

ValcoMelton Gluing and ClearVision Daily Maintenance

The following tasks must be carried out at the end of every shift

Gluing - must be done for both Operator Side & Drive Side gluing heads.

From inside the folding rails there is an AUTO/MANUAL Box (Picture to right) for head cleaning, turn the switch to M you will see the Valves move from the parked position to the working position as per the below picture.





When in this position using a damp cloth wipe the nozzles clean, and remove any dried adhesive, when done press the PURGE button and make sure all nozzles fire cleanly and directly down, if not keep cleaning nozzles.

Coat the nozzles with Gardol release agent.

When finished make sure you switch the system back to the A position, (Valves move to Parked position)



DEV-016 Spray Bottle







Remove any dried adhesive around the glue head assembly by spraying with Dev-016 adhesive cleaner, let soak and wipe off the adhesive.

ClearVision Daily Maintenance



GlueChek Cameras



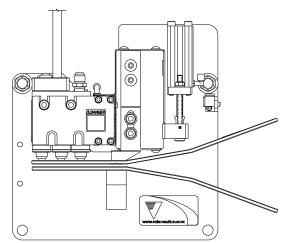
Check & Clean the Glass on both the Operator Side and Drive side GlueChek Cameras.

3-Valve Glue Station (583xx350; 583xx345)

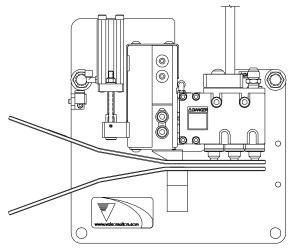
The 3-valve glue station uses individual valves to dispense glue without contacting the box. The all-electric Series 524 works with a variety of noncontact adhesives.

The station uses a laser beam to detect product, so a precise glue pattern is applied even if the board flutters during the gluing process.

The 3-valve glue station parks the Valve Tips on a sealing pad (Tipsealer) when the Feeder is stopped, keeping the nozzles from drying out. When boxes are fed again, the glue station returns to the operating position.



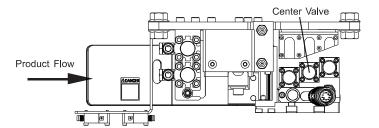
Drive Side / 4th Panel Side (583xx350)



Operator Side / Tab Side (583xx345)

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Initial Setup of Glue Application System (3NC - 524 valves) When the station is shipped, it is ready for a 4th panel (drive side) or tab (operator side) installation. The scanner is initially mounted on the arm, to view the leading edge of the sheet. The gap adjustment is set so that a single-walled product (approximately 5 mm thick) can pass through the glue station.

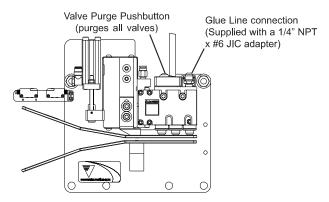


Valves (top view)

Minimal adjustments, if any, should be made during the setup process.

The Setup Process consists of the following steps:

- 1. Mount the glue station to the mounting rods.
- Connect the single-valve cable to the MCP-4, MCP-8 or VCX control.
- 3. Connect the air lines and cables to the Tipsealer Manifold Box.
- 4. Purge all air from the glue line, then connect the glue supply from the regulator to the valve manifold.
- 5. Place the Tipsealer Box in Manual Mode.
- 6. Purge the valve by activating the push button switch on the valve manifold.



Glue Line Connections and Valve Purge Pushbutton

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Initial Setup of Glue Application System (3NC - 524 valves) -Confinued

- 7. Purge adhesive through the valves until no air is present in the glue line and no air bubbles are coming from the valve. (The valves should produce an even glue flow.)
 - a. If you place your finger in the adhesive stream, near the nozzle, you will feel any air bubbles that may be in the stream pop against your finger.
- 8. Run the parent machine. Stop the machine when a product reaches the glue station.
- 9. Adjust the glue station vertically to ensure the product is level. The product should not be forced up or down when traveling through the glue station (see *3NC Adjustment*, below).



Do not remove the valves from the manifold, as the connecting wires are short and might break.

 If the leading edge of the tab is to be detected, the scanner would need to be relocated on the scanner bracket.



It is possible to mount the scanner remotely to the folding rail.

Make sure the scanner is always facing down (red on bottom and yellow indicator light on top).

11. The upper inlet guide height can be adjusted to optimize the gap for the box, and to guide the board under the nozzles properly.

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3NC Adjustment (except Reversible station)

CAUTION!

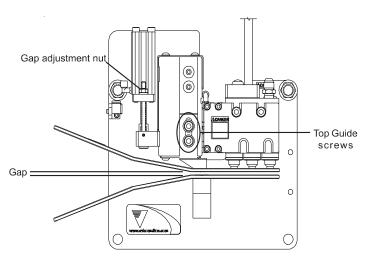


The system must be set to 'Manual' mode when adjusting the glue station.



