

# rEvo III

## service plan



Version 2021

## 1. Maintenance Schedule

rEvo III service plan							
		condition based	6M	1Y	2Y	5Y	Remarks
general							
	Desinfecting		X				USER
Cannisters							
	Filter set			X	X	X	USER
loop							
	DSV Barrel O-ring kit		X	X	X	X	USER
	BOV Barrel O-ring kit		X	X	X	X	USER
	BOV second stage service				X	X	
	Mushroom valves				X	X	USER
	Loop hoses	X					
	Bytepiece + strap	X					
Gass addition							
	First stage service	X			X	X	
	hose kit + Schradders	X					
	hoses HP + Swivel	X					
	ADV service					X	
	Solenoid	X					
	Orifice (flow)	X					
	MAV block, gas buttons	X				X	
	Clippard	X					Elimination Kit
Wing							
	Bladder	X					
	Inflator	X					
	Dump valve	X					
Eletronics							
	B-box o-ring kit			X	X	X	USER
	SW update	X					
	Molex Connectors	X				X	
	rEvodream P5 Battery					X	



	rEvodream P/NG Battery	X					USER
	Oxygen sensors (exchange)		X	X	X	X	USER
Housing							
	Condition, rust, pressnuts	X				X	
	Bolts					X	
	Internal service					X	
	OPV Valve Part					X	
	O-ring kit R212				X	X	
	Counter lungs	X					

## 2. Loop service

Reference documents: How to service BOV barrel part

DSV / BOV / breathing loop			
Mushroom valves	Replace both inhale/exhale	R519	
Spiders	Replace if old drager spiders	R536/537	
DSV Barrel	change o-rings (part of R212), lubricate Tribolube	R212	
BOV Barrel	change o-rings, lubricate Tribolube	R634	
BOV second stage	service second stage part		
Breathing hoses	check for wear, tears,...	R518	
Hose connection	replace o-rings, tyrap on hose connectors to housing, check condition of treath (part of R212)		
DSV Bite-piece	check for tears, gag-strap present?	R521 / R527	
Remarks:			

## 3. Wing Harness

Wing + Harness			
inflator	check operation, infl. button smooth operation?, wing inflation time < 15 sec (50lbs) or < 10 sec (35lbs). Air leak?	r241	
dump valve	funtional? Leak? Clean		
Wing	Positive Pressure test, leak?	R569	
Harness	check attachments, check buckles		
Harness	check crotch strap	R580	
Back plate support	check condition of backplate protectors, replace if torn	R546A / R546B	
Remarks:			

## 4. Housing

rEvo Housing			
Carrying handle	condition? Screws present?	R555	
feet	Condition stands, cracked, rubber parts present?	R1032A/B	
Stand	Install, modify housings <2019		
weight shelf	condition, replace if necessary		
housing	replace bolts after unit being opened		
housing	check for damaged, loose Press nuts, replace if needed		
housing	Remove rust, dents, polish, clean...		
Remarks:			

## 5. Gas addition

Reference documents: How to eliminate clipart buttons; Service Manuel 25CCR; How to install the triple MAV

regulators + Hose connections and gauges			
Regulators	Service both regulators, service kit APO241 (APEKS)	R1033	
Regulators	Service both regulators, service kit MARES 46201809		
Regulators	APR plate installed?, replace if needed (orifice plugged)		
regulators	adjust intermediate pressure: 10 bar (orifice 0,035) / 12 bar (orifice 0,030)		
Hoses HP and MP	check condition of the hoses, replace if damaged or leaking		
Hoses HP and MP	check condition of Shradder valves, replace if leaking	R1037	
Pressure gauges	Check functionality, Leak? Replace swivel if needed	R1038	
Remarks:			



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MAV frontmount / Clippard buttons			
MAV block	check funtion of Dil / O <sub>2</sub> / offboard button, moves smoothly, leak?, replace if necessary	R567A / R567B	
MAV block	rubber protector on offboard, replace if necessary	R575	
Clippard	replace if locked	R522A / R522B	
Remarks:			

## 6. Cannisters

Cannisters			
Cannisters	Clean canister, replace filter pads	R203	
Cannisters	Check condition of canister, Stainless grids not dislocated?		
Cannisters	Top Marker Present?	R558	
Remarks:			

## 7. Internal service

OPV			
OPV	Replace OPV valve part	R716	
OPV	check and adjust overpressure 30mbar < X < 40 mbar		
Remarks:			

Internal Service			
counterlungs	check condition, vacuumtest, replace if necessary	R900 / R901 / R902	
Anticolaps	check fixture, check tyrap		
internal Gas supply	replace internal gas cables (4 mm green / blue )		
ADV	check condition, if leaks, the service. Adjust trigger point	R1067	
ADV	Service valve part		
CMF	check orifice, condition? Replace shrinkwrap if needed. Flow between 0,5 and 0,6 l/min?		
Solenoid	check fixture, check wiring, clean and grease solenoid connection (non-waterproof version)		
O <sub>2</sub> cells	check for compliancy to cell exchange policy		
Cell tray	check for damage, if brittle, upgrade to black injection molded trays. (Part of R718 upgrade kit 2012)		
Cover + seals	check cover for damage, replace sticker if needed, replace O-rings (Part of R212)		
Connection/ports	check condition of PG7 plugs, leaks, damage, replace if necessary		
Remarks:			

## 8. Electronics

rEvo Dreams			
rEvo Dreams	check functionality, calibration cycle, LED's in HUD,...		
rEvo Dreams	Battery change	R432 / R437	
rEvo Dreams	O-ring replacement of Dream body		



rEvo Dreams	Check condition of Molex conn. Repair, replace if needed	R572	
rEvo Dreams	Rubber protector, check condition, replace if necessary	R500	
rEvo Dreams	Fixture to Pressure gauge, check condition,...		
Remarks:			

Reference documents: How to check power consumption on the rMS system

Electronics (only hCCR and eCCR)			
Battery box	Replace O-rings	R221	
Battery box	Check condition of wires, battery clip present?	R714	
Battery box	Replace 9V battery		
Shearwater controller	Replace Battery	R438	
Shearwater controller	check functionality, upgrade to latest software		
Molex conn	check condition repair, replace if needed		
rMS	check functionality		
General	current measurement, see tabel		
Remarks:			





