

MATRIX		Service Bulletin Announcing Matrix ClimbMill Improvements	
Effective Date: April 16, 2015	Models Affected: C-3X-F (CS21), C-5x/7x-01-F (CS17/CS22/CS23/CS24)		Bulletin Num. NB-1505004
Prepared by: Eric Chen			

SYMPTOM

Some rust, assembly, and cable routing issues have been reported in the field.

REASON

This is due to material and design issues.

SOLUTION

Improve the materials and design. Improvement items are listed in [Table 1](#) below. Click the link in the “Link to Page” column to review the details of the improvements.

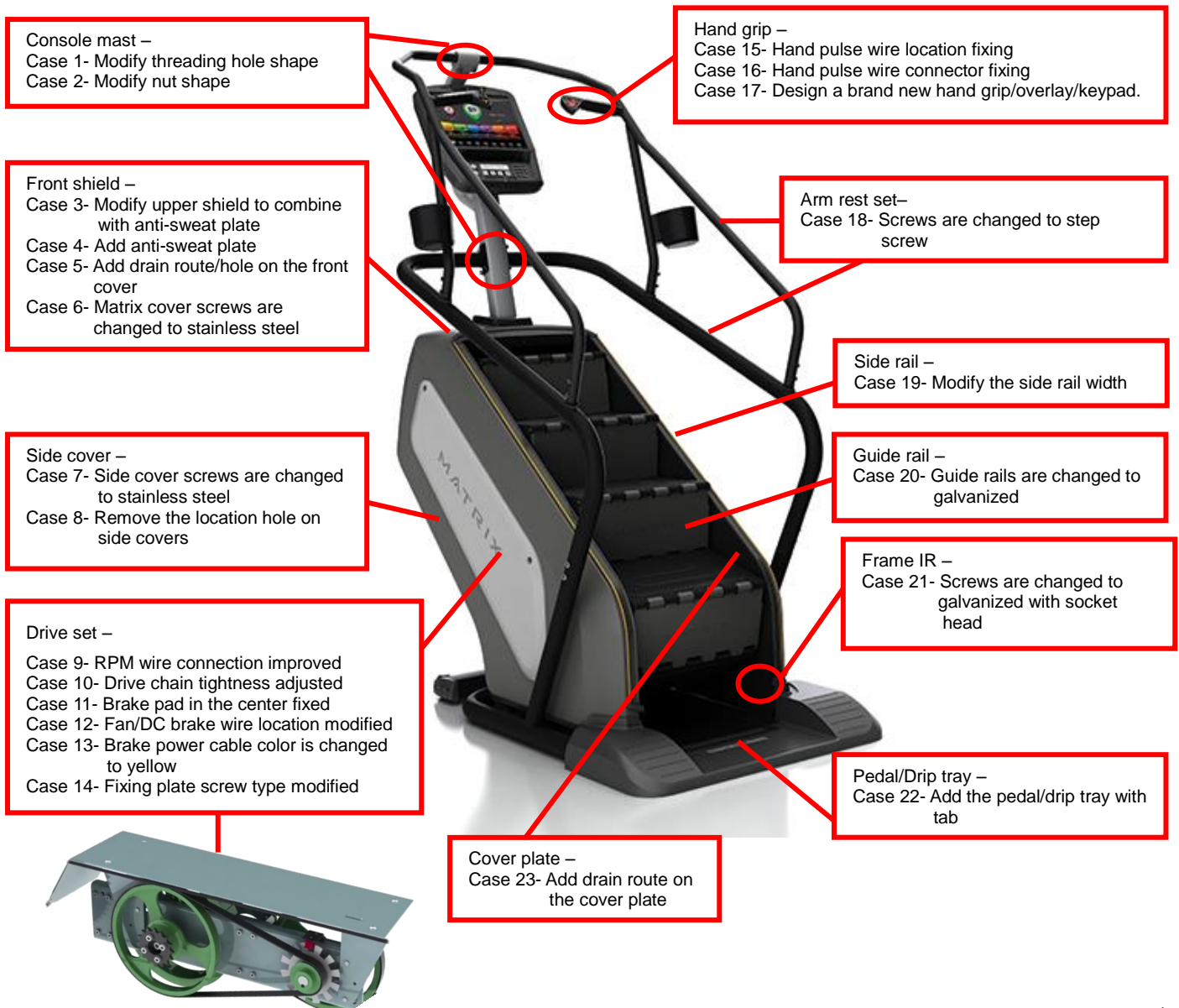



Table 1: Matrix ClimbMill Improvements

Case No.	Photo of Improvement	Improvement Description	Serial Number for Improvement Start	Implemented Date	New Part No.	Old Part No.	Link to Page
1		Console mast – modify the threading hole shape (threading issue)	CS24150101324 CS24C141200501	1/23/2015	Console mast set: part no. 1000209252	Console mast set: part no. 1000209252	P. 4
2		Console mast – modify nut shape (assembly issue)	CS24D141200048	12/24/2014	1. Console mast set: part no. 1000209252 2. Nut: part no. 004979-00	1. Console mast set: part no. 1000209252 2. Nut: part no. 004983-A	P. 4
3		Front shield – Modify upper shield to combine with anti-sweat plate (waterproof)	CS24150302047	3/23/2015	upper shield set: part no. 1000309614	upper shield set: part no. 1000309614	P. 5
4		Front shield – Add anti-sweat plate (waterproof)	CS24150502276	4/21/2015	anti-sweat plate: part no. 1000358924 [Note]: The anti-sweat plate is soldered by factory.	no this design	P. 5
