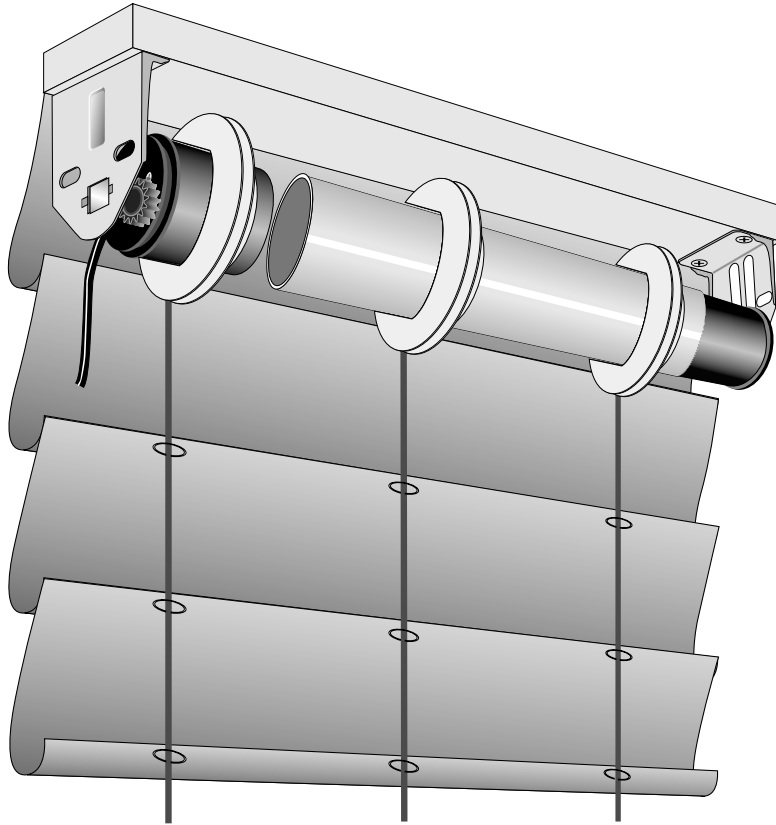


BTX™



Installation Instructions for
RS-B9 Romans,
Austrians and Balloon
Shades

Roman Shades

Tools Required:

Power Screwdriver

Level

Square

Pliers

Test Cable

Drill Bits

Small Phillips

Small Flathead

Extended Phillips
bit for the
power screwdriver

Screws & Anchors

Also Perhaps:

Shims

Table of Contents

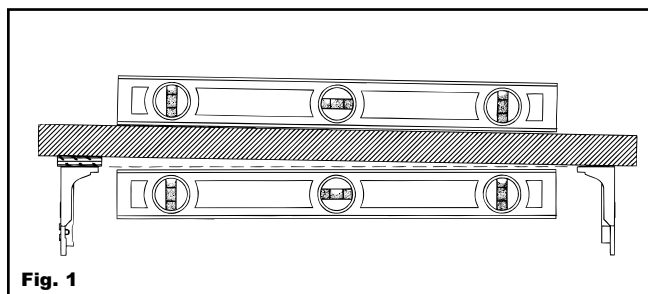
Installing the RS-B9 Roman System	3
RS-B9 Coupler Options	4
Limit Adjustment Instructions	5
RS-B9 Inside Mount Detail	6
Basic Switch Control Wiring	7
Maintenance Instructions for RS Series Systems	7
Warranty	8

Installing the RS-B9 Roman System

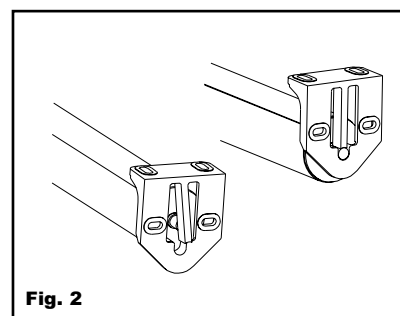
Ref. #	Description	Bracket System
A	Motor	
B	Tube, 2" (50 mm)	
C	Bracket Insert, Plastic	
D	Motor Bracket	
E	Idler Bracket	
F	Idler, 50 mm Tube	
G	Tape Reel	

1. For shades to operate properly, brackets must be level. Check to see if the surface on which the shades will be mounted is level; if not, shim the brackets to make them as level as possible. **(See Fig. 1)** This step is crucial to the final product.

