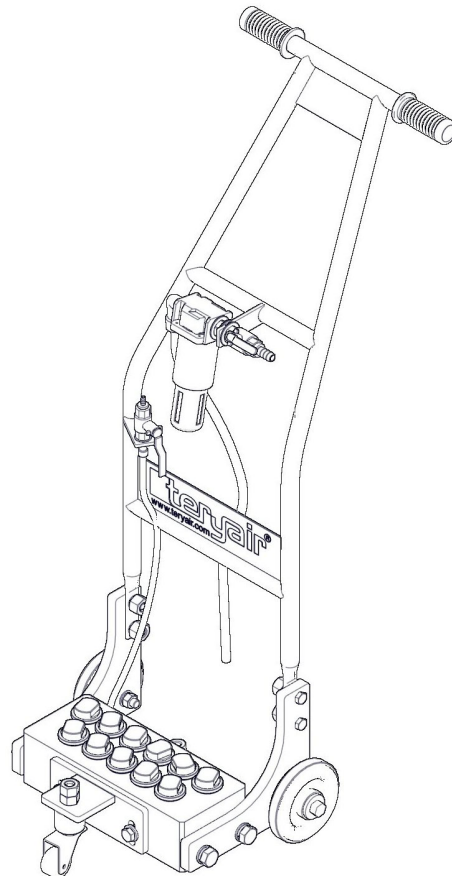




Operation and Maintenance Guide



PDS - 11

Models	Descriptions	IMPA Code
PDS-11	Pneumatic Deck Scaler	59 04 01

Read this manual carefully before installing, operating or servicing this equipment. It's the responsibility of the employer to ensure this manual is read by the operator. Please preserve this manual.

This document is issued with Product Serial No

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Introduction

Teryair Pneumatic Deck Scalers are used for removing scales and surface paint from the decks of ships. These scalers have a handle, allowing the operator to stand during use, relieving fatigue and protecting the eyes from dust and chipped metal or scale.

Technical Data

Teryair Model No	PDS-11
IMPA Number equivalent	59 04 01
Scaling System	Reciprocating
Number of Piston Head	11 pieces
Frequency	4000 bpm
Air Inlet	1/2" BSPP
Weight	35 kgs

Intended Use

- Marine and Offshore industries
- Removal of Coatings
- Hold cleaning, general deck and surface cleaning, removal of heavy rust on tankers and dry dock applications
- Paint removal.
- Other industrial coating removal from floors and other surfaces
- Removals of concrete residue from re-bar
Cleaning cement from plant and vehicles

Prohibitive use

- Any use in an explosive atmosphere is prohibited
- Use on materials containing asbestos is prohibited
- Use by an underage, untrained or person who is under the influence of drugs or alcohol.
- Use with non-genuine spare parts or accessories is prohibited

Safety Instructions

Following symbols are used through out this manual.

 **Warning**

If not followed could cause personal injuries

 **Caution**

If not followed could result in damage to equipment.

 **Warning**

This manual must be read and the operating instructions carefully followed.

 **Warning**

Operators under eighteen not allowed to operate this Pneumatic Piston Scabbler. Operators must be made familiar with the instructions in this manual before attempting to operate the Pneumatic Piston Scabbler. Ensure that job site is clear of bystanders

 **Caution**

Use only genuine Teryair or Teryair approved accessories.

 **Warning**

Never run the Piston Scabbler continuously in the same place, as the cutter heads will dig into the surface.

Warning

This Pneumatic Piston Scabbler is not designed for use in an explosive environment.

Caution

Completely turn off the Pneumatic Piston Scabbler and disconnect air supply line before attempting any service. Read Assembly and Disassembly instructions.

Warning

Take care not to exceed the maximum 7 bar (100psi) supply air pressure. Use a filter and regulator and lubricator as close to the Pneumatic Piston Scabbler inlet as operation will allow ensuring a clean and regulated and lubricated air flow.

Caution

Do not exert excessive pressure against the work surface. Keep hoses in good condition. Check hoses for signs of wear, cracks & bulges and ensure that they are secure. Accidental disconnection while hose is pressurized makes the hose whip and can be a safety hazard.

Caution

Please check the hose connection prior to starting Piston Scabbler. Be aware that these Pneumatic Piston Scabbler can create dust & flying debris. Keep hands & clothing away from moving parts. Store these Pneumatic Piston Scabbler in secure & dry environment. Do not allow the Pneumatic Piston Scabbler to run unattended. Do not modify this Pneumatic Piston Scabbler in any way as this will invalidate the warranty and could lead to serious injury.

