

SECTION 9 COMPONENT MOUNTING TORQUE

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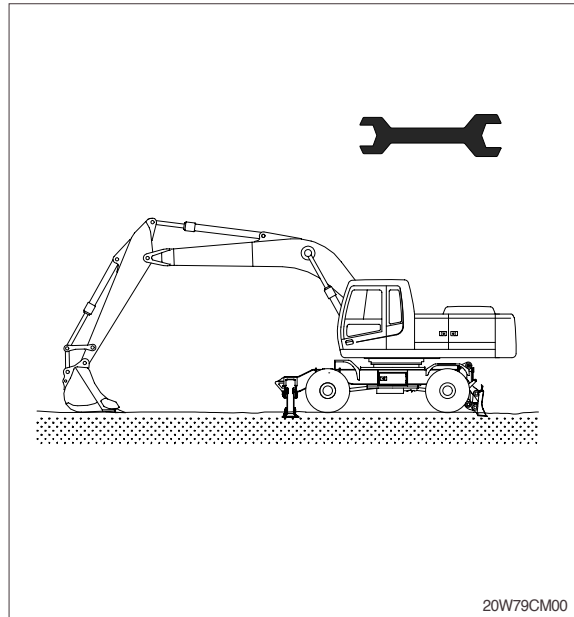
SECTION 9 COMPONENT MOUNTING TORQUE

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.

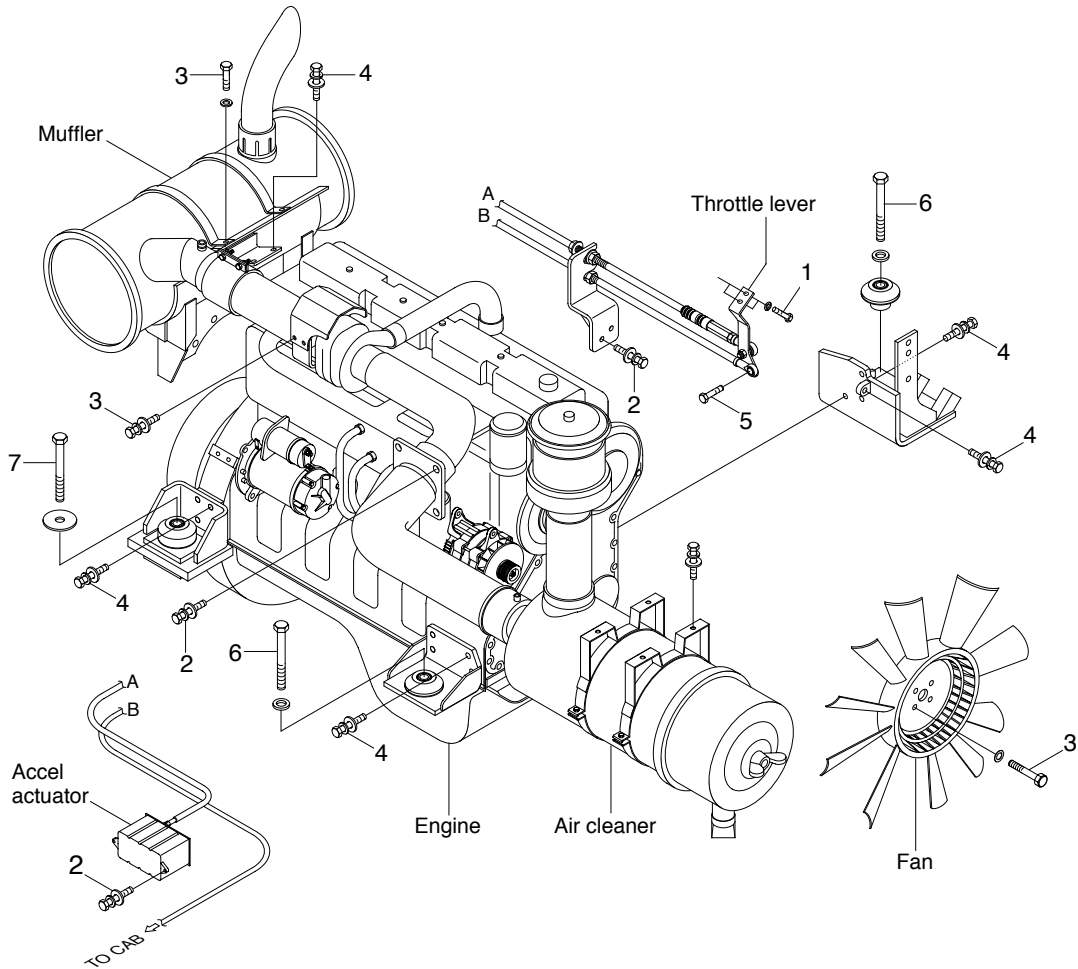
Before installation, clean all the components with a non-corrosive cleaner. Bolts and threads must not be worn or damaged.



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GROUP 2 ENGINE SYSTEM

ENGINE AND ACCESSORIES MOUNTING



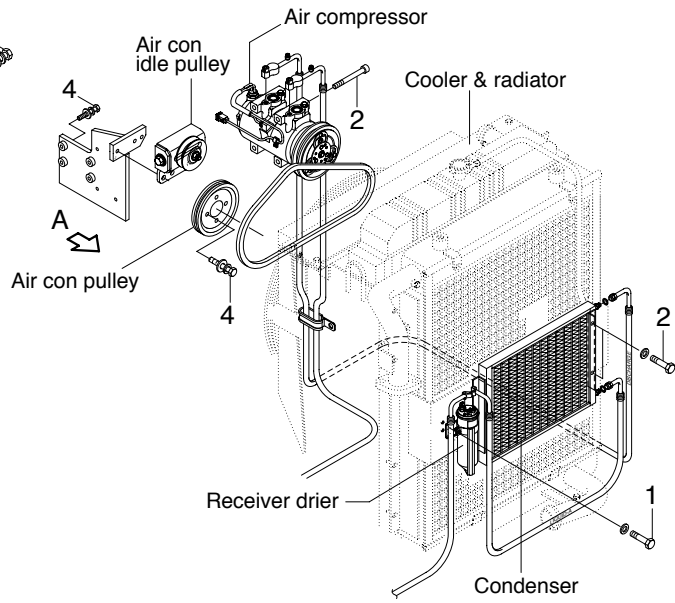
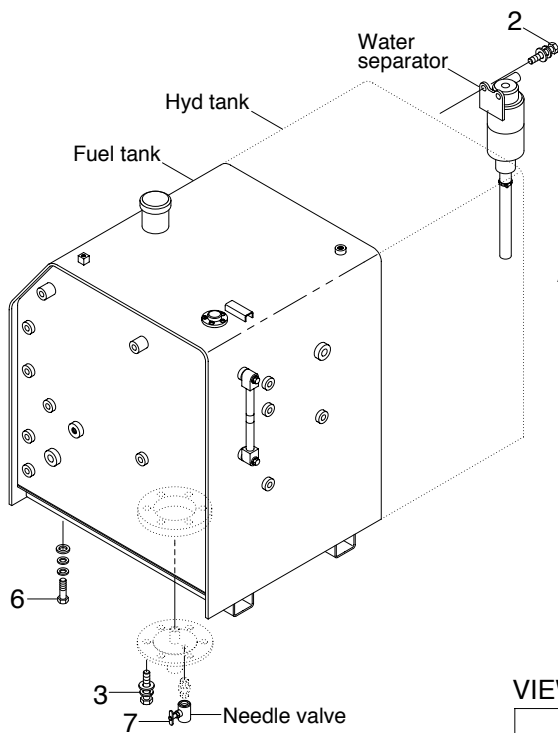
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· Tightening torque

