

# Parts Manual



See "General Information"  
for New Parts Manual  
Features.

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## **3056E Industrial Engine**

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3561-Up (Engine)

This Parts Manual is also Available in PDF Format on Compact Disk  
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# ENGINE ARRANGEMENT

## 207-1091 ENGINE AR-PRIMARY

129 BRAKE KW (174 BHP) AT 2000 RPM

SMCS-1000

i02128453

NOTE	PART NUMBER	QTY	PART NAME						SEE PAGE
			1	2	3	4	5	6 (PRODUCT LEVEL)	
Y	234-5966	1	ALTERNATOR GP-CHARGING						448
Y	228-7387	1	CONNECTION GP-WATER						308
Y	235-6342	1	COOLER GP-FLTR BASE & ENG OIL						319
Y	221-6858	1	COVER GP-ENGINE						82
Y	233-2633	1	COVER GP-VALVE MECHANISM						99
Y	236-1042	1	ELBOW GP-AIR INLET						369
	236-1035	1	ELECTRONICS GP-ENGINE RATINGS						
Y	228-6941	1	ENGINE AR-CORE						1
Y	228-7418	1	FASTENER GP-CYLINDER HEAD						185
Y	216-9683	1	FILTER GP-ENGINE OIL						287
Y	235-6347	1	FILTER GP-FUEL						403
Y	234-2653	1	FLYWHEEL GP						192
Y	234-2651	1	HOUSING GP-FLYWHEEL						199
Y	221-6835	1	HOUSING GP-FRONT						204
Y	228-7462	1	LIFTING GP-ENGINE						217
Y	147-5496	1	MOUNTING GP-ENGINE						219
Y	186-3660	1	MOUNTING GP-FAN DRIVE						227
Y	236-1040	1	PAN GP-OIL						253
Y	239-1349	1	PLUG GP-CYLINDER BLOCK						268
Y	233-2765	1	PLUG GP-ENGINE						270
Y	236-6604	1	PLUG GP-ENGINE						273
Y	233-2684	1	PULLEY GP-CRANKSHAFT						282
Y	234-6106	1	PUMP GP-ENGINE OIL						292
Y	235-6331	1	PUMP GP-FUEL INJECTION						413
Y	219-2455	1	PUMP GP-FUEL TRANSFER						422
Y	221-5369	1	PUMP GP-WATER						331
Y	236-1047	1	SEPARATOR GP-WATER						441
Y	235-6348	1	STARTING AID GP (HEATER)						458
Y	235-6362	1	STARTING AID GP (LINES)						459
Y	234-2656	1	STARTING MOTOR GP-ELECTRIC						470
Y	233-8649	1	TURBOCHARGER GP						385
Y	228-7487	1	WIRING GP-ENGINE						495
			AVAILABLE REPAIR KIT(S):						
	216-9612	1	KIT-GASKET (TOP)						
	216-9616	1	KIT-GASKET (BOTTOM)						

Y-SEPARATE ILLUSTRATION

# ENGINE ARRANGEMENT

## 207-1138 ENGINE AR-PRIMARY

119 BRAKE KW (158 BHP) AT 2200 RPM

SMCS-1000

i02140952

NOTE	PART NUMBER	QTY	PART NAME						SEE PAGE
			1	2	3	4	5	6 (PRODUCT LEVEL)	
Y	233-0653	1	CONNECTION GP-WATER						309
Y	233-2639	1	COOLER GP-FLTR BASE & ENG OIL						317
Y	239-8034	1	COVER GP-VALVE MECHANISM						127
	<b>217-2211</b>	1	CYLINDER BLOCK GP-SHORT						
Y	235-8231	1	ELBOW GP-AIR INLET						368
	244-5462	1	ELECTRONICS GP-ENGINE RATINGS						
Y	228-6941	1	ENGINE AR-CORE						1
Y	236-1823	1	FASTENER GP-ENGINE						186
Y	216-9683	1	FILTER GP-ENGINE OIL						287
Y	235-6347	1	FILTER GP-FUEL						403
Y	237-6365	1	HOUSING GP-FRONT						214
Y	228-7462	1	LIFTING GP-ENGINE						217
Y	235-6367	1	LINES GP-FUEL FILTER						405
Y	235-6343	1	MOUNTING GP-ALTERNATOR						218
Y	147-5496	1	MOUNTING GP-ENGINE						219
Y	244-5699	1	MOUNTING GP-FAN DRIVE						228
Y	236-5516	1	PAN GP-OIL						255
Y	239-1349	1	PLUG GP-CYLINDER BLOCK						268
Y	198-8271	1	PLUG GP-ENGINE						269
Y	236-6604	1	PLUG GP-ENGINE						273
Y	235-8219	1	PLUG GP-ENGINE						272
Y	236-1720	1	PULLEY GP-CRANKSHAFT						283
Y	236-2317	1	PUMP GP-FUEL INJECTION						416
Y	236-5531	1	PUMP GP-FUEL TRANSFER						431
Y	233-2744	1	PUMP GP-ENGINE OIL						290
Y	226-3557	1	PUMP GP-WATER						333
Y	228-7461	1	STARTING AID GP (HEATER)						457
Y	236-1838	1	STARTING AID GP (LINES)						460
Y	244-5600	1	TURBOCHARGER GP						396
Y	236-5561	1	WIRING GP-ELECTRONIC CONTROL						481
			AVAILABLE GASKET KIT(S):						
	<b>216-9612</b>	1	KIT-GASKET (TOP)						
	<b>236-6930</b>	1	KIT-GASKET (BOTTOM)						

Y-SEPARATE ILLUSTRATION

# ENGINE ARRANGEMENT

## 207-1157 ENGINE AR-PRIMARY

129 BRAKE KW (173 BHP) AT 2000 RPM

SMCS-1000

i02346522

NOTE	PART NUMBER	QTY	PART NAME						SEE PAGE
			1	2	3	4	5	6 (PRODUCT LEVEL)	
Y	236-7665	1	AIR CLEANER GP						363
Y	234-5966	1	ALTERNATOR GP-CHARGING						448
Y	216-8620	1	CAMSHAFT GP						81
Y	233-0653	1	CONNECTION GP-WATER						309
Y	235-6342	1	COOLER GP-FLTR BASE & ENG OIL						319
Y	221-6858	1	COVER GP-ENGINE						82
Y	228-7371	1	COVER GP-VALVE MECHANISM						97
Y	216-8316	1	CRANKSHAFT GP						155
Y	216-8231	1	CYLINDER BLOCK GP						159
Y	216-8343	1	CYLINDER HEAD GP						163
Y	237-0955	1	DRIVE GP-FAN						179
Y	236-1042	1	ELBOW GP-AIR INLET						369
Y	240-6831	1	FAN GP-SUCTION						326
Y	216-9683	1	FILTER GP-ENGINE OIL						287
Y	235-6347	1	FILTER GP-FUEL						403
Y	234-2653	1	FLYWHEEL GP						192
Y	217-1499	1	GEAR GP-FRONT						195
Y	234-2651	1	HOUSING GP-FLYWHEEL						199
Y	221-6835	1	HOUSING GP-FRONT						204
Y	228-7462	1	LIFTING GP-ENGINE						217
Y	271-3497	1	MOUNTING GP-ENGINE						224
Y	236-1040	1	PAN GP-OIL						253
Y	216-8324	1	PISTON & ROD GP						265
Y	233-2765	1	PLUG GP-ENGINE						270
Y	236-6604	1	PLUG GP-ENGINE						273
Y	233-2684	1	PULLEY GP-CRANKSHAFT						282
Y	234-6106	1	PUMP GP-ENGINE OIL						292
Y	235-6331	1	PUMP GP-FUEL INJECTION						413
Y	219-2455	1	PUMP GP-FUEL TRANSFER						422
Y	221-5369	1	PUMP GP-WATER						331
Y	236-7768	1	RADIATOR GP						337
Y	236-1047	1	SEPARATOR GP-WATER						441
Y	235-6348	1	STARTING AID GP (HEATER)						458
Y	235-6362	1	STARTING AID GP (LINES)						459
Y	234-2656	1	STARTING MOTOR GP-ELECTRIC						470
Y	226-3578	1	TURBOCHARGER GP						377
Y	216-8619	1	VALVE MECHANISM GP						286
Y	228-7487	1	WIRING GP-ENGINE						495
	240-5988	1	ELECTRONICS GP-ENGINE RATINGS						
			AVAILABLE GASKET KIT(S):						
	216-9612	1	KIT-GASKET (TOP)						
	216-9616	1	KIT-GASKET (BOTTOM)						

Y-SEPARATE ILLUSTRATION

# ENGINE ARRANGEMENT

## 228-4648 ENGINE AR-PRIMARY

106 BRAKE KW (142 BHP) AT 2200 RPM

SMCS-1000

i02181650

NOTE	PART NUMBER	QTY	PART NAME						SEE PAGE
			1	2	3	4	5	6 (PRODUCT LEVEL)	
Y	233-0653	1	CONNECTION GP-WATER						309
Y	233-2639	1	COOLER GP-FLTR BASE & ENG OIL						317
Y	236-1702	1	COVER GP-VALVE MECHANISM						121
Y	236-1697	1	DRIVE GP-FAN						178
Y	235-8231	1	ELBOW GP-AIR INLET						368
Y	228-6941	1	ENGINE AR-CORE						1
Y	236-1823	1	FASTENER GP-ENGINE						186
Y	216-9683	1	FILTER GP-ENGINE OIL						287
Y	235-6347	1	FILTER GP-FUEL						403
Y	237-6365	1	HOUSING GP-FRONT						214
Y	228-7462	1	LIFTING GP-ENGINE						217
Y	235-6367	1	LINES GP-FUEL FILTER						405
Y	235-6343	1	MOUNTING GP-ALTERNATOR						218
Y	147-5496	1	MOUNTING GP-ENGINE						219
Y	236-5516	1	PAN GP-OIL						255
Y	239-1349	1	PLUG GP-CYLINDER BLOCK						268
Y	233-2765	1	PLUG GP-ENGINE						270
Y	236-6604	1	PLUG GP-ENGINE						273
Y	235-8219	1	PLUG GP-ENGINE						272
Y	236-1720	1	PULLEY GP-CRANKSHAFT						283
Y	233-2744	1	PUMP GP-ENGINE OIL						290
Y	236-2317	1	PUMP GP-FUEL INJECTION						416
Y	236-5531	1	PUMP GP-FUEL TRANSFER						431
Y	221-5369	1	PUMP GP-WATER						331
Y	228-7461	1	STARTING AID GP (HEATER)						457
Y	236-1838	1	STARTING AID GP (LINES)						460
Y	236-1819	1	TURBOCHARGER GP						390
Y	236-5561	1	WIRING GP-ELECTRONIC CONTROL						481
AVAILABLE GASKET KIT(S):									
	216-9612	1	KIT-GASKET (TOP)						
	236-6930	1	KIT-GASKET (BOTTOM)						

Y-SEPARATE ILLUSTRATION

# ENGINE ARRANGEMENT

## 235 - 1850 ENGINE AR-PRIMARY

129 BRAKE KW (173 BHP) AT 2200 RPM

SMCS - 1000

i01940346

NOTE	PART NUMBER	QTY	PART NAME						SEE PAGE
			1	2	3	4	5	6 (PRODUCT LEVEL)	
Y	236-7665	1	AIR CLEANER GP						363
Y	234-5966	1	ALTERNATOR GP-CHARGING						448
Y	233-0653	1	CONNECTION GP-WATER						309
Y	233-2639	1	COOLER GP-FLTR BASE & ENG OIL						317
Y	240-6020	1	COVER GP-VALVE MECHANISM						135
Y	240-6024	1	DRIVE GP-ACCESSORY						170
Y	233-2553	1	DRIVE GP-FAN						174
Y	236-1042	1	ELBOW GP-AIR INLET						369
	240-5988	1	ELECTRONICS GP-ENGINE RATINGS						
Y	228-6941	1	ENGINE AR-CORE						1
Y	235-4591	1	FAN GP-SUCTION						324
Y	216-9683	1	FILTER GP-ENGINE OIL						287
Y	235-6347	1	FILTER GP-FUEL						403
Y	234-2653	1	FLYWHEEL GP						192
Y	234-2651	1	HOUSING GP-FLYWHEEL						199
Y	221-6835	1	HOUSING GP-FRONT						204
Y	228-7462	1	LIFTING GP-ENGINE						217
Y	236-6602	1	MOUNTING GP-ENGINE						222
Y	240-6019	1	PAN GP-OIL						261
Y	233-2765	1	PLUG GP-ENGINE						270
Y	236-6604	1	PLUG GP-ENGINE						273
Y	226-3523	1	PULLEY GP-CRANKSHAFT						281
Y	235-6331	1	PUMP GP-FUEL INJECTION						413
Y	219-2455	1	PUMP GP-FUEL TRANSFER						422
Y	233-2744	1	PUMP GP-ENGINE OIL						290
Y	221-5369	1	PUMP GP-WATER						331
Y	236-7768	1	RADIATOR GP						337
Y	236-1047	1	SEPARATOR GP-WATER						441
Y	235-6348	1	STARTING AID GP (HEATER)						458
Y	235-6362	1	STARTING AID GP (LINES)						459
Y	234-2656	1	STARTING MOTOR GP-ELECTRIC						470
Y	226-3578	1	TURBOCHARGER GP						377
Y	228-7487	1	WIRING GP-ENGINE						495
			AVAILABLE REPAIR KIT(S):						
	216-9612	1	KIT-GASKET (TOP)						
	216-9616	1	KIT-GASKET (BOTTOM)						
Y-SEPARATE ILLUSTRATION									

# ENGINE ARRANGEMENT

## 257-8385 ENGINE AR-PRIMARY

130 BRAKE KW (173 BHP) AT 2200 RPM

SMCS-1000

i02249263

NOTE	PART NUMBER	QTY	PART NAME						SEE PAGE
			1	2	3	4	5	6 (PRODUCT LEVEL)	
(NO SERVICED PARTS)									

# BASIC ENGINE

## 216-4093 AIR COMPRESSOR GP

S/N: 3561-282

AN ATTACHMENT

SMCS - 1803

i01756055

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	<b>5D-1026</b>	4	CLAMP-HOSE						
	2	1	<b>6I-0217</b>	2	BOLT (M8X1.25X20-MM)						
	3	1	<b>6I-4200</b>	1	BOLT (M10X1.5X16-MM)						
	4	1	<b>035-8017</b>	2	UNION						
	5	1	<b>067-6045</b>	2	WASHER (5/8-IN)						
	6	1	<b>100-4461</b>	1	BOLT (M10X50-MM)						
	7	1	<b>100-4830</b>	1	BOLT (M10X1.5X20-MM)						
	8	1	<b>113-4616</b>	2	CONNECTOR						
	9	1	<b>126-3219</b>	1	SEAL-O-RING						
	10	1	<b>166-5255</b>	1	AIR COMPRESSOR GP						
	11	1	<b>166-5262</b>	1	BRACKET						
	12	1	<b>166-5263</b>	1	PIPE AS						
	12A	1	<b>105-3154</b>	1	CLIP						
	13	1	<b>166-5264</b>	1	HOSE						
	14	1	<b>198-8262</b>	1	COVER AS						
	14A	1	<b>198-8263</b>	1	SEAL-O-RING						
	15	1	<b>209-6824</b>	1	HOSE						
	16	1	<b>209-6825</b>	2	ADAPTER						
	17	1	<b>214-3205</b>	1	SPACER						
	18	1	<b>214-3206</b>	1	GEAR (34-TEETH)						

