

Operating Instructions for 7000 Series Auto Cycle Belt Splicer

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Specifications

Model	7012	7024	7040	
Overall Dimensions				
Length x Width x Height in " (mm)	23 x 11 x 13	35 x 11 x 13	51 x 11 x 13	
	(584) x (279) x (330)	(889) x (279) x (330)	(1295) x (279) x (330)	
Weight in pounds (kilograms)				
Upper Half	31 (14)	44 (20)	61 (28)	
Lower Half	45 (20)	62 (28)	85 (39)	
Total (Includes Clamping Bars)	86 (39)	120 (54)	166 (75)	
Overload Protection				
Electrical	External 15 amp Fuse			
Thermal	Internal Heat Overload			
Pneumatic	35 psi ASME Rated Relief Valve			
Performance Data				
Splice Width Range in " (mm)	0 to 12 (0 to 305)	0 to 24 (0 to 610)	0 to 40 (1016)	
Bonding Temperature Range	80 to 400 ° F (27 to 204 ° C)			
Bladder Pressure	0 to 30 PSIG (0 to 210 kPa) Regulated			
Maximum Bladder Force in lb (kg)	3,500 (1,586)	6,500 (2,947)	11,000 (4,987)	
Average Cycle Time ¹	20 minutes	25 minutes	30 minutes	
Input Requirements				
Electrical	110 to 120 volts A.C., 15 Amperes Single Phase, 50/60 Hz, Ground Fault Interrupting Circuit (GFI)			
Pneumatic	75 to 125 PSIG (525 to 875) kPa & 4.5 SCFM (1.9 Liters/Second) ²			

1. Average cycle based on 70 to 325 (21 to 163° C) heat cycle, 120 volts A.C.

2. During cooling cycle.

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Operation

- Remove upper half of heat press (Figure 1, item A) and both clamping bars (Figure 4, item B) and (Figure 5, item B). Wipe off white laminate plate (Figure
 - 1, item C) on the lower half (D) of the heat press.

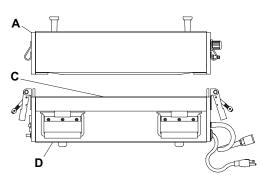
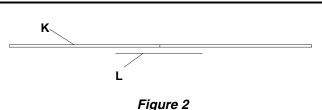


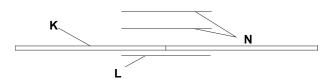
Figure 1

- Place one of the two pieces of #891-020, textured teflon release fabric (Figure 4, item E) (which was furnished with the heat press), centered horizontally and vertically, on the white laminate plate (C). For splicing belts other than woven polyester or black anti-static, skip to step 4.
 For woven polyester or black anti-static belts only:
 - a. If splicing a woven polyester belt (Figure 2, item K), cut an appropriate length (Figure 4, item I) [to match belt width plus a 2" (51 mm) overlap on both sides] of clear urethane splicing foil (film) (Figure 2, item L) #815-011 (sold separately). Be sure to remove the white paper backing before installation. When installed, foil will be below belt as shown.

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b. If splicing a black anti-static belt (Figure 3, item K), cut an appropriate length (Figure 4, item I) [to match belt width plus a 2" (51 mm) overlap on both sides] of black urethane splicing foil (film) (Figure 3, item L) #815-016 (sold separately). When installed, foil will be below belt as shown.





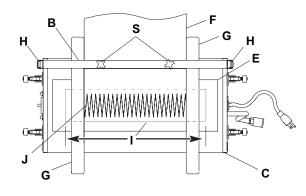


Figure 4

4. Place the one end of the belt (Figure 4, item F) onto the teflon release fabric (E) so that the splice fingers (J) are horizontally and vertically centered as shown. Next, lay the appropriate thickness (see Table 1) shims (G) against the belt, with equal amounts extending beyond each side of the press as shown. Then, attach the clamping bar (B) by engaging the latches (H). Be sure that the shims are tight against the sides of the belt before tightening the clamping bar knobs (S).

IMPORTANT

Tighten knobs (Figure 4, item S) only enough to secure shims and belt from moving. Recheck belt fingers (P), to make sure they have not moved apart.

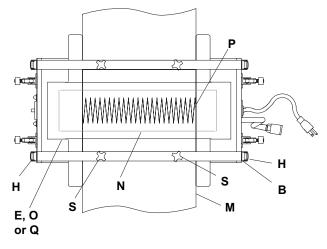


Figure 5

5. Place the other end of the belt (Figure 5, item M) onto the teflon release fabric (Figure 4, item E) so that the splice fingers (Figure 5, item P) are horizontally and vertically aligned, and between and against the shims installed in step 4. Next, proceed to push the fingers, on both ends of the belt, together to create a zig-zag pattern while making sure not to exceed 1/32" (1 mm), at the tips of the fingers (P). Then, attach the other clamping bar (B) by engaging the latches (H). Again, be sure that the shims are completely against the sides of the belt before tightening the clamping bar knobs (S).