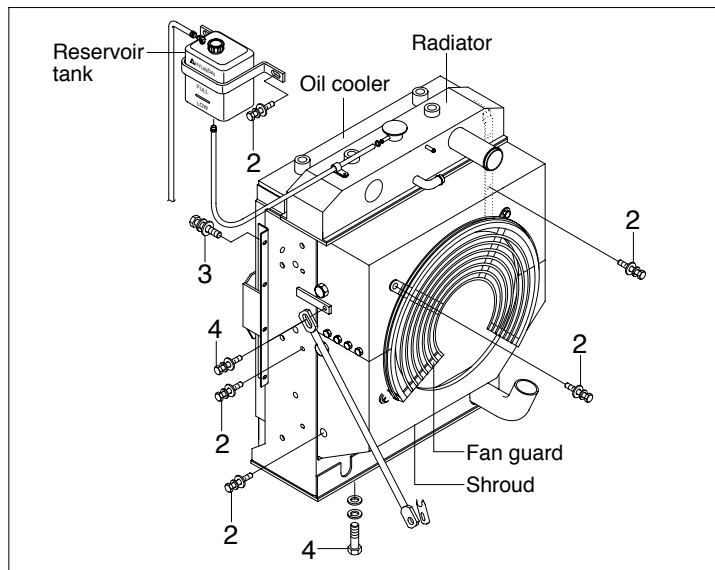
Item	Size	kgf · m	lbf · ft
1	M 6 × 1.0	0.92 ± 0.2	6.7 ± 1.4
2	M 8 × 1.25	2.5 ± 0.5	18.1 ± 3.6
3	M10 × 1.5	4.4 ± 0.9	31.8 ± 6.5
4	M10 × 1.5	6.9 ± 1.4	49.9 ± 10.1
5	M12 × 1.5	12.5 ± 3.0	92.6 ± 21.7

Item	Size	kgf · m	lbf · ft
6	M12 × 1.75	10.0 ± 2.0	72.3 ± 14.5
7	M12 × 1.75	12.8 ± 3.0	92.6 ± 21.7
8	M20 × 2.5	55 ± 3.5	398 ± 25.3
9	M24 × 3.0	90 ± 7.0	651 ± 51
-	-	-	-

COOLING SYSTEM AND FUEL TANK MOUNTING



VIEW A



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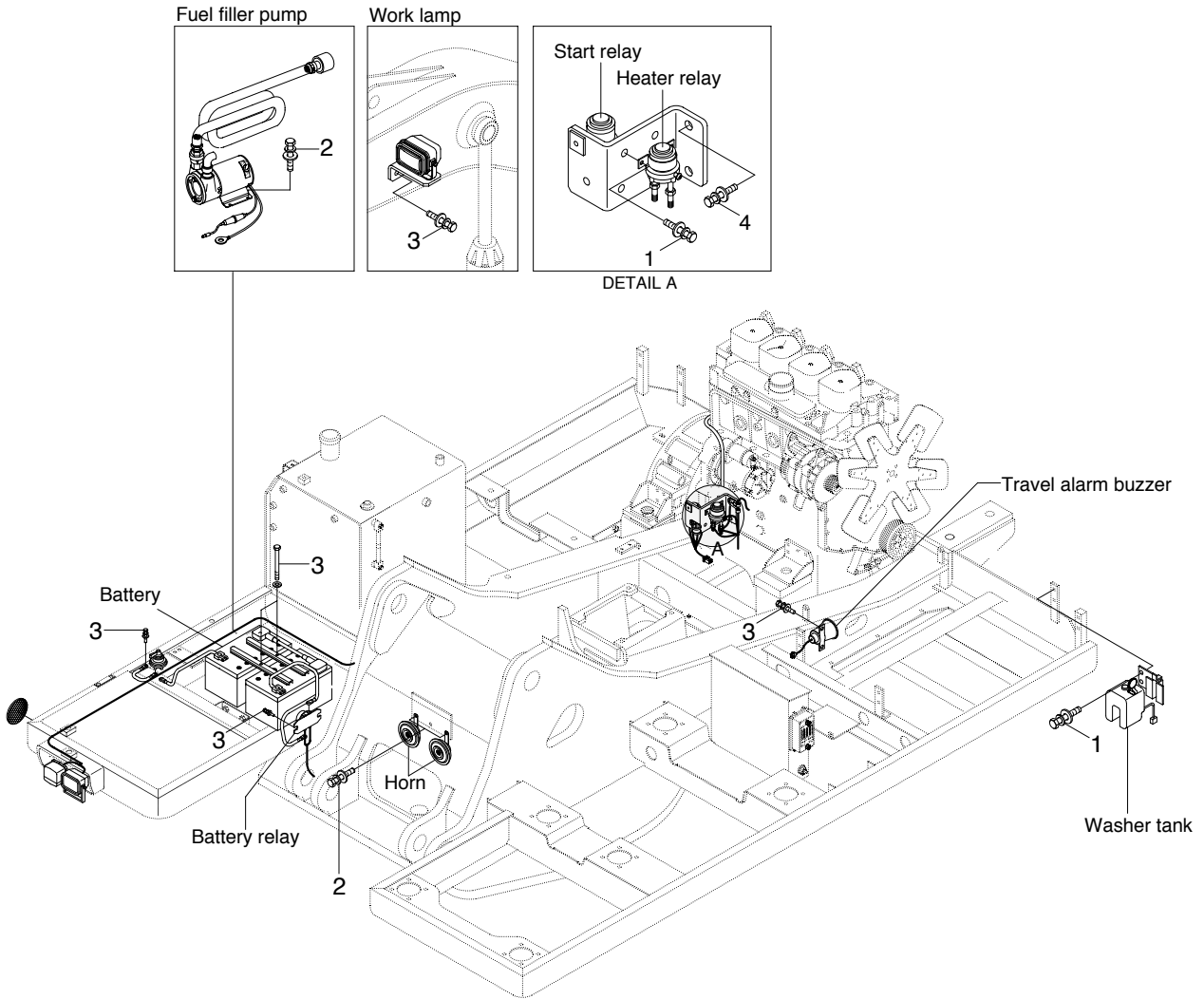
· Tightening torque

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	M12 × 1.75	12.8 ± 3.0	92.6 ± 21.7
5	M20 × 2.5	46 ± 5.1	333 ± 36.9
6	-	2.3 ± 0.6	16.6 ± 4.3

