



Ferrari North America

Technical Information

Date: April 2018
 Bulletin #: 2487
 Campaign #:
 Supersedes:
 Section: 1

Model Type: California/California T, 458 Italia/Spider/Speciale/Speciale A, FF, F12 Berlinetta/TDF, 488 GTB/Spider, GT4Lusso/T, 812 Superfast, Portofino
Model Year: All
Subject: Injectors and O-ring seal kit for Fuel system

Please note that in order to simplify engine servicing procedures for the aforementioned models, the following tool kit will be direct shipped to your dealer and injectors and O-rings will be available from the Ferrari North America Parts Department.

To identify the injector model correctly and the respective O-ring seal kit to be ordered, note the code stamped on the injector to be replaced and refer to the conversion table given below to determine the corresponding Ferrari part number.

PART No. TABLE

Model	Bosch injector part number	Ferrari injector part number	Bosch seal kit part number	Ferrari seal kit part number
California	0261500052	247588	2707010012	70004986
	0261500051	247589	2707010012	70004986
California T	0261500176	289576	2707010067	70004987
	0261500553	308319	F00ZK09016	70004988
458 Italia / 458 Spider / 458 Speciale / 458 Speciale A	0261500086	250776	2707010012	70004986
	0261500085	250775	2707010012	70004986
488 GTB / Spider	0261500176	289576	2707010067	70004987
	0261500553	308319	F00ZK09016	70004988
GTC4 Lusso T	0261500176	289576	2707010067	70004987
	0261500553	308319	F00ZK09016	70004988
Portofino	0261500176	289576	2707010067	70004987
	0261500553	308319	F00ZK09016	70004988



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Model	Bosch injector part number	Ferrari injector part number	Bosch seal kit part number	Ferrari seal kit part number
F12berlinetta	0261500052	247588	2707010052	70004989
	0261500301	307638	F00ZK09016	70004988
F12 tdf	0261500301	307638	F00ZK09016	70004988
812 Superfast	0261500445	339179	F00VH35018	70004990
GTC4 Lusso	0261500301	307638	2707010052	70004988
	0261500547	337711	F00ZK09016	70004988
FF	0261500052	247588	2707010052	70004989
	0261500301	307638	F00ZK09016	70004988

A Bosch tool kit p/n 079612147 with the tools needed to replace the injector seals will be shipped directly to all Authorized Ferrari Dealers – Fig 1.

