



EUI and EUP Inspection and Testing Equipment

Mechanical part of CAM-BOX OS V1

List of kits and accessories

2020
Version 1.04

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1. CAM-BOX main part

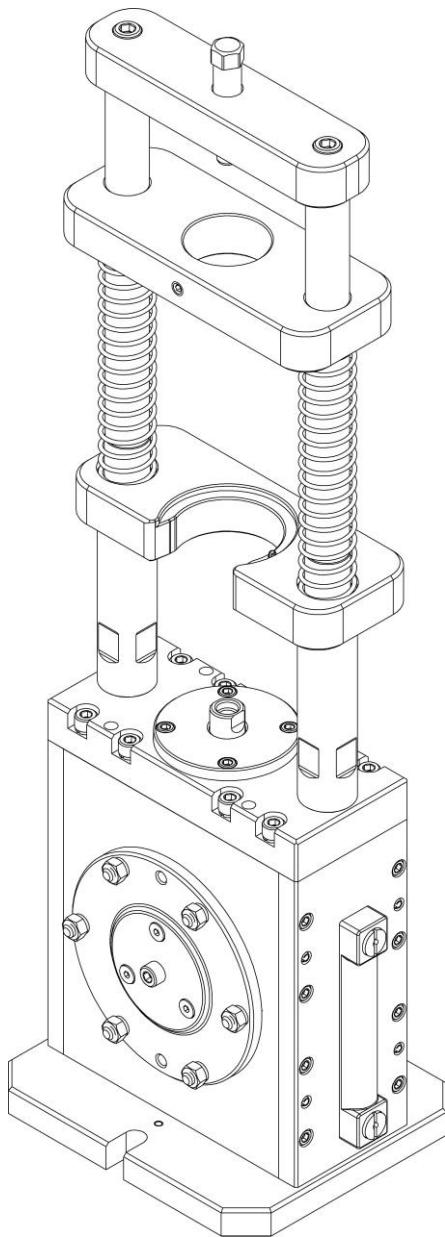


Figure 1. CAM-BOX OS V1

2. Short description

CAM-BOX OS V1 – universal device for mechanical drive of electronically controlled unit injectors EUI and pump sections EUP.

The required amount of linear and angular movement is ensured by changing the cam of the drive mechanism to the desired one with the appropriate profile.

The main features:

Drive shaft axis height.....	125 mm;
The maximum height.....	755 mm;
The weight neto (excluding oil and installation kit)	37 kg;
Oil volume in the lubrication system.....	1 L;
Cam lift minimum	10 mm;
Cam lift maximum	18 mm;
Maximum drive shaft speed	2000 RPM;

Test Equipment Recommendations:

Speed control range	100-2500 RPM;
Speed stability	±1 RPM;
Minimum drive power	7,5 KW/10 L.s;
Minimum moment of inertia of the drive	1 kgm ² ;
Test liquid supply pressure minimum.....	2,5 bar;
Test liquid supply pressure maximum	7 bar;
Test liquid supply temperature	40±5;
Test fluid flow at maximum pressure	8 L/min;

Used liquids:

Test liquid.....	Calibration oil ISO 4113;
Lubrication system	Motor oil 10-40W.

3. The set VW2.0

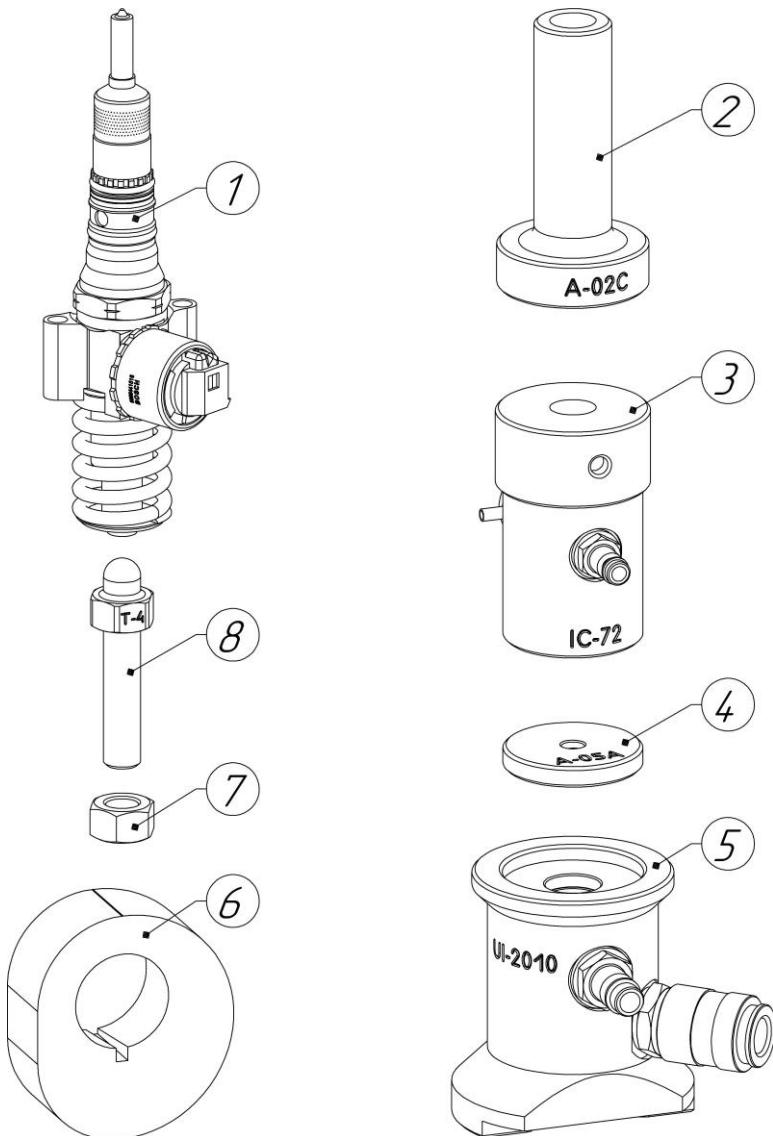


Figure 2. The set VW2.0

The kit for installing unit injectors VW2.0:

Position	Description
1*	Unit injector type VW2.0, 0 445 720 401 and similar;
2	Compensator A-02C;
3	Injection chamber IC-72;
4	The shim A-05A;
5	Adapter UI-2010;
6	The Cam OS.01-10;
7	Lock-nut;
8	Pusher T-4.

