

Service Parts

Engine

Engine Models:

John Deere 3029DF
3029TF

Generator Models:

20-40ROZJB
20-40DSEJB

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Introduction

This manual contains a list of service replacement parts for John Deere diesel-fueled 3029 series engines. Refer to the Specification Number Index for generator models and specifications covered.

This manual includes the following main sections:

- *Table of Contents:* Lists the sections of this catalog.
- *Introduction (and other information sections):* Contains introductory material followed by sections on specification numbers, part numbers, and hardware.
- *Index:* Indexes generator set specifications and their groups.
- *Group Parts Lists:* List part numbers of parts in the groups.

Number Significance

This catalog uses a variety of numbering systems. A description of these follows.

- *Group Number:* A group consists of parts needed to perform one or more related functions. For example, Group 1 is the Engine Air Intake group.

- *Variation Number:* A group might have several variations. Parts comprising each variation perform the same function, but parts lists vary. For example, a 50 Hz fuel injection pump and a 60 Hz fuel injection pump perform the same function. However, they are constructed of different parts. Each of these differences necessitates the assignment of a group variation number.

- *Part Number:* The part number identifies an individual assembly, subassembly, component, or accessory kit.

How to Find Part Numbers

Follow these steps to identify a part:

STEP 1: Turn to the Specification Number Index. The first column lists engine models grouped by generator set model. The headings across the top identify the groups of parts that make up the engine. The intersection of the engine model and the group numbers is the variation number corresponding to the components of that engine. Note the variation number.

STEP 2: Find the page number of the group in the Table of Contents and turn to that page or page forward until you find the group. Use the drawings and itemized text to locate the part and its part number.

Specification Number Index

Group Title	<i>Air Intake</i>	<i>Water Pump</i>	<i>Thermostat</i>	<i>Fan Belt</i>	<i>Vent Tube</i>	<i>Camshaft</i>	<i>Valve Train</i>	<i>Rocker Arm Cover</i>	<i>Fuel Injection Pump</i>	<i>Fuel Injection Nozzle</i>	<i>Cylinder Block</i>	<i>Crankshaft</i>	<i>Crankshaft Pulley</i>
Group No.	1	2a	2b	2c	3	4a	4b	4c	5a	5b	7	8a	8b
	Variation Number												

Engine Model													
3029DF, 60 Hz	1712	2020	2110	2401	-	9914	9901	1105	1603	1603	9906	9919	1330
3029DF, 50 Hz	1712	2020	2110	2401	-	9914	9901	1105	1641	1641	9906	9919	1330
3029TF, 60 Hz	1710	2020	2110	2401	-	9914	9901	1105	16TR	16TR	9906	9919	1330
3029TF, 50 Hz	1710	2020	2110	2401	-	9914	9901	1105	16TT	16TT	9906	9919	1330

Group Title	<i>Cylinder Head</i>	<i>Valves</i>	<i>Oil Filter & Dipstick</i>	<i>Starter Motor</i>	<i>Starter Motor Components</i>	<i>Exhaust Manifold</i>	<i>Flywheel</i>	<i>Flywheel Housing</i>	<i>Fuel Pump</i>	<i>Fuel Filter</i>	<i>Timing Gear Cover</i>	<i>Oil Pan</i>
Group No.	9a	9b	10	11a	11b	12a	13a	13b	14	15	18	21a
	Variation Number											

Engine Model													
3029DF, 60 Hz	9902	9903	4004	3008	3008	2802D	1501	1418	3710	1	4499	1901	
3029DF, 50 Hz	9902	9903	4004	3008	3008	2802D	1501	1418	3710	1	4499	1901	
3029TF, 60 Hz	9902	9903	4006	3008	3008	2802T	1501	1418	3710	1	4499	1901	
3029TF, 50 Hz	9902	9903	4006	3008	3008	2802T	1501	1418	3710	1	4499	1901	

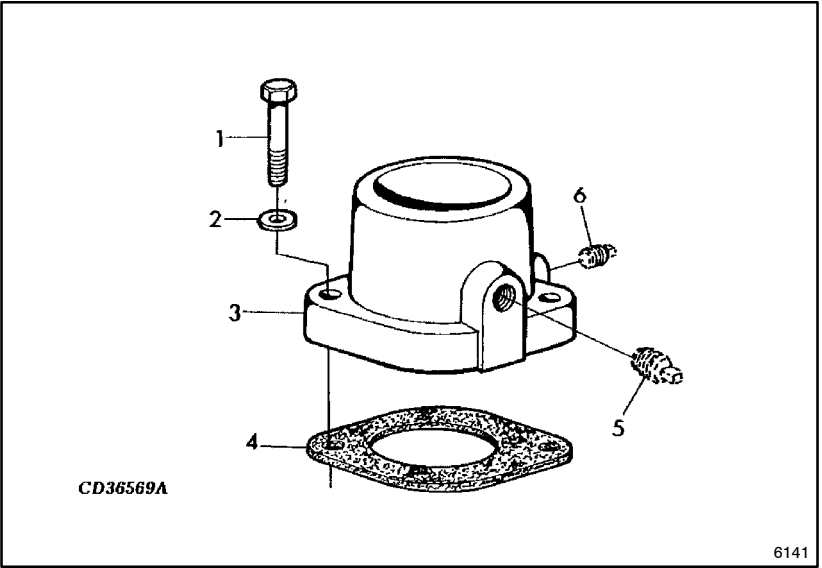
Specification Number Index

Group Title	<i>Oil Fill Tube</i>	<i>Oil Cooler</i>	<i>Piston</i>	<i>Connecting Rod</i>	<i>Oil Pump</i>	<i>Front Plate</i>	<i>Cylinder Head Gasket Set</i>	<i>Overhaul Gasket Set</i>	<i>Short Block</i>	<i>Turbocharger & Oil Lines</i>	<i>Alternator</i>	<i>Alternator Brackets</i>	<i>Alternator Components</i>
Group No.	21b	21c	22a	22b	25	26	39a	39b	42	50	51a	51b	51c
	Variation Number												

Engine Model													
3029DF, 60 Hz	1299	5906	9915	9916	9928	-	1	9932	9910	-	3123	6218	3123
3029DF, 50 Hz	1299	5906	9915	9916	9928	-	1	9932	9910	-	3123	6218	3123
3029TF, 60 Hz	1299	5906	9917	9918	9928	1	1	9932	9910	6547	3123	6218	3123
3029TF, 50 Hz	1299	5906	9917	9918	9928	-	1	9932	9910	65BS	3123	6218	3123

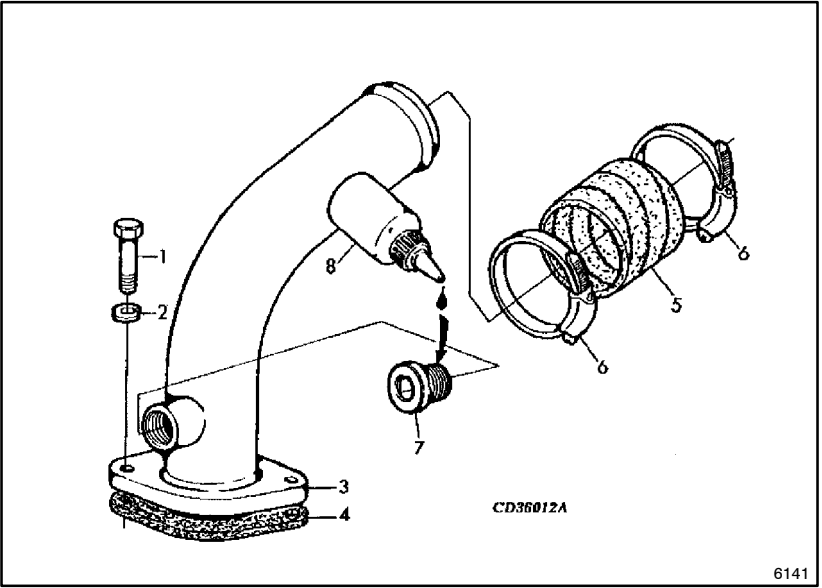
Notes

Group 1: Air Intake



Item	Part No.	Description	Qty.
			Var.
1	222765	Screw, cap	2
2	#	Washer, 10.500 x 18 x 1.600 mm	2
3	GM21398	Intake, air	1
4	223532	Gasket	1
5	Not used		1
6	Not used		1

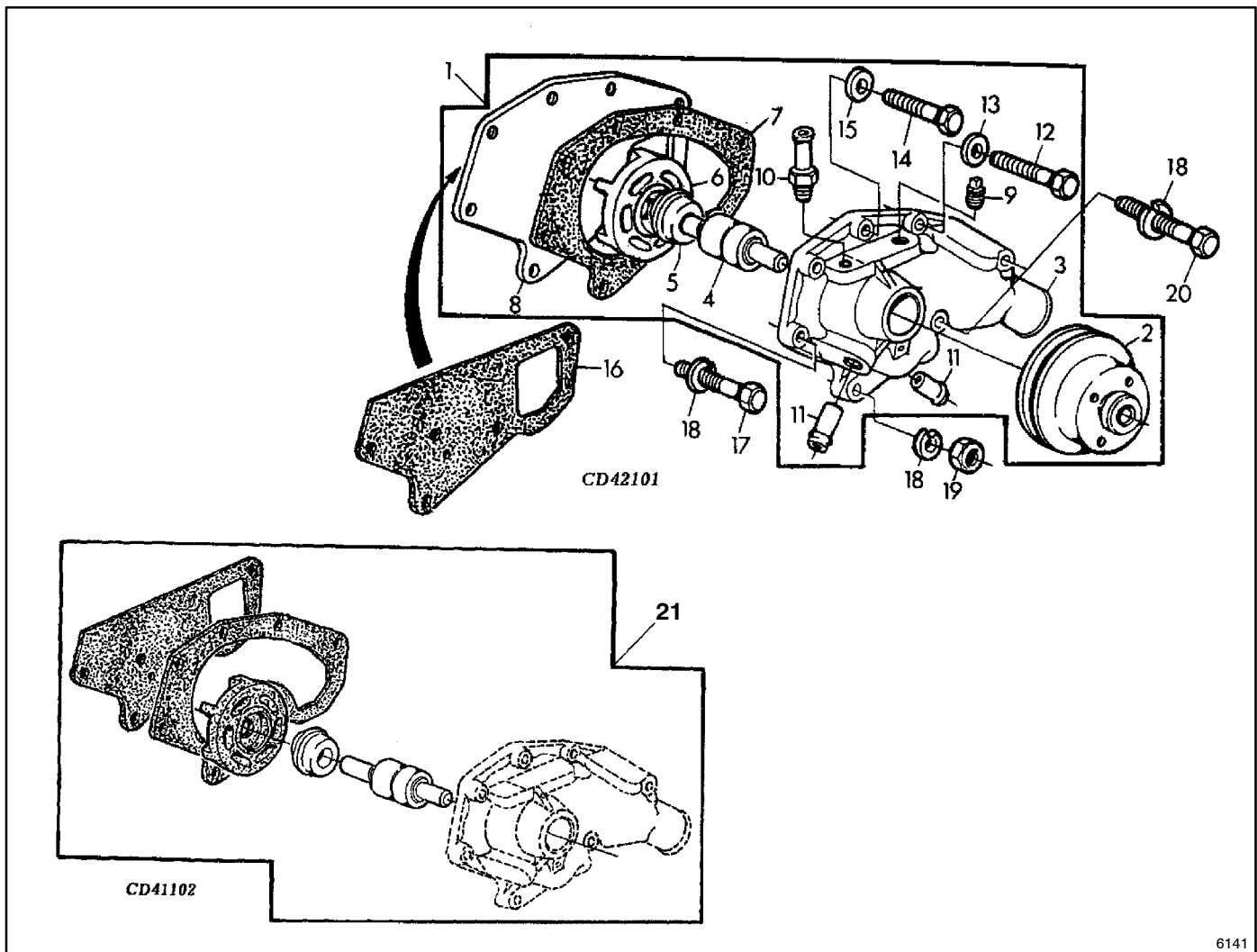
Common hardware; procure locally.



Item	Part No.	Description	Qty.
			Var.
1	222765	Screw, cap	2
2	#	Washer, lock, 3/8 in.	2
3	GM21399	Tube (also order items 7 and 8)	1
4	223532	Gasket	1
5	GM21400	Hose	1
6	336706	Clamp, hose	2
7	360174	Fitting	1
8	#	Sealant, Loctite 592	AR

Common hardware; procure locally.

Group 2a: Water Pump

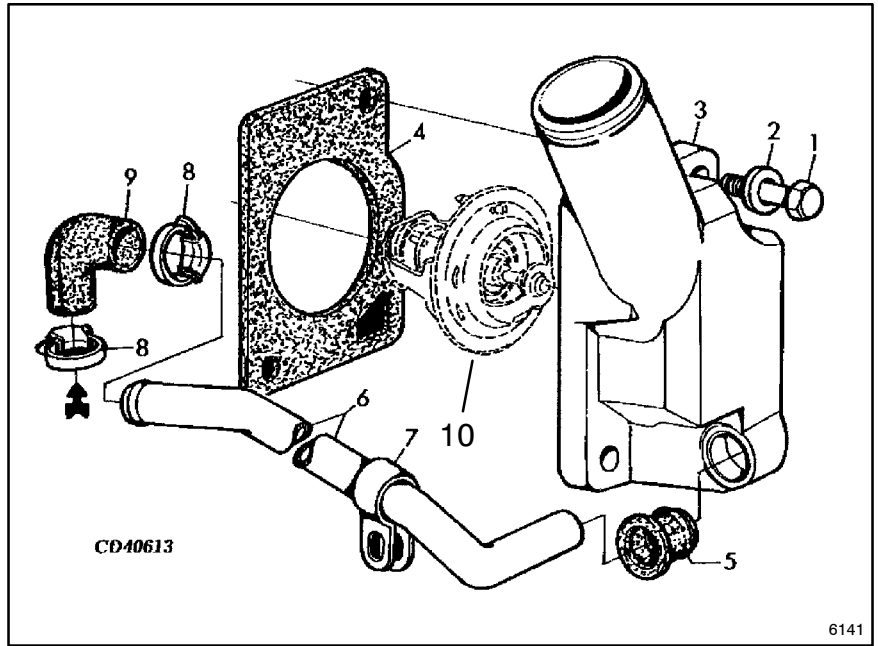


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Item	Part No.	Description	Qty.
			Var.
			2020
1	GM21401	Pump, water	1
2	223659	Pulley	1
3	X	Housing (order item 1)	1
4	X	Bearing, ball (order item 21)	1
5	X	Seal (order item 21)	1
6	223553	Impeller	1
7	223560	Gasket	1
8	GM21402	Cover	1
9	#	Plug, pipe, 1/2 in.-14 NPT	1
10	GM21403	Fitting, union, 1/4 in.-18 NPT x 54 mm	1
11	352067	Tube	2
12	#	Screw, cap, 3/8 in. x 1 1/2 in. (SAE 8)	1
13	#	Washer, 10 x 18 x 2.500 mm	1
14	#	Screw, cap, 3/8 in. x 1 3/8 in. (SAE 8)	1
15	#	Washer, 10.500 x 18 x 1.600 mm	1
16	223628	Gasket	1
17	#	Screw, cap, 3/8 in. x 2 in. (SAE 8)	1
18	#	Washer, locker, 3/8 in.	3
19	#	Nut, 3/8 in.	1
20	#	Screw, cap, 3/8 in. x 3 1/2 in.	2
21	GM21404	Kit, pump repair	1

Common hardware; procure locally.
X Not sold separately.

