



312C Track-Type Excavator

Powered by 3064 Engine

SERIAL NUMBER

CAE1-01200(Vehicle)

6LK23357-Up(Engine)

HOW TO USE THE PARTS MANUAL

Caterpillar Parts Manuals include illustrations of the groups or assemblies which make up the machine. These illustrations show the standard components plus many of the attachments available for the machine.

The alphabetical index located in the front part of the book should be used to determine the page number on which specific illustrations are shown. Reference to those pages will identify each of the individual serviceable parts.

Captions

The caption under each illustration identifies the part number and name of the group or assembly shown. If more than one illustration is included for any group, the caption identifies the specific machine serial numbers to which each illustration applies. In some cases it is not possible to determine the specific machine serial numbers to which different illustrations are applicable. In those cases the caption identifies the illustration as "First Type", "Second Type", etc. Reference to the actual group or assembly is necessary in those cases to determine which illustration should be used.

Captions provide additional information such as page numbers where illustrations of sub assemblies are shown, information regarding quantities used and other information intended to assist the user in determining parts needs.

This information indicates the effective serial number or effective date on which changes became effective.

Example :

D95.05- : Applicable on and after May 1995

↑
—— D indicates the nineteen hundreds.

T00.05- : Applicable on and after May 2000

↑
—— T indicates the two thousands.

Indented Part Names

Within each illustration is a parts list identifying each serviceable part in the illustration. When a part name is indented in this list, it means that serviceable item is a part of the serviceable item under which it is indented.

Abbreviations and Symbols

R.H. Right Hand } Refers to the side of
L.H. Left Hand } the machine as viewed
} from the operator's
} compartment.

L Length
T Thickness
Z Number of Gear Teeth
O.D. Outside Diameter
I.D. Inside Diameter
O.S. Over Size
U.S. Under Size
N/S Not Serviced
AS Assembly
NOM Nominal

