REPEATER 4200

Operation And Maintenance Manual

WARNING:

BEFORE OPERATING THIS TOOL, ALL OPERATORS SHOULD STUDY THIS MANUAL, TO UNDERSTAND AND FOLLOW THE SAFETY WARNINGS AND INSTRUCTIONS. IF YOU HAVE ANY QUESTIONS, CONTACT WITH OUR REPRESENTATIVES OR DISTRIBUTOR.

DUCTMATE® Industries, Inc.

1-800-245-3188 | www.ductmate.com | ductmate@ductmate.com

Contents

Tool Specifications 3
Nail Specifications 3
External Tool Parts 3
Safety Instructions 4
Lubrication and Maintenance 5
Actuating Tool 5
Operating the Tool 6-8
Troubleshooting Guide 8
Part Lists 9-12
Warranty 12

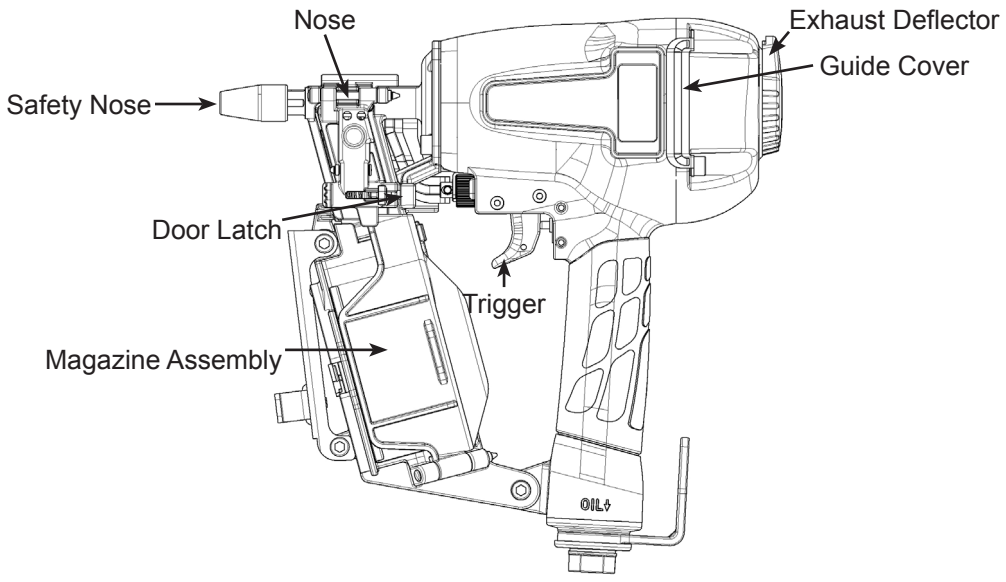
TOOL SPECIFICATIONS

Height	17½" (444.5 mm)
Width	9" (228.6 mm)
Length	13½" (342.9 mm)
Weight	10.5 lbs (4.76 kgs)
Recommended Operating Pressure	70-120 psi (4.9-8.3 bar)
Air Consumption	
Loading Capacity	up to 200 fasteners
Noise Characteristic Values in Accordance with ISO 3774, ISO 11201 A-weighted single-event sound pressure level at aperator's position A-weighted single-event sound power level A-weighted single-event surface sound pressure level	 **L**pA,1s = 91 **dBA** **L**wA,1s = 102 **dBA** **L**pA,1s = 89 **dBA**
Vibration Characteristics Values in Accordance with ISO 8862-1 Weighted root mean square acceleration	 = 2.7 m/s^2

FASTENER SPECIFICATIONS

Smooth Wire-collated Coil Nails	
Nail Lengths	¾" - 1" (19.05-24.5 mm)
Shank Diameters	.001" (.025 mm)
Shank Type	Helical/Gripshank

EXTERNAL TOOL PARTS



SAFETY INSTRUCTIONS

WARNING: *Read this manual and understand all instructions before operating the tool. If you have any questions, please contact with our authorized representatives.*

- Danger to the eyes always exists due to the possibility of dust, debris or fasteners flying up due to improper handling of the tool. For these reasons safety glasses or goggles should always be worn when operating the tool.
  The employer and/or user must ensure that proper eye protections and hearing protection is worn. Eye protection equipment must conform to the requirements of the American National Standards Institute, ANSI Z87.1 (Council Directive 89/686/EEC of 21 DEC. 1989) and provide both frontal and side protection.

