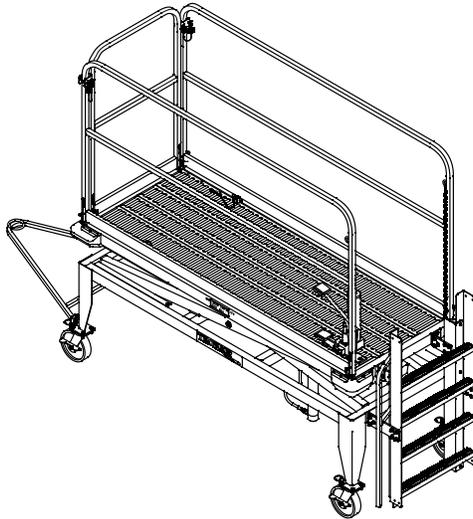




OPERATION & SERVICE MANUAL



**Model: 04-6029-5111
B4 Type
Maintenance Platform**



10/2009 – Rev. 08

REVISION	DATE	TEXT AFFECTED
04	02/2006	Modified Part List and Illustration
05	09/2006	Modified Part List and Illustration
06	04/2007	Modified Part List
07	07/2007	Modified Parts List
08	10/2009	Added CE mark and Declaration of Conformity, Modified Parts List

TABLE OF CONTENTS

	<u>PAGE</u>
1.0 PRODUCT INFORMATION	1
1.1 DESCRIPTION.....	1
1.2 MODEL & SERIAL NUMBER.....	1
1.3 MANUFACTURER	1
1.4 SPECIFICATIONS	1
2.0 SAFETY INFORMATION	1
2.1 USAGE AND SAFETY INFORMATION	1
3.0 TRAINING	1
3.1 TRAINING REQUIREMENTS	1
3.2 TRAINING PROGRAM	1
3.3 OPERATOR TRAINING	1
4.0 OPERATION INSTRUCTIONS	2
5.0 INSPECTION/MAINTENANCE	2
5.1 PERIODIC INSPECTION.....	2
5.2 LOAD TEST	3
6.0 PROVISION OF SPARES.....	4
6.1 SPARE PARTS	4
6.2 PARTS LISTS & ILLUSTRATIONS.....	4
7.0 IN-SERVICE SUPPORT.....	4
8.0 GUARANTEES/LIMITATION OF LIABILITY	4
9.0 APPENDICES	4

This product can not be modified without the written approval of Tronair, Inc. Any modifications done without written approval voids all warranties and releases Tronair, Inc., its suppliers, distributors, employees, or financial institutions from any liability from consequences that may occur. Only Tronair OEM replacement parts shall be used.

1.0 PRODUCT INFORMATION

1.1 DESCRIPTION

The Tronair B4 Type Maintenance Platform is shipped completely assembled and ready for use.

Some important features include:

- Mechanical Platform Stops
- Removable Side Rails
- Hydraulic Foot Pedal
- Locking Swivel Casters
- Towbar
- Optional Pneumatic Foot Pedal

1.2 MODEL & SERIAL NUMBER

Reference nameplate on unit

1.3 MANUFACTURER

TRONAIR, Inc.
1 Air Cargo Pkwy East
Swanton, Ohio 43558 USA

Telephone: (419) 866-6301 or 800-426-6301
Fax: (419) 867-0634
E-mail: sales@tronair.com
Website: www.tronair.com

1.4 SPECIFICATIONS

- Capacity: 500 lbs
- Work Platform Area: 3 ft x 8 ft
- Lowered Platform Height: 3½ ft
- Raised Platform Height: 7 ft

2.0 SAFETY INFORMATION

2.1 USAGE AND SAFETY INFORMATION

To insure safe operations please read the following statements and understand their meaning. Also refer to your equipment manufacturer's manual for other important safety information. This manual contains safety precautions which are explained below. Please read carefully.



WARNING! — Warning is used to indicate the presence of a hazard that **can cause severe personal injury, death, or substantial property damage** if the warning notice is ignored.

CAUTION! — Caution is used to indicate the presence of a hazard that **will or can cause minor personal injury or property damage** if the caution notice is ignored.

