

**HAFCO**

# MOTORBIKE LIFTER OPERATION MANUAL



**Model  
MLN-454**

*Edition No* : MBL001

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# OPERATION MANUAL

## MACHINE DETAILS

<b>MACHINE</b>	MOTORBIKE LIFTER
<b>MODEL NO.</b>	MLN-454
<b>SERIAL NO.</b>	
<b>DATE OF MANF.</b>	

DISTRIBUTED BY



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[www.machineryhouse.co.nz](http://www.machineryhouse.co.nz)

**NOTE:**

This manual is only for your reference. Owing to the continuous improvement of the machine, changes may be made at any time without obligation or notice. Please ensure the local voltage is the same as listed on the specification plate before operating this electric machine.



**NOTE:**

In order to see the type and model of the machine, please see the specification plate. Usually found on the back of the machine. See example (Fig.1)

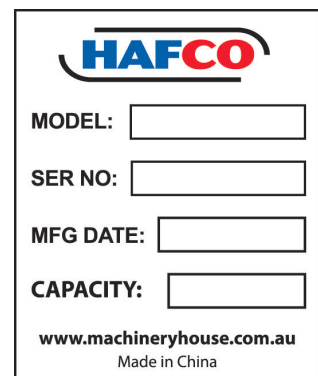


FIG.1



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## OPERATION MANUAL

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**OPERATION MANUAL**

**SPECIFICATIONS**

MODEL	MLN-45
Load Capacity (kgs)	454
Overall Length (mm)	2700
Platform Length (mm)	1960
Platform Width (mm)	230
Platform Height - Minimum to Maximum (mm)	190 - 800
Maximum Air Pressure (p.s.i.)	125
Nett Weight (kgs)	110.5

