

NITCHI

MODEL H-50A·HE-50A Series HAND-OPERATED CHAIN HOIST

Operating Instructions No. 7

IMPORTANT-CAUTION

Install, operate and maintain properly to avoid the possibility of personal injury or damage of materials. In the succeeding pages are given important and useful instructions and recommendations to all persons who will install, operate and maintain the Chain Hoist. Read thoroughly the contents before use and retain this handbook for future use for safe, dependable and economical operation.

CHAIN HOIST SAFETY PRO

1. PRECAUTIONS BEFORE INSTALLATION

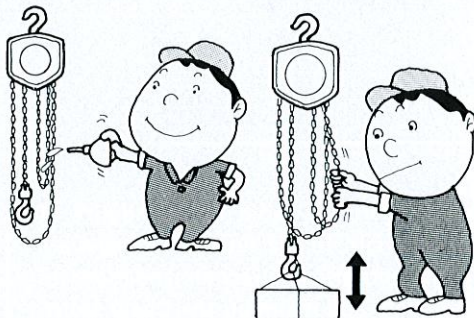
- Inspect carefully for any damage that may occur during shipping. Check for loose, missing, or damaged parts.
- Confirm that the structure supporting the hoist is strong enough to support the rated capacity of the hoist with a generous factor of safety.

2. PRECAUTIONS BEFORE USE

- Confirm that the load chain is not twisted, kinked, damaged or worn. The load chain must always mesh correctly with the load sheave. With 5 ton and larger hoists, i.e. hoists with more than 1-fall of load chain, twists can arise by turning over the bottom hook through the load chain.



- Lubricate the whole length of the load chain with machine or gear oil.



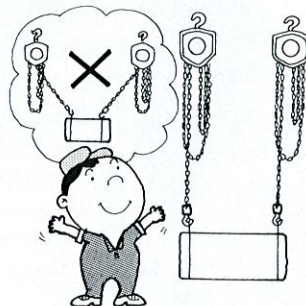
- Confirm that the brake is functioning properly. Hoist the load 10 cm, next check the brake when lowering the load.

3. PRECAUTIONS DURING USE

- Never lift loads in excess of the rated capacity marked on the hoist.
- Never walk or work under a hoisted load and never lift, support, or transport people.
- The hand chain is equipped with a safety link. When the safety link opens or deforms, stop at once and inspect for the cause.
- Do not operate hoist with other than manual power.
- Do not permit more than one operator to pull on a single hand chain at one time.
- Lift loads correctly with proper slings and attachments. Never lift with the point of the hook and never use the load chain as a sling by back hooking.



- Lifting a load with two hoists is not recommended. If the operation is unavoidable, hoist the load with utmost care, keeping balance of the load.



- h) Never run the load chain out too far. When operated beyond the range of lift, an excessive load that can cause damage will be imposed on the hoist.



- i) Hoists are designed for lifting loads vertically and should not be used for horizontal or angle hoisting.
- j) Extreme temperatures will lower the toughness of the hoist. Loads should be hoisted or lowered very slowly and carefully.
- k) Never leave a load hanging on the hoist.
- l) The hoisting operation should never be done with the hook caught to a stationary object.
- m) Never use the chain or hook as a ground for welding.
- n) Use only genuine parts and chains supplied by the authorized distributors.

4. MAINTENANCE

After use, service the hoist before storing it. Servicing and repairs should only be carried out by qualified competent responsible people.

- a) Clean the hoist thoroughly.
- b) Keep the hoist well lubricated. Oil the load chain, hook shank and guide roller.
- c) Store the hoist correctly against rain and moisture. When the hoist is installed outdoors, exceptional care should be taken for maintenance.

5. PERIODIC INSPECTIONS

Periodic inspection and lubrication in accordance to the frequency of use must be carried out to ensure long and safe operation of the hoist. It is also recommended that a record of maintenance be kept.

6 CHAIN AND HOOK

- a) The hooks and load chains are made of special alloy steels and are precisely heat-treated. Never weld or heat-treat them again.

b) Load Chain

The load chains are exceptionally long wearing, but wear is unavoidable and certain conditions will cause wear and corrosion that will lower the strength. Load chains worn beyond the permissible limits shown in the Table 1 must be replaced at once.

c) Hook

The hook opening will elongate with overloads and incorrect hooking. When the hook opening is elongated beyond the permissible limits shown in the Table 2, it is dangerously deformed and must be replaced immediately.

