

Quackenbush™

Self Feed Drill



120	QP	21500	15000	xx...	xx...	2
-----	----	-------	-------	-------	-------	---

Motor Size

120 = 1.2 Horsepower

Tool Style

QP = Quackenbush, Pistol Grip

Series

21500 = Self Feed Drill

Tool Speed

15000 rpm

Accessories

2 = Vacuum Dust Collector

Accessories

625x375x150 = Template Boss
(.625" OD, .375" ID, .150" length)

Spindle Internal Thread Size

M6 x 100

For additional product information visit our website at www.coopertools.com

NORTH AMERICA

CooperTools
P.O. Box 1410
Lexington, SC 29071-1410

EUROPE

Recoules Operation
Zone Industrielle - B.P.28
Avenue Maurice Chevalier
77831 Ozoir-la-Ferriere Cedex, France

Quackenbush

General Instructions



WARNING:

Read the following instructions before using, installing or repairing this equipment.

SAFETY INSTRUCTIONS:

Make sure the air supply is disconnected before performing any service on this equipment.

Before starting the machine on the workstation, check to assure the nose assembly is properly secured.

OPERATING INSTRUCTIONS:

This Quackenbush positive feed drill is designed to operate on 90 PSI (6.3 bar) clean, compressed air.

In order to obtain maximum output and correct automatic cycle, the minimum air pressure must not be less than 80 PSI (5.6 bar). The inside diameter of the air supply hose must be 0.314" (8mm).

Install a filter, regulator and lubricator in the compressed air line. Proper lubrication is important for the performance and extended life of the equipment. The filter must be installed at the same height or higher than the work station.

MAINTENANCE:

To obtain maximum efficiency and output and avoid costly repairs, a maintenance program must be implemented, especially after a long idle period.

Use only manufacturer's replacement parts. The use of parts from other sources may cause malfunction of the equipment and nullify the manufacturer's warranty.

Check the following items on a regular basis:

- 1) Free speed of the equipment
- 2) Oil level (daily)

During periodic maintenance, the bearings must be cleaned and lubricated with a suitable grease (type FAG Arcanol L74V) or equivalent.

MECHANICAL PRINCIPLE:

The Quackenbush 120QP series Self Feed Drill has a pneumatically assisted feed, which is set with accuracy using a hydraulic feed control.

The rotation of the tool holder is transmitted directly by

the air motor to the blades.

The high precision tool holder is guided by several bearings with inclined contacts. Return to initial position is done by a spring.

A micromoter stop is used to set accurate drill depth for countersinking.

CYCLE SEQUENCE:

Connect the machine to the compressed air supply. Check the stroke and feed settings.

Press the trigger to allow air into the motor. At the same time, air enters through the inlet at the back of the handle. This air moves the piston backwards causing the cylinder and spindle to move forward.

The micromoter stop makes contact with the compensation limit, at this point the stroke has completed its maximum displacement. Release the trigger allowing the machine to return to its initial position. Repeat this process for the next drilling operation.

LUBRICATOR:

The lubricator is an air/oil mixture type and has two separate setting screws. One screw adjusts the quantity of air and the other adjusts the quantity of oil. Adjust these screws to achieve the proper mixture of air and oil to ensure adequate lubrication.

To refill the oil reservoir, remove the protective plug and use the standard tank filling system, part number 22008152.

MICROMOTER STOP:

The tool stroke can be controlled with the micromoter stop. In order to do this, simply turn to the desired value (this device has an accuracy of $\pm 0.0004"$ (0.01mm).

