INSTALLATION INSTRUCTIONS FOR TRIPL-I-TRAC
ADC MODELS 422 & 422-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 BURS 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 RE-DRILL THE HOLES FOR THE SPLICE CLAMPS. IF RE-DRILLING 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 4200 track fit in the area between the upper 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.

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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, countersunk 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 upper 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:** The ceiling clamps should be placed on either side of, and as close to, the 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.

INSTALLATION INSTRUCTIONS FOR TRIPL-I-TRAC MANUALLY OPERATED MODELS 420 AND 420-R BI-PART OPERATION

I. 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 4209 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. 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.

Track layouts featuring a continuous curve require 4258 Spindle B's and 4260-A idlers at the overlap for cord alignment. The large 4207-A lap clamps is also used to provide 4" spacing between the track sections at the overlap.

HARDWARE	TRACK LOCATION
4258 SPINDLE A	INSIDE CURVE, LIVE-END HALF
4259 SPINDLE B	INSIDE CURVE, DEAD-END HALF
4260 IDLER	OUTSIDE CURVE, DEAD-END HALF

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

CORDING THE 420 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 4258 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 4260-A idler and 4259 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 4259 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 4258 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 4209 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. 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.

Track lay-outs featuring a continuous curve require 4258 Spindle B's and 4260-A idlers at the overlap for cord alignment. Note that a wider overlap is required for these devices.

HARDWARE	TRACK LOCATION
4258 SPINDLE A	INSIDE CURVE, LIVE-END HALF
4259 SPINDLE B	INSIDE CURVE, DEAD-END HALF
4260 IDLER	OUTSIDE CURVE, DEAD-END HALF

CORDING THE 420 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 4258 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 4260-A idler and 4259 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 4259 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 4258 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 backbone.
- Properly installed track should allow the curtain to traverse without causing any noticeable channel deflection.

INSTALLATION INSTRUCTIONS
RIG-I-FLEX MODEL 140,CURVIT-SURE MODEL 350,PATRIARC MODEL 500
TRIPL-I-TRAC MODEL 420
EQUIPPED WITH CENTER TAKE-OFF LIVE-END PULLEY

1. Follow standard assembly drawings and installation instructions for the particular track to be installed. Tracks that utilize Center Take-Off Pulleys incorporate a dead end pulley in place of the live end pulley. Make the substitution of a dead end pulley for the live end pulley in the instructions. Assemble the track to the point in the instructions where it is ready for cord installation.

2. The CTO device can be located along the track only in areas where the return cord is in an open area. The CTO device can be attached to the track at any point between the dead-end pulley and the center overlap. Note that the device must not interfere with the placement of spindles or idler brackets.

3. The operating cord can be installed either before the track is raised to its final position, or after the track is in place. Starting at the CTO device thread the cord around one of the CTO's sheaves, through the track idler brackets (if used), around the sheave of one dead-end pulley, through one of the master carriers to the other side of the track. Continue through the idlers on the opposite side (if used), around the other dead-end, and back through the other master carrier. Continue past the center overlap, through the remaining idlers (if used), to the CTO. Thread the cord around the remaining sheave of the CTO device.

4. An additional mule block is usually used to mule the cords down a to a floor mounted curtain machine. The mule block can be ceiling, or wall mounted. Run cords from the CTO to the mule block, and then down to the curtain machine making sure that the lines remain in alignment. Connect cords to the curtain machine's grooved cable drum.

5. It is very important that the track be securely braced in every direction so that it does not sway during operation. The use of a CTO device will create a load perpendicular to the track as the system operates. Make sure to add supports to the system that allow for this additional loading. Any movement of the track will affect the cable tension.

