Tiger

CE



Power PRO hoist - ETCB

With load limiter

(ETCB-0300-LL / ETCB-0600-LL / ETCB-1000-LL)

General Instructions (2026 v.1)

WARNING

This hoist should not be installed, operated or maintained by any person who has not read all the contents of these General Instructions. Failure to read and comply with these instructions or any one of the limitations noted herein can result in serious bodily injury and / or property damage.

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1.SCOPE

The Tiger Power PRO hoist with load limiter - ETCB, is available in 3.0 tonne, 6.0 tonne and 10.0 tonne capacities. The hoist is fitted with a slipping clutch overload mechanism so it is protected from overload. It is cordless battery powered and suggested to use a drill of maximum 2600 rpm to operate the unit.

- Cordless battery powered
- Available in 3t, 6t & 10t capacities
- High speed helical gear box
- Load limiter
- Operating temperature : -5°C (23.0°F) to +60 °C (+140 °F).

IMPORTANT REMARKS FOR ETCB

- Do not use impact drills (electric or pneumatic).
- The ETCB must not be operated under load for more than 20 minutes continuously. A minimum rest period of 10 minutes is required after each operating cycle to prevent overheating and ensure safe operation.
- We suggest using the drill of maximum 2600 rpm to operate this unit.
  (Note: The cordless drill used during product development and internal performance verification was
  the Makita HP001G (marketed in the US as model GPH01).
- For cordless drills, we recommend a minimum of 18V; for corded (AC) drills, a minimum power rating of 500W is suggested. If using a cordless drill, we also recommend preparing a spare battery to ensure uninterrupted operation.
  If using a cordless drill, we also recommend preparing a spare battery.
- Use only Tiger Lifting-supplied Grade 100 galvanized load chain for the ETCB. The use of any non-approved chain is strictly prohibited, as it may result in unsafe operation, equipment failure, or serious injury.

2. Must Read Before Use

(1) It is important that this manual is read and fully understood and that all instructions are followed before using this Tiger product.

(2) Inspect the machine and accessories for any damage or wear before use. Do not use the machine if it is not in good working order.

(3) When a “DO NOT OPERATE” sign is placed on the product, do not operate until the sign has been removed by designated personnel.

(4) The product must be operated, inspected, maintained and repaired by a competently trained person in accordance with applicable safety codes and regulations.

(5) Do not use the machine to lift, support or transport people in any way.

(6) Do not hoist loads over or near people.

(7) Never work under or near hoisted loads.

(8) Do not use the product in explosive environments unless an ATEX version has been supplied.

(9) It is the responsibility of the operator to exercise caution, use good practice, common sense and be familiar with proper rigging techniques.

(10) Improper use could result in death or serious injury.

(11) The supplier takes no responsibility for any form of consequential loss or damage as the result of unauthorised repair or use of spare part other than those issued on behalf of the manufacturer/supplier.

3.Safety Information

The operating company is responsible for the proper and professional instruction of the operating personnel. The personnel responsible for operation, maintenance or repair of the product must read, understand and follow these operating instructions. These instructions are intended to make the user familiar with the product and enable them to use it to the full extent of its intended capabilities.

The operating instructions must always be available at the place where the product is operated. Apart from the operating instructions and the accident prevention act valid for the respective country and area where the product is used, statutory regulations and procedures along with the commonly accepted regulations for safe and professional work must also be adhered to. The indicated protective measures will only provide the necessary safety if the product is operated correctly and installed and/or maintained according to the instructions. The operating company must be committed to ensure safe and trouble-free operation of the product.

All lifting equipment must be maintained and tested to meet relevant statutory. It is the responsibility of every company to ensure that their employees have been fully and properly trained in the safe operation of their equipment.

3.1 Equipment Labelling

The identification label/name plate details the product type, model, manufacturer, working load limit (WLL), serial number and the grade and size of the load chain. The CE marking indicates compliance with the essential health and safety requirements of the Machinery Directive 2006/42/EC.

