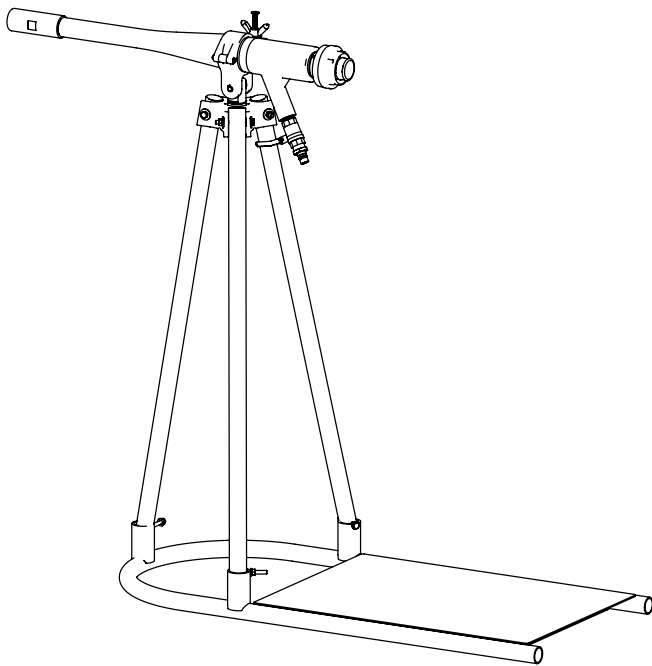
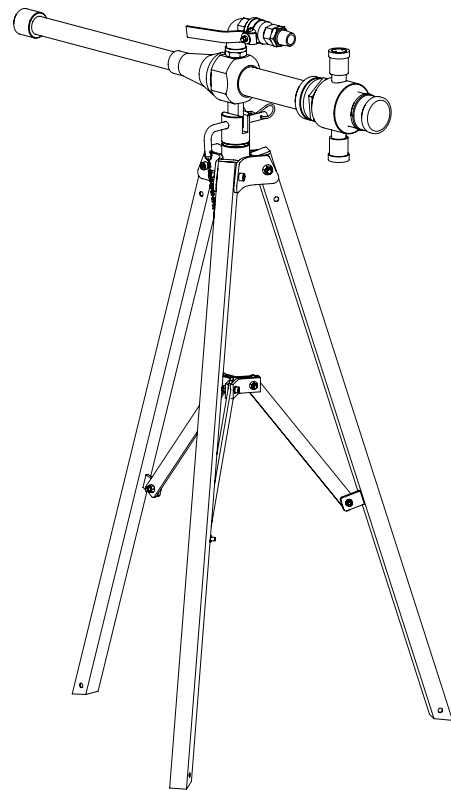


**Operation and Maintenance Guide**



HC - 50



HC - 63

Models	Descriptions	IMPA Number
HC-50	Pneumatic Hold Cleaning Gun - Aluminium	59 07 41
HC-63	Pneumatic Hold Cleaning Gun - Stainless Steel	59 07 42

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

## Table of Contents

3	Introduction
3	Technical Data
3	Safety Instructions
4	Diassembly and Re-assembly for HC-50
5	Bill of Materials for HC-50
6	Exploded View for HC-50
9	Diassembly and Re-assembly for HC-63
10	Bill of Materials for HC-63
11	Exploded View for HC-63
14	Test Certificate Of Materials, Performance
15	Eu Declaration Of Conformity
16	Warranty Certificate

## Introduction

Teryair Pneumatic Hold Cleaning Guns have been specifically designed for cleaning of bulk carrier holds by a high pressure water stream. A combination of water and compressed air produces a strong stream of water can be projected through distance for the removal of any loose rust, flaking paint or cargo residue.

## Technical Data

Teryair Model No	HC-50	HC-63
IMPA Number	59 07 41	59 07 42
Air Inlet	Hose I. D. 19 mm	Hose I. D. 19 mm
Inlet water pressure	6 Kg / cm <sup>2</sup>	6 Kg / cm <sup>2</sup>
Inlet Air pressure	6 kg / cm <sup>2</sup>	6 kg / cm <sup>2</sup>
Weight	15 Kgs	18 Kgs
Material of Gun	Aluminium	SS316
Effective Jet Reach	27- 30 mtrs.	27- 30 mtrs.
Water hose capacity	Two Aluminium Quick coupling To accept hose of either 50.8 mm Or 63.5 I.D.	Two Brass Quick coupling To accept hose of either 50.8 mm Or 63.5 I.D.

