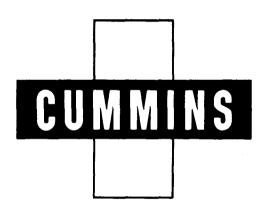
## VAL-VALE

V6-140 • V8-185

PRELIMINARY



# PARTS BOOK

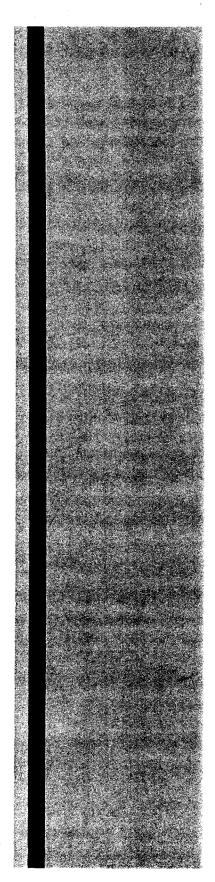
BULLETIN NO. 967000

**CUMMINS ENGINE COMPANY, INC., COLUMBUS, INDIANA** 



#### INSTRUCTIONS

#### for ordering parts



Genuine Cummins Parts and service facilities are world-wide. There are more than 900 Cummins Sales and Service locations in the principal cities of the United States and Canada, and more than 200 Sales and Service locations situated elsewhere throughout the free world. Each distribution outlet is thoroughly equipped with technical data, factory-trained mechanics, modern equipment and a full, adequate stock of Genuine Cummins Parts.

For quicker and better service, your parts requirements should be ordered from your nearest authorized Cummins Distributor or Dealer. At any of the locations prompt, intelligent, courteous service is a basic trademark. Each is ready and eager to help in every possible way through personal contact or through the mail — at your convenience.

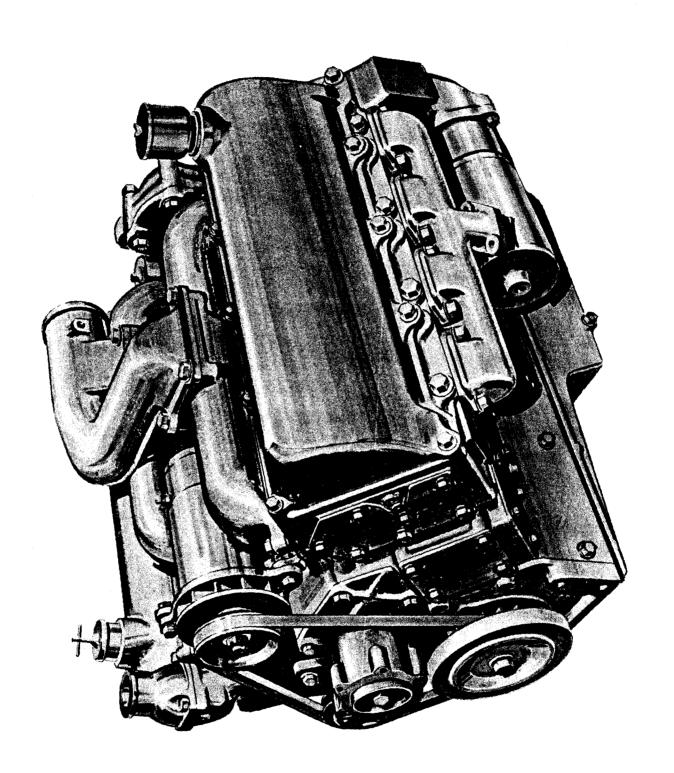
The satisfactory ordering and receiving of parts by the purchaser is greatly dependent upon the proper use of available information. In order that all avoidable errors may be eliminated, the following instructions are offered as the purchaser's guide:

- 1. Write your order clearly, using a typewriter if possible.
- Be sure to list the correct part number. If in doubt as to the correct part number, state the model and serial number of the engine on which the part is to be used. Part numbers are usually located in various places on the part itself.
- When possible, arrange your purchase order in part number numerical sequence.
- 4. Always specify shipping instructions "Best Way" is satisfactory if you have no preference.
- 5. State your company name and shipping address clearly.

Genuine Cummins Parts mean QUALITY! They're designed and engineered to fit best in your Cummins Diesel. Each part is made of the highest quality material — on the most accurate of machines — by the top craftsmen of the trade.

You can be sure a Genuine Cummins Part will fit better — do the job better — lessen the chances of costly breakdown. When you buy replacement parts, buy quality. Buy Genuine Cummins Parts!

YOU OWN THE BEST . . . REPAIR WITH THE BEST



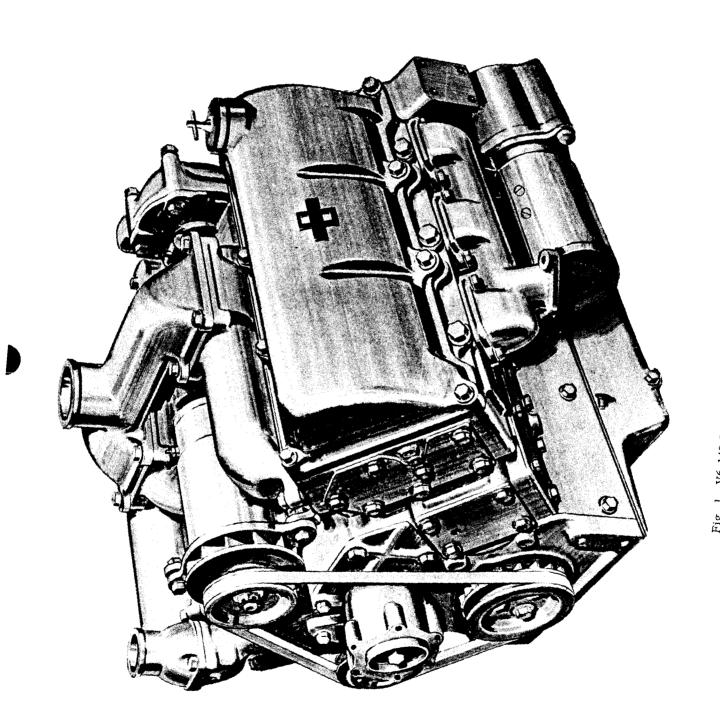


Fig. 1 V6-140 Diesel Engine - Starter side

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Lubricating Oil			_	-	_	_	_	_	_	-	_	_	_	_	21
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Fuel Pump I		per	. Sh	utd	owi	n V	alve	. F	വലി	The	hin	σ			10
and Injector		-1	, ~					, -			~	6			