- Ear protection may be required in some environments. As the working condition may include exposure to high noise levels which can lead to hearing damage, the employer and user should ensure that any necessary hearing protection is provided and used by the operator and others in the work area.

- Never use oxygen, carbon dioxide or any other bottled gas as a power source for this tool. Danger of explosion and/or serious personal injury may result.

- Use only clean, dry regulated compressed air at recommended pressure

- Tools shall not be connected to pressure which potentially exceeds 175 psi or 12 bar.

- Air hose rated for a maximum operating pressure of 150 pst (10.3 bar) or 150% of the maximum system pressure, whichever is higher.

- Do not operate the tools near a flammable substance. Never operate tool near a flammable substance (thinner, gasoline, etc.). Volate fumes from these substances could be drawn into the compressor and compressed together with the air resulting in an explosion.

- Disconnect tool from air supply and remove fasteners from magazine before doing tool maintenance, clearing a jammed fastener, leaving work area, moving tool to another location, or handing the tool to another person.

- Use Correct Fittings. The connector on the tool must not hold pressure when air supply is disconnected. If the wrong fitting is used, the tool can remain charged with air after disconnecting and thus will be able to drive a fastener even after the air line is disconnected, possibly causing injury.

- Never use tool that is leaking air or has damaged or missing parts. Inspect screw tightness, loose or improperly installed screws or bolts cause accidents and tool damage when the tool is put into operation. Inspect to confirm that all screws and bolts are tight and properly installed prior to operating the tool. Never use the tool if any portion of the tool controls (trigger, contact arm) is inoperable, disconnected, altered or not working properly.

- Never point the tools at co-workers or yourself at any time. Never actuate the tool into the air. This will avoid any hazard caused by free flying fasteners and excessive strain of the tool. Always assume the tool contains fasteners.
  Never carry the tool from place to place by the trigger or air hose.

- Do not alter or modify this tool from the original design or function without approval from us or authorized representatives. Do not remove spring from contact trip, inadvertent actuation could occur.

- Always maintain proper footing and place yourself in a firmly balanced position when using or handling the tool. When using the tool in an elevated place, secure the hose at a point close to the area you are going to drice fasteners. Accidents may be caused due to the hose being pulled inadvertently or getting caught.

- Do not drive fasteners on top of other fasteners, the fasteners can ricochet and hurt someone.

- Never use the body of the tool or top cap as a hammer, always use the tool for its intended use. Do not discharge fasteners into concrete, stone, or any material too hard for the fastener to penetrate.

- Do not drive fasteners close to the edge of the work surface. The workpiece may split causing the fastener to ricochet, fly free or hit someone.

- Keep hands and body away from the discharge area of the tool.

- Keep face and body away from back of the tool cap when working in restricted areas. Sudden recoil can result in hard impact to the body.

- Never use tool in the presence of flammable dust, gases, or fumes. The tool may produce a spark that could ignite gases causing a fire and cause the tool to explode.

- Be aware of material thickness when using the nailer.

LUBRICATION AND MAINTENANCE

- Use Pneumatic tool oil or a non-detergent oil. Do not use detergent oil or additives as they will damage o-rings and rubber parts.
- Use a filter and regulator when possible.
- Add pneumatic oil into the air inlet twice daily (depending on frequency of tool use).
- Wipe tool clean daily and inspect for wear. Use solvents only if necessary - Do Not Soak (solvents may damage o-rings and other tool parts).
- Drain compressor tanks and hosed daily.
- Clean magazine, pusher, and contact trip mechanism periodically.
- All screws, nuts and fasteners should be kept tight and undamaged. Loose screws results in unsafe operation and parts breakage.

ACTUATION TOOL

⚠ **WARNING:** *Always wear eye and hearing protection when operating tool.*

Sequential Fire Trigger (Gray Color)

- To be used in applications where precise fastener placement is preferred.
- This trigger reduces the chances of double firing and unintentional firing.

