



		350 AND 340 CURVIT-SURE® CWANA code									
		CORD OPERATED/MOTORIZED								WALK-ALONG	
Parts Included		350	340	350-R	340-R	351	341	351-R	341-R	342	342-R
STRAIGHT						√	√	√	√	√	√
CURVED*		√	√	√	√						
Single Carriers	3501	√	√			√	√		√	√	
	3501-A			√	√			√			√
Master Carrier	3502	√		√		√		√			
	3402		√		√		√		√	√	√
	3439		√		√		√		√		
Pulleys	3503	√		√		√		√			
	3504	√		√		√		√			
	3403		√		√		√		√		
	3404		√		√		√		√		
Idler Brackets	3526	√		√							
	3526-A	√		√							
Cable	3529**	√	√	√	√	√	√	√	√		

350

*Must be factory curved.
 **For hand operated tracks replace 3529 with 2829 and add 2805 Floor pulley.

Note: Curved track systems are inherently more difficult to operate manually than are straight track systems. While Curvit-Sure® tracks are available for manual applications, we suggest motorizing curved applications of this system.



SPECIFICATIONS:

CURVIT-SURE® Model 350 [or 340] Curtain Tracks

Curtain tracks (Model 3500) shall be of 12 gauge extruded aluminum I-channel construction with inverted L-shaped flanges on each side of center beam to assure channel rigidity and provide two separate parallel treads for carrier wheels and runways for cable. Each curtain carrier (**Model 3501**) shall be spaced on 12" centers and shall be of steel construction to include two nylon-tired ball-bearing wheels. Each curtain carrier shall consist of a free-moving plated swivel to accommodate curtain snap hook. Nylon snap-on spacers shall be attached to wheel supports and anti-friction wear tape shall be applied to critical areas to reduce noise and friction. Live-End (**Model 3503**) and Dead-End (**Model 3504**) pulley blocks shall be equipped with 3-1/4" diameter sleeve-bearing wheels. The manufacturer shall furnish two End Stops (**Model 3509**) for placement at track ends. Operating cable (Model 3529) shall be of 3/16" diameter woven cotton with wire-center. 1-1/4" I.D. stiffening pipe or the equivalent shall be used to support both straight and factory-formed curved areas of all suspended curved tracks. Hand operated systems shall use 1/4" diameter glazed woven cotton cable Model 2829.

Model 350 (or 340) as manufactured by Automatic Devices Company of Allentown, PA.

CURVIT-SURE® Model 350-R [or 340-R] Curtain Tracks

Curtain tracks (Model 3500) shall be of 12 gauge extruded aluminum I-channel construction with inverted L-shaped flanges on each side of center beam to assure channel rigidity and provide two separate parallel treads for carrier wheels and runways for cable. Each curtain carrier (**Model 3501-A**) shall be spaced on 12" centers and shall be of steel construction to include two neoprene-tired ball-bearing wheels. Each curtain carrier shall consist of a free-moving plated swivel to accommodate curtain snap hook. Nylon snap-on spacers shall be attached to wheel supports and anti-friction wear tape shall be applied to critical areas to reduce noise and friction. Live-End (**Model 3503**) and Dead-End (**Model 3504**) pulley blocks shall be equipped with 3-1/4" diameter sleeve-bearing wheels. The manufacturer shall furnish two end stops (**Model 3509**) for placement at track ends. Operating cable (Model 3529) shall be of 3/16" diameter woven cotton with wire-center. 1-1/4" I.D. stiffening pipe or the equivalent shall be used to support both straight and factory-formed curved areas of all suspended curved tracks. Hand operated systems shall use 1/4" diameter glazed woven cotton cable Model 2829.

Model 350-R (or 340-R) as manufactured by Automatic Devices Company of Allentown, PA.

CURVIT-SURE® Model 351 [or 341] Curtain Tracks [Straight Track System]

Curtain tracks (Model 3500) shall be of 12 gauge extruded aluminum I-channel construction with inverted L-shaped flanges on each side of center beam to assure channel rigidity and provide two separate parallel treads for carrier wheels and runways for cable. Each curtain carrier (**Model 3501**) shall be spaced on 12" centers and shall be of steel construction to include two nylon-tired ball-bearing wheels. Each curtain carrier shall consist of a free-moving plated swivel to accommodate curtain snap hook. Nylon snap-on spacers shall be attached to wheel supports and anti-friction wear tape shall be applied to critical areas to reduce noise and friction. Live-End (**Model 3503**) and Dead-End (**Model 3504**) pulley blocks shall be equipped with 3-1/4" diameter sleeve-bearing wheels. The manufacturer shall furnish two end stops (**Model 3509**) for placement at track ends. Operating cable (Model 3529) shall be of 3/16" diameter woven cotton with wire-center. 1-1/4" I.D. stiffening pipe or the equivalent shall be used to support all suspended tracks. Hand operated systems shall use 1/4" diameter glazed woven cotton cable Model 2829.

Model 351 (or 341) as manufactured by Automatic Devices Company of Allentown, PA.

CURVIT-SURE® Model 351-R [or 341-R] Curtain Tracks [Straight Track System]

Curtain tracks (Model 3500) shall be of 12 gauge extruded aluminum I-channel construction with inverted L-shaped flanges on each side of center beam to assure channel rigidity and provide two separate parallel treads for carrier wheels and runways for cable. Each curtain carrier (**Model 3501-A**) shall be spaced on 12" centers and shall be of steel construction to include two neoprene-tired ball-bearing wheels. Each curtain carrier shall consist of a free-moving plated swivel to accommodate curtain snap hook. Nylon snap-on spacers shall be attached to wheel supports and anti-friction wear tape shall be applied to critical areas to reduce noise and friction. Live-End (**Model 3503**) and Dead-End (**Model 3504**) pulley blocks shall be equipped with 3-1/4" diameter sleeve-bearing wheels. The manufacturer shall furnish two end stops (**Model 3509**) for placement at track ends. Operating cable (Model 3529) shall be of 3/16" diameter woven cotton with wire-center. 1-1/4" I.D. stiffening pipe or the equivalent shall be used to support all suspended tracks. Hand operated systems shall use 1/4" diameter glazed woven cotton cable Model 2829.

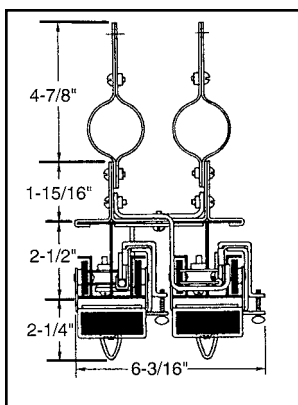
Model 351-R (or 341-R) as manufactured by Automatic Devices Company of Allentown, PA.



Model 350 Assembly

Cross Section of 350 Track at Center Overlap

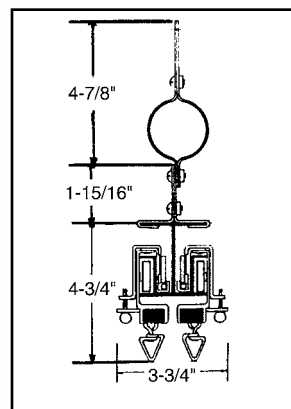
Min. pocket width: 7 in.



Shown with optional pipe clamps.

Cross Section of 340 Track at Center Overlap

Min. pocket width: 4 - 1/2 in.



