



CLINCHING PRESS SERIES

Punch presses manufacturer since 1975



Table of contents

Warranty plan on GEN III clinching presses models	4
Clinching press	5
5	
Start-up	6
Re-adjusting machine for new thickness	20
Shut height adjustment	22
Oiling system	23
Oiling pressure while running	23
Maintenance	23
Ordering spare parts	25
Changing punch & die	26
Troubleshooting	27
Alarms 27	
Press won't stroke	28
Improper clinching joint	29
Procedures	30
Adjustment of the timing belt	30
Re-adjusting material thickness (WITHOUT THICKNESS DIGITAL READOUT) - hmi	31
Verifying cup-ball adjustments	33
Installing Rectangular tooling on existing machine	34
Step 1 – Install tooling adapter (1) inside the shank	34
Step 2 – Install Lance-N-Loc Die-Block.	35
Step 3 – Verify punch alignment & adjustment	35
Step 4 – Punch alignment Front to back – Left to right	36
Step 5 – Install the Clinching Blades	38
Step 6 – Bring shut height to its highest position & install the spring, stripper & stripper can.	39
Adjustment of the timing belt	39
Step 7 – Adjusting the button dimension	41
ANNEXE A – Part list	42
ANNEXE B – Electrical schematic	50



AZIMUTH MACHINERY
T. 450 632 8080 • sales@azimuthpress.com • www.azimuthpress.com
6040 Route 132, Ste-Catherine, Quebec, Canada, J5C 1B6





Figures

Figure 1 - Overall components of the H612 GEN III	5
Figure 2 - How to measure button diameter w/ a caliper	20
Figure 3 - Important dimensions of a clinching joint	21
Figure 4 - Adjustment of the shut height.....	22
Figure 5 - Properly adjusted oiling system.....	23
Figure 6 - How to order spare parts.....	25
Figure 7 - Adjusting belt tension	30
Figure 8 – Adjusting material thickness	31
Figure 9 - Cup-ball verification.....	33
Figure 10 - Adjustment of the button dimension	41

Tables

Table 1 - Button diameter vs material thickness	20
Table 2 - Important values of a clinching joint.....	21
Table 3 - Automatic Oiling parameter	23
Table 4 - Troubleshooting	27
Table 5 - Press won't stroke if.....	28
Table 6 - Button diameter problem	29
Table 7 - Trouble-shooting guide to a bad joint quality.....	29



Warning

This instruction manual is issued for Azimuth's Clinching press servo series. If you have any others types of press, please call Azimuth Machinery technical support for more information.

Do not operate this machine until you read and understand the following safety precautions. Not complying with these precautions may result in death or serious injuries.

- ⚠ Never operate this machine until you've read & understood that this machine is dangerous. Placing your hands or any part of your body in this machine could result in the loss of finger, limbs or even death.**
- ⚠ Never operate this machine without the use of a guard or safety device that will always protect you from injuries**
- ⚠ Never work on this machine unless power is off and lock**



Warranty plan on GEN III clinching presses models

Years servo, drive & Gear-head, PLC & electrical components warranty

5

Azimuth machinery warrants to the original purchaser, to repair or, at AZIMUTH MACHINERY'S sole option, replace any major servo failure, servo drive & gear head & ALL Electrical components (greaser, oiler, motor, main controller, sensors or buttons) after examination by AZIMUTH MACHINERY's properly authorized representative, to be defective in material or workmanship under normal use within five (5) years or, if sooner, **5,000,000 strokes** after the original date of shipment from the AZIMUTH MACHINERY plant.

Does not include labor¹ or diagnostic work. The original purchaser will be responsible for travel costs and expenses.

Years mechanical parts warranty (Frame, mechanical components)

3

Azimuth machinery warrants to the original purchaser, to repair or, at AZIMUTH MACHINERY'S sole option, replace any parts that are found defective (Ball-screw, pitman(s), crankshaft(s), slide, GIBS, RAM, after examination by AZIMUTH MACHINERY's properly authorized representative, to be defective in material or workmanship under normal use within three years or, if sooner, **3,000,000 strokes** after the original date of shipment from the AZIMUTH MACHINERY plant.

Does not include labor² or diagnostic work. The original purchaser will be responsible for travel costs and expenses.

Lifetime support over phone & online videos



Azimuth machinery offers lifetime support to all its end-users. This means free support over phone & access to online videos for technical support & maintenance tips on new machine.

¹ 150\$/hour + traveling expense.



Clinching press

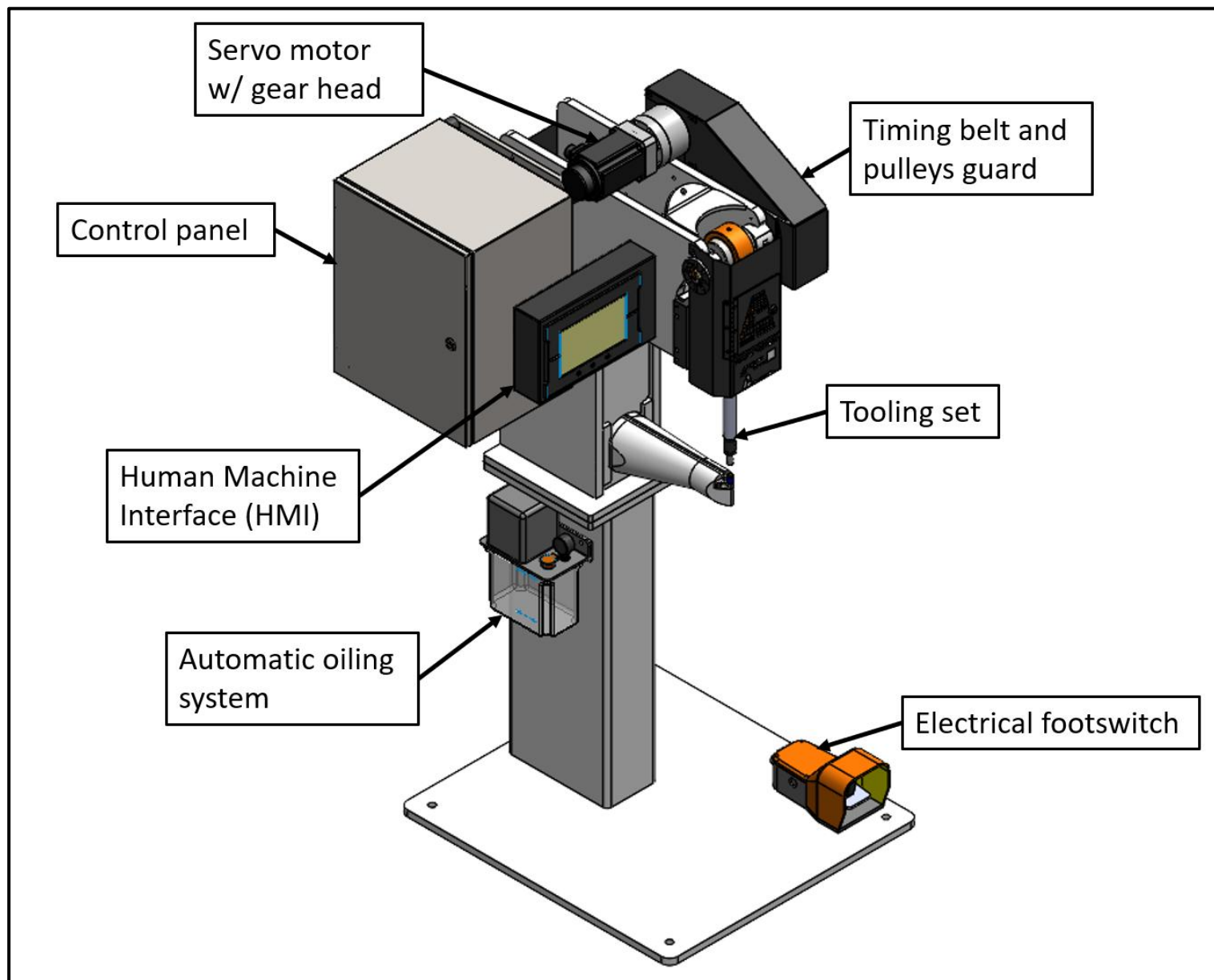


Figure 1 - Overall components of the H612 GEN III



AZIMUTH MACHINERY

T. 450 632 8080 • sales@azimuthpress.com • www.azimuthpress.com
6040 Route 132, Ste-Catherine, Quebec, Canada, J5C 1B6



Start-up

Prior using the machine, make sure the shut height is properly adjusted to your material thickness.

This machine is rated for 208V/60Hz in star configuration. Or a 240V two lines configuration. Make sure to [verify electrical schematic](#) prior start-up.

Prior to using the machine with material, try to cycle it 5 times to make sure nothing has been damaged during transport (guarding system, pitman enclosure, etc.).

******This machine is equipped with intelligent safety stroke make sure you understand and read [safety torque adjustment](#)******



HMI Instruction Manual



H600 GEN III

Presses & Automation

Since 1975

www.azimuthpress.com



Never operate this machine until you've read & understood that this machine is dangerous. Placing your hands or any part of your body in this machine could result in serious injuries



This machine is capable of clinching two layers of 16GA mild steel material. This machine is not capable of clinching wood, plastic, rubber or other type of material



Verify machine adjustment prior use. Failing to do so may result in mechanical failure of the machine



Press anywhere to continue

Preface

1. Operation Modes

1. General information

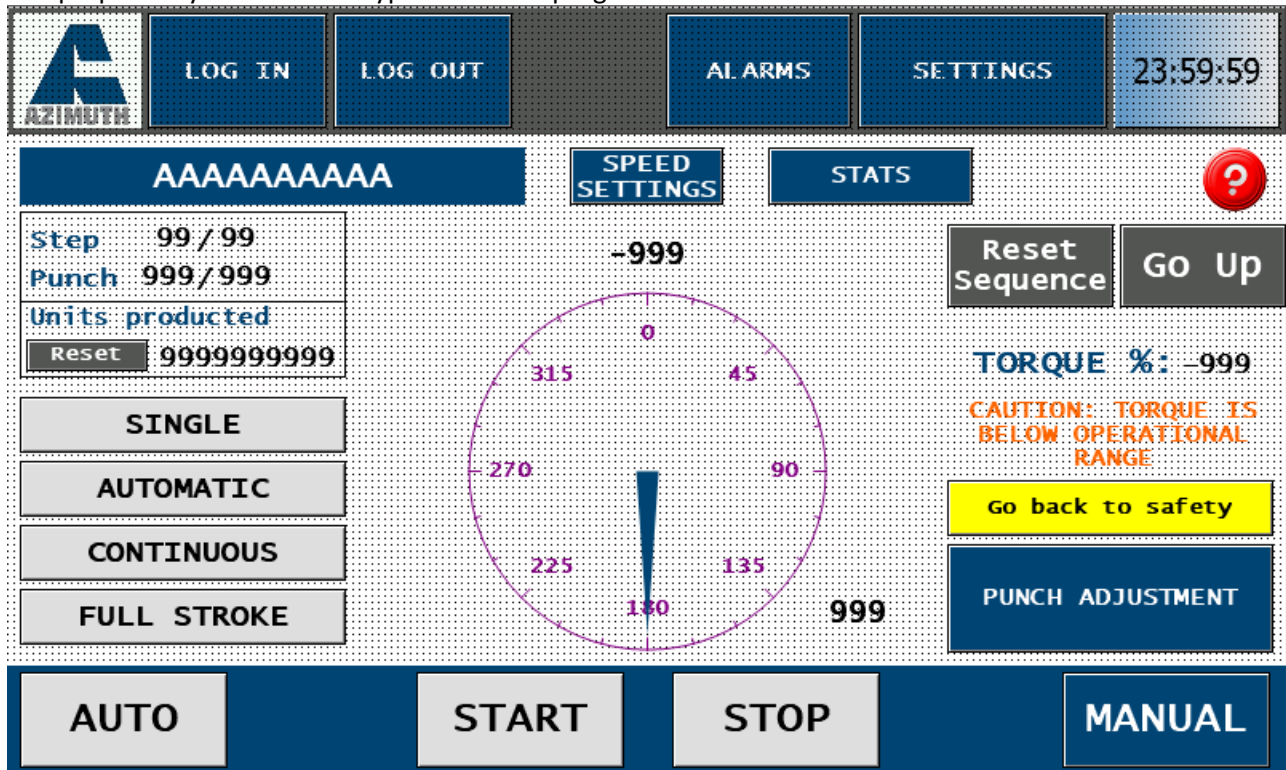
There are four modes of operation that can be selected to operate the machine : Single, Automatic, Continuous and Full Stroke. Full stroke is a legacy mode in which the press does a 360 degrees rotation, this mode is **extremely dangerous** and should only be operated with guarding in place. To operate the press one of the four modes must be selected and no alarm present.

At any time, if you want to stop the machine from operating, press the stop button. Use the Emergency stop button for emergencies only.

Every time you select a different mode, when you press the pedal for the first time, the machine will go in its up position. For every operating mode, there's a preparatory state where the machine gets close to

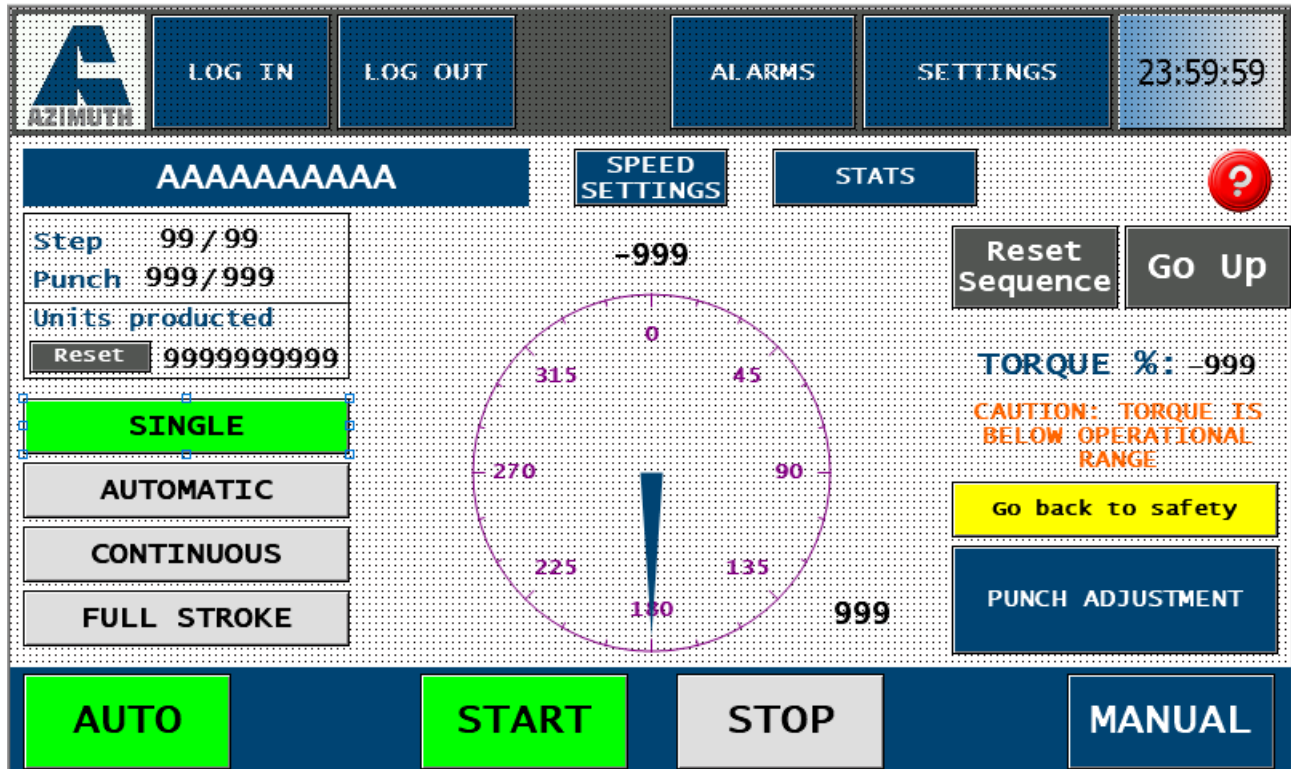


the material, the preparation state is necessary every time the machine is in the up position (0 degrees). The machine will punch only after this state, and a new press on the pedal.
The preparatory state can be bypassed in the program tab when “Direct Punch” is checked.



2. Single

The single mode is a mode in which the user presses the pedal for each punch. When operating in single mode, the program will follow the sequences set in the program page but will not follow the wait time. A punch is done for each press on the pedal.