**- Position 1, is a conditional image, not included.*

4. The set VW Continental

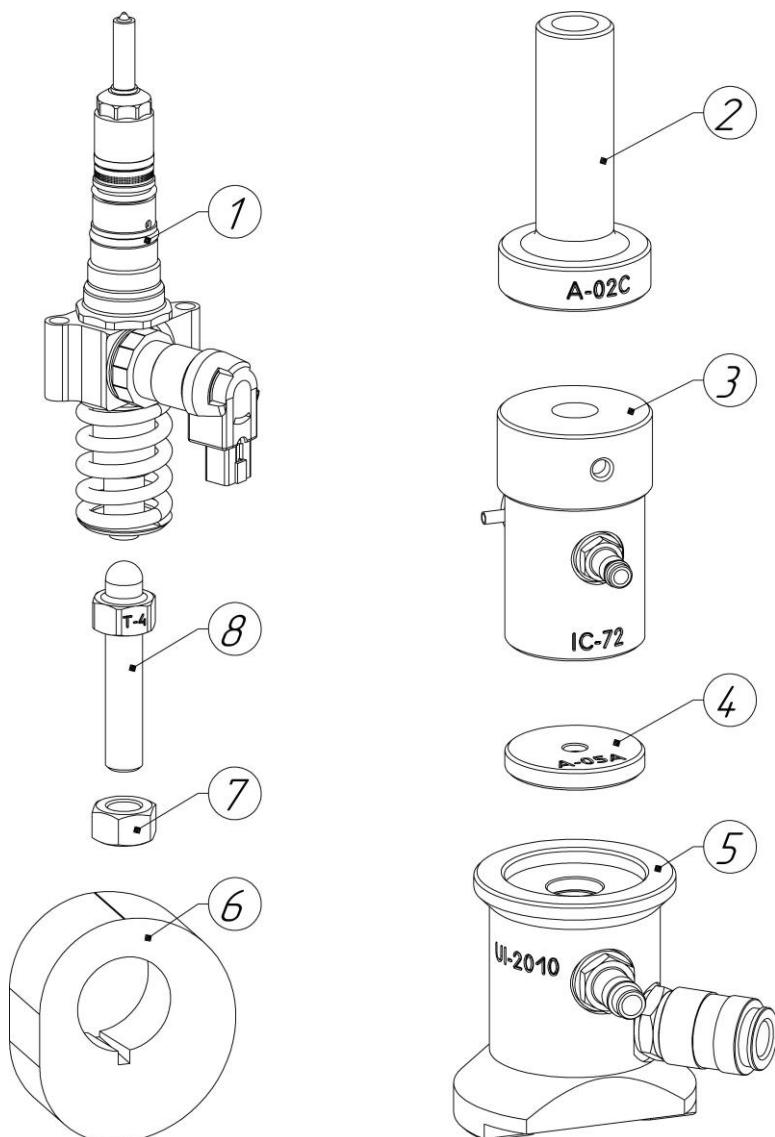


Figure 3. The set VW Continental

The kit for installing unit injectors VW Continental:

Position	Description
1*	Unit injector type VW2.0, 0 445 720 401 and similar;
2	Compensator A-02C;
3	Injection chamber IC-72;
4	The shim A-05A;
5	Adapter UI-2010;
6	The Cam OS.01-10;
7	Lock-nut;
8	Pusher T-4.

**Position 1, is a conditional image, not included.*

5. The set VW1.9

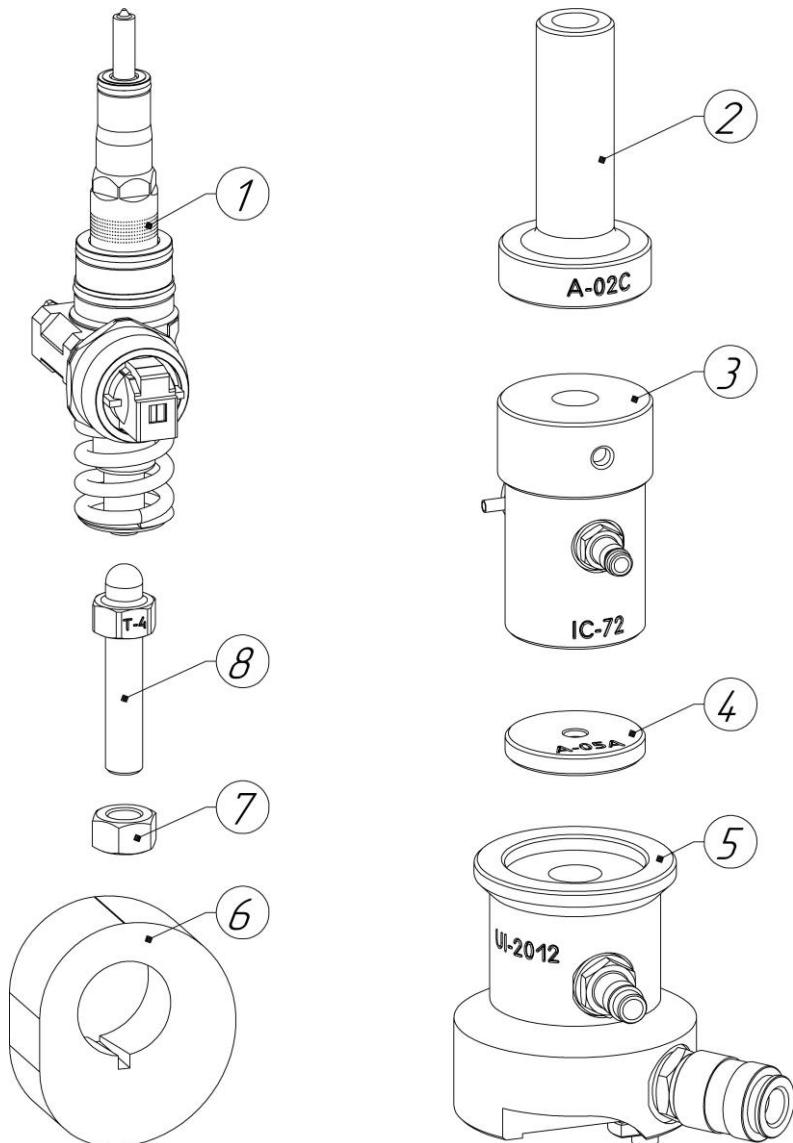


Figure 4. The set VW1.9

The kit for installing unit injectors VW1.9:

Position	Description
1*	Unit injector type VW2.0, 0 445 720 401 and similar;
2	Compensator A-02C;
3	Injection chamber IC-72;
4	The shim A-05A;
5	Adapter UI-2012;
6	The Cam OS.01-10;
7	Lock-nut;
8	Pusher T-4.

