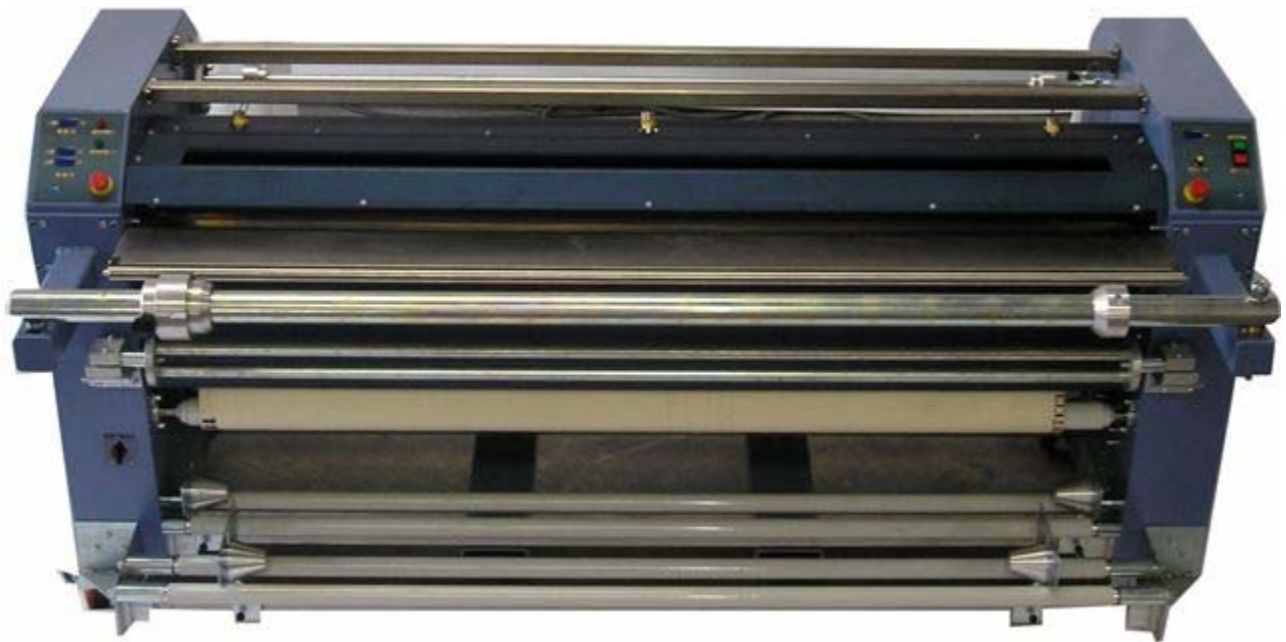




Innovation Excellence, through
Global Manufacturing and Distribution

The Manufacturer of
 *Value by Design*
Astechnologies
Equipment

OPERATION & PARTS MANUAL MODEL 7300IJ ROTARY HEAT PRESS



530 Wilbanks Drive • Ball Ground, GA. 30107
(770) 479-1900 tel. (770) 479-4179 fax



Innovation Excellence, through
Global Manufacturing and Distribution

WARNING

IT IS THE RESPONSIBILITY OF THE PURCHASER OF THIS MACHINERY TO TRAIN HIS OPERATING PERSONNEL IN THE PROPER MANNER OF OPERATION.

IT IS FURTHER UNDERSTOOD THAT A.I.T. ASSUMES NO RESPONSIBILITY FOR INJURIES, DISABILITIES OR DEATH RESULTING FROM IMPROPER OPERATION OF, REMOVAL FROM, OR THE BYPASSING OF ANY ELECTRICAL OR MECHANICAL SAFETY DEVICES INCORPORATED IN THE DESIGN AND MANUFACTURING OF THIS MACHINERY.



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Global Manufacturing and Distribution



SAFETY NOTICE

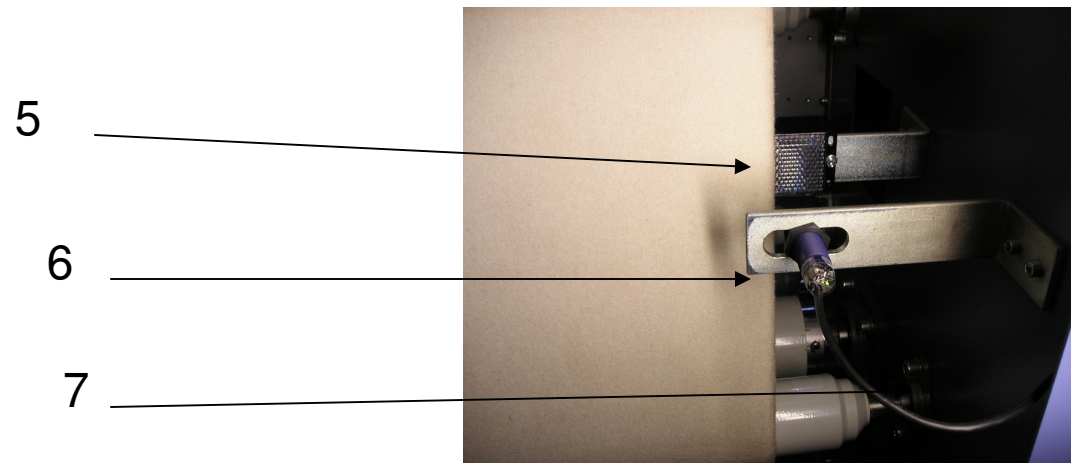
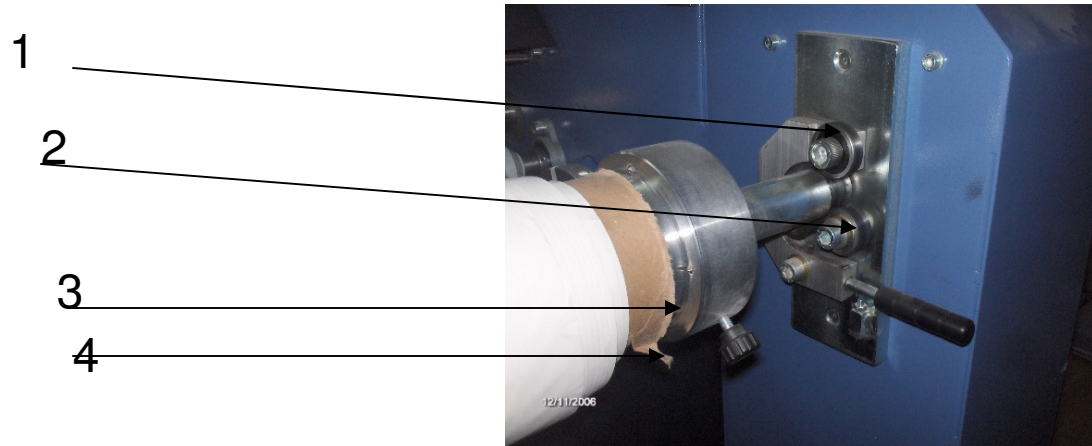
The Model 7300IJ is equipped with a hand safety device at the entrance point of this machine. This device is for the safety of the machine operator.

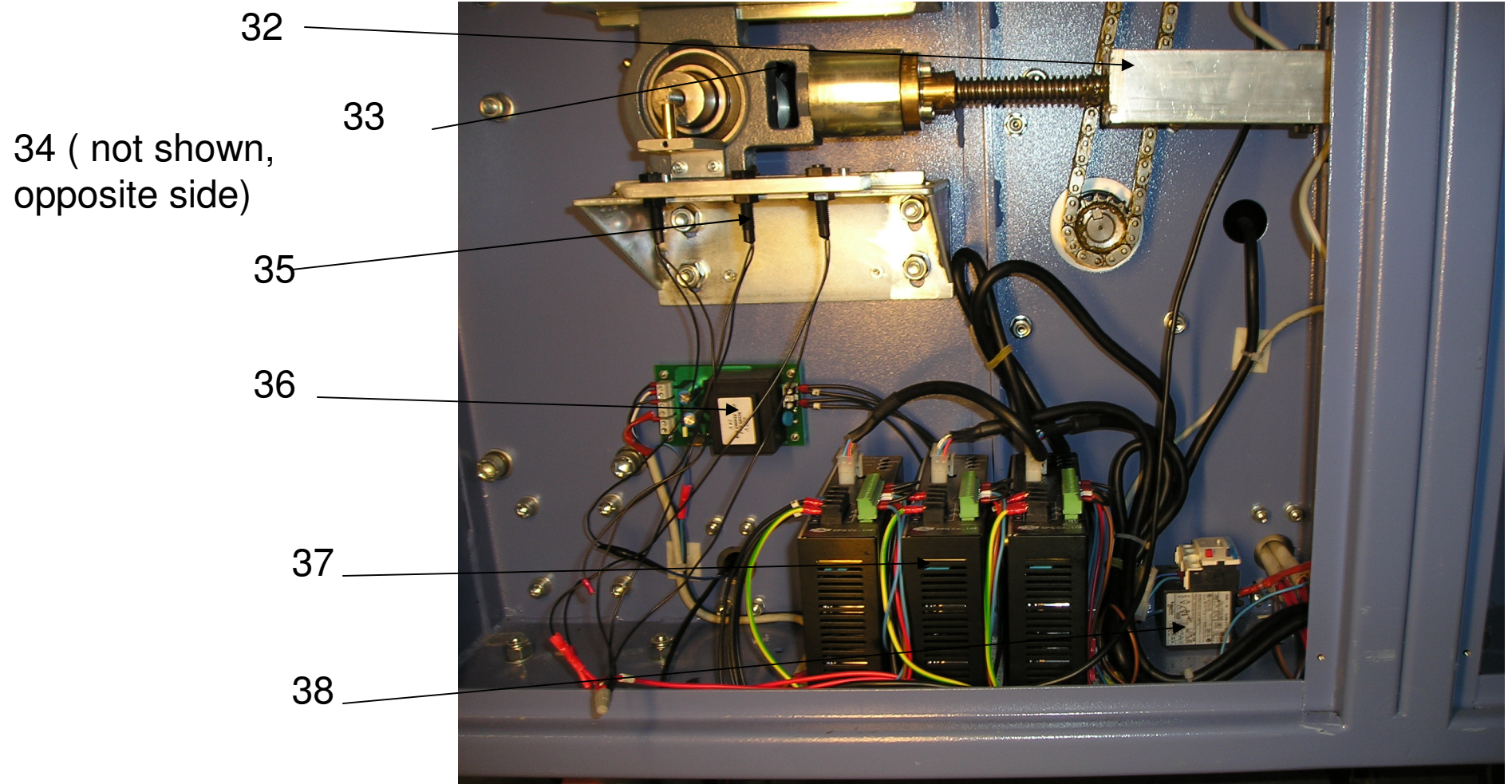
DO NOT REMOVE THIS DEVICE!