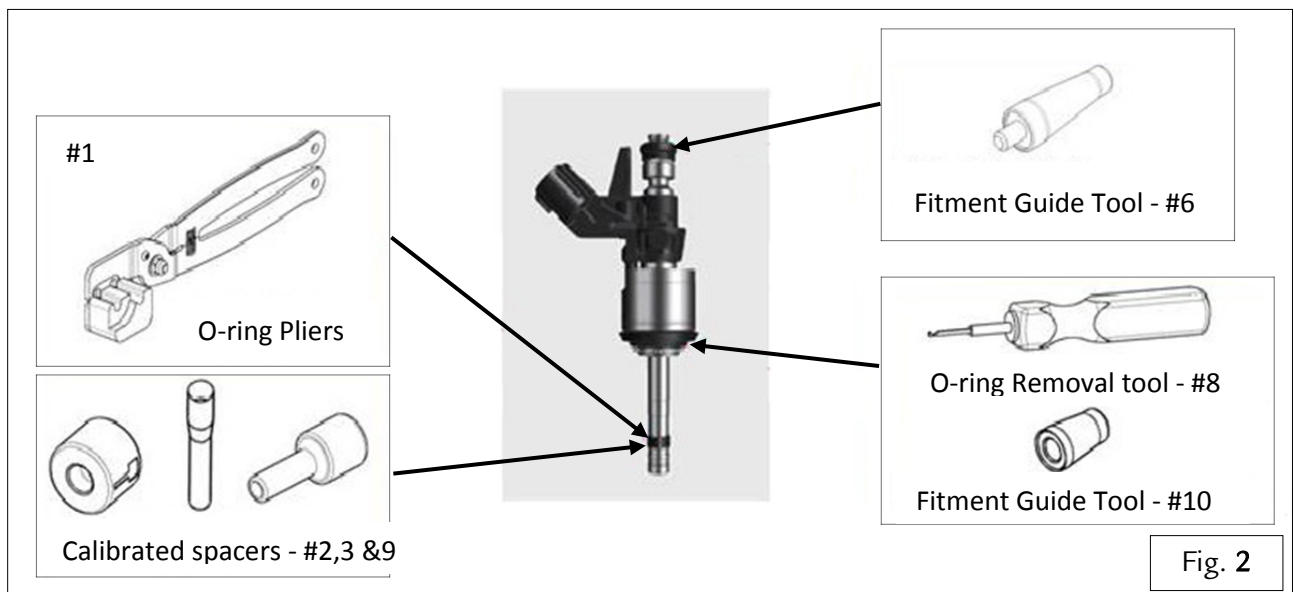
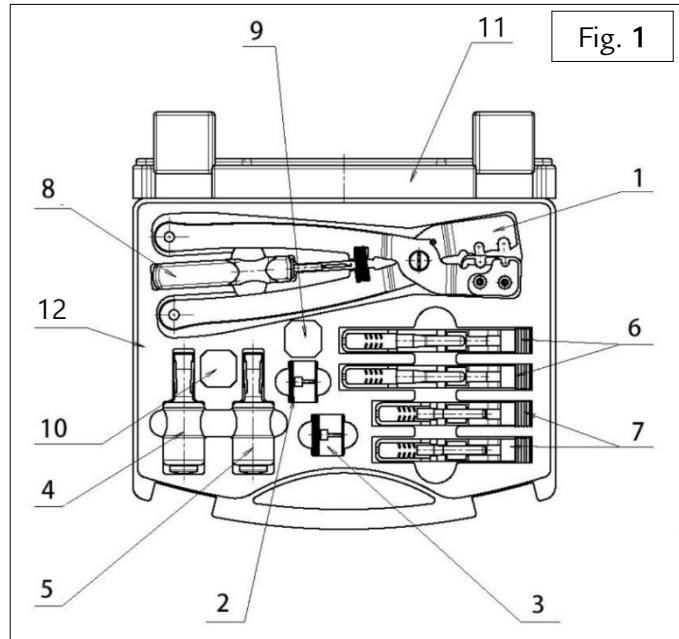


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O-RING REPLACEMENT TOOL KIT

The kit consists of the following:

1. Pliers for HDEV5/6 O-rings
2. Calibrated spacer for HDEV5
3. Calibrated spacer for HDEV6
4. Pusher handle for HDEV5 O-rings
5. Pusher handle for HDEV6 O-rings
6. Fitment guide tool for HDEV5 O-rings
7. Fitment guide tool for HDEV6 O-rings
8. O-ring removal hook
9. Fitment guide tool for seal rings
10. Fitment guide tool for O-rings (injector)
11. Rigid plastic case
12. Molded foam



