

E4 Engine



E4.00.10 List of applicable publications (LOAP)

updated: 11.05.2022

| Doc. No. | Title | Initial Issue | Revision - Date | S/N affected (SB / SI) | Remarks |
|--|--|---------------|-----------------|------------------------|------------------|
| Manuals | | | | | |
| E4.01.01 | Operation Manual E4 (OM) | | 20 15-Nov-2016 | | |
| E4.01.02 | Operation Manual E4P (OM) | | 1 15-Nov-2016 | | |
| E4.02.01 | Installation Manual E4 Series (IM) | | 22 5-May-2022 | | |
| E4.08.04 | Maintenance Manual (MM) | | 30 23-Sep-2021 | | |
| E4.08.16 | Repair Manual Gearbox | | 0 5-Mar-2014 | | |
| E4.12.01 | Overhaul Manual E4 (OHM) | | 5 1-Aug-2021 | | |
| E4.12.02 | Overhaul Manual Gearbox (OHMG) | | 0 31-Oct-2014 | | |
| Manuals - Valid temporary revisions | | | | | |
| OM-TR-MDC-E4-377a | Engine Oil | | - 18-Jan-2017 | | Model E4 and E4P |
| OM-TR-MDC-E4-436 | Turbocharger operation | | - 28-Mar-2018 | | Model E4 and E4P |
| OM-TR-MDC-E4-453 | Caution Handling Tables | | 25-Feb-2019 | | Model E4 and E4P |
| OM-TR-MDC-E4-490 | F34 Jet Fuel DEF(AUST)5240D | | 7-May-2019 | | Model E4 and E4P |
| OM-TR-MDC-E4-567a | Engine Storage | | - 12-Nov-2020 | | Model E4 and E4P |
| OM-TR-MDC-E4-630 | Kathon FP 1.5 Fuel Additive | | - 8-Jul-2021 | | Model E4 and E4P |
| OM-TR-MDC-E4-635 | Jet Fuel 3 GB 6537-2018 | | - 17-Nov-2020 | | Model E4 and E4P |
| OM-TR-MDC-E4-664 | Manual corrections | | - 23-Mar-2021 | | Model E4 and E4P |
| MM-TR-MDC-E4-469 | Turbocharger stud repair | | - 4-Aug-2021 | | |
| MM-TR-MDC-E4-694a | Oil Pump Lifetime Extension | | - 6-May-2022 | | |
| MM-TR-MDC-E4-701c | High pressure pump gear modification | | - 2-Dec-2021 | | |
| MM-TR-MDC-E4-708 | HP fuel supply line - torque adaptation | | - 10-Sep-2021 | | |
| MM-TR-MDC-E4-718 | Engine Harness | | 7-Apr-2022 | | |
| MM-TR-MDC-E4-727 | Scheduled Maintenance Correction | | 4-Nov-2021 | | |
| MM-TR-MDC-E4-737a | Two-Mass-Flywheel and Hub | | - 7-Apr-2022 | | |
| MM-TR-MDC-E4-756 | Wastegate Restrictor Cleaning | | - 10-May-2022 | | |
| MM-TR-ODC-E4-015 | Alternative Camshaft Sensor (CAS) | | - 7-Feb-2022 | | |
| RMG-TR-MDC-E4-369 | General Amendments | | - 15-Dec-2015 | | |
| OHM-TR-MDC-E4-555 | Engine Harness | | - 15-Jun-2021 | | |
| OHM-TR-MDC-E4-652 | Cover Sensor Housing/Flywheel Crack Detection | | - 21-Jan-2021 | | |
| OHM-TR-MDC-E4-717 | Closing Cover EGR bottom | | 12-Oct-2021 | | |
| OHM-TR-MDC-E4-015 | Alternative Camshaft Sensor | | - 7-Feb-2022 | | |
| OHMG-TR-MDC-E4-275c | Crack detection / Repainting of propeller shaft | | - 5-May-2015 | | |
| OHMG-TR-MDC-E4-369 | General Amendments | | - 15-Dec-2015 | | |
| OHMG-TR-MDC-E4-385 | Bonding of gearbox-inner bearing rings | | - 7-Jul-2016 | | |
| OHMG-TR-MDC-E4-390 | Gearbox test run and insertion of threaded inserts | | - 9-Oct-2017 | | |
| OHMG-TR-MDC-E4-419 | Replace of oil pipe and oil cooler | | - 12-Sep-2017 | | |
| OHMG-TR-MDC-E4-503 | Pre-assembly bearing carrier | | - 10-Jun-2019 | | |
| OHMG-TR-MDC-E4-576 | Coating for gearbox gears | | - 14-Mar-2022 | | |

