SERVICE INSTRUCTIONS

X01 PRO

RELEASE 2.2017

VERSION: 1.1 | NOVEMBER, 2022

HYDPRO
SCUBA DIVING
AIR MANAGEMENT DEVICES

THIS MANUAL DESCRIBES
ALL COMMON MAINTENANCE TASKS
FOR THE HYDPRO POWER

XOI PRO

RELEASE 2.2017

SUGGESTED DEVICE SERVICE FREQUENCY ON A YEARLY PERIOD

IN CASE OF INTENSE USE (MORE THAN 100 DIVES PER YEAR)
INSPECT THE DEVICE EVERY 6 MONTHS AND SERVICE EVERY 100 DIVES

THE MANUAL IS INTENDED FOR USE BY QUALIFIED SERVICE TECHNICIANS
SPECIFICALLY TRAINED BY HYDPRO ON DEVICES REPAIR AND MAINTENANCE OPERATIONS

GENERAL INDICATIONS

PLEASE BEFORE PROCEEDING, READ THIS MANUAL CAREFULLY,
IN ORDER TO FAMILIARIZE YOURSELF WITH ALL NECESSARY TOOLS AND TECHNIQUES

USE THIS MANUAL AS A GUIDE DURING THE VARIOUS STAGES
OF MAINTENANCE AND / OR REPAIR OF THE DEVICE, IN ORDER NOT TO OMIT ANY SEQUENCE,
PAYING PARTICULAR ATTENTION TO ALL SUGGESTIONS AND INDICATIONS

MAINTENANCE MUST INCLUDE THE REPLACEMENT OF ALL O-RINGS

ANY METAL PARTS SHOULD BE WASHED WITH HOT SOAPY WATER AND RINSED IN FRESH WATER

IN CASE OF RESIDUAL ENCRUSTATIONS OR LIMESCALE DEPOSITS
PROCEED WITH ULTRASONIC CLEANING OR WITH A SOLUTION OF VINEGAR AND WATER
ALWAYS FOLLOWED BY A LONG AND METICULOUS RINSE IN RUNNING WATER

THE NEW O-RINGS MUST BE LUBRICATED WITH A THIN FILM OF HYDPRO LUBE

RECOMMENDED THREADLOCKER TYPE LOCTITE 222 - LOW STRENGHT

TIGHTEN ALL PARTS ACCORDING TO THE VALUES GIVEN IN THE TIGHTENING TORQUE TABLE (PAGE 2)