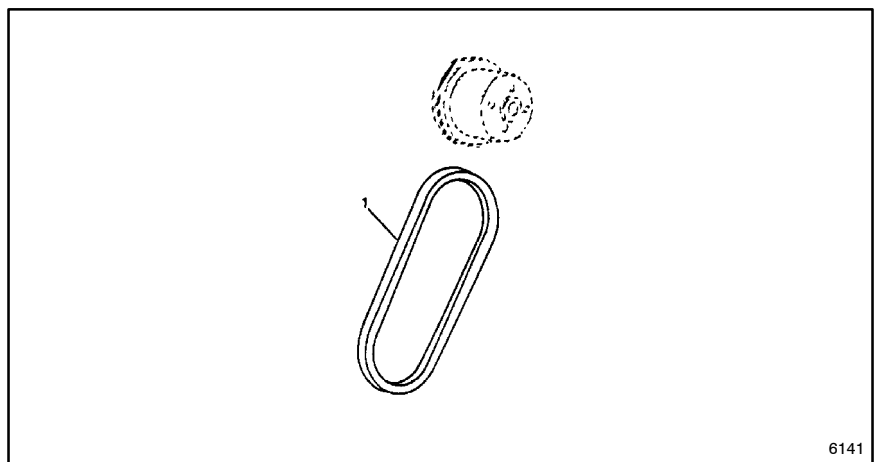
Group 2b: Thermostat



Item	Part No.	Description	Qty.
			Var.
			2110
1	#	Screw, cap, 3/8 in. x 1 1/8 in.	2
2	#	Washer, 10 x 18 x 2.500 mm	2
3	GM21405	Cover, thermostat (includes items 1-4)	1
4	GM21406	Gasket	1
5	360116	Gasket, water bypass tube	1
6	GM21407	Gasket	1
7	GM21408	Clamp	2
8	GM21409	Clamp	1
9	336463	Hose	1
10	GM21410	Thermostat, 82 deg. C	1

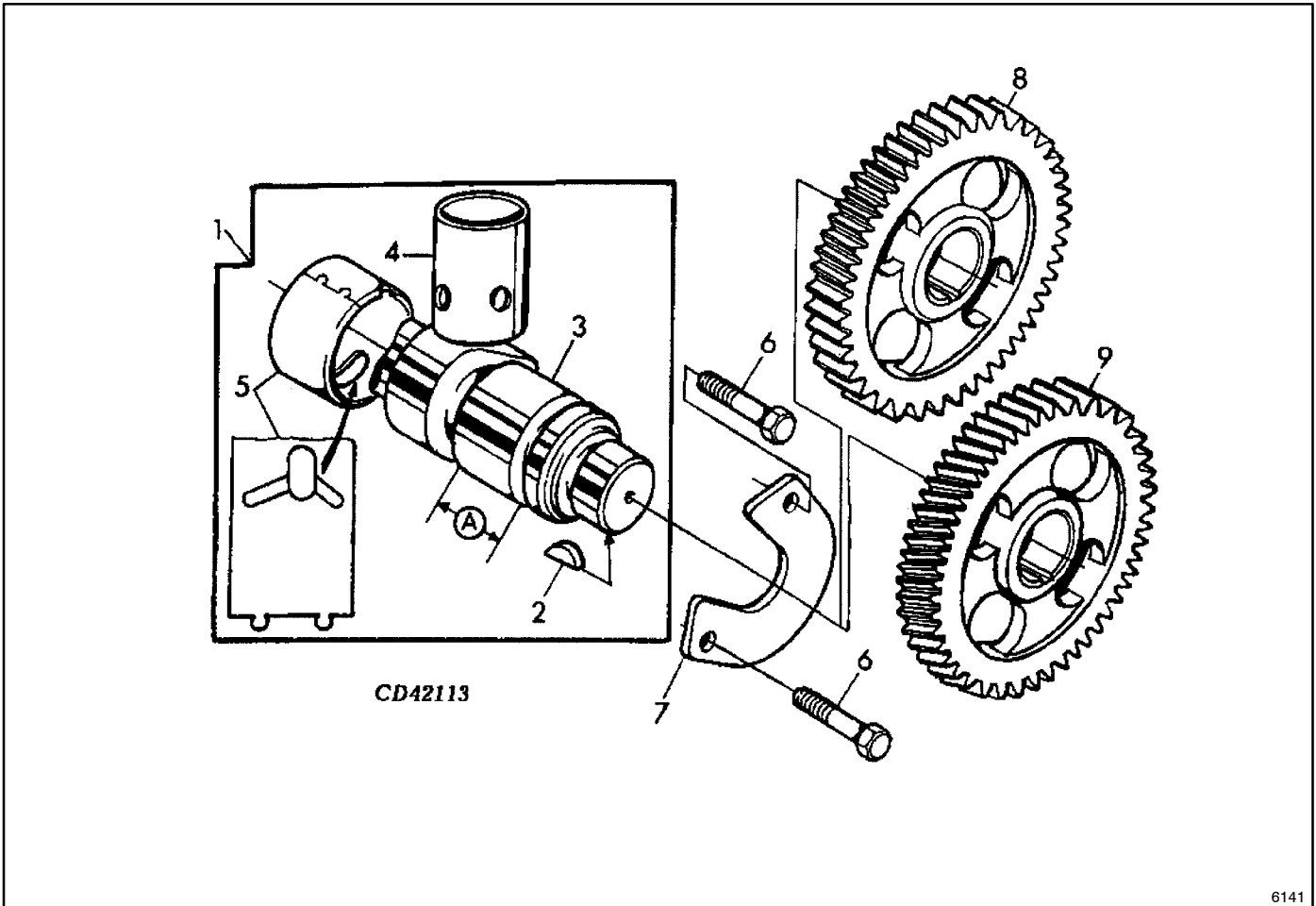
Common hardware; procure locally.

Group 2c: Fan Belt



Item	Part No.	Description	Qty.
			Var.
			2401
1	GM11846	Belt, fan	1

Group 4a: Camshaft



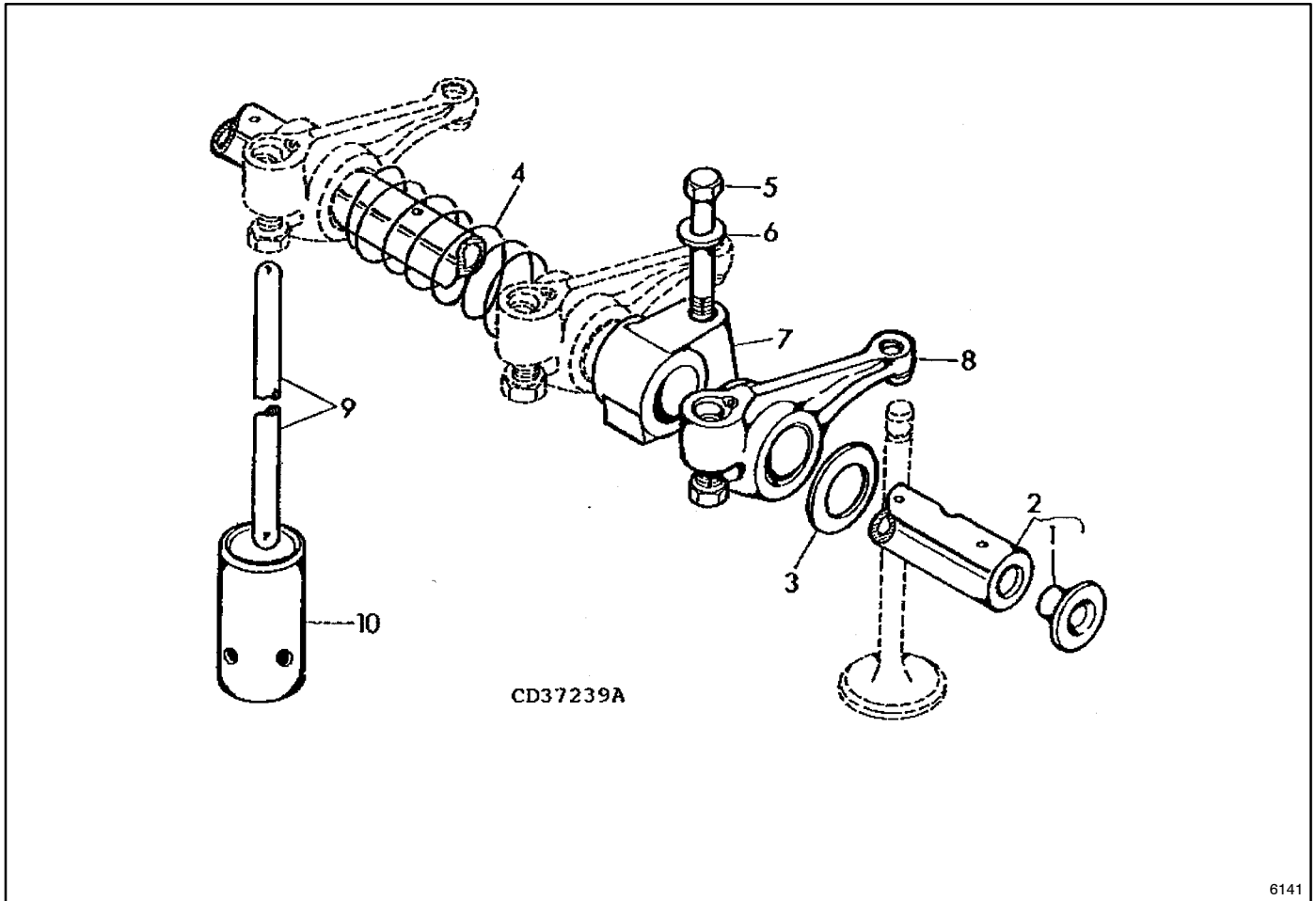
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Item	Part No.	Description	Qty.
			Var. 9914
1	GM21411	Camshaft kit	1
2	223407	Key, woodruff	1
3	X	Camshaft	1
4	223611	Tappet	8
5	352246	Bushing	1
6	#	Screw, cap, 3/8 in. x 1 in. (SAE 8)	2
7	223610	Plate	1
8	Not used	Gear, spur	1
9	223609	Gear	1

Common hardware; procure locally.

X Not sold separately.

Group 4b: Valve Train

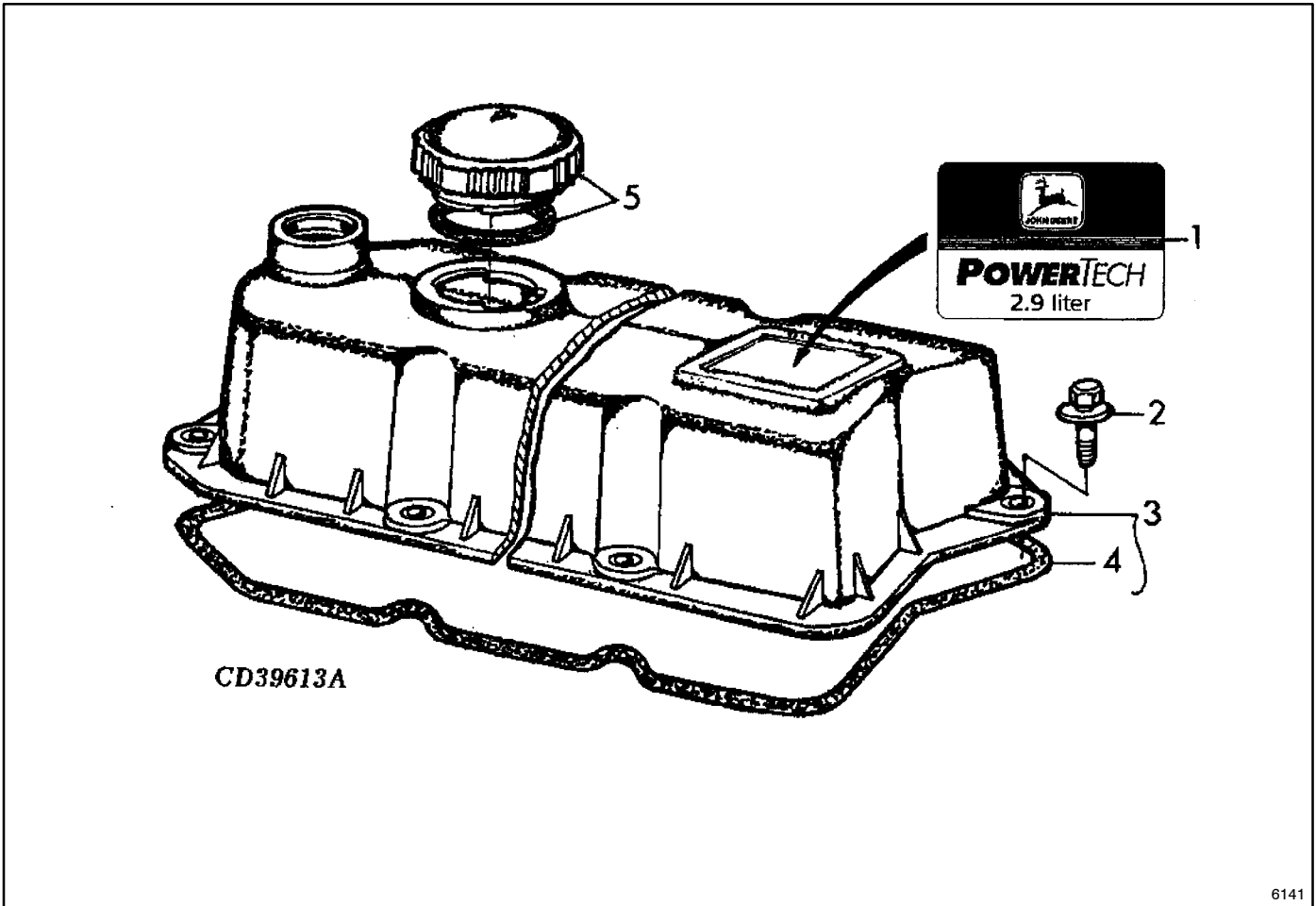


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Item	Part No.	Description	Qty.
			9901
1	223480	Plug	2
2	GM21412	Shaft, rocker arm	1
3	223634	Washer	2
4	223632	Spring	2
5	#	Screw, cap, 3/8 in. x 2 1/2 in. (SAE 8)	3
6	223756	Washer	3
7	223633	Support	3
8	223592	Arm, rocker	6
9	GM21413	Rod, push	6
10	223611	Tappet	6

Common hardware; procure locally.

Group 4c: Rocker Arm Cover

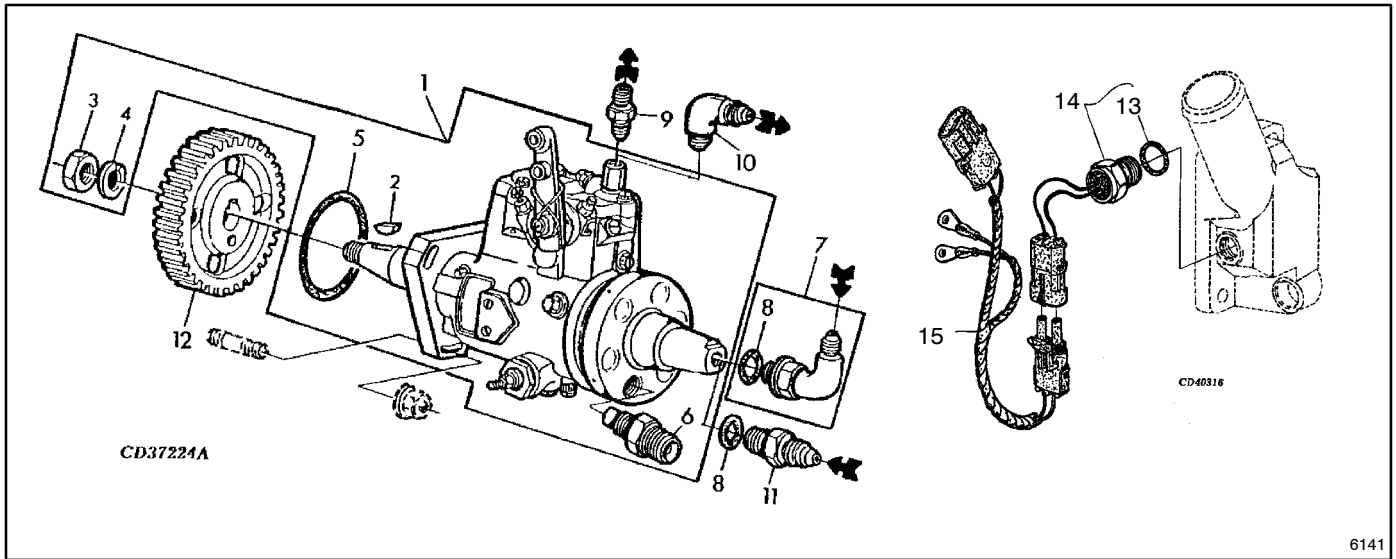


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Item	Part No.	Description	Qty.
1	X	Label	1
2	GM21414	Screw with washer	6
3	GM21415	Cover, valve	1
4	GM21416	Gasket	1
5	336435	Cap, filler	1

X Not sold separately.

