



Please dispose of packaging for the product in a responsible manner. It is suitable for recycling. Help to protect the environment, take the packaging to the local amenity tip and place into the appropriate recycling bin.

**FOR HELP OR ADVICE ON THIS PRODUCT PLEASE CONTACT YOUR DISTRIBUTOR,
OR SIP DIRECTLY ON:**

TEL: 01509500400

**EMAIL: sales@sip-group.com or technical@sip-group.com
www.sip-group.com**

22 Ton Pneumatic Floor Jack



03643

Please read and fully understand the instructions in this manual before operation. Keep this manual safe for future reference.

Declaration of Conformity

We

SIP (Industrial Products) Ltd
Gelders Hall Road
Shepshed
Loughborough
Leicestershire
LE12 9NH
England

As the manufacturer's authorised representative within the EC
declare that the


22 Ton Pneumatic Floor Jack - SIP Part Number 03643

Conforms to the requirements of the following directive/s, as indicated.

2006/42/EC Machinery Directive

And The Relevant Harmonised Standard/s, including

EN 1494+A1:2008

Signed: 

Mr P. Ippaso - Managing Director - SIP (Industrial Products) Ltd
Date: 28/06/2015.



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SAFETY SYMBOLS USED THROUGHOUT THIS MANUAL



Danger / Caution: Indicates risk of personal injury and/or the possibility of damage.



Note: Supplementary information.

SAFETY INSTRUCTIONS



IMPORTANT: Please read the following instructions carefully, *failure to do so could lead to serious personal injury and / or damage to the Floor Jack.*

When using your Floor Jack, basic safety precautions should always be followed to reduce the risk of personal injury and / or damage to the Floor Jack or load.

Read all of these instructions before operating the Floor Jack and save this user manual for future reference.

The Floor Jack should **not** be modified or used for any application other than that for which it was designed.

The Floor Jack was designed for safely lifting loads up to its rated capacity.

If you are unsure of its relative applications do not hesitate to contact us and we will be more than happy to advise you.

Before operating the Floor Jack always check no parts are broken, that no oil is leaking and that no parts are missing.

Always operate the Floor Jack safely and correctly.

KNOW YOUR FLOOR JACK: Read and understand the owner's manual and labels affixed to the Floor Jack. Learn its applications and limitations, as well as the potential hazards specific to it.

KEEP CHILDREN AND UNTRAINED PERSONNEL AWAY FROM THE WORK AREA: All visitors should be kept at a safe distance from the work area; never allow untrained persons to operate the Floor Jack.

STAY ALERT: Always watch what you are doing and use common sense.

NEVER LEAVE THE FLOOR JACK UNATTENDED: When in use / under load.

HAVE YOUR FLOOR JACK REPAIRED BY A QUALIFIED PERSON: The Floor Jack is in accordance with the relevant safety requirements. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user and void the warranty.

DANGER! Check that the Floor Jack is in sound condition and good working order before each use; Take immediate action to repair or replace damaged parts.

NOTES

PARTS LIST

Ref. No.	Description	SIP Part No.	Ref. No.	Description	SIP Part No.
1-1	Snap Ring	HY01-00585	1-21	Lock ring	HY01-00604
1-2	Wheel	HY01-00586	1-22	Washer	HY01-00605
1-3	Bolt	HY01-00587	1-23	Bolt	HY01-00606
1-4	Washer	HY01-00588	1-24	Handle link	HY01-00607
1-5	Right frame	HY01-00589	1-25	Cover	HY01-00608
1-6	Bolt	HY01-00590	2	Hydraulic pump	HY01-00609
1-7	Washer	HY01-00591	4-1	Saddle D	HY01-00610
1-8	Bolt	HY01-00592	4-2	Saddle C	HY01-00611
1-9	Washer	HY01-00593	4-3	Saddle B	HY01-00612
1-10	Bolt	HY01-00594	4-4	Nut	HY01-00613
1-11	Washer	HY01-00595	4-5	Washer	HY01-00614
1-12	Frame	HY01-00596	4-6	Washer	HY01-00615
1-13	Handle frame	HY01-00597	4-7	Support plate	HY01-00616
1-14	Left frame	HY01-00598	4-8	Pin	HY01-00617
1-15	Handle base	HY01-00599	4-9	U-bolt	HY01-00618
1-16	Screw	HY01-00600	4-10	Saddle A	HY01-00619
1-17	Spring washer	HY01-00601	5	Handle	HY01-00620
1-18			6-1 / 6-24	Air motor	HY01-00621
1-19	Universal Joint	HY01-00602	7	Air hose	HY01-00622
1-20	Pin	HY01-00603			

SAFETY INSTRUCTIONS....cont

WARNING! Only operate on a level and stable surface and never use on soft ground where the Floor Jack is likely to "sink" whilst in operation.

