Kjeller: 18th January 1982 Information No: 820116

Tandberg A/S
Fetveien 1,
Kjeller, Norway

Postal address
P.O. Box 53
N-2007 Kjeller, Norway

Telephone
02-71 68 20
Telex
71886 TAND N
Cables
TANRA-OSLO

TANDBERG Service information

Product: TCD 3034

Polarization of C903

In some TCD 3034 the capacitor C903 is inserted in a wrong position so that it will get reverse polarization.
The correct position is that the positive pole of the capacitor shall be connected to ground.

Per Brændshøi / Roger Jensen

PB/RJ/bf

Kjeller: May, 14th 1982 Information No: 82 05 14

Tandberg A/S
Fetveien 1,
Kjeller, Norway

Postal address
P.O. Box 53
N-2007 Kjeller, Norway

Telephone
02-71 68 20
Telex
71886 TAND N
Cables
TANRA-OSLO

TANDBERG

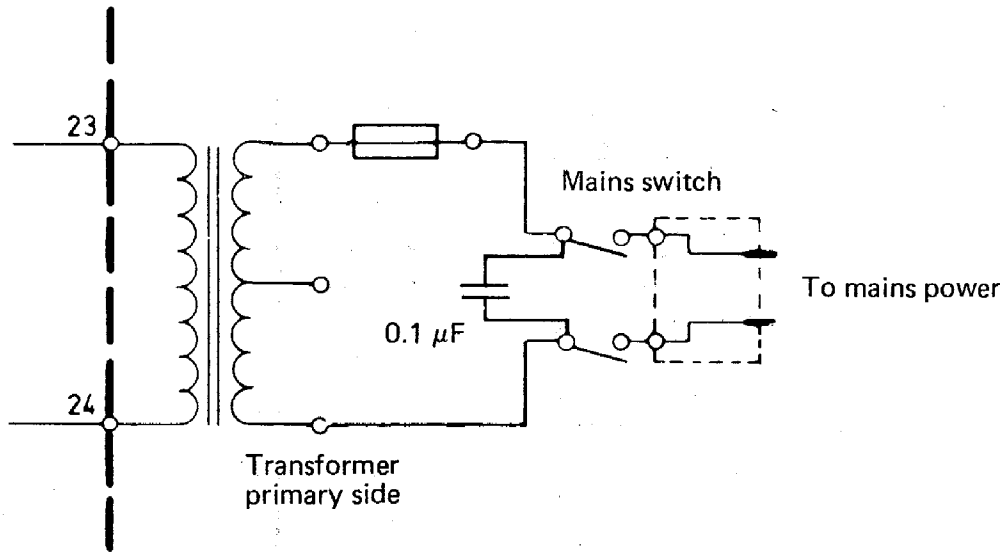
Service information

Product: TCD 3034

Interference suppressor

To reduce the noise when mains power is switched off, connect a 0.1 μF capacitor across the primary windings of the mains transformer.

In our production the capacitor is mounted on the mains switch.



For safety reasons the capacitor leads should be double insulated and soldered to the same terminals as the transformer primary wires.

Type of capacitor which is approved by NEMKO: RIFA PME 271M610.

Notice regarding capacitor on mains switch:

This solution cancels the one described September 30th 1981.

