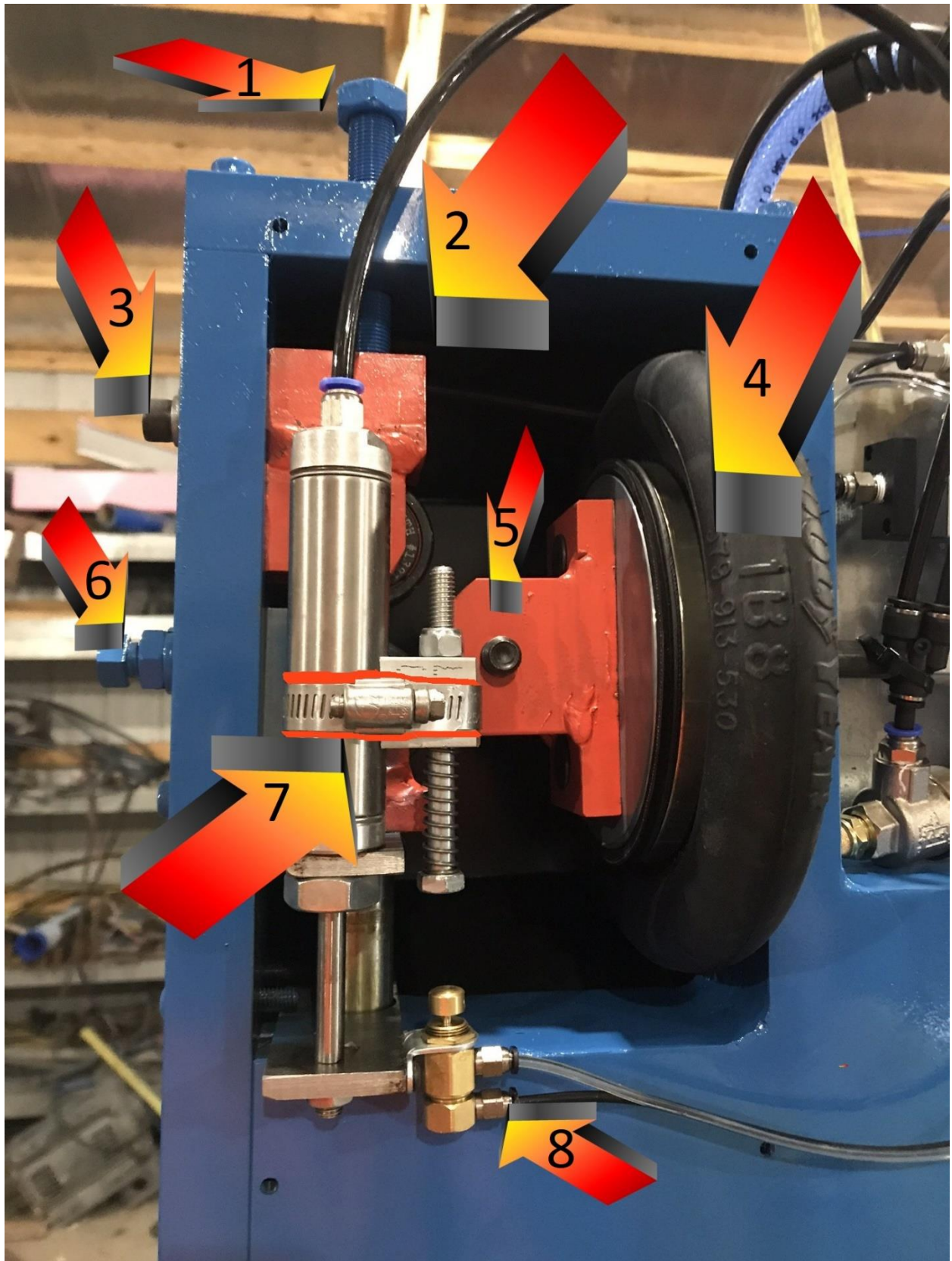


TROUBLE SHOOTING & PARTS DIAGRAMS

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1. 15/16 adjustment bolt. This is the only bolt that should be adjusted to dial in the lock. A small adjustment goes a long way, over adjusting this bolt can result in tooling breakage
2. Upper Cam block
3. Upper Cam block retainment bolt
4. Air bag
5. Center Cam block
6. Center Cam stop adjustment bolt – **DO NOT ADJUST THIS BOLT, TOOLING DAMAGE CAN OCCUR FROM IMPROPER ADJUSTMENT OF THIS STOP**
7. Safety cyl showing clamp. Your machine has been labeled from the factory with a red paint pen showing where the safety cyl clamp was set. Behind the safety is the lower cam block .
8. Safety valve the clear line will always be on top, then black line will always be on bottom