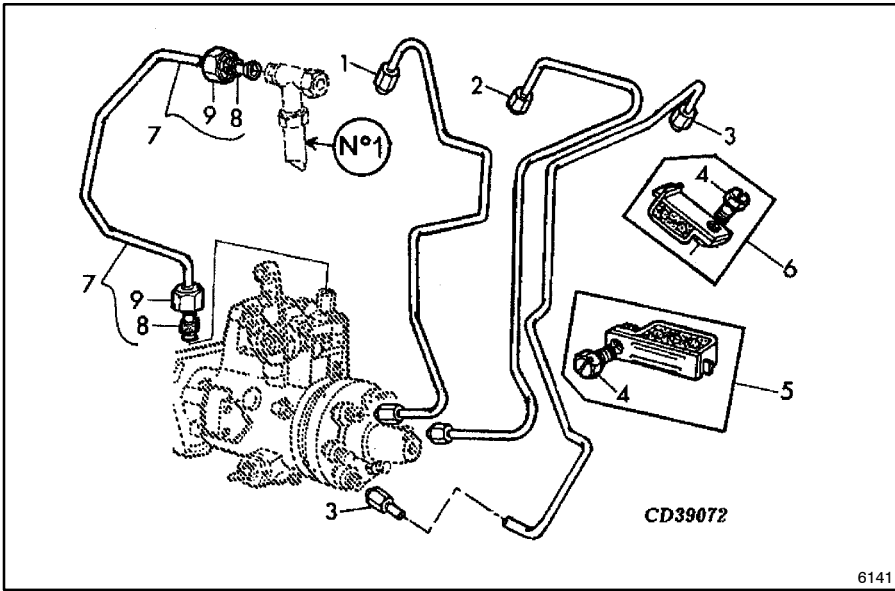
Group 5a: Fuel Injection Pump



Item	Part No.	Description	Qty.			
			1603	1641	16TR	16TT
1	GM21495	Pump, fuel injection	1			
1	GM21496	Pump, fuel injection		1		
1	GM21497	Pump, fuel injection			1	
1	GM21498	Pump, fuel injection				1
2	GM21499	Key, shaft	1	1	1	1
3	224161	Nut	1	1		
3	GM21500	Nut			1	1
4	223471	Washer, lock	1	1		
4	GM21501	Washer			1	1
5	224172	O-ring	1	1	1	1
6	X	Fitting	3	3		
7	223447	Fitting, elbow	AR	AR	3	3
8	222760	O-ring	1	1		
8	360178	O-ring			1	1
9	223460	Fitting	AR	AR		
9	223820	Fitting			1	1
10	352155	Fitting, elbow	AR	AR		
11	222764	Fitting	AR	AR		
11	360037	Fitting			1	1
12	GM21502	Pinion	1	1		
12	224238	Gear			1	1
13	GM21508	O-ring			1	1
14	GM21509	Switch, temperature			1	1
15	GM21510	Harness, wiring			1	1

X Not sold separately.

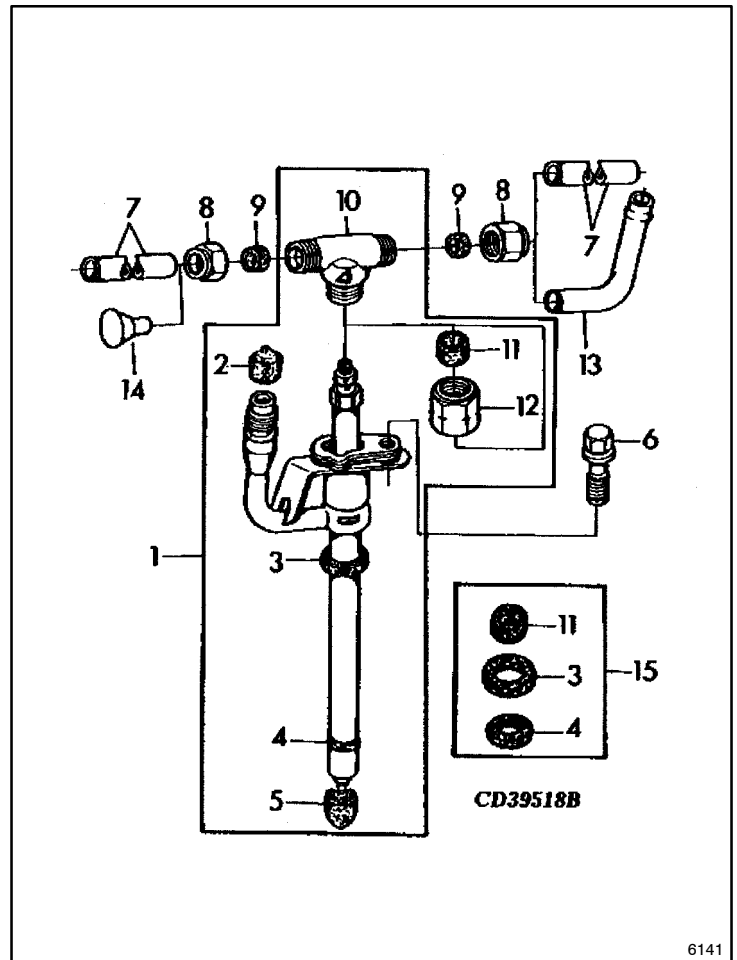
Group 5a: Fuel Injection Lines



Item	Part No.	Description	Qty.			
			Var.			
			1603	1641	16TR	16TT
1	GM21503	Fuel line, no. 1	1	1	1	1
2	GM21504	Fuel line, no. 2	1	1	1	1
3	GM21505	Fuel line, no. 3	1	1	1	1
4	#	Screw, cap, M6 x 12			1	1
5	224071	Clamp	1	1		
6	223572	Clamp	1	1		
7	GM21506	Fuel line	1	1		
7	GM21507	Fuel line			1	1
8	223476	Packing			2	2
9	360141	Nut			2	2

Common hardware; procure locally.

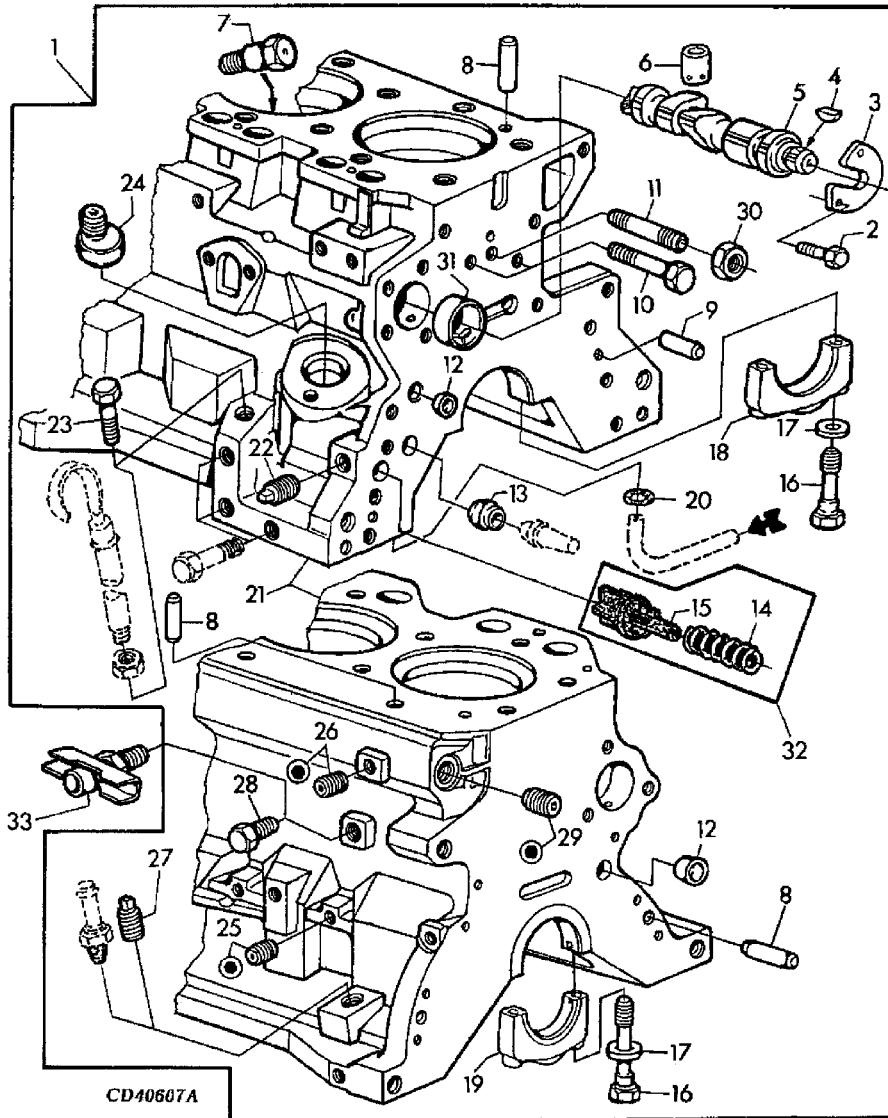
Group 5b: Fuel Injection Nozzle



Item	Part No.	Description	Qty.	Qty.
			Var. 1	Var. 164
1	GM21511	Nozzle, injection	3	3
1	GM21512	Nozzle, injection	AR	AR
2	223660	Plug	AR	AR
3	X	Packing (order item 15)	1	1
4	X	Washer (order item 15)	1	1
5	224257	Plug	AR	AR
6	224188	Screw, cap	3	3
7	223504	Tube	2	2
8	223477	Nut, tube	6	6
9	223476	Packing	6	6
10	GM21513	Fitting, tee	1	1
11	X	Washer (order item 15)	1	1
12	223517	Nut, tube	1	1
13	GM21514	Line, fuel	AR	AR
14	#	Rivet	AR	AR
15	GM21515	O-ring kit	AR	AR
15	GM21516	O-ring kit		AR

Common hardware; procure locally.
X Not sold separately.

Group 7: Cylinder Block



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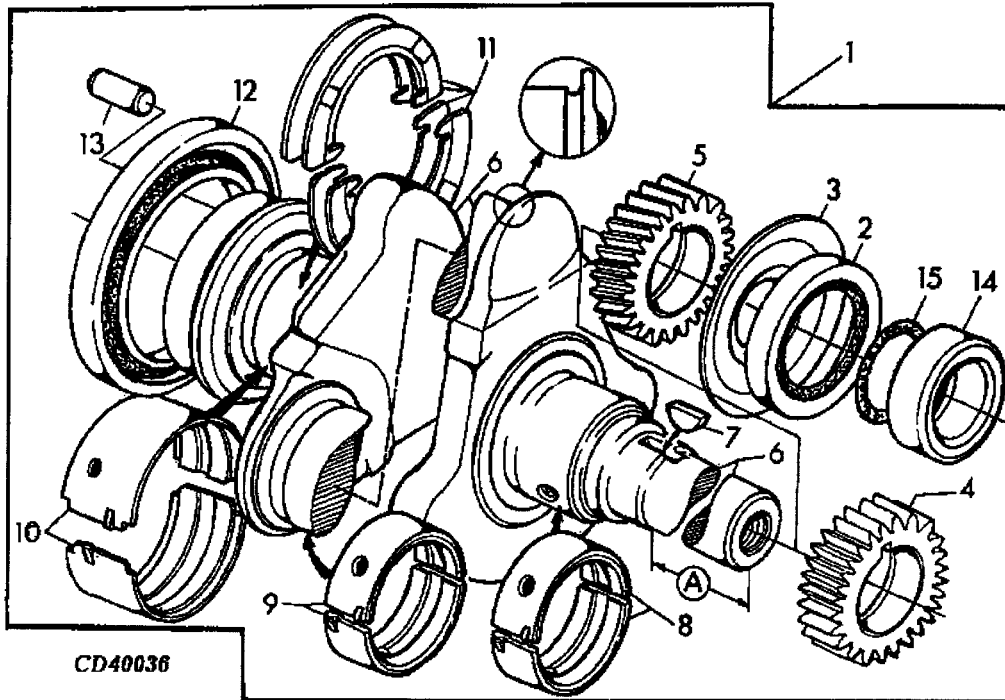
Group 7: Cylinder Block

Item	Part No.	Description	Qty.
			Var. 9906
1	GM21417	Block, cylinder	1
2	#	Screw, cap, 3/8 in. x 1 in. (SAE 8)	2
3	223610	Plate	1
4	223407	Key, woodruff	1
5	X	Camshaft (order kit part number GM21411)	1
6	223611	Tappet	6
7	GM21418	Orifice	3
8	223472	Pin, dowel	4
9	352064	Pin, dowel	2
10	#	Screw, cap, 3/8 in. x 2 1/4 in.	2
11	#	Stud, 3/8 in. x 47 mm	1
12	360517	Cap	AR
13	360518	Bushing	1
14	X	Spring (order item 32)	1
15	X	Valve (order item 32)	1
16	223639	Screw, cap	8
17	GM21419	Washer	8
18	223503	Cap, bearing	3
19	223516	Cap	1
20	336458	O-ring	1
21	X	Block, cylinder	1
22	#	Plug, pipe, 3/8 in.	1
23	#	Screw, cap, 1/2 in. x 1/2 in.	1
24	223638	Nipple, threaded	1
25	224268	Plug, pipe	4
26	#	Plug, pipe, 1/4 in.-18 NPT	1
27	#	Plug, pipe, 1/2 in.-14 NPT	1
28	223802	Plug, pipe	1
29	#	Plug, pipe, 1 in.-11.5 NPT	1
30	#	Nut, 3/8 in.-16UNC	1
31	352246	Bushing	1
32	GM21420	Valve kit	AR
33	223435	Valve, drain	AR

Common hardware; procure locally.

X Not sold separately.

Group 8a: Crankshaft

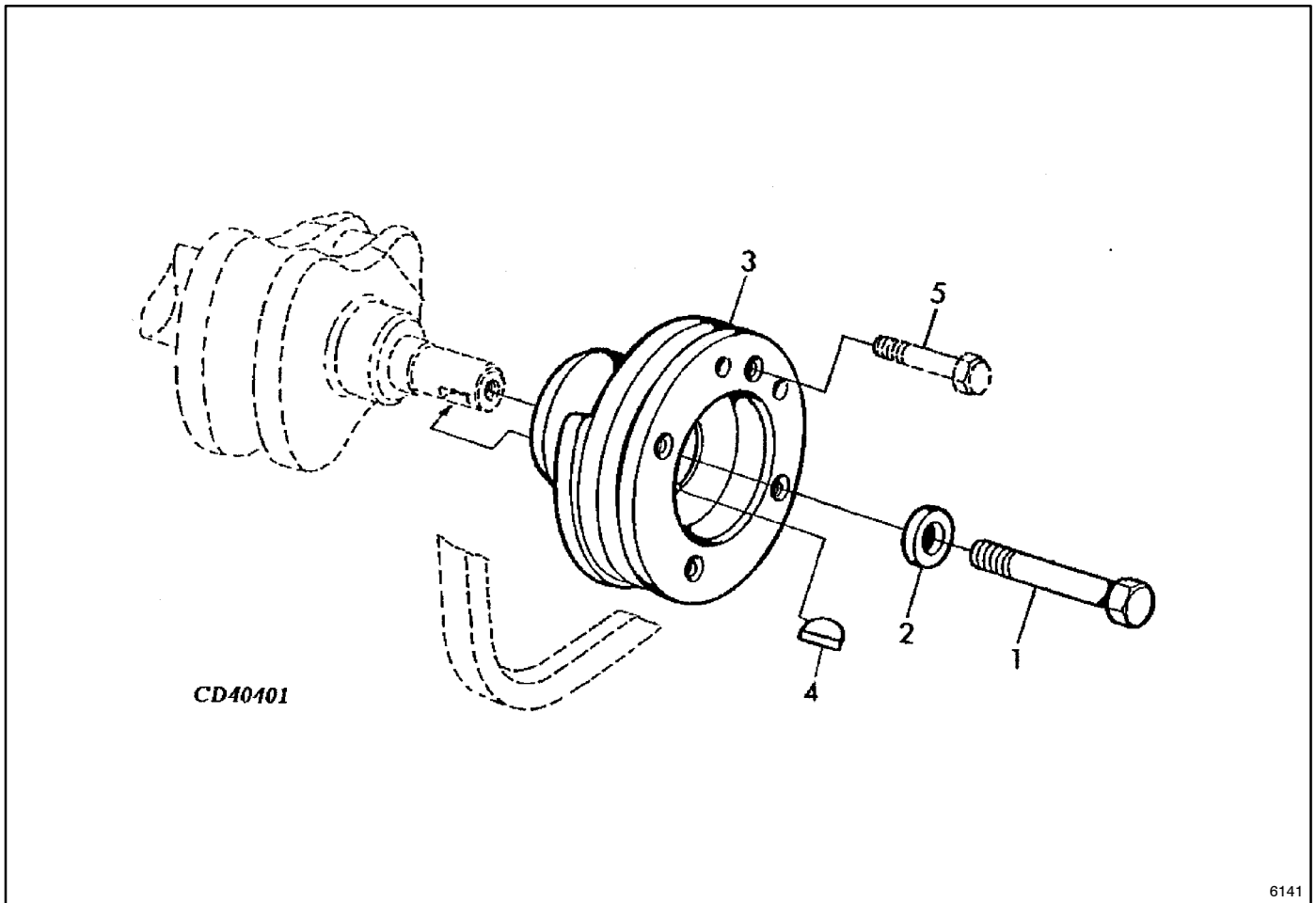


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Item	Part No.	Description	Qty.
			Var.
			9919
1	GM21421	Crankshaft	1
2	223422	Seal	1
3	223607	Slinger, oil	1
4	Not used		1
5	223615	Gear	1
6	X	Crankshaft	1
7	223407	Key, woodruff	1
8	GM21422	Bearing kit, standard	3
8	GM21423	Bearing kit, 0.25 mm US	AR
9	GM21424	Bearing kit, standard	3
10	GM21425	Bearing kit, thrust standard	1
10	GM21426	Bearing kit, thrust 0.25 mm US	AR
11	GM21427	Washer, thrust standard	1
11	GM21428	Washer, thrust 0.1 mm OS	AR
12	223583	Seal, rear	1
13	223472	Pin, dowel	1
14	224056	Sleeve	AR
15	224007	Ring	AR

X Not sold separately.

