

**Your Solutions Provider!** 

Jiffy Air Tool History

# JIFFY AIR TOOL CO

S. SAN PEDRO SALES & SERVICE ME.4-332







Jiffy Headquarters & Manufacturing Facility Carson City, NV USA





Jiffy Air Tool is an 80-year-old market leading solutions provider specializing in hand held, limited access, pneumatic drilling and fastener installation tools for the Aerospace and Aircraft industries. Jiffy Air Tool was founded in the 1940's to support a growing post war commercial aircraft industry in Southern California, later relocating in 1977 to our current facility in Carson City, NV.

Jiffy Air Tool offers an extensive line of specialty hand-held pneumatic tools for airframe assembly, maintenance, repair and overhaul facilities around the globe. Each tool provides hours of trouble-free operation to make the operator's job considerably easier. Designed and built to reach into difficult areas for all your "drill and fill" applications.

The Jiffy product line is designed, engineered, machined and assembled in Carson City, Nevada, USA. Offering top-notch quality products that are built-to-last and priced competitively make Jiffy tools hard to beat. Team Jiffy is famous for their personal touch and speedy response time. This winning combination keeps our customers satisfied and coming back.

# Manufacturing & Testing Equipment







Aerospace demands for ultra-high performance materials led to the development of the C-type 18% nickel maraging tool steels. The strongest of this type of material is C-350 with a nominal ultimate tensile strength of 350 ksi or 350,000 pounds per square inch.

This material has higher strength and better wear properties than any material we have tested. All gears in Jiffy Air Tool attachments are made from this superior material.





You will find the same devotion to quality in all of our parts; housings made from A2, cover plates made from 1095 spring steel, and drive shafts made from chrome-moly tool steel. The limited space available for airframe assembly demands strong, small tools and we pride ourselves in providing the tools that meet and exceed those demands.

















Jiffy doesn't just make promises to its customers, we strive to always meet specifications and exceed expectations. That is why every tool is meticulously hand assembled and tested to our rigorous standards.



# Modular Tool Platforms - Drilling



Jiffy Air Tool pioneered the "Modular Tool" platform for drill motors and attachments (JMD). Utilizing this platform, Jiffy motors accept a wide variety of drill attachments to meet customers' limited access requirements.

- Forward running, reverse running and reversible
- Straight Style and Safety Trigger Option Available
- Pistol Grip Style
- 250 20,000 RPM
- 0.3 1.5 HP
   Available Thread Sizes: 1/4-28, 10-32, 9/32-40, 5/16-24, 3/8-24 and 7mm Collet



### Modular Tool Platforms - Fastener Installation



Jiffy also offers a platform of modular installation tools (JMI). Utilizing this platform, Jiffy installation motors accept a wide variety of install attachments to meet customers' limited access requirements.

Modular attachments are available in 17° Indexable or Fixed, 20° Indexable or Fixed, "L" Type Attachments, and Straight Install Attachments. We offer various series of the above mentioned attachments - the series correlates to the torque capacity of the fastener.

To further the versatility of the attachments we offer three drive styles: A socket and key system, a flush gear with a key and a hex through with no key control to allow access to confined space installations.

In addition to the modular installation tools we also offer Ratchet Install Tools in Straight, 17° and 20° head styles.

