

MORSETM
THE M.K. MORSE COMPANY

Metal Devil[®]

Instructions and Safety Manual
Model: CSM7MB

Serial # _____
(for your future reference please write in Serial # located on machine label)

7" (180mm)
Steel Cutting Circular Saw



IMPORTANT!

The Metal Devil saw you have purchased is a well-made tool. Used according to the directions it will give you excellent service for a number of metal-cutting applications. Misuse of this tool, however, could result in serious or fatal injury. Please read these operating and safety instructions carefully and completely. Heed all safety information. If you are uncertain about any aspect of using this equipment contact your distributor.

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Model CSM7MB Specifications

Machine:

Motor	120V 60Hz 9 Amp Watts 1080
Cutting Capabilities: <i>(Square Tubing)</i>	90 degree cut :1/8" (3mm) wall thickness
Max Cutting thickness	1/4" (6mm) – <i>mild steel plate</i>
Maximum Cutting Depth	2.36" (60mm)
RPM No Load Speed	3500 RPM
Recommended Max.Duty Cyle	30 minutes
Sound Pressure Level <i>Under Load DB(A)</i>	94
Weight	13.25 lbs /6.02 kg's

Blade Dimensions:

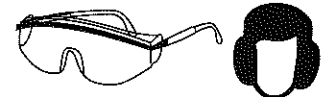
Maximum Diameter	7" (178mm)
Arbor / Bore Diameter	20mm
Average Blade Kerf	.071" (1.8mm)

Standard Equipment Supplied With Saw:

1- side handle	1- fence guide
1- pair safety goggles	1- ear plug set
1- carry case	1-6mm hex key <i>(for hex screws)</i>
1- operating instructions	1- Metal cutting blade.



! WARNING



Ear and eye protection must be worn while operating this equipment.

Warranty Repairs:

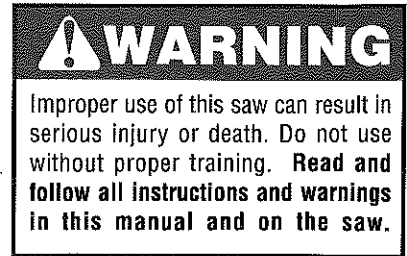
Contact your local Metal Devil Distributor for assistance with obtaining warranty repairs.

Notice: Normal wear and tear and damage caused by misuse is not covered under the 1 year guarantee.

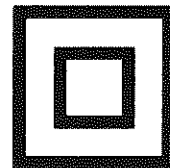
IMPORTANT SAFETY INFORMATION

Before beginning work:

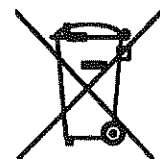
- Check that the voltage is correct and that all handles and parts are firmly secured.
- This machine is designed for cutting steel. Operate it using only the recommended M.K. Morse "Metal Devil" brand TCT (tungsten carbide tipped) blades and accessories. Do not use blades made of HSS or that do not comply with the characteristics in these instructions.
- Ensure that the blade is the correct design for the material being cut.
- Before using any accessories for the Metal Devil Metal Cutting Machines, always ensure that the RPM of the accessory matches the RPM of the tool.
- Inspect the machine and blades before each use. Do not use deformed, cracked or damaged blades.
- Ensure that the blade is properly installed. The direction arrow on the blade should match rotation of the arbor.
- Do not modify this saw.
- Do not use it for any job for which it was not intended. Do not use it to power other equipment.
- This tool is equipped with an approved cord and plug for its intended country of use. Do not try to use it in a country where it will not be compatible. Never modify the plug.
- The green and yellow conductor in the cord is the grounding wire: never connect this to a live terminal.
- Ensure that total work area can be viewed from the operating position. Make sure the work area is clutter-free.
- Use barriers to keep people away from the work area.
- Do not operate the tool in explosive environments. Power tools create sparks that may ignite flammable materials, dusts or gases.
- Do not operate in damp or wet conditions or areas – electric sparks may occur.
- Do not wear loose clothing or jewelry when operating the saw. Tie back long hair that might get into the blade.
- Always securely clamp the material to be cut.
- Never attempt to use this or any power tool while under the influence of alcohol or any drug that might affect your perceptions or judgment.
- Be sure there are no children in the area where you will operate this saw. Never allow children near a power saw.



