

# **PUSH 8** **ECO**

**DUAL USE MACHINE, WITH  
AND WITHOUT STABILISERS  
AUTO BRAKES FITTED**



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## CONTENTS

<b>SECTION ONE   DESCRIPTION</b>	<b>PAGE</b>	<b>SECTION FIVE   MAINTENANCE</b>	<b>PAGE</b>
Introduction	3	Safety During Maintenance	15
Description	3	Periodical Maintenance Checks	15/16
Intended Use	3	Storage	16
Training	4	Lubrication	16
Modifications	4	Hydraulic Oil	17
Terminology	5	Electical Schematic	18
		Hydraulic Schematic	19
		Troubleshooting	20
<b>SECTION TWO   SPECIFICATION</b>	<b>PAGE</b>	<b>SECTION SIX  </b>	<b>PAGE</b>
Technical Data	6	<b>TRANSPORT INSTRUCTIONS</b>	
Operating Site	7	Lifting	21
Noise and Vibration	7	Preparation for Transport	21
Limitations	7	Loading and Unloading	22
<b>SECTION THREE   SAFETY RULES</b>	<b>PAGE</b>	<b>SECTION SEVEN  </b>	<b>PAGE</b>
Safety Rules	8	<b>MAINTENANCE &amp; REPAIR RECORD</b>	
		Maintenance and Repair Record	23
<b>SECTION FOUR  </b>	<b>PAGE</b>	Notes	24
<b>OPERATING INSTRUCTIONS</b>		Daily Checks - Operator Checklist	25
Daily Checks	9		
Manoeuvring the Platform	9		
Engaging the Brakes	10		
Auto Brakes	10		
Deploying the Stabilisers	10		
Stowing the Stabilisers	10		
Battery Isolation Switch	11		
Entering and Leaving the Platform	12		
Control Pendant	12		
Emergency Stop	13		
Emergency Lowering	13		
Emergency Plunger Valve	14		
Battery Charging	14		

**INTRODUCTION**

This handbook provides information on the safe operation of this work platform. Operators should read and understand all of the information contained within this manual prior to operating the work platform.

The handbook contains several warnings, these indicate situations which if not avoided could result in serious injury or death to persons, or damage to the machine or property.

Additional copies of this handbook are available from the manufacturer at the address below. Information contained in this handbook is based on the latest product information at time of publication.

Pop-Up Products Ltd operate a policy of continuous improvement and therefore reserve the right to make product changes at any time without obligation.

**DESCRIPTION**

The POP-UP PUSH 8 ECO is a scissor lift type work platform, which is manoeuvred manually into work positions and elevated and lowered using an electro- hydraulic control system.

The standard machine includes the following standard features:

- |                               |                                       |  |
|-------------------------------|---------------------------------------|--|
| ✓ 240KG SAFE WORKING LOAD     | ✓ STEEL GUARD RAILS                   | ✓ INTEGRAL BATTERY CHARGER                     |
| ✓ 4.5 METRE WORKING HEIGHT    | ✓ NON-SLIP PLATFORM                   | ✓ EMERGENCY LOWERING FACILITY                  |
| ✓ 1.72 METRE STOWED HEIGHT    | ✓ STEERABLE WHEELS                    | ✓ EASILY TRANSPORTABLE                         |
| ✓ EASILY MANOEUVRABLE         | ✓ MANUAL BRAKES ON REAR SWIVEL WHEELS | ✓ LOW MAINTENANCE                              |
| ✓ PASS THROUGH STANDARD DOORS | ✓ AUTO BRAKES ON FRONT FIXED WHEELS   | ✓ COMPLIES WITH EN280:2001                     |
| ✓ SIMPLE OPERATION            | ✓ ANTI-CRUSHING LOWERING DELAY        | ✓ STABILISERS (OPTIONAL IF AUTO BRAKES FITTED) |

**INTENDED USE**

The machine has been designed to comply with the safety requirements of the Machinery Directive 2006/42/EC taking guidance from the European Standard BS EN280:2001 + A2:2009 Mobile Elevating Work Platforms.

The machine is intended to be used to lift persons, plus essential tools and materials, to enable work to be undertaken at height. Typical applications will include maintenance, cleaning, painting, etc. at varying heights above ground level.

**WARNING: THE MACHINE MUST NOT BE USED IN APPLICATIONS OR FOR USES OUTSIDE OF THE SCOPE OF THIS HANDBOOK. SHOULD A CERTAIN APPLICATION NOT BE COVERED, THEN THE MANUFACTURER SHOULD BE CONTACTED**

### TRAINING

It is essential that persons operating this POP-UP PUSH 8 ECO are fully trained in the setting up, safe use and inspection of the machine. Please download a copy of our free Pop-Up & POP-UP PUSH 8 ECO Familiarisation Guide from [www.popupproducts.co.uk](http://www.popupproducts.co.uk)

The guide has been designed to assist competent people in safely operating our range of low-level push around scissor lifts.

**WARNING: OPERATION OF THIS MACHINE BY UNTRAINED OPERATORS MAY RESULT IN SERIOUS INJURY OR DEATH**

### MODIFICATIONS

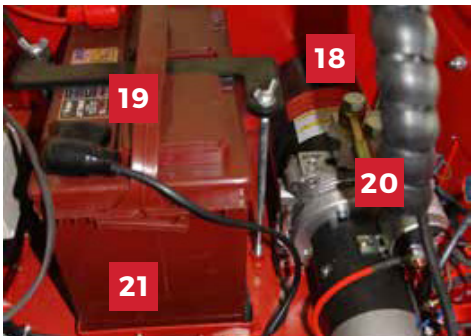
No modifications must be made to this machine unless the manufacturer has given full written approval. If in doubt contact the manufacturer for advice.

