

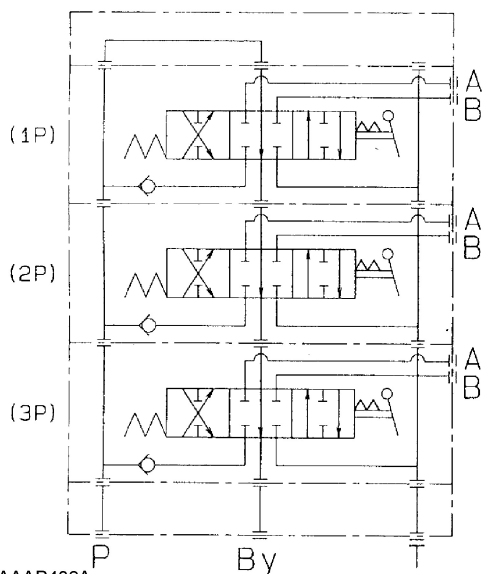
INSTRUCTION MANUAL

DOUBLE ACTING REMOTE HYDRAULIC CONTROL VALVE ASSEMBLY for KUBOTA TRACTOR MX4900 / MX5400 / MX6000 with ROPS

These remote valve assemblies are used to take hydraulic power out of the tractor hydraulic system and to send it by way of hydraulic hoses to an implement to be actuated.

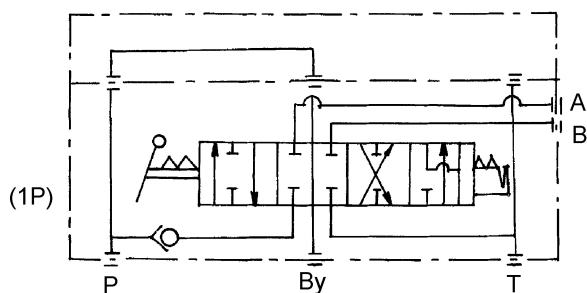
1. HYDRAULIC CIRCUIT DIAGRAM

■ Standard Type



1AGAMAAAP408A

■ Floating Type



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NOTE :

- The floating valve can be attached as the second segment only.

2. STANDARD

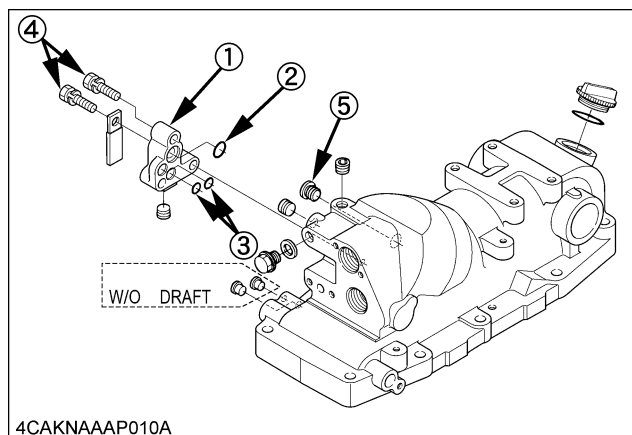
- (1) Hydraulic coupler joint : NPSF 1/2"
- (2) Max. pressure (tractor's relief valve) :
18.1 MPa (185 kgf/cm², 2632 psi)
- (3) Max. Flow rate :
35.8 L/min. (37.8 U.S.qts.)

3. ASSEMBLY PROCEDURE

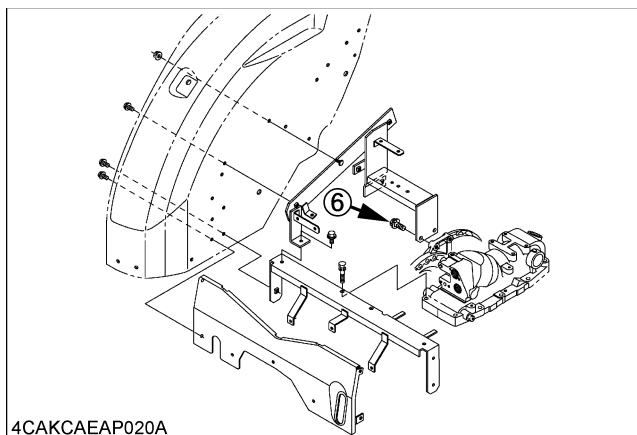
Check service package kit with attached parts list to be certain all parts are included in the service package.

A. Prior to Mounting Remote Valve Unit, Remove the Following Parts.

- | | |
|---------------------|--------|
| (1) Cyl. side cover | 1 pc. |
| (2) O-ring | 1 pc. |
| (3) O-rings | 2 pcs. |
| (4) Bolts | 3 pcs. |
| (5) Plug | 1 pc. |
| (6) Bolts | 2 pcs. |



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B. COUPLER COMPATIBILITY

■ WG# and Coupler Versions

Remote Hydraulic	WG#	Previous/New	Part Number of Coupler		Model Code
			Coupler (Female)	Coupler (Male)	
1st. Remote Hydraulic	MX6881	Previous-type	35861-8200-0	35861-8219-2	TC860-98151
	MX6881A	New-type	TC830-9602-0	TC830-9606-0	
2nd. Remote Hydraulic	MX6882	Previous-type	35861-8200-0	35861-8219-2	TC860-98181
	MX6882A	New-type	TC830-9602-0	TC830-9606-0	
3rd. Remote Hydraulic	MX6883	Previous-type	35861-8200-0	35861-8219-2	TC860-98191
	MX6883A	New-type	TC830-9602-0	TC830-9606-0	

NOTE :

- When customers have previous-type couplers and add a valve, please purchase previous-type couplers.
- It is not possible to assemble previous-type couplers and new-type couplers.