**Do Not Operate in
Wet or Damp Conditions**



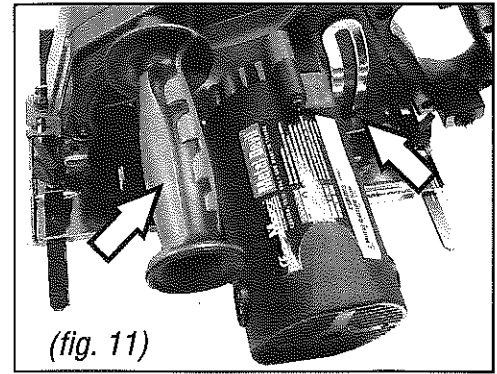
Machine Is Doubleinsulated



Recycle Machine Properly

While operating the saw:

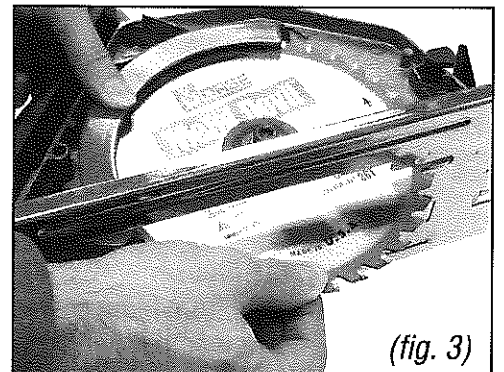
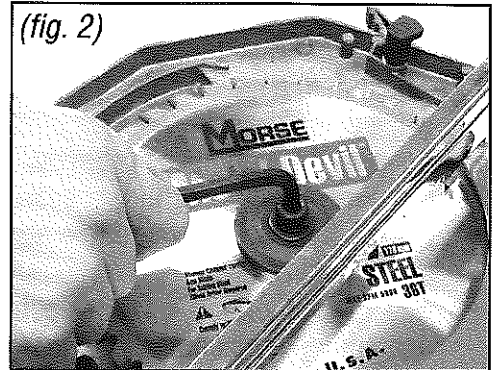
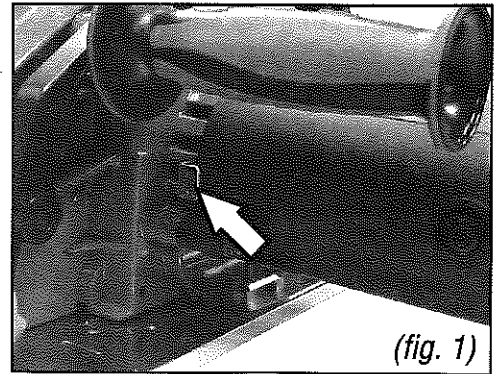
- Always use the safety glasses and hearing protection provided, or their equivalent, when using this saw. A flying chip could cause blindness. Cutting noise could seriously impair hearing.
- Never use the tool without the original protection guard system. Ensure that moveable guards operate freely without restrictions.
- Do not try to defeat any safety device. Do not lock the moving guard in the open position.
- Ensure that the cutting depth adjustment handle/angle adjustment handle and side handle are firmly fixed while using the tool (*fig.11*).
- Support the work piece properly. Never hold the work piece in your hand or put it across your legs.
- Always use both hands to operate the saw. Keep hands out of path of blade.
- Never reach around, under or behind the saw blade when operating the machine. The guard cannot protect your hand if you do so.
- Do not touch the blade while it is in motion. Do not try to stop the blade by lateral pressure on the blade.
- Never reach for a saw blade until the blade has completely stopped rotation and the machine has been disconnected from the power source.
- When cutting wood, use suitable dust extraction and breathing apparatus.
- Remove the plug from main power supply before replacing the blade, making adjustments or performing other maintenance work.
- Always keep the power cord away from the moving parts of the tool.
- In case of saw jamming, immediately switch off the saw and disconnect the plug. Remove the saw from the material and inspect the blade for damage.
- Use only the flanges and washers that are supplied with the tool. Replace them with original (OEM) replacement parts if they become damaged or scored.
- When storing the tool, switch off the motor, unplug the cord from the power source and ensure that all moving parts have come to a complete stop.



