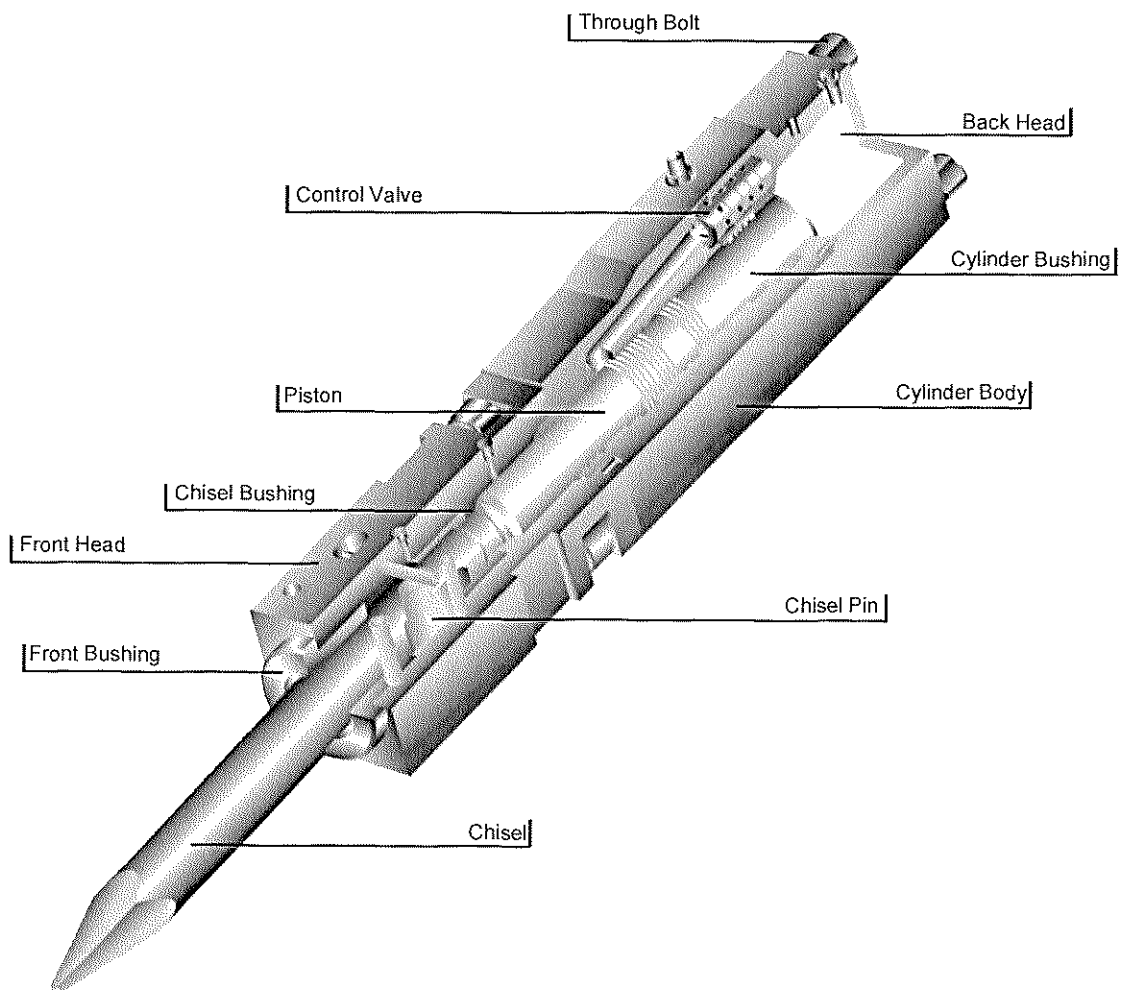


<Fig. 7>

3. Configuration and ordering information

3.1. Main components

The hydraulic hammer has the following main components or assemblies.





Note: The graphic shows only a general view of the main components, the actual details may vary on different models of hydraulic hammer.

The hammer is hydraulically operated equipment, and can be used on any carrier that meets the necessary hydraulic and mechanical installation requirements (See technical specification)

3.2. Ordering and after-sales service information

The equipment serial number is marked with the type and serial number on the cylinder. It is important to make correct reference to the serial number of the hammer when making repairs or ordering spare parts.

Identification by serial number is the only proper means of maintaining and identifying parts for specific hammers.

		S&J Equipment Inc. 18820 Brighton drive, Macomb, Michigan 48042 Tel. 810-531-8784 Fax 586-232-3971 www.SJEquipment.com sjequipment@yahoo.com		
		Year :		
MODEL				
WEIGHT			lb/kg	
PRESSURE			kg · f/cm ²	
OIL FLOW			lpm	
RELIEF PRESSURE			kg · f/cm ²	
B/HEAD PRESSURE			kg · f/cm ²	
ACC' PRESSURE			kg · f/cm ²	
SERIAL NUMBER				

Model Code and Serial Number

Model Code : SJ-□□□□

Example : SJ-800T

Serial Number : Y□□□ □□□□

Example : Y80 B 001,

(○; Arabian Number, □; Alphabet)

Model code : SJ-800 T

- SJ : Model prefix
- 800 : Product name
- B : Box = silence type
- T : Top type = open top type
- S : Side type
- BL : Backhoe loader type,

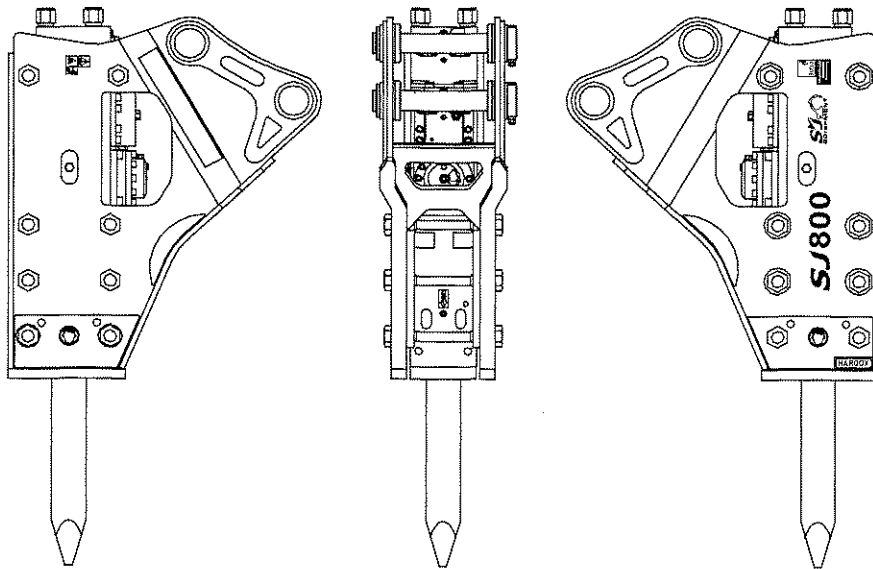
Serial Number: Y80 B 001

- Y : Model series
- 80 : Model name
- B : Box
- 001 : Serial number

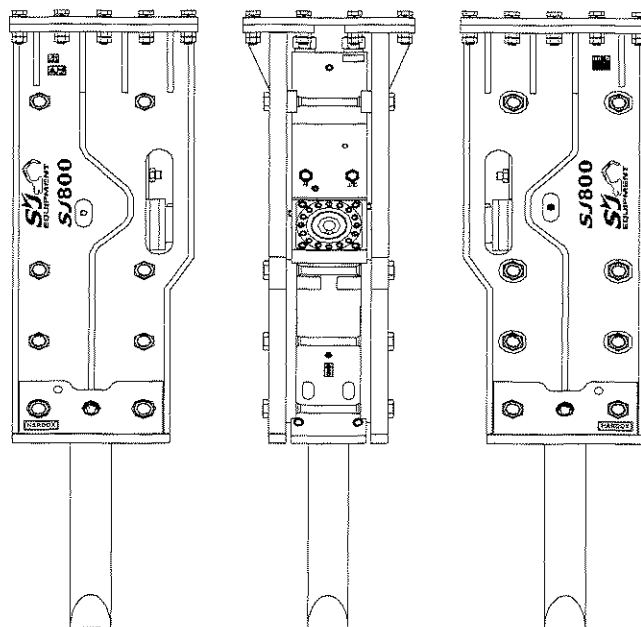
4. Standard specifications

4.1 Markings and labels

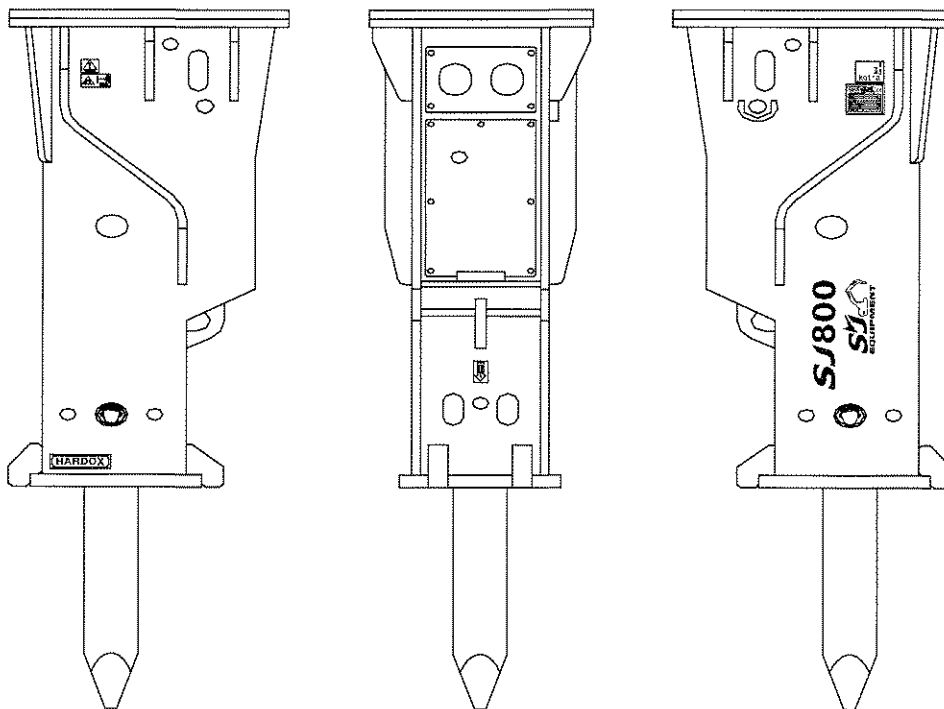
- Side type



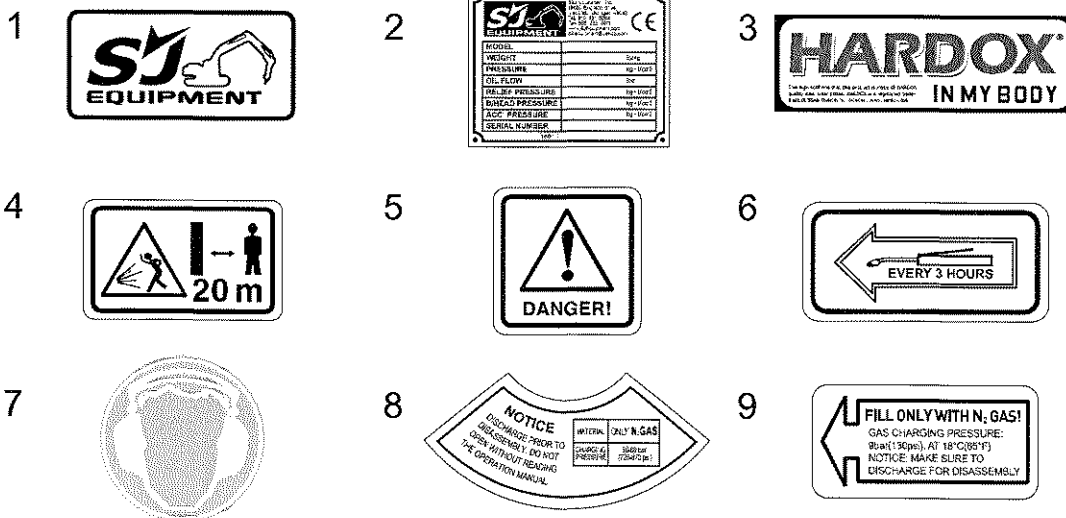
- Top type



- Silence type (=Box)



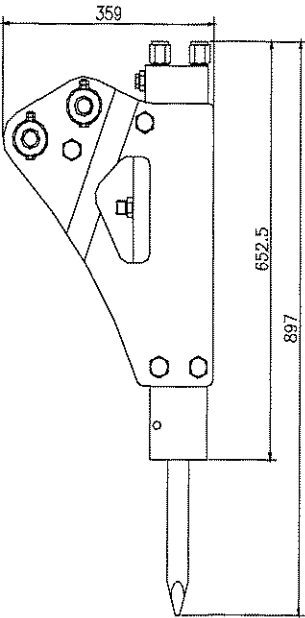
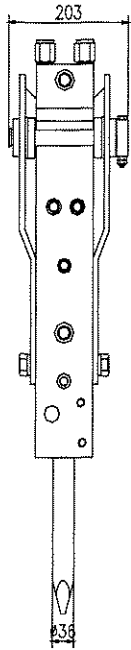
Pay attention to the marks and labels related to safety



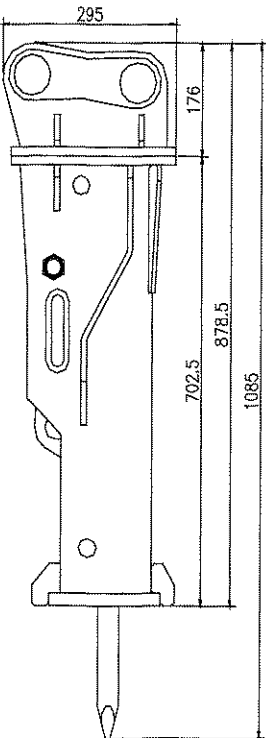
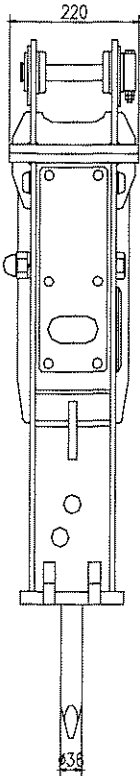
4.2 External dimension

SJ-50

SIDE TYPE

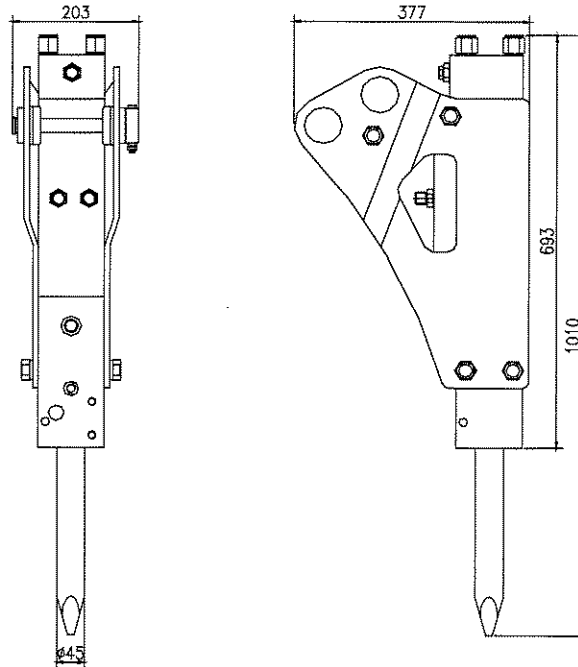


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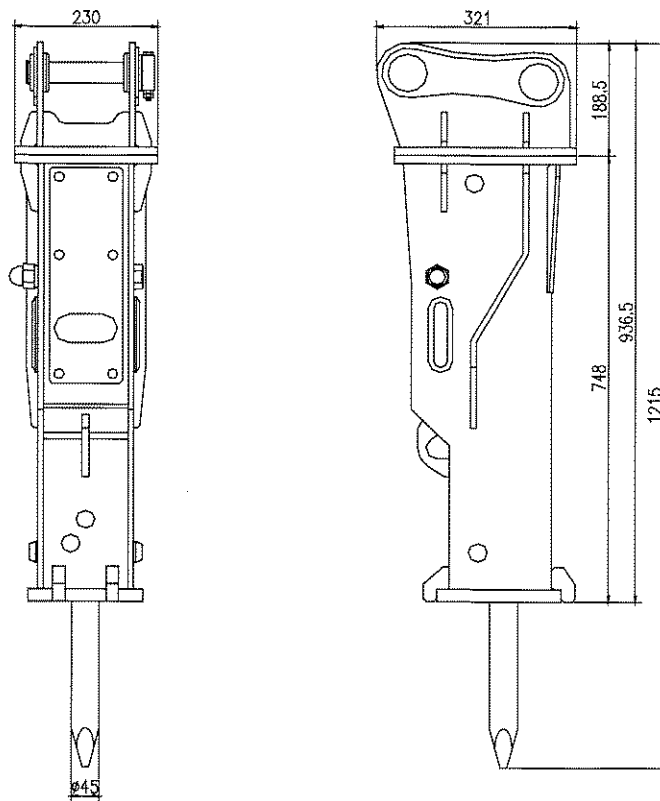


SJ-70

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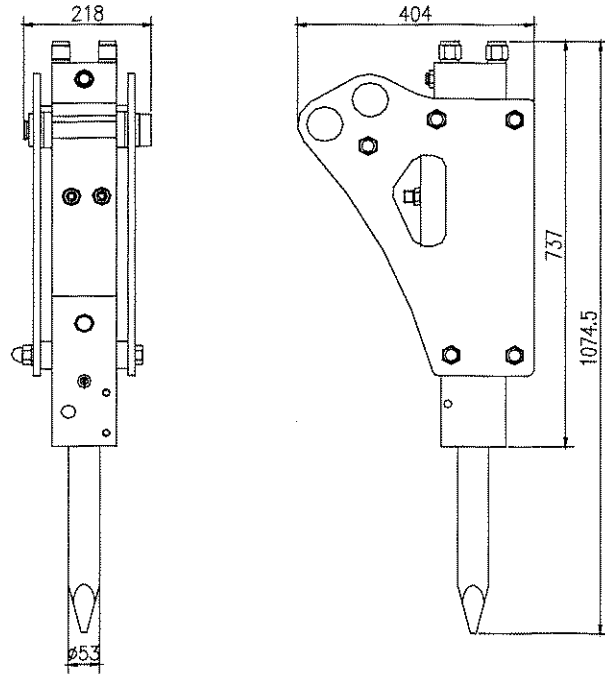


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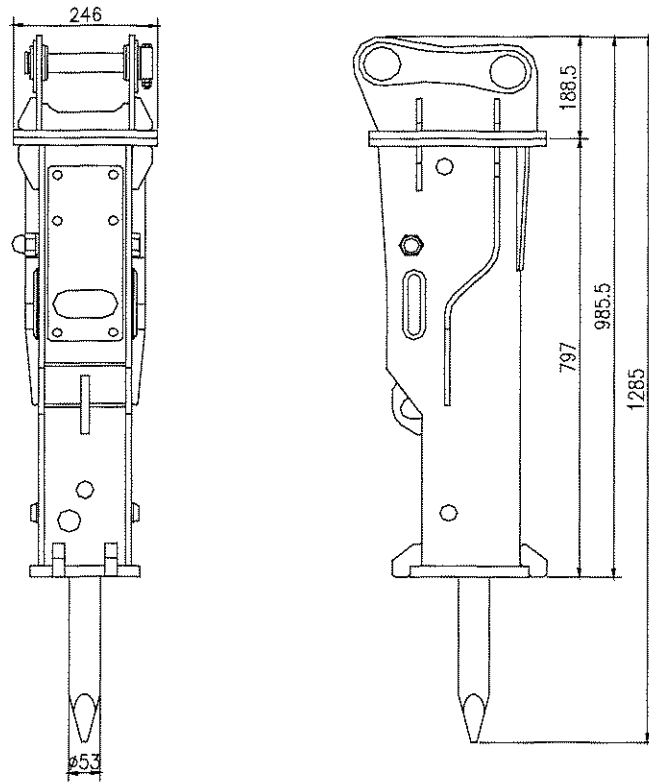


SJ-100

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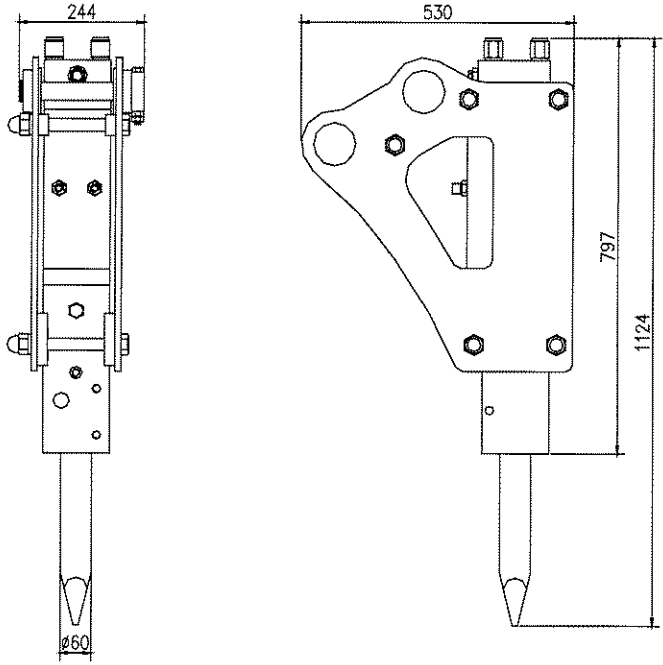


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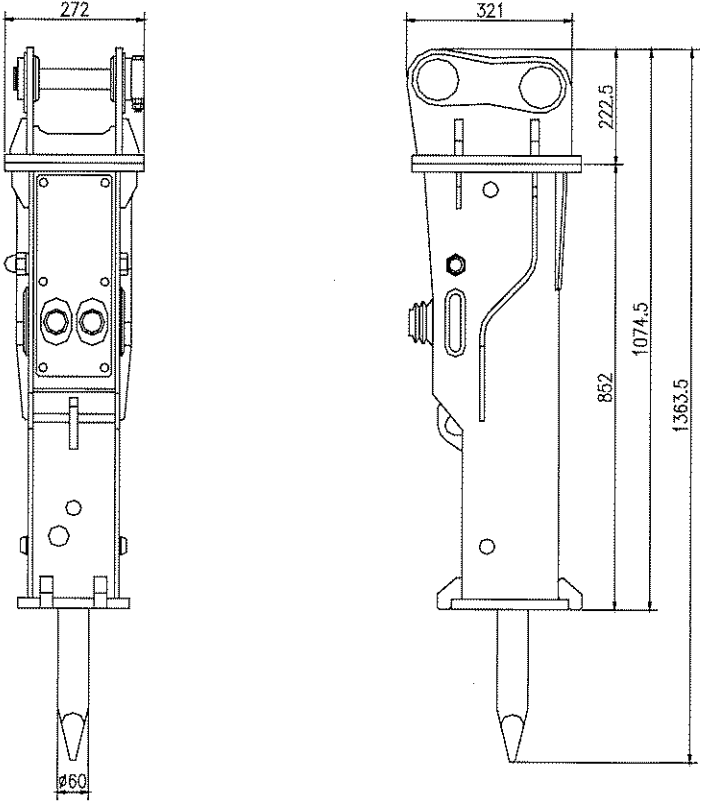


SJ-210

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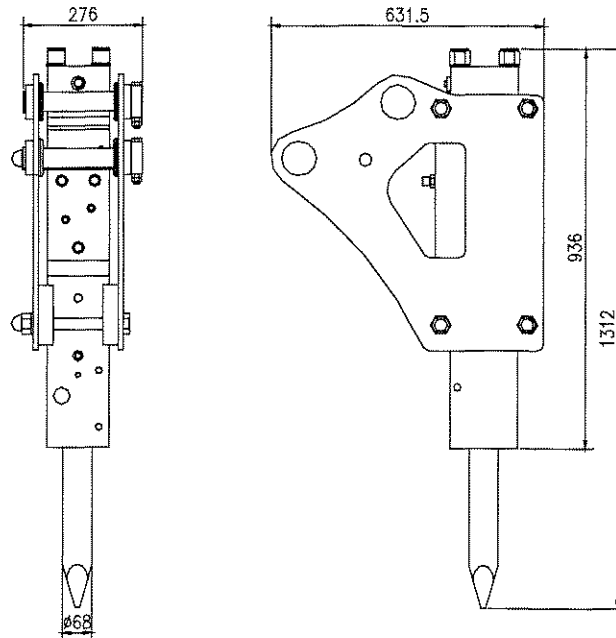


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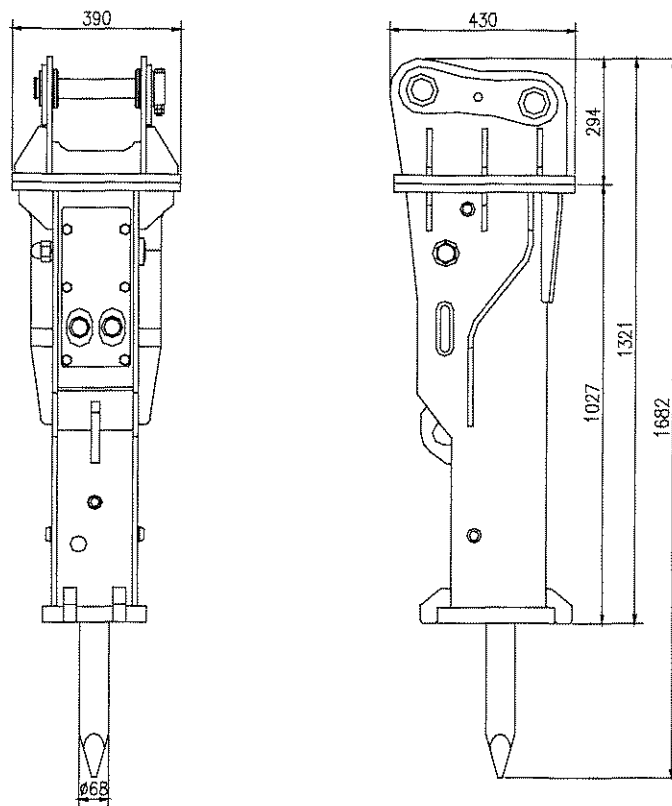


SJ-300

SIDE TYPE

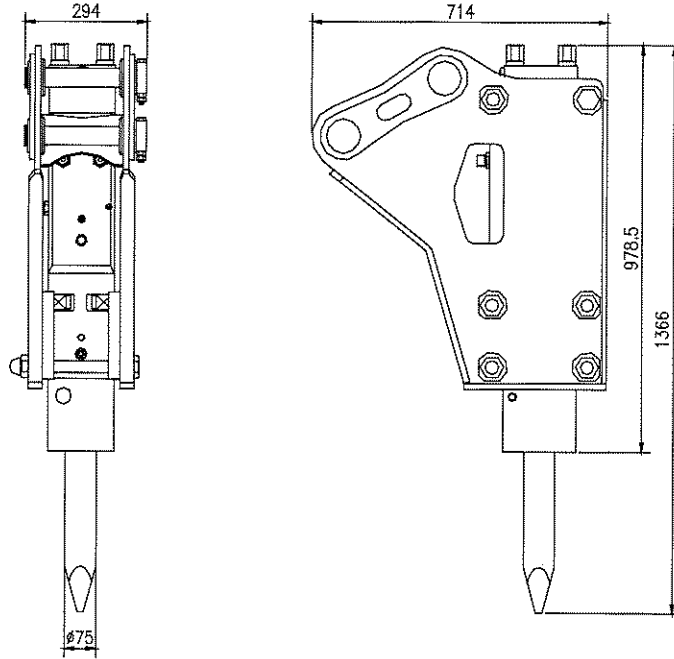


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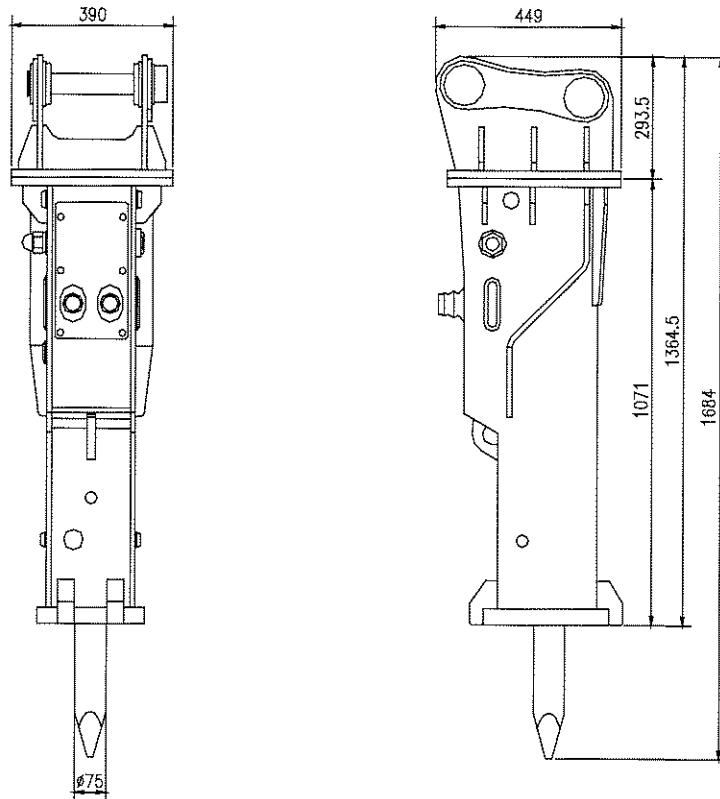


SJ-400

SIDE TYPE

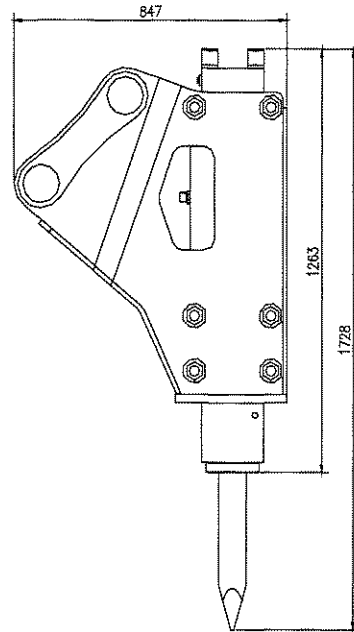
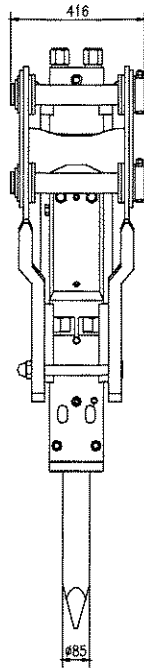


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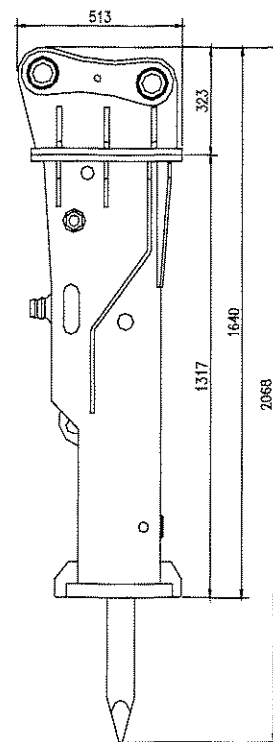
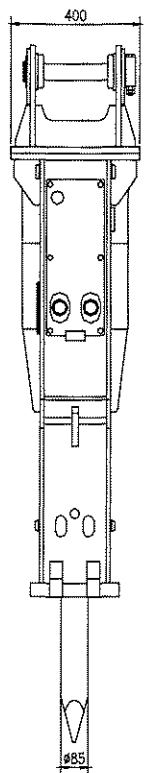


SJ-500

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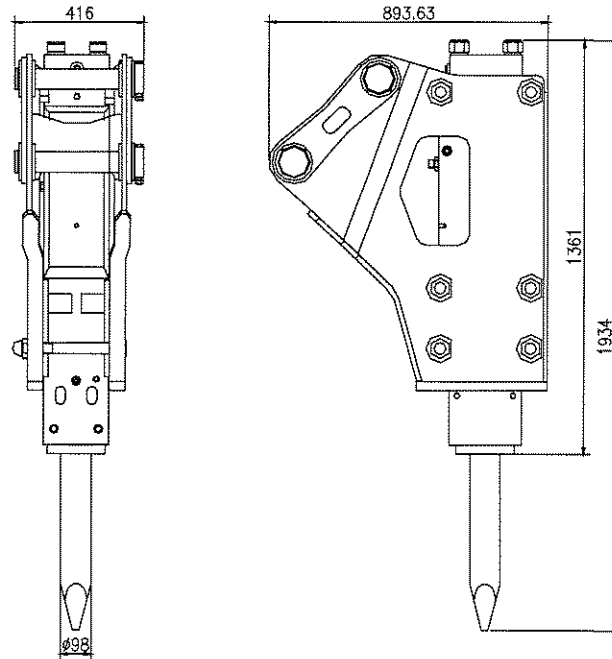


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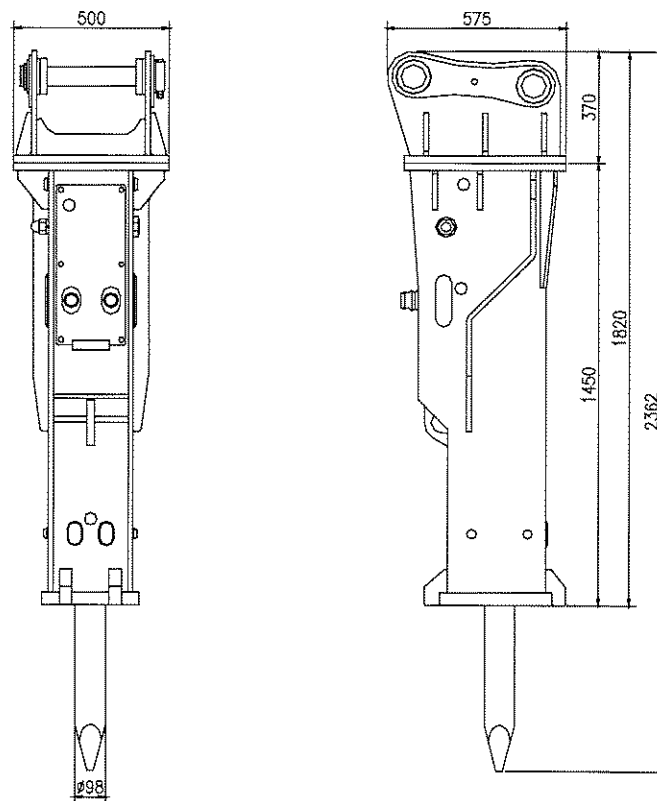


SJ-600

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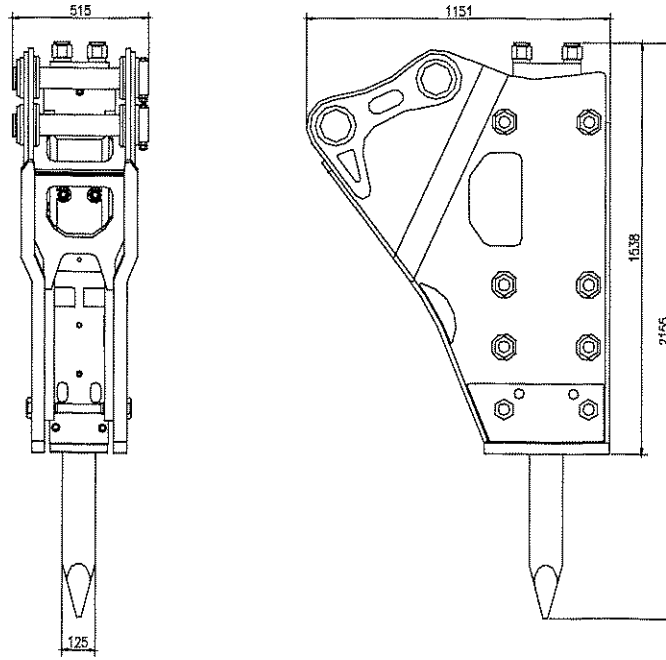


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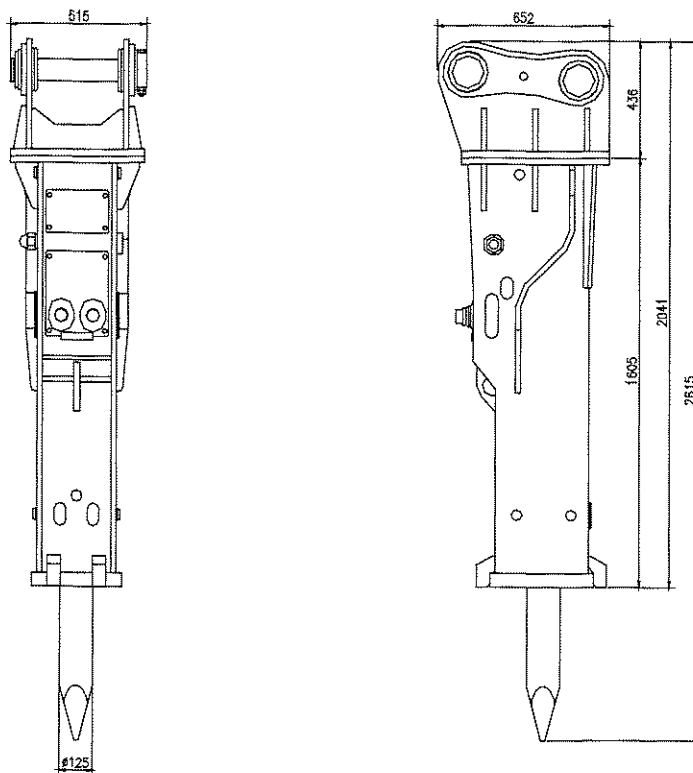


SJ-700

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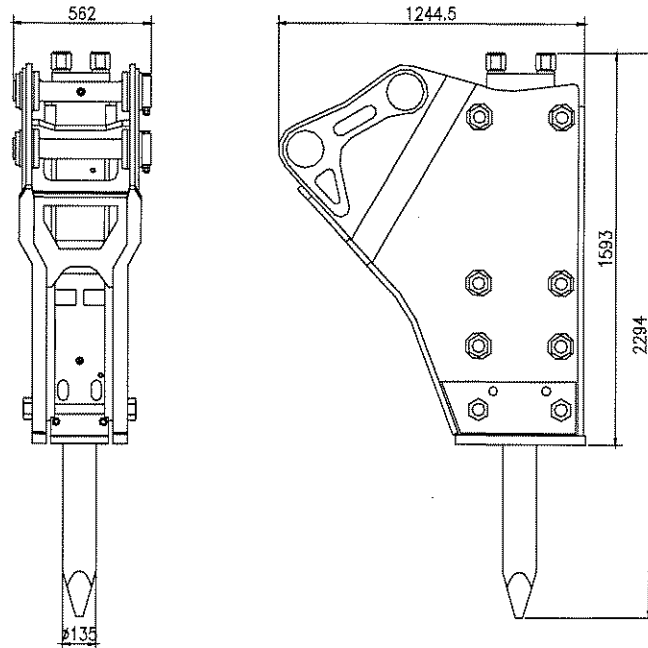


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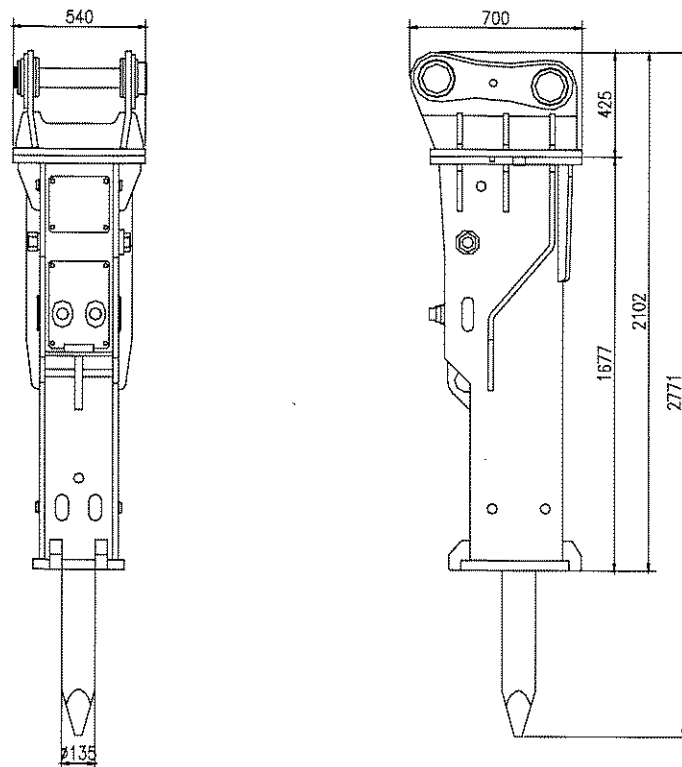


SJ-760

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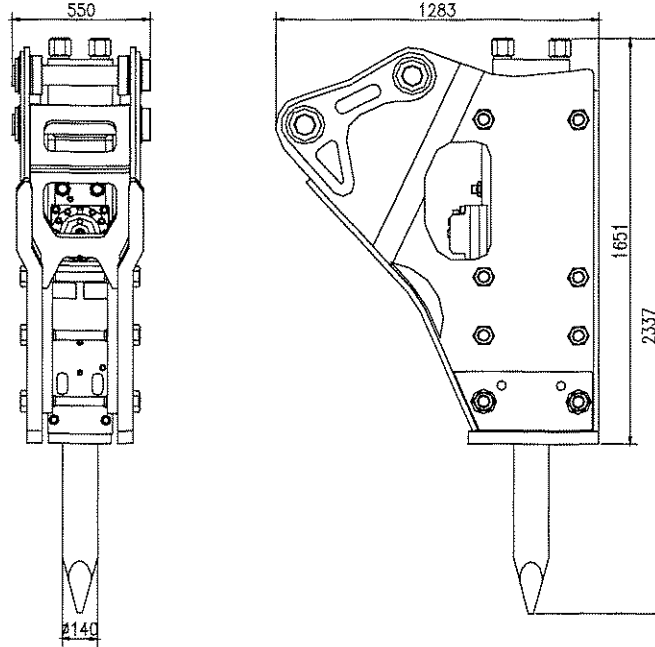


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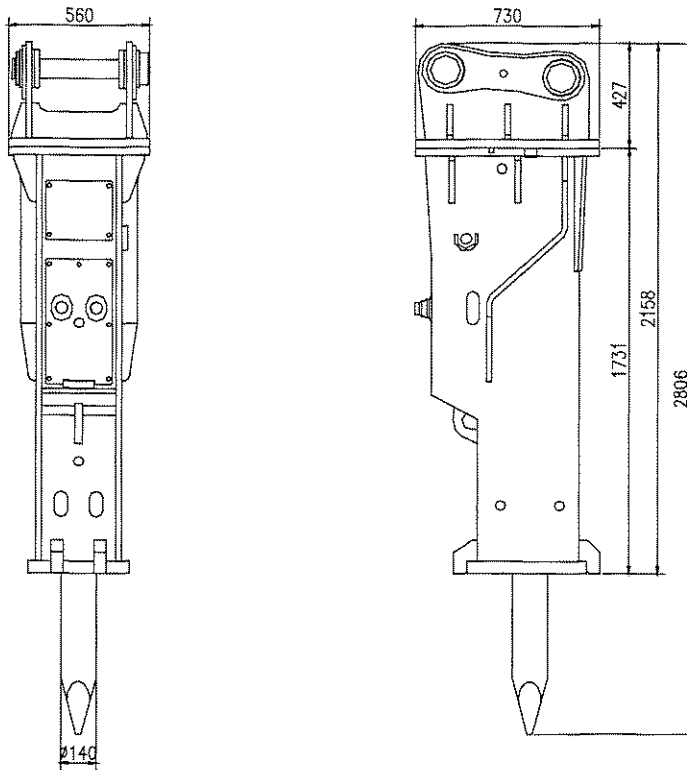