[If using 1" x 4" board continue on to step #2, if not skip to step #3]



2. The RS-B9 comes pre-mounted on a 1" x 4" board. To install, simply attach board with screws (not supplied) into solid blocking. [Proceed to step #5]
3. Using the RS-B9 brackets with no board, take the brackets and install them with screws to a solid surface.
4. Take assembled motor tube and insert the motor end into the motor bracket.
5. With motor end firmly inserted, hold idler end to the inside back edge of the idler bracket. Snap into place with a firm diagonal downward motion. The idler will snap into the bracket and be locked in place by the finger of the bracket. **(See Fig. 2)**
6. Completely tighten screws and make sure your RS-B9 is secure. Check to see if shade is level.
7. Adjust limits with test cable.
8. Run shade to check that fabric is level and no further adjustments are needed. Shim if necessary.
9. Wire the motor to the existing pre-wire or controls.

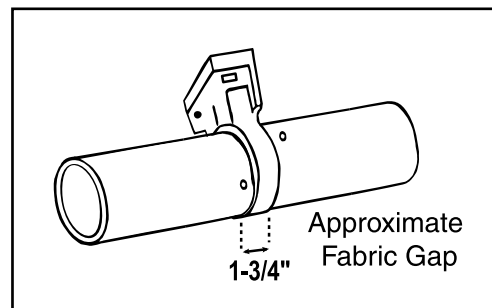


RS-B9 Coupler Options

Straight Coupler - Assembled

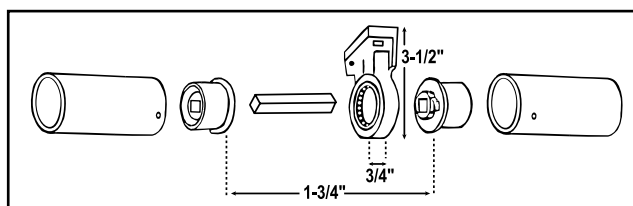
This illustration shows an assembled coupler for joining two to six shades together. These shades are operated by one motor located at either end of the line of shades.

Bracket	Idler Side	Coupler	Motor Side
Hardware Deductions	5/8"	1-5/8"	1-1/8"



Coupler System - Exploded View

This illustration shows the individual components of the coupler system. The steel ball bearings allow frictionless connections between the material shade bands. The Allen wrench adjustment at each junction keeps each shade band in alignment.



23.539.0001 Center Support with Ball Bearings



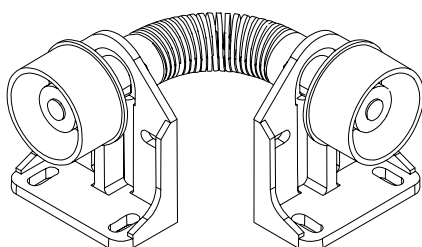
Tip . . .

Clearance between tubes can be modified to 3/4".

- Disassemble coupler assembly using 2.5mm Allen wrench.
- Remove rim on both plastic tube inserts using a sharp knife or grinder.
- Re-install the tube inserts with locking collars to the inside of the tube.
- Stake tube to tube inserts using a pop rivet.

Note: At least one of the tube inserts must be tightened to square drive shaft with Allen wrench.

Angled Coupler



Approximate Fabric Gap = 5" Maximum

09.710.0300 Angled Coupler

Limit Adjustment Instructions

The maximum limit switch range for this motor is 21 revolutions. If installing a 32-revolution motor, proceed as described under "Extended Limit Switch Range Adjustment". A gear-adjusting tool is required for adjustment.