**Position 1, is a conditional image, not included.*

6. The set Delphi E1

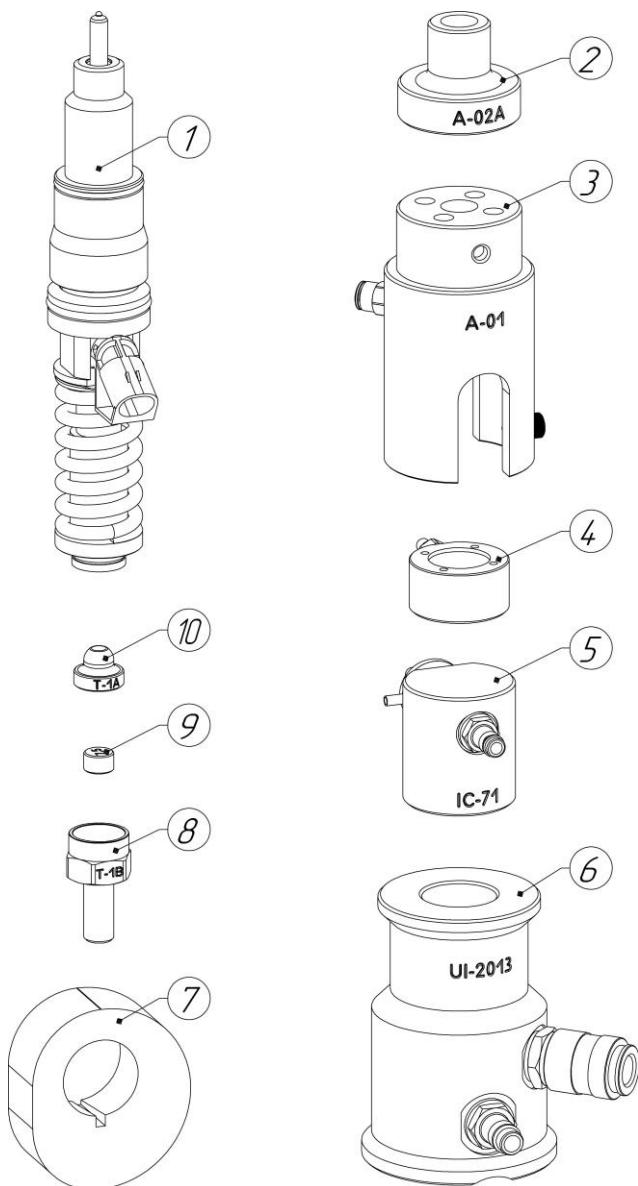


Figure 5. The set Delphi E1

The kit for installing unit injectors Delphi E1:

Position	Description
1*	Unit injector type E1;
2	Compensator A-02A;
3	Injection chamber A-01;
4	Sensor Load cell;
5	Injection chamber IC-71;
6	Adapter UI-2013;
7	Cam OS.01-15;
8	The pusher T-1B;
9**	The shim T1Sx.xx;
10	The pusher T-1A.

* -Position 1, is a conditional image, not included in the package.

** - Position 9, supplied in the kit "The shim selection complex for E1-E3 injectors", see the description of the complex.

7. The set Delphi E3

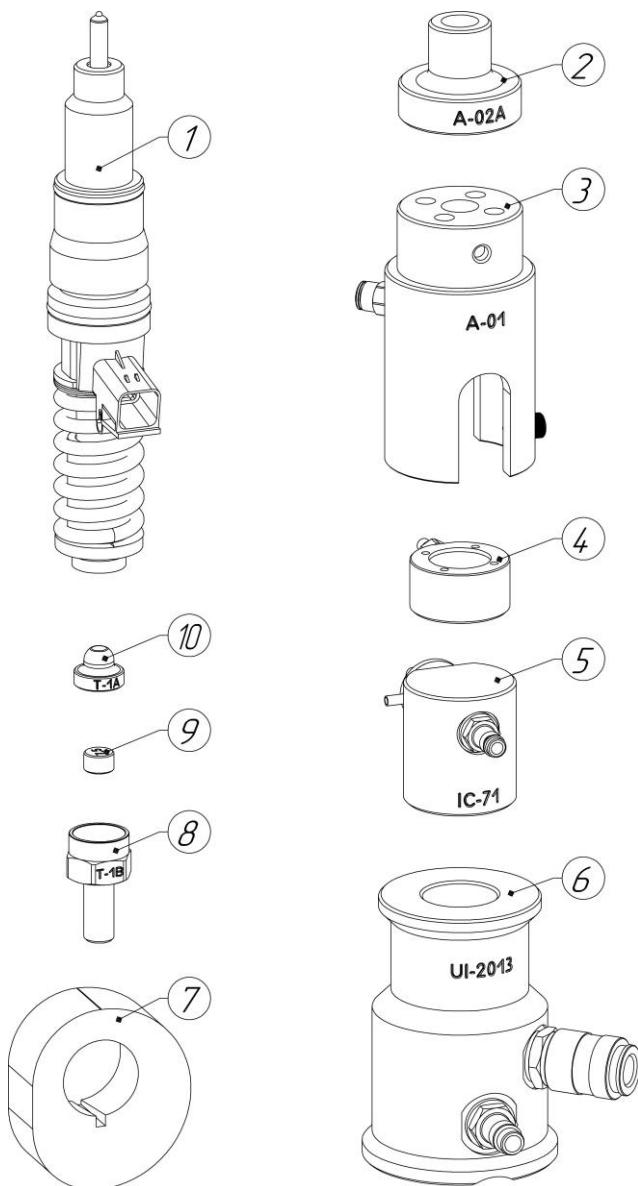


Figure 6. The set Delphi E3

Set for installation of unit-injectors Delphi E3:

Position	Description
1*	Unit injector type E3;
2	Compensator A-02A;
3	Injection chamber glass A-01;
4	Load cell sensor;
5	Injection chamber IC-71;
6	Adapter UI-2013;
7	Cam OS.01-17;
8	Pusher T-1V;
9**	Shim T1Sx.xx;
10	Pusher T-1A.

* -Position 1, is a conditional image, not included in the package.