Roger Jensen

Kjeller: 28th May 1982 Information No: 820528

Tandberg A/S
Fetveien 1,
Kjeller, Norway

Postal address
P.O. Box 53
N-2007 Kjeller, Norway

Telephone
02-71 68 20
Telex
71886 TAND N
Cables
TANRA-OSLO

TANDBERG Service information

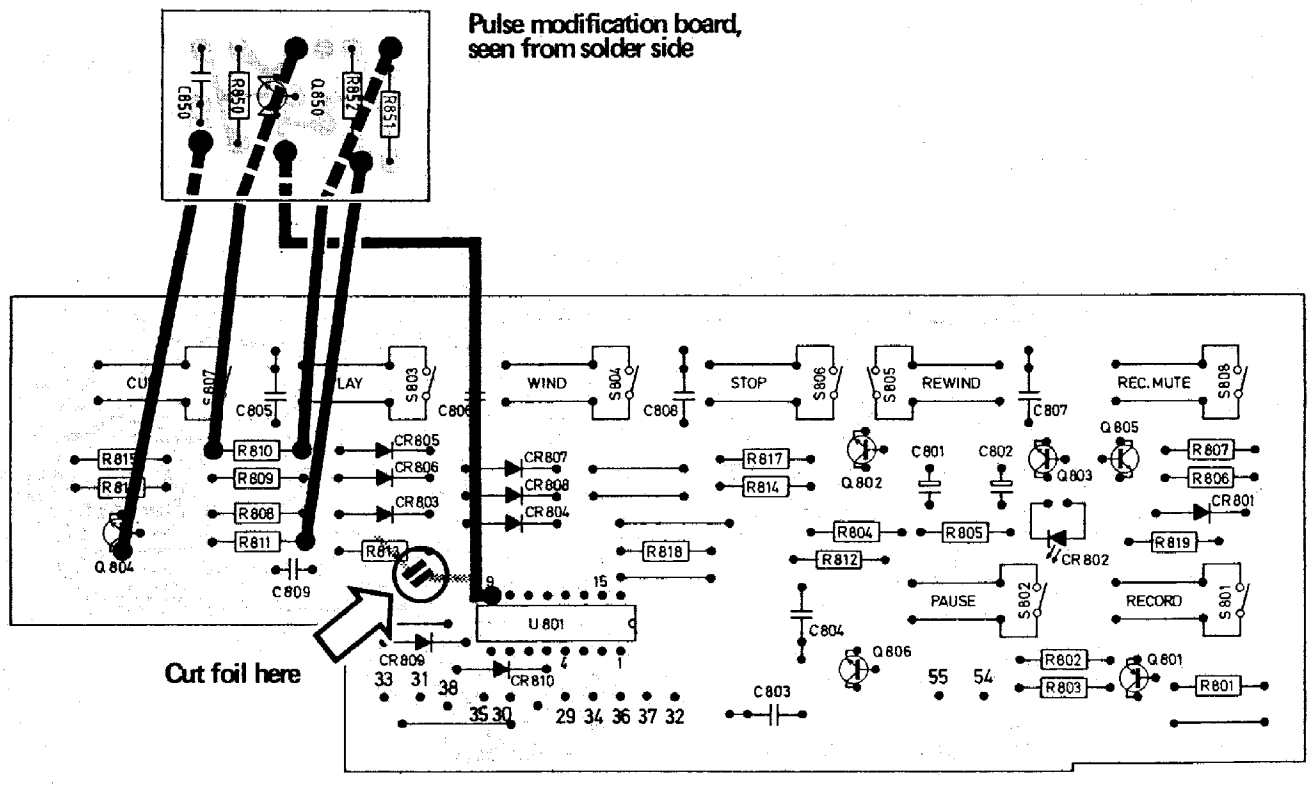
Product: TCD 3034

PULSE MODIFICATION CIRCUIT

In some areas there are noise spikes on the mains voltage. The spikes can disturb the logic function so that the deck may fall out of play or fast winding modes.

To correct this, a pulse modification board can be installed on the function board. When this board is installed, the input 9 on U801 will have a high level, and make the deck less sensitive to noise spikes.

Cut the foil near the input 9 on U801 and solder on the board as shown in the figure below.



Function board, seen from solder side

After installing the pulse modification board, you must check the end stop function. If the end stop has an intermittant function, then change:

R808 from 1 kohm to 4,7 kohm and
R809 from 12 kohm to 22 kohm.

TANDBERG

P R E F A C E

to

Service Information 821223 - TCD 3034

Mechanical damage of tapes in TCD 3034

When used with TCD 3034 some cassette/tape types are more exposed to mechanical damage than others, especially when their internal friction is very low, like e.g. the BASF SM type mechanism.
To overcome this problem, all TCD 3034 being brought in for service should be controlled and adjusted according to this Service Information.

After control and adjustment the serial number label attached to the rear side of the product should be marked with an asterisk following the serial number for later service identification.