### Intended Use

The Teryair Pneumatic Hold cleaning gun kit is a continuous, compressed air driven product which is specially designed to give the strongest solid water jet. It can be easily operated by one man using the normal service mains available on most bulk carriers. It requires 5 to 6 kg / cm<sup>2</sup> air pressure (service air line) and can be simply connected to the normal water on deck. For Cleaning of Bulk Carrier, a strong stream of water can be projected for a distance of about 30 meters for the removal of any loose rust, flaking point or cargo residue. The full operation can be carried out by one man easily and safely, operating from standing position.

### Prohibitive use

Pneumatic Hold cleaning gun is prohibited to be used from purposes other than mentioned in intended use.

Following safety precautions should be taken

- Wear appropriate personal protective equipments.
- Do keep hands & clothing away from moving parts.

- Pneumatic Hold cleaning gun should be stored in dry environment.
- Do not allow the equipment to run unattended.
- Do not modify this equipment.
- Do not use petrol (gasoline) thinners or any other high flash point solvents to clean the equipment .
- Please check the hose connection prior to starting the hold cleaning gun.

## Safety Instructions

1. Wear personal protective equipment including safety goggles, footwear, ear muffs and gloves. If necessary wear face masks or breathing apparatus.
2. Be aware that this product can create flying particles.
3. Never aim hold cleaning gun at any person. This equipment produces a very powerful jet of water and can cause serious injury if misused.
4. Do not operate this Hold Cleaning gun kit

unless it is securely fixed to its tripod and situated on a flat surface.

5. Do not drag this tool by the water or air hose.
6. Any person other than well instructed personal should not operate this gun.
7. Any integral part of hold cleaning gun should not be removed for independent use or for other application.
8. Keep work area clean.
9. All persons around working area should be aware of dangerous and of their duties.
10. All live air hose should be in good condition.

## Air Supply

Ensure that a minimum 19 mm (3/4") bore air hose is used and that all couplings are secure, leak free and in good condition. HC 50 work best at 6 Kg. / Cm<sup>2</sup> pressure at its inlet. Also the compressor should be capable to supply continuous air flow of 100 cfm.