GROUP 3 ELECTRIC SYSTEM

ELECTRIC COMPONENTS MOUNTING 1



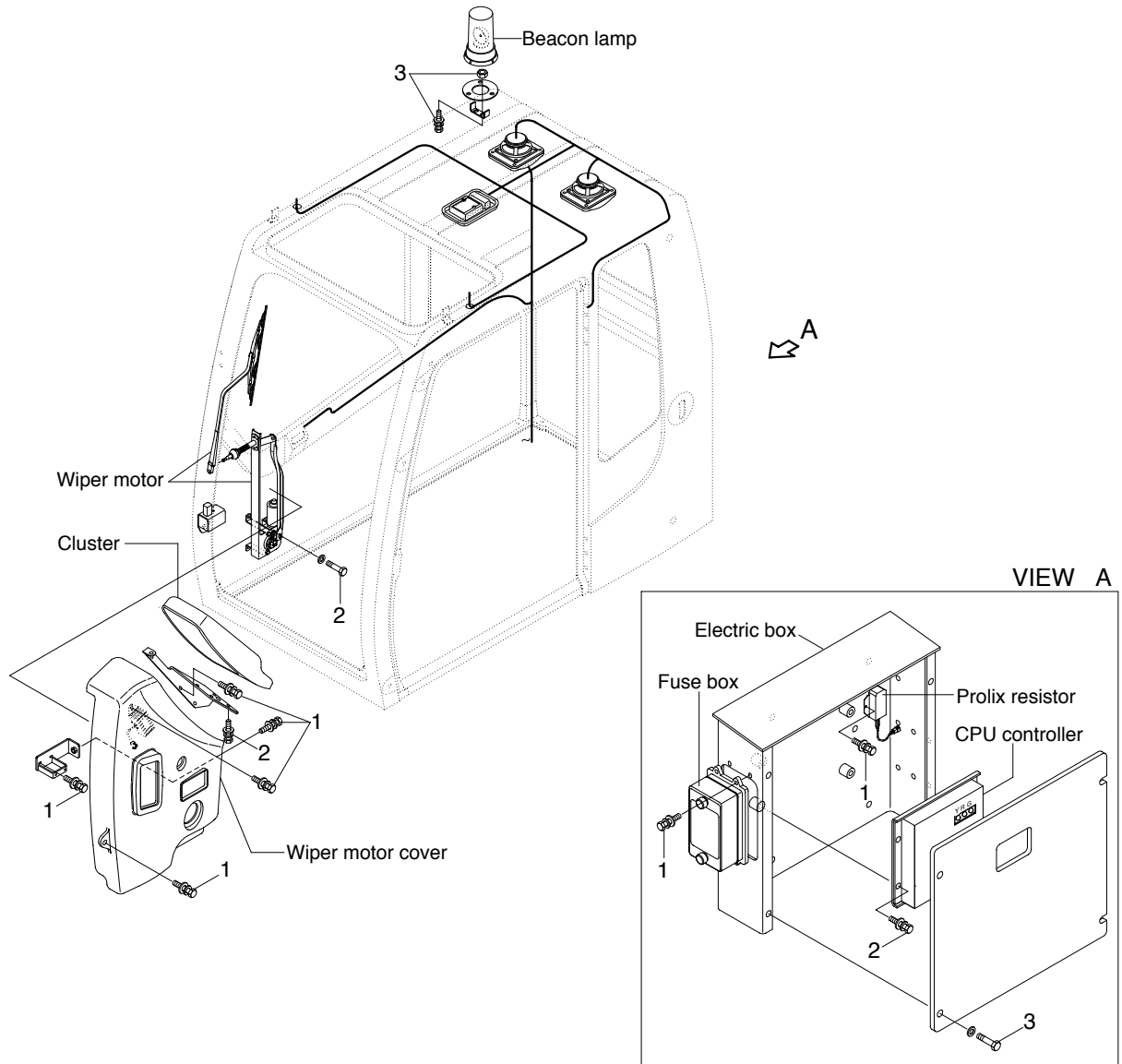
14W79CM03

· 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

ELECTRIC COMPONENTS MOUNTING 2



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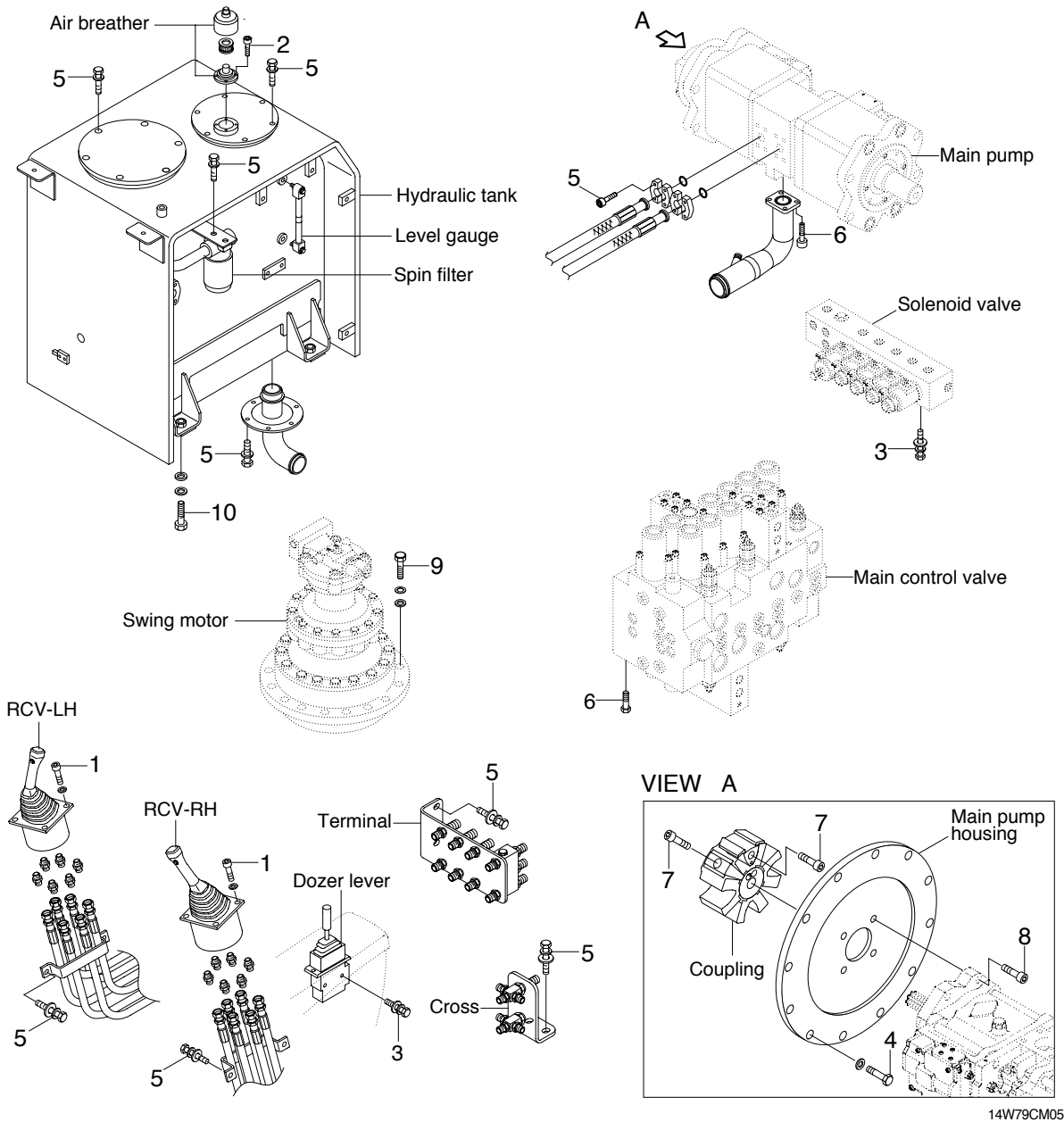
· Tightening torque

