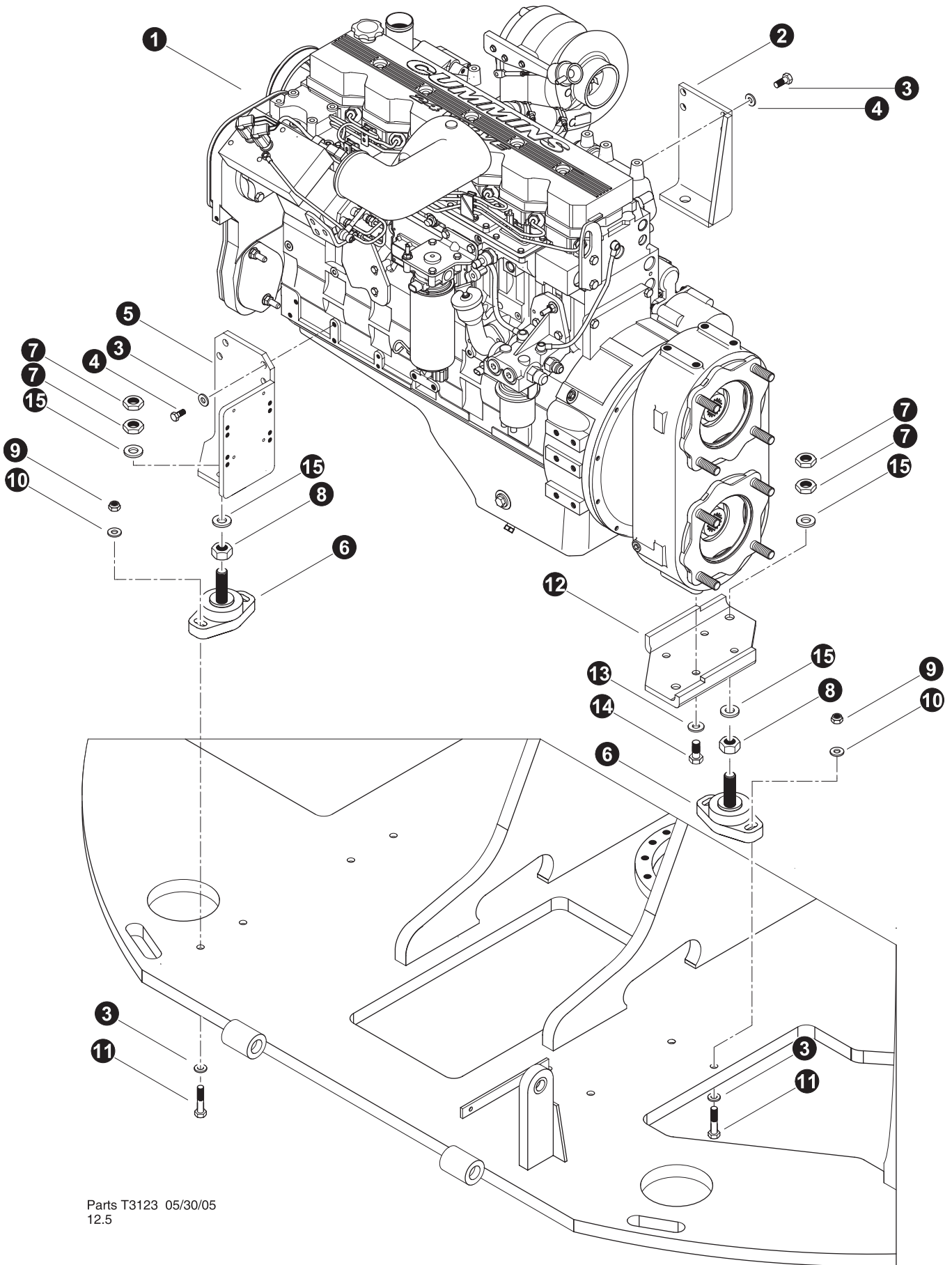


Section EE-1

Cummins QSC Engine - Installation and Parts

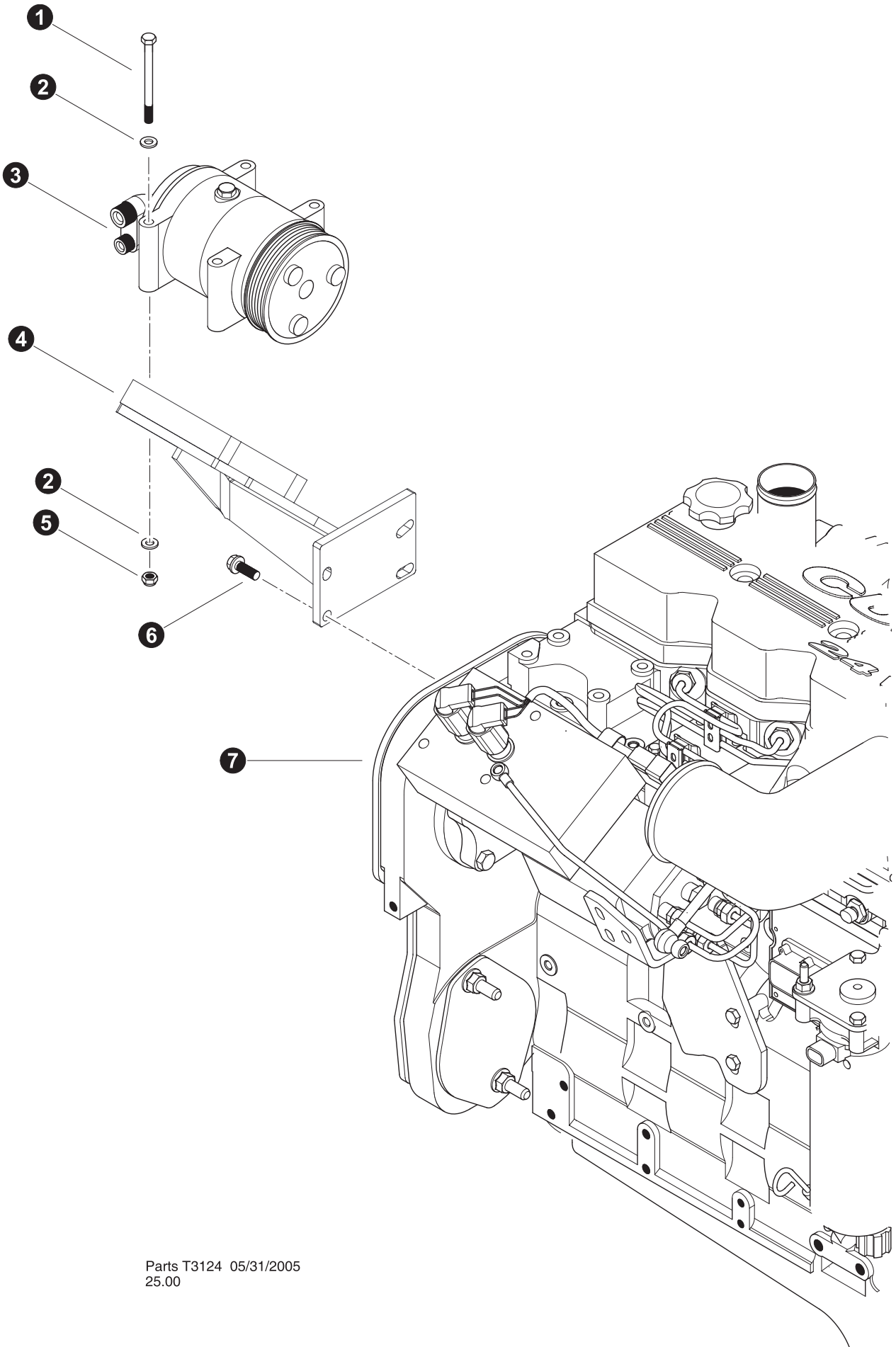


Parts T3123 05/30/05
12.5

ENGINE INSTALLATION


REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	50125-EE	1	ENGINE, Cummins - QSC8.3-C 260HP <i>(Optional)</i>	
	50126-EE	1	ENGINE, Cummins - QSC8.3-C 300HP <i>(Optional)</i>	
2	51602-EE	1	MOUNT, ENGINE - C8.3 (RF-300)	
3	15534-EE	14	WASHER, SAE FLAT - .5"	
4	15551-EE	8	BOLT - 12mm-1.75P x 40mm <i>(Torque to 92 ft.lbs. (122 Nm))</i>	
5	51601-EE	1	MOUNT, ENGINE - C8.3 (LF-300)	
6	51678-EE	4	<input type="checkbox"/> ISOLATOR, ENGINE MOUNT - MARINE STYLE	
7	-EE	8	NUT, JAM - .75"	
8	10776-EE	4	NUT, HEX - .75"	
9	10815-EE	8	NUT, LOCK - .5"	
10	10804-EE	8	WASHER, FLAT - .5"	
11	15567-EE	8	BOLT - .5" X 2.5"	
12	51647-EE	1	MOUNT, ENGINE REAR 830/630	
13	10771-EE	4	WASHER, SAE flat - 5/8	
14	15526-EE	4	BOLT - 5/8" x 2" <i>(Torque to 92 ft.lbs. (122 Nm))</i>	


- Kit or Assembly - includes all items indented underneath.

