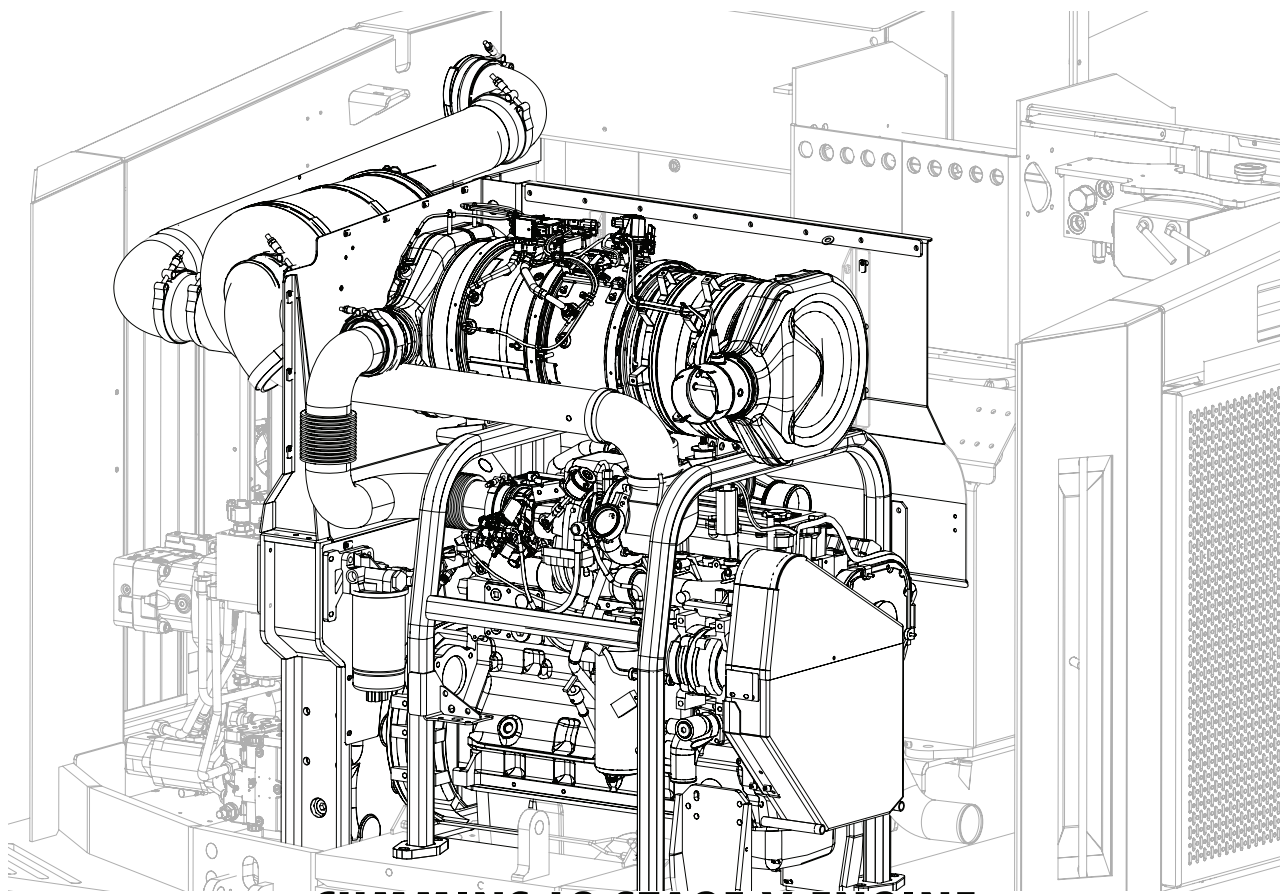


# SECTION EE-1

## CUMMINS L9 STAGE V ENGINE

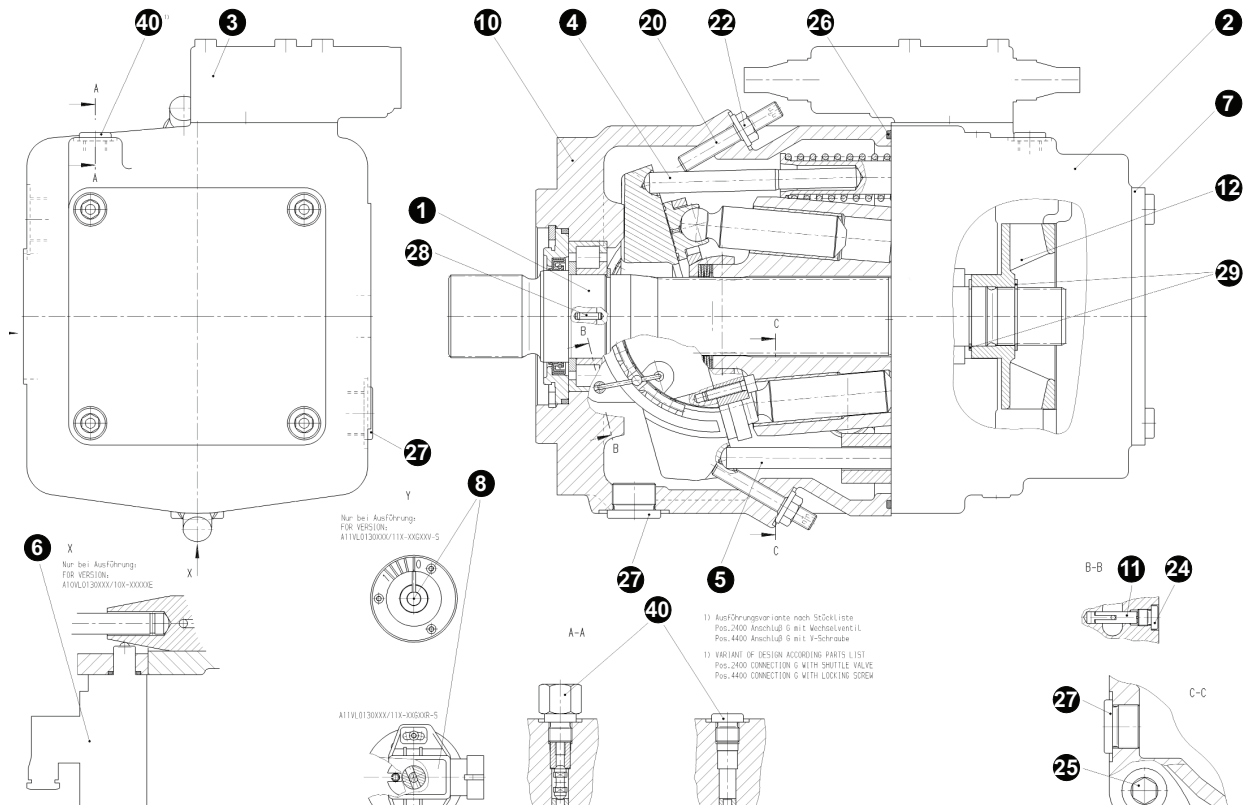


**CUMMINS L9 STAGE V ENGINE**

See [Section UP-2](#) for DEF Tank Assembly, Installation, and Complete Layout.

# ENGINE COMPONENTS AND INSTALLATION

## 57661 145CC IMPLEMENT PUMP PARTS BREAKDOWN (REXROTH #R902232637)

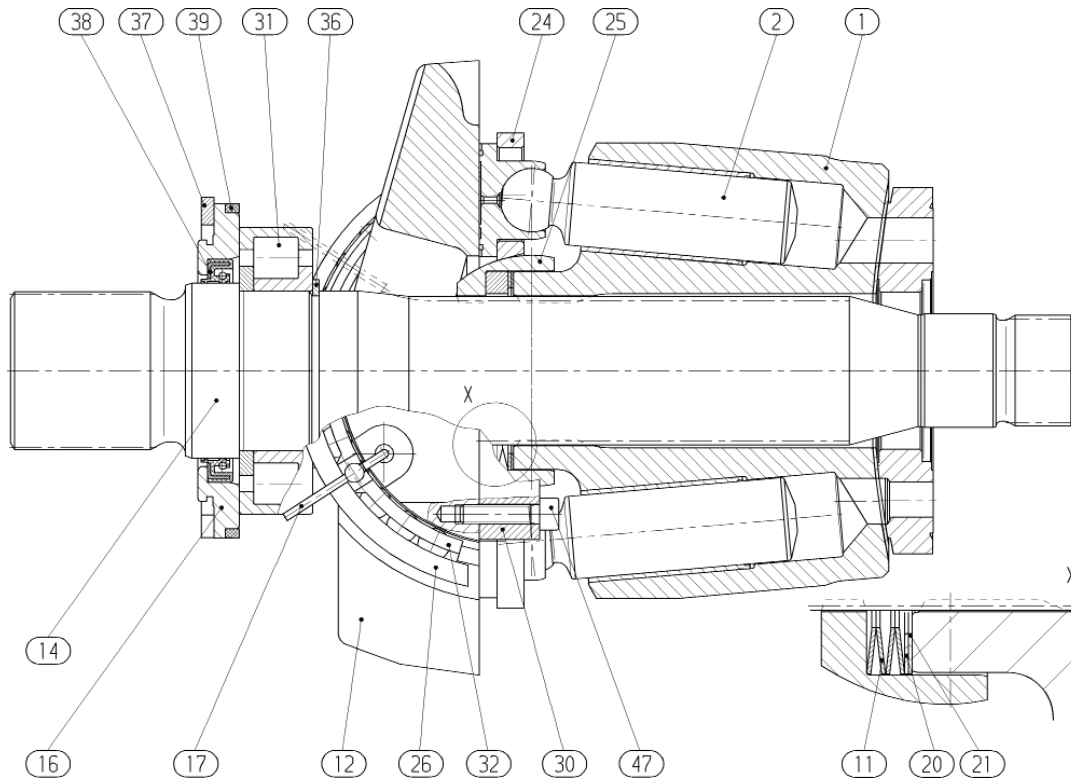


### IMPLEMENT PUMP (PART #R902232637)

REF.	PART #	QTY	DESCRIPTION
	57661	1	PUMP, IMPLEMENT - REX 145CC/40(coupler)
1	R902152756	1	ROTARY GROUP
2	R902234899	1	CONNECTION PLATE, LL
3	R909600081	1	REGULATOR
4	R909601774	1	CONTROL
5	R909601775	1	CONTROL
7	R902005947	1	BELL HOUSING
10	R902117357	1	HOUSING
11	R902132714	4	PIVOT PIN
12	R909921290	1	IMPELLER, LEFT HAND ROTATION
20	R909449078	2	SETSCREW
22	R909152426	2	SEALING NUT
24	R909153364	4	SCREW PLUG
25	R909830782	4	SOCKET HEAD CAP SCREW
26	R909083835	1	O-RING
27	R909154480	1	SCREW PLUG
28	R913016373	2	SLOTTED SPRING PIN
29	R909083360	2	RETAINING RING
40	R909153371	1	SCREW PLUG