# Modular .45 HP Drills (JMD) & Install Tools (JMI)

# JMD Pistol Motors

### **JMD Straight Motors**









### SPECIFICATIONS

Jiffy Model No.	Motor (HP)	Speed (RPM)	Length (IN)	Length (MM)	Weight (LBS)	Weight (KG)	Noise (dBA)	Air Cons. (CFM)	Vibration (m/sec²)		
				JMD PIST	OL MOTOR	S					
23722	0.45	500	5.08	129.0	1.38	0.63	77	22	1.98		
23723	0.45	1,000	5.08	129.0	1.38	0.63	77	22	1.98		
23724	0.45	2,400	4.57	116.1	1.27	0.58	77	22	1.98		
23725	0.45	3,300	4.57	116.1	1.27	0.58	77	22	1.98		
23726	0.45	4,500	4.57	116.1	1.27	0.58	77	22	1.98		
23727	0.45	6,000	4.57	116.1	1.27	0.58	77	22	1.98		
			J	MD STRAI	GHT MOTO	RS					
24314	0.45	500	7.0	177.8	1.4	0.64	77	22	1.98		
24315	0.45	1,000	7.0	177.8	1.4	0.64	77	22	1.98		
24316	0.45	2,400	6.1	154.9	1.25	0.57	77	22	1.98		
24317	0.45	3,300	6.1	154.9	1.25	0.57	77	22	1.98		
24318	0.45	4,500	6.1	154.9	1.25	0.57	77	22	1.98		
24319	0.45	6,000	6.1	154.9	1.25	0.57	77	22	1.98		
				JMI PISTO	DL MOTOR	S					
23731	0.45	250	5.08	129.0	1.38	0.63	77	22	1.98		
23732	0.45	500	5.08	129.0	1.38	0.63	77	22	1.98		
			J	MI STRAIC	GHT MOTO	RS					
24323	0.45	250	6.1	154.9	1.38	0.63	77	22	1.98		
24324	0.45	500	6.1	154.9	1.38	0.63	77	22	1.98		

- Features powerful .45 HP lubrication free motor
- 6 Speed ranges to cover all material requirements
- Titanium gear case reduces weight and adds durability
- Patented through-handle exhaust improves work environment
- Fully ported throttle valve for unmatched speed control
- Complete housing over-mold insulates handle while reducing grip force
- Can accommodate most drilling attachments



# Reversible Offset & Straight Motors (JMD & JMI)



### SPECIFICATIONS

Jiffy Model No.	Motor (HP)	Speed (RPM)	Length (IN)	Length (MM)	Weight (LBS)	Weight (KG)	Noise (dBA)	Air Cons. (CFM)	Vibration (m/sec²)				
	JMD REVERSIBLE OFFSET MOTORS												
27161	0.45	300	5.35	136	2.25	1.02	89	24	1.46				
27162	0.45	750	5.35	136	2.26	1.02	89	24	1.46				
27163	0.45	1,500	4.96	125.9	2.09	.95	89	24	1.46				
27164	0.45	2,800	4.96	125.9	2.10	.95	89	24	1.46				
	JMI REVERSIBLE OFFSET MOTORS												
27165	0.45	300	5.35	136	2.26	1.02	89	24	1.46				

Rec Air Pressure: 90 PSI - 6.2 Bar 1/4-in. NPT Air Inlet Rec. Hose Size 3/8-in. I.D.



JMD Reversible Straight Motors



JMD Reversible Straight Motor with attachment

### SPECIFICATIONS

Jiffy Model No.	Motor (HP)	Speed (RPM)	Length (IN)	Length (MM)	Weight (LBS)	Weight (KG)	Noise (dBA)	Air Cons. (CFM)	Vibration (m/sec <sup>2</sup> )				
	JMD REVERSIBLE STRAIGHT MOTORS												
27722	0.7	500	8.38	212.8	2.17	.98	86.5	3.8	2.2				
27723	0.7	1,000	8.38	212.8	2.17	.98	86.5	3.8	2.2				
27724	0.7	2,400	7.95	201.9	2.02	.91	86.5	3.8	2.2				
27725	0.7	3,300	7.95	201.9	2.02	.91	86.5	3.8	2.2				
	JMI REVERSIBLE STRAIGHT MOTORS												
27726	0.7	250	8.38	212.8	2.17	.98	86.5	3.8	2.2				
27727	0.7	500	8.38	212.8	2.17	.98	86.5	3.8	2.2				

Rec Air Pressure: 90 PSI - 6.35 Bar 1/4-in. NPT Air Inlet Rec. Hose Size 3/8-in. I.D.