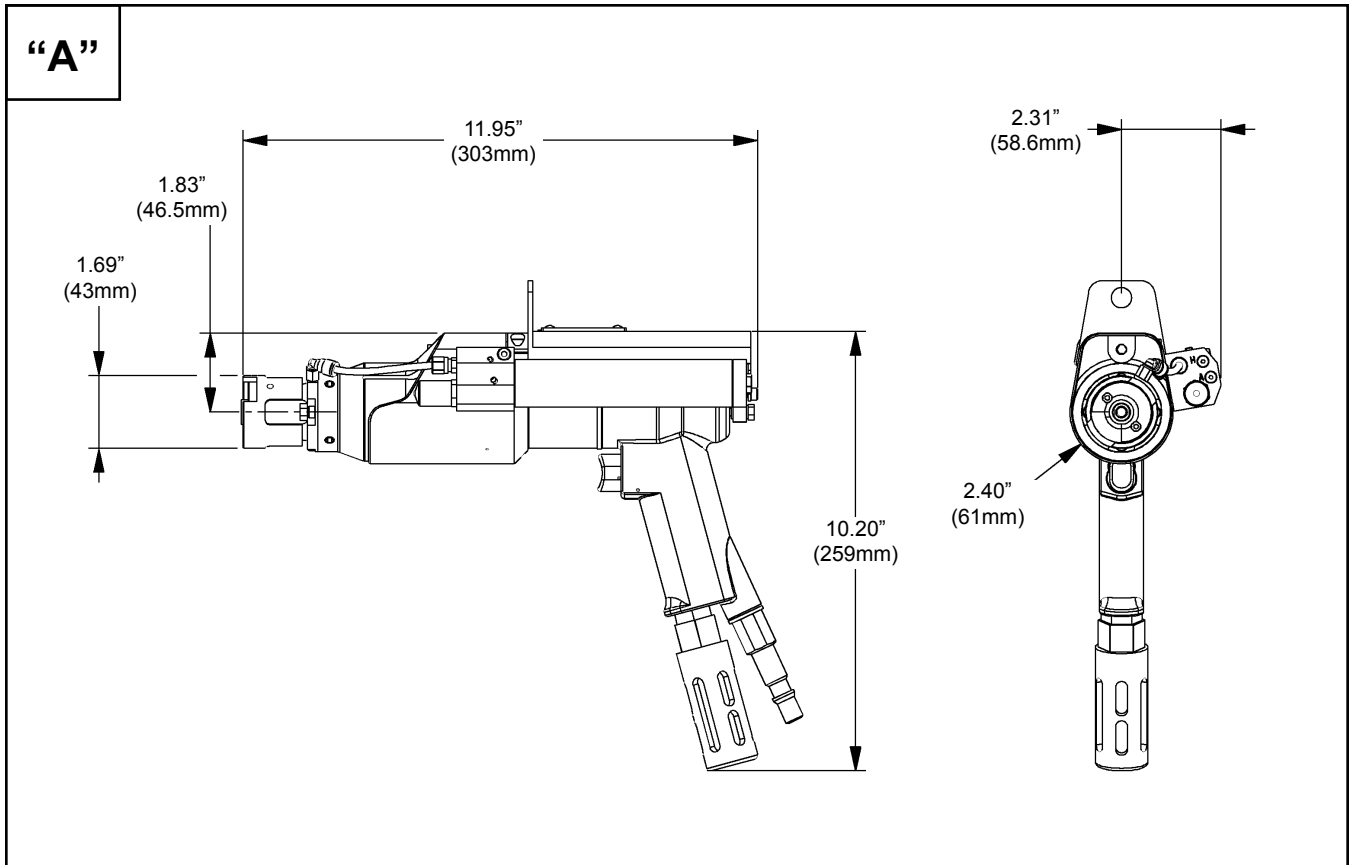
HYDRAULIC FEED CONTROL:

Graduated from 0 to 30, the hydraulic feed control allows adjustment of the machine feed (30 being maximum).

Using the rear button, turn to the desired setting. After selecting the desired feed setting, the rotation of the button can be locked by tightening the lock screw.

Quackenbush Specifications

PL92-120QP-0
July 3, 2003

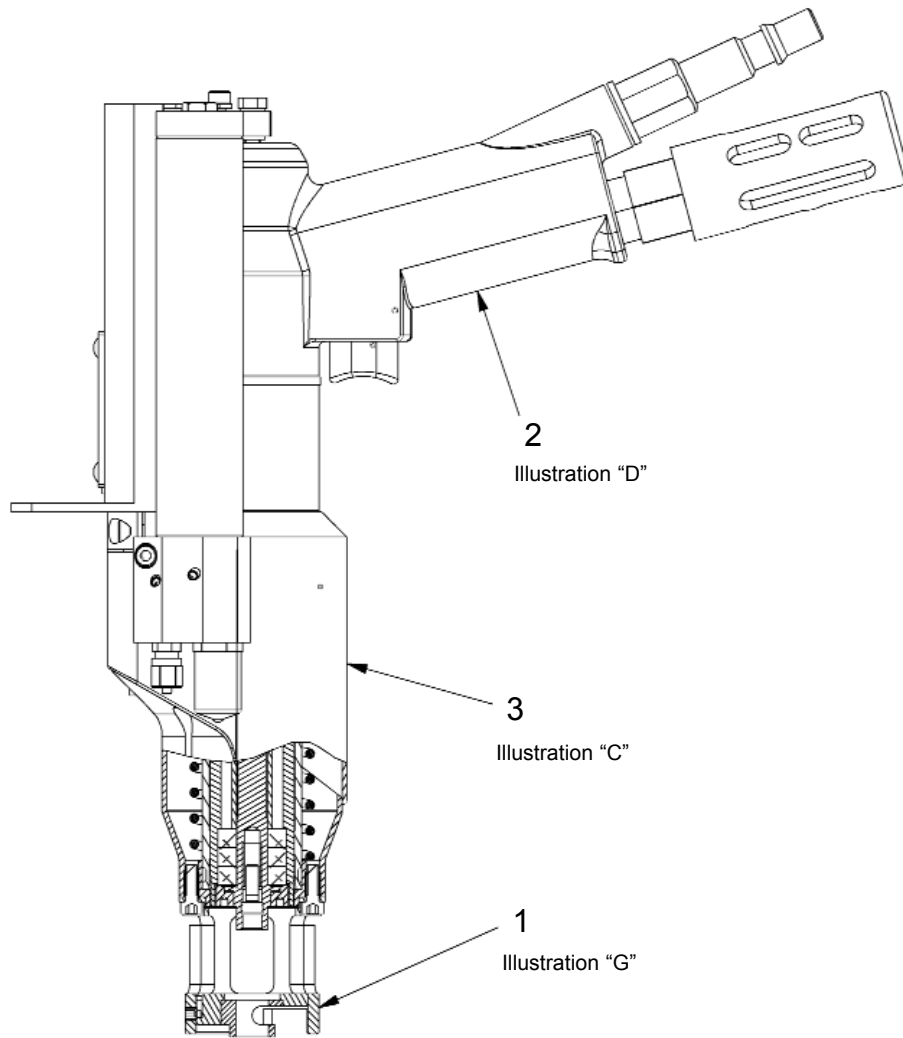
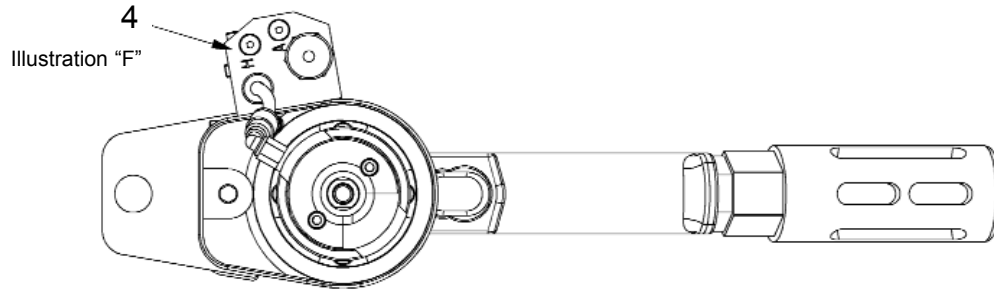


