



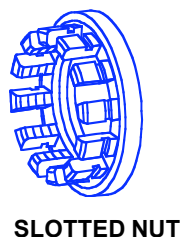
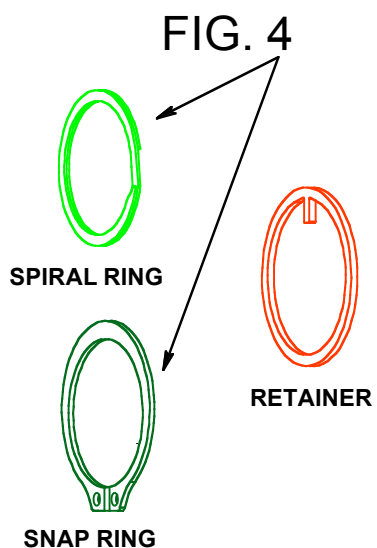
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**PART NO. APV-GA-1**

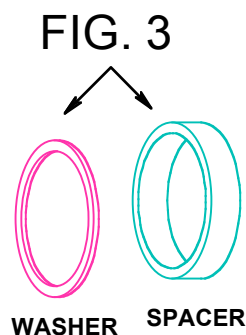
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED
A	AS ISSUED TO TOOLING	11-06-00	ERM
B	Part no change, add Figure 3 and installation instructions	09-05-02	ERM
C	Add spiral ring, Figure 4 and installation instructions for spiral ring, add table for pin hole and keyway specifications. Change installation instructions to reflect.	07-02-04	ERM

**INSTALLATION INSTRUCTIONS**

1. Check the axle and nut for burrs and rough threads. 2. Drill out cotter pin-hole or cut keyway in axle to specifications on table. Ok to use aircraft manufactures larger pre-existing pinhole or keyway. 3. Apply a light coat of aircraft grease (MIL-PRF-81322F example Aeroshell Grease 22 or MIL-G-3545C example Aeroshell Grease 5) to the threads of the axle and nut. 4. Install slotted nut using spanner tool, tighten to 150-200 inch pounds while rotating the wheel to ensure proper seating of the bearings (aircraft manufactures wheel installation procedures can be used). 5. Back off the slotted nut to zero torque, then torque the nut to 30-40 inch pounds while rotating. Check to see that there is no side motion of the wheel and wheel turns freely. 6. Engage tab of retainer into both the slotted nut and the pinhole or keyway of axle. a. Axle with pinhole (FIG 2); tilt retainer over slotted nut so tab of retainer will slide into pinhole of the axle and through one of the slots in the slotted nut. As tab enters the hole, tilt the retainer flush against the nut face. (see 6a) If location of pinhole does not allow retainer to sit flush on nut face, washers and or spacers (FIG 3) or keyway (FIG 1) are recommended. If tab does not align, tighten the slotted nut to next available keying position. b. Axle with keyway; slide retainer tab into slot on nut that aligns with keyway of axle. 7. Use FAA PMA snap ring or spiral ring provided by True-Lock LLC only. a. Using snap ring pliers, install snap ring and engage into grooves of slotted nut. Apply only enough force as necessary to expand the snap ring over the slots of the slotted nut to engage grooves fully. b. Using spiral ring, lubricate lightly with oil or grease; separate coils and insert end of ring into groove; wind ring into grooves of slotted nut. Apply only enough force necessary to wrap spiral ring over slots of the slotted nut to engage grooves fully. 8. Fill out FAA Form 337, reference STC No. SA00780SE and make appropriate log book entry. Weight and balance change negligible.

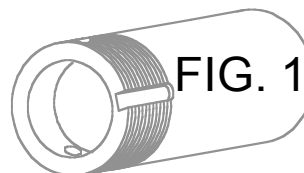
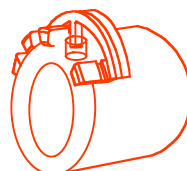


Slotted Nut

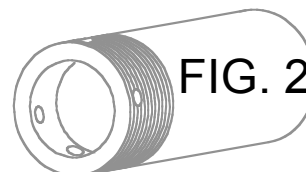


Washer Spacer

(6a) SHOWS PROPER ENGAGEMENT



AXLE WITH KEYWAY



AXLE WITH PIN-HOLE

PART NO.	KEYWAY			DRILL OUT PIN-HOLE
	WIDTH	CENTERED	DEPTH & LENGTH TO END THREADS	
APV-.937-16	.145 +.005 -.000	+ .003 - .003	.080 +.005 -.005	
APV-1.25-12	.167 +.005 -.000	+ .003 - .003	.080 +.005 -.005	
APV-1.25-16	.147 +.005 -.000	+ .003 - .003	.125 +.005 -.005	0.187 3/16th
APV-1.375-18	.175 +.005 -.000	+ .003 - .003	.125 +.005 -.005	
APV-1.50-12	.147 +.005 -.000	+ .003 - .003	.125 +.005 -.005	0.187 3/16th
APV-1.50-16	.147 +.005 -.000	+ .003 - .003	.125 +.005 -.005	0.187 3/16th
APV-1.50-18	.147 +.005 -.000	+ .003 - .003	.125 +.005 -.005	0.187 3/16th

US PATENT NO. 6,095,735

ERM 9/05/02	<b>TRUE-LOCK LLC</b>
ERM 9/05/02	
ERM 9/05/02	
RELEASE TO PROD	TITLE
GRAPHITE 7	INSTALLATION INSTRUCTIONS
APV-GA-1B	C PART NO. APV-GA-1
	SHEET 1 OF 1