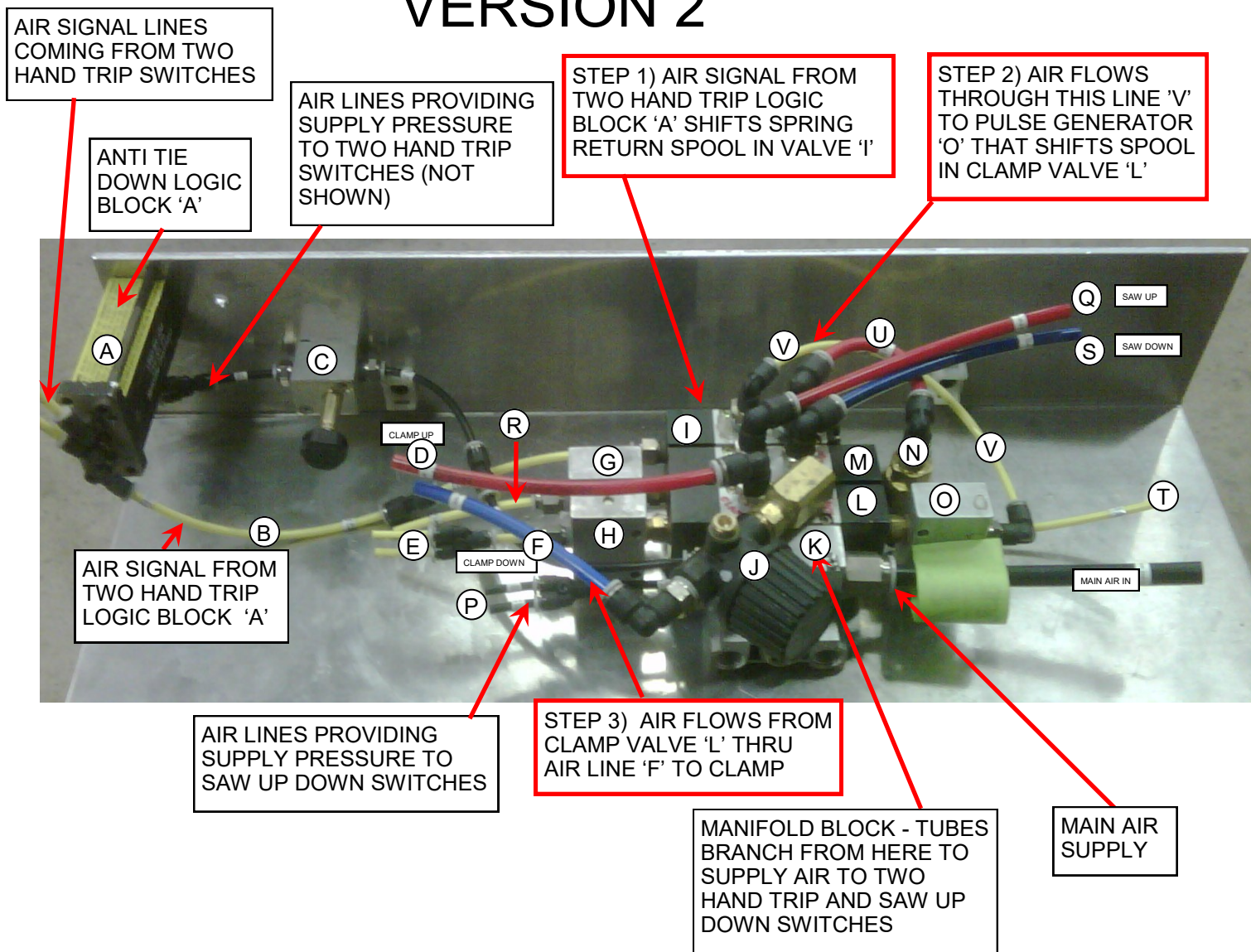


# Cyclone 500 Air Logic

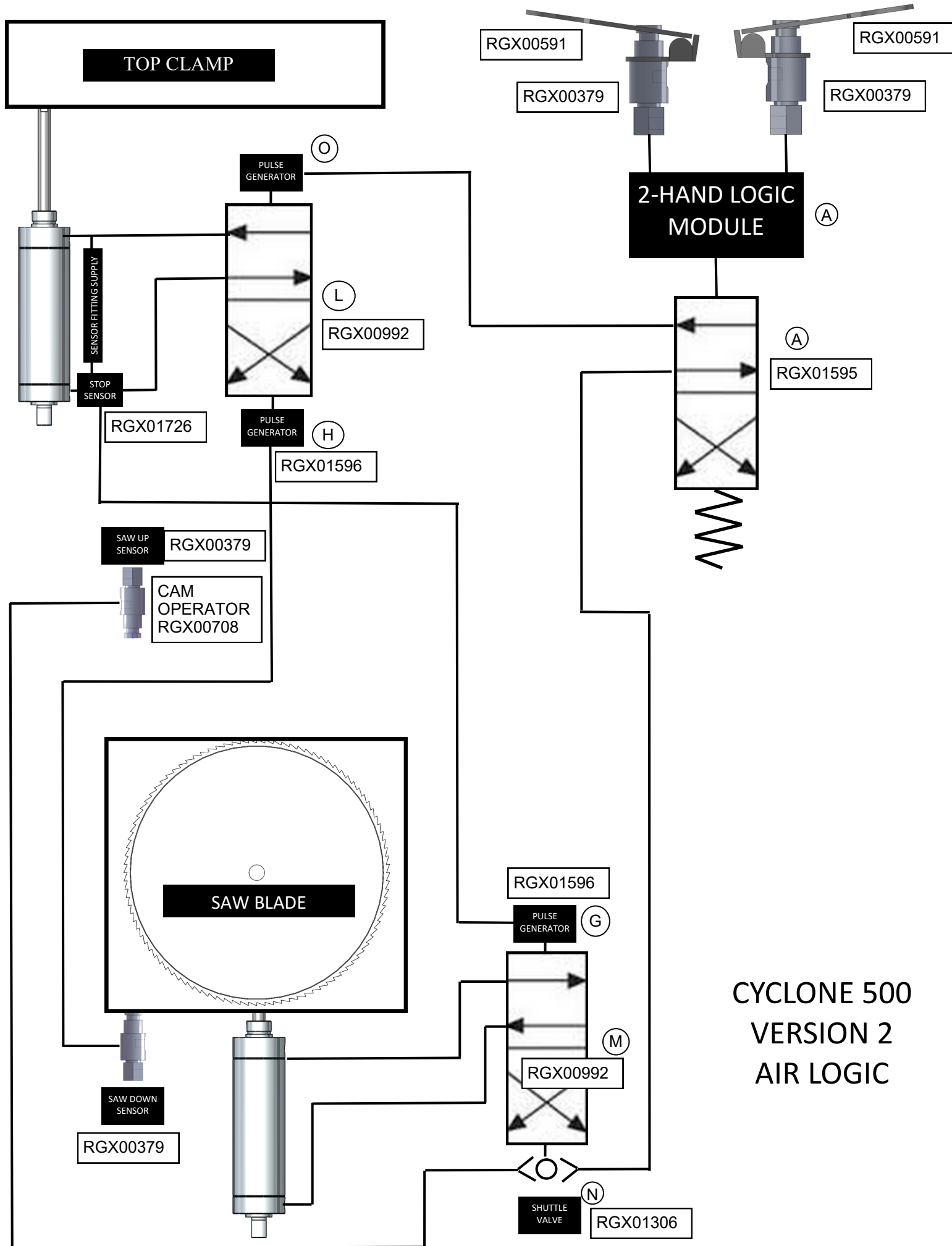
## VERSION 2



**STEP 4) WHEN TOP CLAMP STOPS AGAINST PART, AN AIR SIGNAL IS SENT FROM STOP SENSOR (NOT SHOWN) THRU AIR LINE 'R' TO PULSE GENERATOR 'G' WHICH SHIFTS SAW CYLINDER VALVE 'M'**

**STEP 5) AIR FLOWS THRU AIR LINE 'Q' TO SAW CYLINDER CAUSING IT TO LIFT SAW. AT THIS POINT IF OPERATOR REMOVES FINGERS FROM TRIP BUTTONS, MODULE 'A' WILL DROP SIGNAL TO VALVE 'I' ALLOWING SPRING IN VALVE 'I' TO SHIFT THE SPOOL BACK TO ITS INITIAL POSITION. THIS SENDS AIR PRESSURE THRU AIR LINE 'U' TO SHUTTLE VALVE 'N' WHICH SHIFTS SAW VALVE 'M' CAUSING SAW TO DROP. OTHERWISE SAW CONTINUES UP TO ITS TOP OF STROKE SWITCH (NOT SHOWN) WHICH SENDS AN AIR SIGNAL THRU AIR LINE 'T' TO SHUTTLE VALE 'N' WHICH WILL ALSO SHIFT SAW VALVE 'M' CAUSING SAW TO DROP.**