Abbreviations of Wire Colors

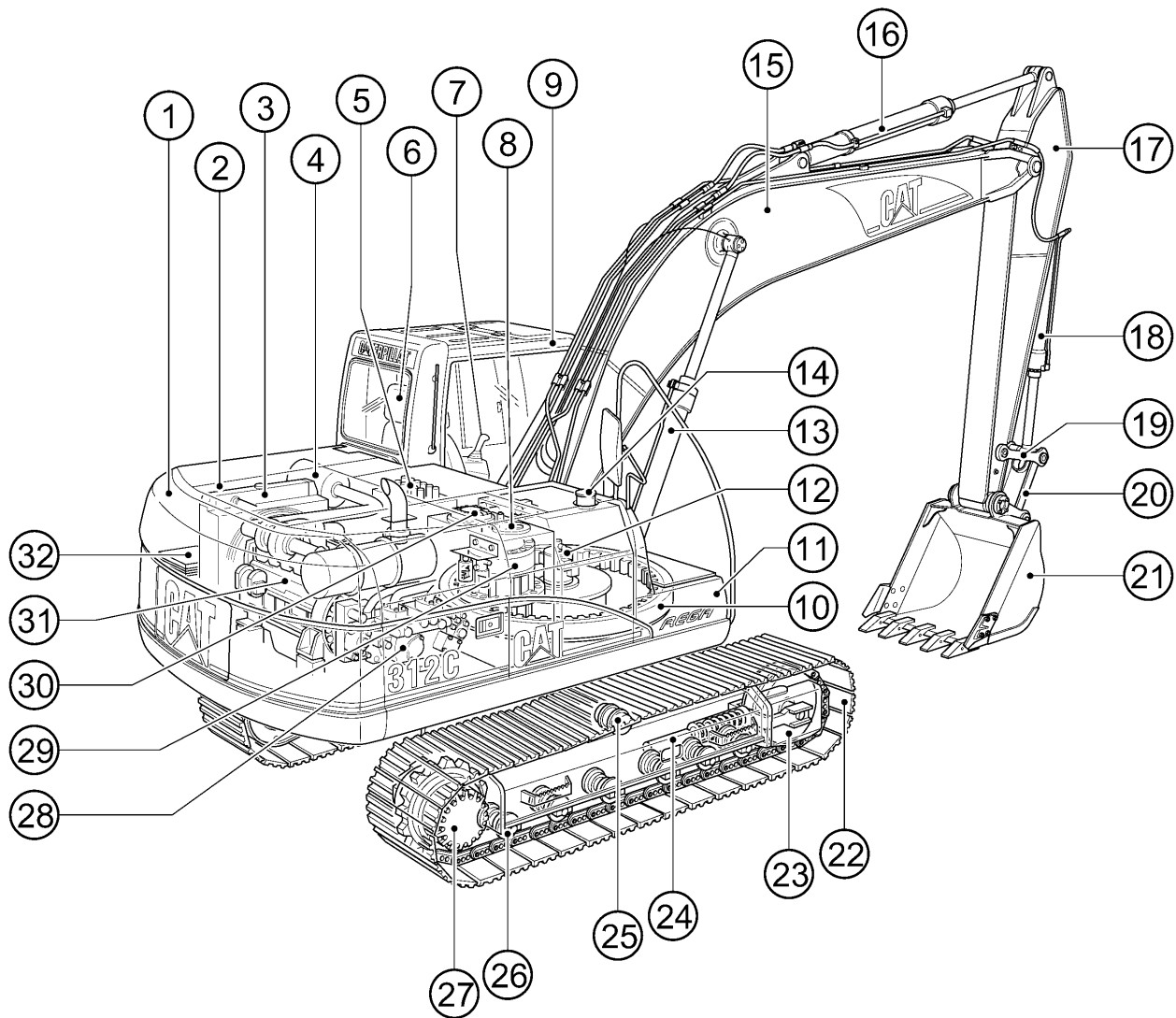
RD :Red	BR :Brown
WH :White	GN :Green
OR :Orange	BU :Blue
YL :Yellow	T :Tan
PK :Pink	DK/BU :Dark Blue
BK :Black	DK/GN :Dark Green
GY :Gray	LT/BU :Light Blue
PU :Purple	LT/GN :Light Green

Note

Continuing improvement and advancement of product design may cause changes to your machine which may not be included in this publication. Each publication is reviewed and revised, as required, to update and include these changes in later editions.

Whenever a question arises regarding your Caterpillar product, or this publication, please consult your Caterpillar dealer for the latest available information.

MODEL VIEW



	PAGE		PAGE		PAGE
① Counterweight	204	⑫ Swivel	380	⑳ Idler	217
② Engine Cover	176	⑬ Boom Cylinder	268	㉑ Track Adjuster	221
③ Radiator & Oil Cooler	34	⑭ Fuel Tank	63	㉒ Carrier Roller	222
④ Air Cleaner	47	⑮ Boom	554	㉓ Track Roller	222
⑤ Control Valve	402	⑯ Stick Cylinder	269	㉔ Final Drive	168
⑥ Operator Seat	517	⑰ Stick	558	㉕ Pump	243
⑦ Control Lever	381	⑱ Bucket Cylinder	270	㉖ Swing Drive	372
⑧ Hydraulic Tank	232	⑲ Link	569.01	㉗ Return Filter	258
⑨ Cab	449	㉔ Rod	569.01	㉘ Engine	12
⑩ Swing Bearing	210	㉕ Bucket	581	㉙ Battery	72
⑪ Storage Box	199	㉖ Track	228		

REPLACEMENT ITEMS

The following chart provides a convenient listing of those items which require occasional replacement during normal operation or maintenance.