USE ONLY ORIGINAL HYDPRO SPARE PARTS
AND ORIGINAL DEDICATED HYDPRO SERVICE KIT TOOLS

PROTECTIVE EYEWEAR MUST BE WORN AT ALL TIMES DURING TESTING

SERVICE INSTRUCTIONS

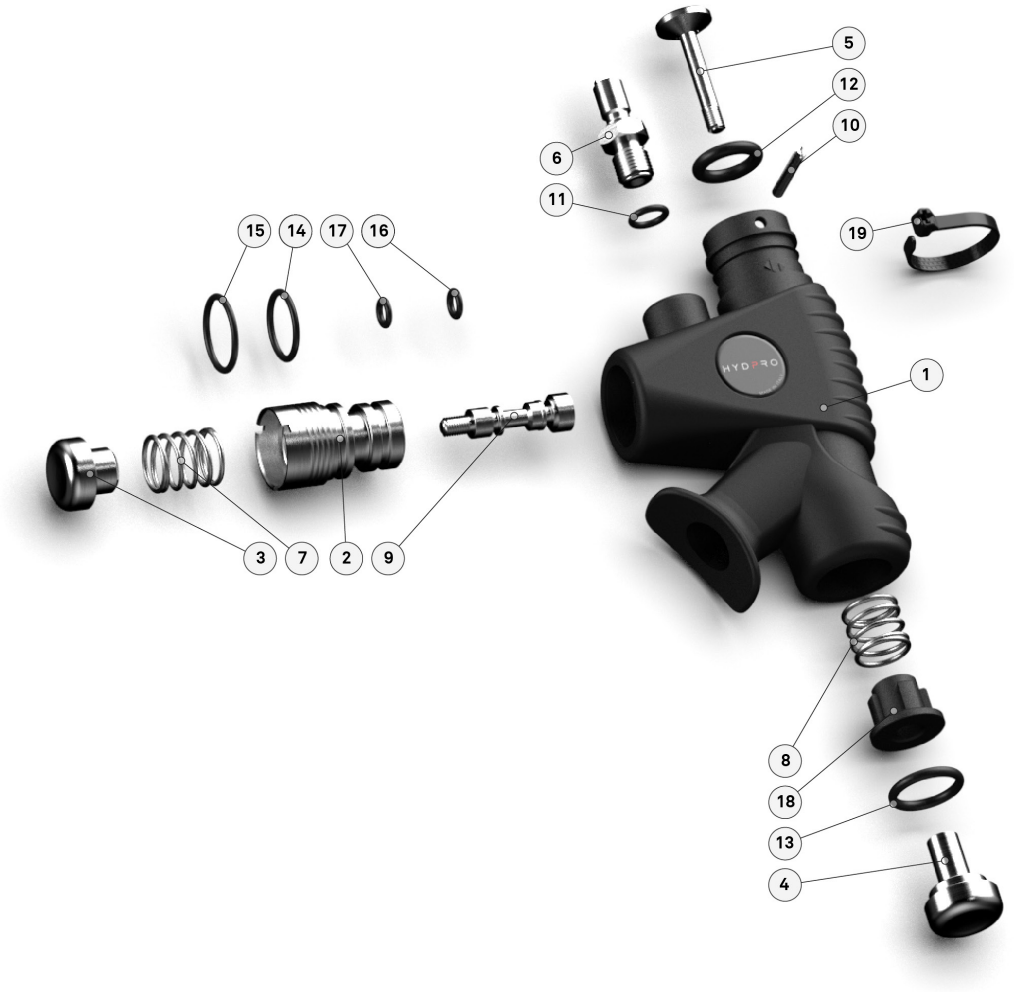
XOI PRO

RELEASE 2.2017

TABLE OF CONTENTS

X01 PRO
RELEASE 2.2017

Rif	Code	Description	Notes
1	F173	Power Body X01 Pro	
2	G084	Load Bushing X01	
3	G138	Load Button X01	
4	G095	Exhaust Button X01	
5	G081	Exhaust Mushroom X01	
6	G046	QDC	
7	E085	Load Spring X01	
8	E082	Exhaust Spring X01	
9	G008	Load Piston X01	
10	G009	Pin NX	
11	E017	Or 106	
12	E053	OR 13X3 EP851	
13	E088	Or 119	
14	E091	Or 2056	
15	E090	Or 2062	
16	E111	Or R3 90 SHA	
17	E105	Or R3 80 SHA	
18	F218	Exhaust Bushing X01K	
19	E033	Zip Tie	



SPECIAL TOOLS INCLUDED IN THE X01 SERVICE KIT

NON/ROUNDED HEX KEY (5 MM)

X01 MULTITOOL SERIES

SEMI ROUND NOSE PLIERS

LOCKING PIN

X01 INSERTION CONE

SPACER

HYDPRO LUBRICANT

STANDARD TOOLS (NOT INCLUDED)

SMALL SIZE FLATHEAD SCREWDRIVER

REPLACEMENT COMPONENTS

N.17
R3
80 SHA

N.16
R3
90 SHA
RED OR GREEN

N.11
OR
106

N.14
OR 2056

N.15
OR 2062

N.12
OR
13 X 3 EP851

N.13
OR 119

N.19
ZIP TIE

TIGHTENING TORQUE TABLE

PART	TIGHTENING VALUE
QDC	1000 MN.M / 0.74 LBF-FT
EXHAUST BUTTON	700 MN.M / 0.52 LBF-FT
INLET BUTTON	700 MN.M / 0.52 LBF-FT
INLET CARTRIDGE	1500 MN.M / 1,11 LBF-FT

