

POP UP Pro & Pro iQ machines - Hydraulic cylinder pivot pins

An incident involving a POP UP Pro iQ machine manufactured during 2015 has been brought to our attention.

After a thorough investigation of the incident, which involved the failure of a hydraulic cylinder pivot pin. Our findings have highlighted a combination of causes for this incident including the excessive wear of the pivot plate mounting holes, pivot pin and the lack of detection of these problems during the bi-annual Thorough Examinations required by the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER), Pre/post hire inspections and the daily/pre-use inspections.

The investigation found excessive amounts of wear has taken place over an undetermined amount of time to the pivot pin mounting holes, which are located in the scissor pack pivot plates and the pivot pin itself. This has led to the subsequent failure of the pivot pin.

It is therefore our duty as manufacturers of the equipment in question to inform our customers who have purchased this equipment about the incident and to stress the importance of carrying out both the pre-use and LOLER inspections, but also to ensure periodic maintenance is adhered to which would have, in this instance, picked up and allowed the faults with the machine to be rectified.

This should consist of periodic visual and operational checks, along with periodic minor adjustments that assure proper performance. Daily inspection will prevent abnormal wear and prolong the life of all systems. The inspection and maintenance schedule should be performed at the specified intervals and after prolonged periods of storage before returning the machine to service. Inspection and maintenance shall be performed by personnel who are trained and familiar with mechanical and electrical procedures.

A Machine Identification Guide can be found to the right to help in establishing the machines that require inspection of the components in question and an inspection procedure can be found on page 2 of this bulletin. This will identify the components that require inspection and the procedure to carry out this inspection correctly. Our Daily Preventative Maintenance Checklist, as found in the user guide can be found on page 3.

Any machine found to exhibit the signs of wear outlined in the inspection procedure should be removed from service immediately and placed in quarantine awaiting further inspection and repair.

MACHINE IDENTIFICATION GUIDE



PRO

Serial Number Sequences

PUSH06 - 01 - 000002 to 335

PUSH08 - 01 - 000001 to 689

PUSH10 - 01 - 000005 to 337

NOTES:

- 1. Round section handrails
- 2. Scissor pack and handrails in silver powdercoat