1. Allow the motor to run completely in the down or closed position. If the motor stops before you want it to, continue to engage to control or test cable in the down position and turn the down or closed limit switch, adjusting the screw in the "+" (plus) direction until the desired end position is reached. If the motor overruns the down or closed position, turn the down or closed limit switch, adjusting the screw in the "-" (minus) direction one full turn. Run the shade up or into the open position about a foot, then run it down and see if the one turn of the screw was enough. If not, repeat the process.
2. If the up or open limit needs adjustment, follow the instructions in the paragraph above for setting, using the up or open limit switch adjusting screws.
3. Run the motor alternately in both directions until the limit switches trip. Fine-tune the limit switch settings if necessary. One turn of the adjusting screw approximately corresponds to a 90-degree turn of the tube.

Note: The motor has a running time of approximately six minutes before the built-in thermal overload shuts the motor off. If the motor stops operating, allow it to cool down for at least 15 minutes before trying to switch it on again.

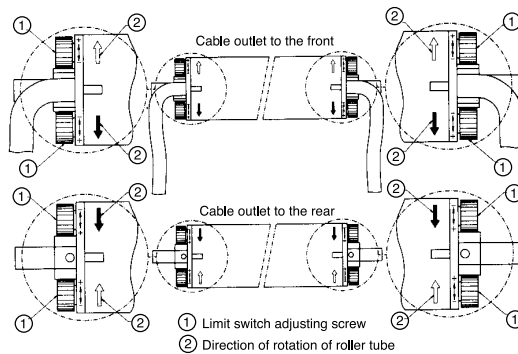
Extended Limit Switch Range Adjustment

If more than 21 revolutions of the tube are necessary, the motor must be switched on in the "down" direction until the motor cuts out. Do not attach the shade fabric until then. Hold the "down" switch depressed and turn limit switch, adjusting the screw "down" in the "-" (minus) direction until the motor has made approximately eight revolutions of the tube.

Identify the limit switch adjusting screws from the direction of travel arrows. Turn the limit switch adjusting screws to:

minus (-) = shorter travel

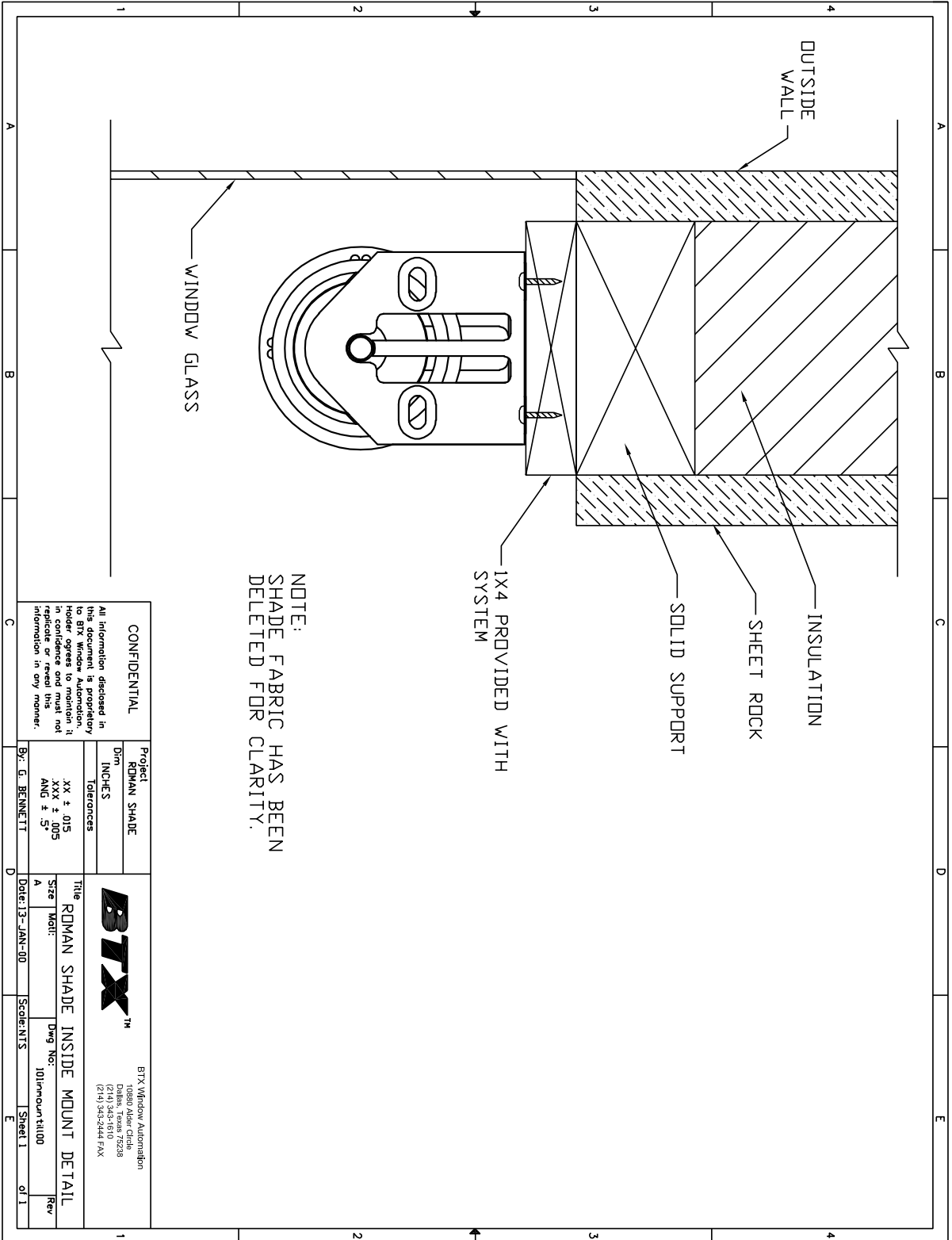
plus (+) = longer travel



Tip . . .

The limit switches function only when the motor is installed in the tube. If you are going to check limits without the motor in the tube, you must rotate the crown in the same direction the drive shaft is turning while the motor is running.

Roman Shade Inside Mount Detail



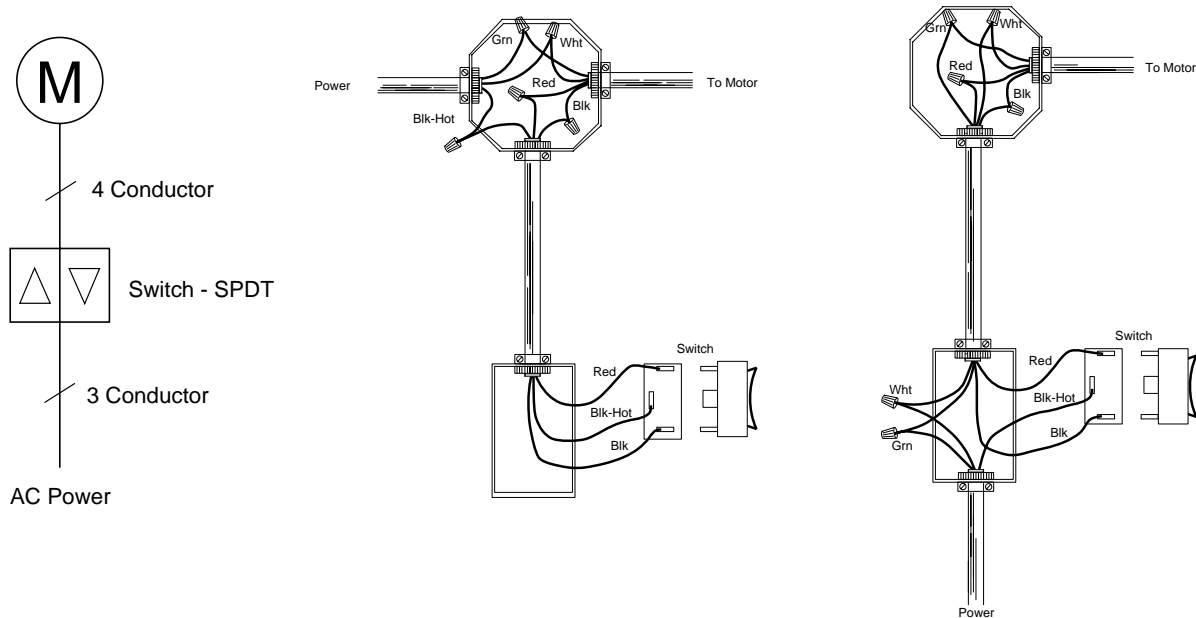
NOTE:
SHADE FABRIC HAS BEEN
DELETED FOR CLARITY.