Jiffy Reversible Offset Motors & Reversible Straight Motors are supplied without attachment. If an attachment is required, please specify when ordering.

- Powerful lubrication free motor
- 4 Speed ranges to cover most material requirements
- Reversible for back drilling applications
- Patented through-handle exhaust improves work environment
- Complete housing over-mold insulates hand while reducing grip force
- Fully ported throttle valve for unmatched speed control (Reversible Offset Motors)
- Rear exhaust (Reversible Straight Motors)

### Palm Drill



### SPECIFICATIONS

Jiffy Model No.	Motor (HP)	Speed (RPM)	Length (IN)	Length (MM)	Weight (LBS)	Weight (KG)	Noise (dBA)	Air Cons. (CFM)
23210	0.45	500	5.7	144.8	1.5	.68	77	22
23211	0.45	1,000	5.7	144.8	1.5	.68	77	22
23212	0.45	2,400	5.4	137.2	1.4	.64	77	22
23213	0.45	3,300	5.4	137.2	1.4	.64	77	22
23214	0.45	4,500	5.4	137.2	1.4	.64	77	22
23215	0.45	6,000	5.4	137.2	1.4	.64	77	22

Rec Air Pressure: 90 PSI - 6.2 Bar 1/4-in. NPT Air Inlet Rec. Hose Size 3/8-in. I.D.

Jiffy Palm Drills are supplied without chuck. If a drill chuck is required, please specify when ordering.

- Powerful .45 HP lubrication free motor
- 6 Speed ranges to cover all material requirements
- Titanium gear case reduces weight and adds durability
- Patented through-handle exhaust improves work environment
- Fully ported throttle valve for unmatched speed control
- Complete housing over-mold insulates hand while reducing grip force



## Nutplate Drill



The Jiffy nutplate drill is a pneudraulic hand tool specially made for precise drilling and countersinking 2 holes simultaneously for the eventual attachment of nutplate fasteners.

The tool uses a pneumatic piston, hydraulic feed control, and an expandable collet to clamp & feed the twin drill spindles through a workpiece at a controlled & adjustable speed.





For more info, scan the QR code for additional details and technical flyers.

- The tool can be configured at 6,000 or 600 RPM in a wide range of configurations to suit the tool to a variety of nutplate fasteners.
- Front spindle support is adjustable to allow for easy reconfiguration.
- Modular feet allow for easy maintenance or reconfiguration.
- Rear spindle support, 3 variants with different spacing to minimize flex shaft deflection and extend the service life of bushings.
- Replaceable front spindle, easily removed and replaced due to unrecoverable broken drill bits.
- Front spindle support adjustable for spacing.

## Schatz Testing & Certification





Concurrent with our torque control product expansion, Jiffy Air Tool has partnered with Kistler Instrument's Schatz, certTest stationary bench to test and certify our products to Boeing Spec. BSS7083 Rev D standards. Each Torque tool is supplied with a test certificate shown

1.815

0.64

3.841

28.096

31.938

6.000 in.lbs

in.lbs

in,lbs

in.lbs

0.900 in.lbs

5,400

27.317

32,717

1.667

**PASS** 

PASS

PASS

PASS

PASS

Jiffy MR TOOL Y	ΓEST	CERT	ΓIFI	CATE		Firs Sample	* MCT		HATZ		
Model Serial No.	_	3571-22 9K00007		-30.0 Motor - Attachment - Torque Motor Serial Number							
Date/Time		1/17/:	2022 4	:21:11 PM							
Tester ID Order Details: S/O -	P/N	542 S/0: 20	000048	98 P/N: 23571-22270U	-12465						
Device: cerTEST S	tationary	2.5	Model	5413-5392/65432-E	0	Serial #	: 5921833	Article #	: 18035912		
Input Paramete	rs			Results							
Test Point Joint Hardness	67% Soft	Transducer N 88,51 in		Evaluation	:	PASS	3				
Tested Parameter	Т	arget Units		Tested Parameter	Resu	lt Targe	et Value Units		Result		
Dimension		Torque in	lhs	Average		30 017	+5% 30 000	in lhs	PASS		

