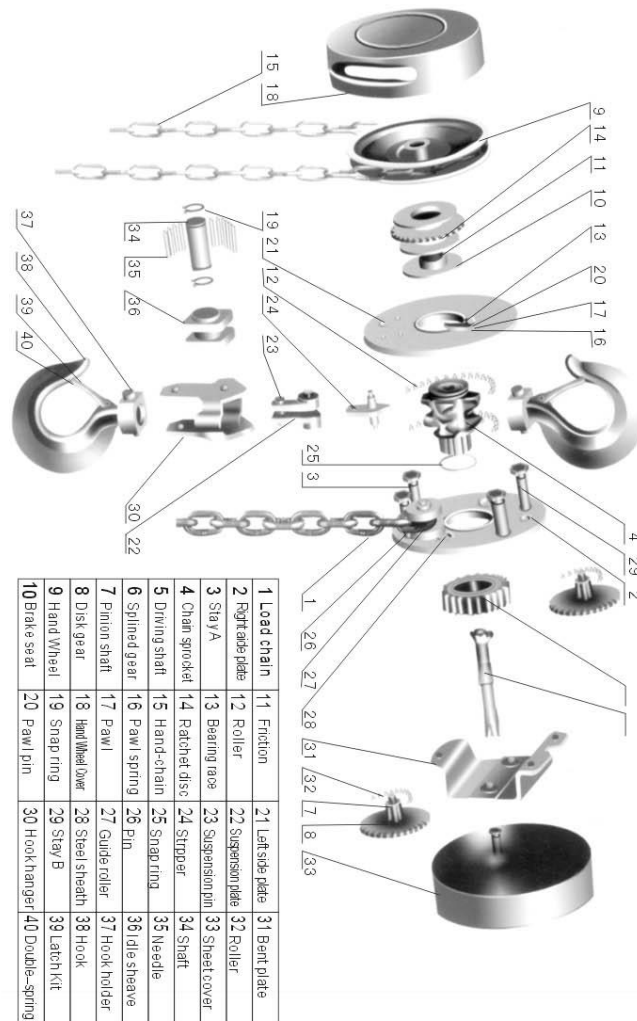


HSZ SERIES
0.5-20TON CHAIN BLOCK



INSTRUCTION MANUAL

7. PARTS ILLUSTRATION



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0.5-20TON CHAIN BLOCK

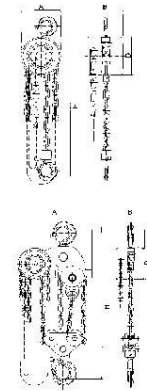
1. APPLICATION

The HSZ series chain block is a portable lifting device easily operated by hand chain. It is suitable for use in factories, mines, farms, construction sites, wharves, docks and warehouses for installation of equipment, as well as for loading and unloading goods. It is specially advantageous for lifting work in open air grounds and places where no electric power supply is available.

The chain block can be attached to a trolley of any type as a traveling chain block. It is suitable to monorail overhead conveying system, hand traveling crane and jib crane.

2. MAIN TECHNICAL PARAMETER

Model		HSZ ½	HSZ1	HSZ1½	HSZ2	HSZ3	HSZ5	HSZ10	HSZ20
Capacity	t	0.5	1	1.5	2	3	5	10	20
Standard lift	m	2.5	2.5	2.5	2.5	3	3	3	3
Running test load	t	0.63	1.25	2	2.5	4	6.3	12.5	25
Headroom(drawn closeup) H min	mm	270	270	368	444	486	616	700	1000
Effort required to lift max. load	n	225	309	343	314	343	383	392	392
N0.of columns ofload chain		1	1	1	2	2	2	4	8
Load chain dia.	mm	6	6	8	8	8	10	10	10
Dimensions	A	120	142	178	142	178	210	358	580
	B	108	122	139	122	139	162	162	189
	C	24	28	34	34	38	48	64	82
	D	120	142	178	142	178	210	210	210
Net Weight	kg	9.5	10	16	14	24	36	68	155
Gross Weight	kg	12	13	20	17	28	45	83	193
Extra Weight per meter of extra lift	kg	1.7	1.7	2.3	2.5	3.7	5.3	9.7	19.4



3. FEATURES

Five prominent features in design and in service are inherent in HSZ Series Chain Block:

- (1) Safety in operation and easy maintenance
- (2) High efficiency and small hand pull
- (3) Light weight and easy handling
- (4) Fine appearance with small size
- (5) Durability in use

4. OPERATION

The HSZ Series Chain Block is designed with a transmission mechanism of symmetrically arranged two-stop spur gears. The main principle of operation is as follows:

On pulling the hand chain, the hand wheel rotates in clockwise direction, presses the friction plates and ratchet disc tightly against the brake seat and causes these parts to rotate in unison, the driving gear shaft turns the disk gear, pinion shaft and spline gear to rotate hence the load chain sprocket which is mounted on the splined gear actuates the load chain to lift (or pull) the load smoothly and stably.

The brake used is a ratchet disc with a set of single-acting friction plates. It hold up itself on load, and the pawl is meshed with the ratchet disc by force of the spring, thus ensuring brake to work safely.

5. CAUTIONS

- (1) Overload is strictly prohibited.
- (2) Prohibit other power but manpower from operating chain block.
- (3) Make sure that the chain block, the lubrication of transmitting part and load chain. Idle motion is in good condition.
- (4) Before lifting, inspect the hooks to see whether they are securely attached. Load suspension at hook tie is not permissible. The load chain should be kept vertically straight without any twist so as to ensure safely.
- (5) During operation, the operator should stand in the plane of the handwheel. To lift the load, pull the hand chain to rotate the handwheel in clockwise direction. When pulling the hand chain in the reverse direction, the load will be lowered down smoothly.
- (6) For the sake of safety passing or working under a lifting load is strictly forbidden.
- (7) While lifting or lowering a load, the hand chain should be pulled steadily so as to prevent it from jerking or tangling.
- (8) Stop operation immediately in case the chain pulls force exceeds that of normal operation. Proceed inspection as follows:
 - (a) If there is anything entangled with the load.
 - (b) Whether there is any trouble with the parts of the block.
 - (c) Whether the load weight is over the rated capacity of the block.