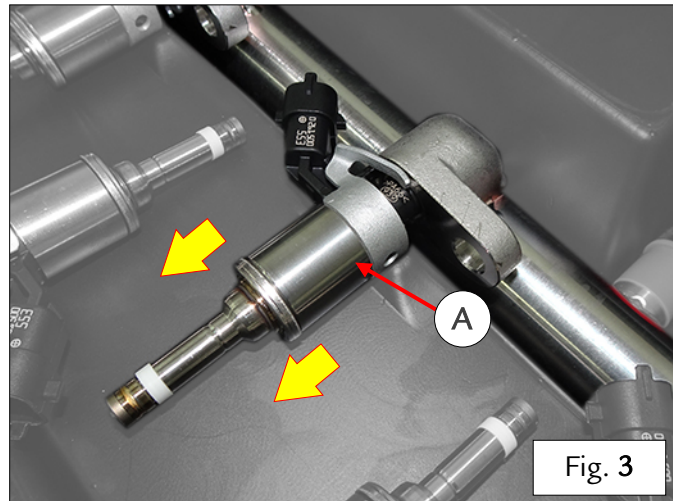


EXAMPLE OF PROCEDURE TO REPLACE HDEV5 SEAL RINGS

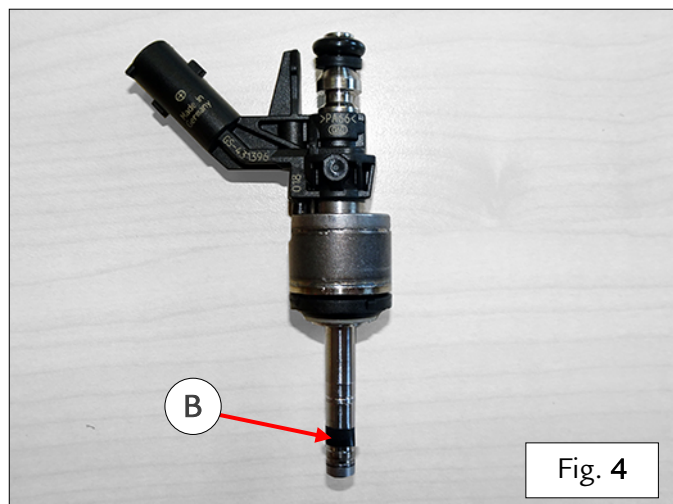
Removing the seal rings.

- Remove the GDI injector rail (as described in “GDI Direct Injection System” paragraph F3.XX (depending on model) Step 1 of the Workshop Manual).

- After removing the complete injector rail, the individual injector may be removed by pulling gently in the direction indicated by the yellow arrows (A) - Fig. 3.



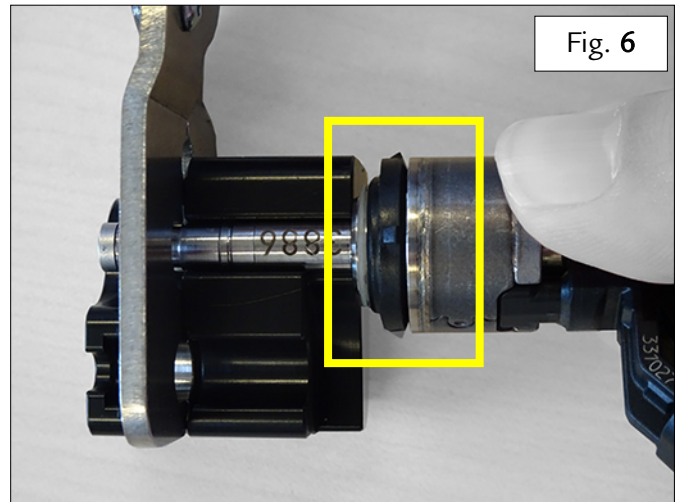
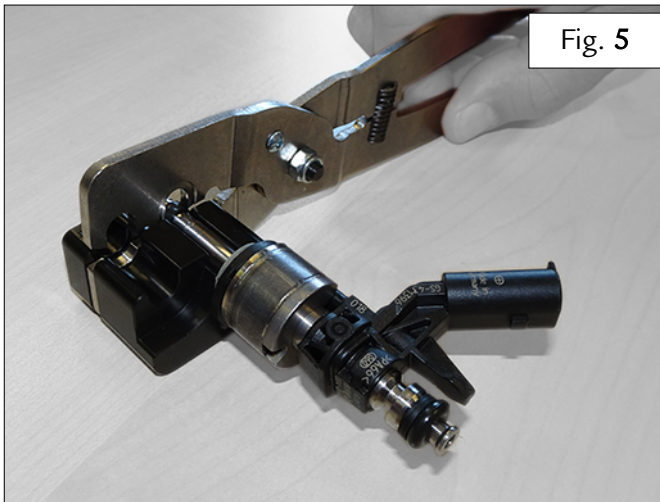
- After removing the injector from the rail, cut the Teflon seal (B) with the specific pliers (1) - Fig. 4.



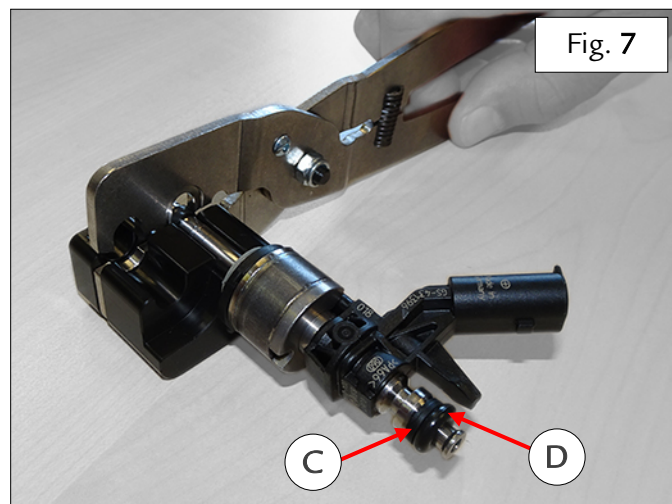


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- To ensure that the seal is cut correctly, place the injector in the jaws of the pliers (Fig.5) with the stem of the injector nozzle in the specific guide (5 mm), and make sure that the shoulder of the injector is against the edge of the guide before cutting - Fig. 6.



