

MANUAL

TRIAD
Extreme™



This instruction manual is intended to be a guide when operating the Triad Extreme Seam welder. To ensure optimal performance from your welder, please follow the recommendations and specifications precisely.

For more technical information regarding this machine call our Resolution Center 1-855-888-WELD or email service@weldmaster.com.

You can also subscribe to Miller Weldmaster Insiders to stay updated on tech tips, machine maintenance updates, and more at www.weldmaster.com/insiders.

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1.0 Introduction

The Triad Extreme Seam hot wedge welding machine is designed for in house fabrication of a wide range of flexible membranes. This includes, but is not limited to, PVC, PP, PE, LDPE, Urethane, etc.

Thickness of material that can be welded will vary also with product. Normal range is 5-100 mil thickness and can be supported or non-supported material.

The Triad comes complete with three different guides. This will allow you to perform the overlap weld, hem weld, prayer weld and many more welding options.

The Triad uses a hot wedge as its heat source. This method will give you smokeless and quiet operation. The wedge also allows for welding thinner products without distortion.

The Triad can be used as a stationary welder or in an automatic mode. When using the Triad in an automatic mode, a track system is suggested. Please refer to Track System Specifications.

We suggest that you make samples welds of your product to achieve the correct settings for heat, speed and wedge alignment before you start welding


1.1 Intended Use

The Triad Extreme Seam Welder is a hot wedge welding machine intended to heat-seal weldable thermal plastics such as:

- Vinyl (PVC) laminated and coated fabrics
- Vinyl (PVC) and Polyurethane (PU) films
- Polyurethane (PU) and Polypropylene (PP) coated fabric
- Polyethylene (PE)
- Thermoplastic rubber (TPR) film and fabrics Non-woven Polyester and Polypropylene Various Weldable Webbing

The manufacturer does not approve of:

- Any other uses for these machines.
- The removal of any safety guards while in operation.
- Unauthorized modification of the machines.
- Using replacement parts that are not manufacturer-approved.

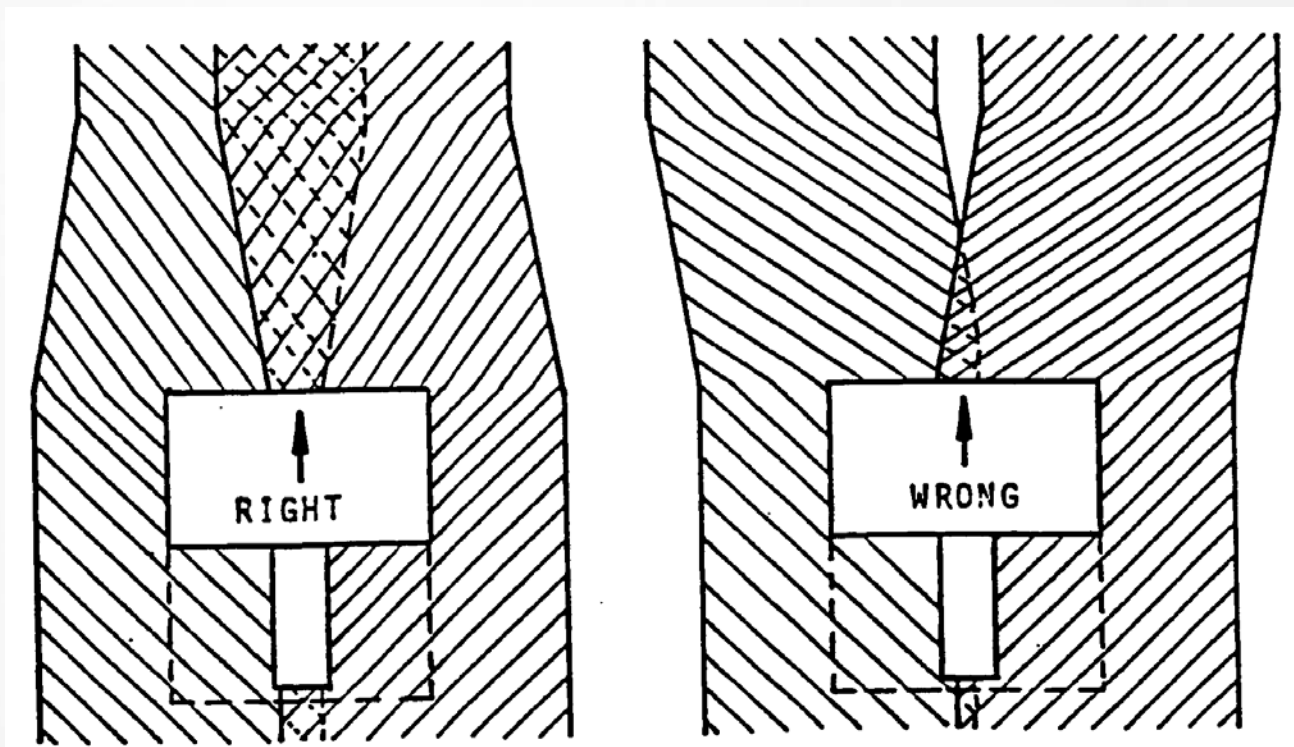
 Only a properly-trained technician may operate and/or perform any routine maintenance or repairs to the machines.

NOTE: The manufacturer will not be held liable for any damage or injuries occurring from any inappropriate use of this machine.

2.0 Material Setup

Material should be laid out as flat as possible, either on the floor or table depending on how you set up your fabrication area. With most material and especially thinner goods, it is preferred to pull out the wrinkles or pull taunt. The use of sheet metal in or next to the machine on the table, allows for the use of magnets to position and hold the material. Taping material taunt is a good practice.

To perform overlap welds, always overlap material more than the final weld width. **Example:** With a 1-1/2" weld width, overlap the end of material or run 2 to 2 1/2". The machine and front guides will push the material to the desired overlap. If the material is not overlapped or positioned properly, the machine will not make the desired overlap weld. See sample below.



3.0 Operating Instructions

The following procedures should be followed only after you have followed the Wedge Adjustment and Guide adjustment procedures.

1. Pull up on Red Power Switch #3 to turn machine on. The Green Power Light #4 will go on with a one second delay. The Green light will remain on as an indicator that you have power to the machine. (Push down on Red Power Switch #3 to turn machine off)
2. Temperature Controller #7 will come on with a 1-2 second delay after Green Power Light goes on. Units are set in celsius at the factory. Press the Set Button and hold, now press the up or down button until you reach your desired temperature. Heat up time is only one to two minutes. Do not adjust heat over 510 degrees C. For sample welds, set controller to 400 degrees C. This may not be your final setting.
3. Set For/Rev Switch #5 to Forward position. This indicates direction of machine and drive/pressure roller movement.
4. Set Man/Auto Switch #2 to Auto position. This will engage or start Drive/Pressure rollers when wedge is moved into welding position.
5. Swing Drive Wheel Assembly #10 under bottom Pressure Roller. This will make the machine move or automatic. With Drive Wheel Assembly out, the machine can be used in a stationary mode.
6. #1 is the Speed Control. It is adjustable from 0-30 feet per minute. Normal setting will be in the 30 to 60 range, for 12-30 mil goods.
7. #8 is the Pressure Knob. It can be adjusted for more or less pressure, depending on the thickness of material.
8. Insert material into the machine with proper guides installed and close Pressure Wheel Handle #9.
9. Swing Wedge Engagement Handle #11 in toward the machine, this will automatically start forward motion of the Triad and engage wedge with material.
10. Adjust speed control up or down until you can verify you are getting a proper weld.

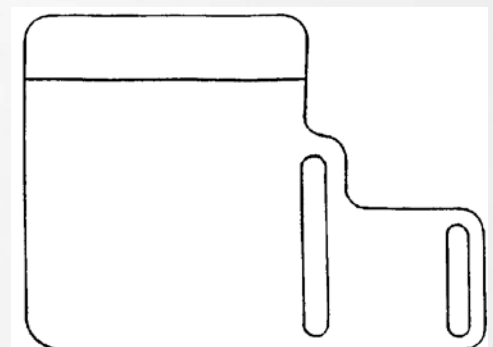
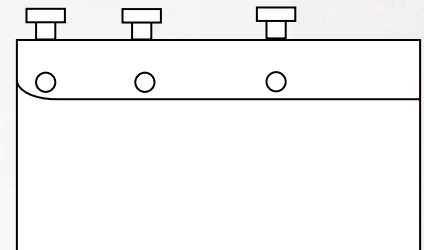
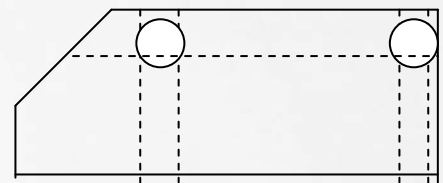
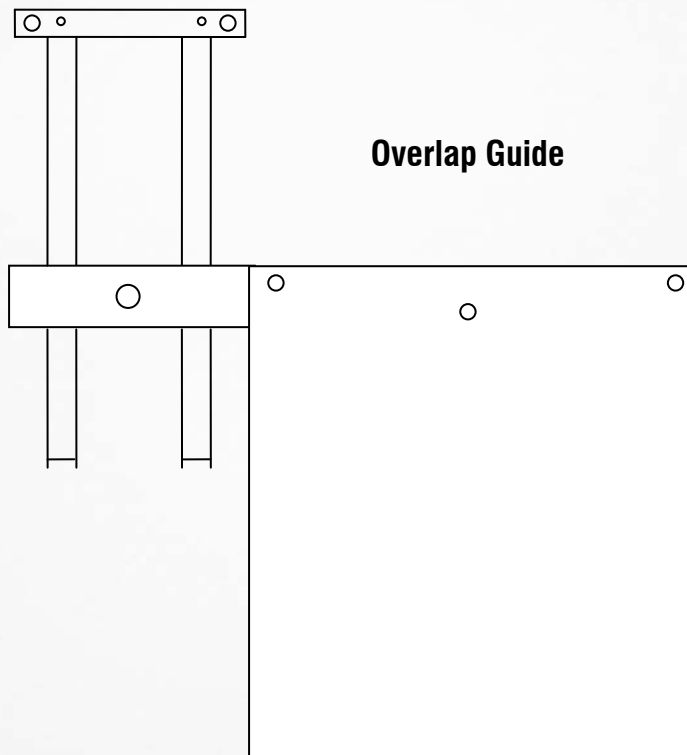


4.0 Material Guides

All Guides shown below are included with the purchase of the standard machine. Each guide will give you a specific type of weld and more. You can only use one guide system at a time.

The Top Guide will be used with all three different welding functions, overlap, hem and prayer welds. All Guides are adjustable.

To achieve a precise weld with no loose flap on top or bottom of sheet, guides should be adjusted so that they are even with the width of wedge, or welding area



5.0 Welding

5.1 Overlap Weld

Attach Overlap Guide #1 to base plate with the two screws provided. Loosen screw (A) to adjust bottom side of overlap for proper alignment and re-screw.



5.2 Hem Weld

Slide Hem Guide #2 onto the three stainless rods up to the outer Horn Guide #3 (Diagram #1), leaving enough area between the two so material will slide easily. Tighten thumbscrew (B) (Diagram #1), this will allow the outer Horn guide and Hem guide to move as one. This dictates the size of the hem to be welded. Push on Hem Slide #4 (Diagram #2) to achieve desired hem width or size. When this is done, tighten thumb-screws (C) (Diagram #1) to lock in place.



5.3 Prayer or Fin Weld

Position the Prayer Guide #5 under the Welding Horn, placing the key way into the slot. Fasten with screw provided once proper alignment is completed.



5.4 Front Guides

Front Guides #6 are adjustable to pre-align material before you reach the welding process. This will help the operator in feeding material into machine properly.



6.0 General Maintenance

General maintenance should be performed annually to your Triad Extreme Welder.

Chain tension should be checked to alleviate excessive wear to the chains and sprockets. Using a foaming chain lubricant will cling to the chain and extend chain life.

The pinch rollers should be replaced if there are cuts, flat spots, burn marks etc.

Wedge adjustment should be checked daily before performing any welding. The operator should be familiar with all wedge adjustments to get the best weld quality. Check for any loose hardware. Loose hardware can alter the wedge adjustment with every engagement.