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

GROUP 4 HYDRAULIC SYSTEM

HYDRAULIC COMPONENTS MOUNTING 1

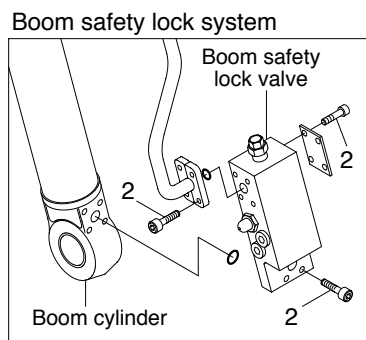
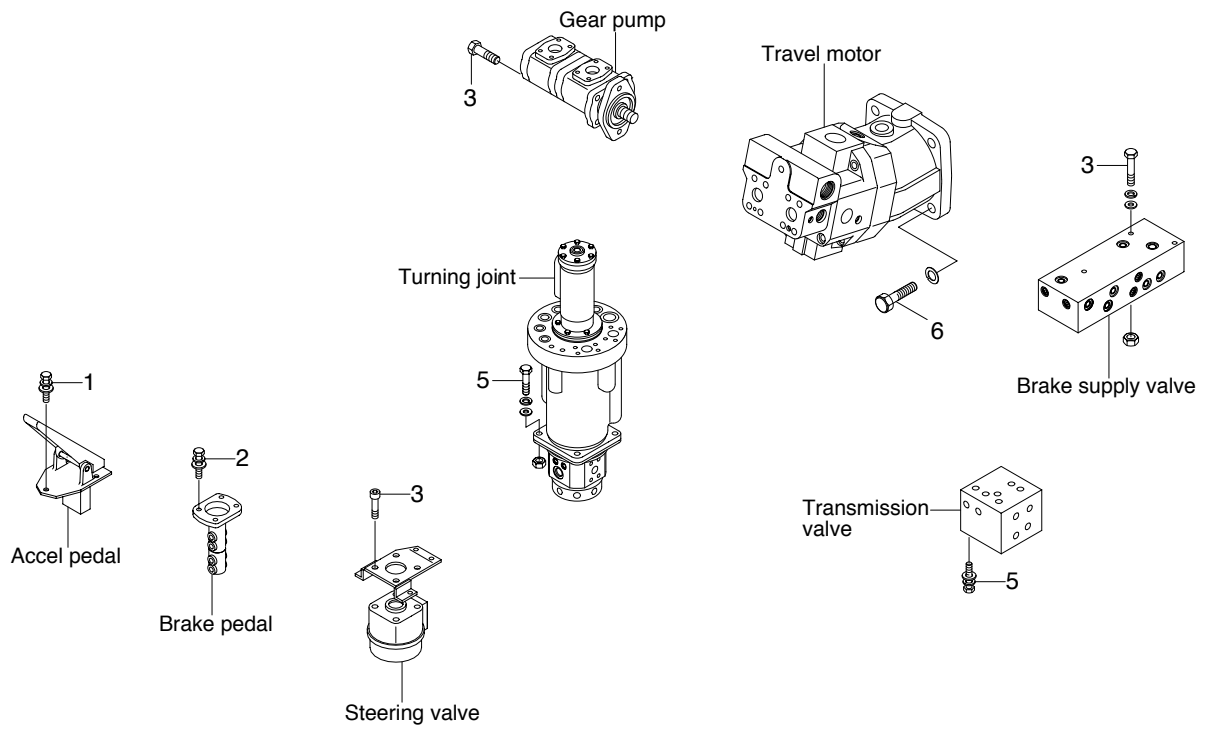


· Tightening torque

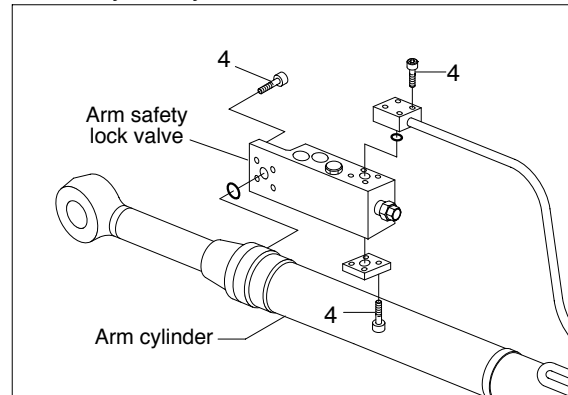
Item	Size	kgf · m	lbf · ft
1	M 6 × 1.0	1.05 ± 0.2	7.6 ± 1.45
2	M 6 × 1.0	1.44 ± 0.3	10.4 ± 2.2
3	M 8 × 1.25	2.5 ± 0.5	18.1 ± 3.6
4	M10 × 1.5	4.8 ± 0.3	34.7 ± 2.2
5	M10 × 1.5	6.9 ± 1.4	49.9 ± 10.1

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	29.7 ± 4.5	215 ± 32.5
10	M20 × 2.5	46 ± 5.1	333 ± 36.9

HYDRAULIC COMPONENTS MOUNTING 2



Arm safety lock system



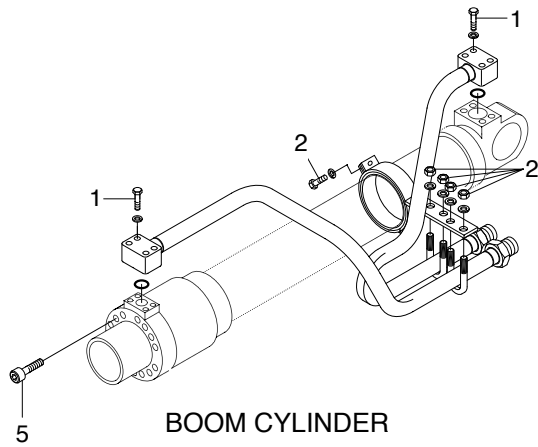
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· Tightening torque

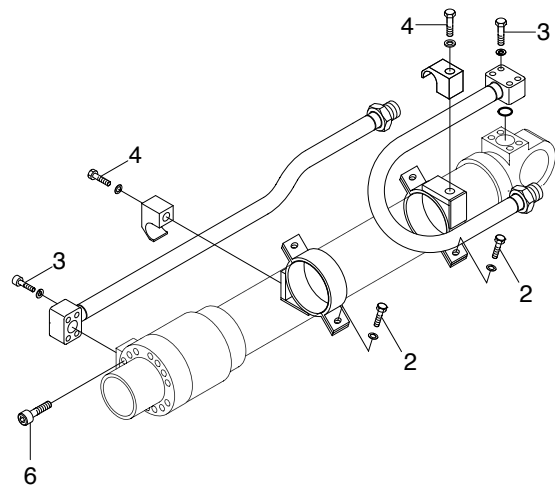
Item	Size	kgf · m	lbf · ft
1	M 6 × 1.0	1.05 ± 0.2	7.6 ± 1.4
2	M 8 × 1.25	2.5 ± 0.5	18.1 ± 3.6
3	M10 × 1.5	6.9 ± 1.4	49.9 ± 10.1

Item	Size	kgf · m	lbf · ft
4	M10 × 1.5	8.27 ± 1.7	59.8 ± 12.3
5	M12 × 1.75	12.0 ± 1.3	86.8 ± 9.4
6	M16 × 2.0	29.6 ± 3.2	214 ± 23.1

