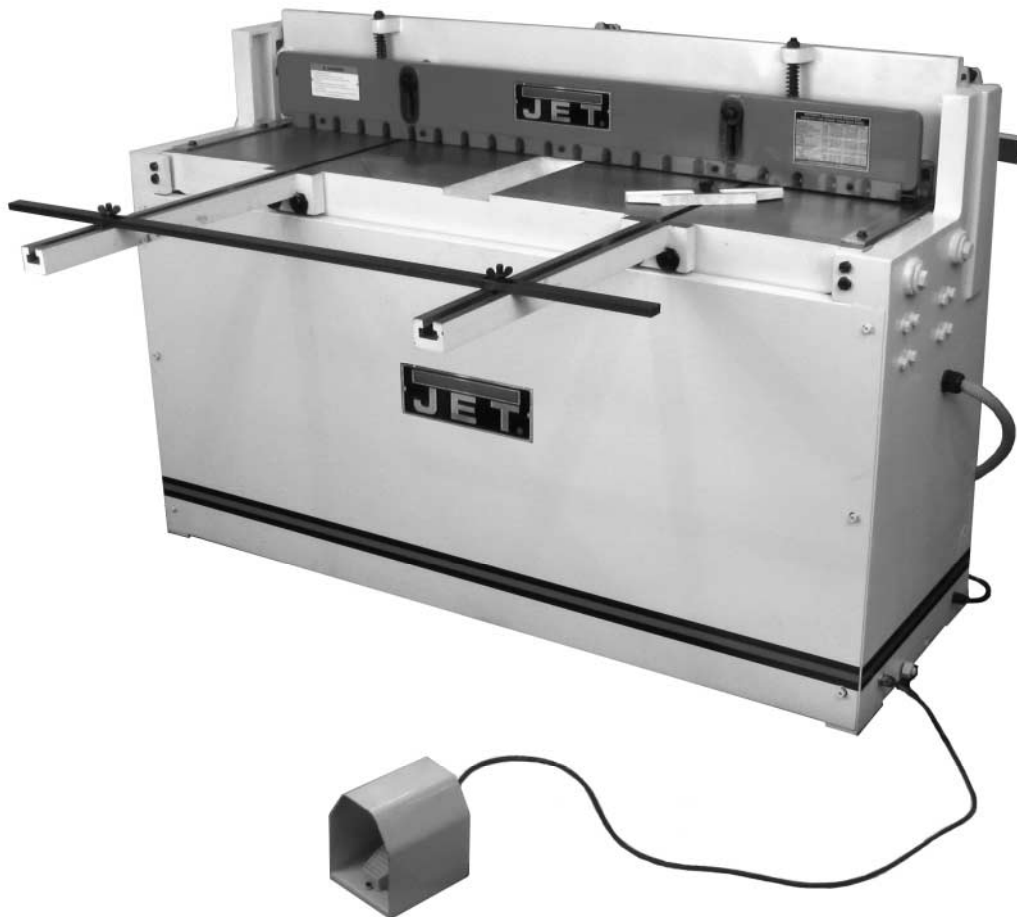




Operating Instructions and Parts Manual
16ga. x 52-inch Pneumatic Shear
Model PS-1652E



WALTER MEIER (Manufacturing) Inc.
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Part No. M-755203
Revision A 10/09

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Warranty and Service

Walter Meier (Manufacturing) Inc., warrants every product it sells. If one of our tools needs service or repair, one of our Authorized Service Centers located throughout the United States can give you quick service. In most cases, any of these Walter Meier Authorized Service Centers can authorize warranty repair, assist you in obtaining parts, or perform routine maintenance and major repair on your JET® tools. For the name of an Authorized Service Center in your area call 1-800-274-6848.

MORE INFORMATION

Walter Meier is consistently adding new products to the line. For complete, up-to-date product information, check with your local Walter Meier distributor, or visit jettools.com.

WARRANTY

JET products carry a limited warranty which varies in duration based upon the product (MW = Metalworking, WW = Woodworking).