Shown with optional pipe clamps.

CURVIT-SURE® MODEL 350

Curvit-Sure® 350 is a double-sectioned curved track designed for medium weight curtains on bi-parting lengths of up to 60' (layout dependent). All curves are factory formed with a **minimum radius of 6'** (layout dependent). The operating cord is routed through a trough and idler system and does not come into contact with any carriers except the masters. The broad-sides at each end have 1-1/4" cutaway area to allow for insertion or removal of single carriers. Anti-friction tape and nylon spacers applied at critical areas reduce noise and friction.

Manually operated cord-drawn curved tracks require more pulling effort than straight tracks. Therefore, curved tracks should be motorized whenever possible.

Curvit-Sure® tracks cannot be used in reverse curve applications.

MODEL 350-R

Model 350-R is identical to Model 350 except that No. 3501-A neoprene Ball-Bearing Single Carriers are used in place of the standard No.3501 Single Carriers. Neoprene carriers help reduce the noise of a track system.

MODELS 351 AND 351-R

Model 351 is identical to Model 350 except that it is ENTIRELY STRAIGHT IN LAYOUT. This unit is especially desirable for installations where it is necessary that the cord be concealed within the track channel. Model 351-R is identical to Model 351 except that No. 3501-A neoprene Ball-Bearing Single Carriers are used in place of the standard No.3501 Single Carriers.

MODELS 340 AND 340-R

Model 340 is a single-sectioned track designed for medium weight curtains on bi-parting lengths of up to 50' (layout dependent). The cord is completely concealed in the track channel, and overlapping is accomplished by master and tandem carriers which by-pass on opposite sides of the track.

Model 340-R is identical to Model 340 except that it features Model 3501-A neoprene-tired ball-bearing single carriers.

MODELS 341, 341R

Model 341 is identical to Model 340 track except that it is ENTIRELY STRAIGHT IN LAYOUT.

Model 341-R is identical to Model 340 track except that it is ENTIRELY STRAIGHT IN LAYOUT and it uses Model 3501-A neoprene-tired ball-bearing single carriers.

MODELS 342, 342-R

Model 342 is for WALK-ALONG operation only and does not include any cords, end pulleys, or a floor pulley. It utilizes the same components as the Model 350 track with the exceptions of the pulleys.

Model 342-R is also for WALK-ALONG operation only and includes no cords, end pulleys, or a floor pulley. It utilizes the same components as the Model 342 track and includes Model 3501-A neoprene-tired ball-bearing.



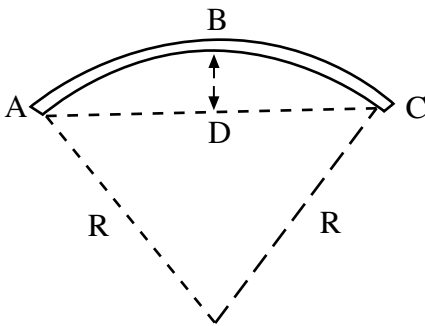
Explanation of Curved Track Terms

A sketch or template must accompany each inquiry or order for Curvit-Sure® curved tracks. The sketch shown below explains terms used in connection with curved tracks. A simple formula for determining the radius when Chord (AC) and Rise (BD) are given is as follows:

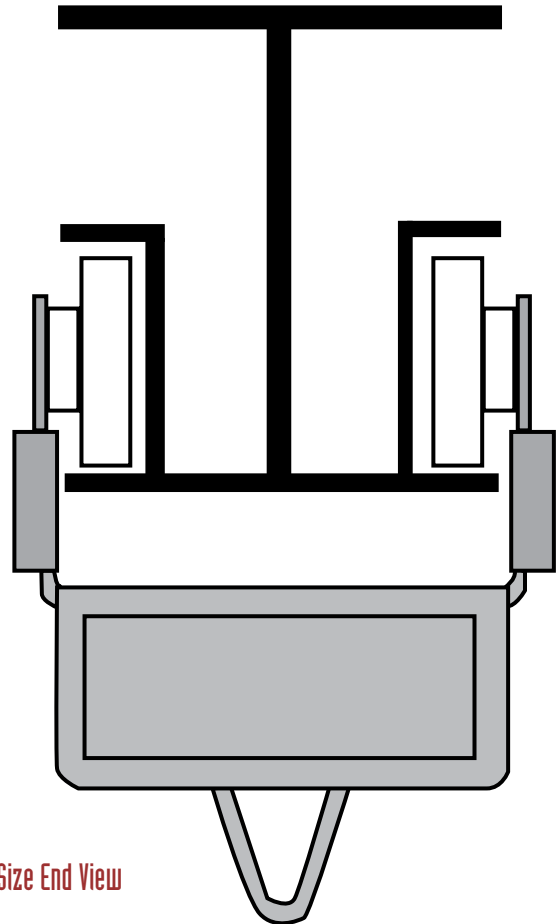
$$\text{Radius (R)} = \frac{\left(\frac{AC}{2}\right)^2 + BD^2}{2BD}$$

When placing an order for Curvit-Sure® curved tracks, the following information is required:

- A. Arc (track channel) and all radii dimensions (6' minimum radius).
- B. Manner of mounting track (suspended or ceiling-mounted).
- C. Is the track machine or hand operated?



ABC - Arc
 AC - Chord
 BD - Rise
 R - Radius



Full Size End View



No. 3500 Channel

1' - 1 lb.
 12 gauge extruded aluminum, mill-finish. Obtainable in unspliced lengths up to 20'. Must be curved at factory. Minimum radius: 6' (layout dependent).
 Approximately: 2-1/4" wide x 2-1/2 high.



No. 3501 Nylon Ball-Bearing Single Carrier

1 - 5 oz.
 Carrier spacing: 12". Block constructed of plated steel equipped with two nylon-tired ball-bearing wheels. Rubber bumper helps with noise suppression when curtain is opening. Carrier width: Approximately 1-1/2".



No. 3501-A Neoprene Ball-Bearing Single Carrier

1 - 5 oz.
 Carrier spacing: 12"
 Block constructed of plated steel equipped with 2 neoprene-tired ball-bearing wheels. Rubber bumper helps with noise suppression when curtain is opening.
 Carrier width: Approximately 1-1/2".



No. 3502 Master Carrier

1 - 1 lb. 6 oz.

Plated steel block equipped with 4 nylon-tired ball-bearing wheels, and cable clamp for tightening cable from outside of channel.

Carrier width: Approximately 4-1/2".



No. 3402 Master Carrier

1 - 10 oz.

Includes plated steel block with 2 nylon-tired ball-bearing wheels and cable clamp for tightening cord from outside of channel. Rubber bumper provides quiet operation.

Carrier width: Approximately 2-1/2".

No. 3525 Cord Connector used to splice cords adjacent to master carrier on hand-operated or motorized tracks.



No. 3439 Tandem Carrier

1 - 6 oz.

Placed on 12" centers behind master carriers. Number dependent on amount of overlap required. Composed of steel block and 2 nylon-tired ball-bearing wheels. Rubber bumper provides quiet operation.

For use only with Model 340 series tracks.



No. 3503 Live End Pulley

1 - 2 lbs. 15 oz.

Painted steel block equipped with 2 oil-impregnated sleeve-bearing nylon wheels. Attaches to track end. Extends 3-1/2" beyond track end.

Pulley width: Approximately 7-1/2".