NEVER STAND ON THE FLOOR JACK: The Floor Jack is not designed for this purpose.

DO NOT dismantle or tamper with the Floor Jack, as this may be dangerous and will invalidate the warranty.

ALWAYS ensure the load is central on the saddle.

- If a problem with the Floor Jack is experienced or suspected stop using the Floor Jack **immediately** and contact your distributor for repair.
- Do not attempt to lift a load that exceeds the rated capacity of the Floor Jack.
- Do not attempt to lift a load beyond the maximum height of the Floor Jack.
- This Floor Jack is a lifting device only.
- Immediately after lifting, support the load with a pair of appropriately rated jack stands.
- Never work on, under or around a load supported only by the Floor Jack.
- Regularly inspect and lubricate the Floor Jack, ensuring that it is in good working order and condition.
- Always ensure that the work area is clean and tidy, free from unrelated materials and has adequate lighting.
- When lifting a vehicle ensure a minimum distance of 0.5m between vehicle and static objects such as doors, walls, etc. to allow for tilting during jacking.
- Ensure that all persons are out of the vehicle before jacking.
- **DO NOT** enter the vehicle whilst it is supported on the Floor Jack or axle stands.
- Check vehicle weight and recommended lifting points by referring to the vehicle's manual. Ensure that the lifting point is not corroded.
- **DO NOT** allow the vehicle to move, or try to start the engine, during jacking.
- **DO NOT** start the engine when vehicle is jacked up.
- **DO NOT** jack a vehicle if this may result in the spillage of fuel, battery acid, or other dangerous substances.
- Check that the Floor Jack saddle is centred and stable on the lifting point (off-centre loads can slip).
- Position the Floor Jack to avoid operating it from under vehicle.
- Keep hands, limbs etc. clear of moving parts during the raising and lowering of the vehicle.
- **DO NOT** top-up the Floor Jack with brake fluid, or other oil types; use only hydraulic oil.
- **DO NOT** adjust the safety overload valve.
- Ensure that there are no persons or obstructions beneath the load before lowering.
- Clean and stow the Floor Jack correctly, with the ram in the down position, **DO NOT** leave it extended; ensure storage area is dry.
- **IMPORTANT!** Ensure that you can see the saddle and jacking point throughout the jacking operation in case there is any relative movement.
- Failure to follow the warnings in this manual, may result in personal injury and/or prop-

SAFETY INSTRUCTIONS....cont

erty damage.

- Understand the operating environment; Before each use the operator should assess, understand and where possible reduce the specific risks and dangers associated with the operating environment. Bystanders should also be made aware of any risks associated with the operating environment.



Danger: *Never* lift a load greater than that which the jack was designed, overloading can lead to personal injury or damage to the racing jack.



Danger: *Never* use the Floor Jack to hold the load; after lifting, immediately support the lifted vehicle with a pair of appropriately rated jack stands.



CAUTION: The warnings and cautions mentioned in this user manual can not 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 applied.

GUARANTEE

This SIP Floor Jack is covered by a 12 month parts and labour warranty covering failure due to manufacturers defects. This does not cover failure due to misuse or operating the Floor Jack outside the scope of this manual - any claims deemed to be outside the scope of the warranty may be subject to charges including, but not limited to parts, labour and carriage costs.