90 DAY WARRANTY	1 YEAR WARRANTY	Body Repair Kits Bottle Jacks Cable Pullers Cold Saws Hoists-Air Hoists-Electric Metal forming Mill/Drills Milling Machines MW Bandsaws MW Drill Presses MW Finishing Equipment MW Lathes MW Precision Vises	2 YEAR WARRANTY	Palet Trucks Rigging Equip. Service Jacks Stackers Surface Grinders Tapping Trolleys-Air Trolleys-Electric Web Slings Winches-Electric	3 YEAR WARRANTY	WW Benchtop Tools	5 YEAR WARRANTY	Beam Clamps Chain Hoist- Manual Lever Hoists Pullers-JCH Models Scissor Lift Tables Screw Jacks Trolleys-Geared Trolleys-Plain Winches-Manual WW Air Filtration WW Bandsaws WW Buffers	WW Drill Presses WW Dust Collectors WW Dust Filters WW Dust Fittings WW Jointers WW Lathes WW Planers WW Sanders WW Shapers WW Tablesaws	LIFE LIFETIME WARRANTY	Fastening Tools Mechanics Hand Tools Striking Tools Vises (no -precision) Clamps
<i>Warranty reverts to 1 Year Warranty if woodworking (WW) products listed above are used for industrial or educational purposes.</i>											

WHAT IS COVERED?

This warranty covers any defects in workmanship or materials subject to the exceptions stated below. Cutting tools, abrasives and other consumables are excluded from warranty coverage.

WHO IS COVERED?

This warranty covers only the initial purchaser of the product.

WHAT IS THE PERIOD OF COVERAGE?

The general JET warranty lasts for the time period specified in the product literature of each product.

WHAT IS NOT COVERED?

Five Year Warranties do not cover woodworking (WW) products used for commercial, industrial or educational purposes. Woodworking products with Five Year Warranties that are used for commercial, industrial or education purposes revert to a One Year Warranty. This warranty does not cover defects due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair or alterations, or lack of maintenance.

HOW TO GET SERVICE

The product or part must be returned for examination, postage prepaid, to a location designated by us. For the name of the location nearest you, please call 1-800-274-6848.

You must provide proof of initial purchase date and an explanation of the complaint must accompany the merchandise. If our inspection discloses a defect, we will repair or replace the product, or refund the purchase price, at our option. We will return the repaired product or replacement at our expense unless it is determined by us that there is no defect, or that the defect resulted from causes not within the scope of our warranty in which case we will, at your direction, dispose of or return the product. In the event you choose to have the product returned, you will be responsible for the shipping and handling costs of the return.

HOW STATE LAW APPLIES

This warranty gives you specific legal rights; you may also have other rights which vary from state to state.

LIMITATIONS ON THIS WARRANTY

WALTER MEIER (MANUFACTURING) INC., LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD OF THE LIMITED WARRANTY FOR EACH PRODUCT. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG THE IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

WALTER MEIER SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY, OR FOR INCIDENTAL, CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Walter Meier sells through distributors only. The specifications in Walter Meier catalogs are given as general information and are not binding. Members of Walter Meier reserve the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever. JET®-branded products are not sold in Canada by Walter Meier.

