

BMW 428i, 435i, F32, F33, F36

BMW 4 Series (F32, F33, F36) Service Manual 2014-2016

Models: 428i, 435i, including xDrive

INTRODUCTION

This Bentley Manual provides comprehensive maintenance, service, and repair information for the BMW 4 Series models produced from 2014 to 2016. This includes the F32, F33, and F36 chassis, covering 428i and 435i variants, as well as xDrive models. The manual is designed for clarity and ease of use, offering practical explanations, step-by-step procedures, and precise specifications. It serves as an essential resource for both professional technicians and do-it-yourself BMW owners, enabling a deeper understanding of vehicle care and repair.

BMW 4 Series

Service Manual

428i, 435i, including xDrive
2014, 2015, 2016



B BentleyPublishers®
.com

Image: Front cover of the BMW 4 Series Service Manual, illustrating the vehicle models covered and examples of detailed technical content within.

KEY FEATURES AND COVERED TOPICS

- **Maintenance Procedures:** Detailed instructions for routine tasks, from cabin microfilter replacement to battery registration.
- **Fluid and Lubricant Service:** Comprehensive guidance for front-to-rear fluid changes, including xDrive transfer case fluid and Automatic Transmission Fluid (ATF).
- **Engine Repair:** Procedures for cylinder head cover gasket and crankshaft seal replacement.

- **Cooling System:** Service information for the cooling system, thermostat, and radiator.
- **Fuel and Ignition Systems:** Diagrams and explanations for turbo-valvetronic-direct injection (TVDI) engines.
- **BMW EfficientDynamics:** Service and repair information on technologies like Valvetronic, xDrive, TwinPower turbo, and DSC (Dynamic Stability Control).
- **Turbocharger Service:** Replacement procedures for twin-scroll turbochargers in 4- and 6-cylinder engines.
- **Variable Camshaft Timing (VANOS):** Step-by-step service instructions.
- **Suspension Repairs:** Includes wheel bearing replacement.
- **Brakes, Steering, and ABS:** Troubleshooting and repair guides.
- **Heating and Air-Conditioning:** Repair information, including A/C component replacement.
- **Body and Lid Repairs:** Adjustments and repairs for Gran Coupe tailgate and rear doors.
- **Retractable Hardtop Service:** Electrical, mechanical, and hydraulic operation, locations, and replacement.
- **Electrical System:** Service information with an illustrated component locator section.
- **Wiring Schematics:** Comprehensive diagrams, including fuses and grounds.
- **OBD II Diagnostics:** BMW OBD II diagnostic trouble codes, SAE-defined OBD II P-codes, and basic scan tool operation.
- **Factory Tolerances:** Includes wear limits, adjustments, and tightening torques.

ENGINE INFORMATION

This manual covers detailed information for the following engine types:

- **N20 engine:** Applicable to 428i models, including xDrive variants.
- **N26 (SULEV) engine:** Applicable to 428i models, including xDrive variants.
- **N55 engine:** Applicable to 435i models, including xDrive variants.

TRANSMISSION SERVICE

The manual provides instructions for the removal, installation, and external service of various transmission types:

Manual Transmissions

- **GS6-17BG:** For 4-cylinder models.
- **GS6-45BZ:** For 6-cylinder Rear-Wheel Drive (RWD) models.
- **GS6X-45BZ:** For 6-cylinder models with xDrive.

Automatic Transmissions

- **ZF GA8HP45Z:** Detailed service procedures.

MAINTENANCE PROCEDURES

Regular maintenance is crucial for the longevity and performance of your BMW 4 Series. This manual details all necessary procedures, including:

- **Condition-Based Service (CBS) Reset:** Instructions on how to reset CBS intervals using the iDrive system.
- **Fuel Injection Service:** Procedures for direct fuel injection service, including injector replacement and quantity compensation resetting.

- **Fluid Checks and Changes:** Guidance on checking and replacing engine oil, coolant, brake fluid, power steering fluid, and transmission fluids.
- **Filter Replacements:** Steps for replacing air filters, cabin microfilters, and fuel filters.
- **Battery Service:** Procedures for battery replacement and registration.

REPAIR PROCEDURES

For more involved repairs, the manual provides comprehensive, step-by-step instructions:

- **Driveshafts and Axles:** Service procedures for drive axles, driveshafts, and wheel bearings.
- **Suspension Systems:** Detailed repair guides for front and rear suspension components.
- **Brake System:** Troubleshooting and repair for brake components, including ABS.
- **Steering System:** Repair and adjustment procedures for the steering system.
- **Bodywork:** Instructions for body and lid repairs, including specific details for Gran Coupe tailgate and rear doors.
- **Convertible Top:** Mechanical, electrical, and hydraulic operation and repair for the retractable hardtop.

ELECTRICAL SYSTEM

The electrical system section includes:

- **Component Locator:** An easy-to-use illustrated guide to locate electrical components.
- **Wiring Schematics:** Comprehensive diagrams covering fuses and grounds.
- **Diagnostic Trouble Codes:** Information on BMW OBD II diagnostic trouble codes and SAE-defined P-codes, along with basic scan tool operation.

SPECIFICATIONS

Attribute	Detail
Publisher	Bentley Publishers
Publication Date	January 11, 2017
Language	English
Print Length	1020 pages
ISBN-10	0837617650
ISBN-13	978-0837617657
Item Weight	5.56 pounds
Dimensions	8.7 x 1.7 x 11.2 inches

SUPPORT AND CONTACT INFORMATION

For further assistance or inquiries regarding this service manual, please contact Bentley Publishers:

Bentley Publishers
Automotive Reference

1734 Massachusetts Avenue
Cambridge, MA 02138 USA
Phone: 800.423.4595 / 617.547.4170

This manual is intended for informational and repair purposes only. Always exercise caution and follow safety guidelines when performing vehicle maintenance.