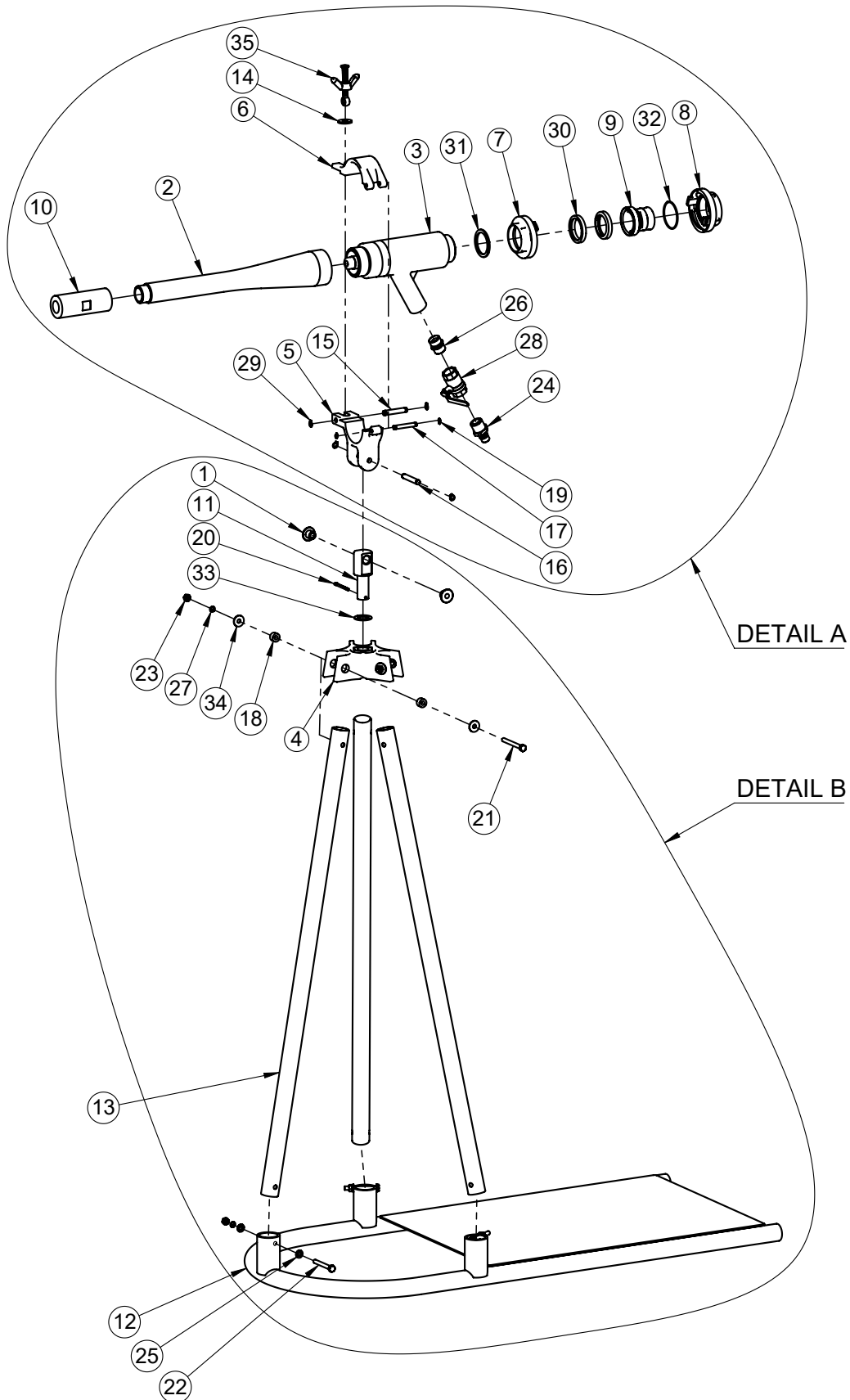
## Diassembly and Re-assembly for HC-50

- a. Shut off air supply and water supply allow residual Pressure to bleed off.
- b. Remove Hose from Hose connection (9) and Steel coupler (24)
- c. Loosen Dog bolt assembly (35) with Plain washer (14) from Top gun holder (6). Turn Dog bolt assembly (35) along Pin (15) and unlatch Top gun holder (6) to remove Gun assembly.
- d. Unscrew Coupling (7) from Housing (3) and remove Seal (31) and replace it with new ones. (If found damaged/worn-out)
- e. Unscrew Steel coupler (24) from Ball valve (28) & unscrew Ball valve (28) from Adaptor (24) and replace it with new ones. (If found damaged/worn-out)
- f. Remove both External circlips (29) from Pin (15) to remove Pin (15) and Dog bolt assembly (35) and replace it with new ones. (If found damaged/worn-out)
- g. Remove both External circlips (19) from Pin (17) to remove Pin (17) and Top gun holder (6) and replace it with new ones. (If found damaged/worn-out)
- h. Remove both External circlips (29) from Pin (16) to remove Pin (16) and Bottom gun holder (5) and replace it with new ones. (If found damaged/worn-out)
- i. Remove Split pin (20) from Pivot Pin (11) to remove pivot Pin (11) and Plain washer (33) from Support saddle (4) and replace it with new ones. (If found damaged/worn-out)
- j. Remove Sleeve (1) from Pivot Pin (11) and replace it with new one. If found damaged/worn-out)
- k. Now follow the above steps in reverse manner to reassemble the HC50.

