

INSTRUCTION MANUAL

PORTABLE DOUBLE ACTION HYDRAULIC PUMP

Please read this manual carefully before you attempt to use your tool so that you may use it properly and safely.

PUMP Model HPD-05 115V/230V **PROFESSIONAL TOOL**

Specifications

Model		HPD-05 115V/230V	
Output	At No Load	50Hz	1.20 ℓ /min
		60Hz	1.44 ℓ /min
	At 68.65MPa	50Hz	0.55 ℓ /min
		60Hz	0.66 ℓ /min
Motor			0.4KW 4P
Power Source (Single Phase)			115V/230V ~ 50/60Hz
Power Input	115V	50Hz	6.4A
		60Hz	5.1A
	230V	50Hz	3.2A
		60Hz	2.5A
Reservoir Capacity			4.0 ℓ
Thread Size of Discharge Port, Return Port			Rc3/8
Solenoid Valve			4 Way 3 Position Valve
Mass (Weight)			32.5Kg
Max. Output Pressure			68.65MPa
Airborne noise levels			< 70dB(A)

Due to continuous product development/improvement the specifications and configurations in this document are subject to change without prior notice.



Manufactured by :

NITTO KOHKI Co., Ltd.

2-9-4, Nakaikegami, Ohta-ku,
Tokyo, 146-8555, Japan

Tel : (81)-3-3755-1111

Fax : (81)-3-3753-8791

E-mail : overseas@nitto-kohki.co.jp

URL : www.nitto-kohki.co.jp

Keep the manual handy – so you can use it whenever necessary.

Original Instructions

Thank you very much for your purchase of this **Nitto Kohki product**.

Before using your tool, please read this manual carefully so that you may use it properly to get the most out of it.

Please keep the manual handy - so you can use it whenever necessary.

- **English** : Please ask your dealer or distributor for instruction manual in local language(s).
- **German** : Bitte fragen Sie Ihren Händler nach eine Betriebsanleitung in Landessprache.
- **French** : S'il vous plait, veuillez demandez á votre fournisseur de manuel instruction en langue locale.
- **Spanish** : Por favor, contacte con su distribuidor para el manual de instrucciones en español.
- **Portuguese** : Por favor pessa ao seo agente ou distribuidor o manual de instrucces ih linguagen local.
- **Italian** : Per Manuale Istruzioni in lingua locale Vi preghiamo di rivolgervi al rivenditore o distributore.
- **Dutch** : Vraag uw handelaar om een nederladstalige gebruiksaanwijzing.
- **Swedish** : Be er lokala Åtreförsäljare eller distributör om manualer pá svenska.
- **Danish** : Venligst henvend Dem til den danske distributør for instructions manualer.
- **Polish** : Proszę pytać swojego dealera lub dystrybutora o instrukcje obsługi w języku localnym.
- **中文** : 請向當地供應商或經銷商詢問中文使用說明書

CONTENTS	page
IMPORTANT SAFETY INSTRUCTIONS FOR ALL	
ELECTRIC TOOLS	2
IMPORTANT SAFETY INSTRUCTIONS FOR PORTABLE	
DOUBLE ACTION HYDRAULIC PUMP	3
1. USAGE	4
2. CHECK THE CONTENTS OF THE PACKAGE	4
3. NAME OF PARTS	4
4. PREPARATION	5
5. HOW TO OPERATE THE TOOL	6
6. MAINTENANCE AND INSPECTION	6
7. ORDERING SERVICE PARTS	6
8. HPD-05 ASSEMBLY	7
9. HPD-05 PARTS LIST	8

PICTOGRAM



Warning: It might be dangerous to operate the tool if the instructions supplied are not followed.



Using this tool improperly could result in serious injury. Read the instruction manual before using.



Always wear suitable eye protection.



Always wear suitable hearing protection.



Always wear respiratory protective equipment (PPE).



Always wear protective gloves for protection of hands from Vibration and Shock.

The following Safety notations are used throughout the manual to highlight safety precautions for the user and for the tool.



WARNING:

Indicates a potentially hazardous situation which, if not avoided by following the instructions given, could result in death or serious injury.



CAUTION:

Indicates a potentially hazardous situation which, if not avoided by following the instructions given, could result in injury or material damage.

Please note, however, that failure to observe safety precautions under the “**Caution**” category could result in a serious occurrence depending on the situation: please observe all safety precautions in the manual.

Caution: Important precautions for tool setup, operation and maintenance.

IMPORTANT SAFETY INSTRUCTIONS FOR ALL ELECTRIC TOOLS

WARNING

When using electric tools, basic safety precautions should always be followed to reduce risk of fire, electric shock, personal injury and the like, including the following.

(1) Keep work area clean.

- Cluttered work areas and benches invite accidents and injuries.

(2) Consider work area environment.