MACHINE PREPARATION and OPERATION

Blade Removal and Installation:

1. Unplug machine from Power Source before doing any servicing or blade replacement.
2. Remove the chip collection unit (See instructions on page 6)
3. Depress spindle lock to stop blade/spindle rotation. (fig.1)
4. Use the supplied 6mm hex key to remove the bolt / washers (2) and flange holding the blade. (fig.2)
5. Rotate the blade guard away from the blade. Remove used blade.
6. Replace with new Morse Metal Devil Blade.
7. Replace flange / washers and bolt.
8. Depress spindle lock and securely tighten the bolt. MAKE SURE THAT THE ARROW ON THE BLADE AND THE TEETH ARE ROTATING COUNTERCLOCKWISE.
9. Release spindle lock. Check to be sure that it has fully released by manually rotating the blade. (fig.3)
10. Replace chip collection unit and securely latch.



Making a Cut:

Where possible, always clamp the work piece on a rigid support.

1. Before starting the saw motor:
 - Place front edge squarely on the work piece.
 - Ensure that the blade is not touching the material to be cut.
 - Sight the cutting line with the line of the cut guide.
2. Allow the machine to come to full start.
3. Introduce the blade slowly so as not to damage the teeth of the blade.
DO NOT FORCE THE TOOL. ALLOW THE SPEED OF THE SAW BLADE TO DO THE WORK.
4. Using both hands, move the saw forward through the work piece. Applying more pressure on the tool will not improve cutting performance, but will reduce blade life.

MACHINE PREPARATION and OPERATION (Cont.)

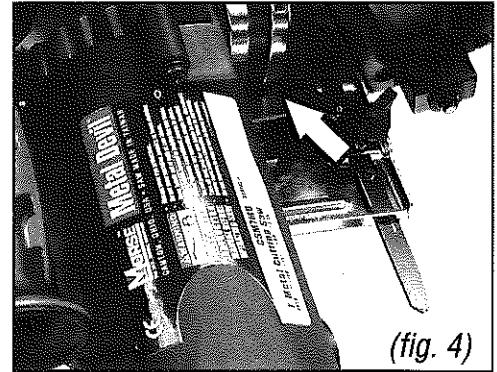
Adjustment of the Cutting Depth

With power to the saw turned OFF:

- 1 Release the lock to adjust to the required cutting depth. (fig.4)
- 2 Make sure that the blade protrudes at the maximum cutting depth that the saw is capable of in the material being cut.
- 3 Tighten to lock into position. Check to ensure that the lock will not loosen while being used.

NOTE: Metal cutting blades work best while having the maximum amount of blade engaged in the cutting action. This distributes the cutting load among the teeth on the blade. This is the opposite of how a wood cutting blade is used, where minimal blade protrusion allows the operator to make a cut while minimizing the potential for the blade to become bound in the cut and produce material tearout.

EXCEPTION: Metal grating is best cut by having the blade protrude very minimally beyond the depth of the grating. The interrupted cuts that occur when cutting grating are very hard on the blade and carbide tips.



(fig. 4)

! WARNING

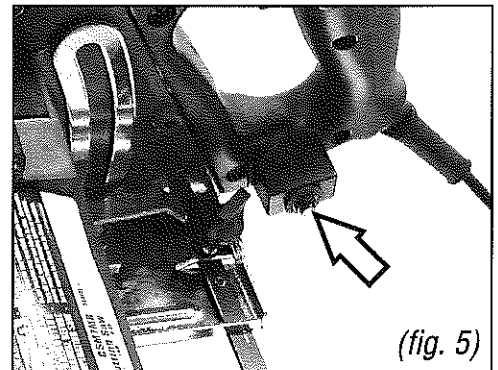
Adjusting a saw with the power connected could lead to an injury if the saw started suddenly.

Never connect the saw to a power source until all adjustment steps are completed.

Parallel Blade Guide

To set the guide:

- 1 Loosen the two retaining screws.
- 2 Slide the guide up snugly against the side of the work piece.
- 3 Using a measuring tape, check that the distances from the front and the back of the blade to the edge of the blade guide are equal. This will ensure that the guide is parallel to the blade. The guide should be parallel to the blade, and not to the base of the tool, to avoid damage to both blade and motor.
- 4 Retighten the screws.



(fig. 5)

Tool Overload / Reset

If the tool overload protection device activates, allow the motor to cool, then press the reset button to continue operation. (fig.5)

MACHINE PREPARATION and OPERATION (Cont.)

