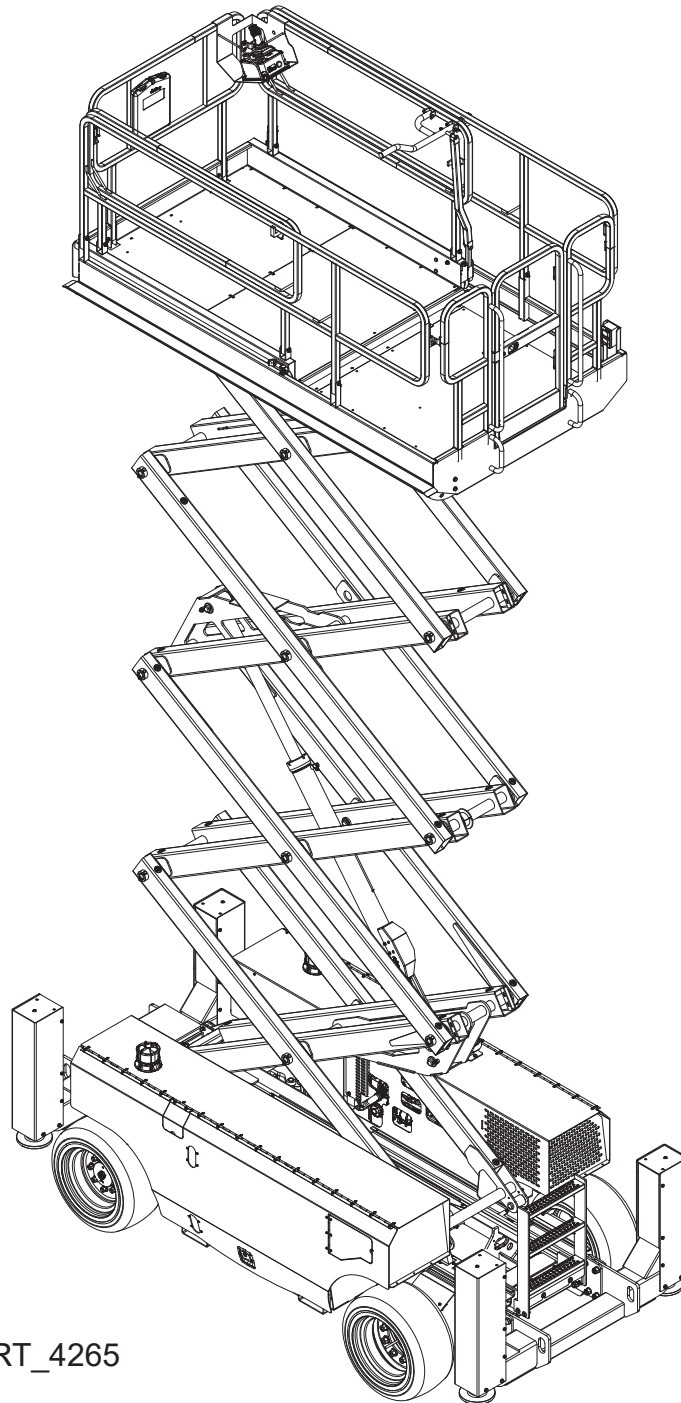




Service & Parts Manual

XX69ERT Series



ART_4265

This manual applies to machines **ANSI A92.20-2020** and **CSA B354.6-2019**.
3369ERT Serial Number Range 13300200 - Up
4069ERT Serial Number Range 13700200 - Up

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MEC Aerial Work Platforms

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Service Introduction

This Service section is designed to provide you, the customer, with the instructions needed to properly maintain the MEC self-propelled aerial work platform. When used in conjunction with the illustrated Parts section in this manual and the Operator's Manual (provided separately), this manual will assist you in making necessary adjustments and repairs, and identifying and ordering the correct replacement parts.

All parts represented here are manufactured and supplied in accordance with MEC quality standards. We recommend that you use genuine MEC parts to ensure proper operation and reliable performance.

To obtain maximum benefits from your MEC Aerial Work Platforms, always follow the proper operating and maintenance procedures. Only trained authorized personnel should be allowed to operate or service this machine. Service personnel should read and study the Operator's, and the Service and Parts Manuals in order to gain a thorough understanding of the unit prior to making any repairs.

MEC Operator Policy

Note: *The best method to protect yourself and others from injury or death is to use common sense. If you are unsure of any operation, **don't start** until you are satisfied that it is safe to proceed and have discussed the situation with your supervisor.*

Service personnel and machine operators must understand and comply with all warnings and instructional decals on the body of the machine, at the ground controls, and platform control console.



MODIFICATIONS OF THIS MACHINE FROM THE ORIGINAL DESIGN AND SPECIFICATIONS WITHOUT WRITTEN PERMISSION FROM MEC ARE STRICTLY FORBIDDEN. A MODIFICATION MAY COMPROMISE THE SAFETY OF THE MACHINE, SUBJECTING OPERATOR(S) TO SERIOUS INJURY OR DEATH.

MEC's policies and procedures demonstrate our commitment to Quality and our relentless ongoing efforts towards Continuous Improvement, due to which product specifications are subject to change without notice.

Any procedures not found within this manual must be evaluated by the individual to assure oneself that they are "proper and safe."

Your MEC Aerial Work Platform has been designed, built, and tested to provide many years of safe, dependable service. Only trained, authorized personnel should be allowed to operate or service the machine.

MEC, as manufacturer, has no direct control over machine application and operation. Proper safety practices are the responsibility of the user and all operating personnel.

If there is a question on application and/or operation, contact MEC Aerial Work Platforms:



MEC Aerial Work Platforms

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Safety Symbols & General Safety Tips

MEC manuals and decals use symbols, colors and signal words to help you recognize important safety, operation and maintenance information.



RED and the word DANGER – Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



ORANGE and the word WARNING – Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



YELLOW with alert symbol and the word CAUTION – Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



YELLOW without alert symbol and the word CAUTION – Indicates a potentially hazardous situation which, if not avoided, may result in property damage.



GREEN and the word NOTICE – Indicates operation or maintenance information.

Regular inspection and constant maintenance is the key to efficient economical operation of your aerial work platform. It will help to assure that your equipment will perform satisfactorily with a minimum of service and repair.

The actual operating environment of the machine governs the inspection schedule. Correct lubrication is an essential part of the preventative maintenance to minimize wear on working parts and ensure against premature failure. By maintaining correct lubrication, the possibility of mechanical failure and resulting downtime is reduced to a minimum.

- Never leave hydraulic components or hoses open. They must be protected from contamination (including rain) at all times.
- Never open a hydraulic system when there are contaminants in the air.
- Always clean the surrounding area before opening hydraulic systems.
- Use only recommended lubricants. Improper lubricants or incompatible lubricants may be as harmful as no lubrication.
- Watch for makeshift “fixes” which can jeopardize safety as well as lead to more costly repair.

3369ERT Specifications

Height, Working Maximum	38 ft 10 in	12 m
Height, Platform Maximum	32 ft 10 in	10 m
Height, Stowed Maximum Rails Up	8 ft 6 in	2.59 m
Height, Stowed Maximum Rails Folded	5 ft 11 in	1.82 m
Width, Standard Tires	5 ft 9 in	1.76 m
Length, Platform Retracted Models Without Outriggers	10 ft 6 in	3.19 m
Length, Platform Retracted Models With Outriggers	12 ft 7 in	3.84 m
Length, Platform Extended Models Without Outriggers	14 ft 9 in	4.51 m
Length, Platform Extended Models With Outriggers	15 ft 9 in	4.81 m
Platform Dimensions Platform Length × Width	9 ft 5 in × 4 ft 11 in	2.88 × 1.52 m
Platform Extension Length	4 ft 8 in	1.43 m
Maximum Load Capacity	1,000 lb	454 kg
Maximum Wind Speed	28 mph	12.5 m/s
Wheelbase	7 ft 6 in	2.29 m
Turning Radius (Outside)	15 ft 1 in	4.60 m
Turning Radius (Inside)	6 ft 11 in	2.11 m
Ground Clearance	9 ½ in	24 cm
Weight	See Serial Label (Machine weights vary with option configurations)	
Controls	Proportional	
AC Outlet In Platform	Standard	
Maximum Hydraulic Pressure (Functions)	3,500 psi	240 bar
Tire Size - Standard Tires	26 × 12-16.5	
Airborne Noise Emissions	<80 dB Maximum sound level at normal operating workstations (A-weighted)	
Gradeability	40%	
Maximum Working Slope	X-1.5°, Y-3°	
Drive Speeds		
Stowed, Maximum	3.2 mph	5.0 km/h
Platform Raised, Maximum	0.3 mph	0.45 km/h
Floor Loading Information		
Tire Load, Maximum	4,254 lb	1,930 kg
Outrigger Load, Maximum	4,254 lb	1,930 kg
Tire Contact Pressure	137 psi	945.5 kPa
Outrigger Contact Pressure	87 psi	602 kPa
Occupied Floor Pressure	178 psf	8.5 kPa

Note: Floor loading information is approximate and does not incorporate different option configurations. It should be used only with adequate safety factors.

4069ERT Specifications

Height, Working Maximum	46 ft 4 in	14.3 m
Height, Platform Maximum	40 ft 4 in	12.3 m
Height, Stowed Maximum Rails Up	8 ft 11 in	2.74 m
Height, Stowed Maximum Rails Folded	6 ft 5 in	1.97 m
Width, Standard Tires	5 ft 9 in	1.76 m
Length, Platform Retracted Models Without Outriggers	10 ft 6 in	3.19 m
Length, Platform Retracted Models With Outriggers	12 ft 7 in	3.84 m
Length, Platform Extended Models Without Outriggers	14 ft 9 in	4.51 m
Length, Platform Extended Models With Outriggers	15 ft 9 in	4.81 m
Platform Dimensions Platform Length × Width	9 ft 5 in × 4 ft 11 in	2.88 × 1.52 m
Platform Extension Length	4 ft 8 in	1.43 m
Maximum Load Capacity	800 lb	363 kg
Maximum Wind Speed	28 mph	12.5 m/s
Wheelbase	7 ft 6 in	2.29 m
Turning Radius (Outside)	15 ft 1 in	4.60 m
Turning Radius (Inside)	6 ft 11 in	2.11 m
Ground Clearance	9 ½ in	24 cm
Weight	See Serial Label (Machine weights vary with option configurations)	
Controls	Proportional	
AC Outlet In Platform	Standard	
Maximum Hydraulic Pressure (Functions)	3,500 psi	240 bar
Tire Size - Standard Tires	26 × 12-16.5	
Airborne Noise Emissions	<80 dB Maximum sound level at normal operating workstations (A-weighted)	
Gradeability	40%	
Maximum Working Slope	X-1.5°, Y-3°	
Drive Speeds		
Stowed, Maximum	3.2 mph	5.0 km/h
Platform Raised, Maximum	0.3 mph	0.45 km/h
Floor Loading Information		
Tire Load, Maximum	4,872 lb	2,210 kg
Outrigger Load, Maximum	4,872 lb	2,210 kg
Tire Contact Pressure	154 psi	1,065 kPa
Outrigger Contact Pressure	98 psi	678 kPa
Occupied Floor Pressure	198 psf	9.5 kPa

Note: Floor loading information is approximate and does not incorporate different option configurations. It should be used only with adequate safety factors.

Bolt Torque Specification - American Standard

Fasteners

Use the following values to apply torque unless a specific torque value is called out for the part being used.

American Standard Cap Screws								
SAE Grade	5				8			
Cap Screw Size (inches)								
	Torque				Torque			
	Ft.	Lbs	Nm		Ft.	Lbs	Nm	
	Min	Max	Min	Max	Min	Max	Min	Max
1/4 - 20	6.25	7.25	8.5	10	8.25	9.5	11	13
1/4 - 28	8	9	11	12	10.5	12	14	16
5/16 - 18	14	15	19	20	18.5	20	25	27
5/16 - 24	17.5	19	12	26	23	25	31	34
3/8 - 16	26	28	35	38	35	37	47.5	50
3/8 - 24	31	34	42	46	41	45	55.5	61
7/16 - 14	41	45	55.5	61	55	60	74.5	81
7/16 - 20	51	55	69	74.5	68	75	92	102
1/2 - 13	65	72	88	97.5	86	96	116	130
1/2 - 20	76	84	103	114	102	112	138	152
9/16 - 12	95	105	129	142	127	140	172	190
9/16 - 18	111	123	150	167	148	164	200	222
5/8 - 11	126	139	171	188	168	185	228	251
5/8 - 18	152	168	206	228	203	224	275	304
3/4 - 10	238	262	322	255	318	350	431	474
3/4 - 16	274	302	371	409	365	402	495	544
7/8 - 9	350	386	474	523	466	515	631	698
7/8 - 14	407	448	551	607	543	597	736	809
1 - 8	537	592	728	802	716	790	970	1070
1 - 14	670	740	908	1003	894	987	1211	1137

Torque values apply to fasteners as received from the supplier, dry or when lubricated with normal engine oil.

If special graphite grease, moly-disulphide grease, or other extreme pressure lubricants are used, these torque values do not apply.

Bolt Torque Specification - Metric Standard

Fasteners

Use the following values to apply torque unless a specific torque value is called out for the part being used

Metric Cap Screws								
Metric Grade	8.8				10.9			
Cap Screw Size (Millimeters)	 				 			
	Torque				Torque			
	Ft.	Lbs	Nm		Ft.	Lbs	Nm	
	Min	Max	Min	Max	Min	Max	Min	Max
M6 × 1.00	6	8	8	11	9	11	12	15
M8 × 1.25	16	20	21.5	27	23	27	31	36.5
M10 × 1.50	29	35	39	47	42	52	57	70
M12 × 1.75	52	62	70	84	75	91	102	123
M14 × 2.00	85	103	115	139	120	146	163	198
M16 × 2.50	130	158	176	214	176	216	238	293
M18 × 2.50	172	210	233	284	240	294	325	398
M20 × 2.50	247	301	335	408	343	426	465	577
M22 × 2.50	332	404	450	547	472	576	639	780
M24 × 3.00	423	517	573	700	599	732	812	992
M27 × 3.00	637	779	863	1055	898	1098	1217	1488
M30 × 3.00	872	1066	1181	1444	1224	1496	1658	2027

Torque values apply to fasteners as received from the supplier, dry or when lubricated with normal engine oil.

If special graphite grease, moly-disulphide grease, or other extreme pressure lubricants are used, these torque values do not apply.

Hydraulic Components Torque Table

Note: Always lubricate threads with clean hydraulic fluid prior to installation.

Use the following values to torque hydraulic components when a specific value is not available. Always check for torque values in the following places before relying on the Hydraulic Components Torque Table.

- Parts drawings and service instructions in this manual.
- Packaging and instruction sheets provided with new parts.
- Instruction manuals provided by the manufacturer of the component being serviced.

Type: SAE Port Series	Cartridge Poppet		Fittings		Hoses	
	Ft. lbs	Nm	Ft. lbs	Nm	In. lbs	Nm
#4	N/A	N/A	N/A	N/A	135 - 145	15 - 16
#6	N/A	N/A	10 - 20	14 - 27	215 - 245	24 - 28
#8	25 - 30	31 - 41	25 - 30	34 - 41	430 - 470	49 - 53
#10	35 - 40	47 - 54	35 - 40	47 - 54	680 - 750	77 - 85
#12	85 - 90	115 - 122	85 - 90	115 - 122	950 - 1050	107 - 119
#16	130 - 140	176 - 190	130 - 140	176 - 190	1300 - 1368	147 - 155

XX69ERT Fault Codes

Fault Code	Display	Description	Solution
01	Internal ECU Fault	Main ECU system fault	Replace ECU.
02	Platform ECU Fault	ECU/Platform communication fault	Check communications cable connections and other wiring. If that does not resolve the problem, try replacing the PCU or ECU.
03	MC PEDAL WIRE KO	Motor controller analog signals Fault	Check input analog signal.
04	MC COIL SHOR. MC-EB	Motor controller brake contactor end Fault	Check contactor and brake coil.
05	MC LOGIC FAILURE #3	Motor controller logic unit Fault	Replace motor controller.
06	MC CAPACITOR CHARGE	Motor controller capacitor charge Fault	Pre-charge resistance fault. Replace motor controller.
07	MC VMN LOW	Motor controller Power unit Fault	Check motor wiring, power unit of motor controller short circuit.
08	Floating Coil Left Fault	Left Floating Coil Fault	Check the connections to the coil's terminals and make sure they are tight. If so, check the coil itself to see if it is open or shorted.
09	Floating Coil Right Fault	Right Floating Coil Fault	Check the connections to the coil's terminals and make sure they are tight. If so, check the coil itself to see if it is open or shorted.
10	MC VACC OUT RANGE	Motor controller Analog signals Error	Analog value is out of the range, calibrate again.
11	MC STBY I HIGH	Motor controller Electrical current sensor Fault	Replace motor controller.
12	MC CONTACTOR OPEN	Motor controller Contactor Drive Fault	Check if contactor's contact point has been closed and coil's connection is abnormal.
13	MC SLIP_PROFILE	Motor controller SLIP setup Error	Parameter setting wrong at 'Hardware Setting' option.
14	Angle Sensor Fault	Angle Sensor Fault	Restart system, check the wiring, reset sensor, replace sensor.
15	Pressure Sensor Fault	Pressure Sensor Fault	Restart system, check the wiring, reset sensor, replace sensor.
16	MC AUX DRIV.SHRT.	Motor controller Brake Drive Fault	Motor brake coil has short circuit, motor controller short circuit.
17	MC LOGIC FAILURE #1	Motor controller LOGIC unit 1 Fault	Voltage of A10 pin is abnormal, check battery voltage.
18	MC LOGIC FAILURE #2	Motor controller LOGIC unit 2 Fault	Replace motor controller.
19	MC POS. EB. SHORTED	Motor controller Brake Drive Fault	Motor brake coil has short circuit, motor controller short circuit
20	Chassis Start Sw Fault	Chassis Start Switch ON at power-up	Self-check fault, don't touch other button at power-on.
21	Chassis Choke Sw Fault	Chassis Choke Switch ON at power-up	Self-check fault, don't touch other button at power-on.
22	Chassis Up Sw Fault	Chassis Up Switch ON at power-up	Self-check fault, don't touch other button at power-on.

23	Chassis Lift Sw Fault	Chassis Lift Switch ON at power-up	Self-check fault, don't touch other button at power-on.
24	Chassis Down Sw Fault	Chassis Down Switch ON at power-up	Self-check fault, don't touch other button at power-on.
25	Left Turn Switch Fault	Platform Left Turn Switch ON at power-up	Self-check fault, don't touch other button at power-on.
26	Right Turn Switch Fault	Platform Right Turn Switch ON at power-up	Self-check fault, don't touch other button at power-on.
27	Drive Enable Sw Flt	Platform Drive Enable Switch ON at power-up	Self-check fault, don't touch other button at power-on.
28	Off Neutral Drive Joystick	Platform Joystick not in neutral ON at power-up	Self-Check fault, don't touch joystick or other button at power-on.
31	Platform Choke Sw Fault	Platform Choke Switch ON at power-up	Self-check fault, don't touch other button at power-on.
32	Platform Start Sw Fault	Platform Start Switch ON at power-up	Self-check fault, don't touch other button at power-on.
33	Left Front Outrig Sw Flt	Platform Left Front Outrigger Enable Switch ON at power-up	Self-check fault, don't touch other button at power-on.
34	Right Front Outrig Sw Flt	Platform Right Front Outrigger Enable Switch ON at power-up	Self-check fault, don't touch other button at power-on.
35	Left Rear Outrig Sw Flt	Platform Left Rear Outrigger Enable Switch ON at power-up	Self-check fault, don't touch other button at power-on.
36	Right Rear OutrigSw Flt	Platform Right Rear Outrigger Enable Switch ON at power-up	Self-check fault, don't touch other button at power-on.
37	Auto Level Switch Fault	Platform Outrigger Auto-Level Enable Switch ON at power-up	Self-check fault, don't touch other button at power-on.
38	MC FORW + BACK	Input signal Fault	Receive forward and backward signal at the same time
39	MC INCORRECT START	Input signal Fault	Check motor controller.
40	MC VACC NOT OK	Analog signals Error	Analog value is out of the range, calibrate again.
41	MC CONTACTOR DRIVER	Contactor Drive Fault	Main contactor short circuit.
42	MC TH. PROTECTION	Motor controller temperature Fault	Controller temperature exceed 85 degrees.
43	Float Limit Switch Fault	Float limit switch fault	Check float limit switches (work at the same time), Check wires.
44	MC BATTERY LOW	Motor controller Voltage of Battery is Low	Check battery voltage, charger or replace battery.
45	MC EEPROM KO	Motor controller Memorizer Fault	Load software again or replace motor controller.
46	MC MOTOR TEMPERAT.	Motor temperature Fault	Motor temperature exceed 150 degrees.
47	MC WRONG BATTERY	Voltage setup Error	Voltage setting is wrong, battery voltage is abnormal (beyond $\pm 20\%$).

48	MC THERMIC SENS. KO	Motor controller temperature Fault	Temperature sensor is out of the range.
49	MC SMART DRIVER KO	Motor controller Smart driver Fault	Check parameter, check brake coil, check the pin 2 is directly connected to the negative pole, then disconnect the brake.
50	MC NO CAN MSG.	Motor controller Inner CAN bus lose	CAN bus lose, replace motor controller.
51	MC AUX DRIV.OPEN	Motor controller Brake Drive Fault	Brake port is disconnected.
52	MC ANALOG INPUT	Motor controller Logic unit Fault	Check input signal, or replace motor controller.
53	MC WATCHDOG	Motor controller Watchdog Fault	Replace motor controller.
54	Up Coil Fault	Lift up coil fault	Check wiring, replace coil.
55	Down Coil Fault	Lift down coil fault	Check wiring, replace coil.
56	Right Turn Coil Fault	Steer right coil fault	Check wiring, replace coil.
57	Left Turn Coil Fault	Steer left coil fault	Check wiring, replace coil.
58	MC WATCHDOG #2	Motor controller Watchdog Fault	Replace motor controller.
59	MC EMERGENCY	Motor controller A3 port abnormality	Check pin 3 signal.
60	MC POWER MOS SHORT	Motor controller Power unit short	Replace motor controller.
61	MC CONTACTOR CLOSED	Contactor drive Fault	Contactor's contact point has been closed, replace contactor
62	MC ENCODER ERROR	Motor Encoder Error	Motor Encoder signal abnormal, replace encoder
63	MC TILLER OPEN	Input signal Fault	Check input signal, or replace motor controller.
64	MC DEAD MAN ABSENT	Motor controller Deadman SW absent	Replace motor controller.
65	MC CURRENT SENS. KO	Motor controller Current sensor Fault	Replace motor controller.
66	MC PUMP VACC NOT OK	Motor controller Lift analog signals Error	Analog value is out of the range, calibrate again.
67	MC CURRENT GAIN	Motor controller Current sensor Fault	Replace motor controller.
68	MC LIFT + LOWER	Motor controller Input signal Fault	Check lift up and down input signal.
69	MC PUMP INC START	Motor controller received lift up analog value, without Deadman signal.	Motor controller received lift up analog value, without Deadman signal.
70	MC PUMP VMN LOW	Motor controller Pump Power unit Fault	Pump motor has open or loose contacts, motor controller defective.
71	MC PUMP VMN HIGH	Motor controller Pump Power unit Fault	Pump motor has open or loose contacts, motor controller defective.
72	MC PUMP I=0 EVER	Motor controller Pump sensor current =0	Pump unit current coil fault.
73	C WAITING FOR NODE	Motor controller Waiting for node	Check wires

74	MC PUMP I NO ZERO	Motor controller Pump sensor current is not 0	Replace motor controller.
75	MC COIL INTERRUPTED	Motor controller coil interrupted	Pump analog voltage exceeds actual voltage by 0.4V.
76	MC FLASH CHECKSUM	Motor controller Memorizer Fault	Replace motor controller, update software again.
77	MC KEY OFF SHORTED	Motor controller A10 Voltage Low	There are other loads on the circuit, check wires.
78	MC WRONG RAM	Memorizer Fault	Replace motor controller.
79	MC SENS MOT TEMP KO	Motor controller temperature Fault	Motor temperature sensor fault, replace sensor.
80	MC PHASE KO	Motor lose phase	Check walking motor wiring (include U, V, W phases)
81	Left Front Otrg Coil Flt	Left Front Outrigger Coil Fault	Check wiring, replace coil.
82	Left Rear Otrg Coil Flt	Left Rear Outrigger Coil Fault	Check wiring, replace coil.
83	Right Front Otrg Coil Flt	Right Front Outrigger Coil Fault	Check wiring, replace coil.
84	Right Rear Otrg Coil Flt	Right Rear Outrigger Coil Fault	Check wiring, replace coil.
85	Outrigger Ext Coil Flt	Outrigger Extend Coil Fault	Check wiring, replace coil.
86	Outrigger Ret Coil Flt	Outrigger Retract Coil Fault	Check wiring, replace coil.
87	MC PUMP VMN NOT OK	Motor controller Power unit Fault	Pump power unit fault.
88	MC AUX BATT. SHORT.	Motor controller Brake contactor Fault	Replace motor controller.
89	MC WRONG ZERO	Motor Voltage diagnose Fault	Replace motor controller.
90	MC WRONG CONFIG	Motor controller A18/A21 signal Fault	Check pin 18 and 21.
91	MC INPUT MISMATCH	Motor controller Input signal mismatch	Check input signal.
92	MC MOTOR STALL	Motor controller encoder defective or has open circuit, motor plugging turns beyond 16s.	Replace encoder.
93	MC SPARE FAULT	Motor controller other faults	Replace motor controller.
96	MC DRIVER SHORTED	Motor controller contactor drive fault	Main contractor coil fault, has open or short circuit.
97	MC VMN HIGH	Motor controller power unit fault	Loose contact of motor wire, motor controller short circuit.
98	Platform Overload	Platform Overload Fault	Remove the excess load immediately.
LL	LL Tilt	Machine Tilted Beyond Safe Limits Fault	If the machine is tilted, find a way to make it level. If the machine is level, check the wiring to the tilt sensor and then the sensor itself.

Maintenance

Observe and Obey:

- Only routine maintenance items specified in this manual shall be performed by the operator.
- Scheduled maintenance inspections shall be completed by qualified service technicians, according to the manufacturer's specifications and the requirements specified in this manual.

Pre-Delivery Preparation Report

The Pre-Delivery Preparation Report contains checklists for each type of scheduled inspection.

Make copies of the Pre-Delivery Preparation Report to use for each inspection. Store completed forms as required.

Maintenance Schedule

There is scheduled maintenance that must be performed according to a schedule: daily, quarterly, semi-annually, annually, and two year. The Maintenance Inspection Report is divided between quarterly and annual inspection.

Maintenance Inspection Report

The Maintenance Inspection Report contains checklists for each type of scheduled inspection.

Make copies of the Maintenance Inspection Report to use for each inspection. Maintain completed forms for a minimum of 4 years or in compliance with your employer, jobsite and governmental regulations and requirements.

Pre-Delivery Preparation Report

Fundamentals

It is the responsibility of the dealer to perform the Pre-Delivery Preparation.

The Pre-Delivery Preparation is performed prior to each delivery. The inspection is designed to discover if anything is apparently wrong with a machine before it is put into service.

A damaged or modified machine must never be used. If damage or any variation from factory delivered condition is discovered, the machine must be tagged and removed from service.

Repairs to the machine may only be made by a qualified service technician, according to the manufacturer's specifications.

Scheduled maintenance inspections shall be performed by qualified service technicians, according to the manufacturer's specifications and the requirements listed in this manual.

Instructions

The Pre-Delivery Preparation consists of completing the Pre-Operation Inspection, the Maintenance items and the Function Tests.

Use this form to record the results. Place a check in the appropriate box after each part is completed.

If any inspection receives an "N", remove the machine from service, repair and re-inspect it. After repair, place a check in the "R" box.

Instructions

- Make copies of this report to use for each inspection.
- Select the appropriate checklist(s) for the type of inspection to be performed.
- Place a check in the appropriate box after each inspection procedure is completed.
- Use the step-by-step procedures in this section to learn how to perform these inspections.
- If any inspection receives an "N", tag and remove the machine from service, repair and re-inspect it. After repair, place a check in the "R" box.

Legend
Y = Yes, Completed
N = No, Unable To Complete
R = Repaired

Pre-Delivery Preparation	Y	N	R
Pre-Operation Inspection completed			
Maintenance items completed			
Function tests completed			

Maintenance Inspection Report

XX69RT & XX69ERT Series Scissor Lifts

Fleet Equipment Number _____ Date _____

Inspector Name _____ Inspector Co. _____

Model Number _____ Address _____

Serial Number _____

Hour Meter _____ Signature _____

Machine Owner & address _____

Maintain all service records in accordance with ANSI A92.24-2019

*If an inspection receives an "N", remove from service. Once repaired, place an R in the box.

*Refer to the proper service manual for specific information, settings and torque specifications.

Key Y = Yes, Acceptable N = No, Remove from Service R = Repaired 0 = Not Applicable

☐ **QUARTERLY** - Inspect only those marked "Q"

☐ **ANNUAL** - Inspect all items

	Q/A	Y/N/O	R
DECALS:			
Legible - undamaged/readable	Q		
Capacity decal correct for model	Q		
RAILS:			
Not damaged, all in place	Q		
All rail fasteners secure	Q		
Entry gate/s secure, closes properly	Q		
Manual box in good condition	Q		
Operators Manual in manual box	Q		
PLATFORM EXTENSION: (if equipped)			
Rolls in and out freely	Q		
Lock holds deck in place	Q		
Release pedal moves freely (lube)	Q		
ELEVATING ASSEMBLY:			
Scissor Slide Blocks, lubed	Q		
Maintenance Stand, good condition	Q		
Beam structures: Straight, no cracks	A		
Welds: secure, no cracks	A		
Retaining Rings or Pins	A		
Cylinder Pins, secure	A		
ELECTRICAL:			
GFCI operates correctly	Q		
Wire harnesses good condition, secure	A		
Comm cable no damage, secure	A		
BASE:			
Fasteners tight	Q		
Cover panels secure	Q		
Welds	A		
Drive Motors secure, no leaks	A		

	Q/A	Y/N/O	R
WHEELS:			
Tire damage	Q		
Lug nuts (Wheel mounting) torqued correctly	Q		
King Pins lubed (if equipped)	A		
COMPONENT AREA:			
Hydraulic - no leaks, Clean oil, correct level	Q		
Hoses not damaged - Fittings tight	Q		
Valve manifold/s secure, no leaks	Q		
Power unit secure, no leaks (electric powered)	Q		
Batteries properly filled and cables clean	Q		
Emergency stop, cuts power/operation	Q		
Replace Hydraulic return Filter	A		
Clean or replace tank breather filter	A		
OPERATIONAL INSPECTION:			
All functions, operate smooth and quiet	Q		
All functions, speeds correct	Q		
Upper control box, operates correctly	Q		
Emergency Down, operates correctly	Q		
Height monitoring system operates correctly	Q		
Pothole switch test (2659ERT & 3259ERT only)	Q		
Main Pressure relief set correctly	A		
Steering pressure relief, set correctly	A		
Lift pressure relief, set correctly	A		
ENGINE (if equipped):			
Engine serviced per recommendations'	Q		
Oil and Coolant Levels correct	Q		
Fuel lines secure, no leaks	Q		
All shields, guards in place, secure	Q		
Mounting secure	Q		

Daily Checklist

The following maintenance should be done every day or 8 hours of operation.

A-1 Inspect the Manuals and Decals

Maintaining the operator's manual in good condition is essential to safe machine operation. Manuals are included with each machine and should be stored in the container provided in the platform. An illegible or missing manual will not provide safety and operational information necessary for a safe operating condition.

In addition, maintaining all of the safety and instructional decals in good condition is mandatory for safe machine operation. Decals alert operators and personnel to the many possible hazards associated with using this machine. They also provide users with operation and maintenance information. An illegible decal will fail to alert personnel of a procedure or hazard and could result in unsafe operating conditions.

1. Check to make sure that the operator's manual is present and complete in the storage container on the platform.
2. Examine the pages of manual to be sure that they are legible and in good condition.
 - **Result:** The operator's manual is appropriate for the machine and the manual are legible and in good condition.
 - **Result:** The operator's manual is not appropriate for the machine or the manual is not in good condition or is illegible. Remove the machine from service until the manual is replaced.
3. Open the operator's manual to the decals inspection section. Carefully and thoroughly inspect all decals on the machine for legibility and damage.
 - **Result:** The machine is equipped with all required decals, and all decals are legible and in good condition.
 - **Result:** The machine is not equipped with all required decals, or one or more decals are illegible or in poor condition. Remove the machine from service until the decals are replaced.
4. Always return the manual to the storage container after use.

A-2 Perform Pre-Operation Inspection

Completing a Pre-Operation Inspection is essential to safe machine operation. The Pre-Operation Inspection is a visual inspection performed by the operator prior to each work shift. The inspection is designed to discover if anything is apparently wrong with a machine before the operator performs the function tests. The Pre-Operation Inspection also serves to determine if routine maintenance procedures are required.

Complete information to perform this procedure is available in the appropriate operator's manual. Refer to the Operator's Manual on your machine.

A-3 Check the Battery

- New parts will be required to perform this procedure.

Proper battery condition is essential to good machine performance and operational safety. Improper fluid levels or damaged cables and connections can result in component damage and hazardous conditions.



Electrocution hazard. Contact with hot or live circuits may result in death or serious injury. Remove all rings, watches and other jewelry.



Bodily injury hazard. Battery contain acid. Avoid spilling or contacting battery acid. Neutralize battery acid spills with baking soda and water.

1. Put on protective clothing and eye wear.
2. Be sure that the battery cable connections are tight and free of corrosion.
3. Be sure that the battery hold-down bars are secure.
4. Remove the battery vent caps.
5. Check the battery acid level. If needed, replenish with distilled water to the bottom of the battery fill tube. Do not overfill.
6. Install the vent caps.

A-4 Test the Oscillate System

The oscillate system is designed so that all four tires maintain firm contact with the ground on unlevel terrain, improving traction and machine stability.

Proper axle oscillation is essential to safe machine operation. If the axle oscillation system is not operating correctly, the stability of the machine is compromised and it may tip over.

Test The Oscillate System (Stowed Position)

1. Drive the left steer tire up onto a 4 in (10 cm) high ramp.
 - **Result:** All four tires should maintain firm contact with the ground.
2. Drive the right steer tire up onto a 4 in (10 cm) high ramp.
 - **Result:** All four tires should maintain firm contact with the ground.

Note: Verify that there are no fault codes shown on ground control display.

Test The Oscillate System (Elevated Position)

1. Press the lift function select button. Raise the platform approximately 8 ft (2.4 m) from the ground.
2. Drive the left steer tire into a 4 in (10 cm) deep hole.
 - **Result:** All four tires should maintain firm contact with the ground.
3. Drive the right steer tire into a 4 in (10 cm) deep hole.
 - **Result:** All four tires should maintain firm contact with the ground.

Note: Verify that there are no fault codes shown on ground control display.

A-6 Check the Hydraulic Oil Level

- New parts will be required to perform this procedure.

Maintaining the hydraulic oil at the proper level is essential to machine operation. Improper hydraulic oil levels can damage hydraulic components. Daily checks allow the inspector to identify changes in oil level that might indicate the presence of hydraulic system problems.

NOTICE

Perform this procedure with the platform in the stowed position and the machine off.

1. Visually inspect the sight of hydraulic oil level from the side of the hydraulic oil tank.
 - **Result:** The hydraulic oil level should be within the top 2 in (5 cm) of the tank sight gauge.
2. Add oil if necessary. Do not overfill.

NOTICE

Original Hydraulic oil specifications ISO-46.

Customers shall choose the appropriate hydraulic oil according to the ambient temperature used.

- **Example:** ISO-32 for cold temperatures.

A-8 Perform Function Tests

Completing the function tests is essential to safe machine operation. Function tests are designed to discover any malfunctions before the machine is put into service. A malfunctioning machine must never be used. If malfunctions are discovered, the machine must be tagged and removed from service.

Complete information to perform this procedure is available in the appropriate operator's manual. Refer to the Operator's Manual on your machine.

A-10 Perform 30 Day Service

- Tools will be required to perform this procedure.
- New parts will be required to perform this procedure.

The 30 day maintenance procedure is a one time procedure to be performed after the first 30 days or 40 hours of usage. After this interval, refer to the maintenance tables for continued scheduled maintenance.

Perform the following maintenance procedures:

- B-3 Inspect the Tires, Wheels and Castle Nut Torque (Refer to page 21)
- B-4 Check the Oil Level in the Drive Hubs (Refer to page 21)
- D-1 Replace the Hydraulic Tank Return Filter Element (Refer to page 26)

Quarterly Checklist

The following maintenance should be done every 3 months (quarterly) or 250 hours of operation.

B-1 Inspect the Battery

- Tools will be required to perform this procedure.
- New parts will be required to perform this procedure.

Proper battery condition is essential to good machine performance and operational safety. Improper fluid levels or damaged cables and connections can result in component damage and hazardous conditions.



Electrocution / burn hazard. Contact with electrically charged circuits could result in death or serious injury. Remove all rings, watches and other jewelry.



Bodily injury hazard. Battery contain acid. Avoid spilling or contacting battery acid. Neutralize battery acid spills with baking soda and water.

1. Put on protective clothing and eye wear.
2. Be sure that the battery cable connections are free of corrosion.

Note: Adding terminal protectors and a corrosion preventative sealant will help eliminate corrosion on the battery terminals and cables.

3. Be sure that the battery retainers and cable connections are tight.
4. Fully charge the battery. Allow the battery to rest 24 hours before performing this procedure to allow the battery cells to equalize.
5. Remove the battery vent caps and check the specific gravity of each battery cell with a hydrometer. Note the results.
6. Check the ambient air temperature and adjust the specific gravity reading for each cell as follows:
 - Add 0.004 to the reading of each cell for every 10°F (5.5°C) above 80°F (26.7°C).
 - Subtract 0.004 from the reading of each cell for every 10°F (5.5°C) below 80°F (26.7°C).
 - **Result:** All battery cells display an adjusted specific gravity of 1.217 or higher. The battery is fully charged. Proceed to step 10.
 - **Result:** One or more battery cells display a specific gravity of 1.217 or below. Proceed to step 7.
7. Perform an equalizing charge OR fully charge the battery and allow the battery to rest at least 6 hours.
8. Remove the battery vent caps and check the specific gravity of each battery cell with a hydrometer. Note the results.
9. Check the ambient air temperature and adjust the specific gravity reading for each cell as follows:
 - Add 0.004 to the reading of each cell for every 10°F (5.5°C) above 80°F (26.7°C).
 - Subtract 0.004 from the reading of each cell for every 10°F (5.5°C) below 80°F (26.7°C).
 - **Result:** All battery cells display a specific gravity of 1.277 or greater. The battery is fully

charged. Proceed to step 10.

- **Result:** One or more battery cells display a specific gravity from 1.269 to 1.218. The battery is still usable, but at a lower performance so will need to be recharged more often. Proceed to step 11.
 - **Result:** One or more battery cells display a specific gravity from 1.217 to 1.173. The battery is approaching the end of its life. Proceed to step 11.
 - **Result:** The difference in specific gravity readings between cells is greater than 0.1 OR the specific gravity of one or more cells is less than 1.172 or less. Replace the battery.
10. Check the battery acid level. If needed, replenish with distilled water to $\frac{1}{8}$ in (3 mm) below the bottom of the battery fill tube. Do not overfill.
 11. Install the vent caps and neutralize any electrolyte that may have spilled.

B-2 Inspect the Electrical Wiring

- Tools will be required to perform this procedure.

Maintaining electrical wiring in good condition is essential to safe operation and good machine performance. Failure to find and replace burnt, chafed, corroded or pinched wires could result in unsafe operating conditions and may cause component damage.



Electrocution / burn hazard. Contact with electrically charged circuits could result in death or serious injury. Remove all rings, watches and other jewelry.

