



INSTRUCTION MANUAL

Machine Section

Applicable serial No.: 6110051—

Roughter

SR-300L

 **WARNING**

- You must read and understand this manual before operating or servicing this crane.
If you do not do so, you may cause serious injury or death including damage to the equipment etc.
- All people who come into contact with this crane must read and be familiar with the contents of this manual. Keep it in the crane so it will be available to anybody who needs it.
- If you need a copy of this manual in another language, ask your authorised KATO dealer.

214521

背厚 11.5 mm (中)

KATO

SR-300L

INSTRUCTION MANUAL

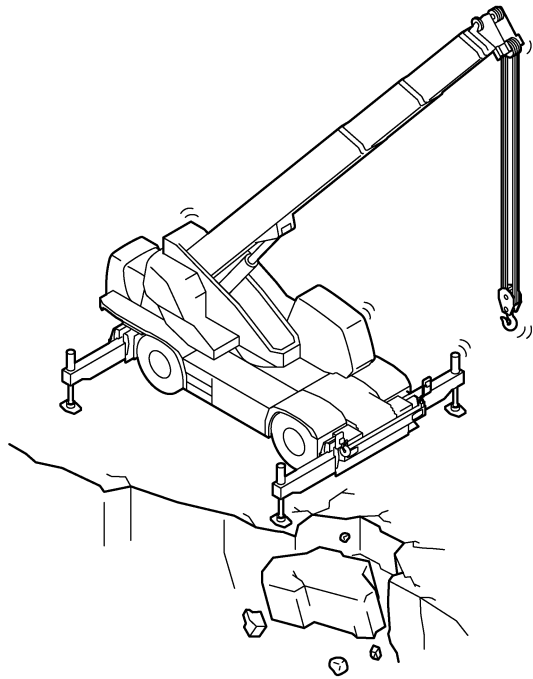
214521

 DANGER

Cautions on setting outriggers

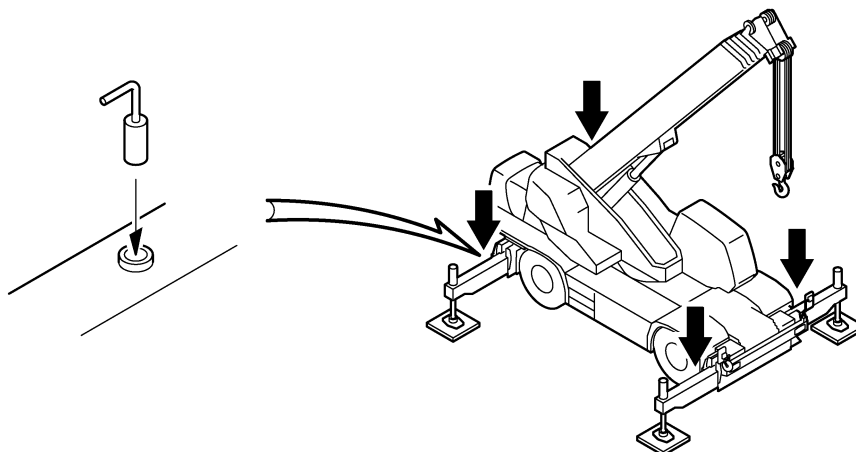
Inadequate setting of the outriggers or an error in setting the outrigger status to the ACS could result in the crane tipping over. So be sure to check the following before starting work.

- ① Has the strength of the ground where the outriggers will be set been sufficiently discussed with the work supervisor ?
- ② Is the crane set horizontal ?
- ③ Are the tires off the ground ?



0099-00820

- ④ Are the outriggers fully extended ?
- ⑤ Are the outrigger stopper pins inserted ?
- ⑥ Has the outrigger extension width been correctly set to the ACS ?



0099-00830

 **DANGER**

All operations in accordance with rated lifting capacity chart

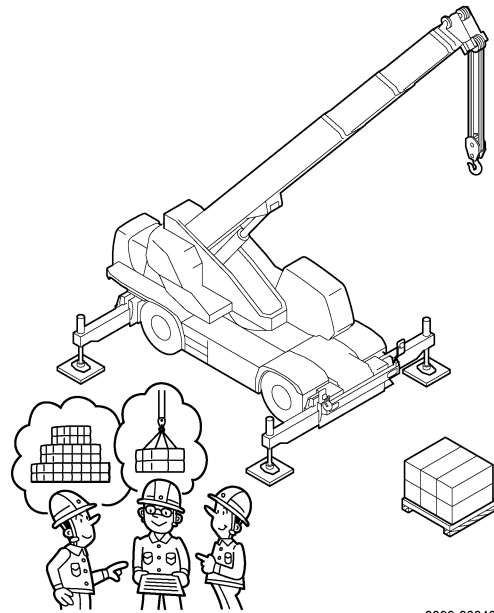
Make sure that all crane operations are in accordance with the rated lifting capacity chart for the crane.

Accidents such as the crane tipping over or damage to the boom etc. cannot be attributed but to operation beyond the rated lifting capacity of the crane.

The 1st step toward safe operation is to set the crane level on firm ground using the outriggers, and then operate according to the rated lifting capacity chart.

Operation very close to or slightly in excess of the limits could result in an accident.

Everyone including the crane operator and site supervisor must perform work with a sufficient safety margin.



0099-00840

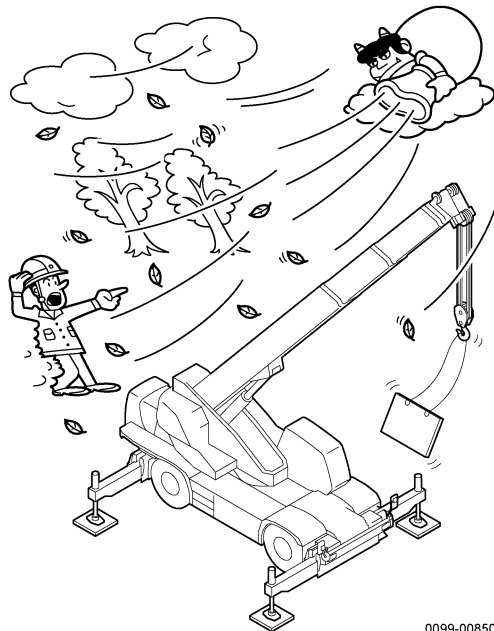
(0099-0002-0E)

 **DANGER**

Beware of wind !!

When operating with the boom extended or when hoisting/ lowering a large load, the wind could produce unexpected moment against the crane and cause the boom to break or the crane to tip over.

Be especially careful about wind striking the side of the boom or when operating in the space between buildings.