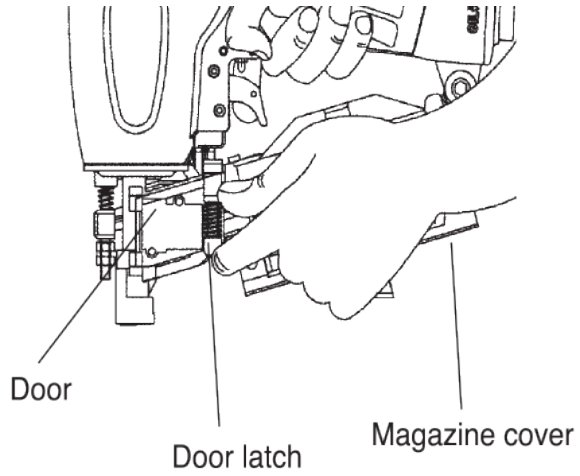
1. With your finger off the trigger, press the safety nose all the way down on the surface of the material the fastener is being driven into.
2. Pull the trigger firing a fastener into the material.
3. The tool will not fire again until the trigger is released and the safety nose removed completely from the material being used.
4. To fire the next fastener repeat the above steps.

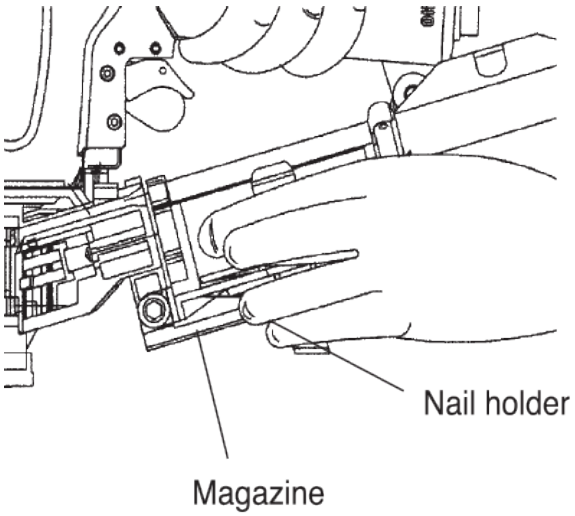
OPERATING THE TOOL

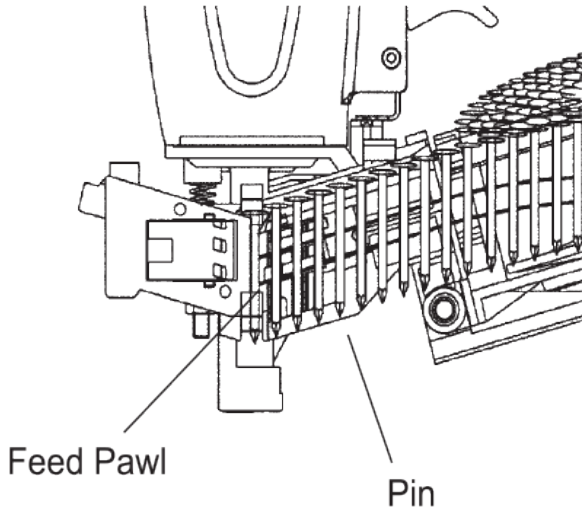
Read Safety Instruction section of this manual.

Loading the tool:

WARNING: *Always connect air before loading the tool.*
Always wear safety goggles when operating the tool.







1. **Open the magazine.**
   Pull down door latch and swing the door, then swing magazine cover open.

2. **Check adjustment.**
   The pin support can be adjusted up and down for three settings. Set the position of the pin support according to the pin length. The pins will not feed smoothly unless the magazine is not adjusted correctly. To change setting pull up on the post and twist to the correct step.

3. **Load the coil fasteners.**
   Place a coil of fasteners over the post in the magazine. Uncoil enough of the pins to reach the feed pawl, place the first pin in front of the feed pawl into the driver channel and place the second pin between the teeth of the feed pawl. The heads of the pins must be in the slot in the nose.

4. **Close the magazine.**
   Close the magazine cover and swing the door closed. Be sure that the door is fully latched when released. The tool is now ready to operate.

TEST OPERATION

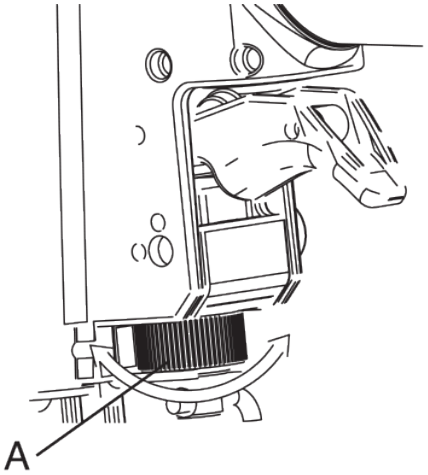
1. Adjust the air pressure at 80 p.s.i. (5.5 bar) and connect the air supply.
2. Without touching the trigger, depress the safety nose against the work-piece. Pull the trigger. (The tool must fire the fastener.)
3. With the tool off the work-piece, pull the trigger. Then depress the safety nose against the work-piece. (The tool should NOT fire the fastener.)
4. Adjust the air pressure as much as the lowest possible according tot he diameters and length of fastener and the hardness of work-piece.

