

# MySpot 120 (v1)

## Service Manual Version 1

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### Updated Documentation

The user is encouraged to contact the factory to obtain updated version of this and all other manuals. Please view our web site at [www.DesignatedParking.com](http://www.DesignatedParking.com) for announcements and posting about updated documentation.



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# MySpot 120 Service Manual

## Introduction

### Installation Manual

This service manual does not cover descriptions and explanations of how the product works or how it is to be installed and used. These are covered in MySpot 120 Installation Manual. You can download and print the latest Installation manual from our web site [www.designatedparking.com/downloads/install\\_manuals](http://www.designatedparking.com/downloads/install_manuals)

### PARTS LIST

The parts list below displays the components that make up the MySpot 120. Each component is identified with a part number, as well as a reference number. The reference number is used extensively throughout this manual when referring to a component, and are shown in the drawings as well.

#### PARTS 01-6420. MySpot 120 kit random key

Ref	PN	Description	Note	qty	ListPrice
01	51-1210.	Plate, MS120 base mounting		1	\$31.00
02	51-4016.	Extruded pylon MS120 with secondaries		1	\$48.00
03	51-6303.	Base casting, MS120		1	\$19.00
04	51-6302.	Defense hinge, painted, for MS120		1	\$21.00
05	51-6301.	Upper Hinge, painted, for MS120		1	\$29.00
06	04-3052.	Cable assembly, MS120		1	\$9.50
07	49-2003.	Lock, MS120		1	\$10.00
08	53-0187.	Cap, MS120 pylon		1	\$8.00
09	94-1110.	Label, warning MS120 pylon		1	\$6.00
10	41-1306.	Screw M4 x 8 mm Security flat head	base to plate	4	\$1.00
11	51-1212.	Arm for keylock, MS120		1	\$2.50
12	51-2846.	Plate, MS120 defense spring support		1	\$5.00
13	43-1219.	Retaining ring (e-ring) M5, MS120	pin to lock arm	1	\$0.25
14	43-0005.	Washer M8 x15.5mm T=1mm MS200	Cable under nut	1	\$0.10
15	49-9216.	Spring, compression latch return MS120	pushes latch up	1	\$1.00
16	51-6304.	Latch casting, MS120	locks hinge	1	\$15.00
17	51-6305.	Plug for lower hinge, MS120		2	\$5.00
18	51-7018.	Tube, PU Spring container, MS120		1	\$5.00
19	51-7019.	Rod, latch release, MS120		1	\$6.00
20	51-9221.	Cup, PU spring end MS120		1	\$7.00
21	53-2002.	Spring, Polyurethane MS120 Defense		1	\$11.00
22	55-3005.	Pin, lifting latch, MS120	on lock arm	1	\$3.50
23	42-1047.	Nut M3 hex	lock rod	2	\$0.50
24	43-1101.	Washer, split locking M6	screw to lock arm	1	\$0.50
31	71-1063.	Carton, Unit packing MS120 915x365x140mm KK		1	\$9.00
32	73-4063.	Poly Foam insert Left 150x340x110mm MS120		1	\$3.50

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Ref	PN	Description	Note	qty	ListPrice
33	73-4064.	Poly Foam insert Right 150x340x110mm MS120		1	\$3.50
40	42-1048.	Nut M8 hex	cable lock	1	\$0.50
42	41-1305.	Screw Security flat head M5 x 10mm		6	\$1.50
51	03-6270.	Anchor assembly, for MS120		3	\$1.45
52	71-1065.	Template MS120 mounting		1	\$3.50
53	51-6202.	Socket, security bolt tool, MS200		1	\$5.00
54	51-6207.	Wrench, M5 hex with hole for security screws		1	\$3.50