5		Front shield – Add drain route/hole on the front cover (rustproof)	CS24150301902	3/25/2015	front cover: part no. 1000309617	front cover: part no. 1000309617	P. 6
6		Front shield – Matrix cover screws are changed to stainless steel (rustproof)	CS24150101254	1/15/2015	stainless steel screw: part no. 004385-AD	Non- stainless steel screw: part no. 004385-00	P. 6
7		Side cover – Screws are changed to stainless steel (rustproof)	CS24141100889	11/20/2014	stainless steel screw: part no. 1000304478	non-stainless steel screw: part no. 004385-00	P. 6
8		Side cover – Location hole on side covers is removed	CS24150301849	3/4/2015	1. side cover (right): part no. 1000309608 2. side cover (left): part no. 1000309602	1. side cover (right): part no. 1000309608 2. side cover (left): part no. 1000309602	P. 7
9		Drive set – RPM wire connection improved (wire loose)	CS24B141000086	10/15/2014	N/A	N/A	P. 7
10		Drive chain – Drive chain tightness adjusted (noise issue)	CS21141001258 CS24C141000301	10/31/2014	N/A	N/A	P. 8
11		Drive set – Brake pad in the center fixed (assembly issue)	N/A (only for field)	11/30/2014	1. fixing sleeve: part no. 1000354902 2. DC brake set with fixing sleeve: part no. 1000354903	1. fixing sleeve: no this parts 2. DC brake set without fixing sleeve: part no. 1000203334	P. 8
12		Drive set – Fan/DC brake wire location modified (easy repair)	CS24141100980 CS24150101429	1/27/2015	N/A	N/A	P. 9

