# **Impact Tools**

- ▶ 3/8" 1" Drive
- ► New Titanium Impact Tools
- ► Industrial and Maintenance Class Tools
- ► Air and Electric Impact Tools
- ► Torque Control Impact Tools
- ► Full Line of Industrial Grade Sockets

**Proven Source. Proven Solutions.** 



# **Notes**

# *Industrial Impacts* **Introduction**



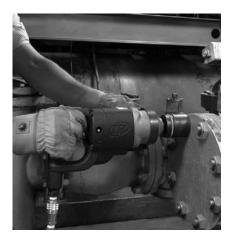


### **Proven Source**

Throughout its history, Ingersoll-Rand has earned a global reputation for creating tools that solve problems, build productivity, and put more power in the hands of the user. Ingersoll-Rand has been manufacturing impact tools for over seventy years, starting out as the original pioneer, and today leading the marketplace in design and development of the broadest impact tool selection in the world.

### **Proven Solution**

Ingersoll-Rand continues to create innovative products that provide solutions for customers. Our impact tool line is no different. Recent design



Model 2925B2Ti

improvements, such as the incorporation of titanium, make our tools stronger and lighter than any other impact tool on the market. The latest 2115 and 2135 Titanium series impact tools both lead the industry as the most powerful and lightest weight tools in their class. Ingersoll-Rand is constantly evolving its product categories and you can expect continued innovations providing productivity solutions.

# Industrial Production Class Impact Tools

The toughest industrial applications in the world run 24hours a day, 7 days a week, 365 days a year...that's why Ingersoll-Rand is dedicated to manufacturing impact tools that can hold up to your toughest jobs. Ingersoll-Rand Industrial Production Class impact tools are designed with durability in mind, from the vanes turning the motor to the hammer frames and anvils. Proprietary hardening and treatment processes, innovative ergonomic design, and excellence in manufacturing all add up to the longest lasting, hardest hitting impact tools in the business.



# Maintenance / Automotive Class Impact Tools

Ingersoll-Rand impact tools are the brand of choice for professional automotive mechanics and the racing teams of NASCAR.

Maintenance / Automotive class impact tools are designed for those applications that aren't as demanding as those for industrial production.

Applications best suited for tools in this class involve intermittent use such as basic maintenance and light production.

# Air Impact Tools Introduction



Throughout the section, page headings let you know what category the tool falls in. For assistance in determining the correct tool for your application please contact your Ingersoll-Rand sales representative or Ingersoll-Rand customer service.





**High Performance Ergonomics** 

### **Three Types of Impact Tool Mechanisms**



### Twin-Hammer

A simplified, yet highly effective design that holds each of the reversible

hammers in full engagement or disengagement with centrifugal force. The twin-hammer mechanism delivers more power per pound, and is less sensitive to air pressure fluctuations than any other design.

- · Smooth, balanced blow
- High power-to-weight ratio
- Suitable for hard or soft-draw applications







### **Jumbo Hammer**

Similar in concept to the twin-hammer mechanism, but employing a single hammer.

- · Simplified design
- Reversible hammers
- · Direct drive

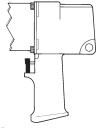
### **Ball and Cam**

Precision mechanism converts motor torque into powerful rotary impacts. The ball and cam mechanism is ideal for soft draw applications, and is utilized in larger Impact Tools, as well as in all torque control and electric Impact Tools.

- · Air or electric
- Does not stall
- A time-tested design

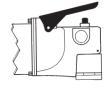


### **Configurations**













Outside Grip

Straight

Quick Change Square Drive



Spline Drive









Ingersoll-Rand takes pride in the fact that we produce the best industrial products available. However, even the most robust designs require maintenance. When your IR tool, or other IR equipment, requires maintenance or repair, insist on Genuine IR parts and service. Remember, nothing keeps your equipment and tools running better than the original parts they were designed to work with.



### **Vanes**

State of the art, fiber reinforced, engineered polymers ensure top performance from critical parts. IR is constantly looking for ways to increase the power and durability of their impacts.



### Vanes w/motor

Tight production tolerances, robust designs and optimized performance provide the user with the best of both worlds: performance and reliability.





### **Endplates**

Easily serviceable parts, simplified components and unique features give the longest tool life available, and the shortest downtime. Meaning increased productivity for our customers.



processes reduce wear and drastically extend tool life. Working with industry leaders, IR tools are the best by design.





### Cylinder and hammers

Unique metallurgy and chemical treatment processes have been perfected over the 70+ years that Ingersoll-Rand has been producing impact tools. These processes reduce the susceptibility of many components to wear that most other tools experience. From the very start, IR has worked to make their industrial products the very best that they can be.



### Call 1-866-474-8665

Ingersoll-Rand, the leader in industrial impact tools, is continuously striving for excellence. Through improvement in design and process, our products are the best they can be. Why settle for less? Demand IR genuine parts and services for your business.



# A New Standard of Performance

280 ft.-lbs. of Torque in a tool weighing just 2.4 lbs.



Two tools for two types of tasks. The IR Titanium Team is ready.





# from the Leader in Impact Tools.

1000 ft.-lbs. of Nut Busting Torque in a tool weighing just 3.9 lbs.



# 3/8" Industrial Production Class



### IR 2902P1

3/8" Air Impact Wrench

The 2902P1 is Ingersoll-Rand's most durable 3/8" impact wrench. It's designed for serious industrial and production environments that require tools that will last.

- Steel hammer case
- · Epoxy coated motor housing and handle
- Built in power regulator
- Jumbo hammer mechanism



3/8" Air Impact Wrench

The 1702P1 is our most popular, industrial 3/8" impact. A great all purpose tool, the 1702P1 is designed for those applications not as demanding as those for the 2902P1.

- Steel hammer case
- · Built in power regulator
- Pressure feed impact mechanism lubrication



### IR 1702SB1

### 3/8" Air Impact Wrench

Our newest 3/8" drive model combines power and economy for general service applications. It provides adjustable power output in forward and reverse with handle exhaust to direct air away from the operator and the work.

- 160 ft.-lbs. of maximum torque
- Two-piece housing for easy service
- Comfortable ergonomic handle design



Hanger not included

### **IR 2115PTi**

### 3/8" Air Impact Wrench

The 2115PTi is Ingersoll-Rand's smallest, lightest, & hardest hitting 3/8" industrial impact wrench. Incorporating a titanium hammer case and a composite body for added durability.

- Small size is great for tight spots
- 280 ft-lbs. max torque
- Only 2.4 lbs.
- Ergonomic, composite handle for operator comfort



### **Options Available**

### Series 1702

- · Vertical hanger No. 1901-365 (B)
- Exhaust muffler kit No. 212-K23 (P)

 Horizontal hanger No. 1901-366

### Series 2902

- · Vertical hanger No. 1901-365 (B)
- · Horizontal hanger No. 1901-366 (P&B)

### Series 2903

- · Vertical hanger No. 2908-365
- Horizontal hanger No. 1901-366

Model	Drive Description	Handle	Free Speed rpm	Impacts per minute	Maxin Torq ftlb.		Reco Toro Rar ftlb.	que	Weig less so lb.		Leng less s in.		Side Cer Dista in.	iter	Size Hos Recomm in. mn	. cfm
Super Duty	Impact Tools															
2902P1	3/8" square	Pistol	10,000	1500	140	190	20-120	27-163	21/2	1.25	51/2	140	13/8	35	5/16 8	15
2903P2	3/8" square	Pistol	6000	1200	205	278	30-170	41-230	413/16	2.18	55/8	143	13/8	35	3/8 10	21
2115PTi	3/8" square	Pistol	15,000	1500	250F	339	25-250	34-312	2.4	1.1	53/4	146	11/8	29	3/8 10	17
	Reverse Bias				280R	378										
2115P4Ti	1/4" hex QC	Pistol	15,000	1500	250F	339	25-230	34-312	2.4	1.1	53/4	146	1 <sup>1</sup> /8	29	3/8 10	17
	Reverse Bias				280R	378										
<b>Heavy Duty</b>	Impact Tools															
1702SB1	3/8" square	Straight	10,000	1500	105	142	13-85	18-115	21/2	1.12	57/8	149	1	25	5/16 8	13
1702P1	3/8" square	Pistol	10,000	1500	125	170	20-100	27-136	23/4	1.25	51/2	140	13/8	35	5/16 8	15
1702P4	1/4" hex QC	Pistol	10,000	1500	125	170	20-100	27-136	23/4	1.25	51/2	140	13/8	35	5/16 8	15

"QC" designates a Quick Change chuck.

Note: All of the above square drive Impact Tools furnished with pin-type retainer.

Performance figures are at 90 psi (620kPa) air pressure.

### Air Impact Tools 3/8" Maintenance/Automotive Class\*



### **IR2115Ti**

3/8" Titanium Duty

### Mini Air Impact Wrench

The new IR2115Ti is the world's most powerful and compact 3/8" impact. The streamlined titanium hammer case allows the user to access fasteners that other bulky impacts can't reach. The 280 ft.lbs. of torque

will remove even the toughest nuts and bolts. The IR2115Ti excels on all of your automotive applications: transmissions, brakes, exhaust, body repair, and under hood.

- 280 ft.-lbs. maximum torque
- 15,000 rpm
- 2.4 lbs.
- Titanium Strength

### **IR212**

3/8" Super Duty

### **Air Impact Wrench**

Tremendous power and longer life make this wrench the popular choice of professional mechanics for exhaust systems, air conditioning, radiators, body shop, and bench work. Still the most powerful 3/8" pistol-grip on the market, it offers all the advantages of the Single Hammer Impact Mechanism for removing and replacing bolts up to 7/16" without a struggle.

- Power up to 180 ft.-lbs
- Unaffected by air pressure changes
- · More torque, less vibration
- Pistol-style yet extremely compact and lightweight
- Built-in power regulator prevents over-torquing
- Handle exhaust



### **IR215**

3/8" Heavy Duty

### **Air Impact Wrench**

Our newest 3/8" drive model combines power and economy for general service applications. It provides adjustable power output

in forward and reverse with handle exhaust to direct air away from the operator and the work.

- 160 ft.-lbs. of maximum torque
- · Two-piece housing for easy service
- · Comfortable ergonomic handle design

### **IR216**

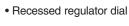
3/8" Super Duty

### In-Line Air Impact Wrench

The IR216 puts power and ergonomics in the palm of your hand. This durable in-line wrench is handy for the small cramped spaces common to small engine repair and other general service work. The butterfly-style throttle valve lets you adjust speed smoothly in either direction in one continuous motion.

- The most powerful 3/8" palm-grip wrench you can get
- 175 ft.-lbs. of torque

· Contoured composite butterfly throttle for comfort and control





Model Number	Performance Rating	Maximum Torque ft.—lb. (Nm)	Free Spd. (rpm)	Weight lbs. (kg)	Length in. (mm)	Av. Air Consump. cfm (I/min)	@ Load cfm (l/min)	Sound dBA (Press./ Power)	Air Inlet NPTF in.	Min. Hose Size in. (mm)
3/8" Square	Drive									
IR211	Heavy Duty	150 (204)	10,000	2.4 (1.09)	6.6 (168)	2.5 (71)	11 (311)	104/117	1/4	3/8 (10)
IR212	Super Duty	180 (245)	10,000	2.89 (1.31)	6 (152)	2.5 (71)	11 (311)	97.5/110.5	1/4	3/8 (10)
IR215	Heavy Duty	160 (217)	9,500	2.89 (1.31)	6.125 (156)	3.0 (84)	13 (364)	80.6/93.6	1/4	3/8 (10)
IR216	Super Duty	175 (232)	8,000	2.89 (1.31)	6.125 (156)	3.0 (85)	13 (368)	97.5/110.5	1/4	3/8 (10)
IR2115Ti	Titanium Duty	260 (354)	14,500	2.65 (1.20)	5.625 (143)	4 (113)	17 (476)	94.9/107.9	1/4	3/8 (10)

<sup>\*</sup> Maintenance/Automotive class tools are designed for maintenance and automotive applications involving intermittent use.

### DOBCO EQUIPMENT LTD

# 1/2" Industrial Production Class

### IR 2906P1

### 1/2" Air Impact Wrench

The 2906P1 is Ingersoll-Rand's most durable 1/2" impact wrench. It's designed for serious industrial and production environments that require a tool to last 24 hours a day, 7 days a week.

- Steel hammer case
- · Built in lubricator
- Built in power regulator
- Two-piece motor housing



### IR 2707P1

1/2" Air Impact Wrench The 2707P1 is designed for applications not as demand as those for the 2906P1, making it a great general purpose industrial tool.

- Steel hammer case
- Built in power regulator
- Pressure feed impact mechanism lubrication



### **IR 2135PTi**

### 1/2" Air Impact Wrench

The 2135PTi is Ingersoll-Rand's newest 1/2" impact wrench and incorporates titanium technology to create the lightest weight, hardest hitting impact in its class.

