Tunnel	Model	Number	7020	B
Description	**Designation**	**Part Number**	**Description**	**Schematic & Rev.**
Electrical Schematic				
Main Circuit Breaker	CB 1	CU1770	Circuit Breaker	C 7020 8003 Rev 2
	1 L 2 SS 1-1			
Cool Down Switch	1 L 2 SS 1-2	SW19746	Switch Toggle 3PDT 30A MP 250V Bush MT	C 7020 8003 Rev 2
	1 L 2 SS 1-3			
Heater Bank 230 Volts 6000 Watts	HT 1	HT20228	Heater 6000 Watts	C 7020 8003 Rev 2
Over Tempertaure Controller	CO 2	CO20975	Thermostat Set To 550 Dg F	C 7020 8003 Rev 2
Indicator On Light Part Of TH 1	PL 1	CO19745	Temperature Controller	C 7020 8003 Rev 2
Primary Temp Controler	TH 1	CO19745	Temperature Controller	C 7020 8003 Rev 2
Fuse Glass 1.5 Amp	F 1	FZ1352	Fuse Slow Blow 1.5 Amp 3Ag	C 7020 8003 Rev 2
Fuse Glass 1.5 Amp	F 2	FZ1352	Fuse Slow Blow 1.5 Amp 3Ag	C 7020 8003 Rev 2
Main Blower Motor	M 1	BW19743	Blower Motor Assy	C 7020 8003 Rev 2
Tunnel Hood Cooling Fan	M 3	BW19749	Blower Axial Fan Cooling 125 CFM 230 VAC 3000 RPM	C 7020 8003 Rev 2
Cool Down Thermostat	TH 2	CO19748	Thermostat M/O Close 140 Dg. F Open 140 Dg F	C 7020 8003 Rev 2
Control Fuses For T1	F 3	FZ1216	Fuse Slow Blow 1 Amp 3Ag	C 7020 8003 Rev 2
Control Fuses For T1	F 4	FZ1216	Fuse Slow Blow 1 Amp 3Ag	C 7020 8003 Rev 2
Fuse Mounted To T1	F5	FZ1216	Fuse Slow Blow 1 Amp 3Ag	C 7020 8003 Rev 2
Control Transformer	T 1	TR19579	Xformer 100 VA 240 / 480 V Primary 120V Secondary	C 7020 8003 Rev 2
Conveyor Speed Control	CO 1	CO19747	Control Speed 115 VAC In 0 - 90 VDC Out	C 7020 8003 Rev 2
Conveyor Motor	M 2	MR19824	PM Gear Motor 130 VDC 139 RPM 1/17 HP	C 7020 8003 Rev 2

Tunnel	Model	Number	7020	B
Description	**Qty Req**	**Part Number**	**Description**	**Assembly Drawing**
Tunel Hood Parts				
Circuit Breaker Main On Off	1	CU1770	Circuit Breaker	70200083
Blower Motor Assy	1	BW19743	Blower Motor Assy	70200192
Heater Bank 220 Volts	1	HT20228	Heater 6000 Watts	70200192
Heater Bank Wires	1	70200822	Wire Connection Heater	70200083
Heater Bank Wires	2	70200823	Wire Connection Heater	70200083
Thermostat Main Temperature Controler	1	CO19745	Temperature Controller	70200820
Thermostat Cool Down	1	CO19748	Thermostat M/O Close 140 Dg. F Open 140 Dg F	70200019
Thermostat Over Heat	1	CO20975	Thermostat Set To 550 Dg F	70200019
Curtains	2	70201831	Curtain	70200019
Control Transformer	1	TR19579	Xformer 100VA 240/480 Primary 120V Secondary	70200820
Blower Motor Fuses	2	FZ1352	Fuse Slow Blow 1.5 Amp 3Ag	70200820
Control Transformer Fuse Primary Side	2	FZ1216	Fuse Slow Blow 1 Amp 3Ag	70200820
Speed Control Fuse	1	FZ1216	Fuse Slow Blow 1 Amp 3Ag	70200820
Speed Control 1120-041	1	CO19747	Control Speed 115VAC IN 0-90 Out	70200820
Cool Down Relay	1	RY20960	Power Relay 30 Amps SPST 240 V Coil 50/60 Hz	70200019

Tunnel	Model	Number	7020	B
Description	Qty Req	Part Number	Description	Assembly Drawing
Conveyor Parts				
Drive Shaft Assembly	1	70200223	Drive Shaft Assembly Compleat See C70200223	70200022
Drive Shaft	1	70202231	Drive Shaft	
Drive Shaft Sprockets	2	70202021	Sprocket Modified	70200223
Drive Shaft Bearings	2	BG19435	Relube Typ Ball Flang 0.50 Bore	70200022
Conveyor Drive Motor	1	MR21217	PM Gear Motor 130 VDC 139 RPM 1/17 HP	70200022
Motor Sprocket	1	SK1317	Sprocket #40 12T	
Driven Sprocket on Drive Shaft	1	70202021	Sprocket Modified	70200022
Motor Drive Chain	1	70202239	Chain Conveyor Drining	70200022
Motor Drive Chain Master Link	1	CH0413	Master Link	
Idler Shaft	1	70202234	Idler Shaft	70200022
Idler Sprocket Assy	2	71210711	Idler Sprocket Assembly	70200020
Idler Sprocket Bushings	2	71217002	Bushing Made From BU20751	71210711
Idler Shaft Take Up Assembly	2	70200214	Take Up Assy See A 7020 0214	70200022
Idler Sprocket	2	71217001	Sprocket 40B12	71210711
Conveyor Chain	2	70202230	Conveyor Chain #40 Hollow Pin CH0680	70200022
Conveyor Chain Master Link	2	CH0682	Master Link	70200022
Conveyor Tie Rods	7	71214007	Tie Rod	70200022
Tie Rod Washers	14	WA0692	Washer Flat Steel #8	70200022
Tie Rod Cotter Keys	14	PN17102	Cotter Key 0.045 Dia 0.250 Long Chisel Point	70200022
Conveyor Chain Oil	1	LU0855	Thremolube LU0855 1/2 Pt. Can	Spare Parts
Conveyor Rollers Complete	55	70200110	Roller Assy RO1665	70200022
Conveyor Roller Covering	Feet 74	TU1649	Standard 3/8 ID Tubing Smooth Silicone	
Additional Rollers For High Density	22	70200110	Roller Assembly	
Mesh Over Lay Kit	1	371	Mesh Over Lay Kit Including Adaptor, Belt,Lifter,Ect.	3710021
Mesh Overlay Belt	1	BL14631	Mesh Belt Tephlon Impregnated Fiberglass	3710021
Mesh Overlay Device Part 1	2	3710100	Adapter & Welding Assembly	3710021
Mesh Overlay Device Part 2	2	3711001	Bar Clamp	3710021
Mounting Scress For Clamp	20	SS7293	Flat Head Screw 8/32	3710021
Rail Assembly Live	2	70202242	Live Roller Rails Top Of Conveyor	70200022
Rail Chain Roller Return Bottom	2	70202241	Rail Chain Return	70200022
Rail Assembly Chain Lifter Mesh Belt	2	3710210	Lifter For Chain When Using Meash Belt	3710021

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Description	**Designation**	**Part Number**	**Description**	**Schematic & Rev.**
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Cool Down Thermostat	TH 2	CO19748	Thermostat M/O Close 140 Dg. F Open 140 Dg F	C 7020 8003 Rev 2
Control Fuses For T1	F 3	FZ1216	Fuse Slow Blow 1 Amp 3Ag	C 7020 8003 Rev 2
Control Fuses For T1	F 4	FZ1216	Fuse Slow Blow 1 Amp 3Ag	C 7020 8003 Rev 2
Fuse Mounted To T1	F5	FZ1216	Fuse Slow Blow 1 Amp 3Ag	C 7020 8003 Rev 2
Control Transformer	T 1	TR19579	Xformer 100 VA 240 / 480 V Primary 120V Secondary	C 7020 8003 Rev 2
Conveyor Speed Control	CO 1	CO19747	Control Speed 115 VAC In 0 - 90 VDC Out	C 7020 8003 Rev 2
Conveyor Motor	M 2	MR19824	PM Gear Motor 130 VDC 139 RPM 1/17 HP	C 7020 8003 Rev 2

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Heater Bank Wires	1	70200822	Wire Connection Heater	70200083
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Thermostat Over Heat	1	CO20975	Thermostat Set To 550 Dg F	70200019
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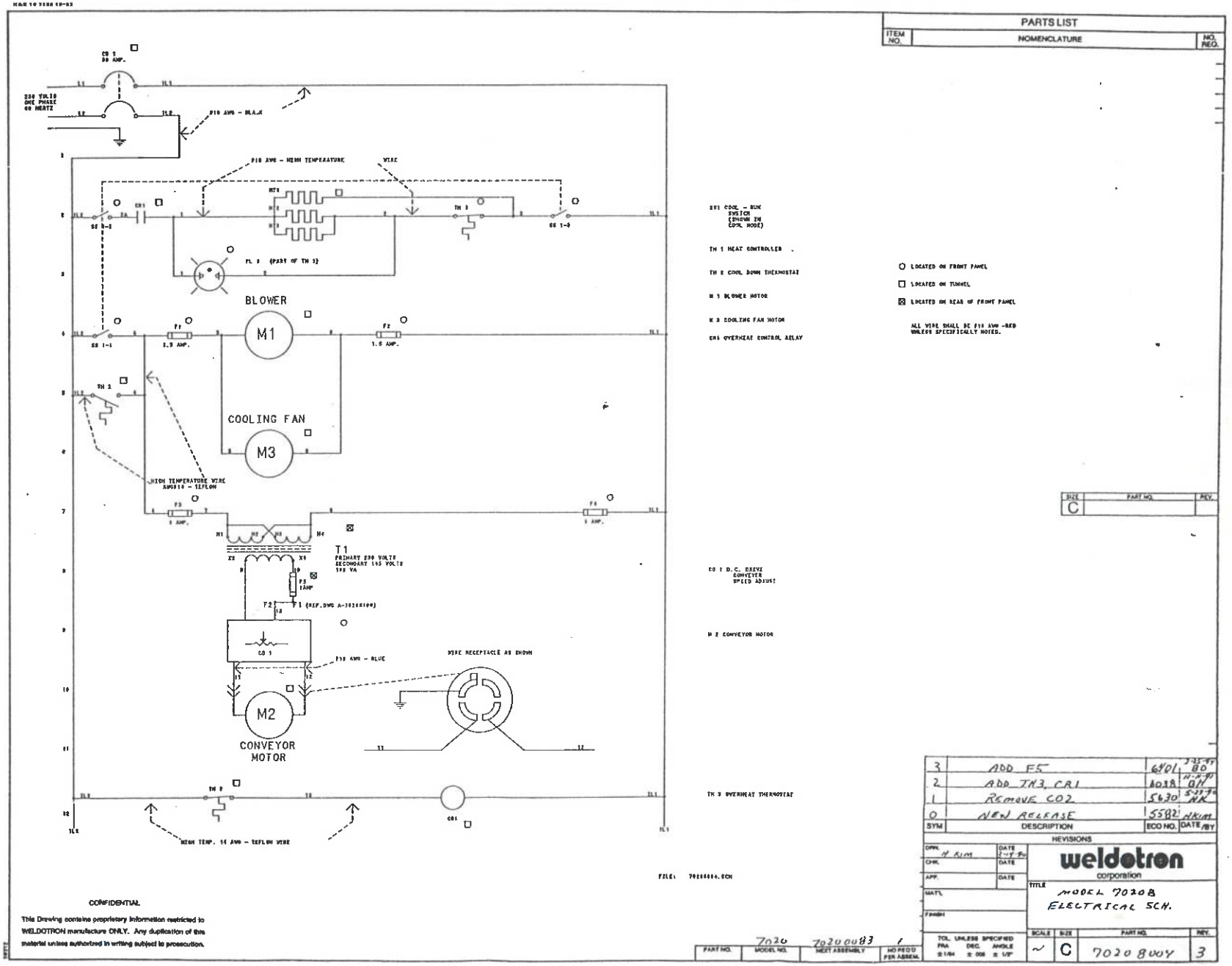
Control Transformer Fuse Primary Side	2	FZ1216	Fuse Slow Blow 1 Amp 3Ag	70200820
Speed Control Fuse	1	FZ1216	Fuse Slow Blow 1 Amp 3Ag	70200820
Speed Control	1	CO19747	Control Speed 115VAC IN 0-90 Out	70200820
Cool Down Relay	1	RY20960	Power Relay 30 Amps SPST 240 V Coil 50/60 Hz	70200019


PARTS LIST
ITEM NO.
NOMENCLATURE
NO. REQ.
CB 1
30 AMP.
230 VOLTS
ONE PHASE
60 HERTZ
#10 AWG - BLACK
#10 AWG - HIGH TEMPERATURE WIRE
HTR
TH 3
SS 1-2
SS 1-3
SS 1-4
FL 2 (PART OF TH 1)
BLOWER
M1
F2
1.6 AMP.
F1
1.6 AMP.
TH 2
COOLING FAN
M3
HIGH TEMPERATURE WIRE
AWG#10 - TEFLON
F3
F4
1 AMP.
1 AMP.
T1
PRIMARY 230 VOLTS
SECONDARY 195 VOLTS
195 VA
P3
12AMP
F2
F1 (REF.DWG A-70206100)
CR 1
#10 AWG - BLUE
WIRE RECEPTACLE AS SHOWN
M2
CONVEYOR
MOTOR
TH 3
HIGH TEMP. 14 AWG - TEFLON WIRE
CR1
SS1 COOL - RUN SWITCH (SHOWN IN COOL MODE)
TH 1 HEAT CONTROLLER
TH 2 COOL DOWN THERMOSTAT
M 1 BLOWER MOTOR
M 3 COOLING FAN MOTOR
CR1 OVERHEAT CONTROL RELAY
CO 1 D.C. DRIVE CONVEYER SPEED ADJUST
M 2 CONVEYOR MOTOR
TH 3 OVERHEAT THERMOSTAT
LOCATED ON FRONT PANEL
LOCATED ON TUNNEL
LOCATED ON REAR OF FRONT PANEL
ALL WIRE SHALL BE #18 AWG -RED UNLESS SPECIFICALLY NOTED.
SIZE
PART NO.
REV.
C
FILE: 70208884.ECH
CONFIDENTIAL
This Drawing contains proprietary information restricted to WELDOTRON manufacture ONLY. Any duplication of this material unless authorized in writing subject to prosecution.
3 ADD F5 6401 7-15-97 BD
2 ADD TH3, CR1 A038 11-21-96 DM
1 REMOVE CO2 5630 5-21-96 NR
0 NEW RELEASE 5582 NR/DM
SYM DESCRIPTION ECO NO. DATE/BY
REVISIONS
DRN. M. KIM DATE 2-17-96
CHK. DATE
APP. DATE
MATL
FINISH
weldotron corporation
TITLE MODEL 7020B ELECTRICAL SCH.
TOL. UNLESS SPECIFIED FRA. ± 1/64 DEC. ± .005 ANGLE ± 1/2°
SCALE ~ SIZE C PART NO. 7020 BWDY REV. 3
PART NO. 7020 MODEL NO. 70200083 NEXT ASSEMBLY 1 NO REQ'D PER ASSEM.

OPERATING AND MAINTENANCE INSTRUCTIONS FOR WELDOTRON MODEL 7020B SHRINK TUNNEL

Technical Document #4024
Issued: March 1990
Revised: May 1990

CAUTION

THE SAFETY OF PERSONNEL INVOLVED IN THE OPERATION OF INDUSTRIAL EQUIPMENT CAN ONLY RESULT FROM A WELL-CONCEIVED AND RIGIDLY ENFORCED SAFETY PROGRAM DEVELOPED BY THE USER OF SUCH EQUIPMENT. WHILE WELL-DESIGNED EQUIPMENT INCLUDING PERSONNEL SAFETY FEATURES IS EXTREMELY IMPORTANT, OF EQUAL OR EVEN GREATER IMPORTANCE IS THE ROLE PLAYED BY USER MANAGEMENT INVOLVING PROPER INSTALLATION, GOOD MAINTENANCE PROCEDURES BY TRAINED PERSONNEL AND RIGIDLY ENFORCED SAFETY RULES FOLLOWING THE PRACTICES RECOMMENDED BY SUCH ORGANIZATIONS AS A.N.S.I. AND O.S.H.A.

WELDOTRON
CORPORATION
1532 So. Washington Avenue
Piscataway, New Jersey 08855
Telephone # (908) 752-6700
FAX # (908) 752-6062

Welcome to the Weldotron Family!

Weldotron is a recognized leader in the industrial packaging industry. Whether you own or lease your Weldotron packaging system, you are assured the highest quality in design, workmanship, and performance of any packaging system available.

The purpose of this manual is to familiarize you with the Model 7020 Shrink Tunnel and to provide instructions for the operation, maintenance and, if necessary, repair of the system. This manual also includes a complete set of parts lists and assembly drawings to facilitate maintenance and repair.

If certain unique installation requirements arise, or if there are any questions concerning your Weldotron packaging system which are not answered by this manual, one of our courteous Customer Service representatives will be happy to assist you.

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1 INTRODUCTION

The Weldotron Model 7020 Shrink Tunnel is a conveyorized heat shrinking device employing electric heating combined with a recirculating air system, and a complete range of adjustments. The main components are the blower, the heater, the shrink chamber and the package conveyor. Silicone-fiberglass curtains cover the entrance and exit of the heat chamber to minimize heat loss as packages travel through the tunnel.