Table 1: Matrix ClimbMill Improvements - continued

Case No.	Photo of Improvement	Improvement Description	Serial Number for Improvement Start	Implemented Date	New Part No.	Old Part No.	Link to Page
13		Drive set – Brake power cable color is changed to yellow (easy distinguish)	CS24141100996	11/21/2014	brake set with yellow cable: part no. 1000203334	brake set with yellow cable: part no. 1000203334	P. 10
14		Drive set – Fixing plate screw type modified (easy disassembly)	CS21141001327 CS24141000696	11/10/2014	socket head screw: part no. 004447-AC	Oval crisscross screw: part no. 004385-00	P. 10
15		Hand grip – hand pulse wire location fixing	CS21141001170 CS24141000486 CS24D141200048	10/15/2014	cable tie: part no. 005815-00	no this design and parts	P. 11
16		Hand grip – hand pulse wire connector fixing (wire broken issue)	CS24150201802	2/10/2015	Hand pulse wire with 2.5 mm tape: (R)- 1000212335 (L)- 1000207236	Hand pulse wire with 1.5 mm tape: (R)- 1000212335 (L)- 1000207236	P. 11
17		Hand grip – Design a brand new hand grip/overlay/ keypad (waterproof)	CS24150502534 CS21150501928	5/26/2015	Hand grip set: (R)- 1000359164 (L)- 1000359150	Hand grip set: (R)- 1000229891 (L)- 1000209257	P. 12
18		Arm rest set – Screws are changed to step screw (easy assembly)	CS24150101209	11/20/2014	step screw: part no. 1000356178	non step screw: part no. 1000211360	P. 12
19		Side rail – Modify the side rail width (waterproof)	CS24150301898	3/5/2015	1. side rail (right): part no.1000209821 2. side rail (left): part no. 1000211386	1. side rail (right): part no.1000209821 2. side rail (left): part no. 1000211386	P. 13
20		Guide rail – Guide rails are changed to galvanization (rustproof)	CS21141001240	10/30/2014	1. Guide rail (upper): part no. 1000203482 2. Guide rail (lower): part no. 1000203799	1. Guide rail (upper): part no. 1000203482 2. Guide rail (lower): part no. 1000203799	P. 13
21		Frame IR – Screws are changed to galvanized with socket head (easy to disassembly and rustproof)	CS24141100889	11/20/2014	socket head screw: part no. 070248	socket head screw: part no. 004860-00	P. 13
22		Pedal/drip tray – Add the pedal/drip tray with tab (curve issue)	CS24150402104	4/9/2015	1. drip tray: part no. 1000301732 2. pedal: part no. 1000203748	1. drip tray: part no. 1000301732 2. pedal: part no. 1000203748	P. 14
23		Cover plate – Add a rustproof drain route on the cover plate (waterproof)	CS24150702774	7/3/2015	Cover plate: part no. 1000350050	Cover plate: part no. 1000350050	P. 15

ClimbMill Improvements

Case 1: Console mast – Modify threading hole shape



Old – Round, small threading hole



New – Long, larger threading hole

Case 2: Console mast – Modify nut shape for easier assembly



Old – Console mast with a thin hexagonal nut



New – Console mast with a thicker hexagonal nut

Case 3: Front shield – Modify upper shield to combine with a waterproof anti-sweat plate



Old – See photo



New – Upper shield combined with an anti-sweat plate

Case 4: Front shield – Add a waterproof anti-sweat plate (soldered on by the factory)



Old – Without the anti-sweat plate



New – With the anti-sweat plate

Case 5: Front shield – Add a rustproof drain route/hole on the front cover



Old – Front cover without a drain route and hole




New – Front cover with a drain route and hole


Case 6: Front shield – Matrix cover screws are changed to rustproof stainless steel



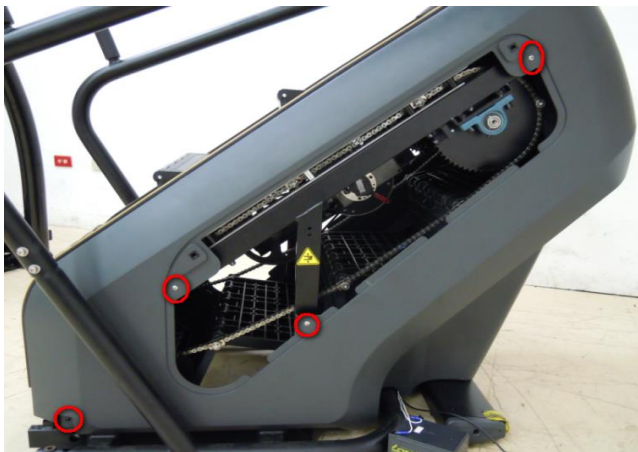
Old – Non-stainless steel screw




New – Stainless steel screw




Case 7: Side cover - Screws are changed to rustproof stainless steel



Old – Non-stainless steel screw



New – Stainless steel screw



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Case 8: Side cover - Location hole on side covers is removed