SPECIFICATIONS

Power:	1.2 hp (895 W)
Spindle Speed:	15,000 rpm (other speeds available on request)
Standard Stroke:	0.98" (25mm)
Accuracy of countersinking:	0.002" (0.05mm)
Feed:	Pneumatically assisted, regulated by hydraulic brake
Tool attachment:	M6 x 100
Dimensions:	See illustration "A"
Weight:	5.95 Lbs. (2.7 kg)
Noise level:	Less than 80 dB(A) during operation

Quackenbush 120QP Self Feed Drill 21500210

“B”



Quackenbush

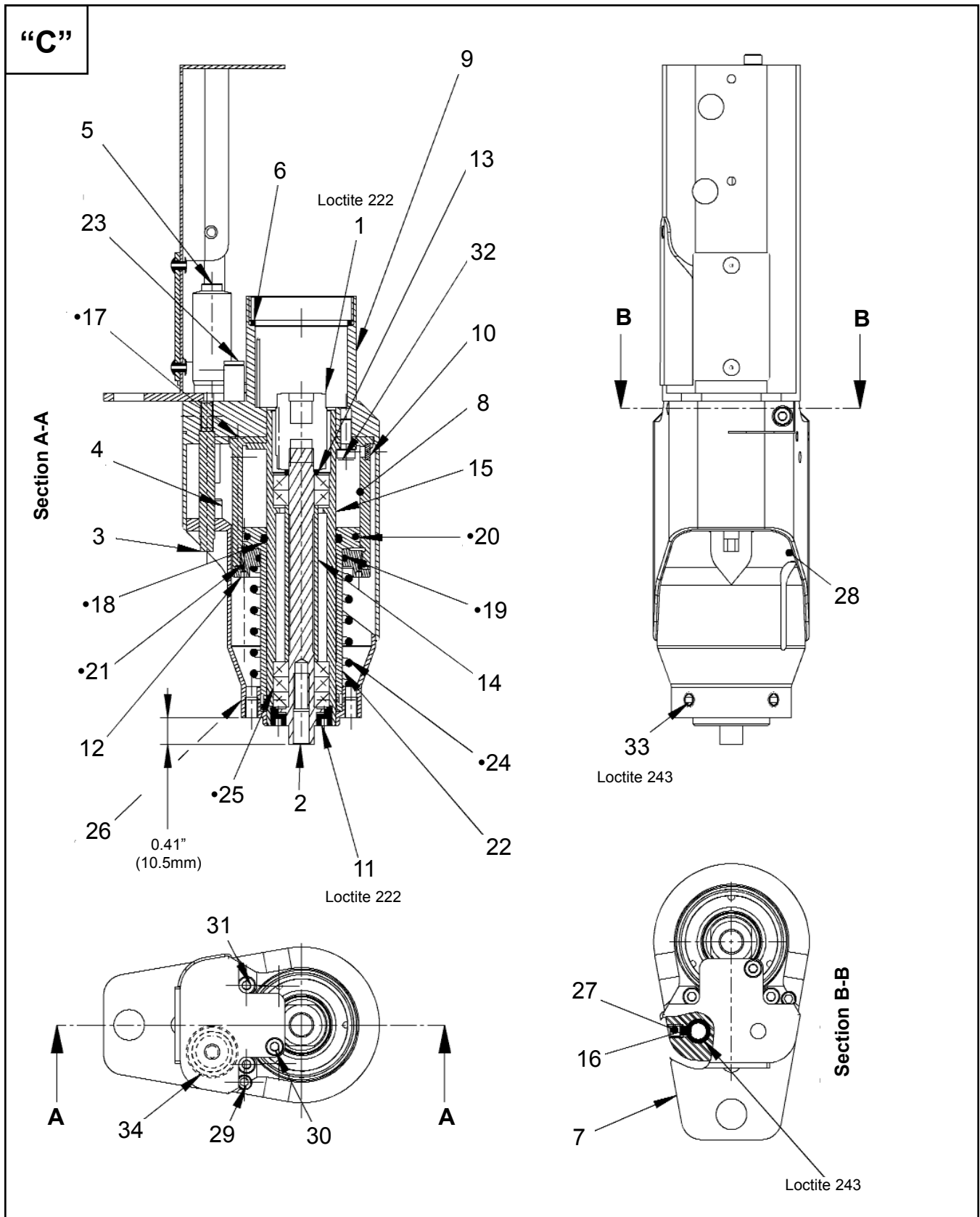
120QP Self Feed Drill 21500210

PL92-120QP-0
July 3, 2003

Index	Number	#	Kit	EN	DE	FR	ES	IT
				Description	Benennung	Designation	Description	Description
1	21500041	1		Bipod Nose	Kopfstück	Nez bipode	Tobera	Naso
2	21500055	1		Handle Assembly	Handgriff	Poignée	Manija	Manipugnatura
3	21500070	1		Pneumatically Assisted Drill	Selbstvorstößende Bohrer	Perceuse assistée	Taladros de autoalimentación	Trapani ad alimentazione automatica
4	22007060	1		Acculub Lubricator	Schmierung	Lubrificateur acculub	Lubricación	Lubrificazione

#) Quantity / Stückzahl / Quantité / Cantidad / Quantità

Quackenbush 120QP Self Feed Drill 21500070



Quackenbush

120QP Self Feed Drill 21500070

PL92-120QP-0
July 3, 2003

Index	Number	#	Kit	EN	DE	FR	ES	IT
				Description	Benennung	Designation	Description	Description
1	90000027	1		Elastic Coupling	Kupplung	Accouplement Élastique	Acoplamiento	Accoppiamento
2	90030133	1		Output Spindle	Spindel	Abrè	Husillo	Mandrino
3	90030162	1		Shaft	Achse	Axe du vérin	Eje	Abero
4	90290037	1		Guide	Führung	Guide	Guía	Guía
5	90290041	1		Micrometer Limit	Stopper	Bouchon	Tapadero	Tappo
6	90410784	1	A	Shim	Unterlegstück	Calepeable	Cabo	Spessore
7	90420147	1		Housing	Gehäuse	Corps	Caja	Corpo