Group 8b: Crankshaft Pulley

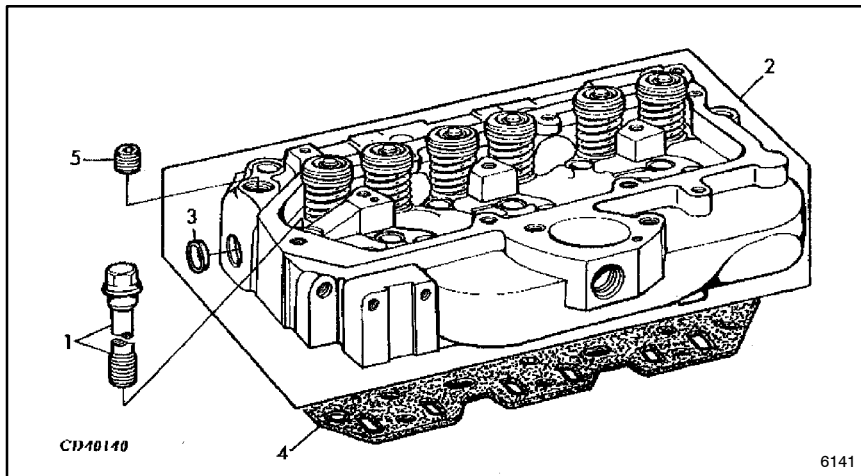


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Item	Part No.	Description	Qty.
1	#	Screw, cap, 1/2 in. x 1 3/4 in. (SAE 8)	14
2	352035	Spacer	1
3	GM21429	Sheave	2
4	GM21430	Key, shaft, 5/16 in. x 1 1/8 in.	1
5	#	Screw, cap, 3/8 in.-16UNC	AR

Common hardware; procure locally.

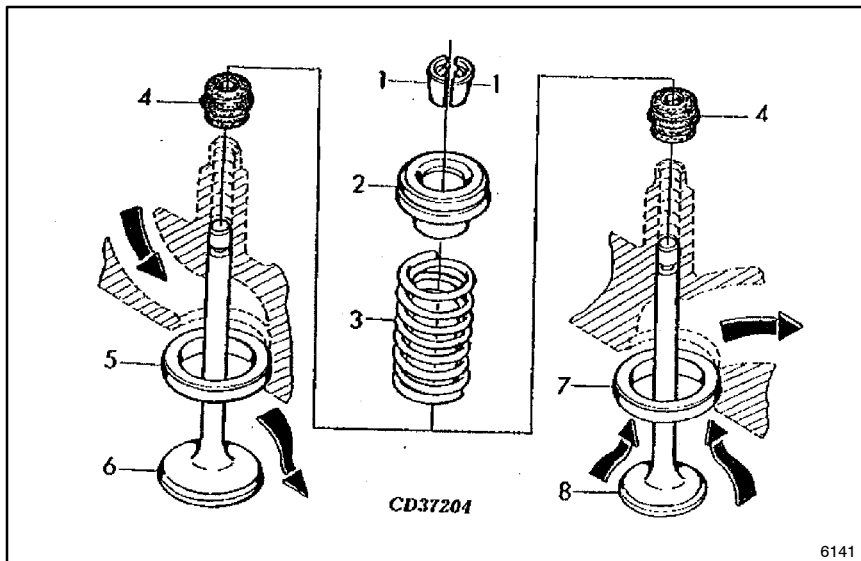
Group 9a: Cylinder Head and Valves



Item	Part No.	Description	Qty.	Var.
2	GM21431	Head, cylinder	1	9902
3	223448	Cap	2	
4	GM21432	Gasket, cylinder head	1	
5	#	Plug, pipe, 1/2 in.-14 NPTF	AR	

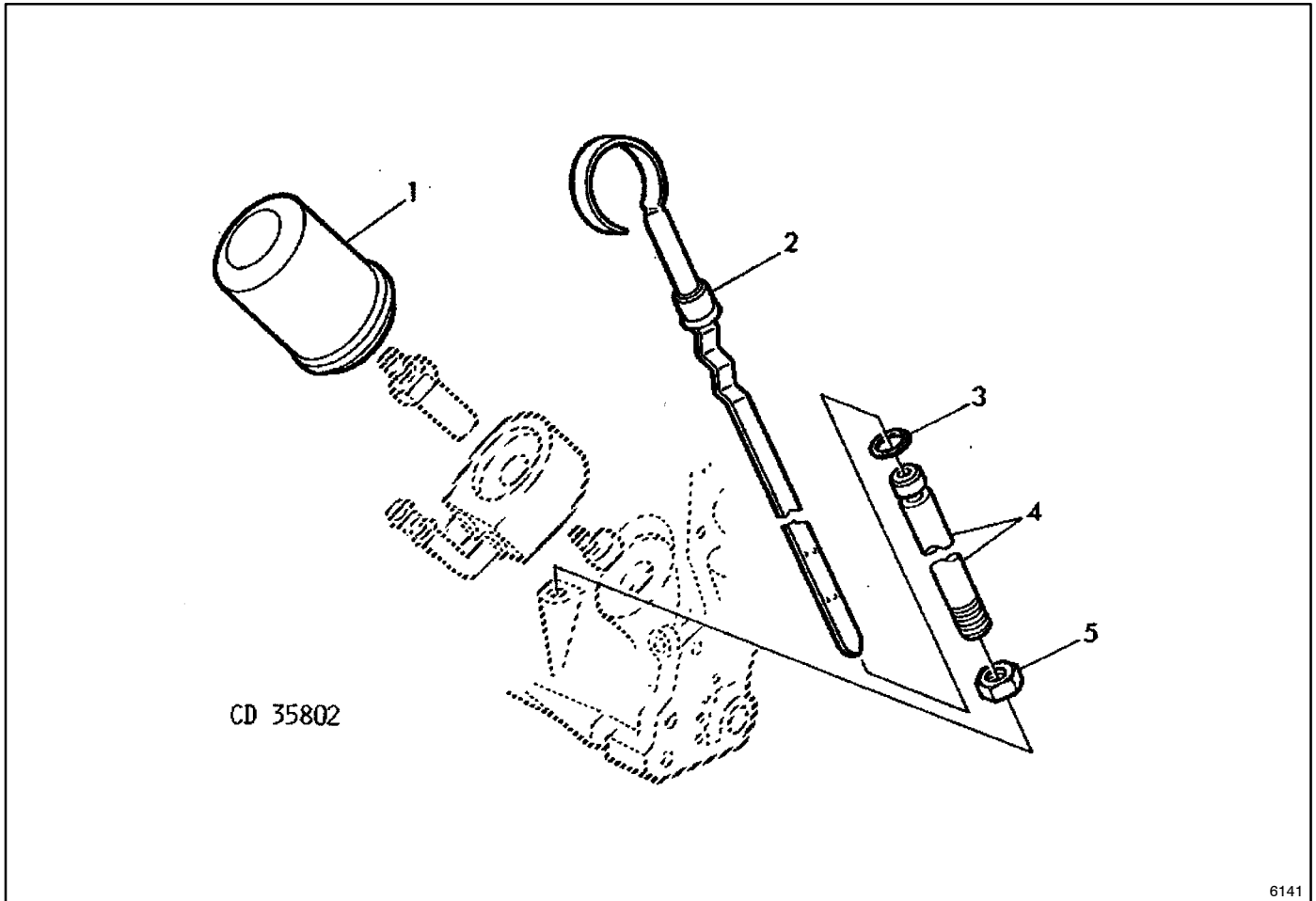
Common hardware; procure locally.

Group 9b: Valves



Item	Part No.	Description	Qty.	Var.
1	224184	Lock	12	
2	224176	Rotator	6	
3	223455	Spring	6	
4	224243	Seal	6	
5	GM21433	Insert, valve	6	
6	224168	Valve, intake, standard	3	
6	224193	Valve, intake, OS, 0.381 mm	AR	
6	224197	Valve, intake, OS, 0.762 mm	AR	
7	GM21434	Insert, valve	6	
8	224156	Valve, exhaust	3	
8	224153	Valve, exhaust, OS, 0.381 mm	AR	
8	224151	Valve, exhaust, OS, 0.762 mm	AR	

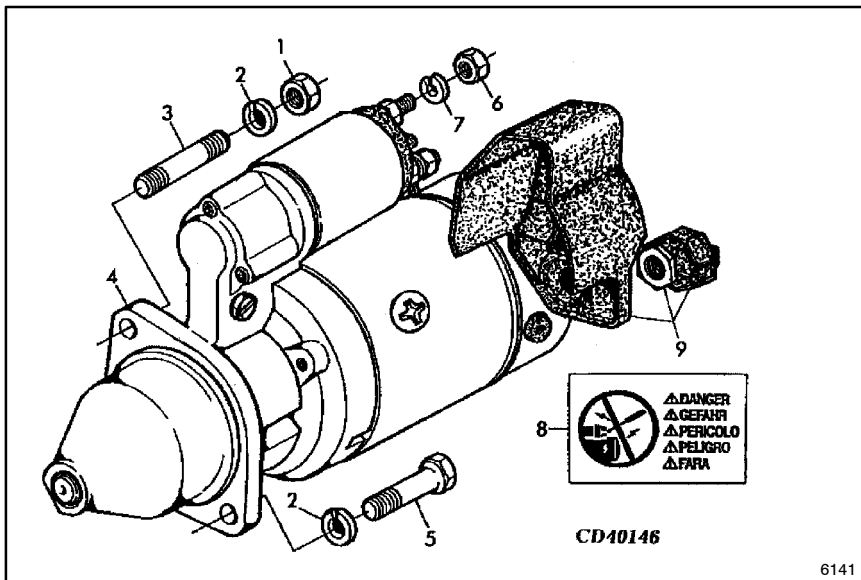
Group 10: Oil Filter & Dipstick



Item	Part No.	Description	Qty.	
			4404	4006
1	223604	Filter, oil	1	1
2	223443	Dipstick	1	1
3	223454	O-ring	1	1
4	223502	Nipple, threaded	1	
4	GM21435	Guide, dipstick		1
5	#	Nut, 1/2 in.	1	1

Common hardware; procure locally.

Group 11a: Starter Motor

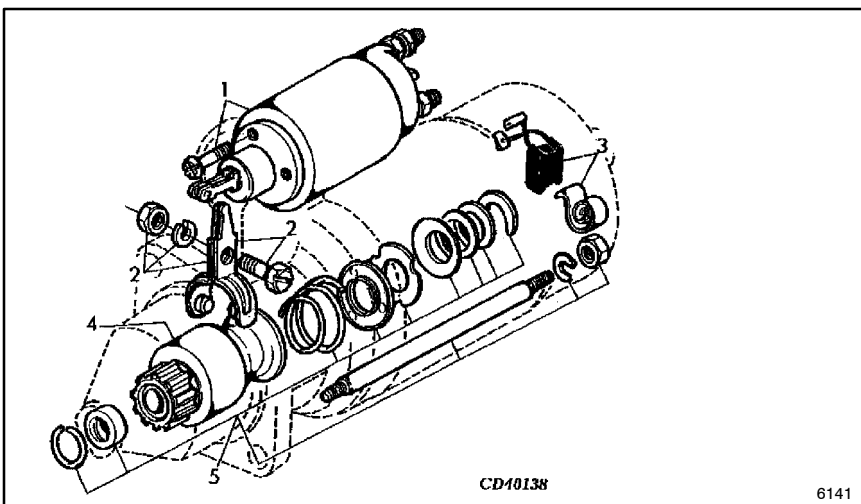


Item	Part No.	Description	Qty.
			3008
1	336726	Nut, hex	1
2	#	Washer, lock, 3/8 in.	2
3	#	Stud, 3/8 in. x 43 mm	1
4	GM21436	Starter	1
5	#	Screw, cap, 3/8 in. x 1 1/4 in. (SAE 8)	1
6	#	Nut, 3/8 in. x 1 1/4 in. (SAE 8)	1
7	#	Washer, lock, 10.200 mm	1
8	X	Label	1
9	GM21437	Cover	AR

Common hardware; procure locally.

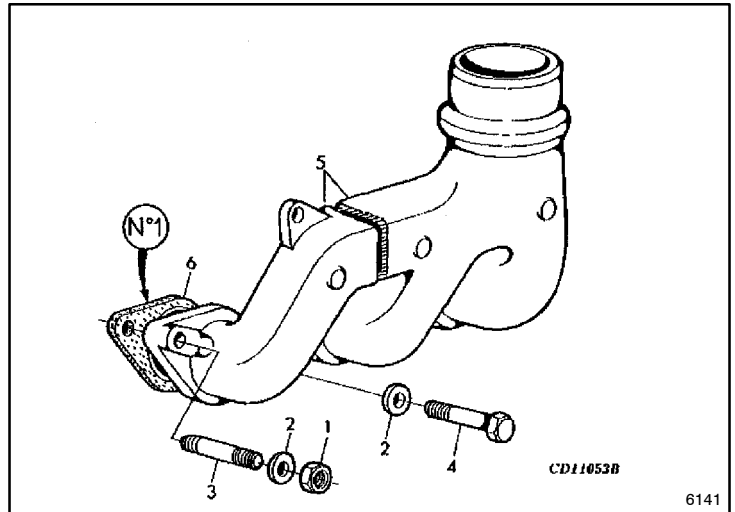
X Not sold separately.

Group 11b: Starter Motor Components



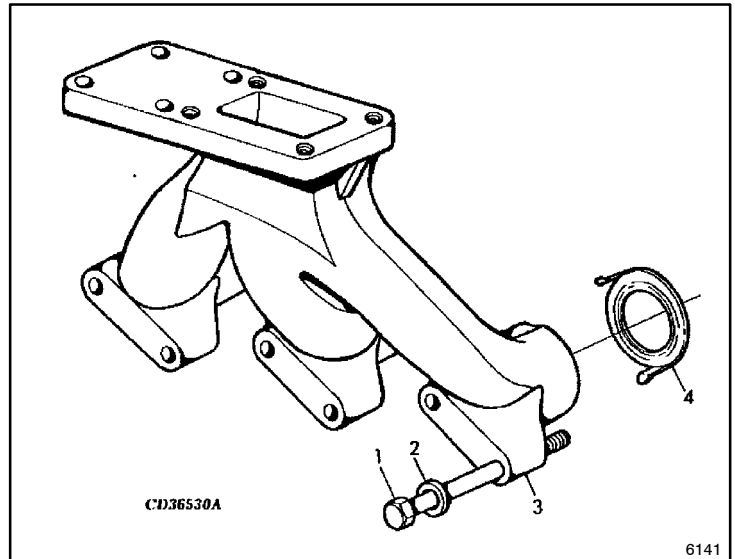
Item	Part No.	Description	Qty.
			3008
1	GM21438	Solenoid	1
2	GM21439	Shifter	1
3	GM21440	Brush kit	1
4	GM21441	Drive, Bendix	1
5	GM21442	Seal kit	1

Group 12a: Exhaust Manifold



Item	Part No.	Description	Qty.
			Var. 2802D
1	336726	Nut, hex	2
2	#	Washer, 10 x 18 x 2.500 mm	6
3	#	Stud, 9.525 x 48.500 mm	2
4	#	Screw, 3/8 in. x 1 1/4 in. (SAE 8)	4
5	GM21443	Manifold, exhaust	1
6	GM21444	Gasket	3

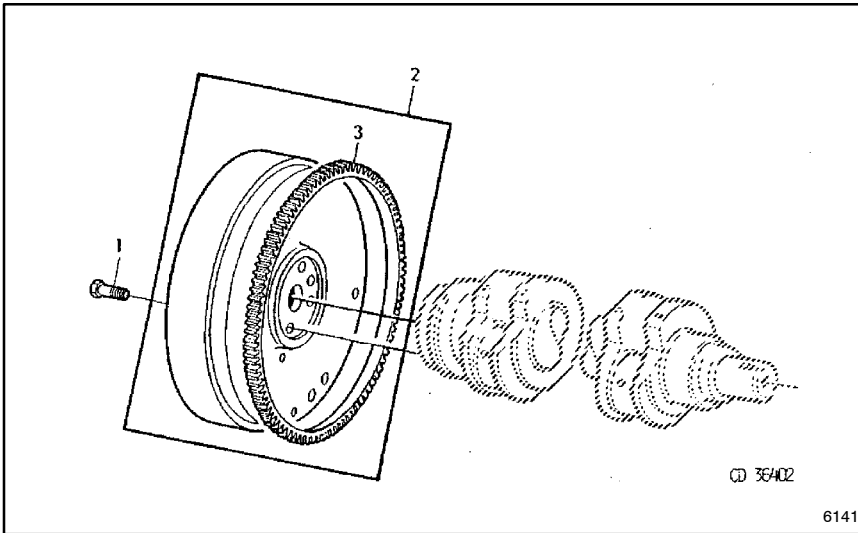
Common hardware; procure locally.