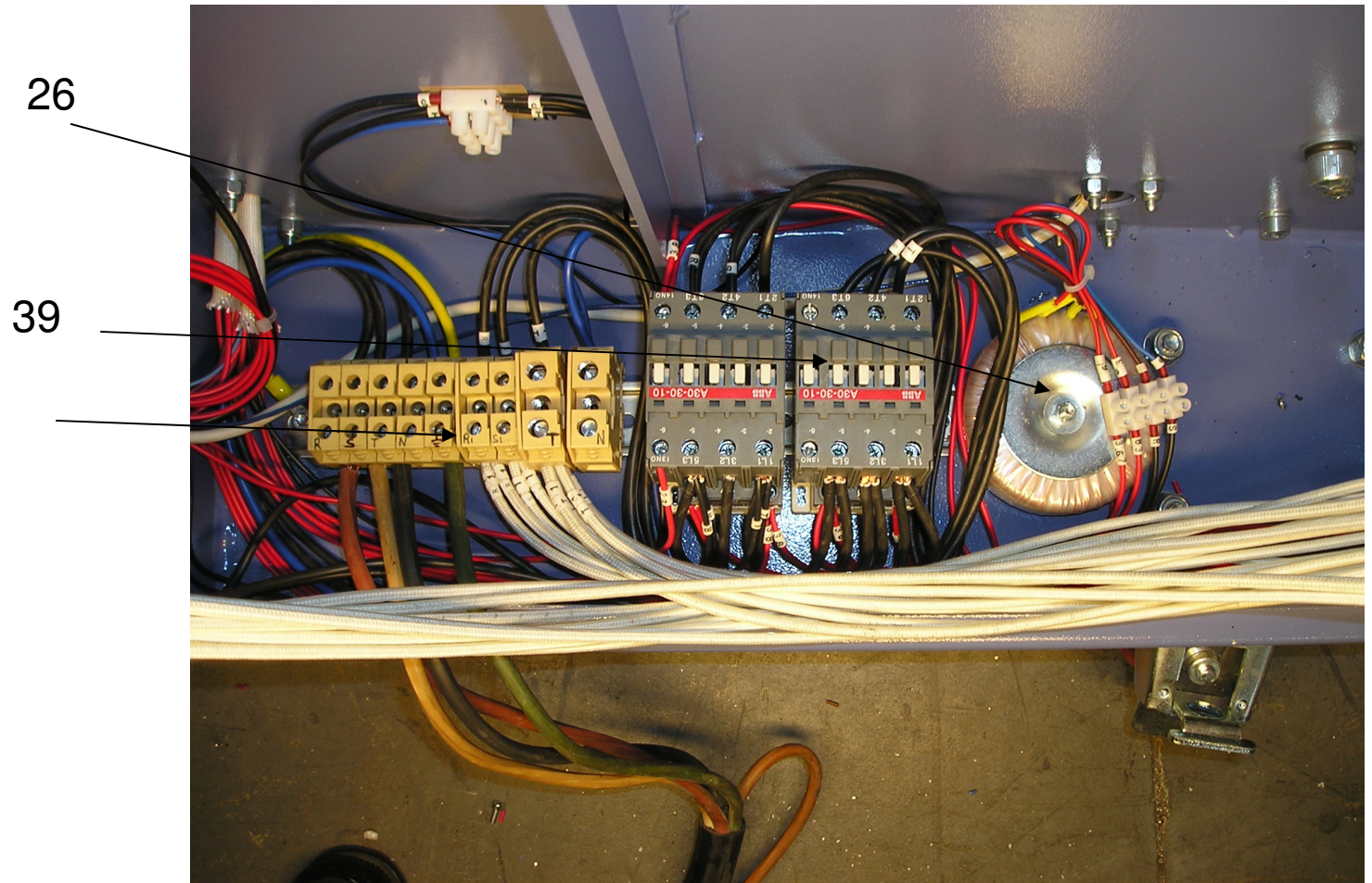
530 Wilbanks Drive • Ball Ground, GA. 30107
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7300 PARTS

Page 1 of 12

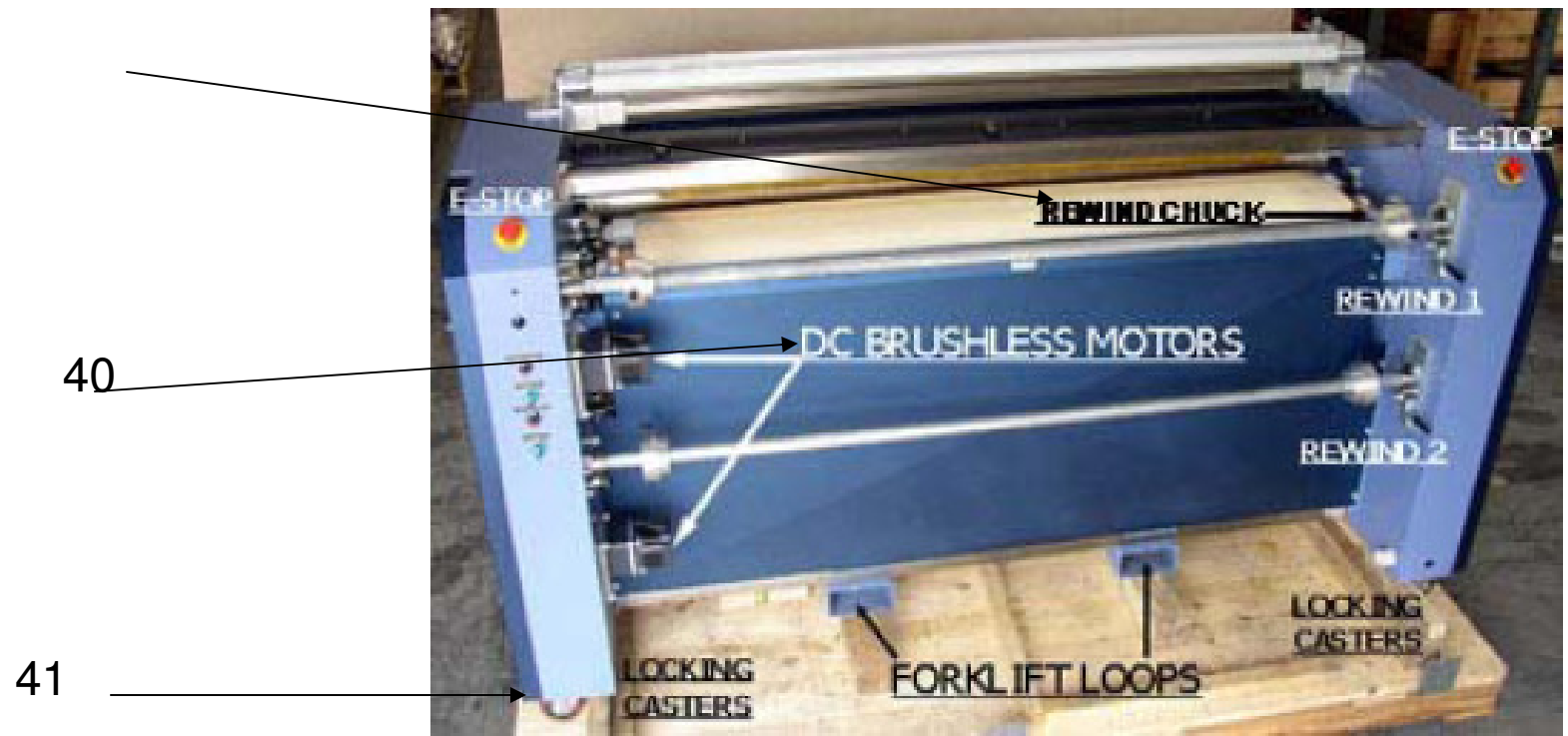






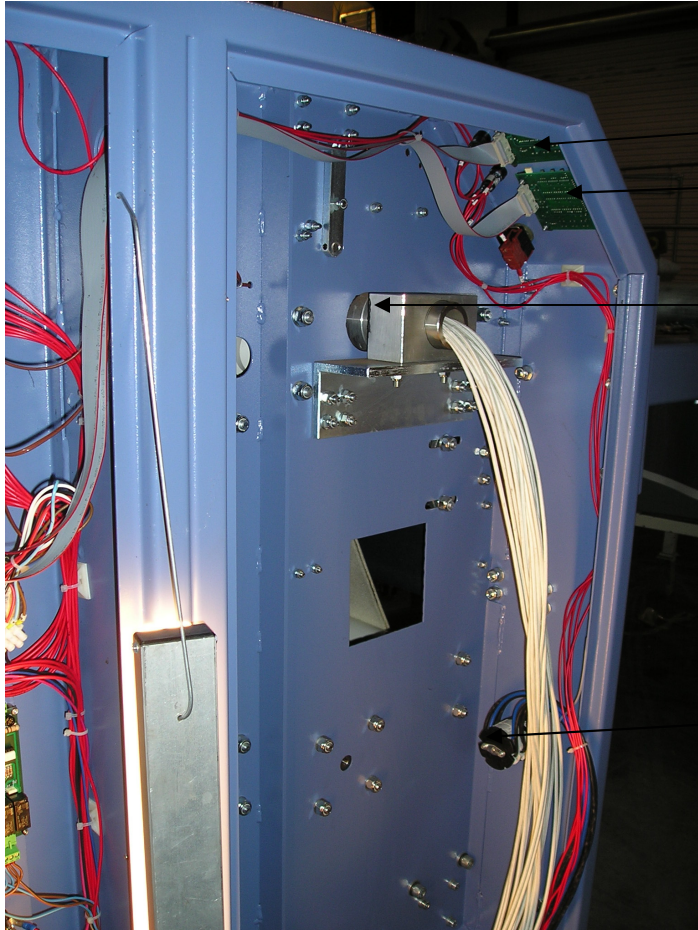
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7300 PARTS

