



201 Grandin Road
Maineville, Ohio 45039
(513) 677-0500

Carrier Tune-Up Manual

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Cautions

Do not lubricate the tape or tape track with anything. Using WD-40 or equivalents will permanently damage the machine.

Do not remove the drive motor from the vertical tube. This manual details the proper method for removing and replacing the drive tape.

Do not use tape to hold the brake release button down for extended periods of time. This will cause overheating and damage to the brake.

Use the proper screws as described in the instructions.

Install screws in all the original factory locations.

Bill of Materials

00611041	G Car Tune-Up Instructions	1
00601013	CC W/Twist Bavsonic Manual	1
02908213	Screw-In Mic Windscreen	1
04071011	CC "O" Ring	2
04088051	G Car Liner Top & Bottom	2
04167012	WG Lubricant Warning Label	1
04191011	Blue / Green Grease	1
06820191	CC Tape Cut to Length	1
04429011	Short Tape Block Screw	2
04429021	Long Tape Block Screw	2
95005071	¼" E Clip	2
04115011	Clear Grease - 4cc Tube	1
93082723	8-32 x ½ Phillip Truss Screw	2
93042723	8-32 x ¼ Phillip Truss Screw	2
92042123	6-32 x ¼ Phillip Flat Screw	2
92042723	6-32 x ¼ Phillip Truss Screw	10
93044623	#8 x ¼ Phillip Pan Screw	11

Scope of Work

For a standard tune-up, the following work needs to be done:

Inspect the machine.

Remove and replace the drive tape.

Replace worn and/or broken parts

Clean and lube where needed.

Inspection of the Captive Carrier

Inspect the machine for visible signs of damage.

Does the car travel in slow speed on the vertical, the turn sections, and the airlock?

Does the car travel in high speed in the horizontal section? If it does not, please see page 5 of this manual for instructions on how to adjust the speed shift points.

Are the ceiling trims anchored to the ceiling?

Does the car stop properly on the inside and at car and truck on the outside?

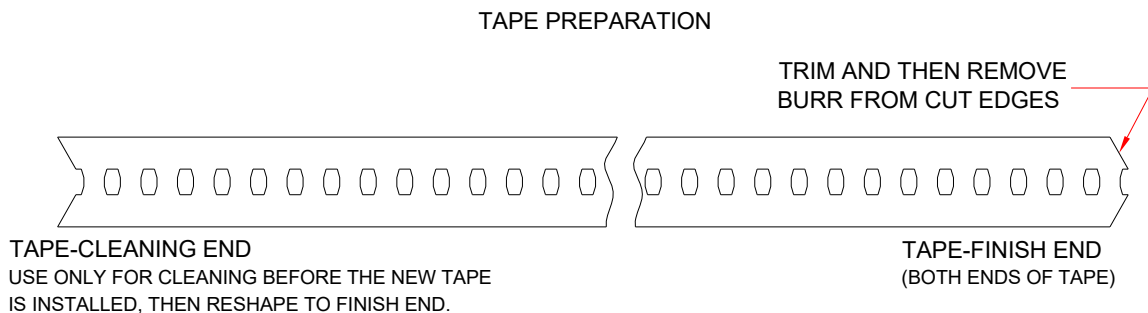
Any unusual noises?

If there is damage or problems, please consult with the factory. The telephone number is (800) 937-3322