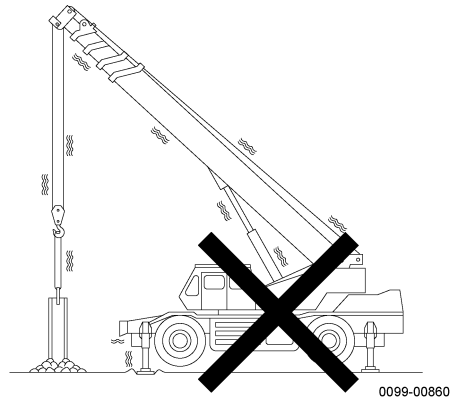
0099-00850

(0099-0003-1E)

 **DANGER**

Don't use the crane to lift the planet !!

If you use the crane to pull up or break off objects which have been driven into the ground or buried (sheet piles, H-beams, posts, pipes etc.), or if you try to drag a load toward the crane by raising the boom, you place a strong diagonal load on the boom which may exceed rated lifting capacity by many times. Pulling or breaking off driven or buried objects by raising the boom is recklessly dangerous as if you would use the crane to lift the planet. Therefore raising the boom in any way that may apply diagonal loads is forbidden. If you ignore the danger and the warning of the ACS and continue such an operation, an excessive load will act, possibly breaking the boom or the wire rope. Even if there is no final collapse during operation, the crane will be damaged resulting in progressive damage even when working within rated lifting capacity and leading to sudden catastrophic failure.

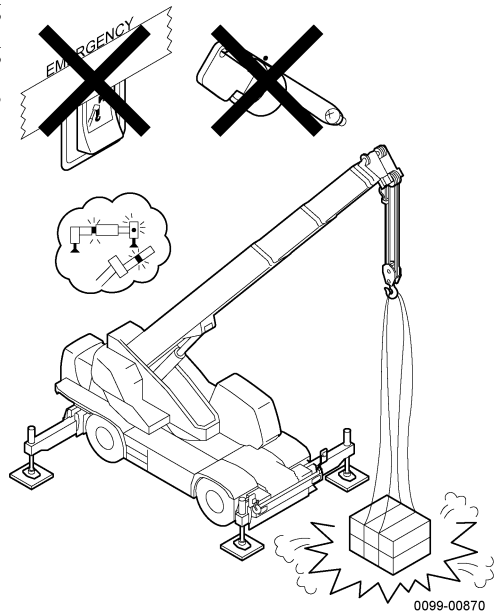


(0099-0004-0E)

 **DANGER**

Absolutely avoid releasing !!

Working with the ACS emergency switch and the overhoisting emergency switch turned to the release positions risks causing accidents. Before you start work, always check that both switches are positioned correctly.



(0099-0099-0E)

MEMO

Introduction (0099-0045-0E)

Thank you for choosing KATO.

Correct operation and handling of the crane is essential for maximum safety and performance and will help to improve working efficiency and work rate.

We have prepared this manual to help you to do just that. Do not start using the crane before you have read this manual thoroughly and understood its contents.

WARNING

(1) Modifications

If you modify this crane from the state in which it left our factory, you may impair its safety or performance.

KATO bears no responsibility for accidents or malfunctions which arise as a result of unauthorised modifications.

(2) Optional parts and attachments

Refer to the instruction manuals provided when you install genuine optional parts or designated attachments. Attachments not designated by KATO may impair safety or performance. They may cause tip-over accidents or have an adverse effect on the lifespan of the crane.

KATO bears no responsibility for accidents or malfunctions which arise as a result of the fitting of unauthorised attachments.

(0099-0100-0E)

How to use this manual (0099-0101-1E)

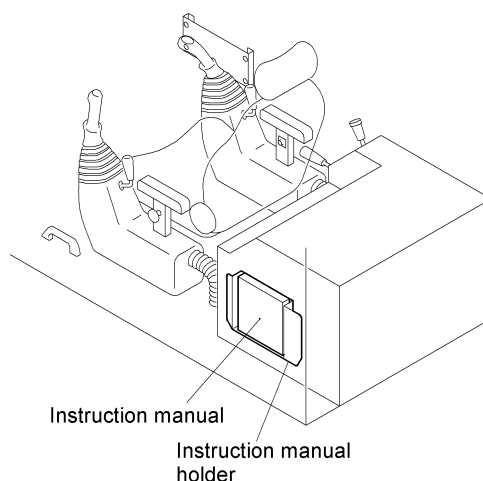
- You must read this manual fully and understand its contents before you operate, inspect or service this crane.

This manual is intended to be a guide to safe operation and regular servicing so it should be kept in the designated place inside the cab available to all those who use the crane.

- The sections in this manual and safety signs on this crane include safety information.

The labels " ⚠DANGER", " ⚠WARNING" and " ⚠CAUTION" are used in this manual and safety signs on this crane, so that you can understand the important items for safety operations and procedures.

Read them fully and understand them before you operate, inspect or service this crane.



611A-00010E

DANGER

Indicates warnings concerning direct risks of serious injury or death.

(0099-0048-0E)

WARNING

Indicates warnings concerning potential risks of serious injury or death.

(0099-0049-0E)

CAUTION

Indicates warnings concerning potential risks of injury or major damage to the crane.

(0099-0050-0E)

- If this manual is lost or seriously damaged, please order a replacement immediately from your authorised KATO dealer.
- When the user changes through resale or other circumstances, the instruction manuals must be transferred together with the crane.
- This manual has been written as a standard for general handling in specified operations. Before attempting any operations not covered by this manual or when you are unsure of any aspect of its contents, contact your authorised KATO dealer.
- Any operations which do not conform to the contents of this manual are at the operator's own risk and responsibility. KATO will bear no responsibility for any accident or damage which occurs as a result.
- In addition to the contents of this manual, further safety information and requirements are to be found on the safety signs on the crane and are contained in laws, regulations, ordinances, insurance conditions and other sources. You must also adhere to these conditions. Further observe the safety regulations and laws of the country where the crane is used.
- Please also refer to the separate instruction manuals.

Inspection and servicing (0099-0102-0E)

