

### D A M™ Window Cleaner - A New Product from McFarlane

Fast and easy aircraft window cleaner!

**This stuff is so D A M good we had to share it!**

Aircraft size 1.5 oz. P/N DAM17-1.5

Hangar size 16 oz. P/N DAM17-16

A fast, streak free liquid spray designed for acrylic and other surfaces.

The carnauba wax and polymer formula fills minor scratches and leaves a slick clean surface that makes cleaning bugs easier next time.

Freezing and thawing of the D A M window cleaner doesn't affect the performance of the product. Thaw and shake to use.

- Liquid spray - No smeary paste
- No ammonia and only a harmless trace of alcohol
- Anti-static - Repeals dust
- Safe on all surfaces
- Amazing *Melt Away* cleaning power
- Economical - a little goes a long way
- Hazes off for a streak free polish finish
- Improves visibility in the rain

### Cotton Windshield Towels

Stop scratching your window with paper towels!

- New t-shirt material with no seams or print, and no abrasive wood fibers (paper towels)
- Won't scratch
- Reusable for many cleanings
- Cheap enough to throw away
- Random sizes - 12 to 24 inches per side



Part Number	Description	Size	Qty.
DAM17-1.5	Aircraft size	1.5 oz.	1
DAM17-1.5C	Aircraft size	Case	14
DAM17-16	Hangar size	16 oz.	1
DAM17-16C	Hangar size	Case	12
Complete Window Cleaning Kit			
DAM17-KIT	Aircraft size	1.5 oz.	1
	Hangar size	16 oz.	1
	Towel, knit, grey	Varies	5
Towels			
1533-5	Towel, knit, grey	Varies	5
1533-20	Towel, knit, grey	Varies	20

#### Directions:

Shake well. Spray on windows and rub bugs, dirt, and smears with your hand or with a small towel saturated with D A M until contaminants are loose and melted. Keep the surface wet with D A M as you clean. Wipe the window clean but not necessarily completely dry with a soft cotton or micro-fiber towel. The remaining D A M will quickly haze-off. Finish by polishing with a clean dry cotton towel (T-shirt material is recommended). Do not use paper towels as they have wood fiber that can scratch.



FAA-PMA Approved

**Central Texas Aircraft Parts  
Manufacturing FAA-PMA Aircraft  
and Engine Components for TPE 331 Engines**

The parts you need at the prices you want!  
For specific eligibility on products see [www.mcfarlaneaviation.com](http://www.mcfarlaneaviation.com)

**Thrust Reverser Inspection Kits**

Items contained in the HP201TR kits are standard parts used in a 1400HR TR inspection.

The HP200TR kit consists of two HP201TR kits to service both engines. In addition to the PMA'd parts all hardware required is included and there will normally be a few extra parts left over.

Most of these parts are also used on Dassault Falcon 20's that have the Aeronca STC installed and on all Sabreliner model 80 aircraft. The main difference in the 1400 HR kits for these aircraft (P/N HP100TR) is that the Falcons and Sabreliners use the 232-20260-1HP bearing instead of the 45-12216-1HP bearing.

In addition to the standard parts replaced during the 1400 HR inspection P/N 3233190-2HP Vespel bearing (eight per A/C) may or may not be needed.

FAA-PMA approved and industry standard components.



**TR Inspection Kits**

P/N	Description	Qty
AN960C10L	Washer	12 24
AN960-416	Washer	2 4
D6-1	Washer	60 120
D6-4	Washer	4 8
MS21043-3	Nut	14 28
MS21043-4	Nut	4 8
MS24665-151	Cotter Pin	6 12
MS24665-153	Cotter Pin	5 10
MS24665-302	Cotter Pin	2 4
M9364-10	Nut	4 8
M9464-09	Pin	4 8
NAS1291C4M	Nut	10 20
NAS1351C3-8	Screw	10 20
NAS620C416L	Washer	4 8
NAS620-416L	Washer	16 32
232-20268-503HP	Shoulder Bolt	4 8
232-20426-1HP	Bushing	4 8
3515-28-04	Washer	4 8
45-12216-1HP	Bearing	4 8

1 Contains enough components for one engine  
2 Contains enough components for two engines

**FAA-PMA Cable Assemblies for Learjet**

Aircraft Model	Part Number
24, 24A,B,B-A,C,D,D-A,E,F,F-A, 25, 25A,B,C,D,F, 31, 31A, 35, 35A, 36, 36A	HP2411660-13
	HP2411660-15
	HP2411660-34
24, 24A,B,B-A,C,D,D-A,E,F,F-A, 25, 25A,B,C,D,F, 35, 35A, 36, 36	HP2411660-18
55, 55B, 55C, 60	5415530-5HP
55	5415542-16HP
	5415542-23HP
55, 55B, 55C	5415542-26HP
	6015550-002HP
60	6015550-003HP



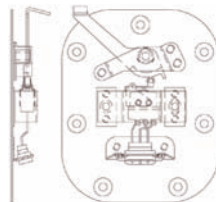
P/N 6015550-003HP



**DPI - (Door Position Indicator) Switches and Kits for Learjet  
FAA-PMA and industry standard components**

P/N	Description	Qty
45-0008-KIT	DPI Switch and Acuator Kit	1
45-12368-KIT	DPI Pivot Arm Kit	1
45-12370-1HP	Mounting Plate Assy.	1
MS24694-C3	Screw	2
MS35333-72	Washer	2
MS21043-08	Nut	2

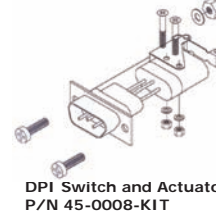
Contains enough components for one engine



DPI Switch and Plate Kit  
P/N 45-12370-10TR

P/N	Description	Qty
MS21043-08	Nut	2
MS35333-72	Washer	2
MS35206-213	Screw	2
NAS662C2R9	Screw	2
MS21042-02-08	Nut	2
NAS620-4	Washer	2
45-12449-3HP	Actuator	1
45-0008-7HP	Plug/Switch Assy	1

Contains enough components for one engine



DPI Switch and Actuator Kit  
P/N 45-0008-KIT

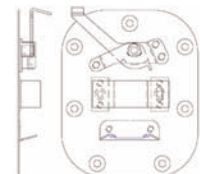
P/N	Description	Qty
45-12368-KIT	DPI Pivot Arm Kit	1
45-12370-1HP	Mounting Plate Assy.	1
MS24694-C3	Screw	2
MS35333-72	Washer	2
MS21043-08	Nut	2

