

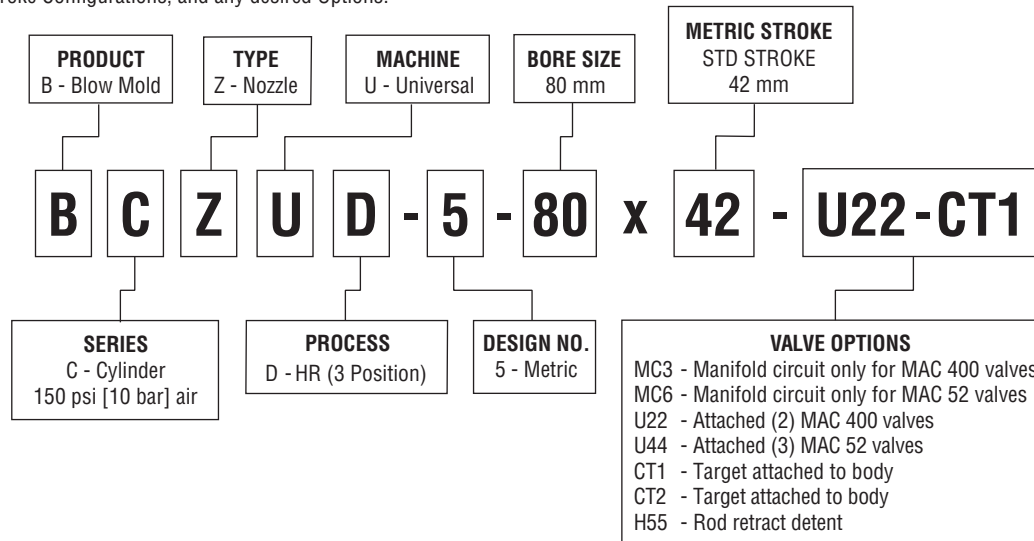
# phd<sup>®</sup> START-UP & INFORMATION SHEET: SERIES BCZUD UNIVERSAL HR NOZZLE CYLINDER

## IMPORTANT INFORMATION DO NOT DISCARD!

Use this information sheet to assist with cylinder installation and setup.  
File with maintenance or machine documentation.

### TO ORDER, SPECIFY:

Product, Series, Type, Machine No., Process, Design No., Bore Size, Stroke Configurations, and any desired Options.



### LIFE EXPECTANCY

Series BCZU Cylinders have been designed for 20 million trouble-free cycles.

### CYCLE RATE

Series BCZU Nozzle Cylinders meet or exceed cycle rate of competitor's unit when using optional manifold/valve combinations.

### MAINTENANCE

As with most PHD products, these cylinders are field repairable. Repair kits, tooling kits, and all components are available as needed for extended service. Rebuild service is available.