C. Assembling Remote Valve Unit According to the Following Procedure. (Refer to the Attached Parts List.)

1. Place the label ((1) and (2)) on the hyd. lever guide (A).
2. Place the label ((3) or (4) or (5)) on the frame support (B).
3. Apply grease to the O-rings ((6), (7), (8), (9), (10)) and place in the O-ring grooves on the pipe assembly (11) and return pipe (12).
Assemble the parts ((11), (13) and (C)) by tightening the bolts (14).
◆ Tightening torque : 22.5 to 24.5 N·m (2.3 to 2.4 kgf·m, 16.6 to 18.1 lbf·ft.)

* To add another valve, take the following steps. Disconnect the hydraulic hoses; remove the valve assemblies ((13) and (C)) from the tractor; remove the bolts (14); place the added valve in between; tighten up the 2nd-gang and 3rd-gang bolts ((15) and (16)); finally take the below steps 8 to 12.
4. Attach the return pipe (12) to the remote valve assembly.
5. Attach the remote valve assembly to the hydraulic cylinder (D) with the bolts (17). Do not tighten the bolts.
6. Attach the valve stay (18) on the floor sheet support (E) and remote valve assembly with the bolts ((19), (20)).
7. Tighten the bolts ((17), (19), (20)).
◆ Tightening torque :

M10 x 30	48.1 to 55.9 N·m (4.9 to 5.7 kgf·m, 35.5 to 41.2 lbf·ft.)
M8 x 20, M8 x 35	23.5 to 27.5 N·m (2.4 to 2.8 kgf·m, 17.3 to 20.3 lbf·ft.)
M12 x 35	77.5 to 90.2 N·m (7.9 to 9.2 kgf·m, 57.2 to 66.5 lbf·ft.)
8. Cut the lever tube (21) moderately.
 - Original : 130 mm (5.1 in.)
 - For 1st. lever : 85 mm (3.3 in.)
 - For 2nd. lever : 110 mm (4.3 in.)
 - For 3rd. lever : 130 mm (5.1 in.) *Same as original
9. After installing the lever grip (22) and lever tube (21), attach the control lever ((23), (24), (25)) to the remote valve assembly with the joint pins (26), plain washers (27) and split pins (28).

[Previous-type couplers]

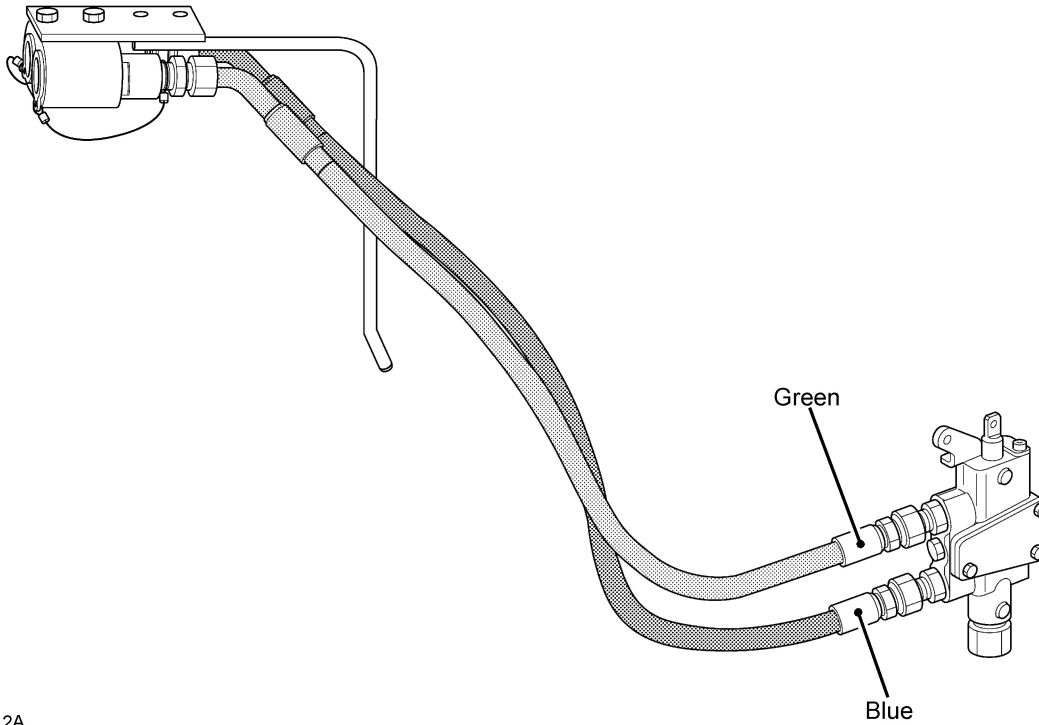
Whole goods number (WG#): MX6881, MX6882, MX6883

10. Attach the coupler stay ((29), (42)) to the rear of frame support with the bolts (30).
◆ Tightening torque : 23.5 to 27.5 N·m (2.4 to 2.8 kgf·m, 17.3 to 20.3 lbf·ft.)
11. Attach the couplers (31) and holder (32) to the coupler stay (29) with the bolts ((33) or (34) or (35)), spring washers (36) and nuts (37).
◆ Tightening torque : 23.5 to 27.5 N·m (2.4 to 2.8 kgf·m, 17.3 to 20.3 lbf·ft.)
12. Tighten the hydraulic hoses ((38), (39) or (40), (40) or (41), (41)) securely to the remote valve and couplers (32) to avoid oil leakage. (Refer to the following drawings.)
◆ Tightening torque : 49.0 to 58.9 N·m (5.0 to 6.0 kgf·m, 36.2 to 43.4 lbf·ft.)

