

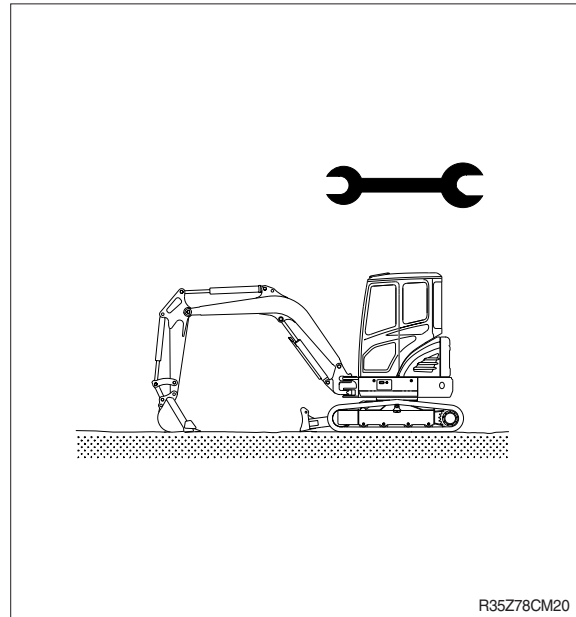
## SECTION 8 COMPONENT MOUNTING TORQUE

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# SECTION 8 COMPONENT MOUNTING TORQUE

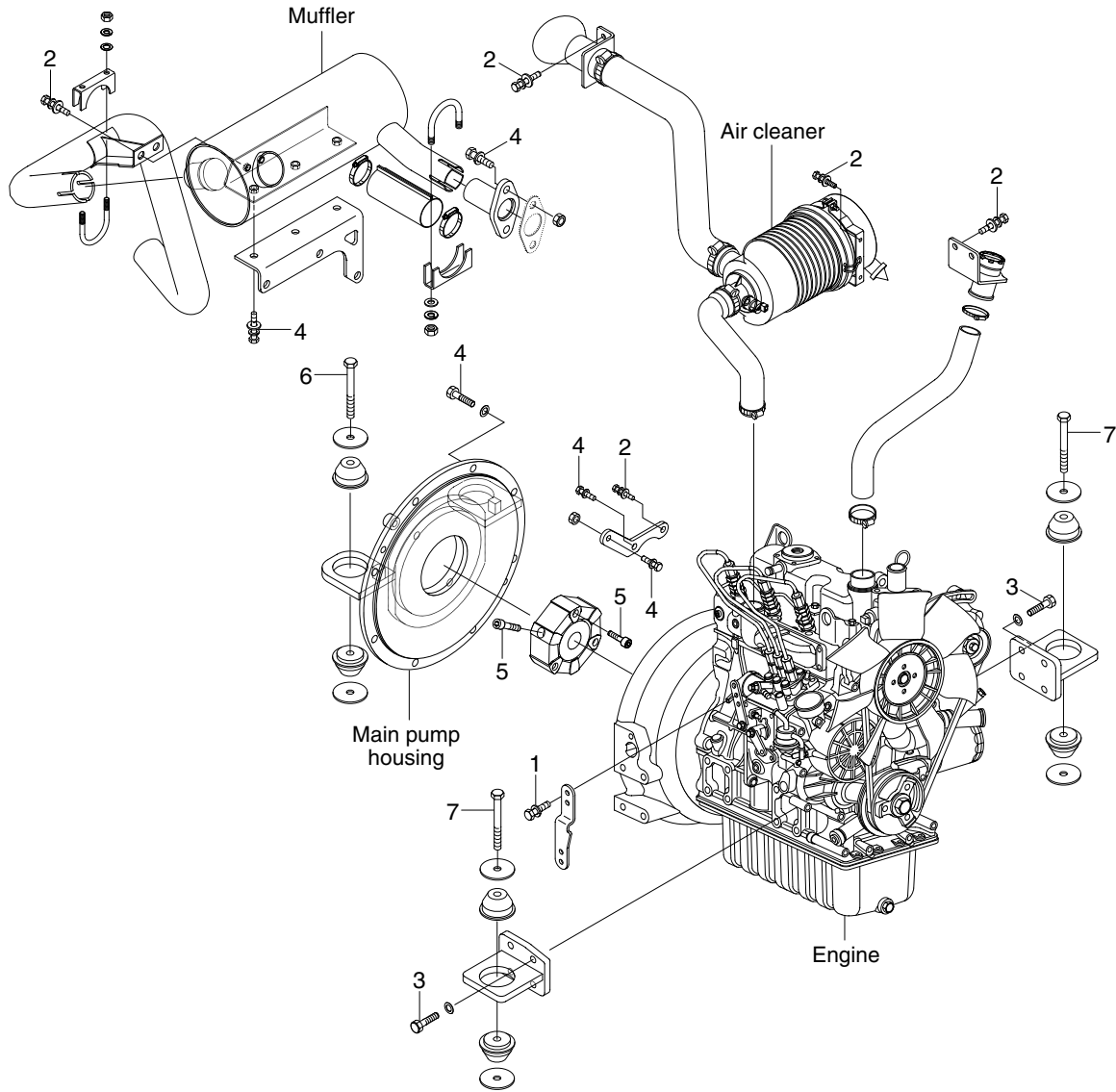
## GROUP 1 INTRODUCTION GUIDE

1. This section shows bolt specifications and standard torque values needed when mounting components to the machine.
  2. Use genuine Hyundai spare parts.  
We expressly point out that Hyundai will not accept any responsibility for defects resulted from non-genuine parts.  
In such cases Hyundai cannot assume liability for any damage.
- ※ **Only metric fasteners can be used and incorrect fasteners may result in machine damage or malfunction.**
  - ※ **Before installation, clean all the components with a non-corrosive cleaner. Bolts and threads must not be worn or damaged.**



