



## CHAIN BLOCK 2 TONNE



**TSCB20**

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*This product Complies with Australian Safety Standard:  
AS 1418.2-1997 Cranes – Part 2: Serial Hoists and Winches*

**Thank You**

*For the purchase of this ToolShed product. We try our hardest to supply customers like you with the best quality products available, at the best price possible. We cant wait to continue working together in the future.*

*Please contact us for any servicing, replacement parts, or questions you might have about your ToolShed product by visiting our website, or calling: 0800 948 665.*

# PRODUCT DETAILS

|                      |                                     |
|----------------------|-------------------------------------|
| <i>Product Model</i> | <i>ToolShed Chain Block 2 Tonne</i> |
| <i>Product Code</i>  | <i>TSCB20</i>                       |

**DISTRIBUTED BY:**

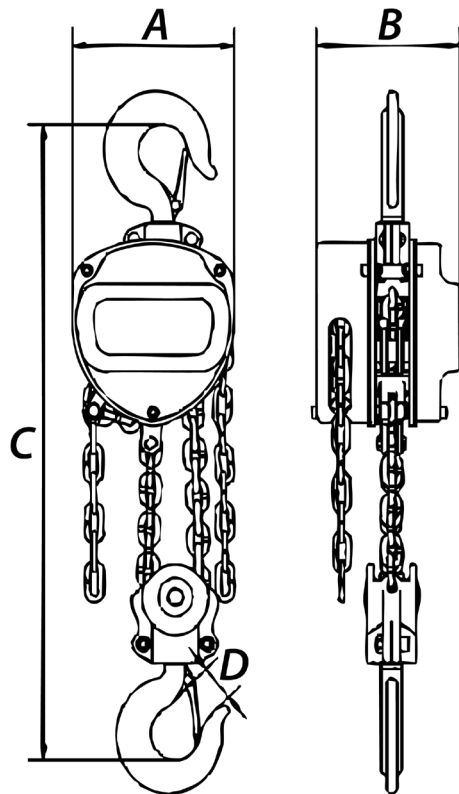


**Note:**  
This manual is for your reference only. Due to the continuous improvement of the ToolShed products, changes may be made at any time without obligation or notice.

**Warranty:**  
This product may be covered under The ToolShed warranty. For more information, see our Terms & Conditions at [www.thetoolshed.co.nz](http://www.thetoolshed.co.nz)

## SPECIFICATIONS

|                                             |                            |
|---------------------------------------------|----------------------------|
| <b>Capacity</b>                             | 2 tonne                    |
| <b>Standard Lift</b>                        | 2.5 metres                 |
| <b>Running Test Load</b>                    | 2.5 tonne                  |
| <b>Effort Required to Lift Maximum Load</b> | 314 Newton                 |
| <b>Number of Columns of Load Chain</b>      | 2                          |
| <b>Load Chain Diameter</b>                  | 6mm Ø                      |
| <b>Product Dimensions (WxDxL)</b>           | (A)187 x (B)161 x (C)414mm |
| <b>Hook Opening</b>                         | (D)41mm                    |



### Intended Use

This chain block is a portable lifting device operated suitable for use in factories, mines, farms, construction sites, wharves, docks, and warehouses for equipment installation, as well as for loading and unloading goods. It is especially useful for lifting in outdoor areas or locations without electric power. The chain block can be fitted to any type of trolley for use as a travelling chain block, and is compatible with monorail overhead conveying systems, hand travelling cranes, and jib cranes.

## SAFETY GUIDELINES



### WARNING

**READ ALL SAFETY WARNINGS & INSTRUCTIONS.** Failure to follow instructions and warnings could lead to serious injury, electric shock, or fire.

### Work Area Safety

- **Ensure that your work area is kept clean and well lit.** Lack of visibility and clutter greatly increase the risk of accident when using tools.
- **Keep bystanders, pets, and children clear when operating this power tool or machine.** They can cause distraction or risk injury to themselves.
- **Ensure you are not operating the power tool or machinery in the presence of dust, liquids, flammable gases, or anything that can create an explosive atmosphere.** Power tools and machinery can create sparks which can lead to ignition and fire hazards in working environments.