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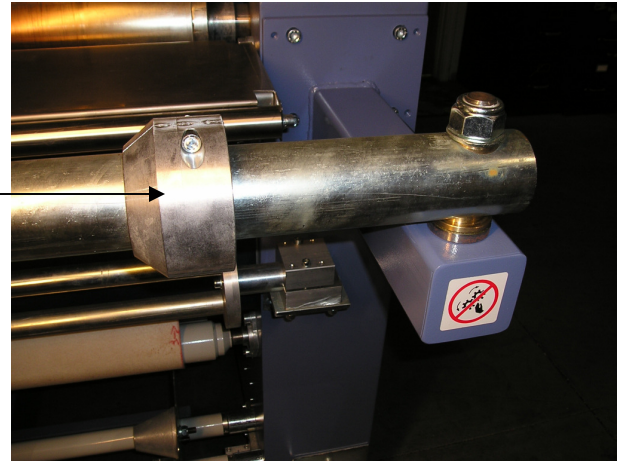
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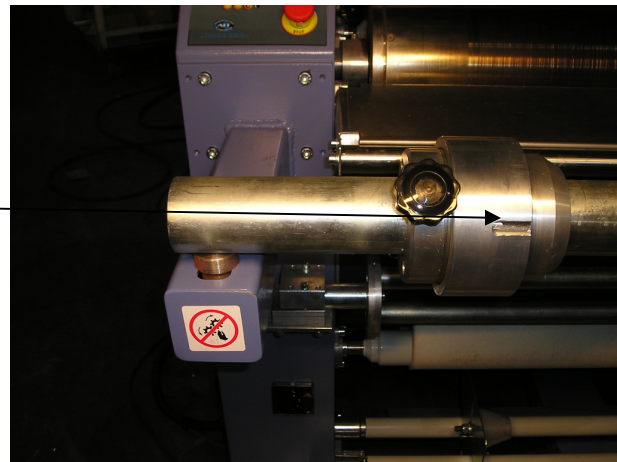
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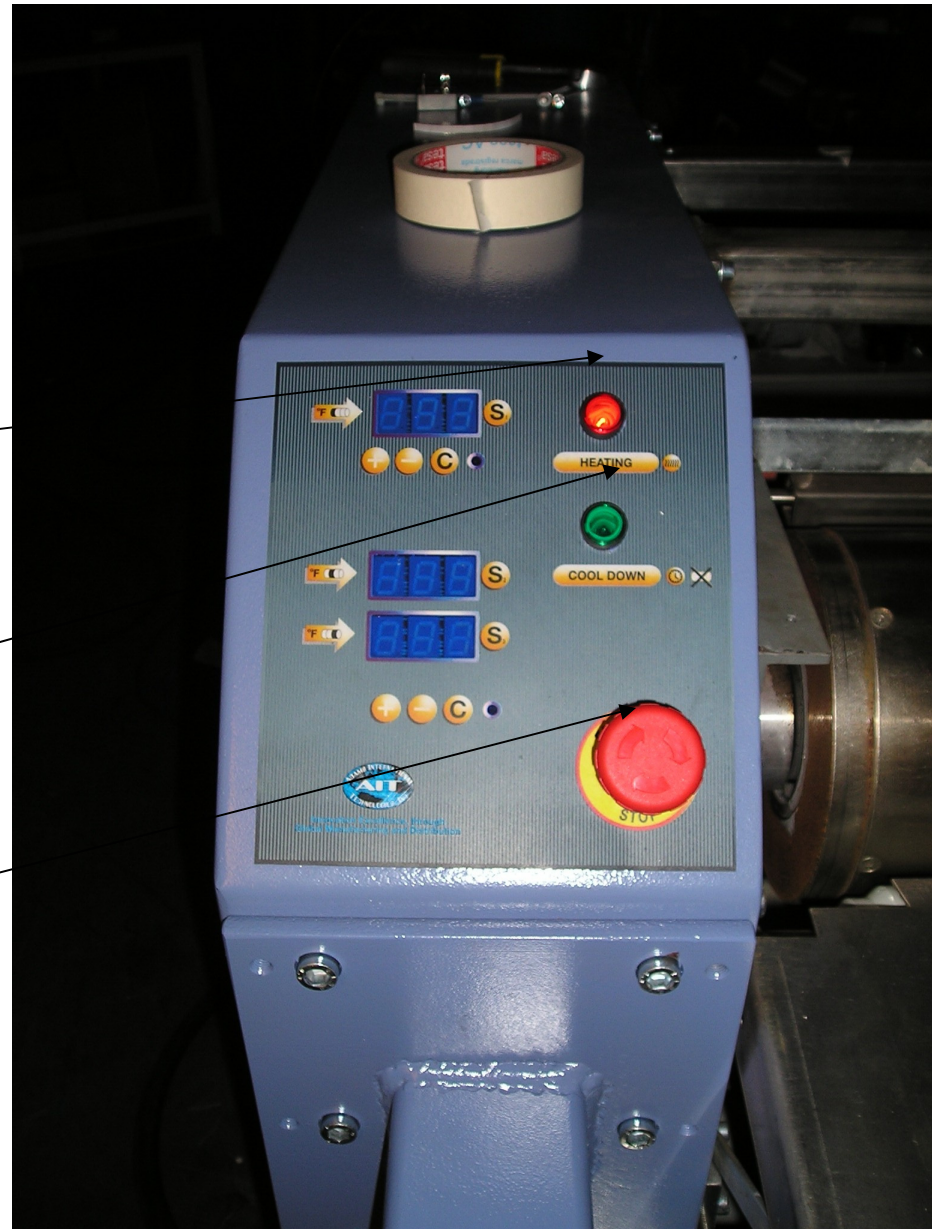
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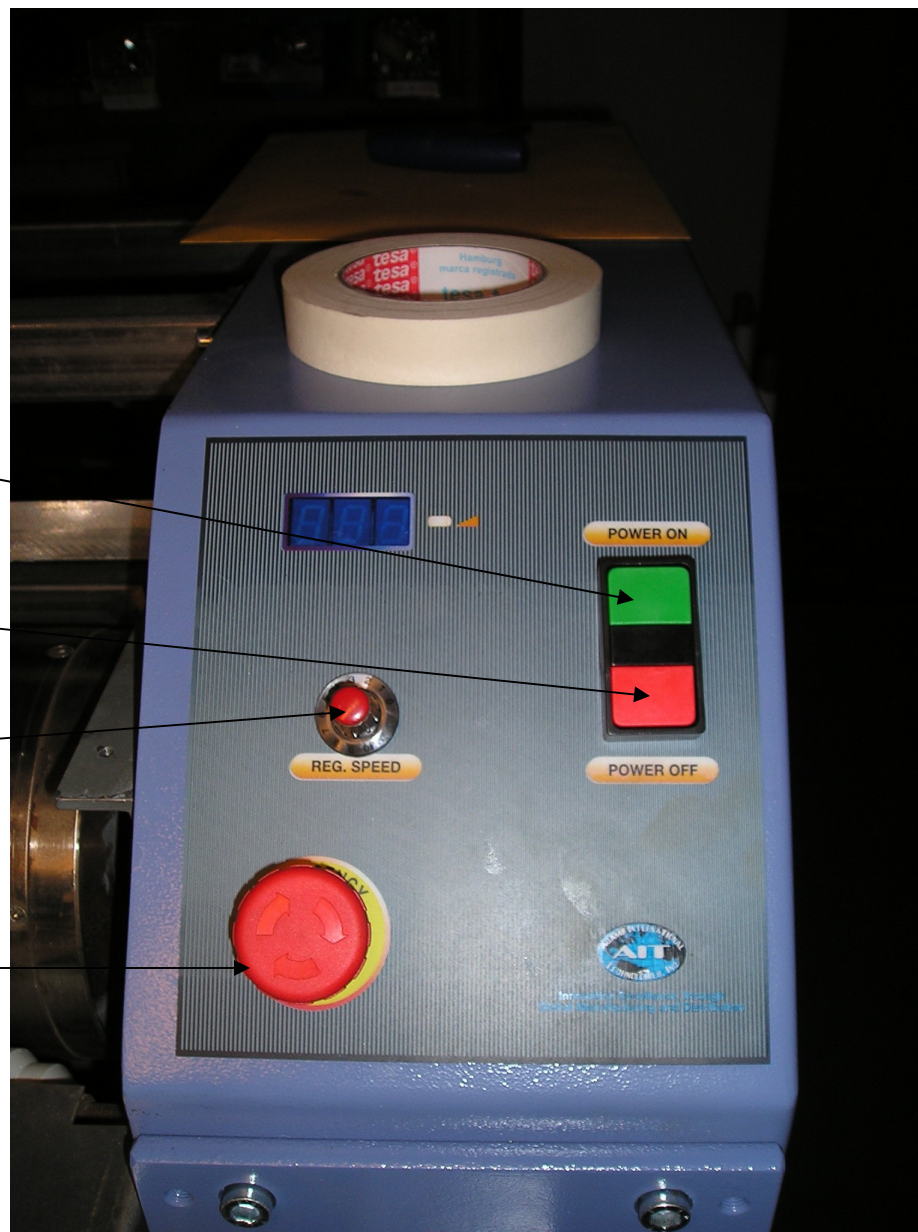
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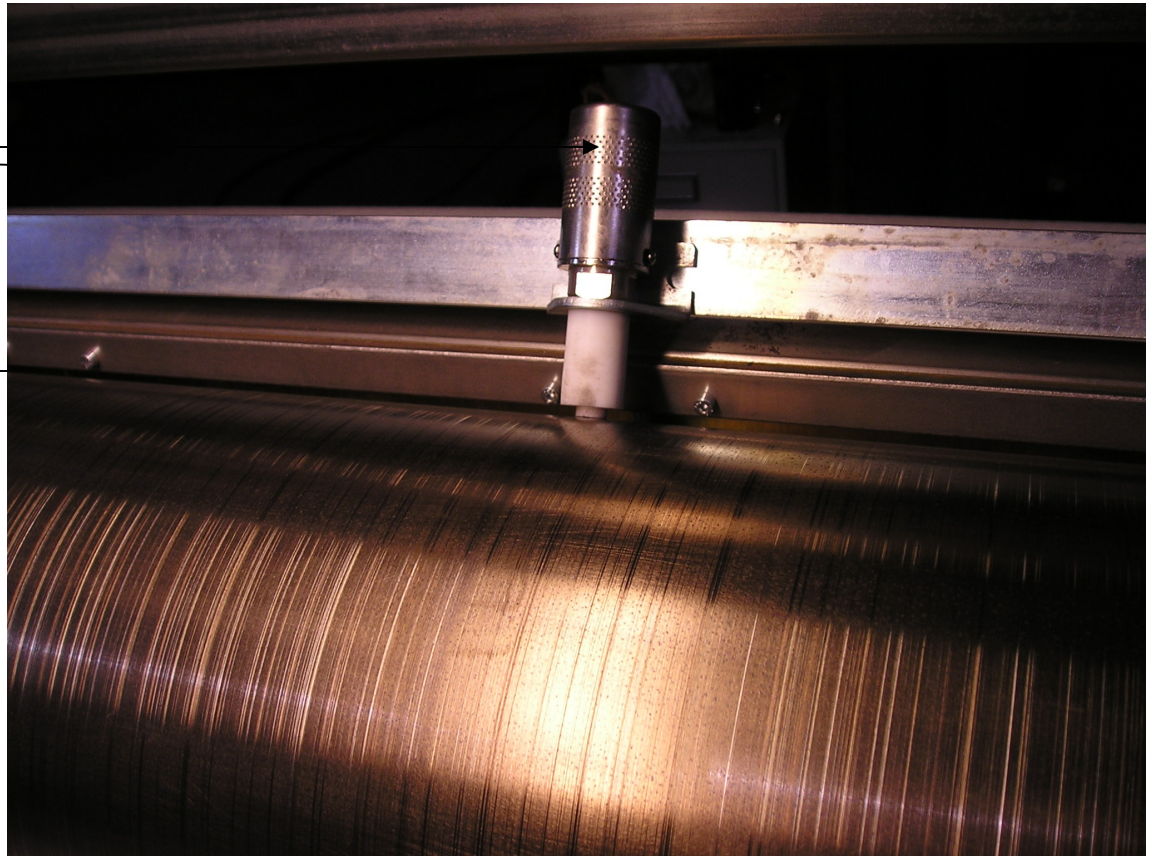
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7300

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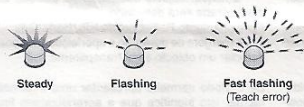
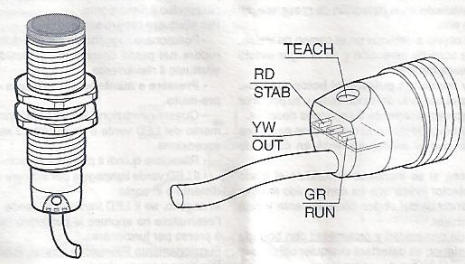




W 916343440111 A05

Osiris XUB

Osiconcept photo-electric sensors
 Détecteurs photoélectriques Osiconcept
 Photoelektronische Sensoren Osiconcept
 Detectores fotoeléctricos Osiconcept
 Interruttori fotoelettrici Osiconcept
 Detectores fotoeléctricos Osiconcept.