Illust. Ref. No.	Cummins Part No.	Part Name	No. Req. Per Eng.
Group A	All Models		v6 v8
	BM-79995 BM-79996 160424 152540 152550 151763 154219 107712 S-137 S-112 159401 100973 150073 150118 70645 68568 120830 70674 153270 S-908 S-910-B S-604 160423 153411 156580 152948 152947 151106	Block, cylinder (152158) Block, cylinder (157791) Bolt, main bearing cap *Bushing, camshaft  **Bushing, camshaft  Capscrew, cylinder head (short)  Capscrew, cylinder head (long)  Capscrew, main bearing, side locking  Capscrew, water header cover  Capscrew, water header cover  Cover, water header  Dowel, ring, cylinder head to block  Dowel, gear housing to block (Master)  Dowel, gear housing to block (Diamond)  Dowel, front cover to block (Diamond)  Dowel, front cover to block (Diamond)  Dowel, rear main bearing cap  Dyna-seal, main bearing capscrew  Gasket, water header cover  Plug, pipe  Lockwasher, water header cover  Washer, main bearing cap  Washer, cylinder head capscrew  Liner, cylinder  Packing, cylinder liner  Ring, liner sealing  Dowel, gear housing to block (.015* 0/S)  (Diamond)	1 8 10 2 2 2 3 20 26 8 10 8 10 2 2 1 14 1 1 1 1 1 2 8 10 1 2 5 14 8 10 28 36 6 8 6 8
	151107 151108	Dowel, gear housing to block (.030 0/S) (Diamond)  Dowel, gear housing to block (.040 0/S)	As
	151103	(Diamond) Dowel, gear housing to block (.015* 0/S) (Master)	•••
	151104 151105	Dowel, gear housing to block (.030" 0/S) (Master)  Dowel, gear housing to block (.040" 0/S) (Master)	Req≀d.

<sup>\*</sup> V6 l,4 position - V8 l,5 position

<sup>\*\*</sup> V6 2,3 position - V8 2,3,4 position

Illust. Ref. No.	Cummins Part No.	Part Name		Req. Eng.
Group A	All Models		٧6	78
	162184 161383 156954 159043 107947	Cover, water header (L.B.) Cover, water header (R.B.) Cover, water header (L.B.) Cover, water header (R.B.) Cock, drain Mounting Parts	1 2	1 1 2
	S-120 S-109 15149014 1514906 157039 S-6014	Capscrew, cover to block Capscrew, cover to block Gasket, cover to block (L.B.) Gasket, cover to block (R.B.) Gasket, cover to block Lockwasher, cover to block	28 1 1 26	36 2 <b>36</b>

Mounts on cylinder block in place of oil cooler.

Illust. Ref. No.	Cummins Part No.	Part Name	No. Req. Per Eng.
Group A	All Models		<b>v</b> 6 v8
Ref. No.	Part No.  All Models  BM-79990 BM-90000 152310 152320 152290 152300 152447 152842 BM-79991 BM-90001 152311 152321 152291 152301 152447 152842 BM-79992 BM-90002 152312 152302 152447 152842 BM-79993 BM-90003 152313 152323 152393 152303	Bearing set, main (std.) Bearing set, main (std.) Bearing, main (No. 1,2,3, upper) Bearing, main (No. 1,2,3, lower) *Bearing, main *Bearing, main *Bearing, crankshaft thrust (lower) Half-ring, crankshaft thrust (upper) Bearing set, main (.010) Bearing set, main (No. 1,2,3, upper) Bearing, main (No. 1,2,3, lower) *Bearing, main *Bearing, main Half-ring, crankshaft thrust (lower) Half-ring, crankshaft thrust (upper) Bearing set, main (.020) Bearing set, main (.020) Bearing, main (No. 1,2,3, upper) Bearing, main (No. 1,2,3, lower) *Bearing, main Half-ring, crankshaft thrust (lower) Half-ring, crankshaft thrust (upper) Bearing set, main (.030) Bearing set, main (.030) Bearing set, main (.030) Bearing, main (No. 1,2,3, upper) Bearing, main (No. 1,2,3, lower) *Bearing, main *Bearing, main	V6 V8  1 1441122 1 1441122 1 1441122 1 14411121 1 3311221 1 3311
	152447 152842 BM-79994 BM-90004 152324 152324 152304 152447 152842	Half-ring, crankshaft thrust (lower) Half-ring, crankshaft thrust (upper) Bearing set, main (.040) Bearing set, main (.040) Bearing, main (No. 1,2,3, upper) Bearing, main (No. 1,2,3, lower) *Bearing, main *Bearing, main Half-ring, crankshaft thrust (lower) Half-ring, crankshaft thrust (upper)	2 2 2 2 1 1 3 4 1 1 1 1 2 2 2 2

<sup>\*</sup> Use V6-140, No. 4 position. V8-185, No. 5 position.

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#### CRANKSHAFT

Illust. Ref. No.	Cummins Part No.	Part Name		Req. Eng.
Group A-	-All Models		<b>v</b> 6	8
	BM_78779	Crankshaft assembly	1	
	BM-79710	Crankshaft assembly		1
	159970	Crankshaft	1	
	156340	Crankshaft		1
	151456	Gear, crankshaft	1	1
	144131	Key, gear	1	1
	156564	Capscrew, flywheel to crankshaft	6	6
	142207	Dowel, flywheel	2	
	108709	Capscrew, pulley	5	6
	S-610	Lockwasher, pulley	5	6
	160521	Pulley, crankshaft (low mount fan)	1	
	156572	Pulley, crankshaft (low mount fan)	1	
	160837	Pulley, crankshaft (high mount fan)	1	
	157638	Slinger, oil	1	1

VIBRATION DAMP	V	₹A	A	Т	Ι	0	N	D	Α	M	P	Ε	R
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Page 5

Illust. Cummins No. Req. Ref. No. Part No. Part Name Per Eng. V6 V8 Group A--All Models Damper, vibration (158411) Capscrew, damper BM-79712 1 6 6 S-149 S-608 Lockwasher BM\_79826 Damper, vibration (158926)

NOTE: Damper has two (2) Groove Pulley.