<p>CONFIDENTIAL</p> <p>All information disclosed in this document is proprietary to BTX Window Automation. Holder agrees to maintain it in confidence and must not disclose it in any manner.</p>	
<p>Project ROMAN SHADE</p> <p>Dim INCHES</p> <p>Tolerances XX ± .015 XXX ± .005 ANG ± .5°</p>	<p>Title ROMAN SHADE INSIDE MOUNT DETAIL</p> <p>Size A</p> <p>Date 13-JAN-00</p> <p>Scale N.T.S.</p> <p>Sheet 1 of 1</p>
<p>By: G. BENNETT</p>	<p>BTX™</p> <p>BTX Window Automation 10880 Alder Circle Dallas, Texas 75228 (214) 343-5944 (214) 343-5944 FAX</p>

Basic Switch Wiring

Illustrated below is the basic wiring diagram for the MotorShade™ RS-B9 System.

Caution! Do not wire motors in parallel!



RS Shade Maintenance

Hardware

The BTX RS Series manual and motorized shades are designed to be virtually maintenance free. It is important to periodically examine the bracket fasteners to ensure they remain secure and hold the hardware level.

Fabric

Fabric care is dependent on the composition of the material selected. Fabric panels should roll up evenly on the roller tube. Any irregularity should be corrected to prevent damage to fabric edges. Shim to correct problems in rolling fabric up.

PVC-coated materials (780 material, E-screen, T-screen and Phifer) should be cleaned with a brush. Use mild detergent and rinse.

Acrylics (Flocke`): Remove dust with a vacuum cleaner, clean with sponge, cold water and mild detergent (5%). Dry in an upright position with blind open. **NOTE: Do not rub fabric hard, as this will discolor it.**

Warranty & Return Policy

1. Contract

All offers, quotes and sales by BTX Window Automation, Inc. (BTX) are subject to these Terms and Conditions of Sale. No other agreements have been made or will be valid unless expressly confirmed in writing by BTX.

2. Acceptance

BY TAKING DELIVERY OF BTX PRODUCTS, PURCHASER ASSENTS TO THE TERMS AND CONDITIONS STATED HEREIN, UNLESS OTHERWISE EXPRESSLY AGREED IN WRITING BY BTX. BTX HEREBY OBJECTS TO ANY DIFFERENT OR ADDITIONAL TERMS AND CONDITIONS WHICH MAY BE PROPOSED OR HAVE BEEN PROPOSED BY PURCHASER IN ANY PURCHASE ORDER FORMS OR OTHER DOCUMENTS. THE TERMS AND CONDITIONS STATED HEREIN SHALL PREVAIL OVER ANY DIFFERENT OR ADDITIONAL TERMS AND CONDITIONS PROPOSED BY PURCHASER AND SHALL APPLY TO THE SALE OR SHIPMENT OF ANY GOODS IN RESPONSE TO PURCHASER'S ORDER.

