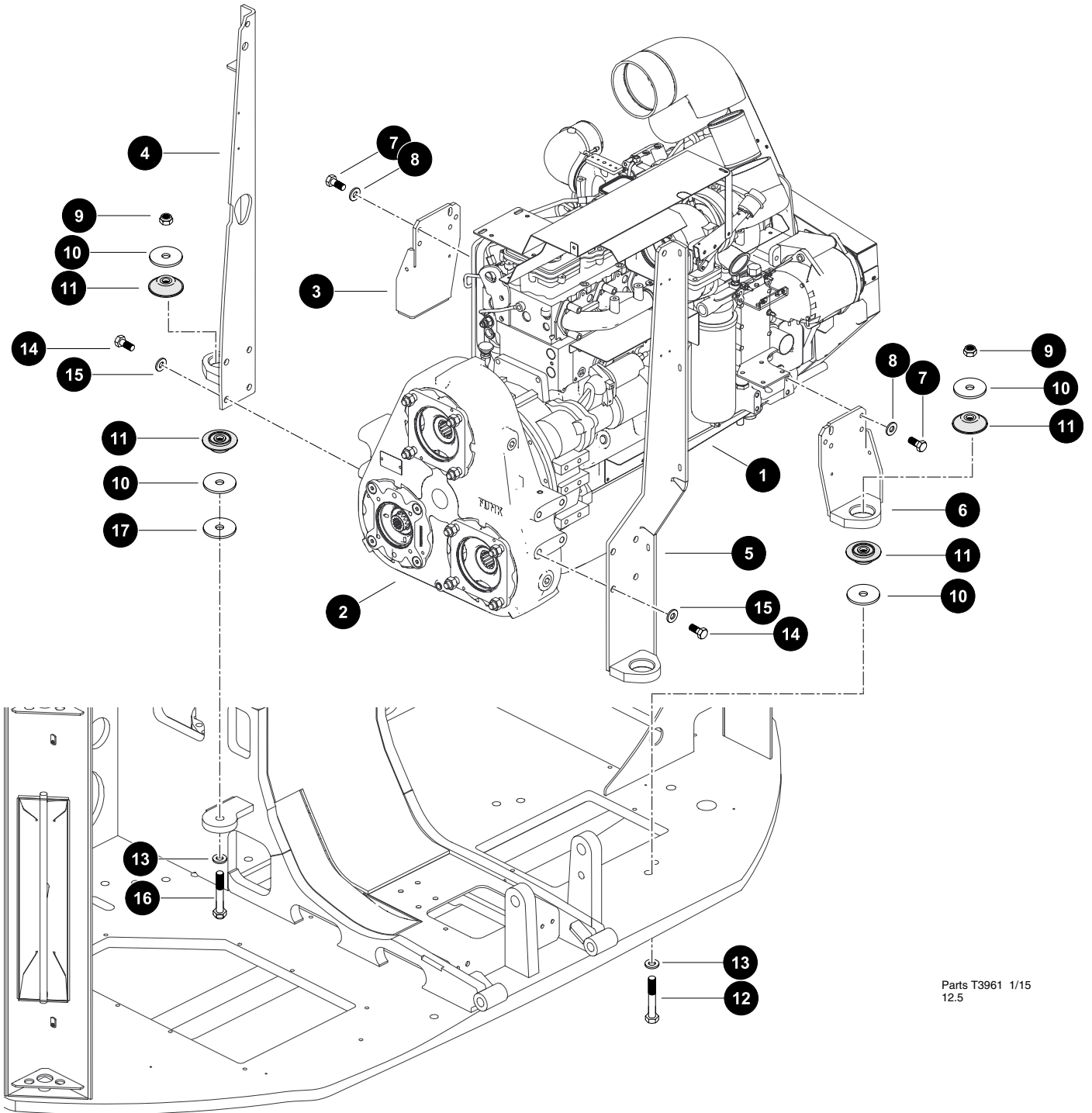


# ***Section EE-1***

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## ***Cummins QSC Engine - Installation and Parts***



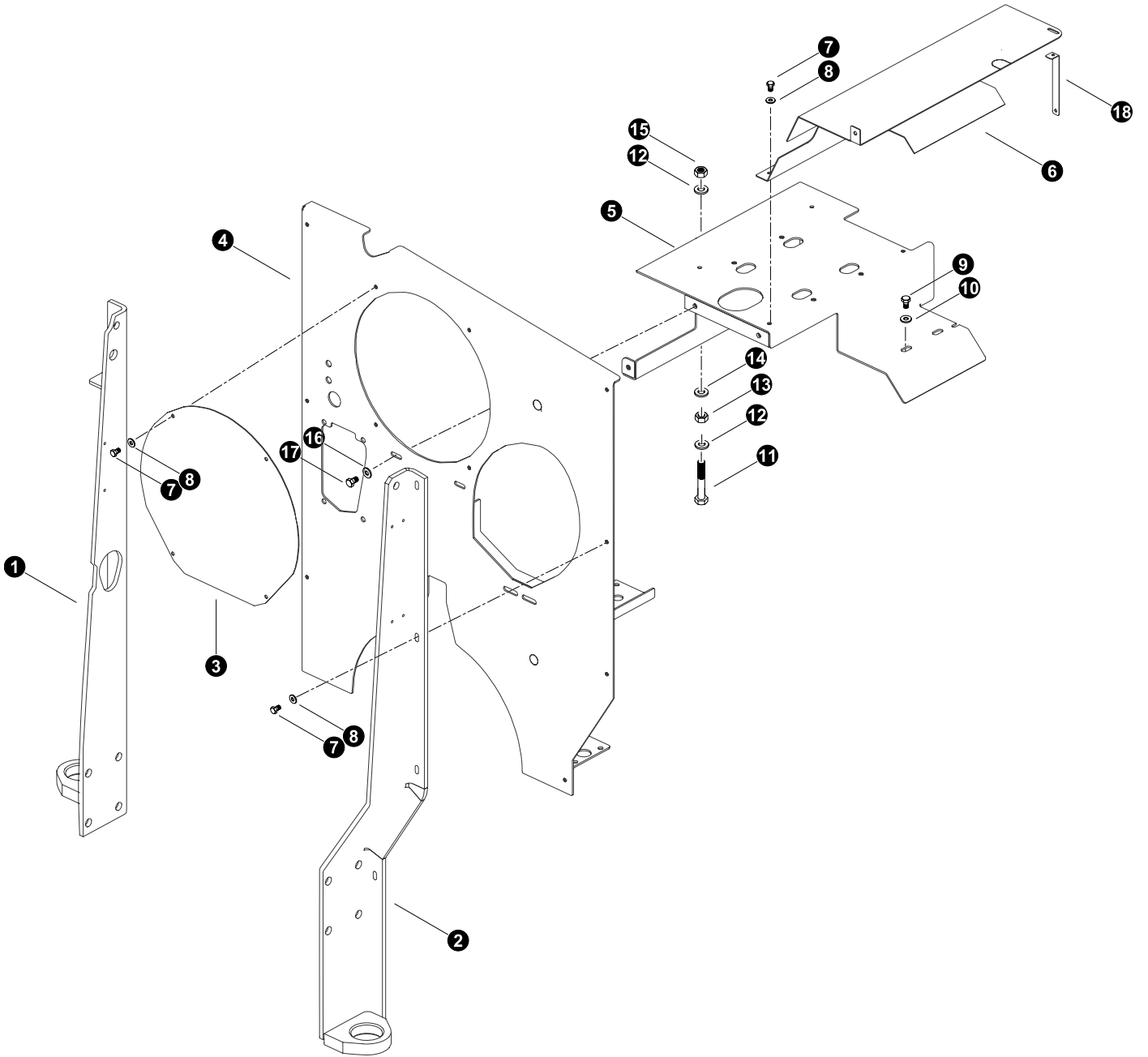
Parts T3961 1/15  
12.5

## ENGINE INSTALLATION

### Cummins QSC 8.3L

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	54251-EE	1	ENGINE, CUMMINS - 300HP (TIER 3 TPEM)	
2	REF	1	PUMP DRIVE TRANSMISSION .....	EE-4
3	46058-EE	1	MOUNT, ENGINE C-SERIES CUMMINS TIER 3	
4	46062-EE	1	MOUNT, ENGINE REAR LH CUMMINS TIER 3	
5	46795-EE	1	MOUNT, GEARBOX - OUTER (C SERIES)	
6	46058-EE	1	MOUNT, ENGINE C-SERIES CUMMINS TIER 3	
7	15551-EE	4	BOLT - 12mm-1.75P x 40mm ( <b>Torque to 92 ft.lbs. (122 Nm)</b> )	
8	15534-EE	4	WASHER, SAE FLAT - .5"	
9	10817-EE	2	NUT, lock 3/4"	
10	17918-EE	8	WASHER, isolator mount .875"	
11	17904-EE	8	ISOLATOR	
12	10846-EE	3	BOLT - 3/4" x 5.5"	
13	15550-EE	6	WASHER, SAE flat - 3/4"	
14	15502-EE	8	BOLT - 5/8" x 1-1/2" (Torque to 150 ft.lbs. (200 Nm))	
15	10771-EE	8	WASHER, SAE flat - 5/8	
16	10846-EE	1	BOLT - 3/4" x 6"	
17	47267-EE	2	WASHER, ENGINE MOUNT	

- Kit or Assembly - includes all items indented underneath.

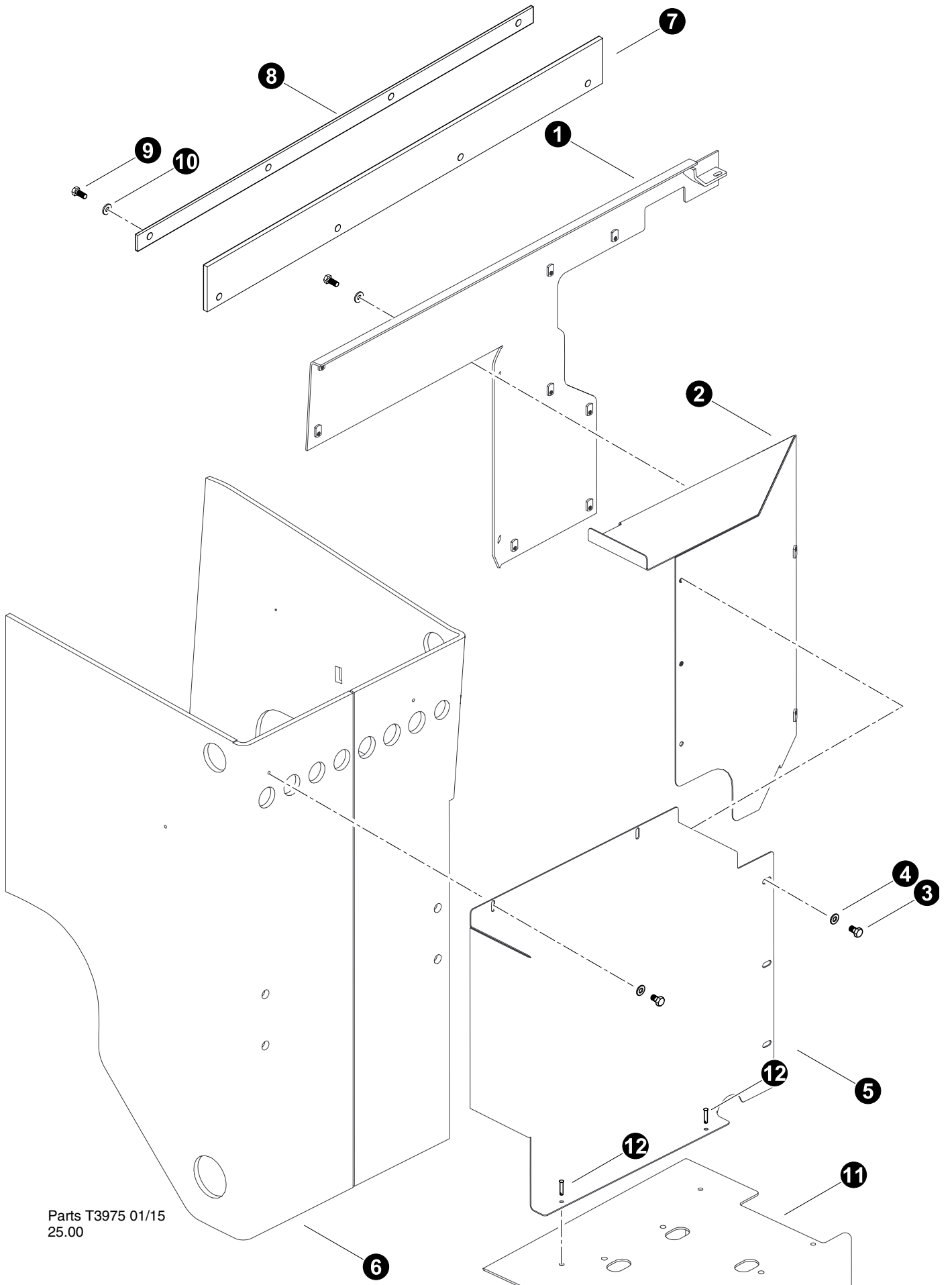


Parts T3962 1/15  
25.00

**BARRIER PANELS - REAR****Cummins QSC 8.3L**

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF	1	REAR ENGINE MOUNT .....	EE-1
2	REF	1	REAR ENGINE MOUNT .....	EE-1
3	46940-EE	1	COVER, AIR CLEANER ACCESS - CUMMINS	
4	46894-EE	1	PANEL, ENGINE - CUMMINS C SERIES	
5	46196-EE	1	MOUNT, AIR CLEANER ASSY CUMMINS TIER 3	
6	46936-EE	1	SHIELD, HEAT - EXHAUST PIPE	
7	15604-EE	4	BOLT - .25" X .75"	
8	10757-EE	4	WASHER, SAE FLAT - .25"	
9	18416-EE	2	BOLT - 10MM-1.5P X 25MM	
10	15548-EE	2	WASHER, SAE FLAT - .4375"	
11	20084-EE	1	BOLT - .375" X 1.75"	
12	15528-EE	2	WASHER, SAE FLAT - .375"	
13	10700-EE	1	NUT, HEX - .375"	
14	15528-EE	2	WASHER, SAE FLAT - .375"	
15	10813-EE	1	NUT, LOCK - .375"	
16	15559-EE	4	WASHER, SAE FLAT - .3125"	
17	15605-EE	4	BOLT - .3125" X .75"	
18	46939-EE	1	BRACKET, HEAER SHIELD SUPPORT - CUMMINS	

Kit or Assembly - includes all items indented underneath.