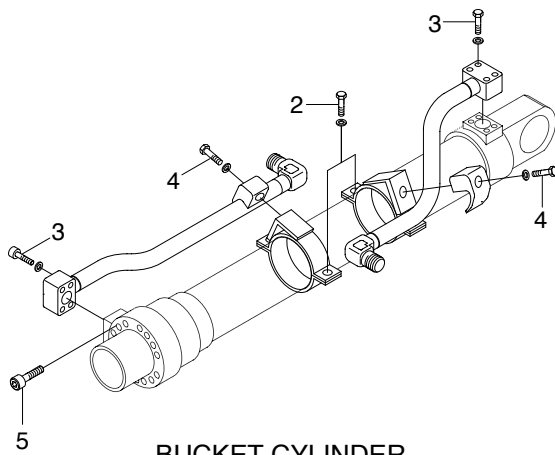
HYDRAULIC COMPONENTS MOUNTING 3



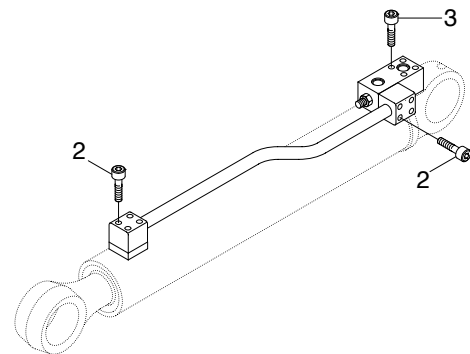
BOOM CYLINDER



ARM CYLINDER



BUCKET CYLINDER



DOZER CYLINDER

14W79CM07

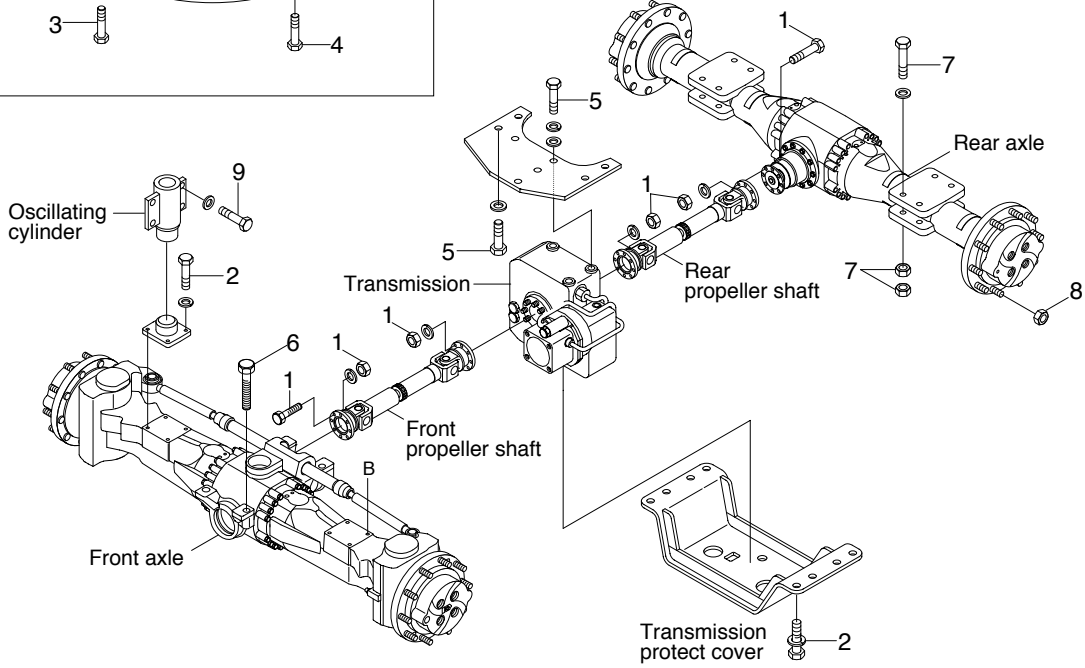
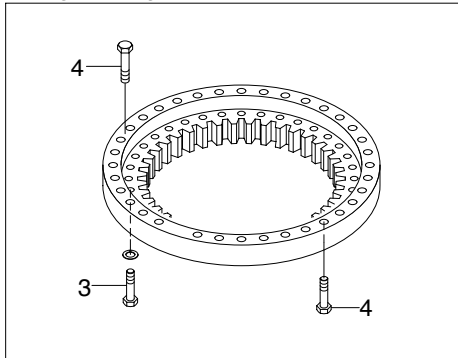
· Tightening torque

Item	Size	kgf · m	lbf · ft
1	M8 × 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

Item	Size	kgf · m	lbf · ft
4	M12 × 1.75	5.5 ± 0.6	39.8 ± 4.3
5	M16 × 2.0	23 ± 2.0	166 ± 14.5
6	M18 × 2.5	32 ± 3.0	232 ± 21.7

