

KONICA® MINOLTA® MAGICOLOR 1600W TONER CARTRIDGE



# REMANUFACTURING THE KONICA MINOLTA MAGICOLOR 1600W BLACK & COLOR TONER CARTRIDGES

#### By Mike Josiah and the Technical Staff at UniNet

First released in November 2008, the Magicolor 1600 series of machines are based on a 20ppm Black 5ppm color print engine. The 1600 series has a base resolution of 600 x 600 Dpi, Enhanced resolution of 1200 x 600dpi. The MF machines are multifunction with scanners, copiers and fax built in. All models have a recommended monthly duty style of 35,000 pages per month. These machines are all based on the old carousel type system where the toner cartridges rotate and feed a single drum cartridge. This system is slower than the newer systems, but the costs for the cartridges are less (one drum unit for all).

#### **MACHINES BASED ON THE 1600 SERIES ENGINE**

Magicolor 1600W Magicolor 1650EN
Magicolor 1680 MF Magicolor 1690 MF

There are high yield cartridges as well as low yield cartridges available. In addition to the toner cartridges, there is a separate drum unit as well as a waste box. The cartridges used by these machines by region are as follows (this is the first machine I have seen where China has its own region set aside for cartridges):

USA	A0V3 01F Black HY	<b>2,500</b> pages at <b>5</b> %
	A0V3 0HF Cyan HY	<b>2,500</b> pages at <b>5</b> %
	A0V3 06F Yellow HY	<b>2,500</b> pages at <b>5</b> %
	A0V3 0CF Magenta HY	<b>2,500</b> pages at <b>5</b> %
	A0V3 0GF Cyan LY	<b>1,000</b> pages at <b>5</b> %
	A0V3 05F Yellow LY	<b>1</b> ,000 pages at <b>5</b> %
	A0V3 0AF Magenta LY	<b>1</b> ,000 pages at <b>5</b> %
	AOVU 011 Drum	
EUROPE	A0V3 01H Black HY	<b>2,500</b> pages at <b>5</b> %
	A0V3 0HH Cyan HY	<b>2,500</b> pages at <b>5</b> %
	A0V3 06H Yellow HY	<b>2,500</b> pages at <b>5</b> %
	A0V3 OCH Magenta HY	<b>2,500</b> pages at <b>5</b> %
	A0V3 0GH Cyan LY	<b>1,000</b> pages at <b>5</b> %
	A0V3 05H Yellow LY	<b>1,000</b> pages at <b>5</b> %
	A0V3 0AH Magenta LY	<b>1,000</b> pages at <b>5</b> %
	A0VU 0Y1 Drum	
ASIA/PACIFIC	A0V3 01K Black HY	<b>2,500</b> pages at <b>5</b> %
	A0V3 OHK Cyan HY	<b>2,500</b> pages at <b>5</b> %
	A0V3 06K Yellow HY	<b>2,500</b> pages at <b>5</b> %
	A0V3 OCK Magenta HY	<b>2,500</b> pages at <b>5</b> %
	A0V3 0GK Cyan LY	<b>1,000</b> pages at <b>5</b> %
	A0V3 05K Yellow LY	<b>1,000</b> pages at <b>5</b> %
	A0V3 OAK Magenta LY	<b>1,000</b> pages at <b>5</b> %
	A0VU 0Y1 Drum	
GREATER CHINA	A0V3 01N Black HY	<b>2,500</b> pages at <b>5</b> %
	AOV3 OHN Cyan HY	<b>2,500</b> pages at <b>5</b> %
	A0V3 06N Yellow HY	<b>2,500</b> pages at <b>5</b> %
	A0V3 OCN Magenta HY	<b>2,500</b> pages at <b>5</b> %
	A0V3 OGN Cyan LY	<b>1,000</b> pages at <b>5</b> %
	A0V3 05N Yellow LY	<b>1,000</b> pages at <b>5</b> %
	AOV3 OAN Magenta LY	<b>1,000</b> pages at <b>5</b> %
	AOVU OY1 Drum	

<sup>\*</sup>The pricing on all cartridges (in U.S. dollars) is current as of December 2009.



