

# **e-STUDIO455SE and e-STUDIO855SE SERVICE MANUAL ADDENDUM**



Model: DP-2090/2520/3000/3570/4570  
DP-5550/6550/7550/8550  
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## 1. About Service Manual Addendum

This Service Manual Addendum is a service manual explaining about the e-STUDIO455SE Series and the e-STUDIO855SE Series. For other basic contents not explained in this manual, refer to Service Manuals or Service Handbooks for the e-STUDIO455 Series and the e-STUDIO855 Series currently being used.

## 2. Model Names

e-STUDIO455SE Series: e-STUDIO205SE/255SE/305SE/355SE/455SE

e-STUDIO855SE Series: e-STUDIO555SE/655SE/755SE/855SE

## 3. About the e-STUDIO455SE Series and the e-STUDIO855SE Series

"SE" stands for Security Enabled. The e-STUDIO455SE Series is changed from that of the existing e-STUDIO455 Series. The next chapter explains about the changed items.

For the e-STUDIO455SE Series and the e-STUDIO855SE Series, options such as the Data Overwrite Enabler (GP-1070) and the External Interface Enabler (GS-1020) are equipped as standard features so as to enhance security.

## 4. Changed Items



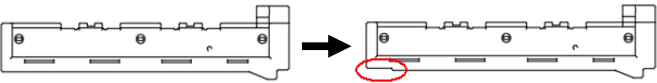
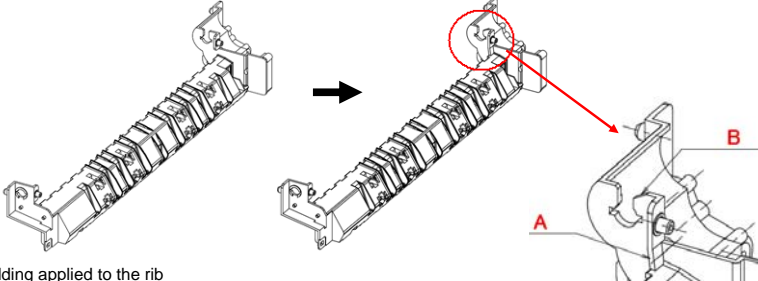
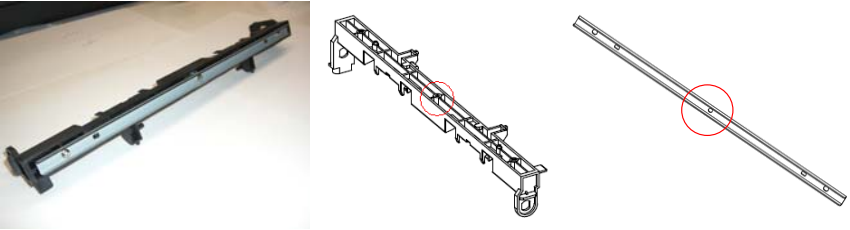
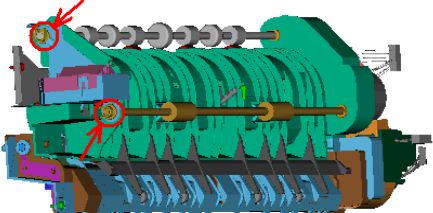
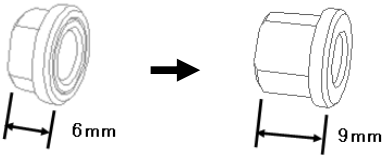
#### 4-1. e-STUDIO455SE Series

