



---

# ***Parts Manual***

## ***Models*** ***TH414C, TH514C,*** ***TH417C***

S/N KEK00150 thru KEK00372  
S/N RWW00150 thru RWW00168  
S/N MWC00150 thru MWC00406  
S/N KKW00150 thru KKW00176  
S/N RRJ00150 thru RRJ00245  
S/N RRW00150 thru RRW00217

**31200729**

*Revised*  
*December 21, 2017*

---

# TABLE OF CONTENTS

FIGURE NO.	TITLE	PAGE NO.
<b>SECTION 1 –</b>		
<b>FRAME &amp; ATTACHING PARTS</b> .....		<b>1-1</b>
1-1	Frame & Attaching Parts .....	1-2
1-2	Covers .....	1-8
1-3	Outrigger Installation .....	1-12
1-4	Licence Plate Lamp Installation .....	1-14
1-5	Hitches .....	1-16
<b>SECTION 2 –</b>		
<b>BOOM</b> .....		<b>2-1</b>
2-1	Boom Installation .....	2-2
2-2	First Boom Section Assembly .....	2-10
2-3	Second Boom Section Assembly .....	2-16
2-4	Third Boom Section Assembly .....	2-24
2-5	Fourth Boom Section Assembly .....	2-30
2-6	Extend Chains .....	2-32
2-7	Retract Chains .....	2-36
2-8	Quick Coupler & Quick Disconnect Installation .....	2-40
<b>SECTION 3 –</b>		
<b>ATTACHMENTS</b> .....		<b>3-1</b>
3-1	Carriage Assembly .....	3-2
3-2	Forks .....	3-6
3-3	Side Shift Carriage .....	3-10
3-4	Fork Rotator Carriage .....	3-14
3-5	Dual Fork Carriage .....	3-18
3-6	Rotate/Side Tilt Carriage .....	3-20
3-7	Side Tilt Carriage .....	3-24
3-8	Side Tilt Carriage .....	3-26
3-9	General Purpose Bucket .....	3-28
3-10	Multi-Purpose Bucket .....	3-30
3-11	Material Handling Bucket .....	3-32
3-12	Grapple Bucket .....	3-34
3-13	Truss Boom .....	3-38
3-14	Lifting Hook .....	3-40
3-15	Platform Installations .....	3-42
3-16	THP18s Platform Installation .....	3-44
3-17	THP45s Platform Installation .....	3-50
3-18	Console Box Assembly .....	3-56
3-19	Platform Installations .....	3-60
<b>SECTION 4 –</b>		
<b>ENGINE &amp; ATTACHING PARTS</b> .....		<b>4-1</b>
4-1	Engine Installation .....	4-2

# TABLE OF CONTENTS

FIGURE NO.	TITLE	PAGE NO.
4-2	Engine .....	4-10
4-3	Fuel Tank and Lines .....	4-14
4-4	Radiator Installation .....	4-20
4-5	Air Cleaner Installation .....	4-30
4-6	Exhaust Installation .....	4-34
4-7	Block Heater Installation .....	4-38
4-8	Jacket Water Heater Installation .....	4-40
<b>SECTION 5 –</b>		
	<b>DRIVE TRAIN .....</b>	<b>5-1</b>
5-1	Drive Train Components .....	5-2
5-2	Front Axle (Mechanical Park Brake) .....	5-4
5-3	Front Axle Housing .....	5-6
5-4	Front Axle - Swivel Housing & Steering Cylinder .....	5-8
5-5	Front Axle - Bevel Gear Set .....	5-10
5-6	Front Axle - Differential .....	5-12
5-7	Front Axle - Double U-Joint .....	5-14
5-8	Front Axle - Brakes .....	5-16
5-9	Front Axle - Wheel Hub .....	5-18
5-10	Front Axle - Final Reduction .....	5-20
5-11	Front Axle - Brake Caliper .....	5-22
5-12	Rear Axle (Mechanical Park Brake) .....	5-24
5-13	Rear Axle Housing .....	5-26
5-14	Rear Axle - Swivel Housing & Steering Cylinder .....	5-28
5-15	Rear Axle - Bevel Gear Set .....	5-30
5-16	Rear Axle - Differential .....	5-32
5-17	Rear Axle - Double U-Joint .....	5-34
5-18	Rear Axle - Wheel Hub .....	5-36
5-19	Rear Axle - Final Reduction .....	5-38
5-20	Transmission .....	5-40
5-21	Fender Installation .....	5-42
5-22	Remote Grease System Installation .....	5-44
5-23	Wheel Assembly .....	5-48
5-24	Front Axle, TH414C (Hydraulic Park Brake) .....	5-54
5-25	Front Axle, TH514C, TH417C (Hydraulic Park Brake) .....	5-68
5-26	Rear Axle, TH414C (Hydraulic Park Brake) .....	5-82
5-27	Rear Axle, TH514C, TH417C (Hydraulic Park Brake) .....	5-96
5-28	Steering Arm Assy .....	5-110
5-29	Steering Arm Assy .....	5-112
5-30	Steering Cylinder .....	5-114
5-31	Steering Cylinder .....	5-116
5-32	Steering Cylinder .....	5-118
5-33	Bevel Gear Set .....	5-120
5-34	Bevel Gear Set 11/32 .....	5-122
5-35	Bevel Gear Set 11/32 .....	5-124

**<https://www.ebooklibonline.com>**

Hello dear friend!

Thank you very much for reading.

Enter the link into your browser.

The full manual is available for immediate download.