6. Locate the master carrier(s) an equal distance from the ends of their track(s) and secure to the operating cable.

7. Test the track and machine operation prior to attaching curtain to the track system.

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(8/96)

INSTALLATION INSTRUCTIONS FOR TRIPL-I-TRAC
MOTORIZED MODELS 420 AND 420-R
BI-PART OPERATION

I. SUSPENDED TRACK (bi-part operation)

1. If the track is to be curved in the field, curve it now. Please refer to ADC Form 404A for the curving procedure for this track, using the BT-1 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. 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.

Track layouts featuring a continuous curve require 4258 Spindle B's and 4260-A idlers at the overlap for cord alignment. The large 4207-A lap clamps is also used to provide 4" spacing between the track sections at the overlap.

HARDWARE	TRACK LOCATION
4258 SPINDLE A	INSIDE CURVE, LIVE-END HALF
4259 SPINDLE B	INSIDE CURVE, DEAD-END HALF
4260 IDLER	OUTSIDE CURVE, DEAD-END HALF

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

CORDING THE 420 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 4258 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 layouts, the cable would pass through the 4260-A idler and 4259 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 4259 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 404A for the curving procedure for this track, using the BT-1 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. 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.

Track lay-outs featuring a continuous curve require 4258 Spindle B's and 4260-A idlers at the overlap for cord alignment. Note that a wider overlap is required for these devices.

HARDWARE	TRACK LOCATION
4258 SPINDLE A	INSIDE CURVE, LIVE-END HALF
4259 SPINDLE B	INSIDE CURVE, DEAD-END HALF
4260 IDLER	OUTSIDE CURVE, DEAD-END HALF

CORDING THE 420 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 4258 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 4260-A idler and 4259 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 4259 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

GENERAL INSTALLATION INSTRUCTIONS FOR GROOVED CABLE DRUM MACHINES

1. After the cable has been threaded through the pulleys, carriers and track, place the excess on the floor beneath the live-end pulley. At this time the machine should be mounted beneath the live-end pulley. A plumb line should be used to ensure proper alignment between the machine and the live-end pulley. **Do not** cut the cable at this time.

2. Disengage the drum from the drive shaft by loosening the thumb screw on the driving dog. Thread one of the ends of the cable through the hole at one end of the drum. Fasten the end of the cable, with cord connector provided, on the inside of the drum.

NOTE: Models 1002VED, 1002VEA are not equipped with driving dogs.

On these machines the output drum is pinned to the shaft of the machine. When cording these drums fill or wrap an amount of cable equal to the amount of cable travel required plus 5' from the interior of the drum toward the end of the drum. When the end of the drum is reached, thread the cable through the hole of the drum and secure it with the fasteners provided with the machine. Take the remaining cable and wrap at least three (3) dead wraps of the cable around the drum in the opposite direction from the interior of the drum toward the end of the drum. Be sure to remove all slack from the cable as it is wrapped. **Be careful not to make the cord too taut!** Damage to track components and curtain machine could occur. When the end of the drum is reached, thread the cable through the hole of the drum and secure with fasteners provided with the machine.
Proceed to Step 6 below.

3. Following the grooves carefully, wrap the cable on the drum to within 3 grooves of the far end of the drum, or with enough cable for the total amount of travel needed plus 5 feet. Remove all slack in the system by pulling the other end of the cable. **Be careful not to make the cord too taut!** Damage to track components and curtain machine could occur.

4. Wind 2 wraps of the cord around the other end of the drum in the opposite direction, feeding the end of the cable through the remaining hole in the drum and attaching it with a cord connector. Cut off any excess cable.