The Bottom Guide is fixed, and should be installed level with the product line. The machine inflow guides should end just before the Boardrunner Guides.

- Set the Nozzles 3/16" (5mm) above the lower edge of the Top Guide by adjusting the manifold as follows:.
 - A. Use a 6mm hex wrench to loosen the top guide screws shown below. Adjust the top guide to move it closer to, or away from, the valves.



Manifold Adjustment

2. Modify the 'gap adjust' between the guides, using a 10mm wrench to adjust the hex nut, increasing or decreasing the gap between the upper and lower guides. Adjust the gap to slightly greater than the thickness of the thickest product.



The box should run freely between the guides, with neither bounce nor drag.

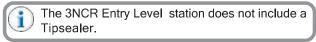
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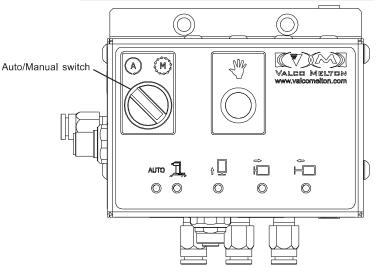
Tipsealer Adjustment

WARNING!



Always set the Tipsealer Auto/Manual switch to "Manual" before performing any station-based adjustments. If the switch is set to auto, and the scanner were to be triggered, the glue station would move to the gluing position.





Tipsealer Auto/Manual Switch on Manifold

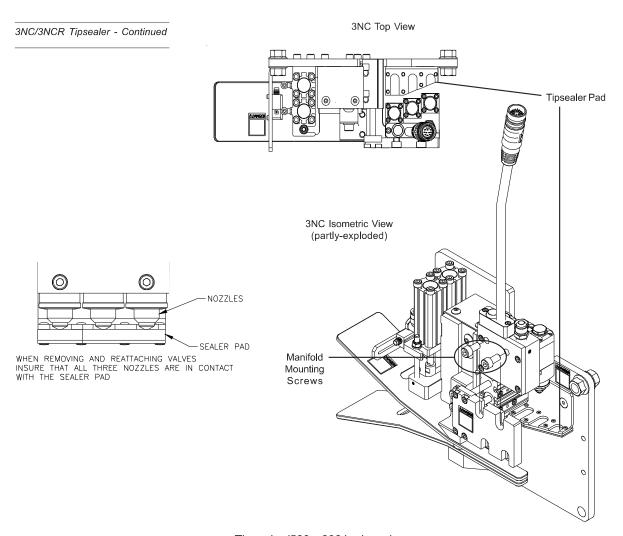
3NC/3NCR Tipsealer

When products stop feeding through the machine, the tipsealer manifold will move the valve manifold from the gluing position to the tip-sealing position, placing all three nozzle on the tip-sealing pad. The nozzles must be in contact with the pad to prevent the adhesive from drying on the nozzle.

If the nozzles are not all contacting the Tipsealer pad, adjust as follows:

- Set the system to MANUAL.
- 2. Use a 6mm hex wrench to loosen the manifold mounting screws.
- Adjust the manifold so the nozzles will be in contact with the 3. Tipsealer pad.
- Retighten the manifold mountingscrews.
- 5. Reset the system to AUTO. When the valves move to the Tipsealer pad, check to see if the nozzles are contacting the pad.
- If the nozzles still do not contact the Tipsealer, repeat the above steps until the position is correct.

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Tipsealer (583xx292 is shown)

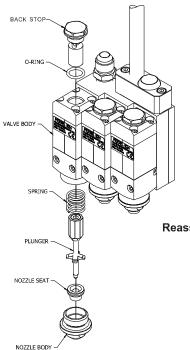
CAUTION!

The Manifold must be aligned correctly.



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524 Valve Maintenance



Disassembly

- 1 Use a 15mm wrench to loosen the Nozzle Body Assembly from the Valve Body.
- Remove the Nozzle Body Assembly (w/Nozzle Seat), Plunger Assembly and Spring from the Valve Body



If the Nozzle Seat needs to be replaced, press it out from the lower end of the Nozzle Body. If a tool is required, take care not to damage the parts.

- Remove the Spring from the large diameter end of the Plunger Assembly.
- Use a 16mm wrench to loosen the Back Stop into the Valve Body.
- 5. Unscrew and remove the Back Stop from the Valve Body.
- 6. Slide the O'Ring off of the Back Stop.

Reassembly

- Before reassembling, make sure all parts are clean and free of burrs or other debris that can cause improper operation and valve damage.
- 2. Slide the O'Ring over the Back Stop.
- 3. Thread the Back Stop into the Valve Body.
 - A. Use a 15mm wrench to tighten it completely.



If the Nozzle Seat has been removed from the Nozzle Body Assembly for replacement, insert the new Nozzle Seat into the Nozzle Body Assembly, allowing the Nozzle Seat insert to slide into the bottom of the Nozzle Body, and then use the ball end of the Plunger Assembly to gently press the Nozzle Seat into place.