# GROUP 2 ENGINE SYSTEM

## 1. ENGINE AND ACCESSORIES MOUNTING



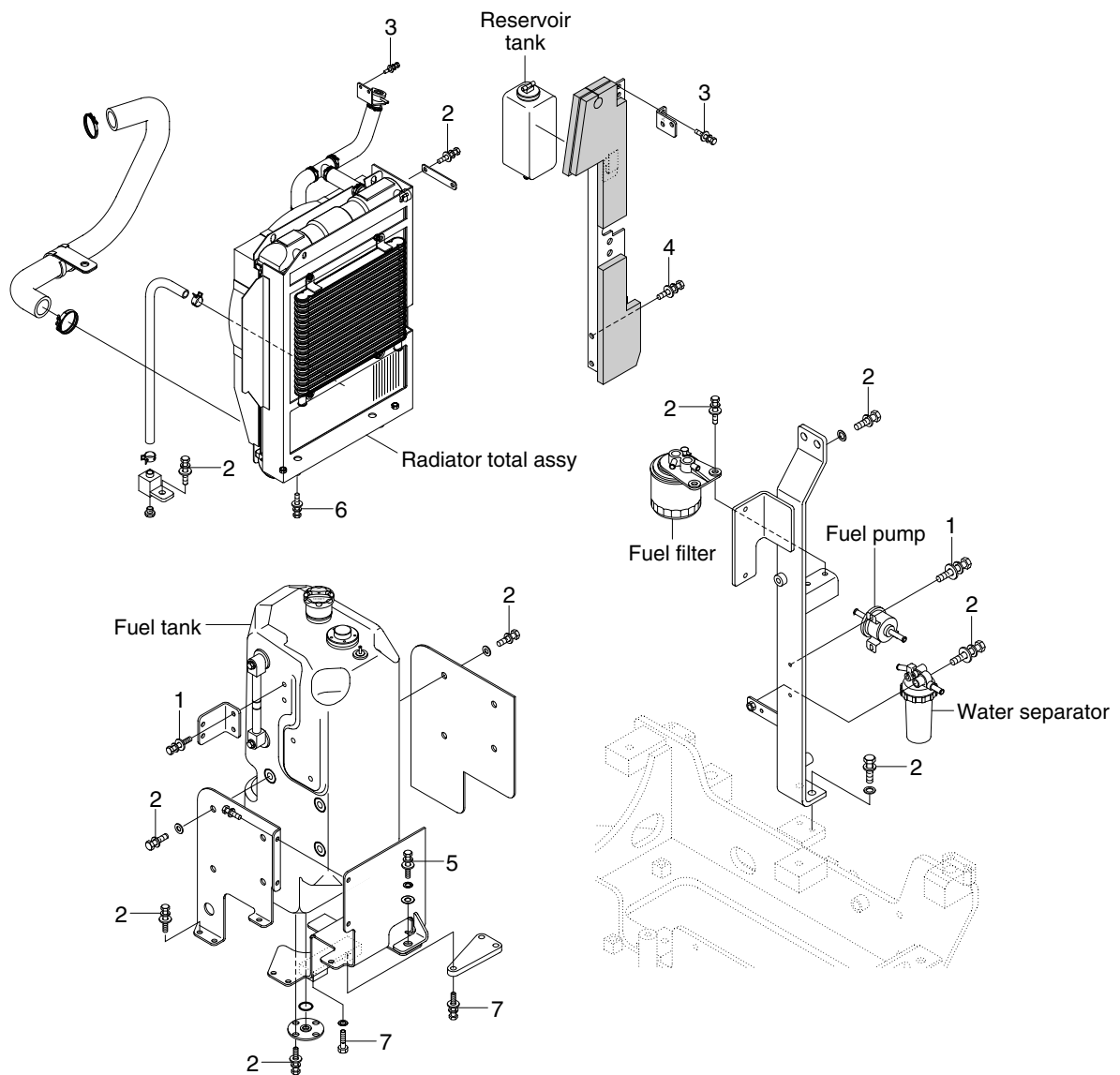
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• Tightening torque

Item	Size	kgf · m	lbf · ft
1	M 6×1.0	1.05±0.2	7.6±1.45
2	M 8×1.25	2.5±0.5	18.1±3.6
3	M10×1.25	7.4±1.5	53.5±10.9
4	M10×1.5	6.9±1.4	49.9±10.1

Item	Size	kgf · m	lbf · ft
5	M12×1.75	9.25±0.25	67±1.8
6	M12×1.75	13±1.0	94±7.2
7	M12×1.75	12.8±3.0	92.6±21.7