GROUP 5 POWER TRAIN SYSTEM

Swing bearing



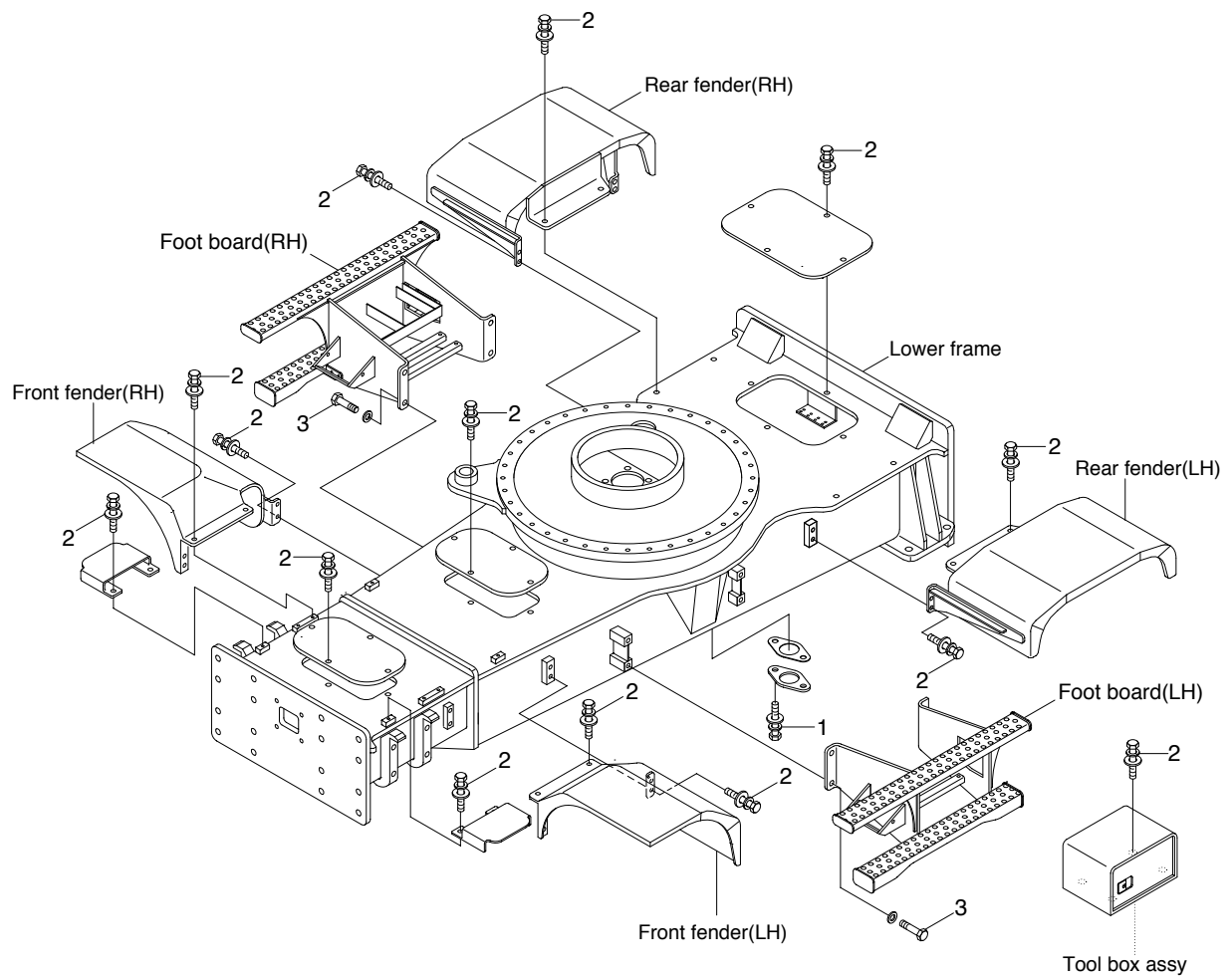
14W79CM08

· Tightening torque

Item	Size	kgf · m	lbf · ft
1	M10 × 1.0	5.9 ± 0.6	42.7 ± 4.3
2	M12 × 1.75	12.3 ± 2.5	89.0 ± 18
3	M16 × 1.5	31.3 ± 3.2	226 ± 23
4	M18 × 2.5	41.3 ± 4.5	299 ± 44.8
5	M20 × 2.5	44 ± 2.0	318 ± 14.4

Item	Size	kgf · m	lbf · ft
6	M20 × 2.5	57.9 ± 8.7	419 ± 63
7	M20 × 2.5	58 ± 6.3	420 ± 46
8	M22 × 1.5	62 ± 3.0	448 ± 21.7
9	M22 × 1.5	83.2 ± 9.2	602 ± 66.5
-	-	-	-

COVER AND FOOT BOARD



14W79CM09

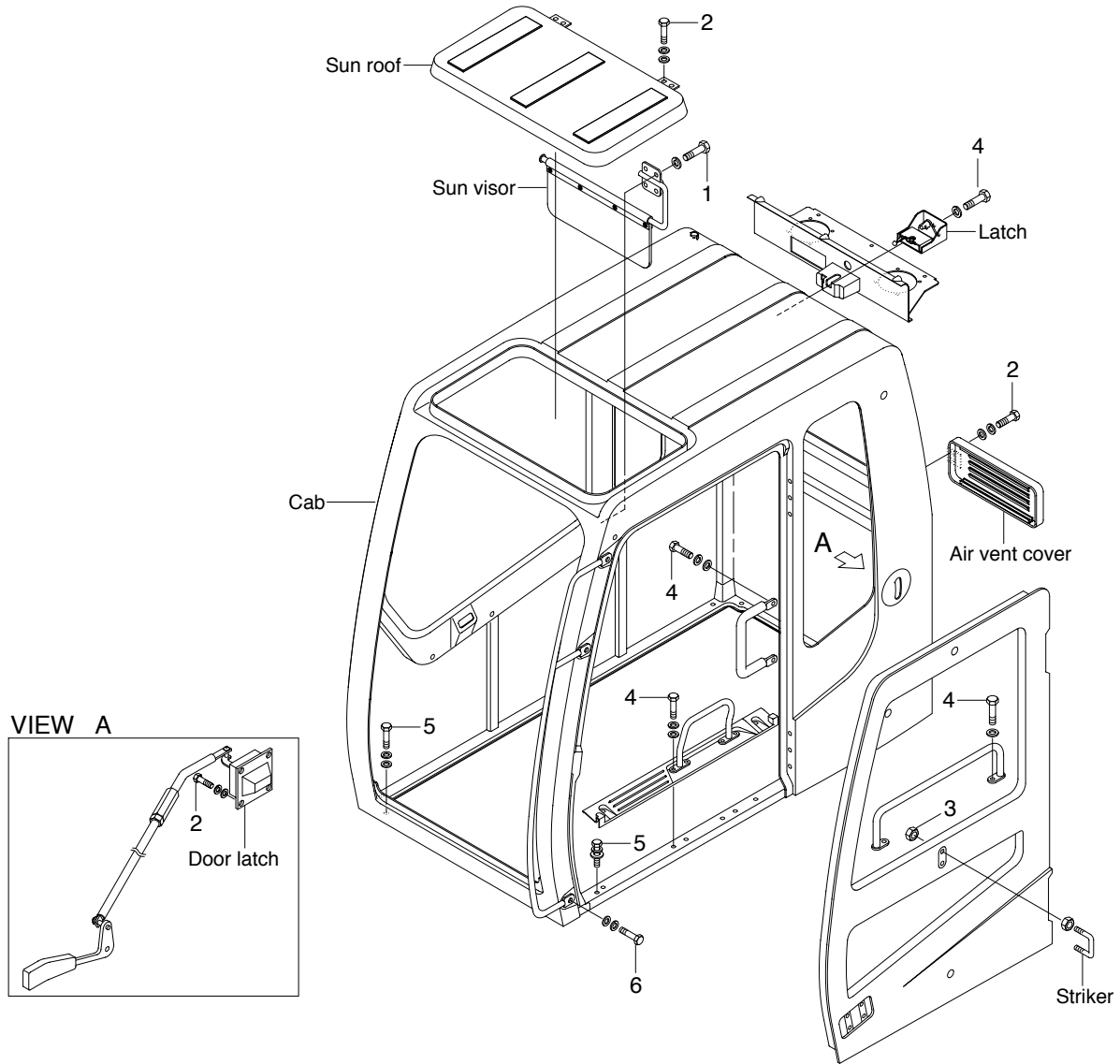
· Tightening torque

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	M20 × 2.5	57.9 ± 8.7	419 ± 62.9
-	-	-	-

