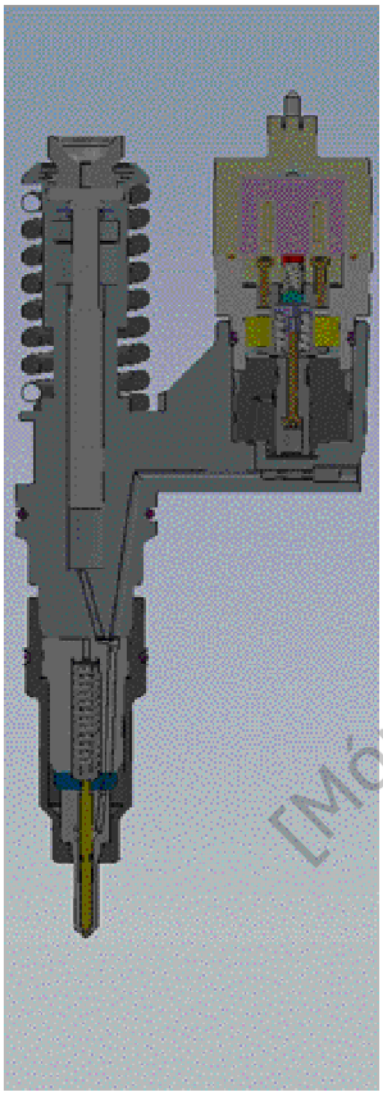
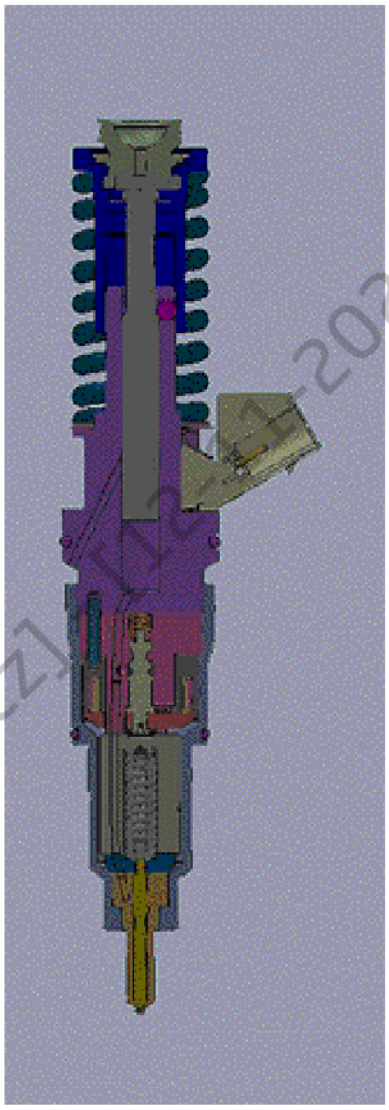
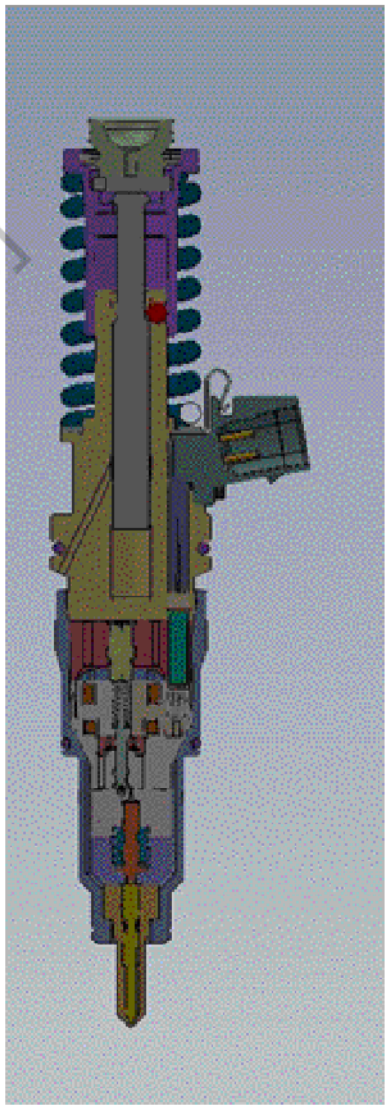
INTRODUCTION

This workshop manual will describe the main features, the operation, and the necessary procedures for the correct repair of Delphi E3 type Electronic Unit Injectors (EUI).

The overall layout of the E3 EUI is similar to the E1 type EUI but the function differs with the inclusion of an additional electronically controlled valve to manage the operation of the nozzle which can now be controlled independently of the pumping stage of the EUI.

The result is that unlike the A and E1 type EUI, multiple injection events are possible within a single pumping cycle.