3.0 TRAINING

3.1 TRAINING REQUIREMENTS

The employer of the operator is responsible for providing a training program sufficient for the safe operation of the unit.

3.2 TRAINING PROGRAM

The employer provided operator training program should cover safety procedures concerning use of the unit in and around the intended aircraft at the intended aircraft servicing location.

3.3 OPERATOR TRAINING

The operator training should provide the required training for safe operation of the unit.

NOTE: Maintenance and Trouble Shooting are to be performed by a skilled and trained technician.

4.0 OPERATION INSTRUCTIONS

1. Check reservoir level. Fill as required with MIL-H-5606 hydraulic oil.
2. Ensure mechanical stop pins are not in the stop holes before raising the platform.
3. Raise the platform by pumping the foot pump until the desired height has been reached.
4. Install the mechanical stops. If the hole is blocked, install pins into next hole down.
5. While working on the platform, it is recommended that the safety chain and the railings remain in place.
6. When the platform is in use, it should always be locked in place with the mechanical stop pins.



CAUTION!

Never use the ladder while the platform is raised or lowering.

7. The platform is lowered by first raising it off the mechanical stop pins.
8. Remove the mechanical stop pins.
9. Actuate the relief foot valve on the pump to lower the platform.

CAUTION!



1. Always ensure the ladder and scissors area are clear of obstacles and/or personnel before lowering.
2. Never tow the platform with personnel on it.
3. If the platform experiences a sudden downward surge, the velocity fuse will be activated and the platform will immediately stop lowering. In order to reset the fuse, the relief foot valve on the pump must be depressed and released and the foot pump pedal must be quickly depressed to reset the pump. Failure to reset the fuse through the foot pump could result in pump damage and will cause the platform to no longer raise.

5.0 INSPECTION/MAINTENANCE

5.1 PERIODIC INSPECTION

A qualified inspector shall perform a complete inspection at the following intervals

SERVICE	INTERVAL	
Normal	Yearly	Inspect equipment at site of use. Operation with various weights within the rated load limit, or uniform loads less than 65 percent of rated load.
Heavy	Semi-Annual	Inspect equipment at site of use unless external conditions indicate that disassembly should be done to permit detailed inspection. Operation within the rated load limit that exceeds normal service.
Severe	Quarterly	Inspect equipment at site of use unless external conditions indicate that disassembly should be done to permit detailed inspection. Operation at normal or heavy service under abnormal operating conditions.
Special/ Infrequent	As recommended by a qualified person before the first such use and as directed by the qualified person for any subsequent uses	

1. Before each use:
 - a. Visually inspect unit to ensure all components are present and functional
 - All pivot bolts & nuts are secure
 - Pump is free of leaks & relief valve is operational
 - All casters & locks are operational
 - No bent or, broken components



WARNING!

Ensure platform components are free of damage and or excessive wear. Never use platform if any component is bent or broken

2. Periodically:
 - a. Lubricate platform
 - All pivot points
 - Threaded adjustment areas
 - b. Check cylinder reservoir level. Replenish with MIL-PRF-5606
 - Ensure Fluid is at acceptable level
 - Flush reservoir if fluid is contaminated
3. Annually:
 - a. Safely perform load test with 625 lb test weight.

5.0 Inspections/maintenance continued on following page.

6.0 PROVISION OF SPARES

6.1 SPARE PARTS

Spare parts may be obtained from the manufacturer:

TRONAIR, Inc.

1 Air Cargo Pkwy East

Swanton, Ohio 43558 USA

Telephone: (419) 866-6301 or 800-426-6301

Fax: (419) 867-0634

E-mail: sales@tronair.com

Website: www.tronair.com

6.2 PARTS LISTS & ILLUSTRATIONS

Reference the following page for Replacement Parts and Kits available.

7.0 IN-SERVICE SUPPORT

Contact Tronair, Inc. for technical services and information. See Section 1.3 – Manufacturer.

