

Manual JEX-24, JEX-28 e JT-20

INSTRUCTIONS FOR THIS TOOL

About Your Tool

WARNING

- **Wear protective glasses and a dustproof mask.**
Operation generates chips and dust particles, etc. which may cause eye and / or respiratory injury: Always use PPE (Personal Protective Equipment) for eye and respiratory protection.
- **Wear vibration reducing and shock absorbing gloves.**
This is a power tool utilizing vibration. Wear vibration reducing and shock absorbing gloves. When your hands, fingers, arms, etc. feel discomfort during operations, immediately stop your work. Long hour operation should be prohibited, for it may cause Vibration-induced disorder.
- **Always wear suitable hearing protection.**
The tool generates loud noise. Always use ear plugs for hearing protection. Take necessary measures to comply with the local regulatory requirements and laws with regard to noise level, or do better.
- **Do not operate tool at no load.**
Do not operate the tool at no load: It may not only Cause damage to the tool but also may cause Needles to fracture and fly out, possibly resulting in unexpected accident.

1. USAGE

- Remove slag and spatter from welding.
- Perform shot peening after welding.
- Remove rust, paint, cast sand from irregular metal surface.
- Peel off adhered concrete. Clean brick surfaces and stone structures.
- The tool is used for operations in the difficult-to-operate areas where no other tool would be feasible : in narrow difficult-to-reach areas, extremely irregular surfaces, and grooves, cracks and other exterior surfaces without containers, etc.

2. CHECK THE CONTENTS OF THE PACKAGE

Check the contents and make sure that the tool does not have any damage which may have occurred during transportation. The contents should correspond to the list as follows. In case of damage/missing parts, please contact the sales agent from whom you purchased the tool.

JT-20

Package Contents	Qty	Check
JT-20	1set	
Needle O.D.3×180mm;(on tool)	12	
Needle O.D.3×180mm	12	
Bushing R3/8×NPT3/8	1	
Hose Nipple R3/8×3/8	1	
Instruction Manual	1	
Declaration of Conformity	1	
Caution for Use	1	

JEX-20

Package Contents	Qty	Check
JEX-20	1set	
Needle O.D.3×180mm;(on tool)	12	
Needle O.D.3×180mm	12	
Bushing R3/8×NPT3/8	1	
Hose Nipple R3/8×3/8	1	
Instruction Manual	1	
Declaration of Conformity	1	
Caution for Use	1	

JEX-24

Package Contents	Qty	Check
JEX-24	1set	
Needle O.D.3×180mm;(on tool)	23	
Hex. Socket Screw Key 6	1	
Bushing R3/8×NPT3/8	1	
Hose Nipple R3/8×3/8	1	
Instruction Manual	1	
Declaration of Conformity	1	
Caution for Use	1	



Eurosul Fornecedor de Navios Ltda
 Rua Iapó, 180 - Pinheis/Pr
 Alphaville Graciosa - Cep: 83.327-075
 Fone: 41 3668-1319 - Cel: 41 99191-3037
 Email: CRL@eurosul.com
 CNPJ 03.178.524/0001-63 - Insc: 99166839-26



JEX-2800A

Package Contents	Qty	Check
JEX-2800A	1set	
Needle O.D.3x180mm;(on tool)	28	
Needle O.D.4x180mm	14	
Needle Supporter O.D.4	1	
Bushing R3/8xNPT3/8	1	
Hose Nipple R3/8x3/8	1	
Instruction Manual	1	
Declaration of Conformity	1	
Caution for Use	1	

3-3. Lubrication

Install an oiler between the compressor and the tool.
 Use the machine oil ISO VG-10. Failure to lubricate as required may result in damage to the tool. Use of oil that is too thick will reduce the performance of the tool.

3-4. Short hose fittings

Do not fix a coupling directly on the tool. Make sure that after a short hose is fixed with the Hose Nipple R3/8X3/8 including in the accessories, then the coupling be attached. If the coupling is directly fixed, it would be damaged by the vibration and the life would be shortened.

