



# 3445MAX & 345MAX

**Air Angle Grinders**



# 3445MAX & 345MAX

## MAX performance for the daily grind

In keeping with the tradition of Ingersoll Rand MAX tools, the 3445MAX (4.5" wheel) and 345MAX (5" wheel) air angle grinders deliver MAX Power, MAX Productivity, MAX Comfort, and improved reliability needed to tackle the toughest material removal jobs.



**0.88 hp air motor** delivers 12,000 rpm for impressive performance and greater material removal.

**Internal governor** maximizes speed under load, increasing your productivity.

**Enhanced grip design** increases operator comfort for extended usage.

**Lightweight, under 3.5 lb construction** delivers the best power-to-weight ratio of its class.

**Built-in lubricating wick** optimizes the life of the angle gear set by improving lubrication to the bevel and pinion gear set.



**MAX Power** 0.88 hp and 12,000 rpm motor delivers the power you need to grind through the toughest jobs.

**MAX Productivity** Internal governor maximizes speed under load, increasing your rate of material removal.

**MAX Comfort** Lower weight and enhanced grip design enables extended usage without fatigue.

Model	Power hp (kW)	Avg. Free Speed rpm	Output	Weight lb (kg)	Length in (mm)	Width in (mm)	Height Over Spindle in (mm)	Side To Center Distance in (mm)	Free Speed Sound Level dBA	Vibration Level (m/s <sup>2</sup> )	Exhaust	Avg Air Cons (cfm)	Air Cons @ Load (cfm)
<b>MAX SERIES</b>													
3445MAX	0.88 (0.66)	12,000	5/8" - 11 Thread	3.37 (1.53)	9.6" (244)	5.2" (132)	2.8" (71)	1.3" (33)	79.6	6.4	Rear	10	41
345MAX	0.88 (0.66)	12,000	5/8" - 11 Thread	3.44 (1.56)	9.6" (244)	5.6" (142)	2.8" (71)	1.3" (33)	79.6	7.9	Rear	10	41

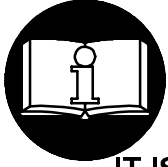
Air inlet size: 1/4" NPTF  
Recommended hose size: 3/8"  
Performance figures are at 90 psi.



## INSTRUCTIONS FOR MODELS LA421-EU AND LA422-EU ANGLE GRINDERS

### NOTICE

Models LA421-EU and LA422-EU Angle Grinders are designed for metal dressing, rust removal, weld preparation and automotive body work. Ingersoll-Rand is not responsible for customer modification of tools for applications on which Ingersoll-Rand was not consulted.



### ▲ WARNING

**IMPORTANT SAFETY INFORMATION ENCLOSED.  
READ THIS MANUAL BEFORE OPERATING TOOL.**

**IT IS THE RESPONSIBILITY OF THE EMPLOYER TO PLACE THE INFORMATION  
IN THIS MANUAL INTO THE HANDS OF THE OPERATOR.**

**FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.**

#### PLACING TOOL IN SERVICE

- Always operate, inspect and maintain this tool in accordance with all regulations (local, state, federal and country), that may apply to hand held/hand operated pneumatic tools.
- For safety, top performance, and maximum durability of parts, operate this tool at 90 psig (6.2 bar/620 kPa) maximum air pressure at the inlet with 3/8" (10 mm) inside diameter air supply hose.
- Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this tool, or before performing any maintenance on this tool.
- Do not use damaged, frayed or deteriorated air hoses and fittings.
- Be sure all hoses and fittings are the correct size and are tightly secured. See Dwg. TPD905-1 for a typical piping arrangement.
- Always use clean, dry air at 90 psig maximum air pressure. Dust, corrosive fumes and/or excessive moisture can ruin the motor of an air tool.
- Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel.
- Do not remove any labels. Replace any damaged label.

#### USING THE TOOL

- Always wear eye protection when operating or performing maintenance on this tool.
- Always wear hearing protection when operating this tool.
- Keep hands, loose clothing and long hair away from rotating end of tool.
- Anticipate and be alert for sudden changes in motion during start up and operation of any power tool.
- Keep body stance balanced and firm. Do not overreach when operating this tool. High reaction torques can occur at or below the recommended air pressure.
- Tool accessory may continue to rotate briefly after throttle is released.
- Check for excessive speed and vibration before operating.
- Air powered tools can vibrate in use. Vibration, repetitive motions or uncomfortable positions may be harmful to your hands and arms. Stop using any tool if discomfort, tingling feeling or pain occurs. Seek medical advice before resuming use.

