



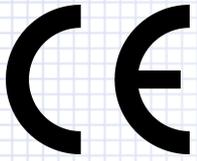
Model No .....  
Serial No.....  
Year of manufacture.....  
Jack serial.....

# Skoots<sup>®</sup> moving system Models SK600 to SK5000

from 2015 Q2 Model year

Operator's manual  
original instructions

Tel: +44 (0)1249 822222  
[www.bilhandling.co.uk](http://www.bilhandling.co.uk)



# Skoots® SK600 to SK5000

## EC Declaration of Conformity

We hereby declare that the load moving system below complies with and fulfils all of the relevant provisions of the following directive...

2006/42/EC – The Machinery Directive (and its amending Directives)

The product has been designed and manufactured to the following specification:

**Mobile or movable jacks and associated lifting equipment:  
EN 1494:2000 + A1:2008**

Product description: Load lifting and moving system

Make: Skoots

Model numbers: SK600, SK900, SK1400, SK2000, SK3500 & SK5000

Manufactured by: BIL Group Ltd

Address: Porte Marsh Road, Porte Marsh Industrial  
Estate, Calne, Wiltshire, SN11 9BW

The technical documentation has been  
completed by Mark Farrell, Managing Director.

Signed .....  ..... Date: 1st February 2015

Name: Mark Farrell Position: Managing Director



### CAUTION:

Read and completely understand the contents of this Operator's Manual before operating the Skoots. Failure to read, understand, and follow instructions in this manual may result in personal injury, death or property damage. Prior to use, internal risk assessment should be undertaken by a competent person to evaluate health and safety risks within the proposed working area and transportation route.

Skoots are designed to be used as a minimum two man operation i.e. one man per Skoots unit on opposing ends of the load. Never attempt to lift or transport loads as a single man operation. Keep Skoots in an upright position at all times including during transportation and storage to avoid airlocks in the hydraulic jacks. If an airlock is present then refer to Fault Finding on page 8.

If you do not understand any part of this manual, or if you have any questions, please contact BIL Group Service & Support on... +44 (0)1249 822 222.