4. HOW TO OPERATE THE TOOL

⚠ WARNING

- Do not operate tool at no load. Do not operate the tool at no load: It may not only cause damage to the tool but also may cause needles to fracture and fly out, possibly resulting in unexpected accident.

3. AIR SUPPLY

3-1. Air Pressure

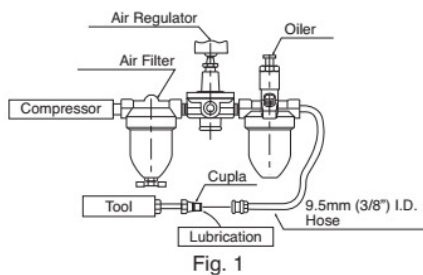
Adjust air pressure with the air regulator to the appropriate level for the pneumatic tool used.

Air pressure that is too low will stop the tool from operating at full capacity.

Air pressure that is too high may cause damage to the tool.

3-2. Air Line (Fig.1)

Use a 9.5 mm (3/8") I.D. connecting hose between the compressor and the tool. Drained water, etc., if flown into the tool, could cause tool failure. Install an air filter between the compressor and the tool.



4-1. Start and Stop

- Check that a Throttle Lever is turned off and connecting the tool to the hose leading to air supply line.
- Hold the tool and turn on the Throttle Lever to Start.
- When the Throttle Lever is released, it will automatically turn off.

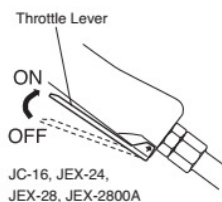


Fig. 2

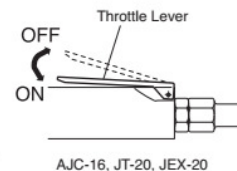


Fig. 3

4-2. Operation

You do not have to press the Needles against the workpiece with much force. Keep the Needle in contact with the work surface and apply force as if you were just trying to maintain solid contact between the Needles and workpiece. Too much force, if applied, could result in damage to the Needles, such as bending and / or breakage, or even damage to the tool itself. The Needles will closely follow any kind of configurations the workpiece surfaces may have, making it possible to get the work done with ease, speed and accuracy.

purchased the tool.



Eurosul Fornecedora de Navios Ltda
Rua Iapó, 180 - Pinhais/Pr
Alphaville Graciosa - Cep: 83.327-075
Fone: 41 3668-1319 - Cel: 41 99191-3037
Email: CRL@eurosul.com
CNPJ 03.178.524/0001-65 - Insc: 99186839-26

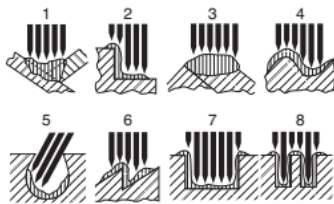


Fig. 4

4-3. Needle for JET CHISEL

Three types of Needles are available for JET CHISEL: i.e. 2, 3 and 4mm outer diameter (O.D.). The table below shows the Needles that are compatible with each model. Use these needles in accordance with your applications. (Note: represents diameter.)

Model	O.D.2	O.D.3	O.D.4
AJC-16	7pcs	3pcs	-
JC-16	29pcs	-	-
JT-20	29pcs	12pcs	-
JEX-20	29pcs	12pcs	-
JEX-24	53pcs	23pcs	-
JEX-28	66pcs	28pcs	14pcs
JEX-2800A	66pcs	28pcs	14pcs

Caution: The Needle Supporter that matches with the needle diameter is additionally required.

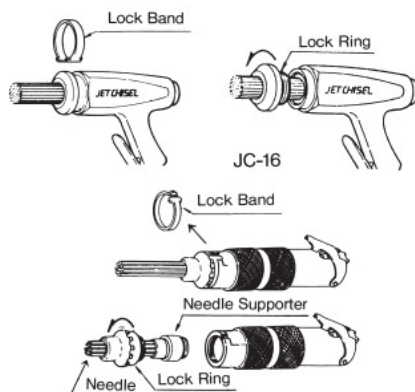
5. CHANGING NEEDLES

! WARNING

Before changing Needles, turn off the Throttle Lever and disconnect the air supply line.