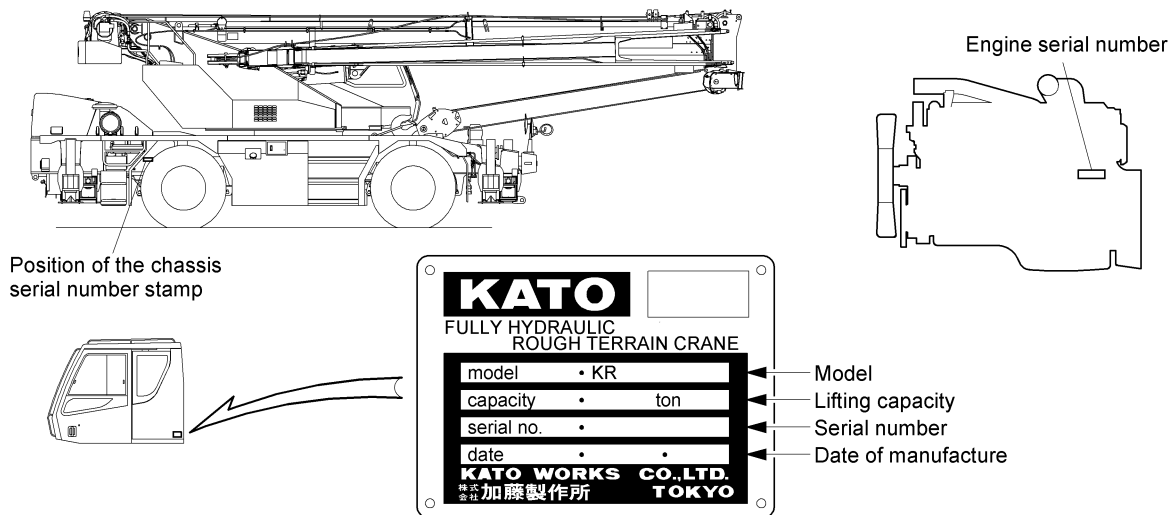
The inspection and servicing operations listed in this manual are a guide for extending the lifespan of the crane and improving its work rate. Carry out the regular inspection and servicing tasks on the basis of this manual and regulations of the country where the crane is used without fail.

This manual details the procedures for preoperational, monthly and annual inspection and servicing. Record the results of each inspection and servicing measures taken in the separate "Inspection Sheet".

Refer to the separate "Service Manual" for servicing procedures for breakdowns and disassembly.

Serial number nameplate (0099-0221-0E)

When you order parts or repairs from your authorised KATO dealer, please help to ensure smooth processing by quoting the model and serial number of the crane at the same time.



611A-00020E

When you take delivery of the crane, make a record of its serial number, engine serial number and delivery date.

Serial number	
Engine serial number	
Delivery date	

(0099-0053-0E)

Operation qualifications (0099-0054-0E)

⚠ WARNING

- Before operating this machine, make sure you have obtained all necessary qualifications following the regulations and law of the country where the machine is used.
- You must not operate without these qualifications.

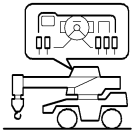
(0099-0225-0E)

MEMO

Table of Contents

(611A-0001-0E)

Introduction	[5]
How to use this manual	[6]
Inspection and servicing	[7]
Serial number nameplate	[7]
Operation qualifications	[7]

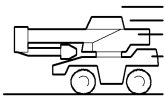


541A-00130

General devices (for driving and crane)

214521

1. Part names and terms	1
2. For safe operation	11
3. General operation devices	17
4. Safety signs	37
5. Precautions on getting on and off the machine	46
6. Precautions when filling with fuel	47
7. Starting and stopping the engine	49
8. Handling the machine in winter and summer	52

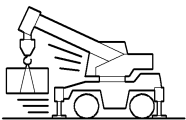


541A-00140

Driving operation

214521

9. Driving safely	55
10. What to do when the machine breaks down	61
11. Drive operation devices	69
12. Driving the machine	94

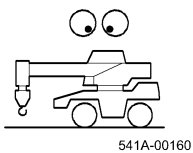


541A-00150

Crane operation

214521

13. For safe operation	105
14. How to read the capacity charts	129
15. Crane operation devices	137
16. Crane operation when the outriggers are used	147
17. Crane operation without outriggers	168
18. Crane operation	175
19. Changing the wire rope number of parts	192



541A-00160

Preoperational checks/ Pre-drive checks

214521

20. Preoperational checks/Pre-drive checks 195

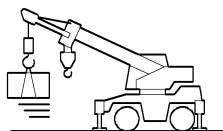


541A-00170

Index

214521

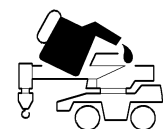
Index 211



541A-00180

Manual Jib Section

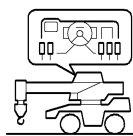
Separate manual 214531



541A-00190

Inspection and Servicing Section

Separate manual 214541



General devices (for driving and crane)

