

## **CZ Service Manuals**

RiD03781

**Maintenance Parts\_CRUR Series** 

### Maintenance

### WARNING!

DO NOT RUN THE CONTROLLER WITHOUT ALL THE COVERS FITTED. ALWAYS ISOLATE THE CONTROLLER AT THE MAIN VOLTAGE SUPPLY

SWITCH ON THE WALL, BEFORE REMOVING ANY COVERS.

### **HIGH VOLTAGE!**



ACCESS TO THE ELECTRICAL ENCLOSURES SHOULD ONLY BE ALLOWED SUITABLY QUALIFIED PERSONNEL.
ISOLATE AND LOCK THE ELECTRICAL SUPPLY OFF BEFORE PERFORMING ANY MAINTENANCE OPERATIONS. DO NOT WORK ON ELECTRICAL EQUIPMENT WHILE VOLTAGE IS SUPPLIED.

### WARNING!



ALWAYS ISOLATE AND LOCK OFF THE TEST BENCH ELECTRICAL SUPPLY WHEN PERFORMING MAINTENANCE TASKS ON THE TEST BENCH.



Impervious gloves and overalls should be worn if contact with ISO4113 test fluid and lubrication oil is likely. Gloves should also be worn when handling fixture parts or injectors after testing which may be hot. Refer to the Health & Safety Data Sheets.

Step 1:

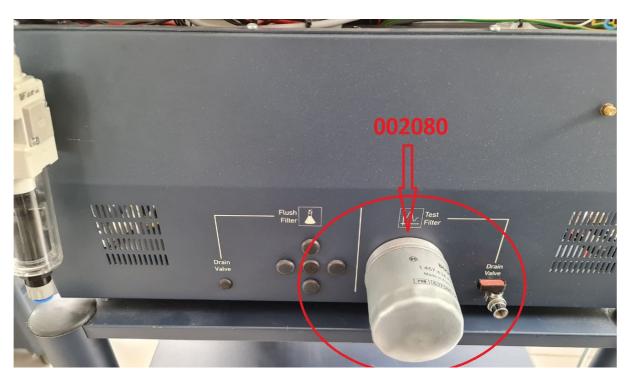
Drain all the old fluid from the valve back of the machine and fill up again with new.



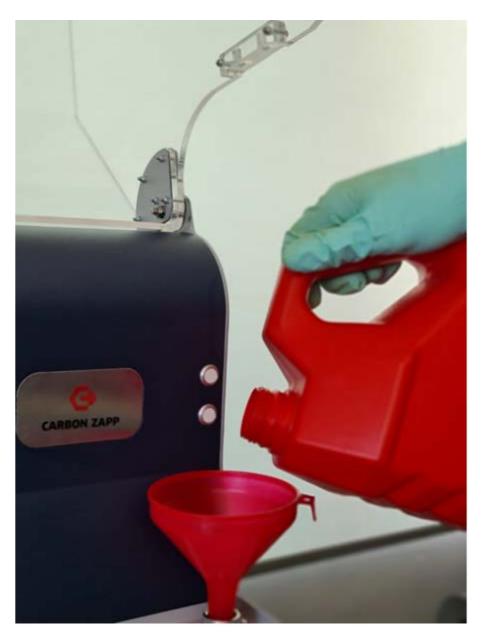
Step 2:

Replace the main filter which located back of the machine.

Main Filter x1:002080



Step 3: Fill up the machine with new fluid (D20L-ISO  $\times$  1pc & for [F] flushing units CD2L  $\times$  1pc)



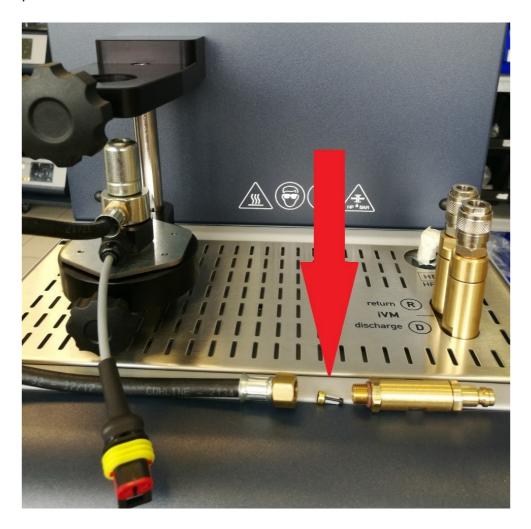
# Step 4:

Replace the discharge ports filters with new elements and O-rings. Discharge Ports Filters x4: 008185



# Step 5:

Replace the IPSC / RSP.### valve filters. IPSC / RSP.### Valves Filters x4: 000695

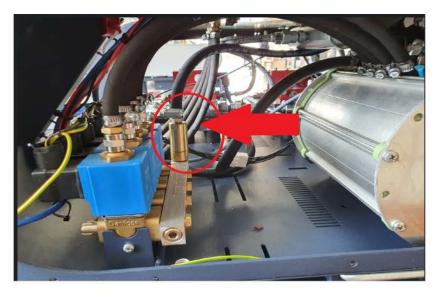


# Step 6:

Replace the filter before the sensor. Open the right-side panel by using a 2.5mm Hexagon Allen Key.

