WSM

WORKSHOP MANUAL
FRONT LOADER

LA344AU

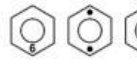
Kubota

KiSC issued 02, 2018 A

TIGHTENING TORQUES

1. General use screws, bolts, and nuts

Tighten screws, bolts, and nuts whose tightening torques are not specified in the Workshop Manual according to the table below.

Indication on top of bolt	 No-grade or 4T						 7T						 9T		
Indication on top of nut	 No-grade or 4T												 6T		
Material of opponent part	Ordinariness			Aluminum			Ordinariness			Aluminum			Ordinariness		
Unit	N·m	kgf·m	lbf·ft	N·m	kgf·m	lbf·ft	N·m	kgf·m	lbf·ft	N·m	kgf·m	lbf·ft	N·m	kgf·m	lbf·ft
M6	7.9 to 9.3	0.80 to 0.95	5.8 to 6.8	7.9 to 8.8	0.80 to 0.90	5.8 to 6.5	9.81 to 11.2	1.00 to 1.15	7.24 to 8.31	7.9 to 8.8	0.80 to 0.90	5.8 to 6.5	12.3 to 14.2	1.25 to 1.45	9.05 to 10.4
M8	18 to 20	1.8 to 2.1	13 to 15	17 to 19	1.7 to 2.0	13 to 14	24 to 27	2.4 to 2.8	18 to 20	18 to 20	1.8 to 2.1	13 to 15	30 to 34	3.0 to 3.5	22 to 25
M10	40 to 45	4.0 to 4.6	29 to 33	32 to 34	3.2 to 3.5	24 to 25	48 to 55	4.9 to 5.7	36 to 41	40 to 44	4.0 to 4.5	29 to 32	61 to 70	6.2 to 7.2	45 to 52
M12	63 to 72	6.4 to 7.4	47 to 53	—	—	—	78 to 90	7.9 to 9.2	58 to 66	63 to 72	6.4 to 7.4	47 to 53	103 to 117	10.5 to 12.0	76.0 to 86.7
M14	108 to 125	11.0 to 12.8	79.6 to 92.5	—	—	—	124 to 147	12.6 to 15.0	91.2 to 108	—	—	—	167 to 196	17.0 to 20.0	123 to 144
M16	167 to 191	17.0 to 19.5	123 to 141	—	—	—	197 to 225	20.0 to 23.0	145 to 166	—	—	—	260 to 304	26.5 to 31.0	192 to 224
M18	246 to 284	25.0 to 29.0	181 to 209	—	—	—	275 to 318	28.0 to 32.5	203 to 235	—	—	—	344 to 402	35.0 to 41.0	254 to 296
M20	334 to 392	34.0 to 40.0	246 to 289	—	—	—	368 to 431	37.5 to 44.0	272 to 318	—	—	—	491 to 568	50.0 to 58.0	362 to 419