Contains enough components for one engine

P/N	Description	Qty
45-12356-1HP	Spring	1
45-12370-109	Pin	1
45-12368-9HP	Pivot Arm	1
MS24665-132	Cotter Pin	1

Contains enough components for one engine

P/N	Description
45-12368-9HP	Pivot Arm
45-12256-3HP	Bumper Plate
45-0008-07HP	Plug and Switch Assy
45-12449-3HP	Actuator Assy
45-12356-1HP	Spring
45-12370-1HP	Switch Plate Assy



Swith Plate Kit  
P/N 45-12370-1HP



DPI Pivot Arm Kit  
P/N 45-12368-TR

**TPE331 Bushings, Bearings and Components FAA-PMA approved**

Part Number	Description
3101373-1HP	Lock Plate
3101703-10HP	Bushing
3101703-11HP	Bushing
3101703-12HP	Bushing
3101703-13HP	Bushing
3101703-14HP	Bushing
3101703-15HP	Bushing
3101703-16HP	Bushing
3101703-17HP	Bushing
3101703-18HP	Bushing
3101703-19HP	Bushing

Part Number	Description
3101703-1HP	Bushing
3101703-20HP	Bushing
3101703-24HP	Bushing
3101703-25HP	Bushing
3101703-26HP	Bushing
3101703-27HP	Bushing
3101703-28HP	Bushing
3101703-29HP	Bushing
3101703-2HP	Bushing
3101703-3HP	Bushing
3101703-4HP	Bushing

Part Number	Description
3101703-5HP	Bushing
3101703-6HP	Bushing
3101703-7HP	Bushing
3101703-8HP	Bushing
3101703-9HP	Bushing
3101759-1HP	Bushing
3101759-2HP	Bushing
3101759-3HP	Bushing
3101759-4HP	Bushing
3101759-5HP	Bushing
3101759-6HP	Bushing

Part Number	Description
3101759-7HP	Bushing
865057-7HP	Retainer
865542-5HP	Bearing Sleeve
867595-3HP	Gasket
867681-5HP	Seal Disk
867905-1HP	Valve Seat
868746-6HP	Gasket
869615-1HP	Bearing Sleeve
869615-2HP	Bearing Sleeve
869616-1HP	Bearing Sleeve
869616-2HP	Bearing Sleeve

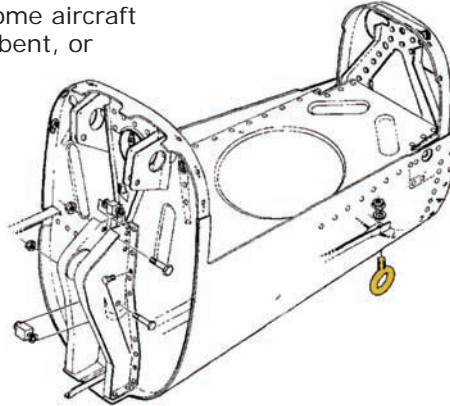
Part Number	Description
893579-1HP	Bushing

**Tail Tie Down Eye Bolts**

**Save money with McFarlane's affordable eye bolts!**

**P/Ns MC0422344, MC0523613-1 and MC0523613-4**

- FAA approved for the tail tie down for most Cessna aircraft. Also approved for wing and fuselage tie down for some aircraft
- Replace your tie down eye bolts if they are rusted, bent, or ground flat from a tail low landing



P/N MC0422344



P/N MC0523613-1



P/N MC0523613-4

Aircraft Model	Serial Number	Location						
		Part Number	MC00422344	MC00422344	MC00422344	MC0523613-1	MC0523613-4	Wing
150, 150A,B,C,D,E,F,G,H,J, F150F,G,H,J	All					1		
150K,L,M, A150K,L,M, F150K,L,M, FA150K,L,M, FRA150L,M	All						1	
152 A152 F152 FA152	15279406 thru 15284541 A1520735 thru A1520943 F15201429 thru F15201828 FA1520337 thru FA1520372					1		
	15284542 and On A1520944 and On F15201829 and On FA1520373 and On						1	
172, 172A,B,C,D,E,F,G,H,I,K,L,M,N,P,Q,R,S, F172D,E,F,G,H,K,L,M,N,P, FR172E,F,G,H,J,K, P172D, R172K	All		1	1				
172RG, R172E,F,G,H	All			1				
175, 175A,B,C	All		1	1				
180, 180A,B,C,D,E,F	All <b>1</b>				1			
182, 182A,B,C,D	All		1	1				
182E,F,G,H,J,K,L,M,N,P,Q,R,S,T	All			1				
F182P,Q, FR182, R182, T182, T182T, TR182	All			1				
188, 188A,B, A188, A188A, A188B, T188C	All							2
188, 188A, A188, A188A	All		5					
190, 195, 195A,B	All							2
210-5 (205), 210-5A (205A)	All			1				
206, 206H, U206, U206A,B,C,D,E,F,G, P206, P206A,B,C,D,E, T206H, TP206A,B,C,D,E, TU206A,B,C,D,E,F,G	All <b>1 2</b>			1				
207, 207A, T207, T207A	All			1				
208, 208B	All			1				
210, 210A,B,C,D,E,F,G,H,J,K,L,M,N,R, P210N,R, T210F,G,H,J,K,L,M,N,R	All			1				
310, 310B,C,D,F,G,H,I,J,J-1,K, E310H,J	All							2
320, 320-1, 320A,B,C	All							2
336, 337, 337A,B, T337B	All							2

**1** Includes Amphibian and floatplane aircraft.  
**2** Amphibian and floatplane aircraft use two each instead of one.

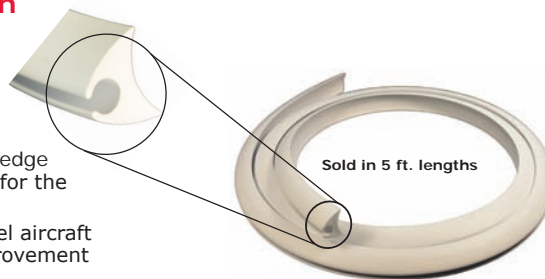
**Cessna Brake Line Fairing Extrusion**

**Reduce Drag!**  
**P/N P580058**

- Paintable
- Easily attaches with super glue
- Replaces P/N S1511-1

White rubber extrusion that attaches to the trailing edge of flat Cessna landing gears and serves as a fairing for the brake line.