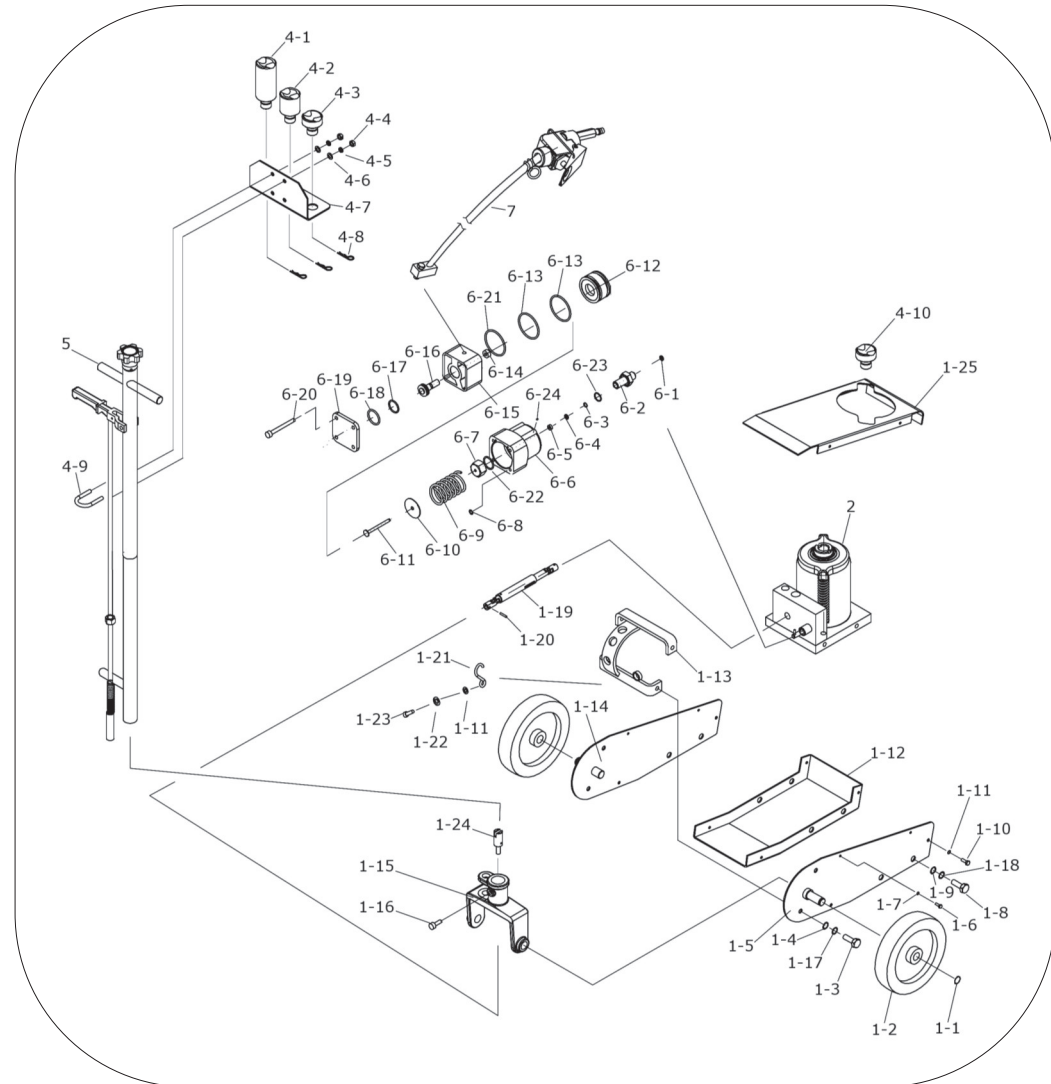
This guarantee does not cover consumables such as oil etc.

In the unlikely event of warranty claims, contact your distributor as soon as possible.



Note: Proof of purchase will be required before any warranty can be honoured.