- Place the Spring over the large diameter end of the Plunger Assembly.
- 5. Insert the Plunger Assembly and Spring into the Valve Body.
- Place the Nozzle Body Assembly over the ball end of the Plunger Assembly, and then thread it into the Valve Body.
 - A. Use a 15mm wrench to tighten it completely.



Do not attempt to remove the valves from the manifold. Do not soak the valve in water; use a damp cloth only.

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Cleaning the Exterior of the Valve



Never hose or steam-clean the unit. If the surrounding area is cleaned in this manner, protect the unit by covering it with plastic or other waterproof material. OTHERWISE, EQUIPMENT DAMAGE COULD OCCUR.

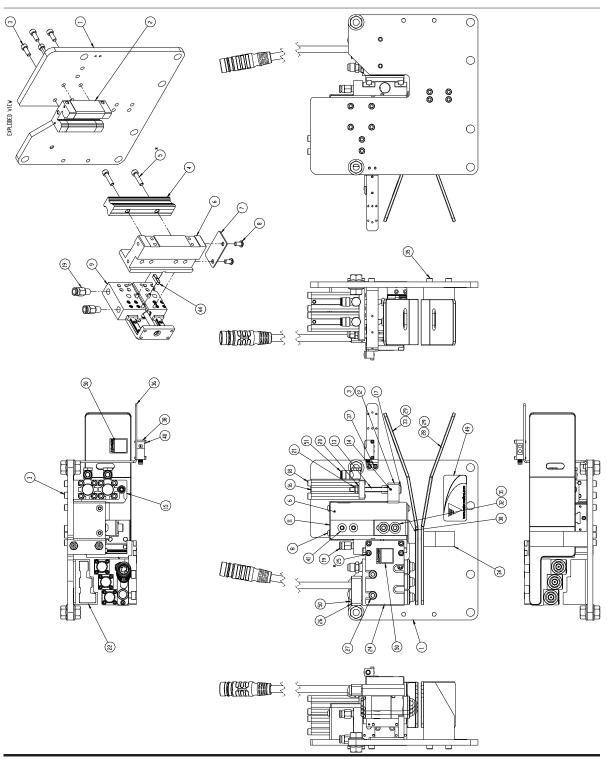
Before cleaning the valve with any type of liquid, remove the solenoid. LIQUID CAN CAUSE DAMAGE TO THE SOLENOID.

The exterior of the 524 valve needs to be kept clean. To clean the exterior of the valve, follow these steps:

- 1. Disconnect valve from system.
- 2. Using a damp cloth, clean the exterior of the valve with a mild soap-and-water solution.

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524 Glue Station, Non-Contact; 3-Valve; Drive Side (583xx350)



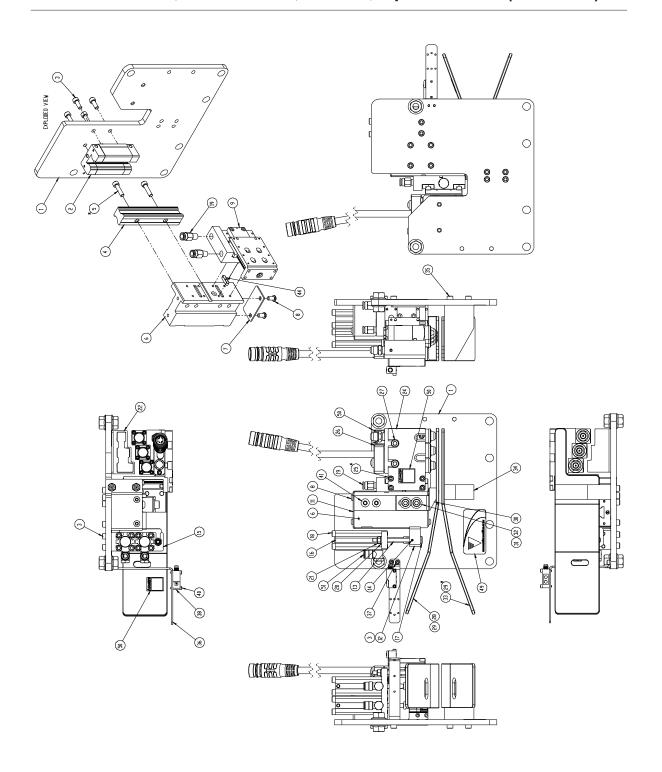
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3-Valve; Drive Side (583xx350) - Continued

