

HP LaserJet Pro M452 Fuser Unit Rebuild Instructions (See video as well)

Tools and materials needed to rebuild the fuser unit	
<ul style="list-style-type: none"> • PH#2 screwdriver • Small flathead screwdriver • Tweezers • Needle nose pliers • Hook, or pick tool • Long shaft (any shaft longer than the fixing film) and/or dowel • Lint free cloth • Isopropyl alcohol • Acetone • Cotton swab • Wooden toothpick • Conductive grease • CET Products: <ul style="list-style-type: none"> ○ CET211001 Water Foam Lower Fuser Roller ○ CET311001 Upper Fixing Film ○ CET311041 Lower Fuser Fixing Film ○ CET361008 Lower Roller Bushing 2Pcs 	

Order	Current subtitles
1	Fuser unit rebuild for HP Color LaserJet Pro M452, M377, M477, M479
2	Remove the clip, lower roller drive gear and pin
3	Release the heater cable from the plastic cable holder
4	Remove the plastic cable holder, prying it with a small flathead screwdriver
5	Remove the clip, upper pressure release gear and pin
6	Remove the clip holding the lower pressure release gear
7	Rotate the lower pressure release gear until the arrow on the gear is directed to the pressure release cam axle
8	Remove the lower pressure release gear
9	Remove the screw, then remove the intermediate gear assembly
10	Remove the two screws, then remove the metal cover
11	Remove the plastic cover
12	Remove the tension spring on the sensor cables' side
13	Remove the screw, then remove the pressure arm bracket and pressure arm on the sensor cables' side
14	Remove the tension spring on the drive side
15	Remove the pressure arm on the drive side, then remove the screw and pressure arm bracket
16	Remove the plastic clips, then release the sensor cables from the cable holder
17	Remove the upper fixing film assembly from the fuser unit
18	Remove the fuser entrance shutter assembly from the fuser unit

19	Remove the screw holding the plastic cable holder
20	Rotate the upper pressure release gear until the arrow on the gear is directed as shown
21	Remove the plastic cable holder unsnapping its latches
22	Remove the small spring attached to the antistatic resistor assembly
23	Remove the screw, then remove the antistatic resistor assembly
24	Remove the screws and lower roller bushing brackets on both sides
25	Remove the lower roller and its bushings from the fuser unit
26	Remove the pressure release cam and pin on the drive side
27	Pull out the pressure release axle
28	Remove the fuser entrance guide assembly
29	Remove the lower fixing film assembly
30	Remove the end hub, then pull out the lower fixing film
31	Wipe the lower fixing film pressure plate and its casing with a dry, lint free cloth
32	Continue wiping with isopropyl alcohol
33	Clean the end hubs with isopropyl alcohol
34	Wipe the inner surface of the lower fixing film with a dry, lint free cloth using a long shaft or other suitable tool
35	Continue wiping with isopropyl alcohol
36	<i>Note:</i> <i>Replace the lower fixing film with the new CET311041 film if it is damaged or has significant wear</i>
37	Apply 0.2-0.3 ml of Permalub G No.2 (CK-0551) grease onto the lower fixing film pressure plate, then evenly distribute it across the plate
38	<i>Note:</i> <i>The grease should cover the plate by thin, semitransparent layer</i>
39	Apply a small amount of Permalub G No.2 (CK-0551) grease onto the end hubs
40	Reinstall the lower fixing film, then reinstall the end hub
41	Clean the surface of the lower fixing film with isopropyl alcohol
42	Reinstall the lower fixing film assembly into the fuser unit
43	Reinstall the fuser entrance guide assembly into the fuser unit
44	Insert the pressure release axle from the sensor cables' side
45	Do not fully insert the axle at this step
46	Fully insert the pressure release axle, aligning the arrow on the upper gear with the tab on the lower gear
47	Reinstall the pin and pressure release cam on the drive side as shown
48	Remove the lower roller bushings from the old lower roller, then clean them with a cotton swab
49	Apply a small amount of Permalub G No.2 (CK-0551) grease into the lower roller bushings
50	Take out the new CET Water Foam lower roller
51	CET211001 Water Foam lower roller
52	Install the antistatic ring (included with CET211001) onto the new lower roller shaft
53	Reinstall the lower roller bushings onto the new lower roller shaft on both sides as shown
54	Reinstall the new lower roller into the fuser unit directing the longer shaft to the drive side
55	Reinstall the lower bushing bracket on the drive side directing the three-hole bracket's side to the post on the bushing
56	Secure the bracket with two screws