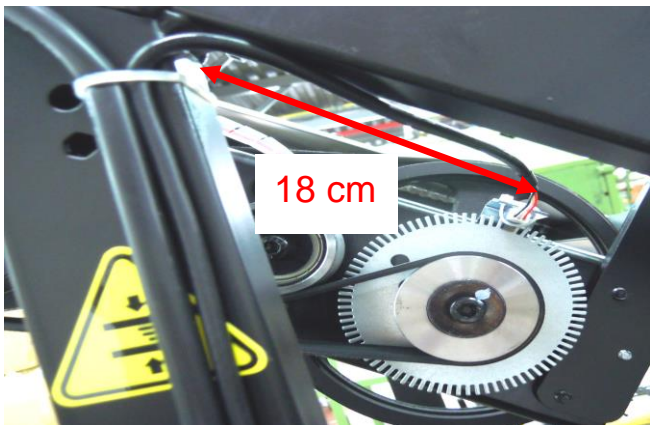


Old – Side cover with location hole



New – Side cover with location hole removed

Case 9: Drive set – RPM wire connection loosened



Old – Wire connection too tight

New – Leave 18cm of RPM wire between the cable tie and speed sensor.

Case 10: Drive set – Drive chain tightness adjusted to resolve noise issue



Old – Use tooling to set up the drive set location



New – Put drive set by natural gravity

Case 11: Drive set – Brake pad in the center fixed (for spare part only)

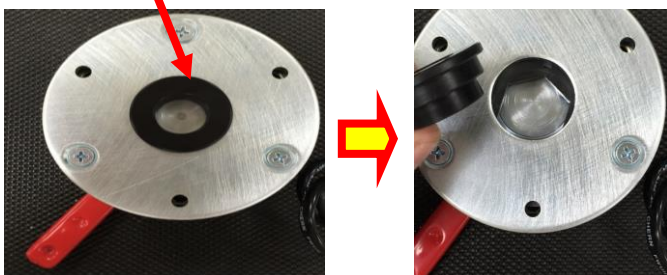
Note: You must remove the fixing sleeve after you assemble DC brake to drive set.



Old – Without fixing sleeve



Fixing sleeve-
part no. 1000354902



New – With fixing sleeve

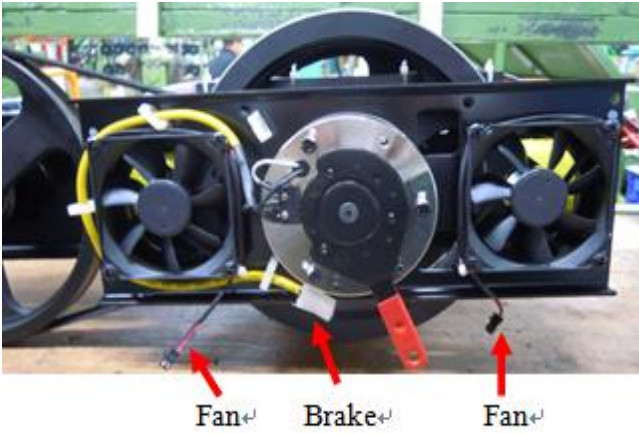
DC brake set (with fixing sleeve) – part no. **1000354903**

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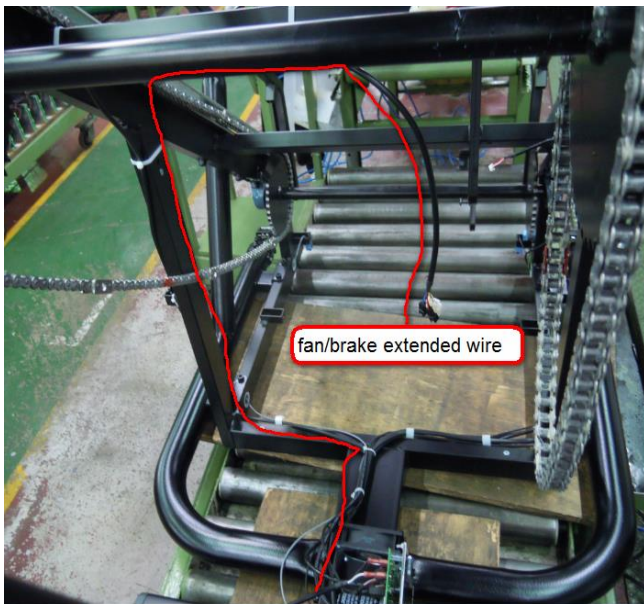
Case 12: Drive set – Fan/DC brake wire location modified for easier repair