**<https://www.ebooklibonline.com>**

# TABLE OF CONTENTS

FIGURE NO.	TITLE	PAGE NO.
5-36	Bevel Gear Set 11/37 .....	5-126
5-37	Differential Kit .....	5-128
5-38	Differential Kit .....	5-130
5-39	Double Joint .....	5-132
5-40	Double Joint .....	5-134
5-41	Wheel Hub Kit .....	5-136
5-42	Wheel Hub Kit .....	5-138
 <b>SECTION 6 –</b>		
	<b>CAB .....</b>	<b>6-1</b>
6-1	Cab Installation .....	6-2
6-2	Cab Assembly .....	6-8
6-3	Cab Door & Window Installation .....	6-12
6-4	Cab Interior .....	6-16
6-5	Wiper System .....	6-20
6-6	Seats .....	6-26
6-7	Heater Installation .....	6-30
6-8	Air Conditioning Installation .....	6-36
6-9	Cab Hydraulic Installation (Hydraulic Park Brake) .....	6-42
 <b>SECTION 7 –</b>		
	<b>CONTROLS .....</b>	<b>7-1</b>
7-1	Brake .....	7-2
7-2	Hand Brake .....	7-4
7-3	Accelerator .....	7-6
7-4	Mechanical Throttle Cable .....	7-8
7-5	Steering Column .....	7-10
7-6	Boom Joystick .....	7-14
 <b>SECTION 8 –</b>		
	<b>HYDRAULIC CIRCUITS .....</b>	<b>8-1</b>
8-1	Supply Circuit .....	8-2
8-2	Dump Circuit .....	8-6
8-3	Steer Select .....	8-10
8-4	Service Brake .....	8-12
8-5	Lift Cylinder .....	8-14
8-6	Extend/Retract .....	8-16
8-7	Tilt & Tilt Compensation .....	8-22
8-8	Auxiliary Hydraulics .....	8-34
8-9	Frame Level & Outrigger .....	8-40
8-10	Platform Hydraulics .....	8-42
8-11	Steering Installation (Hydraulic Park Brake) .....	8-44

# TABLE OF CONTENTS

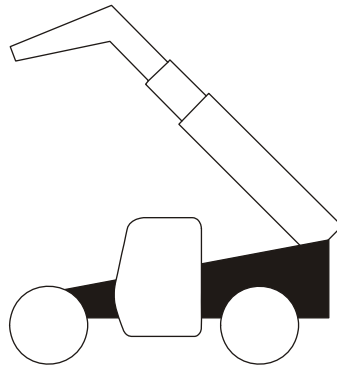
FIGURE NO.	TITLE	PAGE NO.
<b>SECTION 9 –</b>		
<b>HYDRAULIC COMPONENTS</b>		<b>9-1</b>
9-1	Lift Cylinder	9-2
9-2	Extend/Retract Cylinder	9-6
9-3	Tilt Cylinder	9-14
9-4	Compensation Cylinder	9-18
9-5	Frame Level Cylinder	9-22
9-6	Outrigger Cylinder	9-24
9-7	Quick Coupler Cylinder	9-26
9-8	Platform Rotate Cylinder	9-28
9-9	Main Control Valve	9-30
9-10	Piston Pump	9-34
9-11	Steering Select Valve	9-36
9-12	Hydraulic Tank Installation	9-38
9-13	Diverter Valve	9-40
9-14	Outrigger & Frame Level Valve	9-42
9-15	Double Pilot Check Valve	9-44
9-16	Side Tilt Cylinder	9-46
9-17	Auxiliary Power Pump	9-50
9-18	Hydraulic Handbrake Valve	9-52
9-19	Relay Valve Installation (Hydraulic Park Brake)	9-54
9-20	Dynamic Select Valve	9-56
9-21	Auxiliary Valve Installation	9-58
<b>SECTION 10 –</b>		
<b>ELECTRICAL</b>		<b>10-1</b>
10-1	Engine Compartment Electrical Installation	10-2
10-2	Dual Battery Installation	10-10
10-3	Boom and Frame Electrical Installation	10-12
10-4	LMIS Installation	10-18
10-5	Cab Electronic Installation	10-22
10-6	Cab Switches	10-26
10-7	Worklight Lights	10-30
10-8	Driving Lights	10-32
10-9	Engine Harness	10-36
10-10	Transmission Harness	10-44
10-11	Boom Auxiliary Electric Harness	10-46
10-12	Boom Auxiliary Electric Harness	10-48
10-13	Cab Floor Harness	10-50
10-14	Cab Roof Harness	10-66
10-15	Boom Work Light Harness	10-68
10-16	LMIS Cab Harness	10-70
10-17	LMIS Frame Harness	10-72
10-18	Boom Work Light Harness	10-74
10-19	A/C Harness	10-76

# TABLE OF CONTENTS

FIGURE NO.	TITLE	PAGE NO.
10-20	Outrigger Harness	10-78
10-21	ECM To Injectors Harness	10-80
10-22	Vehicle Speed Harness	10-82
10-23	Light Extension Harness	10-84
10-24	Front Chassis Harness	10-86
10-25	Rear Chassis Harness	10-88
10-26	DPF Switch Harness	10-92
10-27	3-Section Boom Harness With Platform	10-94
10-28	Cab to Boom Harness	10-96
10-29	Platform Recognition Harness	10-98
10-30	1/2 Aux & QC Harness	10-100
10-31	LSS CAN-BUS Harness	10-102
10-32	Boom Retract Sensor Harness	10-104
10-33	Boom Extension Limit Harness	10-106
10-34	Platform Harness	10-108
10-35	EStop Link Harness	10-112
10-36	Multi SW Link-OROPS Harness	10-114
10-37	Dual Seat Switch Harness	10-116
10-38	DPF Link Harness	10-118
10-39	Reverse Fan Harness	10-120
10-40	Platform Electrical Installation	10-122
10-41	Solenoid Assembly	10-124
10-42	Platform Relay Box Harness	10-126
10-43	Auxiliary Platform Harness	10-128
10-44	Link Harness	10-130
10-45	Ride and Float Cab Harness	10-132
10-46	Auxiliary Power Unit Installation	10-134
10-47	Boom Auxiliary Electrical Harness Installation	10-138
10-48	Boom Extension Limit Harness	10-140
10-49	Temperature Sensor Harness	10-142
10-50	3B PLATFORM HARNESS	10-144
<b>SECTION 11 –</b>		
	<b>DECALS</b>	<b>11-1</b>
11-1	Cab & Frame Decals	11-2
11-2	Boom Decals	11-8
11-3	Platform Decals	11-10
<b>SECTION 12 –</b>		
	<b>MAINTENANCE PARTS LIST</b>	<b>12-1</b>
<b>SECTION 13 – PART NUMBER INDEX</b>		
		<b>13-1</b>