EXPLODED DRAWING



TROUBLESHOOTING

Symptom	Possible Causes	Corrective Action
Jack will not lift load.	<ul style="list-style-type: none"> Release valve not tightly closed. Pump has lost it's prime. Load is too heavy. Air supply not sufficient. 	<ul style="list-style-type: none"> Ensure release valve tightly closed. See 'priming the pump'. Consider higher capacity jack. Check air supply.
Jack will lift, but not maintain pressure.	<ul style="list-style-type: none"> Release valve not tightly closed. Hydraulic unit malfunction. 	<ul style="list-style-type: none"> Ensure release valve tightly closed. Discontinue use, contact supplier.
Jack will not lower after unloading.	<ul style="list-style-type: none"> Reservoir overfilled. Release valve not fully open. Linkages binding. Low oil level. 	<ul style="list-style-type: none"> Drain oil to proper level. Ensure release valve is fully open. Clean and lubricate moving parts. Ensure proper oil level.
Poor lift performance.	<ul style="list-style-type: none"> Low oil level. Air trapped in system. Air supply not sufficient. 	<ul style="list-style-type: none"> Ensure proper oil level. See 'bleeding the jack'. Check air supply.
Will not lift to full extension.	<ul style="list-style-type: none"> Low oil level. Air supply not sufficient. 	<ul style="list-style-type: none"> Ensure proper oil level. Check air supply.

TECHNICAL SPECIFICATIONS

Lifting Capacity	22 Ton	Adaptor sizes	110 x 50 mm Ø
Minimum Height	230 mm		50 x 50 mm Ø
Ram Stroke	120 mm		20 mm x 50 mm Ø
Screw Extension	115 mm		20 mm x 70 mm Ø
Air Pressure	7 - 10 bar	Net. Weight	46Kg

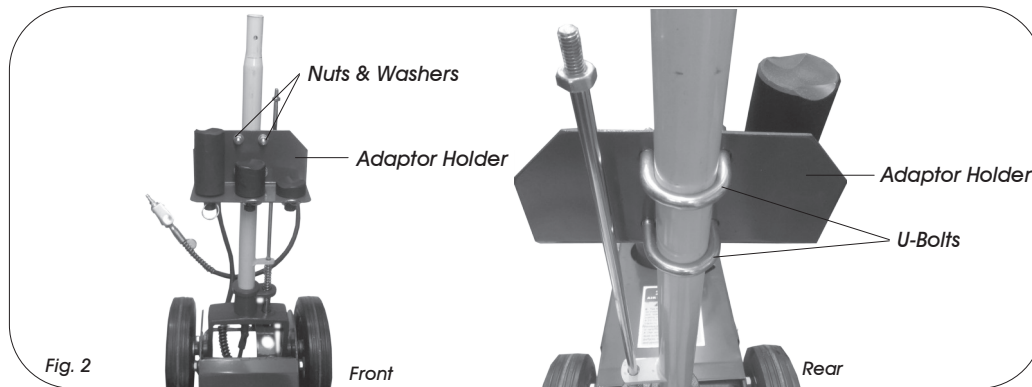
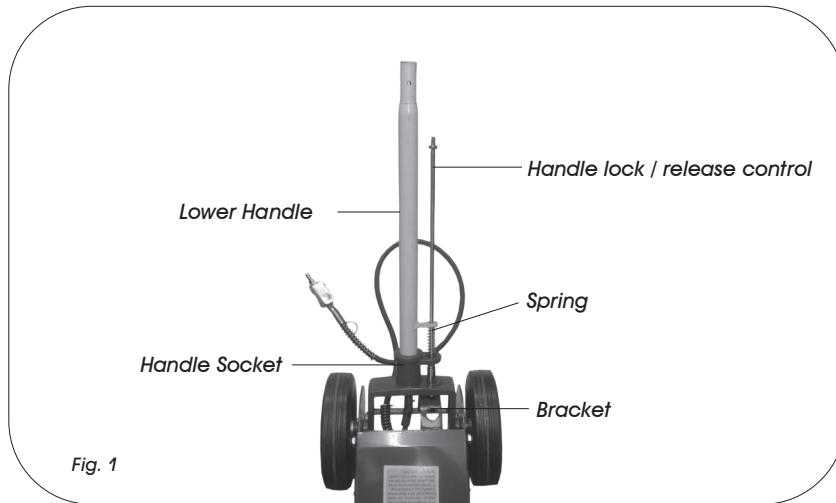
GETTING TO KNOW YOUR JACK



ASSEMBLY INSTRUCTIONS

FITTING THE HANDLE

- Fit the bottom half of the handle into the handle socket ensuring that the handle lock / release control is also fitted into its bracket (Fig. 1).
- Using the 2 U-bolts and nuts, washers & spring washers fit the adaptor holder onto the lower part of the handle; Tighten the nuts to secure in place (Fig. 2).