**IMPORTANT:** Keep these instructions with your Skoots.

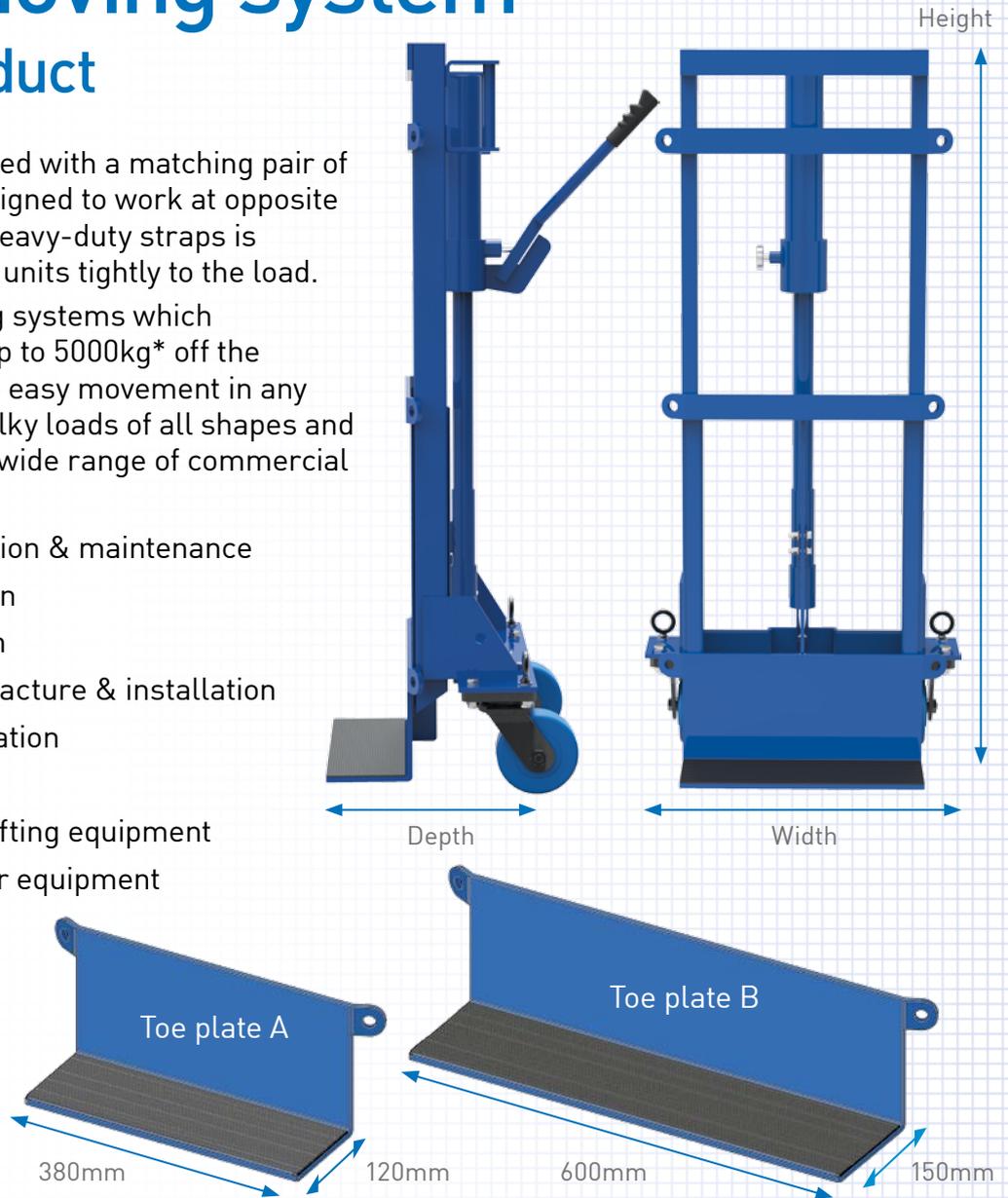
# Skoots® moving system

## About the product

Each set of Skoots is supplied with a matching pair of main frames which are designed to work at opposite ends of the load. A pair of heavy-duty straps is supplied to bind the Skoots units tightly to the load.

Skoots are portable moving systems which hydraulically lift a load of up to 5000kg\* off the floor onto castors, allowing easy movement in any direction. For heavy and bulky loads of all shapes and sizes they can be used in a wide range of commercial and amenity situations...

- Air conditioning installation & maintenance
- Commercial refrigeration
- Security safe installation
- Switchgear panel manufacture & installation
- Vending machine installation
- Museums and galleries
- Hire shops – speciality lifting equipment
- Data cabinets and server equipment
- Machinery installation and many more...



Model	Dimensions (mm)			SWL pair	Wheel diameter	Lifting height	Toeplate (A or B)	Total weight pair
	H	W	D					
SK600	1160	510	330	600kg	125mm	400mm	A	87.2kg
SK900	1160	510	330	900kg	125mm	400mm	A	98.2kg
SK1400	1160	510	330	1400kg	125mm	400mm	A	98.6kg
SK2000	1160	510	330	2000kg	125mm	400mm	A	94.0kg
SK3500	1160	510	400	3500kg	125mm	375mm	A	99.4kg
SK5000	1170	790	490	5000kg	150mm	200mm	B	230.0kg



\* Load capacity according to model number

# Skoots® moving system



## WARNING:

Failure to follow user instructions carefully each time could result in serious injury or death, or damage to property.

## Before and during use, always...

Check Skoots units for loose or missing nuts and bolts, stress cracks, worn wheel treads, bearings and general wear and tear – and any missing ancillary equipment such as straps.

Keep within the safe working load as designated on the side of the Skoots units – remember, load capacity is for a pair of Skoots not per side.

Keep the working area and transport route free from hazards such as debris, electrical cables, potholes, deep gullies, large gaps between floor and goods lifts.