# BASIC ENGINE

## 236-1807 AIR COMPRESSOR GP

S/N: 356333-UP

SMCS-1803

i02214793

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	5D-1026	4	CLAMP-HOSE						
	2	1	6B-0933	1	SPACER (10.31X19.05X6.35-MM THK)						
	3	1	6I-0217	2	BOLT (M8X1.25X20-MM)						
	4	1	6I-0233	4	NUT (M12)						
	5	1	6I-0646	1	BOLT (M10X1.5X14-MM)						
	6	1	6I-4200	2	BOLT (M10X1.5X16-MM)						
	7	1	035-8017	2	UNION						
C	8	1	247-4928	2	WASHER (16.5X20.5X1.6-MM THK)						
	9	1	100-4461	1	BOLT (M10X50-MM)						
	10	1	100-4830	1	BOLT (M10X1.5X20-MM)						
	11	1	113-4616	2	CONNECTOR						
	12	1	124-3815	3	BOLT (M8X16X1.25-MM)						
	13	1	126-3205	1	BRACKET						
	14	1	126-3206	1	HUB						
	15	1	126-3207	1	SEAL-O-RING						
	16	1	126-3208	1	BEARING						
	17	1	126-3210	1	PLATE						
	18	1	126-3211	3	BOLT						
	19	1	126-3212	4	BOLT						
	20	1	126-3216	1	STUD						
	21	1	126-3217	1	STUD						
	22	1	126-3219	1	SEAL-O-RING						
	23	1	166-5262	1	BRACKET						
	24	1	166-5263	1	PIPE AS						
	24A	1	105-3154	1	CLIP						
	25	1	166-5264	1	HOSE						
	26	1	209-6817	1	PLATE AS						
	26A	1	210-1074	1	SEAL-O-RING						
	27	1	209-6824	1	HOSE						
	28	1	209-6825	2	ADAPTER						
	29	1	214-3203	1	WASHER						
	30	1	214-3204	1	GEAR-IDLER (28-TEETH)						
	31	1	214-3206	1	GEAR (34-TEETH) (COMPRESSOR, DRIVE)						
	32	1	218-4954	1	AIR COMPRESSOR GP						

C-CHANGE FROM PREVIOUS TYPE

# BASIC ENGINE

## 221-7115 COVER GP-VALVE MECHANISM

S/N: 3561-1404

AN ATTACHMENT

SMCS-1107

i02372743

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	<b>2S-3440</b>	2	CLAMP-HOSE						
	2	1	<b>5D-1026</b>	2	CLAMP-HOSE						
	3	1	<b>6I-0217</b>	2	BOLT (M8X1.25X20-MM)						
	4	1	<b>6I-0456</b>	1	BOLT (M8X1.25X45-MM)						
	5	1	<b>6I-4374</b>	1	BOLT						
	6	1	<b>100-4104</b>	1	GASKET						
	7	1	<b>112-7704</b>	2	BOLT						
	8	1	<b>160-6988</b>	1	FILLER AS-OIL						
	9	1	<b>113-1505</b>	1	SEAL-O-RING						
	10	1	<b>130-9888</b>	1	CAP AS (ENGINE OIL FILLER)						
	11	1	<b>113-1504</b>	1	SEAL-O-RING						
	12	1	<b>216-9606</b>	1	COVER AS (VALVE)						
	12A	1	<b>229-3557</b>	1	SEAL-O-RING						
	13	1	<b>229-3558</b>	1	BOLT						
	14	1	<b>216-9600</b>	8	BOLT						
	15	1	<b>216-9602</b>	1	BREATHER AS (CRANKCASE)						
	16	1	<b>216-9604</b>	1	GASKET (VALVE COVER)						
	17	1	<b>216-9608</b>	1	BREATHER (CLOSED CIRCUIT CRANKCASE)						
	17A	1	<b>229-3555</b>	1	FILTER-BREATHER (CLOSED CIRCUIT CRANKCASE)						
	17B	1	<b>229-3556</b>	1	SEAL-O-RING (CRANKCASE BREATHER)						
	18	1	<b>216-9611</b>	1	BRACKET						
	19	1	<b>216-9614</b>	1	HOSE (UPPER FUMES DISPOSAL)						
	20	1	<b>216-9617</b>	1	HOSE (LOWER FUMES DISPOSAL)						
	21	1	<b>216-9618</b>	1	VALVE-CHECK (CRANKCASE BREATHER CHECK)						
	22	1	<b>216-9620</b>	1	ELBOW						
	23	1	<b>216-9623</b>	1	ADAPTER						
	24	1	<b>219-1803</b>	1	TUBE						

# BASIC ENGINE

## 228-7371 COVER GP-VALVE MECHANISM

ALSO AN ATTACHMENT

SMCS-1107

i02009826

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	5D-1026	1	CLAMP-HOSE						
	2	1	6I-0217	4	BOLT (M8X1.25X20-MM)						
	3	1	7C-1281	1	BRACKET						
	4	1	7M-7410	1	PLUG-PIPE						
	5	1	100-4104	1	GASKET						
	6	1	162-1565	1	SPRING (CRANKCASE BREATHER HOSE)						
	7	1	197-5015	1	PLATE AS						
	8	1	113-1505	1	SEAL-O-RING						
	9	1	219-1787	1	COVER AS-VALVE						
	9A	1	136-3608	1	CAP AS (ENGINE OIL FILLER)						
	9B	1	124-0506	1	SEAL						
	9C	1	199-9252	1	SEAL-O-RING						
	9D	1	229-3558	1	BOLT (M5X.8X16-MM)						
	9E	1	216-9600	8	BOLT (ISOLATOR)						
	9F	1	216-9602	1	BREATHER AS (CRANKCASE)						
	9G	1	216-9604	1	GASKET (VALVE COVER)						
	10	1	219-1803	1	TUBE						
	11	1	198-8645	1	HOSE (CRANKCASE BREATHER)						

# BASIC ENGINE

## 233-8636 COVER GP-VALVE MECHANISM

S/N: 3561463-UP  
ALSO AN ATTACHMENT

SMCS-1107

i02368724

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	2S-3440	2	CLAMP-HOSE						
	2	1	5D-1026	2	CLAMP-HOSE						
	3	1	6I-0217	4	BOLT (M8X1.25X20-MM)						
	4	1	100-4104	1	GASKET						
	5	1	112-7704	2	BOLT						
	6	1	197-5015	1	PLATE AS						
	6A	1	113-1505	1	SEAL-O-RING						
C	7	1	262-1044	1	BREATHER AS (CRANKCASE)						
C	7A		229-3555	1	FILTER-BREATHER (CLOSED CIRCUIT CRANKCASE)						
C	7B		262-1046	1	SEAL-O-RING (CRANKCASE BREATHER)						
C	8	1	262-1045	1	BRACKET						
	9	1	216-9614	1	HOSE (FUMES DISPOSAL, UPPER)						
	10	1	216-9617	1	HOSE (FUMES DISPOSAL, LOWER)						
	11	1	216-9618	1	VALVE-CHECK (CRANKCASE BREATHER CHECK)						
	12	1	216-9620	1	ELBOW						
	13	1	216-9623	1	ADAPTER						
	14	1	219-1803	1	TUBE						
	15	1	233-8551	1	COVER AS-VALVE						
	15A	1	229-3558	1	BOLT						
	15B	1	216-9600	8	BOLT						
	15C	1	216-9602	1	BREATHER AS (CRANKCASE)						
	15D	1	216-9604	1	GASKET (VALVE COVER)						
	15E	1	229-3557	1	SEAL-O-RING						
	15F	1	136-3608	1	CAP AS (ENGINE OIL FILLER)						
	15G	1	124-0506	1	SEAL						

C- CHANGE FROM PREVIOUS TYPE

# BASIC ENGINE

## 235-4590 COVER GP-VALVE MECHANISM

S/N: 3561463-UP

SMCS-1107

i02349377

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	<b>2S-3440</b>	2	CLAMP-HOSE						
	2	1	<b>5D-1026</b>	2	CLAMP-HOSE						
	3	1	<b>6I-0217</b>	2	BOLT (M8X1.25X20-MM)						
	4	1	<b>6I-0260</b>	2	BOLT (M8X1.25X25-MM)						
	5	1	<b>112-7704</b>	2	BOLT						
	6	1	<b>197-5015</b>	1	PLATE AS						
	6A	1	<b>113-1505</b>	1	SEAL-O-RING						
C	7	1	<b>262-1044</b>	1	BREATHER AS (CRANKCASE)						
C	7A	1	<b>229-3555</b>	1	FILTER-BREATHER (CLOSED CIRCUIT CRANKCASE)						
C	7B	1	<b>262-1046</b>	1	SEAL-O-RING (CRANKCASE BREATHER)						
C	8	1	<b>262-1045</b>	1	BRACKET						
	9	1	<b>216-9614</b>	1	HOSE (FUMES DISPOSAL, UPPER)						
	10	1	<b>216-9617</b>	1	HOSE (FUMES DISPOSAL, LOWER)						
	11	1	<b>216-9618</b>	1	VALVE-CHECK (CRANKCASE BREATHER CHECK)						
	14	1	<b>219-1787</b>	1	COVER AS-VALVE						
	14A	1	<b>136-3608</b>	1	CAP AS (ENGINE OIL FILLER)						
	14B	1	<b>124-0506</b>	1	SEAL						
	14C	1	<b>199-9252</b>	1	SEAL-O-RING						
	14D	1	<b>216-9600</b>	8	BOLT						
	14E	1	<b>216-9602</b>	1	BREATHER AS (CRANKCASE)						
	14F	1	<b>216-9604</b>	1	GASKET (VALVE COVER)						
	14G	1	<b>229-3558</b>	1	BOLT						
	15	1	<b>234-6174</b>	1	FILLER AS-OIL						
	15A	1	<b>130-9888</b>	1	CAP AS (ENGINE OIL FILLER)						
	15B	1	<b>113-1504</b>	1	SEAL-O-RING						
	15C	1	<b>234-6171</b>	1	SEAL-O-RING						
C	16	1	<b>268-0876</b>	1	ELBOW						
C	17	1	<b>032-8048</b>	2	OLIVE						
C	18	1	<b>7W-2628</b>	2	NUT						
C	19	1	<b>7W-2634</b>	1	UNION						

C-CHANGE FROM PREVIOUS TYPE

# BASIC ENGINE

## 239-8034 COVER GP-VALVE MECHANISM

SMCS-1107

i02372765

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	5D-1026	1	CLAMP-HOSE						
	2	1	6I-0217	1	BOLT (M8X1.25X20-MM)						
	3	1	6I-0260	2	BOLT (M8X1.25X25-MM)						
	4	1	7C-1281	1	BRACKET						
	5	1	7M-7410	1	PLUG-PIPE						
	6	1	162-1565	1	SPRING (CRANKCASE BREATHER HOSE)						
	7	1	197-5015	1	PLATE AS						
	7A	1	113-1505	1	SEAL-O-RING						
	8	1	198-8645	1	HOSE (CRANKCASE BREATHER)						
	9	1	216-9606	1	COVER AS (VALVE)						
	9A	1	216-9600	8	BOLT						
	9B	1	216-9602	1	BREATHER AS (CRANKCASE)						
	9C	1	216-9604	1	GASKET (VALVE COVER)						
	9D	1	229-3557	1	SEAL-O-RING						
	9E	1	229-3558	1	BOLT						
	10	1	217-7317	1	BRACKET						
	11	1	217-9039	1	STRAP-CABLE						
	12	1	234-6174	1	FILLER AS-OIL						
	12A	1	130-9888	1	CAP AS (ENGINE OIL FILLER)						
	12B	1	113-1504	1	SEAL-O-RING						
	12C	1	234-6171	1	SEAL-O-RING						

# BASIC ENGINE

## 242-0183 COVER GP-VALVE MECHANISM

SMCS-1107

i02372774

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	5D-1026	1	CLAMP-HOSE						
	2	1	6I-0217	2	BOLT (M8X1.25X20-MM)						
	3	1	6I-0512	1	GASKET						
	4	1	6I-0839	1	BOLT (M8X1.25X70-MM)						
	5	1	7C-1281	1	BRACKET						
	6	1	7M-7410	1	PLUG-PIPE						
	7	1	100-4104	1	GASKET						
	8	1	101-3771	1	BOLT						
	9	1	113-8084	1	CAP AS-FILLER						
	9A	1	130-9888	1	CAP AS (ENGINE OIL FILLER)						
	9B	1	113-1504	1	SEAL-O-RING						
	10	1	162-1565	1	SPRING (CRANKCASE BREATHER HOSE)						
	11	1	191-5049	1	HOSE (CRANKCASE BREATHER)						
	12	1	193-3311	1	SPACER						
	13	1	219-1787	1	COVER AS-VALVE						
	13A	1	136-3608	1	CAP AS (ENGINE OIL FILLER)						
	13B	1	124-0506	1	SEAL						
	13C	1	199-9252	1	SEAL-O-RING						
	13D	1	216-9600	8	BOLT						
	13E	1	216-9602	1	BREATHER AS (CRANKCASE)						
	13F	1	216-9604	1	GASKET (VALVE COVER)						
	13G	1	229-3558	1	BOLT						
	14	1	219-1803	1	TUBE						

# BASIC ENGINE

## 256-2806 COVER GP-VALVE MECHANISM

S/N: 3561463-UP

SMCS-1107

i02349372

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	<b>2S-3440</b>	2	CLAMP-HOSE						
	2	1	<b>5D-1026</b>	2	CLAMP-HOSE						
	3	1	<b>6I-0217</b>	6	BOLT (M8X1.25X20-MM)						
	4	1	<b>100-4104</b>	1	GASKET						
	5	1	<b>112-7704</b>	2	BOLT						
	6	1	<b>197-5015</b>	2	PLATE AS						
					(EACH INCLUDES)						
	6A	1	<b>113-1505</b>	1	SEAL-O-RING						
C	7	1	<b>262-1044</b>	1	BREATHER AS (CRANKCASE)						
	7A	1	<b>229-3555</b>	1	FILTER-BREATHER (CLOSED CIRCUIT CRANKCASE)						
	7B	1	<b>262-1046</b>	1	SEAL-O-RING (CRANKCASE BREATHER)						
C	8	1	<b>262-1045</b>	1	BRACKET						
	9	1	<b>216-9618</b>	1	VALVE-CHECK (CRANKCASE BREATHER CHECK)						
	12	1	<b>219-1787</b>	1	COVER AS-VALVE						
	12A	1	<b>136-3608</b>	1	CAP AS (ENGINE OIL FILLER)						
	12B	1	<b>124-0506</b>	1	SEAL						
	12C	1	<b>199-9252</b>	1	SEAL-O-RING						
	12D	1	<b>216-9600</b>	8	BOLT						
	12E	1	<b>216-9602</b>	1	BREATHER AS (CRANKCASE)						
	12F	1	<b>216-9604</b>	1	GASKET (VALVE COVER)						
	12G	1	<b>229-3558</b>	1	BOLT						
	13	1	<b>219-1803</b>	1	TUBE						
	14	1	<b>249-2826</b>	1	HOSE (FUMES DISPOSAL, UPPER)						
	15	1	<b>249-2827</b>	1	HOSE (FUMES DISPOSAL, LOWER)						
C	16	1	<b>268-0876</b>	1	ELBOW						
C	17	1	<b>032-8048</b>	2	OLIVE						
C	18	1	<b>7W-2628</b>	2	NUT						
C	19	1	<b>7W-2634</b>	1	UNION						

C-CHANGE FROM PREVIOUS TYPE

# BASIC ENGINE

## 216-8316 CRANKSHAFT GP

ALSO AN ATTACHMENT

TYPE 2

SMCS-1202

i02145194

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	<b>216-8314</b>	1	GEAR-CRANKSHAFT (34-TEETH)						
	2	1	<b>240-8467</b>	1	CRANKSHAFT GP						
	3	1	<b>1B-8736</b>	1	KEY-WOODRUFF						
	4	1	<b>032-9090</b>	2	WASHER-THRUST (STANDARD-UPPER)						
AB		1	<b>067-6873</b>		WASHER-THRUST (0.18-MM OS)						
	5	1	<b>032-9091</b>	2	WASHER-THRUST (STANDARD-LOWER)						
AB		1	<b>067-6874</b>		WASHER-THRUST (0.18-MM OS)						
	6	1	<b>7W-4589</b>	1	BEARING GP-MAIN (STANDARD)						
AB		1	<b>7W-4590</b>		BEARING GP-MAIN (0.25 US ID)						
AB		1	<b>7W-4591</b>		BEARING GP-MAIN (0.51 US ID)						
AB		1	<b>7W-4592</b>		BEARING GP-MAIN (0.76 US ID) (STANDARD)						
	7	1	<b>236-4397</b>	1	BEARING SET-ROD						
	8	1	<b>225-8839</b>	1	DOWEL						
	9	1	<b>226-2036</b>	1	RING-TIMING						
	10	1	<b>6I-4716</b>	1	KEY						