RD	Red	Rouge	Rot	Rojo	Rosso	Vermello
YW	Yellow	Jaune	Gelb	Amarillo	Giallo	Amarelo
GR	Green	Vert	Grün	Verde	Verde	Verde

English

Thank you for choosing Osiconcept technology
 Please connect and install the sensor on your equipment as per wiring instructions on package label.

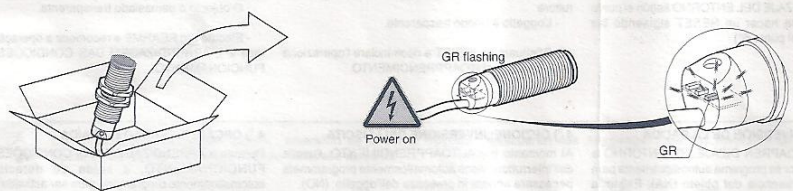
Français

Merci d'avoir sélectionné la technologie Osiconcept
 Raccordez et installez le détecteur suivant les instructions de l'étiquette de l'emballage.

① Factory setting: awaiting environment teach mode / Réglage usine: attente apprentissage de l'environnement / Werksseitige Einstellung: Bereit für Teach-in der Umgebungsbedingungen / Preajuste de fábrica: En espera del auto-aprendizaje del entorno / Regolazione di fabbrica: autoapprendimento preciso / Regulação de fábrica: aguarda aprendizagem das condições de funcionamento.

1st INITIAL ADJUSTMENT
 Your detector is waiting for the ENVIRONMENT TEACH MODE 2nd procedure to be performed. This is signaled by flashing of the green LED.

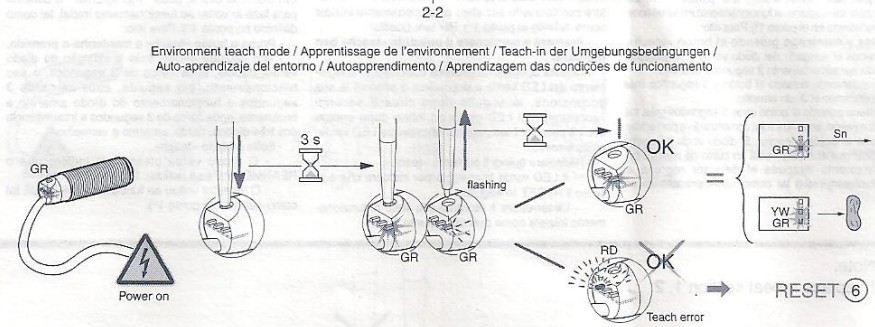
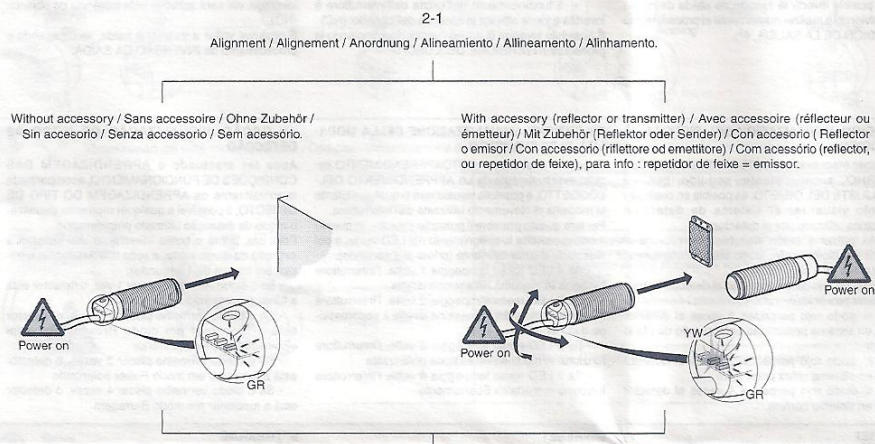
1^{er} REGLAGE INITIAL
 Le détecteur que vous avez sélectionné est capable de la détection sans accessoire. Ce signal est signalé par le clignotement de la diode verte.



② Environment teach mode: Object absent / Apprentissage de l'environnement: absence objet / Teach-in der Umgebungsbedingungen: Objekt nicht vorhanden / Auto-aprendizaje del entorno: ausencia de objetos / Autoaprendimento: Assenza oggetto / Aprendizagem das condições de funcionamento: Ausência do objeto.

2nd ENVIRONMENT TEACH MODE
 This detector is capable of functioning in all the standard detection modes, i.e.: Without accessory: Diffuse, Diffuse with background suppression. With accessory: (Reflector or Transmitter): Polarised reflex, Thru-beam.

2^o APPRENTISSAGE DE L'ENVIRONNEMENT
 Ce détecteur est capable de fonctionner dans tous les modes de détection standard, c'est-à-dire: Sans accessoire: Diffuse, Diffuse avec suppression de l'arrière-plan. Avec accessoire: (Réflecteur ou Transmetteur): Réflexe polarisé, Barrage.



Before performing the ENVIRONMENT TEACH MODE procedure, you must align the detector correctly. Remove all objects from the detector's field of detection.

Without accessory: place the detector opposite the zone to be detected.

With accessory: align the detector on the accessory using the signals provided by the yellow and red LEDs (Yellow LED on and Red LED off signals correct alignment).

You have aligned the detector and it is now ready for the ENVIRONMENT TEACH MODE procedure. To do this:

- Remove all objects from the detector's field of detection.
- Press in and hold the «teach» pushbutton.
- The green LED goes out then comes on again after about 3 seconds.
- Release the «teach» pushbutton when it comes on.
- The green LED flashes to indicate that environment teaching is in progress.

Then:

- If the green LED comes on, the detector has been taught the environment and is ready to function.
- The detection mode (Diffuse, Diffuse with background suppression, Polarised reflex, Thru-beam) is memorized, and the INITIAL SETTING can only be restored by a RESET.
- Any object passing within its detection field (in front of a background or between the detector and the reflector or transmitter) will be detected; the Yellow LED comes on and the output is activated.

If the red LED starts flashing very rapidly, the environment teaching procedure has failed:

- The detector may be misaligned.
- An object passed within its detection field during teaching.
- The background or the reflector is too close to the detector.

Readjust the alignment conditions, perform a RESET 6th then repeat the ENVIRONMENT TEACH MODE procedure.

Avant de procéder à l'APPRENTISSAGE DE L'ENVIRONNEMENT, il est nécessaire d'aligner correctement le détecteur. Éliminez tout objet dans le champ de détection du détecteur.

Sans accessoire: placez le détecteur en face de la zone à détecter.

Avec accessoire: alignez le détecteur sur l'accessoire en utilisant les signaux jaunes et rouges (diode jaune allumée et diode rouge éteinte correspondent à un alignement correct).

Vous avez aligné le détecteur et il est maintenant prêt à réaliser l'APPRENTISSAGE DE L'ENVIRONNEMENT. Pour cela:

- Éliminez tout objet dans le champ de détection du détecteur.
- Appuyez et maintenez enfoncée la touche «teach».
- La diode verte s'éteint puis se rallume après environ 3 secondes.
- Relâchez la touche «teach» quand la diode verte se rallume.
- La diode verte clignote pour indiquer que l'apprentissage de l'environnement est en cours.

Ensuite:

- Si la diode verte s'allume, le détecteur a appris l'environnement et est prêt à fonctionner.
- Le mode de détection (en face d'un arrière-plan ou entre le détecteur et le réflecteur ou le transmetteur) est mémorisé, et les réglages initiaux ne peuvent être restaurés qu'à l'aide d'un RESET 6^e.
- Tout objet passant dans son champ de détection (devant un arrière-plan ou entre le détecteur et le réflecteur ou le transmetteur) sera détecté; la diode jaune s'allume et la sortie est activée.

Si la diode rouge commence à clignoter très rapidement, la procédure d'apprentissage de l'environnement a échoué:

- Le détecteur peut être mal aligné.
- Un objet est passé dans son champ de détection pendant l'apprentissage.
- L'arrière-plan ou le réflecteur est trop proche du détecteur.

Reajustez les conditions d'alignement, effectuez un RESET 6^e, puis répétez la procédure d'apprentissage de l'environnement.

MAINTENANCE Calendar Model 7300

[illegible]



Innovation Excellence, through
Global Manufacturing and Distribution

Preventative Maintenance

Checklist for 7300

Daily

1. Drain moisture from filter regulator at the air connection.
2. Clean Nomex (felt) belt with a lint brush, and or vacuum.
3. Check drum temperature with a Temp Strip before starting production.

Weekly

1. Clean and inspect machine and remove any ink residue from machine.
2. Clean and inspect temperature probes.
3. Spray high temp lubricant on Drum Bearing.

Monthly

1. Grease all roller bearings and sprockets with fittings.
2. Lubricate idler sprockets and drive chains.
3. Check alignment of all sprockets and adjust if necessary.
4. Oil tracking gear.
5. Check bolts and set screws for tightness. (Including drum end-cap)
6. Check chain tension and adjust as needed.