Ensure that the working area and transport route are adequately lit.

Lift the load evenly and use minimum ground clearance when transporting loads.

Ensure you can see where you are going or get a colleague to guide you.

Push but do not pull loaded Skoots.

Watch the Skoots unit and load at all times during any movements.

Use protective pads between the Skoots frame and the load if considered necessary.

## Never...

Underestimate weight and overload the Skoots units.

Raise a load without it being fully secured by correctly positioned straps – see operating instructions.

Raise the load higher than necessary.

Raise a top-heavy, high-centre-of-gravity load by more than 20mm to avoid the risk of overbalancing.

Remove straps or release tension while a load is in a raised position.

Place your hands, feet or other under the load or moving parts when the load is raised.

Use Skoots units on a hill or incline without prior full risk assessments.

Move the load faster than is safe to ensure that you can keep it under control and upright.

Leave a raised load unattended.

Attach cranes or other lifting tackle to Skoots units.

Interfere with seals or hydraulics.

Attempt the lifting and moving procedure without wearing safety shoes to avoid the risk of injury from the load potentially rolling over and crushing feet.

Attempt to engage/disengage directional locks on castors whilst the load is raised or on a gradient to prevent the risk of a crushing injury caused by uncontrolled loaded equipment.

Use other equipment to move loaded Skoots. They are designed to be manually propelled unless when used with a BIL Group recommended product such as PowerDrive.

# Operating instructions

Pay close attention to the safety notes opposite before attempting to use your Skoots units.

## Operating steps

1. Ensure the load is within the safe working capacity of the Skoots as identified by the data plate affixed to the Skoots, all the floors are suitable for the total load and that the route is clear of all hazards. A formal risk assessment should be carried out by a competent person, if necessary.

**IMPORTANT: Consider the floor surface and structure before attempting to transport a load, floors should be suitably boarded or plated first if necessary.**

2. Place Skoots units centrally under each end of the load, ensuring that the load is located firmly in the heel of the toe plate. Note that the toe plate will try to push away from the load whilst the top of the frame will try to push into the load. Use protective pads, such as carpet tiles, between the Skoots frame and the load if considered necessary.

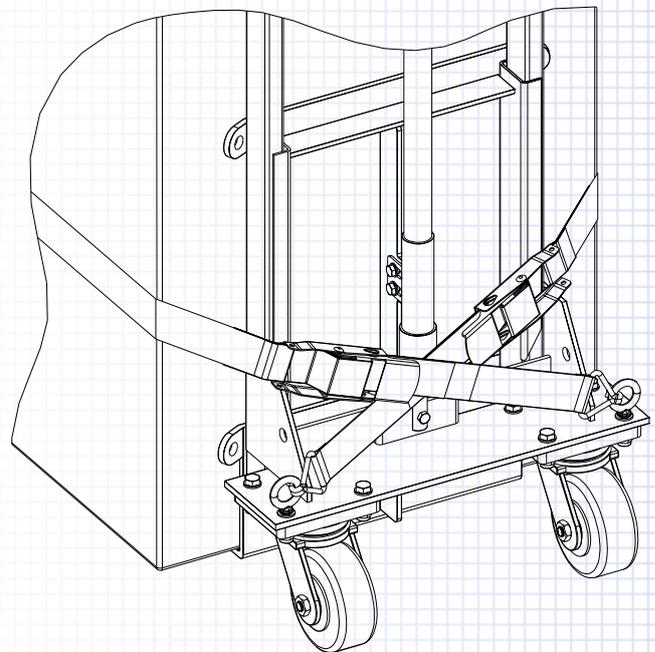
3. Secure load using both straps, ensuring that they are hooked into the eyebolts at each end and cross at the back of the Skoots units. It is important to cross the straps over at the rear of the Skoots frames to allow the position of the cam buckle to sit behind the frame rather than at the side of the load. This also enables the straps to be fixed at greater tension than would otherwise be the case.