# SECTION 1

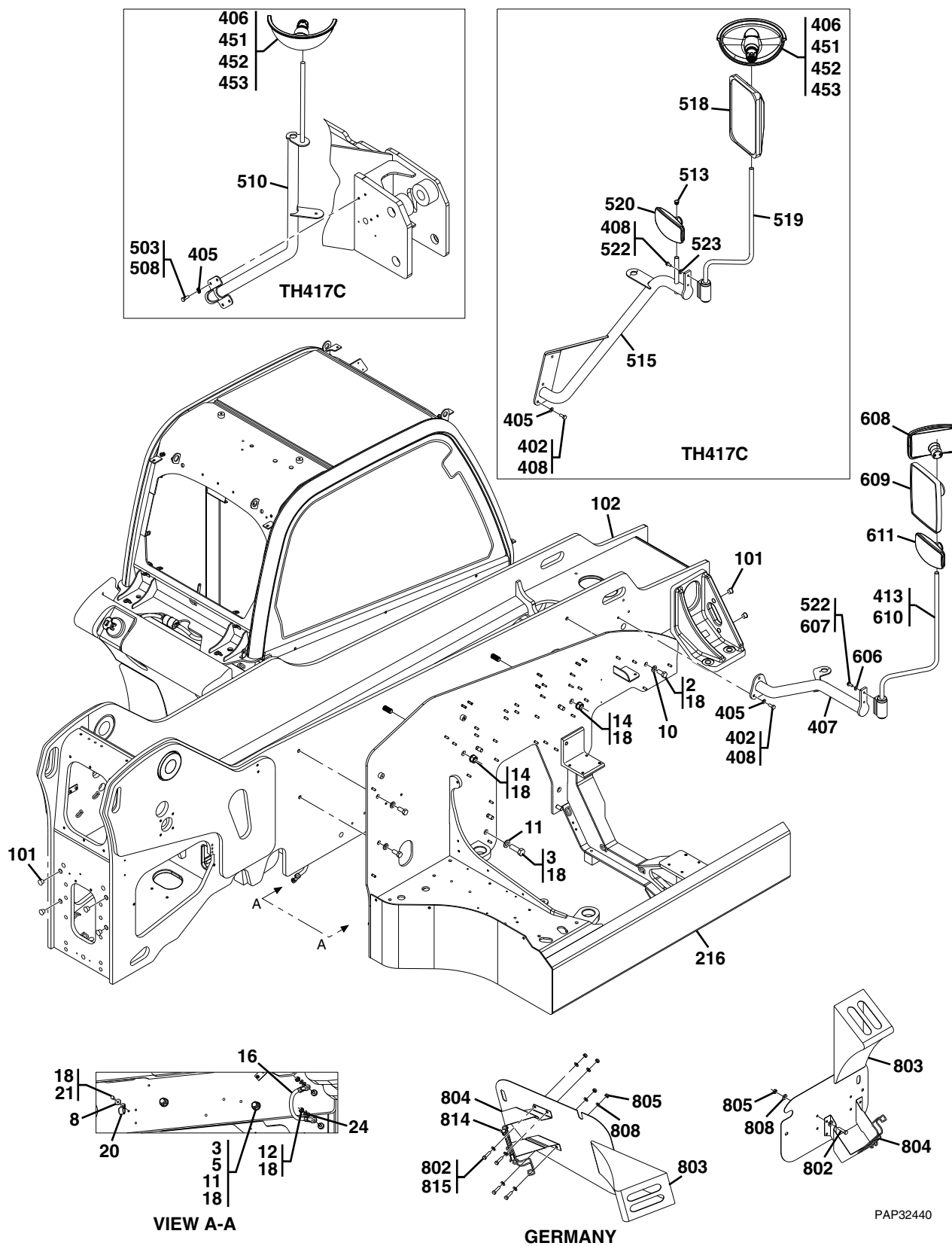
## FRAME & ATTACHING PARTS





# FRAME & ATTACHING PARTS

## Figure 1-1 Frame & Attaching Parts



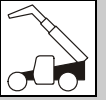
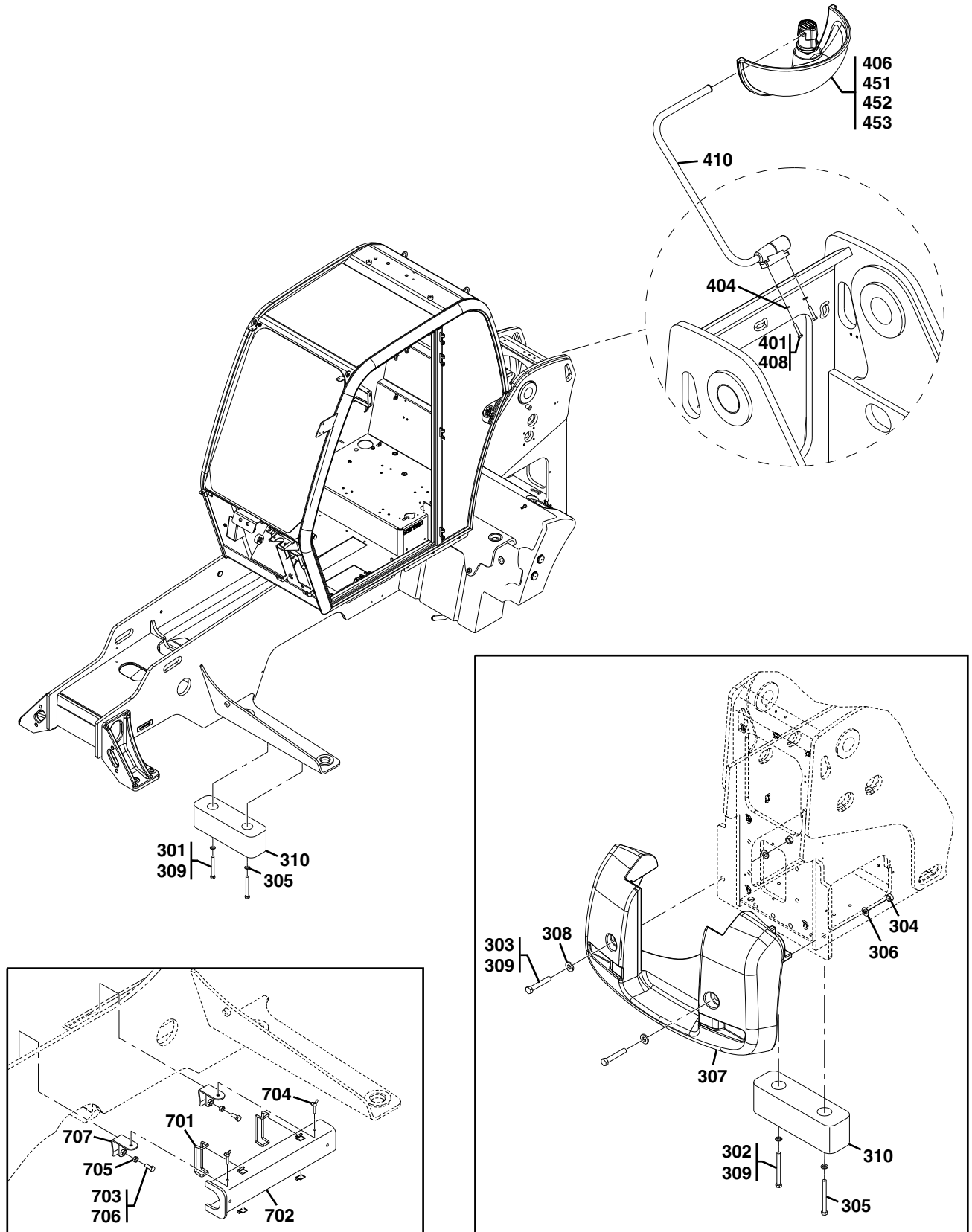


Figure 1-1 Frame & Attaching Parts (Continued)



PAP32450



## FRAME & ATTACHING PARTS

Figure 1-1 Frame & Attaching Parts

Item	Part Number	Qty.	Description	Rev.
	397-9230	Ref	ENGINE POD TO FRAME INSTALLATION, (not available to order, see items 2 thru 24 for service), <b>(TH414C S/N KEK00150 &amp; After, TH514C S/N MWC00150 &amp; After, TH417C S/N RRJ00150 &amp; After)</b>	D
	457-7440	Ref	ENGINE POD TO FRAME INSTALLATION, (not available to order, see items 2 thru 24 for service), <b>(TH414C S/N RWW00150 &amp; After, TH514C S/N KKW00150 &amp; After, TH417C S/N RRW00150 &amp; After)</b>	C
2	8T-4779	3	HEX HD CAPSCREW, M16X35, GR8.8	
3	7X-2563	4	HEX HD CAPSCREW, M20X60, GR8.8	
5	8T-4131	4	HEX NUT, M20X2-1/2	
8	309-3997	1	WASHER, 8mm	
10	9X-8257	3	WASHER, 16mm	
11	7Y-1858	8	WASHER, 20mm	
12	255-3022	2	RIPP NUT, 10mm	
14	201-1919	2	HEX NUT	
16	8I-4641	1	EARTH STRAP	
18		AR	LOCTITE® 243™	
20	327-5534	1	CLIP	
21	8T-4189	1	HEX HD CAPSCREW, M8X20, GR8.8	
24	8T-4121	4	WASHER, 10mm	
101	329-3606	AR	BLACK PLUG	
102	NSS	1	FRAME WELDMENT	
103	435-1720	AR	CAP, (not shown)	
216	397-3794	1	ENGINE FRAME	
	451-1810	Ref	COUNTERWEIGHT INSTALLATION, <b>(TH414C-AUS)</b> , (not available to order, see items 301, 305, 309 & 310 for service)	A