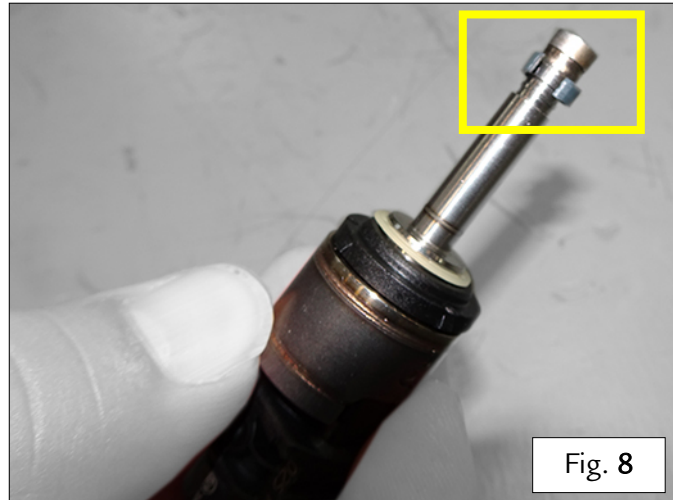
- After checking that the injector is positioned correctly relative to the pliers, apply a slight pressure to cut the seal - Fig. 7.
- To complete removal of the seal rings, pry the O-rings (C) and (D) out of their seats with the specific hook (8) - Fig. 7.



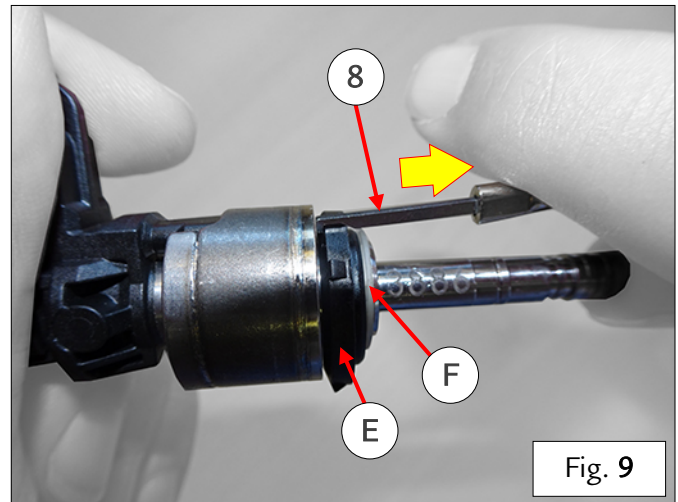


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- The following photo shows how the injector appears after the Teflon seal is cut - Fig. 8.



- Use the hook (8), ensuring that the seal ring (E) engages correctly in the notch in the tool, and then apply slight force in the direction indicated by the yellow arrow to pry both the seal ring and the safety retainer ring (F) out of their seats - Fig. 9.





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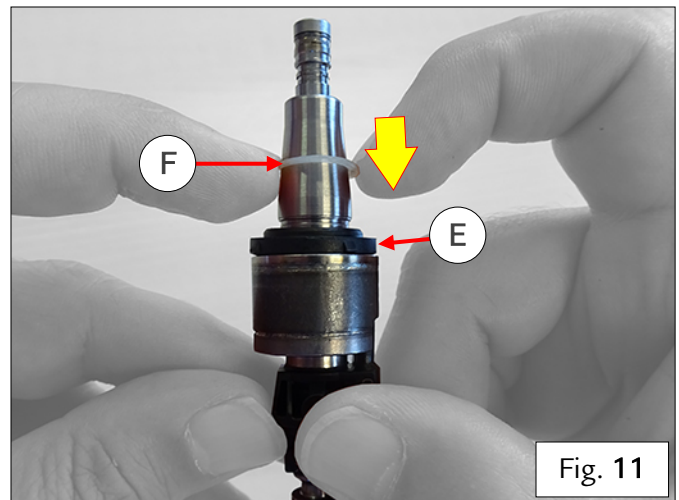
Installing new seal rings.

