

90mm Tape-off Device
For an
Orion Printer

90mm Tape Off

Release 1.0

Product Manual

9891-00-000

**Designed for operation
on an Orion 130 Printer**

9891-01-000

For Orion w/Cupslide

Release 1.0

PAGE 1-1



Trusted Partner for Your Product Decorating Needs

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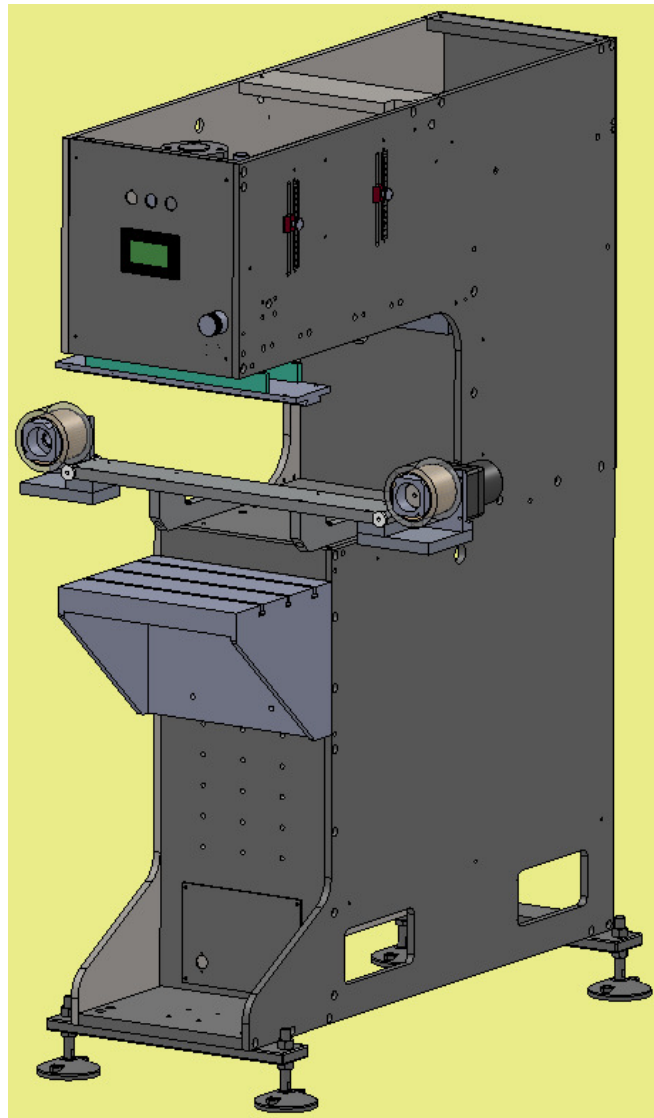
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of ITW

90mm Tape-off Device For an Orion Printer

Overview

This pad cleaning device is designed solely for use on an Orion 130 Pad printing machine which utilizes a standard cliché holder. There is another model which is designed for use with a cup slide module. The tape is pulled across the tape plate by an electric motor. The amount of tape pulled at each command and the frequency of tape clean cycles is programmable via the touchscreen on the front of the printer. This unit is practically maintenance free except for the occasional replenishment of the tape and routine cleaning.



**90mm Tape-off Device
For an
Orion Printer**

| | |
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1. Safety

Symbols and their Interpretations



WARNING Neglecting a safety instruction identified with the **WARNING** symbol may lead to personal injury.



CAUTION Neglecting a safety instruction identified with the **CAUTION** symbol may lead to property damage.



POINTER It is strongly recommended to observe instructions identified with a **POINTER** symbol.

Liability



- In no event will **ITW TRANS TECH** be responsible or liable for indirect or consequential damages resulting from the use of this equipment.
- The information contained in this manual is subject to change due to improvements in design.
- Though this document has been checked for inaccuracies, **ITW TRANS TECH** does not assume responsibility for any errors contained herein.
- This manual is provided as an aid when operating the Orion 130 pad printing machine. Prior to operation, it is strongly advised that the user be thoroughly familiar with the Orion 130 operating manual.
- **ITW TRANS TECH** is not responsible or liable for any disadvantage occurred for not following the operating instructions.



All operators must be sufficiently trained.

Warnings and Cautions



- Switch off main switch prior to connecting/disconnecting power.
- Disconnect power prior to opening the electrical enclosure.



