




Loader manual

BL150(C)

Loader	Tractor	
BL150(C)	15 Series	
No.	Date	
	2022.01.26	

► METRIC FASTENER(ISO) TORQUE CHART

Note: Use these torques. Unless special torques are specified. Values are for UNF thread fastener, plated or un-plated as received from supplier. Fasteners can be dry or lubricated with normal engine oil. Values do not apply if graphite, moly-disulphide or other extreme pressure lubricant is used.

ISO Class No.	8.8				10.9				12.9			
Bolt head identification (see note 1)												
Bolt size	LB FT		NM		LB FT		NM		LB FT		NM	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
M4	2	3	3	4	3	4	4	5	Because of the low ductility of these fasteners, the torque range is to be determined individually for each application. As a general rule, the torque ranges specified for grade 10.9 fasteners can be used satisfactorily on 12.9 fasteners *M14 is not a preferred Size.			
M5	5	6	6.5	8	7	8	9.5	11				
M6	8	9	10.5	12	11	13	15	17.5				
M8	19	23	26	31	27	32	37	43				
M10	38	45	52	61	54	64	73	87				
M12	66	79	90	75	93	112	125	150				
*M14	106	127	144	172	149	179	200	245				
M16	160	200	217	271	230	280	310	380				
M20	320	380	434	515	450	540	610	730				
M24	500	600	675	815	780	940	1050	1275				
M30	920	1100	1250	1500	1470	1770	2000	2400				
M36	1600	1950	2175	2600	2580	3090	3500	4200				

► Hydraulic hose fitting torque

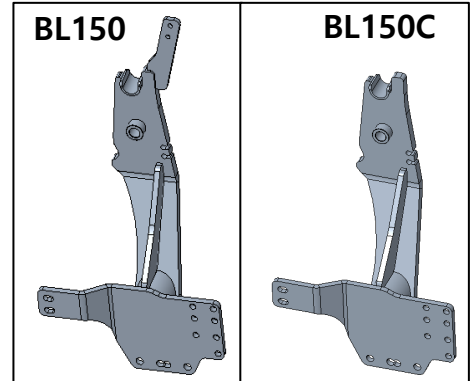
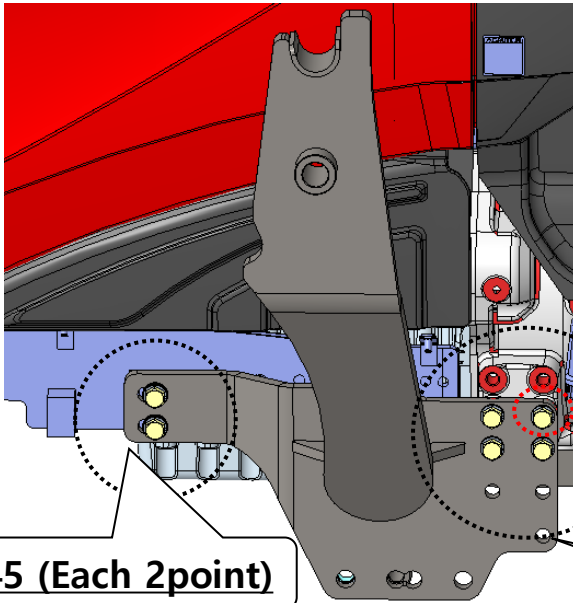
: 1/4" : 250 kgf-cm, 3/8" : 500 kgf-cm, 1/2" : 600 kgf-cm

► **Mounting frame assembly**

1) Assemble Loader Mounting Frame COMP , LH/RH

a. Assemble Loader Mounting COMP (**81071001000DB/LH , 81071002000D /RH (BL150)**
81081002000DB /RH (BL150C))
 to axle frame and Front TM case.

- assembly Bolt **M16X45 (Each 6point) + M16 SW**



M16X35 (1 point, only LH)

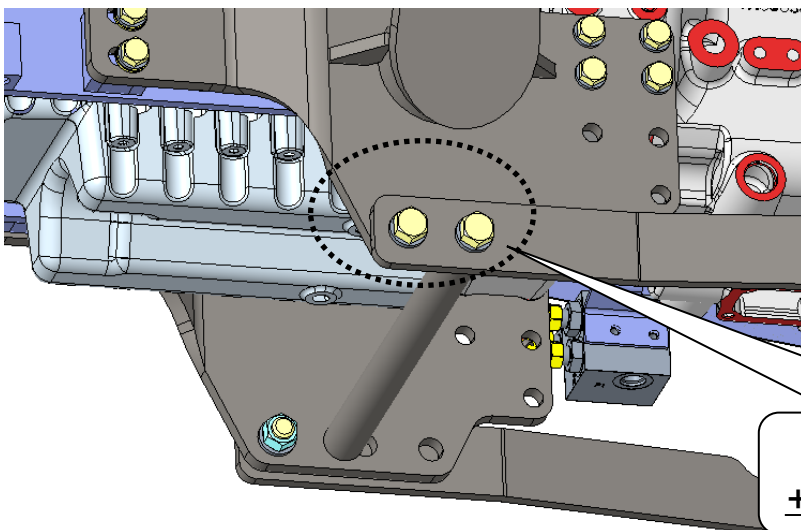
M16X45 (Each 2point)