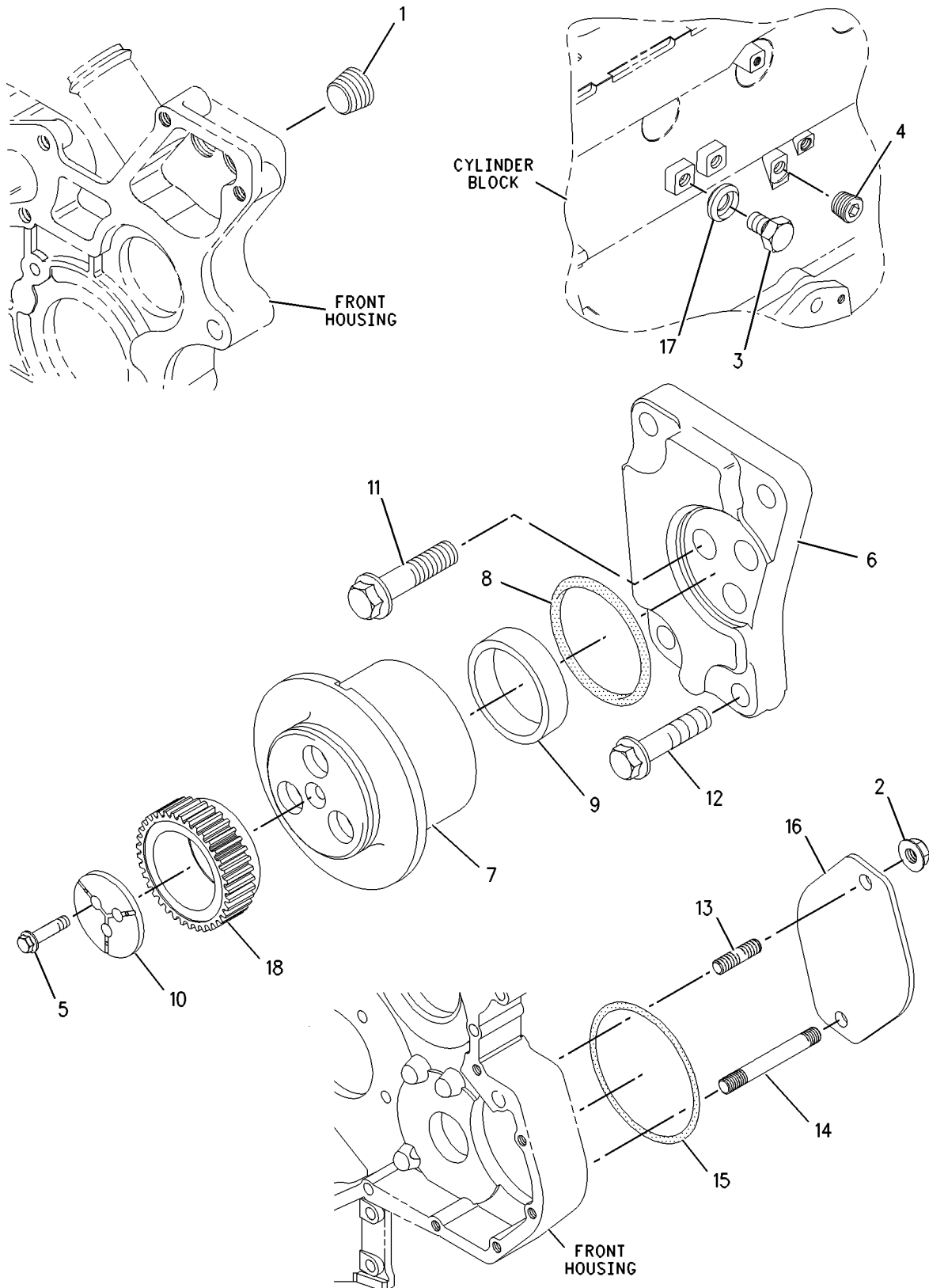
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B-USE AS REQUIRED

# BASIC ENGINE

226-3558 DRIVE GP-ACCESSORY (contd.)

i02181559



GRAPHIC #1

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g00909741

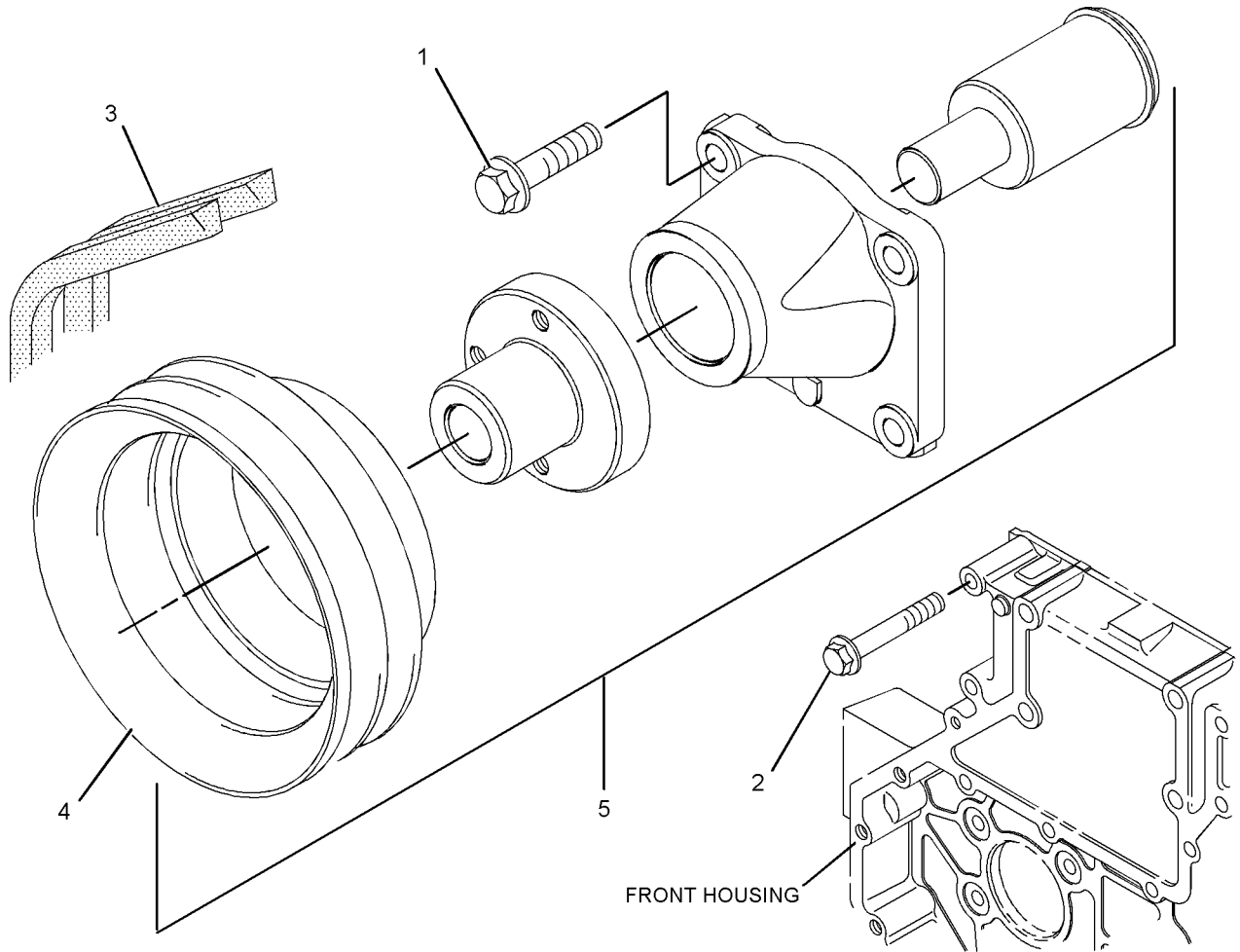
# BASIC ENGINE

## 235-8211 DRIVE GP-FAN

SMCS-1359

i02191401

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	<b>6I-0593</b>	4	BOLT (M10X1.5X30-MM)						
	2	1	<b>6I-0650</b>	4	BOLT (M10X1.5X65-MM)						
	3	1	<b>9L-1106</b>	1	V-BELT SET (INCLUDES 2-BELTS) (FAN DRIVE)						
	4	1	<b>130-3879</b>	1	PULLEY-FAN DRIVE						
	5	1	<b>166-0482</b>	1	HOUSING AS						



GRAPHIC #1

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g01057851

# BASIC ENGINE

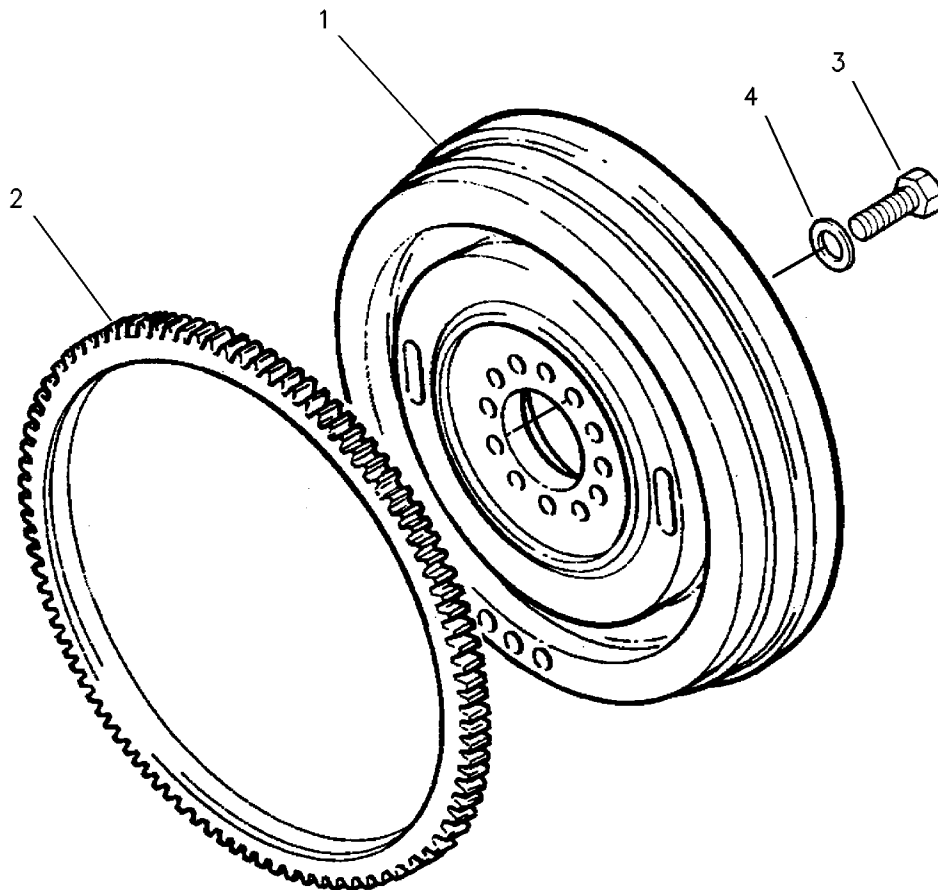
## 221-6990 FLYWHEEL GP

AN ATTACHMENT  
TYPE 1

SMCS-1156

i01724912

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	113-7543	1	FLYWHEEL AS						
	2	1	033-7687	1	RING-STARTING MOTOR (126-TEETH)						
	3	1	4K-7502	12	BOLT (1/2-20X1.375-IN)						
	4	1	5P-8245	12	WASHER-HARD (13.5X25.5X3-MM THK)						



GRAPHIC #1

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g00241149

# BASIC ENGINE

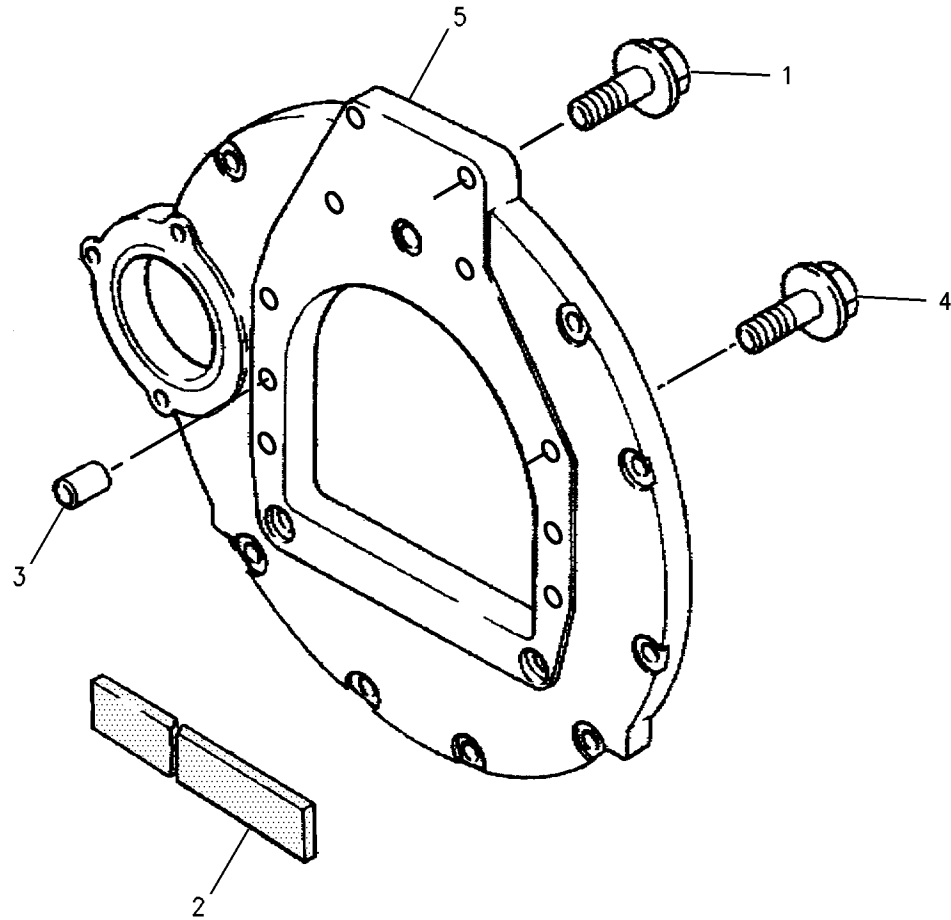
## 233-0696 HOUSING GP-FLYWHEEL

ALSO AN ATTACHMENT

SMCS-1157

i01959134

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	<b>6I-0423</b>	2	BOLT (M12X1.75X30-MM)						
	2	1	<b>7W-4642</b>	1	SHIELD-DUST						
	3	1	<b>067-6123</b>	2	DOWEL						
	4	1	<b>121-0883</b>	6	BOLT (M10X1.5X30-MM)						
	5	1	<b>186-2342</b>	1	PLATE						