Item	Part No.	Description	Qty.
			Var. 2802T
1	336724	Screw, hex head	6
2	#	Washer, 10 x 18 x 2.500 mm	6
3	GM21445	Manifold, exhaust	1
4	GM21446	Gasket	3

Common hardware; procure locally.

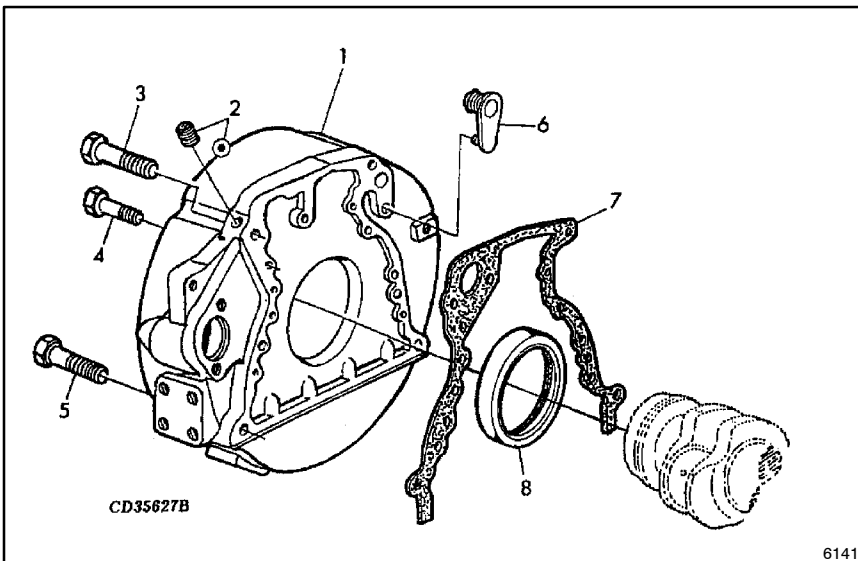
Group 13a: Flywheel



Item	Part No.	Description	Qty.
			Var.
			1501
1	#	Screw, cap, 1/2 in. x 1 1/2 in.	4
2	GM21447	Flywheel	1
3	223613	Gear, flywheel ring	1

Common hardware; procure locally.

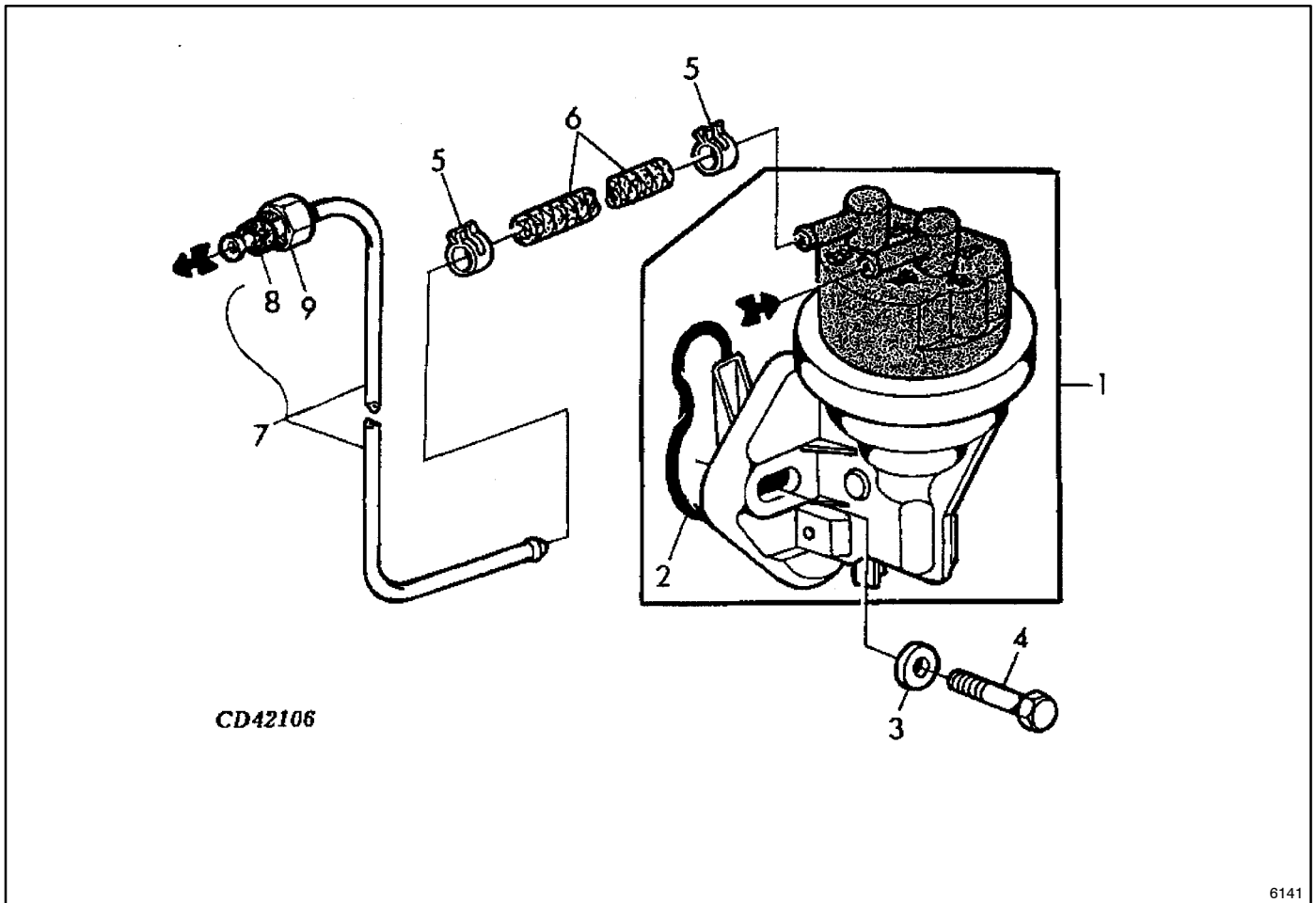
Group 13b: Flywheel Housing



Item	Part No.	Description	Qty.
			Var.
			1418
1	GM21448	Housing	1
2	224268	Plug, pipe	AR
3	#	Screw, cap, 5/8 in. x 3 in. (SAE 8)	2
4	#	Screw, cap, 3/8 in. x 1 3/8 in. (SAE 8)	8
5	#	Screw, cap, 5/8 in. x 5 1/2 in. (SAE 8)	2
6	360582	Plug	1
7	223558	Gasket	1
8	223583	Seal	1

Common hardware; procure locally.

Group 14: Fuel Pump



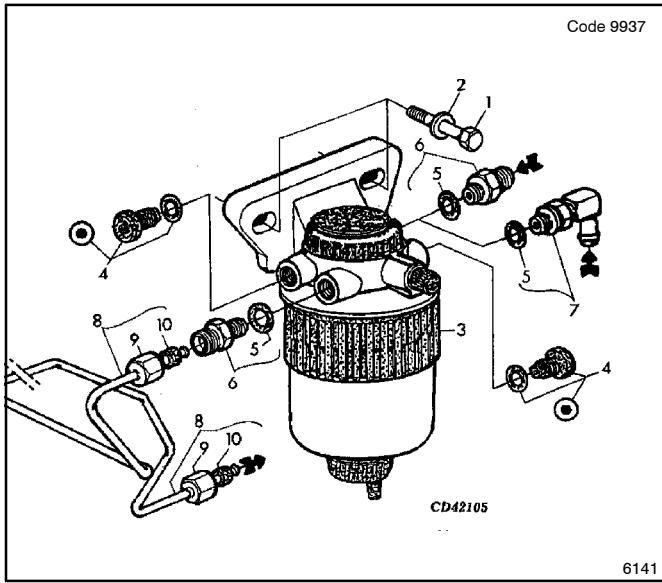
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Item	Part No.	Description	Qty.
			Var. 3710
1	GM21449	Pump, fuel	1
2	GM17555	O-ring, 44.12 x 2.616	1
3	#	Washer, 11/32 in. x 11/16 in. x 0.065 in.	2
4	#	Screw, cap, 5/16 in. x 7/8 in.	2
5	GM21450	Clip	2
6	GM21451	Hose	1
7	GM21452	Line, fuel	1
8	GM17494	Washer, sealing	1
9	GM21453	Nut	1

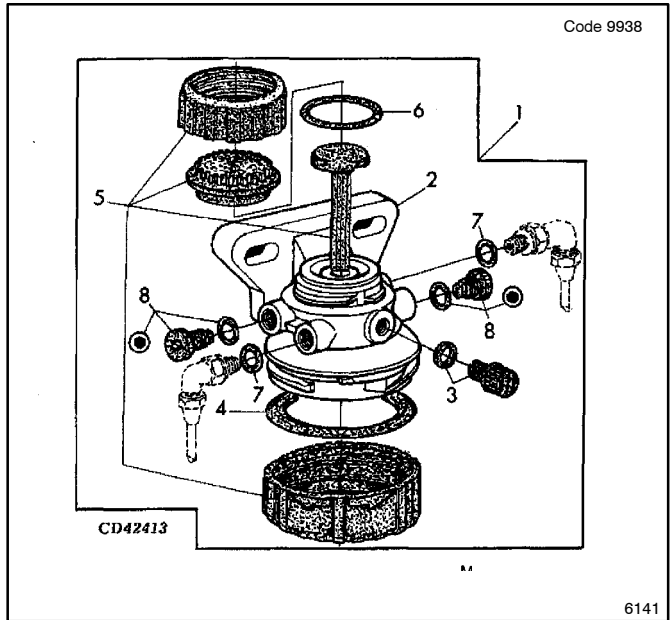
Common hardware; procure locally.

Group 15: Fuel Filter



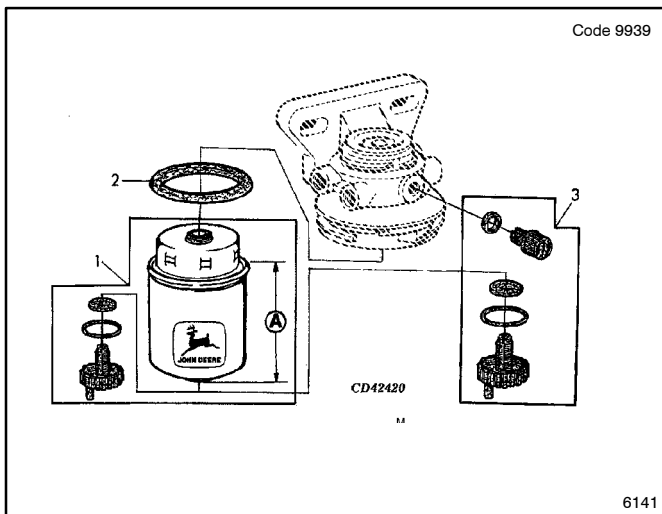
Item	Part No.	Description	Qty.
			Var.
1	#	Screw, cap, 3/8 in. x 1 in. (SAE 8)	2
2	#	Washer, 10 x 18 x 2.5 mm	2
3	275501	Filter, fuel	1
4	#	Plug, pipe, M12 x 1.5	2
5	360178	O-ring	AR
6	360037	Fitting	2
7	GM21454	Fitting, hose	1
8	GM21455	Line, fuel	1
9	GM21453	Nut	2
10	GM17494	Washer, sealing	2

Common hardware; procure locally.

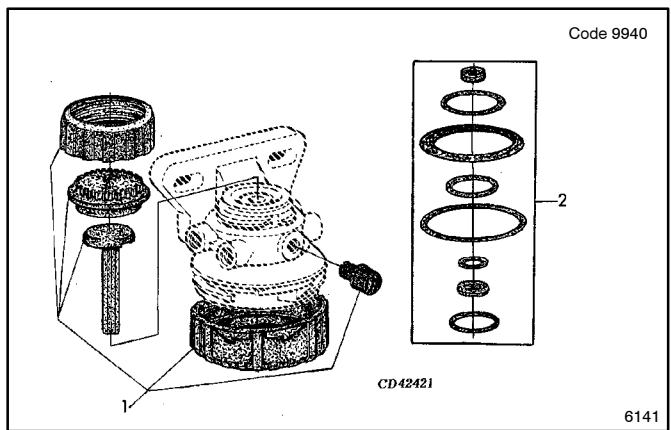


Item	Part No.	Description	Qty.
			Var.
1	X	Kit	1
2	X	Head, filter	1
3	X	Plug, drain (order part 360048)	1
4	GM17445	O-ring	1
5	X	Retainer (order part 360561)	1
6	X	O-ring (order part 222772)	1
7	360178	O-ring	2
8	#	Plug, pipe, M12 x 1.5	2

Common hardware; procure locally.
X Not sold separately.

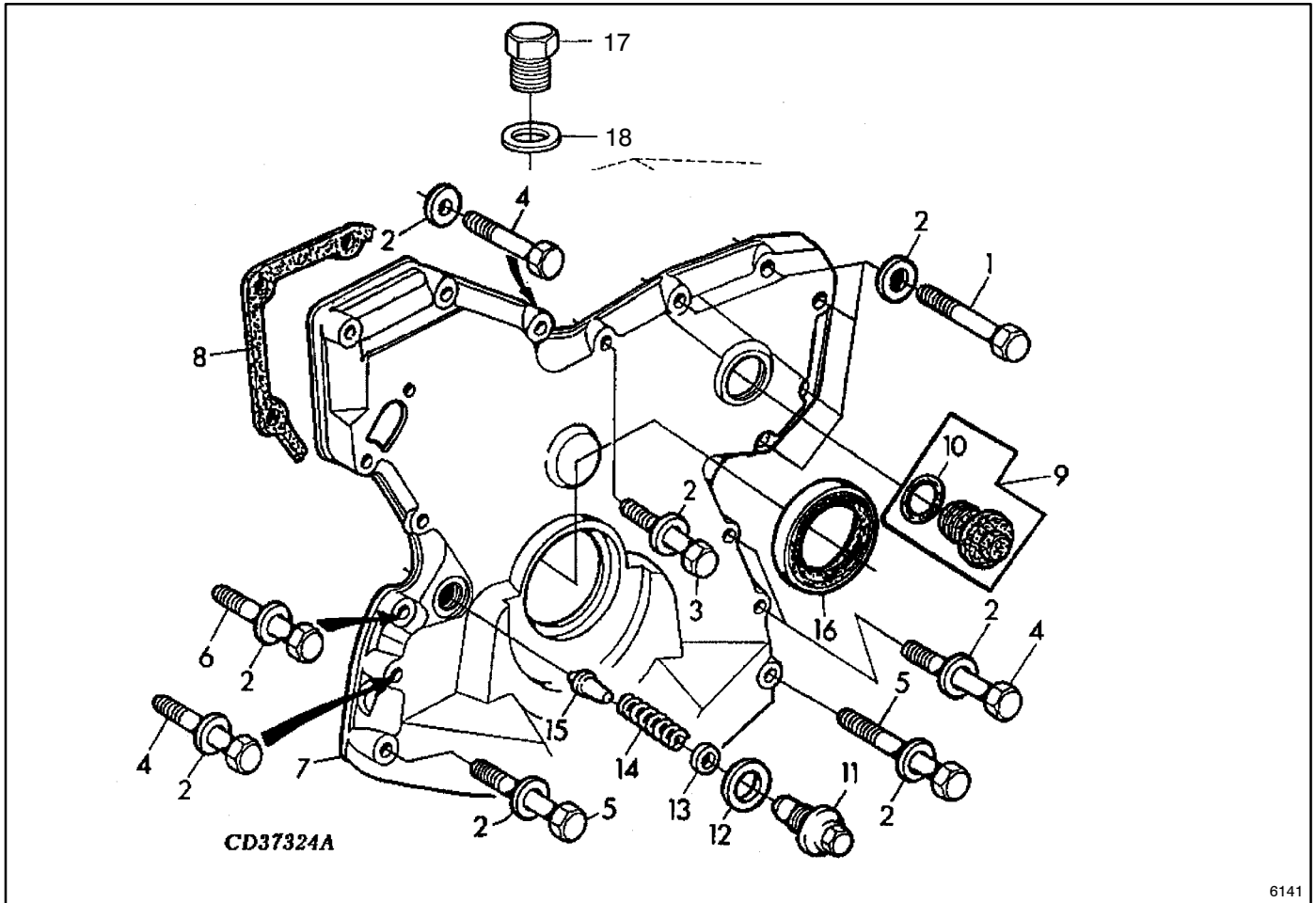


Item	Part No.	Description	Qty.
			Var.
1	275501	Filter, fuel	1
2	GM17445	O-ring	1
3	360048	Kit, bleed plug and drain valve	1