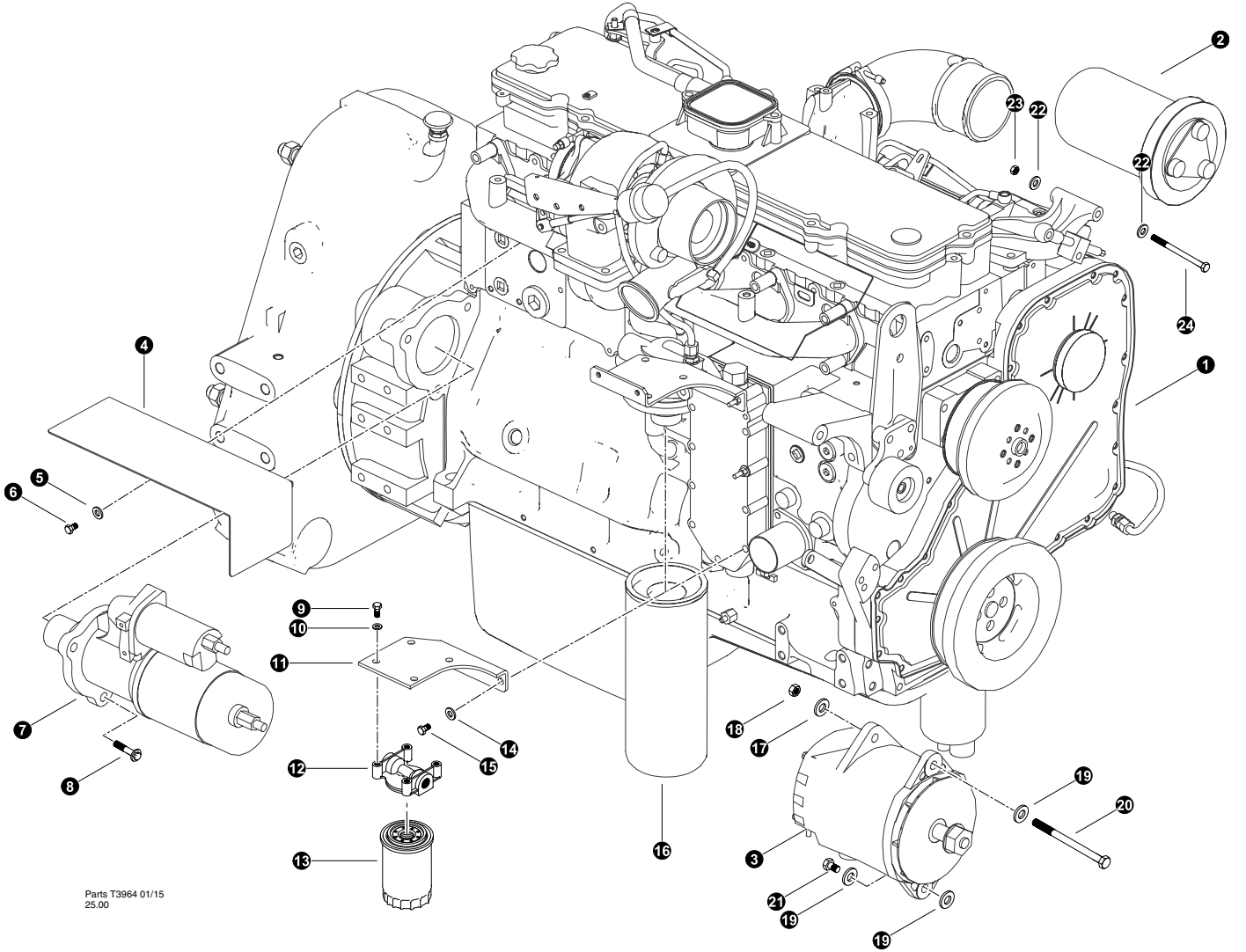
Parts T3975 01/15  
25.00

## BARRIER PANELS - FRONT

### Cummins QSC 8.3L

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	46485-EE	1	WELDMENT, ENG BARRIER - VALVE COVER	
2	46325-EE	1	BARRIER, ENGINE 3 - C MODEL	
3	15604-EE	7	BOLT - .25" X .75"	
4	10757-EE	7	WASHER, SAE FLAT - .25"	
5	46322-EE	1	BARRIER, ENGINE 2 - C MODEL	
6	REF	1	UPPER TURNTABLE WELDMENT.....	UP-1
7	47202-EE	1	RUBBER, COOLER SIDE - INNER (C SERIES)	
8	53052-EE	1	BAR, RETAINER 1/8x1x31.7	
9	15604-EE	4	BOLT - .25" X .75"	
10	10757-EE	4	WASHER, SAE FLAT - .25"	
11	REF	1	MOUNT, AIR CLEANER ASSY CUMMINS TIER 3.....	EE-1
12	46322-EE	2	CLEVIS - 1/4" x .88"	

Kit or Assembly - includes all items indented underneath.



Parts T3964 01/15  
25.00

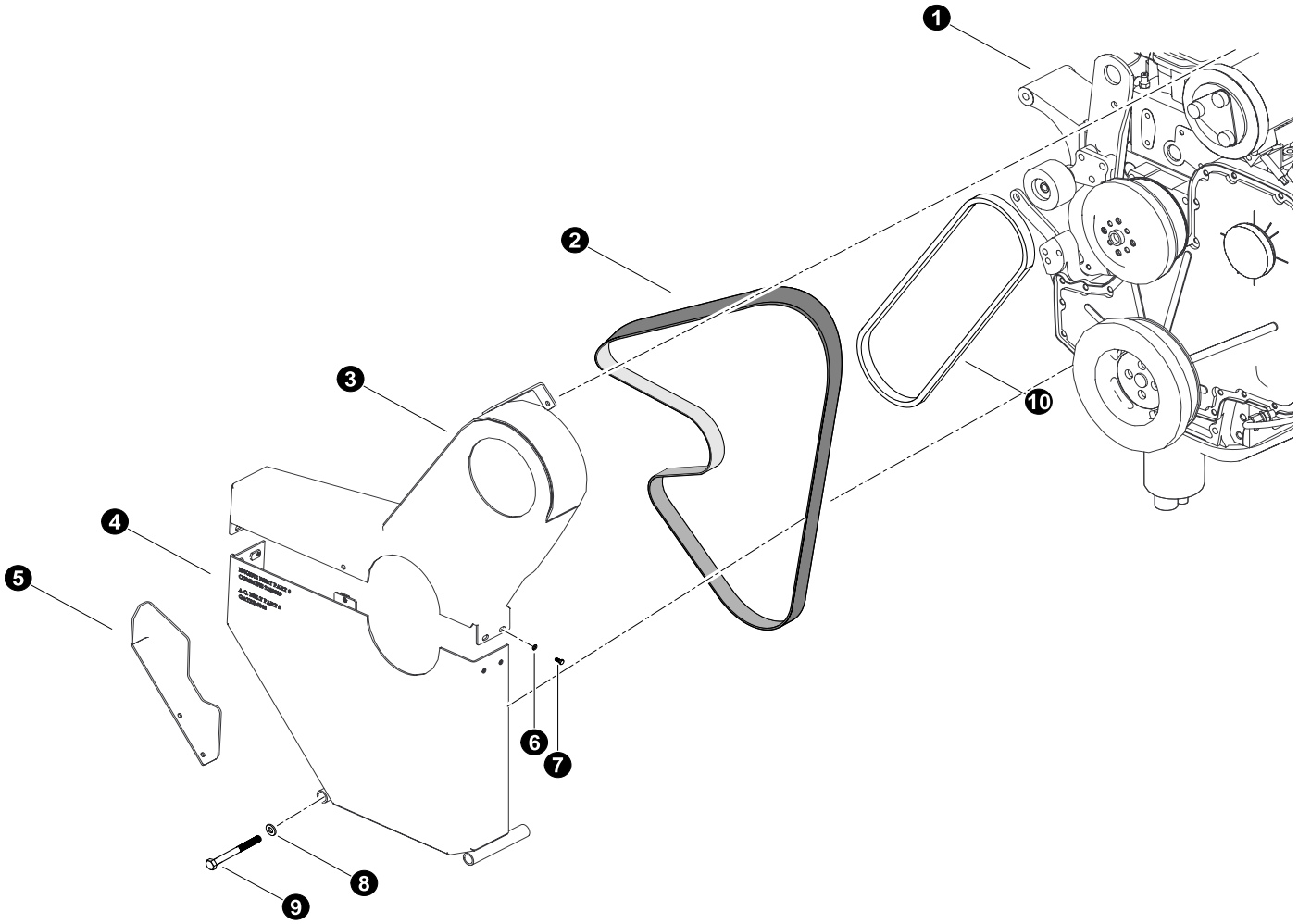


## Starter, Alternator, Compressor and Filters

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF	1	ENGINE, CUMMINS .....	EE-1
2	55135-EE	1	COMPRESSOR, A/C - C MODEL / SKIDDER	
3	53246-EE	1	ALTERNATOR, TIER 3 CUMMINS - 24V/100A	
4	46199-EE	1	SHIELD, STARTER - CUMMINS TIER 3	
5	15548-EE	2	WASHER, SAE FLAT - .4375"	
6	17395-EE	2	BOLT - 10MM-1.5P X 20MM	
7	53240-EE	1	STARTER - C8.3C/QSC (24V) 3102767	
8	-EE	1	BOLT, 12 point cap - 10mm x 35 mm	
9	15542-EE	4	BOLT - .375" X .75"	
10	15528-EE	4	WASHER, SAE FLAT - .375"	
11	46739-EE	1	PLATE, WATER - FLITER SUPPORT - CUMMINS	
12	16574-EE	1	MOUNT, FILTER HEAD ASSEMBLY	
13	20445-EE	1	FILTER, COOLANT - CUMMINS C SERIES	
14	15548-EE	2	WASHER, SAE FLAT - .4375"	
15	25038-EE	2	BOLT - 8MM-1.25P X 65MM	
16	16070-EE	1	FILTER, engine oil	
17	15534-EE	2	WASHER, SAE FLAT - .5"	
18	24610-EE	1	NUT, HEX - 12MM-1.75P	
19	15534-EE	2	WASHER, SAE FLAT - .5"	
20	-EE	1	BOLT, Flange Head - 12mm x 150mm	
21	50149-EE	1	BOLT - 12MM-1.75P X 25MM	
22	15528-EE	2	WASHER, SAE flat - 3/8"	
23	15530-EE	1	NUT, hex - 10mm-1.5P	
24	24604-EE	1	BOLT - 10mm-1.5P x 125mm (Flange Head)	





See referenced page for component or assembly breakdown.



Parts T3963 01/15  
12.5

## ENGINE BELT AND SHROUDS

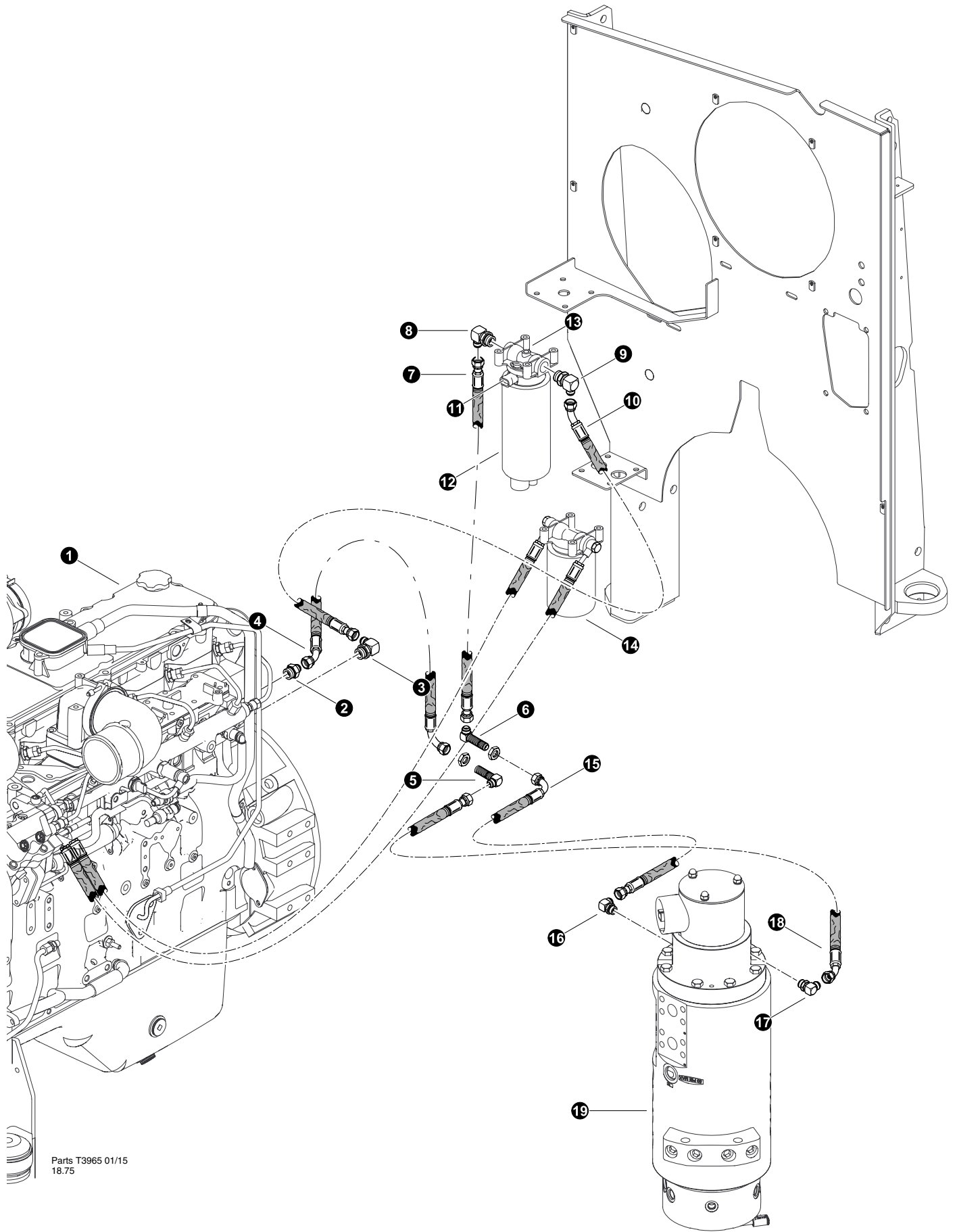
REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 ENGINE - Cummins QSC8.3-C	
2	3289809	1	BELT, Cummins QSC8.3- C Model	
-	46268-EE	1	 SHROUD, RADIATOR FAN DRIVE ENGINE	
3	46272-EE	1	SHROUD, TOP	
4	46275-EE	1	SHROUD, Bottom	
5	46288-EE	1	SHROUD, Side	
6	10757-EE	4	WASHER, SAE FLAT - .25"	
7	15604-EE	4	BOLT - .25" X .75"	
8	15534-EE	2	WASHER, SAE FLAT - .5"	
9	53110-EE	2	BOLT - 12MM X 180MM FAN GUARD	
10	55584-EE	1	BELT, A/C COMPRESSOR - C-SERIES - Gates PowerRated 6848	



See referenced page for component or assembly breakdown.




Kit or Assembly - includes all items indented underneath.

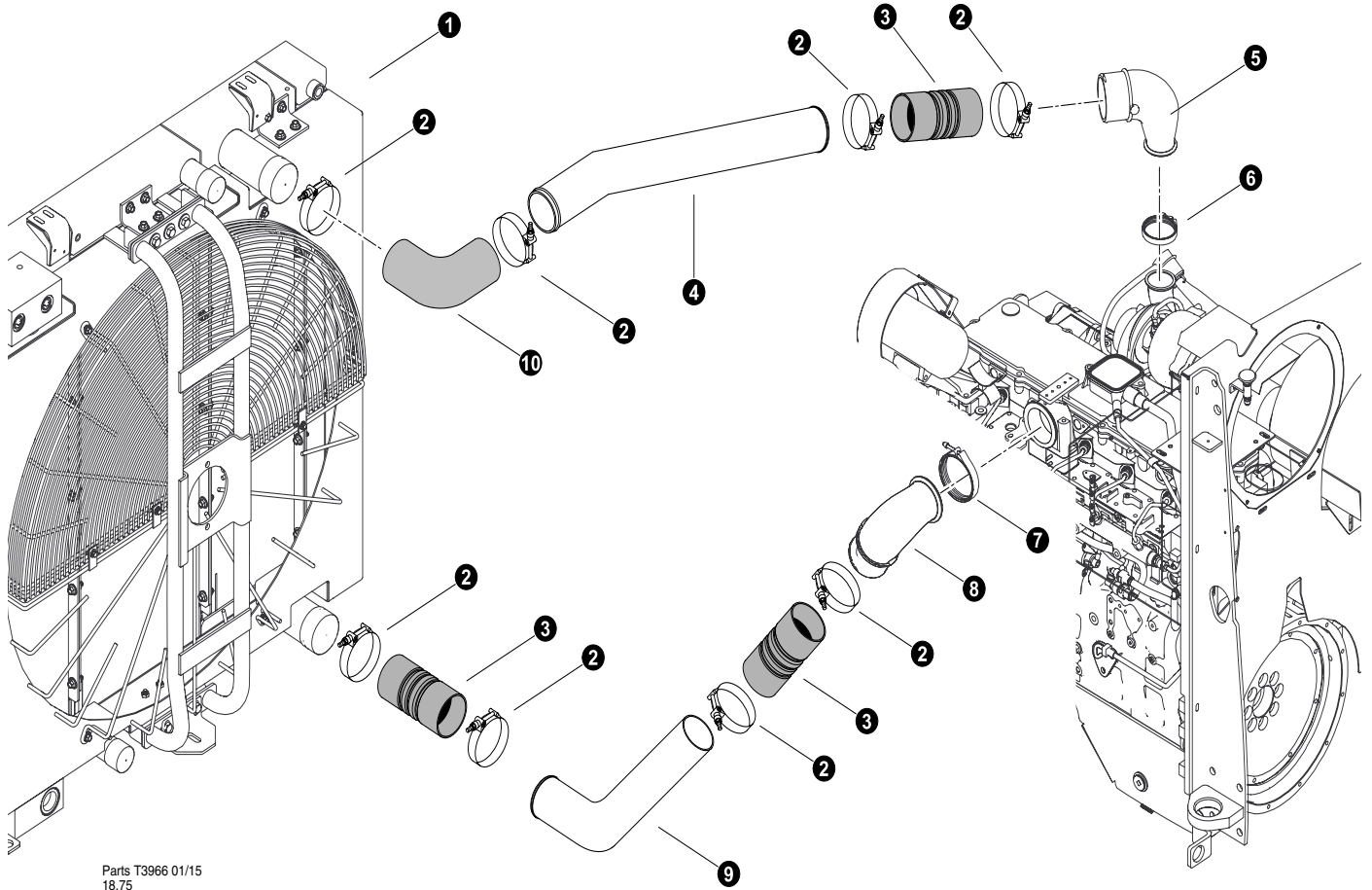


Parts T3965 01/15  
18.75

## FUEL LINES


REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 ENGINE - Cummins QSC8.3-C.....	EE-1
2	53103-EE	1	FITTING, 6-8 - ORB-JIC 830-B	
3	53073-EE	1	ELBOW, 90 6-JIC X 10-ORB	
4	-EE	1	HOSE ASSEMBLY - 2038-06-06JS-06J4-W ( <i>Engine Return to Bulkhead</i> )	
5	55347-EE	1	FITTING, ELBOW - BULKHEAD 6 WETX-WLN-S	
6	55347-EE	1	FITTING, ELBOW - BULKHEAD 6 WETX-WLN-S	
7	-EE	1	HOSE ASSEMBLY - 2027-06-06JS-06J9-W ( <i>Filter Supply to Bulkhead</i> )	
8	53073-EE	1	ELBOW, 90 6-JIC X 10-ORB	
9	53073-EE	1	ELBOW, 90 6-JIC X 10-ORB	
10	-EE	1	HOSE ASSEMBLY - 2038-06-06JS-06J4-W ( <i>Engine Supply to Filter</i> )	
11	-EE	1	Thermostat, Fuel Heater (3942357)	
12	24062-EE	1	FILTER, FUEL (CUMMINS QSC - ELECTRONIC)	
13	-EE	1	HEAD, Fuel Filter (3944986)	
14	52848-EE	1	FILTER, FUEL - PRIMARY QSC TIER 3	
15	-EE	1	HOSE ASSEMBLY - 2081-06-06JS-06J9-W ( <i>rotary manifold port FR to Bulkhead</i> )	
16	15480-EE	1	ELBOW, 90 - 6801-6	
17	15480-EE	1	ELBOW, 90 - 6801-6	
18	-EE	1	HOSE ASSEMBLY - 2081-06-06JS-06J9-W ( <i>rotary manifold port FS to Bulkhead</i> )	
19	REF	1	ROTARY MANIFOLD.....	UP-1



 See referenced page for component or assembly breakdown.

