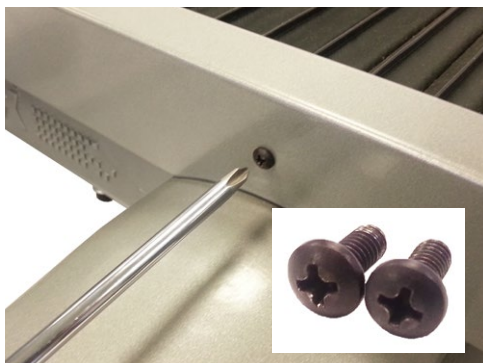

Included Parts:

1. Dual Fusion Rail and Block Set, Front (23 holes)
2. Dual Fusion Rail and Block Set, Rear (15 holes)
3. 2x Lever Nuts
4. 10x 1/4"-20 x 1-1/8" Screws
5. 38x M4 x 20mm Screws
6. 12x M5 x 25mm Flat Head Screws
7. M4x0.7 Threaded Inserts with installation tools
8. Press Mount Skeleton
9. 3x Zip Ties

Required Tools:

10. #2 Phillips Screwdriver
11. Short #2 Phillips Screwdriver or Ratchet with #2 Phillips Bit
12. 2mm Precision Flathead Screwdriver
13. Allen Wrenches (1/8", 3/16", 3mm, 4mm)
14. Wire Stripper (14ga)
15. Wire Cutter
16. Ruler
17. Permanent Marker
18. 5/32" Combination Wrench
19. 1/4" Combination Wrench
20. 1" Combination Wrench
21. 1-1/2" Combination Wrench



Remove Front Base Cover by unscrewing 2x #8-32 x 3/8" Screws using #2 Phillips Screwdriver

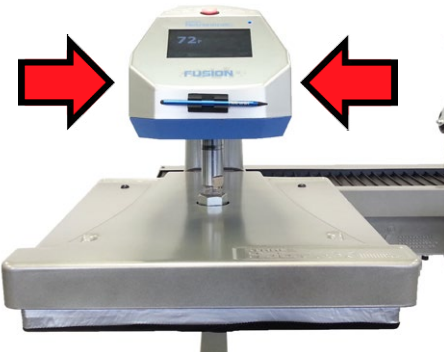
NOTE: Slide or shuttle press left & right and temporarily remove platens to access screws



Remove Press Mount Cover by unscrewing 4x #8-32 x 1/4" Screws using #2 Phillips Screwdriver



Turn press ON and set timer for 15 seconds or more



Press Print Switches to lower heater



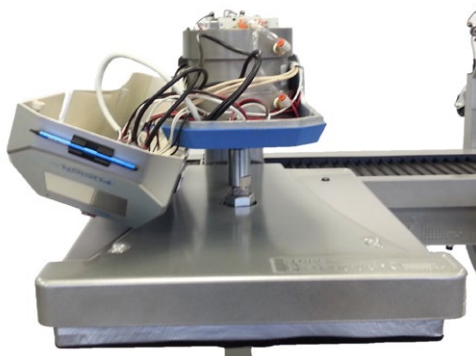
While heater is lowered,
disconnect air supply line from air
filter



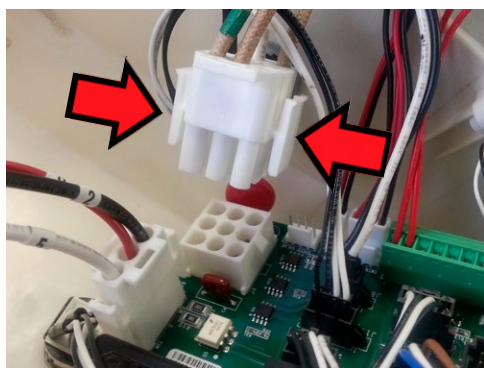
CAUTION: Turn press OFF
and detach power cord before
proceeding



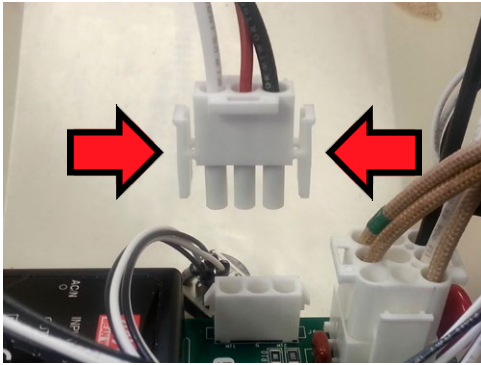
Remove four #8-32 x 3/4" Screws from Control Housing using Short #2 Phillips Screwdriver



