



Parts Manual

Model: 1860

Covers Serial Number Range:

123-T-86TCX5Y2*04123 through _____

Sold & Serviced By:

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Contents

Quick Order List.....	4
Hoppers	6
Push Beam Assembly	8
Sight Gauge Rod	10
Hydraulic Tank.....	12
Wash Down Tank.....	14
Fuel Tank	16
Battery Enclosure	18
Fuel Tank (Late Model)	20
Cooler and Fan Package.....	22
Exhaust and SCR	24
Engine Air Intake	26
Engine	28
Generator	30
Tractor Hood	32
Egnine Compartment.....	34
Conveyor Drive RH	36
Conveyor Drive LH	38
Conveyor Idler	40
Track Drive RH.....	42
Track Drive LH	44
Screed Arm Assembly	46
Main Screed	48
Walk Boards	50
Upper Walk Board	52
Screed Cover Plate	54

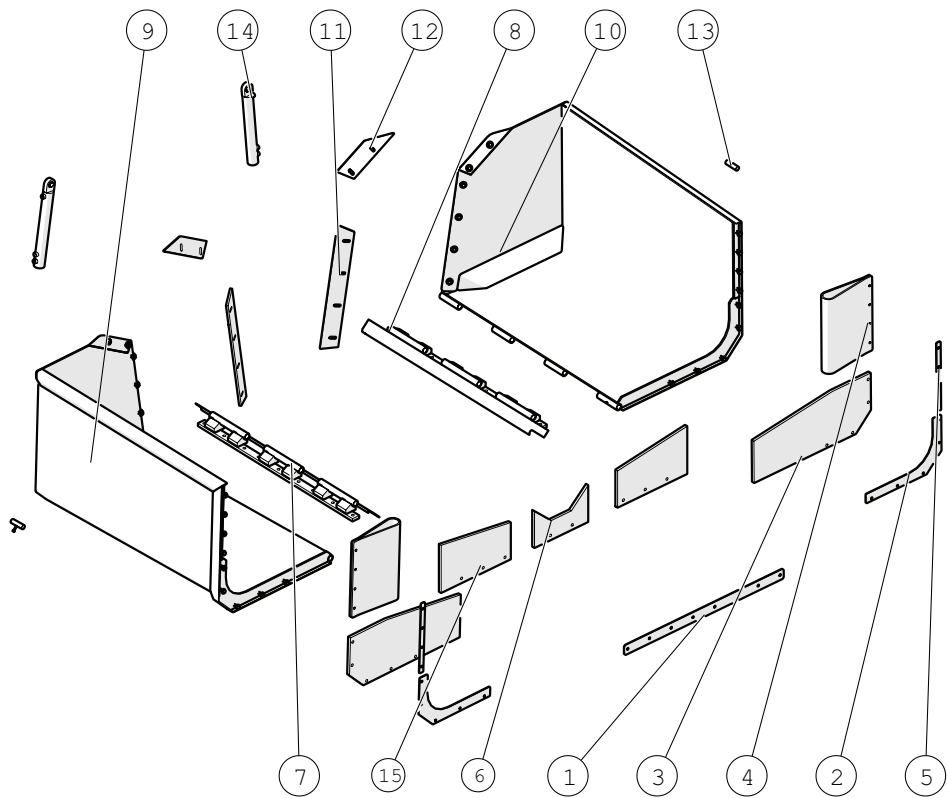
Screed Prestrike Off 9in Auger	56
Screed Prestrike Off 12in Auger	58
Power Crown Assembly	60
Manual Crown Assembly	62
Left Hand Match Height & Slope.....	64
Right Hand Match Height & Slope.....	66
Left Hand End Gate.....	68
Right Hand End Gate	70
Left Hand Extension	72
Right Hand Extension	74
Left Hand Control Station Lower.....	76
Left Hand Control Station Upper.....	78
Left Hand Control Panel	80
Left Hand Control Panel Toggles	82
Right Hand Control Station Lower	84
Right Hand Control Station Upper.....	86
Right Hand Control Panel	88
Right Hand Control Panel Toggles	90
Right Hand Control Panel Toggles	91
12V Screed Control Box	92
240V Screed Heat Control Box.....	94
Wiring Harnesses.....	96
Options: Grade Packages	99
Options: Road Crew Kit	100
Options: Hardened Segmented Augers.....	102
Electrical Schematics	105
Hydraulic Schematics.....	116
Generator Diagnostics.....	118

Quick Order List

BOM ID	Part Number	Description	Quantity
1	112-302080	Auger Hanger Assembly	4
2	112-302561	Auger Lower (LH)	1
3	112-302560	Auger Lower (RH)	1
4	112-302551	Auger, Upper (LH)	1
5	112-302550	Auger, Upper (RH)	1
6	015-0154	Auger Sprocket Lower	2
7	015-0045	Auger Chain Coupler	2
8	021-0243	Filter Engine Oil	1
9	021-0244	Filter Engine Air Primary	1
10	021-0245	Filter Engine Air Secondary	1
11	021-0169	Filter Hydraulic Oil High Pressure	1
12	021-0239	Filter Hydraulic Oil Return Suction	1
13	021-0247	Filter Fuel Water Separator	1
14	021-0246	Filter Fuel	1
19	050-0522	Cap, Fuel tank	1
21	050-0522	Cap Washdown	1
22	024-0233	Decal Kit	1
23	091-414600	Flight Chain Assembly	2
24	018-0091	Flight Chain Bearing	8
25	020-0174	Fuel Sender	1
26	013-0094	Motor Upper Auger	2
27	013-0096	Motor Auger Lower	2
28	093-408756	Rubber Flap Hopper Outer	2
29	093-414646	Plastic Hopper Inner	2
30	093-414642	Plastic Hopper Center W/ Cutout	1
31	093-414643	Plastic Hopper Center W/o Cutout	1
32	093-414890	Plastic Hopper Scraper	2
33	092-0301E	Screed Plate Main	1
34	111-302280	Screed Extension Plate	2
35	050-0350	Sonic Sensor Cord	2
36	020-109473	Sonic Sensor LH & RH	1

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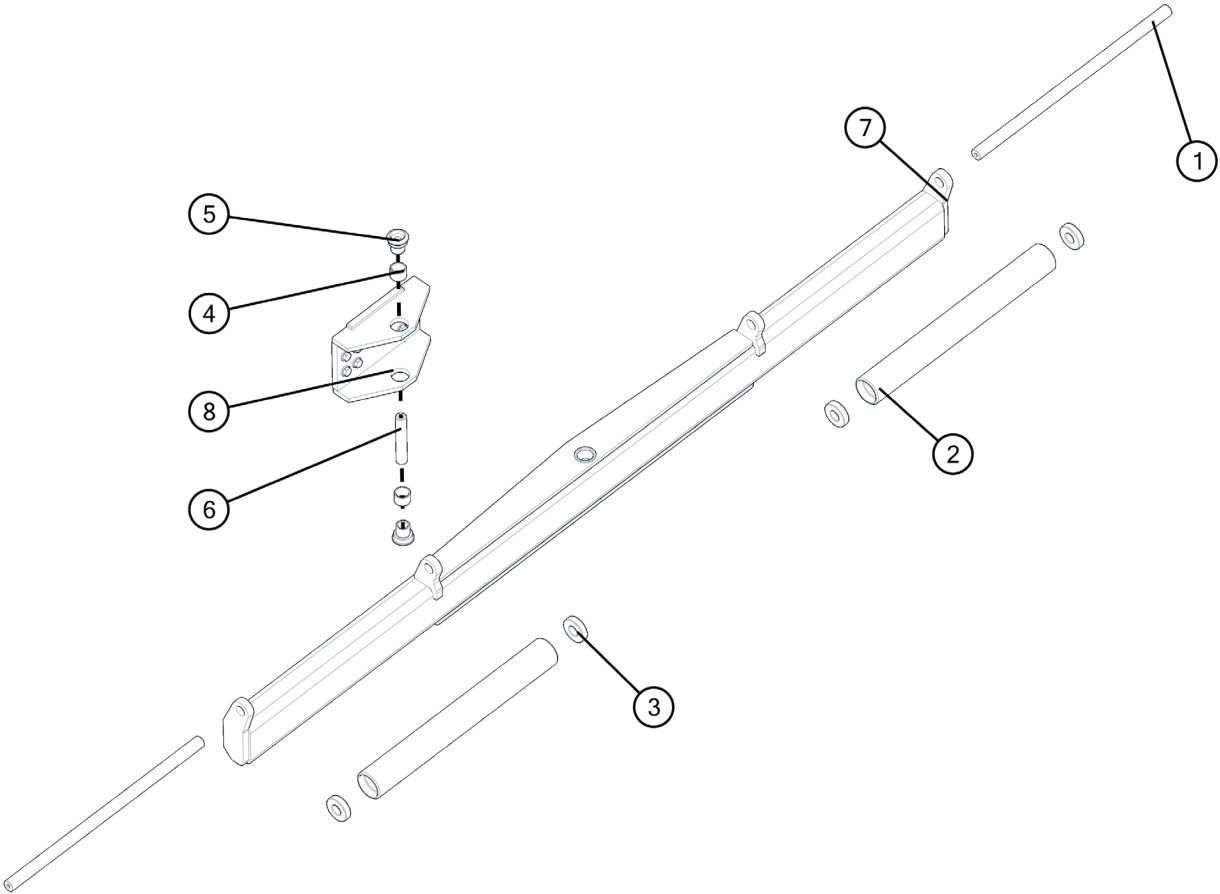
Hoppers



Hoppers

BOM ID	PART NUMBER	DESCRIPTION	Qty
1	093-414264	FRONT CENTER PLASTIC RETAINER	1
2	093-414886	RETAINER, FRONT SIDE LOWER PLASTIC	2
3	093-414646	HOPPER PLASTIC, FRONT	2
4	093-408756	HOPPER SIDE FLAPS	2
5	093-408830	RETAINER, HOPPER SIDE RUBBER FLAP	2
6	093-414642	HOPPER PLASTIC FRONT CENTER	1
7	092-414840	HOPPER MOUNT WELDMENT, RIGHT	1
8	092-414841	WELDMENT, HOPPER HINGE, LEFT	1
9	092-414900	HOPPER WELDMENT, RIGHT	1
10	092-414901	HOPPER WELDMENT, LEFT	1
11	093-414890	HOPPER REAR LOWER PLASTIC WIPER	2
12	093-414892	HOPPER REAR UPPER PLASTIC WIPER	2
13	093-414928	HOPPER LOCK PIN	2
14	012-414002	HOPPER CYLINDER	2
15	093-414644	HOPPER PLASTIC FRONT OUTER	2

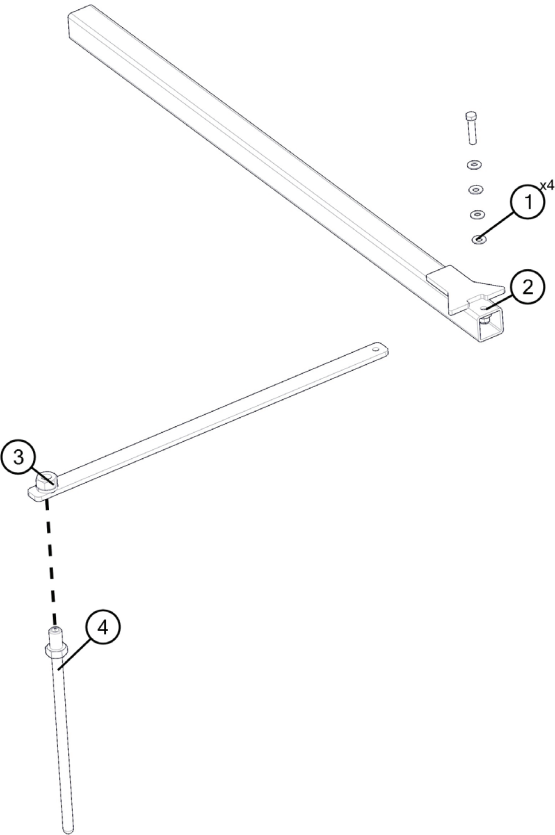
Push Beam Assembly



Push Beam Assembly

BOM ID	PART NUMBER	DESCRIPTION	Qty
1	093-100778	PUSH ROLLER AXLE	2
2	093-100776	TRUCK PUSH ROLLER	2
3	018-0010	BEARING PUSH ROLLER	4
4	018-622681	BRONZE BUSHING	2
5	093-104308	PUSH BEAM PIVOT PIN	2
6	093-104306	PUSH BEAM PIVOT PIN	1
7	092-100512	OSCILLATING PUSH BEAM WELDE- MENT	1
8	092-408574	PUSH BEAM CARRIER WELDMENT	1

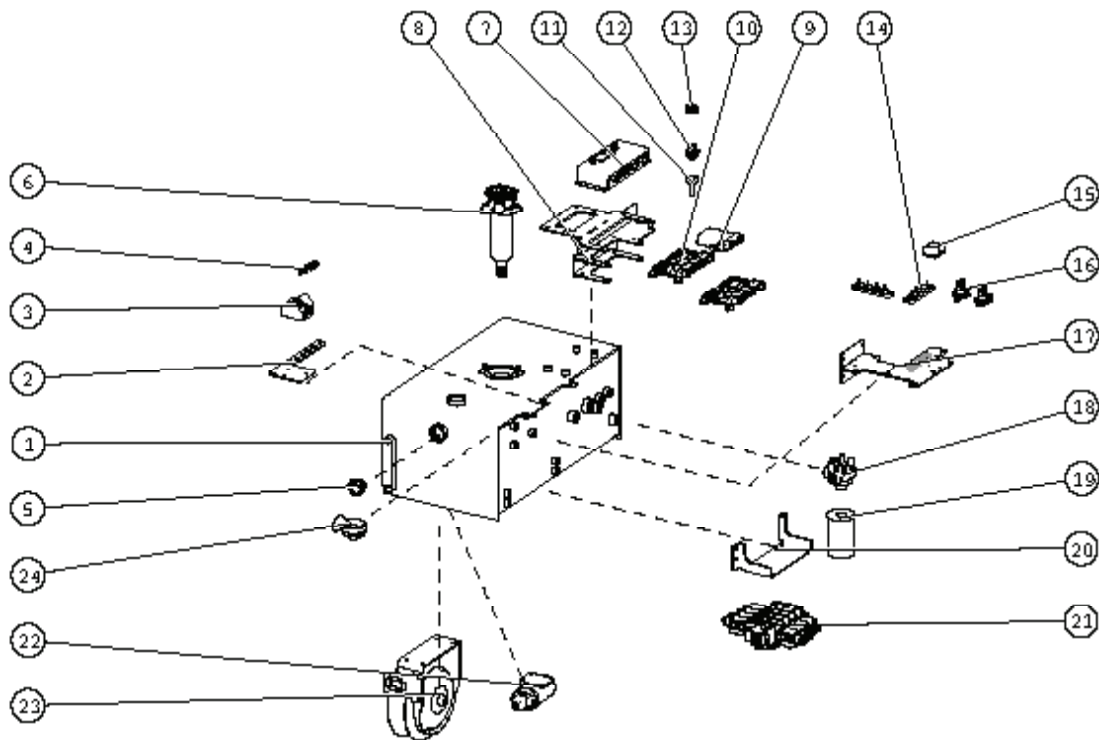
Sight Gauge Rod



Sight Gauge Rod

BOM ID	PART NUMBER	DESCRIPTION	Qty
1	030-0580	BELLEVILLE DISC SPRING	4
2	092-204634	SIGHT GUIDE SLIDE TUBE WELDMENT	1
3	093-204628	SIGHT GUIDE EXTENSION BAR	1
4	091-204632	SIGHT GUIDE POST SUB-AS- SEMBLY	1
5 (not shown)	030-0544	HANDLE LEVER SIGHT GAUGE LATERAL LOCK	1

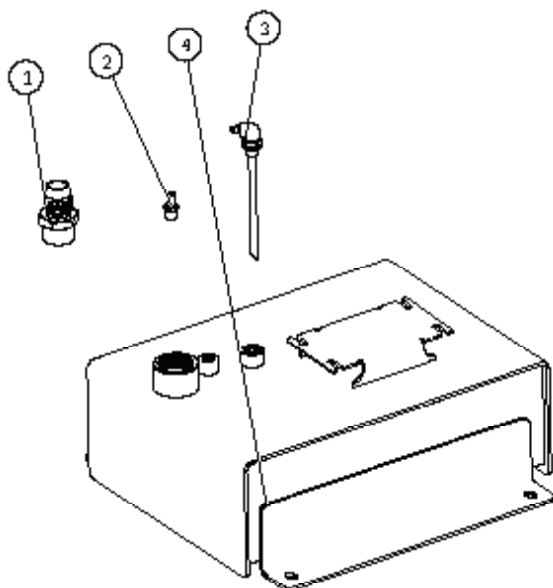
Hydraulic Tank



Hydraulic Tank

BOM ID	PART NUMBER	PART NAME	Qty
1	092-414040	HYDRAULIC TANK WELDMENT	1
2	093-414850	HOPPER CYLINDER FEED MANIFOLD BRACKET	1
3	017-0263	BLOCK COUNTERBALANCE SINGLE	1
4	017-0261	CARTRIDGE VALVE COUNTERBALANCE	1
5	060-0066	SIGHT GLASS	1
6	021-0238	FILTER IN TANK ASSEMBLY	1
6.1	021-0239	FILTER ELEMENT	
7	020-0907	AFTER TREATMENT RELAY	1
8	092-414030	TRACTOR ELECTRONICS BRACKET WELDMENT	1
9	020-0904	MODULE INPUT/OUTPUT MMX 65-1	1
10	020-0716	MODULE POWER DISTRIBUTION	2
11	020-0901	BOOT RECEPTACLE	1
12	020-0841	9-PIN FLANGED RECEPTACLE	1
13	020-0901	BOOT RECEPTACLE	1
14	020-0920	BUSBAR	2
15	020-0239	MIDI FUSE HOLDER	2
16	020-0874	SWITCH 100A	2
17	092-414050	WELDMENT AIR FILTER BRACKET	1
18	021-0233	FILTER HEAD	1
19	021-0169	HIGH PRESSURE HYD OIL FILTER	1
20	093-414052	TRACTOR CYLINDER VALVE BANK BRACKET	1
21	017-0302	Valve Bank Tractor Functions	1
22	011-0231	WASH DOWN FLUID PUMP	1
23	050-0344	SPRAY WAND HOSE REEL	1
24	020-0410	HORN	1

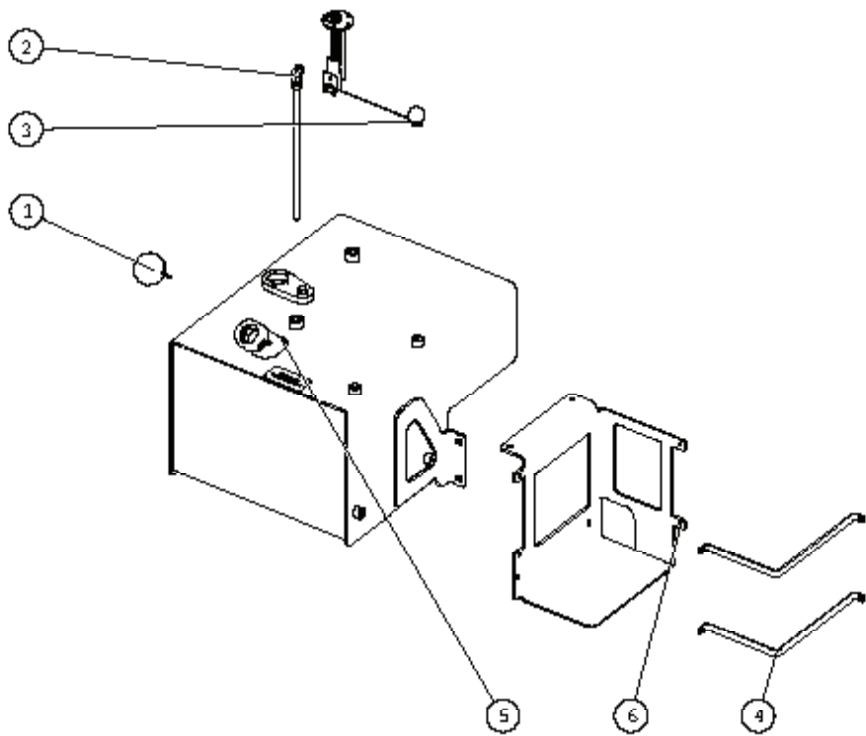
Wash Down Tank



Wash Down Tank

BOM ID	PART NUMBER	PART NAME	Qty
1	014-0657	HOSE BARB	1
2	019-0243	HOSE BARB BRASS	1
3	019-414080	WASH DOWN TANK PICK-UP TUBE	1
4	092-414080	WASHDOWN TANK WELD- MENT	1

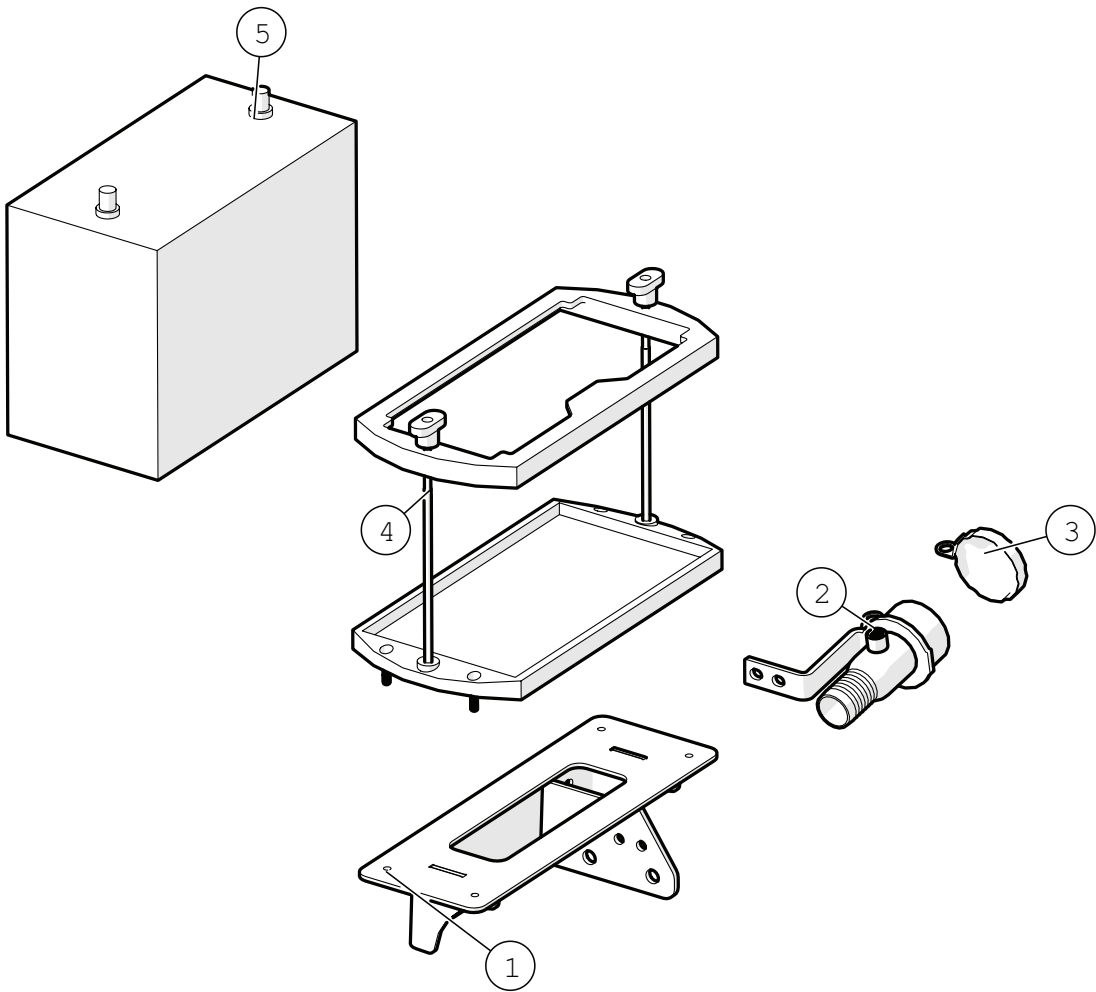
Fuel Tank



Fuel Tank

BOM ID	Part Number	Description	Qty
1	050-0522	DIESEL FILL NECK CAP W/ LOCK TAB	1
2	019-414060	FUEL TANK PICKUP TUBE	1
3	020-0985	FUEL LEVEL SENDING UNIT	1
4	093-414098	DEF TANK STRAP	2
5	092-414090	FUEL TANK WELDMENT	1
6	092-414096	DEF TANK BRACKET WELDEMENT	1
7 (Not Shown)	010-0828	DEF TANK	1

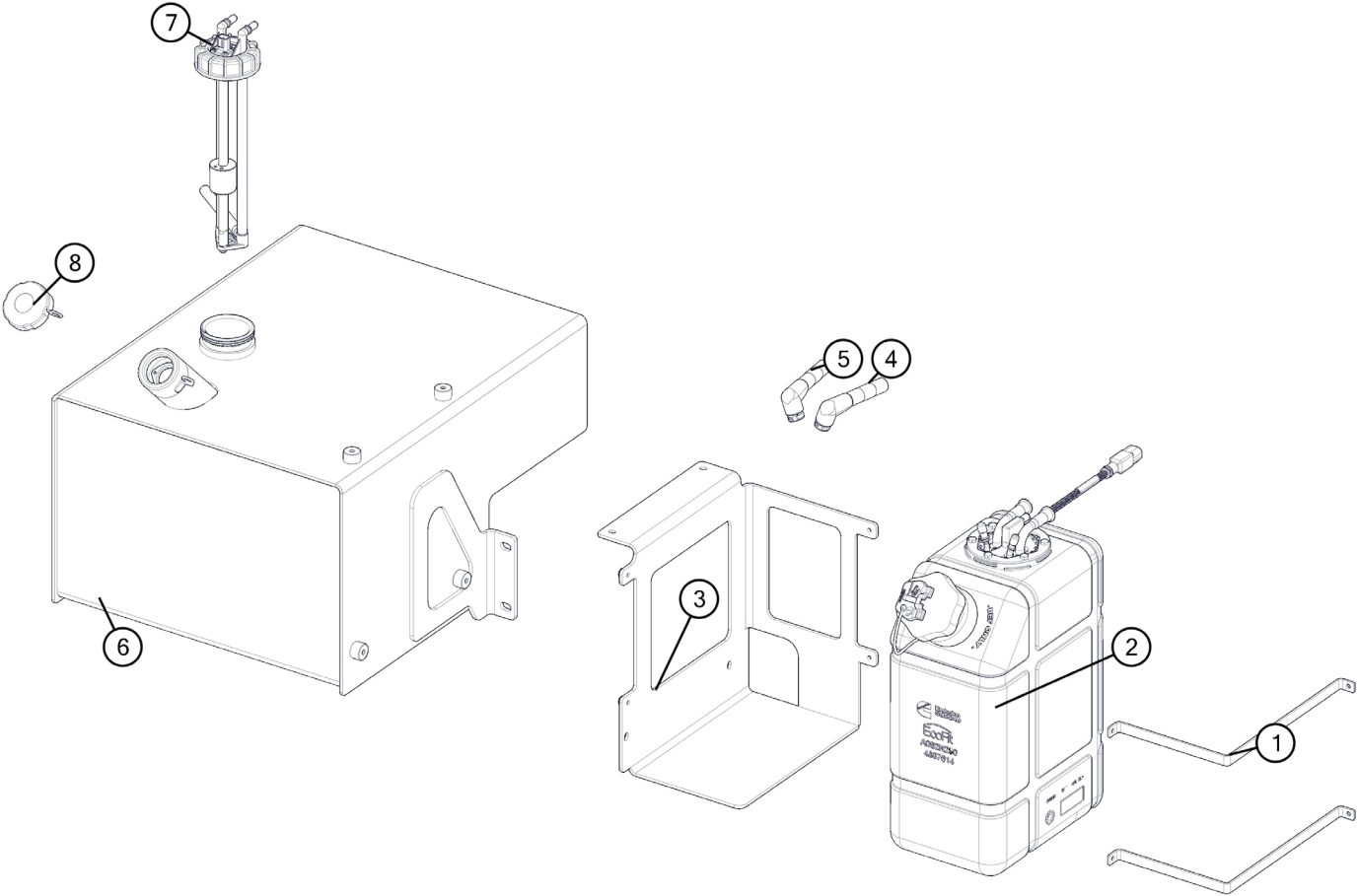
Battery Enclosure



Battery Enclosure

BOM ID	PART NUMBER	DESCRIPTION	Qty
1	092-414054	BATTERY BRACKET WELDMENT	1
2	092-414952	WASHDOWN FILL WELDMENT	1
3	050-0522	DIESEL FILL NECK CAP W/ LOCK TAB	1
4	050-0852	BATTERY HOLDER	1
5	See Descrip- tion	BATTERY, GROUP 31 AUTO POST	1