Table 1 Load & Hand Chain

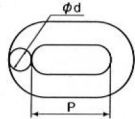
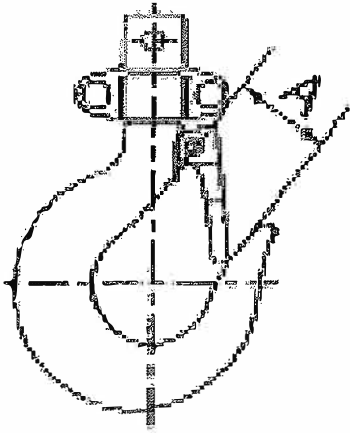
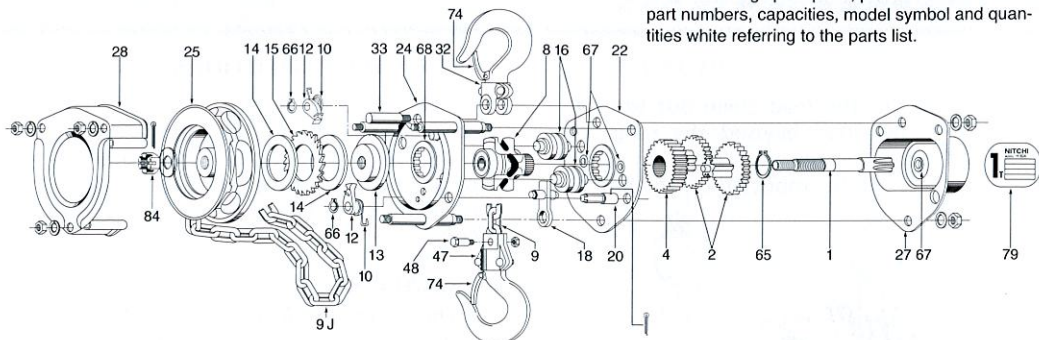
			
Capacity (ton)	Diameter of Link ϕd (mm)	Standard Dimension P (mm)	Permissible Limit P (mm)
0.5	5	15.1	15.4
1	6.3	19.1	19.5
1.6 - 5	7.1	21.2	21.6
2	7.9	24.2	24.7
3.2 - 10	10	30.3	30.9
Hand chain	5	24	25

Table2: Permissible limit of the hooks

	Capacity (ton)	Standard Dimension A(mm)	Permissible Limit A(mm)
	0.5	30	33
	1	36	39
	1.6	39	43
	2	42	46
	3.2	48	53
	5	56	60
	10	75	80
	16	90	99
	20-25	90	99
	32	102	112
	40	122	134
	50	127	140

EXPLODED VIEW (Model H-50A Series)

When ordering spare parts, please be sure to state part numbers, capacities, model symbol and quantities while referring to the parts list.



PARTS LIST (Model H-50A Series)