NOTE :

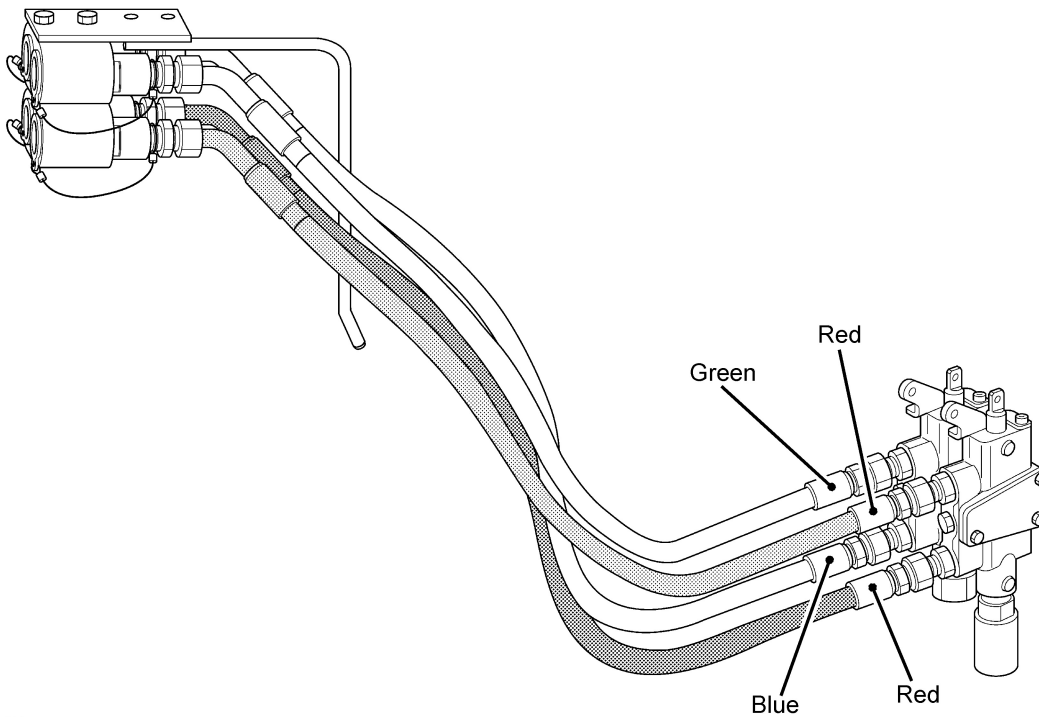
- Make sure the hydraulic hoses and 3P link do not interfere each other with the hose guide of coupler stay (29).
- When installing the hydraulic hoses, be sure not to confuse the colors of the hydraulic hoses.

■ 1st. Remote Hydraulic [Whole goods number (WG#): MX6881]



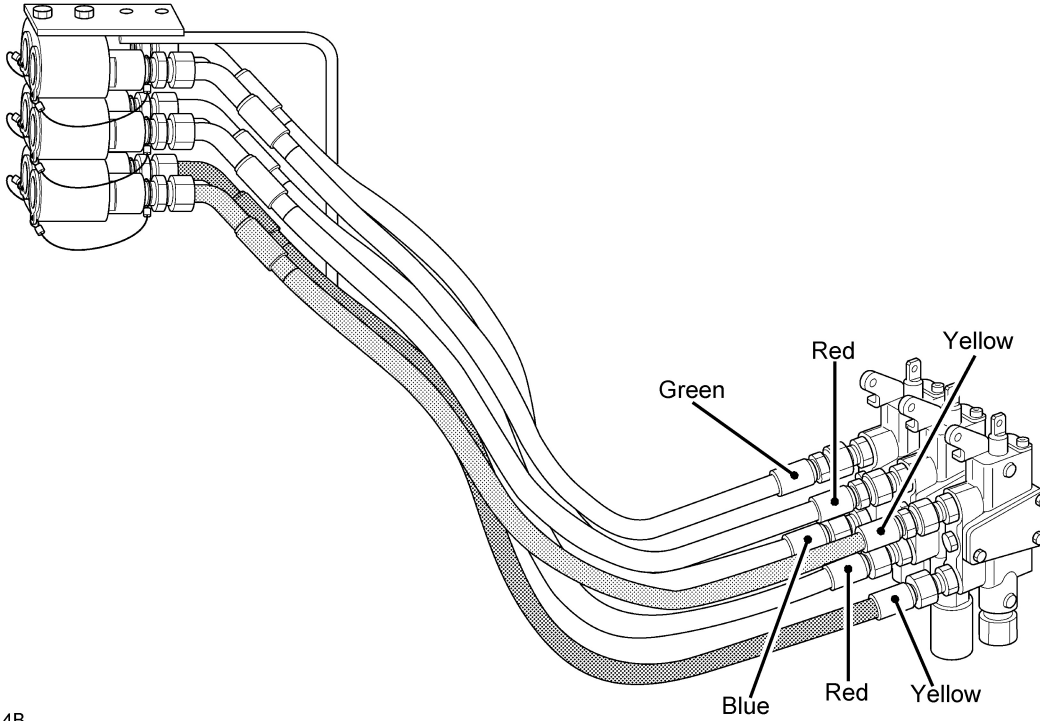
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■ 2nd. Remote Hydraulic [Whole goods number (WG#): MX6881, MX6882]