Test Volume	10	╝	Positional Index		2.334 >		> 1.333		PASS
Average Torque Must Be	± 5.0% of Target		Average :	: 3	0.017 in.lbs		Deviation	1:	0.056 %
Range of Values Must Be	± 5.0% of Average		Rmin from Avg.	: -	-3.195 %		Rmax from Avg.	:	2.852 %
All Values Must Be ± 10.0	% of Target		Rmin from Target	: -	3.140 %	R	max from Target	:	2,910 %

Range

Siama

All Statistical Calculations, Including Capability Index and Positional Index, use a Range of ± 15% per BSS7083 Rev: D Section 5.4.1 (4)

Six Sigma

Average - 3o

Average + 3o

Capability Index

30.000 in lbs

27.000 in.lbs

33.000 in.lbs

300 Hz

3.000 in.lbs

15.000 in.lbs

Aviation is at the forefront of high-tech and innovation. Every aircraft, helicopter, or aerial vehicle is a highly complex machine that requires precision testing and documented certification to ensure optimal performance across every situation and scenario.

For over 60 years, Kistler has been dedicated to providing the most rigorous and accurate testing equipment across the entire Aircraft industry.

Schatz Advanced Quality is a registered trademark of Kistler Instrument Corp.



# **Torque Control Tools-Straight**



### SPECIFICATIONS

MODEL NO.	FREE SPEED (RPM)	TORQUE RANGE (IN-LBS)	TORQUE Range (N.m)	LENGTH (IN)	LENGTH (MM)	WEIGHT (LB)	WEIGHT (KG)	AIR INLET (IN) NPT
23541	150	15-45	1.7-5.1	13	330.2	2.5	1.1	1/4
23542	150	35-80	4 - 9	13	330.2	2.5	1.1	1/4
23550	150	70-110	7.9 - 12.4	14.5	368.3	3.8	1.7	1/4
23553	150	100-180	11.3 - 20.3	14.5	368.3	3.8	1.7	1/4
23556	160	165-300	18.6 - 33.7	16	406.4	4.5	2.0	1/4

### Jiffy® Torque Control Straight Hi-Lok® Motors

- Jiffy® has expanded our line of precision torque control shut-off tools. Models available include straight and offset designs.
- These units are designed for fasteners requiring a precise yet repeatable torque with minimal torque reaction.
- Models are tested to Six Sigma torque standards.

# **Torque Control Offset Air Motors**



# Torque Control Offset Screwdrivers



MODEL NO.	DRIVE SIZE	FREE SPEED (RPM)	TORQUE RANGE (IN-LBS)	TORQUE RANGE (N.m)	WEIGHT (LB)	WEIGHT (KG)	AIR INLET (IN) NPT	NOISE LEVEL dB(A)					
23571	1/4" Hex	150	15-45	1.7 - 5.1	2.53	1.15	1/4	75					
23572	1/4" Hex	150	35-80	4 - 9	2.64	1.20	1/4	75					
23573	1/4" Hex	150	70-110	7.9 - 12.4	2.64	1.20	1/4	85					
23574	1/4" Hex	150	100-180	11.3 - 20.3	3 - 20.3 3.10		1/4	85					
23575	1/4" Hex	160	165-300	18.6 - 33.7	3.50	1.45	1/4	85					
	TORQUE CONTROL OFFSET SCREWDRIVERS												
23578	1/4" Hex Q.C.	250	15-45	1.7 - 5.1	2.53	1.15	1/4	75					
23579	1/4" Hex Q.C.	250	35-80	4 - 9	2.64	1.20	1/4	75					



# **Torque Control Power Tool System**

# The Torque Controlled Power Tool System for Installation and Removal of Temporary Fasteners (Cylindrical)



23578-10 Torque Control Offset Screwdriver



The 27517 socket can be used to manually install and uninstall cylindrical temporary fasteners.