1.1 UNPACKING

Remove the Shrink Tunnel from its shipping crate and inspect for possible damage. **IF ANY DAMAGE IS NOTED, CONTACT CARRIER IMMEDIATELY. DO NOTHING FURTHER UNTIL CARRIER'S AGENT HAS MADE AN INSPECTION OF THE DAMAGE TO THE UNIT.** If no damage is present, check for the presence of the following items:

1. Hole Plug, 3/8" Diameter (25 furnished), part no. PG-0063.
2. Blower Motor fuses (F1 & F2) 1 1/2 amperes (3 furnished), part no. FZ-1352.
3. Conveyor Motor fuses (F3 & F4) 1 ampere slo-blo (3 furnished), part no. FZ-1216.
4. One-half pint can Thermolube, part no. LU-0855.
5. Lubricant applicator brush, part no. MP-0001.

If any of these items are missing, contact the manufacturer immediately.

2 SPECIFICATIONS

CONVEYOR: Continuously variable package speed adjustment by means of solid state speed control.

SHRINK TEMPERATURE RANGE: Continuously variable with the thermostatic control up to 400°F as required.

BLOWER: Equipped with 1/3 HP continuous-duty motor.

CONTROL:
a. Main power switch.
b. Conveyor speed control.
c. Thermostatic heat control with indicating light.
d. COOL-RUN Mode Switch

SURFACE AREA REQUIRED: 39 inches x 22 inches

POWER REQUIREMENTS: 230 volts, 1 phase, 60 cycles, 30 amperes

HEATER WATTAGE: 6000 watts

2.1 ORDERING INSTRUCTIONS

In order to avoid necessary delay in filling orders for parts, customers should follow procedures recommended below:

a. State the Machine Name, Model Number, Serial Number and F.W.O. Number.
b. List the Part Number and Part Name of required part exactly as shown on parts list.
c. Specify the quantity desired.
d. Specify when needed.
e. Specify desired shipping method: Parcel Post, Truck, Air Express, etc.

CAUTION

Do not attempt to install, adjust, or operate this machine without first reading the contents of this manual. Although the design of this equipment incorporates safeguards to protect operating and maintenance personnel, care should be used in operating, adjusting, and servicing.

2.2 INSTALLATION

a. Place the Shrink Tunnel in the desired location, with required electrical power source available. Make sure the current-carrying capacity of the wiring is heavy enough to assure proper voltage to the tunnel. If the voltage is too low the power company can usually adjust it to the proper level, if the wiring capacity is adequate.

   In choosing a location for the Shrink Tunnel, it is important to avoid a drafty area in the path of cooling or ventilation fans or air-conditioning ducts, as heat may be unintentionally drawn from the tunnel and reduce its efficiency.

b. Shut off the in-house tunnel power-source switch and throw the tunnel Main Circuit Breaker , (located at the top-left corner on the rear of the tunnel) to its OFF position.

c. Remove the four screws on the tunnel top and remove the top cover plate.

d. Remove insulation from the circuit breaker area.

e. Insert the in-house power supply cable-end through the tunnel cut-out and secure cable with the clamp provided. Wire the cable leads to the circuit breaker.

f. Replace insulation an d secure the tunnel top cover plate. With circuit breaker still in the OFF position, turn on the in-house power-source switch.

g. On the rear of the tunnel, there is a power outlet socket. Insert the conveyor drive motors 4-prong power plug into the polarized "twist lock" socket and turn the plug approximately a quarter-turn to lock the plug in place in the socket.

h. Adjustable leveling pads are incorporated into the design of this model to permit desired alignment with the Sealer or an existing conveyor. The four leveling pads (located at the leg corners) allow a 4-inch change in the tunnel conveyor height.

3 OPERATION

Refer to Drawing 7020-0820 for location of controls and adjustments.

3.1 INITIAL OPERATION

a. Throw the MAIN POWER switch to the ON position.

b. Set the CONVEYOR SPEED CONTROL to about its mid-range setting on the scale until exact desired conveyor speed is determined later (based on package size and sealer speed). Note that the speed control scale is in arbitrary units, not in feet-per-minute.

c. Place COOL-RUN mode switch in RUN mode.

3.2 FINAL OPERATION

a. Set the thermostat to the temperature recommended by the film manufacturer. Approximate settings for several popular films are 250°F to 350°F.

These approximate temperature settings are, of course, affected by the conveyor speed selected, the film gauge, and the package size and configuration. The temperature settings should be modified experimentally for best shrink results.

When the proper operating temperature has been reached, the indicator lamp on the thermostat will go out.

NOTE

The indicator will turn on occasionally to maintain temperature.

b. Arrange the tunnel's heat-control hole plug pattern as follows:

1. Arrange the tunnel's hole plug pattern to suit the package configuration. The chamber's top and side holes may be plugged to minimize shrinkage or unplugged to afford greater shrinkage. For low, flat packages with less than 1-inch side height, the side holes should be completely plugged. For somewhat higher packages, the holes may be only partially plugged to admit side air-flow as required. It is important to remember that, as the top holes of heat chamber are plugged, the airflow is increased from the side air holes and vice versa.

3.2 FINAL OPERATION (cont'd)

NOTE

1. The more open holes, the better when using polyethylene.

2. Conveyor rollers must be non-revolving ("dead") for sealing polyethylene film. Contact a customer service representative to order special rails for dead roller operation.

b. Arrange the tunnel's heat-control hole plug pattern as follows: (cont'd)

2. Again, as a reminder, it is recommended that the setting of the thermostat be varied in small increments for best shrink results.

3. Set the CONVEYOR SPEED CONTROL to a setting which is consistent with the sealer speed and with production rate requirements.

4. If desired, the outfeed curtains may be removed from the shrink chamber to prevent marring or sticking of the soft polyethylene film as it emerges from the tunnel in a semimolten state. To remove the outfeed curtains, unscrew the three mounting screws on the curtains' cover, Item #20 on drawing 7020-0019, remove it. Now the mounting plate of curtain will be exposed. Remove it along with curtain. When operating without the curtains, somewhat different setting of the various tunnel adjustments may be required to compensate for the heat loss within the shrink chamber.

3.3 SHUTDOWN

When it is desired to cease operation of the shrink tunnel, operate toggle switch, SS1 on front panel into COOL mode. The conveyor and blower will continue to run, but the heaters will be turned off, until the interior of the shrink tunnel has reached a safe cool down temperature.

After the shrink tunnel has cooled down, turn off main circuit breaker on rear of tunnel.

LOCKOUT/TAGOUT PROCEDURE (OSHA Standard 1910.147)
(THE CONTROL OF HAZARDOUS ENERGY)

WARNING

This standard covers the servicing and maintenance of machines and equipment in which the unexpected energization or start up of the machines or equipment, or release of stored energy could cause injury to employees. This standard establishes minimum performance requirements for the control of such hazardous energy.

APPLICATION

This standard applies to the control of all energy during servicing and/or maintenance of Weldotron machines and equipment.

PURPOSE

This procedure establishes the minimum requirement for the lockout or tagout of energy isolating devices. It shall be used to ensure that the machine or equipment is isolated from all potentially hazardous energy and locked out or tagged out before employees perform any servicing or maintenance activities.

RESPONSIBILITY

Appropriate employees (Maintenance employees and Machine set-up employees) must be instructed in the safety significance of the lockout (tagout) procedure. Each person transferred or newly hired into such positions shall be trained at time of hire or transfer.

PREPARATION FOR LOCKOUT OR TAGOUT

Identify all isolating devices to be certain which switches, valves, or other energy isolating devices apply to the equipment to be locked or tagged out.

1. Electrical boxes - Power off, remove fuses.

2. Air - disconnect air.

3. Placing a tag on machine, indicates the machine is disconnected from power and out of service.

SEQUENCE OF LOCKOUT OR TAGOUT SYSTEM PROCEDURE

1. Notify all affected employees that a lockout or tagout system is going to be utilized and the reason therefore, i.e.: Foreman and operator.
2. Shut down equipment by normal stopping procedure.
3. Open switch, disconnect air, and unplug equipment isolating it from its energy source. Stored energy (such as that in springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, or water pressure, etc.) must be dissipated or restrained by methods such as repositioning, blocking, bleeding down, etc.
4. Lockout and/or tagout the energy isolating devices with assigned individual locks or tags. In the case of a disconnect switch tagout and/or lockout. In the case of a plug, unplug, and tagout.
5. After ensuring that no personnel are exposed and as a check on having disconnected the energy sources, operate the push button or other normal operating controls to make certain the equipment will not operate.

CAUTION

Return operating controls to "NEUTRAL" or "OFF" position after test.

6. The equipment is now in a lockout and/or tagout condition.

RESTORING MACHINES OR EQUIPMENT TO NORMAL PRODUCTION OPERATIONS

1. After servicing and/or maintenance is complete and equipment is ready for normal use, check the area around the machine or equipment to ensure that no one is exposed.

2. After all tools have been removed from the machine or equipment, guards have been reinstalled and employees are in the clear, remove all lockout or tagout devices. Reinstall fuses and undo any other energy isolating devices to restore energy to the machine or equipment.

PROCEDURE INVOLVING MORE THAN ONE PERSON

In the preceding steps, if more than one person is required to lockout or tagout equipment, each shall place his or her own personal lockout device or tagout device on the energy isolating device. Maintenance personnel will use multiple locks. When mechanic and electrician work together, each will tagout the plug and no one but the person installing the tag can remove it and equipment is not to be plugged in with any tagout on it.

BASIC RULES FOR USING LOCKOUT OR TAGOUT SYSTEM PROCEDURE

All equipment must be locked out or tagged out to protect against accidental or inadverted operation when such operation could cause injury to personnel. Do not attempt to operate any switch, valve, or other energy isolating device where it is locked or tagged out.

4 MAINTENANCE

To aid in maintaining the high reliability of this Shrink Tunnel, the following maintenance should be provided. Refer to Drawing 7020-0019 and 7020-0022 for locations, as applicable.

4.1 LUBRICATION

4.1.1 Package Conveyor Chain and Conveyor Drive Chain

The package conveyor chains of the roller conveyor tunnels and conveyor drive chain should be lubricated once every 40 operating hours with Weldotron Thermolube LU-0855. The lubricant should be applied liberally, with a brush, to either a hot or a cold chain with the conveyor running slowly. **It is extremely important to use only Weldotron Thermolube LU-0855**, as this lubricant is especially formulated to withstand the high temperatures encountered within the shrink chamber.

4.1.2 Points Not Requiring Lubrication

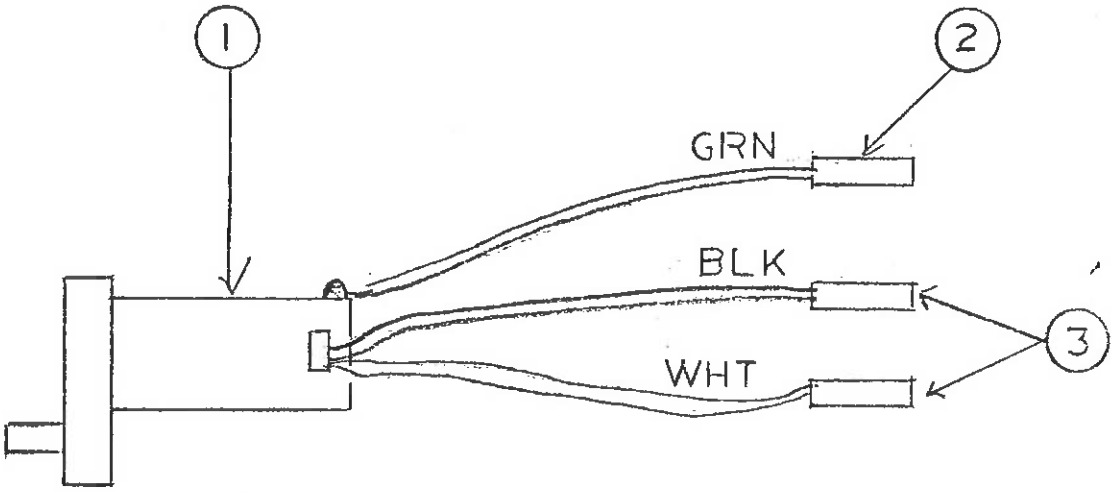
The following items are permanently lubricated and require no further lubrication:

Main Blower motor bearings.
Cooling fan motor for cooling main blower motor and controls.
Package conveyor drive motor main bearings.

4.2 CLEANING

4.2.1 Live Roller Conveyor

The silicone rubber covering on the live roller conveyor should be inspected regularly to assure that no scrap pieces of film are wrapped around the rollers to cause sticking or marring of packages. To clean, run the conveyor until the affected rollers are within the heated chamber. Allow the rollers and film residue to heat up to soften the film, then carefully advance the conveyor to stop the rollers outside the heat chamber for cleaning. Use a clean cloth and a detergent, such as Mr. Clean, and wipe the rollers thoroughly. Use a clean dry cloth to dry the rollers.



SYM	DESCRIPTION	ECO NO.	DATE /BY
	REVISIONS		

DRN	HTG	DATE	10-27-89
CHK		DATE	
APP		DATE	
MAT'L			
FINISH			

TOL. UNLESS SPECIFIED
FRA ± 1/64 DEC. ± .005 ANGLE ± 1/2°

weldotron corporation

TITLE MOTOR ASSEMBLY
MODEL 7020A

SCALE	SIZE	PART NO.	REV.
	A	7020-0827	

PART NO.	MODEL NO.	NEXT ASSEMBLY	NO REQ'D PER ASSEM.
	7020A	-0022	1

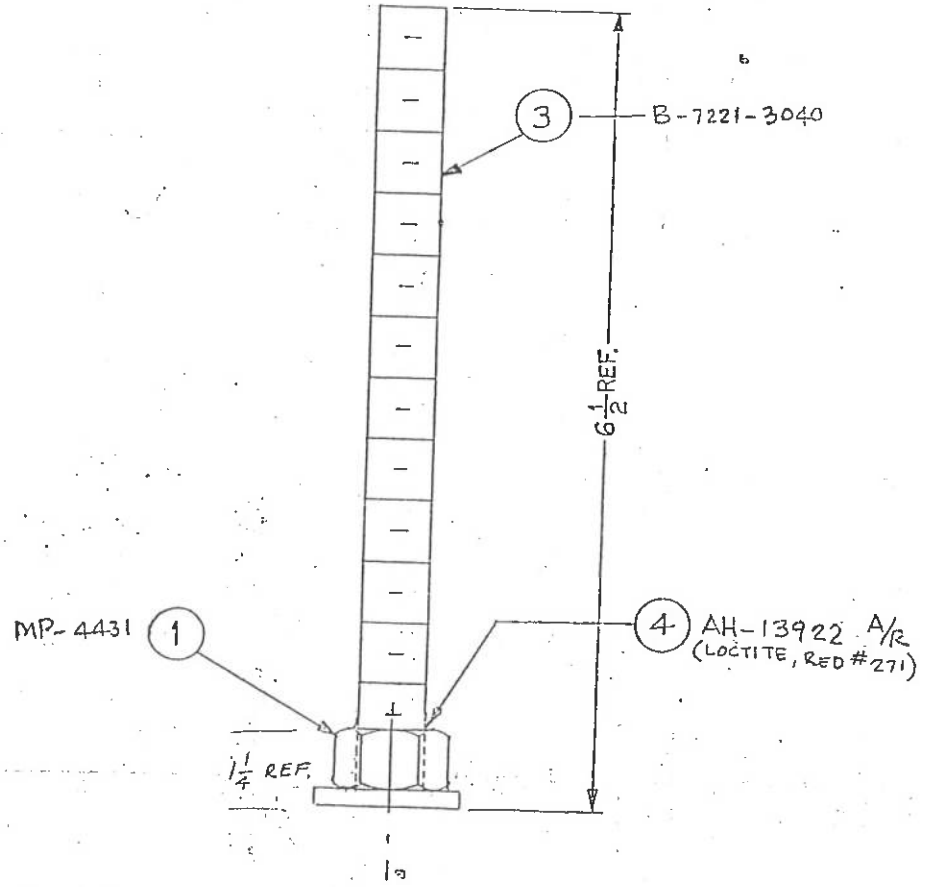
4038

PART NO: 72210305 REV: 01/27/88
DESCRIPTION: LEVELING PAD ASSY ACT: ROUTE: 1

ITEM	P/N	DESCRIPTION	QTY	U/M	RV	ACT	MD
1	MP4431	PAD, SWIVEL	1.0	EA			
3	72213040	STUD LEVELING PAD	1.0	EA	03		
4	AH13922	ADHESIVE RED HIGH STRENGTH	0.0	EA			
9000	DWG72210305	DWG,LEVELING PAD ASSY	1.0	EA	03		B

SIZE	PART NO.	REV
B	7221-0305	

PARTS LIST		
ITEM NO.	NOMENCLATURE	NO. REQ.



SYM	DESCRIPTION	ECO NO.	DATE/BY
	REVISIONS		
3	DELETED ITEM #2 & TACK WELDING ADDED ITEM #4 DELETED. FIN. WAS CAD. PL.	3422	1-27-8 J.D.
2	ADDED SWIVEL NUT ASSY.	1105	7-7-71 JRL
1	ADD 7100 & 7010 MODEL NOS.	860	5-13-67

DRN.		DATE	3-5-68
CHK.	NP	DATE	1-21-2-3
APP.		DATE	
MAT'L	~		
FINISH	NONE A		
TOL. UNLESS SPECIFIED FRA ±1/64 DEC. ±.005 ANGLE ± 1/2°			

weldotron corporation

TITLE: LEVELING PAD ASSEMBLY

SCALE	SIZE	PART NO.	REV
1/1	B	7221-0305	3

PART NO.	MODEL NO.	NEXT ASSEMBLY	NO REQ'D PER ASSEM.
	7400	7400-0133	4
	5872	5872-0100	1
	7100 SERIES	7121-0001	4
	7010	7010-0205	-
	7200 SERIES	7221-0030	4

4.2.1 Live Roller Conveyor (cont'd)

If the rollers have accumulated an excessive amount of film scrap which cannot be removed by the use of the detergent, heat up the affected rollers within the heat chamber, as described above, then carefully advance the conveyor to stop the rollers outside the chamber for cleaning. Scrape the film residue from the rollers carefully, using a dull, blunt-edged tool to prevent damage to the roller covering.

