

Group 15 Engine Assembly

GENERAL: This group contains information on the purchased engine that is not covered in the other groups. It covers all engine parts from the timing gear cover to the flywheel housing, and from the valve cover to the oil pan. The group also includes all engine-to-frame mounting parts.

SPECIFICS: As applicable

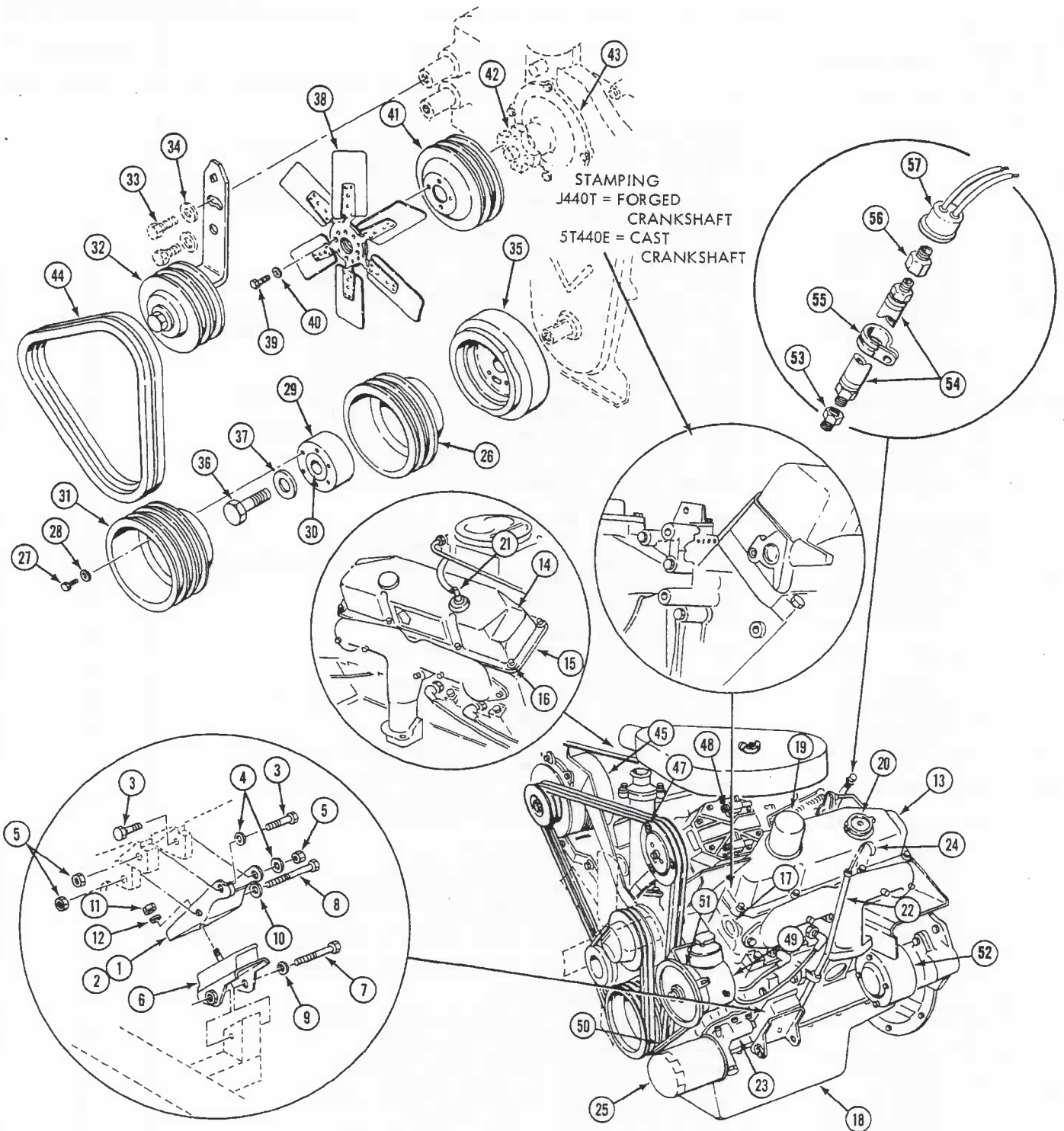
- ...Camshaft
- ...Connecting Rods
- ...Crankcase
- ...Crankshaft
- ...Cylinder Head
- ...Flywheel and Housing
- ...Oil Pan
- ...Oil Pump
- ...Pistons and Pins
- ...Timing Gear Cover
- ...Timing Gears
- ...Valve Covers
- ...Valves and Rockers