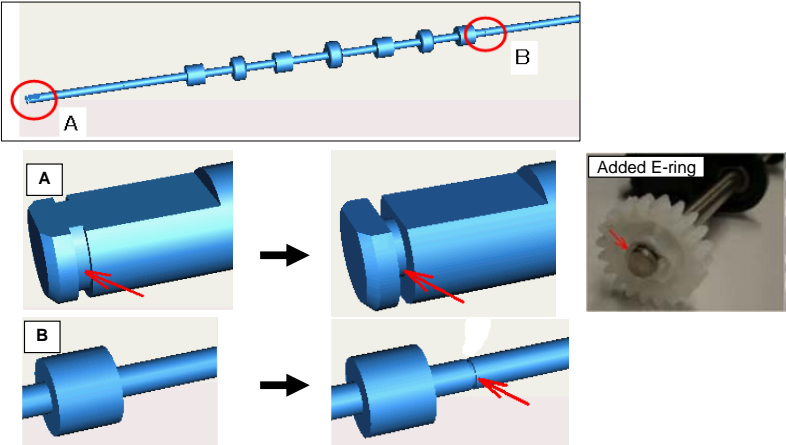
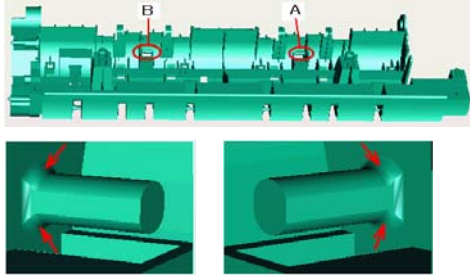
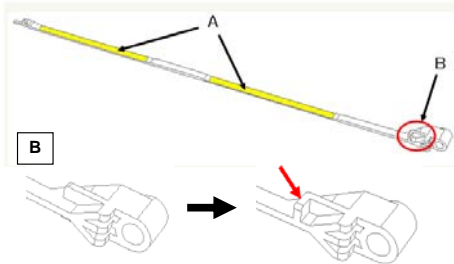

		No.	Items	Parts
S/W	-	0	System Software: T470SY0U230 The Data Overwrite Enabler (GP-1070) and the External Interface Enabler (GS-1020) are equipped as standard features so as to enhance security.	-
H/W	Paper Exit Section	1	The cover is reshaped to improve serviceability.	COVER-EXIT-AC1050
			A reinforcing rib is added. Chamfering is applied to improve serviceability.	GUIDE-EXIT-L-473
		2	The offset gate guide (slide guide) are reinforced.	GUIDE-SLIDE-473 BRKT-EXIT-LOW
		3	Dislocation of the bushing is prevented.	BUSH-F6-GCB
		4	Dislocation of the gear is prevented.	GEAR-10S20-06
	Reverse Section	5	The part in the Reverse Section is stronger	GUIDE-EXIT-UPR-L-473
	ADU	6	The thickness of the stopper is changed from 0.69 mm to 1.0 mm.	STOPPER-ADU-47X-S
	Fuser Unit	7	The protrusion is reinforced.	-
	Cover	8	The front cover is improved not to be opened during copying.	COVER-FRONT-L-N SPL-COV-LOCK
	Paper Feeding Section	9	Coming off the pickup roller is prevented.	ARM-RLR-PICK-F47X-F ARM-RLR-PICK-F47X-R
		10	Wearing out the pusher of the registration roller is prevented.	PUSH-RGST-470-V
	Others (Image / Noise)	11	Black streaks on images are suppressed.	ASYB-PWA-LGC-470S ASYB-PWA-LGC-471S ASYB-PWA-LGC-472S ASYB-PWA-LGC-473S ASYB-PWA-LGC-474S
		12	The driving noise of the main motor is reduced.	GEAR-5H58_4H48-6 GEAR-4H118_PS2M38-6_H
		13	Acoustic noise and image deviation are suppressed.	ASYS-BRKT-TENS-47X
		14	Electrical conduction of the exit roller is improved.	SPL-T-EARTH-EXIT-471 SPL-T-EARTH-EXIT-473
Overview (Cover)	15	The emblem is changed.	SHEET-EMBLEM-*****	