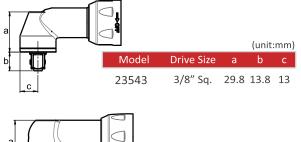
The torque control tool increases the accuracy of the fastening torque and helps prevent over—torque, reducing costly damage and re—work.

# **Aviation Grade Angle Nutrunners**

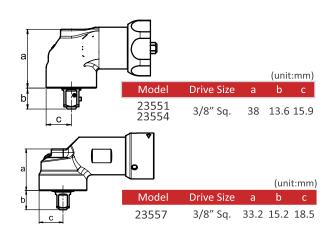




23544 also available with key control







### SPECIFICATIONS

Jiffy	Drive Size	Screw Size	Torque Range		Free Speed	Wei	ght	Tool Diameter		Tool Length		Air Inlet inch	Noise Level
Model	inch	mm	in-lb	N.m	rpm	lb	kg	inch	mm	inch	mm	NPT	dB(A)
23543*	3/8" Sq.	M5	18 - 53	2 - 6	300	2.57	1.17	1.53	39	12.5	318	1/4"	75
23544*	3/8" Sq.	M5 - M6	20 - 115	2.2 - 13	160	3.03	1.38	1.53	39	13.8	351	1/4"	75
23551	3/8" Sq.	M6	80 - 140	9 - 16	220	3.96	1.8	1.77	45	14.5	369	1/4"	80
23554	3/8" Sq.	M8	125 - 220	14 - 25	150	3.96	1.8	1.77	45	14.5	369	1/4"	80
23557	3/8" Sq.	M10	215 - 400	24 - 45	110	4.62	2.1	1.77	45	16.1	411	1/4"	80

<sup>\*</sup> Available with 1/4" Sq. Drive

Max. Air Pressure: 90 PSI (6.3kg/cm<sup>2</sup>) / 0.63Mpa

Air Hose Size: 3/8"

### **Jiffy Angle Nutrunners**

- We have expanded our product line to include precision angle nutrunners with torque ranges from 18-400 in-lbs. These units are tested to Six Sigma torque standards.
- Adjustable shut-off clutch provides precise torque repeatability.
- Tools feature a soft grip over mold that provides comfort while reducing grip force. All models have contoured lever throttles and rear exhaust.



# JMD Indexing Adapter



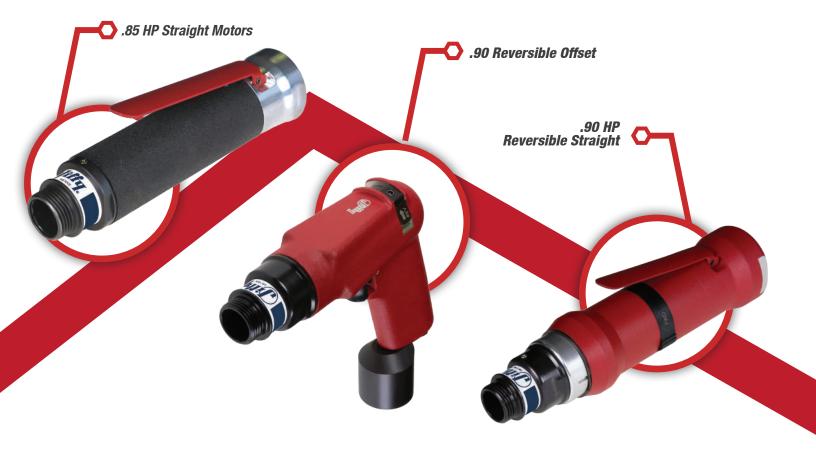
### **27875 JMD Indexing Adapter**

- 12x Available Indexing Positions 30° each
- Permits easy indexing of attachments
- Available for JMD or JMI tools
- Once installed between the motor and attachment, allows quick change indexing of the "L" Tool attachment by depressing the exterior ring on the adapter and rotating the accessory to the desired position