OPERATING THE TOOL Cont.

Adjusting Depth:

The depth that the fastener is driven can be adjusted using the depth adjustment next to the trigger of the tool.

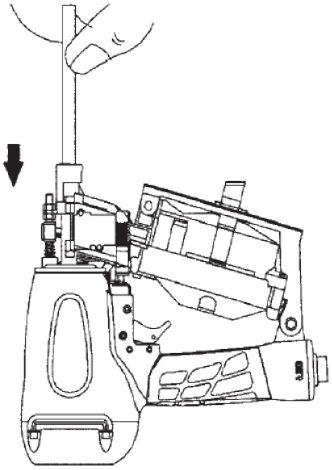
⚠ **WARNING:** *To reduce risk of serious injury from accidental actuation when attempting to adjust depth, ALWAYS;*

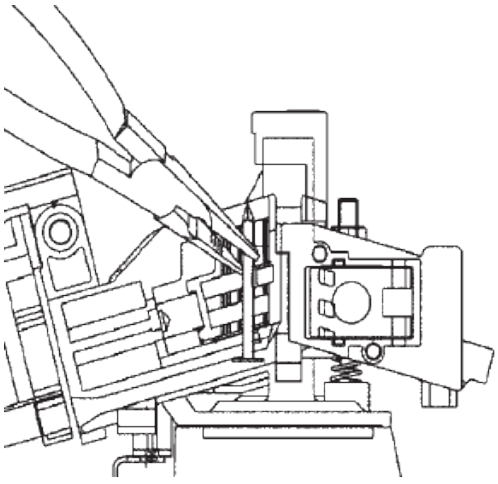


1. To drive the nail shallower, turn the wheel (A) to the right to the extent desired.
2. To sink a nail deeper, turn the wheel (A) to left to the extent desired.
3. Make sure that the trigger and safety move freely up and down without binding or sticking after each adjustment.

Clearing a Jammed Fastener

Should a pin jam occur, disconnect air supply from tool, keep the tool pointed away from you and follow these instructions to clear. If the tool jambs, do not continue to fire the tool. This cause the driver blade to break.





1. Press down the door latch and swing the door.
2. Insert the rod into the nose to push the pin back up and into the guide body bore.
3. Remove the jammed pin from driver channel.
4. Extract the pin with pliers or, if the pin is loose, turn the tool upside-down and shake it out.

OPERATING THE TOOL Cont.

Operation in Cold Weather

When operating tools at temperatures near and below freezing, the moisture in the air line may freeze and prevent tool operation:

1. Reduce the air pressure to 80 psi (5.5 bar) or less.
2. Removed all fasteners from magazine.
3. Connect air and free-fire (blank-fire) the tool. Slow speed operation tends to worm up the moving part.

CAUTION: *Do not store tool in a cold weather environment to prevent frost or ice formation on the tools operating valves and mechanisms that could cause tool failure.*

Operation in Hot Weather

Keep tool out of direct sunlight as excessive heat can deteriorate bumpers, o-rings and other rubber parts resulting in increased maintenance.