The washers mentioned under - Position of cassette - have the following data : 7 x 3 x 0,3 mm - part No. 263070.

The tools necessary are:

1 ea Tandberg tape path gauge A - part No. 713537
1 ea Tandberg tape path gauge B - part No. 716391
1 ea Tandberg pinch roller adj.tool - part No. 997570
1 ea Sony torque meter CQ 102 A

Kjeller, 23rd December, 1982

Tor Andresen (sign.)
Product Manager

- Control of tape path.

  For controlling the tape path a C 90 BASF CrO_2 cassette is to be used.
  The tape must run centric on the pinch roller and no climbing must be observed at the start of the tape.

- Azimuth.

  After any adjustment of the tape path azimuth is to be adjusted.
  Use Tandberg test tape No. 23 or a standard azimuth cassette.
  Adjust the azimuth screw on record/-playback head for maximum reading measured on the playback connections.

Tor Andresen (sign.)
Product Manager

Viktor Pedersen (sign)
Technical Writer

Kjeller: 23rd December 1982 Information No: 821223

Tandberg A/S
Fetveien 1,
Kjeller, Norway

Postal address
P.O. Box 53
N-2007 Kjeller, Norway

Telephone
02-71 68 20
Telex
71886 TAND N
Cables
TANRA-OSLO

TANDBERG

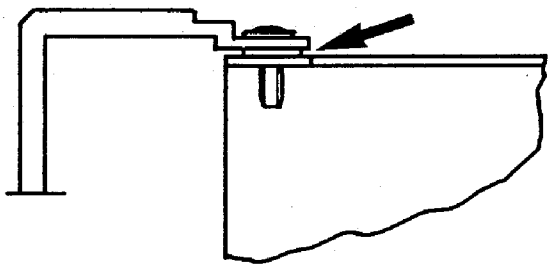
Service information

Product: TCD 3034

CONTROL AND ADJUSTMENT OF TAPE PATH ON T C D 3 0 3 4

In an exact tape path the following items have to be correctly adjusted.

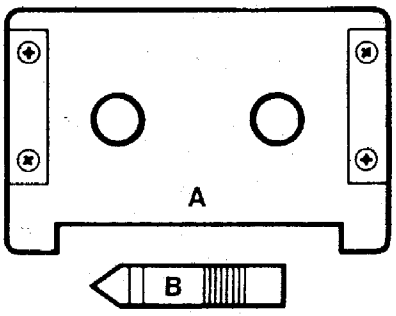
- Height and angle of heads.
- Height and angle of pinch roller.
- Pinch roller pressure.
- Position of cassette.
- A clean tape path.



CONTROL AND ADJUSTMENT

- Position of cassette.

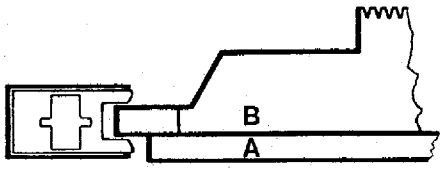
  The cassette is not allowed to touch the front of the unit. If it does, 5 washers have to be placed under the 5 mounting screws. This to obtain a straight front cover. See fig.



Tape path gauge

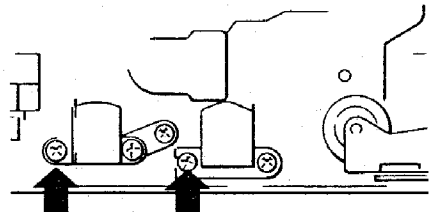
- Erase head.

  Part B of Tandberg tape path gauge is to move freely between the tape guides, see fig. The height can be adjusted with the adjusting screw shown on fig.



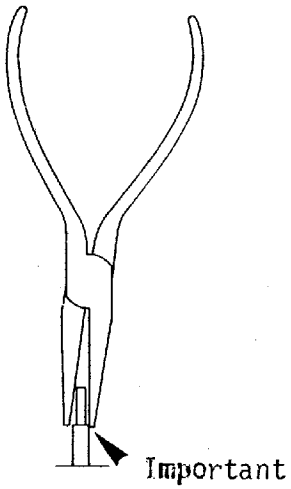
- Record / Playback head.

