

Germany Headquarters	ROTHENBERGER AG Industriestrasse 7 • D-65779 Kelkheim/Germany Tel. + 49 (0) 61 95 / 800 - 1 • Fax + 49 (0) 61 95 / 7 44 22 verkauf@rothenberger.com • www.rothenberger.com ROTHENBERGER Produktion GmbH Lillenthalstrasse 71 - 87 • D-37235 Hessisch-Lichtenau Tel. + 49 (0) 56 02 / 93 94 - 0 • Fax + 49 (0) 56 02 / 93 94 36 ROTHENBERGER Werkzeuge GmbH Industriestrasse 7 • D-65779 Kelkheim/Germany Tel. + 49 (0) 61 95 / 800 - 1 • Fax + 49 (0) 61 95 / 7 44 22 verkauf@rothenberger.com
Australia	ROTHENBERGER Australia Pty. Ltd. Unit 12 • 5 Hudson Avenue • Castle Hill • N.S.W. 2154 Tel. + 61 2 / 98 99 75 77 • Fax + 61 2 / 98 99 76 77 rothenberger@rothenberger.com.au www.rothenberger.com.au
Austria	ROTHENBERGER Werkzeuge- und Maschinen Handelsgesellschaft m.b.H. Gewerbeparkstrasse 9 • A-5081 Anif near Salzburg Tel. + 43 (0) 62 46 / 7 20 91-45 • Fax + 43 (0) 62 46 / 7 20 91 -15 office@rothenberger.at • www.rothenberger.at
Belgium	ROTHENBERGER Benelux bvba Antwerpsesteenweg 59 • B-2630 Aartselaar Tel. + 32 (0) 3 / 8 77 22 77 • Fax + 32 (0) 3 / 8 77 03 94 info@rothenberger.be
Brazil	ROTHENBERGER do Brasil Ltda. Rua marinho de Carvalho, No. 72 - Vila Marina 09921-005 Diadema - Sao Paulo - Brazil Tel. + 55 11 / 40 44 47-48 • Fax + 55 11 / 40 44 50-51 vendas@rothenberger.com.br • www.rothenberger.com.br
Bulgaria	ROTHENBERGER Bulgaria GmbH Boul. Sitniakovo 79 • BG-1111 Sofia Tel. + 35 9 / 2 9 46 14 59 • Fax + 35 9 / 2 9 46 12 05 info@rothenberger.bg • www.rothenberger.bg
China	SHANGHAI ROTHENBERGER I/E CO., LTD No. 199 Jiugan Road, Sijing Town Songjiang District, Shanghai, (201601) China Tel. + 86 / 21 57 61 76 88 • 0086 / 21 5761 7959 Fax + 86 / 21 57 62 60 62 • office@rothenberger.cn
Czech Republic	ROTHENBERGER CZ, národní stroje, spol. s.r.o. Vinohradská 100 (1710) • CZ-130 00 Praha 3 Tel. + 42 02 / 71 73 01 83 • Fax + 42 02 / 67 31 01 87 info@rothenberger.cz • www.rothenberger.cz
Denmark	ROTHENBERGER Scandinavia A/S Fåborgvej 8 • DK-9220 Aalborg Øst Tel. + 45 98 / 15 75 66 • Fax + 45 98 / 15 68 23 rosca@rothenberger.dk
France	ROTHENBERGER France S.A. 24, rue des Drapiers, BP 45033 • F-57071 Metz Cedex 3 Tel. + 33 3 / 87 74 92 92 • Fax + 33 3 / 87 74 94 03 info-fr@rothenberger.com
Greece	ROTHENBERGER Hellas S.A. 249 Syngrou Avenue • GR-171 22 Nea Smyrni, Athens Tel. + 30 210 / 94 07 302 • Fax + 30 210 / 94 07 322 ro-he@otenet.gr
Hungary	ROTHENBERGER Hungary Kft. Gubacsi út 26 • H-1097 Budapest Tel. + 36 1 / 3 47 - 50 40 • Fax + 36 1 / 3 47 - 50 59 mail@rothenberger.hu
India	ROTHENBERGER India Private Limited B-1/D-5, Ground Floor Mohan Cooperative Industrial Estate Mathura Road, New Delhi 110044 Tel. + 91 11 / 51 69 90 40, 51 69 90 50 • Fax + 91 11 / 51 69 90 30 contactus@rothenbergerindia.com