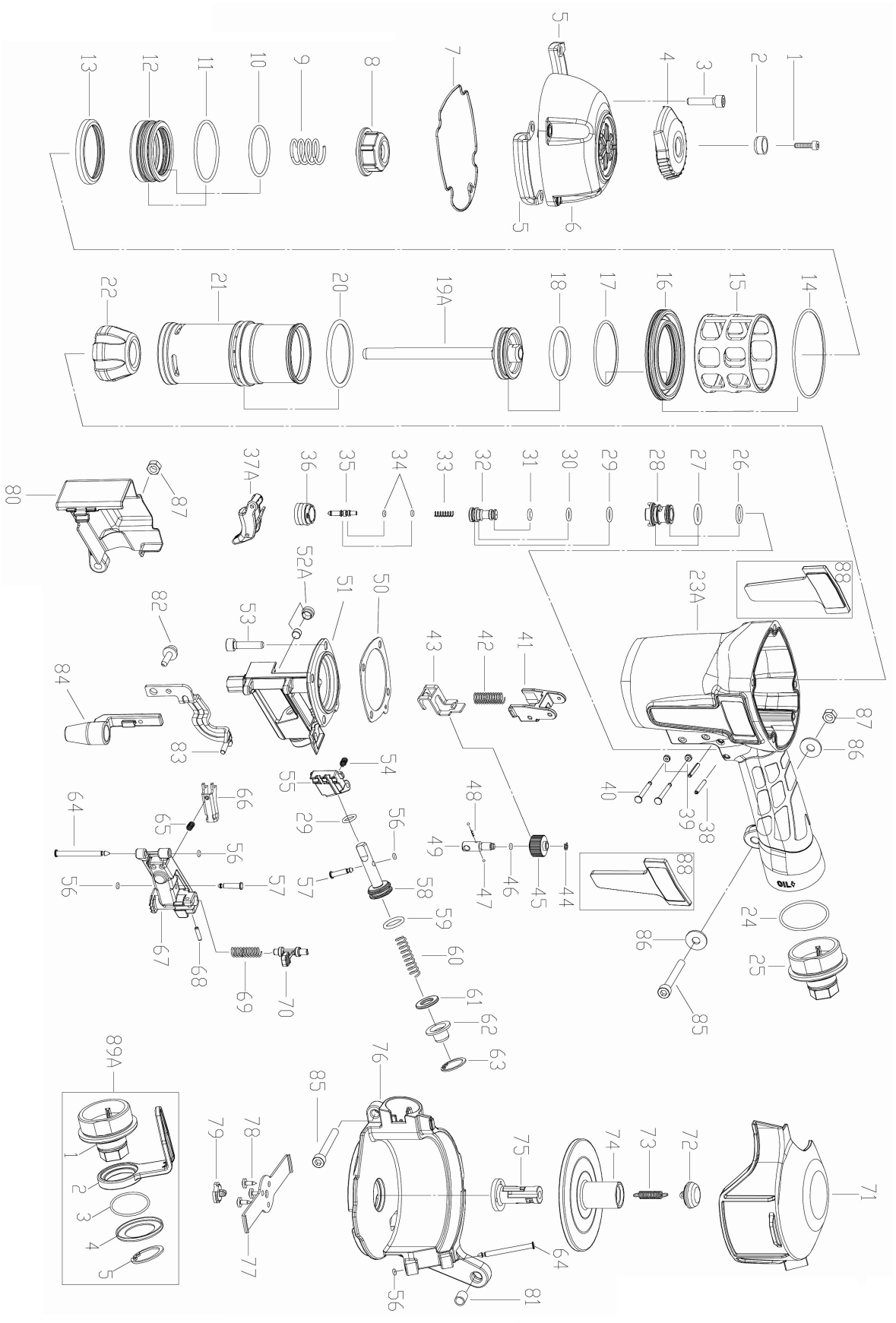
TROUBLESHOOTING GUIDE

WARNING: *Disconnect air from tool before all repairs!*

Stop using the tool immediately if any of the following problems occur. Serious personal injury could occur. Any repairs or replacements must be done by a qualified person or an authorized service center only.

PROBLEM	CAUSE	CORRECTIVE ACTION
Trigger valve leaks air Frame and nose leaks air Frame and cap leaks air	O-rings in trigger valve housing are damaged	Replace o-ring
	Loose now screw	Tighten screws and recheck
	Damaged o-rings or gasket	Replace o-ring or gasket
	Bumper cracked/worn	Replace bumper
	Loose cap screws	Tighten screws and recheck
	Damaged seal or gasket	Replace seal or gasket
Skipping fasteners Intermittent feed	Worn bumper	Replace bumper
	Dirt in nose	Clean
	Dirty/dry magazine	Clean/lubricate use pneumatic tool oil
	Damaged magazine	Replace magazine
	Air restriction/inadequate air flow	Fitting hose or air compressor needs to be checked
	Worn o-ring on piston or lack or lubrication	Replace o-ring. Lubricate.
	Trigger valve o-ring cut/worn	Replace o-ring
	Leaking cap gasket	Tighten screw, replace gasket
	Worn/damaged pusher spring	Replace spring
	Broken and damaged driver blade	Replace driver blade
	Fasteners too short or wrong size for tool	Use recommended fasteners only
	Bent fasteners	Discontinue using these fasteners
	Air leaks	Tighten screws and fittings
Lack of power Sluggish	Low air pressure	Check air supply
	Lack of lubrication	Use pneumatic tool lubricant
	Damaged or worn o-ring/sea	Replace o-ring/seal
	Exhaust blocked	Check bumper, head valve spring
Fasteners jam in tool	Driver channel worn	Replace nose/check door
	Wrong size fasteners	Use recommended fasteners only
	Bent fasteners	Discontinue using these fasteners
	Broken and damaged driver blade	Replace driver blade
	Loose magazine, nose screw	Tighten all screws