# ENGINE COMPONENTS AND INSTALLATION

## 57661 145CC IMPLEMENT PUMP PARTS BREAKDOWN (REXROTH #R902232637)

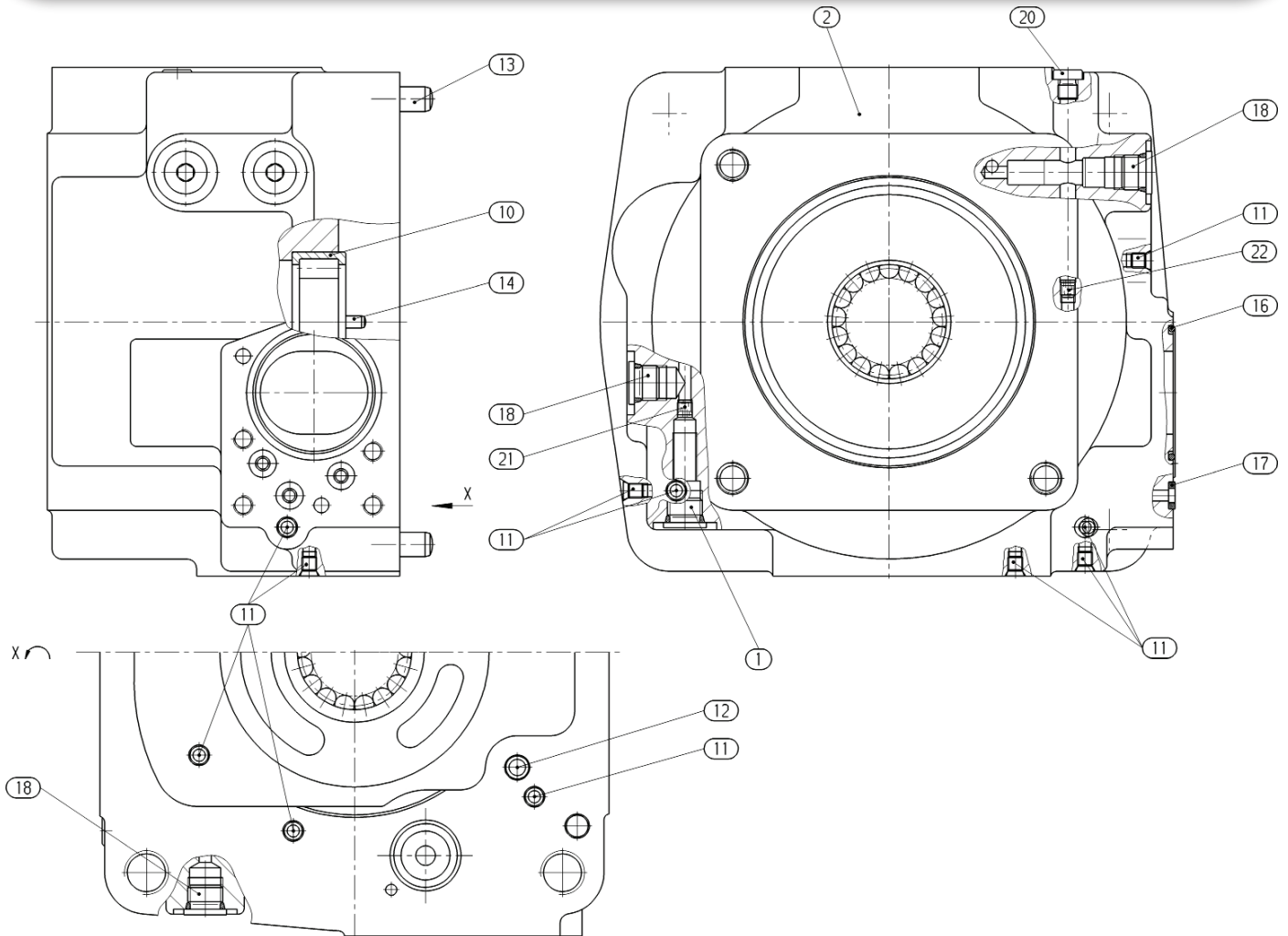


### ROTARY GROUP (PART #R902152756)

REF.	PART #	QTY	DESCRIPTION
1	R902071734	1	CYLINDER
2	R902114307	9	PISTON PAD
11	R909074128	1	CUP-SPRING STACK
12	R902213209	1	CRADLE
14	R909650314	1	DRIVESHAFT
16	R902034801	1	LOCKING RING
17	R909417959	4	WIRE
20	R909078319	1	SHIM RING
	R909412706	1	SHIM RING
	R909412707	1	SHIM RING
	R909413043	1	SHIM RING
21	R909412706	1	SHIM RING
24	R902210083	1	RETAINING PLATE
25	R902041873	1	RETAINING BALL
26	R902066599	1	BEARING SHELL PAIR
30	R909431891	2	REAINING SEGMENT
31	R902603914	1	CYL ROLLER BEARING
32	R913010011	1	CAGE PAIR
36	R909084416	1	RETAINING RING
37	909154528	1	RETAINING RING
38	R913043034	1	ROTARY SHAFT LIP SEAL
39	R909086949	1	O-RING
47	R909831330	4	SOCKET HEAD CAP SCREW
98	R902002458	1	SEAL KIT

# ENGINE COMPONENTS AND INSTALLATION

## 57661 145CC IMPLEMENT PUMP PARTS BREAKDOWN (REXROTH #R902232637)



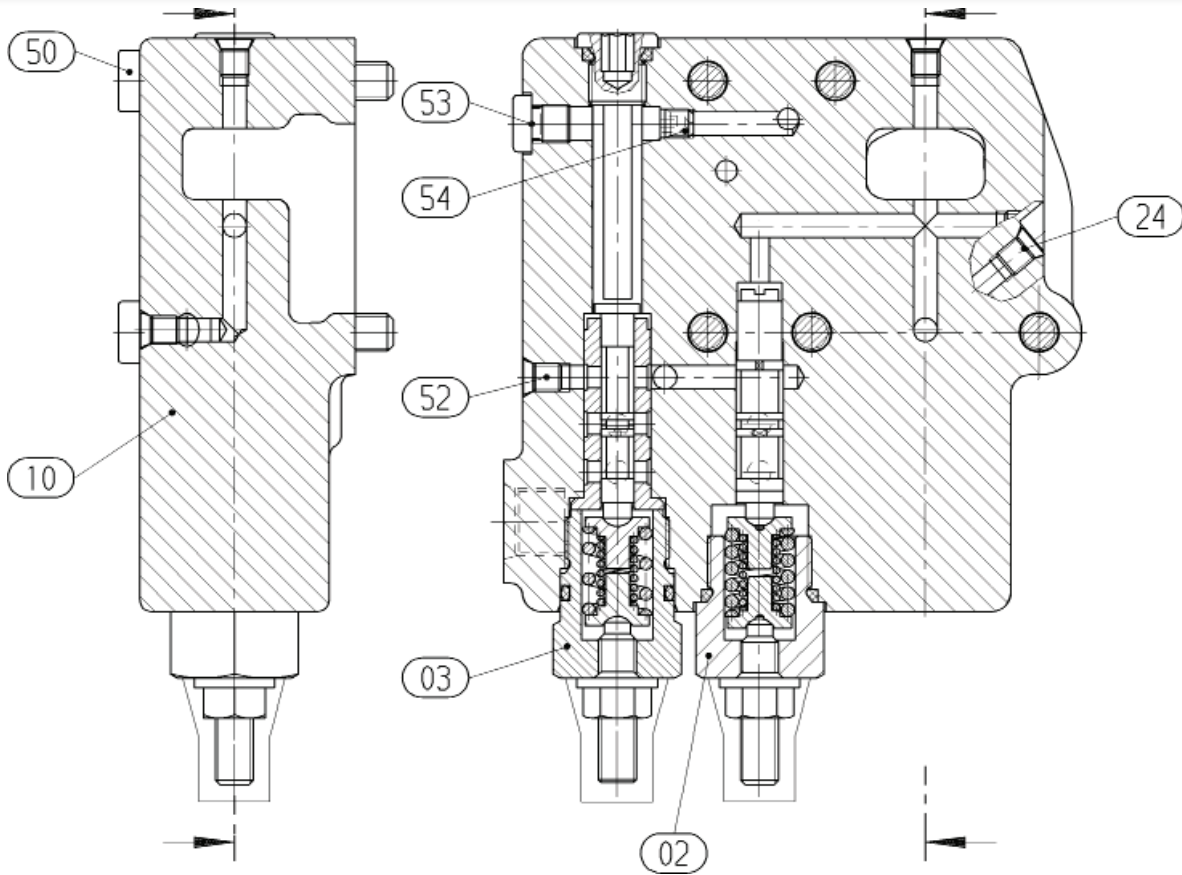
### CONNECTION PLATE (PART #R902234899)

REF.	PART #	QTY.	DESCRIPTION
1	R909151979	1	SCREW PLUG
2	R902237832	1	CONNECTION PLATE, LL
10	R909156310	1	CYLINDER ROLLER BEARING
11	R909831318	6	DOUBLE BREAK-OFF PLUG
12	R909831319	1	DOUBLE BREAK-OFF PLUG
13	R913009671	2	STRAIGHT PIN
14	R909087755	1	STRAIGHT PIN
16	R909152464	1	O-RING
17	R902602890	3	O-RING
18	R909153371	2	SCREW PLUG
20	R909154024	1	SCREW PLUG
21	R909157345	1	NOZZLE
22	R909157343	1	NOZZLE
98	R902002458	1	SEAL KIT



