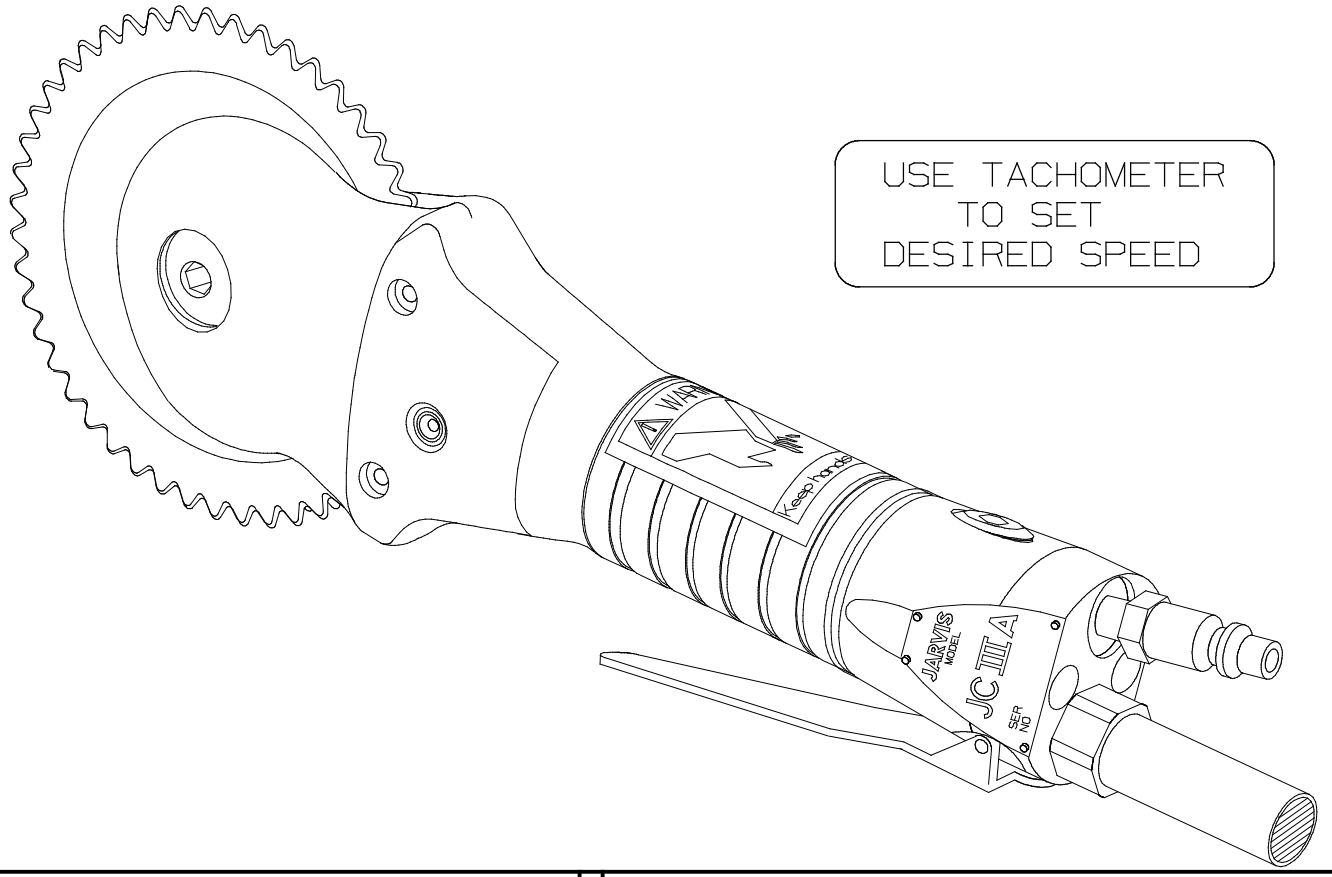
Model JC IIIA
Air Powered Dehider



EQUIPMENT SELECTION

JC IIIA Complete	Blade Set	Blade Diameter	Operating Pressure
4034038	3023011	110 mm	90 psi
4034035	3023004	100 mm	45 psi
4034037	3023004	100 mm	90 psi
4034036	3023011	110 mm	45 psi
4034042	3023162	100 mm	90 psi
4034041	3023163	110 mm	90 psi
4034050	3023162	100 mm	45 psi
4034049	3023163	110 mm	45 psi

JCIIIA Round Runner	4034052
Air Hose (with connector)	1059002
Coiled Air Hose (with connector)	3059047
Suspension Bracket	1042028
Air Filter/Regulator/Lubricator	3022003
Vibration Tachometer	8012004
Tool Kit (Arbor Press not included)	8039085