1. Inspect the following areas for burnt, chafed, corroded and loose wires:
 - Ground control panel
 - Hydraulic tray
 - Scissor arms
 - Platform controls
2. Inspect for a liberal coating of dielectric grease in the following locations:
 - Between the ECM and platform controls
 - All wire harness connectors
 - Level sensor
3. Turn the key switch to ground control and turn the ground red Emergency Stop button clockwise to the "ON" position pull out the platform red Emergency Stop button to the "ON" position.
4. Start the machine and raise the platform approximately 10 ft (3 m) from the ground.
5. Lift the safety arm, move it to the center of the scissor arm and rotate up to a vertical position.
6. Lower the platform onto the safety arm.



Crushing hazard. Keep hands clear of the safety arm when lowering the platform.

7. Inspect the center chassis area and scissor arms for burnt, chafed and pinched cables.
8. Inspect the following areas for burnt, chafed, corroded, pinched and loose wires:
 - ECU to platform controls
 - Power to platform wiring
9. Raise the platform and return the safety arm to the stowed position.

10. Lower the platform to the stowed position and turn the machine off.

B-3 Inspect the Tires and Wheels (including castle nut torque)

- Tools will be required to perform this procedure.
- New parts will be required to perform this procedure.

Maintaining the tires and wheels in good condition is essential to safe operation and good performance. Tire and/or wheel failure could result in a machine tip-over. Component damage may also result if problems are not discovered and repaired in a timely fashion.

1. Check the tire surface and sidewalls for cuts, cracks, punctures and unusual wear.
2. Check each wheel for damage, bends and cracks.
3. Remove the castle nut lock plate or cotter pin and check each nut for proper torque

Castle Nut Torque, Dry	300 ft lbs	406.7 Nm
Castle Nut Torque, Lubricated	225 ft lbs	305 Nm
Wheel Nut Torque	160 ft lbs	210 Nm

Note: Always replace the cotter pin with a new one when removing the castle nut or checking the torque of the castle nut.

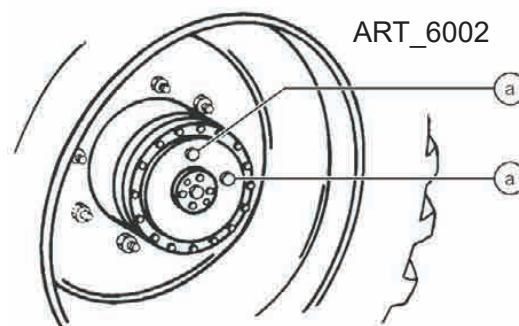
4. Check each lug bolt for proper torque.
5. Install the castle nut lock plate using a new lock washer OR install a new cotter pin and secure.

B-4 Check the Oil Level in the Drive Hubs

- Tools will be required to perform this procedure.
- New parts will be required to perform this procedure.

Failure to maintain proper drive hub oil levels may cause the machine to perform poorly and continued use may cause component damage.

1. Drive the machine to rotate the hub until the plugs are located one on top and the other at 90 degrees.
2. Remove the plug located at 90 degrees and check the oil level.
 - **Result:** The oil level should be even with the bottom of the side plug hole.
3. If necessary, remove the top plug and add oil until the oil level is even with the bottom of the side plug hole.
4. Apply pipe thread sealant to the plug(s), and then install the plug(s) in the drive hub.
5. Repeat this procedure for each drive hub.



NOTICE

Original oil specifications EP-90.

B-5 Test the Emergency Stop

A properly functioning Emergency Stop is essential for safe machine operation. An improperly operating red Emergency Stop button will fail to shut off power and stop all machine functions, resulting in a hazardous situation.

As a safety feature, selecting and operating the ground controls will override the platform controls, except the platform red Emergency Stop button.

1. Start the machine from ground controls.
2. Push in the red Emergency Stop button at the ground controls to the "OFF" position.
 - **Result:** The machine should shut off and no machine functions should operate.
3. Start the machine from platform controls.
4. Push in the red Emergency Stop button to the "OFF" position.
 - **Result:** The machine should shut off and no machine functions should operate.

Note: The red Emergency Stop button at the ground controls will stop all machine operation, even if the key switch is switched to platform control.

B-6 Test the Key Switch

Proper key switch action and response is essential to safe machine operation. The machine can be operated from the ground or platform controls and the activation of one or the other is accomplished with the key switch. Failure of the key switch to activate the appropriate control panel could cause a hazardous operating situation.

Perform this procedure from the ground using the platform controls. Do not stand in the platform.

1. Turn the ground red Emergency Stop button clockwise to the "ON" position. Pull out the platform red Emergency Stop button to the "ON" position.
2. Turn the key switch to ground controls and start the machine from ground controls.
3. Check any machine function from the platform controls.
 - **Result:** The machine functions should not operate.
4. Turn the key switch to platform controls and start the machine from platform controls.
5. Check the machine functions from the ground controls.
 - **Result:** The machine functions should not operate.
6. Turn the key switch to the "OFF" position.
 - **Result:** The machine should stop and no functions should operate.

B-7 Test the Automotive-style Horn

The horn is activated at the platform controls and sounds at the ground as a warning to ground personnel. An improperly functioning horn will prevent the operator from alerting ground personnel of hazards or unsafe conditions.

1. Start the machine from platform controls.
2. Push down the horn button at the platform controls.
 - **Result:** The horn should sound.

Note: If necessary, the horn can be adjusted to obtain the loudest volume by turning the adjustment screw near the wire terminals on the horn.

B-8 Test the Down Limit Switch

- Tools will be required to perform this procedure.

Maintaining the limit switches is essential to safe operation and good machine performance. Operating the machine with a faulty limit switch could result in reduced machine performance and a potentially unsafe operating condition.

Perform these procedures with the machine on a firm, level surface that is free of obstructions.

1. Remove the platform controls from the platform.
2. Start the machine from the platform controls.
3. Press the high speed idle select button.
 - **Result:** The light will turn on. The machine is functioning properly.
 - **Result:** The light will turn off, replace the down limit switch.
4. Press the Lift function select button.
5. Raise the platform 13 ft (4 m).
6. Lift the safety arm, move it to the center of the scissor arm and rotate up to a vertical position.
7. Lower the platform until the safety arm rests securely on the link. Keep clear of the safety arm when lowering the platform.



Crushing hazard. Keep hands clear of the safety arm when lowering the platform.

8. Press the roller arm of the limit switch to engage the switch contacts.
 - **Result:** The light on the button for high speed idle will turn on when pressed.
 - **Result:** The light on the button for high speed idle will turn off when pressed.
9. Raise the platform and return the safety arm to the stowed position.
10. Lower the platform to the stowed position.

B-9 Test the Up Limit Switch

- Tools will be required to perform this procedure.

Maintaining the limit switches is essential to safe operation and good machine performance.

Operating the machine with a faulty limit switch could result in reduced machine performance and a potentially unsafe operating condition.

Perform these procedures with the machine on a firm, level surface that is free of obstructions.

1. Start the machine from the ground controls.
2. Raise the platform approximately 13 ft (4 m) from the ground controls.
3. Lift the safety arm, move it to the center of the scissor arm and rotate up to a vertical position.
4. Lower the platform until the safety arm rests securely on the link. Keep clear of the safety arm

when lowering the platform.



Crushing hazard. Keep hands clear of the safety arm when lowering the platform.

5. While raising the platform from the ground controls, push in the roller of the up limit switch to activate the limit switch.
 - **Result:** The platform stops rising. The machine is functioning properly.
 - **Result:** The platform continues to rise. Adjust or replace the up limit switch.
6. Raise the platform and rotate the safety arm to the home position.
7. Lower the platform to the stowed position.

Semi-annual Checklist

The following maintenance should be done every 6 months (semi-annual) or 500 hours of operation.

C-1 Check the Down Limit Switch Height

1. Turn the key switch to platform controls. Start the machine.
2. Raise the platform approximately 10 ft (3 m).
3. Lower the platform until the down limit switch activates and the platform stops lowering.
4. Push in the red Emergency Stop button to the "OFF" position.
5. Measure the distance between the working surface and the platform deck.

3369	5 ft 10 in to 6 ft 6 in	1.8 to 2.0 m
4069	6 ft 6 in to 7 ft 3 in	2.0 to 2.2 m

Annual Checklist

The following maintenance should be done every year (annual) or 1,000 hours of operation.

D-1 Replace the Hydraulic Tank Return Filter Element

- Tools will be required to perform this procedure.
- New parts will be required to perform this procedure.

Replacement of the hydraulic tank return filter is essential for good machine performance and service life. A dirty or clogged filter may cause the machine to perform poorly and continued use may cause component damage. Extremely dirty conditions may require that the filter be replaced more often.



Bodily injury hazard. Beware of hot oil. Contact with hot oil may cause severe burns.

1. Remove the filter with an oil filter wrench. Clean the area where the hydraulic oil filter meets the filter head.



Bodily injury hazard. Spraying hydraulic oil can penetrate and burn skin. Loosen hydraulic connections very slowly to allow the oil pressure to dissipate gradually. Do not allow oil to squirt or spray.

Note: The hydraulic filter is mounted on the hydraulic tank.

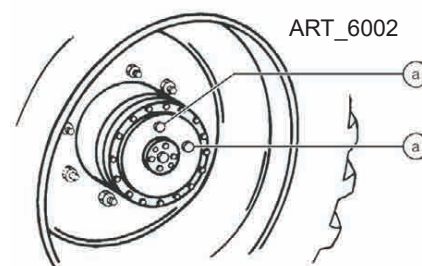
2. Apply a thin layer of fresh oil to the new oil filter gasket.
3. Install the new filter and tighten it securely by hand.
4. Use a permanent ink marker to write the date and number of hours from the hour meter on the filter
5. Clean up any oil that may have spilled during the replacement procedure.
6. Turn the ground red Emergency Stop button clockwise to the "ON" position. Pull out the platform red Emergency Stop button to the "ON" position. Start the machine.
7. Raise the platform approximately 3 ft (1 m).
8. Inspect the filter and related components to be sure that there are no leaks.

D-3 Replace the Drive Hub Oil

- Tools will be required to perform this procedure.
- New parts will be required to perform this procedure.
- Dealer service will be required to perform this procedure

Replacing the drive hub oil is essential for good machine performance and service life. Failure to replace the drive hub oil at yearly intervals may cause the machine to perform poorly and continued use may cause component damage.

1. Select the drive hub to be serviced. Drive the machine until one of the two plugs is at the lowest point.
2. Remove both plugs and drain the oil into a suitable container.
3. Drive the machine until one of the two plugs is at the highest point.
4. Fill the hub until the oil level is even with the bottom of the lowest plug hole.
5. Install the plugs into the drive hub.
6. Repeat this procedure for each drive hub.



D-4 Test the Drive Brakes

- Tools will be required to perform this procedure.

Proper brake action is essential to safe machine operation. The drive brake function should operate smoothly, free of hesitation, jerking and unusual noise. Hydraulically-released individual wheel brakes can appear to operate normally when not fully operational.

Perform this procedure with the machine on a firm level surface that is free of obstructions, with the platform extension deck fully retracted and the platform in the stowed position.

1. Mark a test line on the ground for reference.
2. Start the machine from platform controls.
3. Choose a point on the machine; i.e., contact patch of a tire, as a visual reference for use when crossing the test line.
4. Slowly move the joystick in the direction indicated by the blue arrow on the control panel until the machine begins to move, then return the joystick to the center position.
 - **Result:** The machine should move in the direction that the blue arrow points on the control panel, then come to a quick stop.
5. Slowly move the joystick in the direction indicated by the yellow arrow on the control panel until the machine begins to move, then return the joystick to the center position.
 - **Result:** The machine should move in the direction that the yellow arrow points on the control panel, then come to a quick stop.
6. Bring the machine to maximum drive speed before reaching the start line. Release the function enable switch on the joystick or release the joystick when your reference point on the machine crosses the test line.
7. Measure the distance between the test line and your machine reference point.

Braking Distance, Maximum		
High range on paved surface	3 ft 3 in	1 m

Note: The brakes must be able to hold the machine on any slope it is able to climb.

D-5 Test the Drive Speed - Stowed Position

- Tools will be required to perform this procedure.

Proper drive functions are essential to safe machine operation. The drive function should respond quickly and smoothly to operator control. Drive performance should also be free of hesitation, jerking

and unusual noise over the entire proportionally controlled speed range.

Perform this procedure with the machine on a firm, level surface that is free of obstructions.

1. Create start and finish lines by marking two lines on the ground 40 ft (12.2 m) apart.
2. Turn the key switch to platform controls and Turn the ground red Emergency Stop button clockwise to the "ON" position. Pull out the platform red Emergency Stop button to the "ON" position.
3. Start the machine from the platform controls.
4. Lower the platform to the stowed position.
5. Choose a point on the machine; i.e., contact patch of a tire, as a visual reference for use when crossing the start and finish lines.
6. Bring the machine to maximum forward drive speed before reaching the start line. Begin timing when your reference point on the machine crosses the start line.
7. Continue at full speed and note the time when your reference point on the machine passes over the finish line. The time should be less than 8.8 sec.

D-6 Test the Drive Speed - Raised Position

- Tools will be required to perform this procedure.

Proper drive functions are essential to safe machine operation. The drive function should respond quickly and smoothly to operator control. Drive performance should also be free of hesitation, jerking and unusual noise over the entire proportionally controlled speed range.

Perform this procedure with the machine on a firm, level surface that is free of obstructions.

1. Create start and finish lines by marking two lines on the ground 40 ft (12.2 m) apart.
2. Turn the key switch to platform controls and turn the ground red Emergency Stop button clockwise to the "ON" position. Pull out the platform red Emergency Stop button to the "ON" position.
3. Start the machine from the platform controls.
4. Raise the platform approximately 8 ft (2.4 m) from the ground.
5. Choose a point on the machine; i.e., contact patch of a tire, as a visual reference for use when crossing the start and finish lines.
6. Bring the machine to top drive speed before reaching the start line. Begin timing when your reference point on the machine crosses the start line.
7. Continue at full speed and note the time when your reference point on the machine passes over the finish line. The time should be 80 to 90 seconds.

D-7 Perform Hydraulic Oil Analysis

- Tools will be required to perform this procedure.
- New parts will be required to perform this procedure.
- Dealer service will be required to perform this procedure.

Replacement or testing of the hydraulic oil is essential for good machine performance and service life. Dirty oil may cause the machine to perform poorly and continued use may cause component damage. Extremely dirty conditions may require oil changes to be performed more often.

Before replacing the hydraulic oil, the oil may be tested by an oil distributor for specific levels of contamination to verify that changing the oil is necessary.

If the hydraulic oil is not replaced at the two year inspection, replace the oil when it fails the test. See E-1, Test or Replace the Hydraulic Oil.

D-8 Inspect the Fuel and Hydraulic Tank Cap Venting System

- Tools will be required to perform this procedure.

Perform this procedure more often if dusty conditions exist.

A free-breathing hydraulic tank cap is essential for good machine performance and service life. A dirty or clogged cap may cause the machine to perform poorly. Extremely dirty conditions may require that the cap be inspected more often.



Explosion and fire hazard. Engine fuels are combustible. Perform this procedure in an open, well-ventilated area away from heaters, sparks, flames and lighted tobacco. Always have an approved fire extinguisher within easy reach.

1. Remove the breather cap from the fuel tank.
2. Check for proper venting.
 - **Result:** Air passes through the breather cap. Proceed to step 4.
 - **Result:** If air does not pass through the cap, clean or replace the cap. Proceed to step 3.

Note: When checking for positive tank cap venting, air should pass freely through the cap only in one direction from the tank.

3. Using a mild solvent, carefully wash the cap venting system. Dry using low pressure compressed air. Repeat this procedure beginning with step 2.
4. Install the fuel tank cap onto the fuel tank.
5. Remove the breather cap from the hydraulic tank.
6. Check for proper venting.
 - **Result:** Air passes through the fuel tank cap. Proceed to step 8.
 - **Result:** If air does not pass through the cap, clean or replace the cap. Proceed to step 7.

Note: When checking for positive tank cap venting, air should pass freely through the cap.

7. Using a mild solvent, carefully wash the cap venting system. Dry using low pressure compressed air. Repeat this procedure beginning with step 6.
8. Install the breather cap onto the hydraulic tank.

D-9 Test the Flashing Beacons

Flashing beacons are used to alert operators and ground personnel of machine proximity and motion. The flashing beacons are located on both sides of the machine.

1. Turn the ground red Emergency Stop button clockwise to the "ON" position. Pull out the platform red Emergency Stop button to the "ON" position.
2. Turn the key switch to ground controls and start the machine from ground controls.
 - **Result:** The beacons should flash.
3. Turn the key switch to platform controls and start the machine from platform controls.
 - **Result:** The beacons should flash.

Two Year Checklist

The following maintenance should be done every two years or 2,000 hours of operation.

E-1 Test or Replace the Hydraulic Oil

- Tools will be required to perform this procedure.
- New parts will be required to perform this procedure.

Replacement or testing of the hydraulic oil is essential for good machine performance and service life. Dirty oil and suction strainers may cause the machine to perform poorly and continued use may cause component damage. Extremely dirty conditions may require oil changes to be performed more often.

Note: Before replacing the hydraulic oil, the oil may be tested by an oil distributor for specific levels of contamination to verify that changing the oil is necessary. If the hydraulic oil is not replaced at the two year inspection, test the oil annually. Replace the oil when it fails the test.

Note: When removing a hose assembly or fitting, the O-Ring (if equipped) on the fitting and/or the hose end must be replaced. All connections must be torqued to specification during installation.

1. Push in the red Emergency Stop button to the "OFF" position.
2. Tag and disconnect the harnesses from the ground control box.
3. Remove the ground control box retaining fasteners and set aside. Remove the ground control box.
4. Locate the tank cover plate. Remove the tank cover plate mounting fasteners and remove the cover.
5. Place a drain pan or other suitable container under the hydraulic tank.
6. Remove the drain plug from the hydraulic tank and completely drain the tank.



Bodily injury hazard. Spraying hydraulic oil can penetrate and burn skin. Loosen hydraulic connections very slowly to allow the oil pressure to dissipate gradually. Do not allow oil to squirt or spray.

7. Tag, disconnect and plug the suction hose from the hydraulic tank. Cap the fitting.
8. Tag, disconnect and plug the return hose at the return filter. Cap the fitting on the filter.
9. Remove the return filter and head assembly from the tank. Cap and plug the fittings.
10. Loosen the tank strap retaining fastener in front of the tank. Move the strap to the side.
11. Remove the hydraulic tank from the machine.
12. Remove the suction strainer and clean using a mild solvent or replace.
13. Clean the inside of the hydraulic tank using a mild solvent.
14. Install the drain plug using thread sealer on the threads.
15. Install the suction strainer using thread sealer on the threads.
16. Install the hydraulic tank onto the machine.
17. Secure the tank with the tank strap. Do not over tighten.
18. Install the suction hose onto the tank.
19. Install the return filter and head assembly.

Note: Replace the return filter.

20. Install the return hose to the return filter.
21. Fill the tank with hydraulic oil until the fluid is within the top 2 in (5 cm) of the sight gauge. Do not overfill.
22. Clean up any oil that may have spilled. Properly discard the oil.
23. Operate all machine functions through a full cycle and check for leaks.
24. Check the oil level in the tank and add if needed.
25. Install the tank cover plate and install the tank cover plate mounting fasteners.

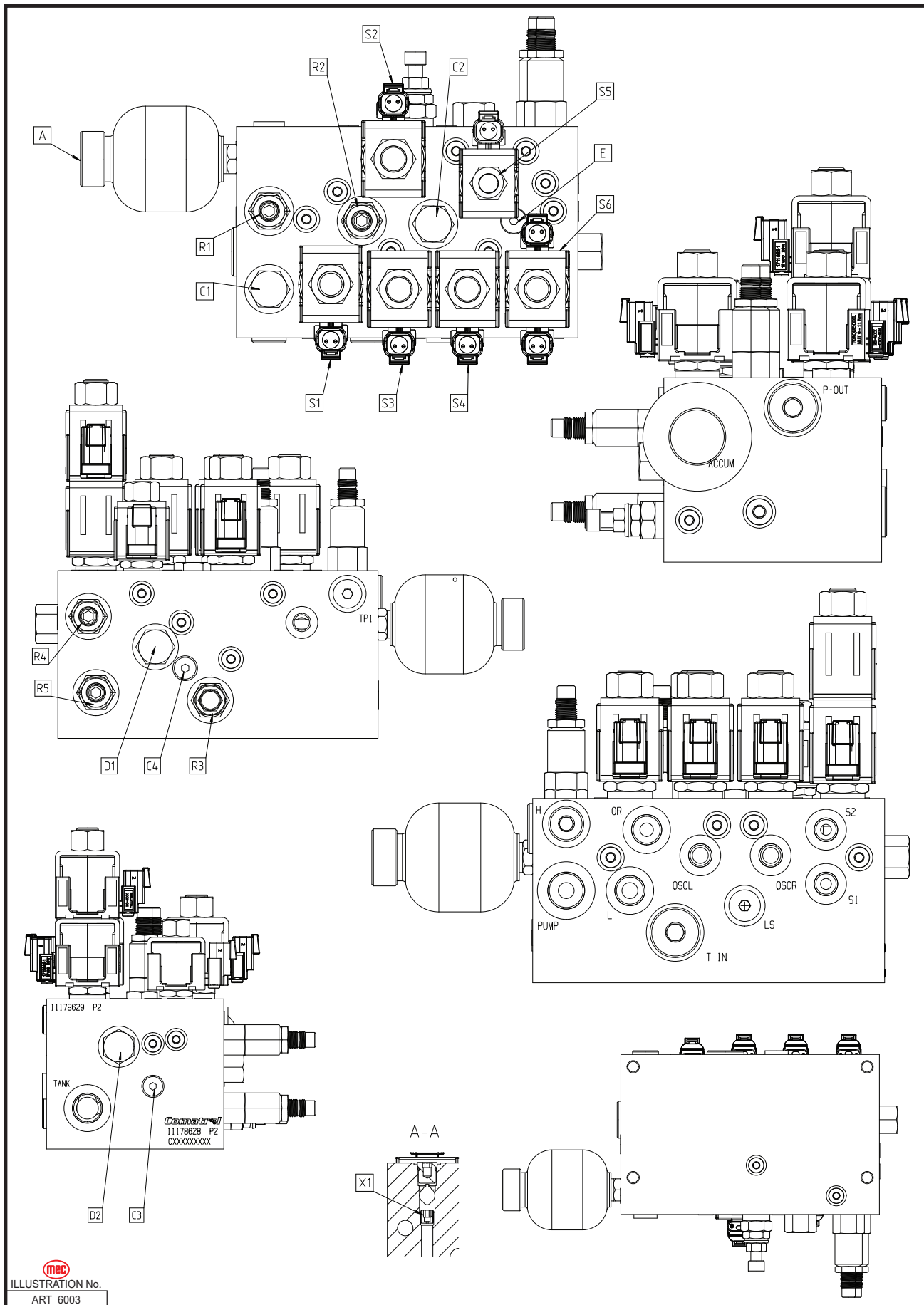
E-4 Replace the Hydraulic Tank Breather Cap

- New parts will be required to perform this procedure.

The hydraulic tank is a vented-type tank. The breather cap has an internal air filter that can become clogged or, over time, can deteriorate. If the breather cap is faulty or improperly installed, impurities can enter the hydraulic system which may cause component damage. Extremely dirty conditions may require that the cap be inspected more often.

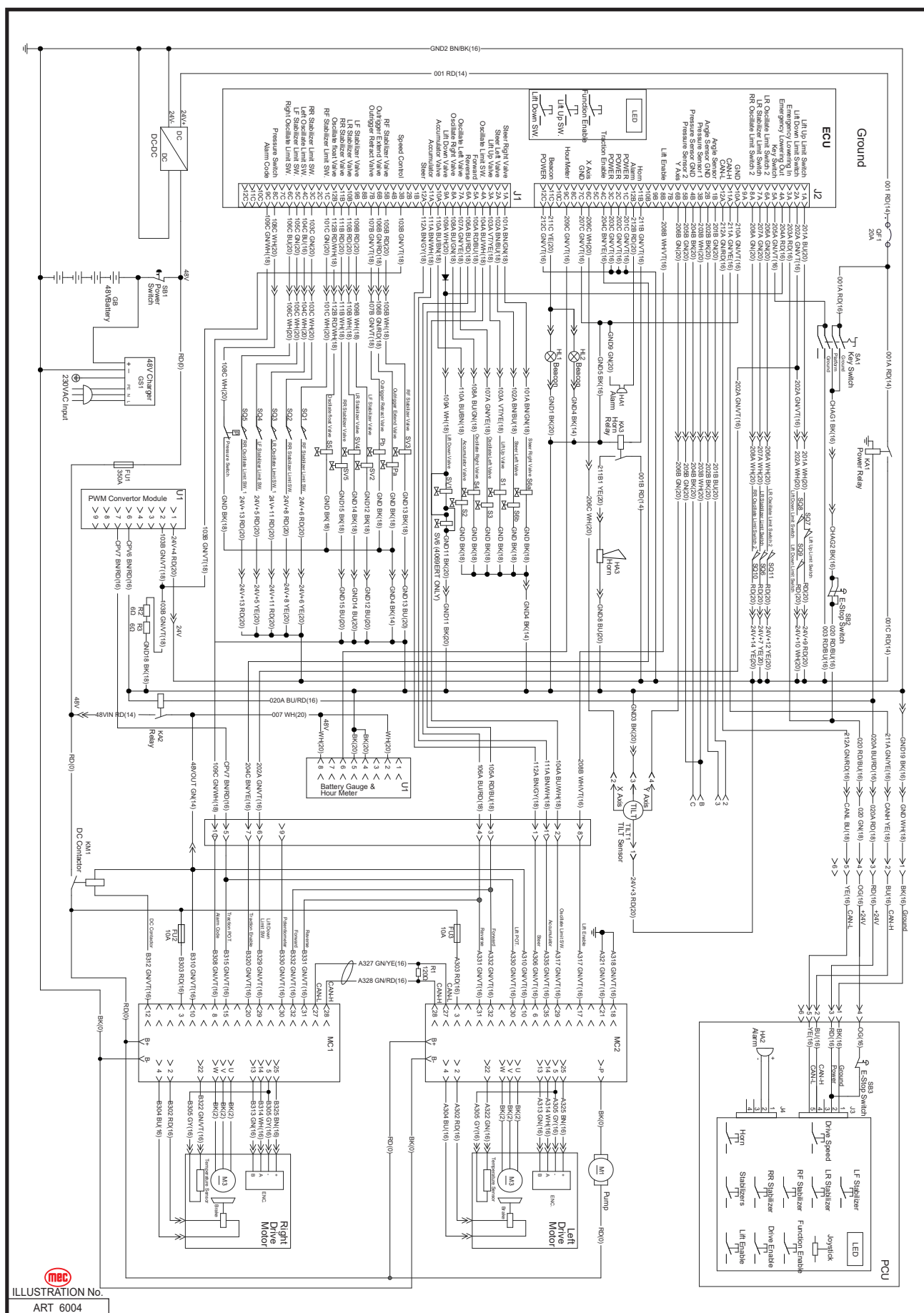
1. Remove and discard the hydraulic tank breather cap.
2. Install a new cap onto the tank.

Electrical Manifold, XX69ERT



Identification	Description	Function.
C3	Check Valve	Provides single directional flow for Load Sense Port
C4	Check Valve	Provides single directional flow for Load Sense Port
E	Shuttle Valve	Provides single directional flow for Load Sense Port from Steer
C1	Check Valve	Prevents backflow to Pump
C2	Check Valve	Prevents flow loss from Accumulator
A	Accumulator	Provides reserve flow for Axle Circuit when pump is off
R1	Relief Valve	Main System Pressure Relief
R2	Relief Valve	Limits pressure to Lift Cylinder
R3	Relief Valve	Limits pressure to Axle Circuit
R4	Relief Valve	Limits pressure to Steer Left
R5	Relief Valve	Limits pressure to Steer Right
D1	Flow Regulator	Reduces flow to Axle Circuit
D2	Flow Regulator	Reduces flow to Steer Circuit
S1	Solenoid Valve	Provides flow to platform Lift Function
S2	Solenoid Valve	Connects accumulator to Axle Circuit when energized
S3	Solenoid Valve	Controls Axle Oscillation left
S4	Solenoid Valve	Controls Axle Oscillation right
S5	Solenoid Valve	Provided flow to Axle Circuit when required
S6	Solenoid Valve	Controls Steer direction

Electrical Schematic, XX69ERT



Hydraulic Schematic, XX69ERT

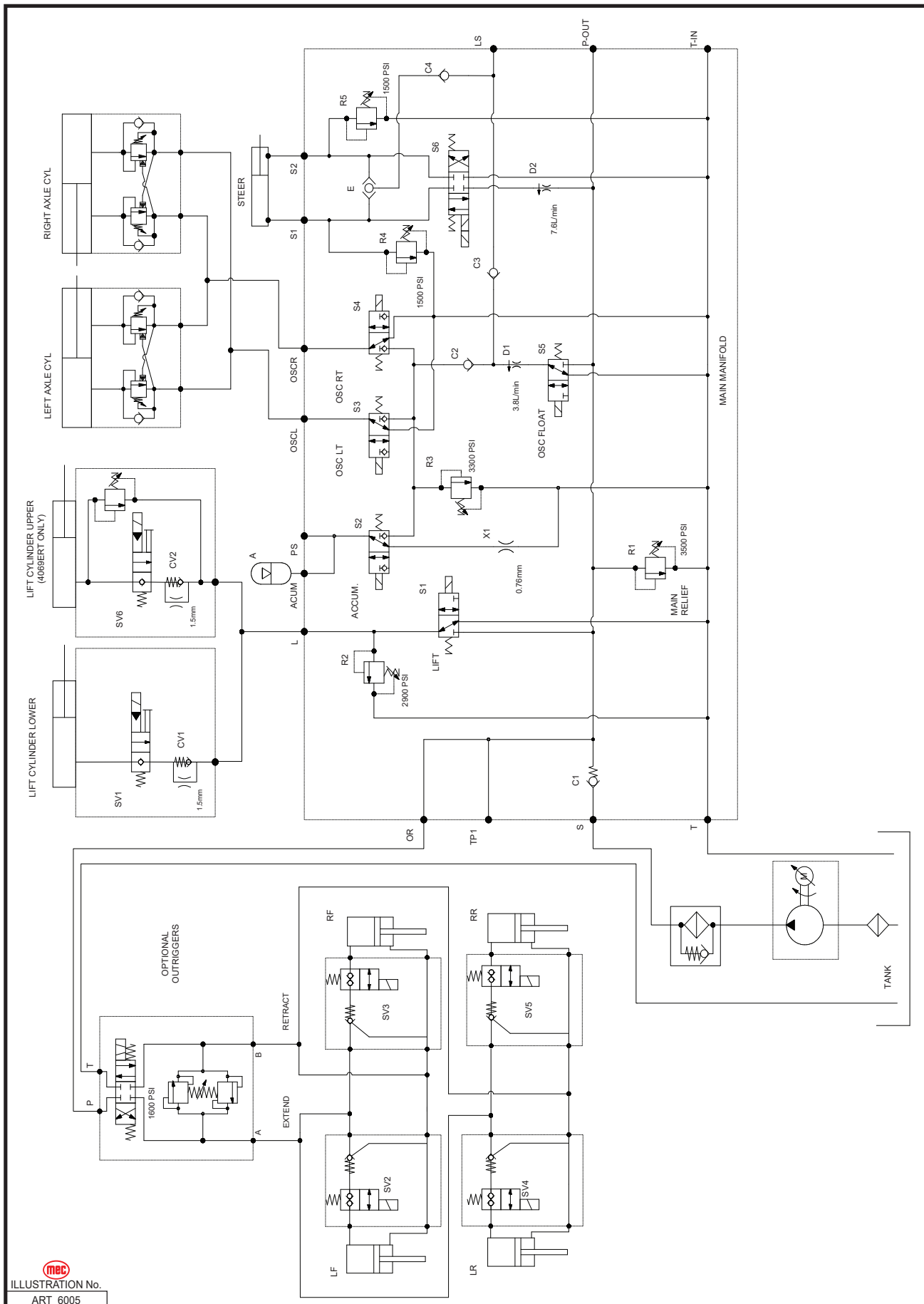


ILLUSTRATION No.
ART_6005

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Parts Introduction

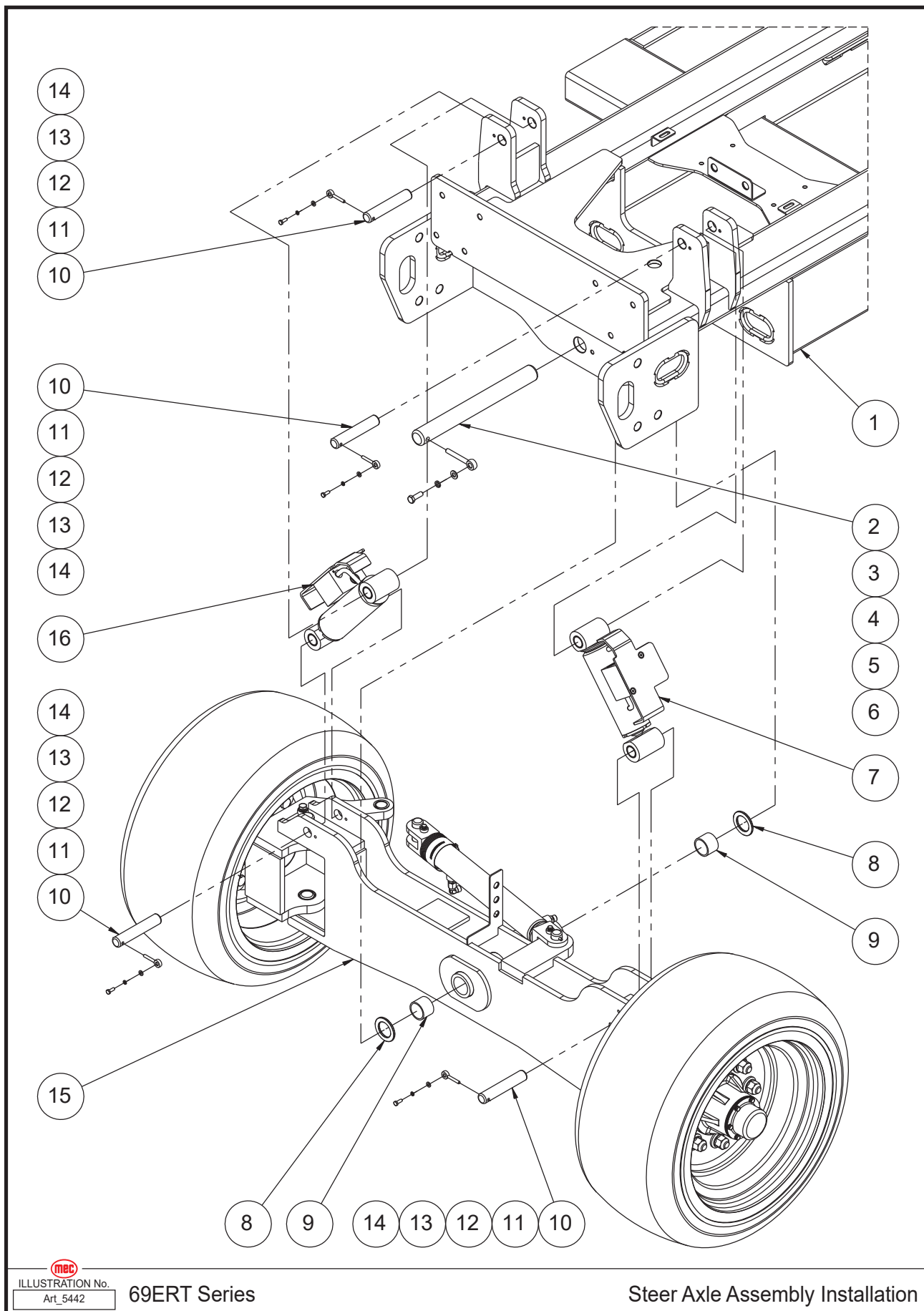
This Parts sections consists of illustrated parts sections and is designed to provide you, the customer, with illustrations and the list of associated parts needed to properly maintain the MEC self-propelled aerial work platform. When used in conjunction with the Service section in this manual and the Operator's Manual (provided separately), this manual will assist you in making necessary adjustments and repairs, and identifying and ordering the correct replacement parts.

All parts represented here are manufactured and supplied in accordance with MEC quality standards.

We recommend that you use genuine MEC parts to ensure proper operation and reliable performance.

To obtain maximum benefits from your MEC Aerial Work Platforms, always follow the proper operating and maintenance procedures. Only trained authorized personnel should be allowed to operate or service this machine. Service personnel should read and study the Operator's, and the Service and Parts Manuals in order to gain a thorough understanding of the unit prior to making any repairs.

