

WARRANTY AND LIABILITY STATEMENT

The MySpot 500 and all of Designated Parking Products are sold subject to all the terms and condition defined on our web sites under Terms and Conditions.

Under no circumstances will DPC be liable for consequential damages or for costs in excess of the original price paid to Designated Parking.

FCC THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.

THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

PATENTS

The design of the MySpot 500 is covered by **US Patent 9,464,392**

TRADE NAME: MySpot is a registered trade name of Designated Parking Corp.

CE HEREBY, DESIGNATED PARKING CORP., DECLARES THAT MYSLOT 500 IS IN COMPLIANCE WITH THE ESSENTIAL REQUIREMENTS AND OTHER RELEVANT PROVISIONS OF DIRECTIVE 1999/5/EC. A COPY OF THE STATEMENT OF CONFORMITY CAN BE FOUND ON THE COMPANY'S WEB SITE.

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Owner Manual V1.02

MySpot™ 500 version V1 Remote Controlled Parking Barrier

Congratulations!

MySpot 500 rugged construction, careful design and attention to detail will provide you with years of service and enjoyment. However, like all things mechanical and electronic, proper installation and use are essential in order for the product to perform as designed.

MySpot 500 is installed in the middle of the space to block access to a parking space.

On command, the barrier is rotated down away from the incoming car to allow access to the parking space. A second command will raise the barrier to the vertical position where it guards the space.



The product has advanced features many of which are covered in this manual.

WARNING! Barrier may cause pedestrians or users to trip over it. Please install and provide warning signs accordingly. Note that Public Liability should be in place.



We suggest that you keep this manual in the car's glove compartment. The manual will refresh your memory how to use the barrier, as well as show you how to recognize when the batteries need replacing and how to go about it.

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IMPORTANT

DEFENSE

The MySpot 500 barrier is designed to absorb external frontal forces and yield if they exceed a dangerous point. The barrier will return on its own to the upright position once the external force has been removed.

The Defense works in both directions — if the barrier is forced towards the back of the parking space, or if it is forced towards the front of the parking space.

WARNING: The internal defense spring can store damaging energy when the barrier is abruptly released.

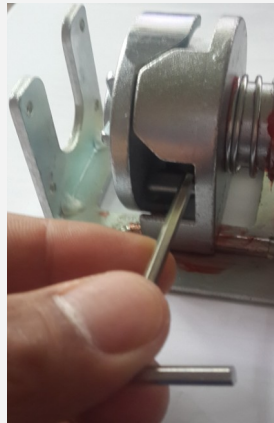
LOW BATTERY SIGNAL

When the unit detects that the battery is nearly discharged, the barrier will “hesitate” for one second at 45 degrees every time it is commanded to go down. After 50 such warning cycles, the barrier will refuse to go up any further, until the batteries have been replaced.

For assistance in using, installing, programming or troubleshooting, we recommend that you look up our video clips on **YouTube.com**. Search using the term “MySpot 500 support”. Also consult our MySpot 500 troubleshooting wizard at http://designatedparking.com/TS_500MS/index.php

MANUAL RELEASE

If the barrier is stuck in the up or down positions, you can release the locking mechanism manually. Use the M8 open-wrench to remove the vent in the back of the housing, then insert the long arm of the M3 hex wrench into the housing until you hit the brake.



Apply a sideways force to the left. This will force the brake to the right (the hole in the housing acts as a fulcrum). While holding the brake in this position, manually lower or raise the barrier.

Troubleshooting continued

the batteries and measure the voltage across each one. The voltage must be above 1.3 volt.

We recommend replacing a set of batteries if any is below 1.40V to save maintenance next time. Fresh batteries should read over 1.55V.

There can be other reasons; please consult our online troubleshooting wizard.

Barrier does not rise/drop fully

This is an indication that there is resistance that blocks the movement of the barrier, or causes the barrier to move slower than usual. Watch the LEDs in the front of the barrier. Send a command; the barrier should move without the RED LED flashing until it is stopped at the end of travel (vertically up of horizontally down).

A possible reason for slow movement or failure to reach the full up and down positions may be due to the barrier being bent/misaligned (after a car bumped into it).

Barrier does not lock in the Up position

If the barrier moves properly and reaches the vertical position, but offers no resistance against push-

back at that position, there may be a failure of the internal barrier lock.