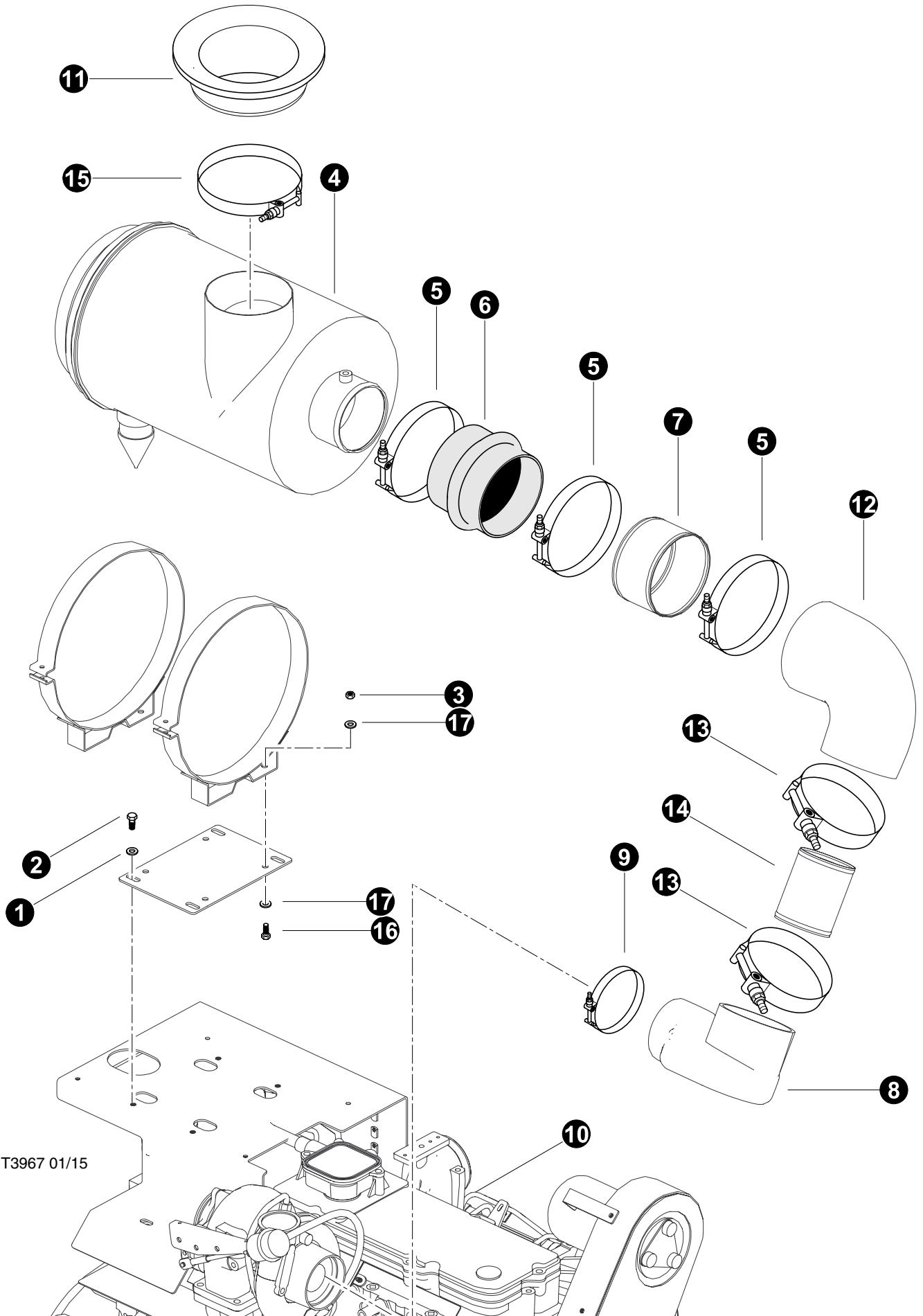


Parts T3966 01/15  
18.75

## CHARGE AIR (Air To Air Connections Tier 3 engine)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 RADIATOR / AIR COOLER ASSEMBLY .....	EE-3
2	52862-EE	6	CLAMP, spring hose - 4" (3926703)	
3	52861-EE	4	HOSE, HUMP - SILICONE (3 WIRE CUMMINS)	
4	46222-EE	1	TUBE, AIR TO AIR (UPPER) C-SEREIS	
5	-EE	1	CUMMINS - Air Transfer Elbow	
6	-EE	1	CLAMP, V-Band - 3101325	
7	-EE	1	CLAMP, V-Band - 3067979	
8	-EE	1	CUMMIN - Air Transfer Elbow - 3682674	
9	46228-EE	1	TUBE, AIR TO AIR (LOWER) C-SERIES	
10	52753-EE	1	ELBOW, 90 - 3.5" X 6" SILICONE C-SERIES	

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





Parts T3967 01/15  
12.5

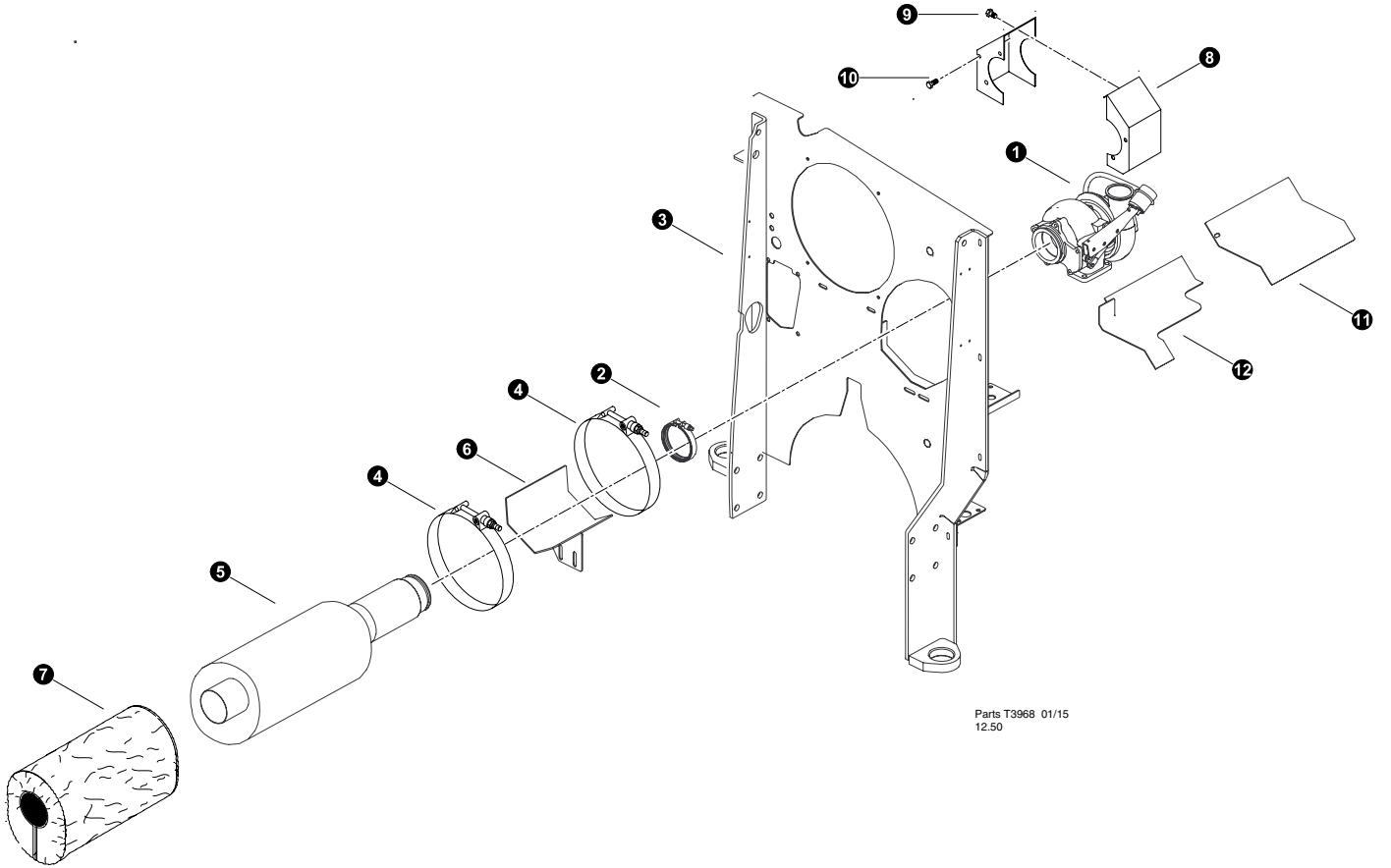


## AIR CLEANER INSTALLATION

### (Tier 3 engine)



REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	15559-EE	4	WASHER, SAE FLAT - .3125"	
2	15605-EE	4	BOLT - .3125" X .75"	
3	10813-EE	4	NUT, LOCK - .375"	
4	REF.	1	 AIR CLEANER ASSEMBLY . . . . .	EE-1
5	16249-EE	3	CLAMP, strap band - 5-1/2"	
6	52055-EE	1	HOSE, HUMP AIR CLEANER (5" X 5") CUMMINS	
7	46374-EE	1	TUBE, AIR CLEANER / TURBO - C SERIES (LH	
8	55634-EE	1	ELBOW, RUBBER - 4" x 4" - CUMMINS C-SER.	
9	15697-EE	1	CLAMP, strap band - 4-1/2"	
10	REF.	1	 ENGINE - Cummins C8.3-C . . . . .	EE-1
11	52147-EE	1	FLANGE, RUBBER SEAL - AIR CLEANER	
12	15831-EE	1	ELBOW, 90 RUBBER - AIR CLEANER 4" X 5"	
13	15697-EE	2	CLAMP, strap band - 4-1/2"	
14	46529-EE	1	TUBE, AIR INTAKE STEEL - TURBO TO CLEAN	
15	53749-EE	1	CLAMP, HOSE - WORM STYLE - AIR CLEANER	

 See referenced page for component or assembly breakdown.

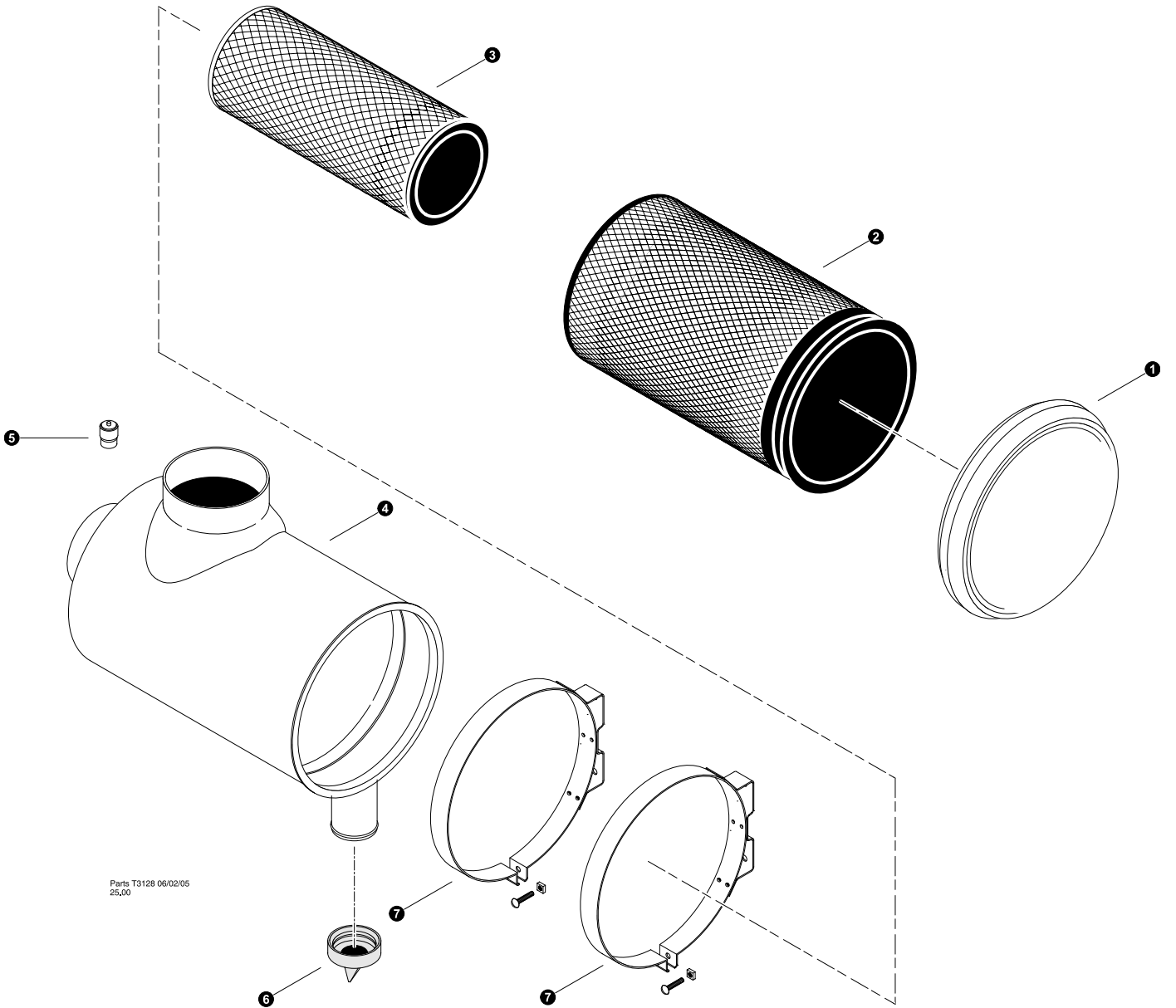


Parts T3968 01/15  
12.50

## 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 (3905216)	
3	REF.	1	 REAR ENGINE PANEL . . . . .	EE-1
4	55373-EE	2	CLAMP, MUFFLER - C SERIES - CUMMINS	
5	46182-EE	1	WELDMENT, MUFFLER ASSY - CUMMINS	
6	46157-EE	1	WELDMENT, MUFFLER MTG BRKT	
7	55142-EE	1	INSULATION, MUFFLER (C-SERIES)	
8	54839-EE	1	GUARD, TURBO - DEBRIS DEFLECTOR (standard)	
9	25059-EE	1	BOLT - 8MM-1.25P X 20MM	
10	25060-EE	2	BOLT - 8MM-1.25P X 25MM	
11	46234-EE	1	GUARD, exhaust manifold	
12	46238-EE	1	GUARD, exhaust manifold	

 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.