Ireland	ROTHENBERGER Ireland Ltd. Bay N. 119, Shannon Industrial Estate IRL-Shannon, Co. Clare Tel. + 35 3 61 / 47 21 88 • Fax + 35 3 61 / 47 24 36 rothenb@iol.ie
Italy	ROTHENBERGER Italiana s.r.l. Via G. Reiss Romoli 17 • I-20019 Settimo Milanese Tel. + 39 02 / 33 50 12 12 • Fax + 39 02 / 33 50 0151 rothenberger@rothenberger.it • www.rothenberger.it
Mexico	Rothenberger S.A. Sucursal México Bosques de Duraznos No. 69-1006 Bosques de las Lomas • México D.F. 11700 Tel. + 52 / 55 85 89 - 39 48 ext 21/22 Fax + 52 / 55 85 89 - 57 70 ext 11
Netherlands	ROTHENBERGER Nederland bv Postbus 45 • NL-5120 AA Rijen Tel. + 31 (0) 1 61 / 29 35 79 • Fax + 31 (0) 1 61 / 29 39 08 info@rothenberger.nl • www.rothenberger.nl
Poland	ROTHENBERGER Polska Sp.z.o.o. ul. Cyklamienów 1 • PL-04-798 Warszawa Tel. + 48 22 / 6 12 77 01 • Fax + 48 22 / 6 12 72 95 biuro@rothenberger.pl • www.rothenberger.pl
Portugal	SUPER-EGO TOOLS FERRAMENTAS, S.A. Apartado 62 - 2894-909 Alcochete - PORTUGAL Tel. + 3 51 / 9 12 21 80 80 • Fax + 3 51 / 2 26 00 40 30 sul.pt@rothenberger.es
Singapore	ROTHENBERGER TOOLS (FE) PTE LTD 147 Thyrwhitt Road Singapore 207561 Tel. + 65 / 6296 - 2031 • Fax + 65 / 6296 - 4031 www.rothenberger.com.sg
South Africa	ROTHENBERGER-TOOLS SA (PTY) Ltd. P.O. Box 4360 • Edenvale 1610 165 Vanderbijl Street, Meadowdale Germiston Gauteng (Johannesburg), South Africa Tel. + 27 11 / 3 72 96 33 • Fax + 27 11 / 3 72 96 32 info@rothenberger-tools.co.za
Spain	ROTHENBERGER S.A. Ctra. Durango-Elorrio, Km 2 • E-48220 Abadiano (Vizcaya) (P.O. Box) 117 • E-48200 Durango (Vizcaya) Tel. + 34 94 / 6 21 01 00 • Fax + 34 94 / 6 21 01 31 export@rothenberger.es • www.rothenberger.es
Switzerland	ROTHENBERGER Schweiz AG Herost. 9 • CH-8048 Zürich Tel. + 41 / 14 01 08 00 • Fax + 41 / 1 4 01 06 08 info@rothenberger-werkzeuge.ch
Turkey	ROTHENBERGER Tes. Alet ve Mak. San. Tic. Ltd. Sti Poyraz Sok. No: 20/3 - Detay Is Merkezi TR-34722 Kadiköy-Istanbul Tel. + 90 / 216 449 24 85 pbx • Fax + 90 / 216 449 24 85 rothenberger@rothenberger.com.tr
UK	ROTHENBERGER UK Limited 2, Kingsthorpe Park, Henson Way Kettering • GB-Northants NN16 8PX Tel. + 44 15 36 / 31 03 00 • Fax + 44 15 36 / 31 06 00 info@rothenberger.co.uk
USA	ROTHENBERGER USA LLC 4455 Boeing Drive; USA-Rockford, IL 61109 Tel. + 1 / 8 15 3 97 70 70 • Fax + 1 / 8 15 3 97 82 89 www.rothenberger-usa.com ROTHENBERGER USA Inc. Western Regional Office • USA-955 Monterey Pass Road Monterey Park, CA 91754 Tel. + 13 23 / 2 68 13 81 • Fax + 13 23 / 26 04 97
Russia	ROTHENBERGER Agency OLMAX 2-d Verkhny Mikhailovsky pr-d, 9 build.2 115419 Moscow Tel. +7/09 57 92 59 44 • Fax +7/09 57 92 59 46 olmax@olmax.ru • www.olmax.ru