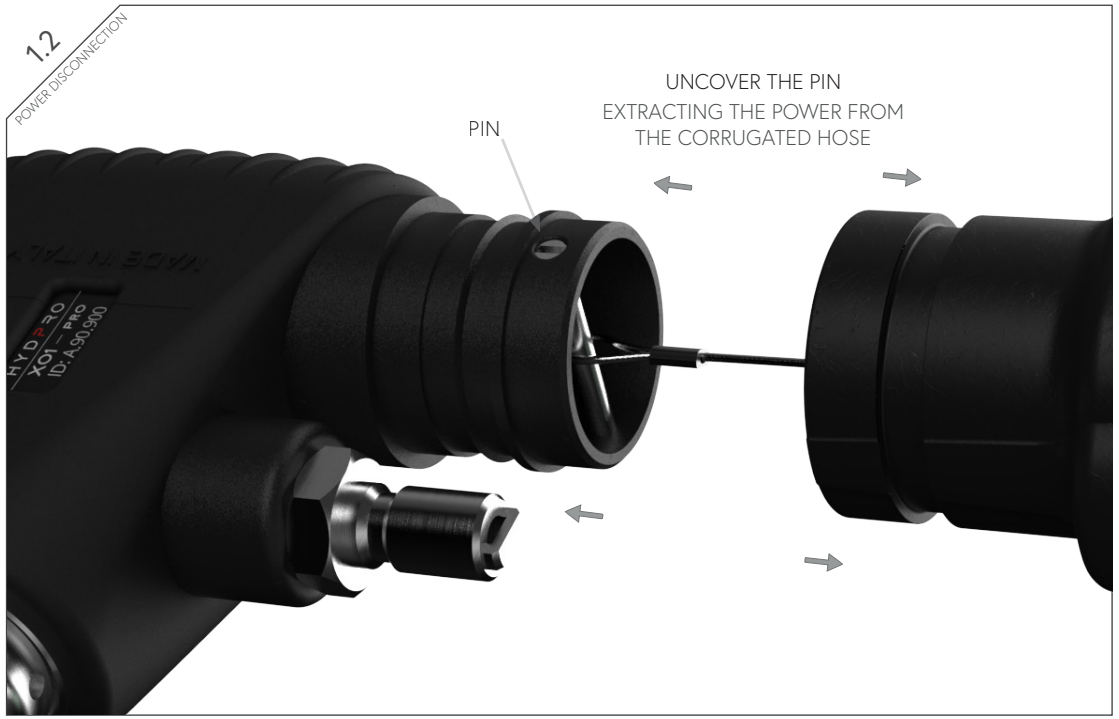
1 -POWER DISCONNECTION

1.1
POWER DISCONNECTION

CUT THE HEAD OF THE ZIP TIE

USING THE SHARP SECTION OF THE SEMI-ROUND NOSE PLIERS AND TAKING CARE NOT TO DAMAGE THE HOSE

1.2
POWER DISCONNECTION



UNCOVER THE PIN

EXTRACTING THE POWER FROM THE CORRUGATED HOSE

1.3
POWER DISCONNECTION

UNSCREW THE PIN

USING A FLATHEAD SCREWDRIVER

1.4
POWER DISCONNECTION

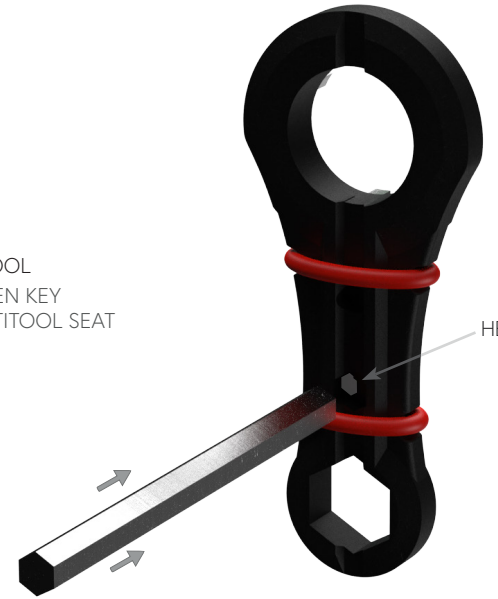
RELEASE THE INNER CORD

BY FULLY EXTRACTING THE PIN FROM ITS SEAT

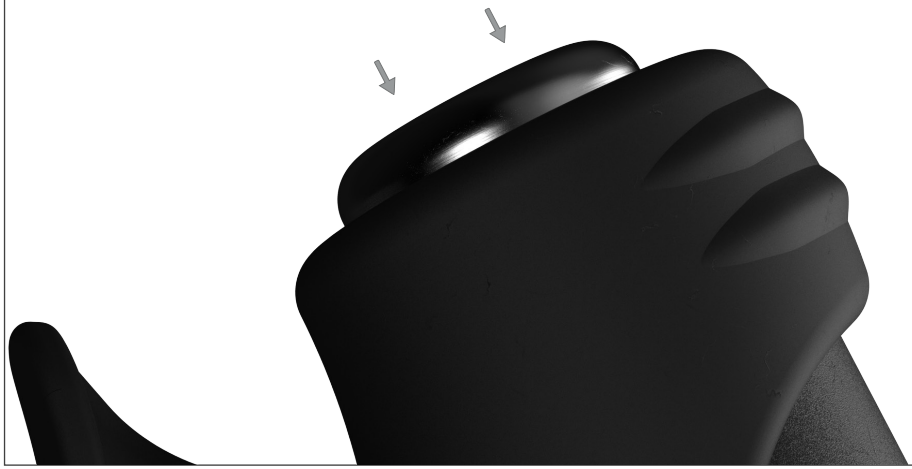
2-EXHAUST SYSTEM SERVICE

EXHAUST SYSTEM DISASSEMBLY

SET THE MULTITOOL
PLUGGING THE ALLEN KEY
IN THE HEXAGONAL MULTITOOL SEAT



PUSH THE BUTTON
AND KEEP IT FIRMLY TO THE BOTTOM
DURING SCREWING OPEARTION

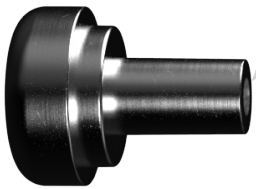


UNSCREW THE MUSHROOM
USING THE PREVIOUSLY SET MULTITOOL,

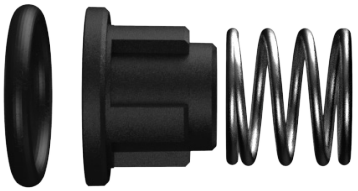
EXHAUST SYSTEM SERVICE

MAKE SURE TO EXTRACT ALL THE PARTS
AND CLEAN O-RING AND BUTTON HEAD
SEATS FROM ANY RESIDUAL DIRT

APPLY A SMALL DAB
OF THREADLOCKER
TO THE BUTTON THREAD

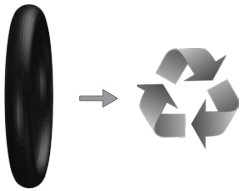


LUBRICATE AND REPLACE
THE BUTTON HEAD O-RING

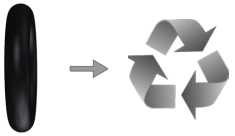


N.13
OR 119

DISMISS THE USED O-RING



DISMISS THE USED O-RING