GRAPHIC #1

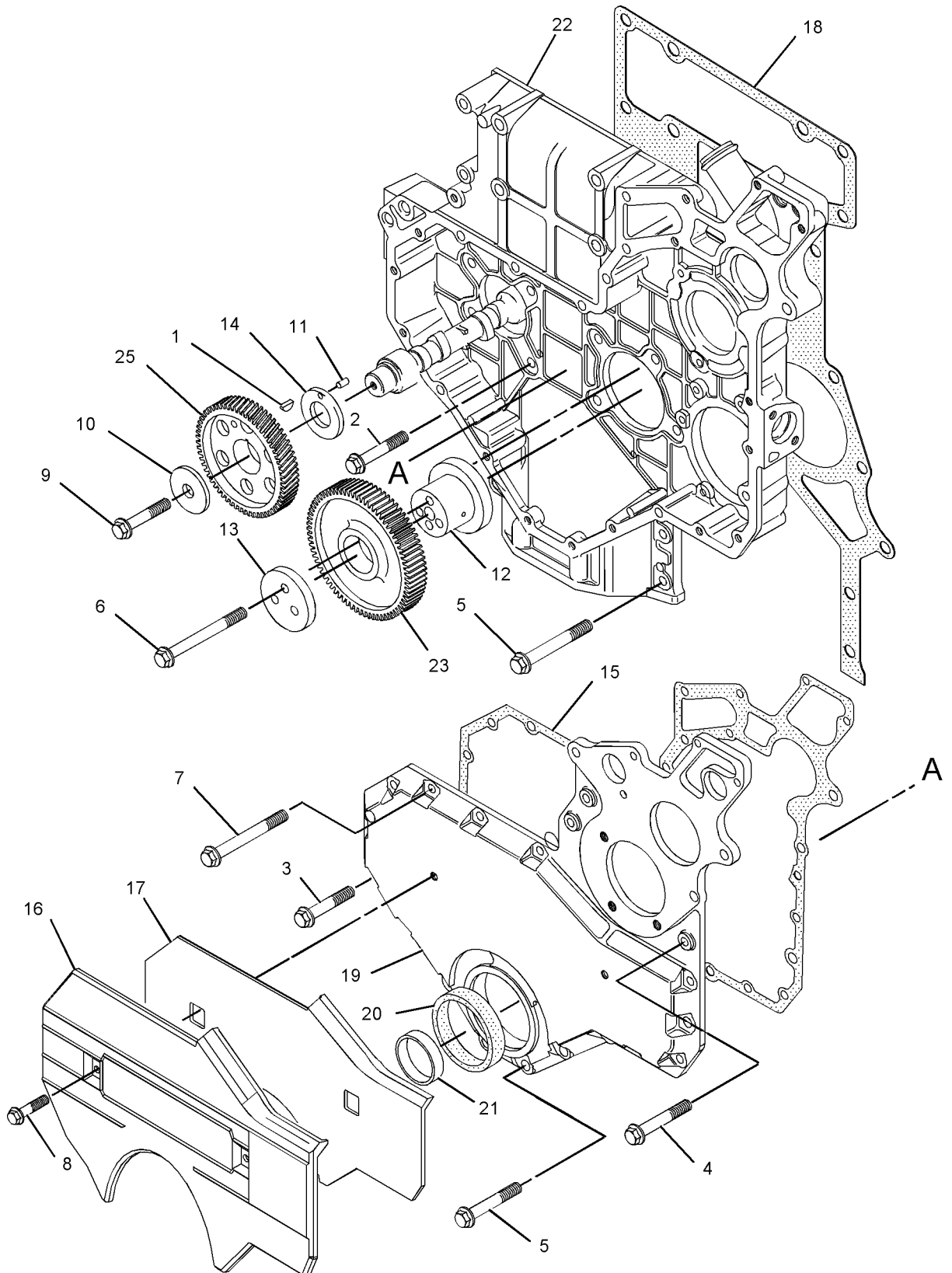
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g00733445

# BASIC ENGINE

221-6835 HOUSING GP-FRONT (contd.)

i02161534



GRAPHIC #1

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g01081842

# BASIC ENGINE

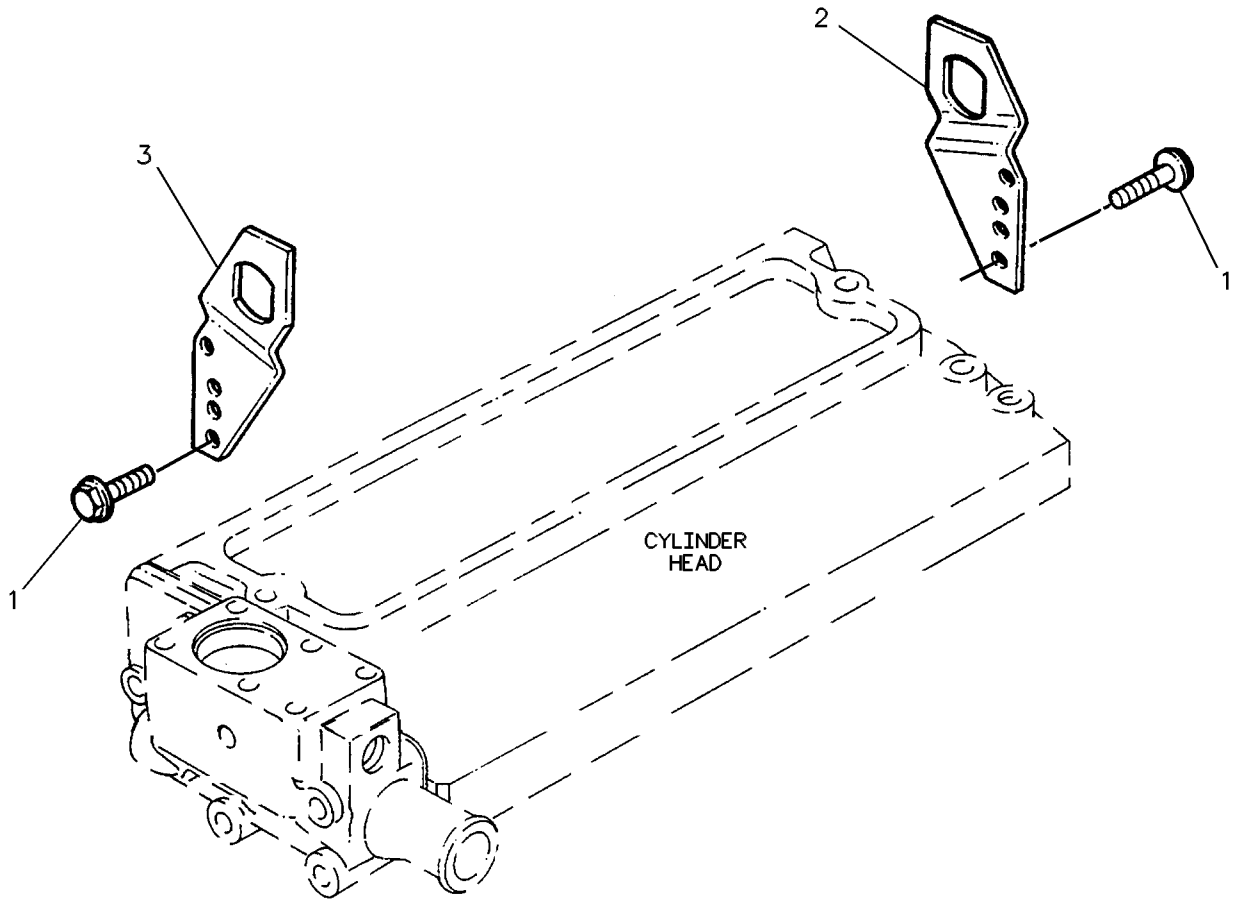
## 228-7462 LIFTING GP-ENGINE

ALSO AN ATTACHMENT

SMCS-1122

i01827919

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	<b>6I-0654</b>	4	BOLT (M10X1.5X25MM)						
	2	1	<b>140-8953</b>	1	PLATE						
	3	1	<b>142-0349</b>	1	PLATE-LIFTING						



GRAPHIC #1

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g00272676

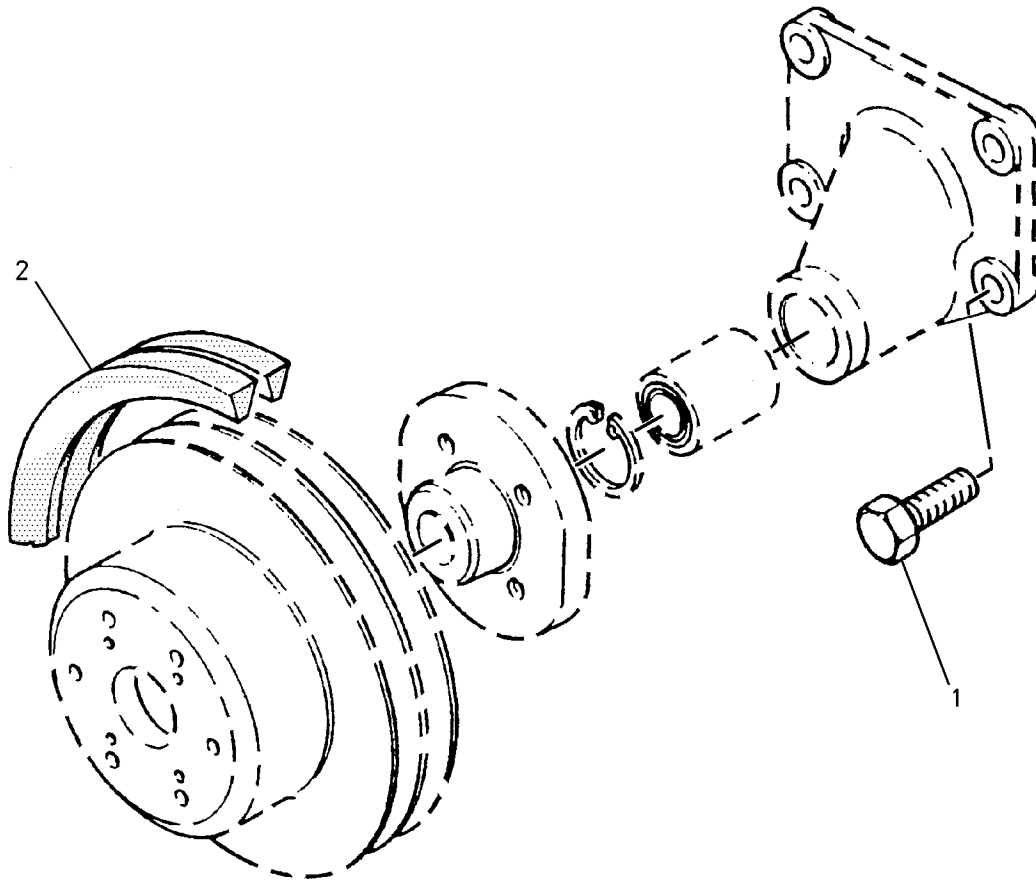
# BASIC ENGINE

## 186-3660 MOUNTING GP-FAN DRIVE

SMCS-1359

i02188286

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	6I-0650	4	BOLT (M10X1.5X65-MM)						
	2	1	5N-6350	1	V-BELT SET (INCLUDES 2-BELTS) (FAN DRIVE)						



GRAPHIC #1

<END>

g00730645

# BASIC ENGINE

## 221-2959 PAN GP-OIL

AN ATTACHMENT

TYPE 1

SMCS-1302

i02156949

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	113-5280	1	PAN AS-OIL						
	2	1	7C-1224	1	INSERT						
	3	1	195-3761	1	SPACER						
	4	1	7C-0351	2	PLUG-DRAIN (ENGINE OIL)						
	5	1	5P-6718	2	SEAL-O-RING (OIL DRAIN PLUG)						
	6	1	6I-4709	6	BOLT (M8X1.25X100-MM)						
	7	1	6I-0217	22	BOLT (M8X1.25X20-MM)						
	8	1	211-0067	1	BRIDGE						
	9	1	6I-0363	2	BOLT (M6X1X20-MM)						
	10	1	6I-4710	1	GASKET						
	11	1	113-5281	1	TUBE AS						
	12	1	6I-4681	1	GASKET						
	13	1	6I-0260	2	BOLT (M8X1.25X25-MM)						
	14	1	6I-0289	1	PLUG						
	15	1	6I-0572	2	BOLT (M8X1.25X20-MM)						
	16	1	113-5282	1	BRACKET						
	17	1	113-8130	1	CLIP						
	19	1	6I-0291	2	NUT (M8X1.25-THD)						
	20	1	124-3815	1	BOLT (M8X16X1.25-MM)						
	21	1	113-8231	1	SUPPORT						

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# BASIC ENGINE

## 233-2564 PAN GP-OIL

ALSO AN ATTACHMENT

SMCS-1302

i02181914

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	5P-6718	2	SEAL-O-RING						
	2	1	6I-0217	23	BOLT (M8X1.25X20-MM)						
	3	1	6I-0260	2	BOLT (M8X1.25X25-MM)						
	4	1	6I-0289	1	PLUG						
	5	1	6I-0291	1	NUT (M8X1.25-THD)						
	6	1	6I-0363	2	BOLT (M6X1X20-MM)						
	7	1	6I-0572	2	BOLT (M8X1.25X20-MM)						
	8	1	6I-1497	1	SEAL						
	9	1	6I-4376	1	TUBE AS						
	10	1	6I-4681	1	GASKET						
	11	1	6I-4709	4	BOLT (M8X1.25X100-MM)						
	12	1	6I-4710	1	GASKET						
	13	1	7C-0351	2	PLUG-DRAIN (ENGINE OIL)						
	14	1	124-3815	1	BOLT (M8X16X1.25-MM)						
	15	1	130-1161	1	GAUGE AS-OIL LEVEL (DIPSTICK) (ENGINE)						
	16	1	132-8848	1	WASHER						
	17	1	211-0067	1	BRIDGE						
	18	1	213-4814	1	PAN AS-OIL						
	18A	1	7C-1224	2	INSERT						
	19	1	214-5974	1	BRACKET						
	20	1	231-5158	1	TUBE AS						
	20A	1	6I-4079	1	NUT						

# BASIC ENGINE

## 236-5516 PAN GP-OIL

TYPE 2

SMCS-1302

i02182394

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	<b>5P-6718</b>	2	SEAL-O-RING						
	2	1	<b>6I-0217</b>	2	BOLT (M8X1.25X20-MM)						
	3	1	<b>6I-0260</b>	3	BOLT (M8X1.25X25-MM)						
	4	1	<b>6I-0289</b>	1	PLUG						
	5	1	<b>6I-0291</b>	6	NUT (M8X1.25-THD)						
	6	1	<b>6I-0363</b>	2	BOLT (M6X1X20-MM)						
C	8	1	<b>6I-1090</b>	14	BOLT (M8X1.25X40-MM)						
	9	1	<b>6I-1497</b>	1	SEAL						
	10	1	<b>6I-4681</b>	1	GASKET						
C	11	1	<b>6I-4709</b>	8	BOLT (M8X1.25X100-MM)						
	12	1	<b>7C-0351</b>	2	PLUG-DRAIN (ENGINE OIL)						
	13	1	<b>7W-2632</b>	2	WASHER (8.5X16.8X1.6-MM THK)						
CM	14	1	<b>100-3751</b>	2	BOLT (M8X1.25X65-MM)						
	15	1	<b>132-8848</b>	1	WASHER						
	16	1	<b>207-4876</b>	2	STUD						
	17	1	<b>211-0067</b>	1	BRIDGE						
	18	1	<b>213-9710</b>	1	GASKET						
	19	1	<b>214-5974</b>	1	BRACKET						
	20	1	<b>231-5158</b>	1	TUBE AS						
	20A	1	<b>6I-4079</b>	1	NUT						
C	21	1	<b>254-6054</b>	1	PAN-OIL						
	22	1	<b>236-2336</b>	2	BOLT						
	23	1	<b>236-2351</b>	1	GAUGE AS-OIL LEVEL (DIPSTICK) (ENGINE)						
C	24	1	<b>254-6055</b>	1	TUBE-OIL SUCTION						
	25	1	<b>236-5514</b>	1	BRACKET						