#### MANUFACTURER'S ADDRESS:

**Pop-Up**  
**Vigo Centre**  
**Birtley Road**  
**Washington**  
**Tyne & Wear**  
**NE38 9DA**  
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TERMINOLOGY



- |                               |                             |                               |
|-------------------------------|-----------------------------|-------------------------------|
| 1 CONTROL PENDANT             | 10 EMERGENCY PLUNGER VALVE  | 19 BATTERY                    |
| 2 EMERGENCY STOP BUTTON & KEY | 11 MAINTENANCE PROPS        | 20 HYDRAULIC PACK             |
| 3 GATE                        | 12 BUBBLE SPIRIT LEVEL      | 21 BATTERY CHARGER            |
| 4 GUARD RAIL                  | 13 STABILISERS              | 22 CHASSIS PLATE              |
| 5 HANDBOOK                    | 14 FORKLIFT POCKET (1 OF 4) | 23 BATTERY CONDITION METER    |
| 6 PLATFORM                    | 15 CHASSIS                  | 24 BATTERY CHARGING INDICATOR |
| 7 110V AND 240V CHARGER LEADS | 16 AUTO FRONT BRAKES        | 25 BATTERY CHARGER SOCKET     |
| 8 SCISSOR PACK                | 17 MANUAL BRAKE (1 OF 2)    | 26 POWER SELECTOR             |
| 9 MAIN LIFT CYLINDER          | 18 HYDRAULIC TANK           | 27 EMERGENCY LOWERING VALVE   |

## TECHNICAL DATA

<b>SAFE WORKING LOAD (SWL)</b>	<b>240kg</b>
<b>EQUIVALENT TO</b>	<b>1 person + 160kg tools and materials</b>
<b>MAXIMUM PLATFORM HEIGHT</b>	<b>2.5 metres</b>
<b>MAXIMUM WORKING HEIGHT</b>	<b>4.5 metres</b>
<b>PLATFORM LENGTH</b>	<b>1.01 metres</b>
<b>PLATFORM WIDTH</b>	<b>0.52 metres</b>
<b>PLATFORM GUARD RAIL HEIGHT</b>	<b>1.10 metres</b>
<b>TOE BOARD HEIGHT</b>	<b>0.15 metres</b>
<b>MAXIMUM ALLOWABLE MANUAL FORCE</b>	<b>200 Newtons</b>
<b>MAXIMUM ALLOWABLE WIND SPEED</b>	<b>0 metres/sec*</b>
<b>MAXIMUM ALLOWABLE CHASSIS INCLINATION</b>	<b>0 degrees</b>
<b>ELECTRICAL SYSTEM</b>	<b>12 volt DC</b>
<b>MOTOR</b>	<b>0.7 kW</b>
<b>BATTERIES</b>	<b>1 x 80 Ah</b>
<b>BATTERY CHARGER</b>	<b>Universal 90V to 240V AC</b>
<b>HYDRAULIC SYSTEM</b>	
<b>MAXIMUM PRESSURE</b>	<b>13 MPa</b>
<b>RESERVOIR CAPACITY</b>	<b>1.22 litre</b>
<b>FUNCTION SPEEDS (APPROX.)</b>	
<b>RAISE</b>	<b>24 seconds</b>
<b>LOWER</b>	<b>25 seconds</b>
<b>APPROX. NO. OF LIFTS (FULLY CHARGED WITH SWL)</b>	<b>120</b>
<b>OVERALL LENGTH</b>	<b>1.26 metres</b>
<b>OVERALL HEIGHT (STOWED)</b>	<b>1.72 metres</b>
<b>OVERALL WIDTH (WITH STABILISERS DEPLOYED)</b>	<b>1.30 metres</b>
<b>OVERALL WIDTH (WITHOUT STABILISERS)</b>	<b>0.70 metres</b>
<b>OVERALL MASS (GVW) WITHOUT STABILISERS</b>	<b>343kg</b>
<b>OVERALL MASS (GVW) WITH STABILISERS</b>	<b>365kg</b>
<b>WEIGHT (WITHOUT STABILISERS)</b>	<b>343kg</b>
<b>MAXIMUM WHEEL LOAD</b>	<b>350kg</b>

\* For use in indoor exposed areas up to 12.5m/sec wind speed – pack available on request

# OPERATING SITE

Select a site for the machine from which the platform will be able to reach the required work area. A visual inspection of the operating site should be made before setting up the machine. Particular attention should be given to the following items:

## 1. GROUND CONDITIONS

Ensure that the ground on which the POP-UP PUSH 8 ECO is to operate is capable of supporting the weight of the machine (including the weight of the operator plus tools and materials). Be aware of floors or coverings (e.g. manhole covers) that may not withstand point loadings exerted by the castor wheels.

An interlock system ensures that the stabiliser beams and legs are fully deployed before the work platform can be raised. It is essential that each of the four stabiliser feet are located on firm, solid ground. The POP-UP PUSH 8 ECO auto brake kit enables the removal of stabilisers for use in 0m/sec wind conditions.

## 2. GROUND FLATNESS

The POP-UP PUSH 8 ECO must only be operated on flat (0° chassis inclination) and level surfaces. The allowable chassis inclination is indicated when the spirit level bubble is within the marked limits. All castor wheels must be in full contact with the ground.

In indoor exposed wind speeds up to 12.5m/sec the POP-UP PUSH 8 ECO can be used with a stabiliser pack.

## 3. Obstructions

When manoeuvring, raising and lowering, ensure that there are no obstructions or persons that may be struck by the platform.

# NOISE AND VIBRATION

Noise levels emitted from this machine do not exceed 70 dB(A). Hand and arm vibration experienced on this machine does not exceed 0.5 m/s<sup>2</sup>.

# LIMITATIONS

The POP-UP PUSH 8 ECO is limited to operation indoors. The machine must not be used outdoors. Please consult the manufacturer if you are unsure of any application for which the machine is to be used.

This machine has been tested for Electromagnetic Compatibility (EMC) however, operation near to high powered radio transmission apparatus (e.g. radar, antennae) or within strong electrical and/or magnetic fields may affect some features of this product.