M16X45 (Each 4point)

2) Assemble Cross bar comp (81101003011DB) and rear Frame LH , RH

a. Assemble Loader Mounting frame LH to Mounting frame RH

- assembly Bolt : **M20X60 (4point) + M20 S/W (6 point) + M20 Nut (2 point)**



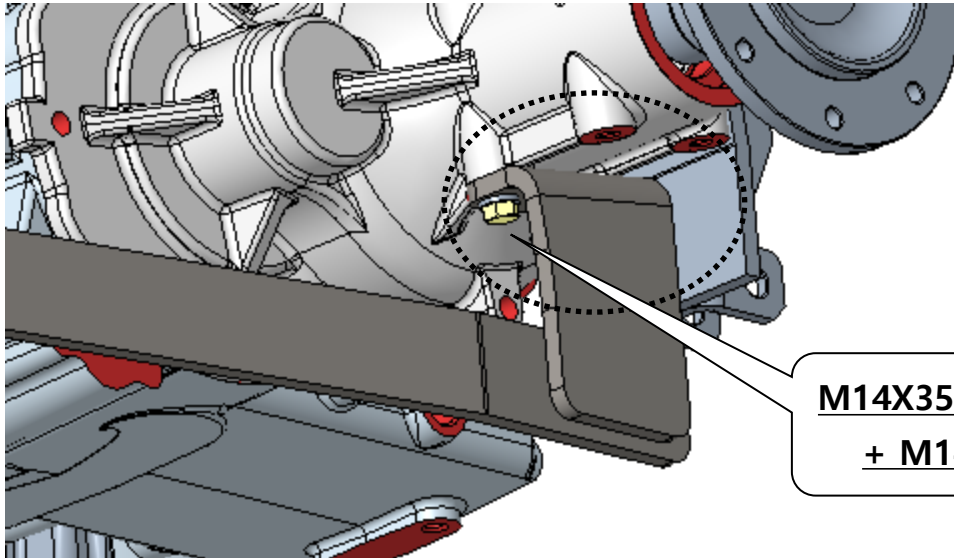
**M20x60 (4point)
 + M20 S/W + M20 Nut**

► **Mounting frame assembly**

2) **Assemble Cross bar comp and rear Frame LH , RH**

b. Assemble Loader Rear frame COMP (**81051004001DB/LH, 81051005002DB/RH**)
to Mounting frame and Rear axle.

- Rear Axle assembly Bolt **M14X35 (Each 2point) + M14 S/W**

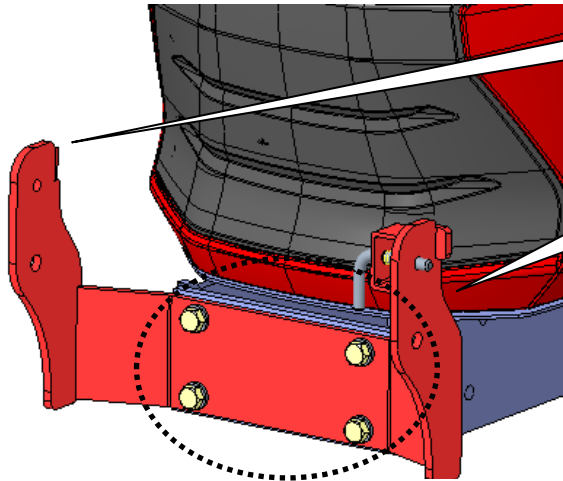


► **Mounting frame assembly**

3) Assemble Loader grill guard assy

a. Assemble to Bracket, Grill guard after removing the tractor support and weight

- **Bracket comp , Grill guard (81051006101BR)**
- **Plate comp , Grill guard (81051006202BR)**
- **Assembly Bolt : M16X45 (4point) + M16 S/W**



Bracket comp , Grill guard

**M16X45 (4point)
+ M16 S/W**

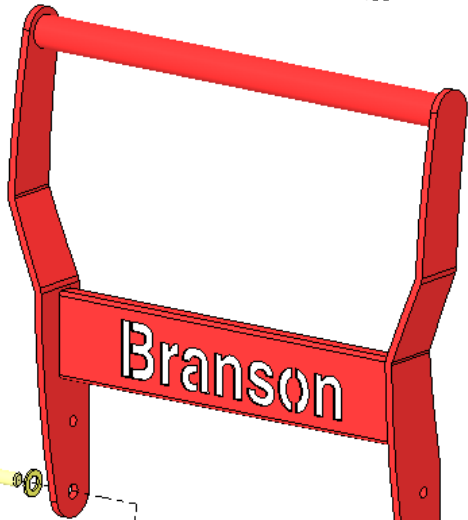
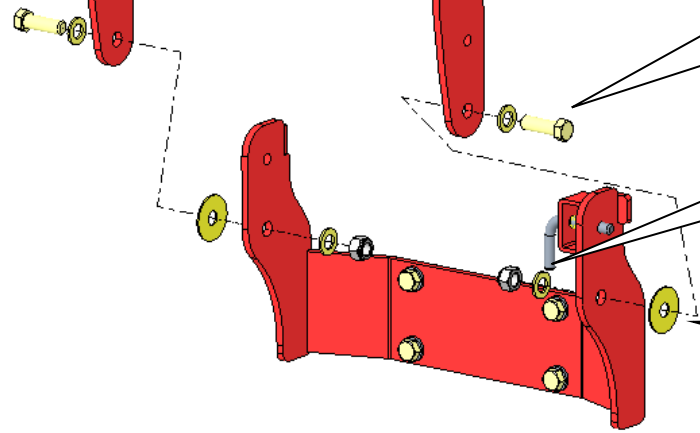