## 2. COOLING SYSTEM AND FUEL TANK MOUNTING



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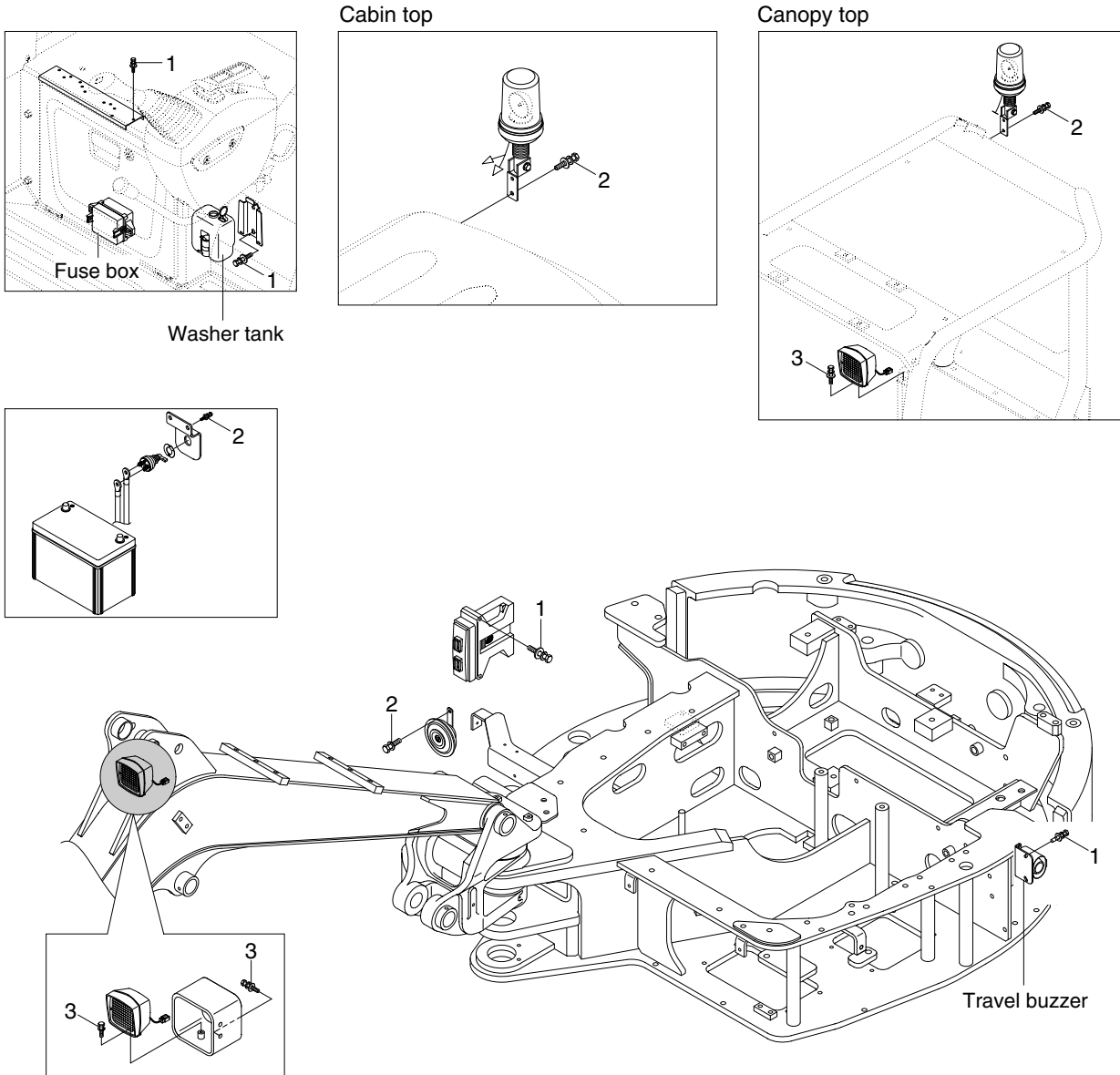
### · Tightening torque

Item	Size	kgf · m	lbf · ft
1	M 6×1.0	1.05±0.2	7.6±1.45
2	M 8×1.25	2.5±0.5	18.1±3.6
3	M 8×1.25	3.43±0.7	24.8±5.1
4	M10×1.5	6.9±1.4	49.9±10.1

Item	Size	kgf · m	lbf · ft
5	M12×1.75	9.3±1.9	67.3±13.7
6	M12×1.75	12.6±3.0	93±22.0
7	M12×1.75	12.8±3.0	93±22.0

# GROUP 3 ELECTRIC SYSTEM

## 1. ELECTRIC COMPONENTS MOUNTING 1



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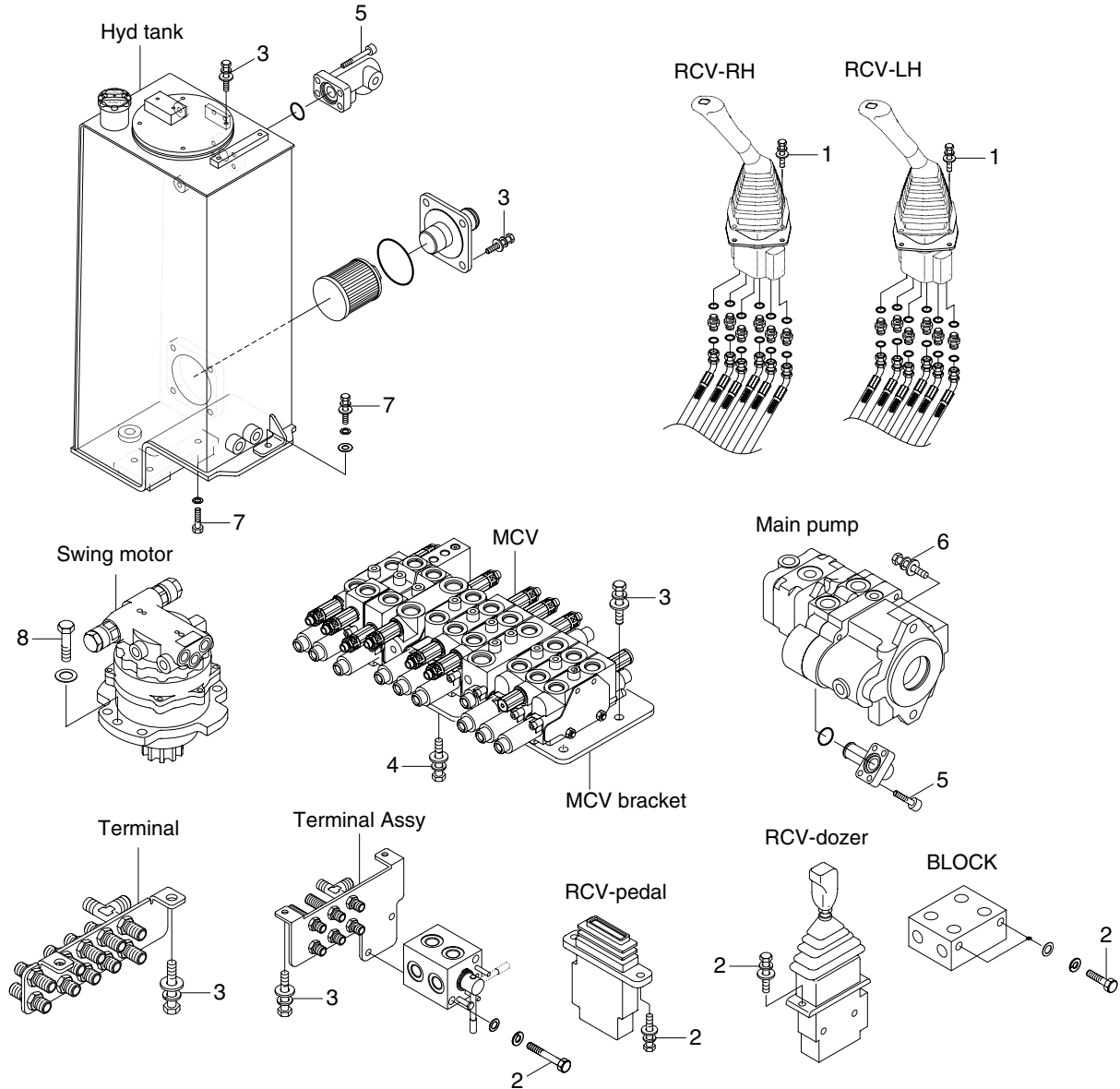
### · Tightening torque