Phone (770) 479-1900
Fax (770) 479-4179

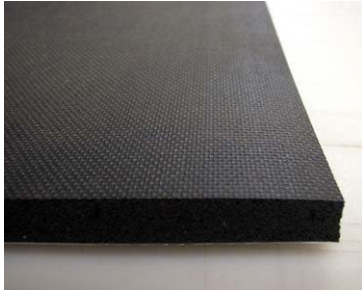
Advanced Innovative Technologies, LLC
530 Wilbanks Dr. Ball Ground, Ga. 30107

TEMPERATURE CONVERSION CHART

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0	32.0	45	113.0	89	192.2	133	271.4	177	350.6
1	33.8	46	114.8	90	194.0	134	273.2	178	352.4
2	35.6	47	116.6	91	195.8	135	275.0	179	354.2
3	37.4	48	118.4	92	197.6	136	276.8	180	356.0
4	39.2	49	120.2	93	199.4	137	278.6	181	357.8
5	41.0	50	122.0	94	201.2	138	280.4	182	359.6
6	42.8	51	123.8	95	203.0	139	282.2	183	361.4
7	44.6	52	125.6	96	204.8	140	284.0	184	363.2
8	46.4	53	127.4	97	206.6	141	285.8	185	365.0
9	48.2	54	129.2	98	208.4	142	287.6	186	366.8
10	50.0	55	131.0	99	210.2	143	289.4	187	368.6
11	51.8	56	132.8	100	212.0	144	291.2	188	370.4
12	53.6	57	134.6	101	213.8	145	293.0	189	372.2
13	55.4	58	136.4	102	215.6	146	294.8	190	374.0
14	57.2	59	138.2	103	217.4	147	296.6	191	375.8
15	59.0	60	140.0	104	219.2	148	298.4	192	377.6
16	60.8	61	141.8	105	221.0	149	300.2	193	379.4
17	62.6	62	143.6	106	222.8	150	302.0	194	381.2
18	64.4	63	145.4	107	224.5	151	303.8	195	383.0
19	66.2	64	147.2	108	226.4	152	305.6	196	384.8
20	68.0	65	149.0	109	228.2	153	307.4	197	386.6
21	69.8	66	150.8	110	230.0	154	309.2	198	388.4
22	71.6	67	152.6	111	231.8	155	311.0	199	390.2
23	73.4	68	154.4	112	233.6	156	312.8	200	392.0
24	75.2	69	156.2	113	235.4	157	314.6	202	395.6
25	77.0	70	158.0	114	237.2	158	316.4	204	399.2
26	78.8	71	159.8	115	239.0	159	318.2	206	402.8
27	80.6	72	161.6	116	240.8	160	320.0	208	406.4
28	82.4	73	163.4	117	242.6	161	321.8	210	410.0
29	84.2	74	165.2	118	244.4	162	323.6	212	413.6
30	86.0	75	167.0	119	246.2	163	325.4	214	417.2
31	87.8	76	168.8	120	248.0	164	327.2	216	420.8
32	89.6	77	170.6	121	249.8	165	329.0	218	424.4
33	91.4	78	172.4	122	251.6	166	330.8	220	428.0
34	93.2	79	174.2	123	253.4	167	332.6	222	431.6
35	95.0	80	176.0	124	255.2	168	334.4	224	435.2
36	96.8	81	177.8	125	257.0	169	336.2	226	438.8
37	98.6	82	179.6	126	258.8	170	338.0	228	442.4
38	100.4	83	181.4	127	260.6	171	339.8	230	446.0
39	102.2	84	183.2	128	262.4	172	341.6	232	449.6
40	104.0	85	185.0	129	264.2	173	343.4	234	453.2
41	105.8	86	186.8	130	266.0	174	345.2	236	456.8
42	107.6	87	188.6	131	267.8	175	347.0	238	460.4
43	109.4	88	190.4	132	269.6	176	348.8	240	464.0
44	111.2								

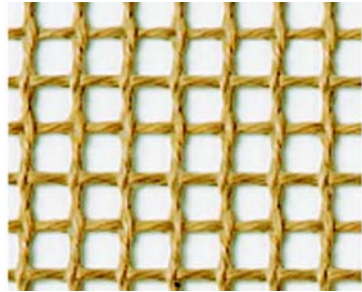
FIGURE 22.

AIT, LLC.



PADS, BELTS AND OTHER SUBLIMATION PRINTING ACCESSORIES

The key ingredient to superior quality digital sublimation printing can often be the pad! AIT offers a complete range of high temperature padding materials, along with belting and tray cover materials for most models of heat transfer printers. We specialize in custom-made solutions according to your specific needs. Call us today for a quotation.



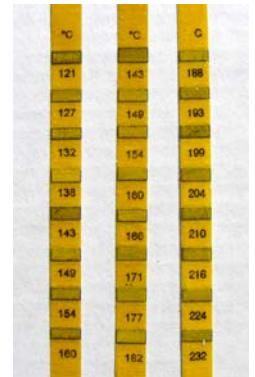
- ☑ Silicon Rubber Padding in Several Degrees of Durometer
- ☑ High Temperature Felt Padding and Endless Belting
- ☑ Nomex Cloth and “Molten” Pad Protector
- ☑ PTFE Coated Screen Belting for Conveyor Systems
- ☑ Custom-made Teflon and Canvas Conveyor Belts
- ☑ Roll Stock up to 72” Teflon Belting
- ☑ “Super Blue” Conductive Rubber Transfer Membrane for Sublimation Printing of Rigid Substrates

TEMPERATURE CALIBRATION STRIPS

PACK OF 40 - \$22.95

AIT offers three types of temperature test strips to accurately measure the actual temperature of fusing machines and heat transfer printers.

AIT recommends a check of temperature calibration controls at least once per week for all fusing machines and heat transfer printing machines to ensure the best quality results.



	Temperature Range F°	Temperature Range C°
TYPE 1 Temperature Strips	250 - 320 F	121 - 160 C
TYPE 2 Temperature Strips	289 - 360 F	143 - 182 C
TYPE 3 Temperature Strips	370 - 450 F	188 - 232 C

530 WILBANKS DRIVE
BALL GROUND, GA. 30107
TEL (770) 479-1900
FAX (770) 479-4179
sales@aitequipment.com
www.aitequipment.com

Please contact us to
confirm availability.



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The Manufacturer of



Equipment

1.0 GENERAL INFORMATION - MODEL 7300IJ

1.1 INTRODUCTION

Congratulations on your purchase of the 7300IJ Series Rotary Heat Transfer Printer. The 7300IJ Series Printer has been designed with both quality and simplicity in mind to give you many years of trouble free service. Please remember that regular preventive maintenance of your 7300IJ Series Printing Press will assure you of a long and profitable working life for your machine.

This manual has been written to assist you with setting up, operating and maintaining your heat transfer printing machine.

1.2 PARTS AND SERVICE

Should you require parts or service, our technicians in the Parts and Service Department will be glad to help you. They can be reached at the following address and phone number:

Advanced Innovative Technologies
530 Wilbanks Drive
Ball Ground, Ga. 30107
(770) 479-1900 tel.
(770) 479-4179 fax
sales@aitequipment.com

When contacting our Parts and Service Department, please be sure to have the model and serial numbers of your machine handy to help in identifying the correct parts. It would be a good idea to record those numbers below for future reference.

MODEL NUMBER: _____

SERIAL NUMBER: _____

530 Wilbanks Drive, Ball Ground, Ga. 30107
(770) 479-1900 tel. (770) 479-4179 fax



1.3 ACCEPTING DELIVERY

Before accepting delivery of the machine from the freight carrier, carefully unpack and inspect the machine for any damage which may have occurred during shipping and handling. Please remember that your machine was accepted by the freight carrier from A.I.T., Inc. in good condition and with all parts intact. Therefore, any damage is the responsibility of the freight carrier. Make a note of any damage on the bill of lading before you sign it and immediately contact the freight carrier for information on making a claim.

1.4 MANUFACTURER'S WARRANTY

A.I.T warrants to the first user of each new A. I. T. product or component that such product or component is free from defects in materials and workmanship, subject to the limitations set forth below. **IN LIEU OF ALL WARRANTIES EITHER EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH A.I.T. HEREBY DISCLAIMS, THE OBLIGATIONS OF A.I.T. UNDER THIS WARRANTY ARE EXPRESSLY LIMITED TO THE FOLLOWING:**

- a. A.I.T. will repair or replace, at its option, free of charge, any product, component of its products, and any component it sells separately which is installed in A.I.T.'s products within (4) four months after shipment of same.
- b. This warranty does not apply to damage incurred in shipment. Damage incurred in shipment should be reported to the designated carrier. It is the carrier's responsibility to ensure arrival in undamaged condition.
- c. Service labor, when requested in connection with any of the above items covered by this warranty, will be charged for traveling expenses only.
- d. This warranty applies only if the product or component proves to be defective under conditions of normal use. It does not apply to breakage or to defects resulting from accident, alteration, misuse, abuse or improper installation.
- e. This warranty does not include installation of the product or component.
- f. Prior to any return of a product or component, Buyer must receive written authorization to do so from A.I.T. After written authorization, Buyer shall return the defective product or component freight prepaid and A.I.T. will ship the replacement or repaired component freight collect.
- g. This warranty is effective only if the product or component is installed in a location and manner prescribed by A.I.T.'s instructions and only if it is maintained in accordance therewith. This warranty shall become ineffective if the product or component is altered by anyone other than A.I.T.'s employees. A.I.T. neither assumes nor authorizes any person to assume for it, any obligation or liability other than as specified herein.

A.I.T. WILL, IN NO CASE AND UNDER NO CIR-CUMSTANCES, BE LIABLE FOR SPECIAL OR CONSEQUENTIAL DAMAGES, LOSS OF PROFIT OR COMMISSION OR FOR LOSS OR DELAY IN PRODUCTION. Without limiting the generality of the foregoing, A.I.T. will not be liable with respect to furnishing or delay in furnishing any product or component; the use, resale or other disposition thereof; failure to furnish the same or any other cause. A.I.T.'s liability arising out of the supply of any product or component, its use, resale or other disposition or out of any guarantee or warranty, express or implied or any other cause, shall in no case exceed the cost to A.I.T. of the product or component which A.I.T. has agreed to supply All liability of A.I.T. with respect to any product or component shall terminate upon the expiration of the four month period described above.

Failure to give notice of a warranty claim within thirty (30) days from discovery of the defect or to demand arbitration within one (1) year thereafter shall constitute a waiver of all claims by Buyer with respect thereto.

Any controversy or claim arising out of or relating to transactions or orders or breach thereof, including breach of warranty shall be settled by arbitration in Cherokee County, Georgia, pursuant to the rules of The American Arbitration Association. Any award made against A.I.T. shall be limited as provided above. Judgment upon award rendered by arbitration may be entered in any court having jurisdiction thereof. However, at A.I.T.'s option, this paragraph shall not apply to collection by A.I.T. of the price of any product sold or any action related thereto.

1.5 MORE INFORMATION ON WARRANTY

If you would like more information on the above warranty or have specific questions you would like answered, please contact our Parts and Service Department.

2.0 INSTALLATION AND SETUP

2.1 INSTALLATION

NOTE: INSTALLATION SHOULD ONLY BE PERFORMED BY QUALIFIED TECHNICIANS.

2.1.1 POSITIONING AND LEVELING THE MACHINE

Carefully remove the machine from the skid and position it on a solid surface where operation will take place. Note: Leave sufficient clearances around the machine for material movement and maintenance personnel. If the left side frame is higher or lower than the right side or vice versa, adjust the legs accordingly.

To adjust the legs use a crescent wrench to turn the leg bolt clock-wise or counter clockwise for correcting the height.

3.1.2 POWER SUPPLY CONNECTION

WARNING!

THE 7300 SERIES MACHINE OPERATES ON AN ELECTRICAL SUPPLY VOLTAGE WHICH CAN SEVERELY INJURE OR EVEN KILL. ALWAYS DISCONNECT THE ELECTRICAL SUPPLY TO THE MACHINE BEFORE REMOVING ANY COVERS OR AT-TEMPTING TO SERVICE OR ADJUSTTHE MACHINE. SERVIC-ING OF THIS MACHINE SHOULD ONLY BE PERFORMED BY QUALIFIED PERSONNEL

The electrical connections should be made by a qualified electrician in accordance with local standards and national electric code for 220 Volt, 3 phase industrial equipment. Bring power supply to wall adjacent to machine. Install breaker. A fused main disconnect switch should be used as a safeguard between the machine and the power supply. Run conduit and wire to machine.

3.1.3 AIR SUPPLY CONNECTION

NOT REQUIRED ON THIS MODEL

3.1.4 FINAL CHECK

Check and test heat press thoroughly If there are any problems or questions, contact the dealer or A.I.T.' customer service.