** - Position 9, supplied in the kit "Shim selection complex for E1-E3 injectors", see the description of the complex.

8. The set Scania

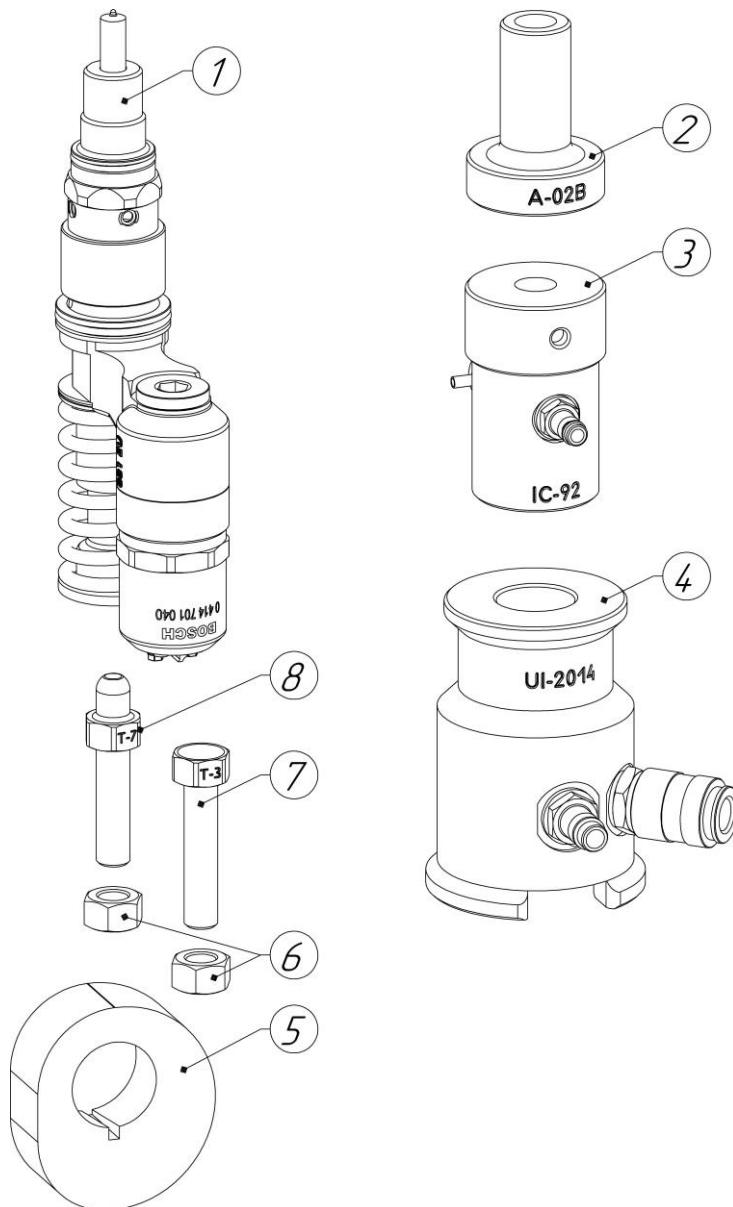


Figure 7. The set Scania

Scania unit injector installation kit:

Position	Description
1*	Unit injector type Scania, 0 414 701 040 and similar;
2	Compensator A-02B;
3	Injection chamber IC-92;
4	Adapter UI-2014;
5	Cam OS.01-15;
6	Lock-nut;
7	Pusher T-3;
8	Pusher T-7.

* -Position 1, is a conditional image, not included.

9. The set Iveco

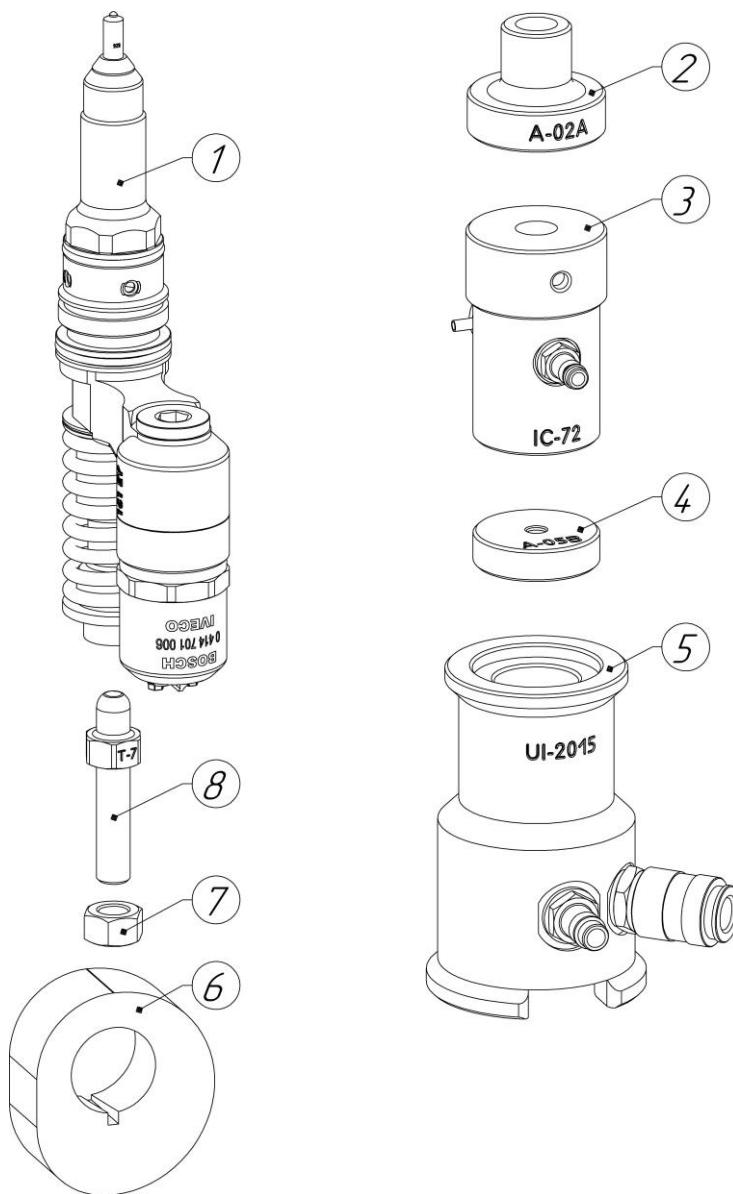


Figure 8. The set Iveco

Installation kit for Iveco unit injectors:

Position	Description
1*	Unit injector type Iveco, 0 414 701 006 and the like;
2	Compensator A-02A;
3	Injection chamber IC-72;
4	Washer A-05B;
5	Adapter UI-2015;
6	Cam OS.01-15;
7	Lock-nut;
8	Pusher T-7.

* -Position 1, is a conditional image, not included in the package.