3. Auto

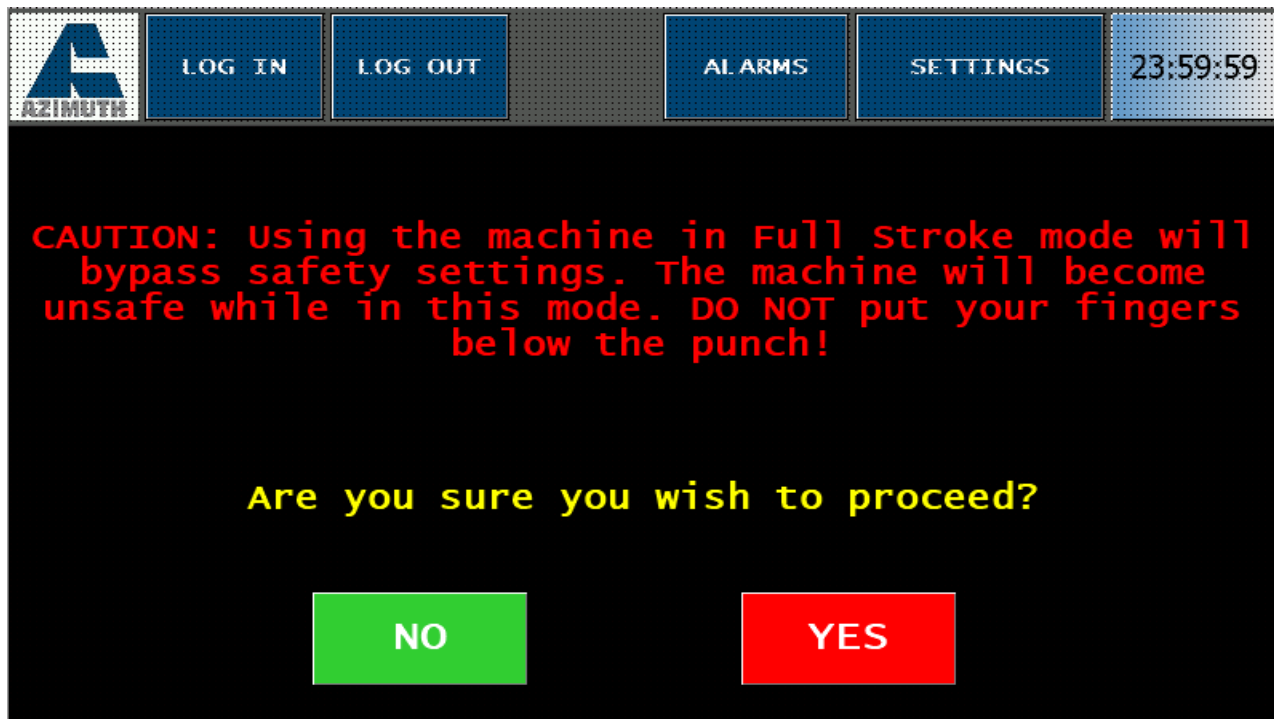
The auto mode allows you to keep your foot down on the pedal and do a sequence of punches. Before each punch, the machine will wait for the time you set in the program page.

4. Continuous

The continuous mode is the same as Auto mode, but you don't need to keep your foot on the pedal. In this mode, the machine will continue to punch multiple times until the sequence is done.

5. Full Stroke

This mode is **extremely dangerous** and should only be operated with guarding in place. In this mode, the machine does a all 360° every time you press the pedal. In this mode, all safety features are **disabled**.



2. Sequences

1. Use sequences

In the program page, it's possible to configure sequences. Each sequence is defined by its number of strokes, the wait between each punch, and the behavior at its end. You can toggle the use of a sequence by clicking on the checkboxes "Enable". Ex: To enable the sequence 3 (S3), the sequence 2 and the sequence 1 must be enabled).



	LOG IN	LOG OUT	ALARMS	SETTINGS	23:59:59
---	--------	---------	--------	----------	----------

AAAAA (99999) ▼				LOAD	SAVE	
-----------------	--	--	--	------	------	---

	Active	Number of punches	Wait time	Stay Down		Active	Number of punches	Wait time	Stay Down
S1	☐	999	-9.9	☐	S6	☐	999	-9.9	☐
S2	☐	999	-9.9	☐	S7	☐	999	-9.9	☐
S3	☐	999	-9.9	☐	S8	☐	999	-9.9	☐
S4	☐	999	-9.9	☐	S9	☐	999	-9.9	☐
S5	☐	999	-9.9	☐	S10	☐	999	-9.9	☐

BACK	Direct Punch ☐	SPEED SETTINGS	RECIPE EDITOR
------	---------------------------------------	----------------	---------------

2. Wait time

The wait time can be configured so the machine waits a certain amount of time before each punch in a sequence. You can set it between 0s and 5s.

3. End of sequence behavior

At the end of a sequence, you have the possibility to force the machine to stay in down position. To do so, click on the checkbox "stay down". Otherwise, the machine will go in up position at the end of each sequence.

3. Recipes

A recipe is a way to store the settings for a product. You can create up to 15 recipes in the HMI

1. Create a recipe

By default, 15 recipes are created with the name "default" to create a recipe, choose one with the name "default" or an existing one in the recipe editor tab accessible from the "program" menu. You can configure the exact same settings that are in the "program" tab. Also, you can set the speeds of the machine. See Settings chapter for more information.





LOG IN

LOG OUT

ALARMS

SETTINGS

23:59:59

AAAAAAAAAA (99999) ▼

EXPORT TO USB

IMPORT FROM USB

Name	AAAAAAAAAA	S1_Enable	0	S6_Enable	0
Prep_Speed	-999	S2_Enable	0	S7_Enable	0
Punch_Speed	-999	S3_Enable	0	S8_Enable	0
GoUp_Speed	-999	S4_Enable	0	S9_Enable	0
Full_Speed	-999	S5_Enable	0	S10_Enable	0

EXIT

Page 1/2

NEXT

S1_Strokes	999	S1_Wait	-9.9	S1_Down	0
S2_Strokes	999	S2_Wait	-9.9	S2_Down	0
S3_Strokes	999	S3_Wait	-9.9	S3_Down	0
S4_Strokes	999	S4_Wait	-9.9	S4_Down	0
S5_Strokes	999	S5_Wait	-9.9	S5_Down	0
S6_Strokes	999	S6_Wait	-9.9	S6_Down	0
S7_Strokes	999	S7_Wait	-9.9	S7_Down	0
S8_Strokes	999	S8_Wait	-9.9	S8_Down	0
S9_Strokes	999	S9_Wait	-9.9	S9_Down	0
S10_Strokes	999	S10_Wait	-9.9	S10_Down	0

EXIT

Page 2/2

BACK

2. How to use a Recipe

In order to use a recipe in production mode, you first need to select the recipe you want to use in the program page using the dropdown-list. Once the recipe is selected, press the “load” button to update the data in the machine. When you press “load”, the program data should update. Another good way to check if the data has been loaded correctly is to go on the main page and confirm the name of the current recipe.

AAAAAAAAAA (99999) ▼

LOAD

SAVE



3. Updating Recipe

You have two options to update a recipe. The first option is to go in the program page and edit the current settings, then press “save” and “confirm, it updates the recipe settings to the current settings of the machine. The best way to do it is to first load the recipe, then edit it. Otherwise, the name and the speed settings of the recipe might change too.

The other way to edit a recipe is to go in the recipe editor and change manually the settings. When doing so, the changes do not take effect immediately. After an edit, you’ll have to load the recipe again.

Tip: You can copy/paste a recipe by loading a recipe, then selecting another one and saving it. Doing so can duplicate the settings from a recipe to another, and it’s sometimes easier and faster than doing it manually.

4. Load / Export Recipes

In the Recipe Editor page, you have the possibility to import/export a list of recipes to/from a “.csv” file. This option is very useful when you want to change all the recipes at once, and can be done in excel. The export function is recommended when you want to save the recipes, to a USB stick for example.

AAAAAAAAAA (99999) ▼	EXPORT TO USB	IMPORT FROM USB
----------------------	---------------	-----------------

4. Settings

1. Speeds

In the program page, you have access to the “speed settings” page. This page allows you to configure at which speed (between 10% and 100% of the motor’s max speed) the machine should operate for each step of the movement.

	LOG IN	LOG OUT	ALARMS	SETTINGS	23:59:59
---	--------	---------	--------	----------	----------

Speeds in %

Preparation	-999	Full Stroke	-999
Punch	-999	Manual Mode	-999
Go Up	-999	Acceleration	-999999
		Deceleration	-99999999
Time before going up	-99.9		

BACK
FINE TUNING

2. Opening Distance

In the safety torque procedure page, under opening angles, you can also configure the opening of the machine in its preparatory state. The opening can be set in inches, mm or degrees. If it’s set too low, you’ll not be able to move your material under the die. If it’s set too high, there’s a higher risk that the material



moves before the punch and can **pose a safety hazard** as your finger could fit under the punch. The default limit for this setting is 1/4" which is a security standard.

	LOG IN	LOG OUT		ALARMS	SETTINGS	23:59:59
--	--------	---------	--	--------	----------	----------

Opening
Angles/Distances

Angle Low	-999	☒
Angle High	-999	☒
mm	-999.999	☒
In.	-9.9999	☒

BACK

3. Homing

The machine is already precisely "homed" in our factory. This operation consists in giving the reference position for the motor. The reference is the angle 0°/360°. To home the machine, move it to its top most position, then click "reset home". The topmost position is determined using a dial indicator gauge. If the machine isn't going low enough to punch properly, doing the homing will not change anything. You will need to mechanically adjust the machine.





LOG IN

LOG OUT

ALARMS

SETTINGS

23:59:59

Jog the machine to the topmost position so that the clock is at 12, as in the picture below, and press the RESET HOME button.

Deg

-999.9

☒

mm

-99.999

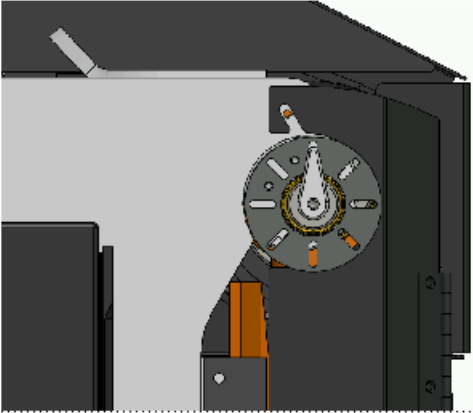
☒

In.

-9.9999

☒

GOTO POSITION



CAUTION: Improperly resetting the homing position can cause injuries, finger safe modes may not work anymore and unpredictable behavior can happen.

Reset Home

MANUAL

START

STOP

AUTO

4. Direct Punch

The direct punch functionality is used to bypass the preparatory state of the machine when using a production mode (Single, Auto, Continuous). When Direct Punch is checked in the program settings page, the machine will go down when you press the pedal, and instantly punch. If you remove your foot before the punch, the machine will go back up.

AAAAAAAAAA (99999) ▼

LOAD

SAVE



	Active	Number of punches	Wait time	Stay Down		Active	Number of punches	Wait time	Stay Down
S1	☐	999	-9.9	☐	S6	☐	999	-9.9	☐
S2	☐	999	-9.9	☐	S7	☐	999	-9.9	☐
S3	☐	999	-9.9	☐	S8	☐	999	-9.9	☐
S4	☐	999	-9.9	☐	S9	☐	999	-9.9	☐
S5	☐	999	-9.9	☐	S10	☐	999	-9.9	☐

BACK

Direct Punch ☐

SPEED SETTINGS

RECIPE EDITOR



5. Access

The HMI allows different users to operate the machine, with different access rights. The accounts are the following:

User	Password	Access
Operator	11223344	• Change the speeds and opening angles • Operate in full stroke
Maintenance	44332211	• See the production statistics of the machine (works only with Advantech Screens) • Make a safety calibration • Modify the recipes • Disable Safety • Everything that OPERATOR has access to
Admin	12345678	• Change the Homing • Change the production mode • Reset the counters • Everything that MAINTENANCE has access to

6. Safety features

To guarantee a safe use of the machine, we developed a safety torque feature which detect when the torque is increasing in a position it shouldn't be. This safety feature is enabled by default and shouldn't be deactivated. It's recommended that you make a calibration of the safety torque when you receive the machine. To do so, you need to go in the settings page, then click on safety torque procedure. Click "Go Up", remove any material of the punch zone. Then click on "Start Calibration". During the calibration, the safety torque feature is **disabled, be extremely careful**. Press the pedal multiple times until the button goes back to grey. The total process can take up to 1 minute total. It's recommended to make a calibration whenever you change a mechanical part (belt, motor, die, pitman). The machine won't let you operate if the safety torque is not calibrated. The calibration expires every 30 000 punches.

Once the automatic calibration is done, you can adjust the absolute torque offset. The higher you set the value, the less sensitive the machine will be. But if you set it too low, the safety torque might trigger for no reason. Avoid setting it higher than 5, typical is 3.

Once you've set the absolute torque offset, you can change the torque offset in angles (from approach and from top). These settings avoid the safety torque to trigger due to acceleration period. The offset from approach can be kept to 0° most of the time. For the top offset, it's recommended you set it between 30° and 50°.

To know if the offset angle from top is too low, go in the main page and try to operate the machine normally. If the safety torque triggers, look the trigger angle on the bottom right of the graphical gauge. For example, if you set an offset top angle of 40° and the safety torque triggers between 40° and 45° or between 320° and 315°, then you can increase the value of the offset angle. Another way to solve false trigger of the safety torque is to increase the acceleration, or increase the absolute torque offset.

Once the calibration is done and you don't have anymore false triggers, then use the plastic finger (or the blue pipe) to test the safety.

Never use your own finger to test the calibration!!!

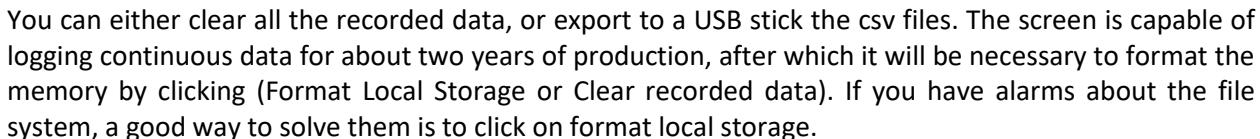


Each time a speed, acceleration or opening setting is changed, you will have to make a new safety torque calibration.

	LOG IN	LOG OUT	ALARMS	SETTINGS	23:59:59																				
Safety Torque calibration Remove evrything from the punch zone. Press the pedal multiple times until the button goes gack to grey. If the button is disabled, make sure that the machine is in up position																									
Go Up		Start Calibration		Warning: No safety during calibration																					
Motor Settings <table style="width: 100%;"> <tr> <td style="width: 40%;">Absolute Max Torque</td> <td style="width: 60%; text-align: center;">-999</td> </tr> <tr> <td>Min Torque</td> <td style="text-align: center;">-999</td> </tr> <tr> <td>Absolute Torque Offset</td> <td style="text-align: center;">-99.9</td> </tr> <tr> <td>Safety Torque</td> <td style="text-align: center; background-color: green; color: white;">Enable</td> </tr> </table>			Absolute Max Torque	-999	Min Torque	-999	Absolute Torque Offset	-99.9	Safety Torque	Enable	Torque offset from bottom <table style="width: 100%;"> <tr> <td style="width: 40%;">Angle</td> <td style="width: 20%; text-align: center;">-999</td> <td style="width: 40%; text-align: center;">☒</td> </tr> <tr> <td>mm</td> <td style="text-align: center;">-99.999</td> <td style="text-align: center;">☒</td> </tr> <tr> <td>In.</td> <td style="text-align: center;">-9.999</td> <td style="text-align: center;">☒</td> </tr> <tr> <td>Torque Offset top in angle</td> <td colspan="2" style="text-align: center;">99</td> </tr> </table>			Angle	-999	☒	mm	-99.999	☒	In.	-9.999	☒	Torque Offset top in angle	99	
Absolute Max Torque	-999																								
Min Torque	-999																								
Absolute Torque Offset	-99.9																								
Safety Torque	Enable																								
Angle	-999	☒																							
mm	-99.999	☒																							
In.	-9.999	☒																							
Torque Offset top in angle	99																								
					BACK																				

7. Production data and statistics

Every 10 minutes, the HMI saves the production data to its local memory, every day at 12:00, a “.csv” file is created that contains all the past production. You can visualize the production of the last 30 days in the graph, make sure to select “Display” to display the data production on the graph. You can also zoom in or out on the vertical axis using the + and – buttons. Click on More to access advanced functions about the data logging.





Go up on time is a function that can be enabled/disabled and allow the machine to go up when no action is detected during a certain amount of time (that can be set in speed settings page).

It is also possible to disable the sequences in the settings page, then “production mode”. Note that only the admin can do it.

	LOG IN	LOG OUT	ALARMS	SETTINGS	23:59:59
Here you can choose which mode is accepted for production					
SINGLE AUTOMATIC CONTINUOUS FULL STROKE		GO UP ON TIME FOLLOW SEQUENCES		Min opening Angle -999	
BACK					

9. Troubleshooting

Alarms	Possible Problems	Solution
Oil level alarm	The oil level is too low.	Fill with oil.
	The float switch is malfunctioning.	Check the input five from the PLC, if it's lit and the oil level is correct then open the oil reservoir to verify the float.
Over torque alarm	Incorrect punch adjustment	Refer to punch adjustment procedure .
	Incorrect material or thickness of material.	Choose the proper material as per the chart on the machine.
	Ram is loose, adjust the guides.	Contact manufacturer
Finger Safety torque alarm	Something, like a finger, obstructed the machine while it was going into its safety angle.	Remove obstruction and reset the alarm.
	Safety torque is due to be readjusted.	Complete safety torque adjustment procedure .
Servo drive fault alarm	An error has occurred with the servomotor.	Check with the documentation of the servo's manufacturer.
Maintenance due alarm	Maintenance is due to be performed.	Complete the maintenance procedure. Although this error can be reset using the alarm screen, it will come shortly afterwards until the maintenance procedure screen is completed.