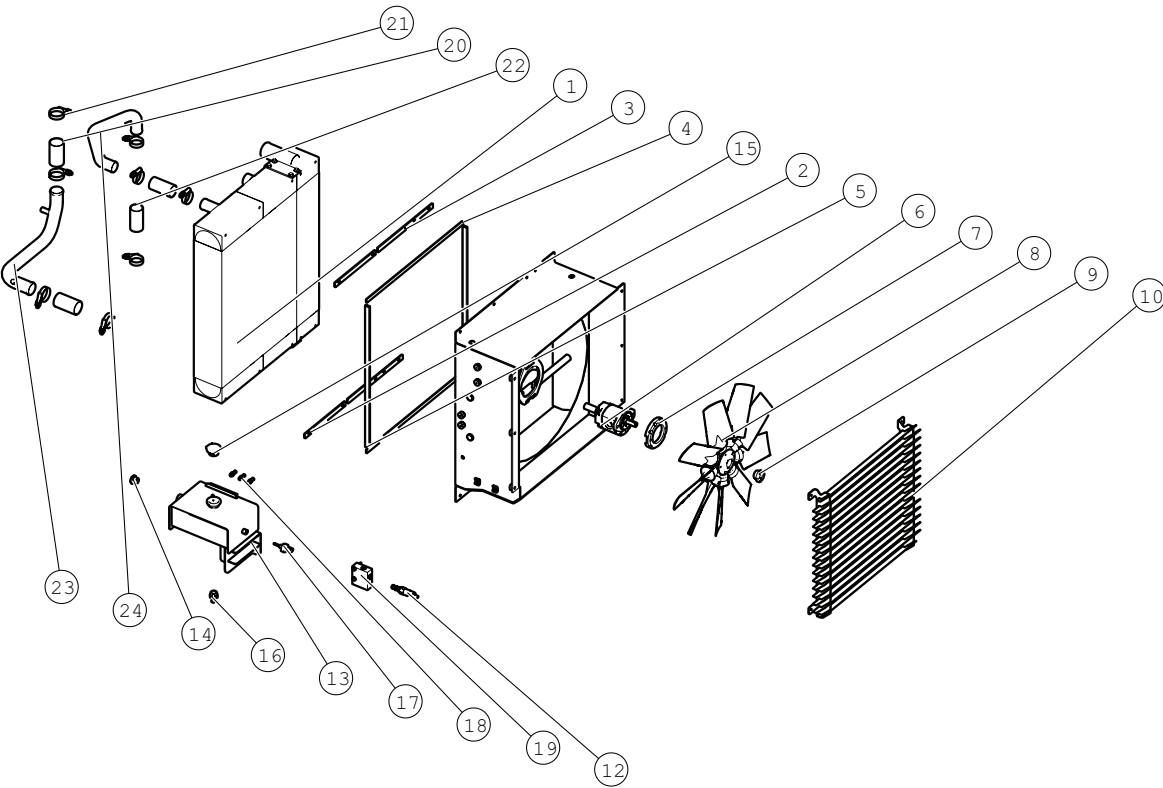
Fuel Tank (Late Model)



Fuel Tank (Late Model)

BOM ID	PART NUMBER	PART DESCRIPTION	Qty
1	093-414098	DEF TANK STRAP	2
2	010-0828	DEF TANK, 5 GAL	1
3	093-414096	DEF TANK BRACKET	1
4	010-0782	DEF TANK RETURN LINE	1
5	010-0781	DEF TANK SUCTION LINE	1
6	092-414090	FUEL TANK WELDMENT	1
7	020-1374	FUEL LEVEL SENDING UNIT	1
8	050-0522	DIESEL FILL NECK CAP W/ LOCK TAB	1

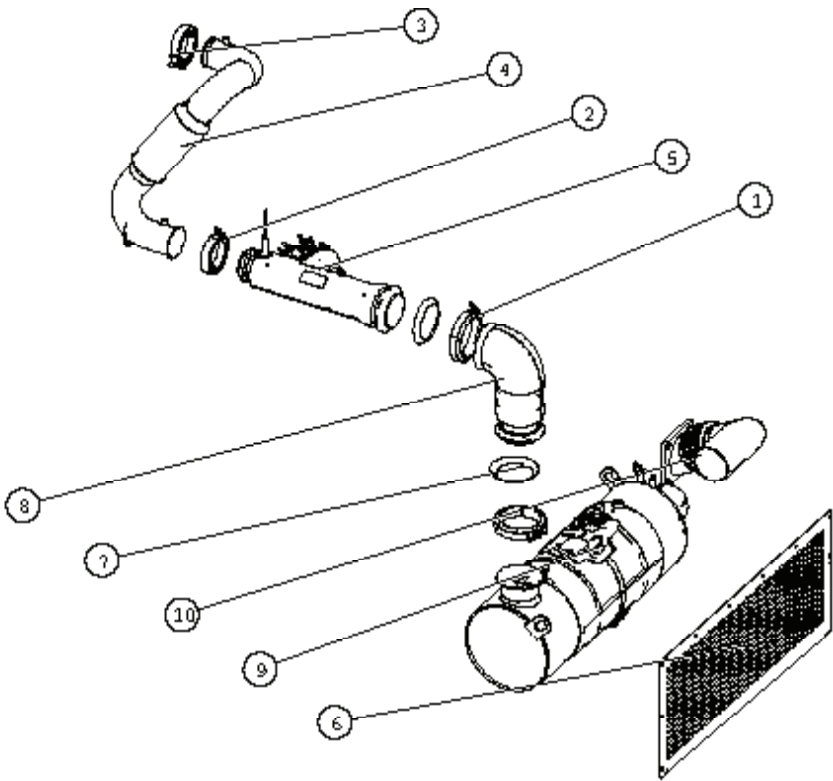
Cooler and Fan Package



Cooler and Fan Package

BOM ID	Part Number	Description	Qty
1	050-0818	RADIATOR/OIL/AIR COOLING CORE	1
2	093-414338	FAN SHROUD GASKET SPACER	2
3	093-414338	FAN SHROUD GASKET SPACER	2
4	050-414100	TRIM-LOK	2
5	050-0861	TRIM-LOK EPDM TRIM SEAL	2
6	017-0103	FAN MOTOR	1
7	093-408336	RADIATOR FAN MOTOR ADAPTOR PLATE	1
8	010-408330	FAN	1
9	018-0125	BUSHING	1
10	092-408360	WELDMENT FAN LOUVERS	1
11	092-408330	FAN SHROUD WELDMENT	1
12	017-0198	COUNTERBALANCE VALVE CARTRIDGE	1
13	092-414360	DEAERATION TANK WELDMENT	1
14	060-0068	SIGHT GLASS	1
15	010-0574	RADIATOR COOLANT TANK CAP	1
16	019-0258	HOSE BARB BRASS	1
17	020-0832	COOLANT LEVEL SENSOR	1
18	014-1096	HOSE BARB	3
19	017-0197	COUNTERBALANCE VALVE BLOCK	1
20	010-0581	HOSE	2
21	010-0582	CLAMP	8
22	010-0605	HOSE	2
23	093-414004	TUBE COOLANT- RADIATOR TO ENGINE	1
24	093-414005	TUBE COOLANT - ENGINE TO RADIATOR	1

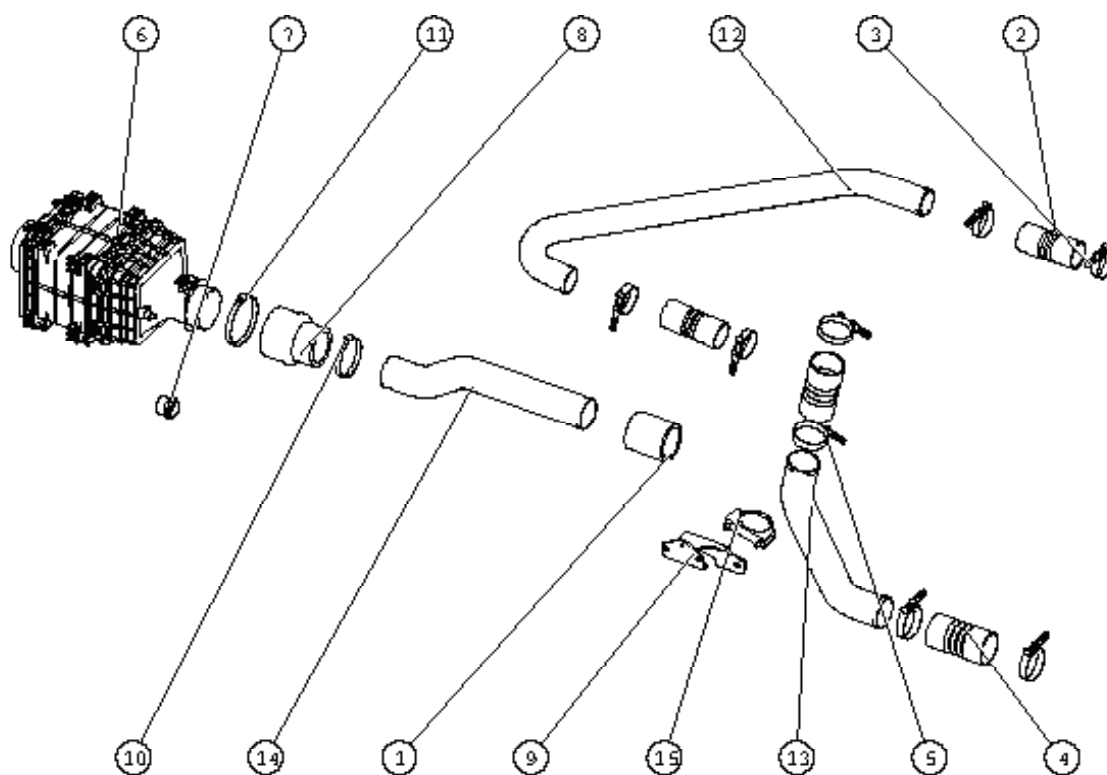
Exhaust and SCR



Exhaust and SCR

BOM ID	Part Number	Description	Qty
1	010-0591	CLAMP V-BAND	2
2	010-0593	CLAMP V-BAND	1
3	010-0786	CLAMP V-BAND	1
4	092-414010	TURBO DOWNPIPE	1
5	010-0587	DECOMPOSITION REACTOR TUBE	1
6	093-414014	SCR ACCESS PANEL	1
7	010-0592	GASKET V-BAND 4"	2
8	010-0586	ELBOW AFTERTREATMENT	1
9	010-0583	SELECTIVE CATALITIC REDUCTION	1
10	092-414007	SCR OUTLET	1

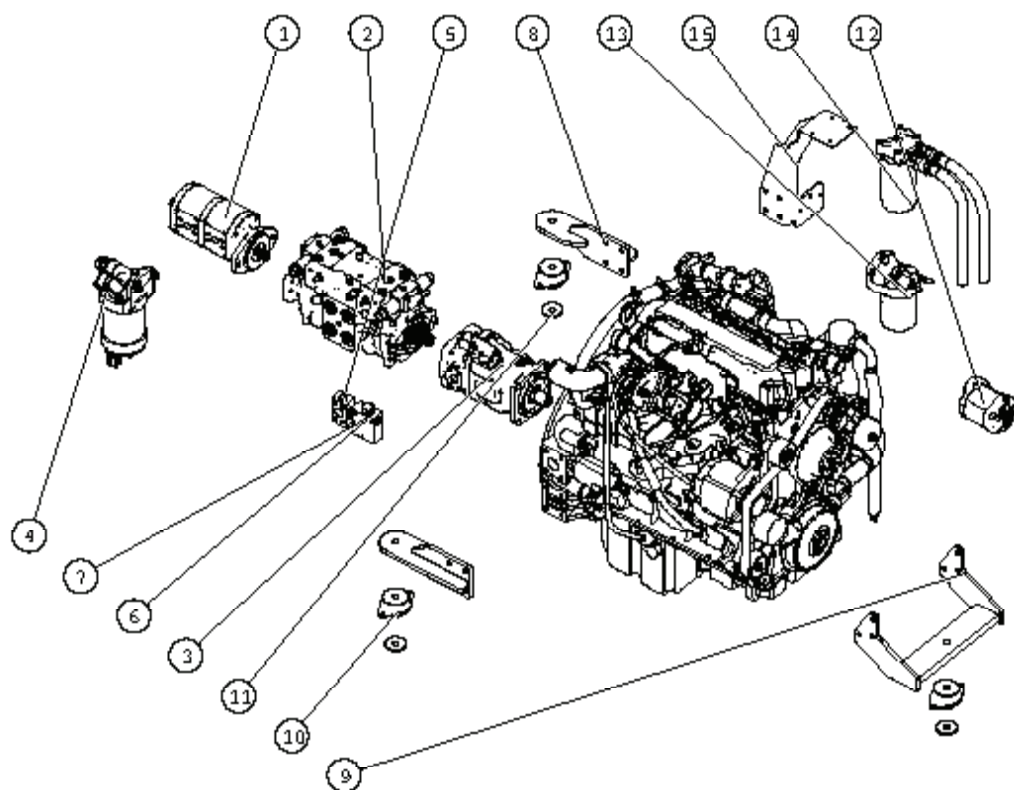
Engine Air Intake



Engine Air Intake

BOM ID	Part Number	Description	Qty
1	010-0569	SILICONE HOSE CONNECTOR	1
2	010-0601	CHARGE AIR HOSE HOT SIDE	2
3	010-0602	CLAMP T-BOLT SPRING	4
4	010-0603	CHARGE AIR HOSE COLD	2
5	010-0604	CLAMP T-BOLT SPRING	4
6	010-0607	AIR CLEANER FRONT INLET REAR OUT-LET	1
7	010-0608	AIR RESTRICTOR INDICATOR	1
8	010-0609	HUMP HOSE REDUCER	1
9	010-414008	COLD PIPE BRACKET	1
10	050-204001	CLAMP HOSE	1
11	050-204002	CLAMP T-BOLT HOSE	1
12	093-414002	CHARGE AIR TUBE HOT SIDE	1
13	093-414003	CHARGE AIR TUBE COLD SIDE	1
14	093-414006	TUBE AIR INTAKE - AIR CLEANER TO TURBOCHARGER	1
15	050-0862	U BOLT CLAMP	1

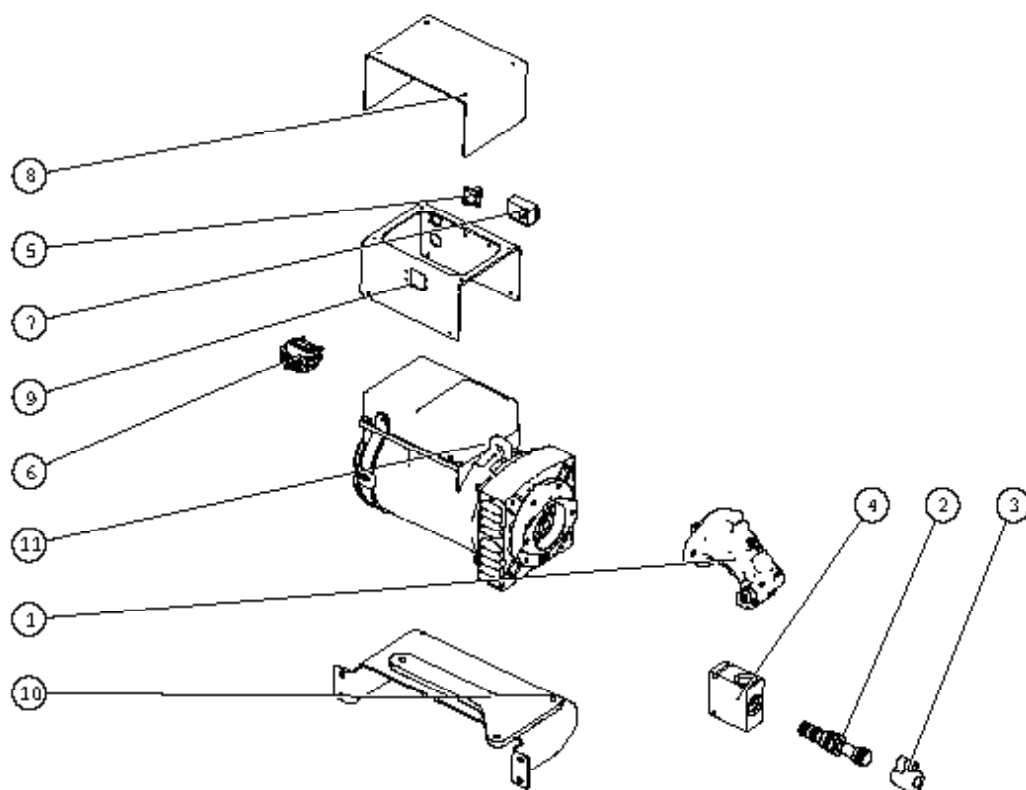
Engine



Engine

BOM ID	Part Number	Description	Qty
1	011-0260	TANDEM GEAR PUMPS	1
2	011-0254	TANDEM DRIVE PUMP	1
3	011-0262	A10VO60 HYDRAULIC PUMP	1
4	021-0247	FUEL/WATER SEP FILTER	1
5	021-109710	GENERATOR 3-WAY PORT BLOCK	1
6	017-0265	MANIFOLD BLOCK MODULATING ELEMENT	1
7	017-1053	MODULATING ELEMENT	1
8	092-414198	ENGINE MOUNT WELDMENT REAR	2
9	092-414194	ENGINE MOUNT WELDMENT FRONT	1
10	010-0606	VIBRATION MOUNT	3
11	010-0599	SNUBBING WASHER	3
12	011-0158	AUX GEAR PUMP REAR PORTED	1
13	021-0246	FUEL FILTER	1
14	021-0243	OIL FILTER	1
15	092-414514	FUEL/LUBE OIL FILTER BRACKET WELDMENT	1

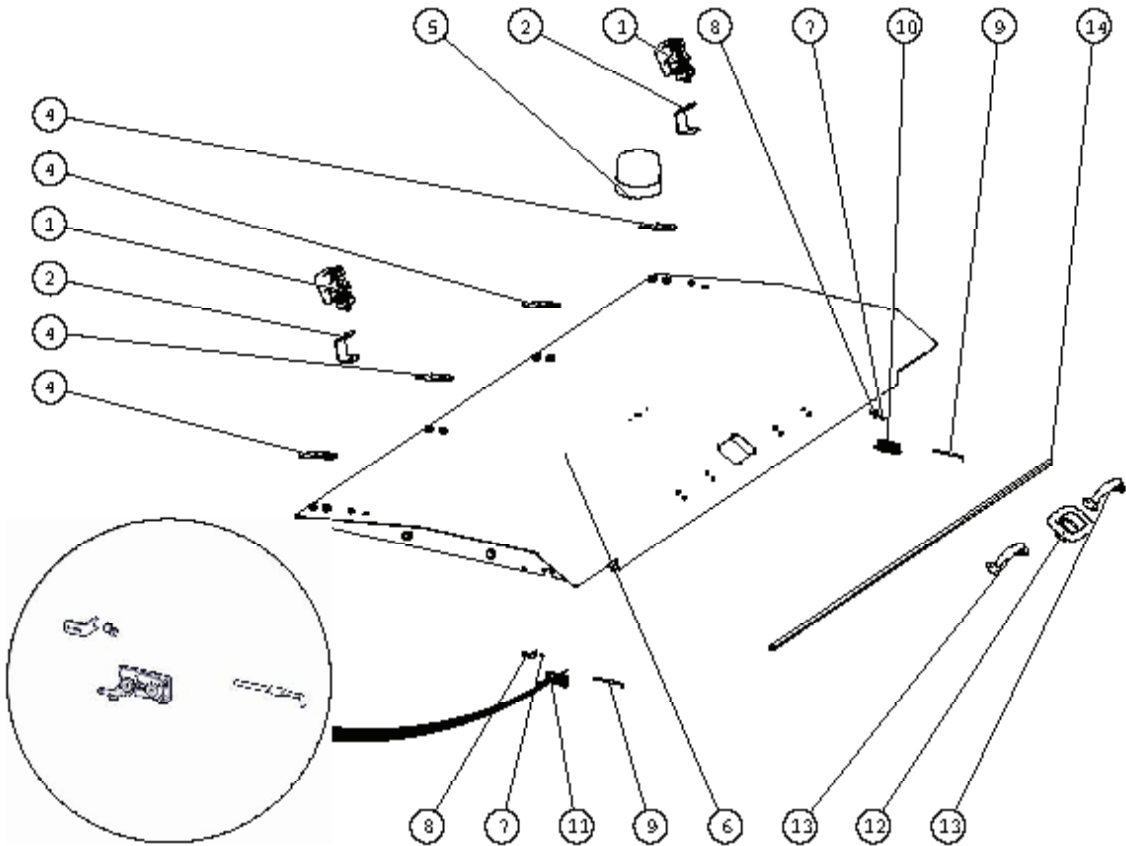
Generator



Generator

BOM ID	Part Number	Description	Qty
1	013-0111	HYDRAULIC MOTOR	1
2	017-0249	PROPORTIONAL CONTROL VALVE	1
3	017-0250	COIL	1
4	017-0251	HYDRAULIC VALVE PORT BLOCK	1
5	020-0221	4 WAY RECEPTACLE FLANGE MOUNT	1
6	020-0769	BREAKER CIRCUIT	1
7	020-0921	AC FREQUENCY SENSOR	1
8	093-408397	GENERATOR KIT COVER PLATE	1
9	093-414942	PLATE GENERATOR KIT MOUNTING	1
10	092-414392	GENERATOR MOUNT WELDMENT	1
11	020-0768	GENERATOR	1

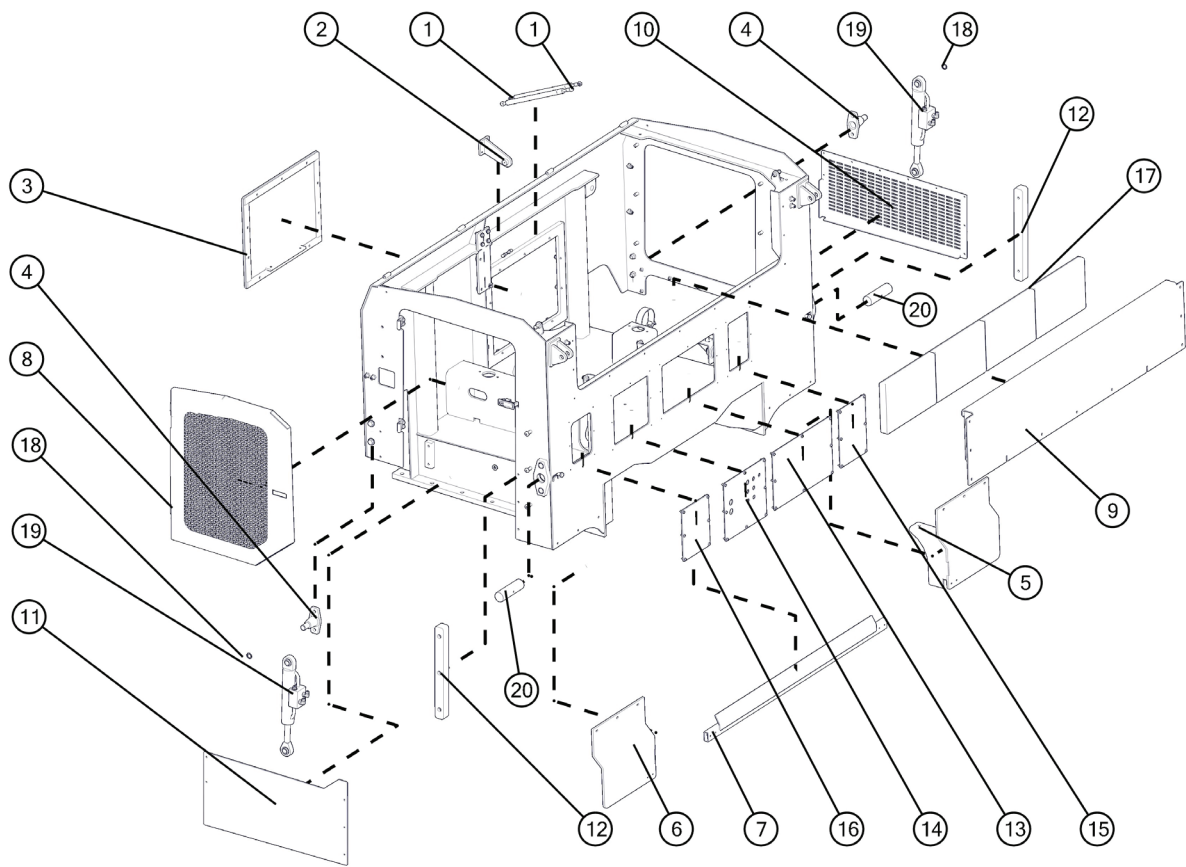
Tractor Hood



Tractor Hood

BOM ID	Part Number	Description	Qty
1	020-0675	WORK LIGHT	2
2	093-414946	HOOD LIGHT BRACKET	2
4	092-204086	HOOD HINGE WELDMENT	4
5	269-0081	AMBER BEACON LIGHT	1
6	092-414410	ENGINE COMPARTMENT HOOD WELDMENT	1
7	050-0843	ROTARY LATCH LINK RETAINER	2
8	050-0844	ROTARY LATCH CABLE BRACKET	2
9	050-0848	ROTARY LATCH CABLE	2
10	050-0845	ROTARY LATCH TWO STAGE LEFT HAND ACTUATION	1
11	050-0846	ROTARY LATCH TWO STAGE RIGHT HAND ACTUATION	1
12	050-0847	PUSH TO CLOSE LATCH	1
13	050-0205	CHROME GRAB HANDLE	2
14	050-414410	HOOD REAR EDGE SEAL	1

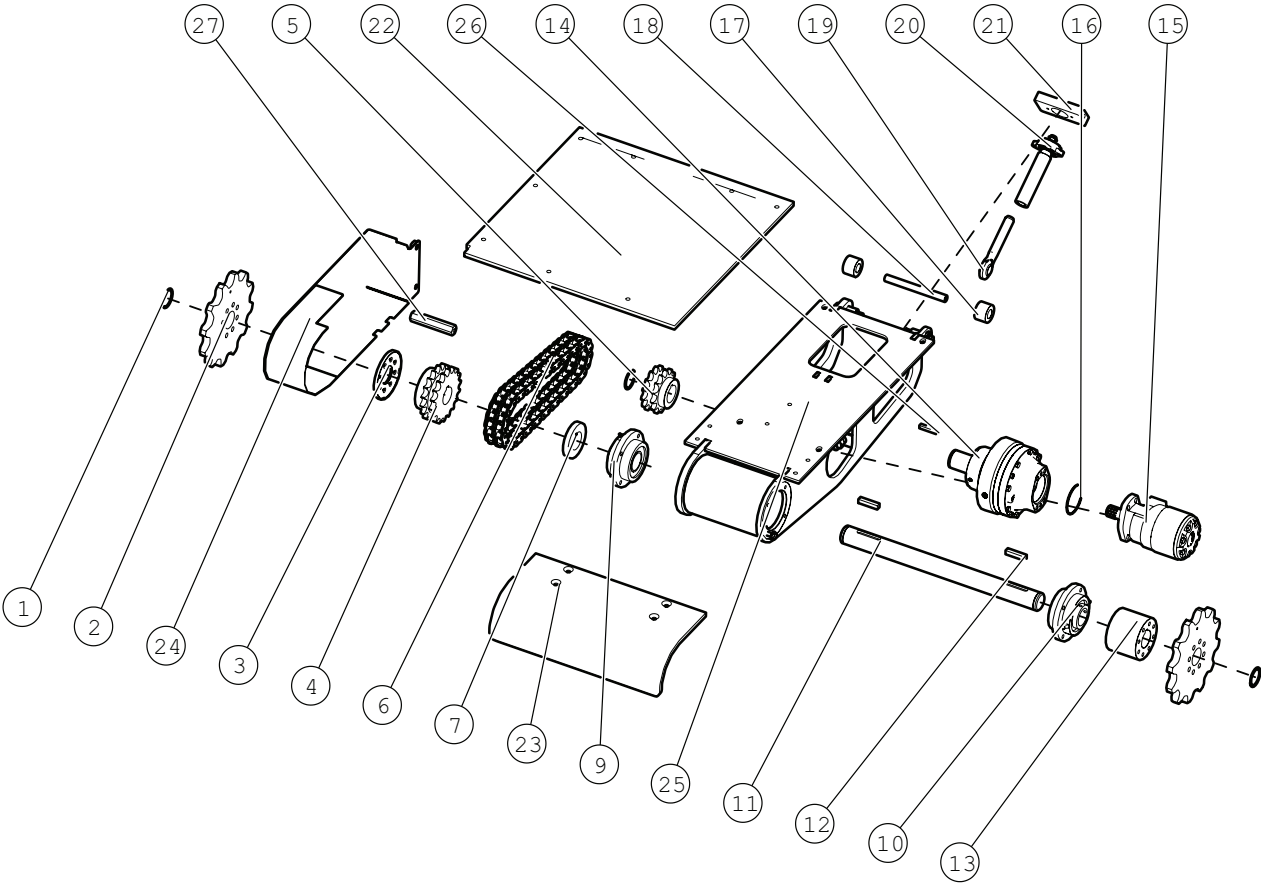
Egnine Compartment



Engine Compartment

BOM ID	PART NUMBER	DESCRIPTION	Qty
1	050-0826	GAS STRUT	2
2	092-414460	WELDMENT, HOOD STRUT MOUNT	1
3	092-408460	WELDMENT, ENGINE ACCESS PANEL	1
4	092-414064	WELDMENT, TOW CYLINDER MOUNT	2
5	092-414232	WELDMENT, SKIRT, RIGHT	1
6	092-414233	WELDMENT, SKIRT, LEFT	1
7	092-414236	REAR MIDDLE SKIRT WELDEMENT	1
8	092-414852	ENGINE SIDE ACCESS DOOR WELDMENT	1
9	092-414868	REAR ENGINE MAIN ACCESS PANEL WELDMENT	1
10	093-414014	SCR ACCESS PANEL	1
11	093-414015	TRACTOR ACCESS PANEL	1
12	093-414648	TOW ARM RUB GUIDE	2
13	093-414012	ENGINE REAR ACCESS PANEL, MIDDLE	1
14	093-414876	REAR LEFT TRACTOR ACCESS PANEL	1
15	093-414878	REAR RIGHT TRACTOR ACCESS PANEL	1
16	093-414882	ENGINE PDM ACCESS BULKHEAD PANEL	1
17	027-414020	INSULATION	1
18	030-0558	EXTERNAL SPIRAL RETAINING RING	2
19	012-414006	TOW POINT CYLINDER	3
20	093-414062	TOW ARM LOCK CYLINDER	2
21 (Not Shown)	014-0476	VALVE SOLENOID FLOAT ASSY	1