LUBRICATE THE REPLACEMENT O-RING
AND PLACE IT IBACK N THE POWER
BODY SEAT AS SHOWN BELOW

N.12
OR
13 X 3 EP851

RE INSERT THE
THE BUTTON HEAD GROUP
IN POSITION

EXHAUST SYSTEM RE-ASSEMBLY

SCREW BACK THE MUSHROOM
KEEPING THE BUTTON HEAD FULLY PRESSED

3 - INLET SYSTEM SERVICE

3.1 INLET SYSTEM SERVICE

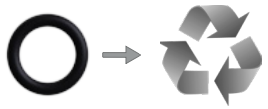
QDC SERVICE

UNSCREW THE Q.D.C.
USING THE SPECIFIC SECTION
OF THE MULTITOOL

3.2 INLET SYSTEM SERVICE

REPLACE THE O-RING
AND LUBRICATE WITH HYDPRO LUBE

DISMISS THE USED O-RING



N.11
OR
106

3.3 INLET SYSTEM SERVICE

SCREW BACK IN THE Q.D.C.
USING THE SPECIFIC SECTION
OF THE MULTITOOL

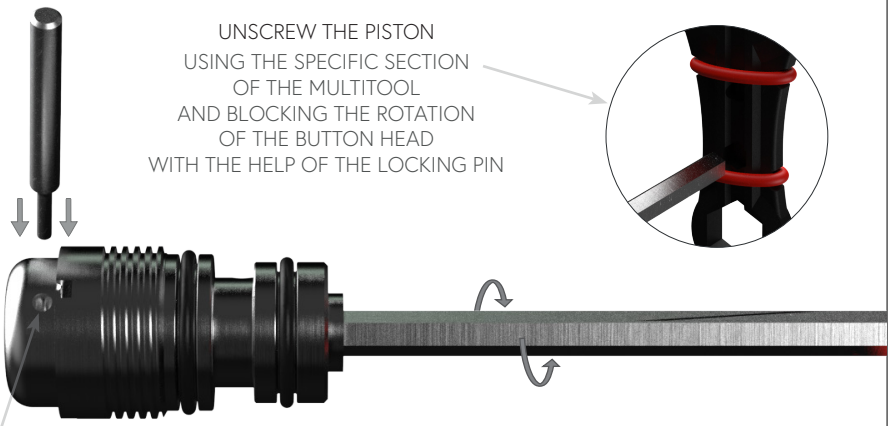
3.4 INLET SYSTEM SERVICE

CARTRIDGE DISASSEMBLY

COUPLE THE SPECIFIC SECTION
OF THE MULTITOOL
WITH THE SECTORS OF THE CARTRIDGE

AND EXTRACT THE CARTRIDGE
BY UNSCREWING IT

UNSCREW THE PISTON
USING THE SPECIFIC SECTION
OF THE MULTITOOL
AND BLOCKING THE ROTATION
OF THE BUTTON HEAD
WITH THE HELP OF THE LOCKING PIN

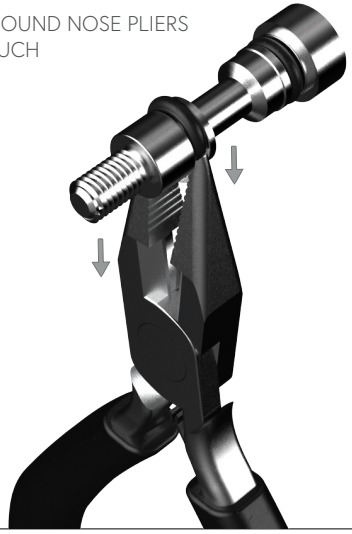


LOCKING
HOLE

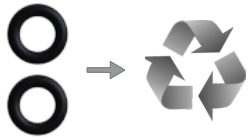
AND DISASSEMBLE THE CARTRIDGE

INLET PISTON SERVICE

RIP OFF BOTH PISTON O-RINGS
USING THE TIPS OF THE SEMI-ROUND NOSE PLIERS
AND TAKING CARE NOT TO TOUCH
AND DAMAGE THE SEATS