Warning

- Eye and face and ear protection must be worn at all times during operation of the Pneumatic Piston Scabbler. There is a chance of flying debris from the jobsite and the quality of wear should be such to protect against such flying debris such as flakes of the removed layer.
- Suitable gloves must be worn at all times during operation.
- Safety Shoes with toe cap protection are a must during operation.

Operating Instructions

Scabblers are rugged dependable Piston Scabblers designed to give you years of satisfactory service. Follow the instructions mentioned here to enhance life and performance of your Scabblers.

Daily Before Operating

Disconnect and pour in 1 to 2 ounces of recommended oil into the Pneumatic Piston Scabbler and reconnect hose after blowing out any accumulated dirt in the hose line before connection. Check all parts of the Piston Scabbler are fully screwed together and secure.

Lubrication Requirements

Always install a line lubricator on the air line as close to the Pneumatic Piston Scabbler as possible. A Filter Regulator Lubricator unit (FRL) is strongly recommended. Keep the lubricator bowl topped up with recommended grade of oil and check that the oil is reaching the Pneumatic Piston Scabbler. Running the Pneumatic Piston Scabbler without lubrication is likely to cause damage to the components causing premature replacement.

Air Supply

The Scabblers work best at 6.2 bar (90 psi) air pressure. The air should be clean, dry and lubricated. Install a FRL unit as close as operation will permit.

Hoses

Daily before operation check the hoses for damage or leaks.

Use genuine Teryair spares and if possible mention the serial number of the Pneumatic Piston Scabbler when ordering spares.

Suggested Lubricants

Brand	Above 27°C / 80°F	5°C to 27°C / 41°F to 80°F	Below 5°C / 80°F
Shell	Toona R 72	Toona R 41	Toona R 27
Mobil	Almo 529	Almo 527	Almo 525
Esso	--	Arox EP.65	Arox EP.45
Caltex	Rando Oil 100	Rando Oil 100	Rando Oil 46
Cp	--	--	Airolene Tool Oil
Texaco	Regal Oil F (R&O)	Regal Oil PE(P&E)	Regal Oil PE(R&O)
Daltron	Silkolene 881	Silkolene 548/T	Silkolene 733
Burmah Castrol	Castrol RD Oil 3	Castrol RD Oil Light	Megna SPX
Duckham	Garnet 7	Garnet 6	Zero Fio 5
Sternol	Merlin 87	Merlin 71	Merlin 54
Petrofina	Purifoc 53	Purifoc 46	Purifoc 32
Chevron	Vistac Oil 18X	Vistac Oil 19X	Vistac Oil 9X
Indoil	Servo Spyn -22	--	--