DESCRIPTION	PART NO.	QTY. USED	PAGE NO.
Filter			
Air Conditioner Filter	178-5479	1	531
Air Filter			
Primary Filter Assembly	131-8902	1	48
Cab Air Filter	4I-1278	1	533
Engine Oil Filter	1R-0739	1	30
Fuel Filter	1R-0751	1	67
Hydraulic Oil Drain Filter	093-7521	1	256
Hydraulic Oil Pilot Filter	5I-8670	1	257
Hydraulic Oil Tank Return Filter	126-2081	1	259
V-Belt			
Refrigerant Compressor V-Belt	9M-1091	1	547
Water Pump V-Belt	135-2409	1	43

LIST OF ATTACHMENTS

The following chart provides a convenient listing of attachments with their reference page numbers as a quick reference for parts ordering.

Consists of:		Page
AIR CLEANER		
118-9881	WITH DOUBLE ELEMENT	49
183-1536	WITH PREFILTER	51
170-6821	ALARM, TRAVEL	149
BLADE		
151-1493	2500MM WIDE	552
198-2120	2500MM WIDE (With Auxiliary Pump)	551.03
183-1476	2600MM WIDE	553.01
151-1494	2700MM WIDE	553
198-2121	2700MM WIDE (With Auxiliary Pump)	551.03
BOOM		
151-1487	R-BOOM, REACH 4.65M	550
171-0020	BOOM LOWERING CONTROL	431
BUCKET		
EXCAVATION (X)		
150-2239	600MM Wide-0.38Cu.M.-Adapter Size J250	572
150-2240	700MM Wide-0.38Cu.M.-Adapter Size J250	572
150-2241	895MM Wide-0.45Cu.M.-Adapter Size J250	573
168-2878	895MM Wide-0.45Cu.M.-Adapter Size J250 (ESCO)	575
150-2242	990MM Wide-0.45Cu.M.-Adapter Size J250	573
159-5676	990MM Wide-0.52Cu.M.-Adapter Size J250 (ESCO)	576
168-2884	990MM Wide-0.52Cu.M.-Adapter Size J250 (For Demolition)	575
150-2243	1000MM Wide-0.57Cu.M.-Adapter Size J250	574
150-2244	1090MM Wide-0.63Cu.M.-Adapter Size J250	574
BUCKET LINKAGE		
151-1491	CASTING TYPE	551
194-8960	FABRICATION TYPE	551.01
194-8947	FABRICATION TYPE (Heavy Duty)	551.02
192-8381	BUMPER, SIDE	214
CAB		
171-7345	METAL ROOF HATCH CAB	450
161-3739	SKYLIGHT HATCH CAB	449
164-0555	WITH ELECTRIC OPENABLE FRONT WINDSHIELD	451
170-2595	COUNTERWEIGHT (With Lifting Eye)	205
194-8945	DEMOLITION	11

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183-1535	FIXED TYPE OIL COOLER	45
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170-2607	BOTTOM, HEAVY DUTY	194
194-8257	BUCKET CYLINDER	287
215-9876	BUCKET CYLINDER (For Demolition)	287.01
178-5549	FOGS	501
171-7485	Cab Front	501.01
164-0497	Cab Top	501.03
137-2813	SWIVEL	196
120-7199	TRACK GUIDE	225
164-0534	WINDSHIELD, FRONT (Full Net)	502
164-0535	WINDSHIELD, FRONT (Half Net)	504
171-0019	HAND CONTROL PATTERN CHANGER (4 Ways)	431
196-1609	HEATER & DEFROSTER	539
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	R-BOOM (4.65M)	
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179-5075	High Pressure Lines	292
179-5079	Medium Pressure Lines	300
198-0506	Quick Coupler Lines	550.01
	QUICK COUPLER LINES	
198-0418	Quick Coupler Circuit	319.01
	STICK LINE GROUPS	
	R2.5 Stick	
179-5082	Drain Lines	309
179-5077	High Pressure Lines	293
179-5080	Medium Pressure Lines	304
198-0791	Quick Coupler Lines	550.02
	R3.0 Stick	
187-9964	Drain Lines	308
187-9966	High Pressure Lines	292
187-9962	Medium Pressure Lines	302
198-0395	Quick Coupler Lines	550.01
	TOOL CONTROL	
165-0965	Auxiliary Pump	319