- Use accessories recommended by Ingersoll-Rand.
- Do not use this tool if the actual free speed exceeds the nameplate rpm.
- Before mounting a wheel, after all tool repairs and whenever a Grinder is issued for use, check the free speed of the Grinder with a tachometer to make certain its actual speed at 90 psig (6.2 bar/620 kPa) does not exceed the rpm stamped or printed on the nameplate. Grinders in use on the job must be similarly checked at least once each shift.
- Always use the Ingersoll-Rand Wheel Guard furnished with the Grinder.
- Do not use a Grinder without the recommended wheel guard. Do not use any wheel for which the operating speed listed on the blotter is lower than the actual free speed of the Grinder.
- Inspect all grinding wheels for chips or cracks prior to mounting. Do not use a wheel that is chipped or cracked or otherwise damaged. Do not use a wheel that has been soaked in water or any other liquid.
- Make certain the grinding wheel properly fits the arbor. The wheel should not fit too snugly or too loosely. Do not use reducing bushings to adapt a wheel to any arbor unless such bushings are supplied by or recommended by the wheel manufacturer.
- After mounting a new wheel, hold the Grinder under a steel workbench or inside a casting and run it for at least 60 seconds. Make certain no one is within the operating plane of the grinding wheel. If the wheel is defective, improperly mounted or the wrong size and speed, this is the time it will usually fail.
- When starting a cold wheel, apply it to the work slowly until the wheel gradually warms up. Make smooth contact with the work, and avoid any bumping action or excessive pressure.
- Always replace a damaged, bent or severely worn wheel guard. Do not use a wheel guard that has been subjected to a wheel failure.
- Make certain the wheel flanges are free of nicks and burrs and sharp edges. Always use the wheel flanges furnished by the manufacturer; never use a makeshift flange or a plain washer. Tighten Flange Nut securely.
- This tool is not designed for working in explosive atmospheres.
- This tool is not insulated against electric shock.

### NOTICE

The use of other than genuine Ingersoll-Rand replacement parts may result in safety hazards, decreased tool performance, and increased maintenance, and may invalidate all warranties.

Repairs should be made only by authorized trained personnel. Consult your nearest Ingersoll-Rand Authorized Servicenter.

Refer All Communications to the Nearest  
Ingersoll-Rand Office or Distributor.

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**INGERSOLL-RAND®**  
**PROFESSIONAL TOOLS**

## WARNING LABEL IDENTIFICATION



FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.

	<p style="text-align: center;"><b>⚠ WARNING</b></p> <p>Always wear eye protection when operating or performing maintenance on this tool.</p>
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	<p style="text-align: center;"><b>⚠ WARNING</b></p> <p>Always wear hearing protection when operating this tool.</p>
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	<p style="text-align: center;"><b>⚠ WARNING</b></p> <p>Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this tool, or before performing any maintenance on this tool.</p>
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	<p style="text-align: center;"><b>⚠ WARNING</b></p> <p>Air powered tools can vibrate in use. Vibration, repetitive motions or uncomfortable positions may be harmful to your hands and arms. Stop using any tool if discomfort, tingling feeling or pain occurs. Seek medical advice before resuming use.</p>
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	<p style="text-align: center;"><b>⚠ WARNING</b></p> <p>Do not carry the tool by the hose.</p>
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	<p style="text-align: center;"><b>⚠ WARNING</b></p> <p>Do not use damaged, frayed or deteriorated air hoses and fittings.</p>
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	<p style="text-align: center;"><b>⚠ WARNING</b></p> <p>Keep body stance balanced and firm. Do not overreach when operating this tool.</p>
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	<p style="text-align: center;"><b>⚠ WARNING</b></p> <p>Operate at 90 psig (6.2 bar/620 kPa) Maximum air pressure.</p>
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**International Warning Label:  
Order Part No. \_\_\_\_\_**