Plate comp , Grill guard

M16X50 (4point)+ M16 plain washer

**M16 plain washer
+ U Nut 86702000160**

**81101006030 ,
WASHER(16.3X52X2)**



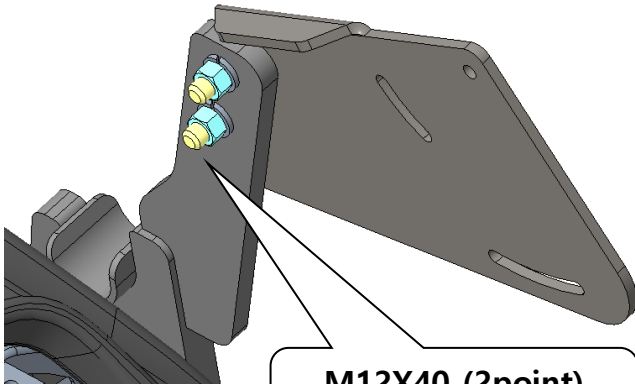
► **LOADER VALVE ASSEMBLY**

For BL150 (ROPS type)

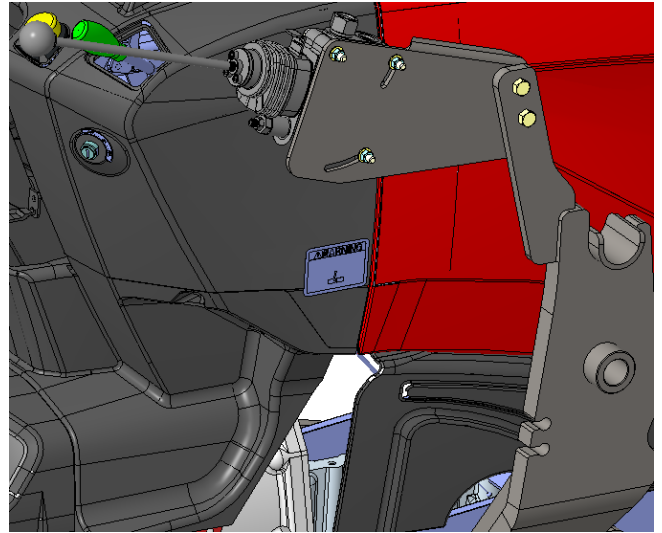
1) **Assemble plate(valve) (81051007112DB)**

a) Assemble to plate(valve) and Mounting frame(RH) COMP

: **Bolt M12x40 (2point) + M12 S/W**



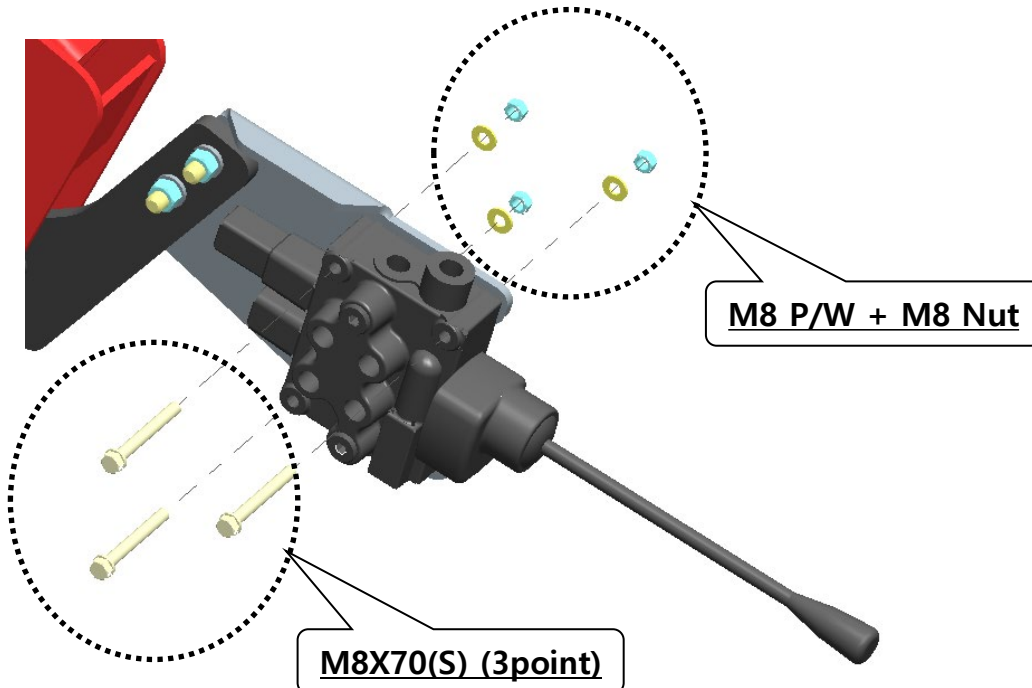
**M12X40 (2point)
+ M12 S/W and Nut**



2) **Assemble loader valve (8105-300-500-3)**

a) Assemble to plate(valve) and loader one handle joystick valve

: **Bolt M8x70(S) (3point) + M8 P/W + M8 Nut**



M8X70(S) (3point)