Item	Size	kgf · m	lbf · ft
1	M 6 × 1.0	1.05 ± 0.2	7.6 ± 1.45
2	M 8 × 1.25	2.5 ± 0.5	18.1 ± 3.6

Item	Size	kgf · m	lbf · ft
3	M 10 × 1.5	6.9 ± 1.4	49.9 ± 10.1

# GROUP 4 HYDRAULIC SYSTEM

## 1. HYDRAULIC COMPONENTS MOUNTING 1



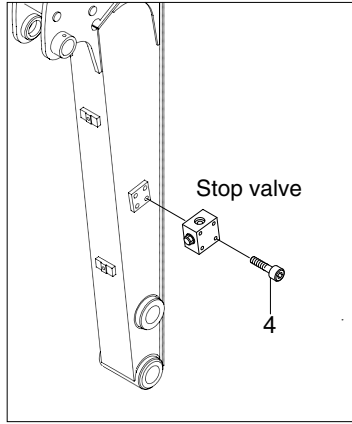
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### · Tightening torque

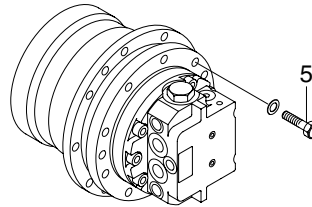
Item	Size	kgf · m	lbf · ft
1	M 6×1.0	1.05±0.2	7.6±1.45
2	M 8×1.25	2.5±0.5	18.1±3.6
3	M10×1.5	6.9±1.4	49.9±10.1
4	M10×1.5	6.9±1.4	49.9±10.1

Item	Size	kgf · m	lbf · ft
5	M10×1.5	8.27±1.7	59.8±12.3
6	M12×1.75	10±1.0	72±7.2
7	M12×1.75	12.8±3.0	93±22.0
8	M16×2.0	29.7±4.5	215±32.5

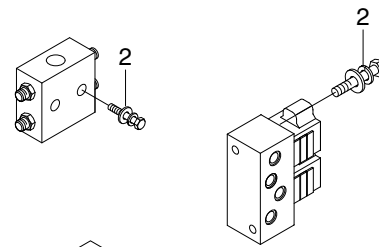
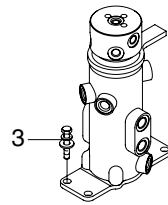
Attachment piping



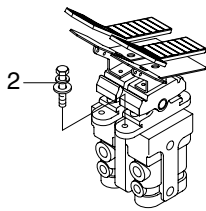
Travel motor



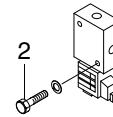
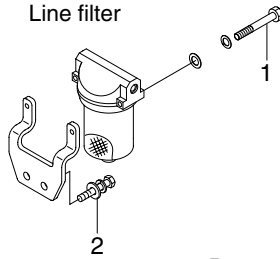
Turning joint



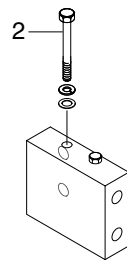
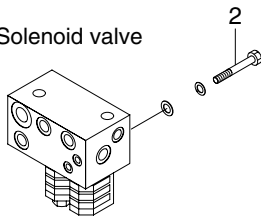
RCV-travel



Line filter

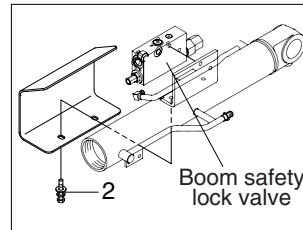


Solenoid valve

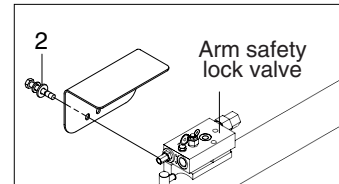


Block

Boom safety lock system



Arm safety lock system



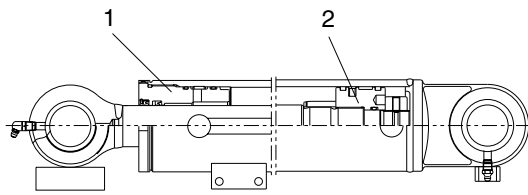
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· Tightening torque

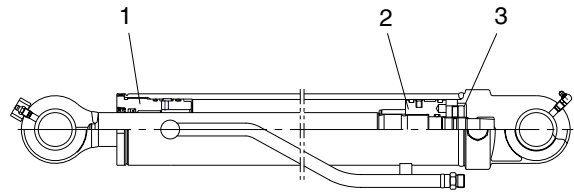
Item	Size	kgf · m	lbf · ft
1	M 6×1.0	1.05±0.2	7.6±1.45
2	M 8×1.25	2.5±0.5	18.1±3.6
3	M10×1.5	6.9±1.4	49.9±10.1