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Warnings

1. Read and understand the entire owner's manual before attempting assembly or operation.
2. Read and understand the warnings posted on the machine and in this manual. Failure to comply with all of these warnings may cause serious injury. Replace the warning labels if they become obscured or removed.
3. This pneumatic shear is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of a shear, do not use until proper training and knowledge have been obtained.
4. Do not use this machine for other than its intended use. If used for other purposes, Walter Meier (Manufacturing), Inc. disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
5. Always wear approved safety glasses/face shields while using this shear. *Everyday eyeglasses only have impact resistant lenses; they are not safety glasses.*
6. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Wear protective hair covering to contain long hair. Non-slip footwear or anti-skid floor strips are recommended.
7. Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
 - Lead from lead based paint.
 - Crystalline silica from bricks, cement and other masonry products.
 - Arsenic and chromium from chemically treated lumber.Your risk of exposure varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area and work with approved safety equipment, such as face or dust masks that are specifically designed to filter out microscopic particles.
8. Do not operate this machine while tired or under the influence of drugs, alcohol or any medication.
9. Do not exceed the rated capacity of this shear; use hand tools for small or narrow parts. Do not attempt to shear hardened materials.
10. Sheet metal stock has sharp edges. To prevent cuts, use caution when handling.
11. Keep hands and fingers clear of the area in front and rear of the shear.
12. Do not place your hands between material being sheared and the shear table.
13. Keep safety guards in place at all times when the machine is in use. If removed for maintenance purposes, use extreme caution and replace the guards immediately after maintenance is complete.
14. Check damaged parts. Before further use of the machine, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
15. Provide for adequate space surrounding work area and non-glare, overhead lighting.
16. Keep the floor around the machine clean and free of scrap material, oil and grease.
17. Keep visitors a safe distance from the work area. **Keep children away.**
18. Make your workshop child proof with padlocks, master switches or by removing starter keys.
19. Give your work undivided attention. Looking around, carrying on a conversation and "horse-play" are careless acts that can result in serious injury.
20. Maintain a balanced stance at all times so that you do not fall or lean against moving parts. Do not overreach or use excessive force to perform any machine operation.
21. Use the right tool at the correct speed and feed rate. Do not force a tool or attachment to do a job for which it was not designed. The right tool will do the job better and more safely.
22. Use recommended accessories; improper accessories may be hazardous.

23. Maintain tools with care. Keep tools sharp and clean for the best and safest performance. Follow instructions for lubricating and changing accessories.
24. Do not stand on the machine. Serious injury could occur if the machine tips over.
25. Unplug or lock out power to the machine when not in use.

Familiarize yourself with the following safety notices used in this manual:

CAUTION This means that if precautions are not heeded, it may result in minor injury and/or possible machine damage.

WARNING This means that if precautions are not heeded, it may result in serious or even fatal injury.

- - SAVE THESE INSTRUCTIONS - -

Introduction

This manual is provided by Walter Meier (Manufacturing) Inc., covering the safe operation and maintenance procedures for a JET Model PS-1652E Pneumatic Shear. This manual contains instructions on installation, safety precautions, maintenance instructions and parts breakdown. This machine has been designed and constructed to provide years of trouble free operation if used in accordance with instructions set forth in this manual. If there are any questions or comments, please contact either your local supplier or Walter Meier. Walter Meier can also be reached at our web site: www.waltermeier.com.

Specifications

Model Number.....	PS-1652E
Stock Number.....	755203
Material Thickness Capacity – Mild Steel.....	16 gauge
Material Thickness Capacity – Aluminum and Copper Alloys.....	12 to 14 gauge
Shearing Length Capacity (in.).....	52
Back Gauge Capacity (in.).....	25-1/2
Front Gauge Capacity (in.).....	28
Foot Control Valve.....	110V, 60Hz
Operating/Maximum Air Pressure (psi).....	85-100 (0.6-0.7 Mpa)
Air Consumption (approx. cfm).....	25.4
Air Consumption per Stroke (approx. cfm).....	1.4
Recommended Air Hose Diameter (in.).....	1/2
Air Hose Inlet (NPT/in.).....	3/8
Strokes Per Minute.....	40
Overall Dimensions (LxWxH)(in.).....	65 x 27 x 41
Overall Floor Space Required (in.).....	65 x 83
Net Weight, approximate (lbs.).....	1048
Shipping Weight, approximate (lbs.).....	1185

The above specifications were current at the time this manual was published, but because of our policy of continuous improvement, Walter Meier reserves the right to change specifications at any time and without prior notice, without incurring obligations.

Uncrating and Clean-Up

1. Remove the crating material from around the machine.
2. Carefully clean all rust protected surfaces with a mild solvent or kerosene and a soft rag. Do not use lacquer thinner, paint thinner, or gasoline, as these may damage painted surfaces.
3. Coat all machined surfaces with a light coat of oil to inhibit rust.
4. Remove the bolts holding the machine to the skid.
5. Carefully move the machine to a level foundation. Machine location must allow access to all sides.