IMPORTANT

Inspect belt to be sure that it is straight and not twisted throughout its length.

- 6. As appropriate, install the following:
 - a. If splicing a woven polyester belt, place the second piece of the #891-020, textured teflon release fabric (Figure 5, item E) (which was furnished with the heat press), centered horizontally and vertically, over the splice.
 - b. If splicing a black anti-static belt, cut two (2) pieces of the appropriate length [to match belt width plus a 2" (51 mm) overlap] of black urethane splicing foil (Figure 3, item N) (film) #815-016 (sold separately). Center the pieces of foil horizontally and vertically over the splice. Then, place the second piece of the #891-020, textured teflon release fabric (Figure 5, item E) (which was furnished with the heat press), centered horizontally and vertically, over the splice.
 - c. If splicing a gray friction belt, place the one piece of the #1U482, silicone impression mat (Figure 5, item O) (which was furnished with the heat press), centered horizontally and vertically, over the splice. Make sure that the mat is clean and free of dirt and oil.
 - d. For all other smooth surfaced belts, place the one

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piece of the #891-019, smooth teflon release fabric (Figure 5, item Q) (which was furnished with the heat press), centered horizontally and vertically, over the splice.

7. While exercising appropriate caution, install and secure the upper half of the heat press.

CAUTION

Upper half of press is heavy and may require two people to lift it. Make sure temperature controller and pressure gauge are on the same end. Lock down the two main tension latches (Figure 6, item T), on each end. Latches should be snug but not tight. If latches are too tight or too loose adjust barrel nut (U), on each latch, until a slight amount of resistance is felt while being locked.

IMPORTANT

Supply air pressure to the heat press must be clean and dry. There must be no in-line oiler.

 Connect gray bladder air hose (Figure 6, item V), attached to bottom half of heat press, to fitting (W) on top half. Apply 75–125 PSI (525 to 875 kPa) supply air pressure to air inlet fitting (X) on lower press half [gauge (Y) on front should read 15 psi]. If necessary, adjust regulator (Z) on back of press.

NOTE

If pressure, in top bladder, exceeds 35 PSI (245 kPa) internal relief valve will "POP" and thus remove excess pressure.

9. Plug cord (AA) into a 15 ampere, 115 volt A.C. single phase "Ground Fault Interrupt (GFI) circuit. Green cycle indicator (AB) should be lit.

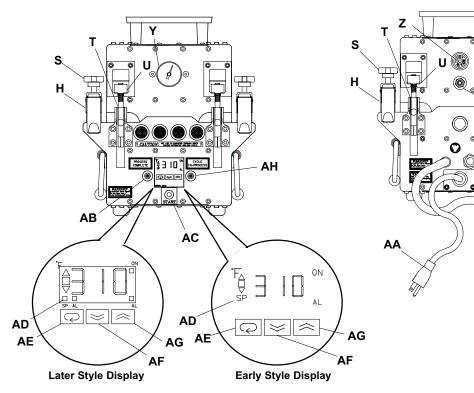


Figure 6

IMPORTANT

Do not depress the start button (AC) without both the upper and lower halves correctly and securely locked in place. 10. Adjust the required set point temperature (listed in Table 1) on temperature controller. The set point temperature is displayed when the green (later style) or red (early style) "SP" indicator (Figure 6, item AD) is lit on the

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display. The key \bigcirc (AE) will toggle the display between the present and set point temperature. Adjust the set point temperature by depressing the \bigcirc (AF)

and (AG) keys.

- Depress the start button (AC). The green (AB) process "complete" indicator will go out and the red (AH) "cycle in-process" indicator will light. This will start the automatic heating and cooling cycle of the press of approximately 20 to 30 minutes.
- 12. During the cooling cycle, a hissing sound is emitted as cooling air is drawn through the press.
- 13. When the cooling cycle is completed, the air will shut off and the green (AB) "cycle complete" indicator will light. This indicates the splice is complete.

A WARNING

Do not attempt to remove the belt until the cooling cycle is completed. The material could be in a molten state before that time. In addition, be aware that the air exiting the press (above the temperature controller), at the start of the cooling cycle, will feel hot and may startle you.

- 14. To remove belt from press, disconnect gray air hose (V) from the fitting (W) on the top half of the press, unlock 2 main tension latches (T) at each end of the press, and remove upper half of press. Remove both clamping bars (Figure 4, item B) and (Figure 5, item B) by unscrewing knobs (S) until they turn freely, and unlocking latches (H). Peel away both pieces of teflon fabric (or the silicone impression mat) and shims from both sides.
- 15. With belt removed from press, trim off excess urethane foil from both edges of the belt and stainless steel shims with a utility knife. The belt is now ready to use.