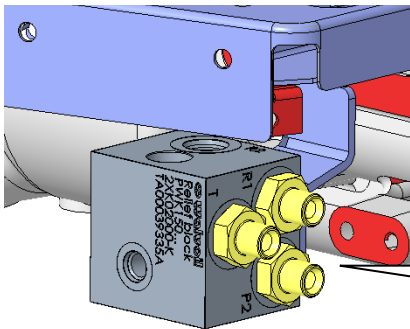
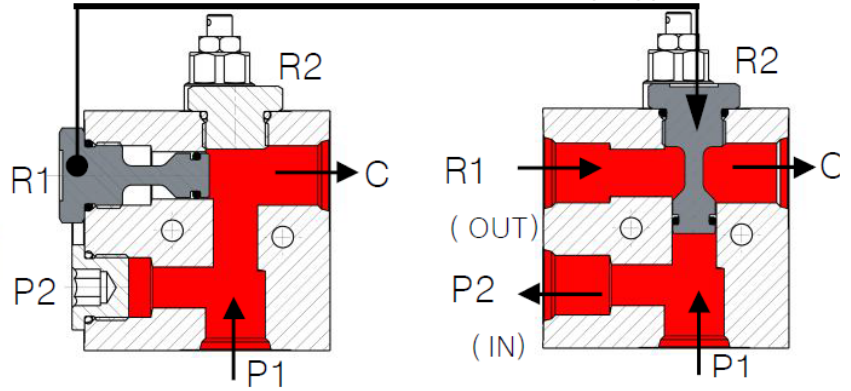
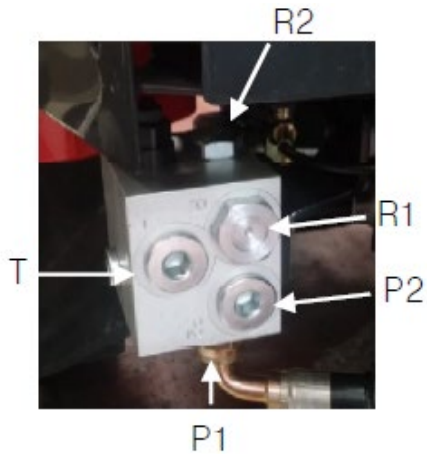
M8 P/W + M8 Nut

For BL150 (ROPS type)

3) Assemble hydraulic connection Part and loader valve SUB :

a) After removing the cap of the hydraulic valve, assemble the union.

replace



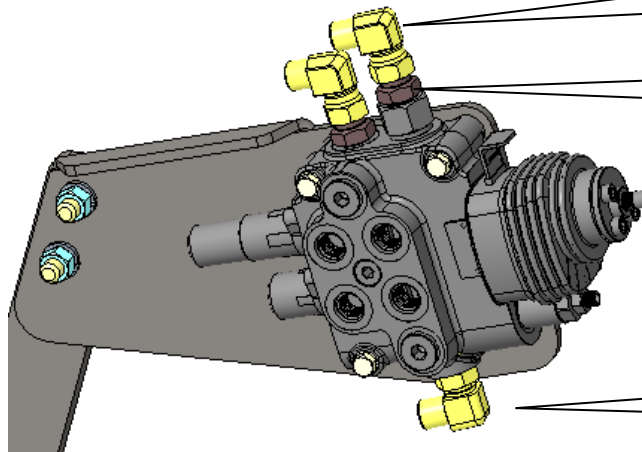
**UNION , PF1/2-PF3/8 , 3EA
8108-501-020-0**

b) Assemble Union (PF3/8) and Elbow to valve.

