



Parts Manual



See "General Information"
for New Parts Manual
Features.

3056E Industrial Engine

3561-Up (Engine)

This Parts Manual is also Available in PDF Format on Compact Disk
(CD-ROM)- Caterpillar Form No. SERP3643

Product and Dealer Information

Note: For product identification plate locations, see the section "Product Identification Information" in the Operation and Maintenance Manual.

Delivery Date: _____

Product Information

Model: _____

Product Identification Number: _____

Engine Serial Number: _____

Transmission Serial Number: _____

Generator Serial Number: _____

Attachment Serial Numbers: _____

Attachment Information: _____

Customer Equipment Number: _____

Dealer Equipment Number: _____

Dealer Information

Name: _____ Branch: _____

Address: _____

Dealer Contact

Phone Number

Hours

Sales: _____

Parts: _____

Service: _____

MEMORANDA

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GENERAL INFORMATION

1. ENGINE IDENTIFICATION

Caterpillar engines are identified with Serial Numbers and Arrangement Numbers. In some cases, Modification Numbers are also used. The serial number plate which shows these numbers is mounted on the engine.

Caterpillar dealers need this information to determine which components were included on the engine when it was assembled at the factory. This permits accurate identification of replacement part numbers.

2. ORDERING PARTS

WARNING

When replacement parts are required for this product Caterpillar recommends using Caterpillar replacement parts or parts with equivalent specifications including, but not limited to, physical dimensions, type, strength and material.

Failure to heed this warning can lead to premature failures, product damage, personal injury or death.

Quality Caterpillar replacement parts are available from Caterpillar dealers throughout the world. Their parts inventories are up to date and include all parts normally required to protect your investment in Caterpillar Engines. Dealers may offer repair kits or remanufactured parts to allow selection of the most effective repair alternative for a particular situation. When ordering parts, your order should specify the quantity, part number, part name, and the serial number/product identification number of the engine for which the parts are needed.

3. PARTS MANUAL ORGANIZATION

Product information in this manual is presented as "information elements" that represent all of the components for the specific model. An Engine Arrangement is an example of an information element. The information elements are organized alphabetically by part name and secondarily by part number within each major section of the manual.

4. TABLE OF CONTENTS

A table of contents (TOC) is found at the beginning of the manual. The TOC lists each section of the manual with a complete list of all information elements organized as they appear in the manual. Page numbers are provided for quick reference to detailed parts identification illustrations and serviceable consist lists.

5. MAINTENANCE PARTS INDEX

The Maintenance Parts Index, located near the beginning of the manual, references most frequently used maintenance part numbers, providing description, quantity, usage and page number. This information is organized alphabetically by part description.

6. INDEX

The index located near the front of the manual is an alphabetical listing of all information elements included in the manual. Page numbers are provided for quick reference to detailed parts identification illustrations and serviceable consist lists.

7. PART NUMBER INDEX

A numerical index listing all part numbers and the corresponding page number(s) appears at the back of the manual.

8. CAPTIONS

Captions located at the beginning each information element identify the part number and part name along with additional descriptive information. S/N information found in each caption should be used to select correct information for a specific engine. Field replacement options, identification of optional attachment components, and where used ("part of") information is also provided.

The first line of a caption is shown in larger type font to indicate the beginning of an information element. Captions for additional pages that may be required to illustrate an information element will be shown in standard type font and will include the term (*contd.*) .

9. NON-SERVICED PARTS

In some instances it is necessary to display non-serviced parts that are a link to lower level serviceable consist lists. These non-serviced part numbers are shown in *italic* type indicating that they are not available. All consist lists have not been converted to reflect this enhancement.

GENERAL INFORMATION

10. PARTS LIST REFERENCE NUMBERS

Numbers shown in the Ref No column correspond to numbers used in the associated graphic(s). An alphabetic suffix may be added to a reference number to identify lower level consist items. Numbers shown in the Graphic Ref column refer to the graphic number identifier displayed in the lower left corner of each illustration. The Graphic Ref number may be used in combination with the item Ref No to determine the correct part number. There may be intentional omission of a Ref No in a consist list as information is updated to reflect the latest serviceable part numbers.