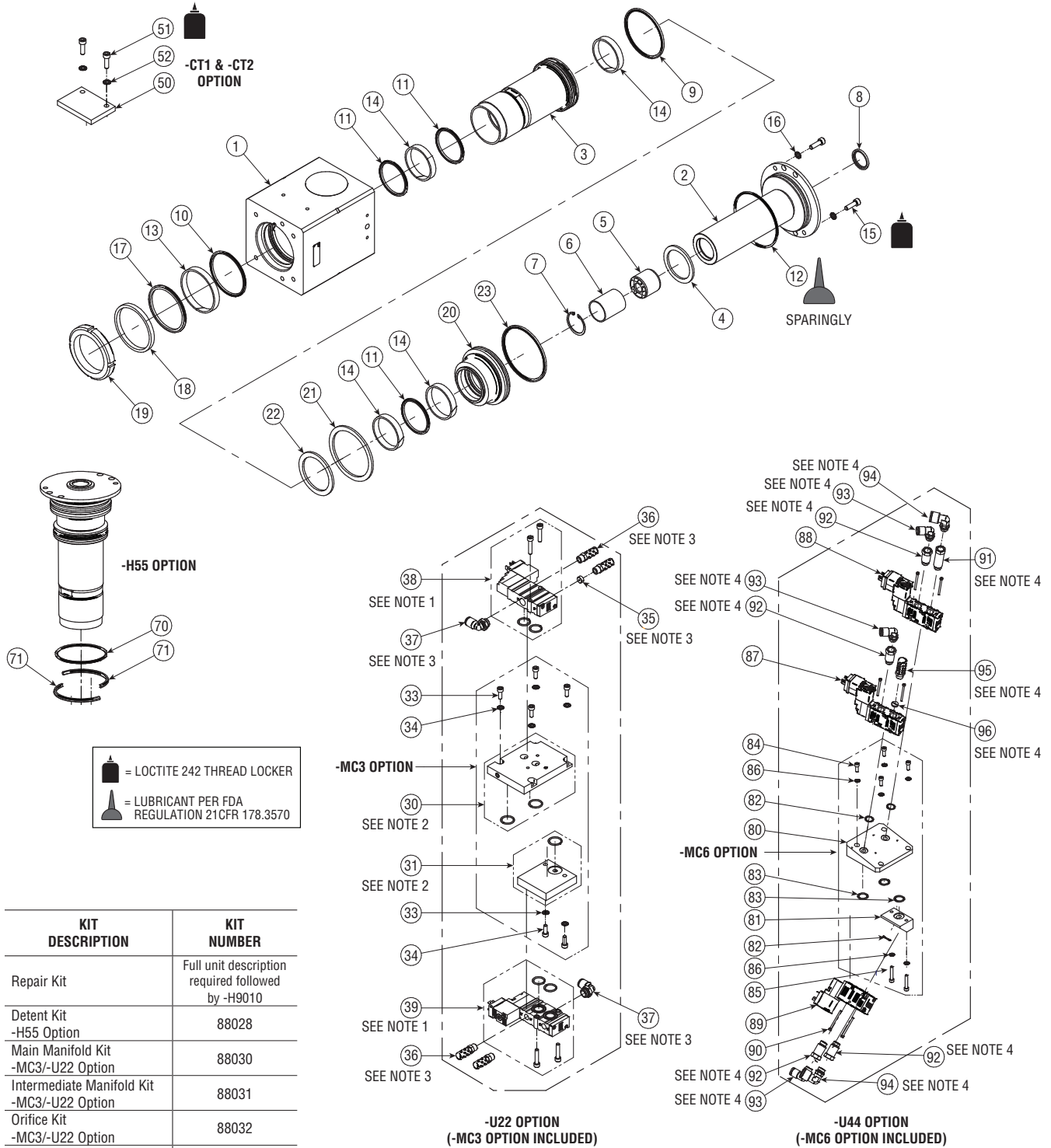
### LUBRICATION

Series BCZU Nozzle Cylinders are designed and intended not to require lubrication. Static seals may be lubricated for assembly purposes using lubrication per FDA Regulation 21CFR 178.3570.

For additional technical assistance, call or visit our website:

P.O. Box 9070, Fort Wayne, IN 46899  
**1-800-624-8511**  
**www.phdinc.com**

# phd PARTS LIST & REPAIR KITS: SERIES BCZUD UNIVERSAL HR NOZZLE CYLINDER



KIT DESCRIPTION	KIT NUMBER
Repair Kit	Full unit description required followed by -H9010
Detent Kit -H55 Option	88028
Main Manifold Kit -MC3/-U22 Option	88030
Intermediate Manifold Kit -MC3/-U22 Option	88031
Orifice Kit -MC3/-U22 Option	88032
-CT1 Target Kit	88034
-CT2 Target Kit	88035
Main Manifold Kit -MC6/-U44 Option	88912
Intermediate Manifold Kit -MC6/-U44 Option	88913
Orifice Kit (52 Series)	88037
Repair Tooling	88033

**NOTES:**  
 1) FASTENERS AND O-RINGS INCLUDED WITH VALVES.  
 2) O-RINGS INCLUDED IN MANIFOLD ASSEMBLIES.  
 3) Included in -MC3 Option  
 4) Included in -MC6 Option