**STEP 6) WHEN THE SAW DROPS BACK TO ITS HOME POSITION IT WILL ACTUATE THE SAW DOWN SWITCH (NOT SHOWN) SENDING AN AIR SIGNAL THROUGH AIR LINE 'E' TO PULSE GENERATOR 'H' WHICH SHIFTS VALVE 'L' BACK TO ITS HOME POSITION WHICH SENDS AIR THROUGH AIR LINE 'D' WHICH LIFTS THE TOP CLAMP. NOW BOTH THE SAW AND THE CLAMP ARE IN HOME POSITIONS READY FOR ANOTHER CYCLE.**





# VERSION 1

TOP CLAMP  
PRESSURE  
REGULATOR 'E'

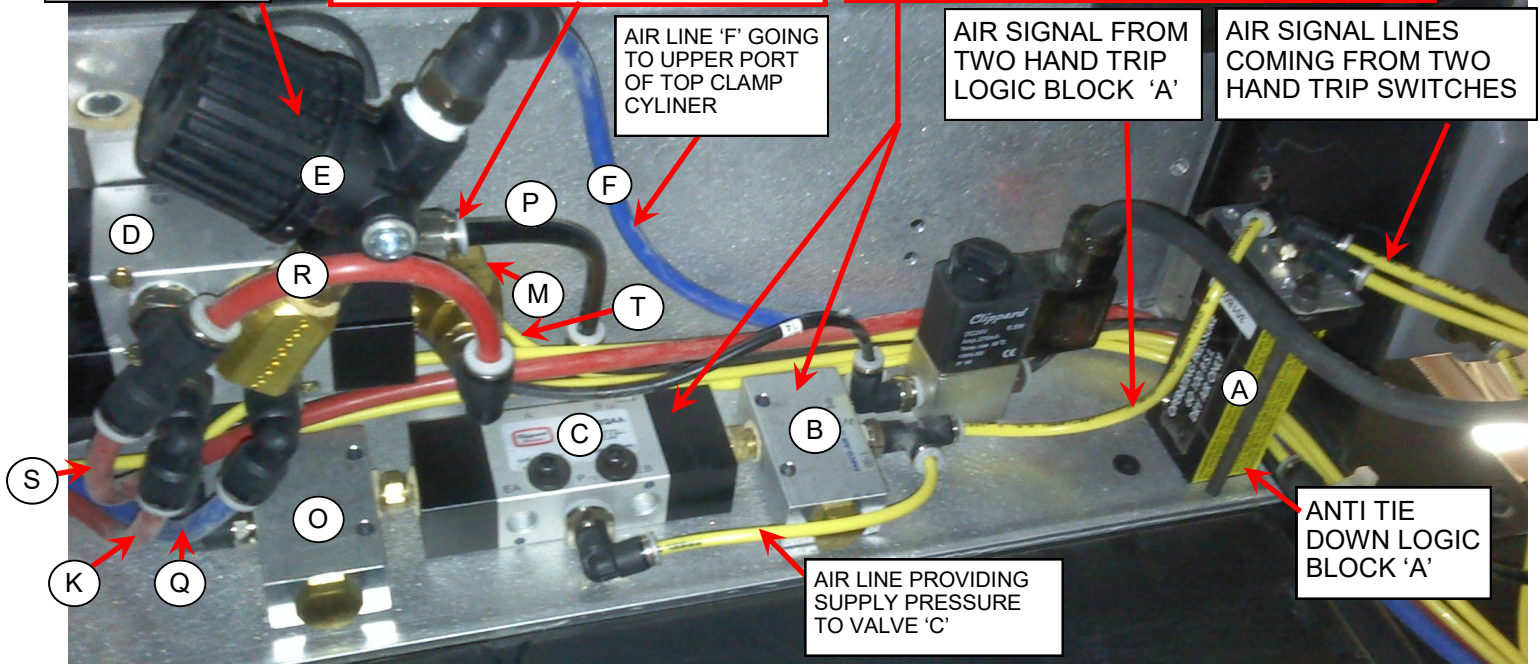
STEP 2) VALVE 'C' PRESSURIZES  
LINE 'P' SHIFTING VALVE 'D' WHICH  
MAKES TOP CLAMP COME DOWN.