Item	Size	kgf · m	lbf · ft
4	M10×1.5	8.27±1.7	59.8±12.3
5	M12×1.75	13.8±2.0	100±14.0

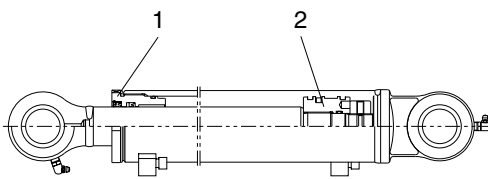
## 2. HYDRAULIC COMPONENTS MOUNTING 2



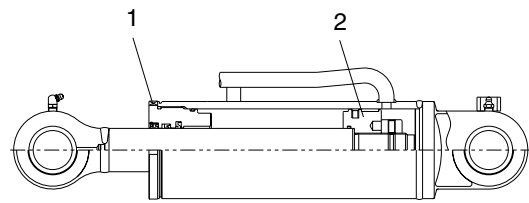
Boom cylinder



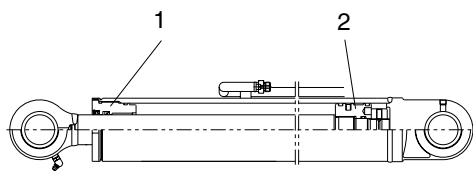
Arm cylinder



Bucket cylinder



Dozer cylinder



Boom swing cylinder

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### • Tightening torque

#### 1) Gland

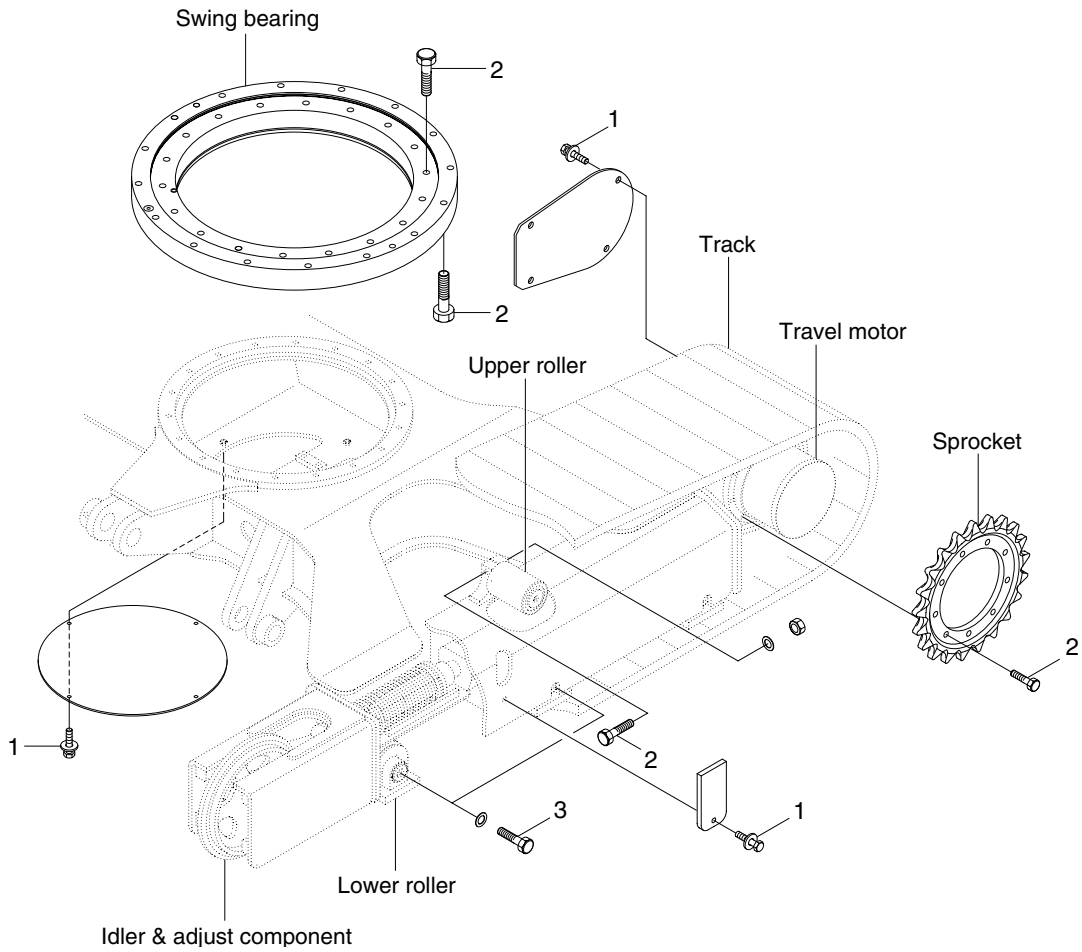
Item	Size	kgf · m	lbf · ft
Boom cylinder	M80 × 2	70 ± 7.0	506 ± 50.6
Arm cylinder	M75 × 2	70 ± 5.0	506 ± 36.2
Bucket cylinder	M65 × 2	50 ± 5.0	362 ± 36.2
Dozer cylinder	M90 × 2	70 ± 7.0	506 ± 50.6
Boom swing cylinder	M80 × 2	70 ± 7.0	506 ± 50.6

#### 2) Piston

Item	Size	kgf · m	lbf · ft
Boom cylinder	M30 × 2	75 ± 7.5	542 ± 54.2
Arm cylinder	M30 × 2	75 ± 7.5	542 ± 54.2
Bucket cylinder	M27 × 2	50 ± 5.0	362 ± 36.2
Dozer cylinder	M36 × 2	75 ± 7.5	542 ± 54.2
Boom swing cylinder	M32 × 2	75 ± 7.5	542 ± 54.2



