

INSTALLATION INSTRUCTIONS

HAND OPERATED MODELS 140 AND 140-R

BI-PART OPERATION

II. SUSPENDED TRACK (bi-part operation)

1. If the track is to be curved in the field, curve it now. Please refer to ADC Form 404 for the curving procedure for this track, using the BT-2 bending tool. If track must be spliced, this should also be done at this time. Please refer to splicing instructions for suspended track systems (DWG A-4224). Make sure that the track sections will not be too large to handle.
2. Attach the live-end and dead-end pulleys to the appropriate ends of the track with the hardware provided. To properly align the live-end pulley make sure that it is on the inside of the curve and that the top wheel of the pulley is closest to the end of the track.

NOTE: The live-end pulley mounting plate is supplied with two (2) sets of mounting holes to allow the pulley wheels to be reversed allowing the assembly to be mounted at either end of the track system.

Attach a 1309 end stop through the track in front of the live-end pulley to prevent the curtain from interfering with the pulley's operation.

3. Clamp the two sections of track together at the center lap with the lap clamps and hardware provided. The track section with the live-end pulley should be the "front" (audience side) track at the center over-lap.
4. Insert an equal amount of single carriers into the two (2) track sections. The carrier can be inserted at the open ends of the track at the center overlap. Be sure to attach the 4225 rubber bumpers to the carrier flanges facing the nearest end pulley, these bumpers help to reduce the operating noise of the track system. Refer to ADC form 743 for further information. Insert a master carrier into each side of the track system, making sure that the cord connectors on each master face the inside of the track curves.
5. Install the combination end-stop/cord hook assembly at the center overlap. This device will be used to guide the cord through the overlap. Hanging clamps can also be attached at this time. Spacing for the hanging clamps is 4 feet or less, with additional supports used at curves and the ends of the track.
6. The location of the spindles and idlers varies according to the amount of curve and the curve's radius. The spindles and idlers always mount to the track between the top and middle flange. Refer to ADC form 442 for further information.

HARDWARE

TRACK LOCATION

1458 SPINDLE A
1459 SPINDLE B

INSIDE CURVE, LIVE-END HALF
INSIDE CURVE, DEAD-END HALF

Track lay-outs featuring a continuous curve require 1458 Spindle B's and 1460-A idlers at the overlap for cord alignment. The large 1407-A lap clamps is also used to provide 4" spacing between the track sections at the overlap.

1460 IDLER OUTSIDE CURVE, DEAD-END HALF

7. The assembled track can now be raised and mounted in its permanent position.

CORDING THE 140 CURVED TRACK SYSTEM

1. Position the cord coil under the live-end pulley. Take one end of the coil and thread it up over the top wheel of the live-end pulley, and continue around the inside of the curved track threading the cord through the TOP of the 1458 spindle A's.
2. When the overlap is reached, thread the cord through the combination end stop/cord hook and continue along the inside of the curve. On continuous curve track lay-outs, the cord would pass through the 1460-A idler and 1459 Spindle B's at the overlap.
3. The cord should now be ready to be threaded through the cord connectors of the master carrier on the dead-end half of the track. Do not tighten these connectors at this time.
4. Continue along the inside of the curve of the dead-end half of the track system, threading the cord around the 1459 spindle B's to the dead-end pulley.
5. When the dead-end pulley is reached, run the cord around the pulley wheel and to the outside of the curve. The cord should now line up with the idler wheels on the outside of the dead-end section of the track. Thread the cord around the OUTSIDE of these wheels, to the master carrier of the opposite, (live-end) half of the track system. When the master carrier is reached, attach the cord to the NEAREST cord connector on the master carrier and tighten this connection.
6. Thread the other end of the cable coil through the floor pulley, align the floor pulley with the live-end pulley, and secure the floor pulley to the floor. Continue threading the operating cord up and over the lower wheel of the live-end pulley, then along the inside of the curve of the live-end half of the track system, threading the cord around the ROLLER TUBE of the 1458 spindle A's to the master carrier located on the live-end half of the track system.
7. Insert the end of the cord through the second cord connector of the master carrier and remove the slack from the system. Tighten the cord connector.

8. Slide each master carrier toward the center overlap, as far as they will travel. Tighten the remaining cord connectors. The track is now ready for the curtain installation.

II. CEILING MOUNTED TRACK SYSTEMS (bi-part operation)

1. If the track is to be curved in the field, curve it now. Please refer to ADC Form 404 for the curving procedure for this track, using the BT-2 bending tool. If track must be spliced, this should also be done at this time. Please refer to splicing instructions for suspended track systems (DWG A-4224). Make sure that the track sections will not be too large to handle.
2. Attach the live-end and dead-end pulleys to the appropriate ends of the track with the hardware provided. To properly align the live-end pulley make sure that it is on the inside of the curve and that the top wheel of the pulley is closest to the end of the track.

NOTE: The live-end pulley mounting plate is supplied with two (2) sets of mounting holes to allow the pulley wheels to be reversed allowing the assembly to be mounted at either end of the track system.

Attach a 1309 end stop through the track in front of the live-end pulley to prevent the curtain from interfering with the pulley's operation.

3. Ceiling mounted track systems can be attached to the overhead structure one of two ways:
 - TYPE 1.** LOOSELY ATTACH THE CEILING CLAMP'S BASE PLATE TO THE TRACK WITH THE SIDE PRESSURE PLATES PROVIDED. THE CLAMPS CAN BE ATTACHED TO THE TRACK ON THE GROUND AND SLID TO THE PROPER MOUNTING POSITION WHEN THE TRACK IS LIFTED INTO PLACE. ONCE IN POSITION THE BASE PLATE IS FIXED TO THE CEILING USING THE TWO OUTSIDE MOUNTING HOLES. ONCE THE BASE PLATE IS BOLTED TO THE CEILING, THE SIDE PRESSURE PLATE BOLTS ARE TIGHTENED.
 - TYPE 2.** SCRIBE A LINE ON THE CEILING THAT FOLLOWS THE TRACK CENTERLINE. MOUNT THE BASE PLATES TO THE CEILING, CENTERING THEM ON THE LINE. USE THE CENTER, COUNTER SUNK HOLE TO MOUNT THE BASE PLATE. LIFT TRACK INTO POSITION AND SECURE IT TO THE CEILING CLAMP USING THE SIDE PRESSURE PLATES PROVIDED.
4. With the track secured to the overhead structure, insert an equal amount of single carriers into the two (2) track sections. The carrier can be inserted at the open ends of the track at the center overlap. Be sure to attach the 4225 rubber bumpers to the carrier flanges facing the nearest end pulley, these bumpers help to reduce the

operating noise of the track system. Refer to ADC form 743 for further information. Insert a master carrier into each side of the track system, making sure that the cord connectors on each master face the inside of the track curves.

5. Install the combination end-stop/cord hook assembly at the center overlap. This device will be used to guide the cord through the overlap.
6. The location of the spindles and idlers varies according to the amount of curve and the curve's radius. The spindles and idlers always mount to the track between the top and middle flange. Refer to ADC form 442 for further information.

HARDWARE

1458 SPINDLE A

1459 SPINDLE B

TRACK LOCATION

INSIDE CURVE, LIVE-END HALF

INSIDE CURVE, DEAD-END HALF

Track lay-outs featuring a continuous curve require 1458 Spindle B's and 1460-A idlers at the overlap for cord alignment. Note that a wider overlap is required for these devices.

1460 IDLER

OUTSIDE CURVE, DEAD-END HALF

CORDING THE 140 CURVED TRACK SYSTEM

1. Position the cord coil under the live-end pulley. Take one end of the coil and thread it up over the top wheel of the live-end pulley, and continue around the inside of the curved track threading the cord through the TOP of the 1458 spindle A's.
2. When the overlap is reached, thread the cord through the combination end stop/cord hook and continue along the inside of the curve. On continuous curve track lay-outs, the cord would pass through the 1460-A idler and 1459 Spindle B's at the overlap.
3. The cord should now be ready to be threaded through the cord connectors of the master carrier on the dead-end half of the track. Do not tighten these connectors at this time.
4. Continue along the inside of the curve of the dead-end half of the track system, threading the cord around the 1459 spindle B's to the dead-end pulley.
5. When the dead-end pulley is reached, run the cord around the pulley wheel and to the outside of the curve. The cord should now line up with the idler wheels on the outside of the dead-end section of the track. Thread the cord around the OUTSIDE of these wheels, to the master carrier of the opposite, (live-end) half of the track system. When the master carrier is reached, attach the cord to the NEAREST cord connector on the master carrier and tighten this connection.
6. Thread the other end of the cable coil through the floor pulley, align the floor pulley with

the live-end pulley, and secure the floor pulley to the floor. Continue threading the operating cord up and over the lower wheel of the live-end pulley, then along the inside of the curve of the live-end half of the track system, threading the cord around the ROLLER TUBE of the 1458 spindle A's to the master carrier located on the live-end half of the track system.

7. Insert the end of the cord through the second cord connector of the master carrier and remove the slack from the system. Tighten the cord connector.
8. Slide each master carrier toward the center overlap, as far as they will travel. Tighten the remaining cord connectors. The track is now ready for the curtain installation.

NOTES

THE MAXIMUM DISTANCE BETWEEN TRACK SUPPORTS SHOULD NOT EXCEED 4'. ADDITIONAL SUPPORTS SHOULD BE ADDED AT CURVES, SPLICES AND STACK AREAS.

LIVE-END AND DEAD-END PULLEYS MUST BE ANCHORED FIRMLY TO THE TRACK.