This extrusion was original equipment on later model aircraft with flat gears. Many mechanics use this as an improvement for the earlier aircraft.



**Seat Roller Housing Gauge for Cessna Aircraft**

P/N TOOL110

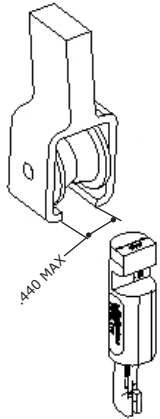
- Hardened Stainless Steel
- Save time! Two times faster than calipers
- Step by step instructions
- Measures all three dimensions

**Checks Cessna seat roller housing limits as per FAA AD 2011-10-09**

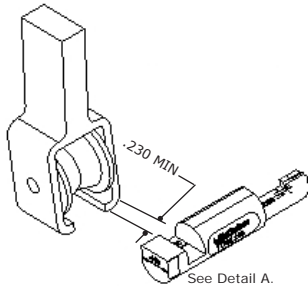
The McFarlane Seat Roller Housing Gauge is designed to facilitate inspection of seat roller housings for wear in Cessna aircraft as required by mandatory FAA AD 2011-10-09. This gauge simplifies determining whether the housing is in or out of tolerance by allowing the areas of concern to be gauged as opposed to measuring each individual attribute on each seat roller housing with calipers.



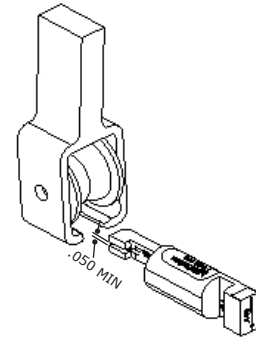
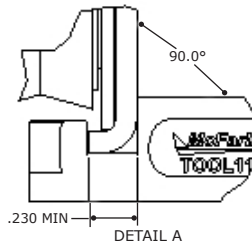
P/N TOOL110



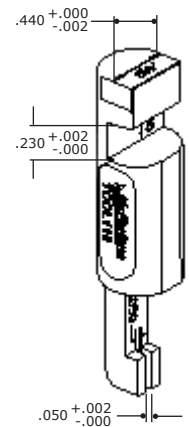
**Step 1.**  
.440 gauge surfaces must not enter space between housing tangs.



**Step 2.**  
The bend area of the tang must not enter the space on the gauge marked .230. See Detail A.



**Step 3.**  
The .050 space on the gauge must not fit on the worn area of the tang.



To calibrate: ensure gauge dimensions are within the tolerances shown.

- .440 + .000/- .002
- .230 + .002/- .000
- .050 + .002/- .000

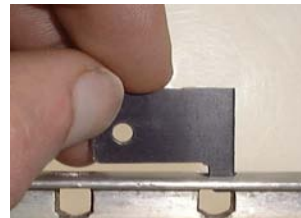
**Seat Rail Wear Gauge for Cessna Aircraft**

Checks seat rail wear limits as per FAA AD 2011-10-09

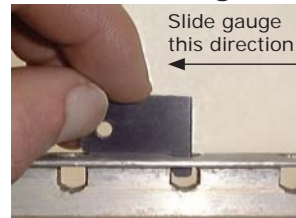
**Seat Rail Directive**

The McFarlane Seat Rail Wear Gauge is designed to check for seat rail pin engagement hole wear on Cessna aircraft, as required by FAA AD 2011-10-09. This gauge is designed to measure the actual radius wear near the seat stop holes and allows for the 0.020 upper surface wear permitted by the AD. This gauge is very precisely machined.

**Fast and Positive - No More Guessing!!**



**1.** Place the gauge into each hole location showing wear.



**2.** Slide gauge back along **top center** of the rail until it contacts the hole edge. Make sure to keep the gauge parallel and square to the unworn rail surface.



**3.** If the step touches the rail, lifting the gauge up, the wear is less than 0.42. If the step **does not** touch the rail, the wear is more than 0.42 and the seat rail must be replaced.



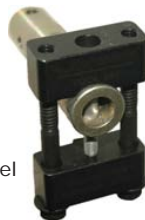
P/N GAUGE SR1

**Note:** Earlier versions of the McFarlane Seat Rail Hole Wear Gauge feature a 0.36 and a 0.42 step. The 0.36 step was included per an earlier version of the Airworthiness Directive and is no longer used.

**U-Joint Taper Pin Removal Tool for Piper Control Yoke**

P/N TOOL107

- Save time and money
- Makes removal of stuck pins easy
- Prevents damage from hammering behind the panel
- Compact to get in tight places
- Heat treated 4140 Alloy Steel



**Small Radius 1/8" Tube Bender**

Ideal for fuel injection, primer, oil pressure, and oxygen lines!  
Tube Bender P/N 364-FH-02

- Easily fabricate 3/8" radius bends up to 180°
- Calibrated to show angle of bend
- For bending 1/8" OD soft copper, aluminum, brass, steel, stainless steel, and other tubing



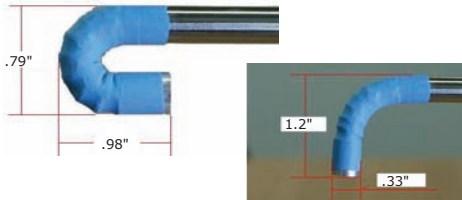
**New!**

**Articulating Borescopes starting at less than \$200**

**Acquire Detailed Visual Inspection with 180° Articulating Probe**

Finally a **low cost**, articulating borescope that really works! Technonlogy has made borescopes a good investment even if you only need it a few times a year.

- Precision optics
- Cost effective
- Look back with 180° articulation
- Connect easily to computer, tablet or phone
- LED illumination
- High quality CMOS sensor
- Durable carrying case



Ideal for detailed visual inspection in hard to reach places. The bendable 0° to 180° continuously adjustable, articulating probe offers a panoramic view of the area being inspected and the wide focal distance makes both close up and general inspection crisp and clear. Six built in LEDs for illumination. Includes a press and release option in addition to a locking and unlocking feature.