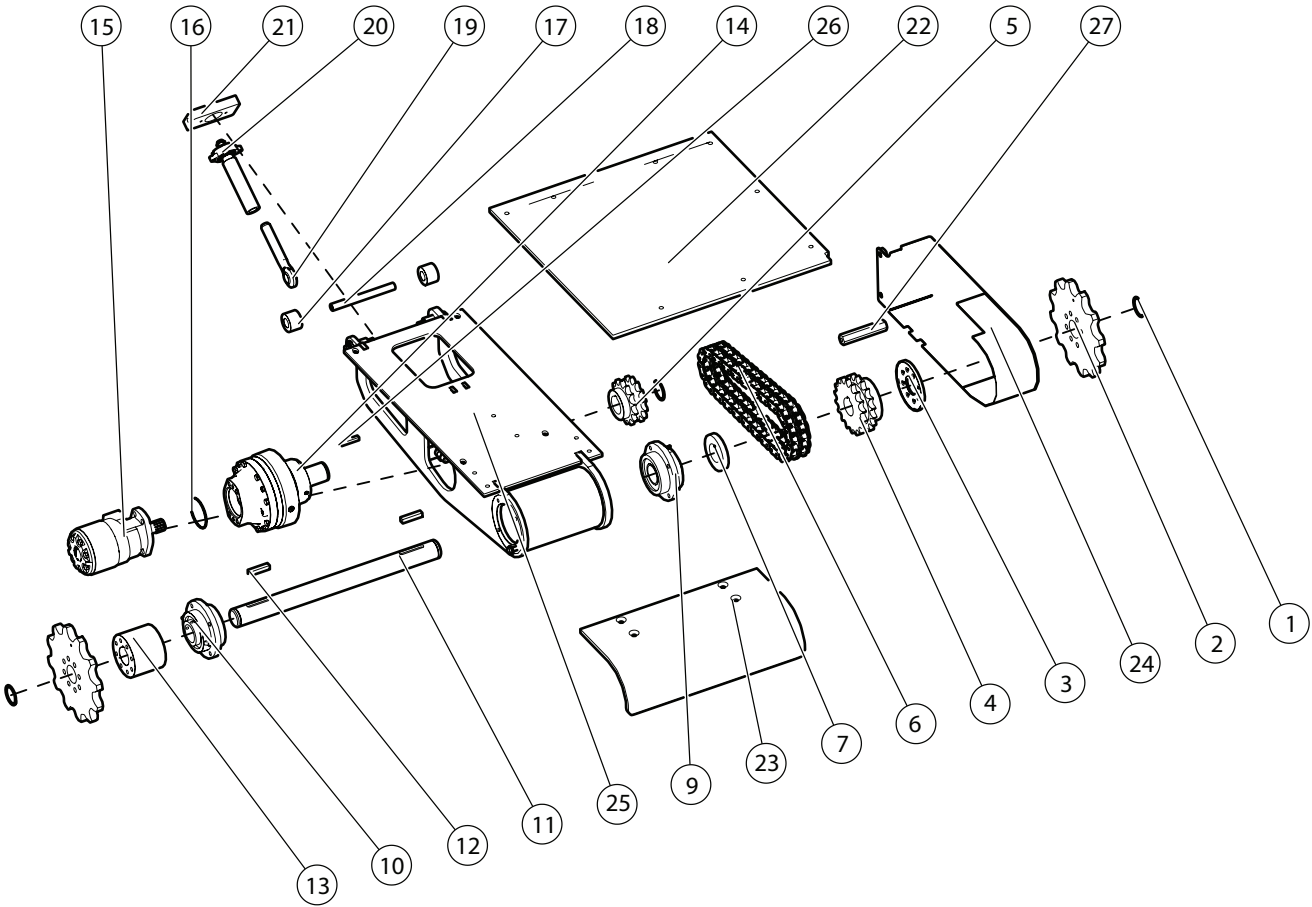
Conveyor Drive RH



Conveyor Drive RH

BOM ID	PART NUMBER	PART NAME	Qty
1	030-0559	EXTERNAL SPIRAL RETAINING RING	3
2	015-414610	FLIGHT CHAIN DRIVE SPROCKET	2
3	093-414630	CONVEYOR SPROCKET SPACER, INBOARD	1
4	093-414636	CONVEYOR ROLLER CHAIN DRIVE SPROCKET	1
5	015-302674	14 TOOTH ROLLER CHAIN SPROCKET	1
6	015-302673	ROLLER CHAIN	1
7	093-414688	SHAFT SPACER CHAIN SIDE	1
9	018-0133	SHAFT PILOT FLANGE BEARING , RIGID	1
10	018-0132	SHAFT PILOT FLANGE BEARING BEARING, EX- PANSION	1
11	093-414612	CONVEYOR DRIVE AXLE	1
12	093-414638	CONVEYOR DRIVE AXLE KEY	2
13	093-414632	SHAFT SPACER CHAIN SPROCKET MOUNT	1
14	016-0001	PLANETARY	1
15	013-0092	HYDRAULIC LSHT MOTOR	1
16	022-0330	O-RING	1
17	093-414686	CONVEYOR LIFT AXLE SPACER	2
18	093-414682	CONVEYOR LIFT AXLE	1
19	112-209583	ADJUSTING ROD WELDEMENT	1
20	092-414652	CONVEYOR LIFT WELDMENT	1
21	113-209180	MATCH HEIGHT BEARING MOUNTING BLOCK	1
22	093-414676	CONVEYOR WEAR PLATE, MIDDLE	1
23	093-414680	CONVEYOR CURVED WEAR PLATE	1
24	092-414654	CHAIN COVER WELDMENT, RIGHT	1
25	092-414660	CONVEYOR LIFT WELDMENT, RIGHT	1
26	093-414639	CONVEYOR DRIVE MOTOR KEY	1
27	093-414690	CHAIN BOX REAR MOUNT POST	1

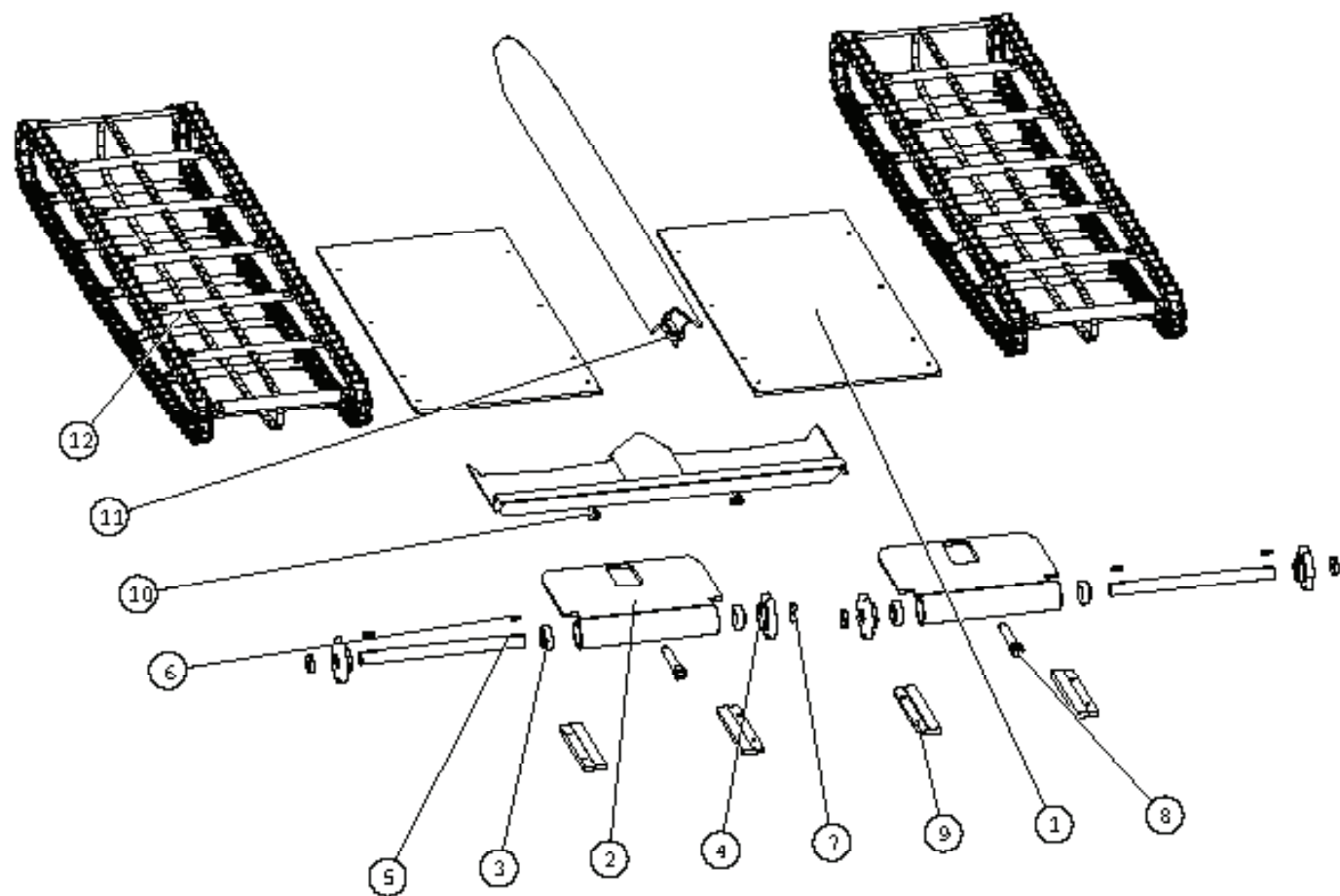
Conveyor Drive LH



Conveyor Drive LH

BOM ID	PART NUMBER	PART NAME	Qty
1	030-0559	EXTERNAL SPIRAL RETAINING RING	3
2	015-414610	FLIGHT CHAIN DRIVE SPROCKET	2
3	093-414630	CONVEYOR SPROCKET SPACER, INBOARD	1
4	093-414636	CONVEYOR ROLLER CHAIN DRIVE SPROCKET	1
5	015-302674	14 TOOTH ROLLER CHAIN SPROCKET	1
6	015-302673	ROLLER CHAIN	1
7	093-414688	SHAFT SPACER CHAIN SIDE	1
9	018-0133	SHAFT PILOT FLANGE BEARING , RIGID	1
10	018-0132	SHAFT PILOT FLANGE BEARING BEARING, EXPANSION	1
11	093-414612	CONVEYOR DRIVE AXLE	1
12	093-414638	CONVEYOR DRIVE AXLE KEY	2
13	093-414632	SHAFT SPACER CHAIN SPROCKET MOUNT	1
14	016-0001	PLANETARY	1
15	013-0092	HYDRAULIC LSHT MOTOR	1
16	022-0330	O-RING	1
17	093-414686	CONVEYOR LIFT AXLE SPACER	2
18	093-414682	CONVEYOR LIFT AXLE	1
19	112-209583	ADJUSTING ROD WELDEMENT	1
20	092-414652	CONVEYOR LIFT WELDMENT	1
21	113-209180	MATCH HEIGHT BEARING MOUNTING BLOCK	1
22	093-414676	CONVEYOR WEAR PLATE, MIDDLE	1
23	093-414680	CONVEYOR CURVED WEAR PLATE	1
24	092-414654	CHAIN COVER WELDMENT, RIGHT	1
25	092-414661	CONVEYOR LIFT WELDMENT, LEFT	1
26	093-414639	CONVEYOR DRIVE MOTOR KEY	1
27	093-414690	CHAIN BOX REAR MOUNT POST	1

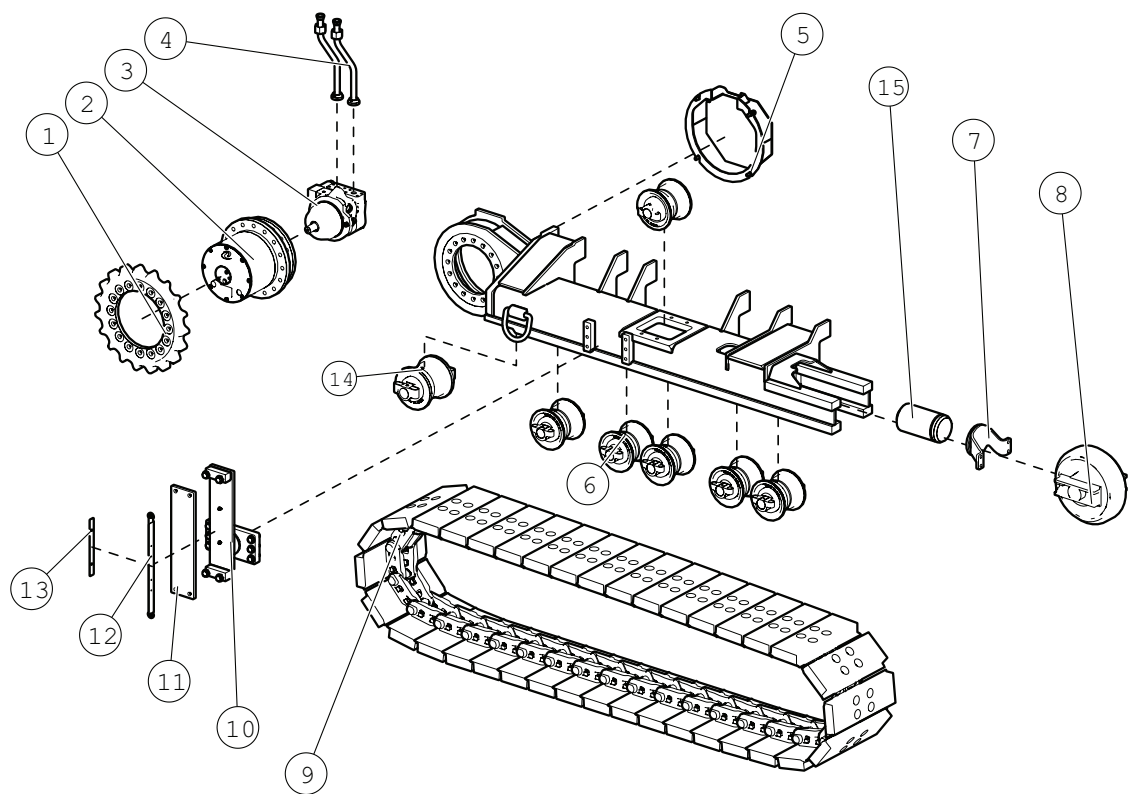
Conveyor Idler



Conveyor Idler

BOM ID	Part Number	Description	Qty
1	092-414602	CONVEYOR WEAR PLATE WELDMENT FRONT	2
2	092-414614	CONVEYOR TENSIONER WELDMENT	2
3	018-0091	BEARING CONVEYOR AXLE	4
4	015-0204	CONVEYOR CHAIN SPROCKET	4
5	093-414618	CONVEYOR IDLER AXLE	2
6	093-0335	3/8" SQUARE KEY	4
7	093-0339	SPROCKET RETAINER	4
8	092-204230	ADJUSTING THREADED ROD WELDMENT	2
9	093-414650	CONVEYOR ASSEMBLY GUIDE	4
10	091-414580	FRONT CONVEYOR COVER ASSEMBLY	1
11	091-414560	CONVEYOR CENTER CHAIN COVER ASSEMBLY	1
12	091-414600	CONVEYOR CHAIN	2

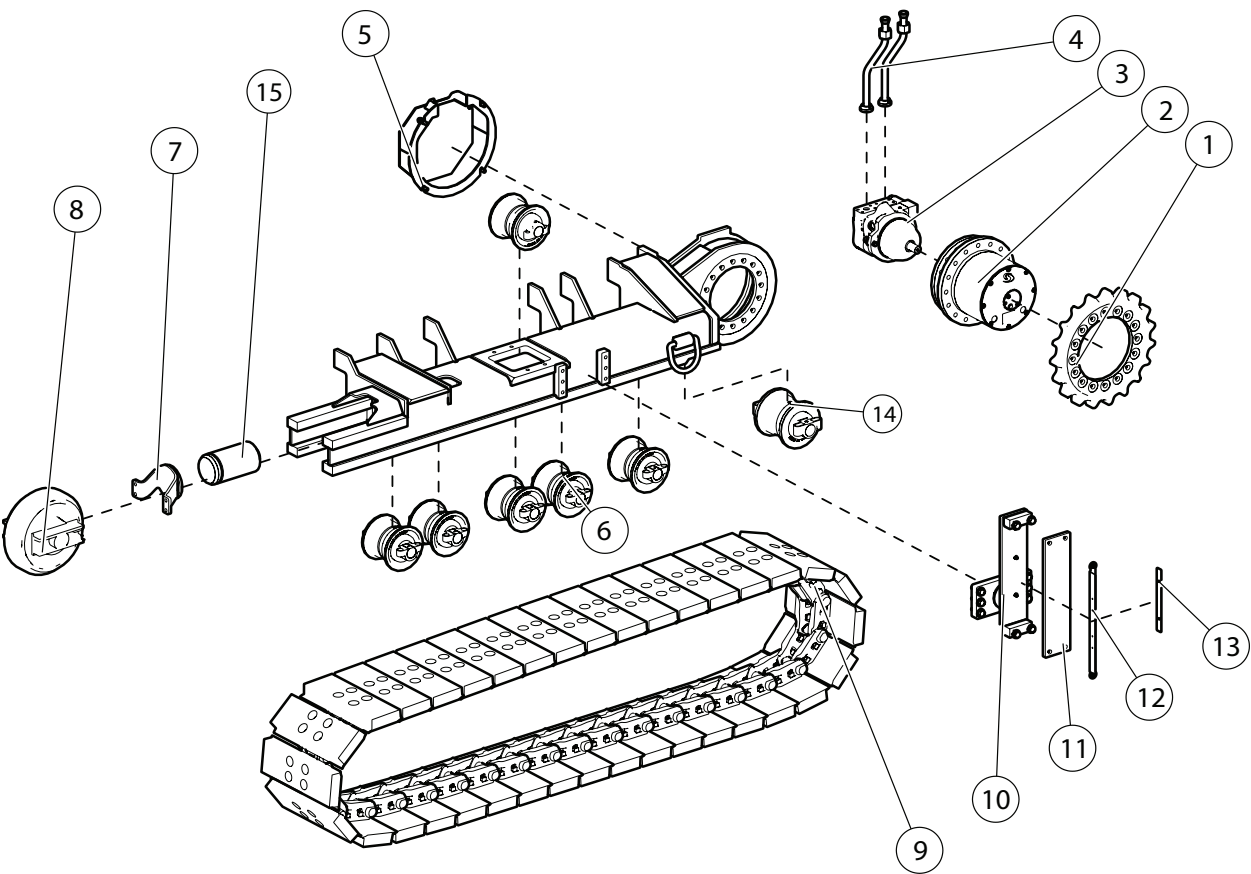
Track Drive RH



Track Drive RH

BOM ID	Part Number	Description	Qty
1	015-0275A	TRACK DRIVE SPROCKET	1
2	016-0058	PLANETARY	1
3	011-0263	TRACK SYSTEM DRIVE MOTOR	1
4	014-414102	TUBE HYDRAULIC DRIVE MOTOR	2
5	092-204570	PLANETARY COVER WELDMENT	1
6	050-0257	UNDERCARRIAGE TRACK ROLLER SMALL	6
7	092-204524	TRACK TENSION CYLINDER PRESSURE PLATE WELDEMENT	1
8	050-0624	TRACK IDLER WHEEL ASSEMBLY	1
9	050-0895	TRACK PAD	36
10	092-414830	TOW ARM GUIDE MOUNT WELDMENT	1
11	093-414838	SCREED TOW ARM GUIDE CAPTIVE PLATE	1
12	093-414831	TOW POINT INDICATOR DECAL MOUNT	1
13	024-0229	TOW POINT DECAL	1
14	050-0163	UNDERCARRIAGE TRACK ROLLER LARGE	1
15	012-0060	TRACK TENSION CYLINDER	1

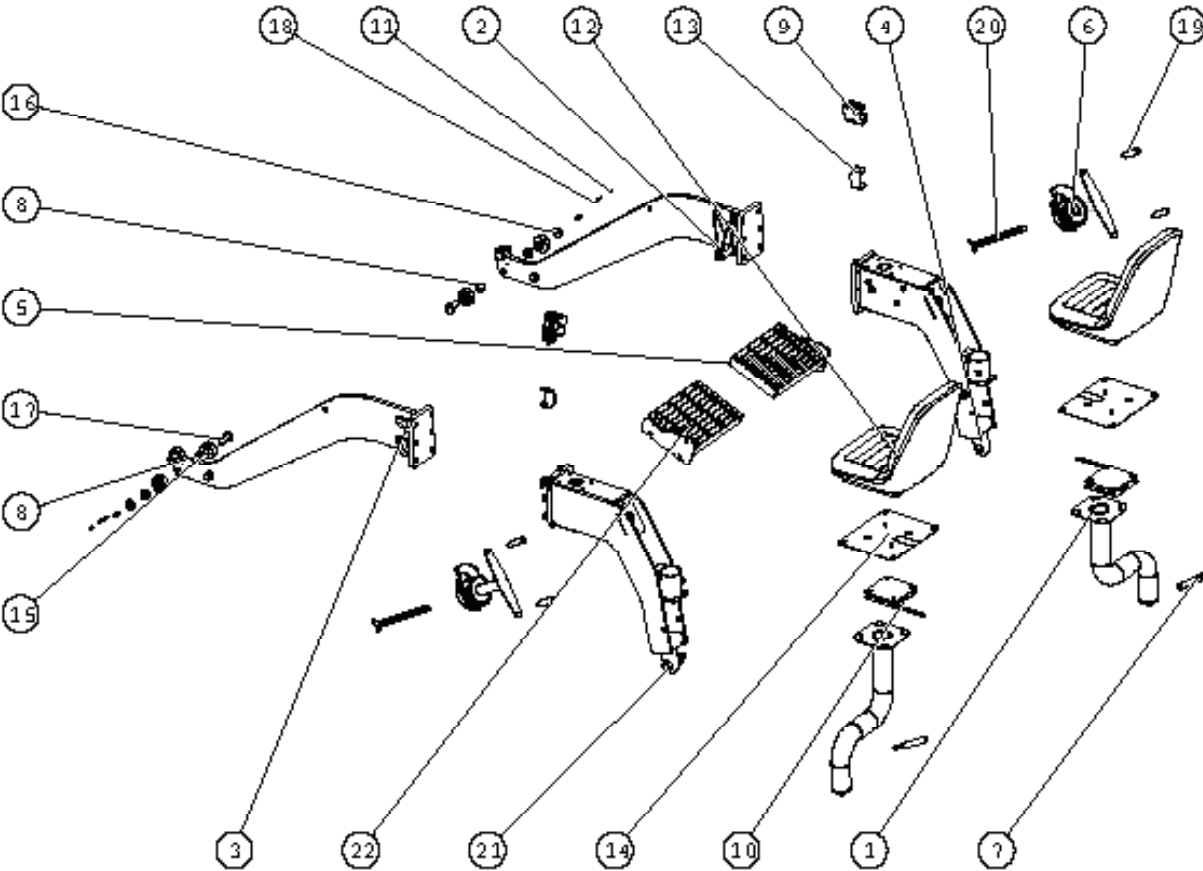
Track Drive LH



Track Drive LH

BOM ID	Part Number	Description	Qty
1	015-0275A	TRACK DRIVE SPROCKET	1
2	016-0058	PLANETARY	1
3	011-0263	TRACK SYSTEM DRIVE MOTOR	1
4	014-414102	TUBE HYDRAULIC DRIVE MOTOR	2
5	092-204570	PLANETARY COVER WELDMENT	1
6	050-0257	UNDERCARRIAGE TRACK ROLLER SMALL	6
7	092-204524	TRACK TENSION CYLINDER PRES- SURE PLATE WELDEMENT	1
8	050-0624	TRACK IDLER WHEEL ASSEMBLY	1
9	050-0895	TRACK PAD	36
10	092-414830	TOW ARM GUIDE MOUNT WELDMENT	1
11	093-414838	SCREED TOW ARM GUIDE CAPTIVE PLATE	1
12	093-414831	TOW POINT INDICATOR DECAL MOUNT	1
13	024-0229	TOW POINT DECAL	1
14	050-0163	UNDERCARRIAGE TRACK ROLLER LARGE	1
15	012-0060	TRACK TENSION CYLINDER	1

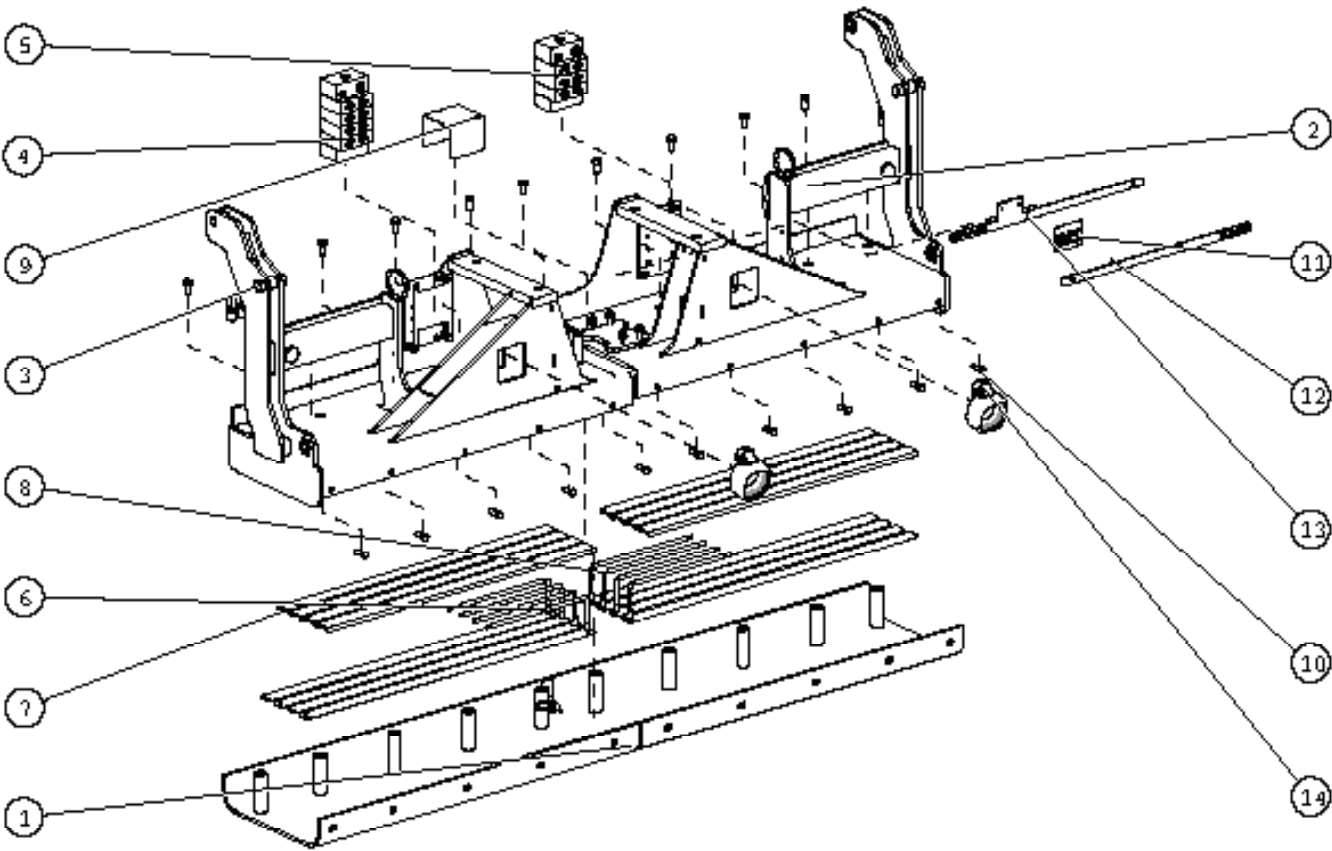
Screed Arm Assembly



Screed Arm Assembly

BOM ID	Part Number	Description	Qty
1	112-414480	SEAT POST WELDMENT	2
2	112-414100	SCREED ARM FRONT WELDMENT RIGHT	1
3	112-414101	SCREED ARM FRONT WELDMENT LEFT	1
4	112-414450	REAR SCREED ARM WELDMENT RIGHT	1
5	112-414140	TOW ARM FOOT REST WELDMENT RIGHT	1
6	092-0045C	SCREED HANDLE ADJUSTMENT WELDMENT	2
7	092-100886	SEAT LOCKING HANDLE	2
8	018-414100	BRONZE BUSHING	4
9	020-0675	LED WORK LIGHT	2
10	050-0383	SEAT SWIVEL	2
11	050-0885	TOW POINT INDICATOR CAP	2
12	060-0049	STANDARD OPERATOR SEAT	2
13	093-414946	HOOD LIGHT BRACKET	2
14	113-100159	SEAT MOUNTING BASE	2
15	113-414120	TOW POINT BUSHING RACE	4
16	113-414122	TOW POINT ROLLER WASHER	2
17	113-414124	TOW POINT ROLLER SHAFT	2
18	113-414128	TOW POINT INDICATION POINTER	2
19	113-100427	SPIN HANDLE ASSEMBLY	4
20	112-302440	SCREED DEPTH HANDLE ROD WELDMENT	2
21	112-414451	REAR SCREED ARM WELDMENT LEFT	1
22	112-414141	TOW ARM FOOT REST WELDMENT LEFT	1
23 (Not Shown)	012-414002	TOW POINT CYLINDER	1