**WARNING: THIS MACHINE HAS NOT BEEN DESIGNED FOR OPERATION WITHIN POTENTIALLY EXPLOSIVE ATMOSPHERES**

**WARNING: THIS MACHINE IS NOT ELECTRICALLY INSULATED AND MUST NEVER BE USED FOR LIVE LINE WORKING. DEATH OR SERIOUS INJURY CAN RESULT FROM CONTACT WITH, OR INADEQUATE CLEARANCE FROM, ELECTRICAL CONDUCTORS**

### SAFETY RULES

- NEVER** Exceed the rated capacity (Safe Working Load or SWL) of the platform (240kgs).
- NEVER** Use the POP-UP PUSH 8 ECO as a 'crane' (e.g. by suspending loads from beneath the platform).
- NEVER** Make any attempt to increase the working height or outreach of the platform (e.g. by use of stepladders in the platform).
- NEVER** Operate the POP-UP PUSH 8 ECO if the bubble spirit level is outside the marked limits.
- NEVER** Manoeuvre the POP-UP PUSH 8 ECO on an inclined surface otherwise it may become uncontrollable.
- NEVER** Manoeuvre the POP-UP PUSH 8 ECO whilst in its elevated position, as this may cause instability.
- NEVER** Manoeuvre the POP-UP PUSH 8 ECO with a person or materials in the platform.
- NEVER** Enter or exit the platform unless the platform is in the lowered and transport position.
- NEVER** Apply external side loads to the platform or scissor structure.
- NEVER** Allow persons at ground level to operate the controls whilst the platform is occupied (unless in an emergency situation).
- NEVER** Operate the POP-UP PUSH 8 ECO outdoors.
- NEVER** Attempt to overreach.
- NEVER** Interfere with, wedge or attempt to override hydraulic, electrical or mechanical safety devices.
  
- ALWAYS** Check that there are no obstructions or persons that may be struck by the platform before and during the raising and lowering of the platform.
- ALWAYS** Ensure that the access gate is closed once the operator has entered the work platform.
- ALWAYS** Ensure that another responsible person on site knows how to use the emergency controls.
- ALWAYS** Undertake the daily checks recommended in this handbook prior to operation of the machine.
- ALWAYS** Ensure that all instructions, warning and Safe Working Load decals are clean and legible.
- ALWAYS** Ensure the POP-UP PUSH 8 ECO is positioned on adequate ground to support the weight of the machine.
- ALWAYS** Ensure that sufficient clearance is given if working near to live conductors.
- ALWAYS** Ensure the manual rear brakes have been engaged before elevating the work platform.
- ALWAYS** Ensure that auto front brakes are functioning correctly before attempting to use the machine.
- ALWAYS** Ensure that the platform does not come into contact with fixed objects (e.g. buildings, etc.) or moving objects (e.g. vehicles, other plant equipment, etc.).
- ALWAYS** Replace any removable guard rails (e.g. close and lock access gate) to enable full edge protection to be maintained.
- ALWAYS** Ensure that the load is evenly distributed within the platform.
- ALWAYS** Ensure the safety of persons that may enter the area around the platform (e.g. cordon off the area to prevent persons entering the danger area).
- ALWAYS** Ensure hands are kept within the confines of the guard rails whilst elevating the work platform.



**SECTION FOUR | OPERATING INSTRUCTIONS**

**DAILY CHECKS**

Prior to operating the POP-UP PUSH 8 ECO, the following items must be checked:

- |   |   |
|---|---|
| ✓ <b>STRUCTURE (E.G. DAMAGE, CRACKS, CORROSION, ABRASION, WELDS, CONNECTIONS)</b> | ✓ <b>BATTERY CONDITION</b>  |
| ✓ <b>PLATFORM (FLOOR, RAILS)</b>  | ✓ <b>RAISE AND LOWER FUNCTIONS (INCLUDING DESCENT DELAY)*</b>                   |
| ✓ <b>CASTORS (SMOOTH MOVEMENT, DAMAGE)</b>  | ✓ <b>EMERGENCY STOP AND LOWERING FUNCTIONS</b>                                  |
| ✓ <b>REAR MANUAL BRAKES</b>   | ✓ <b>LIMIT SWITCH</b>   |
| ✓ <b>AUTO FRONT BRAKES</b>  | ✓ <b>SAFETY DECALS</b>  |
| ✓ <b>HYDRAULIC OIL</b>  | ✓ <b>STABILISERS (OPTIONAL IF POP-UP PUSH 8 ECO IS FITTED WITH AUTO BRAKES)</b> |
| ✓ <b>OIL LEAKS</b>  |   |

\* The raise and lower functions can be tested by removing the upper control box from its holder in the work platform and using the controls whilst at ground level. (NOTE: unless in an emergency situation, this practice must not be employed when a person is in the work platform).

If the above checks reveal malfunctions or damage on the POP-UP PUSH 8 ECO, then the machine must not be used until the problem is rectified. If in doubt, seek further assistance from the manufacturer.

If safety decals are no longer legible or missing, please contact the manufacturer for replacements. The Daily Checks page in Section 7 of this handbook may be photocopied to provide an aide memoir for operators when undertaking these important checks.

**WARNING: BEFORE OPERATING YOUR POP-UP PUSH 8 ECO, YOU MUST ENSURE THAT YOU HAVE BEEN ADEQUATELY TRAINED IN ITS USE AND HAVE FULLY READ AND UNDERSTOOD THIS OPERATOR'S HANDBOOK, PAYING PARTICULAR ATTENTION TO SECTION 3 - SAFETY RULES**

**MANOEUVRING THE PLATFORM**

Manoeuvre the platform into position using both hands on the platform rails as shown. Take care to avoid trapping hands or feet whilst manoeuvring the platform.

Never manoeuvre the POP-UP PUSH 8 ECO whilst it is elevated or with a person, tools or materials in the platform.