MACHINE FULL RESET

IF YOU ARE CONTINUING TO HAVE ISSUES , FOLLOW THESE STEPS TO RESET YOUR MACHINE TO FACTORY SETUP

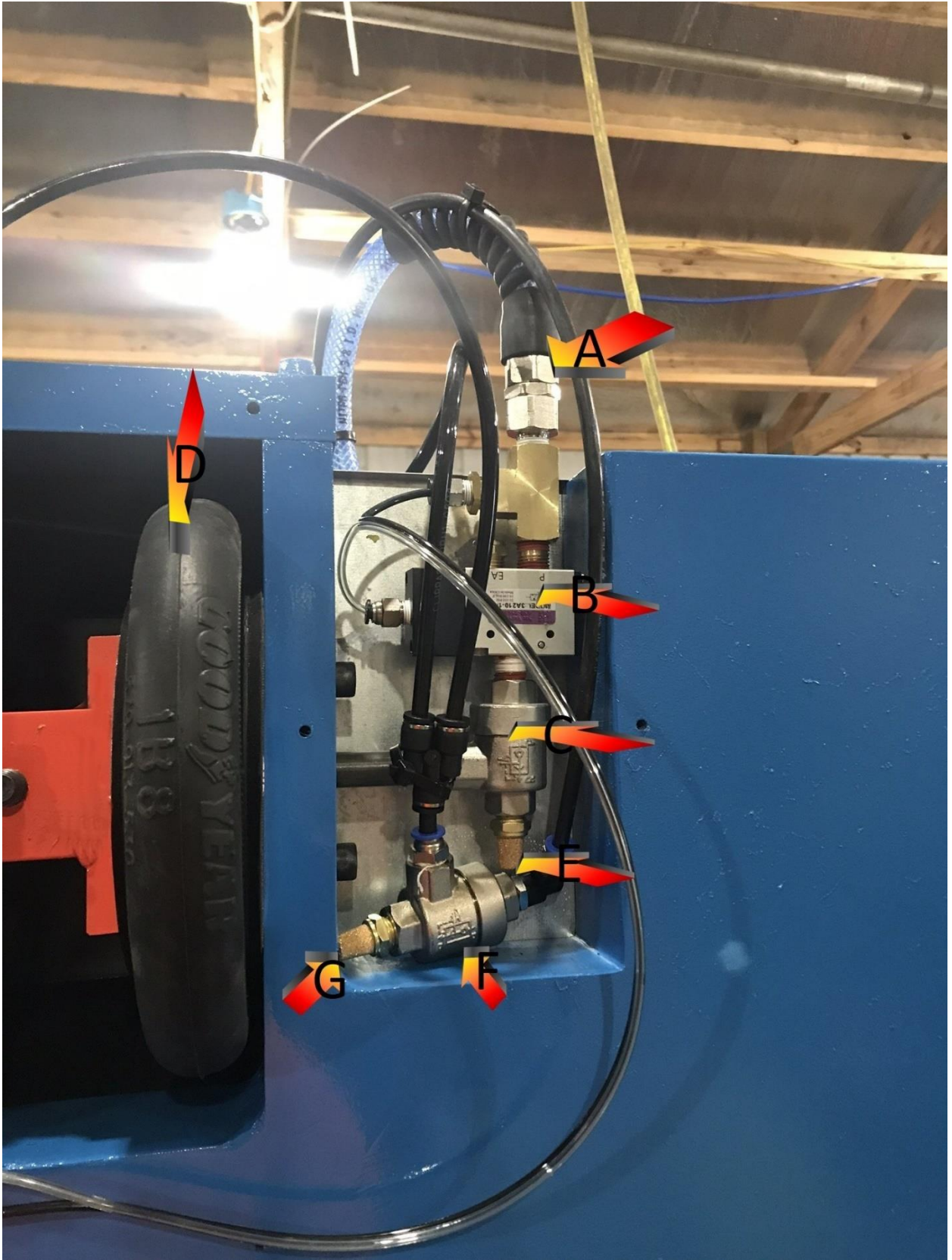
1. Loosen jam nut on bolt labeled number 1 , back up the bolt number 1 approx 6 turns from where-ever the bolt is currently set
2. Check bolt number 6, **WITH THE AIR DISCONNECTED** it should protrude into the inside of the machine by approx. 5/16 of an inch, if it is not, loosen the jam nut, run the bolt in until the desired depth, tighten the jam

nut, this bolt serves solely as a stop for the air bag cam bearing to hit, too deep in a less than desirable tonnage will occur, too shallow and the center cam will cross the plane of the upper and lower cam, resulting in undesirable events including machinery damage