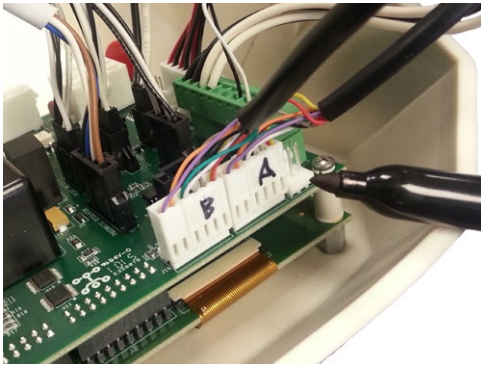
Lift off Control Housing and lay it gently on left side of press



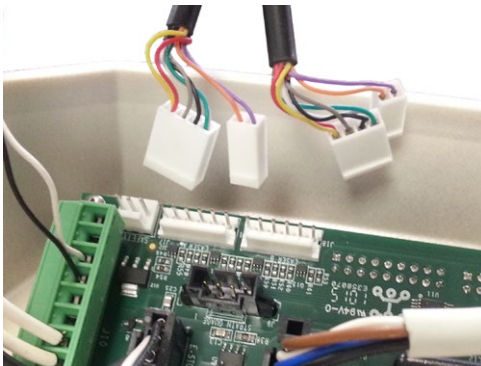
Unplug 9-pin connector from Controller by squeezing sides to release locking clips



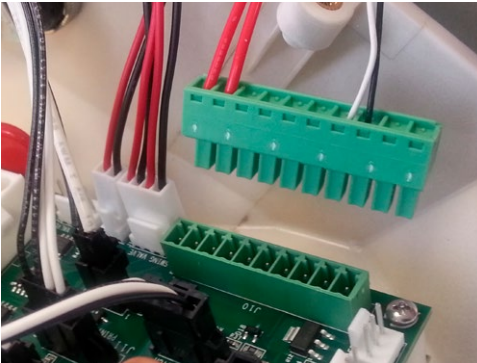
Unplug 3-pin TRIAC connector from Controller by squeezing sides to release locking clips



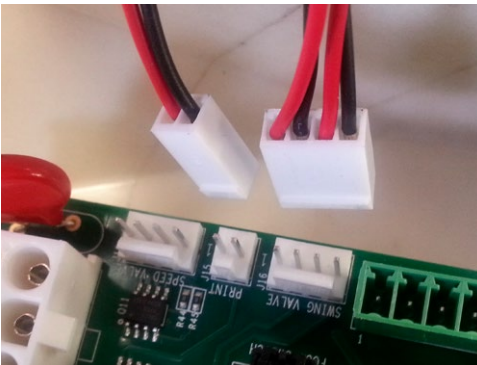
Mark Laser Alignment System connectors A & B using Permanent Marker as shown



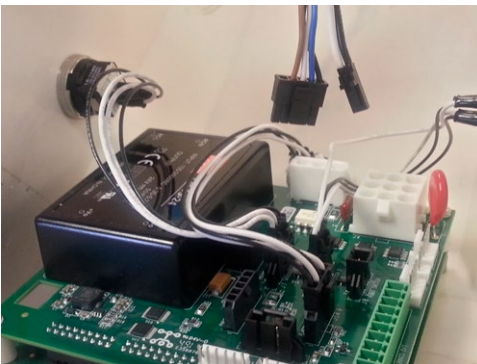
Disconnect 6-pin Laser Alignment System connectors from Controller



Unplug 10-pin I/O connector from Controller



Disconnect Print Valve and Shuttle Valve connectors from Controller



Disconnect Electro-Pneumatic Regulator and Foot Switch connectors from Controller