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**CYLINDER ONLY**

KEY	PART DESCRIPTION	PART NUMBER
1	Body	87174
2	Cap	87175
3	Piston	87176
4	Shock Pad	86263
5	Diffuser	86229
6	Spacer Tube	87186
7	Retaining Ring	Full unit description required followed by -H1200
8	Compression Seal	Sold as part of Repair Kit (-H9010*)
9	80 mm Piston Seal	Sold as part of Repair Kit (-H9010*)
10	66 mm Rod Seal	Sold as part of Repair Kit (-H9010*)
11	50 mm Rod Seal	Sold as part of Repair Kit (-H9010*)
12	O-Ring Seal	Sold as part of Repair Kit (-H9010*)
13	66 mm Wear Ring	Sold as part of Repair Kit (-H9010*)
14	50 mm Wear Ring	Sold as part of Repair Kit (-H9010*)
15	Fastener	61054-118
16	Serrated Safety Washer	84141-008-02
17	66 mm Rod Scraper	Sold as part of Repair Kit (-H9010*)
18	Rod Scraper Retainer	87196
19	Locking Nut	Full unit description required followed by -H2001
20	Intermediate Piston	87177
21	Shock Pad	87178
22	Shock Pad	87179
23	90 mm Piston Seal	Sold as part of Repair Kit (-H9010*)

NOTE: \*Full unit description required (followed by -Hxxxx)

**-MC3 OPTION**

KEY	PART DESCRIPTION	PART NUMBER
30	Main Manifold Assembly	87187
31	Intermediate Manifold Assembly	87190
32	Fastener	61054-100
33	Serrated Safety Washer	84141-007-02
35	Orifice Plug	87189
36	Muffler	86957
37	Elbow Fitting	61734-053

**-MC6 OPTION**

KEY	PART DESCRIPTION	PART NUMBER
80	Main Manifold Plate	88907
81	Intermediate Manifold Plate	88908
82	O-Ring Seal	3642-117-1
83	O-Ring Seal	3642-015-1
84	Fastener	61054-100
85	Fastener	61054-105
86	Serrated Safety Washer	84141-007-02
91	Long Extension	74345-231
92	Short Extension	74345-230
93	Ø 10 mm Tube Elbow Fitting	74345-072
94	Ø 12 mm Tube Elbow Fitting	74345-071
95	Bantum Muffler	74854
96	Orifice Plug	88038

**-CT1 OPTION**

KEY	PART DESCRIPTION	PART NUMBER
50	Target	86239
51	Fastener	61054-118
52	Serrated Safety Washer	84141-008-02

**-CT2 OPTION**

KEY	PART DESCRIPTION	PART NUMBER
50	Target	86259
51	Fastener	61054-118
52	Serrated Safety Washer	84141-008-02

**-H55 OPTION**

KEY	PART DESCRIPTION	PART NUMBER
70	O-Ring Seal	1950-149-14
71	Detent Ring	86334

NOTE: \*Full unit description required (followed by -Hxxxx)

**-U22 OPTION**

KEY	PART DESCRIPTION	PART NUMBER
30	Main Manifold Assembly	87187
31	Intermediate Manifold Assembly	87190
32	Fastener	61054-100
33	Serrated Safety Washer	84141-007-02
35	Orifice Plug	87189
36	Muffler	86957
37	Elbow Fitting	61734-053
38	400 Series Mac Valve	86243
39	400 Series Mac Valve	87192

**-U44 OPTION**

KEY	PART DESCRIPTION	PART NUMBER
80	Main Manifold Plate	88907
81	Intermediate Manifold Plate	88908
82	O-Ring Seal	3642-117-1
83	O-Ring Seal	3642-015-1
84	Fastener	61054-100
85	Fastener	61054-105
86	Serrated Safety Washer	84141-007-02
87	52 Series Mac Valve	88909
88	52 Series Mac Valve	88910
89	52 Series Mac Valve	88911
90	Manifold to Body Fastener	61054-084
91	Long Extension	74345-231
92	Short Extension	74345-230
93	Ø 10 mm Tube Elbow Fitting	74345-072
94	Ø 12 mm Tube Elbow Fitting	74345-071
95	Bantum Muffler	74854
96	Orifice Plug	88038

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