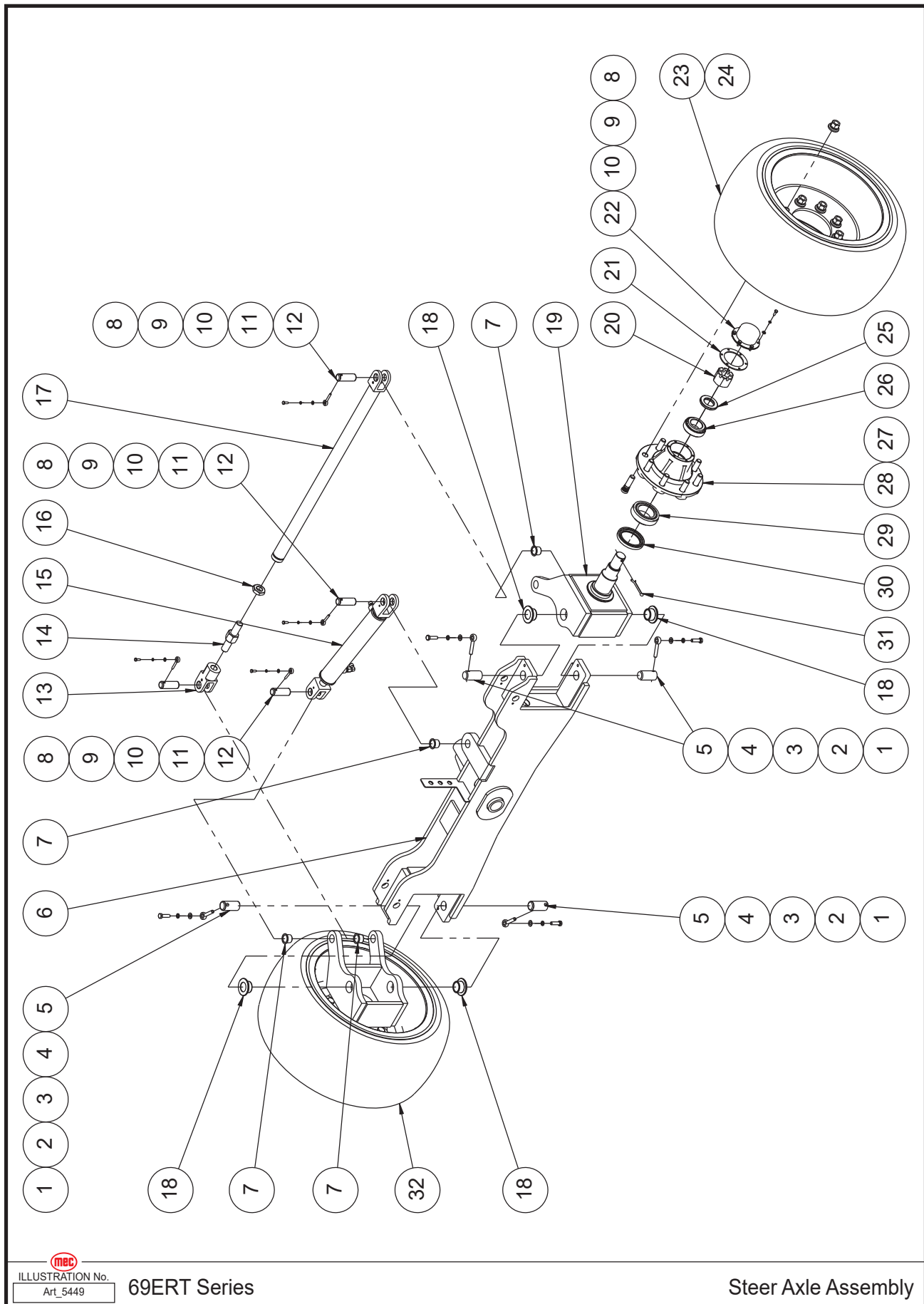
Steer Axle Assembly Installation



Item	Part Number	Description	Qty.
1	43006	Frame Weldment	1
2	43007	Pin	1
3	41431	Pin	1
4	50002	WSHR M10 Standard Flat Washer	1
5	53054	WSHR M10 Spring Washer	1
6	50034	Screw HHCS M10-1.50 × 30	1
7	REF	Left Oscillate Cylinder Assembly (Refer to page 125)	1
8	43008	Washer	2
9	41105	Bearing	2
10	43009	Pin	4
11	42449	Pin	6
12	50000	WSHR M06 Standard Flat Washer	6
13	53046	WSHR M06 Spring Washer	6
14	50445	Screw HHCS M06-1.00 × 16	6
15	REF	Steer Axle Assembly (Refer to page 41)	1
16	REF	Right Oscillate Cylinder Assembly (Refer to page 123)	1

REF - Reference

Steer Axle Assembly



Item	Part Number	Description	Qty.
1	50332	Screw HHCS M10-1.50 × 35	4
2	53054	WSHR M10 Spring Washer	4
3	50002	WSHR M10 Standard Flat Washer	4
4	43024	Pin	4
5	43025	Pin	4
6	43026	Steer Axle Weldment	1
7	43017	Bearing	4
8	50445	Screw HHCS M06-1.00 × 16	16
9	53046	WSHR M06 Spring Washer	16
10	50000	WSHR M06 Standard Flat Washer	16
11	42449	Pin	4
12	43021	Pin	4
13	43018	Clevis Yoke	1
14	43019	Adjusting Screw	1
15	REF	Steer Cylinder Assembly (Refer to page 127)	1
16	53473	Nut NHEX M24-1.50	1
17	43020	Tie Rod Weldment	1
18	43016	Bearing	4
19	43062	Steer Yoke Weldment	2
20	53486	Castle Nut M36-3.00, Hex Slotted	2
21	43063	Seal Washer	2
22	43064	Cap	2
23	43022	Wheel	1
24	53472	Nut NNYL M18-1.50 Flange	16
25	43527	Washer	2
26	43483	Bearing	2
27	43013	Bolt	16
28	43484	Hub	2
29	43485	Bearing	2
30	43486	Seal	2
31	43487	Cotter Pin	2
32	43010	Wheel	1

REF - Reference

Rear Axle Assembly Installation

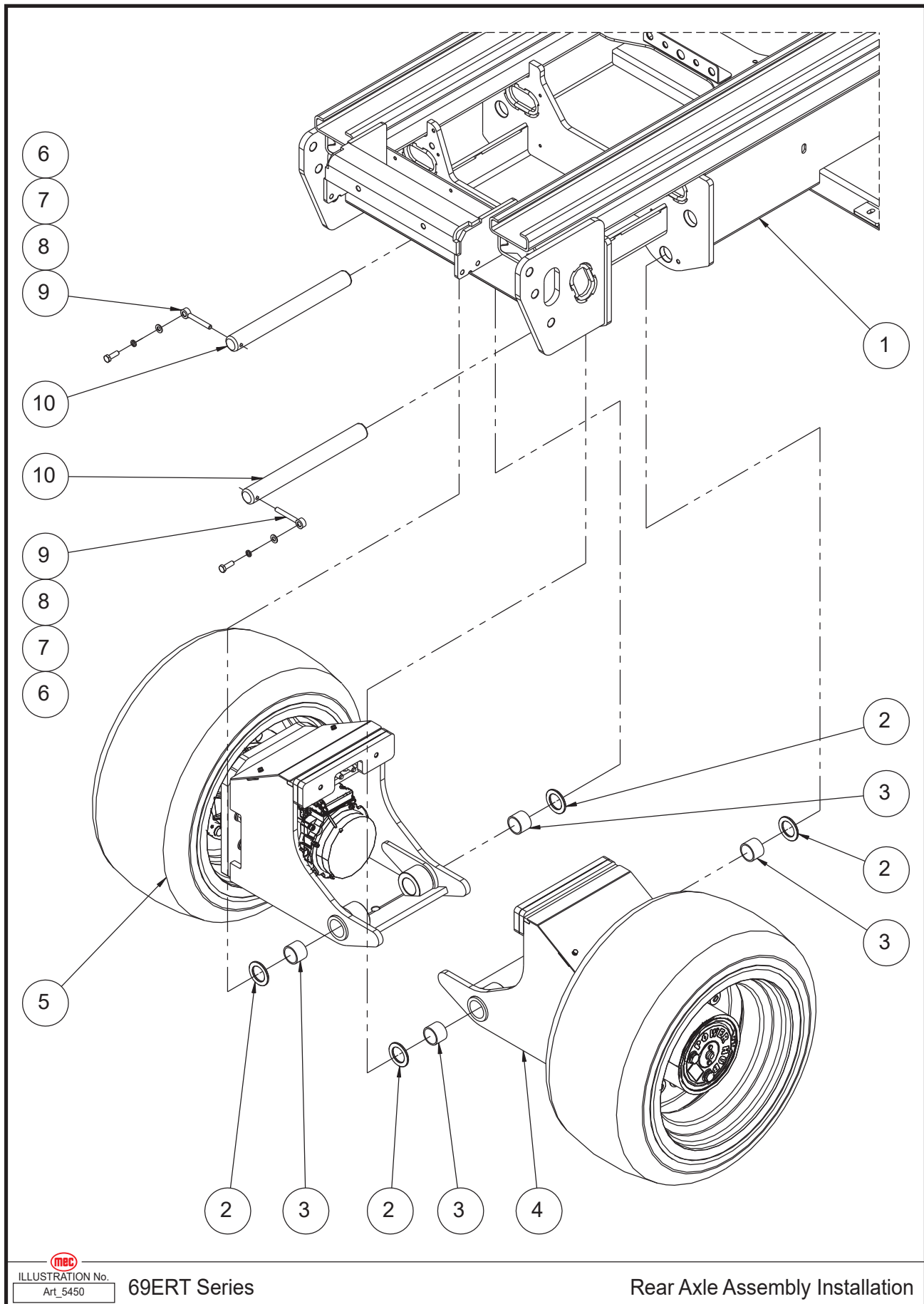


ILLUSTRATION No.
Art_5450

69ERT Series

Rear Axle Assembly Installation

Item	Part Number	Description	Qty.
1	43006	Frame Weldment	1
2	43008	Washer	4
3	41105	Bearing	4
4	REF	Right Rear Wheel Assembly (Refer to page 45)	2
5	REF	Left Rear Wheel Assembly (Refer to page 47)	1
6	50034	Screw HHCS M10-1.50 × 30	2
7	53054	WSHR M10 Spring Washer	2
8	50002	WSHR M10 Standard Flat Washer	2
9	41431	Pin	2
10	43027	Pin	2

REF - Reference

Right Rear Wheel Assembly

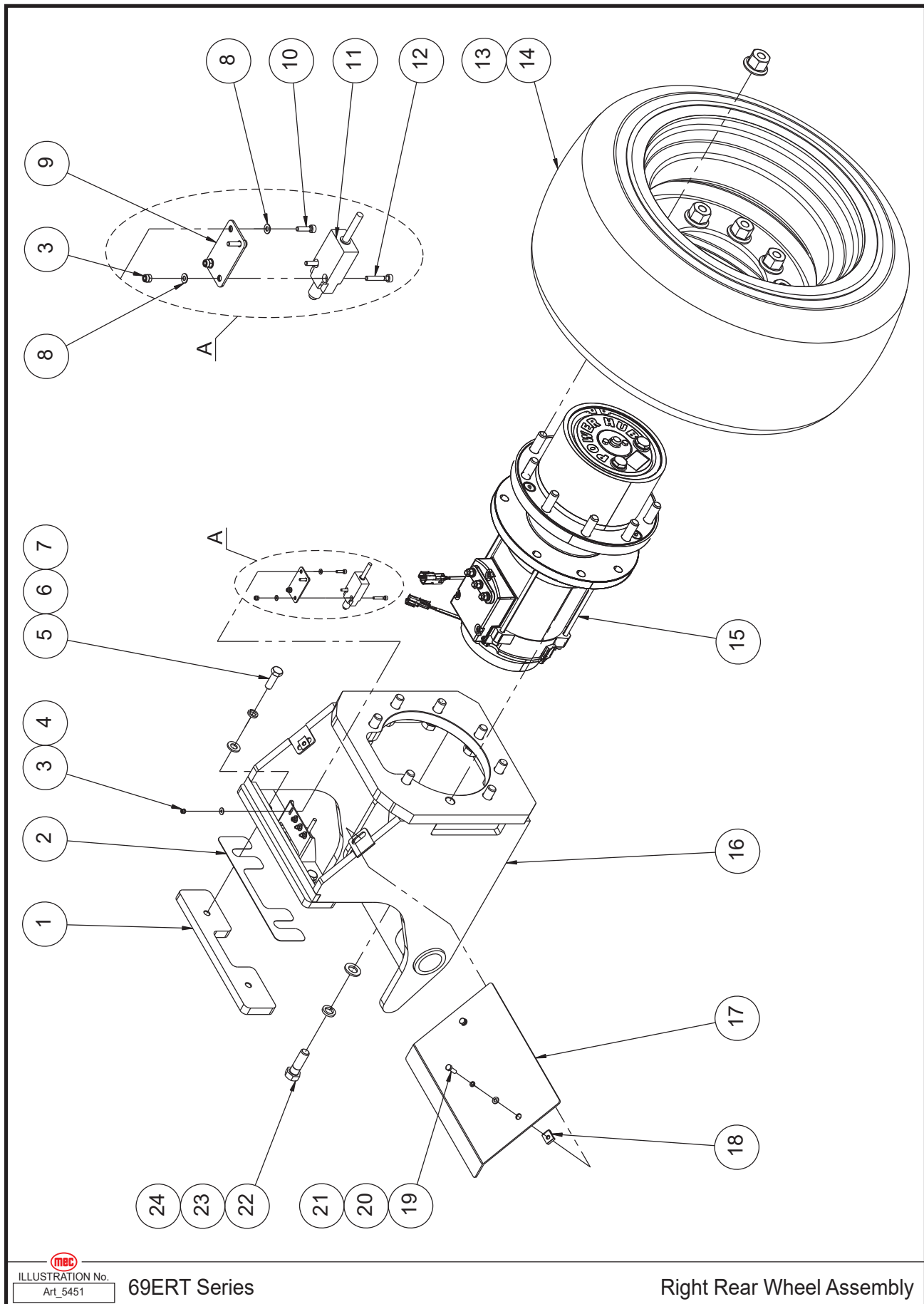


ILLUSTRATION No.
Art_5451

69ERT Series

Right Rear Wheel Assembly

Item	Part Number	Description	Qty.
1	43488	Bumper	1
2	43032	Adjusting Plate	1
3	50285	Nut NNYL M04 × 0.70	8
4	53120	WSHR M04 Flat Fender Washer	4
5	50040	Screw HHCS M12-1.75 × 35	2
6	53148	WSHR M12 Spring Washer	2
7	50003	WSHR M12 Standard Flat Washer	2
8	50284	WSHR M04 Standard Flat Washer	8
9	43030	Switch Plate	2
10	53113	Screw SHCS M04-0.70 × 16	4
11	43031	Limit Switch	2
12	53115	Screw SHCS M04-0.70 × 25	4
13	53477	Nut NHEX 5/8-18 UNF	9
14	43038	Wheel	1
15	43489	Drive Motor Assembly	1
--	46642	Motor	1
--	46643	Reducer	1
--	46644	Brake	1
16	43490	Rear Motor Housing Weldment	1
17	43491	Cover	1
18	53481	No-Slip Clip-On Barrel Nut M06-1.00	2
19	50028	Screw HHCS M06-1.00 × 20	2
20	53046	WSHR M06 Spring Washer	2
21	50000	WSHR M06 Standard Flat Washer	2
22	53487	Screw HHCS 5/8-11 × 2.00	8
23	53149	WSHR M16 Spring Washer	8
24	50004	WSHR M16 Standard Flat Washer	8

Left Rear Wheel Assembly

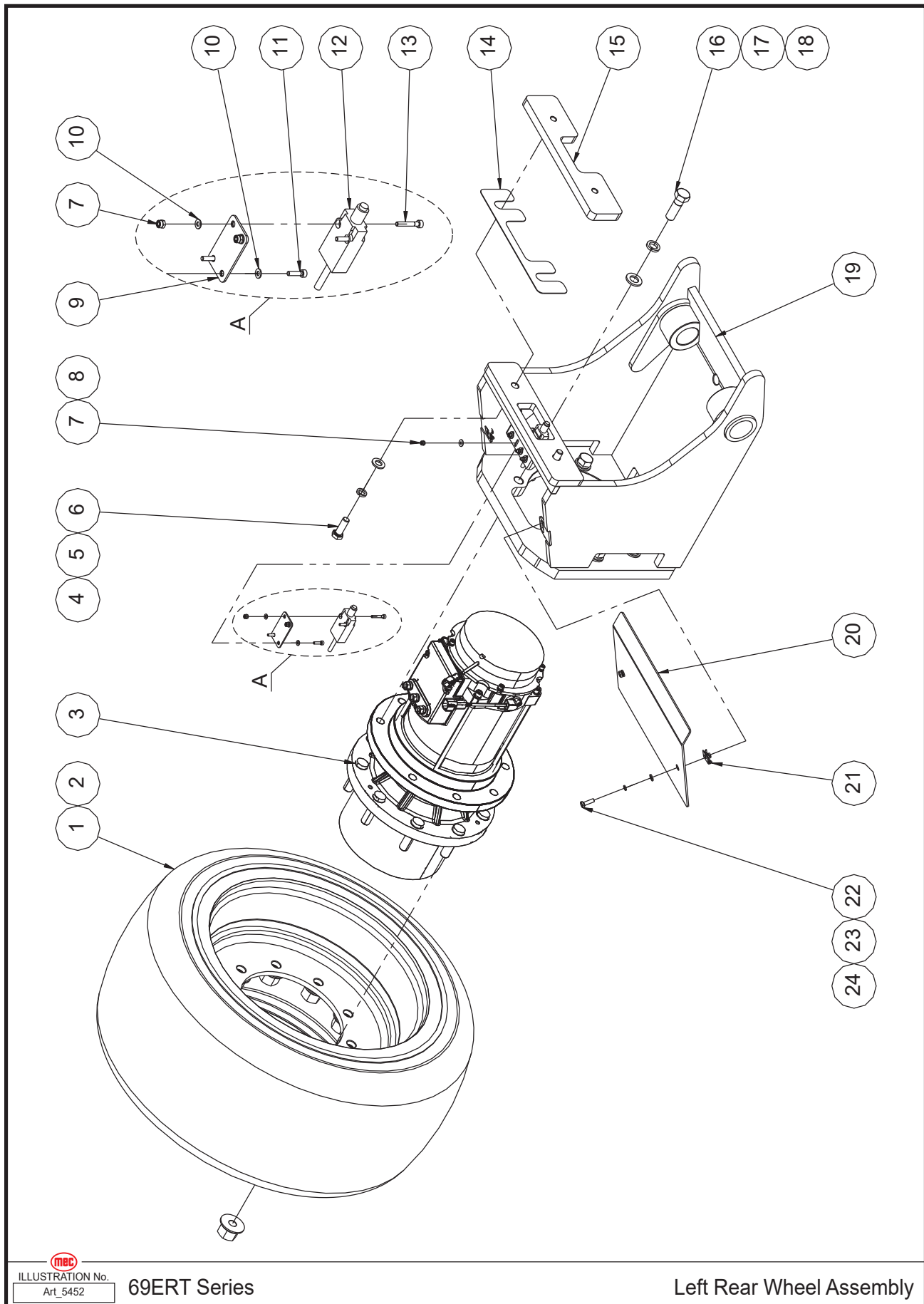


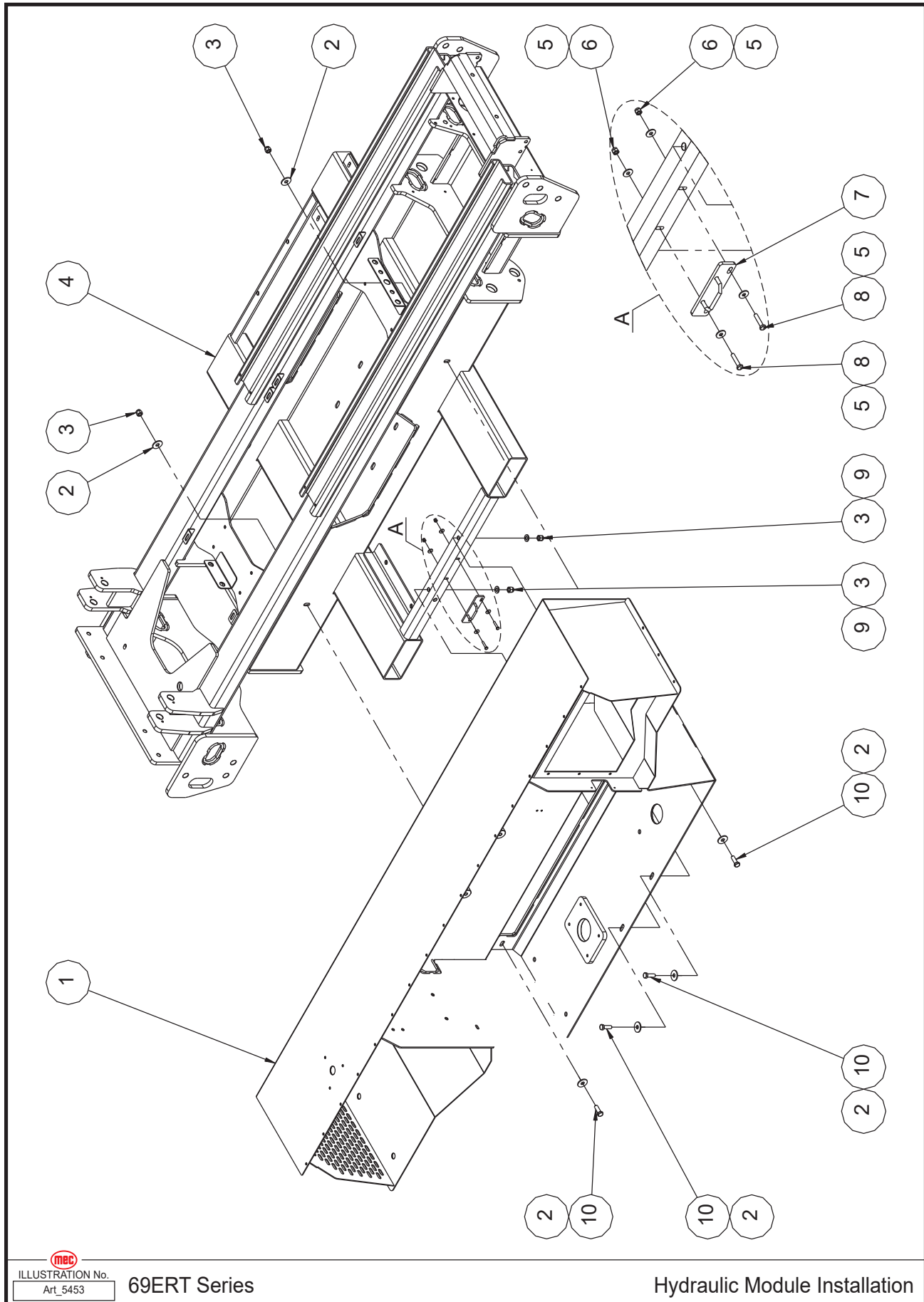
ILLUSTRATION No.
Art_5452

69ERT Series

Left Rear Wheel Assembly

Item	Part Number	Description	Qty.
1	43028	Wheel	1
2	53477	Nut NHEX 5/8-18 UNF	9
3	43489	Motor	1
4	50003	WSHR M12 Standard Flat Washer	2
5	53148	WSHR M12 Spring Washer	2
6	50040	Screw HHCS M12-1.75 × 35	2
7	50285	Nut NNYL M04 × 0.70	8
8	53120	WSHR M04 Flat Fender Washer	4
9	43030	Switch Plate	2
10	50284	WSHR M04 Standard Flat Washer	8
11	53113	Screw SHCS M04-0.70 × 16	4
12	43031	Limit Switch	2
13	53115	Screw SHCS M04-0.70 × 25	4
14	43032	Adjusting Plate	1
15	43488	Bumper	1
16	53487	Screw HHCS 5/8-11 × 2.00	8
17	50004	WSHR M16 Standard Flat Washer	8
18	53149	WSHR M16 Spring Washer	8
19	43490	Rear Motor Housing Weldment	1
20	43491	Cover	1
21	53481	No-Slip Clip-On Barrel Nut M06-1.00	2
22	50028	Screw HHCS M06-1.00 × 20	2
23	53046	WSHR M06 Spring Washer	2
24	50000	WSHR M06 Standard Flat Washer	2

Hydraulic Module Installation



Item	Part Number	Description	Qty.
1	43492	Hydraulic Tray Weldment	1
2	53478	WSHR M12 Flat Fender Washer	6
3	50050	Nut NNYL M12 × 1.75	4
4	43006	Frame Weldment	1
5	50068	WSHR M06 Flat Fender Washer	4
6	50047	Nut NNYL M06-1.00	2
7	43048	Lock Clasp	1
8	50214	Screw HHCS M06-1.00 × 30	2
9	50003	WSHR M12 Standard Flat Washer	2
10	50040	Screw HHCS M12-1.75 × 35	4

Hydraulic Module Door Installation

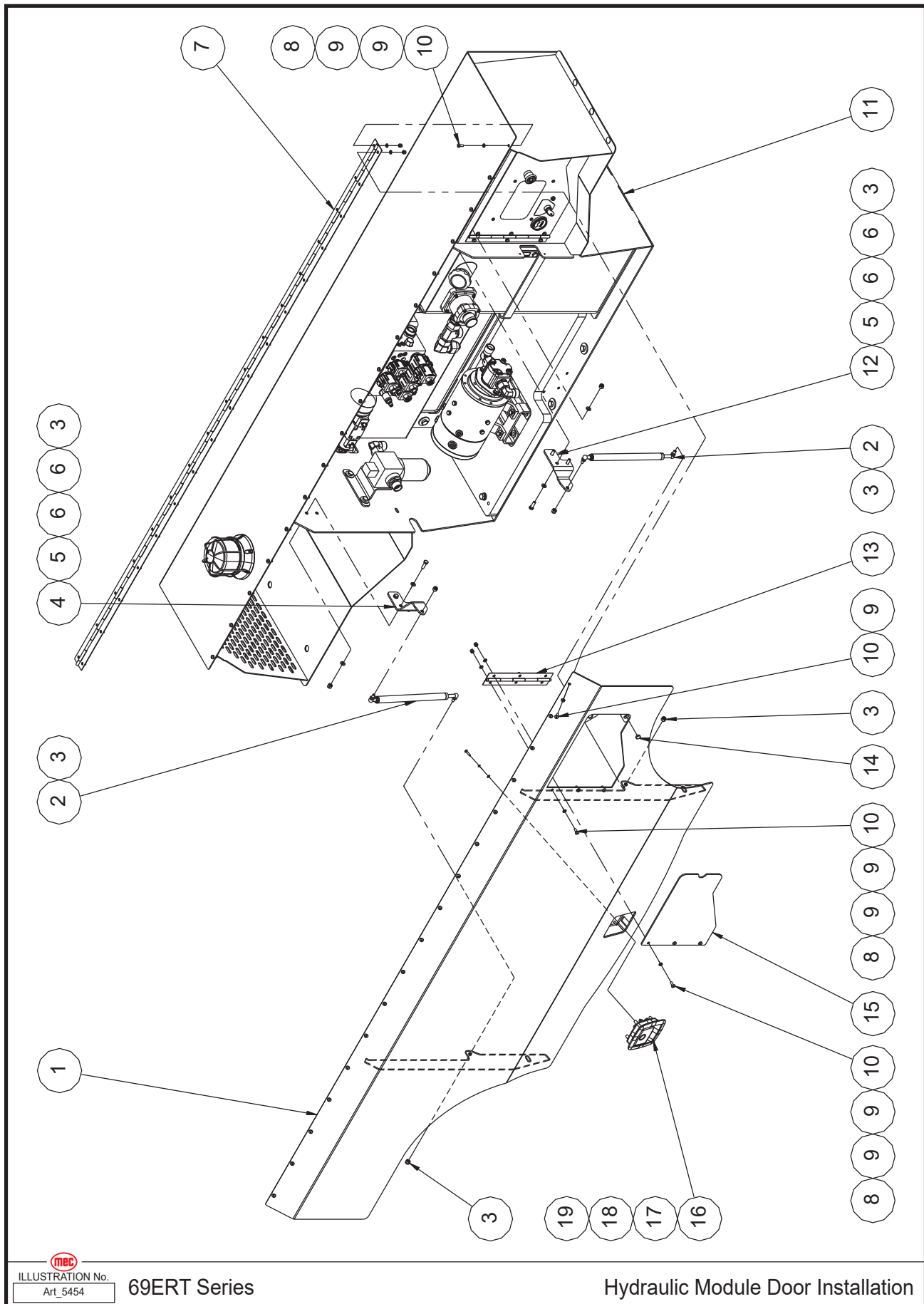


ILLUSTRATION No.
Art_5454

69ERT Series

Hydraulic Module Door Installation

Item	Part Number	Description	Qty.
1	43493	Left Door	1
2	43057	Gas Shock	2
3	50048	Nut NNYL M08 × 1.25	8
4	43058	Gas Shock Bracket	1
5	50031	Screw HHCS M08-1.25 × 25	4
6	50001	WSHR M08 Standard Flat Washer	8
7	43135	Hinge	1
8	50047	Nut NNYL M06-1.00	40
9	50000	WSHR M06 Standard Flat Washer	80
10	53231	Screw PHMS M06-1.00 × 16	40
11	REF	Hydraulic Module Assembly (Refer to page 53)	1
12	43056	Gas Shock Bracket	1
13	43054	Hinge	1
14	43053	Magnet	2
15	43052	Control Door Plate	1
16	43050	Latch	1
17	53038	WSHR M05 Standard Flat Washer	4
18	53043	WSHR M05 Spring Washer	4
19	53479	Screw PHMS M05-0.80 × 20	4

REF - Reference

Hydraulic Module Assembly

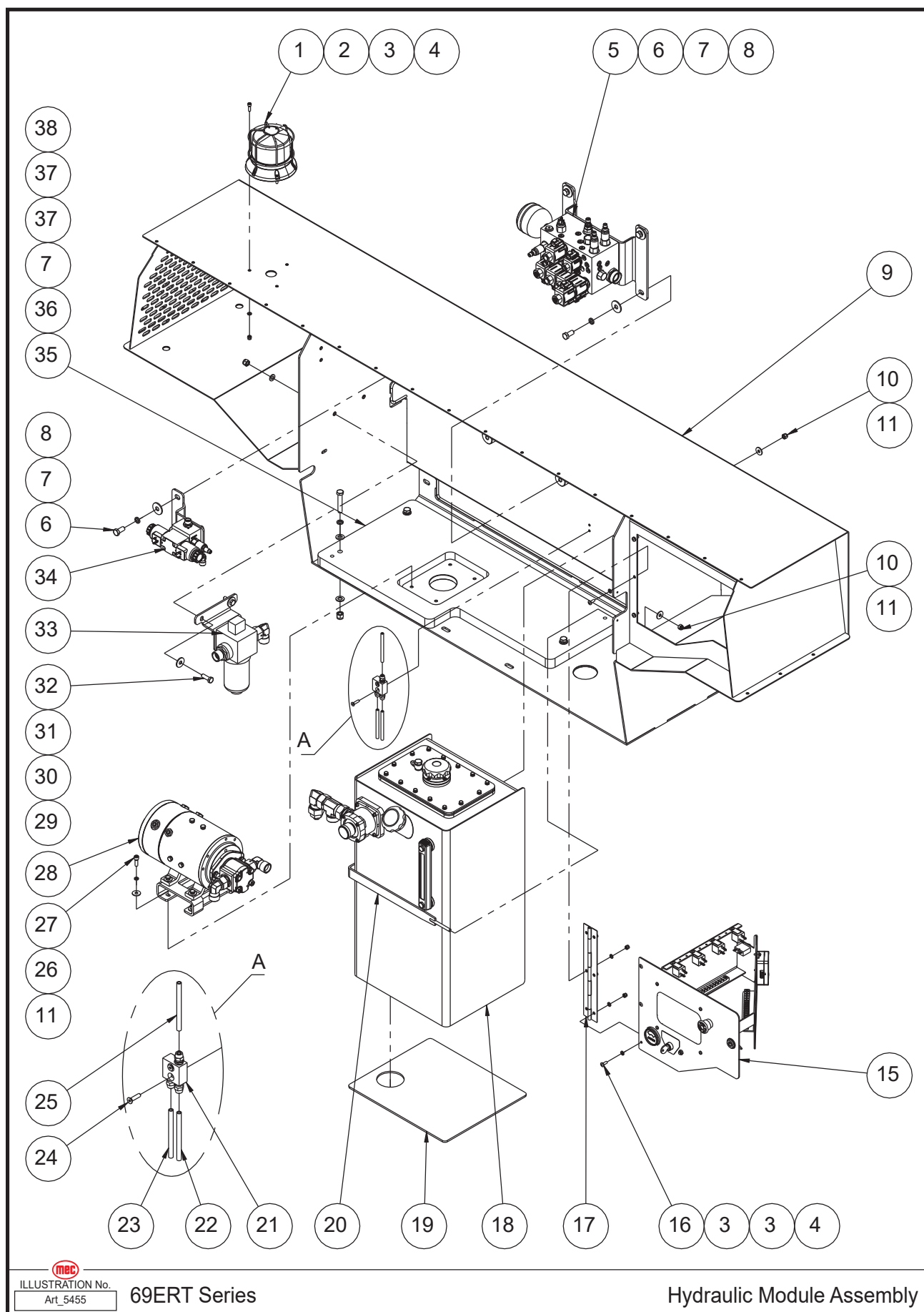


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Art_5455

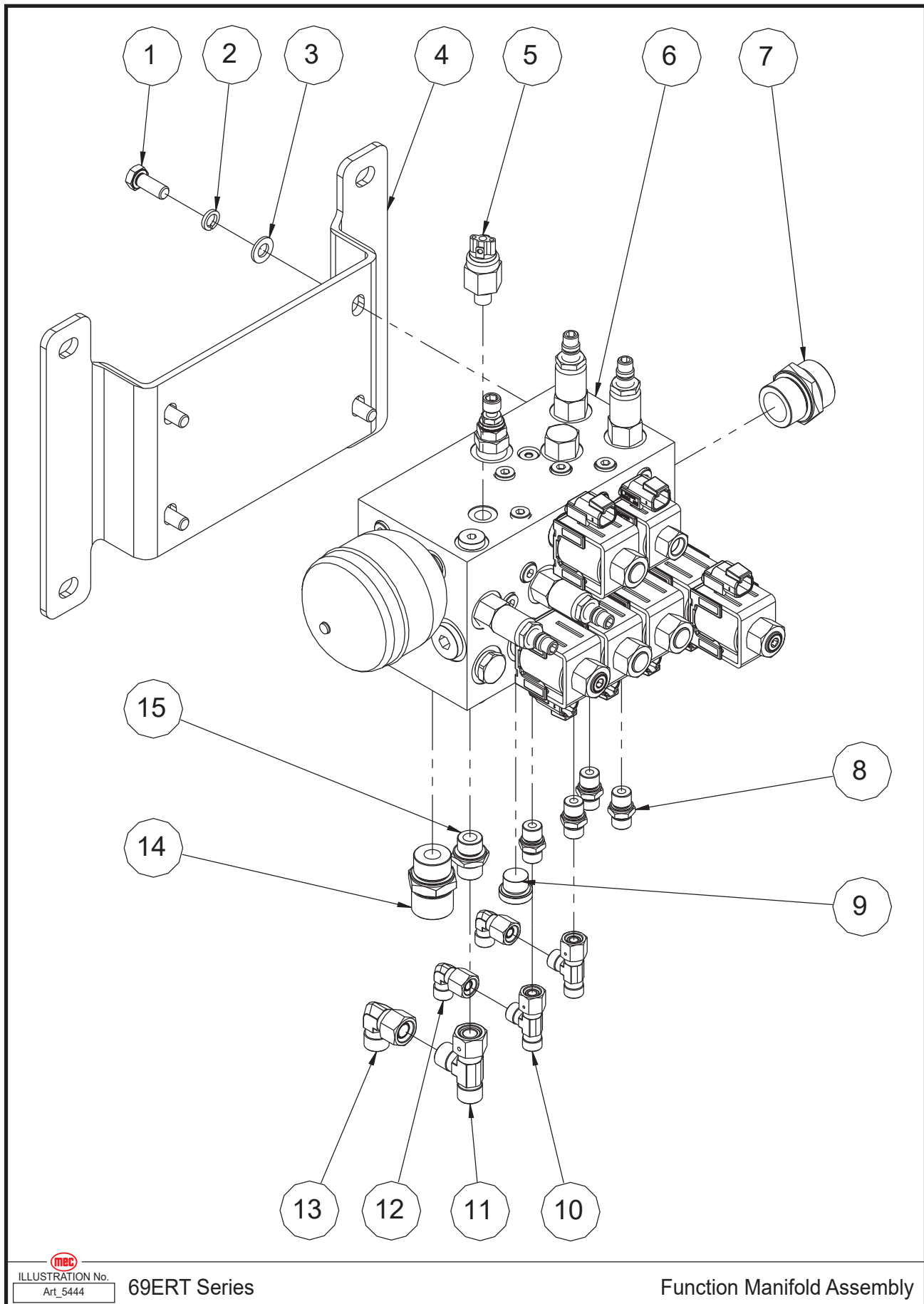
69ERT Series

Hydraulic Module Assembly

Item	Part Number	Description	Qty.
1	43442	Beacon	1
2	53124	Screw SHCS M06-1.00 × 20	3
3	50000	WSHR M06 Standard Flat Washer	15
4	50047	Nut NNYL M06-1.00	15
5	REF	Function Manifold Assembly (Refer to page 55)	1
6	50038	Screw HHCS M12-1.50 × 25	6
7	53148	WSHR M12 Spring Washer	9
8	53478	WSHR M12 Flat Fender Washer	6
9	43492	Hydraulic Tray Weldment	1
10	50048	Nut NNYL M08 × 1.25	2
11	50218	WSHR M08 Flat Fender Washer	6
12	--	--	--
13	--	--	--
14	--	--	--
15	REF	Ground Control Box Assembly (Refer to page 61)	1
16	53231	Screw PHMS M06-1.00 × 16	6
17	43069	Hinge	1
18	REF	Hydraulic Tank Assembly (Refer to page 63)	1
19	43070	Rubber Pad	1
20	43071	Tank Strap	1
21	41112	Hydraulic Hoses Manifolds	1
22	43068	Hose (4069ERT) (To Lower Lift Cylinder)	1
23	43067	Hose (4069ERT) (To Upper Lift Cylinder)	1
24	50386	Screw CSCS M06-1.00 × 25 (4069ERT)	2
25	43066	Hose (4069ERT) (To Hydraulic Tank)	1
26	53055	WSHR M08 Spring Washer	4
27	53210	Screw SHCS M08-1.25 × 25	4
28	REF	Pump Assembly (Refer to page 65)	1
29	50049	Nut NNYL M10 × 1.50	2
30	50002	WSHR M10 Standard Flat Washer	2
31	53375	WSHR M10 Flat Fender Washer	2
32	50034	Screw HHCS M10-1.50 × 30	2
33	REF	Filter Assembly (Refer to page 67)	1
34	REF	Outrigger Manifold Assembly (Refer to page 59)	1
35	43494	Counterweight	1
36	53108	Screw HHCS M12-1.75 × 65	3
37	50003	WSHR M12 Standard Flat Washer	6
38	50050	Nut NNYL M12 × 1.75	3

REF - Reference

Function Manifold Assembly



Item	Part Number	Description	Qty.
1	50033	Screw HHCS M10-1.50 × 25	4
2	53054	WSHR M10 Spring Washer	4
3	50002	WSHR M10 Standard Flat Washer	4
4	43044	Function Manifold Bracket	1
5	43045	Pressure Switch	1
6	46699	Function Manifold (Refer to page 57)	1
7	43085	Straight Fitting	1
8	43076	Straight Fitting	4
9	43124	Plug (Model Without Outriggers)	1
10	43078	Tee Fitting	2
11	43081	Tee Fitting	1
12	43077	Elbow	2
13	43082	Elbow	1
14	46645	Straight Fitting	1
15	43083	Straight Fitting (Model Without Outriggers)	1
		Straight Fitting (Model With Outriggers)	2