	430-7583	1	COUNTERWEIGHT, <b>(TH414C-CE)</b> , (not available to order, see items 301 thru 310 for service)	A
	354-8551	1	COUNTERWEIGHT, <b>(TH414C-AUS)</b> , (not available to order, see items 303, 304 & 306 thru 309 for service)	B
	354-8578	1	COUNTERWEIGHT, (not available to order, see items 303, 304 & 306 thru 309 for service), <b>(TH514C Before S/N MWC00386, TH417C Before S/N RRJ00240)</b>	B
	469-2355	1	COUNTERWEIGHT, (not available to order, see items 303, 304 & 306 thru 309 for service), <b>(TH514C S/N MWC00386 &amp; After)</b>	A
	478-1636	1	COUNTERWEIGHT, (not available to order, see items 303, 304 & 306 thru 309 for service), <b>(TH417C S/N RRJ00240 &amp; After)</b>	A
301	7X-2557	2	HEX HD CAPSCREW, M16X140, GR8.8, (torque to 241 Nm/178 lb-ft)	
302	6C-8647	2	HEX HD CAPSCREW, M16X170, GR8.8	
303	8T-6381	2	HEX HD CAPSCREW, M20X120, GR10.9	
304	6V-7742	2	HEX NUT, M20X2.5, GR10	
305	9X-8257	4	WASHER, 16MM	
	9X-8257	2	WASHER, 16MM, <b>(TH414C-AUS)</b>	
306	329-7279	2	WASHER, 20MM	
307	209-4899	1	COUNTERWEIGHT, <b>(TH414C-CE)</b>	
	346-0763	1	COUNTERWEIGHT, <b>(TH414C-AUS)</b>	
	346-0764	1	COUNTERWEIGHT, <b>(TH514C Before S/N MWC00386, TH417C Before S/N RRJ00240)</b>	
	469-2328	1	COUNTERWEIGHT, <b>(TH514C S/N MWC00386 &amp; After)</b>	
	477-9911	1	COUNTERWEIGHT, <b>(TH417C S/N RRJ00240 &amp; After)</b>	



Figure 1-1 Frame & Attaching Parts (Continued)