UNIT	DESCRIPTION	PART #	QTY
1	PLATE BACK, 3 VALVE BOARDRUNNER	579XX528	1
2	BLOCK RUNNER	579XX540	1
3	SCREW	784XX091	8
4	RAIL GUIDE	579XX527	1
5	SCREW	798XX192	2
6	BLOCK SLIDER; 3 VA. BOARDRUNNER	579XX529	1
7	COVER, BOTTOM; 3 VA. BOARDRUNNER	579XX538	1
8	SCREW	884XX239	4
9	AIR CYLINDER ASSEMBLY	782XX383	1
11	COVER TOP 4TH PANEL	579XX523	1
12	BLOCK, ADJUSTMENT, 4TH PANEL	579XX534	1
13	ROD THREADED	579XX539	1
14	PIN; ROLL	091XX044	1
15	BRACKET CYLINDER MOUNT, 3 VA.	579XX535	1
16	CYLINDER AIR	782XX363	2
17	ADAPTER AIR CYLINDER, 3 VA. BOARDRUNNER	579XX533	2
18	SCREW	884XX234	8
19 20	CONNECTOR WASHER	799XX582	2
21	NUT	784XX183 798XX416	1
22	TIP SEALER ASSEMBLY 3NC	583XX721	1
24	PLATE, MOUNTING; 3 VA. BOARDRUNNER	579XX530	1
25	SCREW	798XX097	4
26	ASSY 3 524 VALVE MANIFOLD FOR	583XX296	1
27	SCREW	784XX442	2
28	GUIDE PRODUCT TOP, 3 VA. BOARDRUNNER	579XX531	1
29	SCREW	884XX236	4
30	BLOCK GUIDE ADJUSTMENT TOP 4TH PANEL	579XX536	1
31	SCREW	784XX993	2
32	WASHER	784XX097	2
33	GUIDE PRODUCT BOTTOM, 3 VA. BOARDRUNNER	579XX532	1
34	BLOCK GUIDE	579XX537	1
35	SCREW	784XX426	4
36	SCANNER BRACKET, 3 SCANNERS	583XX276	1
37	SCREW	784XX051	2
38	SENSOR ASSY	280XX290	1
40	SCREW	798XX099	2
41	SCREW	784XX501	2
42	NUT	798XX699	4
43	BAR RD SLIDER	567XX032	2
44	KEY STOCK SQUARE	763XX328	1
49	LABEL-MARNING REPLETTERING ON WHITE	782XX234	1
50	LABEL; WARNING, RED LETTERING ON WHITE	781XX430	2
51	BOLT BANJO FITTING	799XX781	2
52	FITTING	799XX678	1
53	ILLUSTRATION DRAWING; TRI-VALVE	999XC583-21	1

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524 Glue Station, Non-Contact; 3-Valve; Operator Side (583xx345)

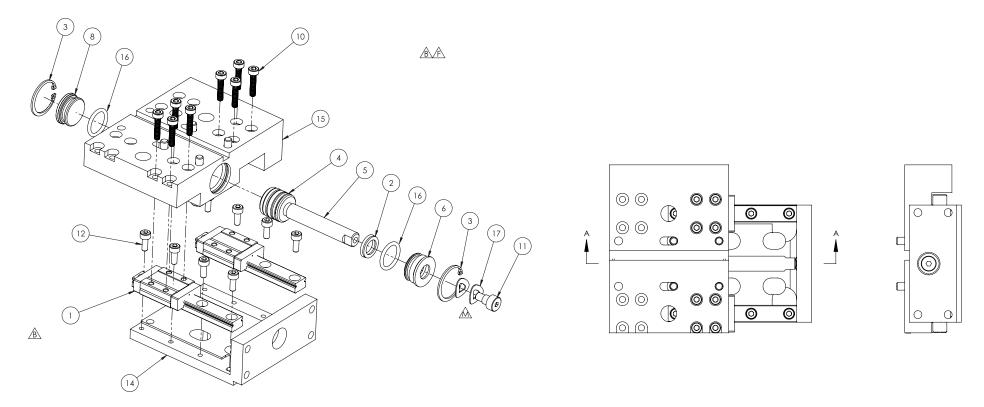


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3-Valve; Operator Side (583xx345) - Continued