**Elbow (PF3/8) , 3EA
8750-300-503-0**

**Union (PF3/8) , 3EA
8010-210-911-0**

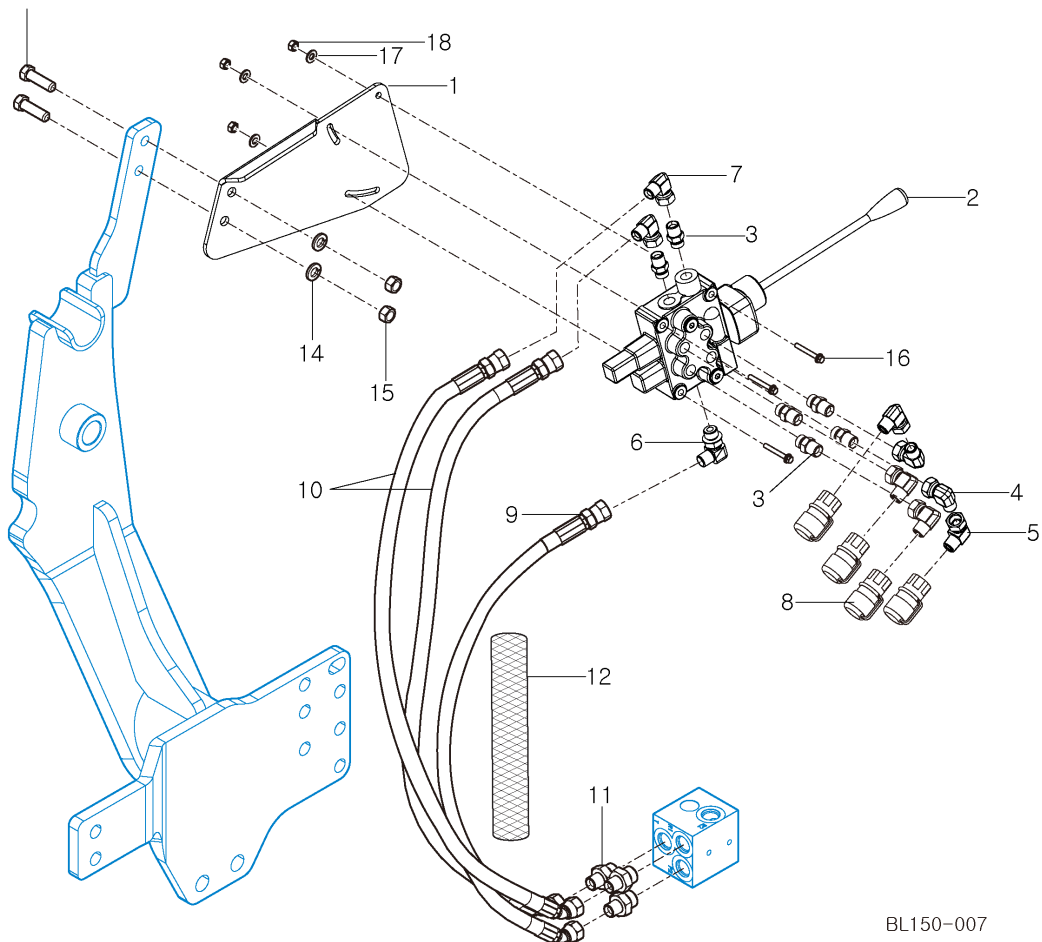
**Elbow (PF3/8) , 3EA
3631-353-002-1**



For BL150 (ROPS type)

Install Hydraulic Line < for BL150 >

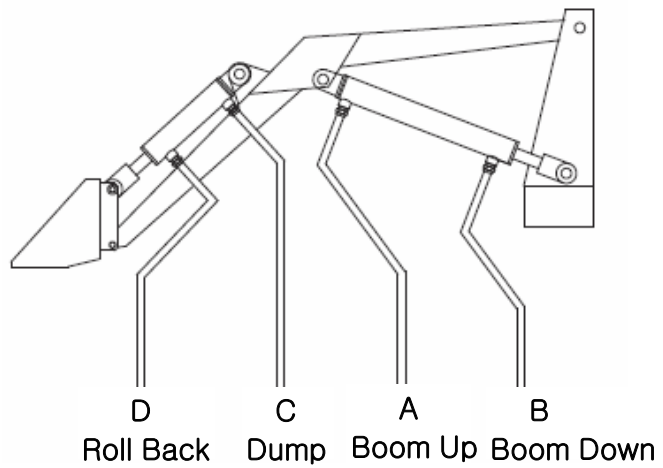
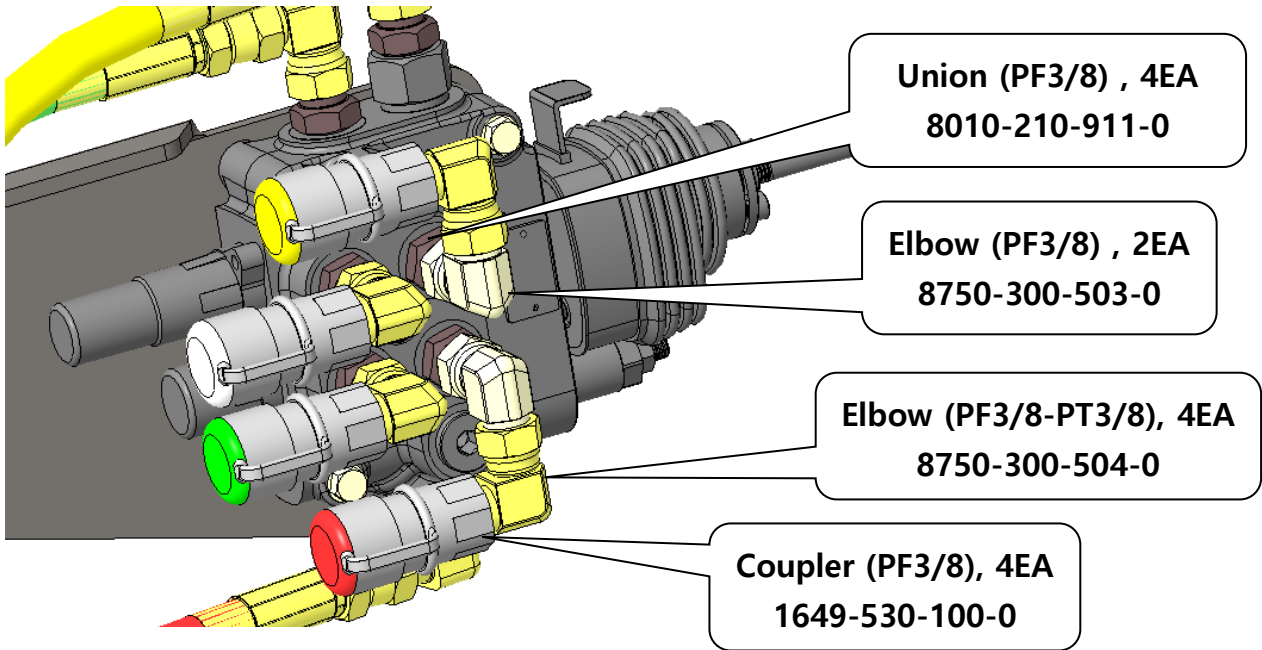
- (1) Valve Plate : 1EA
- (2) Valve (Joystick) ASS'Y : 1EA
- (3) Union PF3/8 : 6EA
- (4) Elbow PF3/8 : 2EA
- (5) Elbow PF3/8- PT3/8 : 4EA
- (6) Elbow PF3/8 : 1EA
- (7) Elbow PF3/8 : 2EA
- (8) Coupler PT3/8 : 4EA
- (9) Hydraulic Hose 900L PF3/8, 45 : 1EA
- (10) Hydraulic Hose 1050L PF3/8, 45 : 2EA
- (11) Union PF1/2 – PF3/8 : 3EA
- (12) Cover , Hose : 1EA
- (13) Hex Head Bolt M12X1.75PX40L : 2EA
- (14) Spring Washer Ø12 : 2EA
- (15) Hex Head Nut M12X1.75P : 2EA
- (16) Hex Head Bolt M8X1.25PX70L : 3EA
- (17) Plain Washer Ø8 : 3EA
- (18) Hex Head Nut M18X1.25P : 3EA