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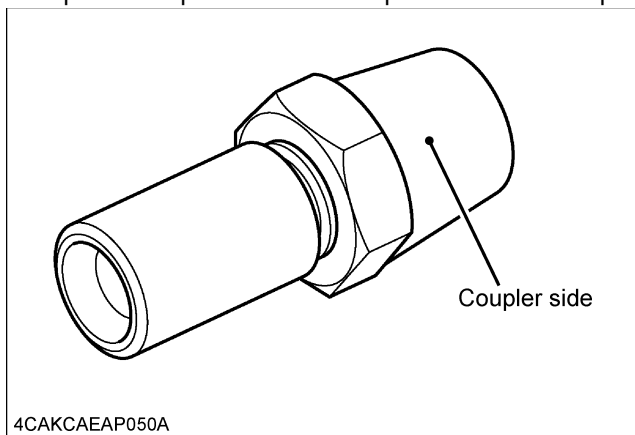
■ 3rd. Remote Hydraulic [Whole goods number (WG#): MX6881, MX6882, MX6883]



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[New-type couplers]**Whole goods number (WG#): MX6881A, MX6882A, MX6883A or later**

10. Attach the coupler stay ((42), (47)) to the rear of frame support with the bolts (30).
 - ◆ Tightening torque : 23.5 to 27.5 N·m (2.4 to 2.8 kgf·m, 17.3 to 20.3 lbf·ft.)
11. Install the bracket (48) to the coupler stay (47) with the bolts (49).
 - ◆ Tightening torque : 23.5 to 27.5 N·m (2.4 to 2.8 kgf·m, 17.3 to 20.3 lbf·ft.)
12. Wrap a seal tape around the coupler side of the adapter (50).

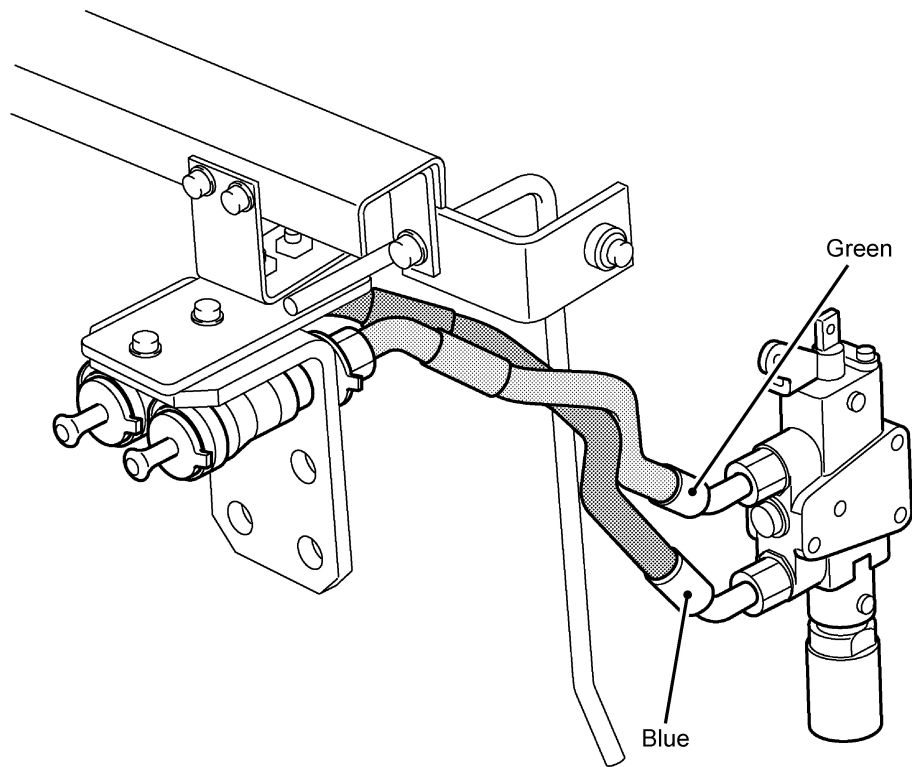


13. Attach the adapters (50) to the bracket (48) with the nuts (51).
 - ◆ Tightening torque : 34.0 to 40.0 N·m (3.5 to 4.1 kgf·m, 25.1 to 29.5 lbf·ft.)
14. Attach the coupler (52) to the adapter (50) by hand. Then tighten it an additional 1 and a half turns.
15. Attach the plugs (53), tighten the hydraulic hoses ((38), (39) or (40), (40) or (41), (41)) securely to the remote valve and adapters (50) to avoid oil leakage. (Refer to the following drawings.)
 - ◆ Tightening torque : 49.0 to 58.9 N·m (5.0 to 6.0 kgf·m, 36.2 to 43.4 lbf·ft.)