Assembly Note: Prior to shipment the pneumatic shear is adjusted at the factory for proper operation. If the machine does not operate properly or the stand does not sit squarely on the floor, proceed to setup.

Stop Assembly

Refer to Figure 1. (The numbers in parentheses refer to the corresponding part in the exploded view.)

1. Attach the two *front arm extensions* (6) to the bed with four *hex cap screws* (7) and four *washers* (76). Level the arm extension surfaces with the table before tightening.
2. Attach the *front stop* (71) to the front extension arms with T-screws (72) and wing nuts (74).
3. Attach the *rear stop* (59) to the *adjusting block assemblies* (61) with six hex cap screws (68) and six flat washers (77).
4. Insert a *scale rod* (58) through each adjusting block assembly and into the cutter bar. Orient each rod according to which scale you prefer, standard or metric.
5. Secure the rods in the cutter bar by tightening the two hex cap screws (40). Tighten the rods in the adjusting blocks with the four knobs (65).

Setup

1. If the table requires adjustment, loosen four bolts (21). Loosen adjusting screws (18) and (19). The bed must rest squarely on the right and left hand side panels at all four corners while screws are loose. Shim legs at floor if necessary. Tighten hardware.

2. Use set screw (18) and hex cap screw (19), to adjust the lower blade toward or away from the upper blade. The distance between the upper and lower blades should be 0.002-0.005".

Do not let the blades overlap.

3. Connect shear to electrical supply, and adjust the air pressure until the gauge reads approximately 90 psi.
4. Place a heavy sheet of paper (~0.005") in the cutting position, along the entire length of the bed, and slowly press the foot lever.
5. If the shear does not cut the paper move the lower blade towards the upper blade.
6. If the shear cuts the paper on the ends, but not the center, turn the tie-rod adjusting screw (37), clockwise until the paper is cut the entire length.
7. If the shear cuts the paper in the center, but not the ends, turn the tie-rod adjusting screw (37) counter-clockwise until the paper is cut the entire length.
8. Make sure the scales (15) and (16) on top of the table are square to the blade, and also show the correct distance from the blade.
9. Make test cuts to verify that the scales are correct.

Maintenance

CAUTION Use care when working with or around the knives.

The 2-way upper knife can be removed and flipped 180°, for a sharp edge before having to sharpen the knife.

Periodically insert oil through the two oil fittings (127) atop the side panels. Use ISO VG32 or equivalent.

Wipe the knife lightly with oil.

Lubricate all pivot points on the machine daily.

Empty the condensation cups on the air regulator as needed.

Spring Tension

The spring return can be adjusted on the hold down (3) by tightening the hex nuts (10).

Gib Adjustment

There are three hex cap screws (32) that can be adjusted for play in each shim (31). Adjust for smooth travel.