**PACKING CONTENTS**

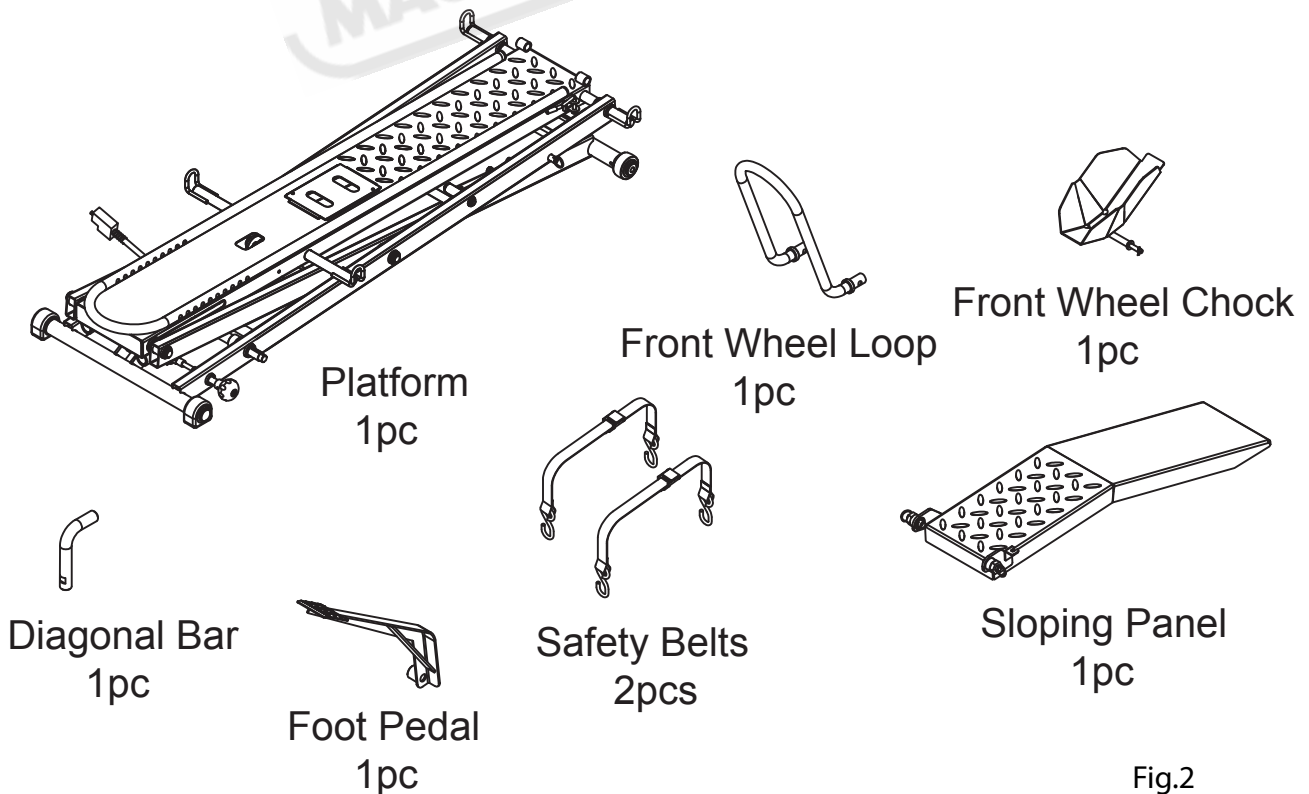


Fig.2



## OPERATION MANUAL

### EXPANDED VIEW

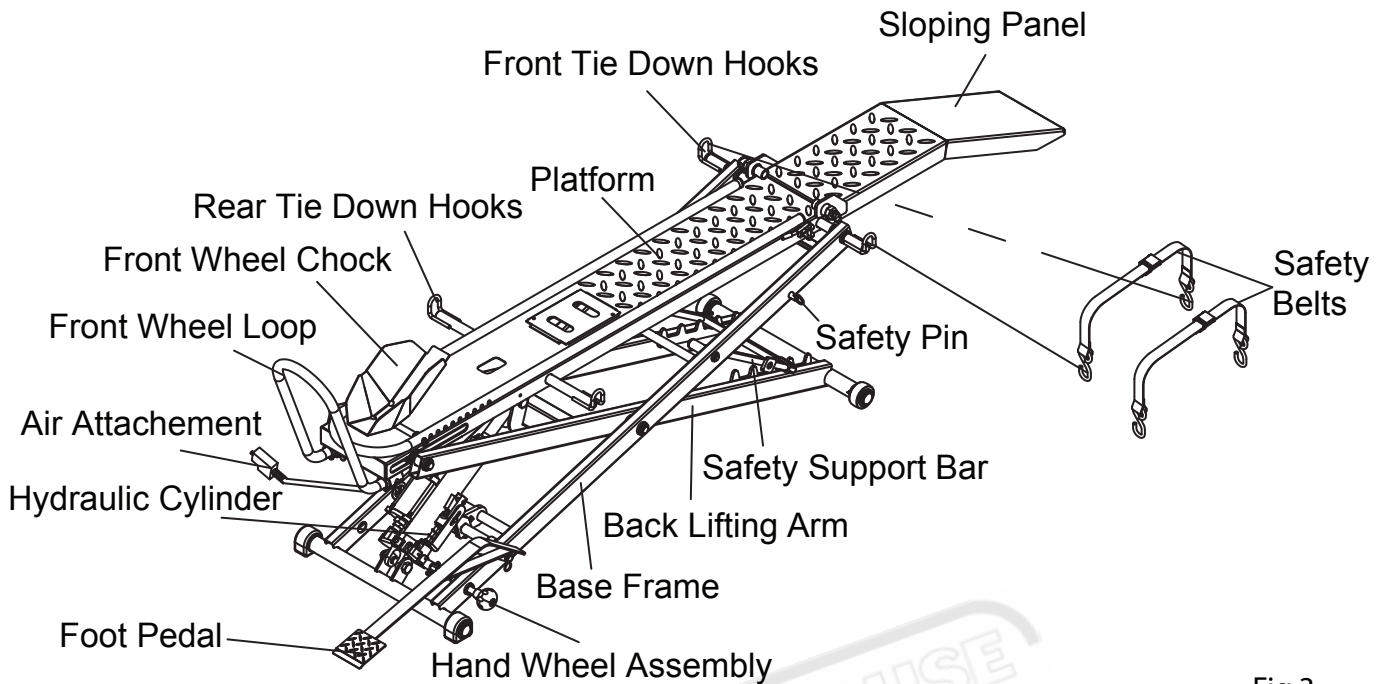


Fig.3

### SAFETY PRECAUTIONS



**READ and UNDERSTAND this manual completely before using the motorbike lifter**

- ◆ Keep the work area clean. Cluttered areas invite injuries.
- ◆ Observe work area conditions. Do not work in a damp or wet locations. Don't expose to rain.
- ◆ Keep the work area well illuminated.
- ◆ Keep children away. Children must never be allowed in the work area. Do not let them handle machines, tools or extension cords.
- ◆ Do not overload the rated capacity. Overloading can cause damage to or failure of the motorbike lifter and may result in personal injury.
- ◆ Store idle equipment. When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of the reach of children.
- ◆ Use eye and ear protection. Always wear ANSI approved impact safety goggles.
- ◆ Do not overreach. Keep proper footing and balance at all times. Do not reach over or across electrical cables or frames.
- ◆ Use the right tool for the job. Do not use a tool for a purpose for which it was not intended.



## OPERATION MANUAL

### SAFETY PRECAUTIONS

- ◆ Dress properly. Do not wear loose clothing or jewelry, as they can be caught in moving parts. Non-skid footwear is recommended. Wear restrictive hair covering to contain long hair. Always wear appropriate work clothing.
- ◆ Stay alert. Watch what you are doing, use common sense. Do not operate any tool when you are tired.
- ◆ Check for damaged parts. Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician.
- ◆ Maintenance. It is recommended that an annual inspection of the tool be made and that any defective parts, decals, or warning labels be replaced with manufacturer's specified parts.

### SAFETY REMINDERS

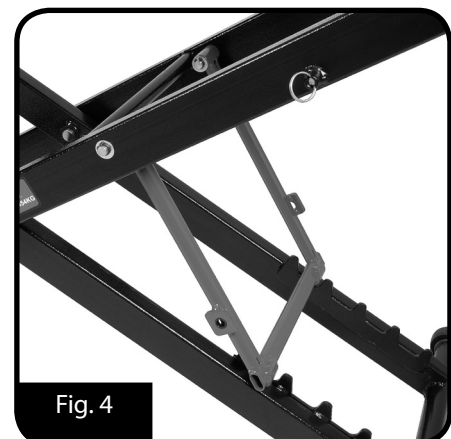
- ◆ Always check the lifter before use.
- ◆ Always push the motor bike by hand onto the lifter. Acquire assistance if needed..
- ◆ Never ride the motor bike onto the ramp.
- ◆ Do not operate or place hands under the table when operating. The air hose should be kept away from underneath the table.
- ◆ When lowering the table be sure to control the rate of descent
- ◆ When the table is at its maximum position, do not attempt to pump the table higher as this may cause damage to the hydraulic system.
- ◆ Do not leave the unit in any lifted position, or undertake doing any work on the motorcycle or motorcycle lifter itself with the unit in any lifted position without first having the safety support bar lowered and engaged

#### **WARNING**

When using the motorcycle lifter, always ensure the safety support bar is lowered and sitting on the safety dogs (Fig. 4)

#### **CAUTION**

Do not leave the unit in any lifted position, or undertake any work on the motorcycle or motorcycle lifter itself with the unit in any lifted position without first having the safety support bar lowered and engaged on the safety dogs.





## OPERATION MANUAL

### CONTROLS AND FEATURES

Read this owner's manual before operating the equipment. Familiarize yourself with the location and function of the controls and features. Save this manual for future reference.

#### FEATURES

1. The Hydraulic motorcycle lifter can be operated by the foot pedal or when air is attached, can be operated by air.
2. After lifting, safety support bar must be used to control the lifting height to prevent unintentional lowering. (See Fig.4)
3. With ramp plate, the motorcycle can be easily moved onto the platform.
4. Two safety belts prevent the motorcycle from slipping, tilting over or falling.
5. The motorcycle lifter has been fitted with two rubber feet that have flats on them and will assist in preventing the lifter from sliding.

**NOTE:** Ensure when using motorcycle lifter the front rubber feet are set up as shown in Figure 5 with the flats on the floor.



Fig. 5

#### CONTROLS

Identify and know how the controls work before operating the motorbike lifter

#### Tie Down Points (Fig. 6)

Before lifting the table the bike needs to be secured to the table with the tie down straps. The motorbike lifter is supplied with two points at the front of the lifter and two at the rear of the lifter.