Remove Control Housing and set aside

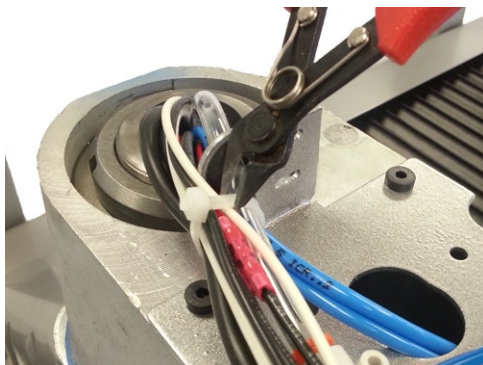


Unscrew Proximity Switch wires (22 AWG) from green 10-pin connector

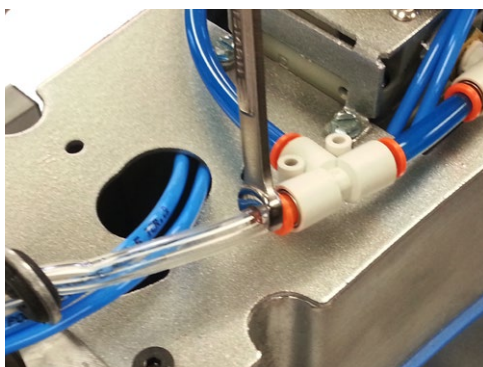
NOTE: Black wires are pins 1 & 2; white wires are pins 3 & 4; polarity does not matter



Cut white & black power cables approximately 6in from 9-pin connector using Wire Cutter



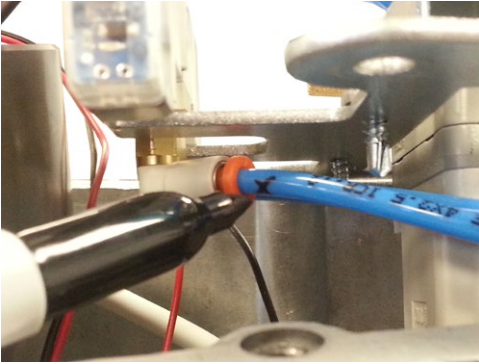
Cut Zip-Ties securing wiring and air tubes using Wire Cutter



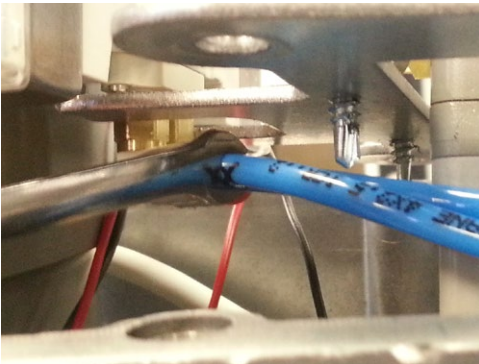
Disconnect Main Air Supply Tube from Tee Fitting by pressing down on push-to-connect fitting collar with 1/4" Combination Wrench or Pliers while pulling out air tube



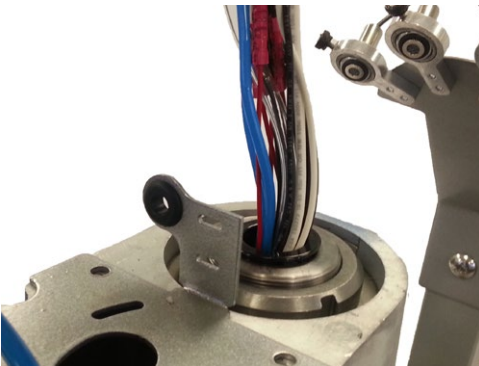
Unscrew 1/4"-20 x 3/4" Low-Profile Screws using 1/8" Allen Wrench



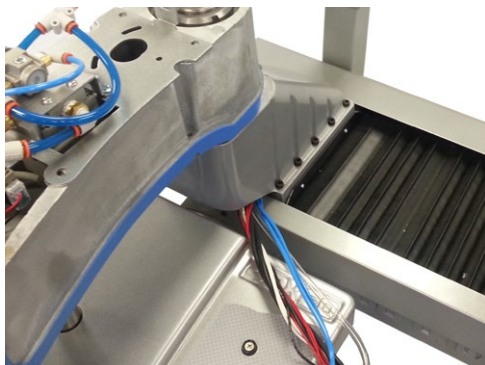
Lift up Pneumatic Package and mark Shuttle Valve air tube as shown using Permanent Marker



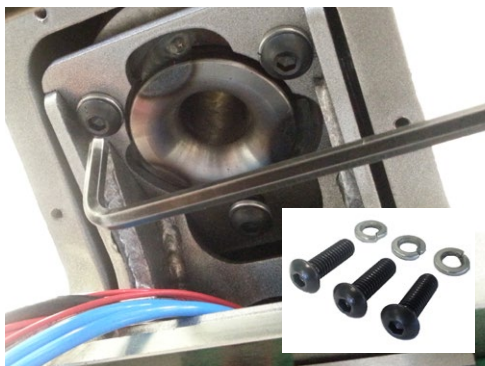
Disconnect air tubes from Shuttle Valve by pressing down on push-to-connect fitting collar with 5/32" Combination Wrench or Pliers while pulling out air tube



