

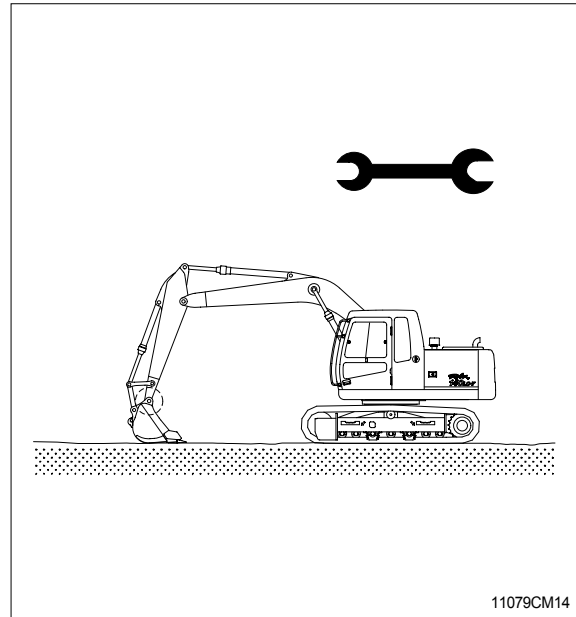
SECTION 9 COMPONENT MOUNTING TORQUE

| | | |
|---------|--------------------------|------|
| Group 1 | Introduction guide | 9-1 |
| Group 2 | Engine system | 9-2 |
| Group 3 | Electric system | 9-4 |
| Group 4 | Hydraulic system | 9-6 |
| Group 5 | Undercarriage | 9-10 |
| Group 6 | Structure | 9-11 |
| Group 7 | Work equipment | 9-14 |