Old – Difficult to perform repair



New – Easier to unplug and fix fan/brake wire

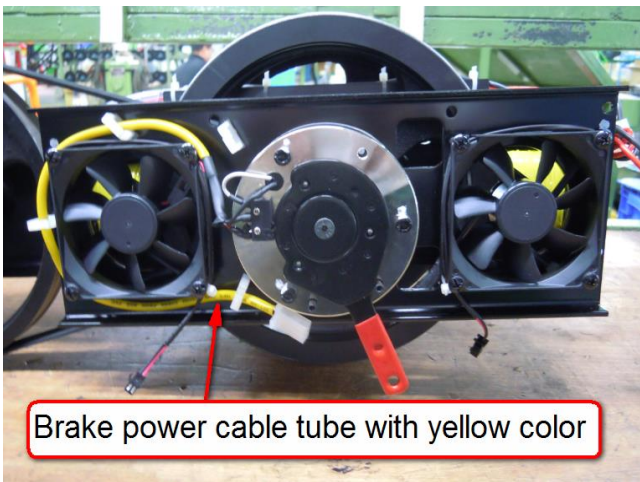


Case 13: Drive set – Brake power cable tube color changed to yellow so it's easy to distinguish



Brake Fan

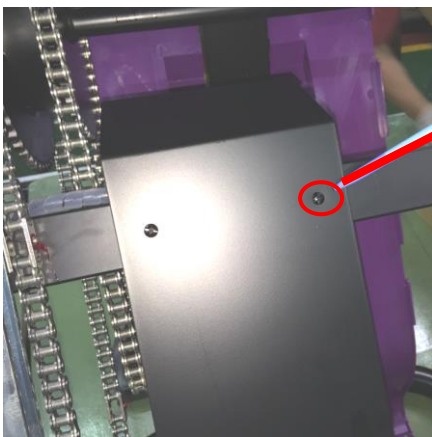
Old – Black brake power cable



Brake power cable tube with yellow color

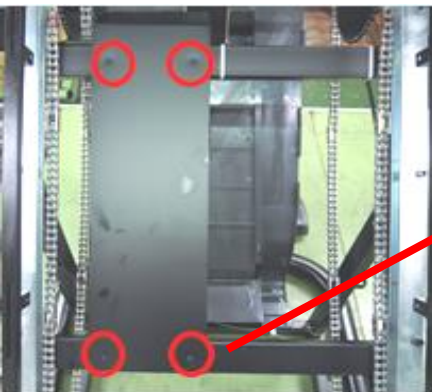
New – Yellow brake power cable

Case 14: Drive set – Fixing plate screw type modified for easier disassembly



Oval crisscross screw

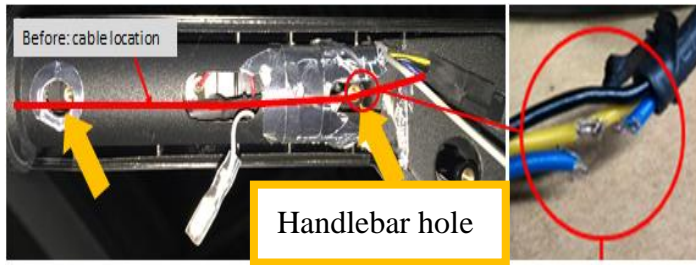
Old – Oval crisscross screw



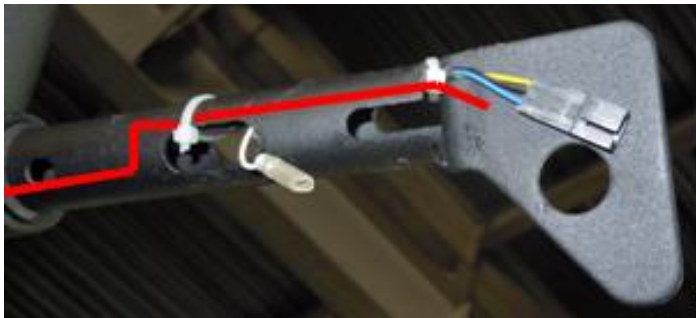
Socket head screw

New – Socket head screw

Case 15: Hand grip – Hand pulse wire location changed to prevent wire damage



- Old –
- There is no cable tie to keep the hand pulse wire in place.
 - Hand pulse wire goes over the handlebar hole. The wire would be damaged when hand grip cover is assembled.