SJ-800

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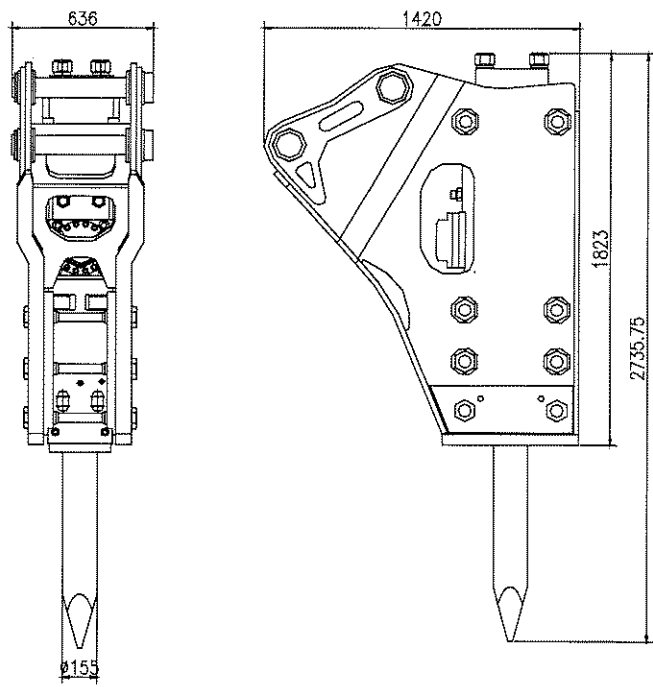


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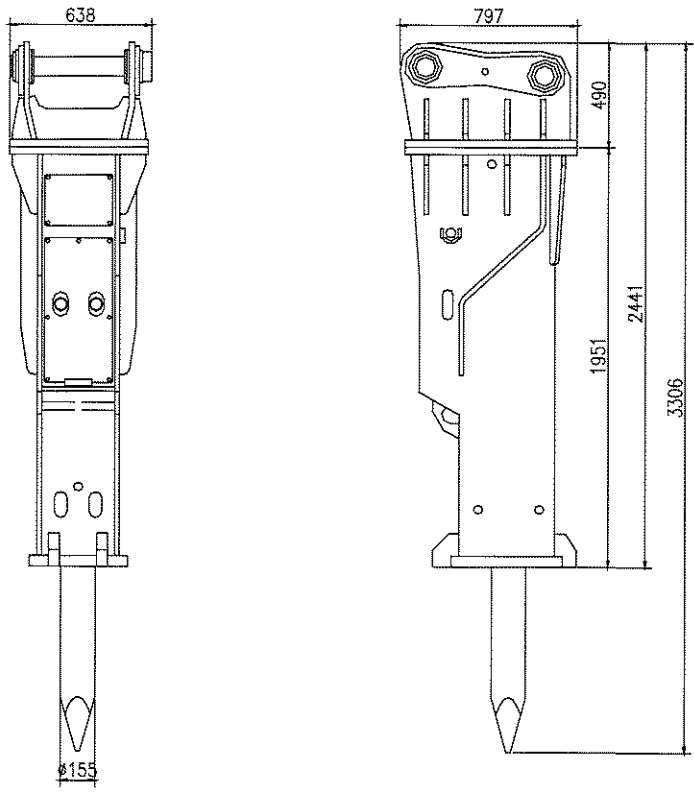


SJ-1200

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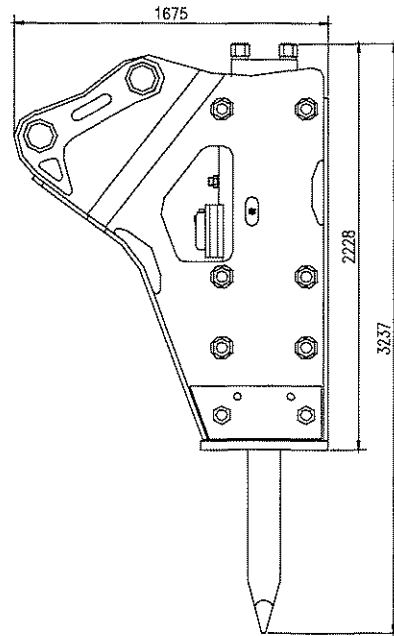
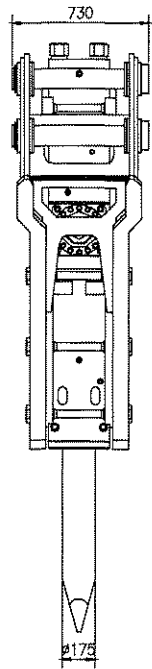


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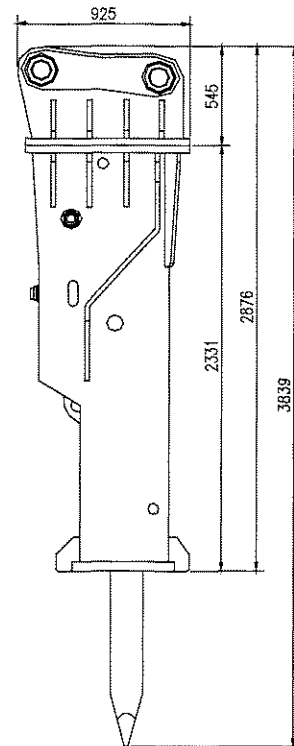
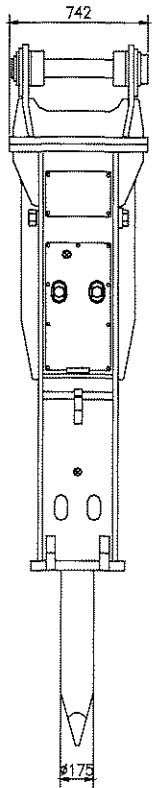


SJ-1500

SIDE TYPE



SILENT & TOP TYPE

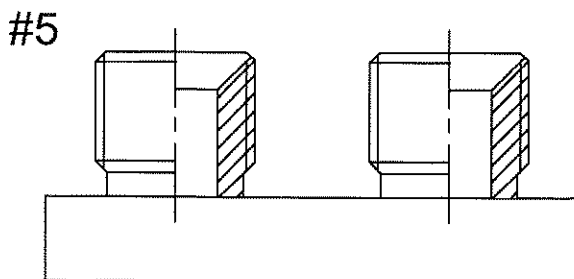
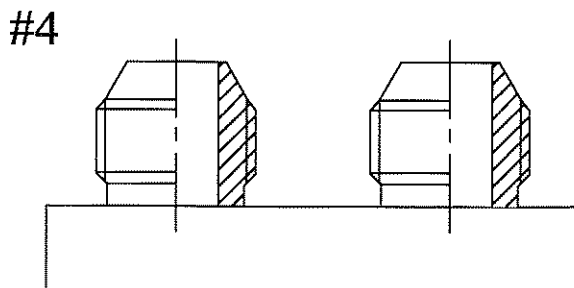
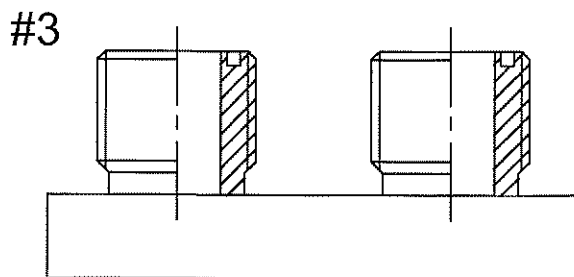


4.3 Hydraulic hose nipple

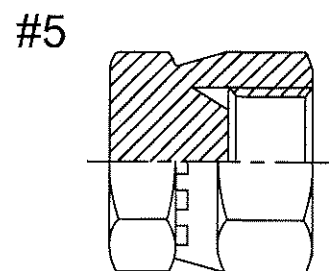
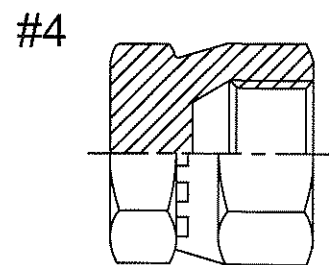
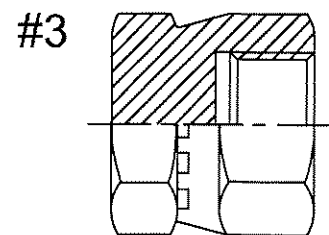
A hydraulic hose nipple is used to plug the hose attached to a hydraulic hammer. It prevents foreign substances from entering the hose.

When S_j hammer is manufactured, Hose nipple #5 type is equipped to hose basically. One touch quick coupling can be used to hose as optional item when a user asks.

- Type of Hydraulic hose nipple



- Type of Union cap



5. Technical specifications ❏

■ SJ - 50 / 70 / 100 / 210 / 300 / 400 / 500

Model		SJ-50	SJ-70	SJ-100	SJ-210	SJ-300	SJ-400	SJ-500
Working weight ¹	kg	72	87	106	178	272	405	480
Overall length ²	mm	1050	1146	1230	1288	1491	1613	2115
Required oil flow rate	ℓ/min	10~20	15~25	25~40	30~50	35~65	40~70	60~90
Operating pressure	bar	80~100	100~120	100~130	120~150	140~170	140~160	140~160
Impact rate	bpm	700~1200	700~1200	700~1100	600~900	500~800	400~800	400~700
Tool diameter	mm	36	45	53	60	68	75	85
Applicable carrier weight	ton	0.8~1.5	1.2~3.0	2.5~4.0	3.0~5.0	4.0~7.0	6.0~9.0	7.0~10.0
Back-head Gas charging pressure	bar	8~10	8~10	8~10	8~10	15~17	15~17	15~17
Accumulator pressure	bar	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Pressure adjust valve setting		n/a	n/a	n/a	n/a	n/a	n/a	n/a
Hose Diameter	inch	3/8"	3/8"	1/2"	1/2"	1/2"	1/2"	1/2"
Acceptable back pressure	bar	15	15	15	15	15	15	15
Oil supply(IN) & Return(OUT)		Both female	Both female	Both female	Both female	Both female	Both female	Both female
Pressure relief(min)	bar	30 bar higher than measured maximum operating pressure						
Hydraulic oil temperature	°C	-20~+85	-20~+85	-20~+85	-20~+85	-20~+85	-20~+85	-20~+85
Hydraulic oil Viscosity	cSt	1000~10	1000~10	1000~10	1000~10	1000~10	1000~10	1000~10

Note:

- 1) Including standard tool, standard mounting adapter and spacers, but excluding hydraulic hoses and fittings.
- 2) Measured from the tool tip of the standard tool to the top of the breaker including standard mounting adapter.

■ SJ- 600 / 700 / 760 / 800 / 1200 / 1500


Model		SJ-600	SJ-700	SJ-760	SJ-800	SJ-1200	SJ-1500
Working weight ¹	kg	790	1250	1455	1870	2460	3920
Overall length ²	mm	2240	2640	2757	2860	3170	3610
Required oil flow rate	Q/min	80~120	100~140	100~150	130~170	170~230	200~300
Operating pressure	bar	150~170	150~170	160~180	160~180	160~180	160~180
Impact rate	bpm	400~700	400~600	400~600	400~600	300~400	200~350
Tool diameter	mm	100	125	135	140	155	175
Applicable carrier weight	ton	10~15	13~18	16~21	19~26	28~40	42~55
Back-head Gas charging pressure	bar	15~17	15~17	15~17	15~17	15~17	15~17
Accumulator pressure	bar	n/a	n/a	n/a	60	60	60
Pressure adjust valve setting		Turns 1-2 screw out	Turns 2-2.5 screw out	Turns 2-2.5 screw out	Turns 2-2.5 screw out	Turns 2.5-3 screw out	Turns 2.5-3 screw out
Hose Diameter	inch	3/4"	3/4"	1"	1"	1 1/4"	1 1/4"
Acceptable back pressure	bar	15	15	12	10	10	10
Oil supply(IN) & Return(OUT)		Both female	Both female	Both female	Both female	Both female	Both female
Pressure relief(min)	bar	30 bar higher than measured maximum operating pressure					
Hydraulic oil temperature	°C	-20~ +85	-20~ +85	-20~ +85	-20~ +85	-20~ +85	-20~ +85
Hydraulic oil Viscosity	cSt	1000~10	1000~10	1000~10	1000~10	1000~10	1000~10

Note:

- 1) Including standard tool, standard mounting adapter and spacers, but excluding hydraulic hoses and fittings.
- 2) Measured from the tool tip of the standard tool to the top of the breaker including standard mounting adapter.

6. Mounting

6.1. Attaching the adapter to the hydraulic hammer

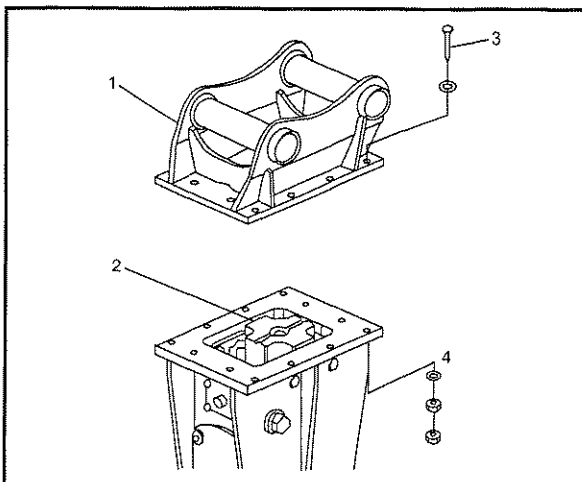


DANGER!
 When mounting the hydraulic hammer to the carrier, never put a finger into any hole, Align only by sight.
 When moving the carrier arm and the bucket link to align with the bracket pin hole, do not touch any part of the carrier or hydraulic hammer.

Put the hydraulic hammer on squared beams or a pallet within reach of the excavator boom with the service window of the hammer box facing upwards.

1. Fix the adapter (1) to the hammer box with two screws.
 For silenced hammer, insert the upper damper (2) in the hammer box before fixing the adapter.
2. The fit all screws (3) and tighten to the specified torque.
 The sizes of screws for different hammer types are as follows;

SJ-50, 70	14mm	SJ-760, 800	27mm
SJ-100, 210	16mm	SJ-1200	30mm
SJ-300, 400, 500, 600	20mm	SJ-1500	36mm
SJ-700	24mm		



1. Adapter
2. Upper damper
3. Screw and washer
4. Nut and washer

6.2. Mounting the hydraulic hammer on the carrier



DANGER!

When aligning linkages, never insert fingers into pinholes as unexpected movement may cause severe injury.

While aligning the armhole or moving the bucket, make sure there are no persons in the vicinity of the arm or bucket.



IMPORTANT!

After mounting the hammer, extend and retract the carrier's cylinder to its full extent in each direction to ensure that carrier's cylinder can move without any difficulty or damage.

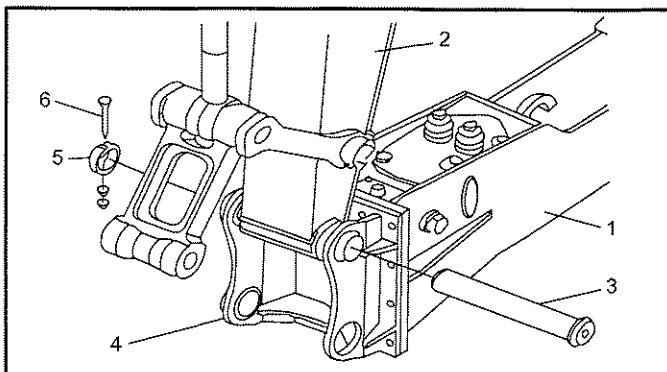
If problems are encountered, consult your local **SJ** dealer.

Mounting adapter is required when mounting the hydraulic hammer on the excavator, and it varies according to the excavator model. It must be ordered separately, when you order the hydraulic hammer, and you will need to provide the following information when ordering:

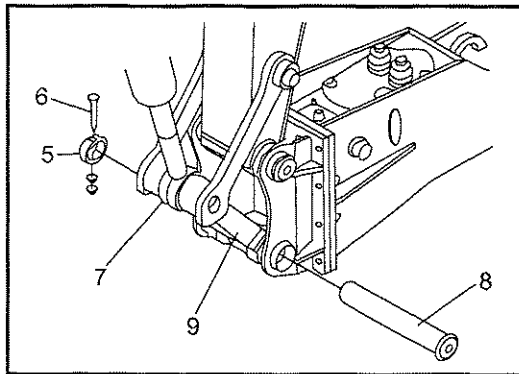
- Excavator maker
- Excavator model and year built
- Arm (stick) type

During hammer mounting, the carrier should only be operated from the operator's cab.

1. Following the direction of an assistant, carefully lower the excavator arm (2) into the adapter (4), until the bore arm is flushed with those on the adapter.
2. Insert the arm pin (3)
3. Fit the stop ring (5) to arm pin (3) and lock by using the bolt and nut (6).
4. Lift up the hydraulic hammer (1)
5. Extend the bucket cylinder (7) until the bore in the link (9) is flush with those in the adapter (4).
6. Insert the bucket pin (8)
7. Fit the stop ring (5) to the bucket pin (8) and lock by using the bolt and nut (6).



1. Hydraulic hammer
2. Excavator arm
3. Arm pin
4. Adapter
5. Stop ring
6. Bolt and nuts

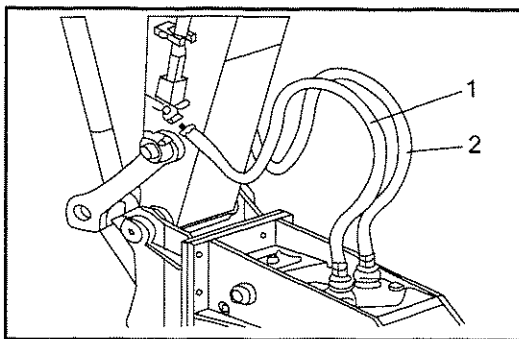


- 5. Stop ring
- 6. Bolt and nuts
- 7. Bucket cylinder
- 8. Bucket pin
- 9. Link

6.3. Mounting the hydraulic hammer on the carrier in hydraulic aspects

The excavator must have a hydraulic system suitable for hammer operations.

1. Remove the end caps from the stop valves and remove the hose plugs, and put them in the tool box for safekeeping.
2. Connect the hoses (I, O) to the stop valves on both sides of the arm.
3. Turn the stop valves to the "ON" position.




- 1. High pressure hose (I)
- 2. Low pressure hose (O)

IMPORTANT!



- Check the nominal bore of the hydraulic line on the carrier's existing hydraulic systems as both supply and return lines for the hydraulic oil must have a sufficiently large inside diameter, to ensure safe operation of the hammer. If the existing hydraulic system does not meet these requirements, it is vital for reasons of safety that you contact your local **SJ** dealer.
- Check the pressure-relief valve on the hydraulic system, this pressure-relief valve setting should be at least 30~40 bar higher than the measure maximum operating pressure of the hydraulic hammer.
- For sufficient cooling, return oil must run through oil cooler to oil tank and back pressure of return line must run through oil cooler to oil tank and back pressure of return line must be less than pressure specified.
- The pressure-relief valve on overflow line must run directly from the pressure-relief valve to the return line to ensure the reliable functioning of the valve.


6.4. Dismounting the hydraulic hammer from the carrier

	<p>WARNING! Wear safety shoes to protect feet. Personal injury can result from dropping pins during dismounting.</p>
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Put the hydraulic hammer on a clean, flat, level surface, and engage the parking brake on the carrier machine.


1. Turn the stop valves to the "OFF" position.
2. Disconnect the hydraulic hoses (I, O) from the stop valves.
3. Ensure no leakage occurs from hoses and stop valves.
4. To prevent contaminating, apply the end caps to the stop valves and hose plugs to the hoses.
5. Remove the stop rings from the arm and link pins.
6. Lift the arm away from the hydraulic hammer, so that the hydraulic hammer can be carried away, or another attachment mounted on the carrier

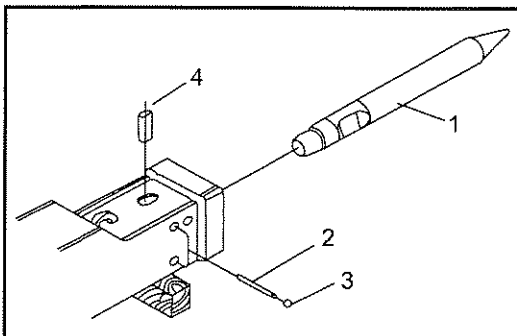
7. Fitting/removing the chisel

	<p>WARNING! For safety reasons, the carrier must be switched off before performing the following work(7.1, 7.2). Do not stand in front of chisel, as injury can result from the chisel jumping out due to back head gas pressure.</p>
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In general the chisel is not fitted when the hammer is delivered.
Before fitting the chisel, move the hydraulic hammer into a horizontal position using the excavator and place it on a suitable support (e. g. squared beams).

7.1. Fitting the chisel

	<p>WARNING! Never use your fingers to check whether the recesses on the chisel shaft are aligned to the slots for the chisel pins.</p>
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1. Chisel
2. Stop pin
3. Rubber plug
4. Chisel pin

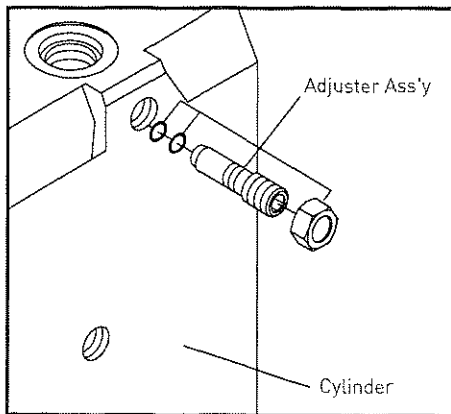
1. Remove the stop pin (2) cross chisel pin (4) by using the special tool provided.
2. Remove the chisel pin(4).
3. Insert the chisel (1) to the chisel bore of the front head.
4. Then assemble the chisel pin (4), stop pin(2), and rubber plug(7).

7.2. Removing the chisel

Removal of the chisel for whatever reason is effected in the reverse order to that of fitting.

Note: The tip of the chisel may remain hot for some time after use.

8. Adjusting the pressure adjust valve



1. Cap nut
2. Washer
3. O-ring
4. Pressure-adjusting valve

The graphic shows only a general view of the pressure-adjusting valve.

The position of the Pressure-adjusting valve may vary on different hammer models.

The **SJ 600** and heavier hydraulic hammer models have a pressure-adjusting valve in the cylinder body, to allow adjustment of the operating pressure which have an effect on the blow power.

The pressure-adjusting valve controls the hammer's drain pressure during the piston raising operation. By controlling the working pressure, the blow power can be increased or decreased.

To increase the blow power, turn the pressure-adjusting valve clockwise.

To decrease the blow power, turn the pressure-adjusting valve anticlockwise.

The pressure adjusting-valve is set in the factory before delivery, if you need to reset it, follow the instructions below:

1. Loosen the fixing nut (1) to enable the adjust valve to be turned.
2. Turn the pressure adjust valve (4) clockwise or anticlockwise as required.
3. Tighten the fixing nut (1) to the prescribed torque (14 ~ 18 kgf.m)
4. The standard factory settings are:

SJ 600	1.0 ~ 2.0	Turns from fully in.
SJ 700, 760, 800	2.0 ~ 2.5	Turns from fully in.
SJ 1200, 1500	2.5 ~ 3.0	Turns from fully in.

9. Operating the hydraulic hammer

Check the following items (9.1~9.5), before operating the hydraulic hammer, this way the hydraulic hammer will deep its optimum performance.

9.1. Hydraulic oil

All hydraulic oil brands prescribed by the carrier manufacturer are suitable for the **SJ** hydraulic hammer.

The oil should however correspond to viscosity class HLP 32 or higher.

In summer and in hotter climates, oils of viscosity class HLP 68 or higher should be used.

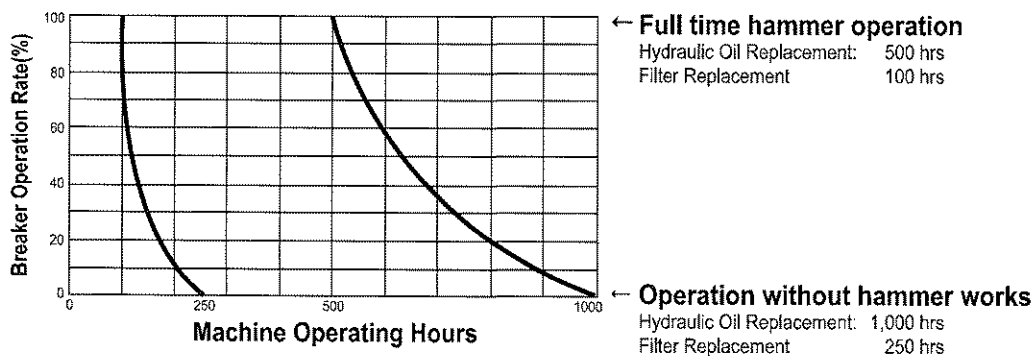
Optimum viscosity range	20 ~ 60 cSt
Max. initial viscosity	1,000 cSt
Min. viscosity	12 cSt for SJ 50 ~ 210 10 cSt for SJ 300 ~ 1500
Max. oil temperature	80°C for SJ 50 ~ 210 85°C for SJ 300 ~ 1500

Check the oil filter in the return line to hydraulic system, the grade of this filter should not exceed 50 micrometers and a magnetic separator should be fitted.

The temperature of the hydraulic oil must never exceed 85°C (80°C for SJ 50~210). If higher temperatures are measured in the tank, the hydraulic system and/or the pressure-relief valve have to be checked.

Hydraulic oil and filter change intervals

Contamination of hydraulic oil may result in parts damage, not only to the hammer, but also to the carriers main hydraulic components, We recommend hydraulic oil and oil filter replacement, as shown in the following table, and this is based on 100% hammer operation.



9.2. Working in high and low outside temperatures



IMPORTANT!

Feeding hot hydraulic oil to extremely cold hydraulic hammer will cause internal stresses in the unit resulting in its failure.

If the hammer is used without pre-heating the oil :

- The hammer seals may fracture.
- The diaphragm in the accumulator may tear.

High : The temperature of the hydraulic oil must be ensure it does not exceed the specified temperature limits.

Low : At temperatures below 0°C, the carrier must be warmed up prior to use, in the way described by the excavator manufacturer.

Ensure that the hydraulic oil in the carrier is at least at 0°C, before starting up the hydraulic hammer.

Note : The hydraulic hammer and excavator will not operate to full capacity until the oil temperature has reached at least 60°C.

9.3. Grease



IMPORTANT!

If grease is not supplied sufficiently, then high heat is generated due to friction at the moving Parts of the hammer. The heat can cause premature wear and cracking of related parts.

Always observe the relevant safety regulations when handling oils and greases.

To properly lubricate the hammer, it must be in a vertical position with enough down pressure applied to force the chisel into the hammer, This will prevent excessive grease getting into the impact chamber which could cause the breaker to lose power, due to cushioning, or to stop operating all together, due to a hydraulic lock in the impact chamber.

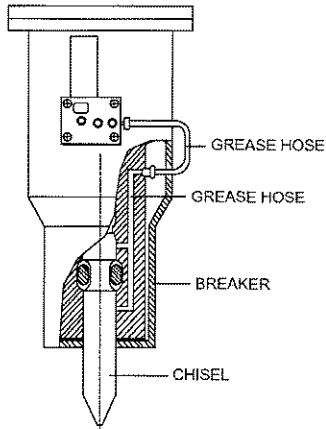
Inject grease between the body and the moving part of the chisel, through the grease nipple provided.

Every two hours of continuous operation lubricate the chisel with Moly-based grease. Failure to lubricate the breaker regularly will reduce the life of the chisel, and the chisel bush and front bush.

To guarantee longer life of chisel and bushes, hydraulic hammer should take high performance grease and genuine part which is supplied by SJ. The standard paste to grease is depicted below.

- Net weight : 500g
- Service temperature : -20 ~ +1100°C

9.3.2. Auto grease

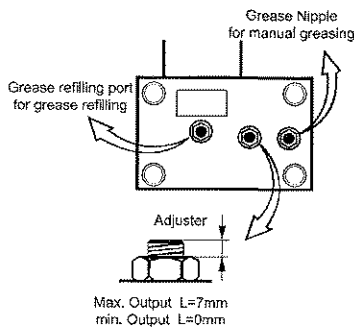


Installation

Auto grease must be installed parallel with a chisel of the breaker

The grease pump body should be tightened strictly on the breaker body. Loosened bolts may cause serious damage or malfunction.

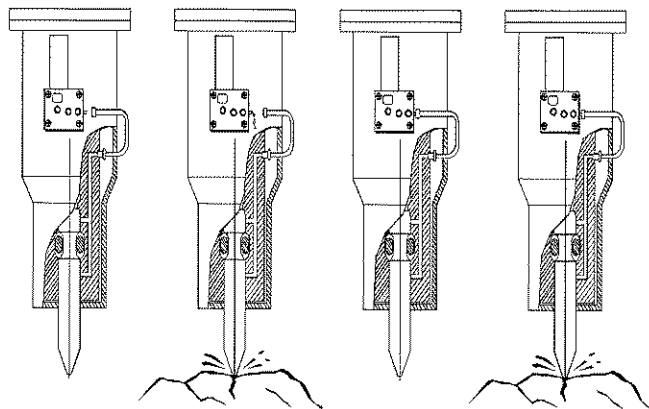
Adjust and manual greasing, refill grease



Output grease quantity can be adjusted by "Adjuster"

Running time For 1 Cartridge (Normal condition)	30ton ~ 70ton class	1~2.5 Day
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Operation



1. Run the breaker without connecting the hose
2. Check whether the grease flow for 3 minutes
3. Connect the hose

9.4. Gas

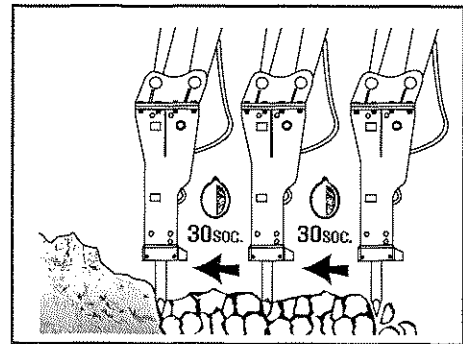


Normal nitrogen, 99.8% pure. Use only nitrogen to fill the accumulator/back head and ensure that no other gas, e.g. air or oxygen is used.

9.5. Safe operating rules

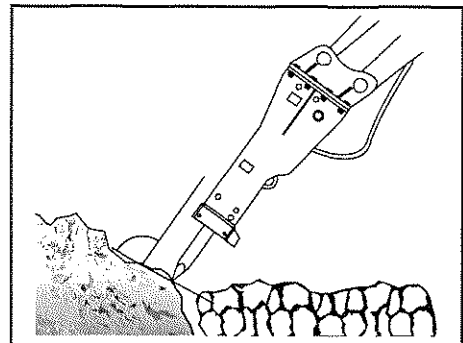
■ Advance :

Move the impact point on the object to be broken, if the object does not break within 30 seconds. Large distance steps will not improve working results.



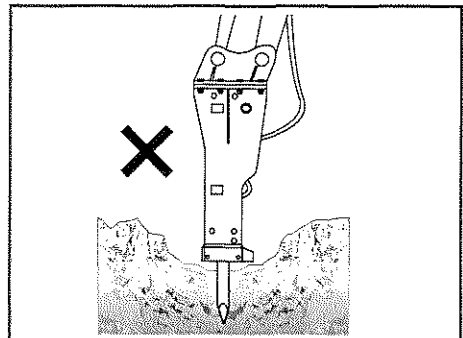
■ Angle of attack :

The chisel should always be positioned at right angles to the working surface. If this is not the case, the hydraulic hammer will wear more quickly, and in the long term will suffer damage.



■ Never drive the chisel into the ground :

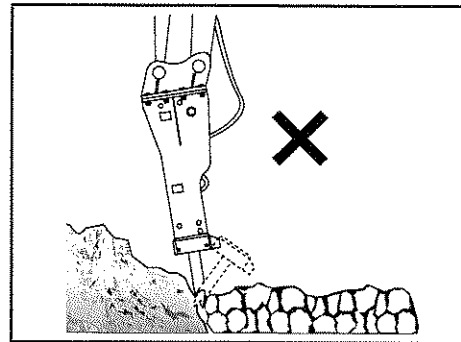
If the hammer is not rocked to allow dust to escape, the chisel will be driven into the material without breaking it sufficiently. The tip of the chisel may start to glow red-hot and lose its hardness. Operating in this way is not permitted.



■ **Never use as a lever :**

Do not use the chisel as a lever, as this will cause the chisel to break.

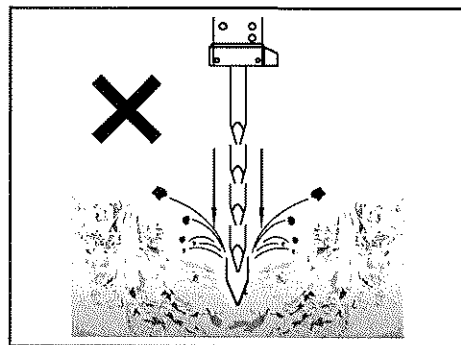
Operating in this way is not permitted.



■ **Never use as a sledgehammer :**

Before starting up, rest the chisel point on the ground.

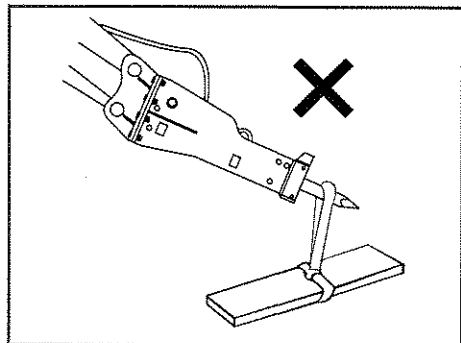
Never attempt to use the hammer and the excavator boom as a sledgehammer to break material, as the result of such action will cause damage to the front-end equipment or swing mechanism of the carrier.



■ **Never use for transport purposes :**

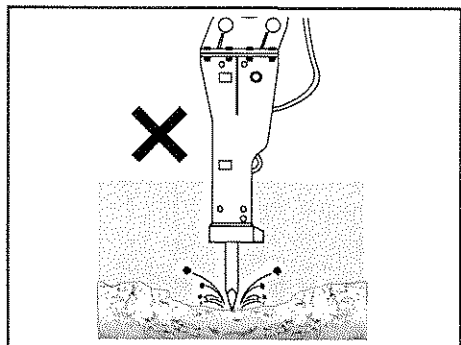
The hydraulic hammer is not designed to lift or transport loads.

Never use the chisel as a lifting point.

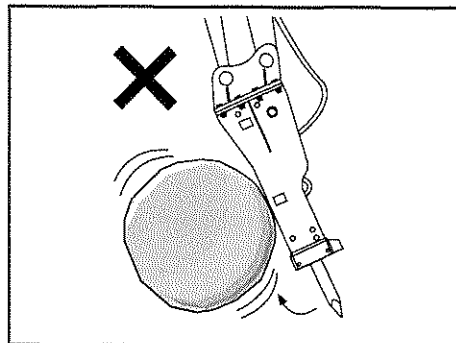


■ **Never use the hydraulic hammer under water :**

The hydraulic hammer must never be used under water without prior conversion. If you use under water, corrosion or lack of lubrication could result in further damage to components, including the front bush and the carrier's hydraulic system.

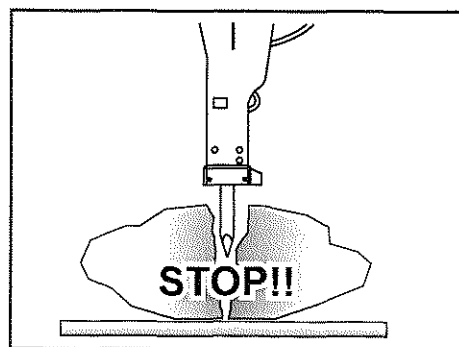


- **Never use the chisel or hydraulic hammer to move rocks or other objects.**



- **Stop operation :**

Stop operation as soon as the object is broken. If operation is continued, idle blows, could result in excessive wear to major components.



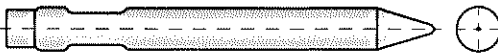



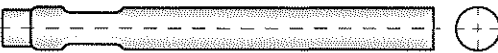
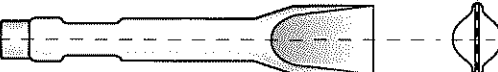
10. Selecting the right chisel

The standard chisels available for the hydraulic hammer are depicted below.

Note:

- Only genuine **SJ** chisels should be used, if other makes of chisels are used the warranty may become void.
- Chisels are subject to wear and tear in the course of normal operations.
(Replacement of these parts due to wear is not covered by **SJ** warranty.)

■ Standard chisels for hydraulic hammers

Type of chisel		
Moil Point(Conical)		Breaking concrete, bed rock and pavement
Moil Point(Pyramid)		Breaking concrete, bed rock and pavement
Flat Wedge(Horizontal)		Mining, Foundation, Trenching, demolition, finishing slopes
Flat Wedge(Vertical)		Mining, Breaking over-sized demolition
Flat End(Blunt)		Mining, Breaking over-sized demolition
Wide Flat Wedge (for Asphalt cutting)		Asphalt pavement breaking

11. Maintenance

11.1. Checking and replacing the wear parts

The chisel and related parts are worn away by the action of the piston on the chisel when breaking an object, and the heat generated by friction of the chisel on the related parts. Of these parts are used beyond their wear limits, the piston and chisel may be damaged critically.

Replacement of the parts below due to wear is not covered by the warranty.

11.1.1. Chisel, Chisel bushing and Front bushing

Check the chisel and chisel bush/front bush for wear every 50 hours of hydraulic hammer use or monthly. If the hydraulic hammer has too much clearance between the chisel and both bushes, this can lead to damage, or breakage of the chisel through irregular piston contact.

■ *Chisel*

Original diameter(D_1) for the chisel is indicated below.

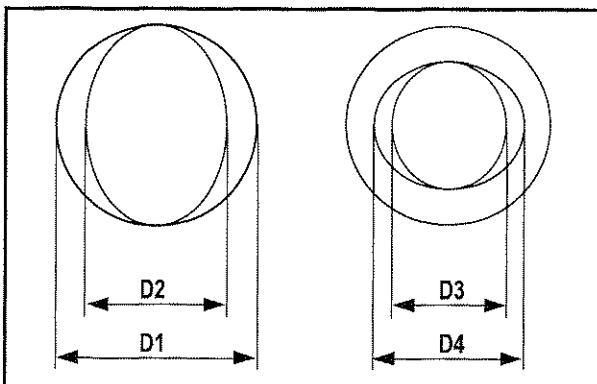
Replace the chisel if the diameter(D_2) is exceeded lower limit specified in the table.

■ *Chisel bushing and front bushing*

The diameters of the chisel bushing and the front bushing for a model, if they are new, are the same.

The specified diameter(D_3) for chisel bushing and front bushing is indicated below.

Replace the both bushings, if the diameter(D_4) is exceeded upper limit specified in the table.



D_1 : Original diameter of chisel

D_2 : Minimum diameter of chisel worn out

D_3 : Original diameter of bush

D_4 : Maximum diameter of bushing worn out

■ Specified diameter of chisel, chisel bushing and front bushing

Hammer modela	Nominal diameter of Chisel and bushing (D ¹ , D ³)	Lower limit of Chisel (D ²)	Upper limit of Chisel Bushing & Front Bushing (D ⁴ .)
SJ - 50	36	34	39
SJ - 70	45	43	48
SJ - 100	53	50	56
SJ - 210	60	57	63
SJ - 300	68	65	71
SJ - 400	75	72	78
SJ - 500	90	88	93
SJ - 600	100	97	104
SJ - 700	125	122	128
SJ - 760	135	132	138
SJ - 800	140	137	143
SJ - 1200	155	152	158
SJ - 1500	175	172	178

11.1.2. Chisel pin

Check the chisel pin for wear, every 50 hours of hydraulic hammer use or monthly as each time the chisel is changed.

Any burr and swelling on the chisel pin must be smoothed off carefully.

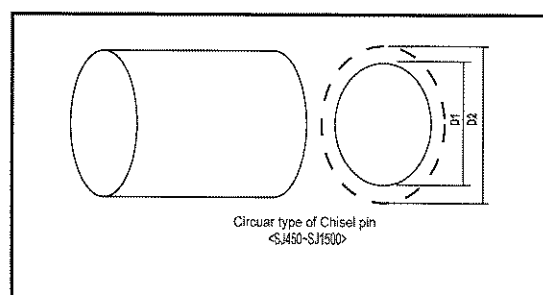
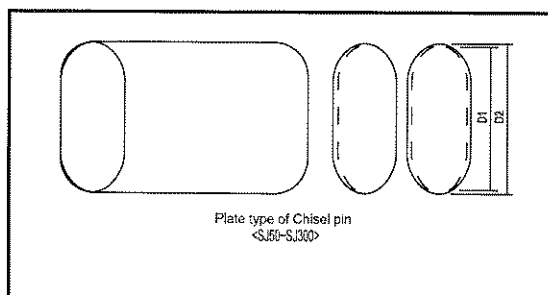
- The chisel of the SJ50 ~ SJ400 is assembled by only circular type chisel pin. The specified diameters(D₂) of the chisel pins are indicated below.

Replace the chisel pin, if the diameter(D₁) is 2mm, less than the original diameter(D₂).

- The chisel of the SJ500 ~ SJ1500 is composed of two plate type chisel pins. The specified width(D₄) for the chisel pin is indicated below.

If wear on one-side “A” exceeds 1.5mm, the chisel pin must be turned to use the other side “B”.

Replace the chisel pin, if the width(D₃= “A” + “B”) is 3mm, less than specified width(D₄)



Unit : mm

Hammer Model	Original Dimensions (D1)	Lower Limits (D2)	Pin shape
SJ - 50, 70	25	23	Circular
SJ - 100	30	28	
SJ - 210	30	28	
SJ - 300	38	36	
SJ - 400	38	36	
SJ - 450	40	38	plate
SJ - 600	60	58	
SJ - 700	75	73	
SJ - 760	81	79	
SJ - 800	89	86	
SJ - 1200	100	98	
SJ - 1500	100	98	

11.1.3. Bracket and adapter

Check the welded bracket and the adapter installed at the top, whenever the chisel is replaced or at least 4 times a year, to see if there is any crack. Of any crack is present, the breaker must not be used until it is repaired.

If the bottom of the bracket is worn away, replace the bottom plate as needed. If it is necessary to repair by welding, contact your local **SJ** dealer for advice.

11.2. Screw tightening

On percussive tools such as hydraulic hammer, the screw couplings are subjected to particularly high loads.

During the first 50 operating hours the screw couplings on the hammer must be checked daily and there after once a week. Tighten any loose connections taking care not to exceeding the prescribed tightening torque.

- The following bolts/couplings must be checked regularly.