E-stop alarm	The E-stop was activated.	Pull on the E-Stop and reset the alarm.
Torque is below operational level WARNING	Incorrect material thickness or no material present	Use correct materials as per punch adjustment page on the main screen.
	Punch is broken	Change punch
	Improper clinching	See the clinching joint section

Re-adjusting machine for new thickness

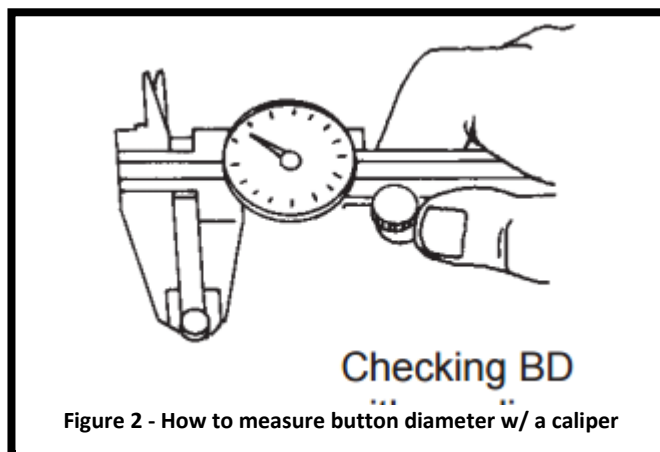
When changing the material thickness, make sure to adjust the machine button diameter on your Azimuth's clinching press. The Table 1 - Button diameter vs material thickness show the different button diameter in relation with the material thickness.

Table 1 - Button diameter vs material thickness

Thickness of 1 part	Button diameter
0.012"	0.240" ± 0.005 "
0.015"	0.250" ± 0.003 "
0.018"	0.260" ± 0.003 "
0.021"	0.270" ± 0.003 "
0.027"	0.275" ± 0.003 "
0.034"	0.285" ± 0.003 "
0.040"	0.285" ± 0.003 "
0.052"	0.290" ± 0.003 "
0.063"	0.295" ± 0.003 "

The button diameter represents the measure of the bottom part of the two metal sheets you are clinching (*die side*).

Joint quality (*strength*) is monitored by measurement of the button diameter. Button diameter is controlled by adjusting the ball screw on your Azimuth's clinching press. See below how to adjust the ball screw on the ram. The **Figure 2 - How to measure button diameter w/ a caliper** shows how to measure the button diameter.





Minimum distance requirement with Azimuth's tooling

The figure below shows the important dimensions to follow when clinching two parts together, Table 1 - Button diameter vs material thickness gives the values related to the figure below. The dimension shown are for reference to get a proper joint size with the Azimuth's Clinching press.

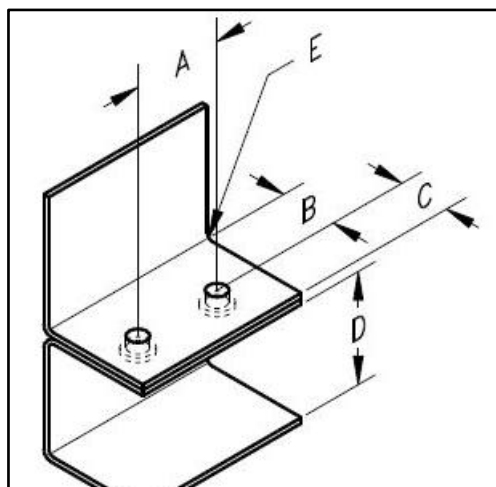


Figure 3 - Important dimensions of a clinching joint

Table 2 - Important values of a clinching joint

A	B	C	D	E
0.580" (14.73mm)	0.320" (8.1mm)	0.180" (4.6mm)	Depends of the machine	0.03" (0.8mm)



Shut height adjustment

The figure below shows how to raise or descend the punch (adjust the shut height of the machine).

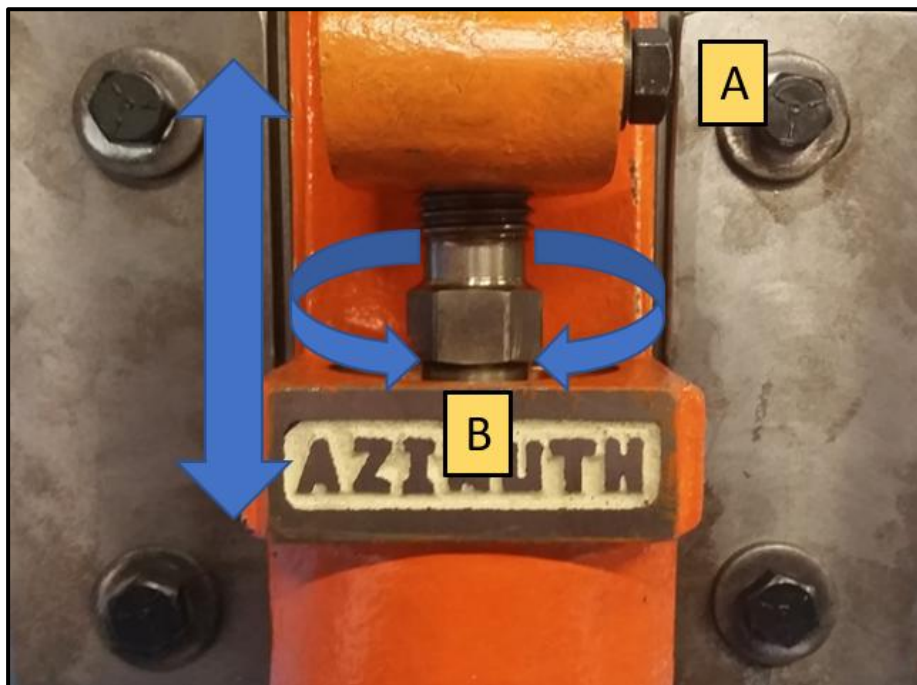


Figure 4 - Adjustment of the shut height

Raising the punch (turning the screw left to right) will result in a **smaller button diameter** while descending (turning the screw right to left) the punch will result in a **bigger button diameter**.

1. Press on the E-Stop or preferably lockout the power to the machine.
2. Raise the front guard by loosening the two screws, one on each side
3. Loosen bolt **A** (see figure above), not need to remove it entirely, just until it's loose.
4. Rotate the ball screw **B** with a ¼ turn or less in the desired direction.
5. Tighten the locking bolt **A** on the side of the pitman.
6. Put the power back on, or reset the securities, and test by using two pieces of material.
7. Verify that button diameter (**die side**) matches the recommended dimension.
8. Continue the procedure lines 1 to 6 until you have the right button diameter.



***** ALWAYS BRING THE BALL SCREW TO THE HIGHEST POSITION WHEN YOU ARE CHANGING THICKNESSES OR INSTALLING A NEW PUNCH *****

Oiling system

Azimuth presses are equipped with an automatic lubrication centralized system for main bearing, bushing & gibs. The table below gives the important information relative to the oiling system.

Table 3 - Automatic Oiling parameter

Idling time	800 minutes
Running time	At start-up, 5sec & after idling time
Oil type	SHELL TELLUS S2 M68 or EQUIVALENT

To change the oiling parameter:

- Press & hold the *Set* key
- Running time will appear, in **seconds**
 - Change with the arrow if needed
- Press & hold the *Set* key
- Idle time will appear, in **minutes**
 - Change with the arrow, if needed
- To run the oiling system manually, simply press the *Set* key once.

Oiling pressure while running

To verify the oiling system is working properly, simply press the *Set* key once & make sure the pressure gauge is within green & yellow range. The figure below shows a well-adjusted oiling system.

Maintenance

The maintenance counter is a built-in counter within the controller to remind you to verify basic points on the machine. Once the counter reaches 300,000 an alarm will trigger to remind you to do maintenance.

Figure 5 - Properly adjusted oiling system



AZIMUTH MACHINERY
T. 450 632 8080 • sales@azimuthpress.com • www.azimuthpress.com
6040 Route 132, Ste-Catherine, Quebec, Canada, J5C 1B6



You can reset the alarm using the reset button on the alarm page but the alarm will come back after 45 minutes. To remove the alarm entirely, **complete the procedure** from the maintenance menu.





Ordering spare parts

Make sure to have tonnage & serial number of the press before ordering spare parts.

First digit represents tonnage of the machine, followed by part's number. (Ex: 6-633, standard servo crankshaft for 6 tons press).

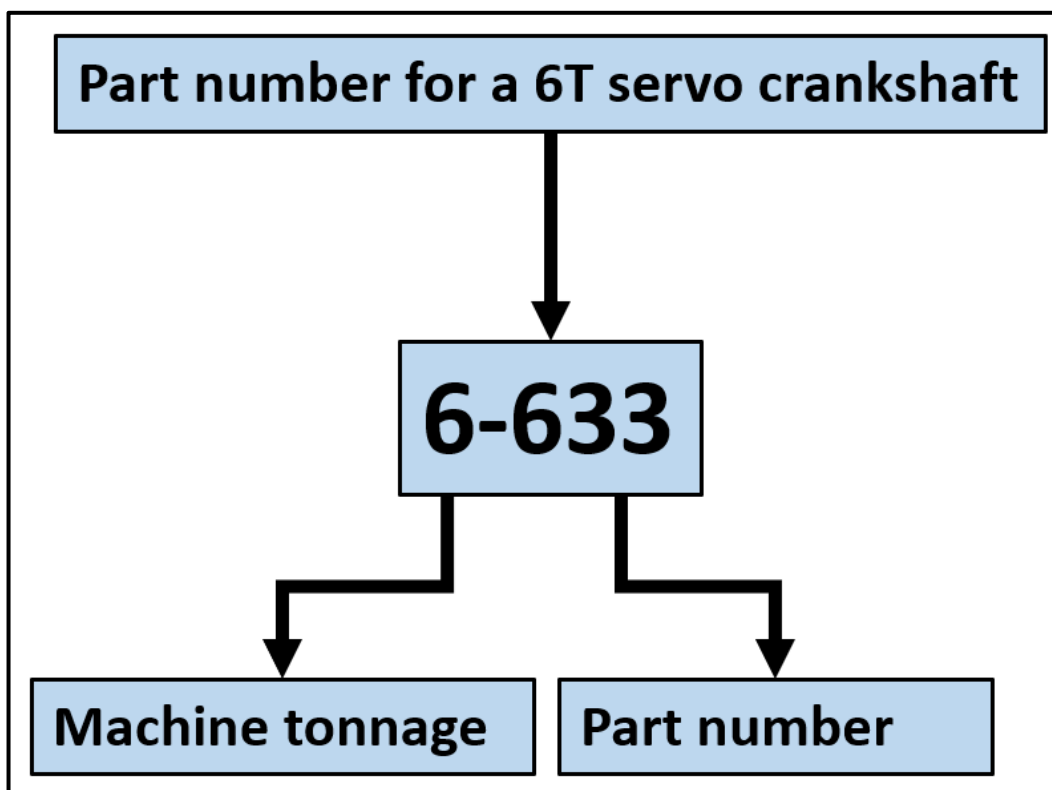


Figure 6 - How to order spare parts



Changing punch & die

Navigation		Status	
LOG IN	LOG OUT	ALARMS	MAINTENANCE
		15:40:31	

Main Menu		
Torque and Safety Parameters	I/O Display	Homing
Maintenance Procedure	Spare Parts	Warranty

Value	Counter Name	Action
898	Warranty Counter (Red if VOID)	
898	Overall Counter	Reset
898	Punch Counter	Reset
898	Die Counter	Reset
898	Maintenance Counter	Reset

Punch & die are rated for approximately 300,000 cycles under good condition. When a maintenance counter is reached, machine's owner should start thinking changing the punch & die for a proper joint quality.

Please note that punch & die might need to be changed before 300,000 cycles.



Troubleshooting

Alarms

Table 4 - Troubleshooting

Alarms	Possible Problems	Solution
Oil level alarm	The oil level is too low.	Fill with oil.
	The float switch is malfunctioning.	Check the input five from the PLC, if it's lit and the oil level is correct then open the oil reservoir to verify the float.
Over torque alarm	Incorrect punch adjustment	Refer to punch adjustment procedure .
	Incorrect material or thickness of material.	Choose the proper material as per the chart on the machine.
	Ram is loose, adjust the guides.	Contact manufacturer
Finger Safety torque alarm	Something, like a finger, obstructed the machine while it was going into its safety angle.	Remove obstruction and reset the alarm.
	Safety torque is due to be readjusted.	Complete safety torque adjustment procedure .
Servo drive fault alarm	An error has occurred with the servomotor.	Check with the documentation of the servo's manufacturer.
Maintenance due alarm	Maintenance is due to be performed.	Complete the maintenance procedure. Although this error can be reset using the alarm screen, it will come shortly afterwards until the maintenance procedure screen is completed.
Safety angle overlapping alarm	One of the positions in the mode settings is overlapping with the safety torque angles set in the torque menu.	Readjust the positions in the mode settings, modify the safety angles or disable safety torque.
E-stop alarm	The E-stop was activated.	Pull on the E-Stop and reset the alarm.
Torque is below operational level WARNING	Incorrect material thickness or no material present	Use correct materials as per punch adjustment page on the main screen.
	Punch is broken	Change punch
	Improper clinching	See the clinching joint section



Press won't stroke

The clinching press won't stroke if:

Table 5 - Press won't stroke if

<i>Possible Problems</i>	<i>Solution</i>
Defective pedal	Verify NO and NC contact inside foot pedal.
Press not in auto mode	Press on the auto button and press start again.
No mode selected	Select a mode from the menu
Active alarm	Remove the cause of the alarm and reset
Broken belt	Verify belt of the servo motor. A broken belt would cause the motor to turn, but not rotating the main shaft.



Improper clinching joint

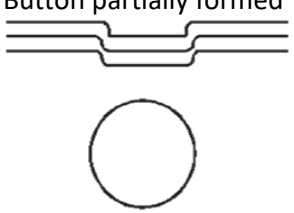
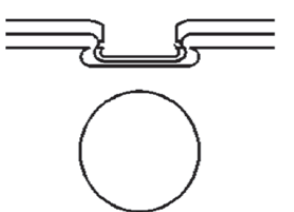
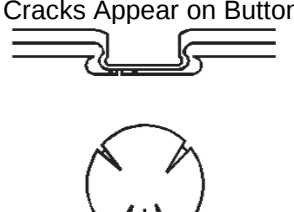
Depending on your material thickness, there is a small adjustment require on the RAM. The table below shows a problem relative to the button diameter.

Table 6 - Button diameter problem

Possible Problems	Solution
Lower/Higer of the button's Diameter	Change your die assembly to the proper die Readjust the ram when you change thicknesses (bring the RAM higher for thicker material, lower for thinner material).

The table below shows different problems related to the button of the joint. The symbol at left represents a properly formed clinching joint, viewed from the button (die) side and in section. Clinching tools can commonly produce more than 200,000 good joints. Problems can however occur. The illustrations below represent possible problem variations of the joint.

Table 7 - Trouble-shooting guide to a bad joint quality

Problem	Cause	Solution
Button partially formed 	Metal not of specified thickness	Use Specified Metals or Change to Appropriate Tooling
	Die Elastomer or Die Spring Broken	Replace Elastomer or Spring
	Incorrect Tooling for Metals	Verify Joint Data / Change Tooling if Necessary
	Incorrect Shut Height	Adjust Shut Height for Correct BD
Piercing or cracking of Punch Side Sheet Metal 	Metals Not of Specified Thickness regarding shut height	Re-adjust the shut height
	Incorrect Tooling for Metals	Verify the tooling matches the specified thickness.
	Weak or Broken Stripper Springs	Verify stripper spring inside the tooling assembly
	Punch and Die Not Concentric	Re-adjust the concentricity of the punch & die.
Cracks Appear on Button 	Metals Not of Specified Thickness or Hardness	Verify the punch & die matches the specify thickness.
	BD Too Large, Tooling Over Adjusted	Raise machine shut height
	Incorrect Tooling for Metals	Change tooling
	Punch and Die Not Concentric	Verify concentricity of punch & die



Procedures

SEE OUR CHANNEL ONLINE FOR MORE DETAILED VIDEOS OF MAINTENANCE & TIPS.