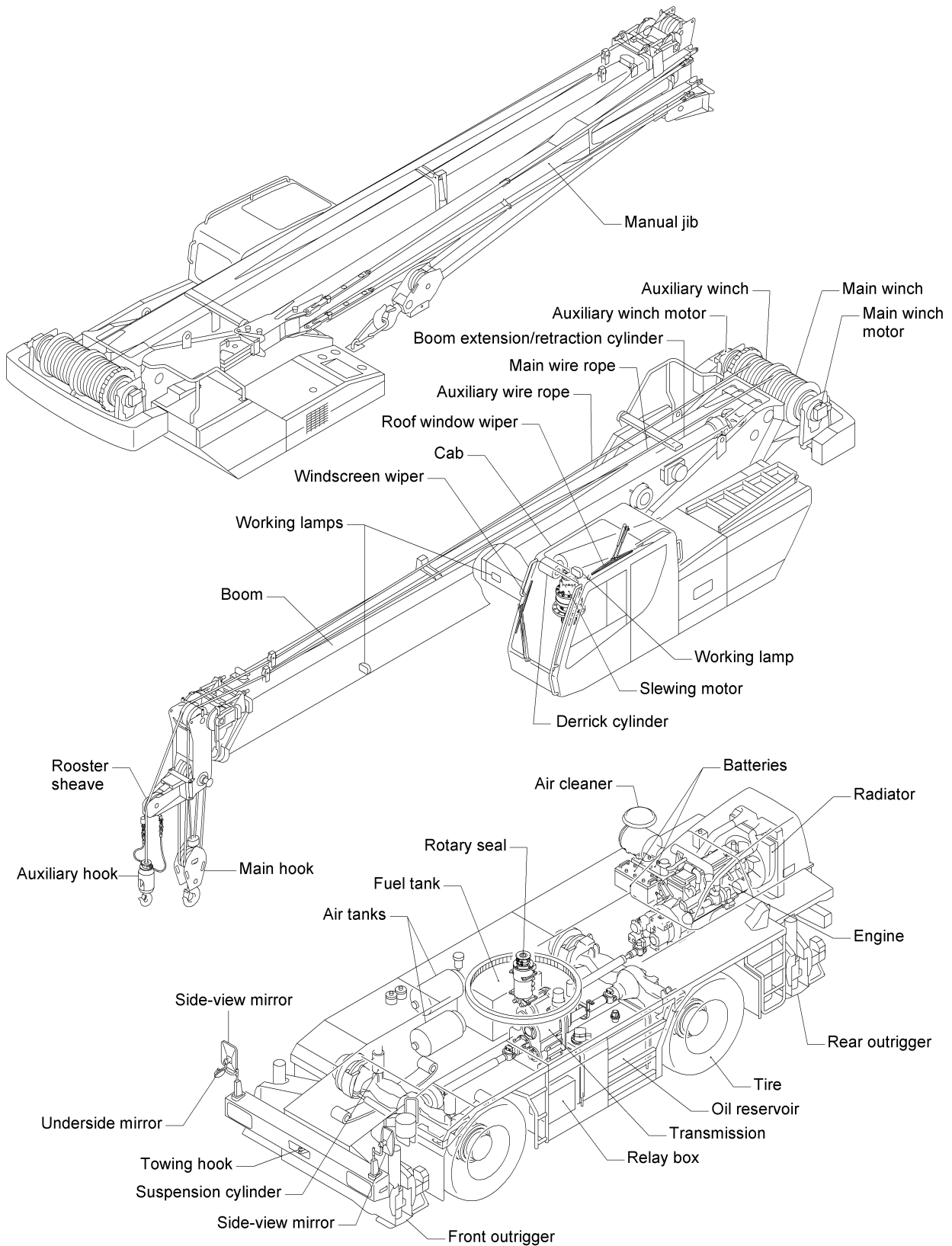
214521

1.	Part names and terms	1
1-1	Part names	1
1-2	Terms	9
2.	For safe operation	11
2-1	General precautions	11
3.	General operation devices	17
3-1	Inside the cab	17
3-2	Front panel	24
3-3	Side panel	26
3-4	Radio (optional)	27
3-5	Cabin air conditioner	31
3-6	Outside the cab	33
4.	Safety signs	37
5.	Precautions on getting on and off the machine	46
6.	Precautions when filling with fuel	47
7.	Starting and stopping the engine	49
7-1	Starting the engine	49
7-2	Stopping and parking	51
8.	Handling the machine in winter and summer	52
8-1	Handling in winter	52
8-2	Handling in summer	53

1. Part names and terms (541A-0019-0E)

1-1 Part names (541A-0020-0E)

1-1-1 Exterior (541A-0268-0E)

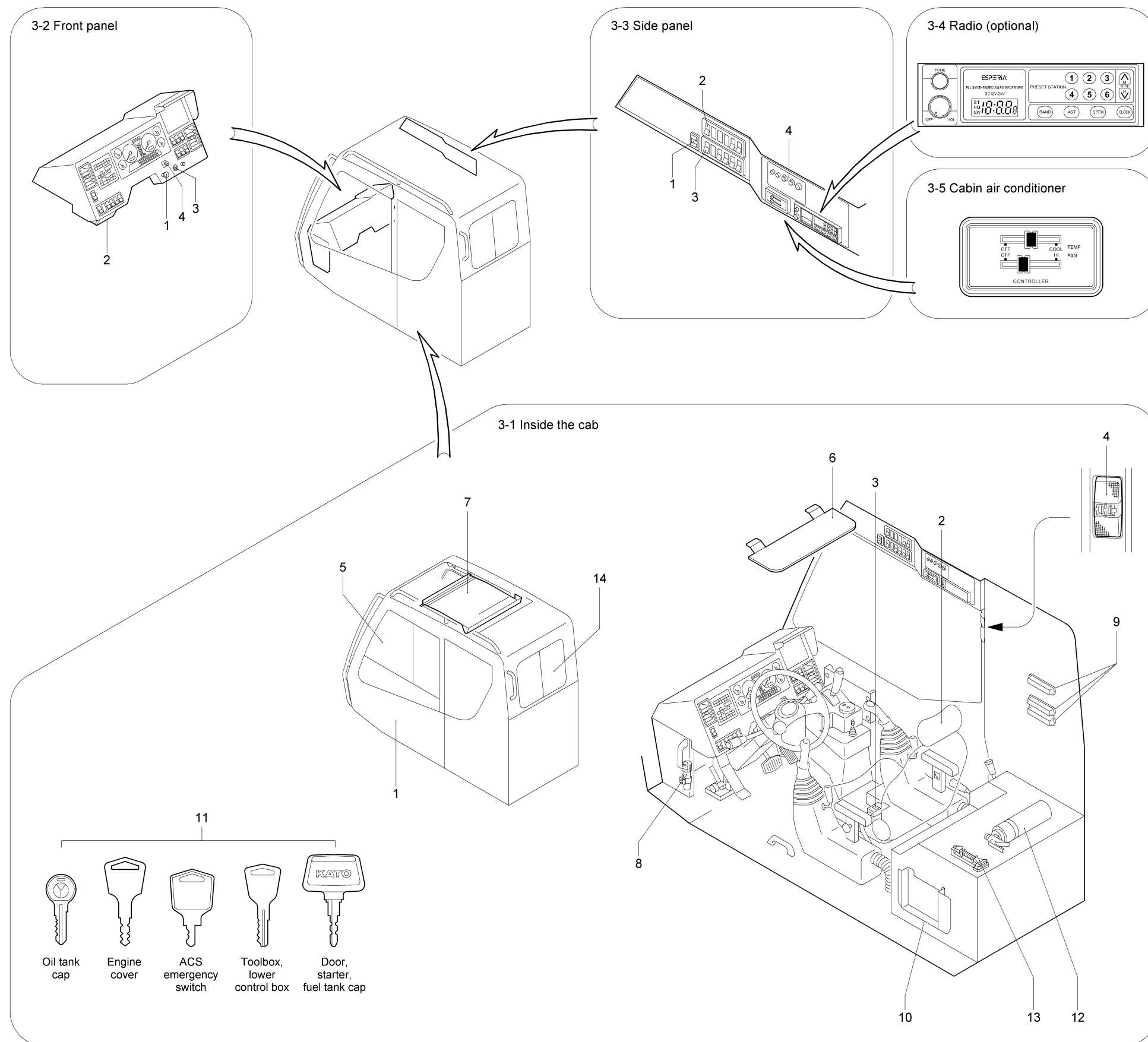


611A-00030E

MEMO

1-1-2 General operation devices (611A-0003-0E)

(1) Inside the cab



3-1 Inside the cab

1. Door
2. Seat
3. Seatbelt
4. Interior lamp
5. Left window
6. Sun visor
7. Sunshade
8. Flare (optional)
9. Fuse box
10. Holders for the rated lifting capacity chart and instruction manual
11. Keys
12. Fire extinguisher (optional)
13. Emergency kit
14. Rear window