## Bill of Materials for HC-50

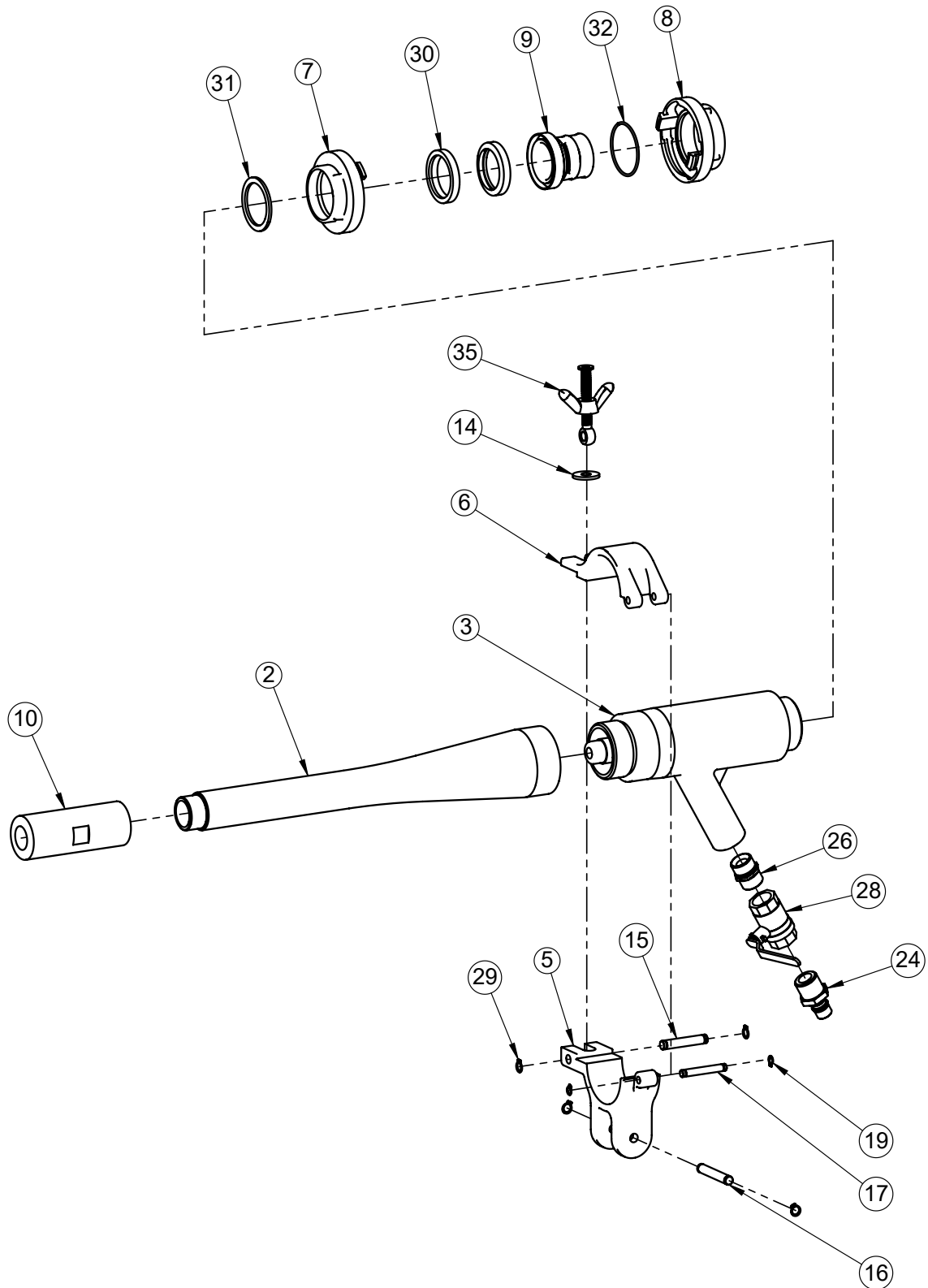
Illustration Number	Part Number	Description	HC-50
1	754 08 01	SLEEVE	2
2	754 10 01	GUN	1
3	754 10 02	HOUSING	1
4	754 10 03	SUPPORT SADDLE	1
5	754 10 04	BOTTOM GUN HOLDER	1
6	754 10 05	TOP GUN HOLDER	1
7	754 10 06	COUPLING (THREADED)	1
8	754 10 07	COUPLING	1
9	754 10 08	HOSE CONNECTION	1
10	754 20 01	FRONT NOSE FOR GUN	1
11	754 20 02	PIVOT PIN	1
12	754 20 03	PLATFORM	1
13	754 20 04	PIPE FOR TRIPOD	3
14	754 90 05	PLAIN WASHER	1
15	754 21 01	PIN FOR DOG BOLT	1
16	754 21 02	PIN FOR GUN HOLDER AND PIVOT	1
17	754 21 03	PIN FOR GUN HOLDER	1
18	754 36 01	SLEEVE FOR SADDLE SUPPORT	6
19	754 90 01	EXTERNAL CIRCLIP	2
20	754 90 02	SPLIT PIN	1
21	754 90 03	HEX BOLT	3
22	754 90 04	HEX BOLT	3
23	022 40 21	HEX. NUT	6
24	35.13.36	STEEL COUPLER	1
25	171 90 50	PLAIN WASHER	6
26	199 21 57	ADAPTOR	1
27	199 90 47	SPRING WASHER	6
28	199 90 50	BALL VALVE	1
29	612 51 34	EXTERNAL CIRCLIP	4
30	671 40 06	SEAL	2
31	671 40 12	FLAT SEAL	1
32	671 90 02	RETAINING RING	1
33	754 90 07	PLAIN WASHER 38X25X2THK MS WH ZNPL	1
34	754 90 06	PLAIN WASHER 25X8.5X2THK MS WH ZNPL	6
35	DB10080	DOG BOLT ASSLY.	1