YOUTUBE CHANNEL: AZIMUTH MACHINERY

See procedure in the HMI

Adjustment of the timing belt

This procedure will help you tighten the timing belt at the right pressure. The figure below illustrates how to check the tension in the belt. To verify the belt tension, you will need to:

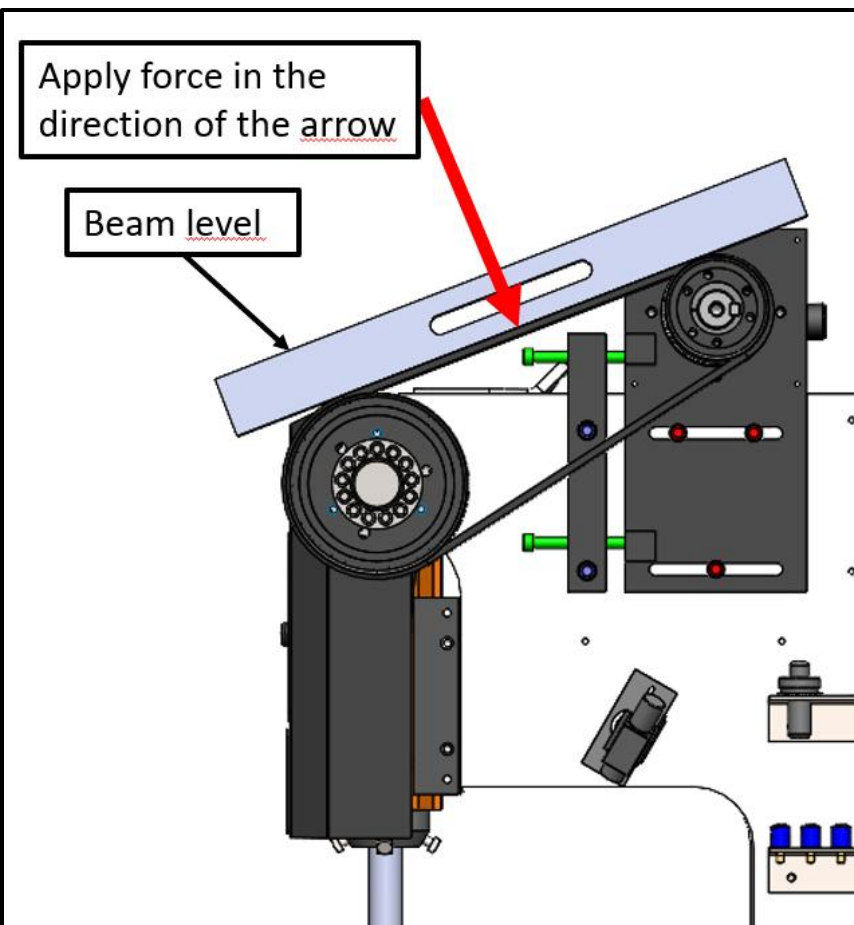


Figure 7 - Adjusting belt tension

1. Remove the timing belt and pulleys guard
2. Put a beam level on the belt and timing pulleys
3. Apply a downward force on the belt
4. Measure the distance between the level and the lowest point of the belt
 - a. If you measure less than a $\frac{1}{4}$ " you do not need to adjust the belt tension
 - b. If you measure more than a $\frac{1}{4}$ " you need to adjust the belt tension

If you have measure a deflexion of a $\frac{1}{4}$ " or more, this is what you need to do :

1. Loosen the 3 red machine screws
2. Tighten the 2 green machine screws
3. Tighten the 3 red machine screws
4. Check the belt tension as explained earlier
5. Repeat until you have a deflexion of less than a $\frac{1}{4}$ "
6. Put back the belt and pulleys guard on the machine



Re-adjusting material thickness (WITHOUT THICKNESS DIGITAL READOUT) - hmi

The figure below shows how to raise or descend the punch (adjust the shut height of the machine).

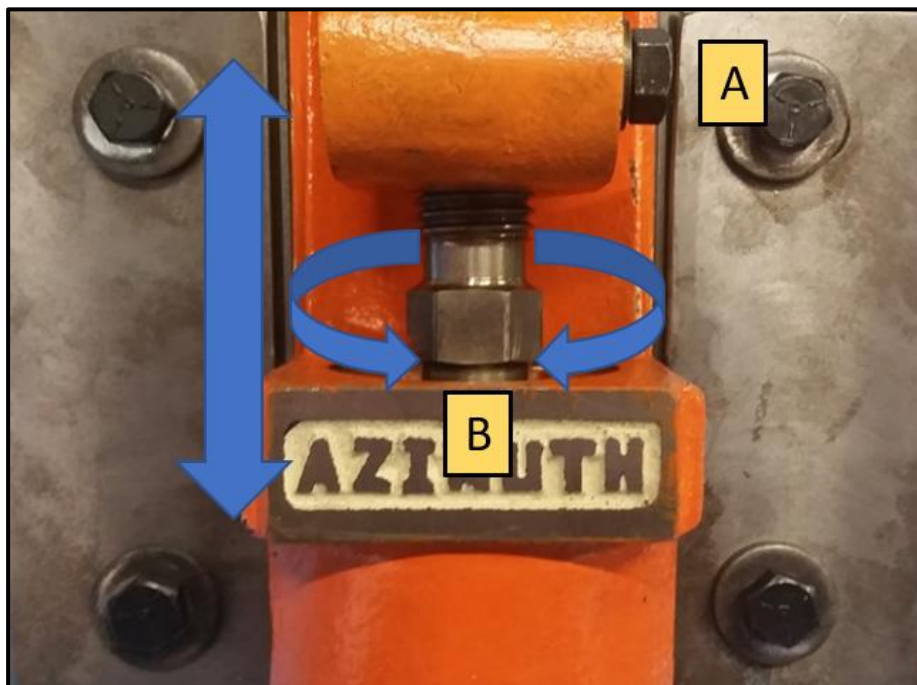


Figure 8 – Adjusting material thickness

Raising the punch (rotating the ball screw counter-clockwise) will result in a **smaller button diameter** while descending (rotating the ball screw clockwise) the punch will result in a **bigger button diameter**.

1. Turn the motor OFF and wait until the inertia wheel has completely stopped.
2. Remove the front guard enclosure of the machine.
3. Loosen bolt (A) on the side of the pitman (see figure above).
4. Rotate the ball screw (B) with a ¼ turn or less (clockwise for a bigger diameter, counter-clockwise for a smaller diameter)
5. Tighten the locking bolt (A) on the side of the pitman.
6. Turn the motor ON & clinch two parts of material together.
7. Verify that button diameter (**die side**) matches the dimension recommended.
8. Continue the procedure lines 1 to 6 until you have the right button diameter.



AZIMUTH MACHINERY
T. 450 632 8080 • sales@azimuthpress.com • www.azimuthpress.com
6040 Route 132, Ste-Catherine, Quebec, Canada, J5C 1B6



***** ALWAYS BRING THE BALL SCREW TO THE HIGHEST POSITION WHEN YOU ARE CHANGING THICKNESSES OR INSTALLING A NEW PUNCH *****



Verifying cup-ball adjustments

The cup-ball adjustment might get loose after several cycle.

Simply verify the cup-ball adjustment by pushing the RAM up. There should **NOT** be any loose. If there is some loose, see procedure online to readjust the cup-ball adjustment. The figure below illustrates how to verify the cup-ball. There shouldn't be more than 0.002" of loose within the ball-cup & the ball screw.

*****Please note that you might need to readjust the machine thickness after readjusting the cup-ball adjustment*****

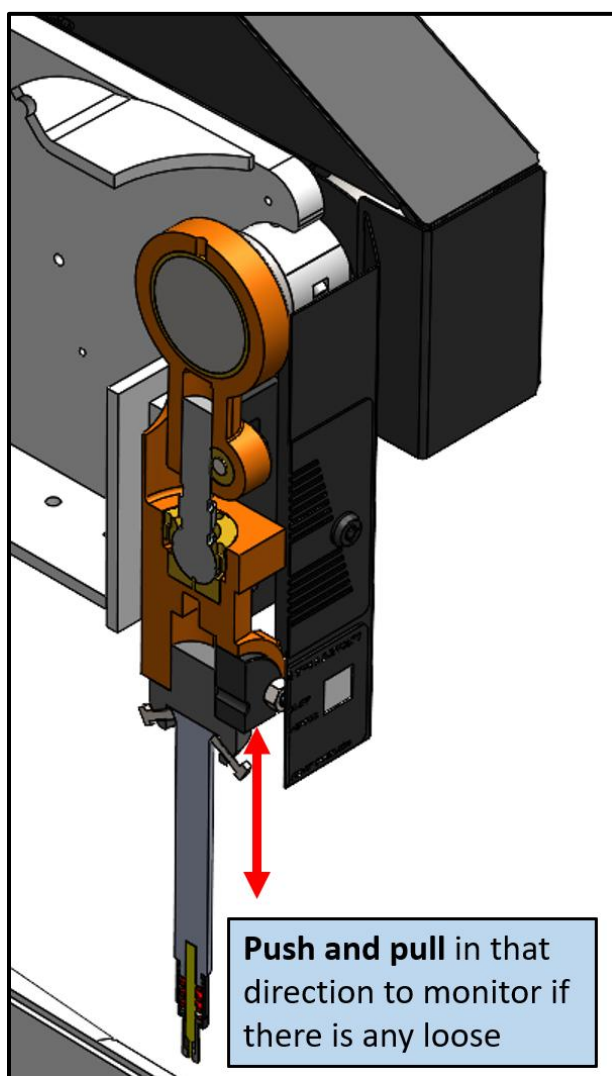


Figure 9 - Cup-ball verification

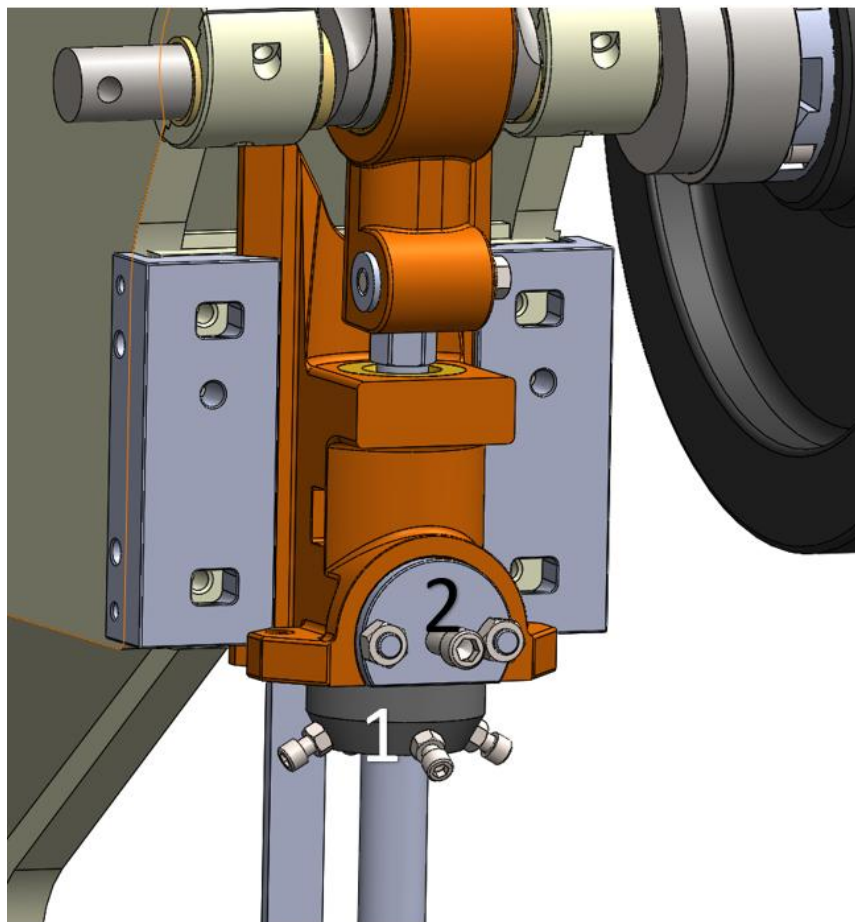
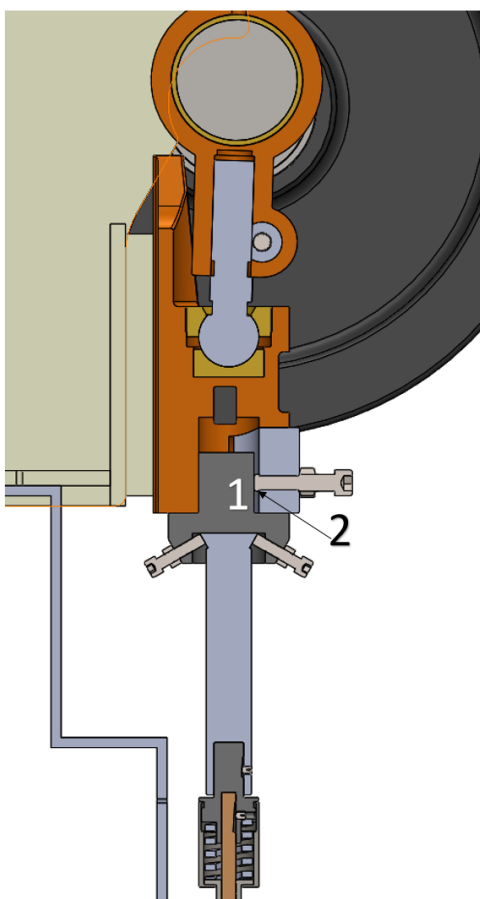


Installing Rectangular tooling on existing machine

Remove every source of power (electricity, air) going to the machine before starting installing the tooling.

Step 1 – Install tooling adapter (1) inside the shank

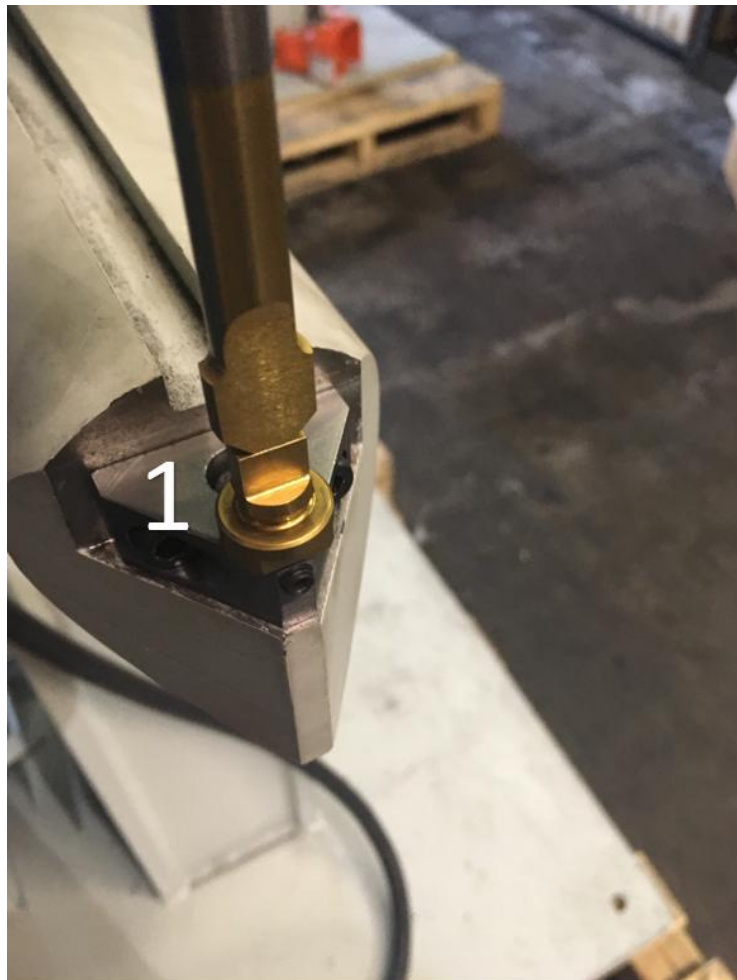
Make sure that the set-screw is properly aligned with the flat on the tooling adapter. Tighten the screw so the tooling adapter won't move.





Step 2 - Install Lance-N-Loc Die-Block.

Install the Lance-N-Loc die block (1) with the lance-n-loc die body
It is important to verify that the punch is properly parallel with the die body.