  Part B of Tandberg tape path gauge is to move freely or slightly touch the tape guides. The touching must not be of such a character that part B loses its contact with part A. If the height is incorrect, something that seldom occurs, the washer under the mounting screw has to be replaced by a



- Pinch roller.

  If the pinch roller needs adjustment the spring clip must first be removed, then carefully remove the spring from the bracket and at last the arm and bracket.
  When applying a plier for adjustment it is very important to do it according to the figure shown.

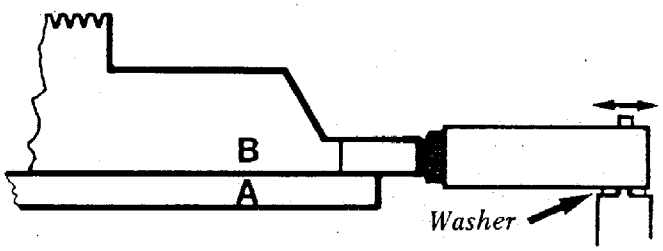


- Pinch roller height.

  The shaft is to be bent as shown by the arrow - to the right if the pinch roller height is too low, to the left if it is too high.

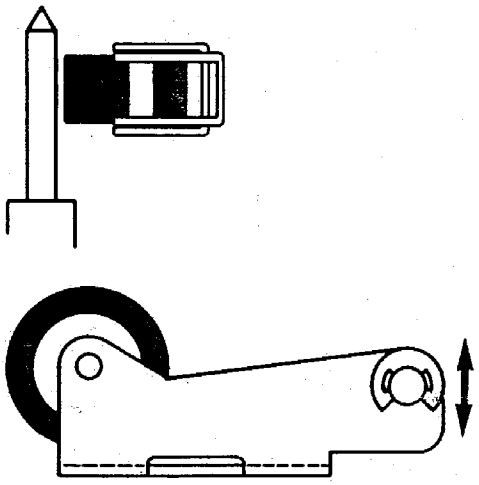
  To control it, the pinch roller is to be mounted (without spring and bracket) and part B of tape path gauge shall hit on the middle of the pinch roller.

  Important:
  The washer must not be removed when controlling.



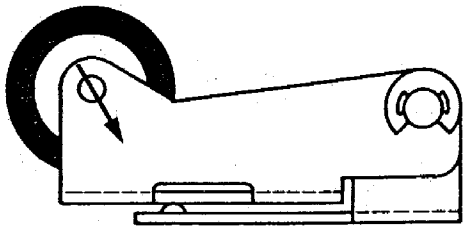
- Parallelism.

  Mount enclosed tool (pinch roller arm with cylindrical pinch roller). Push the arm carefully against capstan. If the pinch roller is not parallel with the capstan, the shaft must be bent according to figure to obtain parallelism.



- Pinch roller pressure.

  Using a 1 kg dial gauge the pressure is to be measured on the pinch roller arm in the direction shown by the arrow. The value is to be red when the pinch roller leaves the capstan. If the pressure is not between 475 and 550 gr. it shall be adjusted within the tolerance by



Kjeller: 5th January 1983 Information No. 83104

Tandberg A/S
Fetveien 1,
Kjeller, Norway

Postal address
P.O. Box 53
N-2007 Kjeller, Norway

Telephone
02-71 68 20
Telex
71886 TAND N
Cables
TANRA-OSLO

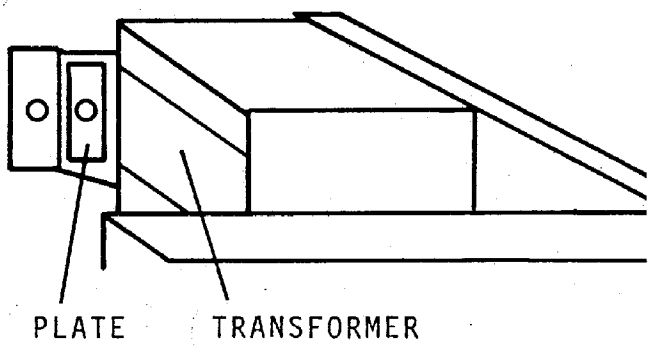
TANDBERG

Service information

Product: TCD 3034

NEW PLATE ON TRANSFORMER.