NOTE :

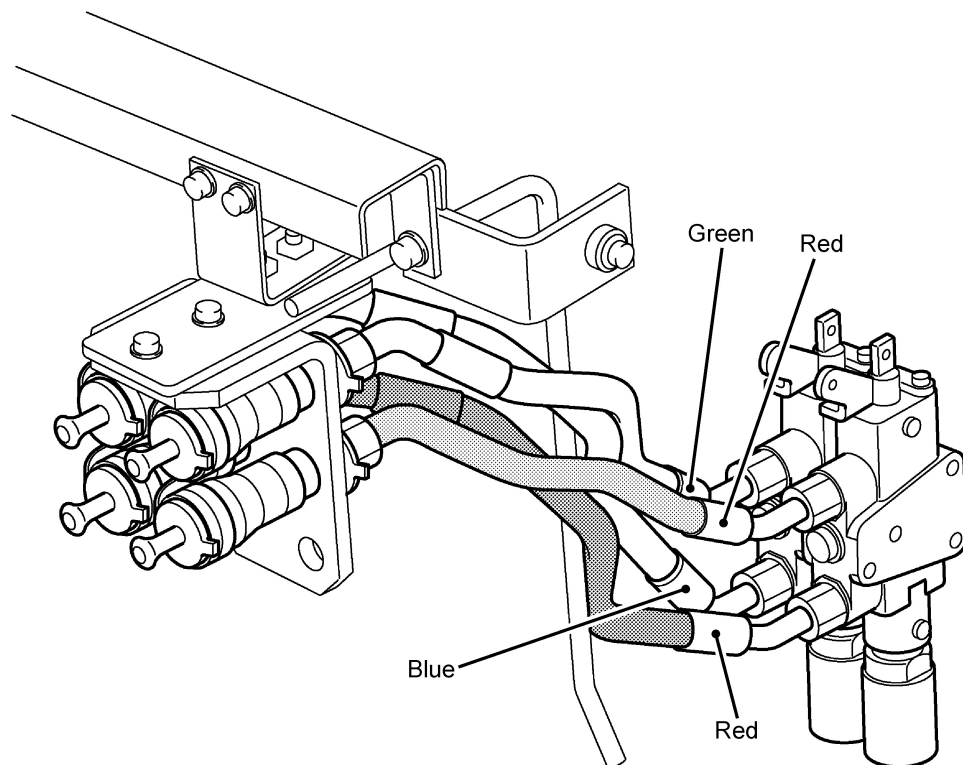
- Make sure the hydraulic hoses and 3P link do not interfere each other with the coupler stay (47).
- When installing the hydraulic hoses, be sure not to confuse the colors of the hydraulic hoses.

■ 1st. Remote Hydraulic [Whole goods number (WG#): MX6881A or later]



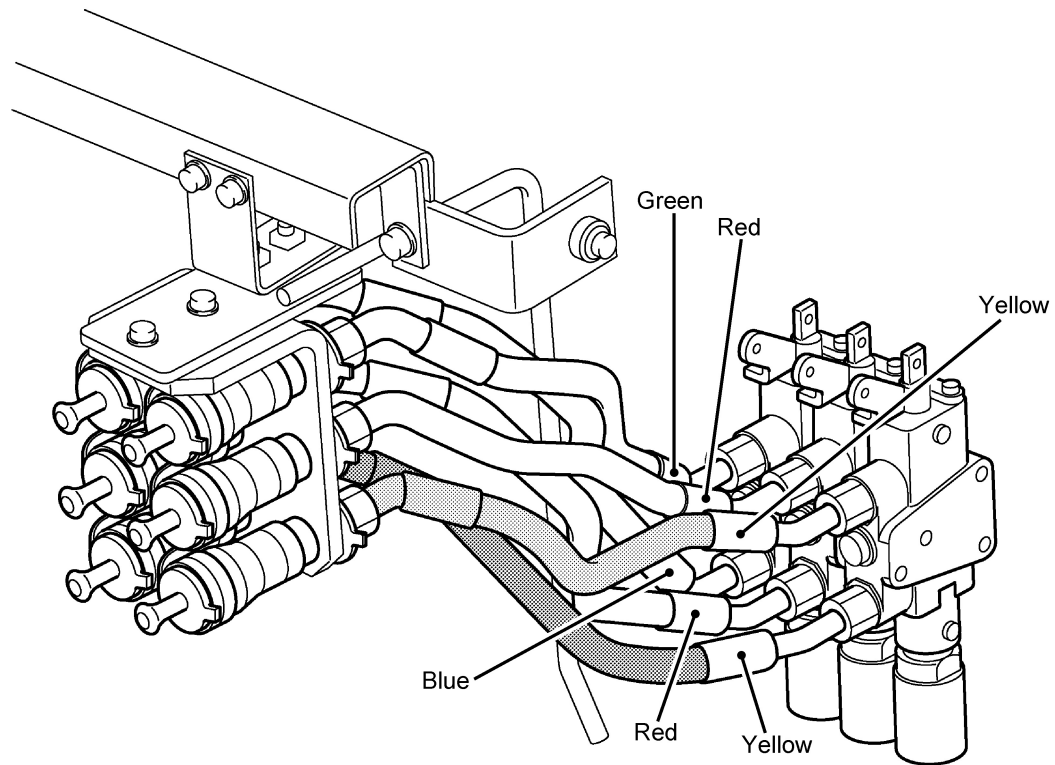
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■ 2nd. Remote Hydraulic [Whole goods number (WG#): MX6881A, MX6882A or later]



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- 3rd. Remote Hydraulic [Whole goods number (WG#): MX6881A, MX6882A, MX6883A or later]