**NOTE: For your safety the bike must be secured every time it is placed on the motorbike lifter**



Fig. 6

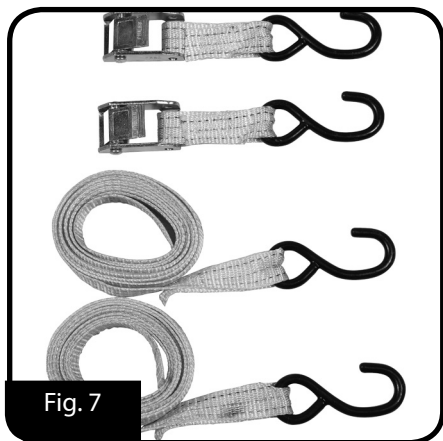


Fig. 7

#### Tie Down Straps (Fig. 7)

The manufacture has designed the motorbike lifter to be used with the tie down straps.

Two tie down straps have been supplied with each unit



## OPERATION MANUAL

### Shut Off Valve (Fig. 8)

Before lifting the table this valve needs to be closed before the table will lift.

Turn clockwise to shut the valve, and counter clockwise to open the valve and release the pressure in the jack..

**NOTE: Open the valve slowly when releasing the pressure in the jack and control the descent of the table.**



Fig. 8

### Foot Pedal (Fig. 9)

When using the motorbike lifter without the air connected,



Fig. 9

### Air Valve(Fig. 10)

When using the motorbike lifter with the air connected the table can be lifted by using the air valve

**NOTE:** The air pressure supply must not be greater than 125p.s.i. Pressure greater will cause damage to seals and will void the warranty



Fig. 10



## OPERATION MANUAL

### ASSEMBLY INSTRUCTIONS

#### STEP 1: Attach Foot Pedal (Fig.11)

Attach the flat key (#63), foot pedal (#7) and R pin (#62) to the lift shaft (#64) in turn. Then tighten with hex bolt M8x20 (#65) and hex nut M8 (#5).

NOTE: Insert R pin from bottom to top. (Fig.6)

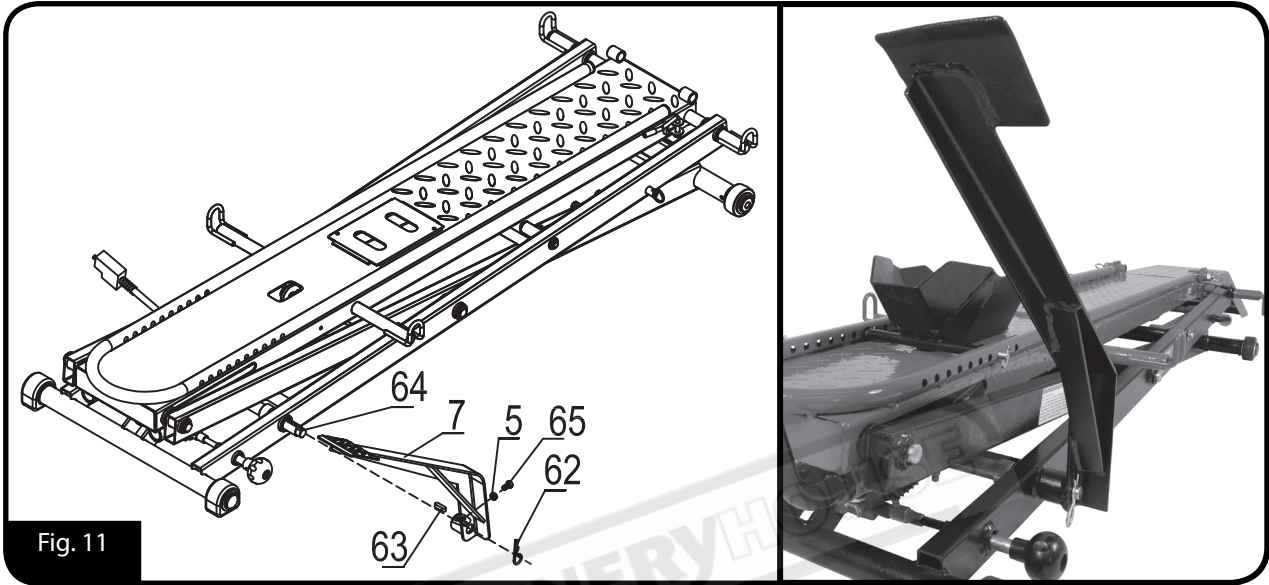


Fig. 11

#### STEP 2: Attach Front Wheel Loop and Front Wheel Chock (Fig.12)

1. Insert front wheel loop (#36) into the hole on the platform (#47) using hitch pin (#34) and spring pin (#35). Then tighten with gasket (#61), lock washer ØM8 (#45) and wing nut M8x10 (#46).

2. Attach front wheel chock (#43) and two rubber washers (#57) to the hole on the platform (#47) using hitch pin (#42) and spring pin (#35).