PRO iQ

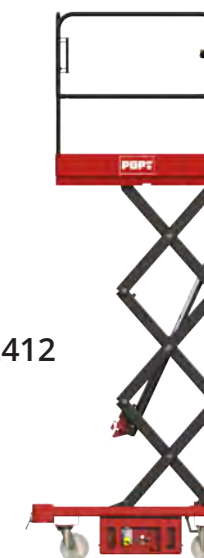
Serial Number Sequences

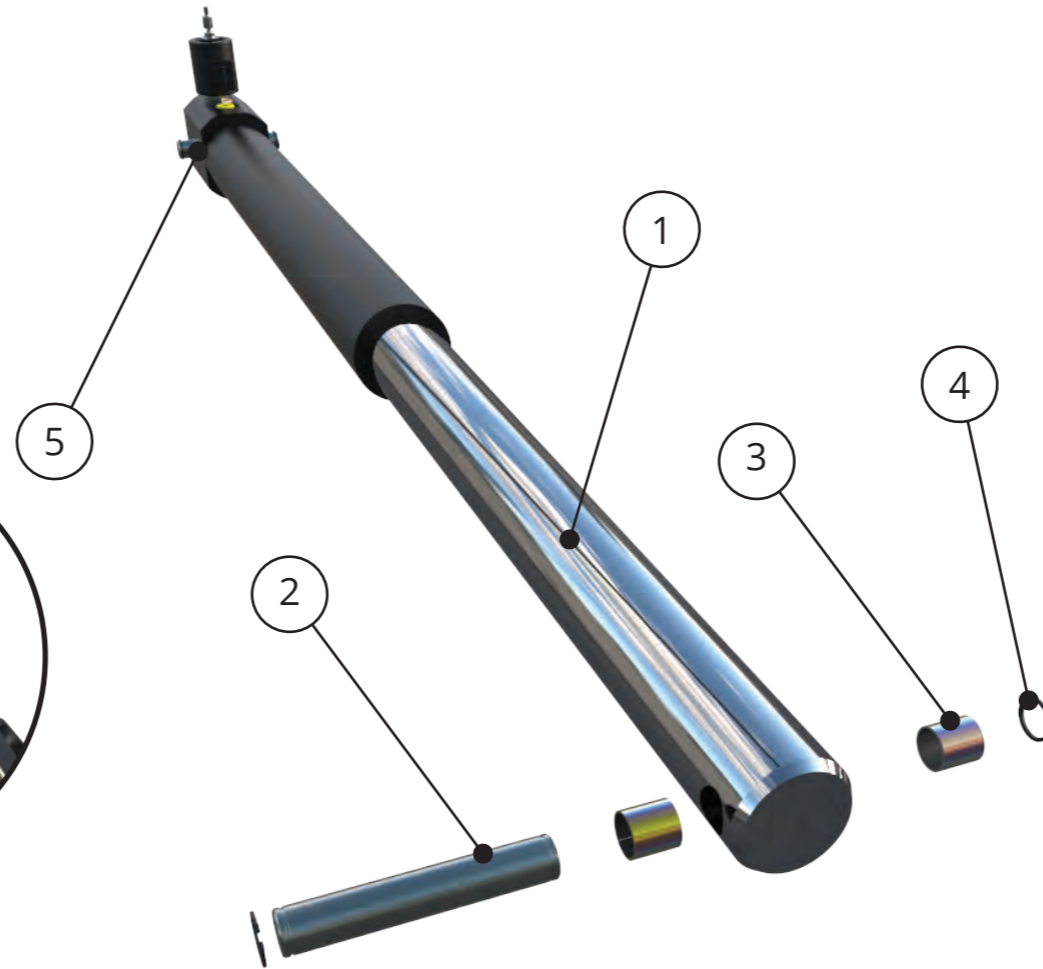
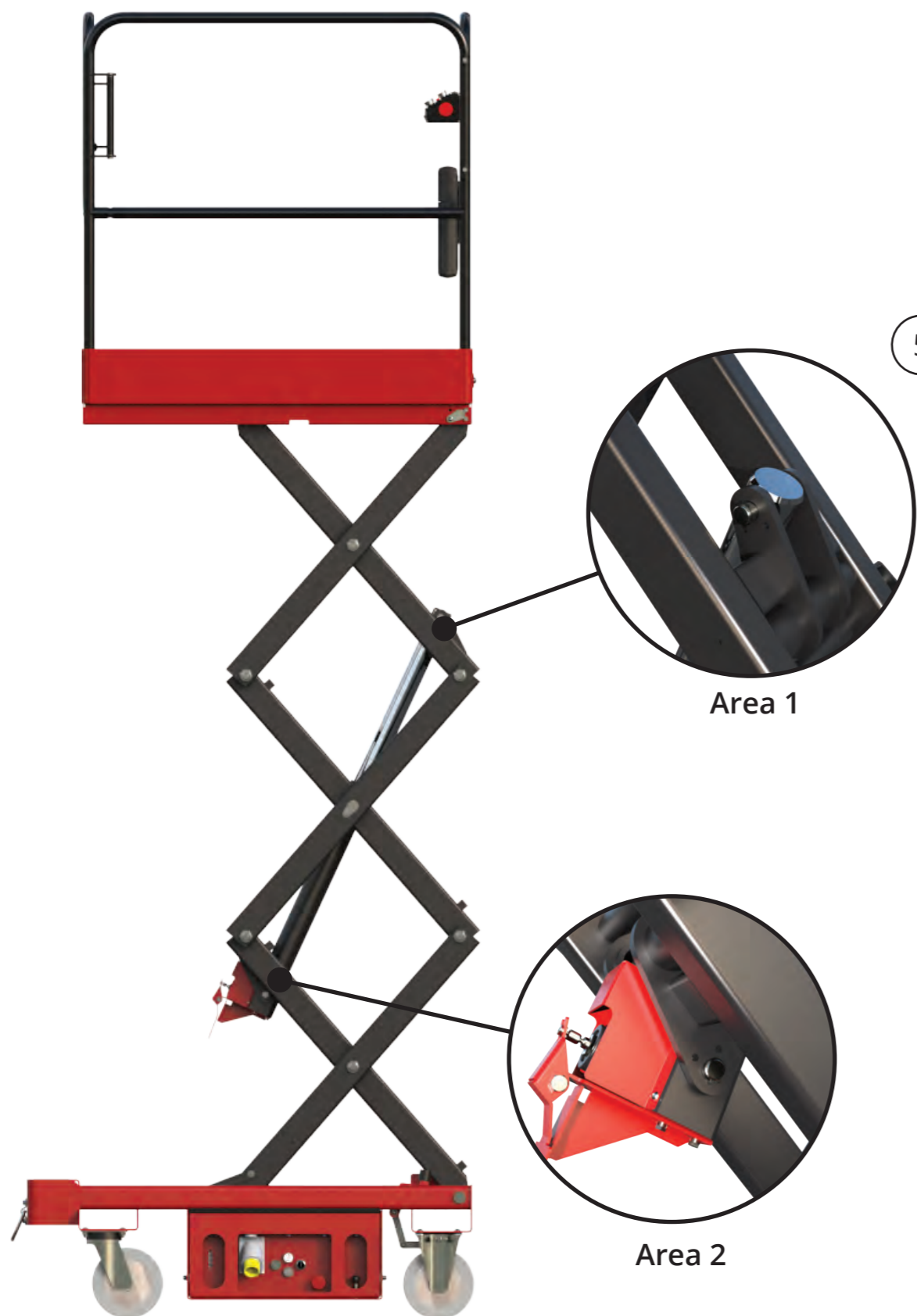
S3010P-01-000512 to S3010P-01-001305