# ENGINE COMPONENTS AND INSTALLATION

## 57661 145CC IMPLEMENT PUMP PARTS BREAKDOWN (REXROTH #R902232637)



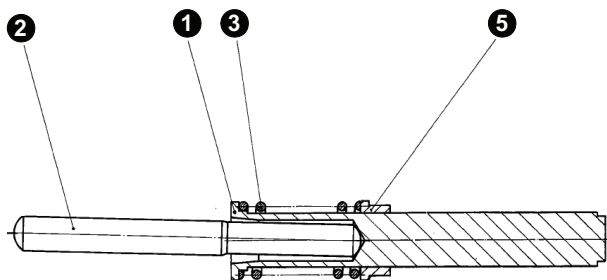
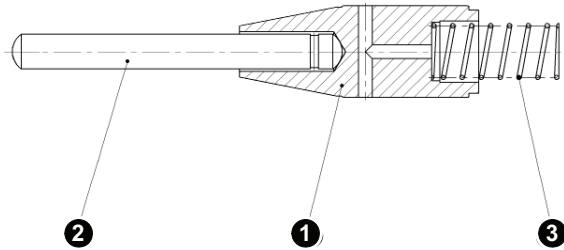
### REGULATOR (PART #R909600081)

REF.	PART #	QTY.	DESCRIPTION
2	R909609420	1	CONTROL ELEMENT
3	R909606784	1	CONTROL ELEMENT
10	R902002701	1	CONTROL HOUSING
24	R909445306	1	DOUBLE BREAK-OFF PLUG
50	R909083044	5	SOCKET HEAD CAP SCREW
52	R909831318	7	DOUBLE BREAK-OFF PLUG
53	R909154024	1	SCREW PLUG
54	R909156490	1	NOZZLE
98	R902002476	1	SEAL KIT

# ENGINE COMPONENTS AND INSTALLATION

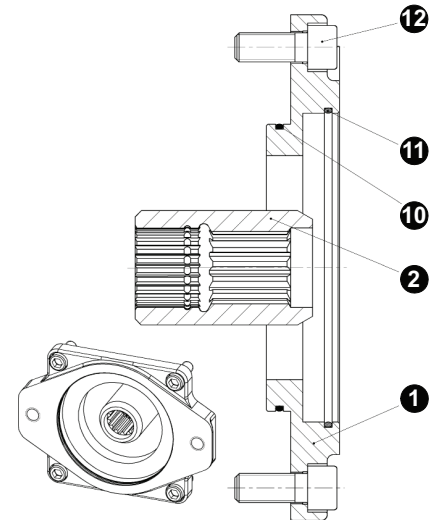
## 57661 145CC IMPLEMENT PUMP PARTS BREAKDOWN (REXROTH #R902232637)

**CONTROL (R909601775)**



**CONTROL (R909601774)**

**Bell Housing (R902005947)**



### CONTROL (PART #R909601775)

REF.	PART #	QTY.	DESCRIPTION
1	R909921505	1	RESET PISTON
2	R909445769	1	RESET ROD
	R909445770	1	RESET ROD
	R909445771	1	RESET ROD
3	R909443435	1	COMPRESSION SPRING

### CONTROL (PART #R909601774)

REF.	PART #	QTY.	DESCRIPTION
1	R909651037	1	POSITIONING PISTON
2	R909651029	1	ADJUSTING ROD
3	R909444263	1	COMPRESSION SPRING
5	R902025363	1	BUSHING

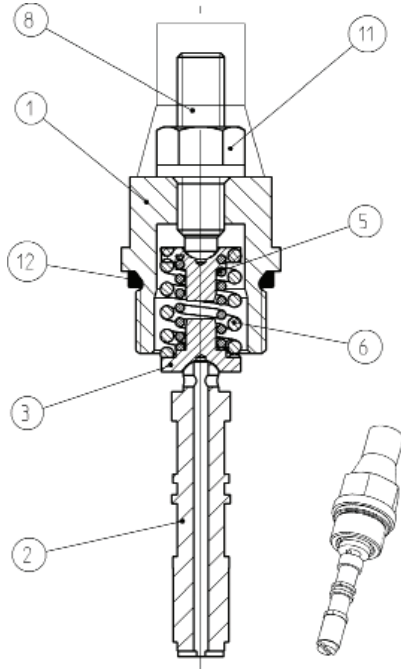
### BELL HOUSING (PART #R902005947)

REF.	PART #	QTY.	DESCRIPTION
1	R902005948	1	FLANGE
2	R902095514	1	COUPLING HUB
10	R902600381	1	O-RING
11	R913002054	1	ORING
12	R909083087	4	SOCKET HEAD CAP SCREW
98	R902095514	1	SEAL KIT

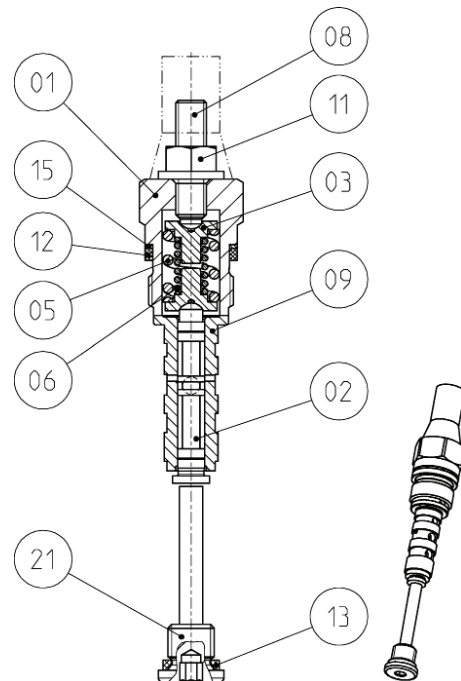
# ENGINE COMPONENTS AND INSTALLATION

## 57661 145CC IMPLEMENT PUMP PARTS BREAKDOWN (REXROTH #R902232637)

**CONTROL ELEMENT (R909609420)**



**CONTROL ELEMENT (R909606784)**



**CONTROL ELEMENT (PART #R909609420R)**

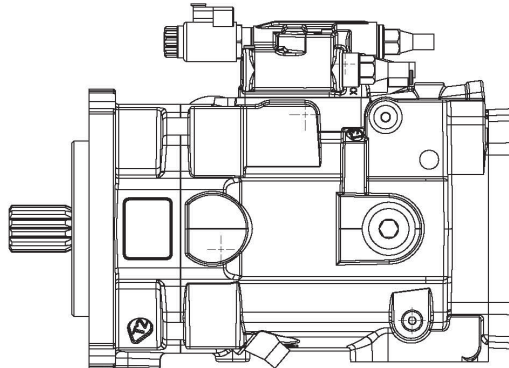
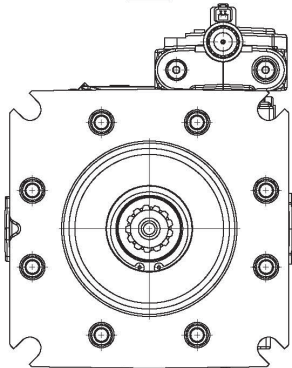
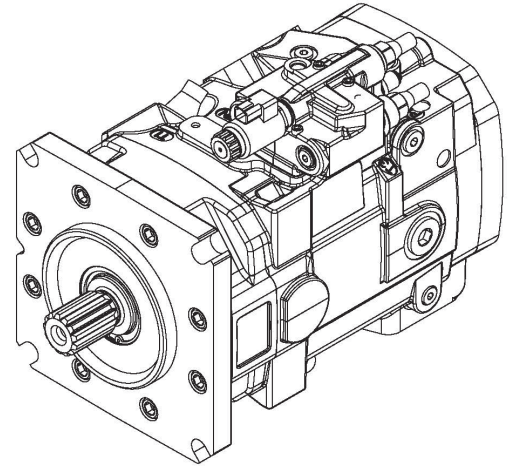
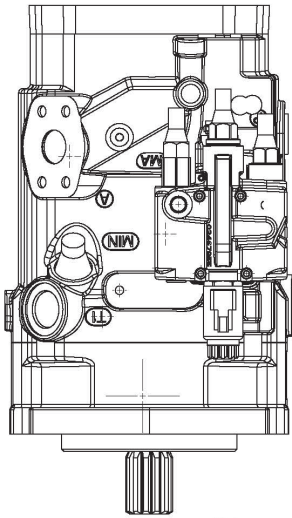
REF.	PART #	QTY.	DESCRIPTION
1	R909440779	1	SCREW PLUG
2	R902004621	1	CONTROL PISTON
3	R909444160	2	SPRING BOLT
5	R909436395	1	COMPRESSION SPRING
6	R909436795	1	COMPRESSION SPRING
8	R909444953	1	SETSCREW
11	R909152707	1	SEALING NUT
12	R909083758	1	O-RING
	R902002458	1	SEAL KIT

**CONTROL ELEMENT (PART #R909606784)**

REF.	PART #	QTY	DESCRIPTON
1	R902262155	1	SCREW PLUG
2	R909449719	1	CONTROL PISTON
3	R909436839	2	SPRING BOLT
5	R909436394	1	COMPRESSION SPRING
6	R909436395	1	COMPRESSION SPRING
8	R909444953	1	SETSCREW
9	R902004934	1	CONTROL SLEEVE
11	R909152707	1	SEALING NUT
12	R909083758	1	O-RING
13	R909083749	1	O-RING
15	R900228795	1	BACKUP RING
21	R902029166	1	SCREW PLUG
	R902221227	1	SEAL KIT