Index No.	Part Name	Nos. used	consisting of Index No.	0.5 t Part No.	1 t Part No.	1.6 t Part No.	2 t Part No.	3.2 t Part No.	5 t Part No.
1	Pinion shaft	1		GHH5A001	JHH5A001	KHH5A001	LHH5A001	NHH5A001	KHH5A001
2	Pinion (with pinion gear)	2 set		GHH5A003T	JHH5A003T	KHH5A003T	LHH5A003T	NHH5A003T	KHH5A003T
4	Load gear	1		GHH5004	JHH5004	KHH5004	LHH5004	NHH5004	KHH5004
* 8	Load sheave	1		GHH5008T	JHH5008T	KHH5008T	LHH5008T	NHH5008T	KHH5008T
* 9	Load chain	1		T-5	V-6.3	V-7.1	V-8	V-10	V-7.1
9J	Hand chain	1							
13	Disc hub	1		GHH5A013	JHH5A013	KHH5A013	J-5		KHH5A013
14	Friction disc	1 set		GHH5A014	JHH5A014	KHH5A014	LHH5A014		KHH5A014
15	Ratchet	1		GHH5A015	JHH5A015	KHH5A015	LHH5A015		KHH5A015
16	Load chain guide	2		GHH5016	JHH5016	KHH5016	LHH5016	NHH5016	KHH5016
18	Stripper	1		GHH5018U	JHH5018U	KHH5018U	LHH5018U	NHH5018U	KHH5018U
20	Load chain anchoring pin	1		GHH5020	JHH5020	KHH5020	LHH5020	NHH5020	KHH5020
22	Gear-side plate	1		GHH5022	JHH5022	KHH5022	LHH5022	NHH5022	KHH5022
67	0.5t-2t, 5t plain bushing for pinion 3.2t, 10t-Needle bearing	4		GHH5A067		KHH5A067	LHH5A067	TR132713NR	KHH5A067
* 68	Needle bearing for load sheave	2		TR273510NR	TR324210NR	TR364710NR	TR425313NR	TR506213NR	TR364710NR
* 24	Wheel-side plate assembly	1 set	10, 12, 66	GHH5024T	JHH5024T	KHH5024T	LHH5024T	NHH5024T	KHH5024T
* 10	Pawl spring	2		GHH5010			KHH5010		
12	Pawl	2		IRB3007			KRB3007		
66	Snap ring for pawl pin	2		SRC5108			SRC5112		
25	Handwheel	1		GHH5A025	JHH5A025	KHH5A025	LHH5A025	NHH5A025	KHH5A025
27	Gear cover	1	w/o 79	GHH5027	JHH5027	KHH5027	LHH5027	NHH5027	KHH5027
* 79	Label	1		E-H5A1	E-H5A2	E-H5A3	E-H5A4	E-H5A5	E-H5A6
28	Handwheel cover	1		GHH5028	JHH5028	KHH5028	LHH5028	NHH5028	KHH5028
32	Top hook assembly	1 set		GHH5032T	JHH5032T	KHH5032T	LHH5032T	NHH5032T	PHH5032T
33	Yoke pin	1		RH4010033		RH4015033	RH4020033	HH4030033	RH4015033
47	Bottom hook assembly	1 set		GHH5047U	JHH5047U	KHH5047U	LHH5047U	NHH5047U	PHH5047U
48	Load chain fastening bolt with nut	1		GHH5048U	JHH5048U	KHH5048U	LHH5048U	NHH5048U	PHH5048U
74	Safety latch assembly	1 set		GHH5074U	JHH5074U	KHH5074U		NHH5074U	PHH5074U
65	Snap ring for loadsheave	1		SRC5122	SRC5125	SRC5130	SRC5138	SRC5145	SRC5130
84	Check nut	1		KN11M8			KN12M12		

PARTS LIST (Model HE-50A Series) The Parts with a *mark are not common for H-50A Series and HE-50A Series.

Index No.	Part Name	Nos. used	consisting of Index No.	0.5 t Part No.	1 t Part No.	1.6 t Part No.	2 t Part No.	3.2 t Part No.
* 8	Load sheave	1		GHE5008	JHE5008	KHE5008	LHE5008	NHE5008
* 9	Load chain	1		T-5	T-6.3	T-7.1	T-8	T-7.1
* 68	Plain bushing for load sheave	2		GHE5005	JHE5005	KHE5005	LHE5005	NHE5005
* 24	Wheel-side plate assembly	1 set	10, 12, 66	GHE5024T	JHE5024T	KHE5024T	LHE5024T	NHE5024T
* 10	Pawl spring	1		GHH5010		KHH5010		
* 79	Label	1		E-HE5A1	E-HE5A2	E-HE5A3	E-HE5A4	E-HE5A5

TEST CERTIFICATE

This is to certify that the Chain Hoist has been manufactured and tested according to our rigid company standards.



N NITCHI CO., LTD.

No.7-17, 4-Chome, Yoshita,
Higashi-Osaka, Osaka, Japan

DECLARATION OF CONFORMITY

NITCHI CO., LTD. declares, in sole responsibility, that the following products referred to in this declaration comply with the standards or Council Directives described below:

-Designation

Manual chain hoist
Manually operated chain lever hoist
Manually trolley

-Model & Capacity

H-50A & HE-50A	0.5t to 50t
RB5 & RBP1	250kg to 6.3t
GT-5, PT-5	100kg to 30t

The product includes the portion that does not
accord with the following relevant regulations.

Standards

- EN ISO 12100 Safety of machinery
- EN 13157:2004+A1 Cranes, Safety Hand powered cranes

Council Directives

- 2006/42/EC EC machinery directive

The company named above will keep on file for review the following documentation:

- Operating instructions as required.
- Plans.
- Description of measures designed to ensure conformity.
- Other technical documentation.

NITCHI CO., LTD.

K. Adachi

Osaka Japan
Oct. 1st 2011

K. Adachi
Director, Technical Div.