- Titanium hammer case is light weight and durable
- 700 ft.-lbs. of maximum torque
- Only 3.95lbs.
- Ergonomic, composite handle for operator comfort

### IR 2705P1

### 1/2" Air Impact Wrench

Designed for light industrial use, the 2705P1 is an economical alternative for an industrial grade tool. It's well suited for industrial maintenance applications.

- Steel hammer case
- Built in power regulator
- Epoxy coated motor housing and handle



# **Options Available**

Series 2903, 2908

• Vertical hanger No. 2908-365

### Series 2705

• Vertical hanger No. 904-366

### Series 2135

• Vertical hanger No. 2131-366

Model	Drive Description	Handle	Free Speed rpm	Impacts per minute	Maxii Toro ftlb.		Reco Toro Rar ftlb.	que	Weig less s lb.		Leng less s in.		Side Cento Distar in.	er	Size Hose Recomm. in. mm	cfm
Super Duty	y Impact Tools	3														
2906P1	1/2" square	Pistol	5000	1200	500	678	40-350	54.2-475	6	2.72	67/8	175	<b>1</b> 11/32	34	3/8 10	23
2903P1	1/2" square	Pistol	6000	1200	220	298	30-185	41-250	413/16	2.18	55/8	143	13/8	35	3/8 10	21
Heavy Dut	y Impact Tools	S	•	•				,								
2707P1	1/2" square	Pistol	7750	1300	450	610	40-275	54-373	6	2.72	61/2	165	13/8	35	5/16 8	26
Standard [	Duty Impact To	ools														
2135PTi	1/2" square	Pistol	9500	1250	625	848	50-600	68-814	3.95	1.79	7.34	186	13/8	35	3/8 10	24
	Reverse Bias				700	949										
2131P7	7/ <sub>16</sub> " hex QC	Pistol	9500	1250	625	848	50-600	68-814	3.95	1.79	7.34	186	13/8	35	3/8 10	24
	Reverse Bias				700	949										
2705P1	1/2" square	Pistol	8500	1200	400	542	40-200	54-271	55/8	2.55	63/4	171	<b>1</b> 11/32	34	3/8 10	23
2125PTi	1/2" square	Pistol	15,000	1500	290	339	25-230	34-312	2.4	1.1	53/4	146	<b>1</b> 1/8	29	3/8 10	17
	Reverse Bias				280	378										

All of the above square drive Impact Tools furnished with pin-type retainer. Performance figures are at 90 psi (620 kPa) air pressure.

# 1/2" Maintenance/Automotive Class\*

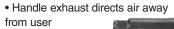




### IR231HA

### 1/2" Super Duty Air Impact Wrench

The 231 Series has set the standard for impact performance for over three decades. Refined engineering design has perfected the performance that has made the IR231 series the most popular impact ever, rivaled only by IR's composite impacts. IR's elite mechanism is the perfect balance between superior power and proven durability.



- Contoured comfort handle
- 590 ft.-lbs. maximum torque
- Pressure feed lubrication system
- Adjustable Power Regulation

### IR231HA-2

1/2" Super Duty Air Impact Wrench Extended Anvil

Featuring a 2" extended anvil with all the performance

benefits found in the IR231HA. Ideal for tire changing and use with flip sockets.

### **IR244A**

1/2" Super Duty

### **Air Impact Wrench**

Bring out the "big gun" for tire-changing, shock and spring work, front end work, and other heavy automotive and truck work. The impact mechanism pumps out 500 ft.-lbs.

torque at a free speed of 7,000 rpm to get the job done fast.

- Powerful, with smooth, balanced blows
- Pressure Feed Lubrication System automatically greases the impact mechanism

### IR244A-2

1/2" Super Duty Extended Anvil

### **Air Impact Wrench**

Specifically designed for heavy tire changes, this is the "twin" of the IR244, but with a 2" extended anvil you use with flip sockets.

### **IR235**

1/2" Heavy Duty

### **Air Impact Wrench**

Ingersoll-Rand has packed more power, features, and durability into its most economical 1/2" drive impact wrench. This tool delivers 375 ft.-lbs. of maximum torque with a free speed of 9,500 rpm, to make easier work of general service applications.

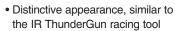
- 375 ft.-lbs. of maximum torque
- Handle exhaust
- Balanced design with easy-to-use controls, tease trigger
- Full power in reverse; adjustable power in forward
- High output impact mechanism



1/2" Super Duty

### **Air Impact Wrench**

This is our fastest 1/2" impact wrench... and as close as you can get to the real racing tools preferred by NASCAR tire changers. It features 625 ft.-lbs. of torque in reverse, with 10,000 rpm to deliver pit crew power, speed, and durability for shop tasks.



- Adjustable power regulator
- Our fastest 1/2" impact wrench!



Model Number 1/2" Square	Performance Rating	Maximum Torque ft.–lb. (Nm)	Av. Free Spd. (rpm)	Weight lbs. (kg)	Sound Length in. (mm)	Air Air Consump. cfm (I/min)	Min. @ Load cfm (I/min)	dBA (Press./ Power)	Inlet NPTF in.	Hose Size in. (mm)
IR231HA	Super Duty.	590 (816)	8,000	5.8 (2.63)	7.3 (185)	4.2 (119)	22 (623)	91.2/104.2	1/4	3/8 (10)
IR231HA-2	Spr.Dty.Ext.Anv.	590 (816)	8,000	6.1 (2.76)	9.5 (241)	4.8 (136)	23 (651)	89/102	1/4	3/8 (10)
IR244A	Super Duty	500 (680)	7,000	6 (2.72)	7.3 (185)	5.4 (153)	21 (595)	105/109.3	1/4	3/8 (10)
IR244A-2	Spr.Dty.Ext.Anv.	500 (680)	7,000	6.28 (2.85)	9.5 (241)	5.4 (153)	21 (595)	105/109.3	1/4	3/8 (10)
IR235	Heavy Duty	375	9,500	5.42 (2.46)	7.75 (197)	4 (113)	17 (474)	104.2/111.6	1/4	3/8 (10)
IR232TGSL	Super Duty.	625 (847)	10,000	6 (2.72)	7.3 (185)	5.4 (153)	21 (595)	105/109.3	1/4	3/8 (10)

### DOBCO EQUIPMENT LTD

# 1/2" Maintenance/Automotive Class\*

### IR2125QTi

1/2" Titanium Duty

### Mini Air Impact Wrench

The 1/2" drive version of the new IR2115Ti Titanium Impact. Superior power in a lightweight package.



### **IR231C**

1/2" Super Duty

### **Air Impact Wrench**

The classic IR231 is the most popular tool in its class. Introduced over 25 years ago and continuously refined, it offers the sheer power and performance features to tackle the toughest jobs with ease – as well as proven durability and economy.

- Exclusive impact mechanism
- Pressure-feed lubrication
- · Adjustable power regulator
- Easy to service two-piece construction
- Contoured handle for comfort and control

### **IR225**

1/2" Heavy Duty

### **Air Impact Wrench**

The new IR225 "mini" air impact wrench brings power and speed to motorcycle service, small

engine repair and transmission work, and other applications involving tight spaces.
Plus, its many comfort and convenience features make it a great value.



- Six-position power management in forward and reverse
- Handle exhaust directs air away from the operator and the work

### 1/2" Drive Impact Tool Sockets

Cat. No.	Description
74411	1/2" drive set (7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, metal tray)
73412	1/2" drive deep set (3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, metal tray)
74466M	1/2" drive metric set (10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27, metal tray)
73467M	1/2" drive deep metric set (10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27, metal tray)



Model Number	Performance Rating	Maximum Torque ft.–lb. (Nm)	Av. Free Spd. (rpm)	Weight lbs. (kg)	Sound Length in. (mm)	Air Air Consump. cfm (I/min)	Min. @ Load cfm (I/min)	dBA (Press./ Power)	Inlet NPTF in.	Hose Size in. (mm)
1/2" Square	Drive									_
IR2125QTi	Titanium Duty	260 (312)	14,500	2.65 (1.2)	5.625 (143)	4 (113)	17 (476)	94.9/107.9	1/4	3/8 (10)
IR225	Heavy Duty	325 (441)	7,500	4.25 (1.93)	6.625 (168)	4 (113)	16.3 (456)	90.5/103.5	1/4	3/8 (10)
IR231C	Super Duty	600 (816)	8,000	5.8 (2.63)	7.3 (185)	4.2 (119)	22 (623)	102/115	1/4	3/8 (10)

<sup>\*</sup>Maintenance/Automotive class tools are designed for maintenance and automotive applications involving intermittent use.

# 1/2" Maintenance/Automotive Class\*

# **R** Ingersoll Rand

### **IR2135Ti**

### 1/2" Titanium Duty Air Impact Wrench

The Titanium IR2135Ti delivers 1,000 ft.-lbs. of Nut Busting Torque in a gun that weighs just 3.95 lbs! The 7-vane power plant drives enough torque to break away a nut tightened to over 1,000 ft.-lbs. in under six seconds.

- 1,000 ft.-lbs. of Nut Busting Torque
- Traditional max. torque of 700 ft.-lbs.
- New ergonomically designed handle
- Easy-to-use forward/reverse push buttons
- Professional touch trigger for precision control
- Power control dial
- Titanium Technology

### IR2135Ti-2

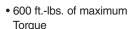
1/2" Titanium Duty Air Impact Wrench Extended Anvil

Featuring a 2" extended anvil with all the performance benefits found in the IR2135Ti. Not many lug nuts can stand in the way of Titanium power. Ideal for tire changing and use with flip sockets.

### IR2130

### 1/2" Heavy Duty Air Impact Wrench

The new IR2130 has all the performance and features you have come to expect from the IR family of Impact wrenches. This Impact features a powerful twin hammer mechanism and a new composite housing, yielding superior ergonomics in a lightweight package.



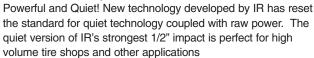
- Full stroke tease throttle
- Easy glide forward/reverse switch
- · Multi position power management
- · Lightweight reinforced aluminum hammercase

### IR2130-2

1/2" Heavy Duty Air Impact Wrench Extended Anvil Featuring a 2" extended anvil with all the performance benefits found in the IR2130. Ideal for tire changing and use with flip sockets.

### IR21350Ti

### 1/2" Titanium Duty Air Impact Wrench



involving frequent use.

- Patented technology silences the tool without sacrificing the power required for tough applications
- New ergonomically designed handle
- Titanium Technology

### IR21350Ti-2

1/2" Titanium Duty

### Air Impact Wrench Extended Anvil

Featuring a 2" extended anvil with all the performance benefits found in the IR2135QTi. Ideal for tire changing and use with flip sockets.

Protect your tool investment with Ingersoll-Rand Impact Tool boots. Tool boots cover the front end of your impact and prevent knicks and scratches from marring the look of your new tool. They are also a great way to individualize and differentiate your tool from everyone else's.

Model	Impact Tool
2131-P32	2131, 2131P, 2131QT-2, 2131QT
2135-P32	2135Ti, 2135Ti-2, 2135PTi, 2135PTi-2
202-P32	212
2112-P32	2112
235-P32	235
231-P32	231C
244-P32	244A TNT
225-P32	225
255-P32	255
2141-P32	2141 (R2141
2161-P32	2161
295-P32	295

Model Number	Performance Rating	Maximum Torque ft.–lb. (Nm)	Free Spd. (rpm)	Weight lbs. (kg)	Length in. (mm)	Av. Air Consump. cfm (I/min)	@ Load cfm (I/min)	Sound dBA (Press./ Power)	Air Inlet NPTF in.	Min. Hose Size in. (mm)
1/2" Square	Drive									
IR2130	Heavy Duty	600 (814)	9,500	4.2 (1.9)	7.25 (184)	4.4 (124.6)	22 (623)	96.6/109.6	1/4	3/8 (10)
IR2130-2	Heavy Duty	600 (814)	9,500	4.55 (2.05)	9.25 (235)	4.4 (124.6)	22 (623)	96.6/109.6	1/4	3/8 (10)
IR2135Ti	Titanium Duty	700 (950)	9,500	3.95 (1.79)	7.34 (186.4)	5 (142)	24 (680)	101/114	1/4	3/8 (10)
IR2135Ti-2	Titanium Duty.	700 (950)	9,500	4.4 (2.0)	9.34 (237)	5 (142)	24 (680)	101/114	1/4	3/8 (10)
IR2135QTi	Titanium Duty	700 (950)	9,500	4.05 (1.84)	7.34 (186.4)	5 (142)	24 (680)	86/96	1/4	3/8 (10)
IR2135QTi-2	Titanium Duty.	700 (950)	9,500	4.4 (2.0)	9.34 (237)	5 (142)	24 (680)	86/96	1/4	3/8 (10)

<sup>\*</sup> Maintenance/Automotive class tools are designed for maintenance and automotive applications involving intermittent use.



# **IR2925P Series Impact Tools**

# A new generation of Impact Tools

The unique features of the 2925 Series extend to pistol grip configurations in the 2925P Models. They offer an unmatched combination of performance and control, with the durability to withstand the toughest operating conditions.