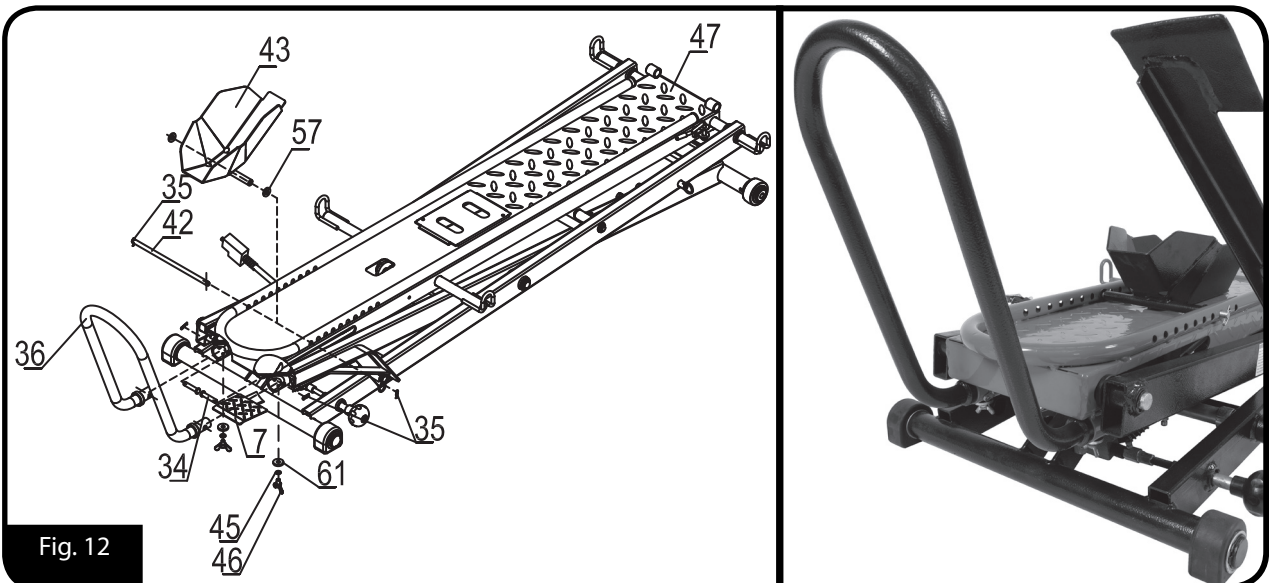


Fig. 12



## OPERATION MANUAL

### STEP 3. Attach The Ramp Plate (Fig.13)

1. Attach the sloping ramp plate (#53) to the platform (#47).

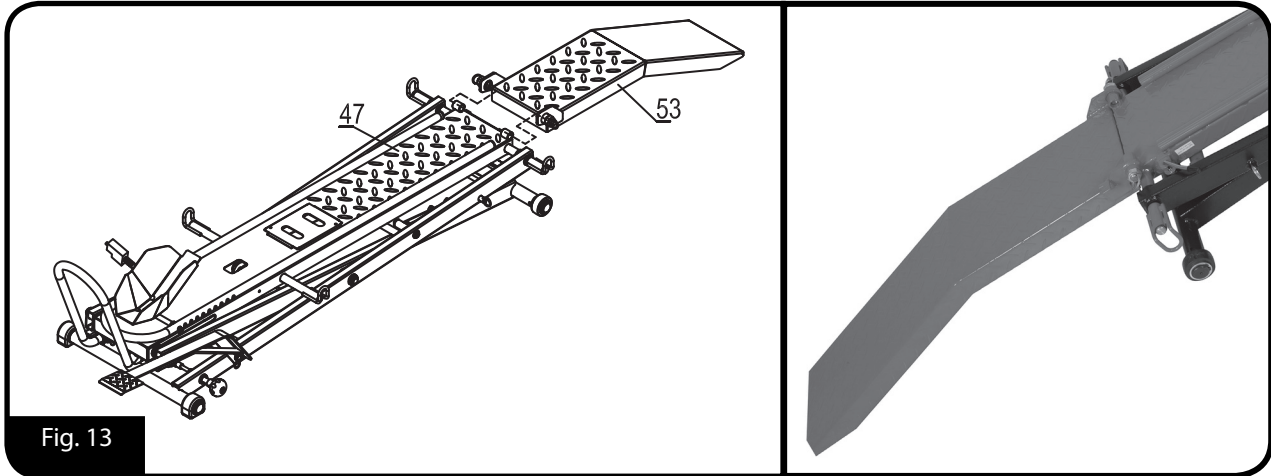


Fig. 13

### STEP 4. Fitting the Support Bar (Fig.14)

1. A support bar leg is mounted on the underside of the ramp and is held in place by a hex head bolt and lock nut.

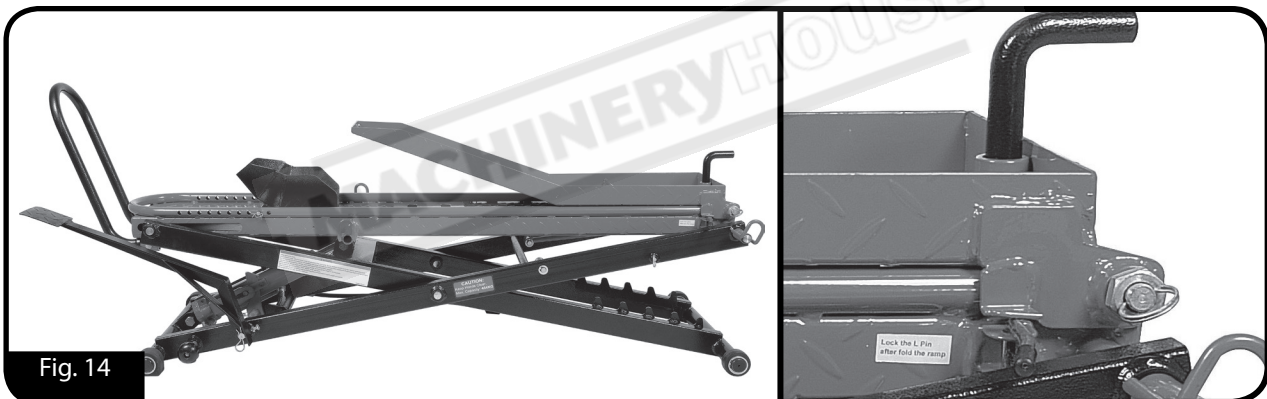


Fig. 14

### STEP 5. Remove Rectangular Plate (Fig.15)

1. Remove rectangular plate (#44) from the platform (#47) in order to collect the oil.

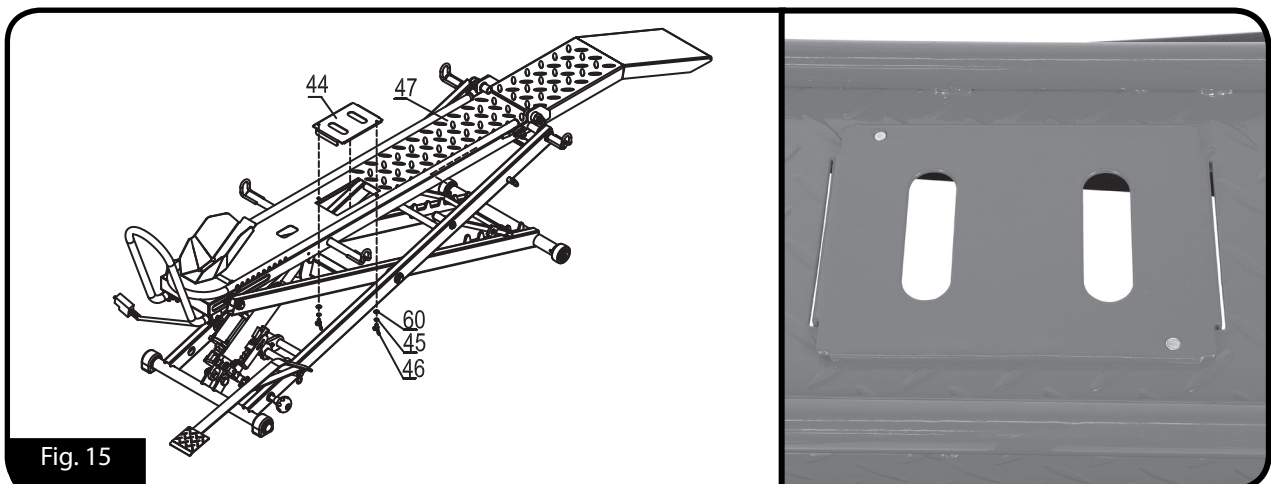


Fig. 15



## OPERATION MANUAL

### MAINTENANCE AND STORAGE

**Important:** Use only a good grade hydraulic jack oil. Avoid mixing different types of fluid and never use brake fluid, transmission fluid or motor oil. Improper fluid can cause premature failure of the jack and the potential for sudden and immediate loss of load. When used daily with an air compressor, pour a teaspoon of air tool lubricant into the air inlet of the lifter control valve. Connect the valve to the air supply and squeeze the valve lever to operate. This will evenly distribute the lubricant and properly prepare the hydraulic power unit for use. Periodically check for leaks around the air connections. Use thread compound to repair. Avoid the use of thread tape when possible.

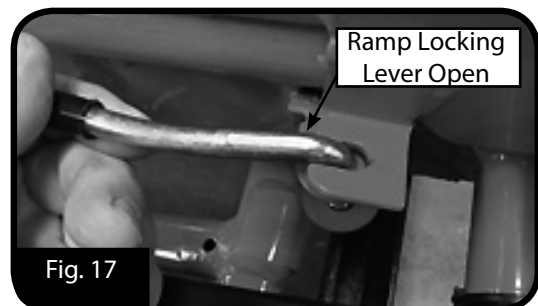
### STORAGE

The motorbike lifters "RAMP" can be folded up and over for storage. Fig 16

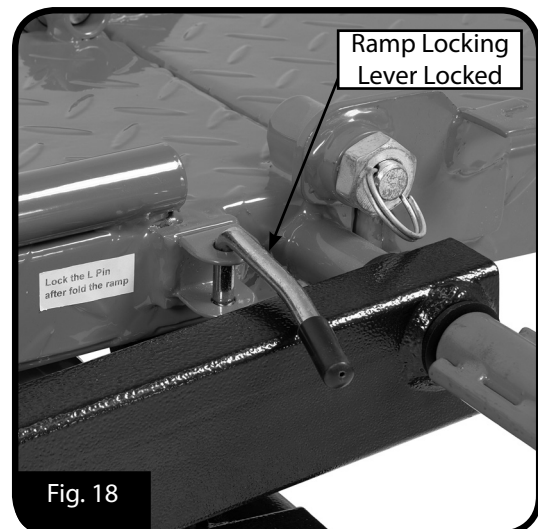


It is also supplied with a locking lever that needs to be locked correctly if storing the motorcycle lifter in the vertical position.