SUSPENDED SYSTEMS SHOULD HAVE SUPPORT LINES ATTACHED AT BOTH ENDS OF THE TRACK.

THE DISTANCE BETWEEN CARRIERS SHOULD NOT EXCEED 1 FOOT.

SUSPENDED, CURVED TRACK SHOULD BE SUPPORTED BY A 1 1/4" PIPE BACK BONE.

PROPERLY INSTALLED TRACK SHOULD ALLOW THE CURTAIN TO TRAVERSE WITHOUT CAUSING ANY NOTICEABLE CHANNEL DEFLECTION.

INSTALLATION INSTRUCTIONS

MOTORIZED MODELS 140 AND 140-R

BI-PART OPERATION

II. SUSPENDED TRACK (bi-part operation)

1. If the track is to be curved in the field, curve it now. Please refer to ADC Form 404 for the curving procedure for this track, using the BT-2 bending tool. If track must be spliced, this should also be done at this time. Please refer to splicing instructions for suspended track systems (DWG A-4224). Make sure that the track sections will not be too large to handle.
2. Attach the live-end and dead-end pulleys to the appropriate ends of the track with the hardware provided. To properly align the live-end pulley make sure that it is on the inside of the curve and that the top wheel of the pulley is closest to the end of the track.

NOTE: The live-end pulley mounting plate is supplied with two (2) sets of mounting holes to allow the pulley wheels to be reversed allowing the assembly to be mounted at either end of the track system.

Attach a 1309 end stop through the track in front of the live-end pulley to prevent the curtain from interfering with the pulley's operation.

3. Clamp the two sections of track together at the center lap with the lap clamps and hardware provided. The track section with the live-end pulley should be the "front" (audience side) track at the center over-lap.
4. Insert an equal amount of single carriers into the two (2) track sections. The carrier can be inserted at the open ends of the track at the center overlap. Be sure to attach the 4225 rubber bumpers to the carrier flanges facing the nearest end pulley, these bumpers help to reduce the operating noise of the track system. Refer to ADC form 743 for further information. Insert a master carrier into each side of the track system, making sure that the cord connectors on each master face the inside of the track curves.
5. Install the combination end-stop/cord hook assembly at the center overlap. This device will be used to guide the cord through the overlap. Hanging clamps can also be attached at this time. Spacing for the hanging clamps is 4 feet or less, with additional supports used at curves and the ends of the track.
6. The location of the spindles and idlers varies according to the amount of curve and the curve's radius. The spindles and idlers always mount to the track between the top and middle flange. Refer to ADC form 442 for further information.

HARDWARE

TRACK LOCATION

1458 SPINDLE A
1459 SPINDLE B

INSIDE CURVE, LIVE-END HALF
INSIDE CURVE, DEAD-END HALF

Track lay-outs featuring a continuous curve require 1458 Spindle B's and 1460-A idlers at the overlap for cord alignment. The large 1407-A lap clamps is also used to provide 4" spacing between the track sections at the overlap.

1460 IDLER OUTSIDE CURVE, DEAD-END HALF

7. The assembled track can now be raised and mounted in its permanent position.

CORDING THE 140 CURVED TRACK SYSTEM

1. Position the cable coil under the live-end pulley. Take one end of the coil and thread it up over the top wheel of the live-end pulley, and continue around the inside of the curved track threading the cord through the TOP of the 1458 spindle A's.
2. When the overlap is reached, thread the cable through the combination end stop/cord hook and continue along the inside of the curve. On continuous curve track lay-outs, the cable would pass through the 1460-A idler and 1459 Spindle B's at the overlap.
3. The cable should now be ready to be threaded through the cord connectors of the master carrier on the dead-end half of the track. Do not tighten these connectors at this time.
4. Continue along the inside of the curve of the dead-end half of the track system, threading the cord around the 1459 spindle B's to the dead-end pulley.
5. When the dead-end pulley is reached, run the cord around the pulley wheel and to the outside of the curve. The cord should now line up with the idler wheels on the outside of the dead-end section of the track. Thread the cord around the OUTSIDE of these wheels, to the master carrier of the opposite, (live-end) half of the track system. When the master carrier is reached, thread the cable through the cable connectors of the master carrier, but do not tighten the connectors.
6. Continue threading the cable around the roller of the Spindle A's and to the live end pulley of the track. Thread the cable over the remaining wheel of the live end pulley and down to the floor mounted machine. Pull several additional feet of cable and coil it next to the machine.
7. Disengage the drum from the drive shaft of the machine by backing out the thumb screw or set screw on the driving dog.
8. Thread the end from the longer coil of cable through the hole at the end of the drum and secure with the cable connector provided. Wrap the cable on the drum by turning the drum with the hand crank provided. Be sure to follow the grooves carefully to within 4 grooves of the opposite end of the drum, or with an amount of cable equal to the cable

travel required.

9. Leaving at least one empty groove, wrap a minimum of 3 cable wraps in the opposite direction of the first cable, from the inner portion of the drum toward the open end of the drum. Thread the cable end through the hole in the drum and secure with the cable connector provided.
10. Operate the track system to the full open and full closed positions using the hand crank. Check for any interference or unusually high resistance in the track system. If the curtain track system operates properly, move the drum into position and secure to the drive shaft of the machine with the thumb or set screw.

DO NOT OPERATE THE MACHINE UNTIL THE LIMIT SWITCHES HAVE BEEN SET. SEE THE INSTRUCTIONS INCLUDED WITH THE CURTAIN MACHINE ON SETTING THE LIMIT SWITCHES.

II. CEILING MOUNTED TRACK SYSTEMS (bi-part operation)

1. If the track is to be curved in the field, curve it now. Please refer to ADC Form 404 for the curving procedure for this track, using the BT-2 bending tool. If track must be spliced, this should also be done at this time. Please refer to splicing instructions for suspended track systems (DWG A-4224). Make sure that the track sections will not be too large to handle.
2. Attach the live-end and dead-end pulleys to the appropriate ends of the track with the hardware provided. To properly align the live-end pulley make sure that it is on the inside of the curve and that the top wheel of the pulley is closest to the end of the track.

NOTE: The live-end pulley mounting plate is supplied with two (2) sets of mounting holes to allow the pulley wheels to be reversed allowing the assembly to be mounted at either end of the track system.

Attach a 1309 end stop through the track in front of the live-end pulley to prevent the curtain from interfering with the pulley's operation.

3. Ceiling mounted track systems can be attached to the overhead structure one of two ways:

TYPE 1. LOOSELY ATTACH THE CEILING CLAMP'S BASE PLATE TO THE TRACK WITH THE SIDE PRESSURE PLATES PROVIDED. THE CLAMPS CAN BE ATTACHED TO THE TRACK ON THE GROUND AND SLID TO THE PROPER MOUNTING POSITION WHEN THE TRACK IS LIFTED INTO PLACE. ONCE IN POSITION THE BASE PLATE IS FIXED

TO THE CEILING USING THE TWO OUTSIDE MOUNTING HOLES. ONCE THE BASE PLATE IS BOLTED TO THE CEILING, THE SIDE PRESSURE PLATE BOLTS ARE TIGHTENED.

TYPE 2. SCRIBE A LINE ON THE CEILING THAT FOLLOWS THE TRACK CENTERLINE. MOUNT THE BASE PLATES TO THE CEILING, CENTERING THEM ON THE LINE. USE THE CENTER, COUNTER SUNK HOLE TO MOUNT THE BASE PLATE. LIFT TRACK INTO POSITION AND SECURE IT TO THE CEILING CLAMP USING THE SIDE PRESSURE PLATES PROVIDED.

4. With the track secured to the overhead structure, insert an equal amount of single carriers into the two (2) track sections. The carrier can be inserted at the open ends of the track at the center overlap. Be sure to attach the 4225 rubber bumpers to the carrier flanges facing the nearest end pulley, these bumpers help to reduce the operating noise of the track system. Refer to ADC form 743 for further information. Insert a master carrier into each side of the track system, making sure that the cord connectors on each master face the inside of the track curves.
5. Install the combination end-stop/cord hook assembly at the center overlap. This device will be used to guide the cord through the overlap.
6. The location of the spindles and idlers varies according to the amount of curve and the curve's radius. The spindles and idlers always mount to the track between the top and middle flange. Refer to ADC form 442 for further information.

HARDWARE

1458 SPINDLE A

1459 SPINDLE B

TRACK LOCATION

INSIDE CURVE, LIVE-END HALF

INSIDE CURVE, DEAD-END HALF

Track lay-outs featuring a continuous curve require 1458 Spindle B's and 1460-A idlers at the overlap for cord alignment. Note that a wider overlap is required for these devices.

1460 IDLER

OUTSIDE CURVE, DEAD-END HALF

CORDING THE 140 CURVED TRACK SYSTEM

1. Position the cable coil under the live-end pulley. Take one end of the coil and thread it up over the top wheel of the live-end pulley, and continue around the inside of the curved track threading the cord through the TOP of the 1458 spindle A's.
2. When the overlap is reached, thread the cable through the combination end stop/cord hook and continue along the inside of the curve. On continuous curve track lay-outs, the cable would pass through the 1460-A idler and 1459 Spindle B's at the overlap.
3. The cable should now be ready to be threaded through the cord connectors of the

master carrier on the dead-end half of the track. Do not tighten these connectors at this time.