### Personal Safety

- **Always wear personal protective equipment (PPE).** Eye protection, ear protection, dust masks, and other protective equipment will help to reduce the risk of personal injury or long-term illnesses.
- **Dress appropriately. DO NOT wear loose clothing that can get caught in moving parts.** Keep hair, loose clothing, jewellery, and anything else that could be of risk, away

from moving parts in the machine, or they could become caught therein.

- **Always remain alert and DO NOT operate power tools or machinery under the influence of any substances such as alcohol or drugs, including prescription medications.** Lack of focus could lead to injury or accidents while operating these power tools and machinery.
- **Always ensure proper footing and balance.** Overreaching can lead to slipping and falling which can result in injury or accident.
- **Ensure the power switch is in the OFF position before connecting any battery, or power source to the power tool or machinery.** This can cause injury as tools and machinery can suddenly fire incidentally when live, causing accidents.
- **Use all provided dust collection and extraction attachments, if included.** This equipment, along with the use of PPE dust masks, can help keep you safe from dust, and keep your work site clear from hazards.
- **Ensure loose parts such as wrenches or adjusting keys are removed before starting the power tool or machinery.**

## SAFETY GUIDELINES

### Power Tool & Machinery Use & Care

- **Use the correct tool for the job.** Forcing a tool to do a job it was not designed for increases the risk of accident or injury.
- **Disconnect tools and machinery from power, or remove batteries before doing any maintenance or adjustments, or before storing the tools and machinery.** This reduces or removes the risk of a power connection that causes the tool or machinery to accidentally fire, which can help prevent injury or accident.
- **Check the general condition of the power tool for damage or any problems that could affect the way the tool or machine works.** An unrepaired tool or machine can lead to accident and injury. Only have your tool or machine repaired with genuine parts from The ToolShed.
- **Only use the power tool and machinery with genuine parts or accessories that are designed to be used with this power tool and machinery.** Failure to do so could result in accident or injury, or damage your tool or machinery.
- **Store your tool or machinery out of reach of children, and away from untrained personnel when not in use.** Use by somebody untrained, or a child, could lead to accident or serious injury.

### Service

- **Have your tools and machinery serviced at The ToolShed with ToolShed replacement parts.** This will ensure that the safety of the power tool or machine is maintained.

### WARNING

*The warnings and precautions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.*

### Always Use Common Sense

- It is not possible to cover every conceivable situation you can face. Always exercise care and use your common sense. If you get into a situation where you feel unsafe, stop and seek expert advice. Contact your dealer, service agent, or an experienced user. Do not attempt any task you feel unsure of!
- **Do not let familiarity gained from the frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

## SAFETY GUIDELINES

### Chain Block Specific Safety

- Do not operate the hoist with anything other than manual hand power.
- Do not use lever hoist with extension on lever handle.
- Do not operate if hook latch is missing or not functioning properly.
- Do not lift more than the rated load.
- Do not operate the product when it is restricted from forming a straight line with the direction of loading.
- Do not operate with twisted, kinked, or damaged chain.
- Do not operate if chain is not seated in sheaves or sprockets.
- Do not wrap chain around load or use chain as a sling.
- Do not operate until load chain is seated correctly in the load sheave.
- Do not operate unless load is properly applied to the saddle or bowl of the hook.
- Do not operate if load is applied to the tip of the hook.
- Do not lift people.
- Do not lift loads over people.
- Do not operate beyond load chain's travel limits.
- Do not operate with side pulling or side loading of load to hoist.
- Do not operate a damaged or malfunctioning product.
- Do not remove, deface, or obscure warning labels.
- Do not leave a suspended load unattended, unless specific precautions are instituted.

- Do not lengthen chain or repair damaged load chain by welding.
- Do not use chain as an electrical or welding ground.
- Do not operate until personnel are warned of approaching loads and are cleared from the area.

### WARNING

*Check for damage during shipment. Do not install or use a damaged product. Check and verify any structure or other equipment that will support the product has a rated load capacity equal to or greater than the rated load capacity of the product to be used.*

## OPERATION

### **Prior to Each Use**

- Check operation of the brake.
- Where applicable, check that the chain is properly seated in sheaves and that the chain is not twisted, kinked, or damaged.
- Correct all chain irregularities before use.
- Make sure that all supporting structures are sufficient to support the hoist and the load.
- Make sure the hoist is installed properly to a fixed point.
- Check that all bolts, nuts, and cotter pins are securely in place.
- Inspect hooks for nicks, gouges, cracks, and signs of pulling apart or twisting.
- Inspect hook latch for proper operation.