5. Engage the drum by tightening the thumb screws.

6. Place the master carriers at equal points along the tracks and secure to operating cable with connectors provided.

7. Adjust the limit switches. Directions for limit switch adjustment are located on the limit switch cover (Form #306).

ADC FORM 745
(5/96)

SUGGESTED IDLER AND SPINDLE SPACING ON CURVED MODELS 140 AND 420 CURTAIN TRACKS

(BASED ON 90 DEGREE CURVES)

CURVE RADIUS	SPINDLE SPACING	NUMBER REQUIRED	CURVE RADIUS	SPINDLE SPACING	NUMBER REQUIRED
2'	12"	4	24'	72"	8
3'	12"	5	26'	72"	8
4'	18"	5	28'	84"	8
5'	18"	6	30'	84"	9
6'	24"	6	32'	84"	9
7'	24'	6	36	84"	10
8'	36"	6	40'	84"	11
10'	42"	7	44'	84"	11
12'	42"	7	48'	84"	12
14'	48"	7	52'	84"	13
16'	48"	7	56'	84"	14
18'	60"	7	60'	84"	15
20'	60"	7	64'	84"	16
22'	72"	7			

NOTES:

1. On curved, bi-parting tracks where the track is straight at the overlap, an equal amount of spindle A (1458 or 4258) located on the inside of the