### **External features include:**

- Titanium hammer case
- · Ergonomic handle design
- Smooth contoured profile with integral grip ledge
- · Three-piece housing
- · Handle exhaust
- · Contoured trigger
- · Minimum side-to-center distance
- Enhanced pressure-feed lubrication system
- · Low profile reverse lever
- Three-position power regulation and forward/reverse control Position #1 = Full

#2 = Approx. 88% #3 = Approx. 77%

### Internal features include:

 Enhanced twin-hammer impact mechanism

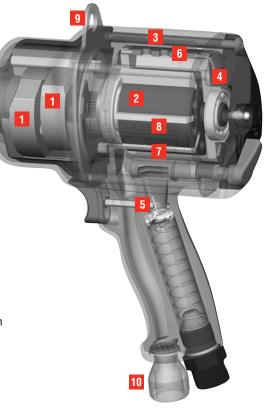


2 Supermotor™

3 Through-bolt construction

Corrode-X<sup>™</sup> (Components impervious to corrosive contaminants)

- 5 Tilt throttle
- 6 Reverse or forward bias
- 7 Concentric cylinder design
- 8 Composite vanes
- 9 Balanced horizontal suspension bail (opt.)
- 10 Piped-away exhaust (opt.)



### IR2161

### The IR2161 models

The IR2161 heavy duty models are ideal for applications a little less demanding than those for the IR2925.

Features that distinguish the IR2161 from the IR2925 models include:



- Enhanced single-hammer mechanism
- · Maximum torque of 1250 ft.-lbs.
- Smooth, high-gloss cast aluminum finish
- 6-Vane high-output air motor
- Smooth, contoured exterior profile

### **External features include:**

- · Ergonomic handle design
- · Smooth contoured profile
- Three-piece housing
- · Handle exhaust

- · 360° swivel air inlet
- Contoured trigger
- · Minimum side-to-center distance
- Enhanced pressure-feed lubrication system
- Three-position power regulation and forward/reverse control

Position #1 = Full

#2 = Approx. 88%

#3 = Approx. 77%

Ribbed lever surface

### Internal features include:

- An enhancement to the original single-hammer mechanism provides increased durability and performance (patent applied for)
- 6-Vane high-output air motor
- Through-bolt construction
- · 360° swivel air inlet
- Tilt throttle
- Concentric cylinder design
- Balanced horizontal suspension bail (opt.)
- · Piped-away exhaust (opt.)









### The IR2141P delivers an exceptional blend of performance, control, and durability



The new 2141P 3/4 -inch drive air impact wrench tackles the toughest jobs in the plant with a new level of productivity.

# 3/4" Industrial Production Class

### IR 2925P1Ti

### 3/4" Air Impact Wrench

Our flagship 3/4" industrial impact wrench, the 2925P1Ti has a titanium hammer case for even greater durability. It's built to provide optimal control and withstand the toughest operating conditions.

- Titanium hammer case
- Ergonomic handle design
- Three position power regulation
- Three-piece motor housing
- Model 2925RBP1Ti is reversed biased with 1600 ft-lbs max torque

### IR 1720B1

### 3/4" Air Impact Wrench

The IR 1720B1 is our most popular 3/4" drive industrial impact wrench in a D handle configuration. Designed for applications not as durable as those for the 2925B2Ti, the 1720B1 is a tough, general purpose industrial impact tool for production or heavy maintenance use.

- 1,000 ft-lbs maximum torque
- · Optional dead handle available
- Steel hammer case



### IR 1720P1

### 3/4" Air Impact Wrench

The 1720P1 is designed for those applications that are not as demanding as those for the 2925P1Ti. A great general purpose industrial 3/4" impact wrench.

- Steel hammer case
- · Built in lubricator
- B1 model: D handle design



### **IR 2141P**

### 3/4" Air Impact Wrench

Weighing just 7 lbs and only 8.2" long, the 2141P is the smallest 3/4" impact on the market. The composite, ergonomic design is durable and comfortable and the 1200 ft-lbs of max torque will get the job done quickly.

- Twin Hammer Plus mechanism for smooth, efficient power
- · High output, six vane motor
- · Four position power regulator



### **Options Available**

### Models 2161P. 2171P

- Piped-away exhaust kit No. 2161-123
- · Horizontal suspension bail No. 2161-366
- Boot 2161-P32

### Series 2925

- Piped-away exhaust kit No. 2161-123
- Horizontal suspension bail No. 2161-366
- Number 4 spline anvil No. 2910-A526

### Series 2920B

- 2910B-726-6: 6" extended
- Horizontal hanger No. 910-366
- 5/8" hex quick change anvil No. 2910B-A926-10
- · Power regulator valve kit No. 2920-K32

### Series 1720

- 3/4" drive x 6" (152 mm) hog ring style
- Extended anvil No. 265-A626-6
- Horizontal hanger No. 910-366
- Power regulator Kit No. 2920-K329
- Reverse valve Kit No. 1720-K329
- Dead handle 834-48
- Dead handle bracket 2910B-364

### Series 2141P

- · Piped-away exhaust kit
- · Horizontal suspension bail
- Tool boot



# Air Impact Tools 3/4" Industrial Production Class



Model	Drive Description	Handle	Free Speed rpm	Impacts per minute		cimum rque Nm	Recor Torq Rang ftlb.	ue	Weig less so lb.	· ·	Len less s in.	gth, ocket mm	Sid Cer Dista in.	iter	Size Hose Recomm. in. mm	cfm
Super Duty	Impact Tools															
2925P1Ti	3/4" square	Pistol	5200	1050	1450	1972	350-1100	476-1496	117/8	5.39	87/8	225	13/4	44	1/2 13	60
2925RBP1Ti	<sup>3</sup> / <sub>4</sub> " square Reverse Bias	Pistol	5200	1050	1600 R 1300 F	2176 1768	400-1400 300-950	544-1904 408-1292	117/8	5.39	87/8	225	13/4	44	1/2 13	60
2920B1	3/4" square	Grip	5000	950	1100	1495	250-800	339-1085	133/16	5.98	121/2	318	129/32	49	1/2 13	36
2920B9	3/4" sq. at 90°	Grip	5000	950	550	949	125-400	203-678	2311/16	10.75	<b>1</b> 7¹/₂	445	† <b>1</b> 5/ <sub>16</sub>	†33	1/2 13	36
Heavy Dut	y Impact Tools															
2161P	3/4" square	Pistol	5750	1025	1250	1700	250-900	340-1224	11 <sup>1</sup> / <sub>4</sub>	5.10	81/2	216	13/4	44	1/2 13	55
1720P1	3/4" square	Pistol	5500	1000	1000	1360	200-600	271-813	11 <sup>7</sup> /8	5.39	75/8	194	129/32	48	1/2 13	40
1720B1	3/4" square	Grip	5500	1000	1000	1360	200-600	271-813	133/16	6.27	113/4	299	129/32	48	1/2 13	40
Standard D	uty Impact Too	ls														
2141P	3/4" square	Pistol	7250	1175	1200R 1000F	1492 1492	200-900	271-1220	7.0	3.2	8.2	208	13/4	44	1/2 13	40
2141P3	#4 spline	Pistol	7250	1175	1200R 1000F	1492 1492	200-900	271-1220	7.0	3.2	8.2	208	13/4	44	1/2 13	40

Note: IR2925 number 4 spline models are available by converting the standard square drive anvil with number 4 spline anvil part number 2910-A526.
The same performance figures apply.

Performance figures are at 90 psi (620 kPa) air pressure. Angle head gear ratio on model 2920B9 is 2 to 1. ◆ Approx. 50% torque reduction.

I.T.: Inside Throttle

O.T.: Outside Throttle

<sup>†</sup> Side to center distance of angle head. Height of angle head to shoulder of square drive is 3½" (89 mm).

<sup>\*\*2920</sup>B9 Hammer Case is plated ductile iron.

# DOBCO

# 3/4" Maintenance/Automotive Class\*

### **IR252**

3/4" Standard Duty

### **Air Impact Wrench**

The IR252 is an economical standard duty 3/4" wrench for engine teardowns or general maintenance. This is a good lightweight 3/4" wrench with a high power rating for its compact size.

- Full power in reverse; 3-position adjustable power in forward
- 750 ft.-lbs. of torque
- Handle exhaust
- Integral 360 degree swivel inlet
- · Lightweight and easy to operate
- Long, trouble-free life insured by oil bath lubrication



### **IR258**

3/4" Heavy Duty

### **Air Impact Wrench**

The IR258 delivers 1000 ft.-lbs. of maximum torque for work on trucks, heavy equipment, and agricultural machinery. It features

an excellent power-to-weight ratio for ease of use, as well as a three-speed power regulator for tailoring output in forward and reverse.

In-handle exhaust directs air flow

- away from the operator and the work360 degree swivel inlet helps eliminate twisted hoses
- Fully adjustable power in forward and reverse



### **IR261**

3/4" Super Duty

### **Air Impact Wrench**

The highly-regarded IR261 model combines compact size with high output, which makes it perfect for everything from spring work to pinion nut and track pad removal

and major engine teardowns.

- Jumbo hammer mechanism
- Up to 1,100 ft.-lbs. of torque
- Trouble-free, longer performance aided by the Pressure-Feed Lube System
- Compact and only 7-5/8" long
- Handle exhaust

For optional power regulator please order part #2920-K329

### IR261-3

3/4" Super Duty Extended Anvil

### **Air Impact Wrench**

Same specifications as the IR261-6 model, but with 3" extended anvil.

### IR261-6

3/4" Super Duty Extended Anvil

### **Air Impact Wrench**

A popular truck tire tool, this model includes all the high-performance features of the IR261. You'll be able to reach lug nuts in deep truck wheels easily with its 6" extended anvil. The tool itself is lightweight and very compact.



Model	Performance	Maximum Torque	Free	Weight	Length	Av. Air	@ Load	Sound dBA	Air Inlet	Min. Hose
Number	Rating	ft.–Ib. (Nm)	Spd. (rpm)	lbs. (kg)	in. (mm)	Consump. cfm (I/min)	cfm (I/min)	(Press./ Power)	NPTF in.	Size in. (mm)
3/4" Squar	e Drive									
IR252	Standard Duty	750 (1,020)	6,500	8.6 (3.9)	9 (229)	7.5 (212)	28 (793)	92.1/105.1	3/8	1/2 (13)
IR258	Heavy Duty	1,000 (1,360)	6,200	10.77 (4.89)	9.8 (249)	8 (226)	30 (835)	93.7/106.7	3/8	1/2 (13)
IR261	Super Duty	1,100 (1,496)	5,500	12.4 (5.62)	8.8 (224)	9.5 (269)	38 (1076)	101.1/114.1	3/8	1/2 (13)
IR261-3	Super Duty Ext.Anv.	1,100 (1,496)	5,500	13 (5.90)	11.8 (300)	9.5 (269)	38 (1076)	101.1/114.1	3/8	1/2 (13)
IR261-6	Super Duty Ext.Anv.	1,100 (1,496)	5,500	13.7 (6.21)	14.8 (376)	9.5 (269)	38 (1076)	101.1/114.1	3/8	1/2 (13)

<sup>\*</sup> Maintenance/Automotive class tools are designed for maintenance and automotive applications involving intermittent use.

# 3/4" Maintenance/Automotive Class\*



### **IR2141**

3/4" Ultra Duty

### **Air Impact Wrench**

Power means productivity. With best-in-class torque, the 2141 delivers plenty of it in the smallest, lightest package available. Delivers best power-to-weight ratio and best size ratio in its

class as well. Great maneuverability for tight, awkward spaces.

- · Weighs just 7 lbs.
- Only 8.2" long
- 1200 ft.-lbs. maximum torque
- TwinHammer Plus™ mechanism for 30 percent greater durability
- Contoured professional touch trigger and ergonomically designed handle for increased comfort

### **IR2161XP**

3/4" Ultra Duty

### Air Impact Wrench



The IR2161 combines a six-vane high output air motor, throughbolt construction, ergonomic handle and housing design to create an impact tool that offers increased power and durability like no other.

- Most powerful 3/4" impact in the industry
- Maximum torque 1,250 ft.-lbs.
- Full power reverse
- 3-position power regulator
- 360 degree swivel inlet



### IR2161XP-6

3/4" Ultra Duty

### **Air Impact Wrench**

The IR2161-6 offers all of the ergonomic, power and durability enhancing features as the IR2161XP but with an extended anvil for those hard to reach applications.



### C28241-800

### Ingersoll-Rand ARO Filter-Regulator-Lubricator (FRL)

Take care of your pneumatic equipment with Ingersoll-Rand ARO brand filters, regulators, and lubricators. Designed to clean, control and lubricate your air lines, ARO FRLs will make sure you get the most out of your tools. They are available in complete FRL packages, individual components, and in piggyback configurations, with a variety of air flows to choose from.