# MySpot 120 Service Manual

## Section 1: Disassembling the Unit

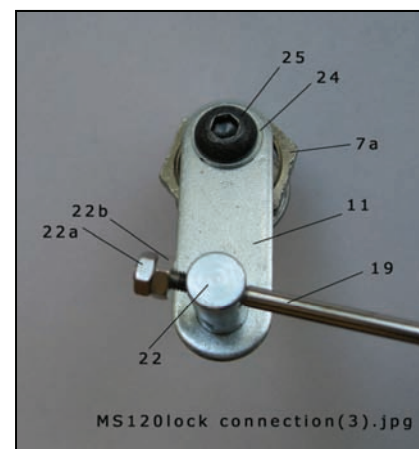
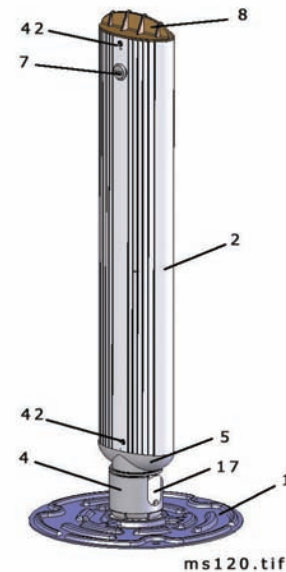
The main external components of the MySpot 120 are shown above. The pylon 2 (also called "post") is attached to the mounting plate 1 through a hinge 4 and 5. The lock 7 allows to unlock the hinge and lower the pylon.

The top of the pylon is cap 8. The cap is attached to the pylon by 2 security screws 42 (only the front one is shown). The pylon is attached to the upper hinge 5 by 2 security screws 42 (only the front is shown). The drawing does not show the "Reserved" label 9, which is glued to the front of the pylon.

To access the interior components of the device, follow these steps:

1. **Remove Cap:** Using the security wrench 54 that is provided in the kit, remove the 2 screws that hold the cap to the pylon. The front screw is covered by the yellow label. Use the wrench through the label and unscrew the screw through the label. It will create a clean hole. Pull the cap upwards and out of the pylon.
2. **Disconnect locking rod:** The locking rod 19 connects the lock with the pin assembly down at the hinge. In order to remove the pylon, we need to disconnect the rod from the lock assembly.

As shown in the picture to the right, lock 7 is connected to rod 19 through arm 11 and lifting pin 22. The simplest way to disconnect the rod is by opening screw 25. This is an M6 screw with hex cup head. You will need a 6 mm L-hex wrench. The screw may be hard to turn, because a thread lock chemical is used in production. (Make sure to use a dab of a similar thread lock when reassembling the unit.)



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## Section 1: Disassembling the Unit

3. **Remove Pylon:** Remove the two screws 42 at the bottom of the pylon (one in front and one in back). The pylon can now be pulled out of the upper hinge 5.
4. **Remove Main Spring:** The Main Spring 21 provides the force that keeps the pylon upright when the hinges are locked. It is a plastic compression spring that can generate over 600 Kg (1,300 lbs) of force.

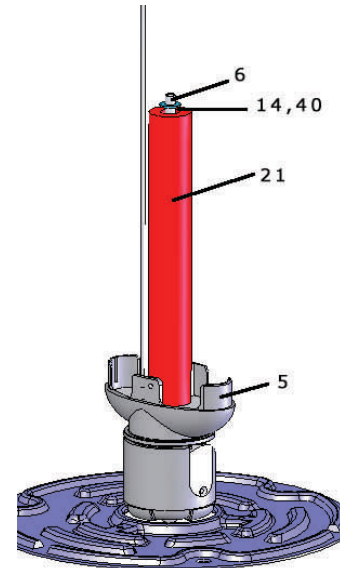
The spring is held in place by a stainless steel cable 6, which is anchored in the base of the unit. The top end of the cable identified as 6 in the drawing on the right is secured by two M8 nuts 40, with a washer 14 held against a metal cup 20 (not shown).

To release the spring, open to the top nut 40 first, then remove the second nut. You may need to hold the lower nut with one wrench and unscrew the top nut using another wrench. There is likely to be significant resistance to loosening the nuts, as they are secured at the factory with a thread-locking liquid.

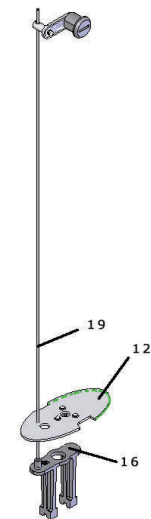
If the nuts rotate together with the cable, push the spring 21 sideways to increase its tension.

Remove the nuts, washer and cup, then remove the spring and the guide tube 18 inside the spring.

5. **Lift Rod Assembly:** Pull out the lock-pin assembly as shown in the right drawing. The plate 12 is sandwiched between the rod 19 and the lock pins 16 but will offer no resistance to pulling the assembly out.