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REPAIR PARTS LIST

GROUP 15 Engine Assembly
 MODEL 2900R



SD-1050

Figure 15-1. Engine Assembly

REPAIR PARTS LIST

GROUP 15
MODEL 2900R

FIG NO.	ITEM NO.	PART NUMBER	ITEM DESCRIPTION	QTY PER UNIT
		5108543	ENGINE ASSY, Basic (CCMI-440-3897110) Above is basic block, pistons, crankshaft, dampner, camshaft, water pump, oil pump, oil pan, cylinder head, plugs, wires, coil, distributor, timing gears, timing cover, flywheel. Basic engine from oil pan to head and timing cover to flywheel.	1
15-1	1	5100011-R373	BRACKET, Engine support LH (CCMI 2536132)	1
	2	5100011-R374	BRACKET, Engine support RH (CCMI 2863751)	1
	3	5100011-R375	BOLT, Engine support bracket (CCMI 602737)	4
	4	M-17001	WASHER, Engine support bracket (CCMI 120395)	6
15-1	5	5100011-R377	NUT, Engine support bracket (CCMI 6026750)	4
	6	5100011-R364	INSULATOR, Engine support (LH & RH) (CCMI 2536121)	2
	7	5100011-R378	BOLT, Engine support insulator to frame (CCMI 6026169)	2
	8	5108696-03	BOLT, Engine support to frame (CCMI 433146)	1
	8	5108696-02	BOLT, Engine support to frame (CCMI 182759)	2
	8	5108696-01	BOLT, Engine support to frame (CCMI 182755)	3
15-1	9	5100011-R379	WASHER, Engine support insulator bolt (CCMI 6023050)	2
	10	5108696-07	WASHER, Engine support bolt (CCMI 6023054)	6
	11	5100011-R377	NUT, Engine support insulator bolt (CCMI 6026750)	6
	11	5108696-08	NUT, Engine support bolt (CCMI 118617)	2
	11	5100011-R381	NUT, Engine support bracket stud (CCMI 120378)	2
15-1	12	5100011-R380	WASHER, Engine support bracket to insulator stud (CCMI 6028763)	2
	13	5100011-R274	COVER, Cylinder head RH (CCMI 3698821)	1
	14	5100011-R273	COVER, Cylinder head LH (CCMI 3751221)	1
15-1	15	5100011-R187	GASKET, Cylinder head cover (CCMI 2899275)	2
	16	5100011-R382	BOLT AND WASHER, Cylinder head cover (CCMI 6029619)	16
	17	5100011-R268	HEAD, Cylinder (CCMI 3751667)	2
		5100011-R216	GASKET, Cylinder head (CCMI 3751218)	2
		5100011-R269	SCREW, Cylinder head short (CCMI 1739605) (7/16x1-27/32)	10
		5100011-R270	SCREW, Cylinder head long (CCMI 1739606) (7/16x3-7/8)	10
		5100011-R271	PLUG, Cylinder head core (CCMI 3698639)	1
		5100011-R272	PLUG, Cylinder head core (CCMI 2463042) (15/16)	1
	18	5100011-R315	PAN, Oil (CCMI 2806836)	1
		5100011-R316	GASKET, Oil pan (CCMI 2658685)	1
15-1	19	5100011-R168	CLEANER, Crankcase vent inlet air (CCMI 3675442) (to engine E273013, coach 00956)	1
15-1	19	5100011-R398	CLEANER, Crankcase vent inlet air (CCMI 3462094) (engine E273014, coach 00957 and up)	1
	20	5100011-R385	CAP ASSY, Oil filler (CCMI 2946051)	1
		5106274	PAN, Oil fill drip	1
		M14017	SCREW, Drip pan (#10 x 1/2)	2
	21	5100011-R386	VALVE, Crankcase vent (CCMI 3671076)	1
	22	5100011-R173	TUBE, Oil level indicator (CCMI 3527112)	1
		5100011-R301	HOSE, Oil level indicator tube (CCMI 3404646)	1
	23	5100011-R304	PUMP, Engine oil (CCMI 3685652)	1
	24	5100011-R190	INDICATOR, Oil level (CCMI 2658697) (to engine E273013, coach 00956)	1
15-1	24	5100011-R171	INDICATOR, Oil level (CCMI 2402837) (engine E273014, coach 00957 and up)	1
	25	5100011-R325	FILTER, Oil (CCMI 3549957)	1
	26	5100011-R120	PULLEY, Crankshaft (2 groove) (CCMI 3675424)	1
	27	5108691-09	SCREW, Pulley attaching (CCMI 181097)	6
	28	5100011-R018	WASHER, Pulley attaching (CCMI 6022185)	6
	29	5108691-06	SPACER, Crankshaft pulley (CCMI 3675418)	1
15-1	30	5108774	HUB, Crankshaft pulley (CCMI 3675414)	1
	31	5100011-R140	PULLEY, Crankshaft (3 groove) (CCMI 3614377)	1
	32	5100011-R167	PULLEY ASSY, Idler (CCMI 3675650)	1
	33	5108691-13	BOLT, Pulley assy attaching (CCMI 9414182)	2
	34	5108691-15	WASHER, Pulley assy attaching (CCMI 6022191)	2
	35	5100011-R389	DAMPNER, Crankshaft vibration (used with forged crankshaft) (CCMI 3614371) (to engine E273013, coach 00956)	1
15-1	35	5108543-R001	DAMPNER, Crankshaft vibration (used with cast crankshaft) (CCMI 3830482) (engine E273014, coach 00957 & up)	1

