



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.
SECTION 1 –		
FRAME & ATTACHING PARTS		1-1
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
SECTION 2 –		
BOOM		2-1
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
SECTION 3 –		
ATTACHMENTS		3-1
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
SECTION 4 –		
ENGINE & ATTACHING PARTS		4-1
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
SECTION 5 –		
	DRIVE TRAIN	5-1
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

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
SECTION 6 –		
CAB		6-1
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
SECTION 7 –		
CONTROLS		7-1
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
SECTION 8 –		
HYDRAULIC CIRCUITS		8-1
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.
SECTION 9 –		
HYDRAULIC COMPONENTS		9-1
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
SECTION 10 –		
ELECTRICAL		10-1
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

Thank you so much for reading.
Please click the “Buy Now!”
button below to download the
complete manual.



After you pay.

You can download the most
perfect and complete manual in
the world immediately.

Our support email:

ebooklibonline@outlook.com