#### 4-2. e-STUDIO855SE Series

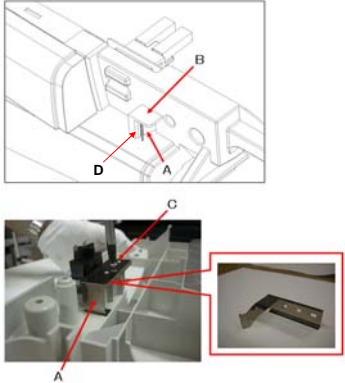
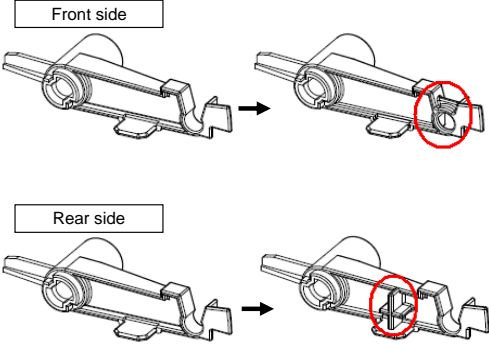
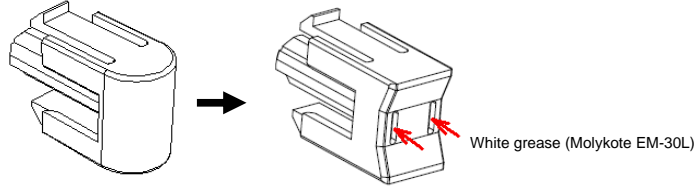
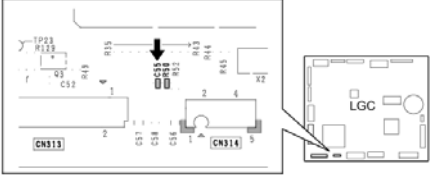
		No.	Item	Parts
S/W	-	0	System Software: T100SY0U230 The Data Overwrite Enabler (GP-1070) and the External Interface Enabler (GS-1020) are equipped as standard features so as to enhance security.	-
H/W	Overview (Cover)	15	The emblem is changed.	SHEET-EMBLEM-*****

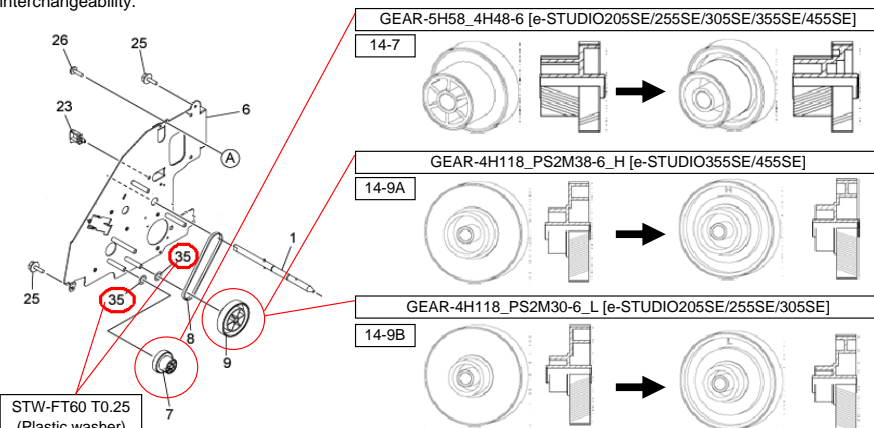
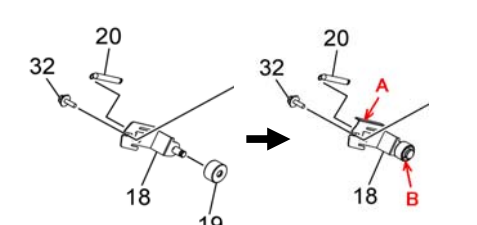
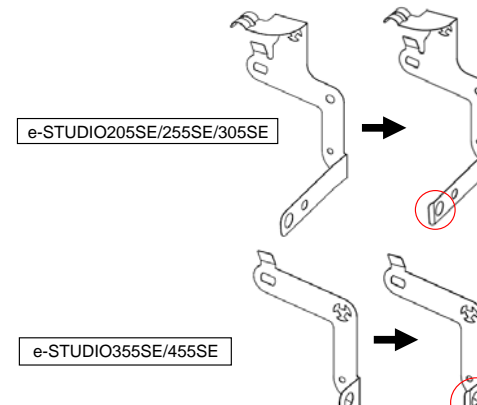
5. Details