7.0 Wedge Cleaning and Honing

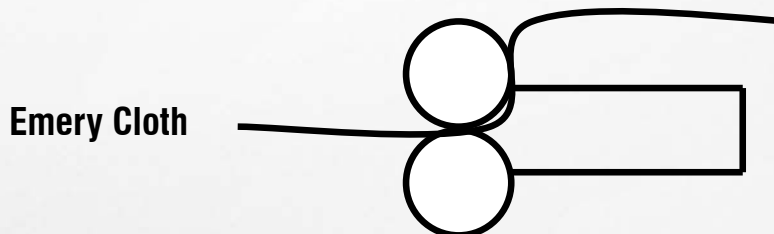
For accurate welds and longer wedge life, the wedge should be cleaned and honed on a regular basis.

CLEANING: Wedge cleaning should be done daily. There are two ways to clean the wedge.

1. With the Pressure Rollers in the up position and the wedge in the weld position, use the Brass Brush provided and clean wedge top and bottom. This can be done after every weld or as needed.
2. The second method of cleaning the wedge is to increase the temperature to 510 degrees C for 5-10 minutes. This will burn the residue on the wedge and it will flake off. Use the Brass Brush to remove.

HONING: Wedge Honing should be done if there are signs of wear on the wedge. This is evident with uneven welds, rounding edges or corners on the wedge.

1. Install both smooth steel rollers on machine, (do not hone the wedge with the Silicone rollers on machine).
2. Turn the forward/reverse switch to reverse position.
3. Swing wedge into weld position and close rollers.
4. Take the fine Emery Cloth provided, and run it back through the rollers on top of the wedge. Repeat this step on the bottom of the wedge.
5. Repeat step 4 top and bottom until there is even wear the full length of wedge.
6. If Honing does not true up the wedge, refer to Wedge Adjustment section. A combination of honing and adjustment may be necessary.



8.0 Wedge Adjustment

Proper wedge alignment is essential to achieve a proper weld. Units are preset at the factory. Sample welds should be made prior to actual use of the machine.

If sample welds are good only on one side or the other, or only partially welded, this means the wedge is not aligned or square to the rollers, and alignment adjustment is needed.

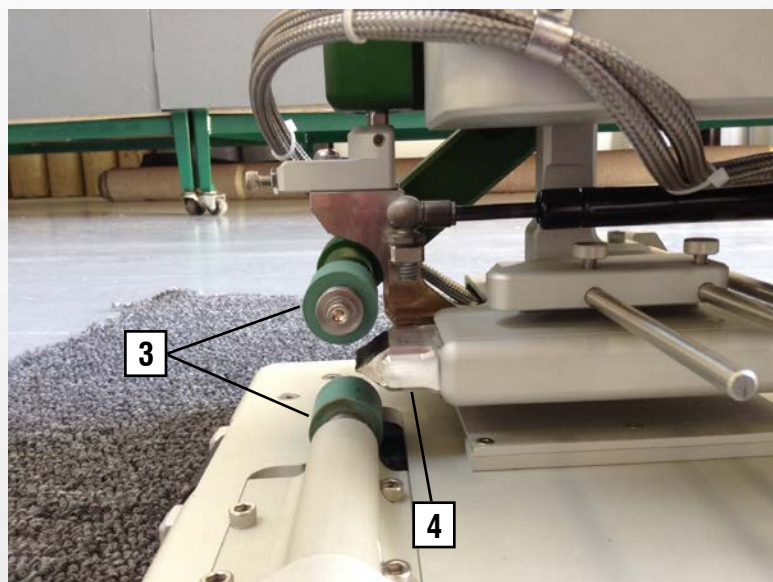
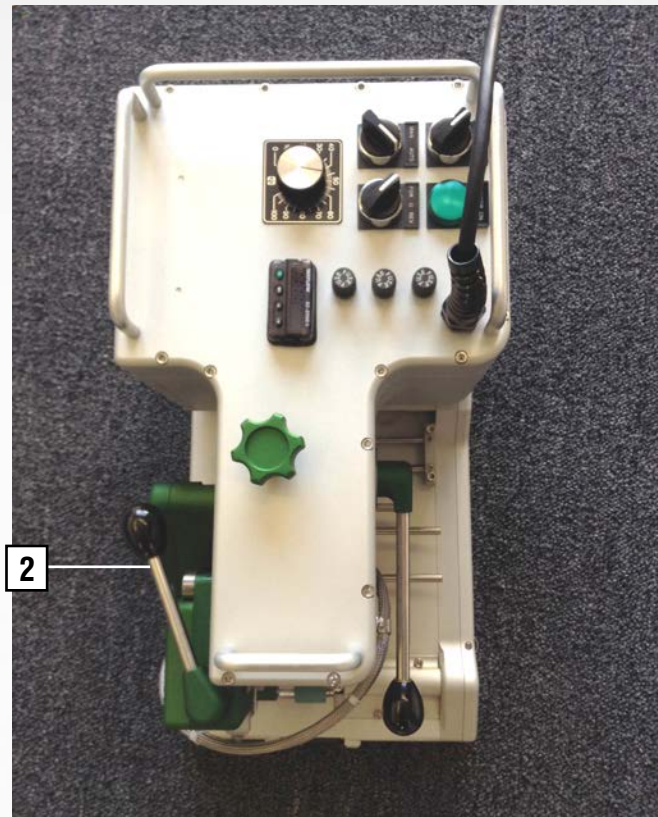
Unplug unit from power source and make sure the wedge is cool before you work on the machine.

1. Pull Pressure Roller Handle #1 down. This will close Pressure Rollers.



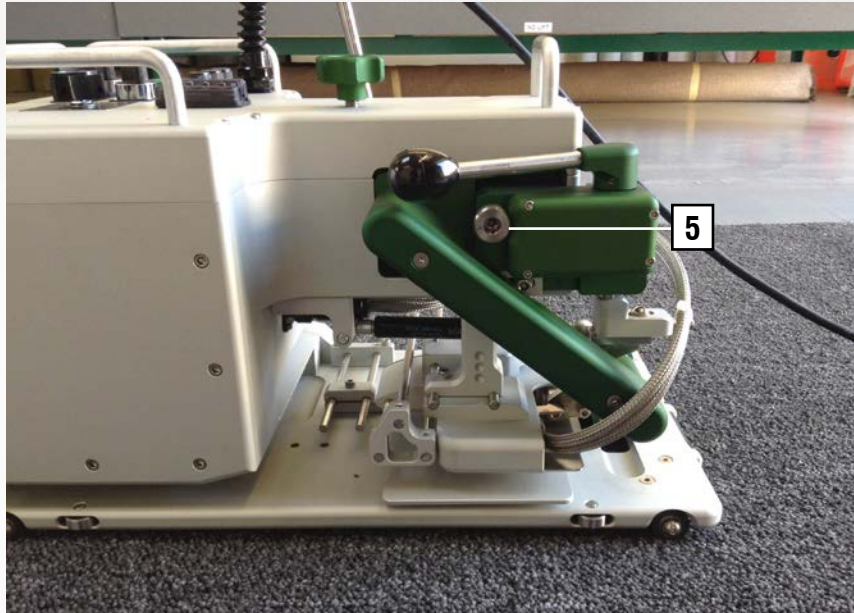
8.0 Wedge Adjustment (Continued)

2. Swing Wedge Handle #2 in this will engage wedge with rollers. The wedge #4 should rest or fit snug into the rollers #3 on both sides and should be centered.

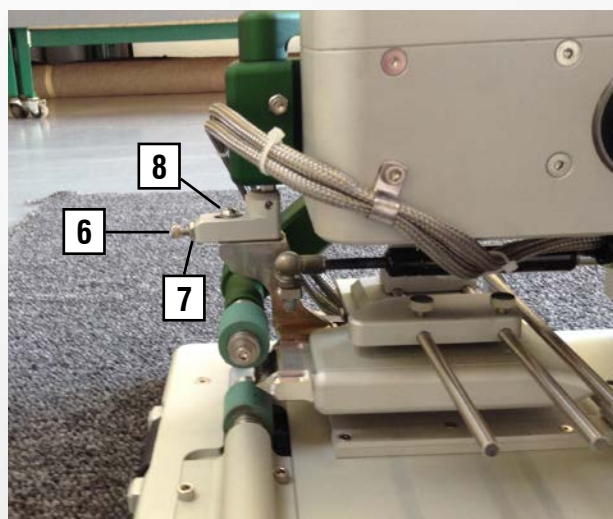


8.0 Wedge Adjustment (Continued)

3. To center wedge between rollers, turn screw #5, this will fine tune wedge up and down. Only a 1/8 or 1/4 turn is necessary. Do not overturn. Move Pressure Roller Handle up and down slowly to check centering adjustment. Swing wedge handle in and out to ensure proper positioning.

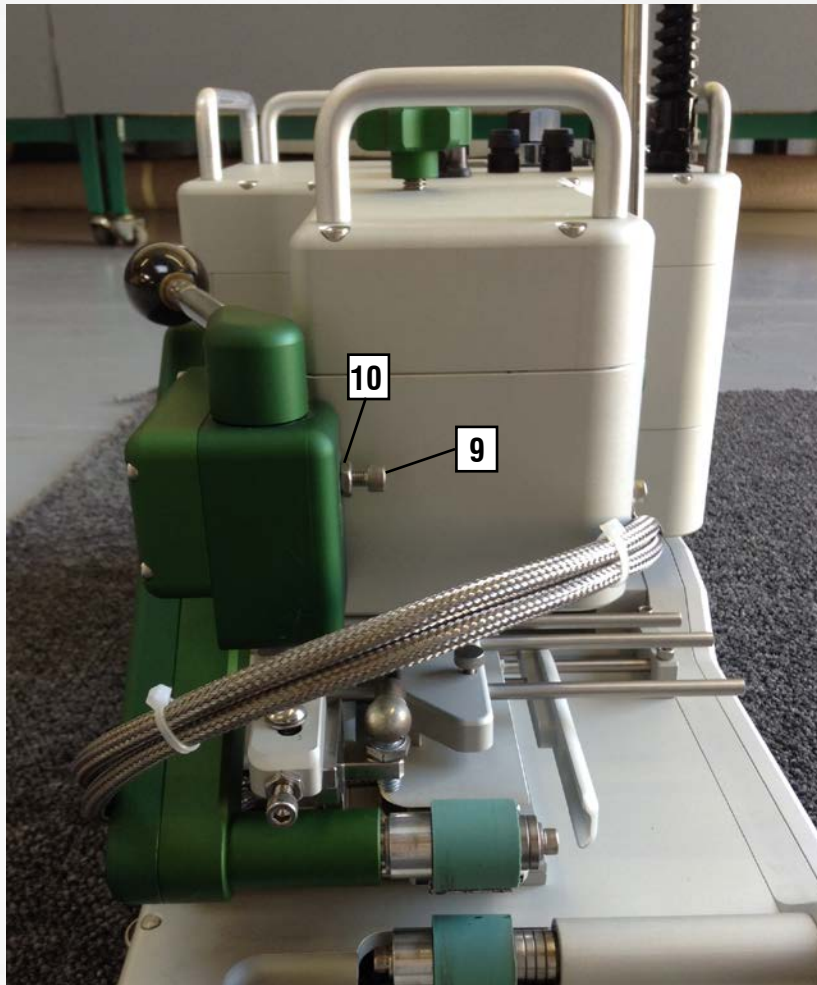


4. Adjustment Screw #6 will move wedge on a center axis left and right. Loosen Locking Screw #8 to make adjustment. Loosen Lock Nut #7, turn Adjustment Screw clockwise to bring right side of wedge in and counterclockwise to bring left side in. When adjusted properly, tighten Locking Screw and Lock Nut.



8.0 Wedge Adjustment (Continued)

5. Wedge Stop Screw #9 will stop travel of wedge when positioning wedge in weld position. Loosen Locknut #10, turn Adjustment Screw in or out to proper position. The edge of the wedge should fit snug and square into the rollers on each end.



Make a test weld before proceeding with job. Fine tuning your adjustments can be made while wedge is hot. Do not run Hot Wedge into Silicone Rollers without material in machine for extended periods, as it will distort the silicon.

