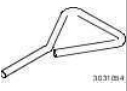
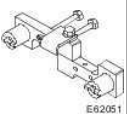
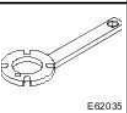
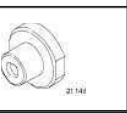


Removal and Installation**Special Tool(s)**

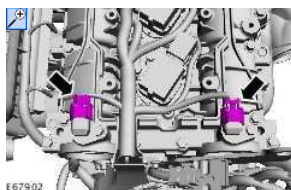
	303-1054 Locking Tool, Timing Belt Tensioner
	303-1178 Timing Tool Camshaft
	303-1179 Holding Wrench, Crankshaft
	303-1182 Timing Tool, Crankshaft
	303-318 Aligner/Installer, Crankshaft Front Seal

Removal

1. Remove the following items:

1. Refer to: [Ignition Coil-On-Plug - 2.5L Duratec-ST \(VI5\)](#) (303-07C Engine Ignition - 2.5L Duratec-RS (224kW/305PS) - VI5/2.5L Duratec-ST (166kW/226PS) - VI5, Removal and Installation).
2. Refer to: [Starter Motor - 2.5L Duratec-RS \(224kW/305PS\) - VI5/2.5L Duratec-ST \(166kW/226PS\) - VI5](#) (303-06 Starting System, Removal and Installation).

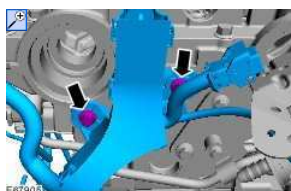
- 2.



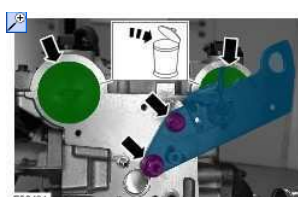
- 3.



- 4.



- 5.

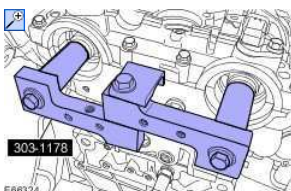


- 6.

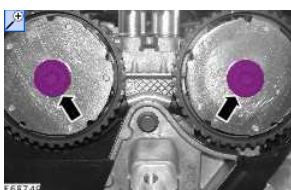


7. Refer to: [Timing Belt](#) (303-01E Engine - 2.5L Duratec-RS (224kW/305PS) - VI5, Removal and Installation).

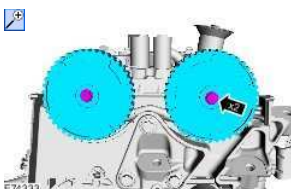
8. *Install Special Service Tool: 303-1178.*
Torque: 10 Nm



9.



10.



11.

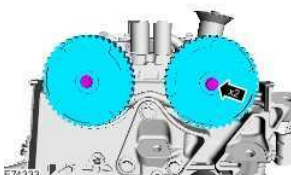


Installation

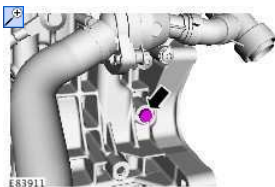
1. *Use Special Service Tool: 303-318.*



2. **NOTE:** Only tighten the bolts finger tight at this stage.

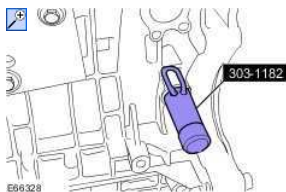


3.

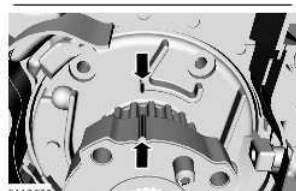
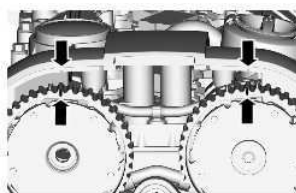


4. Using the special tool, align the crankshaft.

Install Special Service Tool: [303-1182](#).



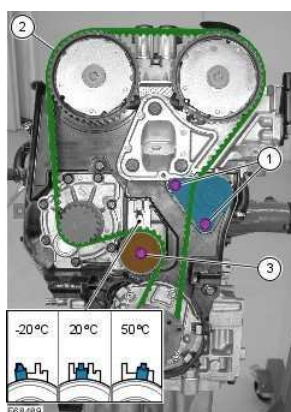
5.  **NOTICE:** Make sure that the installation marks are aligned.



Vehicles with mechanical timing belt tensioner

6. **NOTE:** Make sure that new components are installed.

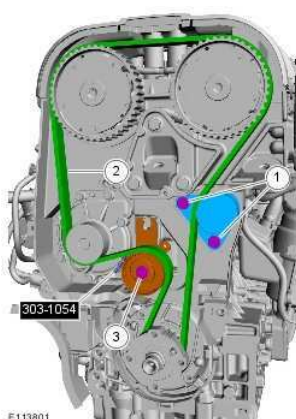
1. Torque: 25 Nm
- 2.
3. **NOTE:** The timing belt tensioner setting is dependant on the engine temperature.
Torque: 25 Nm



Vehicles with automatic timing belt tensioner

7. **NOTE:** Make sure that new components are installed.

1. Torque: 25 Nm
- 2.
3. Use Special Service Tool: [303-1054](#).
Torque: 25 Nm

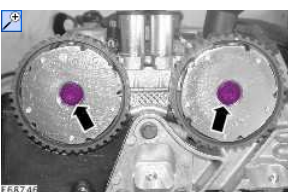


8.  **WARNING:** Take extra care when handling the compressed spring.
Remove Special Service Tool: 303-1054.