- Do not expose tools to rain. Do not use tools in damp or wet locations.
- Keep work area well lit.
- Do not operate near flammable liquids or in gaseous or explosive atmospheres.

(3) Be cautious about electric shock.

- When using electric tools, do not touch any which is earthed. (Ex. Pipe, heating apparatus, microwave oven, outside frame of refrigerator)

(4) Keep children away.

- Also all visitors should be kept away from work area.
- Do not let visitors contact the tool, compressor or connecting hoses.

(5) Store idle tools.

- When not in use, tools should be stored in dry, and locked-up places out of reach of children.

(6) Do not force tool.

- It will do the job better and safer at the rate which it was designed.

(7) Use right tool.

- Do not force a small tool of attachment to do the job of a heavy-duty tool.
- Do not use tool for a purpose not intended.

(8) Dress properly.

- Do not wear loose clothing or accessories. They can be caught in moving parts.
- Non-skid footwear is recommended.
- Wear protective hair covering to contain long hair.

(9) Always wear eye protection.

- Everyday eyeglasses only have impact resistant lenses. They do not protect eyes. Also use face or dust mask, if operations create dust.

(10) Do not abuse cable.

- Never carry tool by connecting cable or yank on hose to disconnect.
- Do not place a cable near a place with high heat, oil, and sharp edge.

(11) Secure work.

- Use clamps or a vise to hold workpieces when practical. It is safer than using your hand and it frees both hands to operate tool.

(12) Do not overreach.

- Keep proper footing and balance at all times.

(13) Cautious maintenance is necessary for electric tools.

- Always maintain blades and keep it work well so that safe and efficient work can be done.
- Follow the instruction manual for oiling or change of accessories.
- Check the cable regularly. Contact the sales agents to repair it when it is defective.
- When an extension cable is used, check regularly and change it when it is damaged.
- The grip should be kept dry and clean. Maintain it so well that it does not carry oil or grease.

(14) Switch off and take off the plug for the following:

- Not in use.
- When you change blades, grinding stone and bit.
- Any danger is anticipated.

(15) Remove spanners, wrenches etc., after adjustment.

- Make sure that spanners, wrenches etc., which are used for adjustment are removed before switching on.

(16) Always avoid unexpected start.

- Do not carry the tool with a finger on the switch when the power supply is on.
- Make sure that the switch is off before plugging in.

(17) Use a cabtyre cable or a cabtyre extension cable when it is used outside.

(18) Stay alert.

- Watch what you are doing.
- Bear in mind the way of handling/operation and the circumstances of the surrounding area.
- Use common sense.
- Do not operate tool when you are tired.

(19) Check damaged parts.

- Before further use of the tool, an accessory or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended functions.
- Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation.
- An accessory or other part that is damaged or inoperable should be properly repaired or replaced. When a switch becomes out of order, repairs should be performed only by the sales agent from whom you purchased the tool or an authorized dealer.
- Do not use electric tools which cannot be activated or stopped with a switch.

(20) Use recommended accessories.

- Consult this manual or the sales agent from whom you purchased the tool or an authorized dealer for recommended accessories. The use of improper accessories may cause risk of injury to persons.

(21) Repairs by authorized personnel.

- This tool should not be modified as it meets safety requirements.
- Any repairs to the tool or installation of replacement parts should be performed only by the sales agent from whom you purchased the tool or an authorized dealer.
- Failure to utilize the expertise of the sales agent from whom you purchased the tool or an authorized dealer or, failure to use genuine replacement parts, may result in an increased risk of injury to the user and may invalidate your warranty.

IMPORTANT SAFETY INSTRUCTIONS FOR PORTABLE DOUBLE ACTION HYDRAULIC PUMP

WARNING

- **Use of power is limited to the power source specified by the rating plate.**

- **Warning this machine must be earthed.**

- **Check the earth leakage breaker.**

Prior to use, check whether the power source is provided with earth leakage breakers to prevent electric shocks as prescribed in industrial safety and health regulations and electrical installations technical standards.

- **The earth lead must not be connected to a gas pipe. This may cause an explosion.**

- **Make sure the Earth Clip and earth lead are not faulty.**

If you have a tester or insulation resistance meter, check for continuity between the Earth Clip and the metal part of the body. Burying an earth rod or earth plate in the ground and connecting the earth lead is a job for a qualified electrician so you should consult a nearby electrical contractor.

- **Do not modify the power plug.**

If the power plug does not suit the power outlet, have a qualified electrician install a suitable outlet. Never modify the power plug which is connected to the tool. Mistaking the earth lead to electrocution. With or without yellow stripes, a lead with green insulation is an earth lead.

If the cord or power plug is replaced, do not connect the earth lead to a terminal which is carrying an electric current.

If you do not understand this explanation, or if you do not know whether your tool is properly earthed, please consult a qualified electrician.