C-CHANGE FROM PREVIOUS TYPE  
M-METRIC PART

# BASIC ENGINE

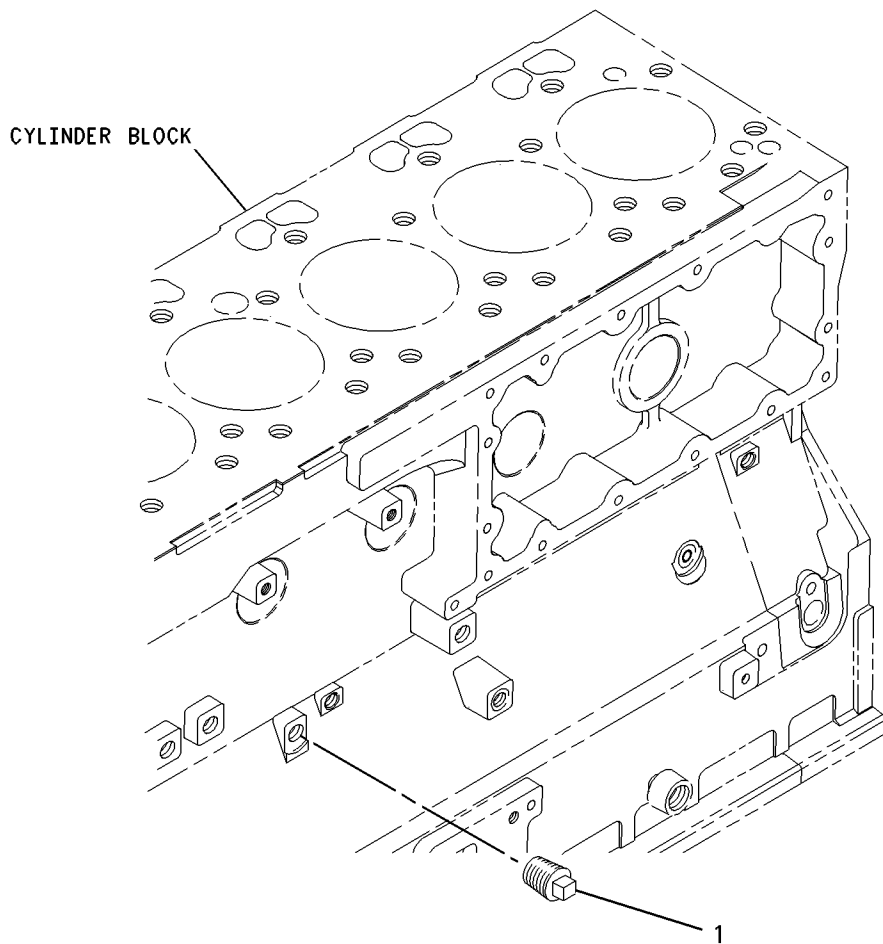
## 228-7470 PLUG GP-CYLINDER BLOCK

AN ATTACHMENT

SMCS-1201

i01827904

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	035-8063	1	PLUG (1/8)						



GRAPHIC #1

<END>

g00934899

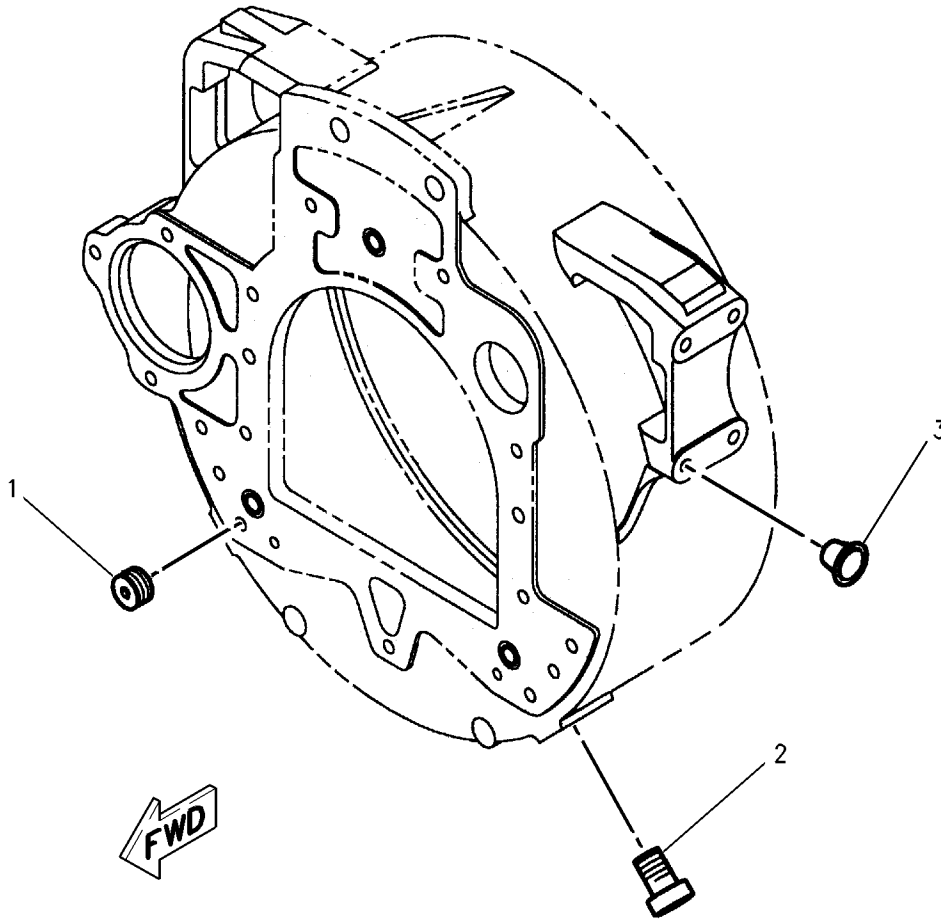
# BASIC ENGINE

## 217-7888 PLUG GP-FLYWHEEL HOUSING AN ATTACHMENT

SMCS-1157

i02225545

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	101-2987	6	PLUG						
	2	1	102-9460	4	PLUG						
	3	1	133-8470	4	PLUG						



GRAPHIC #1

<END>

g00878680

# LUBRICATION SYSTEM

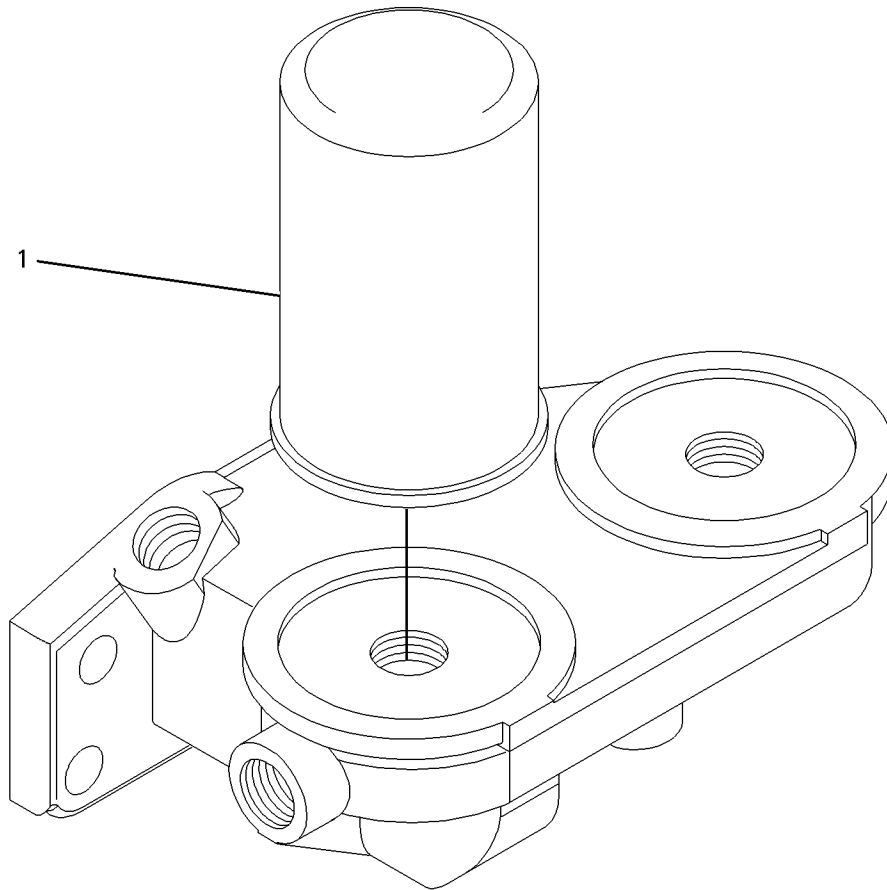
## 216-9683 FILTER GP-ENGINE OIL

ALSO AN ATTACHMENT

SMCS-1306, 1308

i01755992

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	7W-2327	2	FILTER AS-ENGINE OIL						



GRAPHIC #1

<END>

g00861958

# LUBRICATION SYSTEM

## 235-9692 PUMP GP-ENGINE OIL

ALSO AN ATTACHMENT

SMCS-1304, 1315

i02368740

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	<b>5C-1796</b>	1	GASKET						
	2	1	<b>6I-0260</b>	6	BOLT (M8X1.25X25-MM)						
C	4	1	<b>6I-4374</b>	2	BOLT						
	5	1	<b>067-6933</b>	1	GASKET						
	8	1	<b>112-7702</b>	1	HOUSING AS						
	9	1	<b>6I-0787</b>	1	RING-RETAINING						
	10	1	<b>7W-4648</b>	1	SEAT-SPRING						
	11	1	<b>7W-4650</b>	1	SPRING						
	12	1	<b>7W-4782</b>	1	PLUNGER						
C	13	1	<b>133-6106</b>	4	BOLT						
	14	1	<b>124-3815</b>	1	BOLT (M8X16X1.25-MM)						
	15	1	<b>183-6318</b>	1	TUBE AS						
	16	1	<b>189-5601</b>	1	SEAL-O-RING						
	17	1	<b>216-8625</b>	1	PUMP AS-ENGINE OIL						
C	18	1	<b>257-7637</b>	1	TUBE-OIL						

C-CHANGE FROM PREVIOUS TYPE

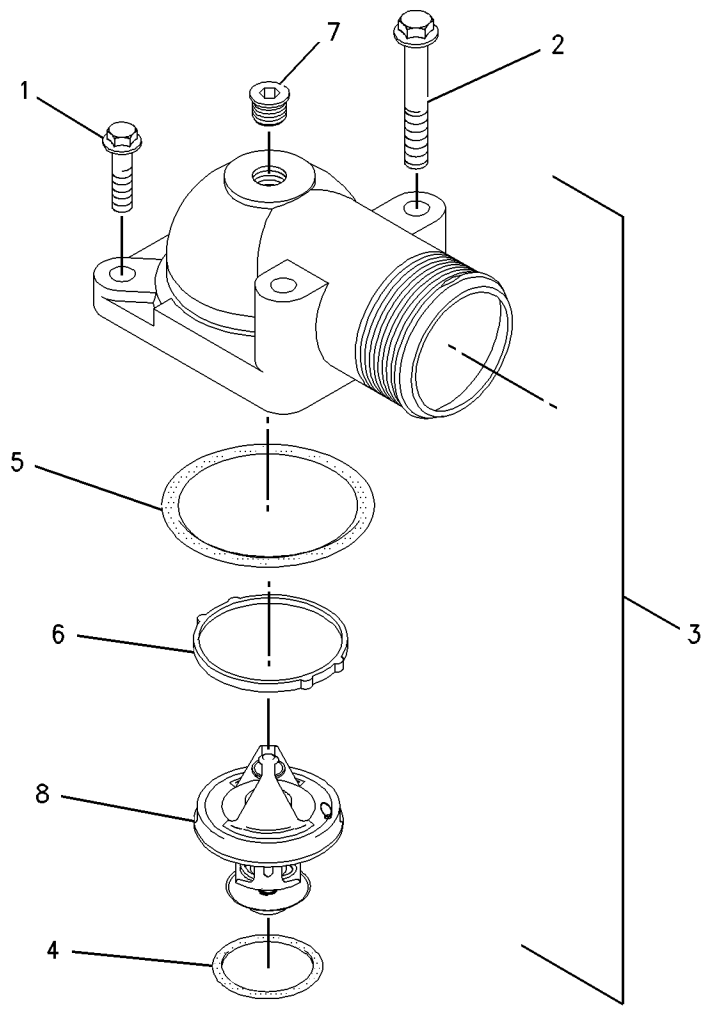
# COOLING SYSTEM

## 220-6144 CONNECTION GP-WATER AN ATTACHMENT

SMCS-1380

i02368896

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	6I-0260	1	BOLT (M8X1.25X25-MM)						
	2	1	6I-4374	1	BOLT						
	3	1	216-9743	1	CONNECTION AS						
	4	1	140-7515	1	SEAL-O-RING (REGULATOR)						
	5	1	141-6188	1	SEAL (HOUSING, REGULATOR)						
	6	1	162-0236	1	RING						
	7	1	162-0237	1	PLUG						
	8	1	216-9737	1	REGULATOR-WATER TEMPERATURE						



GRAPHIC #1

<END>

g00899163

# COOLING SYSTEM

## 233-2639 COOLER GP-FLTR BASE & ENG OIL

ALSO AN ATTACHMENT

SMCS-1306, 1378

i02369094

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	<b>6I-0260</b>	2	BOLT (M8X1.25X25-MM)						
	2	1	<b>6I-0291</b>	4	NUT (M8X1.25-THD)						
	3	1	<b>6I-0593</b>	4	BOLT (M10X1.5X30-MM)						
	4	1	<b>6I-4786</b>	1	GASKET						
	5	1	<b>124-3815</b>	14	BOLT (M8X16X1.25-MM)						
	6	1	<b>140-8783</b>	4	BOLT (M10X45-MM)						
	8	1	<b>162-0761</b>	4	FLANGE						
J	9	1	<b>162-9754</b>	2	SEAL						
	10	1	<b>175-3915</b>	1	COOLER-ENGINE OIL						
	11	1	<b>216-9637</b>	1	HOUSING						
J	12	1	<b>216-9638</b>	1	GASKET						
J	13	1	<b>216-9643</b>	2	GASKET						
	14	1	<b>220-7171</b>	1	ADAPTER-HOUSING						
J	15	1	<b>230-3776</b>	2	SEAL						
	16	1	<b>231-8047</b>	1	HOSE AS						
	17	1	<b>231-8048</b>	1	HOSE AS						
	17A	1	<b>166-8725</b>	1	CLIP						
	18	1	<b>233-2673</b>	1	HEAD AS-OIL FILTER						
	18A	1	<b>7M-7410</b>	1	PLUG-PIPE						
	18B	1	<b>118-9145</b>	2	CONNECTOR						
	18C	1	<b>219-1818</b>	1	CONNECTION						
F			<b>154-8055</b>	1	HOSE						
					AVAILABLE REPAIR KIT(S):						
J			<b>219-2172</b>	1	KIT-REPAIR (OIL COOLER)						

F - NOT SHOWN

J - KIT MARKED J INCLUDES PARTS MARKED J

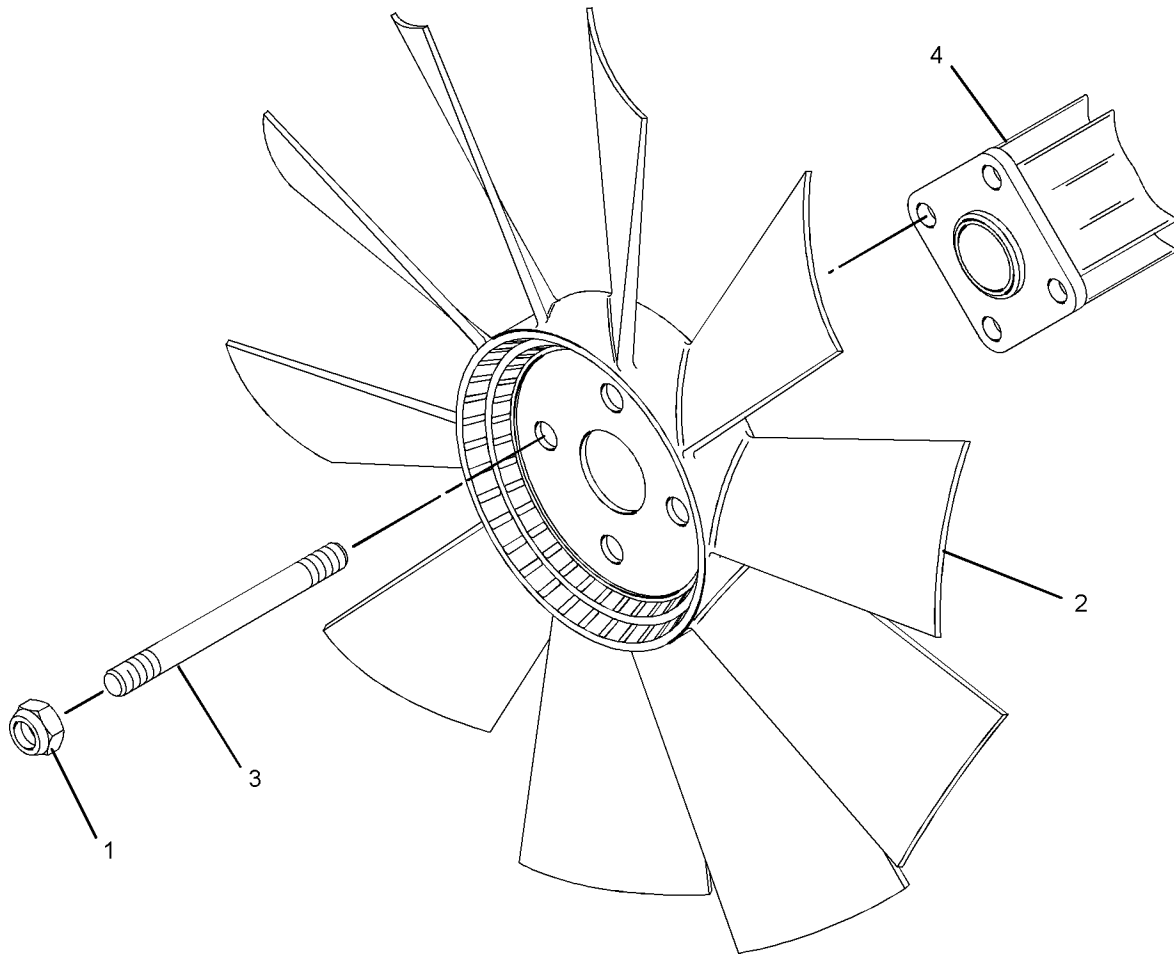
# COOLING SYSTEM

## 245-2753 FAN GP-SUCTION

SMCS-1356

i02052456

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	113-6349	4	NUT (M12-1.75X93-MM THD)						
	2	1	114-2474	1	FAN						
	3	1	135-6362	4	STUD						
	4	1	135-6363	1	EXTENSION-FAN						