AirBox WiFi Converter provides a wireless solution for mobile device users (Apple and Android). AirBox converts the USB feed into a WiFi hot spot enabling functions utilizing the appropriate App to see live images, capture pictures and record videos.

Apple products (i.e. iPhone and iPad) **require** the wireless converter, P/N VA-B2, for viewing and data capture. Android users have the option of connecting directly to the borescope (via USB cable), or by use of the wireless converter.

Each borescope includes an OTG cable adapter, small sleeve changing tool for changing out the silicone sleeves, extra silicone replacement sleeves, case and instruction manual.

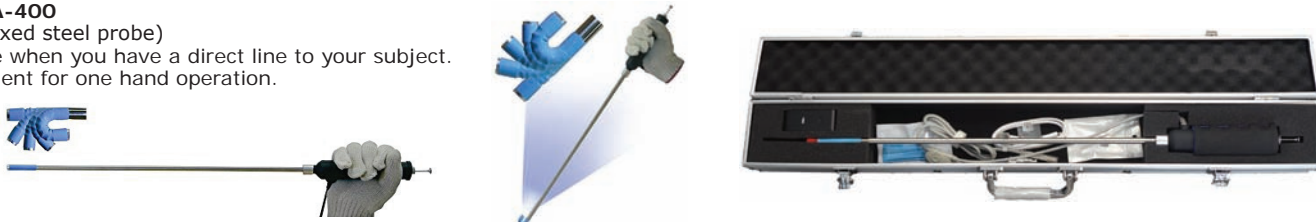
P/N	Probe Type	Probe Diameter	Probe Length	Weight	Focal Distance	Resolution	Optical View Lens Angle	USB Cable Length	Compatibility
VA-400	Rigid	8.5mm	42cm (16.5")	12 oz	4cm - 40cm fixed focus	640X480 pixels	60°	200cm	Windows 10/8/7/Vista/XP, Mac OS X with FaceTime software or Android OS 4.1.2 or higher with USB host function (iPhone and iPad when used with VA-B2 converter).
VA-800	Flexible		80cm (31.5")		3cm - 40cm fixed focus				
VA-980	Semi-Rigid	5.9mm	1 mm (39.3")			180°			
D3160	Flexible					180°			
D3145	Flexible	4.5mm	1 mm (39.3")			360°	Rechargeable lithium battery	Automotive inspection camera, all way articulation controlled by joystick. Takes pictures and records video.	
ME-610	Flexible	6.0mm	1 mm (39.3")						

Notes:  
 ■ Add "KIT" to part number to purchase borescope and VA-B2 converter together, example: VA-400 KIT.

**Vividia AbleScope VA-400 Borescope**

P/N VA-400

Rigid (fixed steel probe)  
 Suitable when you have a direct line to your subject.  
 Convenient for one hand operation.



**Vividia AbleScope VA-800 Borescope**

P/N VA-800

Non-Formable - perfect for snaking the scope into a narrow space.  
 Can be rotated by twisting the probe to change the orientation of the camera.



**Vividia AbleScope VA-980 Borescope**

P/N VA-980

Semi-Rigid Flexible, but stays where you put it.  
 Ideal for general aviation professionals!!!



**WiFi AirBox Converter**

P/N VA-B2

View your Vividia USB borescope wirelessly. The USB cord from your borescope plugs into this small box which acts like a WiFi hotspot.

Connect your phone or tablet to the hotspot to view live feed from the borescope and capture photos and videos. Compatible apps are available for download.



**Flap Track Wear Gauge for Cessna Aircraft**

P/N 950

Use to determine if a Cessna flap track is worn beyond service limits.

**Instructions**

Run the gauge plug along each slot in each flap track while verifying that the gauge will not enter the slot. Reposition the flaps as required to gauge the entire length of each slot. If the gauge enters a slot at any point, the track is worn beyond service limits. Periodically verify the gauge diameter by measuring the gauge diameter with a calibrated micrometer.

**This gauge will work for all single engine Cessna aircraft except 140A, 170A and 195**



**Flap Roller Installation Tool**

P/N 970

- Makes installation of the aft flap roller, bushing and washers easy
- Long handle allows access through the small inspection openings
- Holds parts in alignment while inserting the bolt
- Use on Cessna 150 thru 337



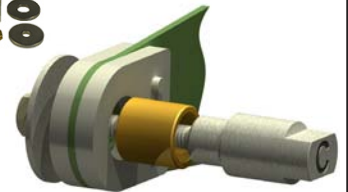
**Elevator and Rudder Bearing Installation Tool for Cessna Aircraft**

Makes pressing bearings in or out easy!

P/N 990

This unique tool is specifically designed to prevent damage when installing and removing **sintered bronze** rudder and elevator hinge bearings contained in kits EBC-KT-1 thru 5 and RBC-KT-1 thru 8.

- Eight piece kit for all sizes of sleeve bearings
- Heat treated stainless steel will last a lifetime
- Comes in a convenient storage pouch



**Cowl Saver™ Scoring Tool**

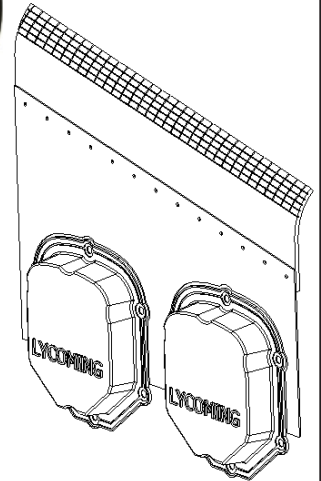
Customize Your Baffle Seal Flexibility for Optimal Cooling!

P/N TOOL120

Customize Cowl Saver™ engine baffle seal material to be extremely flexible for a perfect seal where it contacts the cowl and rigid elsewhere to prevent the seal from blowing past the cowl contact line.

This unique tool has 3 circular razor blades spaced 0.16" apart and makes it fast and easy to score the stiffer outer layer of the Cowl Saver™ material where more flexibility is required. The spacers also precisely control the depth of the cuts to help prevent damage to the material.

- You control the amount of flexibility
- Use during a new baffle seal installation or to perfect the fit and seal of an existing installation
- Material still meets the original AMS3306 specification to which it was certified as long as the fiberglass reinforcing layer hasn't been cut.
- Replacement blade kit also available (P/N TOOL120-BKT)
- See page 44 for more details



**Only for use on the Teflon side of Cowl Saver™ baffle seal material**

**PROP GUARD Installation Tool**

Saves time and makes installation easier!