3.2 SETUP

Take care to perform setup properly Note: If setup is not performed properly quality product may not be produced.

IMPORTANT!

BEFORE OPERATING YOUR MACHINE, ALWAYS BE CERTAIN THATTHE BELT IS CLEAR OF FOREIGN OBJECTS THESE OBJECTS CAN BE DRAWN INTO THE MACHINE WHEN IT IS RUNNING AND DAMAGE THE BELT AND OTHER PARTS

SECTION 1 - INSTALLATION AND SETUP INSTRUCTIONS

1.1 GENERAL INSTALLATION

Once the 7300IJ Rotary Transfer Printer has been received, find a suitable location which will allow enough room for servicing from both sides of the machine. Room must also be provided to change the unwind and rewind material rolls at the front and back of the machine.

NOTE: THE 7300IJ ROTARY TRANSFER PRINTER SHOULD BE LOCATED WHERE THERE ARE NO NOTICEABLE DRAFTS. TOO MUCH AIR FLOW CAN CAUSE SIGNIFICANT HEAT LOSS, AND REDUCE THE MACHINE'S PERFORMANCE.

Remove the 7300IJ Rotary Transfer Printer from the shipping crate and inspect for damage.



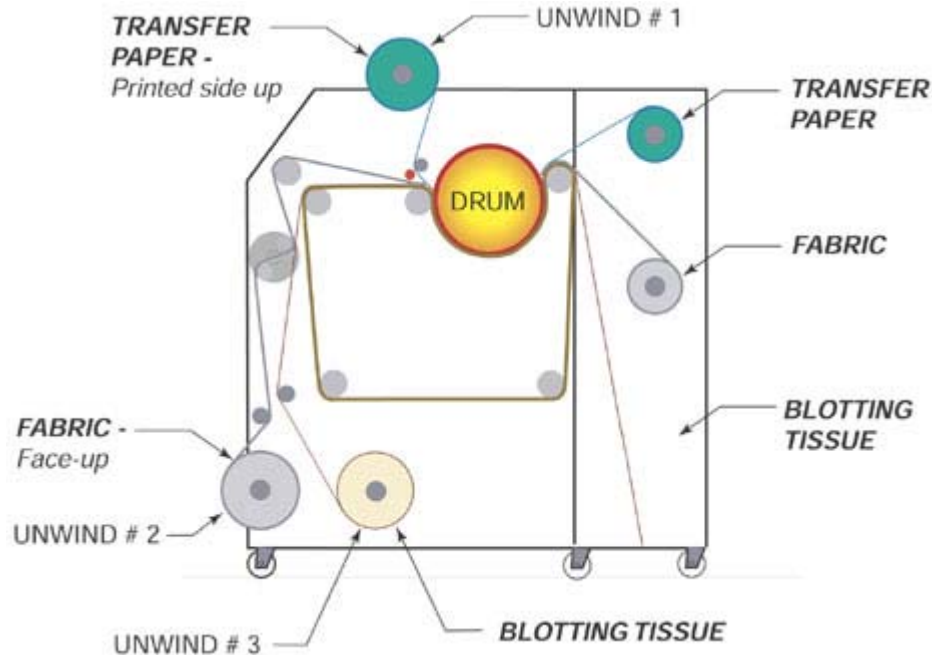
1.2 ELECTRICAL CONNECTION

WARNING!

THE MODEL 7300IJ ROTARY TRANSFER PRINTER OPERATES ON AN ELECTRICAL SUPPLY VOLTAGE WHICH CAN SEVERELY INJURE OR EVEN KILL. ALWAYS DISCONNECT THE ELECTRICAL SUPPLY TO THE MACHINE BEFORE REMOVING ANY COVERS OR ATTEMPTING TO SERVICE OR ADJUST THE MACHINE. SERVICING OF THIS MACHINE SHOULD ONLY BE PERFORMED BY QUALIFIED PERSONNEL.

Electrical connections should be made to the supply terminal located in the electrical cabinet. Refer to the appropriate electrical schematic for your voltage configuration. The 7300IJ Rotary Transfer Printer must be directly hard wired to the electrical power source. IN ALL CASES, THE 7300IJ ROTARY TRANSFER PRINTER MUST BE CONNECTED EITHER TO A CIRCUIT BREAKER OF PROPER SIZE OR A FUSED DISCONNECT SWITCH CONTAINING FUSES OF THE PROPER SIZE. A PLUG AND RECEPTACLE IS NOT AN ADEQUATE FORM OF ELECTRICAL DISCONNECTION ACCORDING TO CURRENT ELECTRICAL CODES.

Refer to the serial number located on the input sided of the machine for the correct supply voltage.



Note: The circuit breaker box or disconnect box should be located no further than 20 feet from the machine.

1.3 LOADING THE FABRIC

The 7300IJ Rotary Transfer Printer has been designed for easy loading and unloading of the unwind and rewind rolls.

IMPORTANT!

**THE UNWIND & REWIND ROLL BARS ARE RATED FOR A CAPACITY OF 70lbs.
IT IS HIGHLY RECOMMENDED NOT TO EXCEED THE LOADING CAPACITY.
EXCESSIVE LOADING ON THE REWIND ROLL BARS MAY CAUSE DAMAGE TO THE MACHINE.**

Tissue paper and fabric are loaded onto the lower cradle unwinds #2 and #3 as shown. Transfer paper is loaded onto the upper unwind cradle #1 as shown.

Loosen **Unwind Adjustment Chucks** and slide to the ends of the cradle.

Load the roll of material (Blotting Tissue, Transfer Paper, or Fabric) into the cradle. Position the roll of material at the center of the unwind cradle or as required for the application. Be sure it is lined up within the belt area, leaving a minimum of a 1 inch border on each side.

Slide the **Unwind Adjustment Chucks** up against the core firmly. Tighten both chucks.

Repeat procedure for each roll of material.

To insert an empty core onto the **Rewind Bar**, first disengage the **Securing Clamps** using the lever. Lift the Rewind Bar from the machine and place on the floor or a table. Loosen both **Rewind Chucks**. Slide one of the **Rewind Chucks** off the **Rewind Bar**.

Slide the empty core over the **Rewind Bar**. Slide the removed **Rewind Chuck** back on. Insert both **Rewind Chucks** into the ends of the core. Tighten both Rewind chucks enough to keep the core and chucks from sliding off.

Place the Rewind Bar with the empty core and chucks back into both the machine. Engage the lever to secure. If needed, loosen both **Rewind Chucks** and reposition the core and chucks in relation to the position of the fabric, transfer paper and tissue paper rolls. Tighten both **Rewind Chucks**. Repeat this procedure for each empty core to be loaded onto the Rewind Bars.

1.4 THREADING THE FABRIC, TRANSFER PAPER AND TISSUE PAPER

Depending on your production application, the method of threading the printer will vary. Always use tissue paper when the width of the image exceeds the width of the fabric, or in any case when contamination of the belt by excess dyes is possible.

Refer to the diagram for the location and path of each roll of fabric, transfer paper and tissue paper. The fabric should be threaded through the **S-Wrap Bars**, located at the front of the machine. Rotate the **S-Wrap Bars** to apply slight tension to the fabric after it has been loaded into the drum. The tension will help to prevent wrinkling of the fabric in the transfer process.

Make sure the fabric and transfer paper have an even cut on the leading edge prior to threading the machine. Cutting the transfer paper into a slight point ^ of the leading edge can make the loading process less difficult and help to prevent wrinkling.

Note: To avoid transferring ink onto the belt and drum, feed the blotting tissue or fabric before feeding the transfer paper.

Wrap the leading edges around the empty cores on the rewinds and secure with tape. Power and speed controls for the rewind bars are located on the rear of the machine.

SECTION 2 - GENERAL OPERATION

2.1 OPERATING CONTROLS

All operating controls for the Astex 7300IJ Rotary Transfer Printer are located in three convenient areas on the machine. Refer to figures 2-1 through 2-3 for a detailed layout on each control panel.

2.2 MACHINE OPERATION

CAUTION!

BEFORE OPERATING YOUR MACHINE, ALWAYS BE CERTAIN THAT THE BELT IS CLEAR OF FOREIGN OBJECTS SUCH AS SCISSORS, CLIPBOARDS AND THE LIKE. THESE OBJECTS CAN BE DRAWN INTO THE MACHINE WHEN IT IS RUNNING AND DAMAGE THE BELT AND OTHER PARTS.



STARTING THE MACHINE

NOTE: BEFORE STARTING THE MACHINE, CONFIRM THAT THE COOL DOWN BUTTON HAS BEEN DISENGAGED.

1. Turn the Power **OFF (0) / ON (1)** Switch to the "ON" position.
1. Press the **POWER ON** button.



2. Rotate the Speed Control Knob to the desired speed (Clockwise to increase, counterclockwise to decrease).

CAUTION!

BEFORE OPERATING YOUR MACHINE, CONFIRM WHETHER THE TEMPERATURE DISPLAYS ARE PROGRAMMED FOR FARENHEIT OR CELSIUS. THE ACTUAL TEMPERATURE CAN BE VERIFIED USING TEMPERATURE INDICATOR STRIPS.

3. Set the left, center and right zone temperature displays to the desired operating **SET POINT** temperature. Follow your transfer paper manufacturer's recommendations regarding proper printer temperature and transfer time.

Each heat zone is independently monitored. Each display panel indicates the actual temperature value, unless the **S** (SET POINT) button is pressed to indicate the set point temperature value.

To change the set point temperature, press and hold the **S** button while using the **(+)** and **(-)** buttons to change the value. While keeping the **S** button depressed, press the **C** (CONFIRM) button to enter the new set point value. Release both buttons to complete the change.

4. When the desired Operating Temperature is achieved, run sample prints through the machine.

Note: For each printing operation, some minor adjustments in speed or temperature might be necessary (due to your particular operating conditions and the type and weight of materials you are using) in order to achieve the desired results.

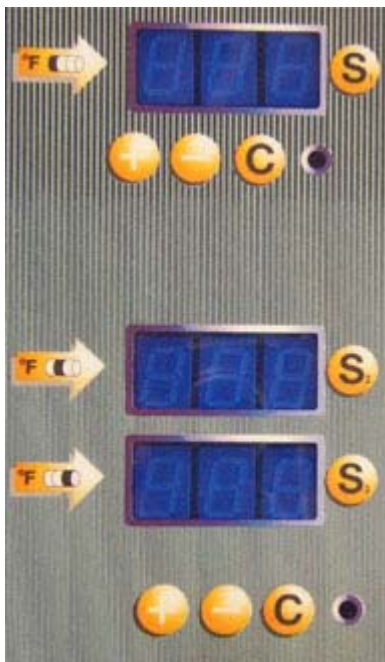
2.3 TEMPERATURE CALIBRATION

To help you in setting proper temperatures on your Astex Model 7300IJ Rotary Transfer Printer, Adams International Technologies makes available through our Parts and Service Department a series of temperature indicator strips. These strips, when run through the Rotary Printer in contact with the drum, change color to indicate the actual temperature of the Drum's surface.