4.Safety Instructions

! WARNING

Improper use of chain blocks could result in death or serious injury, to avoid these hazards:

Always allow only competently trained people to operate the hoist.

Always make sure the chain block suspension hook is securely attached to a suitable support.

Always maintain a firm footing or be otherwise secured when operating the chain block.

Always make sure that load slings or other approved sling attachments are properly sized and seated in the hook saddle.

Always make sure that the hook latch, is closed and not supporting any part of the load.

Always make sure that the load is free to move and will clear all obstructions.

Always take up slack chain carefully, check load balance, then lift a few centimetres and check to be sure the brake will hold the load and that attachments to the load are firmly seated.

Always avoid any swinging of the load or load hook.

Always protect load chain from weld spatter or other damaging contaminants.

Always report any malfunction, unusual performance or damage of lifting equipment to the appropriate person promptly.

Always inspect the chain block regularly, replace damaged or worn parts and keep appropriate records of maintenance.

Always use genuine Tiger parts when repairing the chain block.

Always warn personnel of your intention to move a load in their area.

Always be sure that the hoist's rated capacity is in excess of the weight of the load.

Always keep the load from hitting the chain.

Always check for loose or missing parts before use.

Always lubricate the hoist regularly

Always pay attention to the load at all times when operating the hoist.

Always secure a hoist and loads properly after use.

Always stop using the hoist immediately in case of functional defects or abnormal operating noise.

Always observe that the chain hangs straight (without twists) from chain block to lower hook.

Always lift in a straight line from hook to hook.

Always make sure the chain block is free to swivel on the upper hook.

! WARNING

Improper use of chain blocks could result in death or serious injury, to avoid these hazards:

Never attempt to lift more than the rated load capacity (WLL) of the suspension and the supporting structure.

Never allow your attention to be diverted from operating the chain block.

Never attempt to operate this equipment under the influence of alcohol or drugs.

Never wrap the load chain around the load and hook onto itself as a sling/choker chain.

Never insert the point of the hook into a chain link.

Never lift a load if binding prevents equal loading on the load chain.

Never let the load swing or come into contact with other objects.

Never use the chain block to lift, lower, support or transport people.

Never lift a load over people.

Never work near or under hoisted loads.

Never use a damaged chain block or a chain block that is not working correctly.

Never use a hoist if the hook latch is missing or broken (if one is intended to be fitted).

Never splice load or hand chain by using pins, bolts, screw drivers or similar between links.

Never attempt to lengthen the load chain or repair damaged load chain.

Never use the chain block with twisted, kinked, damaged, stretched or worn chain.

Never swing a suspended load.

Never support a load on the tip of the hook.

Never leave a suspended load unattended.

Never weld or cut a load suspended by a hoist.

Never allow the chain or hook to be used as an earth for welding.

Never use the hoist with rusty chain.

Never run the lower hook block into the chain block frame or bring the load in contact with the chain block

Never use the chain stop as an operational limit device.

Never operate a hoist if chain is jumping, if there is excessive noise, or if jamming, overloading or binding occurs.

Never use a hoist without both load chain anchoring points correctly fitted.

Never use a hoist without a name plate/label or with illegible name plate/label.

Never use modified or deformed hooks.

Never use a hoist near fire or where hot objects may touch it.

Never use the hoist in temperatures below -5°C (23.0°F) or above +60 °C (+140 °F).

Never adjust or repair a chain block unless qualified to perform chain block maintenance.

Never perform maintenance on the hoist while it is supporting a load

Never use the unit for pulling free a jammed load

Never allow loads to drop when the chain is in a slack condition (danger of chain breakage and shock loading).

Never reach into moving parts.

Never allow the unit to fall from height.

Never shock load chain block, chain or hook.

Never drag the chain, chain block or hook along the floor or across other objects.

Never use the hoist for any unauthorised purpose that is beyond the operation instructions contained in this manual.

Never use the chain hoist in acidic conditions.