4. **SK600 to SK3500 models:** Pull the strap tight so that the Skoots units are hard against the load, and close the over-cam buckle to lock so that the straps are held firmly.

**SK5000 model:** Pull the strap tight so that the Skoots units are hard against the load before using the ratchet lever to tightly lock the strap.

**IMPORTANT: Be careful not to over-tighten the straps as this may damage the load if its outer frame casing is weak.**

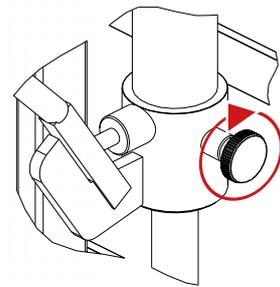
**WARNING: Potential crush injury or damage to property. Do not attempt to raise the load without using straps to secure the load.**



**Straps cross over at rear of load, hooked to the eyebolts with cam buckles behind the Skoots frames**



5. Before attempting to lift the load, close the relief valve by turning the valve wheel clockwise on the side of the jacks on both Skoots frames. Do not over tighten as this could damage the jack. The load is now ready for lifting.



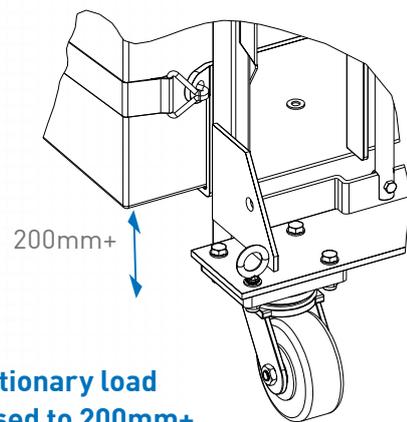
6. Use the pump handles on the jacks maintaining slow, full strokes to raise the load to obtain the minimum ground clearance of about 20mm. Lift evenly, alternating each end to keep the load horizontal.

**NOTE:** Attempting to lift loads which are greater than SWL will activate the relief valve. Whilst the jack handle can still be pumped, the toe plate will not raise until the load is reduced to within safe SWL.

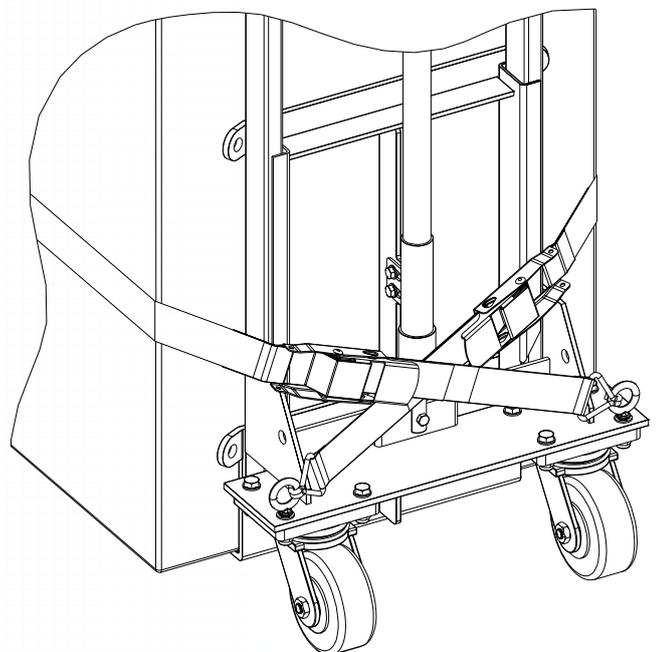
**IMPORTANT:** The default method of strap engagement crossing straps over behind each frame should be used to raise a low-centre-of-gravity load to no more than 200mm when the load is intended to remain in a stationary position, for example when removing the load from a plinth or block. It should also be used when transporting a load at the minimum ground clearance height of no more than 20mm.