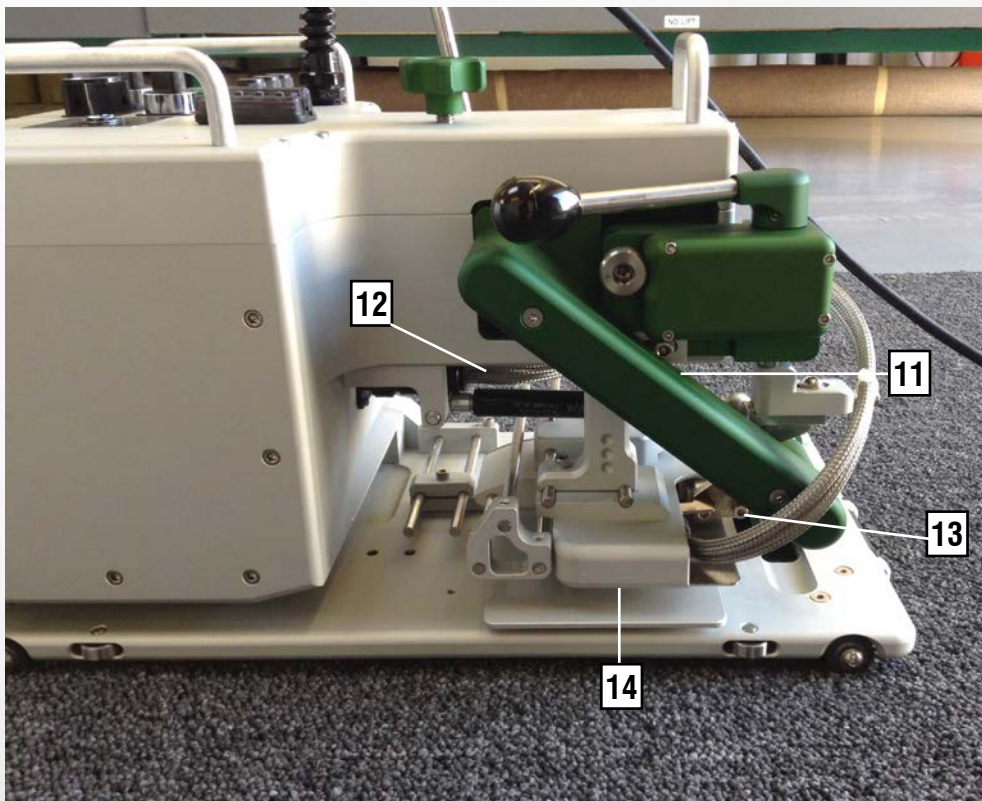
Note: For thicker products (30mil and up) backing the wedge out may be necessary to allow room for material.

9.0 Wedge Replacement

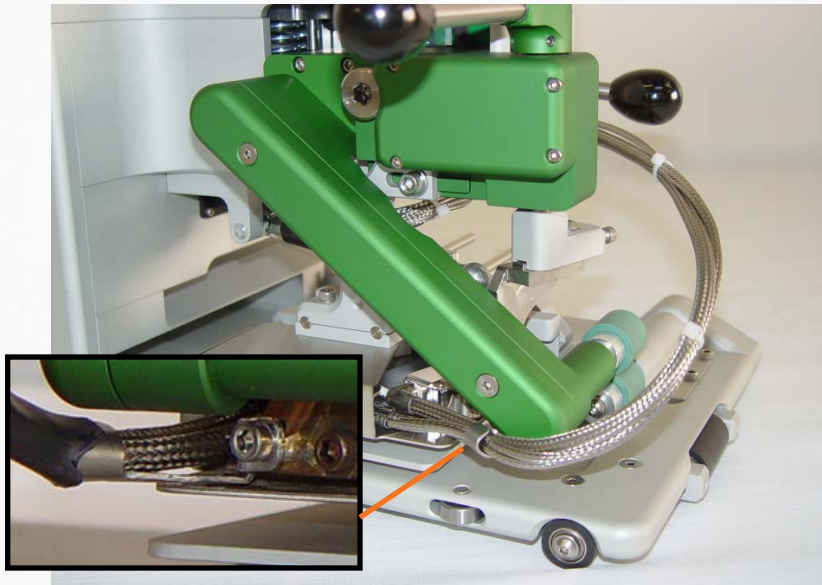
The wedge should be replaced when honing and adjustment is no longer effective. If heater failure occurs after a period of time, the heaters may not be easily removed. The wedge and heater will most likely have to be replaced together.

1. Unplug machine and make sure wedge is cool.
2. Remove Hanger Bracket Screw #11 and remove Wedge Housing Assembly #14.
3. Unscrew and detach Heater Connector #12.
4. Remove both Wedge Screws #13, and remove wedge.
5. Install new wedge with Wedge Screws. Attach Heater Connector and re-attach Wedge.
6. Center Housing with Screw #11 and tighten.
7. Wedge alignment may be necessary, please refer to Wedge Adjustment Section.

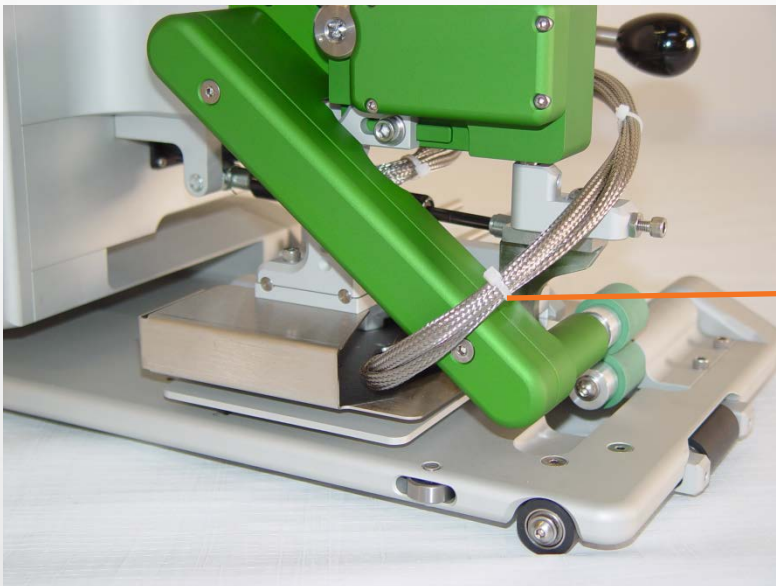
Note: Wedge Housing assembly will move back and forth in slot for #11 screw. Moving the Housing will increase or decrease exposure of material to wedge for different preheat time or exposure. Thinner products need little preheat, thicker material need more.



10.0 Wedge Installation

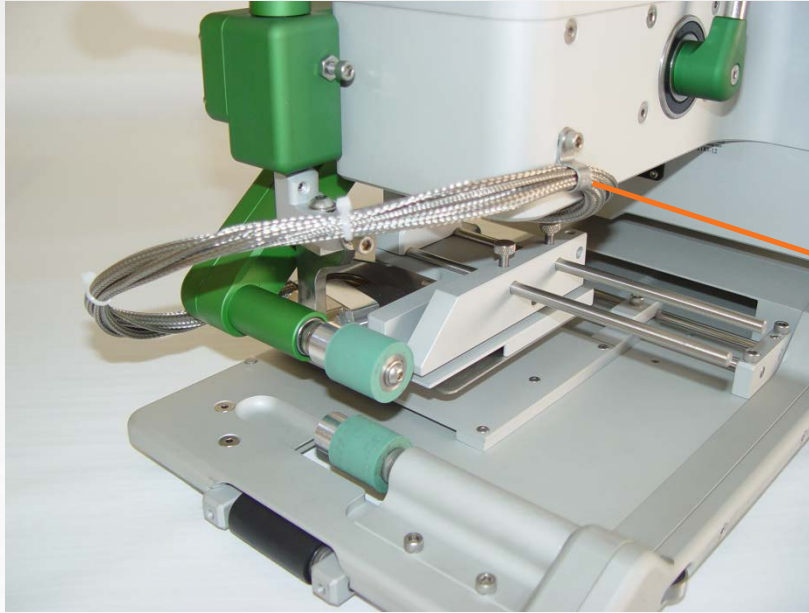


Install wedge on wedge mount arm along with lead bracket using two screws (note insert photo). Position heater wires properly on lead bracket and gently close tabs to secure.

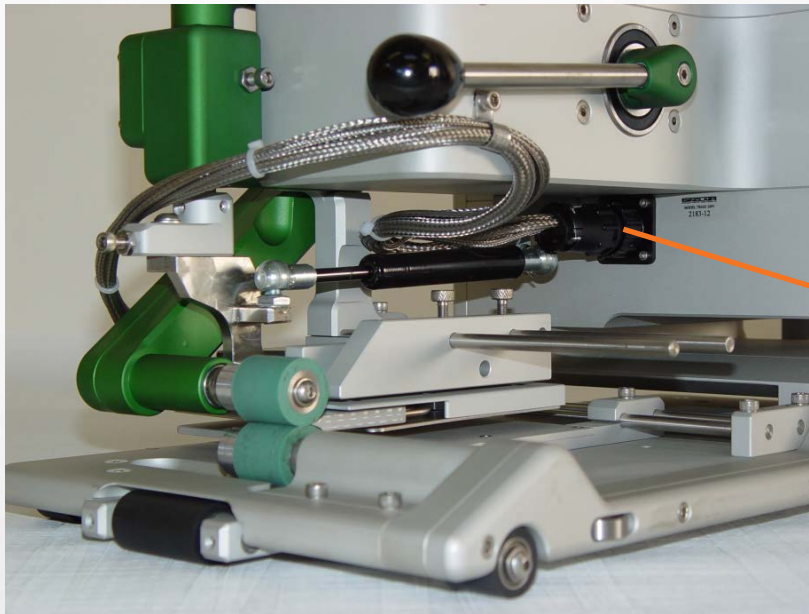


With wedge in engaged position, use zip ties to collect heater wires together. Note the wrap of heater wires around upper pinch roller arm and around back of Triad.

10.0 Wedge Installation (Continued)



Using clip & screw, attach around heater wires and position to body of Triad. Do not fully tighten.