Model Number	Performance Rating	Maximum Torque ft.–lb. (Nm)	Free Spd. (rpm)	Weight lbs. (kg)	Length in. (mm)	Av. Air Consump. cfm (I/min)	@ Load cfm (I/min)	Sound dBA (Press./ Power)	Air Inlet NPTF in.	Min. Hose Size in. (mm)
3/4" Square	Drive									
IR2141	Ultra Duty	1,200 (1,627)	7,250	7 (3.2)	8.2 (208)	9.5 (269)	40 (1133)	99	3/8	1/2 (13)
IR2161XP	Ultra Duty	1,250 (1,695)	6,000	11.8 (5.35)	8.5 (216)	10 (283)	46 (1303)	98/111	3/8	1/2 (13)
IR2161XP-6	Ultra Duty	1,250 (1,695)	6,000	13.1 (5.95)	14.5 (368)	10 (283)	46 (1303)	98/111	3/8	1/2 (13)

<sup>\*</sup> Maintenance/Automotive class tools are designed for maintenance and automotive applications involving intermittent use.

### DOBCO EQUIPMENT LTD

# 1" Industrial Production Class

### IR 2940B2

### 1" Air Impact Wrench

The 2940B2 is our most popular 1" industrial impact wrench. Designed to withstand tough steel erection, power generation or petrochemical applications, the 2940B2's durability and power are legendary.

- Powder coated ductile iron hammer case
- Powder coated motor housing and handle
- Straight dead handle
- Two-piece motor housing
- Built in lubricator



### IR 2940P2

### 3/4" Air Impact Wrench

Similar features and benefits as the 2940B2 but in a pistol grip design.

- Spade style dead handle
- Integral power regulator



### Options Available Series 2940

- Piped-away exhaust muffler kit
   No. 2940–KM184 (A & B models only)
- Horizontal hanger consisting of
- One horizontal hanger
   No. 2934–366
- Two hanger spacersNo. 2934–140
- \*1" drive x 6" (152 mm) extended anvil No. 2940–314–6

Model	Drive Description	Handle	Free Speed	Impacts per minute		imum que	Reco Toro Rai	que		ight, socket	Len less s	• /	Side Cen Dista	ter	Size Hose Recomm.	cfm
			rpm		ftlb.	Nm	ftlb.	Nm	lb.	kg	in.	mm	in.	mm	in. mm	
Super Duty	Impact Tools	3														
2940A1**	No. 5 spline	Grip O.T.	5000	850	2000	2710	1000-1600	1360-2170	22	9.98	12 <sup>1</sup> / <sub>4</sub>	311	23/16	56	3/4 19	58
2940A2	1" square	Grip O.T.	5000	850	2000	2710	1000-1600	1360-2170	22	9.98	12 <sup>1</sup> / <sub>4</sub>	311	23/16	56	3/4 19	58
2940B1**	No. 5 spline	Grip I.T.	5000	850	2000	2710	1000-1600	1360-2170	22	9.98	121/4	311	23/16	56	3/4 19	58
2940B2	1" square	Grip I.T.	5000	850	2000	2710	1000-1600	1360-2170	22	9.98	121/4	311	23/16	56	3/4 19	58
2940P2	1" square	Pistol	4000	810	2000	2710	1000-1600	1360-2170	227/8	10.4	97/8	251	23/16	56	3/4 19	58

<sup>\*</sup>Approx. 15% torque reduction.

Performance figures are at 90 psi (620 kPa) air pressure.

O.T.: Outside Trigger

I.T.: Inside Trigger

<sup>\*\*</sup>No. 5 spline 15/8" OD 14 teeth.



### **1" Industrial Production Class**



### IR 2934B9

### 1" Air Impact Wrench

The 2934B9 has a 90° angle head for vertical applications. Powerful twin hammer design and spade handle come standard.

• Powder coated ductile iron hammer case

- Spade style handle • Two-piece motor housing
- Integral muffler



### **Options Available**

### Series 1734

- No. 5 spline 280-A514-6
- \*6" square anvil: 280–726-6
- Hanger: 2934-366
- Exhaust deflector kit: 2934-K23
- Piped-away exhaust with muffler: 2940-KM184
- Piped-away exhaust without muffler: 2940-K184

### Series 2934

- 90° Angle drive is available
- Order angle attachment No. 2934A90 and hex nose hammer case No. 2934-A827. This hammer case must be used to replace the standard hammer case. Note that these items are furnished as standard equipment on Model 2934B9

# IR 2934P2

### 1" Air Impact Wrench

Ingersoll-Rand's 2934P2 is a 1" pistol grip impact wrench built for tough applications and weighs under 9lbs.

- · Powder coated ductile iron hammer case
- Powder coated motor housing and handle
- Spade style handle
- Two-piece motor housing
- · Built in power regulator

### IR 1712B2

### 1" Air Impact Wrench

One of our more popular 1" industrial impact wrenches, the 1712B2 puts out 1350 ft-lbs max torque and weighs just over 11 lbs.

- Ductile iron hammer case
- · Powder coated motor housing and handle
- Two-piece motor housing
- Inside throttle and spade style dead handle



- for all square drive models.
- \*1" drive x 6" (152 mm) extended anvil No. 2934-314-6
- Horizontal hanger consisting of:
  - One horizontal hanger No. 2934-366
  - Two hanger spacers
  - No. 2934-140
- · Piped-away exhaust muffler kit No. 2940-KM184. (A & B models only)

### **Series 1712**

- \*1" drive x 6" (152 mm) extended anvil No. 280-726-6
- 2934-366 horizontal hanger

Model	Drive Description	Handle	Free Speed rpm	Impacts per minute	-	imum que Nm	To	comm. orque ange Nm	Weig less so lb.	•	Leng less s in.	• •	Sido Cer Dista in.	iter	Size Hose Recomm. in. mm	cfm
Super Duty	Impact Tools		ıpııı		11. 110.	14111	11. 10.	Mill	ıv.	кy						
2934A2	1" square	Grip O.T.	6600	750	1500	2030	500-1100	678-1490	181/2	8.39	111/4	286	23/16	56	3/4 19	47
2934B1**	No. 5 spline	Grip I.T.	6600	750	1500	2030	500-1100	678-1490	181/2	8.39	111/4	286	23/16	56	3/4 19	47
2934B2	1" square	Grip I.T.	6600	750	1500	2030	500-1100	678-1490	181/2	8.39	111/4	286	23/16	56	3/4 19	47
2934B9	1" sq. at 90°	Grip I.T.	5300	780	750	1624	250-500	678-1355	353/4	16.2	185/8	473	†15/8	†41	3/4 19	47
2934P2	1" square	Pistol	5300	825	1500	2030	500-1100	678-1490	20	9.07	85/8	219	23/16	56	3/4 19	47
Heavy Duty	Impact Tools	;														
1734A1**	No. 5 spline	Grip O.T.	6000	800	1400	1904	450-1000	612-1860	18³/ <sub>8</sub>	8.34	111/4	286	23/16	56	3/4 19	47
1712B2	1" square	Grip I.T.	6000	800	1350	1836	450-1000	612-1860	18¹/₄	8.28	111/4	286	23/16	56	3/4 19	47
1712P2	1" square	Pistol	6000	800	1350	1836	450-1000	612-1860	18¹/₄	8.28	111/4	286	23/16	56	3/4 19	56

\*Approx. 15% torque reduction.

Performance figures are at 90 psi (620 kPa) air pressure. Angle head gear ratio on model 2934B9 B is 1 to 1.

\*\*No. 5 spline 15/8" OD 14 teeth.

† Side to center distance of angle head. Height of angle head to shoulder of square drive is 4\%" (111 mm).

I.T.: Inside Trigger

O.T.: Outside Trigger

### DOBCO EQUIPMENT LTD

### 1" Industrial Production Class

### IR 2925P3Ti

### 1" Air Impact Wrench

The IR 2925P3Ti has the same features and benefits as the 3/4" 2925P1Ti but with a 1" anvil.

- Titanium hammer case
- Ergonomic handle design
- Three position power regulation
- Three-piece motor housing



### IR 2925RB2Ti

### 1" Air Impact Wrench

Similar in design to the 3/4" 2925RB1Ti but with more power, the 2925RB2Ti is reverse biased and puts out 1700 ft-lbs.

- Titanium hammer case
- Ergonomic D shaped handle design
- Three position power regulation
- Corrosion resistant component package

### **IR 2171P**

### 1" Air Impact Wrench

With a six vane high output motor, through bolt construction and ergonomic design, the 2171P offers great features and power and an economical price.

- 1250 ft-lbs. max torque
- 3-position power regulator
- 360° swivel inlet
- Steel hammer case

### Options Available

### Models 2161P, 2171P

- Piped-away exhaust kit No. 2161-123
- Horizontal suspension bail No. 2161-366
- Boot 2161-P32

### Series 2925

- Piped-away exhaust kit No. 2161-123
- Horizontal suspension bail No. 2161-366
- Number 4 spline anvil No. 2910-A526

# IR 1720P3

### 1" Air Impact Wrench

The 1720P3 puts out 1100 ft-lbs. max torque and is a good choice for light industrial applications that are not as demanding as those for the 2925 series, such as industrial maintenance.

- Steel hammer case
- B3 model; inside throttle and dead handle



### Series 1720

- 3/4" drive x 6" (152 mm) hog ring style
- Extended anvil No. 265-A626-6
- Horizontal hanger No. 910-366
- Power regulator Kit No. 2920-K329
- Reverse valve Kit No. 1720-K329
- Dead handle 834-48
- Dead handle bracket 2910B-364

### Series 2920B

- 2910B-726-6: 6" extended 3/4" anvil
- Horizontal hanger No. 910–366
- 5/8" hex quick change anvil No. 2910B–A926–10
- Power regulator valve kit No. 2920–K32

Model	Drive Description	Handle	Free Speed	Impacts per minute	Max	imum rque Nm	Recon Torq Rang ftlb.	ue	Weig less so lb.		Len less s in.		Side Cer Dista in.	iter	Size Hose Recomm. in. mm	
Super Duty	Impact Tools		rpm		1110.	IVIII	1110.	MIII	iu.	кy					111. 111111	
2925P3Ti	1" square	Pistol	5200	1050	1450	1972	350-1100	476-1496	117/8	5.39	87/8	225	13/4	44	1/2 13	60
2925B2Ti	1" square	Grip I.T.	6500	900	1600	2170	350-1400	475-1904	14	6.35	12 <sup>3</sup> /8	314	15/8	41	11/2 13	60
2925RB2Ti	1" square Reverse Bias	Grip I.T.	6500	900	1700R 1500F	2305 2034	F300-1300 R400-1500	407-1763 544-2034	14	6.35	12³/ <sub>8</sub>	314	15/8	41	11/2 13	60
2925RBP3Ti	1" square Reverse Bias	Pistol	5200	1050	1600 R 1300 F	2176 1768	400-1400 300-950	544-1904 408-1292	11 <sup>7</sup> /8	5.39	87/8	225	13/4	44	1/2 13	60
2920B3	1" square	Grip	5000	950	1100	1495	250-800	339-1085	133/16	5.98	121/2	318	129/32	49	1/2 13	36

250-900

250-750

250-750

340-1224

340-1016

340-1016

111/4

117/8

133/16

5.10

5.39

6.27

 $8^{1/2}$ 

75/8

113/4

216

194

299

 $1^{3}/_{4}$ 

129/32

129/32

48

1/2 13

1/2 13

1/2 13

55

40

40

2171P

1720P3

1720B3

1" square

1" square

1" square

Pistol

Pistol

Grip

5750

5500

5500

1025

1000

1000

1250

1100

1100

1700

1490

1490

# 1" Maintenance/Automotive Class\*



### **IR271**

1" Super Duty

### **Air Impact Wrench**

The shortest 1" drive air impact wrench is also one of the most powerful. It combines a very compact size with high power output, making it ideal for tire changing, spring work, pinion nut and tractor pad removal, and shock work.

- Impressive power-to-size ratio
- Up to 1,100 ft.-lbs. of torque
- Pressure-Feed Lube
   System for longer service life
- Dead handle improves operator control



1" Super Duty

### **Air Impact Wrench**

Here's the ultimate in quality, the 1" drive wrench with 1,600 ft.-lbs. torque to handle tough jobs in cramped spaces.

- Built-in Pressure-Feed Lube System
- The side handle adjusts to suit you
- Built-in oil reservoir provides continuous misting of the air motor



### IR280-6

1" Super Duty Extended Anvil

### **Air Impact Wrench**

High production truck tire changing requires the brute force only the Jumbo Hammer Impact mechanism delivers. Reach into deep truck wheels easily with the 6" extended anvil wrench, designed for high production truck tire changing.



### #5 Spline Super Duty Extended Anvil

### **Air Impact Wrench**

A standard 6" extended #5 spline drive anvil gives you additional flexibility for certain high production truck tire changing jobs, plus all the power of the rest of the IR280 wrenches.