8	90510078	1		Piston Body	Kolbenblock	Bloc du Piston	Bloque de émbolo	Blocco pistone
9	90510079	1		Drill Housing	Gehäuse	Corps	Caja	Corpo
10	90635005	1		Filter	Filter	Filtre	Filtro	Filtro
11	90810116	1		Lock nut	Überwurfmutter	Contre-écrou môle	Tuerca de fijación	Dado dibloccaggio
12	90810117	1		Nut	Mutter	Écrou	Tuerca	Dado
13	90835060	1		Spacer	Distanzstück	Entotoise	Espaciador	Distanziale
14	90835067	1		Spacer	Distanzstück	Entotoise	Espaciador	Distanziale
15	91015022	1		Sleeve	Hülse	Douille	Manguito	Manicotto
16	91225007	1		Screw	Gewindestift	Vis	Tomillo	Vite
17	91815031	1	A	O-Ring	O-Ring	Jointtorique	Anillo "O"	Anello ad O
18	91815796	1	A	O-Ring	O-Ring	Jointtorique	Anillo "O"	Anello ad O
19	91815926	1	A	O-Ring	O-Ring	Jointtorique	Anillo "O"	Anello ad O
20	91816061	1	A	O-Ring	O-Ring	Jointtorique	Anillo "O"	Anello ad O
21	91816119	1	A	O-Ring	O-Ring	Jointtorique	Anillo "O"	Anello ad O
22	93050058	1		Piston	Kolben	Piston	Embol	Pistone
23	93405121	1	A	Coupling	Kupplung	Couplage	Acoplamiento	Accoppiamento
24	93430073	1	A	Compression Spring	Druckfeder	Ressortde compression	Muelle de compresión	Molla di compressione
25	93452022	5	B	Bearing	Lager	Coussinet	Cojinete	Cuscinetto
26	93620158	1		Housing	Gehäuse	Corps	Caja	Corpo
27	94224055	1		Screw	Gewindestift	Vis	Tomillo	Vite
28	94224120	1		Screw	Gewindestift	Vis	Tomillo	Vite
29	94224190	1		Screw	Gewindestift	Vis	Tomillo	Vite
30	94232080	1		Screw	Gewindestift	Vis	Tomillo	Vite
31	94234185	2		Screw	Gewindestift	Vis	Tomillo	Vite
32	94234190	4		Screw	Gewindestift	Vis	Tomillo	Vite
33	94235078	4		Screw	Gewindestift	Vis	Tomillo	Vite
34	6250024	1		Hydraulic Brake	Bremse	Frein	Freno	Freno