V6-140, V8-185

#### CONNECTING RODS

Illust. Ref. No.	Cummins Part No.	Part Name		Req. Eng.
Group A	All Models		<b>v</b> 6	8V
	BM-78784	Rod, connecting (157648)	. 6	8
	157626	Bolt, connecting rod	12	16
	152530	Bushing, piston pin	12	16
	152838	Nut, connecting rod bolt	12	16
	152839	Lockplate, connecting rod nut	12	16
	157620	Bearing, connecting rod (std.)	12	16
	157621	Bearing, connecting rod (.010)	Us	е
	157622	Bearing, connecting rod (.020)	۸ ــ	
	157623	Bearing, connecting rod (.030)	As	<b>i</b>
	157624	Bearing, connecting rod (.040)	Re	q¹d

Illust. Ref. No.	Cummins Part No.	Part Name		Req.
Group A	All Models		٧6	<b>8</b> V
	BM-90020	Piston assembly (std.)	6	8
	152180	Piston (smooth skirt, aluminum,		
		taper piston pin boss)	6	8
	15 <b>1</b> 770	Pin, piston	6	8
	157978	Ring, snap	12	16
	BM-90022	Piston assembly (.020)	6	8
	152182	Piston	6	8
	151770	Pin, piston	6	8
	<b>1</b> 57978	Ring, snap	12	16
	BM-90023	Piston assembly (.030)	6	8
	152183	Piston	6	8
	151770	Pin, piston	6	8
	157978	Ring, snap	12	16
	BM-90024	Piston assembly (.040)	6	8
	152184	Piston	6	8
	151770	Pin, piston	6	8
	157978	Ring, snap	12	16
	BM-79470	Ring set, piston (std.)	1	
	BM-90010	Ring set, piston (std.)	_	1
	152460	Ring, compression (top)	6	8
	152470	Ring, compression	6	8
	152980	Ring, oil	6	8
	BM-79472	Ring set, piston (.020)	ĭ	Ū
	BM-90012	Ring set, piston (.020)	_	ı
	152462	Ring, compression (top)	6	8
	152472	Ring, compression	6	8
	152982	Ring, oil	6	8
	BM-79473	Ring set, piston (.030)	ĭ	· ·
	BM-90013	Ring set, piston (.030)		1
	152463	Ring, compression (top)	6	8
	152473	Ring, compression	6	8
	152983	Ring, oil	6	8
	BM-79474	Ring set, piston (.040)	1	U
	BM-90011	Ring set, piston (.040)	ı	1
	152464	Ring, compression (top)	6	8
	152474	Ring, compression	6	8
	152984	Ring, oil	6	8
	= -	3) ·	J	U

#### FRONT COVER

Illust. Ref. No.	Cummins Part No.	Part Name		Req. Eng.
Group A	All Models		V6	V8
	S-112 156847 70645 68568 156995 S-604 141743	Capscrew, front cover Cover, front Dowel, front cover (Master) Dowel, front cover (Diamond) Casket, front cover Lockwasher, front cover Seal. oil	4 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Illust. Ref. No.	Cummins Part No.	Part Name	No. Req. Per Eng.
Group A-	-All Models		v6 v8
	159370 160840 156760 159670 151458 159367 5-316	Camshaft (low mount fan) Camshaft (high mount fan) Camshaft (low mount fan) Camshaft (high mount fan) Gear, camshaft Bearing, camshaft thrust Key, fan drive	1 1 1 1 1 1 1 1
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Mounting Parts	<b>-</b>
	S-115 68908-A	Capscrew, thrust bearing Lockplate, thrust bearing	2 2 2 2
		CAMSHAFT KEYS	
	162055 162056 161154 162057 162058 162059	Key, camshaft (.006 offset) Key, camshaft (.012 offset) Key, camshaft (.019 offset) Key, camshaft (.024 offset) Key, camshaft (.030 offset) Key, camshaft (.036 offset)	

Illust. Ref. No.	Cummins Part No.	Part Name		Req. Eng.
Group A	All Models		V6	V8
	S-103-D	Capscrew, camshaft front cover	6	6
	152395	Cover, camshaft (low mount fan)	1	1
	157867	Cover, camshaft (high mount fan)	1	1
	153429	Gasket, camshaft front cover	1	1
	S-316	Key	1	1
	S-604	Lockwasher, camshaft front cover	6	6
	152892	Seal, camshaft front cover oil	1	1
	S-602	Washer, camshaft front cover	6	6
	161358	Cover, camshaft (crankshaft mounted fan)	1	

v6-140, v8-185	PUSH RODS AND TAPPETS	Page 11
Illust. Cummins Ref. No. Part No.	Part Name	No. Req. Per Eng.
Group AAll Models	5	v6 v8
BM-78880 111272 114223 154571 BM-78879 BM-78882 108186 153677 153679 BM-79919	Tappet, valve (162743) Lockwire, tappet Pin, valve tappet roller Roller, valve tappet  Tappet and rivet Rod, valve and injector push	6 8 6 8 6 8 6 8 12 16 12 16 12 16 12 16 12 16 12 16 12 16
156439 156438	Mounting Parts  Spring, injector tappet  Spring, valve tappet	6 8 12 16

Illust. Cummins Ref. No. Part No. Part Name	No. Peq. Per Eng.
Group AV6-140	v6 v8
154109 Bracket, rocker lever shaft	6
154108 Bracket, rocker lever shaft	2
BM-78767 Lever, exhaust valve rocker (153983) (cast steel)	6
BM-78766 Lever and bushing (153983)	6
152937 Bushing, valve rocker lever	6
124333 Nut, adjusting screw	6
124326 Screw, adjusting	6
EM-78769 Lever, intake valve rocker (153982) (cast steel)	6
BM-78768 Lever and bushing (153982)	6
152937 Bushing, valve rocker lever	6
124333 Nut, adjusting screw	6
124326 Screw, adjusting	6
BM-78771 Lever, injector rocker (153981) (cast steel)	6
BM-78770 Lever and bushing (153981)	6
152936 Bushing, lever	6
124333 Nut, adjusting screw	6
124326 Screw, adjusting	6
BM-78772 Shaft, rocker lever (152200)	2
139412 Plug, rocker shaft	4
67282 Lockplate, locating screw	2
117183 Screw, rocker shaft locating	2
Group BV8-185	
154109 Bracket, rocker lever shaft	8
154108 Bracket, rocker lever shaft	2
BM-78767 Lever, exhaust valve rocker (153983)	8
BM-78766 Lever and bushing (153983) (Cast iron)	8
152937 Bushing, lever	8
124333 Nut, valve rocker	8
12'1326 Screw, adjusting	8
BM-78769 Lever, intake valve rocker (153982)	8
BM-78768 Lever and bushing (153982) (Cast iron	
152937 Bushing, lever	8
124333 Nut, valve rocker	8
124326 Screw, adjusting	8

