



**97-043 Rev B
2 May, 2007**

M100A SHUTTER ASSEMBLY REPLACEMENT

I. BACKGROUND:

The older M100A has occasionally exhibited a problem best described as a "sticky" shutter. The symptoms vary from "SHUTTER WARNING" to a negative reading out the back and XXXX displayed intermittently for concentration.

II. SCOPE:

This procedure addresses replacing the shutter assembly in M100A analyzers.

III. TOOLS:

Phillips head screwdriver

Needle-nose pliers

Shutter Assembly, API Part # 01503

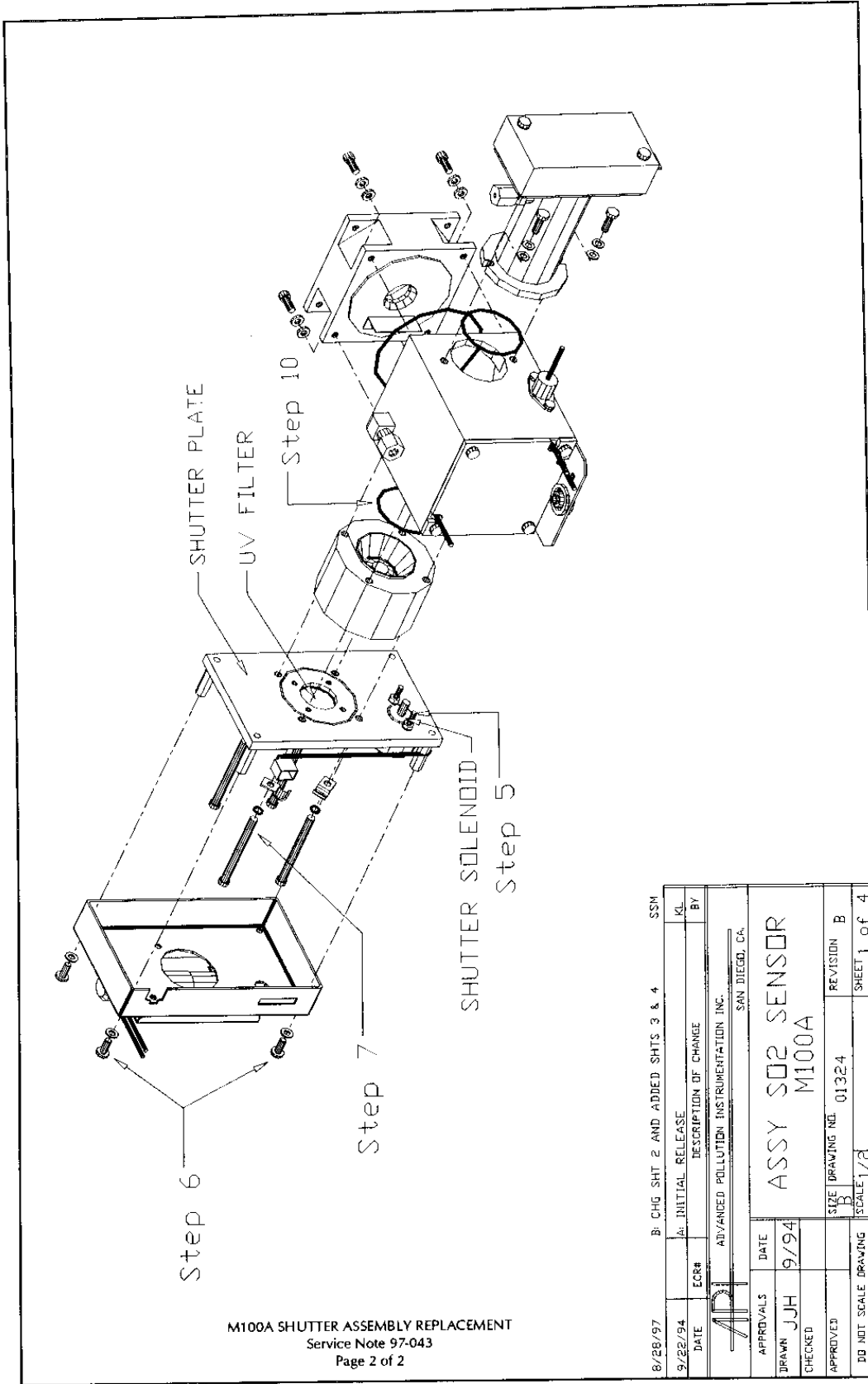
IV. PROCEDURE:


1. Remove power to analyzer.
2. Remove cover from analyzer.
3. Remove status/temp card and V-F / CPU assembly from analyzer.
4. Unplug UV lamp.

NOTE: For the next 7 steps, please refer to drawing #01324 attached.

5. Look behind the shutter cover and locate the two bolts. Use the needle-nose pliers to loosen the nuts until they are about halfway between the plate and the end of the bolt. You may have to remove the three shock mounted screws holding the sensor assembly into the chassis and lift the sensor assembly in order to access these bolts.
6. Remove the four screws holding the shutter cover in place.
7. Remove the shutter cover. If necessary, loosen the two nuts on the back of the plate further to facilitate cover removal.
8. Remove the 4 bolts holding the shutter plate to the lens housing.
9. Remove the shutter plate and lens housing from the sensor assembly.
10. When assembling new shutter plate, be sure to place the o-ring on the end of the lens housing and ensure that it is not pinched.
11. Installation is the reverse of removal. Be sure to remove the lamp holder from the old cover and install it on the new plate.

12. Allow the analyzer to warm up for one hour, then perform the factory calibration to restore slopes and offsets.



8/28/97	B: CHG SHT 2 AND ADDED SHTS 3 & 4		SSM
9/22/94	A: INITIAL RELEASE	DESCRIPTION OF CHANGE	KL
DATE	ECR#		BY
 ADVANCED POLLUTION INSTRUMENTATION INC. SAN DIEGO, CA.			
APPROVALS	DATE	ASSY SO2 SENSOR	
DRAWN J J H	9/94	M100A	
CHECKED		SIZE	REVISION B
APPROVED		DRAWING NO. 01324	
DO NOT SCALE DRAWING		SCALE 1/8	SHEET 1 of 4