- **Extension cord should be selected after ensuring the diameter is compatible with the length of the extension.**

Beware of extremely long power cord (particularly wound up thin cords) as they may cause drops in voltage which weaken the magnetism, adversely affecting the performance and function of the tool, Do not share the extension cord with any other

electric machine tools.

● **115V**

Extension Cable	
Max. Length	Nominal cross-sectional areas
10 m	2.0mm ² or more
20 m	3.5mm ² or more
35 m	5.5mm ² or more
50 m	8.0mm ² or more

● **230V**

Extension Cable	
Max. Length	Nominal cross-sectional areas
20 m	2.0mm ² or more
40 m	3.5mm ² or more
50 m	5.5mm ² or more

● **Do not leave the tool while it is operating.**

If you leave the workplace, switch off the tool and remove the power plug from the supply. Do not leave the area until the tool comes to a complete stop.

● **Do not remove any labels or name plates from the tool.**

If a label or name plate has been damaged or is missing, contact the sales agent from whom you purchased the tool or an authorized dealer to obtain a replacement.

● **The maximum Output pressure.**

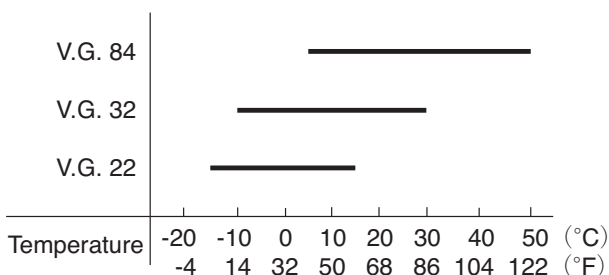
The maximum usage pressure of the Pump is 68.65MPa (700kgf/cm²). Use the actuator, the allowable maximum pressure of which is 68.65MPa (700kgf/cm²) or more.

● **Temperature control**

After continuous use for an extended period, the unit will become hot and the oil in the Pump will also be heated. The oil temperature should not be allowed to exceed 70°C (158°F) .

● **Replacement of Hydraulic Oil by Ambient Temperature.**

In the case that the standard hydraulic oil, V.G.(viscosity index) 32, cannot work properly due to the ambient temperature, replace with the suitable hydraulic oil in accordance with the table below.



1. USAGE

The Pump is the hydraulic power supply device generated by our own double action hydraulic actuator. The suitable actuator is SELFER ACE series.

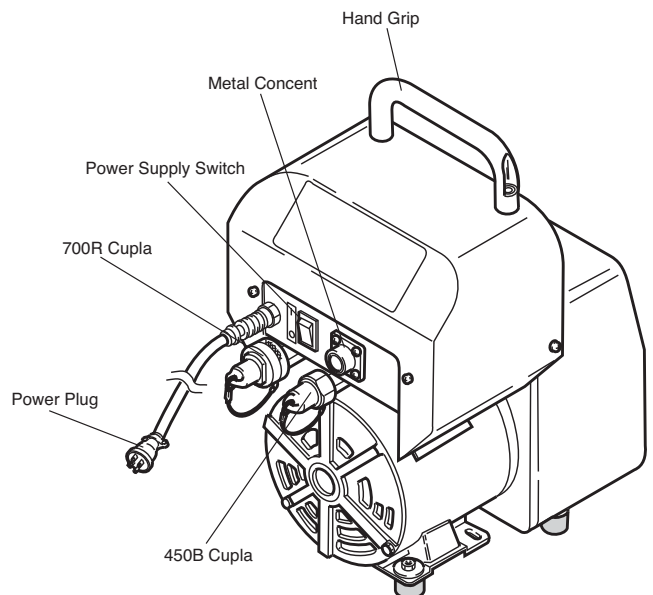
2. CHECK THE CONTENTS OF THE PACKAGE

Check the contents and make sure that the tool does not have any damage due to an accident during the transportation, if any. The contents should correspond to the list as follows. Just in case there are some damages or missing parts, contact the sales agent from whom you purchased the tool or an authorized dealer.

HDP-05

Package Contents	Qty	Check
PUMP HPD-05	1set	
Oil Cap	1	
Hand Grip	1	
Hex. Socket Head Cap Screw 6X20	2	
Hex. Socket Screw Key 8	1	
Hex. Socket Screw Key 5	1	
Instruction Manual	1	
How to mount the Hand Grip	1	
Declaration of Conformity	1	

3. NAME OF PARTS



(Fig. 1)

4. PREPARATION

4-1. ATTACHING ACCESSORIES

(1) Fix the Hand Grip (TQ03239).

(2) Disconnect the plug Rc3/8 from the Pump oiling port, and replace the Oil Cap with the new one supplied as an accessory.