5-1. JC-16, JT-20, JEX-20, AJC-16

- (1) Remove the Lock Band from the groove.
- (2) Loosen the Lock Ring and remove.



JT-20, JEX-20, AJC-16

Fig.5

- (3) Take out the Needle Supporter by pulling out the Needles.

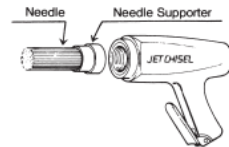


Fig. 6

- (4) Extract the Needles. Whenever the Needles are damaged during operation, they must be changed.
- (5) After changing Needles, assemble in the reverse manner of disassembly.

! Caution

Changing the Needle of AJC-16

The Needle is consumable parts, however, since AJC-16 consists of 3 pieces of Needles, even if one piece has been damaged, the Needle should be changed or replenished.

In this case set them after making the lengths of three Needles almost even through using grinders etc.

5-2. JEX-24

- (1) Unfasten the Hex. Socket Head Cap Screw 8x35 using the Hex. Wrench Key 6 and pull out the Needle Guide.

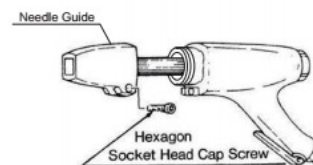


Fig. 7

- (2) Loosen the Lock Ring and remove. Take out the Needle Supporter by pulling out the Needles.



Eurosul Fornecedora de Navios Ltda

Rua Iapó, 180 - Pinhais/Pr
Alphaville Graciosa - Cep: 83.327-075
Fone: 41 3668-1319 - Cel: 41 99191-3037
Email: CRL@eurosul.com
CNPJ 03.178.524/0001-63 - Insc: 09186639-26

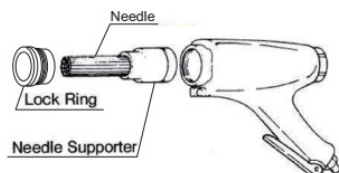


Fig. 8

- (3) Extract the Needles. Whenever the Needles are damaged during operation, they must be changed.
- (4) After changing Needles, assemble in the reverse manner of disassembly.

5-3. JEX-28

- (1) Unfasten the Hex. Socket Head Cap Screw 8X24 of the Needle Guide with the Hex. Socket Screw Key 6 and pull out the Needle Guide.

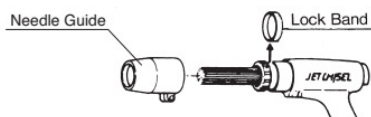


Fig. 9

- (2) Remove the Lock Band from the groove.
- (3) Loosen the Lock Ring and remove. Take out the Needle Supporter by pulling out the Needles.

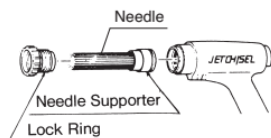


Fig. 10

- (4) Extract the Needles. Whenever the Needles are damaged during operation, the Needles must be changed.
- (5) After changing Needles, assemble in the reverse manner of disassembly.

5-4. JEX-2800A

- (1) To disassemble Needle Guide Ass'y, pull up the Clamp Lever and remove the Clamp Spring from the hook on the Guide. Take out the Needle Guide from the tool body. (Fig. 11)

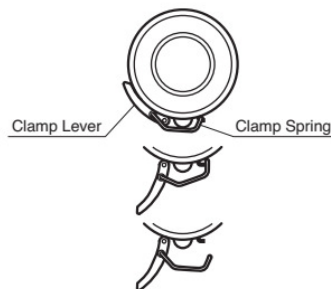


Fig. 11

- (2) Remove the Snap Ring by pinching the projected hooks.
- (3) Then you can take off the Needle Supporter together with other parts by pulling out the edge of Needles. (Fig. 12)