3. Now, RECONNECT THE MAIN AIRLINE remove the white air line from the safety air switch marked number 8, this will disable the main air bag from firing, **WITH ANYTHING MECHANICAL DO NOT TRUST ANYTHING, DO NOT PLACE YOUR FINGERS OR ANYTHING YOU DO NOT WISH TO LOSE INTO THE MACHINE OR INSIDE THE GUARDS WHILE FIRING THE MACHINE**
4. now, remove the red stripper from the punch, so you can inspect the tooling, if there is no damage to the punch, proceed to step 4
5. inspect the lower die, make sure it is free of any debris and no damage to the anvil, if there is no damage and it's clean, proceed to step 6
6. place your foot on the foot pedal and hold down, inspect how the tooling lines up, the punch should be exactly in the center of the die, if it is not, please stop immediately and contact us for technical support, as a bent ram or improper die orientation will break tooling
7. if your punch and die are centered, please proceed to step 8
8. now that the punch and die are verified, we can now start our final adjustment procedure, please replace the red stripper, and reinstall the white safety air line, proceed to step 9
9. using punch and die C, and using two pieces of 24g material, fire the machine off, looking closely at the relationship of block number 2 to bolt number 1, there will likely be a large gap at this point and no visible dent in the metal being joined, slowly adjust bolt number one down absolutely no more than ½ turn when taking up the slack followed by pushing the foot pedal down to verify on the metal, once you make your first very light indentation, proceed to step number 10
10. now that the machine is close, and only making a slight indentation, without the metal locking together we can proceed to a fine adjustment, we will now verify and set the safety distance once again remove the white air line from the safety, using 4 pieces of 16g, we will

set up the safety stack all 4 pieces of the 16g, and loosen the 5/16 bolt on the stainless clamp, slid this up a bit, then proceed to step 11

11. now stack all 4 pieces of the 16g in between the punch and die, to make a $\frac{1}{4}$ thick obstruction, push on the foot pedal, and then drop the silver plunger at number 11, until it just makes contact with the gold micro air valve number 8, now lock down the 5/16 bolt to tighten the hose clamp, do not over tighten this !
12. Now with the white hose still detached, fire the machine with all 4 spacers in place, you should get no air out of the port from the white hose,
13. Now fire the machine with only 3 of the spacers, you should get a blast of air from the white hose port, if so, your machine safety is set up, reinstall the white hose and proceed to step 14, if not repeat step 11-13 until desired adjustment is reached
14. Reconnect the white safety hose, and grab two pieces of test 24g material to finalize the lock adjustment
15. Adjusting the machine $\frac{1}{8}$ of a turn at a time, and test firing bring the lock down into final adjustment, **DO NOT OVER ADJUST THE MACHINE, DO NOT DO MORE THAN $\frac{1}{8}$ OF A TURN BETWEEN EACH TEST FIRE** if will typically take a number of cycles until the best lock is achieved, you are looking for a lock that is depressed to the back side with 3 visible indentations, but not visible over smashed, please refer to the user manual for BTM specifications of the desired lock, once lock is close to the desired look, preform a pull test as detailed in step 16
16. Pull test, preform 4 locks approx. $\frac{1}{2}$ inch apart, and bend the metal to attempt to break the locks apart, 90 degrees of deflection from the original plane is what is desired during this test, if the locks fail, repeat the fine setup as outlined from step 14-15 **IF YOU OVER ADJUST THE MACHINE IT CAN RESULT IN TOOLING BREAKAGE AND MACHINERY DAMAGE**



- A. Air input hose
- B. Safety master valve
- C. Quick release valve for air bag.
- D. Air bag
- E. Muffler for air bag quick release , if your machine is ever slow to let the air out of the air bag, remove this muffler and clean or replace
- F. Quick release for safety system
- G. Muffler for quick release for safety system