No.	Unit	Parts	Contents
1	Paper exit section	GUIDE-EXIT-L-473 COVER-EXIT-AC1050 [e-STUDIO355SE/455SE]	<p>To improve the serviceability when the reverse unit is disassembled, the shape of its cover has been changed to avoid interference, and the guide of the exit unit is reinforced.</p> <p>1. Cover of the reverse unit (Notch added)</p>  <p>2. Guide of the exit unit reinforced (Shape of the rib changed, C chamfer added)</p>  <p>A: Padding applied to the rib B: Chamfering applied</p>
2	Paper exit section	GUIDE-SLIDE-473 BRKT-EXIT-LOW [e-STUDIO355SE/455SE]	<p>The thickness of the reinforcing plate has been changed from 0.8 mm to 1.0 mm to avoid warpage of the offset gate (slide) guide which would cause paper jamming. A fixing hole has been added to its center. The fixing screws have been changed to stepped screws, as well as having their quantity increased from 2 to 3.</p> 
3	Paper exit section	BUSH-F6-GCB [e-STUDIO355SE/455SE]	<p>To prevent the bushings from coming off the mold frame, the depth of those for the reverse roller and the upper transport roller has been changed from 6 mm to 9 mm. (2 points on the front side)</p>  

No.	Unit	Parts	Contents
4	Paper exit section	ROL-EXIT-473 [e-STUDIO355SE/455SE]	<p>To avoid a CDF0 error caused by the exit roller gear dropping from the shaft, the diameter of the gear-fixing groove in the exit roller shaft section has been changed from 5 mm to 4 mm, and also an E-ring has been added [Figure A]. To distinguish the new shaft and the old one, a groove has been added to the new one [Figure B].</p> 
5	Reverse section	GUIDE-EXIT-UPR-L-473 [e-STUDIO355SE/455SE]	<p>To prevent damage to the bosses holding the springs for pressing the roller in the reverse unit, the following changes have been applied. If these bosses are damaged, image skewing and paper jamming in the paper exit section can occur.</p> <ul style="list-style-type: none"> <li>- Their base shape has been changed to improve their strength.</li> <li>- Their material has been changed to increase their resilience and heat resistance.</li> <li>- Their color has been changed from white to black for identification.</li> </ul> 
6	ADU	STOPPER-ADU-47X-S	<p>To prevent damage to the fixing band in the ADU by maintenance work in the field, the thickness of sections A below (shown in yellow) has been changed from 0.65 mm to 1 mm to reinforce the band. Also the shape of section B below has been changed to distinguish the new band and the old one.</p> 
7	Fuser unit	[e-STUDIO205SE/255SE/305SE/355SE/455SE]	<p>A roundness of 0.5 has been applied to the protrusion of the fuser unit to improve its strength.</p> 



No.	Unit	Parts	Contents
8	Front cover	COVER-FRONT-L-N SPL-COV-LOCK  [e- STUDIO205SE/255SE/305S E/355SE/455SE]	<p>A plate spring has been added to reinforce the fixing section of the front cover. Also a rib has been added to the left front cover to stop the edge of the plate spring contacting other parts.</p> <p>A: New plate spring B: Rib added to the left front cover C: Secure the plate spring together with the bracket. D: White grease (Molykote EM-30L)</p> 
9	Paper feeding section	ARM-RLR-PICK-F47X-F ARM-RLR-PICK-F47X-R  [e- STUDIO205SE/255SE/305S E/355SE/455SE]	<p>When the drawer feeding unit is installed or removed, the pickup roller may come off from the pickup arm if its rubber section is pushed. (Only for the front one) To avoid this, the shape of the pickup arm has been changed. The same arm was used for both the front and rear sides in existing models; however, a different arm will be employed from this model.</p> 
10	Paper feeding section	PUSH-RGST-470-V  [e- STUDIO205SE/255SE/305S E/355SE/455SE]	<p>The shape of the pusher for the rubber registration roller has been changed to prevent it from wearing out. When replacing the pusher in the field, apply a blob of White grease (Molykote EM-30L; the size of two grains of rice) onto each contact section between it and the roller shaft.</p> 
11	Others (Image / Noise)	ASYB-PWA-LGC-470S ASYB-PWA-LGC-471S ASYB-PWA-LGC-472S ASYB-PWA-LGC-473S ASYB-PWA-LGC-474S  [e- STUDIO205SE/255SE/305S E/355SE/455SE]	<p>Black streaks in a primary scanning direction (at a right angle to the paper feeding direction) appeared on images due to electrostatic noise. To increase the tolerance level to electrostatic noise, the resistance value (R50) was changed and a capacitor (C55) was added.</p>  <p>R50: 22 ohm -&gt; 1k ohm C55: - -&gt; 33 picofarad</p>