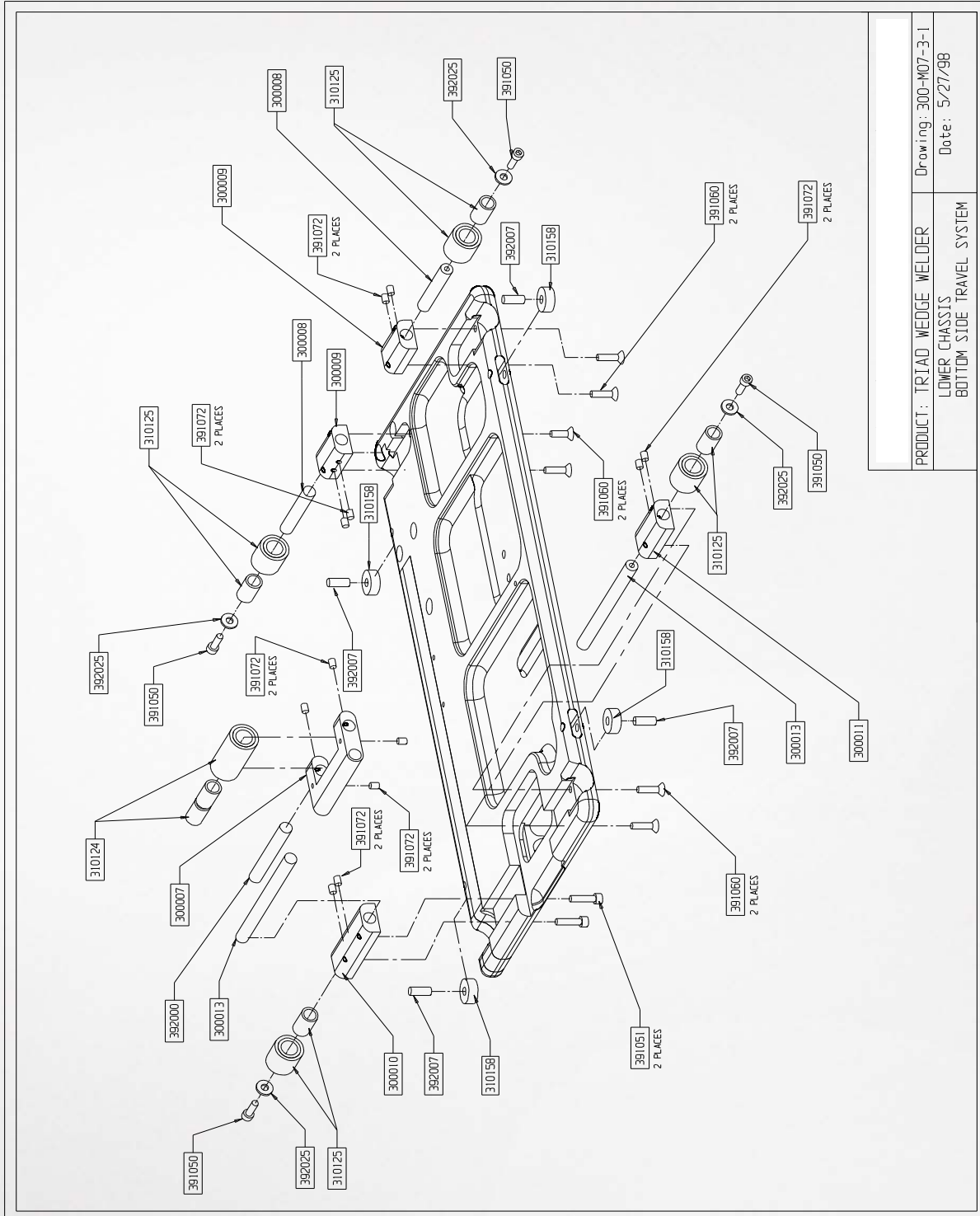
Electrically connect hot wedge to receptacle on body of Triad. When connected, make comfortable bend of heater wire and position properly in clip. Swing wedge in and out of welding position to make sure wrap around back of Triad is comfortable. When completed, tighten clip to secure.

11.0 Troubleshooting

Condition	Possible Cause	Corrective Action
Wedge doesn't heat	Fuse blown Heater failed (220 Volt) Control or relay failure Loose wire	Diagnose wedge Replace fuse Replace wedge Diagnose and replace control Check wiring contacts
No drive, motor hums	Chain break/binding Pinch roller bearings U joint shaft Motor gears stuck (rare)	Find and repair or adjust failed chain Replace bearings/shaft Rebuild U joint shaft Repair or replace motor
No drive, motor quiet	Motor fuse failed caused by fabric or mechanical binding Controller failure (usually associated with control fuse blown)	Correct cause of binding Replace fuse Diagnose and replace controller
Wedge temp unstable	Controller programming Heater failure (120 Volt) Thermocouple failure	Reconfigure control. Diagnose and replace wedge
Fuse blows (heater)	Heater short or ground fault Incorrect fuse value	Diagnose and replace wedge Replace with correct fuse
Fuse blows (control)	Controller failure Short circuit or other wiring problem	Diagnose and replace failed control Diagnose and correct wiring
Temp control display blank, ER 4 (Triad) or ER in (Spec)	No thermocouple signal Thermocouple failure	Plug in and test wedge Replace wedge Check internal T/C wire
Temp control display shows other ER code	Triad control (935) all errors are T/C based, Spec control (SD) see control manual	Plug in and test wedge Check control configuration
Only one pinch roller is turning	Chain failure (Triad) Belt failure (Spec) Gear or sprocket spun	Repair or replace belt or chain Replace shaft assembly
Pinch roller handle doesn't lift completely	Cam roller at apex of travel in cam plate	Rotate wedge height adjustment bolt about 180° and readjust wedge center

12.0 Schematics

12.1 Lower Chassis/Bottom Side Travel System

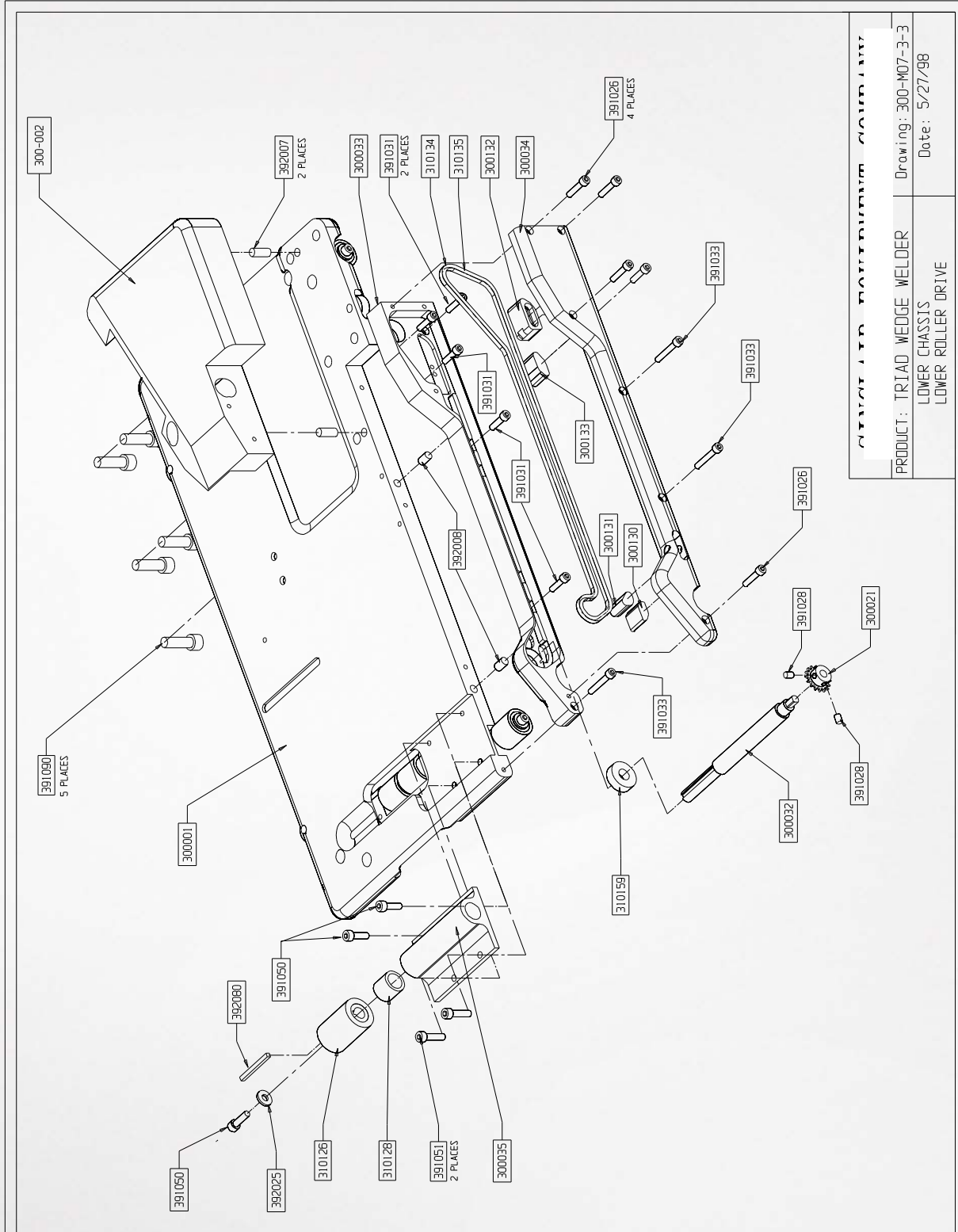


12.0 Schematics

12.1 Lower Chassis/Bottom Side Travel System

Drawing 300-M07-3-1	
Part #	Description
392025	#10 Washer
391050	10-32x.625 818ss SHCS
391060	10-32x.625 818ss FHCS
391051	10-32x.75 818ss SHCS
391072	10-32x.25 818ss SS
392007	Dowel Pin .250 x .625
310125	Idler / Travel Wheel & Bearing Assem.
310127	Needle Brng .562 x .375 x .438
300310	Spacer Pinch Roller
300013	Rear Idler Wheel Axle
392000	Dowel Pin .375 x 3.00
310124	Travel Wheel (std) & Bearing
300007	Drive Wheel Trunion Arm
310158	Brng .75 x .25 x .28
300008	Front Idler Wheel Axle
300009	Front Wheel Axle Mount
300011	Left Rear Wheel Axle Mount
300010	Right Rear Wheel Axle Mount

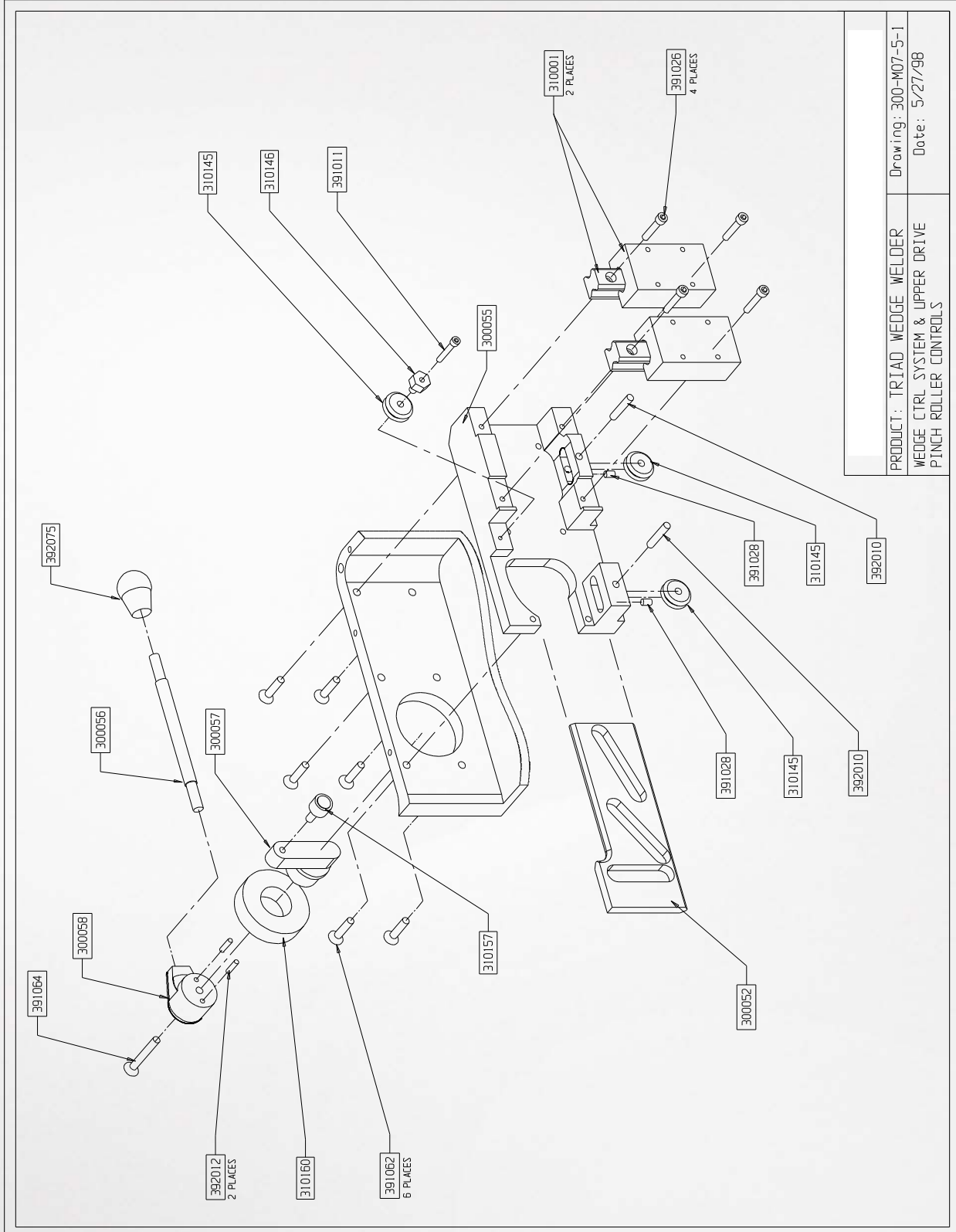
12.2 Lower Chassis/Lower Roller Drive



12.2 Lower Chassis/Lower Roller Drive

Drawing 300-M07-3-3	
Part #	Description
391031	8-32x.625 818ss SHCS
391033	8-32x1.00 818ss SHCS
391050	10-32x.625 818ss SHCS
391026	8-32x.75 818ss SHCS
392008	Dowel Pin .250x.375
300035	Lower Final Drive Shaft Housing
310128	Needle Brng .687x.500x.625
310126	Pinch Roller 1.50 (std.)
392080	Keyway .125x1.0
392025	#10 Washer
300001	Chassis Base Plate
300033	Lower Final Chain Housing
310135	Chain
310134	Link
300132	Lower Final Chain Rub btm/front
300034	Lower Final Chain Housing Cover
300133	Lower Final Chain Rub top/front
300131	Lower Final Chain Rub top/rear
300130	Lower Final Chain Rub btm/rear
300021	Sprocket Std. .1475 pitch x 16 tooth
300032	Lower Final Drive Shaft
310159	Brng .875x.375x.28
391090	5/16-18x1.00 818ss SHCS
392007	Dowel Pin .250x.625
391049	10-32x.312 818ss SHCS
391028	8-32x.25 818ss SS