For better protection during transport, the power transformer is fastened to the bracket with a new plate. The new plate is approx. 2 mm (0,08") thick and has part No. 997463.



To install the new plate:

- Remove the top/side- and back/bottom covers, see Service Manual.

- When installing the plate, make sure a lock washer is placed between the plate and the nut.

- Take the green and brown power wires together and fasten the wires with tape to the upper part of the back cover.

Tor Andresen (sign.)
Product Manager

Kjeller: 6th January 1983 Information No. 830106

Tandberg A/S
Fetveien 1,
Kjeller, Norway

Postal address
P.O. Box 53
N-2007 Kjeller, Norway

Telephone
02-71 68 20
Telex
71886 TAND N
Cables
TANRA-OSLO

TANDBERG

Service Information

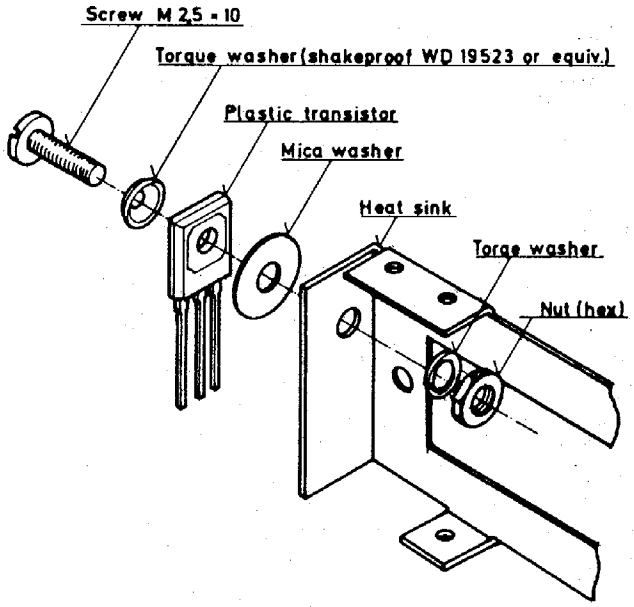
Product: TCD 3034

Internal tooth washers must be replaced by a torque washer (lock washer).

The internal tooth washer might damage the plastic house on the power transistors Q918 and Q703 after some time of operation.

The power transistors must be assembled as shown in the figure.

- Remove the top/side- and back/bottom cover, see Service Manual.



Mounting torque.

A torque of 6,9 kp/cm (6 in-lbs) is sufficient to keep the device firmly mounted. A maximum of 9,2 kp/cm (8 in-lbs) is specified, and if exceeded, the plastic may chip. Mounting torque in excess of 6,9 kp/cm (6 in-lbs) does not appreciably lower the case to sink thermal resistance. Use of the specified torque washer will keep the torque within safe limits by observing when the washer flattens slightly.