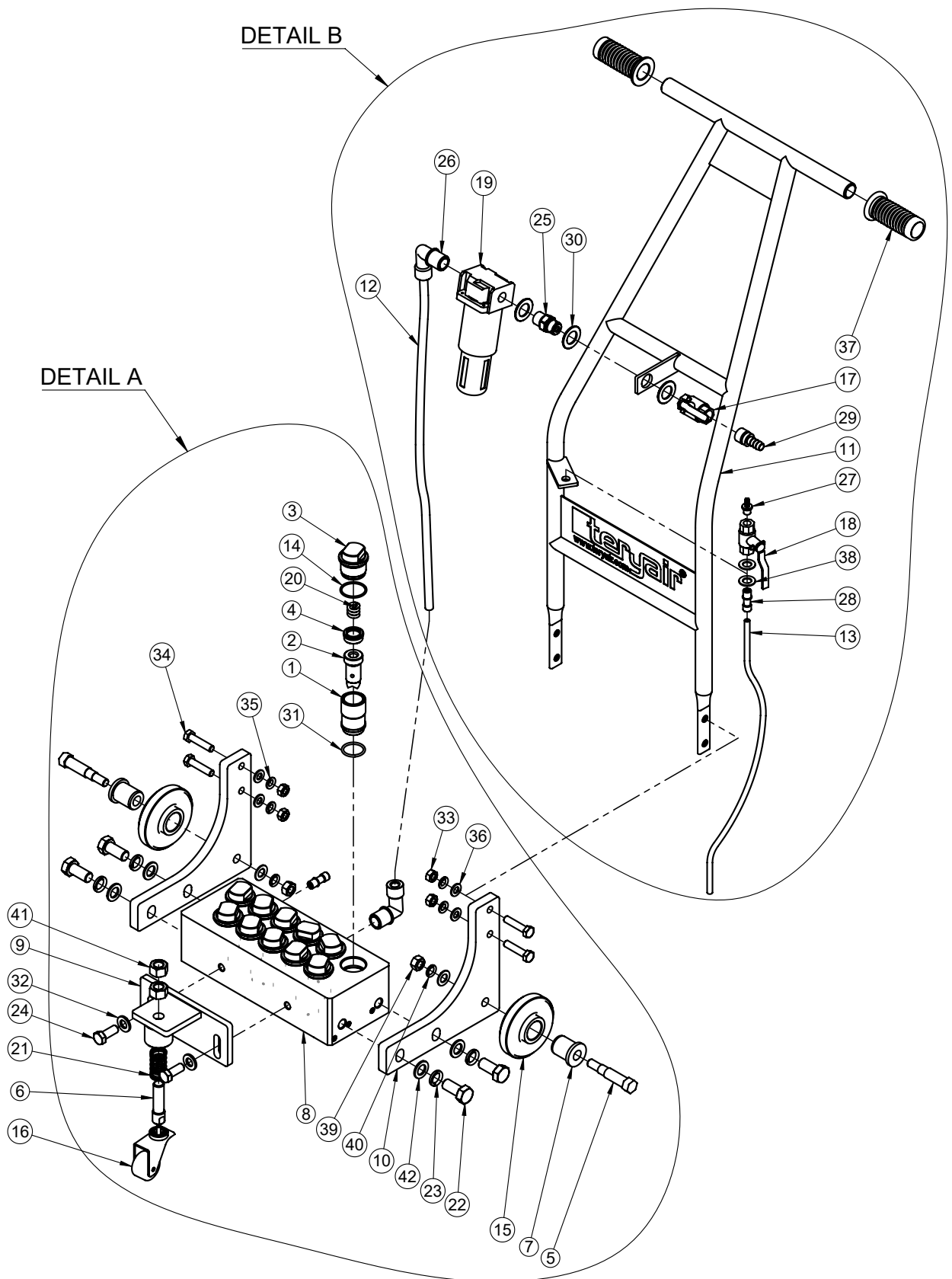
Diassembly and Re-assembly for PDS-11

- a. Shut off air supply and allow residual Pressure to bleed off.
- b. Unscrew Screwed Cap (3) from Cylinder Head (8) & remove O-ring (14), Spring for Piston (20), Spring Seat (4), Piston (2), Cylinder (1) & O-ring (31) respectively to replace it with new ones. (If found damaged/worn-out)
- c. Follow Step 'b' to replace the remaining piston assembly from Cylinder Head (8).
- d. Blow out any accumulated dirt or any foreign particles present in head. Examine all components for wear after washing in suitable solvent. Replace any worn or damaged components.
- e. Coat parts with recommended light oil before reassembling. Now follow the above steps in reverse manner to reassemble the PDS11.