Application	Hex. size(mm)	Torque(kgf.m)	Hammer
Through bolt (= Tie bot)	30	4045	SJ 50, 70
	32	4550	SJ 100, 210
	41	8085	SJ 300
	36	8085	SJ 400
	50	120130	SJ 500
	55	150160	SJ 600
	65	170200	SJ 700
	70	270280	SJ 760
	75	300350	SJ 800, 1200
	85	350380	SJ 1500
Side bolt	30	3035	SJ 50, 70, 100
	36	4045	SJ 210
	41	6065	SJ 300
	46	7075	SJ 400, 450
	55	140150	SJ 600
	65	160180	SJ 700
	75	220240	SJ 760, 800
	85	270300	SJ 1200
	85	300320	SJ 1500
Adapter	27	4550	SJ 300
	30	5560	SJ 400, 500, 600
	36	7075	SJ 700
	41	80100	SJ 760, 800
	46	100120	SJ 1200, 1500

- The following bolts/coupling torque figures ate general figures.

Application	Hex. size(mm)	Torque(kgf.m)	Hammer
Grease nipple	14	5 ~ 6	All models
Air plug	27	20 ~ 25	
Back head gas valve	27	20 ~ 25	
Plug for back head gas valve	19	3 ~ 4	
Connecting adapter of hose	22	15 ~ 20	SJ 50, 70
	27	20 ~ 25	SJ 100, 210, 300, 400
	36	30 ~ 35	SJ 500, 600
	41	50 ~ 55	SJ 700, 760, 800
	50	55 ~ 60	SJ 1200, 1500

11.3. Checking gas pressure in the accumulator/back head and charging

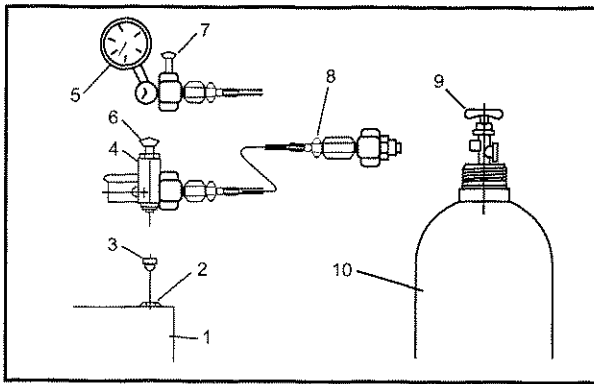
Gas charging kits should be on hand at all times, to allow the following checking and maintenance work to be performed.

- **Checking** : If the performance of the hydraulic hammer starts to drop, the gas pressure in the back head and accumulator should be checked.

The back head and accumulator do not need to be refilled until the gas pressure has dropped below the specified level.

- **Note** : Always lay the hydraulic hammer flat, before checking the pressure. The pressures should be checked with the hammer at an operating temperature of 60°C to 70°C

■ Gas charging kit



1. Back head
2. Charging valve
3. Plug to gas valve
4. Gas adapter
5. Gauge
6. Gas charging button
7. Exhaust valve
8. Coupling
9. Gas valve
10. Nitrogen bottle

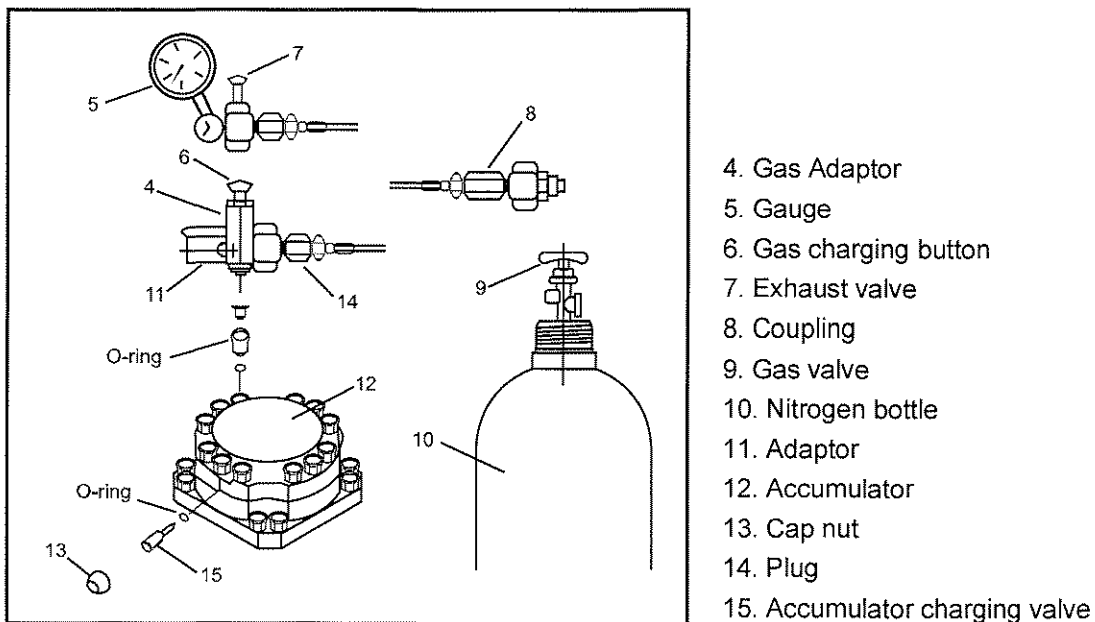
11.3.1. How to charge N₂ gas into back-head

1. Be sure the exhaust valve (7) and gas valve (9) are closed, and then connect coupling (8) to the nitrogen bottle (10).
2. Connect gas adapter (4) to the back head charging valve (2).
3. Push the gas charging button (6) and open the gas valve (9) to charge.
4. Adjust gas valve (9) until the gauge (5) pointer indicates the specified gas pressure.
5. If the back head is charged over the specified gas pressure, open the exhaust valve (7) slowly to reduce the gas pressure.
6. Close the gas valve (9) and cure fully vent the gas adapter (8) by opening the exhaust valve (7) before removing it.

■ Back head gas charging pressure

Hammer model		SJ 50 ~ SJ 210	SJ 300 ~ SJ 1500
Back-head gas	bar	8~10	15 ~ 17
charging pressure	(psi)	(120~150)	(220 ~ 250)

11.3.1. How to charge N₂ gas into back-head



1. Be sure the exhaust valve (7) and gas valve (9) are closed, then connect coupling (8) to the nitrogen bottle (10).
2. Remove the plug (14) from the accumulator.
3. Connect the adaptor (11) and gas adaptor (4) to the gas charging port.
4. Open the accumulator charging valve (15) by turning it counter-clockwise of 1/2 a turn.
5. Open the gas valve (9) to charge the accumulator, until the gauge pointer on the gauge indicates the specified gas pressure. If the accumulator is charged over the specified gas pressure, open the exhaust valve (7) slowly to reduce the gas pressure.
6. After the gas charging is completed, close the accumulator charging valve (15).
7. Close the gas valve (9) and carefully vent the gas adaptor (4) by opening the exhaust valve (7).
8. Remove the adaptor (11) from the accumulator (12) and close accumulator charging port with the plug (14) and O-ring.

■ Accumulator gas charging pressure

Hammer model		SJ 800 ~ SJ 1500
Accumulator gas	bar	58~62
Charging pressure	(psi)	(840~900)

11.4. Checking and replacing the trough bolts (Tie-bolts)

The through bolts are those connecting the body sections of the hydraulic hammer together.

- Types SJ 50 to SJ 300 are directly assembled with the bolts threading directly in to the front head.
- Types from SJ 400 to SJ 800 use front head nuts.

The through bolt can be checked visually, once the sealing plugs of the inspection holes in the top of the bracket have been removed.

If the through bolts get loosen or damaged during work, repairs must be made in the following manner:

1. Remove the nitrogen gas from the back head completely.
2. Remove all the through bolts, and inspect for the presence of any cracks in the bolts.
3. Always apply Molybdenum disulphide (MoS₂) grease, to the thread of the through bolts.
4. Tighten the bolts 2 ~ 3 times in a diagonal direction.
5. Tighten all the bolts equally to the specified torque.

11.5. Checking the bottom of the piston



CAUTION!

Be sure to turn off the power switch of the carrier when checking the bottom of the piston. Be careful not to have a finger inserted into a space when checking the bottom of the piston with the hand.

Check the bottom of the piston, the part that touches the chisel head directly, every week or at least every 50 hours or whenever the chisel is changed. Check the contacting surfaces for wear, sinking, or cracking.

Permissible dent depth

- SJ 50 ~ SJ 600 : less than 1mm
- SJ 700 ~ SJ 1500 : less than 2mm

If the hammer is constantly used once the bottom of the piston is depressed or cut off or cracked, the hammer can be seriously damaged.

Use only genuine replacement parts, or it may invalidate the warranty.

12. Troubleshooting



Trouble	Probable cause	Remedy
The hammer does not start	Pressure and return lines inverted	Connect hammer hoses correctly
	Stop valve in pressure and/or return lines closed	Open stop valve
	Gas pressure in back head too high	Check gas pressure in back head, reset to correct valve
	Hydraulic oil level in tank too low	Check and refill hydraulic oil tank
	Relief valve opens at too-low pressure	Re-adjustment relief pressure
	Failure in valve and piston	Contact your SJ dealer
	Leakage from pressure to return in excavator hydraulic circuit	Check the installation, pump and other hydraulic components
	Operating pressure too low	Check carrier engine speed and/or operating pressure
Impact rate of hydraulic hammer is too low	Insufficient hydraulic oil delivery from carrier	Contact your SJ dealer
	Flow resistance too high on oil filter or oil cooler	Check oil filter/cooler, clean or replace
	Hydraulic oil overheated	Check and replace filter, cooler
	Gas pressure in back head too low	Check and refill back head gas pressure
	Chisel out of range for piston	Push down chisel by carrier
	Inside diameter of return too small	Change return line pipe work inside diameter. (Refer to section 5.)
	Return pressure too high	Check and lower return pressure
	Relief valve opens at too low pressure	Re-adjust the relief pressure
	Hydraulic oil level in tank too low	Check and refill hydraulic oil tank
	Poor pump performance	Contact authorized service man
	Diaphragm in accumulator defective	Replace diaphragm
	Loose pressure adjustment valve	Re-adjust pressure adjusting valve (Refer to section 8)
	Delivery flow rate of hydraulic system is inadequate	Check pump characteristics with measuring device and compare with original specifications.
The impact rate is irregular	Gas pressure of accumulator is too low	Check and refill with nitrogen gas
	Failure in hammer valve or distributor operation	Contact your SJ dealer
Oil leaks between back head and cylinder	Seal's defective	Check and replace the related seals
Oil leaks at accumulator	O-ring and or back-up ring defective	Check and replace o-ring and back-up ring
Oil leaks from chisel	Cylinder seals defective	Disassemble hydraulic hammer and replace the seals
Hydraulic oil temperature too high	Hydraulic oil level in tank too low	Refill hydraulic oil tank
	Carrier pump delivery too high	Correct carrier engine speed.
	High outside temperature and no cooler fitted	Reset pump & fit oil cooler
	Pressure-relief valve defective	Fit new pressure-relief valve
Back head gas leaks	Loose through bolts	Tighten through bolt (Refer to section 12.5)
	Defect in back head gas valve	Replace back head gas valve
	Defective O-ring on back head	Replace O-ring
	Defective cylinder bushing seals	Check and replace the cylinder bushing seals



13. Dismounting the hydraulic hammer from the carrier for short or long periods of non-use



13.1. Dismounting from the carrier

Unless otherwise stipulated, the hydraulic hammer is dismounted in the reverse order to mounting

13.2. Short periods of non-use

Switch off the carrier pressure supply to the hydraulic hammer.
Lay the hydraulic hammer flat on the floor

13.3. Long periods of non-use

If the hammer is to remain out of use for more than 2 weeks, the following maintenance work must be performed:

- The chisel must be removed
- The back head gas must be discharged
- The percussion piston must be positioned at the upper end of its stroke position
- The hammer must be stored in a dry location
- The lower end of the piston, chisel and bushes must be well protected with grease or anti-oxid oil
- All the connections must be sealed with clean plugs to prevent oil leakage or dirt from getting in to the couplings
- The hammer must be stored in vertical position

13.4. Cleaning the hydraulic hammer

When the hydraulic hammer is working, dirt, mud, rock powder etc. can attach itself to the hammer. Always wash the outside of the hydraulic hammer with a pressure washer before sending it to the workshop otherwise dirt can cause difficulties in the disassembly and reassembly of the hammer.

14. Care and maintenance timetable

To keep the performance of the hydraulic hammer at its best, maintenance must be done regularly to the schedule below.

Since the hydraulic hammer is a precision hydraulic machine, never disassemble the power-cell and main moving parts. If it needs disassembly, contact your local **SJ** dealer. Of the customer disassembles the hammer, we don't take responsibility for it. Release the back-head and accumulator gas before carrying out maintenance or repair work to the hydraulic hammer.

Perform the maintenance work in the following sequence:

1. Put the hammer in a stable position on a level surface, for easy maintenance and repair.
2. Turn off the carrier.
3. Turn off the stop valves.
4. Disconnect the hoses if needed and seal them with plugs to prevent entry of impurities.

Periods	Inspection
Every 2 hours	<ul style="list-style-type: none"> ○ Grease the chisel and chisel bush. ○ Check hydraulic oil temperature, piping & connection and impact efficiency. ○ Tighten loose connections.
Every 10 hours or daily	<ul style="list-style-type: none"> ○ Remove the retaining pin and the chisel and check their condition. ○ Check that the chisel has been receiving sufficient grease. ○ Grease more frequently, if you are in need. ○ Check through bolts, Replace and/or re-tighten if necessary.
Every 50 hours or weekly (Main inspection)	<ul style="list-style-type: none"> ○ Check for wear of the chisel, front bush, chisel bush and piston lower part. (Refer to 11.2) ○ Check the hydraulic hoses, Replace it if necessary. ○ Check through bolts, Replace and/or re-tighten if necessary.
Every 100 hours or monthly	<ul style="list-style-type: none"> ○ It is recommended to have the main inspection done by your local SJ dealer. ○ Check all hydraulic hoses and pipe connections. ○ Check interference between hoses with carrier.
Every 600 hours or 6-monthly	<ul style="list-style-type: none"> ○ It is recommended that the annual maintenance be carried out by your local SJ dealer, or after 600 operating hours. ○ Check all hydraulic pipe and hose connections ○ Check conditions of oil filters, accumulator, diaphragm and through bolts. ○ Change all seals. ○ Check the condition of the power cell.

Hammer

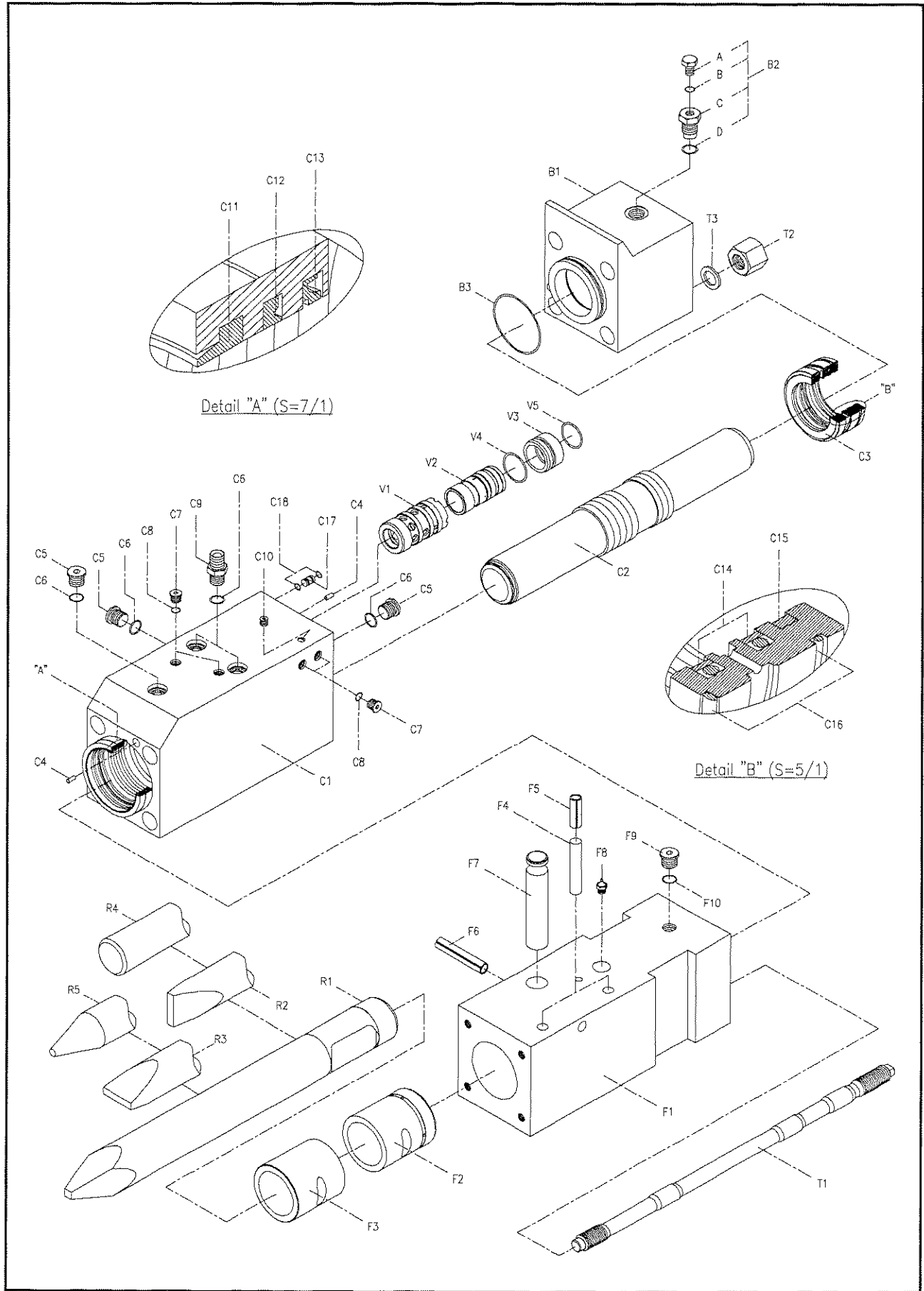
Hydraulic breaker

	Model	Ref.	Ref.	Page
1	SJ-300	S40	M500	2
2	SJ-400	S43		12
3	SJ-500	S45	M900	22
4	SJ-600	S50	M1200	30
5	SJ-700	S60	M1800	38
6	SJ-760	S70	M2000	46
7	SJ-800	S81	M2200	54
8	SJ-1200	S121	M3500	64
9	SJ-1500	S151	M5000	74



S&J EQUIPMENT INC.

SJ-300 BREAKER BODY

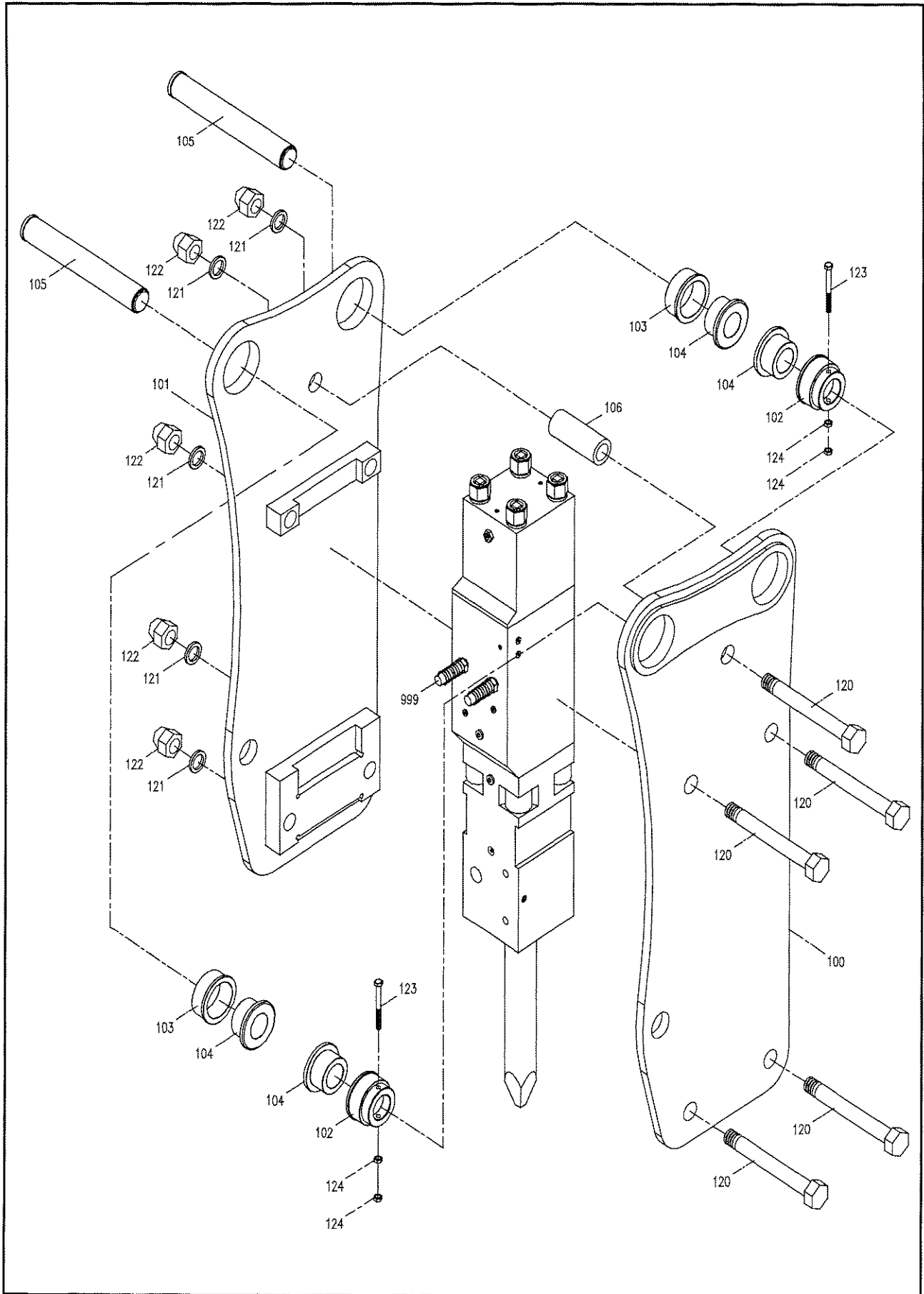


SJ-300, PARTS LIST - MAIN BODY ASSEMBLY

NO.	DESCRIPTION	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY ASS'Y	DB330Z01A	1	
	BACK HEAD ASS'Y	DB315Z01A	1	
	CYLINDER ASS'Y	DB315Z02A	1	
	FRONT HEAD ASS'Y	DB315Z03A	1	
	CONTROL VALVE ASS'Y	DB340Z01A1A	1	
	THROUGH BOLT ASS'Y	DB370Z10A	1	
	ACCUMULATOR ASS'Y	-	-	
	CHISEL	D90/03D-01	1	
	SEAL KIT	D30-0300Z	1	

NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
B1	BACK HEAD ASS'Y	BACK HEAD	DB315Z01	1	166 x 145 x 192
B2		GAS CHARGING VALVE ASS'Y	D40CV-01	1	PF 1/2"
B2_A		GAS CHARGING PLUG	D40CV-01-01	1	M10 x P1.0
B2_B		O-RING	D35P012	1	P12
B2_C		GAS CHARGING VALVE	D40CV-01	1	PF 1/2"
B2_D		O-RING	D35P018	1	P18
B3		O-RING	D35G095	1	G95
C1	CYLINDER ASS'Y	CYLINDER	DB315Z02	1	375 x 145 x 192
C2		PISTON	DB320Z01	1	D77 x L485
C3		CYLINDER BUSHING	DB325Z01	1	D100 x L48
C4		LOCK PIN	DF765Z23A1	2	D12.35 x L30
C5		PLUG	D771/20-1	3	PF 1/12"
C6		O-RING	D35P018	5	P18
C7		PLUG	D771/40-01	4	PF 1/4"
C8		O-RING	D35P011	4	P11
C9		NIPPLE	D851/205	2	PF 1/2" x 5
C10		TAPER PLUG	D75N1/8-01	1	PT 1/8"
C11		DUST SEAL	D30DSI070-01	1	DSI 70
C12		U-PACKING	D30ISI070-01	1	ISI 70
C13		BUFFER SEAL	D30HBY070-01	1	HBY 70
C14		STEP SEAL	D30STE068-01	2	STS 68
C15		GAS SEAL	D30GAS068-01	1	GAS 68
C16		O-RING	D35G095	2	G95
C17		PLUG	D77D10-01	1	D10 x L20
C18		O-RING	D35P007	2	P7
F1	FRONT HEAD ASS'Y	FRONT HEAD	DB315Z03	1	398 x 145 x 156
F2		CHISEL BUSHING	DB360Z01	1	D88 x L98
F3		FRONT BUSHING (TOP TYPE)	DB360Z02	1	D90 x L94
F4		BUSHING STOP PIN	DB365Z22	2	D16 x L95
F5		SPRING PIN	D99B16-02	2	D16 x L50
F6		SPRING PIN	D99B16-01	1	D16 x L100
F7		CHISEL PIN	DY365Y21	1	D38 x L155
F8		GREASE NIPPLE	D851/4G01	1	PT 1/4"
F9		PLUG	D771/20-03	1	PF 1/2"
F10		O-RING	D35P018	1	P18
V1	CONTROL VALVE ASS'Y	VALVE BUSH	DB340Z01A1	1	D47 x L72.5
V2		MAIN VALVE	DB340Z01A2	1	D36.2 x L69.5
V3		VALVE CAP	DB340Z01A3	1	D47 x L27.5
V4		O-RING	D35P041	1	P41
V5		O-RING	D35G030	1	G30
T1	THROUGH BOLT ASS'Y	THROUGH BOLT	DB370Z10	4	M27 x P2.0 x L580
T2		BACK HEAD NUT	DB370Z11	4	M27 x P2.0 x L38
T3		BACK HEAD WASHER	DB370Z12	4	D45 x L5
R1	CHISEL	MOIL TYPE	D90/03D-01	1	D68 x L700
R2		FLAT WEDGE - VERTICAL	D90/03D-02	1	
R3		FLAT WEDGE - HORIZONTAL	D90/03D-02	1	
R4		BLUNT TYPE	D90/03D-03	1	
R5		CONICAL TYPE	D90/03D-04	1	

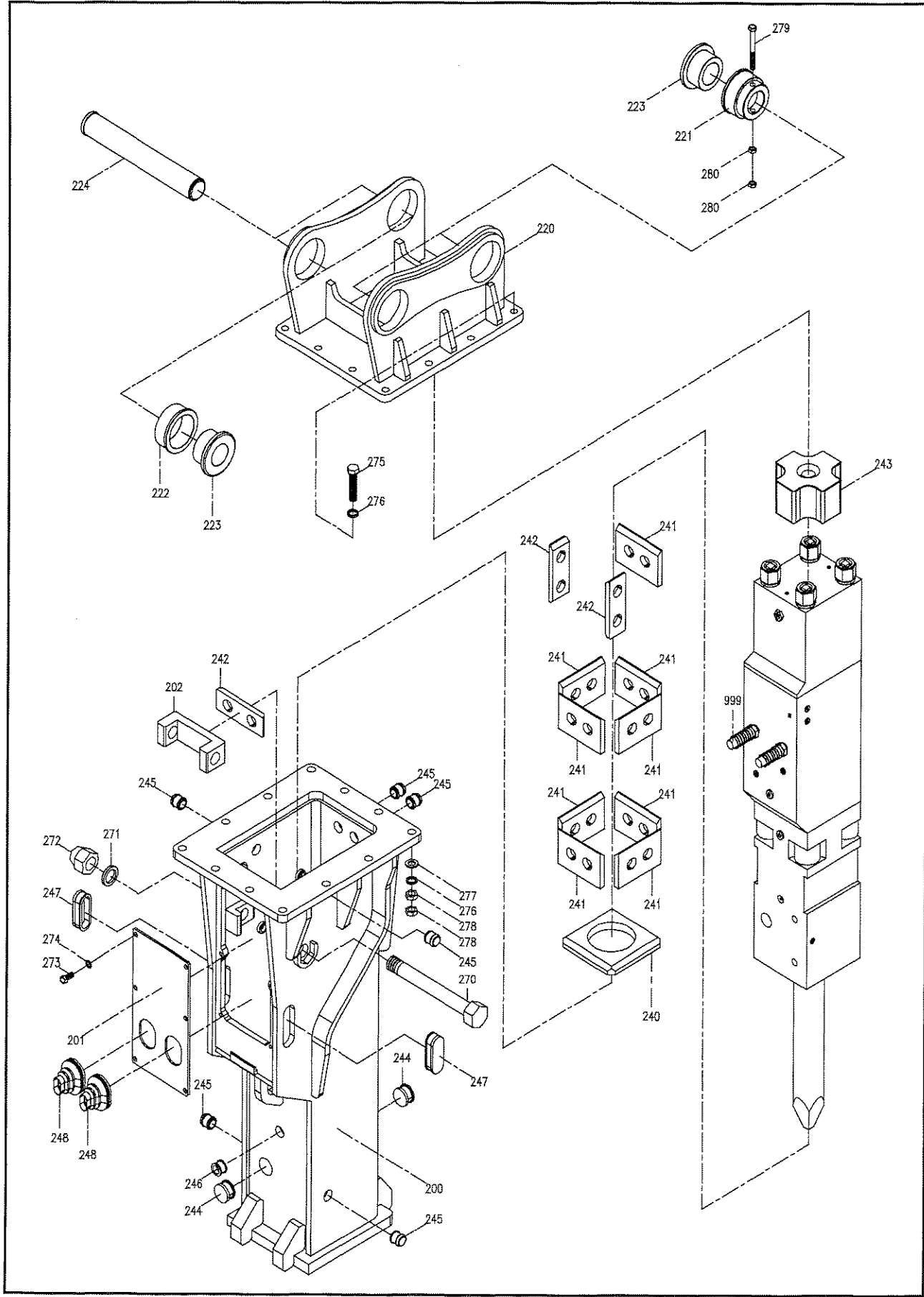
SJ-300 BREAKER TOP BRACKET



SJ-300, PARTS LIST - TOP BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD
	BRACKET ASSEMBLY		DYT310Z01A	1	
	SIDE BOLT ASSEMBLY		DB370Y01A	1	
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DB300Z01A	1	936 x 145 x 192
100	BRACKET ASSEMBLY	TOP BRACKET - RIGHT	DYT310Z01	1	940 x 411 x 90
101		TOP BRACKET - LEFT		1	940 x 411 x 65
102		WELDING BUSHING RIGHT	DB360Y12	2	D89 x L60
103		WELDING BUSHING LEFT	DB360Y11	2	D89 x L35
104		PIN BUSHING	DB371Z01	4	D89 x L40
105		BRACKET PIN	DY365K01	2	D45 x L280
106		SUPPORT PIPE	DB360Z32	1	D34 x L162
120		BOLT / NUT	SIDE BOLT	DB370Y01	5
121	SIDE BOLT WASHER		5		M27
122	SIDE BOLT CAP NUT		5		M27 x P2.0 x L46
123	WELDING BUSHING HEX. BOLT		D75M12-01	2	M12 x P1.75 x L100
124	WELDING BUSHING HEX. NUT			4	M12 x P1.75 x L10
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D801/2150S01	2	1/2" x 1500L x S/P

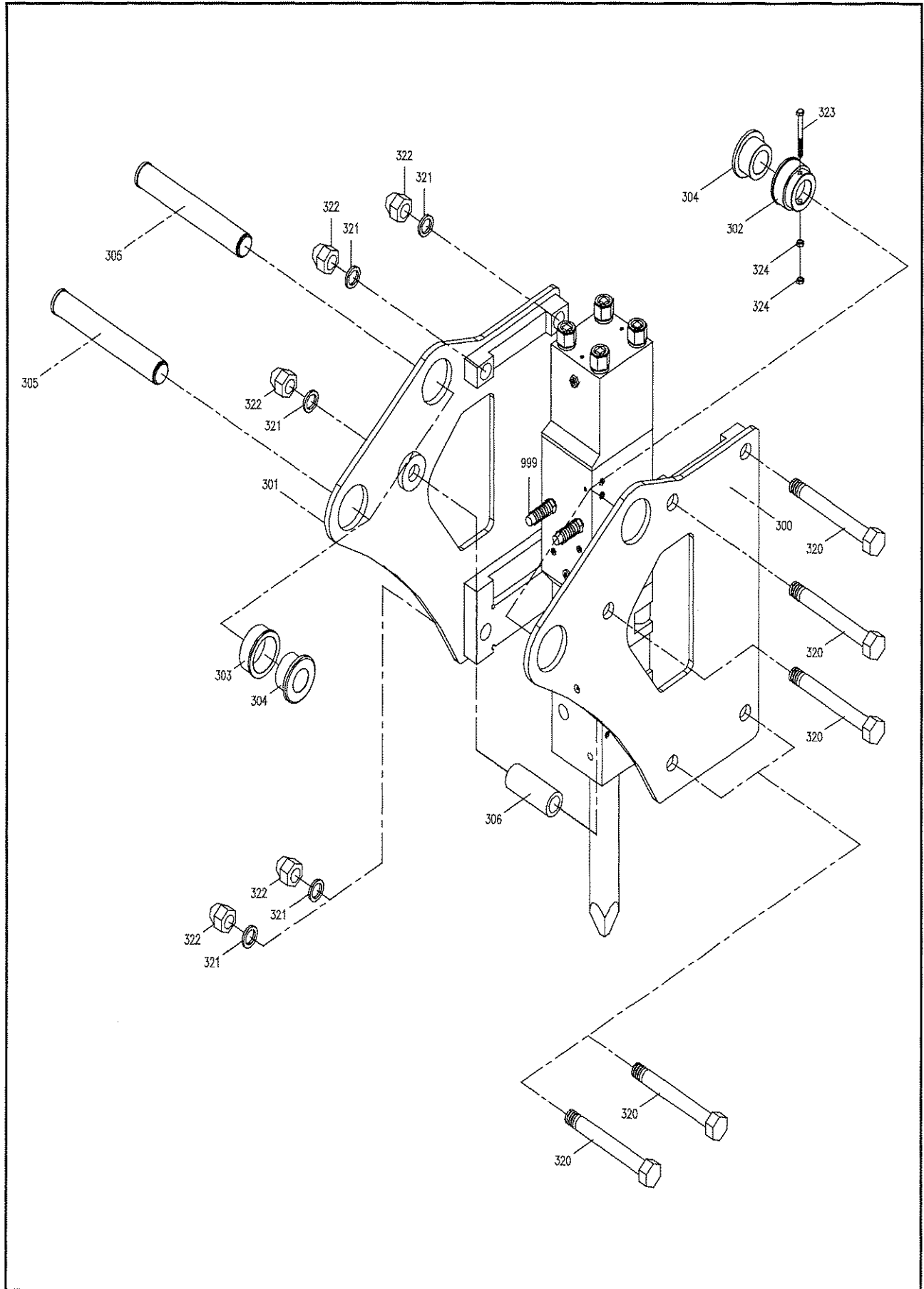
SJ-300 BREAKER SILENT BRACKET



SJ-300, PARTS LIST - SILENT BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD
	BRACKET ASSEMBLY		DBS310Z01A	1	
	ADAPTOR ASSEMBLY		DBS391Z11A	1	
	SIDE BOLT ASSEMBLY		DB370Y01A	1	
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DB300Z01A	1	936 x 145 x 192
200	BRACKET ASSEMBLY	SILENT BRACKET ASSEMBLY	DBS310Z01A	1	1027 x 390 x 420
201		UPPER COVER PLATE	DBS310Y11	1	374 x 160 x 7
202		GUIDE PLATE	DBSKT310Z17	1	151 x 67 x 79
220	ADAPTOR ASSEMBLY	ADAPTOR ASSEMBLY	DBS391Z11	1	430 x 390 x 294
221		ADAPTOR WELDING BUSHING RIGHT	DB360Y12	2	D89 x L60
222		ADAPTOR WELDING BUSHING LEFT	DB360Y11	2	D89 x L35
223		ADAPTOR PIN BUSHING	DB371Z01	4	D89 x L40
224		ADAPTOR PIN	DY365K01	2	D45 x L276
240	URETHANE & RUBBER	LOWER DAMPER	DBSKT311Z01	1	156 x 145 x 30
241		SIDE DAMPER "A"	DBSKT311Z03	9	130 x 100 x 15
242		SIDE DAMPER "B"	DBSKT311Z04	3	150 x 50 x 15
243		UPPER DAMPER	DBSKT311Z02	1	145 x 145 x 75
244		CHISEL PIN RUBBER PLUG	DYS311Z01A1	2	D50 x L12
245		RUBBER PLUG		6	D30 x L12
246		GREASING RUBBER PLUG		1	D30 x L9
247		HYD. HOSE CHECK PLUG		2	125 x 35 x 12
248	HYD HOSE BELLOWS	2		80 x 50 x 7	
270	BOLT / NUT	SIDE BOLT	DB370Y01	1	M27 x P2.0 x L250
271		SIDE BOLT WASHER		1	M27
272		SIDE BOLT CAP NUT		1	M27 x P2.0 x L46
273		LOWER COVER BOLT	D75M14-03	6	M14 x P2.0 x L30
274		LOWER COVER SPRING WASHER		6	M14
275		ADAPTOR JOINT BOLT	D75M20-01	12	M20 x P2.5 x L95
276		ADAPTOR JOINT SPRING WASHER		24	M20
277		ADAPTOR JOINT FLAT WASHER		12	M20
278		ADAPTOR JOINT HEX. NUT		24	M20 x P2.5 x L18
279		STOPPER HEX. BOLT	M75M12-05	2	M12 x P1.75 x L100
280	STOPPER HEX. NUT	4		M12 x P1.75 x L10	
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D801/2150S01	2	1/2" x 1500L x S/P

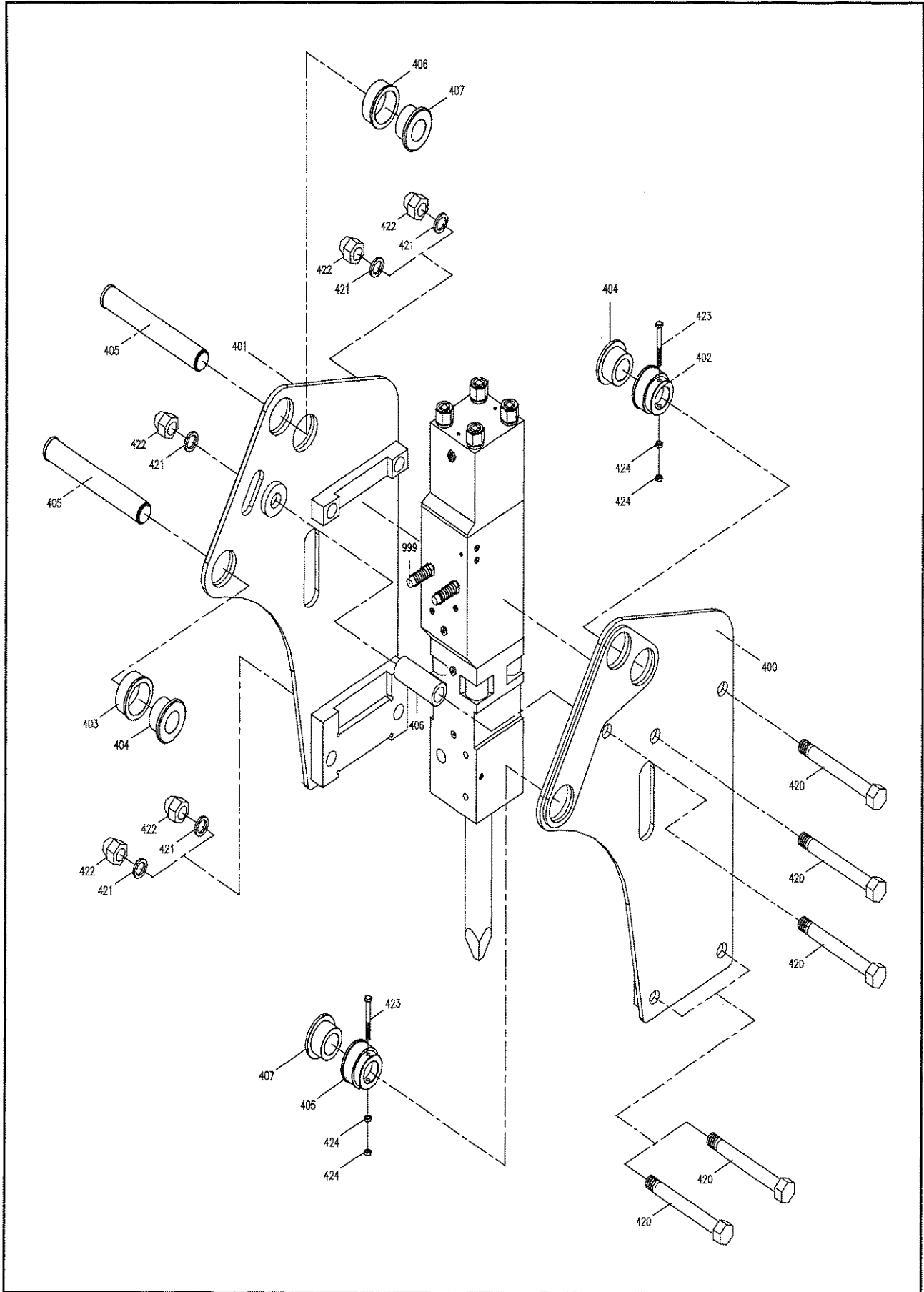
SJ-300 BREAKER SIDE BRACKET



SJ-300, PARTS LIST - SIDE BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD
	BRACKET ASSEMBLY		DB391Z01SA	1	
	SIDE BOLT ASSEMBLY		DB370Y01A	1	
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DB300Z01A	1	936 x 145 x 192
300	BRACKET ASSEMBLY	SIDE BRACKET - RIGHT	DB391Z01S	1	648 x 631.5 x 60
301		SIDE BRACKET - LEFT		1	648 x 631.5 x 35
302		WELDING BUSHING RIGHT	DB360Y12	2	D89 x L60
303		WELDING BUSHING LEFT	DB360Y11	2	D89 x L35
304		PIN BUSHING	DB371Z02	4	D89 x L40
305		BRACKET PIN	DY365K01	2	D45 x L280
306		SUPPORT PIPE	DB360Z32	1	D43 x L162
320		BOLT / NUT	SIDE BOLT	DB370Y01	5
321	SIDE BOLT WASHER		5		M27
322	SIDE BOLT CAP NUT		5		M27 x P2.0 x L46
323	WELDING BUSHING HEX. BOLT		D75M12-01-S	2	M12 x P1.75 x L100
324	WELDING BUSHING HEX. NUT			4	M12 x P1.75 x L10
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D801/2150S01	2	1/2" x 1500L x S/P