8.0 GUARANTEES/LIMITATION OF LIABILITY

Tronair products are warranted to be free of manufacturing or material defects for a period of one year after shipment to the original customer. This is solely limited to the repair or replacement of defective components. This warranty does not cover the following items:

- a) Parts required for normal maintenance
- b) Parts covered by a component manufacturers warranty
- c) Replacement parts have a 90-day warranty from date of shipment

If you have a problem that may require service, contact Tronair immediately. Do not attempt to repair or disassemble a product without first contacting Tronair, any action may affect warranty coverage. When you contact Tronair be prepared to provide the following information:

- a) Product Model Number
- b) Product Serial Number
- c) Description of the problem

If warranty coverage is approved, either replacement parts will be sent or the product will have to be returned to Tronair for repairs. If the product is to be returned, a Return Material Authorization (RMA) number will be issued for reference purposes on any shipping documents. Failure to obtain a RMA in advance of returning an item will result in a service fee. A decision on the extent of warranty coverage on returned products is reserved pending inspection at Tronair. Any shipments to Tronair must be shipped freight prepaid. Freight costs on shipments to customers will be paid by Tronair on any warranty claims only. Any unauthorized modification of the Tronair products or use of the Tronair products in violation of cautions and warnings in any manual (including updates) or safety bulletins published or delivered by Tronair will immediately void any warranty, express or implied.

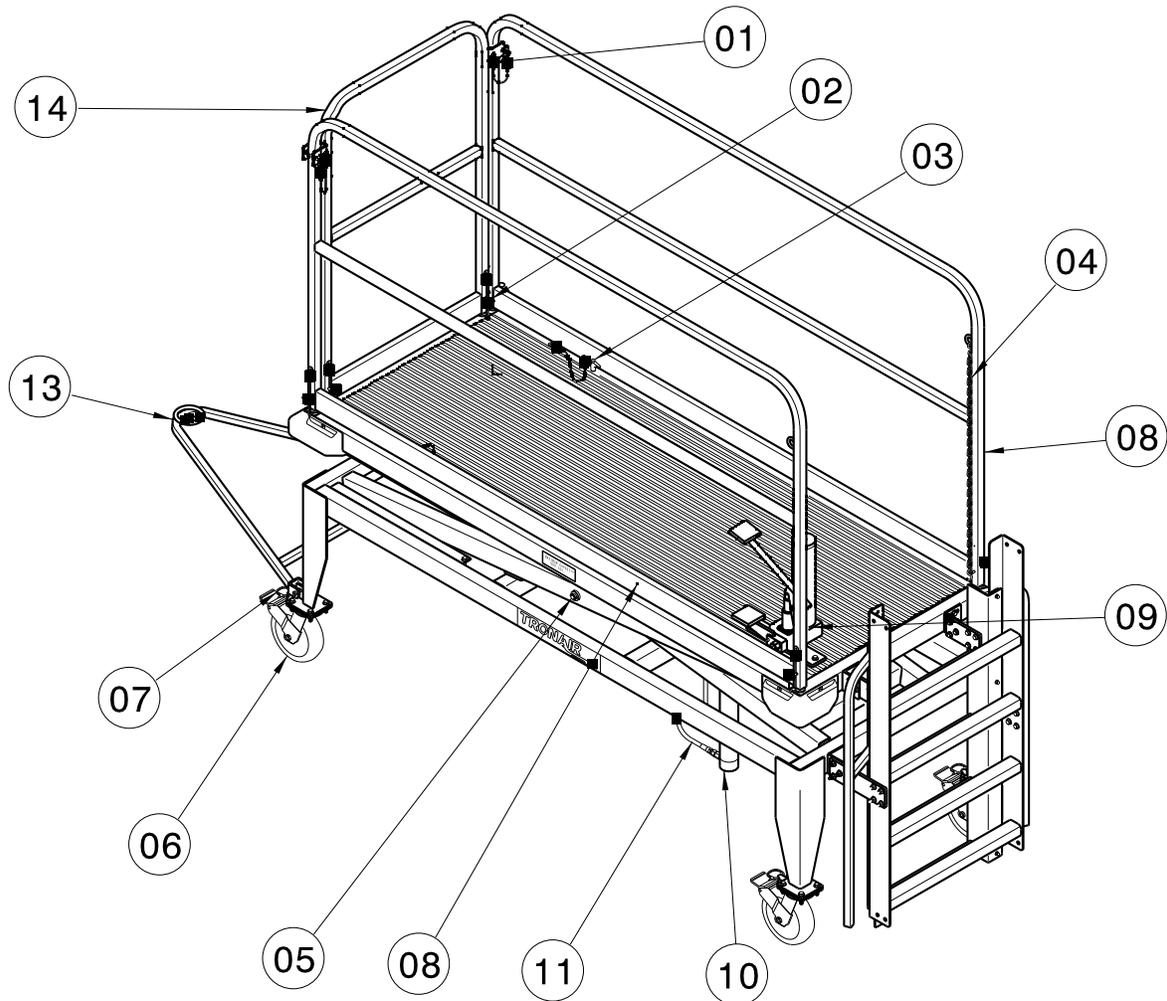
The obligations of Tronair expressly stated herein are in lieu of all other warranties or conditions expressed or implied. **Any unauthorized modification of the Tronair products or use of the Tronair products in violations of cautions and warnings in any manual (including updates) or safety bulletins published or delivered by Tronair will immediately void any warranty, express or implied and Tronair disclaims any and all liability for injury (WITHOUT LIMITATION and including DEATH), loss or damage arising from or relating to such misuse.**