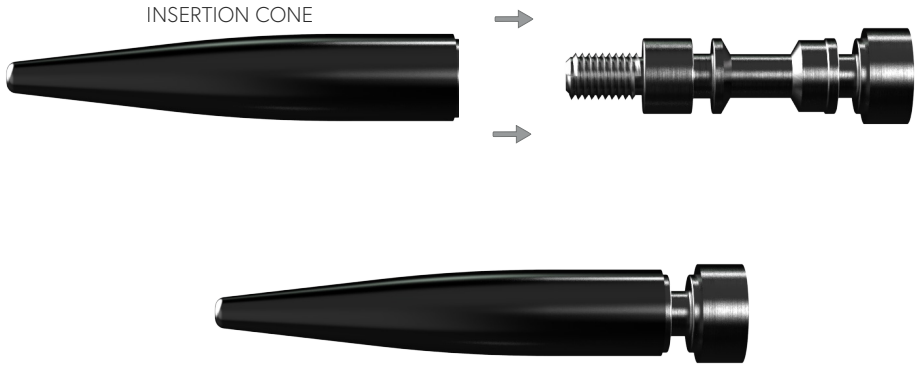


DISMISS THE USED O-RINGS



REMOVE ANY RESIDUAL DIRT / LIMESCALE DEPOSIT
SOAKING AND BRUSHING
IN A SOLUTION OF VINEGAR AND WATER
BEFORE PROCEEDING WITH O-RING REPLACEMENT

PLUG THE INSERTION CONE
ON THE PISTON TO FACILITATE THE INSERTION OF
THE FIRST REPLACEMENT O-RING

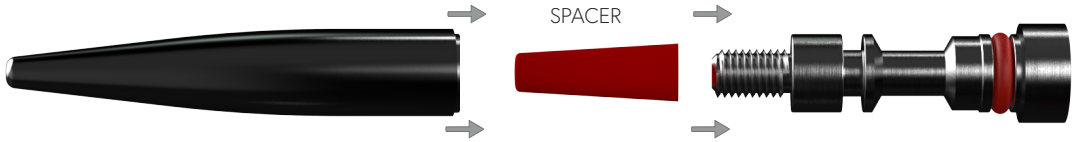


AND INSTALL N.16 - OR R3 90 ShA
IN THE LOWER SEAT OF THE PISTON

N.16
R3
90 ShA
RED OR GREEN

WARNING - PAY ATTENTION NOT TO INVERT THE POSITION OF 80 SHA AND 90 SHA VERSION (COLORED)

ADD THE SPACER
AND RE-INSERT THE CONE ON THE PISTON
TO FACILITATE THE INSERTION OF THE SECOND
REPLACEMENT O-RING



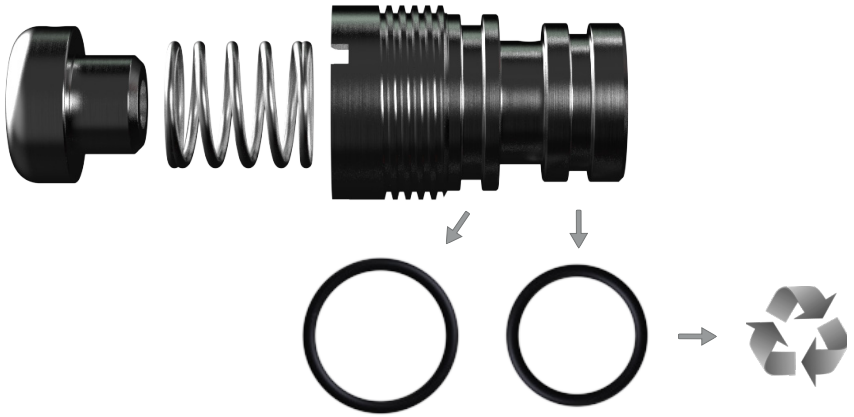
... NOW INSTALL N.17 - OR R3 80 ShA
IN THE UPPER SEAT OF THE PISTON

N.17
R3
80 ShA

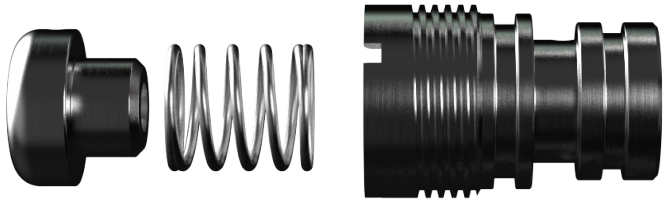
WARNING - PAY ATTENTION NOT TO INVERT THE POSITION OF 80 SHA AND 90 SHA VERSION (COLORED)