SJ-300 BREAKER BACKHOE BRACKET



SJ-300, PARTS LIST - BACKHOE BRACKET ASSEMBLY

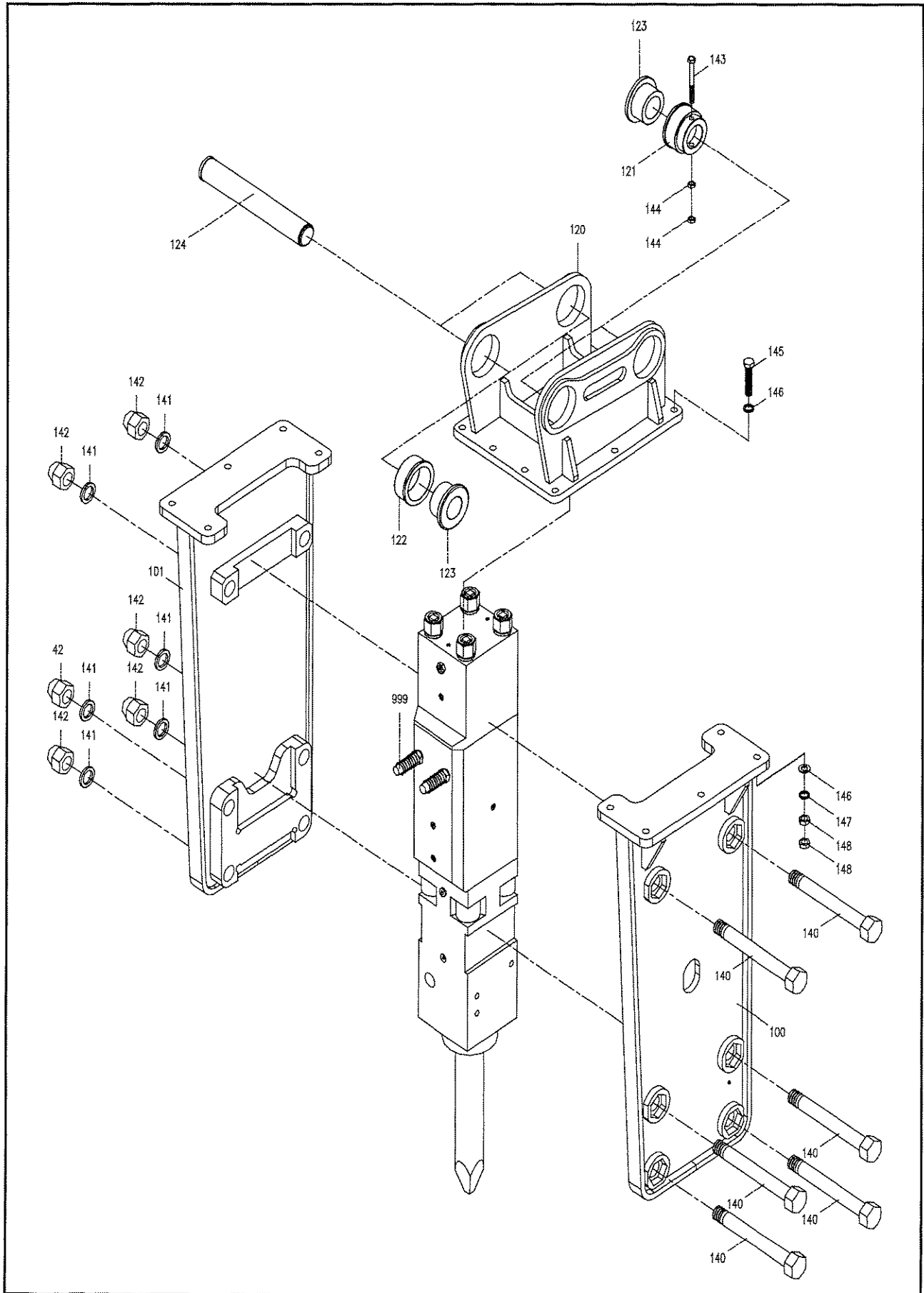
NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD
	BRACKET ASSEMBLY		DB310KB01A	1	
	SIDE BOLT ASSEMBLY		DB370Y01A	1	
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DB300Z01A	1	936 x 145 x 192
400	BRACKET ASSEMBLY	BACKHOE BRACKET - RIGHT	DB310KB01	1	953.5 x 630 x 90
401		BACKHOE BRACKET - LEFT		1	953.5 x 630 x 65
405		WELDING BUSHING RIGHT	DB360Y12	3	D89 x L60
406		WELDING BUSHING LEFT	DB360Y11	3	D89 x L35
407		PIN BUSHING	DB371Z01	6	D89 x L40
408		BRACKET PIN	DY365Y01	3	D45 x L290
409		SUPPORT PIPE	DB360Z32	1	D34 x L162
420		BOLT / NUT	SIDE BOLT	DB370Y01	5
421	SIDE BOLT WASHER		5		M27
422	SIDE BOLT CAP NUT		4		M27 x P2.0 x L46
423	WELDING BUSHING HEX. BOLT		D75M12-01	2	M12 x P1.75 x L100
424	WELDING BUSHING HEX. NUT			4	M12 x P1.75 x L10
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D801/2150S01	2	1/2" x 1500L x S/P

SJ-400, PARTS LIST - MAIN BODY ASSEMBLY

NO.	DESCRIPTION	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY ASS'Y	DY400Z01A	1	
	BACK HEAD ASS'Y	DY415Z01A	1	
	CYLINDER ASS'Y	DY415Z02A	1	
	FRONT HEAD ASS'Y	DY415Z03A	1	
	CONTROL VALVE ASS'Y	DY440Z01A1A	1	
	THROUGH BOLT ASS'Y	DY470Z10A	1	
	ACCUMULATOR ASS'Y	-	-	
	CHISEL	D90/04C-01	1	
	SEAL KIT	D30-0400Z	1	

NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
B1	BACK HEAD ASS'Y	BACK HEAD	DY415Z01	1	180 x 160 x 210
B2		GAS CHARGING VALVE ASS'Y	D40CV-01	1	PF 1/2"
B2_A		GAS CHARGING PLUG	D40CV-01-01	1	M10 x P1.0
B2_B		O-RING	D35P012	1	P12
B2_C		GAS CHARGING VALVE	D40CV-01	1	PF 1/2"
B2_D		O-RING	D35P018	1	P18
B3		O-RING	D35G095	1	G95
C1	CYLINDER ASS'Y	CYLINDER	DY415Z02	1	367 x 160 x 210
C2		PISTON	DY420Z01	1	D79 x L487
C3		CYLINDER BUSHING	DY425Z01	1	D100 x L46
C4		LOCK PIN	DH765Z23A1	2	D12.35 x L30
C5		AIR VENT VALVE	D771/20-02	1	PF 1/2"
C6		O-RING	D35P018	7	P18
C7		PLUG	D77M20-01	4	M20 x P2.0
C8		PLUG	D771/40-01	1	PF 1/4"
C9		O-RING	D35P011	1	P11
C10		NIPPLE	D851/205	1	PF 1/2"
C11		DUST SEAL	D30DSI070-01	1	DSI 70
C12		U-PACKING	D30HSI070-01	1	ISI 70
C13		BUFFER SEAL	D30HBY070-01	1	HBY 70
C14		STEP SEAL	D30STE068-01	2	STS 68
C15		GAS SEAL	D30GAS068-01	1	GAS 68
C16		O-RING	D35G095	2	G95
F1	FRONT HEAD ASS'Y	FRONT HEAD	DY415Z03	1	426 x 160 x 176
F2		CHISEL BUSHING	DY460Z01	1	D92 x L107
F3		FRONT BUSHING (TOP TYPE)	DY460Z02	1	D140 x L110
F4		FRONT BUSHING (SILENCE TYPE)	DY460Z03	1	D118 x L90
F5		BUSHING STOP PIN	DY465Z22	2	D19 x L114
F6		RUBBER PLUG	D77RD20-01	2	D20
F7		CHISEL PIN	DY465Z21	1	D38 x L116
F8		GREASE NIPPLE	D851/4G01	1	PT 1/4"
F9		SPRING PIN	D99B16-01	1	D16 x L100
V1	CONTROL VALVE ASS'Y	VALVE BUSH	DY440Z01A1	1	D48 x L73.5
V2		MAIN VALVE	DY440Z01A2	1	D36 x L69.5
V3		VALVE CAP	DY440Z01A3	1	D48 x L27.5
V4		O-RING	D35P042	1	P42
V5		O-RING	D35G030	1	G30
T1	THROUGH BOLT ASS'Y	THROUGH BOLT	DY470Z10	4	M27 x P2.0 x L640
T2		BACK HEAD NUT	DB370Z11	4	M27 x P2.0 x L40
T3		BACK HEAD WASHER	DY470Z12	4	D42 x L10
T4		FRONT HEAD NUT	DY470Z13	4	M27 x P2.0 x L38
R1	CHISEL	MOIL TYPE	D90/04C-01	1	D75 x L750
R2		FLAT WEDGE - VERTICAL		1	
R3		FLAT WEDGE - HORIZONTAL	D90/04C-02	1	
R4		BLUNT TYPE	D90/04C-03	1	
R5		CONICAL TYPE	D90/04C-04	1	

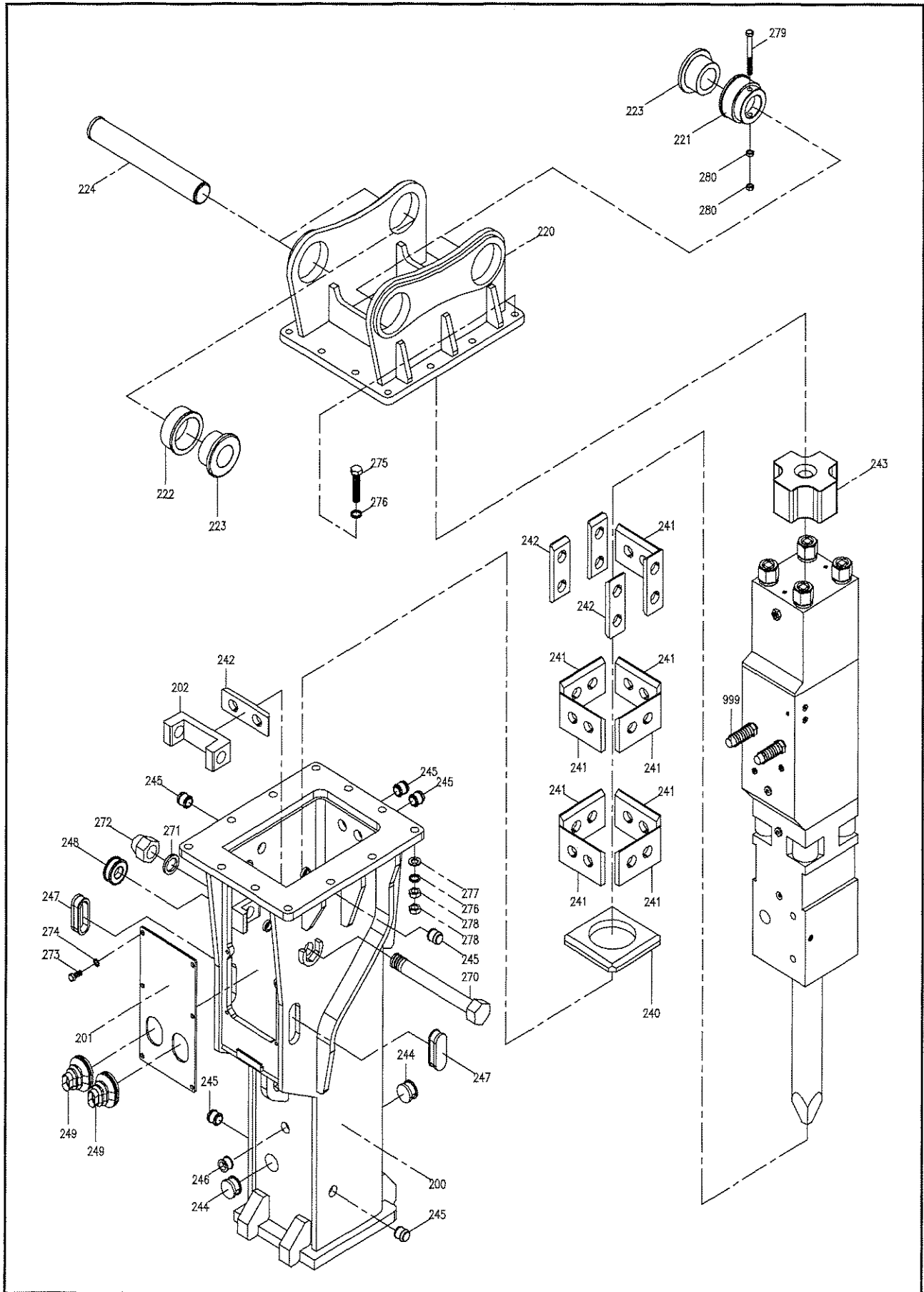
SJ-400 BREAKER TOP BRACKET



SJ-400, PARTS LIST - TOP BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD
	BRACKET ASSEMBLY		DYT491Z01A	1	
	ADAPTOR ASSEMBLY		DBT491Z11A	1	
	SIDE BOLT ASSEMBLY		DB470Z01A	1	
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DY400Z01A	1	978.5 x 160 x 210
100	BRACKET ASSEMBLY	BRACKET - RIGHT	DYT491Z01	1	880 x 160 x 390
101		BRACKET - LEFT		1	
120	ADAPTOR ASSEMBLY	ADAPTOR ASSEMBLY	DBT491Z11	1	434 x 380 x 293.5
121		ADAPTOR WELDING BUSHING RIGHT	DB460Z11	2	D108 x L68
122		ADAPTOR WELDING BUSHING LEFT	DB460Z10	2	D108 x L38
123		ADAPTOR PIN BUSHING	DB471Z01	4	D99 x L49
124		ADAPTOR PIN	DB465Z07	2	D50 x L338
140	BOLT / NUT	SIDE BOLT	DB470Z01	6	M30 x P2.0 x L270
141		SIDE BOLT WASHER		6	M30
142		SIDE BOLT CAP NUT		6	M30 x P2.0 x L50
143		WELDING BUSHING HEX. BOLT	D75M14-01	2	M14 x P2.0 x L120
144		WELDING BUSHING HEX. NUT		4	M14 x P2.0 x L11
145		ADAPTOR JOINT BOLT	D75M20-03	10	M20 x P2.5 x L90
146		ADAPTOR JOINT SPRING WASHER		20	M20
147		ADAPTOR JOINT FLAT WASHER		10	M20
148	ADAPTOR JOINT HEX. NUT	20		M20 x P2.5 x L16	
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D801/2150S01	2	1/2" x 1500L x S/P

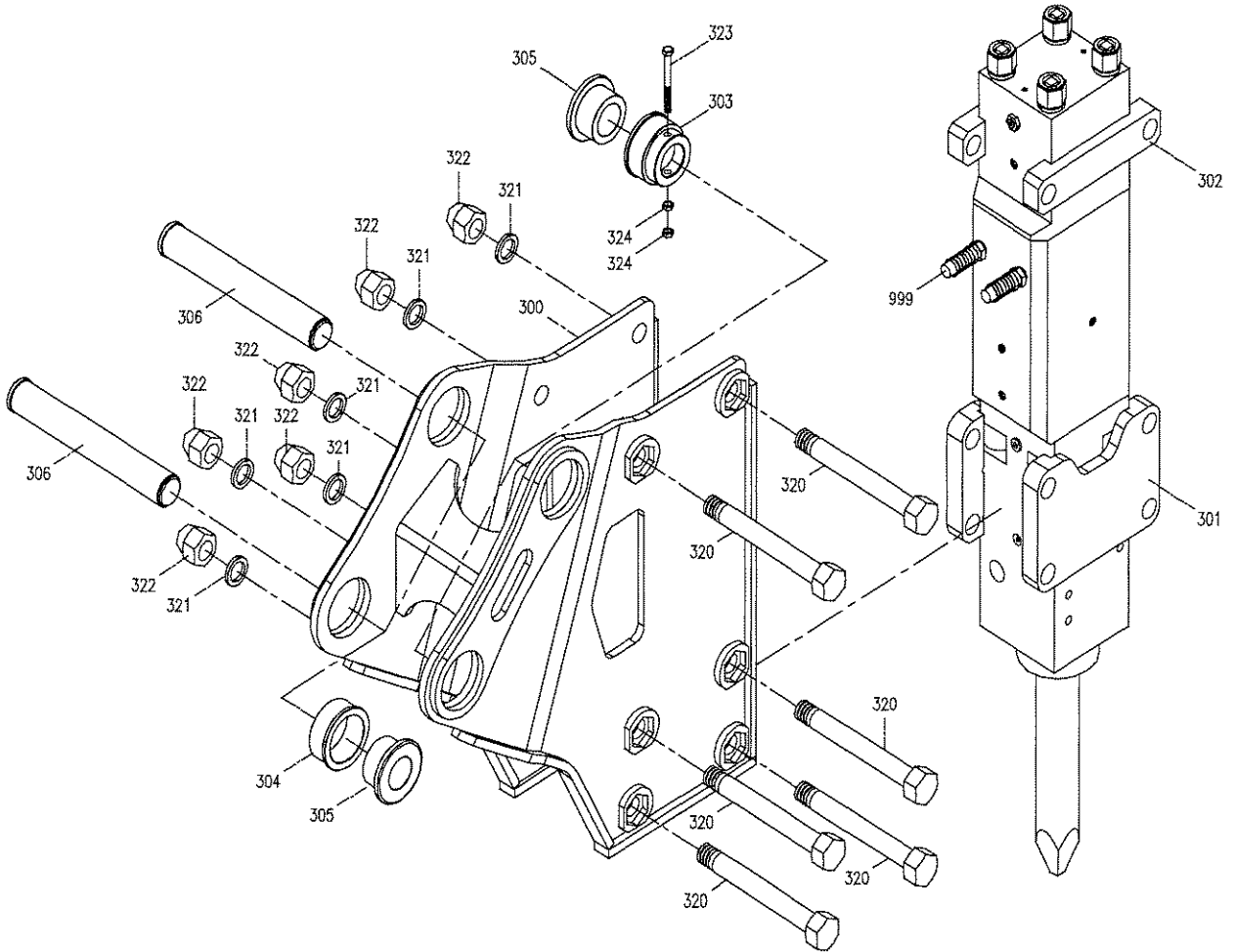
SJ-400 BREAKER SILENT BRACKET



SJ-400, PARTS LIST - SILENT BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD
	BRACKET ASSEMBLY		DBS410Z01A	1	
	ADAPTOR ASSEMBLY		DBS491Z11A	1	
	SIDE BOLT ASSEMBLY		DB470Z01A	1	
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DY400Z01A	1	978.5 x 160 x 210
200	BRACKET ASSEMBLY	SILENT BRACKET ASSEMBLY	DBS410Z01A	1	1071 x 420 x 390
201		UPPER COVER PLATE	DBS410Z11	1	330 x 174 x 7
202		GUIDE PLATE	DYS410K17	1	151 x 77 x 50
220	ADAPTOR ASSEMBLY	ADAPTOR ASSEMBLY	DBS491Z11	1	449 x 390 x 293.5
221		ADAPTOR WELDING BUSHING RIGHT	DB460Z11	2	D108 x L68
222		ADAPTOR WELDING BUSHING LEFT	DB460Z10	2	D108 x L38
223		ADAPTOR PIN BUSHING	DB471Z01	4	D99 x L49
224		ADAPTOR PIN	DB465Z07	2	D50 x L338
240	URETHANE & RUBBER	LOWER DAMPER	DBS411Z01	1	176 x 160 x 30
241		SIDE DAMPER "A"	DBSKT311Z03	9	130 x 100 x 15
242		SIDE DAMPER "B"	DBSKT311Z04	5	150 x 50 x 15
243		UPPER DAMPER	DBS411Z02	1	175 x 160 x 80
244		CHISEL PIN RUBBER PLUG	DYS411Z01A1	2	D50 x L12
245		RUBBER PLUG		6	D30 x L12
246		GREASING RUBBER PLUG		1	D30 x L12
247		HYD. HOSE CHECK PLUG		2	125 x 35 x 12
248		AIR VENT RUBBER PLUG		1	D80 x L12
249		HYD HOSE BELLOWS		2	80 x 50 x 7
270	BOLT / NUT	SIDE BOLT	DB470Z01	1	M30 x P2.0 x L270
271		SIDE BOLT WASHER		1	M30
272		SIDE BOLT CAP NUT		1	M30 x P2.0 x L50
273		LOWER COVER BOLT	D75M14-03	6	M14 x P2.0 x L30
274		LOWER COVER SPRING WASHER		6	M14
275		ADAPTOR JOINT BOLT	D75M20-03	12	M20 x P2.5 x L90
276		ADAPTOR JOINT SPRING WASHER		24	M20
277		ADAPTOR JOINT FLAT WASHER		12	M20
278		ADAPTOR JOINT HEX. NUT		24	M20 x P2.5 x L16
279		WELDING BUSHING HEX. BOLT	D75M14-01	2	M14 x P2.0 x L120
280	WELDING BUSHING HEX. NUT	4		M14 x P2.0 x L11	
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D801/2150S01	2	1/2" x 1500L x S/P

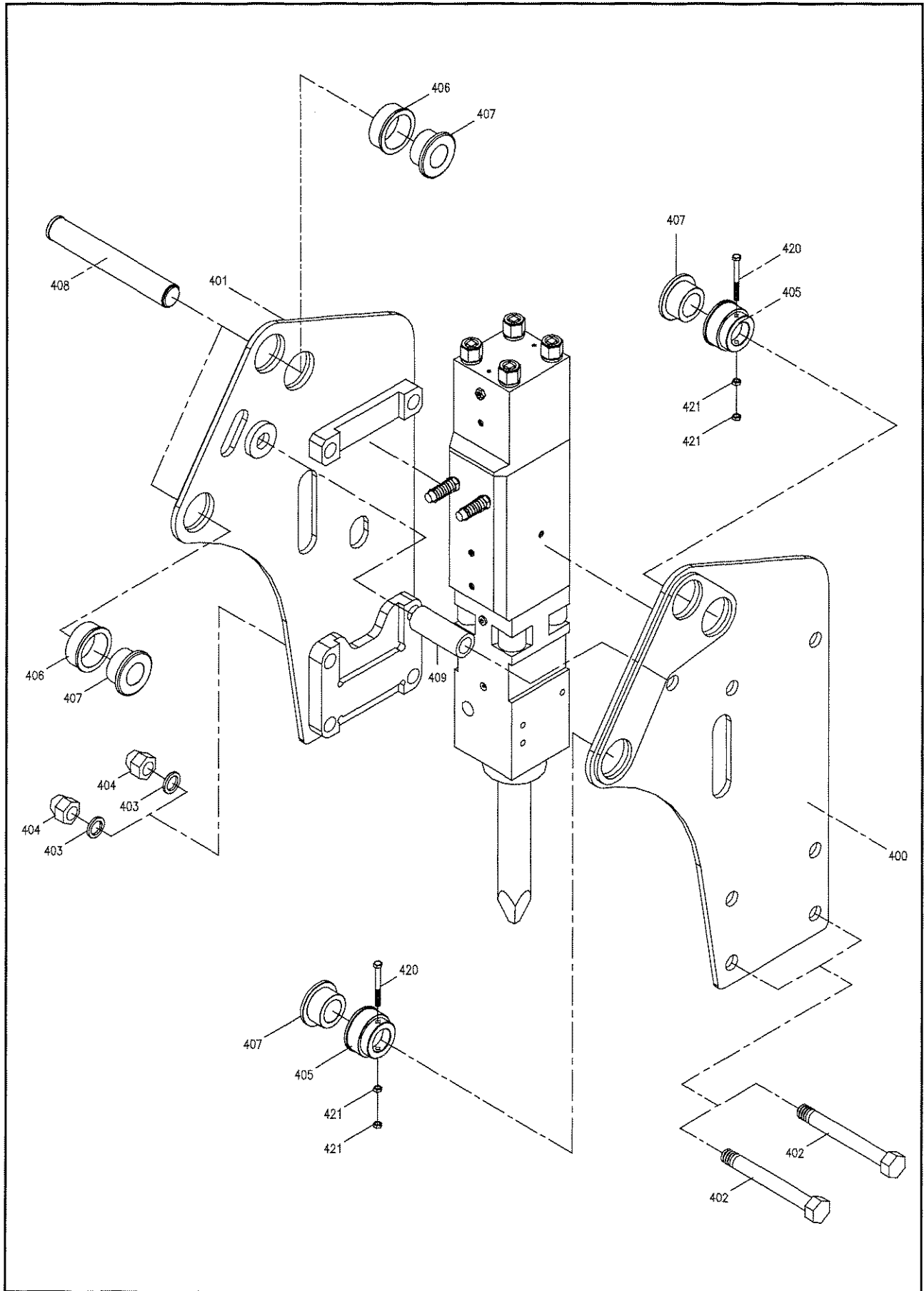
SJ-400 BREAKER SIDE BRACKET



SJ-400, PARTS LIST - SIDE BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD
	BRACKET ASSEMBLY		DY491Z01A	1	
	SIDE BOLT ASSEMBLY		DB470Z01A	1	
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DY400Z01A	1	978.5 x 160 x 210
300	BRACKET ASSEMBLY	SIDE BRACKET	DY491Z01	1	825 x 714 x 294
301		SET PLATE "A"	DY410Z40	2	276 x 210 x 35
302		SET PLATE "B"	DY410Z41	2	276 x 60 x 35
303		WELDING BUSHING RIGHT	DB460Z11	2	D108 x L68
304		WELDING BUSHING LEFT	DB460Z10	2	D108 x L38
305		PIN BUSHING	DB471Z01	2	D99 x L49
306		BRACKET PIN	DY465Z01	2	D45 x L294
320		BOLT / NUT	SIDE BOLT	DB470Z01	6
321	SIDE BOLT WASHER		6		M30
322	SIDE BOLT CAP NUT		6		M30 x P2.0 x L50
323	WELDING BUSHING HEX. BOLT		D75M14-01	2	M14 x P2.0 x L120
324	WELDING BUSHING HEX. NUT			4	M14 x P2.0 x L11
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D801/2150S01	2	1/2" x 1500L x S/P

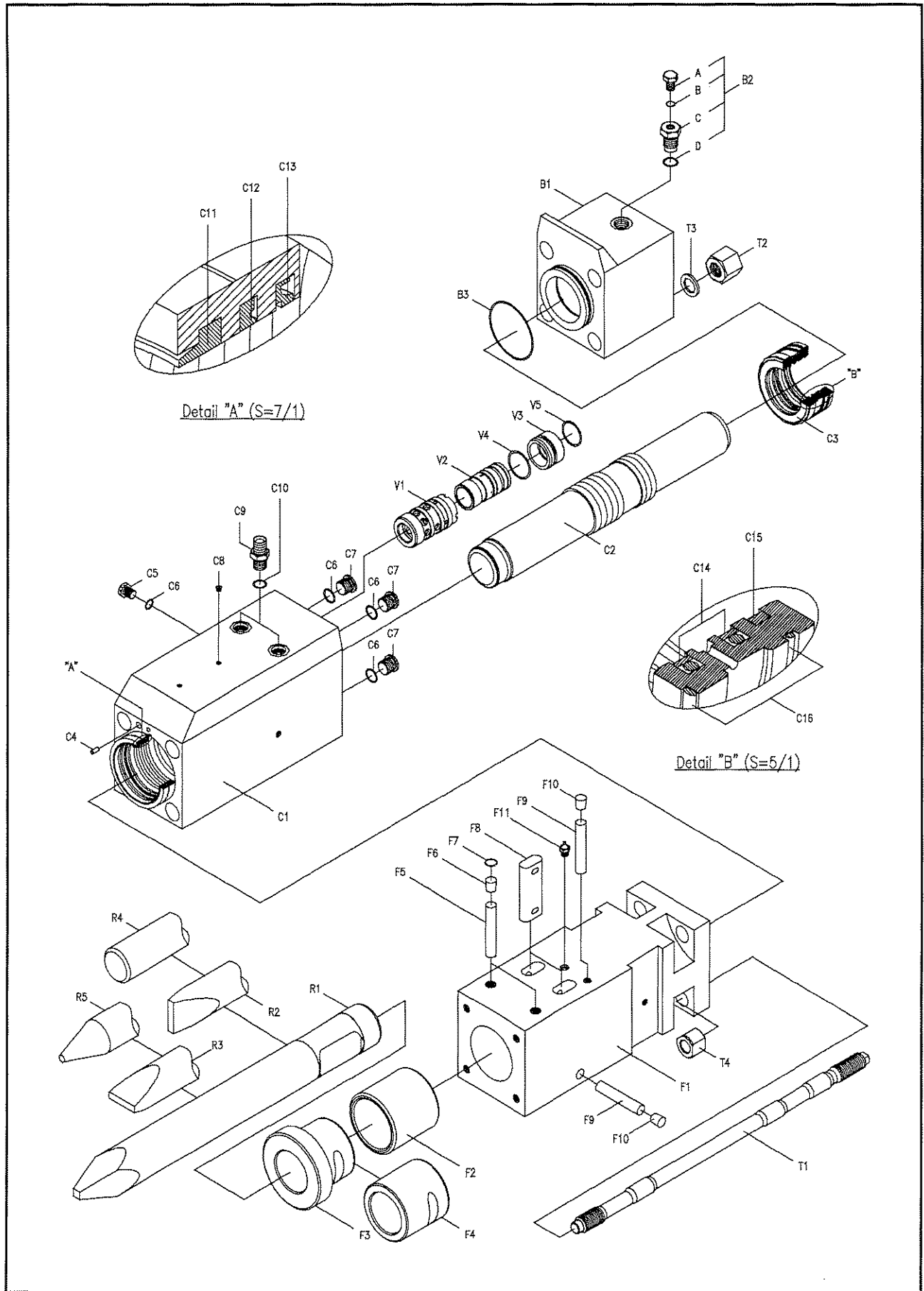
SJ-400 BREAKER BACKHOE BRACKET



SJ-400, PARTS LIST - BACKHOE BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD	
	BRACKET ASSEMBLY		DY410KB06A	1		
	SIDE BOLT ASSEMBLY		DB470Z01A	1		
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD	
	MAIN BODY	MAIN BODY ASSEMBLY	DY400Z01A	1	978.5 x 160 x 210	
400	BRACKET ASSEMBLY	BACKHOE BRACKET - RIGHT	DY410KB06	1	1039.5 x 660 x 90	
401		BACKHOE BRACKET - LEFT		1	1039.5 x 660 x 65	
402		SIDE BOLT	DB470Z01	7	M30 x P2.0 x L270	
403		SIDE BOLT WASHER		7	M30	
404		SIDE BOLT CAP NUT		7	M30 x P2.0 x L50	
405		WELDING BUSHING RIGHT		DB360Y12	3	D89 x L60
406		WELDING BUSHING LEFT		DB360Y11	3	D89 x L35
407		PIN BUSHING	DB371Z01	6	D89 x L45	
408		BRACKET PIN	DB365Y01	3	D45 x L290	
409		SUPPORT PIPE	DBS360Z31	1	D43 x L177	
420		BOLT / NUT	WELDING BUSHING HEX. BOLT	D75M12-01	2	M12 x P1.75 x L100
421			WELDING BUSHING HEX. NUT		4	M12 x P1.75 x L10
999		HYDRAULIC HOSE	HYDRAULIC HOSE	D801/2150S01	2	1/2" x 1500L x S/P

SJ-500 BREAKER BODY

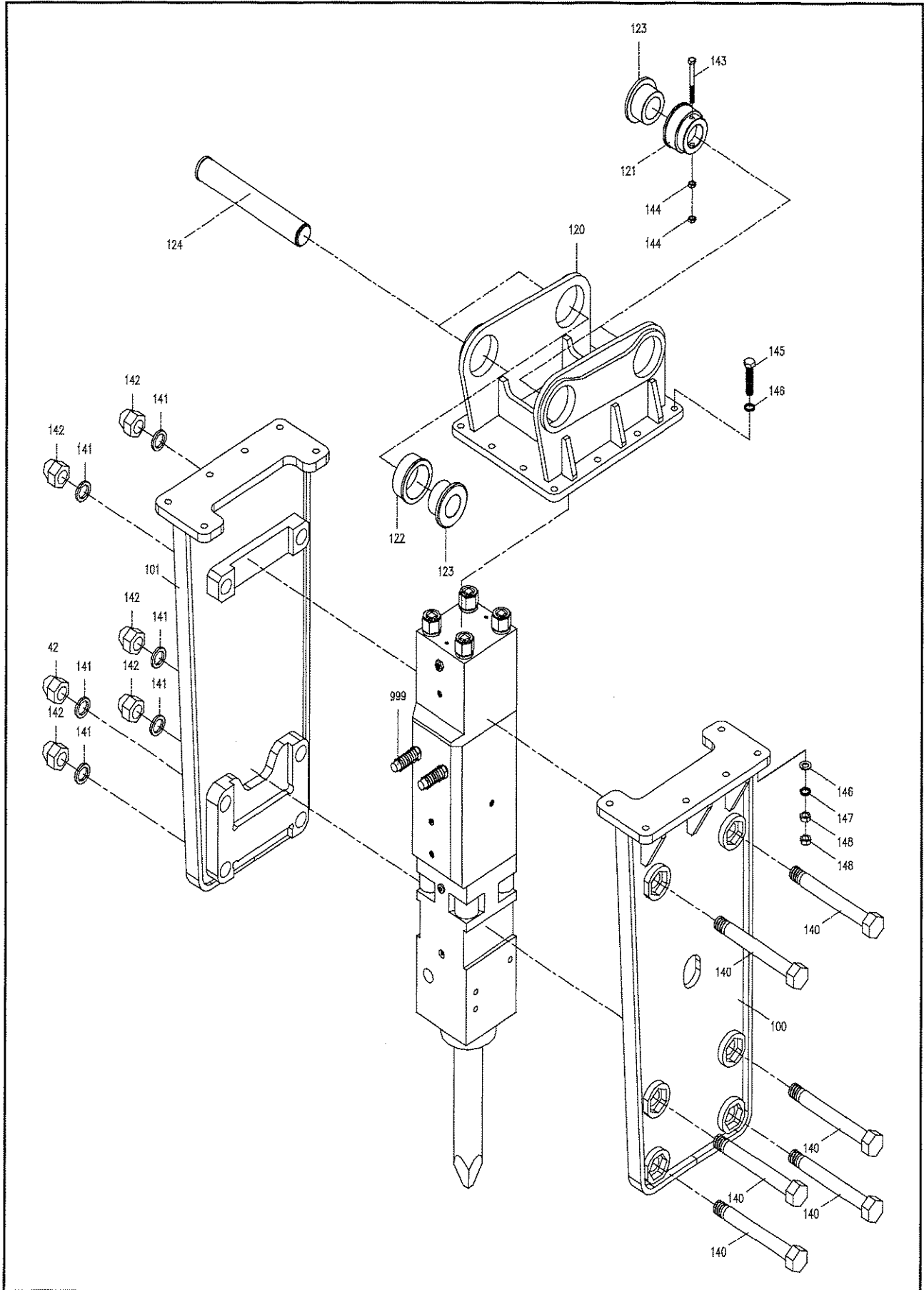


SJ-500, PARTS LIST - MAIN BODY ASSEMBLY

NO.	DESCRIPTION	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY ASS'Y	DY430Z01A	1	
	BACK HEAD ASS'Y	DY4315Z01A	1	
	CYLINDER ASS'Y	DY4315Z02A	1	
	FRONT HEAD ASS'Y	DY4315Z03A	1	
	CONTROL VALVE ASS'Y	DY4340Z01A1A	1	
	THROUGH BOLT ASS'Y	DY4370Z10A	1	
	ACCUMULATOR ASS'Y	-	-	
	CHISEL	D90/04C-10-S	1	
	SEAL KIT	D30-0430Z-S	1	

NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
B1	BACK HEAD ASS'Y	BACK HEAD	DY4315Z01	1	166 x 228 x 257
B2		GAS CHARGING VALVE ASSY	D40CV-01	1	PF 1/2"
B2 _ A		GAS CHARGING PLUG	D40CV-01-01	1	M10 x P1.0
B2 _ B		O-RING	D35P012	1	P12
B2 _ C		GAS CHARGING VALVE	D40CV-01	1	PF 1/2"
B2 _ D		O-RING	D35P018	1	P18
B3		O-RING	D35G115	1	G115
C1	CYLINDER ASS'Y	CYLINDER	DY4315Z02	1	166 x 228 x 489
C2		PISTON	DY4320Z01	1	D92.5 x L660
C3		CYLINDER BUSHING	DY4325Z01	1	D120 x L61
C4		LOCK PIN	DH765Z23A1	1	D12.35 x L30
C5		AIR VENT VALVE	D771/2-02	1	PF 1/2"
C6		O-RING	D35P018	1	P18
C7		PLUG	D77M20-01	3	D20 x P2.0
C8		PLUG	D771/4-02	3	PF 1/4"
C9		NIPPLE	D8531405	2	PF 3/4" x 5
C10		O-RING	D35P024	2	P24
C11		DUST SEAL	D30DIS085-01	1	DIS 85
C12		U-PACKING	D30ISI085-01	1	ISI 85
C13		BUFFER SEAL	D30HBY085-01	1	HBY 85
C14		STEP SEAL	D30STE083-01	2	STS 83.5
C15		GAS SEAL	D30GAS083-01	1	YGS 83.5
C16		O-RING	D35G115	2	G115
F1	FRONT HEAD ASS'Y	FRONT HEAD	DY4315Z03	1	166 x 192 x 482
F2		CHISEL BUSHING	DY4360Z01	1	D103 x L107
F3		FRONT BUSHING (TOP TYPE)	DY4360Z02	1	D166 x L122
F4		FRONT BUSHING (SILENCE TYPE)	DY4360Z03	1	D121 x L90
F5		FRONT BUSHING PIN	DY565Z23	2	D20 x P132
F6		RUBBER PLUG	D77RD20-01	2	D20
F7		R SNAP RING	D99L020-02	2	D20
F8		CHISEL PIN	DY4365Z21	2	30 x 54 x 190
F9		BUSHING STOP PIN	DY565Z22	2	D17.5 x L130
F10		RUBBER PLUG	D77RD18-01	2	D17
F11		GREASE NIPPLE	D851/4G01	1	PT 1/4"
V1	CONTROL VALVE ASS'Y	VALVE BUSH	DY4340Z01A1	1	D50 x L90.5
V2		MAIN VALVE	DY4340Z01A2	1	D37.5 x L87
V3		VALVE CAP	DY4340Z01A3	1	D50 x L37.5
V4		O-RING	D35G045	1	G45
V5		O-RING	D35G030	1	G30
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
T1	THROUGH BOLT ASS'Y	THROUGH BOLT	DY4370Z10	4	RD33 x P3.175 x L840
T2		BACK HEAD NUT	DY4370Z11	4	RD33 x P3.175 x L48
T3		BACK HEAD WASHER	DY4370Z12	4	D50 x L10
T4		FRONT HEAD NUT	DY4370Z13	4	RD33 x P3.175 x L45
R1	CHISEL	MOIL TYPE	D90/04C-10-S	1	D85 x L800
R2		FLAT WEDGE - VERTICAL		1	
R3		FLAT WEDGE - HORIZONTAL	D90/04C-11-S	1	
R4		BLUNT TYPE	D90/04C-12-S	1	
R5		CONICAL TYPE	D90/04C-13-S	1	

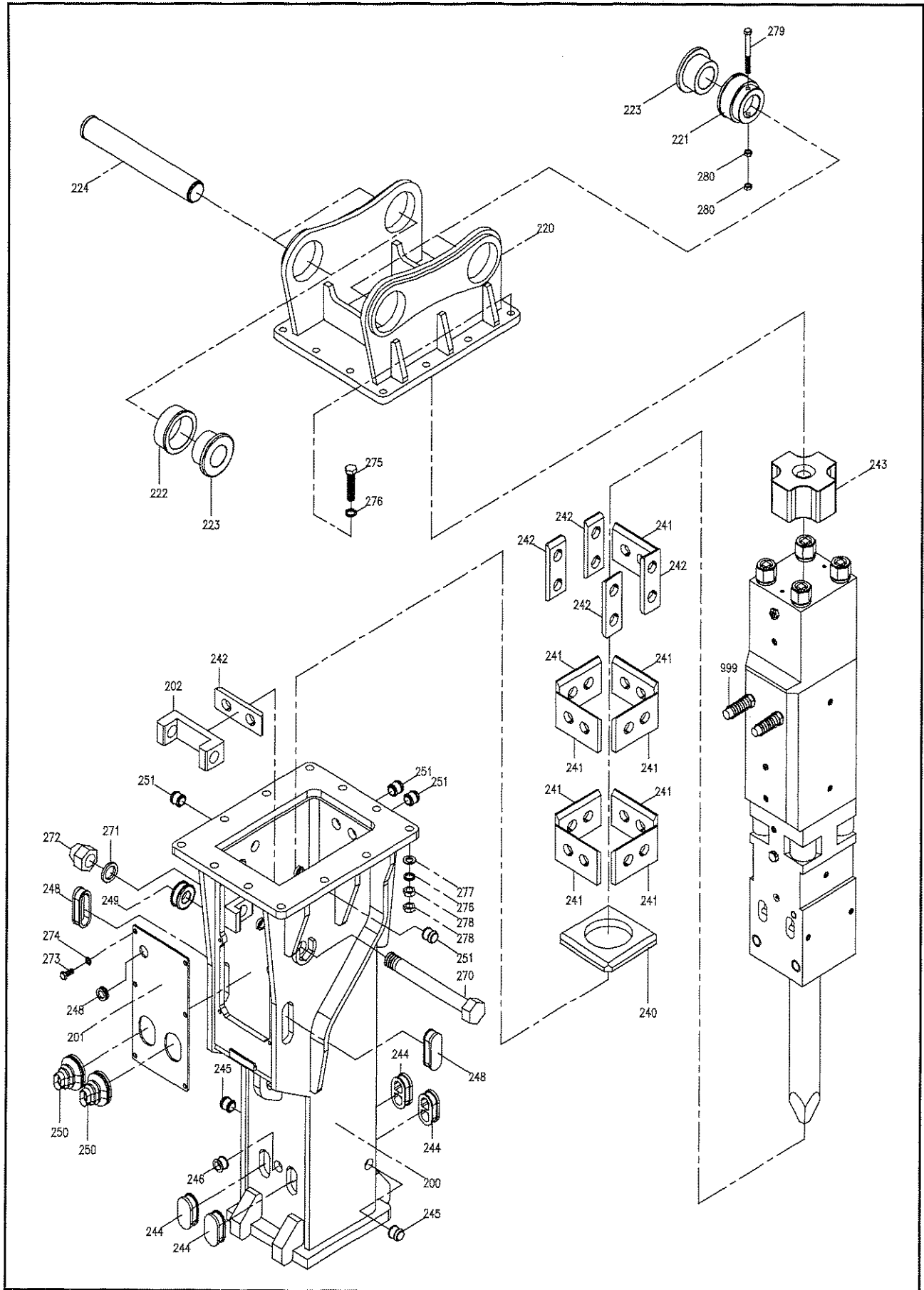
SJ-500 BREAKER TOP BRACKET



SJ-500, PARTS LIST - TOP BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD
	BRACKET ASSEMBLY		DY430Z01A	1	
	ADAPTOR ASSEMBLY		DYT4391Z11A	1	
	SIDE BOLT ASSEMBLY		DB470Y01A	1	
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DY430Z01A	1	1263 x 166 x 280
100	BRACKET ASSEMBLY	BRACKET - RIGHT	DYT4391Z01	1	1099.5 x 170 x 470
101		BRACKET - LEFT		1	
120	ADAPTOR ASSEMBLY	ADAPTOR ASSEMBLY	DYT4391Z11	1	513 x 400 x 323
121		ADAPTOR WELDING BUSHING RIGHT	DB460Z11	2	D108 x L68
122		ADAPTOR WELDING BUSHING LEFT	DB460Z10	2	D108 x L38
123		ADAPTOR PIN BUSHING	DB471Z01	4	D99 x L49
124		ADAPTOR PIN	DB4365Z07	2	D50 x L343
140	BOLT / NUT	SIDE BOLT	DB470Y01A	6	M30 x P2.0 x L280
141		SIDE BOLT WASHER		6	M30
142		SIDE BOLT CAP NUT		6	M30 x P2.0 x L50
143		WELDING BUSHING HEX. BOLT	D75M14-01	2	M14 x P2.0 x L120
144		WELDING BUSHING HEX. NUT		2	M14 x P2.0 x L11
145		ADAPTOR JOINT BOLT	D75M20-03	12	M20 x P2.5 x L90
146		ADAPTOR JOINT SPRING WASHER		24	M20
147		ADAPTOR JOINT FLAT WASHER		12	M20
148	ADAPTOR JOINT HEX. NUT	24		M20 x P2.5 x L16	
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D803/4150S03	2	3/4" x 1500L x S/P