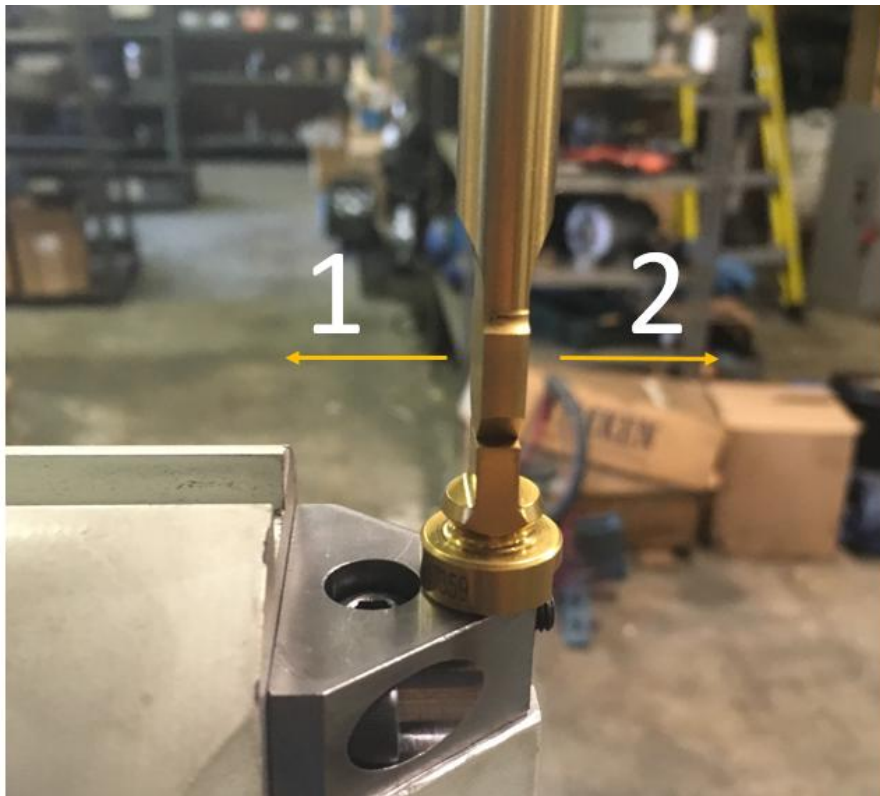
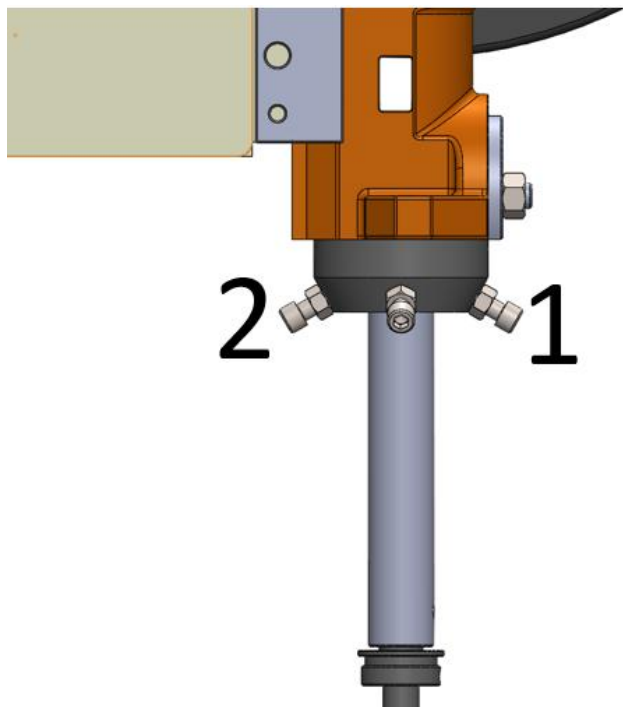
Step 3 - Verify punch alignment & adjustment

Verify that the punch is properly aligned with the die-body. Side #1 & Side #2 must be parallel with the respective face of the die-body.

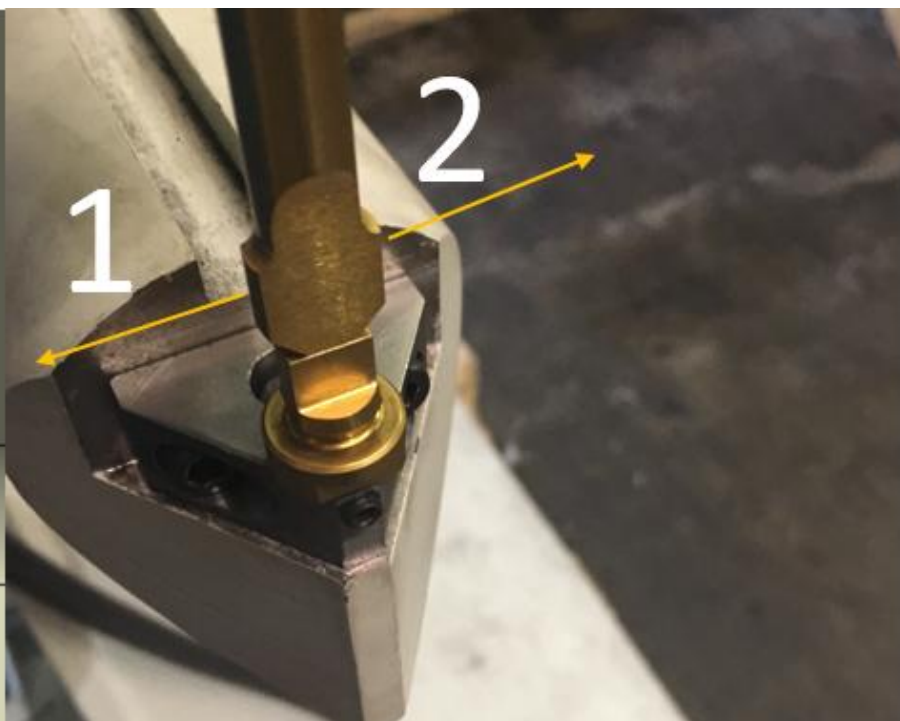
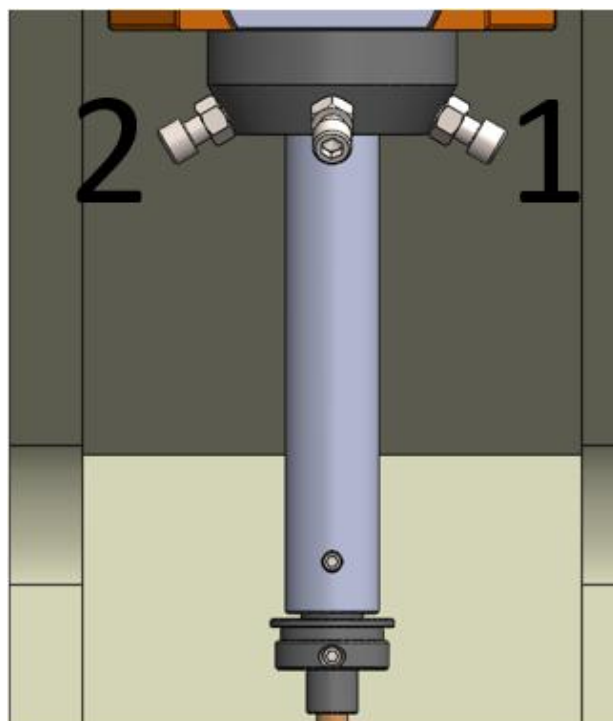
If those faces are not parallel, verify “Step 1 – Install tooling adapter (1) inside the shank”.

If the punch is not properly set (front to back – Left to right) go to step 4.

Step 4 - Punch alignment Front to back - Left to right



To align the punch perfectly with the Die-body, please refer to the picture above & below. Tightening the screw #1 will move the punch in direction #1 while tightening screw #2 will move the punch in direction #2.





AZIMUTH MACHINERY
T. 450 632 8080 • sales@azimuthpress.com • www.azimuthpress.com
6040 Route 132, Ste-Catherine, Quebec, Canada, J5C 1B6

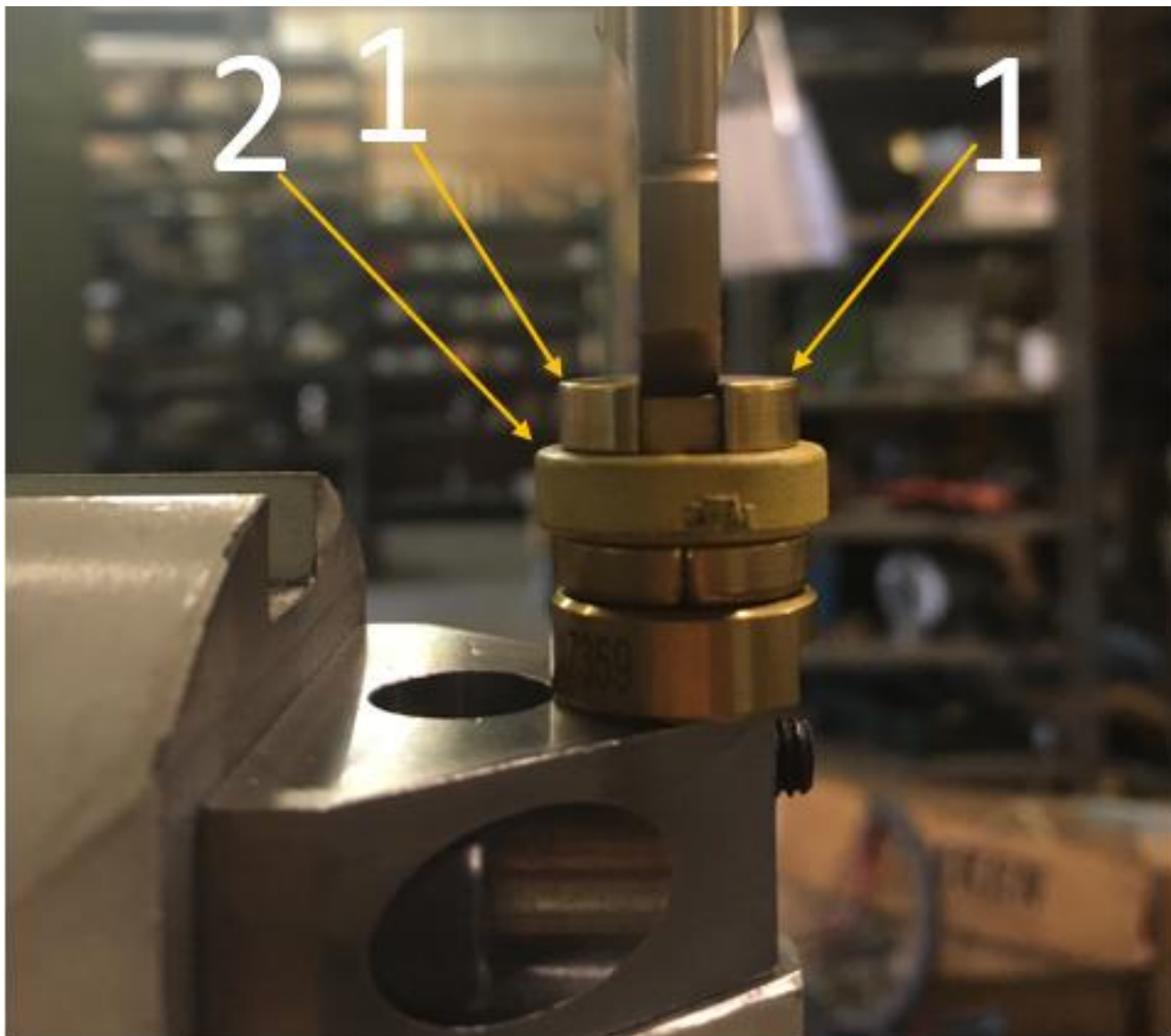




Step 5 - Install the Clinching Blades

Once the punch is properly aligned with the die body, install the clinching blades (2) with the elastomer (1) on the die body & verify that the installation is done properly.

Manually engaged the clutch on the side of the machine & bring the punch down. Verify that the punch



does not hit the blades & goes freely inside the anvil depth of the Lance-N-Loc die assembly.



Step 6 – Bring shut height to its highest position & install the spring, stripper & stripper can.

Bring the shut height of the machine to its highest position to install the Stripper (2), spring (inside the stripper can) & Stripper can (1).

SEE OUR CHANNEL ONLINE FOR MORE DETAILED VIDEOS OF MAINTENANCE & TIPS.

YOUTUBE CHANNEL: AZIMUTH MACHINERY

See procedure in the HMI

Adjustment of the timing belt

This procedure will help you tighten the timing belt at the right pressure. The figure below illustrates how to check the tension in the belt. To verify the belt tension, you will need to:

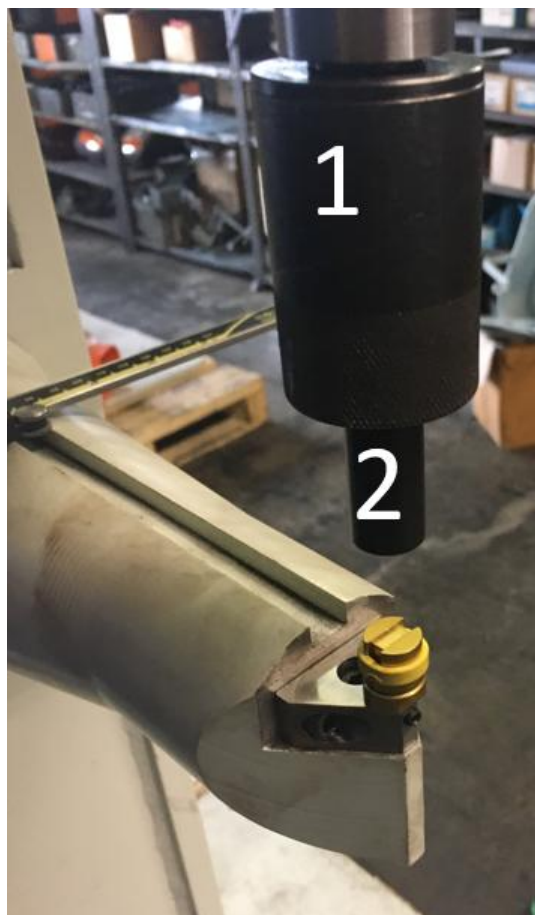
5. Remove the timing belt and pulleys guard
6. Put a beam level on the belt and timing pulleys
7. Apply a downward force on the belt
8. Measure the distance between the level and the lowest point of the belt
 - a. If you measure less than a ¼" you do not need to adjust the belt tension
 - b. If you measure more than a ¼" you need to adjust the belt tension

If you have measure a deflexion of a ¼" or more, this is what you need to do :

7. Loosen the 3 red machine screws
8. Tighten the 2 green machine screws
9. Tighten the 3 red machine screws
10. Check the belt tension as explained earlier
11. Repeat until you have a deflexion of less than a ¼"
12. Put back the belt and pulleys guard on the machine



Re-adjusting material thickness to raise the shut height to its highest position.



Visually verify stripper alignment with the punch.





Step 7 – Adjusting the button dimension

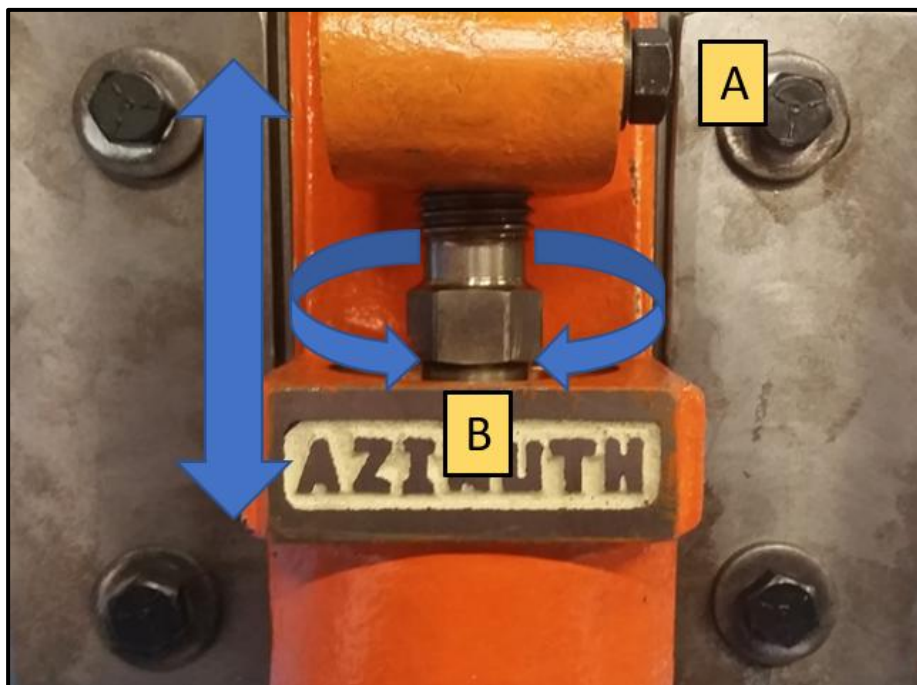


Figure 10 - Adjustment of the button dimension

Raising the punch (rotating the ball screw counter-clockwise) will result in a **smaller button diameter** while descending (rotating the ball screw clockwise) the punch will result in a **bigger button diameter**.

1. Turn the motor OFF and wait until the inertia wheel has completely stopped.
2. Remove the front guard enclosure of the machine.
3. Loosen bolt (A) on the side of the pitman (see figure above).
4. Rotate the ball screw (B) with a ¼ turn or less (clockwise for a bigger diameter, counter-clockwise for a smaller diameter)
5. Tighten the locking bolt (A) on the side of the pitman.
6. Turn the motor ON & clinch two parts of material together.
7. Verify that button diameter (***die side***) matches the recommended dimension.
8. Continue the procedure lines 1 to 6 until you have the right button diameter.