Choose the Right Chain Block for the Job

The load capacity indicated on the unit is the maximum working load limit (WLL) that may be attached. Choose a chain block with the capacity for the job. Know the capacities of your loads, then match them. The application, environment it is to be used in, the size and type of load, the attachments to be used and the period of use must also be taken into consideration in selecting the right chain block for the job.

5.Inspection

According to national and international accident prevention and safety regulations (for example LOLER for the UK), hoisting equipment must be inspected:

- in accordance with the risk assessment of the operating company
- prior to initial operation
- before the unit is put into service for any subsequent use
- after substantial changes
- however, at least once per year, by a competent person.

The intervals of inspection must be determined by the individual application and are based upon the type of service to which the chain block will be subjected.

Prior to initial operation, before it is put into operation again and after substantial changes

Before the unit is put into operation, for the first time, for a subsequent use or after substantial repair or modification, it should be thoroughly examined by a competent person in compliance with applicable statutory regulations.

Typical pre-use inspection will consist of a visual inspection and a function check. These inspections are intended to establish that the hoist is in a safe condition, has been set up appropriately and is ready for operation, and that any defects or damage are detected and eliminated.

Inspect the chain block for operation warning notices and legibility. Deficiencies should be noted and brought to the attention of supervisors. Be sure defective chain blocks are tagged and taken out of service until repairs are made.

The following checks should be carried out before starting work:

5.1Check the unit

- Inspect the unit for visual defects, e.g. deformations, damage, cracks, wear and corrosion marks.
- Check that the name plate/label showing the hoist capacity is attached and clearly legible.
- Check lubrication and lubricate if necessary.
- Check the functioning of the chain drive in unloaded condition. When facing the hand chain side of the hoist with no load, the brake is operating normally if the pawl "clicks" when the hand chain is wound in a clockwise direction and does not "click" when operated in the anti-clockwise direction.
- Check for loose or missing nuts and for missing split pins.

5.2 Check the brake function

Before starting work, always check operation of the brake. To do this, lift, pull or tension, then lower or release a load over a short distance with the unit. When the hand chain is released, the load must be held in any position. Repeat this at least twice before starting further work.

5.3 Inspect the supporting structure and attachment point

The attachment point for the hoist must be selected so that the supporting structure to which it is to be fitted has sufficient stability and to ensure that the expected forces can be safely absorbed. The unit must align freely also under load in order to avoid impermissible additional loading. Check that the hoist and the load are correctly attached.

5.4 Inspect the load chain

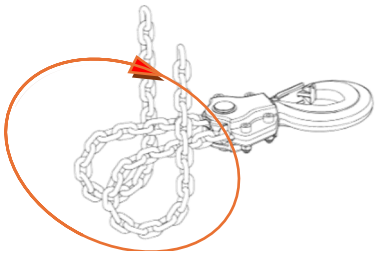
Inspect the load chain for sufficient lubrication, mechanical damage and check for external defects, deformations, superficial cracks, wear, excessive rust and corrosion marks. Check for gouged, twisted and distorted links, and for deposits of foreign material which may be carried into the chain block mechanism. Do not operate chain blocks with twisted, kinked or damaged chain links. See Chain and Hooks.

5.5 Inspection of the Load Chain Anchoring

The load chain anchoring must always be fitted securely at both ends. There must be no wear or incorrect alignment.

5.6 Inspection of the top hook and bottom load hook

The top and load hooks must be checked for cracks, deformations, damage, wear and corrosion marks. The safety latch must be attached, move freely and be fully functioning. Hooks that are bent, worn or have openings which are enlarged beyond normal throat opening should not be used. If the latch does not engage in the throat opening of the hook, the chain block should be taken out of service. Hooks that do not fulfil all requirements must be replaced immediately. Welding on hooks, e.g. to compensate for wear or damage is not permissible.



5.7 Inspection of chain reeving in the bottom block

All units with two or more chain falls must be inspected before initial operation to ensure that the load chain is not twisted or kinked. The chains of hoists with two or more falls may become twisted if the bottom block is rolled over “capsized” (i.e. bottom hook has looped through the multi fall chain). A twist in the load chain can damage the chain block and cause injury.