3-2 Front panel

1. Lighter
2. Ashtray
3. Starter switch
4. Idle speed knob

3-3 Side panel

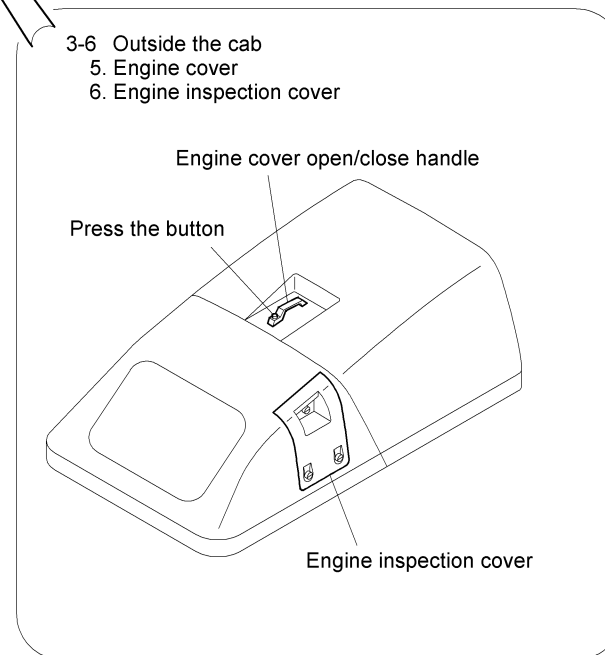
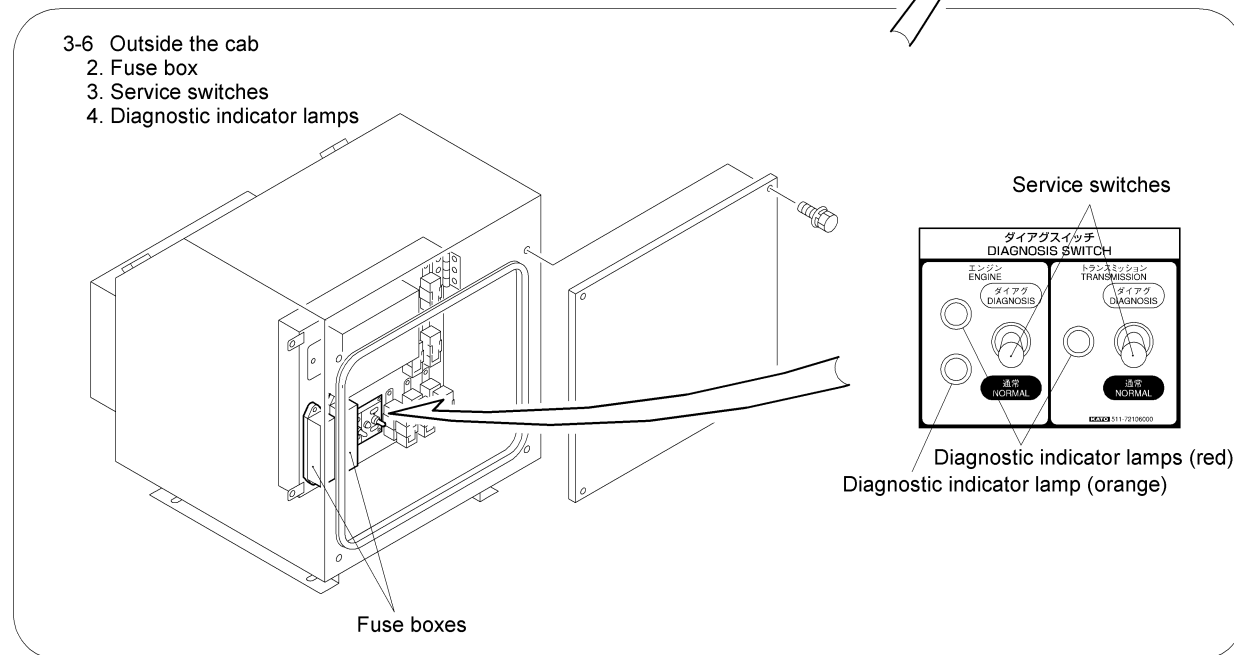
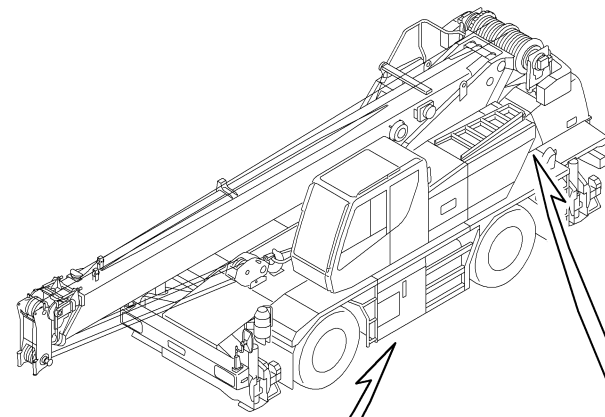
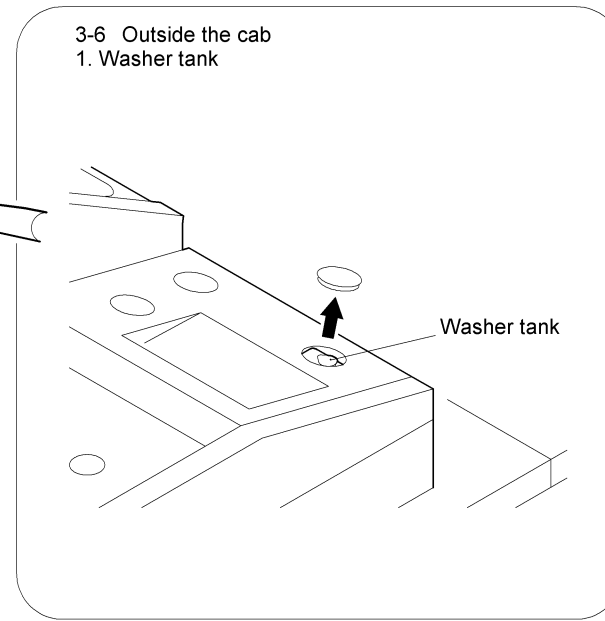
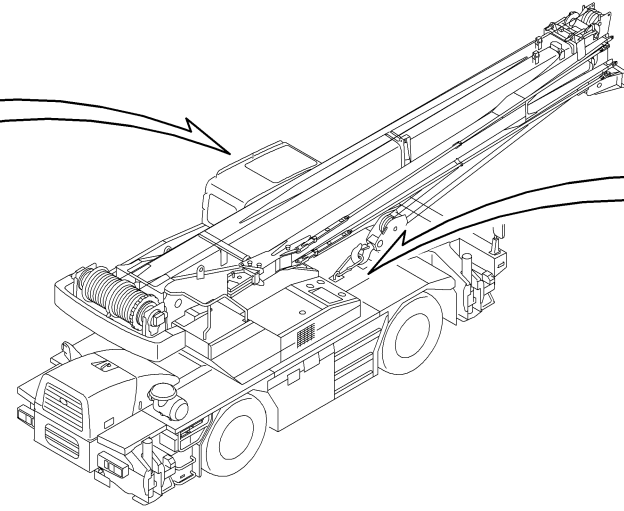
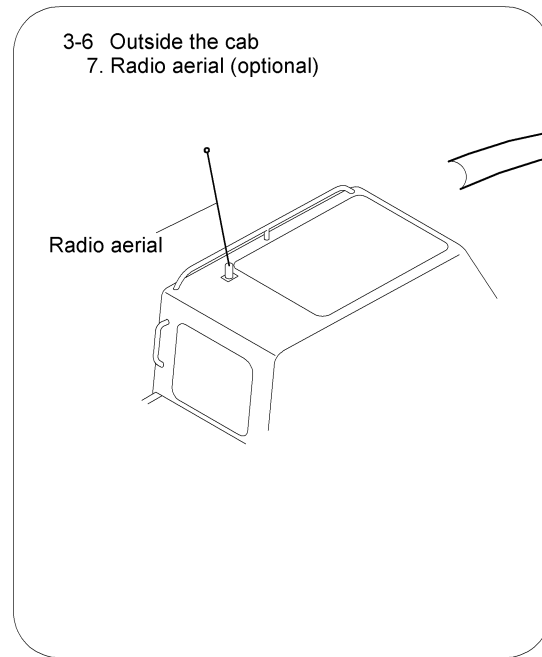
1. Roof window wiper/washer switch
2. Fan switch (optional)
3. Defroster switch
4. Heater switch (optional)