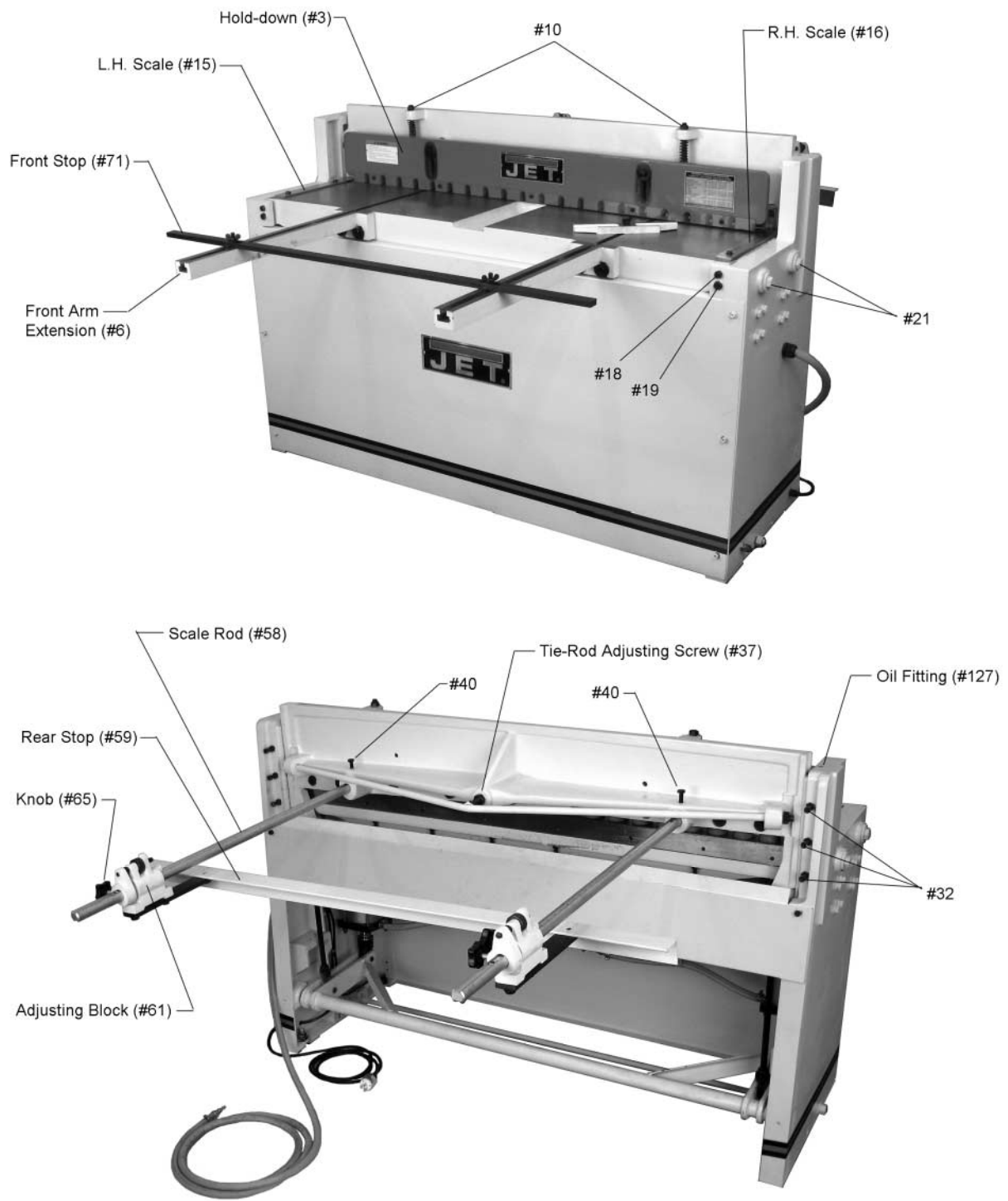


Figure 1

Electrical Connections

⚠WARNING Electrical connections must be made by a qualified electrician in compliance with all relevant codes. This machine must be properly grounded to help prevent electrical shock and possible fatal injury.

Grounding Instructions

The Shear is equipped with a 15 amp cord and plug set, with a grounding prong.

This machine must be grounded. In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock.