10. The set FH12

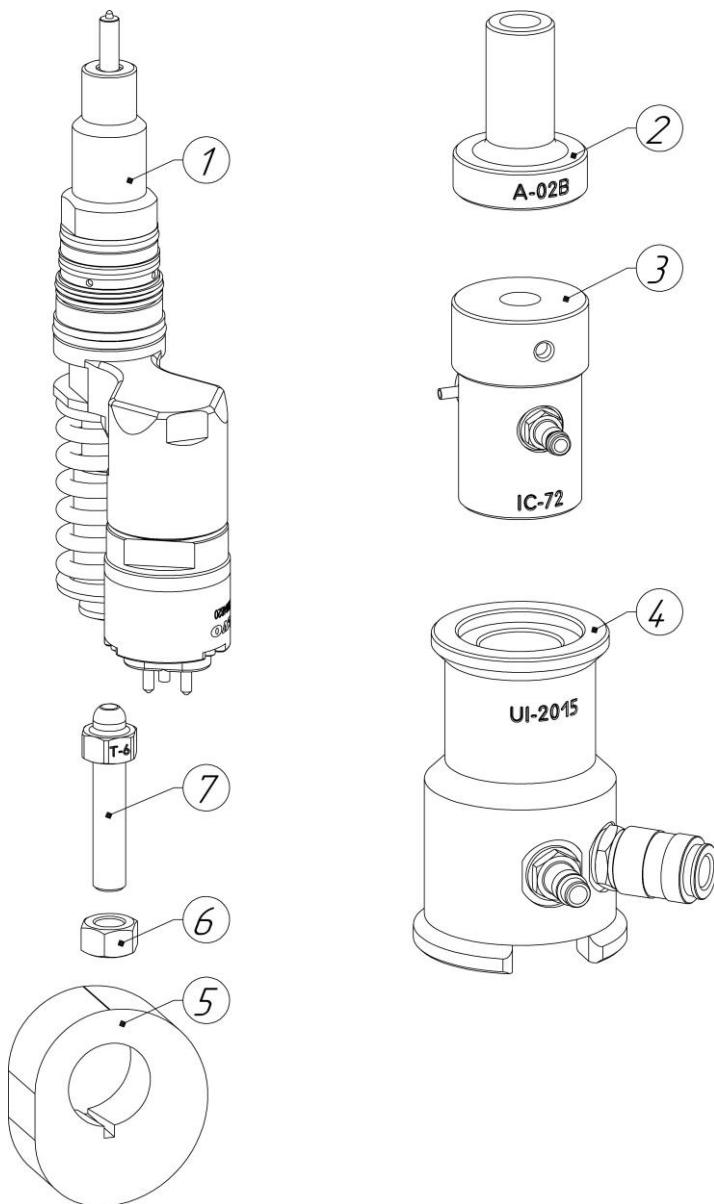


Figure 9. The set FH12

Installation kit for unit injectors FH12:

Position	Description
1*	Unit injector type FH-12;
2	Compensator A-02B;
3	Injection chamber IC-72;
4	Adapter UI-2015;
5	Cam OS.01-15;
6	Lock-nut;
7	Pusher T-6.

* -Position 1, is a conditional image, not included in the package.

11. The set DAF95

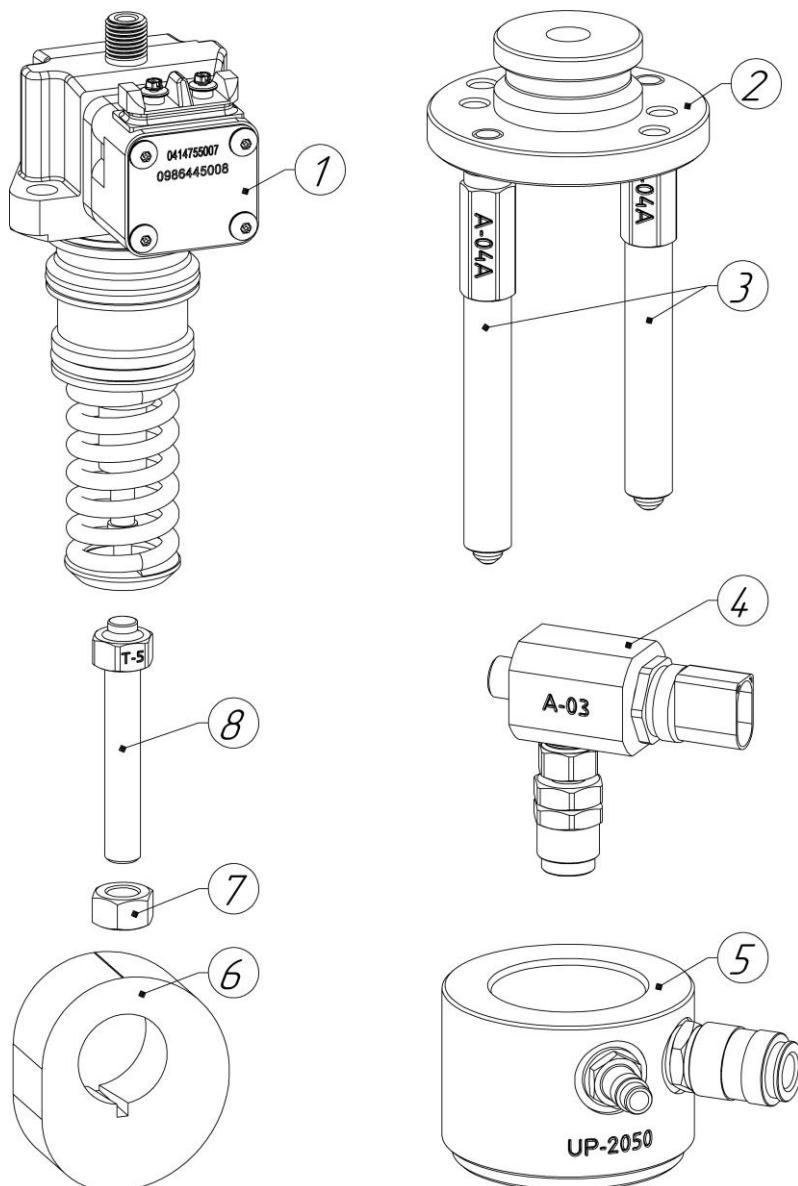


Figure 10. The set DAF95

Kit for installation of pumping sections DAF95:

Position	Description
1*	Pump section DAF95, 0 414 755 007 and the like;
2	Universal support A-04;
3	Remote speakers A-04A;
4	Pressure measurement adapter A-03;
5	UP-2050 adapter;
6	Cam OS.01-18;
7	Lock-nut;
8	Pusher T-5;
9**	Test nozzle fixing set.

* -Position 1, is a conditional image, not included in the package.