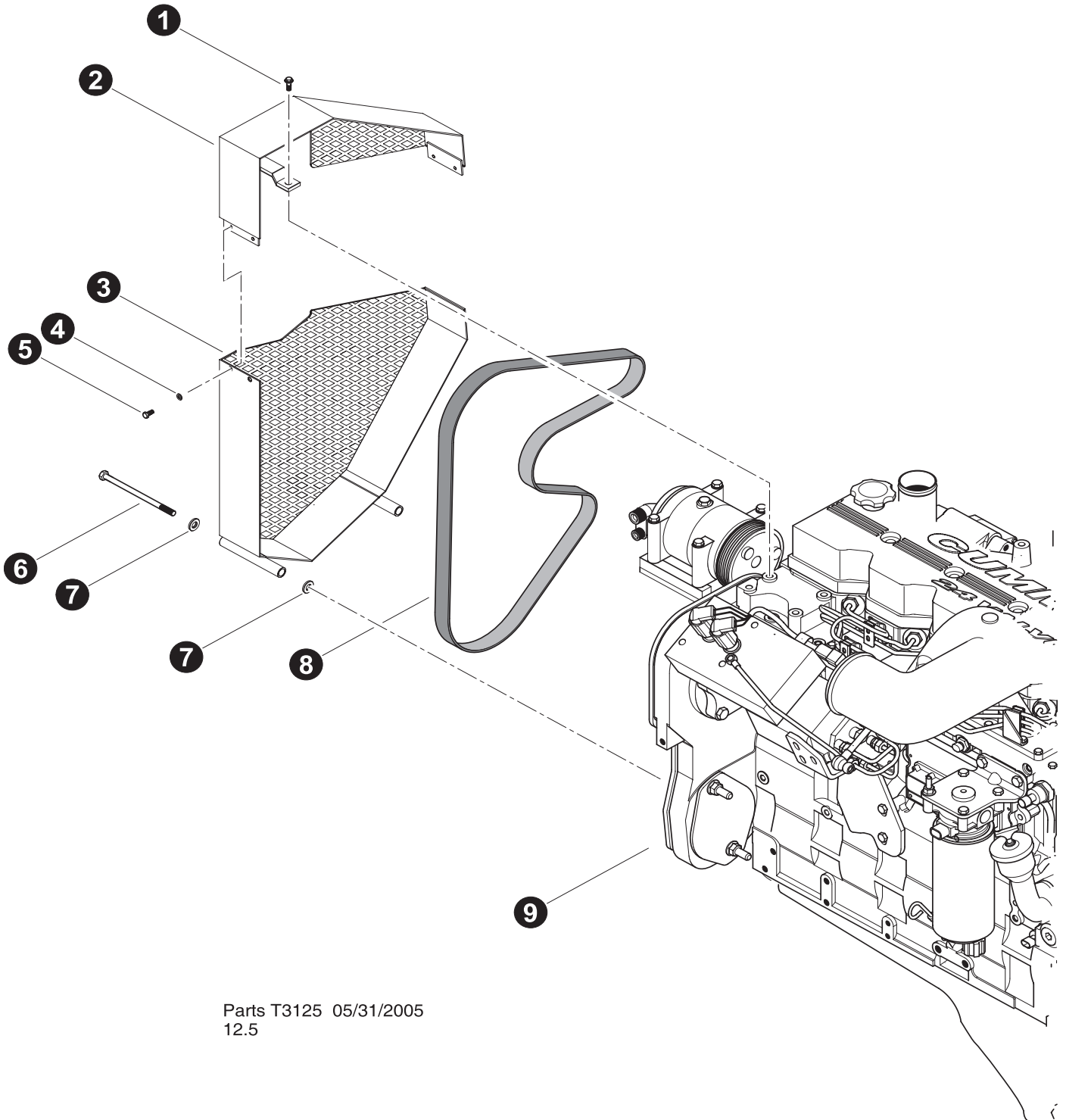


Parts T3124 05/31/2005
25.00

AIR CONDITIONER COMPRESSOR INSTALLATION



REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	19251-EE	4	BOLT - .3125" X 5"	
2	15559-EE	8	WASHER, SAE FLAT - .3125"	
3		1	COMPRESSOR, AC (flange mount / rear discharge)	
4	51712-EE	1	MOUNT, FREON COMPRESSOR - 630/830	
5	10812-EE	4	NUT, LOCK - .3125"	
6	24605-EE	4	BOLT - 10mm-1.5P x 30mm (<i>Flange Head</i>)	
7	REF.	1	 ENGINE - Cummins QSC8.3-C.....	EE-3



 See referenced page for component or assembly breakdown.

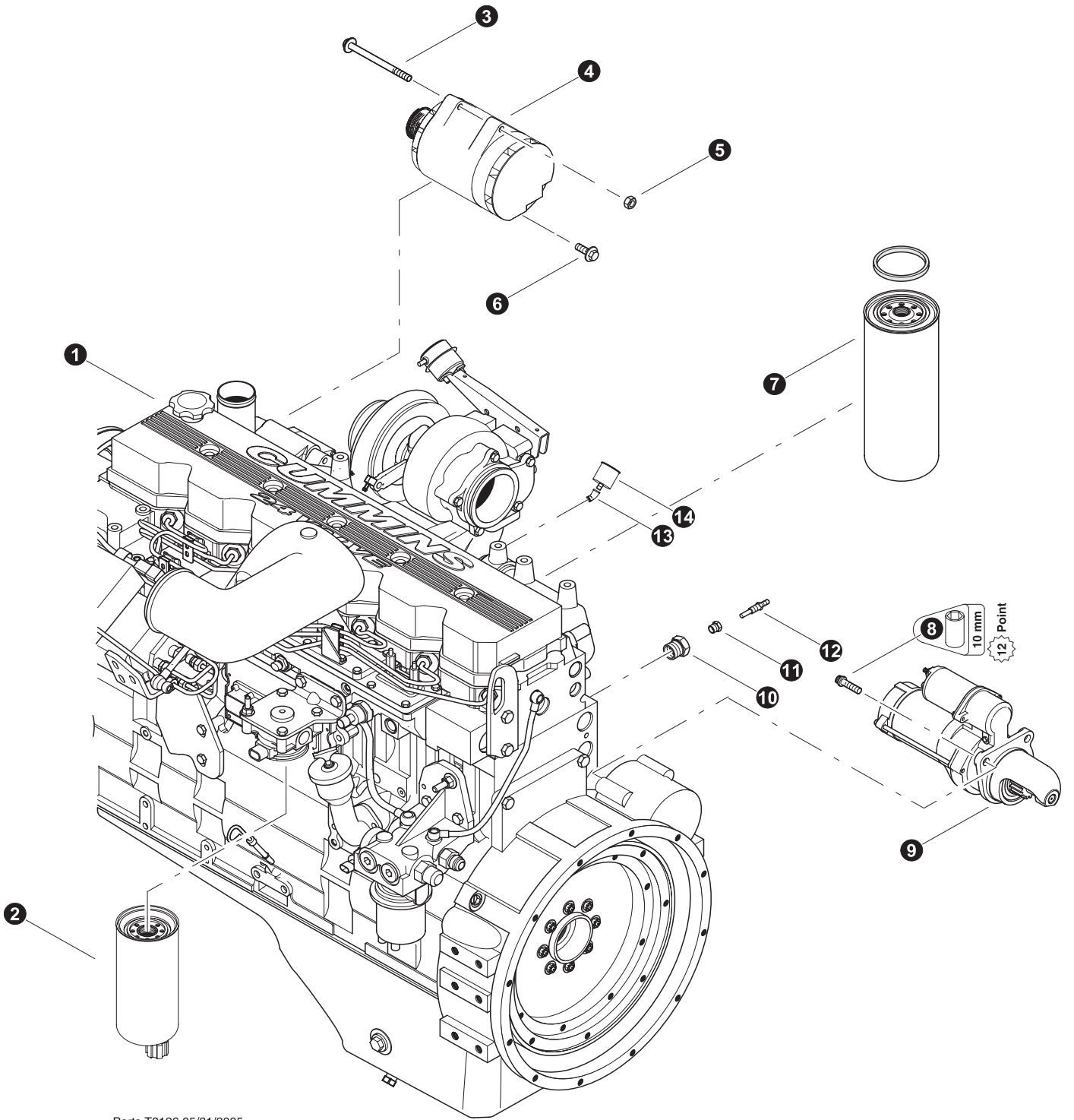


Parts T3125 05/31/2005
12.5


ENGINE BELT AND SHROUDS

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	24605-EE	1	BOLT - 10mm-1.5P x 30mm (<i>Flange Head</i>)	
-	51607-EE	1	 SHROUD, BELT CUMMINS (top and bottom - 830)	
2		1	SHROUD, TOP	
3		1	SHROUD, BOTTOM	
4	10757-EE	4	WASHER, SAE FLAT - .25"	
5	15604-EE	4	BOLT - .25" X .75"	
6	51772-EE	1	BOLT - 12MM X 180MM FAN GUARD (830/630)	
7	15534-EE	4	WASHER, SAE FLAT - .5"	
8	51777-EE	1	BELT, FAN - CUMMINS CHARGE AIR (830/630)	
9	REF.	1	 ENGINE - Cummins QSC8.3-C.....	EE-1