\$90.00 List\* \$127.95 List\* \$127.95 List\* \$127.95 List\*

#### **REQUIRED TOOLS**

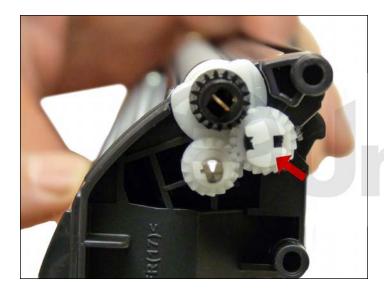
- 1. Toner approved vacuum
- 2. Phillips head screwdriver
- 3. Needle nose pliers
- 4. Jeweler's screwdriver set

#### **SUPPLIES REQUIRED**

- 1. 1600 dedicated color toner
- 2. Replacement chip
- 3. Shipping cover
- 4. Lint free cloths



1. Remove the fill plug and dump out any remaining toner.



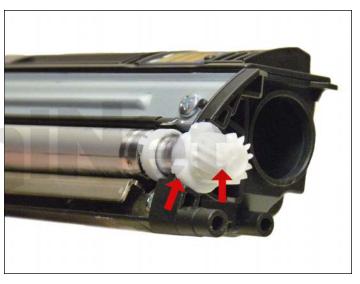


2. On the gear side of the cartridge, pry in on the tab of the gear lock. Remove the lock.





3. Remove the two white gears.



4. On the opposite side, remove the large drive gear and bushing.





5. Slide the gear side bushing out and remove the mag roller.



6. Remove the two screws and doctor blade. Pry the blade up from the back edge. There are alignment pins that can break.





7. Remove the two screws and the sealing blade. Carefully lift off and place on the top of the assembly.

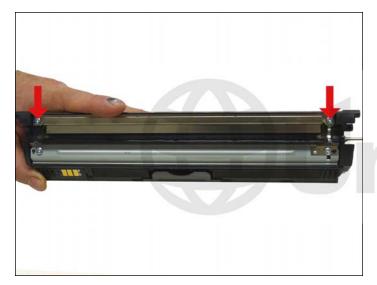
Do not try to remove completely as the seals will tear and you may develop a leak.



8. Clean out any remaining toner from the hopper, foam seals and the feed roller.



9. Install the cleaned sealing blade assembly, seals and two screws.

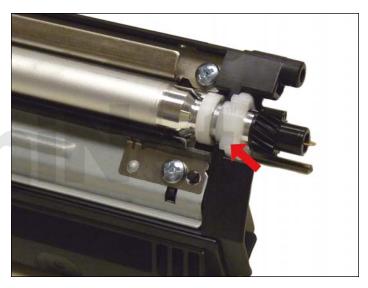


10. Install the doctor blade and two screws.



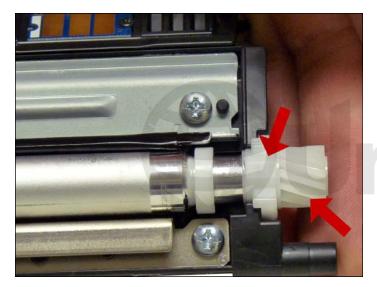
11. Install the developer roller assembly.





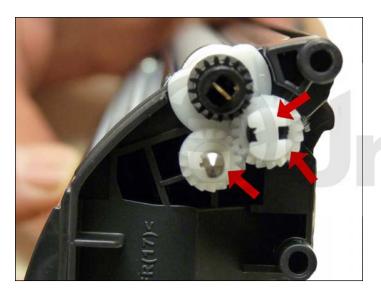
12. On the gear side, set the bushing and turn so that the flat side is facing up.

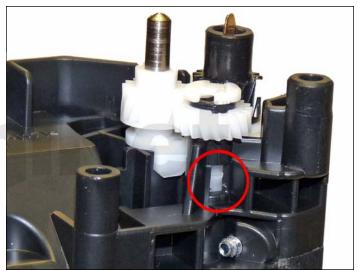
Press in on the bushing until it locks in place.



13. On the opposite side of the roller, install the bushing flat side up. Press in the drive gear. Make sure the gear locks into the shaft.







14. Install the two gears and gear lock.

Make sure the tab on the gear lock is in the slot.



15. Fill with the appropriate 1600 color toner.

Replace the fill plug.



16. Replace the chip by removing the small Phillips screw.







17. Install the developer roller cover. Slide the thin black edge under the sealing blade.

Tape the cover in place.

#### **TAKING TEST PRINTS**

For the 1600W and the 1650EN, the printer driver controls everything. Test prints have to be run through a PC with the driver installed. On the two MF machines, you can just make a copy of a suitable test page.