### ENGAGING THE BRAKES

Always ensure that both rear manual castor brakes are engaged before elevating the work platform to prevent any inadvertent movement. The brakes are engaged by pushing down on the lever as shown. Releasing the brake is simply a reversal of the engaging procedure. Before operating please ensure that both of the manual



**ENGAGE**



**RELEASE**



**AUTO BRAKES**

### AUTO BRAKES

On the latest models POP-UP PUSH 8 ECO is fitted with a secondary automatic brake system acting on the front fixed wheels. POP-UP PUSH 8 ECO does not require stabilisers if these auto brakes are fitted. An auto brake kit is available to purchase. This system should be checked for functionality before attempting to use the machine. To check, leave the rear manual brakes 'OFF' and elevate the machine approximately 150mm. Hold the handrail on both sides at the gate end and attempt to push the machine. It should be difficult to push the machine if the auto brakes are functioning correctly. Please consult the manufacturer if the machine is easily pushed. Before operating please ensure the manual rear brakes are engaged. An auto brake kit is available for POP-UP PUSH 8 ECO for the safe

### STABILISERS

#### DEPLOYING THE STABILISERS

Models of POP-UP PUSH 8 ECO, without auto brakes, are fitted with four stabilisers, one at each corner. All four stabilisers must be fully deployed before the platform can be raised, as follows:

- 1 Pull out the red knob on the stabiliser beam housing**
- 2 Extend the beam until it locks into position**
- 3 Pull out the blue plunger on the stabiliser leg so that the foot drops to the ground**
- 4 Ensure that the plunger pin engages into the radial slot at the top of the leg**
- 5 Wind the handle clockwise until it is hand-tight**
- 6 Ensure that the yellow stabiliser indicator lamp is lit**

Once the stabilisers are in position, the platform can be raised to the desired height.

#### RETRACTING AND STOWING THE STABILISERS

When work is finished on the POP-UP PUSH 8 ECO, the platform should be lowered into its resting position and the worker should exit the platform. Only then should the stabilisers be retracted and stowed. To do so:

- 1 Turn the handle anti-clockwise to loosen the stabiliser foot**
- 2 Pull out and hold the blue plunger**
- 3 Lift the stabiliser leg until it is in the raised position**
- 4 Release the blue plunger until it is seated in the radial ring around the bottom of the stabiliser leg**
- 5 Pull the red knob on the stabiliser beam outwards**
- 6 Push the beam back into its housing until it locks into the 'transport' position**



## SECTION FOUR | OPERATING INSTRUCTIONS



### BATTERY ISOLATION SWITCH

The POP-UP PUSH 8 ECO is provided with a key operated switch which is used to isolate the battery and therefore the electrical system, preventing unauthorised use. To enable the electrical system, insert the key and turn clockwise, as shown below, making sure the emergency stop button is fully released.

Ensure that when the machine is not in use, the emergency stop button is depressed and the key removed. Further electrical isolation can be achieved by selecting '0' on the power selector switch. Position '1' is for normal operation and position '2' is for charging the machine.

### ENTERING AND LEAVING THE WORK PLATFORM

Always use three points of contact when entering or exiting the platform, using the handholds provided. For example, use two hands and one foot, as shown below. Use the step provided on the base of the machine.

On entering the platform, ensure that the gate is closed behind you.



### CONTROL PENDANT

The control pendant houses the platform raise and lower controls.

**PRESSING THE 'UP' BUTTON RAISES THE PLATFORM.**

**PRESSING THE 'DOWN' BUTTON LOWERS THE PLATFORM.**

To avoid crushing and shearing hazards, a delay feature is fitted which actuates when the platform is lowered to the transport position. The platform will momentarily stop to enable the operator to look around the machine to determine whether any persons are adjacent to the scissor mechanism. After a time delay, the lowering control will be enabled once more to permit the operator to continue to lower to the transport position. Take care to avoid repeated jerky movements which could cause unnecessary impact loads on the structure.

## SECTION FOUR | OPERATING INSTRUCTIONS

### EMERGENCY STOP

An emergency stop button is provided on the control pendant. Once depressed, this isolates power to the raise and lower functions.

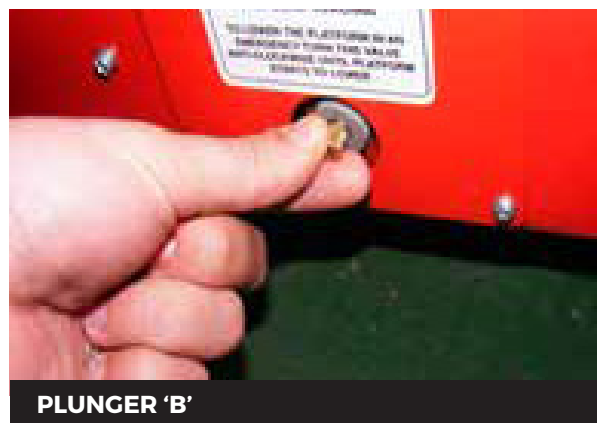
To restore functionality, twist the emergency stop button clockwise to release the button, as shown below.

Turning the Power Selector to the '0' position also has the effect of isolating power to the raise and lower functions.



### EMERGENCY LOWERING

- 1** Pull out Plunger 'A' and rotate through 90 degrees.
- 2** Turn valve 'B' anticlockwise until platform starts to lower. To stop the platform at any time, turn valve clockwise until platform stops descending.
- 3** Once platform has descended fully, please ensure valve 'B' is closed off by turning clockwise.
- 4** Also ensure that the plunger valve is reset before operating, see instructions for plunger valve resetting.





### EMERGENCY PLUNGER VALVE

The plunger valve must be reset to enable the machine to operate correctly. To reset the valve firstly ensure Valve 'B' has been fully closed. Depress the raise button on the pendant control and raise the platform until the maintenance stands can be deployed. Once the stands have been deployed simply pull Plunger 'A' and turn through 90 degrees. Push the plunger back into the slot as shown left. Depress the raise button once again and reset the maintenance stands. The machine is now able to operate correctly.