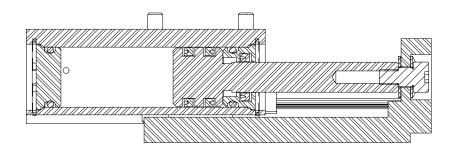
UNIT	DESCRIPTION	PART#	QTY
1	PLATE BACK, 3 VALVE BOARDRUNNER	579XX528	1
2	BLOCK RUNNER	579XX540	1
3	SCREW	784XX091	8
4	RAIL GUIDE	579XX527	1
5	SCREW	798XX192	2
6	BLOCK SLIDER; 3 VA. BOARDRUNNER	579XX529	1
7	COVER, BOTTOM; 3 VA. BOARDRUNNER	579XX538	1
8	SCREW	884XX239	4
9	AIR CYLINDER ASSEMBLY W/LINEAR BEARING	782XX382	1
11	COVER, TOP: 3 VALVE BOARDRUNNER	579XX526	1
12	BLOCK, ADJUSTMENT 3 VALVE BOARDRUNNER	579XX524	1
13	ROD THREADED	579XX539	1
14	PIN; ROLL	091XX044	1
15	BRACKET CYLINDER MOUNT, 3 VA.	579XX535	1
16	CYLINDER AIR	782XX363	2
17	ADAPTER AIR CYLINDER, 3 VA. BOARDRUNNER	579XX533	2
18	SCREW	884XX234	8
19	CONNECTOR	799XX582	2
20	WASHER	784XX183	1
21	NUT	798XX416	1
22	TIP SEALER ASSEMBLY 3NC	583XX721	1
24	PLATE, MOUNTING; 3 VA. BOARDRUNNER	579XX530	1
25	SCREW	798XX097	4
26	ASSY 3 524 VALVE MANIFOLD FOR	583XX296	1
27	SCREW	784XX442	2
28	GUIDE PRODUCT BOTTOM, 3 VA. BOARDRUNNER	579XX532	1
29	SCREW	884XX236	4
30	BLOCK, GUIDE ADJUSTMENT, 3 VALVE	579XX525	1
31	SCREW	784XX993	2
32	WASHER	784XX097	2
33	GUIDE PRODUCT TOP, 3 VA. BOARDRUNNER	579XX531	1
34	BLOCK GUIDE MOUNTING BOTTOM	579XX537	1
35	SCREW	784XX426	4
36	SCANNER BRACKET, 3 SCANNERS	583XX276	1
37	SCREW	784XX051	2
38	SENSOR ASSY	280XX290	1
40	SCREW	798XX099	2
41	SCREW	784XX501	2
42	NUT	798XX699	4
43	BAR RD SLIDER	567XX032	2
44	KEY STOCK SQUARE	763XX328	1
49	LABEL-CDS ENCLOSURE	782XX234	1
50	LABEL; WARNING, RED LETTERING ON WHITE	781XX430	2
51	BOLT BANJO FITTING	799XX781	2
52	FITTING	799XX678	1
53	ILLUSTRATION DRAWING; TRI-VALVE	999XC583-21	1

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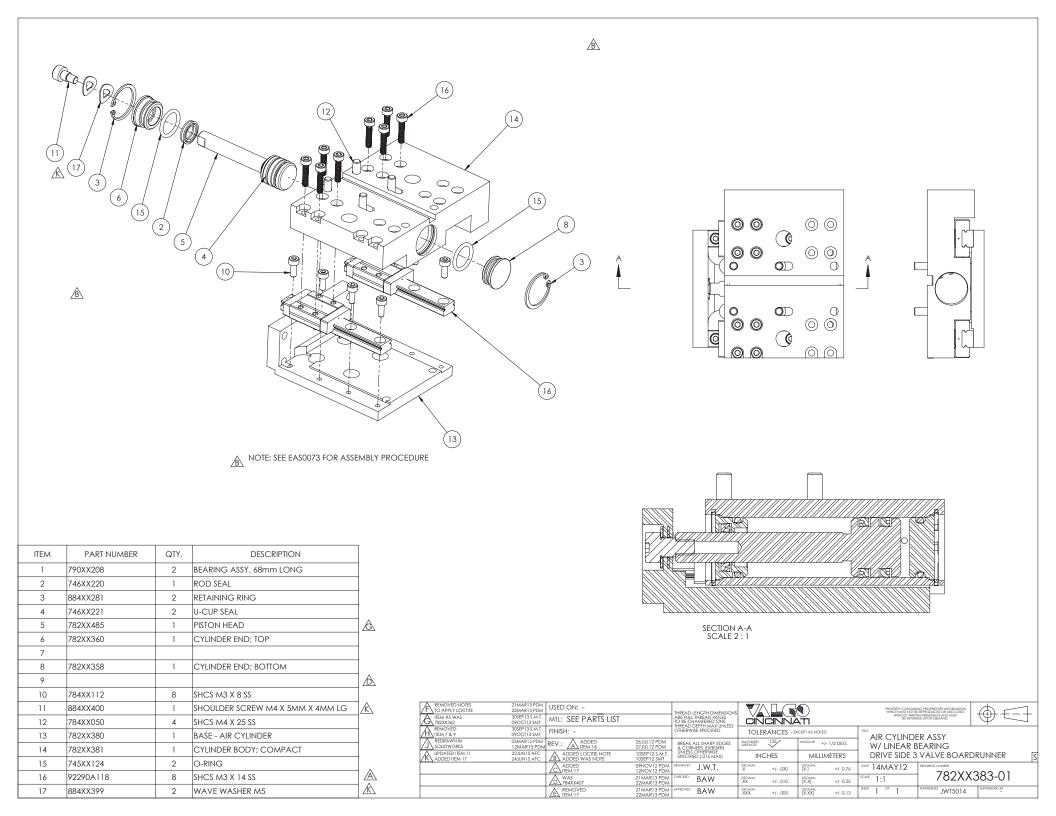
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/B\ /k\	NOTE:	SEE E/	4S0073	FOR	ASSEMBLY	PROCEDUR	SE.