live-end curve, spindle B (1459, 4259) located on the inside of the dead-end curve, and idler brackets (1460 or 4260) which are located on the outside of the dead-end curve are required for proper operation.

2. If the track is curved through the overlap, a special 1460A idler bracket (1460A or 4260A) is used at the overlap to prevent the operating cord from rubbing against the cut end of the track. Two additional spindles B are also needed inside the overlap.

3. One-way draw tracks require only spindles type A (1458 or 4258) mounted on the inside of the curve, as the cord is always on the inside of the curve.

4. Due to the potential for cord sag, spacing greater than 84" between spindles or idlers is not recommended.

ADC FORM 442 (4/96)

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.

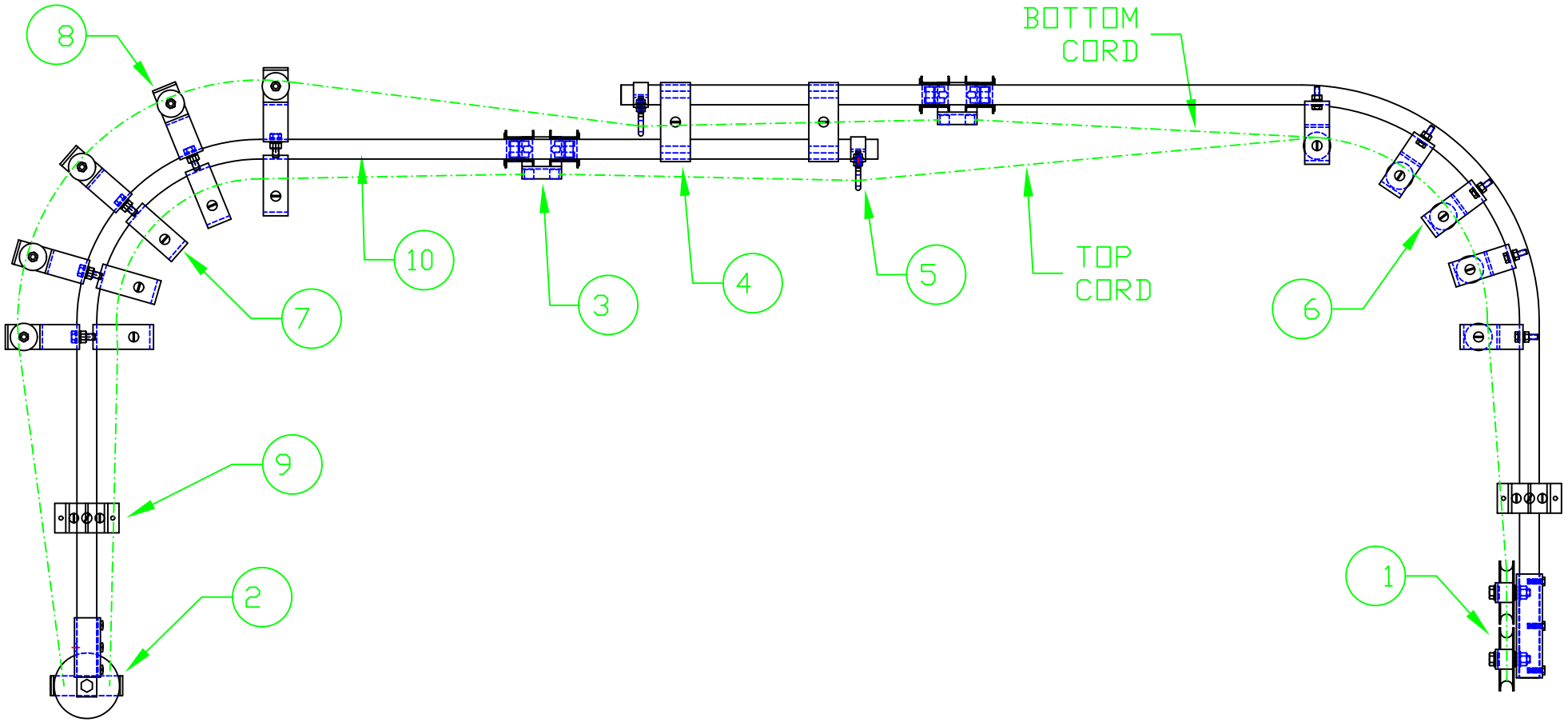
8. Check the track radius against the chalk drawing by laying it on top of the chalk line.