Switch the MAIN DISCONNECT off and disconnect the power cord prior to working on the electrical system.

Application Restrictions



Any use other than described in this manual may cause damage to the equipment, personal injury or property damage.

2. Installation

The normal procedure is to order the tape off device when buying a new Orion 130 printer. If it is desired to add a tape off device to an Orion 130 printer which is already in use, we highly recommend that the printer be sent to our facility in Carol Stream, Illinois where we can correctly install it and verify its proper operation. If field installation is desired, arrangements can be made.

It is very important to remember that our highly experienced staff is only a phone call away at 630-752-4000 to be of assistance. Please don't hesitate to call if the need arises.

3. Operation

There is a screen in the HMI which controls the operation of the tape off device. Please consult the Orion 130 operator's manual for how to navigate through the various screens.

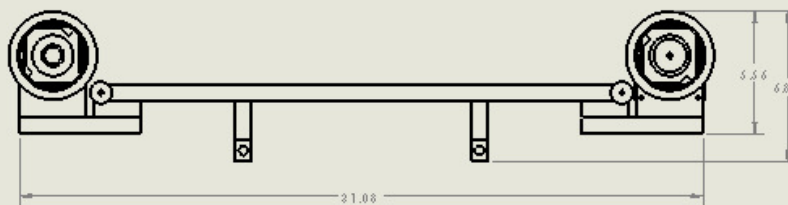
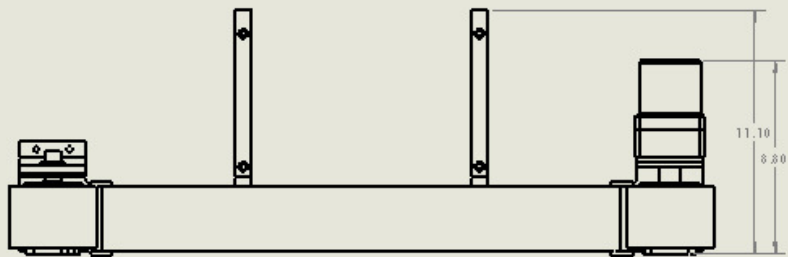
1. From the "ACCESSORIES" screen choose "PAD CLEAN".
2. From the "PAD CLEAN" screen:
 - a. Choose "ON"
 - b. Choose "WITH"
 - c. "INTERVAL=" touching this will cause a numeric keypad to appear allowing the interval to be adjusted. *The interval is the number of print cycles between cleaning cycles.*
 - d. "PULL TIME=" touching this will cause a numeric keypad to appear allowing the pull time to be adjusted. *This is the amount of time that the motor which pulls the tape, runs. This should be set to the optimum time which moves the tape enough for the pad(s) to be properly cleaned at the next pad clean cycle.*
3. To clean the pad(s) at any time go to the "MANUAL" screen and press the "CLEAN PAD" button. The printer will perform one complete pad clean cycle.
4. To disable the tape off, go to the "PAD CLEAN" screen and choose "OFF".

It is very important to remember that our highly experienced staff is only a phone call away at 630-752-4000 to be of assistance. Please don't hesitate to call if the need arises.

4. Maintenance

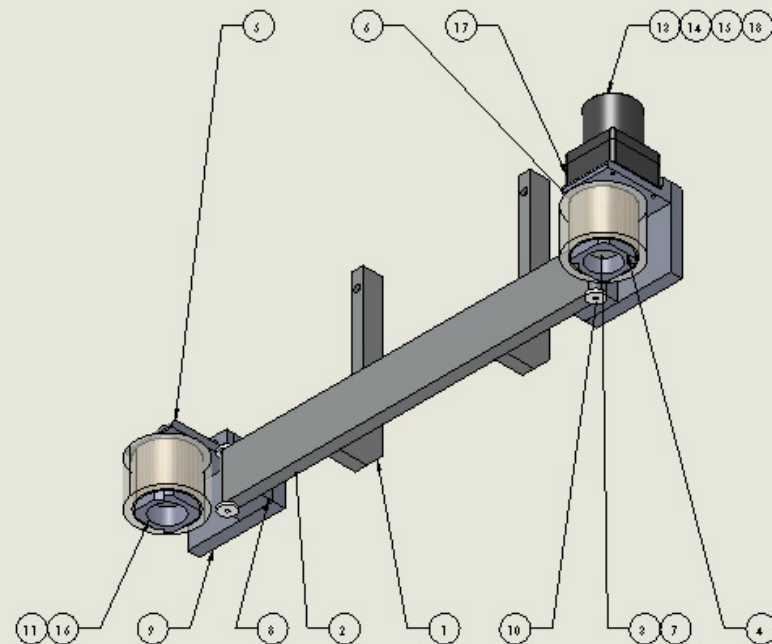
Other than routine tape replenishment there is no maintenance required on this unit. In the unlikely event of a component needing replacement, refer to the attached bills of materials and contact our parts and service department.