ROBULL 2"

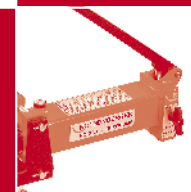
Bedienungsanleitung
Instructions for use
Instruction d'utilisation
Instrucciones de uso
Istruzioni d'uso
Instruções de uso



www.rothenberger.com/manuals

- 5.7950X
- 5.7966X
- 5.7961X
- 5.7969X
- 5.7973X
- 5.7972X

9992079 02.08



Service Hotline +49 (0) 61 95-99 52-12
www.rothenberger.com



INDEX

1. General characteristics	6
2. Starting up and using the two-plate pipe bender	6
3. Training and maintenance	7
4. Troubleshooting	7
4.1 The piston fails to advance	7
4.2 The piston advances only in the absence of load	7
4.3 The piston stops before reaching the end of its stroke	7
4.4 The piston advances and returns with each pump stroke	7
4.5 The piston advances well under load but the lever returns suddenly.	7
5. Exploded drawing	8-9

INSTRUCTIONS FOR USE

INSTRUCTIONS FOR USE

1. General characteristics

With the rothenberger pipe bender you can cold bend galvanized or black steel pipes of the following types, without filling, and without reamers on the inside:

Steel Pipe EN 10255 Medium and heavy series

The angles we can effect with these benders range from 0° to 180°. A right angle can be made directly, while others can be effected with several curves.

These angles can be in different planes. The equipment could be hand operated or electrically, with automatic, piston return.

Its main features are:

- Nominal power: 8 Tn
- Maximum travel: 270 mm.
- Piston diameter: 34 mm.
- Pump piston diameter: 16 mm (hand operated) y 10 mm (electric).
- Volume of top-up oil: 850 cc.

- Oil to be used: ISO 32 or similar.

2. Starting up and using the two-plate pipe bender

1. Fit the guide plates to the front flange and secure them with pins.
2. Fit the diabolos to the lower plate, in the position corresponding to the size of the pipe to be bent. At the same time fit the diablo in position in accordance with the size of the pipe.
3. At the end of the piston, fit the former corresponding to the size of the pipe that it is desired to bend. Place the pipe in position and put down the upper plate.
4. In the event that the pipe to be bent is welded, the weld beam should be placed either in the upper or lower side position.
5. Before starting to use the pipe bender, release any pressure there may be in the valve system of the hydraulic circuit. Do this by opening the return cock and pumping several times with the lever or switch on the motor.

6. Make sure the return valve is well closed, and the tank plug open
7. You can then begin to operate the pump lever or switch on the motor.
8. When the bend has been finished, return the piston by loosening the return valve on the side of the distributor.

When the oil has been topped up, fit the unit in inclined position, i.e. almost vertical, and with the piston upward. Open the return valve and work the pump with the lever until suction is as it should be. After a short space of time with the position unchanged, and when suction is satisfactory, fit in horizontal working position.

In the event that it is necessary to top up, use a high-quality hydraulic oil. Never use brake fluid. Bear in mind that excess of oil will render the equipment inoperative. Accordingly fill to about 70% of tank capacity (1250 cc), first removing the cap.