9.0 APPENDICES

APPENDIX I Declaration of Conformity

Parts List

When ordering replacement parts/kits, please specify model, serial number and color of your unit.



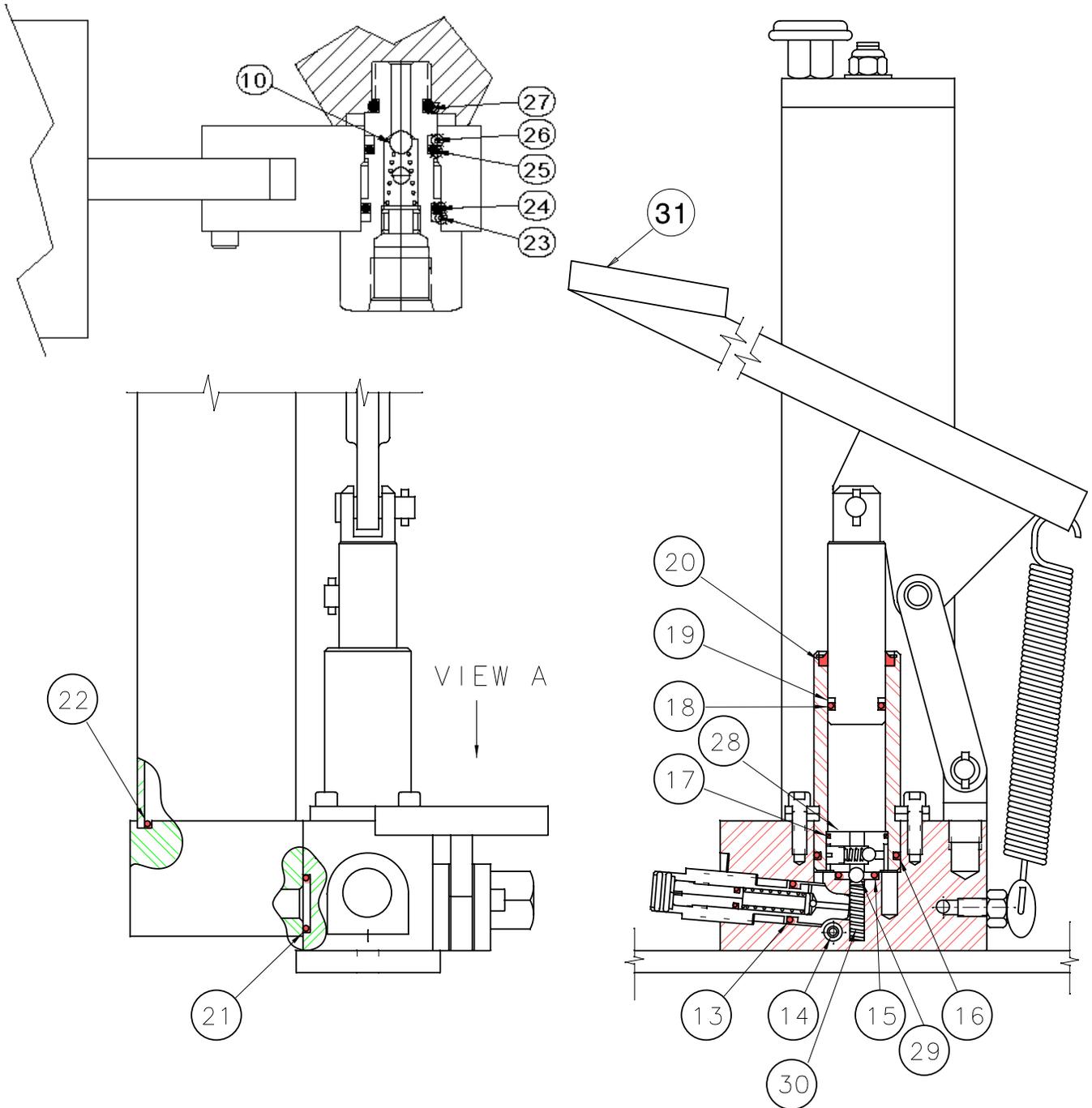
Item	Part Number	Description	Qty
8	Z-4405	Assembly, Side Rail	2
9	HC-1888-01	Pump, Hydraulic Foot	1
11	TF-1043-03*120	Assembly, Hose	1
13	Z-4771	Assembly, B4 Stand Towbar	1
14	Z-4402	Assembly, End Rail (includes Item 1, Qty. 2 and Item 2, Qty 2)	1
	K-2752	Kit, Ball Lok-T Replacement; consists of:	
1	G-1310-0420	Pin, Ball Lok-T, 1/4" diameter x 2" long	1
	G-1182-05-01	Screw	1
	H-1026*07.0	Assembly, Lanyard	1
	K-3089	Kit, Aerofast Pin Replacement; consists of:	
2	G-1307-0418	Pin, Aerofast Pin, 1/4" diameter x 1.8" long	1
	G-1351-04	Rivet, 1/8 Open-End Steel	1
	H-1026*07.0	Assembly, Lanyard	1
	K-2700	Kit, Ball Lok-T Replacement; consists of:	
3	G-1310-0855	Pin, Ball Lok-T, 1/2" diameter x 5-1/2" long	1
	G-1351-04	Rivet, 1/8 Open-End Steel	1
	H-1026*12.0	Assembly, Lanyard	1