Contact the factory or your distributor.

Use of the Wizard

Visit our online self-diagnosing wizard at:

http://designatedparking.com/TS_500MS/index.php

The wiki is symptom driven. Find the symptom, then navigate to either more questions or to the solution by clicking on the appropriate entry.

Troubleshooting

CONTACT US for assistance

1 973 669.8214 or

support@designatedParking.com

YouTube.com "myspot 500 support"

Wizard: http://designatedparking.com/TS_500MS/index.php

DIAGNOSTICS LEDs

The MySpot 500 has 2 LEDs in the front panel, visible through a clear hole in the yellow "reserved" label. The location is immediately to the left of the "S". One LED is green and the other is red.

BARRIER IS DOWN. Does not rise on command

press the center button on the remote and observe the LEDs.

If the **red LED flashes** in response to the command, it means that the remote is not paired with the barrier.

- One cause can be a mix-up between remotes paired for different barriers
- Another cause can be the introduction of a new remote that was not previously paired.
- A 3rd possibility is that the barrier unit was rebooted

and thus lost its pairing history.

- See page 5 for pairing procedures.

If the **green LED flashes** in response to the command, it means that the radio link is OK and the cause of the problem could be one of the list below:

- The barrier is mechanically prevented from rising (Red LED will flash during movement)
- The position sensor information inside the barrier unit got corrupted. Reset the power to the unit (see page 15), then send a couple of commands to exercise the barrier up and down.

If **neither LEDs flashes**, a likely cause for no response is that the barrier batteries are run down or that they "jumped" out of the holder during shipping. Access

Before You Install

BEFORE YOU OPEN THE CARTON:

If external damage to the packing is evident, notify the carrier immediately. Shipping damage is not covered by the manufacturer's warranty.

KIT CONTENTS

The kit includes the following.

- Flat open wrench M8
- Hex L wrench M3
- 4 concrete expansion anchors
- 2 HTm remote control fobs
- This manual

TOOLS REQUIRED—CONCRETE

The following tools are required to install the MySpot 500 on **concrete**.

- Hammer drill
- 10 mm drill bit
- M13 (1/2") open end wrench
- Hammer

TOOLS REQUIRED—ASPHALT

The following tools and supplies are required to install the MySpot 500 on **asphalt**.

- AK-4 anchor kit
- Hammer drill
- 7/8" drill bit, 6" long
- 1/2" open end wrench
- Hammer
- Grease or anti-seize paste

Installation instructions begin on page 7.

OPERATION

The MySpot 500 is provided with 2 handheld remotes ("fobs") that have been factory programmed to control this individual barrier. Only button #2 on these remotes is pre-programmed to control the barrier.



The fobs will control the barrier from a distance of 1 foot to 40 feet (0.3 meter to 12 meters). You need to hold the fob horizontally and face the front of the barrier (the "Reserved" yellow strip on the housing of the barrier).

Pressing button 2 on the fob will raise the barrier if it was down, or lower it if the barrier was up.

If the barrier hits resistance on its way up, it will stop and reverse itself to bring the barrier back down. If the barrier hits resistance on the way down, it will stop and await a new command.

Remote's Features

The HTm (Hand Transmitter) remote offers an array of features unique in the industry. In this section we cover some of these features.



Pairing

Pairing is a procedure whereby a remote is added to the list of devices that are authorized to control the barrier. It is similar to the procedure used to pair your Smartphone with your car for hands-free operation.

Why 3 buttons?

Each button on the HTm remote control generates an individual code. That allows one remote to control 3 individual MySpot 500.

The HTm also supports a 2-button mode of operation. In the 2-button mode, 9 MySpot barriers can be controlled individually.

1 or 2 Button Code?

The HTm is shipped in the mode where only one button is required to be pressed. For applications where more than 3 adjacent barriers need to be controlled, the HTm can be set to a two-button mode. Up to 9 adjacent barriers can be individually controlled. A command is sent only after the 2nd button was pressed (e.g. button 2 then button 1).

To program the HTm remote to the 2-button mode, or to return it to its 1-button mode, see page 6.

Toggle vs. Discrete Commands

Toggle commands instruct the barrier to alternately go up and go down. This is the standard configuration for the barrier and the HTm.