P/N TOOL125

This rubber coated roller makes working air bubbles out during installation easier than using the spatula included with the PROP GUARD kits. The rubber conforms to the shape of the propeller, and the rolling action allows you to press harder to eliminate small air bubbles. It is recommended for customers who may be installing more than one PROP GUARD or those who just want to make the job faster and easier.



### McFarlane Aircraft Tire Balancers

Tire balance is important.

**Now it's fast, accurate and affordable!**

Aircraft tires spin 1.6 times faster than car tires.

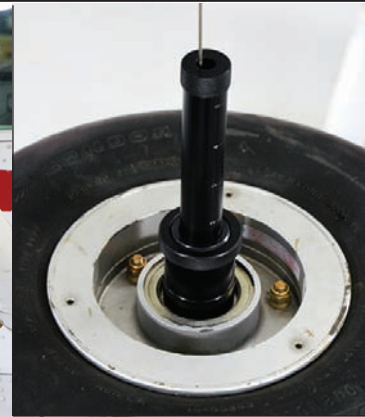
Out-of-balance tires cause a long list of maintenance problems:

- Uneven tire wear
- Premature bearing wear
- Shimmy and resulting torque link damage
- Destructive and distracting airframe vibration

McFarlane's tire balancer is a suspension tire balancer with a patented design featuring a pivot point that is easily adjustable on-the-fly for maximum balance sensitivity. It is small enough to fit in a tool box and doesn't require a bulky stand. The McFarlane design is more precise than other static balancing methods, and allows the wheel and tire to be balanced with the bearings and seals installed.

**It's fast and easy.** Due to the horizontal balancing orientation, test weights can be temporarily set in place and easily adjusted while balancing. This eliminates the need to tape the test weights. The McFarlane tire balancers are precision machined with a black, hard anodized finish, and comes in an oiled wooden case. This is a **lifetime tool** that fits almost all light aircraft wheel/tire assemblies.

- On-the-fly adjustable pivot point for maximum sensitivity (U.S. Patent No. US 9,032,793 B1)
- Portable – small enough to fit in your toolbox
- Does not require removal of bearings or seals
- Complete instructions included
- Multiple models and add-on bushing kits to accommodate 3/4", 1", 1 1/4", 1 1/8", 1 5/8" and 2" axles
- Conveniently packaged in a durable wooden box



**New and Improved  
More Axle Sizes!**



P/N TOOL129 LA-KT



P/N TOOL129



**Costs less and more accurate  
than axle style balancers.**

**Now available to accommodate  
standard and taper axle sizes  
ranging from 3/4" to 2".**

Part Number	Description
TOOL128	Tire balancer for 3/4" diameter axles (common on experimental aircraft)
TOOL129 (Supersedes TOOL108)	Tire balancer for 1", 1 1/4", and 1 1/2" axles, including Cessna 300 and 400 Series tapered axles with 1 1/2" and 1" bearing bores.
TOOL129 LA-KT	Large Axle Bushing Kit for 1 1/8" and 2" axles (compatible with TOOL129 only)
TOOL108 LA-KT	Large Axle Bushing Kit for 1 1/8" and 2" axles (compatible with TOOL108 only)

### McFarlane Aircraft Propeller

#### Balancing Bushing Kit

**Fine tune propeller balance with this accurate and easy to use bushing kit!**

An out of balance propeller can lead to harmful vibrations and costly aircraft maintenance.

Costly issues that may arise from an out of balance propeller include:

- Excessive load on crankshaft bearings
- Cracking of propeller and spinner bulkheads
- Engine mount wear and deterioration
- Distracting airframe vibration

P/Ns:

**TOOL129 P1-KT (Compatible with TOOL129 Only)**

**TOOL108 P1-KT (Compatible with TOOL108 Only)**



P/N TOOL129 with TOOL129 P1-KT

The McFarlane Propeller Balancing Bushing Kits are add-ons for either P/N TOOL129 or P/N TOOL108 tire balancers. These bushing kits make it possible to check the static balance of a propeller quickly and accurately.

- More accurate than knife edge and mandrel methods
- Allows for a quick check after minor repairs
- Durable wooden storage box
- Works with nearly all fixed pitch propellers
- Includes one 2 1/4" diameter bushing for SAE standard crankshaft bores, two cone bushings for the other side of the hub for bores ranging from 2 1/4" to 5 1/8" diameter and complete instructions **1**

**1** Instructions cover the use of the tool for checking balance. Propeller manufacturer and FAA guidance must be used when changing the balance of a propeller; some manufacturers require the use of an authorized propeller repair station.

Part Number	Description
TOOL129 P1-KT	Propeller balancing bushing kit (compatible with TOOL129 only)
TOOL108 P1-KT	Propeller balancing bushing kit (compatible with TOOL108 only)



**Adjustable Elevator Neutral Rigging Tool for Cessna Aircraft**

Save time, you'll always have the correct tool!  
P/N TOOL126

Proper elevator rigging is necessary for full range of motion and maneuverability of the airplane. Many Cessna maintenance manuals require the fabrication of a tool to hold the yoke in the neutral position while the mechanic rigs the elevator control system. These tools utilize the holes for the control gust lock. At least 17 different sizes of rigging tools are required to cover the various Cessna aircraft. Now there is one tool to replace them all.

The McFarlane Elevator Neutral Rigging Tool is adjustable from 0.4" to 2.5" and universal in design, consisting of six different pin sizes to fit your application. This tool may also be used to properly rig other makes of aircraft with similar elevator neutral rigging requirements.

**Features and Benefits**

- Replaces 17 costly tools
- Quick setup and adjustment
- Simple to use instructions
- Includes compact storage box
- Replacement parts available separately
- Stainless steel components

**Fits most Cessna  
150 thru 425 aircraft!**

Elevator Neutral Rigging Tool Replacement Parts	
Part Number	Description
6409	.050"/1.3mm Hex Wrench
6870	Square Nut
6868-4	Pin, .188, Short
6868-3	Pin, .188, Long
6868-1	Pin, .209, Short
6868-2	Pin, .209, Long
6869-1	Pin, .250, Short
6869-2	Pin, .250, Long



**Note:**

Refer to your Cessna maintenance manual to determine if your model requires the use of the elevator neutral rigging tool and follow its guidelines for proper pin selection and adjustment guidelines.