SECTION 9 COMPONENT MOUNTING TORQUE

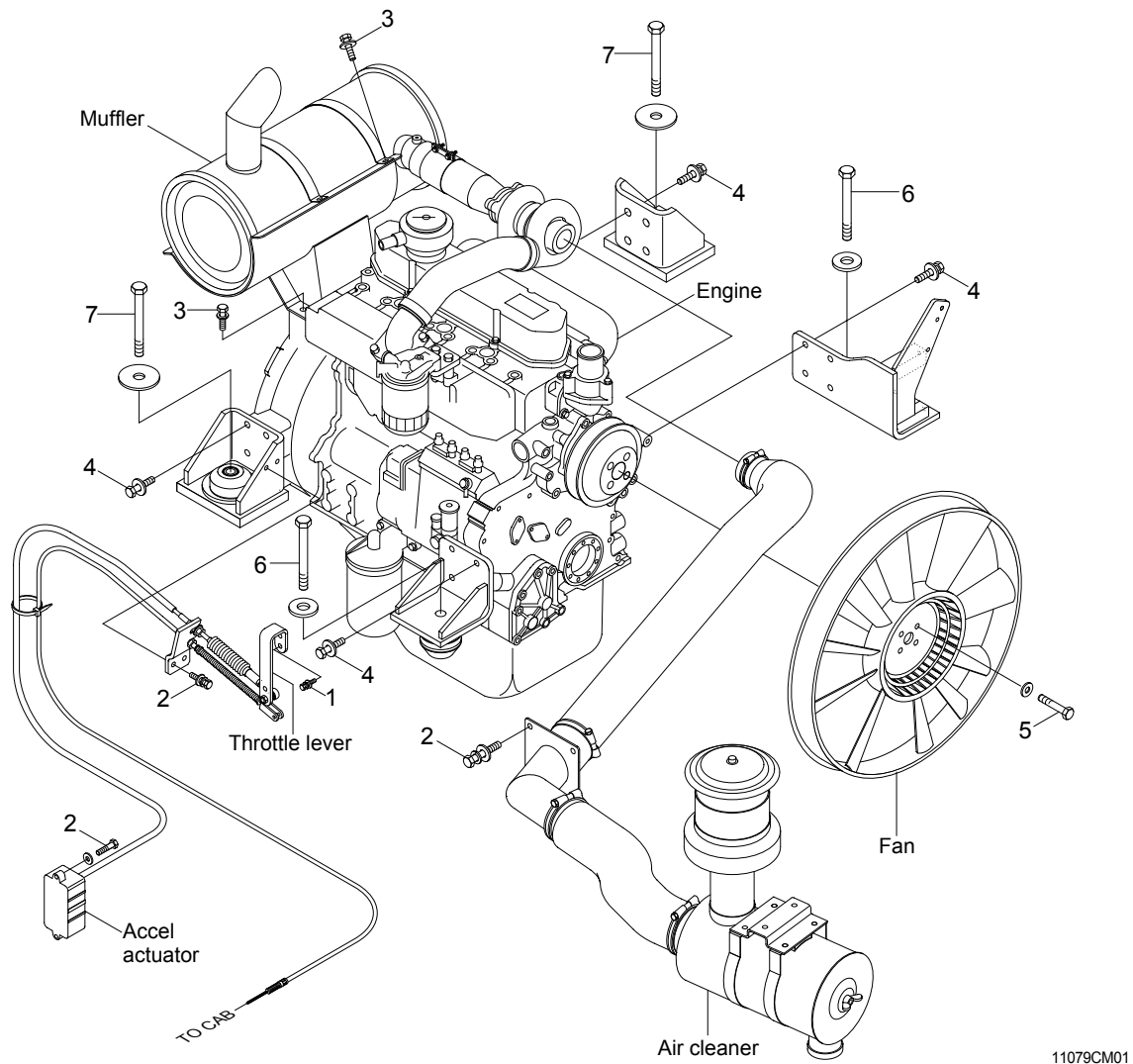
GROUP 1 INTRODUCTION GUIDE

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

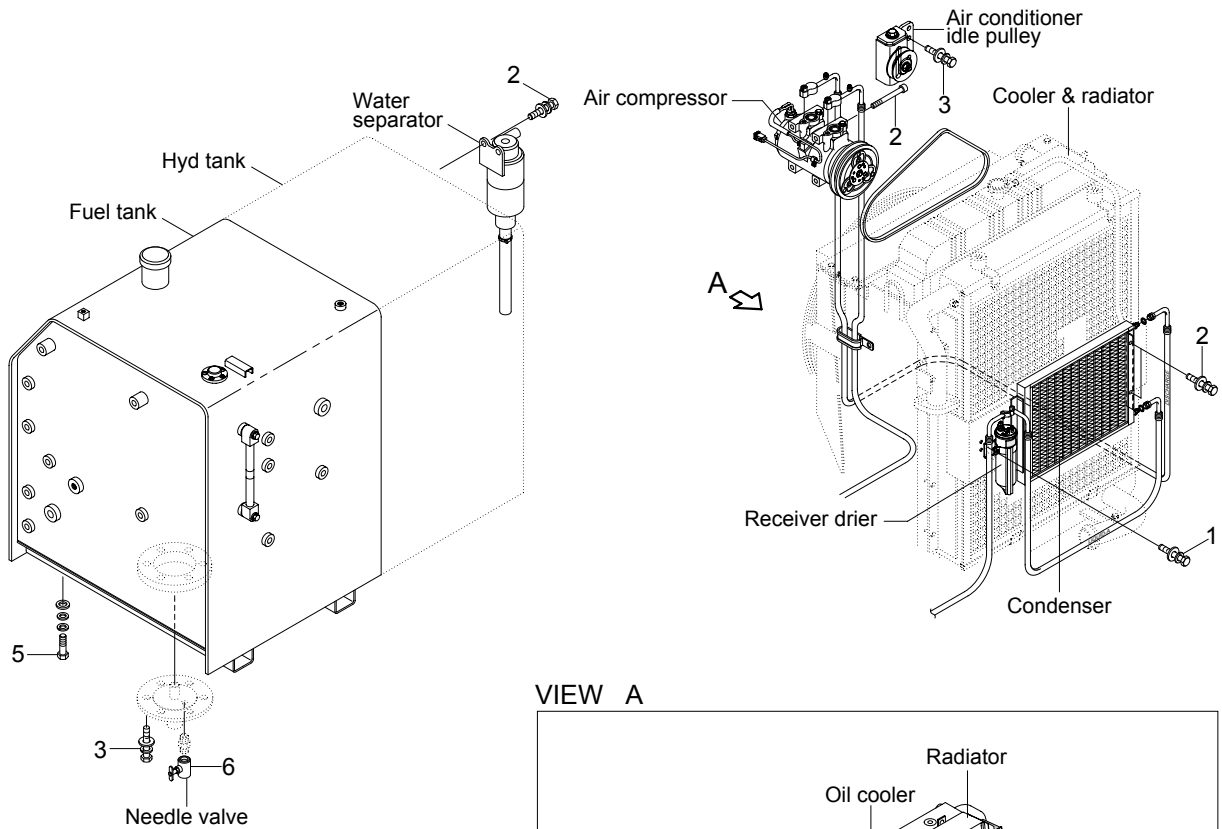


· Tightening torque

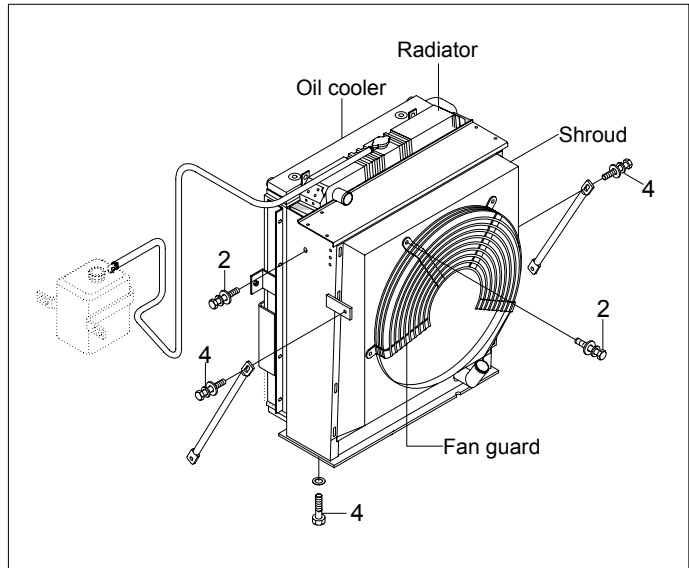
| Item | Size | kgf · m | lbf · ft |
|------|----------|---------|-----------|
| 1 | M 6×1.0 | 1.1±0.2 | 7.95±1.45 |
| 2 | M 8×1.25 | 2.5±0.5 | 18.1±3.6 |
| 3 | M10×1.5 | 6.9±1.4 | 49.9±10.1 |
| 4 | M12×1.75 | 10±2.0 | 72.3±14.5 |

| Item | Size | kgf · m | lbf · ft |
|------|---------|---------|----------|
| 5 | M8×1.25 | 2.5±0.5 | 18.1±3.6 |
| 6 | M16×2.0 | 55±3.5 | 398±25.3 |
| 7 | M20×2.5 | 30±3.5 | 217±25.3 |
| - | - | - | - |

2. COOLING SYSTEM AND FUEL TANK MOUNTING



VIEW A



11079CM02

· Tightening torque

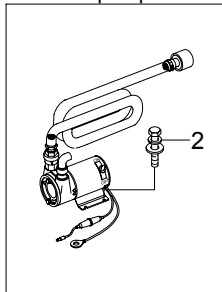
| Item | Size | kgf · m | lbf · ft |
|------|----------|----------|-----------|
| 1 | M 6×1.0 | 1.05±0.2 | 7.6±1.45 |
| 2 | M 8×1.25 | 2.5±0.5 | 18.1±3.6 |
| 3 | M10×1.5 | 6.9±1.4 | 49.9±10.1 |

| Item | Size | kgf · m | lbf · ft |
|------|----------|----------|-----------|
| 4 | M12×1.75 | 12.8±3.0 | 92.6±21.7 |
| 5 | M20×2.5 | 45±5.1 | 325±36.9 |
| 6 | - | 2.3±0.6 | 16.6±4.3 |

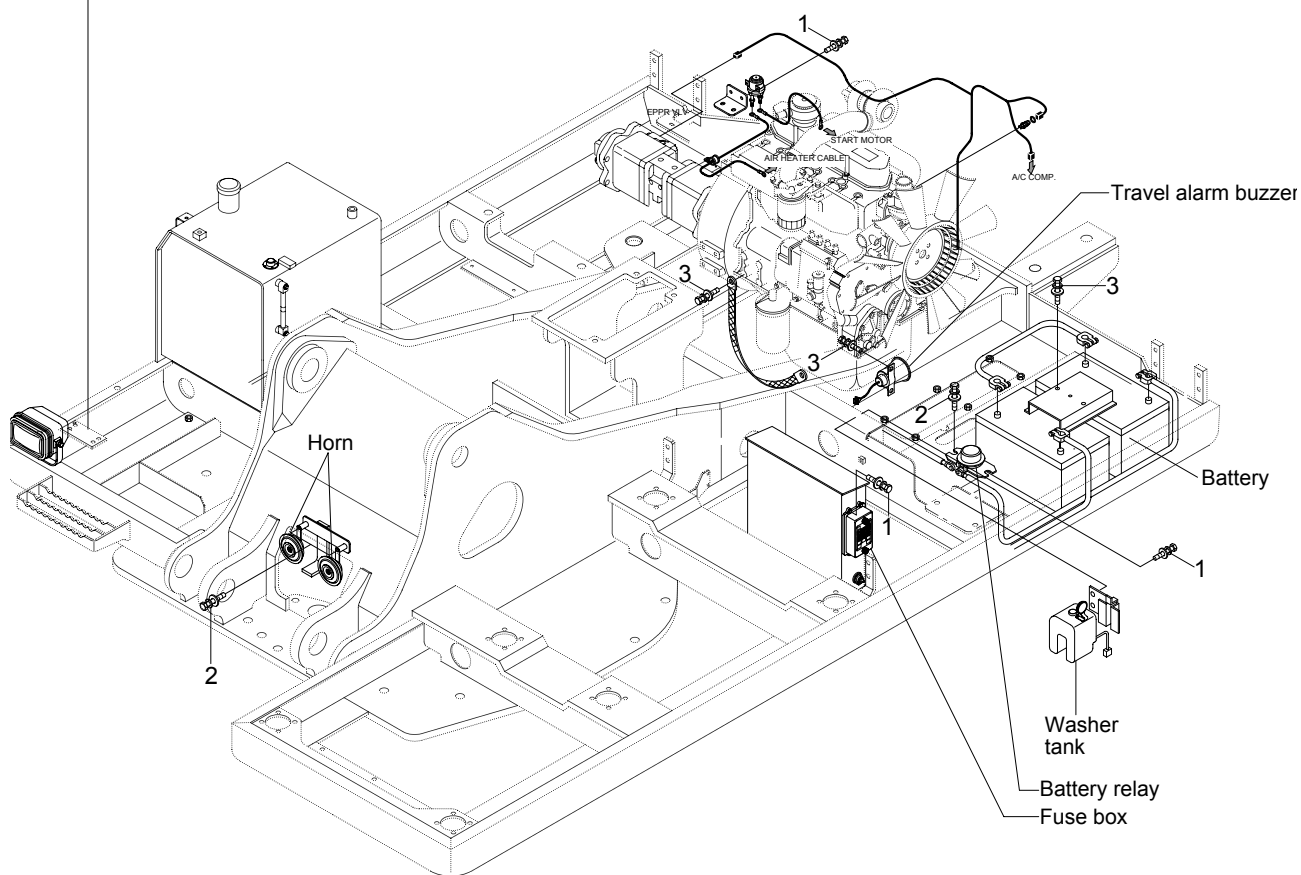
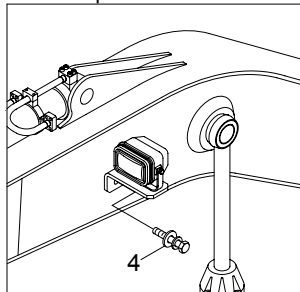
GROUP 3 ELECTRIC SYSTEM