Illust. Ref. No.	Cummins Part No.	Part Name		Req. Eng.
Group B	.V8_185 - Cont	o'd.	<b>v</b> 6	8V
	BM-78771	Lever, injector rocker (153981)		8
	BM-78770	Lever and bushing (153981) (Cast iron)		8
	152936	Bushing, lever		8
	124333	Nut, injector rocker		8
	121,326	Screw, adjusting		8
	BM-79976	Shaft, rocker lever (156857)		2
	161825	Plug		4
	67282	Lockplate, locating screw		2
	117183	Screw, rocker shaft locating		2

Illust. Ref. No.	Cummins Part No.	Part Name		Req. Eng.
Group A	-All Models		٧6	v8
	BM-78777 BM-79732 S-2037 43696-A 155441 153287 162138 151079 154078 BM-78776 BM-79731 154220 154946 154390 S-995 S-911-B S-910-B 70459 154391 154392 1514393 1514394	Head assembly, cylinder (152140) Head assembly, cylinder (157780) Half-collet, valve "O" ring Retainer, valve spring Seal, intake valve Spring, valve Valve, exhaust Valve, intake Head assembly, cylinder (152140) Head assembly, cylinder (157780) Guide, crosshead Guide, valve Insert, exhaust valve seat Plug, pipe Plug, pipe Plug, pipe Plug, fuse Sleeve, injector Insert, exhaust valve seat (.010) Insert, exhaust valve seat (.020) Insert, exhaust valve seat (.030) Insert, exhaust valve seat (.040) Mounting Parts	2 48 4 24 12 21 12 2 12 14 12 6 8 Re	
	151763 154219 156879 100973 153767 EM-78774 EM-79721 156081 156674 156082 156146 131168 S-273 147389 EM-78775 S-1048-A S-1022-A	Capscrew, cylinder head Capscrew, cylinder head Crosshead, valve Dowel, ring, cylinder head to block Dowel, ring, cylinder head Gasket, cylinder head (156080)(.050 thick) Gasket, cylinder head (156673)(.050 thick) Grommet Grommet, push rod Grommet, oil and water Grommet, push rod opening Retainer, grommet Nut, adjusting screw Screw, adjusting Tube, vent (153882) Connector, tube Nut, tube Washer, capscrew	20 8 12 4 2 10 26 22 12 28 8 8 28	26 10 16 4 12 2 34 34 16 16 2 8 8 36

Illust. Ref. No.	Cummins Part No.	Part Name		Req. Eng.
Group A-	-All Models		<b>v</b> 6	8V
	101322	Cap, oil filler	1	1
	BM-78787	Cover and tube (L.B.)(filler or breather at rear)	1	
	154160	Cover, cylinder head	1	
	101264	Tube, oil filler	1 1	
	154160	Cover, cylinder head	ī	
	BM-79715	Cover and tube (L.B.)		1
	156675	Cover, cylinder head		1
	101264	Tube, oil filler	ı	
	156675	Cover, cylinder head		1
	161263	Cover, cylinder head (L.B.)(filler and breather at front)	1	
	161264	Cover, cylinder head (plain)	1	
	151065	Plate, instruction	1 1	
	159835	Plate, instruction		1
	S <b>-</b> 2286	Screw, plate	4	4
		Mounting Parts		
	108707	Capscrew, cover to head	16	20
	154019	Gasket, cover to head	2	
	157018	Gasket, cover to head		2
	S-6011	Lockwasher, cover to head	16	20
	S-602	Washer, cover to head	16	20

Illust. Ref. No.	Cummins Part No.	Part Name		Req.
Group A	-All Models		V6	ν8
	154272 155997 123716 125015 125019 155998 125017 125016	Breather, crankcase Cover, breather Element (FA-250) Gasket, washer Gasket, cover Housing, filter Nut, wing, cover Washer, plain, cover	1 1 1 1 1 1	1 1 1 1 1 1
Group B-	-All Models  156779  156781  155997  123716  125015  125019  150663  150662  125016	Breather, crankcase (optional) Body, breather Cover, breather Element, breather (FA-250) Gasket, wing nut Gasket, cover Plug, stopper "T" handle Washer, cover	1 1 1 1 1 1 1	1 1 1 1 1 1

Illust. Ref. No.	Cummins Part No.	Part Name		Req. Eng.
Group AAll	Models		v6	<b>v</b> 8
	S-109 S-104 S-126	Capscrew, plate to block Capscrew, cover to block Capscrew	10 4 2	10 4 5
	S-11:1 10870 <b>7</b> 9089	Capscrew, cover to block Capscrew, gear housing and flywheel housing Dowel, gear housing to fuel pump front cover (Master)	1 2 1	4 5 1 3 1
	153807	Dowel, gear housing to fuel pump front cover (Diamond)	1	1
	154908 154907 BM-78823	Gasket, gear housing to plate Gasket, plate to block Housing, gear and flywheel (light weight starter)(157331)	1 1 1	1 1 1
	BM-90084	Housing, gear and flywheel (heavy weight starter) (154979)	1	1
	157639 68909 S_604 154961 152890	Shield, oil slinger Lockplate, plate to block Lockwasher, gear housing Plate, gear housing Seal, oil	1 10 13 1	1 10 23 1
	S <b>-</b> 602	Washer, plain	13	23

Oversize Gear Housing Dowel part numbers shown in Cylinder Block Group.