11. INDENTED PART NAMES

When a part name is indented in a parts list, it is part of (included in) the group or assembly under which it is indented.

12. ILLUSTRATION REFERENCE LETTERS

When necessary, illustrations contain reference letters (A, B, C etc.) that are intended to track lines and harnesses from one point to another. They are also used to show where to reconnect illustrations that have been separated.

13. ABBREVIATIONS AND SYMBOLS

O.D. – Outside Diameter
I.D. – Inside Diameter
A – Not Part Of This Group
B – Use As Required
C – Change From Previous Type
D – Order By The Meter
E – Order By The Centimeter
F – Not Shown
G – Order By The Inch
I – Refer To Hydraulic Information System
M – Metric Part
R – Remfg Part May Be Available
Y – Separate Illustration
Z – Not Serviced Separately

 *New Feature*

14. <END>

This symbol indicates the end of an information element.

NOTE:

Continuing improvement and advancement of product design may cause changes to your engine which may not be included in this publication. Whenever a question arises regarding your Caterpillar product or this publication, please consult your Caterpillar dealer for the latest available information.

REPAIR ALTERNATIVES

REMANUFACTURED COMPONENTS

As an option when making repairs consider Caterpillar Remanufactured Components. Components that are available through the Caterpillar Remanufactured Program are identified three ways in the parts book:

- with the letter R in the note field of the parts list
- with an R* at the beginning of the first line of the caption
- with an *R at the end of the first line of the caption

Typical components included in the Remanufacturing Program include:

ALTERNATORS
CONNECTING RODS
CRANKSHAFTS - UNDERSIZE
CRANKSHAFTS - UPGRADE TO NEW
CYLINDER HEADS
ELECTRONIC CONTROL MODULES (ECM)
ELECTRONIC SENSORS
FUEL INJECTORS
FUEL NOZZLES
FUEL PUMPS
GOVERNORS
OIL PUMPS
PISTONS
SHORT BLOCKS
STARTERS
TURBOCHARGERS - COMPLETE
TURBOCHARGER CARTRIDGES
WATER PUMPS

Caterpillar Remanufactured engines for many engine arrangements are also available.

SUPPLEMENTAL COOLANT ADDITIVES

CUSTOMER BENEFITS:

Protects against cavitation, foam, erosion, corrosion, and scale buildup in cooling systems.

- Provides measured coolant conditioner.

DESCRIPTION:

Additives deplete from the coolant with normal operation. For this reason, Supplemental Coolant Additives (SCA) must be added to all heavy duty coolants at regular intervals. In addition, when not using a fully formulated, pre-charged antifreeze, like Caterpillar's DEAC, an initial charge of SCA must be added to the cooling system. The amount of SCA added to the system is dependent on the capacity of the system.

The SCA for initial fill is provided as a liquid. SCA's for maintenance intervals are available in liquid form and as a spin-on element. (No Spin-on available for 3600 Family of Engines)

NOTE:

The amount of SCA added at initial fill is not the same as the amount added at maintenance intervals.

The coolant additive elements can be used with any ethylene or propylene glycol type antifreeze which meets ASTM D4985 or ASTM D5345 Specifications.

NOTE:

For use with standard heavy duty coolant only, not for use with Extended Life Coolant.