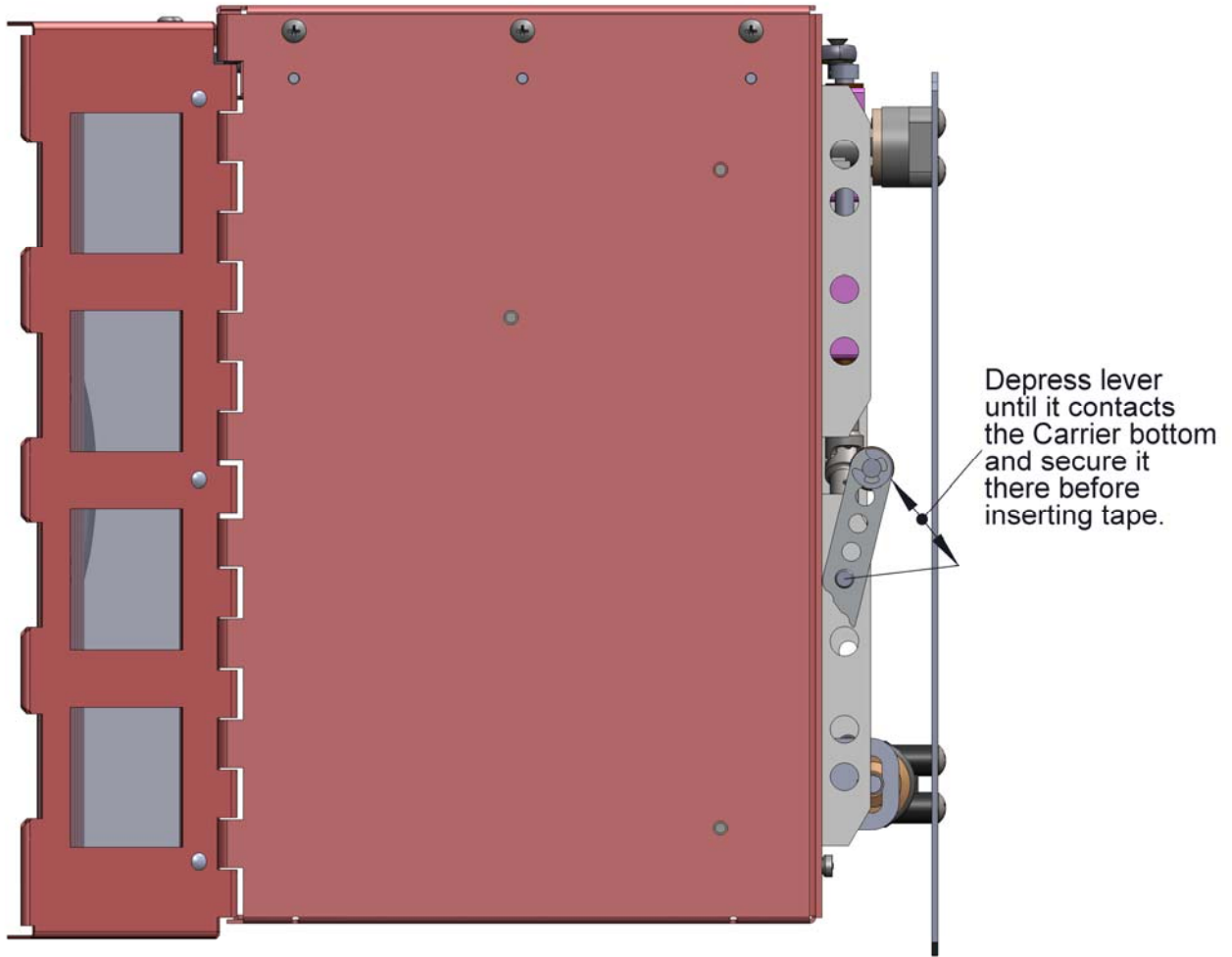
Drive Tape Replacement Instructions

1. Remove the flat head screw(s) that hold the speaker panel to the customer vertical tube. Pull down on the speaker panel. The speaker panel can hang by the speaker lead.
2. Go inside and send the car to the car position outside.
3. Open the right door of the inside vertical standoff. The door is hinged; removing the two screws will allow the door to open.
4. On the front side of the tube, insert a screwdriver into a slot in the drive tape.
5. Press and hold the brake release button on the brake board located on the right door of the inside vertical standoff (see page 5).
6. Push up on the screwdriver pushing the tape up. Observe the car outside as it lowers. Do not let the carrier hit the island. Do this until the car disengages the drive sprocket.
7. Go outside and pull the drive tape completely out of the unit.
8. Remove the screws that attach the car to the drive tape.
9. Remove the “E” clips that hold the large tape block assembly in place. Remove the assembly by twisting it diagonally in the bracket and then gently bowing the end of the bracket away from the end of the axle until it is free.
10. Remove the brass wheels from the tape block assembly. The axles should be cleaned and lubed with the blue/green grease provided.
11. Replace the old “O” rings with the new ones provided. Put the brass wheels back on the tape block and make sure that the wheels spin freely.
12. Reassemble the tape block assembly to the car. Refer to the diagram on the bottom of the car or on page 8 & 9 so that the tape block assembly is in the right direction. Bow the end of the bracket and slide the tape block in diagonally until it snaps into place. Reinstall the “E” clips provided.
13. Inspect the car for worn or damaged parts. If this is a red car and the doors need adjusting, please refer to the instructions on page 7. If the liners are damaged, replace them with the ones provided.
14. Use the old drive tape to measure and cut the new drive tape with a pair of diagonal cutters.
15. Bevel the ends of the new drive tape with a file (see the diagram below).