Close the tank plug for transportation

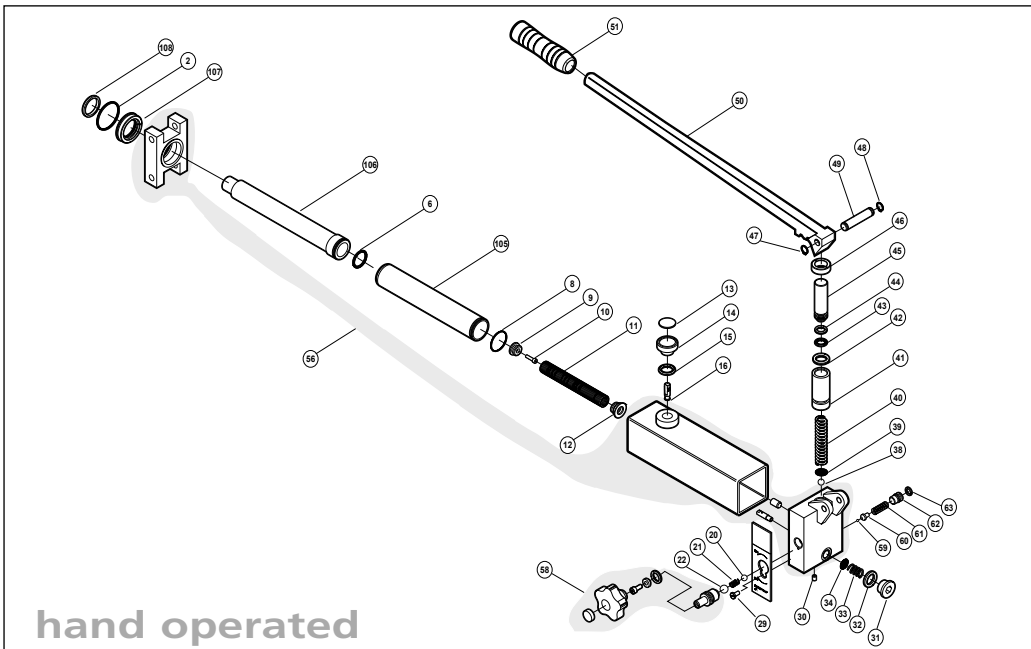
3. Training and maintenance

Check oil level at regular intervals. When topping up, be especially sure to filter the oil so that it is free of extraneous matter. Check its level by lifting the front part of the unit about 45° and looking in. The oil should reach the level of the hole used for loading it in.

4. Troubleshooting

Cause	Solution
The piston fails to advance	
Insufficient oil	Check oil level
Return valve not closed	Close return valve
Air in the system (pump)	Open the return valve and operate the pump lever until the air is released. To do this, position the unit with the piston upward, so that the oil will descend to the distributor
The piston advances only in the absence of load	
Return valve is poorly closed	Close the return valve
There is a foreign body in the intake valve	Disassemble the intake valve and clean it thoroughly, first having made the piston return
The piston stops before reaching the end of its stroke	
Very low oil level	Top up the oil
Tank plug closed	Open the tank plug
The piston advances and returns with each pump stroke	
Foreign body in the output valve, or air in the pipes	Position the cylinder vertically, first having made the cylinder return. Take apart the output valve and clean it.
Foreign body in the intake valve	Take apart the intake valve and clean it, first having made the piston return.
The piston advances well under load but the lever returns suddenly	
Foreign body in the check valve	Remove the check valve, disassemble it, and clean it, first having made the piston return.