Bill of Materials for PDS-11

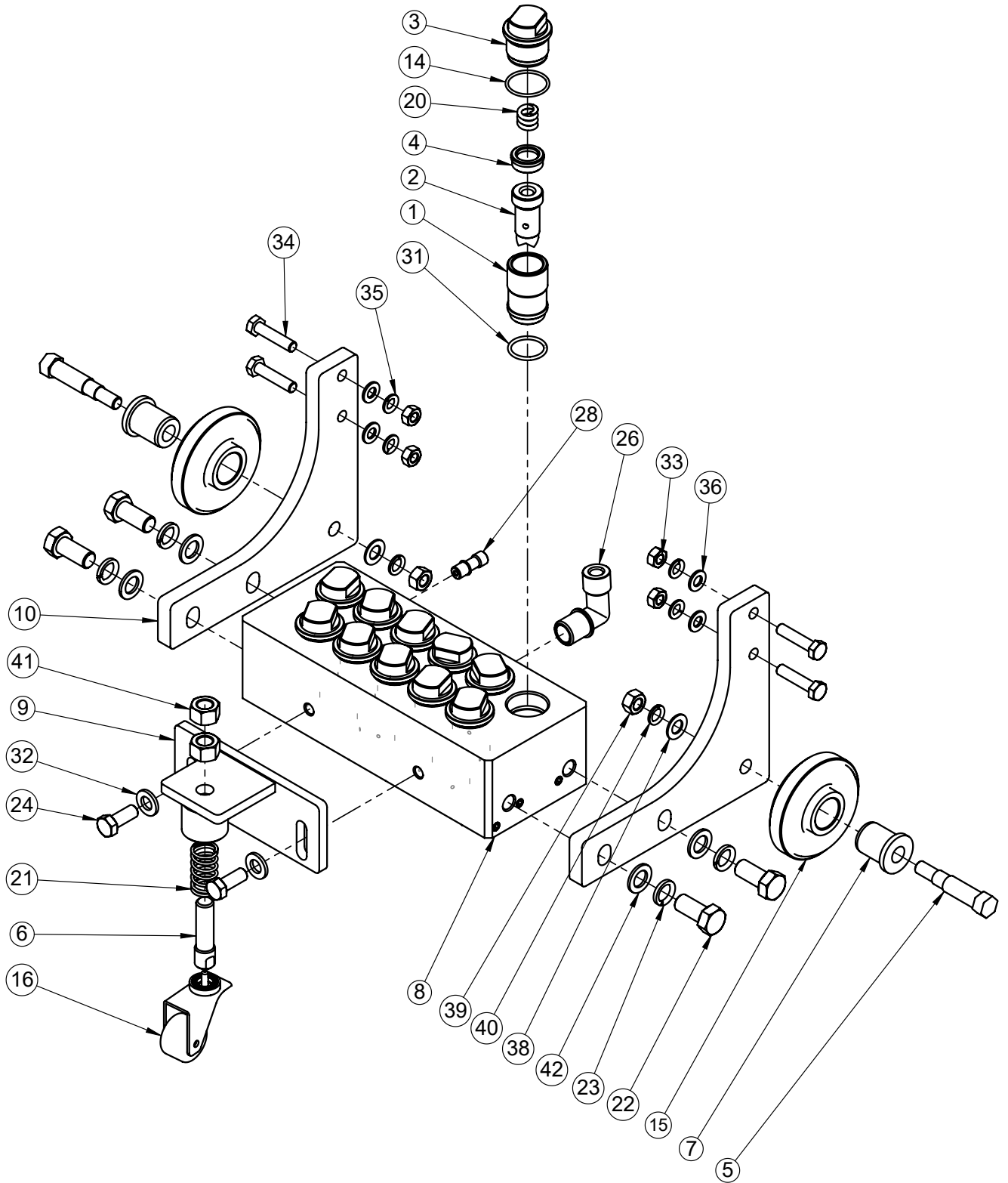
Illustration Number	Part Number	Description	PDS-11
1	128 21 01	CYLINDER	11
2	128 21 02	PISTON	11
3	128 21 03	SCREWED CAP	11
4	128 21 04	SPRING SEAT	11
5	128 21 05	WHEEL MOUNTING PIN	2
6	128 21 06	STUD FOR FRONT WHEEL	1
7	128 21 07	BUSH FOR SIDE WHEEL	2
8	128 31 01	CYLINDER HEAD	1
9	128 31 02	FRONT MOUNTING PLATE	1
10	128 31 03	SIDE MOUTING PLATE	2
11	128 33 01	PIPE FRAME	1
12	128 40 01	TUBE	1
13	128 40 02	TUBE	1
14	128 40 03	O-RING	11
15	128 50 01	SIDE WHEEL FOR PDS	2
16	128 50 02	FRONT WHEEL	1
17	128 50 05	BALL VALVE	1
18	128 50 06	BALL VALVE	1
19	128 50 08	LUBRICATOR	1
20	128 51 01	SPRING FOR PISTON	11
21	128 51 02	SPRING FOR FRONT WHEEL	1
22	128 90 01	HEX BOLT	4
23	128 90 02	SPRING WASHER	4
24	128 90 05	HEX BOLT	2
25	128 90 06B	ADAPTOR	1
26	128 90 07	ELBOW	2
27	128 90 09B	ADAPTOR	1
28	128 90 10	PUSH TYPE CONNECTOR	2
29	35.13.54	COUPLER	1
30	130 21 10	PLAIN WASHER	3
31	140 40 10	O' RING	11
32	195 10 21	PLAIN WASHER	2
33	200 40 30	HEX. NUT	4
34	210 90 27	HEX BOLT	4
35	210 90 35	SPRING WASHER	4
36	330 90 26	PLAIN WASHER	4
37	340 30 24	RUBBER GRIP	2
38	342 90 24	PLAIN WASHER	4
39	552 90 14	HEX. NUT	2
40	653 90 04	SPRING WASHER	2
41	671 90 05	HEX. NUT	2
42	671 90 06	PLAIN WASHER	4