4. Continue along the inside of the curve of the dead-end half of the track system, threading the cord around the 1459 spindle B's to the dead-end pulley.
5. When the dead-end pulley is reached, run the cord around the pulley wheel and to the outside of the curve. The cord should now line up with the idler wheels on the outside of the dead-end section of the track. Thread the cord around the OUTSIDE of these wheels, to the master carrier of the opposite, (live-end) half of the track system. When the master carrier is reached, thread the cable through the cable connectors of the master carrier, but do not tighten the connectors.
6. Continue threading the cable around the roller of the Spindle A's and to the live end pulley of the track. Thread the cable over the remaining wheel of the live end pulley and down to the floor mounted machine. Pull several additional feet of cable and coil it next to the machine.
7. Disengage the drum from the drive shaft of the machine by backing out the thumb screw or set screw on the driving dog.
8. Thread the end from the longer coil of cable through the hole at the end of the drum and secure with the cable connector provided. Wrap the cable on the drum by turning the drum with the hand crank provided. Be sure to follow the grooves carefully to within 4 grooves of the opposite end of the drum, or with an amount of cable equal to the cable travel required.
9. Leaving at least one empty groove, wrap a minimum of 3 cable wraps in the opposite direction of the first cable, from the inner portion of the drum toward the open end of the drum. Thread the cable end through the hole in the drum and secure with the cable connector provided.
10. Operate the track system to the full open and full closed positions using the hand crank. Check for any interference or unusually high resistance in the track system. If the curtain track system operates properly, move the drum into position and secure to the drive shaft of the machine with the thumb or set screw.

NOTES

THE MAXIMUM DISTANCE BETWEEN TRACK SUPPORTS SHOULD NOT EXCEED 4'. ADDITIONAL SUPPORTS SHOULD BE ADDED AT CURVES, SPLICES AND STACK AREAS.

LIVE-END AND DEAD-END PULLEYS MUST BE ANCHORED FIRMLY TO THE TRACK.

SUSPENDED SYSTEMS SHOULD HAVE SUPPORT LINES ATTACHED AT BOTH ENDS OF THE TRACK.

THE DISTANCE BETWEEN CARRIERS SHOULD NOT EXCEED 1 FOOT.

SUSPENDED, CURVED TRACK SHOULD BE SUPPORTED BY A 1 1/4" PIPE BACK BONE.

PROPERLY INSTALLED TRACK SHOULD ALLOW THE CURTAIN TO TRAVERSE WITHOUT CAUSING ANY NOTICEABLE CHANNEL DEFLECTION.

INSTALLATION INSTRUCTIONS FOR RIG-I-FLEX ADC MODELS 142 & 142-R WALK-DRAW SYSTEMS

NOTE: IF THE TRACK IS TO BE CURVED OR CUT, DO SO FIRST. BE SURE TO FILE ALL CUT ENDS AND REMOVE ALL BURRS AND FILINGS FROM TRACK, AS THEY CAN CAUSE BINDING AND PREMATURE WEAR ON THE CARRIERS. IF CUTTING IS REQUIRED, THEN IT WILL BE NECESSARY TO REDRILL THE HOLES FOR THE SPLICE CLAMPS. IF REDRILLING OF THE SPLICE HOLES IS REQUIRED, MAKE SURE THAT THE TRACK SECTIONS ARE PROPERLY ALIGNED BEFORE DRILLING.

I. SUSPENDED INSTALLATIONS:

HANGING CLAMPS ARE USED FOR THIS TYPE OF INSTALLATION, THEY CAN BE MOUNTED TO THE TRACK AT THIS TIME. THE MAXIMUM RECOMMENDED SPACE BETWEEN HANGING CLAMPS IS 4 FEET. ADDITIONAL CLAMPS ARE REQUIRED AT CURVES AND SPLICES.

1. PLACE THE TRACK AND CURVES (IF USED) ON THE FLOOR, OR A STABLE SUPPORT FOR ASSEMBLY.
2. IF A CENTER OVERLAP IS DESIRED, OVERLAP THE TRACKS BY THE AMOUNT DESIRED AND ATTACH THE LAP CLAMPS TO THE TRACK. NOTE THAT A MINIMUM OF 2 LAP CLAMPS SHOULD BE USED.
3. CHECK ALL CUT TRACK ENDS FOR BURRS AND FILE IF NEEDED. MAKE ALL SPLICES AT THIS TIME. SEE SPLICING INSTRUCTIONS AND DRAWINGS FOR TRACK BEING USED. SPLICE BARS FOR THE MODEL 1400 TRACK FIT IN THE AREA BETWEEN THE MIDDLE AND TOP FLANGE OF THE TRACK., ONE BAR ON EACH SIDE. BE SURE TO CHECK ALIGNMENT OF TRACK VERTICAL AND HORIZONTAL COMPONENTS AT THE SPLICE.
4. INSERT THE SINGLE AND MASTER CARRIER INTO THE TRACK SECTIONS. THE MASTER CARRIERS NEED TO BE BETWEEN THE CENTER OVERLAP END OF THE SECTION AND THE SINGLE CARRIERS.
5. INSTALL END STOPS TO ALL OPEN ENDS OF THE TRACK SYSTEM WITH THE HARDWARE PROVIDED.
6. LOCATE THE POSITIONS FOR THE HANGING CLAMPS AND SECURE THEM TO THE TRACK WITH THE HARDWARE PROVIDED. NOTE: THAT HANGING CLAMPS SHOULD BE PLACED ON EITHER SIDE OF, AND AS CLOSE TO, SPLICES AS POSSIBLE. ALSO, HANGING CLAMPS SHOULD BE LOCATED BEFORE AND AFTER CURVES IF THE RADII ARE SMALL, AND ALONG THE CURVE IF THE RADII ARE LARGE.
7. IT MAY BE DESIRABLE TO ATTACH CHAINS BETWEEN CARRIERS, ESPECIALLY ON LONG TRACKS, OR ON TRACKS WITH HEAVY CURTAINS WHERE CURTAINS WILL BE PULLED FROM EITHER END. THE CHAINS WILL RELIEVE THE STRAIN ON THE TOP OF THE CURTAIN. IT IS OFTEN EASIER TO PUSH THE FOLDED CURTAIN AROUND CURVES RATHER THAN PULL IT AROUND THE CURVE FROM ONE END.

II. CEILING MOUNT INSTALLATIONS: THIS TYPE OF MOUNTING CAN BE INSTALLED ONE OF

TWO WAYS.

TYPE 1. LOOSELY ATTACH THE CEILING CLAMP'S BASE PLATE TO THE TRACK WITH THE SIDE PRESSURE PLATES PROVIDED. THE CLAMPS CAN BE INSTALLED ON THE TRACK ON THE GROUND AND SLID TO THE PROPER MOUNTING POSITION WHEN THE TRACK IS LIFTED INTO PLACE. ONCE IN POSITION THE BASE PLATE IS FIXED TO THE CEILING USING THE TWO OUTSIDE MOUNTING HOLES. ONCE THE BASE PLATE IS BOLTED TO THE CEILING, THE SIDE PRESSURE PLATE BOLTS ARE TIGHTENED.

TYPE 2. SCRIBE A LINE ON THE CEILING THAT FOLLOWS THE TRACK CENTERLINE. MOUNT THE BASE PLATES TO THE CEILING, CENTERING THEM ON THE LINE. USE THE CENTER, COUNTER SUNK HOLE TO MOUNT THE BASE PLATE. LIFT TRACK INTO POSITION AND SECURE IT TO THE CEILING CLAMP USING THE SIDE PRESSURE PLATES PROVIDED.

1. PLACE THE TRACK AND CURVES (IF USED) ON THE FLOOR, OR A STABLE SUPPORT FOR ASSEMBLY.
2. IF A CENTER OVERLAP IS DESIRED, OVERLAP THE TRACKS BY THE AMOUNT DESIRED AND MARK TRACKS ON BOTTOM FLANGE WITH END LOCATION OF OPPOSITE TRACK.
3. CHECK ALL CUT TRACK ENDS FOR BURRS AND FILE IF NEEDED. MAKE ALL SPLICES AT THIS TIME. SEE SPLICING INSTRUCTIONS AND DRAWINGS FOR TRACK BEING USED. SPLICE BARS FOR THE MODEL 4200 TRACK FIT IN THE AREA BETWEEN THE MIDDLE AND TOP FLANGE OF THE TRACK., ONE BAR ON EACH SIDE. BE SURE TO CHECK ALIGNMENT OF TRACK VERTICAL AND HORIZONTAL COMPONENTS AT THE SPLICE.
4. INSERT THE SINGLE AND MASTER CARRIER INTO THE TRACK SECTIONS. THE MASTER CARRIERS NEED TO BE BETWEEN THE CENTER OVERLAP END OF THE SECTION AND THE SINGLE CARRIERS.
5. INSTALL END STOPS TO ALL OPEN ENDS OF THE TRACK SYSTEM WITH THE HARDWARE PROVIDED.
6. LOCATE THE POSITIONS FOR THE CEILING CLAMPS ACCORDING TO THE INFORMATION PROVIDED ABOVE AND SECURE THEM TO THE TRACK WITH THE HARDWARE PROVIDED. NOTE: THAT CEILING CLAMPS SHOULD BE PLACED ON EITHER SIDE OF, AND AS CLOSE TO, SPLICES AS POSSIBLE. ALSO, CEILING CLAMPS SHOULD BE LOCATED BEFORE AND AFTER CURVES IF THE RADII ARE SMALL, AND ALONG THE CURVE IF THE RADII ARE LARGE.
7. IT MAY BE DESIRABLE TO ATTACH CHAINS BETWEEN CARRIERS, ESPECIALLY ON LONG TRACKS, OR ON TRACKS WITH HEAVY CURTAINS WHERE CURTAINS WILL BE PULLED FROM EITHER END. THE CHAINS WILL RELIEVE THE STRAIN ON THE TOP OF THE CURTAIN. IT IS OFTEN EASIER TO PUSH THE FOLDED CURTAIN AROUND CURVES RATHER THAN PULL IT AROUND THE CURVE FROM ONE END.