CAUTION

DO NOT use any sharp instrument, such as a razor blade or screwdriver blade, as nicking or splitting of the silicone rubber may result, requiring replacement of the roller covering.

4.3 PACKAGE CONVEYOR TENSION ADJUSTMENT

4.3.1 Roller Adjustment

The adjustment of package conveyor chain tension should be checked occasionally to insure that it is not excessive as this would cause unnecessary wear of the sprockets and the idler shafts upon which the sprockets revolve.

To check or adjust tension, shut off power to the tunnel. Lift both conveyor chains with the fingers and judge the tension. It should allow lifting of the chains approximately one inch at a point about 6-inches from the sprockets at either end of the machine. Both chains should have approximately the same tension. If it is necessary to adjust the tension, loosen two screws at the end of idler shaft, item #14 on drawing 7020-0022, extend or retract the take-up screws to achieve proper tension of both conveyor chains. Tighten end screws of idler shaft, (item #14) to retain proper tension.

4.4 PACKAGE CONVEYOR REPLACEMENT

4.4.1 Roller Covering Replacement - Refer to Drawing 7020-0022

Under conditions of heavy, continuous use, the silicone rubber covering of the conveyor rollers may eventually require replacement. To replace this covering proceed as follows:

a. Remove the cotter pins, item #17, and flat washers, item #18, from the front end (end nearest the control panel side of the tunnel) of each conveyor chain tie rod. Remove the tie rods, item #16. With heat off, run conveyor, as required, for access to the rods. Spread the conveyor chains apart and remove the conveyor rollers.

b. Remove the old roller-covering tubing from each roller and discard. If necessary, carefully slit tubing to remove.

c. Thoroughly clean all rollers, using fine steel wool if necessary. Make sure all rollers are completely smooth and free of residue and burrs.

d. Fit the new silicone rubber tubing onto each roller and work on, by hand, at least a half-inch. At the opposite end of the tubing fit and hold, by hand, an air supply hose of moderate pressure. While the tubing is slightly expanded by the air pressure, push the tubing onto the roller and work it into final position on the roller. The rollers are now ready for reinstallation.

e. Replace rollers on conveyor by inserting the roller-ends into the chains. Place a tie rod at approximately every 12-inches along the conveyor. Place flat washers (1) on each end and secure the tie rods using the cotter pins.

f. Check and adjust conveyor tension as described in paragraph 4.3.1.

4.5 CONVEYOR-MOTOR BRUSH REPLACEMENT

The package conveyor drive-motor brushes should be inspected about two or three times a year to determine if brush replacement is required. Brushes should be replaced before their lengths are reduced to less than 1/4-inch.

The motor-brushes are located at the rear end of the motor on opposite sides of the motor. To gain access to the brushes for inspection or replacement, unscrew the brush caps and withdraw the brushes and their compression springs.

4.6 CONVEYOR SPEED CONTROL

If the package conveyor will not turn, check to see if the conveyor fuse F3 & F4 are illuminated signifying that a fuse is blown. (The fuse holders are on the Control Panel). If a fuse is blown, replace with good fuse. Check and test according to Trouble Shooting Chart Part 5, Items 3 & 4.

4.7 HEATER REPLACEMENT

If the shrink tunnel will not develop or maintain proper operating temperature, the electric heater may be defective. Before replacing the heater, however, the following tests should be made.

Refer to Drawing 7020-0083 for component locations and the circuit schematic drawing. Remove the tunnels top coverplate.

a. Check that in-house power to the tunnel is on.

b. Check that main circuit breaker is operative.

c. Using an Amprobe (or equivalent clamp-on type ammeter) around one of the heater cables to the heater, a reading of 24 (nominal) amperes should be obtained (at 230 volts input of the tunnel). If no reading, or a substantially lower reading is obtained, the heater bank is open or defective and should be replaced.

d. With tunnel power on, turn the thermostat's knob to the highest temperature position. The thermostat indicating lamp should light. If the lamp does not light, the thermostat is defective and should be replaced.

e. To remove old heater, turn off power at main circuit breaker and remove all insulation to get access to heater. Remove eight (8) sheet metal screws holding heater and pull out the heater.

f. Unscrew the terminal lugs and cables to the heater.

g. Push in the new heater. Orient the same way as the old heater. Hold heater in place using eight (8) metal screws.

h. Reconnect the heater cables.

i. Repack tunnel with insulation and reinstall top cover plate.

j. Turn on power.

5 TROUBLE SHOOTING CHART

The following chart is provided to aid in determining the source of troubles which may be encountered. For checking any electrical troubles the use of test equipment such as a small volt-ohmmeter, and an Amprobe (or equivalent) clamp-on type ammeter is required.

In performing the tests and checks which follow, carefully inspect for loose components, wires touching moving parts, broken cables or wires, poor connections, etc. while testing the transformers, switches, motors, etc. Refer to Drawing 7020-0820 for locations of controls and adjustments and the Schematic Diagram, Drawing 7020-8004.

TROUBLE	PROCEDURE
1. Inadequate film shrinkage.	a. Check that all adjustments are as described in Sections 3.1 and 3.2 (as applicable).
	b. Check that tunnel is not in windy location near fans or other drafts which would lift curtains allowing heat to escape.
	c. Check for adequate voltage supply to tunnel.
	d. Check conveyor speed. It may be too high for particular film and package. Also, temperature setting may be too low.
	e. Check for lack of heat or defective heater, as in Section 4.7.
2. Excessive film shrinkage with splitting of packages.	a. Check for proper film type, gauge and condition.
	b. Check that all adjustments are as described in Sections 3.1 and 3.2 (as applicable).
	c. Check conveyor speed. It may be too low for particular film and package.
	d. Poor film seal. Check the quality of the film seal prior to tunnel entry.
	e. Conveyor rollers not revolving properly. Check tension adjustment as per Section 4.3 and lubrication as per Section 4.1.1.
	f. Readjust speed, temperature, etc. until proper combination is obtained for good shrink, as described in Section 3. et al.
	g. Make sure that conveyor belt or roller covers are clean, as in Section 4.2, as film residue particles could cause film to stick and become cloudy if package movement through heat were erratic due to sticking to dirty rollers, or belt pitting.
3. Conveyor speed erratic or too slow (with or without blowing of conveyor motor fuses F3 and F4 on control panel).	a. Remove the conveyor drive chain pull conveyor by hand. Conveyor should move freely. If not, check for presence of foreign object jamming conveyor chain, conveyor rollers, or conveyor belt.
	b. Check lubrication as in Section 4.1.1.
	c. Check conveyor chain tension as in Section 4.3.
	d. Check condition of conveyor motor brushes, as in Section 4.5.
	e. Check for worn or binding idler sprockets or shafts.

5 TROUBLE SHOOTING CHART (cont'd)

TROUBLE	PROCEDURE
4. Conveyor does not run and/or blows conveyor motor fuses F3 and F4 on control panel.	a. Check all of #3 troubles above.
	b. Change speed control CO-1.
5. No tunnel heat, or low tunnel heat with air blowing.	a. Check for adequate power and voltage from in-house supply.
	b. Check and make tests as in heater replacement of Section 4.7.

6 OPTIONS AND CUSTOMER MODIFICATIONS

	PART NO.	DESCRIPTION
■	7020K	SPARE PARTS KIT
■	371-0021	OVERLAY MESH BELT KIT

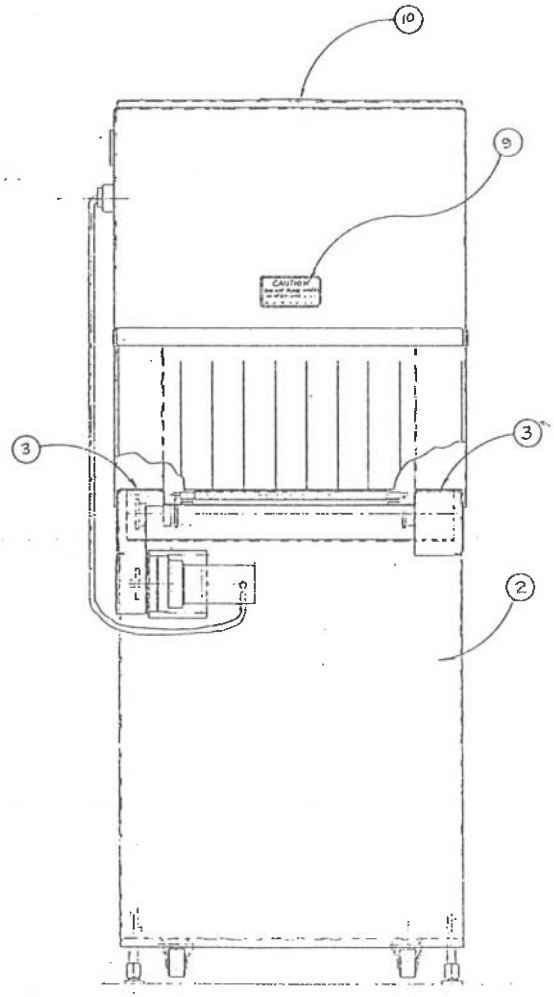
ASSEMBLY DRAWINGS DESCRIPTION AND PARTS LIST

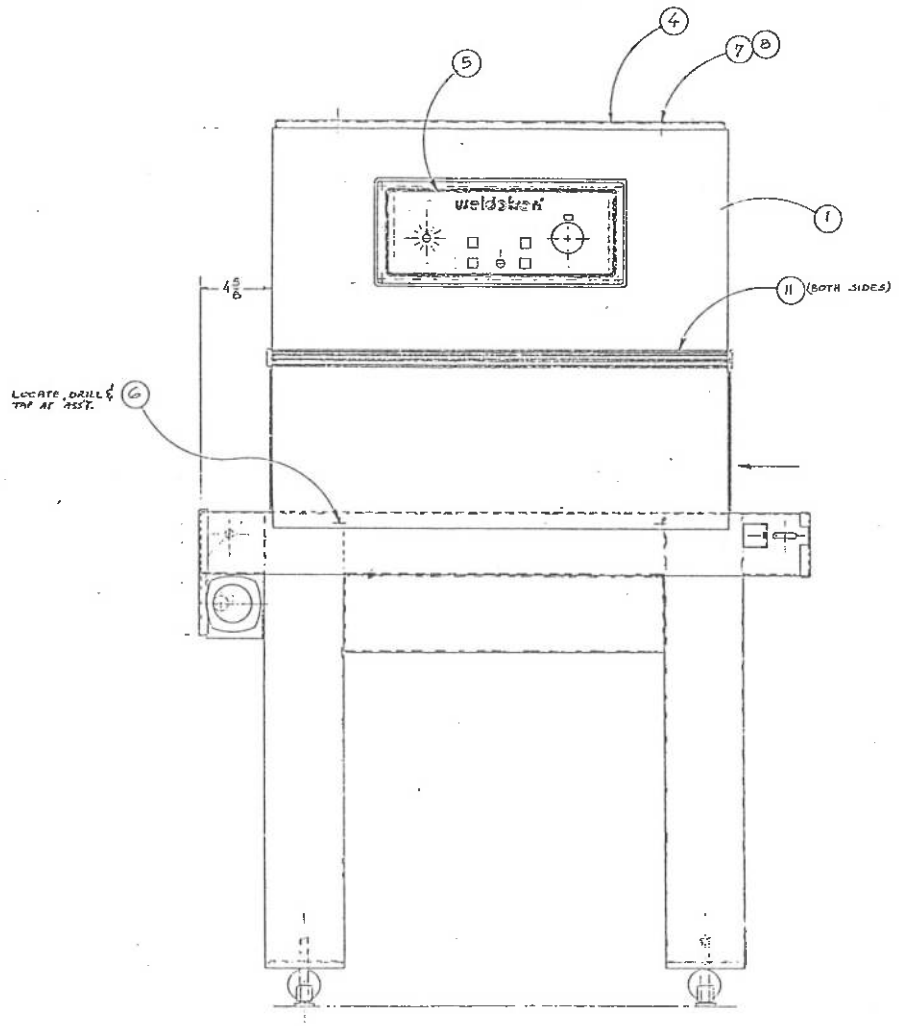
DESCRIPTION	PARTS LIST NO.
FINAL ASSEMBLY MODEL 7020B	7020B0001
TUNNEL ASSEMBLY	70200019
BLOWER MOUNTING ASSY	70200192
CONVEYOR ASSY	70200022
TAKE UP ASSEMBLY	70200214
IDLER SPROCKET ASSEMBLY	71210711
DRIVE SHAFT ASSY	70200223
MOTOR ASSEMBLY MODEL 7020A	70200827
LEVELING PAD ASSY	72210305
TOP ELECT ASSY 230V,1PH	70200083
CONTROL PANEL ASSY-FRONT	70200820
WIRE CONNECTION HEATER	70200822
WIRE,CONNECTION,HEATER	70200823
CORD SET ASSEMBLY	70200828
START UP KIT	70200116
THERMOLUBE LU855 IN 1/2 PT CONTAINER	LU0855
PKG INSTRUCTIONS OF THERMO LUBE LU855	TD1785

PART NO: 7020B0001 REV: 03/21/90
DESCRIPTION: FINAL ASSEMBLY MODEL 7020B ACT: ROUTE: 1

ITEM	P/N	DESCRIPTION	QTY	U/M	RV	ACT	MD
1	70200019	TUNNEL ASSEMBLY	1.0	EA			AS
2	70200022	CONVEYOR ASSY	1.0	EA	04	2	AS
3	70201010	INSULATION STRIP	2.0	EA		2	
4	70201824	TOP COVER	1.0	EA		2	
5	70200083	TOP ELECT ASSY 230V,1PH	1.0	EA			AS
6	SS3056	ABQ,12X0.750 LG SCR SHT MTL POZIDRIVE	4.0	EA			
7	SS0340	AAG,10-32X0.750 LG CAD PL	4.0	EA			
8	WA2223	AAA,10 WASHER FLAT CP	4.0	EA			
9	TD12341000P1	LABEL,CAUTION	2.0	EA			
10	TD12341000P3	LABEL,CAUTION DISCONNECT	1.0	EA			
11	LB19594	LABEL VISTA STRIPE BLACK 1-1/16X36 FT	5.0	FT			
12	70200116	START UP KIT	1.0	EA			AS
9000	DWG7020A0001	DWG,FINAL ASSY	1.0	EA			D