Exploded View for PDS-11



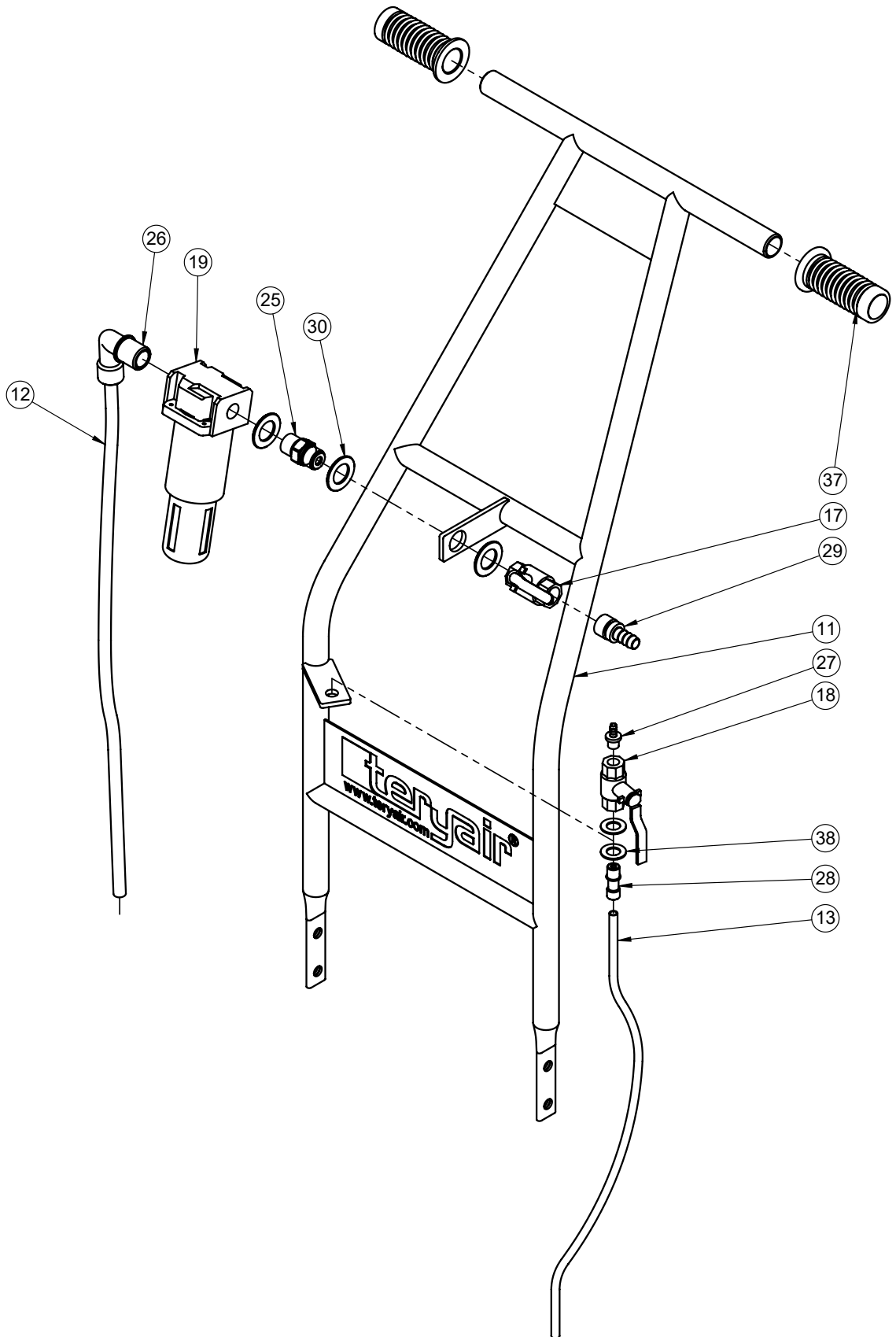
Exploded View Detail-A for PDS-11

DETAIL A



Exploded View Detail-B for PDS-11

DETAIL B



Repair Kits For PDS - 11

Illu. No.	Part No.	Description	1289700
1	128 21 01	CYLINDER	11
2	128 21 02	PISTON	11
4	128 21 04	SPRING SEAT	11
14	128 40 03	O-RING	11
20	128 51 01	SPRING FOR PISTON	11
31	140 40 10	O' RING	11