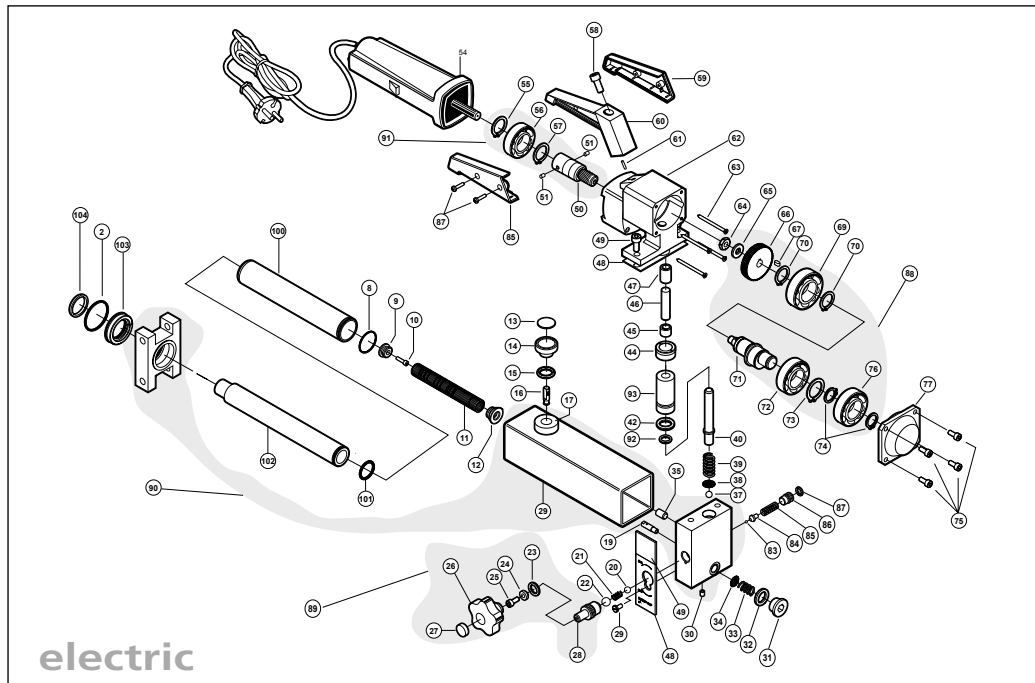
EXPLODED DRAWING



Code Item N° Art. N° N° Art. N°

	5.7985	Short radius 3/8" wafer	2	8.4852	46	8.4866
	5.8010	Long radius 3/8" wafer	6	8.4855	47	8.4885
	5.7986	Short radius 1/2" wafer	8	8.4864	48	8.4885
	5.8011	Long radius 1/2" wafer	9	8.4858	49	8.4884
	5.7987	Short radius 3/4" wafer	10	8.4859	50	8.4883
	5.8012	Long radius 3/4" wafer	11	8.4857	51	8.4886
	5.7988	Short radius 1" wafer	12	8.4860	56	7770137
	5.8013	Long radius 1" wafer	14	8.4849	58	7770118
	5.7989	Short radius 1.1/4" wafer	15	8.4850	59	7770132
	5.8014	Long radius 1.1/4" wafer	20	8.4871	60	7770131
	5.7990	Short radius 1.1/2" wafer	21	8.4880	61	7770133
	5.8015	Long radius 1.1/2" wafer	22	8.4879	62	2110134
	5.7991	Short radius 2" wafer	23	8.4877	63	2110019
	5.8016	Long radius 2" wafer	28	8.4627	106	7770020
	5.7981	2" single plate	29	8.4878	105	7770024
	5.7979	Fastening bolt	30	8.4882	107	7770025
	5.7982	Right diablo. Single plate	31	8.4874	108	7770026
	5.7983	Left diablo. Single plate	32	8.4875		
	5.7352	Tripod	33	8.4873		
	R 5.8185	Hydraulic Oil (1 Litre)	35	8.4861		
	5.8002	2" double plate	38	8.4871		
	5.7979	Fastening bolt	39	8.4872		
	5.8004	2" double plate right diablo	40	8.7870		
	5.8004	2" double plate left diablo	42	8.4881		
	5.7950	Hand-operated hydraulic pump	43	8.4867		

EXPLODED DRAWING



Code Item N° Art. N° N° Art. N°

	5.7985	Short radius 3/8" wafer	2	8.4852	76	8.4241
	5.8010	Long radius 3/8" wafer	6	8.4855	77	8.4232
	5.7986	Short radius 1/2" wafer	8	8.4864	78	7770135
	5.8011	Long radius 1/2" wafer	9	8.4858	79	7770129
	5.7987	Short radius 3/4" wafer	10	8.4859	80	7770128
	5.8012	Long radius 3/4" wafer	11	8.4857	82	7770127
	5.7988	Short radius 1" wafer	12	8.4860	83	7770132
	5.8013	Long radius 1" wafer	14	8.4849	84	7770131
	5.7989	Short radius 1.1/4" wafer	15	8.4850	85	7770133
	5.8014	Long radius 1.1/4" wafer	20	8.4871	86	7770134
	5.7990	Short radius 1.1/2" wafer	21	8.4880	87	2110019
	5.8015	Long radius 1.1/2" wafer	22	8.4879	88	7770113
	5.7991	Short radius 2" wafer	23	8.4877	89	7770118
	5.8016	Long radius 2" wafer	29	8.4878	90	7770138
	5.7981	2" single plate	30	8.4882	91	7770114
	5.7979	Fastening bolt	31	8.4874	92	7770143
	5.7982	Right diablo. Single plate	32	8.4875	93	7770142
	5.7983	Left diablo. Single plate	33	8.4873	100	7770020
	5.7352	Tripod	35	8.4861	102	7770024
	R 5.8185	Hydraulic Oil (1 Litre)	38	8.4871	103	7770025
	5.8002	2" double plate	39	8.4872	104	7770026
	5.7979	Fastening bolt	40	8.7870		
	5.8004	2" double plate right diablo	72	8.4242		
	5.8004	2" double plate left diablo	73	8.4249		
	5.7968	Electro hydraulic pump 230 V	74	8.4250		