Discharge Ports Filters x1: 008185







# Step 7:

Replace the air filter from the water separator / air regulator, which located back of the machine.

Pull the trigger down and then twist it, a the shown in the bellow photos.

Air filter x1:002461





### Step 8:

### **DRV** Maintenance

High Pressure Regulators (DRVs), should be removed and cleaned with Ultrasonics or replaced with NEW ones ONLY in the case that the pressure cannot be reached or stabilized correctly or the machine diagnostics indicate so.

### NOTE: DRV'S ARE NOT COVERED UNDER WARANTY.

Tightening torque for DRVs is:

- Tighten to 65Nm >> Release for 90<sup>o</sup> degrees >> Tighten to 85Nm
- DO NOT Exceed 110Nm
- DRV part number: Bosch 0 281 006 246
- DRV Washer Part number: Bosch 1 680 109 139







### Step 9:

Finally, after you finished all the above tasks, you should reset the filters / fluids timers. Download here the help video Fluids Filters Timers Reset. (Right Click And Save As)

Please note that you should service the spool valve of the high pressure pumps every 6 months, and the air in your shop should be free of water and oil. For CRU.2R or CRU.2R/F <a href="Download here the service manual RiD90100i SPOOL VALVE KIT Type Mxxx PUMPS">Download here the service manual RiD90100i SPOOL VALVE KIT Type Gxxx PUMPS</a>. PUMPS.

- Furthermore, a few things that might be interesting for you:
- Frequently Asked Questions (FAQ's) <a href="https://carbonzapp.com/login/">https://carbonzapp.com/login/</a>
- To subscribe to our newsletter <a href="https://carbonzapp.com/contact/#newsletter">https://carbonzapp.com/contact/#newsletter</a>

<sup>\*\*</sup> Important note that all the images are for simulation purposes and does not relate to your machine.

Ordering Part #	CRU.2R Suggested QTY /Unit	CRU.2R/F Suggested QTY /Unit	CRU.4R Suggested QTY /Unit	CRU.4R/F Suggested QTY /Unit	Component Photo
CZ-008185	3	3	9	9	C2-000709 C2-000774
CZ-001047	1	1	1	1	
CZ-002080	1	1	1	1	
CZ-000957	-	1	-	1	
CZ-002461	1	1	1	1	
CZ-008628	1	1	1	1	30-88 SET OF 20 pcs
CZ-008898	-	-	1	1	3 3 8
CZ-008896	1	1	-	-	-030
CD2L	-	1	-	1	
D20L-ISO	1	1	1	1	ISO4113 NV2

### Servicing

- CRUR unit requires maintenance at regular intervals for efficient operation.
- The maintenance intervals are based on 8-hour operation daily.
- Please follow the maintenance intervals and messages prompts the AZO software provides.
- For advanced diagnosis or if needed to calibrate unit, please refer to your Carbon Zapp dealer.

Maintenance work		1	2	3	4	5
Check high-pressure hoses		_	-	ı	-	х
Check hoses		_	х	-	_	х
Change calibrating oil, clean calibrating oil tank		_	х	-	_	х
Drain dirty oil in stowage space of work area		х	_	-	_	х
Replace the In-Line Filters		_	_	-	_	_
Replacing the volume meter filter		_	_	-	х	х
High Pressure Regulators (DRVs)		_	_	-	х	_
Service the spool valve kit of the high-pressure pumps		_	_	Х	_	_
New/Refurbished Pump		_	_	-	_	х

### Maintenance intervals

- 0 Weekly or per channel after test of 30 cleaned common rail injectors
- 1 Weekly
- 2 After 1500 injector tests; after 2 months at the latest
- 3 Every 6 months; or after 1250 hours or if prompted by software.
- 4 Yearly or after 2500 hours or if prompted by software.
- 5 On main inspection by Customer. Service every 2 years.

After each filter replacement, the filter change must be reset in the "Maintenance Menu" in the AZO software



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