Toggle commands are a simple and effective way to control the barrier when it is in line of sight. You know that if the barrier is down and you send a command, the barrier will go up, and vice versa.

There are applications where Discrete commands are preferred. The commands are Up and Down. If one sends an Up command and the barrier is up, the command will be ignored. Likewise, when the barrier is down, a Down command will be ignored.

Discrete commands are available when using the PK250 long-range transmitter.

Reset & Reboot

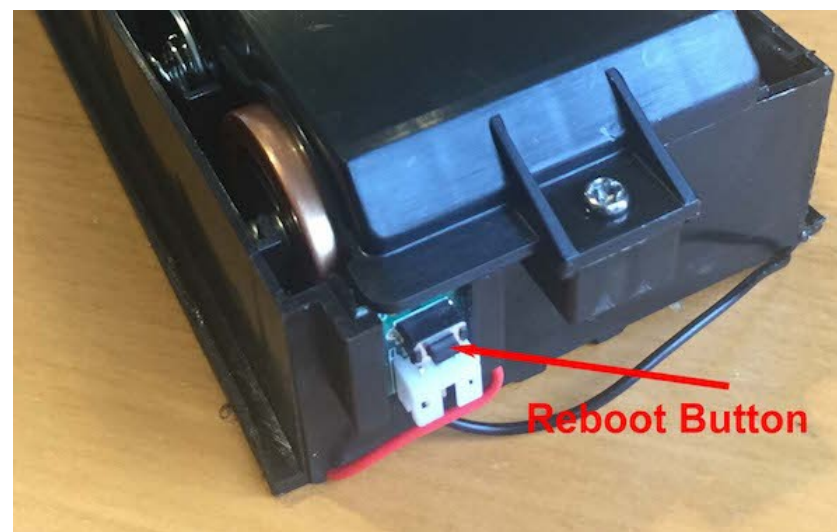
RESET

Reset is achieved by momentarily removing power from the electronics in the barrier unit.

1. Follow the steps to gain access to the battery holder (page 11)
2. Pull out the battery closest to you, and reinsert it 5 seconds later.
3. After the power has been restored to the unit, watch the green and red LEDs in the front of the unit just to the left of the "S" in "RESERVED".
4. The sequence of light flashes identifies the software revision level. Revision 1.4.1 will flash green once, red 4 times followed by green 1 time. This is followed by 10" of no activity, then 3 quick red flashes indicating that the unit is ready to respond.

REBOOT

1. Follow the steps to gain access the battery holder (page 11)
2. Pull the battery holder as far as it will go, exposing all 5 battery cells.
3. Reach behind the wall of the holder. You will feel a push switch. Push the switch towards you and hold it for 7 seconds, then release it
4. If the reboot was successful, you will see a light show of the green and red LEDs where they flash alternately 6 times. This will be followed by the power up light show (see Reset on the left)
5. After the reboot, send a command from the remote of your choice. This will automatically pair that remote with the barrier.



Remote's Battery Replacement

The MySpot 500 is supplied with the HTm fobs.

NOTE:

The HTm uses 2 CR2032 batteries in two separate holders.



To replace the batteries, open the small Philips screws on the back of the unit. Replace the Lithium button batteries with the suitable battery as list on the left. **Observe polarity!** The outer housing of the batteries should be on the top.

Check operation of the indicator before closing the housing. If OK, close with the screws

Pairing Procedures

Pairing links a remote to the barrier. When an un-paired remote sends a command to the barrier, the barrier will not move in response to the command as this command has not been authorized. The red LED on the front of the barrier will flash for 1/2 second to acknowledge the signal. We refer to un-paired but otherwise valid signals as RED commands.

When a paired command is received, the green LED will flash. And the barrier will move. We refer to these as GREEN commands.

Adding Remotes

Pairing a new remote is a 4-step procedure. It requires a previously paired HTm and the new remote to be paired. We refer to the pre-paired remote as the GREEN remote and to the new one as RED remote.

Preparations:

1. Bring the barrier down using the Green remote
2. For the duration of the pairing procedure, stand on the barrier to prevent it from rising
3. Each step must follow its predecessor within 5 seconds. If the time was ex-

ceeded, the pairing sequence will be aborted and the red LED will flash once.

4. If the step was performed within the required time and in the proper sequence, the Green or Red LED will flash a number of times indicating the completed step count (1 to 4).