Negligence of this procedure will cause abnormal heat, noise and other accidents, and the specified performance will not be obtained. (Fig. 2)

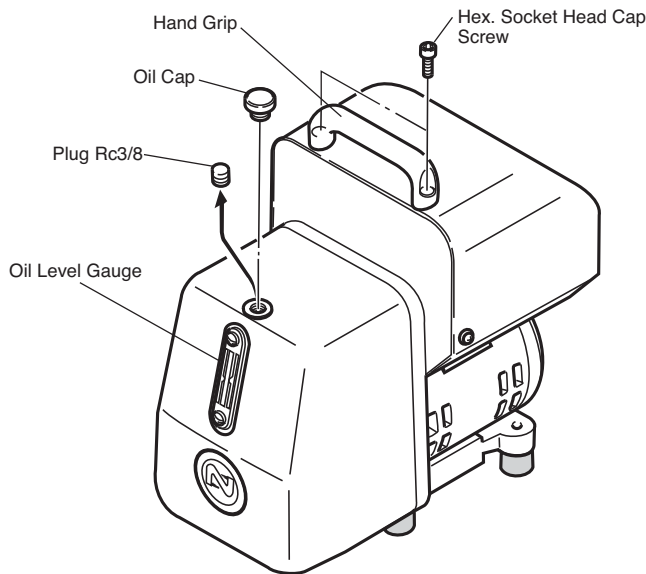
The plug Rc3/8 should be set to the original position during transportation.

4-2. INSTALLATION

Install the Pump in a well-ventilated level position, with low humidity and little dust.

4-3. CHECK THE OIL LEVEL

Check that the oil level is above the center on the Oil Level Gauge. If there is insufficient oil, top up to the "H" level with the Oil: ISO V.G. 32 (equivalent to #90 turbine oil)



(Fig. 2)

4-4. HOSE CONNECTIONS

(1) Connect the hoses between the Selfer Ace and the Pump. The 700R Cupla is used on the discharge side (high pressure) and the 450B Cupla goes to the return side (low pressure). Make the connections as follows. (Fig. 3)

To Prevent Malfunction

- Before connecting the Cuplas, ensure they are well cleaned and free of dust and foreign matter.
- When disconnecting always fit the supplied dust caps.

[700R]

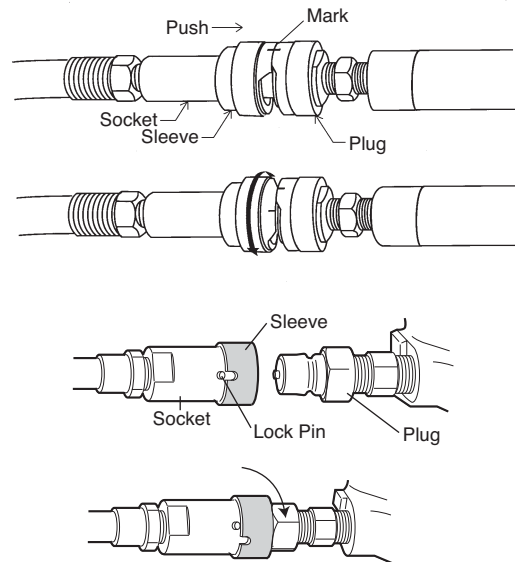
◎ Connection :Align the two—marks of both sleeves of Cupla, force inwards and once fully depressed rotate Cupla sleeve 90 degrees. This will fully lock the Cupla in position.

◎ Disconnection :To disconnect re-align the two—marks on the Cupla sleeves and the Cupla will disconnect.

[450B]

◎ Connection :Align the slot on socket sleeve with the lock pins, draw back the sleeve and push over the plug. Release the sleeve and then rotate the sleeve 90 degrees.

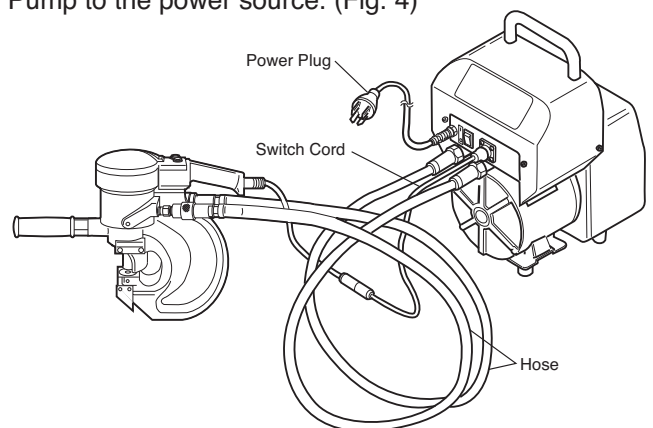
◎ Disconnection :To disconnect rotate the sleeve until slot and pins are aligned then simply pull back sleeve.