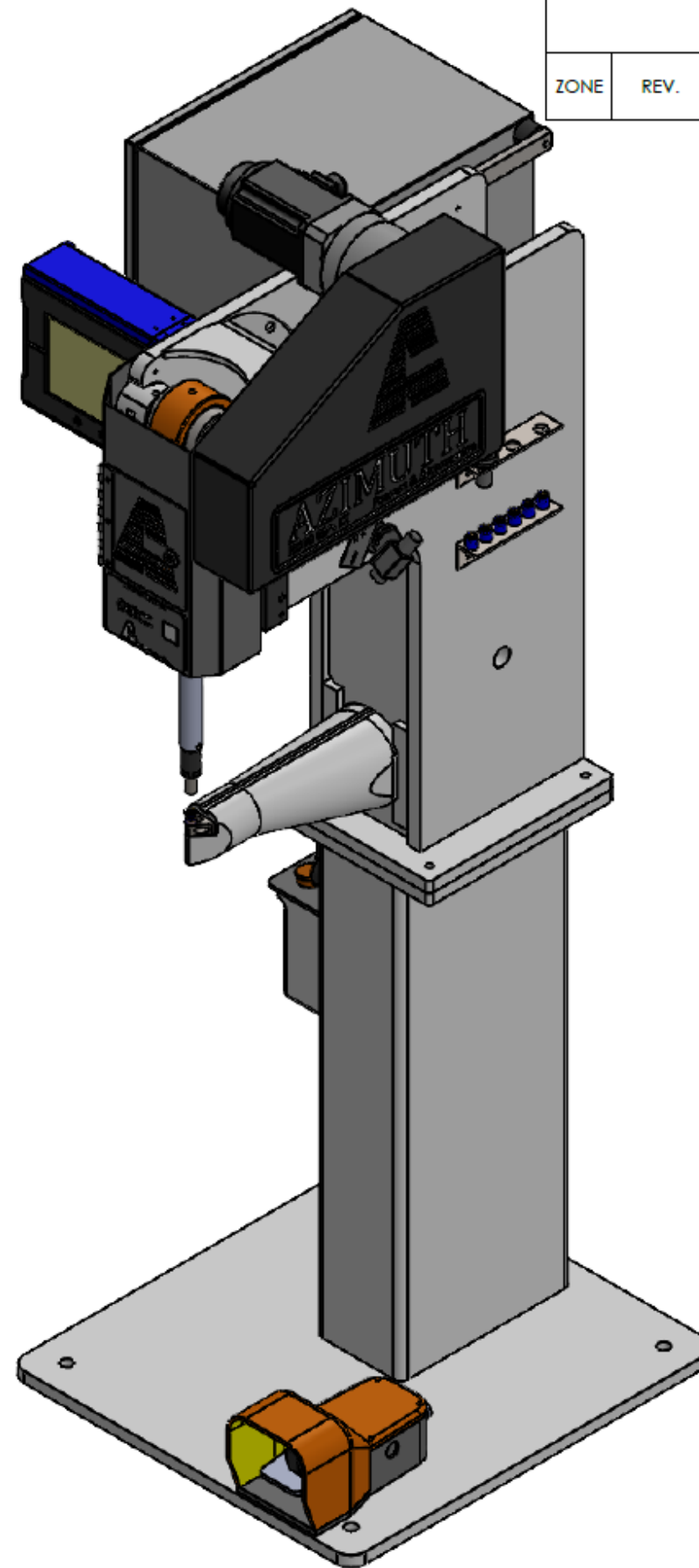
***** ALWAYS BRING THE BALL SCREW TO THE HIGHEST POSITION WHEN YOU ARE CHANGING THICKNESSES OR INSTALLING A NEW PUNCH *****



ANNEXE A – Part list

Product No.	Description	Quantity
H612-S	H612 Clinching machine GEN III	1
H612-001	Frame	1
6-023AS	Ram Assembly	1
6-022	Gib, LEFT	1
6-306	DIE BLOCK	1
6-326AS	FRONT GUARD ASSEMBLY	1
6-012AS	Automatic lubrication Oiling system 4-15 tons	1
6-302.1AS	NARROW PUNCH HOLDER ASSEMBLY	1
6-669AS	MOTOR ASSEMBLY	1
6-633AS	CRANKSHAFT ASSEMBLY	1
6-500AS	CONTROL PANNEL ASSEMBLY - SERVO	1
6-625AS	BELT & PULLEY GUARD	1
6-624	MOTOR BELT H 1.5"X39"	1
1005-025	Electric foot pedal 2 POS. NO/NC	1
6-669.2	TENSIONNER	1
6-610AS	SIDE LOGO SERVO	1
6-022.1	Gib, Right	1
6-311	PUNCH MOUNTING BRACKET	1
6-311.1	DIE MOUNTING BRACKET	1
6-315AS	LASER ALIGNEMENT TOOL	1
6-633.1	CRANKSHAFT POSITION DIAL	1
6-633.2	CRANKSHAFT POSITION INDICATOR	1
6-505.1AS	HMI ENCLOSURE 7"	1

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	H612-001	FRAME	1
2	6-023AS	RAM ASSEMBLY	1
3	6-022	GIB, LEFT	1
4	6-306	DIE BLOCK	1
5	20032AS	DIE ASSEMBLY	1
6	6-311	PUNCH MOUNTING BRACKET	1
7	6-311.1	DIE MOUNTING BRACKET	1
8	6-326AS	FRONT GUARD ASSEMBLY	1
9	6-012AS	AUTOMATIC OILER	1
10	6-315AS	LASER ALIGNMENT TOOL	1
11	6-302.1AS	NARROW PUNCH ASSEMBLY	1
12	6-410.9	QR CODE VIDEOS	1
13	6-669AS	MOTOR ASSEMBLY	1
14	6-633AS	CRANK SHAFT ASSEMBLY	1
15	6-500AS	CONTROL PANEL ASSEMBLY-SERVO	1
16	6-625AS	BELT & PULLEY GUARD	1
17	6-633.2	CRANKSHAFT POSITION DIAL	1
18	6-633.1	CRANKSHAFT POSITION INDICATOR	1
19	6-624	MOTOR BELT H 1.5"X39.5"	1
20	1005-025	ELECTRIC FOOT PEDAL	1
21	6-411AS	HMI BOX ASSEMBLY 9"	1
22	6-669.2	TENSIONER	1
23	6-410	H612 GEN III SIDE LOGO	1
24	6-022.1	GIB, RIGHT	1



REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED



Azimuth Machinery Ltd
T 450 632 8080
F 450 632 8081
www.azimuthpress.com
6040 Rte. 132, Ste Catherine
QC, Canada, J5C 1B6

DESCRIPTION
H612 GEN III CLINCHING PRESS

PART NO
H612-S

DRAWN BY
FRANCIS DURAND

SCALE
1:8

DRAWING #
H612-S-AS

MATERIAL

COMMENTS :

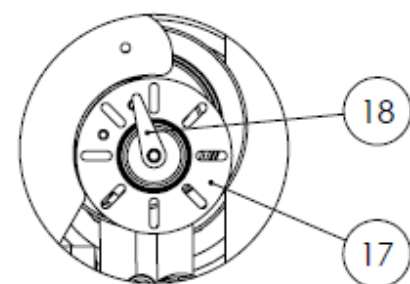
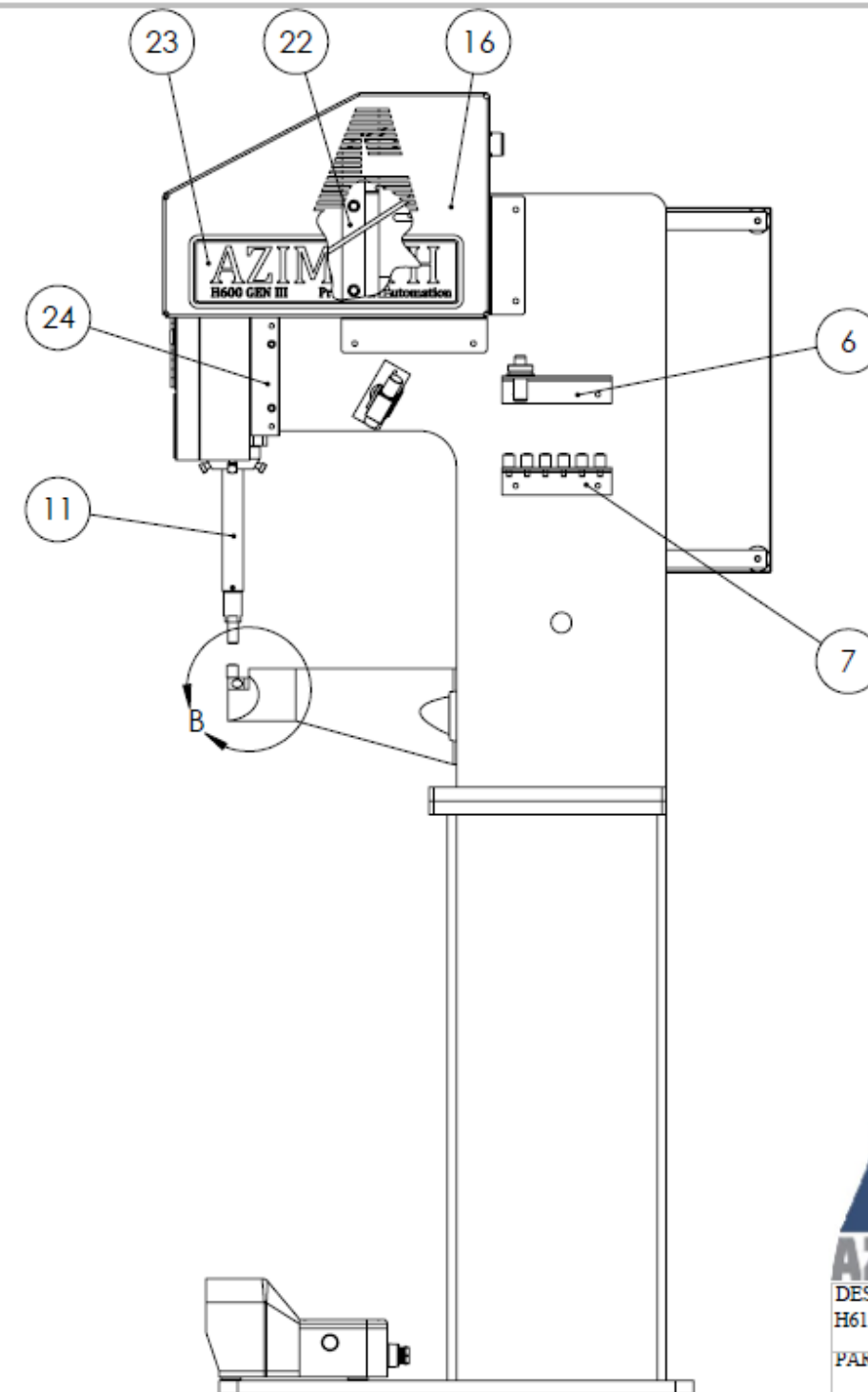
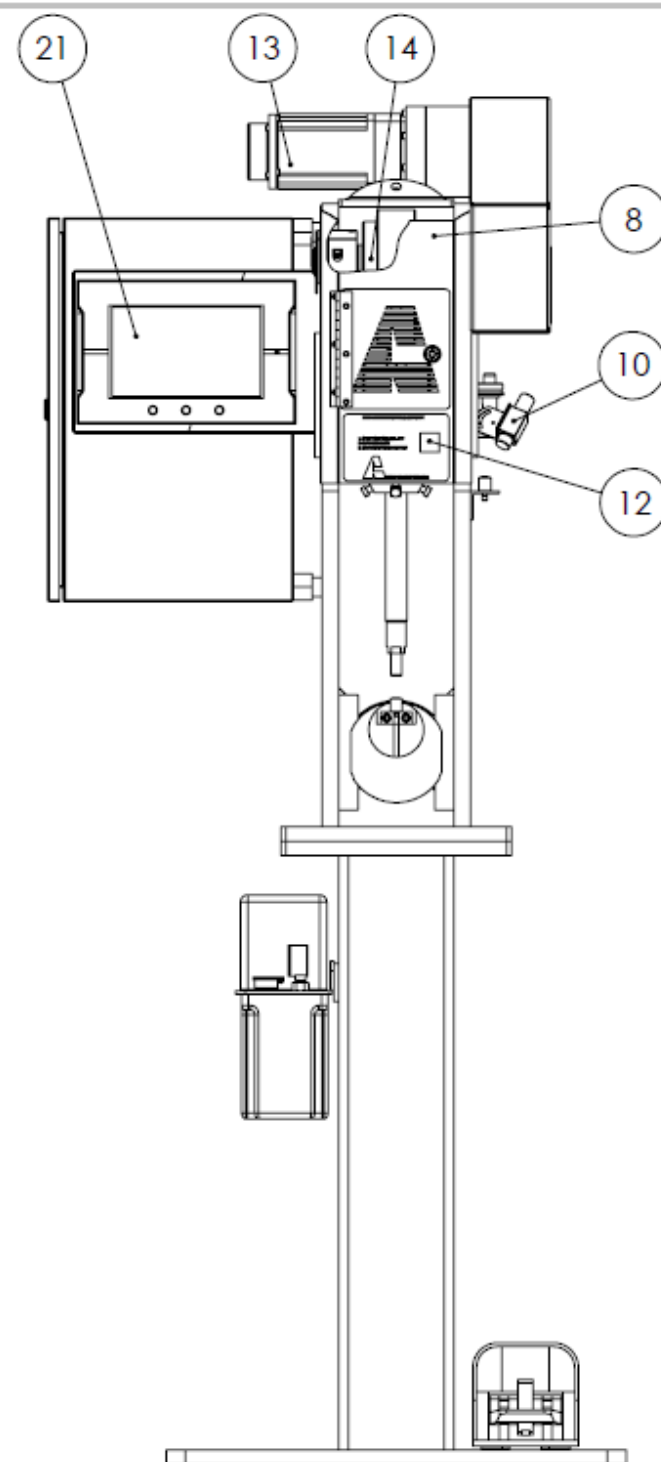
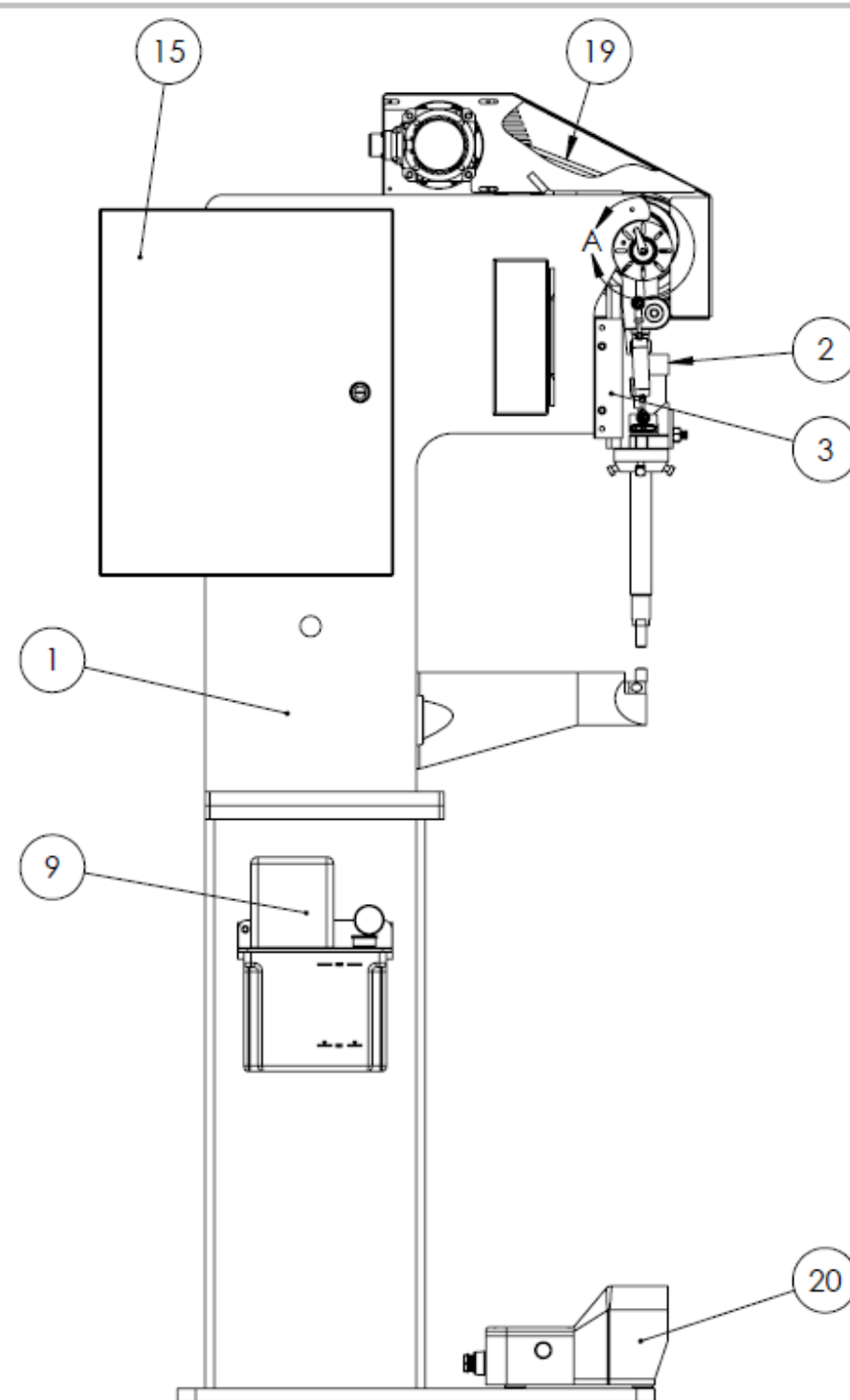
UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES
TOLERANCES :

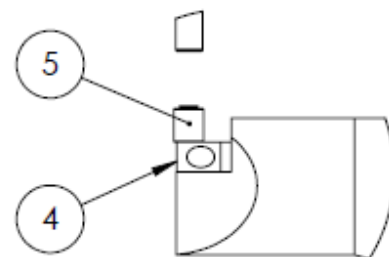
FRACTIONAL $\pm 1/64$
TWO PLACE DECIMAL $\pm .01$
THREE PLACE DECIMAL $\pm .005$

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE
SOLE PROPERTY OF AZIMUTH MACHINERY. ANY
REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE
WRITTEN PERMISSION OF AZIMUTH MACHINERY
IS PROHIBITED.



