





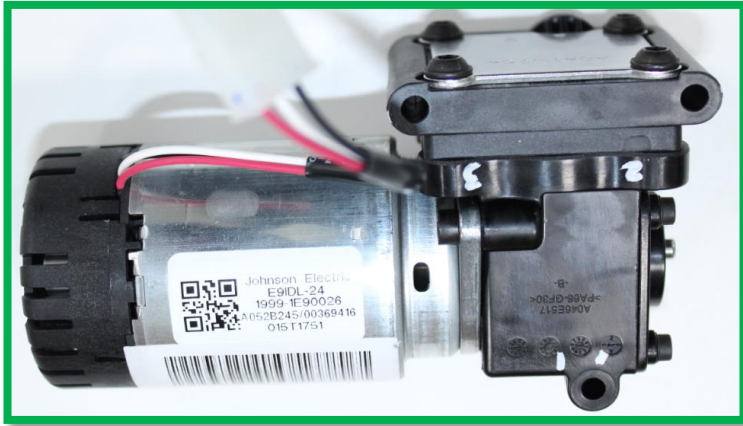
# **Will fit vs actual UA2 doser.**

CES CPS Team

27-Aug-2019

# Pump



 → Genuine Part  
 → Will-fit Part

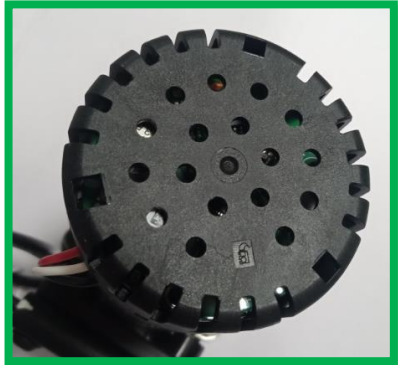
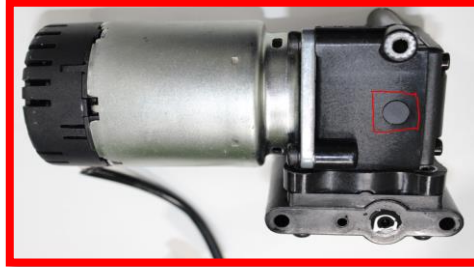
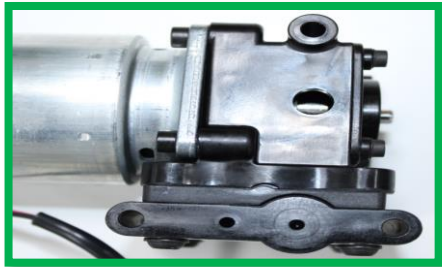


**What are the differences?** :- Barcode, Part no. and scan bar is dissimilar. Covered Rotating shaft area from RH side view and bottom view of pump (manifold fitment side) and not visible

**Effect and Explanation:** - Part tracking & identification during any failure investigation will be difficult without barcode & part no.

# Pump



 → Genuine Part  
 → Will-fit Part



**What are the differences?** :- No symbol available on PCB covered body. Part no and Fluid IN arrow marks not present on read valve side metal plate. overtighten marks on below 1st screw mounting surface . No part no and numbers clocks available on plastic body of Pump in between 3 screw mounting passage (from Top View)

**Effect and Explanation:** - Part tracking & identification during any failure investigation will be difficult without barcode & part no., over torque can damaged pump internal part & may cause failed to prime issue. During our investigation we found FC1682

# Injector (MV)

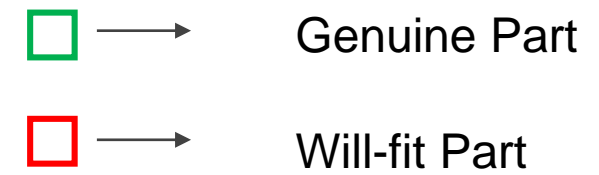
 → Genuine Part  
 → Will-fit Part



**What are the differences?** :- DEKA name is not available and sr no. series is different. And Part no/sr.no font is dissimilar. Nozzle tip is diverse and spray hole size is bigger than genuine doser. Rupture marks found on back side of MV (plastic surface)

**Effect and Explanation:** - MV is critical component to measure the amount of DEF so using a non standard MV can cause inaccuracy in dosing and hence it'll impact on Nox conversion. Bigger hole size in MV can doser extra DEF which can cause DEF crystallization issue.