No. 3504 Dead End Pulley

1 - 2 lbs. 6 oz.

Plated steel block equipped with 1 oil-impregnated sleeve-bearing nylon wheels. Attaches to end of track. Extends 3-1/2" beyond track.

Pulley width: Approximately 4-3/4".



No. 3403 Live End Pulley

1 - 1 lb. 11 oz.

Equipped with 2 oil-impregnated sleeve-bearing nylon wheels. Attaches to track end. Extends 2 - 1/4" beyond track end. (Used with 340 series tracks only.)

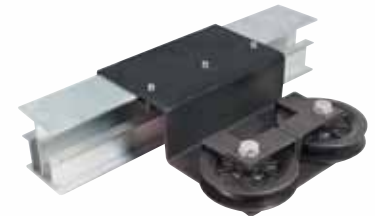


No. 3404 Dead End Pulley

1 - 15 oz.

Painted steel block equipped with 1 oil-impregnated sleeve-bearing nylon wheel and 2 steel idler wheels. Attaches to end of track. Extends 4-1/4" beyond track end.

(Used with 340 series track only.)



No. 3503-A Center Take Off Live End Pulley

1 - 3 lbs.

Designed to be used in installations where it is necessary to have the operating lines routed perpendicular to the track. When using this device, add 1 each Model 3504 Dead End Pulley. 3503-A must be located a minimum of 4' from the end of the track. Additional pulleys may be required to mule operating lines to machine or floor pulley.



No. 3524 Splicing Clamp [Suspended Systems]

1 pr. - 2 lbs. 3 oz.

For joining track sections assuring proper alignment of track channels on suspended installations.

Approximately: 10" long x 2-1/2" wide x 2" high.

NOTE: Used with suspended tracks only.



No. 3524-A Ceiling Splicing Clamp

1 - 1 lb.

For joining track sections assuring proper alignment of track channels on ceiling-mounted installations.

Approximately: 6" long x 3-1/2" wide x 5/16" high.

NOTE: Used with ceiling mounted tracks only.



No. 3508 Hanging Clamp

1 pr. - 4-1/2 oz.

Recommended spacing: 5' with additional units in curves and stack areas. Pipe batten recommended with suspended track systems.

Approximately: 1-1/2" wide x 2" long x 2" high.



No. 3523 Ceiling Clamp

1 - 6 oz.

Recommended spacing: 5' with additional units in curves and stack areas. For use on ceiling-mounted installations only.

Approximately: 3-9/16" wide x 1-1/2" long.



No. 3509 End Stop

1 pr. - 4 oz.

Prevents carriers from moving beyond selected position in track. Used also as curtain tie-off at track ends.

Width: Approximately 1-1/2".



No. 3507 Lap Clamp

1 - 13 oz.

For securing double-sectioned track at center overlap.

NOTE: For use with suspended bi-parting track systems only.



No. 2805 Adjustable Floor Pulley

1 - 3 lbs. 5 oz.

Painted steel side plates, equipped with 1 oil-impregnated sleeve-bearing nylon wheel. Locks in place via threaded axle. Adjustment - 9".

Approximately: 3-1/4" long x 5" wide x 13" high.



No. 3526-S Idler Bracket

1 - 6 oz.

Equipped with 1" steel ball-bearing wheel for guiding cord around the inside of the curve (used on Live-End half of the track system).

NOTE: For use with suspended track systems only.



No. 3526-C Ceiling Type Idler Bracket

1 - 6 oz.

Equipped with 1" steel ball-bearing wheel, used to guide cord around the inside of the curve (used on Live-End half of the track system).

NOTE: For use with ceiling mounted track systems only.



No. 3526-AC Idler Bracket

1 - 6 oz.

Equipped with 1" steel ball-bearing wheel, used to guide cord around the outside of the curve (used on Dead-End half of the track system).

NOTE: For use with ceiling mounted track systems only.

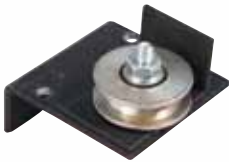


No. 3526-AS Idler Bracket

1 – 6 oz.

Equipped with 1" steel ball-bearing wheel, used to guide cord around the outside of the curve (used on Dead-End half of the track system).

NOTE: For use with suspended type track systems only.



No. 3561 Center Stop

1 - 8 oz.

End stop and idler combination for use only with 350 series tracks. Used at overlap on both track ends.



No. 3516 Cord Retainer

1 - 2-1/2 oz.

Plated steel body with locking screw. Installed on upper portion of No. 3500 channel on side opposite master carrier. Retains cord in runway. For special applications only.



No. 3525 Cord Connector

1 - 1 oz.

Used to splice cords adjacent to master carrier. Nylon coated. For use with hand-operated or motorized tracks.



No. 3556 Track Straightening Tool

1 - 1 lb. 2 oz.

Extra accessory for smoothing out depressed areas of track walls.



No. 3529 Cable

100' - 2 lbs. 7 oz.

Wire center with woven polyester cover. For machine-operated tracks. Partially concealed in track runways. 3/16" (No. 6)



No. 2814 [BL] Pipe Clamp

1 pr. - 13 oz.

For 1-1/4" I.D. Schedule 40 pipe



No. 2815 [BL] Pipe Clamp

1 pr. - 16 oz.

For 1-1/2" I.D. Schedule 40 pipe



No. 2816 [BL] Pipe Clamp

1 pr. - 18 oz.

For 2" I.D. Schedule 40 pipe

CHECK LIST TO ASSURE SATISFACTORY OPERATION OF CURVIT-SURE ADC MODELS 340 AND 350

- Make sure that the channel is not damaged, or twisted.
- Make certain that all moving parts, such as carriers, pulleys and idlers are in working order. Under no circumstances should a larger diameter cord other than the size specifically recommended by ADC be used.
- 1 1/4" stiffening pipe or the equivalent is recommended to support all suspended curved tracks. Tracks attached directly to an overhead structure do not require pipe support.
- The track channel must be properly secured at all mounting points.
- On manually operated tracks where the height exceeds 1/2 the width, the cord connection securing the two cut ends of the operating cord should be made outside of the track. When this is **not** possible, it is necessary that the nylon-coated cord connector be placed **between** the live-end pulley and the master carrier and **under no circumstances** on the other side of the master carrier. The cord connector should not be placed farther from the master carrier than the stacking space the single carriers occupy when the curtain is fully opened. It is also important that the only cord connector used on any installations be ADC nylon-coated connectors.
- Make certain that the connector in each of the master carriers is fasten tightly so that no slippage can occur, but not so tight as to damage the thumb screw, or cord clamp.
- Because the greatest pressure is exerted on the live-end pulley, make certain that it is securely fastened to the track end. If it is not, the bracket may bend and cause the wheels to come out of alignment.
- The center overlap must be properly positioned in relation to the live-end and dead-end pulleys. Be sure to follow the factory provided arrows and markings on the track.
- When the CURVIT-SURE is used with a drum driven curtain machine, the drum must be located plumb under the live-end pulley. The cord must be kept taut at all times in order for the line to properly follow the grooves of the drum. A cable tension device (CTD) is recommended to ensure trouble-free operation of motorized curtain tracks.
- The live-end pulley should always be a minimum of 10 feet from the machine drum. This generally provides an adequate fleet angle for the operating cord to properly wrap onto the grooved drum.