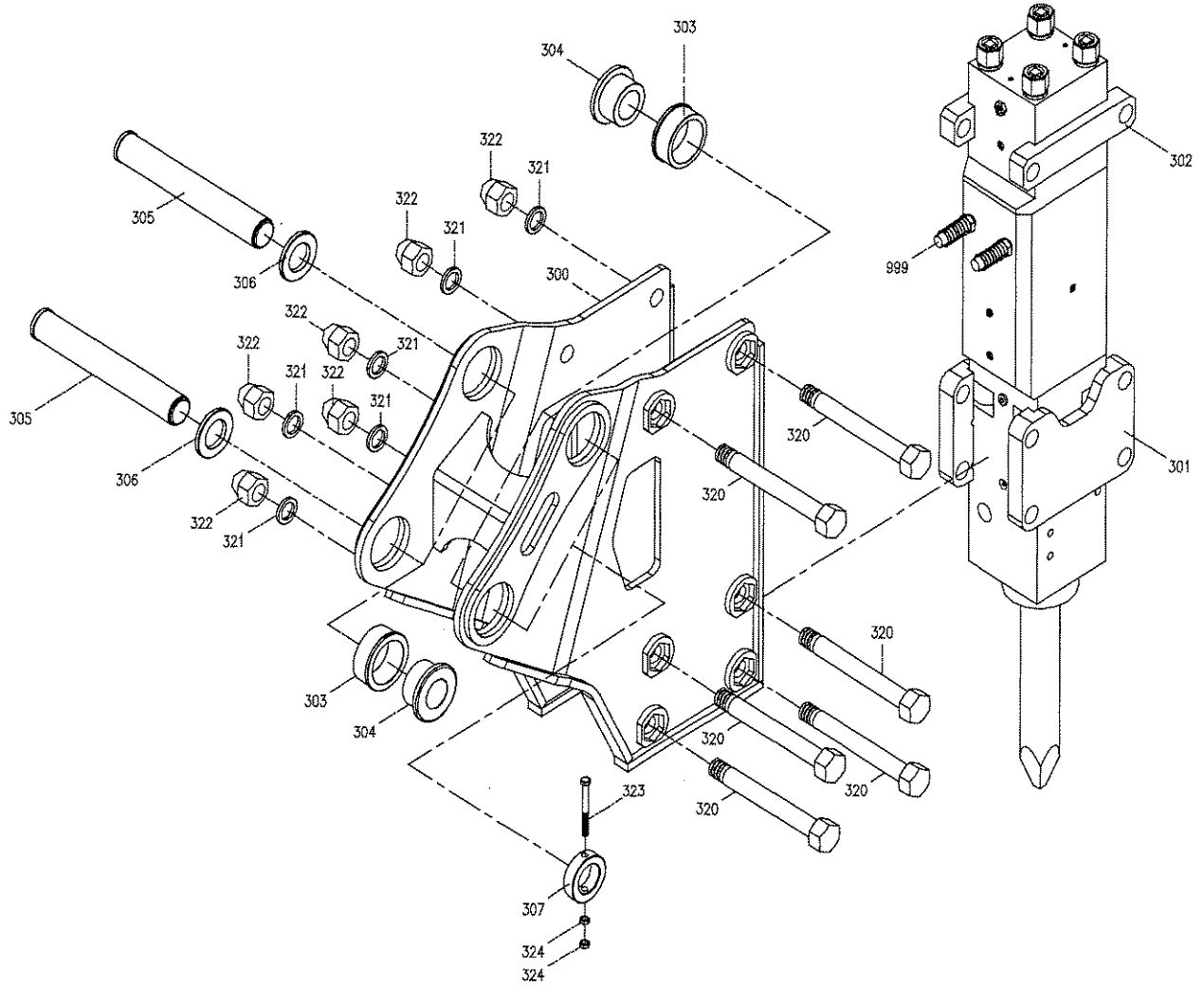
SJ-500 BREAKER SILENT BRACKET



SJ-500, PARTS LIST - SILENT BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD	
	BRACKET ASSEMBLY		DYS591Z01A	1		
	ADAPTOR ASSEMBLY		DYS591Z11A	1		
	SIDE BOLT ASSEMBLY		DB470Z01A	1		
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD	
	MAIN BODY	MAIN BODY ASSEMBLY	DY430Z01A	1	1231 x 181 x 260	
200	BRACKET ASSEMBLY	SILENT BRACKET ASSEMBLY	DYS591Z01A	1	1317 x 400 x 470	
201		UPPER COVER PLATE	DYS4310K11-A	1	465 x 180 x 7	
202		GUIDE PLATE	DYS4310Z16	1	151 x 81 x 50	
220	ADAPTOR ASSEMBLY	ADAPTOR ASSEMBLY	DYS591Z11A	1	513 x 400 x 323	
221		ADAPTOR WELDING BUSHING RIGHT	DB460Z11	2	D108 x L68	
222		ADAPTOR WELDING BUSHING LEFT	DB460Z10	2	D108 x L38	
223		ADAPTOR PIN BUSHING	DB471Z02	4	D99 x L54	
224		ADAPTOR PIN	DY565Z01	2	D50 x L348	
240	URETHANE & RUBBER	LOWER DAMPER	DYS511Z05-S	1	166 x 192 x 30	
241		SIDE DAMPER "A"	DYS511Z03-S	9	130 x 100 x 15	
242		SIDE DAMPER "B"	DYS511Z04-S	5	150 x 50 x 15	
243		UPPER DAMPER	DYS511Z02-S	1	175 x 160 x 80	
244		CHISEL PIN RUBBER PLUG	DYSS11Y01A1	4	65 x 35 x 13	
245		RUBBER PLUG		2	D30 x L12	
246		GREASING RUBBER PLUG "A"		1	D30 x L12	
247		GREASING RUBBER PLUG "B"		1	D40 x L7	
248		HYD. HOSE CHECK PLUG		2	150 x 50 x 12	
249		AIR VENT RUBBER PLUG		1	D50 x L12	
250		HYD HOSE BELLOWS		2	80 x 50 x 7	
251	RUBBER PLUG	4		D40 x L12		
270	BOLT / NUT	SIDE BOLT		DB470Z01	1	M30 x P2.0 x L260
271		SIDE BOLT WASHER			1	M30
272		SIDE BOLT NUT			2	M30 x P2.0
273		LOWER COVER BOLT	D75M14-03	6	M14 x P2.0 x L30	
274		LOWER COVER SPRING WASHER		6	M14	
275		ADAPTOR JOINT BOLT	D75320-01	12	M20 x P2.5 x L100	
276		ADAPTOR JOINT SPRING WASHER		24	M20	
277		ADAPTOR JOINT FLAT WASHER		12	M20	
278		ADAPTOR JOINT HEX. NUT		24	M20 x P2.5	
279		STOPPER HEX BOLT	D75M14-01	2	M14 x P2.0 x L120	
280	STOPPER HEX NUT	4		M14 x P2.0		
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D803/4150Z03	2	3/4" x 1500L x S/P	

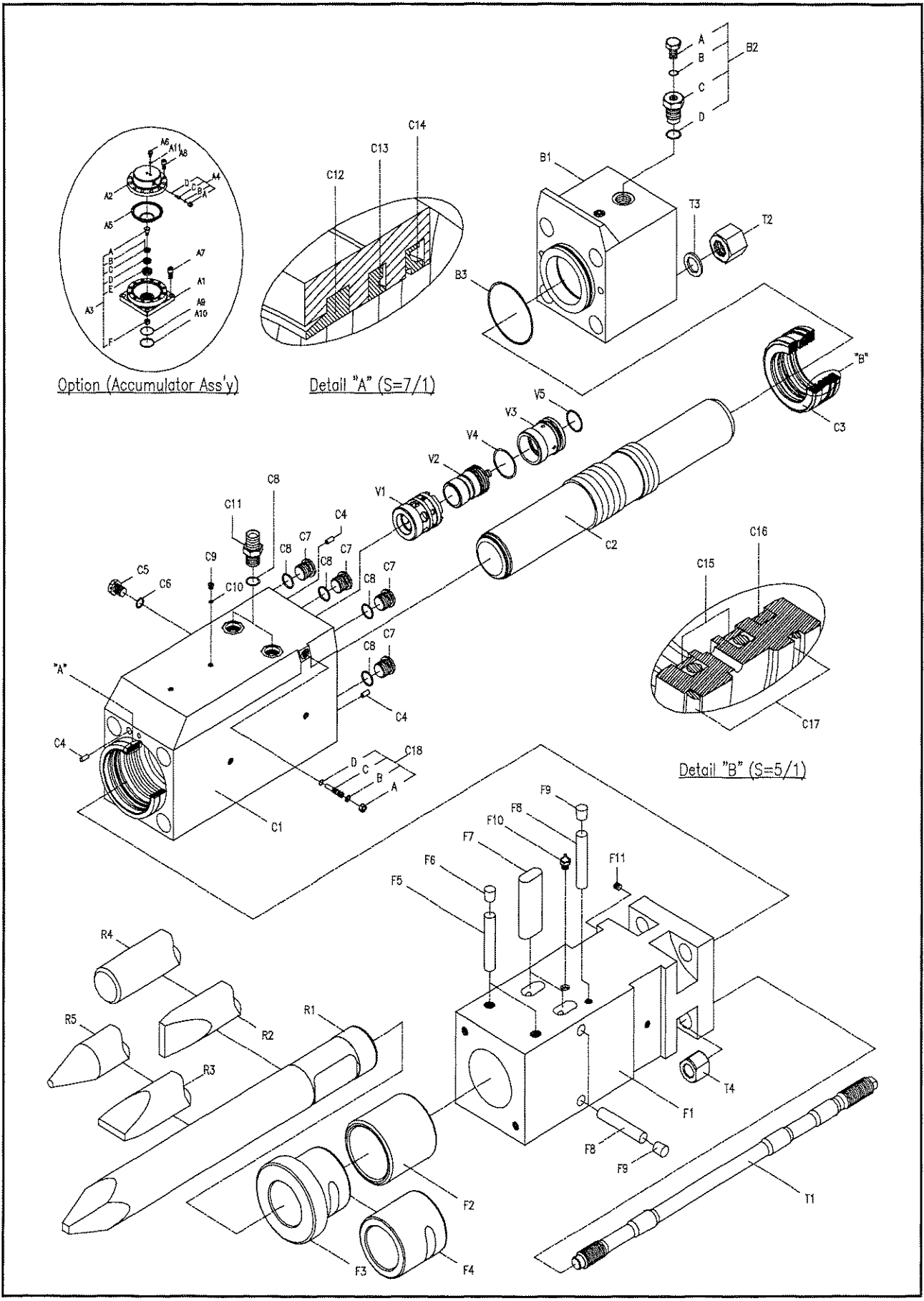
SJ-500 BREAKER SIDE BRACKET



SJ-500, PARTS LIST - SIDE BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD
	BRACKET ASSEMBLY		DY591Z01-A	1	
	SIDE BOLT ASSEMBLY		DY4370Z01A	1	
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DY430Z01A	1	I263 x 166 x 280
300	BRACKET ASSEMBLY	SIDE BRACKET	DY591Z01	1	I263 x 847 x 416
301		SET PLATE "A"	DYT4310K40	2	284 x 235 x 40
302		SET PLATE "B"	DYT4310K41	2	286 x 46 x 40
303		WELDING BUSHING	DBT660Z11	4	D118 x L42
304		PIN BUSHING	DBT671Z02	4	D118 x L67
305		BRACKET PIN	DY565Y02	2	D60 x L416
306		PIN WASHER	DB665Y06	2	D90 x L9
307		PIN STOPPER	DBS665Z10	2	D96 x L30
320	BOLT / NUT	SIDE BOLT	DY4370Z01	6	M30 x P2.0 x L280
321		SIDE BOLT WASHER		6	M30
322		SIDE BOLT CAP NUT		6	M30 x P2.0 x L50
323		WELDING BUSHING HEX. BOLT	D75M12-05	2	M12 x P1.75 x L120
324		WELDING BUSHING HEX. NUT		2	M12 x P1.75 x L10
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D803/4150S03	2	3/4" x 1500L x S/P

SJ-600 BREAKER BODY

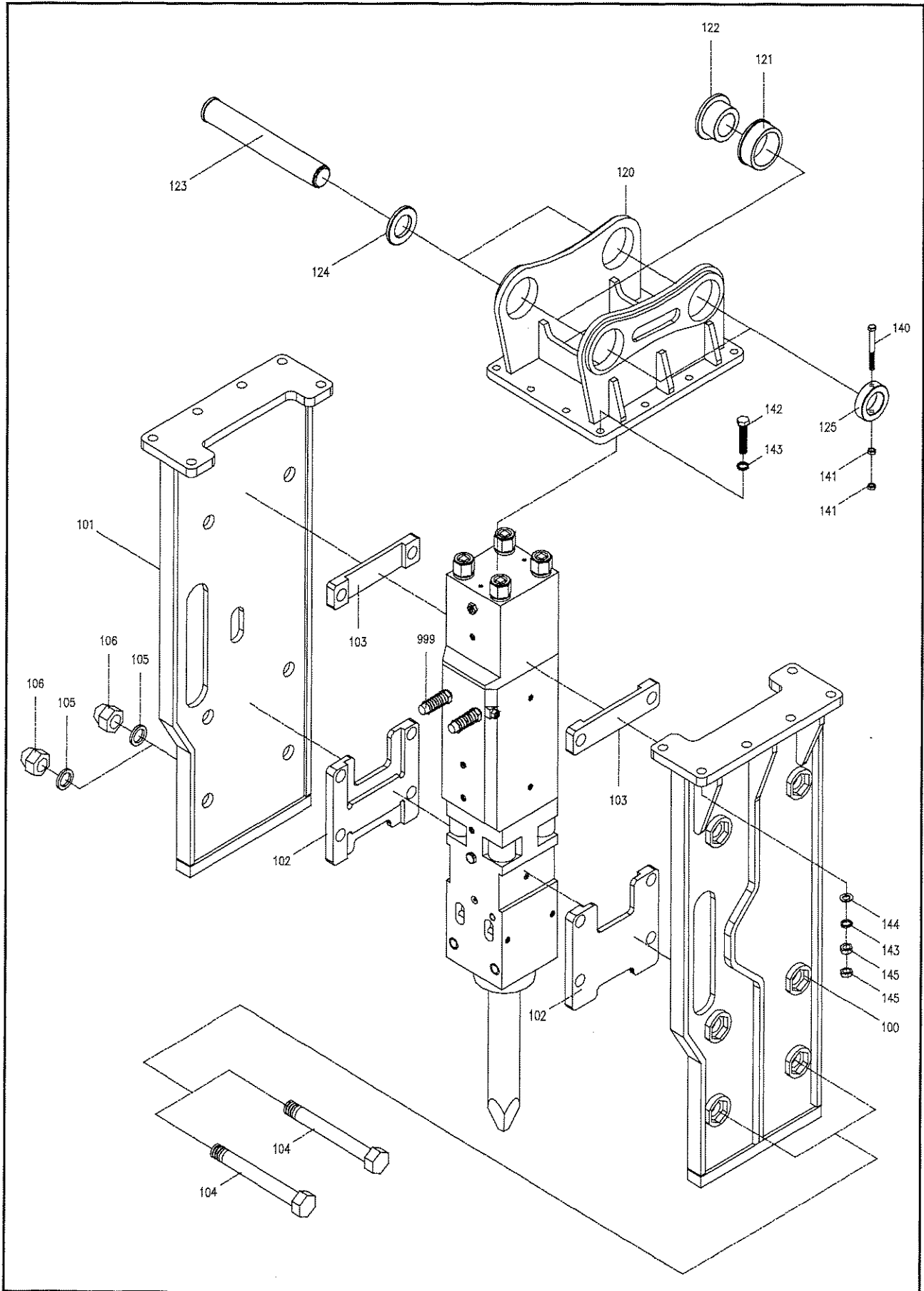


SJ-600, PARTS LIST - MAIN BODY ASSEMBLY

NO.	DESCRIPTION	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY ASS'Y	DB600Z01A	1	
	BACK HEAD ASS'Y	DB615Z01A	1	
	CYLINDER ASS'Y	DB615Z02A	1	
	FRONT HEAD ASS'Y	DB615Z03A	1	
	CONTROL VALVE ASS'Y	DB640Z01A	1	
	THROUGH BOLT ASS'Y	DB670Z10A	1	
	ACCUMULATOR ASS'Y	-	-	
	CHISEL	D90/06D-01	1	
	SEAL KIT	D30-0600ZA0	1	

NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
B1	BACK HEAD ASS'Y	BACK HEAD	DB615Z01	1	253 x 210 x 267
B2		GAS CHARGING VALVE ASS'Y	D40CV-01	1	PF 1/2"
B2 _ A		GAS CHARGING PLUG	D40CV-01-01	1	M10 x P1.0
B2 _ B		O-RING	D35P012	1	P12
B2 _ C		GAS CHARGING VALVE	D40CV-01	1	PF 1/2"
B2 _ D		O-RING	D35P018	1	P18
B3		O-RING	D35G135	1	G135
C1	CYLINDER ASS'Y	CYLINDER	DB615Z02	1	533.5 x 210 x 267
C2		PISTON	DB620Z01	1	D108.5 x L678.5
C3		CYLINDER BUSHING	DB625Z01	1	D140 x L61
C4		LOCK PIN	DH765Z23A1	3	D12.35 x L30
C5		AIR VENT VALVE	D771/20-02	1	PF 1/2"
C6		O-RING	D35P018	1	P18
C7		PLUG	D773/40-01	4	PF 3/4"
C8		O-RING	D35P024	6	P24
C9		PLUG	D771/40-01	1	PF 1/4"
C10		O-RING	D35P011	1	P11
C11		NIPPLE	D853/405	2	PF 3/4" x 5
C12		DUST SEAL	D30DSI100-01	1	DSI 100
C13		U-PACKING	D30ISI100-01	1	ISI 100
C14		BUFFER SEAL	D30HBY100-01	1	HBY 100
C15		STEP SEAL	D30STE098-01	2	STS 98
C16		GAS SEAL	D30GAS98-01	1	YGS 98
C17		O-RING	D35G135	2	G135
C18		VALVE ADJUSTER ASS'Y	DB640Z02A1	1	M16 x P1.5 x L63
C18 _ A	VALVE ADJUSTER NUT				
C18 _ B	VALVE ADJUSTER WASHER				
C18 _ C	VALVE ADJUSTER				
C18 _ D	O-RING	D35P014	1	P14	
F1	FRONT HEAD ASS'Y	FRONT HEAD	DB615Z03	1	551 x 210 x 232
F2		CHISEL BUSHING	DB660Y01	1	D122 x L117
F3		FRONT BUSHING (TOP TYPE)	DB660Z02	1	D188 x L140
F4		FRONT BUSHING (SILENCE TYPE)	DB660Z03	1	D143 x L110
F5		FRONT BUSHING PIN	DB665Z23	2	D24.5 x L157
F6		RUBBER PLUG	D77RD024-01	2	D24
F7		CHISEL PIN	DB665Y23	2	162 x 31 x 60
F8		BUSHING STOP PIN	DB665Z22	3	D17 x L170
F9		RUBBER PLUG	D77RD18-01	3	D17
F10		GREASE NIPPLE	D851/4G01	1	PT 1/4"
F11		TAPER PLUG	D75N1/4-01	1	PT 1/4"
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
V1	CONTROL VALVE ASS'Y	VALVE BUSH	DB640Y01A1	1	D62 x L71
V2		MAIN VALVE	DB640Y01A2	1	D50.5 x L95
V3		VALVE CAP	DB640Y01A3	1	D62 x L64
V4		O-RING	D35P052	1	P52
V5		O-RING	D35P032	1	P32
T1	THROUGH BOLT ASS'Y	THROUGH BOLT	DB670Z10	4	RD39 x L882
T2		BACK HEAD NUT	DB670Z11	4	RD39 x L41
T3		BACK HEAD WASHER	DB670Z12	4	D55 x L9
T4		FRONT HEAD NUT	DB670Z13	4	RD39 x L50
R1	CHISEL	MOIL TYPE	D90/06D-01	1	D100 x L1000
R2		FLAT WEDGE - VERTICAL	D90/06D-02	1	
R3		FLAT WEDGE - HORIZONTAL		1	
R4		BLUNT TYPE	D90/06D-03	1	
R5		CONICAL TYPE	D90/06D-04	1	

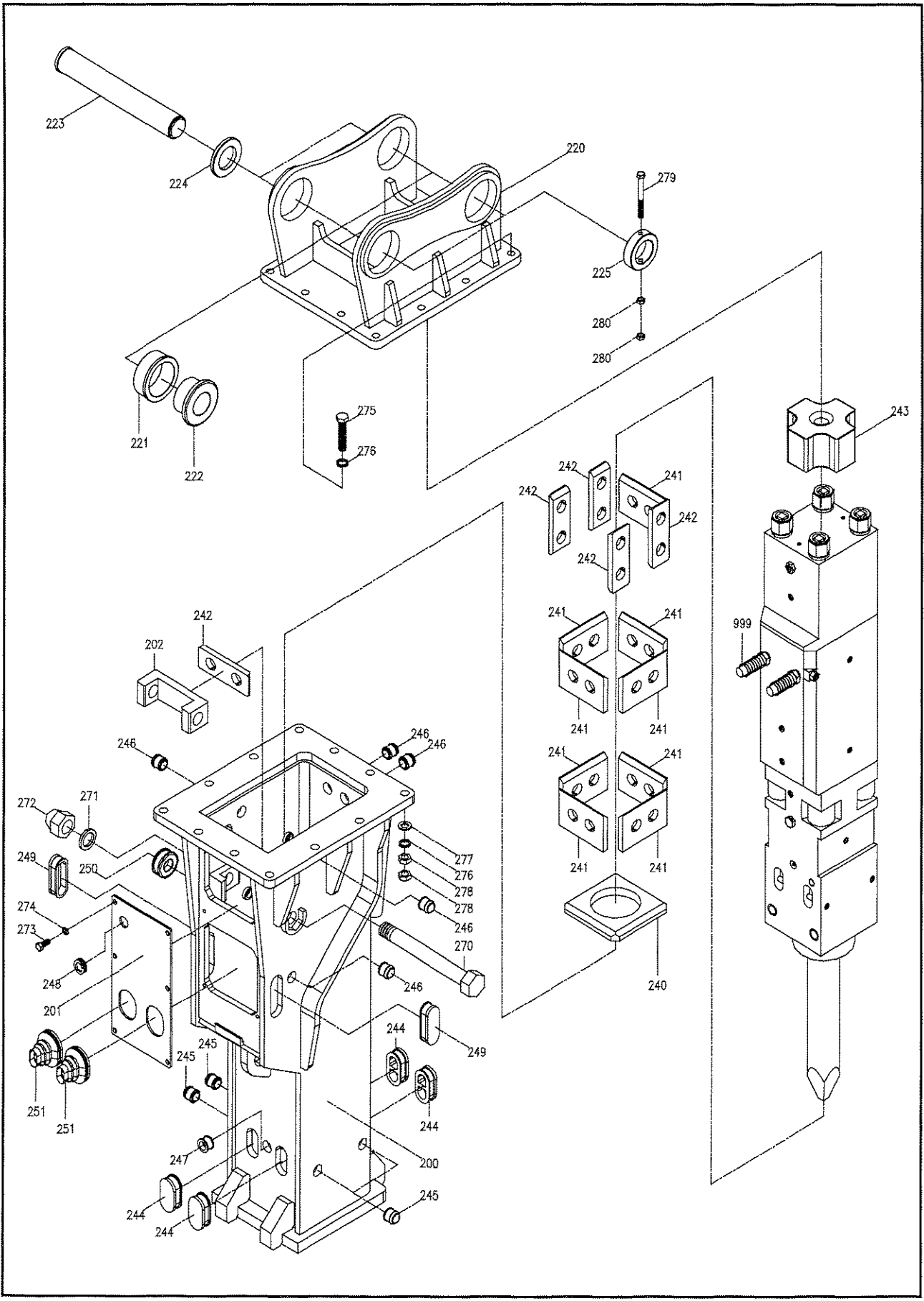
SJ-600 BREAKER TOP BRACKET



SJ-600, PARTS LIST - TOP BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD
	BRACKET ASSEMBLY		DBT691Z01A	1	
	ADAPTOR ASSEMBLY		DBT691Z11A	1	
	SIDE BOLT ASSEMBLY		DB670Y01A	1	
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DB600Z01A	1	1361 x 210 x 267
100	BRACKET ASSEMBLY	BRACKET - RIGHT	DBT691Z01	1	1221.5 x 191 x 515
101		BRACKET - LEFT		1	
102		SET PLATE "A"	DB610Y40	2	320 x 350 x 30
103		SET PLATE "B"	DB610Y41	2	80 x 350 x 30
104		SIDE BOLT	DB670Y01	6	M36 x P3.0 x L315
105		SIDE BOLT WASHER		6	M36
106		SIDE BOLT CAP NUT		6	M36 x P4.0 x L59
120		ADAPTOR ASSEMBLY		DBT691Z11	1
121	ADAPTOR ASSEMBLY	ADAPTOR WELDING BUSHING	DBT660Z11	4	D118 x L42
122		ADAPTOR PIN BUSHING	DBT671Z02	4	D118 x L67
123		ADAPTOR PIN	DBS665Z02	2	D65 x L446
124		ADAPTOR PIN WASHER	DB665Y06	2	D90 x L9
125		ADAPTOR PIN STOPPER	DBS665Z10	2	D96 x L30
140		BOLT / NUT	STOPPER HEX. BOLT	D75M112-05	2
141	STOPPER HEX. NUT		4		M12 x P1.75 x L10
142	ADAPTOR JOINT BOLT		D75M20-03	12	M20 x P2.5 x L90
143	ADAPTOR JOINT SPRING WASHER			24	M20
144	ADAPTOR JOINT FLAT WASHER			12	M20
145	ADAPTOR JOINT HEX. NUT			24	M20 x P2.5 x L16
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D803/4190S01	2	3/4" x 1900L x S/P

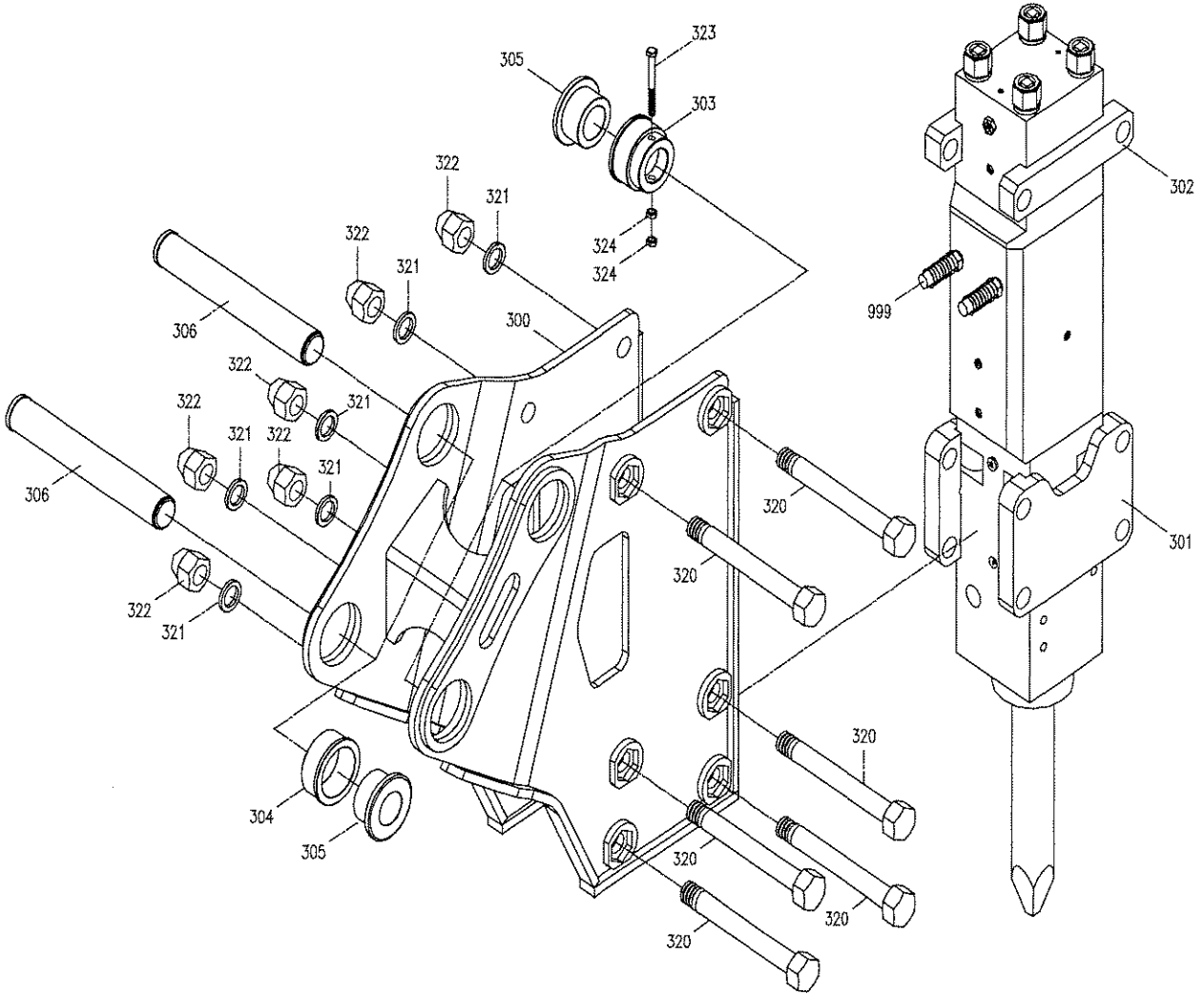
SJ-600 BREAKER SILENT BRACKET



SJ-600, PARTS LIST - SILENT BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD	
	BRACKET ASSEMBLY		DBS610Z01A	1		
	ADAPTOR ASSEMBLY		DYS691Z11A	1		
	SIDE BOLT ASSEMBLY		DB670Y01A	1		
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD	
	MAIN BODY	MAIN BODY ASSEMBLY	DB600Z01A	1	1361 x 210 x 267	
200	BRACKET ASSEMBLY	SILENT BRACKET ASSEMBLY	DBS610Z01A	1	1450 x 500 x 520	
201		UPPER COVER PLATE	DBSKT610Z11	1	525 x 222 x 7	
202		GUIDE PLATE	DBSKT610Z17	1	207 x 91 x 50	
220	ADAPTOR ASSEMBLY	ADAPTOR ASSEMBLY	DYS691Z11	1	570 x 500 x 370	
221		ADAPTOR WELDING BUSHING	DBT660Z11	4	D118 x L42	
222		ADAPTOR PIN BUSHING	DBT671Z02	4	D118 x L67	
223		ADAPTOR PIN	DB665Y10A	2	D65 x L465	
224		ADAPTOR PIN WASHER	DB665Y06	2	D86 x L9	
225		ADAPTOR PIN STOPPER	DBS665Z10	2	D96 x L30	
240	URETHANE & RUBBER	LOWER DAMPER	DBS611Y01	1	210 x 232 x 30	
241		SIDE DAMPER "A"	DBSKT611Z03	9	140 x 160 x 15	
242		SIDE DAMPER "B"	DBSKT611Z04	5	200 x 60 x 15	
243		UPPER DAMPER	DBSKT611Z02	1	210 x 212 x 103	
244		CHISEL PIN RUBBER PLUG	DYS611K01A1	4	77 x 45 x 16	
245		RUBBER PLUG		4	D30 x L16	
246		RUBBER PLUG		5	D40 x L16	
247		GREASING RUBBER PLUG "A"		1	D40 x L16	
248		GREASING RUBBER PLUG "B"		1	D40 x L7	
249		HYD. HOSE CHECK PLUG		2	170 x 50 x 16	
250		AIR VENT / ADJUSTER RUBBER PLUG		1	D80 x L16	
251		HYD HOSE BELLOWS		2	80 x 50 x 7	
270		BOLT / NUT		SIDE BOLT	DB670Y01	1
271	SIDE BOLT WASHER			1		M30
272	SIDE BOLT CAP NUT			1		M30 x P3.5 x L50
273	LOWER COVER BOLT			D75M14-03	7	M14 x P2.0 x L30
274	LOWER COVER SPRING WASHER				7	M14
275	ADAPTOR JOINT BOLT		D75M20-01	12	M20 x P2.5 x L100	
276	ADAPTOR JOINT SPRING WASHER			24	M20	
277	ADAPTOR JOINT FLAT WASHER			12	M20	
278	ADAPTOR JOINT HEX. NUT			24	M20 x P2.5 x L16	
279	STOPPER HEX BOLT		D75M12-05	2	M12 x P1.75 x L120	
280	STOPPER HEX NUT	4		M12 x P1.75 x L10		
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D803/4190S1	2	3/4" x 1900L x S/P	

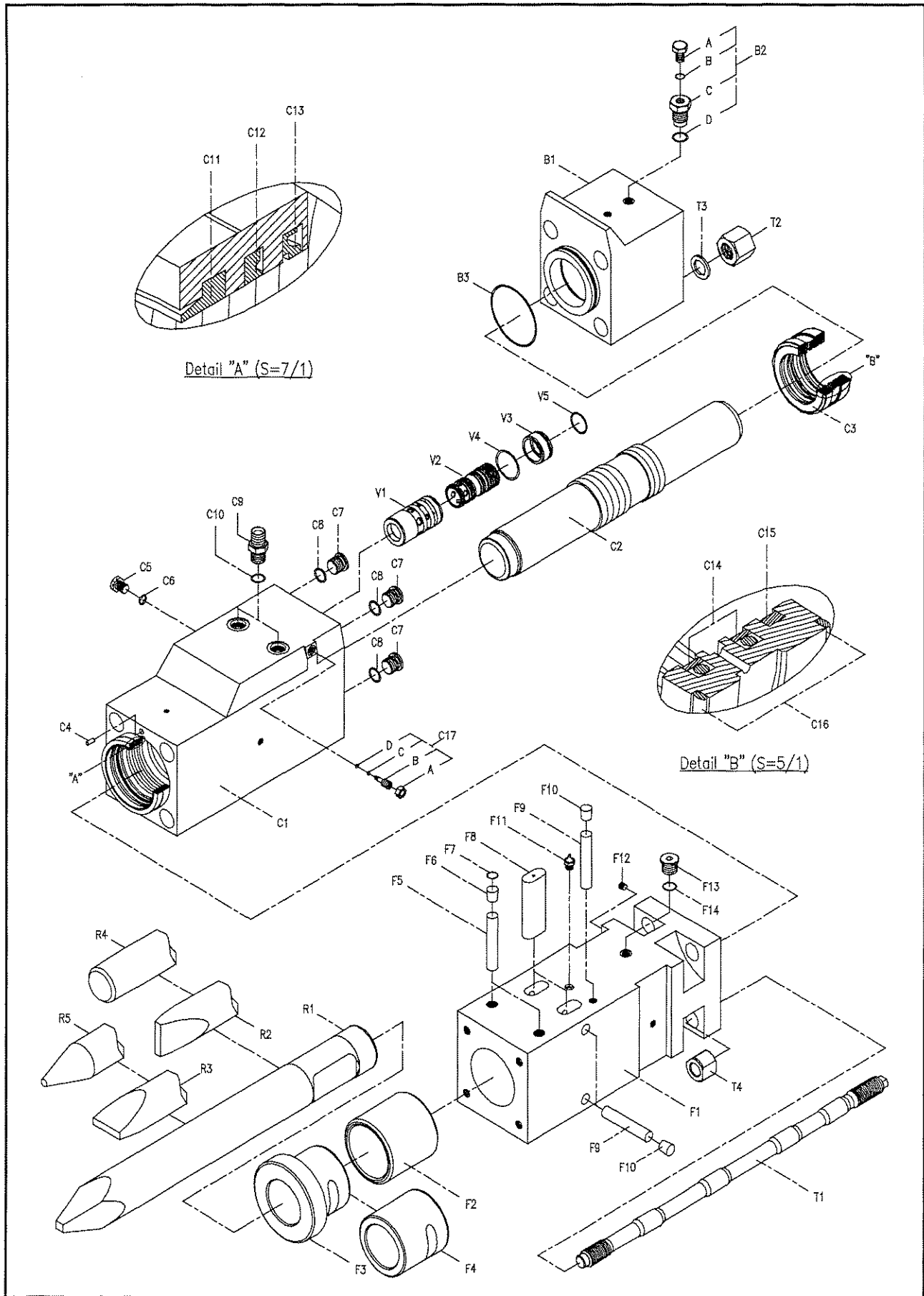
SJ-600 BREAKER SIDE BRACKET



SJ-600, PARTS LIST - SIDE BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD
	BRACKET ASSEMBLY		DY691Z01A	1	
	SIDE BOLT ASSEMBLY		DB670Z01A	1	
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DB600Z01A	1	1361 x 210 x 267
300	BRACKET ASSEMBLY	SIDE BRACKET	DY691Z01A	1	1361 x 894 x 416
301		SET PLATE "A"	DB610Y40	2	350 x 320 x 30
302		SET PLATE "B"	DB610Y41	2	350 x 80 x 30
303		WELDING BUSHING RIGHT	DB660Z11	2	D120 x L72.5
304		WELDING BUSHING LEFT	DB660Z10	2	D120 x L42
305		PIN BUSHING	DB671Z09	4	D118 x L52
306		BRACKET PIN	DY665Y01	2	D65 x L416
320		BOLT / NUT	SIDE BOLT	DB670Z01A	6
321	SIDE BOLT WASHER		6		M36
322	SIDE BOLT CAP NUT		6		M36 x P3.0 x L59
323	WELDING BUSHING HEX. BOLT		D75M14-01	2	M14 x P2.0 x L120
324	WELDING BUSHING HEX. NUT			4	M14 X P2.0 x L11
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D803/4190S1	2	3/4" x 1900L x S/P

SJ-700 BREAKER BODY

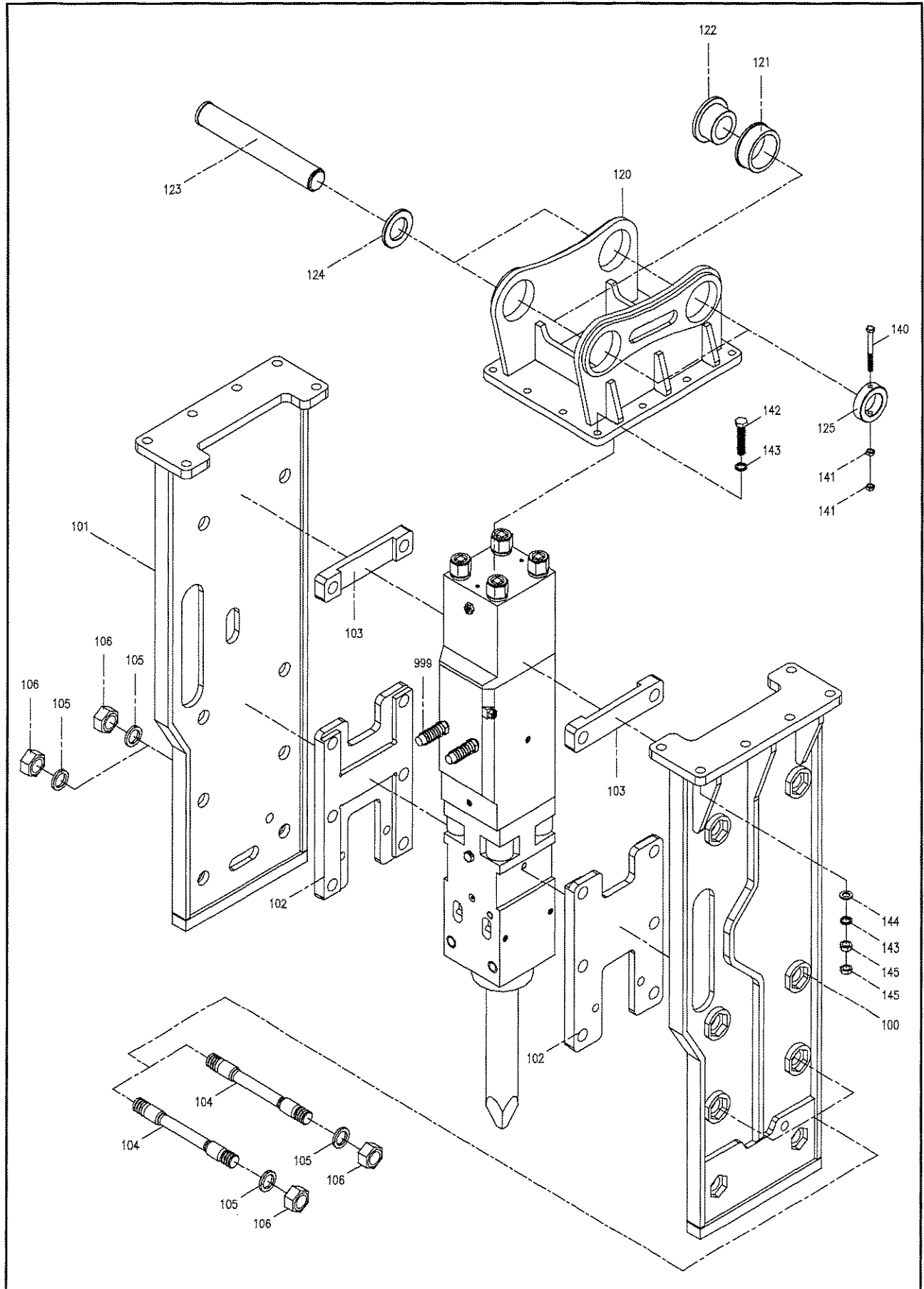


SJ-700, PARTS LIST - MAIN BODY ASSEMBLY

NO.	DESCRIPTION	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY ASS'Y	DY700Z01A	1	
	BACK HEAD ASS'Y	DY710Z01A	1	
	CYLINDER ASS'Y	DY715Z02A	1	
	FRONT HEAD ASS'Y	DY715Z03A	1	
	CONTROL VALVE ASS'Y	DY740Z01A	1	
	THROUGH BOLT ASS'Y	DY770Z10A	1	
	ACCUMULATOR ASS'Y	-	-	
	CHISEL	D90/07D-01	1	
	SEAL KIT	D30-0701	1	

NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
B1	BACK HEAD ASS'Y	BACK HEAD	DY710Z01	1	331 x 222 x 298
B2		GAS CHARGING VALVE ASS'Y	D40CV-01	1	PF 1/2"
B2_A		GAS CHARGING PLUG	D40CV-01-01	1	M10 x P1.0
B2_B		O-RING	D35P012	1	P12
B2_C		GAS CHARGING VALVE	D40CV-01	1	PF 1/2"
B2_D		O-RING	D35P018	1	P18
B3		O-RING	D35G150	1	G150
C1	CYLINDER ASS'Y	CYLINDER	DY715Z02	1	510 x 222 x 298
C2		PISTON	DY720Z01	1	D135 x L740
C3		CYLINDER BUSHING	DY725Z01	1	D160 x L52
C4		LOCK PIN	DH765Z23A1	2	D12.35 x L30
C5		AIR VENT VALVE	D771/20-02	1	PF 1/2"
C6		O-RING	D35P018	1	P18
C7		PLUG	D773/40-01	3	PF 3/4"
C8		O-RING	D35P024	3	P24
C9		NIPPLE	D851PF5	2	PF 1" x 5
C10		O-RING	D35P029	2	P29
C11		DUST SEAL	D30DSI125-01	1	DSI 125
C12		U-PACKING	D30ISI125-01	1	ISI 125
C13		BUFFER SEAL	D30HBY125-01	1	HBY 125
C14		STEP SEAL	D30STE123.5-01	2	STS 123.5
C15		GAS SEAL	D30GAS123.5-01	1	GAS 123.5
C16		O-RING	D35P150	2	P150
C17		VALVE ADJUSTER ASS'Y	DY715Z02	1	M20 x P1.5 x L82.5
C17_A	VALVE ADJUSTER NUT				
C17_B	VALVE ADJUSTER				
C17_C	O-RING	D35P012	1	P12	
C17_D	BACK UP RING	D35BT2P012	1	T2 P12	
F1	FRONT HEAD ASS'Y	FRONT HEAD	DY715Z03	1	642 x 222 x 258
F2		CHISEL BUSHING	DY760Z01	1	D151.5 x L150
F3		FRONT BUSHING (TOP TYPE)	DY760Z02	1	D220 x L150
F4		FRONT BUSHING (SILENCE TYPE)	DY760Z03	1	D178 x L115
F5		FRONT BUSHING PIN	DY765Y24	2	D25 x L178
F6		RUBBER PLUG	D77RD25-01	2	D25
F7		R SNAP RING	D99L025-02	2	D25
F8		CHISEL PIN	DY765Y21	2	189 x 40 x 75
F9		BUSHING STOP PIN	DY765Y23	3	D17 x L185
F10		RUBBER PLUG	D77RD18-01	3	D17
F11		GREASE NIPPLE	D851/4G01	1	PT 1/4"
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
F12	FRONT HEAD ASS'Y	TAPER PLUG	D75N1/4-01	1	PT 1/4"
F12		PLUG	D771/20-03	1	PF 1/2"
F13		O-RING	D35P018	1	P18
V1	CONTROL VALVE ASS'Y	VALVE BUSH	DY740Z01	1	D65 x L130
V2		MAIN VALVE	DY740Z02	1	D49 x L131
V3		VALVE CAP	DY740Z03	1	D65 x L36
V4		O-RING	D35G060	1	G60
V5		O-RING	D35G045	1	G45
T1	THROUGH BOLT ASS'Y	THROUGH BOLT	DY770Z10	4	RD42 x L965
T2		BACK HEAD NUT	DY770Z11	4	RD42 x L60
T3		BACK HEAD WASHER	DY770Z12	4	D67 x L15
T4		FRONT HEAD NUT	DY770Z13	4	RD42 x L56
R1	CHISEL	MOIL TYPE	D90/07D-01	1	D125 x L1100
R2		FLAT WEDGE - VERTICAL	D90/07D-02	1	
R3		FLAT WEDGE - HORIZONTAL		1	
R4		BLUNT TYPE	D90/07D-03	1	
R5		CONICAL TYPE	D90/07D-04	1	

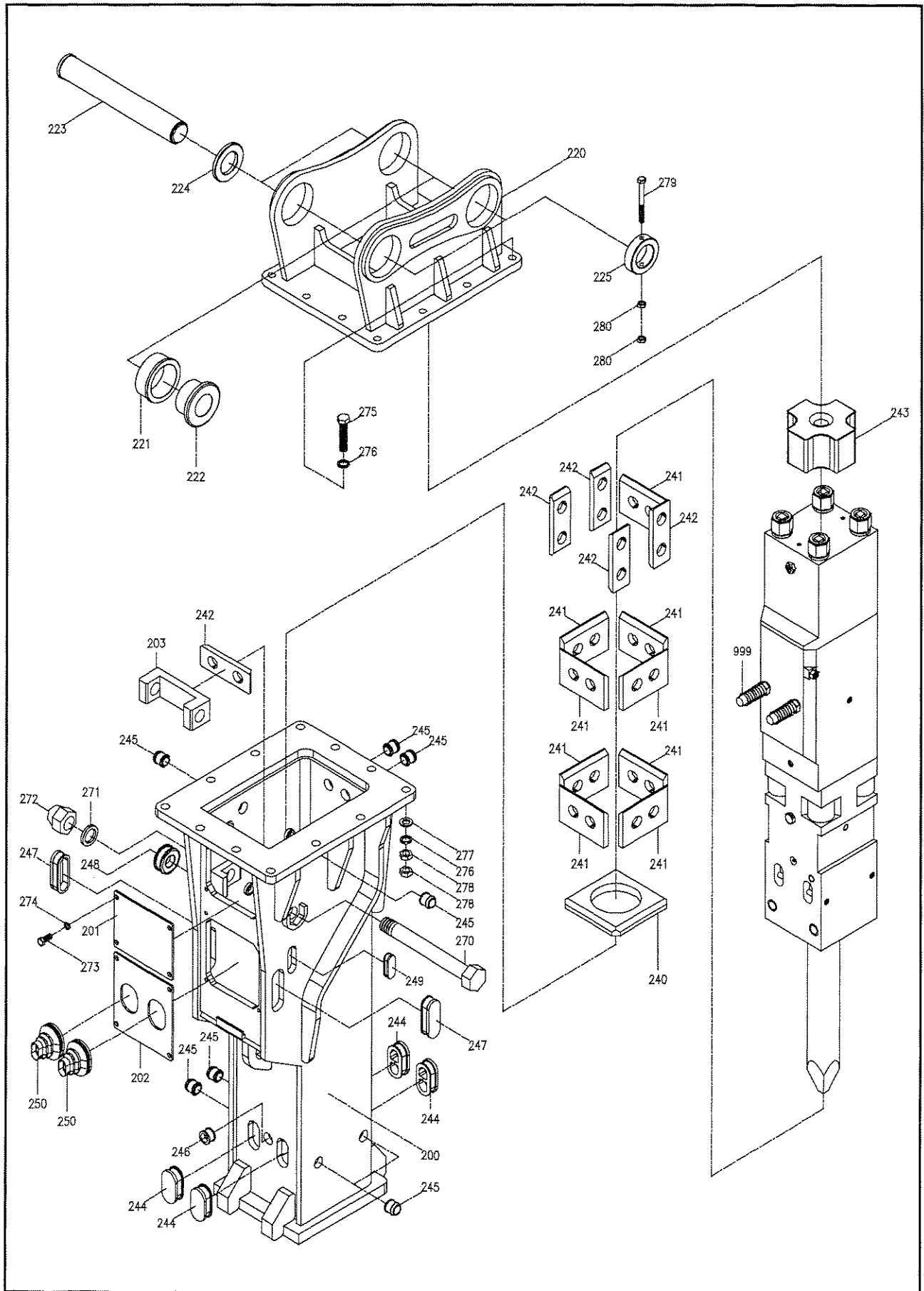
SJ-700 BREAKER TOP BRACKET



SJ-700, PARTS LIST - TOP BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD
	BRACKET ASSEMBLY		DBT791Z01A	1	
	ADAPTOR ASSEMBLY		DBT791Z11A	1	
	SIDE BOLT ASSEMBLY		DY770Z01A	1	
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DY700Z01A	1	1538 x 222 x 298
100	BRACKET ASSEMBLY	BRACKET - RIGHT	DBT791Z01	1	1583 x 215 x 560
101		BRACKET - LEFT		1	
102		SET PLATE "A"	DBT710Z40	2	556 x 385 x 40
103		SET PLATE "B"	DBT710Z41	2	385 x 80 x 40
104		SIDE BOLT	DY770Z01A	8	M42 x P3.0 x L400
105		SIDE BOLT WASHER	DY770Z03	16	D78 x L12
106		SIDE BOLT NUT	DY770Z02	16	M42 x P3.0 x L32
120	ADAPTOR ASSEMBLY	ADAPTOR ASSEMBLY	DBT791Z11	1	652 x 510 x 411
121		ADAPTOR WELDING BUSHING	DBS860Z10	4	D158 x L60
122		ADAPTOR PIN BUSHING	DBS871Z01	4	D158 x L70
123		ADAPTOR PIN	DB765Z01	2	D80 x L508
124		ADAPTOR PIN WASHER	DH865Z07	2	D135 x L14
125		ADAPTOR PIN STOPPER	DB865Y10	2	D129 x L36
140	BOLT / NUT	STOPPER HEX. BOLT	D75M16-04	2	M16 x P2.0 x L160
141		STOPPER HEX. NUT		4	M16 x P2.0 x L13
142		ADAPTOR JOINT BOLT	D75M24-02	12	M24 x P3.0 x L110
143		ADAPTOR JOINT SPRING WASHER		24	M24
144		ADAPTOR JOINT FLAT WASHER		12	M24
145		ADAPTOR JOINT HEX. NUT		24	M24 x P3.0 x L19
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D801220S2	2	1" x 2200L x S/P

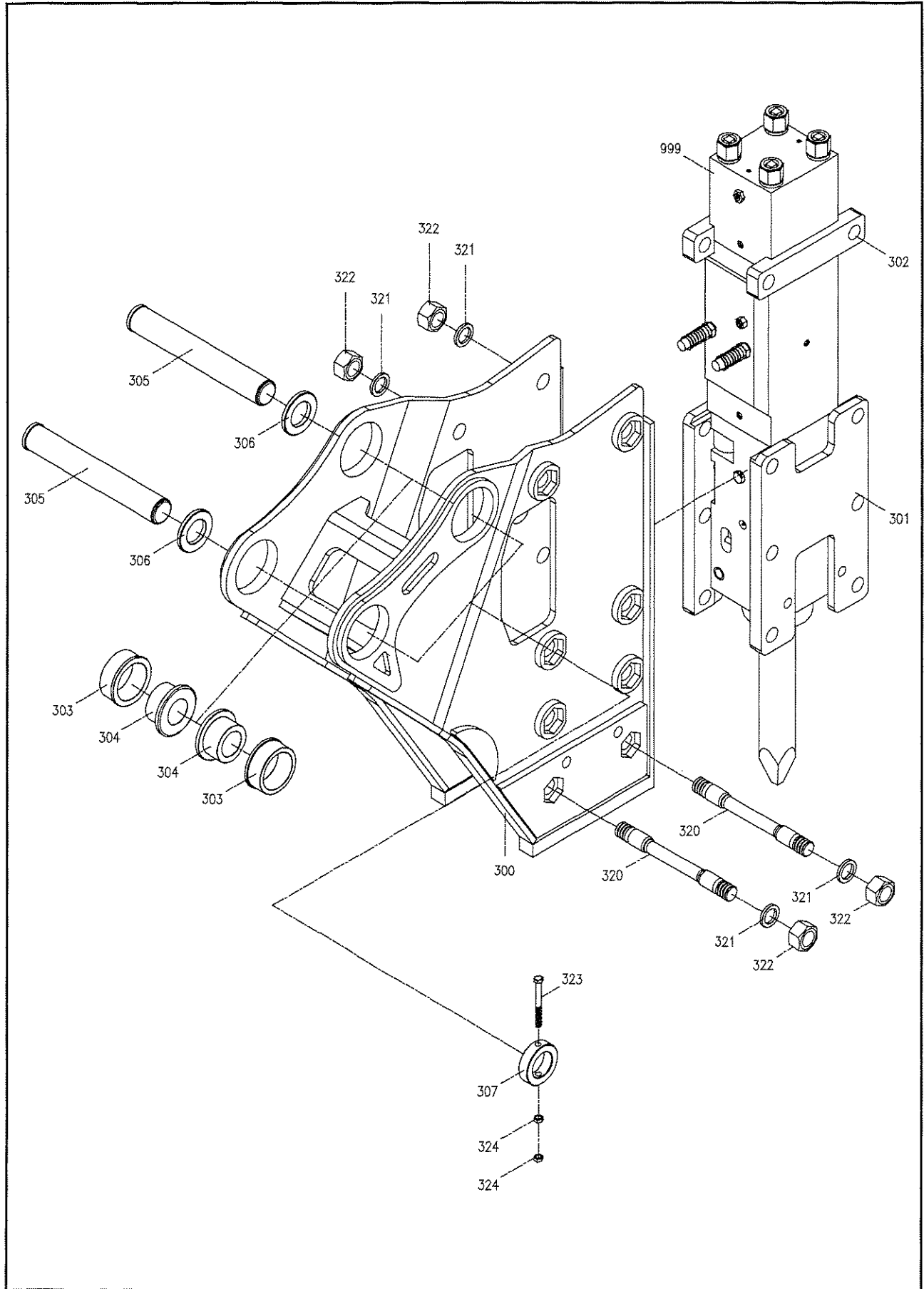
SJ-700 BREAKER SILENT BRACKET



SJ-700, PARTS LIST - SILENT BRACKET ASSEMBLY

NO.	DESCRIPTION	PARTS NUMBER	Q'TY	STANDARD		
	BRACKET ASSEMBLY	DBS710Z01A	1			
	ADAPTOR ASSEMBLY	DBS791Z11A	1			
	SIDE BOLT ASSEMBLY	DB670Y02A	1			
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD	
	MAIN BODY	MAIN BODY ASSEMBLY	DY700Z01A	1	1538 x 222 x 298	
200	BRACKET ASSEMBLY	SILENT BRACKET ASSEMBLY	DBS710Z01A	1	1605 x 510 x 560	
201		UPPER COVER PLATE	DYS710Y10	1	160 x 238 x 7	
202		LOWER COVER PLATE		1		
203		GUIDE PLATE	DYS710Y17	1	223 x 82 x 50	
220	ADAPTOR ASSEMBLY	ADAPTOR ASSEMBLY	DBS791Z11	1	652 x 510 x 411	
221		ADAPTOR WELDING BUSHING	DBS860Z10	4	D158 x L60	
222		ADAPTOR PIN BUSHING	DBS871Z01	4	D158 x L70	
223		ADAPTOR PIN	DB765Z01	2	D80 x L508	
224		ADAPTOR PIN WASHER	DH865Z07	2	D135 x L14	
225		ADAPTOR PIN STOPPER	DB865Y10	2	D129 x L36	
240	URETHANE & RUBBER	LOWER DAMPER	DYS711Y01	1	222 x 258 x 30	
241		SIDE DAMPER "A"	DYS711Y03	9	210 x 140 x 20	
242		SIDE DAMPER "B"	DHSKT911Z04	5	235 x 80 x 20	
243		UPPER DAMPER	DBSKT611Z02	1	212 x 210 x 103	
244		CHISEL PIN RUBBER PLUG	DYS711Y01A1	4	88 x 46 x 22	
245		RUBBER PLUG		8	D40 x L20	
246		GREASING RUBBER PLUG "A"		1	D40 x L20	
247		HYD. HOSE CHECK PLUG		2	170 x 50 20	
248		AIR VENT RUBBER PLUG		1	D80 x L22	
249		ADJUSTER RUBBER PLUG		1	88 x 46 x22	
250		HYD HOSE BELLOWS		2	115 x 86 x 7	
270	BOLT / NUT	SIDE BOLT		DB670Y02	1	M36 x P3.0 x L340
271		SIDE BOLT WASHER			1	M36
272		SIDE BOLT CAP NUT			1	M36 x P3.0 x L59
273		LOWER COVER BOLT		D75M14-03	8	M14 x P2.0 x L30
274		LOWER COVER SPRING WASHER	8		M14	
275		ADAPTOR JOINT BOLT	D75M24-02	12	M24 x P3.0 x L110	
276		ADAPTOR JOINT SPRING WASHER		24	M24	
277		ADAPTOR JOINT FLAT WASHER		12	M24	
278		ADAPTOR JOINT HEX. NUT	D75M16-04	24	M24 x P3.0 x L19	
279		STOPPER HEX BOLT		2	M16 x P2.0 x L160	
280	STOPPER HEX NUT	4	M16 x P2.0 x L13			
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D801220S2	2	1" x 2200L x S/P	

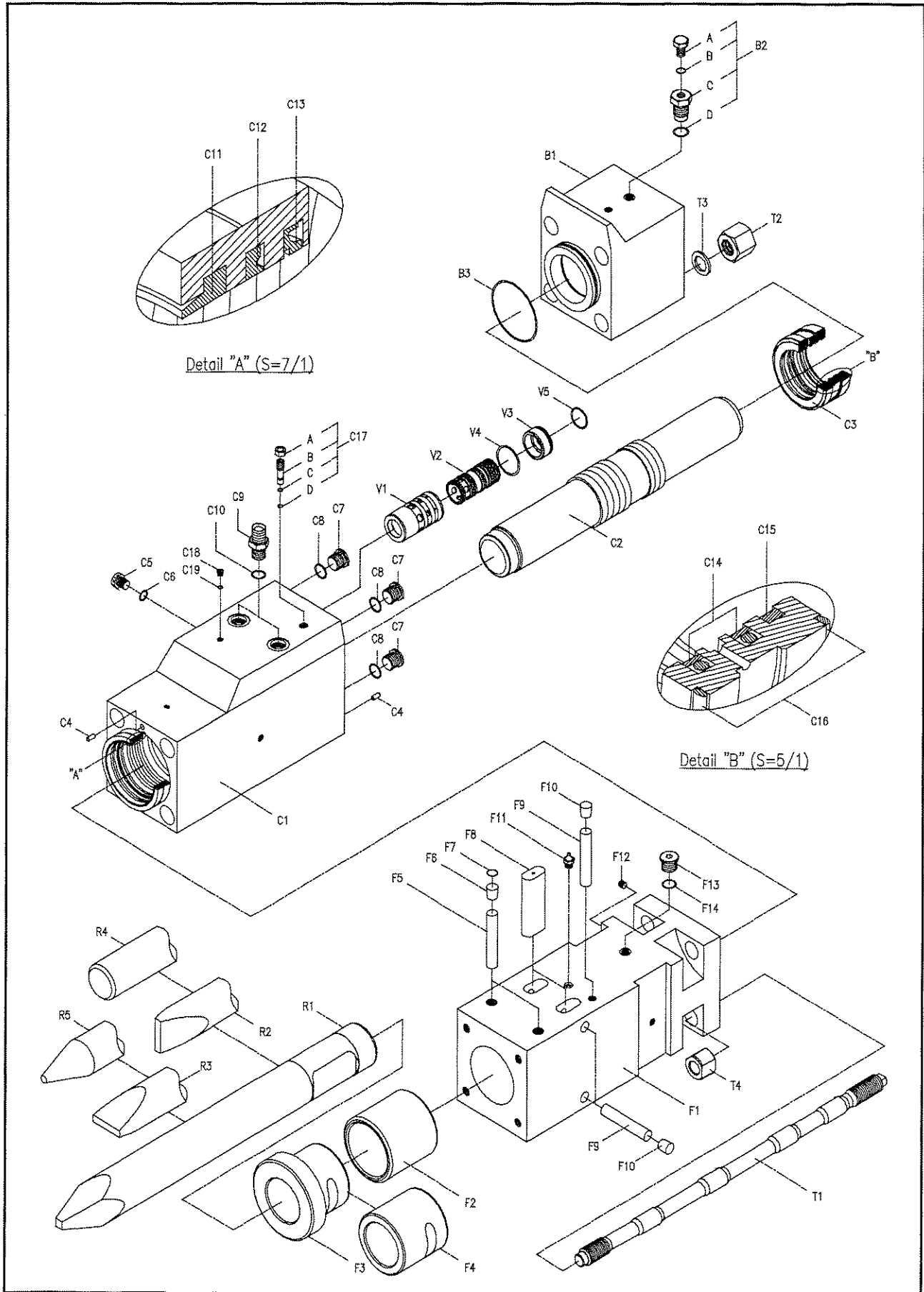
SJ-700 BREAKER SIDE BRACKET



SJ-700, PARTS LIST - SIDE BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD
	BRACKET ASSEMBLY		DY791Z01A	1	
	SIDE BOLT ASSEMBLY		DY770Z01A	1	
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DY700Z01A	1	1538 x 222 x 298
300	BRACKET ASSEMBLY	BRACKET	DY791Z01	1	1538 x 1151 x 515
301		SET PLATE "A"	DY710Z40	2	385 x 556 x 40
302		SET PLATE "B"	DY710Z41	2	385 x 80 x 40
303		BRACKET WELDING BUSHING	DBS860Z10	4	D158 x L60
304		BRACKET PIN BUSHING	DBS871Z01	4	D158 x L70
305		BRACKET PIN	DB765Z02	2	D80 x L515
306		BRACKET PIN WASHER	DB965Z07	2	D135 x L14
307		BRACKET PIN STOPPER	DB865Y10	2	D129 x L36
320	BOLT / NUT	SIDE BOLT	DY770Z01A	8	M42 x P3.0 x L400
321		SIDE BOLT WASHER	DY770Z03	16	D78 x L12
322		SIDE BOLT NUT	DY770Z02	16	M42 x P2.0 x L32
323		STOPPER HEX. BOLT	D75M16-04	2	M16 x P2.0 x L160
324		STOPPER HEX. NUT		4	M16 x P2.0 x L13
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D801220S2	2	1" x 2200L x S/P

SJ-760 BREAKER BODY

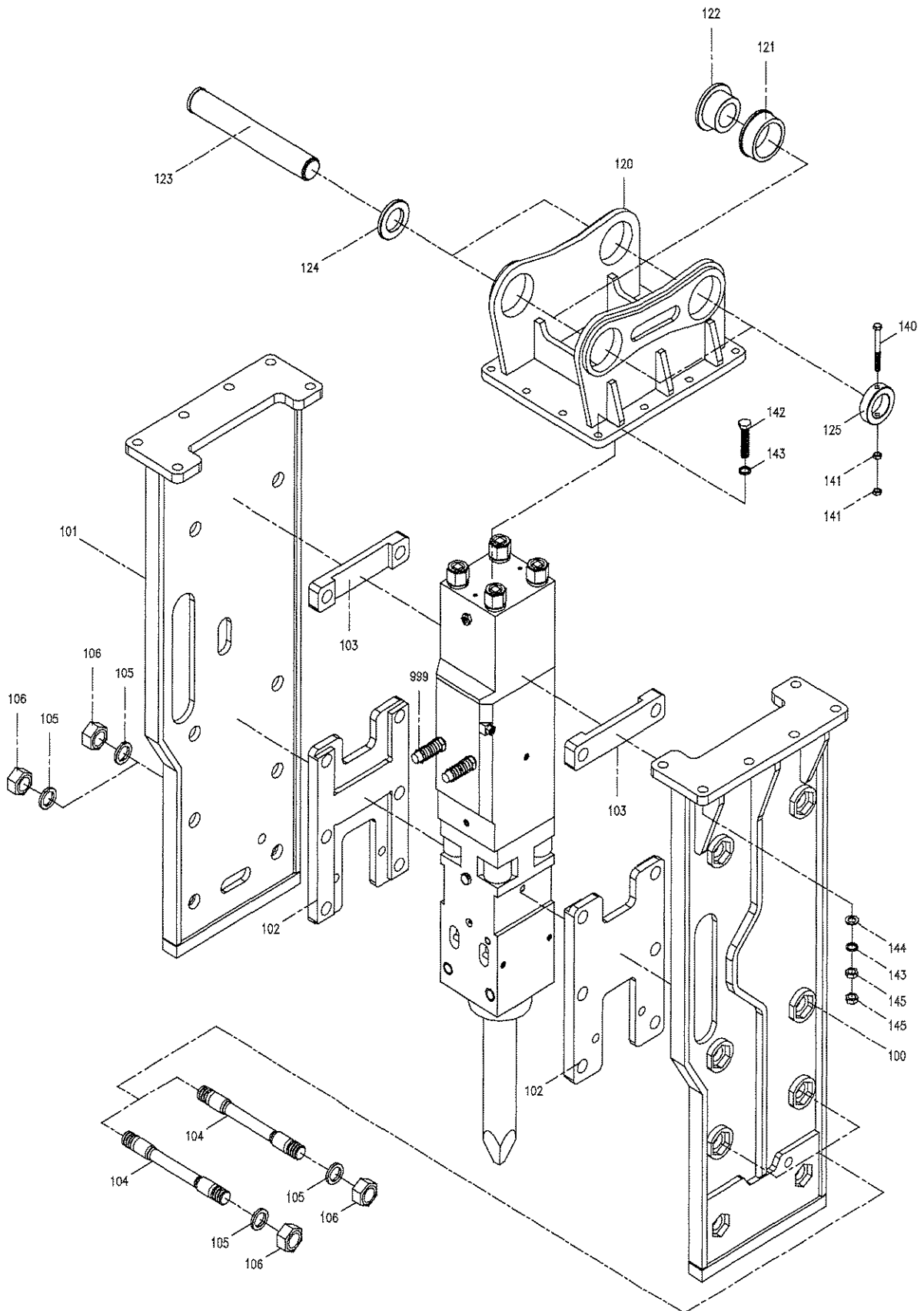


SJ-760, PARTS LIST - MAIN BODY ASSEMBLY

NO.	DESCRIPTION	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY ASS'Y	DY760Z02A	1	
	BACK HEAD ASS'Y	DY7615Z01A	1	
	CYLINDER ASS'Y	DY7615Z02	1	
	FRONT HEAD ASS'Y	DY7615Z03	1	
	CONTROL VALVE ASS'Y	DY7640Z01A	1	
	THROUGH BOLT ASS'Y	DY7670Z10A	1	
	ACCUMULATOR ASS'Y	-	-	
	CHISEL	D90/0760-01-A	1	
	SEAL KIT	D30-0760-01S	1	

NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD	
B1	BACK HEAD ASS'Y	BACK HEAD	DY7615Z01	1	329 x 237 x 322	
B2		GAS CHARGING VALVE ASS'Y	D40CV-01	1	PF 1/2"	
B2_A		GAS CHARGING PLUG	D40CV-01-01	1	M10 x P1.0	
B2_B		O-RING	D35P012	1	P12	
B2_C		GAS CHARGING VALVE	D40CV-01	1	PF 1/2"	
B2_D		O-RING	D35P018	1	P18	
B3		O-RING	D35G165	1	G165	
C1	CYLINDER ASS'Y	CYLINDER	DY7615Z02	1	540 x 237 x 322	
C2		PISTON	DY7620Z01	1	D146 x L778	
C3		CYLINDER BUSHING	DY7625Z01	1	D175 x L54	
C4		LOCK PIN	DH765Z23A1	2	D12.35 x L30	
C5		AIR VENT VALVE	D771/20-02	1	PF 1/2"	
C6		O-RING	D35P018	1	P18	
C7		PLUG	D773/40-01	3	PF 3/4"	
C8		O-RING	D35P024	6	P24	
C9		NIPPLE	D851PF5	2	PF 1" x 5	
C10		O-RING	D35P029	2	P29	
C11		DUST SEAL	D30DSI135-01	1	LPI 135	
C12		U-PACKING	D30ISI135-01	1	ISI 135	
C13		BUFFER SEAL	D30HBY135	1	HBY 135	
C14		STEP SEAL	D30STE133-01	1	STS 133	
C15		GAS SEAL	D30GAS133-01	1	YGS 133	
C16		O-RING	D35G165	2	G165	
C17		VALVE ADJUSTER ASS'Y	DB840Y02	1	M18 x P1.5 x L67	
C17_A		VALVE ADJUSTER NUT				
C17_B		VALVE ADJUSTER				
C17_C	O-RING	D35P011	1	P11		
C17_D	BACK UP RING	D35BT2P011	1	T2 P11		
C18	PLUG	D771/40-1	1	PF 1/4"		
C19	O-RING	D35SP011	1	P11		
F1	FRONT HEAD ASS'Y	FRONT HEAD	DY7615Z03	1	658 x 237 x 275	
F2		CHISEL BUSHING	DY7660Z01	1	D165 x L164	
F3		FRONT BUSHING (TOP TYPE)	DY7660Z02	1	D237 x L146	
F4		FRONT BUSHING (SILENCE TYPE)	DY7660Z03	1	D191 x L110	
F5		FRONT BUSHING PIN	DY7665Z23	2	D26 x L203	
F6		RUBBER PLUG	D77RD25-01	2	D26	
F7		R SNAP RING	D99L025-02	2	D26	
F8		CHISEL PIN	DY7665Z21-S	2	197 x 40 x 81	
F9		BUSHING STOP PIN	DY765Y23	3	D17 x L190	
F10	FRONT HEAD ASS'Y	RUBBER PLUG	D77RD20-01	3	D20	
F11		GREASE NIPPLE	D851/4G01	1	PT 1/4"	
F12		TAPER PLUG	D75N1/4-01	1	PT 1/4"	
F13		PLUG	D771/20-01	1	PF 1/2"	
F14		O-RING	D35P018	1	P18	
V1	CONTROL VALVE ASS'Y	VALVE BUSH	DY7640Z01	1	D70 x L138	
V2		MAIN VALVE	DY7640Z02	1	D54.5 x L131	
V3		VALVE CAP	DY7640X03	1	D70 x L37	
V4		O-RING	D35G050	1	G50	
V5		O-RING	D35G065	1	G65	
T1	THROUGH BOLT ASS'Y	THROUGH BOLT	DY7670Z10	4	RD48 x L1019	
T2		BACK HEAD NUT	DY7670Z11	4	RD48 x L70	
T3		BACK HEAD WASHER	DY7670Z12	4	D75 x L18	
T4		FRONT HEAD NUT	DY7670Z13	4	RD48 x L60	
R1	CHISEL	MOIL TYPE	D90/0760-01-S	1	D135 x L1200	
R2		FLAT WEDGE - VERTICAL	D90/0760-03-S	1		
R3		FLAT WEDGE - HORIZONTAL		1		
R4		BLUNT TYPE		D90/0760-05-S		1
R5		CONICAL TYPE		D90/0760-06-S		1

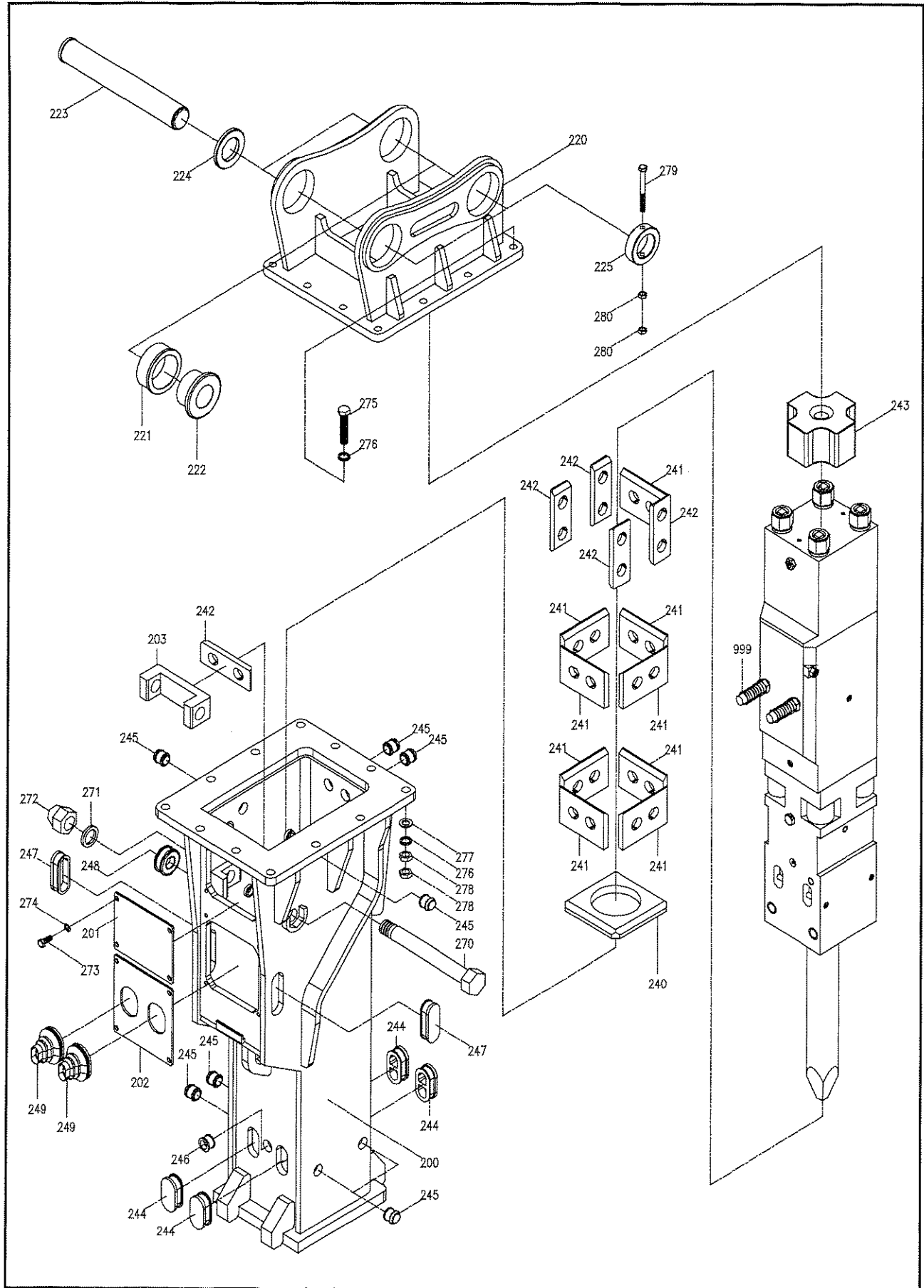
SJ-760 BREAKER TOP BRACKET



SJ-760, PARTS LIST - TOP BRACKET ASSEMBLY

NO.	DESCRIPTION	PARTS NUMBER	Q'TY	STANDARD	
	BRACKET ASSEMBLY	DYT7691Z01A	1		
	ADAPTOR ASSEMBLY	DYT7691Z011A	1		
	SIDE BOLT ASSEMBLY	DHB870Z01A	1		
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DY760Z01A	1	1557 x 237 x 354
100	BRACKET ASSEMBLY	BRACKET - RIGHT	DYT7691Z01	1	1654 x 215 x 615
101		BRACKET - LEFT		1	
102		SET PLATE "A"	DY76910Z40	2	595 x 405 x 45
103		SET PLATE "B"	DY76910Z41	2	90 x 405 x 45
104		SIDE BOLT	DHB870Z01A	8	M48 x P3.0 x L460
105		SIDE BOLT WASHER	DY7670Y03	16	D72 x L17
106		SIDE BOLT NUT	DY7670Y02	16	M48 x P3.0 x L45
120		ADAPTOR ASSEMBLY	ADAPTOR ASSEMBLY	DYT7691Z11	1
121	ADAPTOR WELDING BUSHING		DB860Y10	4	D158 x L60
122	ADAPTOR PIN BUSHING		DB871Y01	4	D158 x L71
123	ADAPTOR PIN		DY7665Z01	2	D8 x L538
124	ADAPTOR PIN WASHER		DY1265Z07	2	D135 x L14
125	ADAPTOR PIN STOPPER		DB865Y10	2	D129 x L36
140	BOLT / NUT	STOPPER HEX. BOLT	D75M16-04	2	M16 x P2.0 x L170
141		STOPPER HEX. NUT		4	M16 x P2.0
142		ADAPTOR JOINT BOLT	D75M27-02	12	M27 x P3.0 x L130
143		ADAPTOR JOINT SPRING WASHER		24	M27
144		ADAPTOR JOINT FLAT WASHER		12	M27
145		ADAPTOR JOINT HEX. NUT		24	M27 x P3.0
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D801220S1	2	1" x 2200L x S/P

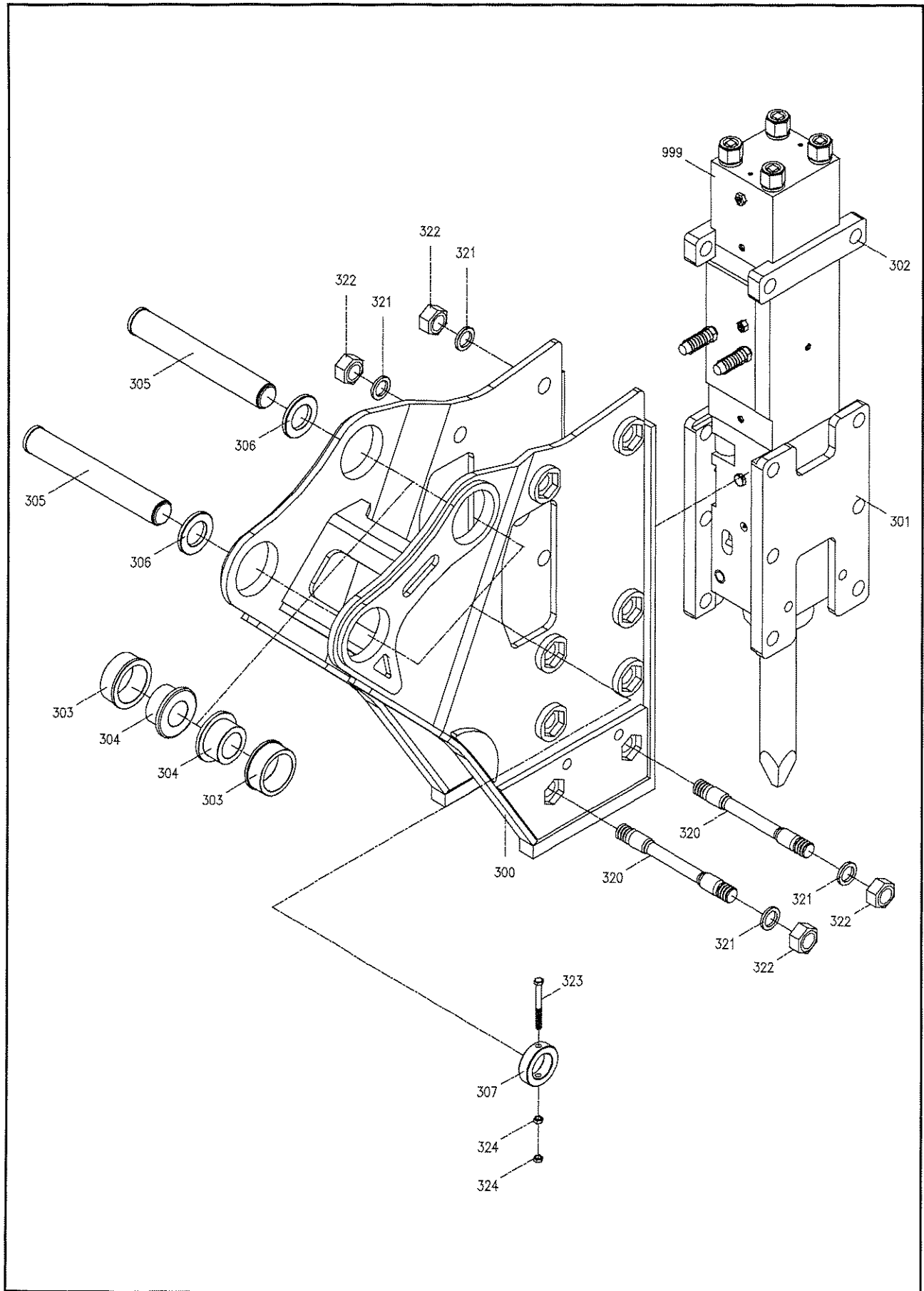
SJ-760 BREAKER SILENT BRACKET



SJ-760, PARTS LIST - SILENT BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD
	BRACKET ASSEMBLY		DYS7691Z01A	1	
	ADAPTOR ASSEMBLY		DYS7691Z11A	1	
	SIDE BOLT ASSEMBLY		DYS7670Z01A	1	
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DY760Z01A	1	1557 x 237 x 354
200	BRACKET ASSEMBLY	SILENT BRACKET ASSEMBLY	DYS7691Z01	1	1677 x 540 x 615
201		UPPER COVER PLATE	DYS7610Z11-A	1	247 x 226.5 x 7
202		LOWER COVER PLATE	DYS7610Z10-A	1	247 x 357 x 7
203		GUIDE PLATE	DYS7610Z16-A	1	238 x 96 x 80
220	ADAPTOR ASSEMBLY	ADAPTOR ASSEMBLY	DYS7691Z11	1	680 x 540 x 425
221		ADAPTOR WELDING BUSHING	DB860Y10	4	D158 x L60
222		ADAPTOR PIN BUSHING	DH871Y01	4	D158 x L71
223		ADAPTOR PIN	DY7665Z01	2	D80 x L538
224		ADAPTOR PIN WASHER	DY1265Z07	2	D135 x L14
225		ADAPTOR PIN STOPPER	DB865Y10	2	D129 x L36
240	URETHANE & RUBBER	LOWER DAMPER	DYS7611Y01-S	1	237 x 275 x 30
241		SIDE DAMPER "A"	DYS811Y03	9	210 x 140 x 20
242		SIDE DAMPER "B"	DH871Y01	5	235 x 80 x 20
243		UPPER DAMPER	DYS7611Z02-S	1	200 x 200 x 141
244		CHISEL PIN RUBBER PLUG	DYS7611Y01A1	4	111 x 55 x 23
245		RUBBER PLUG		8	D40 x L22
246		GREASING RUBBER PLUG "A"		1	D40 x L22
247		HYD. HOSE CHECK PLUG		2	140 x 50 x 22
248		AIR VENT RUBBER PLUG		1	D80 x L22
249		HYD HOSE BELLOWS		2	115 x 86 x 7
270	BOLT / NUT	SIDE BOLT	DYS7670Z01	1	M42 x P3.0 x L419
271		SIDE BOLT WASHER		2	M42
272		SIDE BOLT CAP NUT		2	M42 x P3.0
273		LOWER COVER BOLT	D75M14-03	8	M14 x P2.0 x L30
274		LOWER COVER SPRING WASHER		8	M14
275		ADAPTOR JOINT BOLT	D75M27-02	12	M27 x P3.0 x L130
276		ADAPTOR JOINT SPRING WASHER		24	M27
277		ADAPTOR JOINT FLAT WASHER		12	M27
278		ADAPTOR JOINT HEX. NUT	D75M16-04	24	M27 x P3.0
279		STOPPER HEX BOLT		2	M16 x P2.0 x L170
280	STOPPER HEX NUT	4	M16 x P2.0		
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D80I220S1	2	1" x 2200L x S/P

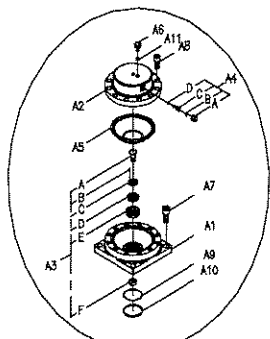
SJ-760 BREAKER SIDE BRACKET



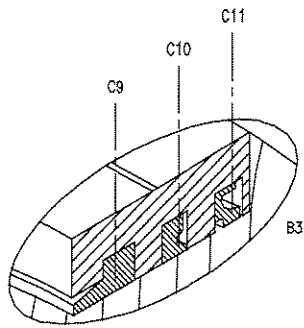
SJ-760, PARTS LIST - SIDE BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD
	BRACKET ASSEMBLY		DY7691Z01A	1	
	SIDE BOLT ASSEMBLY		DHB870Z01A	1	
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DY760Z01A	1	1557 x 237 x 354
300	BRACKET ASSEMBLY	BRACKET	DY7691Z01A	1	1593 x 1244 x 562
301		SET PLATE "A"	DY76910Z40	2	595 x 405 x 45
302		SET PLATE "B"	DY76910Z41	2	90 x 405 x 45
303		BRACKET WELDING BUSHING	DB860Y10	4	D158 x L60
304		BRACKET PIN BUSHING	DB871Y01	4	D158 x L71
305		BRACKET PIN	DY7665Z03	2	D80 x L562
306		BRACKET PIN WASHER	DY1265Z07	2	D135 x L14
307		BRACKET PIN STOPPER	DB865Y10	2	D129 x L36
320	BOLT / NUT	SIDE BOLT	DHB870Z01A	8	M48 x P3.0 x L460
321		SIDE BOLT WASHER	DY7670Y03	16	D72 x L17
322		SIDE BOLT NUT	DY7670Y02	16	M48 x P3.0 x L45
323		STOPPER HEX. BOLT	D75M16-04	2	M16 x P2.0 x L170
324		STOPPER HEX. NUT		4	M16 x P2.0
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D801220S1	2	1" x 2200L x S/P