1. ELECTRIC COMPONENTS MOUNTING 1

Fuel filler pump



Work lamp



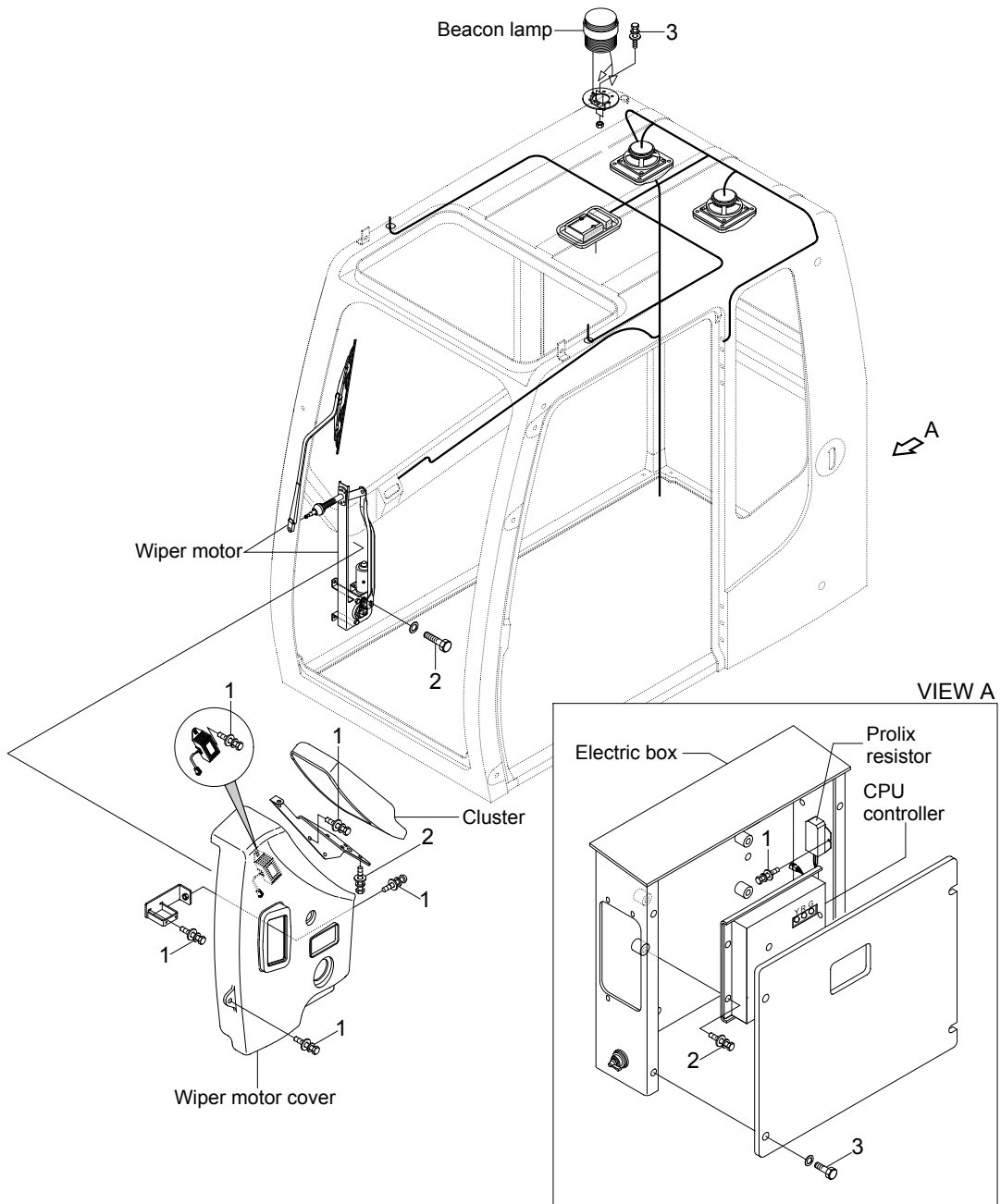
11079CM03

· 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 | M10×1.5 | 6.9±1.4 | 49.9±10.1 |
| 4 | M12×1.75 | 12.8±3.0 | 92.6±21.7 |