### **Lubricants and Greases**

Proper lubrication of air tools is a must to prevent excessive wear of moving parts: to prevent possible rust and corrosion of bare, unprotected surfaces; and to provide smooth operation of motors and impact mechanisms. The Ingersoll-Rand full line of oils and greases has been tested thoroughly and is recommended without reservation.





Model 10P Air Line Lubrication

Model 105-LBK1 Air Care Kit

Model Number 1" Square	Performance Rating Drive	Maximum Torque ft.–lb. (Nm)	Free Spd. (rpm)	Weight Ibs. (kg)	Length in. (mm)	Av. Air Consump. cfm (I/min)	@ Load cfm (I/min)	Sound dBA (Press./ Power)	Air Inlet NPTF in.	Min. Hose Size in. (mm)
IR271	Super Duty	1,100 (1,496)	5,500	12.5 (5.67)	8.9 (226)	9.5 (269)	39 (1104)	101.1/114.1	3/8	1/2 (13)
IR280	Super Duty	1,600 (2,176)	6,000	22 (9.98)	13 (330)	10 (283)	55 (1557)	109.1/122.1	1/2	1/2 (13)
IR280-6	Super Duty Ext.Anv.	1,600 (2,176)	6,000	23.8 (10.80)	18.5 (470)	10 (283)	55 (1557)	109.1/122.1	1/2	1/2 (13)
IR280-S6	#5 Spline SD.Ext.Anv.	1,600 (2,176)	6,000	23.8 (10.80)	18.5 (470)	10 (283)	55 (1557)	109.1/122.1	1/2	1/2 (13)

<sup>\*</sup> Maintenance/Automotive class tools are designed for maintenance and automotive applications involving intermittent use.

# DOBCO

# 1" Maintenance/Automotive Class\*

### **IR285A**

1" Heavy Duty

### **Air Impact Wrench**

The IR285A model combines exceptional power, durability, and operator convenience. It delivers 1,450 ft.-lbs. of maximum torque, with a 5,000 rpm free speed and high efficiency, 6-vane motor. The integral 360 degree swivel inlet makes kinked hoses a thing of the past, and along with the swept-back side handle, provides excellent maneuverability.

- 1,450 ft.-lbs. maximum torque
- Superior balance; "angled-down" exhaust

• High efficiency 6-vane air motor



### **IR290**

1" Super Duty

### **Air Impact Wrench**

Designed for getting into cramped spaces with big power, the IR290 has a three-way adjustable handle. It's a good choice for spring work, tractor pads, bus maintenance, and off-road and farm equipment.

- Up to 1,600 ft.-lbs. of torque
- Pressure-Feed Lube System for long life
- Adjustable side handle for better control.

For optional thread on muffler order part #2910-674

### IR290-S

#5 Spline Super Duty

### **Air Impact Wrench**

You get a standard #5 short spline drive anvil and the same quality features as the IR290.

### IR285A-6

1" Heavy Duty Extended Anvil

### **Air Impact Wrench**

The same quality features of the IR285 with a



### IR285A-S6

#5 Spline Heavy Duty Extended Anvil

### **Air Impact Wrench**

A standard 6" extended #5 spline drive anvil and the other quality features of the IR285. The extended anvil makes these tools perfect for the demanding world of truck tire service.

### **IR293**

1" Super Duty

### **Air Impact Wrench**

This is the most powerful 1" wrench for spring work, tractor pads, bus maintenance, and off-road and farm equipment work. The built-in Pressure-Feed Lube System protects the unique Twin Hammer Impact mechanism as it delivers the ultimate in power.

- Up to 2,000 ft.-lbs. of torque
- Most powerful 1" wrench
- Long-lasting tool
- Handle exhaust

### IR293-S

#5 Spline Super Duty

### **Air Impact Wrench**

Ultimate power and all the other advantages of the IR293 are built into this tool along with a standard #5 short spline drive anvil.



Model Number	Performance Rating	Maximum Torque ft.–Ib. (Nm)	Free Spd. (rpm)	Weight lbs. (kg)	Length in. (mm)	Av. Air Consump. cfm (I/min)	@ Load cfm (I/min)	Sound dBA (Press./ Power)	Air Inlet NPTF in.	Min. Hose Size in. (mm)
1" Square D	)rive									
IR285A	Heavy Duty	1,450 (1,972)	5,000	22 (9.98)	13.2 (335)	10 (283)	37 (1047)	107/120	1/2	1/2 (13)
IR285A-6	Hvy.Dty.Ext.Anv.	1,450 (1,972)	5,000	25.2 (11.43)	20.1 (511)	10 (283)	37 (1047)	107/120	1/2	1/2 (13)
IR285A-S6	#5Sp.HD.Ext.Anv.	1,450 (1,972)	5,000	25.2 (11.43)	20.1 (511)	10 (283)	37 (1047)	107/120	1/2	1/2 (13)
IR290	Spr.Dty.	1,600 (2,176)	6,000	21.9 (9.93)	9.75 (248)	10 (283)	60 (1699)	104.6/117.6	1/2	1/2 (13)
IR290-S	#5Sp.Spr.Dty.	1,600 (2,176)	6,000	21.9 (9.93)	10 (254)	10 (283)	60 (1699)	104.6/117.6	1/2	1/2 (13)
IR293	Spr.Dty.	2,000 (2,720)	3,500	22.8 (10.34)	11.3 (287)	12 (340)	64 (1812)	90.3/103.3	1/2	1/2 (13)
IR293-S	#5Sp.Spr.Dty.	2,000 (2,720)	3,500	22.8 (10.34)	11.3 (287)	12 (340)	64 (1812)	90.3/103.3	1/2	1/2 (13)

# 1" Maintenance/Automotive Class\*



### **IR295**

1" Heavy Duty

### **Air Impact Wrench**

A new, improved 1" drive tool perfect for truck and heavy equipment maintenance, the IR295 offers power and convenience at an affordable price. It's compact and lightweight, and perfect for working on suspension components, tractor pads, and other big capacity general repair functions.

- Handle exhaust directs air away from the work
- Top-mounted dead handle
- 3-position power regulator provides torque management

### IR295-S

#5 Spline 1" Heavy Duty

### **Air Impact Wrench**

The IR295-S offers all the features and benefits of the IR295, but with a standard #5 short spline drive anvil.

### IR2190DTi-6

1" Titanium Duty

IR2190DTi-6

IR2171XP

Titanium Duty

Ultra Duty

### **Air Impact Wrench**

A traditional "D" handle coupled with the features and benefits of the Titanium 2190Ti-6



### IR2190Ti

### 1" Titanium Duty Air Impact Wrench

The newest member on the Titanium Team. Designed specifically for tire changing, the chainsaw handle provides comfortable control for the operator. The Titanium IR2190Ti delivers devastating torque in a lightweight package.

- Titanium Hammer Case provides super strength with reduced weight
- Narrow Hammer case provides better access to the wheel well
- Chainsaw handle for enhanced ergonomic operation
- Durable anvil bushing for extended life
- Roll cage inlet design protects the tool during extreme use



1" Titanium Duty Air Impact Wrench Extended Anvil Same specifications as the 2190Ti with a 6" extended anvil.

### **IR2171XP**

1" Ultra Duty

### **Air Impact Wrench**

The new IR2171 combines a six-vane high output air motor, through-bolt construction, ergonomic handle and housing design to create an impact tool that offers increased power and durability like no other.

- High power-to-weight ratio
- Maximum torque 1,250 ft.-lbs.
- Full power reverse
- 3-position power regulator

12 (336)

10 (282)

58 (1624)

46 (1303)

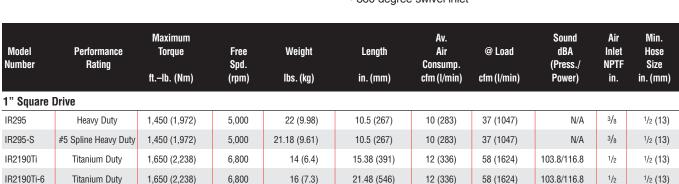
103.8/116.8

98/111

1/2

1/2

• 360 degree swivel inlet



21.48 (546)

12.5 (318)

16 (7.3)

13.1 (5.95)

6,800

6,000

1,650 (2,238)

1,250 (1,695)

1/2 (13)

 $^{1}/_{2}$  (13)

<sup>\*</sup> Maintenance/Automotive class tools are designed for maintenance and automotive applications involving intermittent use.



# 

This chart will assist you in recommending a particular Impact Tool for a specific application. The figures used are based on 70% of the tension proof load of a given size and grade bolt. For example, a Grade 5 bolt has a proof load of 94,200 psi (649,509 kPa). A 1/2"-13 UNC Grade 5 bolt has a tensile stress area — the cross section at the root of the thread — of 0.1282 in.² (82.7 mm²). So therefore it has an actual proof load of 12,076 lbs. (53,715 newtons). 70% of this proof load is 8453 lbs. (14,523 newtons). By looking at the chart, we find that in order to put 8450 lbs. (37,586 newtons) of tension on the 1/2" (13 mm) UNC Grade 5 bolt, we must apply 70 ft.-lbs. (94.9 Nm) torque. To do this, we recommend the Series 2906 Impact Tool.

It should be remembered that 70% of the proof load is normally the amount of tension needed to assure a properly tightened joint.

				•		,							, ,	,
Bolt Grade	Bolt Diame Bolt Diame	,	1/ <sub>4</sub> 6	<sup>5</sup> / <sub>16</sub>	<sup>3/8</sup> 10	<sup>7/</sup> 16 <b>11</b>	1/ <sub>2</sub> 13	<sup>9/</sup> 16 14	<sup>5</sup> / <sub>8</sub> 16	<sup>3</sup> / <sub>4</sub> 19	<sup>7</sup> / <sub>8</sub> 22	1 25	1 <sup>1</sup> / <sub>8</sub> 29	1 <sup>1</sup> / <sub>4</sub> 32
	Hex Size, Inches	Max. Min.	1/2 3/8	19/ <sub>32</sub> 15/ <sub>32</sub>	<sup>11</sup> / <sub>16</sub> <sup>9</sup> / <sub>16</sub>	25/ <sub>32</sub> 21/ <sub>32</sub>	7/ <sub>8</sub> 3/ <sub>4</sub>	31/ <sub>32</sub> 27/ <sub>32</sub>	<sup>11</sup> / <sub>16</sub> <sup>15</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>4</sub> 1 <sup>1</sup> / <sub>8</sub>	1 <sup>7</sup> / <sub>16</sub> 1 <sup>5</sup> / <sub>16</sub>	1 <sup>5</sup> /8 1 <sup>1</sup> / <sub>2</sub>	<b>1</b> 13/ <sub>16</sub> <b>1</b> 11/ <sub>16</sub>	2 1 <sup>7</sup> /8
Grade 1	Torque	ftIbs. Nm	3 4.07	6 8.14	11 14.9	18 24.4	28 38	43 58.3	55 74.6	97 132	155 210	230 312	340 461	480 651
	Impact Too Recomme					2902	2903 2902	2903 2115	2903 2115	2906 2705	2906 2707	2161 2141	2161 2141	2925 2161
	Tension	lbs. kN	730 3.24	1,210 5.38	1,800 8.01	2,460 10.9	3,280 14.6	4,200 18.7	5,200 23.1	7,000 31.1	10,600 47.1	14,000 62.3	18,200 80.9	23,000 102
Grade 5	Torque	ftIbs. Nm	8 10.8	16 21.7	28 38	46 62.4	70 95	110 149	140 190	250 339	405 549	600 814	770 1,044	1,080 1,464
	Impact Too Recomme				2902	2903 2902	2903 2115	2906 2705	2906 2707	2161 2141	2161 2141	2925 2161	2934 2925	2934 1712
	Tension	lbs. kN	1,900 8.4	3,100 13.8	4,600 20.4	6,350 28.2	8,450 37.6	10,900 48.5	13,500 60	20,000 89	27,400 122	36,000 160	41,000 182	52,000 231
ASTM-A325	Torque	ftIbs. Nm							200 271	355 481	570 773	850 1,153	1,060 1,437	1,495 2,027
	Impact Too Recomme								2906 2707	2161 2141	2925 2161	2934 2925	2940 2934	2940
	Tension	lbs. kN							19,000 44.5	28,000 124	39,000 173	51,000 227	56,000 249	71,000 316
Grade BB ASTM-A354	Torque	ftIbs. Nm	8 10.8	15 20.3	27 36.6	43 58.3	66 89.5	106 144	131 178	234 317	376 510	565 766	830 1,125	1,170 1,586
	Impact Too Recomme				2902	2903 2902	2903 2115	2906 2705	2906 2707	2161 2141	2161 2141	2925 2161	2934 2925	2940 1734
	Tension	lbs. kN	1,780 7.9	2,930 13	4,340 19.3	5,950 26.5	7,950 35.4	10,190 45.3	12,660 56.3	18,700 83.1	25,870 115	33,940 151	44,240 196	56,000 249
Grade BC ASTM-A354	Torque	ftIbs. Nm	10 13.6	20 27.1	35 47.5	56 75.9	86 117	138 187	173 234	306 415	495 671	742 1,006	1,090 1,478	1,530 2,075
	Impact Too Recomme			2902	2903 2902	2903 2115	2906 2705	2906 2707	2161 2906	2161 2141	2925 2161	2934 2925	2940 1734	2945 2940
	Tension	lbs. kN	2,340 10.4	3,850 17.1	5,700 25.3	7,815 34.8	10,430 46.4	13,380 59.5	16,610 74	24,550 109	33,960 151	44,550 198	58,070 258	73,500 327
Grade 8 ASTM-A354	Torque	ftIbs. Nm	11 14.9	23 31.2	40 54.2	65 88.1	99 134	159 216	198 268	350 475	566 767	848 1,150	1,245 1,688	1,750 2,373
Grade BD	Impact Too Recomme			2902	2903 2902	2903 2115	2906 2705	2906 2707	2161 2141	2925 2161	2934 2925	2934 2925	2940 1734	2950
	Tension	lbs. kN	2,740 12.2	4,400 19.6	6,510 28.9	8,930 39.7	11,920 53	15,290 68	18,980 84.4	28,050 125	38,800 172	50,900 226	66,360 295	84,000 374
ASTM-A490	Torque	ftIbs. Nm							250 339	435 590	715 970	1,070 1,451	1,580 2,142	2,125 2,882
	Impact Too Recomme								2161 2141	2925 2161	2934 2925	2940 1734	2945 2940	2950
	Tension	lbs. kN							24,000 107	35,000 156	49,000 218	64,000 285	80,000 356	102,000 454

# **Impact Tool Selection Guide**



Only certain Impact Tools are shown in this chart. Compare the required torque shown in this chart with torque range figures shown in the Impact Tool specifications tables to select other suitable tools.