Item	Part Number	Qty.	Description	Rev.
308	8T-5439	2	WASHER	
309		AR	LOCTITE® 243™	
310	399-7783	2	COUNTERWEIGHT PLATE	
	323-7408	Ref	MIRROR INSTALLATION, <b>(TH414C &amp; TH514C)</b> , (not available to order, see items 401 thru 413 for service)	H
	361-8838	Ref	MIRROR INSTALLATION, <b>(TH417C)</b> , (not available to order, see items 401 thru 406, 408, 410 & 503 thru 523)	F
401	8T-4971	2	HEX HD CAPSCREW, M6C30, GR8.8	
402	8T-4136	3	HEX HD CAPSCREW, M10X25, GR8.8, <b>(TH414C &amp; TH514C)</b>	
	8T-4136	4	HEX HD CAPSCREW, M10X25, GR8.8, <b>(TH417C)</b>	
404	8T-4205	2	WASHER, 6mm	
405	8T-4121	3	WASHER, 10mm, <b>(TH414C &amp; TH514C)</b>	
	8T-4121	8	WASHER, 10mm, <b>(TH417C)</b>	
406	336-7619	1	MIRROR, (includes items 451 thru 453), <b>(TH414C &amp; TH514C)</b>	C
	336-7619	3	MIRROR, (includes items 451 thru 453), <b>(TH417C)</b>	C
407	452-8395	1	BRACKET	
408		AR	LOCTITE® 243™	
410	220-4049	1	MIRROR ARM	
413	318-0434	1	REAR VIEW MIRROR INSTALL, (not available to order, see items 522 & 606 thru 611 for service)	G
451	3B-4503	2	LOCKWASHER, #12	
452	8T-0328	2	WASHER	
453	281-0791	2	HEX SOCKET HD CAPSCREW	
503	8T-4195	4	HEX HD CAPSCREW, M10X30, GR8.8	
510	361-8840	1	MIRROR BRACKET	
513	314-5568	1	LAMP BRACKET CAP	
515	453-5743	1	MIRROR BRACKET	
518	434-3614	1	REAR VIEW MIRROR	
519	423-7345	1	MIRROR SUPPORT BRACKET	
520	424-0725	1	CONVEX MIRROR	
522	8T-4189	2	HEX HD CAPSCREW, M8X20, GR8.8, (torque to 28Nm/21 lb-ft)	
523	8T-4224	2	WASHER, 8mm	
606	8T-4224	2	WASHER, 8mm	
607		AR	LOCTITE® 243™	
608	424-0720	1	CONVEX MIRROR	
609	424-0721	1	REAR VIEW MIRROR	
610	423-7345	1	MIRROR SUPPORT BRACKET	
611	424-0725	1	CONVEX MIRROR	
	327-1056	Ref	BOOM PROP INSTALLATION, <b>(TH414C)</b> , (includes items 701 thru 707)	A
	327-1056	Ref	BOOM PROP INSTALLATION, <b>(TH514C &amp; TH417C)</b> , (includes 701 thru 707)	A
701	329-3624	2	O-RING	
702	326-2012	1	BOOM PROP BRACKET, <b>(TH414C)</b>	
	330-3671	1	BOOM PROP BRACKET, <b>(TH514C &amp; TH417C)</b>	
703	8T-4139	2	HEX HD CAPSCREW, M12X30, GR8.8	
704	327-1059	2	WING BOLT, M8X40	
705	471-2121	2	HEX NUT, M12X1.75	
706		AR	LOCTITE® 243™	



## FRAME & ATTACHING PARTS

Figure 1-1 Frame & Attaching Parts (Continued)

Item	Part Number	Qty.	Description	Rev.
707	327-1058	2	BOOM PROP MOUNT	
802	8T-7547	8	HEX HD CAPSCREW, (full thread), M8X30, GR8.8, <b>(Germany - if equipped)</b>	
803		2	WEDGE, <b>(Germany - if equipped)</b>	
804		2	WEDGE HOLDER, <b>(Germany - if equipped)</b>	
805	5C-7261	8	HEX NUT, M8X1.25, <b>(Germany - if equipped)</b>	
808	8T-4224	16	WASHER, 8mm, <b>(Germany - if equipped)</b>	
814		2	CABLE TIE DOWN, <b>(Germany - if equipped)</b>	
815	8T-4200	4	HEX HD CAPSCREW, M8X16, (full thread), <b>(Germany - if equipped)</b>	