ITEM NO	PARTS LIST NOMENCLATURE





SYM	DESCRIPTION	ECO NO	DATE
	REVISIONS		

7020A	FINAL				

weldotron

FINAL ASSEMBLY
MODEL # 7020A

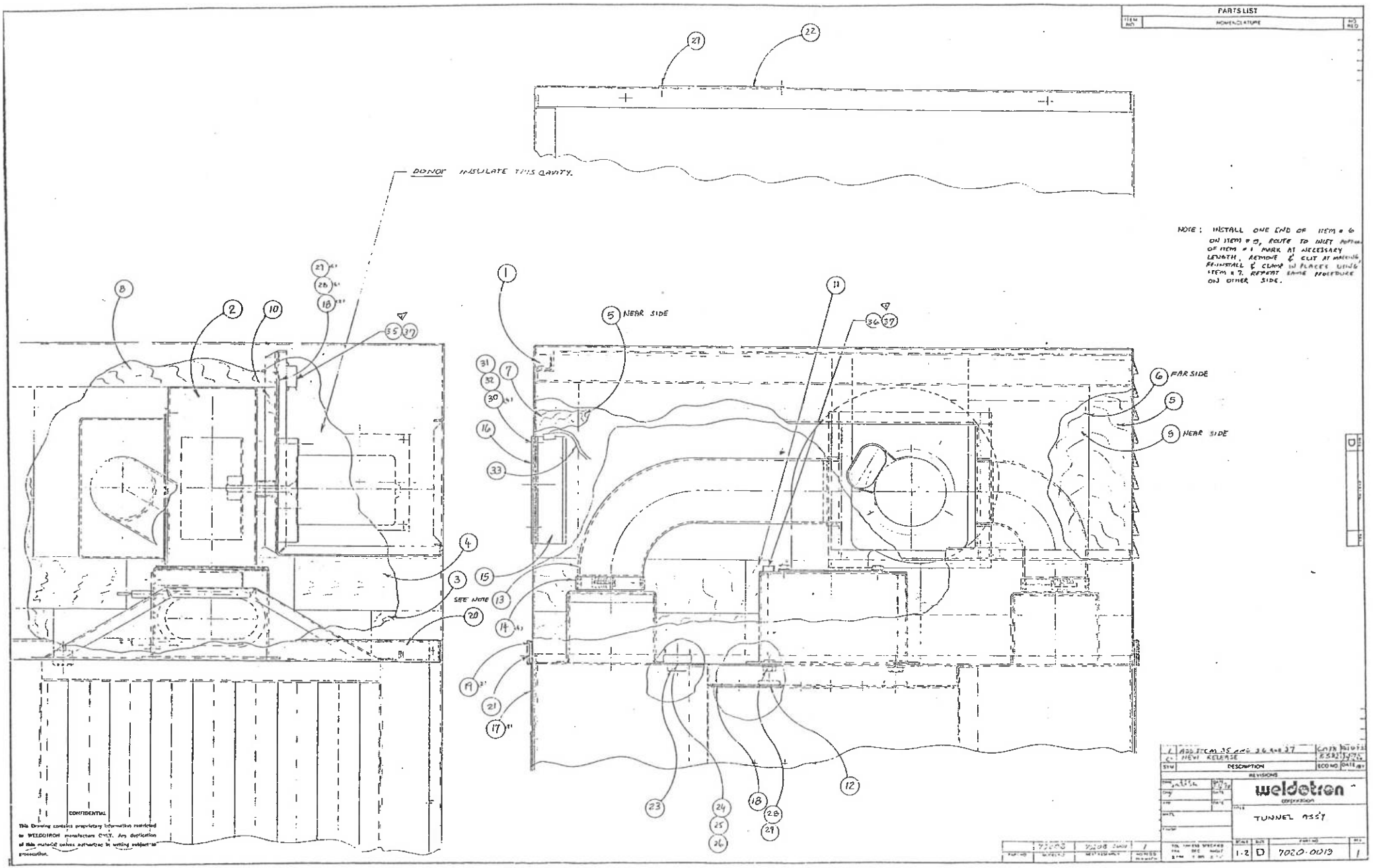
SCALE	SIZE	PART NO	REV
1:4	D	7020A-0001	

PART NO: 70200019 REV: 12/09/91
DESCRIPTION: TUNNEL ASSEMBLY ACT: ROUTE: 1

ITEM	P/N	DESCRIPTION	QTY	U/M	RV	ACT	MD
1	70200180	TUNNEL WELDMENT	1.0	EA	02		
2	70200192	BLOWER MOUNTING ASSY	1.0	EA			AS
3	70201011	INSULATION	1.0	EA			
4	70201012	INSULATION	1.0	EA			
5	70201013	INSULATION	2.0	EA			
6	70201014	INSULATION	1.0	EA			
7	70201015	INSULATION	1.0	EA			
8	70201016	INSULATION	1.0	EA			
9	70201017	INSULATION	1.0	EA			
10	70201018	INSULATION	1.0	EA			
11	70201019	INSULATION	2.0	EA			
12	70201020	PLUG,MODIFIED (PG19653)	4.0	EA			
13	HS19827	HOSE,METAL FLEXIBLE 3" DIAX 15FT LONG	0.5	EA			
14	CP19828	CLAMP,HOSE 31N DIA	4.0	EA			
15	BW19749	BLOWER,AXIAL FAN,125CFM,230 VAC,3000RPM	1.0	EA			
16	BW19750	GUARD,BLOWER,AXIAL FAN FOR BW19749	1.0	EA			
17	70201831	CURTAIN	2.0	EA			
18	70201830	WASHER PLATE	2.0	EA			
19	70201823	PLATE,CURTAIN MTG.	2.0	EA	02	2	
20	70201828	COVER,CURTAIN	2.0	EA	01		
21	SS1676	ABQ,6X0.500 LG SCR SHT MTL	10.0	EA			
22	LB1817	SPEC.& PATENT NAMEPLATE	1.0	EA	08		
23	CO19748	THERMOSTAT,M/O,CLOSE 140DEG F,OPEN 140F	1.0	EA			
24	SS0272	AAG,10-32X0.375 LG SCR BIND HD MA CAD PL	2.0	EA			
25	WA2223	AAA,10 WASHER FLAT CP	2.0	EA			
26	NT0287	AAA,10-32 NUT HEX CAD PL	2.0	EA			
27	SS1733	ABQ,4X0.250 LG SCR SHT MTL PAN HD ST	4.0	EA			

PART NO: 70200019 REV: 12/09/91
DESCRIPTION: TUNNEL ASSEMBLY ACT: ROUTE: 1

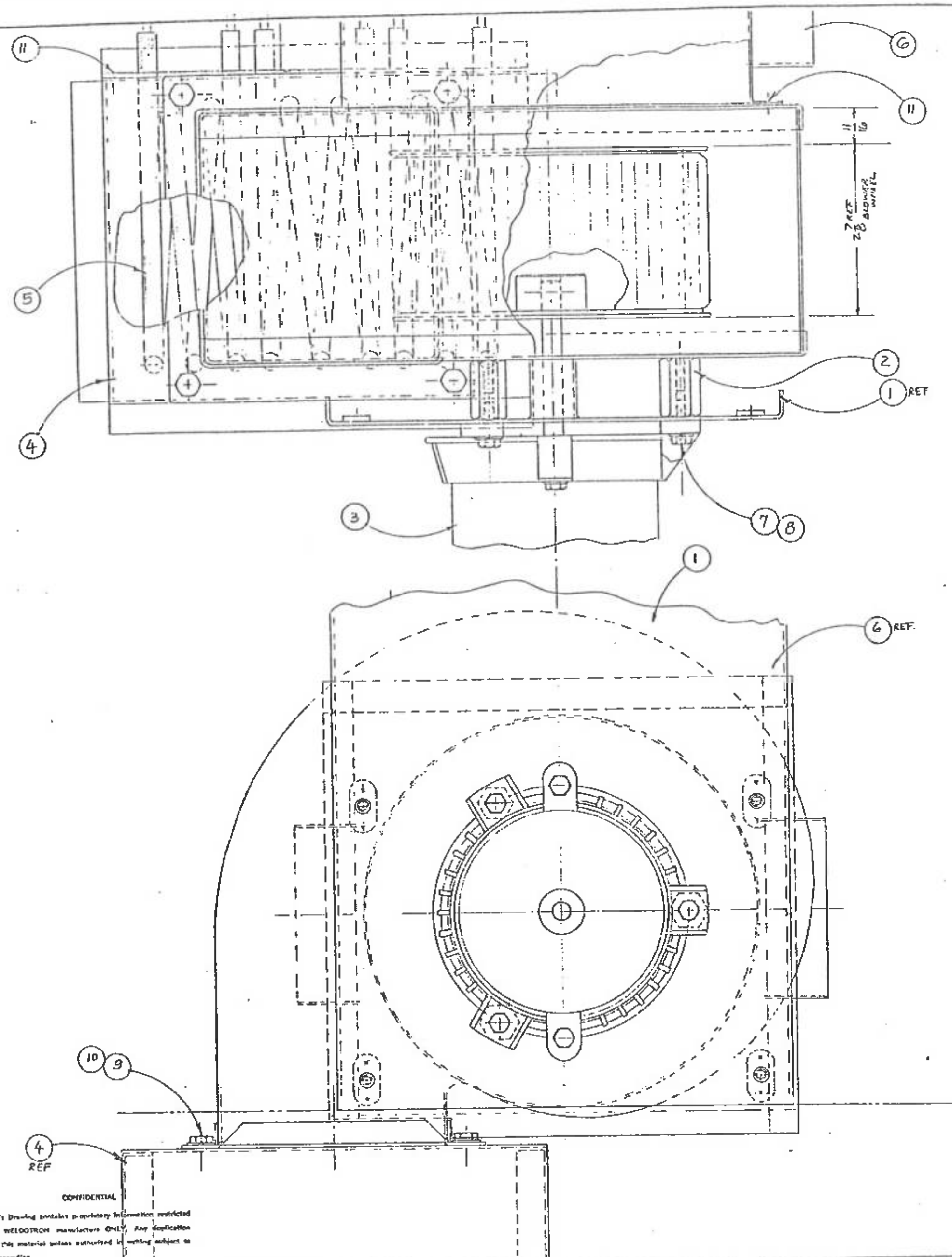
ITEM	P/N	DESCRIPTION	QTY	U/M	RV	ACT	MD
28	SS7293	ACA,10-32X0.500 LG SCR HEX HD SST	10.0	EA			
29	WA2230	AAB,10 WASHER LOCK CP	10.0	EA			
30	NT0198	AAA,6-32 NUT HEX CAD PL	4.0	EA			
31	SS2086	ABG,#6-32-2,SCREW,BIND HEAD MACH	4.0	EA			
32	WA1292	AAA,6 WASHER PLAIN CP	4.0	EA			
33	CB20260	CORD SET FAN	1.0	EA			
34	PG0063	PLUG METAL 3/8 NKL PLT	1.0	EA			
35	RY20960	PWR RELAY 30AMPS SPST 240V COIL 60/50HZ	1.0	EA			
36	CO20975	THERMOSTAT,SET TO 550 DEG F 240V,5A	1.0	EA	01		
37	SS0331	AAG,6-32X0.500 LG SCR BIND HD MACH CAD	4.0	EA			
9000	DWG70200019	DWG,TUNNEL ASSY	1.0	EA	01		D


PARTS LIST
ITEM NO
NOMENCLATURE
QTY REQ
DO NOT INSULATE THIS CAVITY.
NOTE: INSTALL ONE END OF ITEM # 6 ON ITEM # 9, ROUTE TO INLET PORT OF ITEM # 1 MARK AT NECESSARY LENGTH, REMOVE & CUT AT MARKING, REINSTALL & CLAMP IN PLACE USING ITEM # 7. REPEAT SAME PROCEDURE ON OTHER SIDE.
NEAR SIDE
FAR SIDE
SEE NOTE
CONFIDENTIAL
This Drawing contains proprietary information restricted to WELDOTRON manufacturers ONLY. Any duplication of this material unless authorized in writing subject to prosecution.
ADD ITEM 35 AND 36 & 37
INITIAL RELEASE
DESCRIPTION
REVISIONS
weldotron
TUNNEL ASSY
1-2
D
7020-0013

PART NO: 70200192 REV: 03/21/90
DESCRIPTION: BLOWER MOUNTING ASSY ACT: ROUTE: 1

ITEM	P/N	DESCRIPTION	QTY	U/M	RV	ACT	MD
1	70200190	MOUNTING PLATE WELDMENT	1.0	EA			
2	70201827	SPACER	3.0	EA			
3	BW19743	BLOWER,MOTOR ASSY	1.0	EA			
4	70200186	BOX, HEATER MTG. WELDMENT	1.0	EA	02		
5	HT20228 1720-067	HEATER,6000 WATTS	1.0	EA			
6	70200187	BOX WELDMENT, AIR INLET	1.0	EA			
7	SS13535	ACA,8-32X0.500 LG SCREW HEX HD SST	3.0	EA			
8	WA1334	AAB,8 WASHER LOCK SPRING CP	3.0	EA			
9	SS7293	ACA,10-32X0.500 LG SCR HEX HD SST	4.0	EA			
10	WA2230	AAB,10 WASHER LOCK CP	4.0	EA			
11	SS3056	ABQ,12X0.750 LG SCR SHT MTL POZIDRIVE	11.0	EA			
9000	DWG70200192	DWG,BLOWER MOUNTING ASSY	1.0	EA			D

ITEM NO	PARTS LIST NOMENCLATURE	NO REQ



ASSEMBLY INSTRUCTIONS:

1. PRE-DRILL BLOWER HOUSING ITEM #3, USING DRILL JIG
2. REMOVE MOTOR FROM BLOWER HOUSING.
3. RE-ASSEMBLE BLOWER HOUSING AND MOTOR USING SPACERS, ITEM #2 AND MOUNTING PLATE, ITEM #1 AS SHOWN.
4. RE-INSTAL SUCTION RING OF BLOWER.
5 MOUNT REST OF THE PARTS AS SHOWN.

SYM	DESCRIPTION	ECO NO	DATE	BY
	NEW RELEASE			

REVISIONS

weldotron corporation

TITLE: BLOWER MOUNTING ASS'Y

SCALE 1:1 | SIZE D | PART NO 7020-0152

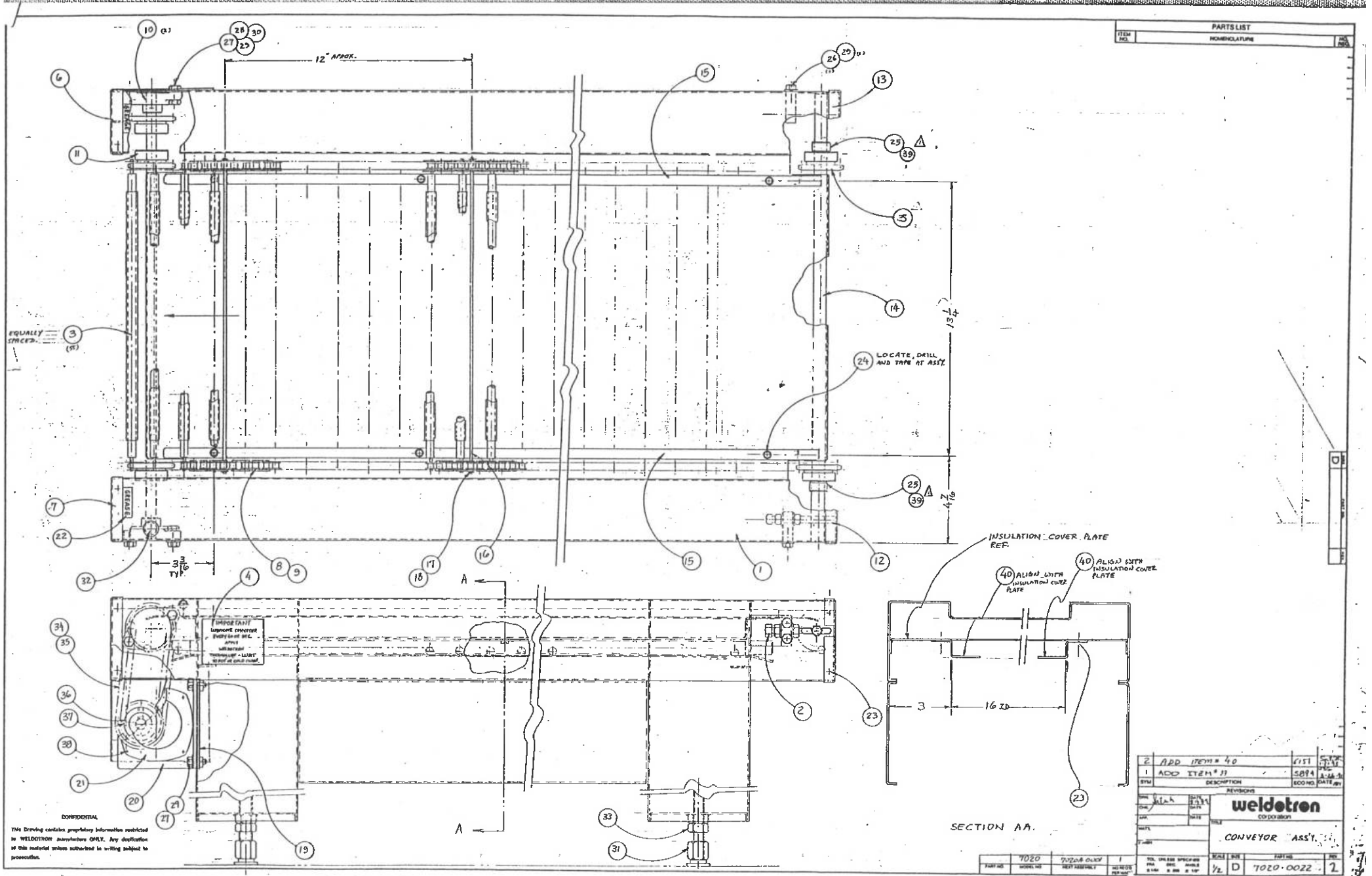
NEXT ASSY 7020-0013 | 7020A

PART NO: 70200022 REV:04 01/22/93
DESCRIPTION: CONVEYOR ASSY ACT:2 ROUTE: 1

ITEM	P/N	DESCRIPTION	QTY	U/M	RV	ACT	MD
1	70200220	CONVEYOR FRAME WELDMENT	1.0	EA	01	2	
2	70200214	TAKE UP ASSEMBLY	2.0	EA	02		AS
3	70200110	ROLLER ASSY(RO1665)	55.0	EA			
4	LB1365	LABELS "LUBRICATE CHAIN"	1.0	EA			
5	71210711	IDLER SPROCKET ASSEMBLY	2.0	EA			AS
6	70202228	END CAP,DRIVE END LH	1.0	EA		2	
7	70202229	END CAP DRIVE END,RH	1.0	EA		2	
8	CH0682	CHAIN #40 MJ 40CL HOLL. PIN CONN & #10 8	2.0	EA			
9	70202230	CHAIN,CONVEYOR (CH0680)	2.0	EA		2	
10	BG19435	ABD,RELUBE TYP BALL FLG .500 BORE	2.0	EA			
11	70200223	DRIVE SHAFT ASSY	1.0	EA	01	2	AS
12	70202232	END CAP,TAKE-UP END RH	1.0	EA	01	2	
13	70202233	END CAP,TAKE-UP END LH	1.0	EA	01	2	
14	70202234	SHAFT IDLER/TAKE UP	1.0	EA	01	2	
15	70202242	RAIL,ROLLER	2.0	EA			
16	71214007	TIE ROD	7.0	EA	01		
17	PN17102	AAE,0.045 DIAX0.250 LG.ZINC PL CHISEL PT	14.0	EA			
18	WA0692	AAA,#8 FLAT WASHER STEEL	14.0	EA			
19	70200225	NUT PLATE WELDMENT	1.0	EA		2	
20	70202238	MOUNTING BRACKET,MOTOR	1.0	EA	01	2	
21	70200827	MOTOR ASSEMBLY MODEL 7020A	1.0	EA			AS
22	LB0968	DECAL GREASE	2.0	EA			
23	SS1676	ABQ,6X0.500 LG SCR SHT MTL	22.0	EA			
24	SS2781	AGQ,8-18X0.625 LG SCR POZI DRIVE FL HD T	8.0	EA			
25	CL8036	ACA,0.625ID,1.125OD,0.500 W	2.0	EA			
26	SS0188	AAA,0.250-20X0.500LG SCREW HEX HD CAP CP	6.0	EA			
27	SS2111	AAA,0.250-20X0.875LG SCR HD HEX MACH C/P	8.0	EA			

PART NO: 70200022 REV:04 01/22/93
DESCRIPTION: CONVEYOR ASSY ACT:2 ROUTE: 1

ITEM	P/N	DESCRIPTION	QTY	U/M	RV	ACT	MD
28	WA2224	AAA,0.250 WASHER FLAT CP	6.0	EA			
29	WA2231	AAB,0.250 WASHER LOCK CP	12.0	EA			
30	NT0627	AAA,0.250-20 NUT HEX CAD	4.0	EA			
31	72210305	LEVELING PAD ASSY	4.0	EA			AS
32	PG0652	PLUG METAL 5/8 NICKEL PLTD	2.0	EA			
33	NT2322	AAA,0.625-11 NUT HEX STL CP	4.0	EA			
34	70202239	CHAIN,CONVEYOR DRIVE (CH0409)	1.0	EA	01	2	
35	CH0413	#40 CONN. LINK 1/2P, W/SPRG CLIP	1.0	EA			
36	SK1317	SPRKT #40 FOR SINGL ROL CH 1/2P 12T	1.0	EA	03		
37	SS6001	ABI,0.250-20X0.500 LG SCR SOC HD DOG PT	2.0	EA			
38	SS6290	ABC,10-32X0.250LG SCREW SOC HD CAP	4.0	EA			
39	TW9904	ABI,THRUST WASHER 0.625 X 1.250 X .25TK	2.0	EA			
40	70202241	RAIL,CHAIN RETURN	2.0	EA			
9000	DWG70200022	DWG,CONVEYOR ASSY	1.0	EA	02		D



ITEM NO.	PARTS LIST NOMENCLATURE	NO. REQ.