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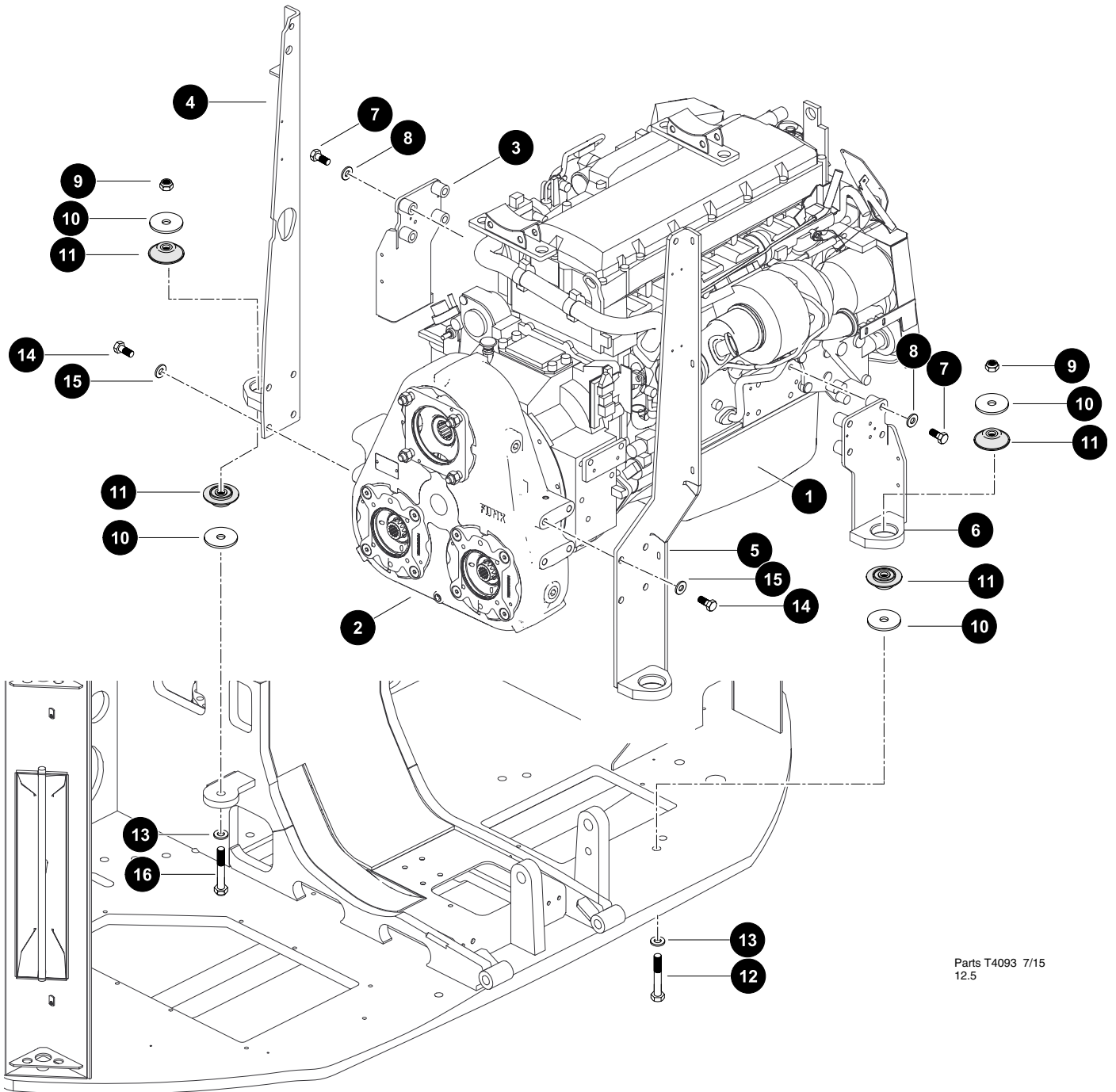
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## ***Section EE-2***

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### ***Volvo Tier 4 Engine - Installation and Parts***



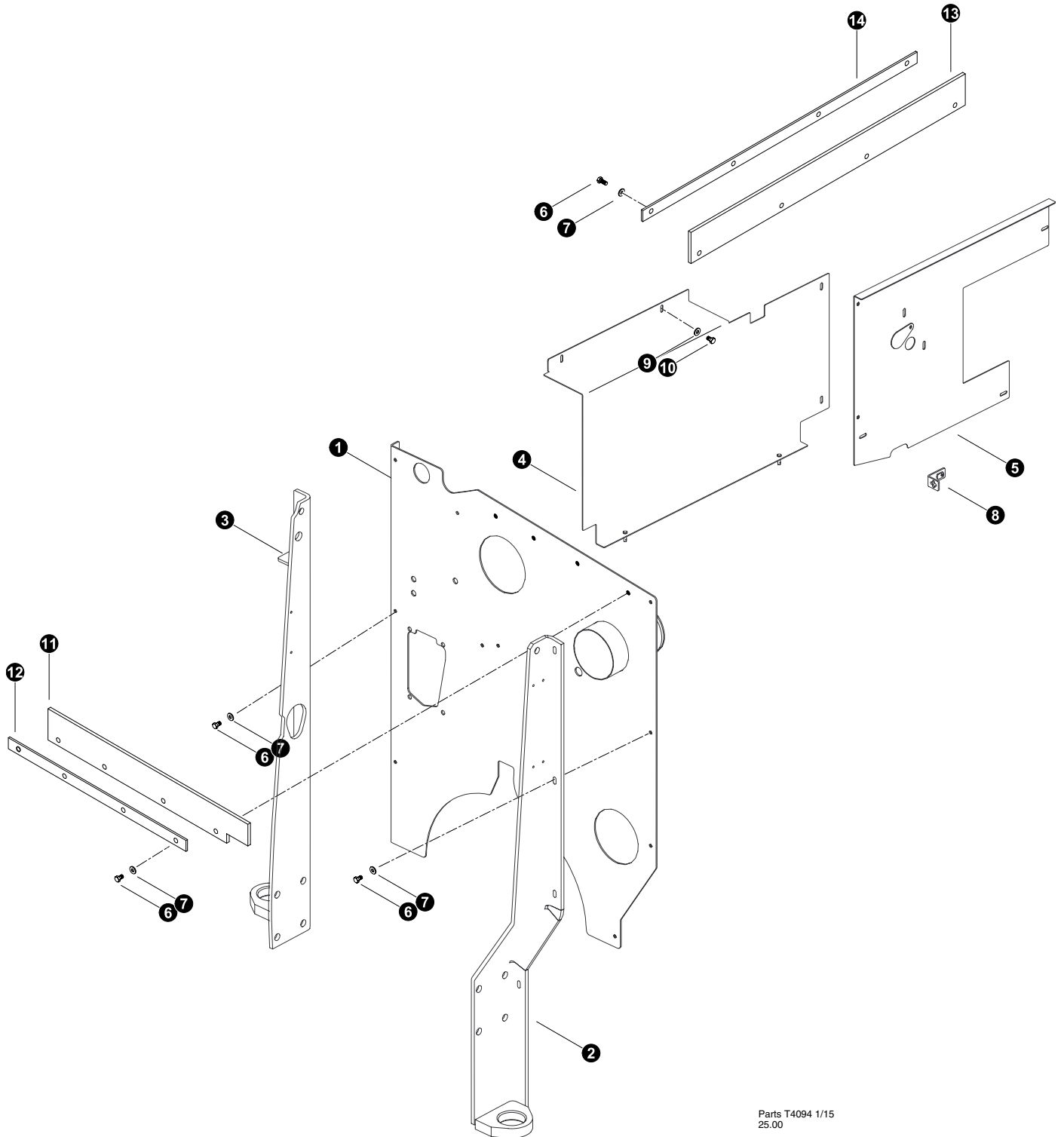
Parts T4093 7/15  
12.5



## ENGINE INSTALLATION Volvo Tier 4

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	55396-EE	1	ENGINE, VOLVO - TAD 873 VE TIER 4F	
2	REF	1	PUMP DRIVE TRANSMISSION .....	EE-4
3	46423-EE	1	MOUNT, ENGINE C-SERIES CUMMINS TIER 3	
4	46062-EE	1	MOUNT, ENGINE REAR LH	
5	46061-EE	1	MOUNT, ENGINE REAR RH	
6	46423-EE	1	MOUNT, ENGINE - VOLVO TIER 4F	
7	19929-EE	4	BOLT - 16MM-2.0P X 70MM (Torque to 150 ft.lbs. (200 Nm))	
8	15534-EE	4	WASHER, SAE FLAT - .5"	
9	10817-EE	2	NUT, lock 3/4"	
10	17918-EE	8	WASHER, isolator mount .875"	
11	17904-EE	8	ISOLATOR	
12	10846-EE	3	BOLT - 3/4" x 6"	
13	15550-EE	6	WASHER, SAE flat - 3/4"	
14	15502-EE	8	BOLT - 5/8" x 1-1/2" (Torque to 150 ft.lbs. (200 Nm))	
15	10771-EE	8	WASHER, SAE flat - 5/8	
16	10846-EE	1	BOLT - 3/4" x 6"	

- Kit or Assembly - includes all items indented underneath.

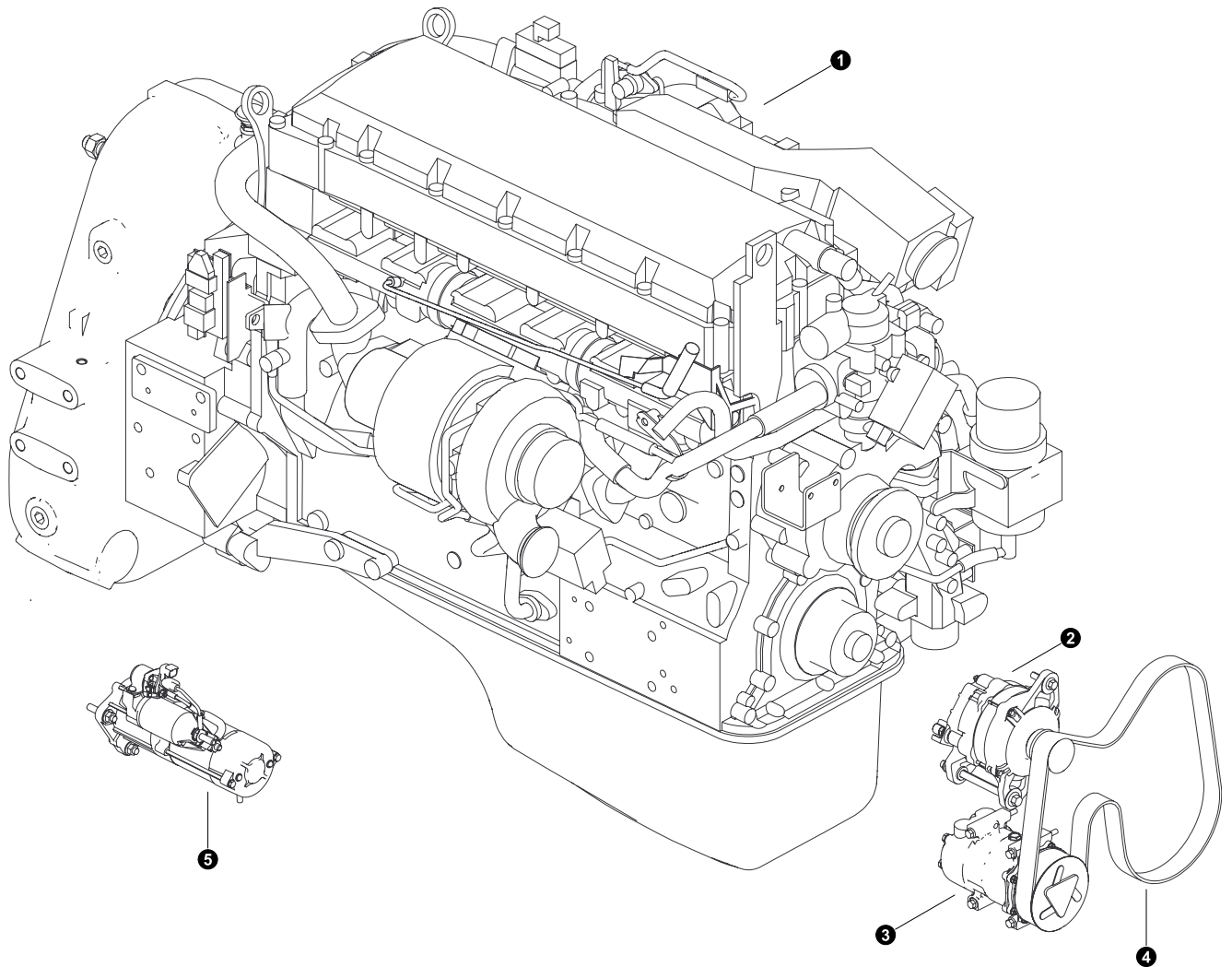


Parts T4094 1/15  
25.00

**BARRIER PANELS - REAR****Volvo Tier 4**


REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	46877-EE	1	BARRIER, ENGINE - VOLVO	
2	REF	1	REAR ENGINE MOUNT .....	EE-1
3	REF	1	REAR ENGINE MOUNT .....	EE-1
4	46944-EE	1	SHIELD, HOSES - VOLVO	
5	46950-EE	1	ASSY, ENGINE BARRIER SHIELD MTG - VOLVO	
6	15604-EE	7	BOLT - .25" X .75"	
7	10757-EE	7	WASHER, SAE FLAT - .25"	
8	46946-EE	1	BRACKET, SHIELD MTG - VOLVO	
9	10757-EE	7	WASHER, SAE FLAT - .25"	
10	15604-EE	7	BOLT - .25" X .75"	
11	47206-EE	1	RUBBER, ENGINE BARRIER PANEL	
12	53051-EE	1	BAR, RETAINER 1/8x1x12	
13	47202-EE	1	RUBBER, COOLER SIDE - INNER (C SERIES)	
14	53052-EE	1	BAR, RETAINER 1/8x1x31.75	

Kit or Assembly - includes all items indented underneath.

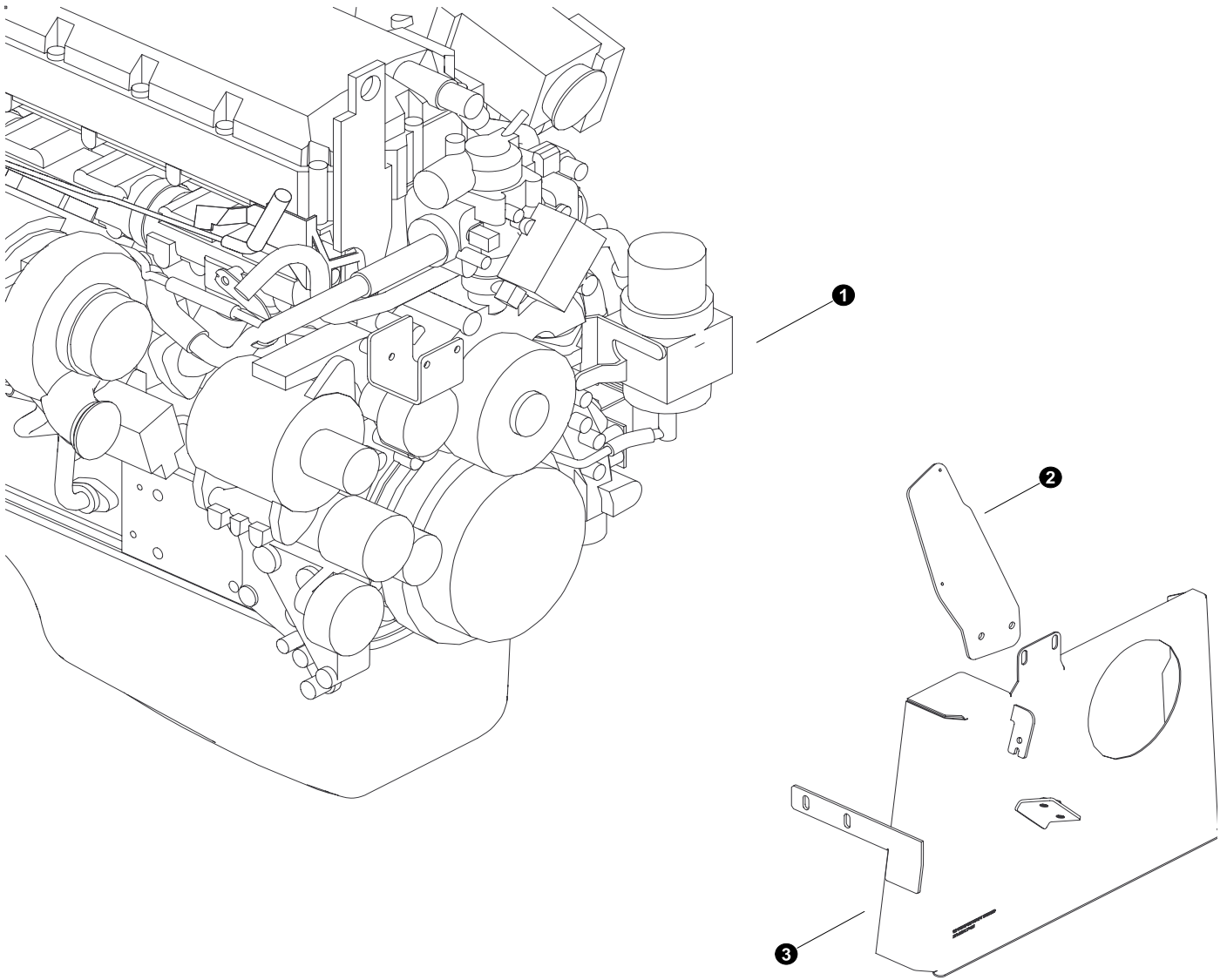


Parts T4095 07/15  
25.00

## Starter, Alternator, Compressor and Filters


REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 ENGINE, VOLVO Tier4 .....	EE-2
2	21922756	1	ALTERNATOR, 130 amp	
3	-EE	1	COMPRESSOR, A/C - C MODEL	
4	54739-EE	1	BELT, A/C DRIVE - VOLVO 722 ENGINE	
5	21774085	1	STARTER, Volvo Tier4	


 See referenced page for component or assembly breakdown.