Illust. Ref. No.	Cummins Part No.	Part Name		Req. Eng.
Group A	-All Models		V6	8V
	S-11:9-A	Capscrew	1	1
	S-120	Capscrew	l	1
	S-103-D	Capscrew	6	8
	S-184-B	Capscrew	3	1 8 <b>3</b> 3
	S-119	Capscrew	3 3 1	3
	153404	Gasket, oil pan	1	-
	157017	Gasket, oil pan		l
	67946	Gasket, drain plug	2	2
	S-605	Lockwasher	6	6
	S-604	Lockwasher, pan to block	8	12
	152448	Pan, oil (rear sump)(standard)	1	
	<b>1</b> 56856	Pan, oil (rear sump)(standard)		1
	110907	Plug, oil pan drain	2	2
	S-915-A	Plug, pipe	2	2
	S-911-B	Plug, pipe	1	1
	S <b>-</b> 626	Washer, plain	6	6
	S-602	Washer	8	12

Illust. Ref. No.	Cummins Part No.	Part Name	_	Req. Eng.
Group A	All Models		76	8V
	158293	Dipstick	1	1
	158592	Tube, dipstick	1	1
	159272	Tube, dipstick	1	
	BM-79261	Tube and clamp, dipstick	l	1
	159389	Tube, dipstick (mounts behind R.B. rocker cover)	1	
	161918	Tube, dipstick (mounts at side of R.B. rocker cover with rear sump pan)	1	1
		Mounting Parts		
	S-109	Capscrew	1	
	S-115	Capscrew	ī	1
	158381	Clip	ī	ī
	S-604	Lockwasher, clip	ī	ī
	S-605	Lockwasher	ī	
	1585 <b>11</b>	Clamp, tube	ī	
	159390	Support, tube clip (use with 159389)	1	

Illust. Cummins Ref. No. Part No.	Part Name	No. Req. Per Eng.
Group A ModelV6-140		v6 v8
BM_78868 BM_79989 68586 S_107 S_134 BM_78863 157844 158170 S_16247 161013 S_670 151832 151629 BM_78864 126457 68908_A 152804 155097	Pump, lubricating oil Body and bushing(157811) Bushing, drive shaft Capscrew, cover to body Capscrew, cover to body Cover and tube (157813) Gasket, cover to body Plunger, pressure regulator Ring, snap Spring, plunger Washer, plain Gear, lubricating pump drive (main) Gear, lubricating pump drive Gear, lubricating pump idler (151630) Bushing, idler gear Lockplate, cover to body Shaft, idler Shaft, drive Mounting Parts	1 2 4 2 1 1 1 1 1 1 1 6 1
S_112 68908	Capscrew, pump to block Lockplate, pump to block	3 3
Group B ModelV8-185  Same as Group A except	parts shown below:	
BM-79925 BM-90162 BM-79921 68588 BM-79922 156961 156962	Pump, lubricating oil Body and bushing (156881) Cover and tube (160386) Gear, lubricating pump drive Gear, lubricating pump idler (160308) Shaft, drive Shaft, idler	1 1 1 1 1

Illust. Ref. No.	Cummins Part No.	Part Name		Req. Eng.
Group A-	-All Models		V6	8V
	BM-78871 156699  153525 BM-78870 156708 156707 8265 S-910-B S-16245 153518 153519 153521 153520 156562 156617 S-910-B 156676 153524 S-689	Filter, lubricating oil Cartridge Gasket, cartridge Disc, filter Can, filter Bolt, center Can, filter Gasket, bolt Plug, pipe Ring, snap Seal, bolt Spring, cartridge Support, cartridge Washer, bolt Head, filter Ring, sealing, head Plug, pipe, head Ring, snap, disc Spring, by-pass Washer, disc		
	S-148-C 105831 S-165 S-194 156778 S-604 S-602 127362 161265 161266	Capscrew, filter to block Gasket, filter to block Lockwasher, filter to block Washer, filter to block Washer, filter to block Washer, flat Block, junction (use remote mounted filter) Gasket, junction block	2 2 2 1 1 7 5 2 1	2 2 1 7 5 2 1

Illust. Ref. No.	Cummins Part No.	Part, Name		Req. Eng.
Group A	-All Models	(LOW MOUNT FAN)	٧6	87
	BM-78827 70171 115512 152297 BM-78826 143913 135079 160523 70183 160586 144306 160522 153196	Pump, water Bearing, ball Bearing, ball Body, water pump Impeller, water pump (153032) Film, bonding Seat, water pump (Impeller ceramic) Pulley, water pump Retainer, bearing Ring, retaining Seal, water pump Shaft, water pump Washer, bearing	1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1
Group E-	S-911-B S-915-A 70885 108707 153414 S-604	Plug, pipe Plug, pipe Belt, water pump Capscrew, water pump Gasket, water pump to block Lockwasher, pump to block	1 1 1 4 1	1 1 1 1 1 1
	BM <b>-</b> 152297 160898	Pump, water (part number not released) Body, water pump Pulley, water pump		1 1 1

Illust. Ref. No.	Cummins Part No.	Part Name		Req. Eng.
Group A	All Models	(HIGH MOUNT FAN)	V6	v8
	BM-79313 70171 115512 152297 BM-78826 143913 135079 S-915-A S-911-B 160907 160586 144306 160522 153196	Pump, water Bearing, ball Bearing, ball Body, water pump Impeller (153032) Film, bonding Seat, water pump impeller (ceramic) Plug, pipe Plug, pipe Pulley, water pump Ring, retaining Seal, water pump Shaft, water pump Washer, bearing Mounting Parts		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	108707 153411; S-604; S-915-A S-911-B	Capscrew, water nump to block Gasket, water pump to block Lockwasher, water pump to block Plug, pipe Plug, pipe	4 1 4 1	1 4 1

#### FAN HUB

Illust. Cummins Ref. No. Part No. Part Name		Part Name		Req. Eng.
Group AAll	Models	(LOW MOUNT)	<b>v</b> 6	<b>8</b> V
	BM-78783	Hub, fan (156574, 156573)	1	1
		Mounting Parts		
	S-100-A S-609 153799	Capscrew Lockwasher Washer, fan hub	1 1 1	1 1 1
		(HICH MOUNT)		
	BM-79315 143116 116759 143108 159669 67532 146650 S-510 S-911-B 106276 149369 146651 67526 66912-1D 143085	Hub, fan Bearing Bearing Gasket Pulley, hub Nut Nut Pin Plug, pipe Seal, oil Shaft Washer, clamp Washer Screw, fan adjusting Spacer (1/4")	1 1 1 1 1 2 1 1 2 1 1	1 1 1 1 1 2 1 2 1
	146653 154805	Spacer (3/4") Belt, fan (matched set)	2	1 2