16. Mount the car to the new drive tape. See page 8 (red car), or page 9 & 10 (grey car), on how to do this. Make sure that the tape block holes are not stripped out. If they are, consult the factory for new tape blocks.
17. Feed the new drive tape back into the unit until you feel the drive tape stop.
18. Go to the inside and press the power button of the inside control assembly on.
19. Insert a screwdriver into a slot in the new drive tape.
20. Press and hold the brake release button on the brake board.
21. Pull down on the screwdriver feeding the tape around the drive sprocket. Continue to do this until the car is resting on the stabilizers outside. Be careful that the car is not caught on the speaker lead. Also, if this is a red car, make sure that the car lever is pushed in to allow the car to be up the customer unit past the outside stabilizer (see the diagram on page 6). If you have a problem feeding the tape into the motor surround, slide a thin screwdriver into the surround slot and move the surround sprocket left to right as needed.
22. Recall the car.
23. Run the machine and observe for proper operation. Note: If the car started out above the stop switches, it would not shift into high speed. Simply run the car again and it should change speed.
24. Check the shift point adjustment (see page 5).
25. Replace the customer speaker panel and close the right standoff door.
26. If the unit does not have a lubricant warning label on the black inside vertical control, Install the one provided with the kit.



Red Car Installation Diagram



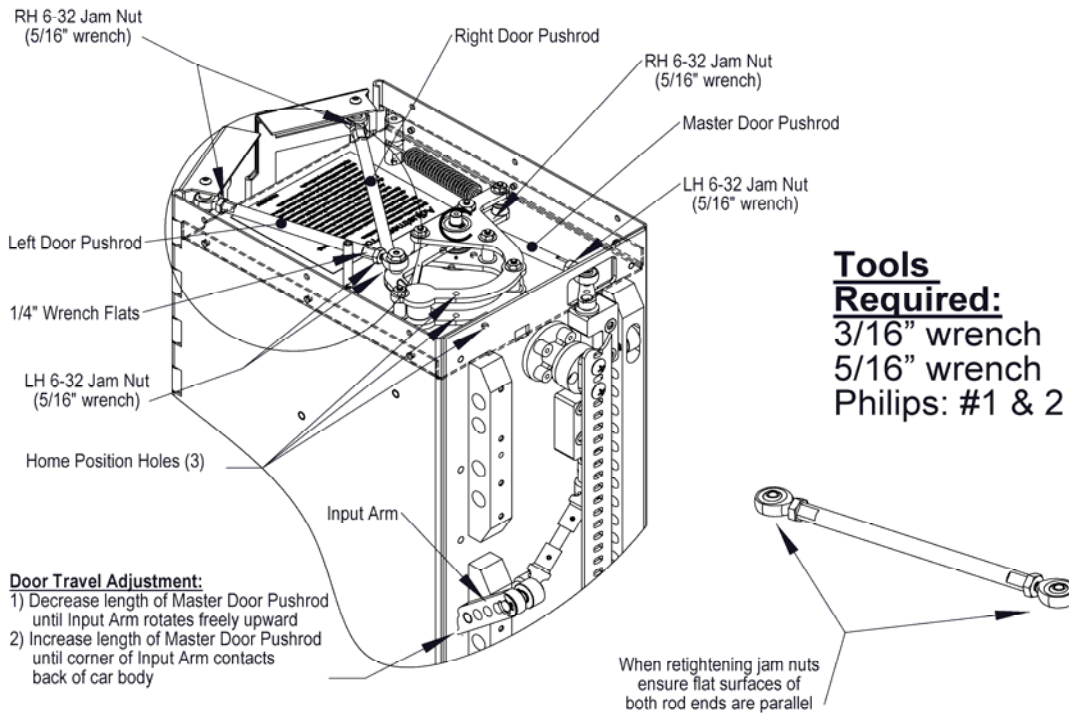
Red Car Door Adjustment Procedure

HOME POSITION - LEFT TO RIGHT DOOR ADJUSTMENT:

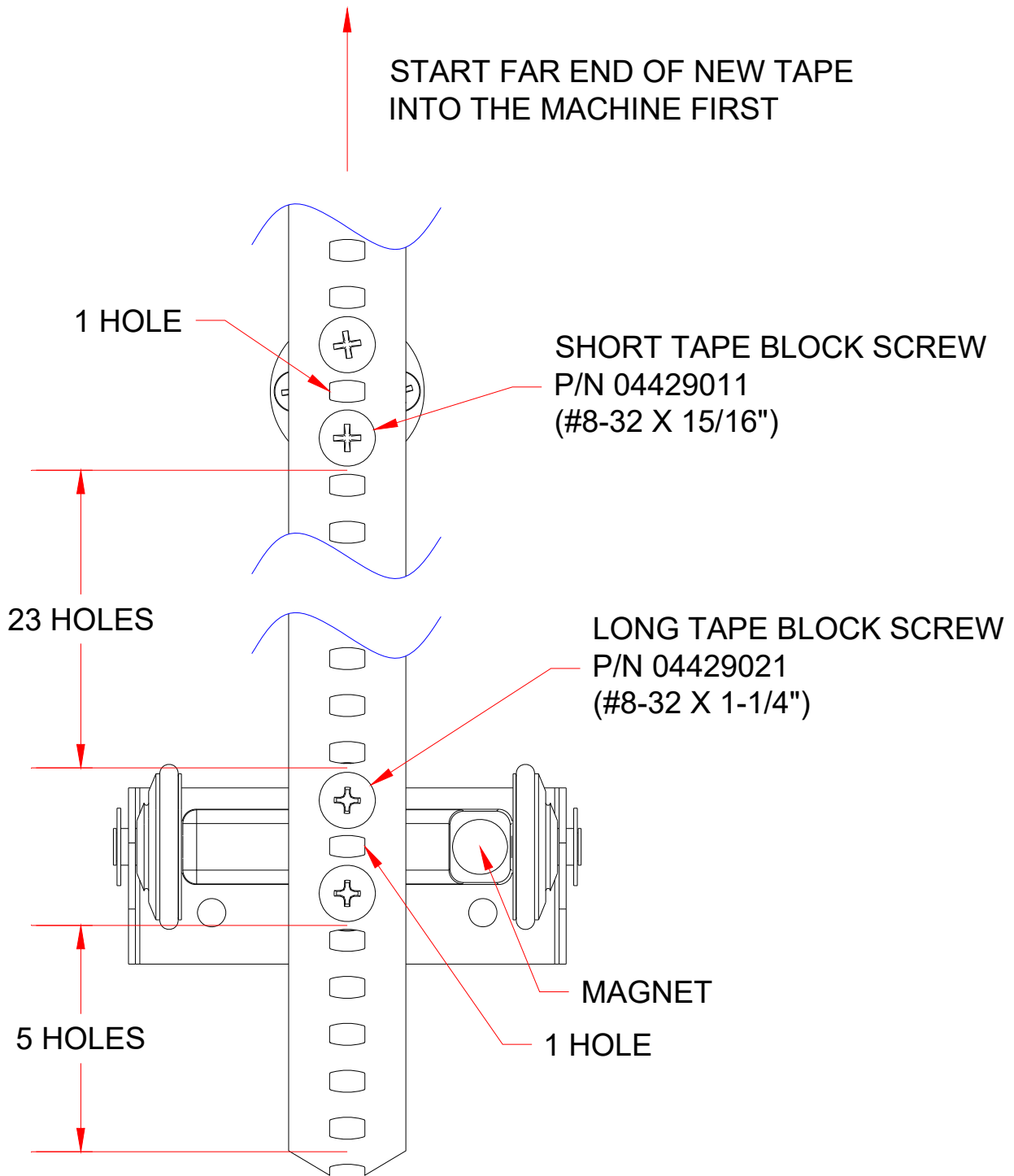
- 1) Car MUST be off stabilizers, either at the customer end or off the track entirely.
- 2) Remove Car Cover (6 screws on side, 3 screws on top).
- 3) Remove door close spring.
- 4) Loosen, and fully back off all 4 jam nuts on each door arm. Use a 5/16" wrench on the nuts and a 1/4" wrench on the pushrod wrench flats. **See diagram for Right hand and Left hand thread positions.**
- 5) Insert 1/8" pin into Home Position hole of the magnetic overrun assembly. Push pin thru both plastic arms.
- 6) Rotate the assembly until the pin drops into the 1/8" Home Position hole. **DO NOT FORCE** the mechanism or pin. If the pin does not find Home Position hole, the door arms may need to be lengthened.
- 7) With the pin thru all three Home Position holes, adjust the length of the door arms until both doors are fully closed.
- 8) Firmly tighten BOTH jam nuts on either end of BOTH door arms.
- 9) You are now ready to adjust the door travel.