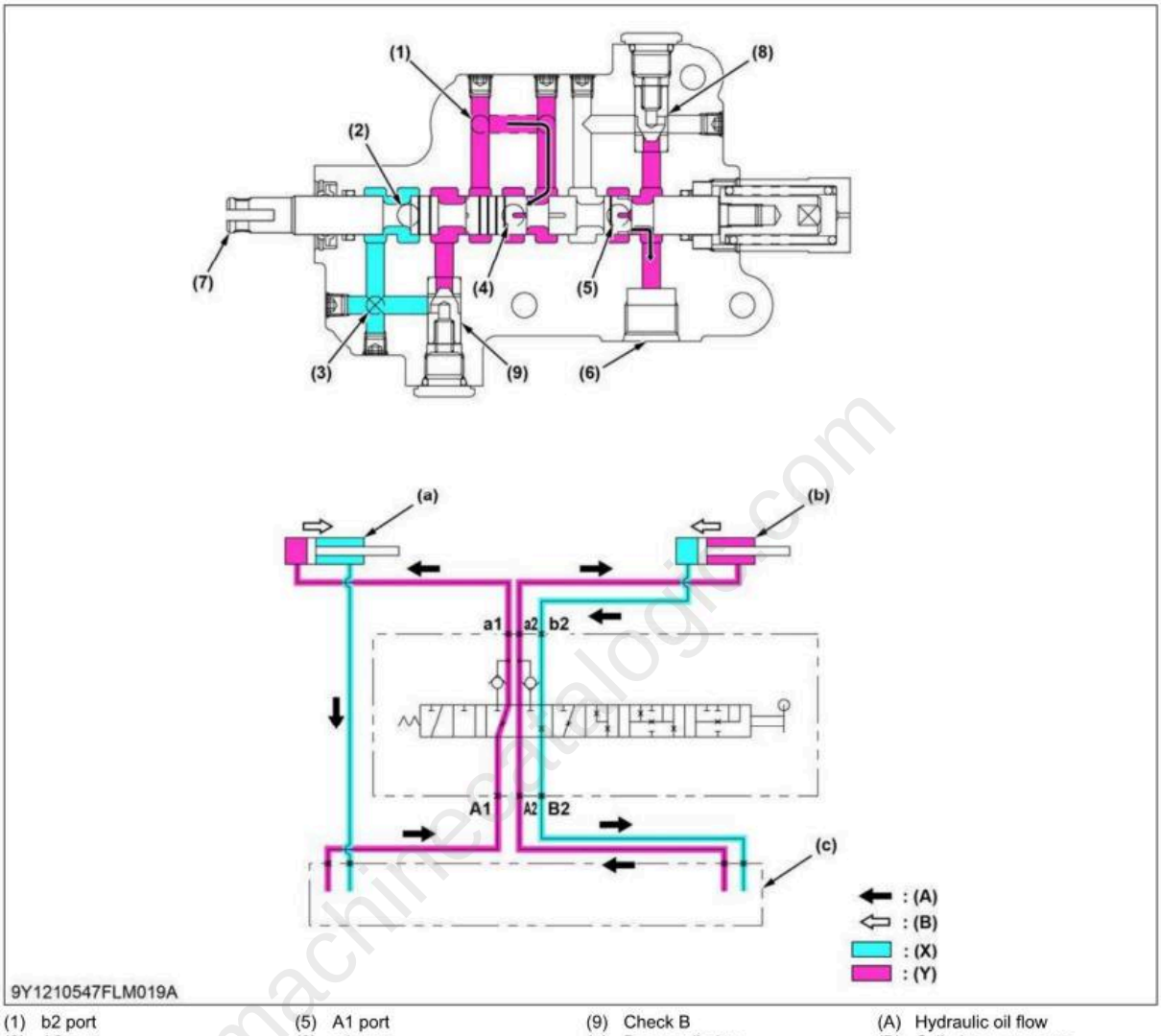
2. Stud bolts

Material of opponent part	Ordinariness			Aluminum		
Unit	N·m	kgf·m	lbf·ft	N·m	kgf·m	lbf·ft
M8	12 to 15	1.2 to 1.6	8.7 to 11	8.9 to 11	0.90 to 1.2	6.5 to 8.6
M10	25 to 31	2.5 to 3.2	18 to 23	20 to 25	2.0 to 2.6	15 to 18
M12	30 to 49	3.0 to 5.0	22 to 36	31	3.2	23
M14	62 to 73	6.3 to 7.5	46 to 54	—	—	—
M16	98.1 to 112	10.0 to 11.5	72.4 to 83.1	—	—	—
M18	172 to 201	17.5 to 20.5	127 to 148	—	—	—

Specification of hydraulic parts

(5)	8.0 L/min. (2.1 U.S.gals/min., 1.8 Imp.gals/min.) to the power steering controller and excessive flow to the front loader
(6)	12.3 to 12.7 MPa (125 to 130 kgf/cm^2, 1780 to 1840 psi)
(7)	23.5 L/min. (6.2 U.S.gals/min., 5.2 Imp.gals/min.)
(9)	1.0 to 1.3 MPa (11 to 13 kgf/cm^2, 150 to 180 psi)
(16)	8.34 to 8.82 MPa (85.0 to 90.0 kgf/cm^2, 1210 to 1280 psi)
(17)	20.1 to 21.1 MPa (205 to 215 kgf/cm^2, 2920 to 3060 psi)
(18)	0.55 to 0.75 MPa (5.6 to 7.7 kgf/cm^2, 80 to 100 psi)

8.4.2.2 Spool 2 to 3 mm from neutral position



(1) b2 port	(5) A1 port	(9) Check B	(A) Hydraulic oil flow
(2) A2 port	(6) a1 port	(a) Boom cylinder	(B) Cylinder movement
(3) a2 port	(7) Spool	(b) Bucket cylinder	(X) Low pressure
(4) B2 port	(8) Check A	(c) Control valve	(Y) Middle pressure

The above figure shows an oil pressure circuit chart. The control valve (c) is in boom up and bucket.

Roll-back

Hydraulic oil passage between A1 port (5) and a1 port (6) is open.
Hydraulic oil passage between A2 port (2) and a2 port (3) is open.
Hydraulic oil passage between B2 port (4) and b2 port (1) is open.

(Boom up condition)

Hydraulic oil flows from A1 port (5) to a1 port (6) through the orifice.

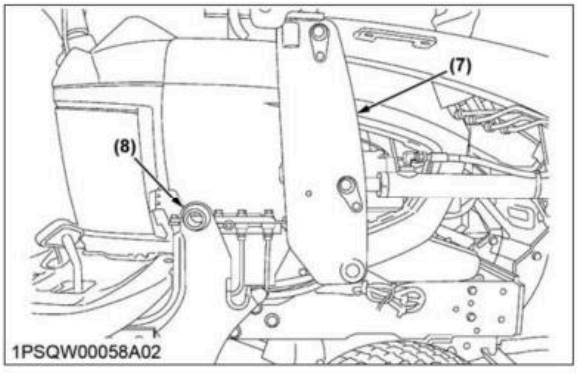
(Boom down condition)