### Exploded View for HC-50



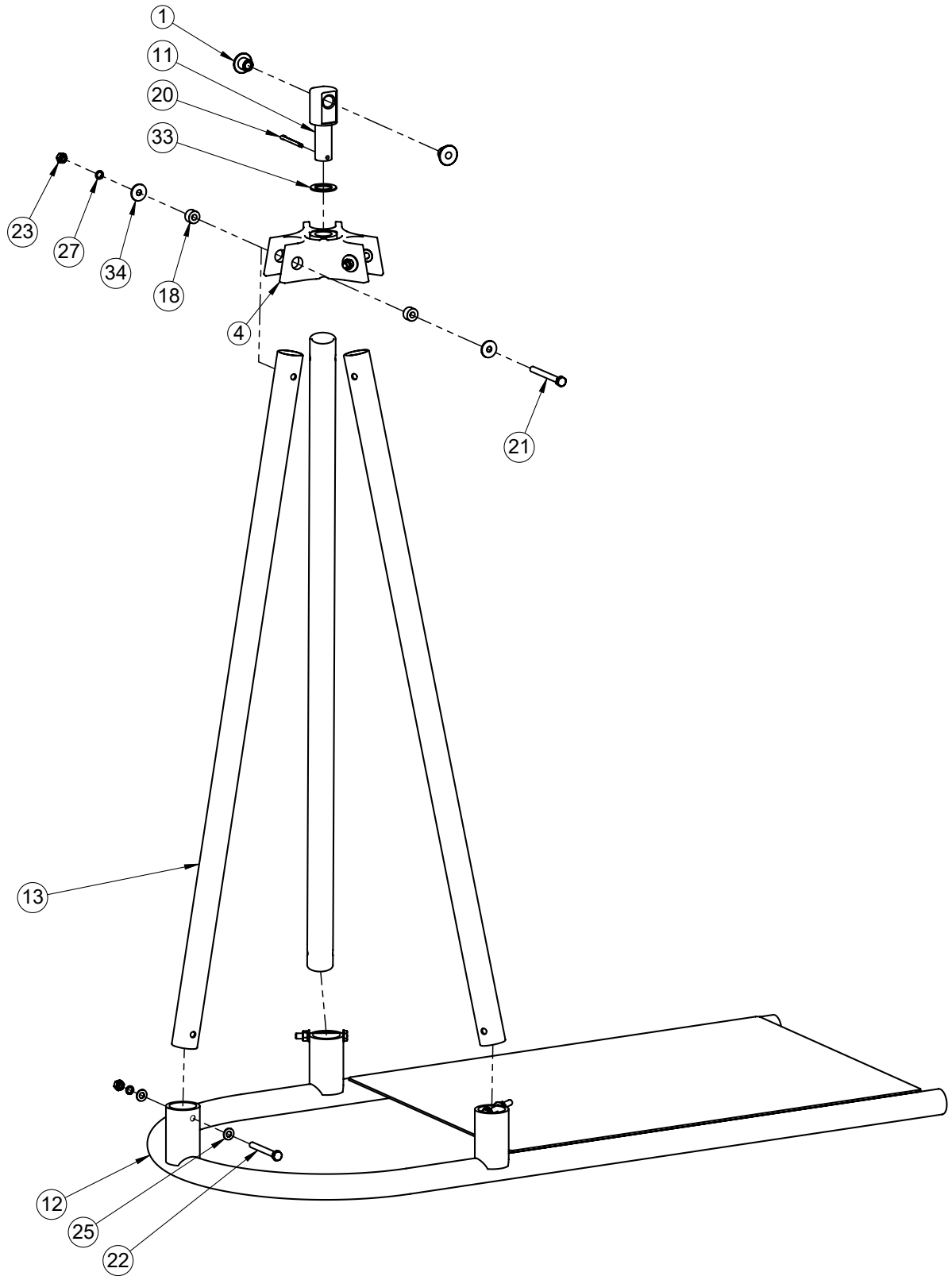
### Exploded View Detail-A for HC-50

#### DETAIL A



### Exploded View Detail-B for HC-50

#### DETAIL B





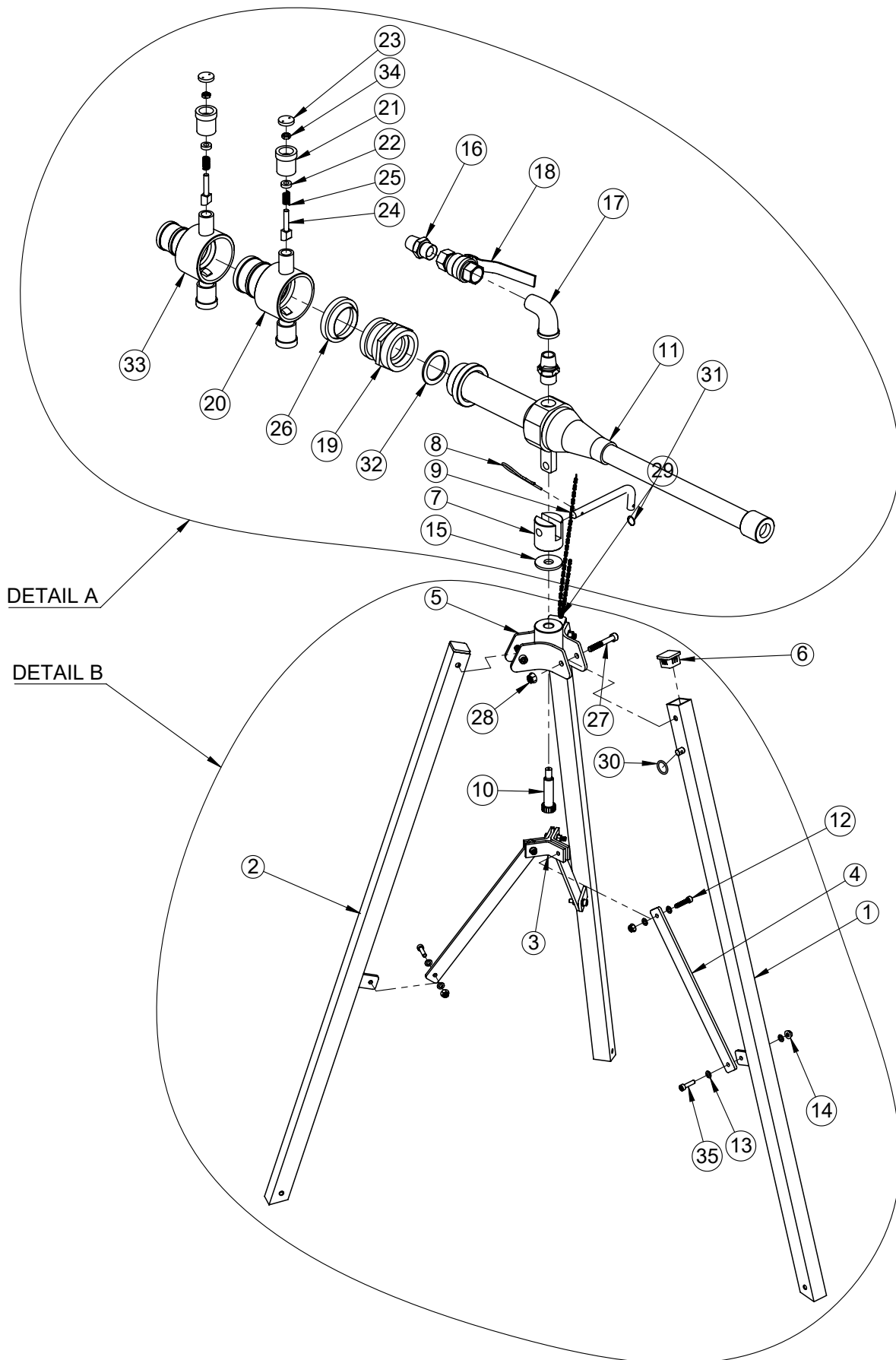
## Diassembly and Re-assembly for HC-63

- a. Shut off air supply and water supply allow residual Pressure to bleed off.
- b. Remove Hose from Water hose coupling (20)/(33) and Male adaptor (16)
- c. Pull both Bush (21) of both ends, in opposite direction to remove Water hose coupling (20)/ (33) from Water hose adaptor (19).
- d. Remove Seal (26) from Water hose coupling (20)/ (33) and replace it with new ones. (If found damaged/worn-out)
- e. Unscrew Water hose adaptor (19) from Gun assembly (11) and remove Sealing washer (32) to replace it with new ones. (If found damaged/worn-out)
- f. Unscrew Adaptor (16) from Ball valve (18) & unscrew Ball valve (18) from Elbow (17) and replace it with new ones. (If found damaged/worn-out)
- g. Unscrew Elbow (17) from Adaptor (16) & Adaptor (16) from Gun assembly (11) and replace it with new ones. (If found damaged/worn-out)
- h. Remove Bee pin (8) from locking pin (9) & remove Locking pin (9), Gun assembly (11) from Pivot holder (7) respectively and replace it with new ones. (If found damaged/worn-out)
- i. Unscrew Bolt (10) from Pivot holder (7) to remove Pivot holder (7) & Buffer washer (15) and replace it with new ones. (If found damaged/worn-out)
- j. Now follow the above steps in reverse manner to reassemble the HC63.