And finally, listen (while hoist operates) for unusual sounds which may indicate trouble.

Thorough Examination

The chain block must be subject to periodic thorough examination in compliance with national statutory regulations including on initial use or following installation.

Reports of thorough examination can be based on statutory maximum intervals or via a written examination scheme based on risks and hazards associated with use.

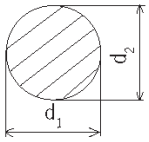
Initial inspection and recurring inspections must be documented. contains the inspection log which must be maintained for each block. Any deficiencies noted are to be corrected before the chain block is returned to service. Any parts that are deemed unserviceable are to be replaced with new parts before the unit is returned to service. It is very important that the unserviceable parts are destroyed to prevent possible future use as a repair item and are properly disposed of.

6. Chain

Load Chain are made of special alloy-steels and are precisely heat-treated. Never weld or heat-treat them again. Inspect the load chain for sufficient lubrication, mechanical damage and check for external defects, deformations, superficial cracks, wear and corrosion marks.

Round steel section chains must be replaced when the original nominal thickness ´d´ on the chain link with the worst wear has been reduced by more than 10% or when the chain has elongated to a value greater than the discard levels shown in the tables below. There are two alternative tables for either measuring the chain over 21 links or measuring the chain over 7 pitches. Chain should be clean, free of twists and pulled taut before measuring.

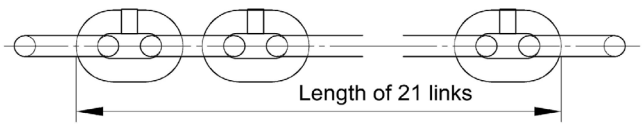
Measuring the diameter of the chain

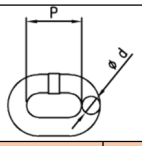


$$d_m = \frac{d_1 + d_2}{2}$$

Replace the chain if $d_m \leq 0.9 \times d$, where d is the normal diameter of the chain wire.

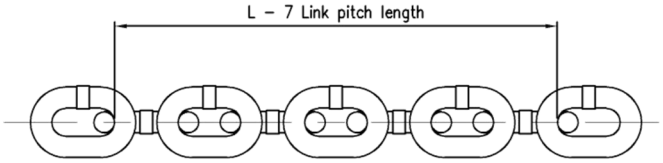
Measuring over 21 links

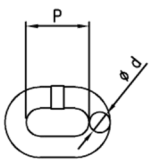




Capacity (tonnes)	Diameter of Chain Wire Ød (mm)	Discard if Diameter of Chain Wire Ød (mm) ≤	Dimensions of Chain (Ød x P) (mm)	21 links length (mm)	Discard if 21 links (mm) ≥
3.0 Single / 6.0 / 10.0	10.0	9.0	10 × 30	650.0	668.0

Measuring over 7 pitches





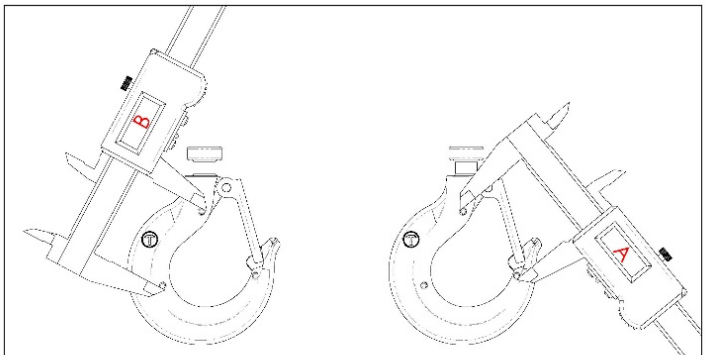
Capacity (tonnes)	Diameter of Chain Wire Ød (mm)	Discard if Diameter of Chain Wire Ød (mm) ≤	Dimensions of Chain (mm) (Ød x P)	Pitch length L (mm)	Discard if L (mm) ≥
3.0 Single / 6.0 / 10.0	10.0	9.0	10 × 30	210.0	216.5

Do not repair load chains installed in the hoist. Protect load chain from weld spatter or other damaging contaminants.