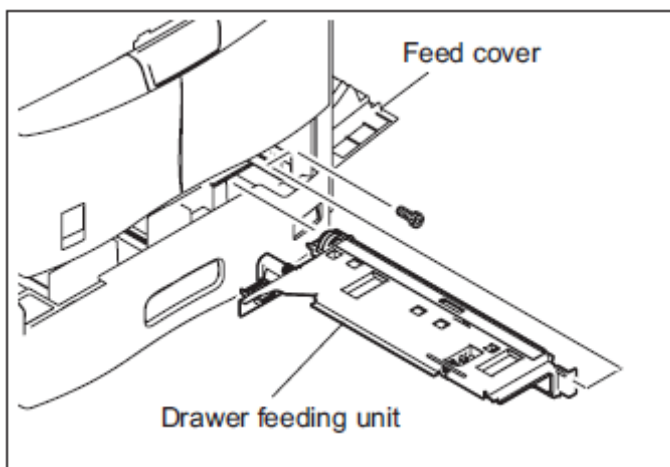
No.	Unit	Parts	Contents
12	Paper feeding section	<p>GEAR-5H58_4H48-6 GEAR-4H118_PS2M38-6_H STW-FT60 T0.25 [e-STUDIO355SE/455SE]</p> <p>GEAR-5H58_4H48-6 GEAR-4H118_PS2M30-6_L STW-FT60 T0.25 [e-STUDIO205SE/255SE/305SE]</p>	<p>To reduce noise occurring when the main motor is stopped, its driving gears have been changed and the plastic washers have been added. Also the angle of the teeth of the gear has been changed to prevent the gear from being moved to its loose side. To avoid leaning in the rattling direction, the helical direction of the helical gear will be changed. (See the figures) The shape will be also altered to make it distinguishable. When changing the current gears (14-7, 14-9) to the new ones, exchange them in a set since there is no individual part interchangeability.</p>  <p>STW-FT60 T0.25 (Plastic washer)</p>
13	Paper feeding section	<p>ASYS-BRKT-TENS-47X [e-STUDIO205SE/255SE/305SE/355SE/455SE]</p>	<p>The tension roller in the main motor drive unit rarely comes off due to deformation of the bracket (metal plate). This may cause abnormal noise and image leading edge deviation. To avoid this, the following changes in the tension bracket have been applied.</p> <p>A: A bend has been added to strengthen the bracket (metal plate). B: The tension roller has been integrated into the unit so that it does not come off.</p> 
14	Paper feeding section	<p>SPL-T-EARTH-EXIT-471 SPL-T-EARTH-EXIT-473 [e-STUDIO205SE/255SE/305SE/355SE/455SE]</p>	<p>The shape and the material of the plate spring have been changed to improve electrical conduction between the exit roller and the frame on the equipment. (Material: SUS304 -&gt; SUS631)</p>  <p>e-STUDIO205SE/255SE/305SE</p> <p>e-STUDIO355SE/455SE</p>