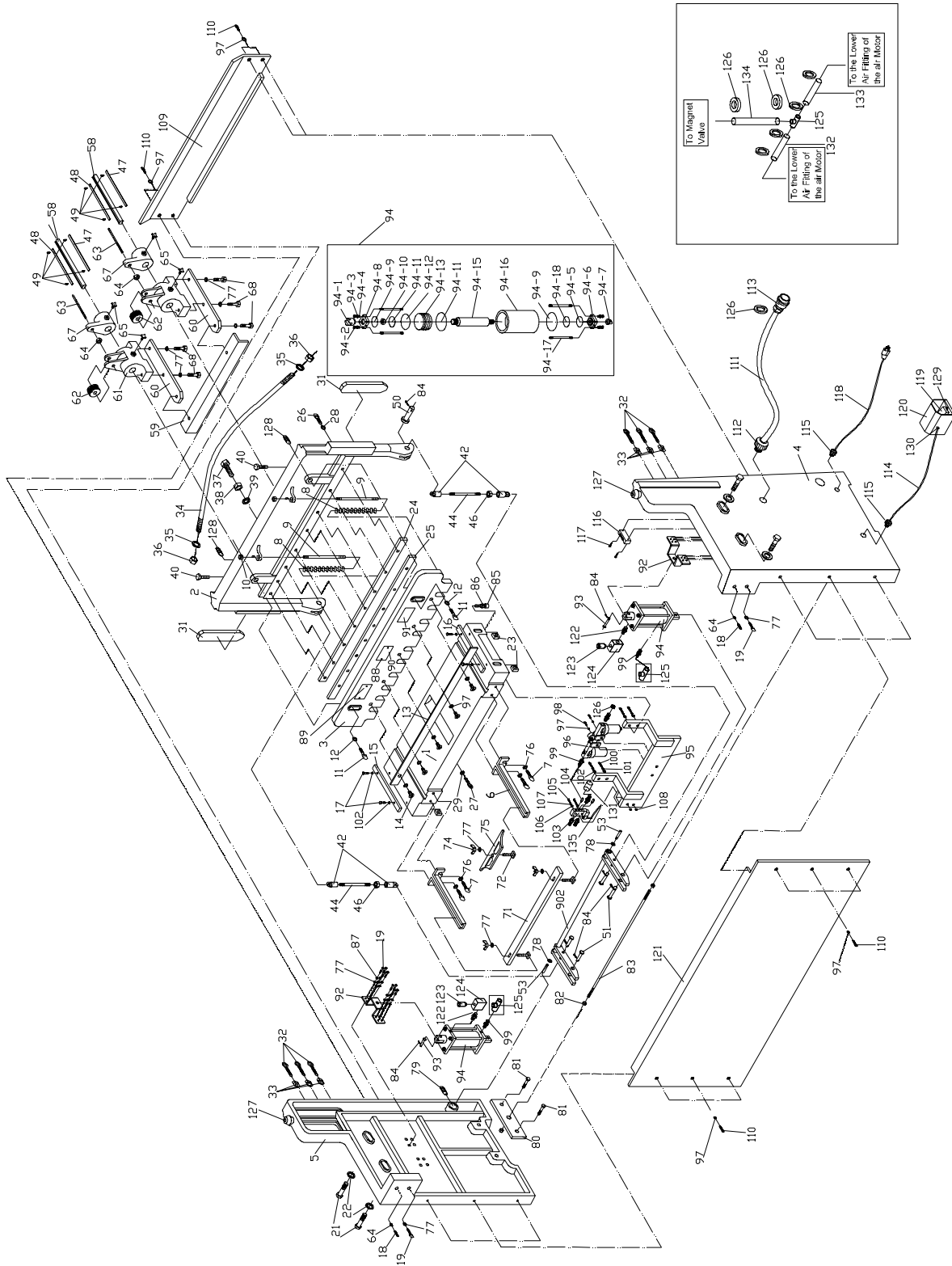
Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes, is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded. Repair or replace a damaged or worn cord immediately.

Replacement Parts

Replacement parts are listed on the following pages. To order parts or reach our service department, call 1-800-274-6848, Monday through Friday (see our website for business hours, www.waltermeier.com). Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

