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18 Park Way, Upper Saddle River, NJ 07458

Service Bulletin

No. 012

Date: January 5, 2006

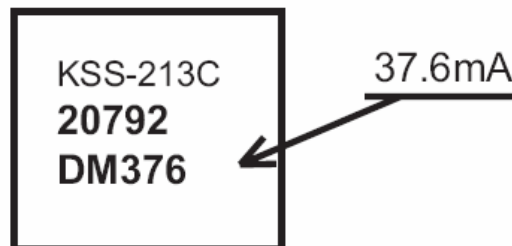
Model: CDC-3/3.1/3.4, DX-C34/C370/C380/C390

Subject: Alignment Tips before Replacing the KSS-213C Optical Pickup.

Symptom: Models using an Analog Servo do not automatically adjust IP (Laser Current) and sometimes will leave the RF Level very low.

Solution: Measure IP of Pickup at both ends of TR Emitter Resistor (20-30 ohm) connected to LD terminal of Pickup, and then compare the measured value with the standard value (printed on label).

Standard Value of IP
Rating Label



1.) IP (laser current) Check

If the obtained IP value is lower than the standard value perform the following:

Adjust the RF Level to 1Vp-p using the trimmer potentiometer and make sure that the IP is in the specified range.

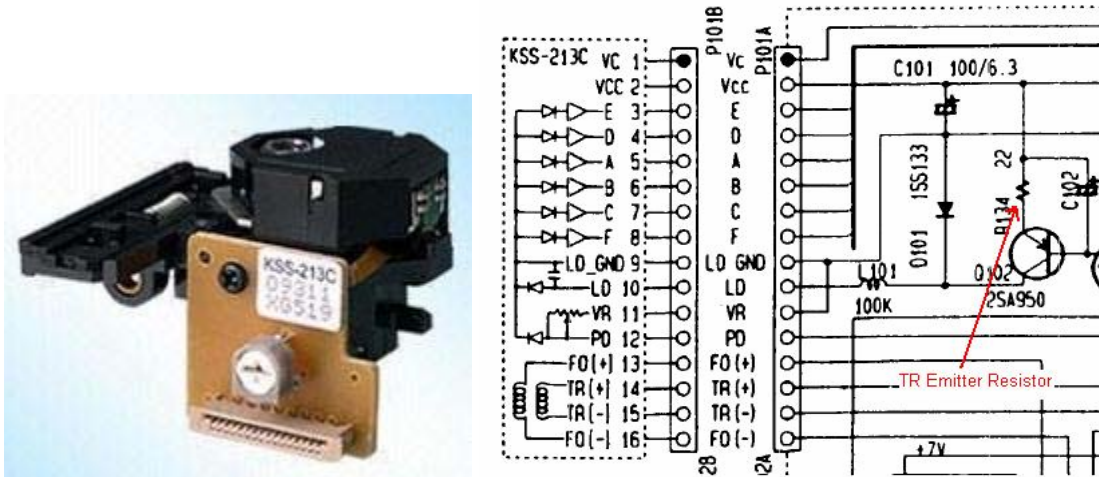
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Apply 1-hour aging to the unit and make sure again that the IP is still in the specified range.

Note: IP increases as the temperature goes up because the resistance goes down.
After aging, the increase in value should be within 5% of the Standard Value.
Example: before aging value → 37-38mA., suitable value after aging → 40mA.

If the IP rapidly increases, the Photo Diode has a problem. In this case, the Optical Pickup needs replacing.



2.) Visual Check

Check to see the Lens has not dropped.

If so, Focus Zero Cross is not correctly positioned and, in most cases, the outermost track (TR 15) of the Test Disc cannot be played. Replace the Pickup with a new one.

3.) Test Disc Check: ABEX TCD-731RA

Check to see if the outermost track (TR 15) can be played.

Check whether there is only a small difference in Jitter values between the innermost (TR 1) and the outermost track (TR 15).

Reference Jitter Value: Standard jitter value varies depending on the measuring instrument. It is preferable to set the value in advance by checking a known good unit.

Note: If the ABEX Test Disc has a lot of scratches, fingerprints, dirt, etc., the Jitter value tends to be slightly higher.

If either of the above two checks (Visual and Test Disc) is not good, replace the Pickup with a new one.

Serial Number Range: All

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