GRAPHIC #1

<END>

g01088909

# COOLING SYSTEM

## 236-7768 RADIATOR GP

S/N: 3561-1521

SMCS-1353

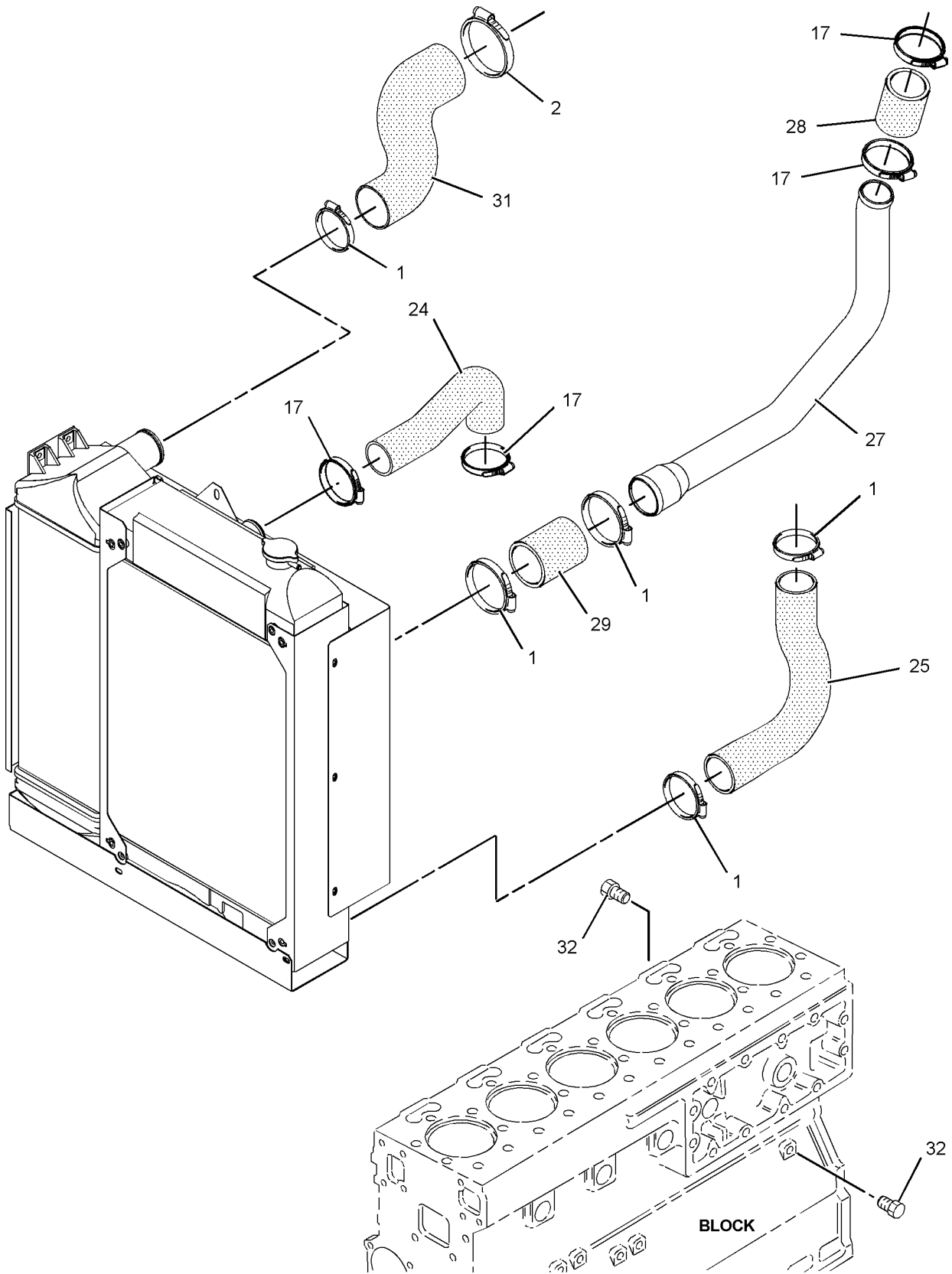
i02204309

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	2	5P-0597	5	CLAMP-HOSE						
	2	2	5P-0598	1	CLAMP						
	3	1	6I-0260	1	BOLT (M8X1.25X25-MM)						
	4	1	6I-0291	1	NUT (M8X1.25-THD)						
	5	1	6I-0654	2	BOLT (M10X1.5X25-MM)						
	6	1	7W-2601	2	SPACER						
	7	3	100-4458	2	BOLT (M8X1.25X14-MM)						
	8	1	100-4461	2	BOLT (M10X50-MM)						
	9	1	101-3917	2	WASHER						
	10	1	101-7538	2	MOUNT						
	11	1	101-7540	2	WASHER						
	12	1	101-7541	4	BOLT						
	13	1	101-7546	1	MOUNT						
	14	1	101-7547	2	WASHER						
	15	1	103-6720	2	NUT						
	16	2	141-1667	4	CLAMP-HOSE						
	17	1	146-7737	8	BOLT						
	18	3	257-6957	1	GUARD						
	19	3	257-6958	1	GUARD						
	20	1	236-7706	1	BRACKET						
	21	1	236-7707	1	BRACKET						
	22	2	236-7722	1	HOSE-RADIATOR (UPPER)						
	23	2	236-7723	1	HOSE-RADIATOR (LOWER)						
	24	1	236-7725	1	BRACKET-MOUNTING						
	25	2	236-7732	1	TUBE						
	26	2	236-7734	1	HOSE (AFTERCOOLER)						
	27	2	236-7735	1	HOSE (AFTERCOOLER)						
	28	3	236-7766	1	RADIATOR AS						
	28A	3	114-4363	12	BOLT (M8X1.25X12-MM)						
	28B	3	236-7760	1	GUARD-RADIATOR						
	28C	3	236-7763	1	BRACKET-MOUNTING						
	28D	3	236-7764	1	CAP-RADIATOR						
	28E	3	236-7765	1	PLUG (RADIATOR DRAIN)						
	29	2	236-7776	1	HOSE (AFTERCOOLER)						

# COOLING SYSTEM

236-8085 RADIATOR GP (contd.)

i02188359



GRAPHIC #2

g01082972

# COOLING SYSTEM

## 241-7646 RADIATOR GP

SMCS - 1353

i02188368

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	2	<b>5P-0597</b>	5	CLAMP-HOSE						
	2	2	<b>5P-0598</b>	2	CLAMP						
	3	1	<b>6I-0260</b>	1	BOLT (M8X1.25X25-MM)						
	4	1	<b>6I-0291</b>	1	NUT (M8X1.25-THD)						
	5	1	<b>6I-0654</b>	2	BOLT (M10X1.5X25-MM)						
	6	1	<b>7W-2601</b>	2	SPACER						
	7	1	<b>100-4461</b>	2	BOLT (M10X50-MM)						
	8	1	<b>101-3917</b>	2	WASHER						
	9	1	<b>101-7538</b>	2	MOUNT						
	10	1	<b>101-7540</b>	2	WASHER						
	11	1	<b>101-7541</b>	4	BOLT						
	12	1	<b>101-7546</b>	1	MOUNT						
	13	1	<b>101-7547</b>	2	WASHER						
	14	1	<b>103-6720</b>	2	NUT						
	15	2	<b>141-1667</b>	2	CLAMP-HOSE						
	16	1	<b>146-7737</b>	8	BOLT						
	17	1	<b>236-7706</b>	1	BRACKET						
	18	1	<b>236-7707</b>	1	BRACKET						
	19	2	<b>236-7722</b>	1	HOSE-RADIATOR (UPPER)						
	20	2	<b>236-7723</b>	1	HOSE-RADIATOR (LOWER)						
	21	1	<b>236-7725</b>	1	BRACKET-MOUNTING						
	22	2	<b>236-7732</b>	1	TUBE						
	23	2	<b>236-7734</b>	1	HOSE (AFTERCOOLER)						
	24	2	<b>236-7735</b>	1	HOSE (AFTERCOOLER)						
	25	3	<b>236-7766</b>	1	RADIATOR AS						
	25A	3	<b>114-4363</b>	12	BOLT (M8X1.25X12-MM)						
	25B	3	<b>236-7760</b>	1	GUARD-RADIATOR						
	25C	3	<b>236-7763</b>	1	BRACKET-MOUNTING						
	25D	3	<b>236-7764</b>	1	CAP-RADIATOR						
	25E	3	<b>236-7765</b>	1	PLUG (RADIATOR DRAIN)						
	26	2	<b>236-7776</b>	1	HOSE (AFTERCOOLER)						
	27	2	<b>069-1124</b>	2	PLUG						

# AIR INLET AND EXHAUST SYSTEM

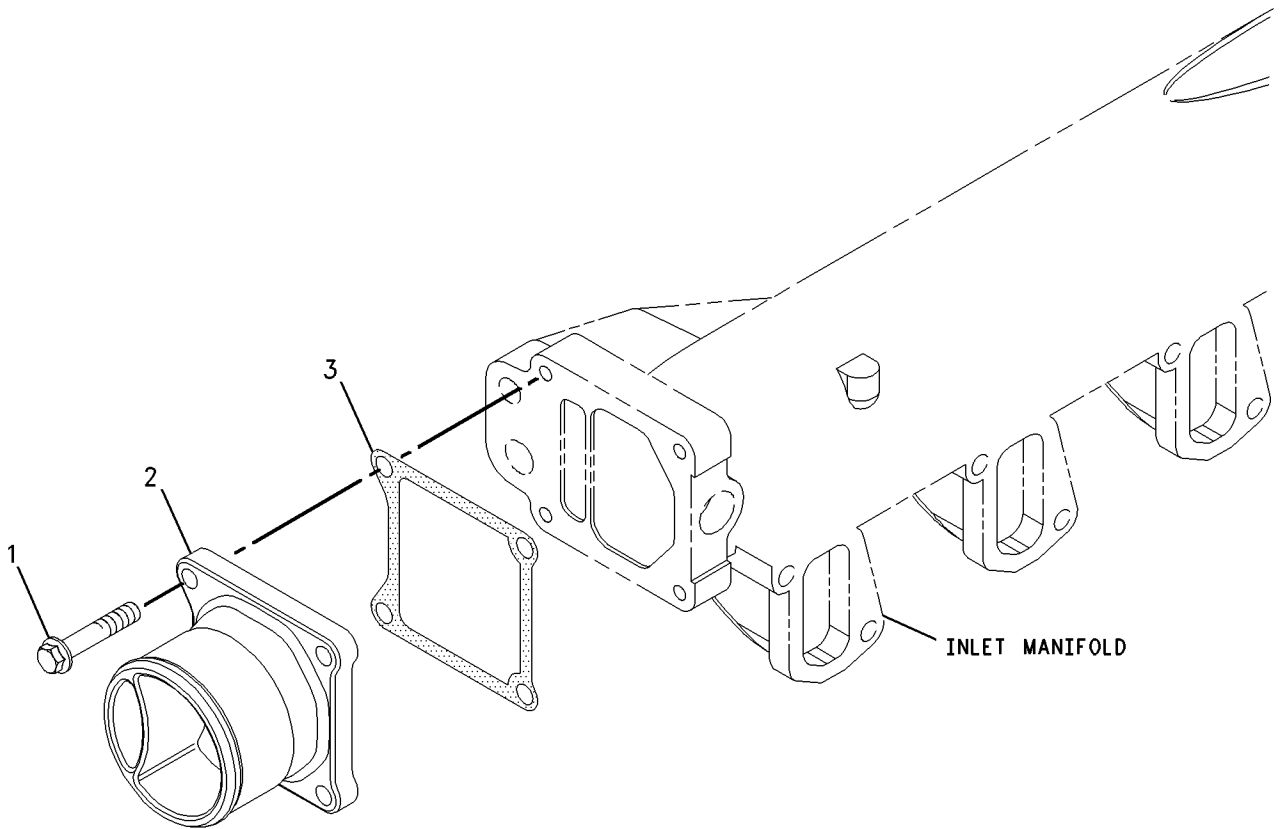
## 217-0594 ELBOW GP-AIR INLET

ALSO AN ATTACHMENT

SMCS - 1087

i01725034

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	<b>6I-0260</b>	4	BOLT (M8X1.25X25MM)						
	2	1	<b>217-0595</b>	1	CONNECTOR						
	3	1	<b>217-0596</b>	1	GASKET						