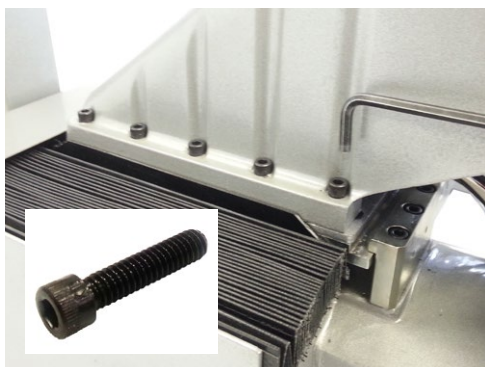
Check that all wiring and air tubes from top of Main Spindle are disconnected



Remove wiring and air hose from main spindle tube by pulling them down through bottom of Press Mount Casting

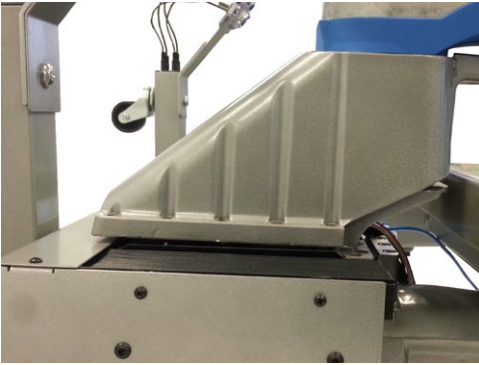


Unscrew 3x 5/16"-18 x 1" Screws from bottom of Main Spindle using 3/16" Allen Wrench



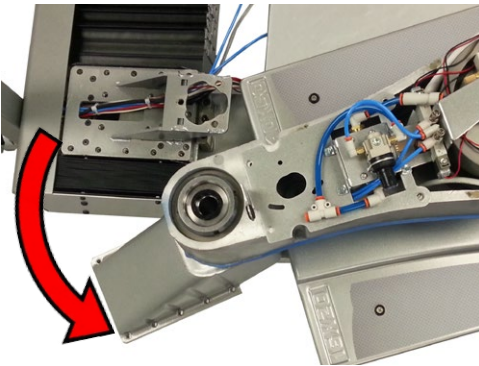
Unscrew 10x 1/4"-20 x 1" screws from Press Mount Casting using 3/16" Allen Wrench and discard

CAUTION: When final screws are removed, entire Press Head assembly is detached from base.



Raise Press Head assembly to separate from Carriage

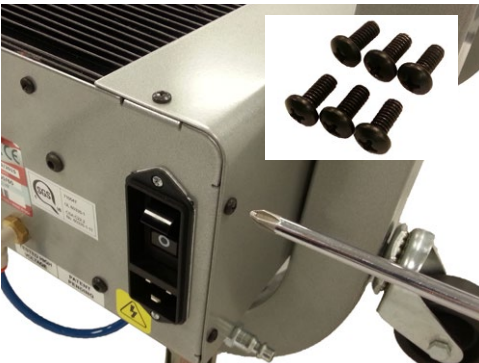
CAUTION: Practice safe lifting procedures as assembly weighs over 60lbs (30kg)



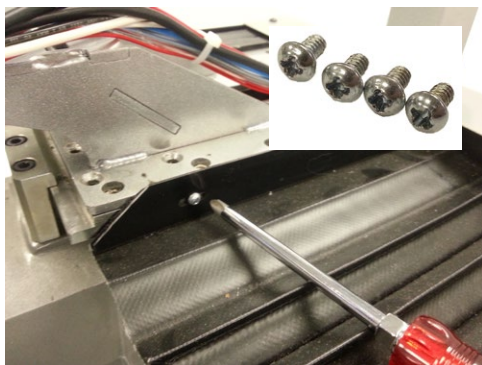
Carefully rotate Press Head Assembly to gain access to Press Mount Casting

CAUTION: Practice safe lifting procedures as assembly weighs over 60lbs (30kg)

CAUTION: when released, assembly will lower as Print Cylinder retracts under weight of assembly



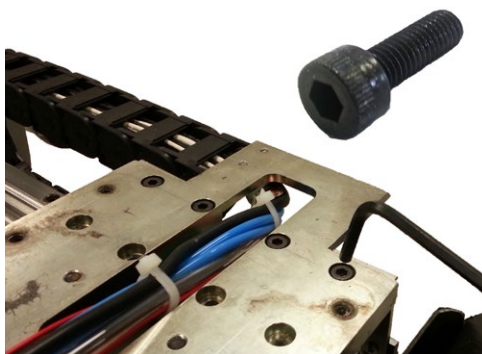
Remove Rear Base Cover by unscrewing 6x #8-32 x 3/8" Screws using #2 Phillips Screwdriver