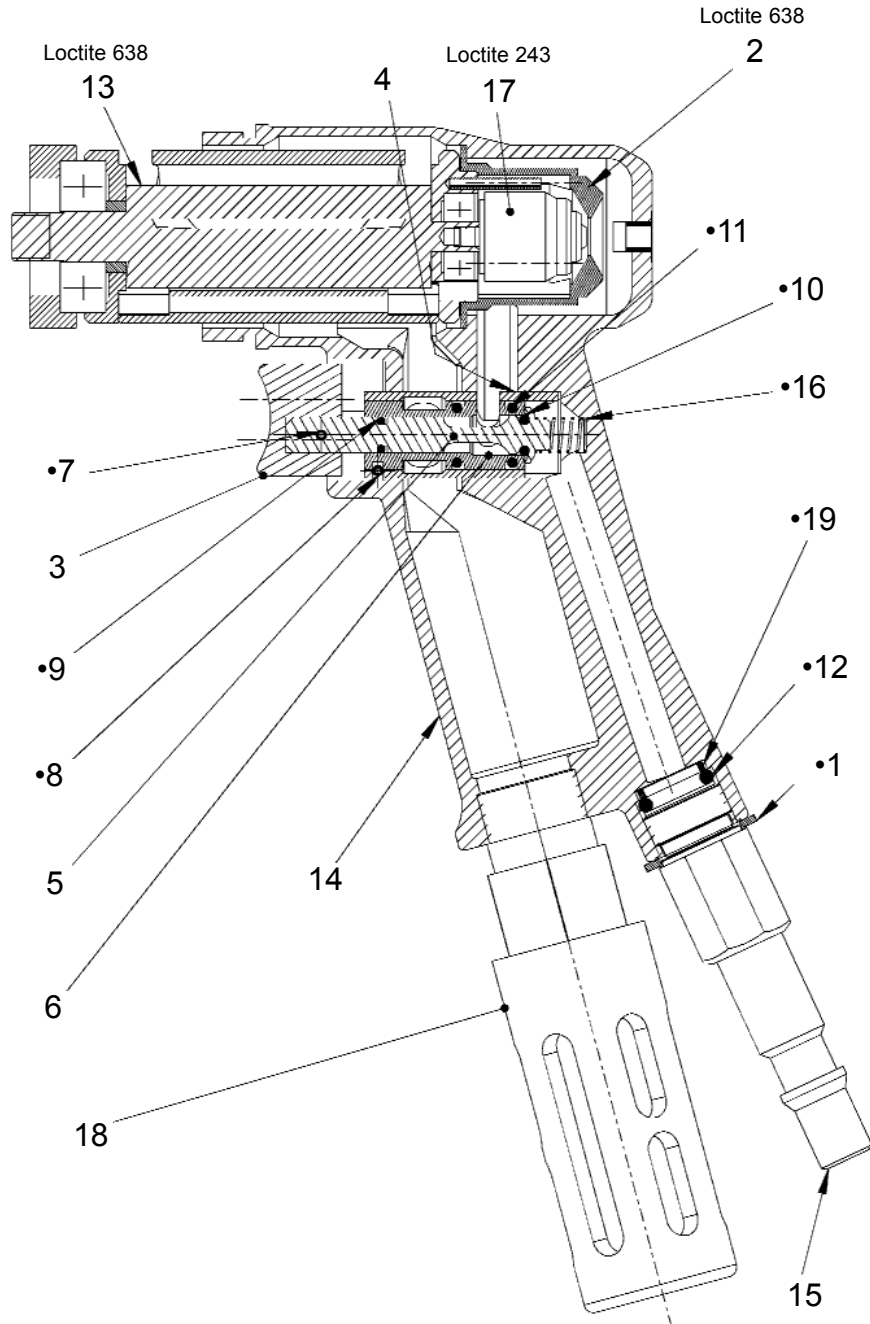
#) Quantity / Stückzahl / Quantité / Cantidad / Quantità

Kit - A: Included in Repair Parts Kit # 21500900

Kit - B: Included in Repair Parts Kit # 21500902

Quackenbush Handle Assembly 2150055

“D”