HOME POSITION - DOOR TRAVEL ADJUSTMENT:

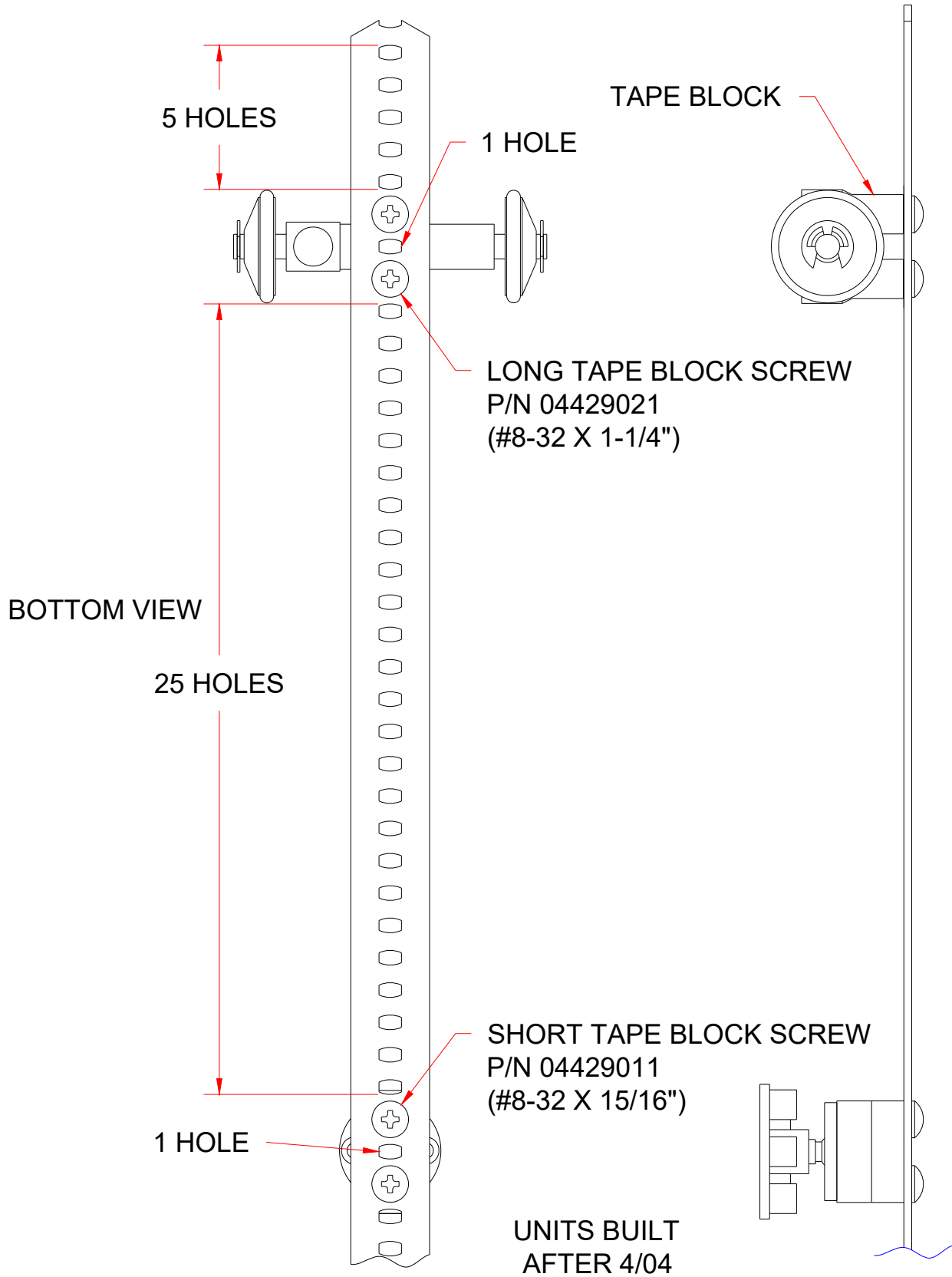
- 1) Install door close spring.
- 2) Loosen, and fully back off both jam nuts on the Master Door Pushrod. Use a 5/16" wrench on the nuts and a 1/4" wrench on the pushrod wrench flats. **See diagram for Right hand and Left hand thread positions.**
- 3) Turn the Master Door Pushrod in the appropriate direction to decrease its length until the Input Arm rotates freely upward.
- 4) Turn the Master Door Pushrod in the opposite direction to increase its length until the lower corner of the Input Arm contacts the back of the car body. (See diagram below)
- 5) Firmly tighten BOTH jam nuts on either end of the drive arm.
- 6) Remove Pin from Home Position holes.
- 7) Reinstall Car Cover.
- 8) Verify the doors open past 90 degrees and close fully when installed on the machine.