(Fig. 3)

(2) Connect the Switch Cord to the Selfer Ace and Pump. (Fig. 4)

(3) Connect the Power Plug which is coming from the Pump to the power source. (Fig. 4)



(Fig. 4)

5. HOW TO OPERATE THE TOOL

WARNING

- **Don't pressurize the Pump independently.**

If the Pump is by itself, or the hoses are not connected to the Selfer Ace, the Pump must not be started. Otherwise the valves may be forced out of the Cuplas.

START AND STOP

Use the switch on SELFER ACE to start and stop these operations. Refer to the instruction manual of SELFER ACE for details.

6. MAINTENANCE AND INSPECTION

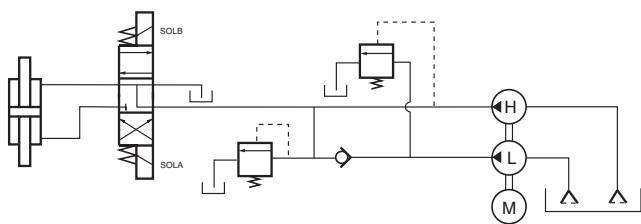
WARNING

- **The Power Plug must be removed from the power supply during maintenance and inspection.**
- **All attached parts should be checked periodically for loose screws, etc. Any loose screws should be tightened securely.**

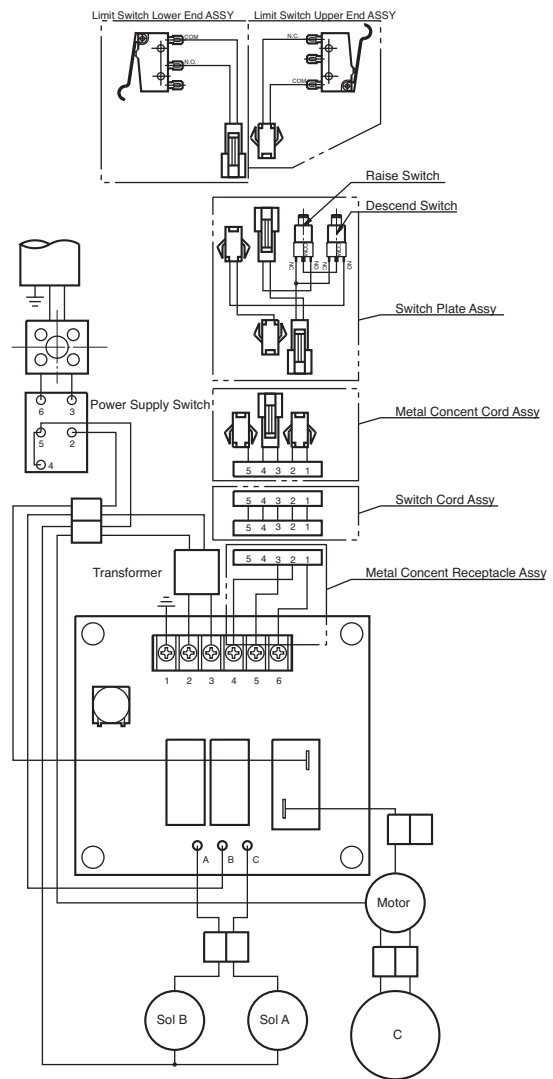
6-1. OIL CHANGE

Initial oil replacement should be done after operation for fifty hours. Subsequent replacement should be made at intervals of five hundred hours.

6-2. WIRING DIAGRAM AND OIL CIRCUIT DIAGRAM



(Fig. 5)



(Fig. 6)