- First, place the fitment guide tool (9) as illustrated to permit installation of the new seal ring (E) and the new safety retainer ring (F) - Fig. 10.

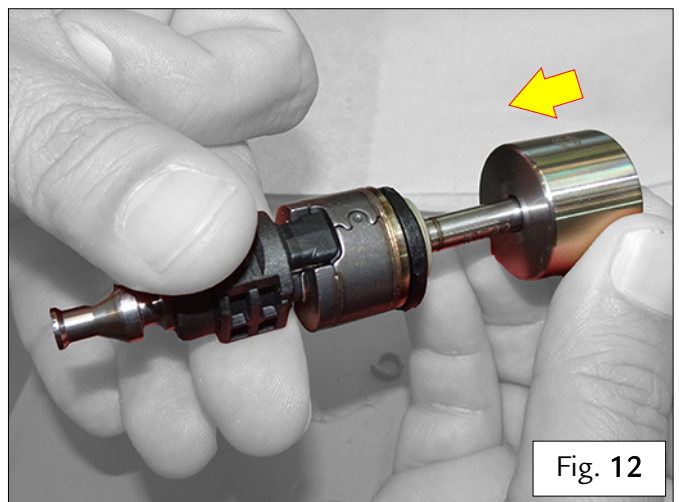


- After fitting the seal ring (E) in its seat, push the safety retainer ring (F) gently along the fitment guide tool and ensure that it fits correctly in its seat. After fitting the two rings, remove the fitment guide tool - Fig. 11.

Note: ensure that the seal rings are fitted correctly in the same positions as the originally fitted rings.



- Fit the calibrated spacer onto the stem of the injector (inserting the stem into the smaller diameter hole in the spacer), and push it completely against the shoulder of the injector - Fig. 12.





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- Place the fitment guide tool (5) onto the injector stem, pushing it completely into place - Fig. 8.
- Fit the Teflon O-ring (B) on the fitment guide tool - Fig. 13.

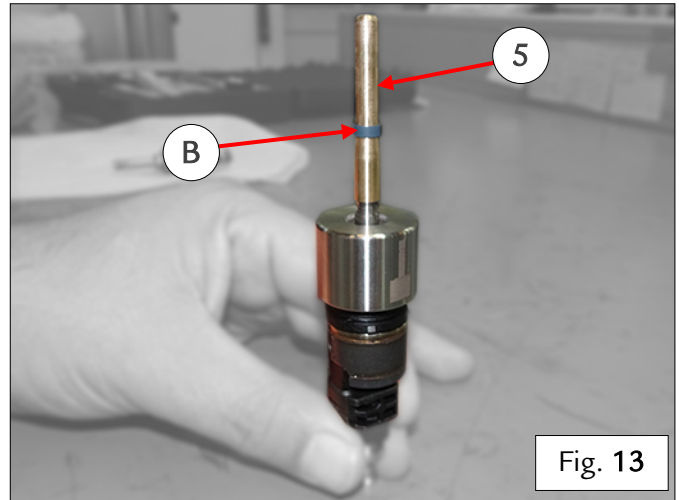


Fig. 13

- Use the pusher handle (4) to gently push the Teflon O-ring into its seat - Fig. 14.

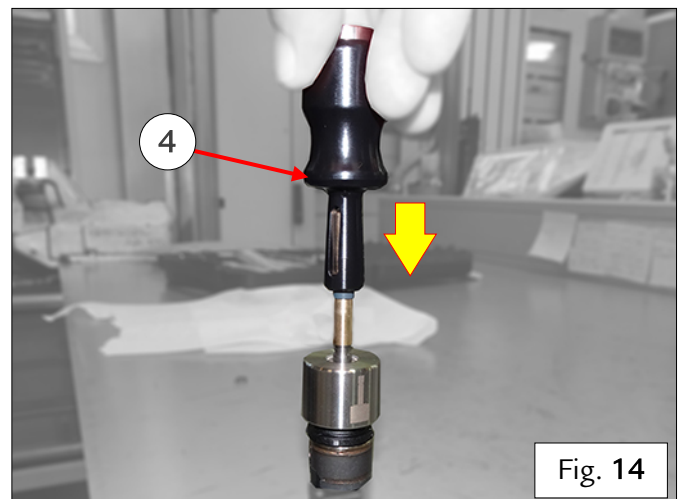


Fig. 14

- Ensure that the O-ring (B) is fitted correctly in its seat - Fig. 15.
- After fitting the O-ring, remove the fitment guide tool and the calibrated spacer.