Quackenbush

Handle Assembly 2150055

PL92-120QP-0
July 3, 2003

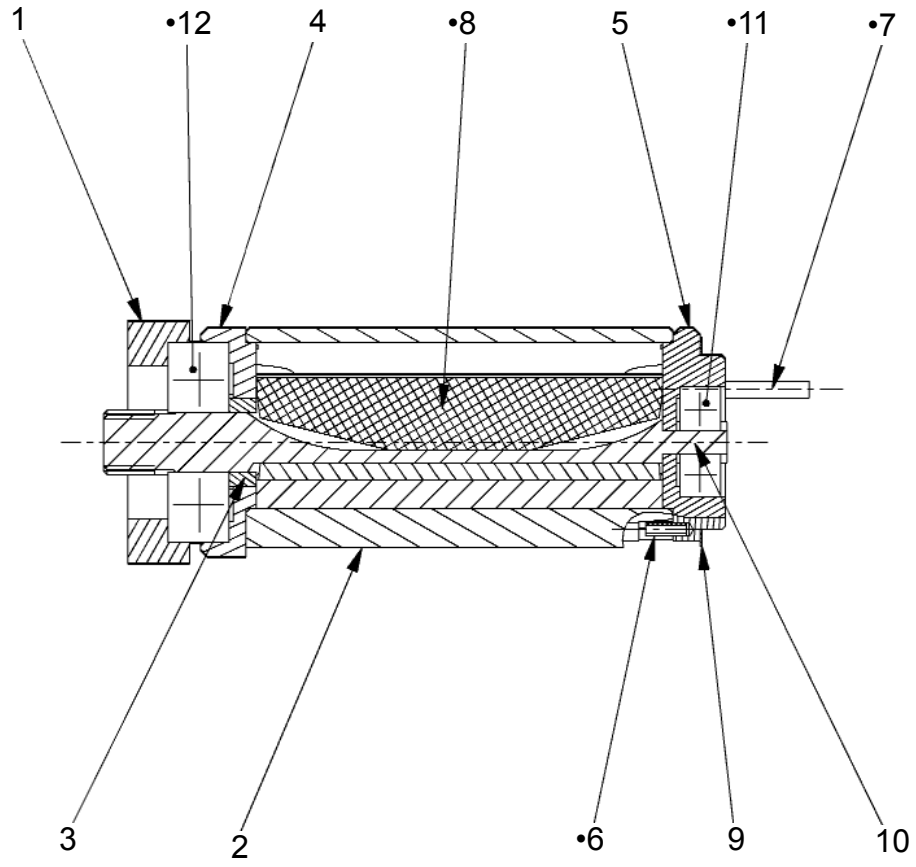
Index	Number	#	Kit	EN	DE	FR	ES	IT
				Description	Benennung	Designation	Description	Description
1	90225177	1	A	Seal	Dichtung	Sceau	Selb	Guarnizione
2	90247042	1		Block	Block	Bloc	Bloque	Blocco
3	90270014	1		Start Button	Drucktaste	Bouton de départ cycle	Botón	Pulsante
4	90450017	1		Sleeve	Hülse	Douille	Manguito	Manicotto
5	90460012	1		Valve	Ventil	Soupape	Válvula	Valvola
6	90620046	1		Sleeve	Hülse	Douille	Manguito	Manicotto
7	91217110	1	A	Rollpin	Spannstift	Boulin à roureau	Pivote de rodillo	Perno a cilindro
8	91217125	1	A	Rollpin	Spannstift	Boulin à roureau	Pivote de rodillo	Perno a cilindro
9	91815089	1	A	O-Ring	O-Ring	Jointorique	Anillo "O"	Anello ad O
10	91815095	1	A	O-Ring	O-Ring	Jointorique	Anillo "O"	Anello ad O
11	91815245	2	A	O-Ring	O-Ring	Jointorique	Anillo "O"	Anello ad O
12	91815330	1	A	O-Ring	O-Ring	Jointorique	Anillo "O"	Anello ad O
13	92429048	1		Motor	Motor	Moteur	Motor	Motore
14	93060062	1		Handle	Handgriff	Poignée	Manija	Impugnatura
15	93405837	1		Air inlet fitting	Luft einlass amatur	Monture d'entrée d'air	Accesorio de entrada de aire	Attacco aria
16	93430074	1	A	Spring	Druckfeder	Ressort	Resorte	Molla
17	93564004	1		Regulator	Regler	Régulateur	Regulador	Regolatore
18	93615007	1		Muffler	Schalldämpfer	Silencieux	Silenciador	Silenziatore
19	93800001	1		Filter	Filter	Filtre	Filtro	Filtro

#) Quantity / Stückzahl / Quantité / Cantidad / Quantità

Kit - A: Included in Repair Parts Kit # 21500900

Quackenbush Motor Assembly 92429048

“E”



Quackenbush

Motor Assembly 92429048

PL92-120QP-0
July 3, 2003

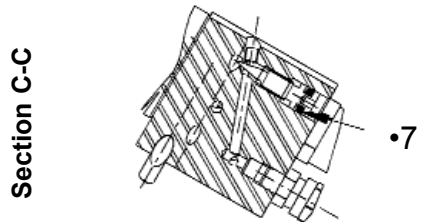
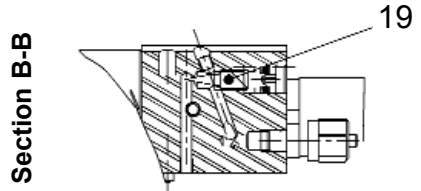
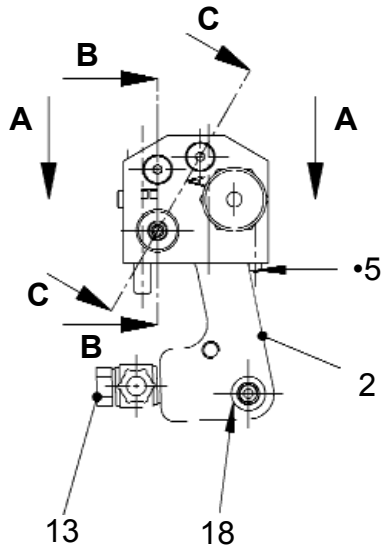
Index	Number	#	Kit	EN	DE	FR	ES	IT
				Description	Benennung	Designation	Description	Description
1	90226097	1		Bushing	Lagerbuchse	Douille	Casquillo	Boccola
2	90530014	1		Cylinder	Zylinder	Cylindre	Cilindro	Cilindro
3	90835052	1		Spacer	Distanzstück	Enteise	Espaciador	Distanziale
4	91010022	1		FrontPlate	Vorderplatte	Plaque de devanture	Placa frontal	Platello anteriore
5	91010037	1		RearPlate	Hinterplatte	Plaque arrière	Placa posterior	Platello posteriore
6	91217095	2		RollPin	Spannstift	Bouln à rouleau	Pivote de rodillo	Perno a cilindro
7	91217180	2		RollPin	Spannstift	Bouln à rouleau	Pivote de rodillo	Perno a cilindro
8	93010009	3	B	Rotorblade	Rotorblatt	Palette	Alabe del rotor	Paletta del rotore
9	93440119	1		Washer	Scheibe	Rondelle	Arandela	Rondella
10	93442007	1		Rotor	Rotor	Rotor	Rotor	Rotore
11	93450200	1	B	Bearing	Lager	Coussinet	Cojinete	Cuscinetto
12	93450385	1	B	Bearing	Lager	Coussinet	Cojinete	Cuscinetto