IMPORTANT NOTES:

IT IS ESSENTIAL THAT THE TRACK BE PROPERLY ALIGNED WHEN MOUNTED AND SPLICED. IF THE TRACK IS NOT ALIGNED, THE CARRIERS WILL NOT TRAVEL PROPERLY, ESPECIALLY AT THE SPLICE JOINTS.

IF THE TRACK IS NOT A CLOSED LOOP, THE CARRIERS MAY BE ADDED AFTER THE TRACK IS INSTALLED. IF IT IS A CLOSED LOOP, THE CARRIERS MUST BE ADDED BEFORE THE FINAL SECTION OF TRACK IS SPLICED.

FOUR WHEELED MASTER CARRIERS SHOULD BE USED ON ALL LEADING EDGES OF THE CURTAIN. USING MASTER CARRIERS ON THE LEADING EDGES OF THE CURTAIN WILL HELP ELIMINATE THE TIPPING TENDENCY OF THE CARRIERS AND MAKE FOR A SMOOTHER OPERATION.

END STOPS MUST BE ADDED AT ALL TRACK ENDS TO ENSURE SAFE OPERATION. A BATON OR TOW LINE SHOULD BE ATTACHED TO ALL LEADING EDGE MASTER CARRIERS.

A 1 1/4" PIPE BATTEN BACK-BONE OR EQUIVALENT IS RECOMMENDED FOR ALL SUSPENDED TRACKS TO REDUCE SWAY AND PROVIDE ADDITIONAL SUPPORT FOR THE TRACK.

INSTRUCTIONS FOR USING THE BT-1 BENDING TOOL

IMPORTANT: DO NOT BEND THE TRACK COMPLETELY AROUND THE BENDING TOOL SHOE. THE RADIUS OF THE SHOE IS 7" AND THE MINIMUM RADIUS FOR THE TRACK IS 24". THE TRACK MUST BE ADVANCED AS IT IS BENT ON THE TOOL.

(READ ALL OF THE FOLLOWING INSTRUCTIONS PRIOR TO CURVING THE TRACK)

1. A full scale chalk drawing of the curved portion of the track must be drawn on the floor or work bench in order to check the curving operation's progress. The radius of this full scale drawing can be drawn using a wooden plank or string with a length equal to the radius of the required curve. Be sure to allow at least 1' of straight track at each end of the curve to assure correct alignment.
2. Use a marker, or wax pencil to mark the location of the center of the curve on the top flange of the track.
3. Place marks on the top of the track in both directions out from the center line mark in 3" increments or a distance of 1.5 times the radius of the curve.
4. Slide the track into the bender and line up the FIRST mark of either end of the marked section with the apex of the bender's shoe.
5. Pull back SLIGHTLY on the bending tool's lever pipe. This should put a SLIGHT bend in the track, usually around 5 degrees.
6. Move the track forward or backward in the bender and align the second mark on the track with the apex of the bender's shoe. Pull back SLIGHTLY on the bending tool's lever pipe.
7. Continue this process until all the marks have a slight bend.
8. Check the track radius against the chalk drawing by laying it on top of the chalk line.
9. In most cases the formed radius will be too large, which is desirable. Repeat steps 4 through 8 until the required curve is formed.
11. If the radius becomes too tight during this process you can remove some of the curve by placing the apex of the curve against a wall, securing one end of the track, and pushing the other end toward the wall. Keep in mind that this is for SLIGHT adjustments only. **The key to bending the track correctly is to bend in small multiple steps**, checking the radius against the chalk line while you do it, avoiding curving the track too tightly.

INSTRUCTIONS FOR USING THE BT-2 BENDING TOOL

IMPORTANT NOTE: DO NOT BEND THE TRACK COMPLETELY AROUND THE BENDING TOOL SHOE. THE RADIUS OF THE SHOE IS 7" AND THE MINIMUM RADIUS FOR THE TRACK IS 24". THE TRACK MUST BE ADVANCED AS IT IS BENT ON THE TOOL.

(READ ALL OF THE FOLLOWING INSTRUCTIONS PRIOR TO CURVING THE TRACK)

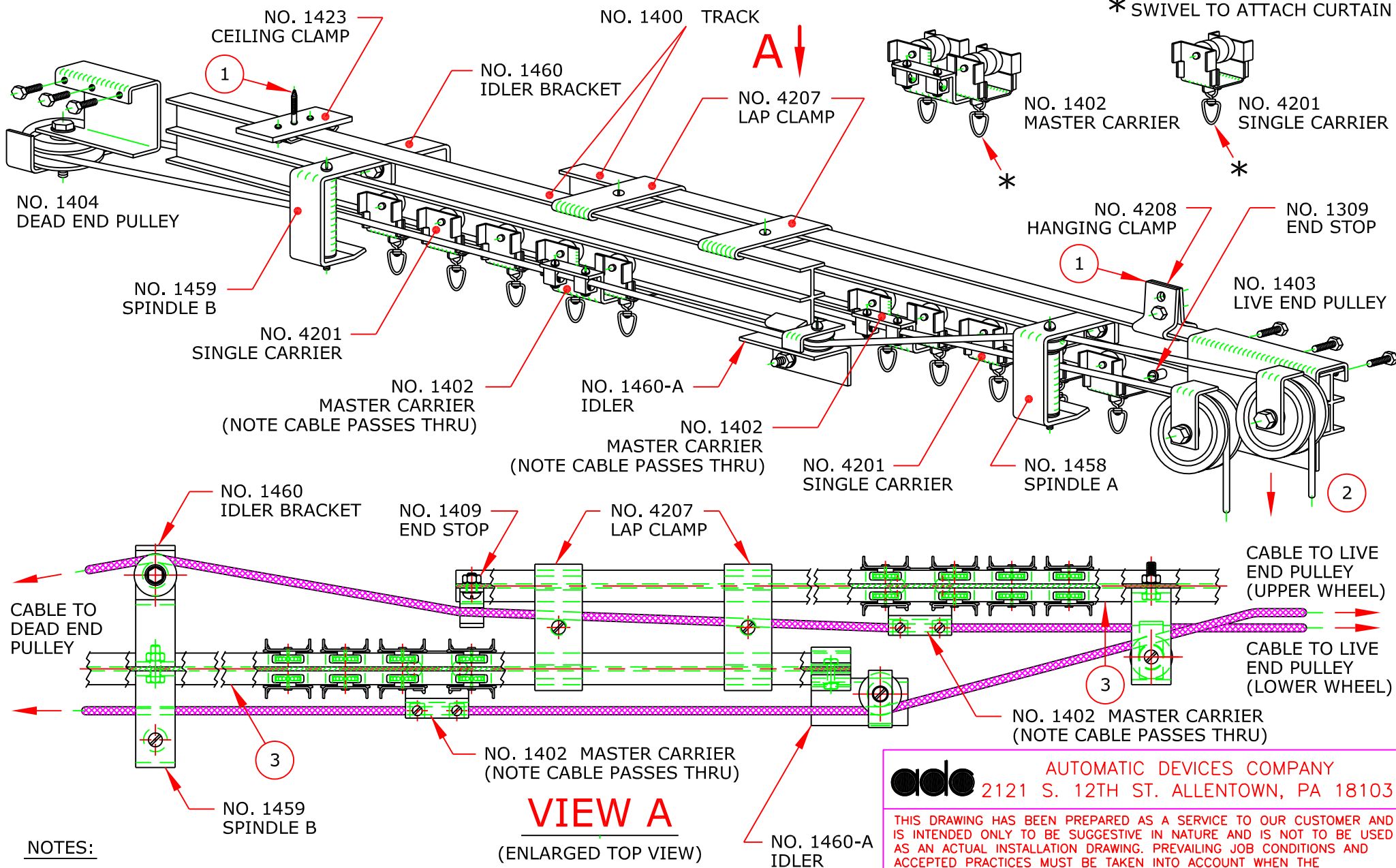
1. A full scale chalk drawing of the curved portion of the track must be drawn on the floor, or work bench in order to check curving progress. The radius of this full scale drawing can be drawn using chalk attached to a wooden plank, or string, with a length equal to the radius of the required curve. Be sure to allow at least 1' of straight track at each end of the curve to assure alignment of the track.
2. Use a marker or wax pencil to mark the location of the center of the curve on the top flange of the track.
3. Place marks on the top of the track in both directions out from the center line mark in 3" increments, or a distance of 1.5 times the radius of the curve.
4. Secure the BT-2 tool to the floor, or work bench making sure that ample room exists to walk the track around the tool.
5. Slide the track into the bender and line up the FIRST mark of either end of the marked section with the apex of the tool's shoe.
6. Pull SLIGHTLY on the longest section of track coming out of the shoe. This should put a SLIGHT bend in the track, usually around 5 degrees.
7. Move the track forward or backward in the bender and align the second mark on the track with the apex of the tool's shoe. Pull SLIGHTLY on the longest section of track coming out of the shoe.
8. Continue this process, repeating steps 6 and 7 until a slight bend exists at each mark unless the track is beginning to curve more than the drawn template. If this occurs the individual bends are too severe for the overall bend required and must be straightened.
9. Check the track radius against the chalk drawing by laying it on top of the chalk line.
10. In most cases the formed radius will be too large, which is desirable. Repeat steps 5 through 9 until the required curve is formed.
11. If the radius becomes too tight during this process you can remove some of the curve. **The key to bending the track correctly is to bend in small multiple steps**, checking the radius against the chalk line while you do it, avoiding curving the track too tightly.