Either way, Care must be taken when folding over the ramp that the locking lever is in the OPEN position (Fig 17) to accept the tab slot on the ramp as it is folded over.



If Motorbike Lifter is Stored in the Vertical Position, You must ensure the locking lever is moved to the LOCKED position (Fig. 18) before lifting unit up against the wall.





## OPERATION MANUAL

### STORAGE Cont.

To assist in stabilizing when standing the motorbike lifter vertically, the unit relies on the support bar leg that was mounted on the underside of the ramp in Step 4 of the assembly. (Fig.19)

#### **WARNING**

Before storing the motorcycle lifter in a vertical position against a wall, ensure the support bar leg is fitted correctly as shown. (Fig.19)

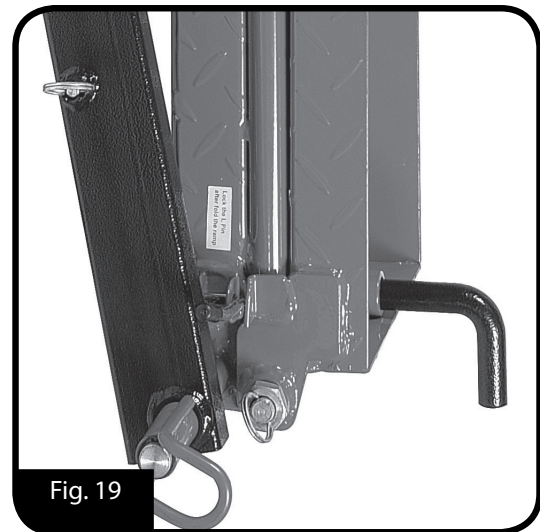


Fig. 19

The lifter is designed to stand upright. However, it is Heavy and may be knocked over. It is **IMPERATIVE** to secure the upright lifter to the wall using **SAFETY BELTS**. Failure to obey this warning may void the warranty on your lifter and may cause serious injury or death. (Fig.20)

#### **CAUTION**

The wall and fasteners that are used to secure the strap must be suitable for this particular application. If in doubt find another wall or fastener that we do the job securely.

#### **WARNING**

The motorbike lifter is very heavy and if falls will cause serious injury to anyone standing in its way. Use care when raising and lowering the motorbike lifter from horizontal to the vertical position. The unit is heavy and will require the help of other people.