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JARVIS®

SAFETY MESSAGES TO EMPLOYER AND SAFETY DIRECTOR

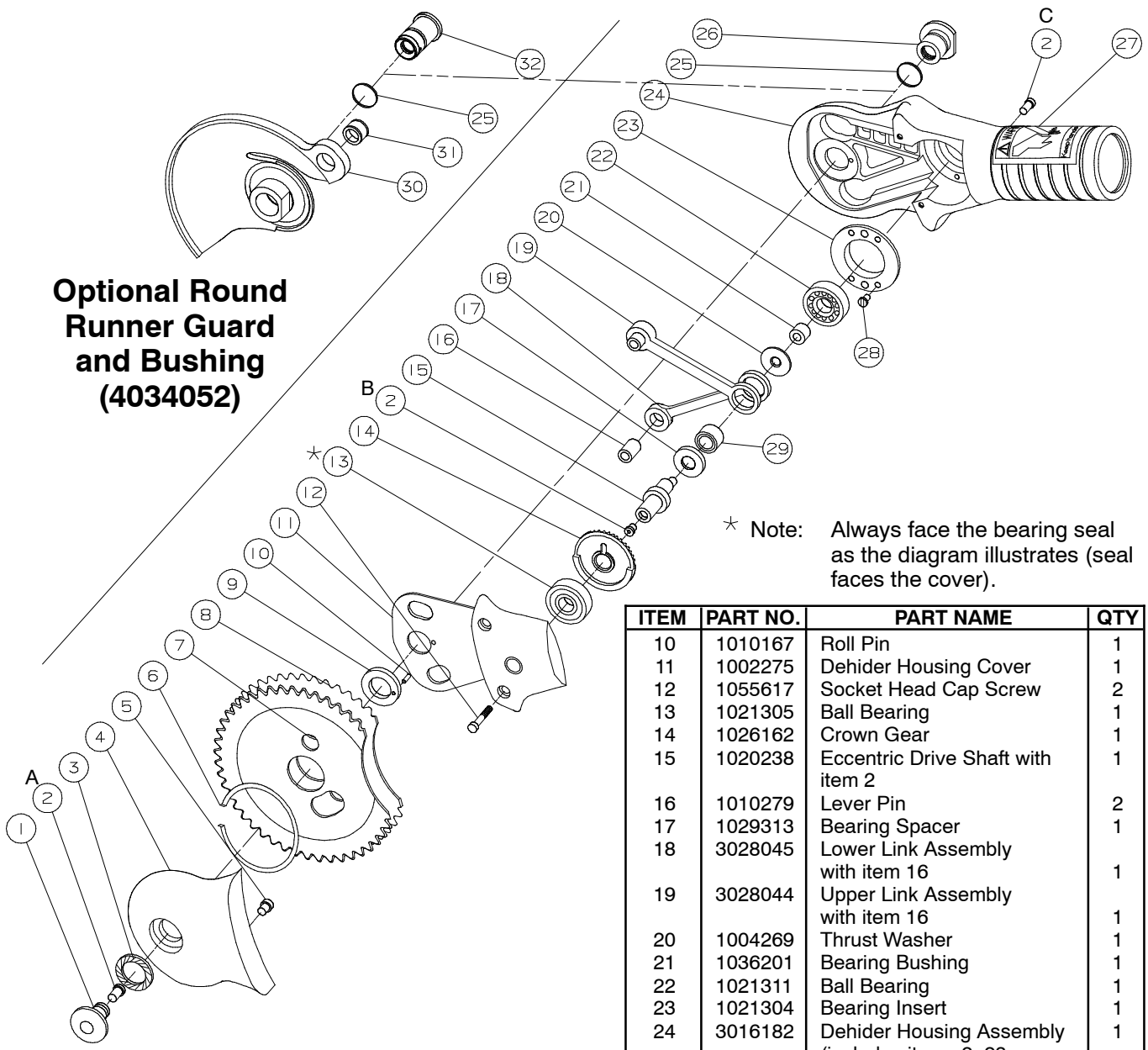
AVOID INJURY

1. **Ensure** that all employees who use this tool are trained in the proper use of this tool and are aware of the dangers that may arise if they do not follow these procedures.
2. **Enclosed** are four (4) copies of **"NOTICE TO OPERATORS, MAINTENANCE AND CLEANUP PERSONNEL."** Post one copy on the employees' bulletin board; give one copy to the operator(s); give one copy to the maintenance foreman; and give one copy to the sub-contract cleanup / internal cleanup foreman. *Additional copies will be provided upon request.*
3. The tool is designed and intended to be powerful. This fact should be obvious to your employees, but you must emphasize it to them.
4. **Never** make modifications or alterations to the tool. *Replace any missing or illegible labels.*
5. **Ensure** that proper procedures are established (in accordance with OSHA's lockout/tagout procedures 1910.147) to prevent accidental startup.
6. **HAND/WRIST/ARM** injury and other Cumulative Trauma Disorders may result from repetitive work, motion or vibration. You must make your employees aware of hazards, symptoms of injury and appropriate prevention. See OSHA's "Ergonomics Program Management Guidelines for Meatpacking Plants."
7. **Follow** our installation and maintenance instructions for proper installation and care the tool.
8. **Avoid** injury. Do not permit the tool to be misused.
9. **Remove** and **repair** any tool that malfunctions. **All** personnel must be instructed to remove any malfunctioning equipment.
10. If you **resell** or **distribute** a Jarvis product, you must provide the purchaser with the appropriate safety sheets and tool brochure. *Additional copies of safety sheets and tool brochures will be provided upon request.*