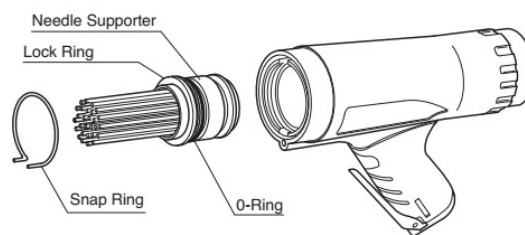


Fig. 12

- (4) After changing with new Needles, reverse assembly procedure.

⚠ Caution : When you assemble the Snap Ring, make sure it fits into the slot on the Cylinder.

6. THREAD SIZE OF HOSE FITTING

The product comes with a metal fitting with Rc (metric) thread. Connect the Bushing R thread x NPT thread included as standard accessories, if you would like to have American NPT thread instead.

7. STORAGE

⚠ CAUTION

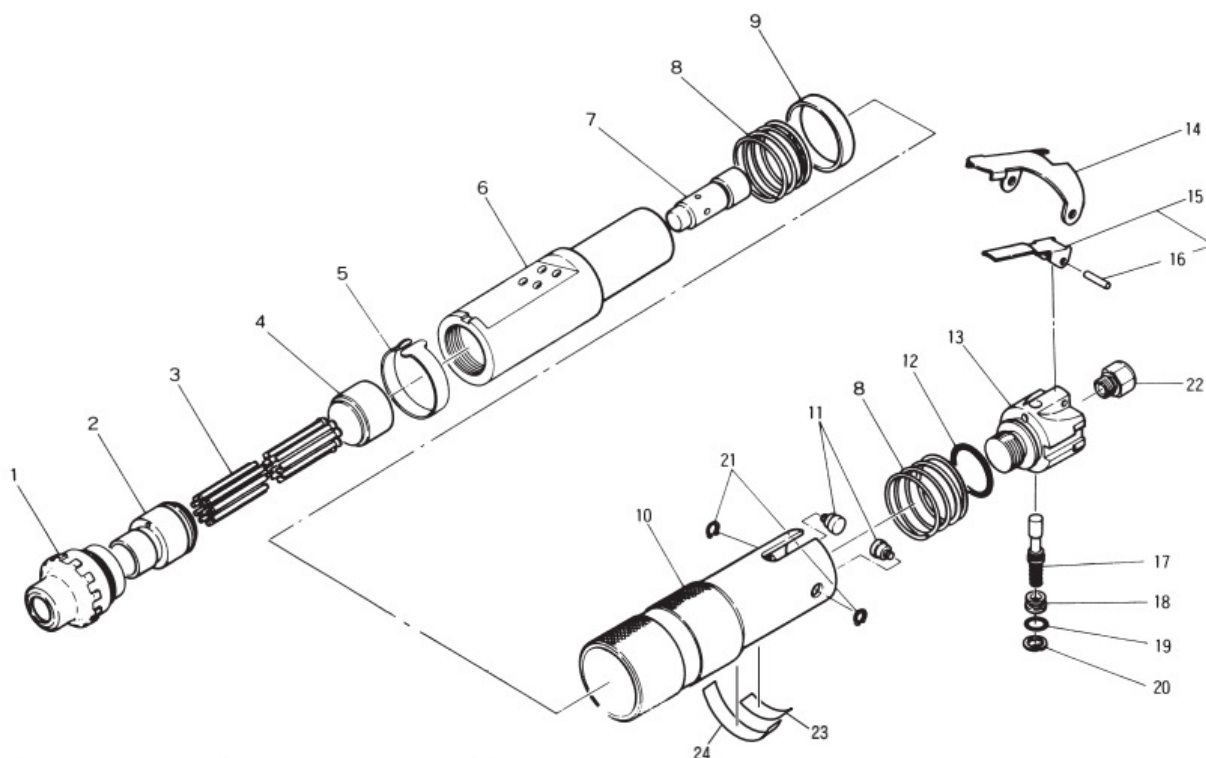
- **When tool is not used, store it out of children.**
Avoid storing the tool in a location subject to high humidity. If the tool is left as it is used, residual moisture on the inside can cause rusting. Before storing, and after operation, oil the tool at the air inlet with machine oil ISO VG-10 and run it for a short time.