Item	Part No.	Description	Qty.
			Var.
1	360561	Fuel filter kit	1
2	222772	Seal kit	AR

Group 18: Timing Gear Cover

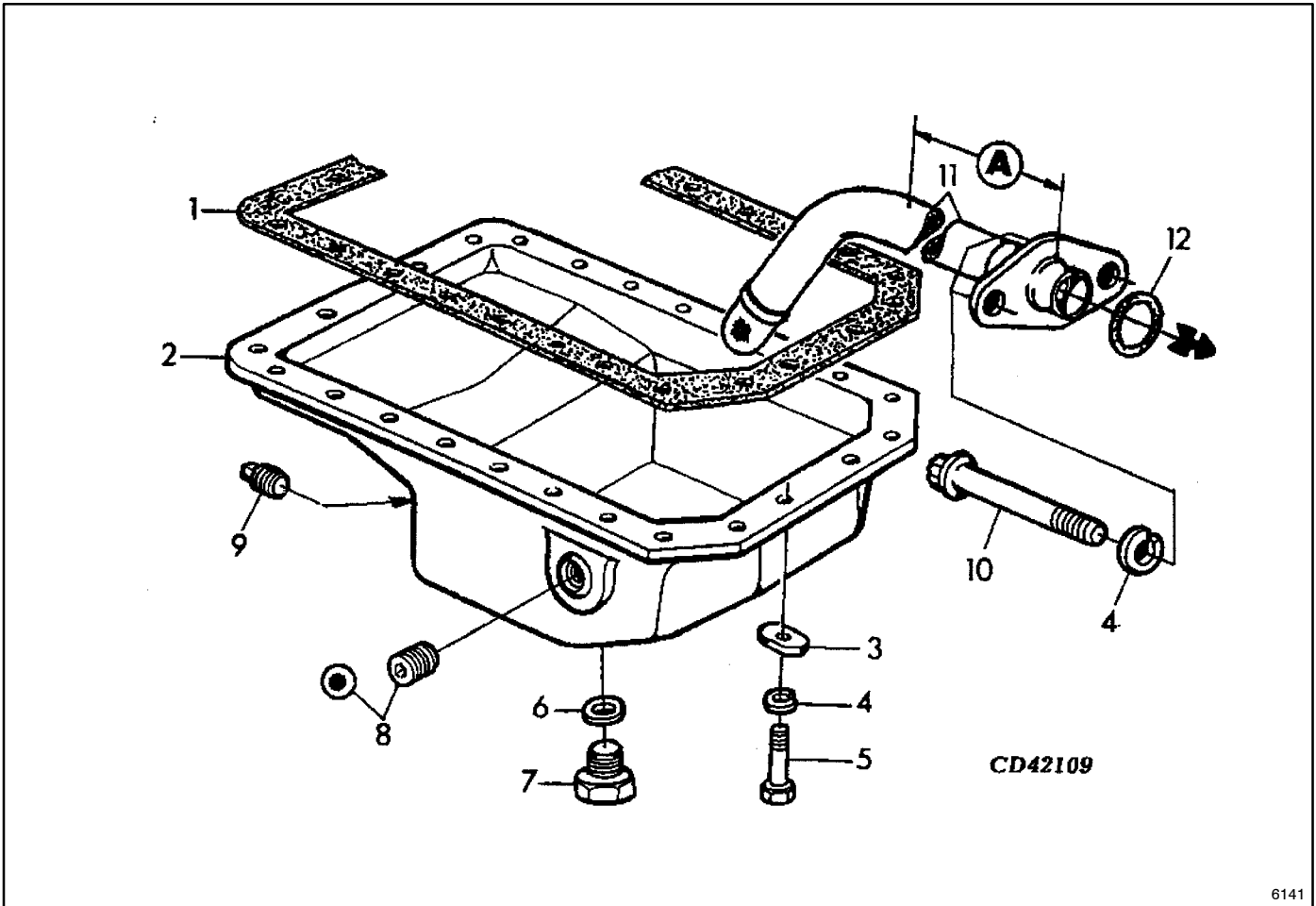


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Item	Part No.	Description	Qty.
			Var. 4499
1	#	Screw, cap, 3/8 in. x 2 in. (SAE 8)	5
2	#	Washer, 10 x 18 x 2.500 mm	13
3	#	Screw, cap, 3/8 in. x 2 1/4 in.	1
4	#	Screw, cap, 3/8 in. x 2 3/8 in. (SAE 8)	4
5	#	Screw, cap, 3/8 in. x 2 1/2 in. (SAE 8)	2
6	#	Screw, cap, 3/8 in. x 1 7/8 in.	1
7	336451	Cover kit	1
8	223620	Gasket	1
9	336453	Plug, drain	1
10	GM21456	O-ring	1
11	336454	Plug, fitting	1
12	223410	Washer	1
13	#	Washer, 21/64 in. x 3/4 in. x 0.035 in.	AR
14	224095	Spring	1
15	224058	Valve	1
16	223422	Seal	1
17	223451	Plug, drain	1
8	223449	Washer	1

Common hardware; procure locally.

Group 21a: Oil Pan

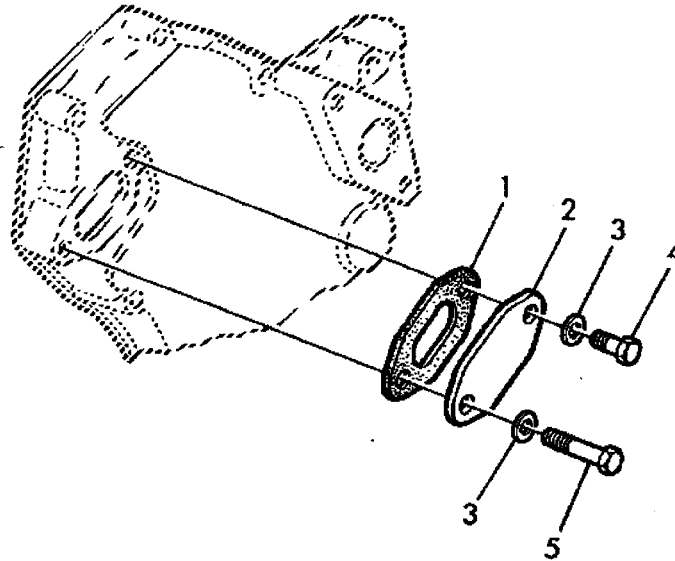


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Item	Part No.	Description	Qty.
			Var. 1901
1	GM21457	Gasket	1
2	GM21458	Pan, oil	1
3	GM21459	Strap	24
4	#	Washer, lock, 3/8 in.	26
5	#	Screw, cap, 3/8 in. x 1 in. (SAE 8)	24
6	GM21460	Ring, copper	1
7	223616	Plug, drain	1
8	#	Plug, 1/2 in.-14 NPT	1
9	#	Plug, 3/4 in.-14 NPT	1
10	#	Screw, cap, 120 mm	2
11	GM21461	Intake, oil pump	1
12	224035	O-ring	1

Common hardware; procure locally.

Group 21b: Oil Fill Tube



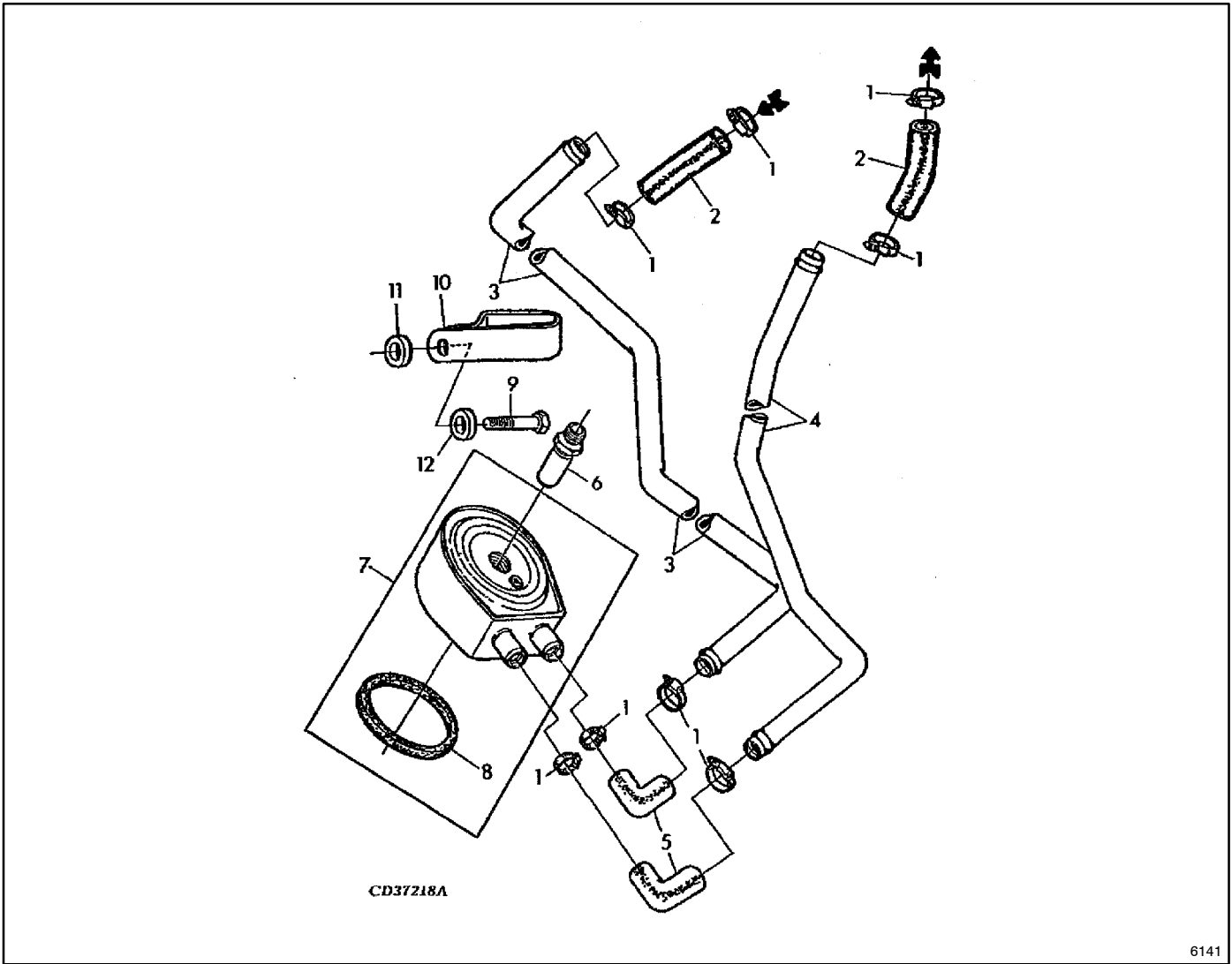
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Item	Part No.	Description	Qty.
			Var. 1299
1	223559	Gasket	1
2	GM21462	Cover	1
3	#	Washer, 10 x 18 x 2.500 mm	2
4	#	Screw, cap, 3/8 in. x 7/8 in.	1
5	#	Screw, cap, 3/8 in. x 2 1/4 in.	1

Common hardware; procure locally.

Group 21c: Oil Cooler

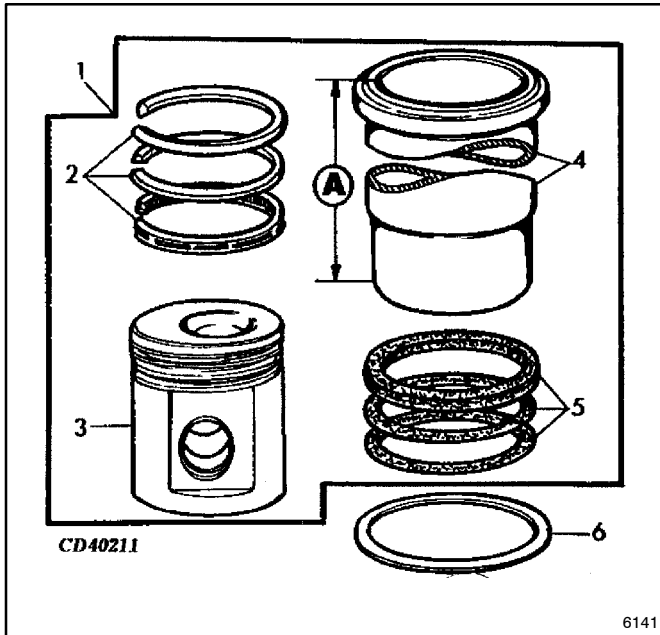


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Item	Part No.	Description	Qty.
			Var. 5906
1	GM21409	Clamp	8
2	GM21463	Hose	2
3	336462	Line	1
4	336461	Line	1
5	336463	Hose	2
6	GM21464	Nipple, threaded	1
7	GM21465	Cooler, oil	1
8	GM21466	Packing	1
9	#	Screw, cap, 3/8 in. x 2 3/8 in. (SAE 8)	1
10	336466	Clamp	1
11	336467	Washer	1
12	#	Washer, 10 x 18 x 2.5 mm	1

Common hardware; procure locally.

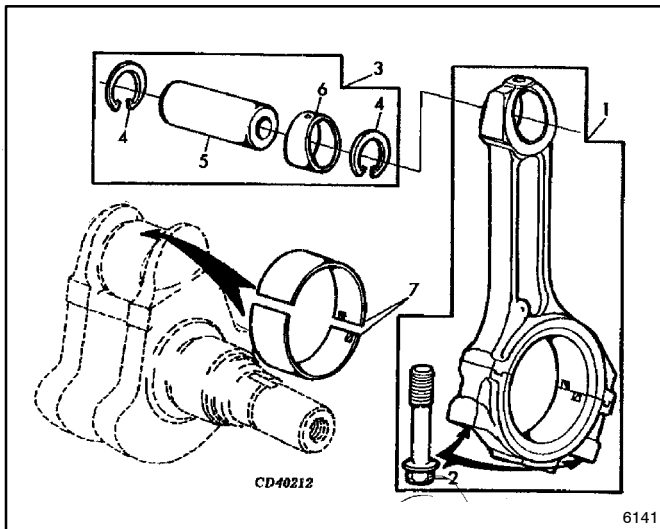
Group 22a: Piston



Item	Part No.	Description	Qty.	
			9915	9917
1	GM21472	Piston-liner kit	AR	
1	GM21476	Piston-liner kit		AR
2	360066	Ring kit	1	1
3	X	Piston	1	1
4	GM21473	Liner, cylinder	1	1
5	223419	O-ring kit	1	1
6	GM21474	Shim, 0.05 mm	AR	AR
6	GM21475	Shim, 0.1 mm	AR	AR

X Not sold separately.