DÉTAIL A
ECHELLE 1 : 4



DÉTAIL B
ECHELLE 1 : 4



Azimuth Machinery Ltd
T 450 632 8080
F 450 632 8081
www.azimuthpress.com
6040 Rte. 132, Ste Catherine
QC, Canada, J5C 1B6

DESCRIPTION
H612 GEN III CLINCHING PRESS

PART NO
H612-S

DRAWN BY FRANCIS DURAND	SCALE 1:10
DRAWING # H612-S-AS	MATERIAL

COMMENTS :

UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES
TOLERANCES :

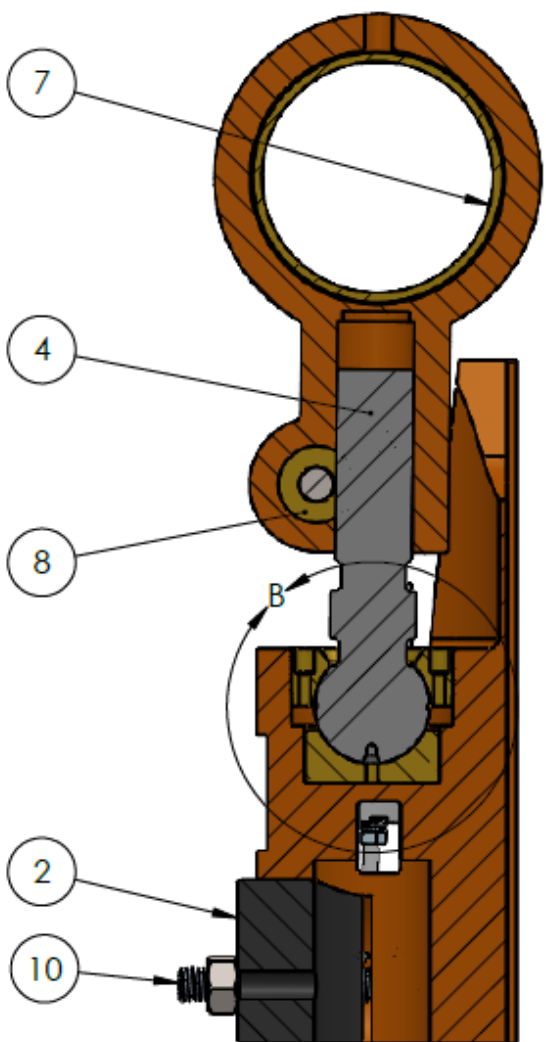
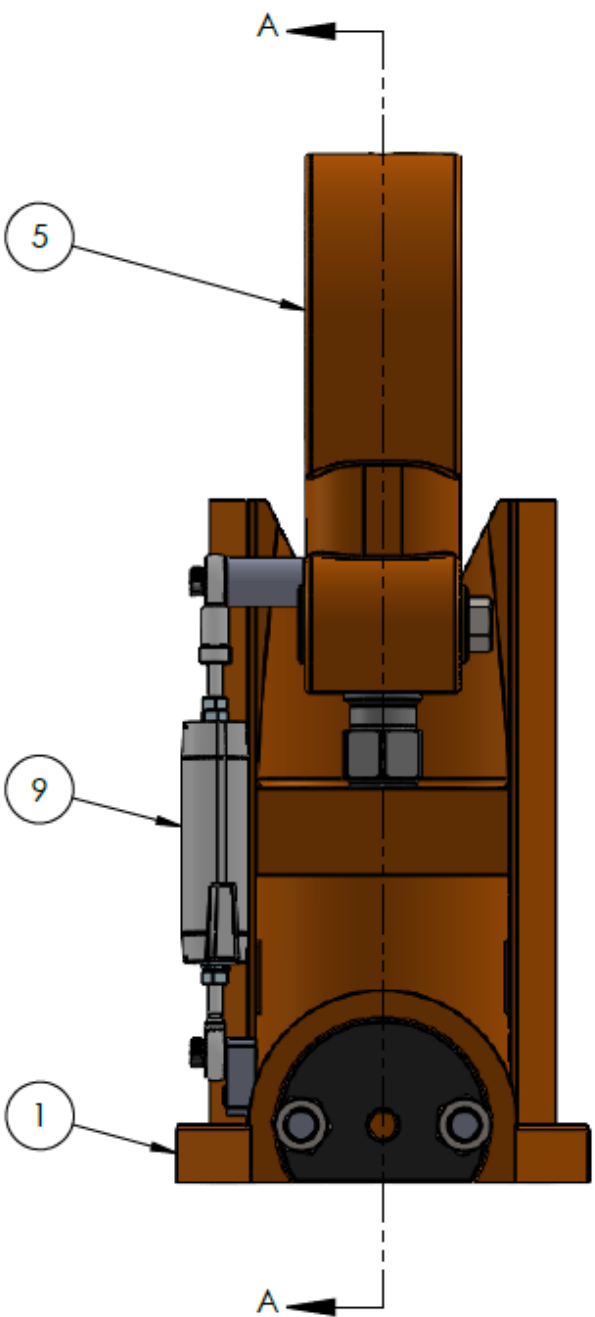
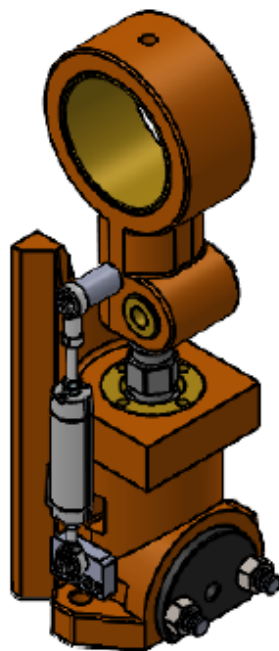
FRACTIONAL	±1/64
TWO PLACE DECIMAL	±.01
THREE PLACE DECIMAL	±.005

PROPRIETARY AND CONFIDENTIAL

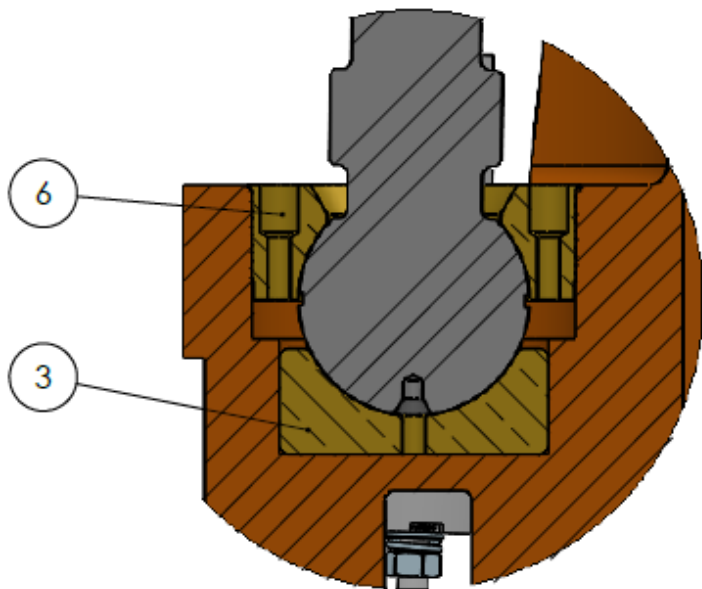
THE INFORMATION CONTAINED IN THIS DRAWING IS THE
SOLE PROPERTY OF AZIMUTH MACHINERY. ANY
REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE
WRITTEN PERMISSION OF AZIMUTH MACHINERY
IS PROHIBITED.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6-023	RAM	1
2	6-024	CLAMP BLOCK, RAM	1
3	6-025	BALL SEAT, RAM	1
4	6-027	BALL SCREW, PITMAN	1
5	6-029	PITMAN (CON, ROD)	1
6	6-026	CUP, BALL ADJUSTMENT	1
7	6-136	BRONZE BUSHING PITMAN	1
8	6-028	CLAMP BLOCK, PITMAN	1
9	6-403AS	SHUT HEIGHT INDICATOR 0-1" ASSEMBLY	1
10	6-090	STUD, CLAMP BLOCK, 7/16-14 x 3.25 LG.	2

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED



COUPE A-A
ECHELLE 2 : 5



DÉTAIL B
ECHELLE 4 : 5

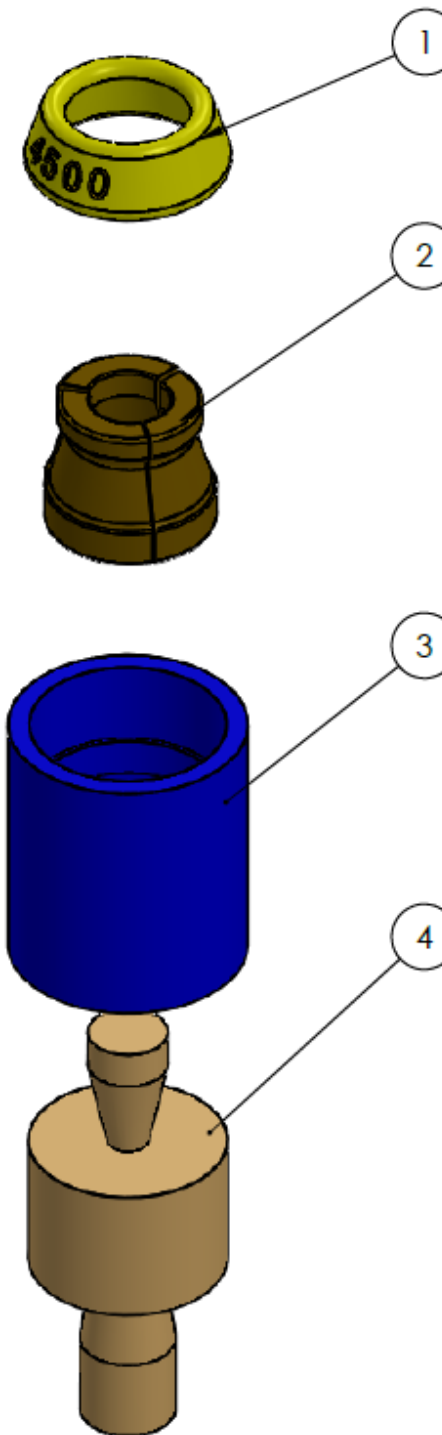
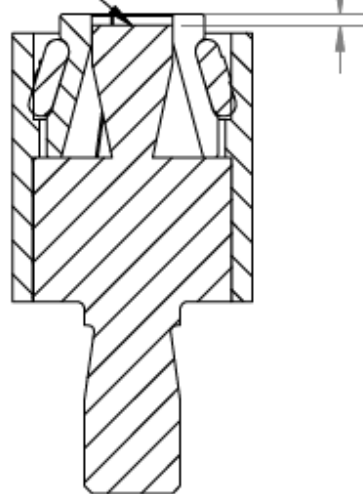


Azimuth machinery
www.azimuthpress.com
T 450 632 8080
F 450 632 8081
6010 Rte. 132
Ste-Catherine, QC, CAN

DESCRIPTION	
RAM ASSEMBLY	
MODEL NO	
6-023AS	
DRAWN BY	SCALE
FRANCIS DURAND	1:3
DRAWING #	REV
COMMENTS :	
PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF AZIMUTH MACHINERY. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF AZIMUTH MACHINERY IS PROHIBITED.	

PLEASE REFER TO COMPLETE CHART
FOR DIFFERENT ANVIL DEPTH & SLEEVE COLOR

ANVIL DEPTH



NO	PartNo	DESCRIPTION	QTE
1	20262	ELASTOMER MEDIUM	1
2	20254	BLADES	3
3	6-304.1	BLUE Sleeve	1
4	20032	Clinching die body 0.180, 24-29G	1



Azimuth machinery
www.azimuthpress.com
T 450 632 8080
F 450 632 8081
6040 Rte. 132
Ste-Catherine, QC, CAN

DESCRIPTION
DIE ASSEMBLY

DESCRIPTION
STANDARD PARTS

DRAWN BY JOEY TRUDEAU	DATE 2019-04-15
ISSUED FOR CUSTOMER APPROVAL	DWG. # 20032AS

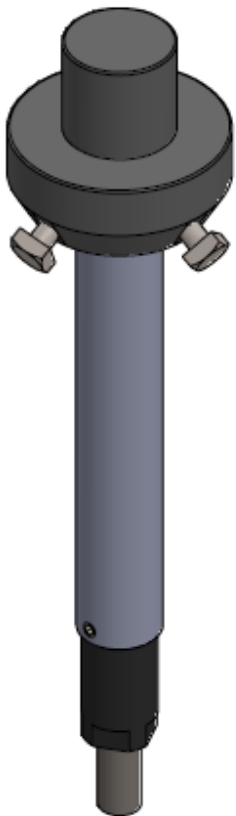
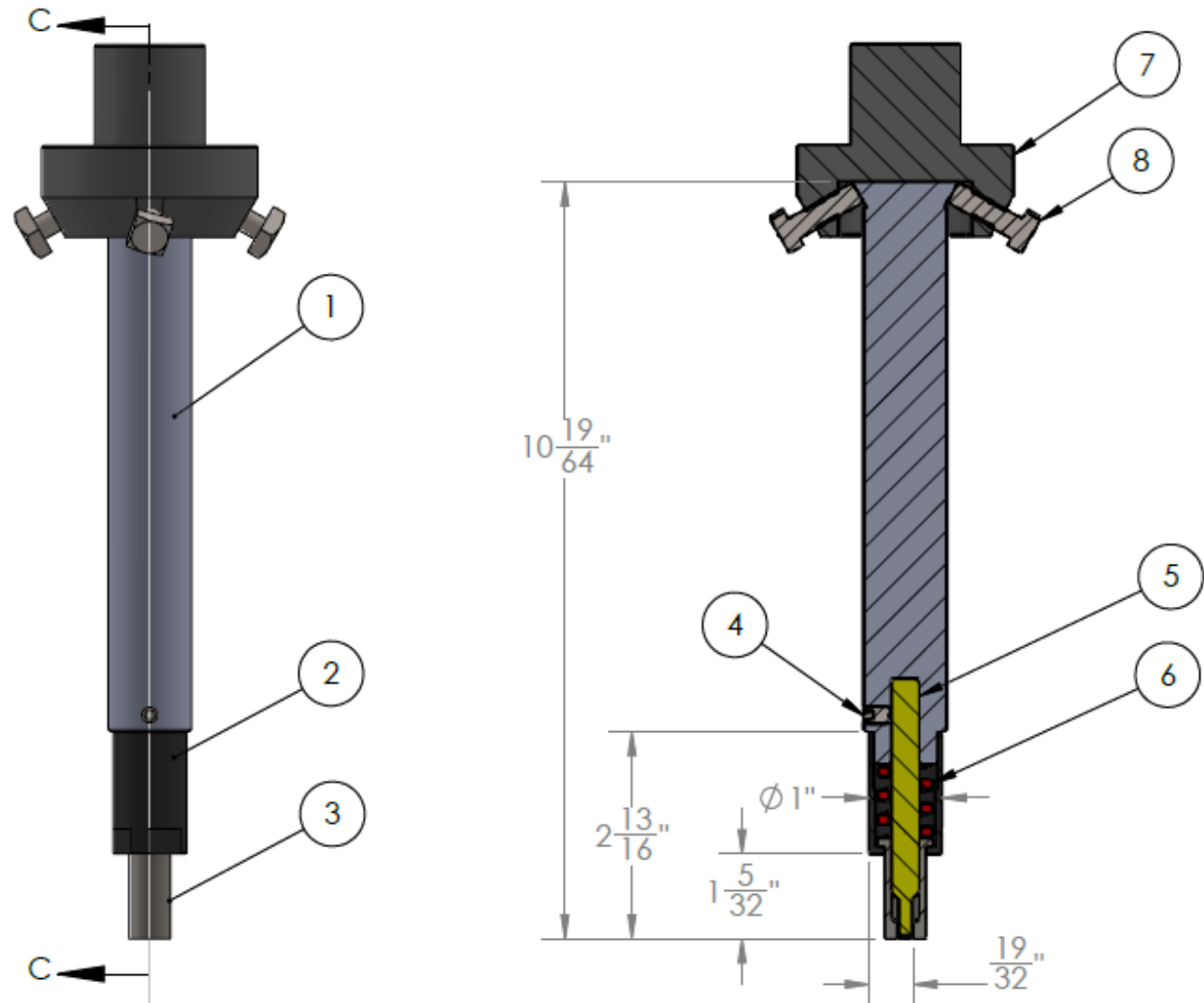
COMMENTS :

PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE
SOLE PROPERTY OF AZIMUTH MACHINERY. ANY
REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE
WRITTEN PERMISSION OF AZIMUTH MACHINERY
IS PROHIBITED.