Parts List

When ordering replacement parts/kits, please specify model, serial number and color of your unit.

Item	Part Number	Description	Qty
	K-3090	Kit, Safety Chain Replacement; consists of:	
4	H-1024-01*34.0	Chain, Double Loop 2/0	1
	H-1518-03	S-Hook	2
	K-3129	Kit, Pivot Pin Replacement; consists of:	
5	R-1948	Pin, Pivot	1
	G-1301-03	Pin, Cotter	2
	G-1255-11	Washer, 3/4 AN	2
	K-3289	Kit, Caster Replacement; consists of:	
6	G-1100-107014	Bolt, Hex Head, Grade 5, 3/8-16 x 1-1/2" long	4
	G-1202-1070	Stopnut, 3/8-16 Elastic	4
	G-1250-1070N	Flatwasher, 3/8 Narrow	8
	U-1085	Caster, Swivel	1
	U-1087	Lock, De-mountable Swivel	1
	K-3290	Kit, Towbar Pivot Replacement; consists of:	
7	G-1155-106220	Screw, Hex Socket Head Shoulder, 3/8" diameter x 5/16-18 x 2" long	2
	G-1202-1060	Stopnut, 5/16-18 Elastic	2
	G-1250-1060N	Flatwasher, 5/16 Narrow	2
	K-3450	Kit, Cylinder Replacement; consists of:	
10	G-1151-107214	Screw, Socket Head Cap, 3/8-24 x 1-1/2" long	4
	G-1155-110220	Screw, Hex Socket Head Shoulder, 3/4" diameter, 5/8-11 x 2" long	1
	G-1202-1100	Stopnut, 5/8-11 Elastic	1
	HC-2034-01	Cylinder, Hydraulic (Mineral Base)	1