Polt Crodo	Dolt Diama	tor in	13/0	11/2	15/0	13/.	0	21/4	01/2	23/4	2	31/4	31/2	33/4	4
Bolt Grade	Bolt Diame Bolt Diame		1 <sup>3</sup> / <sub>8</sub> 35	1½ 38	1 <sup>5</sup> / <sub>8</sub> 41	1 <sup>3</sup> / <sub>4</sub> 44	2 51	57	2 <sup>1</sup> / <sub>2</sub> 64	70	3 76	83	89	95	4 102
	Hex Size, Inches	Max. Min.	2 <sup>3</sup> / <sub>16</sub> 2 <sup>1</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>8</sub> 2 <sup>1</sup> / <sub>4</sub>	2 <sup>9</sup> / <sub>16</sub> 2 <sup>7</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>4</sub> 2 <sup>5</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>8</sub> 3 <sup>1</sup> / <sub>2</sub>	3 <sup>7</sup> / <sub>8</sub> 3 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub> 4 <sup>1</sup> / <sub>8</sub>	4 <sup>5</sup> / <sub>8</sub> 4 <sup>1</sup> / <sub>2</sub>	5 4 <sup>7</sup> / <sub>8</sub>	5 <sup>3</sup> / <sub>8</sub> 5 <sup>1</sup> / <sub>4</sub>	5 <sup>3</sup> / <sub>4</sub> 5 <sup>5</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>
Grade 1	Torque	ftlbs. Nm	660 895	860 1,166											
	Impact Too Recommer		2925	2934 1712											
	Tension	lbs. kN	28,400 126	34,600 154											
Grade 5	Torque	ftlbs. Nm	1,470 1,933	1,950 2,644											
	Impact Too Recommer		2940 2934	2950 2945											
	Tension	lbs. kN	64,000 285	77,000 342											
ASTM-A325	Torque	ftlbs. Nm	1,960 2,658	2,600 3,526											
	Impact Too Recommer		2950 2945	5980			d on structu olt by the tur							-	eyond the
	Tension	lbs. kN	85,000 378	103,000 458											
Grade BB ASTM-A354	Torque	ftlbs. Nm	1,580 2,142	2,080 2,820	2,700 3,661	3,400 4,610	5,150 6,983	7,500 10,170	10,300 13,967	13,100 17,764	17,100 23,188	21,800 29,561	27,500 37,290	34,000 46,104	41,300 56,003
	Impact Too Recommer		2945	2950	5980	5980	5982	5982 5980	588	588	588	599	599	599	599
	Tension	lbs. kN	69,050 307	83,550 371	99,680 443	116,480 518	155,120 690	199,360 887	248,640 1,106	285,080 1,268	341,780 1,520	403,725 1,796	470,400 2,092	542,850 2,414	
Grade BC ASTM-A354	Torque	ftlbs. Nm	2,075 2,814	2,440 3,309	3,545 4,807	4,465 6,054	6,785 9,200	9,815 13,309	13,600 18,442	16,550 22,442	21,645 29,351	27,700 37,561	34,760 47,134	42,980 58,281	52,360 71,000
	Impact Too Recommer		2950	5980	5980	5980	5982	5982	588	588	588	599	599	599	599
	Tension	lbs. kN	90,630 403	109,620 488	130,830 582	152,880 680	203,950 907	261,660 1,164	326,340 1,452	361,100 1,606	432,910 1,926	517,690 2,303	595,840 2,650	687,610 3,058	787,370 3,493~
Grade 8 ASTM-A354	Torque	ftlbs. Nm	2,375 3,220	3,135 4,251											
Grade BD	Impact Too Recommer		2950	5980											
	Tension	lbs. kN	103,570 461	125,330 557											
ASTM-A490	Torque	ftlbs. Nm	2,780 3,770	3,700 5,017											
	Impact Too Recommer		5980	5980 2950			d on structu olt by the tur								eyond the
	Tension	lbs. kN	121,000 538	148,000 658											



# **Torque Control Impact Tools**

IR Torque Control Impact Tools are designed for applications requiring fastener tightening control. The tools shut off automatically when preset torque levels are reached. Depending upon the model, built-in or detachable torsion bars sense torque levels, and signal a mechanical shut-off device to prevent over-torquing. These tools combine a ball and cam impact mechanism with a heavy-walled aluminum hammer case for maximum strength, minimum weight.



# EQUIPMENT LTD

# 3/8" and 1/2" Class Torque Control Impact Tools (Included Ingersoll Rand)







### **Options & Accessories** Series 5020T and Model 5020TDQ

### • Torque setting clamp No. 5020T-951

- (for Series 5020T only) Horizontal hanger:
- One horizontal hanger No. 5020-366
- includes spacers & screws
- Two horizontal hanger spacers No. 504-140
- Two horizontal hanger cap screws No. 504-376A
- Vertical hanger No. 5020-365

### Series 5040T and Model 5040TDQ

- Vise-type torque setting jig No. 5040T-A951 (for Series 5040T only)
- Horizontal hanger:
  - One horizontal hanger No. 5040-366. Includes the following; Two horizontal hanger spacers No. 504-140 and two horizontal hanger cap screws No. 504-376A
- Vertical hanger No. 5040-365



Model	Drive Description		rque inge	Type Torsion Bar	Free Speed	Impacts per minute	We	ight	ı	.ength	Cei	e to nter ance	cfm
		ftlb.	Nm		rpm		lb.	kg	in.	mm	in.	mm	
5020TAL1	3/8" square	6-17	8-23	AB	1400	2100	4	1.81	9	229	11/16	27	10
5020TAH1	3/8" square	10-30	13-40	AB	1400	2100	4	1.81	9	229	11/16	27	10
5020TDQ	<sup>7</sup> / <sub>16</sub> " hex Q.C.	10-30	13-40	NAD	1400	2100	43/16	1.9	11	279	11/16	27	10
5040TAL1	1/2" square	20-45	27-61	AB	1500	2150	61/4	2.84	101/2	267	13/8	35	15
5040TAM1	1/2" square	40-65	54-88	AB	1500	2150	61/4	2.84	101/2	267	13/8	35	15
5040TAH1	1/2" square	60-90	81-122	AB	1500	2150	61/4	2.84	101/2	267	13/8	35	15
5040TDQ	7/16" hex Q.C.	20-90	27-122	NAD	1500	2150	67/8	3.12	133/4	349	13/8	35	15

All of the above square drive Impact Tools are furnished with pin-type retainer.

Series 5020 and 5040 Impact Tools have 1/4" NPT air inlet: 1/4" (6 mm) size hose is recommended. Performance figures are at 90 psi (620 kPa) air pressure.

AB = Adjustable, Built-in torsion bar. NAD = Non-adjustable, Detachable torsion bar.

Weights shown are with torsion bar, less socket. Weights of models with detachable torsion bars are with heaviest torsion bars. Lengths shown are with torsion bar, less socket.

Models ending in L1 are equipped with light torsion bar.

Models ending in M1 are equipped with medium torsion bar.

Models ending in H1 are equipped with heavy torsion bar.

# DOBCO

# **Torque Control Impact Tools**

Non-adjustable Detachable Torsion Bars and Kits for Models 5020TDQ and 5040TDQ

- No. 5040TDQ-KP637 torsion bar kit (consists of one each non-adjustable torsion bar with pin-type retainer and No. 5040TDQ-637 torsion bar case)
- No. 5040TDQ-KB637 torsion bar kit (consists of one each non-adjustable torsion bar with ball-type retainer and No. 5040TDQ-637 torsion bar case)

Torsion B: With 12" Square Drive Pin-Type Retainer	ar Number With 12" Square Drive Ball-Type Retainer		l 5020TDQ ie Range Nm		5040TDQ e Range Nm	Color Code
5040TDQ-P535-1	5040TDQ-B535-1	6-10	8.14-13.6	20-25	27.1-33.9	Red
5040TDQ-P535-2	5040TDQ-B535-2	8-12	10.8-16.3	22-30	29.8-40.7	Orange
5040TDQ-P535-3	5040TDQ-B535-3	10-14	13.6-19	25-35	33.9-47.5	Yellow
5040TDQ-P535-4	5040TDQ-B535-4	12-16	16.3-21.7	30-40	40.7-54.2	Green
5040TDQ-P535-5	5040TDQ-B535-5	14-18	19-24.4	35-45	47.5-61.0	Blue
5040TDQ-P535-6	5040TDQ-B535-6	16-20	16.3-27.1	40-50	54.2-67.8	Violet
5040TDQ-P535-7	5040TDQ-B535-7	18-22	24.4-29.8	45-55	61.0-74.6	Red
5040TDQ-P535-8	5040TDQ-B535-8	20-24	27.1-32.5	50-60	67.8-81.4	Orange
5040TDQ-P535-9	5040TDQ-B535-9	22-26	29.8-35.2	55-65	74.6-88.1	Yellow
5040TDQ-P535-10	5040TDQ-B535-10	24-28	32.5-38	60-75	81.3-101	Green
5040TDQ-P535-11	5040TDQ-B535-11	26-29	35.2-39.3	70-85	94.9-115	Violet
5040TDQ-P535-12	5040TDQ-B535-12	27-30	36.6-40.7	75-90	102-122	Blue

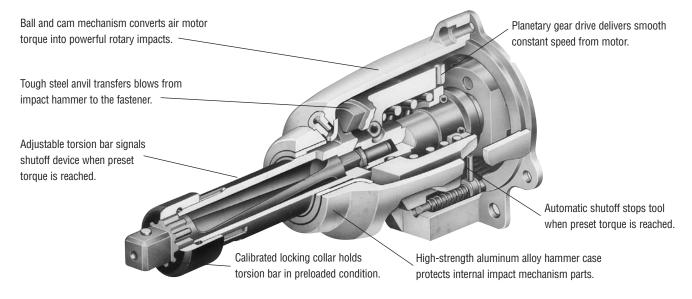
### **Torque Control Impact Tool Operation**

The Torque Control Impact Tool converts

the torque of the air motor into powerful rotary impacts when a certain resistance to turning is met. The Ingersoll-Rand principle of compressing a sturdy hammer spring and suddenly releasing this energy to strike a powerful rotary blow makes it possible to quickly and efficiently run fasteners.

The Torque Control Impact Tool also incorporates a torsion bar and an automatic shut-off valve. Torque control is obtained by preloading the torsion bar to the torque desired. When the resistance of the fastener being run becomes equal to the torque preloaded in the torsion bar, the extra clearance in the flutes of the locking collar allows the torsion bar to flex a few degrees beyond its original setting.

Acting like a spring, the torsion bar snaps back, supplying additional impetus to the hammer, causing the hammer to rebound higher and trip the automatic shut-off valve, instantly stopping the tool. By varying the setting of the torsion bar, using different torsion bars and/or different size tools, torques from 6 to 90 ft.-lbs. (8.14 to 122 Nm) can be accurately obtained time after time.