SYM	DESCRIPTION	ECO NO.	DATE
2	ADD ITEM # 40	6151	
1	ADD ITEM # 13	5894	

REVISIONS

weldotron corporation

TITLE: CONVEYOR ASS'Y.

SCALE	SIZE	PART NO.	REV
1/2	D	7020-0022	2

PART NO.	MODEL NO.	NEXT ASSEMBLY	NO. REQ'D PER UNIT
	7020	7020 CONV	1

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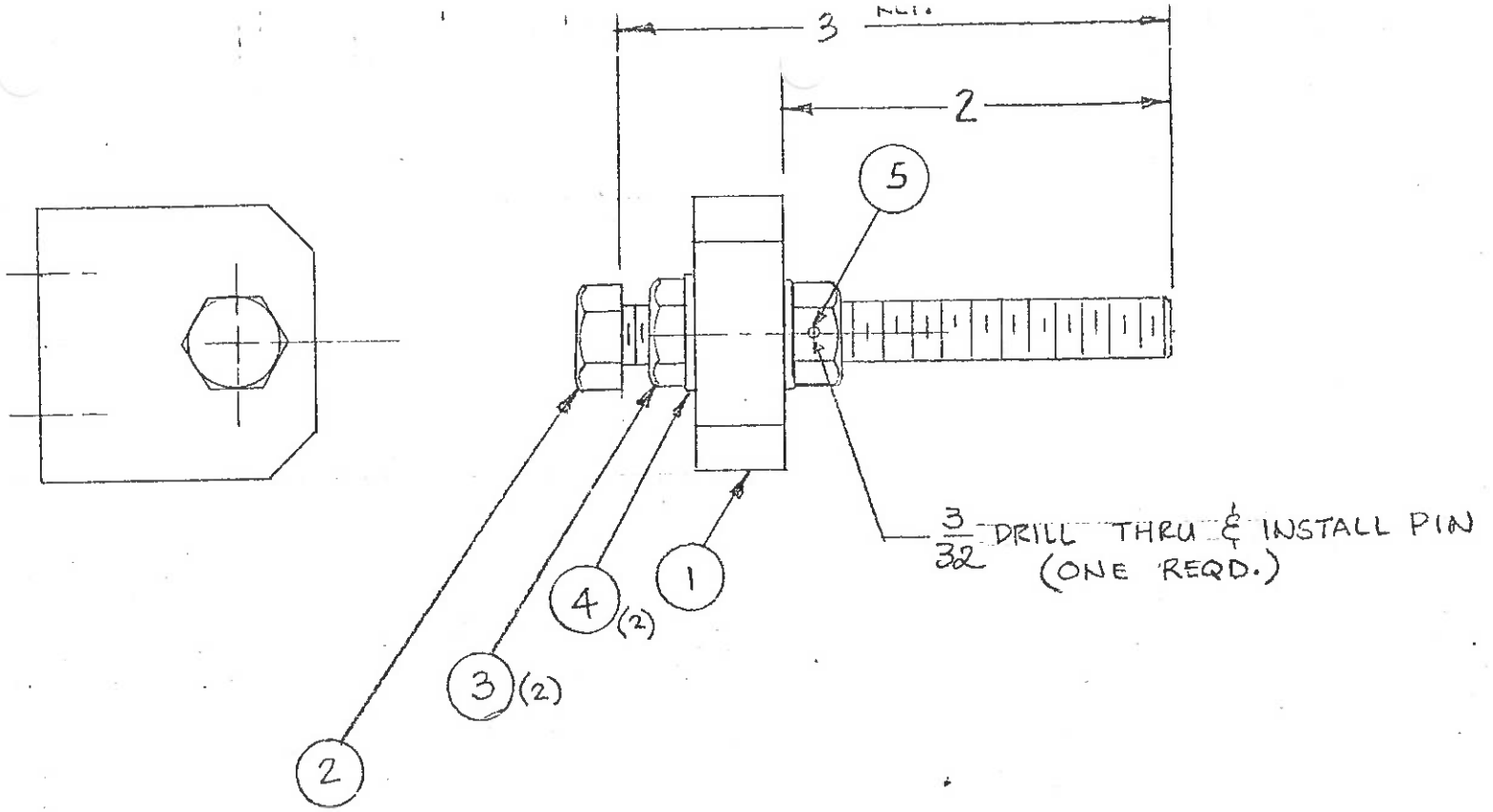
PART NO: 70200214 REV:02 06/23/93
DESCRIPTION: TAKE UP ASSEMBLY ACT: ROUTE: 1

ITEM	P/N	DESCRIPTION	QTY	U/M	RV	ACT	MD
1	70202014	BLOCK, TAKE UP	1.0	EA			
2	SS2099	AAL,0.312-18X3.000LG SCR BOLT-TAP THD*	1.0	EA			
3	NT0199	AAA,0.312-18 NUT HEX CAD PL	2.0	EA			
4	WA2225	AAA,0.312 WASHER FLAT CP	2.0	EA			
5	PN8480	ABA,0.093 DIA X0.500LG PIN ROLL	1.0	EA			
9000	DWG70200214	DWG,TAKE UP ASSEMBLY	1.0	EA	01		A



NOTES:

1. ASSEMBLE AT FINAL ASSY

SYM	DESCRIPTION	ECO NO.	DATE/BY
1	3/32 DIA WAS 1/16 DIA	6236	J.P 6-22-93

REVISIONS

DRN. J.D.	DATE 10-19-88	weldotron corporation	
CHK.	DATE		
APP.	DATE	TITLE TAKE UP ASSY.	
MAT'L PER P/L			
FINISH NONE			
TOL. UNLESS SPECIFIED FRA ±1/64 DEC. ±.005 ANGLE ± 1/2°		SCALE FULL / SIZE A / PART NO. 7020-0214 / REV. 1	

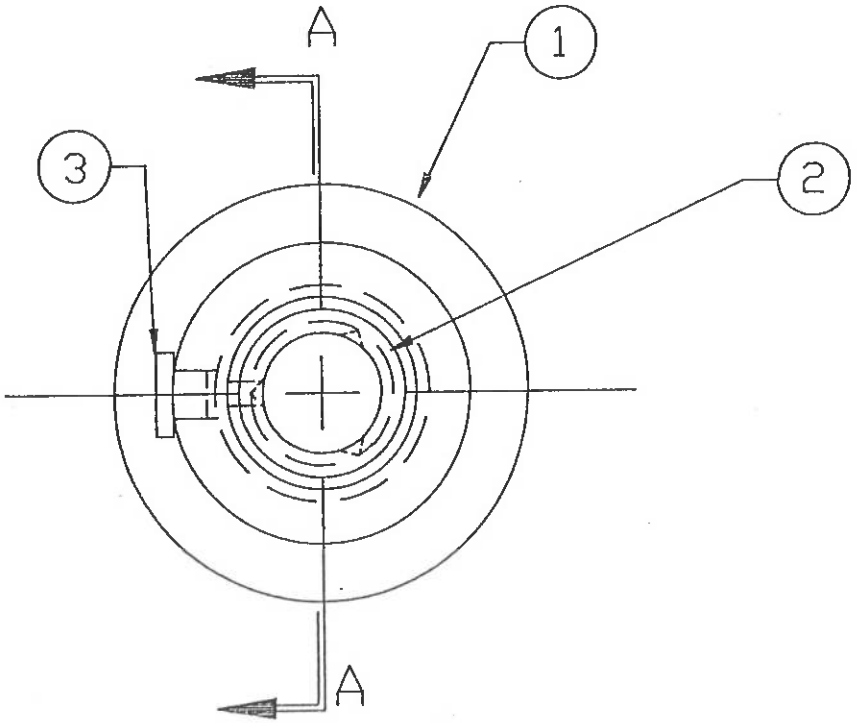
PART NO.	MODEL NO.	NEXT ASSEMBLY	NO REQ'D PER ASSEM.
	7020	D-7020-0021	2
	7020	D-7020-0020	2

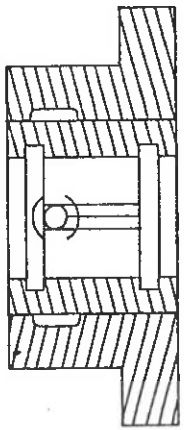
133741

TRUKMANN'S

PART NO: 71210711 REV: 05/07/91
DESCRIPTION: IDLER SPROCKET ASSEMBLY ACT: ROUTE: 1

ITEM	P/N	DESCRIPTION	QTY	U/M	RV	ACT	MD
1	71217001	MOD. SPROCKET 40B12 (SK1802 5)	1.0	EA	01		
2	71217002	BUSHING (BU20751)	1.0	EA			
3	FG9822	BAJ,FITTING GREASE	1.0	EA			
9000	DWG71210711	DWG,IDLER SPROCKET 40B12	1.0	EA			A





SECTION A-A

FILENAME: 71210711
DISC #?

SYM	DESCRIPTION	ECO NO.	DATE/BY
REVISIONS			

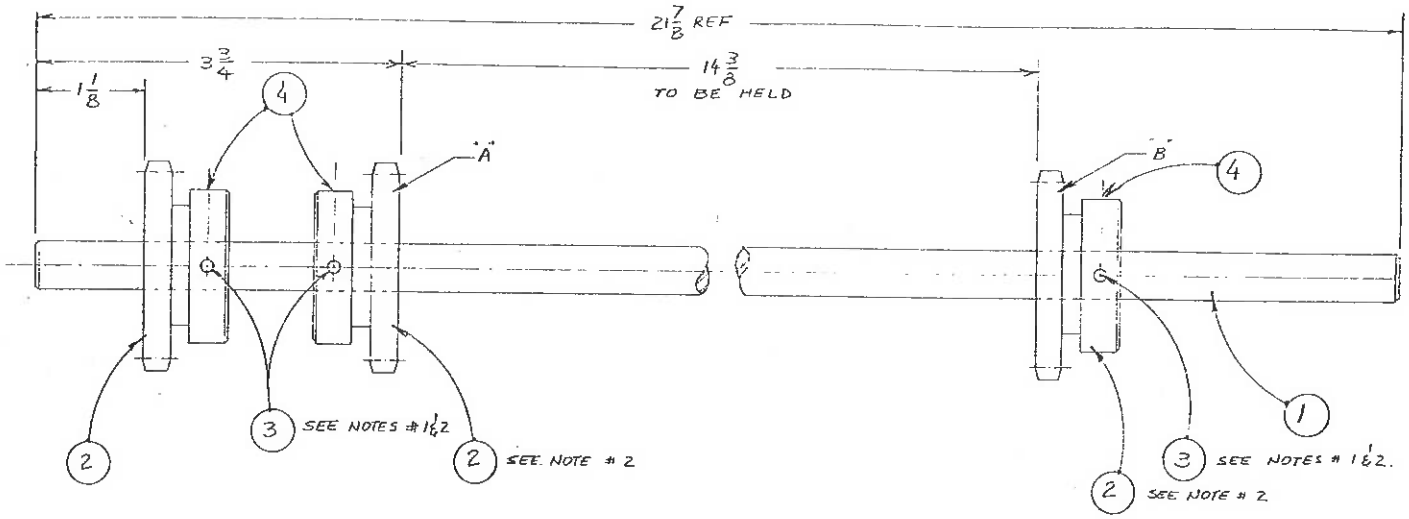
DRN JSG	DATE 3-25-91	weldotron corporation	
CHK	DATE		
APP	DATE	TITLE IDLER SPRKT 40B12	
MAT'L			
FINISH			
TOL. UNLESS SPECIFIED FRA ±1/64 DEC. ±.005 ANGLE ±1/2°		SCALE	SIZE A
		PART NO 7121-0711	REV.

PART NO.	MODEL NO.	NEXT ASSEMBLY	NO REQ'D PER ASSEM.
0711	7121A	B-7121-0710	1

PART NO: 70200223 REV:01 03/22/90
DESCRIPTION: DRIVE SHAFT ASSY ACT:2 ROUTE: 1

ITEM	P/N	DESCRIPTION	QTY	U/M	RV	ACT	MD
1	70202231	DRIVE SHAFT	1.0	EA		2	
2	70202021	SPROCKET,MODIFIED (SK1317)	3.0	EA			
3	PN8861	ACA,0.125 DIA X 1.5 LG ROLL PIN SS	3.0	EA			
4	SS0006	ABI,0.250-20X0.375 LG SCR SOC HD CUP PT	3.0	EA			
9000	DWG70200223	DWG,DRIVE SHAFT ASSY	1.0	EA	01		C

PARTS LIST		
ITEM NO.	NOMENCLATURE	NO. REQ



SIZE	PART NO.	REV.
C		

NOTES:
1. ALLIGN ITEMS # 2 AS SHOWN. DRILL 1/8 DIA HOLE THRU USING PILOT HOLE AND PRESS IN ITEM # 3 AS SHOWN.
2. TEETH OF SPROCKETS MARKED 'A' & 'B' MUST BE IN LINE WITH EACH OTHER WITHIN .005 TIR. (PROPER TOOLING / FIXTURE TO BE USED FOR ALLIGNMENT.

SYM	DESCRIPTION	ECO NO.	DATE/BY
1	ADDED: "USING PILOT HOLES" TO NOTE #1	5582	3/1/82

REVISIONS

DRN. Latish	DATE 2.11.81	weldotron corporation
CHK.	DATE	
APP.	DATE	
MAT'L		TITLE: DRIVE SHAFT ASS'Y.
FINISH		

PART NO.	MODEL NO.	NEXT ASSEMBLY	NO REQ'D PER ASSEM.	TOL. UNLESS SPECIFIED FRA ± 1/64 DEC. ± .005 ANGLE ± 1/2°	SCALE	SIZE	PART NO.	REV.
	7020A	D.7020-0022	1		1:1	C	7020-0223	1

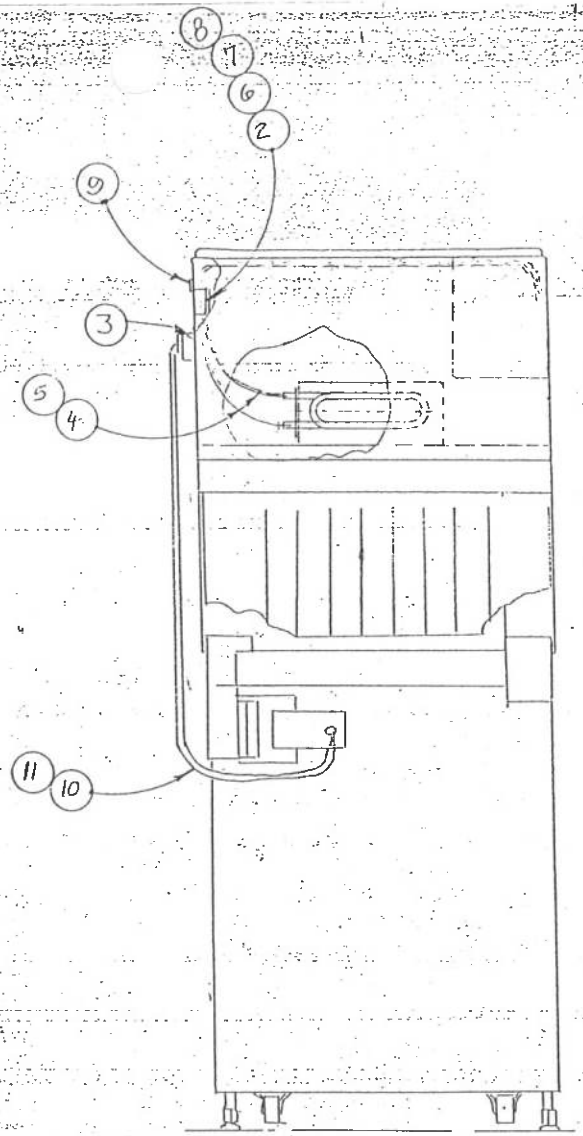
PART NO: 70200827 REV:01 03/07/94
DESCRIPTION: MOTOR ASSEMBLY MODEL 7020A ACT: ROUTE: 1