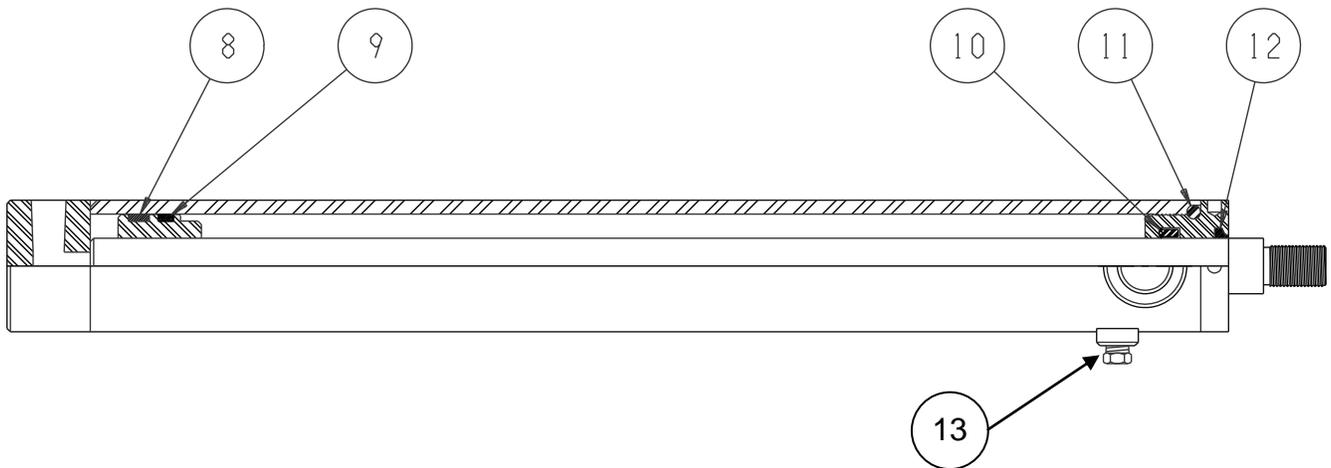
Parts List - Replacement Pump Seal Kit



Parts List - Replacement Pump Seal Kit

Item	Part Number	Description	Qty
31	H-3046	Lever, Foot Pedal	1
	K-4361	Kit, Pump Seal Replacement; consists of:	
10		Ball, Inlet Check	2
13		O-ring, Release Screw	1
14		O-ring, Outlet	1
15		O-ring, Outlet Check	1
16		O-ring, Tube Seal	1
17		O-ring, Valve Body	1
18		O-ring, Piston	1
19		Backup Ring, Piston	1
20		Wiper, Rod	1
21		O-ring, Reservoir Mount	1
22		O-ring, Reservoir Seal	1
23		Backup Ring, Piston	1
24		O-ring, Piston	1
25		O-ring, Piston	1
26		Backup Ring, Piston	1
27		O-ring, Seal	1
28		Valve Body	1
29		Ball, Outlet Check	1
30		Spring, Outlet Check	1

Parts List - Replacement Cylinder Seal Kit



Item	Part Number	Description	Qty
	K-3291	Kit, Cylinder Seals Replacement; consists of:	
8		Ring, Seal	1
9		Seal, PSP	1
10		Polypak	1
11		O-ring	1
12		Wiper, Rod	1
13	N-2523-01	Fitting, Vent Plug, 1/8	1



APPENDIX I

Declaration of Conformity



DECLARATION of CONFORMITY

The design, development and manufacture is in accordance with European Community guidelines

B4 Type Maintenance Platform
04-6029-5111

Relevant provisions complied with by the machinery:
2006/42/EC

Relevant standards complied with by the machinery:
BS EN 1915-1:2001
pr EN 12312-8:1997

Identification of person empowered to sign on behalf of the Manufacturer:

A handwritten signature in black ink that reads "Patrick Finch". The signature is written in a cursive style and is positioned above a solid horizontal line.

Quality Assurance Representative