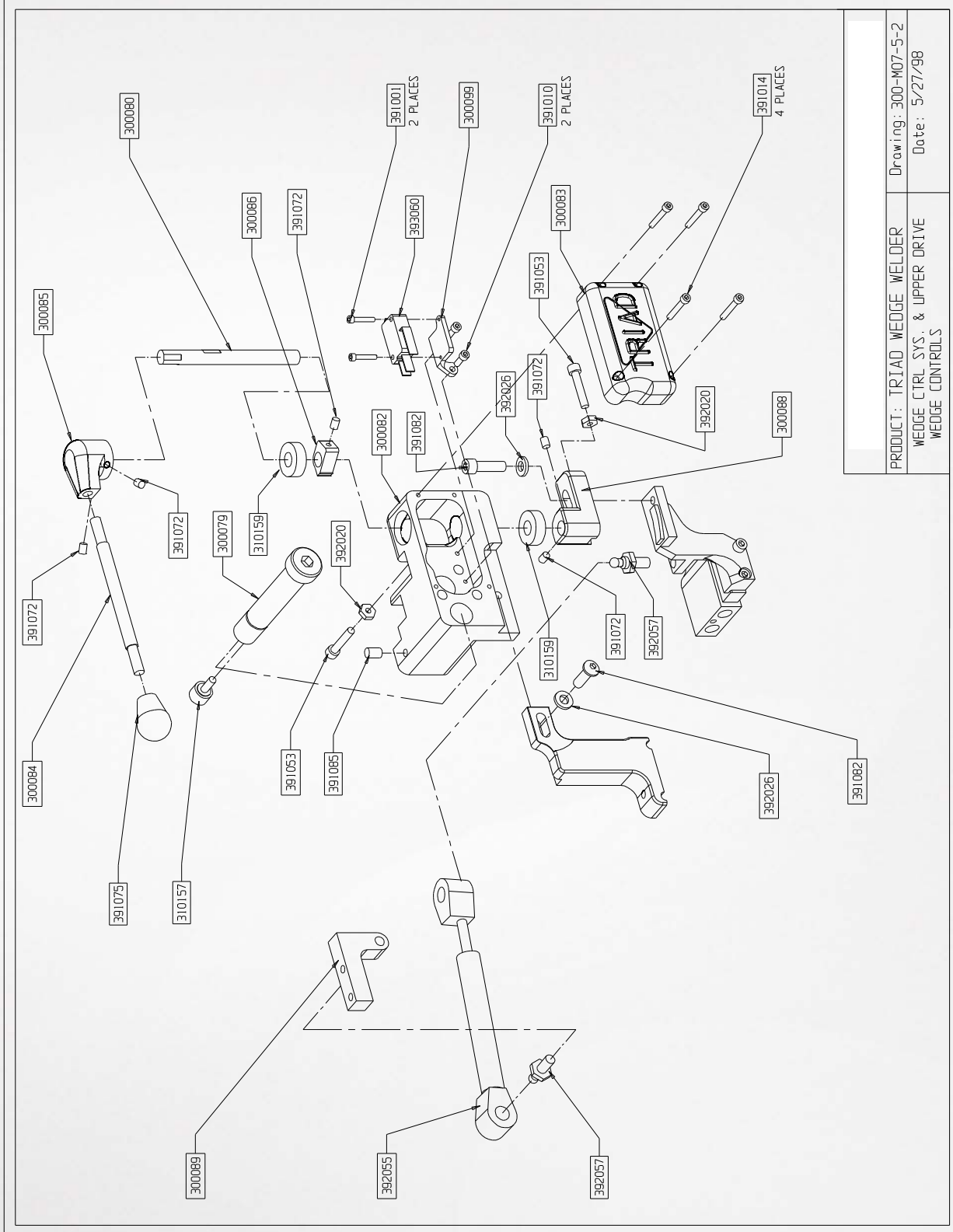
12.3 Wedge Control System & Upper Drive Pinch Roller Controls



12.3 Wedge Control System & Upper Drive Pinch Roller Controls

Drawing 300-M07-5-1	
Part #	Description
391064	10-32x1.50 818ss FHCS
300058	Pinch/Wedge Drive Arm Hub
300056	Pinch Roller Engagement Arm Shaft
391075	Handle Knob
392012	Dowel Pin .125x.500
310160	Brng 1.875x.875x.500
300057	Pinch/Wedge Drive Arm Spindle
391062	10-32x.875 818ss FHCS
310157	Cam Roller Brng .500x.500x#10
391028	8-32x.25 818ss SS
310145	V-Wheel Roller
310146	Ecentric Hub V-Wheel
391011	6-32x1.00 818ss SHCS
300052	Pinch/Wedge Drive Plate
391026	8-32x.75 818ss SHCS
392010	Dowel Pin .188x1.00
300055	Pinch/Wedge Drive Plate Housing
310001	Linear Rail / Linear Bearing Assembly

12.4 Wedge Control System & Upper Drive Wedge Controls

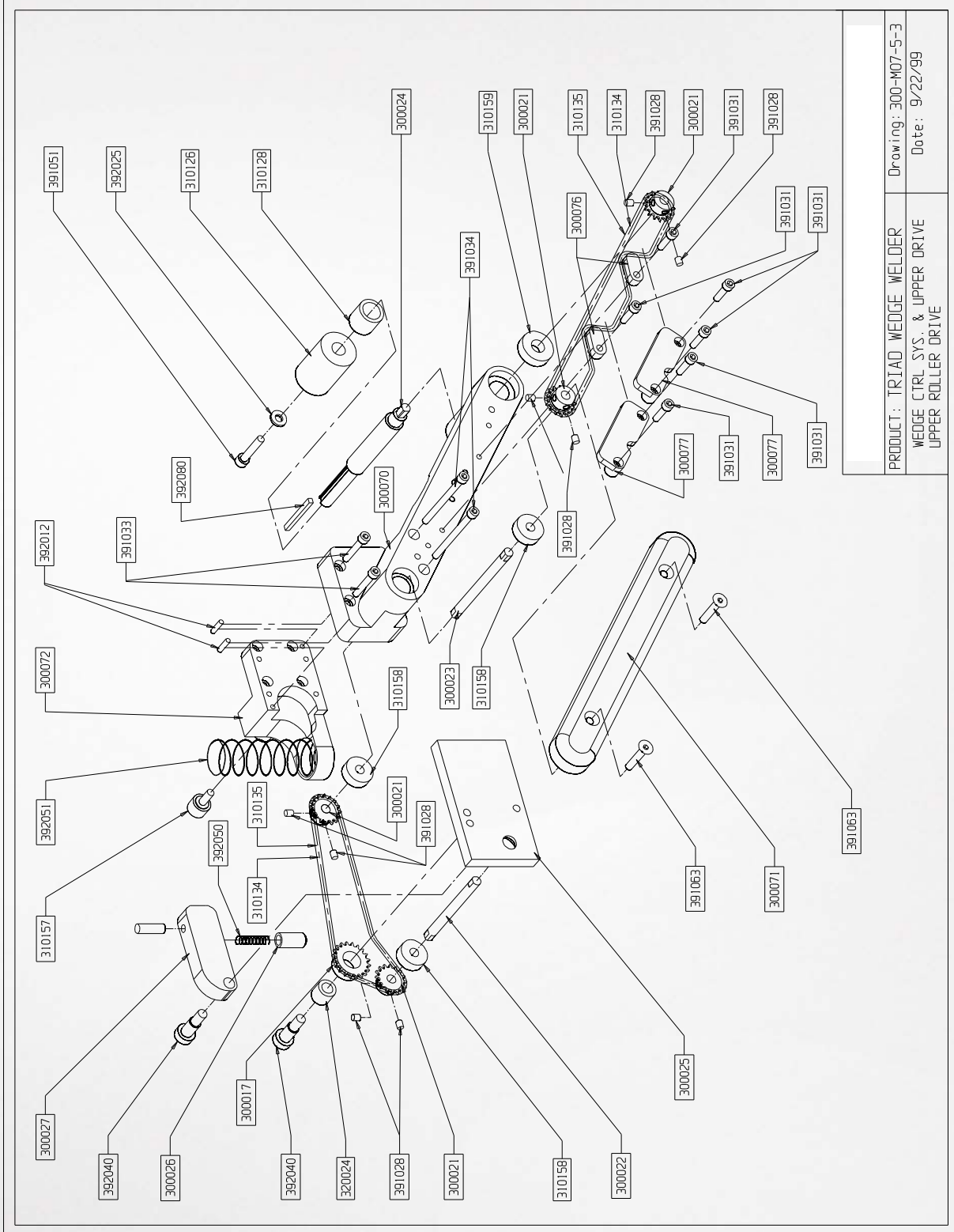


PRODUCT: TRIAD WEDGE WELDER WEDGE CTRL SYS. & UPPER DRIVE WEDGE CONTROLS	
Drawing: 300-M07-5-2 Date: 5/27/98	Date: 5/27/98

12.4 Wedge Control System & Upper Drive Wedge Controls

Drawing 300-M07-5-2	
Part #	Description
300085	Wege Pivot Arm Hub
391072	10-32x.25 818ss SS
300084	Wege Pivot Arm Shaft
391075	Handle Knob
300080	Wedge Pivot Shaft
310157	Cam Roller Brng .500x.500x#10
300079	Wedge Height Adjuster
392020	10-32 Hex Nut
391085	1/4-20x.375 SS
300082	Wege Pivot Linear Housing
310159	Brng .875x.375x.28
300086	Wege Travel Auto Start Cam
391001	4-40x.625 818ss SHCS
300099	Auto Start Switch Bracket
391010	6-32x.375 818ss SHCS
391082	1/4-20x.875 818ss SHCS
392026	1/4 Washer
300088	Wege Angle Adjuster Hub
391014	6-32x.875 818ss SHCS
300089	Wege Tensioner Upper Mount
391052	10-32x.875 818ss SHCS
392055	Gas Spring
392057	Mount Stud Gas Spring
391082	1/4-20x.750 818ss BHCS
393060	Limit Sw
300083	Wege Pivot Housing Cover
391053	10-32x1.00 818ss SHCS