MAINTENANCE...cont

LUBRICATION

A periodic coating of light lubricating oil to pivot points, axles and hinges will help to prevent rust and assure that wheels, castors and pump assemblies move freely.

CLEANING

Periodically check the pump piston and ram for signs of rust or corrosion. Clean as needed and wipe with an oily cloth.



Note: Never use sandpaper or abrasive material on these surfaces.

MAINTENANCE....cont

4. Return the jack to an upright position.
5. Fill with hydraulic oil until the oil reaches the bottom of the oil fill hole.
6. Wipe away any excess oil.
7. Refit the oil fill bung.



Note: Contact your local authority on how / where to dispose of the waste oil.

BLEEDING

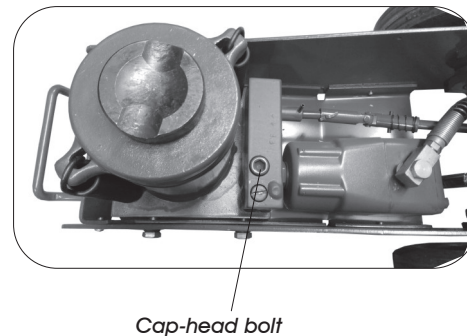
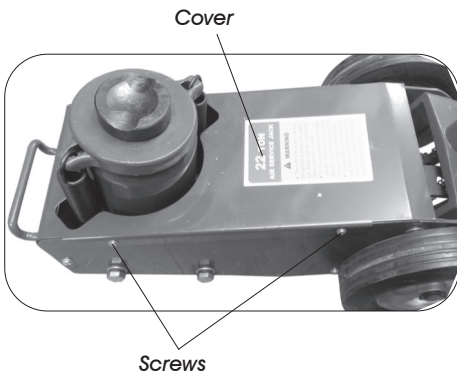
If air gets into the hydraulic system the jack will not operate correctly and will need to be bled. To bleed air from the hydraulic system, follow the instructions below.

1. Set the jack in its normal operation position.
2. Turn the release knob anti-clockwise to open the release valve.
3. Connect the airline to the air inlet of the jack.
4. Press and hold the lever on the air inlet for 10 to 15 seconds.

PRIMING THE PUMP

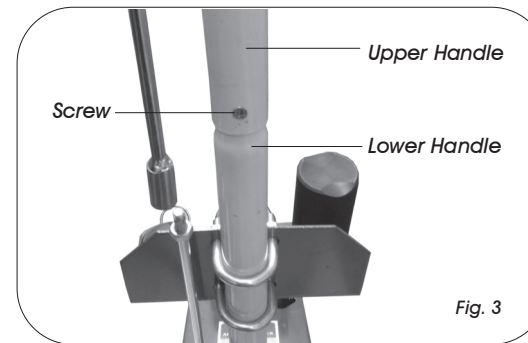
The air / hydraulic pump may lose its prime during shipment, or after long periods without use; To prime the pump:

1. Remove the upper cover; unscrew the 2 screws on each side (see below, left).
2. Loosen the cap head bolt (see picture below, right) by half a turn.
3. Close the release valve.
4. Operate the air pump whilst repeatedly tightening and loosening the bolt.
5. When the piston begins to rise fully tighten the bolt and ensure that the piston can rise to its maximum height.

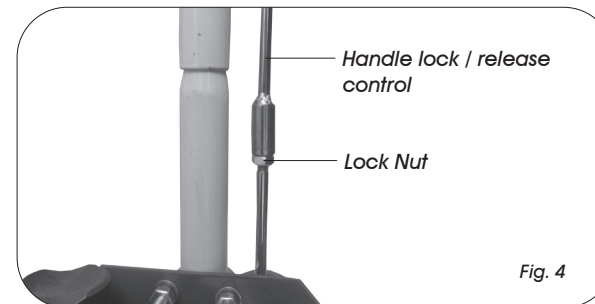


ASSEMBLY INSTRUCTIONS....cont

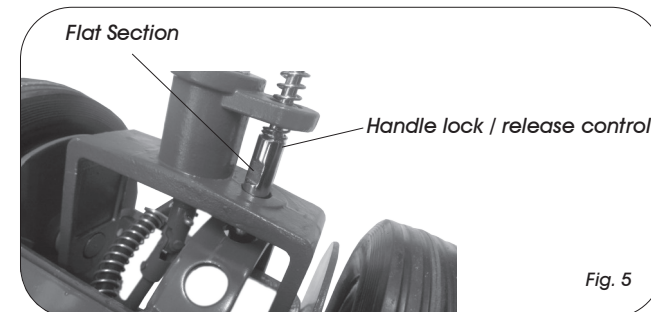
- Slide the upper handle over the lower handle and secure in place with the handle screw (Fig 3).