Figure 1-2 Covers

Item	Part Number	Qty.	Description	Rev.
	420-9611	AR	COVER PLATES INSTALLATION, <b>(TH414C &amp; TH514C)</b> , (not available to order, see items 1 thru 18, 120 & 121 for service)	C
	420-9612	AR	COVER PLATES INSTALLATION, <b>(TH417C)</b> , (not available to order, see items 1, 3 thru 6 & 8 thru 120 for service)	A
1	112-2095	4	FLAT HD CAPSCREW, M6X20mm	
2	8T-4908	2	HEX HD CAPCREW, M8X25, GR8.8, <b>(TH414C &amp; TH514C)</b> , (torque to 28 Nm/21 lb-ft)	
	8T-4908	4	HEX HD CAPCREW, M8X25, GR8.8, <b>(TH417C)</b> , (torque to 28 Nm/21 lb-ft)	
3	8T-4137	6	HEX HD CAPSCREW, M10X20, GR8.8, (torque to 55 Nm/41 lb-ft)	
4	303-4779	8	HEX LOCK NUT, M6X1	
5	309-3997	6	WASHER, 8mm, <b>(TH414C &amp; TH514C)</b>	
	309-3997	4	WASHER, 8mm, <b>(TH417C)</b>	
6	8T-4121	6	WASHER, 10mm	
7	330-6891	8	RIPP WASHER, 6mm	
8	323-7261	2	HINGE JOINT	
9		4	SCREW, M6X40mm	
10	214-0978	1	COVER	
11	349-0554	1	FRONT COVER PLATE	
12	323-5595	1	LATCH	
13	323-5596	1	PAWL	
14	316-1987	1	REAR HYDRAULICS PANEL	
15	316-1992	1	SIDE HYDRAULICS PANEL	
16		AR	LOCTITE® 243™	
17	316-2023	1	REAR HINGED PANEL	
18	420-9609	1	FRONT HYDRAULICS PANEL, <b>(TH414C &amp; TH514C)</b>	
	420-9610	1	FRONT HYDRAULICS PANEL, <b>(TH417C)</b>	
102	8T-4200	2	HEX HD CAPSCREW, M8X16, GR8.8, (torque to 28 Nm/21 lb-ft)	
106	8T-4205	8	WASHER, 6mm	
107	8T-4224	2	WASHER, 8mm	
120	363-8939	2	SPACER	
121	8T-4189	4	HEX HD CAPSCREW, M8X20, GR8.8, (torque to 11 Nm/8.11 lb-ft)	
	396-6913	Ref	ENGINE ENCLOSURE INSTALLATION, (not available to order, see items 201 thru 228 for service), <b>(TH414C S/N KEK00150&amp; After, TH514C S/N MWC00150 &amp; After, TH417C S/N RRJ00150 &amp; After)</b>	I
	397-9234	Ref	ENGINE ENCLOSURE INSTALLATION, (not available to order, see items 201 thru 228 for service), <b>(TH414C S/N RWW00150&amp; After, TH514C S/N KKW00150 &amp; After, TH417C S/N RRW00150 &amp; After)</b>	J
201	8T-4189	8	HEX HD CAPSCREW, M8X20, GR8.8, (torque to 11 Nm/8.11 lb-ft)	
202	8T-4908	7	HEX HD CAPSCREW, M8X25, GR8.8, (torque to 11 Nm/8.11 lb-ft)	
203	8T-7547	2	HEX HD CAPSCREW, M8X30, GR8.8, (torque to 11 Nm/8.11 lb-ft)	
204	8T-4191	2	HEX HD CAPSCREW, M10X16, GR8.8, (torque to 55 Nm/40.56 lb-ft)	
205	8T-4136	9	HEX HD CAPSCREW, M10X25, GR8.8, (torque to 55 Nm/40.56 lb-ft)	
206	5C-7261	10	HEX NUT, M8X1.25, (torque to 11 Nm/8.11 lb-ft)	
207	8T-4133	2	HEX NUT, M10X1.5	
208	420-9613	2	ZSB JOINT	
209	8T-4224	4	WASHER, 8mm	
210	8T-4121	4	WASHER, 10mm	
211		AR	LOCTITE® 243™	
212	347-1639	1	GAS SPRING	



## FRAME & ATTACHING PARTS

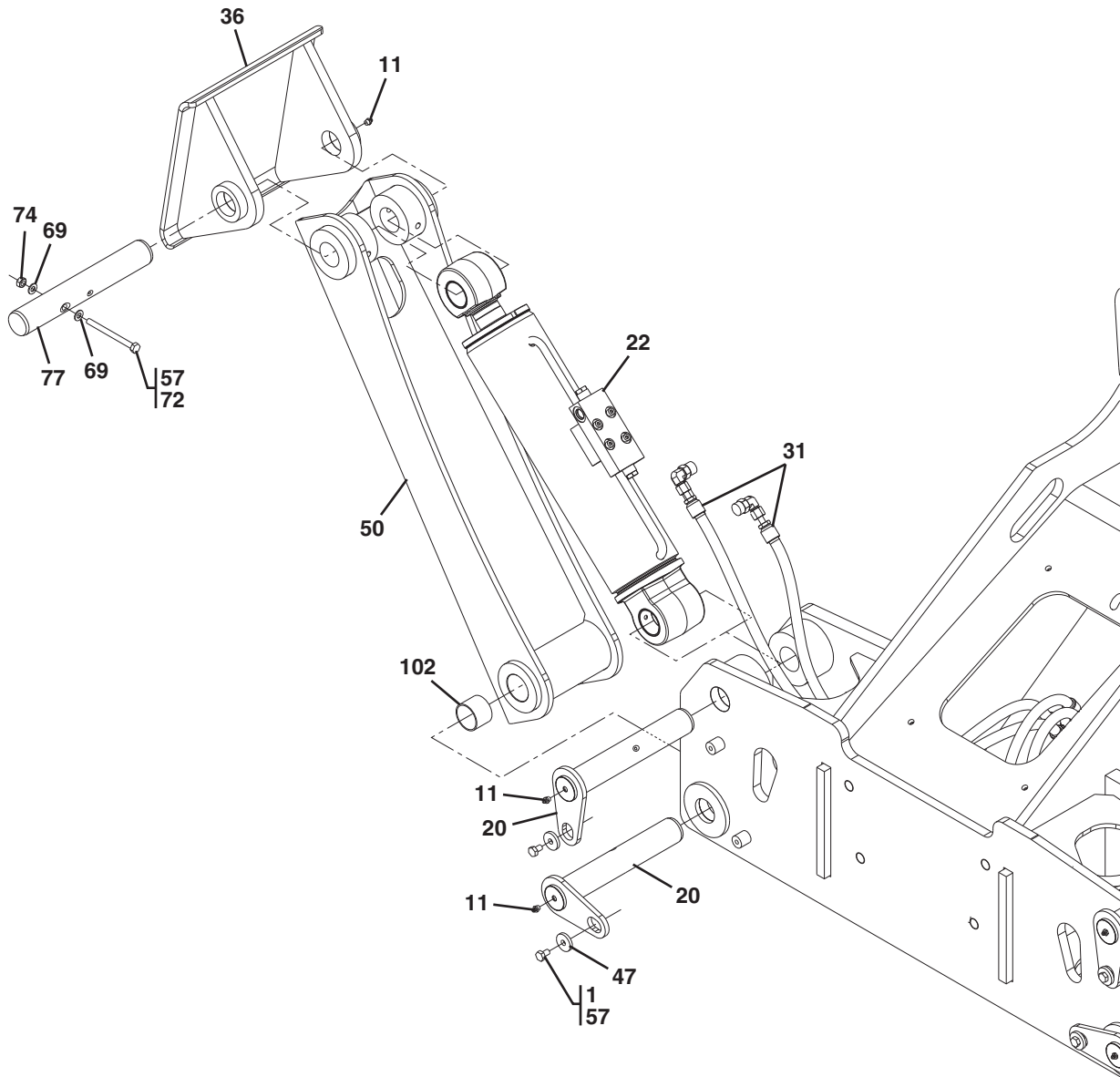
Figure 1-2 Covers (Continued)