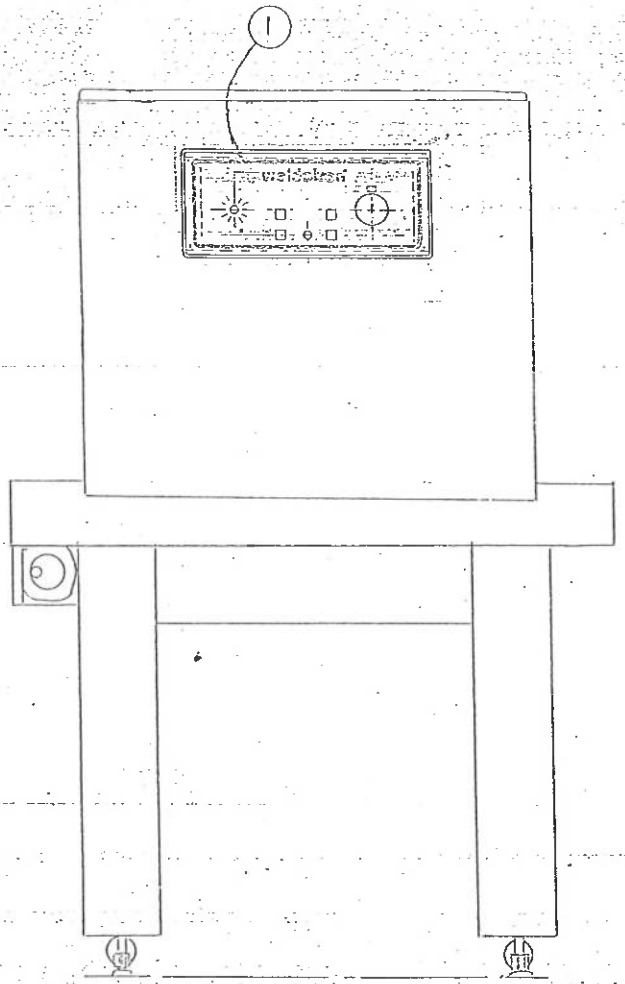
ITEM	P/N	DESCRIPTION	QTY	U/M	RV	ACT	MD
1	MR21217	PM,GEAR MOTOR,130VDC,139RPM 1/17HP	1.0	EA			
2	TL19628	FEMALE DISCONNECT,NYL INSUL WIRE TERM	1.0	EA			
3	TL19629	MALE TAB, NYLON INSUL WIRE RANGE 16-14	2.0	EA			
9000	DWG70200827	DWG,MOTOR ASSY	1.0	EA			A

PART NO: 70200083
DESCRIPTION: TOP ELECT ASSY 230V,1PH

REV: 03/21/90
ACT: ROUTE: 1

ITEM	P/N	DESCRIPTION	QTY	U/M	RV	ACT	MD
1	70200820	CONTROL PANEL ASSY-FRONT	1.0	EA	04		AS
2	CU1770	CIRCUIT BREAKER	1.0	EA			
3	PG18367	RCPT,20A,125/250V,3P,4 WIRE UL &CS	1.0	EA			
4	70200822	WIRE CONNECTION HEATER	1.0	EA	01		AS
5	70200823	WIRE,CONNECTION,HEATER	2.0	EA	01		AS
6	WA0692	AAA,#8 FLAT WASHER STEEL	2.0	EA			
7	SS0336	ABG,8-32X0.625LG SCREW BIND HD MACH	2.0	EA			
8	E580155	FRONT PLATE CIRC BREAK	1.0	EA	10		
9	CQ0609	CONN BX 2 SCREW 3/4	1.0	EA			
10	70200828	CORD SET ASSEMBLY	1.0	EA			AS
11	WE3293	TY-WRAP	3.0	EA			
9000	DWG70200083	DWG,ELEC ASSY MOD 7020B 230V,1PH,HZ	1.0	EA			C
9001	70208004	SCHEMATIC FOR 7020B,230V, 1PH	1.0	EA	03		C





PARTS LIST

ITEM NO.	NOMENCLATURE	NO. REQ.

SIZE	PART NO.	REV
C		

SYM	DESCRIPTION	ECO NO.	DATE/BY
	NEW RELEASE	5582	3.7.90

REVISIONS

DRN JDH DATE 3.7.90
CHK DATE
APP. DATE
MATL
FINISH

weldotron corporation

TITLE TOP ELECTRICAL ASSY MODEL 7020B 230V 1Ø 60HZ

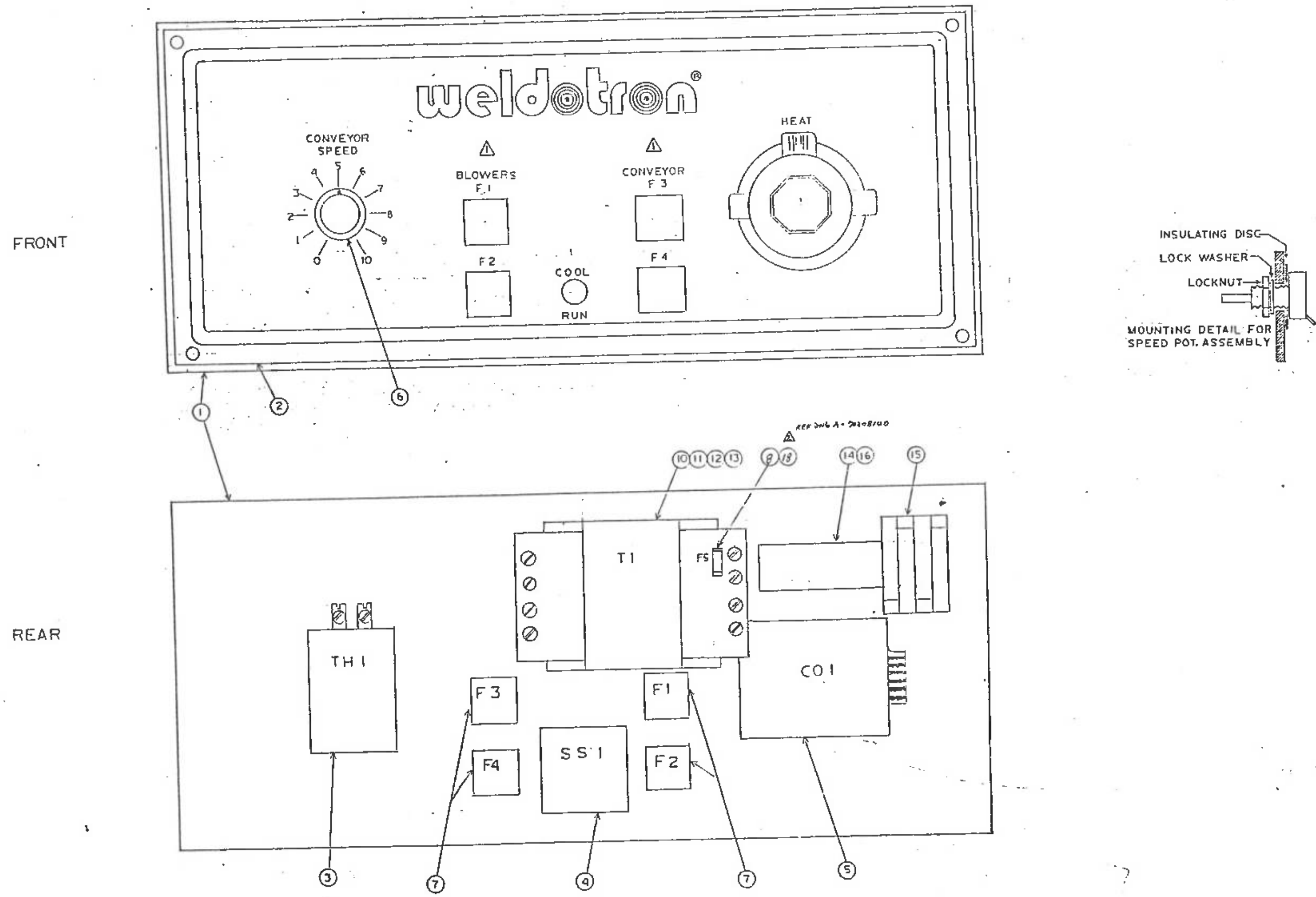
SCALE C SIZE PART NO. 7020.0083 REV.

TOL. UNLESS SPEC. FRA. ±1/64 DEC. ±.005 ANGLE ±1/2°

PART NO.	MODEL NO.	NEXT ASSEMBLY	NO REQD PER ASSEM.
	7020B	7020B 0001	1

PART NO: 70200820 REV:04 03/07/94
DESCRIPTION: CONTROL PANEL ASSY-FRONT ACT: ROUTE: 1

ITEM	P/N	DESCRIPTION	QTY	U/M	RV	ACT	MD
1	70200821	DRILL & WELD CONTROL PANEL	1.0	EA	01		
2	LB19730	CONTROL PANEL LABEL	1.0	EA	02		
3	CO19745	TEMPERATURE CONTROLLER	1.0	EA	01		
4	SW19746	SWITCH,TOGGLE,3PDT 30A MP-250V,BUSH. MT	1.0	EA			
5	CO19747	CONTROL,SPEED-115VACINPUT,0-90VDCE1.5AMP	1.0	EA			
6	KB6240	KNOB	1.0	EA			
7	FZ19502	IND FUSE HOLDER 3AG	4.0	EA			
8	FZ1216	FUSE,SLOW BLOW,1AMP,3AG	3.0	EA			
9	FZ1352	FUSE,SLOW-BLOW,1.5A	2.0	EA			
10	TR19579	XFMR,100VA,240/480VPRI 120V SEC 3-230	1.0	EA			
11	NT0287	AAA,10-32 NUT HEX CAD PL	4.0	EA			
12	WA2223	AAA,10 WASHER FLAT CP	4.0	EA			
13	WA2230	AAB,10 WASHER LOCK CP	4.0	EA			
14	TL19534	12 CIRCUIT TERM BLOCK	1.0	EA			
15	TL7195	TERMINAL BLOCK	2.0	EA			
17	WE15276	HI TEMP WIRE TEFLON WIRE 14 GA	22.0	FT			
18	FZ21424	SECONDARY FUSE KIT,FOR ACME XFMR TR19579	1.0	EA			
9000	DWG70200820	DWG,CONT PANEL ASSY FRONT	1.0	EA	01		D
9001	70208201	WIRING DIAGRAM	1.0	EA	04		B
9002	70208100	XFMR FUSE KIT (FZ21424) MTG INSTRUCTIONS	1.0	EA			A



PARTS LIST

ITEM NO	NOMENCLATURE	NO REQ

SYM	DESCRIPTION	ECO NO	DATE
2	ADD F5 & FUSE KIT (BALLOONS 8 & 18)	6401	
1	CORRECT LABEL	5630	

REVISIONS

DRN HTG

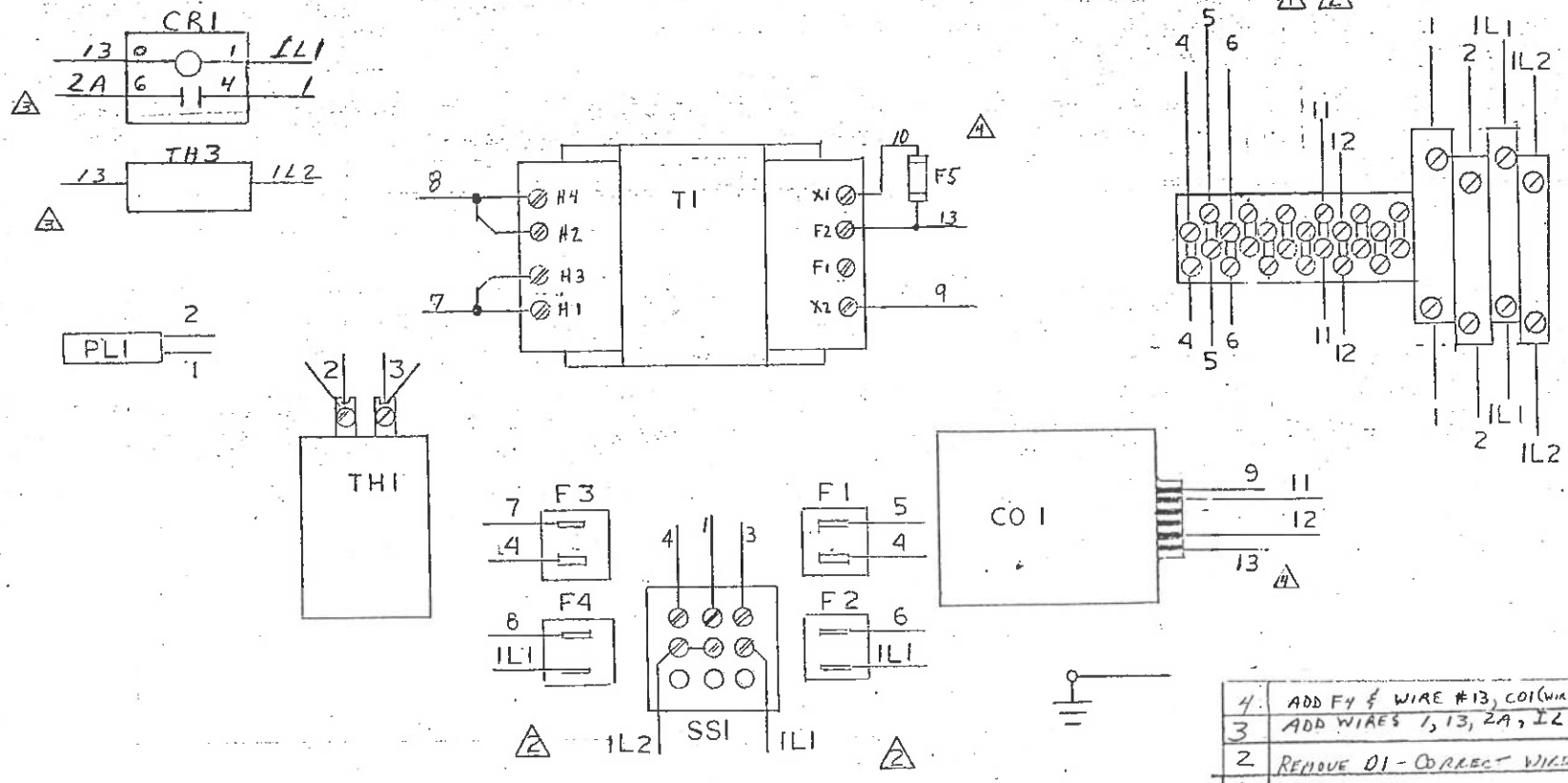
weldotron corporation

TITLE CONTROL PANEL ASSY MODEL 7020A/B

D 7020 0820 1

CONFIDENTIAL

This Drawing contains proprietary information restricted to WELDOTRON manufacture ONLY. Any duplication of this material unless authorized in writing subject to prosecution.



SYM	DESCRIPTION	ECO NO.	DATE /BY
4	ADD F4 & WIRE #13, CO1 (WIRE #13 WAS #10)	6401	2-25-97 BD
3	ADD WIRES 1, 13, 2A, IL1, IL2	6038	11-25-97 BD
2	REMOVE O1 - CORRECT WIRE #'S	5633	5-23-96 HTG
1	ADD - D1 -	5499	12-14-95 HTG

REVISIONS

DRN HTG DATE
CHK DATE
APP. DATE
MAT'L
FINISH
TOL. UNLESS SPECIFIED FRA ±1/64 DEC ±.005 ANGLE ±1/2°

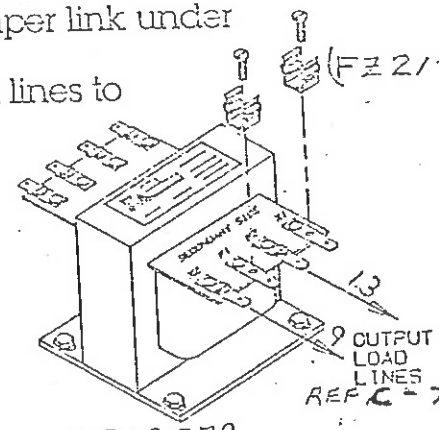
weldotron corporation

TITLE WIRING DIAGRAM MODEL 7020

SCALE	SIZE	PART NO.	REV
	B	7020-8201	4

PART NO.	MODEL NO.	NEXT ASSEMBLY	NO REQ'D PER ASSEM.

1. Mount one secondary fuse clip on terminal X1 using the screw supplied with the transformer.
2. Mount remaining secondary fuse clip and hole end of jumper link on terminal F1 using the screw supplied with the transformer.
3. Secure slotted end of jumper link under screw on terminal F2.
4. Connect secondary load lines to terminals X2 and F2.