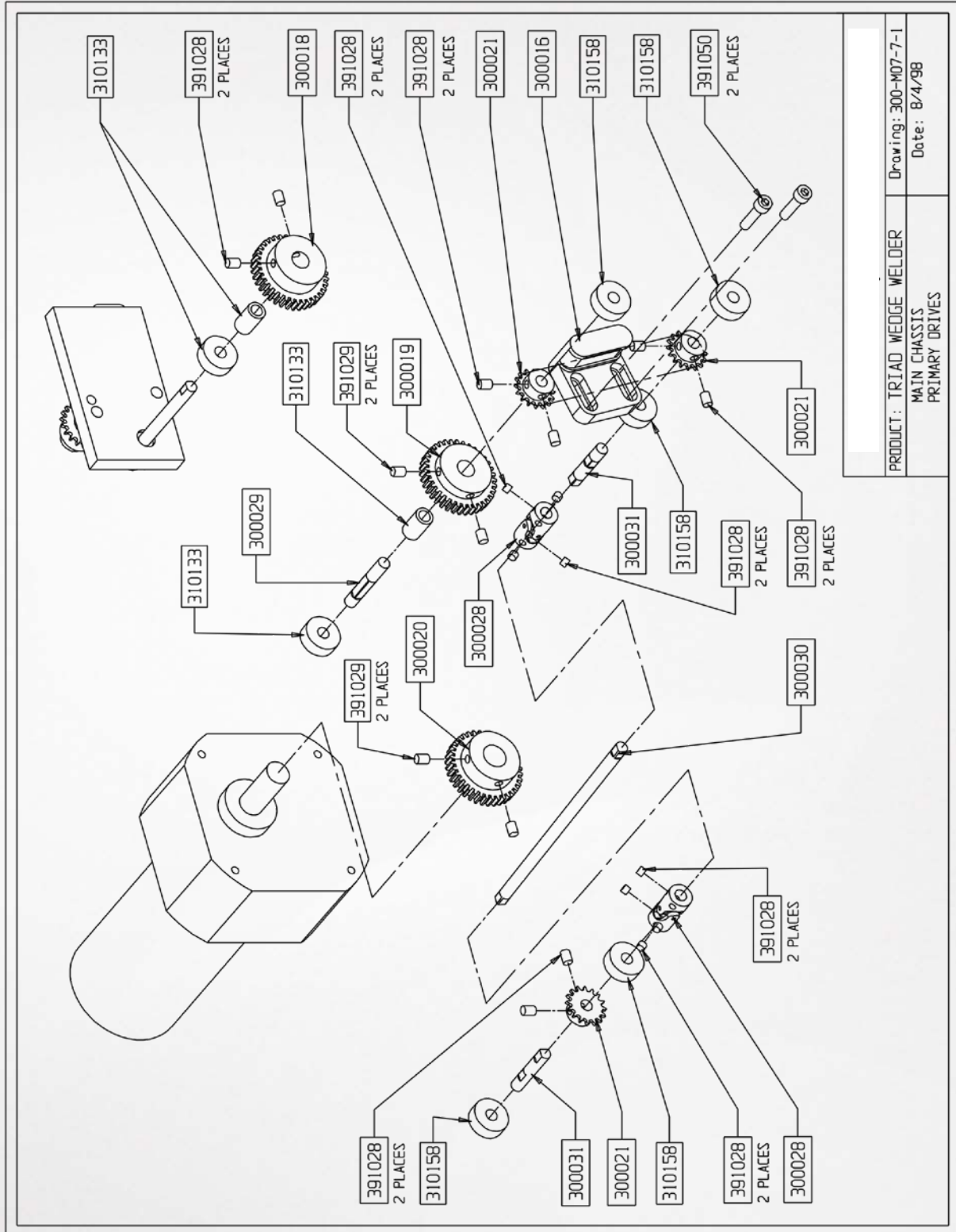
12.5 Wedge Control System & Upper Drive Upper Roller Drive



12.5 Wedge Control System & Upper Drive Upper Roller Drive

Drawing 300-M07-5-3	
Part #	Description
392012	Dowel Pin .125x.500
300072	Upper Roller Arm Lift Mount
391033	8-32x1.00 818ss SHCS
391051	10-32x.75 818ss SHCS
392025	#10 Washer
310126	Pinch Roller 1.50 (std.)
310128	Needle Brng .687x.500x.625
300024	Upper Roller Final Drive Shaft
391034	8-32x2.00 818ss SHCS
310159	Brng .875x.375x.28
391028	8-32x.25 818ss SS
300021	Sprocket Std. .1475 pitch x 16 tooth
300076	Upper Final Chain Tension Block
310135	Chain
310134	Link
391031	8-32x.625 818ss SHCS
300077	Upper Final Chain Rub Block
300023	Upper Roller Primary Shaft
310158	Brng .75x.25x.28
391063	10-32x1.00 818ss FHCS
300071	Upper Roller Arm Chain Cover
300025	Upper Roller Layshaft Support
300022	Upper Roller Layshaft
320024	Needle Brng .500x.312x.438
392040	5/16x.500 818ss SHSB
300027	Upper Primary Chain Tensioner
300017	Upper Primary Chain Idler Sprocket
300026	Upper Prim. Chain Tensioner Plunger
392050	Compression Spring
392051	Compression Spring
310157	Cam Roller Brng .500x.500x#10
300070	Upper Roller Arm
392080	Keyway .125x1.0

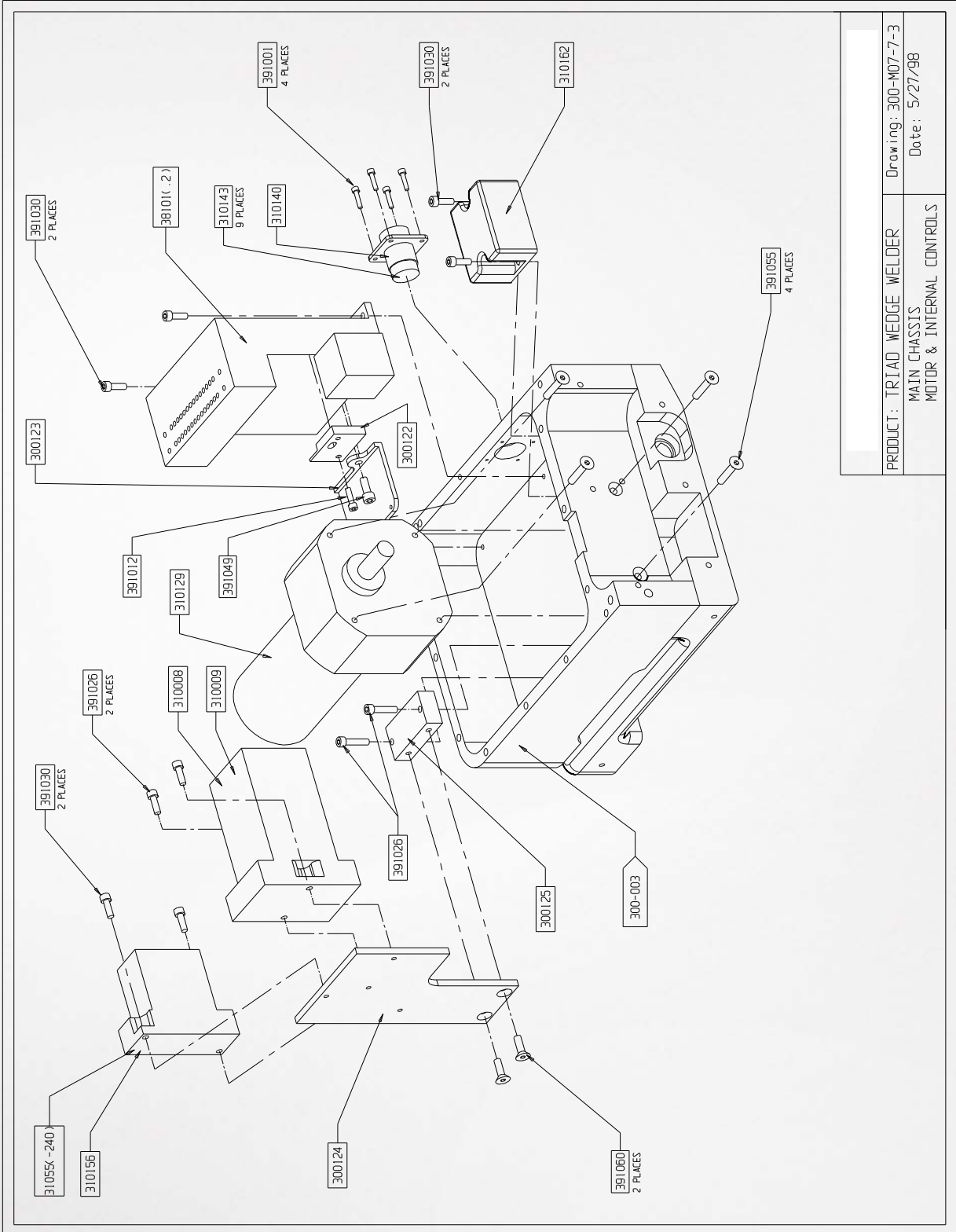
12.6 Main Chassis Primary Drives



12.6 Main Chassis Primary Drives

Drawing 300-M07-7-1	
Part #	Description
391028	8-32x.25 818ss SS
391051	10-32x.75 818ss SHCS
300018	Gear 24p 36t
300019	Gear 24p 36t
300020	Gear 24p 36t
310133	Bushing Aluminum .625
310158	Brng .75x.25x.28
300016	Lower Primary Chain Tensioner
300021	Sprocket Std. .1475 pitch x 16 tooth
300028	U-Joint Standard
300029	Lower Roller Layshaft
300030	Lower Roller Primary Main Shaft
300031	Lower Roller Primary Stub Shaft

12.7 Main Chassis Motor and Internal Controls



PRODUCT: TRIAD WEDGE WELDER MAIN CHASSIS MOTOR & INTERNAL CONTROLS	Drawing: 300-M07-7-3 Date: 5/27/98
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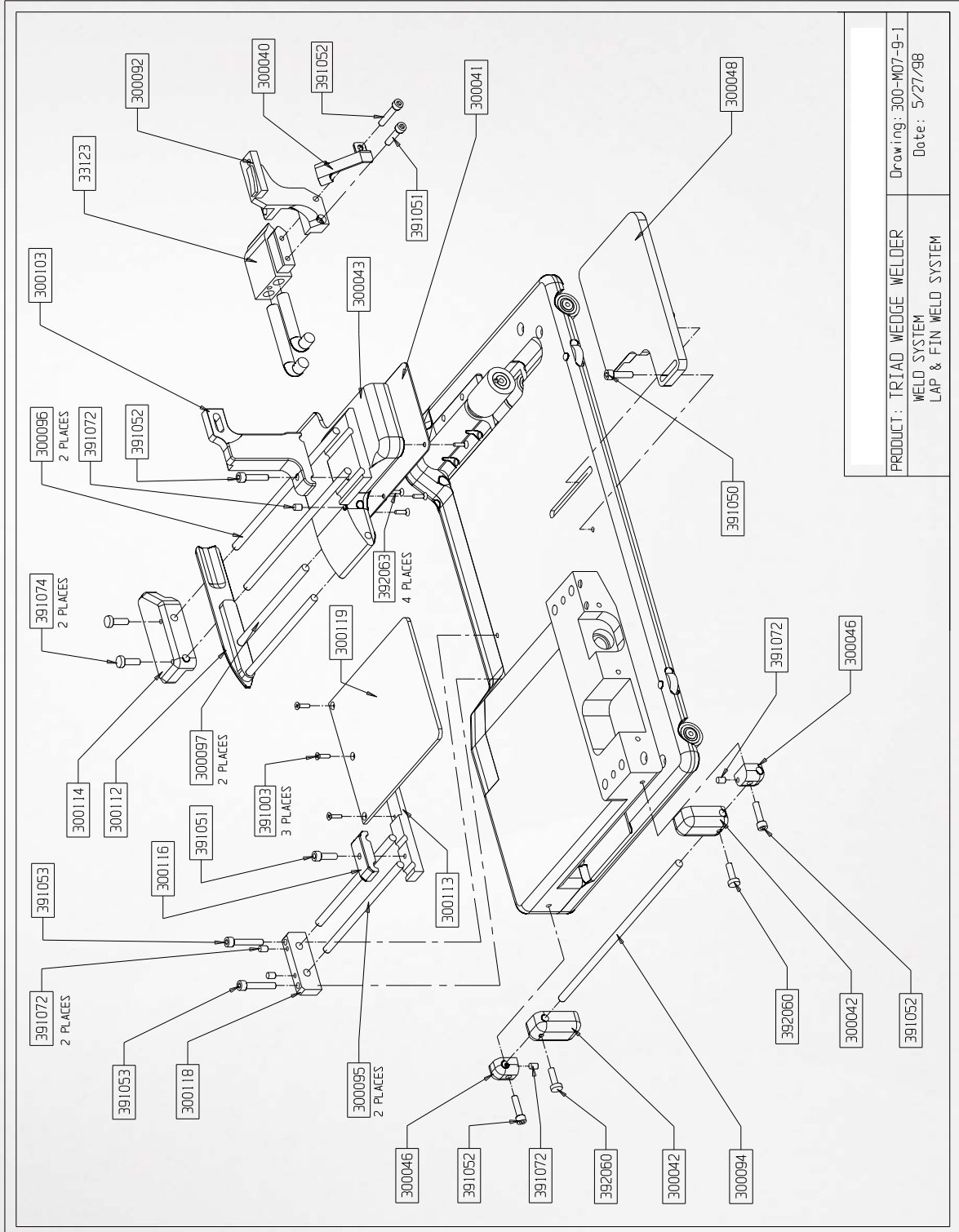
12.7 Main Chassis Motor and Internal Controls