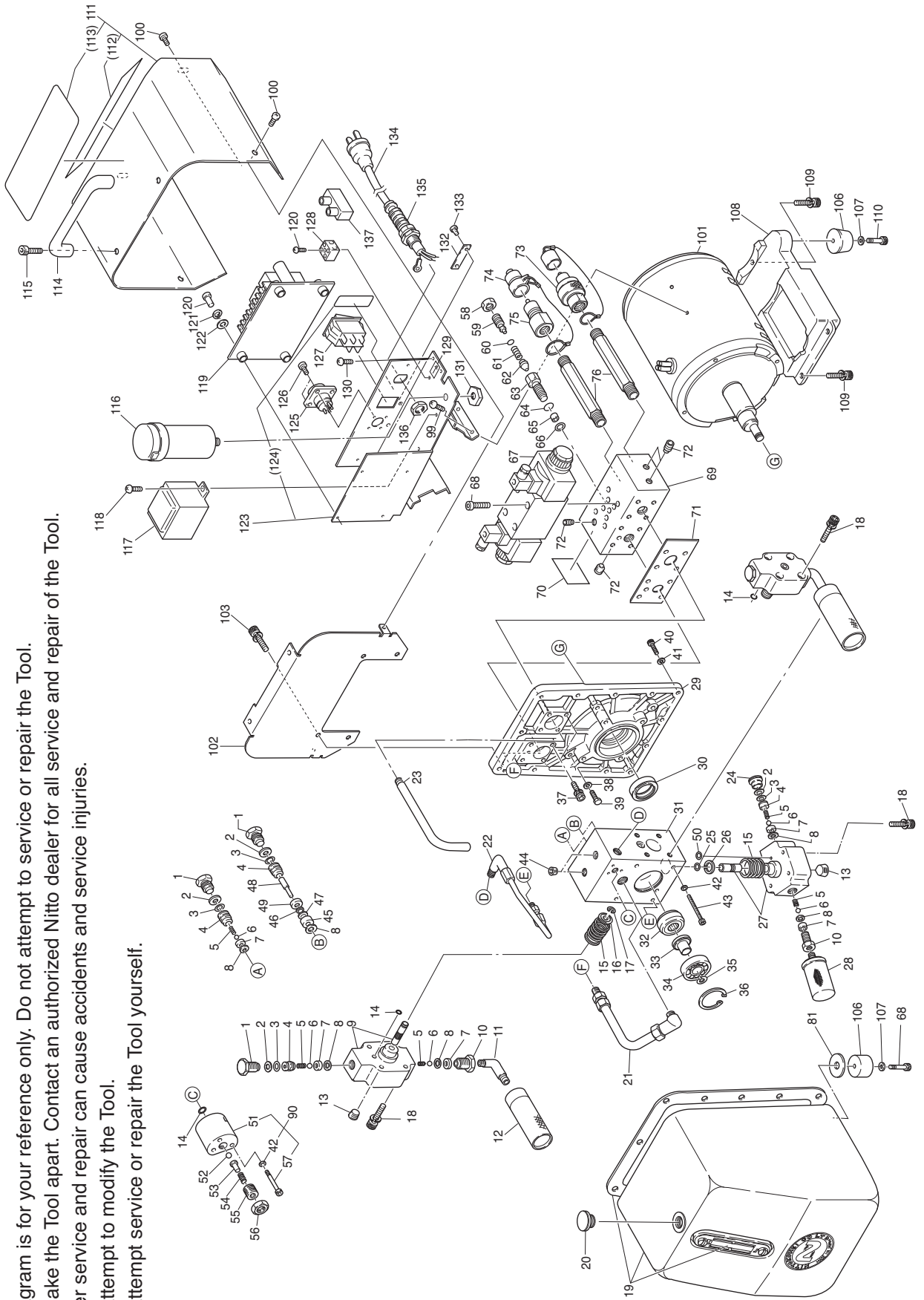
7. ORDERING SERVICE PARTS

In ordering parts and components from the sales agent from whom you purchased the tool or an authorized dealer, give each part number, part name and quantity required.

8. HPD-05 ASSEMBLY

WARNING

This diagram is for your reference only. Do not attempt to service or repair the Tool.
Do not take the Tool apart. Contact an authorized Nitto dealer for all service and repair of the Tool.
Improper service and repair can cause accidents and service injuries.
Never attempt to modify the Tool.
Never attempt service or repair the Tool yourself.



9. HPD-05 PARTS LIST

The part numbers with () are included in the Assy parts written above them.

No.	Part No.	Description	Qty	Price
1	TP05874	Check Set Plug	4	
2	TP05873	Back-up Ring P-10 T2	5	
3	TP05872	O-Ring P-10	5	
4	TP05871	Delivery Valve	5	
5	TP05870	Spring 0.3x5x7	2	
6	CP00800	Ball 1/4	7	
7	TP05869	Valve Seat	7	
8	TP05868	Packing	8	
9	TA9A586	Cylinder Piston Sub Assy	2set	
10	TP05875	Suction Valve	3	
11	TP05876	Elbow PT1/8xPF1/4	2	
12	TP05877	Filter	2	
13	TP05863	Hex. Socket Set Screw PT1/4	3	
14	TP05878	O-Ring P-8	3	
15	TP05865	Piston Spring	3	
16	TP05866	Spring Seat	2	
17	TP05867	Retaining Ring E-64	2	
18	TQ03341	Hex. Socket Head Cap Screw 6x30	12	
19	TA97817	Oil Tank Assy	1set	
21	TA92456	Steel Pipe Assy	1set	
22	TA94198	Steel Pipe Assy	1set	
23	TQ03234	Drain Pipe	1	
24	TP07963	Check Set Plug	1	
25	TP07962	Retaining Ring WR-11	1	
26	TP07961	Spring Seat	1	
27	TA9A603	(L) Cylinder Piston Sub Assy	1set	
28	TP07964	Suction Filter	1	
29	TQ03233	Bracket	1	
30	TP05856	Oil Seal S25x38x8	1	
31	TQ03232	Pump Body	1	
32	TP09671	Yoke Type Track Roller	1	
33	TP09672	Distance Collar	1	
34	TP05928	Ball Bearing	1	
35	TP09673	Retaining Ring E10	1	
36	CP01086	Internal Retaining Ring C-42	1	
37	TQ03340	Hex. Socket Head Cap Screw 6x25	8	
38	TP05853	Seal Washer W5	4	
39	TPT3247	Hex. Head Bolt 5x22	4	
40	TP02863	Hex. Socket Head Cap Screw 5x20	13	
41	TP05950	Copper Washer	13	
42	TP00513	Spring Washer M5	4	
43	TP05857	Hex. Socket Head Cap Screw 5x70	4	
44	TP06597	Hex. Socket Set Screw PT1/8	2	
45	TP06616	Valve Sleeve	1	