- New –
- Add two cable ties to fix the hand pulse wire in place.
 - Hand pulse wire doesn't go over the handlebar hole.

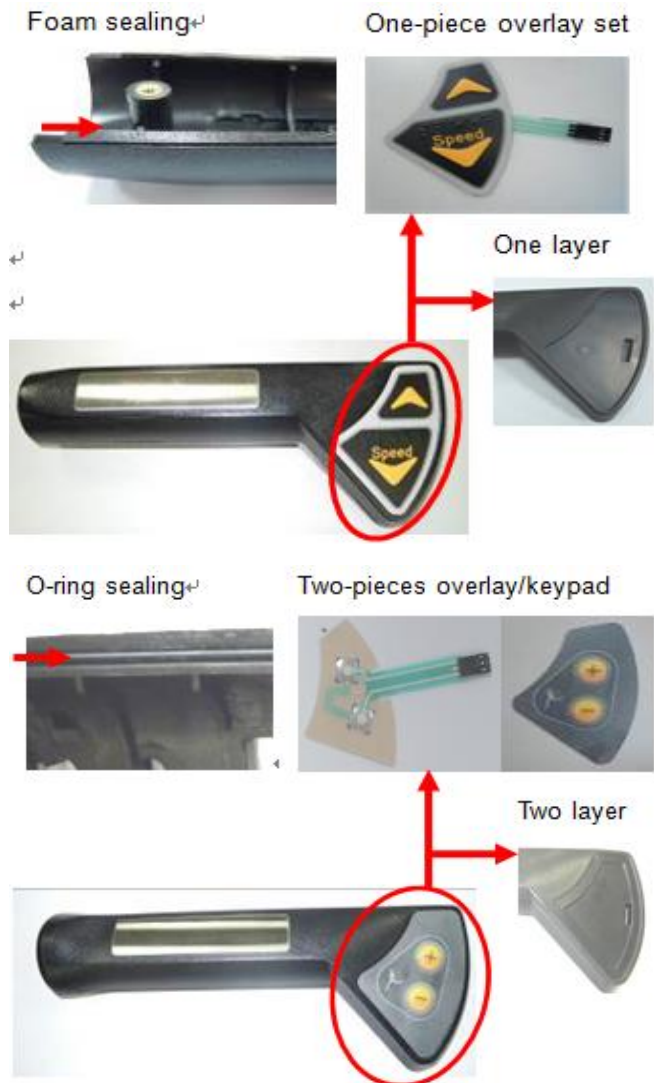
Case 16: Hand pulse wire connector would become loose



Old – Foam tape with 1.5 mm thickness

New – Foam tape with 2.5 mm thickness to prevent wire connector from becoming loose

Case 17: Design a brand new hand grip/overlay/keypad (TBD)



Old –

- One-piece overlay set
- Hand grip with foam sealing

New –

- Two-piece-with new overlay/keypad.
- Brand new hand grip with O-ring sealing.

Note: The new and old hand grip/overlay/keypad are not compatible. If the old hand grip set is defective, you must order and replace two new hand grip sets (parts no. #1000359150/ 1000359164) at the same time.

Case 18: Arm rest set – Screws are changed to step screws for easier assembly



Old – Not a step screw

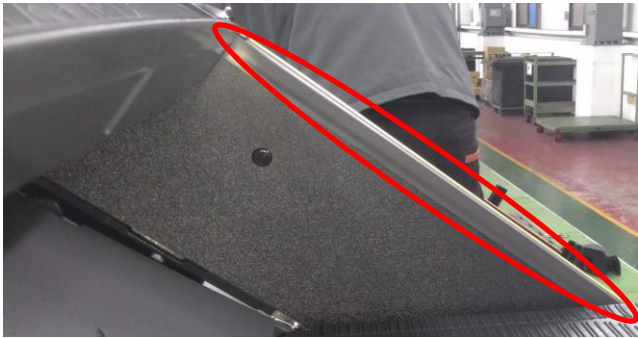
New – Step screw (1000356178 / USD 0.18)