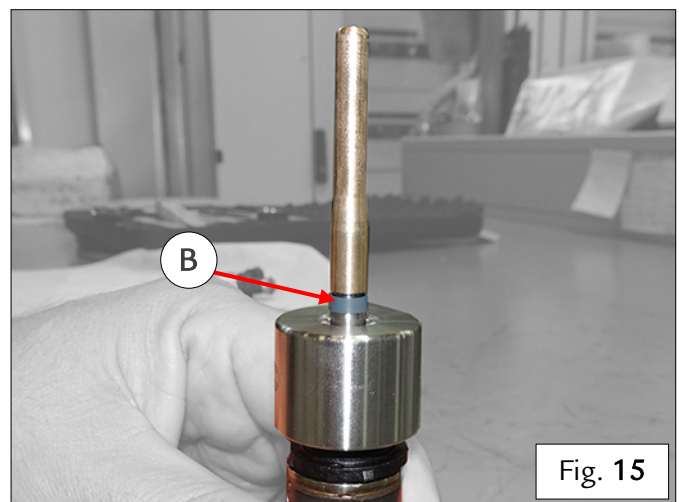


Fig. 15



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- Turn the injector over and fit the ring (D), and then place the fitment guide tool (10) on the stem, pushing it completely into place - Fig. 16.

Note: The ring (D) has a conical cross section and must be fitted the right way around. Ensure that the ring is fitted correctly in the same position and the same way around as the originally fitted ring.

- Fit the seal ring (E) onto the upper end of the fitment guide tool - Fig. 16.
- Push the O-ring (E) gently into its seat. After fitting the ring, remove the fitment guide tool - Fig. 17.

- After replacing all the seal rings, refit the injector (A) on the rail, pushing gently into place in the direction indicated by the yellow arrows - Fig. 18.