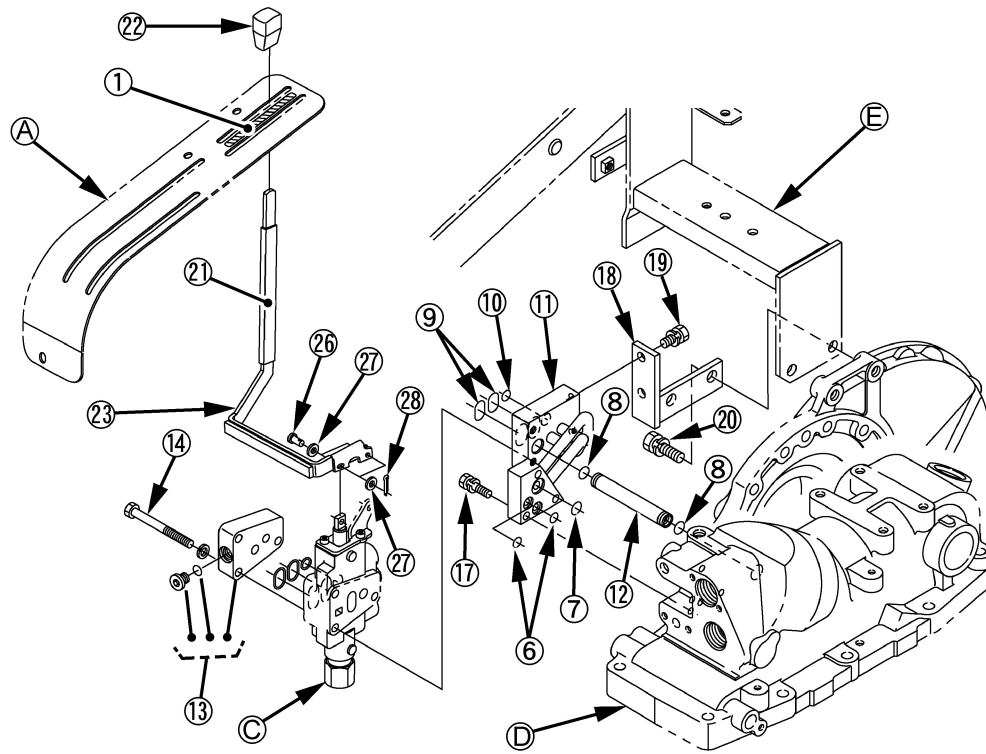
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4. INSPECTION

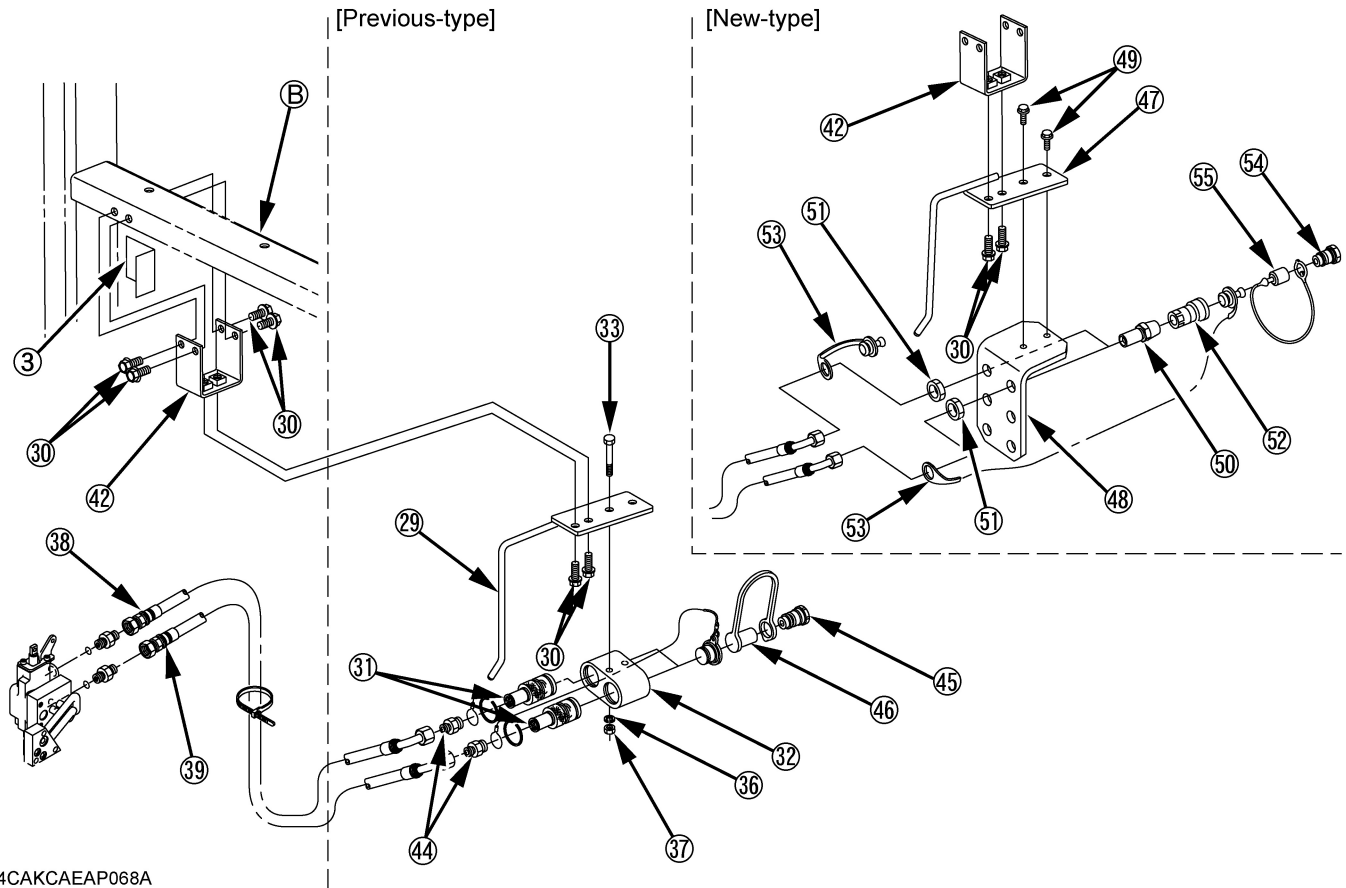
Check the piping and valves for oil leakage before operating the tractor. If any leakage is found, retighten the screw. If this is difficult to do, consult the dealer.