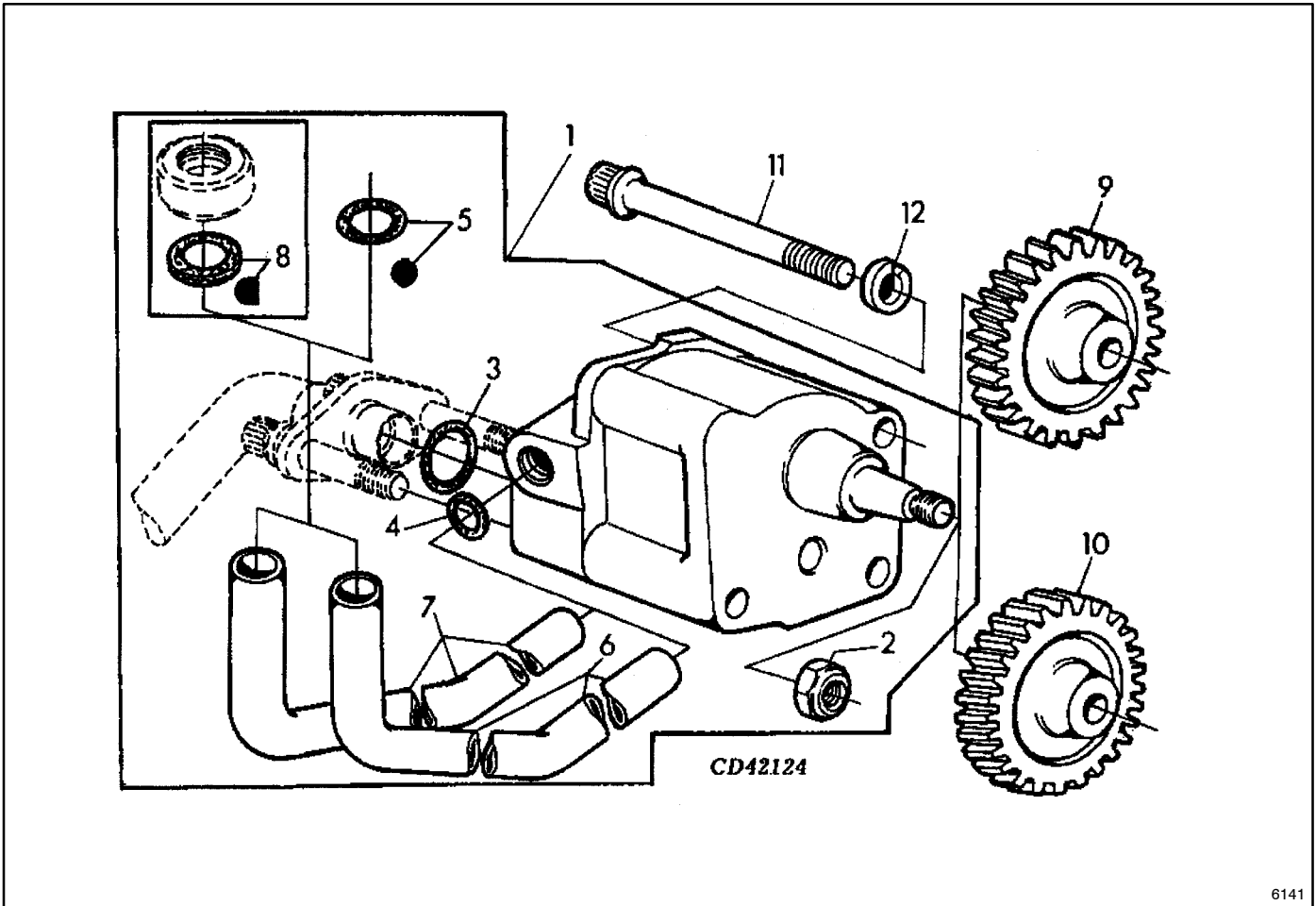
Group 22b: Connecting Rod



Item	Part No.	Description	Qty.	
			9916	9918
1	GM21470	Connecting rod kit (includes items 2-4, 5)	3	
1	GM21467	Rod, connecting (includes item 2)		3
2	223528	Screw	2	2
3	GM21468	Piston pin kit (includes items 4-6)		3
4	GM21471	Ring, snap	2	
4	223479	Ring, snap		2
5	X	Pin, piston (order item 1)	1	
5	X	Pin, piston (order item 3)		1
6	X	Bushing		1
7	GM21424	Bearing kit, standard	3	3
7	GM21469	Bearing kit, 0.25 mm US	AR	AR

X Not sold separately.

Group 25: Oil Pump

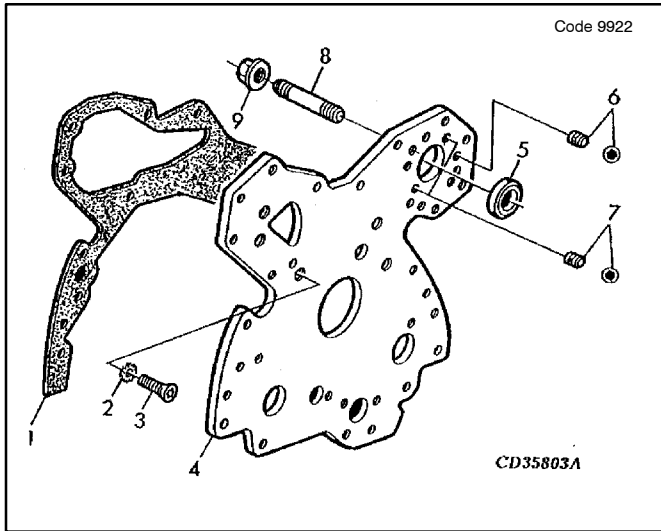


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Item	Part No.	Description	Qty.
			Var. 9928
1	GM21477	Oil pump kit	1
2	#	Nut, 1/2 in.-13UNC	1
3	224035	O-ring	1
4	223511	O-ring	1
5	336458	O-ring	AR
7	GM21478	Tube, oil	1
8	223512	O-ring	AR
9	Not used		1
10	223631	Gear	1
11	224274	Screw, cap	1
12	#	Washer, lock, 3/8 in.	1

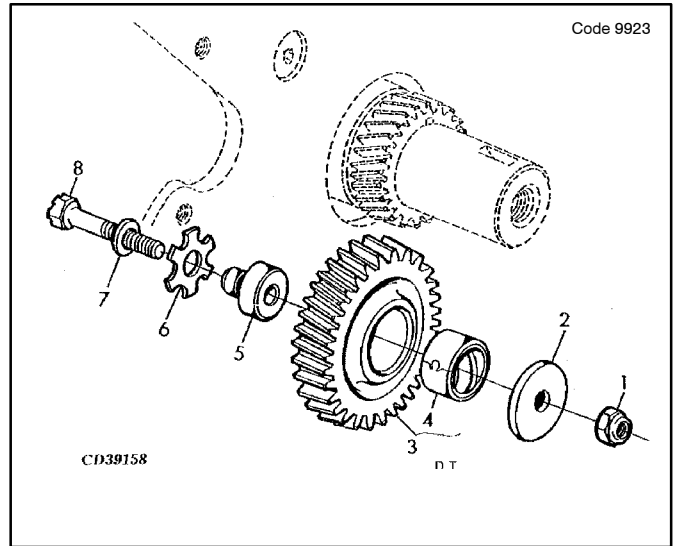
Common hardware; procure locally.

Group 26: Front Plate

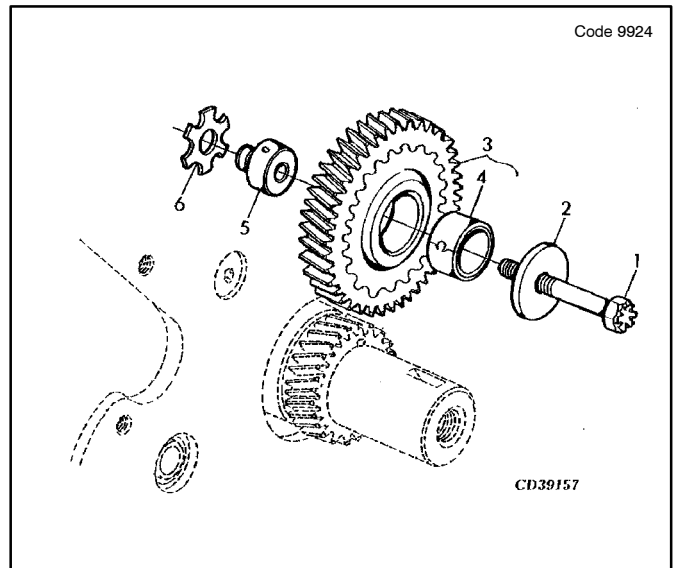


Item	Part No.	Description	Qty.
			Var. 1
1	GM21479	Gasket	1
2	#	Washer, 3/8 in.	5
3	224333	Screw	5
4	GM21480	Plate (also order items 6 and 7)	1
5	GM21481	Washer	AR
6	223442	Screw, set	8
7	223445	Screw, set	2
8	224335	Stud	3
9	#	Nut, 5/16 in.-18UNC	3

Common hardware; procure locally.

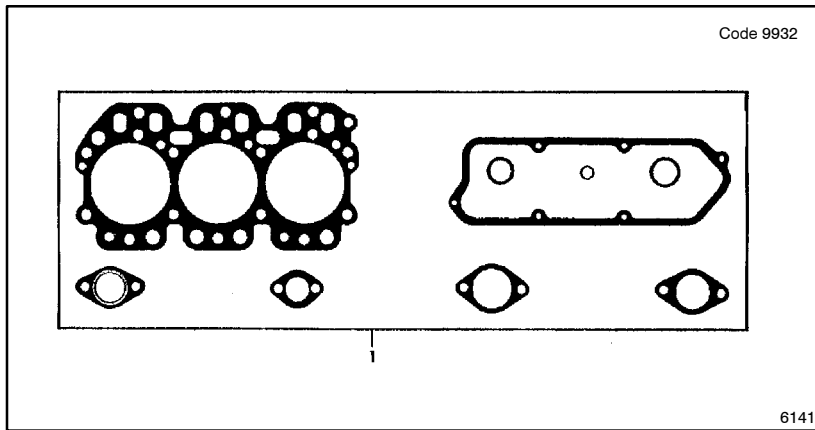


Item	Part No.	Description	Qty.
			Var. 1
1	#	Nut, 1/2 in.-20UNF	1
2	336447	Washer, thrust	1
3	223729	Gear	1
4	223984	Bushing	1
5	224186	Pin	1
6	336446	Washer, thrust	1
7	224267	Washer	1
8	224260	Screw, hex head	1



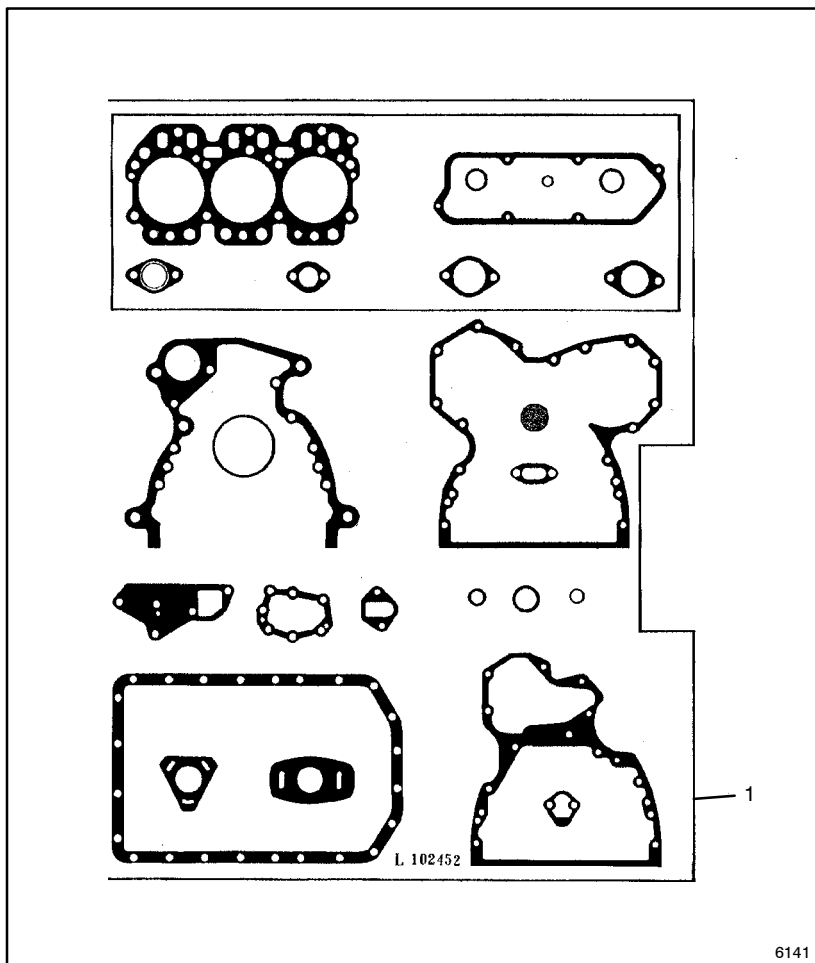
Item	Part No.	Description	Qty.
			Var. 1
1	223652	Screw	1
2	336447	Washer, thrust	1
3	223432	Gear	1
4	223606	Bushing	1
5	224186	Pin	1
6	336446	Washer, thrust	1

Group 39a: Cylinder Head Gasket Set



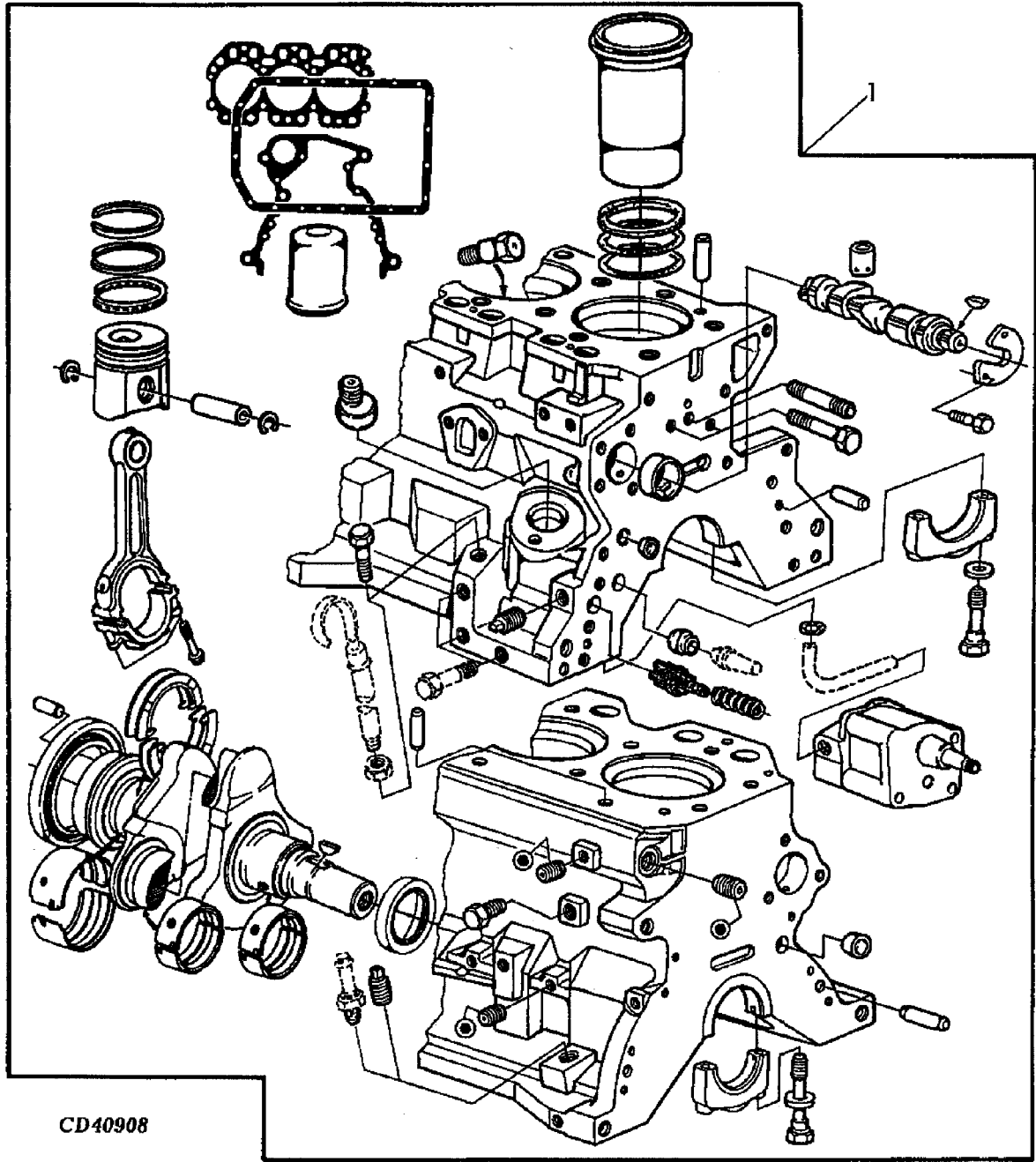
Item	Part No.	Description	Qty.
			Var.
1	GM21482	Gasket kit	1