### **Lube-Free Models**

Jiffy has revolutionized our lubrication—free product offering with the development of a proprietary process that greatly reduces friction of the motor parts. With the reduction of friction, benefits include a reduction of heat and reduced component wear. This process also increases the oxidation resistance of the metal. In addition to our friction reduction process, we are utilizing ceramic bearings and composite blade material, which completely eliminates the need for lubrication.



With these Jiffy Tools, it is now possible to obtain the same performance as a lubricated tool but without the possibility of oil mist in the work area and possible surface contamination from oil.

The gear train will continue to require grease lubrication. Please review our Lubrication- Free catalog and discuss options available with your Jiffy Sales Representative.



**Download Catalog** 





### **New Cordless Tools**



Jiffy has developed 20V cordless tools for installing and removing frangible collar fasteners, including Eddie Bolt® style fasteners. These units are brushless and spark—free, all based on the Modular Jiffy Mounting system, allowing ultimate flexibility in matching the accessories to the application.

The 27830 model delivers 225 in—lbs of maximum torque and the 27860/27861 models deliver 600 in—lbs of maximum torque. Testing shows that with a fully charged battery, this tool is capable of tightening 2100 bolts (cycles).

We define a cycle as fastening and removing six fasteners to max torque, which counts as one cycle. The tool is then left idle for one minute before repeating the process until the battery is consumed. These tools accept all Jiffy JMI attachments (check applicable torque range).

- 27860 1/4" Hex Drive Female
  Accepts JMI attachment for Hi-Lok®
  and Hi-Lite™ fasteners, up to Series 3
  attachment 350 in-lbs
- 27861 3/8" Hex Drive Female Accepts JMI attachment for Hi-Lok® and Hi-Lite™ fasteners, up to Series 4 attachment 525 in-lbs



Cordless Hi-Lok/Lite, Eddie Bolt®
Installation & Removal Tool
Up to 225 in-lbs Maximum Torque



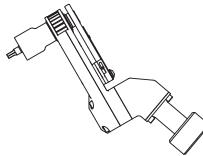
# Series 5 - High Torque Frangible Collar Installation Tool

This tool was designed to meet the increasing break-off torque requirements for aircraft, helicopters, and spacecraft.

### 25560 Motor

- 2.0 Horsepower
- 150 RPM
- 1200 in-lb Maximum Torque
- Mates to Jiffy Air Tool Series 5 Attachments
- Weight 13.0 lbs.





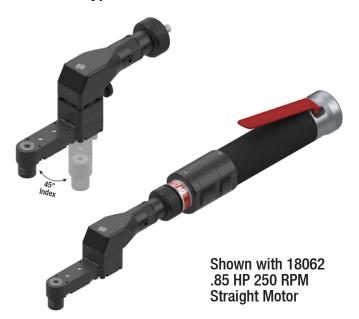
- 20° Fixed or Indexable Available
- 5 Gear R.640 Nose Radius
- Socket, hex flush, hex-thru styles available



# **Jo-Bolt Fastening Tools**



25920 Indexable Pancake Installation Attachment For Use with -5, -6, & -8 Drive-Nut Type Jo-Bolt Fasteners



28080
Indexable 17° Installation Attachment
For Use with -10 & -12 Drive-Nut
Type Jo-Bolt Fasteners



\*Available as a kit, including motor and two attachments

### Lockbolt Nose Assemblies



Jiffy is expanding our lockbolt nose assemblies for -4 to -12 diameter NAS aluminum collars. Lockbolt nose assemblies are available in various lengths, including chisel-style for greater fastener access and self-releasing style for pull-in lockbolts.