3-4 Radio (optional)

3-5 Cabin air conditioner

For details of this page	
	Refer to pages 17-32

(2) Outside the cab

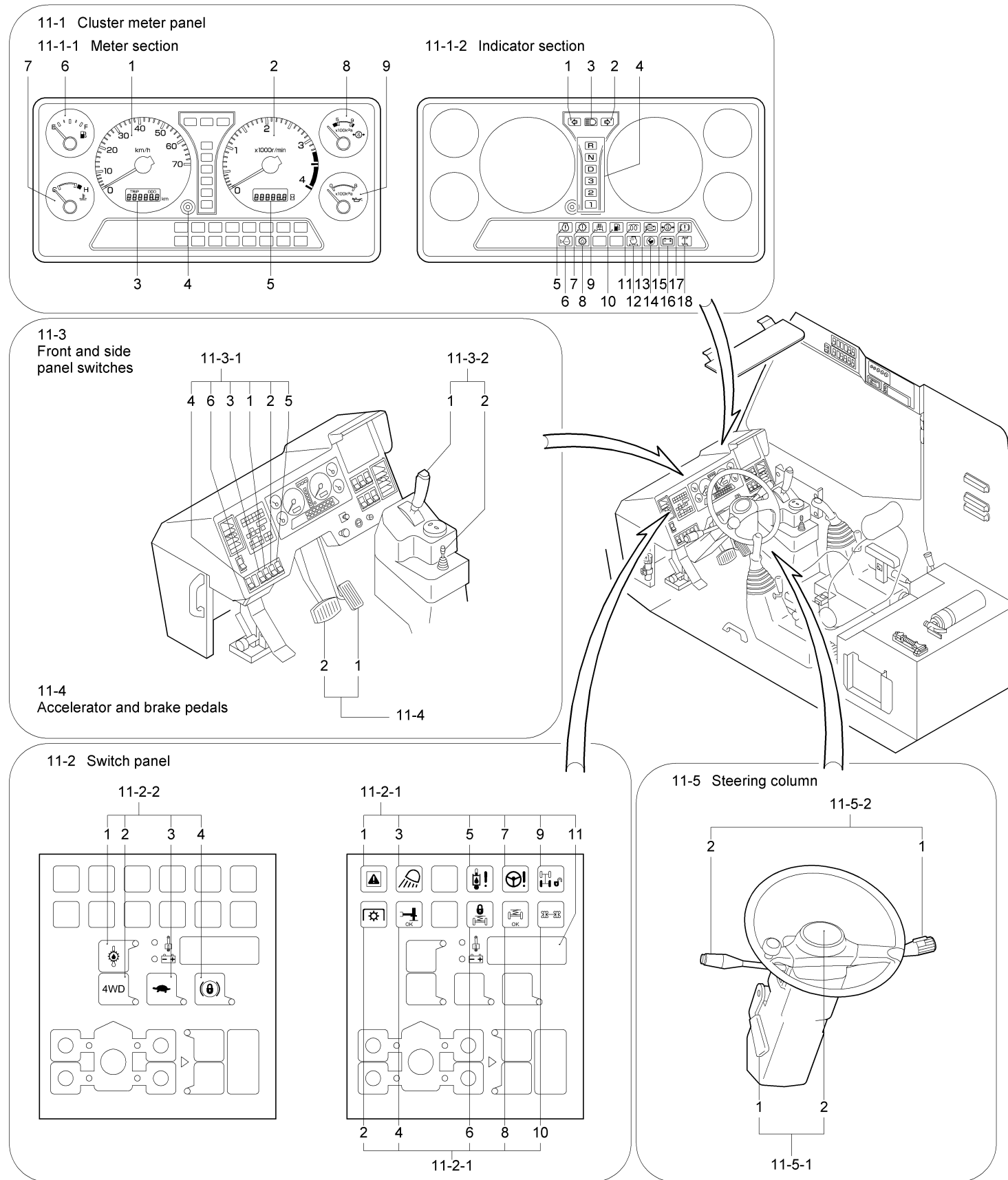


611A-00050E

For details of this page	
	Refer to pages 33—36

1-1-3 Drive operation devices (611A-0004-0E)