No.	Part No.	Description	Qty	Price
46	TP06617	O-Ring P-6	1	
47	TP06618	Back-up Ring P-6 T2	1	
48	TP06619	Spool	1	
49	TP06620	Valve Sleeve Plate	1	
50	TP05949	O-Ring P-7	1	
52	TP06633	Ball 5/16	1	
53	TP07966	Ball Retainer	1	
54	TP07967	Spring 2x7x25.2	1	
55	TQ03407	Hex. Socket Set Screw with Flat Point 12x15	1	
56	TP05422	Hex. Nut M12	1	
58	TP14009	Hex. Nut M12x1	1	
59	TP14279	Adjust Screw	1	
60	TP11241	O-Ring P-7	1	
61	TP14269	Spring 7.4x20x2	1	
62	TA98852	Relief Valve Sub Assy	1	
63	TP14267	Relief Valve Body	1	
64	TP12010	O-Ring P-14	1	
65	TP14266	Relief Valve Seat	1	
66	TP14265	Copper Washer 6x16x0.8	1	
67	TQ03463	Solenoid Valve (115V)	1	
67	TQ03464	Solenoid Valve (230V)	1	
68	TP06217	Hex. Socket Head Cap Screw 6x25	6	
69	TQ03249	Manifold	1	
70	TQ12864	Label Warning Relief Valve	1	
71	TQ03248	Gasket	1	
72	TP06597	Hex. Socket Set Screw PT1/8	4	
73	CA94119	700R-3P Assy	1set	
74	CB09421	450B-3P-D Assy	1set	
75	CA82240	450B-3P Assy	1set	
76	TQ03238	Cupla Joint	2	
81	TQ13224	Spacer 6.5x28x8	2	
90	TB09036	Unloader Valve Assy	1set	
42	(TP00513)	Spring Washer M5	3	
51	(TQ13301)	Unloader Valve	1	
57	(TP05882)	Hex. Socket Head Cap Screw 5x35	3	
99	LQ00444	Pan Head Screw 4x6	4	
100	LQ00190	Pan Head Screw 4x8	4	
101	TB04722	Motor Assy (115V)	1set	
102	TB04735	Motor Assy (230V)	1set	
102	TQ03250	Partition	1	
103	TQ03327	Hex. Socket Head Cap Screw 5x10	4	
106	TP05925	Mount Foot	4	
107	TP05926	Washer 6.5x10x1	4	
108	TQ13226	Condenser Box	1	

No.	Part No.	Description	Qty	Price
109	TQ03329	Hex. Socket Head Cap Screw 5x15	3	
110	TP10953	Hex. Socket Head Cap Screw 6x18	2	
111	TB08782	Cover Assy (115V)	1set	
111	TB08785	Cover Assy (230V)	1set	
112	(TQ12861)	Label Model Number (115V)	1	
112	(TQ12865)	Label Model Number (230V)	1	
113	(TQ12860)	Label Warning	1	
116	TQ06227	Condenser MAB-MKP40/330	1	
117	TQ06226	Transformer 115V/24V 0.416A (115V)	1	
117	TQ06233	Transformer 230V/24V 0.416A (230V)	1	
118	TP06290	Pan Head Screw 4x8	2	
119	TB04726	Print Board	1set	
120	LP30251	Pan Head Screw 4x16	5	
121	TP04234	Spring Washer M4	4	
122	LP30299	Washer M4	4	
123	TB04724	Switch Plate Sub Assy	1set	
124	(TQ06222)	Label Power Supply	1	
125	TB04728	Metal Consent Receptacle Assy	1set	
126	TP00056	Pan Head Screw 3x6	4	
127	TQ06225	Snap-in Switch LLK25L-2	1	
128	TQ06228	Ceramic Connector 2-40Z-2	1	
129	LP13557	Label Earth	1	
130	LP08489	Pan Head Screw 4x6	2	
131	TP08584	Hex. Nut M8	1	
132	TP04769	Plate Serial Number	1	
133	TP05136	Drive Rivet No.2x4.8	2	
134	TB04725	Cabtyre Cord Assy	1set	
135	TQ02644	Cord Stopper BS-PF 5380 1005	1	
136	TQ06435	Lock Nut 5380-1008	1	
137	TQ06229	Terminal Block	5	

