# .ES – GROMMETS – PI

#### RTIN FABRIC CLIPS



Used to secure fabric to metal ribs in wings and control surfaces. Replaces rib-stitch cord or P-K screws. Provides a more secure and streamlined installation. Drastically reduces covering time. FAA-approved for aircraft listed. Easily adapts to homebuilts with metal ribs. Spacing between clips, 3". Spacing may be reduced to 1-1/2" on high-performance aircraft by using 2 wires, with clips inserted in alternate holes that are spaced 1-1/2" apart. Fabricated from stainless steel wire. Supplied in 25-ft. continuous coils.

NOTE: FAA Approved for some aircraft.
Please see our website for complete approval list.

25-Ft. Coil......P/N 09-19400

Aircraft Model	STC No.	Part No.	Feet Req'd.
Aeronca-Champion	SA150S0	09-19500	225
Piper — All Models	SA126S0	09-19600	175-250
Stinson	SA615S0	09-19700	175
Taylorcraft	Original Equipment	09-19800	225

#### **INSTALLATION KITS**

All install kits ---. No clips are included. Order separately. \*If clips are used to secure fabric on controls, add 50 ft.



# **CESSNA-TYPE FABRIC CLIPS**

Individual spring steel clips used to attach fabric to metal ribs. Eliminates rib stitching.

5% Discount on purchase of 100 P/N 09-19900

## 3M™ FINE-LINE PAINT TAPE

This  $3M^{\text{TM}}$  tape is particularly suitable for pin striping, multicolor and other custom painting applications. It is a thin, conformable green polypropylene film tape with a special finish that resists paint runoff. The adhesive adheres instantly and offers good holding power, resists lifting and curling. Stretchable and easy to handle. Provides an extremely fine color-line separation for decorative painting of aircraft. Scotch No. 218.

1/8" x 60 Yds	P/N 09-20200
1/4" x 60 Yds	P/N 09-20300
1/2" x 60 Yds	P/N 09-20400
3/4" v 60 Vde	P/N 09-20500

Less 10% on 6 Rolls (Assorted)

• Less 15% on 12 Rolls (Assorted)



#### WOOD BRUSHES

Natural, undyed bristle with smooth, unpainted wood handles. Unaffected by paint, dopes, thinners or solvents.

Brush Width	Part Number	Price Each	Brush Width	Part Number	Price Each	
1/2"	09-21100		2-1/2"	09-38825		
1"	09-21200		3"	09-38803		
2"	09-21300		4"	09-38804		
Discount: Less 10% on 50, 15% on 100 (per size)						



P99 Heavy Duty......P/N 09-00164/ea.





Grade B fabric patches for quick repairs on Grade B & Dacron covering. Smooth edge, 2.5" dia. Also available in Dacron which are more durable & less noticeable on aircraft exterior. Less 10% For 12 or More. Dacron Dollar Patches...P/N 09-17705/ea. Ceconite C101 ......P/N 09-00162/ea. Ceconite C102 ......P/N 09-00163/ea. PF P-103 Med......P/N 09-18750/ea.

#### **RIB LACING & SEWING NEEDLES**

	Description	Size	Part Number	Price
	3" Curved	Needle 3C	09-18705	
	6" Curved	Needle 6C	09-18710	
	12" Curved Tip	Needle 12C	09-18720	
	12" Straight	Needle 12	09-18725	
-0	18" Curved Tip	Needle 18C	09-18730	

Needle Assortment includes 1 each of the following: 3" curved, 6" curved, 12" curved, 12" straight, 18" straight .. P/N 09-18735

#### **RIB STITCH NEEDLES**

Made from the highest quality steel. Heat treated, nickel plated.

Description	Gauge Size	Part Number	Price
2-1/4" Curved	18	09-18300	
4" Straight	15	09-18400	
10" Straight	13	09-18500	
14" Straight	13	09-18600	
18" Straight	12	09-18700	

# "T" HEAD PINS

Used to hold fabric in place temporarily in covering operation. Plated steel, 1-1/2" L. 100 Pins. P/N 09-18850

#### **SCREWS**

Used on some aircraft models to attach fabric to metal wing ribs and empennage ribs instead of rib lacing. Truss-head, type "A" self-tapping sheet metal screws.

Size #4	Х	1/4".	
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Stainless S	Steel,	Phillips	Head	P/N	T4X4 <b>/ea</b>
Stainless S	Steel	Type A,	Phillips.	P/N	4RX1/2SS/ea
Stainless 9	Steel 7	Type A	Philling	P/N	T4X6/ea

#### AD-41H CLOSED-END BLIND POP RIVET

\_\_\_\_ 1/8" diameter. Used to seal tubing vent holes. P/N 04-01496/ea

#### **BLIND RIVETS**

Use these 1/8" dia. "Pop" rivets to attach fabric to the ribs on Champion/Bellanca aircraft. 100 Rivets. P/N 09-18900

#### **WASHERS**

Aluminum washers may be use in place of original plastic washers under screws and pop rivets to attach



### **DRAIN GROMMETS**

Manufactured from virgin cellulose acetate butyrate resin.

Grommet Type	Part No.	O.D.	I.D.	Price each	
Flat	AN231-1	1-1/4"	3/8"		H
Flat	AN231-2	3/4"	5/16"		Н

Grommet Type	Part No.	O.D.	I.D.	Price each
Seaplane*	AN231-4	1-1/8"	_	
Aluminum	09-19110	3/4"	1/4"	

\*Depressed center — LESS 15% ON QTY. OF 100 (per Part No.)



# **INSPECTION RINGS**

Clear plastic rings, 4-5/8" O.D. x 3-1/2" I.D. x .050" thick, molded from virgin cellulose acetate butyrate resin. To be cemented to fabric as inspection plate retainer. 20% Discount on 100 or more.

P/N 09-19200 ea.

# **INSPECTION RING PATCHES**

Glued over inspection rings to prevent accidental removal. P/N 09-18750 ea.



# **INSPECTION PLATES**

**DOMED** - Concave aluminum snap-type plate has single clip riveted across full diameter. Snaps to the ring at 2 contact points. Plate is 4.75" dia. P/N 09-19300 ea./100

RECESSED - Recessed center and flanged-edge design will not creep off center due to vibration in propwash areas. 4-3/4" dia. x .020 aluminum. Will not twist or vibrate ......P/N 09-18740 ea.

#### PIPER INSPECTION ACCESS HOLE KIT



Piper inspection access hole kit 765-106 comes with hardware, 2 plates, and 2 backup ring assemblies. P/N 09-05779