REPAIR PARTS LIST

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FIG NO.	ITEM NO.	PART NUMBER	ITEM DESCRIPTION	QTY PER UNIT
			NOTE: Engine with cast crankshaft has letter "E" on the pad located on upper front of cylinder block.	
	36	5100011-R276	SCREW, Dampner to crankshaft (CCMI 1731525)	1
	37	5100011-R278	WASHER, Dampner screw (CCMI 1855561)	1
		5108691-12	SUPPORT, Idler pulley bracket to water pump housing (CCMI 3619545)	1
15-1	38	5100011-R106	BLADE, Engine fan-six blade (CCMI 1074949) (See Group 13)	1
15-1	39	5108691-03	SCREW, Engine fan blade (CCMI 181092) (See Group 13)	4
	40	5108691-05	WASHER, Engine fan blade (CCMI 6027185) (See Group 13)	4
	41	5100011-R119	PULLEY, Fan Driven-2 groove (CCMI 3675423) (See Group 13)	1
	42	5100011-R227	SPACER, Fan to pulley and pulley to pump (CCMI 3675419) (See Group 13)	3
15-1		5100011-R160	HUB, Fan pulley to pump (CCMI 1679147) (See Group 13)	1
	43	5100011-R023	PUMP, Engine water (CCMI 3514162) (See Group 13)	1
	44	5100011-R002	BELT ASSY, Fan drive (matched set) (CCMI 3675433) (See Group 13)	1
15-1	45	5101792-01	ALTERNATOR ASSY, Engine driven (85 ampere) (LN A001-2502AA) (See Group 4)	1
	46	5106268	PULLEY, Alternator 2 groove (See Group 4)	1
	47	5100960-05	BELT ASSY, Alternator and freon compressor (SUP 5101792-13) (GR 8335) (See Groups 4 and 14)	1
	48	5100961-01	COMPRESSOR ASSY, Air conditioning freon (TK 3057-C22-G22) (See Group 14)	1
	49	5100011-R007	PUMP ASSY, Power steering (CCMI 3004799) (See Group 7)	1
	50	5100011-R003	BELT ASSY, Power steering pump (CCMI 3419000) (See Group 7)	1
15-1	51	5100011-R006	PULLEY, Power steering pump (CCMI 2951128) (See Group 7)	1
	52	5100011-R036	STARTER, Engine (CCMI 2095150)	1
	53	M-24528	ADAPTER, Oil pressure hose	1
	54	5107050	HOSE, Oil pressure sending unit	1
	55	M-22289	CLAMP, Oil pressure hose	1
	56	M-24573	ADAPTER, Oil pressure sending unit	1
	57	5101899	SENDING UNIT, Oil pressure (VDO 3625) (See Group 4)	1