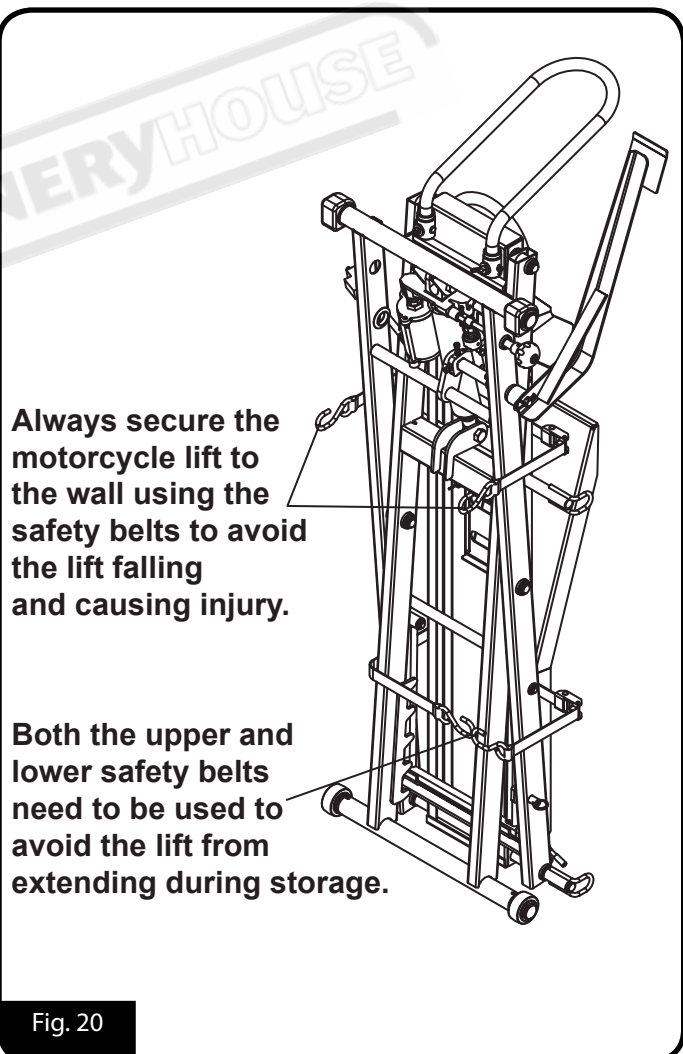


Fig. 20



## OPERATION MANUAL

### TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
Jack will not lift load	Release valve not tightly closed Overload condition Hydraulic unit malfunction	Ensure release valve tightly closed Remedy overload condition Ensure adequate air supply
Jack will lift, but not maintain pressure	Release valve not tightly closed. Overload condition Hydraulic unit malfunction	Ensure release valve tightly closed Remedy overload condition
Jack will not lower after unloading	Reservoir over filled. Linkages binding.	Drain fluid to proper level. Clean and lubricate moving parts
Poor lift performance	Fluid level low Air trapped in system	Ensure proper fluid level. With ram fully retracted, remove oil filler plug to let pressurized air escape, then reinstall oil filler plug
Will not lift to full extension	Fluid level low	Ensure proper fluid level




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## OPERATION MANUAL

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# SPARE PARTS SECTION

The following section covers the spare parts diagrams and lists that were current at the time this manual was originally printed. Due to continuous improvements of the machine, changes may be made at any time without notification.

### HOW TO ORDER SPARE PARTS

1. Have your machines **model number, serial number & date of manufacture** on hand, these can be found on the specification plate mounted on the machine
2. A scanned copy of your parts list/diagram with required spare part/s identified
3. Go to [www.machineryhouse.com.au/contact us](http://www.machineryhouse.com.au/contact-us) and fill out the inquiry form attaching a copy of scanned parts list.

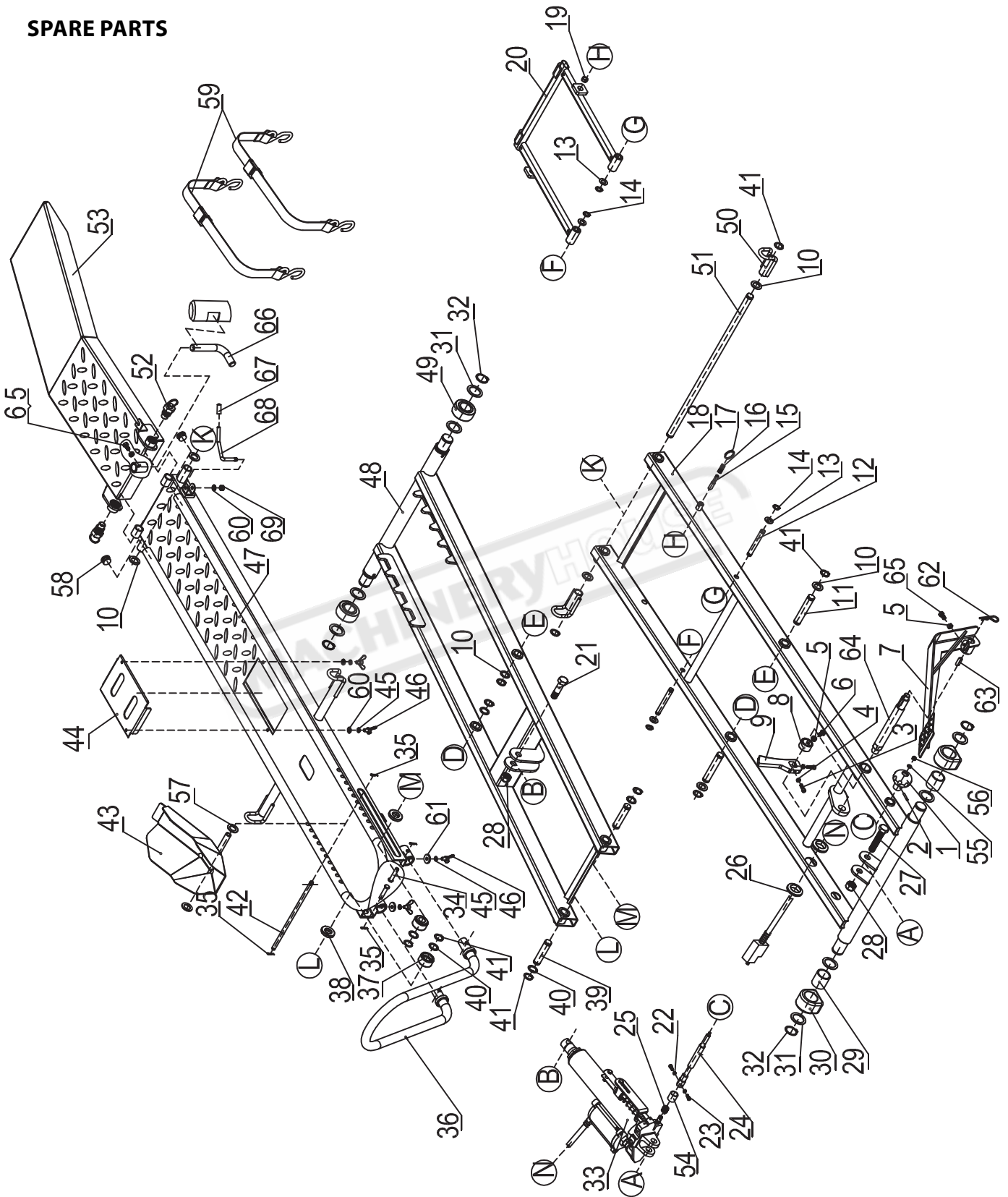
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# OPERATION MANUAL