REF - Reference

Function Manifold, XX69ERT

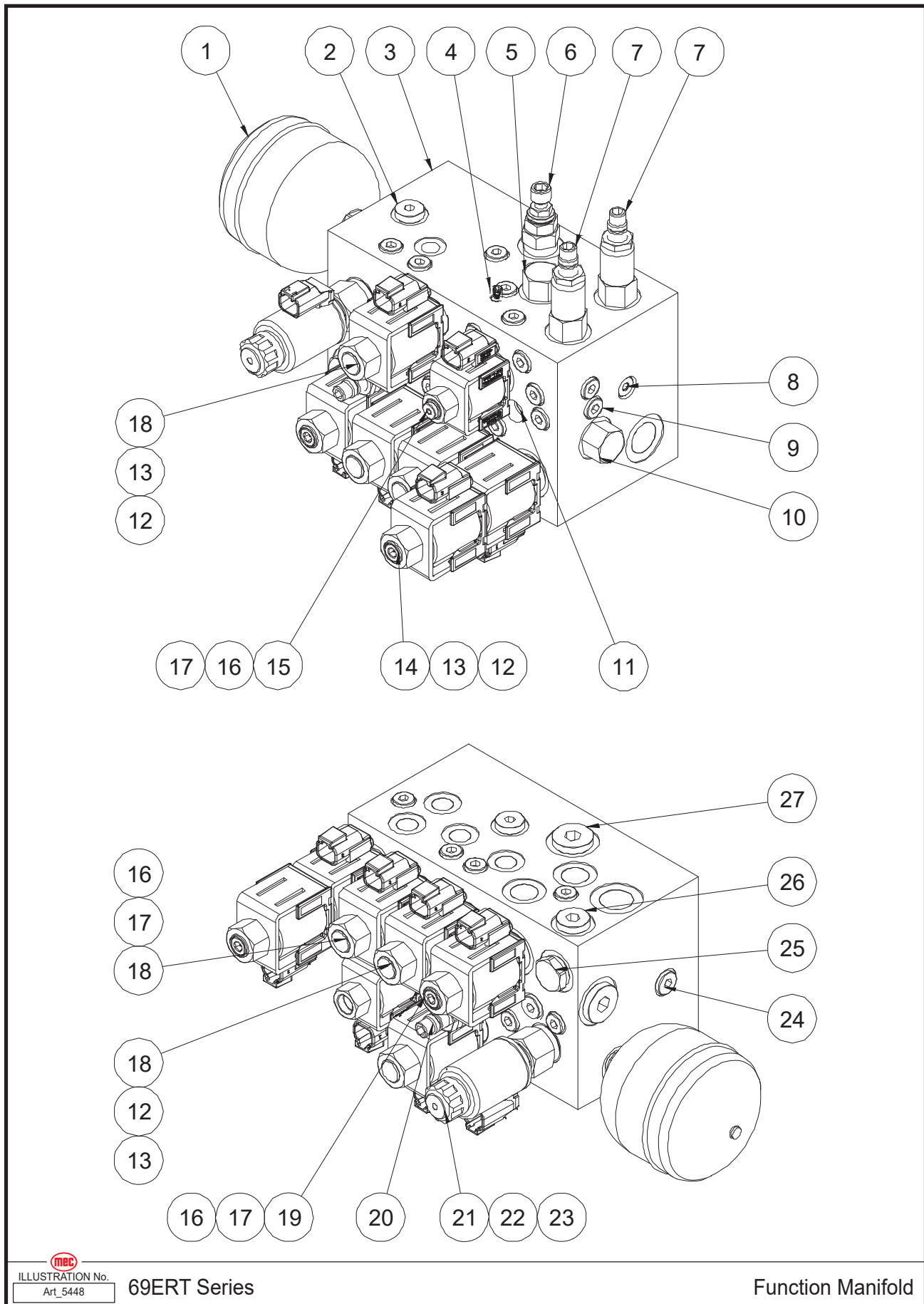


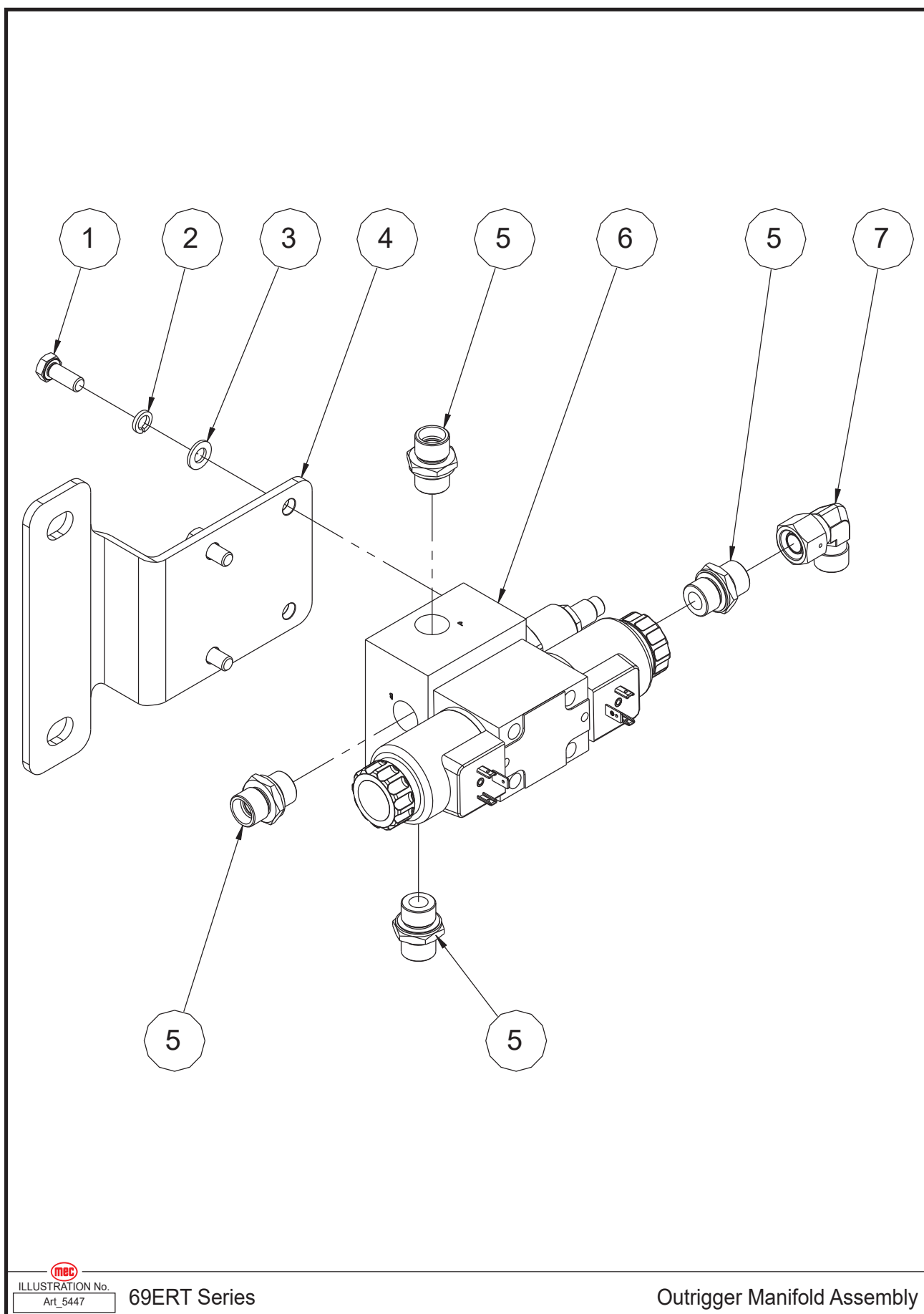
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Art_5448

69ERT Series

Function Manifold

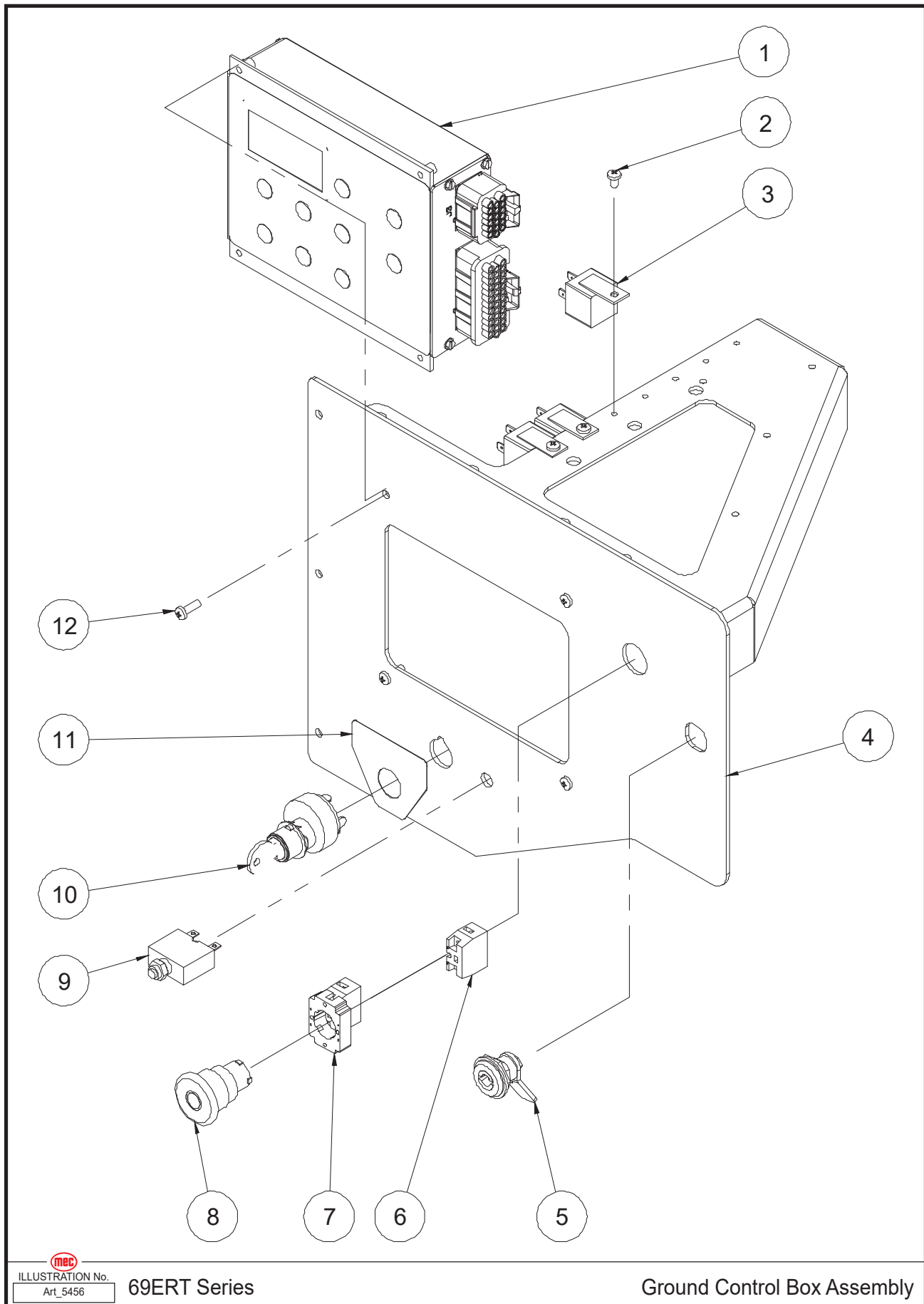
Item	Part Number	Description	Qty.
1	46676	Accumulator (A)	1
2	42480	Plug	2
3	46677	Valve Body	1
4	43429	Orifice	1
5	43471	Flow Control Valve (D1)	1
6	43472	Relief Valve (R3)	1
7	46678	Relief Valve (R4 R5)	2
8	43418	Check Valve (C3 C4)	2
9	42821	Plug	22
10	43402	Flow Control Valve (D2)	1
11	43419	Shuttle Valve (E)	1
12	43474	Nut	5
13	43475	Coil	6
14	43420	Solenoid Valve Spool (S6)	1
15	43407	Solenoid Valve Spool (S5)	1
16	43476	Coil	1
17	43477	Nut	1
18	43478	Solenoid Valve Spool (S2 S3 S4)	3
19	43479	Solenoid Valve Spool (S1)	1
20	46679	Relief Valve (R2)	1
21	46680	Proportional Relief Valve (R1)	1
22	46681	Coil	1
23	43411	Nut	1
24	43434	Plug	2
25	43439	Check Valve (C1 C2)	2
26	43119	Plug	1
27	43079	Plug	2

Outrigger Manifold Assembly



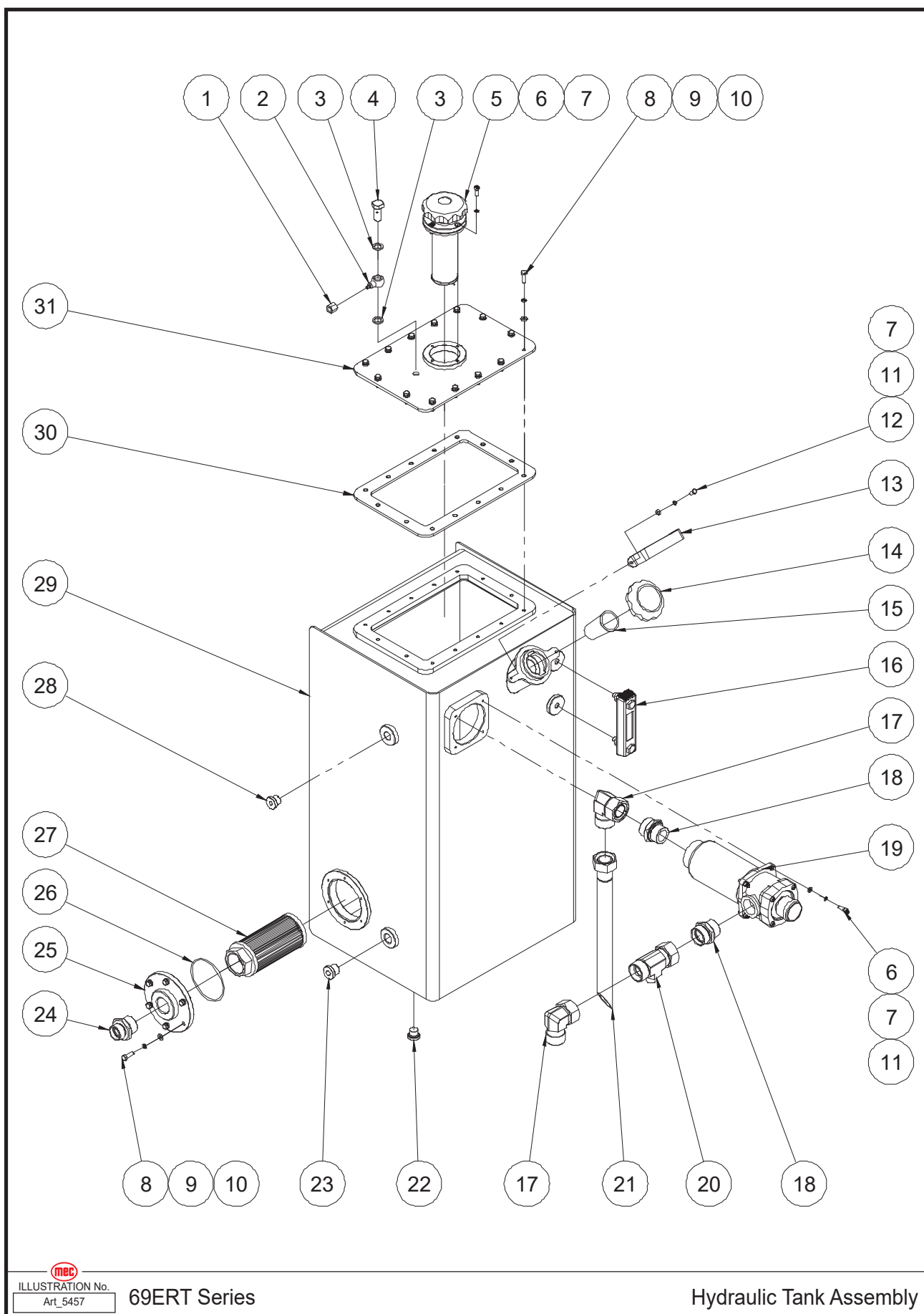
Item	Part Number	Description	Qty.
1	50030	Screw HHCS M08-1.25 × 20	3
2	53055	WSHR M08 Spring Washer	3
3	50001	WSHR M08 Standard Flat Washer	3
4	43461	Outrigger Manifold Bracket	1
5	43083	Straight Fitting	4
6	43462	Outrigger Manifold	1
--	43463	Solenoid Valve	1
--	43464	Relief Valve	1
--	43465	Plug	1
7	43082	Elbow	1

Ground Control Box Assembly



Item	Part Number	Description	Qty.
1	46456	Controller	1
2	53222	Screw PHMS M05-0.80 × 8	3
3	41334	Relay	3
4	46646	Ground Control Box Weldment	1
5	42352	Latch, Column	1
6	43096	NC Contact	1
7	43097	Base With 1 NC Contact	1
8	43098	Red Mushroom Head	1
9	43500	Circuit Breaker	1
10	41418	Key Switch	1
--	91574	Key	1
11	46647	Decal, Key Switch Panel	1
12	53351	Screw PHMS M05-0.80 × 16	4

Hydraulic Tank Assembly



Item	Part Number	Description	Qty.
1	41413	Nut	1
2	41167	Fitting	1
3	44002	Washer	2
4	41166	Fitting	1
5	42055	Air Cleaner	1
6	50359	Screw SHCS M05-0.80 × 16	8
7	53043	WSHR M05 Spring Washer	8
8	50028	Screw HHCS M06-1.00 × 20	20
9	53046	WSHR M06 Spring Washer	20
10	50000	WSHR M06 Standard Flat Washer	20
11	53038	WSHR M05 Standard Flat Washer	6
12	53081	Screw HHCS M05-0.80 × 12	2
13	46648	Keeper Bar	1
14	43109	Tank Cover	1
15	43110	Filter Web	1
16	43130	Level Gauge	1
17	43112	Elbow	2
18	43085	Straight Fitting	2
19	43113	Return Filter	1
--	42837	Filter Element	1
20	46649	Tee Fitting (Model With Outriggers)	1
21	43114	Pipe	1
22	43119	Plug	1
23	43120	Plug	1
24	43331	Straight Fitting	1
25	43121	Flange	1
26	43122	O-Ring	1
27	43123	Suction Filter	1
28	43124	Plug	1
29	46650	Hydraulic Tank Weldment	1
30	43108	Rubber Pad	1
31	43107	Cover Weldment	1

Pump Assembly

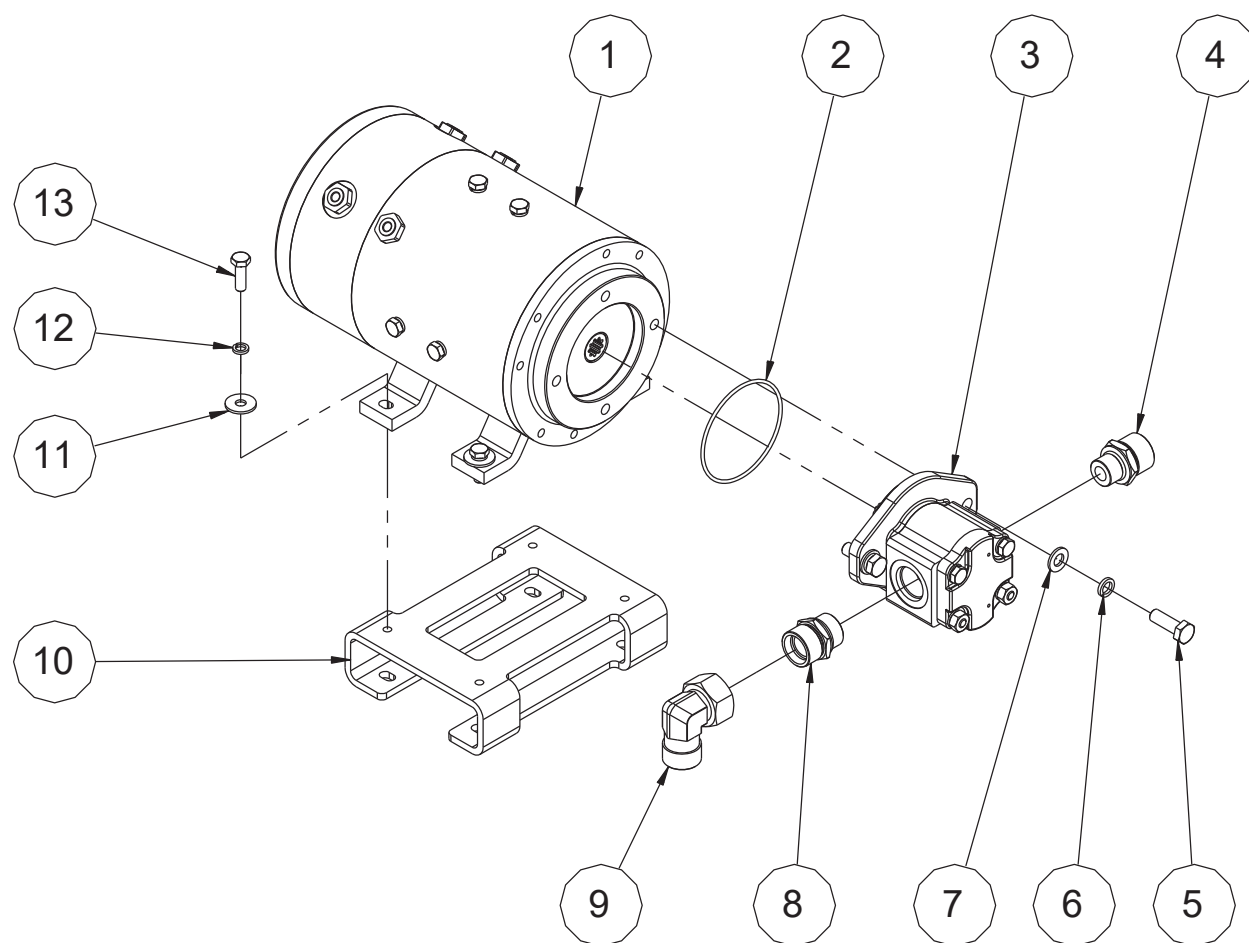


ILLUSTRATION No.
Art_5445

69ERT Series

Pump Assembly



Item	Part Number	Description	Qty.
1	43346	Motor	1
2	43122	O-Ring	1
3	43354	Gear Pump	1
4	43451	Straight Fitting	1
5	50034	Screw HHCS M10-1.50 × 30	2
6	53054	WSHR M10 Spring Washer	2
7	50002	WSHR M10 Standard Flat Washer	2
8	43455	Straight Fitting	1
9	43456	Elbow	1
10	43457	Motor Bracket	1
11	50218	WSHR M08 Flat Fender Washer	4
12	53055	WSHR M08 Spring Washer	4
13	50031	Screw HHCS M08-1.25 × 25	4

Filter Assembly

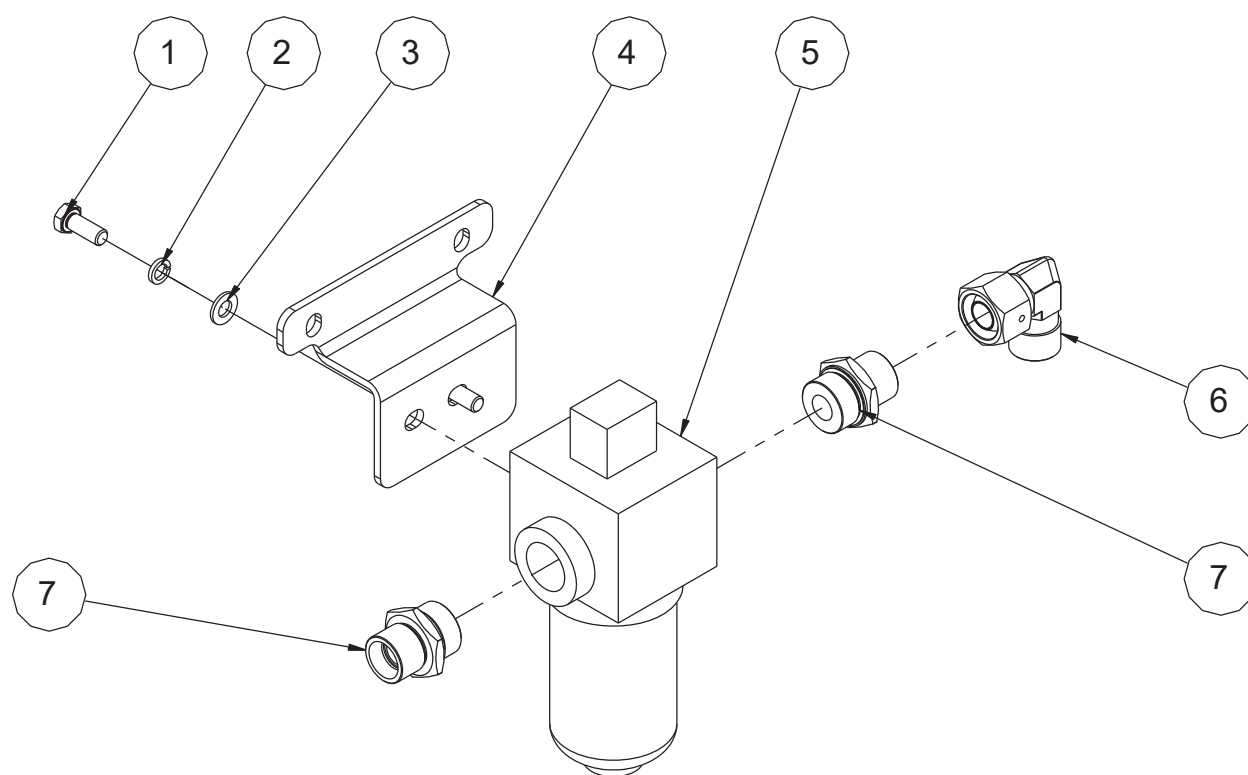


ILLUSTRATION No.
Art_5446

69ERT Series

Filter Assembly



Item	Part Number	Description	Qty.
1	50033	Screw HHCS M10-1.50 × 25	2
2	53054	WSHR M10 Spring Washer	2
3	50002	WSHR M10 Standard Flat Washer	2
4	43458	Filter Bracket	1
5	43454	High Pressure Line Filter	1
--	47188	Element, Filter	1
6	43459	Elbow	1
7	43460	Straight Fitting	2

Battery Module Installation

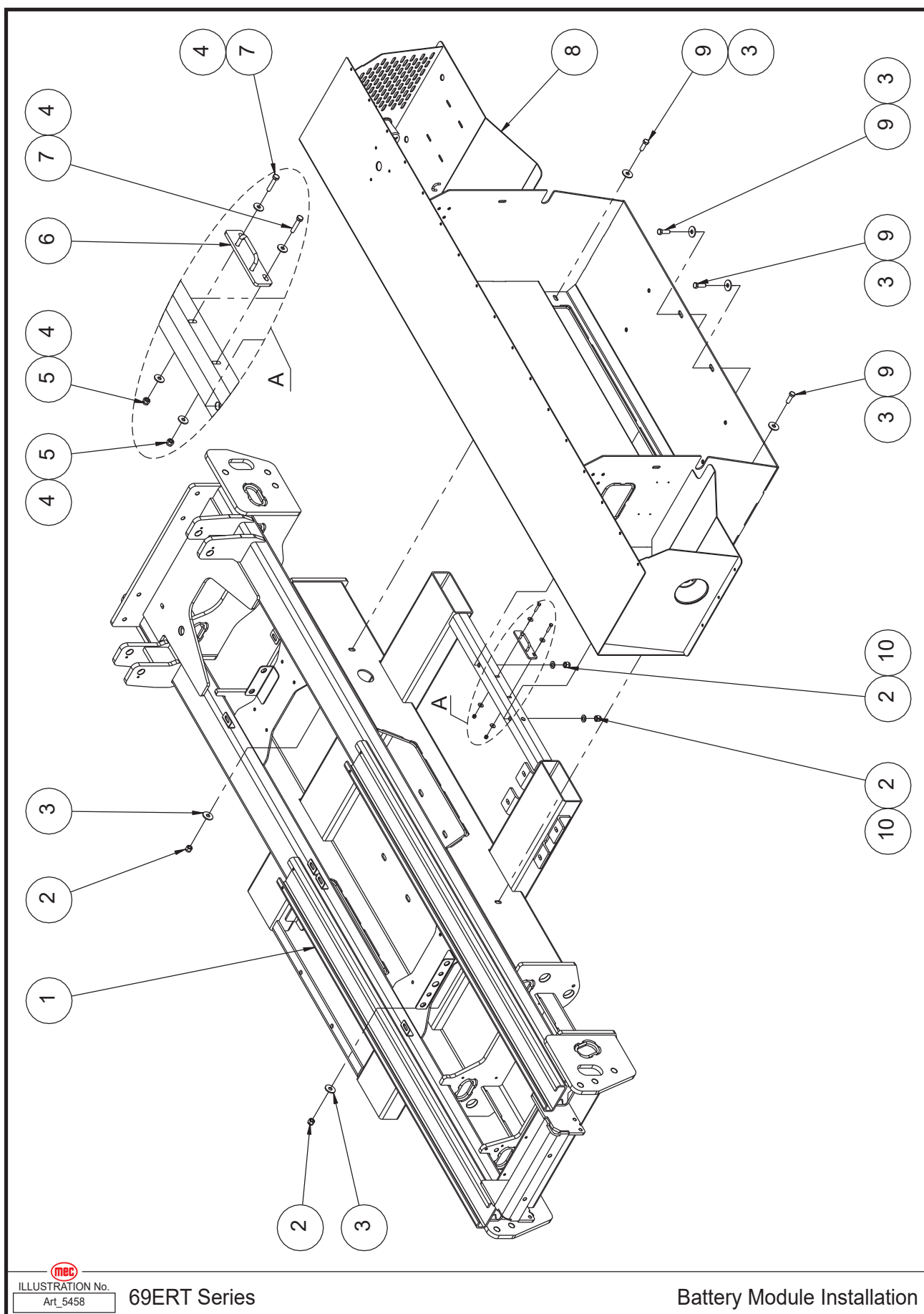


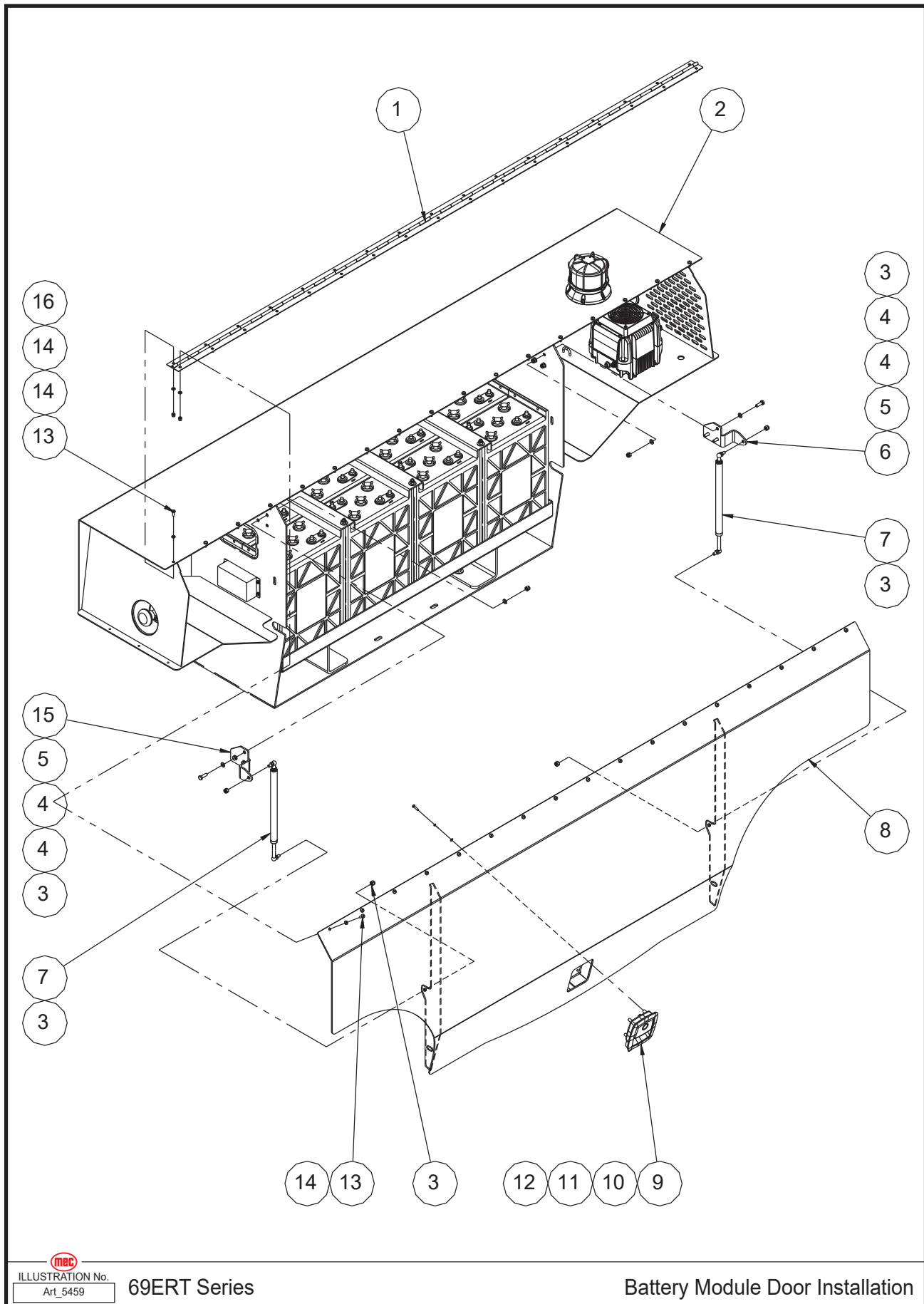
ILLUSTRATION No.
Art_5458

69ERT Series

Battery Module Installation

Item	Part Number	Description	Qty.
1	43006	Frame Weldment	1
2	50050	Nut NNYL M12 × 1.75	4
3	53478	WSHR M12 Flat Fender Washer	6
4	50068	WSHR M06 Flat Fender Washer	4
5	50047	Nut NNYL M06-1.00	2
6	43048	Lock Clasp	1
7	50214	Screw HHCS M06-1.00 × 30	2
8	43503	Battery Tray Weldment	1
9	50040	Screw HHCS M12-1.75 × 35	4
10	50003	WSHR M12 Standard Flat Washer	2

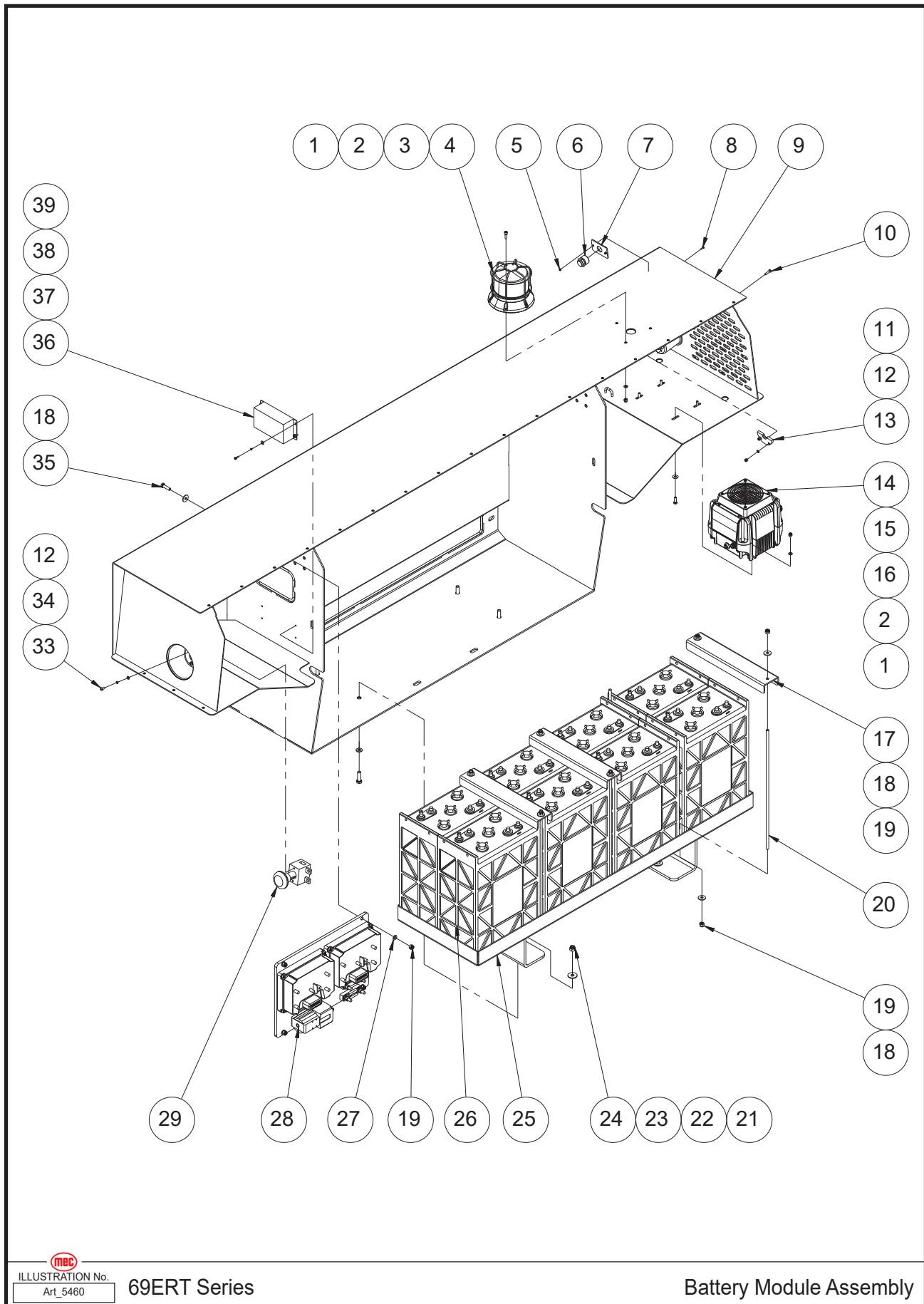
Battery Module Door Installation



Item	Part Number	Description	Qty.
1	43135	Hinge	1
2	REF	Battery Module Assembly (Refer to page 73)	1
3	50048	Nut NNYL M08 × 1.25	10
4	50001	WSHR M08 Standard Flat Washer	12
5	50031	Screw HHCS M08-1.25 × 25	6
6	43133	Gas Shock Bracket	1
7	43057	Gas Shock	2
8	43132	Right Door	1
9	43050	Latch	1
10	53479	Screw PHMS M05-0.80 × 20	4
11	53043	WSHR M05 Spring Washer	4
12	53038	WSHR M05 Standard Flat Washer	4
13	53231	Screw PHMS M06-1.00 × 16	34
14	50000	WSHR M06 Standard Flat Washer	68
15	43134	Gas Shock Bracket	1
16	50047	Nut NNYL M06-1.00	34

REF - Reference

Battery Module Assembly



Item	Part Number	Description	Qty.
1	50047	Nut NNYL M06-1.00	13
2	50000	WSHR M06 Standard Flat Washer	13
3	53124	Screw SHCS M06-1.00 × 20	3
4	43442	Beacon	1
5	53092	Nut NNYL M03 × 0.50	2
6	43504	Charger Display	1
7	43505	Display Bracket	1
8	53214	Screw THMS M03-0.50 × 10	2
9	43503	Battery Tray Weldment	1
10	53479	Screw PHMS M05-0.80 × 20	8
11	50524	Nut NNYL M05 × 0.80	8
12	53038	WSHR M05 Standard Flat Washer	10
13	41064	Half-Round Batten	4
14	43506	Charger	1
15	50028	Screw HHCS M06-1.00 × 20	4
16	50068	WSHR M06 Flat Fender Washer	4
17	43507	Battery Keeper Plate	3
18	50218	WSHR M08 Flat Fender Washer	16
19	50048	Nut NNYL M08 × 1.25	16
20	43508	Threaded Rod	6
21	50332	Screw HHCS M10-1.50 × 35	4
22	50002	WSHR M10 Standard Flat Washer	4
23	53375	WSHR M10 Flat Fender Washer	4
24	50049	Nut NNYL M10 × 1.50	4
25	43509	Battery Box Weldment	1
26	43510	Battery	8
27	50001	WSHR M08 Standard Flat Washer	4
28	REF	Motor Controller Assembly (Refer to page 75)	1
29	42071	Power Switch	1
30	--	--	--
31	--	--	--
32	--	--	--
33	53378	Screw PHMS M05-0.80 × 12	2
34	53043	WSHR M05 Spring Washer	2
35	50032	Screw HHCS M08-1.25 × 30	4
36	43511	DC Power Supply	1
37	50423	Screw SHCS M04-0.70 × 12	4
38	53062	WSHR M04 Spring Washer	4
39	53120	WSHR M04 Flat Fender Washer	4