REF C - 70208004 REV 3

TR19579

SYM	DESCRIPTION	ECO NO.	DATE/BY
0	NEW RELEASE	6401	2-25-94 BD

REVISIONS

DRN B DORRIAN	DATE	
CHK	DATE	
APP.	DATE	
MAT'L		
FINISH		
TOL. UNLESS SPECIFIED FRA ±1/64 DEC. ±.005 ANGLE ± 1/2°		

weldotron corporation

TITLE: XFMR FUSE KIT (FZ 21424) MOUNTING INSTRUCTIONS

SCALE	SIZE	PART NO.	REV.
NONE	A	70208100	1

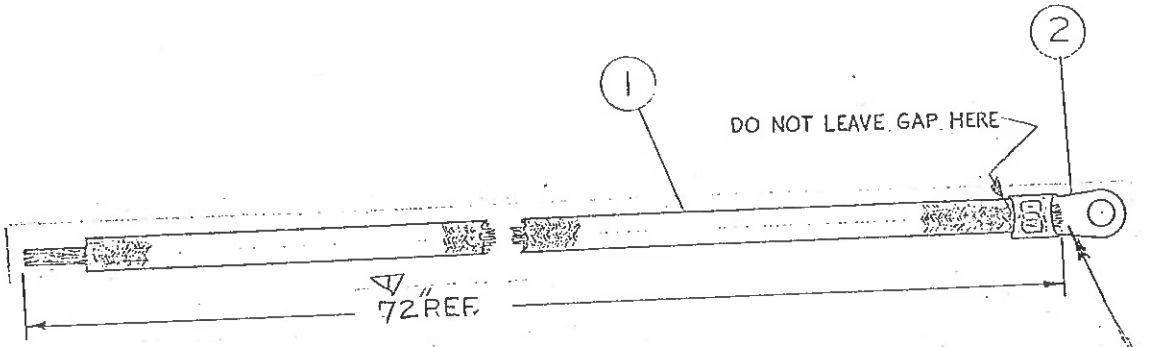
PART NO.	MODEL NO.	NEXT ASSEMBLY	NO REQ'D PER ASSEM.
70208200	70200820		1

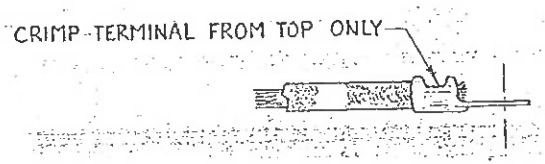
4038

PART NO: 70200822 REV:01 03/22/90
DESCRIPTION: WIRE CONNECTION HEATER ACT: ROUTE: 1

ITEM	P/N	DESCRIPTION	QTY	U/M	RV	ACT	MD
1	WE4552	WIRE,10AWG ANTI-FRAY,600V 450C UL & CSA	6.0	FT			
2	LG4469	LUG,NICK 1200 F 10-12GA 10 STUD	1.0	EA			
9000	DWG70200822	DWG,WIRE,CONNECTION,HEATER	1.0	EA	01		B

DO NOT SUBSTITUTE





NOTES:

1. CRIMPING TO BE DONE WITH "AMP PNEUMATIC CRIMPER #69010" WITH "AMP #46448 DIE" ONLY.
2. CHECK CRIMPER AIR SUPPLY PRIOR TO USE. AIR PRESSURE MUST BE 85 PSIG MINIMUM, 100 PSIG MAXIMUM.
3. THESE CONNCTOR ASSEMBLIES ARE EXACT REPLACEMENTS FOR WIRE AND STRAP CONNECTORS PREVIOUSLY USED.
4. UNASSEMBLED COMPONENTS OF THESE PARTS MAY NOT BE SUPPLIED AS REPLACEMENTS OR SPARE PARTS.
5. PNEUMATIC CRIMPER MUST BE INSPECTED AND MAINTAINED REGULARLY PER MANUFACTURER'S INSTRUCTIONS.

SYM	DESCRIPTION	ECO NO.	DATE/BY
1	DIM. 72 REF. WAS 30 REF	5582	JRH 2.16.90

REVISIONS

DRN HTG	DATE 9-29-89	weldotron corporation
CHK.	DATE	
APP.	DATE	TITLE WIRE, CONNECTING, HEATER
MATL		
FINISH		

TOL. UNLESS SPECIFIED FRA ±1/64 DEC ± .005 ANGLE ± 1/2°

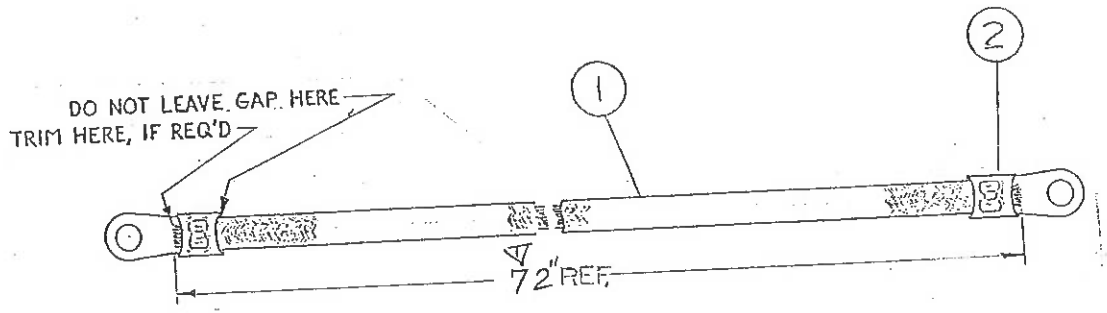
SCALE	SIZE	PART NO.	REV
	B	7020 0822	1

PART NO.	MODEL NO.	NEXT ASSEMBLY	NO REQ'D PER ASSEM.
7020A	0082		1

PART NO: 70200823 REV:01 03/22/90
DESCRIPTION: WIRE,CONNECTION,HEATER ACT: ROUTE: 1

ITEM	P/N	DESCRIPTION	QTY	U/M	RV	ACT	MD
1	WE4552	WIRE,10AWG ANTI-FRAY,600V 450C UL & CSA	6.0	FT			
2	LG4469	LUG,NICK 1200 F 10-12GA 10 STUD	2.0	EA			
9000	DWG70200823	DWG,WIRE,CONNECTION,HEATER	1.0	EA	01		B

DO NOT SUBSTITUTE



NOTES:

1. CRIMPING TO BE DONE WITH "AMP PNEUMATIC CRIMPER #69010" WITH "AMP #46448 DIE" ONLY.
2. CHECK CRIMPER AIR SUPPLY PRIOR TO USE. AIR PRESSURE MUST BE 85 PSIG MINIMUM, 100 PSIG MAXIMUM.
3. THESE CONNCTOR ASSEMBLIES ARE EXACT REPLACEMENTS FOR WIRE AND STRAP CONNECTORS PREVIOUSLY USED.
4. UNASSEMBLED COMPONENTS OF THESE PARTS MAY NOT BE SUPPLIED AS REPLACEMENTS OR SPARE PARTS.
5. PNEUMATIC CRIMPER MUST BE INSPECTED AND MAINTAINED REGULARLY PER MANUFACTURER'S INSTRUCTIONS.

SYM	DESCHIPTION	ECO NO.	DATE/BY
1	DIM. 72" REF. WAS 30" REF	5582	

REVISIONS

DRN HTG	DATE 8.22.89	weldotron corporation
CHK	DATE	
APP	DATE	TITLE WIRE, CONNECTING, HEATER
MAT'L		
FINISH		

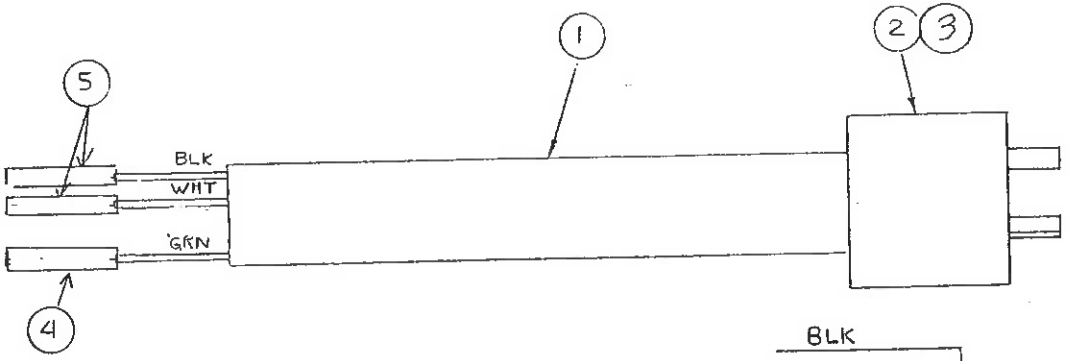
TOL UNLESS SPECIFIED FRA ±1/64 DEC ± .005 ANGLE ± 1/2°

SCALE	SIZE	PART NO.	REV
	B	7020 0823	1

PART NO.	MODEL NO	NEXT ASSEMBLY	NO REQ'D PER ASSEM.
	7020A	0082	1

PART NO: 70200828 REV: 10/27/89
DESCRIPTION: CORD SET ASSEMBLY ACT: ROUTE: 1

ITEM	P/N	DESCRIPTION	QTY	U/M	RV ACT	MD
1	WE0130	WIRE 16 GA 3 COND SJ 300 V CSA APPROVED	6.0	FT		
2	PG18368	PLUG 20A 125/250V 3P 4 WIRE UL &CSA	1.0	EA		
3	GM11180	GROMMET	1.0	EA		
4	TL19629	MALE TAB, NYLON INSUL WIRE RANGE 16-14	1.0	EA		
5	TL19628	FEMALE DISCONNECT,NYL INSUL WIRE TERM	2.0	EA		
9000	DWG70200828	DWG,CORD SET ASSY	1.0	EA		B



REMOVE 2" OUTER CABLE INSUL. & STRIP 4 WIRE 3/8" PLUG END. CONNECT PER. DIAG. "A"

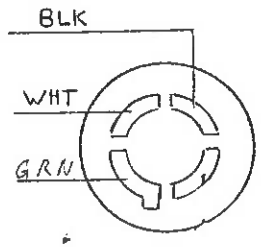


DIAGRAM "A"

SYM	DESCRIPTION	ECO NO.	DATE/BY
	REVISIONS		

DRN. HTG DATE 10.21.85
CHK. DATE
APP. DATE
MAT'L
FINISH
TOL. UNLESS SPECIFIED FRA ± 1/64 DEC. ± .005 ANGLE ± 1/2°

weldotron corporation

TITLE: CORD SET ASS'Y

SCALE	SIZE	PART NO.	REV
	B	70200828	

PART NO.	MODEL NO.	NEXT ASSEMBLY	NO REQ'D PER ASSEM.
70201	0082		1

TRUKMANN'S

PART NO: 70200116
DESCRIPTION: START UP KIT

REV: 10/27/89
ACT: ROUTE: 1

ITEM	P/N	DESCRIPTION	QTY	U/M	RV	ACT	MD
1	PG0063	PLUG METAL 3/8 NKL PLT	25.0	EA			
2	FZ1216	FUSE,SLOW BLOW,1AMP,3AG	3.0	EA			
3	FZ1352	FUSE,SLOW-BLOW,1.5A	3.0	EA			
4	LU0855	THERMOLUBE LU855 IN 1/2 PT CONTAINER	1.0	EA			AS
5	MP0001	1/2" PAINT BRUSH	1.0	EA			

PART NO: LU0855 REV: 08/23/80
DESCRIPTION: THERMOLUBE LU855 IN 1/2 PT CONTAINER ACT: ROUTE: 1

ITEM	P/N	DESCRIPTION	QTY	U/M	RV	ACT	MD
1	LU18136	LUBRICANT	0.1	GL			
2	EN10150	CAN 1/2 PT SCREW CAP REC TANGLE	1.0	EA			
3	LB18135	LABEL,WELDOTRON THERMOLUBE LU855	1.0	EA	01		
4	LB20438	LABEL,SAFETY PRECAUTIONS	1.0	EA			
9000	TD1785	PKG INSTRUCTIONS OF THERMO LUBE LU855	1.0	EA			
9001	TD17851001	SPECIFICATIONS	1.0	EA			A

WELDOTRON INSTRUCTION BULLETIN

INSTRUCTIONS FOR PACKAGING LU855 THERMOLUBE IN 1/2 PINT CONTAINERS

Technical Document #1785
Issued: December 1986
Revised: July 25, 1990

I. INTRODUCTION

The following instructions are given for the packaging of LU855 Weldotron Thermolube for distribution with Weldotron Tunnels and Spare Parts.

II. PROCEDURE

Step 1. Take (1) EN10150 1/2 pint container and fill directly from pump spigot in top of 55 gallon drum of LU18136 Lubricant.

Step 2. Press seal firmly into container top.

Step 3. Screw cap on container securely.

Step 4. After filling of container, wipe clean and dry, take LB18135 and LB20438 labels and remove backing of adhesive and place them one on each side of container centrally located.

LUBRIPLATE®

FISKE BROTHERS REFINING CO.
129 LOCKWOOD ST.
NEWARK, N.J.
07105
AREA CODE 201
589-8150

EST. 1870 FISKE BROTHERS REFINING COMPANY

World's Finest Lubricants for Over 100 Years!

THIS SPECIFICATION AND MATERIAL SAFETY DATA SHEET WAS SUPPLIED TO WELDOTRON BY FISKE BROTHERS REFINING CO. 129 LOCKWOOD ST., NEWARK, N.J. ON JUNE 1990

SPECIFICATIONS ON LUBRIPLATE MOL-TEX 800

Color - Grey Black

Appearance - Tacky oil

°A.P.I. - 27.0

Viscosity @ 210°F. (SUS) - 82

Viscosity @ 100°F. (SUS) - 850

Viscosity Index - 97

Flash - 485°F.

Fire - 535°F.

Pour Point - Minus 10°F.

Molybdenum Disulfide present

Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME: Fiske Brothers Refining Co.	EMERGENCY TELEPHONE NO.: 201-589-9150
ADDRESS (Number, Street, City, State, and ZIP Code): 129 Lockwood Street, Newark, NJ 07105	
CHEMICAL NAME AND SYNONYMS: Lubricating Oil	TRADE NAME AND SYNONYMS: LUBRIPLATE Moltex 800
CHEMICAL FAMILY: Petroleum Hydrocarbon	FORMULA: Mineral oil plus additives

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	Greater than 650°F	SPECIFIC GRAVITY (H_2O=1)	0.88
VAPOR PRESSURE (mm Hg.)	Less than 0.1	PERCENT, VOLATILE BY VOLUME (%)	Nil
VAPOR DENSITY (AIR=1)	Greater than 12	EVAPORATION RATE (n-butyl acetate =1)	0.05
SOLUBILITY IN WATER	Insoluble		
APPEARANCE AND ODOR	Grayish, black liquid with mineral oil odor.		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	COC-420°F	FLAMMABLE LIMITS	Lel 1% / Uel 6%
EXTINGUISHING MEDIA	Foam, dry chemical, carbon dioxide, water spray or fog.		
SPECIAL FIRE FIGHTING PROCEDURES	Use air-supplied rescue equipment for enclosed areas. Cool exposed containers with water.		
UNUSUAL FIRE AND EXPLOSION HAZARDS	Do not mix or store with strong oxidants.		

(Continued on reverse side)

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: 5 mg/m^3 for oil mist

EFFECTS OF OVEREXPOSURE: Prolonged or repeated skin contact may cause mild skin irritation.

EMERGENCY AND FIRST AID PROCEDURES: In case of skin contact, wash with soap and water. If splashed into eyes, flush with clear water until irritation subsides. If swallowed - as with mineral oils.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	

INCOMPATABILITY (Materials to avoid): Strong oxidizing agents like liquid chlorine and pure oxygen.

HAZARDOUS DECOMPOSITION PRODUCTS: Sulfur dioxide (small amounts) Carbon monoxide in case of incomplete combustion.

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wipe with rags - use petroleum solvent to clean remainder. Keep petroleum products out of streams and waterways.

WASTE DISPOSAL METHOD: Incinerate absorbed material.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type): Normally not needed.

VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL (General)	OTHER

PROTECTIVE GLOVES: None

EYE PROTECTION: Do not get into eyes.

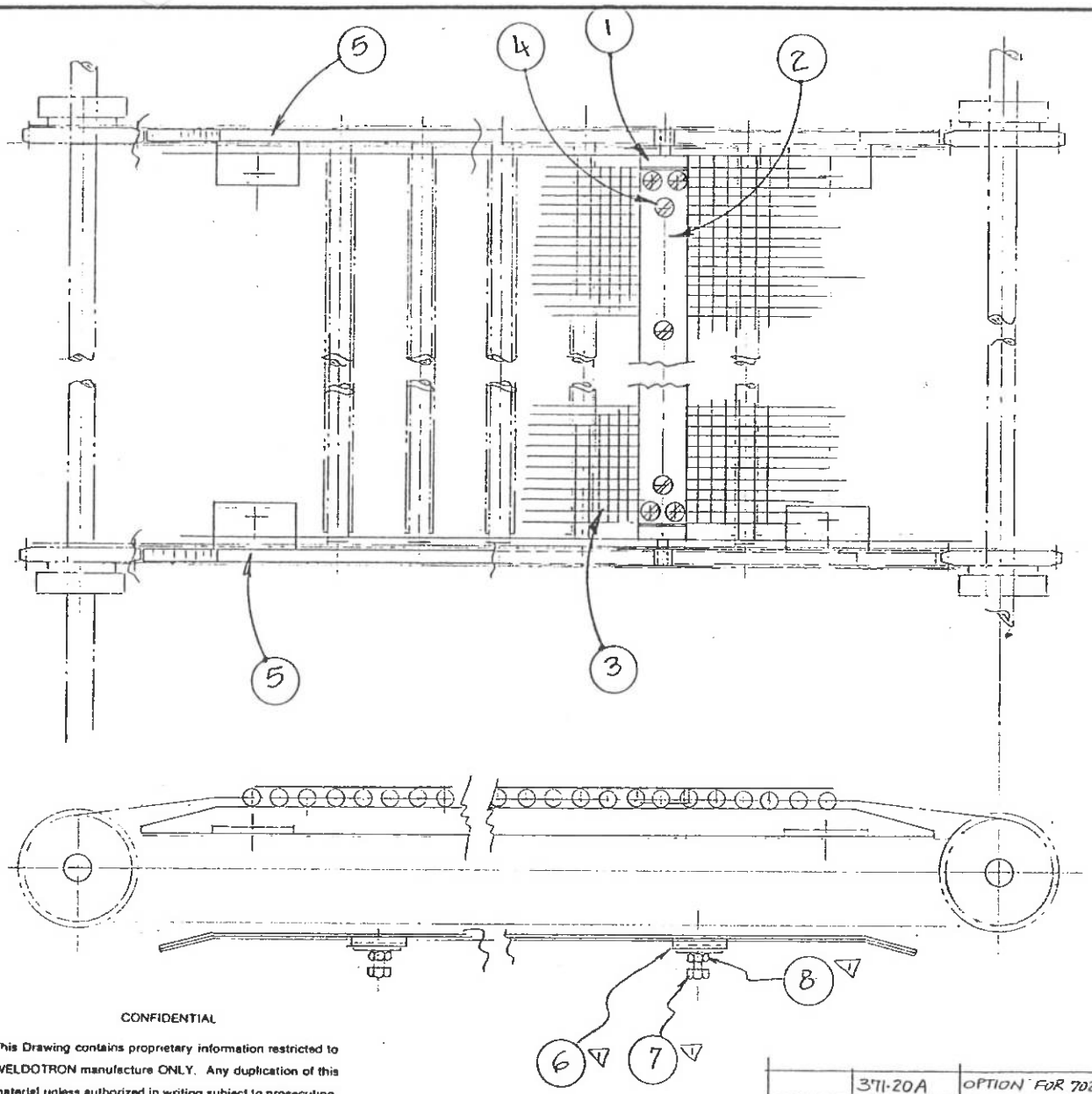
OTHER PROTECTIVE EQUIPMENT:

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: No special precautions.