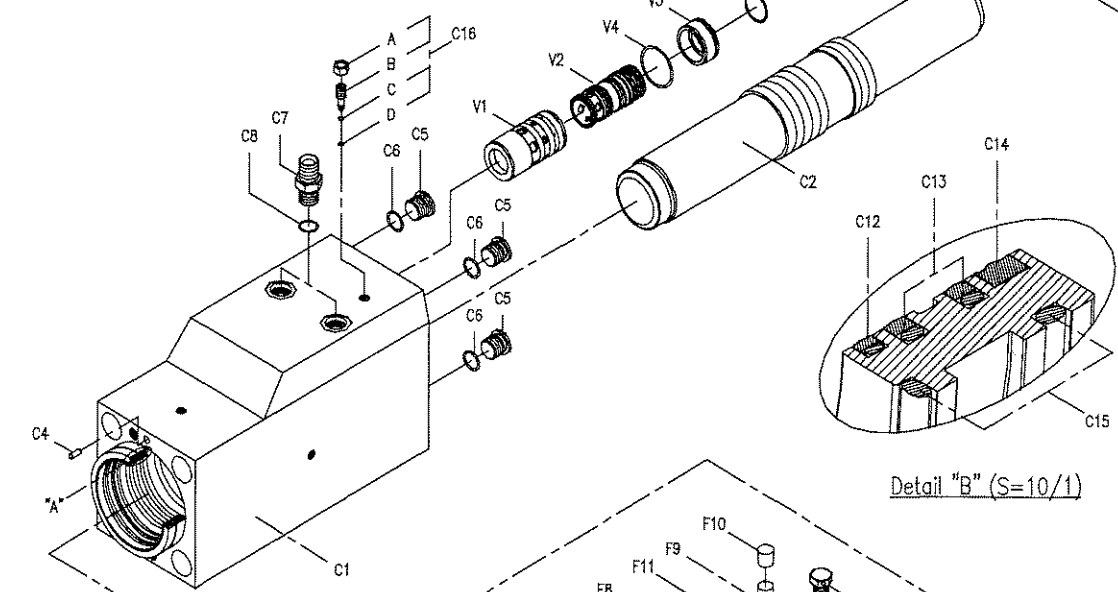
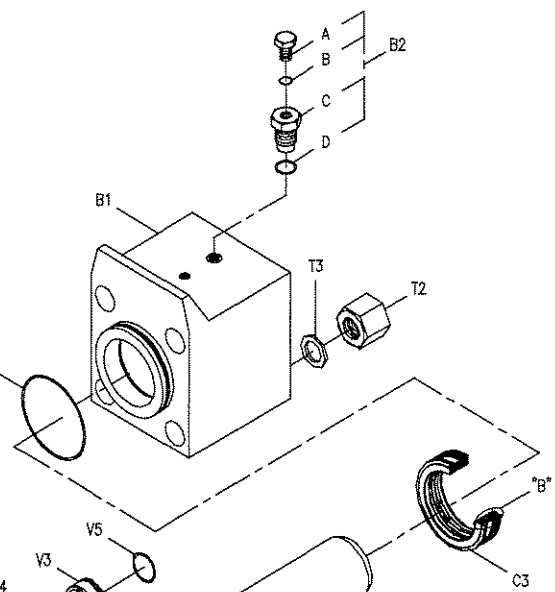
SJ-800 BREAKER BODY



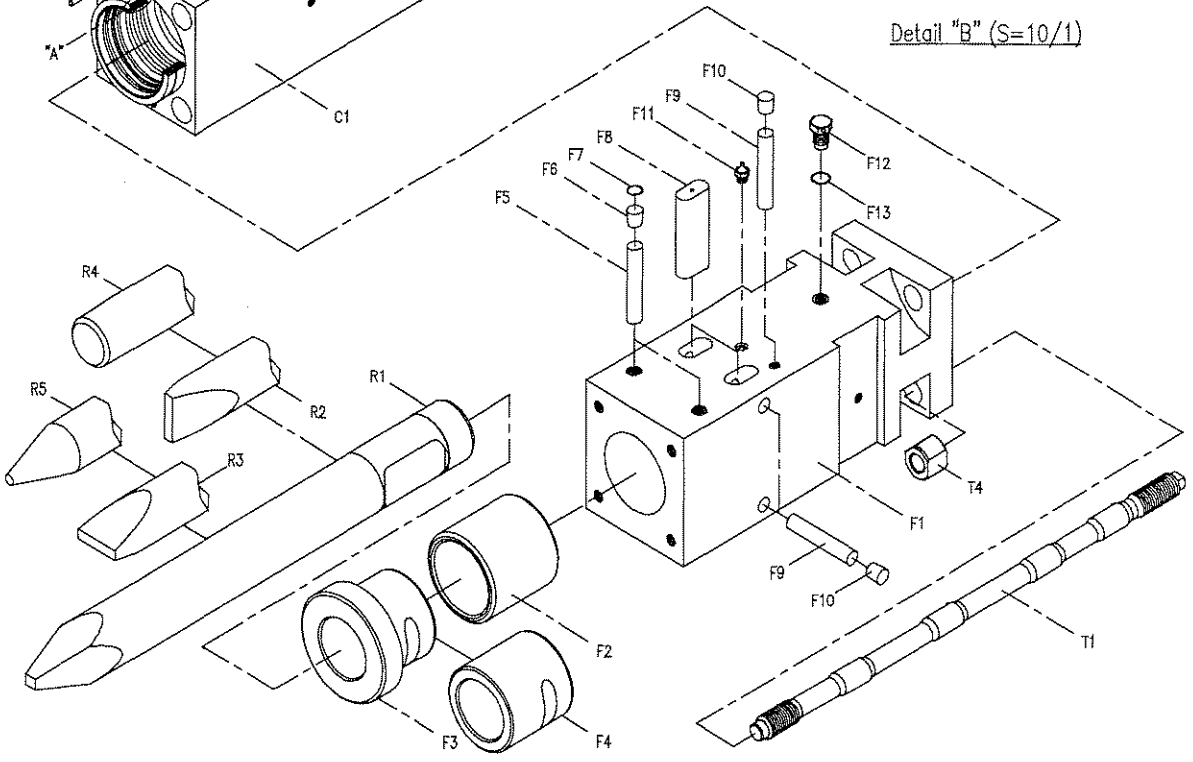
Option (Accumulator Ass'y)



Detail "A" (S=7/1)



Detail "B" (S=10/1)



SJ-800, PARTS LIST - MAIN BODY ASSEMBLY

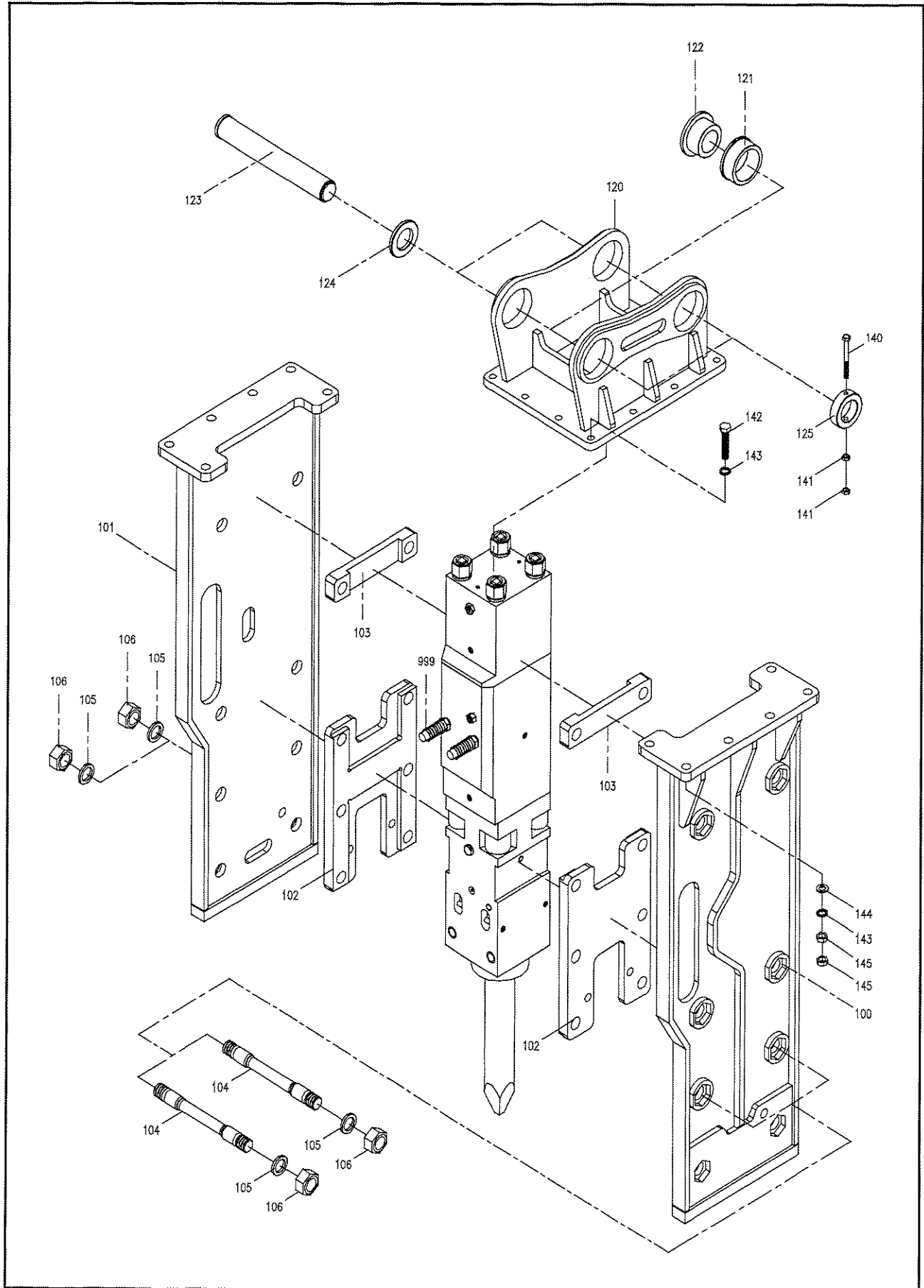
NO.	DESCRIPTION	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY ASS'Y	DB800Z02A	1	
	BACK HEAD ASS'Y	DB815Y01A	1	
	CYLINDER ASS'Y	DB815Z01A	1	
	FRONT HEAD ASS'Y	DB815Y03A	1	
	CONTROL VALVE ASS'Y	DB840Y01A	1	
	THROUGH BOLT ASS'Y	DB870Y10A	1	
	ACCUMULATOR ASS'Y	DB850Y01A	1	
	CHISEL	D90/08D-02	1	
	SEAL KIT	D60-0800ZA01	1	

NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
B1	BACK HEAD ASS'Y	BACK HEAD	DB815Y01	1	353 x 257 x 350
B2		GAS CHARGING VALVE ASS'Y	D40CV-01	1	PF 1/2"
B2_A		GAS CHARGING PLUG	D40CV-01-01	1	M10 x P1.0
B2_B		O-RING	D35P012	1	P12
B2_C		GAS CHARGING VALVE	D40CV-01	1	PF 1/2"
B2_D		O-RING	D35P018	1	P18
B3		O-RING	D35G180	1	G180
C1	CYLINDER ASS'Y	CYLINDER	DB815Y02	1	551 x 257 x 350
C2		PISTON	DB820Y01	1	D150.5 x L790
C3		CYLINDER BUSHING	DB825Y01	1	D190 x L54
C4		LOCK PIN	DH765Z23A1	2	D12.35 x L30
C5		PLUG	D77M27-01	3	M27 x P2.0
C6		O-RING	D35P024	3	P24
C7		NIPPLE	D851PF5	2	PF 1" x 5
C8		O-RING	D35P029	2	P29
C9		DUST SEAL	D30LPI140-01	1	LPI 140
C10		U-PACKING	D30ISI140-02	1	ISI 140
C11		BUFFER SEAL	D30HBY140	1	HBY 140
C12		BUFFER RING	D30-0800ZA01	1	BR 138
C13		STEP SEAL	D30STE138-02	2	STS 138
C14		GAS SEAL	D30GAS138-01	1	YGS 138
C15		O-RING	D35G180	2	G180
C16		VALVE ADJUSTER ASS'Y			
C16_A	VALVE ADJUSTER NUT	DB840Y02	1	M18 x P1.5 x L67	
C16_B	VALVE ADJUSTER				
C16_C	O-RING	D35P011	1	P11	
C16_D	BACK UP RING	D35BT2P011	1	T2 P11	

SJ-800, PARTS LIST - MAIN BODY ASSEMBLY

NO.	DESCRIPTION	PARTS NUMBER	Q'TY	STANDARD	
F1	FRONT HEAD ASSY	FRONT HEAD	DB815Y03	1	688 x 257 x 306
F2		CHISEL BUSHING	DB860Y01	1	D170 x L181
F3		FRONT BUSHING (TOP TYPE)	DB860Y02	1	D248 x L150
F4		FRONT BUSHING (SILENCE TYPE)	DB860Y03	1	D200 x L110
F5		FRONT BUSHING PIN	DB865Z23	2	D29.5 x L205
F6		RUBBER PLUG	D77RD30-01	2	D30
F7		R SNAP RING	D99L030-02	2	D30
F8		CHISEL PIN	DB865Y21	2	215 x 44.5 x 88.5
F9		BUSHING STOP PIN	DB865Z22	3	D19.5 x L220
F10		RUBBER PLUG	D77RD20-01	3	D20
F11		GREASE NIPPLE	DB851/4G01	1	PT 1/4"
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
F12	FRONT HEAD ASSY	AIR VENT VALVE	D771/20-02	1	PF 1/2"
F13		O-RING	D35P018	1	P18
V1	CONTROL VALVE ASSY	VALVE BUSH	DB840X01A1	1	D75 x L135
V2		MAIN VALVE	DB840X01A2	1	D60 x L134
V3		VALVE CAP	DB840X01A3	1	D75 x L39
V4		O-RING	D35G070	1	G70
V5		O-RING	D35G055	1	G55
T1	THROUGH BOLT ASSY	THROUGH BOLT	DB870Y10	4	RD52 x L1049
T2		BACK HEAD NUT	DB870Y11	4	RD52 x L69
T3		BACK HEAD WASHER	DB870Y12	4	D70 x L15
T4		FRONT HEAD NUT	DB870Y13	4	RD52 x L64
R1	CHISEL	MOIL TYPE	D90/08D-01	1	D140 x L1300
R2		FLAT WEDGE - VERTICAL	D90/08D-02	1	
R3		FLAT WEDGE - HORIZONTAL		1	
R4		BLUNT TYPE	D90/08D-03	1	
R5		CONICAL TYPE	D90/08D-04	1	

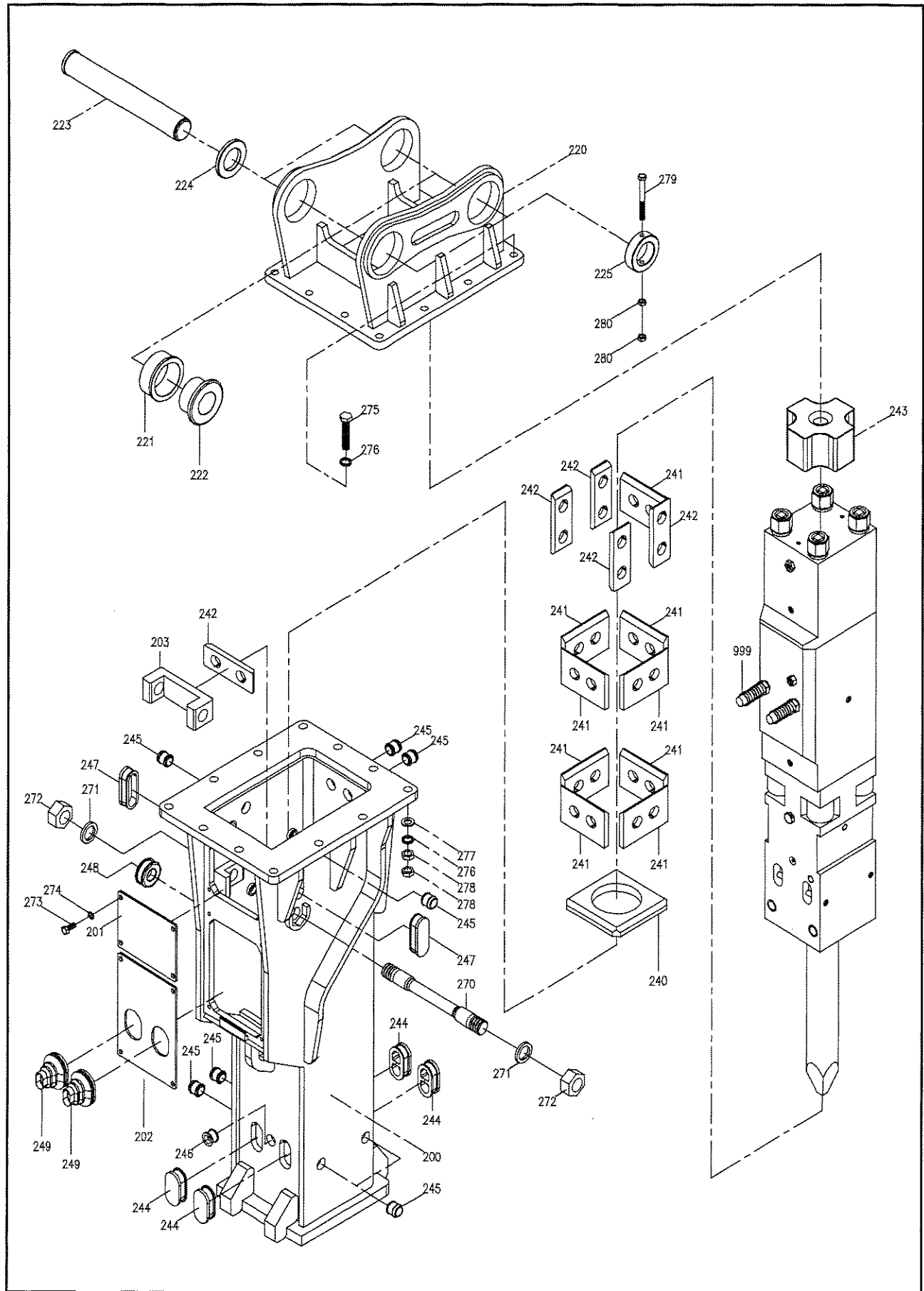
SJ-800 BREAKER TOP BRACKET



SJ-800, PARTS LIST - TOP BRACKET ASSEMBLY

NO.	DESCRIPTION	PARTS NUMBER	Q'TY	STANDARD	
	BRACKET ASSEMBLY	DB891Z01TA	1		
	ADAPTOR ASSEMBLY	DBT891Z11A	1		
	SIDE BOLT ASSEMBLY	DB870Y01A	1		
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DB800Z02A	1	1645 x 257 x 350
100	BRACKET ASSEMBLY	BRACKET - RIGHT	DB891Z01T	1	1701 x 225 x 618
101		BRACKET - LEFT		1	
102		SET PLATE "A"	DB810Y40	2	605 x 447 x 50
103		SET PLATE "B"	DB810Y41	2	90 x 447 x 50
104		SIDE BOLT	DB870Y01	8	M48 x P3.0 x L470
105		SIDE BOLT WASHER	DB870Y03	16	D72 x L9
106		SIDE BOLT NUT	DB870Y02	16	M48 x P3.0 x L45
120	ADAPTOR ASSEMBLY	ADAPTOR ASSEMBLY	DBT891Z11	1	700 x 560 x 394
121		ADAPTOR WELDING BUSHING	DBS860Z10	4	D158 x L60
122		ADAPTOR PIN BUSHING	DB971Z01	4	D158 x L84
123		ADAPTOR PIN	DB865Z01A	2	D80 x L550
124		ADAPTOR PIN WASHER	DH865Z07	2	D134 x L9
125		ADAPTOR PIN STOPPER	DB865Y10	2	D129 x L36
140	BOLT / NUT	STOPPER HEX. BOLT	D75M16-02	2	M16 x P2.0 x L170
141		STOPPER HEX. NUT		4	M16 x P2.0 x L13
142		ADAPTOR JOINT BOLT	D75M27-02	12	M27 x P3.0 x L130
143		ADAPTOR JOINT SPRING WASHER		24	M27
144		ADAPTOR JOINT FLAT WASHER		12	M27
145		ADAPTOR JOINT HEX. NUT		24	M27 x P3.0 Xx L22
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D801220S1	2	1" x 2200L x S/P

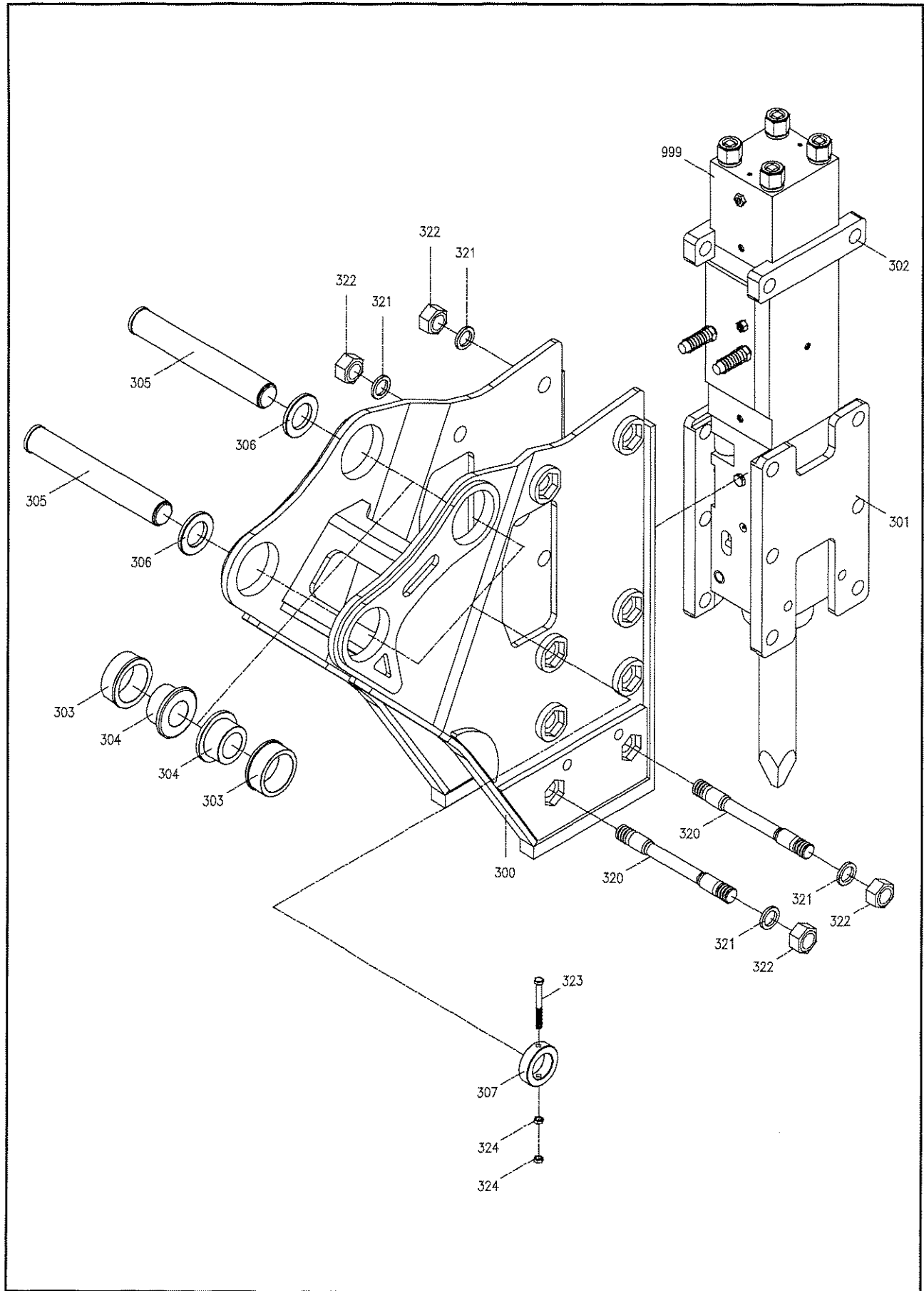
SJ-800 BREAKER SILENT BRACKET



SJ-800, PARTS LIST - SILENT BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD	
	BRACKET ASSEMBLY		DBS891Z01A	1		
	ADAPTOR ASSEMBLY		DBT891Z11A	1		
	SIDE BOLT ASSEMBLY		DHS870Z01A	1		
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD	
	MAIN BODY	MAIN BODY ASSEMBLY	DB800Z02A	1	1645 x 257 x 350	
200	BRACKET ASSEMBLY	SILENT BRACKET ASSEMBLY	DBS891Z01	1	1731 x 560 x 646	
201		UPPER COVER PLATE	DYS810Y10	1	279.5 x 267 x 7	
202		LOWER COVER PLATE	DYS810Y11	1		
203		GUIDE PLATE	DYS810Y17	1	258 x 101 x 60	
220	ADAPTOR ASSEMBLY	ADAPTOR ASSEMBLY	DBT891Z11	1	700 x 560 x 394	
221		ADAPTOR WELDING BUSHING	DBS860Z10	4	D158 x L60	
222		ADAPTOR PIN BUSHING	DBS871Z01	4	D158 x L84	
223		ADAPTOR PIN	DB865Z01A	2	D80 x L550	
224		ADAPTOR PIN WASHER	DH865Z07	2	D134 x L9	
225		ADAPTOR PIN STOPPER	DB865Y10	2	D129 x L36	
240	URETHANE & RUBBER	LOWER DAMPER	DYS811Y01	1	257 x 306 x 30	
241		SIDE DAMPER "A"	DYS811Y03	9	210 x 140 x 20	
242		SIDE DAMPER "B"	DHSKT911Z04	5	235 x 80 x 20	
243		UPPER DAMPER	DBS811Z02	1	245 x 290 x 130	
244		CHISEL PIN RUBBER PLUG	DYS811Y01A1	4	111 x 55 x 23	
245		RUBBER PLUG		8	D40 x L22	
246		GREASING RUBBER PLUG "A"		1	D40 x L22	
247		HYD. HOSE CHECK PLUG		2	140 x 50 x 22	
248		AIR VENT / ADJUSTER RUBBER PLUG		1	D80 x L22	
249		HYD HOSE BELLOWS		2	115 x 86 x 7	
270	BOLT / NUT	SIDE BOLT		DHS870Z01	1	M42 x P3.0 x L442
271		SIDE BOLT WASHER		DHS870Z03	2	D64 x L9
272		SIDE BOLT NUT		DHS870Z02	2	M42 x P3.0 x L40
273		LOWER COVER BOLT		D75M14-03	8	M14 x P2.0 x L30
274		LOWER COVER SPRING WASHER	8		M14	
275		ADAPTOR JOINT BOLT	D75M27-02	12	M27 x P3.0 x L130	
276		ADAPTOR JOINT SPRING WASHER		24	M27	
277		ADAPTOR JOINT FLAT WASHER		12	M27	
278		ADAPTOR JOINT HEX. NUT		24	M27 x P3.0 Xx L22	
279		STOPPER HEX BOLT	D75M16-04	2	M16 x P2.0 x L170	
280	STOPPER HEX NUT	4		M16 x P2.0 x L13		
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D801220S1	2	1" x 2200L x S/P	

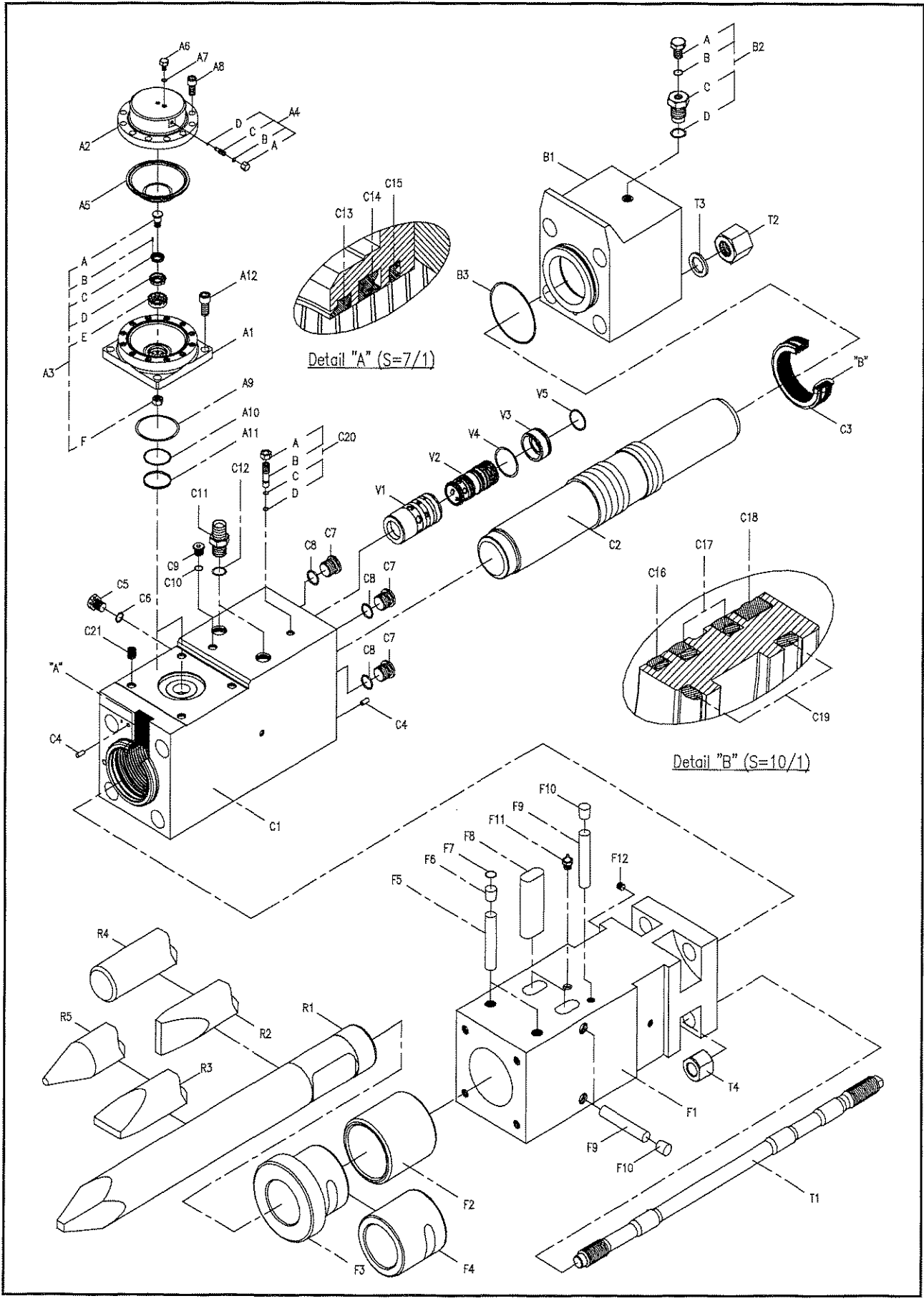
SJ-800 BREAKER SIDE BRACKET



SJ-800, PARTS LIST - SIDE BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD
	BRACKET ASSEMBLY		DB891Z01A	1	
	SIDE BOLT ASSEMBLY		DB870Y01A	1	
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DB800Z02A	1	1823 x 288 x 500
300	BRACKET ASSEMBLY	BRACKET	DB891Z01-C	1	1616 x 1283 x 550
301		SET PLATE "A"	DB810Y40	2	605 x 447 x 50
302		SET PLATE "B"	DB810Y41	2	90 x 447 x 50
303		BRACKET WELDING BUSHING	DH860Y10	4	D158 x L60
304		BRACKET PIN BUSHING	DB871Y01	4	D158 x L74
305		BRACKET PIN	DH865Z01	2	D80 x L562
306		BRACKET PIN WASHER	DB965Z07	2	D135 x L14
307		BRACKET PIN STOPPER	DB865Y10	2	D129 x L36
320	BOLT / NUT	SIDE BOLT	DB870Y01A	8	M48 x P3.0 x L470
321		SIDE BOLT WASHER	DB870Y03	16	D72 x L9
322		SIDE BOLT NUT	DH870Y02	16	M48 x P3.0 x L45
323		STOPPER HEX. BOLT	D75M16-02	2	M16 x P2.0 x L170
324		STOPPER HEX. NUT	D75NUT27-01-S	4	M16 x P2.0 x L13
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D801220S1	2	1" x 2200L x S/P

SJ-1200 BREAKER BODY



SJ-1200, PARTS LIST - MAIN BODY ASSEMBLY

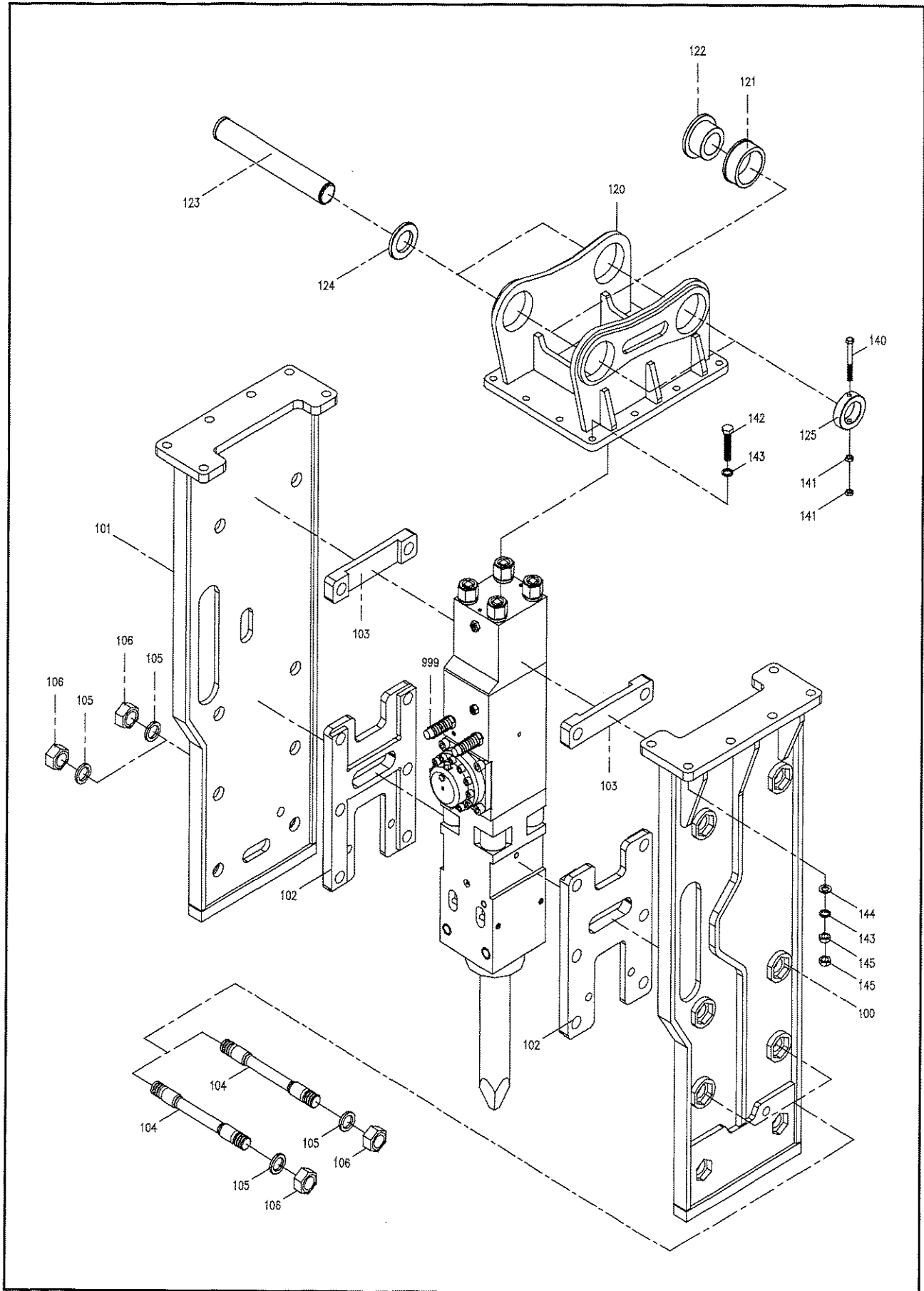
NO.	DESCRIPTION	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY ASS'Y	DYB1200Z01A	1	
	BACK HEAD ASS'Y	DB1215Z01A	1	
	CYLINDER ASS'Y	DB1215Z01A2	1	
	FRONT HEAD ASS'Y	DY1215Z01A3	1	
	CONTROL VALVE ASS'Y	DY1240Z01A01	1	
	THROUGH BOLT ASS'Y	DYB1270Z10A	1	
	ACCUMULATOR ASS'Y	DY1250Z01A	1	
	CHISEL	D90/12DY-01	1	
	SEAL KIT	D30-1200ZA01	1	

NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
B1	BACK HEAD ASS'Y	BACK HEAD	DB1215Z01	1	375 x 288 x 383
B2		GAS CHARGING VALVE ASS'Y	D40CV-01	1	PF 1/2"
B2_A		GAS CHARGING PLUG	D40CV-01-01	1	M10 x P1.0
B2_B		O-RING	D35P012	1	P12
B2_C		GAS CHARGING VALVE	D40CV-01	1	PF 1/2"
B2_D		O-RING	D35P018	1	P18
B3		O-RING	D35G195	1	G195
C1	CYLINDER ASS'Y	CYLINDER	DB1215Z02	1	628 x 288 x 383
C2		PISTON	DB1220Z01	1	D173.5 x L832
C3		CYLINDER BUSHING	D1225Z01	1	D205 x L53
C4		LOCK PIN	DH765Z23A1	2	D12.35 x L30
C5		AIR VENT VALVE	D771/20-02	1	PF 1/2"
C6		O-RING	D35P018	1	P18
C7		PLUG	D77M36-01	3	M36 x P3.0
C8		O-RING	D35P032	3	P32
C9		PLUG	D771/40-01	1	PF 1/4"
C10		O-RING	D35P011	1	P11
C11		NIPPLE	D8511/4PF5	2	PF 1 1/4" x 5
C12		O-RING	D35P038	2	P38
C13		DUST SEAL	D30LB160-01	1	DSI 160
C14		U-PACKING	D30ISI160-01	1	ISI 160
C15		BUFFER SEAL	D30HBY160-01	1	HBV 160
C16		BUFFER RING	D30-1200ZA01	1	BR 157
C17		STEP SEAL	D30STE157-01	2	STS 157
C18		GAS SEAL	D30GAS157-01	1	YGS 157
C19		O-RING	D35G195	2	G195
C20		VALVE ADJUSTER ASS'Y	DB1240Z1	1	M22xP1.5xL75
C20_A	VALVE ADJUSTER NUT				
C20_B	VALVE ADJUSTER				
C20_C	O-RING	D35014	1	P14	
C20_D	BACK UP RING	D35BT2P014	1	T2 P14	
C21	COIL SPRING	D75CM24-01	4	M24 x P3.0	
F1	FRONT HEAD ASS'Y	FRONT HEAD	DB1215Z03	1	765 x 288 x 326
F2		CHISEL BUSHING	DB1260Z01	1	D189.5 x L204
F3		FRONT BUSHING (TOP TYPE)	DB1260Z02	1	D277 x L150.5
F4		FRONT BUSHING (SILENCE TYPE)	DB1260Z03	1	D224 x L110.5
F5		FRONT BUSHING PIN	DB1265Z23	2	D25.5 x L260
F6		RUBBER PLUG	D77RD25-01	2	D25
F7		R SNAP RING	D99L025-02	2	D25

SJ-1200, PARTS LIST - MAIN BODY ASSEMBLY

NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD	
F8	FRONT HEAD ASS'Y	CHISEL PIN	DB1265Z21	2	257 x 51.5 x 95.5	
F9		BUSHING STOP PIN	DB1265Z22	3	D17 x L250	
F10		RUBBER PLUG	D77RD18-01	3	D17	
F11		GREESE NIPPLE	D8514G01	1	PT 1/4"	
F12		TAPER PLUG	D75N1/4-01	1	PT 1/4"	
V1	CONTROL VALVE ASS'Y	VALVE BUSH	DB1240Z01	1	D90 x L163	
V2		MAIN VALVE	DB1240Z02	1	D75 x L161	
V3		VALVE CAP	DB1240Z03	1	D90 x L40	
V4		O-RING	D35G085	1	G85	
V5		O-RING	D35G055	1	G55	
T1	THROUGH BOLT ASS'Y	THROUGH BOLT	DB1270Z10	4	RD56 x L1148	
T2		BACK HEAD NUT	DB1270Z11	4	RD56 x L55	
T3		BACK HEAD WASHER	DB1270Z12	4	D74 x L15	
T4		FRONT HEAD NUT	DB1270Z13	4	RD56 x L65	
A1	ACCUMULATOR ASS'Y	ACCUMULATOR BODY	DY1250Z01A	1	257 x 257 x 79	
A2		ACCUMULATOR COVER		1	D255 x L73.5	
A3		POPPET VALVE ASS'Y	DH850Z02	1	D64	
A3 - A		SHAFT		1	M16 x P1.5 x L41.5	
A3 - B		PIN		1	D5 x L23	
A3 - C		POPPET VALVE - A		1	D44 x L9	
A3 - D		POPPET VALVE - B		1	D54 x L12	
A3 - E		POPPET VALVE - C		1	D64 x L15	
A3 - F		NUT		1	M16 x P1.5 x L13	
A4		NEEDLE VALVE ASS'Y		DH850Z03	1	M12 x P1.25 x L48
A4 - A		CAP NUT			1	M12 x P1.25 x L18
A4 - B		O-RING			D35P014	1
A4 - C		NEEDLE VALVE	DH850Z03		1	M12 x P1.25 x L48
A4 - D		O-RING	D35P005	1	P5	
A5		DIAPHRAGM	D32-12-01	1	D192	
A6		ACCUMULATOR PLUG	D40CV-01-01	1	M12 x P1.25	
A7		O-RING	D35P012	1	P12	
A8		WRENCH BOLT	D75NM18-01	16	M18 x P1.5 x L45	
A9		O-RING	D35G175	1	G175	
A10		O-RING	D35G080	1	G80	
A11	BACK UP RING	D35BT4G080	1	T4 G80		
A12	WRENCH BOLT	D75NM24-05	4	M24 x P3.0 x L60		
R1	CHISEL	MOIL TYPE	D90/12DY-01	1	D155 x L1500	
R2		FLAT WEDGE - VERTICAL	D90/12DY-02	1		
R3		FLAT WEDGE - HORIZONTAL		1		
R4		BLUNT TYPE	D90/12DY-03	1		
R5		CONICAL TYPE	D90/12DY-04	1		