#) Quantity / Stückzahl / Quantité / Cantidad / Quantità

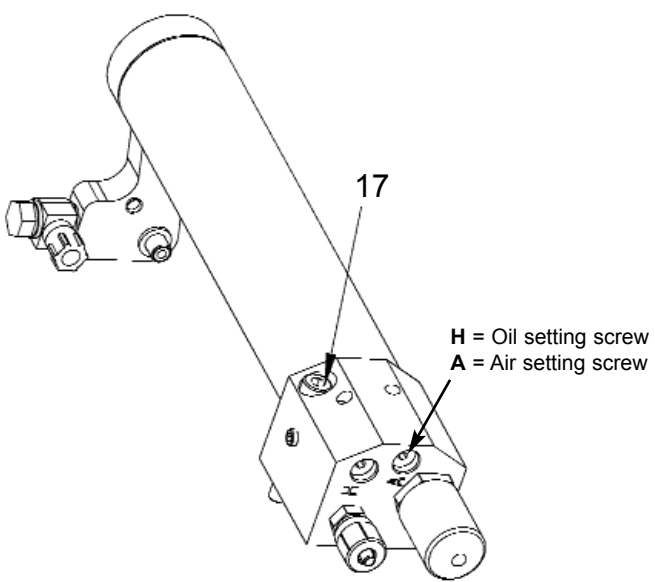
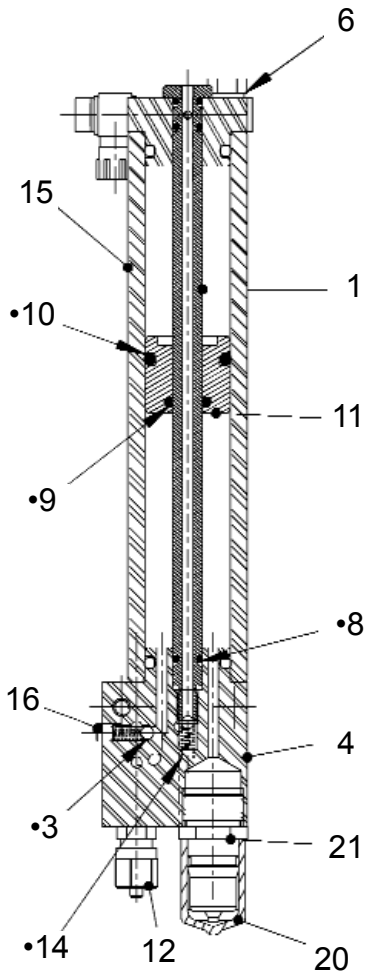
Kit - B: Included in Repair Parts Kit # 21500902

Quackenbush Acculub Lubricator 22007060

"F"