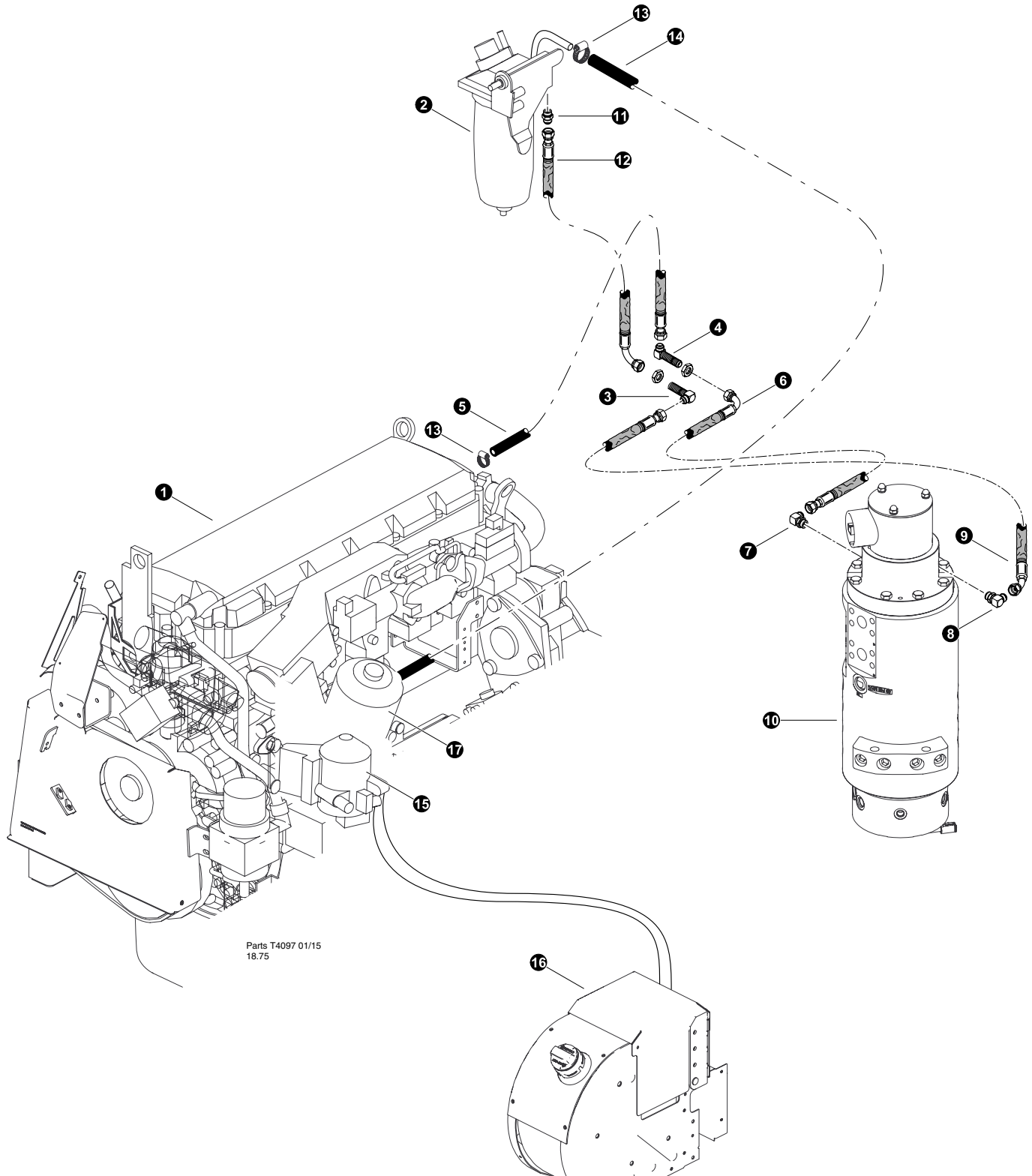
Parts T4096 07/15  
25.00

## FAN SHROUDS

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 ENGINE, VOLVO Tier4 .....	EE-2
2	46982-EE	1	PLATE, SENSOR MODULE MOUNT - VOLVO	
3	46704-EE	1	SHROUD, FAN - VOLVO	

 See referenced page for component or assembly breakdown.


 Kit or Assembly - includes all items indented underneath.



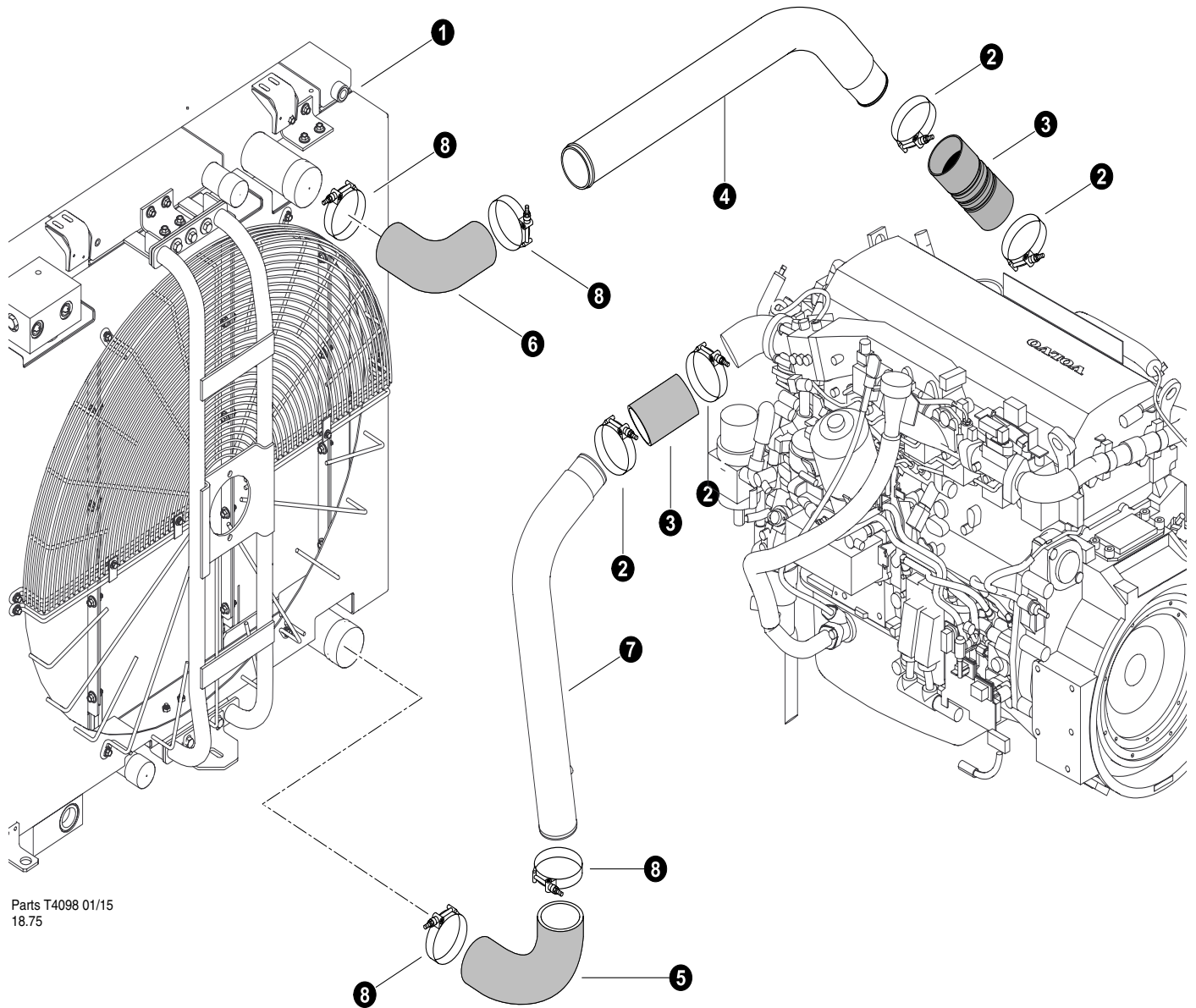
Parts T4097 01/15  
18.75



## FUEL LINES, and Filters


REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 ENGINE, VOLVO Tier4 .....	EE-2
2	57225-EE	1	FILTER, Spin on Volvo	
3	55347-EE	1	FITTING, ELBOW - BULKHEAD 6 WETX-WLN-S	
4	55347-EE	1	FITTING, ELBOW - BULKHEAD 6 WETX-WLN-S	
5	-EE	1	HOSE ASSEMBLY - 2038-06-0600-06J9-W ( <i>Engine Return to Bulkhead</i> )	
6	-EE	1	HOSE ASSEMBLY - 2081-06-06JS-06J9-W ( <i>rotary manifold port FR to Bulkhead</i> )	
7	15480-EE	1	ELBOW, 90 - 6801-6	
8	15480-EE	1	ELBOW, 90 - 6801-6	
9	-EE	1	HOSE ASSEMBLY - 2081-06-06JS-06J4-W ( <i>rotary manifold port FS to Bulkhead</i> )	
10	REF	1	ROTARY MANIFOLD. ....	UP-1
11	55204-EE	1	FITTING, STRAIGHT - 6 FTX-S	
12	-EE	1	HOSE ASSEMBLY - 2027-06-06JS-06J9-W ( <i>Filter Supply to Bulkhead</i> )	
13	10759-EE	1	CLAMP, HOSE - WORM STYLE - .875"	
14	25124-EE	36	HOSE, FUEL LINE (BULK ROLL) - .375"	
15	57229-EE	1	FUEL FILTER	
16	46740-EE	1	TANK, UREA - C SERIES	
17	21913334	1	FILTER, Oil Kit Volvo Tier4	

 See referenced page for component or assembly breakdown.



Parts T4098 01/15  
18.75

## CHARGE AIR (Air To Air Connections Tier 4 Volvo)

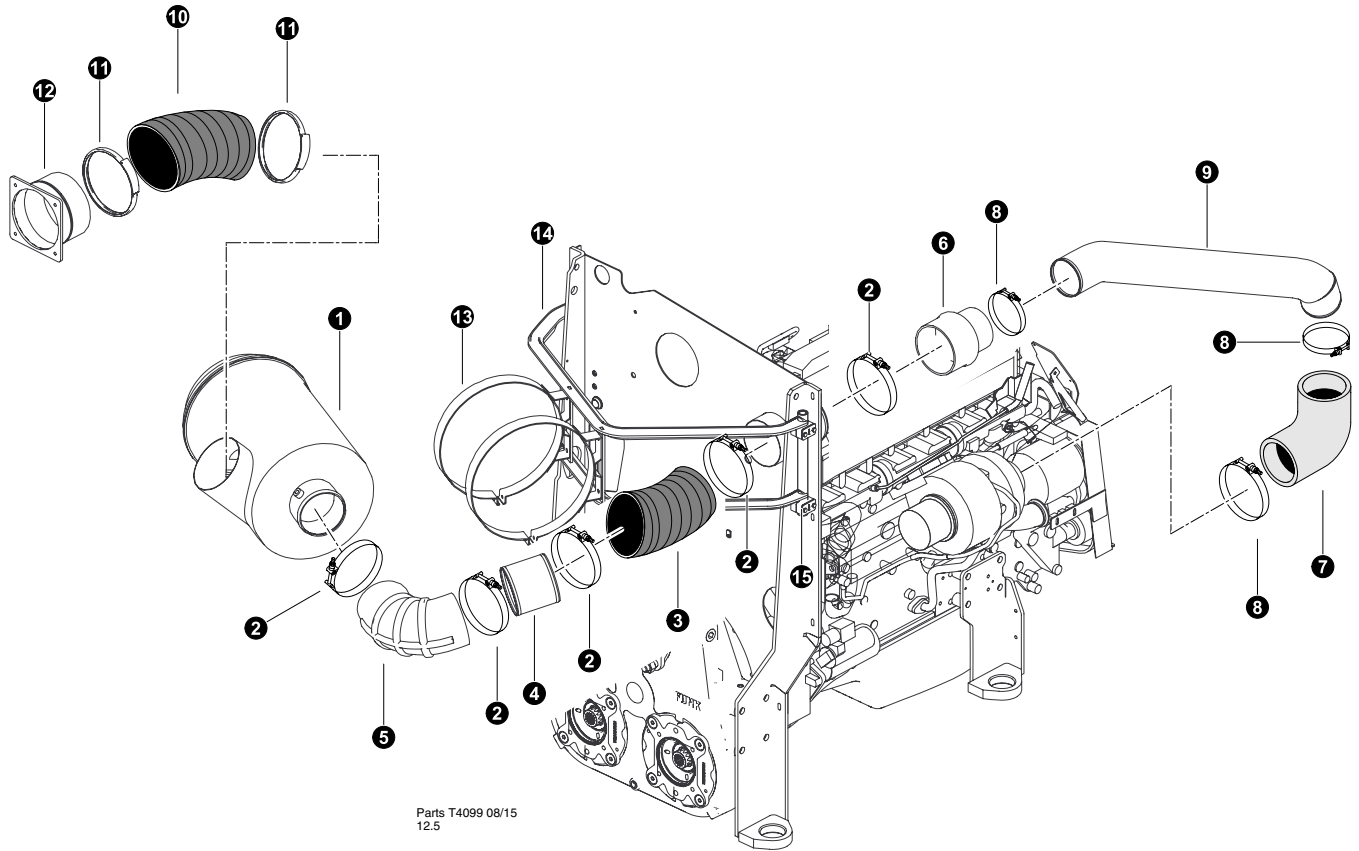
REF	PART #	QTY	DESCRIPTI ON	SEE SECTION
1	REF.	1	 RADIATOR / AIR COOLER ASSEMBLY .....	EE-3
2	55384-EE	6	CLAMP, STRAP BAND - 3.25"	
3	55599-EE	4	HOSE, HUMP - 3" x 6" - VOLVO C SERIES	
4	46665-EE	1	TUBE, AIR TO AIR (UPPER) VOLVO	
5	52753-EE	1	ELBOW, 90 - 3.5" X 6" SILICONE C-SERIES	
6	52753-EE	1	ELBOW, 90 - 3.5" X 6" SILICONE C-SERIES	
7	46666-EE	1	TUBE, AIR TO AIR (LOWER) VOLVO	
8	16337-EE	4	CLAMP, STRAP BAND - 4"	



See referenced page for component or assembly breakdown.




Kit or Assembly - includes all items indented underneath.