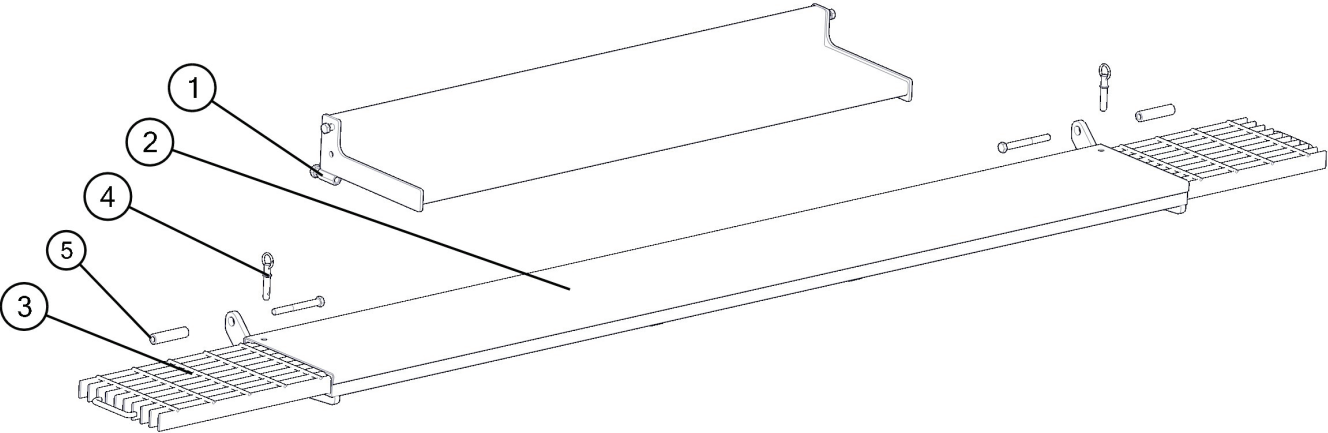
Main Screed



Main Screed

BOM ID	Part Number	Description	Qty
1	092-0301E	MAIN SCREED BOTTOM WELDMENT	1
2	112-309060	MAIN SCREED COVER WELDMENT ELEC- TRIC HEAT RIGHT	1
3	112-309061	MAIN SCREED COVER WELDMENT ELEC- TRIC HEAT RIGHT	1
4	017-0301	VALVE ASSEMBLY 4 BANK SCREED FUNC- TIONS	1
5	017-0303	VALVE ASSEMBLY 3 BANK OPTIONAL FUNCTIONS	1
6	020-0213	HEATING ELEMENT	8
7	113-309290	HEAT STRIP RETAINER	8
8	020-0548	SENSOR TEMPERATURE	8
9	113-309002	ELECTRICAL BOX COVER	1
10	030-0495	Bolt Kit	1
11	024-0183	PLATE CROWN INDICATOR	1
12	113-309642	CROWN INDICATOR POINTER BAR	1
13	113-309644	CROWN INDICATOR BACKING BAR	1
14	020-0491	LED WORK LIGHT	2

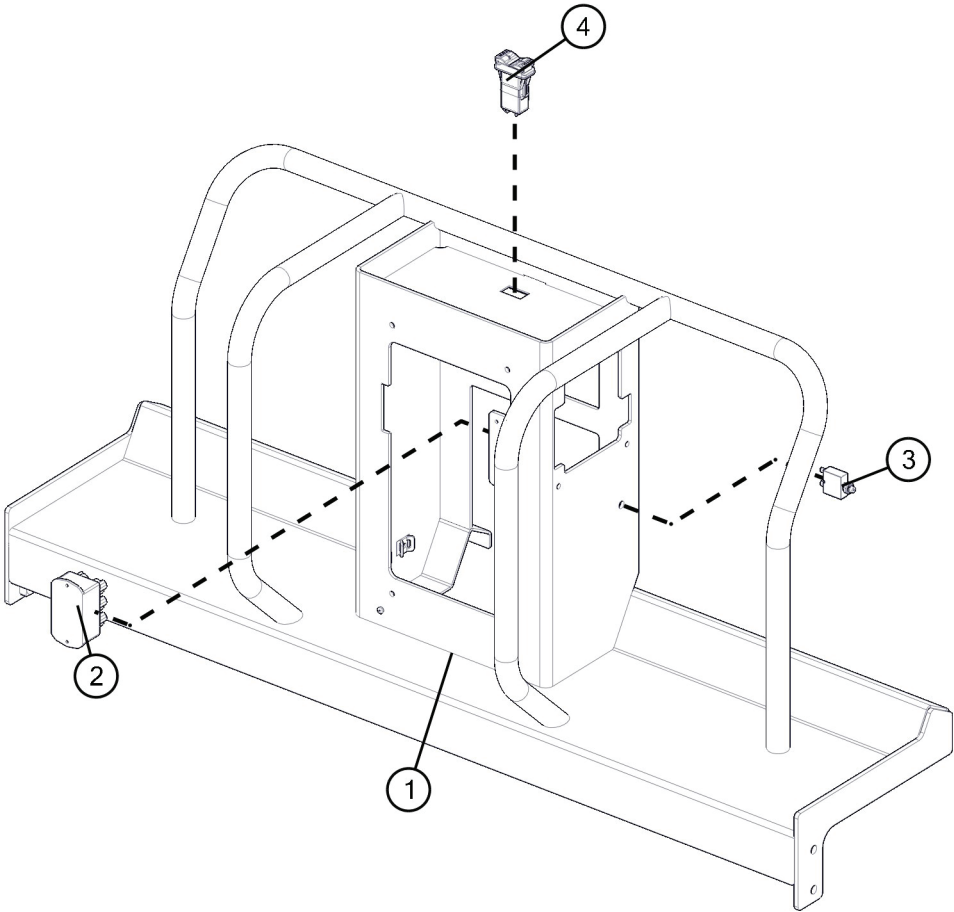
Walk Boards



Walk Boards

BOM ID	Part Number	Description	Qty
1	112-302530	MIDDLE WALKBOARD	1
2	112-302600	WALKBOARD WELDMENT	1
3	111-100701	WELDMENT WALKBOARD EXT	2
4	030-0461	PLUNGER PIN	2
5	113-109260	SPACER WALKBOARD PIVOT	2

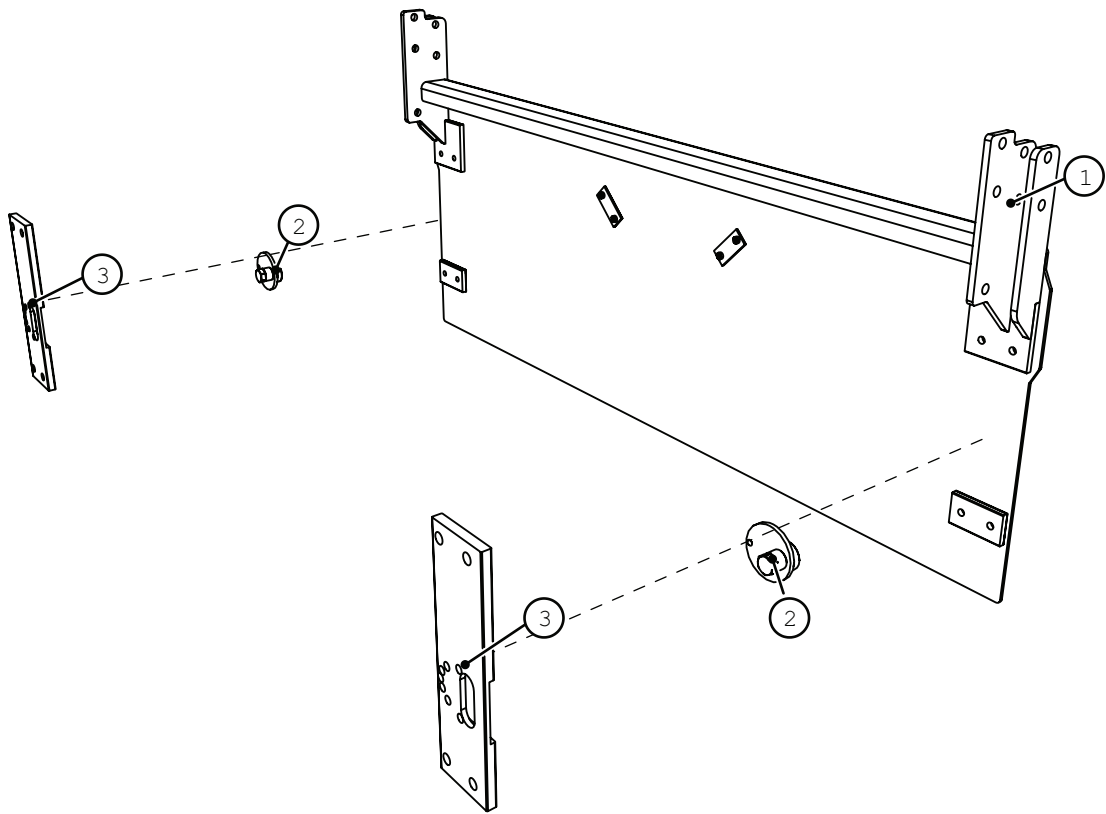
Upper Walk Board



Upper Walk Board

BOM ID	Part Number	Description	Qty
1	112-414520	WELDMENT, SCREED UPPER WALK-BOARD	1
2	020-1034	SPLITTER CAN BUS 6 CONNECTIONS	1
3	E0128-2	5 AMP CIRCUIT BREAKER	1
4	020-109474	2.0 USB CHARGER	1

Screed Cover Plate

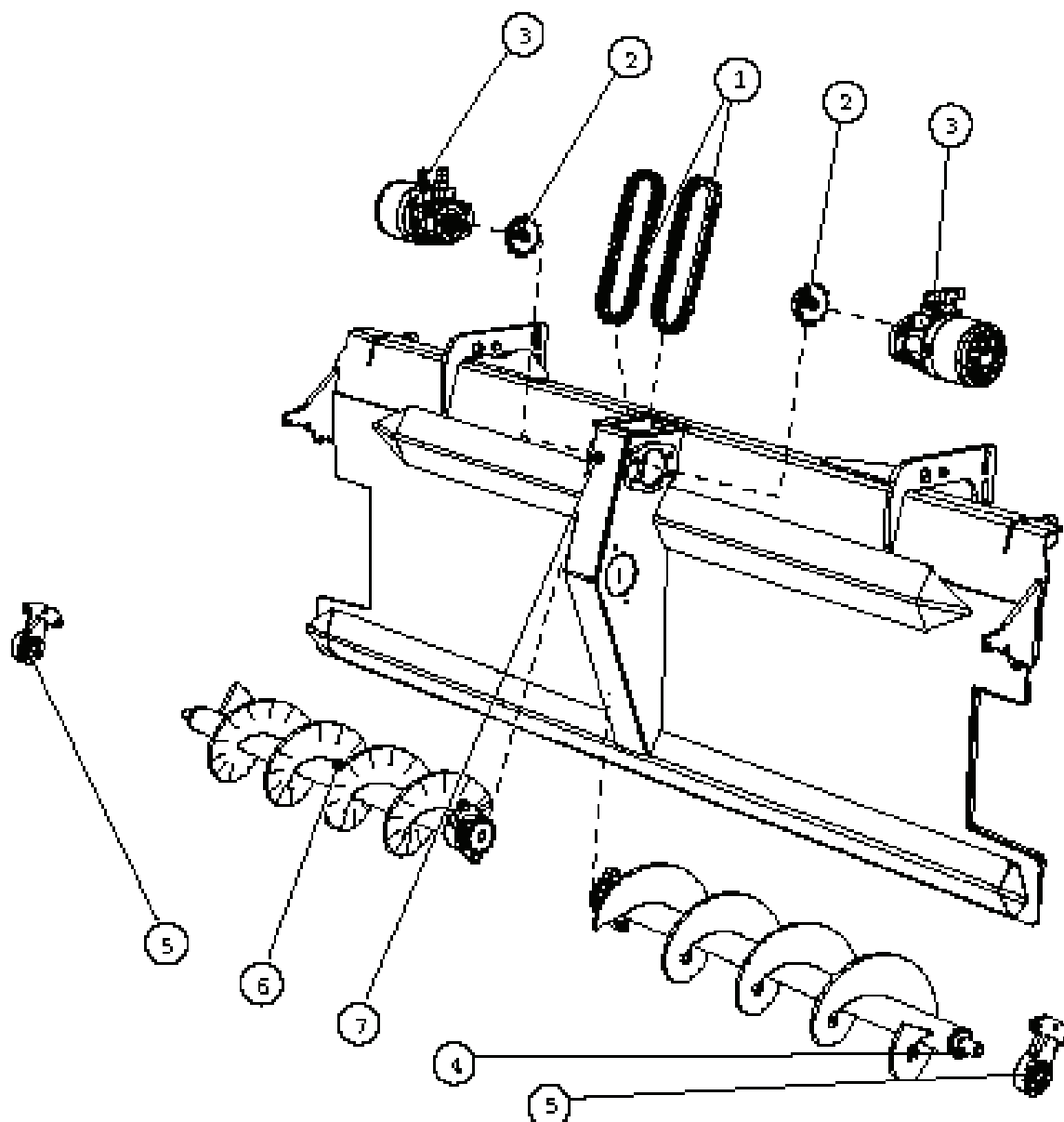


Screed Cover Plate

BOM ID	Part Number	Description	Qty
1	112-302010	Main Screed Front Cover	1
2	112-302018	Prestrike Of Cam Adjustment	2
3	113-302016	Prestrike Off Adjustment Plate	2

Screed Prestrike Off 9in Auger

** 12in Auger Upgrade was offered during 1860 production range. Please verify size of upper auger before placing order.



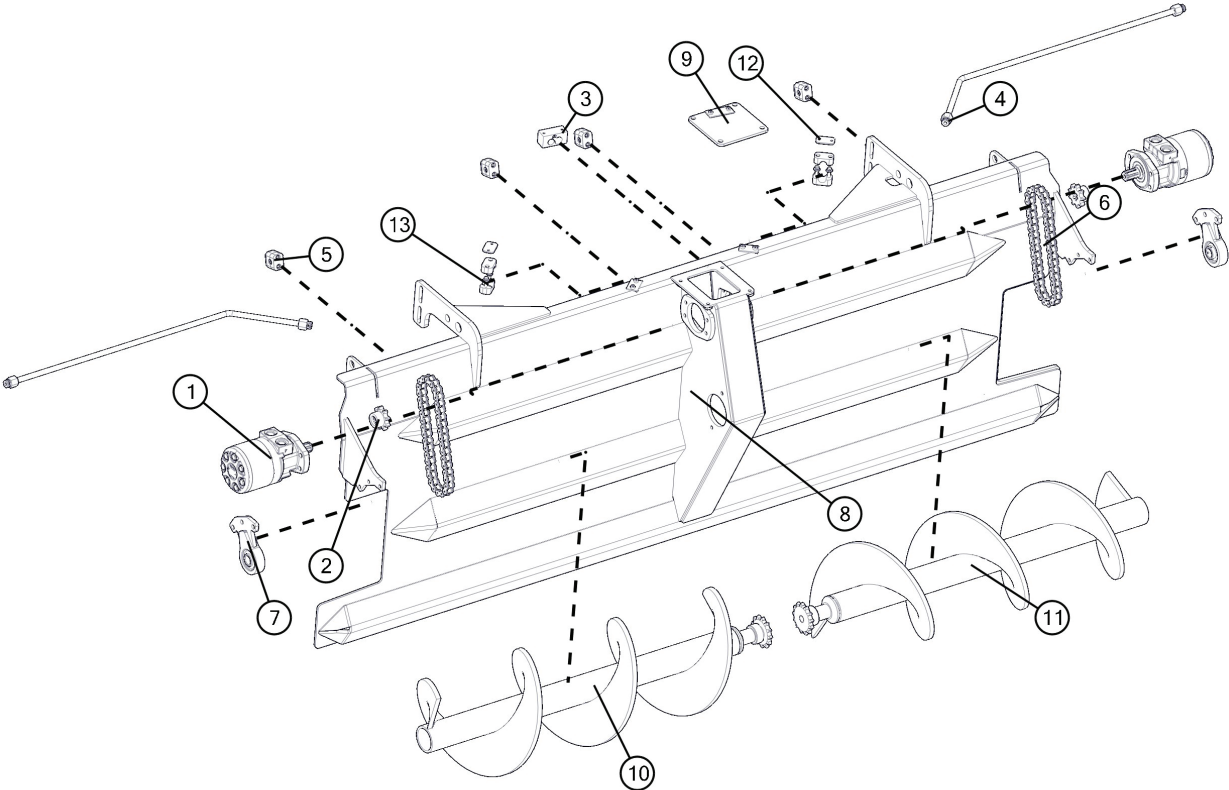
Screed Prestrike Off 9in Auger

BOM ID	Part Number	Description	Qty
1	091-0073	Drive Chain Upper Auger	2
2	015-0274	Drive Sprocket Upper Auger	2
3	013-0094	Drive Motor Upper Auger	2
4	112-302551	Auger Upper Left Hand	1
5	112-302080	Auger Hanger Bearing Assembly	2
6	112-302550	Auger Upper Right Hand	1
7	112-302500	Pre Strike Off Plate	1

** 12in Auger Upgrade was offered during 1860
production range. Please verify size of upper
auger before placing order.

Screed Prestrike Off 12in Auger

**** 12in Auger Upgrade was offered during 1860 production range. Please verify size of upper auger before placing order.**

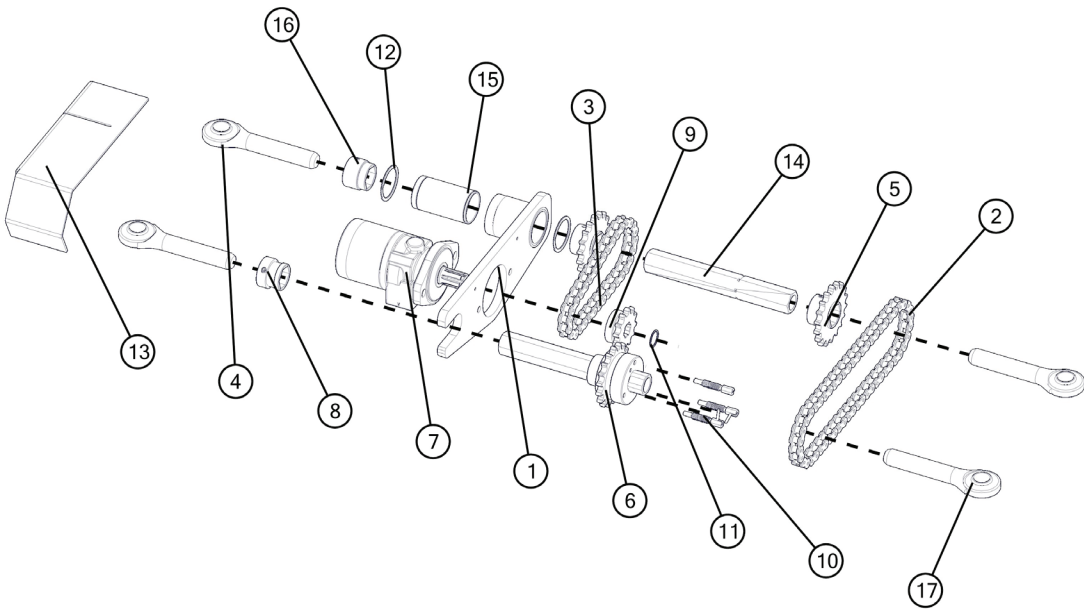


Screed Prestrike Off 12in Auger

BOM ID	Part Number	Description	Qty
1	013-0094	HYD MOTOR TOP AUGER	2
2	015-0352	SPROCKET 9 TOOTH	2
3	014-109414	TRI HOSE CLAMP	1
4	050-0641	HYDRAULIC TUBE, TOP AUGER	2
5	050-0828	SINGLE HOSE CLAMP, 5/8" HOSE	4
6	091-0073	UPPER AUGER CHAIN	2
7	112-302080	AUGER HANGER WELDMENT	2
8	112-421590	PRE STRIKE OFF PANEL WELDE- MENT	1
9	112-302516	WELDMENT, PLATE COVER UPPER AUGER CHAINS	1
10	112-421550	12" AUGER RIGHT SIDE	1
11	112-421551	12" AUGER LEFT SIDE	1
12	014-0652	CLAMP 1/2" TOP PLATE	2
13	014-0651	CLAMP HALF 1/2"	4

** 12in Auger Upgrade was offered during 1860
production range. Please verify size of upper
auger before placing order.

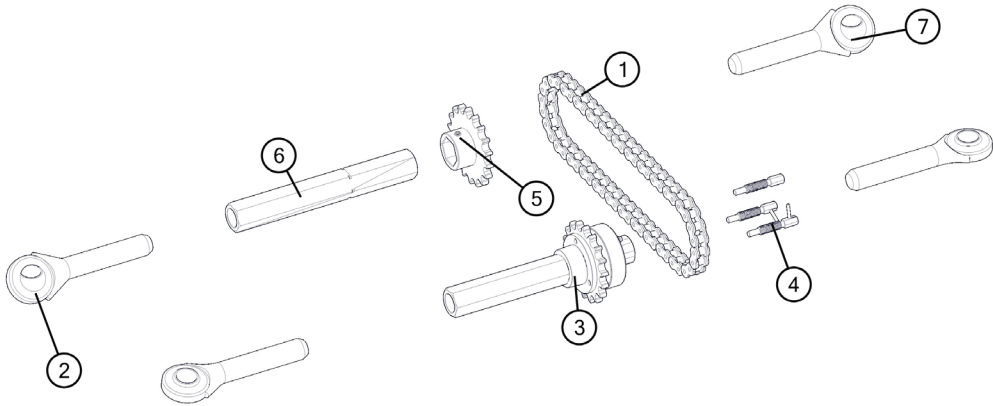
Power Crown Assembly



Power Crown Assembly

BOM ID	PART NUMBER	DESCRIPTION	Qty
1	112-414650	POWER CROWN MOTOR MOUNT WELDEMENT	1
2	015-302670	CROWN SLAVE CHAIN ASSEMBLY, 54 LINKS	1
3	015-302672	CROWN MOTOR CHAIN ASSEMBLY, 34 LINKS	1
4	112-209582	BALL END ADJUSTING ROD WELDMENT, RH THREADS	2
5	112-302674	SCREED CROWN DRIVEN SPROCKET WELDEMENT	2
6	112-414670	CROWN RATCHET JACK WELDMENT, REAR	1
7	013-0106	HYDRAULIC MOTOR	1
8	113-302668	MOTOR MOUNT WELDMENT GUIDE	1
9	015-0348	12 TOOTH SPROCKET	1
10	030-0522	RETRACTABLE PLUNGER	3
11	030-0577	STEEL RETAINING RING 0.925" DIA x 0.042" WIDTH	1
12	030-0578	STEEL RETAINING RING 1.886" DIA x 0.068" WIDTH	2
13	113-302665	POWER CROWN CHAIN GUARD	1
14	113-414671	SCREED CROWN RACHET JACK FIXED BODY	1
15	113-414678	FRONT RACHETJACK DRIVE TUBE	1
16	113-302669	BEARING TUBE STOP	1
17	112-209583	BALL END ADJUSTING ROD WELDMENT, LH THREADS	2

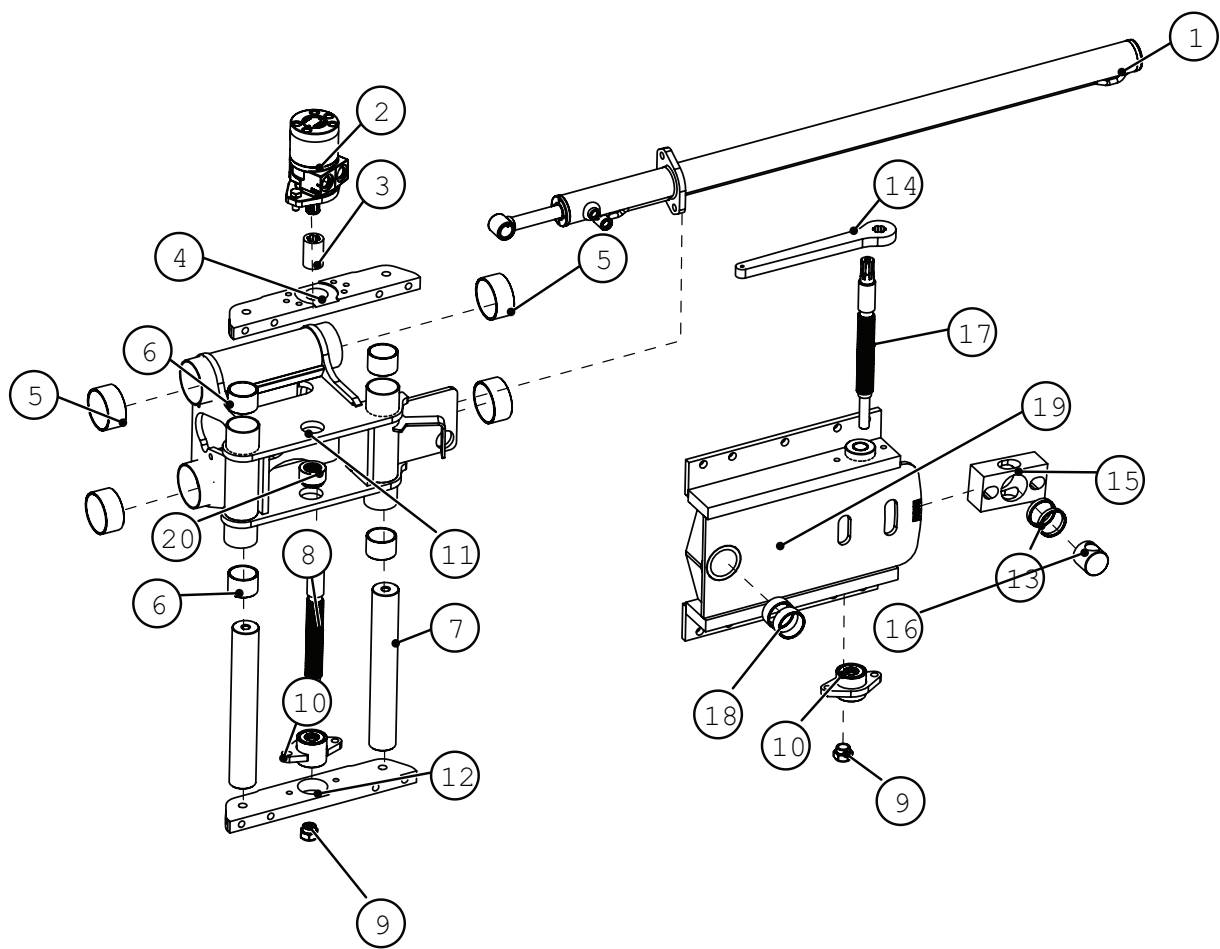
Manual Crown Assembly



Manual Crown Assembly

BOM ID	PART NUMBER	DESCRIPTION	Qty
1	015-302670	CROWN SLAVE CHAIN ASSEMBLY, 54 LINKS	1
2	112-209582	BALL END ADJUSTING ROD WELDMENT, RH THREADS	2
3	112-414670	CROWN RATCHET JACK WELDMENT, REAR	1
4	030-0522	RETRACTABLE PLUNGER	3
5	112-302674	SCREED CROWN DRIVEN SPROCKET WELDEMENT	1
6	113-414671	1-1/4" 1018 CD STEEL HEX BAR	1
7	112-209583	BALL END ADJUSTING ROD WELDMENT, LH THREADS	2