Eurosul Fornecedora de Navios Ltda
 Rua Iapó, 180 - Pinhais/Pr
 Alphaville Graciosa - Cep: 83.327-075
 Fone: 41 3668-1319 - Cel: 41 99191-3037
Email: CRL@eurosul.com
 CNPJ 03.176.524/0001-63 - Insc: 99166639-26



JT-20



No.	Part No.	Description	Qty	Price
1	TP14689	Lock Ring	1	
2	TP00337	Needle Supporter O.D.3	1	
3	—	Needle O.D.3x180mm	12	
4	TP00336	Throttle Anvil	1	
5	TP14593	Lock Band	1	
6	TA99176	Cylinder Ass'y	1set	
7	TP00332	Piston	1	
8	TP14594	Spring 2.2x40.5x34	2	
9	TP14595	Stopper	1	
10	TB08713	Cover Sub Ass'y	1set	
23	(TQ12611)	Label Warning CE Mark	1	
24	(TQ12690)	Label Warning	1	
11	TP14599	Level Pin	2	
12	LP12795	O-Ring G-30	1	
13	TP15229	Valve Body	1	
14	TP14597	Throttle Lever	1	

No.	Part No.	Description	Qty	Price
15	TA98982	Throttle Lever Ass'y	1set	
16	(TP01921)	Spring Pin 3x18	1	
17	TA98983	Throttle Valve Ass'y	1set	
18	TP14601	Valve Cap	1	
19	TP14604	O-Ring S-10	1	
20	TP03695	Internal Retaining Ring C-12	1	
21	TP02853	Retaining Ring E-4	2	
22	TQ02349	Bushing M16xRc3/8	1	

Accessories

No.	Part No.	Description	Qty	Price
	—	Needle O.D.3x180mm	12	
	TQ02350	Bushing R3/8xNPT3/8	1	
	TQ03262	Hose Nipple R3/8x3/8	1	
	TQ12717	Instruction Manual	1	
	TQ12718	Declaration of Conformity	1	