**Interesting History**

Early Cessna aircraft control gust lock holes were aligned with the elevator in the neutral position. This hole placement created safety concerns after Cessna realized that it would be possible for a pilot to take off with the control lock in place, but the lack of control function would not allow for a safe climb rate. Cessna remedied this safety hazard, beginning in the late 1960's, by moving the hole on the control column closer to the yoke. This change prevents flight. With the hole placement moved, new tools were required to be fabricated to align the elevator in the neutral position during rigging.



**Mr. Funnel**

P/Ns F1C, F3C and F8C

Fuel filter funnel stops water and dirt. The Teflon coated stainless steel filter is so fine that water cannot get past it! Works with all aviation fuels, gasoline, diesel and kerosene.

- Tested and proven in rugged Arctic environment
- Expected 10 year life
- Fast flow rates
- Self cleaning lifetime filter
- Filter stops water and dirt
- Conductive plastic

Part Number	Size	GPM
F1C	6" X 3.5"	2.7 Gallons per minute
F3C	8.75" X 5.5"	3.5 Gallons per minute
F8C	10" X 8.5"	5.0 Gallons per minute

Manufactured by Hopkins Manufacturing Corp.



**Buss Fuses**

**Hard to find 9/32" OD  
4AG/AGS/ABS Series**

The 4AG series fuses are commonly specified in older aircraft. About 30 years ago Buss superseded them to the obsolete AGS series fuses. Even this newer series, is now leaving many aircraft owners struggling to find replacements.

The AGS fuses are now being replaced by ceramic ABS series of fuses that have the same electrical and thermal performance.

McFarlane now has all three series (4AG, AGS, ABS) with a mix of new and new surplus fuses in stock.

**Note:** AGC series auto fuses are smaller (1/4" OD) and have different thermal properties than the 4AG/AGS/ABS fuses.

- Glass or ceramic tube, 9/32" X 1-1/4"
- P/Ns 4AG-#, AGS-#, or ABS-# Where # indicates current rating in Amps (1 to 40 Amps)
- Sold in packs of 5 each



Tools and Miscellaneous



## Exhaust Valve Guide **Cleaning** Reamers for Continental and Lycoming Engines

U.S. Patent  
No. 9,878,354

U. S. Patent No. 9,878,354

### Why McFarlane Special Reamers?

McFarlane now offers special valve guide reamers sized specifically for cleaning Continental and Lycoming exhaust valve guides. Standard valve guide reamers are designed to perfect the guide hole size when reaming new guides. The standard reamer pilot is sized to fit the small bore of a new unfinished guide to insure stability and a straight finished bore. When this same type of reamer is used to clean the valve guides, the pilot is smaller than the finished hole. This causes the reamer to wander and misalign while it is being started and turned in the guide hole.

The McFarlane cleaning reamers have a pilot the same size as the valve stem. This properly sized pilot forces the reamer cutter to start straight and follow the correct valve stem path through the guide hole. **Finally, a tool that is designed for the job!**

While using standard reamers to clean valve guides, you probably have noticed that you have some valve guide metal in the reamer flutes afterwards. This metal is cut from the sides of the guide when hard carbon deposits displace the unguided reamer from the original guide hole, or the reamer was not started in alignment with the guide hole. Wavy or gouged guide holes cause premature carbon buildup, poor heat transfer, and early guide hole wear. Prevent damage to your valve guides by using McFarlane Cleaning Reamers!

### Features and Benefits

- Discounted pricing for complete set
- Spiral flutes for a better guide finish
- Pilot sized specifically for cleaning
- Cleans guides without notching guide surfaces
- Constructed of precision ground, high speed tool steel



**Note:** Reference Lycoming Service Instruction 1425A, SSP-1776 and SSP-578 and the appropriate overhaul manual or the appropriate Continental overhaul manual (Note: There are errors in some of the Continental service bulletins regarding reamer sizes.) to determine which specific valve guide sizes you have and the required reamer size before purchasing the necessary cleaning reamer. Lycoming Mandatory Service Bulletin No. 388C requires exhaust valve guide cleaning every 300 hours for helicopter engines and every 400 hours for all other engines. McFarlane valve guide reamers are for cleaning carbon build-up only and must not be used for finish reaming of new valve guides.



Photo courtesy of Jose Oliveros

Continental Cleaning Reamers		
Part Number	Finished Ream Diameter (Corresponds to valve guide ID)	Pilot Diameter (Corresponds to valve stem diameter)
VGR-CN-KT	Contains one of each sized reamer	
VGR-CN1	0.3750 - 0.3758	0.3715 - 0.3725
VGR-CN2	0.4350 - 0.4362	0.4310 - 0.4320
VGR-CN3	0.4365 - 0.4375	0.4320 - 0.4330
VGR-CN4	0.4370 - 0.4378	0.4325 - 0.4335
VGR-CN5	0.4375 - 0.4385	0.4330 - 0.4340
VGR-CN6	0.3427 - 0.3435	0.3390 - 0.3400
Lycoming Cleaning Reamers		
Part Number	Finished Ream Diameter (Corresponds to valve guide ID)	Pilot Diameter (Corresponds to valve stem diameter)
VGR-LC-KT	Contains one of each sized reamer	
VGR-LC1	0.404-0.405	0.4012-0.402
VGR-LC2	0.437-0.438	0.432-0.4333
VGR-LC3	0.4985-0.4995	0.4935-0.4945
VGR-LC4	0.4995-0.5005	0.4957-0.4965

### Maintenance Tip:

Lycoming suggests using ordinary cup grease on the flutes of the reamer to remove deposits with the reamer rather than allowing the deposits to fall into the cylinder.

## Pin Punch Set with Replaceable Tips

Save money on repetitive tool replacement!

P/N TOOL127

How many times have you reached into your toolbox for a pin punch only to find the tip bent or broken from the last job? The McFarlane pin punches feature economical replaceable tips. Spare tips are even included with every set. Simply replace the tip as necessary.

**No more wasted money on fragile pin punches!**

### Superior Material for Longer Tip Life

Traditional pin punches easily bend or distort. McFarlane has solved this problem by using work hardened extra tough steel. McFarlane work hardened punches provide you with superior driving ability.