INSTALLATION INSTRUCTIONS FOR CURVIT-SURE MANUALLY OPERATED ADC MODEL 350

1. If track splicing is required, splice the track sections together at this time to form the desired layout using the splicing clamps and hardware provided. The track is also provided with a 9/16" x 9/16" block insert to provide accurate alignment of the track sections. This insert is placed into the channel of the track that will not contain an operating cord. The block is held in place by the two 1/4" flat head stove bolts provided with the block.
2. The top of the splicing clamps are drilled for four 1/4" x 20 stove bolts, and the top of the track is drilled and tapped to match.
3. The splicing clamps and the track sections are factory marked with corresponding numbers to insure the splice clamps are placed at their proper locations.
4. The center overlap of the track sections is marked with arrows. The arrows should always point in toward the centerline of the track.
5. Install hanging clamps, with the hardware, provided along the track at maximum 4' intervals, being sure to include additional hanging clamps at the curves, splices and in the stacking area. Install 3507 overlap clamps at center overlap to provide the correct channel spacing for the overlap.
6. Install the idler pulleys. The side of the track that the idler pulleys should be attached to is indicated by marking arrows placed along the top flange of the track section.
7. The live and dead-end pulleys should be installed next. They are interchangeable, and should be positioned to match the proper channel runways. Refer to ADC form 735. Make certain that the vertical component of the end pulley's mounting brackets finish against the ends of the track. The track is now ready to be raised into position and secured to the overhead structure.
8. Thread the operating cord up and around one wheel of the live-end pulley, then through the cord runway of the track to the center overlap. Now, thread the cord through the nylon coated cord connector of one of the master carriers and insert this master carrier into this half of the track and install an idler equipped end stop.
9. Continue threading the operating cord around the idler wheels of the second section of track, around the dead-end pulley, through the cord runway of the track and again back to the center overlap area of the track. Insert other master carrier. Leave about one foot of cord past end of track to allow working room to connect cords together.
10. Take the remaining end of the operating cord around the wheel of the floor pulley, plumb floor pulley to the live-end pulley installed on the track and secure the floor pulley to the floor or other surface that it will be mounted to.

11. Continue threading the remaining end of operating cord up over the other wheel of the live-end pulley, through the idler wheel on the outside of the other half of track and back to the center overlap area of the track.
12. Remove all slack from the operating cord and fasten both ends together with the nylon-coated cord connector. Trim the ends of the cord and move the connector into the track and install an idler equipped end stop.
13. Move both master carriers the same distance from the ends of the track place the operating cord into the master carriers connectors and tighten the thumb screws at the bottom of the carriers to fix the master carriers to the operating cord. Single carriers are now inserted through the cutaway sections of track located at each end of the track system. Place an equal number of single carriers in each half of the track.
14. After inserting the single carriers, install the combination end stops and curtain tie-offs at the track ends. The track system is not complete.

IMPORTANT NOTES

- Make certain that the live-end and dead-end pulleys are solidly anchored at the track ends. and that they rest against the end of the track.
- The operating cord must be in the channel runway towards the outside of the curve on both sections of track. (See ADC form 735)
- The span between track supports should never exceed 4 feet. Additional supports should be placed on the curves, spliced portions of track, and the stacking areas.
- Always have supports located at the extreme ends of both track sections. At the operating, or live end, also attach a supporting line to the holes in the live-end double sheave.
- Curtain carrier spacing should never exceed 12 inches.
- All curved tracks suspended by chain, cable, or steel rod should be supported from 1 1/4" ID stiffening pipe, or the equivalent.
- When the curtain is operating, it should be capable of moving back and forth without causing any noticeable channel deflection.

METHOD OF CORD ATTACHMENT FOR CURVIT-SURE MODELS 350 & 340 TRACKS WITH GROOVED DRUM MACHINES

IMPORTANT NOTES

- A plumb line should be run from the center point of the live end pulley to the floor (location of the machine) to make certain that the drum is vertically in line with the live end pulley.
- The grooved drum machine must NEVER be located less than 10 feet from the last pulley of the track system.
- Do not attempt to use cable with a diameter larger and which will nest to the bottom of the grooves of the drum.
- If the machine is to be mounted above the track system, a special live end pulley is required to mule the operating cables up to the machine.
- See FORM 731 or 732 regarding track system installation prior to installing machine.

1. Place the coil of cable on the floor beneath the live-end pulley of the track. Thread one end of the cable over one wheel of the live end pulley and through the track to the dead-end pulley connecting to master carrier as per Form 731 or 732. Continue the cable around the dead-end pulley and back through the other side of the track, over the remaining wheel of the live-end pulley and down to the floor mounted machine. Pull approximately 5 feet of additional cable to allow for the dead wraps on the drum.
2. Unthread the thumb screw of the machine's driving dog, releasing the drum from the drive shaft. Note that some curtain machines, particularly those with long grooved drums and outboard bearings, do not have driving dogs and the drum cannot be disconnected from its shaft. In order to wrap cable on drums of this type, the drum should be rotated by placing the hand crank provided on the shaft extension of the gear or motor, and manually cranking the drum the required number of turns.
3. Thread the end of the cable of the coil through the hole in one end of the drum and fasten it on the inside of the drum with one of the cord connectors supplied with the machine. Wrap the cable on the drum by rotating it allowing the cable to wrap in the grooves. Wrap enough cable to allow the cable travel needed plus four (4) dead wraps, or to within four (4) grooves from the other end of the drum.
4. Pull excess cable through the track from the remaining free end of cable and remove all the slack from the system.

CAUTION

Placing too much tension on the operating cable when removing the slack will put excessive strain on the live end and dead end pulleys and may result in damage to the pulleys, track and its hardware or the curtain machine.

5. Wind three (3) wraps of cable, in the opposite direction of the first cable, on the remaining open end of the drum. Wind from the center of the drum toward the end of the drum so that the end of the cable finishes in the last groove of the drum so that it may be inserted in the hole located in the last groove. Insert the cable end through the hole in the drum and secure with one of the cable connectors supplied with the machine.

IMPORTANT NOTES

All wire center cable stretches during its first few weeks of use. Therefore, it is imperative that excess slack be taken up on the drum periodically. If this is not done, it is possible for the cable to slip off the drum and wrap around the drive shaft of the machine causing serious operational difficulties which may result in damage to the track, its components, the machine or external structures. It is recommended that during the first few weeks of operation, periodic checks be made to assure that excess slack in the cord is eliminated.

6. Insert the single into the track system according to **FORMS 731 or 732.**
7. If previously loosened, realign driving dog thumb screw with the hole in the grooved drum spoke and tighten the thumb screw until it is fully seated in the drum. If used, remove the hand crank from the motor or gear reduction unit.
8. Adjust limit switches

8A. LIMIT SWITCH ADJUSTMENT (all models except 160)

PRIOR TO ADJUSTING LIMIT SWITCH CAMS, REMOVE POWER SOURCE FROM MACHINE AND LOCK OUT USING AN OSHA APPROVED LOCKOUT METHOD.

- 8A.1 With track and machine operating freely, run the machine in the "OPEN" or "CLOSE" direction and allow the curtain to approach the respective end of its travel. Operator should ALWAYS have a hand on the "STOP" button of the

control or be ready to "CENTER" toggle switch should the limit fail or the curtain get mechanically bound. If limit switch does not shut machine off prior to curtain reaching its desired position, stop machine at this position using the "STOP" button, or other function of the control station.