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| Service Information | | | | | |
| SI-E4-001/2 | Life time and TBO extension | | 2 22-Apr-2015 | All | Only engine model E4 |
| SI-E4-002 | Gearbox oil check procedure update | | 0 18-May-2011 | All | |
| SI-E4-003 | Technical publication and reporting system of Austro Engine GmbH (AE) | | 0 30-Jan-2013 | All | |
| SI-E4-004 | EECU Venting Element | | 0 27-Aug-2015 | All | |
| SI-E4-006 | New revision index for part numbers | | 0 27-Mar-2017 | All | |
| SI-E4-007 | Proper handling of turbo charger | | 0 27-Sep-2016 | All | |
| SI-E4-009 | Two-mass Flywheel and Hub | | 0 17-Jun-2017 | All | |
| SI-E4-010 | Caution of foreign object ingestion during maintenance | | 0 16-Oct-2017 | All | |
| SI-E4-011 | Global alternative means of compliance (AMOC) to FAA AD 2018-07-16 (g) | | 0 20-Mar-2019 | All | |
| SI-E4-013/1 | Oil sampling | | 1 10-May-2022 | All | |
| SI-E4-014 | EECU Data Log capability | | 0 26-Jan-2021 | All | |
| SI-E4-015 | Handling and storage condition of engine spare parts | | 0 20-Apr-2021 | All | |
| SI-E4-016/1 | Cylinder head (CH) Identification - Alternative methods | 4-May-2021 | 1 6-Dec-2021 | All | |
| SI-E4-018 | High Pressure Pump (HPP) driving gear identification | | 0 15-Dec-2021 | Affected engine serial numbers are listed in Service Information SI-E4-018 | |
| Service Bulletins - Mandatory | | | | | |
| MSB-E4-002/3 | Configuration specification of the E4 engine | 13-Feb-2009 | 3 25-Aug-2020 | All | |
| MSB-E4-003/26 | Software and hardware versions of the E4 engine series | 18-Feb-2009 | 26 3-Mar-2022 | All | |
| MSB-E4-004/1 | Long term conservation of E4 engine | 15-Dec-2009 | 1 25-Aug-2016 | All | |
| MSB-E4-006 | Repair of sensor cable for camshaft sensor of ECU B | 24-Nov-2009 | 0 24-Nov-2009 | E4-A-00001 to E4-A-00009 E4-B-00001 to E4-B-00084 | |
| MSB-E4-007/6 | Replacement of waste gate controller | 22-Mar-2010 | 6 18-Sep-2013 | E4-A-00001 to E4-A-00070 E4-B-00001 to E4-B-00345 | EASA AD No.: 2013-0213 R1 CAAC CAD2013-DA42-01R1 FAA AD No. 2014-08-10 |
| MSB-E4-008/2 | Exchange of oil separator hose between cylinder head cover and oil separator | 2-Jun-2010 | 2 24-Jan-2014 | E4-B-00001 to E4-B-00109 E4-B-00112 to E4-B-00122 unless MSB-E4-008 has already been conducted or injector cover with maintenance lid is installed. | |
| MSB-E4-009/2 | High pressure pump exchange | 7-Oct-2010 | 2 4-Mar-2011 | All engines having the high pressure pump with the part no. E4A-30-100-000 installed. | EASA AD No.: 2011-0039 FAA AD No. 2011-18-19 |
| MSB-E4-013/1 | Gearbox oil inspection | 18-Aug-2011 | 1 19-Aug-2011 | All Gearbox S/N starting with P All Gearbox S/N below 398 with less than 100 operating hours except those where FC-E4-008 or FC-E4-009 has already been performed. | |
| MSB-E4-014/2 | Replacement of the fuel return line and banjo fitting | 3-Apr-2012 | 2 11-Jun-2012 | E4-A-00001 to E4-A-00099 E4-B-00001 to E4-B-00379 E4-C-00001 to E4-C-00020 | |
| MSB-E4-017/2 | Check/Replacement of timing chain | 30-Jun-2014 | 2 2-Dec-2016 | Model E4; All | EASA AD No.: 2017-0103 CAAC AD No.: CAD2017-MULT-36 Amnd. No. 39-9090 |
| MSB-E4-020 | Inspection of gearbox housing | 24-Feb-2016 | 0 24-Feb-2016 | All engines having gearbox with the part no.: E4A-70-000-000 Rev. 070 up to and including Rev. 101 installed | |