REF - Reference

Motor Controller Assembly

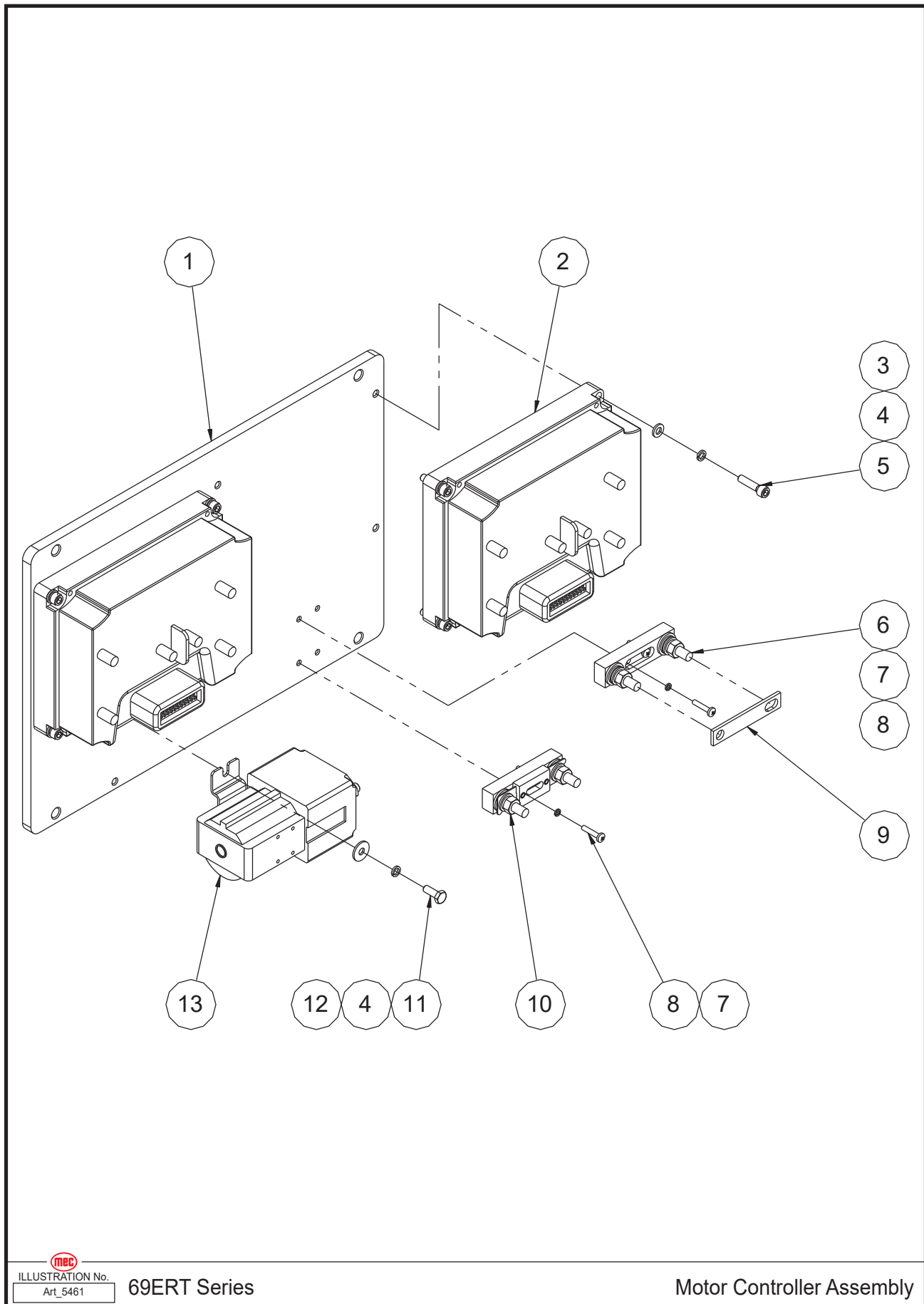


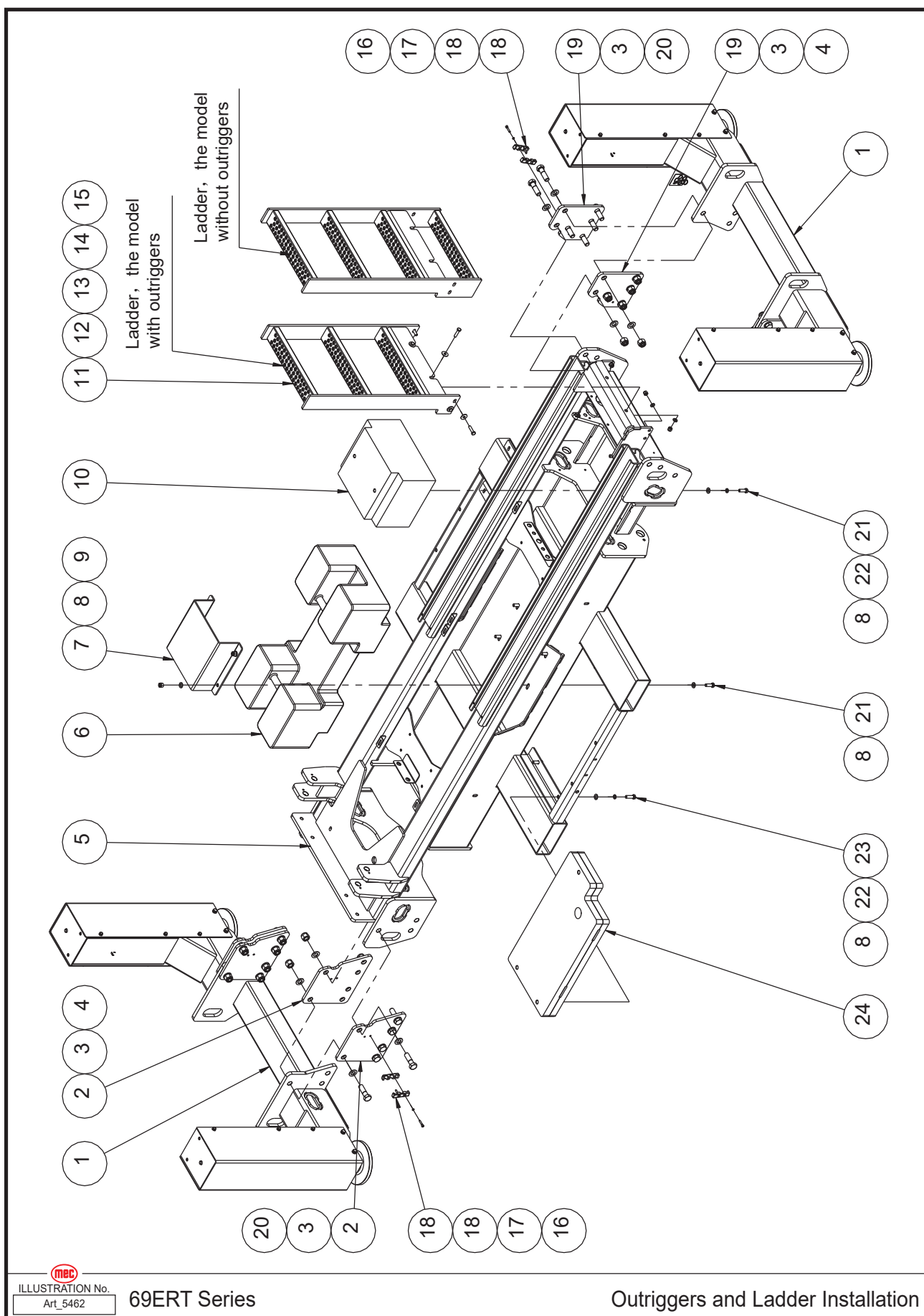
ILLUSTRATION No.
Art_5461

69ERT Series

Motor Controller Assembly

Item	Part Number	Description	Qty.
1	43512	Mounting Plate	1
2	43513	Motor Controller	2
3	50000	WSHR M06 Standard Flat Washer	8
4	53046	WSHR M06 Spring Washer	10
5	53123	Screw SHCS M06-1.00 × 25	8
6	41092	Fuse Seat	1
7	53062	WSHR M04 Spring Washer	4
8	53488	Screw PHMS M04-0.70 × 20	4
9	43515	Copper Bar 3	1
10	43516	350A Fuse Assembly	1
--	43517	350A Fuse	1
11	50445	Screw HHCS M06-1.00 × 16	2
12	50068	WSHR M06 Flat Fender Washer	2
13	43518	DC Contactor	1

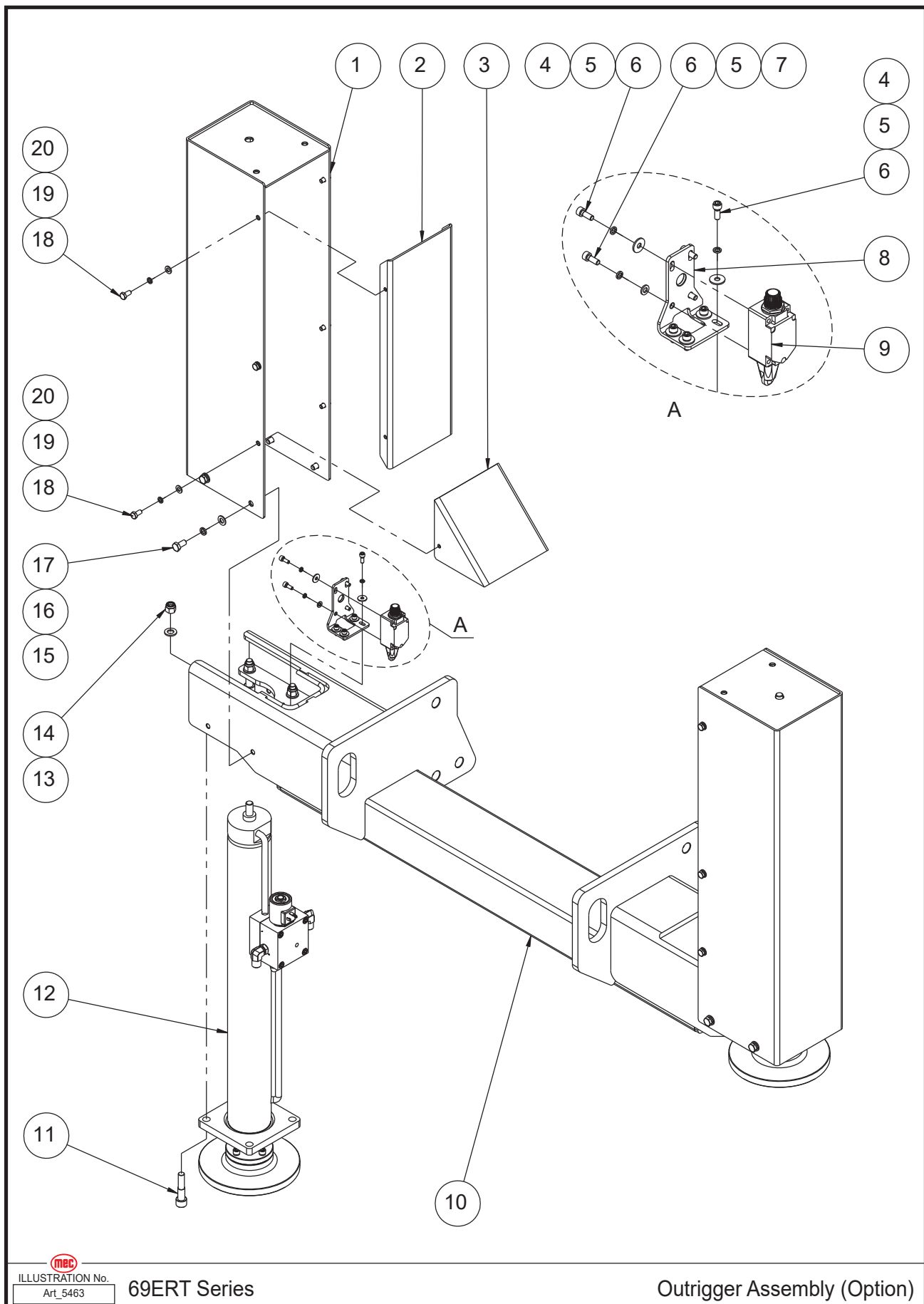
Outriggers and Ladder Installation



Item	Part Number	Description	Qty.
1	REF	Outrigger Assembly (Refer to page 79)	2
2	43222	Outrigger Mount Plate	4
3	50005	WSHR M20 Standard Flat Washer	48
4	50052	Nut NNYL M20 × 2.50	24
5	43006	Frame Weldment	1
6	43219	Counterweight (4069ERT Without Outriggers)	1
7	43220	Locating Plate (4069ERT Without Outriggers)	1
8	50003	WSHR M12 Standard Flat Washer	13
9	50050	Nut NNYL M12 × 1.75	4
10	46651	Counterweight	1
11	43214	Ladder (3369ERT With Outriggers)	1
	43215	Ladder (3369ERT Without Outriggers)	1
	43216	Ladder (4069ERT With Outriggers)	1
	43217	Ladder (4069ERT Without Outriggers)	1
12	50237	Screw HHCS M10-1.50 × 40	6
13	53375	WSHR M10 Flat Fender Washer	6
14	50002	WSHR M10 Standard Flat Washer	6
15	50049	Nut NNYL M10 × 1.50	6
16	53207	Screw SHCS M06-1.00 × 30	8
17	53046	WSHR M06 Spring Washer	8
18	43221	Hose Clamp	8
19	43223	Outrigger Mount Plate	4
20	50488	Screw HHCS M20-2.50 × 70	24
21	50040	Screw HHCS M12-1.75 × 35	2
22	53148	WSHR M12 Spring Washer	5
23	53247	Screw HHCS M12-1.50 × 40	3
24	43519	Counterweight	1

REF - Reference

Outrigger Assembly



Item	Part Number	Description	Qty.
1	43224	Outrigger Housing	2
2	43225	Cover	2
3	43226	Cover	2
4	50068	WSHR M06 Flat Fender Washer	12
5	53046	WSHR M06 Spring Washer	16
6	53138	Screw SHCS M06-1.00 × 16	16
7	50000	WSHR M06 Standard Flat Washer	4
8	43227	Switch Bracket	2
9	43228	Limit Switch	2
10	43233	Outrigger Yoke	1
11	43234	Screw	8
12	REF	Outrigger Cylinder Assembly (Refer to page 131)	2
13	50003	WSHR M12 Standard Flat Washer	8
14	50050	Nut NNYL M12 × 1.75	8
15	50002	WSHR M10 Standard Flat Washer	8
16	53054	WSHR M10 Spring Washer	8
17	50215	Screw HHCS M10-1.50 × 20	8
18	53154	Screw HHCS M08-1.25 × 16	12
19	53055	WSHR M08 Spring Washer	12
20	50001	WSHR M08 Standard Flat Washer	12

REF - Reference

Chassis Accessory Installation

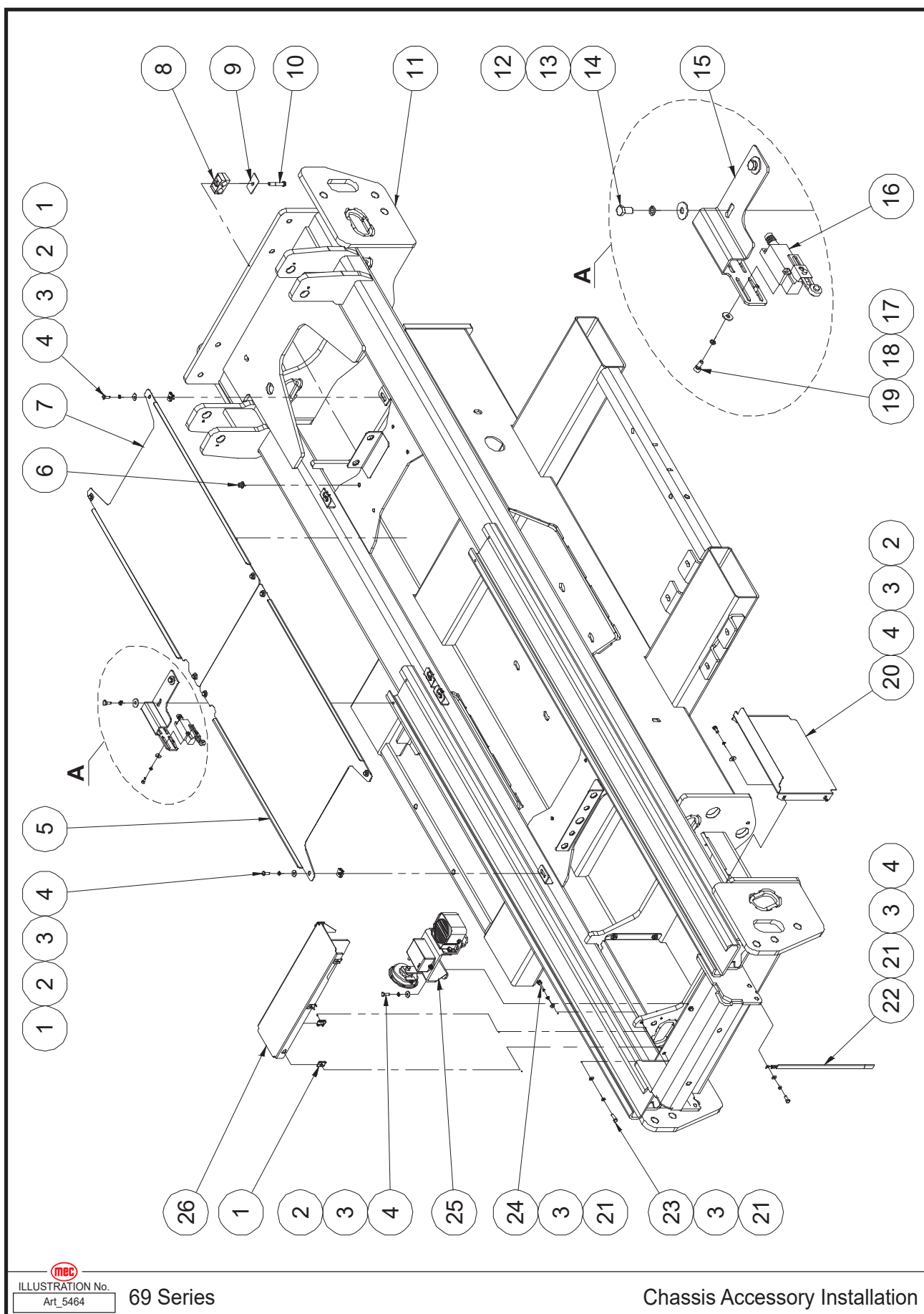


ILLUSTRATION No.
Art_5464

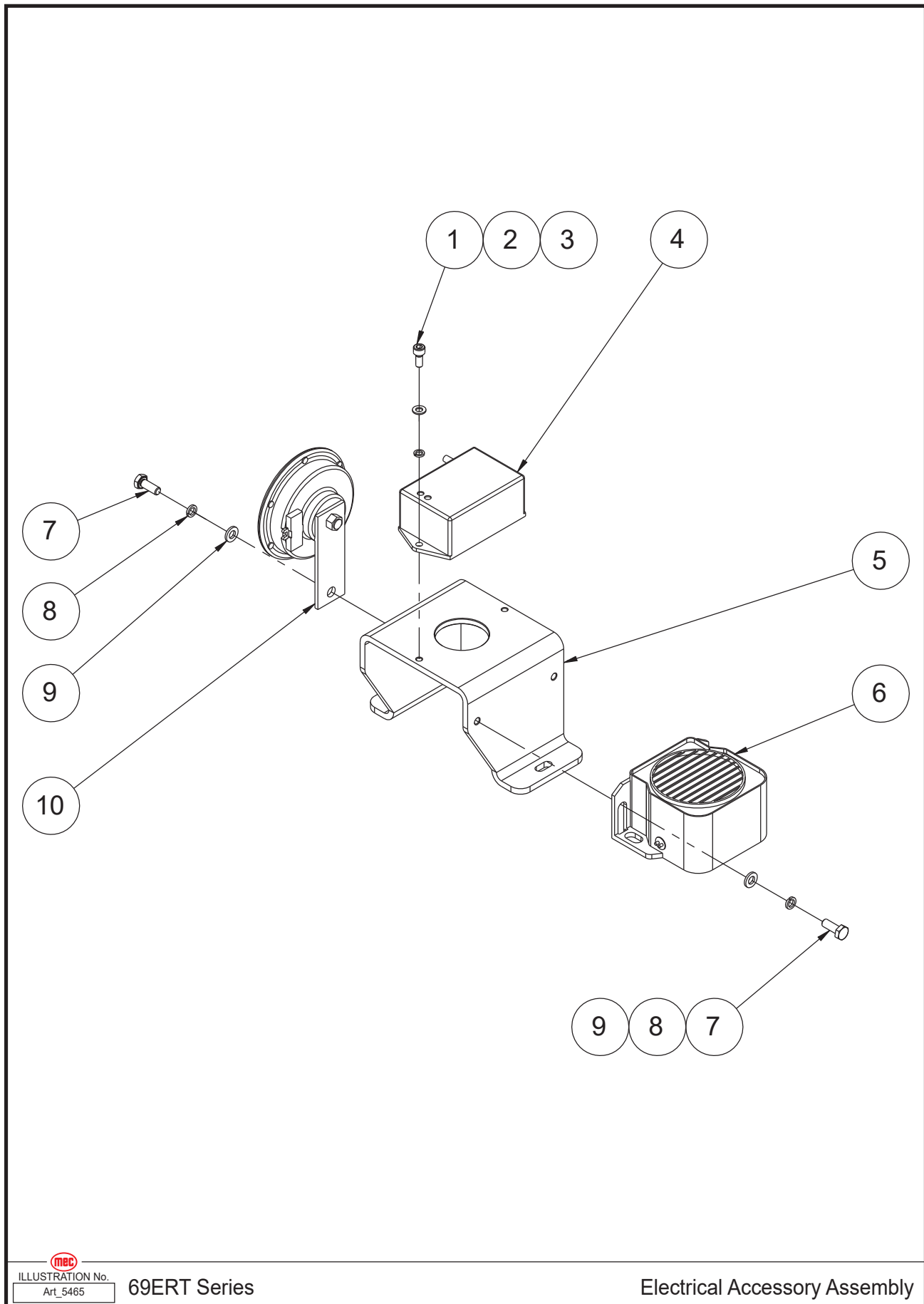
69 Series

Chassis Accessory Installation

Item	Part Number	Description	Qty.
1	53481	No-Slip Clip-On Barrel Nut M06-1.00	13
2	50068	WSHR M06 Flat Fender Washer	18
3	53046	WSHR M06 Spring Washer	27
4	50445	Screw HHCS M06-1.00 × 16	22
5	43235	Cover	1
6	50313	Nut NNYL M08-1.25 Flange	1
7	43236	Cover	1
8	43520	Hose Clamp	1
9	41415	Base Plate	1
10	50015	Screw HHCS M08-1.25 × 50	1
11	43006	Frame Weldment	1
12	53055	WSHR M08 Spring Washer	2
13	50218	WSHR M08 Flat Fender Washer	2
14	53154	Screw HHCS M08-1.25 × 16	2
15	43238	Switch Bracket	1
16	42402	Limit Switch	1
17	50525	WSHR M05 Flat Fender Washer	4
18	53043	WSHR M05 Spring Washer	6
19	53116	Screw SHCS M05-0.80 × 12	6
20	43522	Cover	2
21	50000	WSHR M06 Standard Flat Washer	9
22	43239	Ground Strap	1
23	50028	Screw HHCS M06-1.00 × 20	3
24	50214	Screw HHCS M06-1.00 × 30	2
25	REF	Electrical Accessory Assembly (Refer to page 83)	1
26	43240	Cover	1

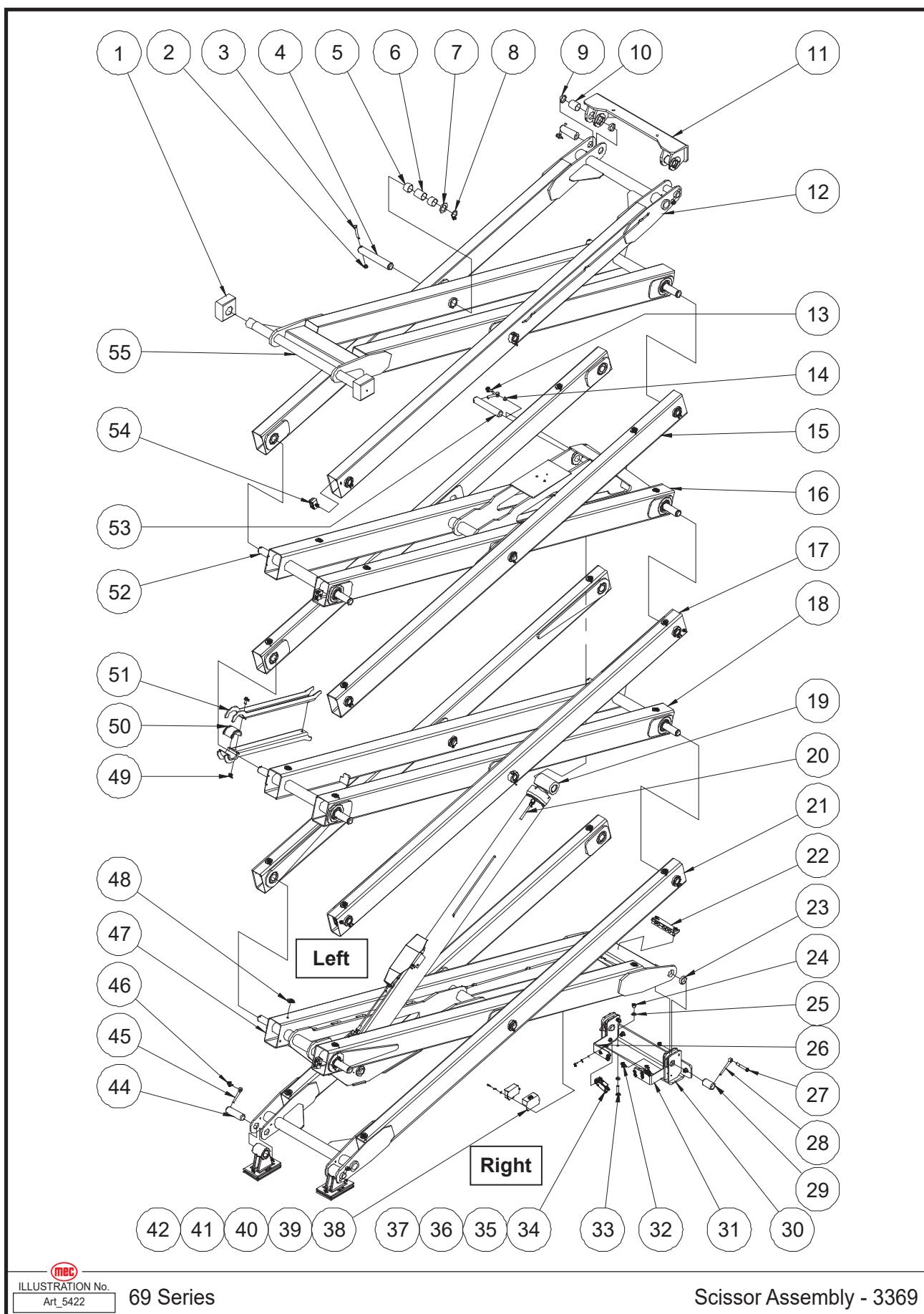
REF - Reference

Electrical Accessory Assembly



Item	Part Number	Description	Qty.
1	53116	Screw SHCS M05-0.80 × 12	2
2	53038	WSHR M05 Standard Flat Washer	2
3	53043	WSHR M05 Spring Washer	2
4	43241	Tilt Sensor	1
5	43242	Mounting Plate	1
6	42882	Alarm	1
7	50445	Screw HHCS M06-1.00 × 16	3
8	53046	WSHR M06 Spring Washer	3
9	50000	WSHR M06 Standard Flat Washer	3
10	41075	Horn	1

Scissor Assembly, 3369ERT



Item	Part Number	Description	Qty.
1	43244	Platform Slider	2
2	50049	Nut NNYL M10 × 1.50	12
3	50352	Screw HHCS M10-1.50 × 80	12
4	43245	Pin	4
5	41105	Bearing	24
6	43246	Spacer Sleeve 2	4
7	41480	Washer	12
8	43248	Circlips	12
9	43249	Bearing	4
10	43250	Spacer Sleeve 1	2
11	43251	Platform Pivot Weldment	1
12	46652	Outer Arm 4	1
13	53304	Screw HHCS M10-1.50 × 35 Serrated Flange	2
14	43253	Washer	2
15	43254	Outer Arm 3	1
--	46653	Left Single Link 3	1
--	46654	Right Single Link 3	1
16	46655	Inner Arm 3	1
17	46656	Outer Arm 2	1
--	46657	Left Single Link 2	1
--	46658	Right Single Link 2	1
18	43257	Inner Arm 2	1
19	REF	Lower Lift Cylinder Assembly (Refer to page 119)	1
20	43258	Hose	1
21	43259	Outer Arm 1	1
22	43546	Hose Clamp Assembly (Refer to page 95)	1
23	43260	Bearing	2
24	50050	Nut NNYL M12 × 1.75	6
25	50003	WSHR M12 Standard Flat Washer	12
26	43261	Switch Bracket	1
27	53482	Screw HHCS M10-1.50 × 80 Flange	2
28	43262	Pin	2
29	43263	Pin	2
30	43264	Chassis Link Pivot Weldment	1
31	43265	Switch Bracket	1
32	53433	Screw HHCS M10-1.50 × 20 Serrated Flange	2
33	50023	Screw HHCS M12-1.75 × 50	6
34	42074	Limit Switch	2
35	53038	WSHR M05 Standard Flat Washer	8
36	53043	WSHR M05 Spring Washer	8
37	50359	Screw SHCS M05-0.80 × 16	8
38	41111	Sensor Cover (3369ERT)	1
39	41110	Angle Sensor (3369ERT)	1
40	50284	WSHR M04 Standard Flat Washer (3369ERT)	2
41	53062	WSHR M04 Spring Washer (3369ERT)	2

42	50483	Screw SHCS M04-0.70 × 10 (3369ERT)	2
43	REF	Slider Assembly (Refer to page 93)	2
44	43269	Pin	4
45	41431	Pin	6
46	50429	Screw HHCS M10-1.50 × 25 Serrated Flange	6
47	46659	Inner Arm 1	1
48	41114	Block	24
49	50311	Nut NNYL M10-1.50 Flange	4
50	41109	Safety Arm Bushing	2
51	43273	Safety Arm	2
52	43274	Pin	8
53	43275	Pin	2
54	46723	Hose Clamp Assembly 2 (Refer to page 99)	6
55	43276	Inner Arm 4	1

REF - Reference

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Scissor Assembly, 4069ERT

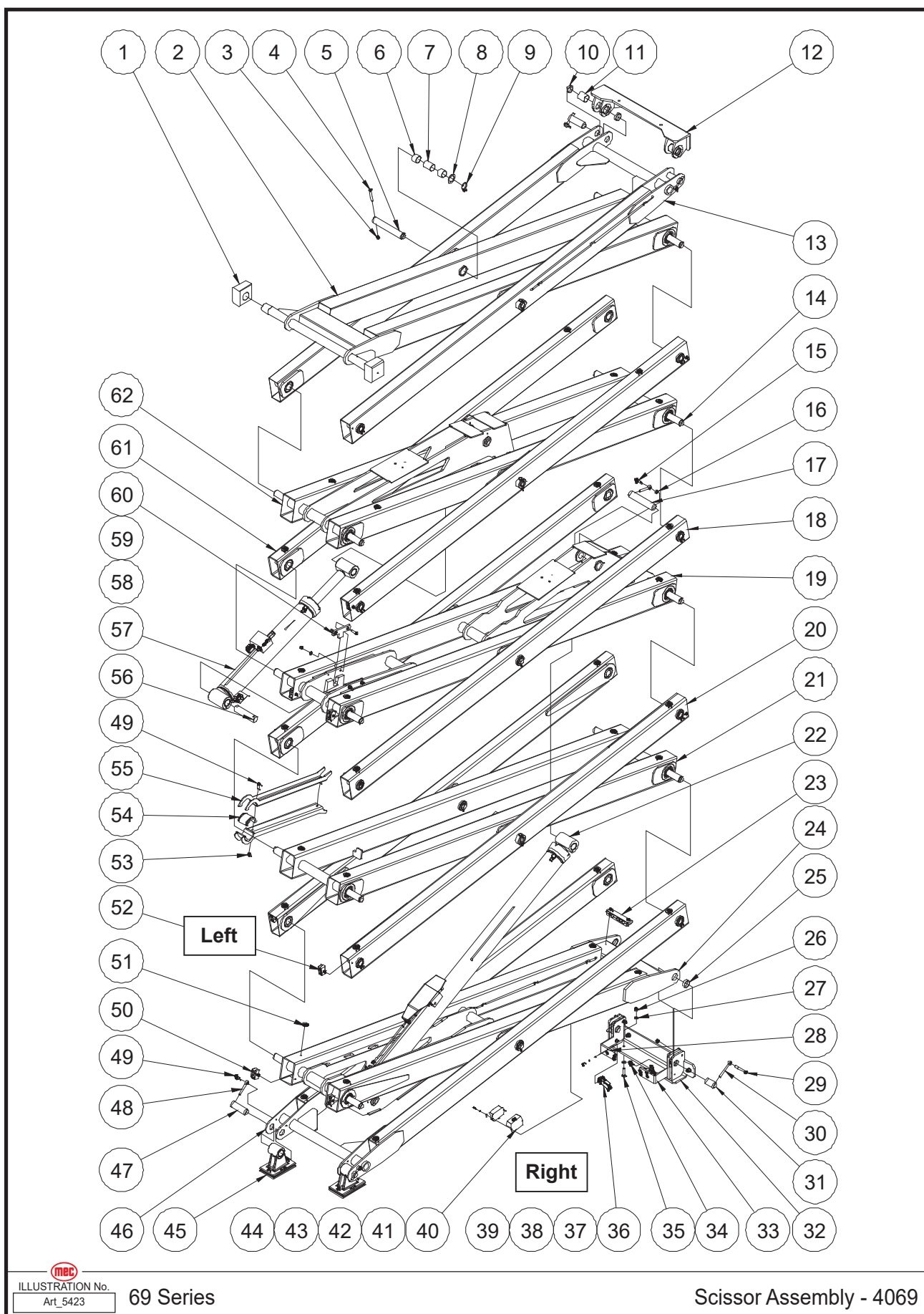


ILLUSTRATION No.
Art_5423

69 Series

Scissor Assembly - 4069



Item	Part Number	Description	Qty.
1	43244	Platform Slider	2
2	43276	Inner Arm 4	1
3	50049	Nut NNYL M10 × 1.50	20
4	50352	Screw HHCS M10-1.50 × 80	16
5	43245	Pin	6
6	41105	Bearing	32
7	43246	Spacer Sleeve 2	6
8	41480	Washer	16
9	43248	Circlips	16
10	43249	Bearing	4
11	43250	Spacer Sleeve 1	2
12	43251	Platform Pivot Weldment	1
13	46652	Outer Arm 4	1
14	43274	Pin	10
15	53304	Screw HHCS M10-1.50 × 35 Serrated Flange	3
16	43253	Washer	3
17	43275	Pin	3
18	43277	Outer Arm 3	1
--	46660	Left Single Link 3	1
--	46661	Right Single Link 3	1
19	46662	Inner Arm 3	1
20	46656	Outer Arm 2	1
--	46657	Left Single Link 2	1
--	46658	Right Single Link 2	1
21	43257	Inner Arm 2	1
22	REF	Lower Lift Cylinder Assembly (Refer to page 119)	1
23	43546	Hose Clamp Assembly (Refer to page 95)	1
24	46659	Inner Arm 1	1
25	43260	Bearing	2
26	50050	Nut NNYL M12 × 1.75	6
27	50003	WSHR M12 Standard Flat Washer	12
28	43261	Switch Bracket	1
29	53482	Screw HHCS M10-1.50 × 80 Flange	2
30	43262	Pin	2
31	43263	Pin	2
32	43264	Chassis Link Pivot Weldment	1
33	43265	Switch Bracket	1
34	53433	Screw HHCS M10-1.50 × 20 Serrated Flange	2
35	50023	Screw HHCS M12-1.75 × 50	6
36	42074	Limit Switch	2
37	53038	WSHR M05 Standard Flat Washer	8
38	53043	WSHR M05 Spring Washer	8
39	50359	Screw SHCS M05-0.80 × 16	8
40	41111	Sensor Cover (4069ERT)	1
41	41110	Angle Sensor (4069ERT)	1

42	50284	WSHR M04 Standard Flat Washer (4069ERT)	2
43	53062	WSHR M04 Spring Washer (4069ERT)	2
44	50483	Screw SHCS M04-0.70 × 10 (4069ERT)	2
45	REF	Slider Assembly (Refer to page 93)	2
46	43259	Outer Arm 1	1
47	43269	Pin	4
48	41431	Pin	7
49	50429	Screw HHCS M10-1.50 × 25 Serrated Flange	6
50	43547	Hose Clamp Assembly (Refer to page 97)	5
51	41114	Block	32
52	46723	Hose Clamp Assembly 2 (Refer to page 99)	7
53	50311	Nut NNYL M10-1.50 Flange	4
54	41109	Safety Arm Bushing	2
55	43273	Safety Arm	2
56	43279	Pin	1
57	REF	Upper Lift Cylinder Assembly (Refer to page 121)	1
58	50002	WSHR M10 Standard Flat Washer	4
59	53230	Screw CSCS M10-1.50 × 40	4
60	43280	Pin Fixing Plate	2
61	46663	Outer Arm 4	1
--	46664	Left Single Link 4	1
--	46665	Right Single Link 4	1
62	43282	Inner Arm 4	1