** - Position 9, “Test injector fixing” set, may have different configurations,
see the description of the set.

12. The set Atego

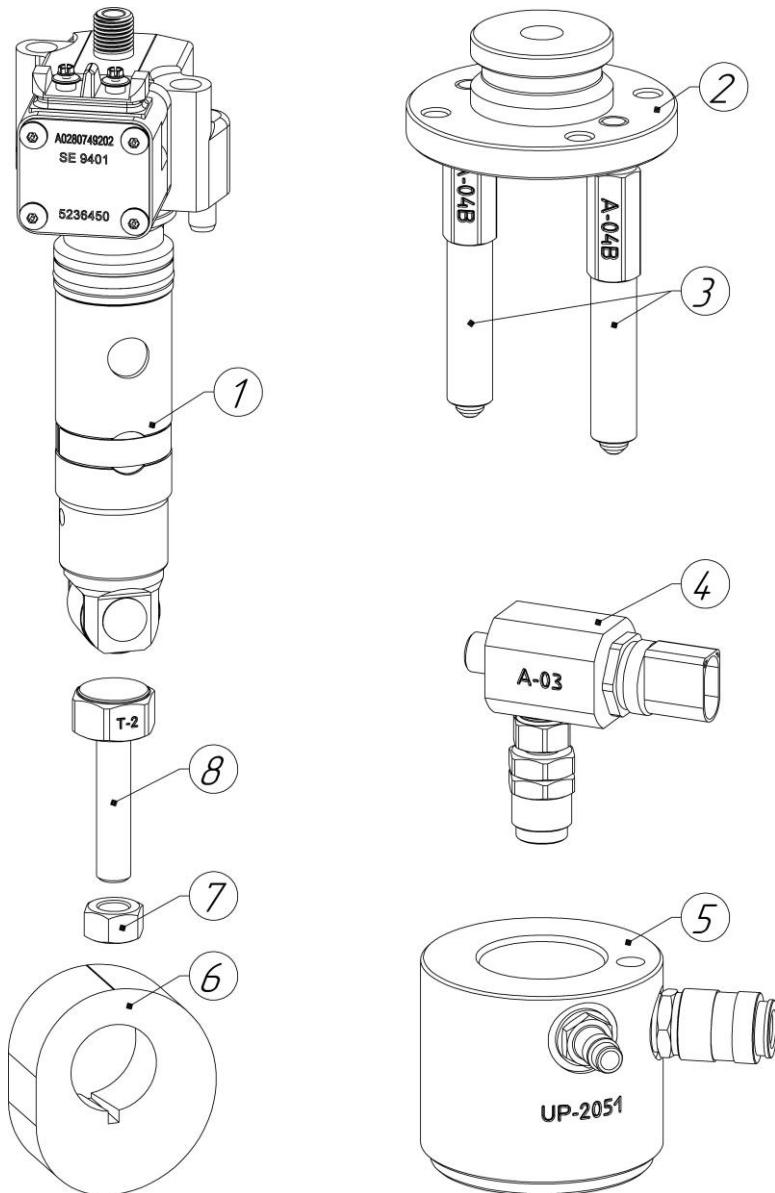


Figure 11. The set Atego

Installation kit for Atego pump units:

Position	Description
1*	Pump section Atego, 0 414 799 008 and the like;
2	Universal support A-04;
3	Remote speakers A-04B;
4	Pressure measurement adapter A-03;
5	UP-2051 adapter;
6	Cam OS.01-18;
7	Lock-nut;
8	Pusher T-2;
9**	Test injector fixing set.

* -Position 1, is a conditional image, not included in the package.

** - Position 9, “Test injector fixing” set, may have different configurations, see the description of the set.

13. The set Actros

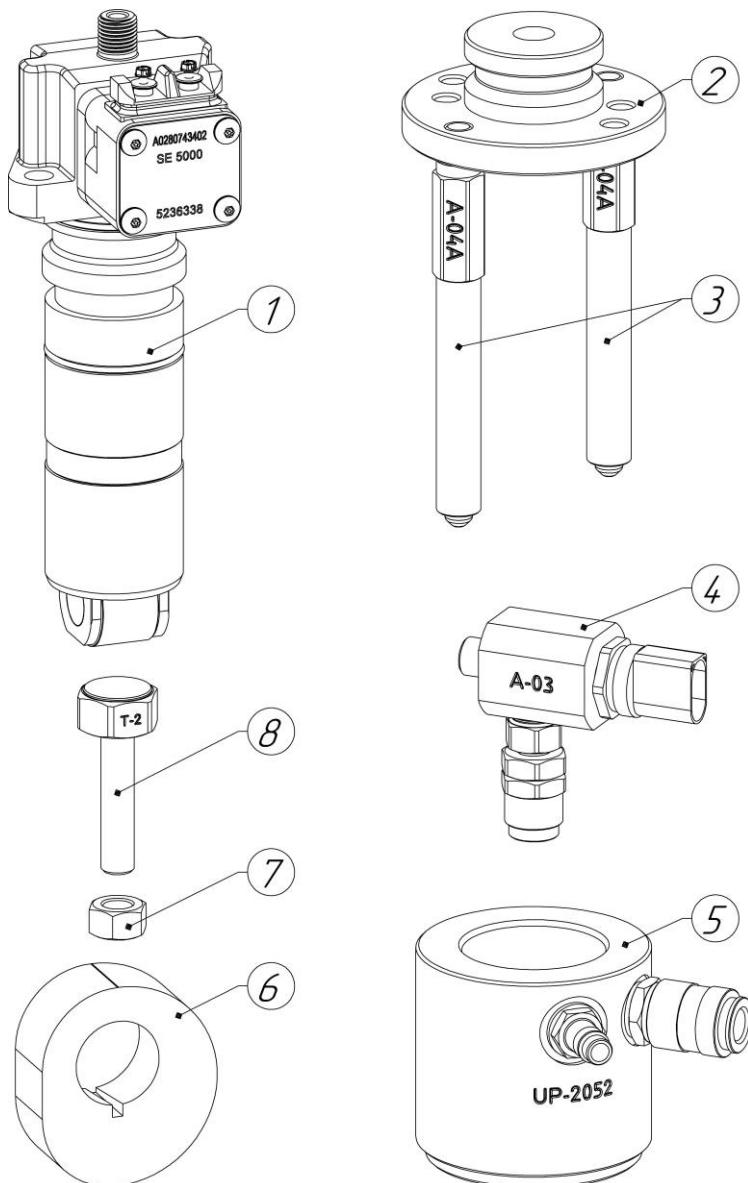


Figure 12. The set Actros

Installation kit for Actros pumping units:

Position	Description
1*	Pump section Actros, 0 414 799 005 and the like;
2	Universal support A-04;
3	Remote speakers A-04A;
4	Pressure measurement adapter A-03;
5	UP-2052 adapter;
6	Cam OS.01-18;
7	Lock-nut;
8	Pusher T-2;
9**	Test injector fixing set.

* -Position 1, is a conditional image, not included in the package.