REV.

DATE:

FORM NO.: 140BPMS

* SWIVEL TO ATTACH CURTAIN

**NOTES:**

- 1 TRACK SYSTEM MUST BE MOUNTED DIRECTLY TO AN OVERHEAD STRUCTURE USING EITHER NO. 1423 CEILING CLAMPS OR NO. 4208 HANGING CLAMPS.
- 2 CABLE GOES TO FLOOR MOUNTED DRUM DRIVE CURTAIN MACHINE.
- 3 TRACK MUST BE CURVED WITH THIS SURFACE ON THE INSIDE OF THE BEND.



AUTOMATIC DEVICES COMPANY
2121 S. 12TH ST. ALLENTOWN, PA 18103

THIS DRAWING HAS BEEN PREPARED AS A SERVICE TO OUR CUSTOMER AND IS INTENDED ONLY TO BE SUGGESTIVE IN NATURE AND IS NOT TO BE USED AS AN ACTUAL INSTALLATION DRAWING. PREVAILING JOB CONDITIONS AND ACCEPTED PRACTICES MUST BE TAKEN INTO ACCOUNT WHEN THE EQUIPMENT IS INSTALLED.

SIZE

A

DATE

10/27/04

SERIES

**MODEL 140
RIG-I-FLEX CURTAIN TRACK**

DRAWN BY

JEK

APPROVED BY

DESCRIPTION

**INSTALLATION DRAWING
BI-PART OPERATION (MACHINE)**SCALE **3/16=1**SHEET **1 OF 1**

DWG NO.

II-140MBI-1-04

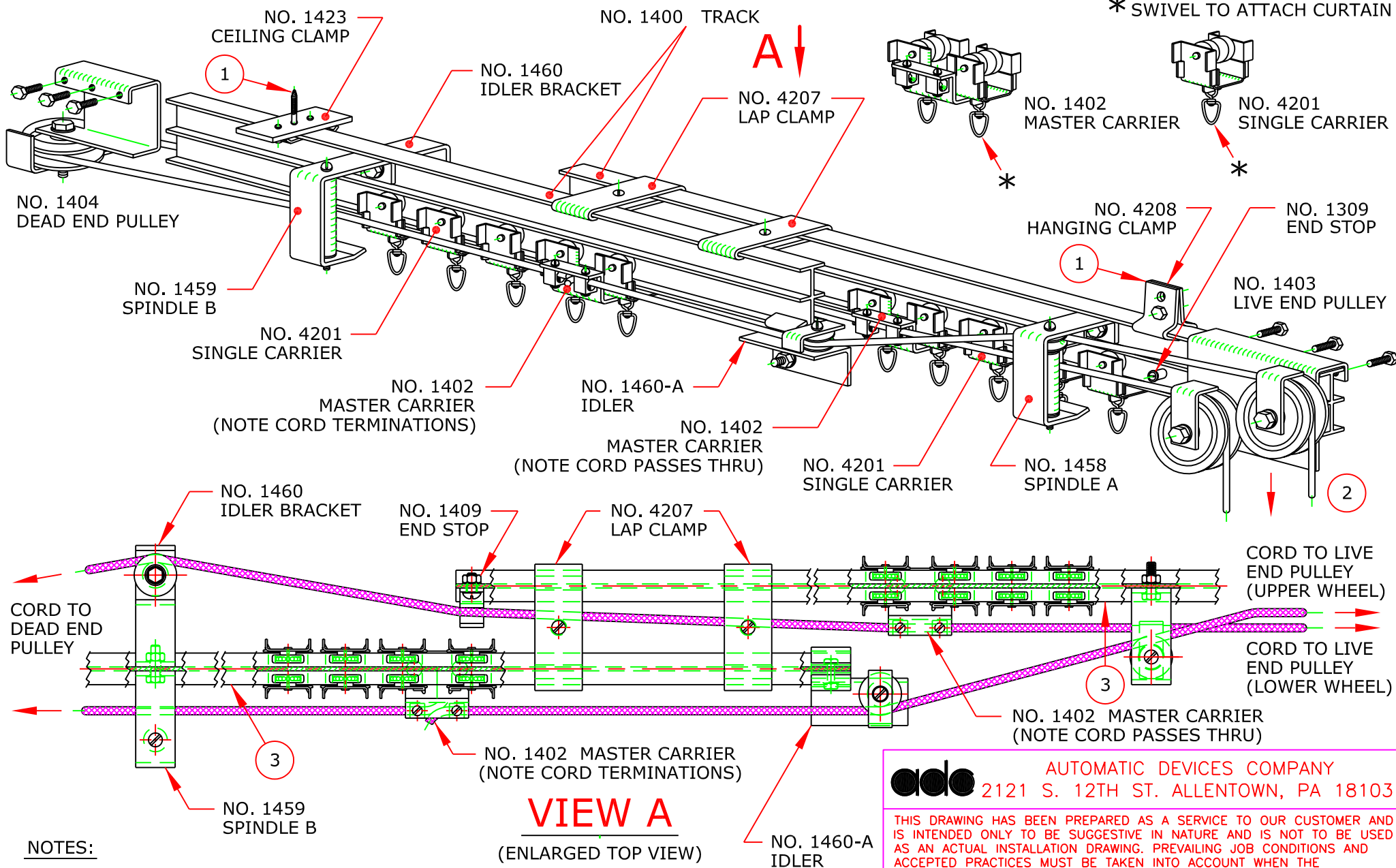
REV.

DATE:

DO NOT USE FOR MACHINE OPERATED TRACKS

FORM NO.: 140BPHOS

* SWIVEL TO ATTACH CURTAIN



NOTES:

- 1 TRACK SYSTEM MUST BE MOUNTED DIRECTLY TO AN OVERHEAD STRUCTURE USING EITHER NO. 1423 CEILING CLAMPS OR NO. 4208 HANGING CLAMPS.
- 2 CORD GOES TO FLOOR PULLEY FOR HAND OPERATION.
- 3 TRACK MUST BE CURVED WITH THIS SURFACE ON THE INSIDE OF THE BEND.



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SIZE

A

DATE

10/18/04

SERIES

MODEL 140
RIG-I-FLEX CURTAIN TRACK

DRAWN BY

JEK

APPROVED BY

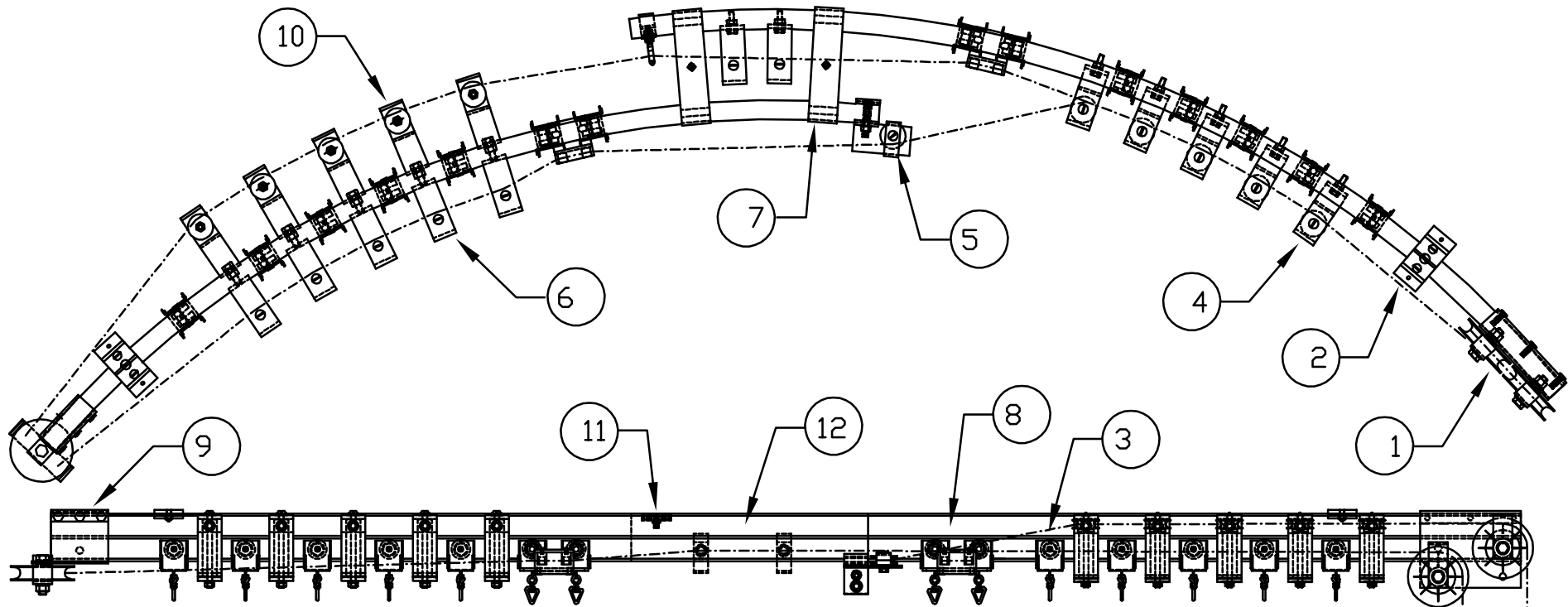
DESCRIPTION

INSTALLATION DRAWING
BI-PART OPERATION (MANUAL)