PS-1652E Pneumatic Shear – Assembly Drawing



PS-1652E Pneumatic Shear – Parts List

Index No.	Part No.	Description	Size	Qty
1	PS1652E-1	Table		1
2	FS1652N-2	Cutter Bar		1
3	FS1652N-3	Hold Down		1
4	PS1652E-4	R.H. Side Panel		1
5	PS1652E-5	L.H. Side Panel		1
6	FS1636N-6	Front Arm Extension		2
7	FS1636N-7	Hex Cap Screw	M12x45	4
8	FS1636N-8	Spring	3.5d x 18.5D x 217mm	2
9	FS1636N-9	Stud		2
10	FS1636N-10	Nylon Lock Hex Nut	M12	2
11	FS1636N-11	Hex Cap Screw	M12x80	2
12	FS1636N-12	Washer		2
13	FS1652N-13	Finger Guard		1
14	FS1636N-14	Phillips Pan Head Machine Screw	M6x12	5
15	FS1636N-15	Table Scale (L.H.)		1
16	FS1636N-16	Table Scale (R.H.)		1
17	FS1636N-17	Hex Cap Screw	M8x20	4
18	FS1636N-18	Set Screw	M10x40	2
19	FS1636N-19	Hex Cap Screw	M10x50	18
21	FS1636N-21	Hex Cap Screw	M16x130	4
22	FS1636N-22	Washer		4
23	FS1636N-23	Square Nut	M16	4
24	FS1652N-24	Upper Knife		1
25	FS1652N-25	Lower Knife		1
26	FS1652N-26	Cap Screw	M10x40	9
27	FS1636N-27	Cap Screw	M10x45	8
28	FS1636N-28	Washer		9
29	FS1636N-29	Washer		8
31	FS1636N-31	Gib		2
32	FS1636N-32	Socket Head Cap Screw	M10x55	6
33	FS1636N-33	Nut	M10	6
34	FS1652N-34	Rod		1
35	FS1636N-35	Plain Washer	16mm	2
36	FS1636N-36	Nut	M16	2
37	FS1636N-37	Screw	M16x80	1
38	FS1636N-38	Nut	M16	1
39	FS1636N-39	Washer	16mm	1
40	FS1636N-40	Hex Cap Screw	M10x35	2
42	FS1636N-42	Swivel		4
44	PS1652E-44	Stud		2
46	FS1636N-46	Nut	M16	2
47	FS1636N-47	Scale (Metric)		2
48	FS1636N-48	Scale (Inches)		2
49	FS1636N-49	Cross Head Pan Screw	M4x8	8
50	FS1652N-50	Pin	Ø12 x 80mm	2
51	FS1652N-51	Pin	Ø12 x 60mm	4
53	FS1636N-53	Brake Pin		2
58	FS1636N-58	Scale Rod		2
59	FS1652N-59	Rear Stop		1
60	FS1636N-60	Extension Bar		2
61	FS1636N-61	Adjusting Block		2
62	FS1636N-62	Adjusting Dial		2
63	FS1636N-63	Adjusting Screw		2
64	FS1636N-64	Hex Nut	M10	4
65	FS1636N-65	Knob		4
67	FS1636N-67	Adjusting Bracket		2
68	TS-1491031	Hex Cap Screw	M10x25	6