Item	Part Number	Qty.	Description	Rev.
213	394-1517	1	HOOD LATCH BRACKET	
214	396-6908	1	REAR ENGINE ENCLOSURE COVER	
215	394-2266	1	BASE PLATE ASSY	
217	396-6912	1	HOOD, (TH414C S/N KEK00150 & After, TH514C S/N MWC00150 & After, TH417C S/N RRJ00150 & After)	
	396-6909	1	HOOD, (TH414C S/N RWW00150 & After, TH514C S/N KKW00150 & After, TH417C S/N RRW00150 & After)	
218	416-8565	1	PLATE	
219	467-9865	1	BASE PLATE	
220	416-8567	1	GAS STRUT MOUNT BRACKET	
221	428-9275	1	FRONT ENGINE ENCLOSURE COVER	
222	8T-4195	1	HEX HD CAPSCREW, M10X30, GR8.8, (torque to 55 Nm/40.56 lb-ft)	
223	309-3997	28	WASHER, 8mm	
224	116-8517	10	WASHER, 10mm	
225	309-9184	1	HEX LOCK NUT, M8X1.25	
227	430-4118	1	ADHESIVE FOAM SEAL	
228	178-3336	2	RIPP NUT, 8mm	
	417-1223	Ref	TOOLBOX INSTALLATION, (if equipped), (not available to order, see items 301 thru 308 for service)	B
301	8T-4189	2	HEX HD CAPSCREW, M8X20, GR8.8	
302	454-6561	1	CLAMP	
303	5C-7261	2	HEX NUT, M8X1.25, GR8	
305	309-3997	5	WASHER, 8mm	
306		AR	LOCTITE® 243™	
307	417-1225	1	TOOLBOX	
308	417-1224	1	WING BOLT, M8	



# FRAME & ATTACHING PARTS

## Figure 1-3 Outrigger Installation



PAM0840



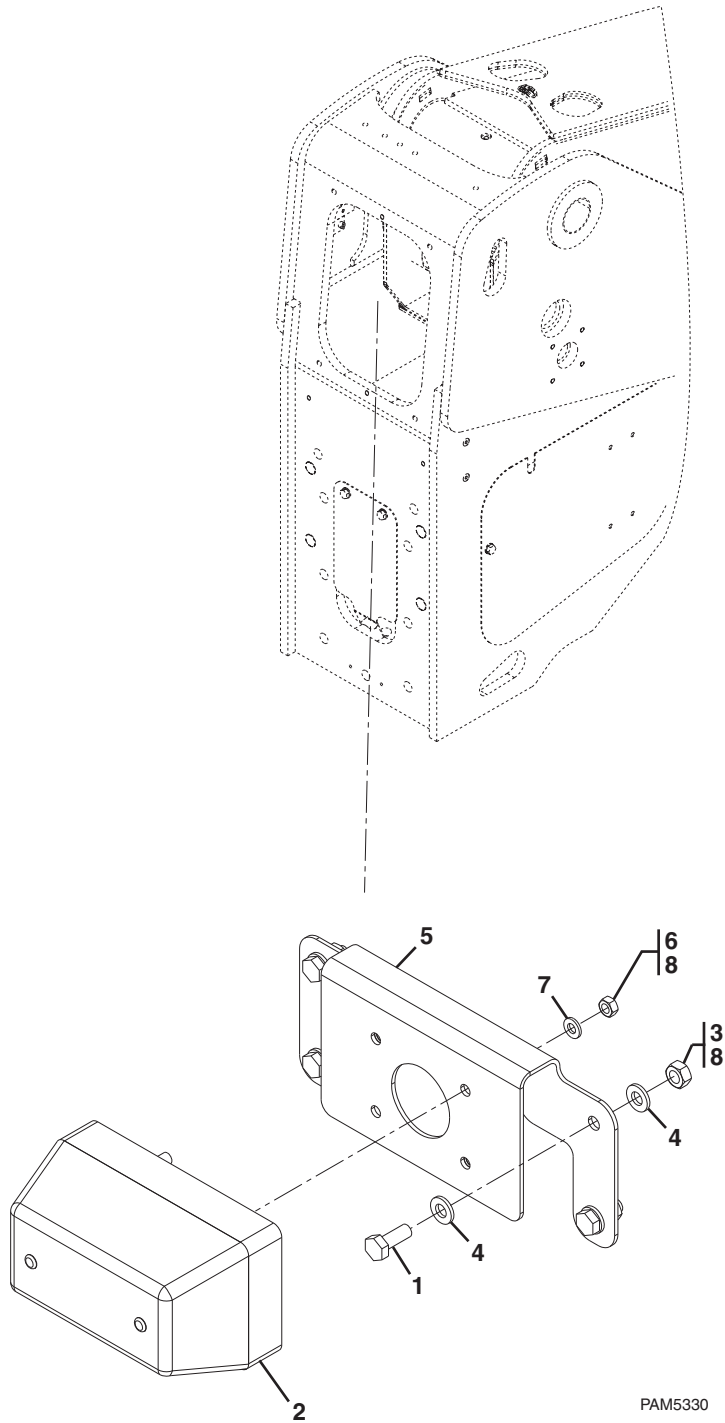
**Figure 1-3 Outrigger Installation**

Item	Part Number	Qty.	Description	Rev.
1	8T-4191	4	HEX HD CAPSCREW, M10X16, GR 8.8, (torque to 55 Nm)	
11	437-0940	6	GREASE FITTING, STRAIGHT	
20	318-7323	4	PIN	
22		Ref	OUTRIGGER CYLINDER, (see Figure 9-6 for details)	
31		Ref	HOSE ASSY, (see Figure 8-9 for details)	
36	459-5341	2	OUTRIGGER PAD WELDMENT	
47	7X-0632	4	HARD WASHER	
50	454-4677	2	OUTRIGGER LEG, (includes item 102)	
57		AR	LOCTITE® 242™	
69	8T-4121	4	FLAT WASHER, 10mm	
72	7X-2543	2	HEX HD CAPSCREW, M10X120, GR8.8, (torque to 55 Nm)	
74	8T-0389	2	HEX NUT, 10X1.5mm	
77	326-7838	2	PIN	
102	318-7363	4	BEARING	