To obtain an accurate reading of the printing temperature inside the machine, Tape a temperature indicator strip face up to the top of a swatch of fabric (approximately 4 - 6 inches in length) and feed into the printer. The piece of fabric allows the operator to pull the Temperature strip off the drum on the exit side (if it sticks to the drum surface).

THE HIGHEST TEMPERATURE WITH A FULL BLACK BACKGROUND IS THE CORRECT TEMPERATURE READING
DISREGARD TEMPERATURE SQUARES WHICH HAVE ONLY PARTIALLY CHANGED COLOR

Read the highest temperature recorded inside the machine. Refer to **Technical Supplement T.1** for Temperature Controller calibration instructions.



2.4 SHUTTING THE MACHINE DOWN

CAUTION!

NEVER TURN THE MACHINE OFF FOR ANY LENGTH OF TIME WHILE THE DRUM IS UP TO OPERATING TEMPERATURE. THE HEATER TEMPERATURES INSIDE THE MACHINE MAY DAMAGE THE BELT.

The 7300IJ Rotary Transfer Printer has an automatic cool down feature which shuts the machine off after the Drum has cooled down. When you are ready to turn the machine off at the end of the day, follow these steps:

1. Press the Cool Down button to start the automatic cool down operation. The belt will continue to turn until the temperature reaches app. 170 F, at which point the machine will automatically switch off.

NOTE: BEFORE RESTARTING THE MACHINE, THE COOL DOWN BUTTON MUST BE DISENGAGED BEFORE IT IS POSSIBLE TO RESTART THE MACHINE.

2.5 APPLICATION TROUBLESHOOTING GUIDE

1. Optimum heat transfer printing cannot be achieved unless the temperature, pressure and time settings are accurately adjusted. If the resulting color in your product is not acceptable, check the following:

- a. Temperature: 380-410 degrees F.
- b. Dwell time speed: 1 - 3 feet per minute depending on dwell time of 20 - 40 seconds

If you continue to experience problems with color, consult with the supplier of your plotter for proper calibration instructions.

2. "Ghosting" is a term used for double imaging. If you experience this phenomenon, check the following:

- a. Make sure that your fabric is heat set prior to printing.
- b. Excessive temperature can cause "blow out" of inks in the gaseous state resulting in ghosting.
- c. Upon exiting the heated drum, the fabric and transfer paper must be separated simultaneously.

3. If you experience wrinkling or uneven pressure in your fabric or transfer paper during the heat transfer process, check the following:

- a. Make sure the fabric and transfer paper have an even cut on the leading edge prior to threading the machine.
- b. Make sure that your rolls of fabric have been supplied with an even edge. Rolls of fabric that have "funneled" edges will not track properly - resulting in wrinkling and uneven pressure.

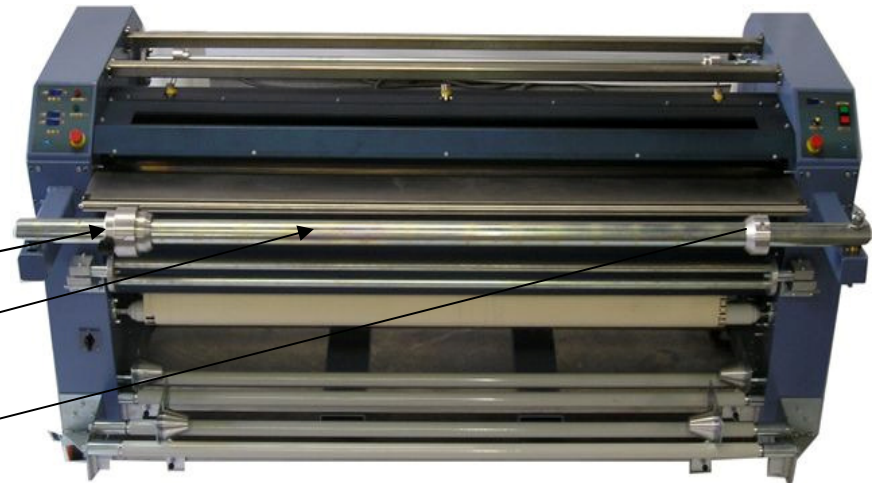
7300IJ ENGINEERING CHANGE

Effective September 2006, the top unwind cradle was replaced with a swing-out arm with tensioning checks. The tensioning chucks allow for additional tension to be used on the print paper when required. The relocation to the front of the machine in line with the loading tray assists the operator in loading the transfer paper straight into the nip with minimum effort.

Adjustable Core Chuck

Swing out Arm

Non-adjustable chuck





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Temperature Calibration Model 7300 Trans-19 Temperature Control

1. Set the temperature to 400 degrees F (204 C) and allow the machine to stabilize at that temperature.
2. Once the machine is stable at the set point, put a temp strip thru at each of the temperature probe positions with the face side against the drum. Its best to place the strip on a piece of paper with masking tape at the top of the strip and marked with the position it was put thru the machine. (Left Auxiliary, Center or Main and Right Auxiliary)
3. Compare the actual temperature to the displayed temperature and determine the difference. (Example; display = 400 and temp strip = 390, the difference is 10 degrees lower than set point)
4. Open the panel that covers the temperature control boards (trans-19) and locate the row of 4 temp control potentiometers (small rectangular blue with a small adjustment screw on top. If the board is installed with the large green plug at the top, the first pot on the left and the third from the left will be the only adjustment allowable. Do not adjust any other pot on the board, if unsure call the office for an explanation. Use caution high voltage.
5. On a three-zone heat machine, one board will control one zone and the other board will control two zones. On the single zone board the first pot on the left will control the display, on the two-zone board the first and third pot will control the display. You must determine which pot controls which zone.
6. Turning the pot to the right (clockwise) will adjust the display up and turning the pot left (counter clockwise) will adjust the display down.
7. Turn the pot to make the display match the temp displayed on the temp strip for the appropriate zone. This will make the control accurate.
8. If you have questions about this procedure please call our office for clarification at 770-479-1900 and ask to speak to a service tech.

Trans 19 Board

7300 7240 Temperature Calibration





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AIT Heat Tape (part #62537)

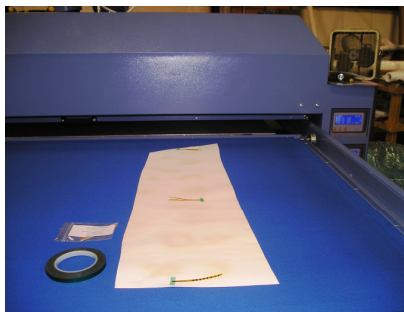
1/2" x 72 yards
Sell price \$7.75

Green color makes tape placement obvious for both application and removal. Silicone adhesive is very heat resistant and removes cleanly from fabric and many other surfaces.

Ideal for many dye-sublimation processes:



Hold transfers in place.
Prevent ghosting!



3 Zone temperature
calibration tool



Daily temperature
chart

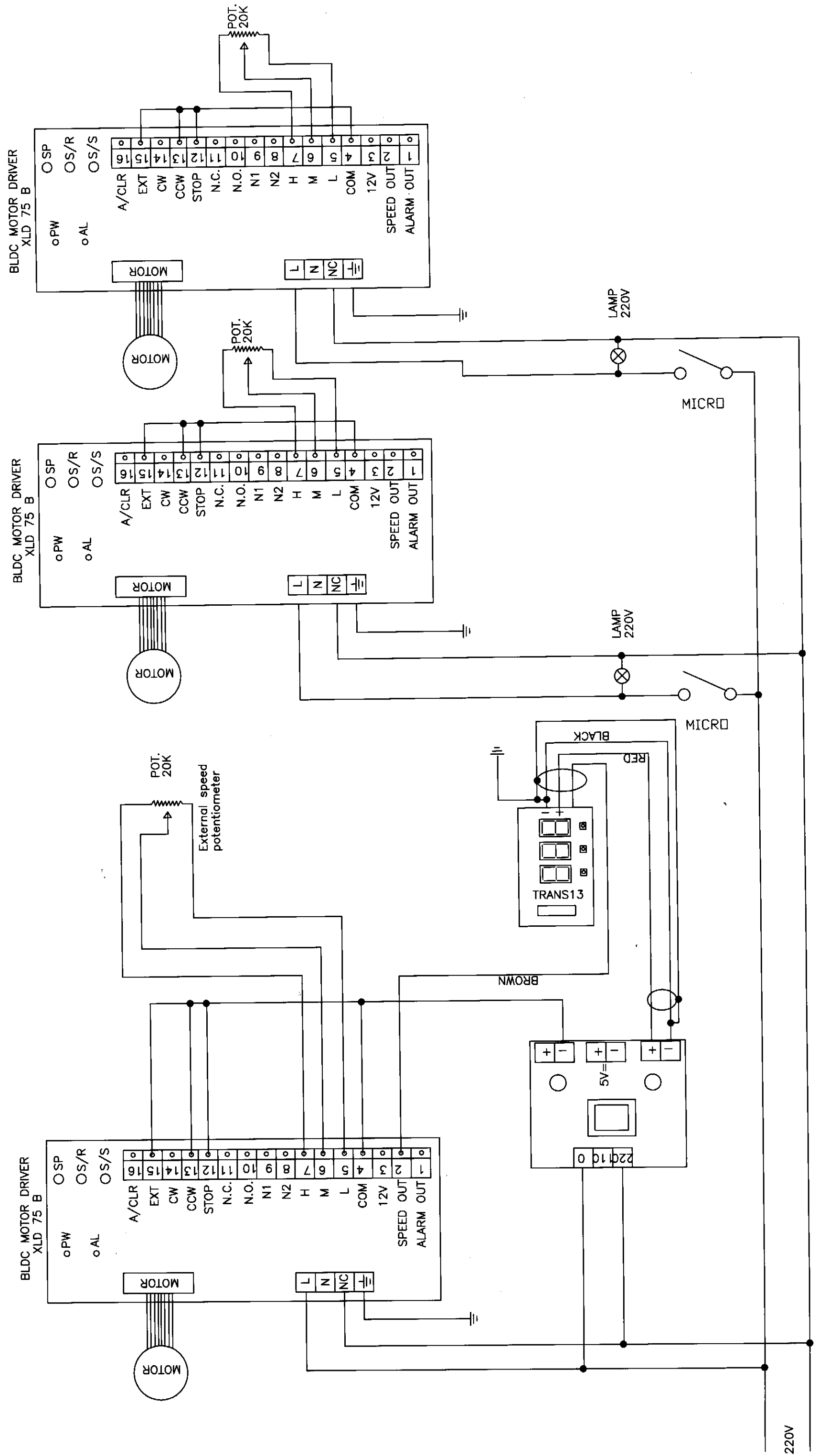
530 Wilbanks Drive • Ball Ground, GA. 30107
(770) 479-1900 tel. (770) 479-4179 fax