4) Assemble cylinder hyd hose

For BL150 (ROPS type)

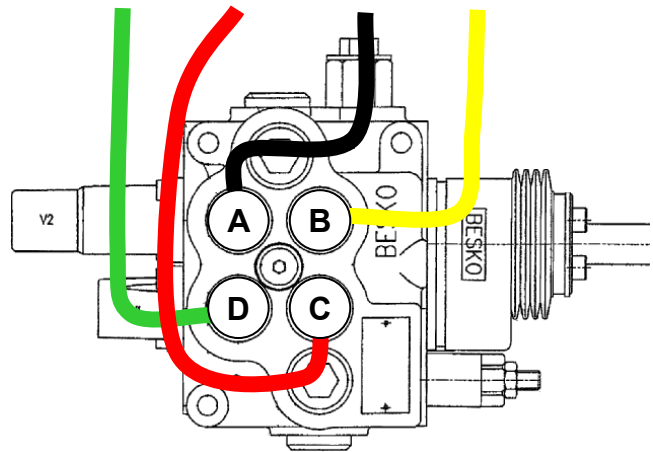
*Note) Assemble to elbow and coupler after wind the teflon tape



Hyd hose color tag

A : Black B : Yellow

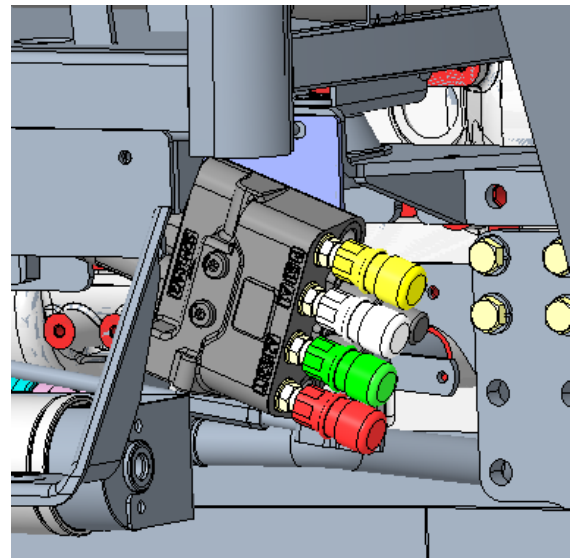
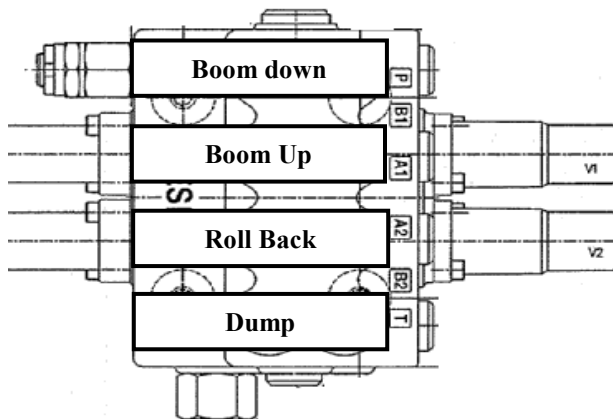
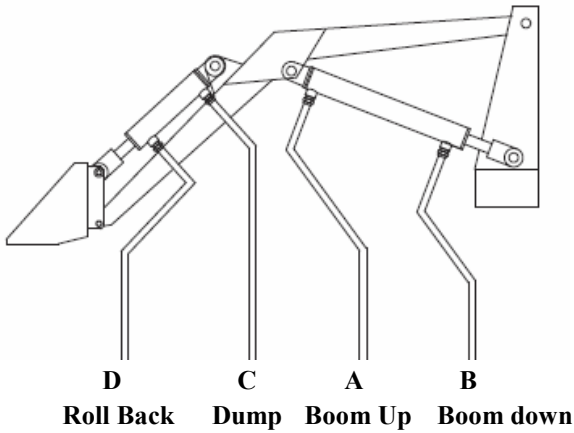
C : Red D : Green