It is very important to remember that our highly experienced staff is only a phone call away at 630-752-4000 to be of assistance. Please don't hesitate to call if the need arises.



| ITEM NO. | PART NUMBER | DESCRIPTION | QTY. |
|----------|-------------|--------------------------------------|------|
| 1 | 9891-00-001 | TAPE ASSEMBLY BAR | 2 |
| 2 | 9891-00-002 | TAPE RUN BAR | 1 |
| 3 | 9670-01-007 | ROLLER POST CAP | 1 |
| 4 | 9670-01-011 | SPOOL | 1 |
| 5 | 9670-01-014 | ANGLE BRACKET-TAPE ROLLER | 1 |
| 6 | 9670-01-018 | ANGLE BRACKET-TAPE MOTOR | 1 |
| 7 | 9670-01-019 | COUPLING-MOTOR/DRUM | 1 |
| 8 | 7725-02-003 | TAPE MOUNT SPACER | 2 |
| 9 | 7725-02-004 | END MOUNT | 2 |
| 10 | 7725-02-005 | TAPE GUIDE | 4 |
| 11 | 860-01-020 | Tape Drum Assembly (8" Wide Tape) | 1 |
| 12 | 501-20-023 | Socket Head Cap Screw, M8 X 70 | 4 |
| 13 | 222-05-009 | Receptacle, Connector (P Contact) | 1 |
| 14 | 222-05-044 | Clamp, Cable (Cbl Shell 432"od, #12) | 1 |
| 15 | 222-05-052 | Contact Pin Male | 5 |
| 16 | 860-01-021 | M18 X 1 NUT | 1 |
| 17 | 401-07-050 | Gearbox, Ac | 1 |
| 18 | 401-07-010 | Motor, Ac | 1 |
| 19 | 9891-00-100 | STOP ASSEMBLY | 1 |
| 20 | 7725-02-012 | FLAG BAR | 1 |

NOTE: ITEM #s 19 & 20 NOT DISPLAYED



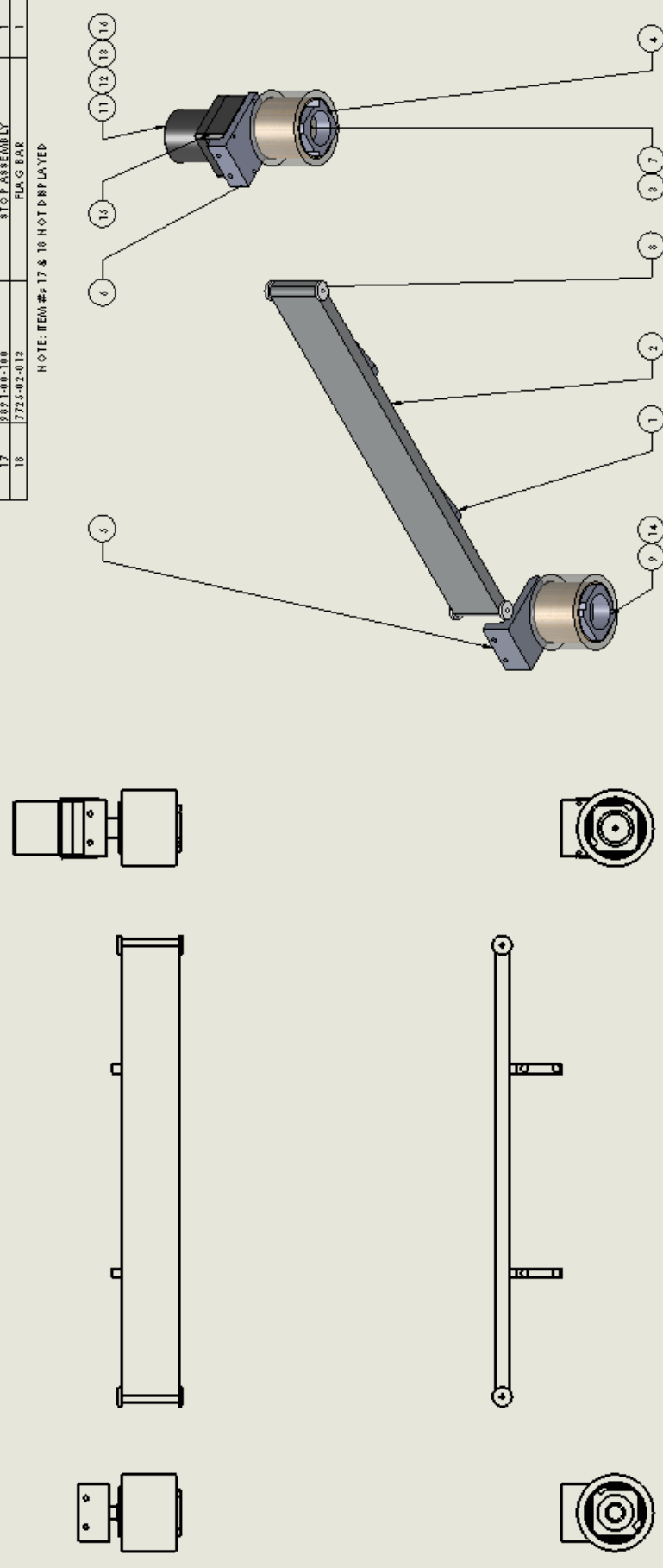
NOTES:

| REVISION | | | | DATE | BY | DESCRIPTION | APPROVED | DATE | BY | DESCRIPTION |
|----------|-----------------|----------|-----|------|----|-------------|----------|------|----|-------------|
| B | REVISED DESIGN | 12/12/13 | PSB | | | | | | | |
| A | INITIAL RELEASE | 7/03 | KS | | | | | | | |
| REV | DESCRIPTION | DATE | BY | | | | | | | |

| | | | |
|-------------------------------|----------------------|---------------------------------|----------------------------|
| MATERIAL | PER BOM | FINISH | INTERPRET PER ANSII Y14.5M |
| DIMENSIONS IN INCHES (MM) | | DRAWN : PSB 12/20/13 12112113 | |
| TOLERANCES UNLESS SPECIFIED | | APPROVED : KS 01/14/14 01141414 | |
| .01 .02 (0.5) | .001 .01 (0.2) | SCALE : 1:1 01/14/14 01141414 | |
| .0001 .0005 (0.01) | .00001 .0005 (0.012) | SHEET : 11 01/14/14 01141414 | |
| ANGLES 1:1:2 | | TAPED-OFF ASSEMBLY | |
| MACHINED SURFACES \sqrt{Ra} | | DRAWING NO: 9891-00-000 | |
| BREAK CORNERS .020 (0.51) MAX | | PART B | |
| CONFIDENTIAL | | | |
| 3RD ANGLE PROJECTION | | | |
| PART C SHEET 1 OF 1 | | | |

| ITEM NO. | PART NUMBER | DESCRIPTION | QTY. |
|----------|-------------|---|------|
| 1 | 9891-01-001 | TAPE PLATE MOUNT | 2 |
| 2 | 9891-00-002 | TAPER LIN BAR | 1 |
| 3 | 9670-01-007 | ROLLER POST CAP | 1 |
| 4 | 9670-01-011 | SP-O-L | 1 |
| 5 | 9670-01-014 | ANGLE BRACKET-TAPE ROLLER | 1 |
| 6 | 9670-01-018 | ANGLE BRACKET-TAPE MOTOR COUPLING-MOTOR/D RUM | 1 |
| 7 | 9670-01-019 | TAPE GUIDE | 4 |
| 8 | 7725-02-005 | Tape from Assembly (3" Wide Tape) | 1 |
| 10 | 50130-032 | SocketHead Cap screw, M6 X 70 | 4 |
| 11 | 222-05-009 | Receptacle, Connector (P Connector) | 1 |
| 12 | 222-05-044 | Clamp, Straps (Cbl Shell) (2 Cg, PEI) | 1 |
| 13 | 222-05-032 | Contact Pin, Male | 3 |
| 14 | 860-01-021 | M18 X 1 NUT | 1 |
| 15 | 401-07-050 | Gearbox Ac | 1 |
| 16 | 401-07-010 | Motor Ac | 1 |
| 17 | 9891-00-100 | STOP ASSEMBLY | 1 |
| 18 | 7725-02-012 | FLAG BAR | 1 |