ITEM	PART NUMBER	QTY	DESCRIPTION	
1	790XX208	2	BEARING ASSY, 68mm LG	
2	746XX220	1	ROD SEAL	
3	884XX281	2	RETAINING RING	
4	746XX221	2	U-CUP SEAL	Π,
5	782XX485	1	PISTON HEAD	
6	782XX360	1	CYLINDER END; TOP	
7				
8	782XX358	1	CYLINDER END; BOTTOM	٦,
9				
10	784XX546	8	SHCS M3 X 14 SS	
11	884XX400	1	SHOULDER SCREW M4 X 5MM X 4MM LG	$\exists M$
12	784XX112	8	SHCS M3 X 8 SS	
13	784XX050	4	SHCS M4 X 25 SS	\Box_{λ}
14	782XX380	1	BASE - AIR CYLINDER	A
15	782XX381	1	CYLINDER BODY; COMPACT	
16	745XX124	2	O-RING	
17	884XX399	2	WAVE WASHER M5	$\neg \triangle$

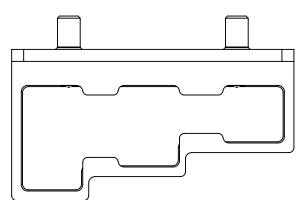


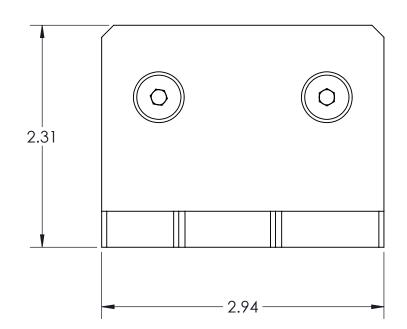
SECTION A-A SCALE 2:1

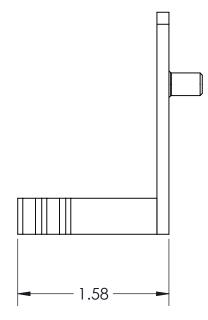
	REMOVED NOTES TO APPLY LOCTITE	21MAR13 PDM 22 MAR13 PDM	USED ON: -		THREAD I	ENGTH DIMENSIONS	₹ /_^				PROPERTY CONTAIN WHICH MUST NOT B	ING PROPRETARY INFORMATION E REPRODUCED OR DISCLOSED EN PERMISSION AND MUST NED UPON DEMAND.	A 1
8	ITEM #5 WAS	30SEP13 S.M.T. 09OCT13 SMT	MTL: SEE PARTS LIST		ARE FULL TO BE CH	THREAD HOLES IAMFERED ONE DEPTH MAX UNLESS			Ϋ́I		WITHOUT WRITE BE RETURN	EN PERMISSION AND MUST NED UPON DEMAND.	$\Psi =$
<u>A</u>	REMOVED ITEMS 7 & 9	30SEP13 S.M.T. 09OCT13 SMT	FINISH: -		OTHERWI	SE SPECIFIED	TOLER	ances - ex	CEPT AS NOTED		AIR CYLINDI	- Υ22 Δ Θ	
	REDRAWN IN SOLIDWORKS	02MAR15 PDM 12MAR15 PDM	REV.: ADDED	26JUL12 PDM 27JUL12 PDM	& CORI	ALL SHARP EDGES NERS (DEBURR)	MACHINED SURFACES	125/	ANGULAR +/-	1/2 DEG.	W/ LINEAR E		
\mathbb{A}		07MAY15 JWT 08MAY15 JWT	ADDED LOCTITE NOTE ADDED EAS NOTE	10SEP12 SMT 10SEP12 SMT	SPECIFI	OTHERWISE ED (.015 MAX)	INC	HES	MILLIM	ETERS	OPER. SIDE 3	VALVE BOARI	DRUNNER [
Λ	UPDATED DRAWING	07MAY15 JWT 08MAY15 JWT	ADDED ITEM 17	09NOV12 PDM 12NOV12 PDM	DRAWN BY	J.W.T.	DECIMAL "X	+/030	DECIMAL [X,]	+/- 0.76	DATE 08JUN12	DRAWING NUMBER	200 01
Ψ	UPDATED ITEM 11 ADDED ITEM 17	18JUN15 AFC 24JUN15 AFC	₩AS 784XX407	21MAR13 PDM 22MAR13 PDM	CHECKED	BAW	JECIMAL JXX	+/010	DECIMAL [X,X]	+/- 0.25	SCALE 1:1	/82XX	382-01
W	ITEM WAS 92290A118	16NOV16 COH 03JAN17 EMR	REMOVED ITEM 17	21MAR13 PDM 22MAR13 PDM	APPROVED	BAW	DECIMAL .XXX	+/005	DECIMAL [X,XX]	+/- 0,13	SHEET 1 OF 1	SUPERSEDES JWT5058	SUPERSEDED BY