BUSHING SERVICE

DISMISS BUSHING O-RINGS



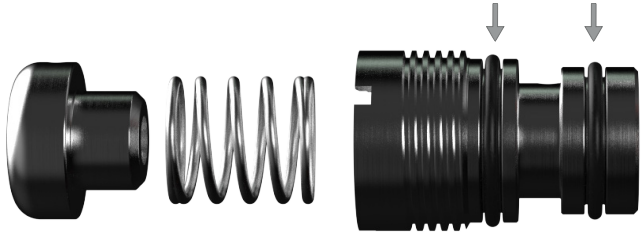
REMOVE ANY RESIDUAL DIRT / LIMESCALE DEPOSIT
SOAKING AND BRUSHING
IN A SOLUTION OF VINEGAR AND WATER
BEFORE PROCEEDING WITH O-RING REPLACEMENT



REPLACE
AND LUBRICATE THE O-RINGS

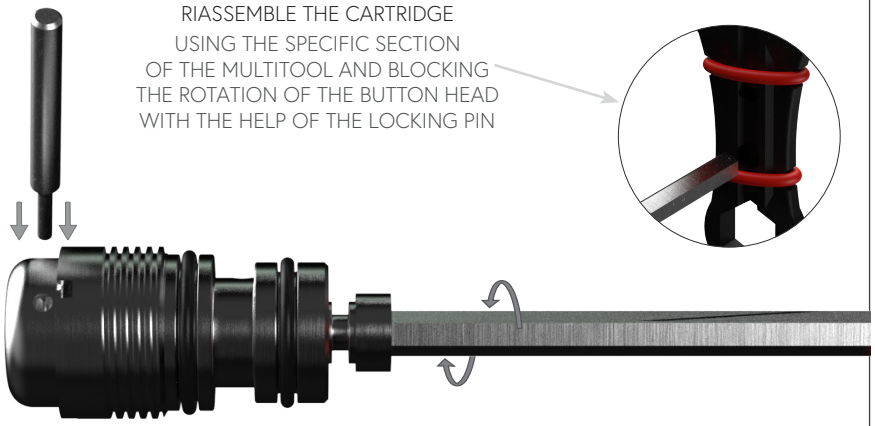
N.15
OR 2062

N.14
OR 2056



INLET SYSTEM RE-ASSEMBLY

RIASSEMBLE THE CARTRIDGE
USING THE SPECIFIC SECTION
OF THE MULTITOOL AND BLOCKING
THE ROTATION OF THE BUTTON HEAD
WITH THE HELP OF THE LOCKING PIN



CLEAN THE UNIT SEAT
FROM ANY RESIDUAL DIRT
AND LUBRICATE
THE O-RING CONTACT
SURFACES

SCREW BACK THE CARTRIDGE

TROUBLESHOOTING

Q.D.C. LEAKS / AIR BLOW

- VERIFY Q.D.C. CORRECT POSITIONING (AIR BLOW)
- CHECK THE GOOD CONDITIONS OF O-RING N. 11 (LEAKS)

TROUBLESHOOTING

INLET BUTTON LEAKS

- VERIFY ABSENCE OF DIRT RESIDUES
- CHECK THE GOOD CONDITIONS OF O-RING N. 15 AND 17

TROUBLESHOOTING

LEAKS FROM CORRUGATED FITTING

- VERIFY ABSENCE OF DIRT RESIDUES
- CHECK THE GOOD CONDITIONS OF O-RING N. 14 AND 16

CONNECT TO AN AIR SUPPLY

MIN. 5 MINUTES AT 10 BAR / 150 PSI

SUBMERGE THE UNIT
AND VERIFY THE TOTAL ABSENCE OF AIR LEAKS
WITH THE SYSTEM NOT IN USE
AND DURING NORMAL OPERATIONS
BEFORE PROCEEDING

FOR A MORE COMPREHENSIVE TROUBLESHOOTING GUIDE
CONSULT THE DEDICATED SECTION (PAGE 18)