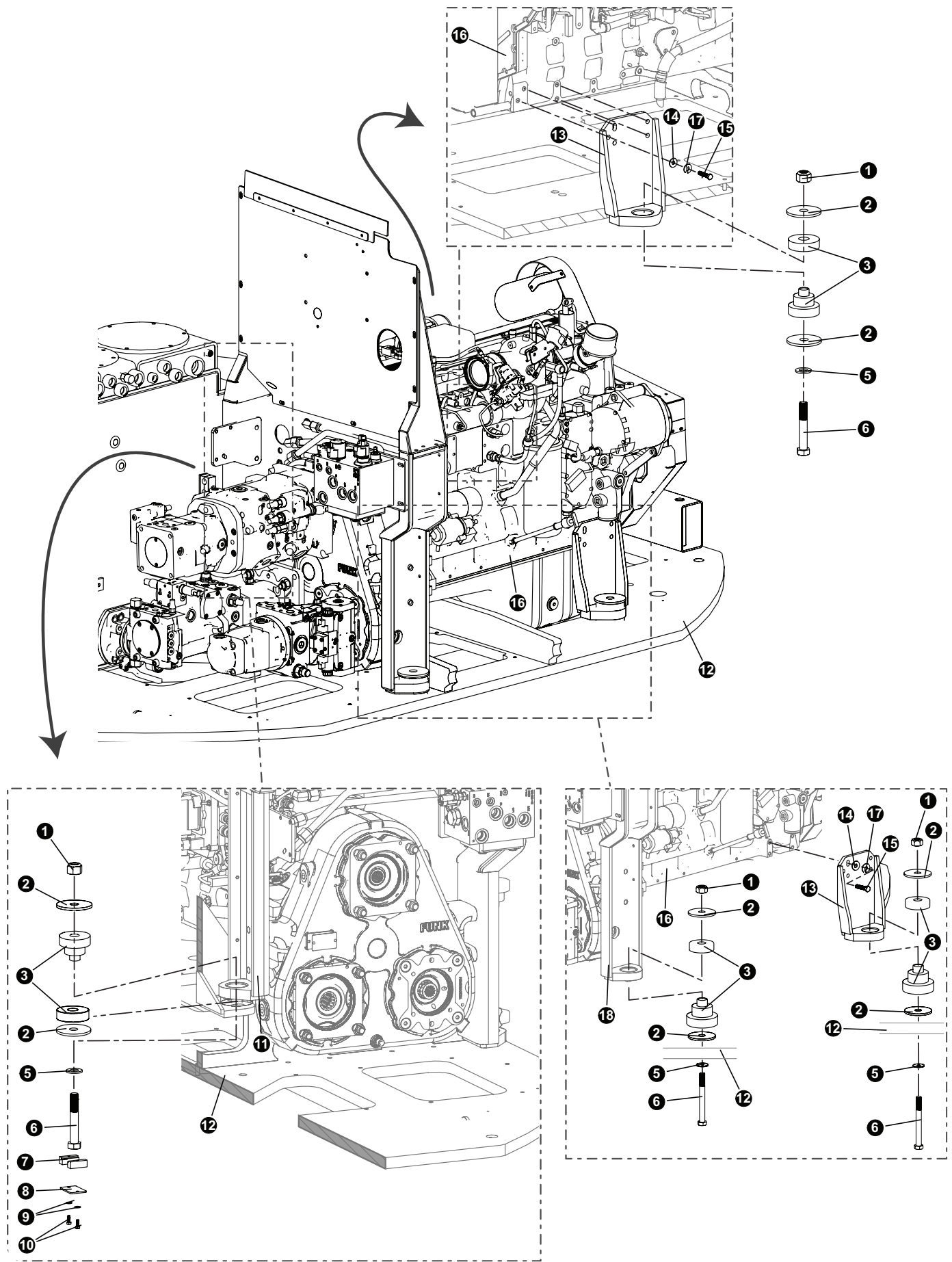
# ENGINE COMPONENTS AND INSTALLATION

## 175CC IMPLEMENT PUMP



REF.	PART #	QTY.	DESCRIPTION
1	57865	1	PUMP, IMPLEMENT - REX 175CC/40 W/HP CONT

**PAGE INTENTIONALLY LEFT BLANK**





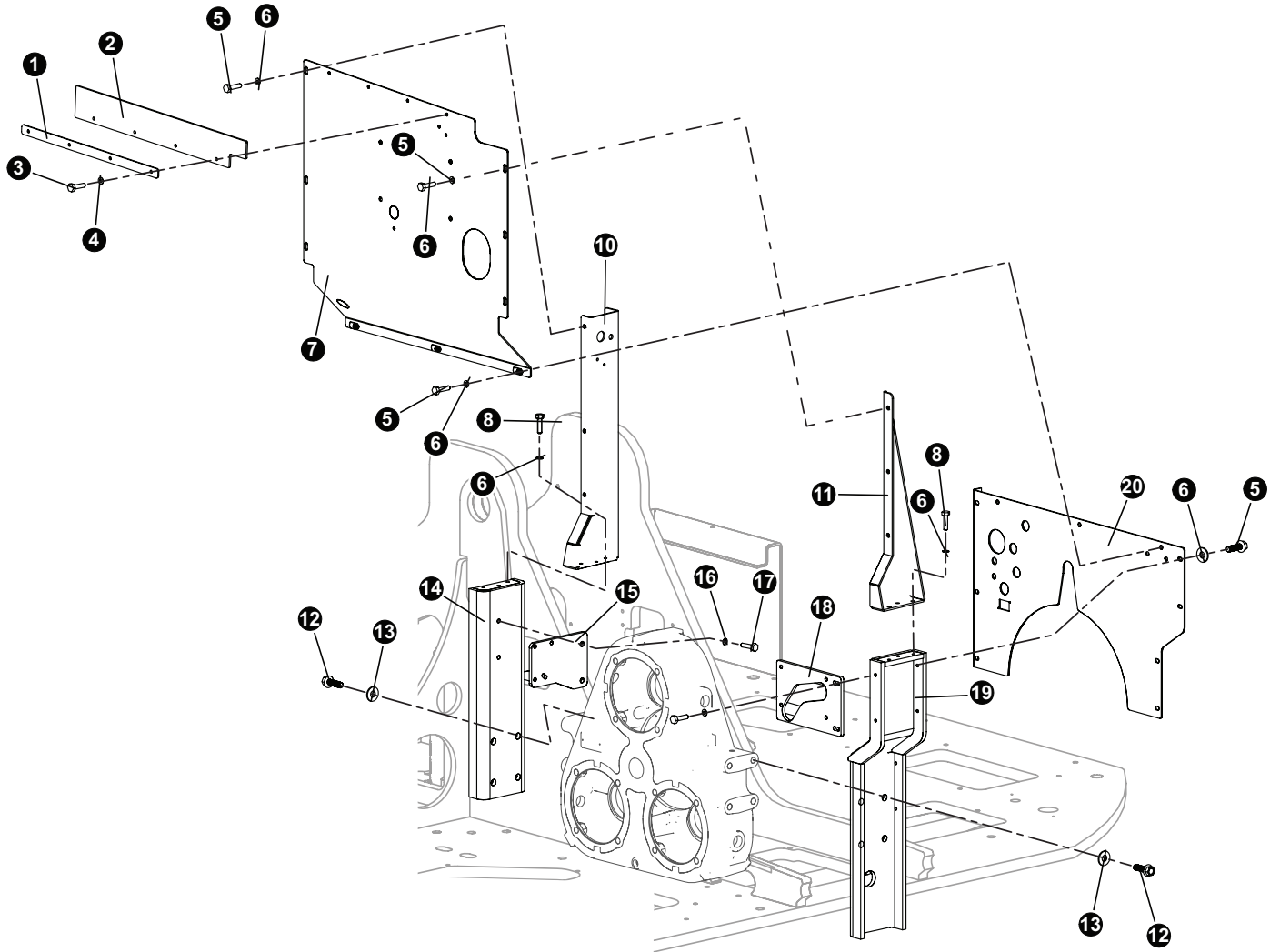
# ENGINE INSTALLATION

## (CUMMINS L9 -STAGE V 350 HP D)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	50334	4	NUT, LOCK .875"	
2	60268	8	WASHER, ENGINE MOUNT D-MOD	
3	60270	4	ISOLATOR, ENGINE MOUNT - D SERIES	
5	10718	6	WASHER, SAE FLAT - .875"	
6	21540	4	BOLT - .875" X 6"	
7	60555	4	MOUNT, GEARBOX - REAR (D-SERIES)	
8	60558	1	COVER, RETAINER	
9	10757	2	1/4" FLAT WASHER	
10	23264	2	BOLT - .25" X .5"	
11	60570	1	MOUNT, ENGINE - INNER REAR (D MODEL)	
12	(SEE PAGE)	1	WELDMENT, D UPPER TURNTABLE .....	UP-1-1
13	60269	2	MOUNT, ENGINE - FRONT (D MODEL)	
14	18735	8	WASHER, FLAT - 12MM	
15	15551	4	BOLT - 12mm-1.75P x 40mm ( <b>Torque to 92 ft.lbs. (122 Nm)</b> )	
16	58049	1	ENGINE, CUMMINS L9 -STAGE V 350 HP D A057G097 SM13" A055V395 SUPPLY MODULE A047S305 CCV A050D461 DEF SUCTION 24132 DEF PRESSURE A053N830 DEF RETURN A051Y803 15GAL. DEF TANK 4387333 DEF TANK CAP Q312516 GASKET A035R793 5" V.BAND CLAMP 2897332 TBAP SENSOR 4383933 LCL SENSOR 3400698 ALTERNATOR 3400698 STARTER WF2076 COOLANT FILTER 5491433 NOX Sensor (inlet) 5491434 NOX Sensor (outlet) 4954905 sensor - coolant temp 4388441 def hose white 4377353 def hose yellow SCR6E400FAFC215 def hose (24132) FILTERS: 4353889 DEF TANK 5303604 SUPPLY MODULE	
17	53760	2	1/2" LOCKWASHER KNURLED	
18	60295	1	MOUNT, ENGINE - REAR (D MODEL)	

Kit or Assembly - includes all items indented underneath.