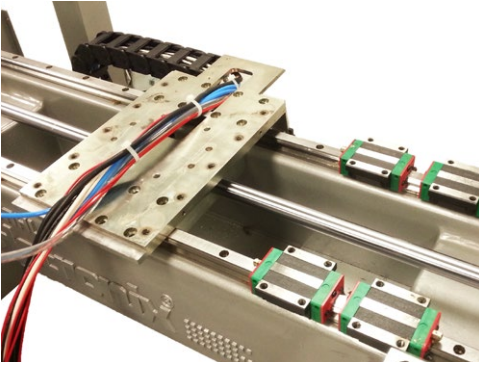
Detach Bellow Covers from Carriage by unscrewing 4x #6-32 x 1/4" Screws using #2 Phillips Screwdriver



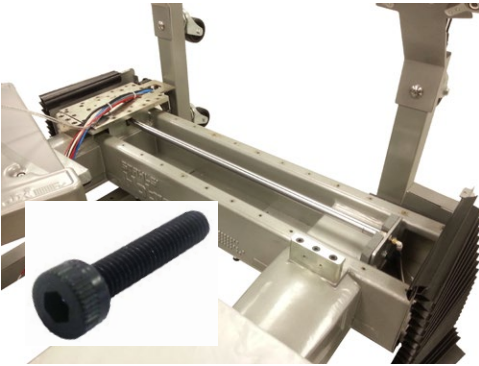
Remove Press Mount Skeleton (if present) from Carriage Plate by unscrewing in 12x M5 x 25mm Flat Head Screws using 3mm Allen Wrench



Unscrew 16x M5 x 15mm screws from Carriage Plate using 4mm Allen Wrench



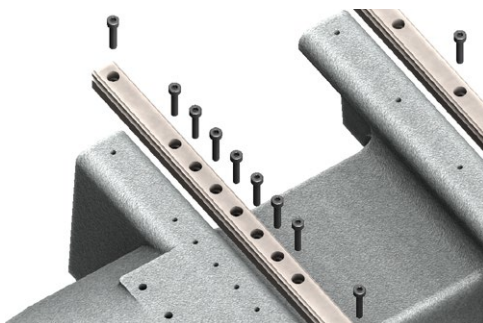
Slide Carriage Plate off of Rail Blocks, being careful not to exert excessive force on Rodless Pneumatic Cylinder (located between Rails)



Remove Linear Guide Rails by unscrewing 30x M4 x 20mm screws using 3mm Allen Wrench and discard



Inspect threads and repair as necessary using M4 x 10mm helical thread inserts

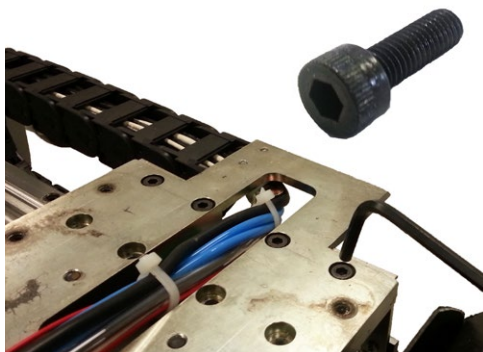


NOTE: Dual Fusion bases made prior to 2017 may not support newer 23-bolt front rail configurations. In this case, either:

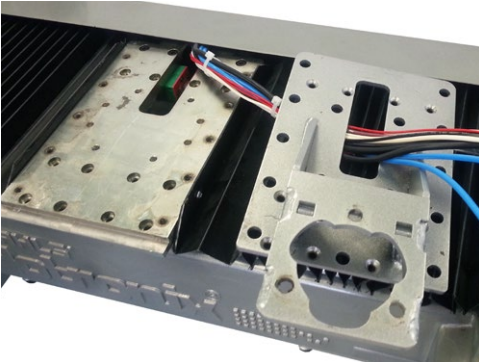
- Install front rails with 15 bolts only as before, or
- Drill and tap 8 additional M4x0.7 x 15mm holes using 23-hole rail as locating jig