Illust. Ref. No.	Cummins Part No.	Part Name		Req. Eng.
Group A	Group AAll Models			<b>V8</b>
	158217 S-112 S-112 S-109 108707 S-1014 13828-B BM-78808 BM-78809 153056 157290 157290 157290 153131 1537014 156378 S-6014 9539-A 152513 1617514 152398 152398 152397 S-915-A S-908 111333	Bracket, lifting Capscrew, cover Capscrew Capscrew Capscrew Capscrew Clamp, hose Connection, water crossover (L.B.) Connection, water crossover (R.B.) Cover, thermostat housing Gasket, thermostat housing to cylinder head Gasket, cover plate to cylinder head Gasket, cover to thermostat housing Gasket, water crossover (L.B.) Gasket, water crossover (R.B.) Lockwasher Hose Housing, thermostat Plate, cylinder head cover (R.B. rear) Plate, cylinder head cover (L.B. front) Plate, cylinder head cover (L.B. front) Plug, pipe Plug, pipe Thermostat (160°-175°)	2 2 5 1 2 1 2 1 1 1 1 2 2 7 1 1 1 1 1 1 1 1 1	2 2 5 1 2 1 1 1 1 2 2 7 1 1 1 1 1 1 1 1 1 1 1
	158226	Thermostat (glow plug) (optional)	i	i

Page 26 AIR INTAKE MANIFOLD AND COVER

Illust. Ref. No.	Cummins Part No.	Part Name		Req. Eng.
Group A-	-All Models		٧6	87
	153641	Manifold, intake	2	
	156618	Manifold, intake (std.)		2
	156619	Manifold, intake (optional)(same as 156618 except has boss and 5/16" hole-tag	ped)	2
	160508	Plate, push tube cover (L.P.)(low mounted fan)	l'	
	160509	Plate, push tube cover (R.B.)		1
	159267	Plate, push tube cover		1 2
		Mounting Parts		
	S-174-B	Capscrew, manifold to cover	12	16
	S <b>-1</b> 10	Capscrew	17	36
	160510	Gasket, plate	2	
	157015	Gasket, plate		2
	154415	Gasket, intake manifold	2	
	156996	Gasket, intake manifold		2
	S-604	Lockwasher	12	16
	S-605	Lockwasher	17	36
	S-602	Washer, plain	17	36
	S-626	Washer, plain	17	36

Illust. Ref. No.	Cummins Part No.	Part Name		Req. Eng.
Group A	-All Models		V6	<b>8</b> V
	161029 156670	Connection, air crossover Connection, air crossover	1	1
	155306	Connection, air inlet (L.B.)(optional)	1	ī
		Mounting Parts		
	S-103-D	Capscrew, connection	8	8
	153711	Gasket, air connection	2	2
	S-60l <sub>4</sub>	Lockwasher, connection	8	8
	66030	Plug, pipe	1	1
	S-602	Washer, plain, connection	8	8
	S-932-B	Nipple, pipe		ı
	9 <b>0</b> 56	Washer		ı

#### EXHAUST MANIFOLD

Illust.	Cummins				$Req_{ullet}$
Ref. No.	Part No.	Part	Name	Per	Eng.
Group A	All Models			v6	<b>v</b> 8
	152918	Manifold,	exhaust (std)(front down)	2	
	152919		exhaust (same as 152918 except	2	
		has 7/16"	hole - tapped)	2	
	156681	Manifold,	exhaust (std)(center outlet)		2
	156682		exhaust (optional)(same as		
		156681 ex	cept has 7/16" hole)		2
	161486		exhaust (L.B.)	1	
	161487	*Manifold,	exhaust (R.B.)	1	
		Mounting 1	Parts		
	S-172-B	Capscrew,	manifold to head	12	16
	153430	•	xhaust manifold	6	8
	109003	Lockplate	, manifold to head	12	16
	157245	Gasket, e	xhaust manifold outlet	2	2
	<b>1</b> 583 <b>51</b>	Flange, e	xhaust outlet	2	2

<sup>\*</sup> Outlet Front and Down.

Illust. Ref. No.	Cummins Part No.	Part Name		Req. Eng.
Group AAll Models		(LESS COMPRESSOR)	<b>v</b> 6	v8
	BM-79295 151457 BM-79294 147610 155325 140896 BM-79293 70755	151457 Gear, drive  BM-79294 Housing, fuel pump (159155)  147610 Bushing  155325 Shaft, fuel pump drive  140896 Seal, oil  BM-79293 Pulley, drive (159153)	1 1 2 1 1 1	1 1 2 1 1
	S-174-B S-112-B 153433 S-604	Mounting Parts  Capscrew  Capscrew  Gasket  Lockwasher	2 2 1 4	2 2 1 4

Illust.	Cummins	The set Manua	No. Req.
Ref. No.	Part No.	Part Name	Per Eng.
Group A-	-All Models	(7 1/4" C. F. M.)	v6 v8
	BM-78902	Compressor, air	1 1
	S-155-A	Capscrew, head to crankcase	4 4
	BM-78899	Crankcase, compressor (152663)	īī
	147610	Bushing, crankshaft	īīī
	152780	Crankshaft, compressor	īīī
	154018	Gasket, head to crankcase	īī
	1531,32	Gasket, support to crankcase	īīī
	151457	Gear, fuel pump drive	īī
	BM-78696	Head and cover	īī
	153966	Body, unloader valve	īī
	S-107	Capscrew, body to head	2 2
	153964	Cover, head	i i
	154996	Gasket, cover to head	î î
	153965	Head, compressor	i i
	S-605	Lockwasher, body to head	2 2
	128085	"O" ring, intake valve	i i
	128086	"0" ring, exhaust valve	ī
	124229	"O" ring, unloader valve	īīī
	S-908	Plug, head	ī ī
	11,1,711,	Seat, exhaust valve	îî
	1/15028	Seat, intake valve	îī
	127936	Seal, plunger	i i
	150631	Spring, unloader valve	īī
	128080	Spring, exhaust valve	īī
	37471308	Spring, intake valve	ī ī
	12 7940	Valve, exhaust	īī
	144948	Valve, intake	īī
	109557	Washer, body to head	$\overline{2}$ $\overline{2}$
	S-605	Lockwasher, head to crankcase	4 4
	136403	Nameplate, serial number	ii
	160047	Nameplate	1 1
	S-965-E	Plug, pipe, crankshaft	2 2
	BM-77410	Piston (standard)	1 1
	11,6250	Piston	1 1
	119810	Pin, piston	1 1.
	119859	Ring, snap	2 2
	BM-77420	Ring set, piston (standard)	1 1
	147630	Ring, compression	2 2
	147620	Ring, oil	1 1
	157860	Rod, connecting	1 1
	5-2267	Screw, nameplate	2 2
	152808	Support, crankshaft	1 1
	s <b>-</b> 626	Washer, plain, head to crankcase	44
			•