2. ELECTRIC COMPONENTS MOUNTING 2



11079CM04

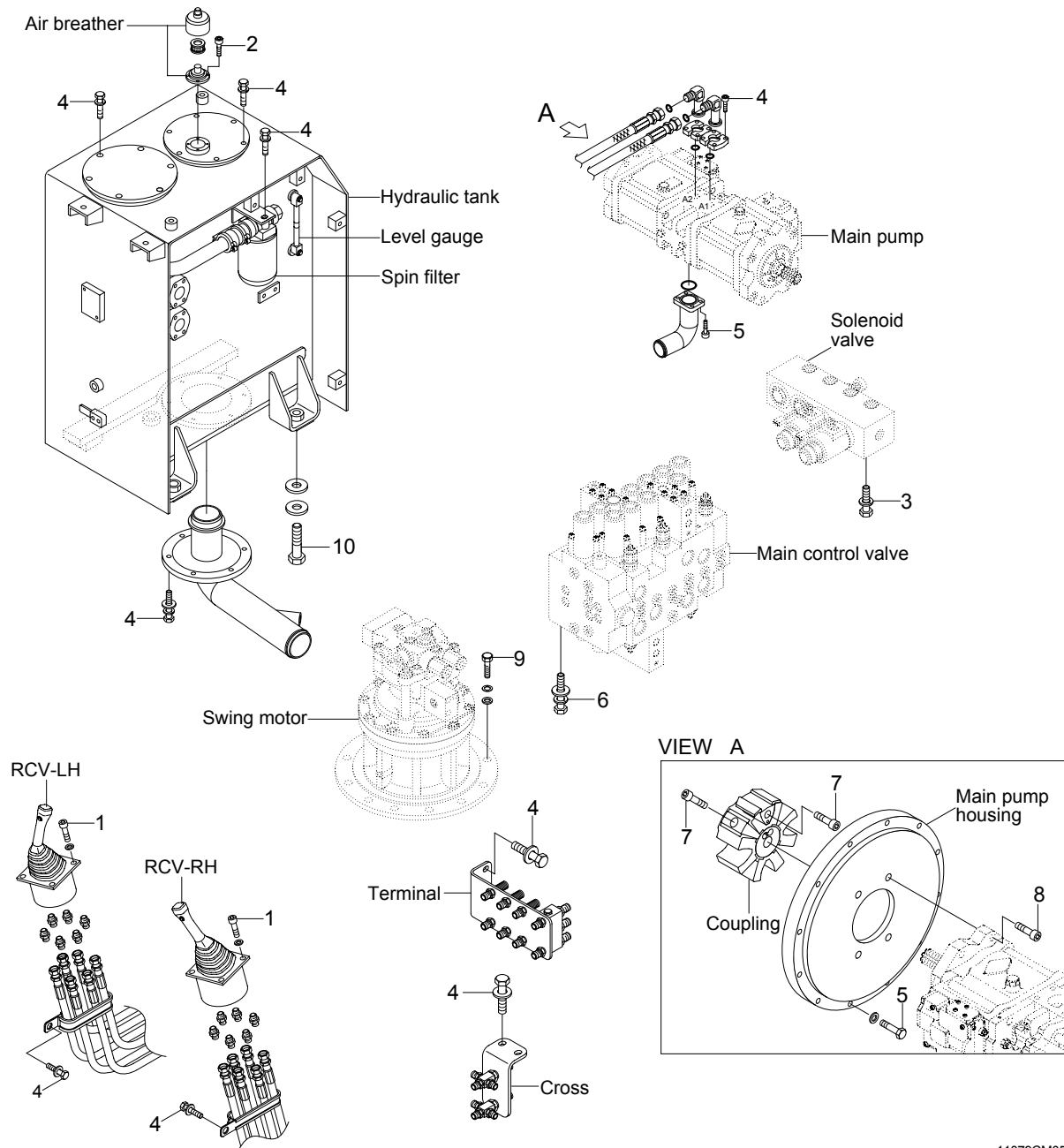
· Tightening torque

| 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 | M10×1.5 | 6.9±1.4 | 49.9±10.1 |
| - | - | - | - |

GROUP 4 HYDRAULIC SYSTEM

1. HYDRAULIC COMPONENTS MOUNTING 1



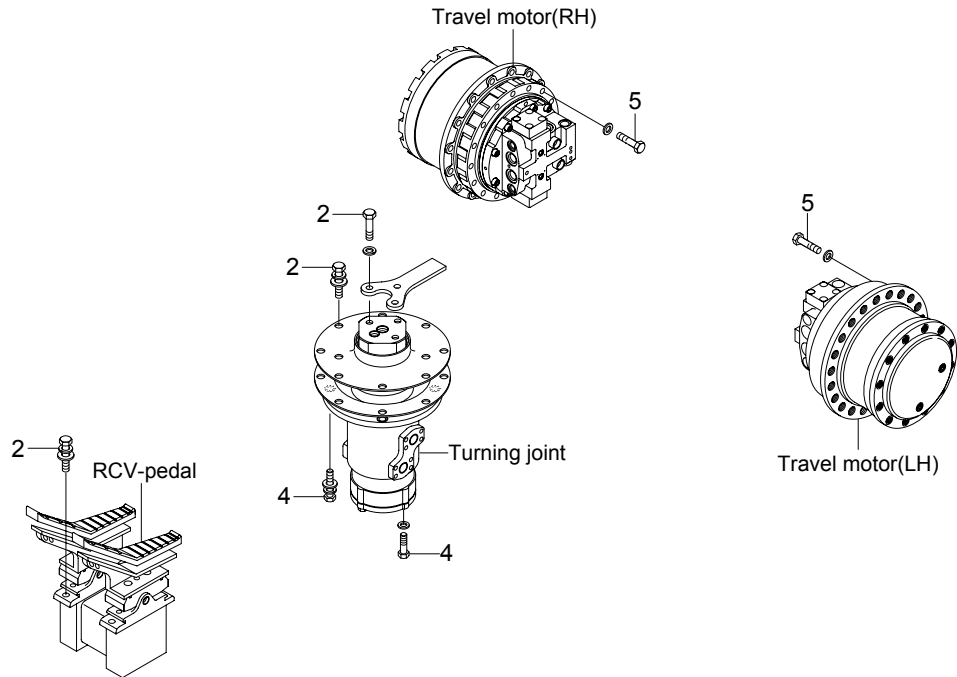
11079CM05

• Tightening torque

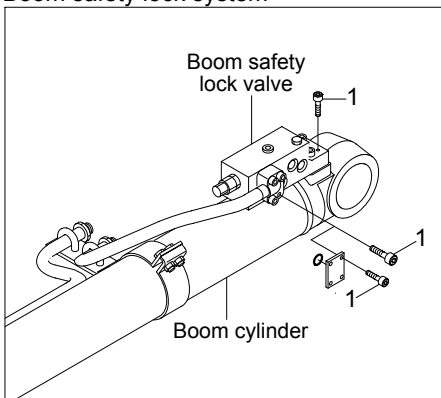
| Item | Size | kgf · m | lbf · ft |
|------|----------|----------|-----------|
| 1 | M 6×1.0 | 1.05±0.2 | 7.6±1.45 |
| 2 | M 6×1.0 | 1.44±0.3 | 10.4±2.2 |
| 3 | M 8×1.25 | 2.5±0.5 | 18.1±3.6 |
| 4 | M10×1.5 | 6.9±1.4 | 49.9±10.1 |
| 5 | M10×1.5 | 6.1±0.3 | 44.1±2.2 |

| Item | Size | kgf · m | lbf · ft |
|------|----------|----------|----------|
| 6 | M12×1.75 | 12.2±1.3 | 88.2±9.4 |
| 7 | M16×2.0 | 22.0±1.0 | 159±7.2 |
| 8 | M16×2.0 | 22.1±2.4 | 160±17.4 |
| 9 | M16×2.0 | 29.6±3.2 | 214±23.1 |
| 10 | M20×2.5 | 45±5.1 | 325±36.9 |