# DEF Pressure Sensor



**What are the differences?** :- Barcode and part no is changed . Circles present inside the sensing element of pressure sensor are differently designed.

**Effect and Explanation:** - Internal design of pump are different from genuine UA2 doser which may change pressure sensor abilities and thus impact overall dosing. Most of dosing unit logic in UA2 dosers are pressure sensor calculation based.

# Bypass Valve

	→	Genuine Part
	→	Will-fit Part

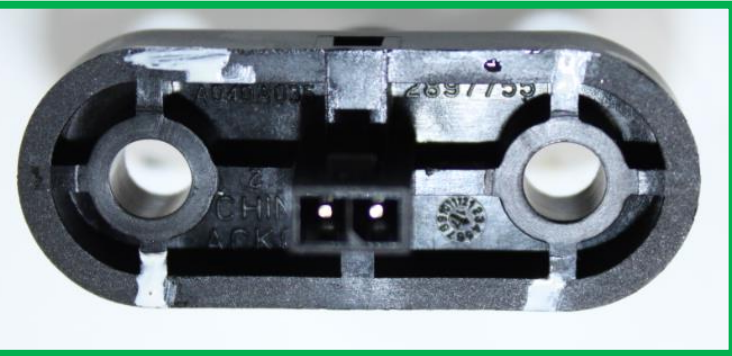


**What are the differences?** :- ED100% W4 is mentioned instead of W2. Serial no not available. DC12 V is written on top side . Plunger stud has over length and assembly and material looks different ; sheet metal is present on assembly body instead of plastic. Number circle is not available on body

**Effect and Explanation:** - Design is differed from genuine BP valve, and can affect to the functionality of BP valve which can lead to DEF crystallization in doser because of incomplete purging event.

# Temperature Sensor



□ → Genuine Part  
□ → Will-fit Part



**What are the differences?** :- Plastic sensing element is used and CHINA 325742 is mentioned instead of CHINA ACKCV.

**Effect and Explanation:** - Willfit Temp sensor is without steel cap which may introduce DEF inside the sensor & FC may triggered.  
Incase of heating requirement willfit temp. sensor will not work & will triggered Temp sensor functionality related FC.

# Mixed Air Pressure Sensor

	→	Genuine Part
	→	Will-fit Part





**What are the differences?** :- Barcode and part no is changed . Circles present inside the sensing element of pressure sensor are differently designed.

**Effect and Explanation:** - Internal design of pump are different from genuine UA2 doser which may change pressure sensor abilities and thus impact overall dosing. Most of dosing unit logic in UA2 dosers are pressure sensor calculation based.



# Check Valve & Diaphragm



	→	Genuine Part
	→	Will-fit Part



**What are the differences?** :- Blackish mark on check valve and shining also low. Inner shape of diaphragm is different and hardness also slightly more due to material may change.

**Effect and Explanation:** - DEF Metering rate is not as per spec, having the FC 3568 when connected to Calterm.

# Air Curtain



	→	Genuine Part
	→	Will-fit Part



What are the differences? :- No O ring on threaded area

Effect and Explanation: - May cause to trigger the pressure sensor related FC. In absence of o ring DEF will leak inside doser & can damaged all the internal parts of doser.

# Manifold

	→	Genuine Part
	→	Will-fit Part



What are the differences? :- A>PA66-GF30< is mentioned instead of B>PA66-GF30< and 2 is mentioned on top side of Manifold instead of 1

Effect and Explanation: - Non standard O ring DEF will leak inside doser & can damaged all the internal parts of doser.