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Slider Assembly

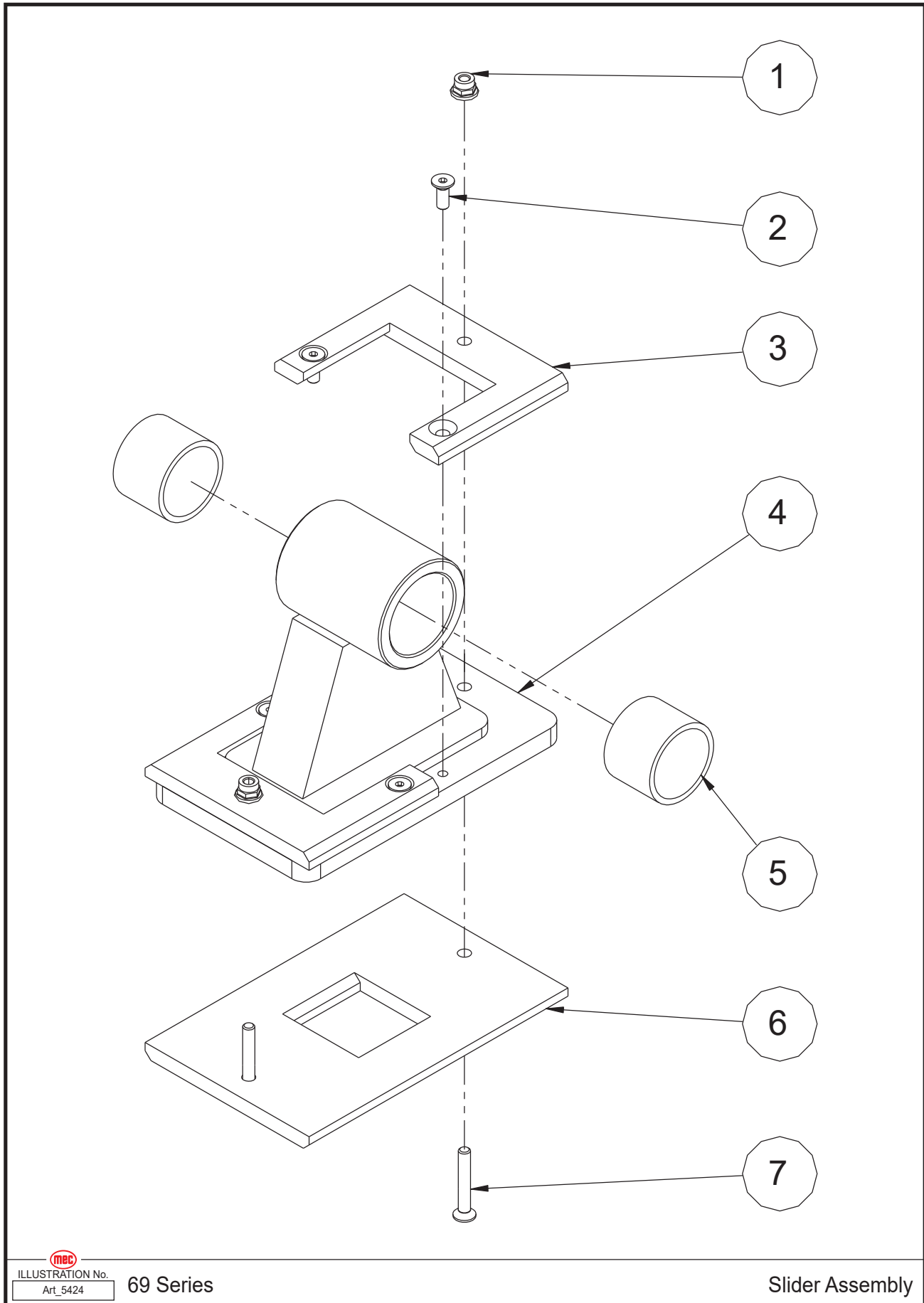


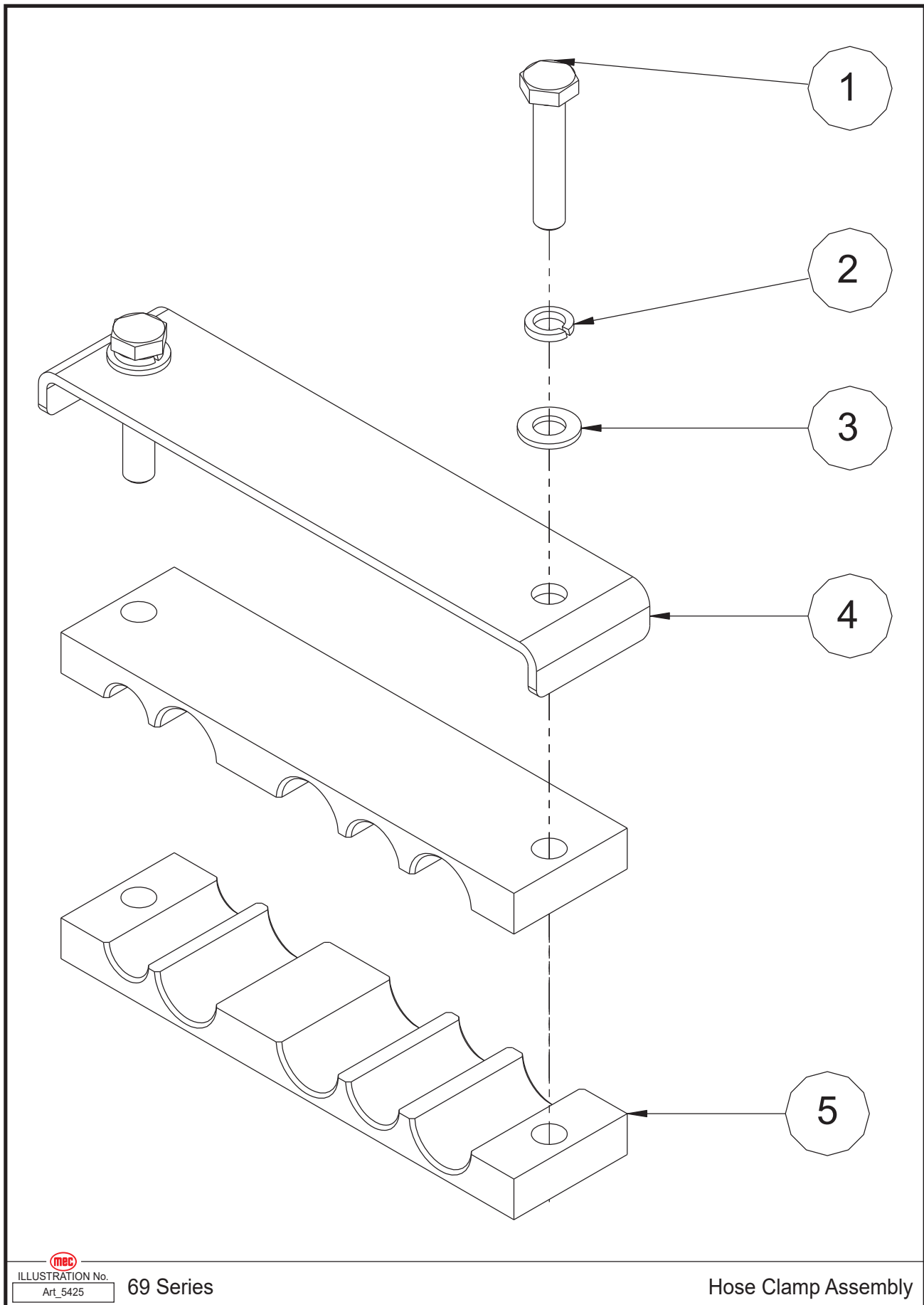
ILLUSTRATION No.
Art_5424

69 Series

Slider Assembly

Item	Part Number	Description	Qty.
1	50568	Nut NNYL M06-1.00 Flange	2
2	53226	Screw CSCS M06-1.00 × 16	4
3	43283	Upper Slider	2
4	46666	Slider Foot Weldment	1
5	41105	Bearing	2
6	43285	Lower Slider	1
7	53126	Screw CSCS M06-1.00 × 40	2

Hose Clamp Assembly



Item	Part Number	Description	Qty.
1	50014	Screw HHCS M08-1.25 × 40	2
2	53055	WSHR M08 Spring Washer	2
3	50001	WSHR M08 Standard Flat Washer	2
4	43286	Base Plate	1
5	43287	Hose Clamp	2

Hose Clamp Assembly, 4069ERT

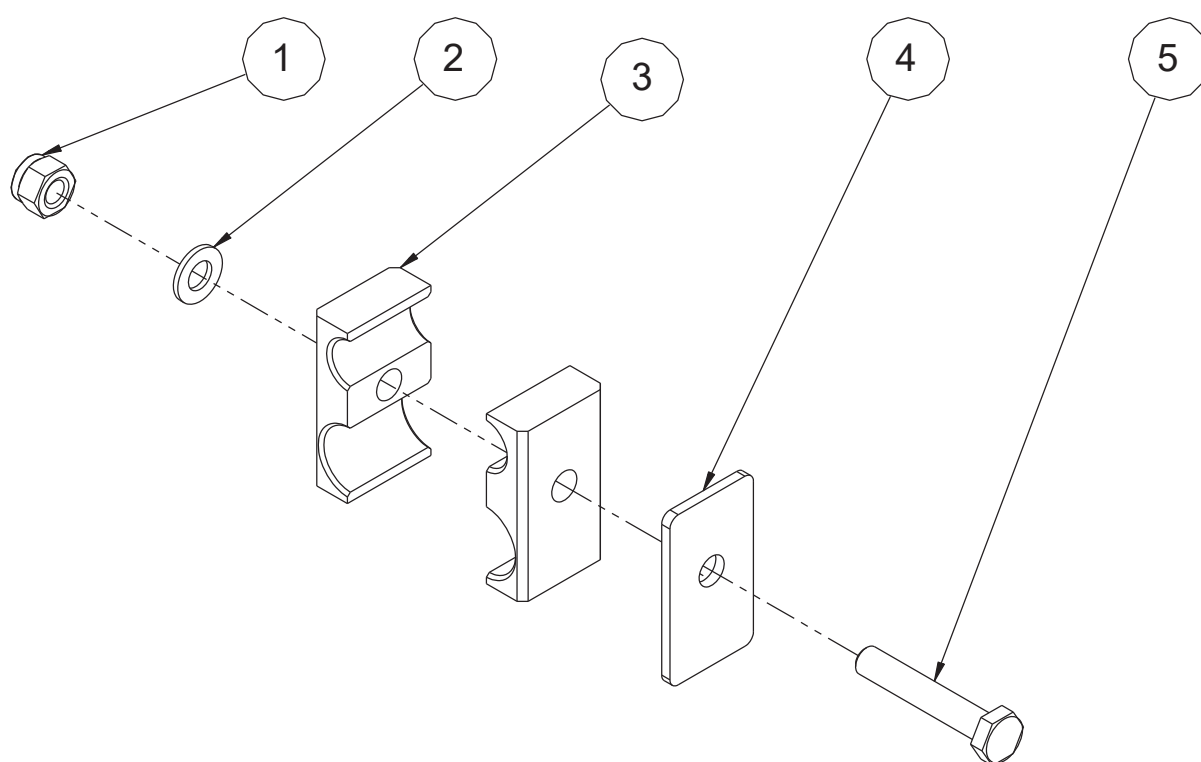


ILLUSTRATION No.
Art_5426

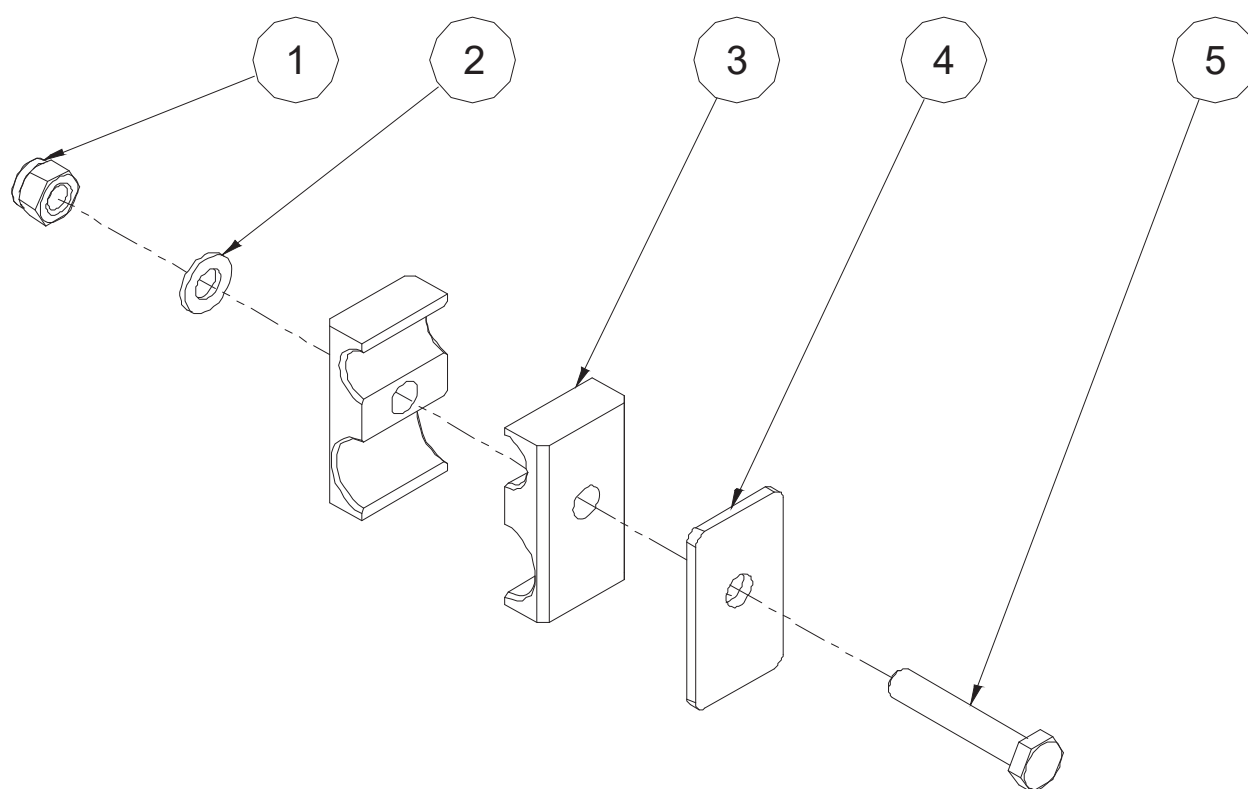
69 Series

Hose Clamp Assembly - 4069



Item	Part Number	Description	Qty.
1	50048	Nut NNYL M08 × 1.25	1
2	50001	WSHR M08 Standard Flat Washer	1
3	43288	Hose Clamp	2
4	43289	Base Plate	1
5	50057	Screw HHCS M08-1.25 × 45	1

Hose Clamp Assembly 2



Item	Part Number	Description	Qty.
1	50048	Nut NNYL M08 × 1.25	1
2	50001	WSHR M08 Standard Flat Washer	1
3	46667	Hose Clamp	2
4	46668	Base Plate	1
5	50057	Screw HHCS M08-1.25 × 45	1

Main Platform Assembly

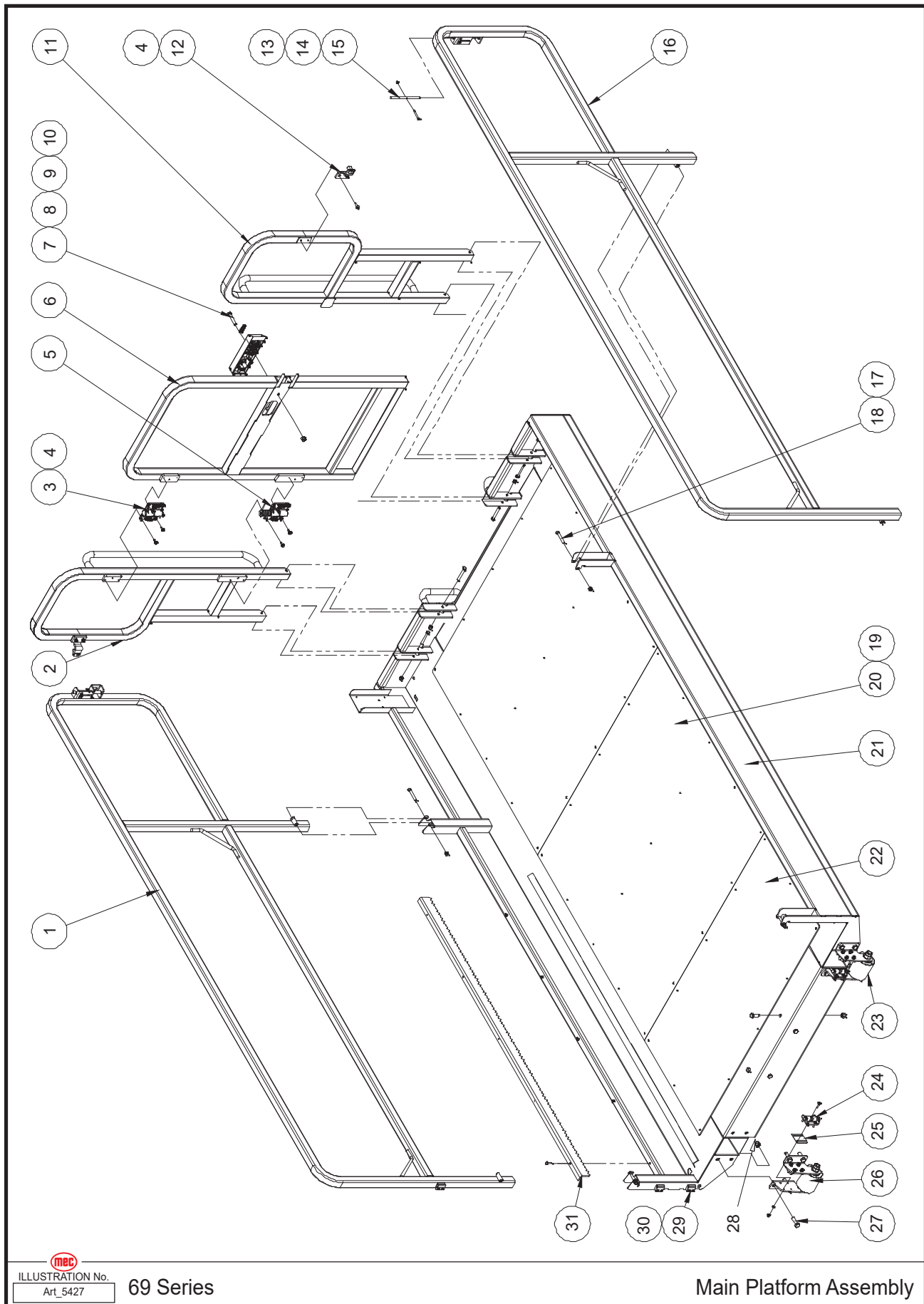


ILLUSTRATION No.
Art_5427

69 Series

Main Platform Assembly

Item	Part Number	Description	Qty.
1	43290	Right Main Rail	1
2	43291	Right Door Rail	1
3	41127	Hinge A	1
4	53273	Screw HHCS M06-1.00 × 14 Serrated Flange	12
5	41128	Hinge B	1
6	43294	Entry Gate	1
7	53272	Screw HHCS M10-1.50 × 55 Flange	1
8	41125	Spring	1
9	41124	Latch Handle	1
10	50311	Nut NNYL M10-1.50 Flange	1
11	43297	Left Door Rail	1
12	43298	Lock Pin	2
13	53067	Screw SHCS M05-0.80 × 40	2
14	53281	Nut NNYL M05-0.80 Flange	2
15	43299	Inserted Pin Rod	2
16	43300	Left Main Rail	1
17	53442	Screw HHCS M08-1.25 × 60 Flange	8
18	50313	Nut NNYL M08-1.25 Flange	8
19	43301	Rivet	50
20	43302	Main Platform Deck Plate 1	2
21	46669	Main Deck Weldment	1
22	43304	Main Platform Deck Plate 2	1
23	REF	Support Roller Assembly (Refer to page 103)	1
24	REF	Side Roller Assembly (Refer to page 105)	4
25	43305	Adjusting Plate	4
26	REF	Support Roller Assembly (Refer to page 103)	1
27	50040	Screw HHCS M12-1.75 × 35	12
28	53261	Nut NNYL M12-1.75 Flange	12
29	41059	Wire Clip	6
30	53113	Screw SHCS M04-0.70 × 16	6
31	43307	Extension Deck Lock Tooth	1

REF - Reference

Support Roller Assembly

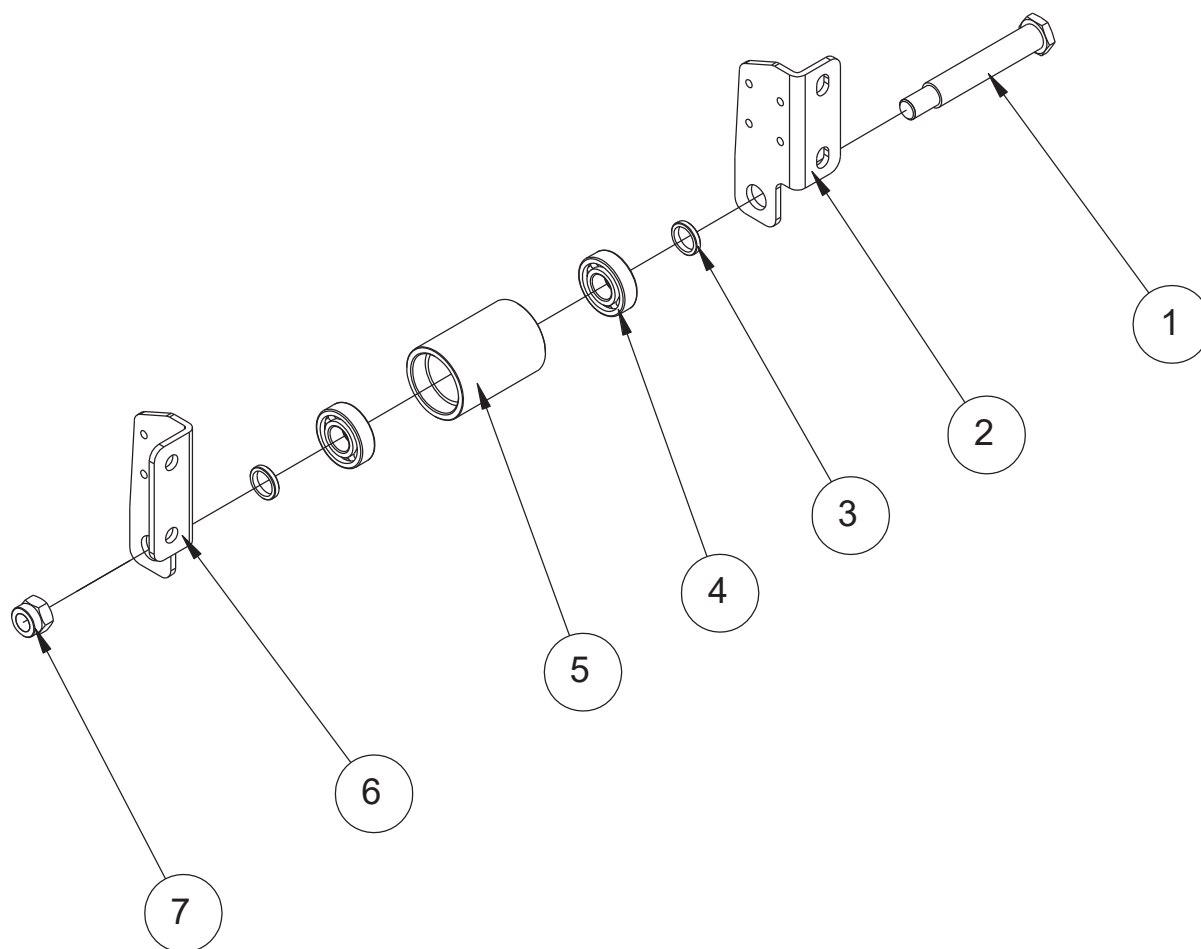


ILLUSTRATION No.
Art_5428

69 Series

Support Roller Assembly

Item	Part Number	Description	Qty.
1	43309	Pin	1
2	43310	Roller Bracket 2	1
3	43311	Shim	2
4	41131	Bearing	2
5	43312	Roller	1
6	43313	Roller Bracket	1
7	53417	Nut NNYL M16-2.00 Flange	1

Side Roller Assembly

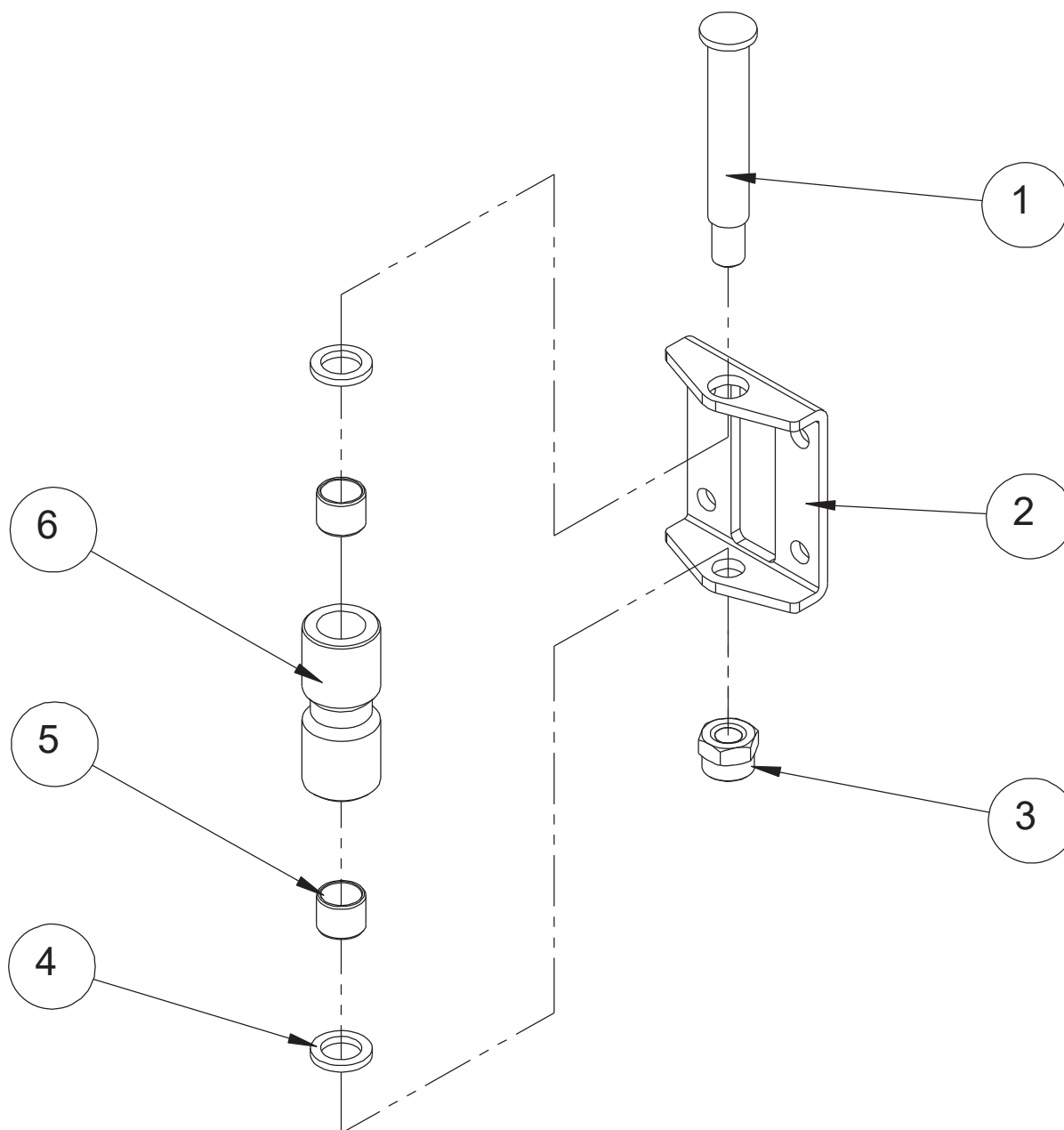


ILLUSTRATION No.
Art_5429

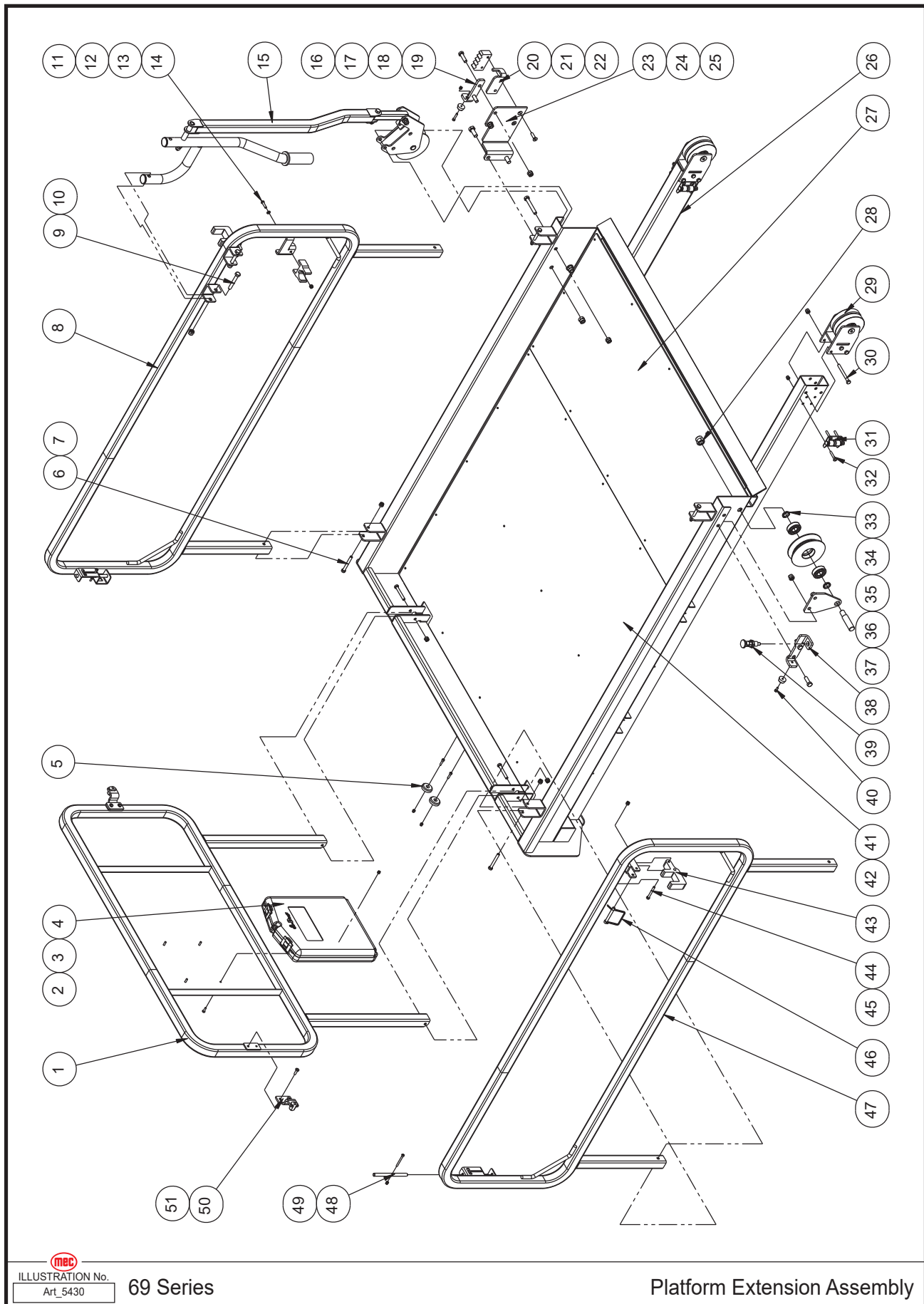
69 Series

Side Roller Assembly



Item	Part Number	Description	Qty.
1	43314	Pin	1
2	43315	Roller Bracket	1
3	50313	Nut NNYL M08-1.25 Flange	1
4	46670	Washer	2
5	43316	Bearing	2
6	43317	Roller	1

Platform Extension Assembly



Item	Part Number	Description	Qty.
1	43318	Front Rail	1
2	53223	Screw THMS M05-0.80 × 16	4
3	53281	Nut NNYL M05-0.80 Flange	9
4	43319	Manual Box	1
5	43320	Bumper	2
6	53442	Screw HHCS M08-1.25 × 60 Flange	6
7	50313	Nut NNYL M08-1.25 Flange	12
8	43322	Right Extension Rail	1
9	50022	Screw HHCS M10-1.50 × 70	4
10	50311	Nut NNYL M10-1.50 Flange	10
11	50047	Nut NNYL M06-1.00	9
12	43323	Catch Clip	1
13	50000	WSHR M06 Standard Flat Washer	1
14	50117	Screw HHCS M06-1.00 × 25	1
15	REF	Platform Locking Device Assembly (Refer to page 111)	1
16	41120	Bumper	2
17	50591	Screw BHCS M05-0.80 × 20	3
18	50332	Screw HHCS M10-1.50 × 35	4
19	43325	Locating Plate 1	1
20	43326	Lock Tooth Seat	1
21	43327	Lock Tooth	1
22	53435	Screw CSCS M08-1.25 × 25	2
23	43328	Lock Seat	1
24	50039	Screw HHCS M12-1.75 × 30	2
25	53261	Nut NNYL M12-1.75 Flange	2
26	43329	Extension Deck Weldment	1
27	43330	Platform Extension Deck Plate 1	1
28	53417	Nut NNYL M16-2.00 Flange	1
29	REF	Roller Assembly (Refer to page 113)	2
30	50018	Screw HHCS M08-1.25 × 80	6
31	REF	Side Roller Assembly (Refer to page 105)	4
32	50264	Screw HHCS M06-1.00 × 65	8
33	43332	Washer	2
34	41131	Bearing	4
35	43333	Roller	2
36	43334	Roller Bracket	1
37	43335	Pin	1
38	43336	Locating Plate 2	1
39	43337	Lock Pin	1
40	53378	Screw PHMS M05-0.80 × 12	1
41	43338	Platform Extension Deck Plate 2	1
42	43301	Rivet	47
43	43339	Rail Spacer	2
44	50294	Screw HHCS M06-1.00 × 45	2
45	50568	Nut NNYL M06-1.00 Flange	10

46	43340	Inserted Pin	2
47	43341	Left Extension Rail	1
48	43299	Inserted Pin Rod	2
49	53067	Screw SHCS M05-0.80 × 40	2
50	43298	Lock Pin	2
51	53273	Screw HHCS M06-1.00 × 14 Serrated Flange	4

REF - Reference

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Platform Locking Device Assembly

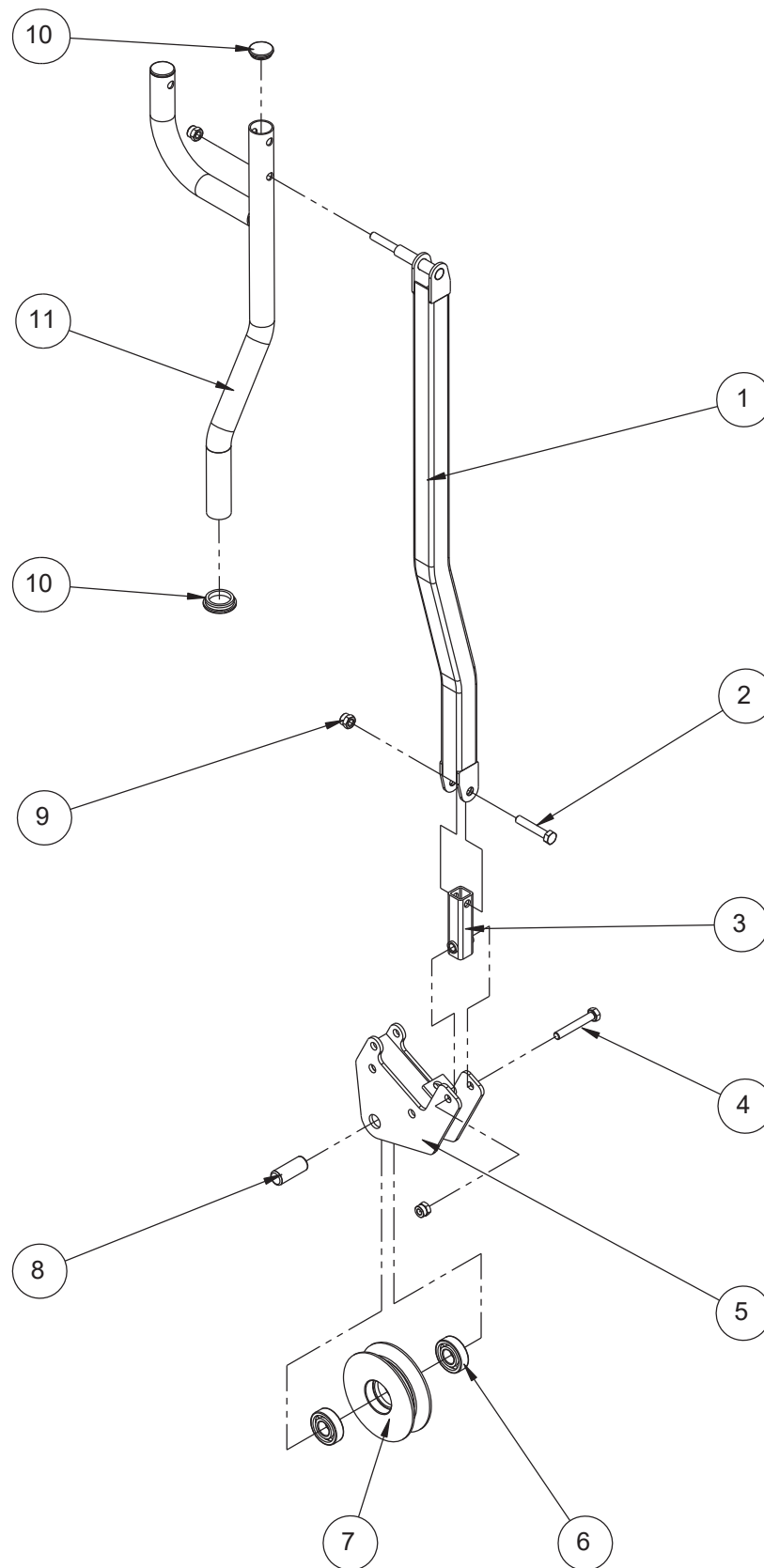


ILLUSTRATION No.
Art_5431

69 Series

Platform Locking Device Assembly

Item	Part Number	Description	Qty.
1	43342	Tie Rod Weldment	1
2	50021	Screw HHCS M10-1.50 × 55	1
3	43343	Connection Rod	1
4	50022	Screw HHCS M10-1.50 × 70	4
5	43344	Roller Bracket	1
6	41131	Bearing	2
7	43333	Roller	1
8	43345	Pin	1
9	50311	Nut NNYL M10-1.50 Flange	2
10	43348	Cover	3
11	43347	Handle	1

Roller Assembly

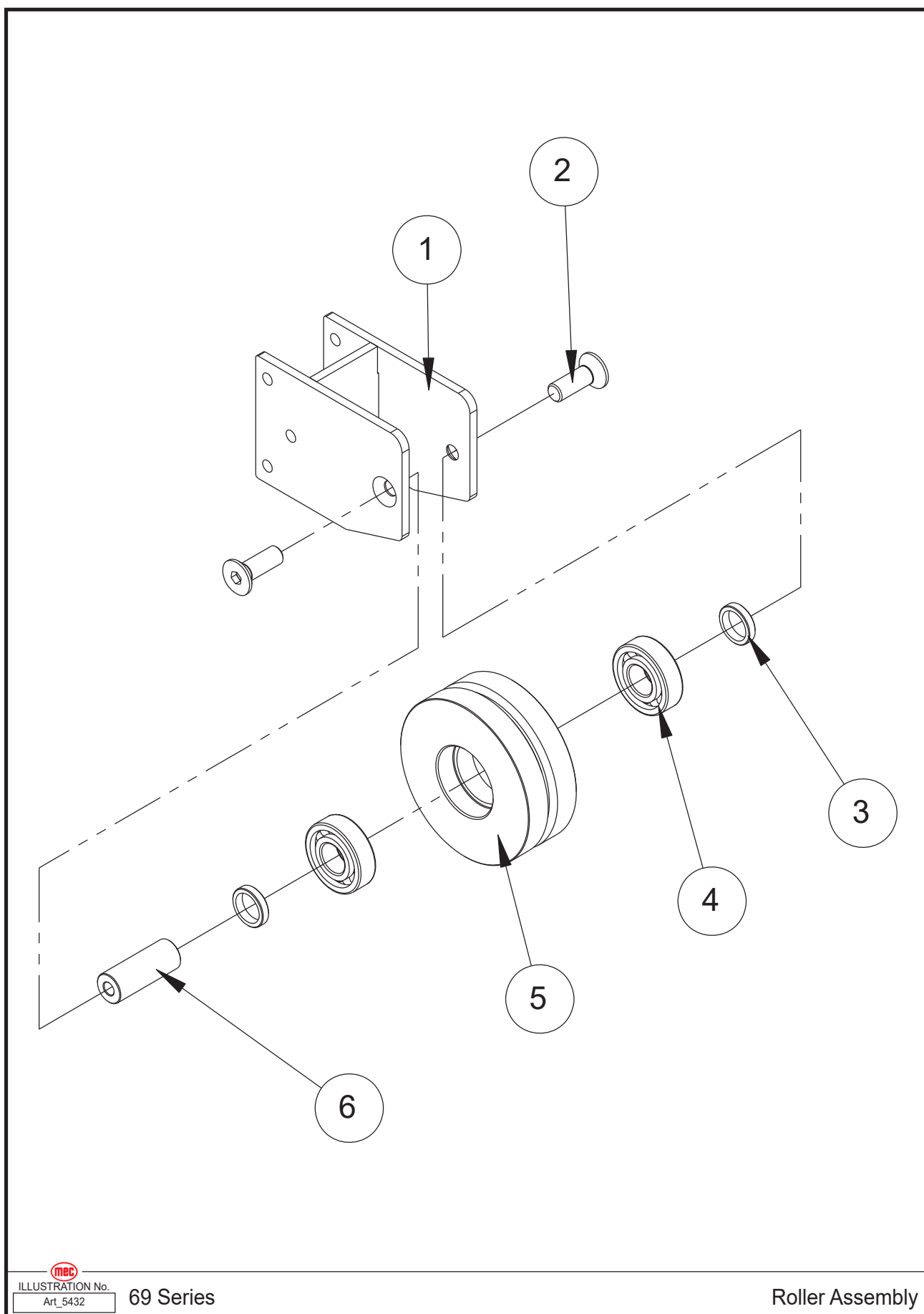


ILLUSTRATION No.
Art_5432

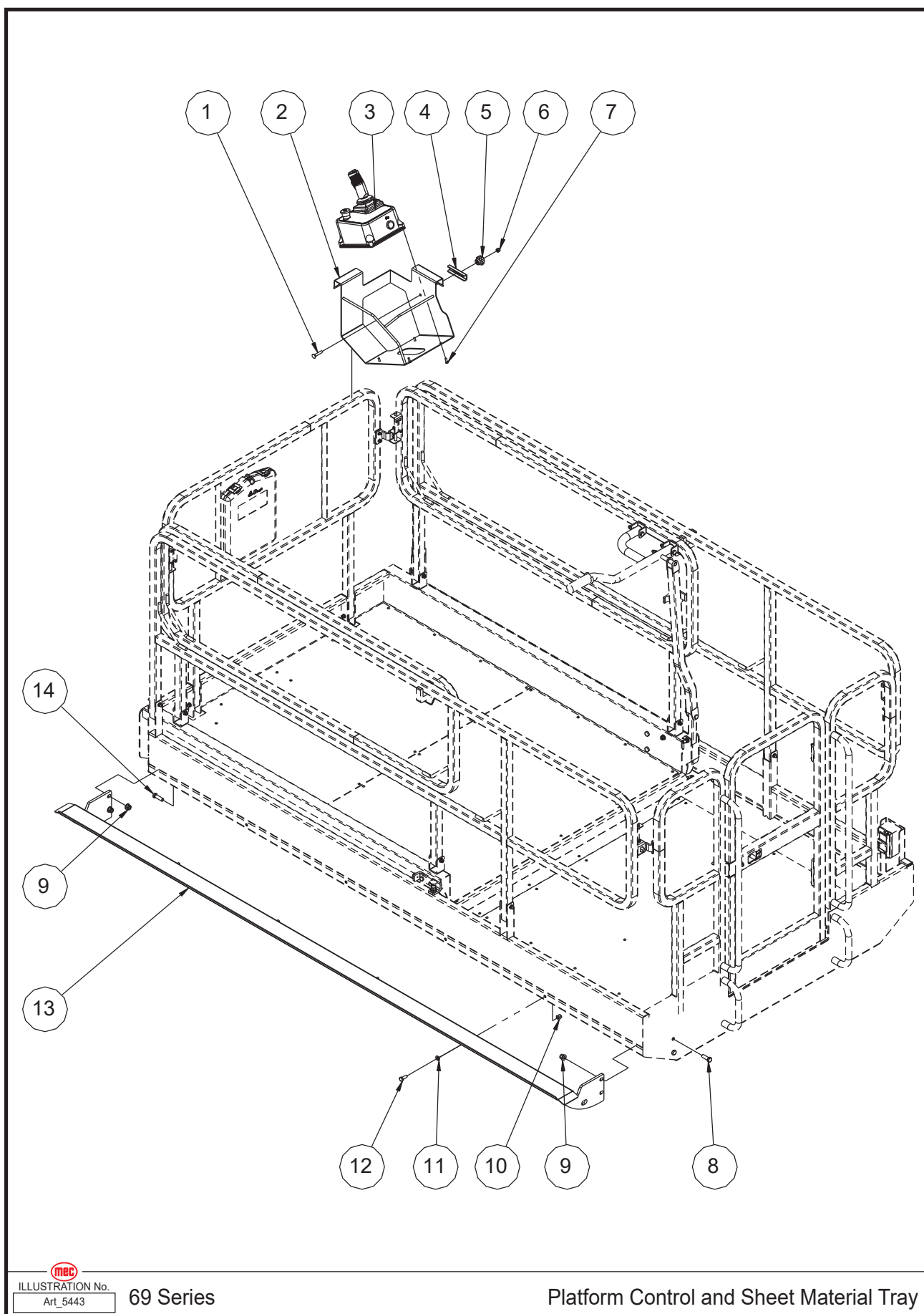
69 Series

Roller Assembly



Item	Part Number	Description	Qty.
1	43349	Roller Bracket	1
2	53483	Screw CSCS M10-1.50 × 25	2
3	43350	Washer	2
4	41131	Bearing	2
5	43351	Roller	1
6	43352	Pin	1