However, if the user wishes to raise the load to a maximum lift height of over 200mm then the straps should be fixed to the Skoots using the eyelets on the toe plate rather than the eyebolts at the rear of the frame before the load is raised. Proceed to raise the load first to the desired height, and then lower it back to the floor when the straps should be reconnected to the eyebolts, crossing the straps over behind the frame before transporting the load.

Never attempt to remove the straps whilst the load is raised, never attempt to transport a raised load at more than the minimum ground clearance level of no more than 20mm and never raise a top-heavy, high-centre-of-gravity load more than 20mm from the floor regardless of strap positions.



Stationary load raised to 200mm+



Then revert to default strapping method before attempting to transport the load...

7. You may now move the load, pushing rather than pulling.

**IMPORTANT: For safety, the load should be transported with a minimum ground clearance of around 20mm to reduce the risk of overbalancing.**

8. Make sure that control and stability of the load is maintained at all times. On cambers and slopes use the direction locks fitted to the castors.

**WARNING: Safety risk assessments by a competent person should be conducted before attempting to transport loaded Skoots on cambers or slopes. Never attempt to push a load over a drop such as a kerb or over a gully.**

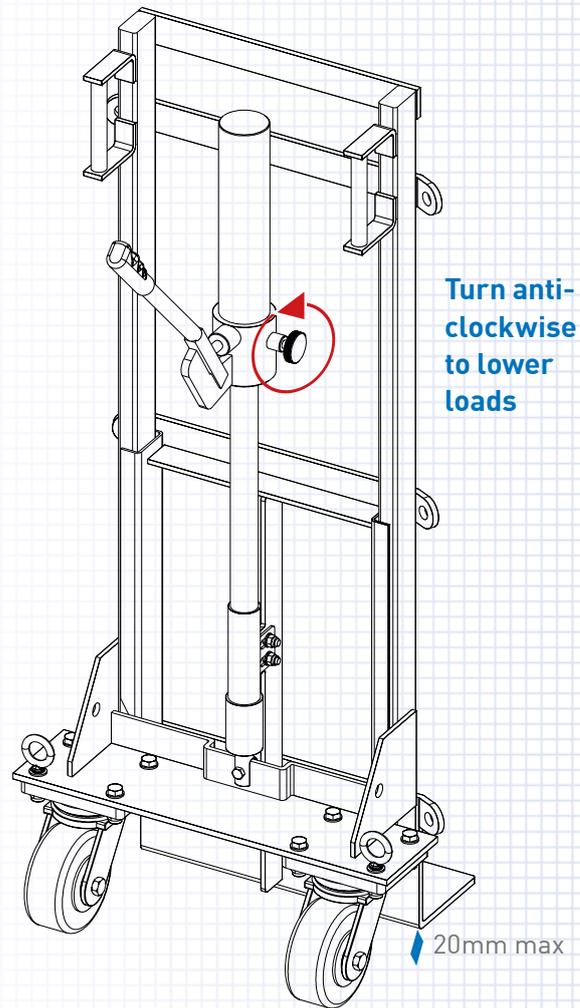
9. Once the load is in position, release the valve wheels approximately one quarter turn anti-clockwise, remembering that the less open the release valves are, the slower the load is lowered.

**WARNING: Potential crush injury. Open the valve very slowly to control the rate of descent. Do not lower the load without first checking for obstacles underneath the load.**

The load should be lowered in tandem by both users at either end. Be careful to keep the load level continuously as it is being lowered.