Drawing 300-M07-7-3	
Part #	Description
391030	8-32x.500 818ss SHCS
391001	4-40x.500 818ss SHCS
391012	6-32x.500 818ss SHCS
391049	10-32x.500 818ss SHCS
391026	8-32x.75 818ss SHCS
391060	10-32x.500 818ss FHCS
391062	10-32x.875 818ss FHCS
300124	Over-Temp Control Panel
31055(-240)	Over-Temperature Contact Relay (120V/240V)
310156	Over-Temp Relay Base
310008	Over-Temperature Control
310009	Over-Temp Control Base
310129	Drive Motor
300122	Motor Control Soliniod Mount
300123	Motor Control Resistor Mount 220V
38101(.2)	Motor Control (110V/220V)
310140	A.M.P. Circular Conector Female
310143	A.M.P. Conector Pins Female
310162	Solid State Relay
300125	Over-Temp Control Panel Mount Foot

12.8 Main Chassis Assembly

Drawing 300-M07-7-5	
Part #	Description
391055	10-32x2.75 818ss SHCS
391050	10-32x.625 818ss SHCS
392006	Dowel Pin .250x.750
391053	10-32x1.00 818ss SHCS
300003	Chassis Motor Housing
300004	Chassis Control Housing
300006	Chassis Primary Drive Cover
300002	Chassis Housing
300089	Wege Tensioner Upper Mount
391091	5/16-18x.875 818ss SHCS
391092	5/16-18x1.25 818ss SHCS
391071	10-32x.25 818ss BHCS

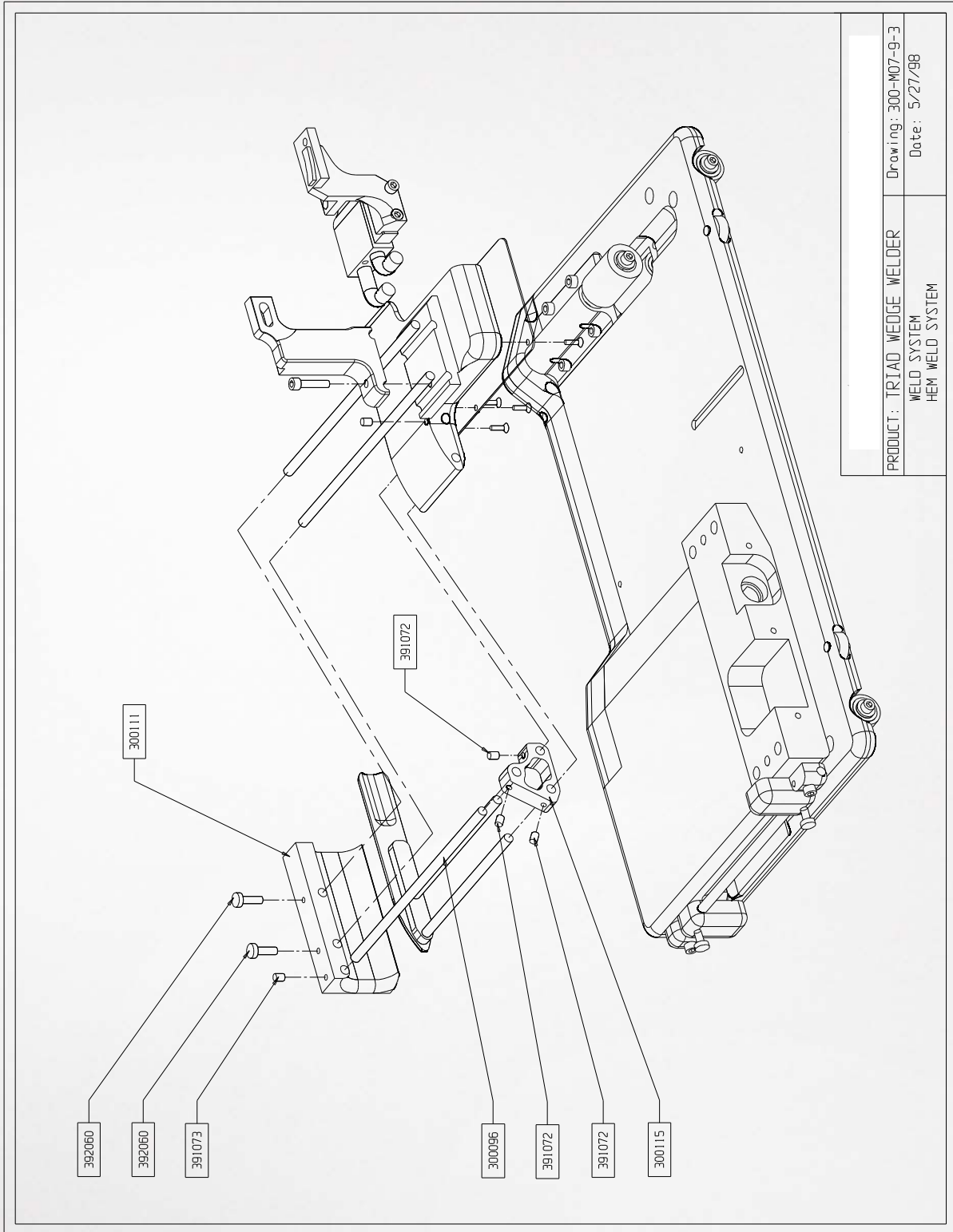
12.9 Lap and Fin Weld System



12.9 Lap and Fin Weld System

Drawing 300-M08-8-1	
Part #	Description
391054	10-32x1.75 818ss SHCS
391081	1/4-20x1.00 818ss SHCS
310149	Top Cover Handle
310148	Top Cover Handle
310147	Top Cover Handle
320022	Strain Relief
300005	Chassis Control Housing Top Cover
392078	Pinch Roller Tension Knob
300078	Upper Tensioner Knob Stop

12.10 Hem Weld System

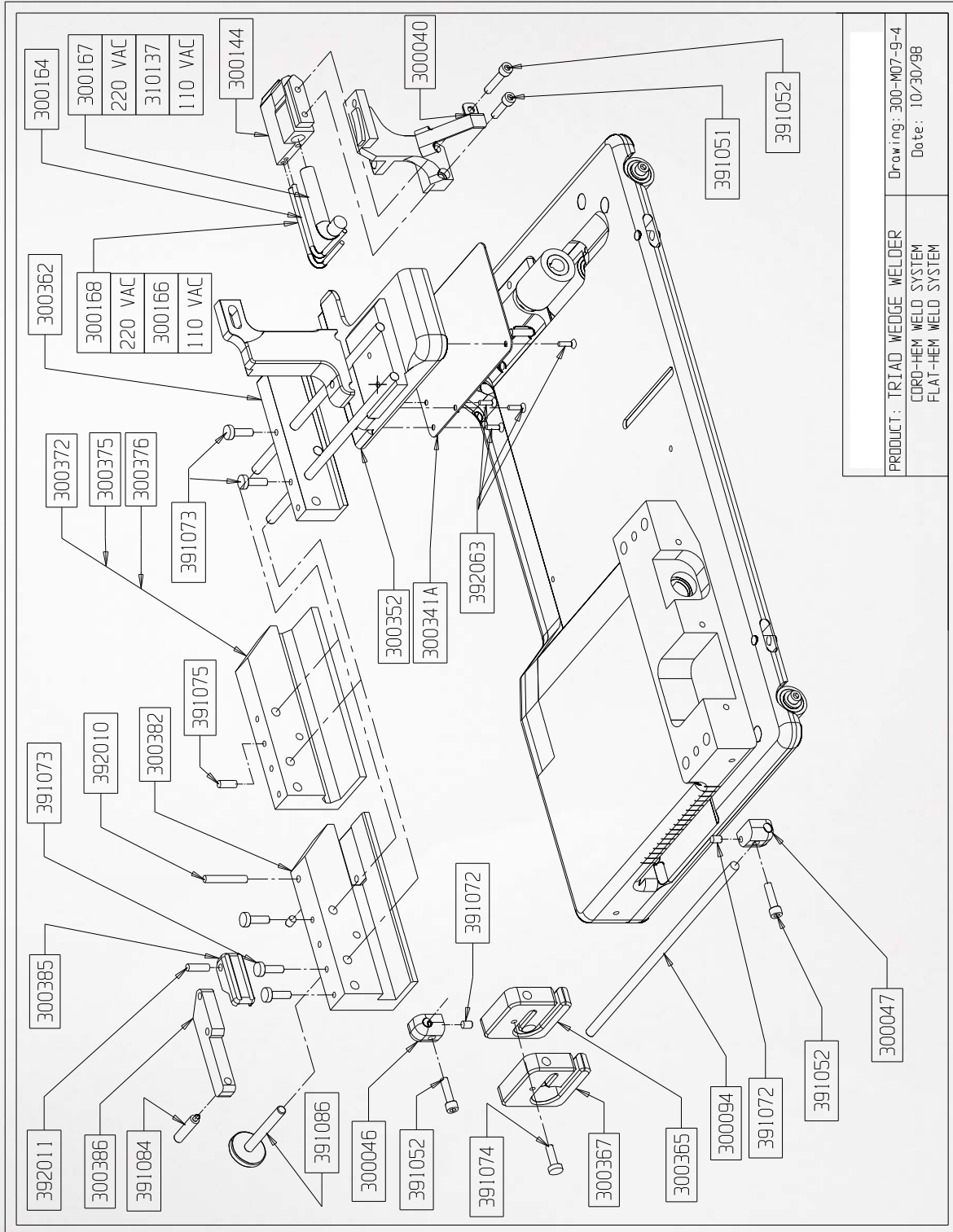


PRODUCT: TRIAD WEDGE WELDER WELD SYSTEM HEM WELD SYSTEM	Drawing: 300-M07-9-3 Date: 5/27/98
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12.10 Hem Weld System

<i>Drawing 300-M07-9-3</i>	
Part #	Title
391072	10-32x.25 818ss SS
392060	10-32x.625 303ss Thmb
300111	Hem Weld Outer Guide
300115	Hem Inner/Outer Guide Link
300096	Hem Outer Guide Retainer Rod
391073	10-32x.500 818ss SS