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FIG NO.	ITEM NO.	PART NUMBER	ITEM DESCRIPTION	QTY PER UNIT	
NONE			<u>BASIC CHRYSLER I440 ENGINE PARTS</u>		
		5100011-R265	GASKET SET, Engine overhaul - lower (CCMI 3683822)	1	
		5100011-R266	GASKET SET, Engine overhaul - upper (CCMI 3780161)	1	
			<u>CRANKSHAFT</u>		
		5100011-R275	CRANKSHAFT, Engine (forged) (CCMI 3671283) (to engine E273013)	1	
		5108543-R002	CRANKSHAFT, Engine (cast) (CCMI 4006426) (engine E273014 & up)	1	
			NOTE: Engine with cast crankshaft has letter "E" on the pad located on upper front of cylinder block. (See Figure 15-1).		
	NONE		5100011-R277	SLINGER, Crankshaft oil (CCMI 2899530)	1
			5100011-R279	SPROCKET, Crankshaft timing (CCMI 2205568)	1
			5100011-R280	KEY, Crankshaft timing sprocket (CCMI 6029411)	1
		5100011-R399	BEARING, Crankshaft main #1 stud (CCMI 3420003)	1	
		5100011-R400	BEARING, Crankshaft main #2,4,5 stud (CCMI 3420009)	3	
		5100011-R401	BEARING, Crankshaft main #3 stud (CCMI 3004944)	1	
			NOTE: Above bearing available in undersize sets.		
		5100011-R402	CAP, Crankshaft main bearing #1,2,4 (CCMI 1852910)	3	
		5100011-R403	CAP, Crankshaft main bearing #3 (CCMI 1852911)	1	
		5100011-R404	CAP, Crankshaft main bearing #5 (CCMI 2206316)	1	
NONE		5100011-R405	SCREW, Crankshaft main bearing cap (CCMI 1408867)	10	
		5100011-R281	SEAL, Crankshaft rear oil (CCMI 3549394)	2	
		5100011-R282	RETAINER, Crankshaft rear seal (CCMI 1945473)	1	
			<u>CAMSHAFT</u>		
		5100011-R406	CAMSHAFT, Engine (CCMI 3577181)	1	
		5100011-R407	BEARING, Camshaft #1 (CCMI 1821771)	1	
		5100011-R408	BEARING, Camshaft #2 (CCMI 1821772)	1	
		5100011-R409	BEARING, Camshaft #3 (CCMI 1821773)	1	
		5100011-R410	BEARING, Camshaft #4 (CCMI 1821774)	1	
		5100011-R411	BEARING, Camshaft #5 (CCMI 1821775)	1	
	5100011-R412	PLUG, Camshaft rear bearing - convex (CCMI 2463041)	1		
	5100011-R413	PLUG, Camshaft rear bearing - flat (CCMI 2402905)	1		
	5100011-R283	SPROCKET, Camshaft timing (CCMI 2463037)	1		
		<u>TIMING COVER</u>			
	5100011-R284	CHAIN, Engine timing (CCMI 2205569)	1		
	5100011-R285	COVER, Engine timing (w/oil seal) (CCMI 3698614)	1		
	5100011-R286	SCREW W/WASHER, Timing cover (CCMI 180119)	10		
	5100011-R414	INDICATOR, Engine timing (CCMI 2751239)	1		
		<u>CONNECTING RODS AND PISTONS</u>			
	5100011-R415	ROD, Connecting (used with forged crankshaft) (CCMI 2951906) (to engine E273013)	8		
	5108543-R003	ROD, Connecting (used with cast crankshaft (CCMI 4027096) (engine E273014 & up)	8		
		NOTE: Engine with cast crankshaft has letter "E" on the pad located on upper front of cylinder block. (See Fig. 15-1)			
	5100011-R416	BEARING, Connecting rod (STANDARD) (CCMI 1881794)	8		
	5100011-R417	PISTON W/PIN, Engine (STANDARD) (CCMI 3579047)	8		
	5100011-R418	RING SET, Engine piston (STANDARD) (CCMI 3780123)	1		
		NOTE: Bearing, pistons, and rings available in oversize sets.			