## PLACING TOOL IN SERVICE

### LUBRICATION



Ingersoll-Rand No. 50

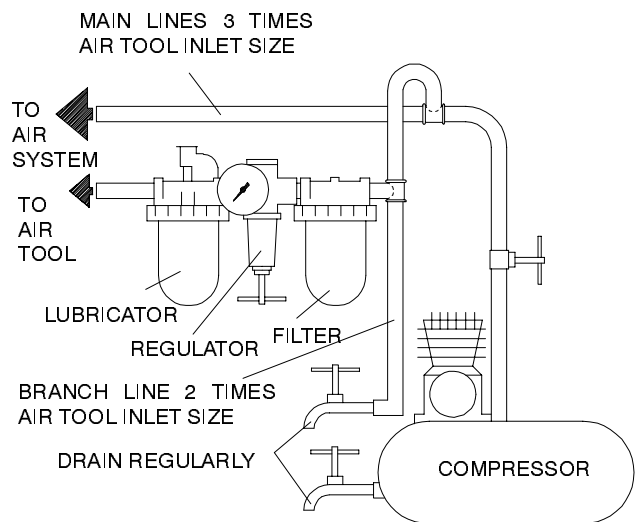
Ingersoll-Rand No. 67

Always use of an air line lubricator with these tools. We recommend the following Filter-Lubricator-Regulator Unit:

For International - No. C16-C3-A29  
For USA - No. C11-03-G00

Before starting the tool and after each two hours of operation, unless the air line lubricator is used, detach the air hose and inject about 1 cc of oil into the air inlet.

After each eight hours of operation, or as experience indicates, inject about 1 cc of the recommended grease into the Grease Fitting.



(Dwg. TPD905-1)

## SPECIFICATIONS

Model	Free Speed rpm	Wheel Capacity in (mm)	■ Sound Level dB (A)		◆ Vibrations Level m/s <sup>2</sup>
			Pressure	•Power	
LA421-EU	12000	4 (102)	85.6	98.6	1.8
LA422-EU	12000	5 (127)	85.6	98.6	2.7

- Tested in accordance with ANSI S5.1-1971 at free speed
- ◆ Tested in accordance with ISO8662-1 with artificial unbalanced load at 50% of rated speed for uncontrolled tools and at 80% rated free speed for controlled tools.
- ISO3744

DECLARATION OF CONFORMITY

We Ingersoll-Rand, Co.  
(supplier's name)

Swan Lane, Hindley Green, Wigan WN2 4EZ  
(address)

declare under our sole responsibility that the product,

Models LA421-EU and LA422-EU Angle Grinders

to which this declaration relates, is in compliance with the provisions of  
89/392/EEC, 91/368/EEC, 93/44/EEC AND 93/68/EEC Directives.

By using the following Principle Standards: ISO8662

Serial No. Range (1994 →) XUA XXXXX →

J. Cartwright  
Name and signature of authorised persons

Chuck S. Zegrati  
Name and signature of authorised persons

February, 1995  
Date

February, 1995  
Date

**NOTICE**

SAVE THESE INSTRUCTIONS. DO NOT DESTROY.

When the life of the tool has expired, it is recommended that the tool be disassembled, degreased and parts be separated by material so that they can be recycled.

# DIE GRINDER

## LA421-EU 4"



FREE SPEED (rpm)	12,000
MOTOR (hp)	1
LENGTH (mm)	229
WEIGHT (kg)	1.8
AVG. AIR CONSUMPTION (cfm)	6



## LA422-EU 5"



FREE SPEED (rpm)	12,000
MOTOR (hp)	1
LENGTH (mm)	229
WEIGHT (kg)	1.85
AVG. AIR CONSUMPTION (cfm)	6



## 3445MAX-M 4 1/2"



FREE SPEED (rpm)	12,000
MOTOR (hp)	0.88
LENGTH (mm)	245
WEIGHT (kg)	1.6
AVG. AIR CONSUMPTION (cfm)	10



## 345MAX-M 5"



FREE SPEED (rpm)	12,000
MOTOR (hp)	0.88
LENGTH (mm)	245
WEIGHT (kg)	1.6
AVG. AIR CONSUMPTION (cfm)	10



## C123160

4" 100 mm WITH SPINDLE LOCK



FREE SPEED (rpm)	11,000
MOTOR (hp)	1.3
LENGTH (mm)	232
WEIGHT (kg)	2
AVG. AIR CONSUMPTION (cfm)	10.8



## C123161

4 1/2" 100 mm WITH SPINDLE LOCK



FREE SPEED (rpm)	11,000
MOTOR (hp)	1.3
LENGTH (mm)	232
WEIGHT (kg)	2
AVG. AIR CONSUMPTION (cfm)	10.8



## C123162

5" 100 mm, WITH SPINDLE LOCK



FREE SPEED (rpm)	11,000
MOTOR (hp)	1.3
LENGTH (mm)	232
WEIGHT (kg)	2
AVG. AIR CONSUMPTION (cfm)	10.8



## C12273

7" 180 mm SAFETY LEVER



FREE SPEED (rpm)	7,600
WEIGHT (kg)	4
AVG. AIR CONSUMPTION (cfm)	19