3. Prices and Delivery

All quoted prices are valid for a period of 60 days from the date of issue, unless otherwise agreed by BTX in writing. Prices on accepted orders remain firm for a period of four months from the date of order acceptance, provided final delivery occurs within that period. If delivery is to occur more than four months from the date of order acceptance, prices are subject to change in accordance with any changes in the published BTX price list which occur after the date of order acceptance. All prices quoted are FOB Dallas, excluding all freight, packaging and taxes. All delivery dates are approximate.

4. Payment Terms

(a) Open account payment terms may be established from time to time at the sole discretion of BTX, and are subject to credit approval in writing. Terms on open accounts are payment in full, net 30 days from date of invoice. Payment terms for single transactions and transactions other than on open account are net C.O.D. or prepay unless confirmed otherwise in writing by BTX.

(b) Amounts past due are subject to a finance charge of 1.5% per month to the legal limit, and the finance charge will apply without further prior notice. In case of purchaser's delinquency in payment or insolvency, BTX retains the right to halt or interrupt all further deliveries and service to the purchaser until all past due amounts have been paid, and to require payment in advance for orders not yet delivered, without any liability resulting for BTX. Purchaser expressly agrees to indemnify BTX and hold BTX harmless from all charges and liability which might arise in any manner from purchaser's nonpayment.

5. Inspection, Acceptance and Claims

All claims by purchaser against BTX for shortages must be made in writing to BTX within fourteen days from date of shipment from BTX's Dallas base or they are waived. Any claims for transport damage are the responsibility of the recipient and must therefore be filed with the carrier by the recipient.

6. Risk of Loss

Full risk of loss, damage or destruction of the goods shall pass to purchaser upon delivery of the goods to the carrier at the point of shipment or upon delivery at storage, whichever applies.

7. Force Majeure

If an order cannot be completed due to causes

beyond BTX's control, BTX retains the right to either cancel the uncompleted portion of the order or complete the order if and when this becomes possible. Purchaser shall not have the right to withhold payment on delivered goods and/or services, nor to unilaterally change the order or cancel same. Force majeure includes but is not limited to strikes, lock-outs, storms, floods and the like, terrorism, wars, revolutions, major equipment failures or fire damage at production facilities, etc.

8. Warranty

BTX extends a three-year limited warranty for its MotorDrape™ DC systems and controls. BTX warrants its other systems and 110/220V motors and hardware accessories against defects in material and workmanship for a period of five years from date of shipment from BTX's Dallas base; however, pull chains and cords for roller shades are excluded. BTX controls and electric and electronic components carry a one-year warranty against defects in material and workmanship from date of shipment from BTX's Dallas base. BTX does not warrant cords and tapes for lift systems, nor customer's own materials, and BTX disclaims any written, oral or implied warranties for such materials. If any item to which a warranty applies proves to be defective during the specified warranty period under normal and proper use and provided the equipment or part has been properly stored, installed and maintained with due regard to any directives, instructions and operating procedures provided, BTX shall, upon presentation of proof of purchase, repair or replace the item at the sole option of BTX, F.O.B. Dallas. Application of the warranty will be determined by BTX technical staff after return of the item, its inspection and any necessary investigation. This warranty does not apply in case of defects resulting from faulty installation, misuse, misapplication, abuse, mishandling, shipping or failure to follow instructions. This warranty does not cover any incidental, special or consequential damages, labor on location, service calls, reinstallation, or expenses involved in shipping, packing, and returning the goods. It also does not cover damages caused by fire, flood, or act of God. BTX warrants items repaired or replaced pursuant to the above warranty, under normal and proper use, storage, installation and maintenance, against defects in material and workmanship for a period of 30 days from date of start-up of such repaired or replaced item or the expiration of the original warranty, whichever is longer. Correction of non-conformities in the manner and for the period of time specified herein shall be purchaser's exclusive remedy and shall constitute fulfillment of all liabilities of BTX, whether in warranty, contract, negligence, tort, or otherwise with respect to the item delivered. In no event shall BTX be responsible for providing access to the allegedly defective item or for disassembly or reinstallation of such item or parts.