# TRIPLE DRIVE BULKHEAD BARRIER PANELS (CUMMINS L9 -STAGE V 338 HP D)



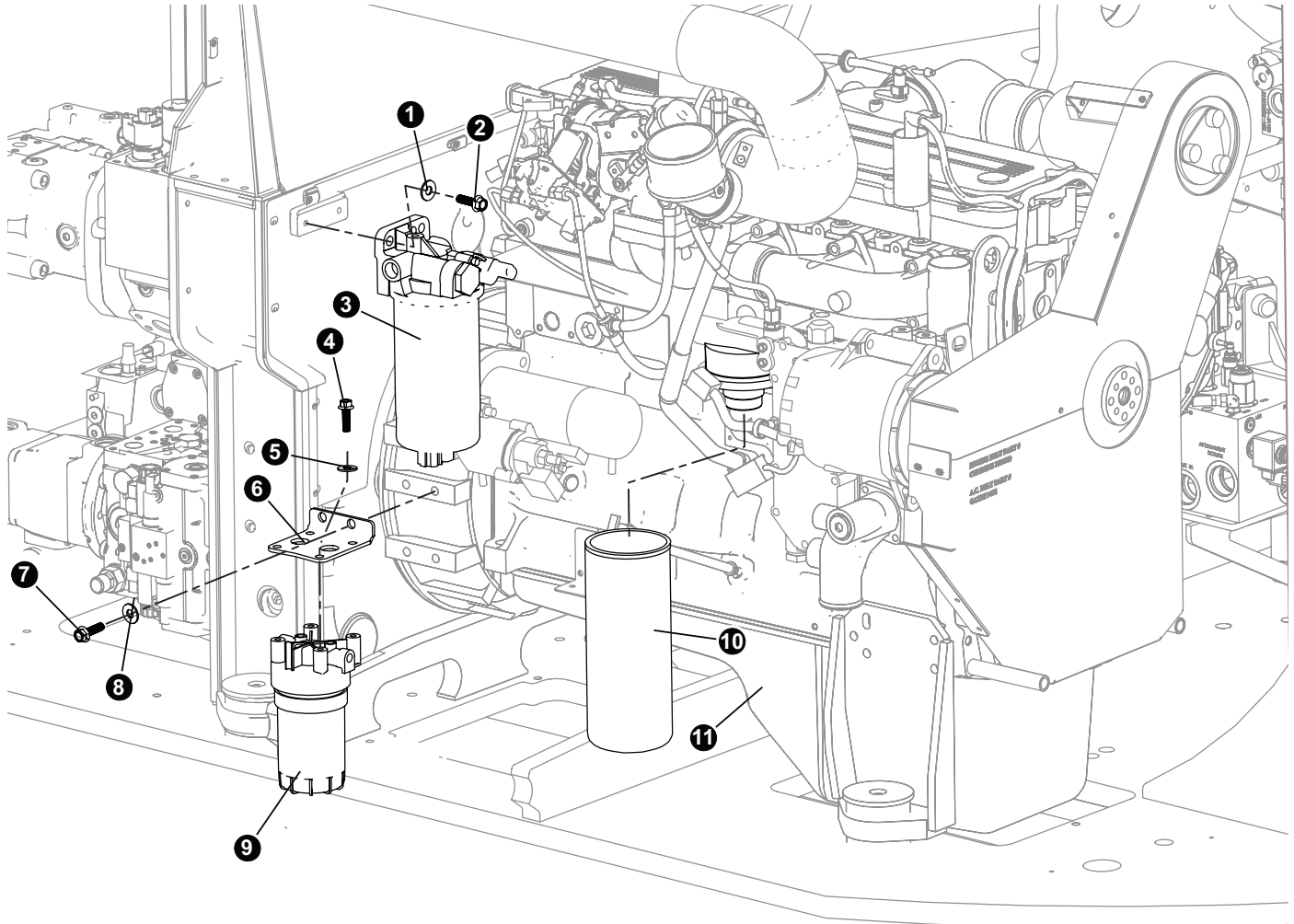
# TRIPLE DRIVE BULKHEAD BARRIER PANELS

(CUMMINS L9 -STAGE V 338 HP D)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	47205	1	BAR, BARRIER PANEL - ENGINE	
2	47206	1	RUBBER, ENGINE BARRIER PANEL	
3	15576	4	BOLT - .25" X 1"	
4	10757	4	1/4" WASHER	
5	15542	9	BOLT - .375" X .75"	
6	15528	20	WASHER, SAE FLAT - .375"	
7	60528	1	BARRIER PANEL, UPPER ENGINE - D SERIES	
8	11707	6	BOLT - .375" X 1"	
10	60392	1	PLATE, UPPER G-BOX 2 - D SERIES	
11	60389	1	WELDMENT, G-BOX UPPER - D SERIES	
12	15526	8	BOLT - .625" X 2"	
13	10771	8	WASHER, SAE FLAT - .625"	
14	60300	1	MOUNT, ENGINE - INNER REAR (D MODEL)	
15	60444	1	MOUNT, MANIFOLD	
16	10805	2	WASHER, SAE FLAT - .5"	
17	50100	2	BOLT - .5" X 1.25"	
18	60391	1	PLATE, CHARGE BLOCK MOUNT - D	
19	60295	1	MOUNT, ENGINE - REAR (D MODEL)	
20	60396	1	WELDMENT, LOWER ENG BARRIER PANEL	

- Kit or Assembly - includes all items indented underneath.

# ENGINE FILTERS



# ENGINE FILTERS

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	15528	2	WASHER, SAE FLAT - .375"	
2	10402	1	BOLT - .375" X 1.25"	
3	58052	1	FUEL PRO FILTER - STAGE 1	
4	25059	2	BOLT - 8MM-1.25P X 20MM	
5	10801	3	5/16" FLAT WASHER	
6	60405	1	MOUNT, FILTER - FUEL	
7	15556	2	BOLT - 12MM-1.75P X 20MM	
8	18735	2	WASHER, FLAT - 12MM	
9	58053	1	FILTER, FUEL - STAGE 2	
10	58054	1	FILTER, ENGINE OIL (D-SERIES)	
11	(SEE PAGE)	1	ENGINE, CUMMINS STAGE V - 350HP .....	EE-1-2
13	15604	1	BOLT - .25" X .75"	
14	10757	1	WASHER, .25 FLAT	
15	46268	1	SHROUD, ASSY BELT GUARD 300HP & D-MOD (Bracket is assembled with entire Shroud Assembly - See next page for 46268 assembly parts.	
16	10812	1	5/16" NUT	
17	10822	1	BOLT - .3125" X 1.25"	
18	55135	1	COMPRESSOR, A/C - C MODEL / SKIDDER	
19	5367768 (Sup. #)	1	STARTER, CUMMINS	
20	24604	1	BOLT - 10MM-1.5P X 125MM (FLANGE HEAD)	
21	3400698 (Sup. #)	1	ALTERNATOR, CUMMINS	

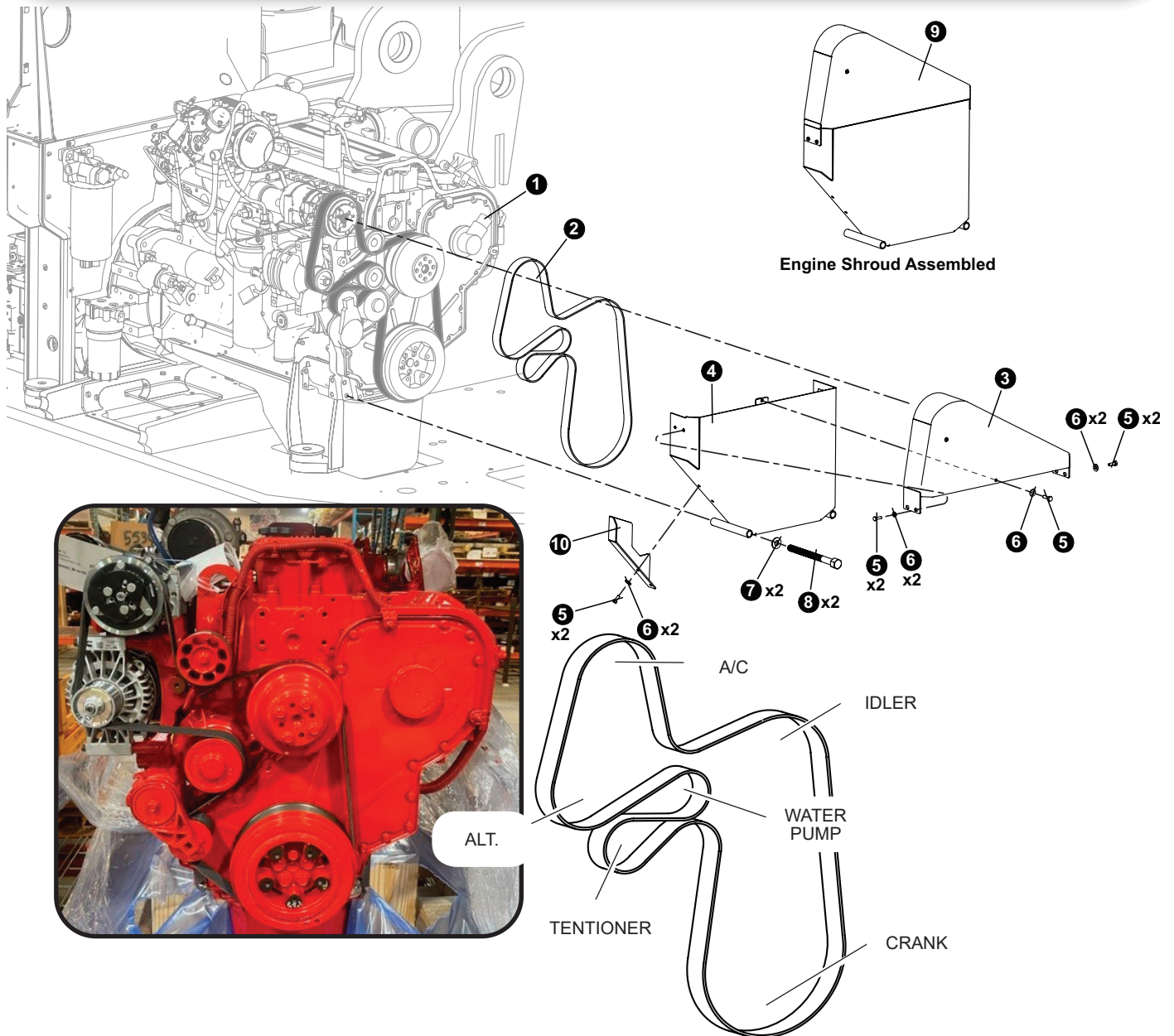


See referenced page for component or assembly breakdown.