### Features and Benefits

- Convenient shadowed case
- Economical replacement tips in three different lengths
- Shock absorbing grip - stops "finger sting"
- Hardened tool steel handle
- Work hardened extra tough steel tips



### Pin Punch Set Contents

This convenient set includes three common pin punch sizes: 1/16", 3/32", and 1/8". Two long, four medium, and two short tips are included for each size. You can use a short stable tip to start driving the pin out and then change to a longer tip when you need more length to finish the job.

### CAUTION

Always wear eye protection when using punches. Do not reuse broken punch tips.

P/N	Description	Package Qty
704KT	Punch Assortment, 1/16"	2 short, 4 med., 2 long
704LR	Punch Refill, Long, 1/16"	5
704MR	Punch Refill, Med, 1/16"	5
704SR	Punch Refill, Short, 1/16"	5
706KT	Punch Assortment, 3/32"	2 short, 4 med., 2 long
706LR	Punch Refill, Long, 3/32"	5
706MR	Punch Refill, Med, 3/32"	5
706SR	Punch Refill, Short, 3/32"	5
707KT	Punch Assortment, 1/8"	2 short, 4 med., 2 long
707LR	Punch Refill, Long, 1/8"	5
707MR	Punch Refill, Med, 1/8"	5
707SR	Punch Refill, Short, 1/8"	5

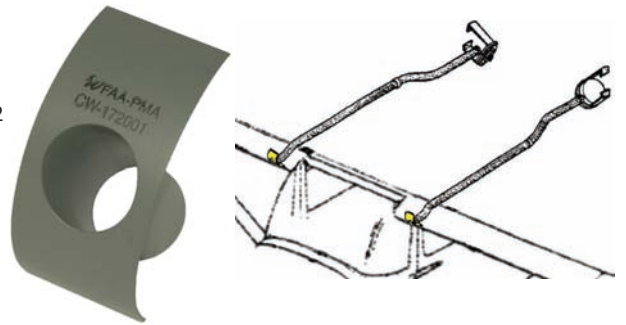
FAA-PMA Approved

**Vent Tube Adapter for Cessna Aircraft**  
**Improved vent tube adapter restores rear seat airflow**  
 P/N CW-172001

- Improved! Aluminum won't crack like the cheap OEM plastic adapters
- Direct replacement for Cessna P/Ns 0501030-2, 0700325-1 and 0700325-2
- Limited lifetime warranty
- Save up to 50%
- Two required per aircraft
- Includes installation instructions

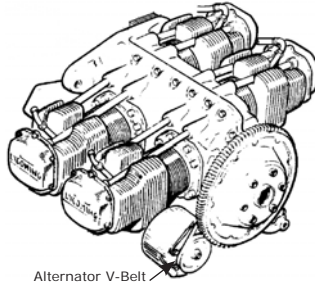
Model
172, 172A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q
172RG, FR172E,F,G,H,J,K
175A,B,C
180, 180A,B,C,D,E,G,H,J
182, 182A,E
185, 185A,B,C,D,E, A185E,F
210-5 (205)
210B,C,D,E

Manufactured by Wingate Aero & Fabrication LLC



**Alternator V-Belt for Piper Aircraft**  
**Finally an approved belt at an affordable price!**  
 P/N MC73965-015

- High quality manufacture
- Direct replacement for P/Ns 10069-806, 452-541, 564-852, 73965-015 and 73965-15
- Save \$\$



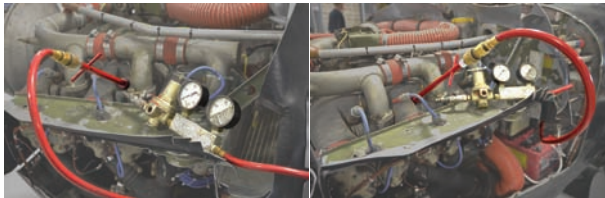
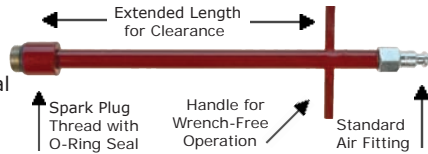
Alternator V-Belt

Model	Serial Number
PA-28-151	All
PA-28-161	28-7716001 thru 28-8616057
PA-28-161	2816001 thru 2816119
PA-28-181	28-7690001 thru 28-8690062
PA-28-181	2890001 thru 2890231
PA-28-236	28-7911001 thru 28-8611008
PA-28R-201	2837001 thru 2837061
PA-28R-201	28R-7737002 thru 28R-7837317
PA-28R-201T	2803001 thru 2803012
PA-28R-201T	28R-7703001 thru 28R-7803373
PA-28RT-201	28R-7918001 thru 28R-8218026
PA-28RT-201T	2831001 thru 2831038
PA-28RT-201T	28R-7931001 thru 28R-8631005
PA-32RT-300	32R-7885002 thru 32R-7985106
PA-32RT-300T	32R-7787001 thru 32R-7987126

**Compression Tester Extension**  
 P/Ns

**EXTENSION CT1 (18mm thread)**  
**EXTENSION CT12 (12mm thread)**  
**EXTENSION CT14 (14mm thread)**

- Wrench-free compression testing
- Quality welded construction, o-ring seal
- Allows for exhaust system and baffling clearance
- Makes compression testing easier
- Save time and \$\$

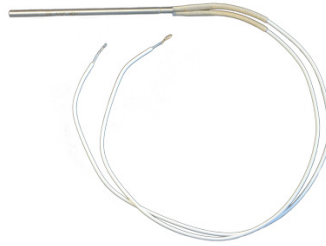


Manufactured by Baines Specialties LLC

**Pitot Heater Elements**

Fits Piper PA-28-151 and PA-28-161 aircraft

- Each pitot tube requires two heaters
- Diameter of each part number is 3/16"



Manufactured by PMA Products Inc

Part Number	Aircraft	Serial Number	Voltage	Power	Length <sup>2</sup>
CA464-356	PA-28-151	All	14V	70 watts	3.25"
CA464-356	PA-28-161	2816001 thru 28-8216059	14V	70 watts	3.25"
CA464-357	PA-28-151	All	14V	100 watts	4.25"
CA464-357	PA-28-161	2816001 thru 28-8216059	14V	100 watts	4.25"
CA464-440	PA-28-161	All	28V	100 watts	4.25"
CA464-441	PA-28-161	All	28V	70 watts	3.25"

<sup>1</sup> P/N CA464-357 and CA464-440 are installed at an angle within the pitot tube.