PARTS NEEDED:

Cooling System Capacity		Liquid SCA at Initial Fill	Liquid SCA at Maintenance*	Spin-on SCA Maintenance Element*
Liters	Gallons			
22-30	(6-8)	3P-2044 (1)	6V-3542 (1)	111-2370 (1)
30-38	(8-10)	3P-2044 (1) 6V-3542 (1)	111-2372 (1)	111-2369 (1)
38-49	(10-13)	3P-2044 (1) 8T-1589 (1)	111-2372 (1)	111-2369 (1)
49-64	(13-17)	3P-2044 (2)	8T-1589 (1)	9N-3368 (1)
64-83	(17-22)	3P-2044 (2) 8T-1589 (1)	111-2372 (1) 6V-3542 (1)	111-2371 (1)
83-114	(22-30)	3P-2044 (3) 8T-1589 (1)	3P-2044 (1)	9N-3718 (1)
114-163	(30-43)	3P-2044 (5)	3P-2044 (1) 6V-3542 (1)	111-2371 (2)
163-242	(43-64)	3P-2044 (8)	3P-2044 (2)	9N-3718 (2)

* Normal maintenance period is 250 hrs. See your Operation and Maintenance Manual for complete coolant maintenance instructions.

() Indicates quantity required.

MAINTENANCE PARTS

DESCRIPTION	PART NUMBER	QTY	WHERE USED	PAGE		
AIR INLET AND EXHAUST SYSTEM						
FILTER ELEMENT AS-AIR (PRIMARY)	233-5183	1	AIR CLEANER GP	362		
FILTER ELEMENT AS-AIR (SECONDARY)	233-5185	1	AIR CLEANER GP	362		
INDICATOR AS-AIR FILTER CHANGE	269-7056	1	AIR CLEANER GP	362		
BASIC ENGINE						
BREATHER AS (CRANKCASE)	216-9602	1	COVER GP-VALVE MECHANISM	87		
		1	COVER GP-VALVE MECHANISM	89		
		1	COVER GP-VALVE MECHANISM	91		
		1	COVER GP-VALVE MECHANISM	93		
		1	COVER GP-VALVE MECHANISM	95		
		1	COVER GP-VALVE MECHANISM	99		
		1	COVER GP-VALVE MECHANISM	101		
		1	COVER GP-VALVE MECHANISM	103		
		1	COVER GP-VALVE MECHANISM	105		
		1	COVER GP-VALVE MECHANISM	107		
		1	COVER GP-VALVE MECHANISM	109		
		1	COVER GP-VALVE MECHANISM	111		
		1	COVER GP-VALVE MECHANISM	113		
		1	COVER GP-VALVE MECHANISM	115		
		1	COVER GP-VALVE MECHANISM	117		
		1	COVER GP-VALVE MECHANISM	119		
		1	COVER GP-VALVE MECHANISM	121		
		1	COVER GP-VALVE MECHANISM	123		
		1	COVER GP-VALVE MECHANISM	125		
		1	COVER GP-VALVE MECHANISM	127		
		1	COVER GP-VALVE MECHANISM	129		
		1	COVER GP-VALVE MECHANISM	131		
		1	COVER GP-VALVE MECHANISM	133		
		1	COVER GP-VALVE MECHANISM	135		
		1	COVER GP-VALVE MECHANISM	137		
		1	COVER GP-VALVE MECHANISM	143		
		1	COVER GP-VALVE MECHANISM	145		
		1	COVER GP-VALVE MECHANISM	147		
		1	COVER GP-VALVE MECHANISM	149		
		1	COVER GP-VALVE MECHANISM	151		
		1	COVER GP-VALVE MECHANISM	153		
		CAP AS (ENGINE OIL FILLER)	130-9888	1	COVER GP-VALVE MECHANISM	85
				1	COVER GP-VALVE MECHANISM	87
1	COVER GP-VALVE MECHANISM			91		
1	COVER GP-VALVE MECHANISM			93		
1	COVER GP-VALVE MECHANISM			109		
1	COVER GP-VALVE MECHANISM			111		
1	COVER GP-VALVE MECHANISM			113		
1	COVER GP-VALVE MECHANISM			115		
1	COVER GP-VALVE MECHANISM			117		
1	COVER GP-VALVE MECHANISM			119		
1	COVER GP-VALVE MECHANISM			121		
1	COVER GP-VALVE MECHANISM			123		
1	COVER GP-VALVE MECHANISM			127		
1	COVER GP-VALVE MECHANISM			129		
1	COVER GP-VALVE MECHANISM			131		
1	COVER GP-VALVE MECHANISM	133				