EC-DECLARATION OF CONFORMITY

EC-DECLARATION OF CONFORMITY

We declare on our sole accountability that this product conforms to the standards and guidelines stated.

CE-KONFORMITÄTSEKTLÄRUNG

Wir erklären in alleiniger Verantwortung, dass dieses Produkt mit den angegebenen Normen und Richtlinien übereinstimmt.

DECLARATION CE DE CONFORMITÉ

Nous déclarons sous notre propre responsabilité que ce produit est conforme aux normes et directives indiquées.

DECLARACION DE CONFORMIDAD CE

Declaramos, bajo nuestra responsabilidad exclusiva, que este producto cumple con las normas y directivas mencionadas.

DICHARAZIONE DI CONFORMITÀ CE

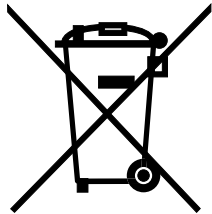
Dichiariamo su nostra unica responsabilità, che questo prodotto è conforme alle norme ed alle direttive indicate.

DECLARAÇÃO DE CONFORMIDADE CE

Declaramos, sob responsabilidade exclusiva, que o presente produto está conforme com as Normas e Directivas indicadas.

CE EN 50144.2.9
89392 EEC
91368 EEC
89/336 EEC
73/23 EEC

José Ignacio Pikaza



- (D) Nach Ablauf ihrer nützlichen Lebensdauer werfen Sie die Maschine bitte nicht in den Hausmüll, sondern überreichen Sie sie zum Recycling einer zugelassenen Entsorgungsstelle.
- (GB) When its useful life is over, do not dispose of the machine into the domestic waste, please send it to authorised places for recycling.
- (F) Une fois la vie utile de la machine terminée, ne la jetez pas à la poubelle, veuillez la remettre en vue de son recyclage dans les endroits autorisés.
- (E) Una vez acabada la vida útil de la máquina, no la tire en la basura doméstica, por favor entréguela para su reciclaje en los lugares autorizados.
- (I) Una volta esaurita la durata utile della macchina, non gettarla nella spazzatura domestica, per favore portarla nei luoghi autorizzati per il riciclaggio. (apparecchio, si es un pequeño electrodoméstico).
- (P) Quando termine a vida útil da máquina, não a jogue no lixo doméstico, por favor entregue-a em lugares autorizados para a sua reciclagem.

DEUTSCH

Bedienungsanleitung bitte lesen und aufbewahren! Nicht wegwerfen!
Bei Schäden durch Bedienungsfehler erlischt die Garantie! Technische Änderungen vorbehalten!

ENGLISH

Please read and retain these directions for use. Do not throw them away! The warranty does not cover damage caused by incorrect use of the equipment! Subject to technical modifications.

FRANÇAIS

Lire attentivement le mode d'emploi et le ranger à un endroit sûr! Ne pas le jeter ! La garantie est annulée lors de dommages dus à une manipulation erronée ! Sous réserve de modifications techniques

ESPAÑOL

¡Por favor, lea y conserve el manual de instrucciones! ¡No lo tire! ¡En caso de daños por errores de manejo, la garantía queda sin validez! Modificaciones técnicas reservadas,

ITALIANO

Per favore leggere e conservare le istruzioni per l'uso! Non gettarle via! In caso di danni dovuti ad errori nell'uso, la garanzia si estingue! Ci si riservano modifiche tecniche

PORTUGUES

Queiram ler e guardar o manual de instruções! Não deitar fora! Em caso de avarias por utilização incorrecta, extingue-se a garantia! Reservado o direito de alterações técnicas.