SAFETY MESSAGES TO OPERATORS, MAINTENANCE AND CLEANUP PERSONNEL

REMOVE ANY MALFUNCTIONING TOOL FROM SERVICE
REPORT ANY PROBLEMS TO YOUR SUPERVISOR

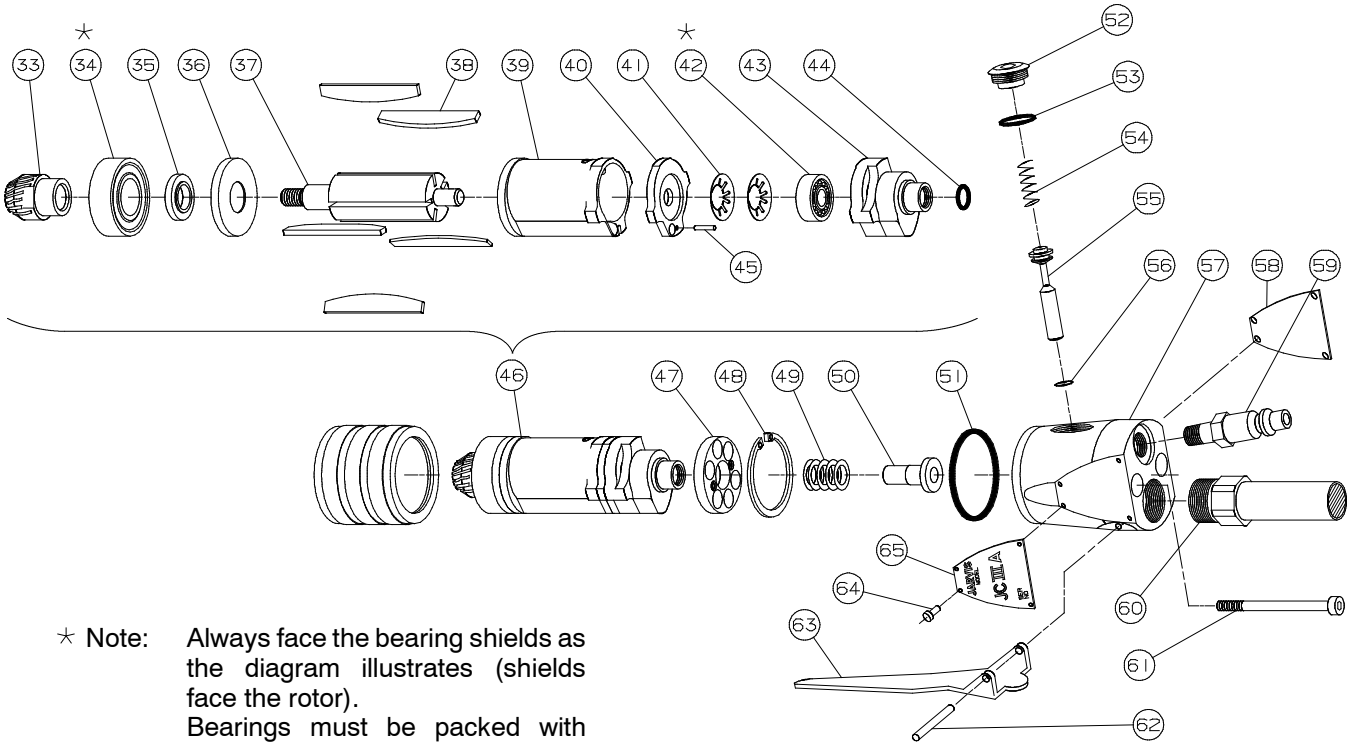
1. **Disconnect** the air hose in accordance with OSHA's lockout/tagout procedures (29 CFR 1910.147) before making any blade changes.
2. **Disconnect** the air hose in accordance with OSHA's lockout/tagout procedures (29 CFR 1910.147) before performing any repairs or maintenance.
3. **Disconnect** the air hose - or have the air hose disconnected - in accordance with OSHA's lockout/tagout procedures (29 CFR 1910.147) before performing any cleanup.
4. **Disconnect** the air hose when the tool is not in use.
5. **Never** put fingers, hands or other parts of the body on the cutting edge or within the cutting path of the tool when it is connected to an air supply.
6. **Always** wear a cut-resistant glove on the hand that is not operating the tool.
7. **Test** the tool prior to use or daily. **Depress** the trigger and the tool should start. **Release** the trigger and the tool should stop. *If the tool malfunctions, remove it from service and report or repair it immediately.*
8. **Never** depress the trigger unless you want to use or test the tool.
9. **Never** make modifications or alterations to the tool. *Report or replace any missing or illegible labels.*



* Note: Always face the bearing seal as the diagram illustrates (seal faces the cover).

ITEM	PART NO.	PART NAME	QTY
1	1054096	Cover Screw with item 2	1
2	1038022	Grease Fitting	3
3	1004011	Spring Lock Washer	1
4	1002274	Blade Cover with item 5	1
5	1010283	Rest Pin	1
6	1014105	Wave Spring	1
7	1036006	Blade Bushing	2
8		Blade Set with item 7	1
	3023004	100 mm Diameter	
	3023011	110 mm Diameter	
	3023162	100 mm, Round Teeth	
	3023163	110 mm, Round Teeth	
9	1029011	Spacer with item 10	1

ITEM	PART NO.	PART NAME	QTY
10	1010167	Roll Pin	1
11	1002275	Dehider Housing Cover	1
12	1055617	Socket Head Cap Screw	2
13	1021305	Ball Bearing	1
14	1026162	Crown Gear	1
15	1020238	Eccentric Drive Shaft with item 2	1
16	1010279	Lever Pin	2
17	1029313	Bearing Spacer	1
18	3028045	Lower Link Assembly with item 16	1
19	3028044	Upper Link Assembly with item 16	1
20	1004269	Thrust Washer	1
21	1036201	Bearing Bushing	1
22	1021311	Ball Bearing	1
23	1021304	Bearing Insert	1
24	3016182	Dehider Housing Assembly (includes items 2, 23, 27 and 28)	1
25	1035309	O-ring	1
26	1036155	Alignment Bushing w/item 25	1
27	1017084	Warning Label	1
28	1055616	Cheese Head Screw	4
29	1021354	Needle Bearing	1
30	1024285	Blade Guard with item 31	1
31	1029513	Spacer	1
32	1036339	Alignment Bushing w/item 25	1
	1017118	Tach Speed Label (45 psi tool only, see page 1)	1
	3020045	Drive Assembly (includes items 2, 13-22 and 29)	



✶ Note: Always face the bearing shields as the diagram illustrates (shields face the rotor).
Bearings must be packed with grease prior to installation.