## GROUP 5 UNDERCARRIAGE



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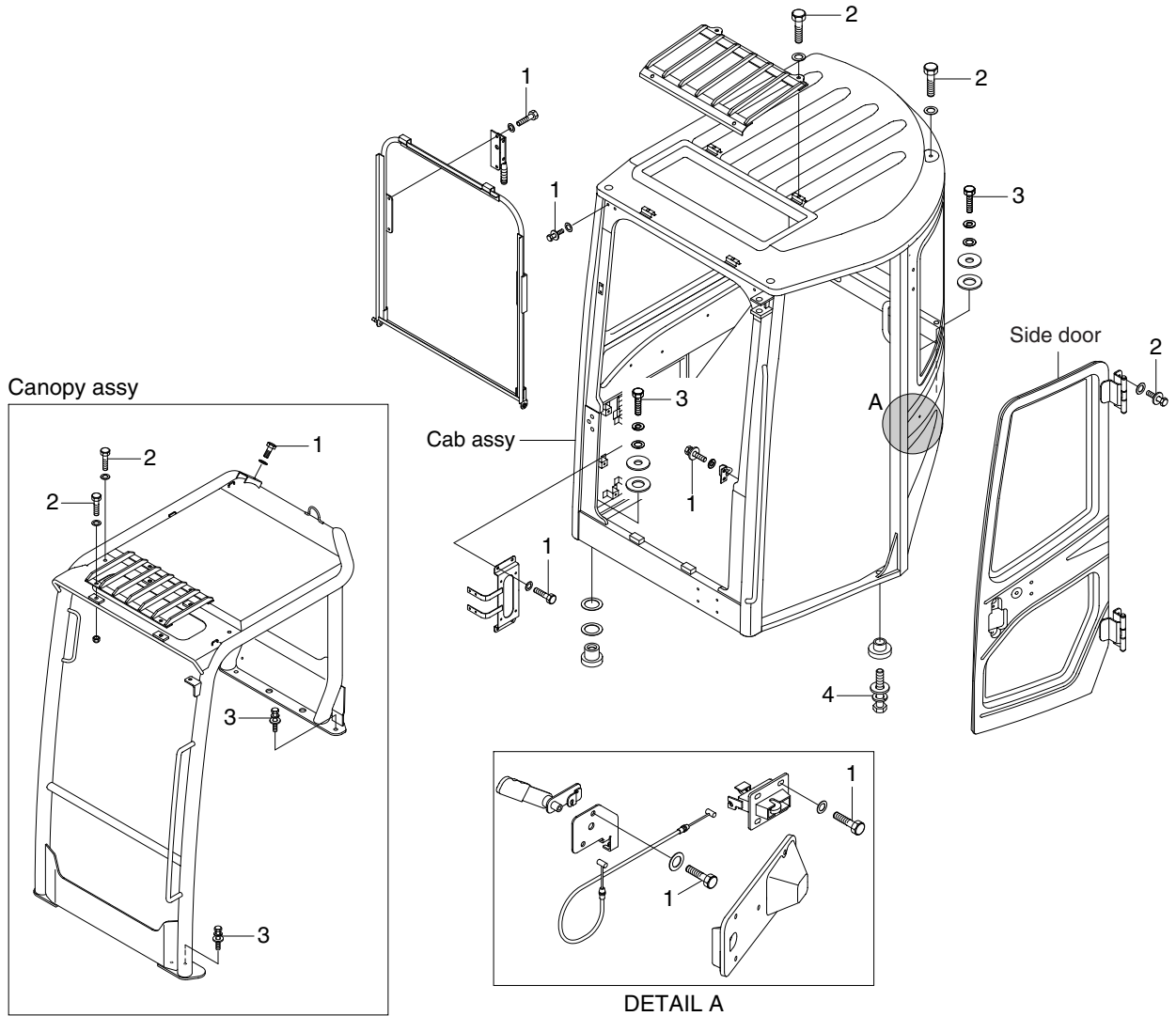
### · Tightening torque

Item	Size	kgf · m	lbf · ft
1	M10×1.5	6.9±1.4	49.9±10.1
2	M12×1.75	12.8±3.0	93±22.0