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FIG NO.	ITEM NO.	PART NUMBER	ITEM DESCRIPTION	QTY PER UNIT
		5100011-R419	VALVES AND ROCKERS	
		5100011-R420	VALVE, Engine intake (CCMI 3751617)	8
		5100011-R288	VALVE, Engine exhaust (CCMI 3751622)	8
		5100011-R289	NOTE: Valves available in oversizes.	
		5100011-R290	SHIELD, Valve stem oil (CCMI 2121686)	16
		5100011-R291	SEAL, Intake valve guide (CCMI 3671616)	8
		5100011-R292	SPRING, Intake valve (CCMI 2658471)	8
		5100011-R293	SPRING, Exhaust valve (CCMI 3751694)	8
		5100011-R294	RETAINER, Intake valve (CCMI 2843165)	8
		5100011-R295	RETAINER, Exhaust valve (CCMI 1551902)	8
		5100011-R296	LOCK, Valve retainer (CCMI 381875)	16
		5100011-R421	SPACER, Valve retainer (CCMI 1859144)	16
		5100011-R422	SILENCER, Valve tappet chamber front (CCMI 1879747)	1
		5100011-R423	TAPPET, Valve (STD) (CCMI 3004647)	16
		5100011-R424	NOTE: Above item available in oversize.	
		5100011-R425	ROD, Valve tappet (CCMI 2899595)	16
		5100011-R426	ROCKER, Valve (right side-engine) (CCMI 3004718)	8
		5100011-R427	ROCKER, Valve (left side-engine) (CCMI 3004719)	8
		5100011-R428	NOTE: Right and left sides mean from flywheel end looking toward fan end of engine. Engine fan faces rear of coach.	
		5100011-R429	SPACER, Valve rocker (CCMI 1737756)	8
		5100011-R219	SHAFT, Valve rocker (CCMI 2465850)	8
		5100011-R299	RETAINER, Rocker shaft (end and center) (CCMI 2463282)	6
		5100011-R155	RETAINER, Rocker shaft (intermediate) (CCMI 2463283)	6
		5100011-R300	PLUG, Rocker shaft (CCMI 1324268)	4
		5100011-R365	INTAKE AND EXHAUST MANIFOLDS	
		5100011-R250	MANIFOLD, Engine exhaust (CCMI 3769109)	1
		5100011-R366	MANIFOLD, Engine intake (CCMI 3698585)	1
		5100011-R215	PLUG, Intake manifold (CCMI 1859127)	1
		5100011-R164	REINFORCEMENT, Intake manifold gasket (CCMI 1851665)	2
		5100011-R315	NUT, Exhaust manifold stud (CCMI 6030310)	16
		5100011-R316	STUD, Exhaust manifold (CCMI 3614292)	4
		5100011-R317	STUD, Exhaust manifold (CCMI 6030070)	12
		5100011-R318	GASKET, Exhaust manifold (CCMI 3751723)	2
		5100011-R319	GASKET, Intake manifold (CCMI 3671933)	1
		5100011-R320	OIL PAN	
		5100011-R321	PAN, Engine oil (CCMI 2806836)	1
		5100011-R322	GASKET, Engine oil pan (CCMI 2658685)	1
		5100011-R323	BOLT AND WASHER, Oil pan (5/16-18 x 13/16) (CCMI 1947953)	4
		5100011-R324	BOLT AND WASHER, Oil pan (5/16-18 x 1/2) (CCMI 2121573)	8
		5100011-R325	BOLT AND WASHER, Oil pan (5/16-18 x 11/16) (CCMI 2121577)	4
		5100011-R326	BOLT, AND WASHER, Oil pan (5/16-18 x 15/16) (CCMI 1343212)	4
		5100011-R327	PLUG, Oil pan drain (CCMI 2125890)	1
		5100011-R328	GASKET, Oil pan drain plug (CCMI 2268513)	1
		5100011-R329	BAFFLE, Oil pan drain plug (CCMI 3751236)	1
		5100011-R330	OIL PUMP AND DISTRIBUTOR DRIVE	
		5100011-R331	PUMP, Engine oil (CCMI 3685652)	1
		5100011-R332	GASKET, Oil pump cover - large (CCMI 2268921)	1
		5100011-R333	GASKET, Oil pump cover - small (CCMI 2084355)	1
		5100011-R334	SHAFT AND ROTOR, Oil pump (CCMI 2084354)	1
		5100011-R335	BODY, Oil pump (inc rotor, shaft, and seals) (CCMI 3685653)	1
		5100011-R336	SEAL, Oil pump body (CCMI 1855328)	1
		5100011-R337	SHAFT, Oil pump and distributor drive (CCMI 1739604)	1
		5100011-R338	BUSHING, Oil pump shaft (CCMI 2863584)	1
		5100011-R339	PLUNGER, Oil pressure relief valve (CCMI 2463541)	1
		5100011-R340	SPRING, Oil pressure relief valve (CCMI 2406677)	1
		5100011-R341	CAP, Oil pressure plunger (CCMI 618621)	1
		5100011-R342	GASKET, Oil pressure valve (CCMI 618622)	1
		5100011-R343	STRAINER, Oil pickup (CCMI 2806838)	1
		5100011-R344	ADAPTER, Engine oil filter (CCMI 1739619)	1
		5100011-R345	FILTER, Engine oil (CCMI 3549957)	1
		5100011-R346	BASE, Engine oil filter (CCMI 2465091)	1



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