Belt Type Number	Belt Description	Shim Thickness	Part Number	Set Point Temperature in ° F (° C)
1	Accumulator Top FDA Approved	0.060" (16 ga)	660138	310 (154)
2	Standard Urethane	0.075" (14 ga)	665081	320 (160)
3	Soft Top FDA Approved	0.060" (16 ga)	660138	310 (154)
4	Gray Friction	0.075" (14 ga)	665081	330 (166)
5	Woven Polyester (Double Carcass)	0.048" (18 ga)	662155	340 (171)
6	Black Anti-Static	0.060" (16 ga)	660138	325 (163)

Table 1: Heat Settings & Shim Sizes

Troubleshooting Guide

Problem	Possible Cause	Solution
Press does not heat.	No power to press. (Temperature display OFF)	Check input circuit and cord connections.
	Electrical overload. (Temperature display OFF)	Replace 15 amp fuse on back end.
	Thermal overload. (Temperature display OFF)	Contact Dorner customer service.
	Control malfunction. (Temperature display ON or OFF)	Contact Dorner customer service.
	Thermocouple broken. (Temperature display blinks "FFF")	Contact Dorner customer service.
Splice not fully melted through	Temperature controller set point too low.	See step 10 of the instructions on page 3.
	Bladder pressure regulator setting too low.	Adjust regulator so gauge reads 15 - 20 PSIG (105 to 140 kPa).
	Pneumatic fittings not connected properly.	See step 8 of the instructions on page 3.
	Control malfunction.	Contact Dorner customer service.
Splice overheated. (discolored, excessively melted or urethane on backside)	Temperature controller set point too high.	See step 10 of the instructions on page 4.
	Insufficient cooling air volume.	Insure air input is 4 scfm @ 75 PSI/ min (1.9 liter/second @ 525 kPa).
	Control malfunction.	Contact Dorner customer service.
Splice fingers separated.	Bladder pressure regulator setting too high.	Adjust regulator so gauge reads 15 to 20 PSIG (105 to 140 kPa)
	Belt not properly held in place.	See step 5 of the instructions on page 2.
	Belt improperly cut.	Insure belt fingers fit tightly together.
Red PROCESS IN-CYCLE light lit when first plugged-in.	Control malfunction.	Contact Dorner customer service.

Accessories

Black Urethane Foil for Anti-Static Belts	815-018 Ordered
Clear Urethane Foil for Woven Polyester Belts *	815-017 Ordered
Silicone Impression Mat for Gray Friction Belts	1U482 Ordered in
Textured Teflon Release Fabric *	891-020 Ordered
Smooth Teflon Release Fabric *	891-019 Ordered
18 ga (0.048,) Edge Shims for Belts 0.040" – 0.055" *	662155 (2 Require
16 ga (0.060,) Edge Shims for Belts 0.055" – 0.070" *	660138 (2 Require
14 ga (0.075,) Edge Shims for Belts 0.070" – 0.085" *	665081 (2 Require
* Included with Belt Splicer Accessory Kit.	

Dorner Belt Splicing Equipment is covered by patents 5,499,565 and 5,562,796

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Notes

Return Policy

Returns must have prior written factory authorization or they will not be accepted. Items that are returned to Dorner without authorization will not be credited nor returned to the original sender. When calling for authorization, please have the following information ready for the Dorner factory representative or your local distributor: 1. Name and address of customer. 2. Dorner part number(s) of item(s) being returned. 3. Reason for return. 4. Customer's original order number used when ordering the item(s). 5. Dorner or distributor invoice number. A representative will discuss action to be taken on the returned items and provide a Returned Goods Authorization number for reference. There will be a return charge on all new undamaged items returned for credit where Dorner was not at fault. Dorner is not responsible for return freight on such items. Conveyors and conveyor accessories Standard catalog conveyors 30% MPB Series, cleated and specialty belt conveyors 50% 7400 & 7600 Series conveyors non-returnable items Engineered special products case by case Drives and accessories 30% Sanitary stand supports non-returnable items Parts Standard stock parts 30% MPB, cleated and specialty belts non-returnable items

Returns will not be accepted after 60 days from original invoice date.

The return charge covers inspection, cleaning, disassembly, disposal and reissuing of components to inventory.

If a replacement is needed prior to evaluation of returned item, a purchase order must be issued. Credit (if any) is issued only after return and evaluation is complete.

Dorner has representatives throughout the world. Contact Dorner for the name of your local representative. Our Technical Sales, Catalog Sales and Service Teams will gladly help with your questions on Dorner products.

For a copy of Dorner's Warranty, contact factory, distributor, service center or visit our website at www.dorner.com.

For replacement parts, contact an authorized Dorner Service Center or the factory.



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