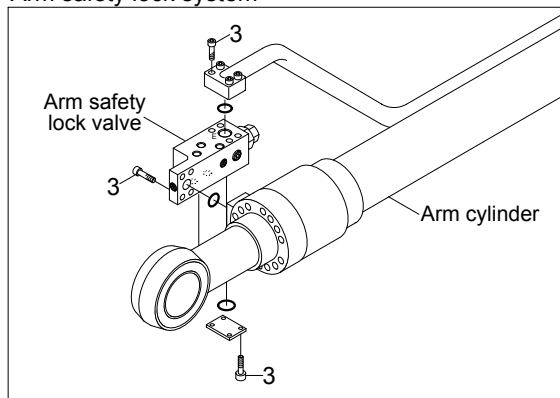
2. HYDRAULIC COMPONENTS MOUNTING 2



Boom safety lock system



Arm safety lock system



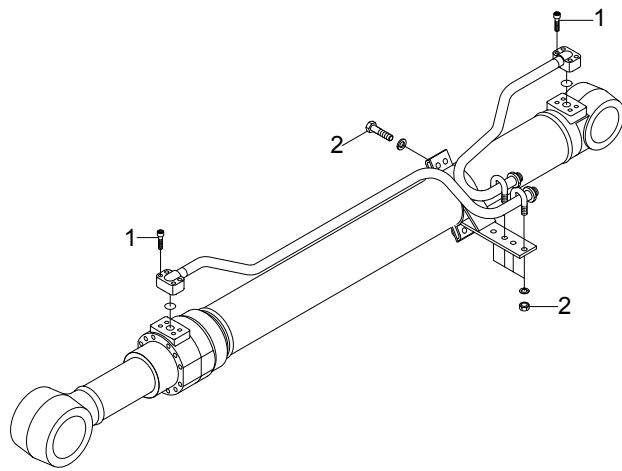
11079CM06

· Tightening torque

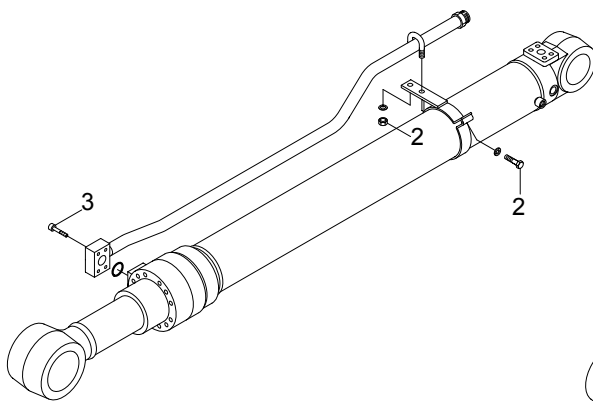
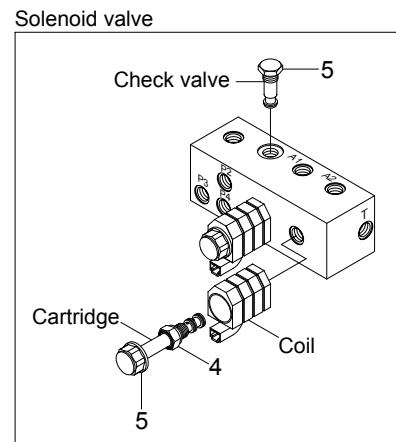
| Item | Size | kgf · m | lbf · ft |
|------|------------|------------|-------------|
| 1 | M 8 × 1.25 | 4.05 ± 0.8 | 29.3 ± 5.8 |
| 2 | M10 × 1.5 | 6.9 ± 1.4 | 49.9 ± 10.1 |
| 3 | M10 × 1.5 | 8.27 ± 1.7 | 59.8 ± 12.3 |

| Item | Size | kgf · m | lbf · ft |
|------|------------|------------|--------------|
| 4 | M12 × 1.75 | 12.8 ± 3.0 | 92.6 ± 21.7 |
| 5 | M16 × 2.0 | 23 ± 2.5 | 166.3 ± 18.1 |
| - | - | - | - |