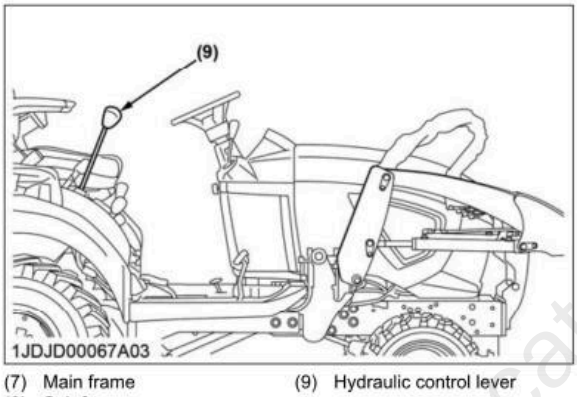
Hydraulic oil flows from a1 port (6) to A1 port (5) through the orifice.

(Bucket roll-back condition)

Hydraulic oil flows from A2 port (2) to a2 port (3). At this time, hydraulic oil flows from b2 port (1) to B2 port (4) through the orifice.

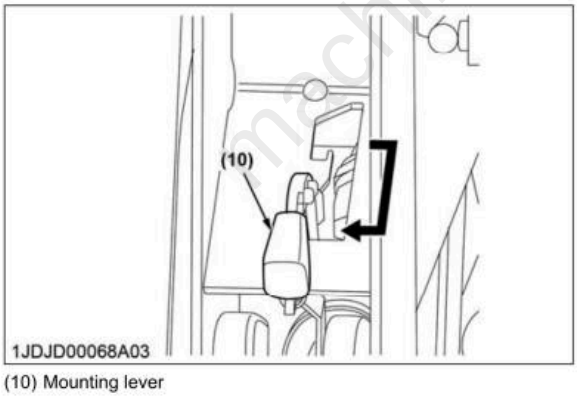
7. Slowly move the hydraulic control lever (9) to the rollback position to raise the side frames of the loader up and out of the receivers of the main frames (7) as shown in the following figure.





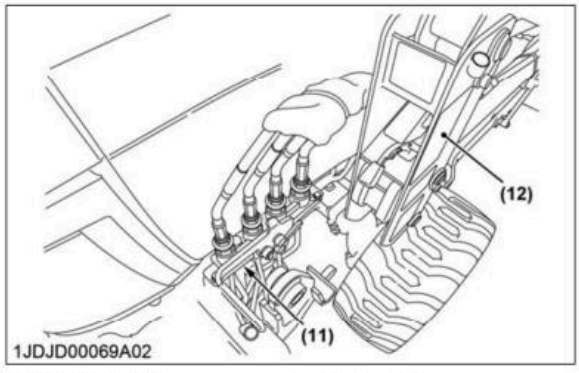
(7) Main frame
(8) Sub frame
(9) Hydraulic control lever

8. Down the mounting levers (10) of both sides as shown in the following figure.



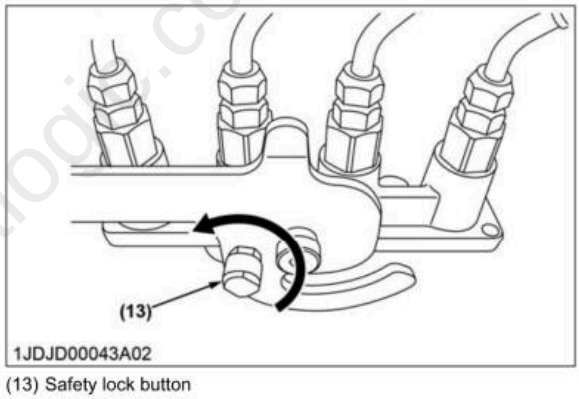
(10) Mounting lever

9. Back the tractor so that the quick coupler (11) is set at the back of side frame (12) as shown in the following figure.



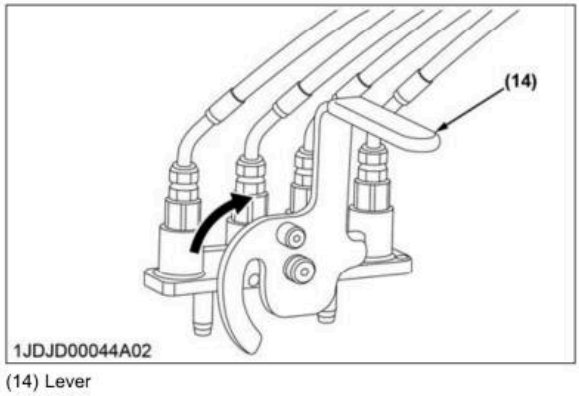
(11) Quick coupler
(12) Side frame

10. Stop the engine, and slowly release all hydraulic pressure by moving the hydraulic control lever in all directions.
11. Unfasten the seat belt, and then turn the safety lock button (13) counter-clockwise to unlock it.



(13) Safety lock button

12. Raise the lever (14) until it stops.



(14) Lever

Full Version Available

Kubota LA344AU Front Loader Workshop Manual

This is a short preview. The complete manual contains all chapters, wiring diagrams, torque specifications and full service procedures.