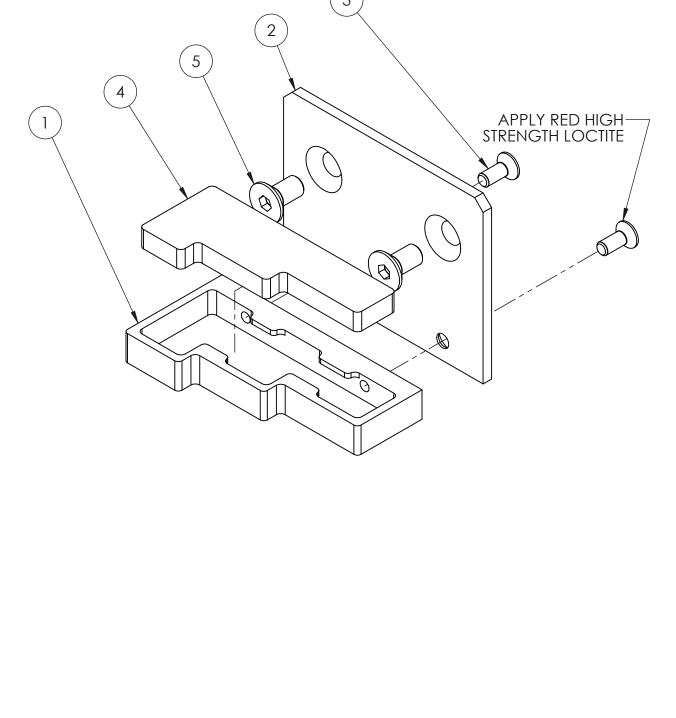


ITEM	PART NUMBER	QTY.	Description
1	583XX718	1	CASE - TIP SEALER PAD
2	583XX717	1	BRACKET, PAD TOP
3	784XX190	2	FHSS M4 X 10 SS
4	583XX719	1	PAD
5	784XX683	2	FHSS M6 X 12 SS

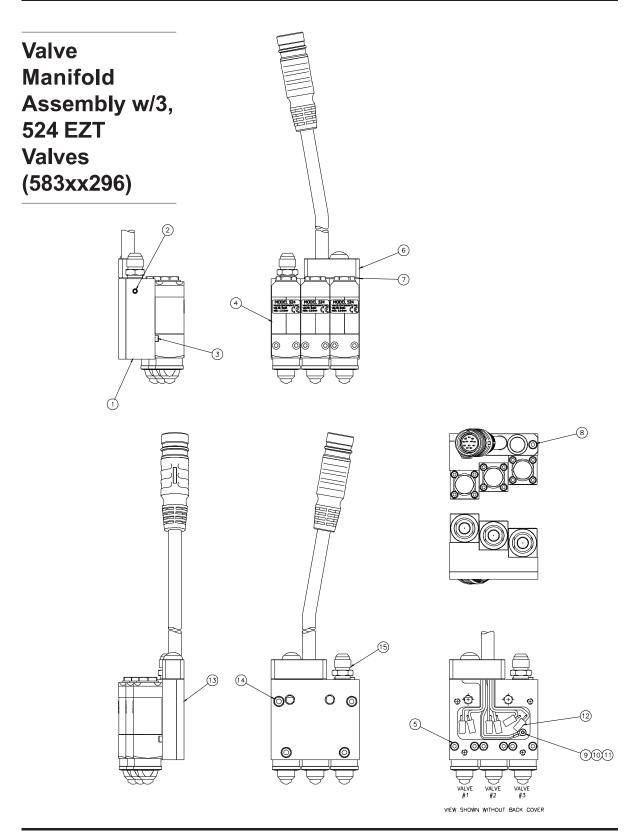








USED ON: - MTL: SEE PARTS LIST	THREAD LENGTH DIMENSIONS ARE FULL THREAD HOLES TO BE CHAMFERED ONE THREAD DEPTH MAX UNLESS			WHICH MUST NOT B WITHOUT WRITT	ING PROPRIETARY INFORMATION IE REPRODUCED OR DISCLOSED IEN PERMISSION AND MUST NED UPON DEMAND.	
FINISH: -	OTHERWISE SPECIFIED			TIP SEALER ASSEMBLY		
REV.: A ITEM 3 WAS 26AUG16 TN 26SEP16 BAV	& CORNERS (DEBURR)	MACHINED 125 SURFACES 125	ANGULAR +/- 1/2 DEG.	3NC BOARDRUNNER		
	UNLESS OTHERWISE SPECIFIED (.015 MAX)	INCHES	MILLIMETERS	-		S
	DRAWN BY AFC	DECIMAL .X +/030	DECIMAL [X,] +/- 0,76	DATE 26APR16	DRAWING NUMBER	701.01
	CHECKED AFC	DECIMAL .XX +/010	DECIMAL [X,X] +/- 0,25	SCALE 1:1	583XX	721-01
	APPROVED AFC	DECIMAL .XXX +/005	DECIMAL [X,XX] +/- 0,13	SHEET 1 OF 1	SUPERSEDES AFC0541	SUPERSEDED BY