Chip Collection and Removal Chamber



Removal:

- 1 Open latch. (fig. 6)
- 2 Tilt the saw so that the collection unit faces down. (fig. 7)
- 3 Hold the collection unit and pull away from the machine. A small hook holds the collection unit to the body of the machine, allowing it to rotate forward.
- 4 Slide the collection unit off the hook and gently shake the metal chips out of the chamber into a proper disposal bin. It should not be necessary to remove the back of the collection chamber to dispose of the chips within the chamber.

Re-Attaching:

- 1 Place the collection unit back onto the body of the saw.
- 2 Check for alignment of the collection unit with the back hook and the saw body. (fig. 8) Note: the back hook goes between the collection unit and the pin that is also fastened to the collection unit.
- 3 Rotate collection unit to the closed position. (fig. 9) The front latch will pull the collection unit tightly against the latching hook that holds the front of the unit.

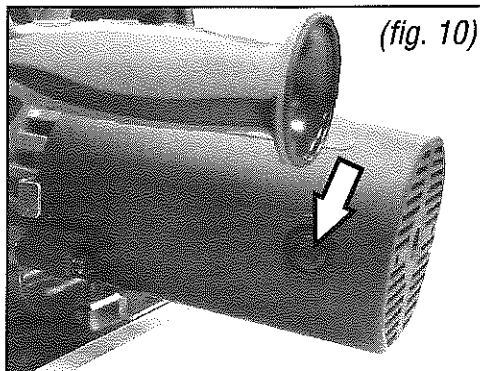
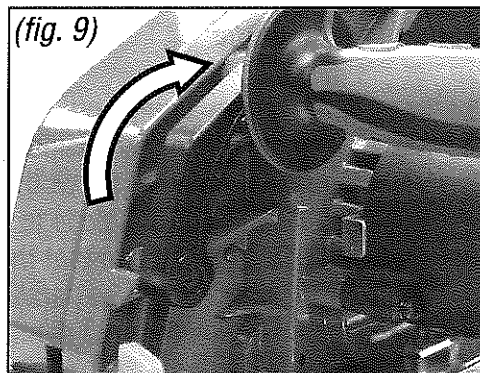
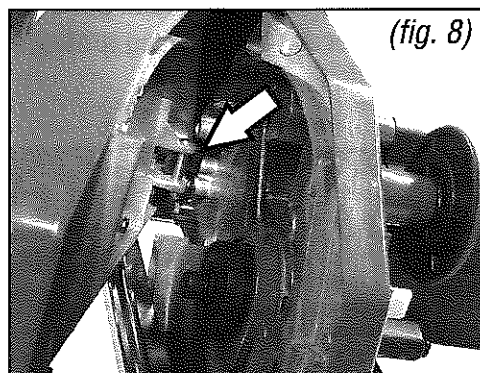
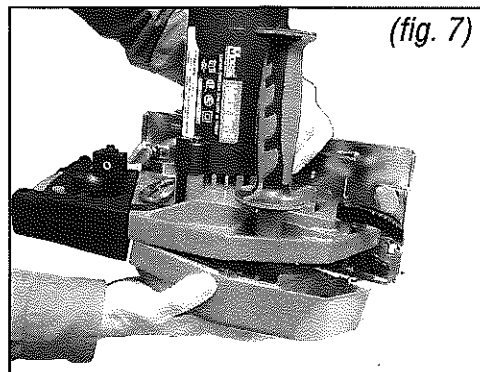
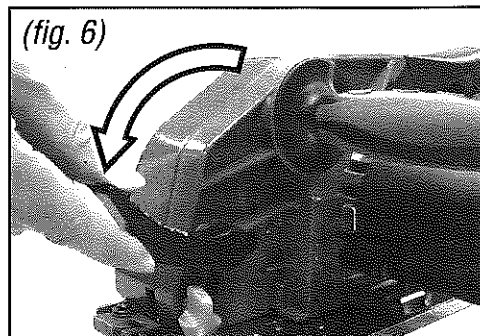
Machine Lubrication

This machine is lubricated during its manufacturing with sufficient lubricant to last approximately 72 hours of operation. To add lubricant, it is necessary to dismantle the tool. This procedure is best accomplished by an authorized service center.