Item	Size	kgf · m	lbf · ft
3	M16×2.0	29.7±4.0	215±29.0

# GROUP 6 STRUCTURE

## 1. CAB (CANOPY) AND ACCESSORIES MOUNTING



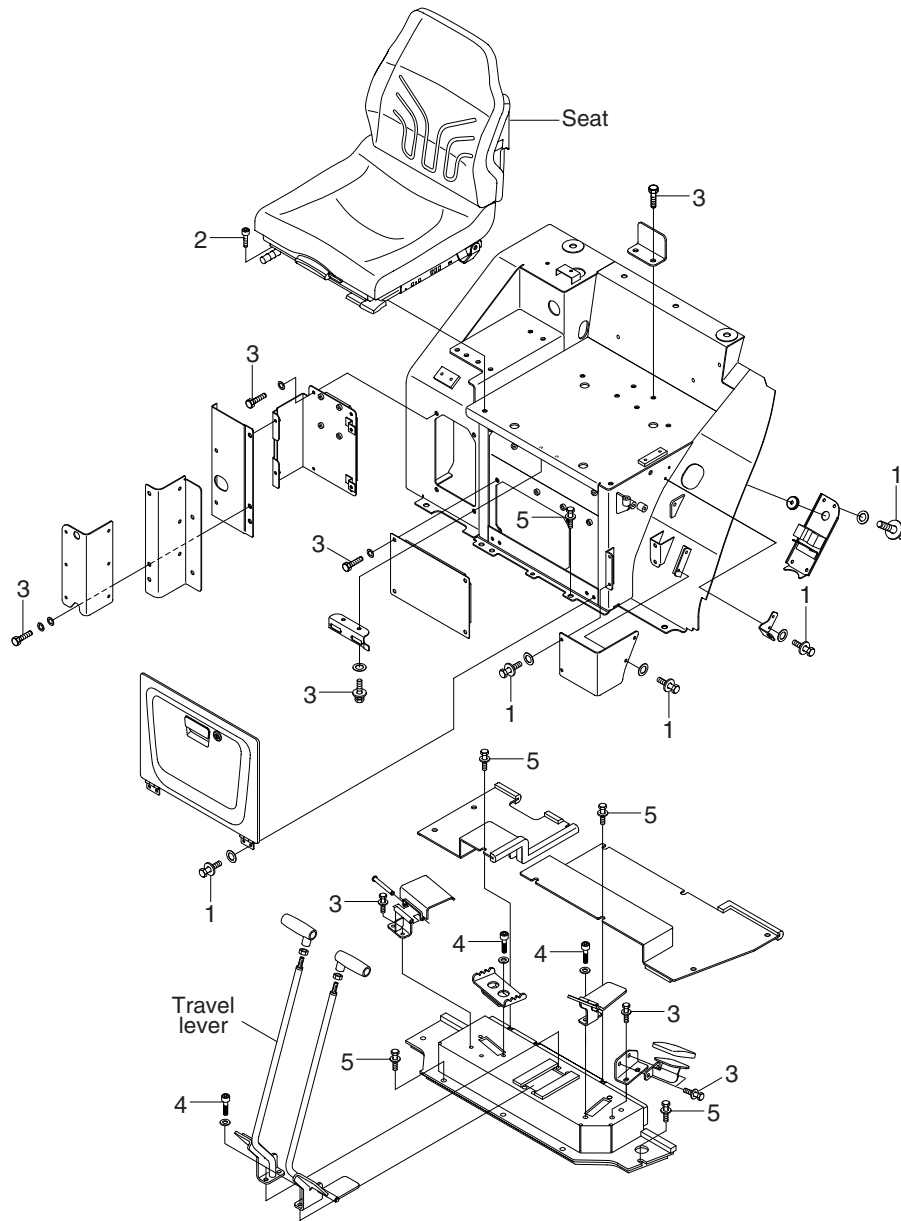
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### • Tightening torque

Item	Size	kgf · m	lbf · ft
1	M 8 × 1.25	2.5 ± 0.5	18.1 ± 3.6
2	M10 × 1.5	6.9 ± 1.4	49.9 ± 10.1

Item	Size	kgf · m	lbf · ft
3	M12 × 1.75	12.8 ± 3.0	92.6 ± 21.7
4	M12 × 1.75	12.8 ± 3.0	92.6 ± 21.7

## 2. CAB INTERIOR MOUNTING



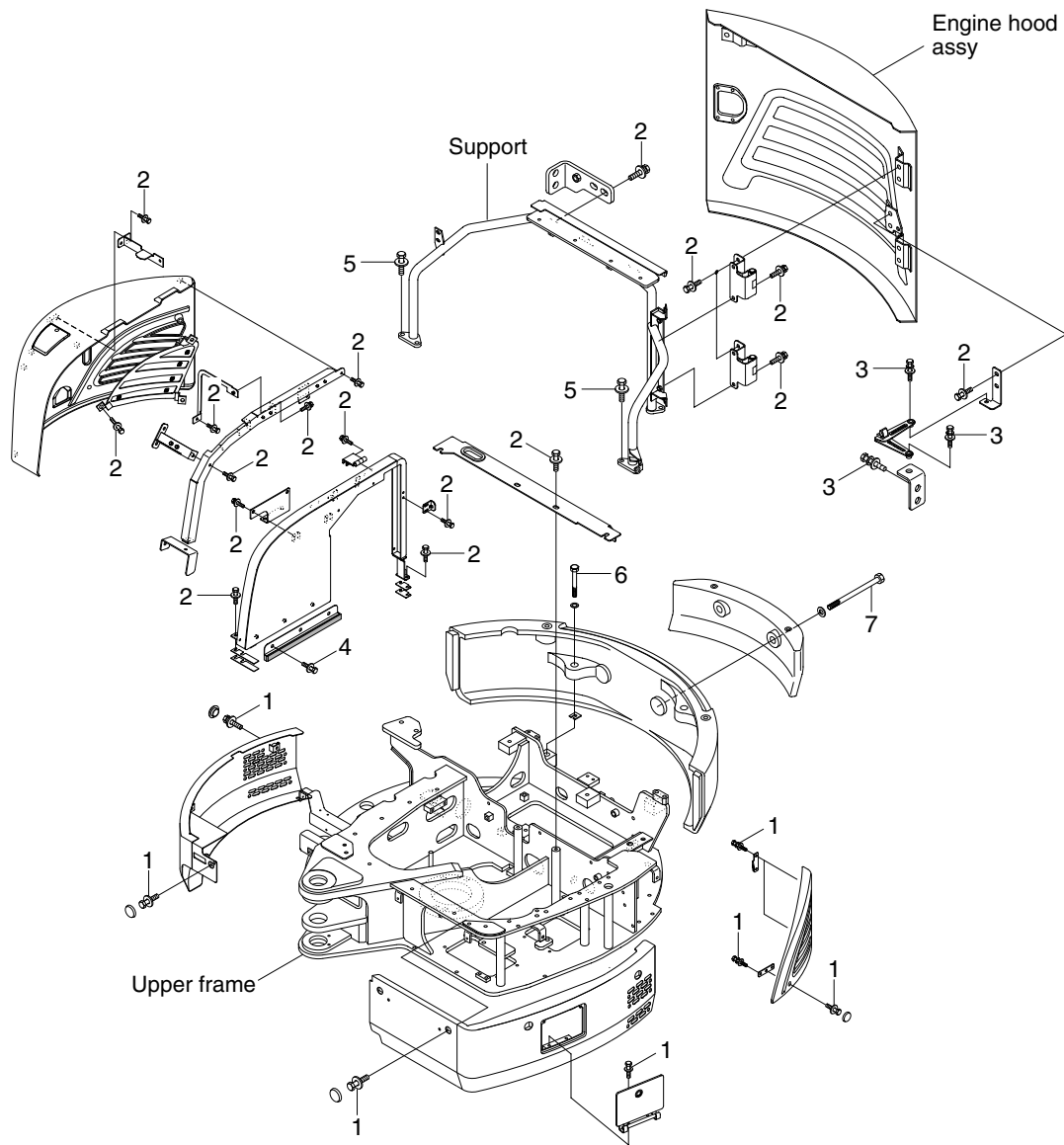
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### • Tightening torque