5 -POWER RECONNECTION

5.1
POWER RECONNECTION

CONNECT THE INNER CORD

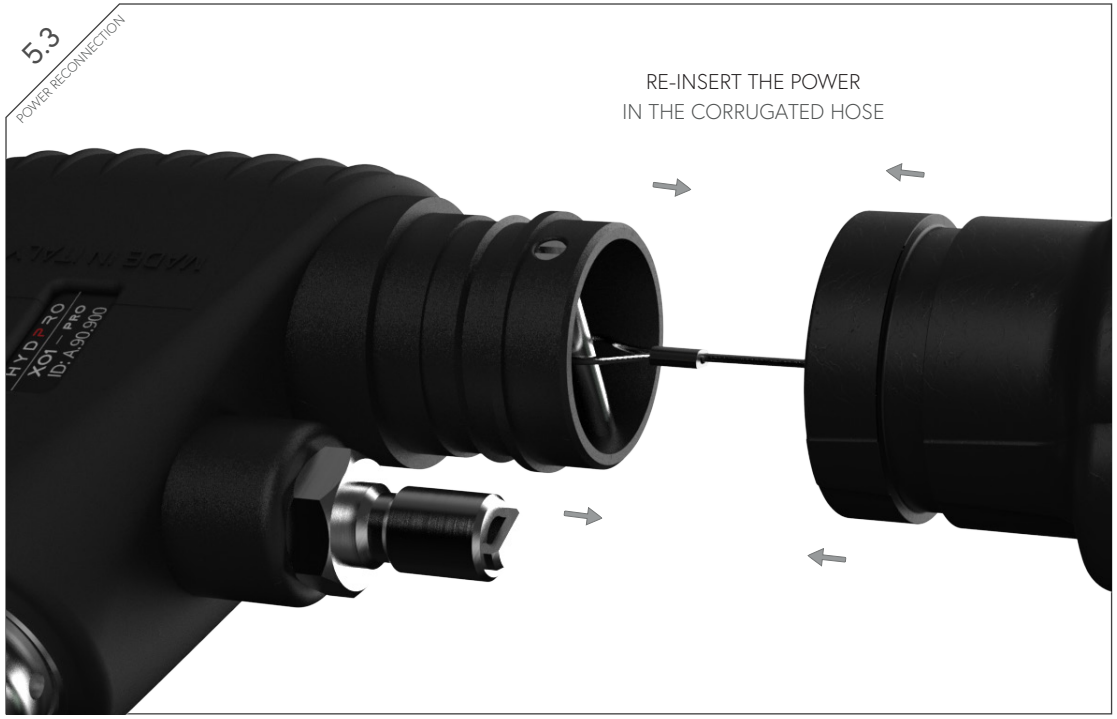
INSERTING THE PIN IN ITS SEAT AND
THROUGH THE INNER CORD EYELET

5.2
POWER RECONNECTION

AND SCREW BACK THE PIN

USING A FLATHEAD SCREWDRIVER
FOR CORRECT POSITIONING,
THE HEAD OF THE PIN
MUST NOT BE SUBMISSIVE
OR PROTRUDE.

5.3
POWER RECONNECTION



RE-INSERT THE POWER

IN THE CORRUGATED HOSE

5.4
POWER RECONNECTION

ZIP TIE
HEAD

FASTEN WITH N. 19 ZIP TIE

POSITIONING THE HEAD ON THE Q.D.C. SIDE
EQUALLY AT ABOUT 45° FROM THE BACK OF THE
UNIT AND THE Q.D.C.
AND CUT OFF THE EXCESS BAND

REINSTALL THE UNIT ON THE BC

INFLATE UP TO THE BC'S OVERPRESSURE VALUE

SUBMERGE THE UNIT AND VERIFY THE TOTAL ABSENCE OF AIR LEAKS WITH THE SYSTEM NOT IN USE AND DURING NORMAL OPERATIONS

LEAVE THE BC COMPLETELY INFLATED OVERNIGHT AND VERIFY THE ABSENCE OF PRESSURE DROPS

For a more comprehensive Troubleshooting guide consult the dedicated section (Page 18)