# ASOV



□ → Genuine Part  
□ → Will-fit Part

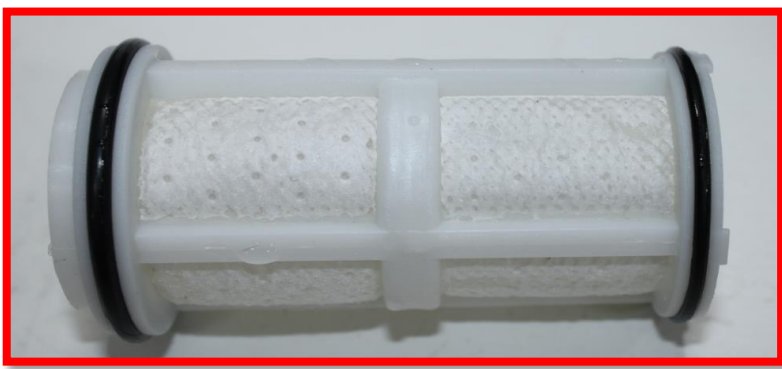


**What are the differences?** :-Air filter screen is not present below the Push fit assembly (after thread finished). Part no.is different .observed harness connector Loosed . ASOV screw material is different . Push fit connector shape is dissimilar.

**Effect and Explanation:** - ID of willfit doser is differ from genuine one, may cause for trigger the FC related to ASOV. ASOV internal parts will damaged because of dust or debris entry inside a doser.

# Filter & Damper



	→	Genuine Part
	→	Will-fit Part



**What are the differences?** :- Part no. and serial no. not present on front view of damper and damper front view shape and inner view looks diverse ; extra groove is available and hole size also slightly bigger. Strainer material also visually looks different.

**Effect and Explanation:** -Non standard filter can allow mud or debris entry inside dosing unit pump & can damaged internal parts. Pump may failed to prime because of non standard design of filters & it can reduce overall life cycle of dosing unit.

# Top Cover View



	→	Genuine Part
	→	Will-fit Part

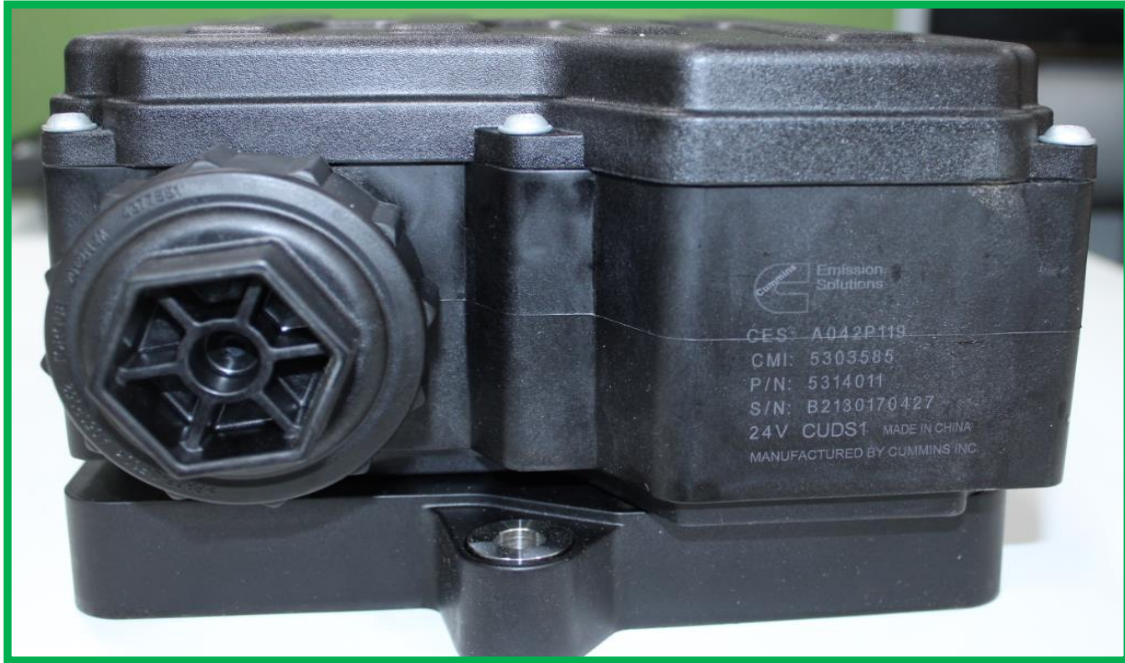


**What are the differences?** :- Eco fit Not mentioned on top cover. SS Screw material is used . Top cover part no.is not available inside

**Effect and Explanation:** - Part tracking & identification during any failure investigation will be difficult without barcode & part no.