5. PARTS LIST

■ 1st. Remote Hydraulic

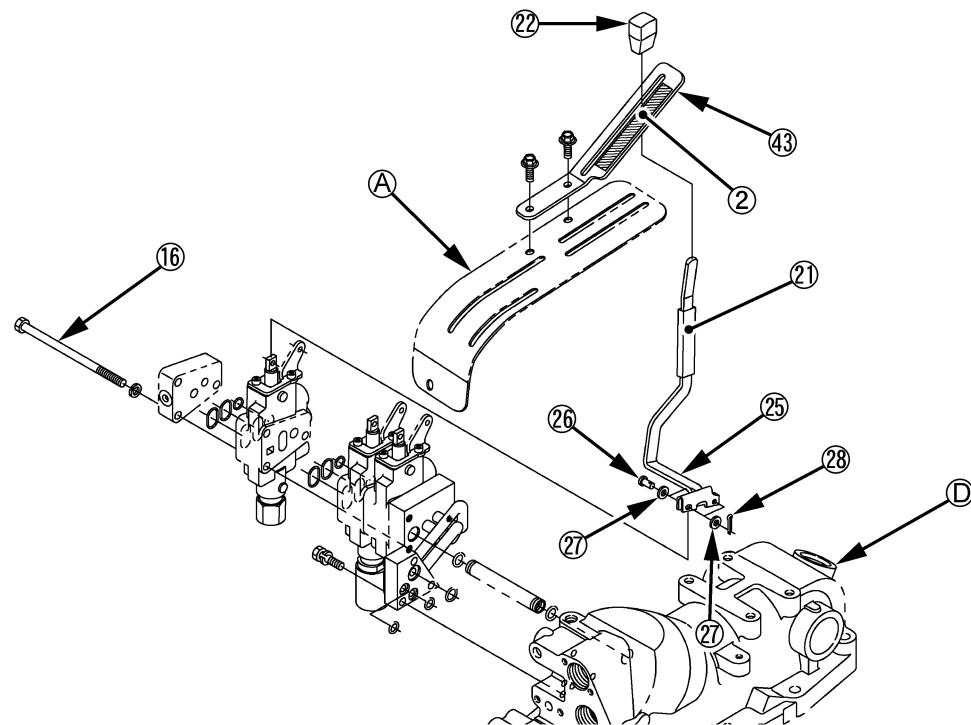


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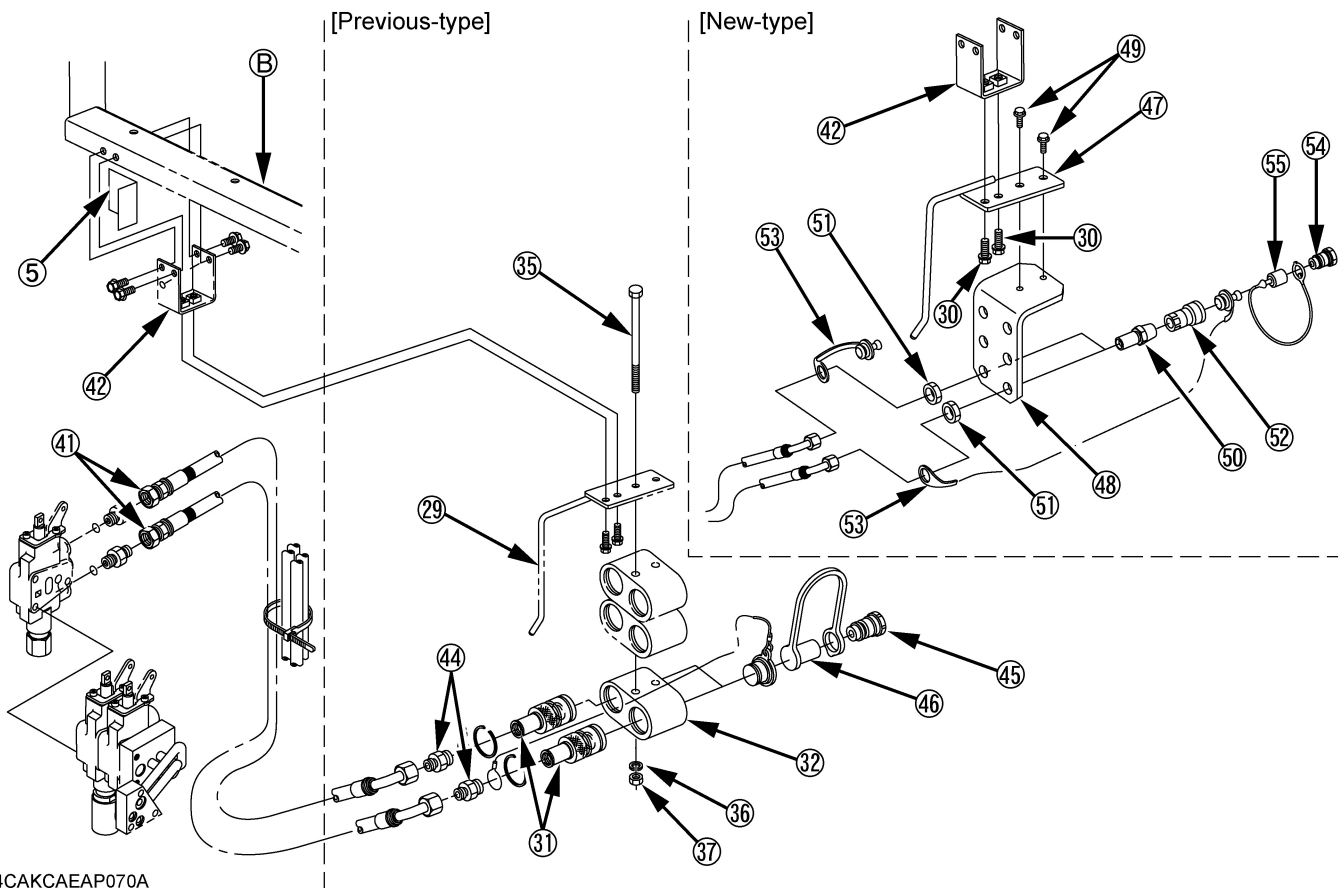