NOTE: ITEM #2 17 & 18 NOT DISPLAYED



| REVISION | DATE | BY | REASON |
|----------|--------|-----|-----------------|
| A | 1/2/14 | PSB | INITIAL RELEASE |
| REV | DATE | BY | |

| QTY | DESCRIPTION | PER BOB |
|-----|-------------|---------|
| | | |
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|-----------------------------|----------|
| DIMENSIONS IN INCHES (MM) | |
| TOLERANCES UNLESS SPECIFIED | |
| FRACTIONS | DECIMALS |
| 1/4" | .2500 |
| 3/16" | .1875 |
| 1/8" | .1250 |
| 1/16" | .0625 |
| 1/32" | .0312 |
| 1/64" | .0156 |
| 1/128" | .0078 |
| 1/256" | .0039 |
| 1/512" | .0019 |
| 1/1024" | .0009 |
| 1/2048" | .0005 |
| 1/4096" | .0002 |
| 1/8192" | .0001 |

| |
|---------------------------|
| INTERPRET PER ASSEMBLY/EN |
| DESIGNER |
| DATE |
| BY |
| REVISED |
| BY |
| DATE |
| ASSEMBLY |
| DATE |
| BY |
| TESTING |
| DATE |
| BY |
| FINISH |
| DATE |
| BY |

| | | | |
|-----------------|--------|-----|--|
| INITIAL RELEASE | 1/2/14 | PSB | |
| DATE | | | |
| BY | | | |

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| SHEET 1 OF 1 | |
| REV | DATE |
| BY | |
| TESTING | |
| DATE | |
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| FINISH | |
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| INTERPRET PER ASSEMBLY/EN |
| DESIGNER |
| DATE |
| BY |
| REVISED |
| BY |
| DATE |
| ASSEMBLY |
| DATE |
| BY |
| TESTING |
| DATE |
| BY |

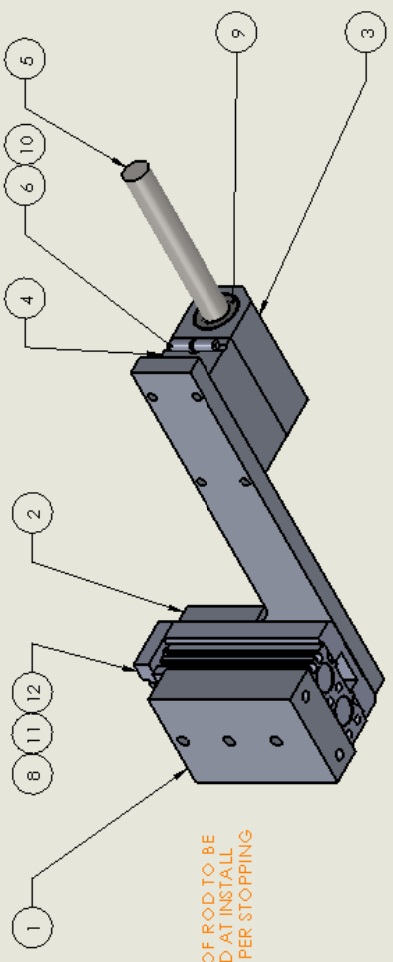
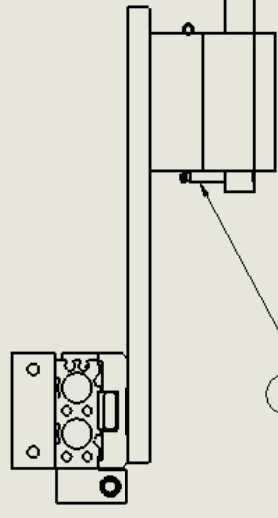
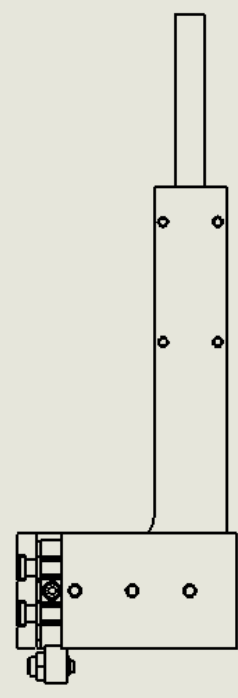
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| SHEET 1 OF 1 | |
| REV | DATE |
| BY | |
| TESTING | |
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|-----------------|--------|-----|--|
| INITIAL RELEASE | 1/2/14 | PSB | |
| DATE | | | |
| BY | | | |