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165-0964	2 Pump (Medium Pressure)	318.01
	Double Function	
200-6637	1 Pump (Joystick Control)	319.01
165-0967	1 Pump (Pedal Control)	319.02
	Single Function	
165-0962	1 Pump	317
165-0963	2 Pump	317
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196-1420	LARGE BOX COVER	487
	LIGHT	
197-4423	R-BOOM, RIGHT SIDE	156
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163-6631	With Falling Object	152
204-1810	Without Falling Object	153.01
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164-0502	KAB 527P SEAT (With Seat Heater)	519
171-7352	KAB T1P/C SEAT	520.01
178-5624	KAB T8P SEAT	520
164-0477	HEADREST (For KAB 528P, KAB T8P Seat)	525
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163-6634	AM	497
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163-6636	AM/FM (With Cassette)	499
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183-1500	FILM (32WR Hydraulic Oil Package)	606
198-2321	STARTING AID	78
190-7873	STICK LOWERING CONTROL	431.01
	STICK-FOR THE REACH (4.65M) BOOM ONLY	
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100-6464	Sharp-Center	591
100-6463	Sharp-Corner	591
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An Attachment

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S/N CAE 1-00238

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S/N CAE 00239-Up

ENGINE ARRANGEMENT

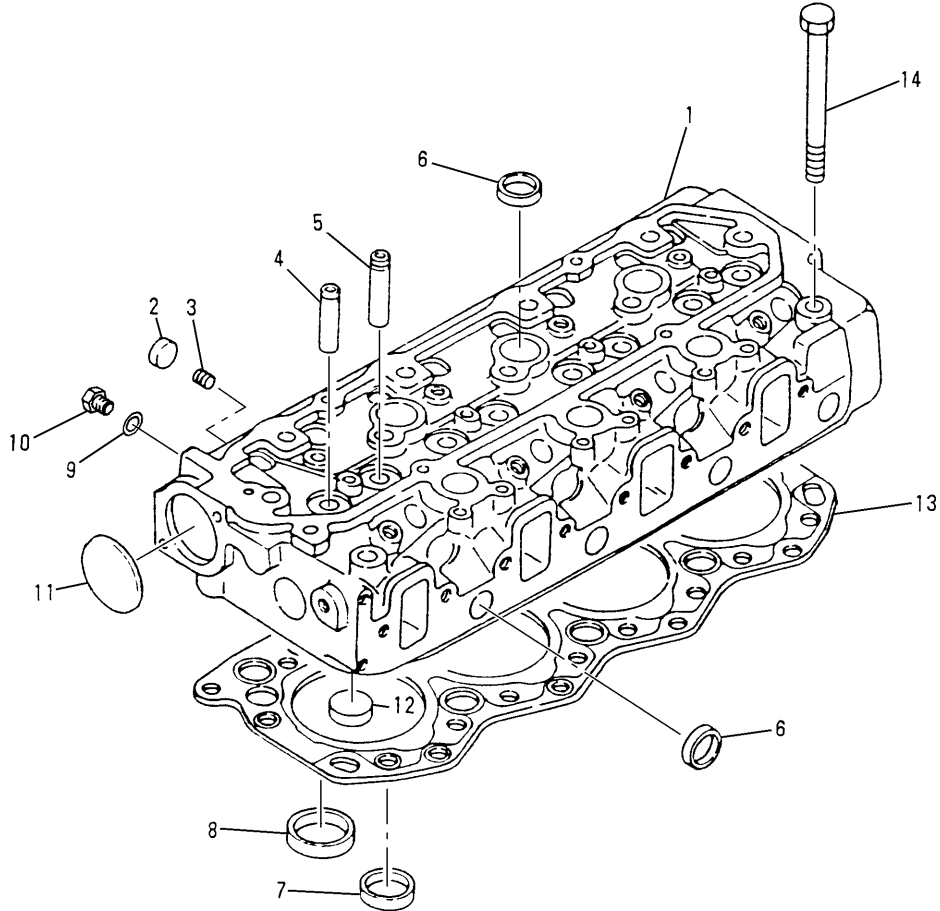
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1	212-8622	ALTERNATOR GP-CHARGING	148.02