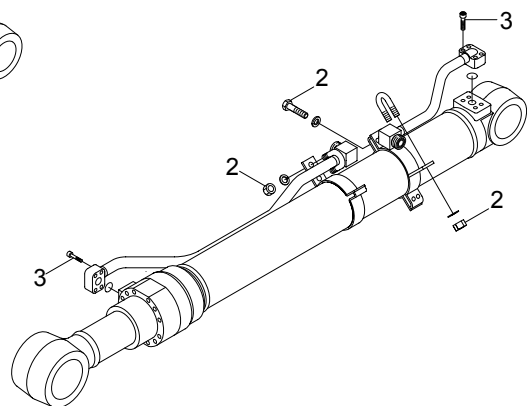
3. HYDRAULIC COMPONENTS MOUNTING 3



BOOM CYLINDER



ARM CYLINDER



BUCKET CYLINDER

11079CM07

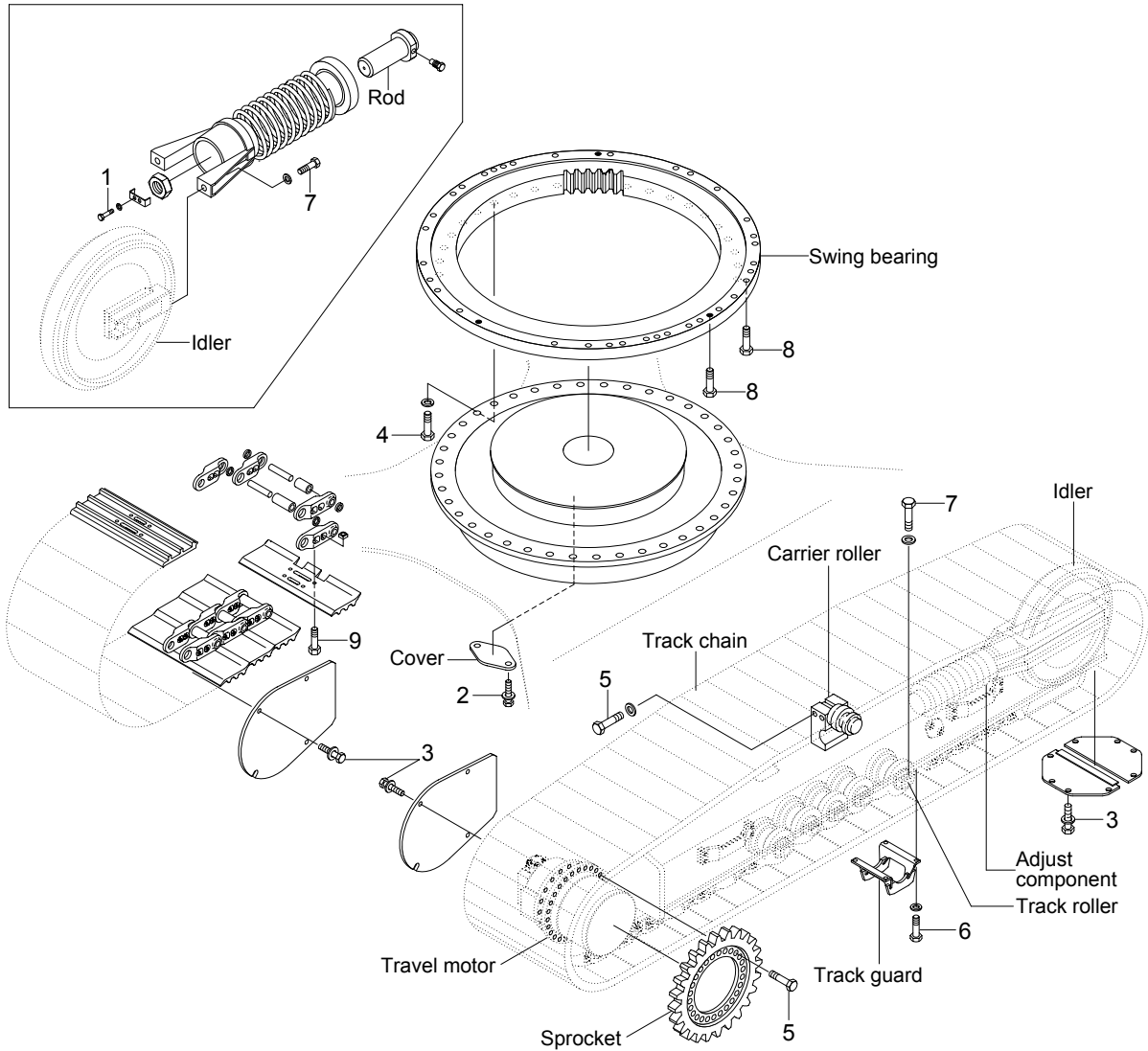
· Tightening torque

| Item | Size | kgf · m | lbf · ft |
|------|----------|---------|----------|
| 1 | M 8×1.25 | 2.7±0.3 | 19.5±2.2 |
| 2 | M10×1.5 | 3.2±0.3 | 23.1±2.2 |
| 3 | M10×1.5 | 5.4±0.5 | 39.1±3.6 |
| 4 | - | 0.4 | 2.9 |

| Item | Size | kgf · m | lbf · ft |
|------|------|---------|----------|
| 5 | - | 2.0 | 14.5 |
| | | | |
| | | | |

GROUP 5 UNDERCARRIAGE

ADJUST COMPONENT



11079CM08

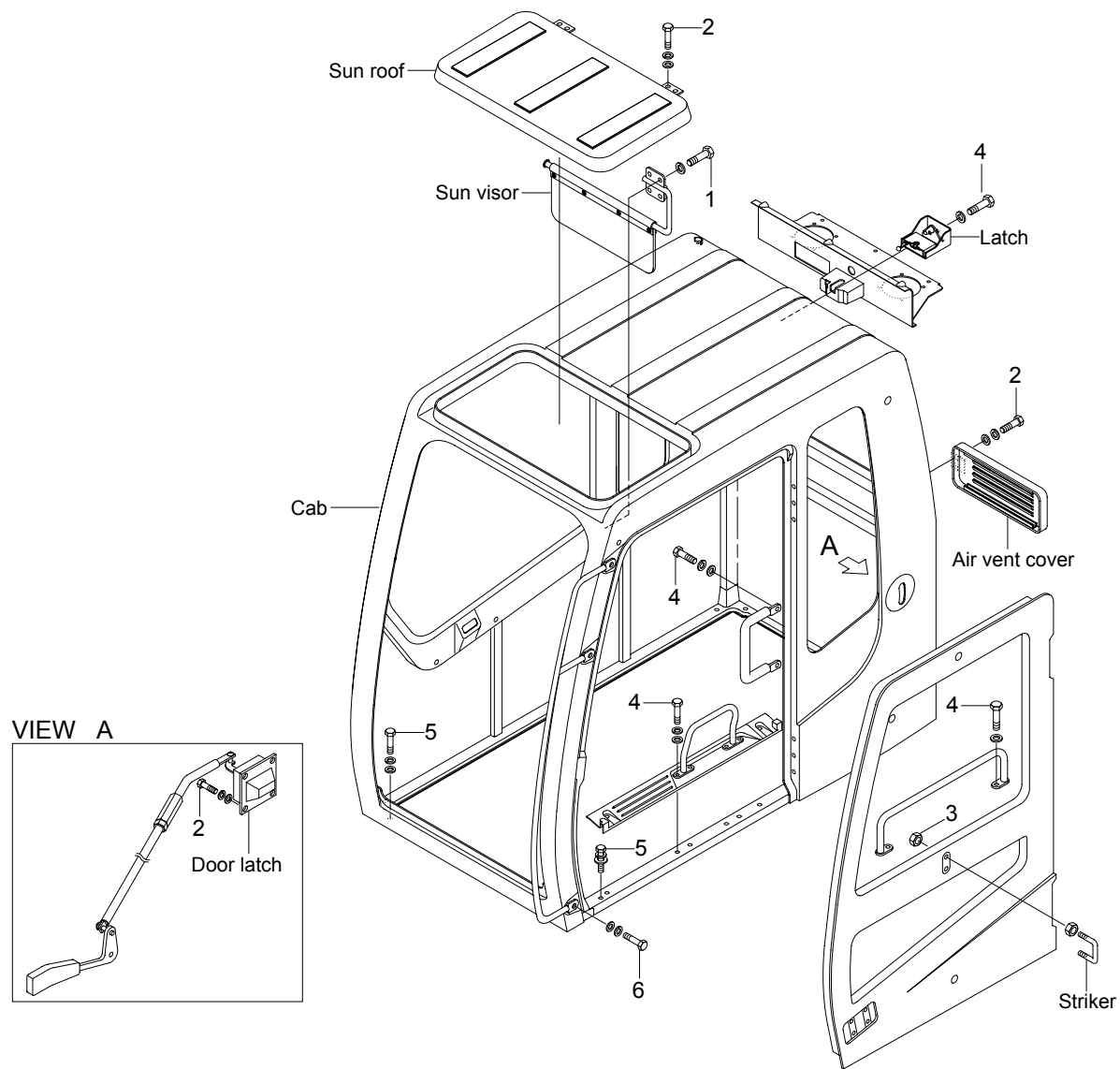
· Tightening torque

| Item | Size | kgf · m | lbf · ft |
|------|------------|------------|-------------|
| 1 | M 8 × 1.25 | 3.43 ± 0.7 | 24.8 ± 5.1 |
| 2 | M10 × 1.5 | 6.9 ± 1.4 | 49.9 ± 10.1 |
| 3 | M12 × 1.75 | 12.8 ± 3.0 | 92.6 ± 21.7 |
| 4 | M16 × 1.5 | 31.3 ± 4.7 | 226 ± 34 |
| 5 | M16 × 2.0 | 29.7 ± 4.5 | 215 ± 32.5 |

| Item | Size | kgf · m | lbf · ft |
|------|-----------|------------|------------|
| 6 | M16 × 2.0 | 29.6 ± 3.2 | 214 ± 23.1 |
| 7 | M16 × 2.0 | 29.7 ± 4.5 | 215 ± 32.5 |
| 8 | M18 × 2.5 | 41.3 ± 6.2 | 299 ± 44.8 |
| 9 | 5/8" | 42 ± 4.0 | 304 ± 29 |
| - | - | - | - |