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| SHEET 1 OF 1 | |
| REV | DATE |
| BY | |
| TESTING | |
| DATE | |
| BY | |
| FINISH | |
| DATE | |
| BY | |

NOTES:

| ITEM NO. | PART NUMBER | DESCRIPTION | QTY. |
|----------|-------------|--|------|
| 1 | 7725-02-006 | MXSB MOUNT | 1 |
| 2 | 7725-02-007 | STOP ASSY MOUNT | 1 |
| 3 | 7725-02-008 | STOP ROD HOLDER | 1 |
| 4 | 7725-02-009 | SPRING BLOCK | 1 |
| 5 | 7725-02-010 | STOP ROD | 1 |
| 6 | 7725-02-011 | SPRING RETAINER PIN | 1 |
| 7 | 7725-02-012 | STOP ROD PIN | 1 |
| 8 | 201-02-460 | Slide Table, Air, 12mm Br, X40mm Stk | 1 |
| 9 | 001-33-581 | Linear Bearing 1/2" x 7/8" x 2-3/8" | 1 |
| 10 | 104-00-322 | Extension Spring Zinc-Plated Steel | 1 |
| 11 | 202-00-775 | Valve, 3-Position Double Solenoid, Blocking Center | 1 |
| 12 | 207-00-257 | VQ12351-5LO1 | 1 |