ACCESSORIES

No.	Part No.	Description	Qty	Price
20	TP05929	Oil Cap KRM-A1	1	
114	TQ03239	Hand Grip	1	
115	TP03086	Hex. Socket Head Cap Screw 6x20	2	
	TP03249	Hex. Socket Screw Key 8	1	
	TP04004	Hex. Socket Screw Key 5	1	
	TQ12862	Instruction Manual	1	
	TQ12863	Declaration of Conformity	1	



■ Overseas Affiliates / Offices

NITTO KOHKI U.S.A., Inc.
4525 Turnberry Drive, Hanover Park, IL 60133, U.S.A
Tel: (1)-630-924-9323 Fax: (1)-630-924-0303
http://www.nittokohki.com/index.html

NITTO KOHKI EUROPE Co., Ltd.
Unit 21, Empire Centre, Imperial Way,
Watford Hertfordshire, WD24 4TS, United Kingdom
Tel: (44)-01923-239668 Fax: (44)-01923-248815
http://www.nitto.co.uk/

NITTO KOHKI DEUTSCHLAND GmbH
Lerchenstr. 47, D-71144 Steinenbronn, Germany
Tel: (49)-7157-22436 Fax: (49)-7157-22437
http://www.nitto-kohki.de/

NITTO KOHKI AUSTRALIA Pty. Ltd.
77 Brandl Street, Eight Mile Plains QLD 4113,
Australia
Tel: (61)-7-3340-4600 Fax: (61)-7-3340-4640
http://www.nitto-australia.com.au/

NITTO KOHKI Co., Ltd. Singapore Branch
10 Ubi Crescent #01-62, Ubi Techpark Lobby D,
Singapore 408564
Tel: (65)-6227-5360 Fax: (65)-6227-0192
http://www.nitto-kohki.co.jp/e/nksb/

NITTO KOHKI Co., Ltd. Shanghai Representative Office
#1117 Ruijing Building, Maoming South Road,
Shanghai 200020 China
Tel: (86)-21-6415-3935 Fax: (86)-21-6472-6957
http://www.nitto-kohki.cn/

NITTO KOHKI Co., Ltd. Shenzhen Representative Office
#0726 International Culture Building, 3039, Shennan
Zhong Rd., Futian District, Shenzhen, 518003 China
Tel: (86)-755-8375-2185 Fax: (86)-755-8375-2187
http://www.nitto-kohki.cn/

NITTO KOHKI Co., Ltd. Bangkok Representative Office
38Q, House Convent Bldg, 7th Floor, Unit 7A,
Convent Rd, Silom, Bangkok, 10500 Thailand
Tel: (66)-2-632-0307 Fax: (66)-2-632-0308
http://www.nittobkk.com/eng_index.htm

EC DECLARATION OF CONFORMITY

We hereby declare that the following our product conforms with the essential health and safety requirements of EC Directives.

Product: PORTABLE DOUBLE ACTION HYDRAULIC PUMP
Model: PUMP: HPD-05
Serial No: X X X X X
Consecutive numbers (00001~99999)
Christian era's last digit (0~9)
Manufacturer: NITTO KOHKI Co., Ltd.
2-9-4, Nakaikegami, Ohta-ku, Tokyo, 146-8555, Japan
Authorised Compiler in the Community:
Masatoshi Ogue
President
NITTO KOHKI EUROPE Co., Ltd.
Unit21, Empire Centre, Imperial Way, Watford Hertfordshire, WD24 4TS, UK
Tel: (44)-01923-239668 Fax: (44)-01923-248815
Directive: 98/37/EC and 2006/42/EC Machinery Directive

The above product has been evaluated for conformity with above directives using the following European standards.
The technical construction file (TCF) for this product is retained at the above manufacturer's location.

Machinery Directive/ Low Voltage Directive:
EN 792-10:2000+A1:2008, EN 809:1998, EN ISO12100-1:2003, EN ISO12100-2:2003, EN ISO14121-1:2007,
EN60204-1:2006, others

EMC Directive:
EMI EN55014-1:2006 EN61000-3-2:2006 EN61000-3-3:1995/A1:2001+A2:2005
EMS EN55014-2:1997+A1:2001:Category II
EN61000-4-2:1995+A1:1998+A2:2001
EN61000-4-4:2004
EN61000-4-5:1995+A1:2001
EN61000-4-6:1996+A1:2001
EN61000-4-11:2004

Name: K.Kishi
Title: GENERAL MANAGER MACHINE TOOLS DIV.

Being the responsible person appointed and employed the manufacturer.