# ENGINE COMPONENTS AND INSTALLATION

## CUMMINS STAGE V BELTS AND GUARDS INSTALLATION

### SERIAL # TL-745D-0718-010320 AND AFTER

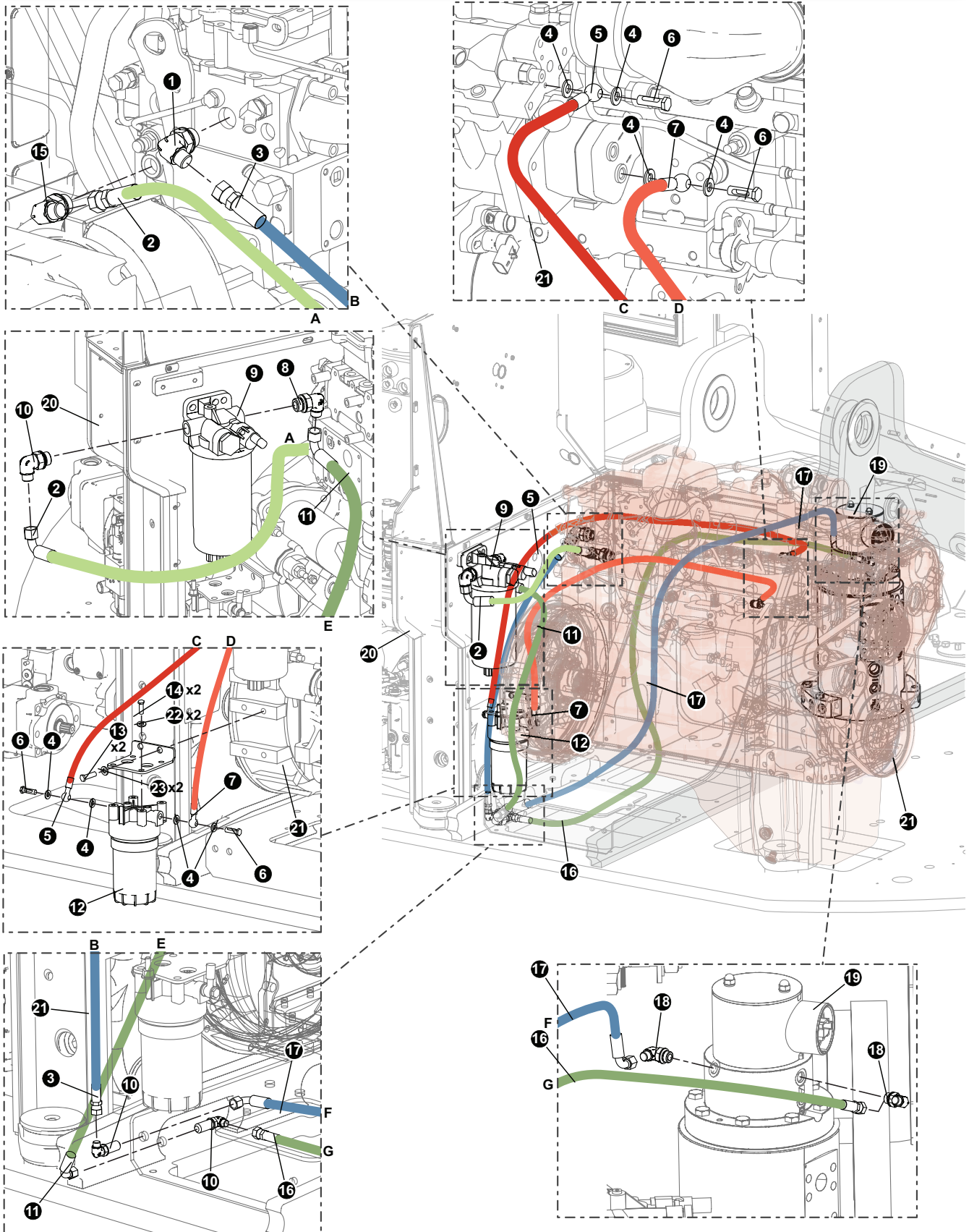


REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	(SEE PAGE)	1	ENGINE, CUMMINS STAGE V - 350HP .....	EE-1-9
2	59058	1	BELT, SERPENTINE - D SERIES	
3	60782	1	SHROUD, ENGINE BELT TOP	
4	60778	1	SHROUD, ENGINE BELT LOWER 300HP & D-MOD	
5	15604	7	BOLT - .25" X .75"	
6	10757	7	1/4" FLAT WASHER	
7	18735 (Mfgr. #)	2	12mm Washer	
8	53110	2	BOLT - 12MM X 150MM FAN GUARD (830-B)	
9	60780	1	SHROUD, ASSY BELT GUARD 300HP & D-MOD	
10	46288	1	SHROUD, FAN - BOTTOM	



**PAGE INTENTIONALLY LEFT BLANK**

# FUEL LINES



# FUEL LINES

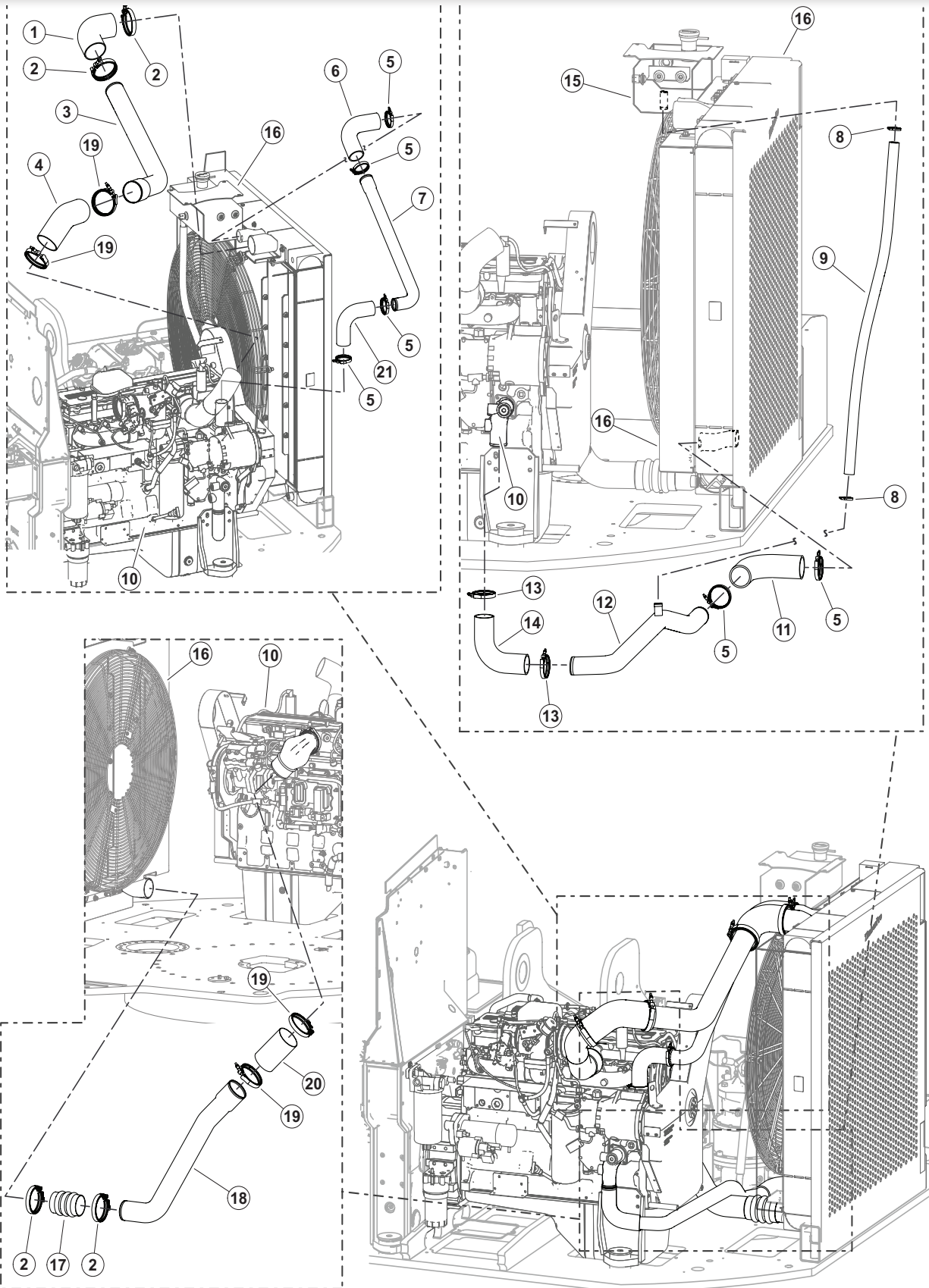
REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	53103	1	FITTING, 6-8 - ORB-JIC 830-B	
2	(See Description)	1	HOSE ASSEMBLY - <b>221FR25-06-06JS-06J9</b>	
3	(See Description)	1	HOSE ASSEMBLY - <b>221FR35-06-06JS-06J9</b>	
4	WASHER	1	(CONTACT YOUR CUMMINS DEALER FOR REPLACEMENT PART)	
5	HOSE	1	(CONTACT YOUR CUMMINS DEALER FOR REPLACEMENT PART)	
6	FASTENER	1	(CONTACT YOUR CUMMINS DEALER FOR REPLACEMENT PART)	
7	FASTENER	1	(CONTACT YOUR CUMMINS DEALER FOR REPLACEMENT PART)	
8	53073-EE	1	ELBOW, 90 6-JIC X 10-ORB	
9	(SEE PAGE)	1	ENGINE, CUMMINS STAGE V - 350HP .....	EE-1-2
1	(SEE PAGE)		FUEL PRO FILTER - STAGE 1 .....	EE-1-13
1	(SEE PAGE)		ENGINE, CUMMINS STAGE V - 350HP .....	EE-1-2
10	55347	2	FITTING, ELBOW - BULKHEAD 6 WETX-WLN-S	
11	(See Description)	1	HOSE ASSEMBLY - <b>221FR28-06-06JS-06J9</b>	
12	(SEE PAGE)	1	FILTER, FUEL - STAGE 2 .....	EE-1-13
13	15556	2	BOLT - 12MM-1.75P X 20MM	
14	25059	2	BOLT - 8MM-1.25P X 20MM	
15	53073	1	ELBOW, 90 6-JIC X 10-ORB	
16	(See Description)	1	HOSE ASSEMBLY - <b>2081-06-06JS-06J9</b>	
17	(See Description)	1	HOSE ASSEMBLY - <b>2081-06-06JS-06J9</b>	
18	15480	2	ELBOW, 90 - 6801-6	
19	(SEE PAGE)	1	ROTARY MANIFOLD .....	UP-1-1
20	(SEE PAGE)	1	TRIPLE DRIVE BULKHEAD .....	EE-1-11
21	(SEE PAGE)	1	ENGINE, CUMMINS STAGE V - 350HP .....	EE-1-2
22	10801	2	WASHER, 5/16"	
23	18735	2	WASHER, FLAT - 12MM	



See referenced page for component or assembly breakdown.