### **Operation**

- Suspend the chain block into the required position to perform the lifting operation, ensuring the top hook is positioned correctly with the safety latch engaged as required.
- To raise the bottom hook, pull down on the hand chain to rotate the hand chain wheel in a clockwise direction (looking from the hand wheel cover side).
- Continuously pulling the hand chain in this direction using a "hand over hand" method will raise the bottom hook until you have it in the required position.
- To lower the bottom hook, pull down on the hand chain to rotate the hand chain wheel in a counter-clockwise direction, (looking from the hand wheel cover side).
- Continuously pulling the hand chain using the above mentioned "hand over hand" method will either raise or lower the bottom

hook into the position required to fix the load.

- Fitment of the load to the lower hook needs care to ensure the safety latch is engaged into the closed position, thereby securing the load to the chain block.
- Start the lifting process carefully, and once the load is just clear, stop and check the integrity of the chain block, the load assembly (including any rigging gear) and that the load path is clear before continuing the lift.
- Lift the load until the required height is achieved.
- Before commencing lowering of the load, ensure that the load path is clear and unobstructed.
- Releasing the hand chain in either direction will stop the load movement and the braking system will hold the load in that position.
- The desired operation is a smooth hand over hand movement when raising or lowering a load and excessive speed is not recommended in either direction.
- Once the load is in the desired position, release the pressure on the load chain further by pulling the hand chain to rotate the hand wheel in the counter-clockwise direction.
- After ensuring the load has been placed safely and securely, release the safety latch of the bottom hook and remove it from its suspension point.

## MAINTENANCE

- Clean the dirt from the chain block, lubricate all parts with grease after use, and store it in a dry place.
- Maintenance and inspection must be carried out by a qualified technician. Never allow untrained persons to disassemble or assemble the block.
- When assembling, ensure the "0" marks on the two gears are aligned.
- During assembly of the brake mechanism, take care to correctly mesh the slanted teeth of the ratchet disc and pawl. Make sure the spring and pawl operate smoothly and reliably. Then rotate the plates on the brake seat. When turned counter-clockwise, there should be clearance between the disc and the plates.
- After cleaning and repair, the block must undergo both a no-load test and a load test. The chain block can only be put back into service once it has been tested and confirmed to be reliable and in good working condition.
- Keep the brake's friction surface clean. The brake mechanism should be inspected regularly to prevent faulty braking or accidental load drop.

### **Load Chain**

The load chain must be discarded or replaced if:

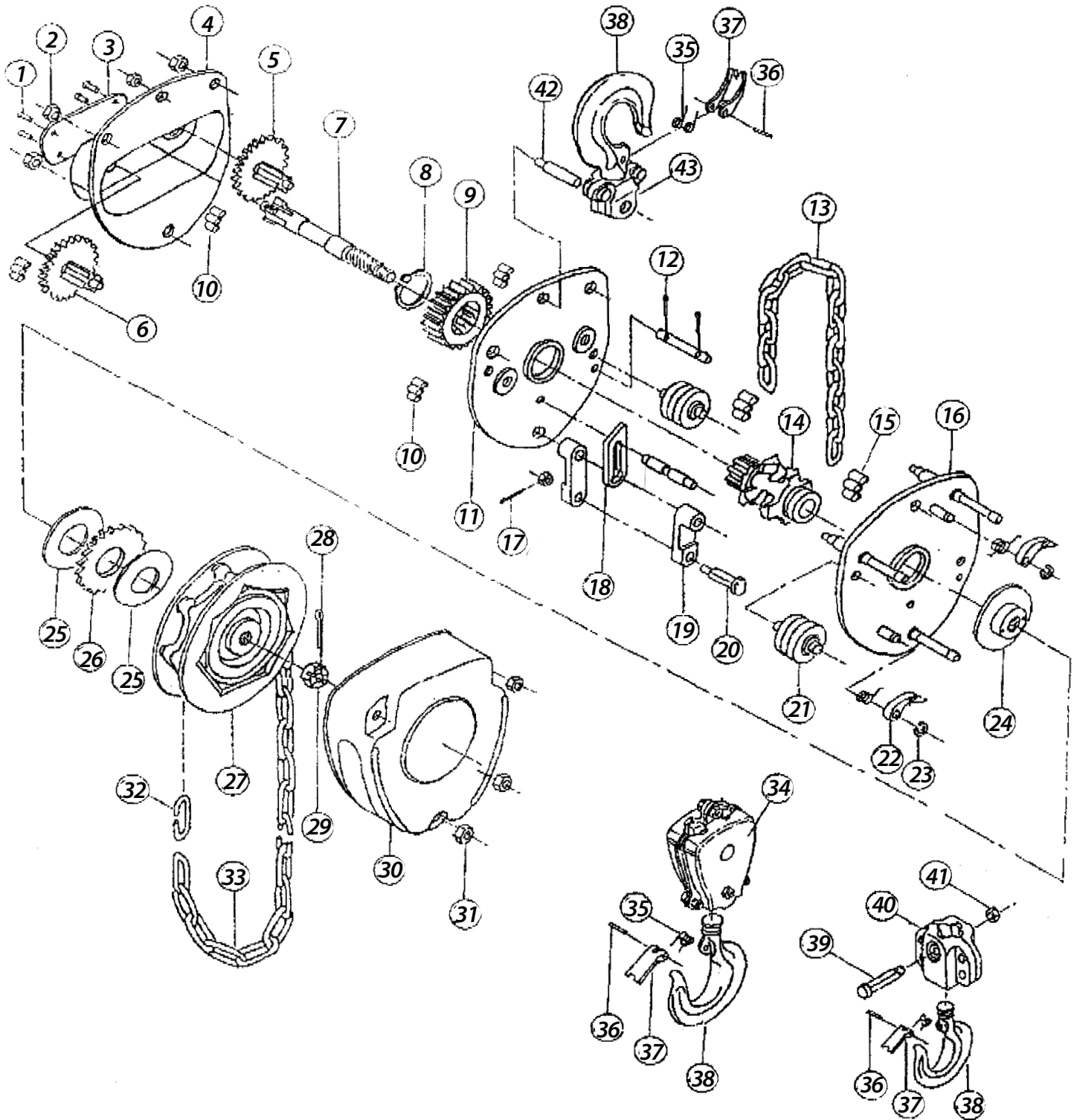
- Cracks are detected on any link.
- Any link is deformed or otherwise damaged.
- The minimum value of any link's diameter falls short.
- The maximum value of the pitch dimension is exceeded at any point.
- The chain is damaged by overheating or has been affected by weld splatter.

Load chains must not be repaired – they must be replaced by new chain. If it is desired to lengthen the chain, it must be replaced by a new and longer chain.

### **Environment & Disposal**

- Packaging materials are raw materials and can be re-used. Separate the different packaging materials and take them to the appropriate waste disposal facility. More information can be obtained from your local authorities.
- Old machines do not belong in your household garbage! Dispose of old machines appropriately, we are all responsible for the environment.

# TSCB20 EXPLODED VIEW & PARTS LIST



|   |             |    |              |    |              |    |              |    |               |
|---|-------------|----|--------------|----|--------------|----|--------------|----|---------------|
| 1 | Rivet       | 9  | Splined Gear | 17 | Bolt         | 26 | Ratchet Disc | 35 | Spring        |
| 2 | Nut         | 10 | Roller       | 18 | Baffle       | 27 | Hand Wheel   | 36 | Rivet         |
| 3 | Name Plate  | 11 | Right Plate  | 19 | Bolt         | 28 | Bolt         | 37 | Latch         |
| 4 | Cover       | 12 | Bolt         | 20 | Shaft        | 29 | Nut          | 38 | Hooks         |
| 5 | Disc Gear A | 13 | Load Chain   | 21 | Guide Roller | 30 | Cover        | 39 | Rivet         |
| 6 | Disc Gear B | 14 | Sprocket     | 22 | Pawl         | 31 | Nut          | 40 | Hook Hanger   |
| 7 | Shaft       | 15 | Roller       | 23 | Pawl Ring    | 32 | Connect Ring | 41 | Nut           |
| 8 | Snap Ring   | 16 | Left Plate   | 24 | Brake Seat   | 33 | Hand Chain   | 42 | Hook Shaft    |
|   |             |    |              | 25 | Friction     | 34 | Hook Hanger  | 43 | Hook Assembly |