

# Shop Manual

ENGINE

**12V140E -7 SERIES**

**KOMATSU**



---

# 00 Index and Foreword

---

# Index

00 Index and Foreword .....	00-1
Abbreviation List .....	00-4
Foreword, Safety, Basic Information .....	00-10
How to Read the Engine Shop Manual .....	00-10
Safety Notice for Operation .....	00-12
Precautions to Prevent Fire .....	00-20
Procedures If Fire Occurs .....	00-22
Precautions for Disposing of Waste Materials .....	00-23
Engine Technology to Conform Exhaust Gas Emission .....	00-24
Precautions When You Handle Hydraulic Equipment .....	00-25
Precautions When You Disconnect and Connect Pippings .....	00-28
Precautions When You Handle Electrical Equipment .....	00-35
Precautions When You Handle Fuel System Equipment .....	00-37
Precautions When You Handle Intake System Equipment .....	00-38
Disconnect and Connect Push-Pull Type Coupler .....	00-39
Precautions for Disconnection and Connection of Connectors .....	00-43
How to Disconnect and Connect Deutsch Connector .....	00-47
How to Disconnect and Connect Slide Lock Type Connector .....	00-48
How to Disconnect and Connect Connector with Lock to Pull .....	00-50
How to Disconnect and Connect Connector with Lock to Push .....	00-51
How to Disconnect and Connect Connector with Housing to Rotate .....	00-53
How to Read the Codes for Electric Cable .....	00-54
Explanation of Terms for Maintenance Standard .....	00-58
Standard Tightening Torque Table .....	00-61
Conversion Table .....	00-68
01 Specifications .....	01-1
Table of Contents .....	01-2
Abbreviation List .....	01-3
Specifications .....	01-9
Outline of Exhaust Gas Regulation .....	01-9
List of Applicable Machines: 12V140E-7 .....	01-13
Specifications .....	01-14
Engine General View .....	01-22
Weight Table .....	01-50
Engine Performance Curve .....	01-55
10 Structure and Function .....	10-1
Table of Contents .....	10-2
Abbreviation List .....	10-5
Engine System .....	10-11
Layout of Engine Components .....	10-11
Intake and Exhaust System Parts .....	10-13
Engine Main Body Parts .....	10-23
Turbocharger System .....	10-40
Lubrication System .....	10-74
Fuel System .....	10-86
Cooling System .....	10-113
Electrical System .....	10-124
Component Parts of Electrical System .....	10-124
Sensor .....	10-167
20 Standard Value Table .....	20-1
Table of Contents .....	20-2
Abbreviation List .....	20-3
Standard Value Table for Engine .....	20-9
Standard Value Table for Engine: SAA12V140E-7 (D475A-8, D475A-8E0, D475AI-8, D475AI-8E0) .....	20-9
Standard Value Table for Engine: SAA12V140E-7 (D475A-8R, D475AI-8R) .....	20-11

Standard Value Table for Engine: SAA12V140E-7 (HD785-8, HD785-8E0) .....	20-13
Standard Value Table for Engine: SAA12V140E-7 (PC2000-11, PC2000-11E0).....	20-15
Standard Value Table for Engine: SAA12V140E-7 (PC2000-11R).....	20-17
Standard Value Table for Engine: SAA12V140E-7 (WA800-8, WA800-8E0, WA900-8, WA900-8E0) .....	20-19
Standard Value Table for Engine: SAA12V140E-7 (WA900-8R).....	20-21
Machine Posture and Procedures to Measure Performance .....	20-23
Running-in Standard and Performance Test Standard .....	20-24
Running-in Standard and Performance Test Standard: SAA12V140E-7 (D475A-8, D475A-8E0, D475AI-8, D475AI-8E0).....	20-24
Running-in Standard and Performance Test Standard: SAA12V140E-7 (D475A-8R, D475AI-8R) .	20-26
Running-in Standard and Performance Test Standard: SAA12V140E-7 (HD785-8, HD785-8E0)...	20-28
Running-in Standard and Performance Test Standard: SAA12V140E-7 (PC2000-11, PC2000-11E0).....	20-30
Running-in Standard and Performance Test Standard: SAA12V140E-7 (PC2000-11R) .....	20-32
Running-in Standard and Performance Test Standard: SAA12V140E-7 (WA800-8, WA800-8E0) ..	20-34
Running-in Standard and Performance Test Standard: SAA12V140E-7 (WA900-8, WA900-8E0) ..	20-36
Running-in Standard and Performance Test Standard: SAA12V140E-7 (WA900-8R) .....	20-38
50 Disassembly and Assembly .....	50-1
Table of Contents .....	50-2
Precautions Before Work .....	50-5
Abbreviation List .....	50-6
Related Information on Disassembly and Assembly .....	50-12
How to Read This Manual .....	50-12
Coating Materials List.....	50-13
Special Tool List.....	50-18
Sketches of Special Tools .....	50-21
Engine System.....	50-23
How to Disassemble Engine Generally .....	50-23
How to Assemble Engine Generally .....	50-301
60 Maintenance Standard .....	60-1
Table of Contents .....	60-2
Abbreviation List .....	60-3
Engine System.....	60-9
Intake and Exhaust System Parts .....	60-9
Engine Main Body Parts.....	60-12
Lubrication System.....	60-38
Cooling System.....	60-43
Index.....	1

It's a preview. You can download the full file by clicking the link below.

<https://shopservicemanual.com/>

Service Manuals from 2\$