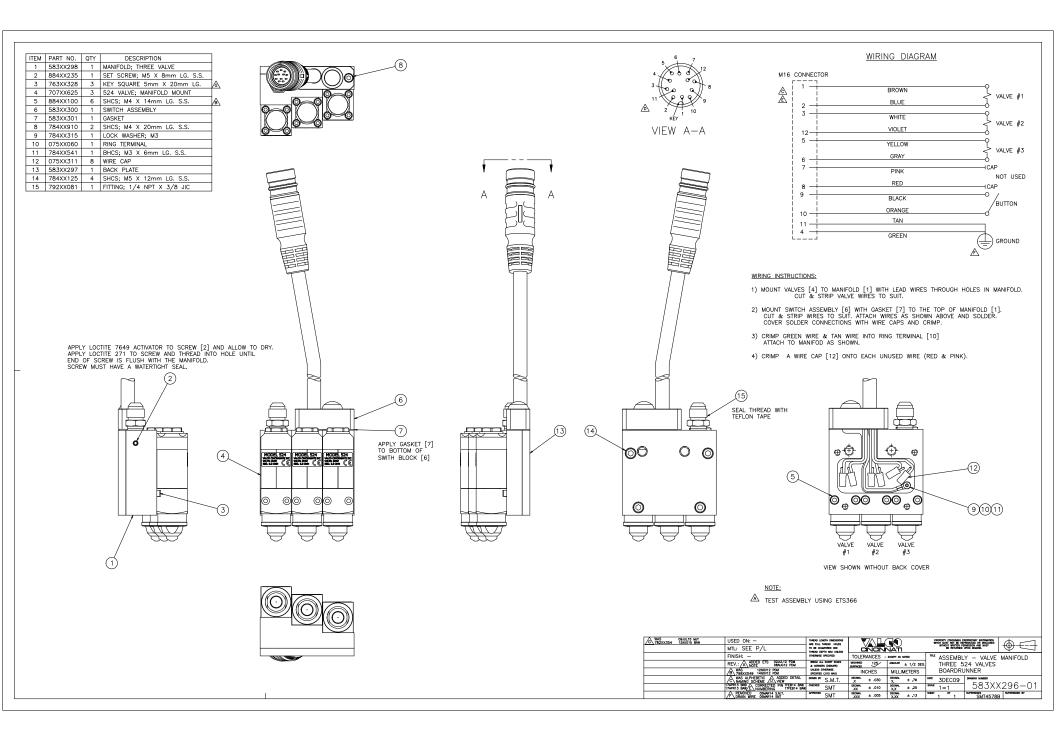


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Valve Manifold Assembly w/3, 524 EZT Valves (583xx296) - Continued

UNIT	DESCRIPTION	PART#	QTY
1	MANIFOLD, GLUE, 3 534 VALVE	583XX298	1
2	SET SCREW M5 X 8 SS	884XX235	1
3	KEY STOCK SQUARE 5MM X 20MM LG	763XX328	3
4	ASSEMBLY 524EZT MANIFOLD MOUNT	707XX625	3
5	SHCS M4 X 14 SS.	884XX100	6
6	ASSEMBLY PURGE CONNECTOR BLOCK	583XX300	1
7	GASKET, PURGE BLOCK	583XX301	1
8	SHCS M4 X 20MM LG S.S.	784XX910	2
9	LOCK WASHER M3	784XX315	1
10	WIRE TERMINAL; RING 213909	075XX060	1
11	BHCS M3 X 6 SS	784XX541	1
12	SPARE WIRE CAP; 16-14AWG	075XX311	8
13	PLATE BACK	583XX297	1
14	SHCS M5 X 12 SS	784XX125	4
15	CONNECTOR 3/8 JIC X 1/4 NPT SS	792XX081	1

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Components Tri-Val	ve Non-0	Contact BoardRur	nner® - 524 Glue Valve - 707xx625
	ITEM	PN	DESCRIPTION
3	1	707XX626	ASSEMBLY COIL 524 VALVE
	2	745XX340	O-RING
2)	3	707XX609	PLUG, STOP
9	4	783XX042	SPRING
8	5	707XX529	PLUNGER ASSEMBLY
	6	707XX524	NOZZLE SEAT
	7	707XX518	NOZZLE BODY
	8	745XX026	O-RING
1	9	782XX211	LABEL, CE LOGO
4	Nozzle	seat options, low res	striction
		707xx521	Nozzle seat, 0.25 mm
5		707xx522	Nozzle seat, 0.30 mm
		707xx523	Nozzle seat, 0.35 mm
		707xx524	Nozzle seat, 0.40 mm
		707xx525	Nozzle seat, 0.50 mm
		707xx526	Nozzle seat, 0.60 mm
		707xx527	Nozzle seat, 0.70 mm
		707xx528	Nozzle seat, 0.80 mm