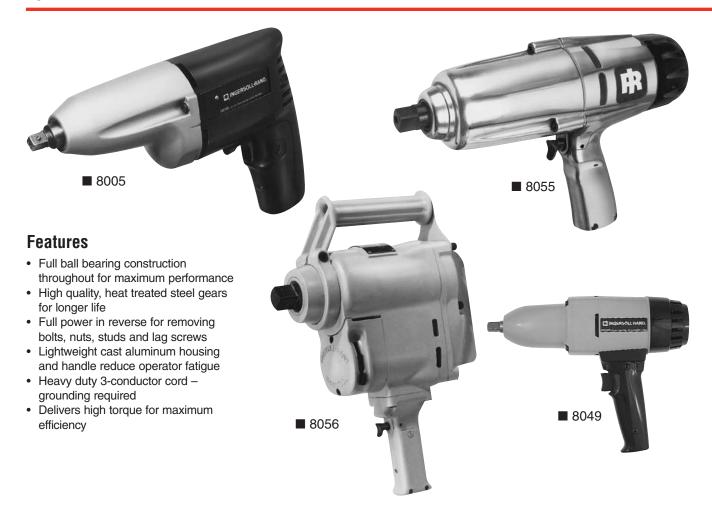
# **Electric Impact Tools**





For applications where the use of compressed air is not practical, IR offers a complete line of electric Impact Tools in 3/8, 1/2, 3/4 and 1-inch drive sizes. All models are ranked according to the Super Duty/Heavy Duty/Standard Duty ratings, and incorporate the same high quality of design and construction that has made Ingersoll-Rand the world leader in Impact Tools.

# Electric Impact Tools 3/8" to 1" Industrial Production Class



Model	Drive Description	Handle	Free Speed	Impacts per minute	-	imum que		mm. que 1ge	Weight, less socket	Length, less socket	Side to Center Distanc			Chord
			rpm		ftlb.	Nm	ftlb.	Nm	lb.	in.	in.	amps	volts	Length
8005	3/8" square	Pistol	2000	2200	85	115	5-50	7-68	41/2	101/8	13/8	3.0	120 AC	10'
8049	1/2" square	Pistol	1900	2000	290	393	30-180	41-244	63/4	<b>11</b> <sup>11</sup> / <sub>16</sub>	15/8	5.0	120 AC	10'
8053	1/2" square	Pistol	1900	1900	330	448	50-225	68-305	7	101/4	15/8	5.0	120 AC/DC	15'
8053QC	7/16" hex QC	Pistol	1900	1900	300	407	50-200	68-272	7	11	15/8	5.0	120 AC/DC	15'
8055	3/4" square	Pistol	1700	1725	450	610	100-375	136-509	10	117/8	13/4	7.5	120 AC/DC	8'
8062	5/8" hex QC	Pistol	1700	1725	400	542	100-350	136-475	10	127/8	13/4	7.5	120 AC/DC	8'
8056	1" square	Grip	800	900	750	1017	300-600	407-814	321/2	141/8	23/8	10.0	120 AC/DC	15'

Tools comply with OSHA requirements and are UL listed.



## **Electric Impact Tools Quick Reference Guide**



	Super	Duty	Heavy	Duty	Standa	rd Duty	Torque (	Control	Electri	ic
Drive Size	Series	Page	Series	Page	Series	Page	Series	Page	Series	Page
3/8"	2902	44	1702	44			5020	57	8005	60
3/8"	2903	44	2904	44						
7/16" Quick Change					2131	45	5020	57		
7/16" Quick Change							5040	57		
1/2"	2906	45	2707	45	2705	45	5040	57	8053	60
1/2"					2904	45			8049	60
1/2"					2131	45				
5/8"	2908	51								
5/8" Quick Change									8062	60
3/4"	2925	51	1720	51					8055	60
3/4"			2161P	51						
1"	2934	52	1734	52	1720	51			8056	60
1"	2940	53	1712	52	2171P	51				

### **Pressure-Feed Lubrication System**



Ingersoll-Rand uses a "pressure-feed" lubrication system on all Twin-Hammer and Jumbo Hammer Impact Mechanisms. This exclusive system allows the operator to externally inject grease into a chamber through a grease fitting in the rear of the motor housing.

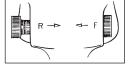
Air pressure from the motor force feeds the right amount of grease from the chamber and through the rotor, distributing a film of protective grease

on the hammer mechanism. This system insures the continuous lubrication of critical hammer parts, resulting in longer, trouble-free life.

Use Cat. No. R000A2-228 Metal Grease Gun and Cat. No. 100 Grease, or equivalent. This grease has the right viscosity to flow through the small orifice in the rotor and anvil.

### **Power Regulator System**

Some Twin-Hammer and Jumbo Hammer tools are equipped with a combination power regulator/reverse valve. This design allows operators to adjust power output, to prevent overtorquing on delicate work, in one direction—while maintaining full power in the opposite direction. The power output in either direction is designated by the numbers "0" thru "5". Number 5 designates maximum power.

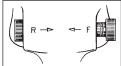




### Forward:

Regulator on 3 reduces power output. Switching to reverse automatically maintains full power.





### Reverse:

Regulator on 3 reduces power output. Switching to forward automatically maintains full power.

### Regulator on 5:

Forward, maximum power output

Reverse, maximum power output



# Air Impact Tools – Industrial Production Class

Model	Drive Description	Handle	Free Speed rpm	Impacts per minute	Maxii Torq ftlb.		Recom Torqu Rang ftlb.	ie	Weig less so lb.		Leng less s in.		Side Cent Dista in.	ter nce	Size Ho Recom in. m	m.	cfm
3/8" Impac	t Tools																,
2902P1	<sup>3</sup> /8" square	Pistol	10,000	1500	140	190	20-120	27-163	21/2	1.25	51/2	140	13/8	35	5/16	8	15
2903P2	<sup>3</sup> /8" square	Pistol	6000	1200	205	278	30-170	41-230	$4^{13}/_{16}$	2.18	55/8	143	13/8	35	3/8 1	0	21
2115PTi	<sup>3</sup> /8" square	Pistol	15,000	1500	250F	339	25-250	34-312	2.4	1.1	53/4	146	11/8	29	3/8 1	0	17
	Reverse Bias				280R	378											
2115P4Ti	<sup>1</sup> /4" hex QC Reverse Bias	Pistol	15,000	1500	250F 280R	339 378	25-230	34-312	2.4	1.1	53/4	146	11/8	29	3/8 1	0	17
1702SB1	3/8" square	Straight	10,000	1500	105	142	13-85	18-115	21/2	1.12	57/8	149	1	25	5/16	8	13
1702P1	3/8" square	Pistol	10,000	1500	125	170	20-100	27-136	23/4	1.25	51/2	140	13/8	35	5/16	8	15
1702P4	<sup>1</sup> /4" hex QC	Pistol	10,000	1500	125	170	20-100	27-136	23/4	1.25	51/2	140	13/8	35	5/16	8	15
1/2" Impact	t Tools																
2906P1	<sup>1</sup> /2" square	Pistol	5000	1200	500	678	40-350	54.2-475	6	2.72	67/8	175	111/32	34	3/8	0	23
2903P1	<sup>1</sup> /2" square	Pistol	6000	1200	220	298	30-185	41-250	413/16	2.18	55/8	143	13/8	35	3/8	0	21
2707P1	1/2" square	Pistol	7750	1300	450	610	40-275	54-373	6	2.72	61/2	165	13/8	35	5/16	8	26
2135PTi	1 <sub>/2"</sub> square Reverse Bias	Pistol	9500	1250	625 700	848 949	50-600	68-814	3.95	1.79	7.34	186	13/8	35	3/8	0	24
2131P7	<sup>7</sup> /16" hex QC Reverse Bias	Pistol	9500	1250	625 700	848 949	50-600	68-814	3.95	1.79	7.34	186	13/8	35	3/8 -	0	24
2705P1	1/2" square	Pistol	8500	1200	400	542	40-200	54-271	55/8	2.55	63/4	171	111/32	34	3/8	.0	23
2125PTi	1 <sub>/2"</sub> square Reverse Bias	Pistol	15,000	1500	290 280	339 378	25-230	34-312	2.4	1.1	53/4	146	11/8	29	3/8	0	17
3/4" Impact	Tools																
2925P1Ti	3/4" square	Pistol	5200	1050	1450	1972	350-1100	476-1496	117/8	5.39	87/8	225	13/4	44	1/2 1	3	60
2925RBP1Ti	3/4" square Reverse Bias	Pistol	5200	1050	1600 R 1300 F	2176 1768	400-1400 300-950	544-1904 408-1292	117/8	5.39	87/8	225	13/4	44	1/2 1	3	60
2920B1	3/4" square	Grip	5000	950	1100	1495	250-800	339-1085	133/16	5.98	121/2	318	129/32	49	1/2 1	3	36
2920B9	3/4" sq. at 90°	Grip	5000	950	550	949	125-400	203-678	2311/16	10.75	171/2	445	† <b>1</b> 5/ <sub>16</sub>	†33	1/2 1	3	36
2161P	3/4" square	Pistol	5750	1025	1250	1700	250-900	340-1224	111/4	5.10	81/2	216	13/4	44	1/2 1	3	55
1720P1	3/4" square	Pistol	5500	1000	1000	1360	200-600	271-813	11 <sup>7</sup> /8	5.39	75/8	194	129/32	48	1/2 1	3	40
1720B1	3/4" square	Grip	5500	1000	1000	1360	200-600	271-813	133/16	6.27	113/4	299	129/32	48	1/2 1	3	40
2141P	<sup>3</sup> /4" square	Pistol	7250	1175	1200R 1000F	1492 1492	200-900	271-1220	7.0	3.2	8.2	208	13/4	44	1/2 1	3	40
2141P3	#4 spline	Pistol	7250	1175	1200R 1000F	1492 1492	200-900	271-1220	7.0	3.2	8.2	208	13/4	44	1/2 1	3	40



# Air Impact Tools — Industrial Production Class (Continued)



Model	Drive Description	Handle	Free Speed rpm	Impacts per minute	Maxi Tori ftlb.	mum que Nm	Recoi Torq Ran ftlb.	ue	Weigless solution	-	Len less s in.	~ .	Side Cen Dista in.	iter	Size Hos Recomm in. mm	. cfm
1" Impact To	ols															
2940A1**	No. 5 spline	Grip O.T.	5000	850	2000	2710	1000-1600	1360-2170	22	9.98	121/4	311	23/16	56	3/4 19	58
2940A2	1" square	Grip O.T.	5000	850	2000	2710	1000-1600	1360-2170	22	9.98	12¹/₄	311	23/16	56	3/4 19	58
2940B1**	No. 5 spline	Grip I.T.	5000	850	2000	2710	1000-1600	1360-2170	22	9.98	12 <sup>1</sup> / <sub>4</sub>	311	23/16	56	3/4 19	58
2940B2	1" square	Grip I.T.	5000	850	2000	2710	1000-1600	1360-2170	22	9.98	12¹/₄	311	23/16	56	3/4 19	58
2940P2	1" square	Pistol	4000	810	2000	2710	1000-1600	1360-2170	227/8	10.4	97/8	251	23/16	56	3/4 19	58
2934A2	1" square	Grip O.T.	6600	750	1500	2030	500-1100	678-1490	18 <sup>1</sup> / <sub>2</sub>	8.39	111/4	286	23/16	56	3/4 19	47
2934B1**	No. 5 spline	Grip I.T.	6600	750	1500	2030	500-1100	678-1490	181/2	8.39	111/4	286	23/16	56	3/4 19	47
2934B2	1" square	Grip I.T.	6600	750	1500	2030	500-1100	678-1490	181/2	8.39	111/4	286	23/16	56	3/4 19	47
2934B9	1" sq. at 90°	Grip I.T.	5300	780	750	1624	250-500	678-1355	353/4	16.2	185/8	473	†15/8	†41	3/4 19	47
2934P2	1" square	Pistol	5300	825	1500	2030	500-1100	678-1490	20	9.07	85/8	219	23/16	56	3/4 19	47
1734A1**	No. 5 spline	Grip O.T.	6000	800	1400	1904	450-1000	612-1860	183/8	8.34	111/4	286	23/16	56	3/4 19	47
1712B2	1" square	Grip I.T.	6000	800	1350	1836	450-1000	612-1860	181/4	8.28	11 <sup>1</sup> / <sub>4</sub>	286	23/16	56	3/4 19	47
1712P2	1" square	Pistol	6000	800	1350	1836	450-1000	612-1860	18 <sup>1</sup> / <sub>4</sub>	8.28	111/4	286	23/16	56	3/4 19	56
2925P3Ti	1" square	Pistol	5200	1050	1450	1972	350-1100	476-1496	11 <sup>7</sup> /8	5.39	87/8	225	13/4	44	1/2 13	60
2925B2Ti	1" square	Grip I.T.	6500	900	1600	2170	350-1400	475-1904	14	6.35	123/8	314	15/8	41	11/2 13	60
2925RB2Ti	1" square Reverse Bias	Grip I.T.	6500	900	1700R 1500F	2305 2034	F300-1300 R400-1500	407-1763 544-2034	14	6.35	123/8	314	15/8	41	11/2 13	60
2925RBP3Ti	1" square Reverse Bias	Pistol	5200	1050	1600 R 1300 F	2176 1768	400-1400 300-950	544-1904 408-1292	117/8	5.39	87/8	225	13/4	44	1/2 13	60
2920B3	1" square	Grip	5000	950	1100	1495	250-800	339-1085	133/16	5.98	12 <sup>1</sup> / <sub>2</sub>	318	129/32	49	1/2 13	36
2171P	1" square	Pistol	5750	1025	1250	1700	250-900	340-1224	111/4	5.10	81/2	216	13/4	44	1/2 13	55
1720P3	1" square	Pistol	5500	1000	1100	1490	250-750	340-1016	117/8	5.39	75/8	194	129/32	48	1/2 13	40
1720B3	1" square	Grip	5500	1000	1100	1490	250-750	340-1016	133/16	6.27	113/4	299	129/32	48	1/2 13	40