10. Release and remove the straps from the Skoots and then the Skoots from underneath the load.

11. The Skoots units should then be stored in an upright position.



**No more than 20mm ground clearance for dynamic loads**



# Fault finding

SYMPTOMS	CAUSE	REMEDY
Unit lifts when pumped but lowers when the handle returns to the rest position.	Airlock.	Untighten the jack filler plug. Release the valve wheel one quarter turn and pump handle 20 to 30 times. Close the jack filler plug.
Unit will only lift a few inches.	Lack of oil.	Stand jack vertically, fully retract ram and remove filler plug using an 8mm allen key. Remove dipstick, wipe clean, reinsert into oil and check oil level. Top up with Varpress 68VG oil so fluid level is between notched markers on the dip stick plug. Refit and tighten down filler plug using the correct 8mm allen key.
Handle pumps but will not raise.	Pressure relief valve actuated.	Check load is within SWL and not unevenly distributed. Reduce the load to within the marked SWL as necessary. Consider upgrading to a higher rated model if required.
	Pumping handle too quickly.	Pump handle with slow, steady strokes.
Oil leakage.	Worn or damaged seals.	Jack should be serviced or replaced with a new exchange unit.
Load slipping on toe plate.	Worn or damaged rubber mats.	Replace rubber mats. Use recommended 3M ScotchWeld 80 spray on prepared surfaces.
	Load incorrectly secured. Tied with loose straps.	Check straps are correctly fitted and are under tension without crushing the load. Ensure load is also seated into the heel of the toe plate.
	Frames not supported against the side of the load.	Ensure that the Skoot frames are presented to a flush, vertical face on the load which extends vertically through the full height of the Skoots frame.

## STORAGE PROCEDURE

Keep Skoots in an upright position at all times including during transportation and storage to avoid airlocks in the hydraulic jacks. If an airlock is present then refer to first symptom above.

In case of difficulty please contact [service@bilgroup.eu](mailto:service@bilgroup.eu) or telephone +44(0)1249 822 222.

# Skoots® moving system

## Spare parts list

	PART NAME	UNIT	PART DESCRIPTION	PART CODE	
1	Main body castor	Single	Steel fabricated heavy-duty bracket. Directional lock.	SK600 SK900 SK1400 SK2000 SK3500 SK5000	BZJ125NYBJDL 2BZSAB125ENPBJDL/SK 2BZSAB125XPNBJDL/SK BZSAB125NYBJDL/SK BZSAB125NYBJDL/SK 2BZQX150NYBJDL/SK
2	Main body castor wheel	Single	SK600: 125mm dia. white nylon with ball bearing, tread width 45mm SK900: 125mm diameter, 82 shore A Blue PU on nylon with ball bearing, tread width 40mm SK1400: 125mm diameter, 97 shore A Blue PU on nylon with ball bearing, tread width 49mm SK2000: 125mm diameter Blue HD solid cast nylon with ball bearing, tread width 55mm SK3500: 125mm diameter Blue HD solid cast nylon with ball bearing, tread width 55mm SK5000: 150mm diameter Blue HD solid cast nylon with ball bearing, tread width 50mm	SK600 SK900 SK1400 SK2000 SK3500 SK5000	BZXH125WNYBJM20 BZH125WENPBJM20 BZXH125WPNBJM20/BLUE BZXH125WNYBJM25HDSK BZXH125WNYBJM25HDSK BZXH150WNYBJM25HDSK
3	Hydraulic jack	Single	Bespoke long ram hydraulic jack.	SK600 SK900 SK1400 SK2000 SK3500 SK5000	SKJACK600 SKJACK900 SKJACK1400 SKJACK2000 SKJACK3500 SKJACK5000
4	Rubber mat	Single	Fluted rubber mat to be bonded to Skoots toe plate.  <b>Note:</b> Rubber mats should be bonded to prepared surface using recommended 3M ScotchWeld 80 spray.	SK600 SK900 SK1400 SK2000 SK3500 SK5000	RM15X5 RM15X5 RM15X5 RM15X5 RM15X5 RM600X150
5.	Straps	Pair	Pair of straps to suit Skoots SK600 to SK3500 supplied with cam buckle. SK5000 straps supplied with ratchet.	SK600 SK900 SK1400 SK2000 SK3500 SK5000	STR2 STR2 STR2 STR2 STR2 STR5



# Care and maintenance

Before each use, visually check for wear and defects such as...

- Ensure that a pair of straps with intact webbing, buckles/ratchets and hooks are available.
- Cut, chunked or damaged wheels on main frames or outriggers.
- Missing mats.
- Leaking rams.
- Toe-plate not at 90 degrees.
- Damaged directional locking mechanisms on main body castors.
- Check the state of markings and that the markings remain as the original one.