- 8B.2 With the curtain in the position desired, and machine stopped, rotate white tripping dog of limit switch for the respective direction using a 1/2" open end wrench, or a thin adjustable wrench. Rotate tripping dog in direction of limit switch rotation until tripping dog engages the microswitch. A distinct "click" should be heard when switch is engaged.
- 8B.3 Run machine in opposite direction for several feet and then repeat previous steps for the opposite direction of travel. Machine should now run to desired limit and shut off automatically when these positions are reached.

NOTE: A fraction of a turn of the cam can represent a considerable amount of curtain travel. Accordingly, adjust the cams CAREFULLY in order to minimize readjustments. Do NOT attempt to stop curtain too close to end stops And do not attempt to stack curtain in too small a space. Allow 6" to 12" at each end of travel. Run curtain several times and examine operation of track and machine. -Be certain that curtain track is running freely and unobstructed along its entire length of travel. Also make sure that machine is de-energized at each end of travel and not in a stalled state.

INSTALLATION INSTRUCTIONS FOR ADC MODEL 340 MANUALLY OPERATED CURVIT-SURE CURTAIN TRACK

1. If splicing is required splice the track sections together with the splice clamps and hardware provided. Note that the track sections must be accurately spliced, otherwise the carriers will not roll properly over the spliced areas. Also note the track(s) has been factory drilled and notched at the live and dead end portions of the track section(s). Be sure not to use one of these ends as a splice end. Since the track will be lifted into position after it is assembled, be sure that the assembled track sections will not be too large to handle.
2. Install the track hanging clamps along the track, note that the maximum recommended spacing for the hanging clamps is 5', with additional units used at the curves and track ends to provided support.
3. Install the live-end and dead-end pulleys to the factory drilled and notched ends of the track with the hardware provided. Make certain that the vertical portions of the end pulley mounting plates rest against the ends of the track. The track is now ready to raise and secure into position.
4. Thread the operating cord through one wheel of the live-end pulley, then through the nylon-coated cord connector of one of the master carriers (first). Do not tighten the setscrew. Feed about one foot of cord through the connector and insert the master carrier into the track through the cut-away area of the track provided next to the end pulley.

NOTE: One half of the track channel has #3516 cord retainers installed on the inside of the curve, in the open portion of the track channel. Make certain that the master and tandem carriers are installed such that the cord connectors and nylon guides are located on the side of the channel opposite these cord holders (outside of curve).

5. Pull the operating cord along the channel of the track, moving the master carrier along to guide the cord in the channel while threading. Continue threading the operating cord to the dead-end pulley, feeding the cord through one hole in the vertical pulley bracket, around the idler wheel then the dead-end pulley wheel, and around the other idler wheel (Note: cord should be located between the two idler wheels not on the outside of them). Next run the cord through the other hole in the pulley bracket and through the nylon-coated connector of the second master carrier and back to the cutaway in the track, but do not insert the master carrier at this time. Leave about one foot of cord exposed at the cutaway.
6. Take the other end of the operating cord around the wheel of the floor pulley and then up and over the other wheel of the live-end pulley, through the other track channel slot to the second master carrier. Thread this end of the cord through the cord connector of the second master carrier and insert the master into the track channel. Once inserted in the channel, pull the slack out of the operating cord and secure it with the cord connector.
7. Insert tandem carriers with nylon guides next to the master carriers on each half of the

track. These carriers bypass each other to form the overlap. Insert four regular single carriers, without cord holders, in each half of the track. Then insert one (1) special # 3501-A single carrier (with arm), followed by another four (4) regular carriers, and then another # 3501-A. Continue in this manner until all single carriers are installed in the track. Make certain that the special carriers are installed so that the arm with the nylon block is located on the inside of the curve (same side as opposite half of track in which cord holders have been installed)

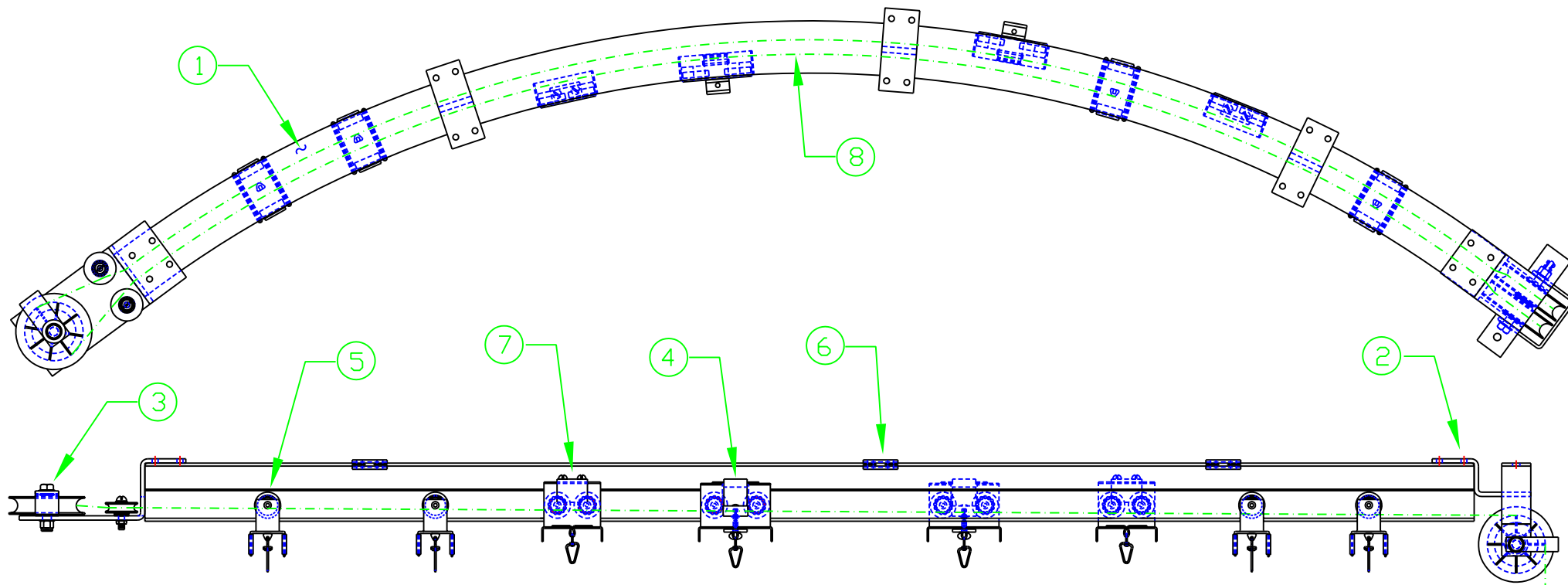
8. Attach the combination end stops and curtain tie-offs to the ends of the track and in front of the live-end and dead-end pulleys.
9. Move the spliced end of the cord just past the cut-away of track, cut off any excess. Slide both master carriers back towards the ends of the track to meet the single carriers. Tighten the thumbscrews at the bottom of the carriers to clamp the operating cord. Track is ready for curtain to be hung.

IMPORTANT NOTES

- The span between track supports should never exceed 5 feet. Additional supports should be placed on the curves, splices, stacking areas and track ends.
- Make certain that the live-end and dead-end pulleys are solidly anchored at the track ends and that they rest against the end of the track.
- Carrier spacing on the curtain should never exceed 12 inches.
- When the installation has been completed and is in operation, the curtain should move back and forth without causing noticeable channel deflection.
- The operating cord may stretch during the first few weeks of operation. Slack should be taken out, and the excess cord trimmed.