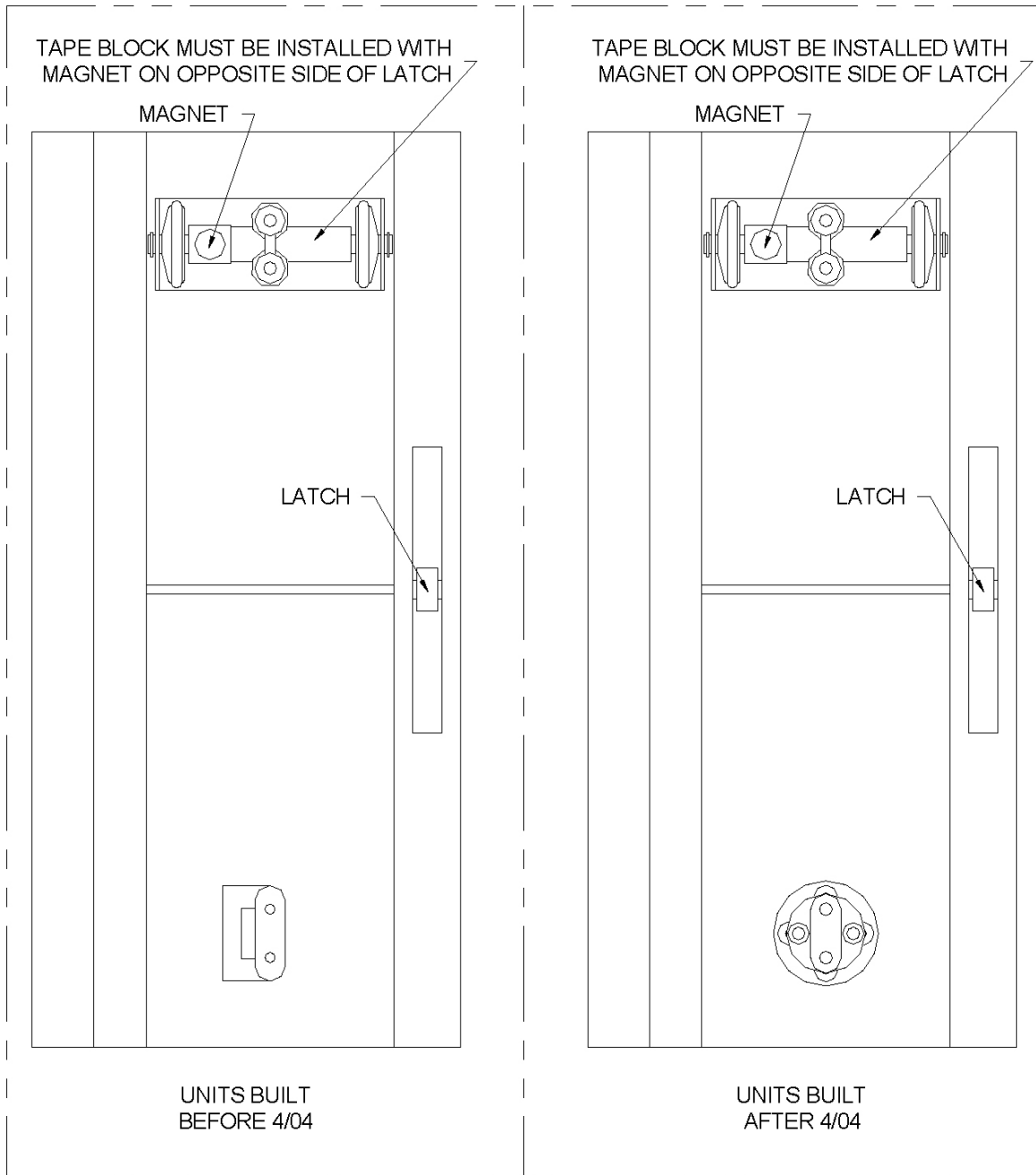
Red Car Tape Mounting Diagram



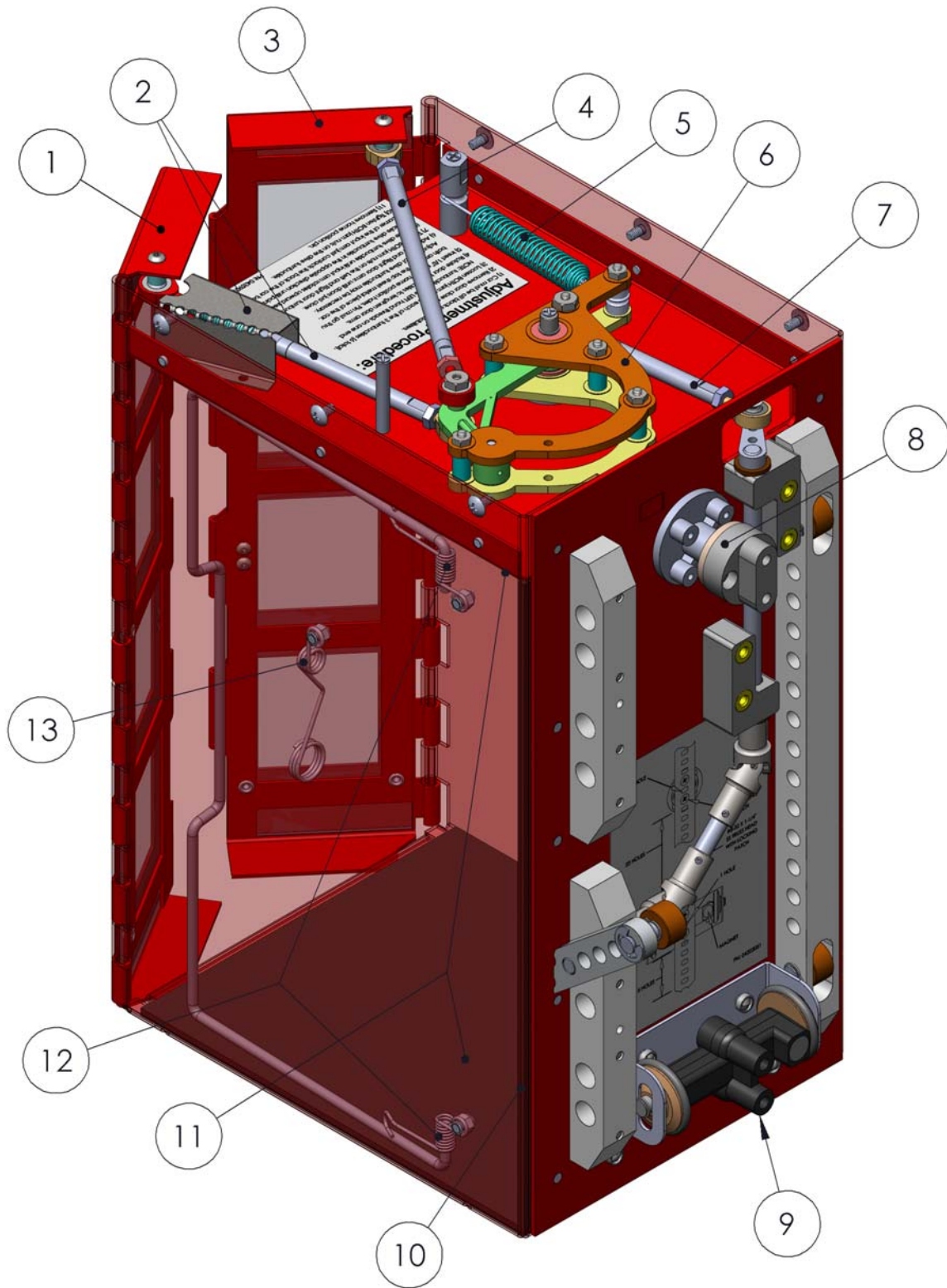
Grey Car Tape Mounting Diagram



Tape Block Diagram



Red Car Replacement Parts Diagram



RED CAR REPLACEMENT PARTS

1	04304111	GC right door assembly	Replaces a bent right door
2	04382991	GC spring pushrod upgrade kit	Replaces a broken right pushrod assembly
3	04304121	GC left door assembly	Replaces a bent left door
4	04392991	GC left door pushrod kit	Replaces a broken left pushrod assembly
5	04317021	GC door close spring	Replaces a broken or stretched door spring
6	04393991	GC magnetic over run kit	Replaces a broken magnetic over run
7	04370991	GC master door pushrod assembly	Replaces a master pushrod assembly
8	04367991	Black spherical tape block kit	Replaces a broken or stripped out tape block
9	04203991	Large tape block kit	Replaces a stripped-out tape block
10	04088041	GC liner back	Replaces a worn-out liner