### BATTERY CHARGING

A battery condition meter is fitted to the POP-UP PUSH 8 ECO as shown. This meter displays the amount of charge in the battery. To accurately check the battery condition, a load must be applied across the battery, elevating the machine from ground level will achieve this. Stand away from the machine with the control pendant and press the UP button whilst observing the bars on the meter. All bars illuminated shows that the battery is fully charged. If less than four bars are on the display, the battery requires charging.



The POP-UP PUSH 8 ECO is supplied with a dedicated battery charger, which is separate to the machine. Do not use any other type of battery charger to charge your POP-UP PUSH 8 ECO machine.

**To charge the battery, follow these steps:**

- 1** Turn the power selector switch to '0' (OFF) position.
- 2** Connect either the 240V or 110V lead (depending on mains supply) to the POP-UP PUSH 8 ECO at the point shown.
- 3** Connect the mains lead to a suitable power supply (either 110V or 240V)
- 4** Turn the power selector to '2' (CHARGE) position and leave the charger to complete the charging cycle. It will shut off automatically once finished. The battery should be fully recharged after a period of 12 hours, which is indicated by the 95% light illuminating on the battery charging indicator panel as shown.







## SAFETY DURING MAINTENANCE

When performing maintenance on the POP-UP PUSH 8 ECO with the platform elevated, always ensure that the maintenance props are engaged as shown.

**WARNING: FAILURE TO ENGAGE THE MAINTENANCE PROPS MAY RESULT IN THE PLATFORM LOWERING WITHOUT WARNING**

## PERIODICAL MAINTENANCE AND CHECKS

The following checks should be undertaken at the recommended intervals shown:

	Daily/Pre-use	Monthly	6 Monthly	12 Monthly
INSPECT STRUCTURE	✓	✓	✓	✓
INSPECT PLATFORM	✓	✓	✓	✓
CHECK CASTORS	✓	✓	✓	✓
CHECK MANUAL REAR BRAKES FUNCTION	✓	✓	✓	✓
CHECK AUTO BRAKES FUNCTION	✓	✓	✓	✓
INSPECT FOR OIL LEAKS	✓	✓	✓	✓
CHECK BATTERY CONDITION	✓	✓	✓	✓
CHECK RAISE/LOWER FUNCTIONS	✓	✓	✓	✓
CHECK EMERGENCY STOP	✓	✓	✓	✓
CHECK EMERGENCY LOWER	✓	✓	✓	✓
CHECK STABILISERS AND LIGHTS FUNCTION	✓	✓	✓	✓
INSPECT TRAINING CARD AND SAFETY DECALS	✓	✓	✓	✓
CHECK HYDRAULIC OIL LEVEL		✓	✓	✓
INSPECT LIMIT SWITCHES		✓	✓	✓
INSPECT WIRING		✓	✓	✓
CHECK ELECTRICAL CONNECTORS		✓	✓	✓
LUBRICATE ROLLER GUIDES		✓	✓	✓
LUBRICATE GREASE NIPPLES		✓	✓	✓
LUBRICATE PIVOT PINS			✓	✓
LUBRICATE CASTOR MOUNTS			✓	✓
REPLACE HYDRAULIC OIL				✓

### PERIODICAL MAINTENANCE AND CHECKS (CONT.)

Prior to first use of the POP-UP PUSH 8 ECO, all daily/pre-use checks must be undertaken. If the machine has been in storage for a long period of time, it may be necessary to undertake additional checks and tests as per the table on the preceding page (e.g. lubrication, hydraulic oil, battery condition).

The Lifting Operations and Lifting Equipment Regulations 1998 (LOLER) require that lifting equipment for lifting persons must be THOROUGHLY EXAMINED every six months.

Following any maintenance on the POP-UP PUSH 8 ECO, a full function test should be undertaken to ensure correct operation of the machine.

It is essential that only manufacturer's approved replacement parts are used when maintaining and servicing the POP-UP PUSH 8 ECO. Failure to do so may result in an unsafe or unstable machine.

### STORAGE

The electrical components of this POP-UP PUSH 8 ECO are not protected from external weather conditions and the machine should therefore not be stored outdoors. Storage in a clean, dry indoor environment is recommended.

Frequent checks on the condition of the machine should be made to ensure no excessive deterioration occurs due to the environment in which the machine is housed.

### LUBRICATION

The required lubrication points are shown opposite. Lubrication points are to be found on the end of the scissor pack at both ends of the machine.

The lubricant recommended for use with this POP-UP PUSH 8 ECO is: standard machine grease