9. DISCLAIMER

THE FOREGOING EXPRESS WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WRITTEN, ORAL OR IMPLIED. ALL OTHER WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED.

10. LIMITED LIABILITY

BTX'S LIABILITY FOR ANY AND ALL CLAIMS, CHARGES, EXPENSES, DAMAGES, LOSSES AND INJURIES ARISING OUT OF OR RELATING TO ITS PERFORMANCE OR BREACH OF

ANY AGREEMENT OF SALE FOR GOODS AND/OR THE MANUFACTURE, SALE, DELIVERY, RESALE, REPAIR OR USE OF ANY GOODS SHALL NOT EXCEED THE PURCHASE PRICE OF SUCH GOODS, REGARDLESS WHETHER THE CLAIM IS BASED ON CONTRACT, TORT, NEGLIGENCE, STATUTE, STRICT LIABILITY, WILLFUL OR WANTON CONDUCT, WARRANTY (EXPRESS OR IMPLIED), OR OTHERWISE. THIS SHALL BE PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST BTX OTHER THAN THE REMEDY PROVIDED FOR UNDER THE EXPRESS BTX WARRANTIES. IN NO EVENT SHALL BTX BE LIABLE FOR INCIDENTAL, SPECIAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES.

11. ARBITRATION

BTX AND PURCHASER AGREE THAT THIS TRANSACTION INVOLVES INTERSTATE COMMERCE AND THAT AT THE OPTION OF BTX, ANY DISPUTE RELATING TO IT IN ANY MANNER SHALL BE SUBMITTED TO BINDING ARBITRATION BEFORE THE AMERICAN ARBITRATION ASSOCIATION AND SHALL BE GOVERNED BY THE FEDERAL ARBITRATION ACT OR, IF THAT STATUTE IS INAPPLICABLE, ANY DISPUTE SHALL BE GOVERNED BY THE TEXAS ARBITRATION ACT; HOWEVER, NO ARBITRATOR MAY AWARD PUNITIVE DAMAGES. PURCHASER AGREES TO PAY ALL COSTS INCURRED BY BTX, INCLUDING BUT NOT LIMITED TO COSTS OF ARBITRATION, COLLECTION, REASONABLE ATTORNEY'S FEES, EXPENSES AND ANY COURT COSTS.

12. Return

No goods may be returned without the express written approval of BTX and the receipt of an BTX RGA identification number. Goods approved for return must be returned in original packaging, freight prepaid, clearly marked with the BTX RGA identification number and be accompanied by a copy of the original invoice. Application of the warranty will be determined by BTX technical staff after return of the item, its inspection, and any necessary investigation. A restocking charge of 25% of invoice value will apply on all items accepted for return.

13. Liens and Security Interest

Purchaser will not permit to be created or to remain undischarged any lien, encumbrance or charge upon the goods supplied by BTX until BTX has received payment in full for such goods. If any liens, encumbrances or charges shall be filed against BTX goods prior to payment in full, purchaser shall discharge the liens, encumbrances or charges within ten days and reimburse BTX for expenses incurred in defending its security interest. Title to the goods shall remain with BTX until payment in full has been received.

14. Statute of Limitations

Any action against BTX shall be commenced within one year after the cause of action has arisen.

15. Choice of Law and Venue

The rights and duties of the parties hereunder and the construction and effect of these terms and conditions shall be governed by the laws of the State of Texas. Venue shall lie in Dallas, Texas, to the exclusion of any other jurisdiction.

16. This agreement supersedes any inconsistent or additional promises made by any employee, representative, agent or dealer of BTX.

17. If any part of this agreement is found invalid, the balance of the agreement remains enforceable.

WTY-030806