INSTALLATION INSTRUCTIONS
RIG-I-FLEX MODEL 140,CURVIT-SURE MODEL 350,PATRIARC MODEL 500
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.



① - 3500 TRACK

⑧ - 3529 CABLE

② - 3403 LIVE END

③ - 3404 DEAD END

④ - 3402 MASTER CARRIER

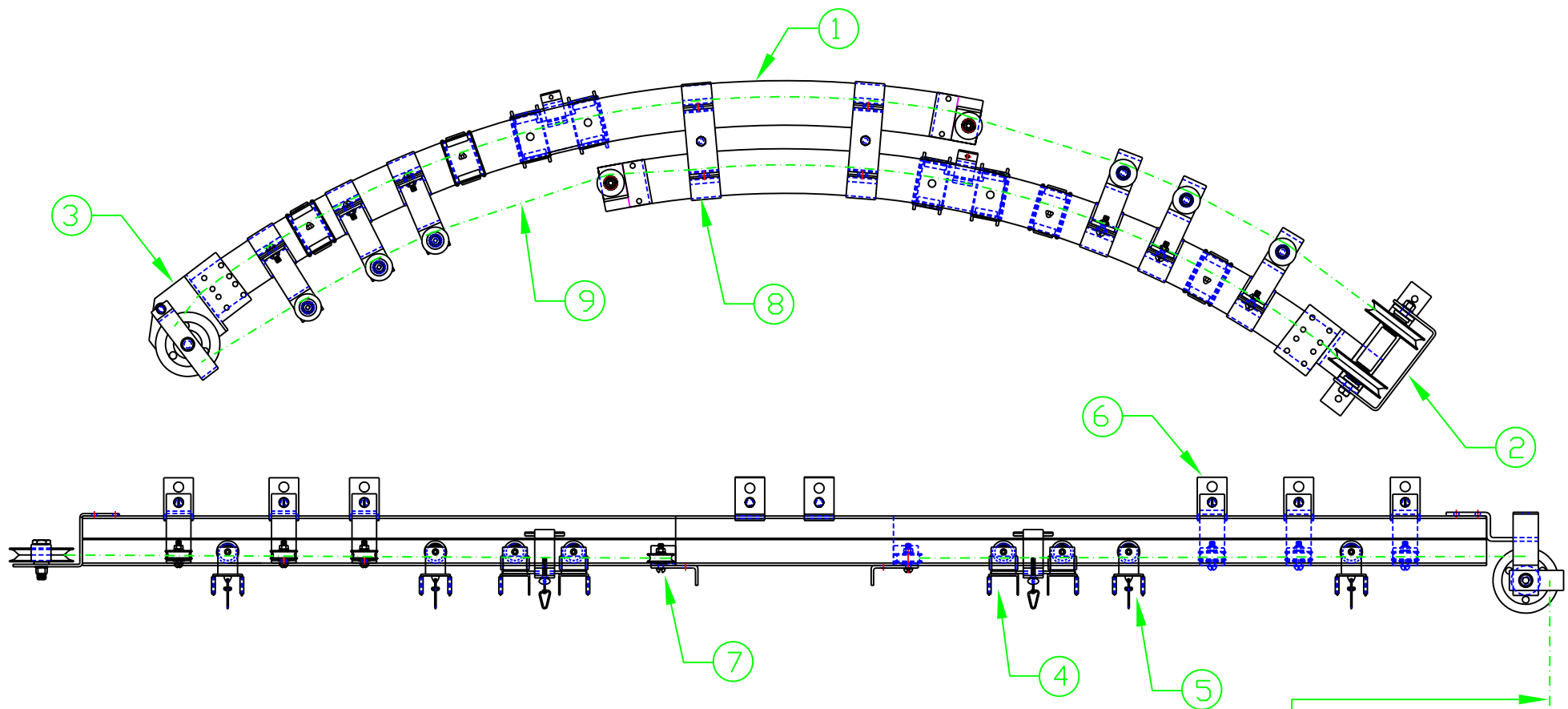
⑤ - 3501 SINGLE CARRIER

⑥ - 3523 CEILING CLAMP
(CAN ALSO USE 3508 HANGING CLAMP)

⑦ - 3439 TANDEM CARRIER

TO FLOOR
PULLEY OR
MACHINE
OPERATOR

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SIZE	DATE	INSTALLATION INSTRUCTIONS	REV
A	07/20/98		
DRAWN BY	APPROVED BY	DESCRIPTION	
GAR		340 TRACK ASSEMBLY-CONTINUOUS CURVE	
SCALE	SHEET	DWG NO.	
NTS	1 OF 2	II-340CC-98	

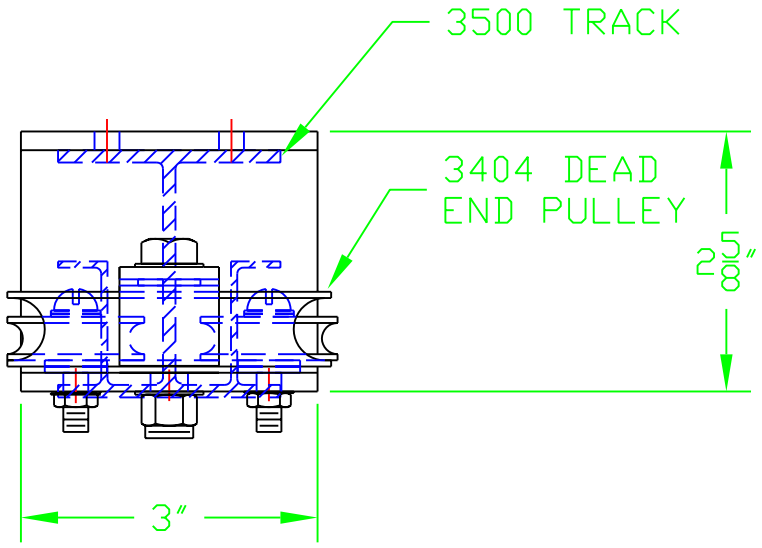


- ① - 3500 TRACK
- ② - 3503 LIVE END
- ③ - 3504 DEAD END
- ④ - 3502 MASTER CARRIER
- ⑤ - 3501 SINGLE CARRIER
- ⑥ - 3526 IDLER
- ⑦ - 3561 CENTER STOP
- ⑧ - 3507 LAP CLAMP
- ⑨ - 3529 CABLE