6. MAINTENANCE

- (1) Clean off the dirt on the chain block, lubricate its parts with grease after use and store it in a dry place.
- (2) Maintenance and inspection should be made by a skilled hand. Never allow any layman to disassemble or to assemble the block.
- (3) Align the "0" marks of the two gears while assembling.
- (4) While assembling the brake mechanism care should be taken to mesh the slanting teeth of the ratchet disc and pawl. Make sure that the spring and pawl work sensitively and reliably. Then turn the plates on the brake seat. Turning it counter clockwise, there should be clearances between the disc and plates.
- (5) After cleaning and repair the block should be subjected to no load test and load test. A chain block can be put into operation after it has been tested and found under reliable and in good condition.
- (6) Keep clean the friction surface of the brake. Brake mechanism should be inspected regularly for prevention of faulty braking and falling the load.



WARNING – To reduce risk of injury:

1. Read and understand the entire owner's manual before attempting assembly or operation.
2. Read and understand the warnings posted on the tool and in this manual. Failure to comply with all of these warnings may cause serious injury and/or damage to property.
3. Replace the warning labels if they become obscured or are missing.
4. Keep visitors a safe distance from the work area. **Keep children away.**
5. Give your work undivided attention. Looking around, carrying on a conversation and "horse-play" are careless acts that can result in serious injury.
6. Provide for adequate space surrounding work area and non-glare, overhead lighting.
7. This chain hoist is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of a chain hoist, do not use until proper training and knowledge have been obtained.
8. Do not use this chain hoist for other than its intended use. If used for other purposes, JET disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
9. Do not use to lift people or loads over people.
10. Do not exceed the rated capacity of the chain hoist.
11. Do not use more than hand power to pull the hand chain.
12. Do not use the load chain as a sling; this may cause damage to the chain.
13. Always inspect the chain hoist for damage prior to use. If the chain hoist is damaged, do not use until it has been repaired or replaced.
14. Do not use more than one chain hoist to lift or move a load. If this is unavoidable, each chain hoist must have the same capacity as the load to be moved.
15. Never allow the load chain to "set" over sharp edges. All lifts must be made with straight chain that is free of obstacles.
16. If the hand chain is difficult to operate, then the load exceeds the capacity of the chain hoist. Select a chain hoist of larger capacity.
17. Do not use a chain hoist unless load is centered between top and bottom hooks.
18. Always take time to study the job to be performed and choose the safest method. Do not place yourself or other people in an unsafe position.
19. Stand to one side of the load being lifted and make sure no one else is standing underneath when lifting a load. Should a load slip, it will descend at a high rate of speed and can cause serious injuries to anyone standing directly underneath.
20. Leave all internal maintenance to a qualified JET Service Center.
21. Replace the chain with factory replacement chain only. Do not use any other type of chain.
22. If welding near the hoist, do not allow the chain or hook to be touched by a live electrode. Prevent weld splatter upon the chain.
23. Never use the chain hoist if either hook is stretched, deformed, or has a broken or missing safety latch. Always replace the safety latch and/or the hook before placing the chain hoist back into service.
24. Understand and follow all procedures as set forth in American National Standards titled "Performance Standard for Hand Chain Manually Operated Chain Hoists," ANSI/ASME HST-2; and "Overhead Hoists (Underhung)," ANSI/ASME B30.16. These standards are available through the American Society of Mechanical Engineers, www.ASME.org

 **WARNING:** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <http://www.p65warnings.ca.gov>.

Familiarize yourself with the following safety notices used in this manual:

CAUTION This means that if precautions are not heeded, it may result in minor injury and/or possible tool damage.

WARNING This means that if precautions are not heeded, it may result in serious injury or possibly even death.

Inspection and Maintenance

Read and follow ANSI Inspection and Maintenance Instructions. Know the meaning of Frequent Inspection, Periodic Inspection, Normal Service, Heavy Service, and Severe Service. It is the customer's responsibility to understand and follow all ANSI and JET inspection and maintenance instructions.

WARNING All repairs and adjustments are to be performed by trained and experienced personnel using procedures that are approved for the hoist system being serviced. Failure to comply may cause serious injury.

WARNING All safety related deficiencies discovered in the inspection are to be corrected before the hoist is to be placed back into service. Failure to comply may cause serious injury.

WARNING Check for internal damage whenever external damage has occurred. Failure to comply may cause serious injury.

1. Clean hoist after each use and oil lightly. NOTE: Do not get oil on brake system.
2. Do not drop or drag the hoist.
3. Store the hoist in a clean and dry environment.
4. While not mandatory, periodically oiling the chain with SAE 30 oil will increase its life.
5. Leave all repairs and adjustments of internal parts to qualified repair personnel.
6. Inspect the load chain and the lower hook after lifting a maximum weight load.
7. This hoist uses special alloy hoisting chain and does not interchange with any other manufacturer. All replacement chain must be purchased from your JET distributor or from JET directly by calling 800-274-6848.
8. Check and inspect the brake system frequently.
9. Annually, the hoist should be disassembled, inspected, and cleaned by trained and experienced personnel only. Contact a JET authorized service center by calling your dealer or visiting our web site at jettools.com.
10. After servicing, test the hoist with no load, then test the hoist with a load.