<sup>2</sup> Length is approximate

**Placards**

Commonly replaced placards available!  
 Each placard measures 3 1/2" X 1 1/4".

**New!**

Part Number	Description
JM-005	No Step
JM-006	No Push
JM-007	No Lift
JM-008	Lift Here
JM-012	80-87
JM-013	100/130
JM-014	Auto Fuel
JM-015	No Smoking
JM-016	External Power 12 Vol
JM-017	External Power 24 Vol
JM-018	Aux Tank
JM-019	Zero Fuel Weight
JM-020	Maximum Baggage Weight
JM-021	Jet Fuel Only
JM-022	Avgas Only
JM-023	Fasten Seat Belt
JM-028	Door Warning
JM-100	100LL



Manufactured by J&M Aircraft

**Nylon Washers**

- Protects the aluminum surfaces under cowl, spinners and fairing screws!
- High quality industry standard washers
- These will not deform like soft washers
- Sold in convenient 100 packs!

P/Ns:

- NAS1515H04L
- NAS1515H06L
- NAS1515H08L
- NAS1515H3
- NAS1515H4



**Standard Hardware**

AN, MS and NAS series. Please call or view online.



**Pitot Tube Screws**

P/N MS24693S224

- Replaces special extra fine thread AN507-640R4 screws
- Used on many pitot tube assemblies



Sold in 10 packs!

### D A M™ Aircraft Pulley Oil

New name, same dependable oil!  
Featuring a re-designed needle oiler.  
Great for unreachable areas with traditional applicators.

- Does not dry out and get sticky
- Loosens old stiff pulley grease
- Save the labor of re-oiling the control system every year!



Qty	Description
<b>P/N PULLEY OIL KT</b>	
1	Pint, Pulley Oil
1	Needle Oiler with Extension, .34 fl oz (10mL)
<b>P/N PULLEY OILER KT</b>	
1	Needle Oiler with Extension, .34 fl oz (10mL)
<b>P/N PULLEY OIL</b>	
1	Pint, Pulley Oil

20" Extension  
P/N 7249  
now sold  
separately!



### Spark Plug Gasket

Best price - quantity discount!  
MS17840-1 18mm solid copper



### McFarlane T-Shirt

- 50/50 Cotton/Polyester
- Available in sizes S, M, L, XL \$6.95.
- Also available in 2X, 3X and 4X.



### KROIL and AEROKROIL Penetrating Oil

Throw away your other penetrating oil! This stuff works!!

P/N AEROKROIL - 10 oz. aerosol can of kroil

P/N KROIL GAL - One gallon can

- Loosens frozen metal parts
- Creeps into openings as small as one millionth of an inch!
- KROIL will loosen the toughest stuck together or rusted metal parts.
- Use Kroil to loosen nuts, bolts, studs, screws, pulleys, shafts, bearings, pipe threads, valve guides, exhaust parts or any corroded metal parts.
- For industrial use only. KROIL and AEROKROIL meets and exceeds military specifications AA50493 and VV-P-216.



### Stabilizer Jack Screw Pin Removal Tool

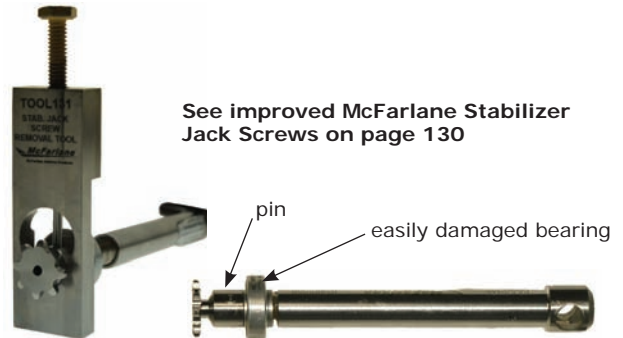
for Cessna Aircraft

P/N TOOL131

- For Cessna 180/182/185 jack screws
- Easily and safely remove and install your roll pin with the turn of a wrench
- No more damaging your jack screw by using a punch and hammer
- Manufactured with hardened stainless steel for increased tool life
- Works only with the larger McFarlane pin sold with P/N 1111
- Includes adapter Barrel P/N 7011 for installation of new roll pin



P/N 7011  
also sold separately



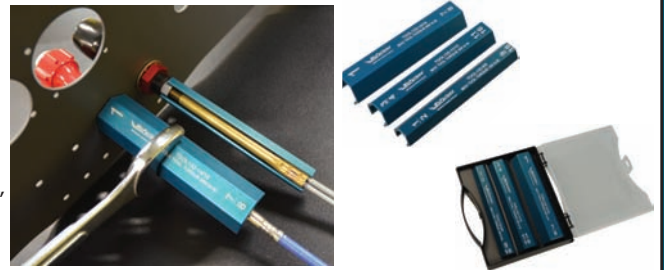
See improved McFarlane Stabilizer Jack Screws on page 130

### Push-Pull Control Wrench Set

Install and remove push-pull control nuts behind the panel

P/N TOOL132

- Slot allows access to nut on installed control
- Wrench anywhere on the external hex
- 5 1/2" length reaches deep, hard to access nuts
- Lightweight aluminum is easy to handle when using overhead
- Works with all controls - six nut sizes: 1/2, 9/16, 11/16, 3/4, 7/8 and 1"
- Many other uses (brake/fuel/vent/hydraulic lines, etc)
- Includes case



### Tempest Oil Filters

P/N AA48103-2,  
P/N AA48108-2,  
P/N AA48109,  
P/N AA48110-2



### Champion Oil Filter Kit

P/N CFO-100-1  
**Oil Filter**  
P/N CH48104-1



### Vacuum Pump Wrench

Finally a vacuum pump wrench that can get into those really tight spots!

P/N TOOL133 (use for small pumps)  
P/N TOOL133-L (use for large pumps)

A different wrench for the two sizes of pumps (one wrench can't do either pump well)

- Heat treated tool steel
- Precision made
- 1/4" square drive
- Black oxide finish
- Torque wrench friendly



### Aeroshell Oil

P/N AEROSHELL W15W-50



### Phillips Oil

P/N PHILLIPS XC 20W50