(Contid. on next page)

Illust. Ref. No.	Cummins Part No. Part Name			Req. Eng.
		(7 1/4" C. F. M.)	٧6	8V
	BM-77411 11,6251 BM-77412 11,6252 BM-77413 11,6253 BM-77421 11,7631 11,7621 BM-77422 11,7632 11,7622 BM-77423 11,7623 11,7623 11,7623 15,7861 S-182-B S-105-C 158295 156711 157911 S-600 S-631 157894	Piston (.010) Piston Piston (.020) Piston Piston (.030) Piston Ring set, piston (.010) Ring, compression Ring, oil Ring set, piston (.020) Ring, compression Ring, oil Ring set, piston (.030) Ring, compression Ring, oil Ring, compression Ring, oil Rod, connecting (.010) Capscrew, connection to head Capscrew, connection to head Connection, air (optional) Connection, air (standard) Gasket, connection to head Lockwasher, connection to head Connection, air (standard) Masher, connection to head Connection, air (standard) Mounting Parts		1 1 1 1 1 2 1 2 1 1 1 1 1 1 1 2 1 2 1 2
	S-1002-A S-137 S-199-A 4;3828-A S-1058 S-1005-A 1534;33 61554 S-604 161028 157091 S-1027-A 161755 156477 S-1003-A S-1004-A	Body, flexible Capscrew, compressor to gear cover Capscrew, compressor to gear cover Clamp, hose Connection, tube Elbow Gasket, support to gear cover Hose Lockwasher, compressor to gear cover Tube, air supply Tube, air supply Nut, tube Tube, water supply Tube, water drain Sleeve, tube Sleeve, tube	3 2 2 2 1 1 1 4 1 2 1 4 4 4	3 2 2 2 1 1 1 4 1 2 1 1 4 4

Illust. Cummins Ref. No. Part No.	Part Name	No. Req. Per Eng.
Group AAll Models		v6 <b>v</b> 8

### MCDELS NOT RELEASED TODATE

## Mounting Parts

159154	Plate, mounting	1	1
159676	Pulley, driven	1	1
159719	Belt, drive	1	1

Illust. Ref. No.	Curmins Part No.	Part Name		Req. Eng.
Group A	-All Models		<b>v</b> 6	v8
	106835 107125 106838 107126 107127 107128 122121	Cleaner, air (10 1/2 diameter - dry type) Cover, shell Flement assembly Gasket, element Gasket, flange Shell, cleaner Spring, cover clamp	1 1 1 1 1 3	1 1 1 1 1 3
	106124 140311 103806 107091	Mounting Parts  Adapter, air cleaner Clamp, hose Hose, flexible Strap, cleaner	1 14 2 2	1 4 2 2

Illust.	Cummins			No.	Req.
Ref. No.	Part No.	Part	Name	Per	Eng.
				V6	V8

Electrical Equipment is not manufactured by the Cummins Engine Company, Inc. Complete service for Electrical Equipment may be obtained from the manufacturers, The Delco-Remy Company at Anderson, Indiana, The Leece-Neville Company at Cleveland, Ohio, The Electric Autolite Company at Toledo, Ohio, or from their service stations. Address of nearest service station may be obtained from the manufacturer.

#### **ALTERNATORS**

156909	Alternator, 12 V, 40 amp., negative ground	1	
156959	(Autolite Company - ABB-5101-S) Alternator, 12 V, 42 amp., negative ground	1	
	(Delcotron - DR-1100629)		
155186	Alternator, 12 V, 55 amp., negative ground (Autolite Company - ALH-51015)	1	
	BAFFLE		
114039	Baffle, generator (standard)	1	1
	BELT		
70885 111 <b>7</b> 25	Belt, generator drive (low mount fan) Belt, generator drive (low mount fan)	1	1
	BRACKETS		
158215 159898	Bracket, generator (std) (low mount fan) Bracket, generator (std) (low mount fan)	1	1
159865	Bracket, alternator (for 156959 alternator) (low mount fan)	1	Д.
159874	Bracket, alternator (for 156909 alternator) (low mount fan)	1	
<b>1</b> 5989 <b>7</b>		٦.	7
158216	Bracket, generator (high mount fan) Bracket, adjusting link (std)	1	1 7.
1,0010	(low mount fan)	1	Д.
159873	Bracket, adjusting link (for 156908, 156959 alternator)(low mount fan)	1	
	(Contid. on nex	t pa	ge)

Illust. Ref. No.	Cummins Part No.	Part Name		Req. Eng.
		FAN	v6	v8
	113938 156958	Fan, generator (std) Fan, alternator (DR1940994)	1	1
		GENERA TOR		
	113910	Generator, 12 V, 30 amp., (DR-1102040)	1	1
		LINKS		
	158214	Link, generator adjusting (std) (low mount fan)	1	1
	159872	Link, alternator adjusting (Delco alternator)	1	
	160836	Link, generator adjusting (high mount fan)	1	1
		PULLEYS		
	159864 159543 1595 <b>5</b> 4	Pulley, generator drive (low mount fan)(std) Pulley, generator drive (low mount fan)(std)	1	1
	159698 161278	Pulley, generator drive (high mount fan) Pulley, generator drive	1	1

Page 36 ELECTRICAL EQUIPMENT (CONTID)

Illust. Ref. No.	Cummins Part No.	Part Name		Req. Eng.
		REGULATORS	V6	8V
	156916	Regulator, voltage and relay, negative ground (Autolite - VBY6201AA)	1	
	156960	Regulator, voltage and relay, negative ground (DR-1119507)	1.	
	115572	Regulator, voltage (DR-1118839)(std)	1	1
		SPACERS		
	161069 159697	Spacer, generator bracket		1
		SWITCHES		
	156650 102846 145027	Switch, heater and starter Switch, key Switch, magnetic	1 1 1	1 1
		Mounting Parts		
	S-115 S-119 S-102 103009 S-221 S-217 S-610 S-605 S-626 S-622 S-1319	Capscrew, bracket Capscrew Capscrew Capscrew Nut, swivel bolt Nut, bracket Lockwasher Lockwasher Washer, plain Washer, plain Screw, baffle to generator	3 2 3 1 2 1 8 8 1 4	5 1 2 1 8 8 1 4

# V6-1140, V8-185 ELECTRICAL EQUIPMENT (CONT'D) Page 37

 Cummins Part No.	Part Name		Req. Eng.
	STARTING MOTOR	V6	8V
155078	Motor, starting, 12 volt (for 40° or over) (Delco-Remy - DR-1113160-11)	1	1
159183	Motor, starting, 12 volt (for under 40°F) (Delco-Remy - DR-1113633)	1	1
	Mounting Parts		
108707 S-604	Capscrew, mounting (less spacer) Lockwasher, mounting	3 3	3 3

Illust.	Cummins		No. Re	eq.
Ref. No.	Part No.	Part Name	Per Er	ng.