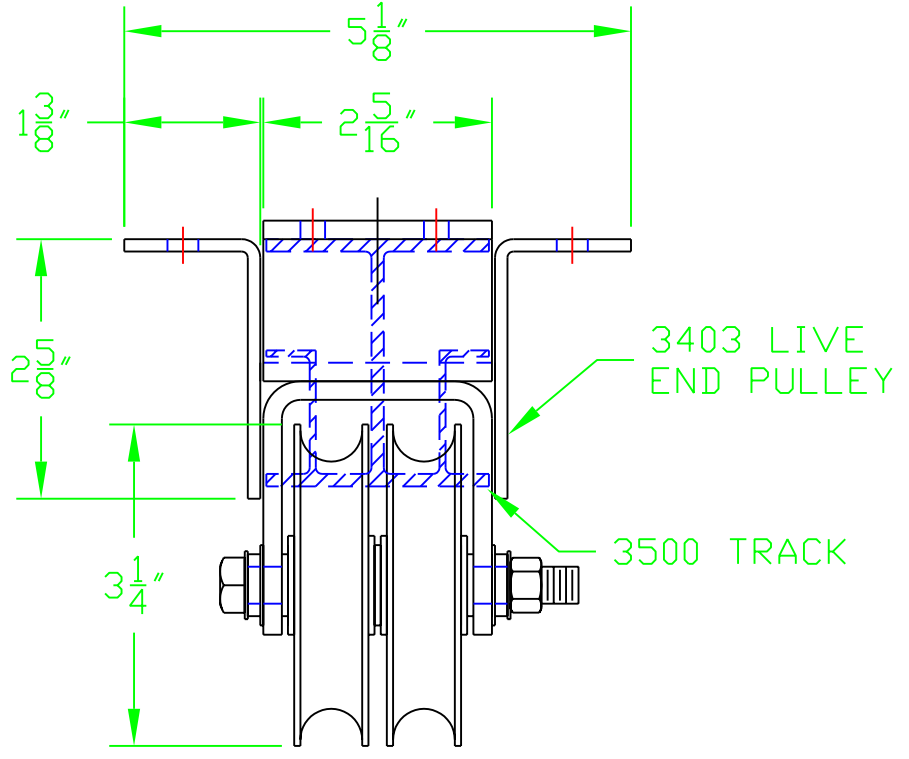
NOTE: SPACING AND QUANTITY OF 3526 IDLERS VARIES ACCORDING TO TRAVEL LAYOUT

TO FLOOR PULLEY OR MACHINE OPERATOR

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SIZE	DATE	INSTALLATION INSTRUCTIONS	REV
A	07/06/98		
DRAWN BY	APPROVED BY	DESCRIPTION 350 TRACK ASSEMBLY-CONTINUOUS CURVE	
GAR			
SCALE NTS	SHEET 1 OF 1	DWG NO. II-350CC-98	



END VIEW AT DEAD END



END VIEW AT LIVE END

FOR MODEL 340 ONLY

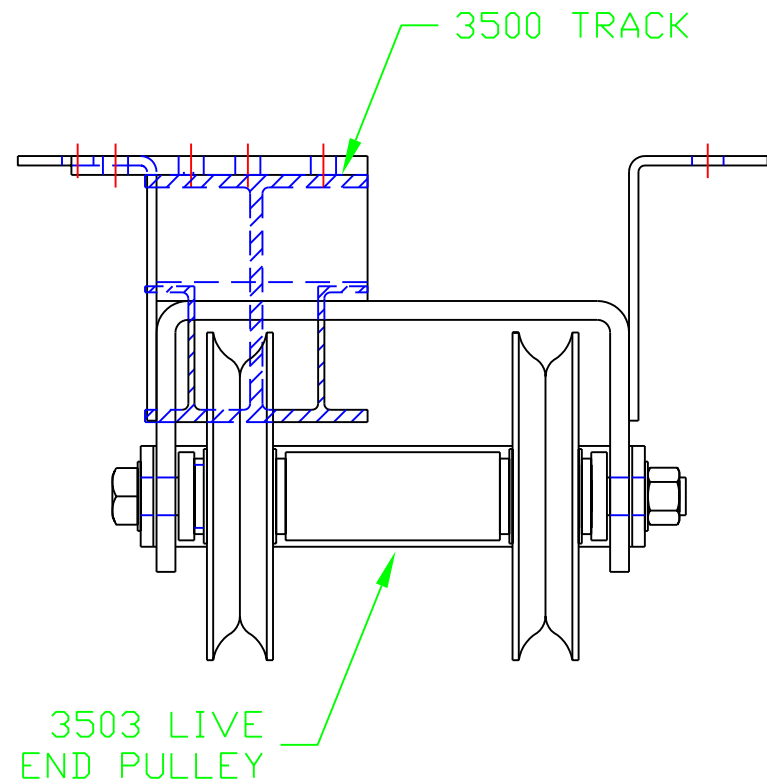
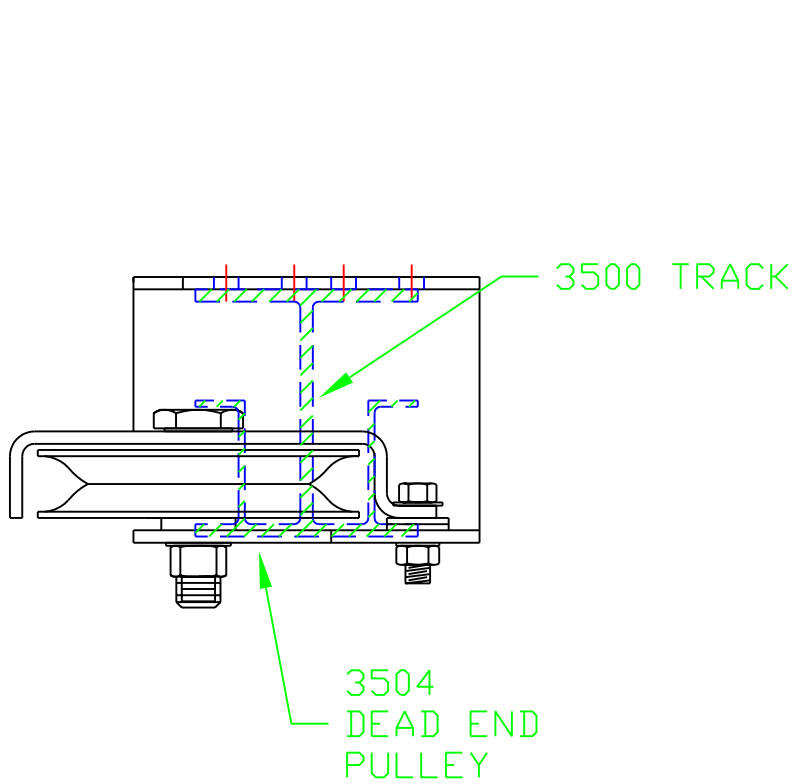
AUTOMATIC DEVICES COMPANY
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SIZE	DATE	INSTALLATION
A	08/17/98	INSTRUCTIONS

DRAWN BY	APPROVED BY	DESCRIPTION
GAR		END VIEW OF 3403 & 3404

SCALE 1/2'=1"	SHEET 2 OF 2	DWG NO. II-340CRS-98
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SIZE A	DATE 09/25/98	REV
DRAWN BY GAR	APPROVED BY	DESCRIPTION END VIEW OF 3503 & 3504
SCALE 1/2"=1"	SHEET 1 OF 1	DWG NO. II-3503-3504-98



CORD ATTACHMENT TO GROOVED CABLE DRUM ADC SILENT STEEL AND BESTEEL MODEL TRACKS

1. After the cable has been threaded through the pulleys, carriers and track, place the excess cable on the floor beneath the live-end pulley. Make sure to pull at least an extra 5 feet of cord all the way through. At this time the machine should be mounted beneath the live-end pulley. A plumb line may be used to ensure proper alignment between the machine and the live-end pulley.

Thumb Screw

Driving Dog

2. Disengage the drum from the drive shaft by loosening the thumb screw on the driving dog (see [Photo 1](#)). Thread the end of the cable through the hole in one end of the drum.