Only fit load chains which have been approved by the manufacturer.

7.Hooks

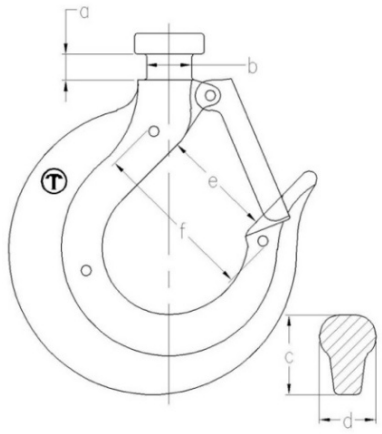
Do not remove the safety latches from top and/or bottom load hooks. Never mark or hard stamp hooks or any other load bearing parts. When the hook measurements have changed beyond the permissible discard limits shown in the table in Technical Data/Hooks, it is dangerously deformed and must be replaced immediately. ETCB are fitted with the patent pending Tiger “EZ check” 3 point marking system. With this system a quick check that the A and B measurements are the same (as shown in the diagram below) will indicate if the hooks have stretched If A≦B the hook is fine; If A>B the hook needs to be replaced.



Tiger Hooks with new “EZ Check” 3 point marking system

The following table shows the normal measurements for the Tiger hooks and the discard limits.

Capacity (Tonnes)	Collar measurements (mm)				Hook thickness at point shown in diagram (mm)				Hook throat Opening (mm)		“EZ Check” measurement (mm)	
	a		b		c		d		e		f	
	Normal	Discard ≥	Normal	Discard ≤	Normal	Discard ≤	Normal	Discard ≤	Normal	Discard ≥	Normal	Discard ≥
3.0	12.5	13.5	20	19	37	35	32	30	42	47	76	81
6.0	19	20.5	30	28.5	43	40.5	36	34	58	63.5	86	91.5
10.0	20	21.5	33	31.4	52	49	48	45	70	78	121	129



8.Maintenance

Load Chain

To determine if load chain should be continued in service, check gauge lengths and condition. Chain worn beyond the maximum allowable gauge length, nicked, gouged or twisted chain should be replaced before returning the chain block to service.

It is recommended that you lubricate load chain at least weekly, or more frequently than normal depending on severity of service. Apply new lubricant over existing layer. Lubricate chain more frequently in a corrosive environment.

A dry film lubricant, e.g. PTFE spray, should be used in environments where abrasives like sand, etc., occur. The service life of the load chain can be increased by careful lubrication to 20 - 30 times, compared with a chain that is not serviced.

When lubricating the chain, make sure the chain is in no-load condition so that the oil can reach the contact points (crown/saddle) of the chain links which are subject to wear. Make sure that the load chain is lubricated over its entire length, also including the part of the chain in the housing of the hoist around the load sheave/wheel. Remove excess lubricant from the chain by wiping with a cloth.

Clean dirty chains with acid free or water based solvent or a similar cleaning agent, to remove rust or abrasive dust build up. Never heat the chain.

Hooks

Lubricate the hook shank, the head within the hook yoke and the hook latch pivot points with the same lubricant used on load chain

Exterior Finish

Normally, the exterior surfaces can be cleaned by wiping with a cloth. Paint damage should be touched up in order to avoid corrosion. All joints and sliding surfaces should be slightly greased. In the case of heavy contamination, the unit must be cleaned using acid free or water based solvent or a similar cleaning agent.