H84438E 05

162-6328 ENGINE AR (2/2)
S/N CAE 00239-Up

BASIC ENGINE



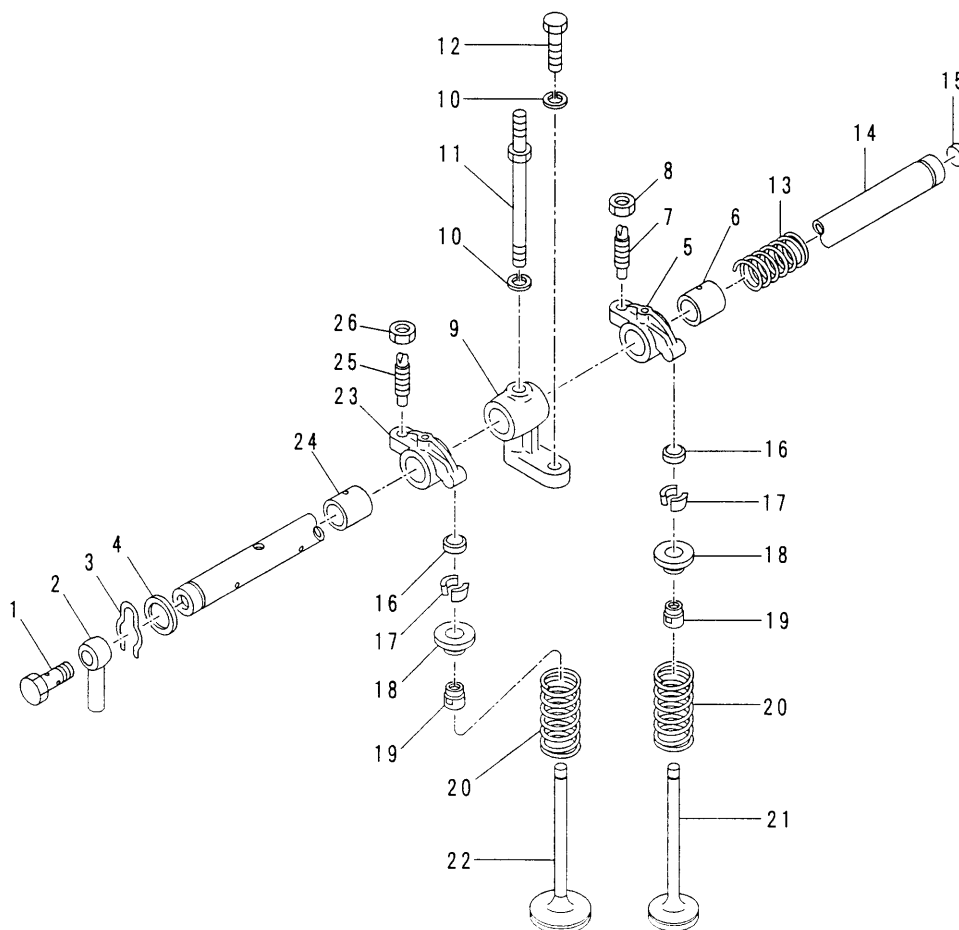
NOTE	No.	PART No.	QTY	PART NAME	NOTE	No.	PART No.	QTY	PART NAME
	1	185-8991	1	HEAD AS					
	2	099-4388	4	CAP					
	3	51-7505	4	PLUG					
	4	183-8172	4	GUIDE (INTAKE)					
	5	183-8173	4	GUIDE (EXHAUST)					
	6	51-4915	16	CAP					
	7	51-8012	4	INSERT (EXHAUST)					
	8	51-8011	4	INSERT (INTAKE)					
	9	095-2038	1	WASHER					
	10	51-5591	1	PLUG					
	11	51-4916	1	PLUG					
	12	51-7583	5	CAP					
	13	51-7835	1	GASKET					
	14	51-7718	17	BOLT (L=125mm)					