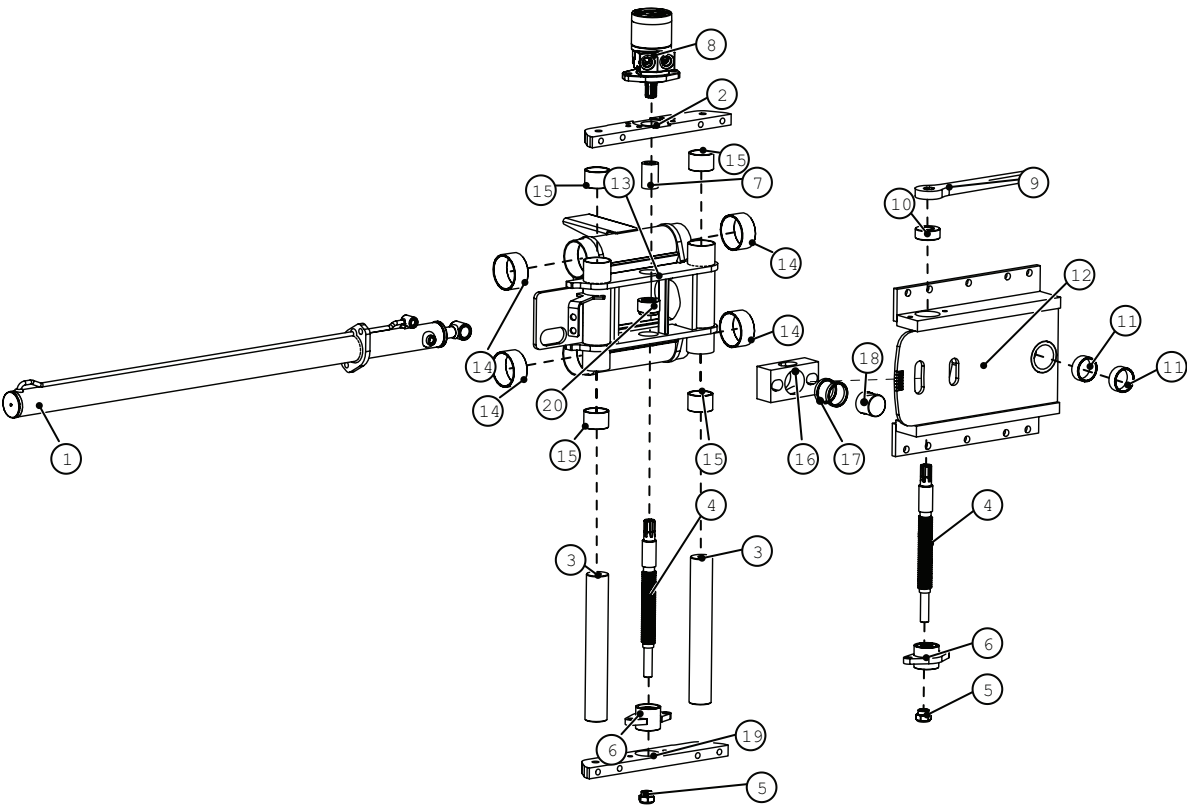
Left Hand Match Height & Slope



Left Hand Match Height & Slope

BOM ID	Part Number	Description	Qty
1	012-0068	Cylinder Screed Extension	1
2	013-0106	Motor Match Height	1
3	015-0286	Coupling	1
4	113-302008	Rod Cap Plate Top	1
5	018-0044	Bearing Rulon 3x3.25x1.5	4
6	018-0095	Bearing Rulon 2x2.25x1.5	4
7	113-302148	Match Height Rod	2
8	113-302190	Threaded Rod Match Height	1
9	113-302192	Nut Threaded Rod Match Height/ Slope	2
10	111-302006	Housing Bottom Support Bearing	2
11	112-302121	Weldment LH Match Height	1
12	113-302008	Rod Cap Plate Bottom	1
13	018-0111	Brass Bearing 2.25x2x.375	2
14	111-104171	Handle Ratcheting Slope Adj	1
15	113-302170	Block Slope Adj	1
16	113-302172	Nut Slope Adj	1
17	113-302190	Threaded Rod Slope Adj	1
18	018-0104	Bushing Slope Pivot	2
19	112-302150	Weldment Slope Adj	1
20	113-302136	Nut Acme Thread Match Height	1

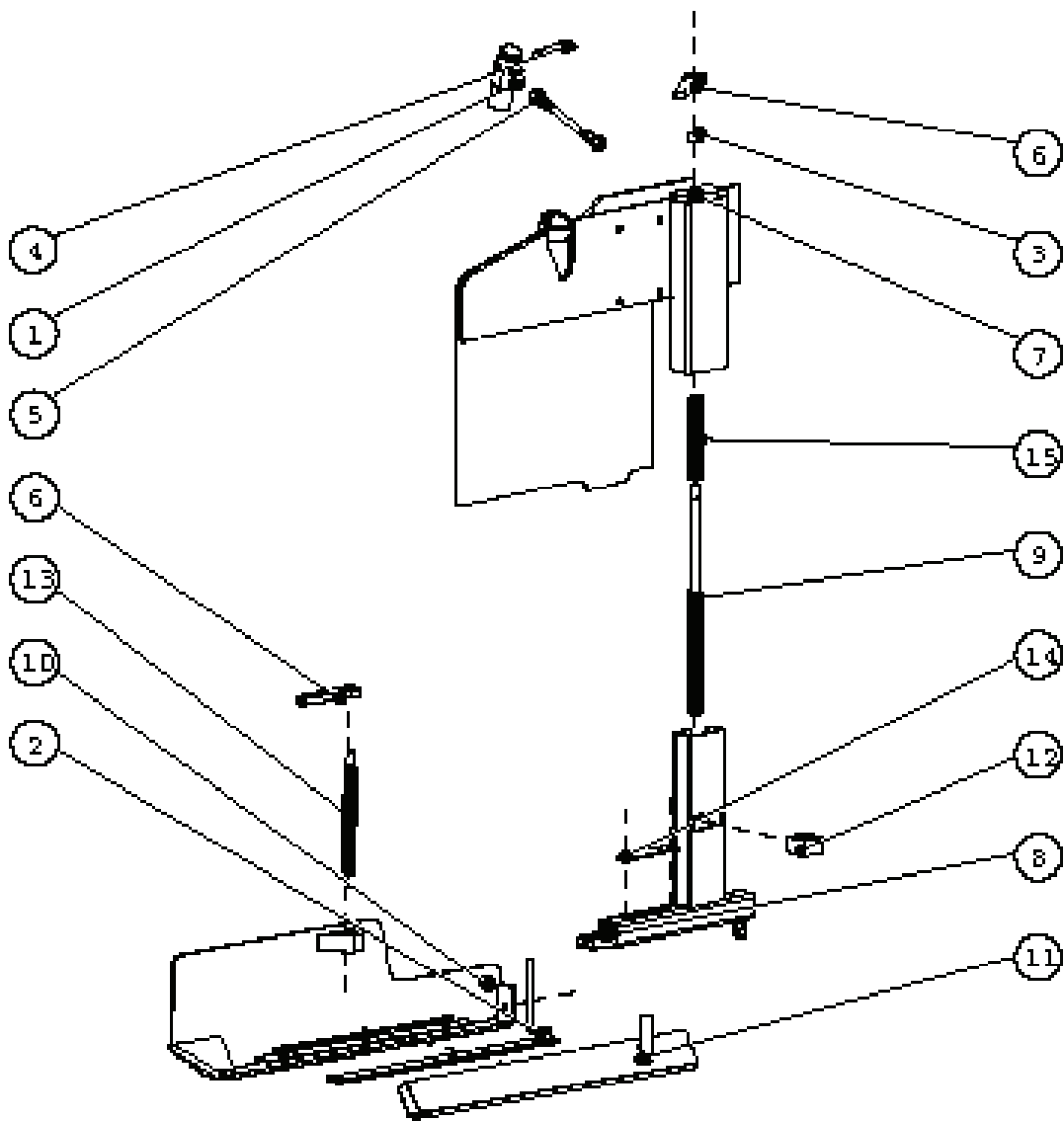
Right Hand Match Height & Slope



Right Hand Match Height& Slope

BOM ID	Part Number	Description	Qty
1	012-0068	Extension Cylinder	1
2	113-302008	Match Height Top Plate	1
3	113-302148	Chrome Rod Match Height	2
4	113-302190	Threaded Rod	2
5	113-302192	Nut Threaded Rod	2
6	111-302006	Bearing Housing Assembly	2
7	015-0286	Coupler	1
8	013-0106	Hydraulic Motor	1
9	111-104171	Handle Ratcheting Slope Adjustment	1
10	111-302007	Top Slope Bearing	1
11	018-0104	Brass Bushing	2
12	112-302150	Weldment Extension Slope Guide	1
13	112-302120	Weldment Extension Guide	1
14	018-0044	Bushing Extension Guide	4
15	018-0095	Bearing Match Height Guide	4
16	113-302170	Block Guide Slope	1
17	018-0111	Brass Bearing	2
18	113-302172	Nut Extension Slope	1
19	113-302008	Match Height Bottom Bar	1
20	113-302136	Nut Acme Thread Match Height	1

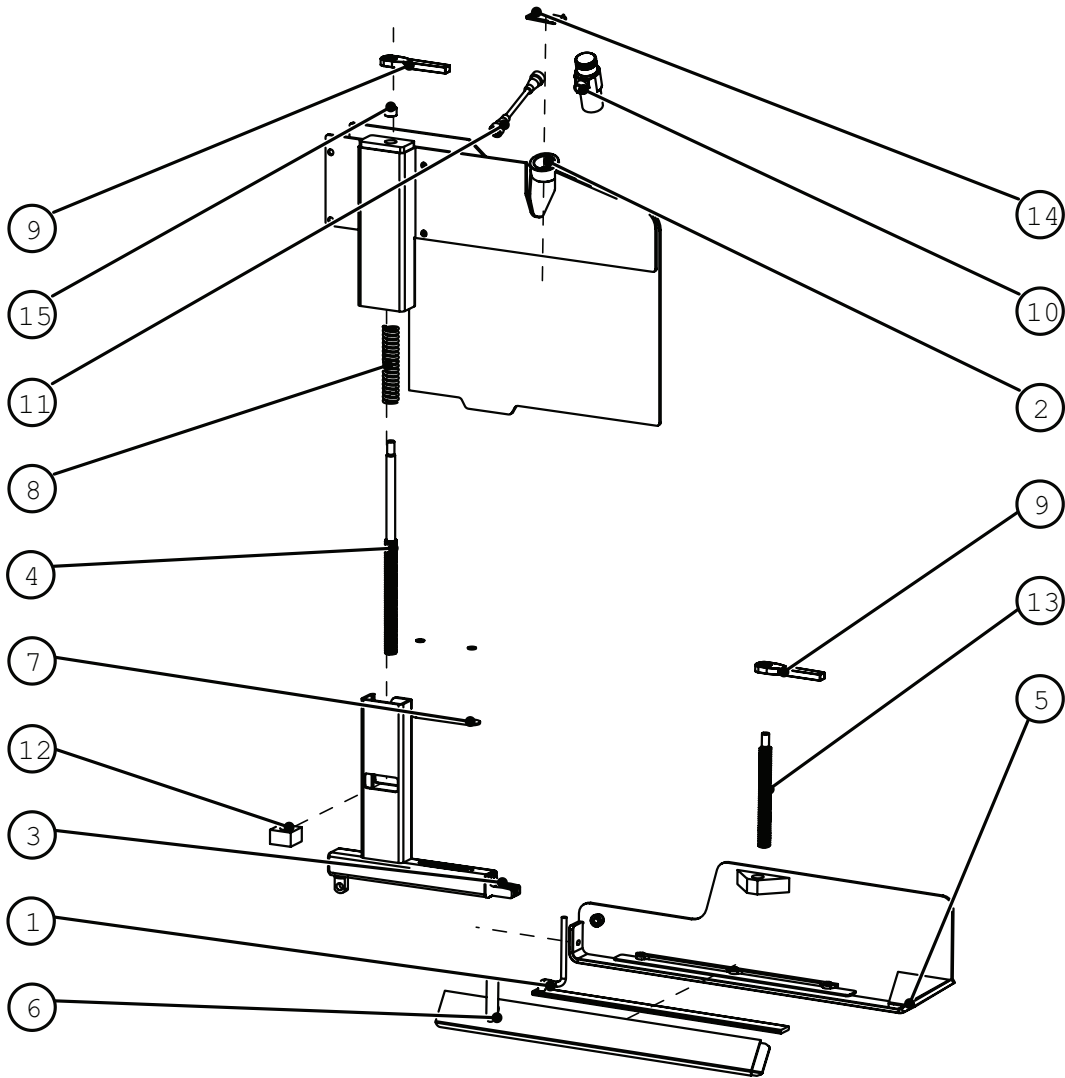
Left Hand End Gate



Left Hand End Gate

BOM ID	Part Number	Description	Qty
1	020-109473	Sonic Sensor	1
2	020-0285	Heat Strip	1
3	018-0107	Bearing	1
4	030-0153	Lynch Pin 5/16 x 2 1/2in	1
5	050-0350	Cord Sonic Sensor	1
6	111-104170	Ratcheting Handle	2
7	112-302301	Weldment End Gate Upper LH	1
8	112-302351	Weldment End Gate Lower LH	1
9	112-302376	Threaded Rod End Gate Rear	1
10	111-309381	Weldment Shoe LH Electric	1
11	112-309383	Weldment Shoe Cover Electric LH	1
12	113-209462	End Gate Nut	1
13	113-209468	Threaded Rod Front	1
14	113-309358	Access Cover	1
15	050-0431	End Gate Spring	1

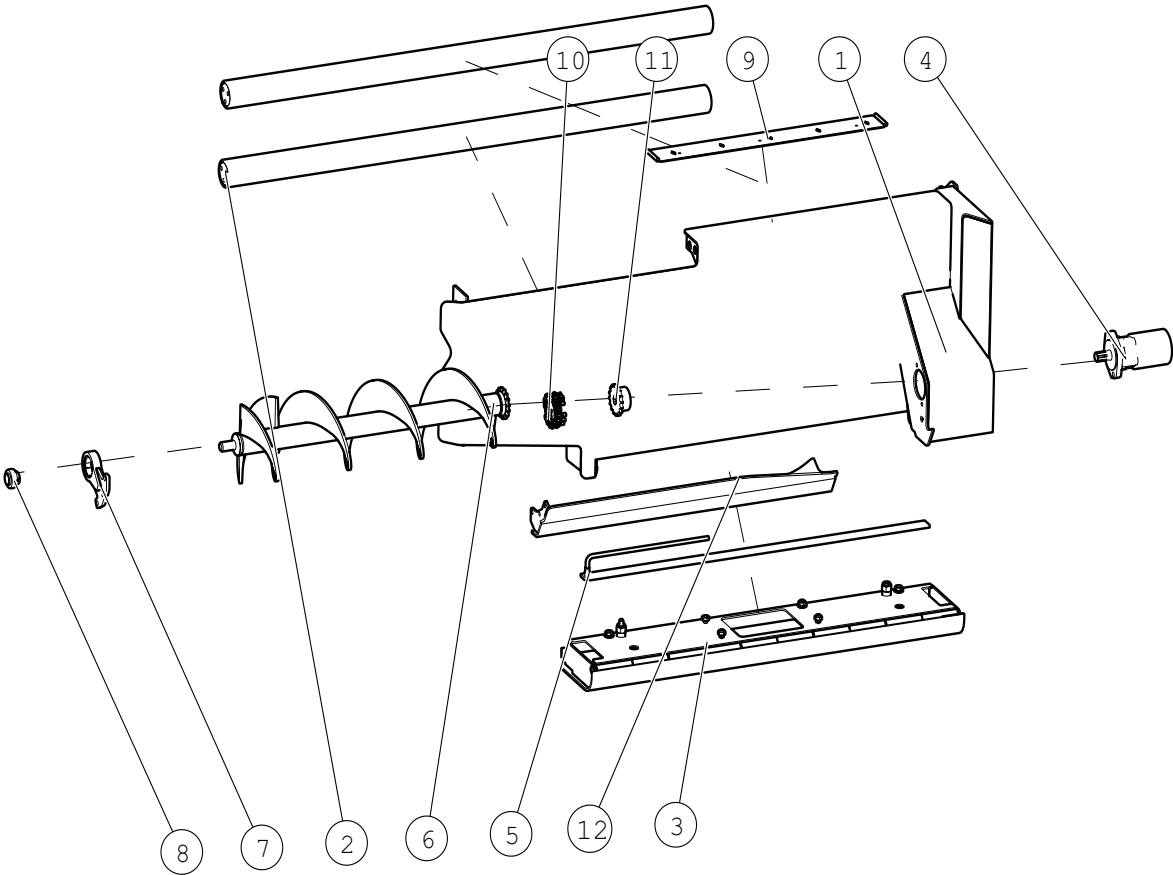
Right Hand End Gate



Right Hand End Gate

BOM ID	Part Number	Description	Qty
1	020-0285	Electric Heat Strip	1
2	112-302300	Weldment End Gate Upper RH	1
3	112-302350	Weldment End Gate Lower RH	1
4	112-302376	Threaded Rod End Gate Rear	1
5	111-309380	Weldment Shoe RH Electric	1
6	112-309382	Weldment Shoe Cover Electric	1
7	113-309358	Access Cover	1
8	050-0431	End Gate Spring	1
9	111-104170	Ratcheting Handle	2
10	020-109473	Sonic Sensor	1
11	050-0350	Cord Sonic Sensor	1
12	113-209462	End Gate Nut	1
13	113-209468	Threaded Rod Front	1
14	030-0153	Lynch Pin 5/16 x 2 1/2in	1
15	018-0107	Bearing 3/4 x 1 x 5/8	1

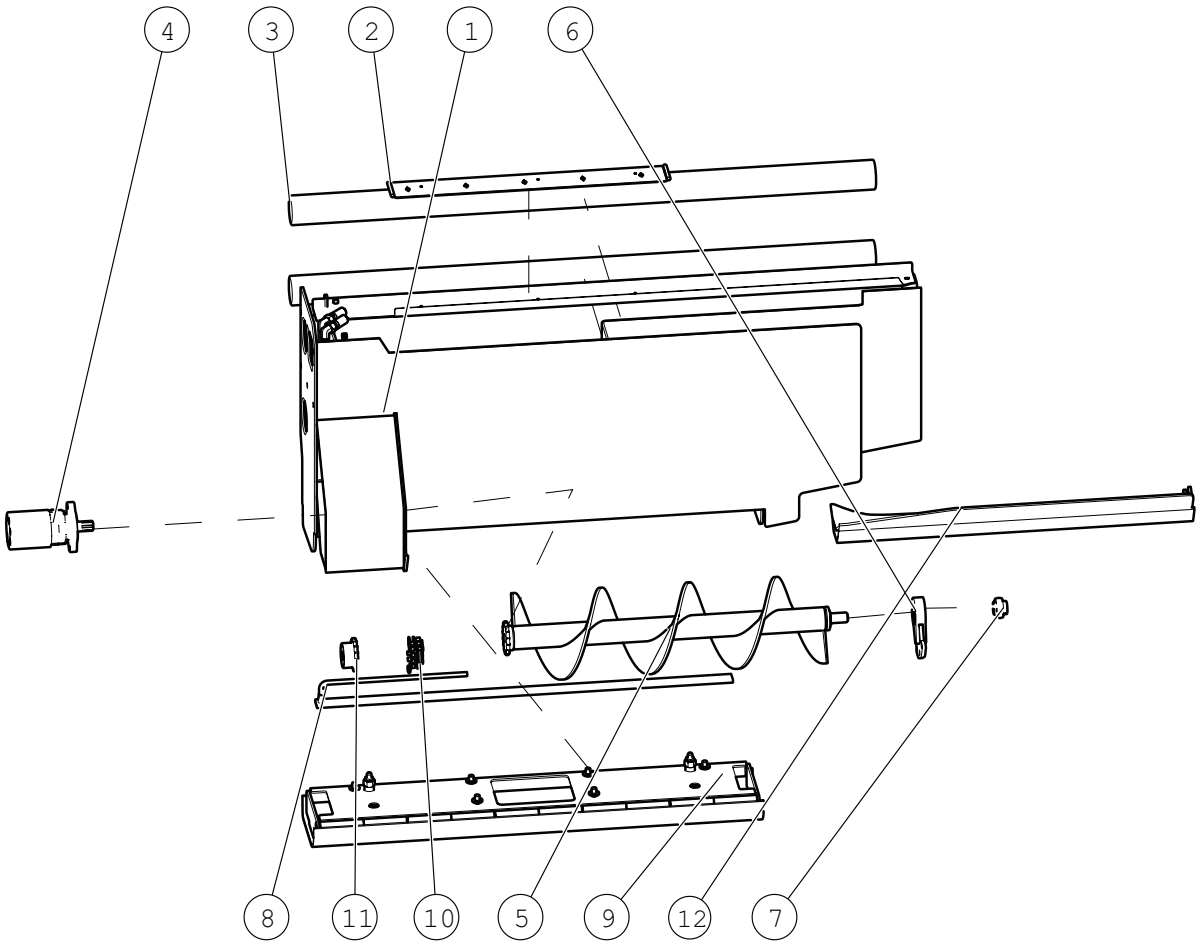
Left Hand Extension



Left Hand Extension

BOM ID	Part Number	Description	Qty
1	112-302201	Weldment LH Extension	1
2	113-302210	Extension Chrome Rod	2
3	111-302290	Assembly Extension Bottom	1
4	013-0096	Motor Auger	1
5	020-0213	Heating Element	1
6	112-302561	Auger Extension Left Hand	1
7	113-302080	Assembly Auger Support	1
8	018-0105	Bearing Replacement Auger Support	1
9	112-302682	Plate Hose Guide	1
10	015-0045	Chain Coupling	1
11	015-0154	Sprocket Auger	1
12	112-302229	Weldment Containment Tunnel	1
13 (Not Shown)	020-0548	Sensor Temperature Screed Heat	1

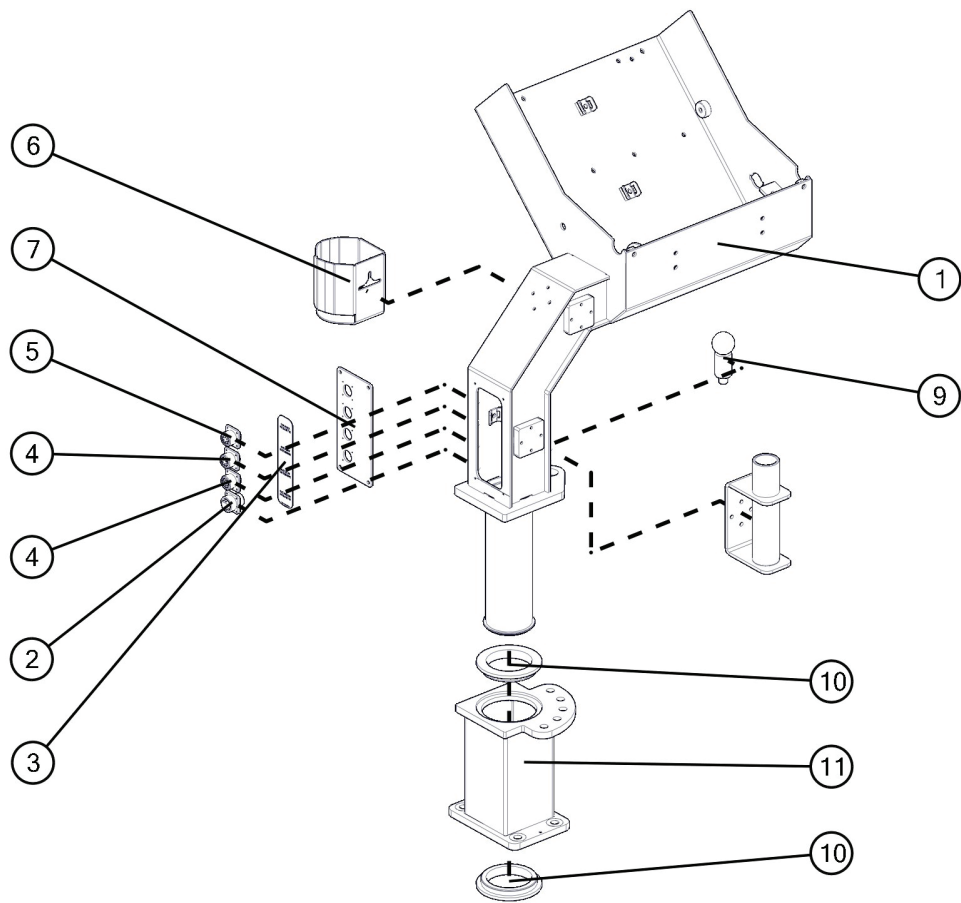
Right Hand Extension



Right Hand Extension

BOM ID	Part Number	Description	Qty
1	112-309200	Weldment RH Extension	1
2	112-302682	Weldment Hose Cover Plate	1
3	113-302210	Chrome Rod Extension	2
4	013-0096	Auger Hydraulic Motor	1
5	015-0289A	Auger Extension Right Hand	1
6	112-302080	Assembly Auger Support Bearing	1
7	018-0105	Auger Support Bearing	1
8	020-0213	Heat Strip	1
9	111-302290	Assembly Extension Wear Plate	1
10	015-0045	Chain Coupling	1
11	015-0154	Sprocket	1
12	112-302228	Weldment Containment Tunnel	1
13 (Not Shown)	020-0548	Sensor Temperature Screed Heat	1

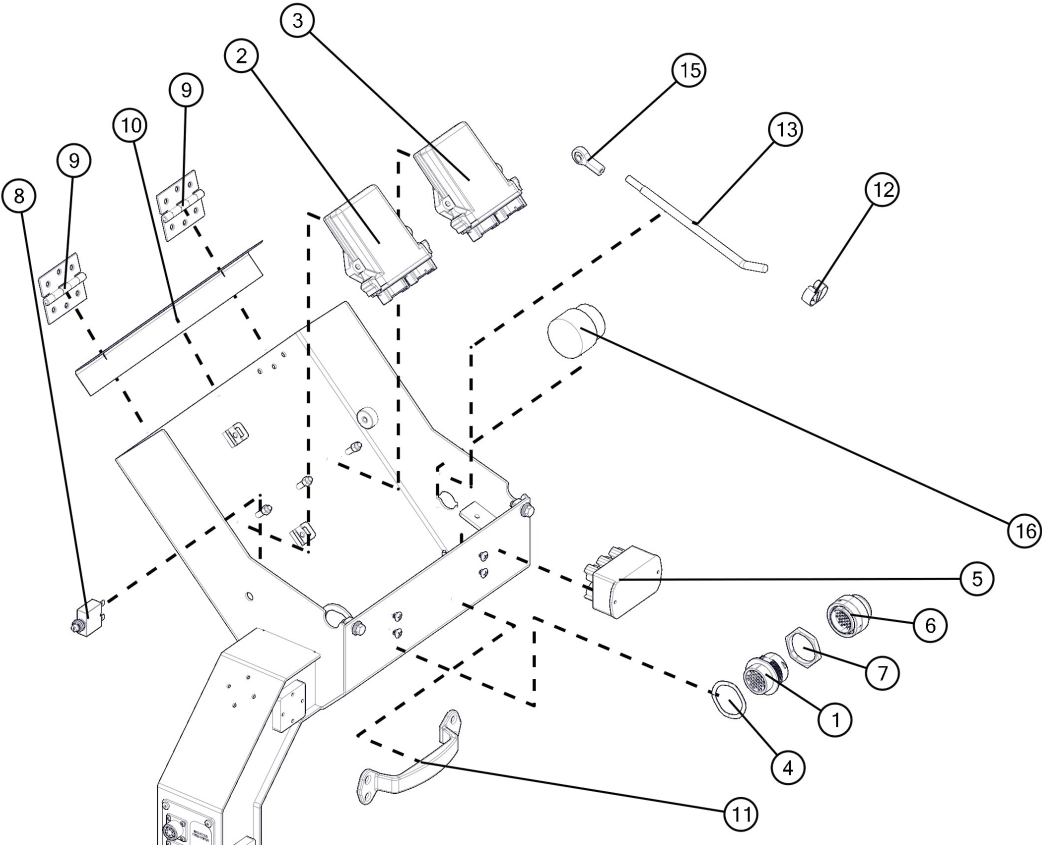
Left Hand Control Station Lower



Left Hand Control Station Lower

BOM ID	Part Number	Description	Qty
1	112-414257	OPERATOR STATION WELDMENT, LEFT	1
2	020-0501	RECEPTACLE 14 PIN REMOTE HANDSET	1
3	024-414284	1860 REMOTES & GRADE PKG DECAL	1
4	050-0372	6 PIN RECEPTACLE BAYONET STYLE FLANGE MOUNT	2
5	050-0372	6 PIN RECEPTACLE THREADED STYLE FLANGE MOUNT	1
6	113-414282	CUP HOLDER	1
7	113-414284	REMOTE RECEPTACLE COVER PLATE	1
8	112-414308	WELDMENT, UMBRELLA HOLDER BRACK- ET	1
9	030-0566	POP DETENT KNOB WITH WELD BARREL	1
10	113-414296	OPERATOR STATION WEAR SPACER	2
11	112-414431	OPERATOR STAND RECEIVER ASSEMBLY, LEFT	1