Platform Control and Sheet Material Tray



Item	Part Number	Description	Qty.
1	53248	Screw CARB M08-1.25 × 45	1
2	43321	Platform Control Box Mount Bracket	1
3	43548	Platform Control Box Assembly (Refer to page 117)	1
4	42500	Locating Plate	1
5	42501	Handle	1
6	50048	Nut NNYL M08 × 1.25	1
7	53231	Screw PHMS M06-1.00 × 16	4
8	50040	Screw HHCS M12-1.75 × 35	2
9	53261	Nut NNYL M12-1.75 Flange	4
10	50311	Nut NNYL M10-1.50 Flange	4
11	50002	WSHR M10 Standard Flat Washer	4
12	50033	Screw HHCS M10-1.50 × 25	4
13	46671	Sheet Material Tray	1
14	53247	Screw HHCS M12-1.50 × 40	2

REF - Reference

Platform Control Box Assembly

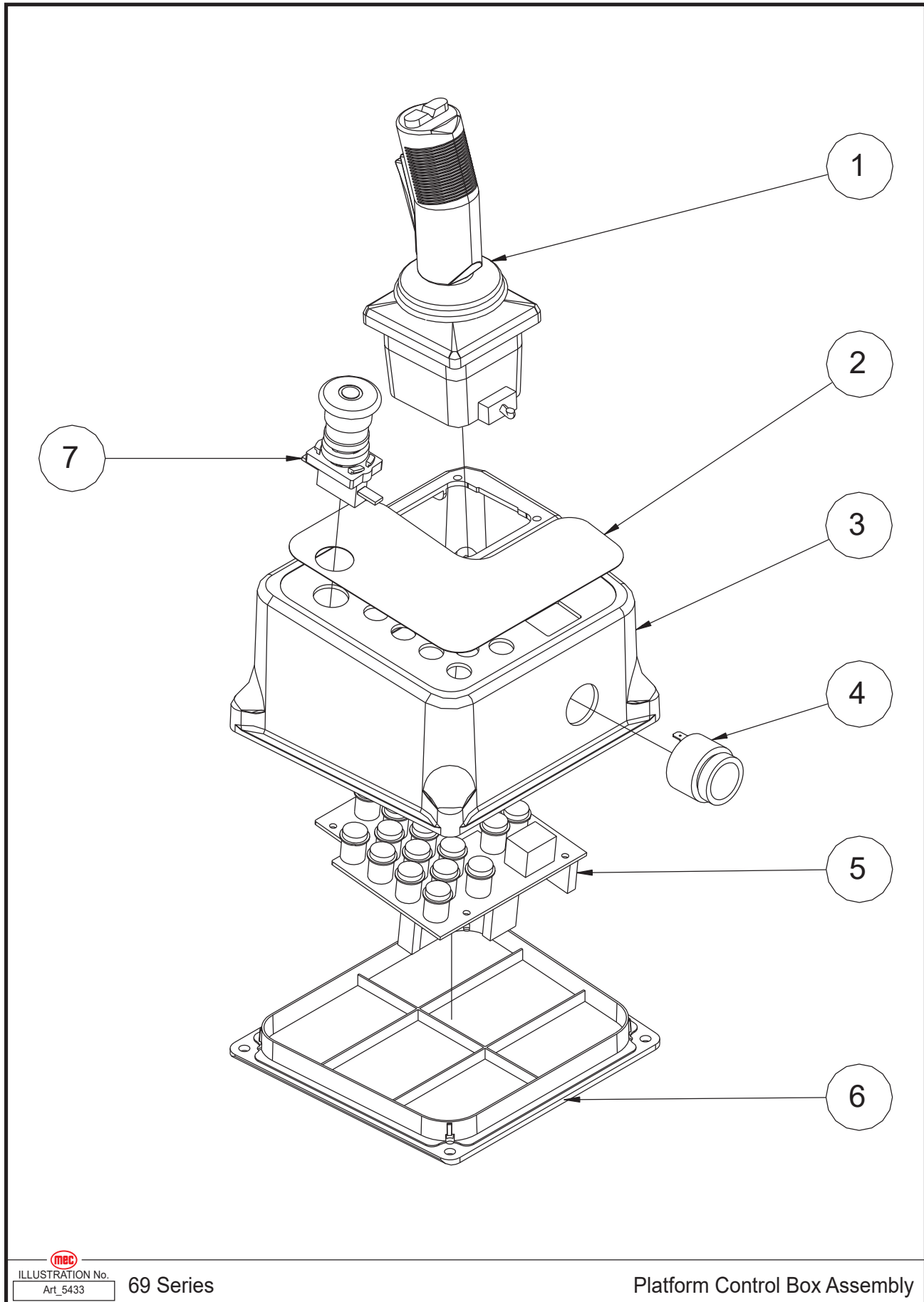


ILLUSTRATION No.
Art_5433

69 Series

Platform Control Box Assembly

Item	Part Number	Description	Qty.
1	43353	Joystick	1
2	43525	Decal, Platform Control Panel	1
3	43355	Enclosure	1
4	41568	Alarm	1
5	43357	Main Board	1
6	43358	Cover Bottom	1
7	41157	Emergency Stop Switch	1

Lower Lift Cylinder Assembly

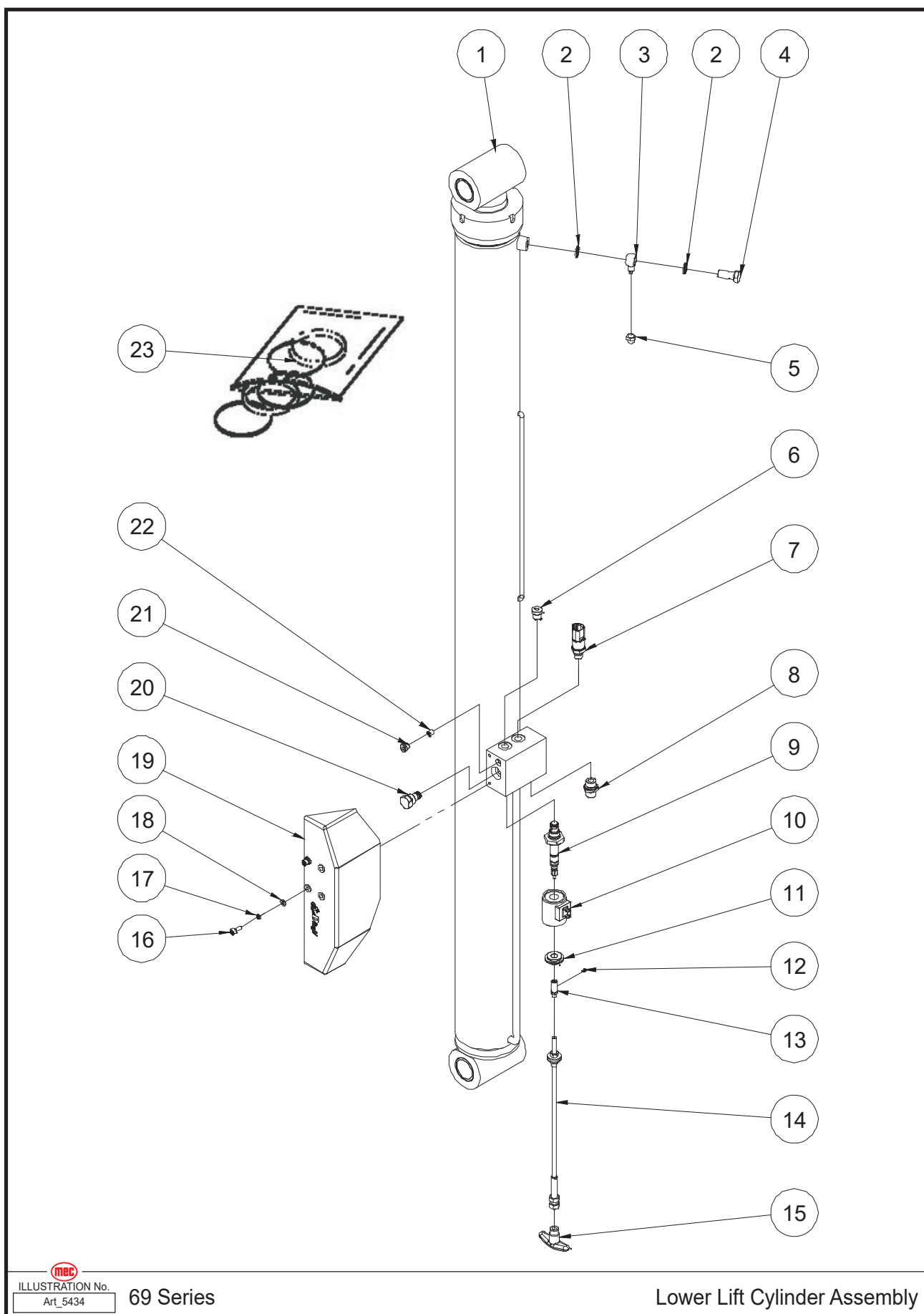


ILLUSTRATION No.
Art_5434

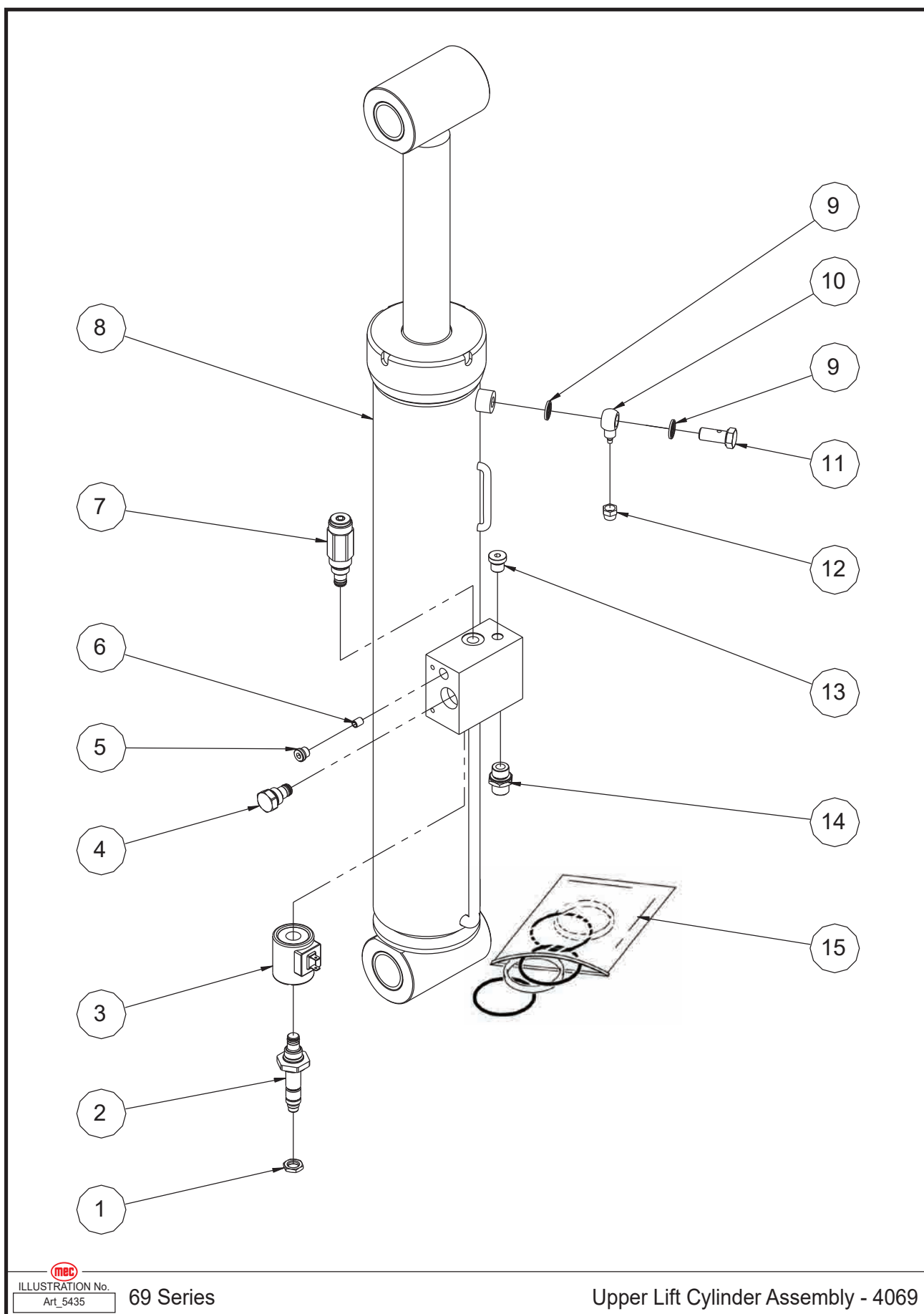
69 Series

Lower Lift Cylinder Assembly



Item	Part Number	Description	Qty.
1	43360	Lower Lift Cylinder	1
2	43361	Washer	2
3	41167	Fitting	1
4	41166	Fitting	1
5	41413	Nut	1
6	42480	Plug	1
7	44448	Pressure Sensor	1
8	43083	Straight Fitting	1
9	41363	Solenoid Valve Spool	1
10	43363	Coil	1
11	43364	Nut	1
12	50423	Screw SHCS M04-0.70 × 12	1
13	43365	Cable Connector	1
14	43366	Emergency Down Cable Assembly	1
15	41162	Lowering Knob	1
16	53138	Screw SHCS M06-1.00 × 16	2
17	53046	WSHR M06 Spring Washer	2
18	50000	WSHR M06 Standard Flat Washer	2
19	41164	Valve Cover	1
20	43369	Check Valve	1
21	42821	Plug	1
22	43370	Orifice	1
23	43371	Seal Kit	1

Upper Lift Cylinder Assembly, 4069RT



Item	Part Number	Description	Qty.
1	42795	Nut	1
2	43372	Solenoid Valve Spool	1
3	41551	Coil	1
4	43369	Check Valve	1
5	42821	Plug	1
6	43374	Orifice	1
7	41169	Relief Valve	1
8	43376	Upper Lift Cylinder	1
9	43361	Washer	2
10	41167	Fitting	1
11	41166	Fitting	1
12	41413	Nut	1
13	42480	Plug	1
14	43083	Straight Fitting	1
15	43377	Seal Kit	1

Right Oscillate Cylinder Assembly

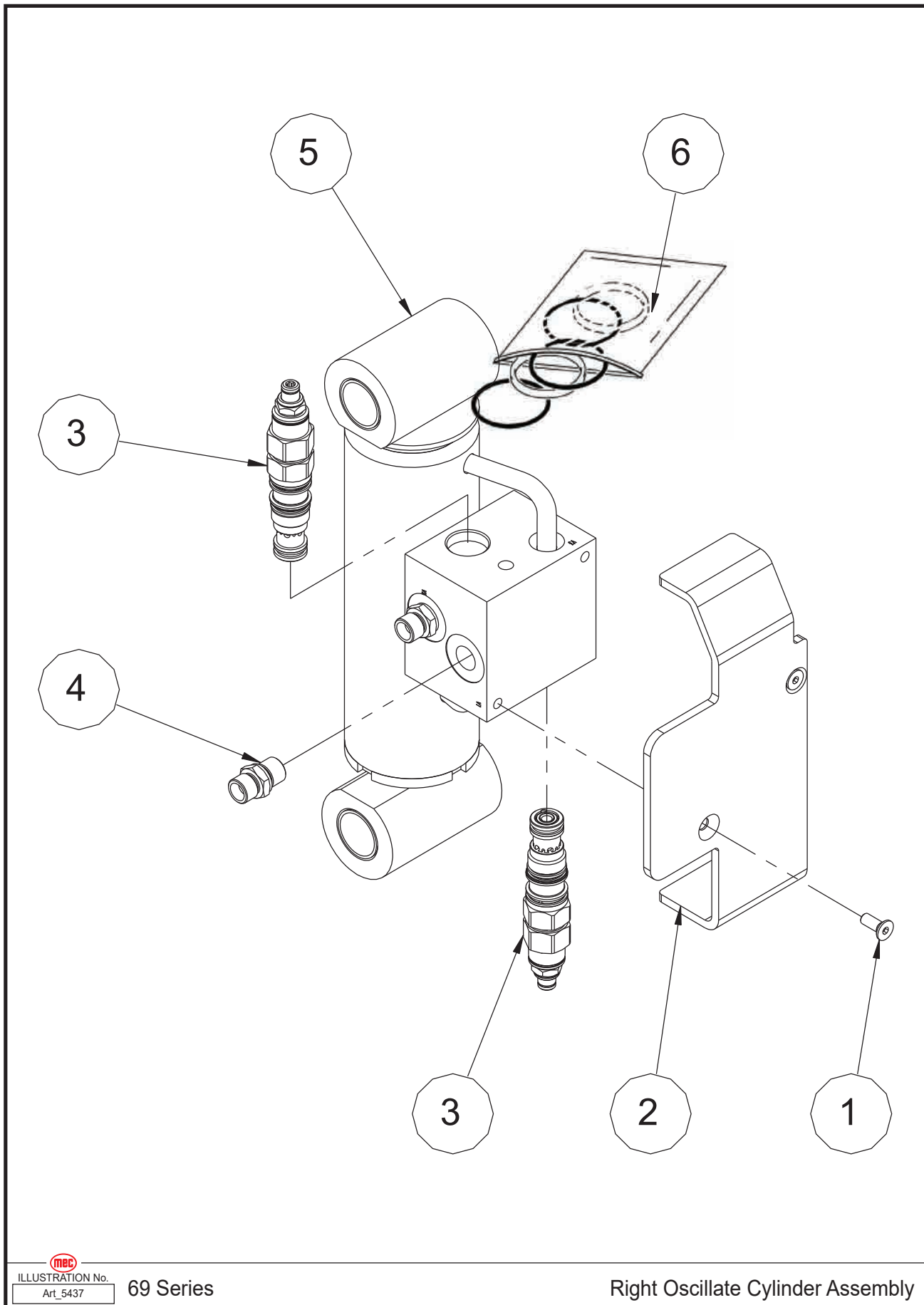


ILLUSTRATION No.
Art_5437

69 Series

Right Oscillate Cylinder Assembly

Item	Part Number	Description	Qty.
1	53226	Screw CSCS M06-1.00 × 16	2
2	43382	Protect Cover	1
3	43378	Counterbalance Valve Spool	2
4	43076	Straight Fitting	2
5	43383	Right Oscillate Cylinder	1
6	43381	Seal Kit	1

Left Oscillate Cylinder Assembly

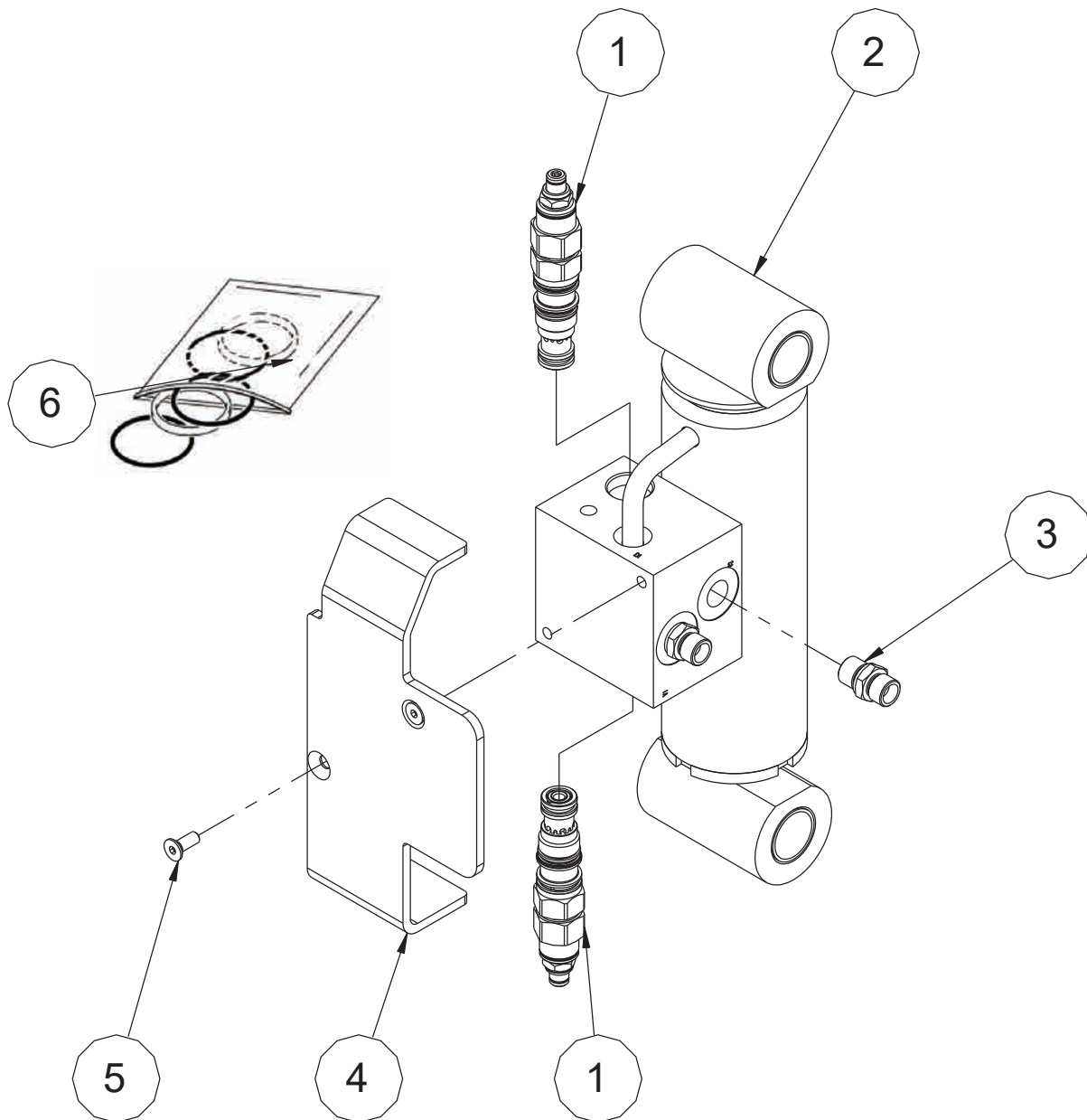


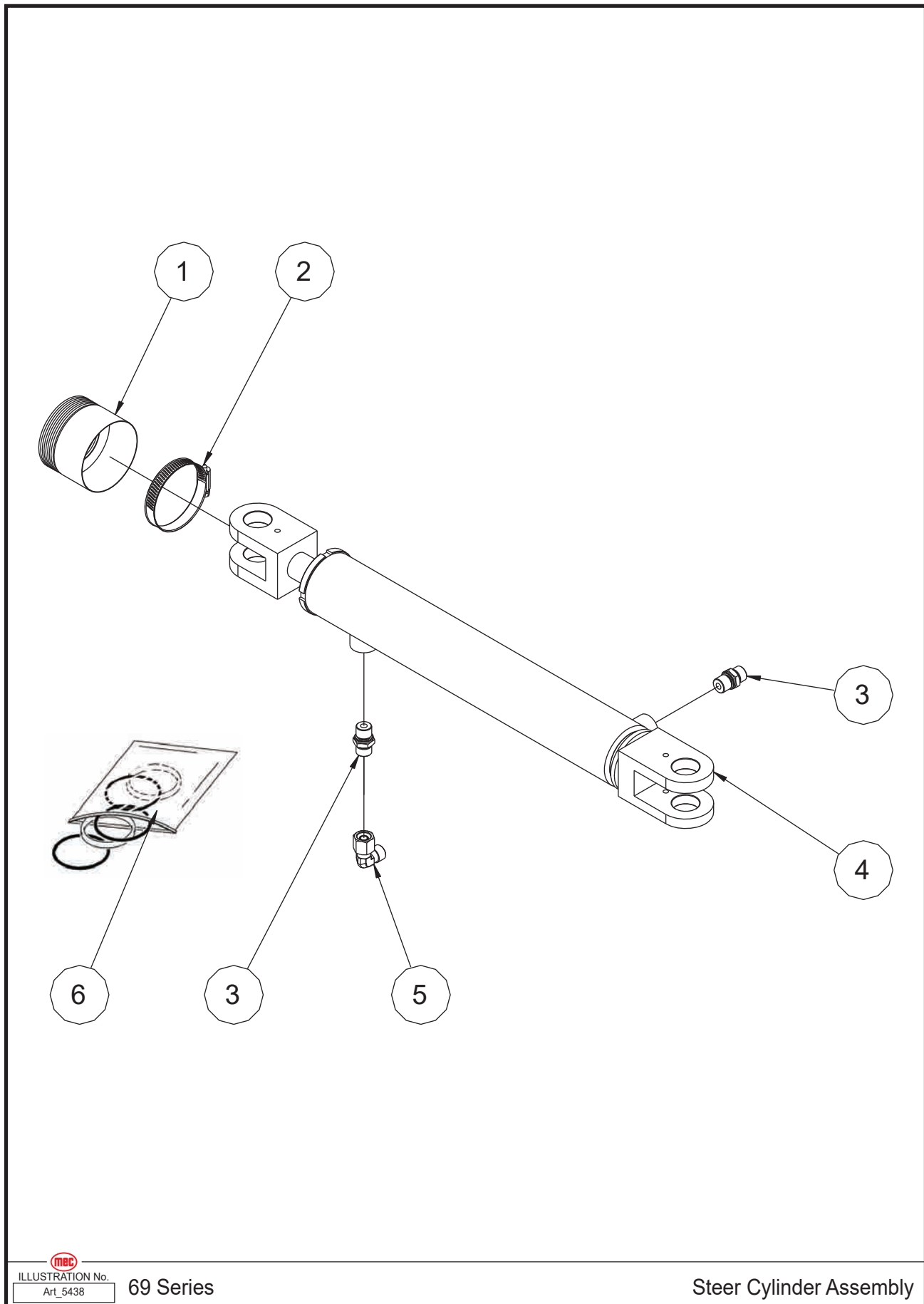
ILLUSTRATION No.
Art_5436

69 Series

Left Oscillate Cylinder Assembly

Item	Part Number	Description	Qty.
1	43378	Counterbalance Valve Spool	2
2	43379	Left Oscillate Cylinder	1
3	43076	Straight Fitting	2
4	43380	Protect Cover	1
5	53226	Screw CSCS M06-1.00 × 16	2
6	43381	Seal Kit	1

Steer Cylinder Assembly



Item	Part Number	Description	Qty.
1	43384	Dustproof Sleeve	1
2	43385	Clamp	1
3	43076	Straight Fitting	2
4	43386	Steer Cylinder	1
5	43077	Elbow	1
6	43387	Seal Kit	1

Outrigger Cylinder Assembly HYDRAFORCE/SUN

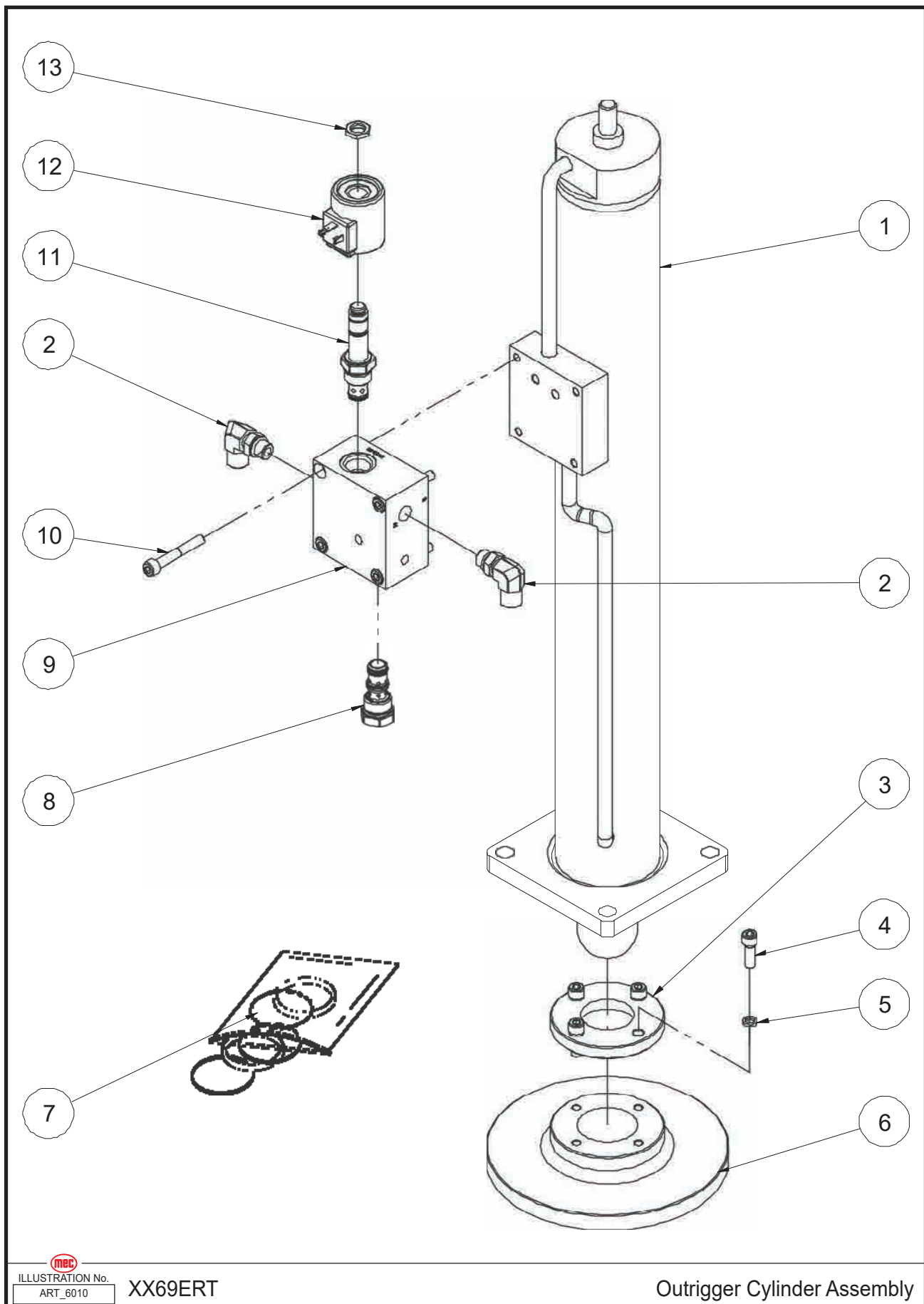


ILLUSTRATION No. **XX69ERT**
ART_6010

Outrigger Cylinder Assembly

Item	Part Number	Description	Qty.
1	43388	Outrigger Cylinder	1
2	43389	Elbow	2
3	43390	Retainer	1
4	53210	Screw SHCS M08-1.25 × 25	4
5	53055	WSHR M08 Spring Washer	4
6	43391	Outrigger Footpad	1
7	43392	Seal Kit	1
8	43393	Pilot-Operated Check Valve	1
9	43394	Valve Body	1
10	53492	Screw SHCS M08-1.25 × 50	4
11	43395	Solenoid Valve Spool	1
12	43468	Coil	1
13	42795	Nut	1

Outrigger Cylinder Assembly HYDRAFORCE/SUN

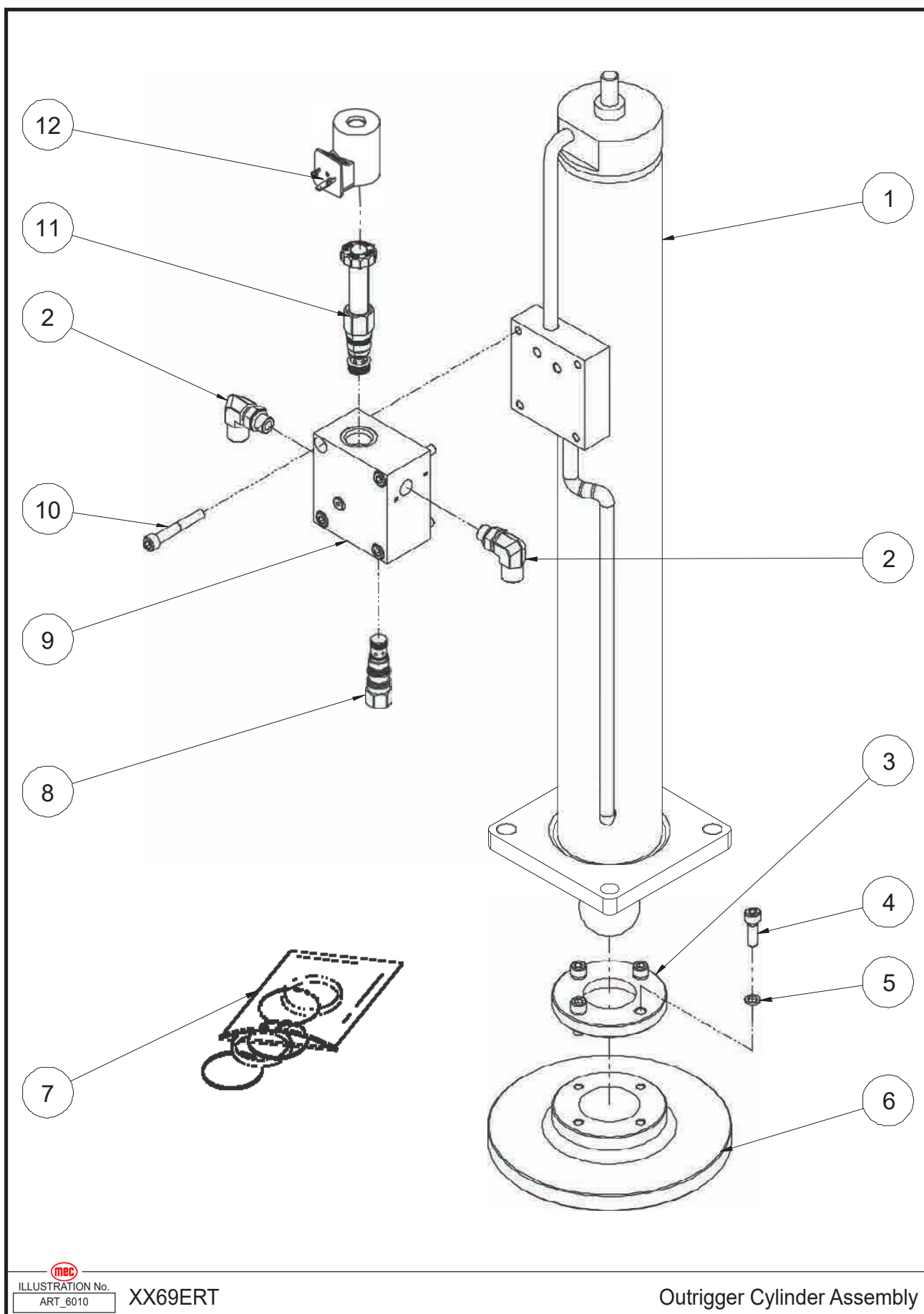


ILLUSTRATION No.
ART_6010

XX69ERT

Outrigger Cylinder Assembly

Item	Part Number	Description	Qty.
1	43388	Outrigger Cylinder	1
2	43389	Elbow	2
3	43390	Retainer	1
4	53210	Screw SHCS M08-1.25 × 25	4
5	53055	WSHR M08 Spring Washer	4
6	43391	Outrigger Footpad	1
7	43392	Seal Kit	1
8	46672	Pilot-Operated Check Valve	1
9	46673	Valve Body	1
10	53492	Screw SHCS M08-1.25 × 50	4
11	46674	Solenoid Valve Spool	1
12	46675	Coil	1