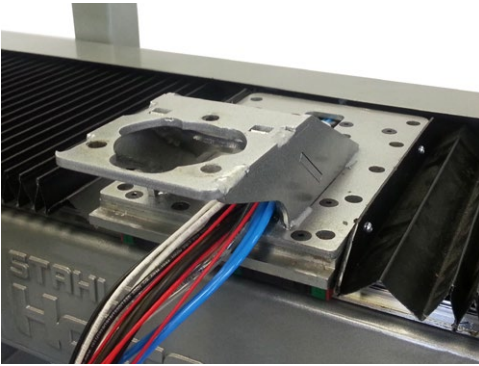
Install new Linear Guide Rails by screwing in 38x new M4 x 20mm screws using 3mm Allen Wrench



Install Carriage Plate onto rear guide rail by screwing in 4x M5 x 15mm screws using 4mm Allen Wrench



Thread wiring and air tube through hole in Press Mount Skeleton as shown



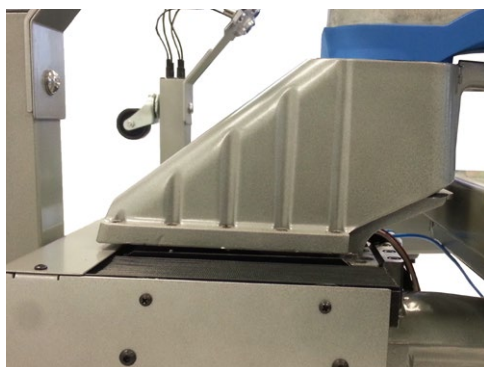
Position Press Mount Skeleton as shown and thread wiring and air tube through front



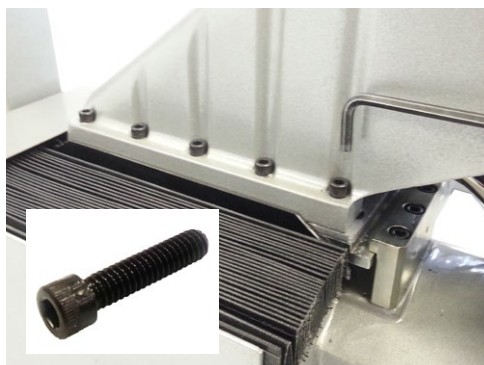
Attach Press Mount Skeleton to Carriage Plate by screwing in 12x M5 x 25mm Flat Head Screws using 3mm Allen Wrench



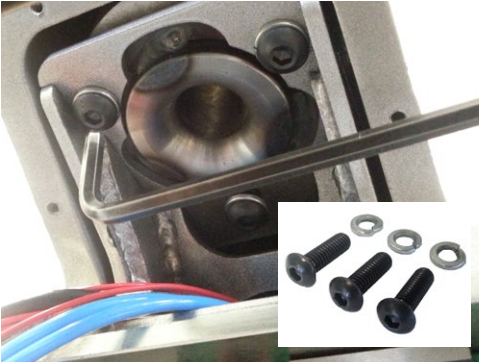
Install Rear Base Cover by
screwing in 6x #8-32 x 3/8"
Screws using #2 Phillips
Screwdriver



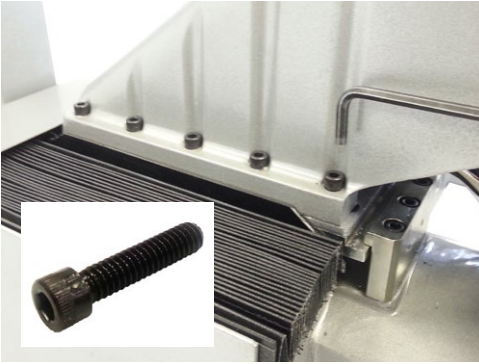
Carefully position Press Head
Assembly to line up with Press
Mount Skeleton



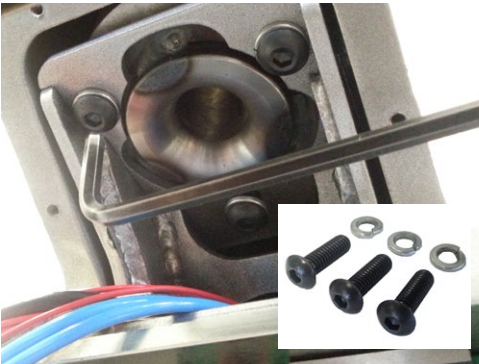
Loosely install 10x new 1/4"-20 x
1-1/8" screws using 3/16" Allen
Wrench, tightening in sequence



Loosely install 3x 5/16"-18 x 1" Screws into bottom of Main Spindle using 3/16" Allen Wrench