MAINTENANCE PARTS

DESCRIPTION	PART NUMBER	QTY	WHERE USED	PAGE
		1	COVER GP-VALVE MECHANISM	135
		1	COVER GP-VALVE MECHANISM	137
		1	COVER GP-VALVE MECHANISM	139
		1	COVER GP-VALVE MECHANISM	141
		1	COVER GP-VALVE MECHANISM	153
	136-3608	1	COVER GP-VALVE MECHANISM	97
		1	COVER GP-VALVE MECHANISM	99
		1	COVER GP-VALVE MECHANISM	101
		1	COVER GP-VALVE MECHANISM	103
		1	COVER GP-VALVE MECHANISM	105
		1	COVER GP-VALVE MECHANISM	107
		1	COVER GP-VALVE MECHANISM	109
		1	COVER GP-VALVE MECHANISM	111
		1	COVER GP-VALVE MECHANISM	113
		1	COVER GP-VALVE MECHANISM	115
		1	COVER GP-VALVE MECHANISM	117
		1	COVER GP-VALVE MECHANISM	125
		1	COVER GP-VALVE MECHANISM	129
		1	COVER GP-VALVE MECHANISM	131
		1	COVER GP-VALVE MECHANISM	133
		1	COVER GP-VALVE MECHANISM	137
		1	COVER GP-VALVE MECHANISM	143
		1	COVER GP-VALVE MECHANISM	145
		1	COVER GP-VALVE MECHANISM	147
		1	COVER GP-VALVE MECHANISM	149
		1	COVER GP-VALVE MECHANISM	151
		1	COVER GP-VALVE MECHANISM	153
	130-9888	1	COVER GP-VALVE MECHANISM	89
		1	COVER GP-VALVE MECHANISM	95
		1	COVER GP-VALVE MECHANISM	83
FILTER-BREATHER (CLOSED CIRCUIT CRANKCASE)	229-3555	1	COVER GP-VALVE MECHANISM	87
		1	COVER GP-VALVE MECHANISM	89
		1	COVER GP-VALVE MECHANISM	91
		1	COVER GP-VALVE MECHANISM	93
		1	COVER GP-VALVE MECHANISM	95
		1	COVER GP-VALVE MECHANISM	99
		1	COVER GP-VALVE MECHANISM	101
		1	COVER GP-VALVE MECHANISM	103
		1	COVER GP-VALVE MECHANISM	105
		1	COVER GP-VALVE MECHANISM	107
		1	COVER GP-VALVE MECHANISM	109
		1	COVER GP-VALVE MECHANISM	111
		1	COVER GP-VALVE MECHANISM	113
		1	COVER GP-VALVE MECHANISM	115
		1	COVER GP-VALVE MECHANISM	117
		1	COVER GP-VALVE MECHANISM	121
		1	COVER GP-VALVE MECHANISM	123
		1	COVER GP-VALVE MECHANISM	129
		1	COVER GP-VALVE MECHANISM	131
		1	COVER GP-VALVE MECHANISM	133
		1	COVER GP-VALVE MECHANISM	143
		1	COVER GP-VALVE MECHANISM	145
		1	COVER GP-VALVE MECHANISM	147