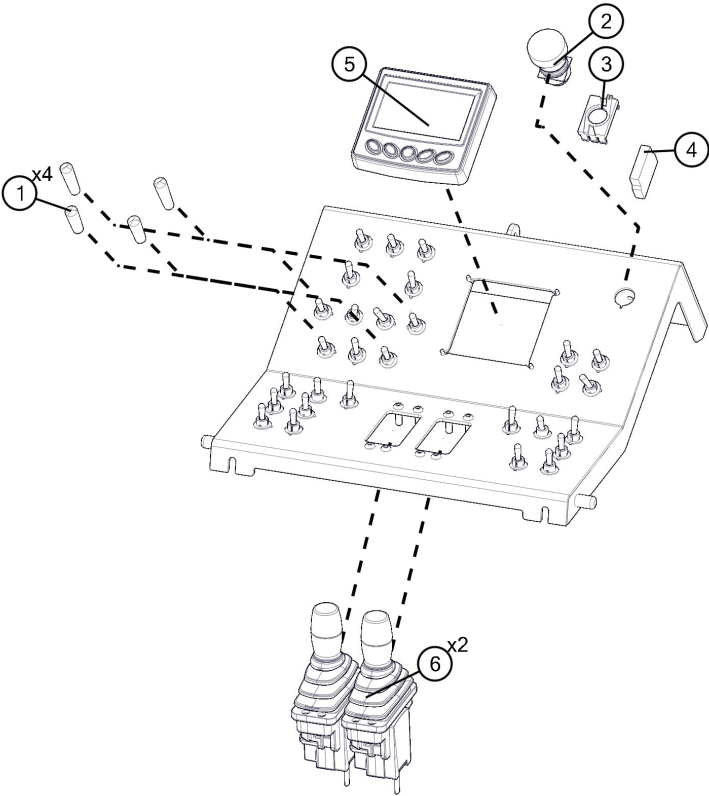
Left Hand Control Station Upper



Left Hand Control Station Upper

BOM ID	Part Number	Description	Qty
1	020-0209	CONNECTOR HOUSING HDP20 31-SOCKET	1
2	020-0715-1	I/O MODULE #1	1
3	020-0715-3	I/O MODULE #3	1
4	020-1026	WAVE LOCK WASHER	1
5	020-1034	SPLITTER CAN BUS 6 CONNECTIONS	1
6	020-1044	PLUG 31 PIN	1
7	020-1048	PANEL NUT	1
8	E0128-2	5 AMP CIRCUIT BREAKER	1
9	030-0567	HINGE ZINC PLATED 3" X 1.250"	2
10	030-0569	OPERATOR STATION HINGE SEAL RUBBER	1
11	050-0205	GRAB HANDLE	1
12	050-0914	TOOL HOLDER CLIP FOR .375" - .625" DIA.	1
13	113-414288	CONTROL PANEL PROP ROD	1
15	030-0430	BALL ROD END	1
16	020-0955	KEYSWITCH	1

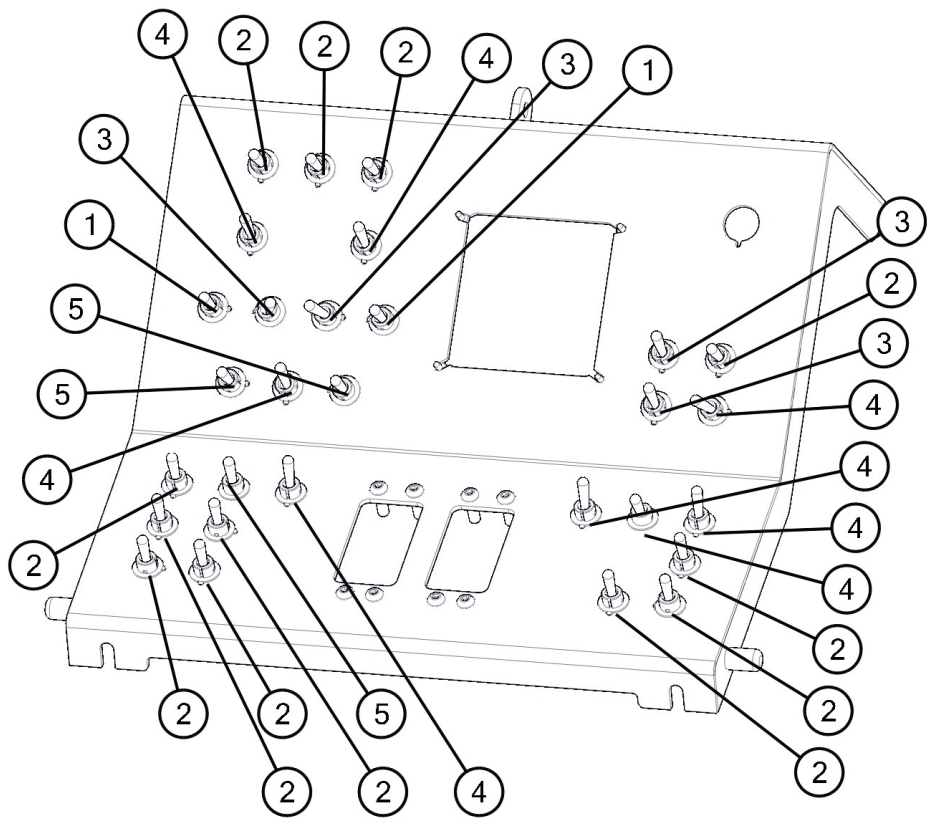
Left Hand Control Panel



Left Hand Control Panel

BOM ID	Part Number	Description	Qty
1	020-0497	TOGGLE SWITCH EXTENSION RED PLASTIC	4
2	020-123714	E-STOP, PUSH BUTTON	1
3	020-123714-1	E-STOP COUPLING	1
4	020-123714-2	E-STOP, CONTACTS	1
5	020-0905	DISPLAY PANEL	1
6	020-0271	JOYSTICK	2

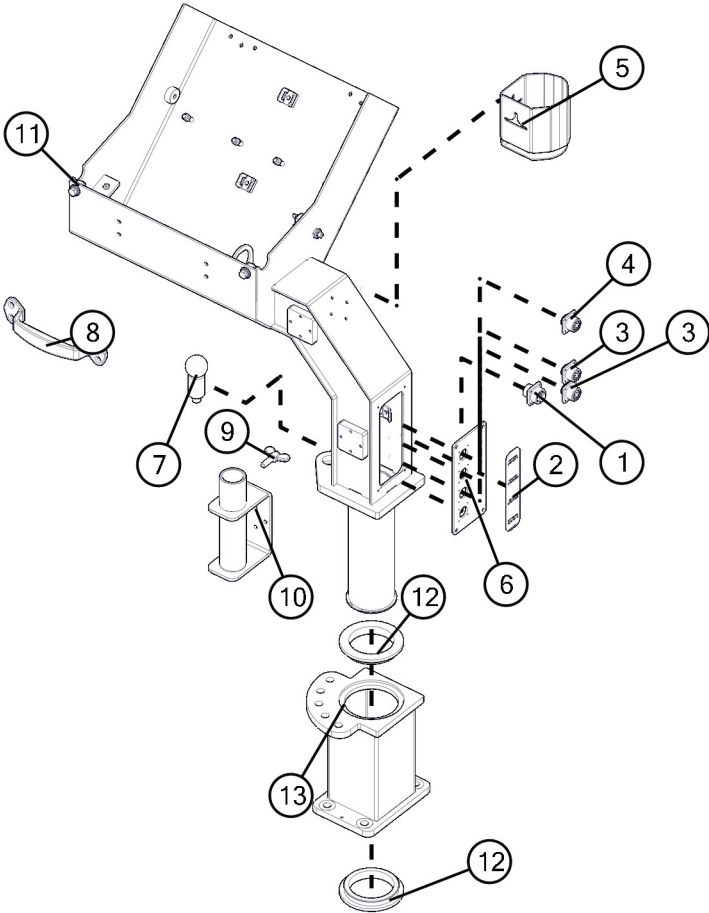
Left Hand Control Panel Toggles



Left Hand Control Panel Toggles

BOM ID	Part Number	Description	Qty
1	020-0083	Toggle Switch On-Off-On	2
2	020-0395	Toggle Switch On-Off Momentary On	12
3	020-0405	Toggle Switch On-On	4
4	020-0423	Toggle Switch Momentary On-On	8
5	020-0479	Toggle Switch Momentary On-Off, Detent On	3

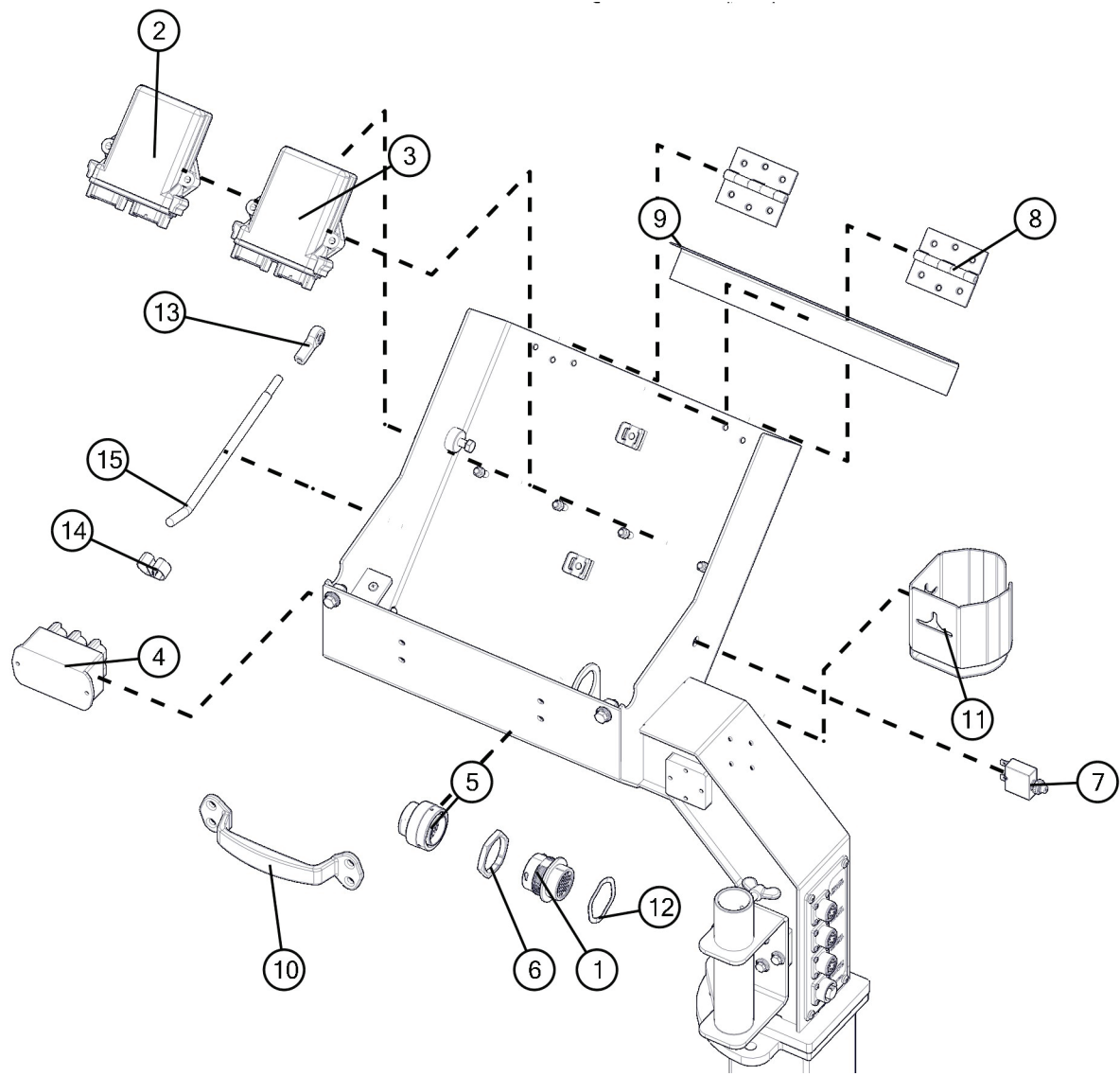
Right Hand Control Station Lower



Right Hand Control Station Lower

BOM ID	Part Number	Description	Qty
1	020-0501	RECEPTACLE 14 PIN	1
2	024-414284	GRADE PKG DECAL	1
3	050-0372	6 PIN RECEPTACLE BAYONET STYLE FLANGE MOUNT	2
4	050-0513	6 PIN RECEPTACLE THREADED STYLE FLANGE MOUNT	1
5	113-414282	CUP HOLDER	1
6	113-414284	REMOTE RECEPTACLE COVER PLATE	1
7	030-0566	POP DETENT KNOB WITH WELD BAR- REL	1
8	050-0205	GRAB HANDLE	1
9	030-0487	WING BOLT	1
10	112-414308	WELDMENT, UMBRELLA HOLDER BRACKET	1
11	112-414256	OPERATOR'S CONTROL STAND WELD- MENT, RIGHT	1
12	113-414296	OPERATOR STATION WEAR SPACER	2
13	112-414430	OP STATION RECEIVER WELDEMENT, RIGHT	1

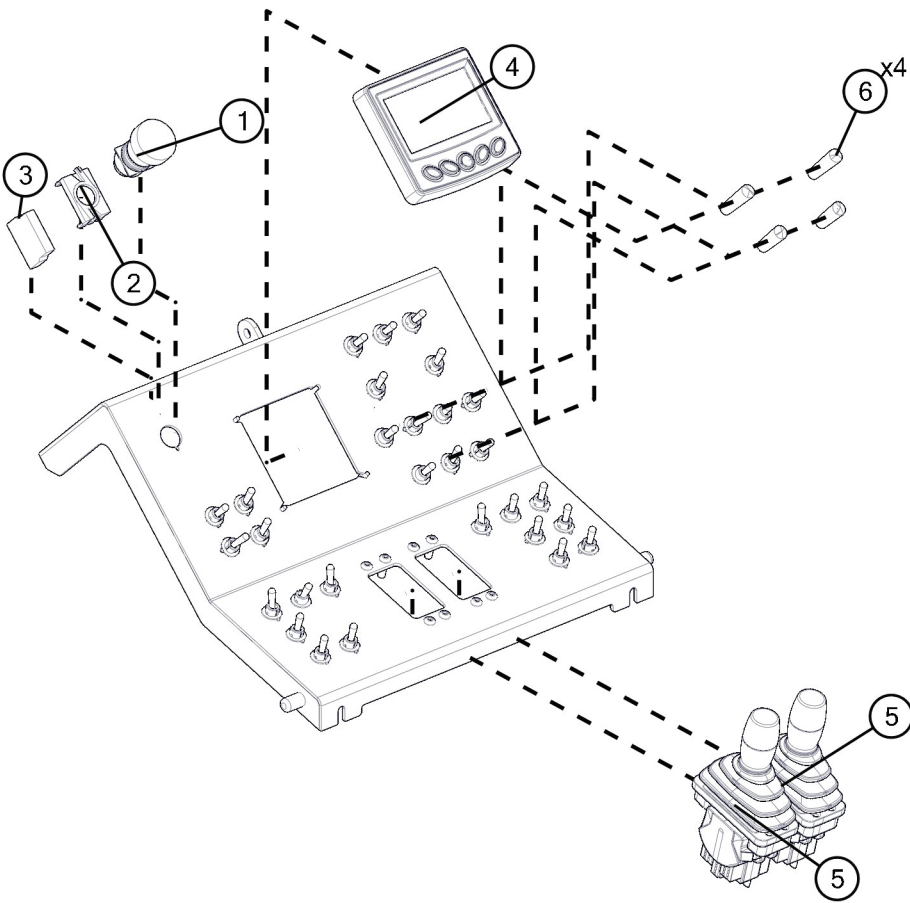
Right Hand Control Station Upper



Right Hand Control Station Upper

BOM ID	PART NUMBER	PART NAME	Qty
1	020-0209	CONNECTOR HOUSING	1
2	020-0715-2	I/O MODULE #2	1
3	020-0715-4	I/O MODULE #4	1
4	020-1034	SPLITTER CAN BUS 6 CON- NECTIONS	1
5	020-1044	PLUG 31 PIN	1
6	020-1048	PANEL NUT	1
7	E0128-2	5 AMP CIRCUIT BREAKER	1
8	030-0567	HINGE	2
9	030-0569	OPERATOR STATION HINGE SEAL RUBBER	1
10	050-0205	GRAB HANDLE	1
11	113-414282	CUP HOLDER	1
12	020-1026	WAVE LOCK WASHER	1
13	030-0430	BALL ROD END	1
14	050-0914	TOOL HOLDER CLIP	1
15	113-414288	CONTROL PANEL PROP ROD	1

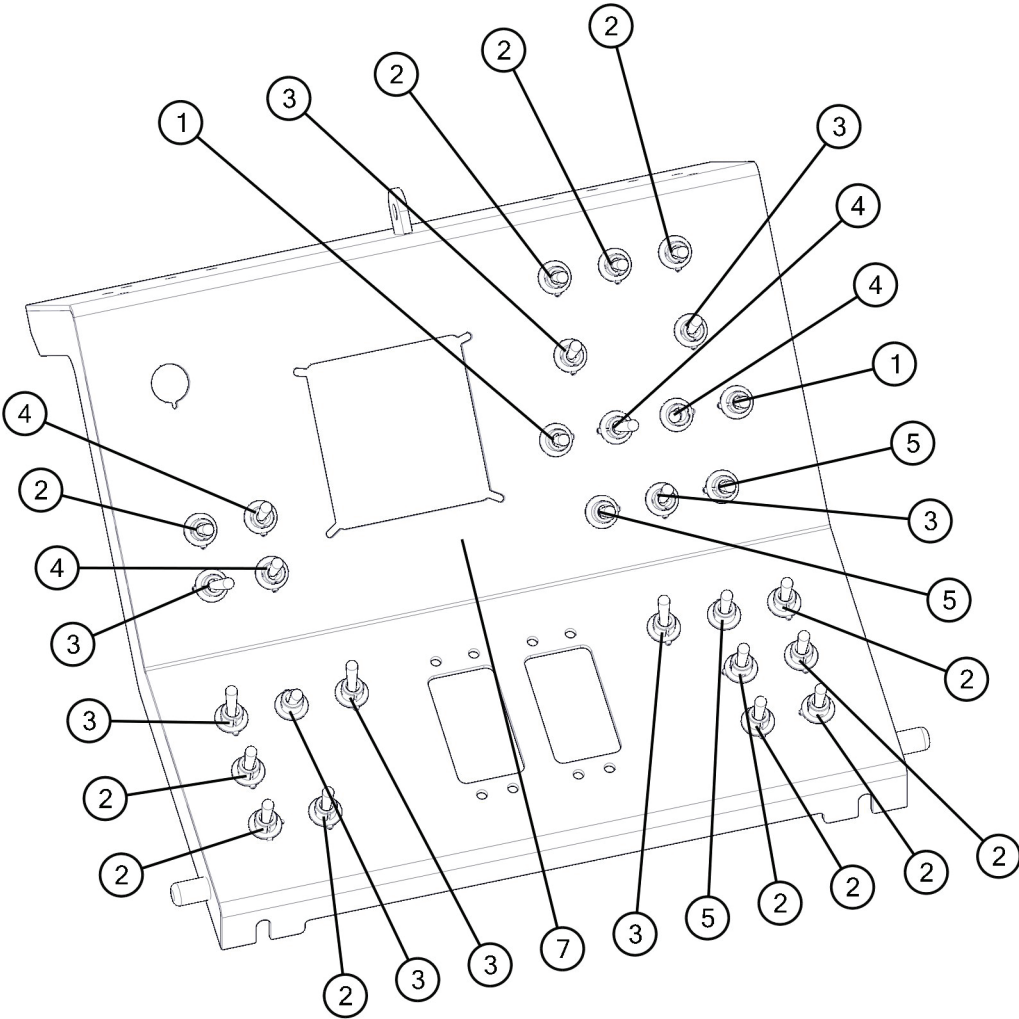
Right Hand Control Panel



Right Hand Control Panel

BOM ID	Part Number	Description	Qty
1	020-123714	E-STOP, PUSH BUTTON	1
2	020-123714-1	E-STOP COUPLING	1
3	020-123714-2	E-STOP, CONTACTS	1
4	020-0905	MURPHY INFORMATION PANEL	1
5	020-0271	JOYSTICK	2
6	020-0497	TOGGLE SWITCH EXTENSION RED PLASTIC	4

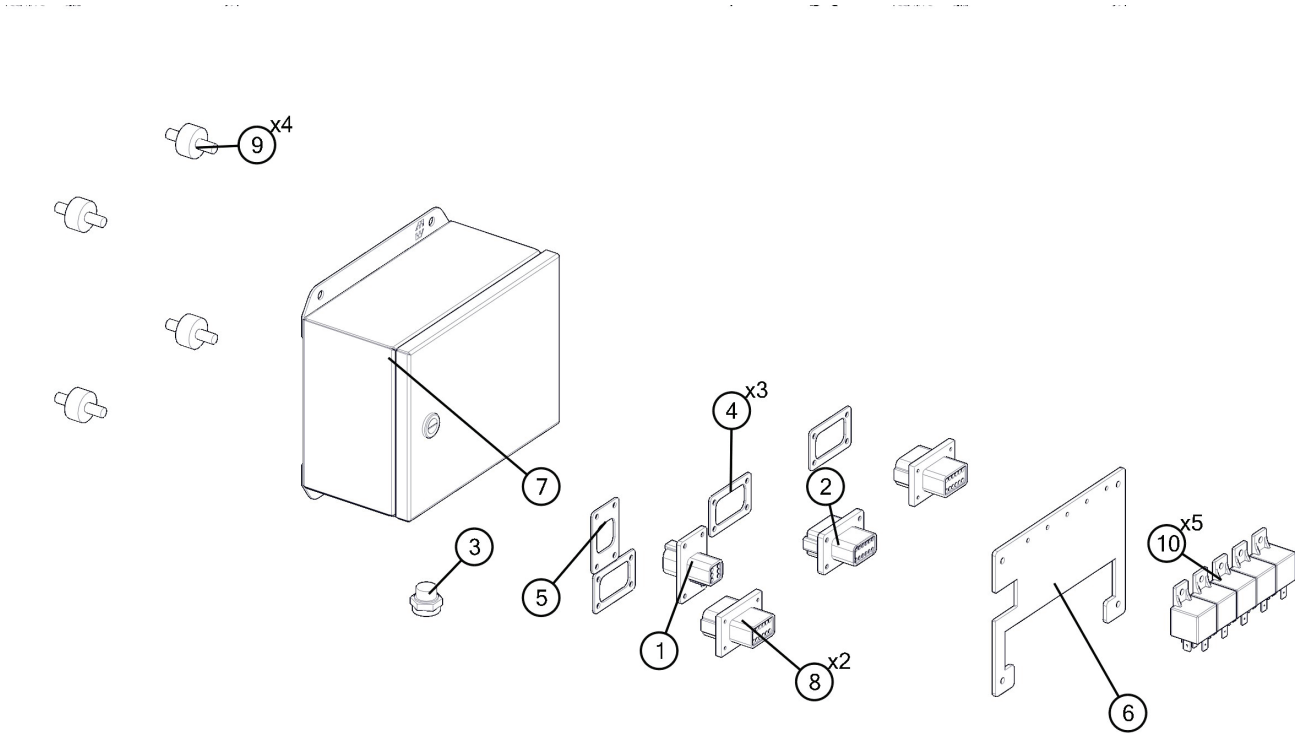
Right Hand Control Panel Toggles



Right Hand Control Panel Toggles

BOM ID	Part Number	Description	Qty
1	020-0083	SWITCH ON-OFF-ON	2
2	020-0395	SWITCH Mom. ON-OFF-Mom. ON	12
3	020-0423	SWITCH Mom. ON-ON	8
4	020-0405	SWITCH ON-ON	4
5	020-0479	SWITCH Mom. ON-OFF-Det. ON	3
7	112-414250	OPERATOR'S DASH PANEL WELDEMENT, RIGHT	1

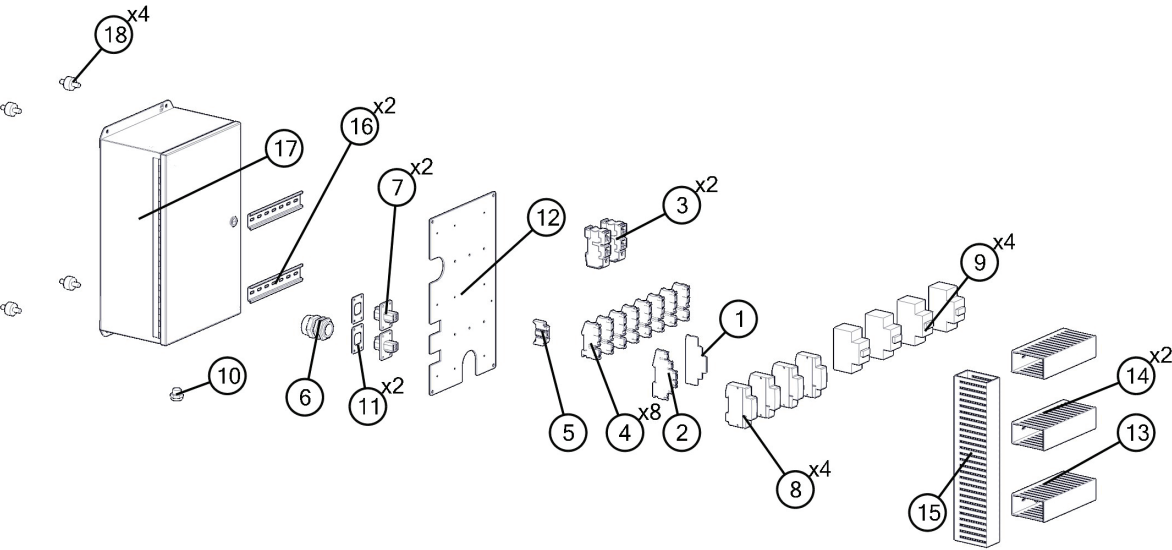
12V Screed Control Box



12V Screed Control Box

BOM ID	Part Number	Description	Qty
1	020-1038	RECEPTACLE 6-PIN FLANGED	1
2	020-1039	RECEPTACLE 12-PIN FLANGED KEYED B	1
3	020-1102	VENT ENCLOSURE PLUG	1
4	020-1103	GASKET FOR RECEPTACLES 020-1039 & 050-0449	3
5	020-1104	GASKET FOR 020-1038 6 PIN RE- CEPTACLE	1
6	020-414161	12VDC ENCLOSURE PLATE	1
7	020-414162	ENCLOSURE 6"	1
8	050-0449	RECEPTACLE FLANGED 12 PIN	2
9	050-0899	STUD PLATE VIBRATION MOUNT	4
10	E0141	RELAY, 12VDC, 50A	5

240V Screed Heat Control Box



240V Screed Heat Control Box

BOM ID	Part Number	Description	Qty
1	020-0999	END COVER	1
2	020-1000	TERMINAL BLOCK DIN RAIL GROUND	1
3	020-1001	TERMINAL POTENTIAL COLLECTIVE	2
4	020-1002	TERMINAL FEED-THROUGH DIN RAIL	8
5	020-1004	END CLAMP DIN RAIL	1
6	020-1027	GLAND CABLE	1
7	020-1038	RECEPTACLE 6-PIN FLANGED	2
8	020-1049	CONTACTOR	4
9	020-1107	BREAKER	4
10	020-1102	VENT ENCLOSURE PLUG	1
11	020-1104	GASKET FLANGED RECEPTACLE	2
12	020-414240	HEAT ENCLOSURE DIN RAIL MOUNT PLATE	1
13	020-414521	DUCT WIRING BOTTOM	1
14	020-414522	DUCT WIRING TOP MIDDLE	2
15	020-414523	DUCT WIRING SIDE	1
16	020-414524	DIN RAIL 16KW 1860 HEAT ENCLOSURE	2
17	020-414526	HEAT ENCLOSURE	1
18	050-0899	STUD PLATE VIBRATION MOUNT	4