** - Position 9, “Test injector fixing” set, may have different configurations, see the description of the set.

14. The set DAF105

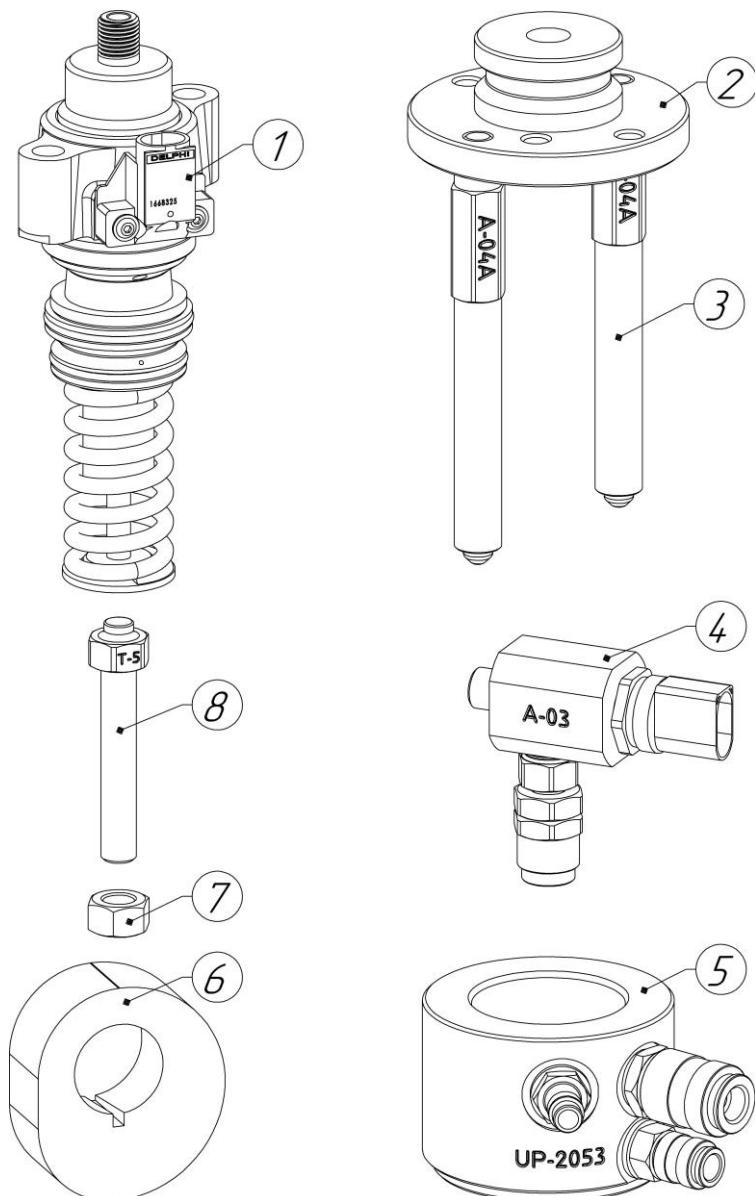


Figure 13. The set DAF105

Installation kit for pumping sections DAF105:

Position	Description
1*	Pump section DAF105;
2	Universal support A-04;
3	Remote speakers A-04A;
4	Pressure measurement adapter A-03;
5	UP-2053 adapter;
6	Cam OS.01-18;
7	Lock-nut;
8	Pusher T-5;
9**	Test injector fixing set.

* -Position 1, is a conditional image, not included in the package.

** - Position 9, “Test injector fixing” set, may have different configurations, see the description of the set.

15. Complex of the shim selection for injectors E1-E3

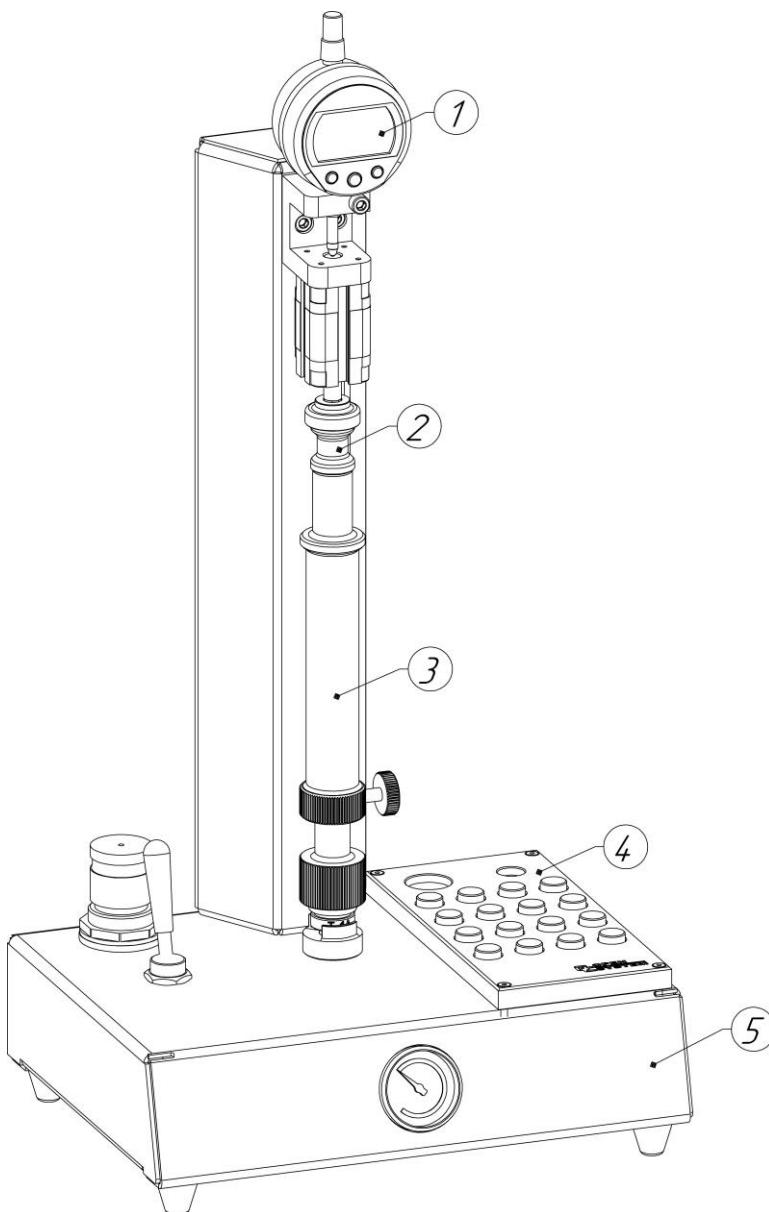


Figure 14. Complex of washer selection for injectors E1-E3

Complex of washer selection for injectors E1-E3

Position	Description
1	Measuring indicator;
2	Compensator;
3	Adjustable meter;
4	Washer kit;
5	Measuring stand.