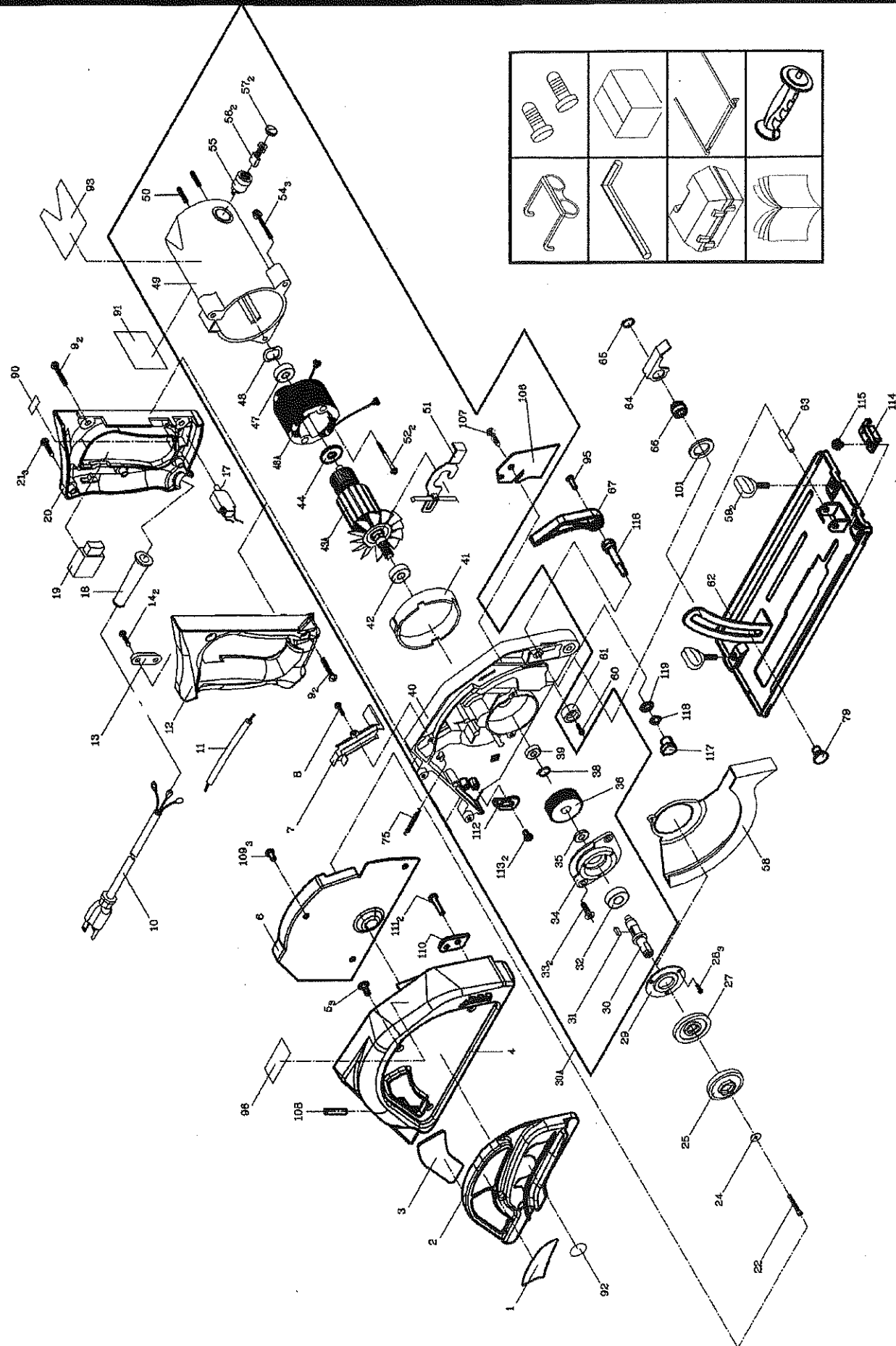
Maintenance and Troubleshooting

- In case of electrical or mechanical malfunction, immediately turn off the machine and disconnect the plug. Ensure that the saw is unplugged and the blade has stopped rotating before doing any maintenance.
- Keep your Metal Devil Circular Saw and cord clean. Use only a damp cloth and very mild soap to clean the saw.
- Excessive sparking can indicate the presence of dirt in the motor or worn carbon brushes. Check for wear. (fig. 10) Replace brushes when they reach 1/4" (6mm).
- For all other service and maintenance take machine to an authorized service center.

READ AND SAVE ALL INSTRUCTIONS FOR FUTURE USE!