Index No.	Part No.	Description	Size	Qty
71	FS1652N-71	Front Stop		1
72	FS1636N-72	"T" Screw		3
74	TS-2321101	Wing Nut	M10	3
75	FS1636N-75	Bevel Gauge		1
76	FS1636N-76	Washer	12mm	4
77	FS1636N-77	Plain Washer	10mm	27
78	FS1636N-78	Spacer		2
79	FS1636N-79	Set Screw	M10x35	2
80	FS1636N-80	Plate		2
81	FS1636N-81	Hex Cap Screw	M12x35	4
82	FS1636N-82	Hex Nut	M16	4
83	FS1652N-83	Connection Bar	Ø16x1463mm	1
84	PS1652E-84	Cotter Pin	Ø4x30mm	8
85	PS1652E-85	Socket Head Cap Screw	M8x45	8
86	PS1652E-86	Hex Nut	M8	8
87	TS-2361101	Helical Spring Lock Washer	10mm	16
88	PS1652E-88	Rivet	Ø2x6mm	4
89	FS1636N-W	Warning Label		1
90	FS1636N-J	JET Plaque		1
91	FS1636N-S	Specification Label		1
92	PS1652E-92	Bracket		2
93	PS1652E-93	Shaft	Ø12x70mm	2
94	PS1652E-94	Air Motor Assembly		2
94-1	PS1652E-94-1	Hinge		1
94-2	PS1652E-94-2	Hex Nut	M10	8
94-3	PS1652E-94-3	Helical Spring Lock Washer	10mm	8
94-4	PS1652E-94-4	Plain Washer	10mm	8
94-5	PS1652E-94-5	Dust Seal	D43xd35xh12 mm	1
94-6	PS1652E-94-6	Bottom Cover		1
94-7	PS1652E-94-7	Hinge		1
94-8	PS1652E-94-8	Top Cover		1
94-9	PS1652E-94-9	O-Ring	100 x 1.9mm	2
94-10	PS1652E-94-10	Hex Nut	M16	1
94-11	PS1652E-94-11	U-Seal	D100xd90xh8 mm	2
94-12	PS1652E-94-12	Piston Ring	2x5mm	1
94-13	PS1652E-94-13	Piston Head		1
94-14	PS1652E-94-14	O-Ring	25x2.4mm	1
94-15	PS1652E-94-15	Piston		1
94-16	PS1652E-94-16	Body		1
94-17	PS1652E-94-17	Bolt		4
94-18	PS1652E-94-18	O-Ring	39x2mm	1
95	PS1652E-95	Bracket		1
96	PS1652E-96	Air Regulator Assembly	BC3000	1
97	TS-1550041	Plain Washer	6mm	17
98	TS-1503051	Socket Head Cap Screw	M6x20	2
99	PS1652E-99	Air Fitting	PT3/8"	15
100	TS-1504041	Socket Head Cap Screw	M8x20	4
101	TS-2361081	Helical Spring Lock Washer	8mm	4
102	TS-1550061	Plain Washer	8mm	8
103	PS1652E-103	Magnetic Valve	4V310-10-AC110V	1
104	PS1652E-104	Muffler	PT1/4"	2
105	PS1652E-105	Cross Head Machine Screw	M4x70	2
106	TS-1550021	Plain Washer	4mm	2
107	TS-2361041	Helical Spring Lock Washer	4mm	2
108	TS-1540021	Hex Nut	M4	2
109	PS1652E-109	Rear Cover		1
110	TS-1503031	Socket Head Cap Screw	M6x12	10
111	PS1652E-111	Air Hose	1/2" x 700psi x 4m	1
112	PS1652E-112	Air Hose Holder	M30x1.5	1

Index No.	Part No.	Description	Size	Qty
113	PS1652E-113	Quick Fitting	Ø10mm	1
114	PS1652E-114	Cable	18AWGx3C,3m	1
115	PS1652E-115	Plastic Cable Holder	M16x1.5	2
116	PS1652E-116	Wiring Block	TB-1504	1
117	TS-1532032	Cross Head Machine Screw	M4x10	2
118	PS1652E-118	Power Cable with Plug	4M	1
119	PS1652E-119	Foot Control Pedal	EKW-5A-B	1
120	PS1652E-120	Foot Pedal Cover		1
121	PS1652E-121	Front Cover		1
122	PS1652E-122	Air Fitting		2
123	PS1652E-123	Muffler	PT3/8"	2
124	PS1652E-124	Air Exhaust Valve	QE-03	2
125	PS1652E-125	3-Way Connection	PT3/8"	2
126	PS1652E-126	Holding Ring	Ø16-25mm	16
127	PS1652E-127	Oil Fitting	Ø10mm	2
128	PS1652E-128	Set Screw	M12x12	2
129	TS-1501041	Socket Head Cap Screw	M4x12	3
130	PS1652E-130	Rubber Grommet	Ø15	1
131	PS1652E-131	Air Hose	1/2" x 700psi x 0.12m	1
132	PS1652E-132	Air Hose	1/2" x 700psi x 1m	2
133	PS1652E-133	Air Hose	1/2" x 700psi x 0.5m	2
134	PS1652E-134	Air Hose	1/2" x 700psi x 0.6m	2
135	PS1652E-135	Cable	18AWGx3C,1.2m	1
902	PS1652E-902	Cylinder Link Bar Assembly		1



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