16. Set "Fixing the test injector"

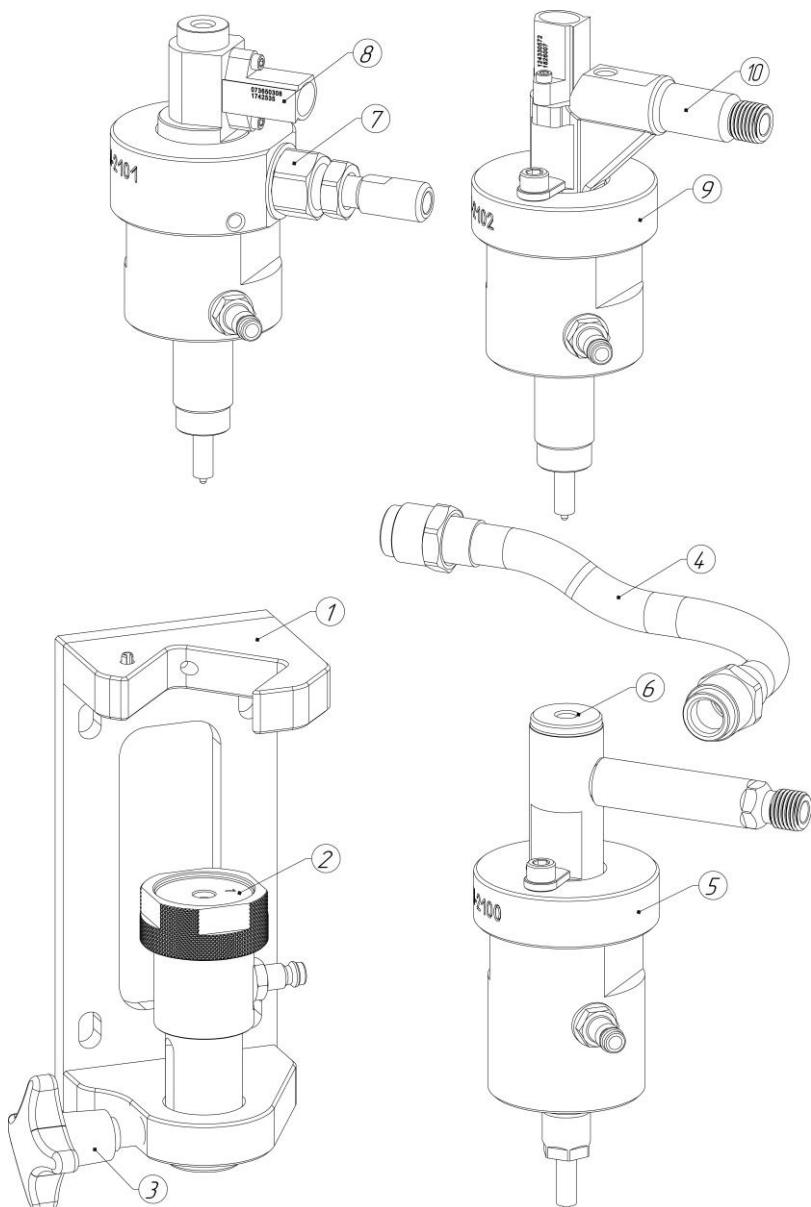


Figure 15. Set "Fixing the test injector"

Test injector fixing kit :

Position	Description
1	Mounting and installation bracket;
2	Injection chamber;
3	Injection chamber retainer;
4	High pressure connecting tube;
5	AI-2100 adapter;
6*	DAF95 injector;
7	AI-2101 adapter;
8*	SMART injector type DAF MX and DAF MX US;
9	AI-2102 adapter;
10*	SMART injector type DAF PR.

* -Position 6,8,10, is a conditional image, not included in the package.

16. Overall and installation dimensions

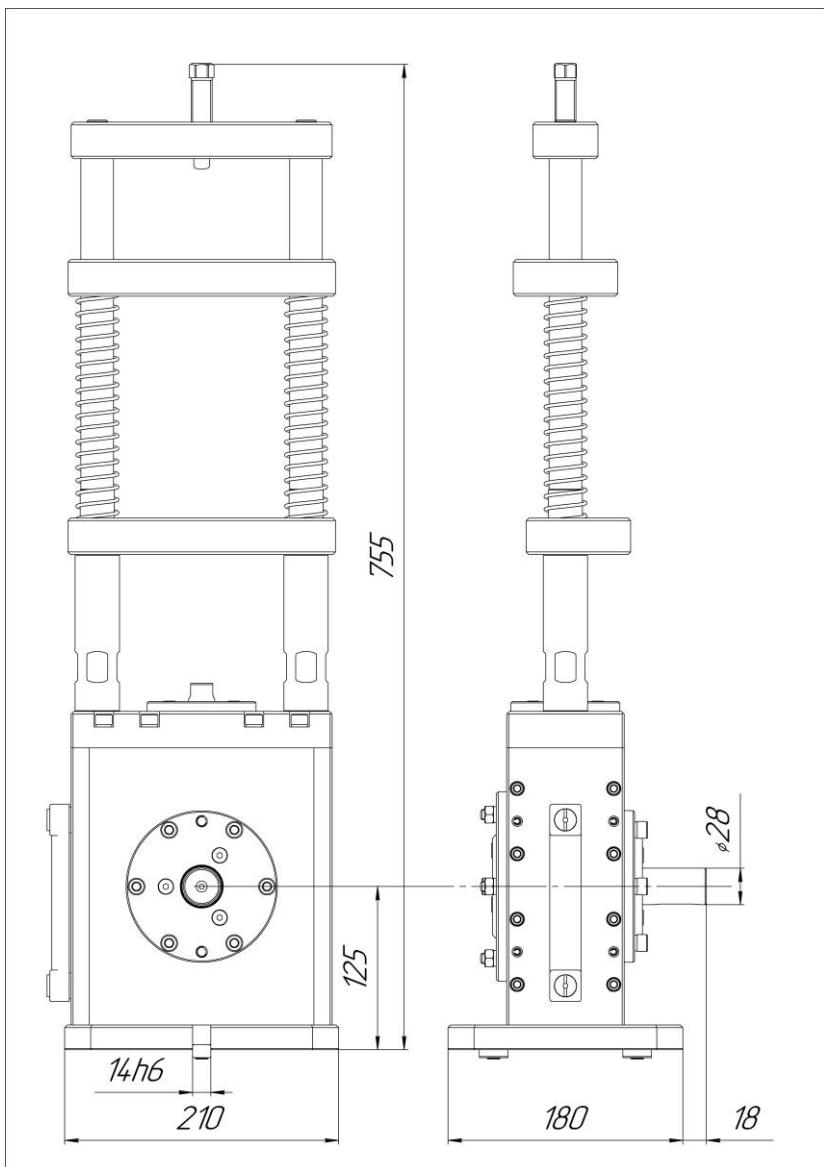


Figure 16.CAM-BOX OS V1 – Overall and installation dimensions