## FRAME & ATTACHING PARTS

Figure 1-4 Licence Plate Lamp Installation



PAM5330



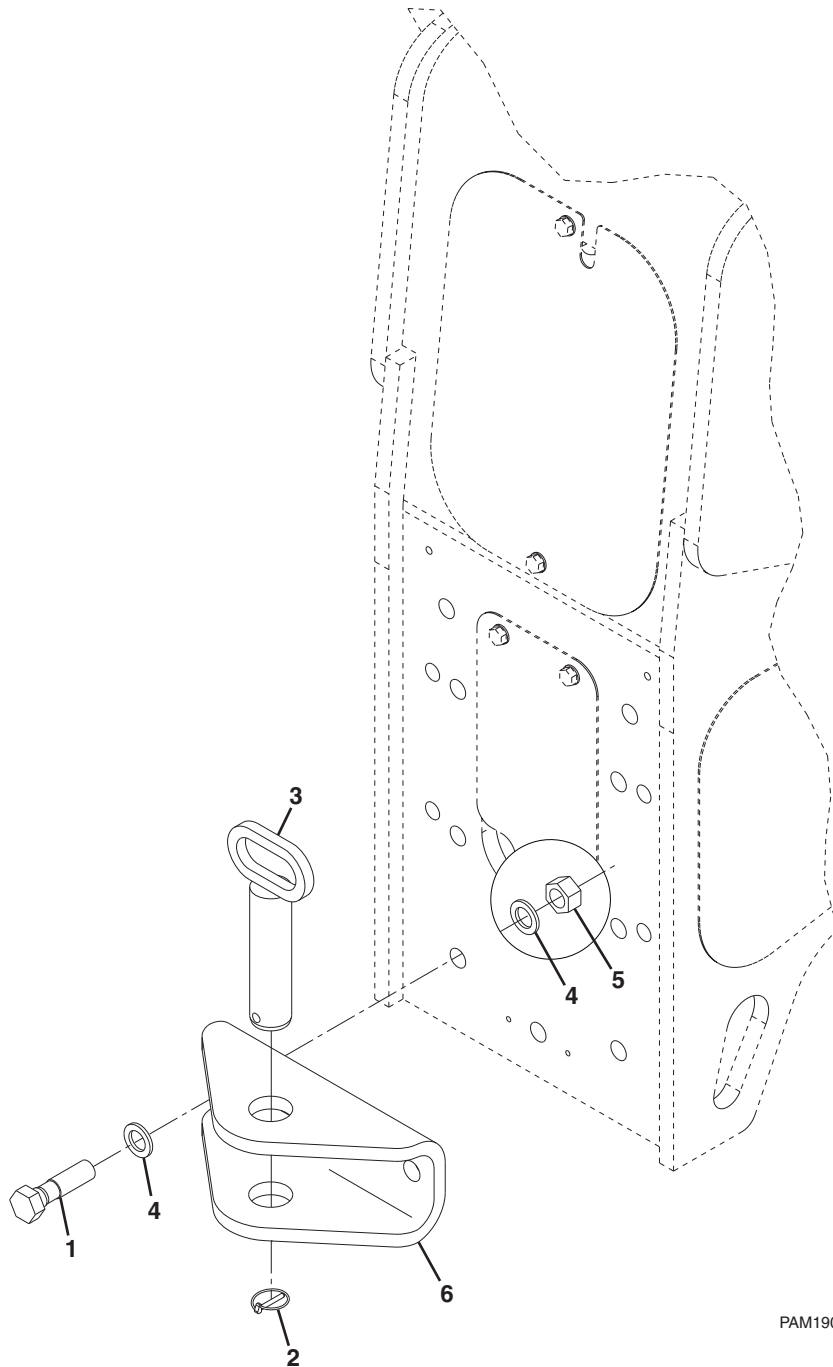
Figure 1-4 Licence Plate Lamp Installation

Item	Part Number	Qty.	Description	Rev.
	320-9306	Ref	LICENSE PLATE LIGHT INSTALLATION, (not available to order, see items 1 thru 8 for service)	B
1	5C-9553	4	HEX HD CAPSCREW, M6X16, GR8.8	
2	323-5642	1	LICENSE PLATE LIGHT	
	323-5649	1	REPLACEMENT BULB, 12V-5W	
3	5C-2890	4	HEX NUT, M6X1	
4	8T-4205	8	WASHER, 6mm	
5	320-9289	1	PLATE MOUNT	
6	303-4777	2	HEX NUT, M5X0.8	
7	309-3996	2	WASHER, 5mm	
8		AR	LOCTITE® 242™	



# FRAME & ATTACHING PARTS

## Figure 1-5 Hitches



PAM1900



**Suggest:**

**If the above button click is invalid.**

**Please download this document**

**first, and then click the above link**

**to download the complete manual.**

**Thank you so much for reading**



Figure 1-5 Hitches

Item	Part Number	Qty.	Description	Rev.
	211-2381	1	RETRIEVAL HITCH, (if equipped), (includes items 1 thru 6)	C
1	166-1880	2	HEX HD CAPSCREW, M20X2.5	
2	174-2844	1	RING PIN	
3	211-9462	1	PIN	
4	8T-4123	4	HARD WASHER	
5	8T-4131	2	HEX NUT, M20X2.5	
6	210-5870	1	RETRIEVAL PLATE	

**<https://www.ebooklibonline.com>**

Hello dear friend!

Thank you very much for reading.

Enter the link into your browser.

The full manual is available for immediate download.

**<https://www.ebooklibonline.com>**