## Bill of Materials for HC-63

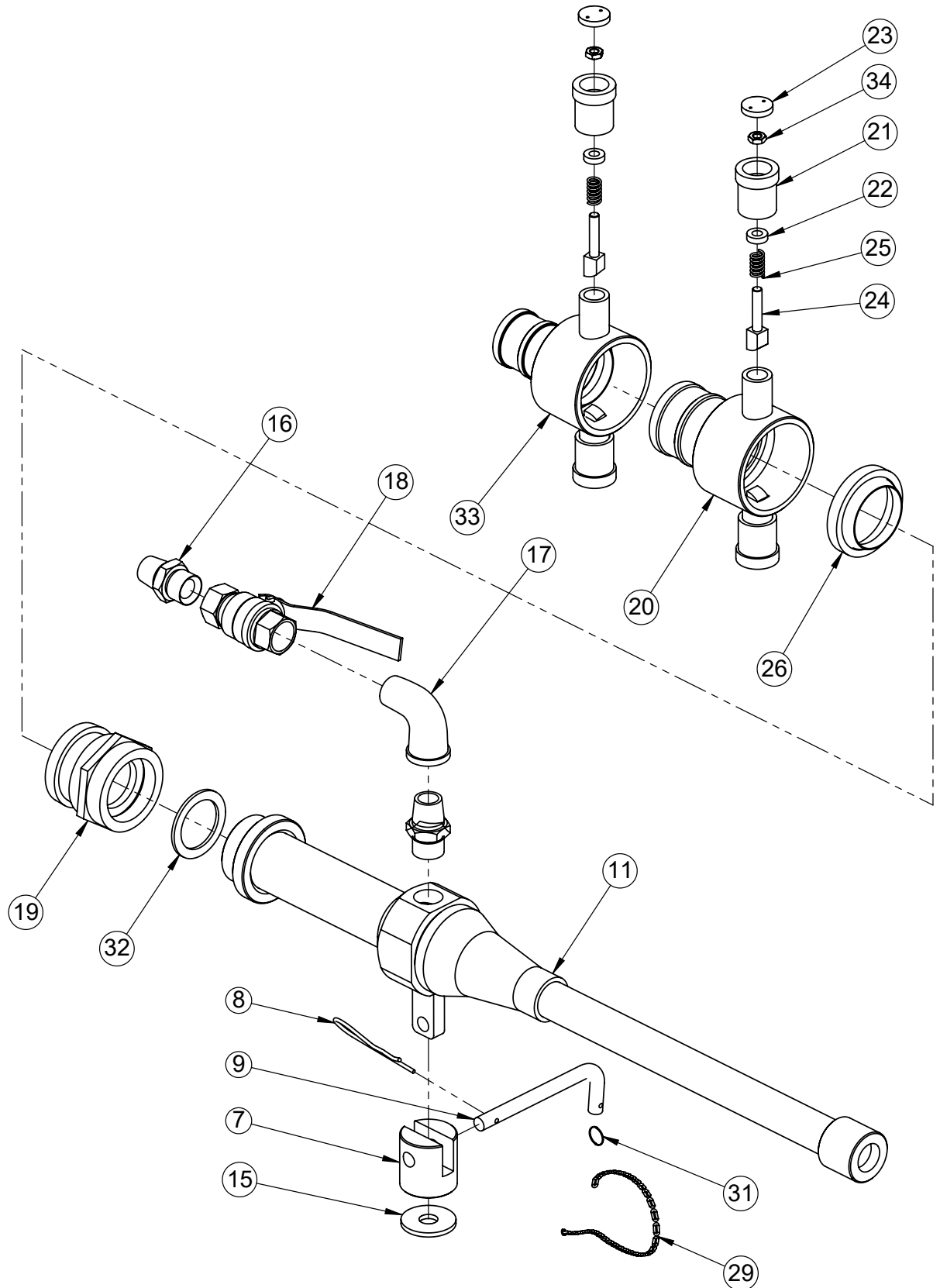
Illustration Number	Part Number	Description	HC-63
1	250 22 14-A	LEG WITH BUSH	1
2	250 22 14-B	LEG	2
3	250 30 18	BRACKET PLATE FOR STAND	3
4	250 30 29	LEG SUPP. FOR STAND	3
5	250 30 22-A	WING ASSEMBLY	3
6	250 40 31	PLASTIC PLUG	3
7	250 21 15	PIVOT HOLDER	1
8	250 50 36	BEE PIN	1
9	250 32 11	LOCKING PIN	1
10	250 21 16	BOLT FOR PIVOT HOLDER	1
11	342.HY35	GUN ASSEMBLY	1
12	552 90 36	ALLEN BOLT	3
13	298 00 90	PLAIN WASHER	12
14	298 00 75	NYLON NUT	6
15	250 39 12	BUFFER WASHER	1
16	826.5004	THREADED MALE ADAPTOR	2
17	250 90 33	ELBOW	1
18	828.1000	BALL VALVE	1
19	250 10 02	WATER HOSE ADAPTOR	1
20	250 04 28	WATER HOSE COUPLING	1
21	250 04 27	BUSH	4
22	250 04 25	LOCKING SCREW	4
23	250 04 26	LOCKING SCREW	4
24	250 04 24	LOCATING PIN	4
25	250 04 09	SPRING	4
26	250 40 20	SEAL	2
27	250 90 38	ALLEN BOLT	3
28	126 50 30	NYLON NUT	3
29	250 90 21	CHAIN	1
30	250 50 34	RING	1
31	250 50 35	KEY CHAIN RING	1
32	250 40 10	SEALING WASHER	1
33	250 04 23	WATER HOSE COUPLING	1
34	250 04 30	HEX NUT	4
35	150 40 26	ALLEN BOLT	3