Item	Size	kgf · m	lbf · ft
1	M 6×1.0	1.05±0.2	7.6±1.45
2	M 8×1.25	1.17±0.1	8.5±0.7
3	M 8×1.25	2.5±0.5	18.1±3.6

Item	Size	kgf · m	lbf · ft
4	M 8×1.25	4.05±0.8	29.3±5.8
5	M10×1.5	6.9±1.4	49.9±10.1

### 3. COWLING AND COUNTERWEIGHT MOUNTING

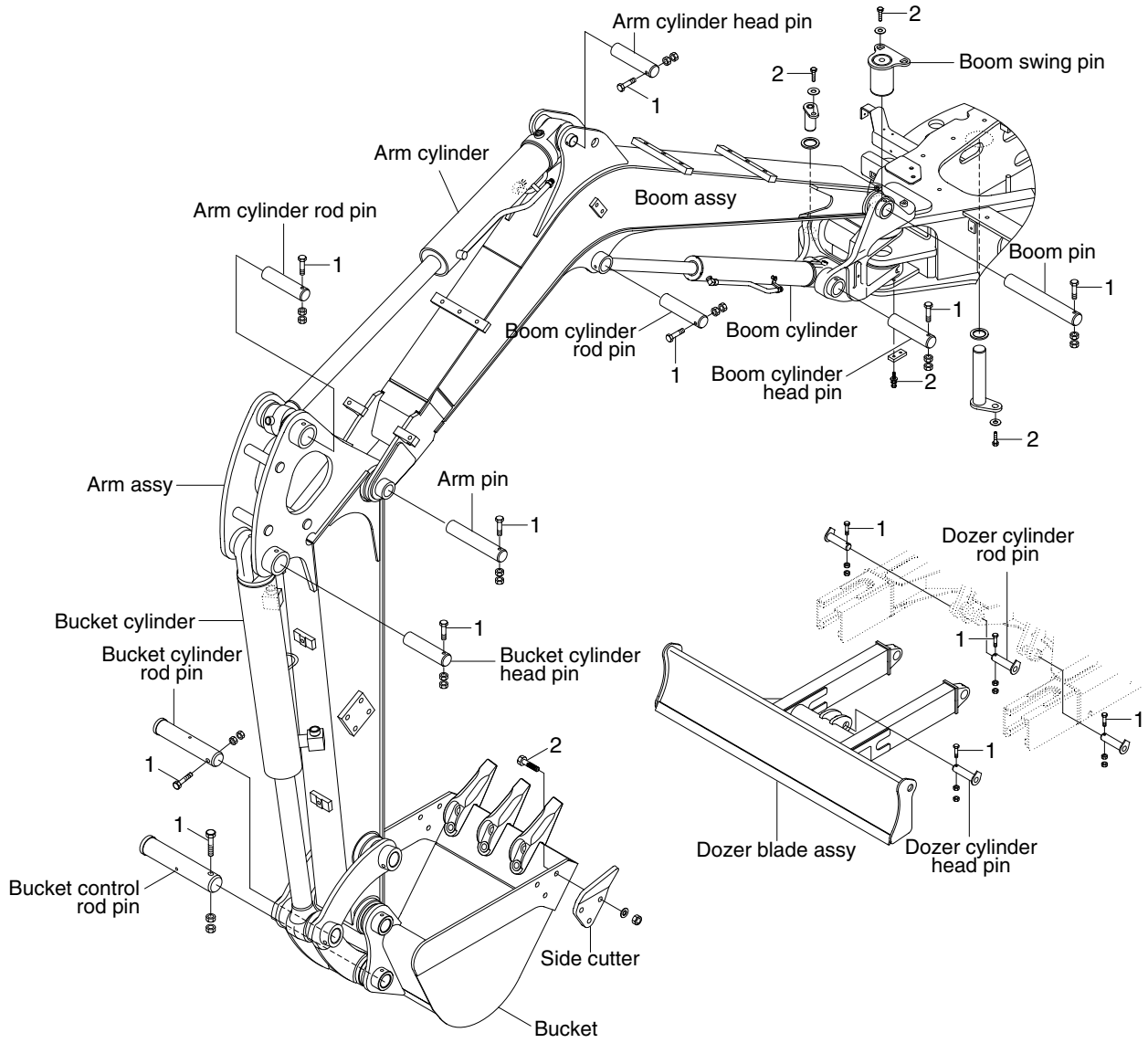


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Item	Size	kgf · m	lbf · ft
1	M 6×1.0	1.05±0.2	7.6±1.45
2	M 8×1.25	2.5±0.5	18.1±3.6
3	M10×1.5	5.0±1.0	36.2±7.2
4	M10×1.5	6.9±1.4	49.9±10.1

Item	Size	kgf · m	lbf · ft
5	M12×1.75	12.8±3.0	92.6±21.7
6	M20×2.5	57.8±6.4	418±46.3
7	M24×3.0	100±15	723±108

# GROUP 7 WORK EQUIPMENT



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• Tightening torque

Item	Size	kgf · m	lbf · ft
1	M10 × 1.5	6.9 ± 1.4	49.9 ± 10.1
2	M12 × 1.75	12.8 ± 3.0	92.6 ± 21.7