# Filter side View



	→	Genuine Part
	→	Will-fit Part

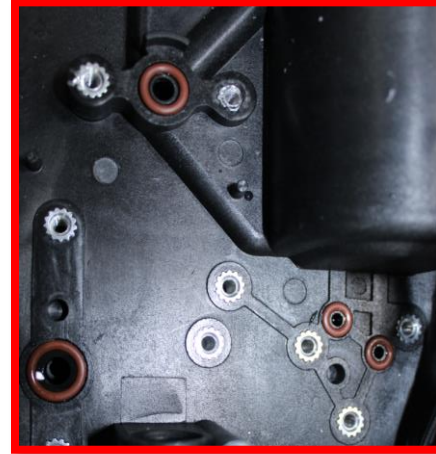
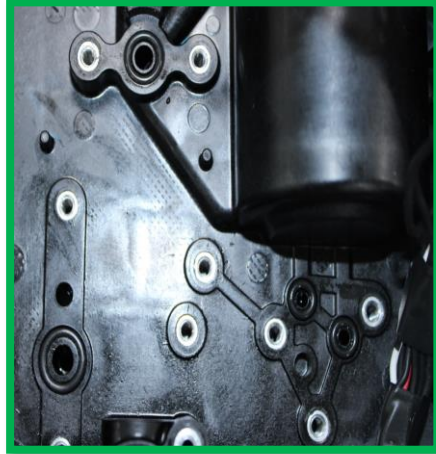


**What are the differences?** :- Doser part no. and serial no details not marked on will fit doser

**Effect and Explanation:** - Material can be differed from the genuine one, need to do the material analysis for more understanding on comparison. Part tracking & identification during any failure investigation will be difficult without barcode & part no.