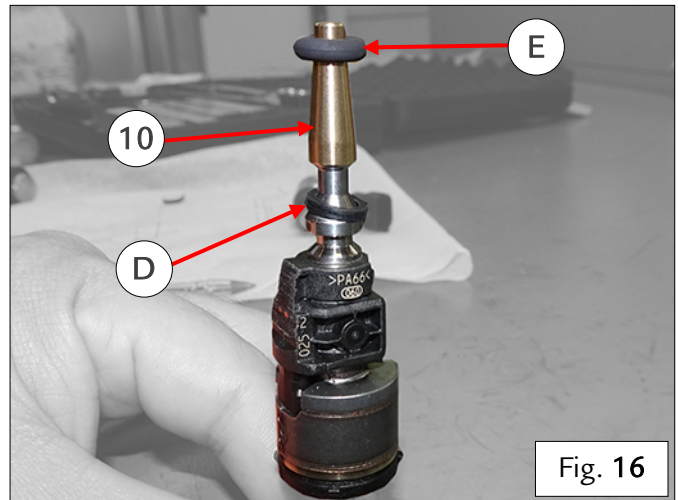


Fig. 16

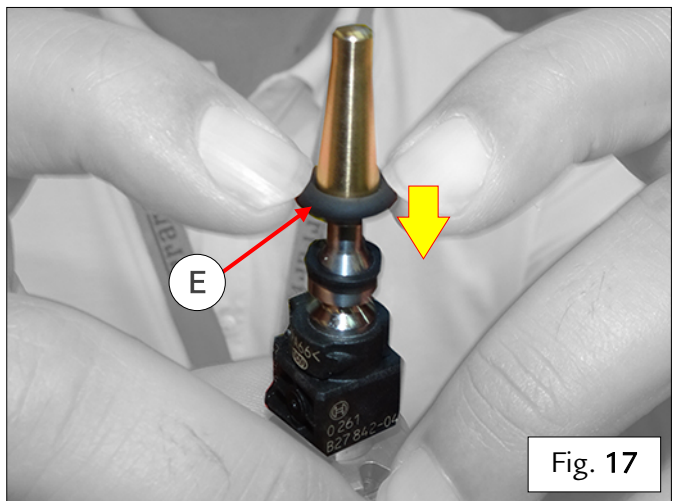


Fig. 17

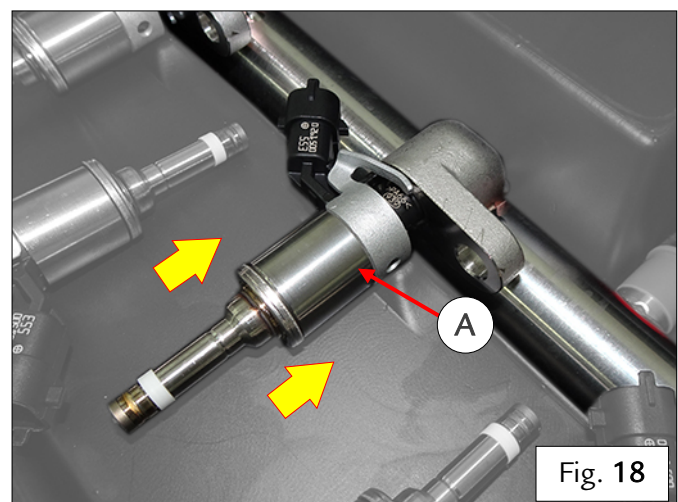


Fig. 18



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- Refit the GDI injector pipes (as described in “GDI Direct Injection System” paragraph F3.XX (depending on model) Step 2 of the Workshop Manual).

- IMPORTANT -

As also indicated in the Workshop Manual (“GDI direction Injection system” paragraph F3.XX –depending on model - Step 2), the high-pressure pump pipes must always be replaced if they have been removed.

EXAMPLE OF PROCEDURE TO REPLACE HDEV6 SEAL RINGS

Removing the seal rings.

- Remove the GDI injector pipes (as described in “GDI Direct Injection System” paragraph F3.XX (depending on model) Step 1 of the Workshop Manual).
- After removing the complete injector pipe, the individual injector may be removed by pulling gently in the direction indicated by the yellow arrows (A) - Fig. 19.

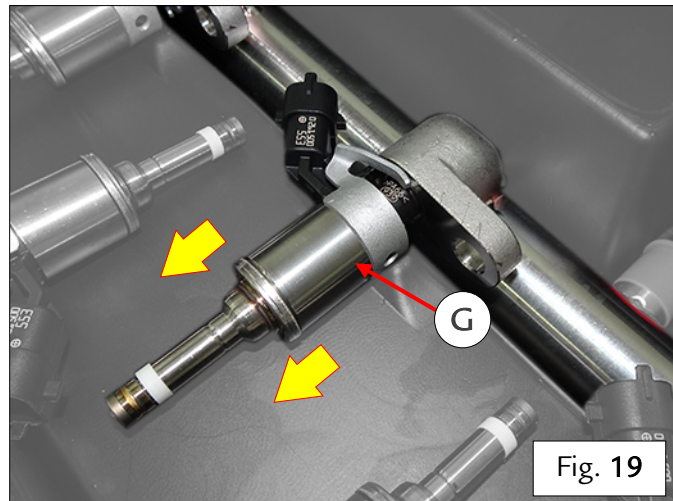
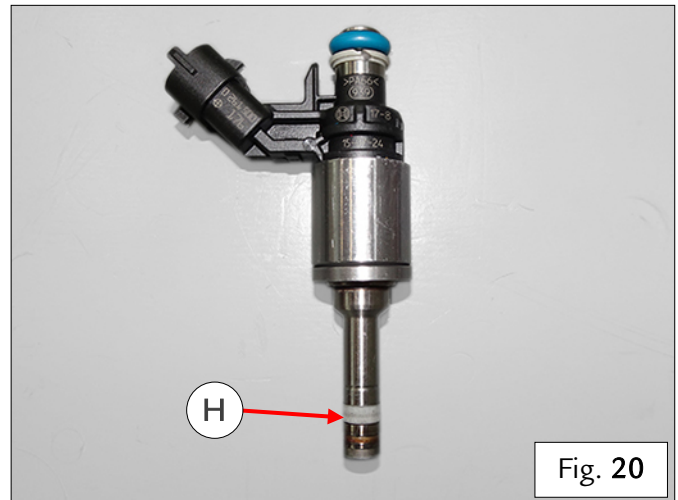