Wiring Harnesses

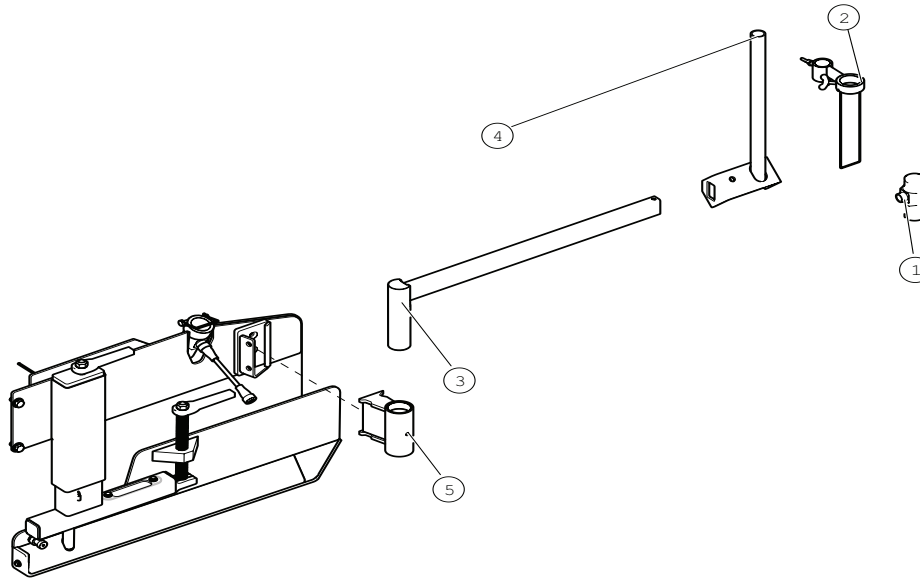
No Exploded View

Wiring Harnesses

BOM ID	Part Number	Description	Qty
1	020-414100	ENGINE HARNESS	1
2	020-414110	PDM1 TO TRACTOR VALVES	1
3	020-414111	PDM2 to FEED VALVES	1
4	020-414112	FEED MANIFOLD HARNESS	1
5	020-414113	MMX DRIVE HARNESS	1
6	020-414114	TRACTOR CANBUS HARNESS	1
7	020-414115	SCREED 4 BANK HARNESS	1
8	020-414116	PDM2 HORN 2 SPEED HARNESS	1

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Options: Grade Packages

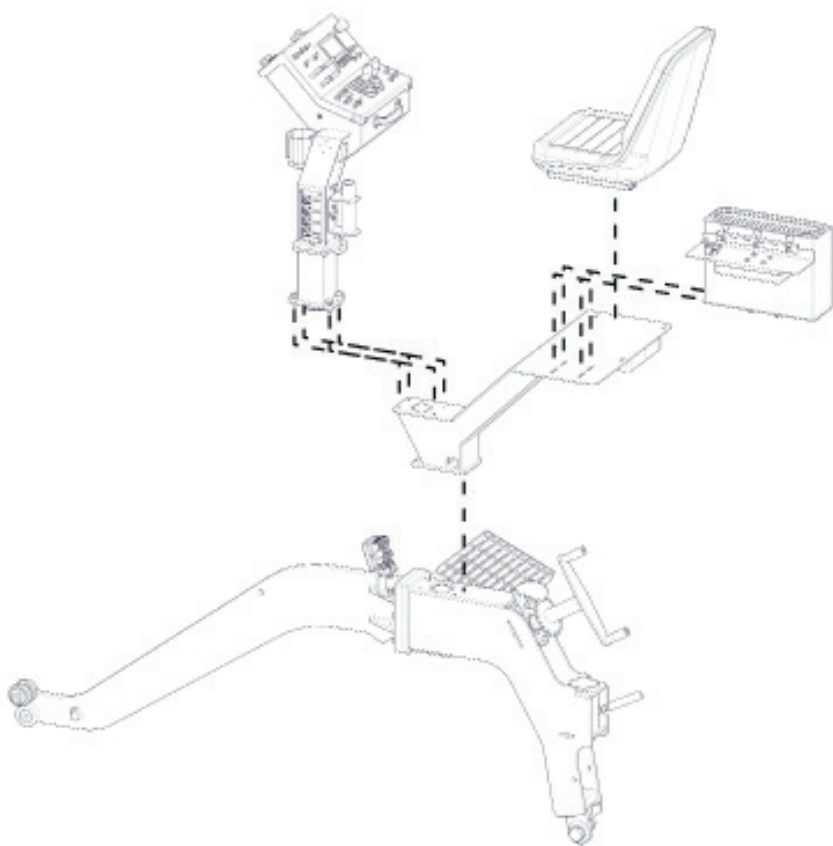


Single Grade			
ID	Number	Description	Qty
	110-202220	Single Grade Kit	
1	020-0506A	Grade Sensor (White)	1
2	112-202260	Grade Sensor Bracket	2
3	112-202230	Grade Pivot Arm	2
4	112-202240	Grade Height Bracket	2
5	112-202220	Mount Grade Base	2
6	050-0393	Carrying Case	1
7	020-0591	Foam Packaging	1
8	020-0358	Controller Handheld	1
9	020-0385-1	Controller Mounts	1
10	050-0604	Cable wiring Handheld	1
11	050-0350	Cable wiring Grade Sensor	1
12	030-0494	Hardware Kit	1

Dual Grade			
ID	Number	Description	Qty
	110-20222-2	Dual Grade Kit	
13	020-0385	Controller Handheld	1
14	020-0506	Grade Sensor (Red)	1
15	020-0604	Cable wiring Handheld	1
16	050-0350	Cable wiring sensor	1

Optional Equipment			
14	050-0667	Cable Topcon	

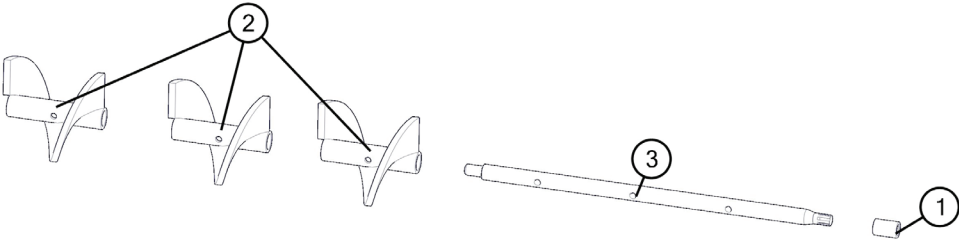
Options: Road Crew Kit



Road Crew Kit

BOM ID	PART NUMBER	DESCRIPTION	Qty
	110-414311	COMPLETE ROAD CREW KIT	1
Individual Components			
1	112-414311	OPTIONAL HIGH DECK WELDMENT, LEFT	1
2	111-414320	TOOL BOX ASSEMBLY	1
3	060-0049	STANDARD OPERATOR SEAT	1
4	020-0503-A	REMOTE 3 FUNCTION SCREED REMOTE	2
5	050-0350	CABLE SCREED REMOTE	2
6	020-0505	MOUNT SCREED REMOTE UNIVERSAL	2

Options: Hardened Segmented Augers

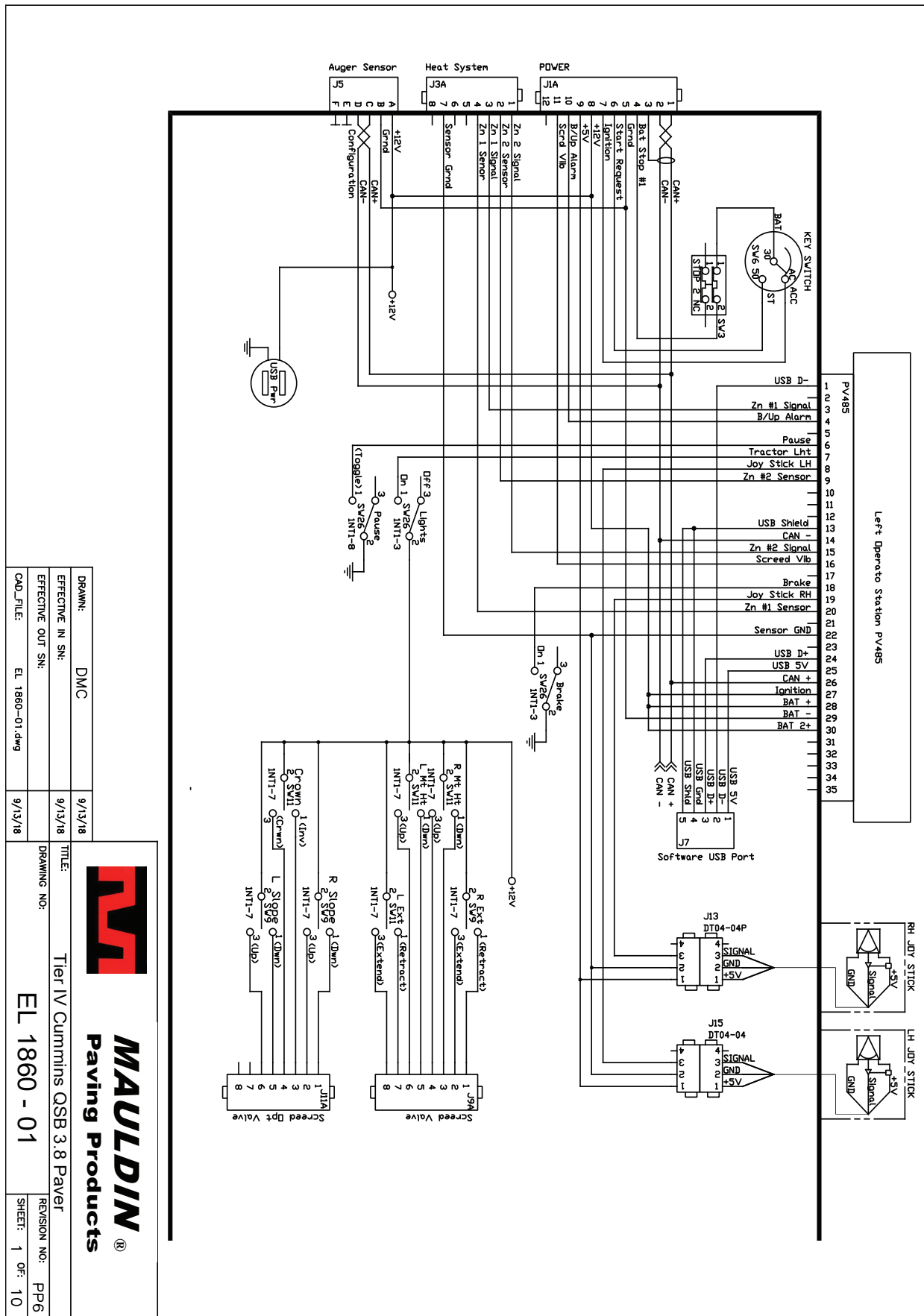


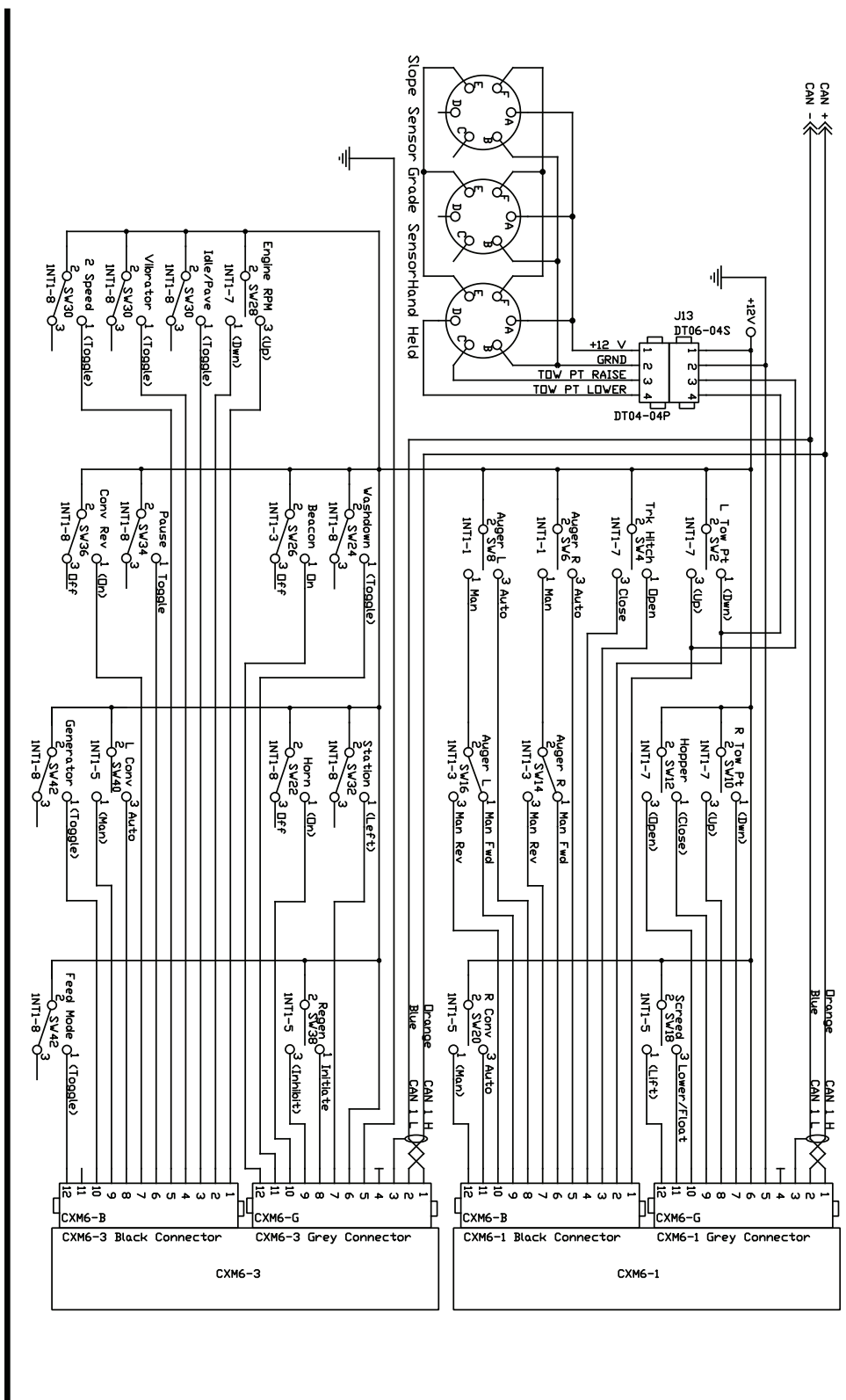
Options: Hardened Segmented Augers

BOM ID	PART NUMBER	PART NAME	Qty
Right Hand Auger			
1.1	015-0289A	COMPLETE RIGHT HAND HARDENED AUGER ASSEMBLY	
1	015-0286	SPLINE BUSHING	1
2	015-0289	HEAVY DUTY CAST IRON AUGER FLIGHT SECTION RIGHT AUGER	3
3	113-302580	AUGER FLIGHT MOUNTING SHAFT	1
Left Hand Auger			
2.1	015-0288A	COMPLETE LEFT HAND HARDENED AUGER ASSEMBLY	
1	015-0286	SPLINE BUSHING	1
2	015-0288	HEAVY DUTY CAST IRON AUGER FLIGHT SECTION LEFT AUGER	3
3	113-302580	AUGER FLIGHT MOUNTING SHAFT	1

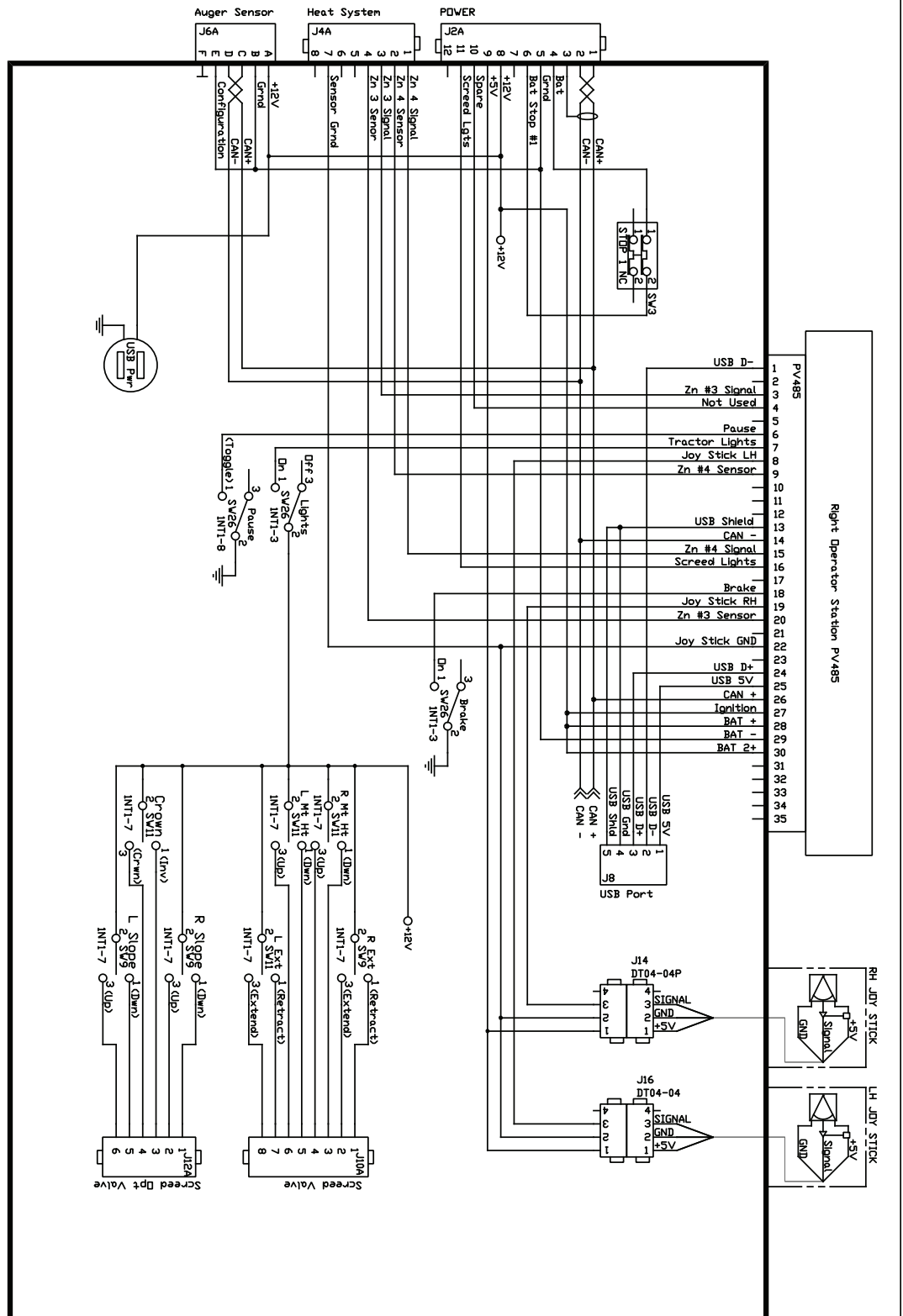
Schematics

Electrical Schematics

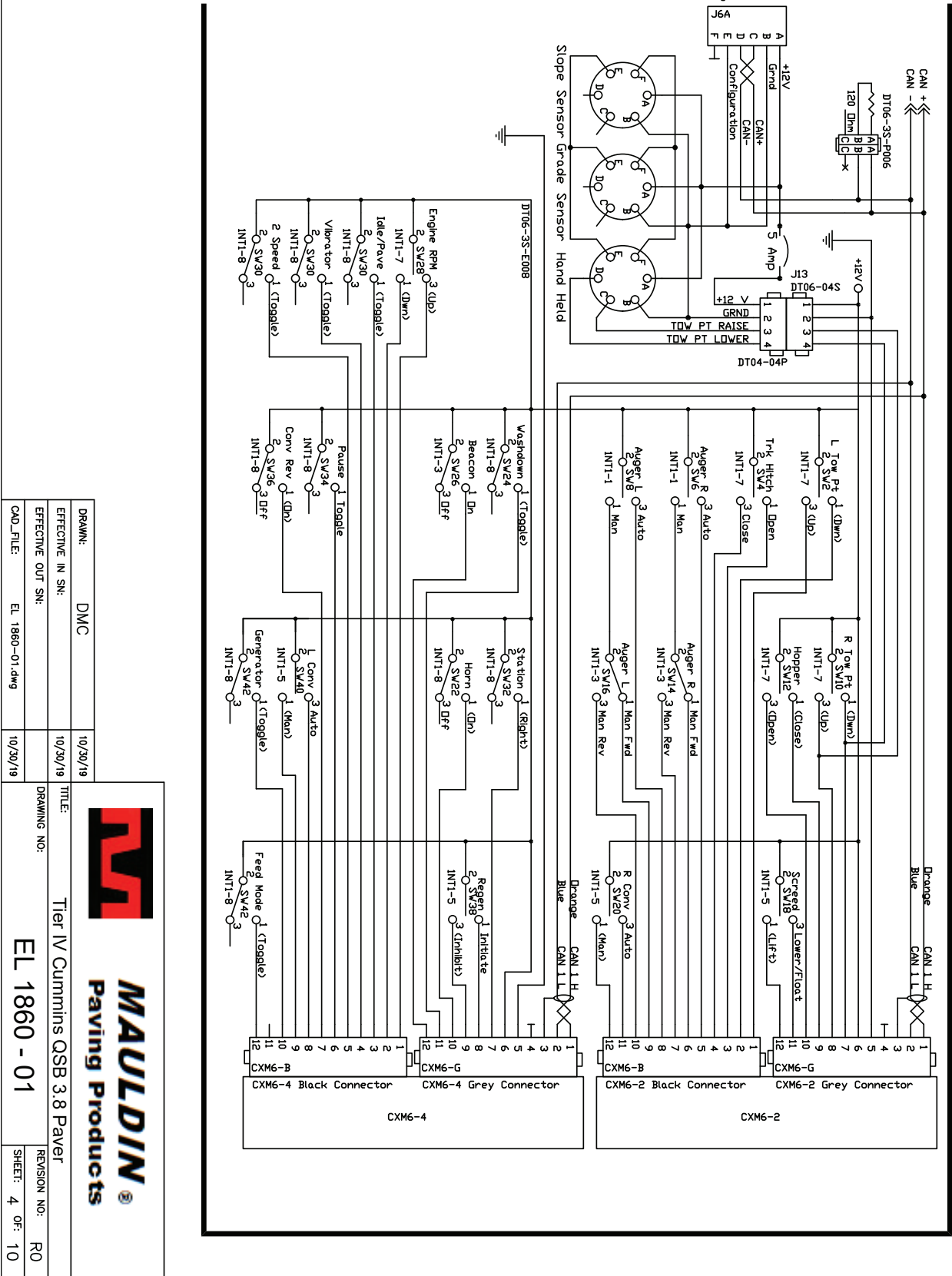


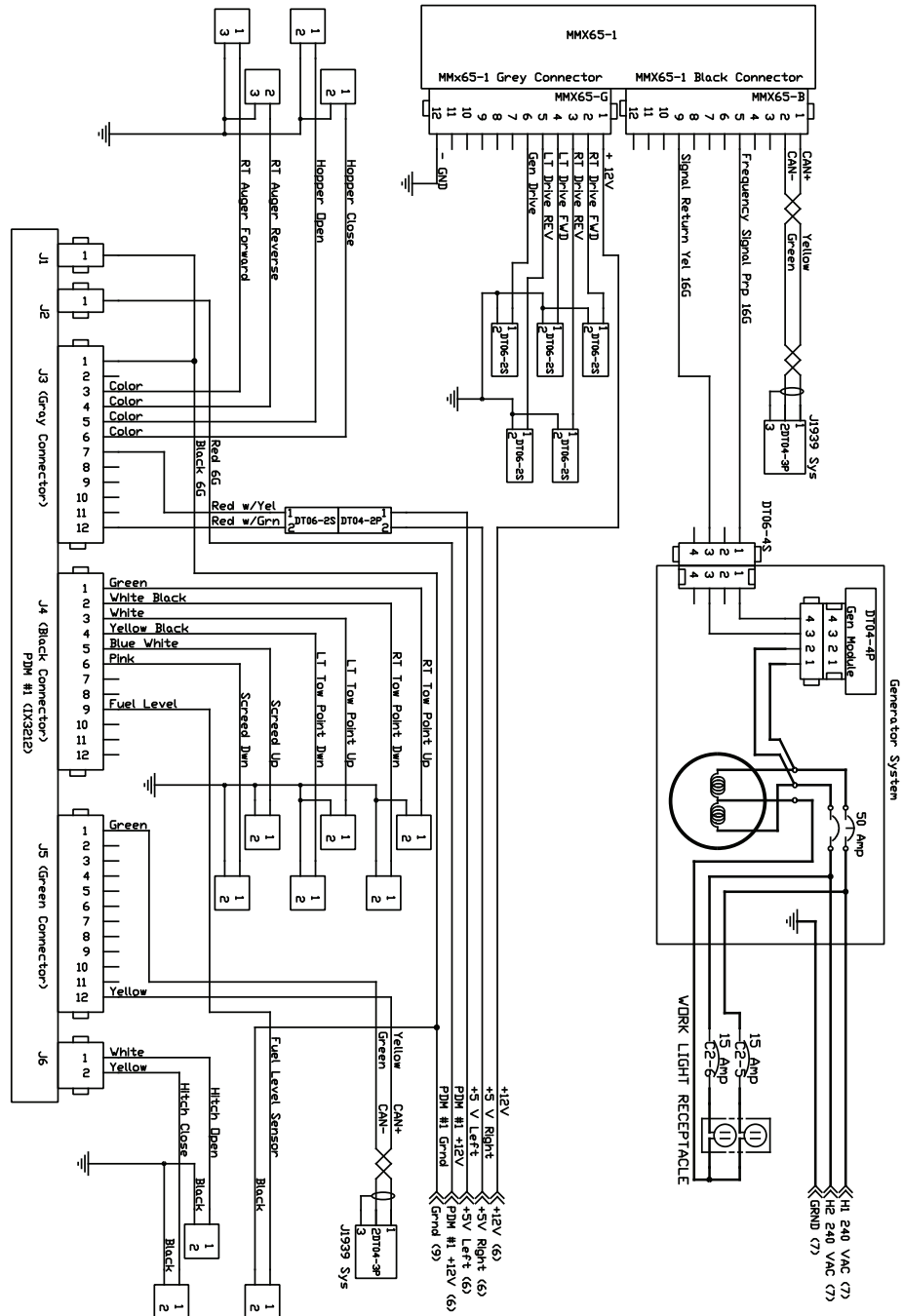


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EFFECTIVE OUT SN:	
CAD FILE:	EL 1860-01.dwg
SHEET:	2 OF 10



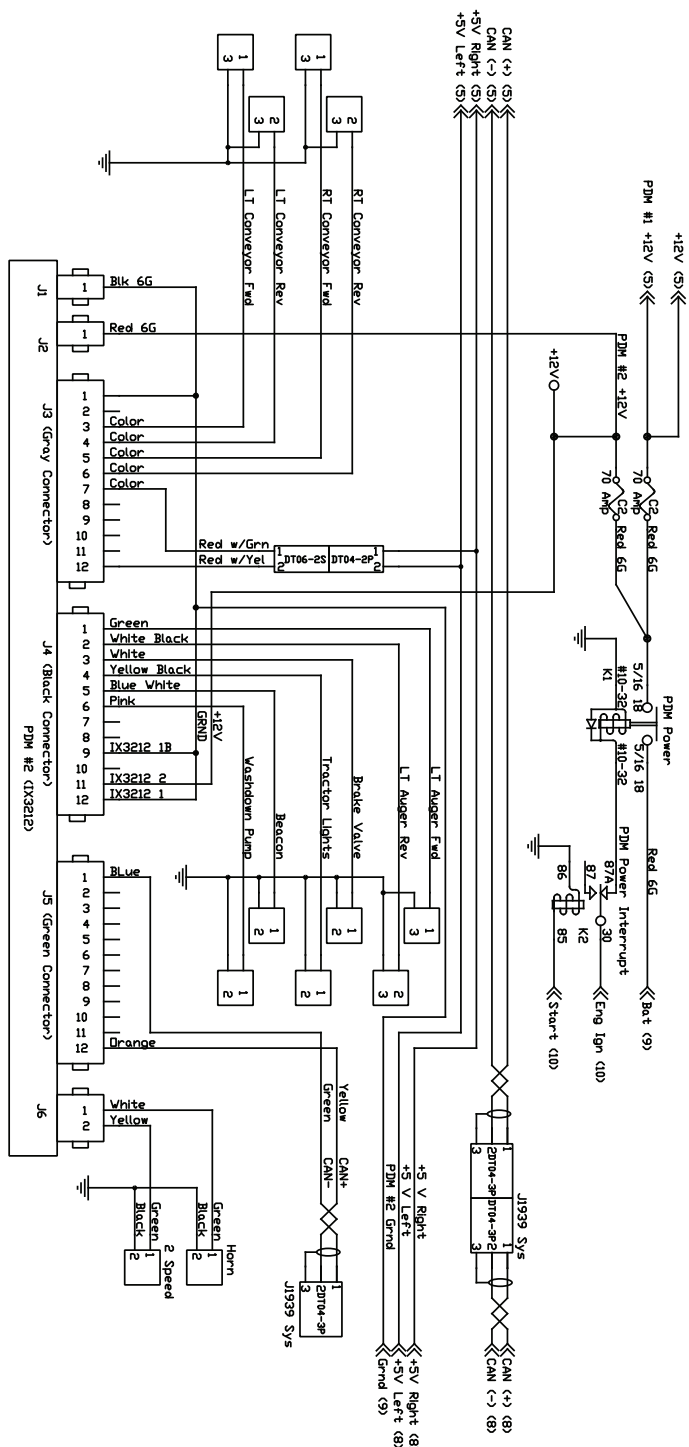
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DRAWING NO:			Tier IV Cummins QSB 3.8 Paver
EL 1860 - 01			REVISION NO: PP6
			SHEET: 3 OF: 10