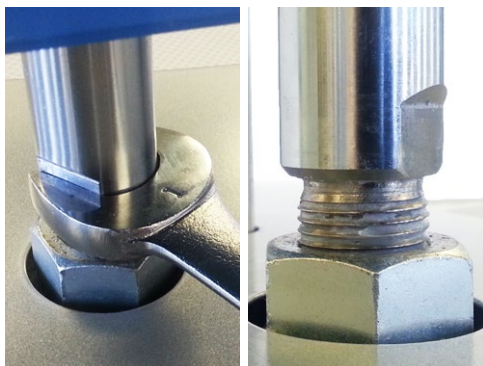
Tighten 10x 1/4"-20 x 1-1/8" screws using 3/16" Allen Wrench



Tighten 3x 5/16"-18 x 1" Screws using 3/16" Allen Wrench



Loosen 1"-12 Nut using 1-1/2"
Combination Wrench



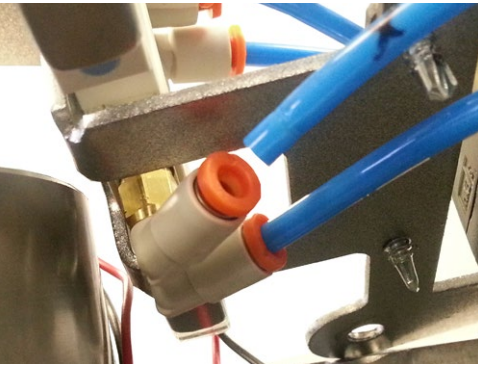
Reduce thread engagement of
Print Cylinder by rotating with
Adjustable Wrench until 4 threads
are visible above the nut



Tighten 1"-12 Nut using 1-1/2"
Combination Wrench



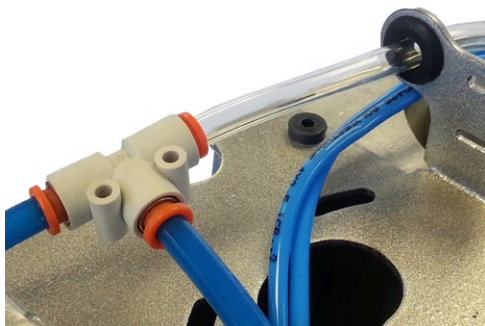
Thread wiring and air hose up through Main Spindle



Lift up Pneumatic Package and connect 5/32" Air Tubes into Shuttle Valve by pushing tube into push-to-connect fitting until it seats securely, noting position of marked tube as shown



Attach Pneumatic Package to Upper Casting by screwing in 4x 1/4"-20 x 3/4" Low Profile Screws using 1/8" Allen Wrench



Connect Main Air Supply Tube into Tee Fitting by pushing tube into push-to-connect fitting until it seats securely



Screw Proximity Switch wires (22 AWG) into green 10-pin connector

NOTE: Black wires are pins 1 & 2; white wires are pins 3 & 4; polarity does not matter



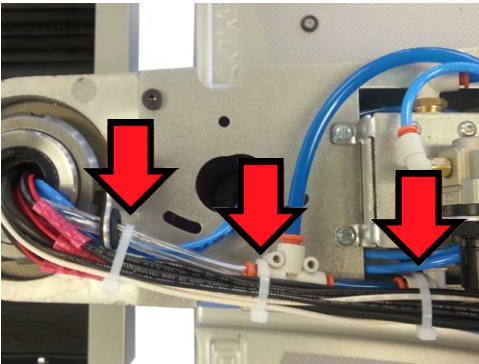
Use Wire Strippers to strip 10mm off ends of 4 black & white power wires (14 AWG)



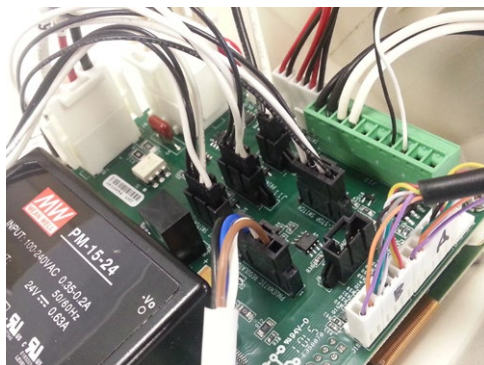
Unlock Lever Nuts by raising levers as shown