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.

ADC FORM 404-A
(6/96)

REV		DATE:	

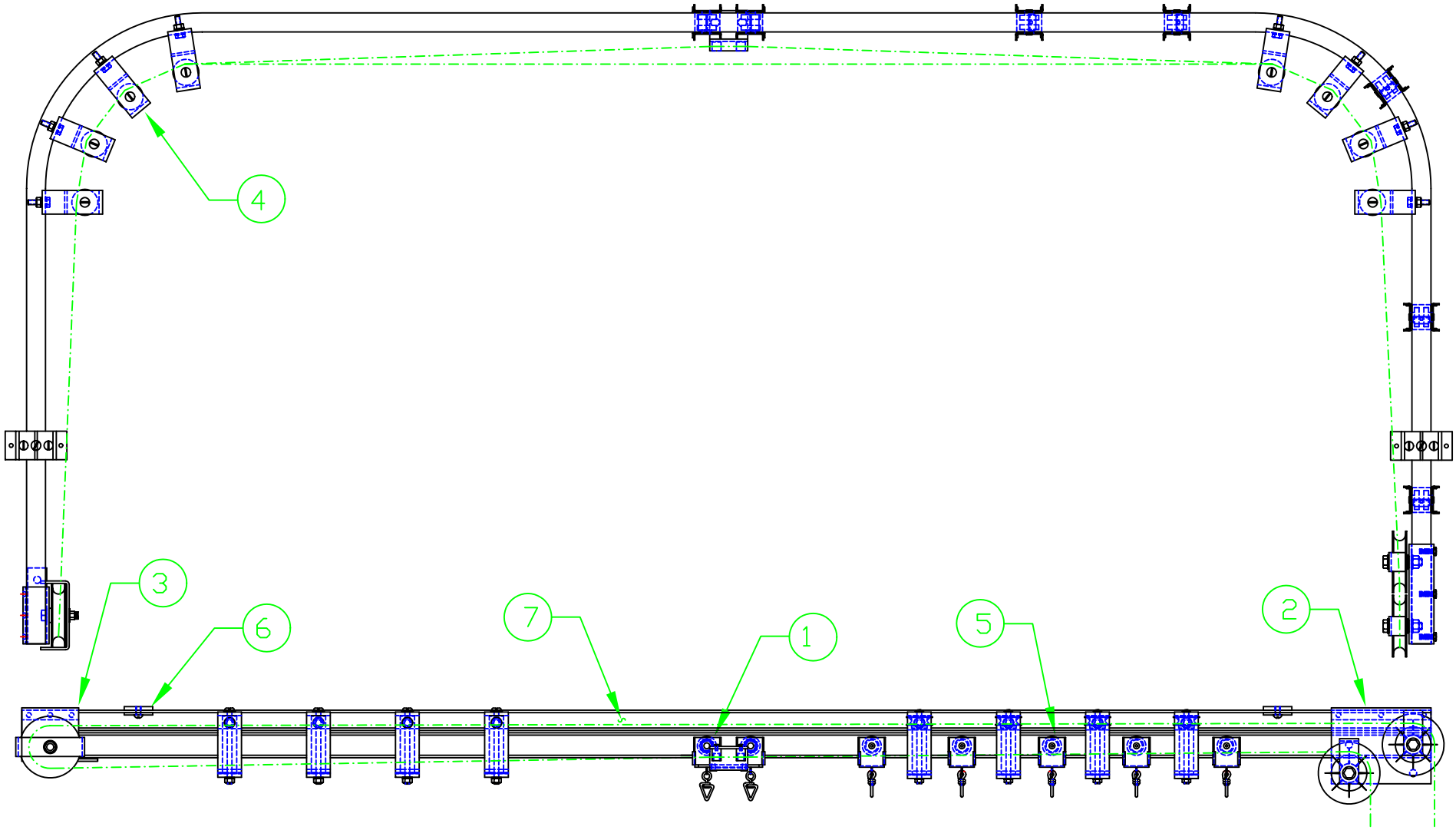


1. 4203 LIVE END PULLEY
2. 4204 DEAD END PULLEY
3. 1402 MASTER CARRIER
4. 1407 LAMP CLAMP
5. 1409A END STOP
6. 4258 SPINDLE "A" (QUANTITIES WILL VARY)
7. 4259 SPINDLE "B" (QUANTITIES WILL VARY)
8. 4260 IDLER (QUANTITIES WILL VARY)
9. 1423 CEILING CLAMP (4208 HANGING CLAMP MAY BE SUBSTITUTED)
10. 4200 CHANNEL (QUANTITIES WILL VARY)

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

SIZE	DATE		REV
A	06/23/98	INSTALLATION INSTRUCTIONS	
DRAWN BY	APPROVED BY	DESCRIPTION	
GAR		420 TRACK BI-PART WITH 2-90° CURVES	
SCALE NTS	SHEET 1 OF 1	DWG NO. II-420BP-98	

REV	DATE:

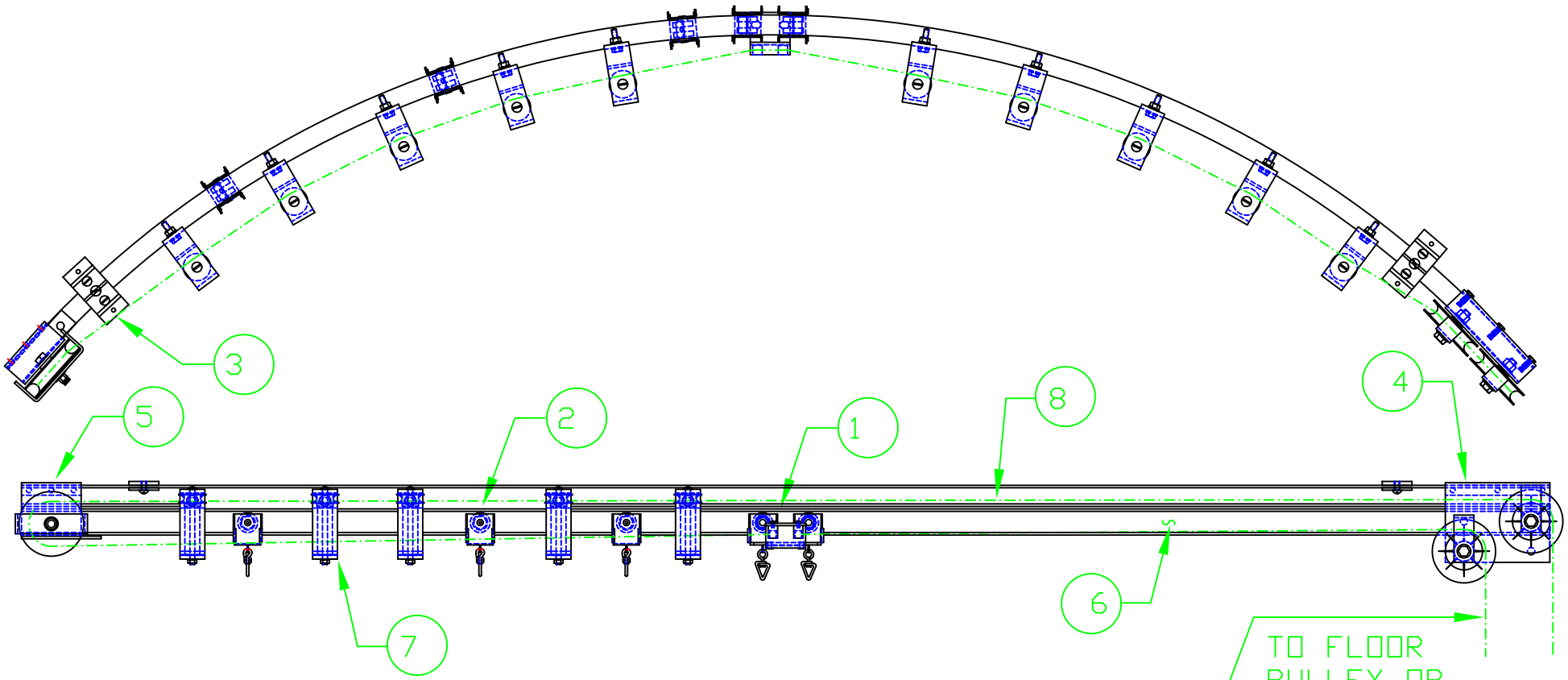


1. 1402 MASTER CARRIER
2. 4203 LIVE END PULLEY
3. 4204A DEAD END PULLEY
4. 4258 SPINDLE "A" - (QUANTITIES WILL VARY)
5. 4201 SINGLE CARRIER
6. 1423 CEILING CLAMP (4208 HANGING CLAMP MAY BE SUBSTITUTED)
7. 4200 CHANNEL

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

SIZE	DATE		REV
A	07/10/98	INSTALLATION INSTRUCTIONS	
DRAWN BY: GAR	APPROVED BY:	DESCRIPTION: 420 TRACK ASSEMBLY CURVED 2-90° 1-WAY	
SCALE: NTS	SHEET: 1 OF 1	DWG NO.: II-420C90-98	

REV		DATE:	