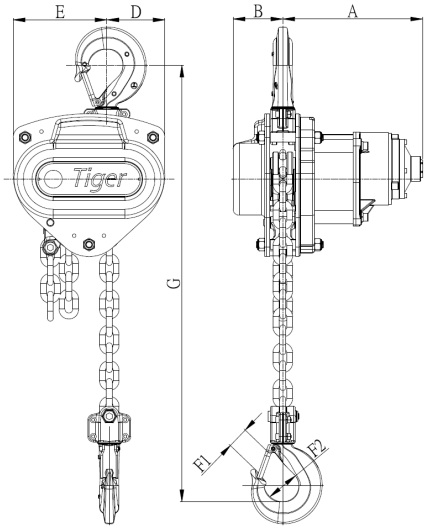
Preventative Maintenance

In addition to the periodic inspection procedure, a preventative maintenance program should be established to prolong the useful life of the chain block and maintain its dependability and continued safe use. The program should include the periodic inspections with particular attention being paid to the lubrication of various components using the recommended lubrican

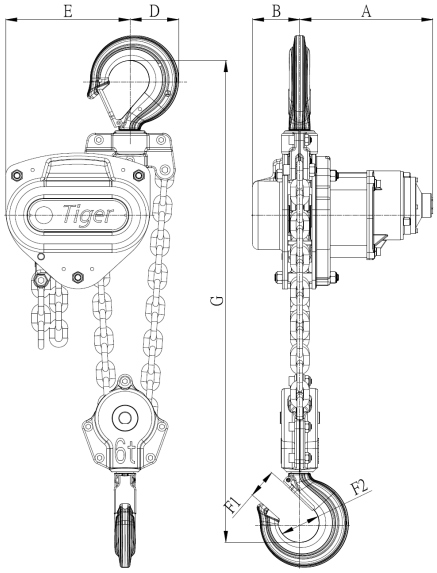
! WARNING

Use only Tiger supplied replacement parts. Parts may look alike however Tiger parts are made of specific materials, processed to achieve specific properties or precisely machined