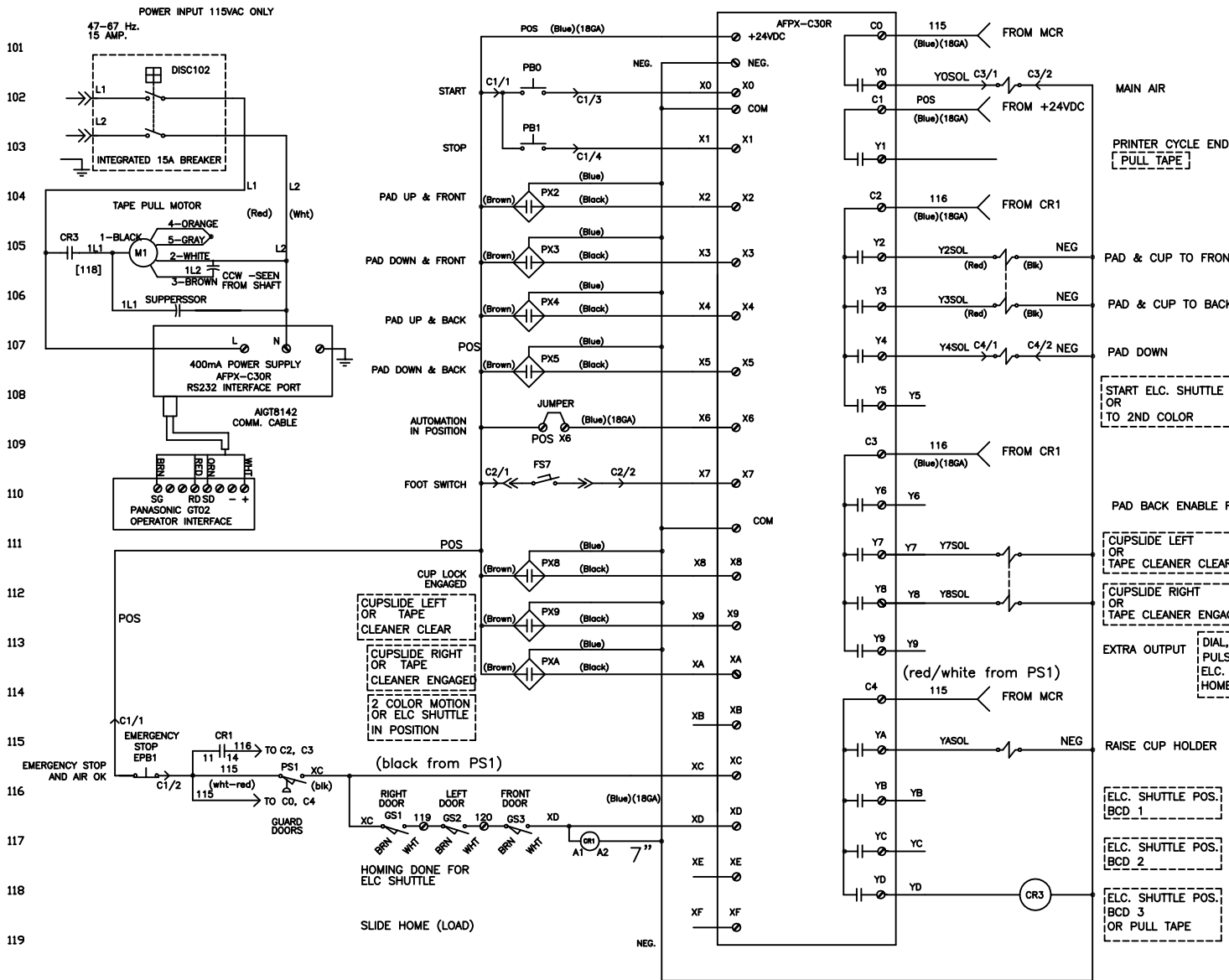
LENGTH OF ROD TO BE ADJUSTED AT INSTALL FOR PROPER STOPPING POINT

| | | | |
|---------------------------------------|-----------------|---------------------------|---------------------|
| MATERIAL: | | INTERPRET PER ANSI Y14.5M | |
| FINISH: | | DESIGN BY: PSB | DATE: 12/12/13 |
| DIMENSIONS IN INCHES [mm] | | APPROVED BY: | RELEASE DATE: |
| TOLERANCES UNLESS SPECIFIED | | SCALE: 1:2 | QTY PER ASSEMBLY: 1 |
| .0 ± .02 [0.5] | | STOP ASSEMBLY | |
| .000 ± .005 [0.13] | | | |
| .0000 ± .0005 [0.013] | | | |
| ANGLES ± 1/2 | | | |
| MACHINED SURFACES ^{AS SHOWN} | | | |
| BREAK CORNERS .020 [0.5] MAX | | | |
| REV | DESCRIPTION | DATE | BY |
| A | INITIAL RELEASE | 12/12/13 | PSB |

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NOTES:

DRAWING: 9891-00-100
 REV A B C SHEET 1 OF 1



ORION W/ PANASONIC PLC AND HMI

SET PAD CLEAN TO "INSTALLED" AND "ON"
SEE 3.4.17 OF OPERATOR MANUAL
DO NOT USE THIS IF CUPSLIDE & PAD
CLEAR ARE BOTH INSTALLED! (PAD CLEANER
I/O SHIFTS TO SHUTTLE I/O)

I/O DESC. IN DASHED FRAME IS VALID
WHEN ACCESSORY IS SET TO "INSTALLED".