(I) Inside the cab

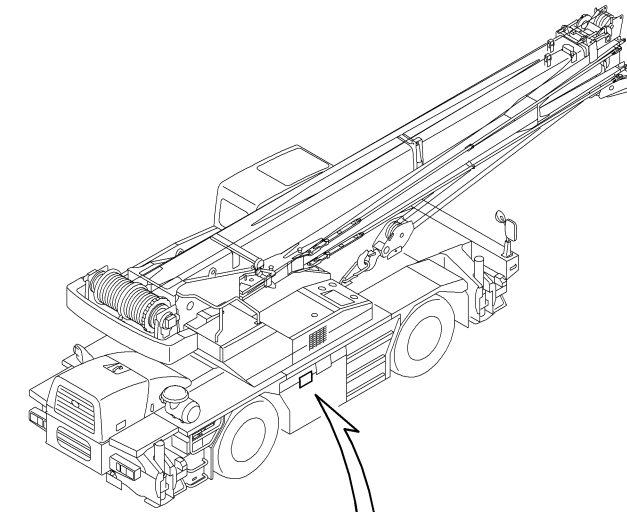


- 11-1 Cluster meter panel
 - 11-1-1 Meter section
 - 1. Speedometer
 - 2. Tachometer
 - 3. Odometer/trip meter
 - 4. Odometer/trip meter switch
 - 5. Hour meter
 - 6. Fuel gauge
 - 7. Engine water temperature gauge
 - 8. Air pressure gauge
 - 9. Engine oil pressure gauge
 - 11-1-2 Indicator section
 - 1. Turn signal indicator lamp (left)
 - 2. Turn signal indicator lamp (right)
 - 3. High beam indicator lamp
 - 4. Shift position indicator lamp
 - 5. Engine trouble warning lamp
 - 6. Radiator coolant level warning lamp
 - 7. AT/M (automatic transmission) malfunction warning lamp
 - 8. Torque converter trouble warning lamp
 - 9. Exhaust brake indicator lamp
 - 10. Fuel level warning lamp
 - 11. Preheat indicator lamp
 - 12. Air cleaner blockage warning indicator lamp
 - 13. Engine control warning lamp
 - 14. Overrun warning lamp
 - 15. Low air pressure warning lamp
 - 16. Battery charge indicator lamp
 - 17. Parking brake/brake fluid level warning lamp
 - 18. Rear steering lock release indicator lamp
- 11-2 Switch panel
 - 11-2-1 Indicator section
 - 1. Multiplex communication error warning lamp
 - 2. PTO indicator lamp
 - 3. Working lamp indicator lamp
 - 4. Outrigger operation OK indicator lamp
 - 5. Hydraulic oil warning lamp
 - 6. Suspension locked indicator lamp
 - 7. Power steering pressure warning lamp
 - 8. Suspension operation OK indicator lamp
 - 9. Rear steering lock release confirmation indicator lamp
 - 10. Rear steering central position indicator lamp
 - 11. Digital display
 - 11-2-2 Switch section
 - 1. Torque converter oil temperature display switch
 - 2. Two/four wheel drive switch
 - 3. High/low speed switch
 - 4. Brake lock switch
- 11-3 Front and side panel switches
 - 11-3-1 Front panel switches
 - 1. Suspension lock/release switch
 - 2. Suspension retraction switch
 - 3. Rear steering lock/release switch
 - 4. Parking brake switch
 - 5. Revolving warning lamp switch (optional)
 - 6. Hazard warning switch
 - 11-3-2 Side panel
 - 1. Shift lever
 - 2. Rear steering switch (self-reset type)
- 11-4 Accelerator and brake pedals
 - 1. Accelerator pedal
 - 2. Brake pedal
- 11-5 Steering column
 - 11-5-1 Steering wheel
 - 1. Height and angle adjustment lock lever
 - 2. Horn switch
 - 11-5-2 Combination switch
 - 1. Combination switch
 - Windscreen wiper switch
 - Windscreen washer switch
 - Exhaust brake lever
 - 2. Turn signal and dimmer switch
 - Turn signal switch
 - Lighting switch
 - Dimmer switch

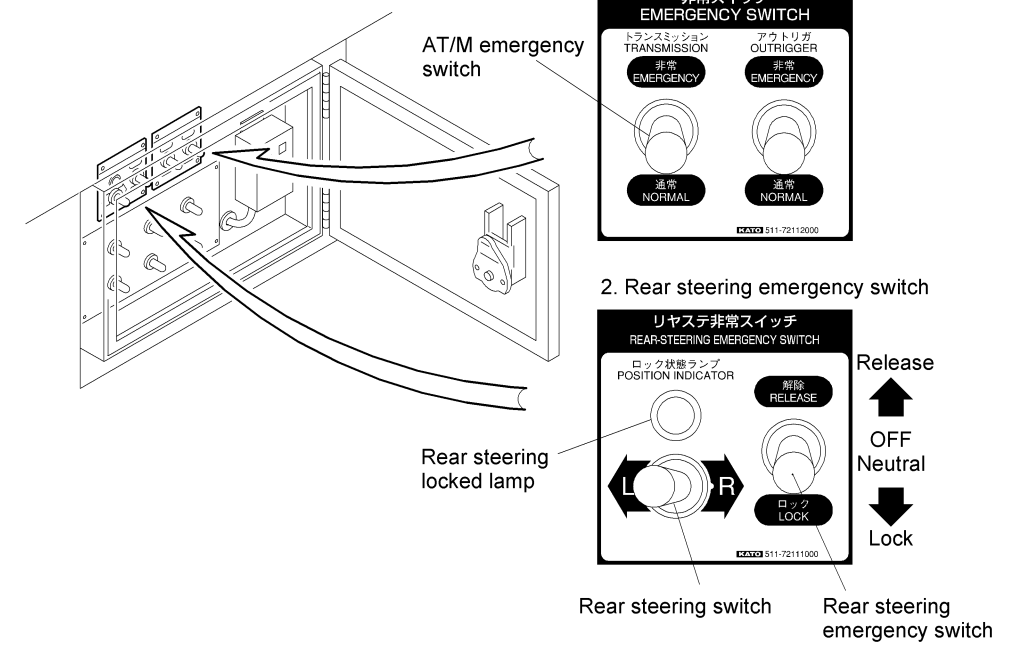
For details of this page

☞ Refer to pages 69—91

(2) Outside the cab



11-6 Lower control switches
1. AT/M emergency switch
2. Rear steering emergency switch