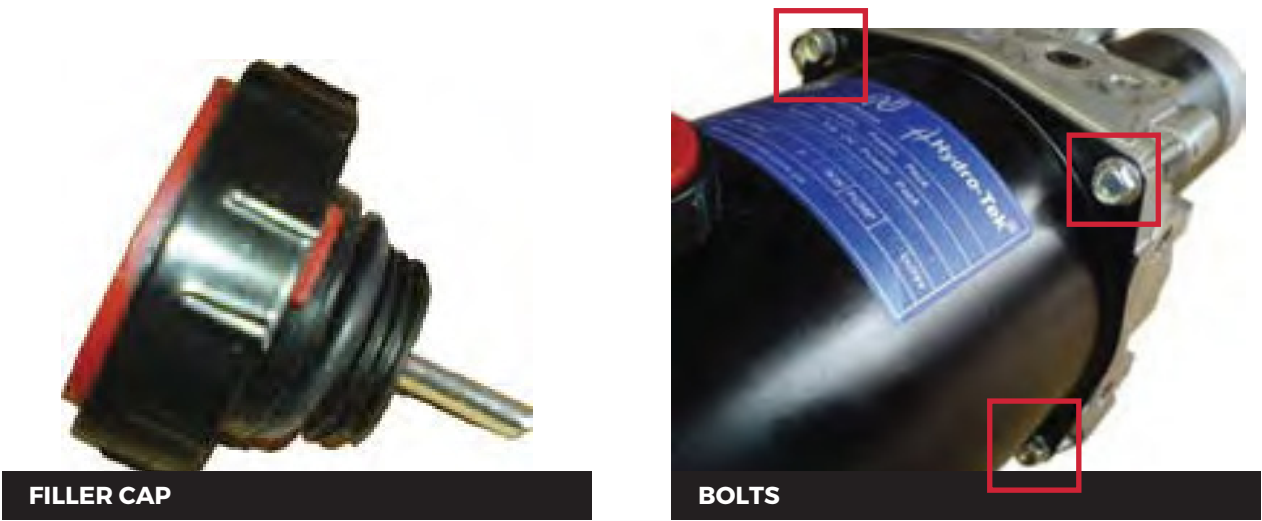


HYDRAULIC OIL

The hydraulic oil level can be checked by removing the filler cap. The correct amount of oil is in the tank when the tip of the level rod has hydraulic oil on it. This check must be carried out on a level surface. The hydraulic oil can be topped up by adding oil to the filler as shown below. Take care not to spill hydraulic fluid over any of the surrounding machine components.

The hydraulic oil can be drained by removing the tank. Remove the bolts as shown above and separate the tank from the pump body. The hydraulic fluid can then be correctly disposed of.

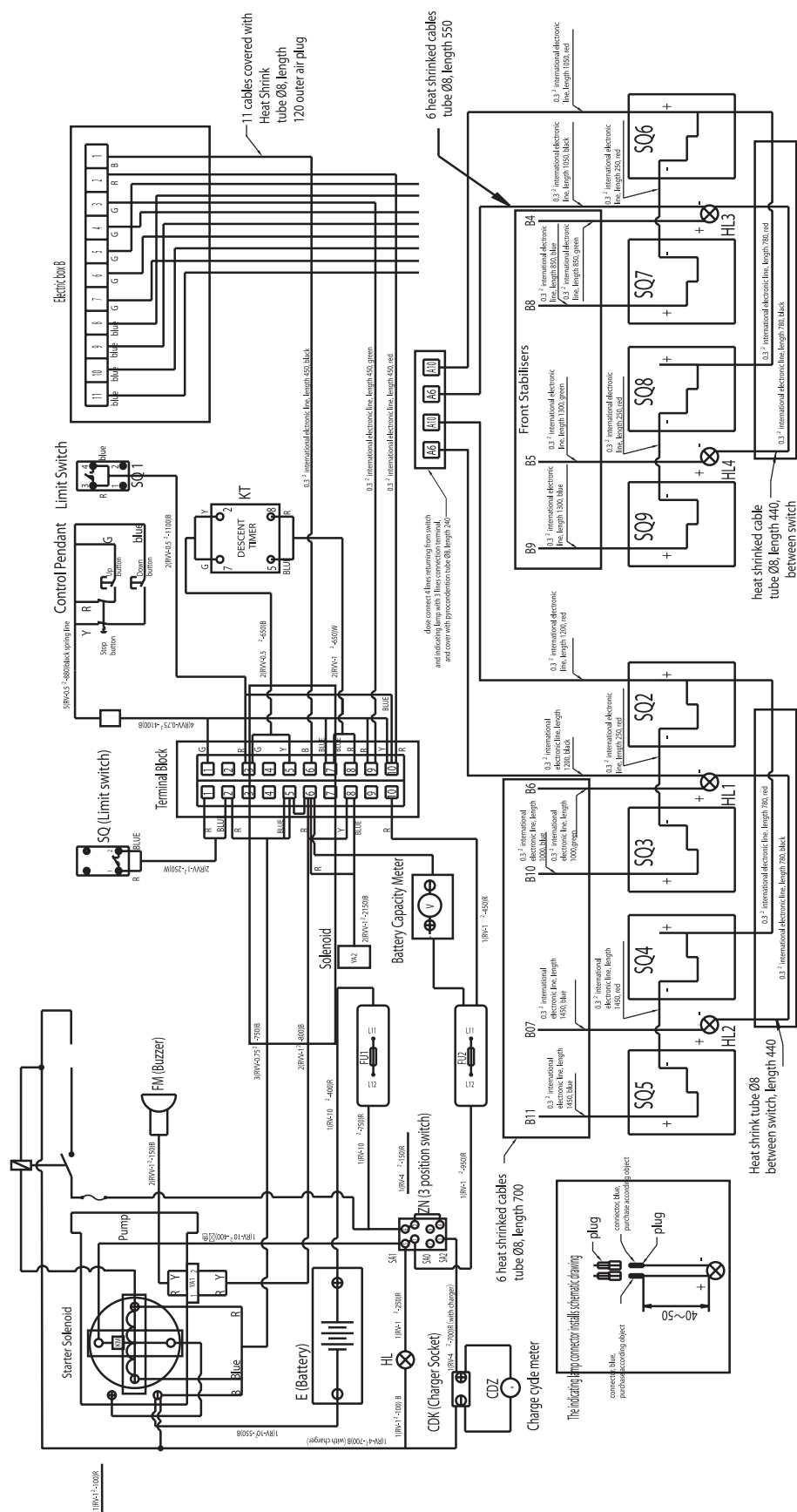
REASSEMBLY IS THE REVERSE OF ABOVE.