# CHARGE AIR

(AIR TO AIR CONNECTIONS CUMMINS ENGINE)



# CHARGE AIR

## (AIR TO AIR CONNECTIONS CUMMINS ENGINE)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	52753	1	ELBOW, 90 - 3.5" X 6" SILICONE	
2	52862	6	CLAMP, spring hose - 4" (Supplier #3926703)	
3	60440	1	TUBE, UPPER CAC TO MANIFOLD	
4	52729	1	ELBOW, 48 - 4" BOOT(AIR TO AIR)	
5	18103	2	CLAMP, CONSTANT TORQUE - #40	
6	58167	1	HOSE, RAD UPPER D-UPDATE 2 1/2" ID	
7	48918	1	WELDMENT, LOWER RADIATOR TUBE	
8	15629	2	CLAMP, HOSE - WORM STYLE - 1.5"	
9	(See Description)	1	HOSE, (Supplier #8031957 16-0-0-SW)	
10	(SEE PAGE)	1	 ENGINE, CUMMINS STAGE V - 350HP .....	EE-1-2
11	58149	1	HOSE, RAD 90 DEG D-MOD 2 1/2 ID	
12	61246	1	TUBE, LOWER RAD D-SERIES W/ TUBE FLARE	
13	18104	2	CLAMP, CONSTANT TORQUE - #36	
14	57992	1	HOSE, RADIATOR - D-SERIES	
15	60671	1	TANK, BURP - D SERIES (HI VOLUME - UPDAT	
16	(SEE PAGE)	1	 RADIATOR / COOLER ASSEMBLY .....	UP-3-12
17	52861	4	HOSE, HUMP - SILICONE (3 WIRE CUMMINS)	
18	60436	1	TUBE, LOWER CAC TO MANIFOLD	
19	15697	2	CLAMP, STRAP BAND - 4.5"	
20	55646	1	HOSE, AIR TO AIR - CUMMINS - 4" X 4" STR	
21	15617	1	HOSE, 90 DEGREE RADIATOR - 2 1/4 ID	



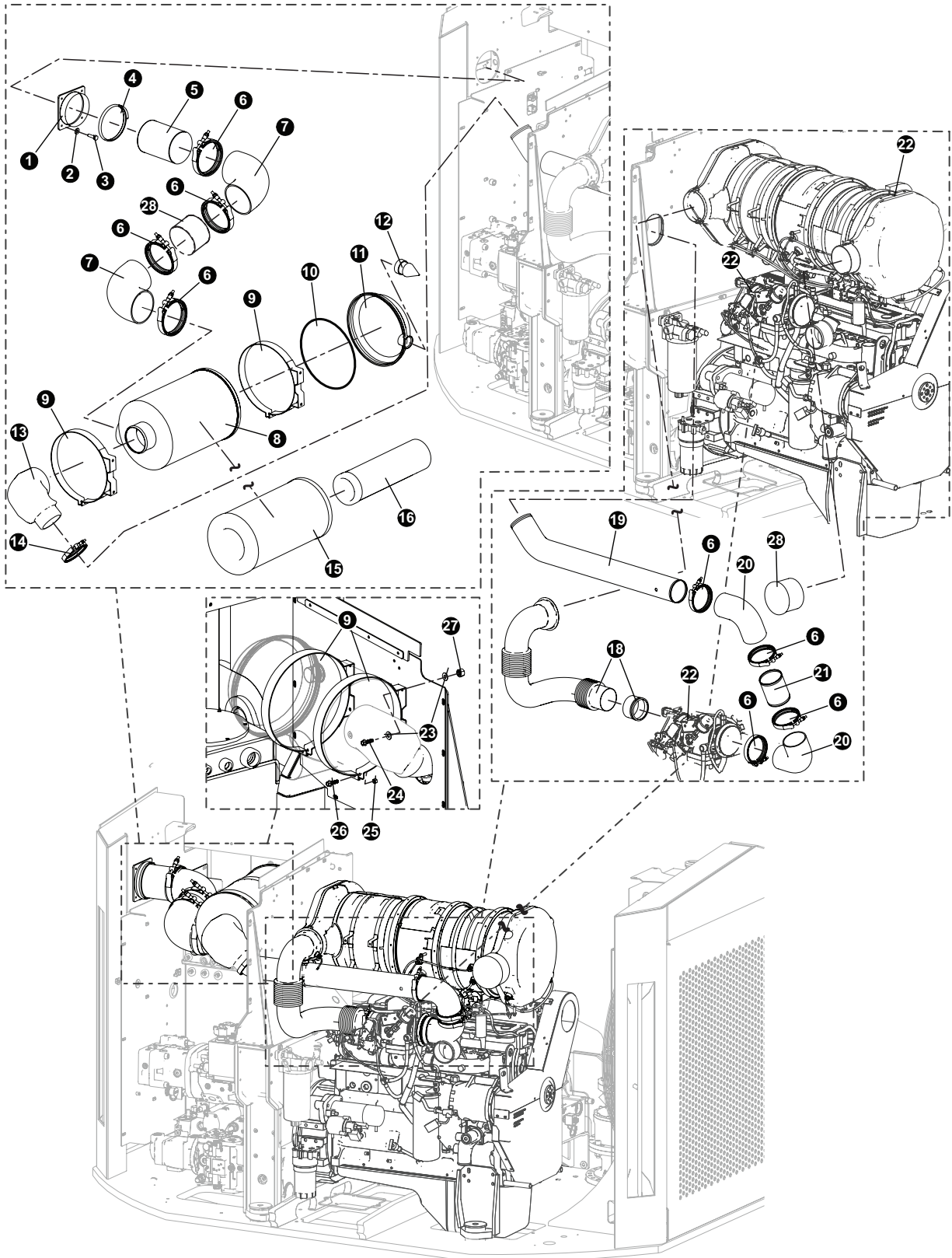
See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.




# AIR CLEANER INSTALLATION (CUMMINS L9 -STAGE V)





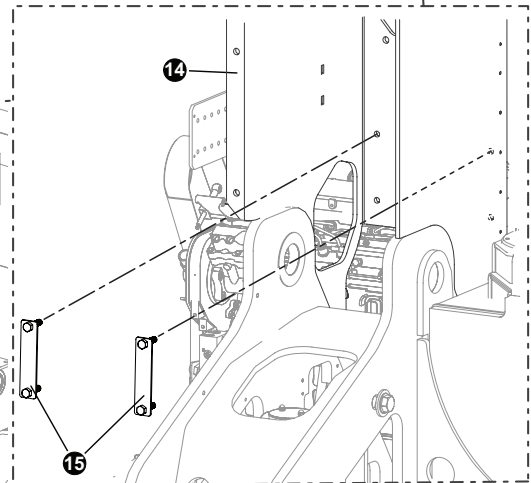
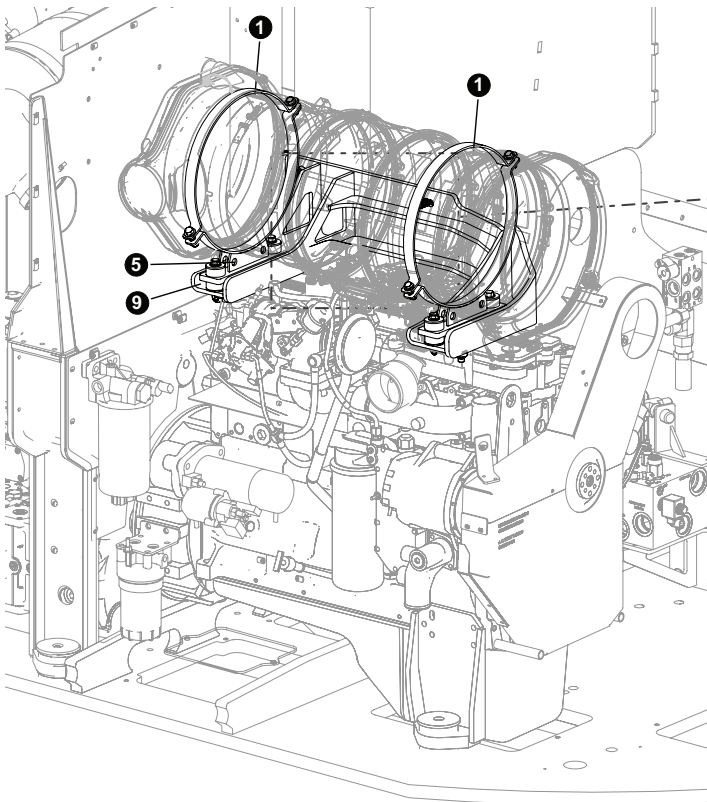
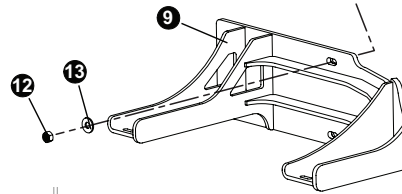
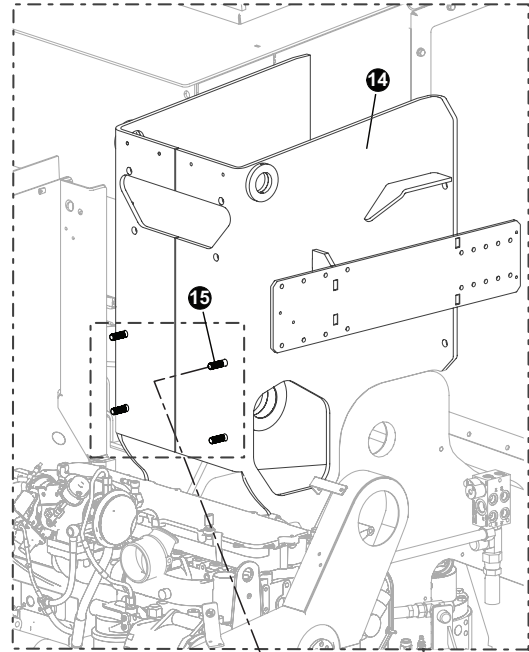
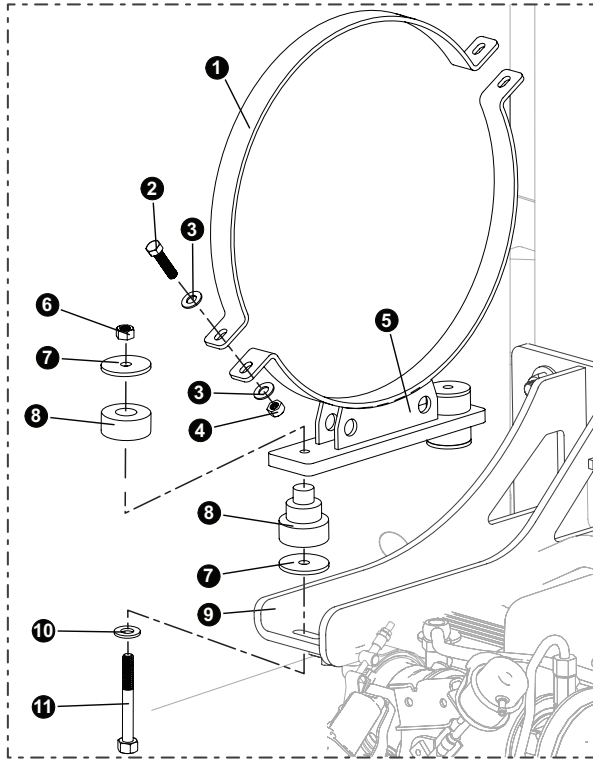
# AIR CLEANER INSTALLATION