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|--------------|---|---------------|-----------------|--|--------------------------|
| MSB-E4-022/5 | Waste Gate Control Rod | 2-Nov-2017 | 5 12-Dec-2018 | All | |
| MSB-E4-024/1 | Waste gate – Spring loaded circlip | 21-Jun-2017 | 1 31-Aug-2017 | All | |
| MSB-E4-025/3 | Fuel Injectors | 1-Oct-2018 | 3 8-Jan-2019 | All | |
| MSB-E4-026/1 | Inspection of engine harness | 1-Mar-2019 | 1 16-Apr-2019 | E4-A-00001 through E4-A-00539 E4-B-00001 through E4-B-00554 E4-C-00001 through E4-C-00539 E4P-C-00001 through E4P-C-00229 | |
| MSB-E4-028/3 | Oil return line pipe, part number E4A-55-100-000 | 8-Jul-2020 | 3 20-Jan-2021 | Affected engine serial numbers are listed in the Service Bulletin MSB-E4-028/3 | |
| MSB-E4-029/2 | Modification of pressure valve hose for damping pressure oscillations | 9-Dec-2020 | 2 26-Apr-2022 | E4-A-00001 up to E4-A-05091 E4-A-06000 up to E4-A-06011 E4-B engines s/n up to E4-B-06001 E4-C engines s/n up to E4-C-06008 E4P engines s/n up to E4P-B-06001 E4P engines s/n up to E4P-C-06007 | |
| MSB-E4-030/4 | Oil pump replacement | 18-Feb-2021 | 4 30-Mar-2021 | Affected engine serial numbers are listed in the Service Bulletin MSB-E4-030/4 | |
| MSB-E4-031/2 | Oil pump replacement | 14-Jun-2021 | 2 21-Jul-2021 | Affected engine serial numbers are listed in the Service Bulletin MSB-E4-031/2 | |
| MSB-E4-034/4 | High pressure pump (HPP) driving gear replacement | 11-Aug-2021 | 4 8-Nov-2021 | Affected engine serial numbers are listed in the Service Bulletin MSB-E4-034/4 | superseded by MSB-E4-036 |
| MSB-E4-035/2 | High pressure pump driving gear inspection | 10-Sep-2021 | 2 9-Nov-2021 | All E4/E4P engine s/ns having a cylinder head part number E4A-12-500-000 installed | superseded by MSB-E4-036 |
| MSB-E4-036/1 | High Pressure Pump (HPP) Inspection and Replacement | 30-Nov-2021 | 1 15-Dec-2021 | Affected engine serial numbers are listed in Service Bulletin MSB-E4-036/1 | |

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| Service Bulletins - Recommended / Optional | | | | | |
| RSB-E4-016/1 | Oil dip stick: renewal of thread lock of oil level rod | 16-Jul-2013 | 1 25-Jul-2013 | All | |
| RSB-E4-018 | Inspection of engine harness | 22-Sep-2014 | 0 22-Sep-2014 | All | |
| RSB-E4-021/1 | Fuel Pressure Sensor - Connector modification for sensor with p/n E4A-30-100-802 | 23-Sep-2016 | 1 17-Jun-2021 | All | |
| RSB-E4-028/2 | Installation of new sensors AEP-00284-901 for OPS (Oil Pressure Sensor) and FPS (Fuel Pressure Sensor) | 3-Mar-2021 | 2 6-Oct-2021 | All | |
| RSB-E4-032/1 | Installation of new sensors AEP-00286-901 for BPS (Boost Pressure Sensor) | 17-Jun-2021 | 1 12-Jul-2021 | All | |
| RSB-E4-037/2 | Loctite on flywheel hub mounting screws | 15-Dec-2021 | 2 11-Jan-2022 | Affected engine serial numbers are listed in the Service Bulletin RSB-E4-037/2 | |
| RSB-E4-038/1 | Flywheel Hub inspection for cracks | 7-Feb-2022 | 1 24-Mar-2022 | All engines having installed Hub with part no.: E4A-73-000-203 | |
| OSB-E4-019/3 | Gearbox oil cooler | 31-Mar-2015 | 3 3-May-2018 | All engines having gearbox with the part no.: E4A-70-000-000 Rev. 110 or higher installed and having engine harness E4A-95-000-000 Rev. 000 or higher installed. | |
| OSB-E4-033/3 | Oil pump inspection to check serviceability | 5-Jul-2021 | 3 6-May-2022 | All | |
| Other Documents | | | | | |
| E4.08.09 | AE300-Wizard User Guide | | 13 20-Feb-2020 | | |
| msi.file | AE300-Wizard Software | | 7.1 30-Sep-2021 | | Due to software issues with rev. 7 from 22.09.2021 the file is updated to rev. 7.1. Please uninstall rev. 7 and install rev. 7.1 |
| .exe | AE300-Wizard Driver | | 3 22-Sep-2021 | | |
| E4.03.01 | Illustrated Parts Catalogue | | 22-Mar-2021 | All | |
| E1.03.01 | Illustrated Parts Catalogue | | 1-Oct-2021 | All | |