### Exploded View for HC-63



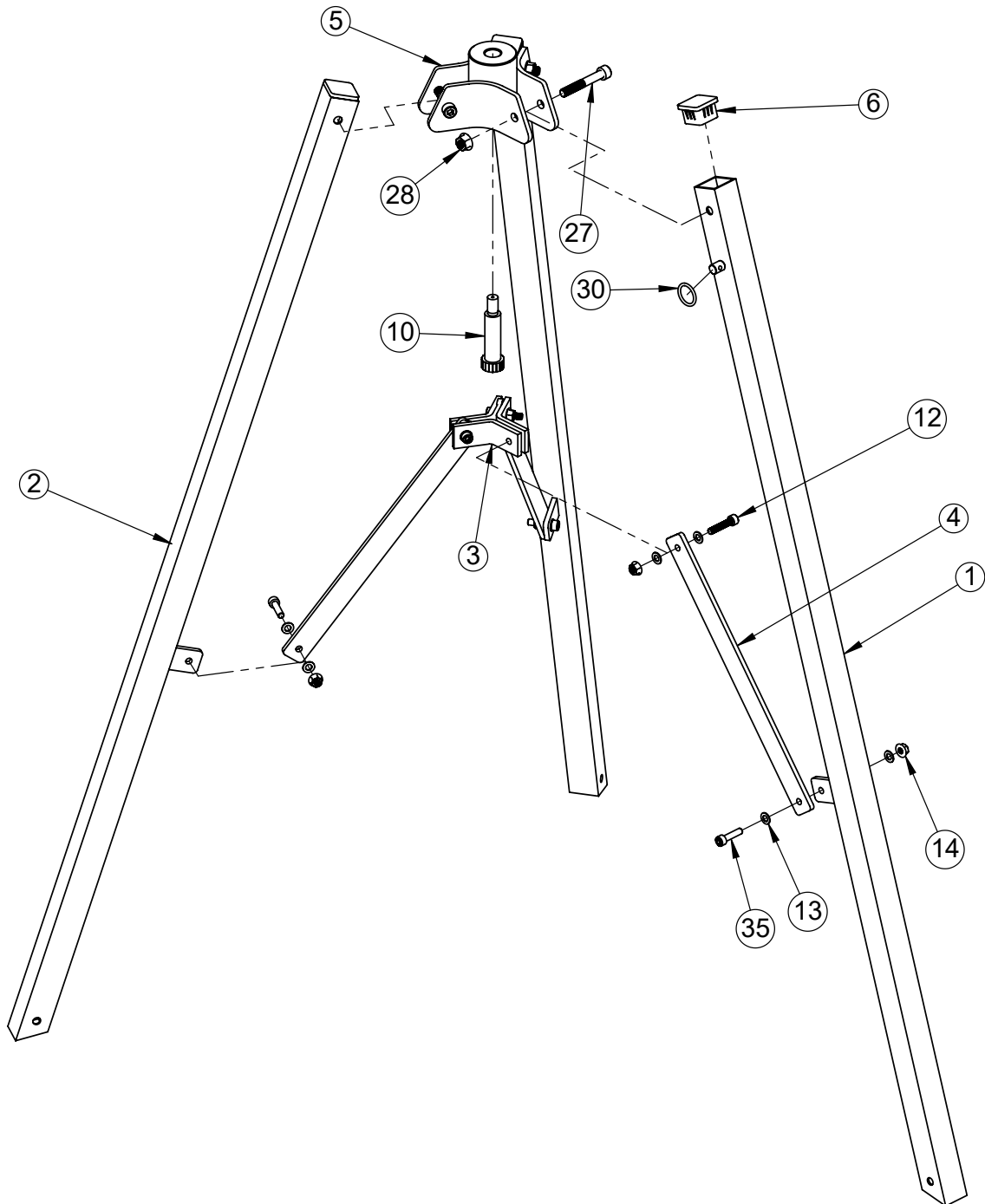
### Exploded View Detail-A for HC-63

#### DETAIL A



## Exploded View Detail-B for HC-63

### DETAIL B



## 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](http://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](http://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)



This page is intentionally  
Left blank.