ITEM	PART NO.	PART NAME	QTY
33	1026141	Pinion Gear	1
34	1021306	Ball Bearing	1
35	1029267	Rotor Spacer	1
36	1032245	Air Motor Front Plate	1
37	1064025	Air Motor Rotor	1
38	1040011	Air Motor Vane	5
39	1009095	Air Motor Sleeve	1
40	1032246	Air Motor Rear Plate with item 45	1
41	1014095	Disk Spring	2
42	1021307	Ball Bearing	1
43	3061124	Manifold Assembly with item 44	1
44	1035173	O-ring	1
45	1010111	Roll Pin	1
46	3008124	Air Motor Assembly (includes items 33-45)	1
47	1032247	Air Motor Exhaust Plate	1
48	1013122	Internal Retaining Ring	1
49	1014104	Compression Spring	1
50	1011222	Air Gland for 45 psi tool	1
	1011253	Air Gland for 90 psi tool (with three rings)	1
51	1035218	O-ring	1

ITEM	PART NO.	PART NAME	QTY
52	1054097	Air Valve Plug with item 53	1
53	1035064	O-ring	1
54	1014069	Compression Spring	1
55	1039048	Plunger with item 56	1
56	1035012	O-ring	1
57		Valve Sub-assembly (includes items 49 and 50)	1
	3022041	for 45 psi tool	1
	3022052	for 90 psi tool	1
58	1017095	Jarvis Label	1
59	1051013	Quick Connect Plug	1
	1011281	Quick Connect Socket	
60	1061404	Muffler	1
61	1055394	Socket Head Cap Screw	2
62	1010286	Dowel Pin	1
63	1018114	Trigger Lever	1
64	1055875	Drive Screw	8
65	1017203	JC IIIA Label	1
		Valve Assembly (includes items 52-57, 62 and 63)	
	3022042	for 45 psi tool	1
	3022051	for 90 psi tool	1

JARVIS®

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SPECIFICATIONS

Model JC IIIA

Motor Power	0.55 hp	410 W
Operating Pressure	45 psi 90 psi	3.1 bar 6.2 bar
Air Consumption	12 ft^3 / min	0.34 m^3 / min
Blade Speed (in oscillations)		6500-7000 / min
Control Handle		Single Pneumatic Trigger
Blade Diameters	3.9 in 4.3 in	100 mm 110 mm
Overall Length	13 in	330 mm
Weight	2.9 lbs	1.3 kg

INSTALLATION INSTRUCTIONS

1 Make the necessary air connection.

1.1 The required compressed air supply is 45-50 psi, 12-14 ft^3/min (3.1-3.4 bar, 0.34-0.37 m^3/min) or 90 psi, 10 ft^3/min (6.2 bar, 0.28 m^3/min). See page 1 for proper operating pressure.

1.2 An air filter/regulator/lubricator (**Jarvis** part no. 3022003) must be installed in the air supply line. *Keep the lubricator filled at all times.*

1.2.1 Use **Jarvis** (USDA approved) *Air Mist Lubricator Oil*.
1 Pint (0.47 L) 1062010
1 Gallon (3.8 L) 1062011
5 Gallons (18.9 L) 1062012

OPERATION INSTRUCTIONS

⚠ **ALWAYS DISCONNECT THE COMPRESSED AIR SUPPLY IN ACCORDANCE WITH OSHA'S LOCK-OUT/TAGOUT PROCEDURES (29 CFR 1910.147) WHEN INSTALLING OR REMOVING THE BLADE.**

Refer to the parts diagrams on pages 4-5 for referenced items.

1 *Each day,* before you begin operation, perform the following:

1.1 Make sure that the compressed air supply is at the proper pressure and that the lubricator oil is up to the full mark. (Use **Jarvis** *Air Mist Lubricator Oil*; if using a conventional air mist lubricator: set the feed rate at 5 drops per minute; if using *a micro fog* air mist lubricator*: set the feed rate at 100 drops per minute). **Almost all air mist lubricators are micro fog air mist lubricators.*

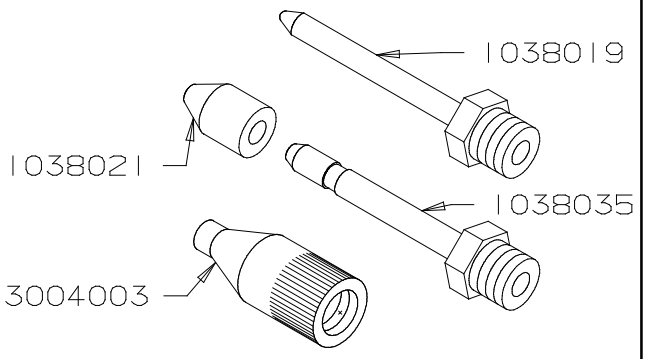
2 *Three times per shift,* perform the following:

2.1 Grease all three grease fittings using **Jarvis** *Grease Gun* (see below):

2.1.1 Grease fittings (items 2 "A" and 2 "C") with two (2) pumps of grease from 14 ounce gun.

2.1.2 Ensure that grease is getting into the eccentric shaft (item 20): grease fitting (item 2 "B") with four (4) pumps of grease from 14 ounce gun.

2.1.3 **Jarvis** grease gun options:
3 ounce *Grease Gun* (push type) 8038001
1 lb. *White Grease* (food grade) 1062003
8 lb. *White Grease* (food grade) 1062025
35 lb. *White Grease* (food grade) 1062005
14 ounce *Grease Gun* (cartridge) 8038002
14 ounce cartridge (food grade) 1062031



Note on grease gun tips:
The illustrations above represent the type of grease gun tips that **Jarvis** recommends.