GROUP 6 STRUCTURE

CAB AND ACCESSORIES MOUNTING



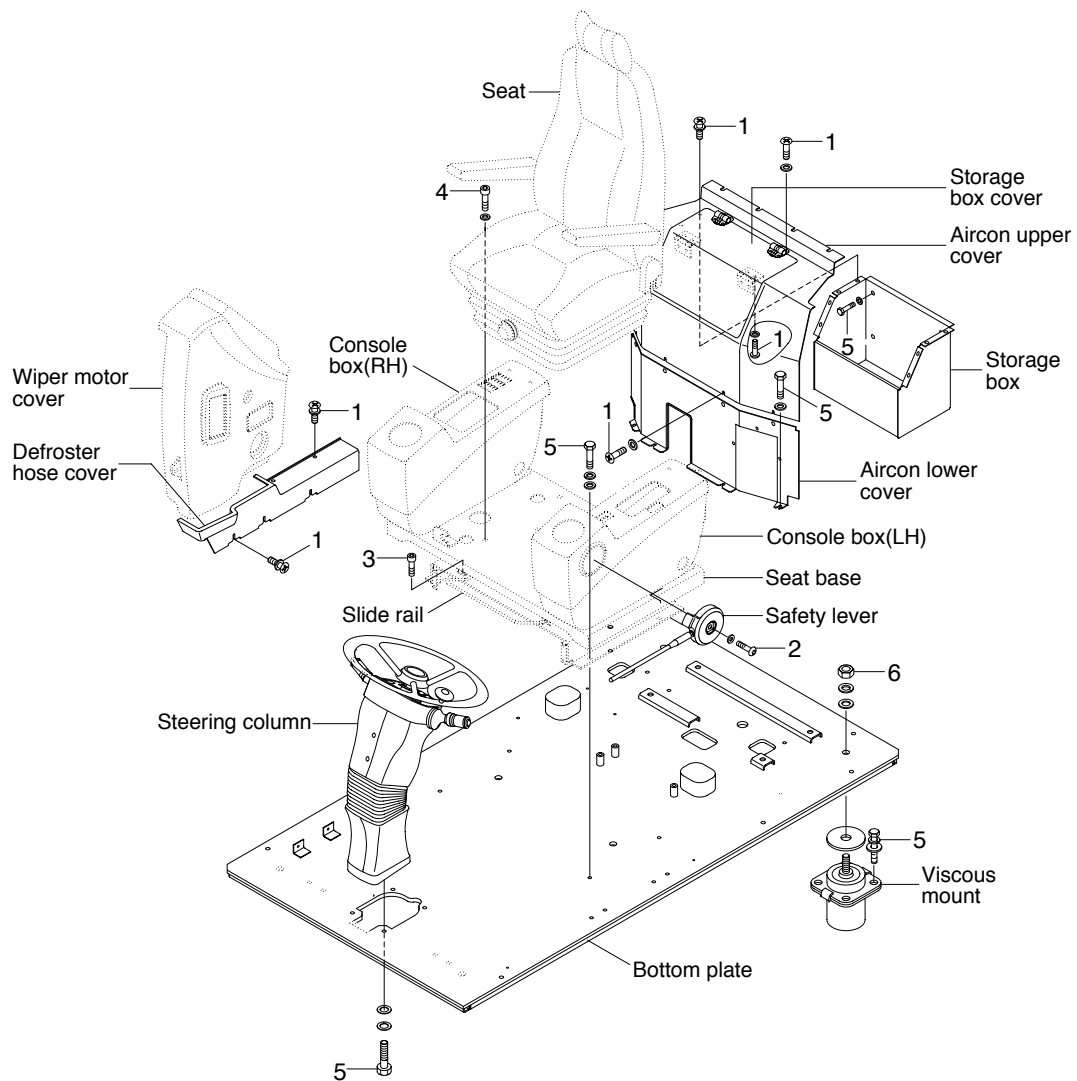
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· Tightening torque

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

CAB INTERIOR MOUNTING



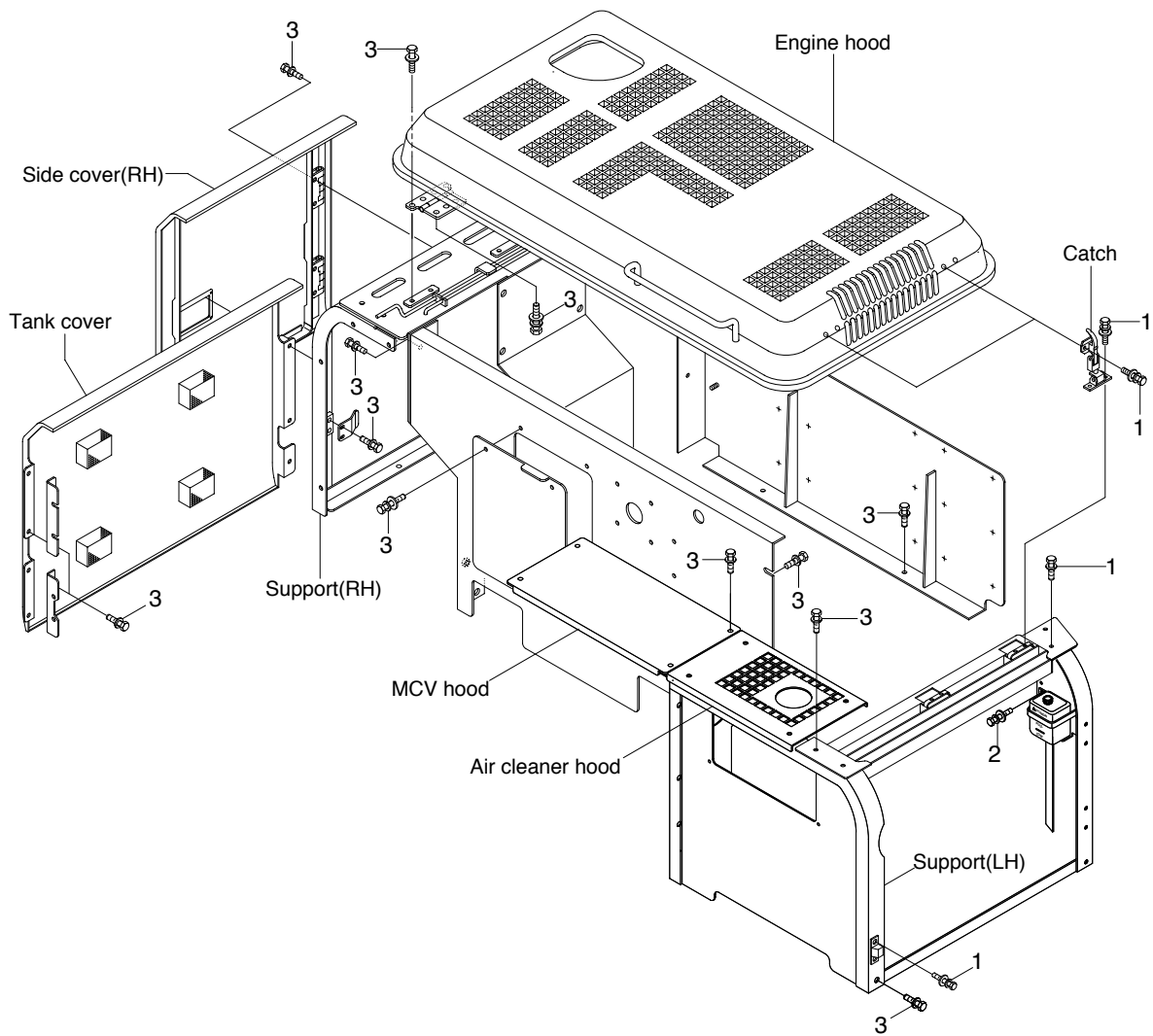
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· Tightening torque

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	M16 × 2.0	29.7 ± 4.5	215 ± 32.5
-	-	-	-