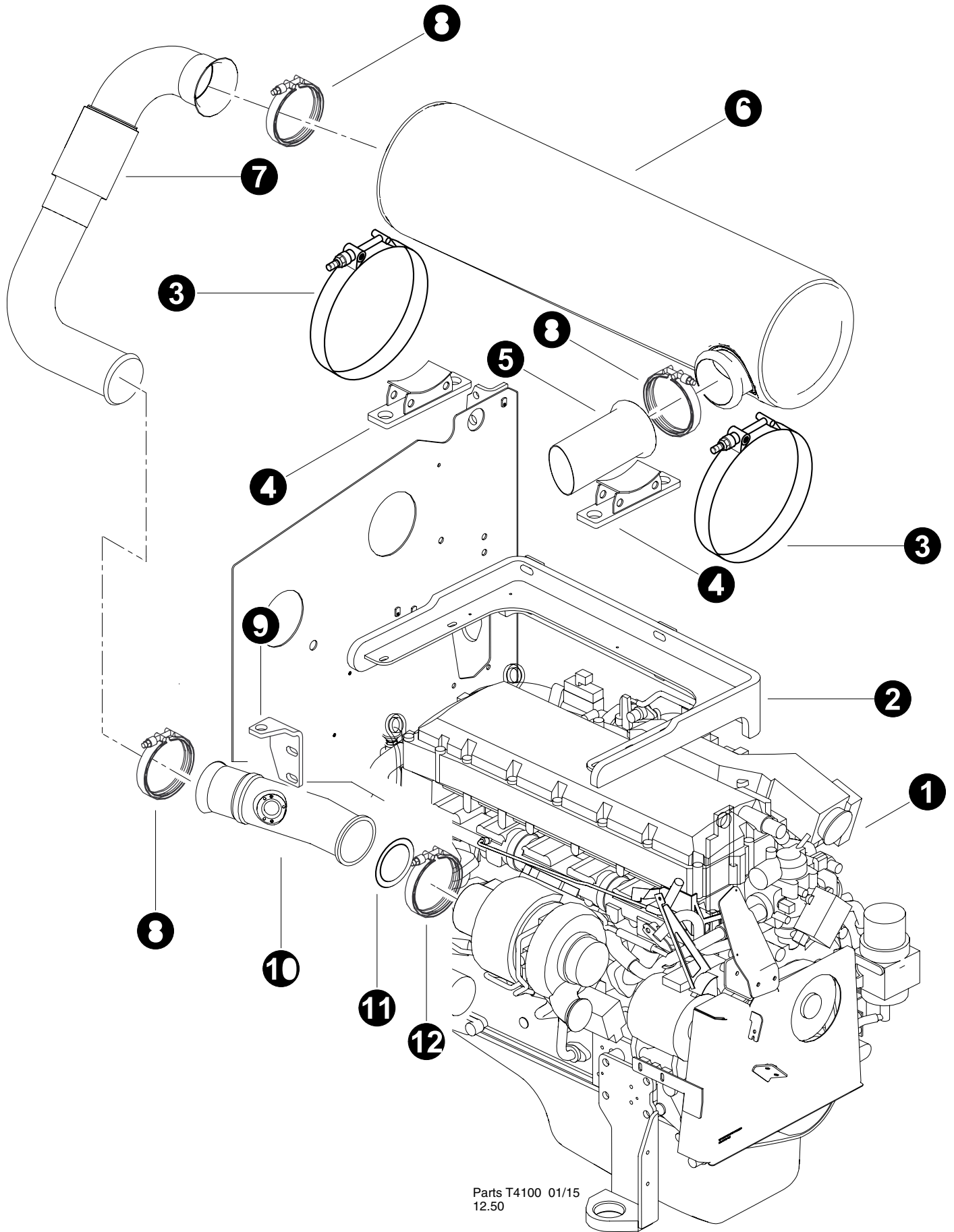


## AIR CLEANER INSTALLATION

### (Tier 4 Volvo)


REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 AIR CLEANER ASSEMBLY . . . . .	EE-1
2	16249-EE	5	CLAMP, strap band - 5-1/2"	
3	55576-EE	36"	HOSE, DUCT - AIR CLEANER TO ENGINE - 5"	
4	46374-EE	1	TUBE, AIR CLEANER / TURBO	
5	55530-EE	1	ELBOW, RUBBER - 90 DEGREE 5" X 5"	
6	52056-EE	1	HOSE, HUMP - 5" X 4"	
7	NSS		ELBOW, VOLVO TURBO	
8	15697-EE	1	CLAMP, strap band - 4-1/2"	
9	46873-EE	1	TUBE, AIR INTAKE - VOLVO TIER 4	
10	55578-EE	16"	HOSE, DUCT - AIR CLEANER TO UPPER - 6"	
11	55579-EE	2	CLAMP, DUCT HOSE - 6"	
12	46868-EE	1	WELDMENT, AIR INTAKE FLANGE - VOLVO	
13	20450-EE	2	CLAMP, air cleaner band	
14	46878-EE	1	MOUNT, AIR CLEANER - SWING OUT	
15	52992-EE	2	CLAMP, STEEL TUBELINE	

 See referenced page for component or assembly breakdown.



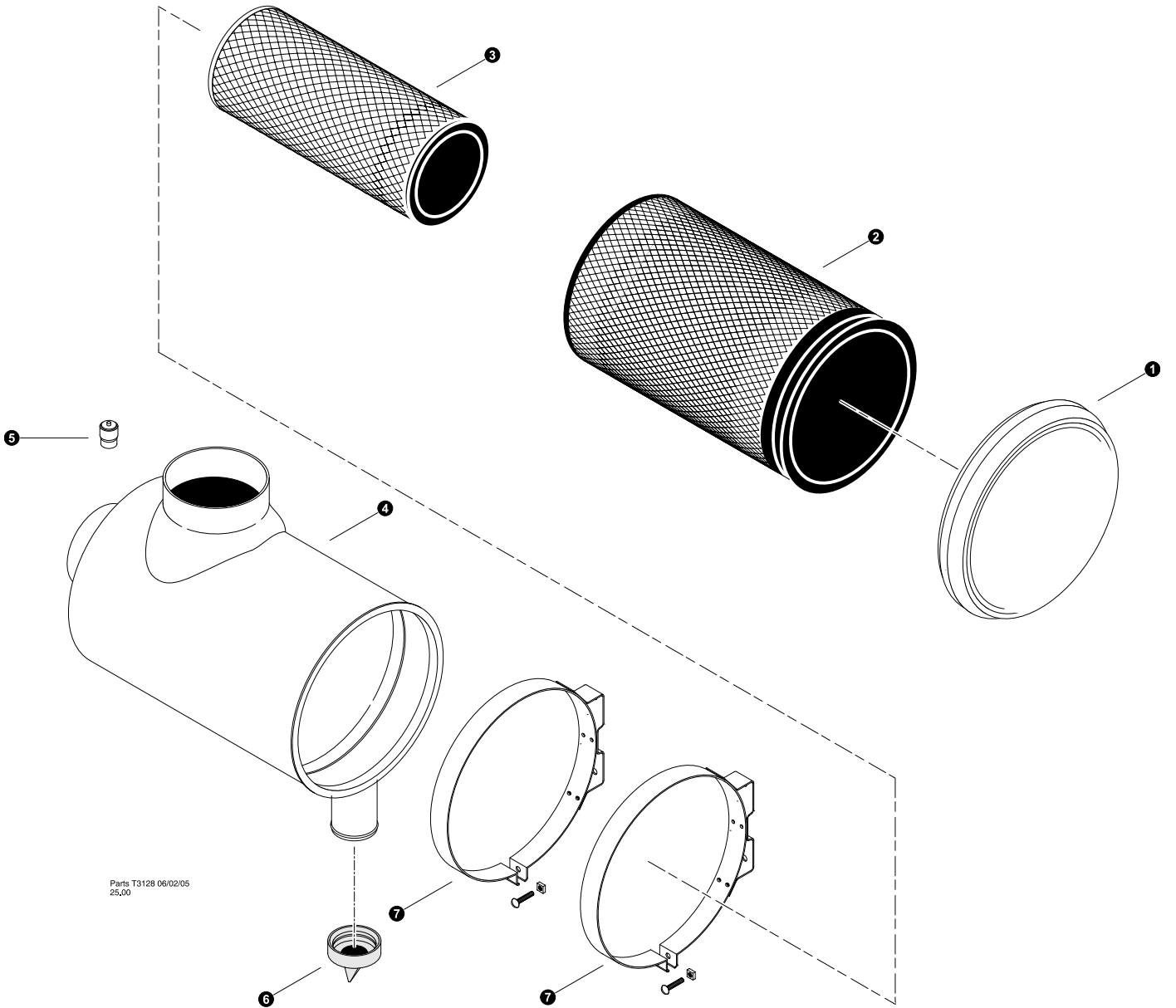
Parts T4100 01/15  
12.50

## MUFFLER INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 ENGINE, VOLVO Tier4 .....	EE-2
2	46865-EE	1	MOUNT, SCR - VOLVO	
3	22280220	2	STRAP, MUFFLER - C SERIES	
4	47100-EE	2	WELDMENT, SCR MTG BASE	
5	47127-EE	1	PIPE, EXHAUST - VOLVO TIER 4F	
6	57223-EE	1	SCR, MUFFLER - VOLVO ENGINE	
-	55443-EE	1	INSULATION, MUFFLER - VOLVO TIER 4F	
7	46770-EE	1	TUBE, EXHAUST W/FLEX JOINT - VOLVO	
-	55442-EE	1	INSULATION, VOLVO - TIER 4F EXHAUST PIPES AND TURBO	
8	22197483	4	CLAMP, VOLVO EXHAUST	
9	46875-EE	1	SUPPORT, EXHAUST - TEIR 4	
10	46772-EE	1	TUBE, TURBO OUTLET SCR INJECTION - VOLVO	
11	-EE	1	SEAL, VOLVO TURBO	
12	22197483	3	CLAMP, VOLVO EXHAUST	

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 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.

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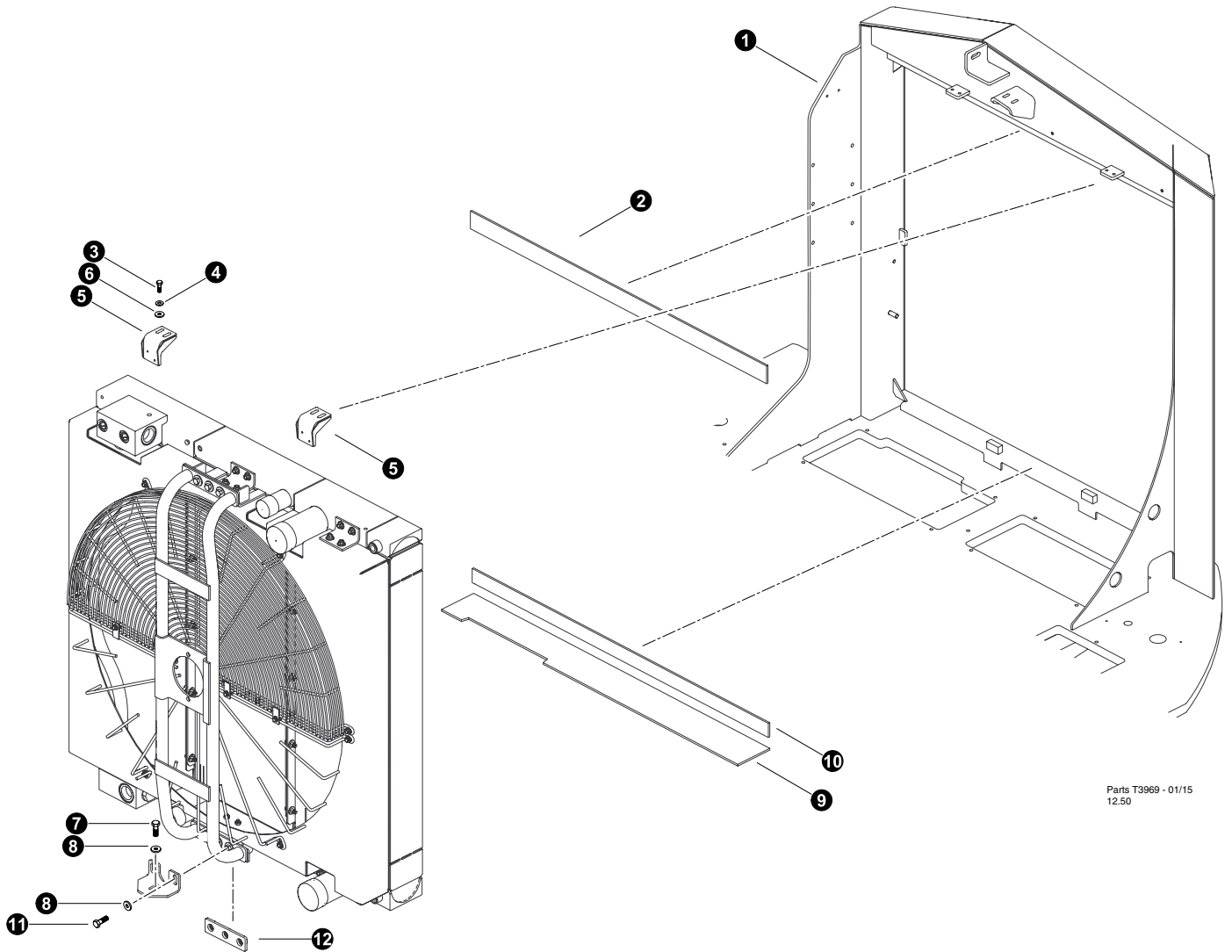
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# Section EE-3


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## Cummins Engine - Cooling System Installation

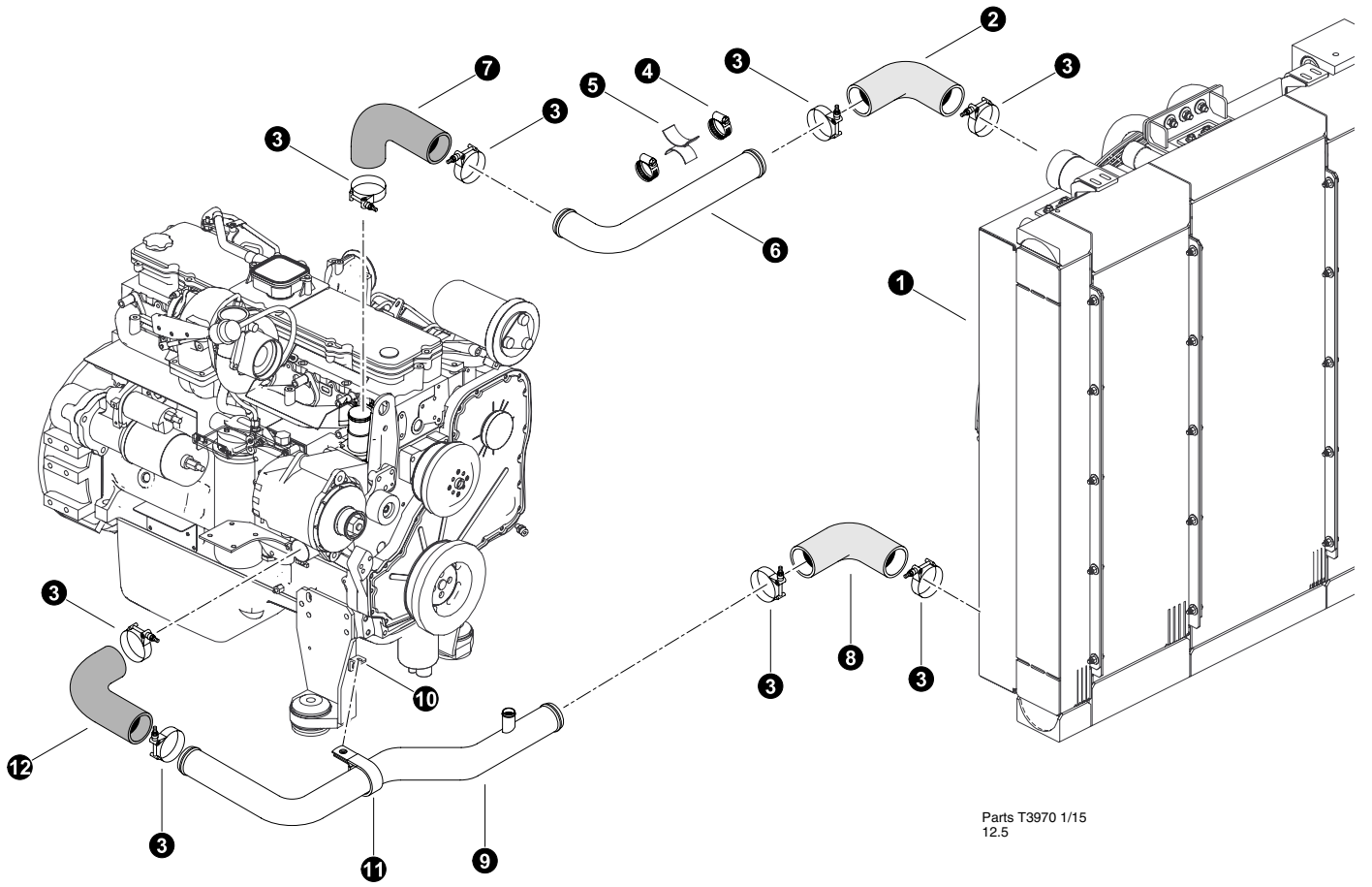


Parts T3969 - 01/15  
12.50


**RADIATOR/OIL & COOLER INSTALATION**

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF	1	 UPPER TURNTABLE ASSEMBLY .....	UP-1
2	46631-EE	2	RUBBER, FLAP - COOLER UPPER (C-SERIES)	
3	10402-EE	4	BOLT - .375" X 1.25"	
4	15528-EE	4	WASHER, SAE FLAT - .375"	
5	46763-EE	2	CLAMP, COOLER MOUNT - C SERIES	
6	10802-EE	4	WASHER, FLAT - .375"	
7	10783-EE	1	BOLT - .5" X 1"	
8	15534-EE	3	WASHER, SAE FLAT - .5"	
9	46629-EE	1	RUBBER, FLAP - COOLER LOWER (C SERIES)	
10	46630-EE	1	RUBBER, FLAP - COOLER FRONT (C SERIES)	
11	10736-EE	2	BOLT - .5" X 2"	
12	46177-EE	1	BAR, MOUNT PLATE	