SCALE 3/16=1

SHEET 1 OF 1

DWG NO. II-140HOB1-1-04

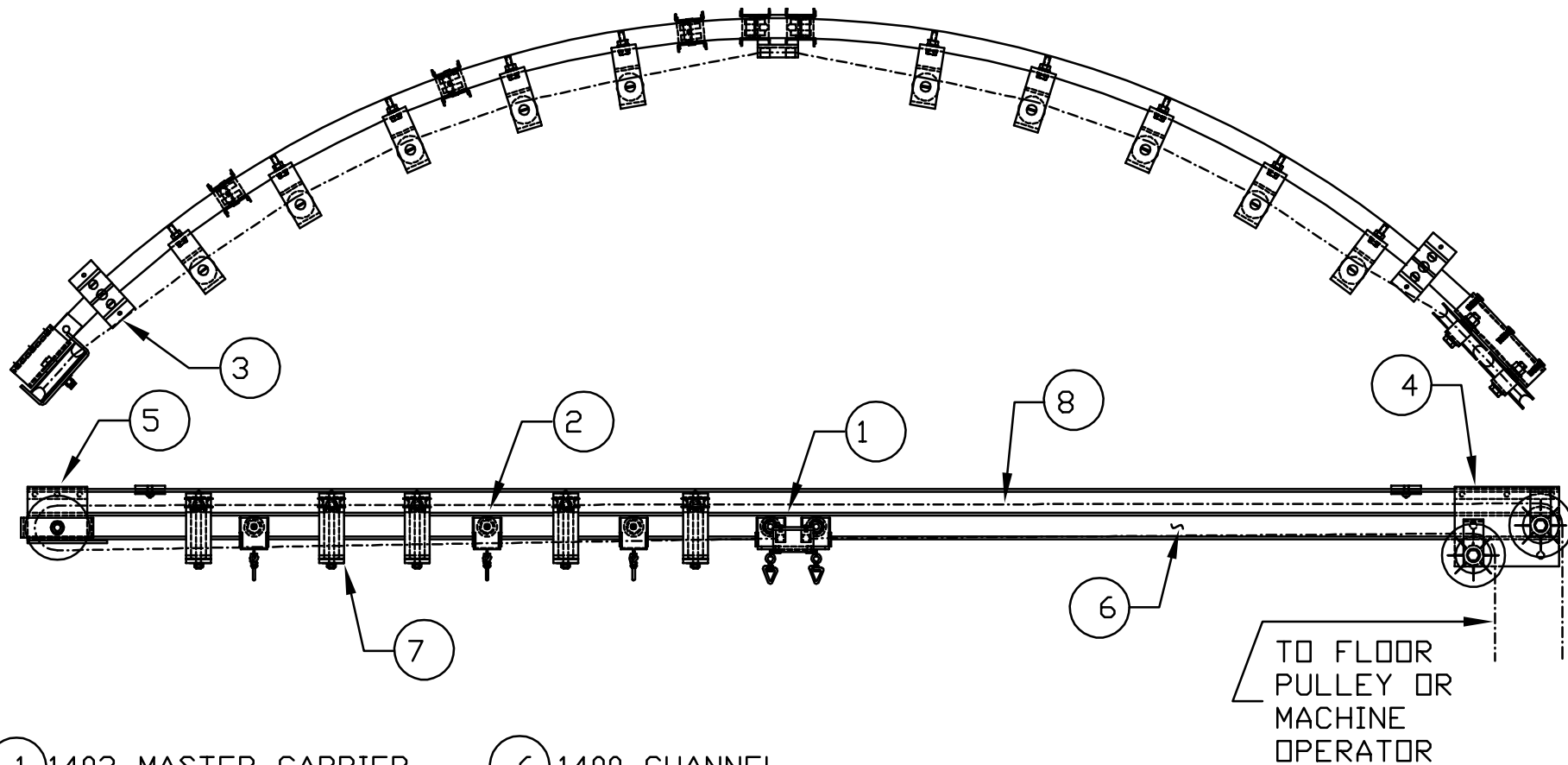


- | | |
|--|---|
| ① 1403 LIVE END PULLEY | ⑦ 1407A LAP CLAMP
(QUANTITY WILL VARY)
THE 1407A IS WIDER THAN
1407 TO ALLOW THE TWO
1459 TO FIT IN THE
OVERLAP. |
| ② 1423 CEILING CLAMP
(4208 HANGING CLAMP
MAY BE SUBSTITUTED) | ⑧ 1402 MASTER CARRIER |
| ③ 4201 SINGLE CARRIER | ⑨ 1404 DEAD END PULLEY |
| ④ 1458 SPINDLE "A"
(QUANTITY WILL VARY) | ⑩ 1460 IDLER BRACKET |
| ⑤ 1460A IDLER BRACKET | ⑪ 1409A END STOP |
| ⑥ 1459 SPINDLE "B"
(QUANTITY WILL VARY) | |

⑫ 1400 TRACK

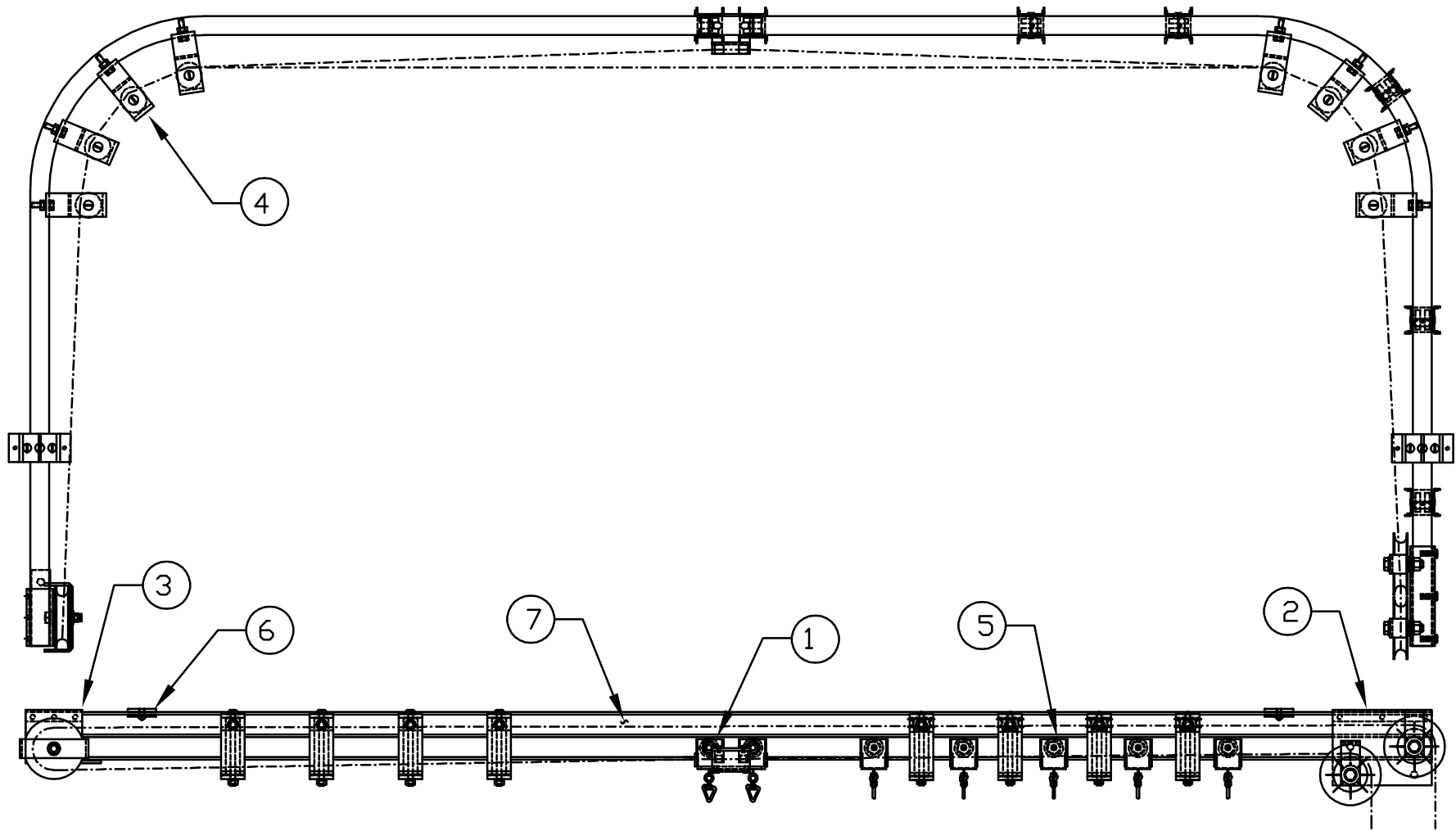
TO FLOOR
PULLEY OR
MACHINE
OPERATOR

AUTOMATIC DEVICES COMPANY 2121 S. 12TH ST. ALLENTOWN, PA 18103			
THIS DRAWING HAS BEEN PREPARED AS A SERVICE TO OUR CUSTOMER AND IS INTENDED ONLY TO BE SUGGESTIVE IN NATURE AND IS NOT TO BE USED AS AN ACTUAL INSTALLATION DRAWING. PREVAILING JOB CONDITIONS AND ACCEPTED PRACTICES MUST BE TAKEN INTO ACCOUNT WHEN THE EQUIPMENT IS INSTALLED.			
SIZE	DATE	INSTALLATION	REV
A	06/25/98	INSTRUCTIONS	
DRAWN BY	APPROVED BY	DESCRIPTION 140 TRACK ASSEMBLY	
GAR		CONTINUOUS BI-PART	
SCALE NTS	SHEET 1 OF 1	DWG NO. II-140CCBP-98	