TEST CERTIFICATE OF MATERIALS, PERFORMANCE

Date :

Model number :

Part description & s.No. :

We hereby certify that the above referenced product has tested and inspected in accordance with our standard test procedures and meets the specifications for material and performance values as published in our literature. We further certify that the product has been given our standard factory test and meets all quality and performance standards established by the company. This product is certified to be produced in our factory, and is of current production.

Authorised Signatory



Q.A Manager
Place - Vasai, Maharashtra

EU DECLARATION OF CONFORMITY

We hereby certify that the Listed Product stipulated below comply with all relevant provisions of the machinery directive (2006/42/EC) and the national laws and regulations adopting this directive.

Description :

Model Number :

Date :

Serial Number :

Is in conformity with the provisions of the following European Directives: (2006/42/EC) Machinery Safety and Harmonized standards

ISO 12100-1: 2010: Safety of Machinery –general Principles for Design –Risk Assessment and Risk Reduction.

Registered Office : 416 Gundecha Industrial Complex, Akuril Road,
Kandivali East, Mumbai – 400101, Maharashtra, India.

Web site : www.teryair.com

Works : A-1, Tirupati Udyog Nagar, Sativali Road, Vasai East,
Palghar – 401208, Maharashtra, India.

CE certification registration no – C E 16832

Issued by – BMQR Certifications Pvt Ltd.
www.cemarking-india.com

Valid Till – 03/11/2021

Signed for and on behalf of



TERYAIR EQUIPMENT PVT. LTD.

Place of Issue:

Date:



Warranty Certificate

Every product manufactured by Teryair is built to meet the highest standards of quality.

Teryair warrants that the Products, accessories and parts manufactured or supplied by the company be free from defects in material and workmanship for a period of six months from date of Teryair authorized dealer invoice to customer, or one year from date of Teryair invoice to dealer, whichever is earlier. Failure due to normal wear, misapplication, or abuse is, of course, excluded from this warranty.

Since the use of Teryair products and parts is beyond our control, Teryair cannot guarantee the suitability of any product or part for a particular application and Teryair shall not be liable for any consequential damage or expense arising from the use or misuse of its products on any application. Teryair does not warranty bought out products or components such as electric motors and hardware but will assist in directing warranty queries to the dealer/manufacturer responsible. Teryair responsibility is limited solely to replacement or repair of defective Teryair products or components.

Dealer/End User shall have no right or remedy and Teryair shall have no liability or obligation under the warranty, if: (i) a Product is altered, changed, modified or tampered with in any way, (ii) a Product is damaged after deposit with the transporter for shipment; (iii) a Product is not properly preserved, packaged, stored, processed or handled after receipt; (iv) a Product is not used and maintained in accordance with Teryair's recommended operating and maintenance manuals, instructions and procedures, if any; (v) a Product is not properly incorporated or installed in, or not properly combined with, an Other Product; (vi) the issue with a Product is directly or indirectly attributable to, or directly or indirectly results from or arises out of, a failure, substandard performance or other issue with another product, material, component or part not supplied by Teryair; (vii) the issue with a Product is directly or indirectly attributable to, or directly or indirectly results from or arises out of, compliance with any design, specification or other specific requirement of Dealer/End User; (viii) a Product is used in a manner, with a substance or for a purpose other than the normal manner, substance and purpose for which it is intended or is otherwise subjected to abnormal use or service; (ix) a Product is subjected to a power surge, brown out or other similar occurrence; (x) the issue with a Product is directly or indirectly attributable to, or directly or indirectly results from or arises out of, normal wear and tear of such Product (including, without limitation, things such as worn seals, diaphragms, balls, O rings, gaskets, chisels, cutters, hoses and other such wearing components; (xi) the issue with a Product is directly or indirectly.

Dated :
Product Model Number :
Product Serial Numbar :

Ajay Bhagat, Q.A. Manager
(Company Seal)

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