MAINTENANCE PARTS

DESCRIPTION	PART NUMBER	QTY	WHERE USED	PAGE	
GASKET (VALVE COVER)	216-9604	1	COVER GP-VALVE MECHANISM	83	
		1	COVER GP-VALVE MECHANISM	85	
		1	COVER GP-VALVE MECHANISM	87	
		1	COVER GP-VALVE MECHANISM	89	
		1	COVER GP-VALVE MECHANISM	91	
		1	COVER GP-VALVE MECHANISM	93	
		1	COVER GP-VALVE MECHANISM	95	
		1	COVER GP-VALVE MECHANISM	97	
		1	COVER GP-VALVE MECHANISM	99	
		1	COVER GP-VALVE MECHANISM	101	
		1	COVER GP-VALVE MECHANISM	103	
		1	COVER GP-VALVE MECHANISM	105	
		1	COVER GP-VALVE MECHANISM	107	
		1	COVER GP-VALVE MECHANISM	109	
		1	COVER GP-VALVE MECHANISM	111	
		1	COVER GP-VALVE MECHANISM	113	
		1	COVER GP-VALVE MECHANISM	115	
		1	COVER GP-VALVE MECHANISM	117	
		1	COVER GP-VALVE MECHANISM	119	
		1	COVER GP-VALVE MECHANISM	121	
		1	COVER GP-VALVE MECHANISM	123	
		1	COVER GP-VALVE MECHANISM	125	
		1	COVER GP-VALVE MECHANISM	127	
		1	COVER GP-VALVE MECHANISM	129	
		1	COVER GP-VALVE MECHANISM	131	
		1	COVER GP-VALVE MECHANISM	133	
		1	COVER GP-VALVE MECHANISM	135	
		1	COVER GP-VALVE MECHANISM	137	
		1	COVER GP-VALVE MECHANISM	139	
		1	COVER GP-VALVE MECHANISM	141	
1	COVER GP-VALVE MECHANISM	143			
1	COVER GP-VALVE MECHANISM	145			
1	COVER GP-VALVE MECHANISM	147			
1	COVER GP-VALVE MECHANISM	149			
1	COVER GP-VALVE MECHANISM	151			
1	COVER GP-VALVE MECHANISM	153			
HOSE (CRANKCASE BREATHER)	191-5049	1	COVER GP-VALVE MECHANISM	83	
		1	COVER GP-VALVE MECHANISM	85	
		1	COVER GP-VALVE MECHANISM	137	
		198-8645	1	COVER GP-VALVE MECHANISM	119
			1	COVER GP-VALVE MECHANISM	125
			1	COVER GP-VALVE MECHANISM	127
	1		COVER GP-VALVE MECHANISM	135	
	1		COVER GP-VALVE MECHANISM	139	
	1		COVER GP-VALVE MECHANISM	141	
	1	COVER GP-VALVE MECHANISM	149		
	1	COVER GP-VALVE MECHANISM	151		
	1	COVER GP-VALVE MECHANISM	153		
HOSE (FUMES DISPOSAL, LOWER)	216-9617	1	COVER GP-VALVE MECHANISM	97	
		1	COVER GP-VALVE MECHANISM	99	
		1	COVER GP-VALVE MECHANISM	101	
		1	COVER GP-VALVE MECHANISM	103	
		1	COVER GP-VALVE MECHANISM	105	
		1	COVER GP-VALVE MECHANISM	107	