5) Assemble cylinder hyd hose

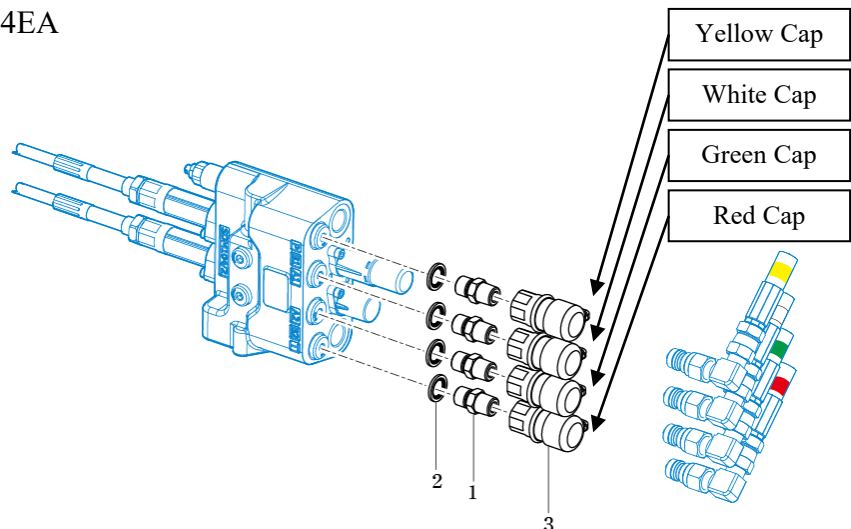
For BL150C (Cabin type)

*Note) Assemble to elbow and coupler after wind the teflon tape



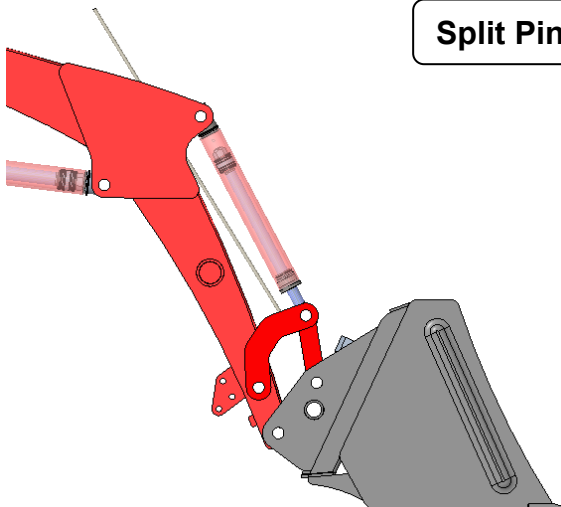
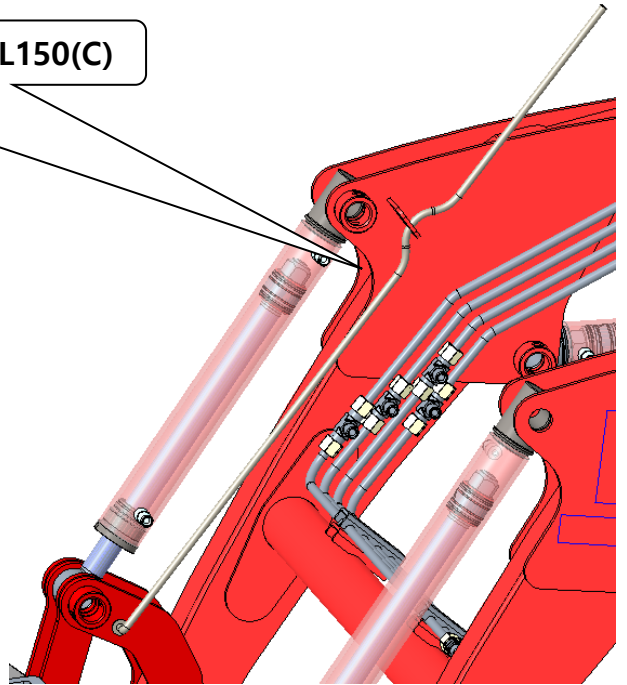
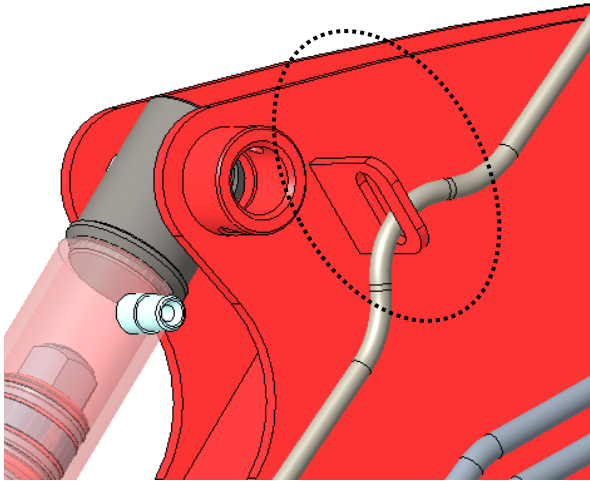
Install Hydraulic Line. < for BL150C >