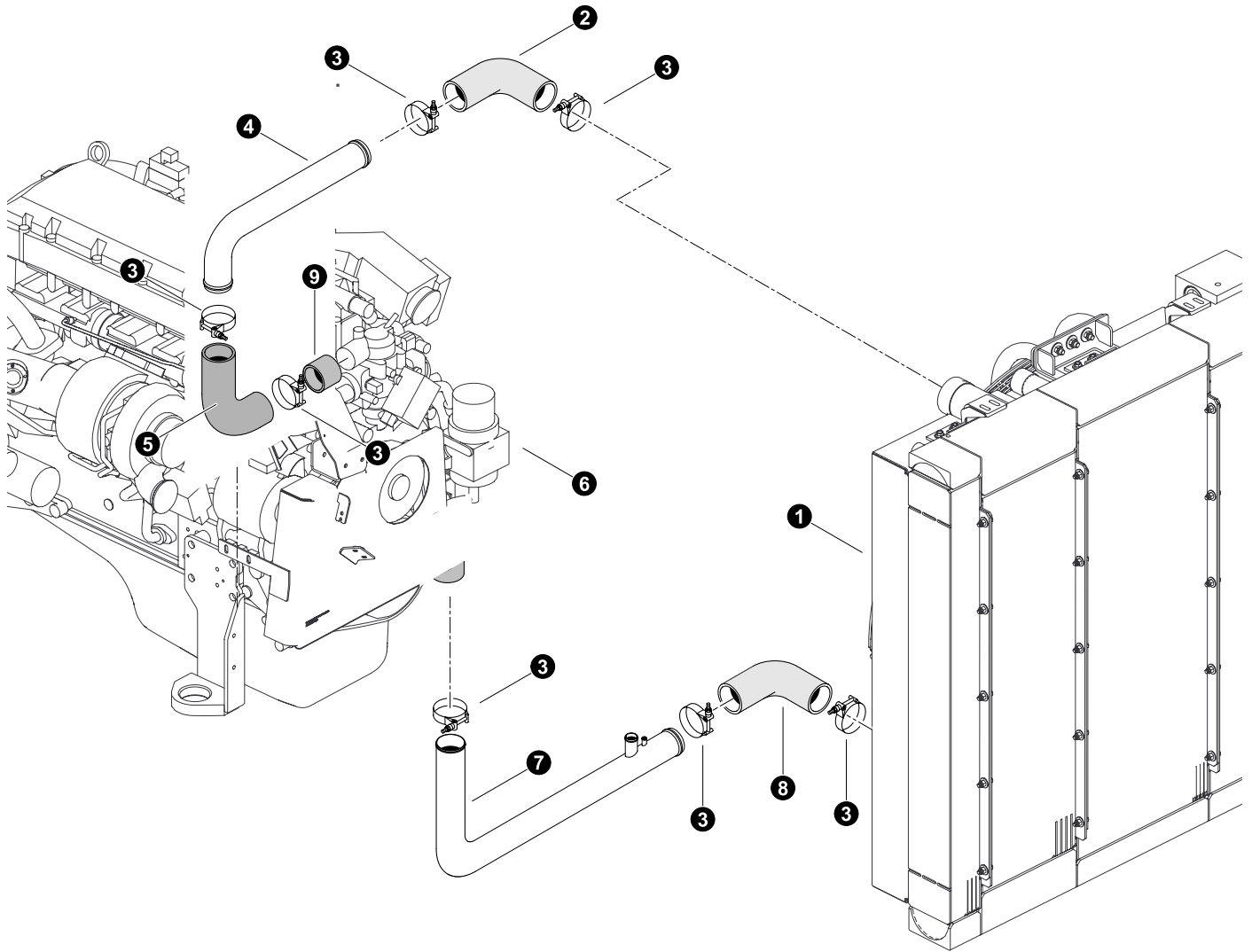
 See referenced page for component or assembly breakdown.



## RADIATOR TO ENGINE CONNECTIONS (QSC 300HP Engine)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF	1	 RADIATOR / CHARGE AIR ASSEMBLY .....	UP-3
2	55583-EE	1	HOSE, 90 DEGREE RADIATOR - 2.5"	
3	18104-EE	8	CLAMP, CONSTANT TORQUE - #40	
4	54788-EE	2	CLAMP, HOSE - WORM STYLE - 2.75"	
5	46844-EE	1	CLAMP, AIR TUBE	
6	46224-EE	1	TUBE, RADIATOR (UPPER) C-SERIES	
7	15617-EE	1	HOSE, 90 DEGREE RADIATOR - 2.5"	
8	15617-EE	1	HOSE, 90 DEGREE RADIATOR - 2.5"	
9	46227-EE	1	TUBE, RADIATOR (LOWER) C-SERIES	
10	46421-EE	1	BRACKET, COOLER LINE SUPPORT	
11	0708827	1	CLAMP, Rubber Coated	
12	15617-EE	1	HOSE, 90 DEGREE RADIATOR - 2.5"	

 See referenced page for component or assembly breakdown.





Parts T4102 1/15  
12.5

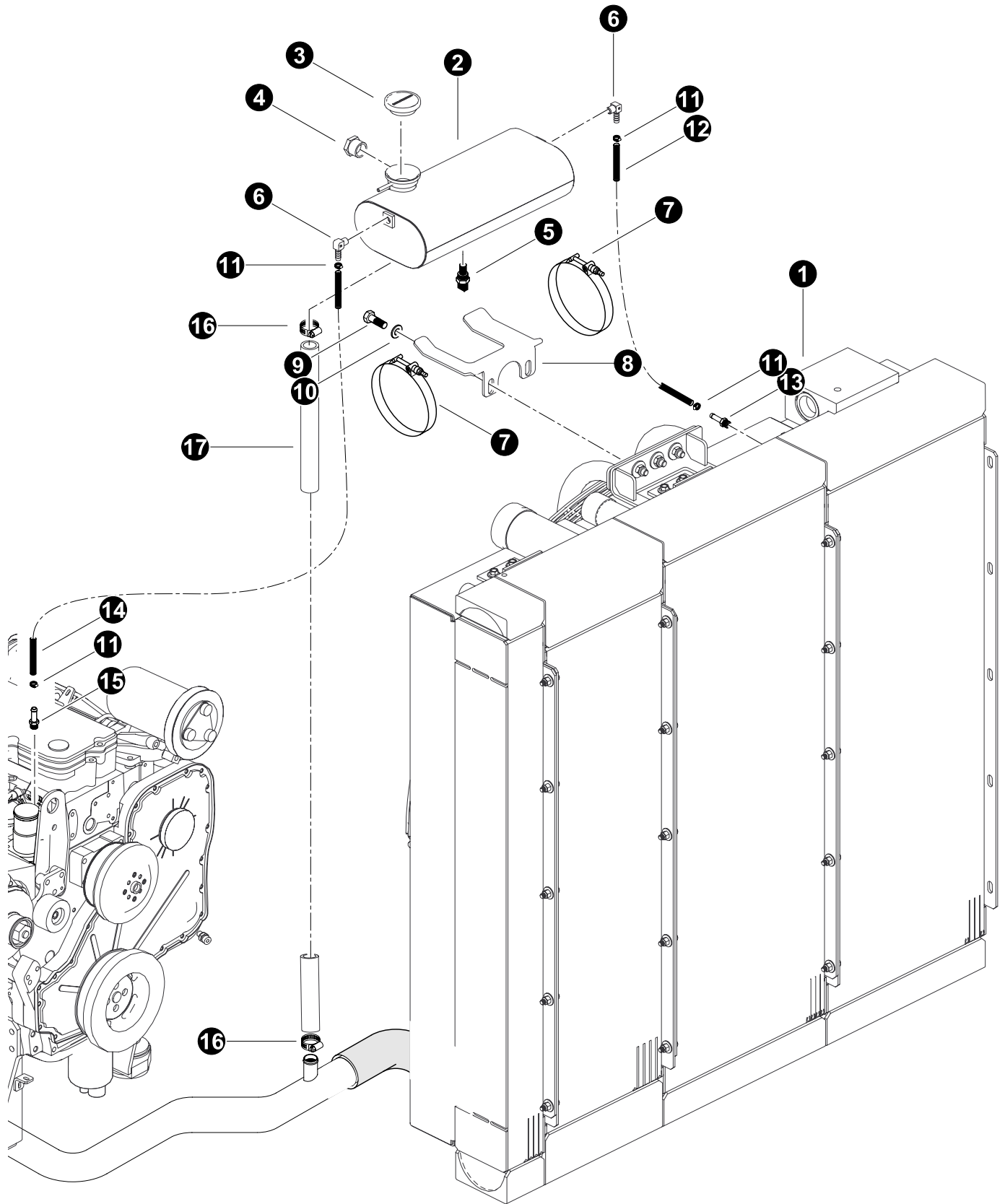


## RADIATOR TO ENGINE CONNECTIONS

### (Volvo Tier4 Engine)


REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF	1	 RADIATOR / CHARGE AIR ASSEMBLY .....	UP-3
2	55583-EE	1	HOSE, 90 DEGREE RADIATOR - 2.5"	
3	18104-EE	8	CLAMP, CONSTANT TORQUE - #40	
4	46667-EE	1	TUBE, RAD LOWER TIER 4 VOLVO	
5	15617-EE	1	HOSE, 90 DEGREE RADIATOR - 2.5"	
6	REF	1	 VOLVO TIER4 .....	EE-2
7	46668-EE	1	TUBE, RAD LOWER TIER 4 VOLVO	
8	55583-EE	1	HOSE, 90 DEGREE RADIATOR - 2.5"	
9	55504-EE	1	ADAPTER, HOSE - 2.25" TO 2" - VOLVO	

 See referenced page for component or assembly breakdown.

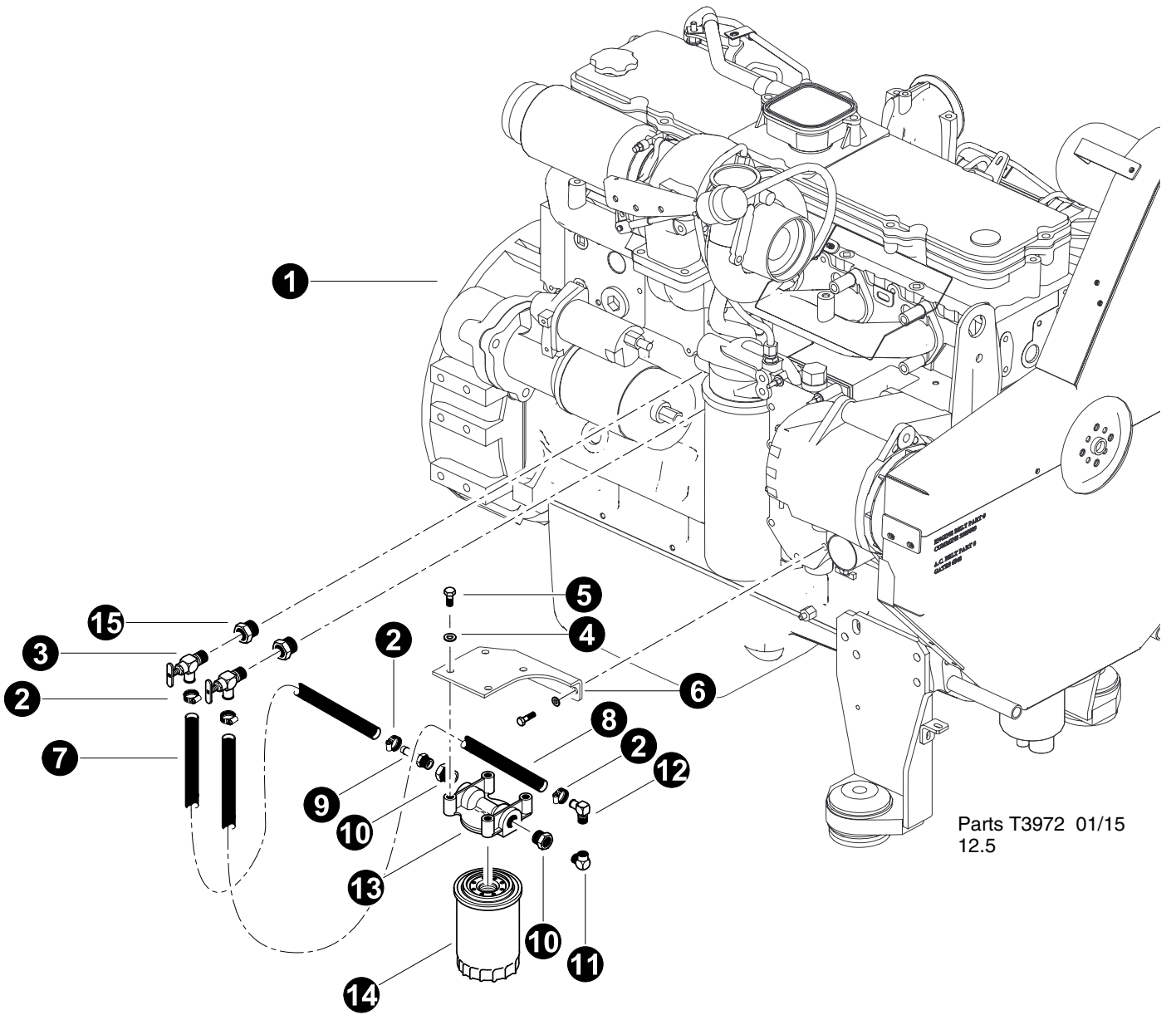


Parts T3971 1/15  
12.5

## OVER FLOW TANK CONNECTIONS


REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF	1	 RADIATOR / CHARGE AIR ASSEMBLY .....	UP-3
2	46280-EE	1	WELDMENT, BURP TANK C-MODEL	
3	15897-EE	1	CAP, RADIATOR - 7 PSI	
4	24308-EE	1	SIGHT GLASS - HYDRAULIC TANK	
5	52661-EE	1	SENSOR, LOW COOLANT - TIER 3	
6	52586-EE	2	ELBOW, 90 MALE HOSE BARB 6-4	
7	18828-EE	2	CLAMP, STRAP BAND - 6.75"	
8	46278-EE	1	PLATE, BURP TANK MTG-C-MODEL TIER III	
9	10736-EE	2	BOLT - .5" X 2"	
10	15534-EE	2	WASHER, SAE FLAT - .5"	
11	16202-EE	4	CLAMP, HOSE - WORM STYLE - .625"	
12	16283-EE	-	HOSE, FUEL LINE (BULK ROLL) - .3125"	
13	16989-EE	1	CONNECTOR, STR HOSE BARB - 4245-5-2	
14	16283-EE	-	HOSE, FUEL LINE (BULK ROLL) - .3125"	
15	-EE	1	CONNECTOR, STR HOSE BARB (cummins with coolant orifice)	
16	16256-EE	2	CLAMP, HOSE - WORM STYLE - 1"	
17	15677-EE	-	HOSE, HEATER - (BULK ROLL) 1" X 50'	

 See referenced page for component or assembly breakdown.



Parts T3972 01/15  
12.5

## COOLANT FILTER INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF	1	 CUMMINS QSC ENGINE .....	EE-1
2	16202-EE	4	CLAMP, HOSE - WORM STYLE - .625"	
3	179901	2	VALVE, Shut-Off Cummins Water	
4	15528-EE	4	WASHER, SAE FLAT - .375"	
5	11707-EE	4	BOLT - .375" X 1"	
6	46739-EE	1	PLATE, WATER - FLITER SUPPORT - CUMMINS	
7	16283-EE	-	HOSE, FUEL LINE (BULK ROLL) - .3125"	
8	16283-EE	-	HOSE, FUEL LINE (BULK ROLL) - .3125"	
9	16989-EE	1	CONNECTOR, STR HOSE BARB - 4245-5-2	
10	11318-EE	1	BUSHING, REDUCER - 5406-6-4	
11	24288-EE	1	BUSHING, BRASS - .375 X .75	
12	52586-EE	1	ELBOW, 90 MALE HOSE BARB 6-4	
13	16574-EE	1	MOUNT, FILTER HEAD ASSEMBLY	
14	20445-EE	1	FILTER, COOLANT - CUMMINS C SERIES	
15	24288-EE	2	BUSHING, BRASS - .375 X .75	

 See referenced page for component or assembly breakdown.