COWLING MOUNTING



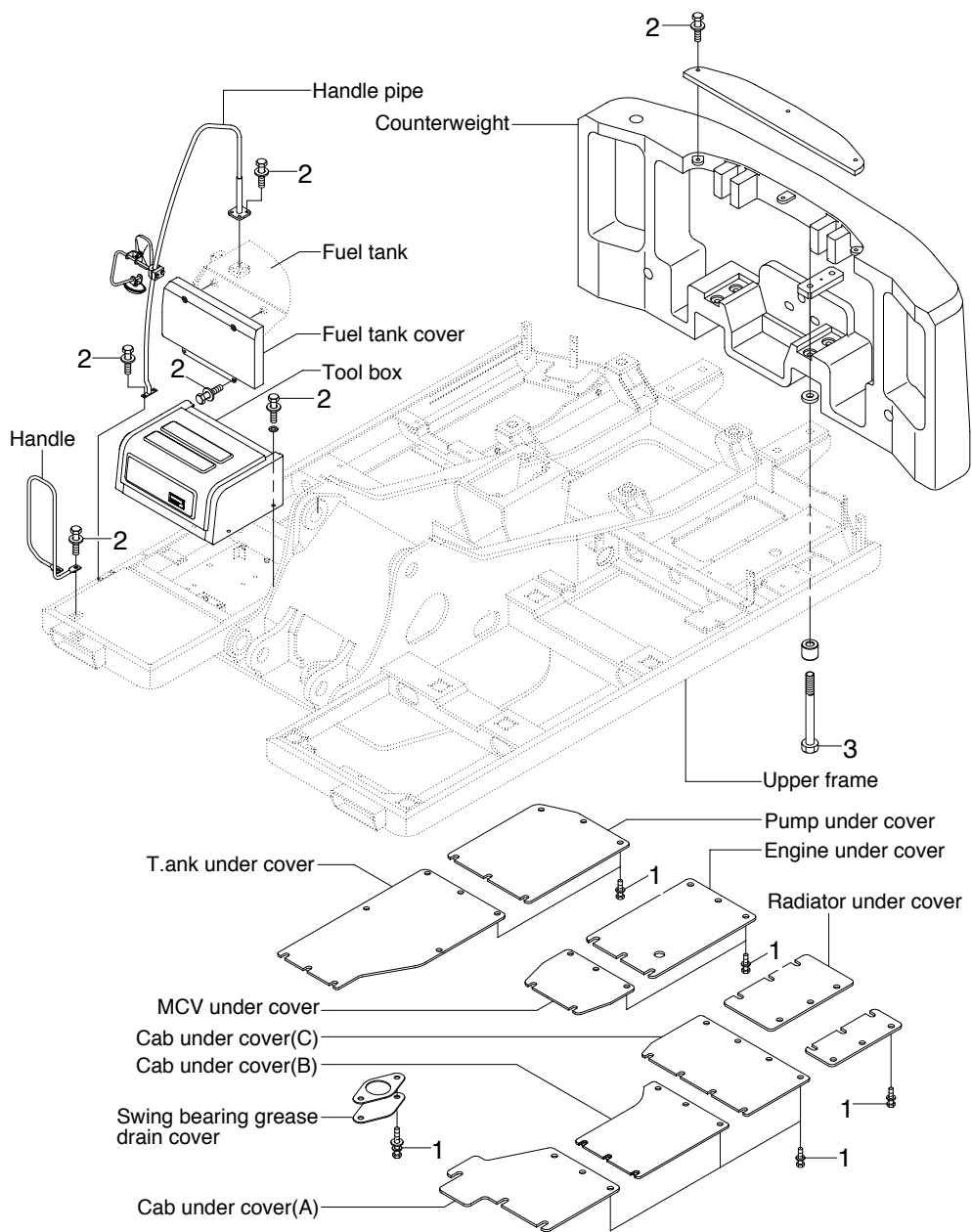
14W79CM11

· 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
-	-	-	-

COUNTERWEIGHT AND COVERS MOUNTING



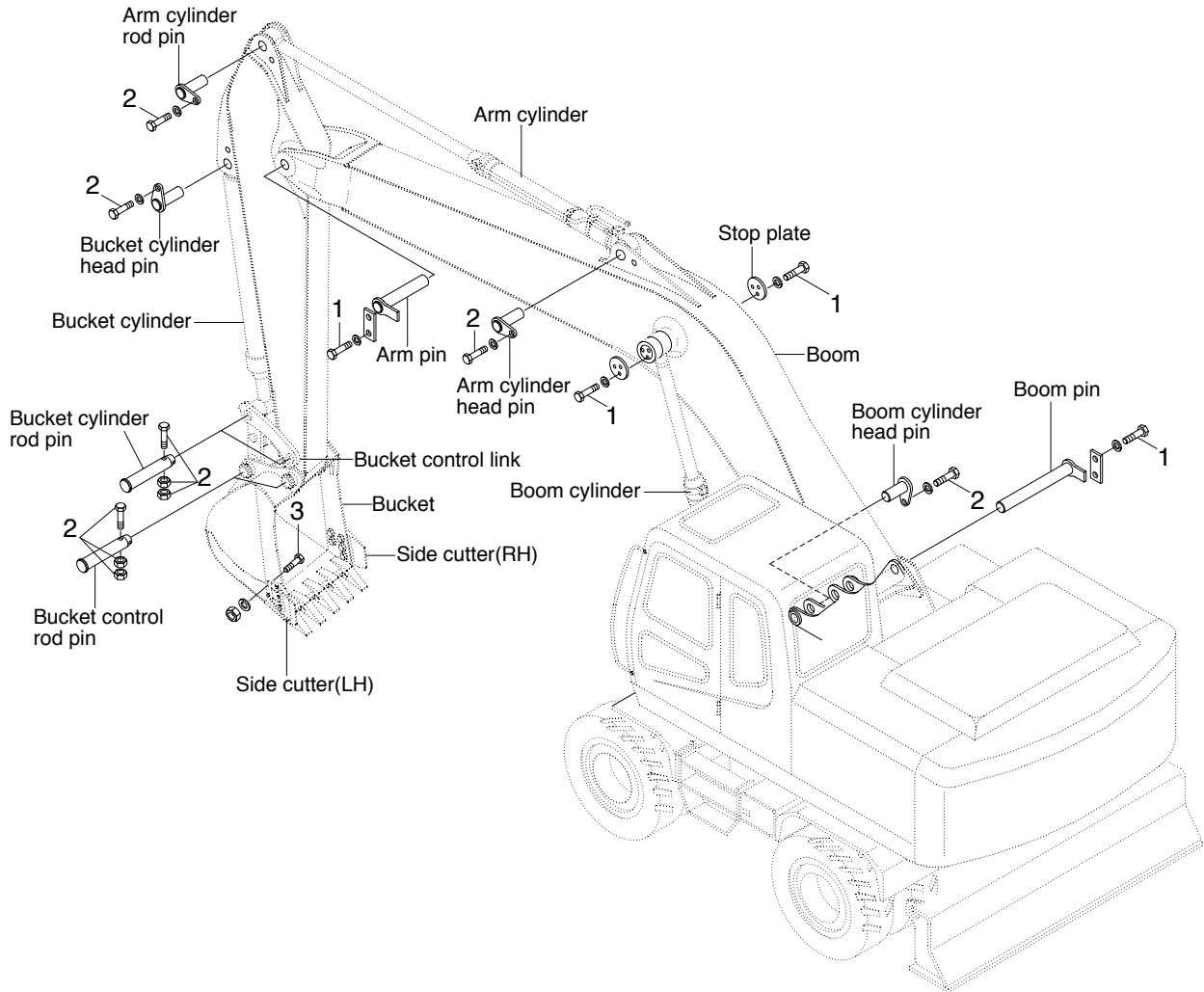
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· Tightening torque

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

Item	Size	kgf · m	lbf · ft
3	M27 × 3.0	140 ± 15	1013 ± 108
-	-	-	-

GROUP 7 WORK EQUIPMENT



14W79CM13

· Tightening torque

Item	Size	kgf · m	lbf · ft
1	M12 × 1.75	12.8 ± 3.0	92.6 ± 21.7
2	M16 × 2.0	29.7 ± 4.5	215 ± 32.5

Item	Size	kgf · m	lbf · ft
3	M20 × 2.5	57.9 ± 8.7	419 ± 62.9
4	M22 × 2.5	55.8 ± 7.5	404 ± 54.2