## 6. Disassembly

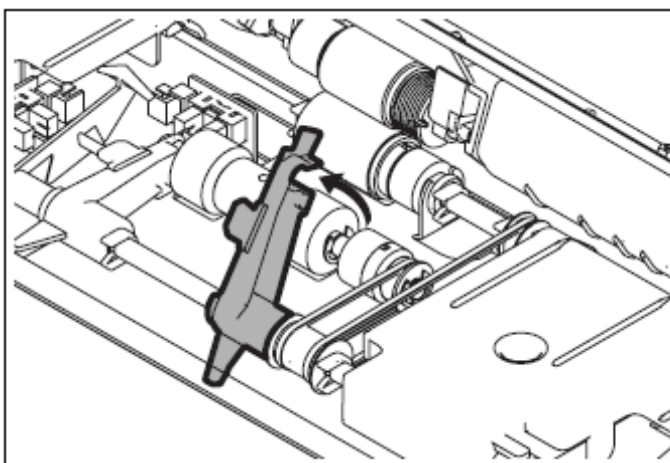
The disassembly procedure changes by the change in the picking up arm (item #9).

### 6-1. Pickup roller

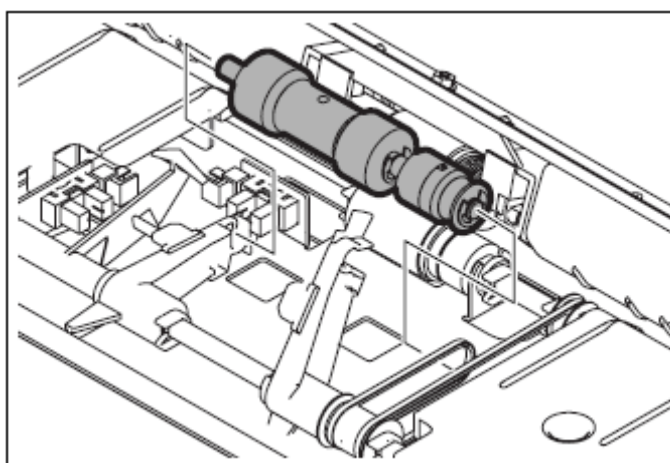
(1) Remove 1 screw and take off the drawer feeding unit by sliding it to the front side.



(2) Pull up the rear side pickup arm.



(3) Take off the pickup roller assembly.



## 7. Additional explanation

To confirm that the equipment is the SE model, "2" is set for 08-9960.

In the SE model, the Data Overwrite Enabler (GP-1070) and External Interface Enabler (GS-1020) are equipped as standard, however, the corresponding 05/08 codes exclusive to it have not been added. Since "0" is set for 08-1422 and 08-1424 by default, change the setting value as required. [\*1]

The functions of the Data Overwrite Enabler (GP-1070) and External Interface Enabler (GS-1020) cannot be disabled or deleted [\*1]. Moreover, their license information is saved in the SRAM. The electric key information (08-3870) is not shown because they are equipped as standard.

If the license data are broken for some reason, or the data in the SRAM are inconsistent, an "F200" service call may occur. In such a case, perform firmware installation (one of the OS / HDD SYS / Engine Main Firmware / Scanner Firmware) using USB media.

When replacing the SRAM, SYS or HDD board, be sure to follow the procedure given in the Service Handbook for the e-STUDIO455 series or e-STUDIO855 series. Mechanism is provided, in which the functions of the Data Overwrite Enabler (GP-1070) and External Interface Enabler (GS-1020) are automatically backed up and restored.

[08 codes used for the above explanation]  
08-1422: HDD data overwriting type setting  
08-1424: HDD data clearing type setting (forcible clearing)  
08-3870: Display of electronic keys registered in equipment  
08-9960: Equipment information (SRAM)

[\*1] Explanation for the e-STUDIO455SE series (production in March, 2011) and the e-STUDIO855SE series (production in April, 2011):

For the e-STUDIO455SE series, production in March, 2011.

For the e-STUDIO855SE series, production in April, 2011

These functions will be able to be set as "disabled" from the products mentioned above. Due to this, 08-3628 (Standard installed data overwrite enabler function setting) and 08-3629 (Standard installed external interface enabler function setting) will be added, and they will be enabled only for the SE model. Moreover, the default value of 08-9379 (Enable the HDD encryption function) will be changed to "1".



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