OTHER PRECAUTIONS: AVOID BREATHING OF OIL MIST. Remove oil-impregnated clothing. Wash thoroughly after exposure.

Form OSHA-20
Rev. May 72



INSTRUCTIONS:

1. REMOVE EXISTING RAILS & CREDIT TO STOCKROOM
2. INSTALL NEW RAILS ITEM # 5 USING OLD TAPED HOLES & SCREWS.
3. INSTALL MESH BELT ITEM # 3 USING ITEMS # 1, 2 AND 4.

SYM	DESCRIPTION	ECO NO.	DATE/BY
1	ADDED ITEMS # 6, 7, & 8	5667	Walsh 7.11.90
	NEW RELEASE	5560	Walsh 12.4.90

REVISIONS

DRN Walsh	DATE 2.14.90	
CHK	DATE	
APP.	DATE	
MAT'L		
FINISH		

weldotron corporation

TITLE: OVERLAY MESH BELT KIT

PART NO.	MODEL NO.	NEXT ASSEMBLY	NO REQ'D PER ASSEM.
	371-20A	OPTION FOR 7020A	

TOL. UNLESS SPECIFIED: FRA ±1/64, DEC ± .005, ANGLE ± 1/2°

SCALE	SIZE	PART NO.	REV.
4	B	371-0021	1

PART NO: 3710021 REV:01 07/25/90
DESCRIPTION: OVERLAY MESHBELT KIT FOR TUNNEL MOD7020A ACT: ROUTE: 1

ITEM	P/N	DESCRIPTION	QTY	U/M	RV	ACT	MD
1	3710100	ADAPTER & WELDING ASSY	2.0	EA			
2	3711001	BAR CLAMP	2.0	EA			
3	BL14631	BELT FLOUROGLAS 1/4 MESH 13-1/2"W	1.0	EA			
4	SS2653	ACH,8-32X0.375 LG SCREW FL HD MACH SST	20.0	EA			
5	3710210	RAIL WELDMENT	2.0	EA			
6	3710211	RAIL EXTENTION WELDMENT	2.0	EA			
7	SS7293	ACA,10-32X0.500 LG SCR HEX HD SST	6.0	EA			
8	NT0287	AAA,10-32 NUT HEX CAD PL	6.0	EA			
9000	DWG3710021	DWG,OVERLAY MESHBELT KIT	1.0	EA	01		B

PART NO: 7020BK
DESCRIPTION: KIT,SPARE PARTS FOR MODEL 7020B

REV:02 07/11/91
ACT: ROUTE: 1

ITEM	P/N	DESCRIPTION	QTY	U/M	RV	ACT	MD
1	FZ1216	FUSE,SLOW BLOW,1AMP,3AG	6.0	EA			
2	FZ1352	FUSE,SLOW-BLOW,1.5A	6.0	EA			
3	HT20228	HEATER,6000 WATTS	1.0	EA			
4	LU0855	THERMOLUBE LU855 IN 1/2 PT CONTAINER	3.0	EA			AS
5	EM20027	BRUSH,CARBON,FOR MR19824	2.0	EA			
6	70200110	ROLLER ASSEMBLY	6.0	EA			AS
7	71214007	TIE ROD	6.0	EA	01		
8	PN17102	AAE,0.045 DIAX0.250 LG.ZINC PL CHISEL PT	12.0	EA			
9	WA0692	AAA,#8 FLAT WASHER STEEL	12.0	EA			

LIMITED WARRANTY AND DISCLAIMER

WELDOTRON CORPORATION warrants to the original Buyer that, except as to expendable items such as elements, tapes, fuses, etc., all equipment and parts manufactured by WELDOTRON shall be free from defects in material of workmanship for a period of one year (1) from the date of shipment (the "warranty period"). The extent of WELDOTRON'S liability under this warranty is limited solely to the repair or replacement of any such defective part at no charge to Buyer, except for the costs of freight and installation which shall be borne by Buyer and provided that Buyer shall, if Weldotron so requests, return any such defective part to WELDOTRON, freight prepaid, for inspection and determination by WELDOTRON as to the nature of the defect.

Notwithstanding the foregoing, WELDOTRON shall be relieved of all liability and obligations under the warranty set forth herein if:

a. The equipment is used, operated or maintained in any manner other than in accordance with Weldotron's instructions and recommended maintenance procedures as set forth in the operating manual which shall be shipped with the equipment;

b. The equipment is misused, abused or neglected in any way;

c. The equipment is altered, modified or changed, or any additional part is installed, unless WELDOTRON shall have previously consented in writing to such alteration, modification, change or installation;

d. The equipment is operated with any additional accessory or part, whether or not WELDOTRON is the manufacturer thereof unless WELDOTRON shall have previously consented in writing to the operation of the equipment with such accessory or part;

e. Any materials, packages, containers, pallets or loads which are to be conveyed and/or wrapped are not in a condition to permit their being properly handled by the equipment.

f. The equipment is serviced or repaired by any person not previously approved by WELDOTRON in writing or,

g. The Buyer fails to notify WELDOTRON in writing of any defect, breakdown, accident or malfunction of the equipment within seven (7) days of the discovery of such defect or the occurrence of such breakdown, accident or malfunction.

THE FOREGOING WARRANTY IS APPLICABLE SOLELY TO PARTS AND/OR EQUIPMENT MANUFACTURED BY WELDOTRON. WITH RESPECT TO COMPONENT PARTS NOT MANUFACTURED BY WELDOTRON AND AS TO WHICH WELDOTRON IS THE BENEFICIARY OF ANY WARRANTY, BUYER SHALL HAVE, FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF SHIPMENT OF THE EQUIPMENT TO BUYER, WHATEVER RIGHTS AND REMEDIES, IF ANY, THAT ARE AVAILABLE TO WELDOTRON WITH RESPECT TO SUCH WARRANTY, PROVIDED THAT BUYER SHALL FULLY REIMBURSE WELDOTRON FOR ALL COSTS OF ENFORCING SUCH WARRANTY.

Except for the express warranty set forth above that the equipment shall be free of any defects in material or workmanship during the warranty period:

a. No affirmation of fact or promise by WELDOTRON with respect to the capacity, suitability or performance of the equipment, whether or not such affirmation or promise is set forth herein, shall constitute any type of warranty as to the equipment, and

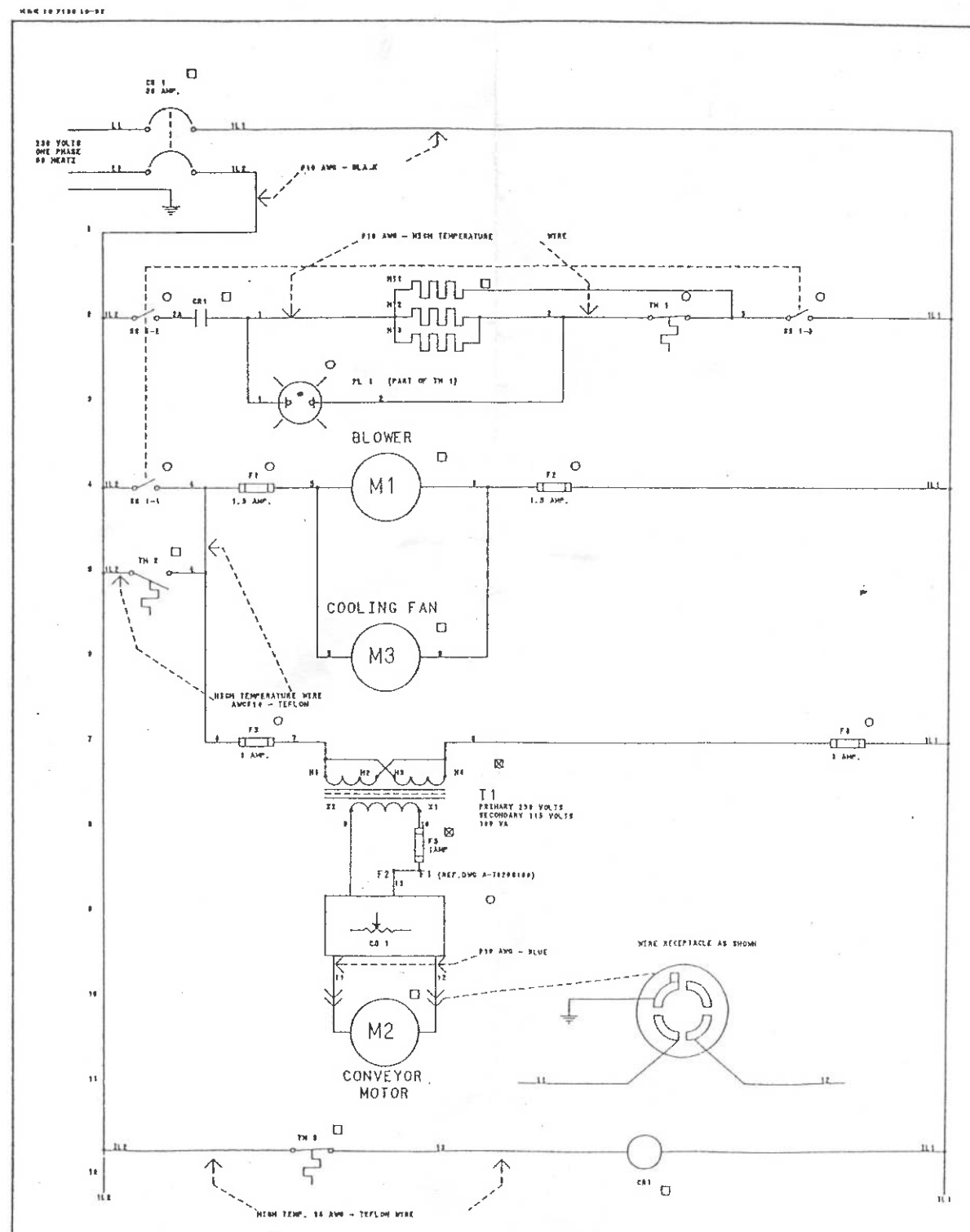
b. THERE ARE NO ADDITIONAL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTIES OF MERCHANT ABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

Except as specified by WELDOTRON in writing, WELDOTRON does not warrant that the equipment, as manufactured, conforms to any particular insurance regulations or electrical codes or that the equipment contains any particular safety features. Buyer assumes full responsibility for compliance with all applicable statutes, codes and regulations, whether federal, state or local.

Under no circumstances shall WELDOTRON have any liability for any type of incidental or consequential damages arising from the use, loss of use or defective performance of the equipment. WELDOTRON'S liability is expressly limited to the repair or replacement of defective parts.

The Limited Warranty extends only to the original buyer and is not transferable to subsequent owners, purchasers or possessors of the equipment.

weldotron
corporation
1532 So. Washington Avenue
Piscataway, NJ 08855



ITEM NO.	NOMENCLATURE	NO. REQ.
SS1	COOL - RUN SWITCH (THRWN IN COOL MODE)	
TH 1	HEAT CONTROLLER	
TH 2	COOL DOWN THERMOSTAT	
M 1	BLOWER MOTOR	
M 3	COOLING FAN MOTOR	
CR1	OVERHEAT CONTROL RELAY	
CO 1	D.C. DRIVE CONVEYER SPEED ADJUST	
M 2	CONVEYOR MOTOR	
TH 3	OVERHEAT THERMOSTAT	

PARTS LIST

○ LOCATED ON FRONT PANEL
□ LOCATED ON TUNNEL
⊠ LOCATED ON REAR OF FRONT PANEL

ALL WIRE SHALL BE #18 AWG -RED UNLESS SPECIFICALLY NOTED.

SIZE	PART NO.	REV.
C		

SYM	DESCRIPTION	ECO NO.	DATE	BY
3	ADD F5	6901	2-25-97	BO
2	ADD TH3, CR1	A038	11-26-96	DJL
1	REMOVE CO2	5630	5-22-96	NK
0	NEW RELEASE	5582		HKIM

REVISIONS

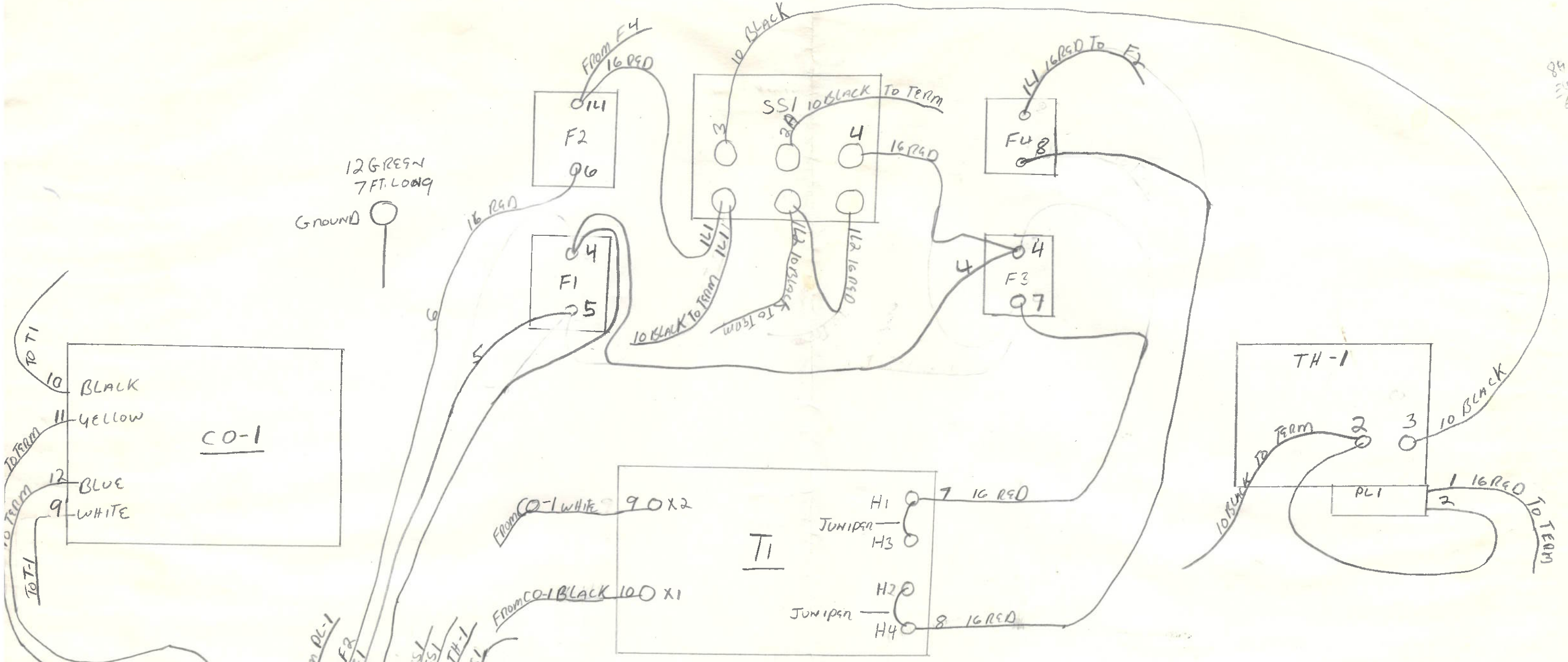
DRN. H KIM	DATE 7-17-96	weldotron corporation
CHK.	DATE	
APP.	DATE	TITLE MODEL 7020B ELECTRICAL SCH.
MAT'L		
FINISH		

TOL. UNLESS SPECIFIED FRA. DEC. ANGLE ±1/64 ± .005 ± 1/2°

SCALE	SIZE	PART NO.	REV.
~	C	7020B004	3

PART NO.	MODEL NO.	NEXT ASSEMBLY	NO REQ'D PER ASSEM.
7020	7020B083		1

FILE: 7020B004.DCN



WIRE	NO	
16 BLUE	11	6'
16 BLUE	12	
16 Red	1	
16 Red	1L1	
10 BLK	1L1	
10 BLK	1L2	
10 BLK	2A	

2A - 10Black - HEATER LUG ONE END
1L1 - 16 RED - 4' 6" - SMALL BLUE LUG
1 - 16 RED - 4' 6" - SMALL BLUE LUG
1L2 - HIGH TEMP - 6' 6" - RED - LUG HEATER - ON END
1L2 - HIGH TEMP - 6' 6" - RED - LUG - PUSH ON - INSULATED
4 - HIGH TEMP - 6' - RED - LUG - PUSH ON - INSULATED
13 - HIGH TEMP - 16' - RED - NOT CONNECTED - LUG SMALL BLUE ONE END HEATER LUG OTHER END
1 - HIGH TEMP - 5' 3" - NOT CONNECTED - LUGS ON BOTH ENDS
2 - HIGH TEMP - 6' LUG ON ONE END
3 - HIGH TEMP - 6' 10" - LUGS BOTH ENDS

7020 REV. 2