TROUBLESHOOTING

LEAKS FROM CORRUGATED CONNECTION

- VERIFY ABSENCE OF DIRT RESIDUES
- CHECK THE TIGHTENING OF N. 19 ZIP TIE

TROUBLESHOOTING

MOUTHPIECE LEAKS

- VERIFY ABSENCE OF DIRT RESIDUES ON THE EXHAUST O-RING SEAT
- CHECK THE GOOD CONDITIONS OF O-RING N. 12

TROUBLESHOOTING

LEAKS FROM EXHAUST BUTTON

- VERIFY ABSENCE OF DIRT RESIDUES
- CHECK THE GOOD CONDITIONS OF O-RING N. 12

SYMPTOM	POSSIBLE CAUSE		CORRECTIVE ACTION
1 - INLET SYSTEM LEAKS (BUTTON NOT ACTIVATED)	1.1	Sand / salt deposits or debris present within the Inlet system	Disassemble and thoroughly clean Inlet system seats and components before re-assembly
	1.2	O-Rings (N. 16 & 17) damaged / worn or not fitted	Replace O-Rings (N. 16 & 17)
	1.3	O-Rings (N. 14 & 15) damaged / worn or not fitted	Replace O-Rings (N. 14 & 15)
	1.4	Damaged button O-ring seats	Replace Load Piston (N.9)
	1.5	Load Bushing (N. 2) has not been tightened properly	Re-tighten the Load Busging (N. 2)
	1.6	Load Piston (N. 9) has not been tightened properly	Re-tighten the Load piston (N. 9)
	1.7	Damaged Load bushing O-ring seats / sealing surfaces	Replace Load Bushing (N.2)
	1.8	Load Spring (N. 7) damaged or not fitted	Replace Load Spring (N. 7)
	1.9	Bushing seat sealing surface damaged	Replace the Power Body (N.1)
2 - INLET SYSTEM DOES NOT OPERATE CORRECTLY LEAKS / UNEVEN SLIDING FLOW ANOMALIES	2.1	Sand / salt deposits or debris present within the Inlet system	Disassemble and thoroughly clean Inlet system seats and components before re-assembly
	2.2	O-Rings (N. 16 & 17) damaged / worn or not fitted	Replace O-Rings (N. 16 & 17)
	2.3	O-Rings (N. 16 & 17) incorrectly installed / inverted	Check the correct positioning of O-rings (N. 16 & 17)
3 - QDC LEAKS / AIR BLOW	3.1	O-Ring (N. 11) damaged / worn or not fitted	Replace O-Ring (N. 11)
	3.2	The QDC (N. 6) has not been tightened / installed properly	Check the correct positioning and re-tighten the QDC (N. 6)
4 - RESTRICTED AIR FLOW	4.1	Sand / salt deposits or debris present within the Inlet system	Disassemble and thoroughly clean Inlet system seats and components before re-assembly
	4.2	The supply pressure is too low	Set the inlet pressure to 9.5 ±0.5 bar.
	4.3	Lp Hose not compatible / damaged or worn	Replace LP Hose
	4.4	QDC (N. 6) damaged / worn	Replace the QDC (N. 6)
5 - EXHAUST SYSTEM DOES NOT OPERATE CORRECTLY LEAKS / UNEVEN SLIDING FLOW ANOMALIES	5.1	Sand / salt deposits or debris present within the Exhaust system	Disassemble and thoroughly clean Exhaust system seats and components before re-assembly.
	5.2	O-Ring (N. 12) damaged / worn or not fitted	Replace O-Ring (N.12)
	5.3	Exhaust Spring (N. 8) damaged or not fitted	Replace Exhaust Spring (N. 8)
	5.1	O-Ring (N. 13) damaged / worn or not fitted	Replace O-Ring (N.13)
	5.2	Exhaust Bushing (N. 18) damaged or not fitted	Replace Exhaust Bushing (N.18)
7 - LEAKS FROM MOUTHPIECE	6.1	Sand / salt deposits or debris present within the Exhaust system	Disassemble and thoroughly clean Exhaust system seats and components before re-assembly.
	6.2	O-Ring (N. 12) damaged / worn or not fitted	Replace O-Ring (N.12)
	6.3	Exhaust Spring (N. 8) damaged or not fitted	Replace Exhaust Spring (N. 8)
8 - LEAKS FROM CORRUGATED HOSE CONNECTION	7.1	Sand / salt deposits or debris present within the connection	Detach the unit from the corrugated and thoroughly clean the connection fitting before re-assembly
	7.2	Zip Tie (N. 19) has not been tightened / installed properly	Check the correct positioning and re-tighten Zip Tie (N. 19)
	7.3	Corrugated Hose sealing surface damaged	Replace the Corrugated Hose
	7.4	Power body sealing surface damaged	Replace the Power Body (N.1)

WARNING!

THIS MANUAL IS INTENDED FOR USE BY QUALIFIED SERVICE TECHNICIANS
SPECIFICALLY TRAINED BY HYDPRO ON DEVICES REPAIR AND MAINTENANCE OPERATIONS

AVOID CARRYING OUT MAINTENANCE OR REPAIRS TO HYDPRO DEVICES WITHOUT PROPER PREPARATION

NO LIABILITY IS ACCEPTED FOR ANY MAINTENANCE AND / OR REPAIRS
CARRIED OUT BY UNAUTHORIZED PERSONNEL

POWER INFLATOR SERVICE DOES NOT REPLACE DAILY MAINTENANCE

IMPROPER SERVICE COULD AFFECT THE PERFORMANCE AND THE GOOD FUNCTIONALITY OF THE PRODUCT
CAUSING A FAILURE OF BUOYANCY CONTROL WITH SERIOUS AND LIFE-THREATENING CONSEQUENCES

THIS DOCUMENT IS IN NO WAY A USER MANUAL

HYDPRO

WWW.HYDPRO.COM