DRAWN:	DMC	9/13/18
EFFECTIVE IN SN:		9/13/18
EFFECTIVE OUT SN:		
CAD FILE:	EL 1860-01.dwg	9/13/18

	
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REVISION NO: PP6	SHEET: 5 OF: 10

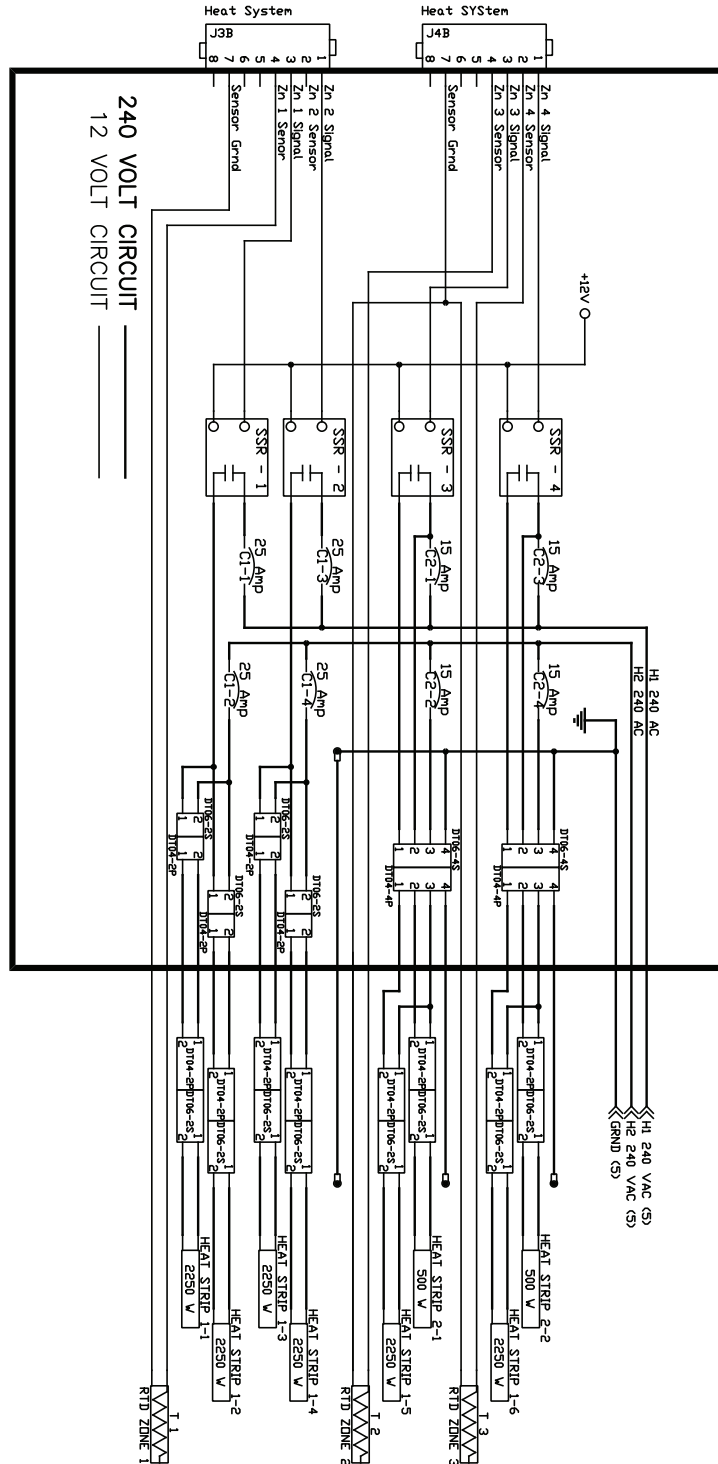


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MAULDIN®
Paving Products

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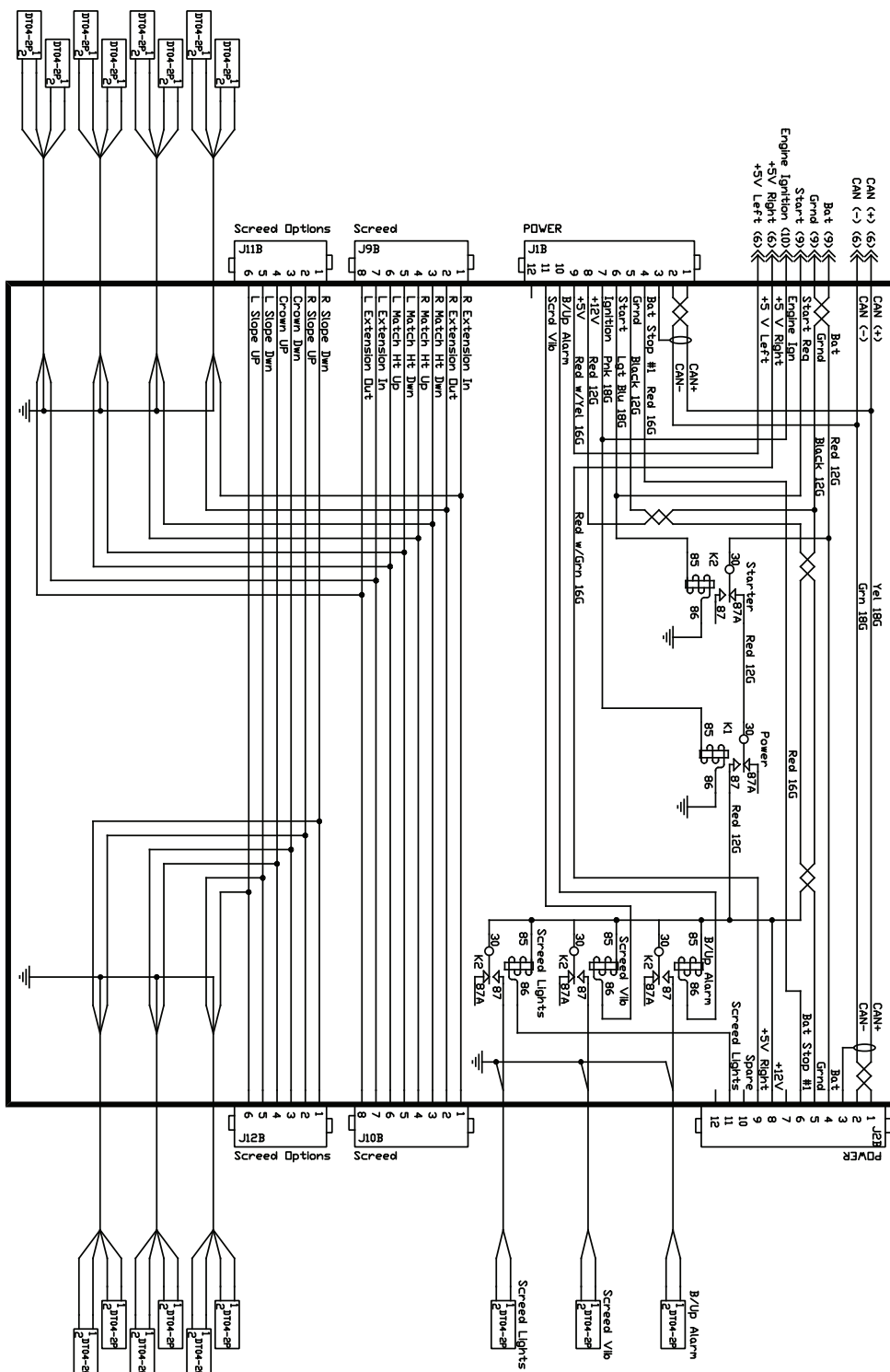


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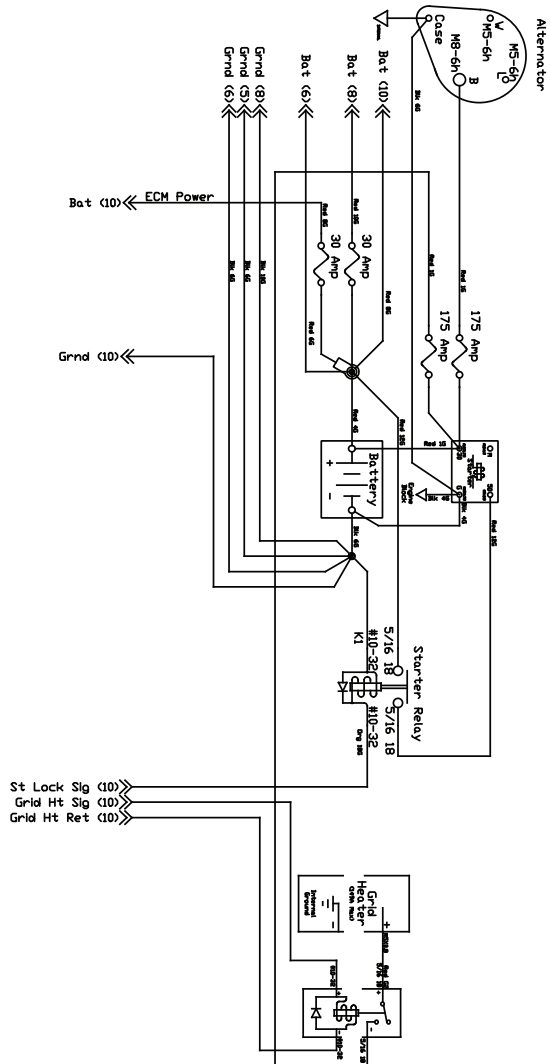
MAULDIN®
Paving Products

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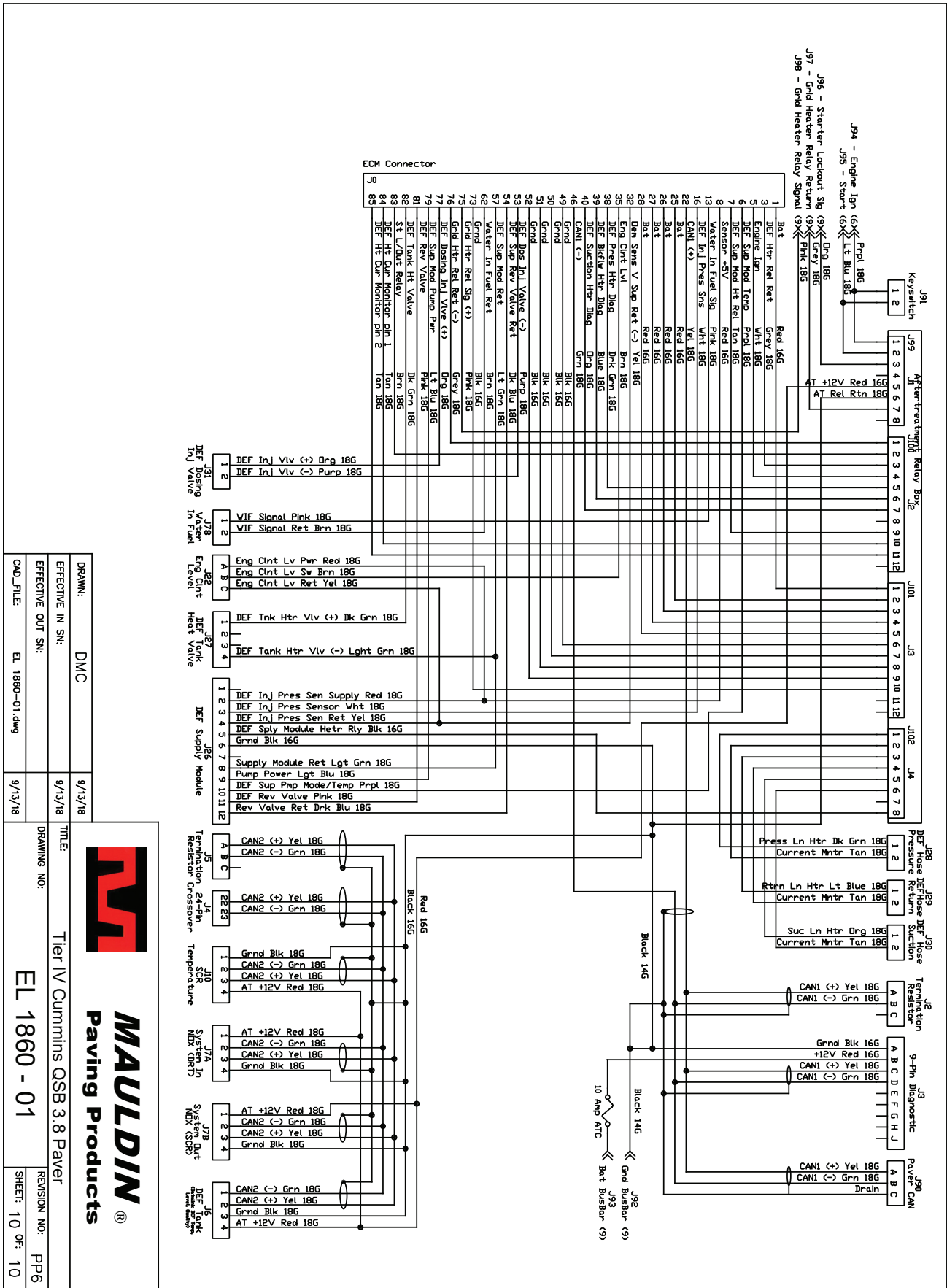
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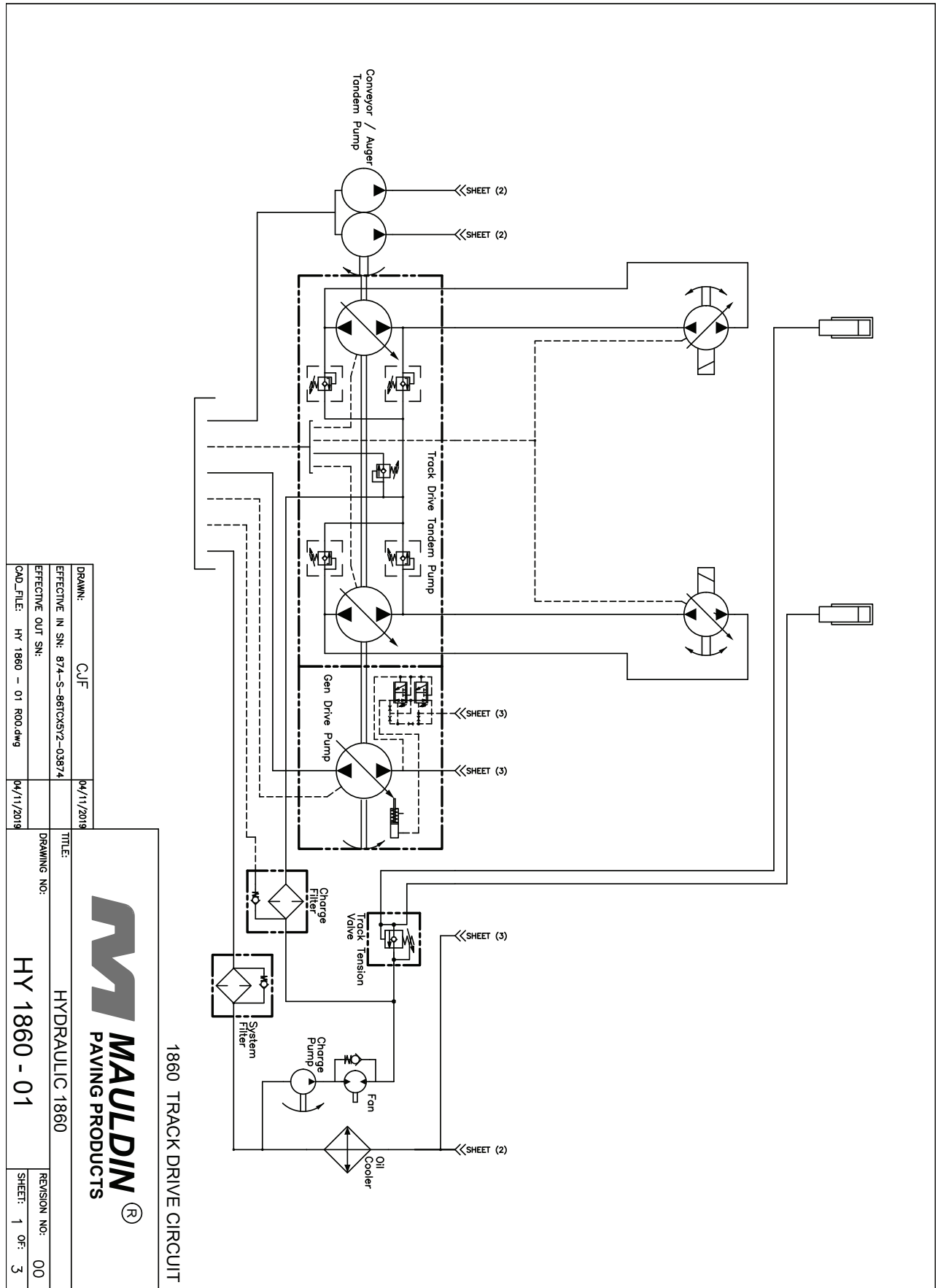
	
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DRAWING NO.: EL 1860 - 01	
REVISION NO.: PP6	SHEET: 8 OF: 10



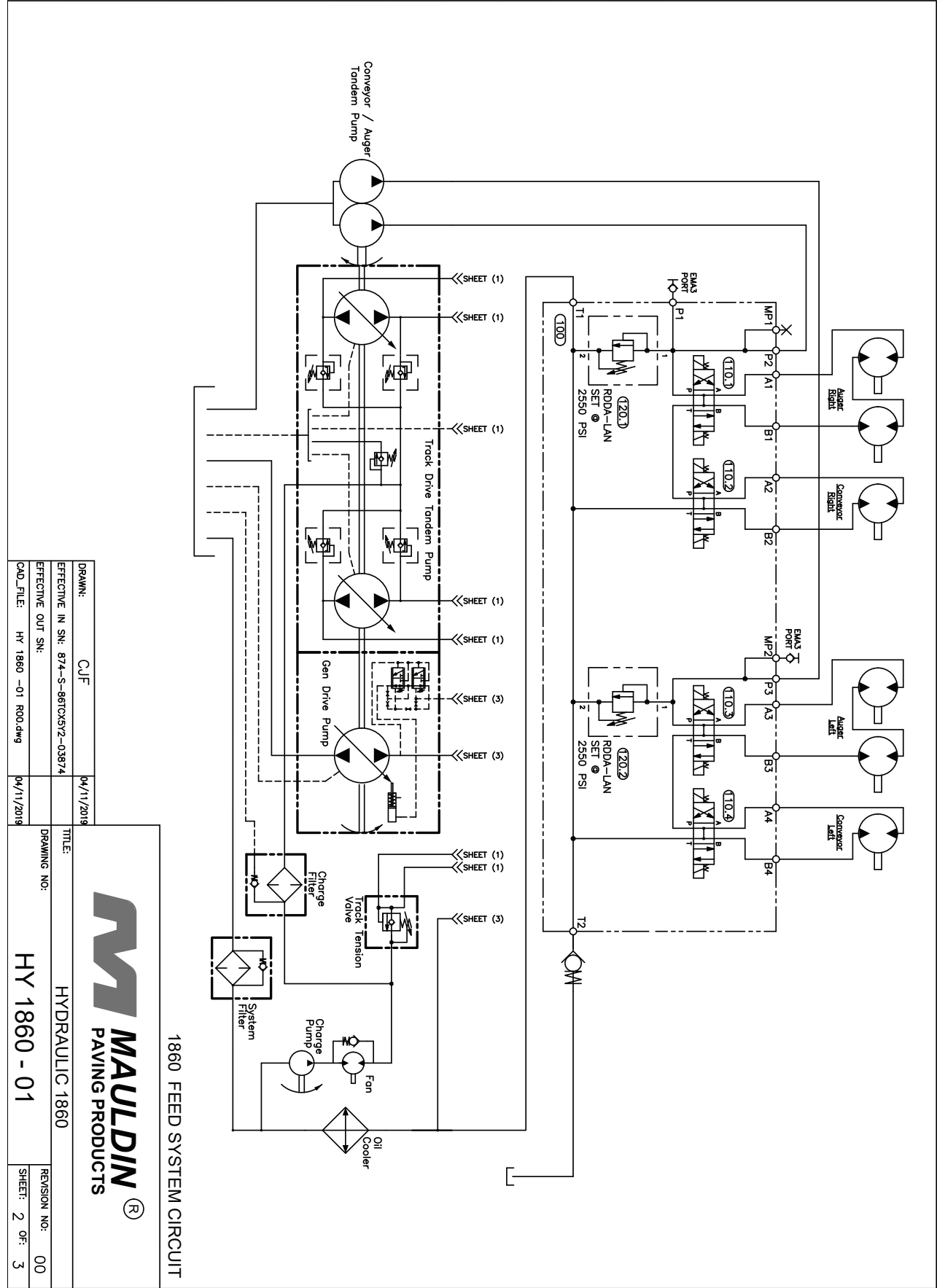
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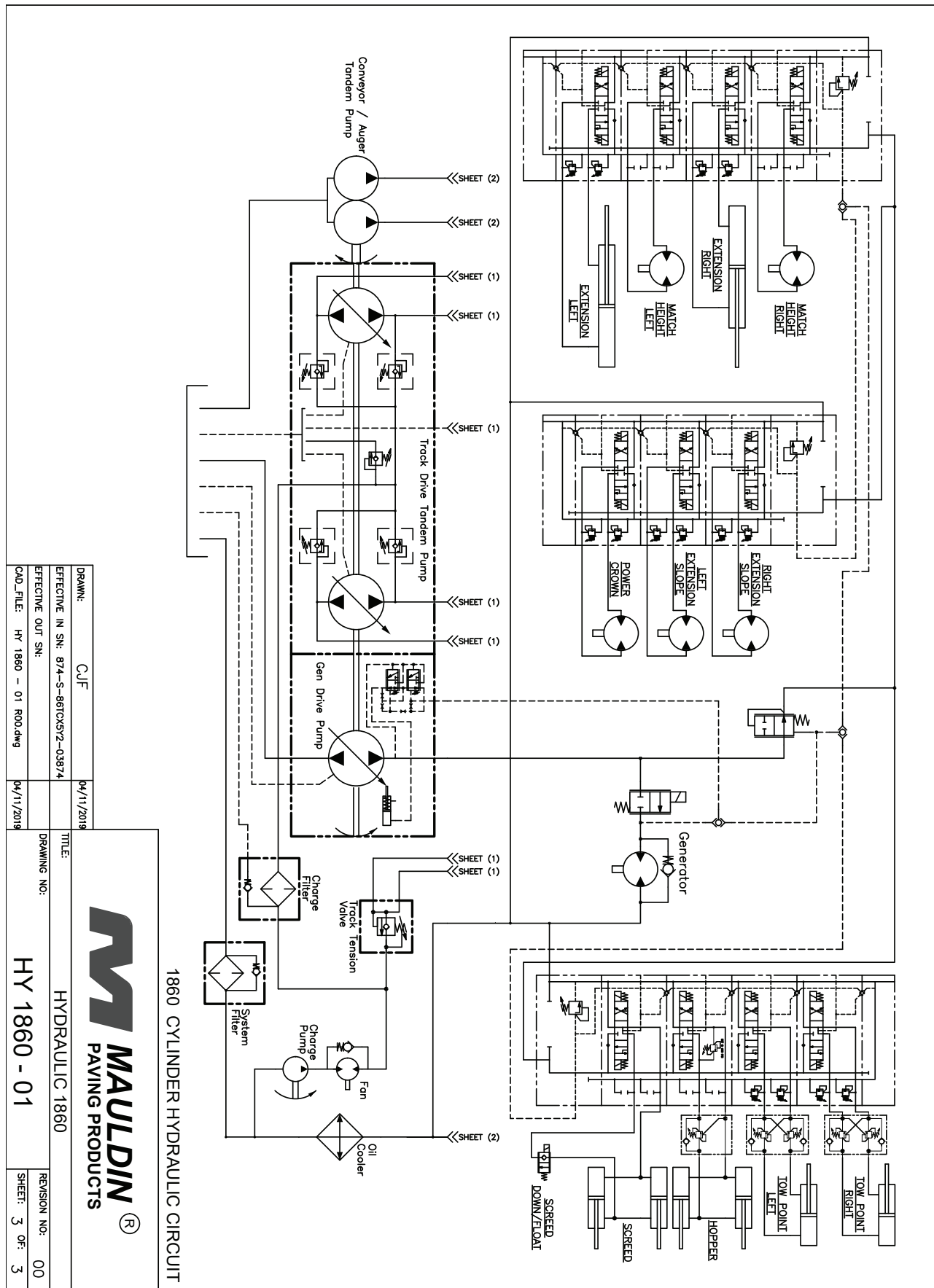
	
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TITLE: Tier IV Cummins QSB 3.8 Paver	
DRAWING NO: EL 1860 - 01	REVISION NO: PP6 SHEET: 9 OF: 10





Hydraulic Schematics





Generator Diagnostics

Generator System Diagnostics 16 KW

1. At 3600 RPM of the generator, voltage is 240VAC
2. At 3600 RPM of the generator, HZ is 60
3. Each extension zone will draw 9 amps at 240v without heated end gates, 10.5 with heated end gates
4. Each main screed zone has 2 elements and will draw 18 amps each at 240v

This generator is controlled by the node (mini computer) behind the key switch. When the temperature controller (touch pad) on the screed calls for the generator to start, the node energizes the hydraulic proportional valve and gives the motor oil flow thus rotates the generator shaft. This signal from the node is an initial signal for 10-15 seconds until it gets a feedback signal verifying that it is spinning. If there is no feedback, the node will de-energize the valve and shut down the generator. If the node sees the feedback, it will modulate the oil going to the generator motor to maintain a speed of 3600 RPM and 60 HZ.

After the generator shuts down, it will stay off until tried again by turning off and back on. The feedback circuit starts with a voltage from the generator output. There is a small transformer connected to the terminals of the main circuit breaker mounted on the end of the generator case. This transformer steps the voltage down from 240v to about 10vac to safely be monitored by the node. If the transformer (which looks like a small donut) is bad, there will be no 10vac to report to the node, therefore the node thinks something is wrong and it shuts down the generator.

This feedback voltage needs to be confirmed. Attach a AC volt meter to the blue and green wires which come from the donut to the 4 pin Deutsch connector while the generator is turning. Double check that the generator is developing voltage at the main circuit breaker. Should read 9-10vac. During this initial signal, the output of the generator is not quite 240V. It starts out at some lower voltage and then ramps up to 240V once the feedback is established.

The transformer can be checked offline. Remove violet wire and the yellow wire from the main circuit breaker and check ohms using a multimeter. This is the primary and it should measure 2353 ohms. Unplug the 4 pin Deutsch connector and measure the resistance of the green and blue wires. This is the secondary and it should measure about 28 ohms.

Make sure 4 pin Deutsch connector is making a good connection.



CALDER BROTHERS CORPORATION (LIMITED) PRODUCT WARRANTY

Calder Brothers Corporation warrants that the Paver, Roller, Tank or Grader under this program will be free from defects in material and workmanship for a period of (12) twelve months from the date of installation. Written notice of any claimed defect must be given to Calder Brothers Corporation within the warranty period and within (30) thirty days after such defect is discovered. Liability under this warranty is limited to replacing or repairing at Calder Brothers Corporation election, any part or parts deemed defective after examination by Calder Brothers Corporation or an Authorized Service Representative via prepaid transportation for which is found to be defective, will be repaired or replaced and returned to the customer via prepaid surface transportation within the United States. Should any part be found not defective, inspection and handling may be charged to the customer by Mauldin or an Authorized Service Representative.

EXCLUSIONS:

This warranty does not apply to routine wearable parts of the Mauldin machine such as seals, points, plugs, hoses or similar items. This warranty does not extend to any machine or part replaced or repaired under this warranty. This warranty does not cover any repair or replacement labor or any part of parts found defective after examination by Mauldin or an Authorized Service Representative. This warranty does not apply to defects caused by casualty or unreasonable use, including faulty repairs by others and failure to provide reasonable and necessary maintenance.

THIS WARRANTY SET FORTH HEREIN IS IN LIEU OF AND EXCLUDES ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, ARISING BY OPERATION OF LAW OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND CUSTOMER WAIVES ANY OBLIGATION OF LIABILITY OF MAULDIN ARISING IN TORT OR STRICT LIABILITY IN TORT, OR FOR LOSS OR USE, REVENUE OR PROFIT WITH RESPECT TO MAULDIN MACHINE AND/OR PARTS FOR ANY LIABILITY OF CUSTOMER TO ANY THIRD PARTY, OR FOR OTHER DIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

I have read and fully understand the warranty policy above.

Customer
CALDER BROTHERS CORPORATION

Witness