Flywheels and Ring Gears have been designed to adapt the Cummins Diesel Engine to hundreds of different installations. For this reason, these assemblies are not listed.

Your Cummins Distributor will record Flywheel Assembly and Ring Gear part numbers in the front of this book. Use this information when ordering a Flywheel and Ring Gear to replace original equipment.

Group AAll Models		V6	8V
156564 142207	Capscrew, gear cover and flywheel housing Dowel, flywheel	6 1	3 1
	ROCKFORD		

BM-78925	Flywheel and gear	13"
156602	Flywheel	1 plate
154849	Gear, ring	•

Illust. Ref. No.	Cummins Part No.	Part Name		Req. Eng.
Group A-	-All Models		٧6	v8
	156777 153881	Support, front engine Bracket, front support (single point)	1	1
		Mounting Parts		
	S-137 S-604	Capscrew, front engine support Lockwasher, front engine support	4	<u>1</u> 4 14
		GAUGES		
	66733	Gauge, lubricating oil pressure	1	1

## GASKET SETS

Illust. Ref. No.	Cummins Part No.	Part Name		Req. Eng.
Group A	-All Models		v6	<b>v</b> 8
	BM-79986 BM-79987	Gasket set, engine Gasket set, engine	1	ו
	BM-79985 BM-79988	Gasket set, cylinder head Gasket set, cylinder head	1.	1
	BM-68356	Gasket set, fuel pump	1	ī

Illust. Cummins Ref. No. Part No.

Part Name

No. Req. Per Eng.

Each Cummins PT Fuel Pump is calibrated to obtain the best performance and fuel economy for your engine. Your Cummins Distributor or Dealer has the special tools required for complete rebuild and calibration. Caution: Do Not Disturb the fuel regulator settings or the throttle screw settings as serious damage to your engine may result. Right Hand engines require Left Hand fuel pumps.

Group AAll Models	FUEL PUMP	<b>v</b> 6	8 <b>v</b>
BM-78842 BM-79740	Pump, fuel Pump, fuel	1	1
	FUEL PUMP HOUSING		
BM-78839 BM-78838	Housing, shaft and drive Housing, fuel pump (158137)	1	
	MAINSHAFT, COVER AND GOVERNOR		
ВМ <b>-</b> 7881;1 ВМ <b>-</b> 7881;0	Cover and governor Cover and seal (152894)	1	1
	FUEL PUMP MOUNTING PARTS		
S-120 109859 153706 S-6014 S-602	Capscrew, fuel pump to compressor Coupling, spider (rubber) Gasket, fuel pump to compressor Lockwasher, fuel pump to compressor Washer, fuel pump to compressor	2 1 1 2 2	2 1 2 2
	FUEL PUMP DAMPER		
BM-76340 153336 S-170-c 139834 S-698 139988 100099 153338 151900 70704	Damper, fuel Body, damper Capscrew, damper to gear pump Diaphragm Lockwasher, damper to gear pump "O" ring "O" ring Plate, damper Seal, damper to gear pump Washer, damper to gear pump	1 2 1 2 1 1 1 2	1 2 1 2 1 1 1 2

Page 42 PT FUEL SYSTEM (CONT'D)

Illust. Ref. No.	Cummins Part No.	Part Name		Req. Eng.
Group A	All Models	INJECTORS	٧6	8V
	BM-78889 BM- 147626 136042 147559 154467 148338 136749 147558 BM-78888 62410 70775 148524 9337	Injector assembly Body and plunger (154830) Ball, check Clamp, injector screen Gasket, retainer Link, injector plunger Plug, orifice Screen, body Retainer, ball Cup, injector (154889) Gasket, cup "O" ring, cup Guide, injector spring Spring, injector	666666666666666	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
	S-137 157825 S-604 1017514	Mounting Parts  Capscrew, injector Clamp, injector to head Lockwasher, injector "O" ring, injector  SHUTDOWN VALVE - CUMMINS	6 6 6 18	8 8 8 24
	BM_69973 S_1211, 131,072 S_257 129826 129838 S_607 129888 111,791 70295 11,3679 129839 129768 129827	Valve, shutdown (12 volt) Capscrew, coil to housing Coil assembly Nut, terminal Housing, valve Knob, manual override Lockwasher, coil to housing "O" ring, coil to housing "O" ring, shaft Plug, pipe Shaft, manual override Shield, fuel Spring Valve	1411111111111111	141111111111111

Illust.	Cummins			Req.
Ref. No.		Part Name	Per	Eng.
Group A	All Models	SHUTDOWN VALVE (CONT'D)	٧6	8V
		Mounting Parts		
	S-189-C S-1027 S-600 154087	Capscrew, valve to housing Connection, outlet Lockwasher, valve to housing "O" ring, valve to housing FUEL TUBING	2 1 2 1	2 1 2 1
	148376 S-1008-1 S-1028 158134 BM-73254 S-1023-A 158135 S-1023-A 158136 S-1051 156476 158268 158269	Connector Connector, tube Elbow Tube, fuel supply Tube, shut-off valve to head Nut, tube Tube, supply (R.B. to L.B.) Nut, tube Tube, drain (R.B. to L.B.) Nut, tube Connector, fuel Ferrule, fuel supply line (optional) Nut, union, fuel supply	2 1 2 1 2 1 2 1 1	2 2 1 2 1 2 1 2
	BM-59497 BM-59481 126516 142784 127506 BM-68635 138627 127506	FUEL FILTER  Filter, fuel Head, filter Bolt, head Head, filter "O" ring Kit, cartridge Cartridge, filter "O" ring	1 1 1 1 1 1	1 1 1