Tor Andresen (sign.)
Product Manager

Kjeller: 6th January 1983 Information No: 830106-A

Tandberg A/S
Fetveien 1,
Kjeller, Norway

Postal address
P.O. Box 53
N-2007 Kjeller, Norway

Telephone
02-71 68 20
Telex
71886 TAND N
Cables
TANRA-OSLO

TANDBERG

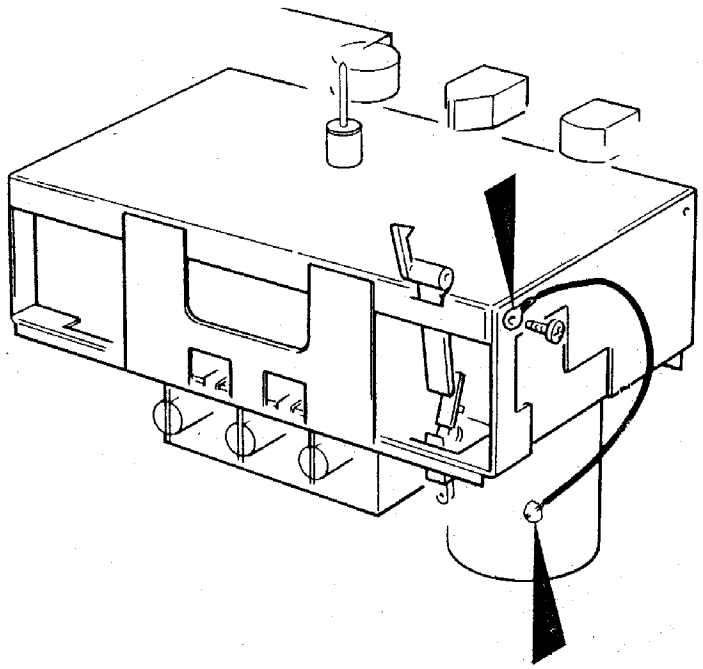
Service Information

Product: TCD 3034

GROUNDING THE CAPSTAN MOTOR.

Sometimes the deck may fall out of play.
This can be corrected by grounding the capstan motor to the bracket for the drive mechanism.

- Remove the top/side cover, see Service Manual.
- Remove some of the coating on the capstan motor to make a good soldering. Then solder a wire of approx. 7,5 cm (3") to the motor. Solder the other end of the wire to a soldering tag and fasten the soldering tag on to the bracket for the drive mechanism with the screw as shown in the figure.



Tor Andresen (sign.)
Product Manager

Viktor Pedersen (sign.)
Technical Writer

Kjeller: 7th January 1983 Information No: 830107

Tandberg A/S
Fetveien 1,
Kjeller, Norway

Postal address
P.O. Box 53
N-2007 Kjeller, Norway

Telephone
02-71 68 20
Telex
71886 TAND N
Cables
TANRA-OSLO

TANDBERG Service information

Product: TCD 3034

CHECKING THE POLARITY OF CAPACITOR C903

After long time C 903 may dry up because of negative pulses during operation.

- Remove the top/side- and back/bottom cover as shown in the Service Manual.
- Check that C 903 - 2,2 µF is mounted so that the + leg on the capacitor is in the + hole marking on the pc-board.

Tor Andresen (sign.)
Product Manager

Viktor Pedersen (sign.)
Technical Writer

Kjeller: 10th January 1983 Information No: 830110

Tandberg A/S
Fetveien 1,
Kjeller, Norway

Postal address
P.O. Box 53
N-2007 Kjeller, Norway

Telephone
02-71 68 20
Telex
71886 TAND N
Cables
TANRA-OSLO

TANDBERG Service information

Product: TCD 3034

HUM IN SOURCE POSITION

On some decks, hum can occur in source.

To correct this, reverse the L101 (left) and L201 (right).

- Remove top/side- and back/bottom cover, as shown in the Service Manual.

Tor Andresen (sign.)
Product Manager

Viktor Pedersen (sign.)
Technical Writer

Kjeller: 11th January 1983 Information No: 830111

Tandberg A/S
Fetveien 1,
Kjeller, Norway

Postal address
P.O. Box 53
N-2007 Kjeller, Norway

Telephone
02-71 68 20
Telex
71886 TAND N
Cables
TANRA-OSLO

TANDBERG Service information

Product: TCD 3034

NOISE WHEN GOING FROM PAUSE TO RECORD MODE.

The modifications are done on the solder side of the PC-board.

- Remove the top/side cover, see Service Manual.
- 1. Cut the foil between C909 (100 µF) and R924 (5k6).
  2. Solder a resistor of 1k between C909 and R924.
  3. Cut the foil between R921 (8k2) and R924.
  4. Solder a strap between R921 and C909 (+ side).
  5. Solder a resistor of 2k7 in parallel with R925 (3k3). (Or from the component side the R925 can be changed to 1k5)
  6. Solder a capacitor of 22 µF in parallel with C501 (10 µF).

Tor Andresen (sign.)
Product Manager

Viktor Pedersen (sign.)
Technical Writer