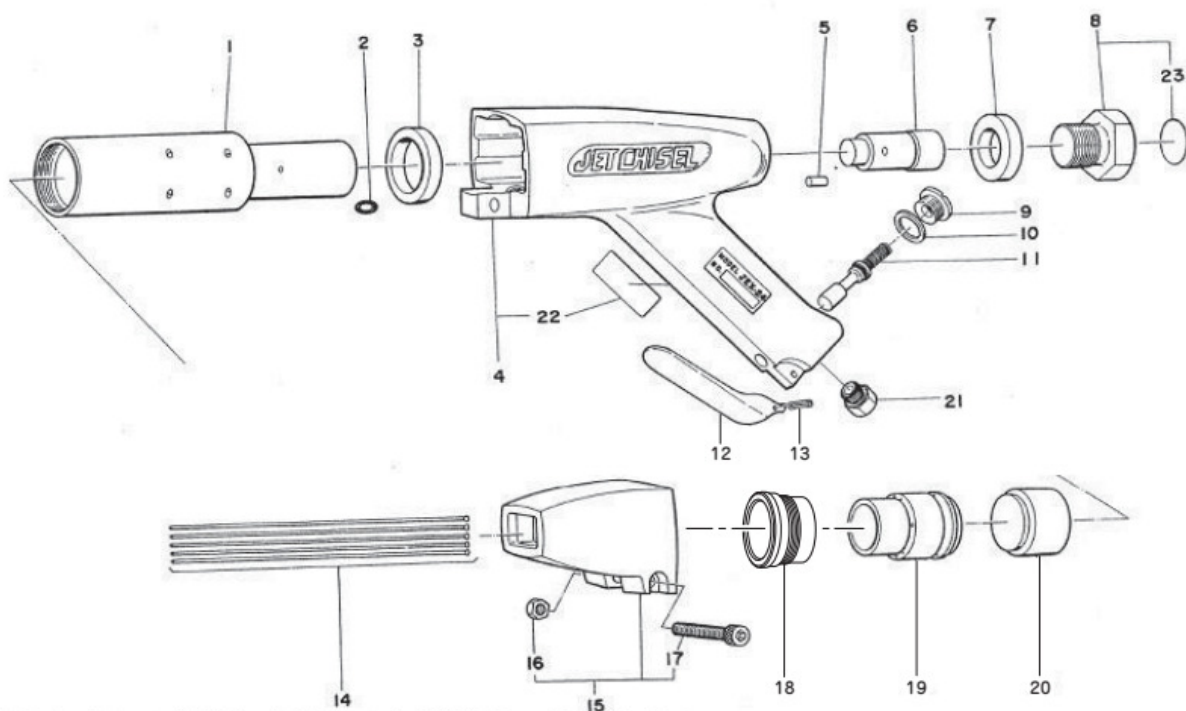


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Rua Iapó, 180 - Pinhais/Pr
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JEX-24



No.	Part No.	Description	Qty	Price
1	TQ13402	Cylinder	1	
2	TP11992	O-Ring KS-9	1	
3	TP02250	Front Washer	1	
4	TB08714	Housing Sub Ass'y	1set	
22	(TQ12611)	Label Warning CE Mark	1	
5	TP01478	Cylinder Lock Pin	1	
6	TP02242	Piston	1	
7	TP02249	Rear Washer	1	
8	TB08715	Rear Bolt Ass'y	1	
23	(TQ12687)	Label Warning	1	
9	TP00389	Valve Cap	1	
10	TP00388	Valve Packing	1	
11	TA90037	Throttle Valve Ass'y	1set	
12	TP01557	Throttle Lever	1	
13	TQ00563	Spring Pin 3x20	1	
14	—	Needle O.D.3x180mm	23	

No.	Part No.	Description	Qty	Price
15	TA93189	Needle Guide Ass'y	1set	
16	(TQ01484)	Small Hex. Nut M8	1	
17	(TP16284)	Hex. Socket Head Cap Screw 8x45	1	
18	TP02246	Lock Ring	1	
19	TP02245	Needle Supporter O.D.3	1	
20	TP02243	Throttle Anvil	1	
21	TQ02349	Bushing M16xRc3/8	1	

Accessories

No.	Part No.	Description	Qty	Price
	TP00170	Hex. Socket Screw Key 6	1	
	TQ02350	Bushing R3/8xNPT3/8	1	
	TQ03262	Hose Nipple R3/8x3/8	1	
	TQ12717	Instruction Manual	1	
	TQ12718	Declaration of Conformity	1	