Section A-A



Quackenbush

Acculub Lubricator 22007060

PL92-120QP-0
July 3, 2003

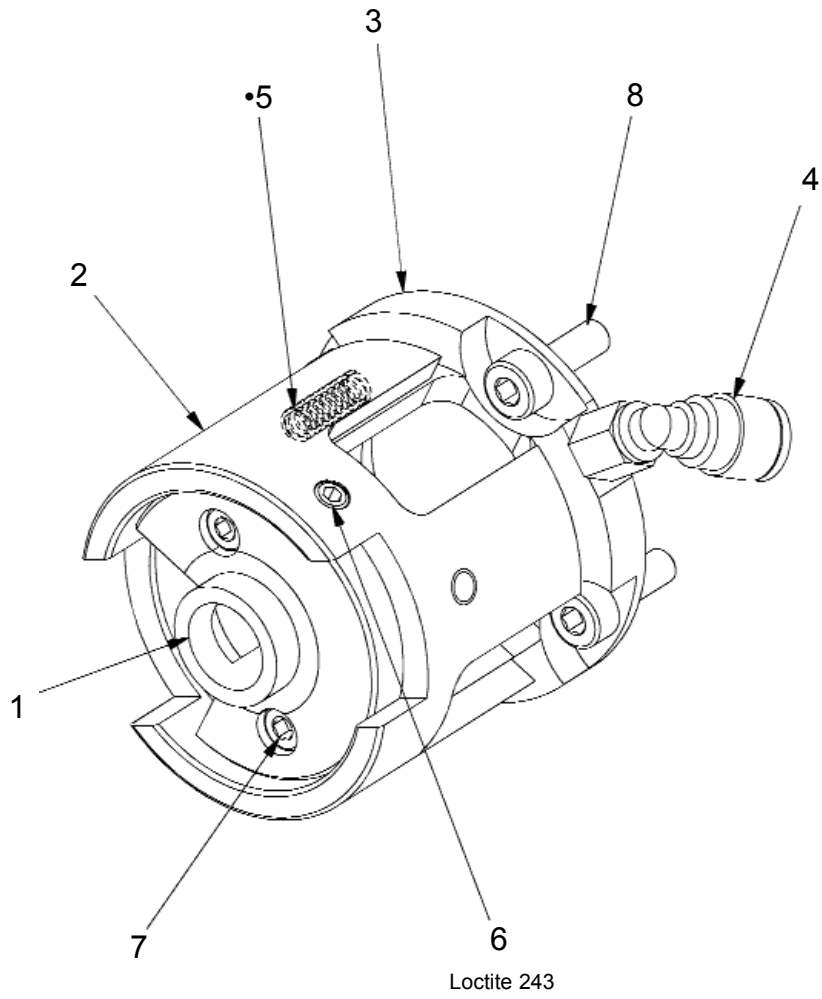
Index	Number	#	Kit	EN	DE	FR	ES	IT
				Description	Benennung	Designation	Description	Description
1	90030134	1		ReservoirShaft	Achse	Axe du vérin	Eje	Albero
2	90233013	1		Feed Bar	Vorschubschaltung	Régulateur d'alimentation	Controlde alimentación	Controlb alimentazione
3	90245140	2		Ball	Kugel	Bille	Bolas	Sfera
4	90247044	1		Block	Block	Bloc	Bloque	Blocco
5	91216090	1	C	Pin	Stift	Goupille cylindrique	Pasador	Spina
6	91810085	2	C	Gasket	Dichtung	Joint d'étanchéité	Empaquetadura	Guarnizione
7	91815071	2	C	O-Ring	O-Ring	Joint torique	Anillo "O"	Anello ad O
8	91815089	3	C	O-Ring	O-Ring	Joint torique	Anillo "O"	Anello ad O
9	91815201	1	C	O-Ring	O-Ring	Joint torique	Anillo "O"	Anello ad O
10	91815476	3	C	O-Ring	O-Ring	Joint torique	Anillo "O"	Anello ad O
11	93050059	1		Piston	Kolben	Piston	Embob	Pistone
12	93405030	1	C	Fitting	Paßstück	Monture	Accesorio	Accessorio
13	93405254	1	C	Elbow	Elbogen	Coude	Codo	Curva
14	93430754	2	C	Spring	Druckfeder	Ressort	Resorte	Molla
15	93825052	1		ReservoirTube	Rohrnuter	Tube	Tubo	Tubo
16	94220130	1		Screw	Gewindestift	Vis	Tomillo	Vite
17	94234206	1		Screw	Gewindestift	Vis	Tomillo	Vite
18	93405256	1		Fitting	Paßstück	Monture	Accesorio	Accessorio
19	622026	2		Lin itScrew	Gewindestift	Vis	Tomillo	Vite
20	625015	1	C	Plug	Buchse	Bouchon	Tapón	Spina
21	631586	1		Quick FillFitting	Paßstück	Monture	Accesorio	Accessorio

#) Quantity / Stückzahl / Quantité / Cantidad / Quantità

Kit - C: Included in Repair Parts Kit # 21500903

Quackenbush Bipod Nose Assembly 21500041

“G”



Quackenbush

Bipod Nose Assembly 21500041

PL92-120QP-0
July 3, 2003

Index	Number	#	Kit	EN	DE	FR	ES	IT
				Description	Benennung	Designation	Description	Description
1	90258...*	1		Boss Guide	Führung	Bossage guide	Guía	Guida
2	90820012	1		Mounting Base	Sockel	Em base bipode portée plate	Base	Base
3	92605112	1		Telescopic Nose	Kopfstück	Nez spécial télescopique	Tobera	Naso
4	93405694	1		Fitting	Paßstück	Monture	Accesorio	Accessorio
5	93430752	4		Spring	Druckfeder	Ressort	Resorte	Molla
6	94222135	1		Screw	Gewindestift	Vis	Tomillo	Vite
7	94234135	2		Screw	Gewindestift	Vis	Tomillo	Vite
8	94234190	4		Screw	Gewindestift	Vis	Tomillo	Vite

#) Quantity / Stückzahl / Quantité / Cantidad / Quantità

* NOTE: Boss guide diameter to be specified.

Quackenbush Repair Tool Kit

21500905 Tool Kit

Index	Number	#	Kit	EN	DE	FR	ES	IT
				Description	Benennung	Designation	Description	Description
	90469137	1		Allen key	Inbusschlüssel	C � Allen	Llave Allen	Chiavina brugola
	90469138	1		Allen key	Inbusschlüssel	C � Allen	Llave Allen	Chiavina brugola
	90470005	1		Allen key	Inbusschlüssel	C � Allen	Llave Allen	Chiavina brugola
	90470010	1		Allen key	Inbusschlüssel	C � Allen	Llave Allen	Chiavina brugola
	90470016	1		Allen key	Inbusschlüssel	C � Allen	Llave Allen	Chiavina brugola
	90470133	1		Allen key	Inbusschlüssel	C � Allen	Llave Allen	Chiavina brugola
	90470134	1		Allen key	Inbusschlüssel	C � Allen	Llave Allen	Chiavina brugola
	90470135	1		Allen key	Inbusschlüssel	C � Allen	Llave Allen	Chiavina brugola
		1		Assembly Tool	Werkzeug	Outil	Henamienta	Utensile

#) Quantity / St ckzahl / Quantit  / Cantidad / Quantit 



CooperTools
P.O. Box 1410
Lexington, SC 29071-1410
USA
Phone: 803-359-1200
Fax: 803-808-6735
www.coopertools.com

Recoules, S.A.
Zone industrielle - B.P. 28
77831 Ozoir-la-Ferrière Cedex
France
Téléphone: (33) 01 64 43 22 00
Téléfax: (33) 01 64 40 17 17