

Rapid Air Operating Instructions

RTB Rapid Touch with Base (Rev 6-15-01)

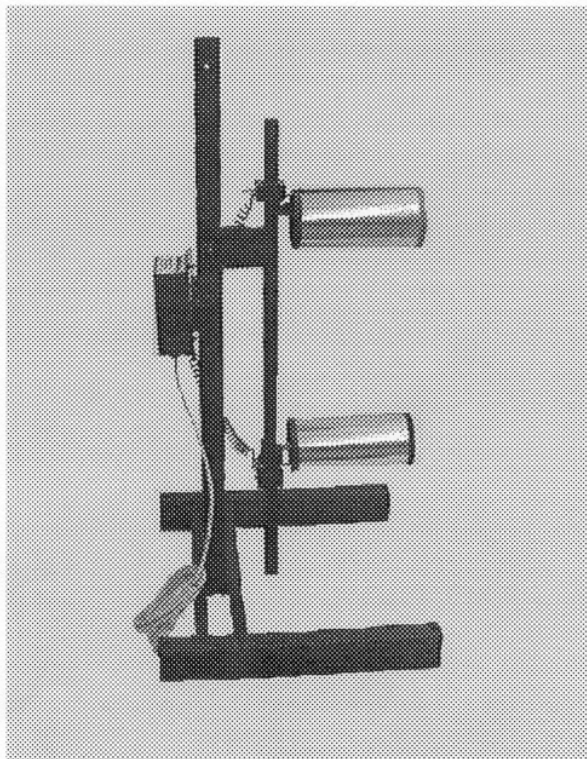
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RTB TOUCH LOOP CONTROL

The RTB touch loop control is shipped ready to be put into service. It was tested at the factory before being shipped and has only to be plugged into a reel, straightener, or rapid roll to get it running.

The unit is very compact with the base being the largest part at approximately 2 foot square, the top of the unit being about 42 inches high. The unit has a 25 pin D-Sub as standard but can be ordered with a 14 pin Amp round plug to match up with our older reels and straighteners. If the unit seemed to be ordered wrong then we also sell short transition cords to match your needs so you will not have to rewire anything.

Please do not attempt to make changes without first reading and understanding what each function does and how it affects the rest of the control.



OPERATING INSTRUCTIONS
RTB (RAPID TOUCH WITH BASE)
Part number 10900534 (with D-sub plug)
Part number 10900535 (with amp plug)

INSTALLATION:

The RTB unit, when received should be checked for shipping damage. If damage has occurred, contact the carrier that handled the shipment first and then Rapid-Air to report the damage.

The RTB unit is shipped pre-tested and adjusted to a working height of 42” and is set for payout operation. It should be set in place on a level surface, although each stand is provided with (4) base holes to level the stand. Base holes can be used as thru holes for 7/16 bolts if the unit is to be bolted to the floor or for leveling the stand.

Each RTB unit assembled is pre-wired to an Amp 14 pin circular plug or 25 pin D-sub connector that matches a connector output on every Rapid Air device capable of running from a non-contact loop controller. Optional cord adapters are available for interfacing each style. Contact Rapid Air for details. The RTB gets its control power from the device that it is controlling. Once the plug is attached, the RTB is ready to run.

The RTB unit (10900534 and 10900535) consists of (3) major components.:

- | | |
|--------------------|--|
| 1. Control Box | 28900348 |
| 2. Stand | 21400130 |
| 3a. Cable Assembly | 28900226 for 10900424 14 pin Amp connector |
| 3b. Cable Assembly | 28900227 for 10900427 25 pin D connector |

CONTROL BOX:

The control box is the key component for the RTB. It is attached, wired and tested at the factory. Please call you representative or Rapid Air before attempting any adjustments.

STAND:

The stand was designed to be durable but not cumbersome. All of the components are designed for easy replacement if a component becomes non-repairable or fails. Access to the payout/rewind switch is from the top of the RTB box.

CABLE ASSEMBLY:

The cable assembly was designed to make the installation of the RTB to a Rapid Air Reel, Straightener, or Rapid Roll very easy. The power and control connection is accomplished through one of two types of connectors. Optional adapter cables are available for each type of conversion if required. Contact Rapid-Air for details or assistance. If connecting to other than Rapid Air equipment, consult the Rapid Air engineering department.

**OPERATION:
PAYOUT MODE**

With the RTB in place and electrically attached to the Reel, Straightener, or Rapid Roll that is in the “ON” position the unit is ready for operation.

To start thread up, press the jog button of the Reel, Straightener, or Rapid Roll to feed material out so the operator has material to work with. Once there is enough material, the operator can release the jog button and put the Reel, Straightener, or Rapid Roll in automatic and let the sensor take over.

With the material aligned between the two horizontal cans, the operator can now walk the material to its destination and the touch probes will take care of the loop needed for the operation.

The RTB maximum voltage is factory set for 6 VDC. The RTB can provide a variable voltage of 0-10 VDC to a Reel or Straightener manufactured by others if required. The Rapid Air device that received the variable voltage, although preset at the factory for optimum performance, might have to be readjusted in acceleration and deceleration to provide smooth operation of the material being handled. Consult with Rapid Air prior to changing the maximum output voltage.