11	04088051	GC liner top and bottom	Replaces a worn-out liner
12	04338011	GC bail top spring	Replaces a broken bail spring (Order top and bottom together)
	04338021	GC bail bottom spring	
13	04105021	CC hold down spring	Replaces a bent or broken hold down spring

Red Car Maintenance

1. With the doors open and holding on to the door open latch in, make sure that the doors can be forced shut and then you still can open and close them with the latch.
2. Check the doors to make sure that they open and close past 90 degree.
3. Check the doors to make sure that they close all the way.
4. Make sure that the hold down spring is not bent or broke.
5. Check the bail for normal operation.
6. Check the brass wheels on the large tape block to make sure that the o rings are not worn or missing.
7. Clean all dirt and grime from the car.

Grey Car Maintenance

1. Remove the left cover from the car. Note that there are twelve screws. Replacement screws are included in the tune-up kit. On later machines, there are undercut flat head screws on the top and bottom. **Caution:** These screws must only be used on each end of the carrier if the holes are countersunk.
2. Remove the right cover from the car. Note that there are two screws.
3. Clean the cables and lightly lubricate with the clear grease supplied.
4. Inspect all the parts to make sure that they are clean and working.

(Note: If any part needs to be replaced except for the large tape block, a new red car will have to be ordered. We no longer carry replacement parts for the grey car.)

5. Replace top and bottom liner if needed. You will have to cut the liners to size from the ones provided.
6. Replace the covers.
7. Inspect to make sure that the door arms and door does not rub any of the covers.
8. Run the car and observe for proper operation.

Revisions:

ECN Date