GRAPHIC #1

<END>

g00859961

# AIR INLET AND EXHAUST SYSTEM

## 226-3578 TURBOCHARGER GP

ALSO AN ATTACHMENT

SMCS-1052, 1053

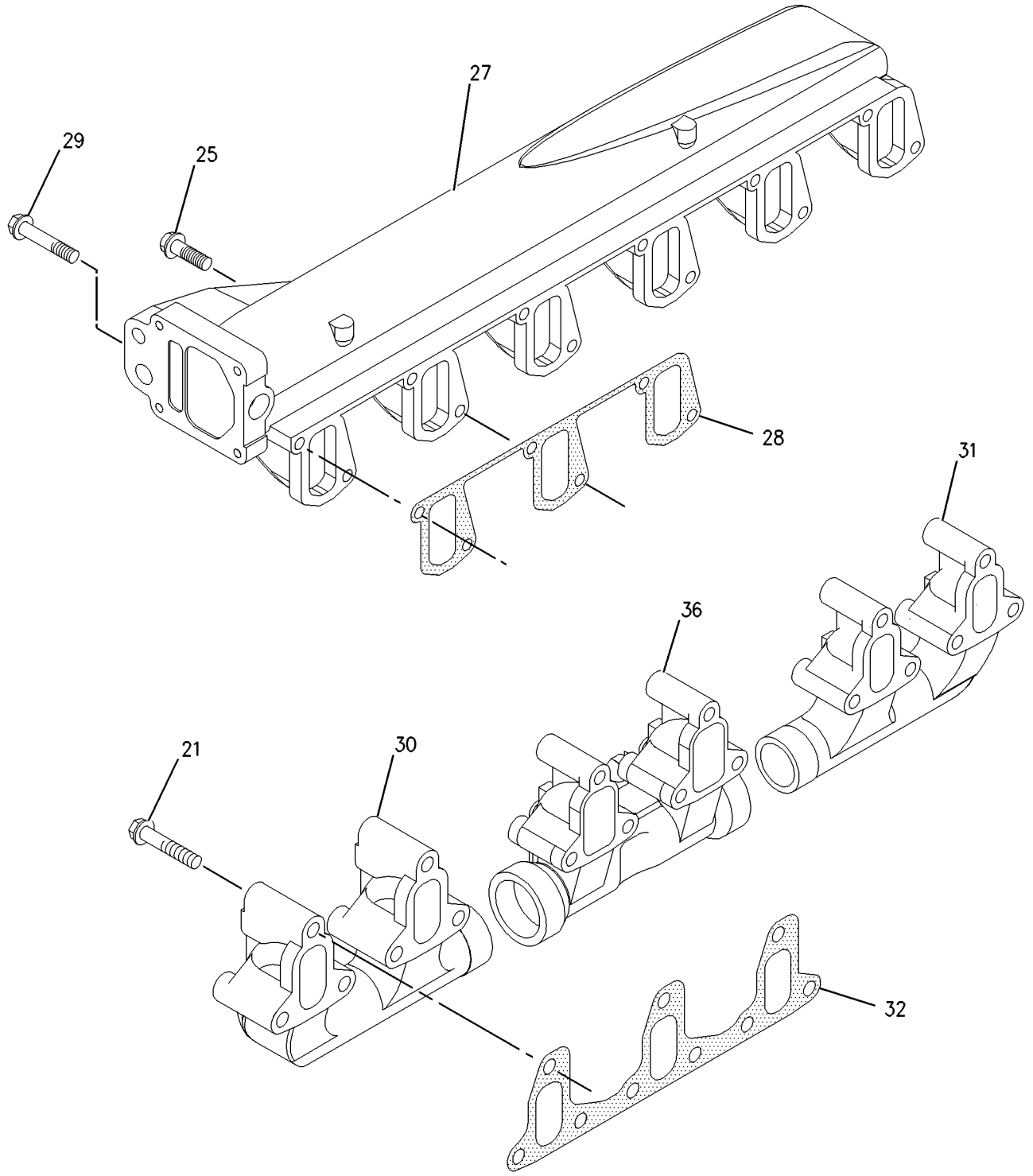
i02347429

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	2	226-3577	1	MANIFOLD-EXHAUST						
	2	1	5D-1026	2	CLAMP-HOSE						
	3	1	6I-0217	4	BOLT (M8X1.25X20-MM)						
	4	1	6I-1132	1	GASKET						
	5	1	226-3575	1	TUBE AS						
	6	1	7W-2628	1	NUT						
	7	1	032-8048	1	OLIVE						
	8	1	226-3574	1	TUBE AS						
	9	1	226-3572	1	TURBOCHARGER GP						
	10	2	216-8712	2	GASKET-MANIFOLD						
	11	1	100-4466	1	GASKET						
	12	2	216-8710	1	MANIFOLD-EXHAUST						
	13	2	216-8708	1	MANIFOLD-EXHAUST						
	14	1	124-3815	3	BOLT (M8X16X1.25-MM)						
	15	2	216-8705	6	BOLT						
	16	1	6I-0563	4	NUT (M10X1.5-THD)						
	17	1	141-8589	1	GASKET						
	18	2	216-8703	2	GASKET-MANIFOLD						
	19	2	216-8699	1	MANIFOLD-INLET						
	20	1	141-9777	1	HEAT SHIELD						
	21	2	238-8292	18	BOLT-FLANGE HEAD						
	22	1	147-5553	4	STUD						
	23	2	162-1504	6	BOLT						
	24	1	160-0149	1	HOSE						

# AIR INLET AND EXHAUST SYSTEM

233-8649 TURBOCHARGER GP (contd.)

i02347175



GRAPHIC #2

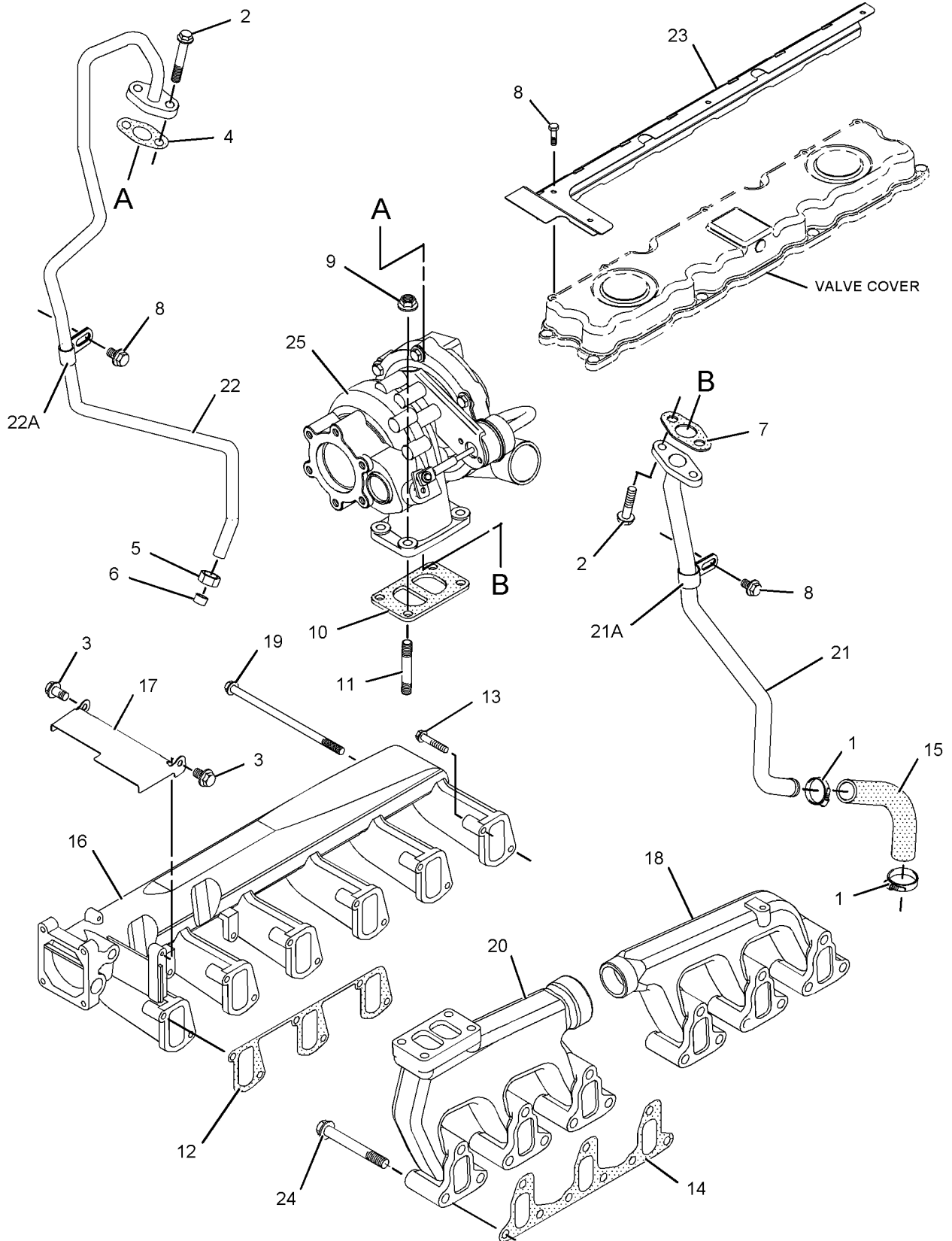
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g00988463

# AIR INLET AND EXHAUST SYSTEM

244-5600 TURBOCHARGER GP (contd.)

i02007133



GRAPHIC #1

<END>

g01087656

# FUEL SYSTEM

## 217-0109 PUMP GP-FUEL INJECTION

AN ATTACHMENT

SMCS-1251, 1290

i02348079

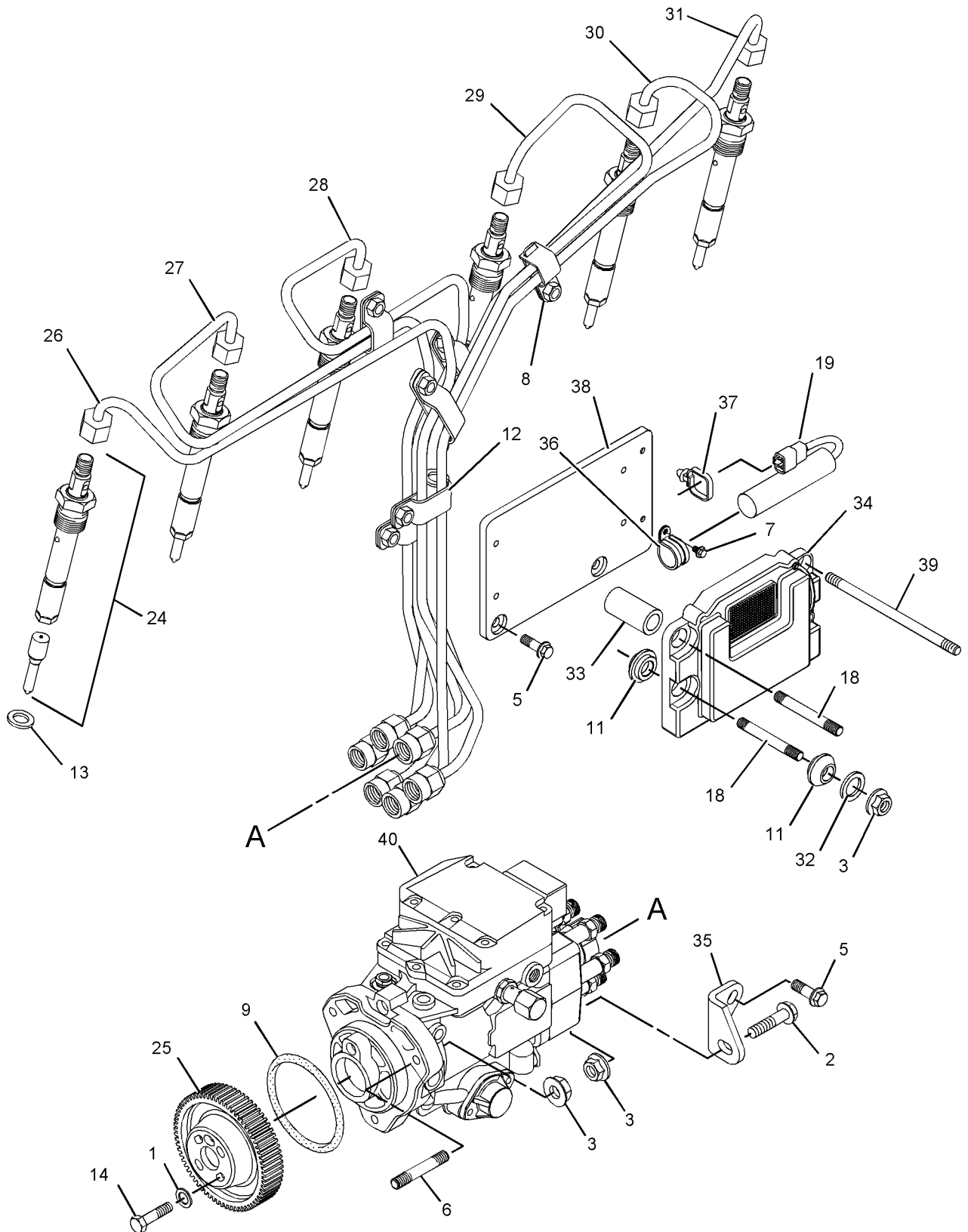
NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	4B-4277	1	WASHER (8.8X17.5X1.6-MM THK)						
	2	1	6I-0217	1	BOLT (M8X1.25X20-MM)						
	3	1	6I-0291	8	NUT (M8X1.25-THD)						
	4	1	133-7668	1	STUD						
	5	1	228-8960	1	CLIP						
	6	1	228-8963	2	STUD						
	7	2	7M-7410	1	PLUG-PIPE						
	8	1	100-4830	1	BOLT (M10X1.5X20-MM)						
	9	1	124-3708	3	CLIP						
	10	1	228-8956	1	BRACKET						
	11	1	228-8943	1	BRACKET						
	12	1	145-8327	1	SEAL-O-RING						
	13	2	149-2091	1	SEAL-O-RING						
	14	1	101-3877	3	STUD						
	15	1	162-9992	3	CLIP						
	16	1	164-3207	6	WASHER						
	17	1	221-1018	1	CONTROL GP-ENGINE ELECTRONIC						
M	18	1	6V-5217	4	BOLT (M8X1.25X20-MM)						
	19	1	141-8599	1	STUD						
	20	1,2	114-4363	3	BOLT (M8X1.25X12-MM)						
	22	2	216-3448	1	SENSOR GP-PRESSURE (ENGINE OIL)						
	23	2	216-3436	1	SENSOR GP-TEMPERATURE (ENGINE COOLANT)						
	24	2	216-3436	1	SENSOR GP-TEMPERATURE (AIR INLET)						
	25	2	216-3446	1	SENSOR GP-SPEED (TIMING)						
	27	2	199-9252	1	SEAL-O-RING						
	28	2	199-9267	1	SEAL-O-RING						
	29	2	199-9751	2	SEAL-O-RING						
	30	2	216-3450	1	SENSOR GP-PRESSURE (BOOST)						
	33	1	216-9786	6	INJECTOR AS-FUEL						
	35	1	216-9790	1	GEAR (FUEL PUMP)						
	37	1	216-9824	1	PUMP GP-FUEL INJECTION						
	38	1	216-9826	1	TUBE AS (CYL NO.1)						
	39	1	216-9828	1	TUBE AS (CYL NO.2)						
	40	1	216-9830	1	TUBE AS (CYL NO.3)						
	41	1	216-9831	1	TUBE AS (CYL NO.4)						
	42	1	216-9834	1	TUBE AS (CYL NO.5)						
	43	1	216-9835	1	TUBE AS (CYL NO.6)						
	44	1	155-0576	8	MOUNT-ISOLATION						
	45	1	217-0099	7	SPACER (8.2X25X2-MM THK)						
	46	1	217-0100	4	SPACER						
	50	1	270-5322	1	CONTROL GP-VOLTAGE (24-VOLT) (LOAD PROTECTION)						
		1	1S-9593	2	STRAP-CABLE						
		1	7T-0093	4	PIN-CONNECTOR						
		1	177-9653	1	KIT-RECEPTACLE (4-PIN)						

M-METRIC PART

# FUEL SYSTEM

236-2317 PUMP GP-FUEL INJECTION (contd.)

i02188392



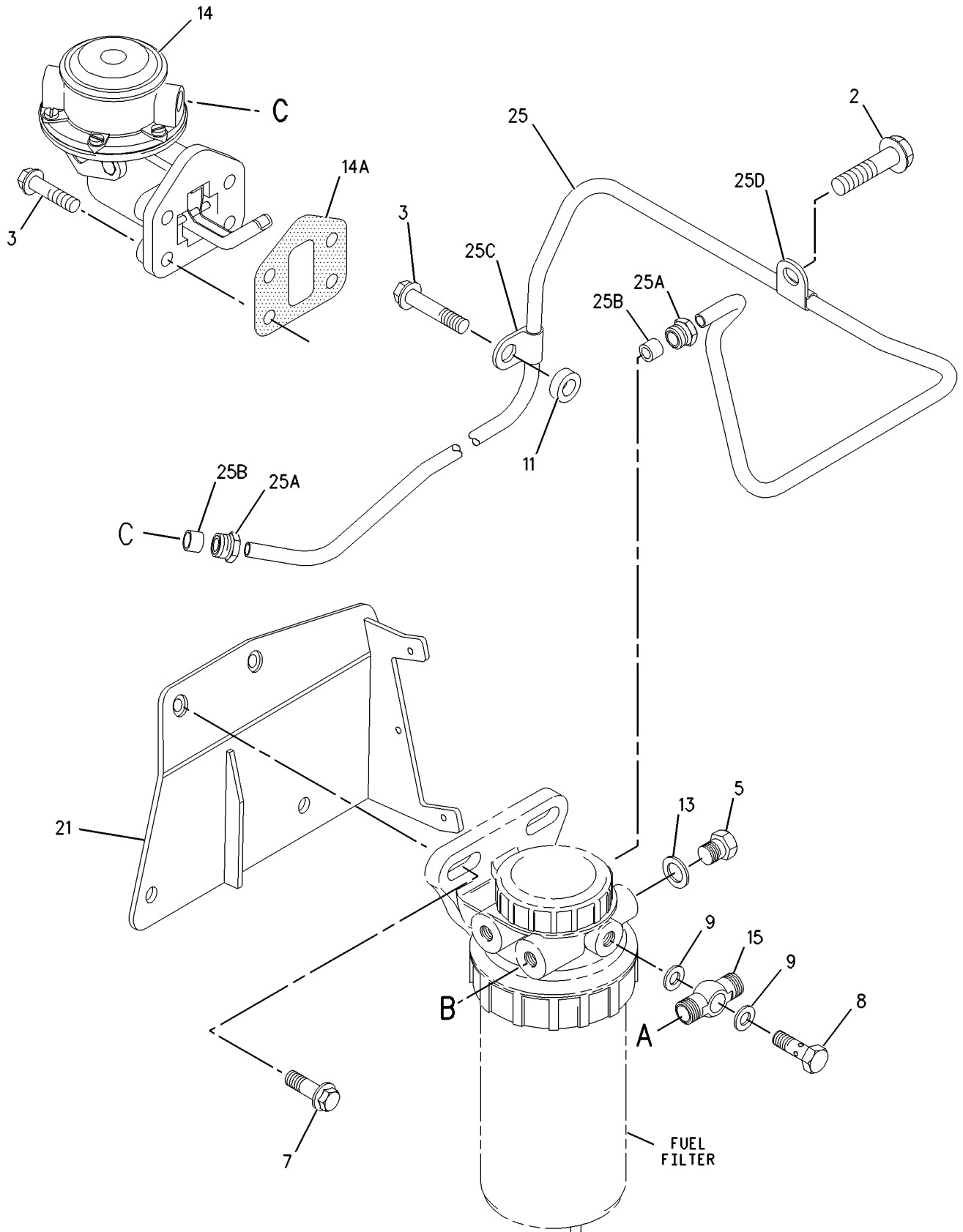
GRAPHIC #1

g01063459

# FUEL SYSTEM

219-2455 PUMP GP-FUEL TRANSFER (contd.)