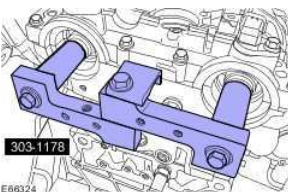


All vehicles

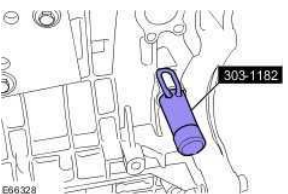
9. Torque: 120 Nm



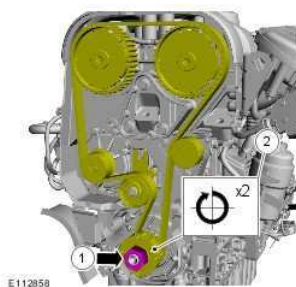
10. Remove Special Service Tool: 303-1178.



11. Remove Special Service Tool: 303-1182.



- 12.

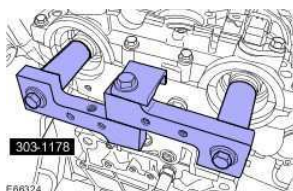


13. Using the special tool, align the crankshaft.

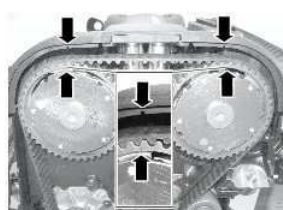
Install Special Service Tool: 303-1182.



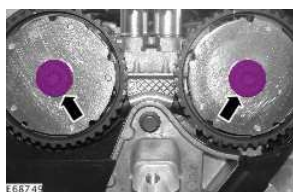
14. Install Special Service Tool: 303-1178.
Torque: 10 Nm



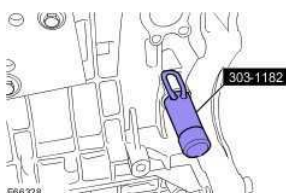
15.  **NOTICE:** Make sure that the installation marks are aligned.



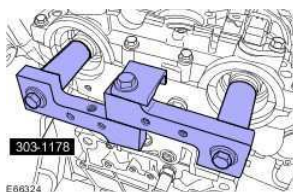
16. Torque: 35 Nm



17. Remove Special Service Tool: 303-1182.



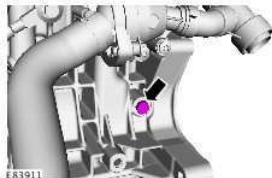
18. Remove Special Service Tool: 303-1178.



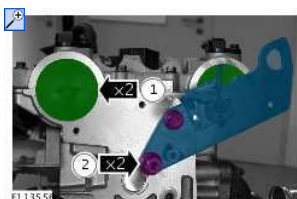
19. Torque: 17 Nm



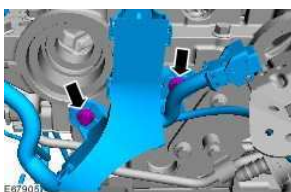
20. Torque: 40 Nm



- 21.
1. NOTE: Make sure that new components are installed.
 2. Torque: 40 Nm



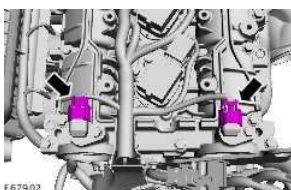
22. Torque: 10 Nm



23. Torque: 28 Nm

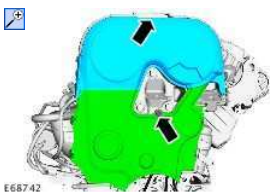


24.

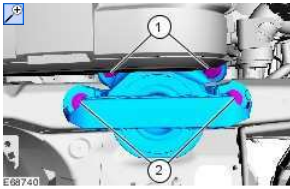


25. Refer to: [Ignition Coil-On-Plug - 2.5L Duratec-ST \(VI5\)](#) (303-07C Engine Ignition - 2.5L Duratec-RS (224kW/305PS) - VI5/2.5L Duratec-ST (166kW/226PS) - VI5, Removal and Installation).

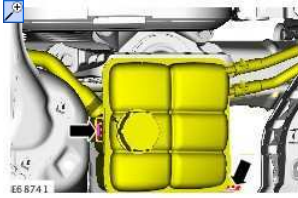
26. Torque: 10 Nm



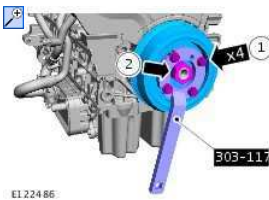
- 27.
1. Torque: 115 Nm
 2. Torque: 90 Nm



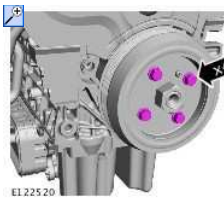
28.



- 29.
1. **NOTE:** Only tighten the bolts finger tight at this stage.
Install Special Service Tool: [303-1179](#).
 2. Torque: 180 Nm
30. Remove Special Service Tool: [303-1179](#).



31. Torque:
- Stage 1: 25 Nm
 - Stage 2: 60°



32. Install the following items:
1. Refer to: [Air Conditioning \(A/C\) Compressor Belt](#) (303-05B Accessory Drive - 2.5L Duratec-RS (224kW/305PS) - VI5/2.5L Duratec-ST (166kW/226PS) - VI5, Removal and Installation).
 2. Refer to: [Starter Motor](#) - 2.5L Duratec-RS (224kW/305PS) - VI5/2.5L Duratec-ST (166kW/226PS) - VI5 (303-06 Starting System, Removal and Installation).