PART LIST REPEATER 4200

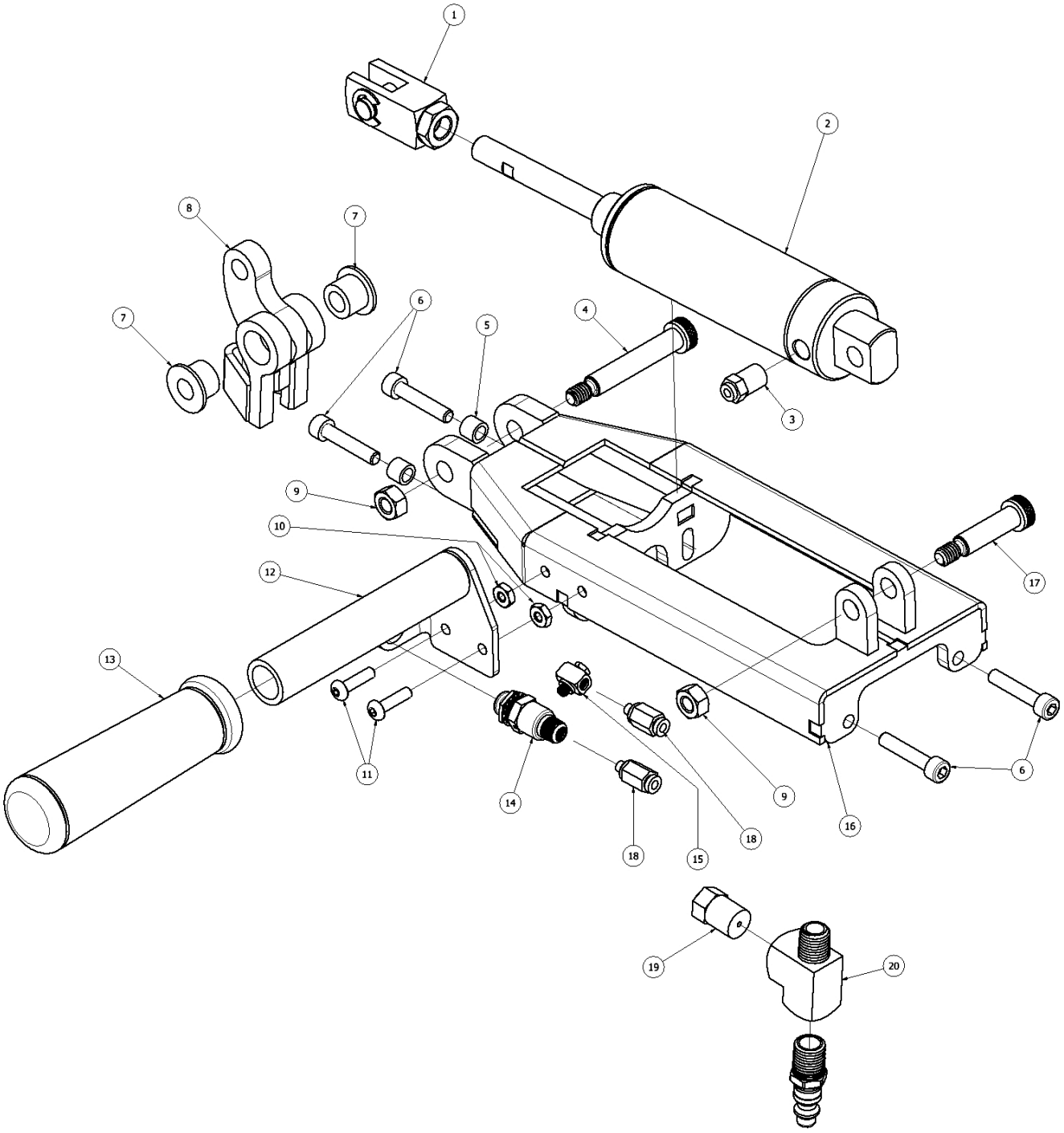


PART LIST REPEATER 4200 Cont.