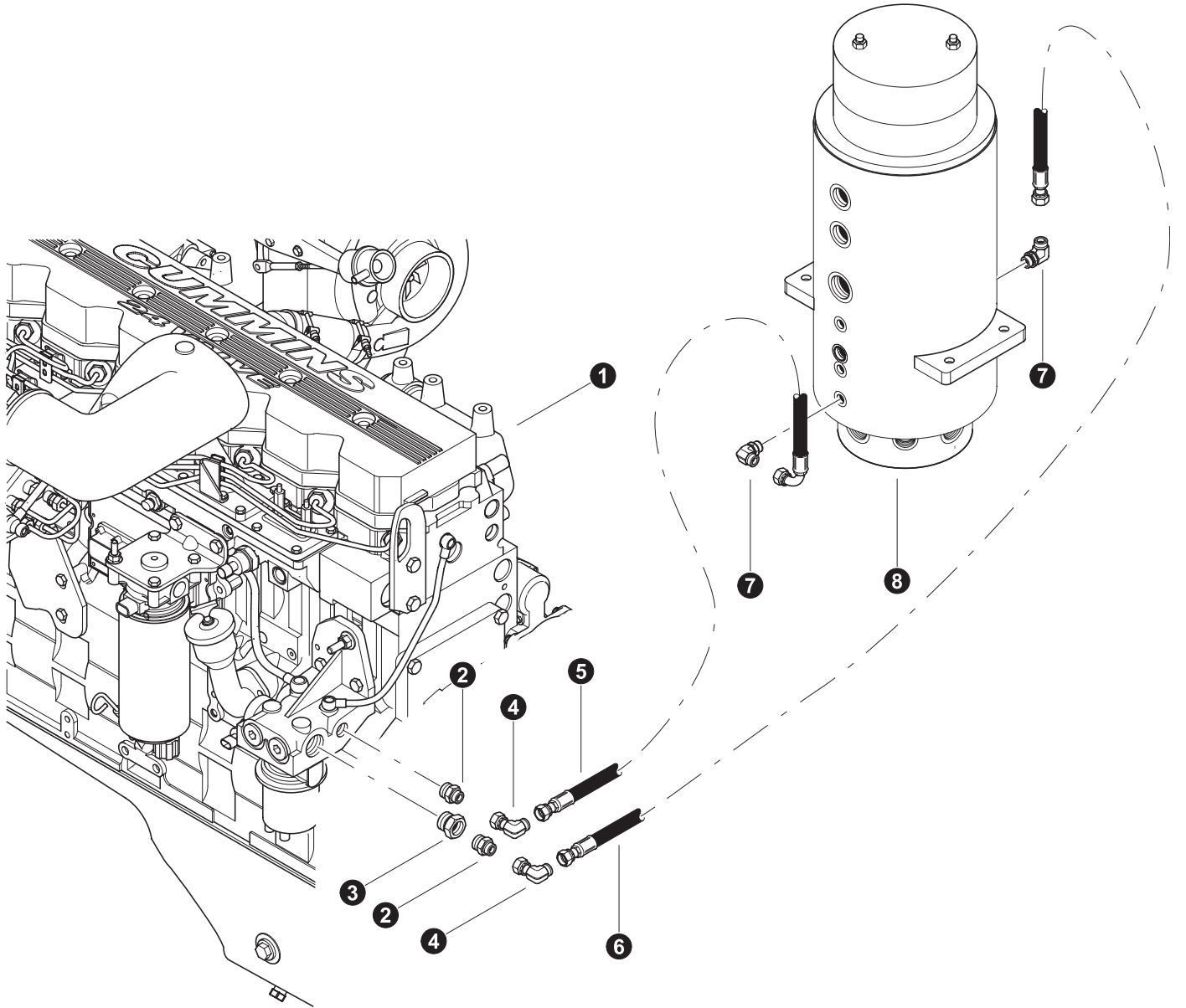
-  See referenced page for component or assembly breakdown.
-  Kit or Assembly - includes all items indented underneath.



ALTERNATOR, STARTER & MISC. COMPONENTS



REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 ENGINE - Cummins QSC8.3-C.....	EE-1
2	24062-EE	1	FILTER, FUEL (CUMMINS QSC - ELECTRONIC)	
3	--	2	BOLT, flange head - 12mm x 150 mm	
4	24669-EE	1	ALTERNATOR - 24V (75 AMP)(BRUSHLESS)	
5	--	1	NUT, flange - 12mm	
6	50149-EE	1	BOLT - 12mm x 25mm	
7	16070-EE	1	FILTER, engine oil	
8		3	BOLT, 12 point cap - 10mm x 35 mm	
9	24671-EE	1	STARTER - C8.3C/QSC (24V)	
10	24290-EE	1	BUSHING, REDUCER - 5406-12-4	
11	15574-EE	1	BUSHING, REDUCER - 5406-4-2	
12	50195-EE	1	SENDER, TEMPERATURE - ELECTRONIC (830)	
13	51884-EE	1	ELBOW, 45 - (4 V50X-S)	
14	50545-EE	1	SENDER, OIL PRESSURE GAUGE (830)	

 See referenced page for component or assembly breakdown.

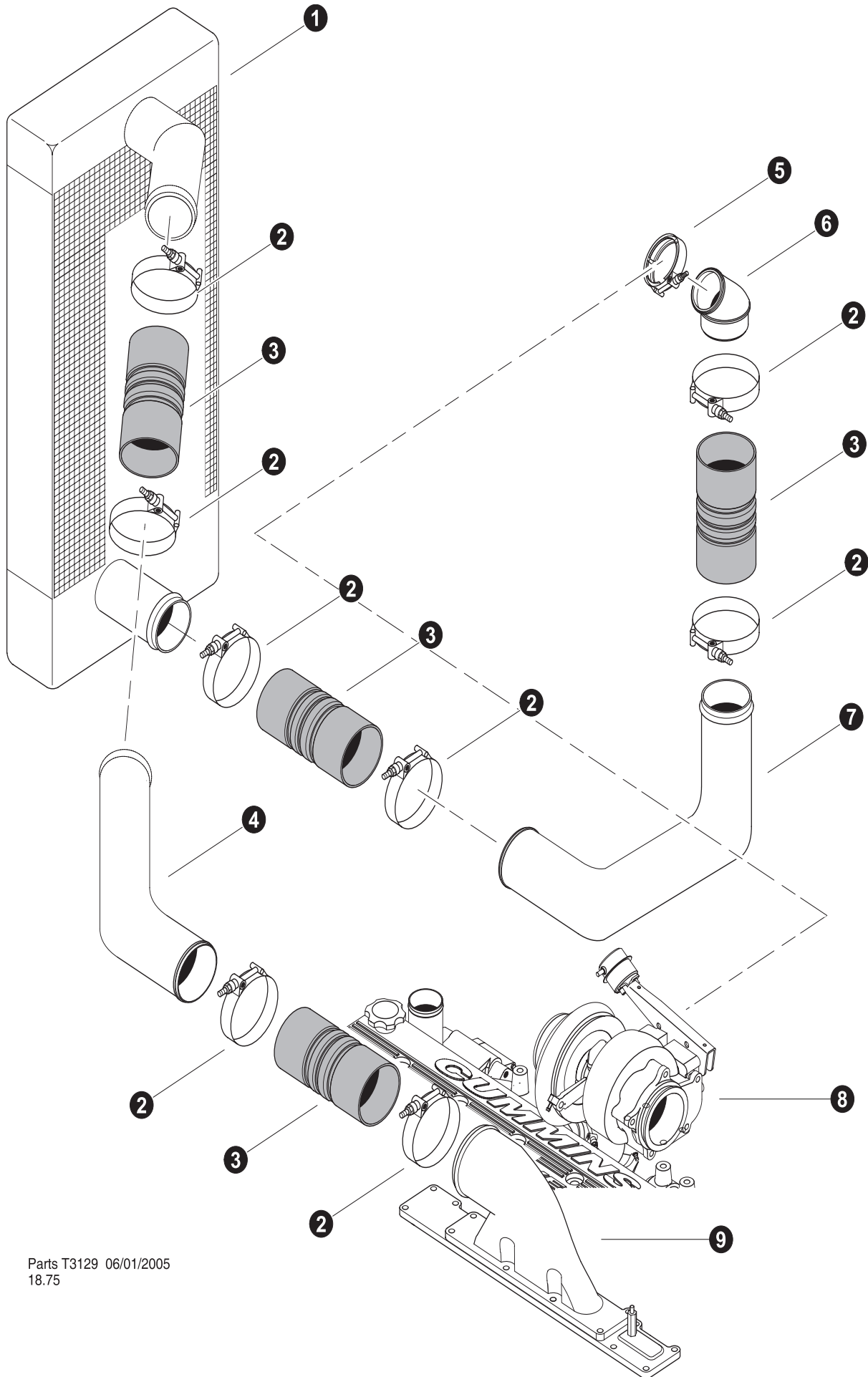


Parts T3131 06/03/2005
18.75

FUEL LINES (Supply & Return To Engine)



REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 ENGINE - Cummins QSC8.3-C.....	EE-1
2	15457-EE	2	CONNECTOR, STR - FF1852T-0806S	
3	19290-EE	1	BUSHING, REDUCER - 6410-10-8	
4	16661-EE	2	ELBOW, 90 SWIVEL - 6500-6	
5	-EE	1	HOSE ASSEMBLY - 2062-06-060S-0609-W (<i>Fuel Return from rotary manifold port #1 to return port on engine</i>)	
6	-EE	1	HOSE ASSEMBLY - 2075-06-060S-060S-W (<i>Fuel supply from rotary manifold port #2 to fuel pump on engine</i>)	
7	15480-EE	1	ELBOW, 90 - 6801-6	
8	REF	1	 ROTARY MANIFOLD ASSEMBLY	UP-1

 See referenced page for component or assembly breakdown.

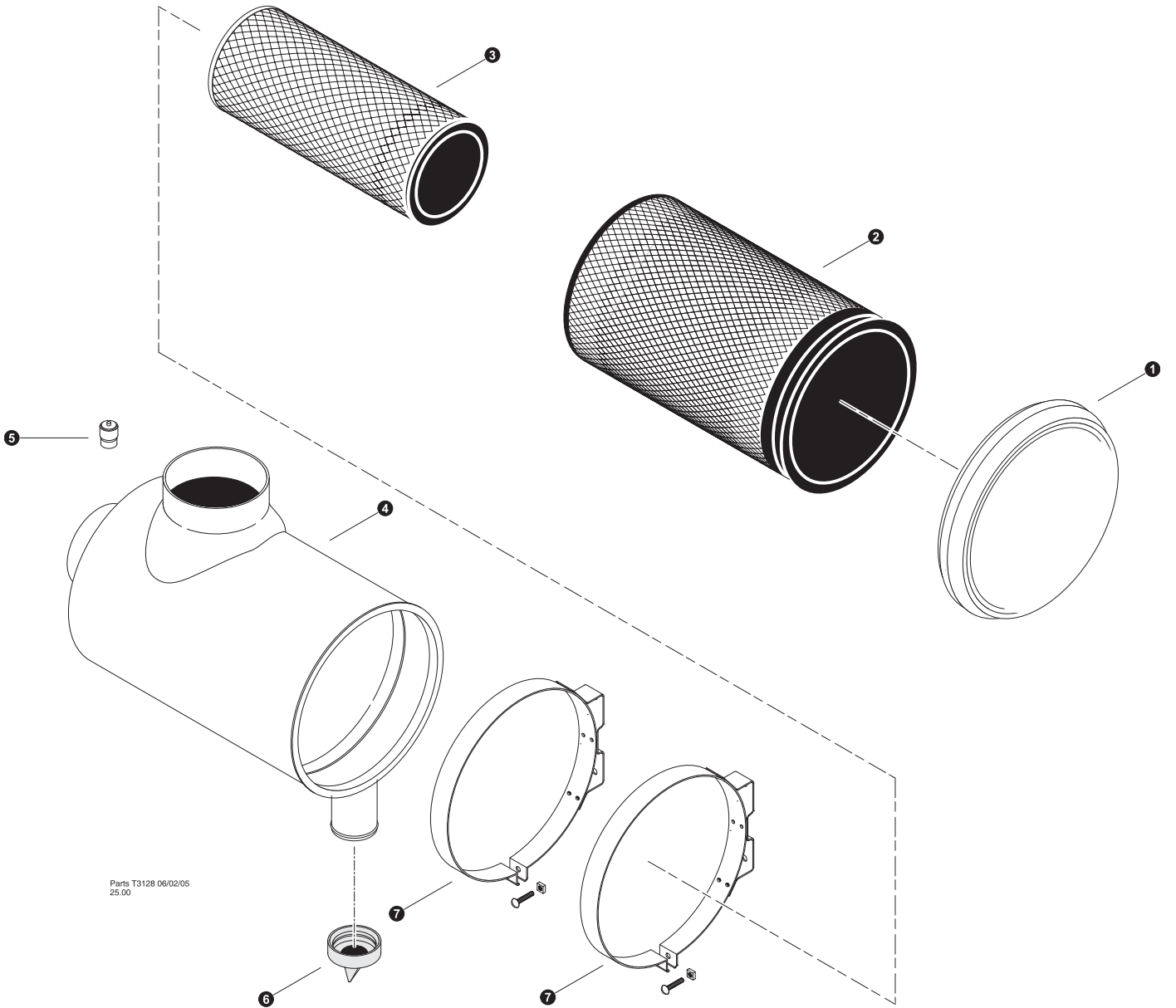


Parts T3129 06/01/2005
18.75

CHARGE AIR (Air To Air Connections)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 RADIATOR / AIR COOLER ASSEMBLY	EE-3
2	16337-EE	8	CLAMP, strap band - 4"	
3	24686-EE	4	CONNECTOR, rubber	
4	51733-EE	1	TUBE, AIR/AIR TOP CUMMINS 630/830	
5	16979-EE	1	CLAMP, muffler band - 2-1/2"	
6	- - -	1	ELBOW, 45° - turbo output tube	
7	51734-EE	1	TUBE, AIR/AIR BOTTOM CUMMINS 630/830	
8	- - -	1	TURBO, CUMMINS QSC	
9	52054-EE	1	 MANIFOLD, CHARGE AIR INTAKE (QSC / 830)	

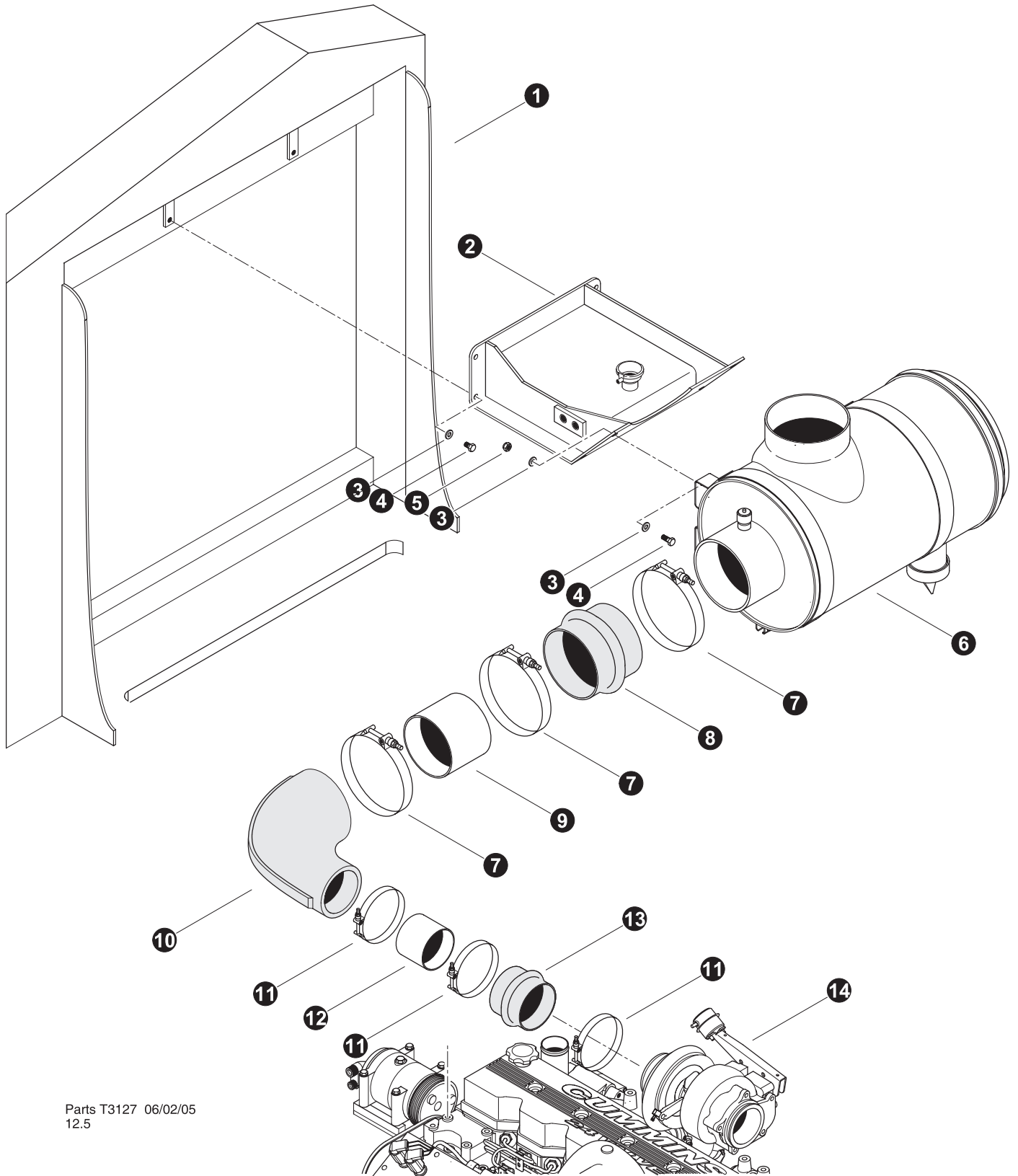
 See referenced page for component or assembly breakdown.