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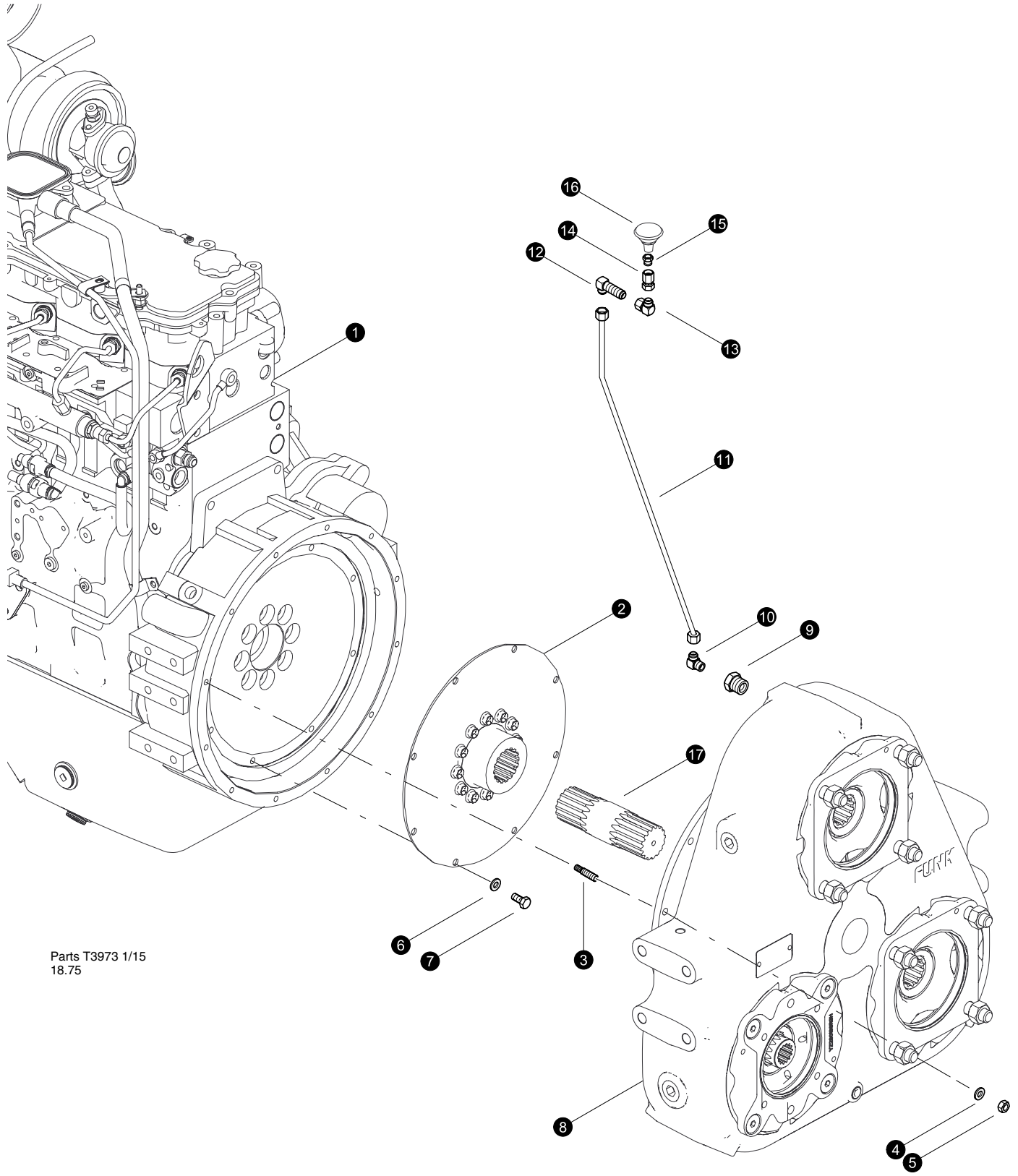


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# ***Section EE-4***

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## **Cummins Engine - Pump Drive Transmission**



Parts T3973 1/15  
18.75



## PUMP DRIVE TRANSMISSION INSTALLATION (Funk)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 ENGINE - Cummins QSC8.3. ....	EE-1
2	18028-EE	1	DRIVEPLATE ASSY. - FUNK	
3	15531-EE	12	STUD, threaded - 10mm x 45mm (See Note #1 below)	
4	15528-EE	12	WASHER, SAE flat - 3/8"	
5	15530-EE	12	NUT, hex - 10mm (See Note #2 below) <b>(Torque to 40 ft.lbs. (53 Nm))</b>	
6	15528-EE	8	WASHER, SAE flat - 3/8"	
7	15542-EE	8	BOLT - 3/8" x 3/4" (See Note #1 below) <b>(Torque to 40 ft.lbs. (53 Nm))</b>	
8	REF.	1	 PUMP DRIVE TRANSMISSION .....	EE-4
9	11312-EE	1	BUSHING, REDUCER - 5406-8-4	
10	55205-EE	1	FITTING, ELBOW - 6 CTX-S	
11	55647-EE	1	TUBELINE, GEAR BOX VENT - CUMMINS	
12	55347-EE	1	FITTING, ELBOW - BULKHEAD 6 WETX-WLN-S	
13	16661-EE	1	ELBOW, 90 SWIVEL - 6500-6	
14	-EE	1	FITTING - 6-6 G6X-S	
15	11318-EE	1	BUSHING, REDUCER - 5406-6-4	
16	21304-EE	1	VENT - YZ106688	
17	18388-EE	1	SHAFT, drive	

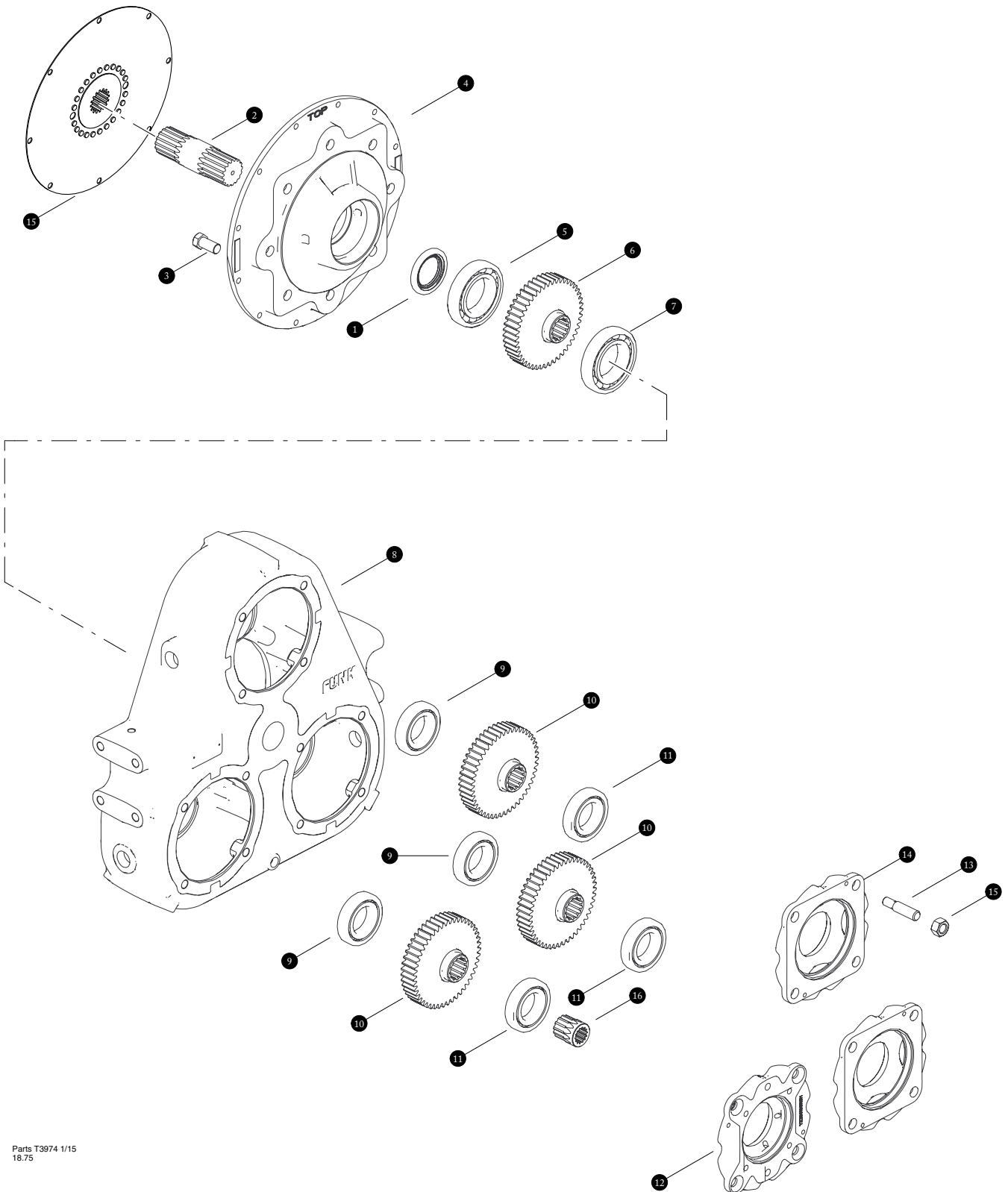
 See referenced page for component or assembly breakdown.

### **Note #1:**

Use Loctite 271 (*red*) during installation.

### **Note #2:**

Use Loctite 272 (*blue*) during installation.



Parts T3974 1/15  
18.75

## PUMP DRIVE TRANSMISSION BREAKDOWN (Cummins QSC8.3L Gear Box)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
-	55673-EE	1	<input type="checkbox"/> TRANSMISSION, TRIPLE PUMP DRIVE - C TRACK	
1	18027-EE	1	SEAL, shaft	
2	18388-EE	1	SHAFT, drive	
3	F1008024-EE	8	BOLT, flywheel cover (See Note #1 Below)	
4	4059411 -EE	1	COVER, engine adapter housing (See Note #2 Below)	
5	18891-EE	1	BEARING, input gear - front	
6	54401-EE	1	GEAR, 65 Teeth	
7	18892-EE	1	BEARING, input gear - rear	
8	YZ101822-EE	1	HOUSING,	
9	16892-EE	3	BEARING,	
10	51408-EE	3	GEAR,	
11	16892-EE	3	BEARING,	
12	54767-EE	2	ADAPTER, pump pad (SAE "C")(Used with track drive pumps)((See Note #2 Below)	
13	18293-EE	4	STUD, "D" Mount (See Note #1)	
14	18292-EE	1	ADAPTER, pump pad (SAE "D")(See Note #2 Below)	
15	10776-EE	4	NUT, hex - 3/4"	
16	16330-EE	1	ADAPTER, Sleeve 14 tooth "C"	

- Kit or Assembly - includes all items indented underneath.

**Note #1:**

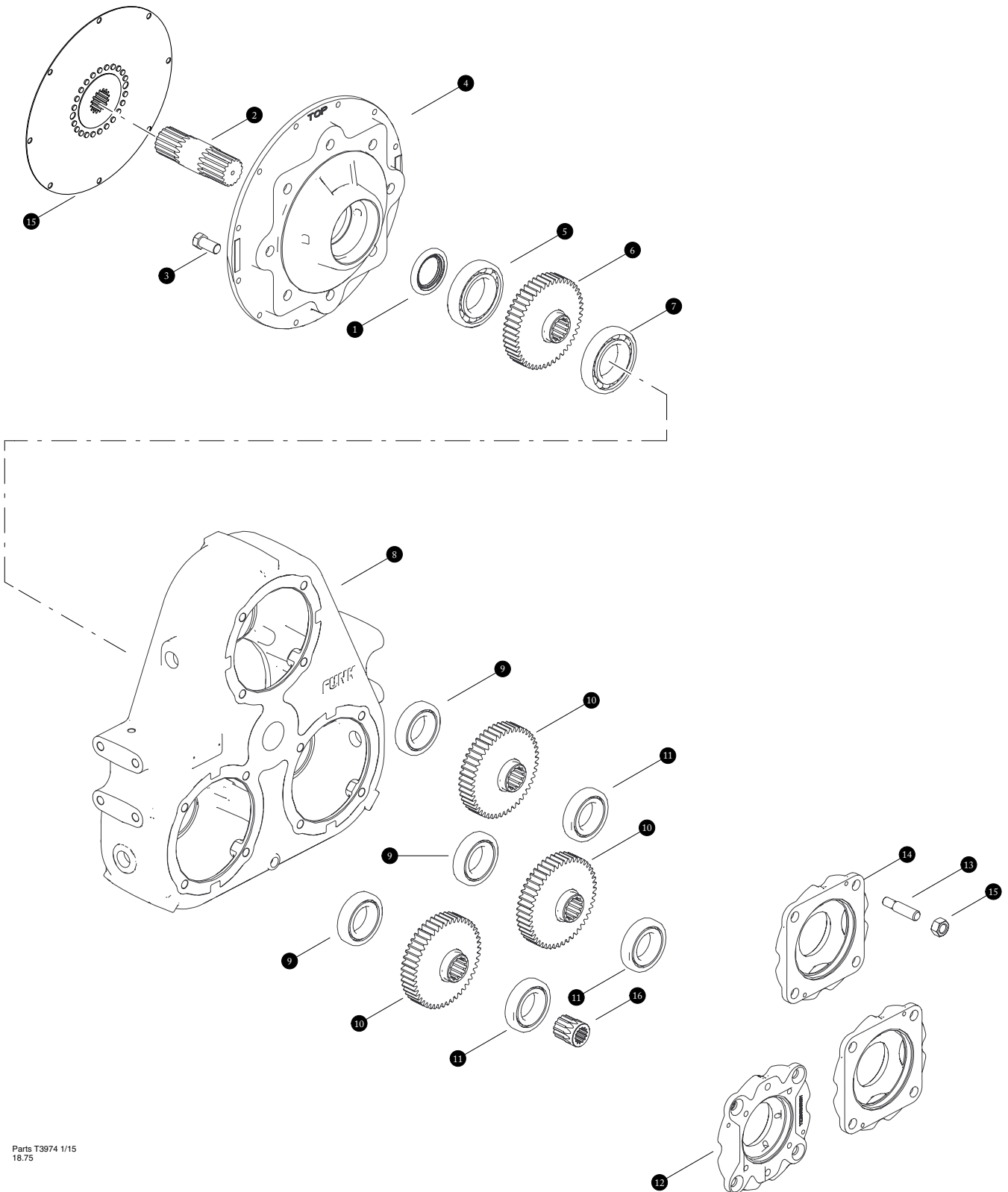
Use Loctite 272 (blue) during installation.

**Note #2:**

Use Silicone sealant during installation.

**Note #3:**

Use teflon sealant during installation.



Parts T3974 1/15  
18.75

## PUMP DRIVE TRANSMISSION BREAKDOWN (Volvo Tier4 Gear Box)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
-	55502-EE	1	<input type="checkbox"/> TRANSMISSION, triple pump drive (.723:1)	
1	18027-EE	1	SEAL, shaft	
2	18388-EE	1	SHAFT, drive	
3	F1008024-EE	8	BOLT, flywheel cover (See Note #1 Below)	
4	-EE	1	COVER, engine adapter housing (See Note #2 Below)	
5	18891-EE	1	BEARING, input gear - front	
6	54401-EE	1	GEAR, 65 Teeth	
7	18892-EE	1	BEARING, input gear - rear	
8	YZ101822-EE	1	HOUSING,	
9	16892-EE	3	BEARING,	
10	51408-EE	3	GEAR,	
11	16892-EE	3	BEARING,	
12	54767-EE	2	ADAPTER, pump pad (SAE "C")(Used with track drive pumps)((See Note #2 Below)	
13	18293-EE	4	STUD, "D" Mount (See Note #1)	
14	18292-EE	1	ADAPTER, pump pad (SAE "D")(See Note #2 Below)	
15	10776-EE	4	NUT, hex - 3/4"	
16	16330-EE	1	ADAPTER, Sleeve 14 tooth "C"	

- Kit or Assembly - includes all items indented underneath.

**Note #1:**

Use Loctite 272 (blue) during installation.

**Note #2:**

Use Silicone sealant during installation.

**Note #3:**

Use teflon sealant during installation.

