

# TANDBERG PRODUCT BULLETIN

CENTRE DU MAGNETOPHONE DE MTL  
6592 BOUL. ST-LAURENT  
MONTREAL, QUE H2S 3C6

RECEIVED MAR - 8 1978

PREPARED BY: Prod. Lab/. T.B. B.S. DATE OF ISSUE: 11.1.78..... No.: TB 71E...

<p>MODEL:.....TCD 330/..... TCD 310 MK 11</p> <p><b>THE CHANGE IMPLIES:</b></p> <p>Delivered equipment <input type="checkbox"/></p> <p>Future deliveries <input type="checkbox"/></p> <p>Spare parts stock <input type="checkbox"/></p> <p>Spare part compability <input type="checkbox"/></p> <p>Manual <input type="checkbox"/></p> <p>Other.....</p>	<p>REASON FOR CHANGE:..Tape path problems.....</p> <p>Design improvement <input type="checkbox"/></p> <p>Custom modification <input type="checkbox"/></p> <p>Supply difficulties <input type="checkbox"/></p> <p>Production adaption <input type="checkbox"/></p> <p>Standardization <input type="checkbox"/></p> <p>Correction of drawing <input type="checkbox"/></p> <p>Other.....</p>
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E.O.No.....

Part No.:..... New Modification No.:..... or New Part No.:.....

**DESCRIPTION OF CHANGE:**

TAPE PATH PROBLEMS ON MOD. TCD 330 and TCD 310MK11.

Symtoms:

- 1: Wrinkling the tape (eating tape).
- 2: Intermittant poor tape/head contact.
- 3: ---- ---- loss of high frequency.
- 4: ---- ---- poor or no erase.

Following modification and adjustment should be carried out.

1. Change R331 from 3.9k $\Omega$  to 2.7k $\Omega$ .  
This will increase the take-up tension from 35 gr/cm to 55 gr/cm. ( This regards only mod.TCD330 )
2. If the recorder is equipped with clutch:  
Remove spindle with clutch on supply motor and install old type spindle. Also put the counter belt back on supply motor. (The old type belt should be used)
3. Carefully adjust the azimuth and zenith of both pinch-rollers in relation to the capstan shaft.  
Also adjust the height of playbackhead and erasehead (tape guides). Use either Tandbergs tape path gauge or an open casset. ( Test casset no. 29 ).

Date of change:..... Changed from serial No.:..... Page..1.. of..2..

**TANDBERG**

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4. Adjust the exentric shaft until both pinch rollers engage the capstans at the same time.
5. Test the tape path by using test casset no. 29.  
Do as following:  
Set the recorder in playback with casset no. 29.  
feed the tape on the supply side (by use of your fingers)  
You will now have a minimum of holdback tension and  
observe as the tape runs through, you should now have  
a stable tape run without wrinkling of the tape.  
Minor adjustment should be made on left pinchroller  
(azimuth) if the tape does not run smooth.

Note: .TCD 330.

From ser.no.4181027 R331 has been changed from 3.9k to 2.7k.

Note: TCD 310MK11

From ser.no.4424992 the clutch has been removed.

The tape recorder lab. is still working on this problems  
to find an final solution.  
We will keep you informed.



# TANDBERG PRODUCT BULLETIN

Model: TCD 330

Serial No./Production date/Code identification:

Prepared by: Prod.lab./O. Lagesen.

Reference:

Bulletin No.: 53

Date: Nov. 25. 1976.

## Wow Reducing Efforts.

There were no special problems in keeping the wow-limits during the control production, but a lot of the capstan-motors (HU 443AG) were rejected because of noise, and we preferred to start the main series with the TCD 310 motor (4ZSC 15U02P).

However, we soon got problems in keeping the specified wow-limits on a large number of units. The wow was also very much depending on the cassette quality.

From serial no. 4171863 the following changes have been introduced in the production with good results:

For 115V-units item 1 (motor) was introduced from ser.no. 4172800.

1. Motor HU 443 AG part no. 283767 has been introduced, but with rubber suspension to reduce noise.

2. Flywheel with greater movement inertia

3 Belts have been sorted out with regard to wow.

4. The erase head has got a different profile. → Part no. 994161

Service device

Part no. 994111

These changes can be introduced on all units.

A great number of the units with ser. no. below 4171863 have already been altered with regard to above points 1-4.

NB. We do not recommend that the motor is changed for rubber suspension as this will have to introduce changes on the mounting plate.

# TANDBERG PRODUCT BULLETIN

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Serial No./Production date/Code identification:

Prepared by: Prod.lab./O. Lagesen.

Reference:

Bulletin No.: 53

Date: Nov. 25. 1976.