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Case 19: Side rail – Modify the side rail width

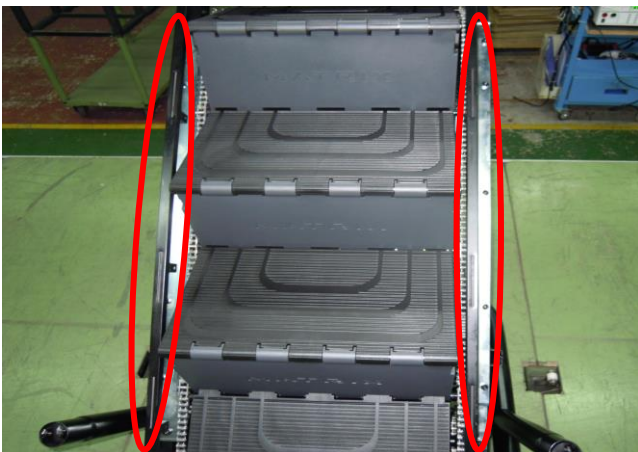


Old – Narrow side rail



New – Wider side rail

Case 20: Guide rail – Guide rails are galvanized to be rustproof



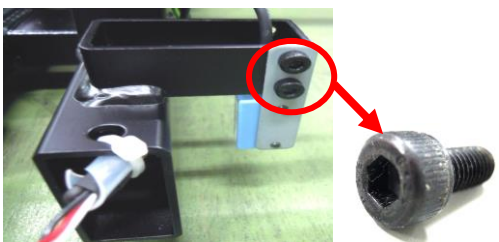
Old – Guide rail with anti-rust grease

New – Galvanized guide rail

Case 21: Frame IR – Screws are changed to galvanized socket head screws (easier to disassemble and rustproof)



Old – Oval crisscross screw



New – Galvanized socket head screw

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Case 22: Pedal/drip tray – Add a tab to the pedal/drip tray to correct the curve issue



Old – Pedal/drip tray without tab



New – Pedal/drip tray with tab

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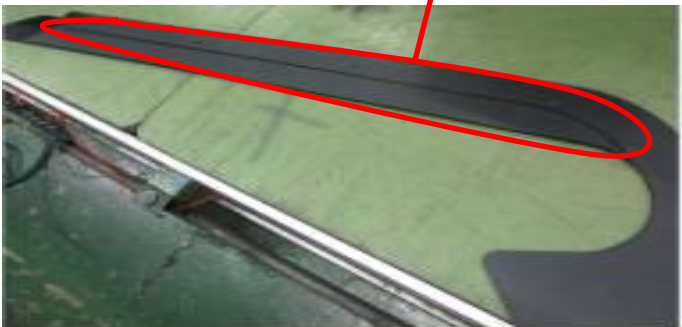
Case 23: Cover plate – Add drain route on the cover plate



Old – Cover plate without a drain route



New – Cover plate with a drain route



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The solutions for the equipment in the field and warehouse

1	Affected models (JHT no.)	C-3X-F (CS21), C-5x/7x-01-F (CS17/CS22/CS23/CS24)			
2	NA ECR no.	N/A	10	Current part number	N/A
3	JHT ECO no.	See table 1	11	Old price	N/A
4	Implemented date	See table 1	12	New part number	See table 1
5	Started s/n	See table 1	13	new price	N/A
6	field service suggestion	<input checked="" type="checkbox"/> case by case <input type="checkbox"/> club by club <input type="checkbox"/> rework all	14	S-BOM updated	N/A
7	units in the warehouse	<input checked="" type="checkbox"/> no action required <input type="checkbox"/> replace all	15	S-Drawing update	N/A
8	parts in stock	<input checked="" type="checkbox"/> running change <input type="checkbox"/> immediate change	16	photos attached	Y
9	video available	N/A	17	SOP attached	N

	Bulletin type (Draft version or Final version)
<input type="checkbox"/>	Draft version due to the implement date and started S/N are not ready yet.
<input checked="" type="checkbox"/>	Final version, All completed