**OPERATION:
REWIND MODE**

With the RTB in place and electrically attached to a Reel, the unit is ready for operation.

Attach the material being run to the reel. Turn on the reel and press the jog button to start the material rewinding and take up the slack. The RTB will then take over the control.

The RTB can now provide a variable voltage to the Reel. The Rapid Air device that received the variable voltage, although preset at the factory for optimum performance, might have to be readjusted in acceleration and deceleration to provide smooth operation of the material being handled. The RTB maximum voltage is factory set for 6 VDC. Consult with Rapid Air prior to changing the maximum output voltage.

****TO SWITCH FROM PAYOUT TO REWIND OR VICE-VERSA, MOVE THE SWITCH TO THE DESIRED POSITION**

In either case, the RTB is set up to start at 50% of maximum speed so the unit won't have to adjust so much at one time. When you have finished threading up the material into the die, then turn the device that the RTB is plugged into off and then on to reset the RTB to 50% of maximum speed.

ADJUSTMENTS

PAYOUT/REWIND SWITCH:

In the payout mode, the device that is receiving the signal from the RTB will increase in speed as the depth of the loop becomes smaller.

In rewind mode, the device that is receiving the signal from the RTB will increase in speed as the depth of the loop becomes larger.

NO STOCK

This relay has a contact controlled by an external switch. The switch should be mounted near the RTB and wired to the unit. If the external switch is used as a no-stock switch, then the contact should be closed when material is present. If not using this accessory then a jumper must be in place for the unit to work.

MECHANICAL

The mechanical assembly of the RTB was designed to be very versatile. It has 3 main mechanical adjustments, which are as follows:

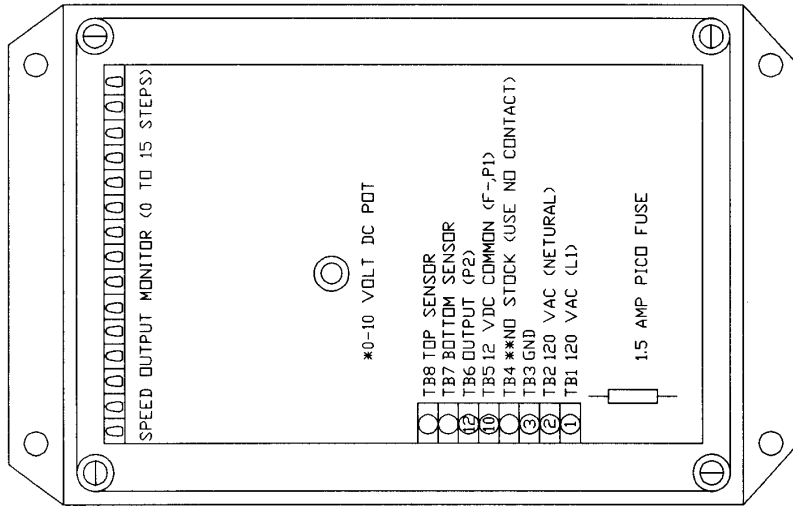
The height of the can assembly can be adjusted upward by a maximum of 24 inches in increments of 1 inch.

The arm holding the touch probe cans can be adjusted a maximum of 4 inches in increments of 2 inches.

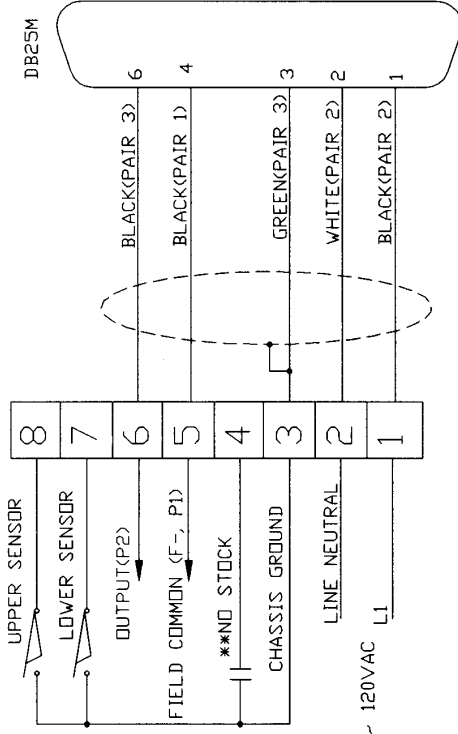
The touch probe cans can be adjusted to a maximum opening of 24 inches in infinite increments.

Caution: Always tighten every bolt securely as the unit depends on a proper and complete path from the probe cans to the electrical control panel in order for the control to work properly.

The feet of the RTB has 4 holes drilled through for mounting the unit to the floor. The hole is a clearance for a 1/2 inch bolt.



TOUCH CONTROLLER TB



* CALL FACTORY BEFORE MAKING ANY ADJUSTMENTS
 **IF NOT USING A 'NO STOCK' CONTACT THEN THIS INPUT MUST BE JUMPERED TO TERMINAL #3 (GND)

RAPID-AIR CORPORATION
 ROCKFORD, IL • MADISON, SD

PART NAME RTB WIRING DIAGRAM

REV.	DATE	CHANGE	SCALE	DRAWING NUMBER	WEIGHT
63			FULL		
1					
2					
3					
4					
5					
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