1038019 is a metal tip included with 8038002.
1038021 is a plastic nose included with 1038035.
1038035 is a metal 52 degree tip ($^3/_{32}$ inch radius) to be used with or without 1038021. Included with 8038001.
3004003 is a round metal ($^7/_{64}$ inch radius) tip.

3 **Prior to use or daily, perform the following test:**

3.1 Make sure the control trigger is working correctly. **Depress** the trigger and the tool should start. **Release** the trigger and the tool should stop. **If the tool malfunctions, remove it from service and report the problem to your supervisor immediately**.

4 Making the cut:

4.1 Position the dehider in the area where the cutting is to be done.

4.2 Squeeze the trigger fully to start the air motor and make the cut.

4.3 When desired cut is finished, release the trigger. (This will stop the blades from oscillating.)

4.4 Withdraw the JC IIIA from the carcass.

MAINTENANCE INSTRUCTIONS

ALWAYS DISCONNECT THE COMPRESSED AIR SUPPLY IN ACCORDANCE WITH OSHA'S LOCKOUT/TAGOUT PROCEDURES (29 CFR 1910.147) WHEN INSTALLING OR REMOVING THE BLADE. ALWAYS DISCONNECT THE COMPRESSED AIR SUPPLY IN ACCORDANCE WITH OSHA'S LOCKOUT/TAGOUT PROCEDURES (29 CFR 1910.147) BEFORE PERFORMING ANY MAINTENANCE OR REPAIRS.

Refer to the parts diagrams on pages 4-5 for referenced items.

Refer to the fixture diagrams on page 8 and the assembly/disassembly diagrams within the text for referenced fixture items.

1 THREE TIMES PER SHIFT:

1.1 Grease all three grease fittings using **Jarvis** 3 or 14 ounce *Grease Guns* (part no. 8038001 or 8038002) and **Jarvis** *White Grease* (*Lubriplate FML-2*).

1.1.1 Grease fittings (items 2 "A" and 2 "C") with two (2) pumps of grease.

1.1.2 Ensure that grease is getting into the eccentric drive shaft (item 15). Grease fitting (item 2 "B") with four (4) pumps of grease.

2 ONE TIME PER SHIFT:

2.1 Flush the air motor by squirting about 10 drops of **Jarvis***Air Mist Lubricator Oil* directly into the air inlet and running the motor for about five seconds.

3 ONE TIME PER DAY:

Wear cut protective gloves when handling blades.

3.1 Make sure that the compressed air supply is at the proper pressure and that the lubricator oil is up to the full mark. (Use **Jarvis** *Air Mist Lubricator Oil*; if using a conventional air mist lubricator: set the feed rate at 5 drops per minute; if using *a micro fog* air mist lubricator*: set the feed rate at 100 drops per minute). **Almost all air mist lubricators are micro fog air mist lubricators.*

3.2 Remove cover screw (item 1).

3.3 Remove items (3-8) by pulling up on and turning the blade set (item 8).

3.4 Push bushing (item 26) in towards housing (item 24) to remove spacer (item 9).

3.5 Remove bushing (item 26).

3.6 Clean the dehider housing cover (item 11). *Do not remove the cover; merely clean the accessible part of the cover.*

3.7 Clean the blades with soap and water.

3.8 Sharpen the blades if necessary.

3.9 Spray or dip the dehider blades in USDA approved oil.

3.10 Grease the eccentric drive shaft (item 15) through grease fitting (item 2 "B") until grease appears through the dehider housing cover (item 11).

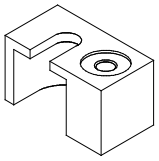
Hex wrenches 8030001 and 8030006 are provided. The following tools are needed for effective assembly and disassembly of the JC IIIA:

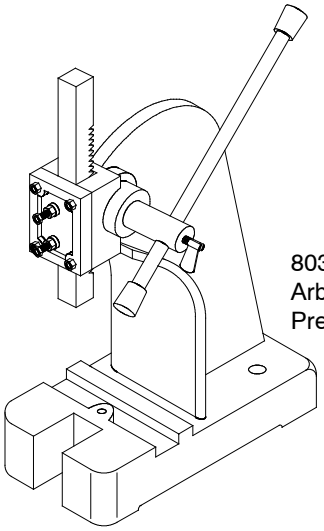
Fixtures 1-8 below
Complete Kit p/n 8039085