Group 39b: Overhaul Gasket Set



Item	Part No.	Description	Qty.
			Var.
1	GM21483	Gasket kit	9932

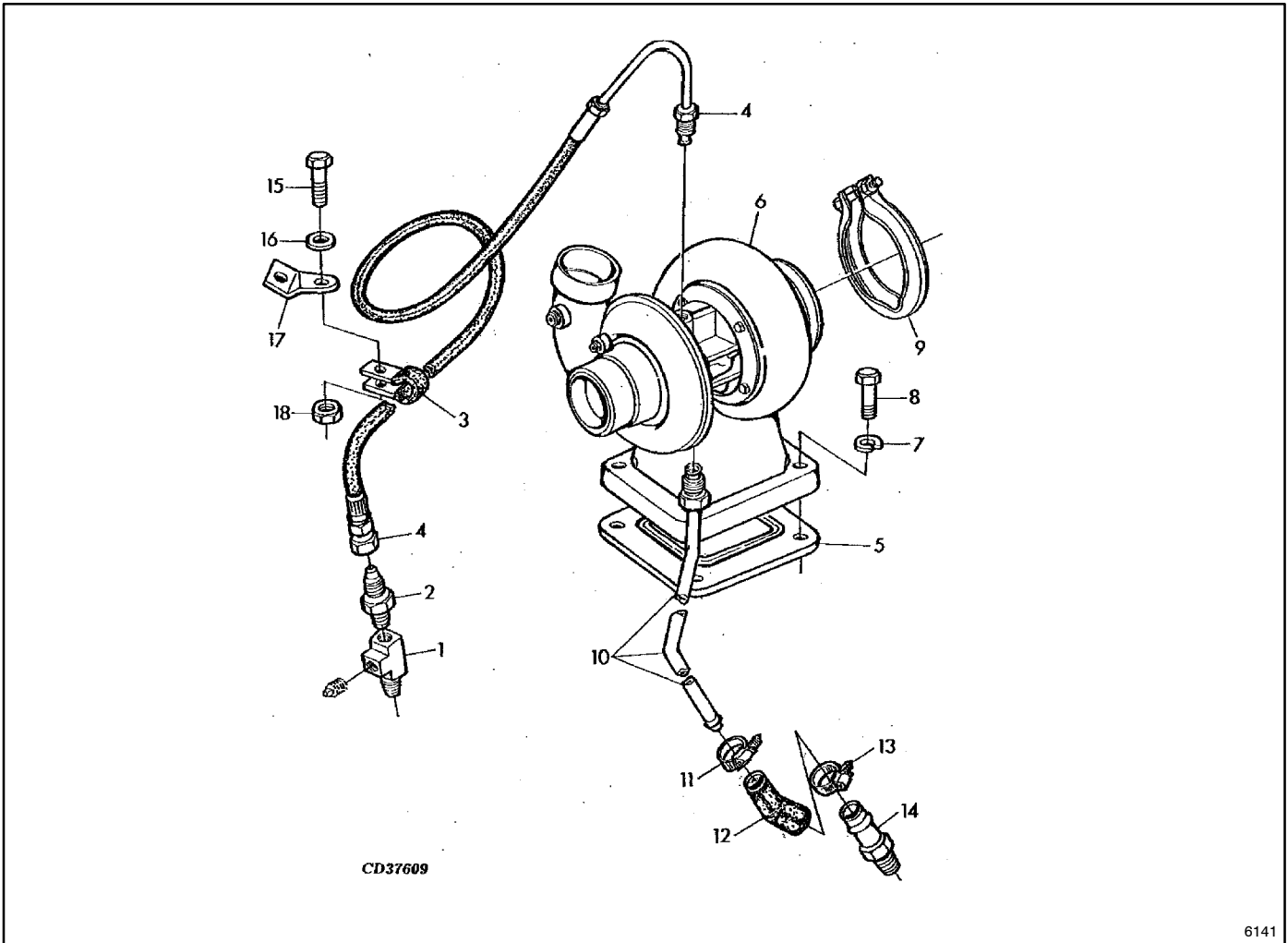
Group 42: Short Block



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Item	Part No.	Description	Qty. Var.
1	GM21484	Short block assembly	9910 1

Group 50: Turbocharger & Oil Lines

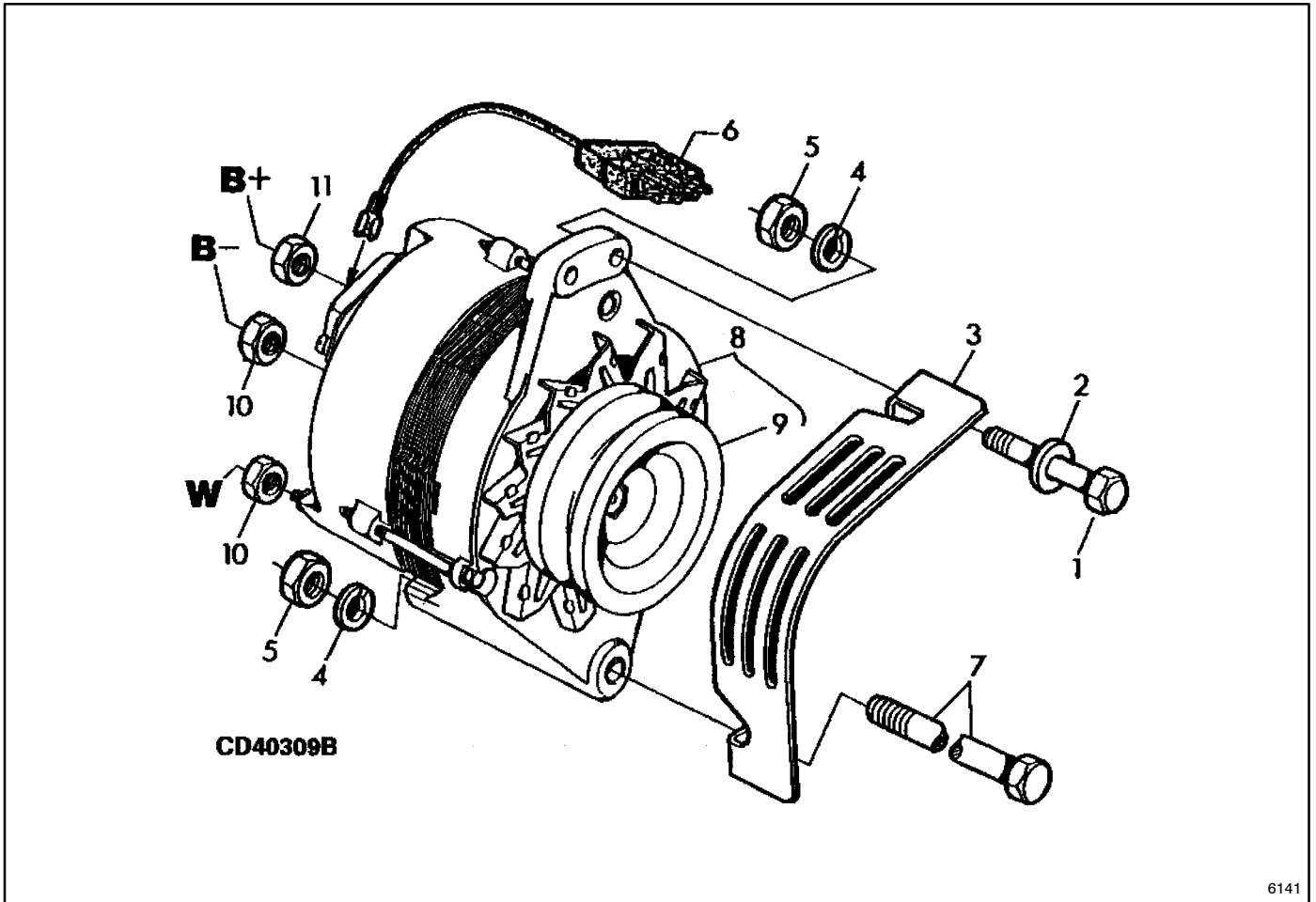


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Item	Part No.	Description	Qty.	
			6547	65BS
1	336477	Fitting, tee	1	1
2	223457	Fitting	1	1
3	336721	Clamp	1	1
4	GM21485	Hose, hydraulic	1	1
5	GM21486	Gasket	1	1
6	GM21487	Turbocharger	1	
6	GM21488	Turbocharger		1
7	#	Washer, lock, 8.100 mm	4	4
8	#	Screw, cap, 5/16 in. x 7/8 in.	4	4
9	GM21489	Clamp	1	1
10	GM21490	Line, oil	1	1
11	GM21409	Clamp	1	1
12	GM21491	Hose	1	1
13	336475	Clamp	1	1
14	GM54885	Fitting, hose	1	1
15	Not used		NA	
16	Not used		NA	
17	Not used		NA	
18	Not used		NA	

Common hardware; procure locally.

Group 51a: Alternator

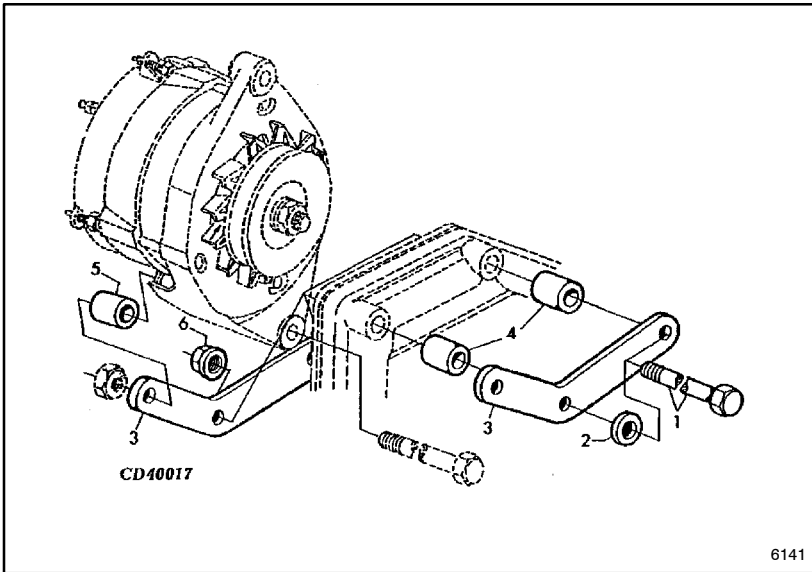


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Item	Part No.	Description	Qty.
			Var. 3123
1	#	Screw, cap, 5/16 in. x 1 3/8 in.	1
2	#	Washer, 11/32 in. x 3/4 in. x 0.120 in.	1
3	GM21517	Shield	1
4	#	Washer, lock, 8.100 mm	2
5	#	Nut, 5/16 in.	1
6	GM21518	Harness, wiring	1
7	#	Screw, cap, 5/16 in. x 3 3/4 in.	1
8	GM21519	Alternator	1
9	GM21520	Sheave	1
10	#	Nut, lock, M5	2
11	#	Nut, lock, M6	1

Common hardware; procure locally.

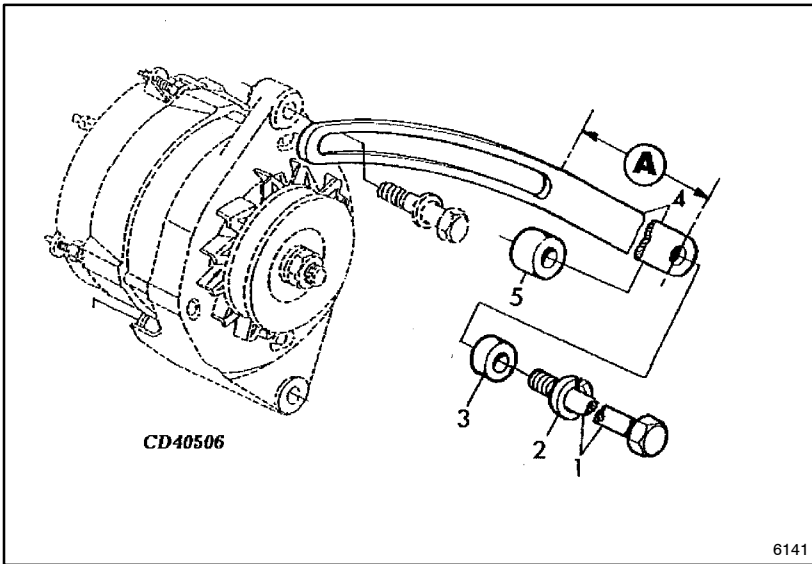
Group 51b: Alternator Brackets



6141

Item	Part No.	Description	Qty.	Var.
1	#	Screw, cap, 3/8 in. x 3 1/2 in.	2	6218
2	Not used		NA	
3	GM21493	Bracket	2	
4	GM21494	Bushing	2	
5	224334	Washer	1	
6	#	Nut, lock, 3/8 in.	2	

Common hardware; procure locally.

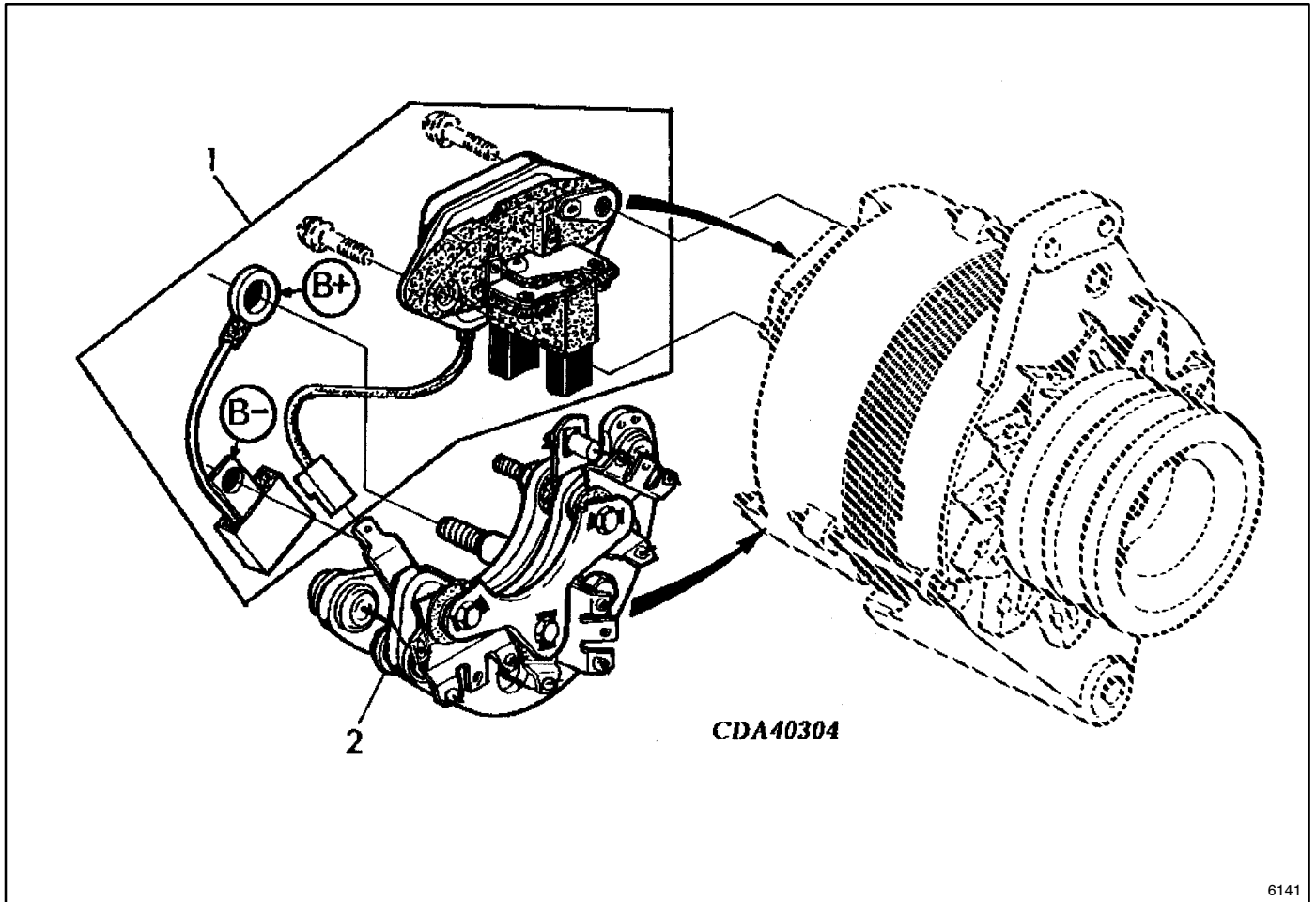


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Item	Part No.	Description	Qty.	Var.
1	#	Screw, cap, 3/8 in. x 2 in. (SAE 8)	1	
2	#	Washer, lock, 3/8 in.	1	
3	Not used		NA	
4	224099	Strap	1	
5	#	Spacer, 10 x 20 x 14 mm	NA	
5	#	Bushing, 13/32 in. x 7/8 in. x 3/4 in.	NA	

Common hardware; procure locally.

Group 51c: Alternator Components



6141

Item	Part No.	Description	Qty.
			Var.
1	GM21521	Regulator	1
2	GM21522	Diode	1
			3123