AIR CLEANER ASSEMBLY





REF	PART #	QTY		DESCRIPTION	SEE SECTION
-	51729-EE	1	<input type="checkbox"/>	AIR CLEANER ASSEMBLY - 830/630	
1	---	1		COVER - AIR CLEANER	
2	51756-EE	1		FILTER, air cleaner - primary	
3	51757-EE	1		FILTER, air cleaner - secondary	
4	---	1		CANISTER, air cleaner	
5	16114-EE	1		INDICATOR, air cleaner filter service	
6	52053-EE	1		BOOT, Air Cleaner Dust	
7	20450-EE	2	<input type="checkbox"/>	CLAMP, air cleaner band	
-	15591-EE	1		BOLT - 5/16" x 1-1/2"	
-	10788-EE	1		NUT, nylock - 5/16"	

Kit or Assembly - includes all items indented underneath.

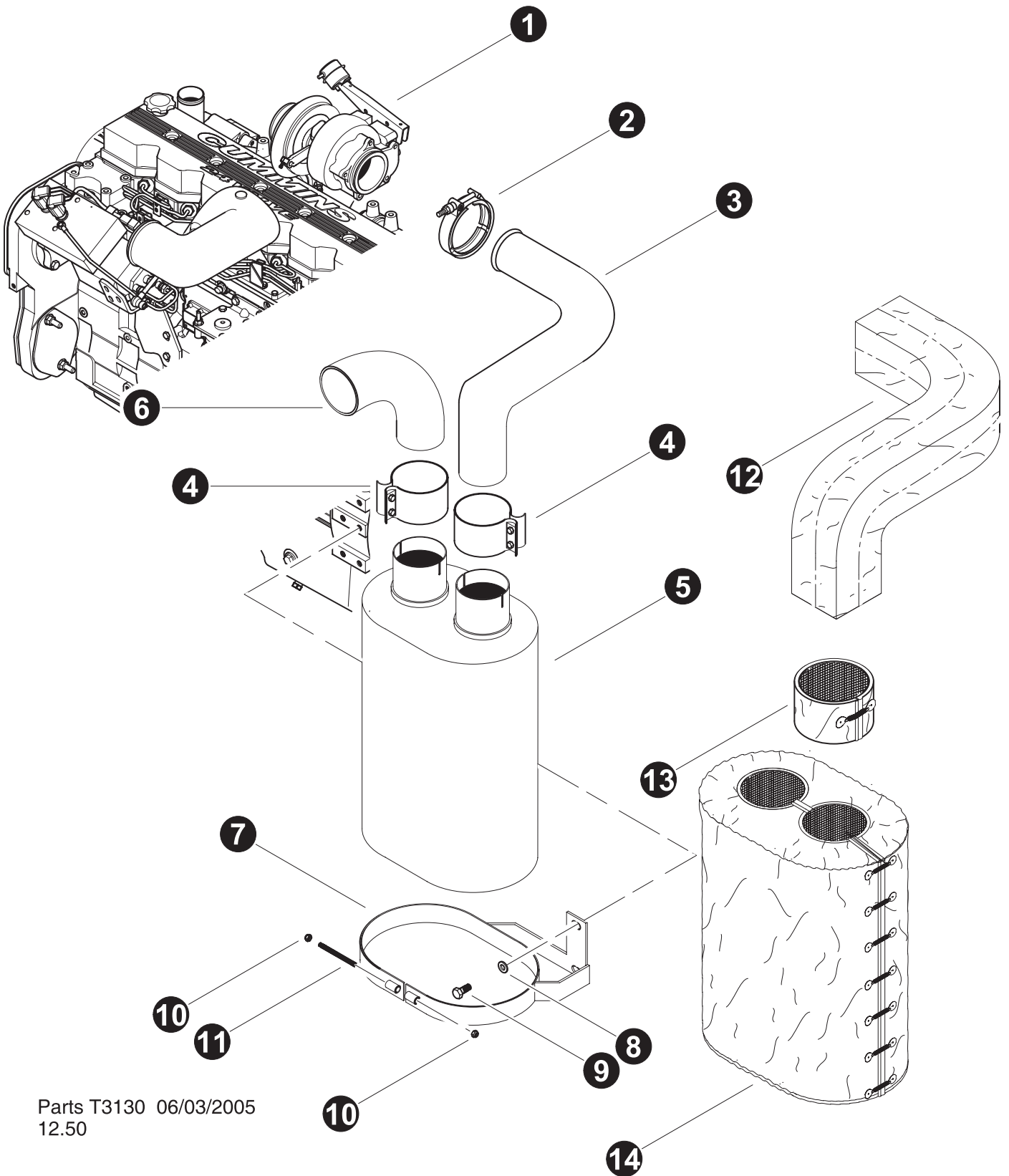


Parts T3127 06/02/05
12.5

AIR CLEANER INSTALLATION


REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 UPPER TURNTABLE	UP-1
2	REF.	1	 TANK, EXPANSION	EE-3
3	15528-EE	12	WASHER, SAE FLAT - .375"	
4	11707-EE	4	BOLT - .375" X 1"	
5	10813-EE	4	NUT, LOCK - .375"	
6	REF.	1	 AIR CLEANER ASSEMBLY	EE-1
7	16249-EE	2	CLAMP, strap band - 5-1/2"	
8	52055-EE	1	HOSE, HUMP AIR CLEANER (5" X 5") CUMMINS	
9	51827-EE	1	TUBE, AIR CLEANER (5" DIA X 3") CUMMINS	
10	15831-EE	1	ELBOW, 90° rubber (<i>Ribbed</i>)	
11	15697-EE	1	CLAMP, strap band - 4-1/2"	
12	51828-EE	1	TUBE, AIR CLEANER (4" DIA X 2.5") CUMMIN	
13	51829-EE	1	HOSE, HUMP AIR CLEANER (4" X 4") CUMMINS	
15	REF.	1	 ENGINE - Cummins C8.3-C	EE-1

 See referenced page for component or assembly breakdown.