STEP 1) AIR SIGNAL FROM TWO HAND TRIP  
LOGIC BLOCK 'A' SENDS AIR TO PULSE  
GENERATOR 'B' WHICH SHIFTS VALVE 'C'.

AIR LINE 'F' GOING  
TO UPPER PORT  
OF TOP CLAMP  
CYLINER

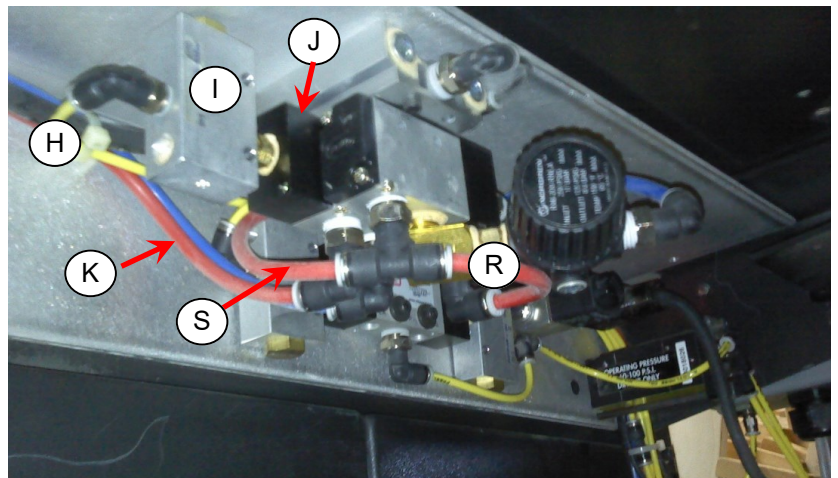
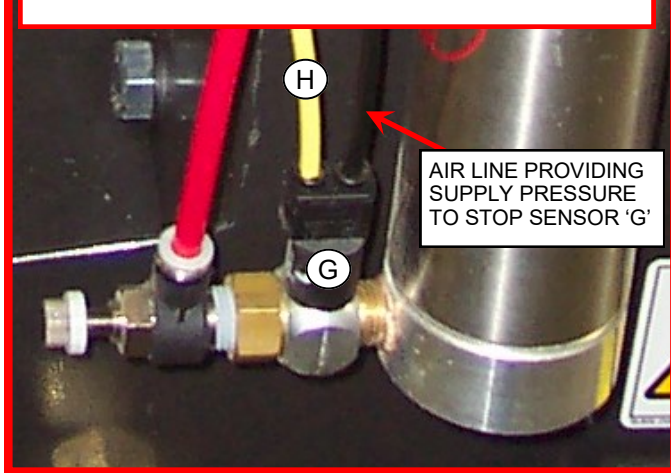
AIR SIGNAL FROM  
TWO HAND TRIP  
LOGIC BLOCK 'A'

AIR SIGNAL LINES  
COMING FROM TWO  
HAND TRIP SWITCHES



STEP 3) WHEN TOP CLAMP STOPS MOVING  
DOWN THE STOP SENSOR 'G' SENDS AN AIR  
SIGNAL OUT LINE 'H'.

STEP 4) LINE 'H' ACTUATES PULSE GENERATOR 'I' WHICH  
SHIFTS VALVE 'J', CAUSING AIR PRESSURE TO FLOW  
THROUGH AIR LINE 'K' WHICH CAUSES SAW TO ASCEND.



STEP 5) WHEN THE SAW SLIDE  
HITS THE UPPER LIMIT SWITCH  
'L' IT SENDS AN AIR SIGNAL TO  
SHUTTLE VALVE 'M' WHICH  
SHIFTS VALVE 'J' CAUSING SAW  
TO DESCEND.

STEP 6) WHEN THE SAW SLIDE HITS THE LOWER LIMIT  
SWITCH 'N' IT SENDS AN AIR SIGNAL TO PULSE GENERA-  
TOR 'O' WHICH SHIFTS VALVE 'C' SHUTTING OFF PRES-  
SURE TO AIR LINE 'P' ALLOWING THE SPRING IN VALVE  
'D' TO SHIFT THE VALVE BACK WHICH CAUSES THE TOP  
CLAMP TO GO BACK UP.

