# **PROPELLER ACCESSORIES**



#### **SPLIT TAPERED BUSHINGS FOR DESIRED BORE SIZE**

- For 1/2" through 17/16" bore range
- Steel construction





#### H-STYLE

(FOR 24"-48" PROPELLERS)

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Part No.	Bore			
60331504	1/2"			
60331505	5/8"			
60331506	3/4"			
60331507	7/8"			
60331508	1"			
60331501	<b>1</b> ½"			
60331502	<b>1</b> <sup>3</sup> / <sub>16</sub> "			
60331509	<b>1</b> ½"			
60331503	13/8"			





P-STYLE (FOR 54"-60" PROPELLERS)

Part No.	Bore
72513808	1"
72513809	<b>1</b> ½"
72513810	11/4"
72513811	13/8"
72513812	<b>1</b> 3/ <sub>16</sub> "
72513813	15/8"
72513815	<b>1</b> <sup>7</sup> / <sub>16</sub> "

Split Tapered Bushings must be ordered separately

#### 

Standard Keyway Sizes

Diameter Keyseat Width

of Shaft X Depth

3/<sub>32</sub> X 3/<sub>64</sub> 1/<sub>8</sub> X 1/<sub>16</sub>

<sup>5</sup>/<sub>16</sub> - <sup>7</sup>/<sub>16</sub>

# INTERCHANGEABLE HUBS FOR 3, 4 & 5-BLADE PROPELLERS

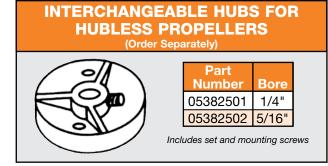
(Order Separately)



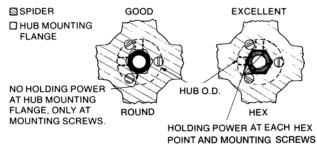
Includes set and mounting screws

Part Number	Bore	Set Screw
60765801	1/4"	1
60765802	5/16"	1
60765803	3/8"	1
60765804	1/2"	2
60765805	5/8"	2
60765806	3/4"	2

- All steel with extra metal for durability in the two mounting surfaces (hex & round)
- One inventory for all propellers hex on one side, round on the other (use either)
- 5/8" and 3/4" models have keyway with extended body length for increased strength
- Double locking device grips threads without backing out
- Order in boxes of 12 or individually



Lau HEX design transfers the torque from the screws to the hub and spider.



Specifications are subject to change without notice or obligation



# PROPELLER ACCESSORIES

**Service Tools** 

# For Contractors, Service Technicians and Maintenance Professionals

#### **HUB PULLERS**

#### **HEAVY DUTY APPLICATIONS**

Part No. 05214101

- Zinc plated, heavy steel construction.
- Sight holes for visual alignment of puller and motor shaft.
- Four square head cup point grab bolts.
- 5/8" bolt will not bend with proper use.
- Bar top ... grip with wrench.
- 1/4" steel collar.
- 1" long threaded surface.
- Torque Limit: 75 ft. lbs.



#### **GENERAL DUTY APPLICATIONS**

Part No. 05380401

- Precision machined.
- 5/8" steel bolt machined and tapered on
- 11/4" threading into body resists stripping.
- Standard 7/8" wrench fitting.
  Four grab bolts for maximum holding power.
- Torque Limit: 75 ft. lbs.

#### Fan blades can be removed in two different ways. If the fan blade has a protruding hub, use the option shown below.



Place the narrow end of the plastic centering sleeve over the end of the motor shaft.



Place the head or face of the puller against the front of the fan blade hub, and insert the puller shaft into the wide end of the centering sleeve. This is critical. It will align the puller with the motor shaft. Otherwise, the puller will just pull against itself.



Get the four fingers. Take each finger and place one hooked end of the finger around the backside of the fan blade hub. Hook the other end of the finger into one of the four finger holes on the puller body. (Finger holes are the 1/2" holes located 1/3 of the way up the puller body.) In effect, the fingers reach around and grab the back of the fan blade hub from the puller.



Now use a wrench to turn the puller shaft. (To prevent the puller from twisting, it is suggested you grasp the bar across the top of the puller with a second wrench.) The motor shaft will then be pushed through and away from the fan blade and the fan blade will be pulled off the shaft.

#### Optional Method (this method is also used for Blower Wheels).



Place the narrow end of the plastic centering sleeve over the end of the blower motor shaft.



Place the head of the puller over the blower wheel hub, and insert the puller shaft into the wide end of the centering sleeve. This is critical. It will align the puller with the blower motor shaft. Otherwise, the puller will just pull against itself.



Firmly tighten the four grasping bolts so they grab onto the blower wheel hub.



Now use a wrench to turn the puller shaft. (To prevent the puller from twisting, it is suggested you grasp the bar across the top of the puller with a second wrench.) The motor shaft will then be pushed through and away from the fan blade and the fan blade will be pulled off the shaft.

#### REPLACEMENT PARTS FOR HUB PULLERS

Hub Puller 05380401 General Duty 05214101 **Heavy Duty** 

Replacement Fingers (4/set 05249901 05221101

05249701 05221201

Centering Sleeve 05249801 05221301

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# **PROPELLER ACCESSORIES**

**Service Tools** 



### **RAINSHIELDS**

# An inexpensive way to protect your motor



31/2"



Position Rainshield between propeller and motor. Use 3<sup>1</sup>/<sub>2</sub>" diameter for closed motors.



7"



Interior cooling blades force air over motor. Use 7" diameter for open type motors.

- Prevents rain from getting into the motor bearings on vertical shaft motor applications
- Used as original equipment on most new air conditioners
- Press-on fit for 1/2" to 5/8" shafts
- 7" <u>with interior cooling blades</u> reduces motor winding temperature to protect open motors
- 3½" for closed motors protects bearings

Part Number	Single Size
60385303	3½"x ½"
60379501	7" x ½"
60379502	7" x ½"

## **PITCH GAUGE**

# Measures the correct pitch & rotation direction



# FOLLOW THESE 3 STEPS TO MEASURE PROPELLER ROTATION AND PITCH:

#### STEP 1

Position the faceplate of the gauge on the blade of the fan.

#### STEP 2

Place the foot of the wire body of the Pitch Gauge on the spider (center section) of the fan.

#### STEP 3

The pointer gives a direct reading of the pitch in degrees, and the clockwise/counter-clockwise markings indicate the rotation.



Part Number 05099801

## **ALLEN HEAD SCREWS**



**Designed for Universal Hubs** 

Part Number	Recommended Seating Desc.	Torque	Quantity Pack
05055001	1/4-28 x 1/2"	70 in-lbs.	12
05055002	5/16-24 x 5/8"	130 in-lbs.	12