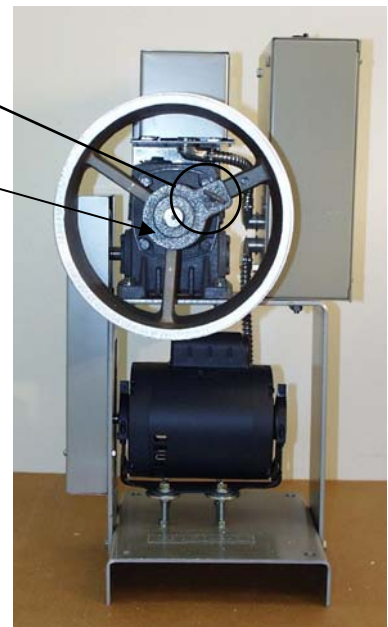


Photo 1

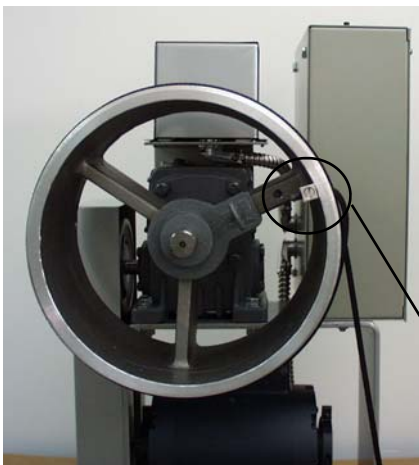


Photo 2

3. Fasten the end of cable to the inside of the drum with cord the cable connector provided. The cord clamps will be in a cloth bag, tied to the machine (see [Photo 2](#)).

Cable Clamp (CF-1)



- Following the grooves carefully, wrap the cable the drum to within 4 grooves of the far end of the drum, or with an amount of cable equal to the amount of cable travel required **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 may occur **if cable is too taut**.

Note at least 4 empty grooves

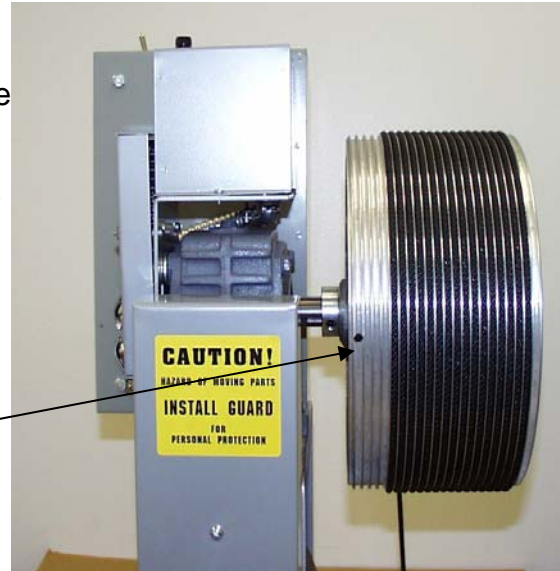


Photo 3

- Leaving at least 1 empty groove, wind 3 wraps of the cord around the drum in the opposite direction of the first cable. Feed the end of the cable through the hole in the drum and secure it with a cord connector (see Photo 1). Cut off any excess cable. Your drum should now look the drum in Photo 4 below.
- Turn the drum until the hole of the driving dog lines up with the hole in the drum spoke. Engage the drum by tightening the thumb screw. (See photo 1)
- The machine is now ready for limit switch adjustment. **DO NOT OPERATE THE MACHINE UNTIL THE LIMIT SWITCHES HAVE BEEN SET.** Directions for limit switch adjustment are located in the machine manual that accompanied the machine.



Photo 4

Limit switch cover. Limit switches located under cover. DO NOT REMOVE COVER BEFORE READING MACHINE INSTALLATION MANUAL.

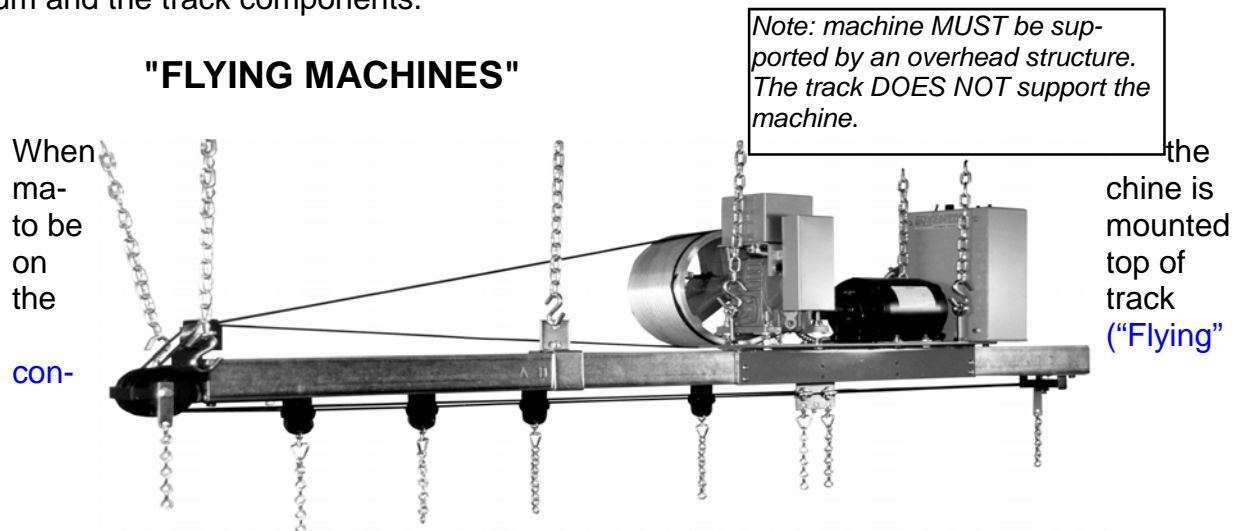
Cable properly loaded on drum.

At least 1 empty groove between cables.



IMPORTANT NOTES

- All wire-centered cable stretches during its first few weeks of use. It is strongly recommended that periodic checks be made, and excess slack be taken **out**, especially during the first few weeks of operation.
- Do not use cable that is larger than what will nest properly in the grooves of the cable drum (**3/16" in most cases**).
- In order to maintain a proper fleet angle, the machine's drum should never be less than 10 feet from the live-end pulley. A plumb line should be run from the center of the live-end pulley to the floor to ensure that the drum is vertically in line with the live-end pulley.
- Always use a covered wire center cable. Uncoated steel cable **will** damage the aluminum drum and the track components.



figuration), follow the previous instructions for threading the cable. Mount the machine to the top of the track with the angle bracket supplied with the machine. Steel track must be drilled and tapped to fasten the angle bracket. Eye bolts for securing the machine to the overhead structure are also furnished on the base. A special live-end pulley must be used to guide the cable up and over the top of the track to the machine. The machine must be mounted to the track at least 10 feet from the flying live-end pulley.

NOTE: THE MACHINE MUST BE SECURED TO AN OVERHEAD STRUCTURE FROM THE EYEBOLTS OF THE MACHINE BASE. THE TRACK ALONE CANNOT SUPPORT THE WEIGHT AND TORQUE OF THE MACHINE.

End of Instructions