Six monthly – oil level in hydraulic jacks... (unless leakage of fluid is noticed during pre-use check whereby oil level should be assessed before use or otherwise remove from service)

- With jacks standing vertically and fully retracted i.e. unraised, unscrew the top filler bolt using an 8mm allen key. Carefully remove the top filler bolt/dipstick. Wipe clean the surface of the dipstick and insert carefully back into the oil before removing once more to check the level of fluid. Add hydraulic oil grade Varpress 68 so fluid level is between the notched markers on the dipstick plug. Tighten the filler bolt using the allen key.

If a top-up of hydraulic oil is required use only Varpress 68VG.  
**NEVER USE ENGINE OIL OR BRAKE FLUID.**

- Store Skoots upright at all times.
- Jacks should be maintained and repaired in accordance with the manufacturer's instructions. Such work should be carried out by qualified persons.
- No modifications shall be carried out which adversely affect the compliance of the jack with this standard.

In case of difficulty contact...

BIL Materials Handling, Porte Marsh Road, Calne, Wiltshire SN11 9BW, UK

Tel: +44(0)1249 822222 Fax: +44(0)1249 822300

email: [service@bilgroup.eu](mailto:service@bilgroup.eu) web: [www.bilhandling.co.uk](http://www.bilhandling.co.uk)

# Warranty & Returns Policy

## Defective products

A limited warranty is offered on a back-to-base basis.

To make a claim, in the first instance you must contact BIL via email at [service@bilgroup.eu](mailto:service@bilgroup.eu) with full details of the product, its geographic location, unique batch serial number, purchase date, nature of the problem and your contact information.

All claims should be accompanied by any documented evidence of service history.

Any part or component returned to our UK factory at the customer's expense within twelve months of despatch, will be refunded, repaired or replaced (the choice of which being at our discretion) without charge if it is found to be defective due to fault of manufacture or workmanship. Subject to any express warranty given in our terms and conditions or any other contractual agreement with you, we do not accept liability under this Warranty & Returns Policy for losses or expenses incurred by customers in relation to such defective products, or for any direct, indirect or consequential damage arising from such defect. Normal wear and tear is not covered, neither is damage resulting from overloading or exertion. Any unauthorized modifications found to have been made to the product will nullify the warranty.

BIL may, unless the customer reasonably believes that the repair would involve specialist knowledge, skills or equipment, offer to send replacement parts without charge for the customer to repair (at the customer's own expense) without the requirement to return the faulty product to our UK factory.

This warranty will not apply if any of the following events occurs in relation to your product during the applicable warranty period stated above:

1. The product's serial number or any rating label is removed, defaced or changed in any way.
2. The product is serviced or otherwise altered using non-genuine replacement parts or accessories, or if genuine parts are fitted incorrectly and/or not in accordance with the manufacturer's instructions.
3. You use a product contrary to the technical or operating environment guidelines recommended in the BIL user guide or manual.
4. A component part of your product, reaches the end of its service life.
5. The product's malfunction or failure to perform according to BIL specifications results from;
  - (a) deliberate or accidental damage;
  - (b) neglect or modification by or on behalf of an end user; or
  - (c) the use of non-genuine replacement parts or accessories.

The manufacturer's decision shall be final and conclusive.





## BIL MATERIALS HANDLING DIVISION

With our comprehensive range of materials handling products plus plant and machinery handling equipment, and over 10,000 different product lines of castors, wheels and rollers manufactured by our parent company, we are confident that we can supply you with a product to match your specific requirements promptly, at a competitive price.

Our current group stock holding of components and finished goods at our European Storage, Assembly and Distribution facility based in Calne, UK is valued at over £2 million. Tried and tested, BIL is a brand that you can rely on for quality, innovation and service.

Call our sales team today to find out more!

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A division of BIL GROUP LTD

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