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	6-302.1	Shank (H612) Taloc	1
2	6-310.1	Spring holder	1
3	6-305.1	Stripper, Narrow punch holder	1
4	4000-007	Setscrew, 1/4-28, 0.375" LG.	1
5	20618	Clinching punch 3.5" 22G	1
6	Refer to shart	Spring	1
NOT INCLUDED IN THIS ASSEMBLY			
ITEM NO.	PART NO.	DESCRIPTION	QTY.
7	6-301	H600 Tooling adapter	1
8	22052	Square head bolt, 5/16-18 x 1" LG.	4

GAUGE	SPRING COLOR	PART NO
14	GREEN	22064
15	GREEN	22064
16	GREEN	22064
17	GREEN	22064
18	GREEN	22064
19	GREEN	22064
20	GOLD	22068
21	GOLD	22068
22	GOLD	22068
23	GOLD	22068
24	GOLD	22068
25	GOLD	22068



UNLESS OTHERWISE SPECIFIED

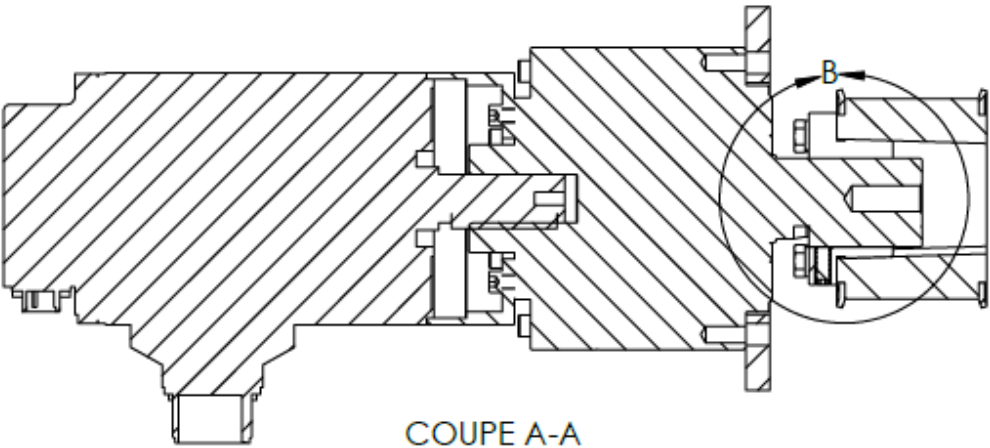
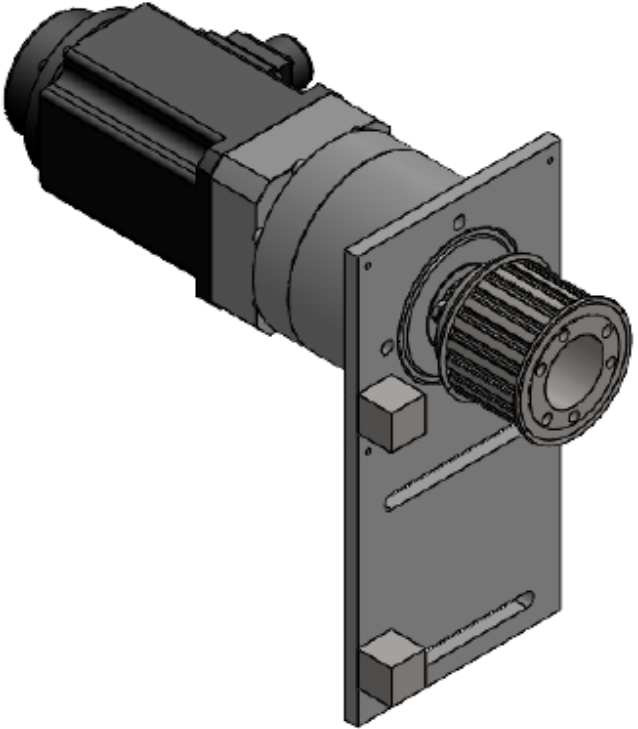
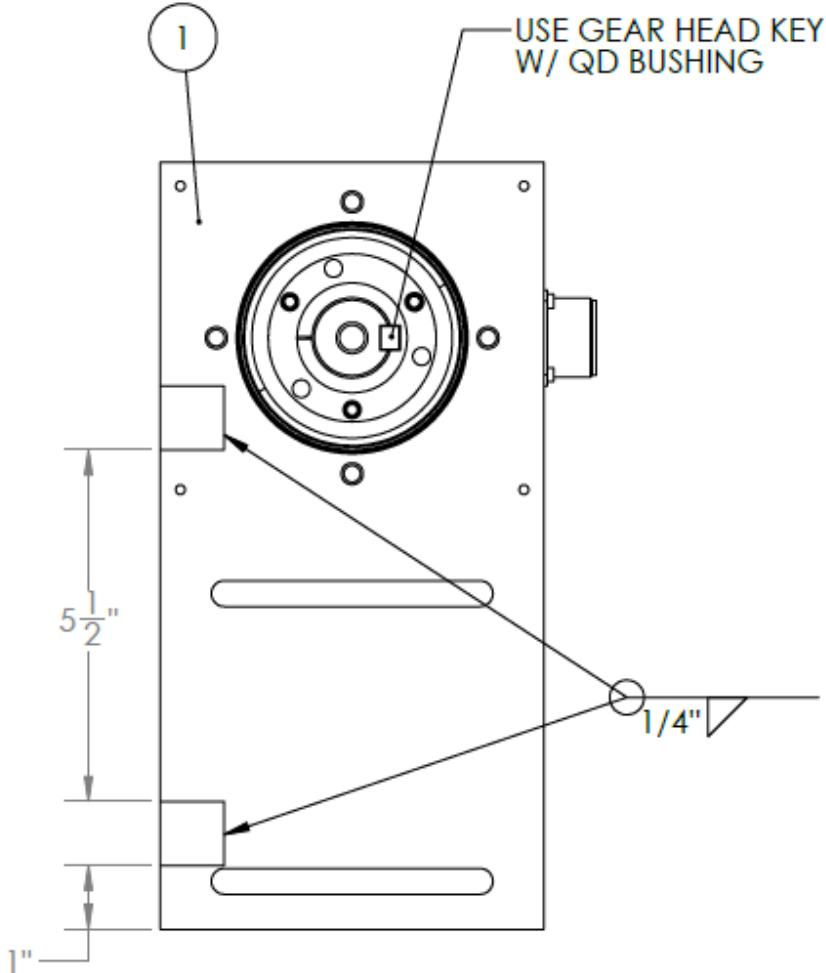
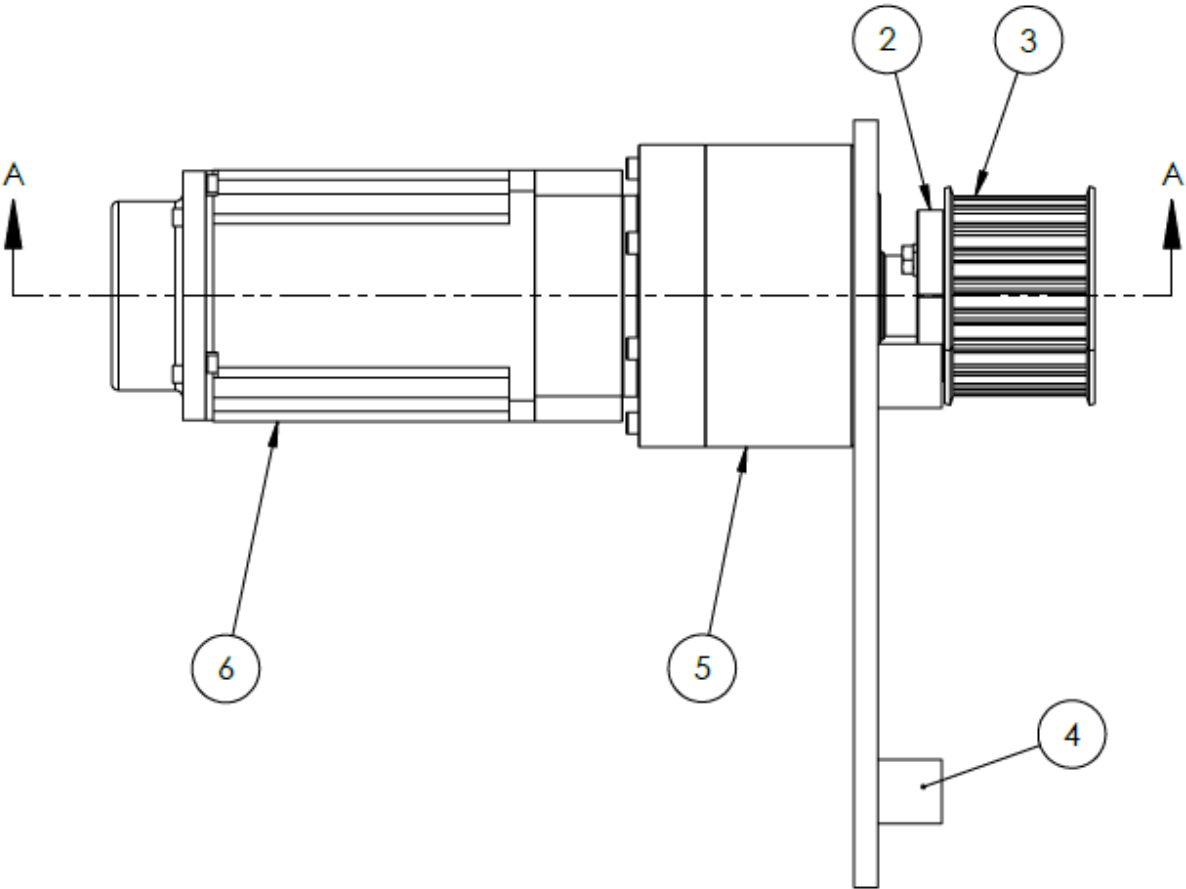
DIMENSIONS ARE IN INCHES
TOLERANCES :

Azimuth Machinery Ltd
T 450 632 8080
F 450 632 8081
www.azimuthpress.com
6040 Rte. 132, Ste Catherine
QC, Canada, J5C 1B6

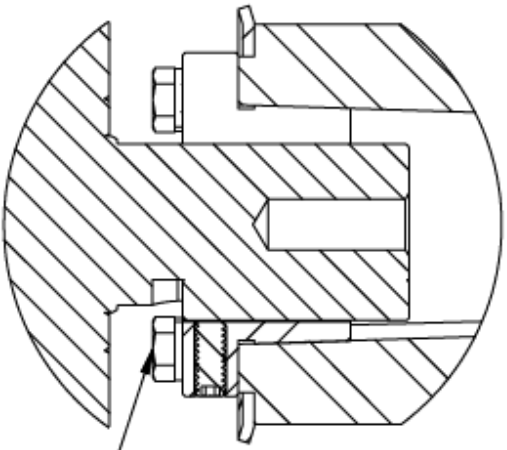
AZIMUTH
DESCRIPTION
NARROW PUNCH HOLDER ASSEMBLY
PART NO
6-302.1AS
DRAWN BY
JOEY TRUDEAU
SCALE
2:1
DRAWING #
COMMENTS :
TO BE USED WITH PUNCH 018274
PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	6-669	MOTOR BRACKET	1
2	6-623	SH BUSHING 32MM BORE	1
3	6-623.1	PULLEY 2" H BELT 20T	1
4	6-669.1	PUSHER BLOCK	2
5	6-630	INLINE GEAR HEAD 10:1	1
6	6-626	MOTOR 1.5kW-3000RPM-240V	1

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED



COUPE A-A
ECHELLE 1 : 3



PLACE QD BUSHING
SCREWS ON THE INSIDE
DÉTAIL B
ECHELLE 2 : 3

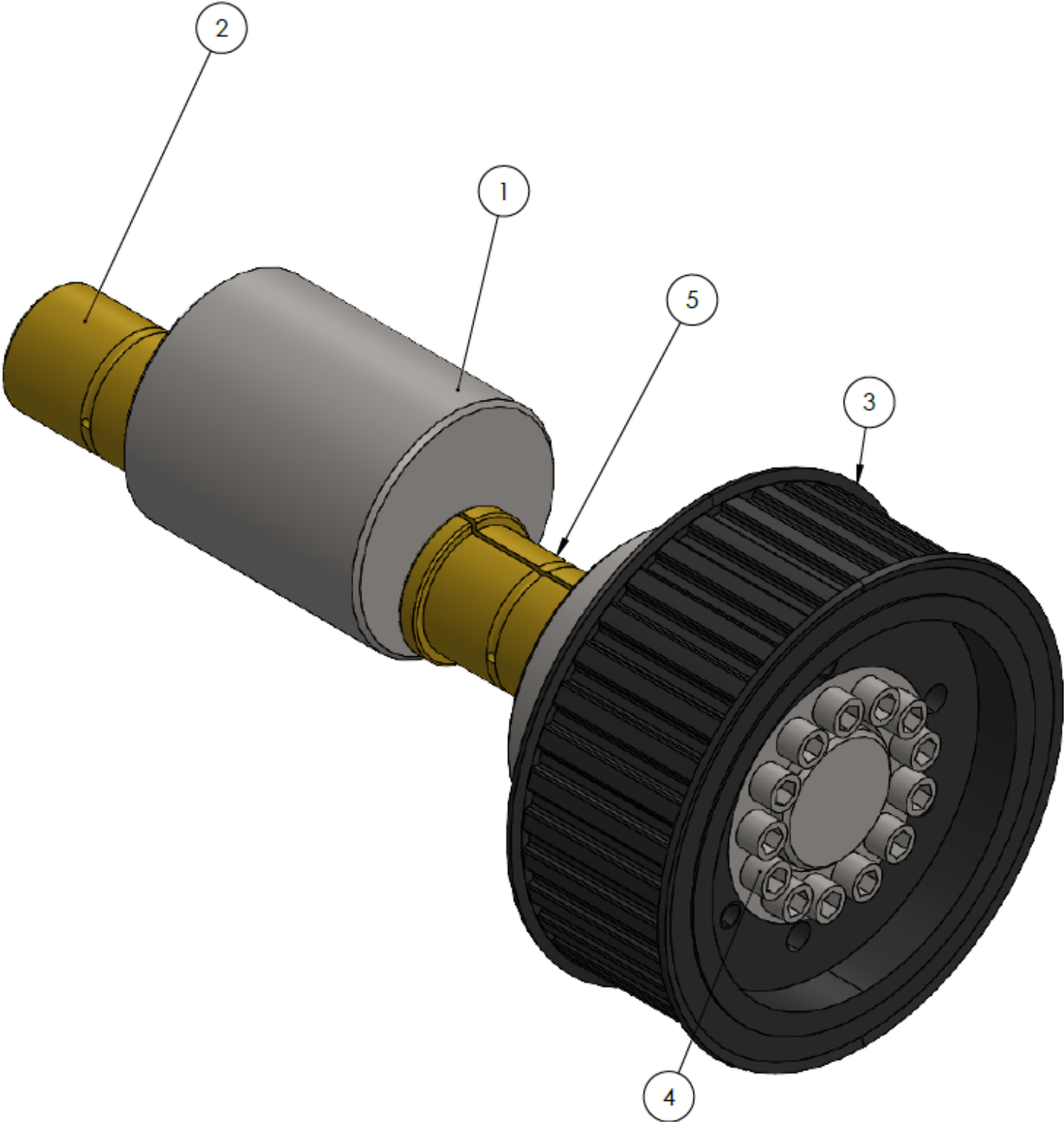


Azimuth Machinery Ltd
 T 450 632 8080
 F 450 632 8081
 www.azimuthpress.com
 6040 Rte. 132, Ste Catherine
 QC, Canada, J5C 1B6

DESCRIPTION MOTOR ASSEMBLY	
PART NO 6-669AS	
DRAWN BY JOEY TRUDEAU	SCALE 1:2
DRAWING #	MATERIAL
COMMENTS :	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES : FRACTIONAL ±1/64 TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	
PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF AZIMUTH MACHINERY. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF AZIMUTH MACHINERY IS PROHIBITED.	

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6-633	CRANKSHAFT, 1.25" STROKE	1
2	6-034SO	BRONZE BUSHING, SOLID	1
3	6-623.2	PULLEY 2" H BELT 36T	1
4	6-601	LOCKING DONUT PULLEY & CRANK	1
5	6-034SP	BRONZE BUSHING, SPLIT	1

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED



Azimuth Machinery Ltd
T 450 632 8080
F 450 632 8081
www.azimuthpress.com
6040 Rte. 132, Ste Catherine
QC, Canada, J5C 1B6

DESCRIPTION
CRANK SHAFT ASSEMBLY

PART NO
6-633AS

DRAWN BY FRANCIS DURAND	SCALE 1:2
DRAWING #	MATERIAL

COMMENTS :

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF AZIMUTH MACHINERY. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF AZIMUTH MACHINERY IS PROHIBITED.



AZIMUTH MACHINERY
T. 450 632 8080 • sales@azimuthpress.com • www.azimuthpress.com
6040 Route 132, Ste-Catherine, Quebec, Canada, J5C 1B6



ANNEXE B – Electrical schematic

Contact azimuth Tech support.