Fig. 19

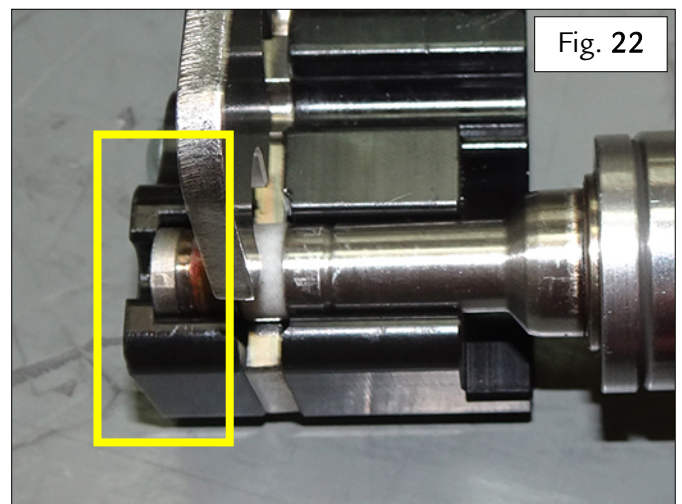
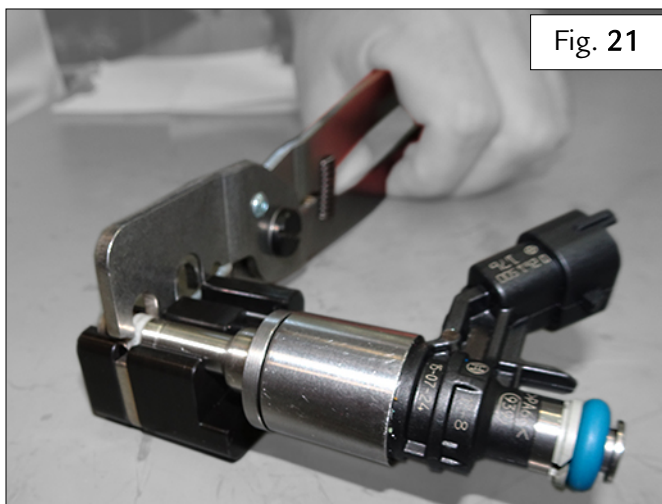


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- After removing the injector from the rail, cut the Teflon seal (H) with the specific pliers (1) - Fig. 20.



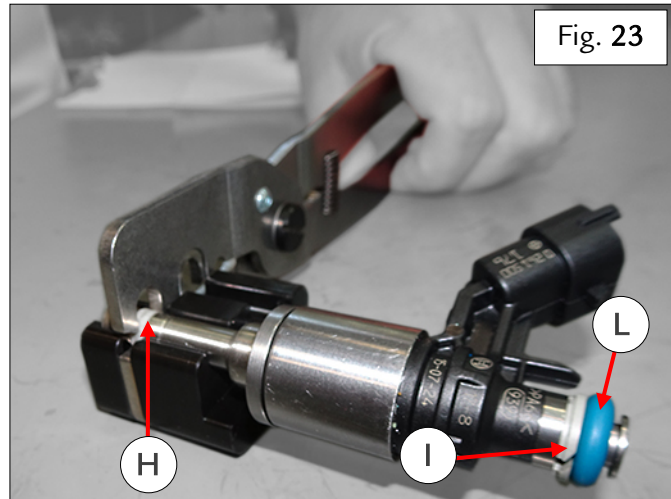
- To ensure that the O-ring (H) is cut correctly, place the injector in the jaws of the pliers (Fig. 21) with the stem of the injector in the specific guide (6 mm), and make sure that the shoulder of the injector is against the edge of the guide before cutting - Fig. 22





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- After checking that the injector is positioned correctly relative to the pliers, apply a slight pressure to cut the O-ring (H) - Fig. 23.
- To complete removal of the seal rings, prise the O-rings (C) and (D) out of their seats with the specific hook (8) - Fig. 23.



Installing new seal rings.

- To fit the new O-ring (H), follow the same procedure described for the HDEV5 model, using the correctly sized calibrated spacer and fitment guide tool.
- The new seal rings (I) and (L) must be fitted into the respective seats on the injector by hand, in the same order and the same way around the as the seal rings fitted originally.

- IMPORTANT -

As also indicated in the Workshop Manual (“GDI direction Injection system” paragraph F3.XX –depending on model - Step 2), the high pressure pump pipes must always be replaced if they have been removed.

- IMPORTANT -

The parts replaced under warranty (injectors) must be returned using the specific Parts Return procedures.

Thank you for your co-operation.