MS120 pu assm.tif



ms120 lockpin assm.tif

**AT THIS POINT, THE HINGE AND BASE ARE LEFT AS AN ASSEMBLY. CONTINUE WITH THE DISASSEMBLY IF REQUIRED, FOLLOWING THE INSTRUCTIONS IN THE NEXT PAGE.**

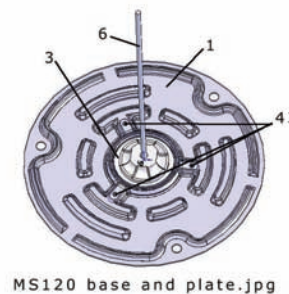
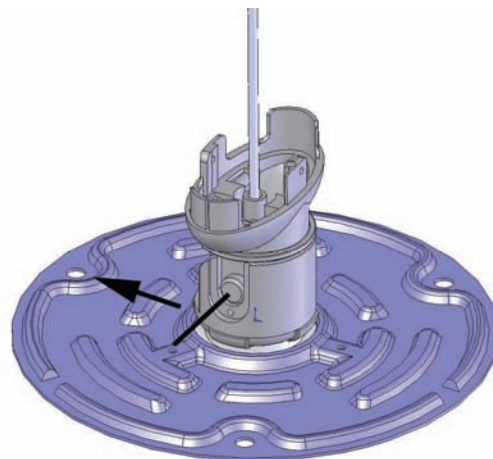
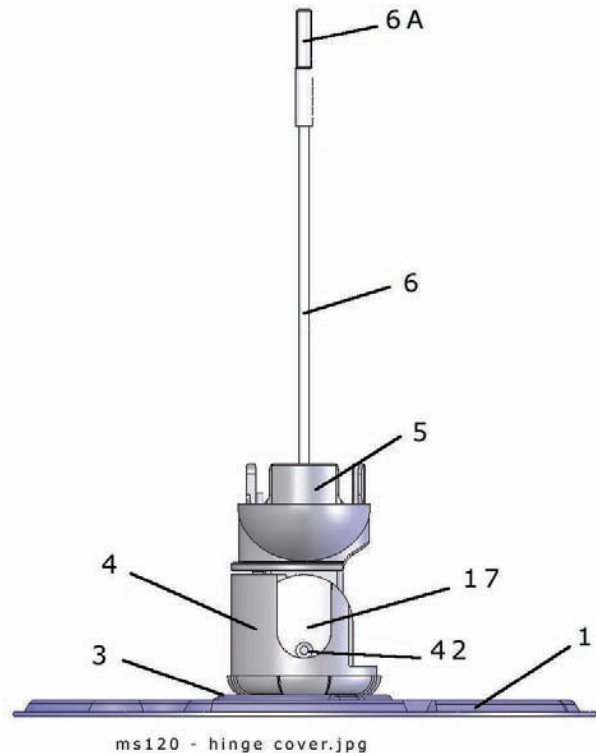
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## Section 1: Disassembling the Unit

- 6. Remove Hinge Covers:** The picture to the right shows the assembly after the previous steps have been completed. The upper hinge 5 is held in place through the 2 covers 17 (one shown, the other is on the other side of the casting). The covers are held by M5 screws 42.
- 7. Remove Upper Hinge:** The hinge 5 can now be pulled out of the lower hinge and threaded out through the cable 6. (6A is the threaded end of the cable.)
- 8. Remove Lower Hinge:** Lower hinge 4 can now also be pulled up and out of the assembly.

**Note the position of the lower hinge in respect to the plate** — the plate is not symmetrical, and a misalignment during reassembly will cause the lowered post to hit one of the mounting screws. See the drawing to the right.

- 9. Remove Cable:** The cable can be pushed through the opening in the base casting 3.
- 10. Remove base:** The base casting 3 is attached to the plate 1 with 3 security bolts 43. Once you removed the 3 screws 43, you have completely disassembled the MySpot 120.