12.11 Cord/Flat HemWeld System



PRODUCT: TRIAD WEDGE WELDER
 CORD-HEM WELD SYSTEM
 FLAT-HEM WELD SYSTEM

Drawing: 300-M07-9-4
 Date: 10/30/98

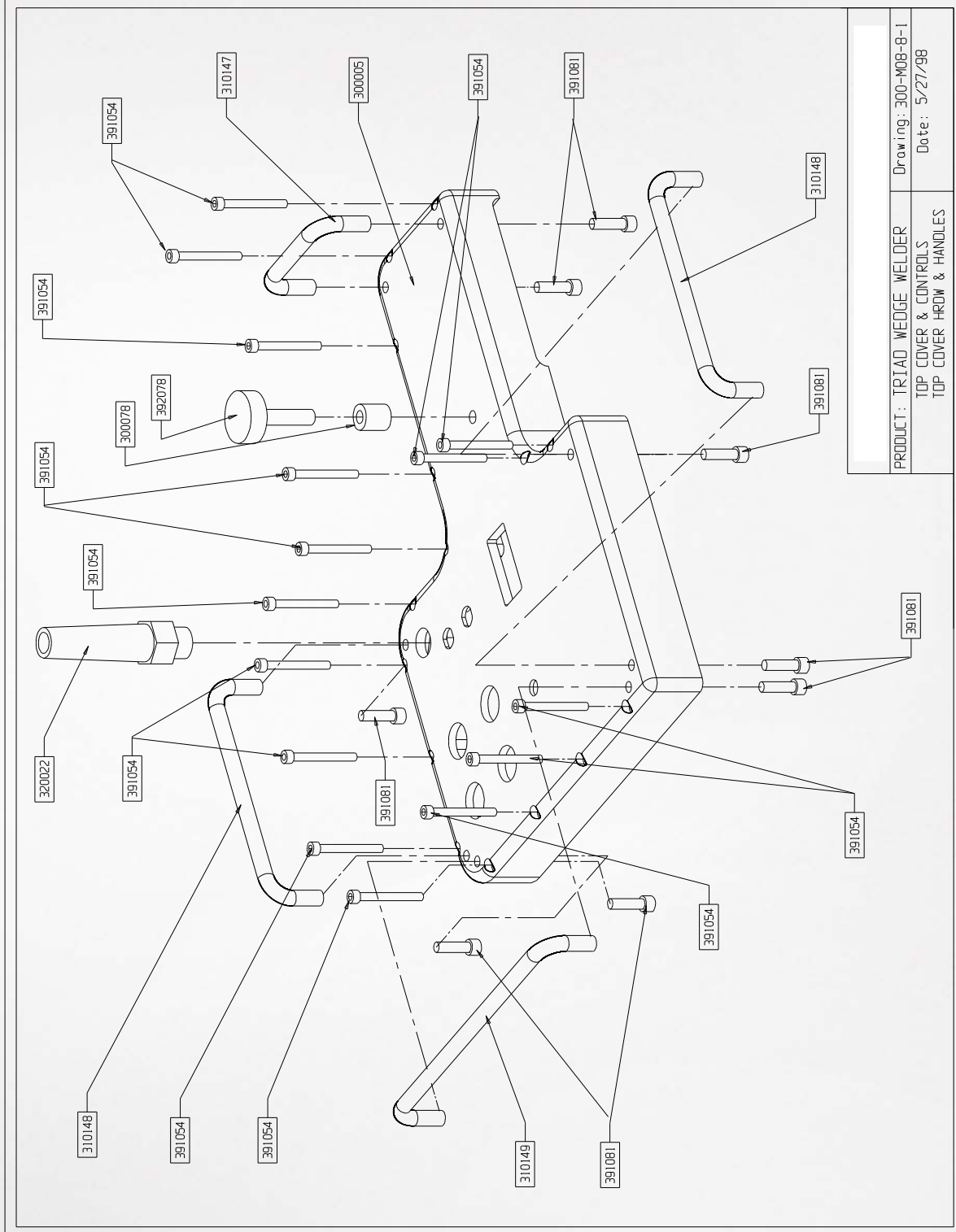
12.11 Cord/Flat HemWeld System

Drawing 300-M07-9-4	
Part #	Title
300352	Cord-Hem .25 Wedge Hsg 1.00 lp
300362	Cord-Hem Out/Top Gd .750x.080
300365	Cord-Hem Front Mat Gd 3/8
300367	Cord-Hem Front Mat Gd 3/8 & Lager
300372	Cord-Hem Out/Btm Gd 1.0x1/8-3/8
300375	Cord-Hem .500 Out/Btm Gd 1.00 lp
300376	Cord-Hem .625 Out/Btm Gd 1.00 lp
300144	Cord-Hem Hot Wedge 1.00
391086	Thumb Screw 1.00 Head
300341A	Wedge Housing Bottom Cover

12.12 Tube Guide System

Drawing 300-M07-9-6	
Part #	Title
300330	Tube Weld Right Rear Retainer Mount
300331	Tube Weld Left Rear Retainer Mount
300332	Tube Weld Top Edge Guide Mount
300333	Tube Weld Top Edge Guide
300334	Tube Weld Right Front Retainer Mount
300335	Tube Weld Left Edge Guide 4.00
300336	Tube Weld Left Edge Guide 7.50
300337	Tube Weld Middle Bottom Edge Guide
300338	Tube Weld Mid. L/R/Btm Edge Gd Mount
300339	Tube Weld Right Edge Guide
300340	Tube Weld Guide Retainer Rods <7.50
300341	Tube Weld Left Front Retainer Mount
300342	Tube Weld Guide Retainer Rods <4.00
300343	Tube Weld Front Bottom Material Tray
300344	Tube Weld Top Edge Guide Frame
392062	4-40x.750 818ss FHMS
391072	10-32x.25 818ss SS
392060	10-32x.625 303ss Thmb
392061	4-40x.1875 818ss FHMS
391002	4-40x.375 FHMS
392064	10-32x.375 303ssThmb
392065	10-32x1.875 818ss SHCS
392066	10-32x1.125 818ss SHCS

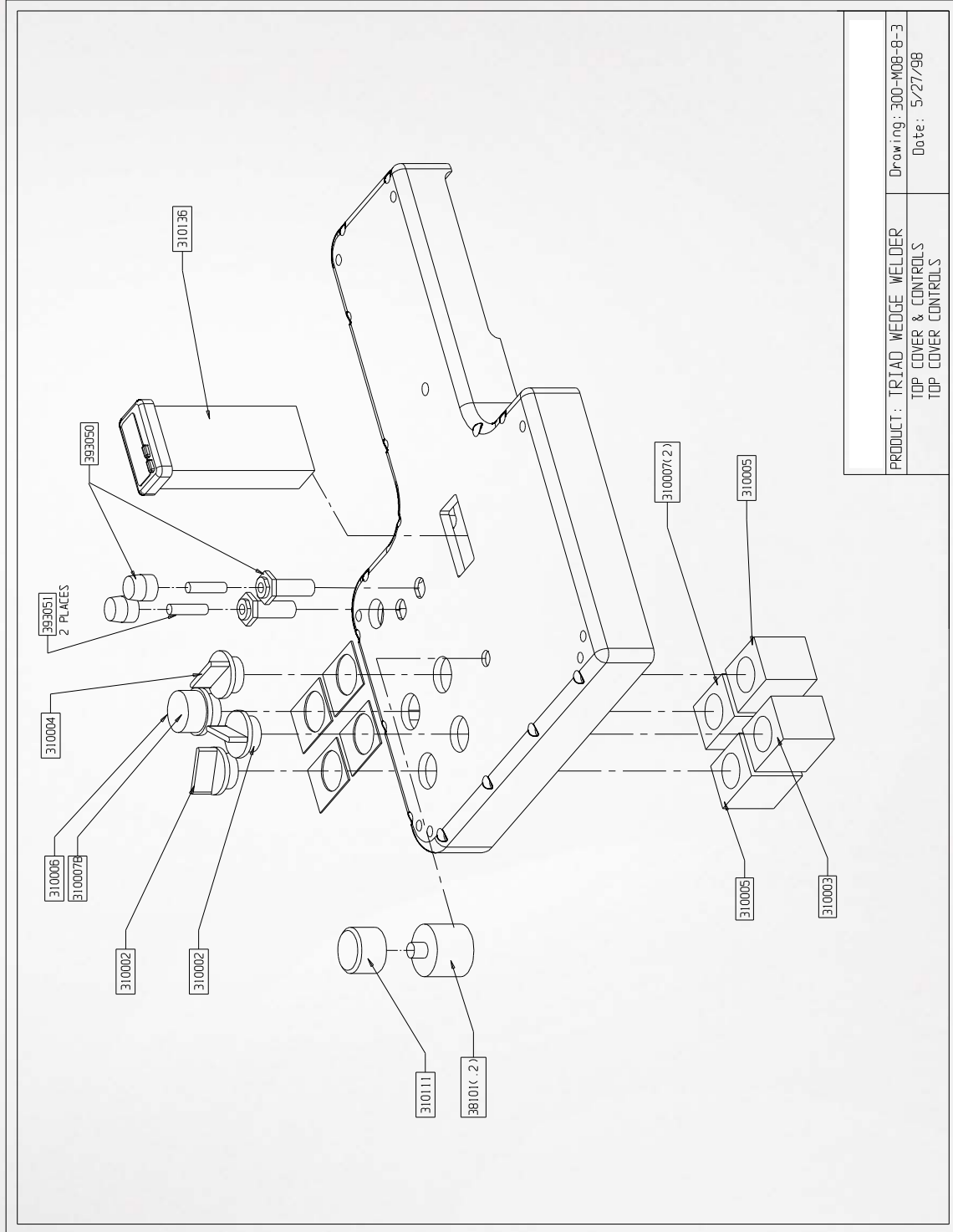
12.13 Top Cover Hem & Handles



12.13 Top Cover Hem & Handles

Drawing 300-M08-8-1	
Part #	Description
391054	10-32x1.75 818ss SHCS
391081	1/4-20x1.00 818ss SHCS
310149	Top Cover Handle
310148	Top Cover Handle
310147	Top Cover Handle
320022	Strain Relief
300005	Chassis Control Housing Top Cover
392078	Pinch Roller Tension Knob
300078	Upper Tensioner Knob Stop

12.14 Top Cover Controls



12.14 Top Cover Controls

Drawing 300-M08-8-3	
Part #	Description
310003	Contact n/o single contact
310002	Selector Switch 2 pos
310004	Selector Switch 3 pos
393050	Fuse Holder
310136	Main Temperature Control
38101(.2)	Speed Control Potentiometer (110V/220V)
310111	Speed Control Knob
310006	Indicator Lamp Green Lense
310007(2)	Indicator Lamp Base (110V/120V)
310007B	Indicator Lamp Bulb
310005	Contact n/o double contact
393051	1/2 amp Fuse

13.0 Commonly Used Parts

300-039A	Wedge Heater Lead Bracket
300-130	Chain Rub Bottom/Rear
300-131	Chain Rub - Top/Rear
300-132	Chain Tensioner - Bottom/Front
300-133	Chain Rub - Top/Front
300-220C	Lower Primary Chain (10")
300-221C	Lower Final Chain (26")
300-222C	Upper Final Chain (17")
310-134	.1475 Master Link (each)
310-124	Drive Roller w/Bearing
310-125	Under Carriage Roller w/Bearing
300-282	Thermal Tape Lower Tape Guide (Torlon)
300-380	1/2" (12mm) Pressure Roller Spacer (each)
310126.1	1" (25mm) Silicone Roller (each)
310-126	1-1/2" (38mm) Silicone Roller (each)
310-1262	2" (51mm) Silicone Roller (each)
391-050	5/8" Screw for 2" Pressure Roller + New 1" Hem Wedge (33-102 & 33-102.2)
391-051	3/4" Screw for Holding Wedge to Hanger (Short)
391-052	7/8" Screw for Holding Wedge to Hanger (Long)
391-070	3/8" Button Screw for Pressure Roller
392-025	#10 Flat Washer for Pressure Roller
392-080	11-8SS 1/8" Key Bar Stock
310-109	120/240V Motor Controller
310-008	Overtemp Control 120V
CWE3.1	Temp Controller, Easy Zone
392-040	5/16" x 1/2" Shoulder Bolt (for CWE3.1)
392-055	Fix Force Gas Spring 20#
392-056	Metal End for Gas Spring
392-058	Safety Clip for Gas Spring
392-035	3/8 x 5/8 x 0.062" (1/16") (1.59mm) Arbor Shim
392-036	3/8 x 5/8 x 0.125" (1/8") (3.175mm) Arbor Shim
392-037	3/8 x 5/8 x 0.031" (1/32") (0.794mm) Arbor Shim
392-038	3/8 x 5/8 x 0.015" (1/64") (0.397mm) Arbor Shim
393-025	Aluminum Oxide Abrasive 1-1/2" x 12"
393-051	Electric Circuit Fuse, 250V, 5Amp
310-114	Electric Circuit Fuse, 250V, 3/4 Amp
33-200	Triad Hex Key Set
42-401B	Aluminum Brush
33-202	End User Care Package