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■ 3rd. Remote Hydraulic



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REF. No.	PART No.	PART NAME	Q'TY			REMARKS
			1st.	2nd.	3rd.	
1	TD359-4961-2	MARKING (AUX. CONT. VALVE)	1	-	-	
2	TD170-9672-0	MARK, AUX. CONT. VALVE	-	-	1	
3	TA040-4967-0	MARK, COUPLER	1	-	-	
4	TA040-4962-0	MARK, COUPLER	-	1	-	
5	TA040-4964-0	MARK, COUPLER	-	-	1	
6	04817-00100	O RING	2	-	-	
7	04817-00140	O RING	1	-	-	
8	04817-00110	O RING	2	-	-	
9	04817-05200	O RING	2	-	-	
10	04817-00100	O RING	1	-	-	
11	TC250-9614-0	ASSY PIPE, CONT. VALVE	1	-	-	
12	TA040-9615-0	PIPE, RETURN	1	-	-	
13	YW165-0010-3	ASSY COVER, VALVE	1	-	-	
14	01153-50875	BOLT	3	-	-	
15	01153-50802	BOLT	-	3	-	
16	55411-1514-0	BOLT	-	-	3	
17	01123-50835	BOLT	3	-	-	
18	TA040-9616-4	STAY, AUX. CONT. VALVE	1	-	-	
19	01123-50820	BOLT	2	-	-	
20	01133-51235	BOLT	2	-	-	
21	TD060-9625-0	TUBE, LEVER	1	1	1	
22	TD060-9626-2	GRIP, AUX. CONTR. LEVER	1	1	1	
23	TC860-9622-0	LEVER, AUX. CON. VALVE	1	-	-	
24	TC860-9623-0	LEVER, AUX. CON. VALVE	-	1	-	
25	TC860-9624-0	LEVER, AUX. CON. VALVE	-	-	1	
26	68021-3279-2	PIN	2	2	2	
27	04012-50050	WASHER, PLAIN	4	4	4	
28	05511-51210	PIN, SPLIT	2	2	2	
29	TC050-9648-7	STAY, COUPLER	1	-	-	Previous-type
30	01754-50820	BOLT, SEMS	6	-	-	
31	35861-8200-0	ASSY, COUPLER	2	2	2	Previous-type
32	35893-8261-2	SUPPORT (COUPLER)	1	1	1	Previous-type
33	01153-50865	HEX. BOLT	2	-	-	Previous-type
34	01153-50802	HEX. BOLT	-	2	-	Previous-type
35	35340-9954-0	BOLT	-	-	2	Previous-type
36	04512-50080	WASHER, SPRING LOCK	2	2	2	Previous-type

REF. No.	PART No.	PART NAME	Q'TY			REMARKS
			1st.	2nd.	3rd.	
37	02156-50080	HEX. NUT	2	2	2	Previous-type
38	TC258-9644-0	HOSE (AUX. CONT. VALVE)	1	-	-	Green
39	TC258-9645-0	HOSE (AUX. CONT. VALVE)	1	-	-	Blue
40	TC230-9641-0	HOSE, AUX. CONT. VALVE	-	2	-	Red
41	TA040-9643-2	HOSE, AUX. CONT. VALVE	-	-	2	Yellow
42	TC860-9647-0	STAY (COUPLER, CONNECTOR)	1	-	-	
43	TC860-9625-0	GUIDE	-	-	1	
44	99063-9341-0	ADAPTER	2	2	2	Previous-type
45	35861-8219-2	ASSY COUPLER MALE	2	2	2	Previous-type
46	35861-9453-3	CAP	2	2	2	Previous-type
47	TC050-9648-8	STAY, COUPLER	1	-	-	New-type
48	TC830-9601-0	BRACKET	1	-	-	New-type
49	01754-50820	BOLT, FLANGE	2	-	-	New-type
50	TC830-9600-0	ADAPTER (AUX. HYD)	2	2	2	New-type
51	TC830-9604-0	NUT (AUX. HYD)	2	2	2	New-type
52	TC830-9602-0	COUPLER (FEMALE, LT)	2	2	2	New-type
53	6F172-3883-0	PLUG (BLUE, COUPLER)	2	2	2	New-type
54	TC830-9606-0	COUPLER (MALE)	2	2	2	New-type
55	TC850-8279-0	PLUG (BLUE, COUPLER)	2	2	2	New-type
56	TC850-9814-4	MANUAL, INST (AUX. CONTROL)	1	1	1	This paper