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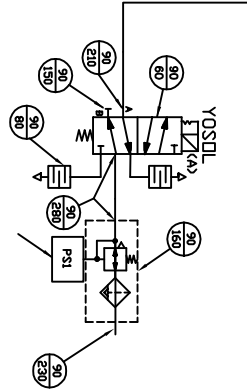
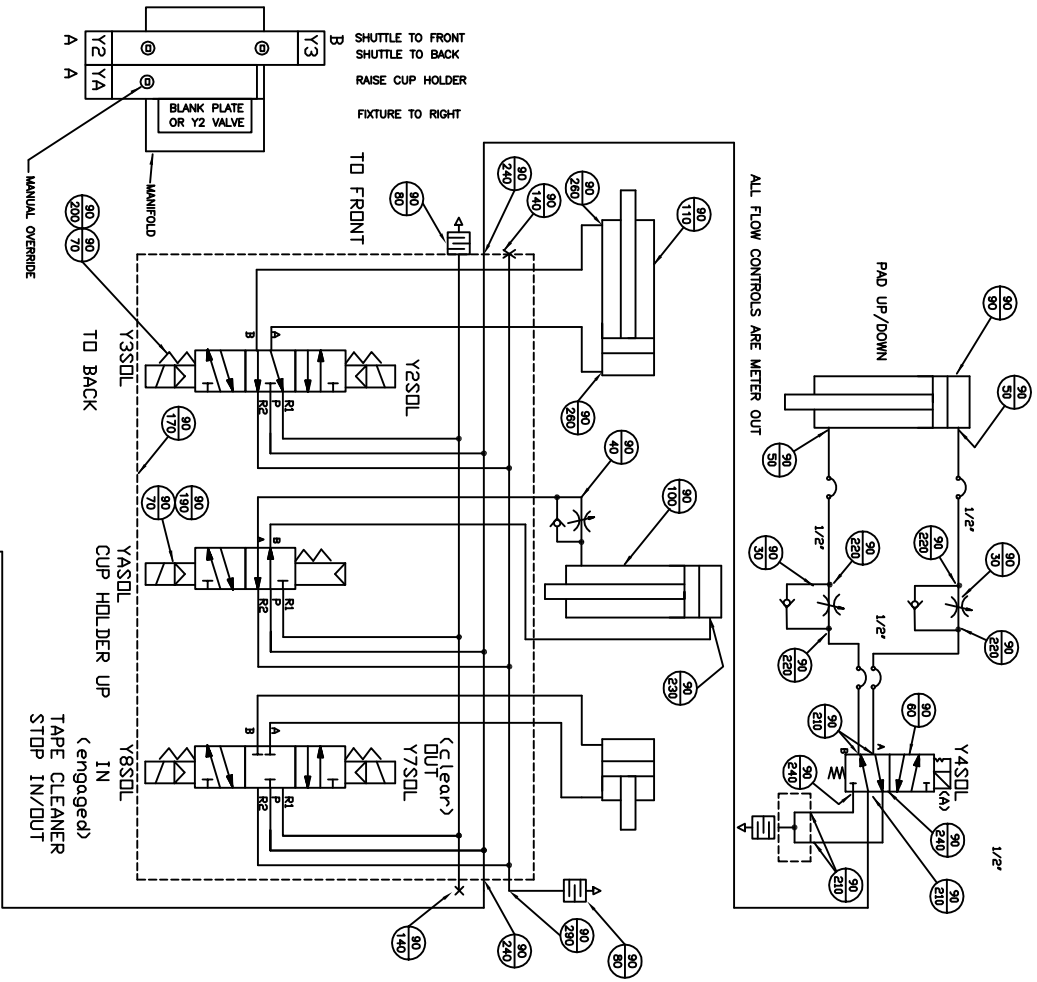
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| REV | DATE | DESCRIPTION |
|-----|-----------|-----------------|
| A | 6/28/2017 | Initial Release |
| RS | 6/28/2017 | RS |

| | |
|---|-------|
| DRAWING TITLE | |
| Electrical Schematic ORION V2 Pad Printer W/TAPE CLEANER | |
| ENGINEER | |
| Rich Schulz | |
| RELEASE DATE | |
| 6/28/2017 | |
| CUSTOMER NAME | |
| STANDARD | |
| JOB NUMBER | |
| 9211, 9891 Combined | |
| SHEET NUMBER | SCALE |
| 01 OF 01 | 1:1 |
| DRAWING NUMBER | |
| 9891-80-001 | |



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| <p>DRAWING TITLE Pneumatic Diagram ORION VZ Pad Printer W/TAPE CLEANER</p> | <p>ENGINEER Rich Schulz</p> | <p>RELEASE DATE 6/28/2017</p> | <p>JOB NUMBER 9211, 9891 Combined</p> | | | | | | | | |
| <p>SHEET NUMBER 01 OF 01</p> | <p>CUSTOMER NAME STANDARD</p> | <p>SCALE 1:1</p> | <p>DRAWING NUMBER 9891-90-001</p> | | | | | | | | |
| <table border="1"> <thead> <tr> <th>REV</th> <th>DESCRIPTION</th> <th>ENG</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Initial Release</td> <td>RS</td> <td>6/28/2017</td> </tr> </tbody> </table> | REV | DESCRIPTION | ENG | DATE | A | Initial Release | RS | 6/28/2017 | | | |
| REV | DESCRIPTION | ENG | DATE | | | | | | | | |
| A | Initial Release | RS | 6/28/2017 | | | | | | | | |