MAINTENANCE PARTS

DESCRIPTION	PART NUMBER	QTY	WHERE USED	PAGE
		1	COVER GP-VALVE MECHANISM	109
		1	COVER GP-VALVE MECHANISM	111
		1	COVER GP-VALVE MECHANISM	113
		1	COVER GP-VALVE MECHANISM	115
		1	COVER GP-VALVE MECHANISM	117
		1	COVER GP-VALVE MECHANISM	121
		1	COVER GP-VALVE MECHANISM	129
		1	COVER GP-VALVE MECHANISM	131
		1	COVER GP-VALVE MECHANISM	133
	249-2827	1	COVER GP-VALVE MECHANISM	89
		1	COVER GP-VALVE MECHANISM	91
		1	COVER GP-VALVE MECHANISM	123
		1	COVER GP-VALVE MECHANISM	143
		1	COVER GP-VALVE MECHANISM	145
		1	COVER GP-VALVE MECHANISM	147
HOSE (FUMES DISPOSAL, UPPER)	216-9614	1	COVER GP-VALVE MECHANISM	99
		1	COVER GP-VALVE MECHANISM	101
		1	COVER GP-VALVE MECHANISM	103
		1	COVER GP-VALVE MECHANISM	105
		1	COVER GP-VALVE MECHANISM	107
		1	COVER GP-VALVE MECHANISM	109
		1	COVER GP-VALVE MECHANISM	111
		1	COVER GP-VALVE MECHANISM	113
		1	COVER GP-VALVE MECHANISM	115
		1	COVER GP-VALVE MECHANISM	117
		1	COVER GP-VALVE MECHANISM	121
		1	COVER GP-VALVE MECHANISM	129
		1	COVER GP-VALVE MECHANISM	131
		1	COVER GP-VALVE MECHANISM	133
	249-2826	1	COVER GP-VALVE MECHANISM	89
		1	COVER GP-VALVE MECHANISM	91
		1	COVER GP-VALVE MECHANISM	123
		1	COVER GP-VALVE MECHANISM	143
		1	COVER GP-VALVE MECHANISM	145
		1	COVER GP-VALVE MECHANISM	147
HOSE (LOWER FUMES DISPOSAL)	216-9617	1	COVER GP-VALVE MECHANISM	87
		1	COVER GP-VALVE MECHANISM	93
		1	COVER GP-VALVE MECHANISM	95
HOSE (UPPER FUMES DISPOSAL)	216-9614	1	COVER GP-VALVE MECHANISM	87
		1	COVER GP-VALVE MECHANISM	93
		1	COVER GP-VALVE MECHANISM	95
PLUG-DRAIN (ENGINE OIL)	7C-0351	2	PAN GP-OIL	229
		2	PAN GP-OIL	231
		2	PAN GP-OIL	233
		2	PAN GP-OIL	235
		2	PAN GP-OIL	237
		2	PAN GP-OIL	239
		2	PAN GP-OIL	241
		2	PAN GP-OIL	243
		2	PAN GP-OIL	245
		2	PAN GP-OIL	247
		2	PAN GP-OIL	249
		2	PAN GP-OIL	251
		2	PAN GP-OIL	253

MAINTENANCE PARTS

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		2	PAN GP-OIL	257
		2	PAN GP-OIL	259
		2	PAN GP-OIL	261
		2	PAN GP-OIL	263
SEAL-O-RING (CRANKCASE BREATHER)	262 - 1046	1	COVER GP-VALVE MECHANISM	89
		1	COVER GP-VALVE MECHANISM	91
		1	COVER GP-VALVE MECHANISM	93
		1	COVER GP-VALVE MECHANISM	95
		1	COVER GP-VALVE MECHANISM	101
		1	COVER GP-VALVE MECHANISM	103
		1	COVER GP-VALVE MECHANISM	107
		1	COVER GP-VALVE MECHANISM	109
		1	COVER GP-VALVE MECHANISM	111
		1	COVER GP-VALVE MECHANISM	115
		1	COVER GP-VALVE MECHANISM	117
		1	COVER GP-VALVE MECHANISM	123
		1	COVER GP-VALVE MECHANISM	131
		1	COVER GP-VALVE MECHANISM	133
		1	COVER GP-VALVE MECHANISM	145
		1	COVER GP-VALVE MECHANISM	147
SPRING (CRANKCASE BREATHER HOSE)	162 - 1565	1	COVER GP-VALVE MECHANISM	85
		1	COVER GP-VALVE MECHANISM	97
		1	COVER GP-VALVE MECHANISM	119
		1	COVER GP-VALVE MECHANISM	125
		1	COVER GP-VALVE MECHANISM	127
		1	COVER GP-VALVE MECHANISM	135
		1	COVER GP-VALVE MECHANISM	137
		1	COVER GP-VALVE MECHANISM	139
		1	COVER GP-VALVE MECHANISM	141
		1	COVER GP-VALVE MECHANISM	149
		1	COVER GP-VALVE MECHANISM	151
		1	COVER GP-VALVE MECHANISM	153
		1	COVER GP-VALVE MECHANISM	83
V-BELT SET (INCLUDES 2-BELTS) (FAN DRIVE)	2S - 2756	1	DRIVE GP-FAN	176
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