Parts T3130 06/03/2005
12.50

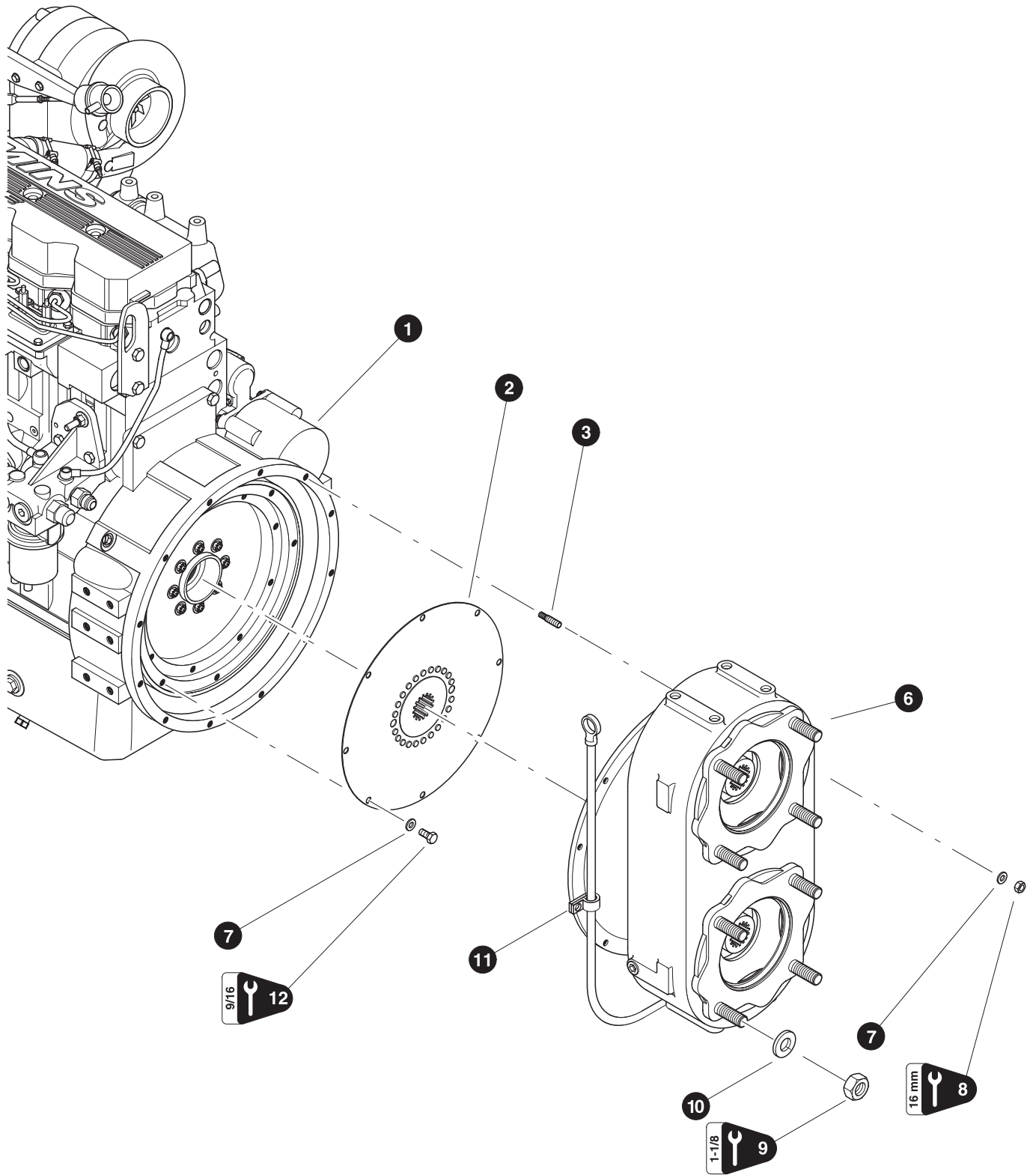
MUFFLER INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 ENGINE - Cummins C8.3-C	EE-1
2	20452-EE	1	CLAMP, turbo exhaust	
3	51613-EE	1	PIPE, EXHAUST - CUMMINS C - 830 MACH	
4	51871-EE	2	CLAMP, MUFFLER - 830/630 - 4" EASY SEAL	
5	51656-EE	1	MUFFLER, CUMMINS / JD (TF830)	
6	51956-EE	1	ELBOW, EXHAUST - CUMMINS (830/630)	
7	51677-EE	2	MOUNT, MUFFLER - CUMMINS - 830	
8	15534-EE	14	WASHER, SAE FLAT - .5"	
9	18415-EE	2	BOLT - 12MM-1.75P X 30MM	
10	10812-E	2	NUT, LOCK - .3125"	
11	-EE		ROD, THREADED - .3125"	
12	51716-EE	1	INSULATION, EXHAUST TUBE (CUMMINS 830)	
13	50072-EE	1	WRAP, MUFFLER - 21" X 3"	
14	51715-EE	1	INSULATION, MUFFLER - 830	

 See referenced page for component or assembly breakdown.




Section EE-2

Cummins QSC8.3 Engine - Pump Drive Transmission



Parts T2721 06/11/2003
18.75

PUMP DRIVE TRANSMISSION INSTALLATION (Funk)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 ENGINE - Cummins QSC8.3.	EE-3
2	REF.	1	 DRIVE PLATE	EE-2
3	15531-EE	12	STUD, threaded - 10mm x 45mm <i>(See Note #1 below)</i>	
4	23557-EE	1	BREATHER	
5	16808-EE	1	BUSHING, reducer - 5406-8-2	
6	REF.	1	 PUMP DRIVE TRANSMISSION	EE-2
7	15528-EE	20	WASHER, SAE flat - 3/8"	
8	15530-EE	12	NUT, hex - 10mm <i>(See Note #2 below)</i> <i>(Torque to 40 ft.lbs. (53 Nm))</i>	
9	10776-EE	8	NUT, HEX 3/4	
10	15550-EE	8	WASHER, SAE 3/4	
11	16203-EE	1	CLAMP, coated 3/8	
12	15542-EE	8	BOLT - 3/8" x 3/4" <i>(See Note #1 below)</i> <i>(Torque to 40 ft.lbs. (53 Nm))</i>	

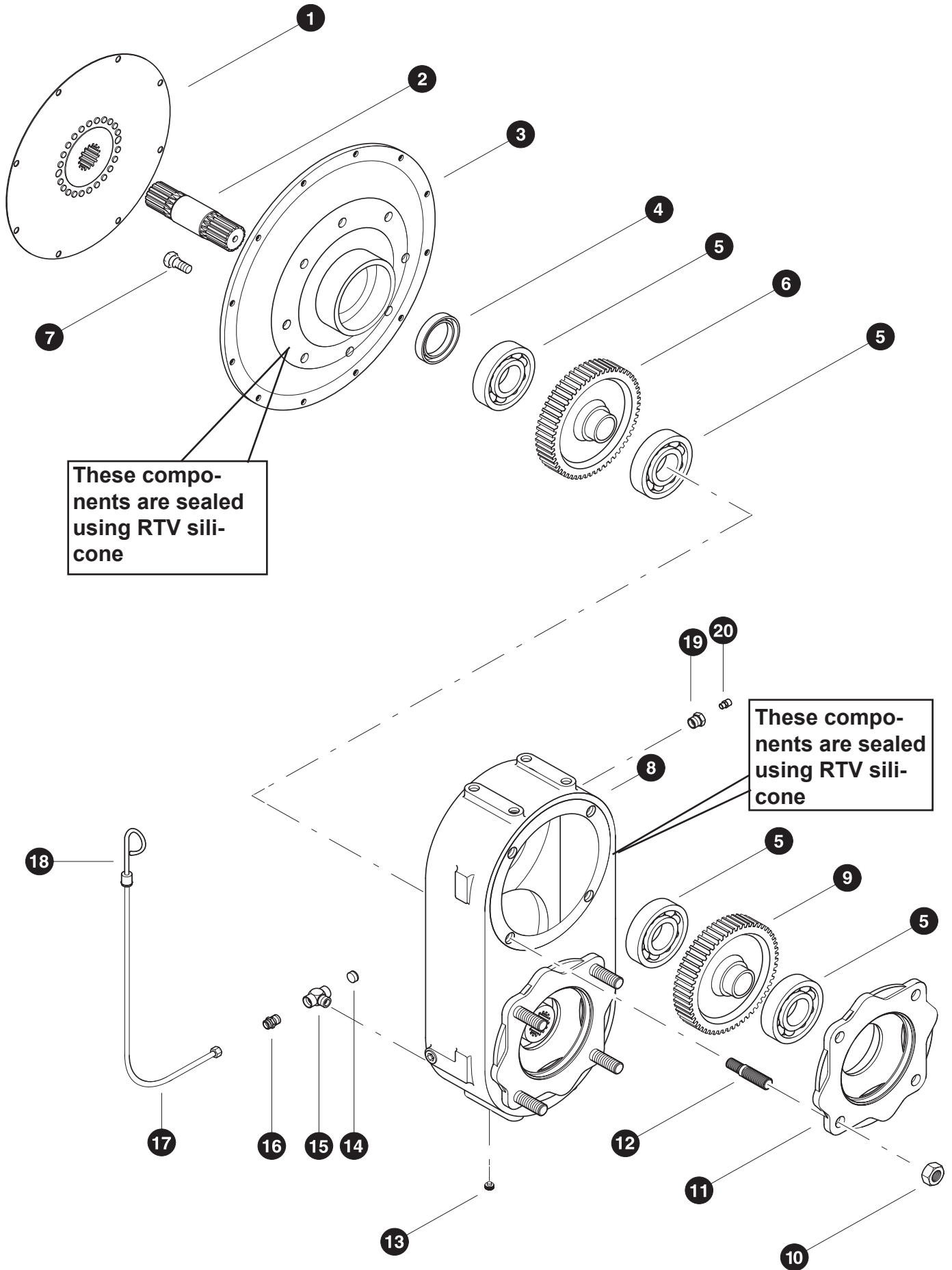
 See referenced page for component or assembly breakdown.