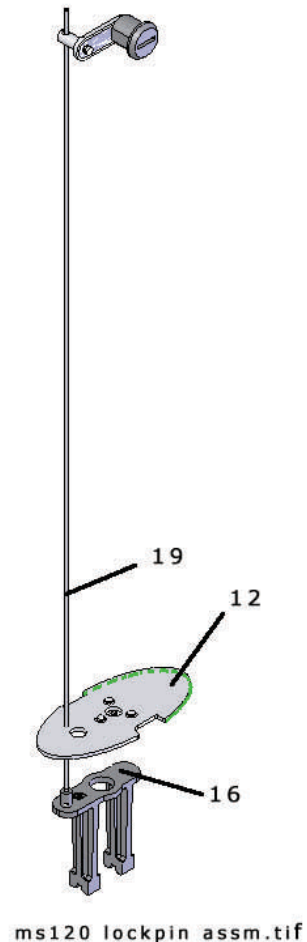
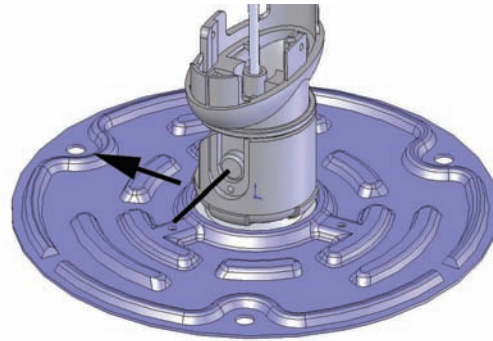


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## Section 2: Reassembling the unit

The re-assembly steps are summarized below.

1. Attach the base casting 3 to the plate 1, using 3 screws 43.
2. Thread the cable 6 through the bottom of the base casting.
3. Place the lower hinge over the base casting. OBSERVE the alignment, per picture on the right.
4. Place the upper hinge over the cable and align it as shown.
5. Prepare the lock rod assembly as shown in the drawing on the right. The rod 19 is threaded into the latch casting 16. Use a thread locking liquid such as Loctite 270. Note that there is a spring between plate 12 and latch casting 16 (not shown). The function of the spring is to push the latch into place.
6. If the lock arm was disconnected, do not connect it at this time.
7. Slide the plate 12 over the rod as shown, observing that the 3 dimples on the plate face up.
8. Make sure that the latch is seated properly, as well as the plate 12. It should be in full contact with the hinge 5.
9. Slide the tube 18 over the cable, followed by the plastic spring 21, the metal cup 20, washer 14 and one M8 nut 40. Hand tighten until the plastic spring is held in place and can not be moved vertically.
10. Using a M8 wrench, tighten the nut 40 5 turns.
11. Use the second nut 40 to double lock the first one, tightening one nut against the other.



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### Section 2: Reassembling the unit

12. Pull on rod 19 and verify that the hinge can bend all the way to bring the rod tip to touch the ground.

13. Install the lock body 7 into the post 2.

14. Slide the post over the rod and spring assemblies and position it over the upper hinge 5. Make sure that the lock faces the front (so that the lock will be on top when the post is horizontal).

15. Use 2 screws 42 to secure the post to the upper hinge.

16. Attach the rod arm to the lock as shown on the right. Make sure to use Loctite on the thread of screw 25.

A. If nuts 22a and 22b were loosened

since the assembly was removed, you will need to adjust their position as follows:

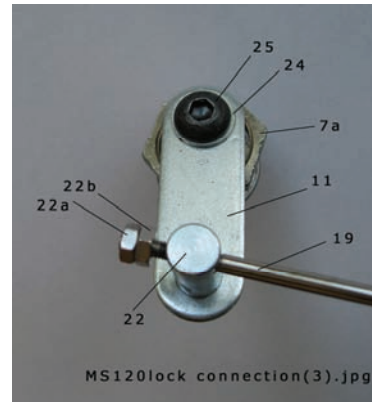
B. With the lock in the normal position, the arm 11 is horizontal;

C. Make sure that the latch locks the hinges, and adjust the first nut 22b so that there is a little play between the nut and the pin 22.

D. Double lock the nut using 22a. Use of Loctite on both nuts is highly recommended.

17. Verify that the lock works properly.

18. Insert the cap 8 on the top of the pylon, and secure with 2 screws 42.



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## Section 3: Troubleshooting

### Troubleshooting

#### Pylon does not lock up

**Symptom:** The Post can not be locked in the up position.

**Prognosis:**

1. Lock rod nuts became loose.
2. Lock arm became loose.
3. The Lock latch 16 is not seated properly when the post is up.
4. Lock latch is broken.

**Solution:** Verify that all the lock assembly parts are secured, and that the lock rod is adjusted properly.

With the post in the vertical position, manual pull the lock rod up and push it down, to verify that the latch can move freely in the hinge