H71745E 03

5I-7800 CYLINDER HEAD GP

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BASIC ENGINE



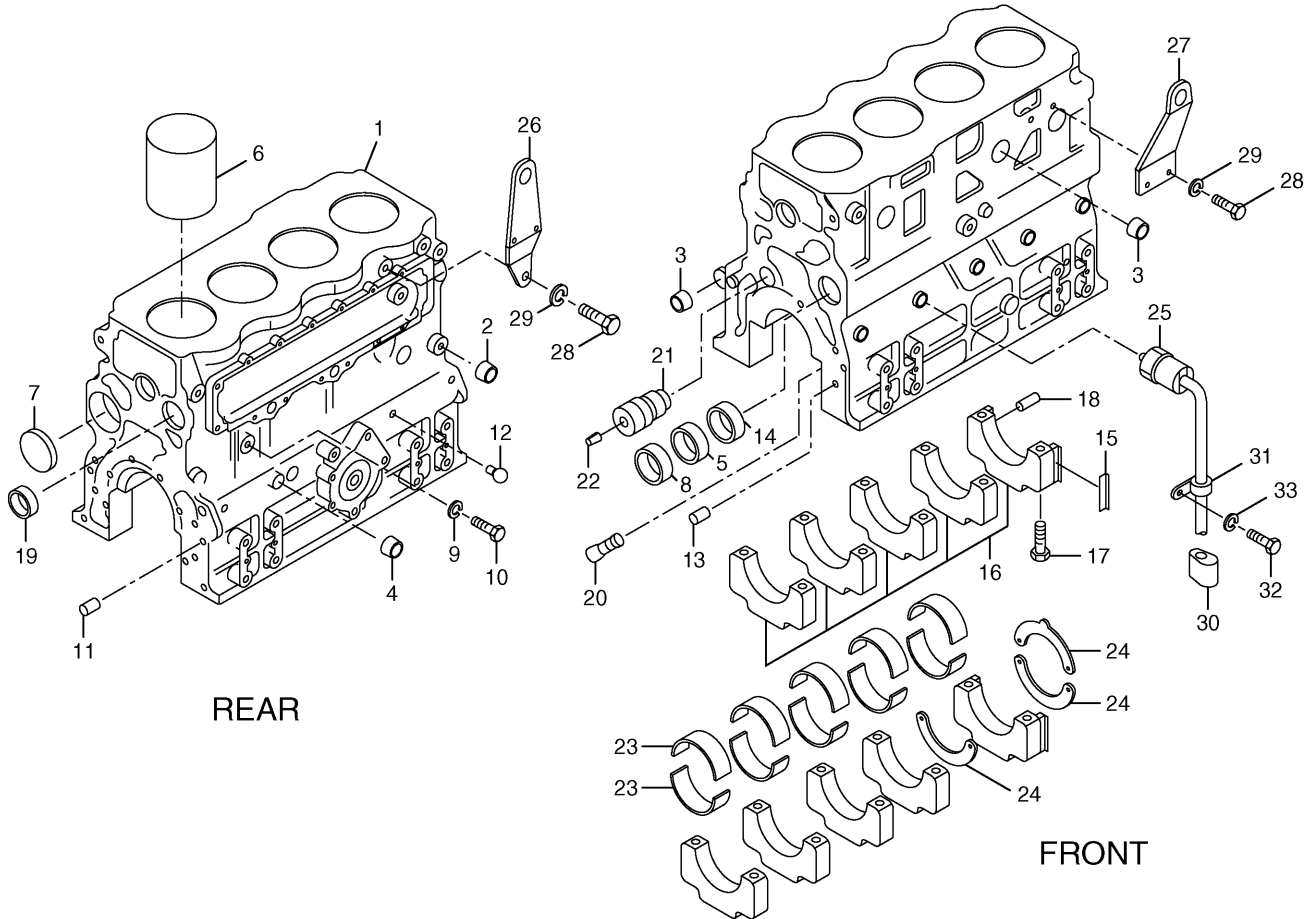
NOTE	No.	PART No.	QTY	PART NAME	NOTE	No.	PART No.	QTY	PART NAME
	1	51-4921	1	BOLT (L=21mm)		21	51-7739	4	VALVE (EXHAUST)
	2	51-7720	1	PIPE		22	51-7738	4	VALVE (INTAKE)
	3	51-7622	2	RING		23	178-6532	4	ROCKER AS
	4	2W-6047	2	WASHER		24	51-7631	1	BUSHING
	5	51-7590	4	ROCKER AS		25	094-9525	1	SCREW
	6	51-7631	1	BUSHING		26	091-3474	1	NUT
	7	094-9525	1	SCREW					
	8	091-3474	1	NUT					
	9	51-7722	4	BRACKET					
	10	095-8638	8	WASHER					
	11	51-5010	4	BOLT (L=65mm)					
	12	8T-4189	4	BOLT (L=20mm)					
	13	51-7721	3	SPRING					
	14	51-7883	1	SHAFT AS					
	15	094-4696	1	PLUG					
	16	51-7630	8	CAP					
	17	51-7719	16	COTTER					
	18	51-7625	8	RETAINER					
	19	51-7624	8	SEAL					
	20	51-7740	8	SPRING					