Our -4 to -6 diameter noses can be mounted on current Cherry G83/G83A/G84, Huck 244/244X, and Gage Bilt GB731 installation tools (with the 29324 retaining nut).

Our -8 to -12 diameter noses fit Cherry G85D/G85D-S, Huck 245/254/255/256, and Gage Bilt GB745/GB756 installation tools.



For quick removal of NAS aluminum lockbolt collars for maintenance or rework, collar splitters are available for the -5 to -12 diameters, featuring A2 blades and a hardened chrome inner body for durability.

- −5 to −8 splitters work with Cherry G83A/G84, Huck 244/244X/2025, and Gage Bilt GB713/GB714/GB731 tools.
- -10 and -12 splitters fit Cherry G85/G85D-S, Huck 245/254/255/756, and Gage Bilt GB745/GB756 tools.

# **Compression Riveter**



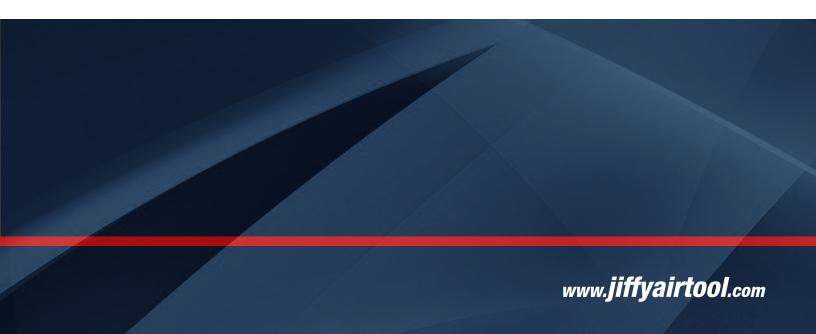
Introducing the JCR Series of Alligator & C-Yoke Type Compression Riveters

Designed by a former aircraft manufacturing engineer, these rugged and reliable pneumatic rivet squeezers are the most powerful and lightweight in the industry.

With our modular and ergonomic design and extreme—service specialty bearings, these compression riveters are available in a variety of standard jaw reaches and C—yoke styles. Special C—1yokes and alligator jaw designs available on request.



Contact us for an on-site demonstration today!



### **Customized Removal Kits**









Jiffy® is now introducing Hi-Lok® Removal Kits for use in removing Hi-Lok®, Hi-Lite®, Eddie Bolt® and Huck threaded collars.

Kits are available using the Jiffy® 17° Indexable Attachment and Straight Motor Model KT379 or the L-Type Attachment and Offset motor Model KT378-1. The innovative sockets feature a conical / tapered shape with helical teeth to grip and remove the collar without jamming the collar into the socket. This kit is suitable for use on aluminum, steel, titanium and all coated collars. The Jiffy® Hi-Lok® Removal Kits will allow operators to remove collars significantly faster, while reducing damage and maintaining pin integrity.



# **Customized Drill & Installation Kits**

KT-276





KT-132A

Combine motors with different drill and installation attachments to customize a kit for your application.

- Lower total cost, greater flexibility
- Wide variety of attachments to fit different applications
- High-impact durable case to fit and organize motors and attachments
- Metal name plates documenting all kit contents
- Flash drive with kit information and parts breakdown

# **Protective Covers**

# Protective Covers Available for All Attachments

Jiffy has an extensive array of protective covers available for many products in our tool line. Download our protective cover catalog or contact us for additional information.





# Full-line Catalogs Available

### **Torque Control**



### **Eddie Bolt**



### **Lubrication Free**



### **Modular Drill**



### **Installation Tools**



### **Protective Covers**





# Jiffy Air Tool Customers























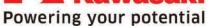






































Jiffy Air Tool's reward for Excellence.



### **HEADQUARTERS**

**EUROPE** 



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