GROUP 6 STRUCTURE

1. CAB AND ACCESSORIES MOUNTING



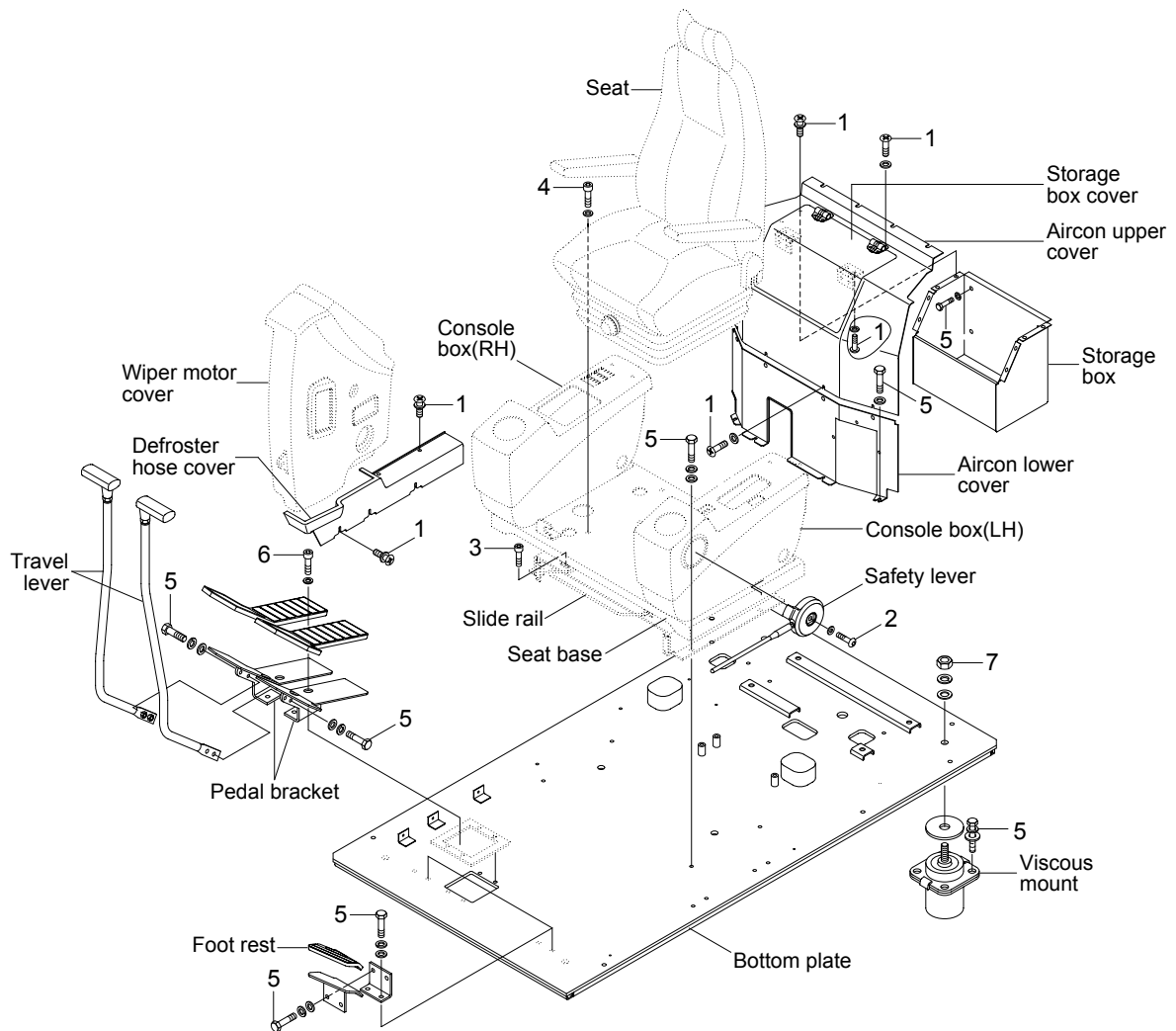
11079CM09

· Tightening torque

| Item | Size | kgf · m | lbf · ft |
|------|----------|----------|----------|
| 1 | M 6×1.0 | 0.49±0.1 | 3.5±0.7 |
| 2 | M 8×1.25 | 2.5±0.5 | 18.1±3.6 |
| 3 | M10×1.5 | 4.7±0.9 | 34±6.5 |

| Item | Size | kgf · m | lbf · ft |
|------|----------|----------|-----------|
| 4 | M10×1.5 | 6.9±1.4 | 49.9±10.1 |
| 5 | M12×1.75 | 12.8±3.0 | 92.6±21.7 |
| 6 | M16×2.0 | 29.7±4.5 | 215±32.5 |