Note #1:

Use Loctite 271 *(red)* during installation.

Note #2:

Use Loctite 272 *(blue)* during installation.



PUMP DRIVE TRANSMISSION BREAKDOWN (Funk)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
-	51404-EE	1	<input type="checkbox"/> TRANSMISSION, pump drive (funk .787:1 inc) (after 04/01/04)	
1	16258-EE	1	DRIVE PLATE, funk	
2	----	1	DRIVE SHAFT, funk pump drive (4028060)	
3	----	1	HOUSING, flywheel mounting (4028011)	
4	----	1	SEAL, shaft (F65006)	
5	----	6	BEARING, funk pump drive (F40211)	
6	----	1	GEAR, input (4059007) (.647:1)	
6	51408-EE	1	GEAR, input (.787:1)	
7	----	8	BOLT, flywheel housing addapter (4003685) (see note #1)	
8	----	1	HOUSING, 2 - pump (YZ102177)	
9	----	2	GEAR, output (4028042) (.647:1)	
9	51409-EE	2	GEAR, output (.787:1)	
10	----	8	NUT, hex 3/4	
11	----	2	PLATE, pump adapter (4028007)	
12	----	8	STUD, adapter (40281351) (see note #2)	
13	----	1	PLUG, pipe, magnetic 1/4 (444-691-00-00-08)	
14	15585	1	PLUG, pipe 1/2	
15	----	1	TEE, pipe branch 1/2 (Z12T-8-8)	
16	----	1	FITTING, 3/8 compression x 1/2 pipe (18-190)	
17	----	1	TUBE, dipstick (NE 10000)	
18	----	1	DIPSTICK, funk (RE69243)	
19	16019-JD	1	BUSHING, REDUCER - 6405-8-4	
20	----	1	BREATHER, (0-PSI) funk (F68103)	

Kit or Assembly - includes all items indented underneath.