H71746E 00

196-7977 VALVE MECHANISM GP

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BASIC ENGINE



NOTE	No.	PART No.	QTY	PART NAME	NOTE	No.	PART No.	QTY	PART NAME
	1	196-8000	1	CRANKCASE AS		21	51-7672	1	SHAFT AS
	2	095-2005	2	CAP		22	095-0879	1	PIN
	3	3P-1896	5	PLUG		23	51-7588	5	BEARING SET (STANDARD)
	4	096-3741	5	CAP	A		51-7784	5	BEARING SET (US=0.25mm)
	5	51-7528	1	BUSHING	A		51-7785	5	BEARING SET (US=0.50mm)
	6	51-7523	4	SLEEVE	A		51-7786	5	BEARING SET (US=0.75mm)
	7	51-7525	1	PLUG		24	51-7654	3	PLATE (STANDARD)
	8	51-7529	1	BUSHING	A		51-7787	3	PLATE (OS=0.15mm)
	9	095-2039	1	WASHER	A		51-7788	3	PLATE (OS=0.30mm)
	10	8T-4191	1	BOLT (L=16mm)	A		51-7789	3	PLATE (OS=0.45mm)
	11	099-4420	2	PIN		25	51-8005	1	SWITCH
	12	51-7505	5	PLUG		26	51-7636	1	EYE
	13	51-7724	2	PIN		27	212-8511	1	EYE
	14	51-8009	1	BUSHING		28	8T-4179	3	BOLT (L=20mm)
	15	51-7524	2	SEAL		29	096-2501	3	WASHER
	16	51-7839	1	CAP SET		30	51-7978	1	SHEET
	17	094-7115	10	BOLT		31	4D-7794	1	CLIP
	18	6V-8236	6	PIN		32	7X-2536	1	BOLT (L=14mm)
	19	095-2011	1	CAP		33	095-8638	1	WASHER
	20	51-7526	4	VALVE					

A-NOT PART OF THIS GROUP

H80935E 01

196-7980 CYLINDER BLOCK GP
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