## SPARE PARTS





## OPERATION MANUAL

### SPARE PARTS LIST

REF#	DRAWING No.	DESCRIPTION	QTY
1	MS1000-11001	Hand wheel	1
2	9402-04025-FH	Elastic Pin	1
3	9105-06020-DX8.8	Hex Socket Round Head Screw M6x20	2
4	9201-06000-DX	Hex Nut M6	2
5	9201-08000-DX	Hex Nut MB	3
6	9101-08016 -DX8.8	Hex Bolt M8x16	2
7	MS1000-10000	Foot Pedal	1
8	MS1000-00012-DX	Pin Bushing	1
9	MS1000-00011-DY	Lift Lever	1
10	MS1000-00010	Washer	8
11	MS1000-00006-DX	Hitch Pin	2
12	MS1000-00007-DX	Hitch Pin	2
13	9301-12000-DX	Flat Washer Ø12	4
14	9304-12000-FH	Circlip for Shaft	4
15	Z330-00007-DX	Pawl	1
16	Z330-00003-FH	Spring B	1
17	Z330-00017-DX	Key Ring	1
18	MS1000-01000	Base Frame	1
19	MS1000-00015	Bracing Bushing	1
20	MS1000-06000	Safety Support Bar	1
21	9101-16060-DX8.8	Hex Bolt M16x60	1
22	9201-05000-DX	Hex Nut MS	2
23	9105-05012-DX8.8	Hex Socket Round Head Screw M5x12	2
24	MS1000-11100	Release Valve Lever	1
25	MS1000-05004-FH	Torsional Spring	1
26	MS1000-00017	Rubber Sheath	2
27	E130-00006-DX	Hex Bolt M16x80	1
28	9206-16000-DX	Nylon Lock Nut M16	2
29	MS1000-00014-DX	Bushing	2
30	MS1000-00009	Active Block	2
31	T932-00005-DX	Flat Washer	8
32	9304-32000-FH	Circlip for Shaft	4
33	MS1000-05000	Hydraulic Cylinder	1
34	MS1000-00013-DX	Hitch Pin	2
35	M080-00007-DX	Spring Pin	4



## OPERATION MANUAL

REF#	DRAWING No.	DESCRIPTION	QTY
36	MS1000-09000	Front Wheel Loop	1
37	MS1000-00002	Wheel	2
38	MS1000-00016	Bushing	2
39	MS1000-00005-DX	Hitch Pin	2
40	N280-00043	Adjustable Washer C	4
41	9304-19000-FH	Circlip for Shaft	10
42	MS1000-00001-DX	Hitch Pin	1
43	MS1000-08000	Front Wheel Chock	1
44	MS1000-00003	Rectangular Plate	1
45	9303-08000-DX	Spring Washer	4
46	919905-08012-DX	Wing Bolt M8x12	4
47	MS1000-03000	Platform	1
48	MS1000-02000	Back Lifting Arm	1
49	MS1000-00008	Nylon Wheel	2
50	MS1000-07000	Tie Down Hook	2
51	MS1000-00004-DX	Hitch Pin	1
52	N600-40000	Safety Pin	2
53	MS1000-04000	Sloping Panel	1
54	MS1000-05002	Pressure Spring Bushing	1
55	9301-06000-DX	Flat Washer Ø 6	1
56	9206-06000-DX	Nylon Lock Nut M6	1
57	LSA22-00021	Rubber Washer 2	2
58	T680-00003	End Cap	2
59	MS1000-00019	Safety Belt	2
60	9301-08000-DX	Flat Washer 08	2
61	T200-00001-DX	Gasket	2
62	LSP25-00012-DX	R Pin	1
63	MS1000-00020	Flat Key	1
64	MS1000-00021-DX	Lift Shaft	1
65	9101-08020-DX8.8	Hex Bolt M8x20	1
66	MS1000-00022-DX	Diagonal Bar	1
67	NW01-00006	Handle Grip	1
68	NW01-00005-CD	Handle B	1
69	9206-08000-DX	Nylon Lock Nut M8	1



# WARNING

## General Machinery Safety Instructions

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Machinery House  
requires you to read this entire Manual before using this machine.