NOTE #1

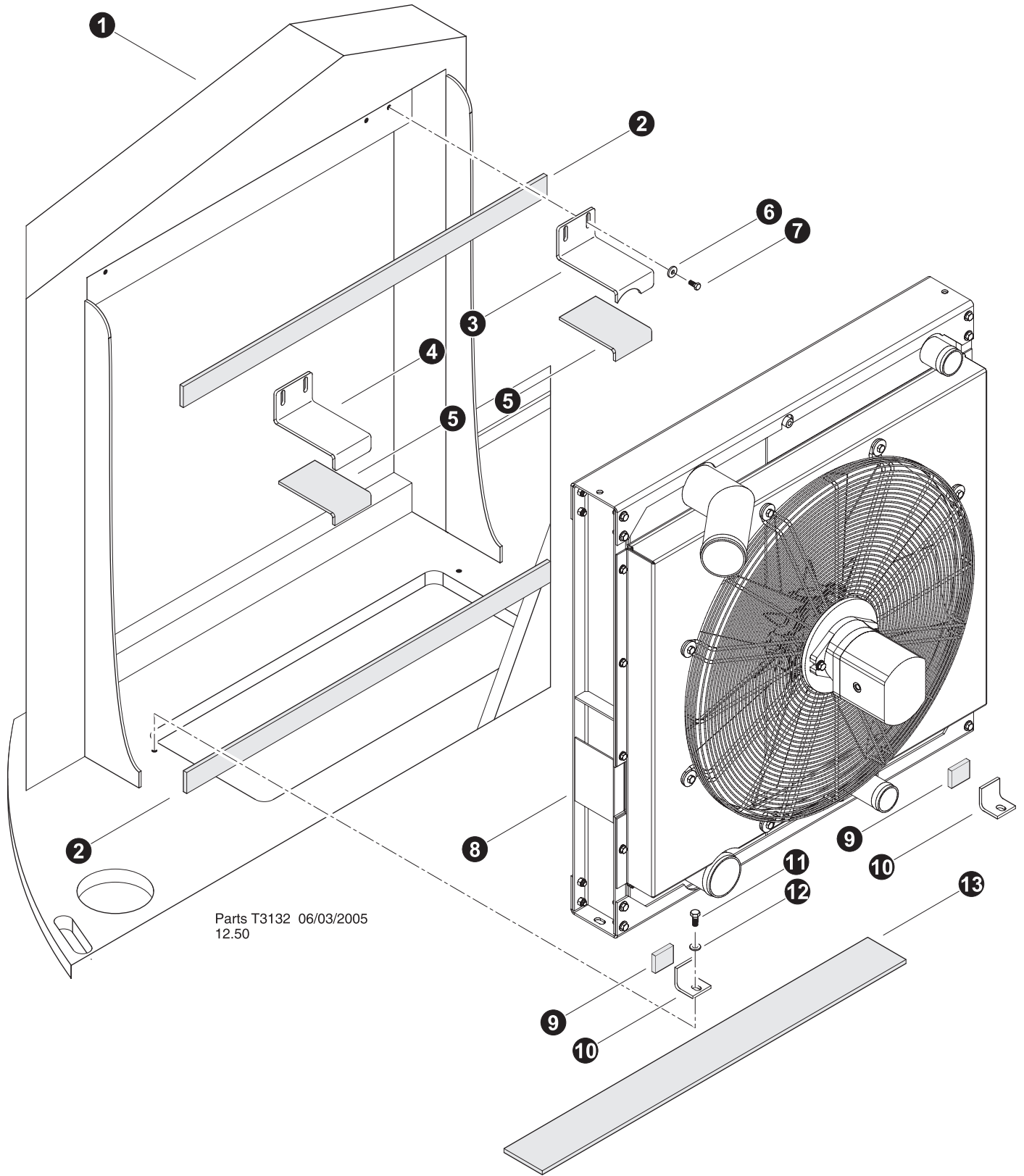
Use loctite 262 when installing bolts

NOTE #2

Apply loctite 271 to housing side before install



Section EE-3

Cummins QSC8.3 Engine - Cooling System

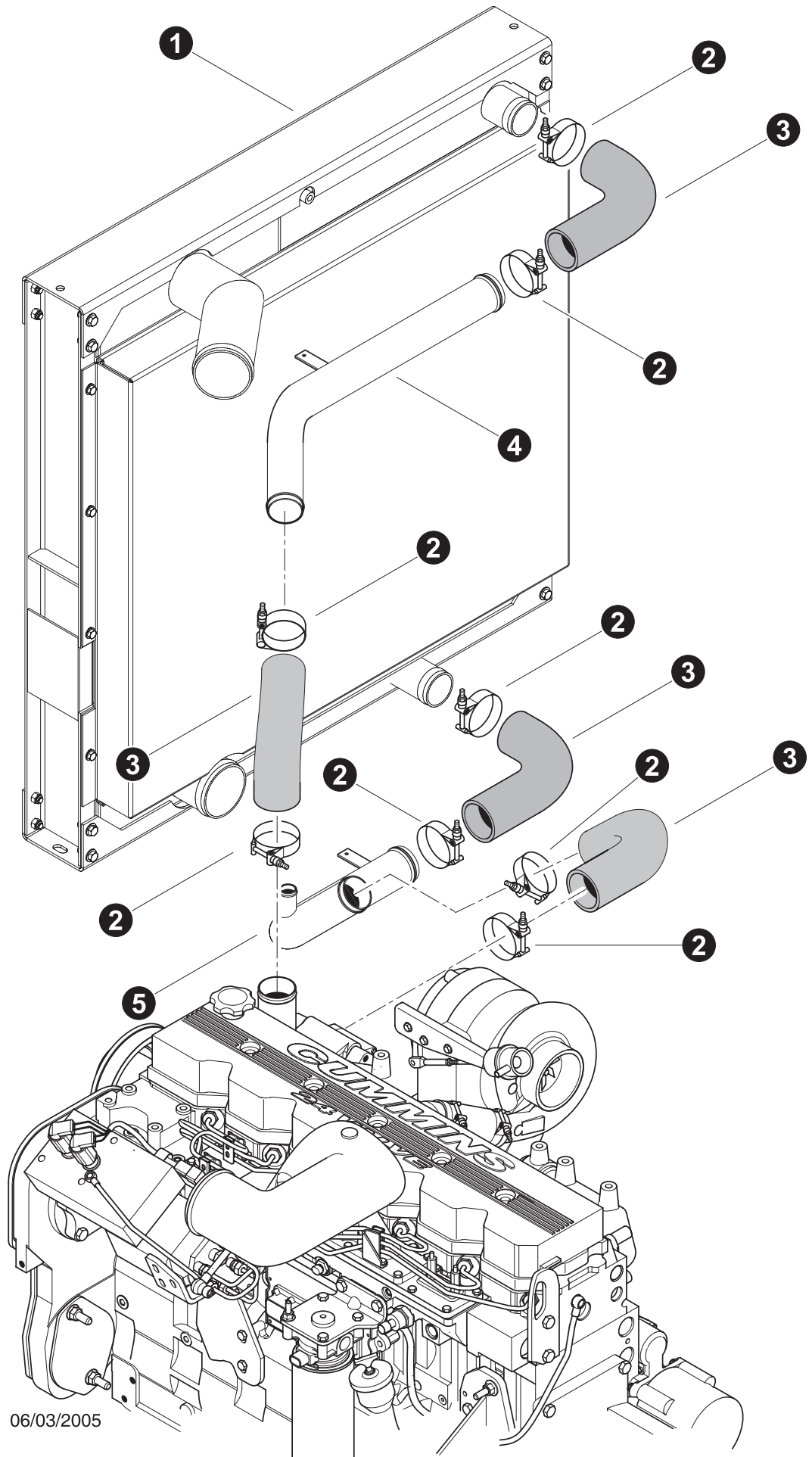


Parts T3132 06/03/2005
12.50

RADIATOR/OIL & COOLER INSTALATION


REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF	1	 UPPER TURNTABLE ASSEMBLY	UP-1
2	51825-EE	2	RUBBER, ISOLATOR - RAD (2"X39"X1/4")	
3	42553-EE	1	BRACKET, RADIATOR UPPER	
4	42553-EE	1	BRACKET, RADIATOR UPPER	
5	-EE	2	RUBBER, ISOLATOR - UPPER RAD BRACKETS	
6	10802-EE	4	WASHER, FLAT - .375"	
7	15542-EE	4	BOLT - .375" X .75"	
8	REF	1	 RADIATOR / CHARGE AIR ASSEMBLY	UP-3
9	-EE	2	RUBBER, ISOLATOR - LOWER RAD BRACKETS	
10	42554-EE	2	BRACKET, RADIATOR LOWER	
11	10783-EE	2	BOLT - .5" X 1"	
12	15534-EE	2	WASHER, SAE FLAT - .5"	
13	51826-EE	1	RUBBER, ISOLATOR - RAD (6"X39"X1/4")	


 See referenced page for component or assembly breakdown.

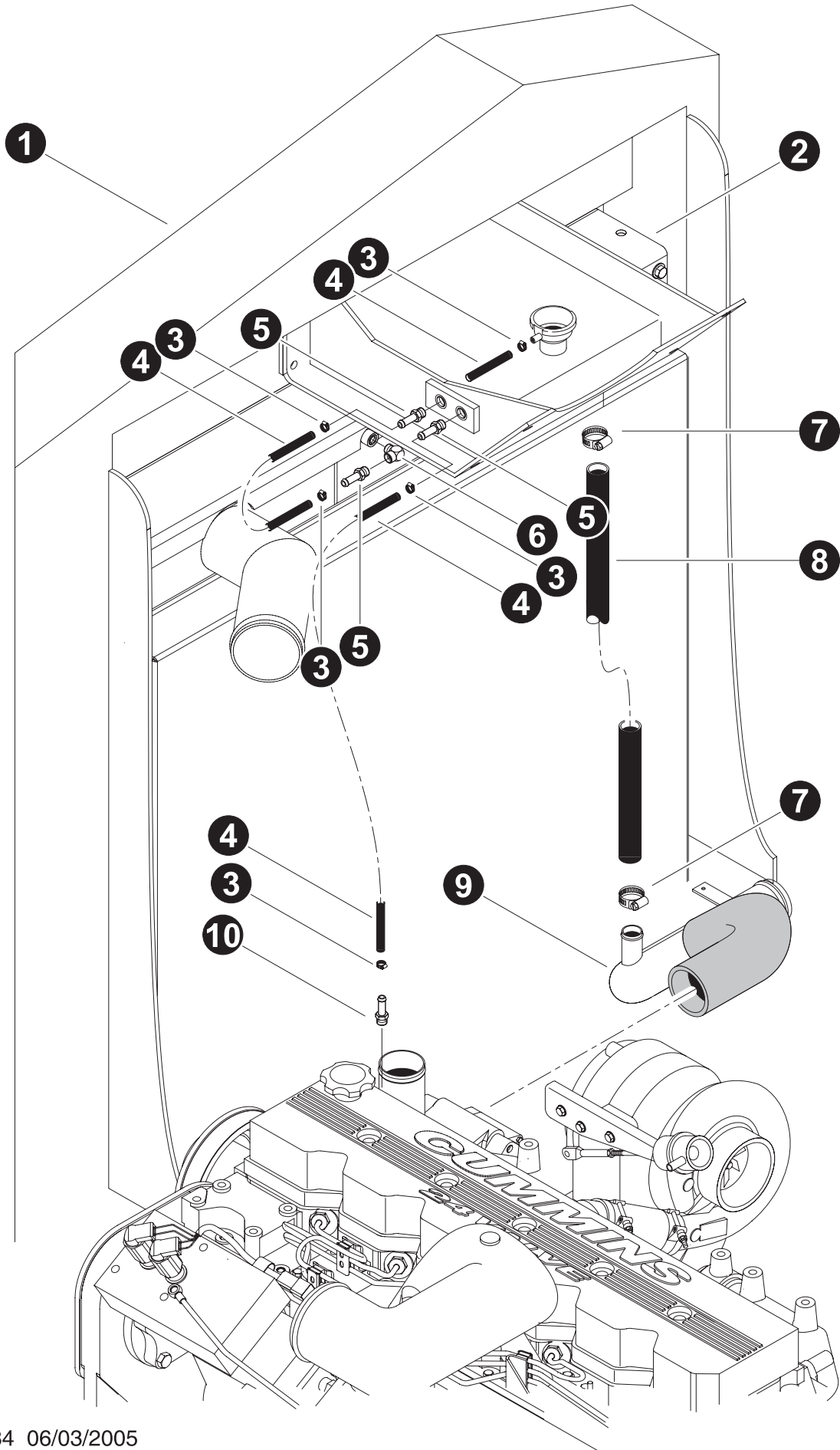


Parts T3133 06/03/2005
12.5

RADIATOR TO ENGINE CONNECTIONS




REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF	1	 RADIATOR / CHARGE AIR ASSEMBLY	UP-3
2	18103-EE	8	CLAMP, CONSTANT TORQUE - #40	
3	15617-EE	4	HOSE, 90 DEG. RADIATOR - 2.5"	
4	51762-EE	1	TUBE, RADIATOR UPPER - CUMMINS W/GTI RAD	
5	51763-EE	2	TUBE, RADIATOR LOWER - CUMMINS W/GTI RAD	


 See referenced page for component or assembly breakdown.




Parts T3134 06/03/2005
12.5


OVER FLOW TANK CONNECTIONS

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF	1	 UPPER TURNTABLE ASSEMBLY	UP-1
2	REF	1	 RADIATOR / CHARGE AIR ASSEMBLY	UP-3
3	16202-EE	5	CLAMP, HOSE - WORM STYLE - .625"	
4	16283-EE	-	HOSE, FUEL LINE (BULK ROLL) - .3125"	
5	16989-EE	3	CONNECTOR, STR HOSE BARB - 4245-5-2	
6	16251-EE	1	ELBOW, 90 STREET - 5502-4	
7	16256-EE	2	CLAMP, HOSE - WORM STYLE - 1"	
8	15677-EE	-	HOSE, HEATER - (BULK ROLL) 1" X 50'	
9	REF	1	 LOWER RADIATOR TUBE ASSEMBLY	EE-3
10		1	CONNECTOR, STR HOSE BARB (cummins with coolant orifice)	

 See referenced page for component or assembly breakdown.

COOLANT FILTER INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF	1	 CUMMINS QSC ENGINE	EE-1
2	24288-EE	2	BUSHING, BRASS - .375 X .75	
3	24289-EE	5	CONNECTOR, STR HOSE BARB - BRASS	
4	16256-EE	4	CLAMP, HOSE - WORM STYLE - 1"	
5	25124-EE		HOSE, FUEL LINE (BULK ROLL) - .375"	
6	25124-EE		HOSE, FUEL LINE (BULK ROLL) - .375"	
7	52057-EE	2	VALVE, SHUT OFF (Cummins Coolant Filter)	
8	24287-EE	2	ELBOW, 90 STREET .375" NPT - BRASS	
9	10811-EE	2	NUT, LOCK - .25"	
10	10757-EE	4	WASHER, SAE FLAT - .25"	
11	11707-EE	2	BOLT - .375" X 1"	
12	15528-EE	2	WASHER, SAE FLAT - .375"	
13	51939-EE	1	BRACKET, COOLANT FILTER	
14	16574-EE	1	MOUNT, FILTER HEAD ASSEMBLY	
15	20445-EE	1	FILTER, COOLANT - CUMMINS C SERIES	
16	15576-EE	2	BOLT - .25" X 1"	

 See referenced page for component or assembly breakdown.