- Join the 2 parts of the handle lock / release control; turn the bottom part of the handle lock / release control to connect the parts together. Tighten the locking nut to fully secure (Fig. 4).



Note: There are 2 flat sections towards the bottom of the lock / release control to allow a 13mm spanner (not supplied) to turn the bottom section (Fig. 5).



OPERATING INSTRUCTIONS

PRE-OPERATION CHECKS

Inspect before each use. Do not use if broken, bent, cracked or damaged parts are noted. Any jack that appears damaged in any way, or operates abnormally should be removed from service immediately. If the jack has been or suspected to have been subjected to a shock load (a load dropped suddenly, unexpectedly upon it), immediately discontinue use until the jack has been checked by an authorised service centre / agent (contact distributor or SIP for list of authorised service centres). It is recommended that an annual inspection be done by a qualified person/s.



Note: Follow the vehicle manufacturer's recommended guidelines for lifting. Engage the emergency brake and chock each un-lifted wheel in both directions to prevent inadvertent vehicle movement.

1. Connect the airline to the air inlet of the jack.
2. Close the release valve by turning the release knob clockwise until firm resistance is felt.
3. Fit the required height adaptor, and / or screw out the ram (if required)
4. Locate the lifting point, centre the jack saddle under the lifting point.
5. Press and hold the lever on the air inlet and the jack will start to rise.



Note: Refer to the vehicle manufacturer owner's manual to locate approved lifting points on the vehicle.

6. Continue to hold the lever until the desired height is achieved.
7. Transfer the load immediately to appropriately rated jack stands.



NEVER use the hydraulic jack as a stand alone device! **ALWAYS** transfer the lifted load **IMMEDIATELY** to a pair of appropriately rated jack stands. Use one pair of jack stands per vehicle. Do not exceed the rated capacity.



LOWERING THE JACK

1. Press the air inlet lever to raise the load high enough to allow it to clear the jack stands.
2. Carefully remove the jack stands.
3. Slowly turn the release knob anti-clockwise to open the release valve - Never turn the release knob more than a ¼ of a turn at a time.
4. Allow the load to slowly lower to its original position.
5. Remove the jack from under the vehicle.

OPERATING INSTRUCTIONS...cont



Caution: Take care when lowering the jack that nothing can get trapped in the moving parts of the jack, or under the load.



Note: After removing the jack from under the vehicle, fully lower the saddle to reduce ram exposure to contamination.

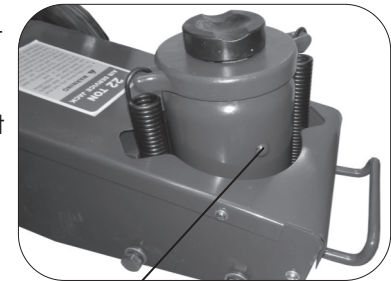
MAINTENANCE

ADDING OIL



Recommended Oil - ISO 15.

1. Lower the saddle to its lowest position (turn the release knob anti-clockwise).
2. Remove the oil fill bung fully from the hydraulic unit.
3. Top the oil up if required; The oil level should be just below the filler hole.
4. Refit the oil fill bung.



Oil fill bung



Note: Do not operate the jack when filling with oil.

OIL CHANGE

For the best performance and longest life, completely change the oil at least once per year. Always dispose of hydraulic oil in accordance with local regulations.

1. Lower the saddle to its lowest position (turn the release knob anti-clockwise).
2. Remove the oil fill bung fully from the hydraulic unit.
3. Tilt the jack and drain all of the oil into a suitable container.



Note: Due to the size and weight of the jack, at least 2 persons are required to safely perform this operation.