- 1. Read the entire Manual before starting machinery.** Machinery may cause serious injury if not correctly used.
- 2. Always use correct hearing protection when operating machinery.** Machinery noise may cause permanent hearing damage.
- 3. Machinery must never be used when tired, or under the influence of drugs or alcohol.** When running machinery you must be alert at all times.
- 4. Wear correct Clothing.** At all times remove all loose clothing, necklaces, rings, jewelry, etc. Long hair must be contained in a hair net. Non-slip protective footwear must be worn.
- 5. Always wear correct respirators around fumes or dust when operating machinery.** Machinery fumes & dust can cause serious respiratory illness. Dust extractors must be used where applicable.
- 6. Always wear correct safety glasses.** When machining you must use the correct eye protection to prevent injuring your eyes.
- 7. Keep work clean and make sure you have good lighting.** Cluttered and dark shadows may cause accidents.
- 8. Personnel must be properly trained or well supervised when operating machinery.** Make sure you have clear and safe understanding of the machine you are operating.
- 9. Keep children and visitors away.** Make sure children and visitors are at a safe distance for you work area.
- 10. Keep your workshop childproof.** Use padlocks, Turn off master power switches and remove start switch keys.
- 11. Never leave machine unattended.** Turn power off and wait till machine has come to a complete stop before leaving the machine unattended.
- 12. Make a safe working environment.** Do not use machine in a damp, wet area, or where flammable or noxious fumes may exist.
- 13. Disconnect main power before service machine.** Make sure power switch is in the off position before re-connecting.
- 14. Use correct amperage extension cords.** Undersized extension cords overheat and lose power. Replace extension cords if they become damaged.
- 15. Keep machine well maintained.** Keep blades sharp and clean for best and safest performance. Follow instructions when lubricating and changing accessories.
- 16. Keep machine well guarded.** Make sure guards on machine are in place and are all working correctly.
- 17. Do not overreach.** Keep proper footing and balance at all times.
- 18. Secure workpiece.** Use clamps or a vice to hold the workpiece where practical. Keeping the workpiece secure will free up your hand to operate the machine and will protect hand from injury.
- 19. Check machine over before operating.** Check machine for damaged parts, loose bolts, Keys and wrenches left on machine and any other conditions that may effect the machines operation. Repair and replace damaged parts.
- 20. Use recommended accessories.** Refer to instruction manual or ask correct service officer when using accessories. The use of improper accessories may cause the risk of injury.
- 21. Do not force machinery.** Work at the speed and capacity at which the machine or accessory was designed.
- 22. Use correct lifting practice.** Always use the correct lifting methods when using machinery. Incorrect lifting methods can cause serious injury.
- 23. Lock mobile bases.** Make sure any mobile bases are locked before using machine.
- 24. Allergic reactions.** Certain metal shavings and cutting fluids may cause an allergic reaction in people and animals, especially when cutting as the fumes can be inhaled. Make sure you know what type of metal and cutting fluid you will be exposed to and how to avoid contamination.
- 25. Call for help.** If at any time you experience difficulties, stop the machine and call you nearest branch service department for help.



# WARNING

## Motorcycle Lifter Safety Instructions

---

Machinery House  
requires you to read this entire Manual before using this machine.

- 1. Maintenance.** Check oil levels and fill to correct oil levels if necessary.
- 2. Motorcycle Lifter Condition.** The Motorcycle Lifter must be maintained for a proper working condition. Never operate a Motorcycle Lifter that has low oil levels, damaged or worn parts. Scheduled routine maintenance should be performed on a scheduled basis. Check frame, welds, wheels & motorcycle wheel clamp for cracks or damage. Replace if necessary.
- 3. Crushing Hazard.** Never place any part of your body in the lifting mechanism or under the table as serious injury can occur. Always ensure the safety bar is either inserted or lowered before working on your motorcycle.
- 4. Work area hazards.** Keep the area around the Motorcycle Lifter clean from oil, tools, objects & chips. Pay attention to other persons in the area and know what is going on around the area to prevent unintended accidents.
- 5. Wheel Clamp System.** Always support the motorcycle during loading & unloading. Secure wheel lock & fix tie down straps to motorcycle before any work is carried out. Regular checking that your motorcycle is securely fixed to lifter should take place.
- 6. Overloading Motorcycle Lifter.** Check your motorcycle manual for the total weight. Do not over load the Motorcycle Lifter capacity.
- 7. Warning Labels.** Take note of any warning labels on the machine and do not remove them.
- 8. Material Hazard.** Do not lift objects that are not secured properly. If they fall serious injury can occur.
- 9. Safe Surface Use.** Only use the Motorcycle Lifter on hard, flat surfaces. Avoid using the Motorcycle Lifter on inclines or ramps that will cause a loss of control.
- 10. Safe Operation.** Use extreme care when handling loads. Always centre and support the Motorcycle during loading and unloading. Ensure front wheel is securely fixed in wheel lock. Always keep heavy loads on Motorcycle Lifter as close to the ground as possible for maximum stability at all times. Always ensure safety bar is inserted or lowered into position and feet are extended to maximum width if available before working on your Motorcycle. Leave the Motorcycle Lifter all the way down when not in use.
- 11. Other Hazards.** Never allow children to play on this Motorcycle Lifter, and never carry passengers!
- 12. Pinching.** Prevent pinching by releasing pressure in the ram leaving table all the way down when not in use.
- 13. Use Correct Air Pressure** Exceeding the maximum PSI rating of motorcycle lifter may cause unpredictable operation, injury and damage to machine. If this rating is not stated in manual suggest NOT to exceed 125psi.  
*(Applies to Pneumatic model only).*
- 14. Disconnect Air Pressure** before servicing Motorcycle Lifter, or leaving unattended. Always disconnect Air and ensure safety bar is inserted or lowered into position.  
*(Applies to Pneumatic model only).*
- 15. Air Hose - Trip Hazard** Hoses can easily become a tripping hazard when laid across the floor in a disorganized fashion.  
*(Applies to Pneumatic model only).*
- 16. Call for help.** If at any time you experience difficulties, stop the machine and call you nearest branch service department for help.

# PLANT SAFETY PROGRAM NEW MACHINERY HAZARD IDENTIFICATION, ASSESSMENT & CONTROL

## Motorcycle Lifter

Developed in Co-operation Between A.W.I.S.A and Australia Chamber of Manufactures  
This program is based upon the Safe Work Australia, Code of Practice - Managing Risks of Plant in the Workplace ( WHSA 2011 No10 )



Item No.	Hazard Identification	Hazard Assessment	Risk Control Strategies <small>(Recommended for Purchase / Buyer / User)</small>
B	CRUSHING	HIGH	Ensure use motorcycle lifter is on even, solid ground. Ensure motorcycle is securely fixed to platform. Keep body clear from under motorcycle lifter at all times. Do not exceed maximum lifting capacity of motorcycle lifter. Always check around motorcycle lifter before lowering. Check motorcycle lifter for cracks etc, prior to lifting. Ensure load is lowered smoothly. Wear safety boots. Do not exceed recommended maximum PSI rating. (applies to Pneumatic model only)
D	SHEARING	MEDIUM	Keep body parts clear between moving components of trolley when lowering.
G	HIGH PRESSURE AIR	MEDIUM	Disconnect air supply to motorcycle lifter prior to checks or maintenance. Do not exceed recommended maximum PSI rating. (applies to Pneumatic model only)
J	SLIPPING, TRIPPING, & FALLING	LOW	Avoid using motorcycle lifter on and around uneven or slippery surfaces.
Plant Safety Program to be read in conjunction with manufactures instructions			



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[www.machineryhouse.co.nz](http://www.machineryhouse.co.nz)

Authorised and signed by:   
 Safety officer: .....  
 Manager:  .....

Revised Date: 4th December 2017