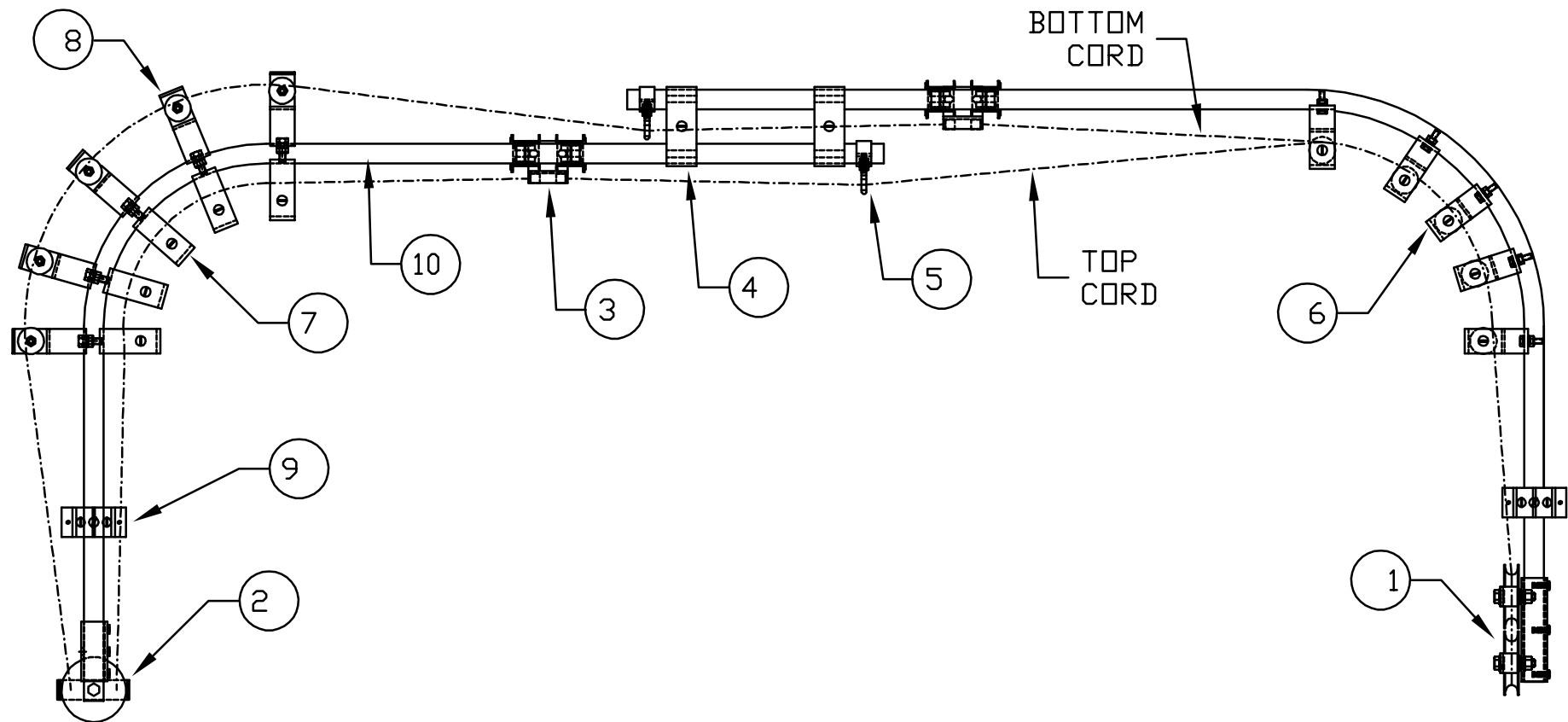
- | | |
|--|---|
| ① 1402 MASTER CARRIER | ⑥ 1400 CHANNEL |
| ② 4201 SINGLE CARRIER | ⑦ 1458 SPINDLE "A"-
(QUANTITIES WILL VARY) |
| ③ 1423 CEILING CLAMP
(4208 HANGING CLAMP
MAY BE SUBSTITUTED) | ⑧ 3529 CABLE |
| ④ 1403 LIVE END PULLEY | |
| ⑤ 1404A DEAD END PULLEY | |

AUTOMATIC DEVICES COMPANY 2121 S. 12TH ST. ALLENTOWN, PA 18103			
THIS DRAWING HAS BEEN PREPARED AS A SERVICE TO OUR CUSTOMER AND IS INTENDED ONLY TO BE SUGGESTIVE IN NATURE AND IS NOT TO BE USED AS AN ACTUAL INSTALLATION DRAWING. PREVAILING JOB CONDITIONS AND ACCEPTED PRACTICES MUST BE TAKEN INTO ACCOUNT WHEN THE EQUIPMENT IS INSTALLED.			
SIZE A	DATE 06/29/98	INSTALLATION INSTRUCTIONS	REV
DRAWN BY GAR	APPROVED BY	DESCRIPTION 140 TRACK ASSEMBLY CONTINUOUS CURVE - 1 WAY	
SCALE NTS	SHEET 1 OF 1	DWG NO. II-140CC1WAY-98	



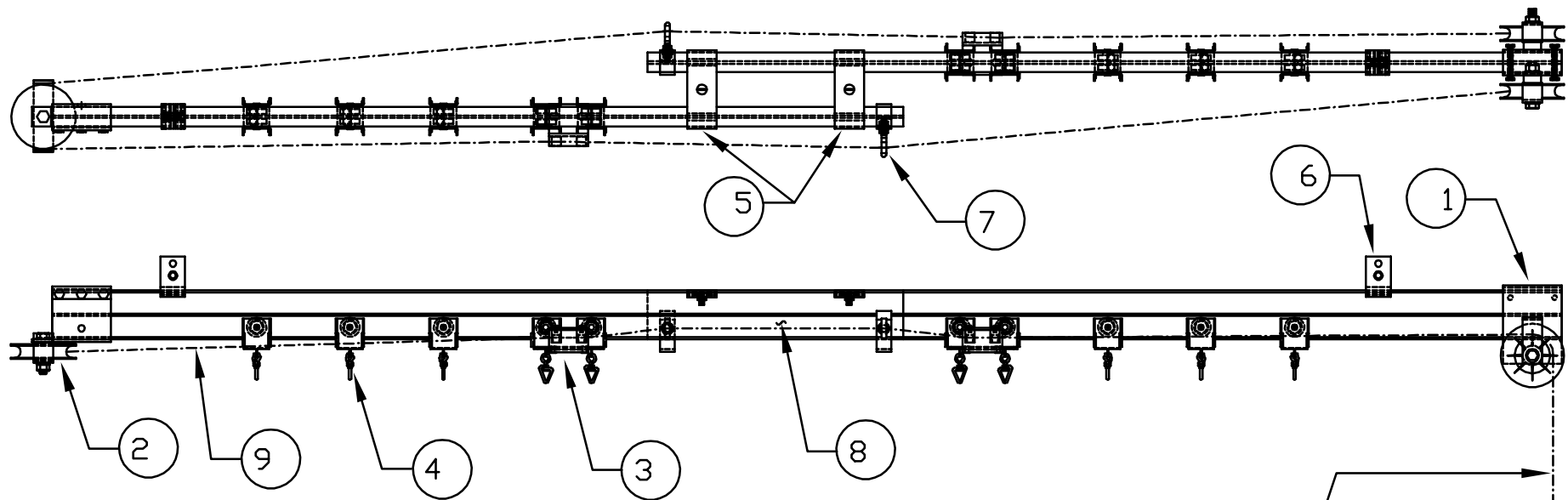
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|--|--|
| <p>① 1402 MASTER CARRIER</p> <p>② 1403 LIVE END PULLEY</p> <p>③ 1404A DEAD END PULLEY</p> <p>④ 1458 SPINDLE "A" -
(QUANTITIES WILL VARY)</p> | <p>⑤ 4201 SINGLE CARRIER</p> <p>⑥ 1423 CEILING CLAMP
(4208 HANGING CLAMP MAY
BE SUBSTITUTED)</p> <p>⑦ 1400 CHANNEL</p> |
|--|--|

<p>AUTOMATIC DEVICES COMPANY 2121 S. 12TH ST. ALLENTOWN, PA 18103</p>			
<p>THIS DRAWING HAS BEEN PREPARED AS A SERVICE TO OUR CUSTOMER AND IS INTENDED ONLY TO BE SUGGESTIVE IN NATURE AND IS NOT TO BE USED AS AN ACTUAL INSTALLATION DRAWING. PREVAILING JOB CONDITIONS AND ACCEPTED PRACTICES MUST BE TAKEN INTO ACCOUNT WHEN THE EQUIPMENT IS INSTALLED.</p>			
SIZE	DATE	INSTALLATION INSTRUCTIONS	REV
A	07/10/98		
DRAWN BY	APPROVED BY	DESCRIPTION	
GAR		140 TRACK ASSEMBLY CURVED 2-90° 1-WAY	
SCALE	NTS	SHEET 1 OF 1	DWG NO. II-140C90-98



- | | |
|--|--|
| <p>① 1403 LIVE END PULLEY</p> <p>② 1404 DEAD END PULLEY</p> <p>③ 1402 MASTER CARRIER</p> <p>④ 1407 LAMP CLAMP</p> <p>⑤ 1409A END STOP</p> <p>⑥ 1458 SPINDLE "A"
(QUANTITIES WILL VARY)</p> | <p>⑦ 1459 SPINDLE "B"
(QUANTITIES WILL VARY)</p> <p>⑧ 1460 IDLER
(QUANTITIES WILL VARY)</p> <p>⑨ 1423 CEILING CLAMP
(4208 HANGING CLAMP
MAY BE SUBSTITUTED)</p> <p>⑩ 1400 CHANNEL
(QUANTITIES WILL VARY)</p> |
|--|--|