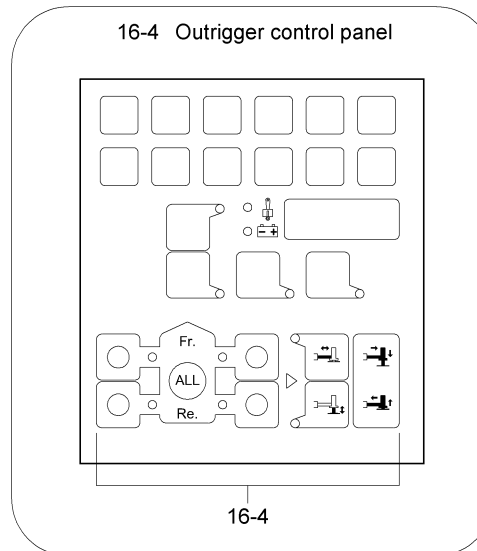
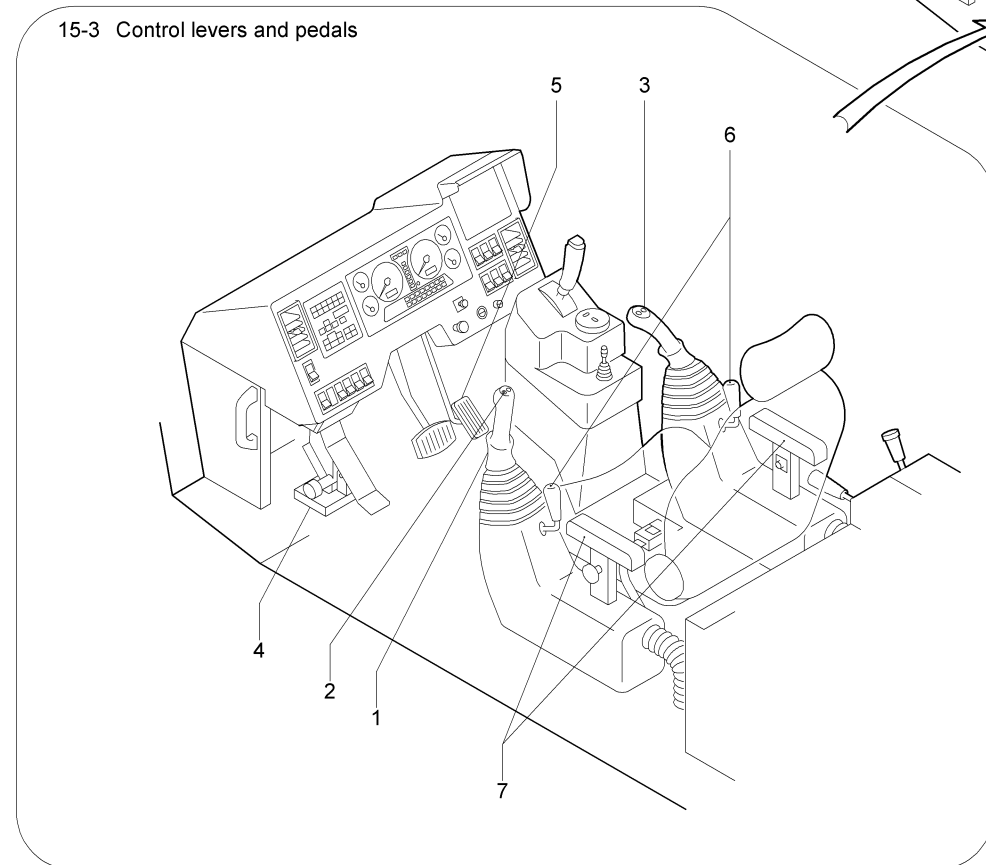
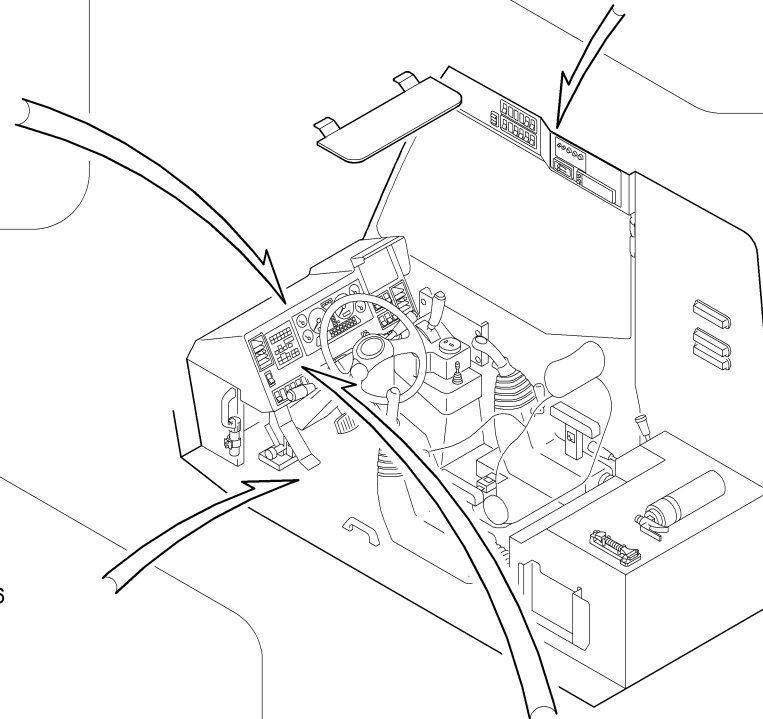
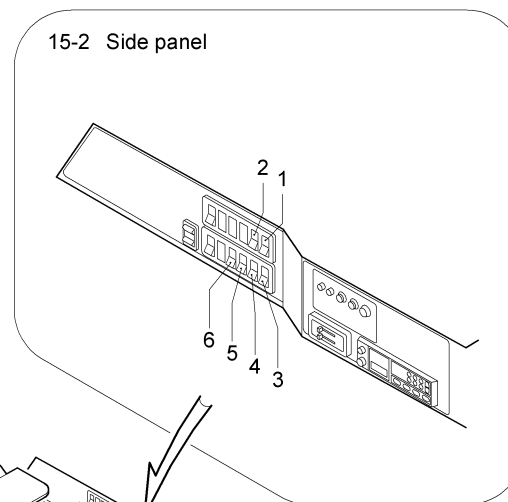
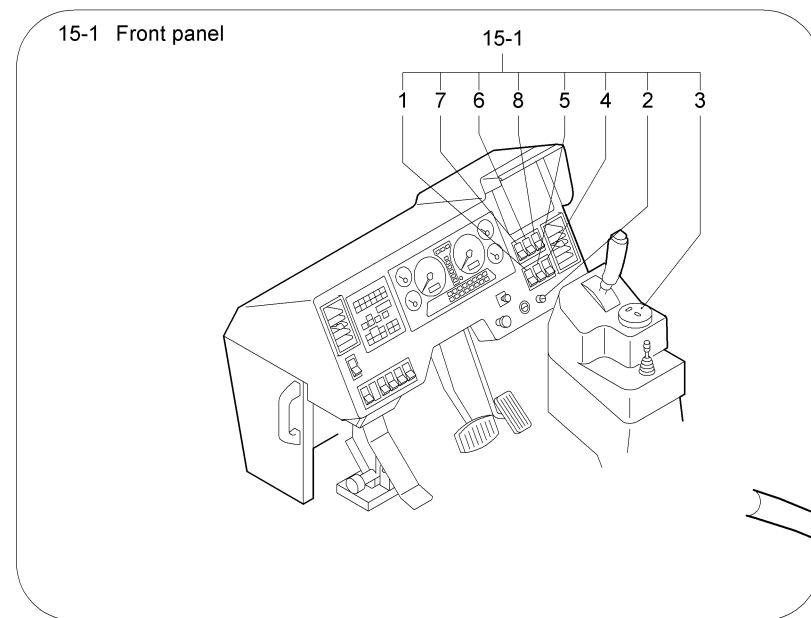


611A-00070E

For details of this page
Refer to pages 92 and 93

1-1-4 Crane operation devices (611A-0005-0E)

(1) Inside the cab



- 15-1 Front panel**
1. PTO switch
 2. ACS emergency switch (self-reset type)
 3. Level gauge
 4. Crane operation switch
 5. Slewing brake switch
 6. Main winch switch
 7. Auxiliary winch switch
 8. Boom extension/retraction switch

- 15-2 Side panel**
1. Overhoisting emergency switch (self-reset type)
 2. Boom extension/retraction emergency switch (self-reset type)
 3. Jib side-lifting switch (self-reset type)
 4. Slewing free/lock switch
 5. Drum rotation detector switch
 6. Working lamp switch

- 15-3 Control levers and pedals**
1. Left control lever
 2. Slewing alarm button
 3. Right control lever
 4. Boom extension/retraction pedal
 5. Accelerator pedal
 6. Console lock lever
 7. Armrest

- 16-4 Outrigger control panel**

611A-00080E

For details of this page	
☞	Refer to pages 137—145 and 157—159