8033007
Drive Pin
Fixture 1

8033006
Drive Pin
Fixture 2

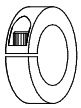
8039084
Assembly Fixture
Fixture 3



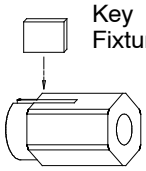


8039037
Arbor
Press

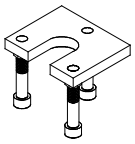
8039041
Locking Collar
Fixture 4



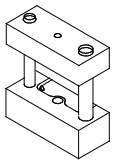
8039042
Key
Fixture 5



8039040
Locking Sleeve
Fixture 6



8039055
Rotor Bearing
Assembly Fixture
Fixture 7



8039087
Eccentric-Gear
Assembly Fixture
Fixture 8

Fixtures 4, 5 and 6 above
assembled complete p/n 8039043

3.11 Grease the housing (item 24) through grease fitting (item 2 "C"). Two (2) pumps of grease should be sufficient.

3.12 Run the dehider without the blades for approximately one minute.

3.13 Insert bushing (item 26) into housing (item 24).

3.14 Place spacer (item 9) into dehider housing cover (item 11).

3.15 Place blade set (item 8) over spacer (item 9).

3.16 Place wave spring (item 6) into blade cover (item 4).

3.17 Place the cover and spring over the bushing.

3.18 Place lock washer (item 3) into blade cover.

3.19 Screw in cover screw (item 1) and tighten.

4 GEAR AND SHAFT DISASSEMBLY:

4.1 Remove cover screw (item 1).

4.2 Remove items 3-8 by pulling up on and turning the blade set (item 8).

4.3 Push bushing (item 26) in towards housing (item 24) to remove spacer (item 9).

4.4 Remove bushing (item 26).

4.5 Remove screws (item 12).

4.6 Tap front of housing (item 24) with a rubber mallet to remove dehider housing cover (item 11).

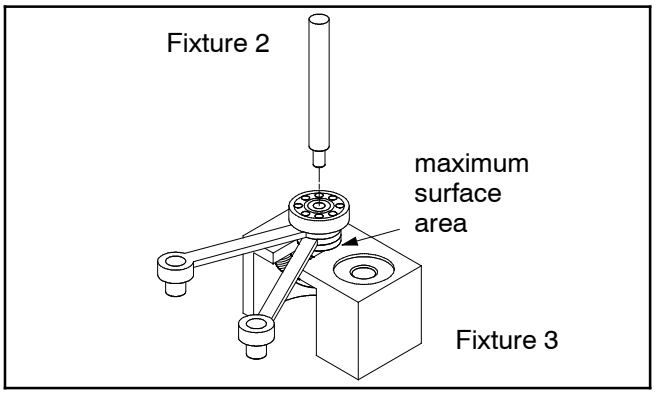
4.7 Remove gear and shaft assembly (items 13-22, 29).

4.8 Place fixture 3 on the arbor press.

4.9 Slide gear and shaft assembly into cavity in fixture 3.

4.9.1 The gear (item 14) should be in the cavity.

4.9.2 The spacer (item 17) should be resting on the top of fixture 3. *(Turn the gear and shaft assembly until the spacer has as much surface area as possible on the top of fixture 3).*



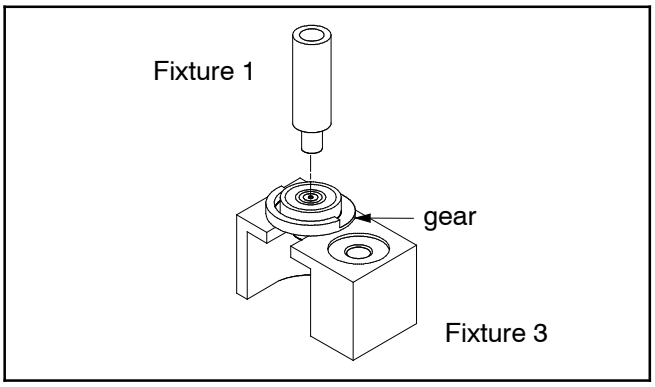
4.10 Position the small diameter end of fixture 2 on the center of eccentric shaft (item 15) and press.

4.11 Items 17-22 and 29 should all slide apart now.

4.12 Place remaining gear and shaft assembly (items 13-15) into cavity in fixture 3.

4.12.1 The gear (item 14) should be resting on the top of fixture 3.

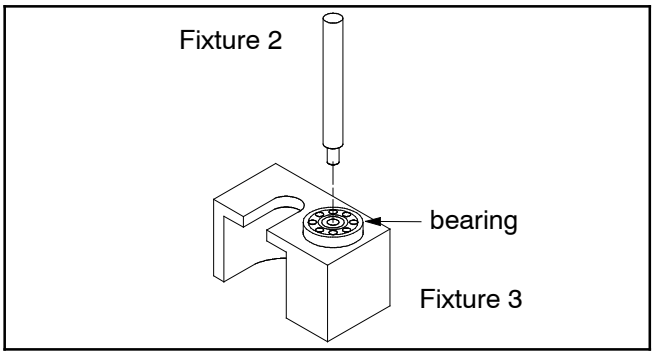
4.12.2 The eccentric shaft (item 15) should be in the cavity of fixture 3.



4.13 Position the small diameter end of fixture 1 on the center of eccentric shaft (item 15) and press.

4.14 Items 13-15 should all slide apart now.

4.15 Place bearing and bushing (items 21 and 22) in the counter-bore of fixture 3.



4.16 Place the small diameter end of fixture 2 through bushing (item 21) and press.

4.17 All of the gear and shaft assembly should be apart now.

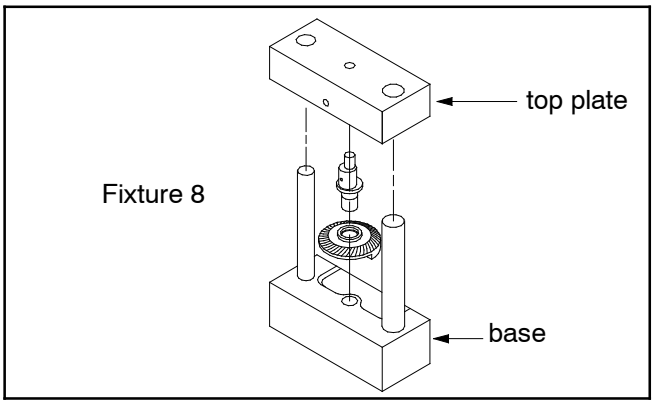
4.18 Inspect for worn parts and replace if necessary.

5 GEAR AND SHAFT ASSEMBLY:

5.1 Place fixture 8 on the arbor.

5.2 Place gear (item 14) onto the base of fixture 8 being careful to nest the wide part of the gear in the cut-out (gear teeth facing up).