CSM7MB SERVICE PARTS LIST



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Morse Metal Devil Part Number

1	Trade mark label	CSP7001
2	Cover	CSP7002
3	Window	CSP7003
4	Dust Cover	CSP7004
5	Screw M5	CSP7005
6	Side Dust Cover	CSP7006
7	Lower cable cover	CSSPMC18028
8	Screw M4	CSSPMC18027
9	Screw M5	CSP7009
10	Power Cord	CSP7010
11	Lead Wire Ass'y	CSP7011
12	Left Handle	CSP7012
13	Power Cord Clamp	CSP7013
14	Screw M4	CSP7014
17	Overload Switch	CSSPMC18064
18	Guard cord	CSSPMC18078
19	Switch	CSSPMC18062
20	Right Handle	CSP7020
21	Screw M4	CSP7021
22	Screw M8	CSSPMC18011
24	Washer	CSP7024
25	Flange(top)	CSSPMC18013
27	Flange(bottom)	CSPMC18015
28	Screw M4	CSP7028
29	Bearing cover	CSSPMC18019
30	Spindle	CSSPMC18017
31	Key	CSSPMC18018
32	Ball bearing	CSSPMC18022
33	Screw M5	CSSPMC18020
34	Bearing Seat	CSSPMC18023
35	Collar	CSSPMC18016
36	Helix Gear	CSSPMC18024
38	C Ring A14	CSSPMC18045
39	Ball bearing	CSSPMC18044
40	Body	CSP7040
41	Stator cover	CSSPMC18029
42	Ball bearing	CSSPMC18030
43(a)	Armature - 110V	CSSPMC18033
44	Bearing washer	CSP7044
46(A)	Field Ass'y	CSSPMC18075
47	Ball bearing	CSSPMC18034
48	Washer	CSSPMC18048
49	Motor Housing	CSSPMC18035
50	Screw M5	CSP7050
51	Spring lock Ass'y	CSSPMC18038
52	Screw M5	CSSPMC18081

Morse Metal Devil Part Number

54	Screw M5	CSSPMC18037
55	Brush Holder Ass'y	CSSPMC18036
56	Carbon Brush Ass'y	CSSPMC18069
57	Brush cap	CSSPMC18070
58	Safety Cover	CSSPMC18058
59	Knob M6	CSP9082
60	Screw M6	CSSPMC18043
61	Bracket Stop	CSSPMC18042
62	Base	CSSPMC18054
63	Spring Pin	CSSPMC18060
64	Lever	CSSPMC18049
65	E Ring E10	CSP7065
66	Nut	CSP7066
67	Knob	CSP7067
68	Goggle	CSP7068
69	Ear Plug	CSP7069
70	Hex. Wrench	CSSPMC18083
71	Retail box	CSP7071
72	Blow mold case	CSP7072
73	Length Adjustor	CSSPMC18055
74	Side Handle	CSP90111
75	Spring	CSP7075
79	Bolt	CSP7079
90	Label	CSP7090
91	Warning label	CSP7091
92	Warning label	CSP7092
93	Name plate	CSP7093
95	Screw M4	CSP7095
96	Label	CSP7096
98	Manual	CSP7098
101	Washer	CSP7101
106	Dust Clapboard	CSP7106
107	Screw M5	CSP7107
108	Pin	CSP7108
109	Screw M5	CSP7109
110	Set Plate	CSP7110
111	Screw M5	CSP7111
112	Set Plate	CSP7112
113	Screw M5	CSP7113
114	Scale	CSP7114
115	Screw M5	CSP7115
116	Bolt	CSP7116
117	Shaft	CSP7117
118	Washer	CSP7118
119	Washer	CSP7119

Metal Devil®

Now Available:

7", 9" & 14" (180mm, 230mm & 356mm) **Saws**

5-3/8" - 14" (137mm - 356mm) **Blades**

Ahora se ofrecen:

Sierras de 180mm, 230mm y 356mm

Hojas de 137mm-356mm

Désormais disponibles :

Scies de 180mm, 230mm y 356mm

Lames de 137mm-356mm



Metal Devil Blades for MODEL CSM7MB:

Hojas Metal Devil para el MODELO CSM7MB:

Lames Metal Devil pour MODÈLE CSM7MB :

Metal / Métal

CSM736SC

Thin steel / Acero Delgado / Acier Mince

CSM768TSC

Aluminum / Aluminio / Aluminium

CSM754AC

Stainless Steel / Acero Inoxidable

CSM748SSC

Acier Inoxydable

MORSE

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