S3010P-01-170100560 to S3010P-01-1902412

NOTES:

- 1. Round section handrails
- 2. Scissor pack and handrails in black powdercoat





Item No.	Description
1	Cylinder Rod
2	Pivot Pin
3	'No Oil' PTFE Bearing
4	Ø18mm External Circlip
5	Manifold end pivot pin assembly
6	Scissor pack pivot plates

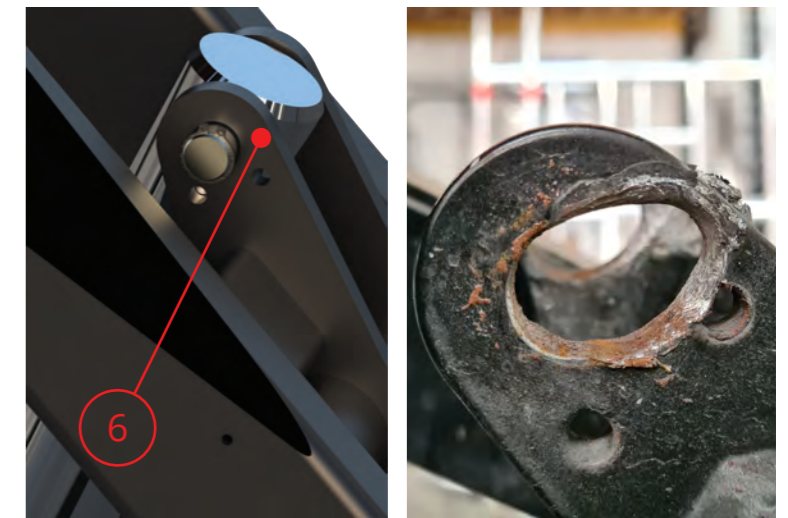


Fig. 1

PROCEDURE:

1. Elevate the machine and deploy the maintenance props.
2. Lower the machine until the scissor packs weight is taken by the maintenance props.
3. Inspect around both area 1 & 2 looking for elongation or excessive wear of the pivot pin mounting holes in the scissor pack pivot plates. An extreme example of this type of wear can be seen in Fig.1
4. With the weight of the scissor pack taken by the maintenance props, it should be possible to tap the pivot pins from side to side with a copper & hide hammer. This will indicate the pivot pin is not seized in either the cylinder rod 'no oil' bearings or the scissor pack pivot plates.
5. If either the pin is seized or excessive wear is found in the mounting holes, the machine should immediately be removed from service and quarantined until the worn components are replaced.

Daily Preventative Maintenance Checklist

Preventative Maintenance Report

Date: _____ Serial No: _____
 Owner: _____ Serviced By: _____
 Model No: _____

Item	Inspect For	Y	N	R
Operator's Manual	In manual holder, all pages readable and intact			
Electrical System				
Battery terminals	Clean, connectors tight			
Battery charge indicator	Proper operation			
Battery charger	Proper operation			
Cables and wiring harness	No wear or physical damage			
Hydraulic System				
Fluid level	Between full and add marks with platform stowed			
Hoses, tubes and fittings	No leaks, all fittings tight			
Castors	Good condition, no damage/smooth movement			
Manual Brakes	Proper operation, no damage or deformation			
Lower Control Station				
Operating controls	Proper operation			
Emergency stop	Shuts off lower controls/proper operation			
Lowering alarm and interrupt	Sounds when platform lowers/proper operation			
Emergency Lowering	Proper operation			
Safety Prop	No damage or deformation			
Structures				
Weldments – Scissors, chassis, steps, platform, etc.	Welds intact, no damage or deformation			
Platform slide rollers	In place, no damage or deformation			
Fasteners	In place, tight, and no damage			
Scissor and Cylinder pins	Securely in place, no damage or corrosion			
Upper Control Station				
Guardrail system	Welds intact, no damage or deformation			
Platform floor	All fasteners in place, no loose or missing parts			
Entry gate	No damage or deformation			
Operating controls	Clean to prevent slip and fall hazards			
Lowering delay	Proper operation, no damage or deformation			
Emergency stop	Proper operation/raise and lower			
Operation and Safety Decals	Proper operation, limit switch delays lowering			
	Shuts off upper controls			
	In place and readable			

Maintenance Table Key: Y = Yes/Acceptable, N = No/Not Acceptable, R = Repaired/Acceptable