57	Reinstall the lower bushing bracket on the sensor cable's side directing the three-hole bracket's side to the post on the bushing
58	Secure the bracket with two screws
59	Reapply the conductive grease onto the lower roller contact on the antistatic resistor assembly
60	Reinstall the antistatic resistor assembly, then secure it with a screw
61	Attach the small spring to the antistatic resistor assembly
62	Clean the surface of the lower roller with isopropyl alcohol
63	Rotate the upper pressure release gear until the arrow on the gear is directed as shown
64	Reinstall the plastic cable holder, carefully sliding it behind the gears and snapping its latches
65	Make sure the latches are correctly positioned
66	Make sure the pressure release sensor flag is working properly
67	Secure the plastic cable holder with a screw
68	Unplug the heater connector from the upper fixing film assembly
69	Remove the end hub on the heater connector side, then pull out the upper fixing film
70	Wipe the heating element and its casing with a dry, lint free cloth
71	Carefully remove the heating element
72	Wipe the area under the heating element with a dry, lint free cloth
73	Clean the thermistors and heater element casing with isopropyl alcohol
74	Clean the heating element with acetone
75	<i>Note: Replace the heating element with the new one (CET291003 – 220V, CET291001 – 110V) if it is damaged or has significant wear</i>
76	Reinstall the heating element into the casing, carefully sliding its end under the metal tab
77	Contact pads are directed to the heater connector side
78	Take out the new CET upper fixing film
79	CET311001 Upper fixing film
80	Apply the grease (included with CET311001) onto the heating element, then evenly distribute it across the heating element
81	<i>Note: The grease should cover the heating element by thin, semitransparent layer</i>
82	Clean the end hubs with a cotton swab
83	Apply a small amount of grease onto the end hubs
84	Reinstall the new upper fixing film onto the heating element
85	Conductive ring on the upper fixing film is directed to the heater connector side
86	Reinstall the end hub
87	Snap the guide roller to the upper fixing film assembly
88	Plug in the heater connector
89	Clean the surface of the upper fixing film and guide roller with isopropyl alcohol
90	Reinstall the upper fixing film assembly into the fuser unit
91	Reinstall the fuser entrance shutter assembly into the fuser unit
92	Arrange the cables into the cable holder
93	Reinstall the intermediate gear assembly, then secure it with a screw
94	On the sensor cables' side, rotate the pressure release gears until the arrows on the gears are directed oppositely

95	On the drive side, reinstall the lower pressure release gear, then secure it with a clip
96	Reinstall the pin into the upper pressure release axle
97	Reinstall the upper pressure release gear, aligning the arrows on the gears as shown, then secure it with a clip
98	Make sure the pressure release gears freely rotate
99	Reinstall the plastic cable holder on the drive side
100	Arrange the cables into the holder
101	Reinstall the pin into the lower roller shaft, then reinstall the lower roller gear, securing it with a clip
102	Reinstall the pressure arm bracket on the drive side, then secure it with a screw
103	Reinstall the pressure release arm, rotate the cam to reach the lowest position of the arm, then attach the tension spring
104	On the sensor cables' side, reinstall the pressure release arm and its bracket
105	Secure the bracket with a screw
106	Attach the tension spring on the sensor cables' side
107	Reinstall the plastic cover
108	Reinstall the metal cover, making sure the four gaps are aligned with the corresponding tabs
109	Secure the metal cover with two screws
110	To find the components used in this video please visit our website www.cetgroupco.com