A-Type EUI	E1 - EUI	E3 - EUI
		

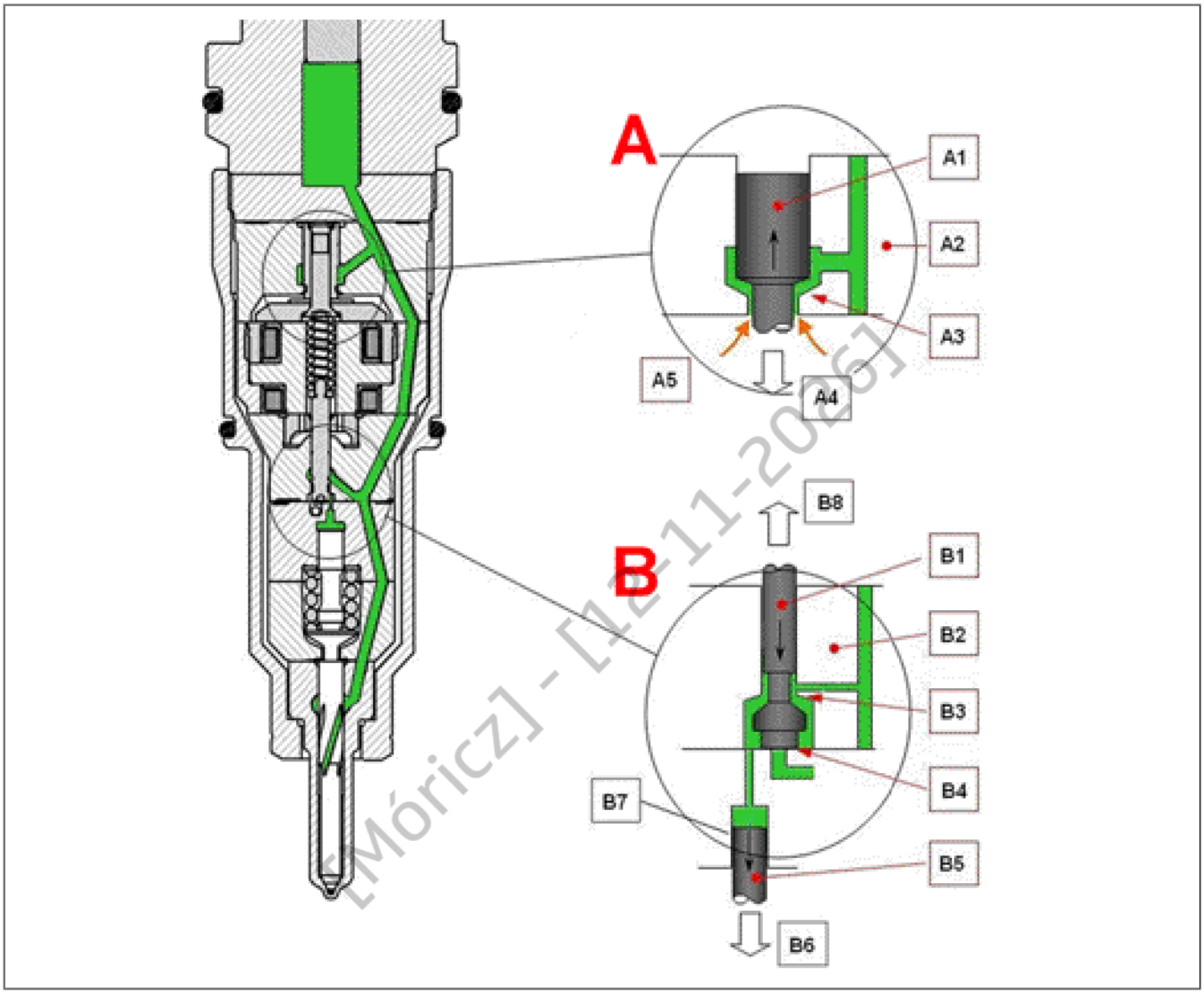
[Móricz, 12-11-2026]

© PHINIA Inc. All rights reserved.

DESIGN AND OPERATION

2.2 Operation

As the plunger is raised by the return spring, with neither the SCV, nor the NCV solenoid, energised the filling cycle begins. Fuel is drawn in through the feed / spill port, priming the internal galleries and the pump bore.



[Móricz] - [12-11-2026]

Filling

A	Spill Control Valve Assembly	B	Nozzle Control Valve assembly
A1	Spill Valve	B1	Direction of Nozzle Control Valve Actuator
A2	Spill Valve Guide	B2	Nozzle Control Valve
A3	Spill Valve Seat	B3	Nozzle Control Valve Upper Seat
A4	Direction of Spill Valve Actuator	B4	Nozzle Control Valve Lower Seat
A5	Filling	B5	Nozzle Needle Backing Piston

© PHINIA Inc. All rights reserved.

DESIGN AND OPERATION

A	Spill Control Valve Assembly	B	Nozzle Control Valve assembly
		B6	Direction of Nozzle Needle
		B7	Piston Spring Guide
		B8	To NCV Armature

[Móricz] - [12-11-2026]

© PHINIA Inc. All rights reserved.