Item #	Part #	Description	Qty
1	DST4200-1	Hex.Soc.Hd.Bolt	1
2	DST4200-2	Bushing	1
3	DST4200-3	Hex.Soc.Hd.Bolt - Lower	2
4	DST4200-4	Deflector, Exhaust	1
5	DST4200-5	Guide Cover	2
6	DST4200-6	Cap	1
7	DST4200-7	Gasket, Cap	1
8	DST4200-8	Piston Stopper	1
9	DST4200-9	Spring	1
10	DST4200-10	O-Ring	1
11	DST4200-11	O-Ring	1
12	DST4200-12	Piston, Head Valve	1
13	DST4200-13	Seal	1
14	DST4200-14	O-Ring	1
15	DST4200-15	Cylinder Seal	1
16	DST4200-16	Cylinder Spacer	1
17	DST4200-17	O-Ring	1
18	DST4200-18	O-Ring	1
19A	DST4200-19A	Driver Assembly	1 Set
20	DST4200-20	O-Ring	1
21	DST4200-21	Cylinder	1
22	DST4200-22	Bumper	1
23A	DST4200-23A	Body Assembly	1 Set
24	DST4200-24	O-Ring	1
25	DST4200-25	End Cap	1
26	DST4200-26	O-Ring	1
27	DST4200-27	O-Ring	1
28	DST4200-28	Valve	1
29	DST4200-29	O-Ring	2
30	DST4200-30	O-Ring	1
31	DST4200-31	O-Ring	1
32	DST4200-32	Valve Plunger	1
33	DST4200-33	Spring	1
34	DST4200-34	O-Ring	2
35	DST4200-35	Plunger	1
36	DST4200-36	Plunger Cap	1
37A	DST4200-37A	Trigger Assembly-Bump	1 Set
38	DST4200-38	Spring Pin	2
39	DST4200-39	Grommet	2
40	DST4200-40	Pin Trigger	2
41	DST4200-41	Guide, Contact Trip	1
42	DST4200-42	Spring, Safety	1
43	DST4200-43	Upper Safety Lever	1
44	DST4200-44	E-Ring	1
45	DST4200-45	Adjusting Nut	1
46	DST4200-46	O-Ring	1
47	DST4200-47	Ball, Steel	2

Item #	Part #	Description	Qty
48	DST4200-48	Adjusting Spring	1
49	DST4200-49	Adjusting Post	1
50	DST4200-50	Gasket	1
51	DST4200-51	Nose	1
52A	DST4200-52A	Magnet Bushing Assembly	1 Set
53	DST4200-53	Hex.Soc.Hd.Bolt - Lower	2
54	DST4200-54	Spring	1
55	DST4200-55	Feed Pawl	1
56	DST4200-56	O-Ring	6
57	DST4200-57	Roll Pin	2
58	DST4200-58	Feed Piston	1
59	DST4200-59	O-Ring	1
60	DST4200-60	Feed Spring	1
61	DST4200-61	Feed Piston Bumper	1
62	DST4200-62	Feed Piston Cover	1
63	DST4200-63	C-Ring	1
64	DST4200-64	Shaft Pin Nail Guide	2
65	DST4200-65	Spring	1
66	DST4200-66	Nail Stopper	1
67	DST4200-67	Nail Guide	1
68	DST4200-68	Spring Pin	1
69	DST4200-69	Spring, Lock Shaft	1
70	DST4200-70	Lock Shaft	1
71	DST4200-71	Magazine Cover	1
72	DST4200-72	Tension Post Bushing(Upper)	1
73	DST4200-73	Spring	1
74	DST4200-74	Nail Holder	1
75	DST4200-75	Adjust Post	1
76	DST4200-76	Magazine	1
77	DST4200-77	Magazine Guide	1
78	DST4200-78	Screw	3
79	DST4200-79	Tension Post Bushing	1
80	DST4200-80	Safety Cover	1
81	DST4200-81	Bushing	1
82	DST4200-82	Hex.Soc.Hd.Bolt	2
83	DST4200-83	Lower Safety Lever Assembly	1
84	DST4200-84	Safety Nose	1
85	DST4200-85	Hex.Soc.Hd.Bolt	1
86	DST4200-86	Flat Washer	1
87	DST4200-87	Locknut	1
88	DST4200-88	Logo Decals	1 Set
89A	DST4200-89A	Belt Hook Assembly	1
89A-1	DST4200-89A-1	End Cap	1
89A-2	DST4200-89A-2	Belt Hook Assembly	1
89A-3	DST4200-89A-3	O-Ring	1
89A-4	DST4200-89A-4	Cover Belt Hook	1
89A-5	DST4200-89A-5	C-Ring	1