## (CUMMINS L9 -STAGE V)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	46868	1	WELDMENT, AIR INTAKE FLANGE C/D/765	
2	15605	2	BOLT - .3125" X .75"	
3	10801	2	5/16" WASHER	
4	55498	1	 CLAMP, AIR INLET	
5	55499	1	TUBE, AIR INLET - TIER 4	
6	16249	8	CLAMP, STRAP BAND - 5.5"	
7	57495	2	ELBOW, RUBBER - 90 DEGREE 6" X 6"	
8	51729	1	AIR CLEANER ASSEMBLY - 830/630	
9	20450	1	BAND, AIR CLEANER CLAMP	
10	P537699 (Sup. #)	1	O-RING, RUBBER	
11	55074	1	COVER, AIR CLEANER - 830/735	
12	52053	1	BOOT, AIR CLEANER	
13	54667	1	ELBOW, RUBBER 90 AIR INTAKE-COBRA	
14	16249	1	CLAMP, STRAP BAND - 5.5"	
15	51756	1	FILTER, AIR CLEANER - PRIMARY	
16	51757	1	FILTER, AIR CLEANER - SECONDARY	
18	60260	1	TUBE, EXHAUST TURBO TO DOC - D SERIES	
19	60445	1	WELDMENT, AIR INTAKE TUBE	
20	55634	2	ELBOW, RUBBER - 4" x 4" - CUMMINS	
21	46529	1	TUBE, AIR INTAKE STEEL - TURBO TO CLEAN	
22	(SEE PAGE)	1	ENGINE, CUMMINS STAGE V - 350HP .....	EE-1-2
23	10802	8	3/8" WASHER	
24	11707	4	BOLT - .375" X 1"	
25	10812	2	5/16" LOCKNUT	
26	10822	2	BOLT - .3125" X 1.25"	
27	10813	4	BOLT - 3/8-16 X 1	
28				

 See referenced page for component or assembly breakdown.

# MUFFLER AND MUFFLER WELDMENT INSTALLATION



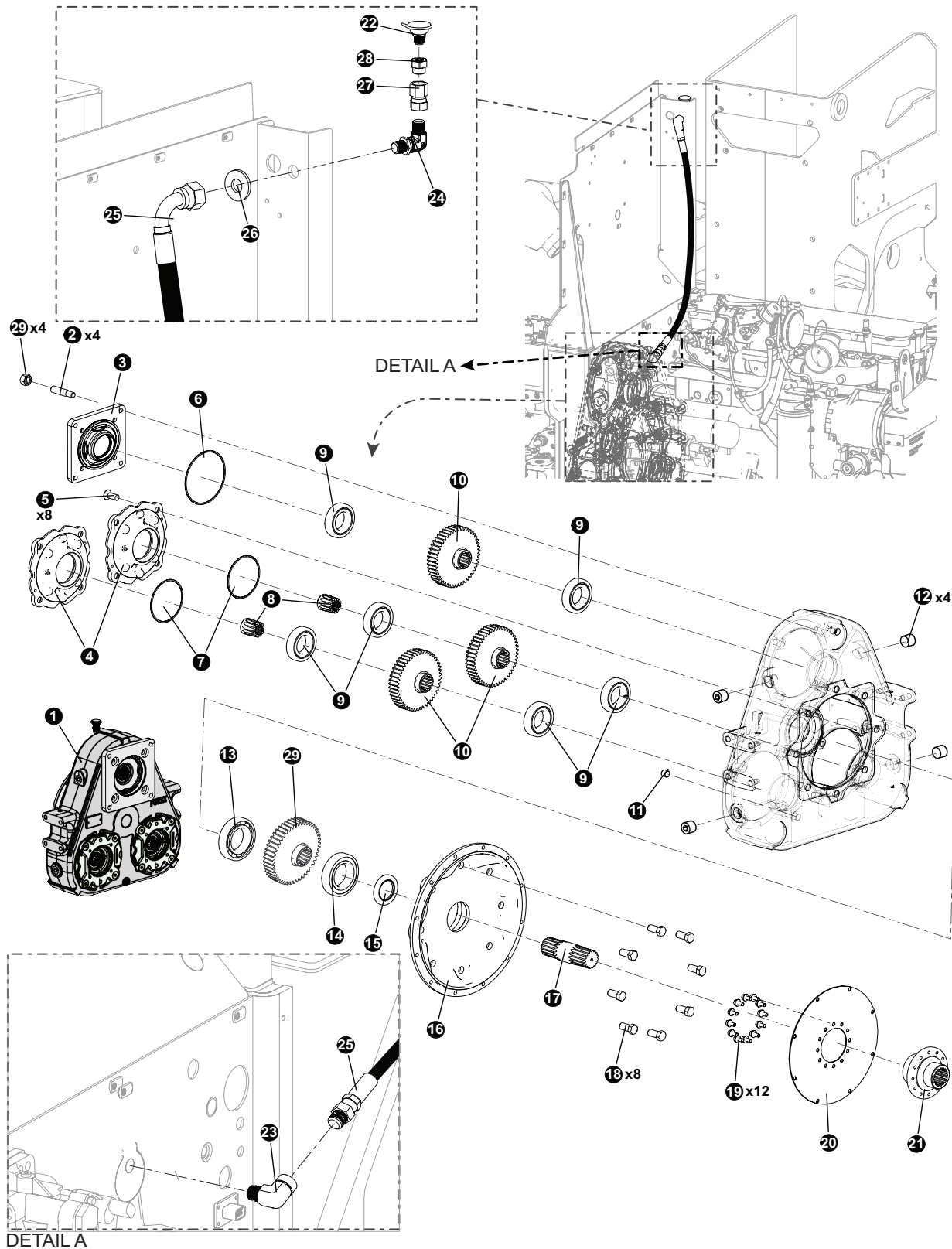
# MUFFLER AND MUFFLER WELDMENT INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	60381	2	STRAP, SINGLE CAN MOUNT - AFTER TREATMENT	
2	10822	4	BOLT - .3125" X 1.25"	
3	10801	8	5/16" WASHER	
4	10812	4	5/16-18 LOCKNUT	
5	60380	2	WELDMENT, SCR MTG CLAMP - D SERIES	
6	10815	4	1/2" LOCKNUT	
7	46674	8	WASHER, FENDER - ISOLATOR	
8	55560	4	ISOLATOR, RUBBER - VOLVO MUFFLER - T4F	
9	60373	1	WELDMENT, ATFER TREATMENT MOUNT - D SERIES	
10	10804	4	1/2" FLAT WASHER	
11	15553	4	BOLT - .5" X 3.5"	
12	10816	2	5/8-11 LOCKNUT	
13	10805	2	5/8" WASHER	
14	(SEE PAGE)	1	WELDMENT, BOOM SURROUND D-STAGE 5 .....	UP-1-8
15	60109	2	PLATE, SCR STUD	



See referenced page for component or assembly breakdown.

# PUMP DRIVE TRANSMISSION BREAKDOWN



# PUMP DRIVE TRANSMISSION BREAKDOWN

REF	PART #	QTY	DESCRIPTION	SEE SECTION
-	55673	1	<input type="checkbox"/> TRANSMISSION, TRIPLE PUMP DRIVE (.723:1)	
1	F13015000	4	NUT	
2	18293	4	THREADED STUD (Supplier # 40281351)	
3	18292	1	COVER, TOP	
4	54767	2	COVER, BOTTOM (Supplier # YZ280186)	
5	F1122824	8	FASTENER	
6	F37030258	1	GASKET	
7	F37030248	2	GASKET	
8	16330	2	ADAPTOR SLEEVE (Supplier # 4028056)	
9	YZ104564_ASM	3	BEARING,	
10	51408	3	GEAR,	
11	F202004	1	INSERT COVER	
12	F1900316	4	INSERT COVER	
13	18892	1	BEARING (Supplier # F40214)	
14	18891	1	BEARING (Supplier # F40214S)	
15	18027	4	SEAL	
16	4059411	1	COVER, engine adapter housing (See Note #2 Below)	
17	18388	1	SHAFT	
18	F1008024	8	FASTENER	
19	YZ280039	12	FASTENER	
20	18028	1	PLATE	
21	YZ100938	1	PINION FLANGE YOKE	
22	21304	1	VENT AP	
23	16251	1	ELBOW, 90 STREET - 5502-4	
24	55347	1	FITTING, ELBOW - BULKHEAD 6 WETX-WLN-S	
25	(See Description)	1	HOSE, <b>Supplier Part # 387TC 38 06-06JS-06J9</b> (Triple Drive Vent Hose)	
26	98631 (Supplier #)	1	5/8" TRU TORQ, EXTRA THICK FLAT WASHER: 15/64" THICK, 21/32" ID, 1 5/16" OD	
27	57422	1	FITTING, 6-6 G6X-S	
28	11318	1	BUSHING, REDUCER - 5406-6-4	
29	54401	1	GEAR, 65 TEETH	

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.

**PAGE INTENTIONALLY LEFT BLANK**