The hydraulic oil recommended for use with this POP-UP PUSH 8 ECO is: mineral basis hydraulic oil with lubricating, antifoaming, anti-corrosive, antioxidant HL-HLP (ISO and UNI HM)-HV-HLPD performances according to DIN51524 part 1-2 standards

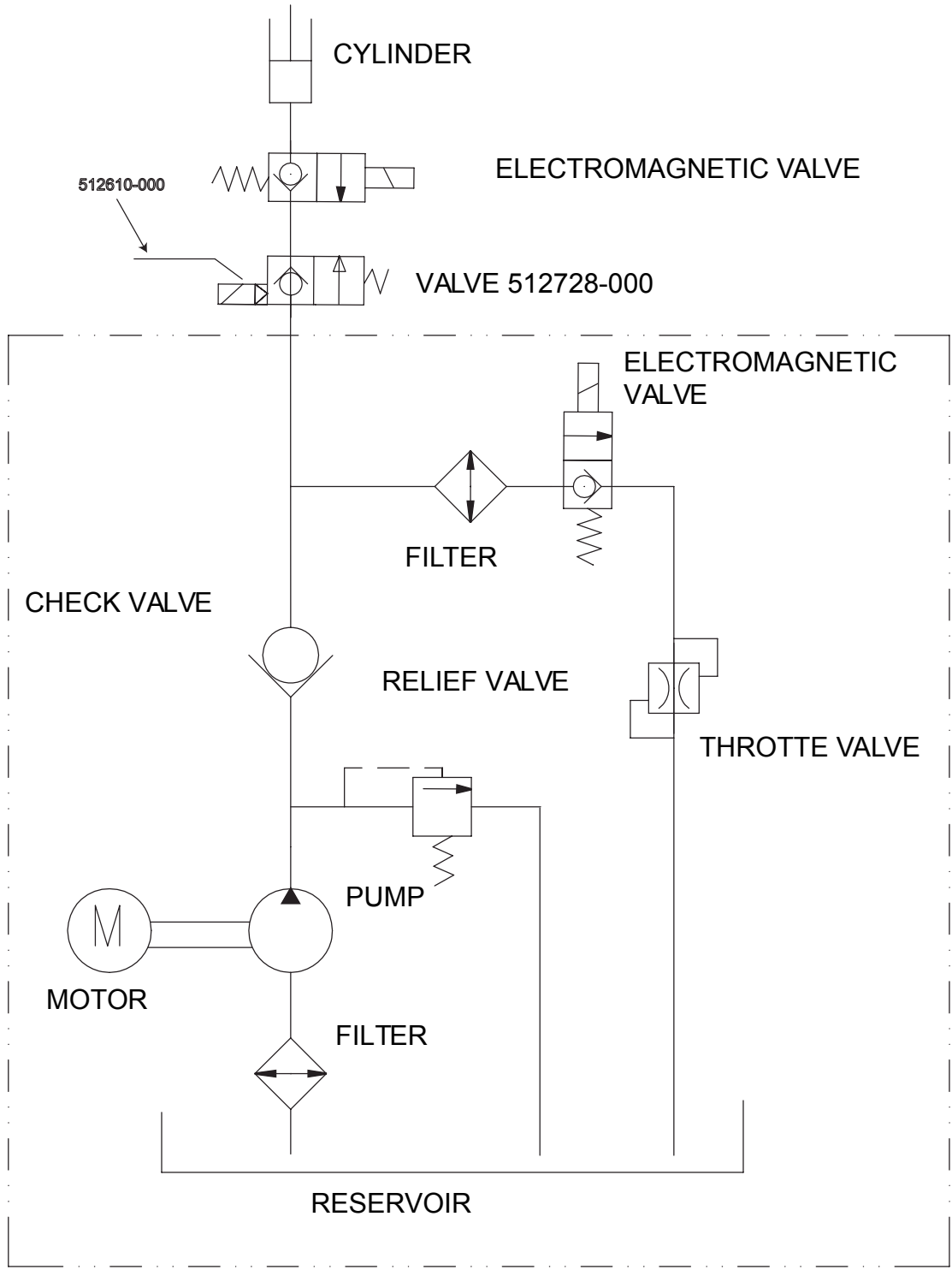
MINIMUM VISCOSITY	15cts (23°E / 77, 39 SSU at 100°F)
MAX. VISCOSITY AT STARTING UP	800cts (105,6°E / 3708 SSU at 100°F)
MAX. WORKING VISCOSITY	100cts (13,2°E / 463,5 SSU at 100°F)
SUGGESTED VISCOSITY RANGE	25 ÷ 40 cts = (3,47 ÷ 5,35° E / 119,3 ÷ 186,3 SSU a 100°F)
ALLOWED TEMPERATURE	Max 80°C (176°F)
RECOMMENDED TEMPERATURE	30 ÷ 60°C (86 ÷ 140°F)

## ELECTRICAL SCHEMATIC



Article No.	Description	Qty
HL1-4	LED Indicator	4
SQ2-9	Stabiliser Switch	8
SQ	Stroke Limit Switch	1
SQ1	Descent Delay Trip Switch	1
KT	Timer Relay	1
FM	Buzzer	1
AN3	Emergency Stop	1
YA1-2	Solenoid	2
AN2	Descent Button	1
AN1	Lifting Button	1
FU2	Fuse 10amp	1
ZN	Isolator Switch	1
M	DC Motor	1
FU1	Fuse 63amp	1
KM01A-KM01B	Magnetic Switch	1
HL1-	Power Indicator	1
CDZ	Charge Indicator	1
CDK	Charger	1
V	Battery Condition Meter	1
E	Battery	1