PART LIST REPEATER 4200 FRAME



PART LIST REPEATER 4200 FRAME Cont.

Item #	Part #	Description	Quantity
1	R1002-06	CYL ROD CLEVIS KIT	1
2	R1002-05	AIR CYLINDER	1
3	RW1043-04	5/32" PUSH CONN. 1/8" NPT THD	1
4	SCREW SHL 3/8-3	3/8" x 2" SHOLDER SCREW	1
5	REPEATER 4200 S	REPEATER 4200 SPACER	2
6	SHCS M6X30	BOLT M6 x 30	4
7	REPEATER 4200 B	FLANGE BEARING 3/8" x 5/8" x 1/2"	2
8	RP1013	TOGGLE CLAMP WELDED	1
9	LOCKNUT NY 5/16	5/16" NYLON LOCKNUT	2
10	CORNERPR1006	10-24 MACHINE SCREW NUT	2
11	SBH 10-24X3/4	10-24 BUTTON HEAD CAP SCREW	2
12	REPEATER 4200 H	HANDLE WELDED	1
13	R1002-13	HANDLE GRIP	1
14	R1002-01	10/32" TAC VALVE	1
15	R1002-02	10/32" UNIV. ELBOW	1
16	REPEATER 4200 F	REPEATER 4200 FRAME ASSEMBLY	1
17	SCREW SHL 3/8-2	3/8" x 1-1/4" SHOLDER SCREW	1
18	RW1045	5/32" PUSH CONN. 10-32 THD	2
19	RW1043-02	5/32" PUSH CONN. 1/4" NPT THD	1
20	RW1044	1/4" NPT STREET RUN TEE	1
N/A	RW1048	5/32"OD POLYFLO TUBING	2.5 ft
N/A	R1002-09-1	1/4" OD POLYFLO TUBING	2.5 ft

LIMITED PRODUCT WARRANTY

Ductmate warrants that the Repeater 4200, when properly installed and maintained, will be free from defects in material and workmanship, and will comply with all written specifications made by Ductmate at the time of sale. Ductmate's warranty shall run for a period of one year from the date of manufacture.

Warranty Limitation
The warranty stated above is in lieu of all other warranties, express or implied, including but not limited to the implied warranties of MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Although Ductmate may have suggested the product, or provided written or oral advice to the Purchaser, it is the Purchaser's responsibility to test and determine the suitability of the Repeater 4200, for the intended use and purpose, and Purchaser and/or its customer assumes all risk and liability whatsoever regarding such suitability.

Limitation of Liability
In the event of a breach of the above warranty, Ductmate's sole obligation, and Purchaser's sole and exclusive remedy, shall be, at Ductmate's option, repair or replacement of any defective products, or refund of an applicable portion of the purchase price. Ductmate shall have no liability for costs of removal or reinstallation of the product. The Purchaser agrees that no other remedy, including but not limited to loss of profits, loss sales, injury to person or property, or any other special, incidental or consequential damages, shall be available to the Purchaser for any claim arising out of this Agreement, regardless of whether such claim is made in contract or in tort, including strict liability in tort. In no event will Ductmate be obligated to pay damages to the Purchaser in any amount exceeding the purchase price that the Purchaser paid to Ductmate for the allegedly defective product.

DUCTMATE® Industries, Inc.

Charleroi, PA
210 Fifth Street
Charleroi, PA 15022
800-245-3188
724-258-0500
FAX: 724-258-5494

Lodi, CA
810 S. Cluff Avenue
Lodi, CA 95240-9141
800-245-3188
724-258-0500
FAX: 209-333-4678

www.ductmate.com

704 - 11/13