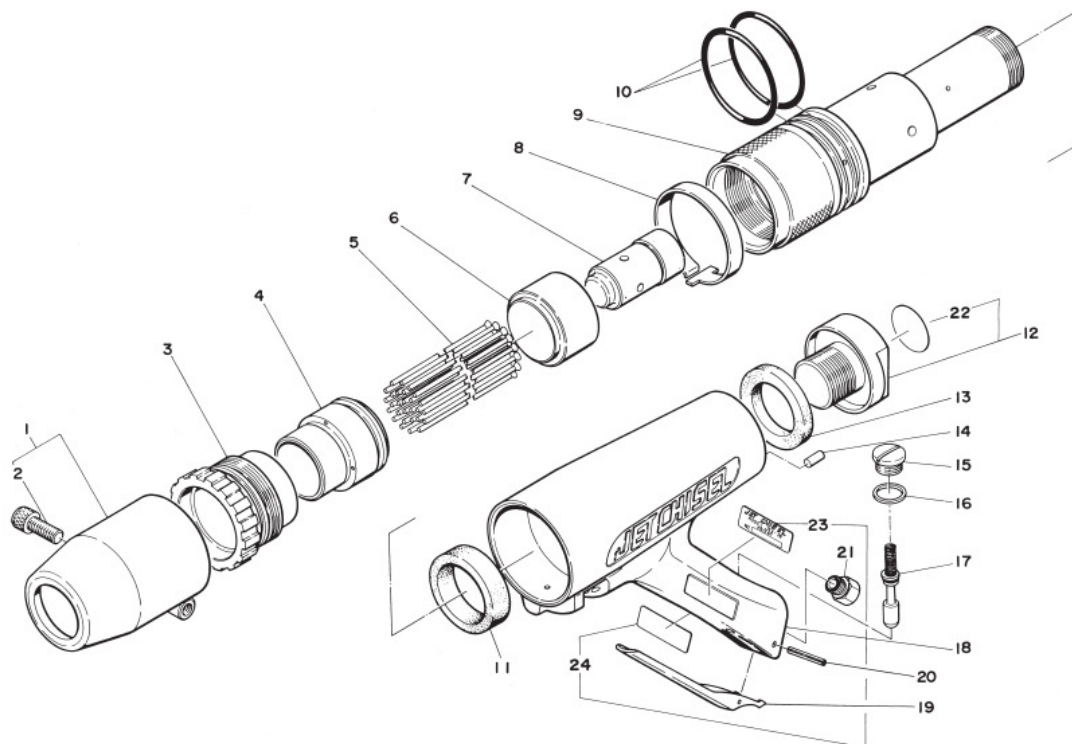


Eurosul Fornecedora de Navios Ltda

Rua Iapó, 180 - Pinhais/Pr
Alphaville Graciosa - Cep: 83.327-075
Fone: 41 3668-1319 - Cel: 41 99191-3037
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JEX-28



The part numbers with () are included in the Ass'y parts written above them.

No.	Part No.	Description	Qty	Price
1	TA93365	Round Needle Guide Ass'y	1set	
2	(TP00045)	Hex. Socket Head Cap Screw 8x25	1	
3	TP01464	Lock Ring	1	
4	TP01461	Needle Supporter O.D.3	1	
5	—	Needle O.D.3x180mm	28	
6	TP00399	Throttle Anvil	1	
7	TP00395	Piston	1	
8	TP01466	Lock Band	1	
9	TP01463	Cylinder	1	
10	TP11993	O-Ring AS568A-226	2	
11	TP01474	Front Washer	1	
12	TB08717	Rear Bolt Ass'y	1set	
22	(TQ12688)	Label Warning	1	
13	TP01475	Rear Washer	1	
14	TP01478	Cylinder Lock Pin	1	
15	TP00389	Valve Cap	1	
16	TP00388	Valve Packing	1	

No.	Part No.	Description	Qty	Price
17	TA90037	Throttle Valve Ass'y	1set	
18	TB08716	Housing Sub Ass'y	1set	
23	(TP01471)	Name Plate	1	
24	(TQ12611)	Label Warning CE Mark	1	
19	TP01557	Throttle Lever	1	
20	TQ00563	Spring Pin 3x20	1	
21	TQ02349	Bushing M16xRc3/8	1	

Accessories

No.	Part No.	Description	Qty	Price
	—	Needle O.D.4x180mm	14	
	TP01462	Needle Supporter O.D.4	1	
	TP00170	Hex. Socket Screw Key 6	1	
	TQ02350	Bushing R3/8xNPT3/8	1	
	TQ03262	Hose Nipple R3/8x3/8	1	
	TQ12717	Instruction Manual	1	
	TQ12718	Declaration of Conformity	1	