# Impact Tools

# **Air Impact Tools – Maintenance/Automotive Class**

Model Number	Performance Rating	Working Torque Range ft.–lb.	Maximum Torque	Blows Per	Free Spd.	Standard Bolt Cap.	Weight	Length	Av. Air Consump.	@ Load	Sound dBA (Press./	Air Inlet NPTI	F Size
		(Nm)	ftlb. (Nm)	Min.	(rpm)	in. (mm)	lbs. (kg)	in. (mm)	cfm (I/min)	cfm (l/min)	Power)	in.	in. (mm)
3/8" Square Drive													
IR211	Hvy.Dty.	20–125 (27–170)	150 (204)	1,500	10,000	3/8 (10)	2.4 (1.09)	6.6 (168)	2.5 (71)	11 (311)	104/117	1/4	3/8 (10)
IR212	Spr.Dty.	20–150 (27–204)	180 (245)	1,500	10,000	7/16 (11)	2.89 (1.31)	6 (152)	2.5 (71)	11 (311)	97.5/110.5	1/4	3/8 (10)
IR215	Hvy.Dty.	15–300 (20–176)	160 (217)	1,600	9,500	7/16 (11)	2.89 (1.31)	6.125 (156)	3.0 (85)	13 (368)	80.6/93.6	1/4	3/8 (10)
IR216	Spr.Dty.	15–160 (20–217)	175 (232)	1,800	8,000	<sup>7</sup> /16 (11)	2.89 (1.31)	6.125 (156)	3.0 (85)	13 (368)	97.5/110.5	1/4	3/8 (10)
IR2112	Ult.Dty.	25–200 (34–272)	260 (354)	1,500	14,500	<sup>7</sup> /16 (11)	2.65 (1.20)	5.625 (143)	4 (113)	17 (476)	94.9/107.9	1/4	3/8 (10)
1/2" Square Drive													
IR2121	Ult.Dty.	25–200 (34–272)	260 (312)	1,500	14,500	<sup>7</sup> /16 (11)	2.65 (1.2)	5.625 (143)	4 (113)	17 (476)	94.9/107.9		3/8 (10)
IR225	Hvy.Dty.	25–200 (34–272)	325 (441)	1,200	7,500	1/2 (13)	4.25 (1.93)	6.625 (168)	4 (113)	16.3 (456)	90.5/103.5	1/4	3/8 (10)
IR231C	Spr.Dty.	25–300 (34–408)	470 (610)	1,200	8,000	9/16 (14)	5.8 (2.63)	7.3 (185)	4.2 (119)	22 (623)	102/115		3/8 (10)
IR231H	Spr.Dty.	25–300 (34–408)*	470 (610)	1,200	8,000	9/16 (14)	5.8 (2.63)	7.3 (185)	4.2 (119)	22 (623)	91.2/104.2		3/8 (10)
IR231H-2	Spr.Dty.Ext.Anv.	50-400 (68-544)*	450 (610)	1,250	8,000	9/16 (14)	6.0 (2.72)	9.3 (180)	4.8 (136)	23 (651)	91.2/104.2	1/4	3/8 (10)
IR235	Hvy.Duty	25–225 (34–306)	375 (510)	1,200	9,500	1/2 (13)	5.42 (2.46)	7.75 (197)	4 (113)	17 (474)	104.2/111.6	1/4	3/8 (10)
IR244A	Spr.Dty.	40–350 (54–476)	500 (680)	1,300	7,000	5/8 (16)	6.0 (2.72)	7.3 (185)	5.4 (153)	21 (595)	105/109.3	1/4	3/8 (10)
IR244A-2	Spr.Dty.Ext.Anv.	40–350 (54–476)	500 (680)	1,300	7,000	5/8 (16)	6.28 (2.85)	9.5 (241)	5.4 (153)	21 (595)	105/109.3	1/4	3/8 (10)
IR2131A	Ult.Dty.	50-400 (68-544)**	450 (612)	1,250	9,500	9/16 (14)	4.5 (2.04)	7.1 (180)	4.8 (136)	23 (651)	89/102	1/4	3/8 (10)
IR2131A-2	Ult.Dty.Ext.Anv.	50-400 (68-544)**	450 (612)	1,250	9,500	9/16 (14)	4.8 (2.18)	9.1 (231)	4.8 (136)	23 (651)	89/102	1/4	3/8 (10)
IR2131QT	Ultra Duty	50-400 (68-544)**	450 (612)	1,250	9500	9/16 (14)	4.5 (2.04)	7.1 9180)	4.8 (136)	23 (651)	82	1/4	3/8 (10)
IR2131QT-2	Ultra Duty	50-400 (68-544)**	450 (612)	1,250	9500	9/16 (14)	4.8 (2.18)	9.1 (231)	4.8 (136)	23 (651)	82	1/4	3/8 (10)
3/4" Square Drive													
IR252	Stnd.Dty.	100-500 (136-680)	750 (1,020)	1,200	6,500	1 (25)	8.6 (3.9)	9 (229)	7.5 (212)	28 (793)	92.1/105.1	3/8	1/2 (13)
IR258	Heavy Duty	200-800 (272-1,088)	1,000 (1,360)	1,100	6,200	1 (25)	10.77 (4.89)	9.8 (249)	8 (226)	30 (835)	93.7/106.7	3/8	1/2 (13)
IR261	Spr.Dty.	200–900 (272–1,224)	1,100 (1,496)	1,000	5,500	1 (25)	12.4 (5.62)	8.8 (224)	9.5 (269)	38 (1076)	101.1/114.1	3/8	1/2 (13)
IR261-3	Spr.Dty.Ext.Anv.	200–900 (272–1,224)	1,100 (1,496)	1,000	5,500	1 (25)	13 (5.90)	11.8 (300)	9.5 (269)	38 (1076)	101.1/114.1	3/8	1/2 (13)
IR261-6	Spr.Dty.Ext.Anv.	200–900 (272–1,224)	1,100 (1,496)	1,000	5,500	1 (25)	13.7 (6.21)	14.8 (376)	9.5 (269)	38 (1076)	101.1/114.1	3/8	1/2 (13)
IR2141	Ult.Dty.	200–900 (271–1,220)	1,200 (1,627)	1,175	7,250	1 (25)	7 (3.2)	8.2 (208)	9.5 (269)	40 (1133)	00/000	3/8	1/2 (13)
IR2161XP	Ult.Dty.	300-1,000 (407-1,356)	1,250 (1,695)	1,025	6,000	1 (25)	11.8 (5.35)	8.5 (216)	10 (283)	46 (1303)	98/111	3/8	1/2 (13)
IR2161XP-6	Ult.Dty.	300-1,000 (408-1,360)	1,250 (1,695)	1,025	6,000	1 (25)	13.1 (5.95)	14.5 (368)	10 (283)	46 (1303)	98/111	3/8	1/2 (13)
1" Square	Drive												
IR280	Spr.Dty.	150-1,000 (204-1,360)	1,600 (2,176)	750	6,000	11/4 (32)	22 (9.98)	13 (330)	10 (283)	55 (1557)	109.1/122.1	1/2	1/2 (13)
IR271	Spr.Dty.	200–900 (272–1,224)	1,100 (1,496)	1,000	5,500	11/4 (32)	12.5 (5.67)	8.9 (226)	9.5 (269)	39 (1104)	101.1/114.1	3/8	1/2 (13)
IR280-6	Spr.Dty.Ext.Anv.	150–1,000 (204–1,360)	1,600 (2,176)	750	6,000	11/4 (32)	23.8 (10.80)	18.5 (470)	10 (283)	55 (1557)	109.1/122.1	1/2	1/2 (13)
IR280-S6	#5Sp.SD.Ext.Anv.	150-1,000 (204-1,360)	1,600 (2,176)	750	6,000	11/4 (32)	23.8 (10.80)	18.5 (470)	10 (283)	55 (1557)	109.1/122.1	1/2	1/2 (13)
IR285A	Hvy.Dty.	100–1,000 (136–1,360)	1,450 (1,972)	750	5,000	11/4 (32)	22 (10)	13.2 (335)	10 (283)	37 (1047)	107/120	1/2	1/2 (13)
IR285A-6	Hvy.Dty.Ext.Anv.	100–1,000 (136–1,360)	1,450 (1,972)	750	5,000	11/4 (32)	25.2 (11.43)	20.1 (511)	10 (283)	37 (1047)	107/120	1/2	1/2 (13)
IR285A-S6	#5Sp.HD.Ext.Anv.	100–1,000 (136–1,360)	1,450 (1,972)	750	5,000	11/4 (32)	25.2 (11.43)	20.1 (511)	10 (283)	37 (1047)	107/120	1/2	1/2 (13)
IR290	Spr.Dty.	150–1,000 (204–1,360)	1,600 (2,176)	800	6,000	11/4 (32)	21.9 (9.93)	9.75 (248)	10 (283)	60 (1699)	104.6/117.6	1/2	1/2(13)
IR290-S	#5Sp.Spr.Dty.	50-1,000 (204-1,360)	1,600 (2,176)	800	6,000	11/4 (32)	21.9 (9.93)	10 (254)	10 (283)	60 (1699)	104.6/117.6	1/2	1/2 (13)
IR293	Spr.Dty.	1,000–1,600 (1,360–2,176)	2,000 (2,720)	810		13/8 (35)	22.8 (10.34)	11.3 (287)	12 (340)	64 (1812)	90.3/103.3		1/2 (13)
IR293-S	#5Sp.Spr.Dty.	1,000–1,600 (1,360–2,176)	2,000 (2,720)	810		13/8 (35)	22.8 (10.34)	11.3 (287)	12 (340)	64 (1812)	90.3/103.3		1/2 (13)
IR295	Hvy.Dty.	100–1,000 (136–1,360)	1,450 (1,972)	750		11/4 (32)	22 (9.98)	10.5 (267)	10 (283)	37 (1047)	N/A		1/2 (13)
IR295-S	#5Sp.Hvy.Dty.	100–1,000 (136–1,360)	1,450 (1,972)	750		11/4 (32)	21.18 (9.61)	10.5 (267)	10 (283)	37 (1047)	N/A		1/2 (13)
IR2080-6	Ult.Dty.	150-1,200 (204-1,627)	1,600 (2,305)	950		11/4 (32)	16 (7.3)	21.48 (546)	12 (336)	58 (1624)	103.8/116.8		1/2 (13)
IR2171XP	Ult.Dty.	300–1,000 (408–1,358)	1,250 (1,695)	1,025	6,000	1 (25)	13.1 (5.95)	12.5 (318)	10 (282)	46 (1303)	98/111	1/2	1/2 (13)
IR2080	Ult.Dty.	150-1,200 (204-1627)	1,600 (2,305)	950		11/4 (32)	14 (6.4)	15.38 (391)	12 (336)	58 (1624)	103.8/116.8		1/2 (13)
1112000	JIL.DIY.	100 1,200 (204-1021)	1,000 (2,000)	330	0,000	1 /4 (32)	17 (0.4)	10.00 (001)	12 (000)	00 (1024)	100.0/110.0	.12	12 (10)



### WARRANTY

### **IMPACT TOOLS**

Ingersoll-Rand warrants to the original user its impact tool products to be free of defects in material and workmanship for a period of one year from the date of purchase. IR will repair, without cost, any Product found to be defective, including parts and labor charges, or at its option, will replace such Products or refund the purchase price less a reasonable allowance for depreciation, in exchange for the Product. Repairs or replacements are warranted for the remainder of the original warranty period.

If any product proves defective within its original one year warranty period, it should be returned to an appropriate Ingersoll-Rand Service Distributor, transportation prepaid with proof of purchase or warranty card.

This warranty does not apply to Products which IR has determined to have been misused or abused, improperly maintained by the purchaser: or where the malfunction or defect can be attributed to the use of non-genuine IR parts.

IR makes no other warranty, and all implied warranties including any warranty of merchantability or fitness for a particular purpose are limited to the duration of the expressed warranty period as set for the above. IR's maximum liability is limited to the purchase price of the Product and in no event shall IR be liable for any consequential, indirect, incidental, or special damages of any nature arising from the sale or use of the Product, whether based on contract, tort, or otherwise.

### **Questions? Parts? Service?**





Ontario's Largest Pneumatic & Hydraulic Tool Distributor

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