5.3 Slide the top plate onto the two posts on the fixture base.



5.4 Insert the small end of the eccentric shaft into the bottom side of the top plate.

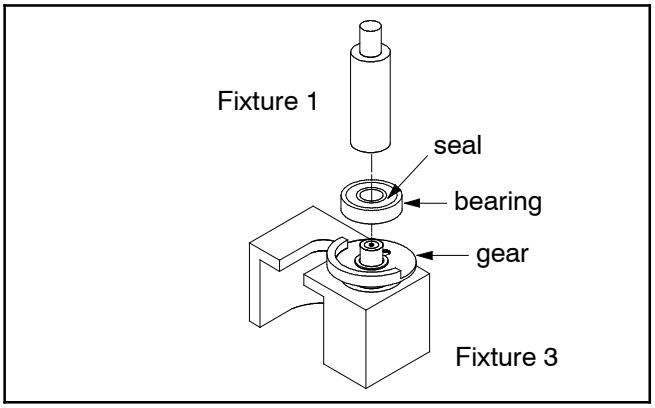
5.4.1 Rotate the eccentric shaft as you lower the top plate until the upper journal on the eccentric shaft enters the hole on the bottom side of the top plate.

5.5 Use the arbor press to push the eccentric journal into the gear.

5.6 Place gear (item 14) onto fixture 3 with teeth facing down.

5.7 Place bearing (item 13) on the large journal of the eccentric shaft.

5.7.1 The seal on the bearing should face up.

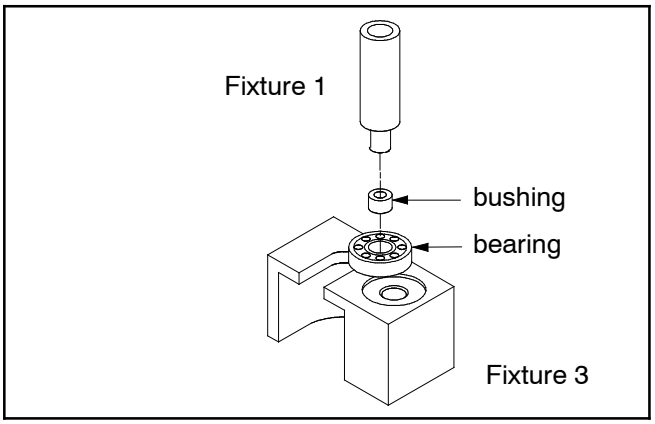


5.8 Lightly tap the bearing with the arbor press to orient it correctly.

5.9 Position the hollow end of fixture 1 over the small end of the eccentric shaft and press the bearing fully onto the eccentric shaft.

5.10 Place bearing (item 22) onto fixture 3.

5.11 Slide bushing (item 21) into the center of the bearing and, if necessary, press using fixture 1.



5.12 Slide spacer (item 17) over the eccentric shaft.

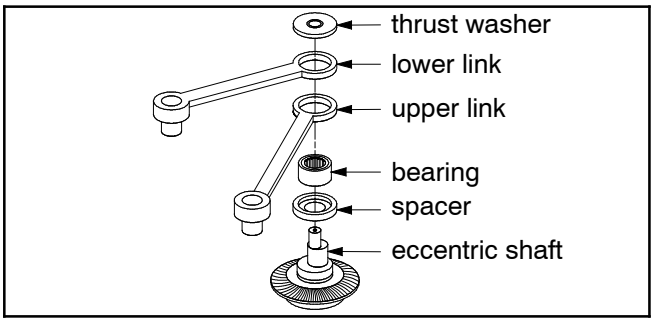
5.12.1 The bore on the spacer should face up.

5.13 Slide bearing (item 29) over the eccentric shaft and into the bore of the spacer.

5.14 Slide upper link assembly (item 19) over the bearing.

5.15 Slide the lower link assembly (item18) over the bearing.

5.15.1 The pin on the lower link assembly should face down.



5.16 Slide thrust washer (item 20) over the eccentric shaft.

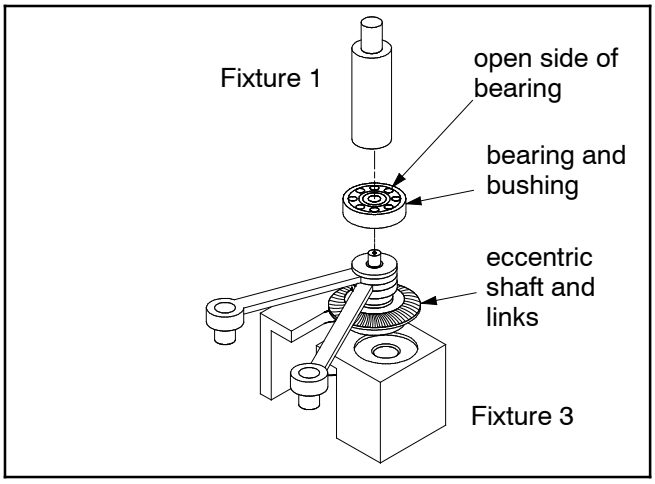
5.17 Place the eccentric shaft and link assembly (items 14-20) onto fixture 3.

5.18 Place bearing (item 22) over the eccentric shaft.

5.19 Lightly tap the bearing with the arbor press to orient it correctly; then press the bearing onto the eccentric shaft as far as possible.

5.20 Position the hollow end of fixture 1 over the small journal of the eccentric shaft and press the bearing onto the eccentric shaft fully.