Step 1: With the barrier down, stand on the barrier and send a Green command (from the pre-paired HTm). The green LED on the barrier housing will flash once.

Step 2: As soon as the LED on the HTm has turned off, send another Green command (from the pre-paired remote). The green LED on the barrier housing will flash 2 times.

Step 3: As soon as the LED on the "green" HTm has turned off, send a Red command (from the un-paired remote). The red LED on the barrier housing will flash 3 times.

Step 4: As soon as the LED on the HTm has turned off, send a Green command (from the pre-paired remote). The green LED on the barrier housing will flash 4 times.

The new remote has now been paired and can control the barrier just like any "green" remote.

Special Configurations

Erase Memory (Boot)

The only way to delete remotes that were previously paired with the MySpot 500 is to erase all the paired remotes from the memory of the barrier. This is also the case when all the paired remotes have been lost, and a replacement remote needs to be added. This erasure is known as a "Boot".

Boot can be done by pressing an internal "Boot" switch at the back of the battery holder. See page 13.

Boot can also be done remotely, using the PK250 keypad remote controller, but only if the PK250 was previously paired with the barrier. Another way is to pair a total of 16 HTm. When the 16th is added, a boot occurs.

Pairing After Boot

This procedure is only applicable immediately after the MySpot was booted and its memory was erased. The MySpot 500 are delivered with 2 remotes which have already been paired. If you need to add more remotes, see the procedure "Adding Remotes" on page 5.

To pair a remote after a boot, send two commands from the remote. The first command will be acknowledged as a RED flash on the LED in the housing. The

next command will be acknowledged as a GREEN flash.

The barrier has now been paired with its first remote.

Please keep this remote in a safe place. It can be used to authorize additional pairing. If you have paired 2 or more HTm with the barrier, any one of them can authorize additional remotes.

Program 2 Button Mode

To place the HTm remote in the 2-button mode (where a sequence of 2 keys is required before a command is sent out):

- Press and hold buttons **1 & 2** simultaneously.
- After 5 seconds, the indicator on the HTm will start flashing. Release the buttons. Make sure that the indicator continues to flash.
- Press button **2** and hold until the flashing indicator turns off.

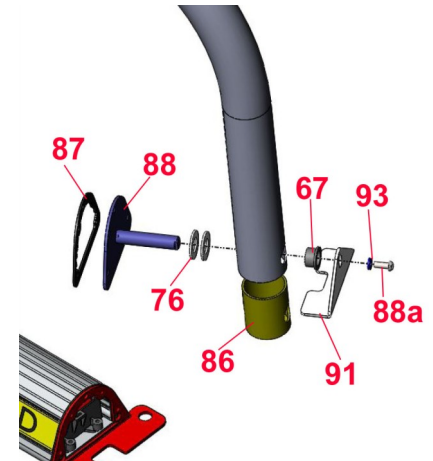
To place the HTm in the 1-button mode, follow the sequence above but as the last step press and hold button **1**.

TEST: Press any button once. IF the indicator responds immediately, you are in 1-button mode.

Battery Replacement continued

fresh D alkaline batteries. We recommend **Duracell**.

8. **Observe the polarity of the 5 batteries as you insert them.** Failure to do so will damage the electronics.
9. Place the holder cover and secure with the 2 screws. The cover is not symmetrical — it has a tab on one end that fits over the boot switch assembly. Also note that you need to snap the cover into the base so that the 2 holes in the cover align with the holes in the holder.
10. Gently push back the battery holder until it is fully inside the housing.
11. Rotate the arch back to its place at the end of the housing. Make sure that the gasket 87 is positioned and aligned between the end cap and the housing. *The alignment needs to be perfect to prevent water damage.*
12. Use the longer (20 mm) screw for the top hole, using the nylon washer under the screw head. Likewise insert the 2 short 10 mm screws into the other 2 holes in the bracket using the nylon washers.
13. Verify that the gasket is straight and did not slide down and is thus completely



The picture above shows the components of the bearing assembly of the cover to the battery compartment. **DO NOT** remove screw 93; all the parts stay as an assembly as you rotate the arch

aligned with the housing and the bracket..