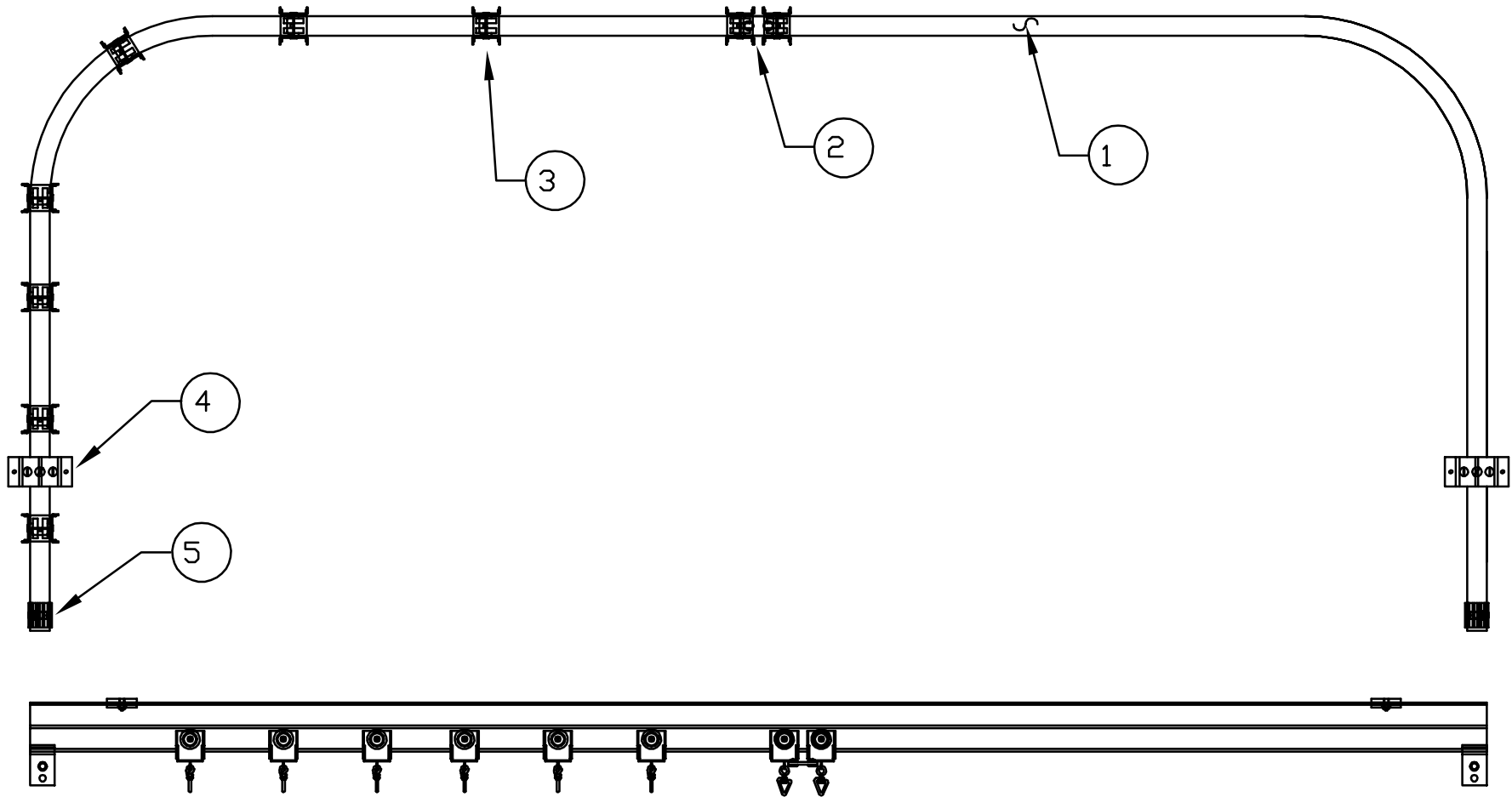
<p>AUTOMATIC DEVICES COMPANY 2121 S. 12TH ST. ALLENTOWN, PA 18103</p>			
<p>THIS DRAWING HAS BEEN PREPARED AS A SERVICE TO OUR CUSTOMER AND IS INTENDED ONLY TO BE SUGGESTIVE IN NATURE AND IS NOT TO BE USED AS AN ACTUAL INSTALLATION DRAWING. PREVAILING JOB CONDITIONS AND ACCEPTED PRACTICES MUST BE TAKEN INTO ACCOUNT WHEN THE EQUIPMENT IS INSTALLED.</p>			
SIZE	DATE	INSTALLATION INSTRUCTIONS	REV
A	06/23/98		
DRAWN BY	APPROVED BY	DESCRIPTION 140 TRACK BI-PART WITH 2-90° CURVES	
GAR			
SCALE NTS		SHEET 1 OF 1	DWG NO. II-140BP-98



TO FLOOR
PULLEY OR
MACHINE
OPERATOR

- | | |
|--|---|
| <p>① 1403A LIVE END PULLEY</p> <p>② 1404 DEAD END PULLEY</p> <p>③ 1402 MASTER CARRIER</p> <p>④ 4201 SINGLE CARRIER</p> <p>⑤ 1407 LAP CLAMP</p> <p>⑥ 4208 HANGING CLAMP
(1423 CEILING CLAMP MAY
BE SUBSTITUTED)</p> <p>⑦ 1409A END STOP</p> | <p>⑧ 1400 TRACK</p> <p>⑨ OPERATING CORD/CABLE</p> |
|--|---|

<p>AUTOMATIC DEVICES COMPANY 2121 S. 12TH ST. ALLENTOWN, PA 18103</p>			
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SIZE	DATE	INSTALLATION INSTRUCTIONS	REV
A	06/15/98		
DRAWN BY	APPROVED BY	DESCRIPTION 141 TRACK ASSEMBLY	
GAR			
SCALE NTS	SHEET 1 OF 2	DWG NO. II-141-98	



- | | | |
|---|------------------------|--|
| <p>① 1400 CHANNEL</p> <p>② 4252 MASTER CARRIER</p> <p>③ 4201 SINGLE CARRIER</p> <p>④ 1423 CEILING CLAMP
(4208 HANGING CLAMP MAY BE SUBSTITUTED)</p> | <p>⑤ 4209 END STOP</p> | |
|---|------------------------|--|

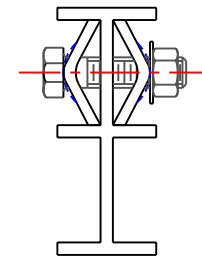
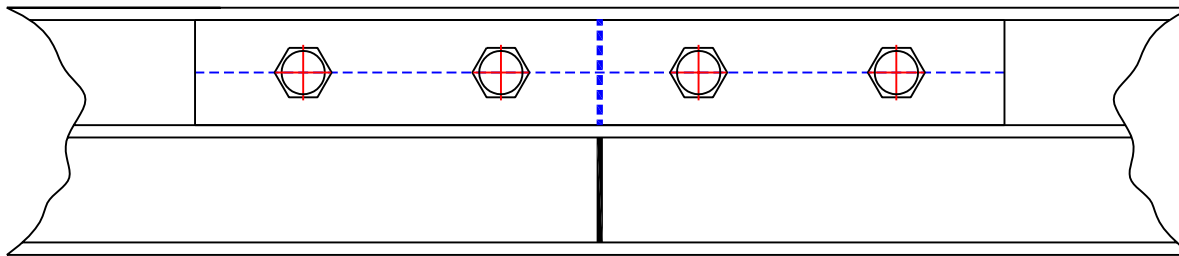
AUTOMATIC DEVICES COMPANY 2121 S. 12TH ST. ALLENTOWN, PA 18103			
THIS DRAWING HAS BEEN PREPARED AS A SERVICE TO OUR CUSTOMER AND IS INTENDED ONLY TO BE SUGGESTIVE IN NATURE AND IS NOT TO BE USED AS AN ACTUAL INSTALLATION DRAWING. PREVAILING JOB CONDITIONS AND ACCEPTED PRACTICES MUST BE TAKEN INTO ACCOUNT WHEN THE EQUIPMENT IS INSTALLED.			
SIZE	DATE	INSTALLATION INSTRUCTIONS	REV
A	06/30/98		
DRAWN BY		APPROVED BY	
GAR			
DESCRIPTION 142 TRACK ASSEMBLY WALK-DRAW -1 WAY			
SCALE NTS		SHEET 1 OF 1	DWG NO. II-142-C90-98

HARDWARE LIST:

Z-318 (4) - 5/16" X 1 1/4" BOLT

Z-207 (4) - 5/16" NUT

Z-510 (4) - 5/16" LOCKWASHER



INSTRUCTIONS FOR PROPER SPLICING:

BUTT TRACK SECTIONS AGAINST EACH OTHER TIGHTLY.
CENTER ONE HALF OF THE SPLICE CLAMP OVER THE JOINT.
MARK LOCATION OF HOLES.

DRILL (4) $\frac{3}{8}$ " DIAMETER HOLES.

COMPLETE SPLICE WITH (4) $\frac{5}{16}$ " DIAMETER HEX HEAD BOLTS
AND HEX NUTS.

TIGHTEN SECURELY.

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2121 S. 12TH ST. ALLENTOWN, PA 18103

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SIZE A	DATE 06/07/93	FORM 411	REV
DRAWN BY GAR	APPROVED BY	DESCRIPTION 4224 SPLICING CLAMP	
SCALE 1/2"=1"	SHEET 1 OF 1	DWG NO. A-4224-93	