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# TANDBERG PRODUCT BULLETIN

CENTRE DU MAGNETOPHONE DE MIL.  
6592 BOUL. ST-LAURENT  
MONTREAL, QUE H2S 3C6

PREPARED BY: Prod. lab. TB. .... DATE OF ISSUE: Feb. 1. -78 No. TB 72E

<b>MODEL:</b> TCD 330.....	<b>REASON FOR CHANGE:</b> Tape path problems.....
<b>THE CHANGE IMPLIES:</b>  Delivered equipment <input type="checkbox"/> Future deliveries <input type="checkbox"/> Spare parts stock <input type="checkbox"/> Spare part compability <input type="checkbox"/> Manual <input type="checkbox"/> Other.....	Design improvement <input checked="" type="checkbox"/> Custom modification <input type="checkbox"/> Supply difficulties <input type="checkbox"/> Production adaption <input type="checkbox"/> Standardization <input type="checkbox"/> Correction of drawing <input type="checkbox"/> Other.....

E.O.No.....  
 Part No.:..... New Modification No.:..... or New Part No.:.....

**DESCRIPTION OF CHANGE:** Additional informations regarding tape path problems on TCD 330. Please refer to Product Bulletin No. 71.

In addition to modifications described in Product Bulletin No. 71, the following changes is carried out on TCD 330:

Modification: Introduction of back-tention on supply motor:  
 Resistor 1 kOhms, 1/2 W is connected as shown in fig.

All modifications including those described in P.B. No. 71 are carried out from Ser. no. 4181142. All machines in stock are also modified from shipping date Feb. 1. -78. The modified machines are marked with T on the identification label on carboard box.

Because of delivery problems on capstan motors for TCD 330 we will from ser.no. 4181142 use the same capstan motor as for TCD 310 Mk II.- Part no. 280405.

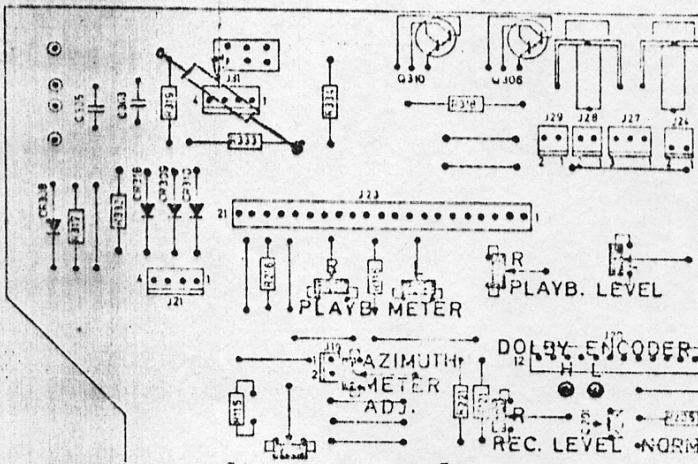
Ref. P.B. No. 71 : Belt for counter for use on right spindle has Part no. 309600.  
 Belt for counter for use on left spindle has Part no. 300001.  
 Spindle for wind- and rewind motors has Part no. 994113.

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Side 2 of 2

*1 kohm 1/2 w*



Part of A 1.

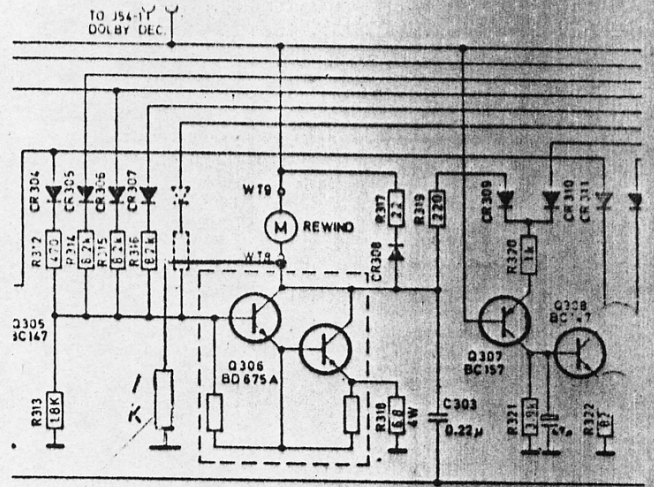


Fig.

Part of A 1.

*1 kohm 1/2 w*

MODEL: TCD 330  
 VOLT: 240  
 FREQ.: 50  
 VARE: 5748 TEAK

TAPE RECORDER  
 BÄNDOPPTAKER

**Tandberg**  
 CARLSBERG



# TANDBERG

OF AMERICA, INC.



May 7, 1979

SERVICE BULLETIN NO. 1

Subject: 1. TCD-330 with frozen  
ball bearings  
2. Maintenance

1. We have had some TCD-330's back for service from both dealers, warranty stations and customers with the following complaint:

"Bad recording/play and drop in volume"

The problem has simply been frozen pinchrollers due to lack of oil in the bearings.

**Solution:**

Replace both pinchrollers and put a fraction of a drop of good thin oil in the bearings. Remember also to clean the pinchroller shaft before the new pinchrollers are installed.

2. Maintenance on all pinchrollers:

Pinchrollers should not be overcleaned. Four to five times a year is sufficient. Freon TF from Dupont is very good to use. After cleaning insert the rubber with a little talcum powder to prevent stickiness.

Sincerely,

TANDBERG OF AMERICA, INC.

A handwritten signature in cursive script, appearing to read "Tor Sivertsen".

Tor Sivertsen  
Technical Director

TS/amm