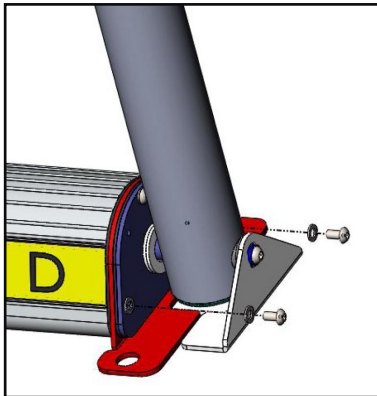
14. Tighten all 3 screws as hard as you can.

Failure to use the 3 nylon washers will allow water to seep into the housing and damage the electronics.

Battery Replacement

The 5 batteries should provide 2 to 3 years of life under residential operating conditions. When the batteries approach their end-of-life, *MySpot 500 will stop for 1 second midway on its way down.*

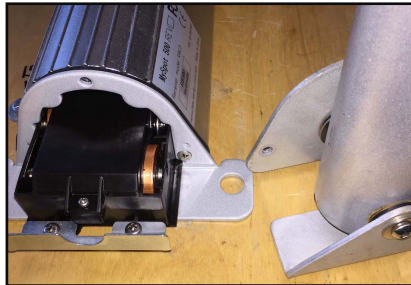
If the batteries are not replaced before they are completely exhausted, after 50 additional operations, the barrier will accept one last command and will stay down.



To replace the batteries:

1. Loosen the right hand end cap by removing 3 round head hex screws using the provided 3 mm hex wrench
2. If the barrier is in the way of accessing one of the screws, use the remote to rotate the barrier and stop the barrier manually when the screw becomes accessible.

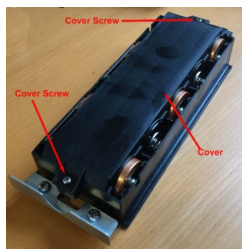
3. If the barrier does not respond (due to low batteries), use the emergency key to release the brake (see page 2).
4. Rotate the barrier as shown



and pull out the battery holder so that the holder is free outside the housing.

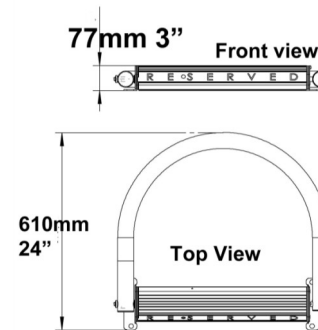


5. Be careful not to move the rubber gasket that is attached to the end cap.
6. Remove the battery holder cover by opening the 2 screws at the end of the holder.
7. Replace the batteries with 5



Positioning the Barrier

Barrier Footprint



The barrier is positioned so that the "RESERVED" label faces the entrance to the parking space. When the barrier is lowered (shown above in the lowered position), the barrier rotates away from the entrance.

FRONT VS. MIDDLE

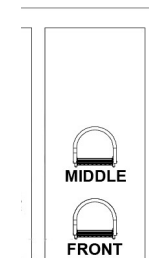
MySpot 500 can be positioned in two distinct locations within the parking space – in the middle or at the front.

Front mounting

means that the car drives in and parks *behind* the barrier.

A benefit of front mounting is that the barrier can be used as a theft deterrent, raising it with the car parked behind it.

The barrier should be installed close to the front end of the space, to allow the barrier to rise behind even a large vehicle. In order to raise the barrier with the car in place, you need a clearance of 0.65 meters



(25") between the bumper and the base of the barrier.

Installing the barrier at the front in multi-car parking areas will increase the likelihood that the barrier will be bumped by cars backing up from parking spots across the aisle and is not recommended.

Middle mounting means that the barrier will stay under the car while the car is parked in the space. The advantages of middle-mounting are:

- The barrier is further removed from dirt and debris pushed from the main access lane
- Cars making J turns are less likely to bump into the raised barrier accidentally
- Cars entering adjacent lanes are less likely to accidentally hit the barrier

When placing the barrier in the middle of the stall, the center line of the device should be about 1.5 meters (5 feet) from the rear of the stall.

STANDING WATER

MySpot 500 is sealed to prevent water from entering the unit. However, the housing should not be exposed to *standing* water or ice as it will materially reduce the range of the remote control signal.

Select a spot for the housing that is slightly raised above the surface, or add a plate to raise it. Be mindful of the added height if low-clearance cars are to use the space

Installation on Concrete

IMPORTANT!!!