5.21 The gear and shaft assembly should be complete now.



6 JC IIIA ASSEMBLY:

6.1 Place the gear and shaft assembly into housing (item 24).

6.1.1 Links (items 18 and 19) should be in their proper slots in housing (item 24).

6.2 Place bushing (item 26) through housing (item 24).

6.3 Place dehider housing cover (item 11) over bushing (item 26) and into housing (item 24).

6.4 Install screws (item 12).

6.5 Place spacer (item 9) into dehider housing cover (item 11).

6.6 Place blade set (item 8) over spacer (item 9).

6.7 Place wave spring (item 6) into blade cover (item 4).

6.8 Place the cover and spring over the bushing.

6.9 Place lock washer (item 3) into blade cover.

6.10 Screw in cover screw (item 1) and tighten.

7 AIR MOTOR DISASSEMBLY:

7.1 Remove two screws (item 61).

7.2 Pull apart valve sub-assembly (item 57) from housing assembly (item 24).

7.2.1 Items 49-51 should come off along with the valve sub-assembly.

7.3 Remove retaining ring (item 48) from housing assembly (item 24).

7.4 Remove exhaust plate (item 47).

7.5 Tap on the end of the housing assembly (item 24) with a rubber mallet to dislodge the air motor (item 46).

7.6 Remove the air motor.

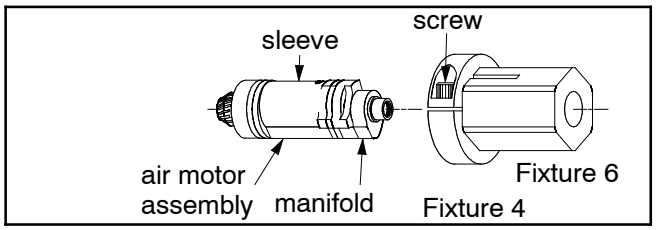
7.7 Place fixture 6 into vise. *Do not over tighten.*

7.8 Place fixture 4 onto fixture 6.

7.9 Slide air motor assembly (item 46) into fixture 6, *manifold end down.*

7.10 Tighten the screw located in fixture 4 so as to lock the manifold assembly (item 43) in place.

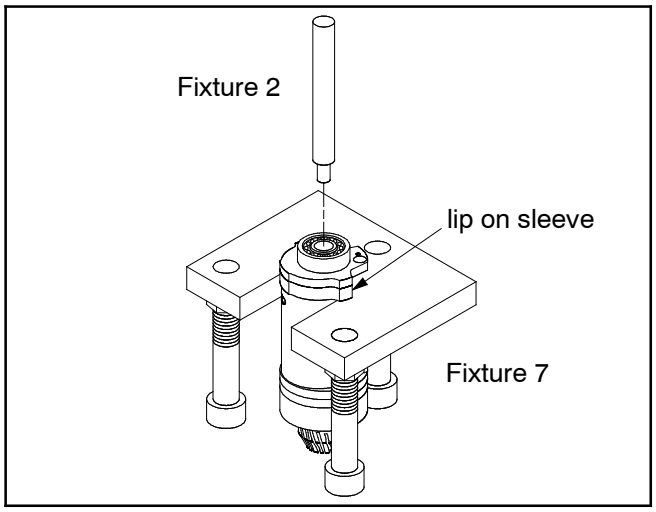
7.11 Pull on sleeve (item 39) section of air motor assembly (item 46) to remove manifold (item 43). *Do not score the air motor assembly.*



7.12 Place fixture 7 on the arbor press.

7.13 Place air motor assembly (item 46) - less the manifold - onto fixture 7.

7.13.1 The lip on the sleeve (item 39) should hold the assembly in the fixture.



7.14 Position the small diameter end of fixture 2 on the center of rotor shaft (item 37) and press.

7.15 Ball bearing (item 42) should now be separated from rotor (item 37).

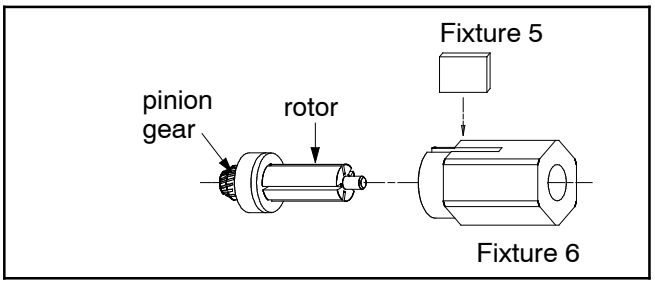
7.16 Remove disk springs (item 41).

7.17 Remove rear plate (item 40).

7.18 Remove sleeve (item 39).

7.19 Remove vanes (item 38).

7.20 Place fixture 6 into vise. *Do not over tighten.*



7.20.1 Place rotor (item 37) and pinion gear (item 33) into fixture 6, *rotor end down*.

7.20.2 Slip fixture 5 into the vane slot in rotor (item 37).

7.20.3 Place wrench on pinion gear (item 33) and unscrew it from rotor (item 37).

7.21 Remove spacer (item 35)

7.22 Remove front plate (item 36).

7.23 Remove ball bearing (item 34) from the pinion gear.

7.24 Check for worn parts and replace if necessary.

8 AIR MOTOR ASSEMBLY:

8.1 Reverse procedures and steps outlined in steps 7.1-7.23. *See notes below.*

8.1.1 Pack bearings (item 34 and 42) with **Jarvis** *White Grease* (part no. 1062003 - *Lubriplate FML-2*) prior to installation.

8.1.2 Be sure to install bearings (items 34 and 42) correctly: the shields must face the rotor (item 37).

8.1.3 With pinion gear (item 33) facing down, press bearing (item 42) onto rotor shaft (item 37) until it is flush with the end of the shaft.