HYDRAULIC SCHEMATIC



## TROUBLESHOOTING

PROBLEM	CAUSE	REPAIR
PLATFORM DOES NOT RAISE (MOTOR NOT RUNNING)	<ol style="list-style-type: none"> <li>1. Faulty wiring</li> <li>2. Battery is disconnected</li> <li>3. Battery charge is insufficient</li> </ol>	<ol style="list-style-type: none"> <li>1. Check the wiring referring to the electrical schematic</li> <li>2. Reconnect the battery</li> <li>3. Charge the battery</li> </ol>
PLATFORM DOES NOT RAISE (MOTOR RUNNING)	<ol style="list-style-type: none"> <li>1. Faulty adjustment of relief valve</li> <li>2. Faulty hydraulic pump</li> <li>3. Insufficient hydraulic oil</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust relief valve</li> <li>2. Replace power pack</li> <li>3. Add hydraulic oil</li> </ol>
PLATFORM CREEPS (UNCONTROLLED LOWERING)	<ol style="list-style-type: none"> <li>1. Oil leakage in power pack</li> <li>2. Oil leakage from hydraulic circuit</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace lowering valve</li> <li>2. Check hydraulic circuit and repair</li> </ol>
OIL LEAKAGE FROM CYLINDER	Faulty sealing	Replace sealing
OIL LEAKAGE FROM PIPING OR JOINT	Insufficient tightening or seal invalid	Tighten joint again or replace seal
OIL LEAKAGE FROM AIR BREATHER	Excessive quantity of oil	Reduce oil quantity

## SECTION SIX | TRANSPORT INSTRUCTIONS

### LIFTING

No lifting attachment points are provided on the POP-UP PUSH 8 ECO and therefore lifting of the machine (e.g. with a crane or straps) is prohibited.

### PREPARATION FOR TRANSPORT

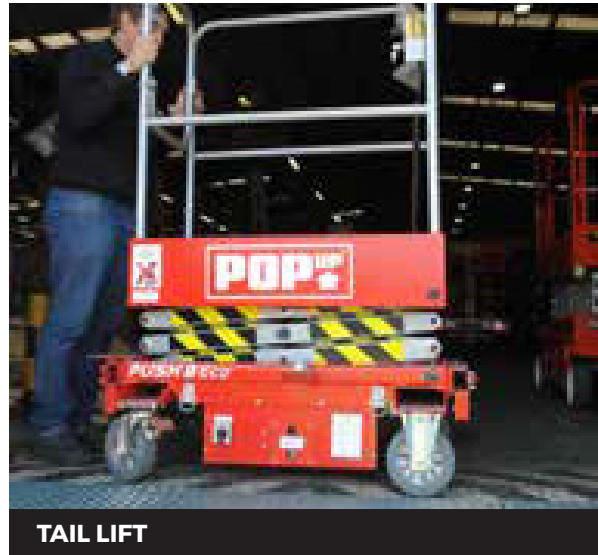
Prior to transporting the POP-UP PUSH 8 ECO on a vehicle, ensure that the following precautions are taken in order to avoid damage to the machine or damage to the transporting vehicle.

- 1** Ensure that the platform is fully lowered to its rest position.
- 2** Ensure that loose items (e.g. control pendant, battery charger) are secured to the platform.
- 3** Ensure brakes are engaged on both rear castor wheels.
- 4** Secure the POP-UP PUSH 8 ECO to the transport vehicle using straps across the platform as shown below.



### LOADING AND UNLOADING

When loading or unloading the POP-UP PUSH 8 ECO, use one of the methods shown.



When using a forklift to lift the POP-UP PUSH 8 ECO, ensure the forks are sufficiently inserted into the forklift pockets in the base of the machine. Safety decals applied to the POP-UP PUSH 8 ECO show the location of the forklift pockets.

When using a tail lift to load or unload the POP-UP PUSH 8 ECO ensure that the manual brakes are applied to both rear castor wheels. Ensure that the capacity of the tail lift is sufficient to handle the POP-UP PUSH 8 ECO. Take care when manoeuvring the machine on the tail lift.

**WARNING: NEVER ATTEMPT TO LOAD OR UNLOAD THE POP-UP PUSH 8 ECO BY MANUAL EFFORT ONLY, SERIOUS INJURY, MACHINE OR PROPERTY DAMAGE COULD RESULT**

**MAINTENANCE**

DATE	SCHEDULED MAINTENANCE UNDERTAKEN	BY

**REPAIRS**

DATE	REPAIRS UNDERTAKEN	BY

**EXAMINATION / TESTS**

DATE	EXAMINATION / TESTS UNDERTAKEN	BY

**PLEASE PHOTOCOPY THIS PAGE FOR YOUR OWN USE, AS REQUIRED.**

## NOTES



DAILY CHECKS - OPERATOR CHECKLIST

The following checklist has been provided to enable daily checks to be undertaken prior to use of this POP-UP PUSH 8 ECO. These checks should be carried out each working day or at the beginning of each shift. The purpose of the checks is to identify any wear and tear or malfunction of the machine’s components and systems.

**WARNING: FAILURE TO UNDERTAKE THESE CHECKS MAY RESULT IN DEFECTS ON, OR DETERIORATION OF THIS POP-UP PUSH 8 ECO GOING UNDETECTED AND POSSIBLY RESULTING IN AN UNSAFE MACHINE**

**Note** that Regulation 8 of the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER) require that persons using lifting equipment have appropriate training and instructions **to enable them to identify whether lifting equipment is safe to use.**

MACHINE NUMBER

1 Prior to operating the platform, the following items must be checked:

OK? (PLEASE TICK)	OK? (PLEASE TICK)
STRUCTURE	BATTERY CONDITION
PLATFORM	RAISE AND LOWER
CASTORS	EMERGENCY STOP
REAR MANUAL BRAKES	EMERGENCY LOWER
FRONT AUTO BRAKES	LIMIT SWITCH
HYDRAULIC OIL	SAFETY DECALS
OIL LEAKS	STABILISERS (optional if Pop-Up+ is fitted with auto brakes)
DATE	
CHECKED BY	

2 Use raise, lower and emergency stop functions to ensure correct operation.

Should any defects be identified in any of the above areas, these should be reported to your employer. It may be necessary to further seek assistance from the supplier of the machine, this may be the hire company or the manufacturer. You should only rectify any defects if you are authorised and competent to do so.

**DO NOT USE THE MACHINE UNLESS EACH OF THE ITEMS ABOVE IS CHECKED AND STATED OK.**



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