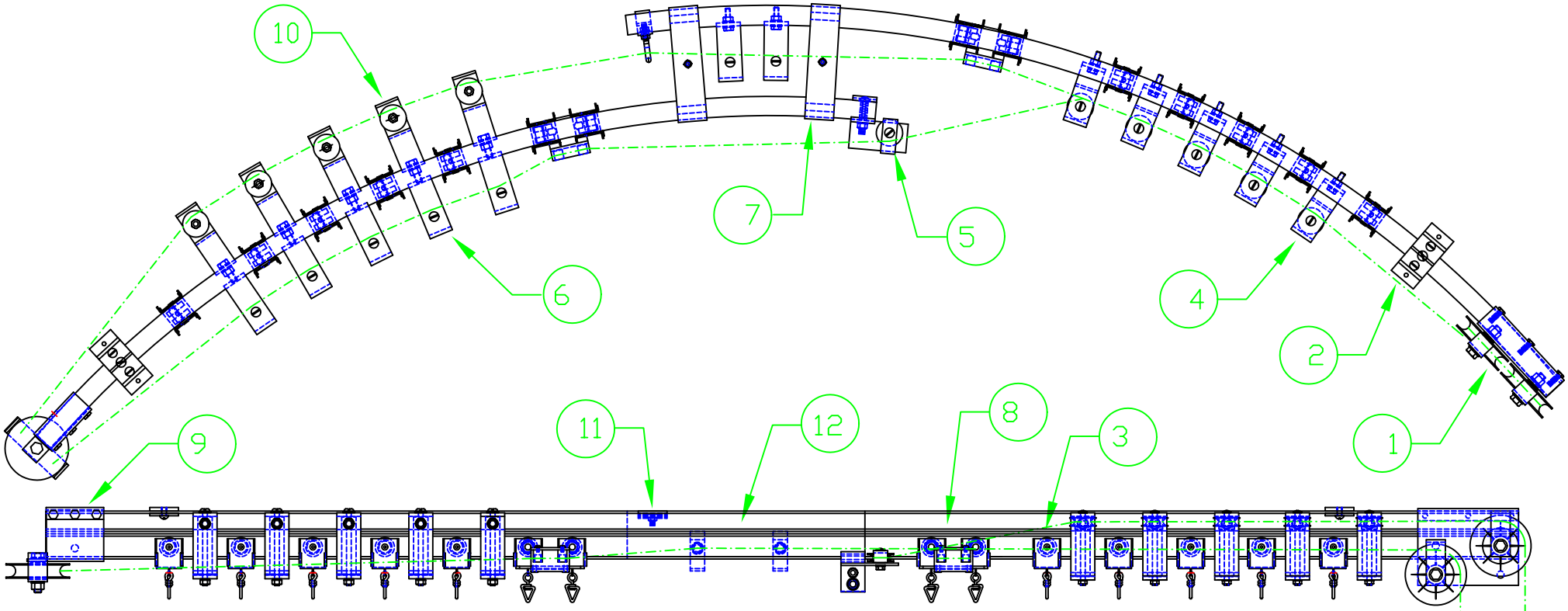


1. 1402 MASTER CARRIER
2. 4201 SINGLE CARRIER
3. 1423 CEILING CLAMP (4208 HANGING CLAMP MAY BE SUBSTITUTED)
4. 4203 LIVE END PULLEY
5. 4204A DEAD END PULLEY
6. 4200 CHANNEL
7. 4258 SPINDLE "A"- (QUANTITIES WILL VARY)
8. 3529 CABLE

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

SIZE	DATE		REV
A	06/29/98	INSTALLATION INSTRUCTIONS	
DRAWN BY	APPROVED BY	DESCRIPTION	
GAR		420 TRACK ASSEMBLY CONTINUOUS CURVE - 1 WAY	
SCALE NTS	SHEET 1 OF 1	DWG NO. II-420CC1WAY-98	

REV	DATE:



1. 4203 LIVE END PULLEY
2. 1423 CEILING CLAMP (4208 HANGING CLAMP MAY BE SUBSTITUTED)
3. 4201 SINGLE CARRIER
4. 4258 SPINDLE "A" (QUANTITY WILL VARY)
5. 4260A IDLER BRACKET
6. 4259 SPINDLE "B" (QUANTITY WILL VARY)
7. 1407A LAP CLAMP (QUANTITY WILL VARY) THE 1407A IS WIDER THAN 1407 TO ALLOW THE TWO 1459 TO FIT IN THE OVERLAP.
8. 1402 MASTER CARRIER
9. 4204 DEAD END PULLEY
10. 4260 IDLER BRACKET
11. 1409A END STOP
12. 4200 TRACK

TO FLOOR PULLEY OR MACHINE OPERATOR

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

SIZE	DATE		REV
A	06/25/98	INSTALLATION INSTRUCTIONS	
DRAWN BY: GAR	APPROVED BY:	DESCRIPTION: 420 TRACK ASSEMBLY CONTINUOUS BI-PART	
SCALE: NTS	SHEET: 1 OF 1	DWG NO.: II-420CCBP-98	