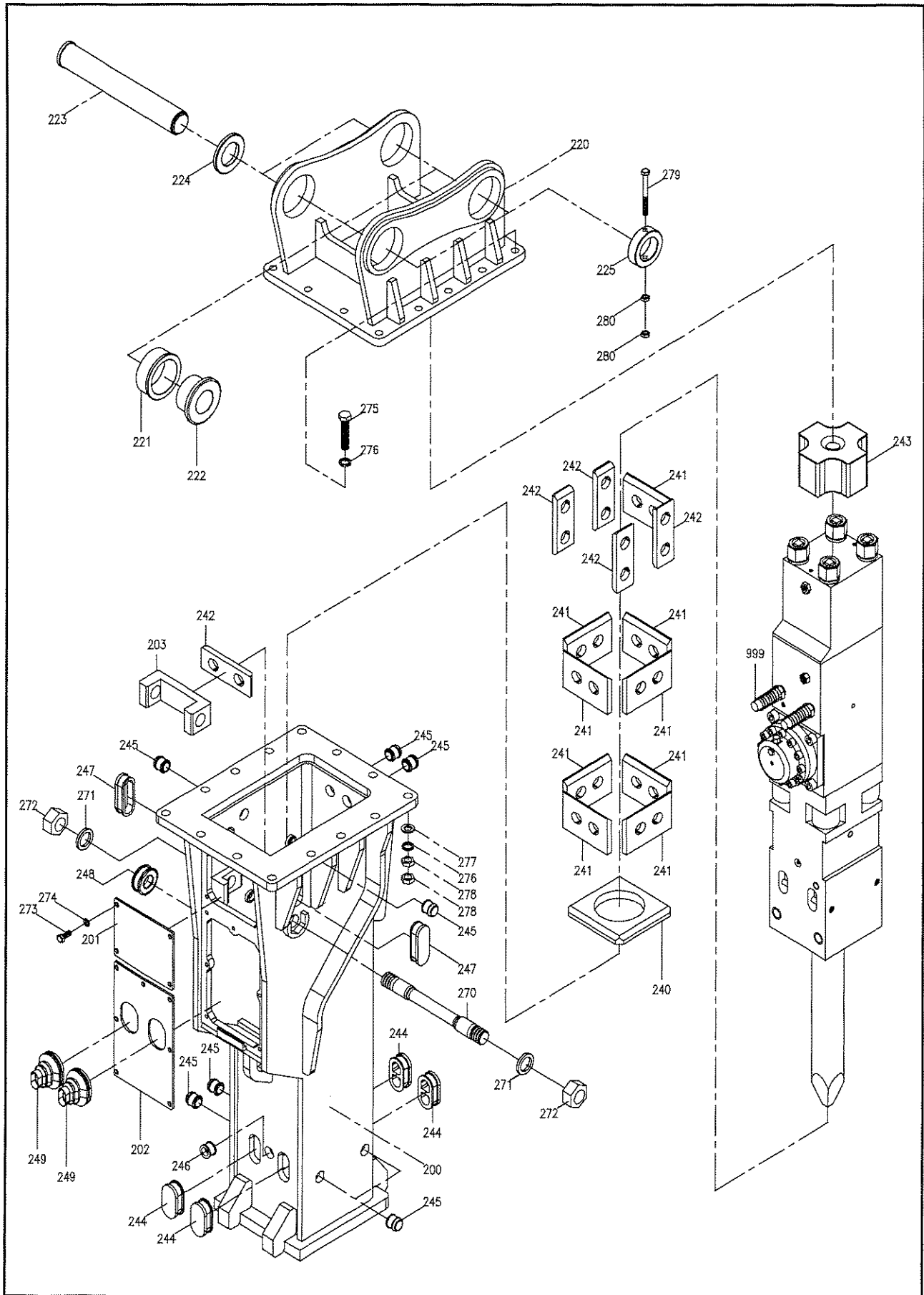
SJ-1200 BREAKER TOP BRACKET



SJ-1200, PARTS LIST - TOP BRACKET ASSEMBLY

NO.	DESCRIPTION	PARTS NUMBER	Q'TY	STANDARD	
BR	BRACKET ASSEMBLY	DYT1291Z01A	1		
AD	ADAPTOR ASSEMBLY	DYT1291Z11A	1		
SB	SIDE BOLT ASSEMBLY	DY1270Y01A	1		
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DYB1200Z01A	1	1823 x 288 x 500
100	BRACKET ASSEMBLY	BRACKET - RIGHT	DYT1291Z01	1	1878 x 257 x 740
101		BRACKET - LEFT		1	
102		SET PLATE "A"	DYT1210Y40	2	670 x 502 x 50
103		SET PLATE "B"	DYT1210Y41	2	502 x 100 x 50
104		SIDE BOLT	DY1270Y01	8	RD56 x L510
105		SIDE BOLT WASHER	DY1270Y03	6	D82 x L12
106		SIDE BOLT NUT	DY1270Y02	6	RD56 x L45
120	ADAPTOR ASSEMBLY	ADAPTOR ASSEMBLY	DYT1291Z11	1	780 x 638 x 450
121		ADAPTOR WELDING BUSHING	DY1260Y10	4	D158 x L70
122		ADAPTOR PIN BUSHING	DY1271Y02	4	D158 x L80
123		ADAPTOR PIN	DY1265Z02	2	D90 x L636
124		ADAPTOR PIN WASHER	DY1265Z07	2	D134 x L14
125		ADAPTOR PIN STOPPER	DY1265Y10	2	D138 x L40
140	BOLT / NUT	STOPPER HEX. BOLT	D75M16-02	2	M16 x P2.0 x L170
141		STOPPER HEX. NUT		4	M16 x P2.0 x L13
142		ADAPTOR JOINT BOLT	D75M30-02	12	M30 x P3.5 x L140
143		ADAPTOR JOINT SPRING WASHER		24	M30
144		ADAPTOR JOINT FLAT WASHER		12	M30
145		ADAPTOR JOINT HEX. NUT		24	M30 x P3.5 x L24
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D8011/4280S3	2	1 1/4" x 2800L x S/P

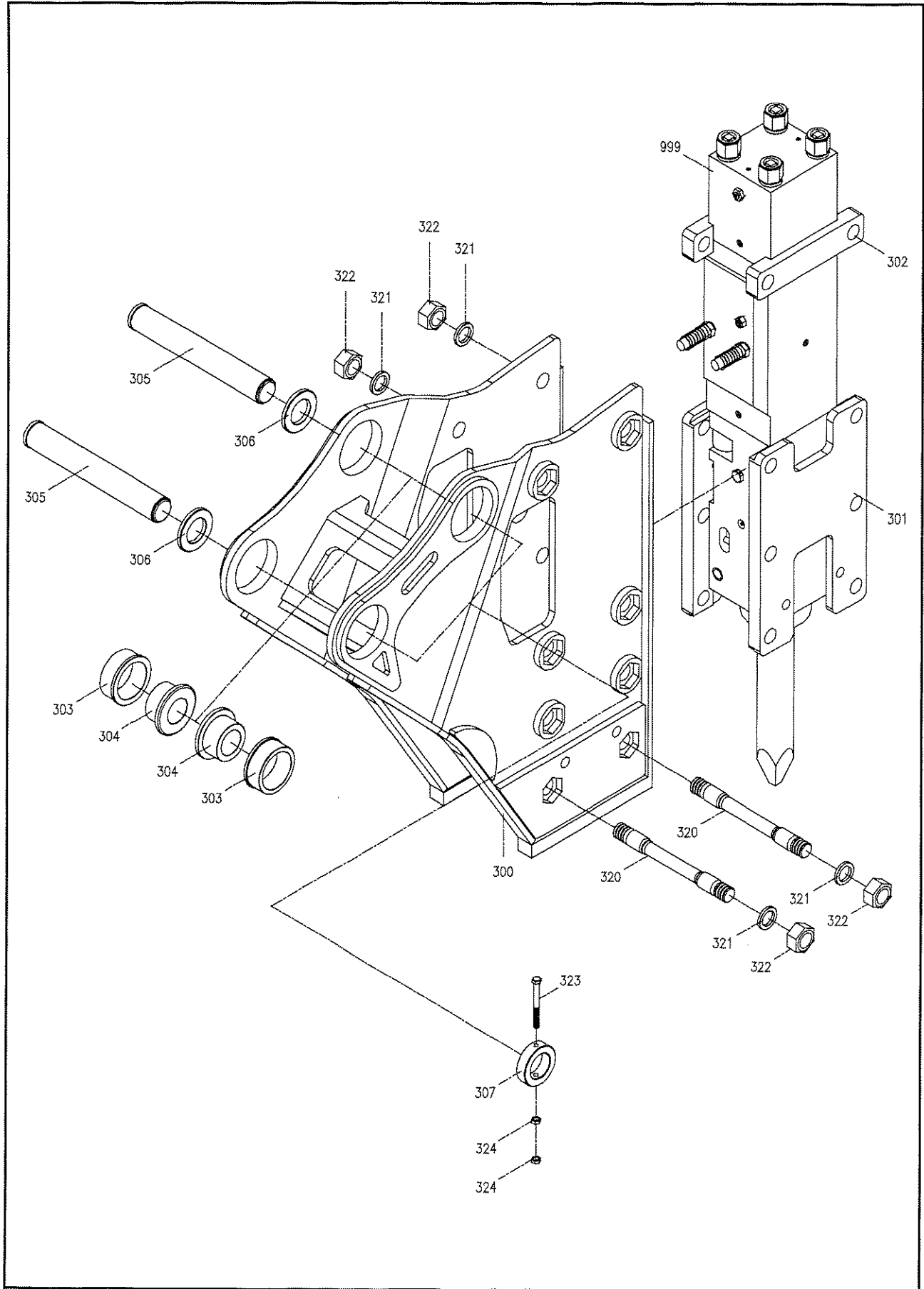
SJ-1200 BREAKER SILENT BRACKET



SJ-1200, PARTS LIST - SILENT BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	QTY	STANDARD	
	BRACKET ASSEMBLY		DBS1291Z01A	1		
	ADAPTOR ASSEMBLY		DBS1291Z11A	1		
	SIDE BOLT ASSEMBLY		DY1270S01	1		
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	QTY	STANDARD	
	MAIN BODY	MAIN BODY ASSEMBLY	DYB1200Z01A	1	1823 x 288 x 500	
200	BRACKET ASSEMBLY	SILENT BRACKET ASSEMBLY	DBS1291Z01	1	1951 x 626 x 774	
201		UPPER COVER PLATE	DYS1210Z11	1	240 x 306 x 7	
202		LOWER COVER PLATE	DYS1210Z10	1	671 x 306 x 7	
203		GUIDE PLATE	DYS1210Z17	1	279 x 137 x 80	
220	ADAPTOR ASSEMBLY	ADAPTOR ASSEMBLY	DBS1291Z11	1	797 x 638 x 490	
221		ADAPTOR WELDING BUSHING	DY1260Y10	4	D158 x L70	
222		ADAPTOR PIN BUSHING	DY1271Y02	4	D158 x L80	
223		ADAPTOR PIN	DY1265Z02	2	D90 x L636	
224		ADAPTOR PIN WASHER	DY1265Z07	2	D134 x L14	
225		ADAPTOR PIN STOPPER	DY1265Y10	2	D138 x L40	
240	URETHANE & RUBBER	LOWER DAMPER	DYS1211K01	1	326 x 288 x 40	
241		SIDE DAMPER "A"	DYS1211K03	9	250 x 140 x 20	
242		SIDE DAMPER "B"	DYS811Y04-S	5	235 x 80 x 20	
243		UPPER DAMPER	DYS1211K02	1	290 x 290 x 155	
244		CHISEL PIN RUBBER PLUG	DYS1211Y01A1	4	I23 x 60 x 23	
245		RUBBER PLUG		8	D40 x L22	
246		GREASING RUBBER PLUG "A"		1	D40 x L22	
247		HYD. HOSE CHECK PLUG		2	140 x 50 x 22	
248		AIR VENT / ADJUSTER RUBBER PLUG		1	D80 x L22	
249		HYD HOSE BELLOWS		2	115 x 74 x 7	
270	BOLT / NUT	SIDE BOLT		DY1270S01	1	M42 x P3.0 x L470
271		SIDE BOLT WASHER		DY1270Z03	2	D70 x L9
272		SIDE BOLT NUT		DY1270Y02	2	M42 x P3.0 x L40
273		LOWER COVER BOLT		D75M14-03	11	M14 x P2.0 x L30
274		LOWER COVER SPRING WASHER	11		M14	
275		ADAPTOR JOINT BOLT	D75M30-02	14	M30 x P3.5 x L140	
276		ADAPTOR JOINT SPRING WASHER		28	M30	
277		ADAPTOR JOINT FLAT WASHER		14	M30	
278		ADAPTOR JOINT HEX. NUT		28	M30 x P3.5 x L24	
279		STOPPER HEX BOLT	D75M16-02	2	M16 x P2.0 x L170	
280	STOPPER HEX NUT	4		M16 x P2.0 x L13		
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D8011/4280S3	2	1 1/4" x 2800L x S/P	

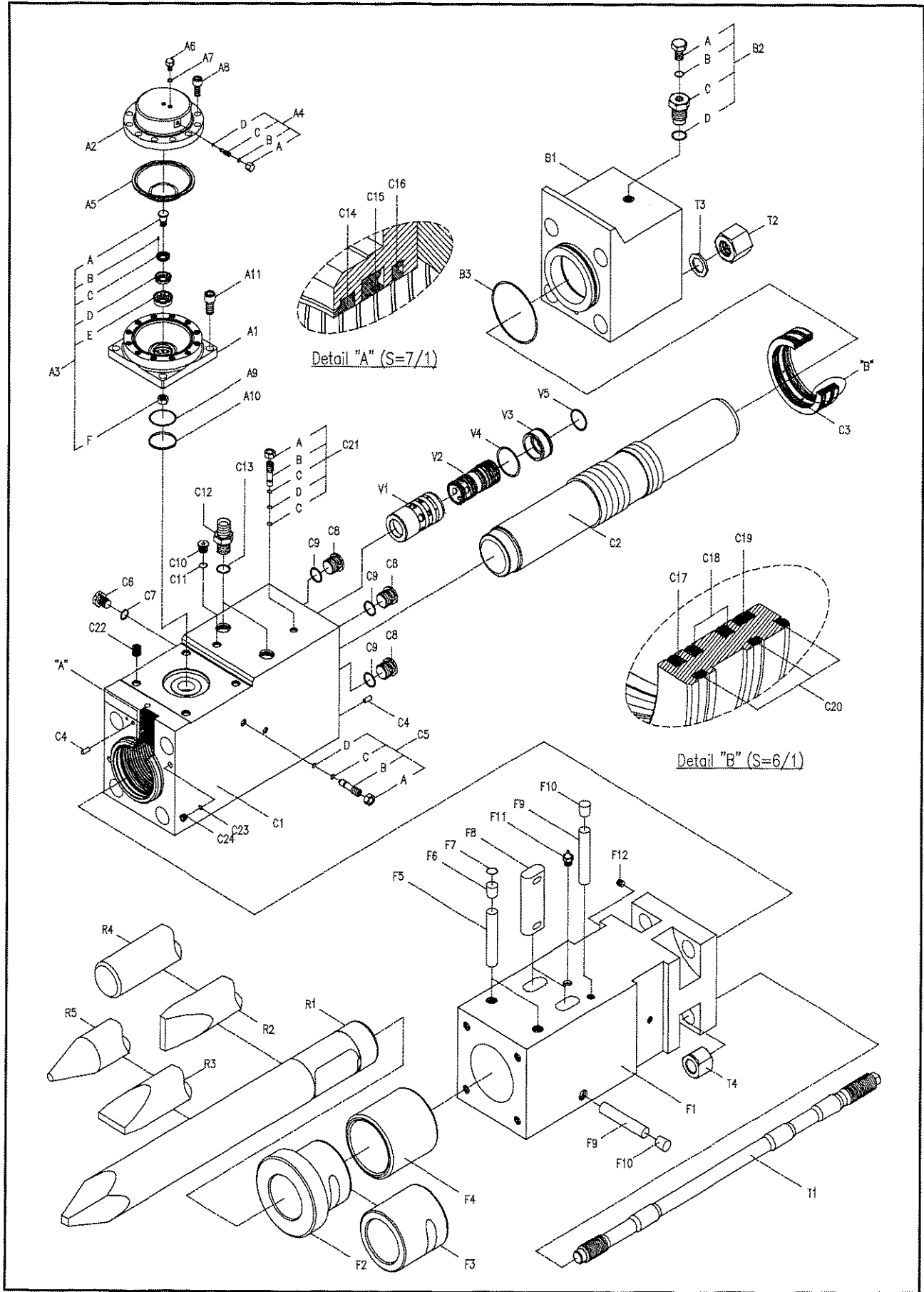
SJ-1200 BREAKER SIDE BRACKET



SJ-1200, PARTS LIST - SIDE BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD
	BRACKET ASSEMBLY		DB1291Z01A	1	
	SIDE BOLT ASSEMBLY		DY1270Y01A	1	
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DYB1200Z01A	1	1823 x 288 x 500
300	BRACKET ASSEMBLY	BRACKET	DB1291Z01	1	1776 x 1420 x 636
301		SET PLATE "A"	DYT1210Y40	2	670 x 502 x 50
302		SET PLATE "B"	DYT1210Y41	2	100 x 502 x 50
303		BRACKET WELDING BUSHING	DY1260Y10	4	D158 x L70
304		BRACKET PIN BUSHING	DY1271Y02	4	D158 x L80
305		BRACKET PIN	DY1265Z02	2	D90 x L636
306		BRACKET PIN WASHER	DB965Y10	2	D135 x L14
307		BRACKET PIN STOPPER	DB965Z11	2	D138 x L40
320	BOLT / NUT	SIDE BOLT	DY1270Y01	8	RD56 x P4.233 x L510
321		SIDE BOLT WASHER	DY1270Y03	16	D85 x L12
322		SIDE BOLT NUT	DH1470Z02	16	RD56 x P4.233 x L45
323		STOPPER HEX. BOLT	D75M16-02	2	M16 x P2.0 x L70
324		STOPPER HEX. NUT	D75NUT27-01-S	4	M16 x P2.0 x L13
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D8011/4280S3	2	1 1/4" x 2800L x S/P

SJ-1500 BREAKER BODY



SJ-1500, PARTS LIST - MAIN BODY ASSEMBLY

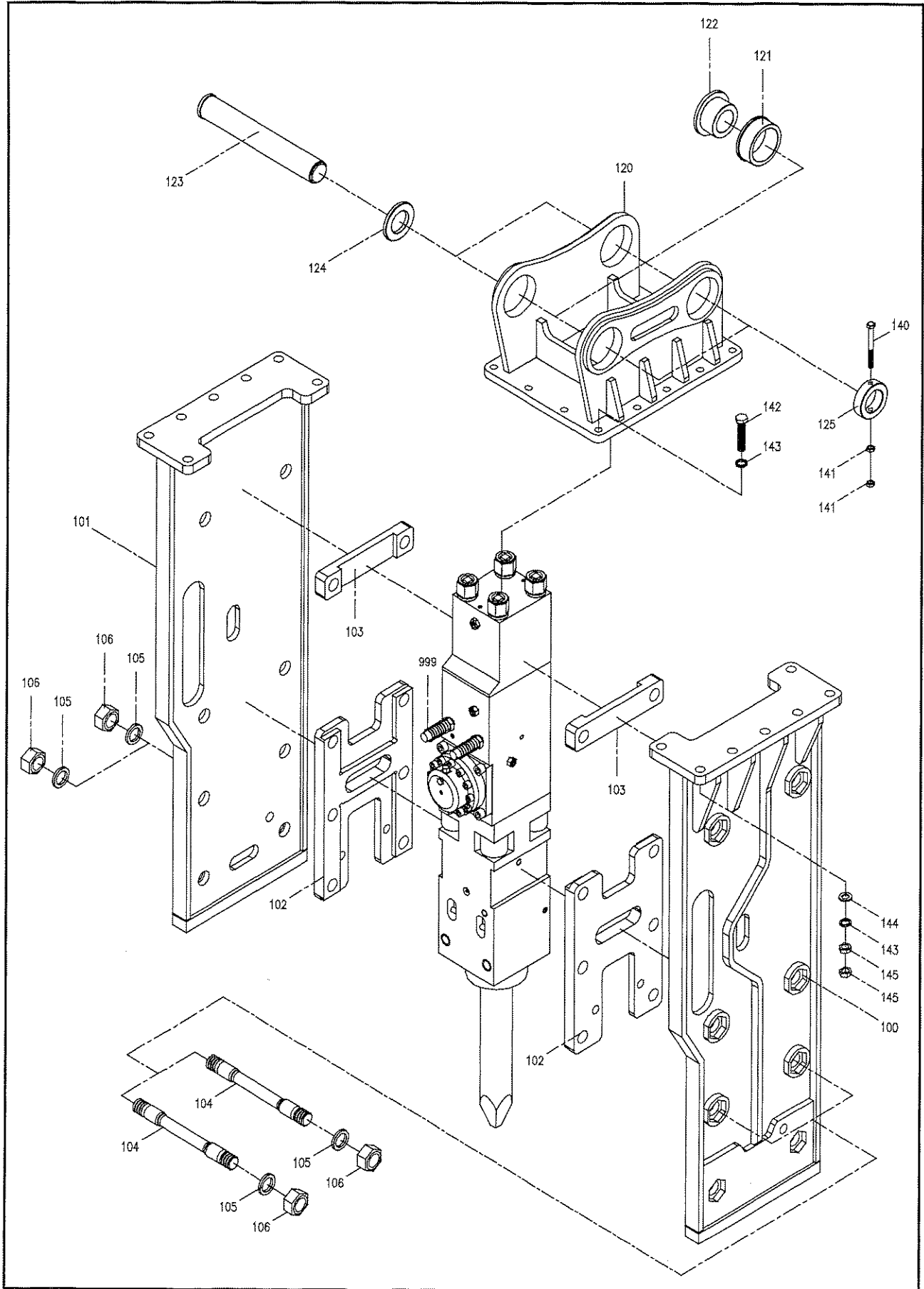
NO.	DESCRIPTION	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY ASS'Y	DYB1500Z01A	1	
	BACK HEAD ASS'Y	DY1515Z01A	1	
	CYLINDER ASS'Y	DY1515Z02A	1	
	FRONT HEAD ASS'Y	DY1515Z03A	1	
	CONTROL VALVE ASS'Y	DY1540Z01A01	1	
	THROUGH BOLT ASS'Y	DY1570Z10A	1	
	ACCUMULATOR ASS'Y	DY1550Z01A	1	
	CHISEL	D90/15DY-01	1	
	SEAL KIT	D30-1500Z01	1	

NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
B1	BACK HEAD ASS'Y	BACK HEAD	DY1515Z01	1	419 x 325 x 421
B2		GAS CHARGING VALVE ASS'Y	D40CV-01	1	PF 1/2"
B2_A		GAS CHARGING PLUG	D40CV-01-01	1	M10 x P1.0
B2_B		O-RING	D35P012	1	P12
B2_C		GAS CHARGING VALVE	D40CV-01	1	PF 1/2"
B2_D		O-RING	D35P018	1	P18
B3		O-RING	D35G210	1	G210
C1	CYLINDER ASS'Y	CYLINDER	DY1515Z02	1	788 x 325 x 421
C2		PISTON	DY1520Z01	1	D195.5 x L1120
C3		CYLINDER BUSHING	DY1525Z01	1	D220 x L66
C4		LOCK PIN	DH765Z23A1	2	D12.35 x L30
C5		CYLINDER ADJUSTER ASS'Y	DH840Z03	1	M22 x P1.5 x L65
C5_A		CYLINDER ADJUSTER NUT			
C5_B		CYLINDER ADJUSTER			
C5_C		O-RING	D35P012	1	P12
C5_D		BACK UP RING	D35BT2P012	1	T2 P12
C6		AIR VENT VALVE	D771/20-02	1	PF 1/2"
C7		O-RING	D35P018	1	P18
C8		PLUG	D77M39-01	3	M39 x P3.0
C9		O-RING	D35P034	3	P34
C10		PLUG	D773/40-01	1	PF 3/4"
C11		O-RING	D35P024	1	P24
C12		NIPPLE	D8511/2PF	1	PF 1 1/2" x 5
C13		O-RING	D35P044	2	P44
C14		DUST SEAL	D30DSI180-01	1	DSI 180
C15		U-PACKING	D30UIS180-1	1	ISI 180
C16		BUFFER SEAL	D30HBY180-01	1	HBY 180
C17		BUFFER RING	D30-1500-01	1	BR 177
C18		STEP SEAL	D30STE177-01	2	STS 177
C19		GAS SEAL	D30GAS177-01	1	YBS 177
C20		O-RING	D35G210	3	G210
C21	VALVE ADJUSTER ASS'Y	DY1540Z02	1	M24 x P2.0 x L85	
C21_A	VALVE ADJUSTER NUT				
C21_B	VALVE ADJUSTER				
C21_C	O-RING	D35P015	2	P15	
C21_D	BACK UP RING	D35BT2P015	1	T2 P15	
C22	COIL SPRING	D75CM24-01	4	M24 x P3.0	
C23	PLUG	D771/40-01	1	PF 1/4"	
C24	O-RING	D75CM24-01	1	P11	

SJ-1500, PARTS LIST - MAIN BODY ASSEMBLY

NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD	
F1	FRONT HEAD ASSY	FRONT HEAD	DY1515Z03	1	944 x 325 x 352	
F2		CHISEL BUSHING	DY1560Z01	1	D214 x L234	
F3		FRONT BUSHING (TOP TYPE)	DY1560Z02	1	D325 x L193	
F4		FRONT BUSHING (SILENCE TYPE)	DY1560Z03	1	D257 x L151	
F5		FRONT BUSHING PIN	DY1565Z23	2	D36 x L269	
F6		RUBBER PLUG	D77RD35-01	2	D35	
F7		R SNAP RING	D99L035-01	2	D35	
F8		CHISEL PIN	DY1565Z21	2	350 x 50 x 99	
F9		BUSHING STOP PIN	DY1565Z22	2	D25 x L259	
F10		RUBBER PLUG	D77RD30-01	2	D25	
F11		GREESE NIPPLE	D851/4G01	1	PT 1/4"	
F12		TAPER PLUG	D75N1/4-01	1	PT 1/4"	
V1	CONTROL VALVE ASSY	VALVE BUSH	DY1540Z01A1	1	D105 x L195	
V2		MAIN VALVE	DY1540Z01A2	1	D87 x L188	
V3		VALVE CAP	DY1540Z01A3	1	D105 x L48	
V4		O-RING	D35G100	1	G100	
V5		O-RING	D35G080	1	G80	
T1	THROUGH BOLT ASSY	THROUGH BOLT	DY1570Z10	4	RD58 x L1372	
T2		BACK HEAD NUT	DY1570Z11	4	RD58 x L70	
T3		BACK HEAD WASHER	DY1570Z12	4	D85 x L20	
T4		FRONT HEAD NUT	DY1570Z13	4	RD58 x L65	
A1	ACCUMULATOR ASSY	ACCUMULATOR BODY	DY1550Z01A-S	1	286 x 286 x 82	
A2		ACCUMULATOR COVER		1	D284 x L78	
A3		POPPET VALVE ASSY	DH850Z02	1	D64	
A3 - A		SHAFT		1	M16 x P1.5 x L41.5	
A3 - B		PIN		1	D5 x L23	
A3 - C		POPPET VALVE - A		1	D44 x L9	
A3 - D		POPPET VALVE - B		1	D54 x L12	
A3 - E		POPPET VALVE - C		1	D64 x L15	
A3 - F		NUT		1	M16 x P1.5 x L13	
A4		NEEDLE VALVE ASSY		DH850Z03	1	M12 x P1.25 x L48
A4 - A		CAP NUT			1	M12 x P1.25 x L18
A4 - B		O-RING			D35P014	1
A4 - C		NEEDLE VALVE	DH850Z03	1	M12 x P1.25 x L48	
A4 - D		O-RING	D35P005	1	P5	
A5		DIAPHRAGM	D32-15-01	1	D204	
A6		ACCUMULATOR PLUG	D40CV-01-01	1	M12 x P1.25	
A7		O-RING	D35P012	1	P12	
A8	WRENCH BOLT	D75NM20-03	16	M20 x P2.5 x L50		
A9	O-RING	D35G080	1	G80		
A10	BACK UP RING	D35BT4G080	1	T4 G80		
A11	WRENCH BOLT	D75NM24-05	4	M24 x P3.0 x L60		
R1	CHISEL	MOIL TYPE	D90/15DY-01	1	D175 x L160	
R2		FLAT WEDGE - VERTICAL	D90/15DY-02	1		
R3		FLAT WEDGE - HORIZONTAL		1		
R4		BLUNT TYPE	D90-15DY-03	1		
R5		CONICAL TYPE	D90-15DY-04	1		

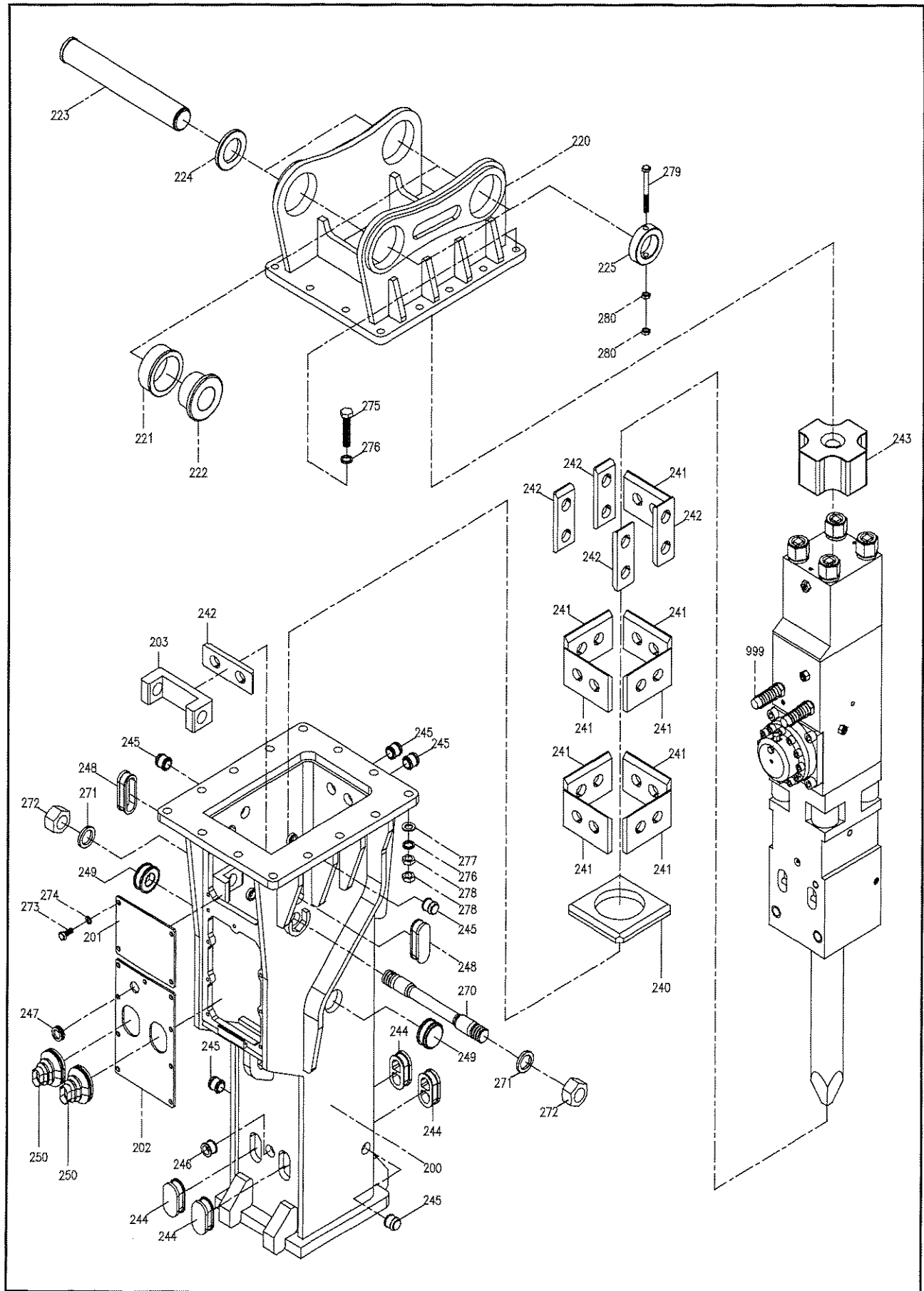
SJ-1500 BREAKER TOP BRACKET



SJ-1500, PARTS LIST - TOP BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD
	BRACKET ASSEMBLY		DYT1591Z01A	1	
	ADAPTOR ASSEMBLY		DY1570Y02A	1	
	SIDE BOLT ASSEMBLY		DY1570Y01A	1	
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DYB1500Z01A	1	2228 x 325 x 551
100	BRACKET ASSEMBLY	BRACKET - RIGHT	DYT1591Z01	1	2288 x 302 x 810
101		BRACKET - LEFT		1	
102		SET PLATE "A"	DYT1510Y40	2	888 x 562 x 60
103		SET PLATE "B"	DYT1510Y41	2	120 x 562 x 60
104		SIDE BOLT	DY1570Y01	8	RD58 x L566
105		SIDE BOLT WASHER	DY1570Y03	16	D85 x L17
106		SIDE BOLT NUT	DY1570Y02	16	RD58 x L45
120		ADAPTOR ASSEMBLY	ADAPTOR ASSEMBLY	DYT1591Z01	1
121	ADAPTOR WELDING BUSHING		DY1560Y10	4	D188 x L80
122	ADAPTOR PIN BUSHING		DY1571Y02	4	D188 x L95
123	ADAPTOR PIN		DY1565Z01	2	D110 x L730
124	ADAPTOR PIN WASHER		DY1565Z07	2	D144 x L14
125	ADAPTOR PIN STOPPER		DY1565Y10	2	D158 x L40
140	BOLT / NUT	STOPPER HEX. BOLT	D75M16-01	2	M16 x P2.0 x L190
141		STOPPER HEX. NUT		4	M16 x P2.0 x L13
142		ADAPTOR JOINT BOLT	D75M36-02	14	M36 x P4.0 x L160
143		ADAPTOR JOINT SPRING WASHER		28	M36
144		ADAPTOR JOINT FLAT WASHER		14	M36
145		ADAPTOR JOINT HEX. NUT		28	M36 x P4.0 x L29
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D8011/4280S3	2	1 1/4 " x 2800L x S/P

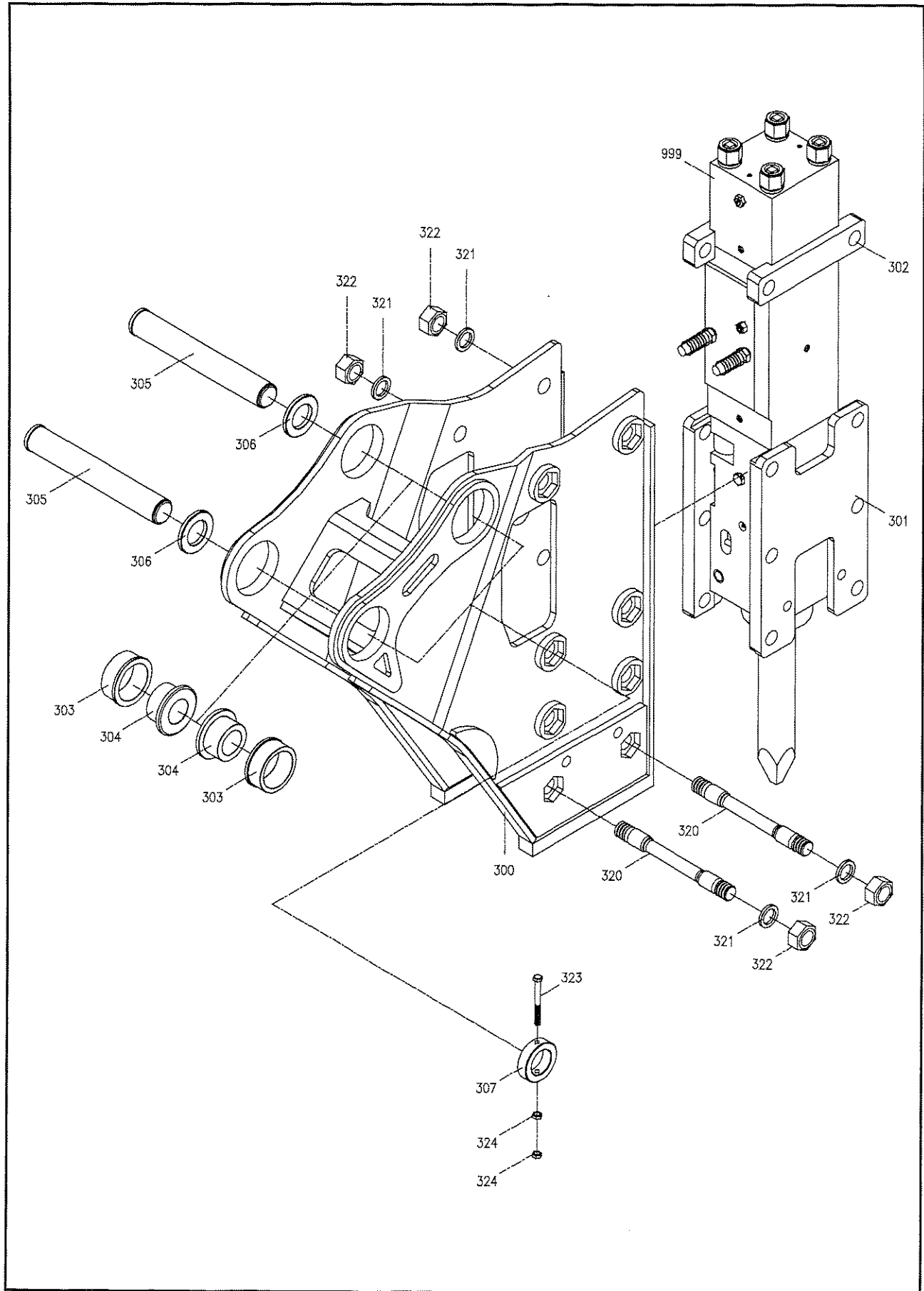
SJ-1500 BREAKER SILENT BRACKET



SJ-1500, PARTS LIST - SILENT BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD	
	BRACKET ASSEMBLY		DBS1591Z01A	1		
	ADAPTOR ASSEMBLY		DBS1591Z11A	1		
	SIDE BOLT ASSEMBLY		DY1570Z01A	1		
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD	
	MAIN BODY	MAIN BODY ASSEMBLY	DYB1500Z01A	1	2228 x 325 x 551	
200	BRACKET ASSEMBLY	SILENT BRACKET ASSEMBLY	DBS1591Z01	1	2331 x 740 x 880	
201		UPPER COVER PLATE	DYS1510K11	1	250 x 346 x 7	
202		LOWER COVER PLATE	DYS1510K10	1	705 x 346 x 7	
203		GUIDE PLATE	DYS1510K17	1	305 x 156.5 x 80	
220	ADAPTOR ASSEMBLY	ADAPTOR ASSEMBLY	DBS1591Z11	1	925 x 740 x 545	
221		ADAPTOR WELDING BUSHING	DY1560Y10	4	D188 x L80	
222		ADAPTOR PIN BUSHING	DY1571Y02	4	D188 x L95	
223		ADAPTOR PIN	DY1565Z01	2	D110 x L750	
224		ADAPTOR PIN WASHER	DY1565Z07	2	D144 x L14	
225		ADAPTOR PIN STOPPER	DY1565Y10	2	D158 x L40	
240	URETHANE & RUBBER	LOWER DAMPER	DYS1511K01	1	352 x 325 x 40	
241		SIDE DAMPER "A"	DYS1511K03	9	250 x 180 x 25	
242		SIDE DAMPER "B"	DYS1511K04	5	300 x 100 x 25	
243		UPPER DAMPER	DYS1511K02	1	298 x 278 x 150	
244		CHISEL PIN RUBBER PLUG	DYS151K01A1	4	123 x 60 x 25	
245		RUBBER PLUG		6	D50 x L25	
246		GREASING RUBBER PLUG "A"		1	D40 x L25	
247		GREASING RUBBER PLUG "B"		1	D40 x L7	
248		HYD. HOSE CHECK PLUG		2	140 x 50 x 25	
249		AIR VENT / ADJUSTER RUBBER PLUG		2	D80 x L25	
250		HYD HOSE BELLOWS		2	115 x 74 x 7	
270	BOLT / NUT	SIDE BOLT		DY1570Z01	1	M48 x P3.0 x L533
271		SIDE BOLT WASHER		DB870Z03	2	D74 x L9
272		SIDE BOLT NUT		DB870Y02	2	M48 x P3.0 x L45
273		LOWER COVER BOLT		D75M14-03	13	M14 x P2.0 x L30
274		LOWER COVER SPRING WASHER	13		M14	
275		ADAPTOR JOINT BOLT	D75M36-02	14	M36 x P4.0 x L170	
276		ADAPTOR JOINT SPRING WASHER		28	M36	
277		ADAPTOR JOINT FLAT WASHER		14	M36	
278		ADAPTOR JOINT HEX. NUT		28	M36 x P4.0 x L29	
279		STOPPER HEX BOLT	D75M16-01	2	M16 x P2.0 x L190	
280	STOPPER HEX NUT	4		M16 x P2.0 x L13		
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D80I1/4280S3	2	1 1/4" x 2800L x S/P	

SJ-1500 BREAKER SIDE BRACKET



SJ-1500, PARTS LIST - SIDE BRACKET ASSEMBLY

NO.	DESCRIPTION		PARTS NUMBER	Q'TY	STANDARD
	BRACKET ASSEMBLY		DB1591Z01A	1	
	SIDE BOLT ASSEMBLY		DY1570Y03A	1	
NO.	PARTS DESCRIPTION	PART NAME	PARTS NUMBER	Q'TY	STANDARD
	MAIN BODY	MAIN BODY ASSEMBLY	DYB1500Z01A	1	2228 x 325 x 551
300	BRACKET ASSEMBLY	BRACKET	DB1591Z01	1	2228 x 1675 x 730
301		SET PLATE "A"	DYT1510Y40	2	562 x 887.5 x 60
302		SET PLATE "B"	DYT1510Y41	2	562 x 120 x 60
303		BRACKET WELDING BUSHING	DY1560Y10	4	D188 x L80
304		BRACKET PIN BUSHING	DY1571Y02	4	D188 x L95
305		BRACKET PIN	DY1565Z01	2	D110 x L730
306		BRACKET PIN WASHER	DY1565Z07	2	D144 x L14
307		BRACKET PIN STOPPER	DY1565Y10	2	D158 x L40
320	BOLT / NUT	SIDE BOLT	DY1570Y01	8	RD58 x P4.233 x L566
321		SIDE BOLT WASHER	DY1570Y03	16	D85 x L17
322		SIDE BOLT NUT	DY1570Y02	16	RD58 x P4.233 x L45
323		STOPPER HEX. BOLT	D75M16-01	2	M16 x P2.0 x L190
324		STOPPER HEX. NUT		4	M16 x P2.0 x L13
999	HYDRAULIC HOSE	HYDRAULIC HOSE	D8011/4280S3	2	1 1/4" x 2800L x S/P

