Vandercook Ink Monitor Instructions

SINGLE COLOR PRESSES

In order to maintain color uniformity from one proof to another, the following steps explain the procedure necessary to calibrate the instrument and place it into operation. The Ink Monitor also permits the operator to return at any future date to duplicate the quantity of ink used on previous proofing operations. It should be noted that color uniformity of proofs can only be maintained providing the identical paper, ink, and printing pressure is used.

The Vandercook Ink Monitor consists of three main sections: (1) a meter, (2) a transducer (or pick-up unit) which is in contact with an inking roller, and (3) a constant voltage regulator.

- 1. Position the transducer (or pick-up unit) in the yoke-type holder so that the glass wheel engages the ductor vibrator. In doing so, make certain the right angle bend in the spring (which is affixed to each end of the shaft attached to the transducer) is positioned on the back side of the yoke holder. In this manner, sufficient spring tension is applied to the transducer to keep it engaged with the ductor vibrator. Plug transducer into receptacle located under the feed board.
- 2. Turn ink drum switch on, and allow Ink Monitor to warm up for approximately five (5) minutes.
- 3. With ductor vibrator disengaged or not in contact with the ink drum, insert standard into slot in the transducer. Return cylinder to feed board.
- 4. In a few seconds, the needle on the meter will respond. Calibrate meter needle to read "20" by means of the adjusting knob.
- 5. After calibration, remove film standard.
- 6. Ink Monitor should be calibrated in this manner at least every day, preferably after each time the press has been washed up.
- 7. At no time should a calibration (or setting) be made when there is ink on the glass wheel, located in the transducer.
- 8. After monitor has been calibrated properly, the operator can then ink the press in the normal manner to obtain a proof for acceptance or approval.
- 9. After the proof has been approved, the reading on the Ink Monitor meter should be noted and recorded for future reference.

Thereafter, all proofs should be pulled with the same reading, working to a suggested tolerance of plus or minus "0.3" graduations on the meter. For example: should a reading of "4.0" be used as a normal setting for a given form, it is suggested that a level between 3.7 and 4.3 be maintained. Individual shop standards can be set, depending upon the quality level desired.

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The interior of the transducer, and especially the light source, must be clean at all times. A deposit of ink mist on the light source will result in an abnormal reading on the meter.

Although the photo cell is sealed within the glass roller, it may become necessary on occasion to remove condensation or fogging from the face of the cell, as well as the interior of the glass roller. The cell can be made accessible by releasing the round head screw and carefully removing the seal.

The photo cell can be cleaned with a cotton swab using mineral spirits or naphtha if necessary. Solvents such as lacquer thinner or those containing a ketone or acetone must not be used.

To realize the greatest accuracy with the Ink Monitor, all readings should be taken when the cylinder is at the feed board. The Ink Monitor transducer, which is extremely sensitive to light, is shielded when the cylinder is at the feed board.

The best performance from the Ink Monitor will be obtained when the press is located in an area that is not affected by changing sunlight or fluctuating light conditions.

Should the Ink Monitor be used with 4-color process inks, a filter for yellow and red inks is provided. The green filter is inserted into the slot in the transducer when yellow and red inks are used. No filter is required for blue and black ink.

In 4-color process ink operations, the press is inked in the usual manner with the Ink Monitor in operation, and with filter in place when necessary.

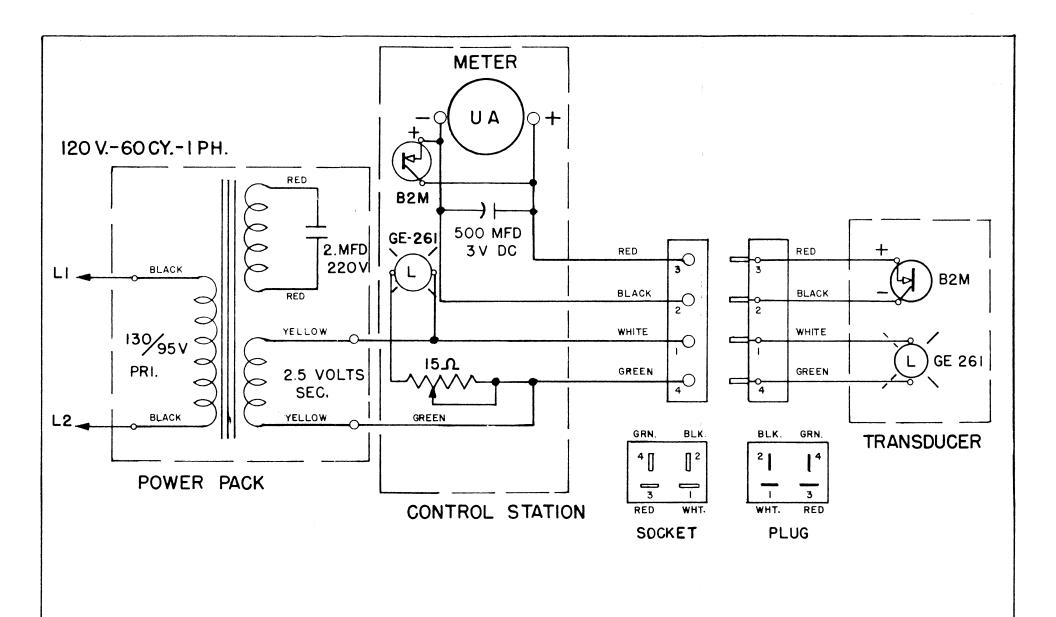
When an approval is given to the proof press operator, the meter is then adjusted to any desired reading—preferably near the center of the meter.

Should it be required to return to the same ink level at a later date, it is necessary to use an instrument such as a densitometer for this purpose.

If any portion of the Ink Monitor is damaged, it is important that it be returned to Vandercook & Sons Inc. for proper servicing.







VANDERCOOK INK MONITOR (ONE COLOR)

F.U. 244 SHEET NO. 267-A