2. CAB INTERIOR MOUNTING



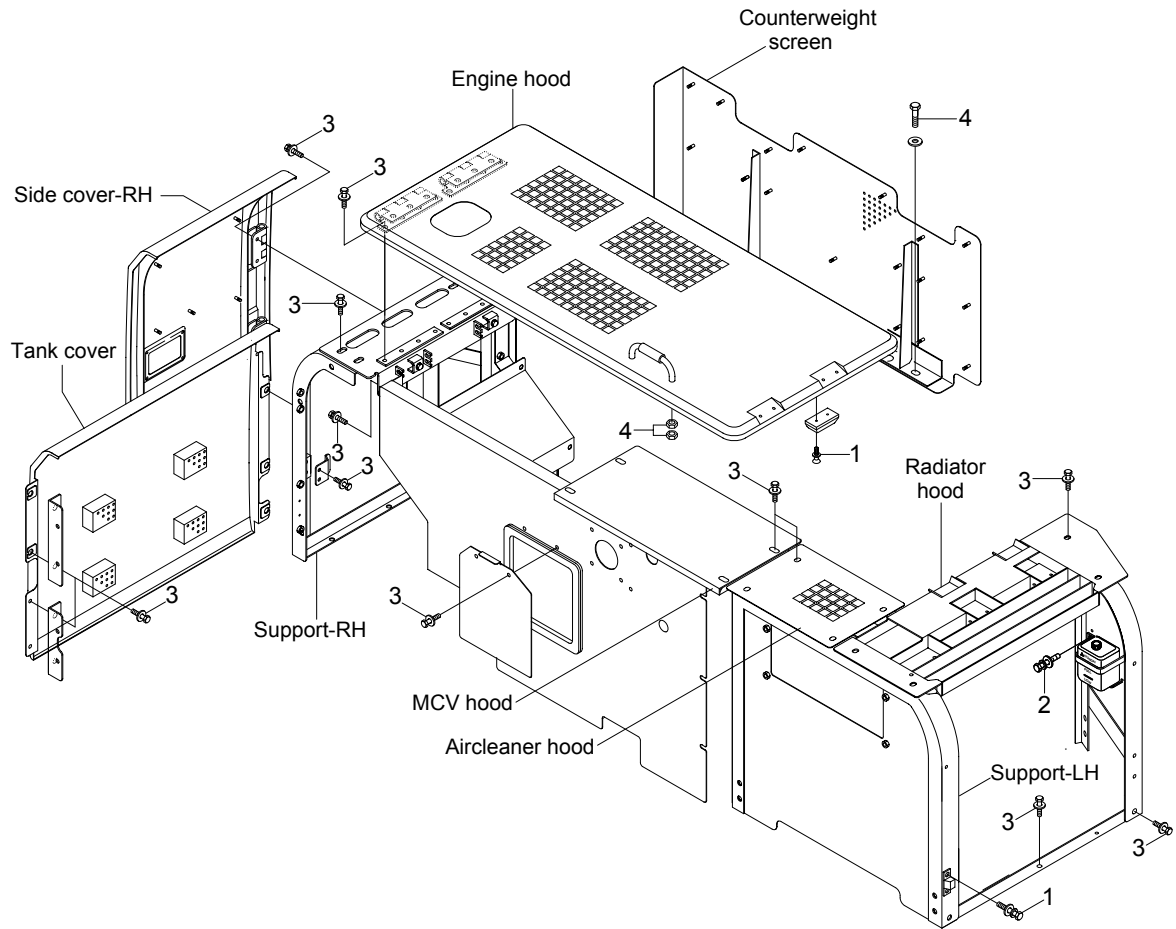
14079CM10

· Tightening torque

| Item | Size | kgf · m | lbf · ft |
|------|----------|----------|----------|
| 1 | M 6×1.0 | 0.49±0.1 | 3.5±0.7 |
| 2 | M 6×1.0 | 1.05±0.2 | 7.6±1.4 |
| 3 | M 8×1.25 | 3.43±0.7 | 24.8±5.1 |
| 4 | M 8×1.25 | 4.05±0.8 | 29.3±5.8 |

| Item | Size | kgf · m | lbf · ft |
|------|---------|----------|-----------|
| 5 | M10×1.5 | 6.9±1.4 | 49.9±10.1 |
| 6 | M10×1.5 | 8.27±1.7 | 59.8±12.3 |
| 7 | M16×2.0 | 29.7±4.5 | 215±32.5 |
| - | - | - | - |

3. COWLING MOUNTING



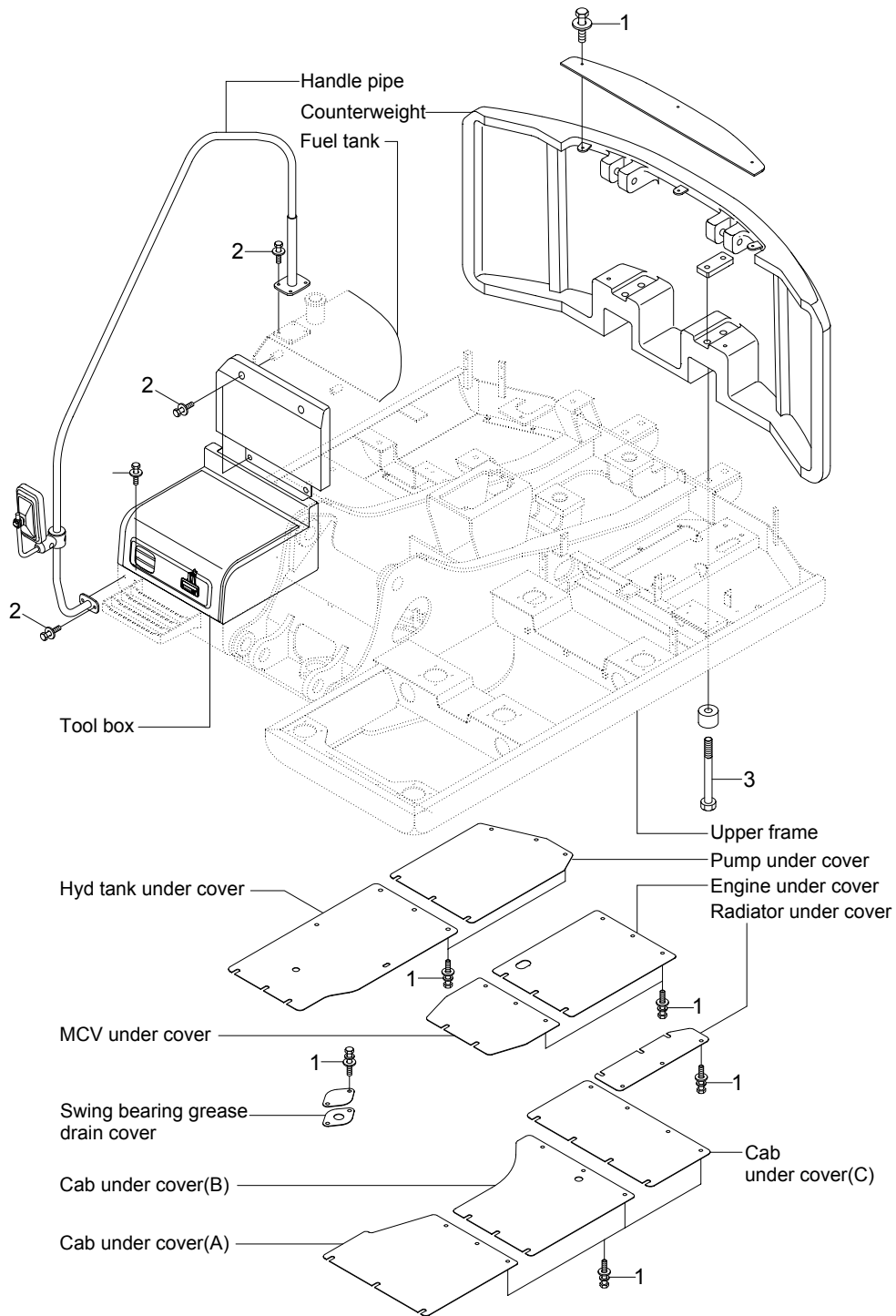
11079CM11

· Tightening torque

| Item | Size | kgf · m | lbf · ft |
|------|------------|------------|------------|
| 1 | M 6 × 1.0 | 0.49 ± 0.1 | 3.5 ± 0.7 |
| 2 | M 8 × 1.25 | 2.5 ± 0.5 | 18.1 ± 3.6 |

| Item | Size | kgf · m | lbf · ft |
|------|------------|------------|-------------|
| 3 | M12 × 1.75 | 12.8 ± 3.0 | 92.6 ± 21.7 |
| 4 | M16 × 2.0 | 29.7 ± 4.5 | 215 ± 32.5 |

4. COUNTERWEIGHT AND COVERS MOUNTING



11079CM12

· 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 |

| Item | Size | kgf · m | lbf · ft |
|------|---------|---------|----------|
| 3 | M24×3.0 | 97.8±10 | 707±72.3 |
| - | - | - | - |