The barrier is shipped in Hibernation mode. To wake the unit up, send a series of 10 commands in quick succession.

Once the barrier responds with a red or green LED flash, the unit is in normal mode and will respond to single commands.

1. While standing on one of the mounting ears of the housing, use the remote to bring the barrier up to the vertical position. Make sure that the barrier has exited the Hibernation mode (see above).
2. Place the barrier at the location you selected.
3. Mark the 4 holes using the mounting ears as your template
4. If you are installing on concrete or other masonry surfaces, use the expansion anchors that are provided in the MySpot 500 kit.
5. Drill four 10 mm (3/8") holes, 65 mm (3") deep.
6. Push the anchor into the hole until its washer is resting on the surface, **DO NOT HAMMER THE ANCHOR IN!** The anchor will collapse and be destroyed.
7. If the anchor does not slip into the hole, re-drill the hole while moving the drill from side to side to slightly enlarge the hole.
8. Tighten the bolt a couple of turns until the anchor bites into



the concrete walls. This will prevent the anchor from rotating freely later, or from falling deeper into the hole.

9. Before removing the bolt (to attach the barrier), clean the area around the anchor so that no debris will enter the thread,
10. Remove the bolts, place the barrier assembly over the anchors and use the washer and bolts to secure the assembly to the anchors.
11. Tighten the bolts to make sure that the anchors are holding fast and to prevent the bolts from loosening up over time.

If an anchor rotates in its seat:

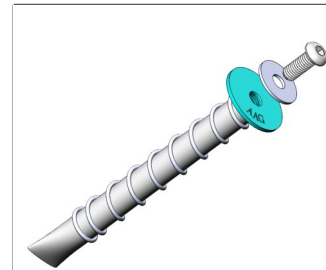
If the hole is only slightly oversize, use a sharp point to hold the anchor against the wall of the hole and gently tighten the bolt. At some point, the expanding anchor will grip the walls of the hole. Turn the bolt another 1/2 turn to make sure that the anchor is set.

If the hole is too large, you may need to fill it with a concrete mix or epoxy, and then re-drill once the mixture has hardened. Inserting the anchor into the still-liquid epoxy may fill the threads and prevent the anchor from accepting the bolts. If the bolt is placed while the filler is not yet hardened, it may not be able to be withdrawn later.

You may also order DPC MA516 anchors, as these require a 16 mm (5/8") hole, and thus can be re-drilled in the same location.

Installation on Asphalt

1. Do not attempt to use the expansion anchors that are provided in the kit for installation on asphalt. The expansion anchors are **guaranteed** to loosen up in a matter of hours.
2. We strongly recommend that you use our **AK-4 asphalt anchor kit**, designed specifically



for mounting the MySpot 500 to asphalt surfaces. The kit contains 4 SP10 anchors with bolts preinstalled, and 2 bags of grout.

3. If you expect to have to remove the barrier for snow plowing, for example, we strongly recommend that you apply grease to the bolt thread. Even better is anti-seizing paste.
4. Drill a 22 mm (7/8") hole, 150 mm (6") deep.
5. Clean the area.
6. To activate the grout, add under a 1/4 cup of water to the bag and mix thoroughly by kneading the bag.
7. Use the bag to pour the grout into the hole, filling it to the top.

8. Do not remove the bolts from the anchors. Press or gently hammer the anchor into the hole until it is flush with the asphalt. (The head of the anchor will rest on the asphalt.) Do not delay this step as the grout cures within 10-15 minutes.
9. Wipe any excess grout from around the anchor.
10. 15 minutes after the last step, remove the bolts from the anchors and install the barrier.
11. We recommend applying heavy grease or aluminum anti-seize paste (Permatex 80078) to the threads of the bolt before inserting it into the anchor. This reduces rust and facilitates removal of the bolts in the future.
12. Use a 1/2" wrench to tighten the bolts.



Seasonal Removal

If you need to remove the barrier often (e.g. for snow removal), we suggest the use of stainless steel bolts to attach the unit to its anchors. As a minimum, fill the anchor thread with heavy grease before screwing in the bolts.

If you installed on asphalt using our SP10-38 anchors, we offer ThreadGuards (P/N 53-0208) that snap tightly to the opening and protect the thread. The ThreadGuards are essentially flat on top so that they will not present a tripping hazard.