Hydraulic Hoses and Fittings-Function, 3369ERT

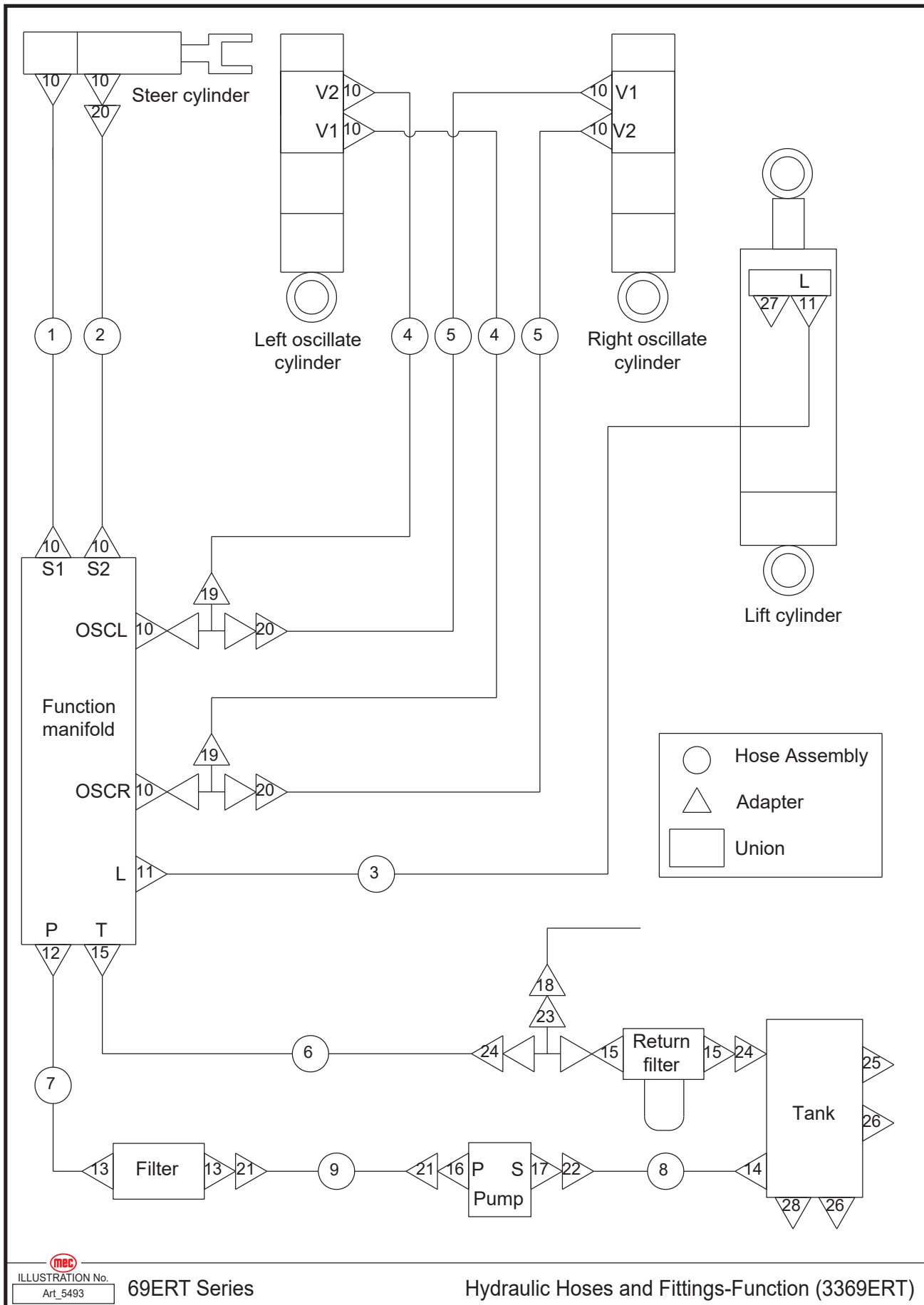


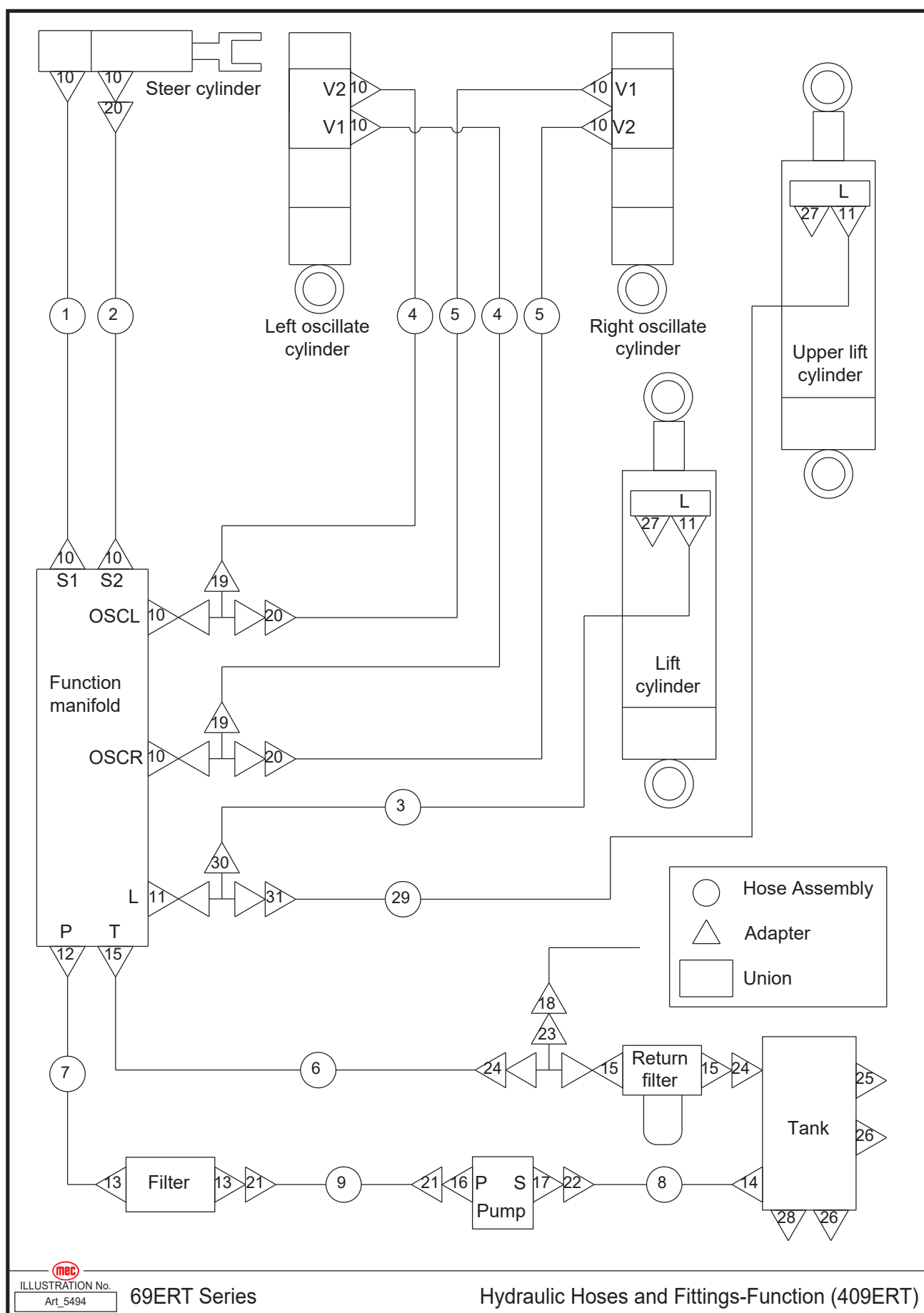
ILLUSTRATION No.
Art_5493

69ERT Series

Hydraulic Hoses and Fittings-Function (3369ERT)

Item	Part Number	Description	Qty.
1	43659	Hose Assembly	1
2	43695	Hose Assembly	1
3	43661	Hose Assembly	1
4	43662	Hose Assembly	2
5	43663	Hose Assembly	2
6	43696	Hose Assembly	1
7	43697	Hose Assembly	1
8	43698	Hose Assembly	1
9	43699	Hose Assembly	1
10	43076	Straight Fitting	10
11	43083	Straight Fitting	2
12	43267	Straight Fitting	1
13	43460	Straight Fitting	2
14	43331	Straight Fitting	1
15	43085	Straight Fitting	3
16	43451	Straight Fitting	1
17	43455	Straight Fitting	1
18	43268	Straight Fitting (Model With Outriggers)	1
19	43078	Tee Fitting	2
20	43077	Elbow	3
21	43459	Elbow	2
22	43456	Elbow	1
23	43115	Tee Fitting (Model With Outriggers)	1
24	43112	Elbow	2
25	43120	Plug	1
26	43119	Plug	2
27	42480	Plug	1
28	43124	Plug	1

Hydraulic Hoses and Fittings-Function, 4069ERT



Item	Part Number	Description	Qty.
1	43659	Hose Assembly	1
2	43695	Hose Assembly	1
3	43661	Hose Assembly	1
4	43662	Hose Assembly	2
5	43663	Hose Assembly	2
6	43696	Hose Assembly	1
7	43697	Hose Assembly	1
8	43698	Hose Assembly	1
9	43699	Hose Assembly	1
10	43076	Straight Fitting	10
11	43083	Straight Fitting	3
12	43267	Straight Fitting	1
13	43460	Straight Fitting	2
14	43331	Straight Fitting	1
15	43085	Straight Fitting	3
16	43451	Straight Fitting	1
17	43455	Straight Fitting	1
18	43268	Straight Fitting (Model With Outriggers)	1
19	43078	Tee Fitting	2
20	43077	Elbow	3
21	43459	Elbow	2
22	43456	Elbow	1
23	43115	Tee Fitting (Model With Outriggers)	1
24	43112	Elbow	2
25	43120	Plug	1
26	43119	Plug	2
27	42480	Plug	2
28	43124	Plug	1
29	43670	Hose Assembly	1
30	43081	Tee Fitting	1
31	43082	Elbow	1

Hydraulic Hoses and Fittings-Outrigger

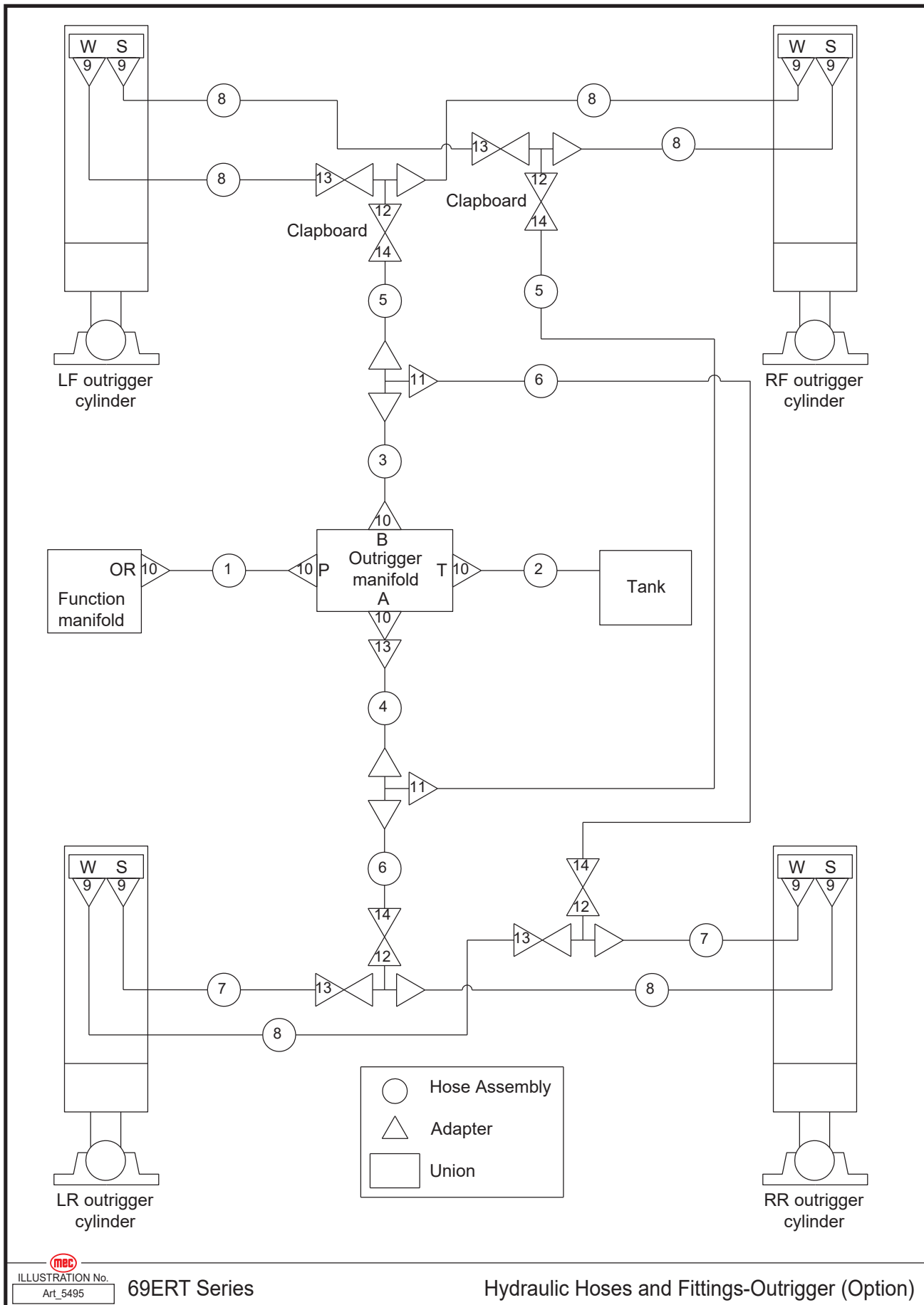


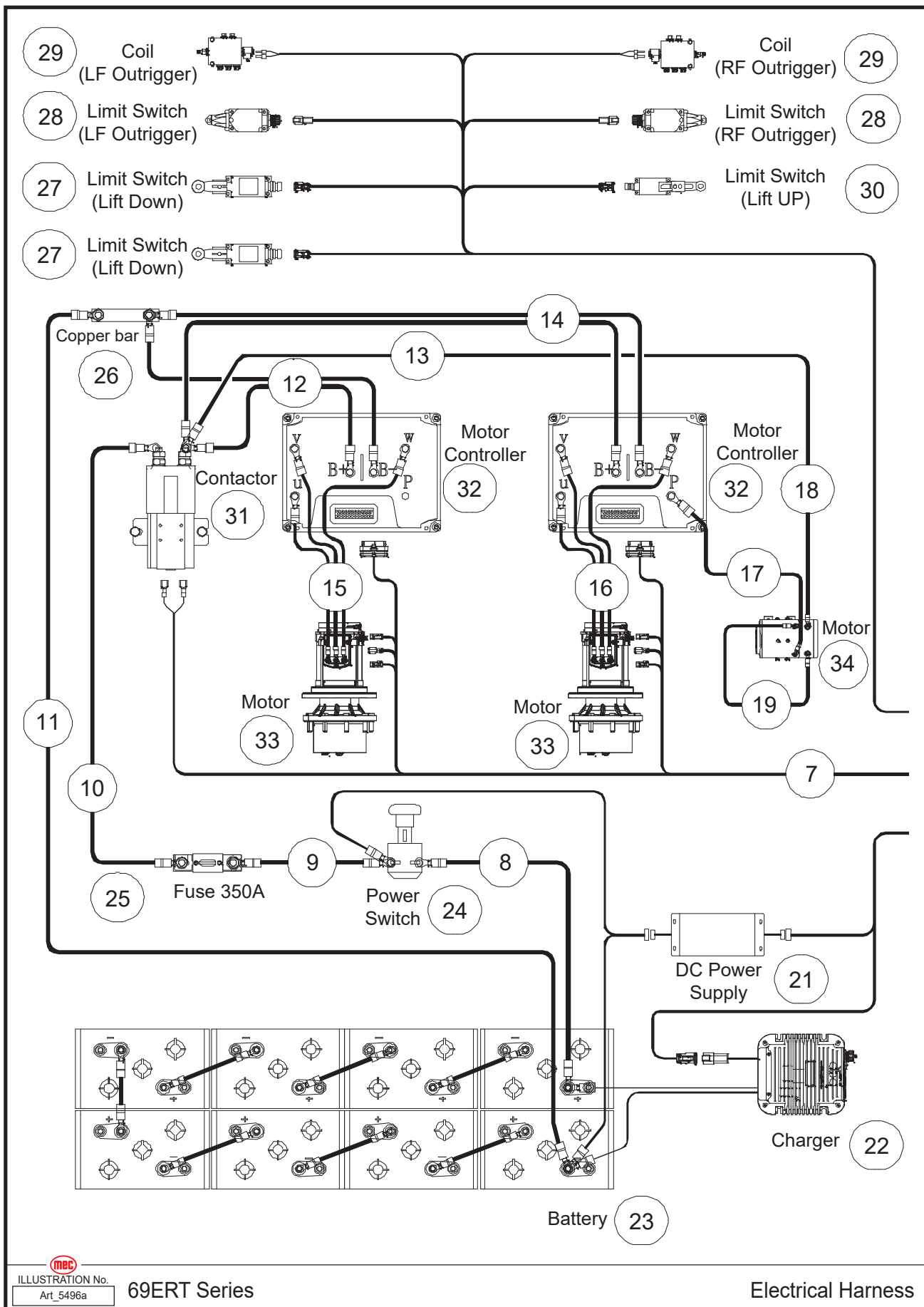
ILLUSTRATION No.
Art_5495

69ERT Series

Hydraulic Hoses and Fittings-Outrigger (Option)

Item	Part Number	Description	Qty.
1	43700	Hose Assembly	1
2	43701	Hose Assembly	1
3	43702	Hose Assembly	1
4	43703	Hose Assembly	1
5	43674	Hose Assembly	2
6	43675	Hose Assembly	2
7	43677	Hose Assembly	2
8	43678	Hose Assembly	6
9	43389	Elbow	8
10	43083	Straight Fitting	5
11	43679	Tee Fitting	2
12	43081	Tee Fitting	4
13	43082	Elbow	5
14	43680	Straight Fitting	4

Electrical Harness



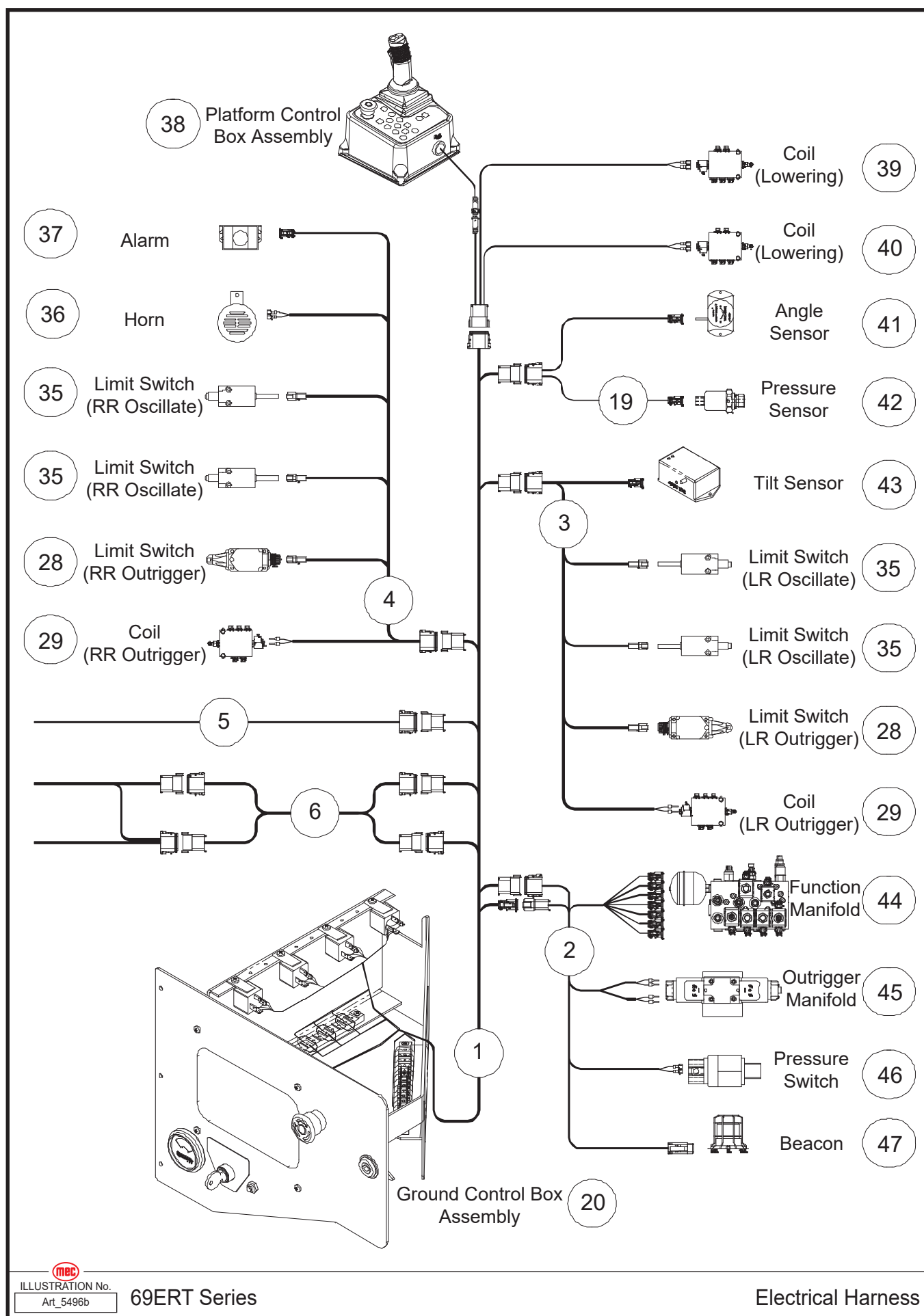


ILLUSTRATION No.
Art_5496b

69ERT Series

Electrical Harness

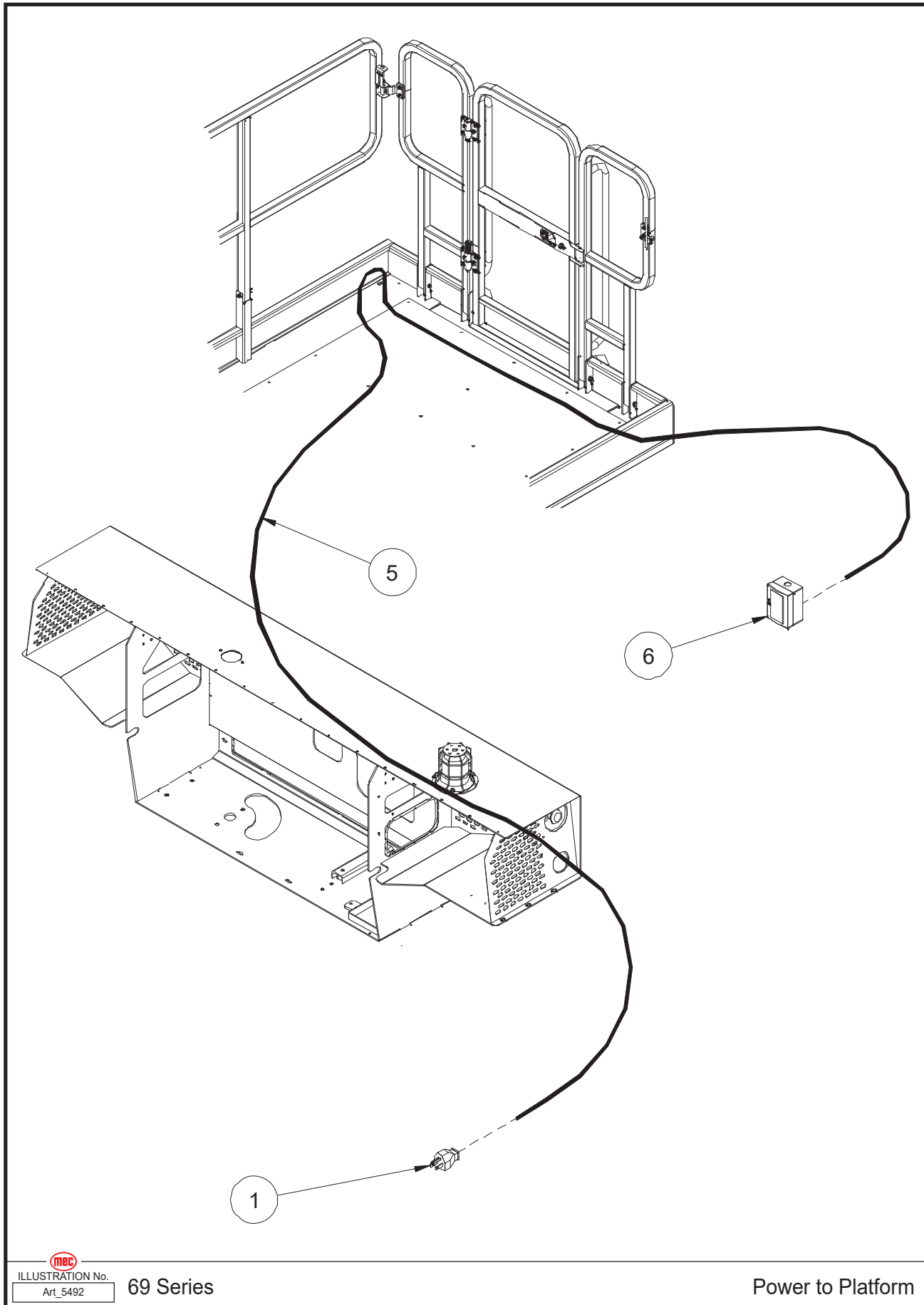


Item	Part Number	Description	Qty.
1	46682	Ground Control Box Harness	1
2	43706	EV Harness	1
3	43683	Outrigger Harness 1	1
4	43682	Outrigger Harness 3	1
5	43685	Outrigger Harness 2	1
6	46683	Transit Harness	1
7	46684	Motor Controller Harness	1
8	46685	Battery Positive Harness	1
9	46686	Fuse Harness	1
10	46687	Contactor Harness	1
11	46688	Battery Negative Harness	1
12	46689	Motor Controller Power Harness 1	1
13	46690	Pump Positive Harness	1
14	46691	Motor Controller Power Harness 2	1
15	46692	Motor Harness 1	1
16	46693	Motor Harness 2	1
17	46694	Pump Negative Harness	1
18	46695	Pump Connection Harness	1
19	46696	Pressure Harness	1
20	REF	Ground Control Box Assembly (Refer to page 61)	1
21	43511	DC Power Supply	1
22	43506	Charger	1
23	46697	Battery	1
24	42071	Power Switch	1
25	43516	350A Fuse Assembly	1
26	43515	Copper Bar	1
27	42074	Limit Switch (Lift Down)	2
28	43228	Limit Switch (Outrigger)	4
29	43468	Coil (Outrigger)	4
30	42402	Limit Switch (Lift Up)	1
31	43518	DC Contactor	1
32	43513	Motor Controller	2
33	43489	Motor	2
34	43346	Motor	1
35	43031	Limit Switch (Oscillate)	4
36	41075	Horn	1
37	42882	Alarm	1
38	46698	Platform Control Box Assembly	1
39	41550	Coil (Lowering)	1
40	41551	Coil (Lowering) (4069ERT)	1
41	41110	Angle Sensor	1
42	44448	Pressure Sensor	1
43	43241	Tilt Sensor	1
44	46699	Function Manifold	1
45	43462	Outrigger Manifold	1

46	43045	Pressure Switch	1
47	43442	Beacon	1

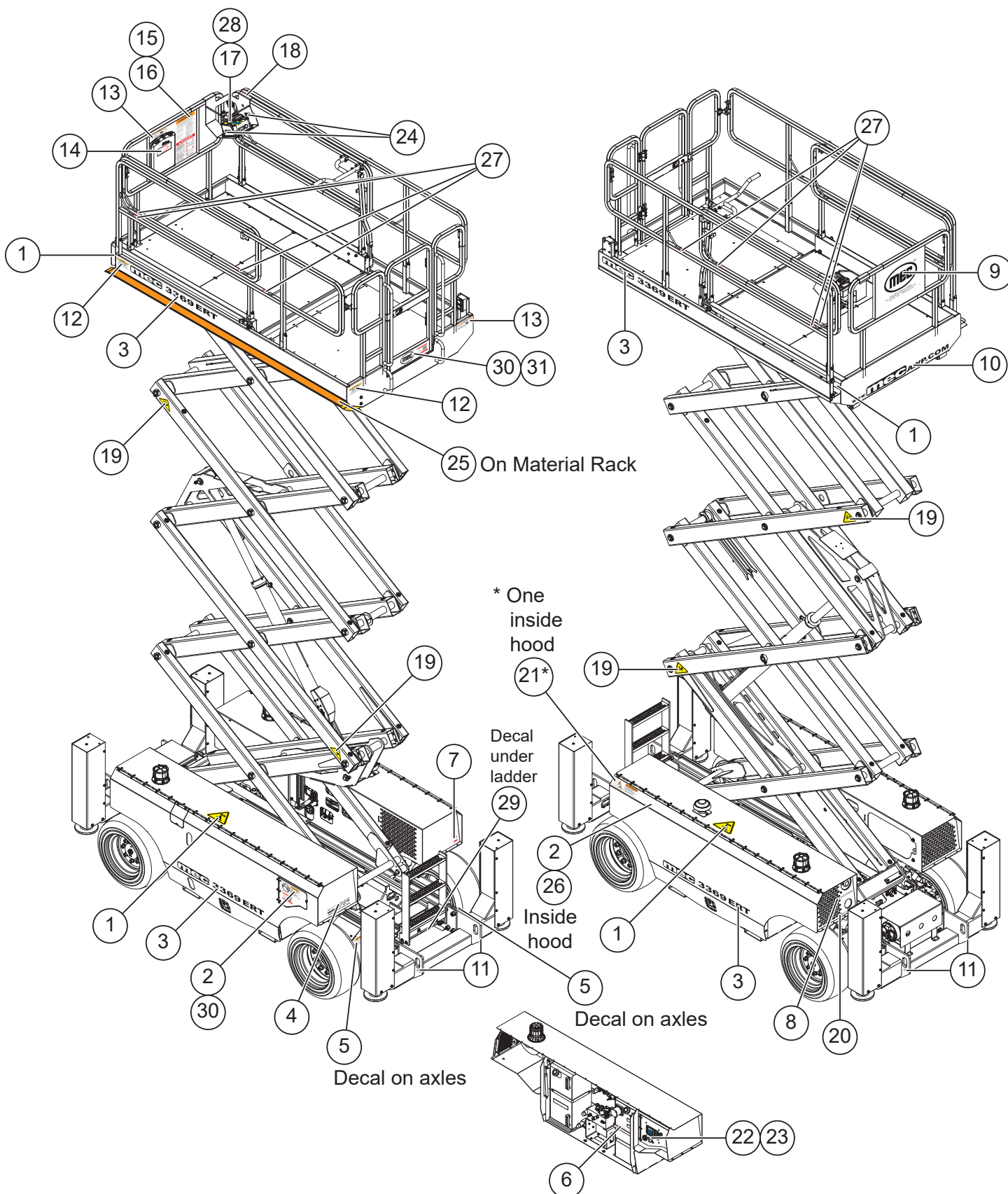
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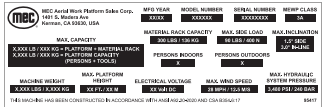
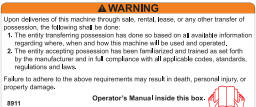
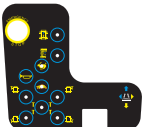
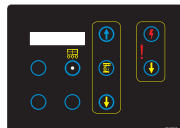
Power to Platform



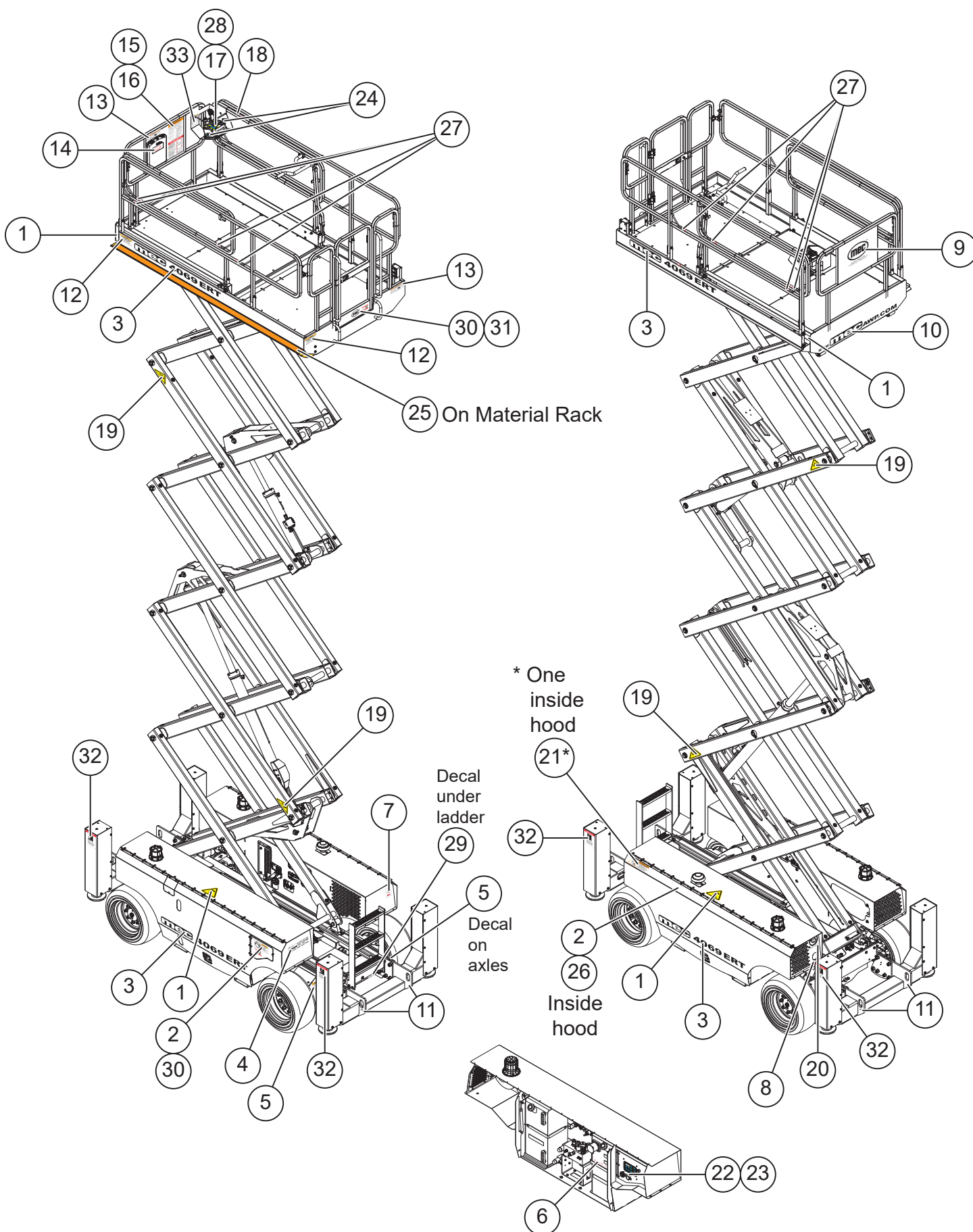
Item	Part Number	Description	Qty.
1	43690	AC Plug	1
2	--	--	--
3	--	--	--
4	--	--	--
5	43692	Wire Cable, Platform AC Power (3369ERT)	1
	43693	Wire Cable, Platform AC Power (4069ERT)	1
6	43694	AC Socket	1

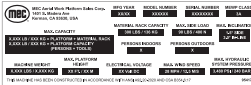
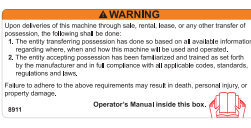
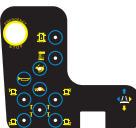
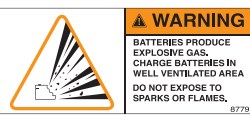
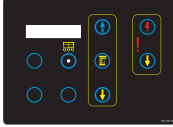
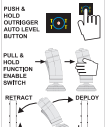
3369ERT Decals



1  91850 Qty. - 4	2  90732 Qty. - 2	3  94856 Qty. - 4	4  95417 Qty. - 1
5  90725 Qty. - 2	6  6873 Qty. - 1	7  9052 Qty. - 1	8  90751 Qty. - 1
9  90719 Qty. - 1	10  92416 Qty. - 1	11  91973 Qty. - 4	12  94872 Qty. - 2
13  95443 Qty. - 2	14  8911 Qty. - 1	15  90722 Qty. - 1	16  90721 Qty. - 1
17  43525 Qty. - 1	18  7155 Qty. - 1	19  9910 Qty. - 4	20  90750 Qty. - 1
21  8779 Qty. - 2	22  43524 Qty. - 1	23  43102 Qty. - 1	24  94120 Qty. - 2
25 UHMV Strip 3" x 1/8" (80mm x 3mm) Length 9 ft (2.8 m) 94899 Qty. - 1	26  91774 Qty. - 1	27  91970 Qty. - 8	28  94122 Qty. - 1
29  41636 Qty. - 1	30  95261 Qty. - 2	31  95301 Qty. - 1	

4069ERT Decals



1  91850 Qty. - 4	2  90732 Qty. - 2	3  93052 Qty. - 4	4  95417 Qty. - 1	5  90725 Qty. - 2
6  6873 Qty. - 1	7  9052 Qty. - 1	8  90751 Qty. - 1	9  90719 Qty. - 1	10  92416 Qty. - 1
11  91973 Qty. - 4	12  94872 Qty. - 2	13  95444 Qty. - 2	14  8911 Qty. - 1	15  90722 Qty. - 1
16  90721 Qty. - 1	17  43525 Qty. - 1	18  7155 Qty. - 1	19  9910 Qty. - 4	20  90750 Qty. - 1
21  8779 Qty. - 2	22  43524 Qty. - 1	23  43102 Qty. - 1	24  94120 Qty. - 2	25 UHMV Strip 3" x 1/8" (80mm x 3mm) Length 9 ft (2.8 m) 94899 Qty. - 1
26  91774 Qty. - 1	27  91970 Qty. - 8	28  94122 Qty. - 1	29  41636 Qty. - 1	30  95261 Qty. - 2
31  95301 Qty. - 1	32 4069ERT Option  9465 Qty. - 4	33 4069ERT Option  95473 Qty. - 1		

Notes



MEC Parts Order Form

Phone: 559-842-1523

Fax: 559-400-6723

Email: Parts@mecawp.com

Please Fill Out Completely:

Date: _____

Account: _____

Bill to: _____

Ordered By: _____

Your Fax No.: _____

Ship to: _____

Purchase Order Number _____

Ship VIA _____

*** All orders MUST have a Purchase Order Number*

***Fed Ex shipments require Fed Ex account number*

Part Number	Description	Quantity	Price

All back-ordered parts will be shipped when available via the same ship method as original order unless noted below:

_____ Ship complete order only - No Backorders

_____ Ship all available parts and contact customer on disposition of back-ordered parts

_____ Other (Please specify)

Signature _____



Limited Owner Warranty

MEC Aerial Platform Sales Corp. warrants its equipment to the original purchaser against defects in material and/or workmanship under normal use and service for one (1) year from date of registered sale or date the unit left the factory if not registered. MEC Aerial Platform Sales Corp. further warrants the structural weldments of the main frame and scissor arms to be free from defects in material or workmanship for five (5) years from date of registered sale or date unit left the factory if not registered. Excluded from such warranty is the battery(s) which carries a ninety (90) day warranty from described purchase date. Warranty claims within such warranty period shall be limited to repair or replacement, MEC Aerial Platform Sales Corp's option, of the defective part in question and labor to perform the necessary repair or replacement based on MEC Aerial Platform Sales Corp's then current flat rate, provided the defective part in question is shipped prepaid to MEC Aerial Platform Sales Corp. and is found upon inspection by MEC Aerial Platform Sales Corp. to be defective in material and/or workmanship. MEC Aerial Platform Sales Corp. shall not be liable for any consequential, incidental or contingent damages whatsoever. Use of other than factory authorized parts; misuse, improper maintenance, or modification of the equipment voids this warranty. The foregoing warranty is exclusive and in lieu of all other warranties, express or implied. All such other warranties, including implied warranties of merchantability and of fitness for a particular purpose, are hereby excluded. No Dealer, Sales Representative, or other person purporting to act on behalf of MEC Aerial Platform Sales Corp. is authorized to alter the terms of this warranty, or in any manner assume on behalf of MEC Aerial Platform Sales Corp. any liability or obligation which exceeds MEC Aerial Platform Sales Corp's obligations under this warranty.



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