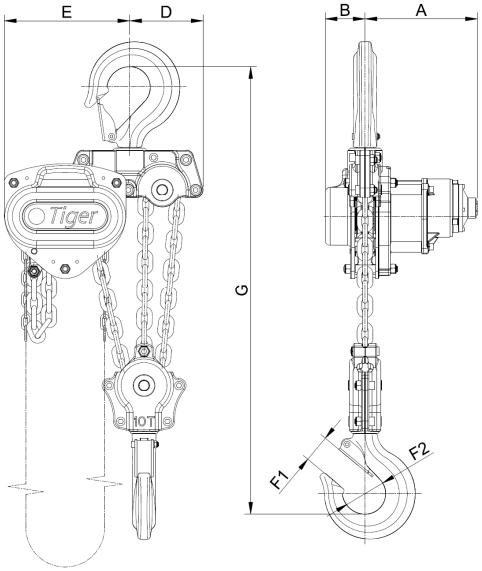
9. Dimensions



ETCB-0300-LL



ETCB-0600-LL



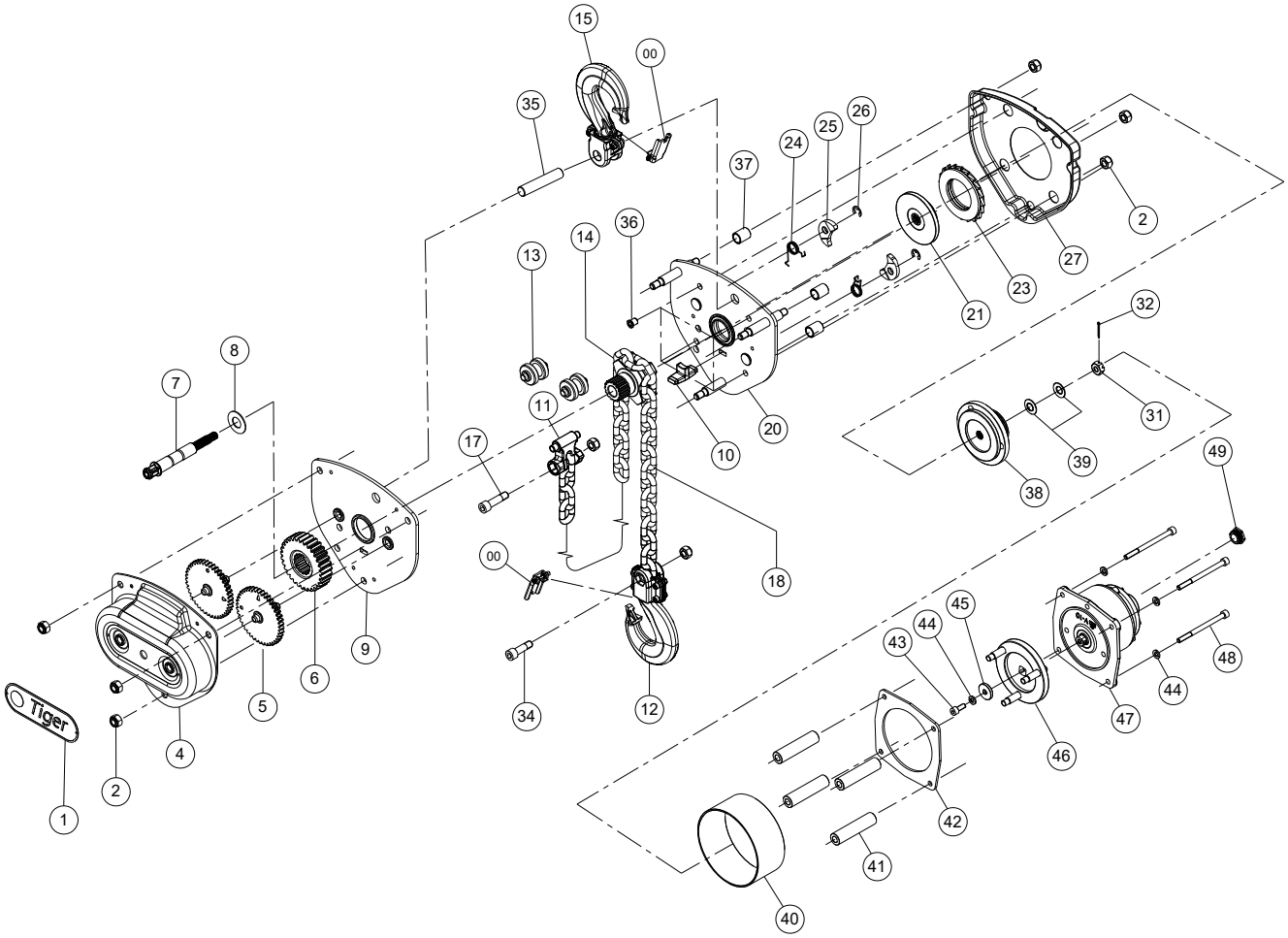
ETCB-1000-LL

Product Code	Rated Load (Kg)	Lifting chain specifications (mm)	Dimension (mm)							Number of chain falls	Motor speed(MAX) (r/min)	Lifting speed (m/min)	Brushless Drill Driver(N.m) V	Net weight (kg)	Packing weight (kg)	Packing size (cm)	Weight for each additional meter of Chain (kg/cm)
			A	B	D	E	F1	F2	G								
ETCB-0300-LL	3000	10X30	235	83.5	98	157	36	56	500	1	2600	0.718	68 18V or above	32.6	34.3	38X34.5X29	2.2
ETCB-0600-LL	6000	10X30	235	83.5	86	220	49	70	635	2	2600	0.359	68 18V or above	47.0	49.4	50X37X33	4.4
ETCB-1000-LL	10000	10X30	235	83.5	153	263	54	87	660	3	2600	0.239	90 18V or above	59.9	63.8	50X43.5X41	6.5

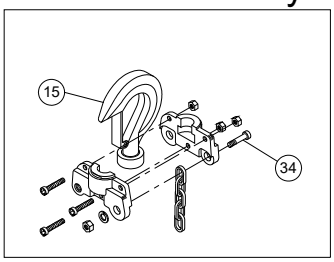
10. Exploded View

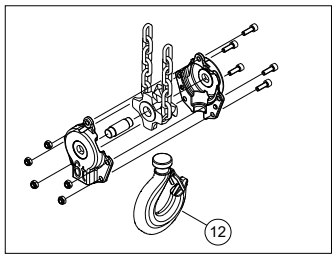
MODEL NO:

ETCB-0300-LL / ETCB-0600-LL / ETCB-1000-LL

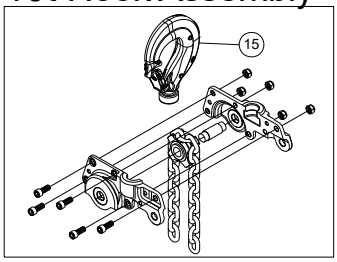


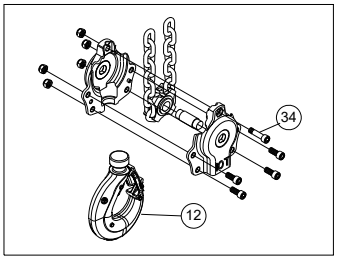
6t Hook Assembly





10t Hook Assembly





Part List

	Part No	Part Name	QTY		Part No	Part Name	QTY
①	ET-1	Label	1	㉔	ET-24	Pawl Spring	2
②	ET-2	M12 Nut	8	㉕	ET-25	Pawl	2
④	ET-4	Gear Cover	1	㉖	ET-26	Snap Ring for Pawl Pin	2
⑤	ET-5	Pinion (with Pinion Gear)	2	㉗	ET-27	Brake Cover	1
⑥	ET-6	Load Gear	1	㉛	ET-31	Check/Castle Nut	1
⑦	ET-7	Pinion Shaft	1	㉜	ET-32	Cotter/Split Pin For Check Nut	1
⑧	ET-8	Pinion Shaft Washer	1	㉞	ET-34	3t Load Chain Hook Pin	1
⑨	ET-9	Gear - Side Plate Assembly	1			6t Load Chain Hook Pin	1
⑩	ET-10	Chain Stripper	1			10t Load Chain Hook Pin	1
⑪	ET-11	Load Chain Anchoring	1	㉟	ET-35	Top Hook Pin	1
⑫	ET-12	3t Bottom Hook Assembly	1	㊱	ET-36	Flat Nut	4
		6t Bottom Hook Assembly	1	㊲	ET-37	Brake Cover Support tube	3
		10t Bottom Hook Assembly	1	㊳	ET-38	Overload Limiter Assembly	1
⑩⑩	ET-00	Safety Latch Assembly	2	㊴	ET-39	Disc Washer	2
⑬	ET-13	Load Chain Guide	2	㊵	ET-40	Transmission parts cover	1
⑭	ET-14	Load Sheave (ETCB-Type)	1	㊶	ET-41	Gear Box - Support tube	4
⑮	ET-15	3t Top Hook Assembly	1	㊷	ET-42	Gear Box support plate	1
		6t Top Hook Assembly	1	㊸	ET-43	Hex socket screw	1
		10t Top Hook Assembly	1	㊹	ET-44	Spring Washer	5
⑰	ET-17	Chain-End-Fixing Pin	1	㊺	ET-45	Coupling Fixing Washer	1
⑱	ET-18	Load Chain (Tiger 100V galvanized load chain)	1	㊻	ET-46	Coupling Assembly	1
⑳	ET-20	Wheel-Side Plate Assembly	1	㊼	ET-47	Gearbox	1
㉑	ET-21	Disc Hub (ETCB-Type)	1	㊽	ET-48	Hex socket screw(110L)	4
㉓	ET-23	Brake Discs / Ratchet Gear (Set)	1	㊾	ET-49	Input Shaft Collar	1

11.Manufacturer Testing and Verification

This product was manufactured under our single-unit control of quality and was passed with strict inspection in accordance with our inspection standards.

Capacity (tonne)	WLL (kg)	Test Load (kg)
3	3000	4500
6	6000	9000
10	10000	15000

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For details of the full Tiger product range visit our website: www.tigerlifting.com