Tracking Adjustments for the 7300

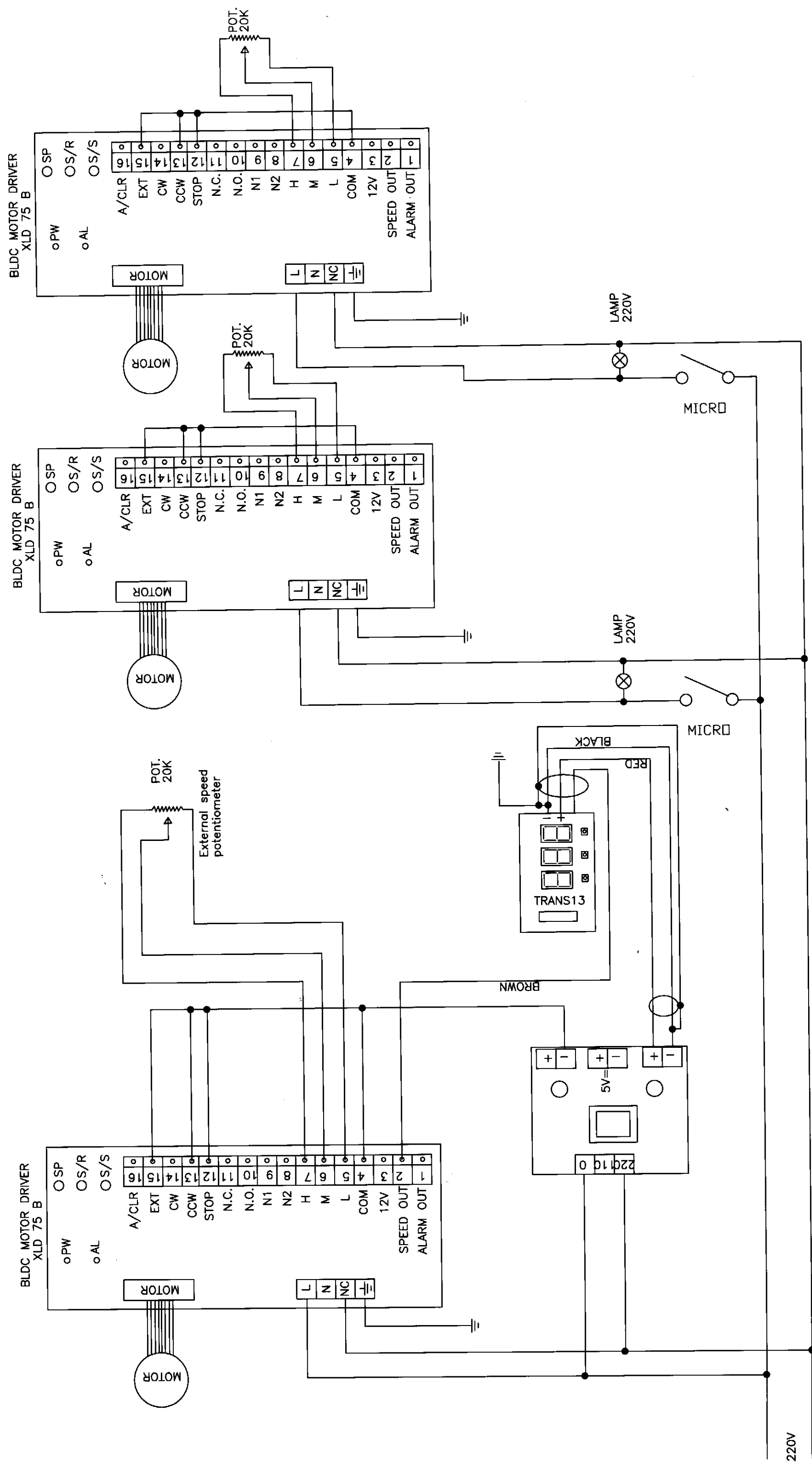
1. Although the belt tracking is automatically controlled by the photo cells on each side of the felt belt, some preliminary adjustments may be necessary to make the auto-tracking function correctly.
2. These adjustments are made on the front of the machine on the tension roller (see diagram behind cover figure 1)
3. After setting up the machine, turn on the machine and watch the edges of the felt belt. The left and right edges of the felt belt activate the photo cells that in turn move the tracking roller (see figure 2).
4. If the edge of the felt belt goes beyond the photo cell on left or right side, adjust the tension roller adjustment bolt (figure 3 & 4) by turning the bolt clockwise to tighten the tension roller on that side.
5. Make small adjustments (usually two or three rounds) and wait between adjustments to allow time for the machine to react to the last adjustment. You may speed up the machine to make the belt react more quickly.
6. When the belt moves back to the other direction, watch the belt until it reaches the photo cell on the opposite side or stays in the center of the machine. If it overrides the other photocell you may have overadjusted the tension roller on the other side and may need to back off on that adjustment.
7. When properly adjusted, the belt will stay between the photo cells (located below figure 5 & 6 inside frame).



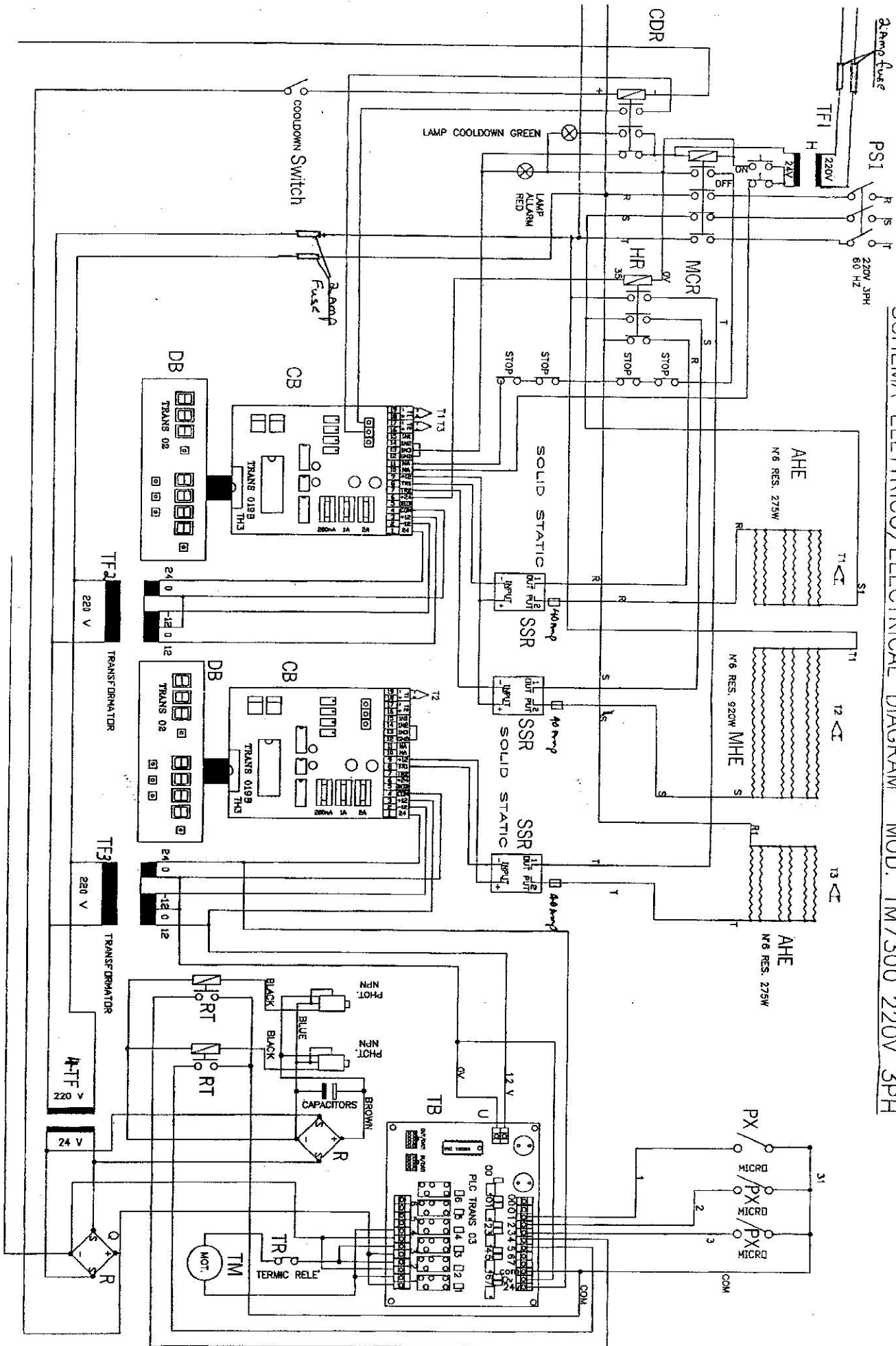
SCHEMA ELETTRICO/ELECTRICAL DIAGRAM MOD. TM 7360



SCHEMA ELETTRICO/ELECTRICAL DIAGRAM MOD. TM 7360



SCHEMA ELETTRICO/ELECTRICAL DIAGRAM MOD. TM7300 220V 3PH



ELECTRIC DIAGRAM TM7300 LEGEND

PS1	Power Switch
MCR	Main Control Relay
HR	Heat Relay
CDR	Cool Down Relay
AHE	Auxiliary Heat Element (12)
MHE	Main Heat Element (6)
SSR	Solid State Heat Relays (3)
T1, T2, T3	Thermocouple (3)
TF	Transformer, step down
RT	Tracking Relay, BEH (2)
CB	Heat Control Boards (2)
DB	Display Board (2)
TM	Tracking Motor, Belt
TR	Thermal Relay for Tracking Motor
TB	Tracking Board for Belt
PHOT	Photo Sensor for Tracking (2)
R	Rectifier, AC to DC
PX	Proximity Sensor, Tracking (3)
STOP	Emergency Stop Switches (3)

7300 Parts Manual
Part List

Reference #	Part #	Description	Notes
1		Bearing, Eccentric, for Rewind	
2		Bearing, Rewind	
3		Cone, Tensioning f/ Rewind	
4		Knob, Rewind Cone	
5		Reflector Plate	
6		Photo Eye	
7		Flange BRG, 24mm	
8		Single Display Board, Temp	
9		Single Display Board, Temp	
10		Bearing, Drum	
11		Main Power, On/Off Switch	
12		Cone, Non-Adj, Unwind	
13		Cone, Adjustable, Unwind	
14		Button, Heat	
15		Button, Cooldown	
16		E-Stop	
17		Pushbutton, On	
18		Pushbutton, Off	
19		Regulator, Speed	
20		E-Stop	
21		Thermocouple (3)	
22		Trans 19 Board	
23		Trans 19 Board	
24		12 / 24 V Transformer	
25		Trans 04 Tracking Board	
26		24 V Transformer	
27		24 V Relays	
28		Bearing, Drum	
29		Drive Sprocket	
30		Idler Sprocket	
31		Drive Chain	

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Part List

32		Motor, Tracking	
33		Bearing, TRK Roller, Take-Up	
34		Bearing, TRK Roller, Swivel	
35		Proximity Switch (3)	
36		Power Supply	
37		Inverter Drive (2) for rewinds	
37a		Inverter Drive (1) for main drive motor	
38		Thermal Protector	
39		Heat Contactors (2)	
40		Motor, DC Brushless	
41		Casters, Locking	

7300 Parts Manual

Part List

[illegible]

7300 Parts Manual

Part List

[illegible]