Connect power wires (white to white & black to black) using Lever Nuts as shown

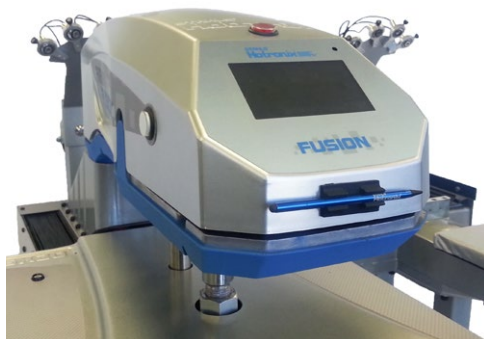


Secure cables and air tube using 3x Zip Ties



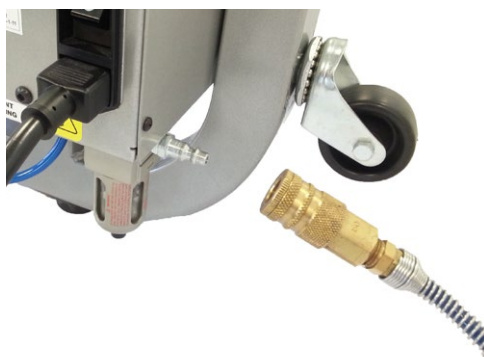
Plug connectors into Controller on Housing:

- 9-pin connector
- 3-pin TRIAC connector
- 10-pin I/O connector
- Foot Switch
- Print Valve
- Shuttle Valve
- Electro-Pneumatic Regulator
- Laser Alignment System



Replace Housing onto press

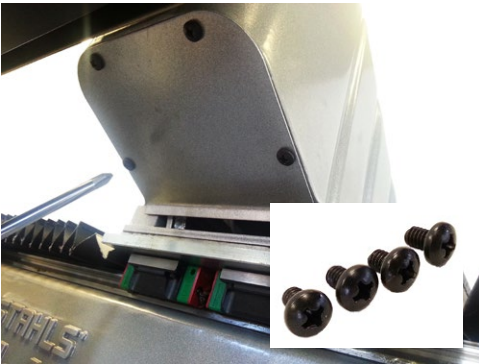
NOTE: Take care not to pinch any wires between Housing and Upper Casting



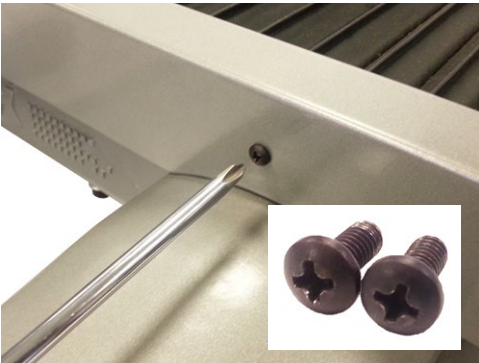
Plug in power cord and air supply line



Turn press ON and check for proper function (i.e. that all connectors are plugged in):
Foot Pedal Shuttle function
Shuttle position detection (A/B light up green)
Laser Alignment lights on/off
Temperature Probe reading



Install Press Mount Cover by screwing in 4x #8-32 x 1/4"
Screws using #2 Screwdriver

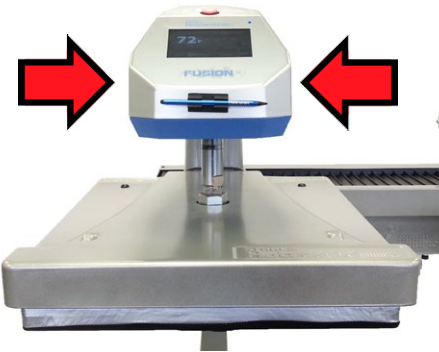


Install Front Base Cover by screwing in 2x #8-32 x 3/8"
Screws using #2 Phillips Screwdriver

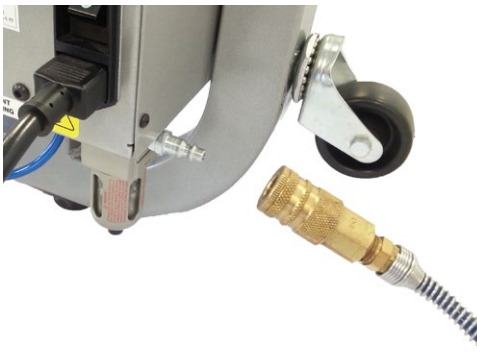
NOTE: Slide or shuttle press left & right and temporarily remove platens to access screws



Turn press ON and set timer for 15 seconds or more



Press Print Switches to lower heater



While heater is lowered,
disconnect air supply line from air
filter



Turn press OFF and detach power cord



Screw in four #8-32 x 3/4"
Screws using Short #2 Phillips
Screwdriver



Plug in press and turn ON to
raise heater and check for proper
function