# All O rings & Screws

	→	Genuine Part
	→	Will-fit Part



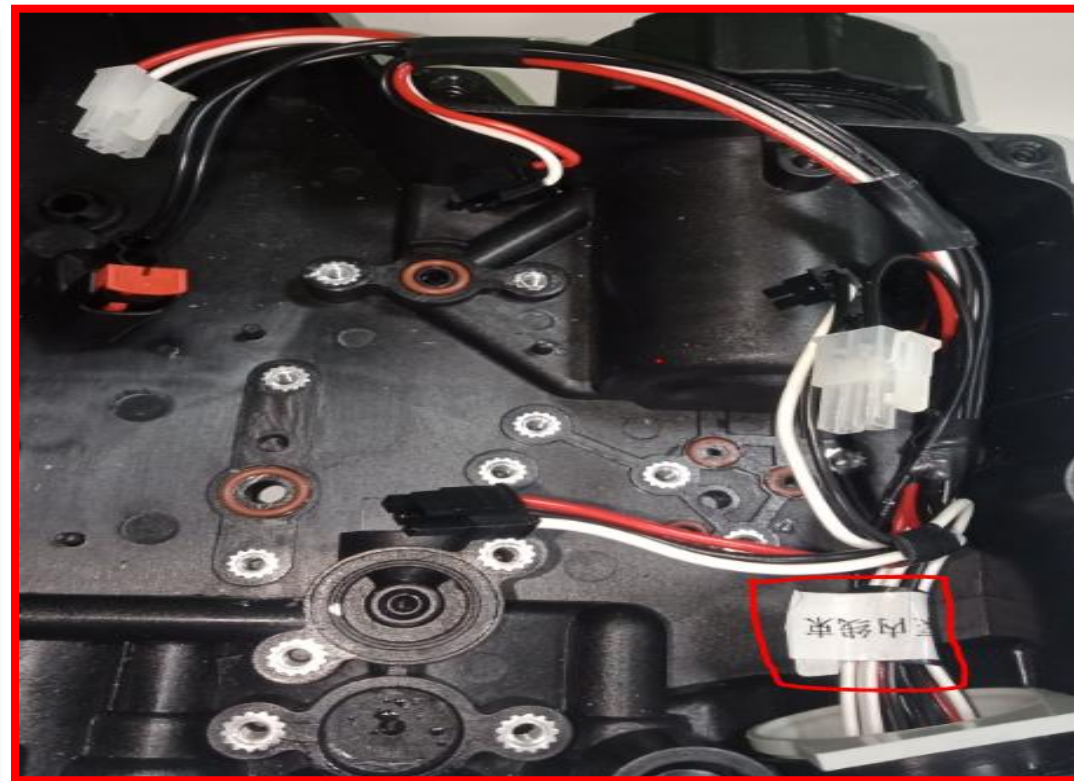
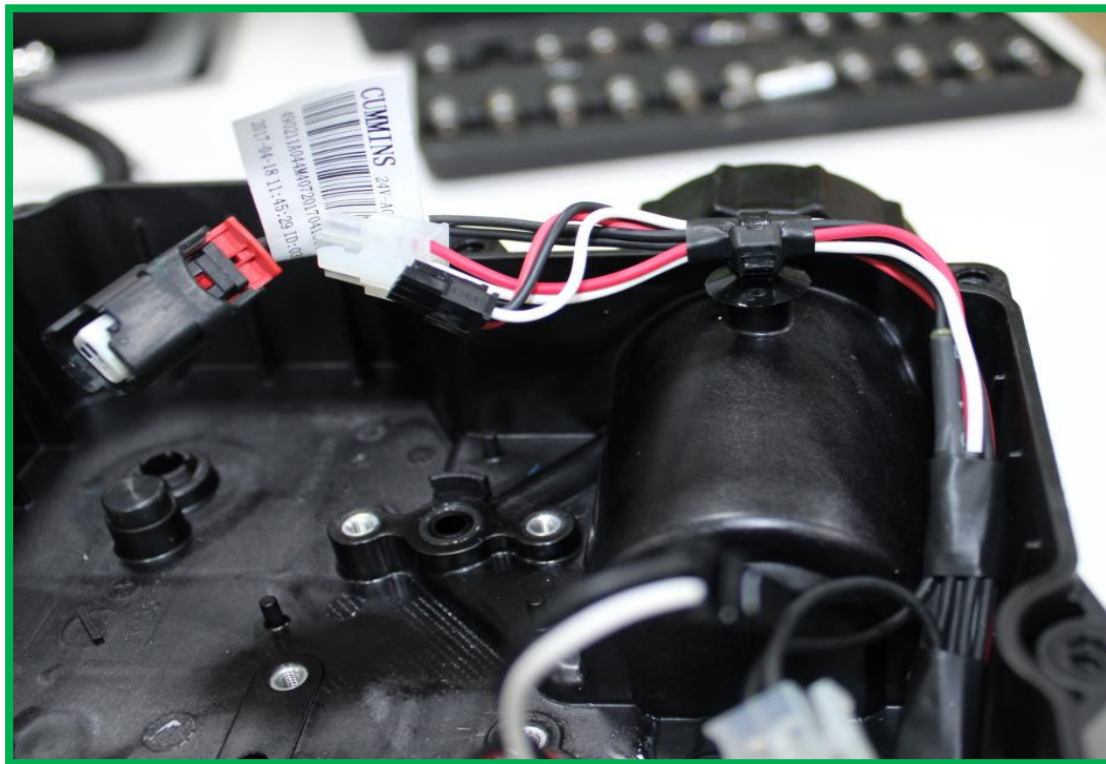
**What are the differences?** :- Brown colour O rings is used everywhere , All Screw material looks different and slightly harden . Female thread shapes (inner plastic body) is differently designed than CES doser for all screw assembly. No blue colour marks on thread area.

**Effect and Explanation:** - Material can be differed from the genuine one, need to do the material analysis for more understanding on comparison. Non standard O ring DEF will leak inside doser & can damaged all the internal parts of doser.



# Doser Harness

	→	Genuine Part
	→	Will-fit Part



**What are the differences?** :- Part no, serial no and scan bar tag is not available on harness and harness holding screw also not offered.

**Effect and Explanation:** -Electrical failure can happen by using not using CES recommended harness

Q+A