- (1) Union PF3/8 –PT3/8: 4EA
- (2) Seal: 4EA
- (3) Coupler PT3/8 : 4EA

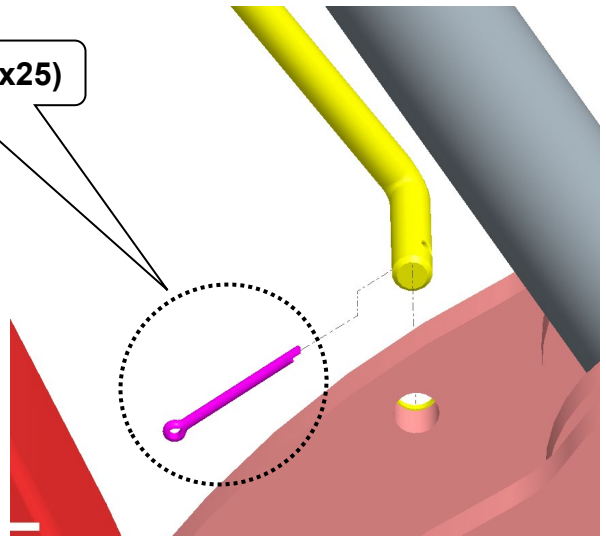


► Assemble Indicator

Indicator (1220 mm) 81353004100 for BL150(C)

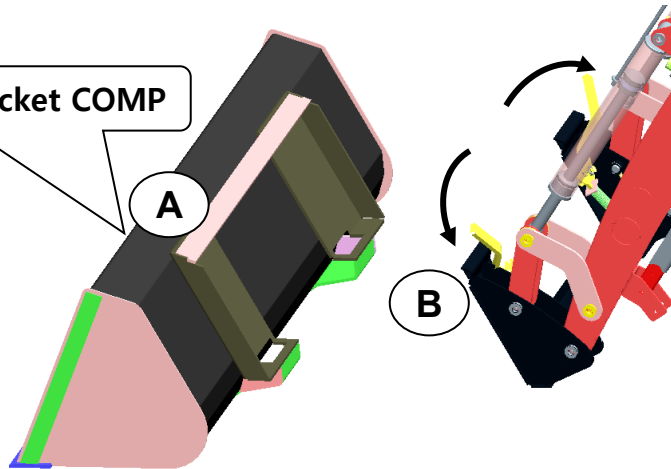


Split Pin (2.5x25)

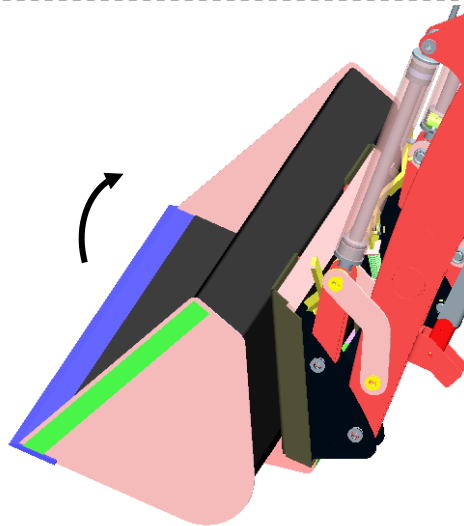


► Assemble Bucket COMP

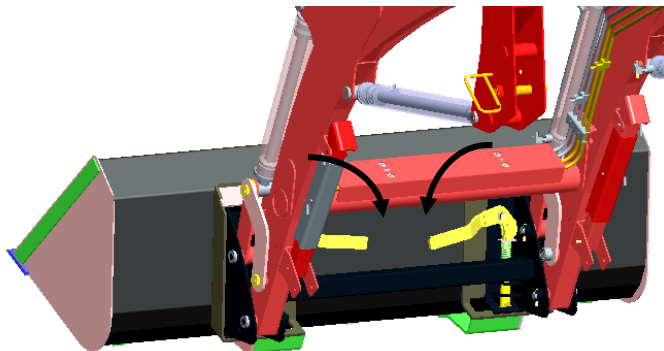
81054001004GB, Bucket COMP



- 1) Operate the quick attach two lever to the outside from the inside.
- 2) Install the Bucket 'A' to the Quick attach 'B' using hoist or any proper tools.



- 3) Operate joystick to the Bucket rollback.



- 4) Operate the Quick attach lever to the inside