i02062542



GRAPHIC #2

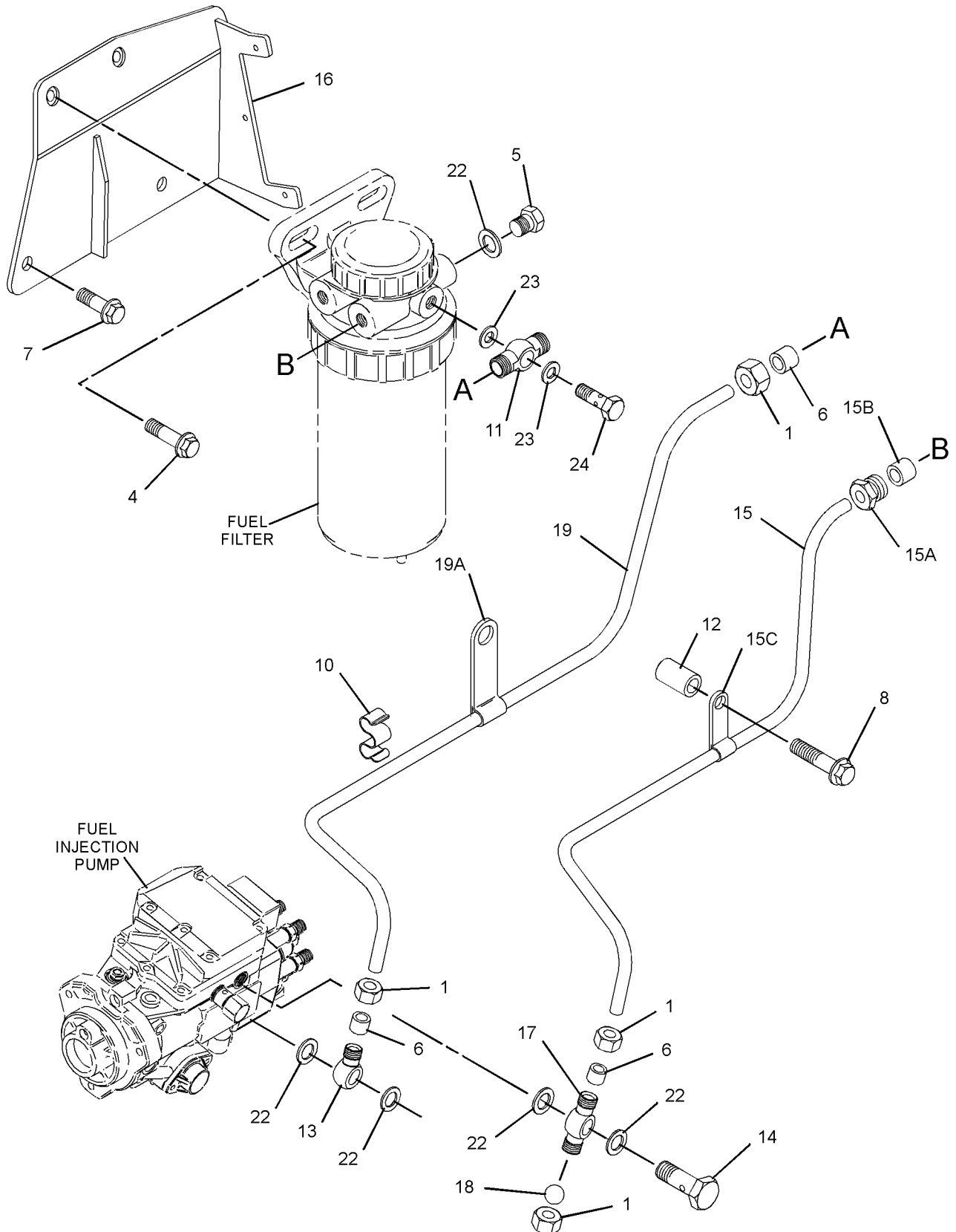
<END>

g01002648

# FUEL SYSTEM

272-5732 PUMP GP-FUEL TRANSFER (contd.)

i02307620



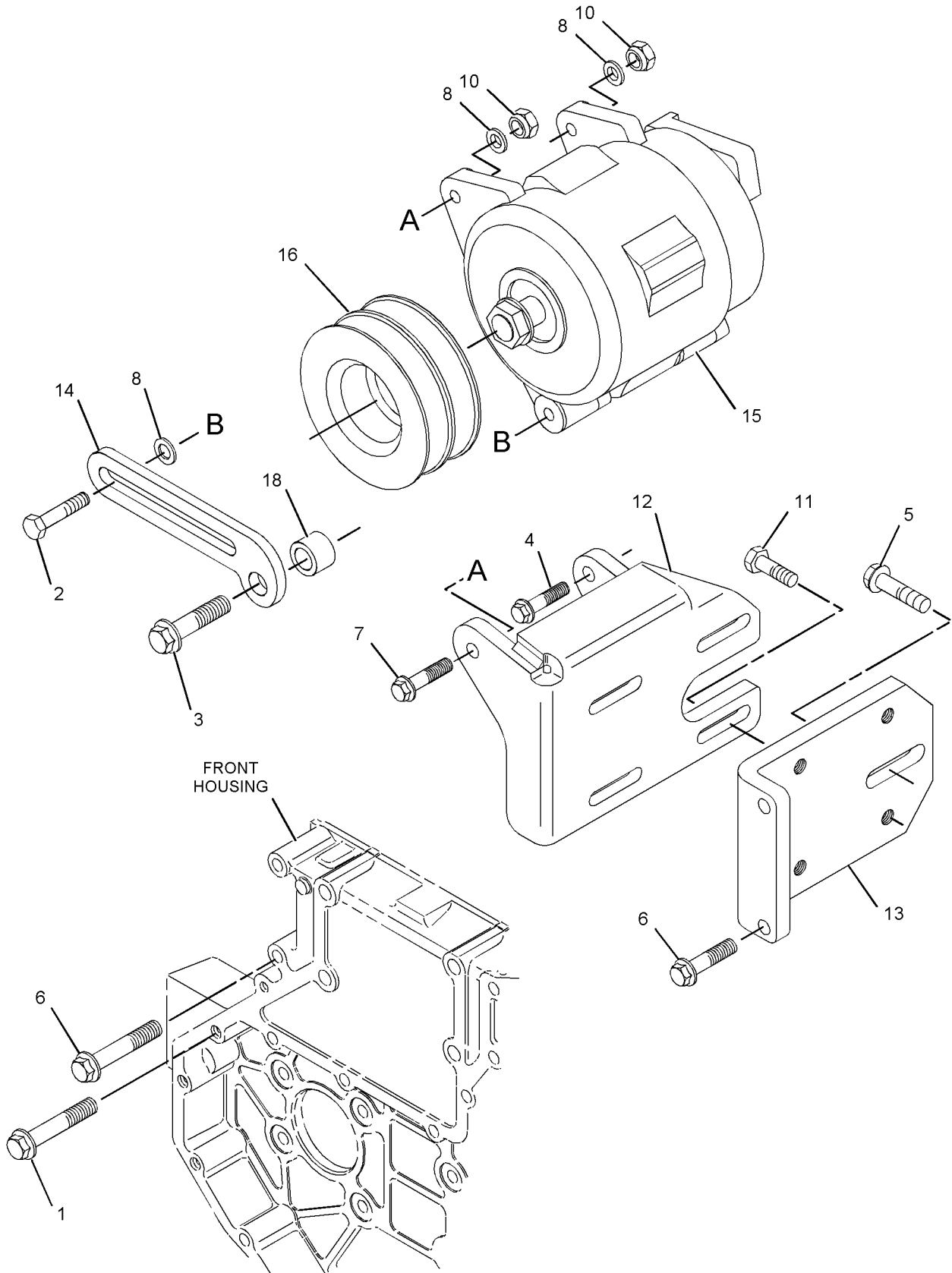
GRAPHIC #1

g01168663

# ELECTRICAL AND STARTING SYSTEM

233-8647 ALTERNATOR GP-CHARGING (contd.)

i02225489



GRAPHIC #1

<END>

g01126139

# ELECTRICAL AND STARTING SYSTEM

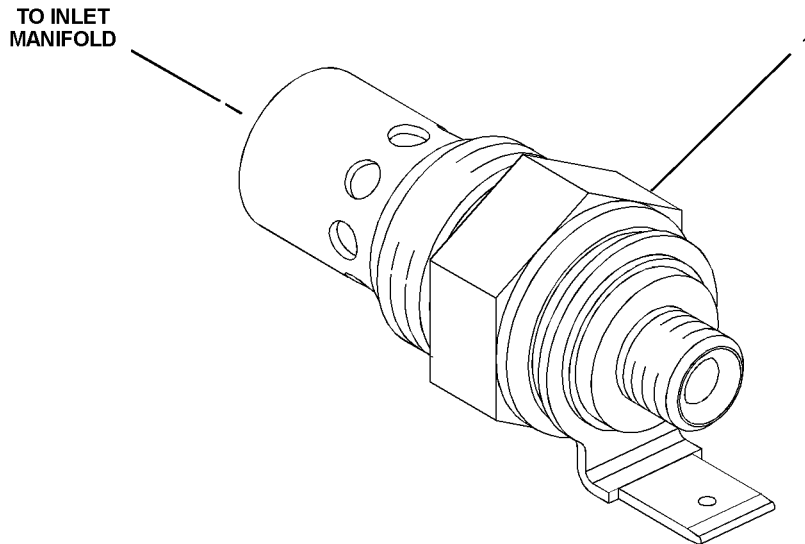
## 228-7461 STARTING AID GP-AIR INLET HEATER

12 VOLT  
ALSO AN ATTACHMENT

SMCS-1090

i02135299

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	252-4460	1	HEATER AS (AIR INLET)						
F		1	246-3263	1	LOCKWASHER						
F - NOT SHOWN											



GRAPHIC #1

<END>

g01082053

# ELECTRICAL AND STARTING SYSTEM

## 226-3490 STARTING MOTOR GP-ELECTRIC

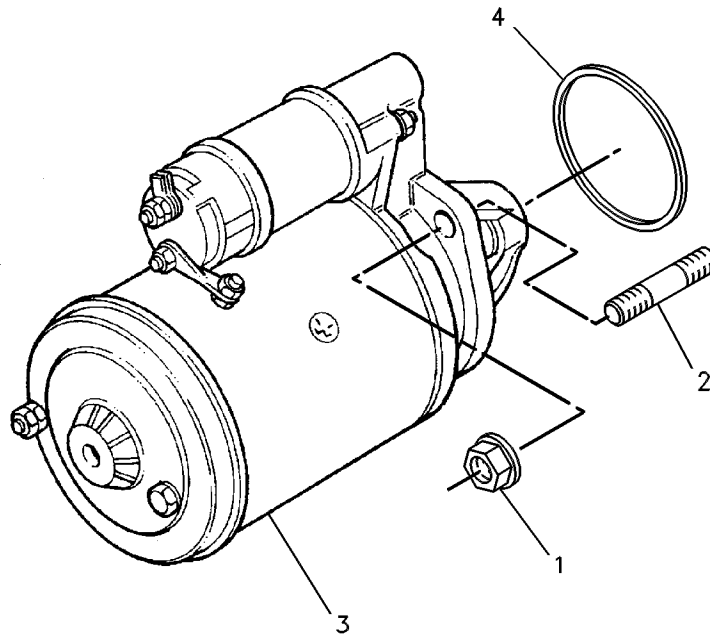
24 VOLT  
AN ATTACHMENT

SMCS-1453

i01773228

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	6I-0594	3	NUT (M10X1.5)						
	2	1	6I-4012	3	STUD						
R	3	1	109-2361	1	STARTING MOTOR GP-ELECTRIC						
	4	1	113-8085	1	RING						

R-REMFG PART MAY BE AVAILABLE



GRAPHIC #1

<END>

g00238555

# ELECTRICAL AND STARTING SYSTEM

## 235-4642 WIRING GP-ELECTRONIC CONTROL

S/N: 3561-1554

SMCS-1408, 1900

i01977771

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	100-4458	3	BOLT (M8X1.25X14-MM)						
	2	1	100-4830	2	BOLT (M10X1.5X20-MM)						
	3	1	124-3815	1	BOLT (M8X16X1.25-MM)						
	4	1	140-8783	1	BOLT (M10X45-MM)						
	5	1	216-9086	1	SPACER						
	6	1	217-8477	2	CLIP						
	7	1	217-9038	3	BOLT						
	8	1	217-9041	1	BRACKET-MOUNTING						
	9	1	224-8636	1	HARNESS AS						
	10	1	226-8778	1	BRACKET (HARNESS)						
	11	1	226-8780	1	BRACKET (WIRING)						
	12	1	228-7477	1	CLIP						

# ELECTRICAL AND STARTING SYSTEM

## 242-0243 WIRING GP-ELECTRONIC CONTROL

S/N: 3561-1554

SMCS-1408, 1900

i02050088

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	100-4458	3	BOLT (M8X1.25X14-MM)						
	2	1	114-4363	1	BOLT (M8X1.25X12-MM)						
	3	1	140-8783	1	BOLT (M10X45-MM)						
	4	1	216-9086	1	SPACER						
	5	1	217-8477	2	CLIP						
	6	1	217-9038	3	BOLT						
	7	1	217-9039	1	STRAP-CABLE						
	8	1	224-8638	1	HARNESS AS						
	9	1	226-8778	1	BRACKET						
	10	1	226-8780	1	BRACKET						
	11	1	228-7477	1	CLIP						

# ELECTRICAL AND STARTING SYSTEM

## 228-7487 WIRING GP-ENGINE

S/N: 3561555-UP  
ALSO AN ATTACHMENT

SMCS-1000, 1408

i02214659

NOTE	REF NO	GRAPHIC REF	PART NUMBER	QTY	PART NAME						SEE PAGE
					1	2	3	4	5	6 (PRODUCT LEVEL)	
	1	1	100-4458	3	BOLT (M8X1.25X14-MM)						
	2	1	114-4363	1	BOLT (M8X1.25X12-MM)						
	3	1	140-8783	1	BOLT (M10X45-MM)						
	4	1	216-9086	1	SPACER (10.5X20X32-MM THK)						
	5	1	217-8477	2	CLIP						
	6	1	217-9038	2	BOLT (M4X0.7X14-MM)						
	7	1	217-9039	2	STRAP-CABLE						
C	8	1	255-3452	1	HARNESS AS						
	9	1	226-8778	1	BRACKET						
	10	1	226-8780	1	BRACKET						
	11	1	228-7477	1	CLIP						

C-CHANGE FROM PREVIOUS TYPE

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