

ACCESSORY KIT NO. AK-126

DATE: February 22, 1973  
 TITLE: Large Wheel Fairing Installation Kit  
 MODELS AFFECTED: AA-1,\* AA-1A,\* AA-1B, and AA-5 Aircraft  
 WEIGHT AND BALANCE CHANGE: AA-1, AA-1A & AA-1B AA-5  
 WEIGHT INCREASE: 18.51 lbs. 18.51 lbs.  
 ARM: 77.97 in. 86.90 in.

PARTS LIST

QUANTITY	PART NUMBER	DESCRIPTION
1	804019-508	Fairing Assembly, Nose
2	AN4-7A	Bolt
2	AN960-416	Washer
2	NAS451-56	Plug Button
1	MS24665-353	Cotter Pin
1	AN380-2-2	Cotter Pin
1	5804022-507	Fairing Assembly, L.H.
1	5804022-508	Fairing Assembly, R.H.
1	804021-505	Bracket Assembly, L.H.
1	804021-506	Bracket Assembly, R.H.
4	804046-5	Spacer (Upper)
2	804046-6	Spacer (Lower)
4	AN6-24A	Bolt
16	AN960-616	Washer
8	MS20365-624	Nut
2	804046-501	Support Assembly
8	AN960-616	Washer
2	804046-2	Bearing
2	AN6-14A	Bolt
2	804021-509	Adapter Assembly
2	AE51024-1	Bolt
2	AN936A516	Washer
2	AN960-516	Washer
2	804046-3	Bearing
2	5804023-1	Bracket
2	5804023-2	Support
4	AN6-22A	Bolt
4	AN6-23A	Bolt
4	AN6-24A	Bolt
2 (use A/R)	5804023-4	Shim
2 (use A/R)	5804023-5	Shim
2	J-4624-4	Flex Bolt
4	AN936A416	Washer
4	AN960-416L	Washer
4	MS35649-2252	Nut
16	AN3-5A	Bolt
8	AN960-10	Washer
2	NAS451-56	Plug Button
8	AN970-3	Washer
2	AN380-4-8	Cotter Pin

\*AA-1's and AA-1A Tr-2's must be equipped with optional 702067-501 nose fork and 6.00-6 main gear tires. The 702067-501 nose fork and 6.00-6 main gear tires are standard on all AA-1B and AA-5 aircraft.

A  
C  
C  
E  
S  
S  
O  
R  
Y  
  
K  
I  
T

DESCRIPTION OF INSTALLATION

1. Installation of large shock mounted (main gear only) wheel fairings for use with 6.00-6 main gear tires and 702067-501 extended nose gear fork.
2. Estimated time to accomplish this installation is 3.0 man hours.

INSTALLATION INSTRUCTIONS

NOTE: THE AIRCRAFT WEIGHT MUST BE REMOVED FROM THE LANDING GEAR FOR THIS INSTALLATION. POSITION THE FORWARD JACKS JUST AFT OF THE COWLING. THE REAR JACK CAN BE THE CRADEL TYPE OR THE HOOK TYPE THAT ATTACHES TO THE REAR TIE DOWN RING. (Reference Section II of each applicable Service Manual.)

CAUTION: A RUBBER PAD AND WOOD BLOCK SHOULD BE PLACED BETWEEN AIRFRAME AND JACK.

PART I. MAIN GEAR (FIGURE 1)

1. Remove three (3) Phillips head screws that attach hubcap/fairing. Discard these items.
2. Remove two (2) bolts holding brake halves together.
3. Remove cotter pin and nut on outboard end of axle and remove wheel.
4. Remove two (2) bolts holding the brake torque plate to the axle forging and replace with AN6-24A bolts supplied with kit. Install 805046-5 spacer (upper), and 804046-6 spacer (lower) 804046-501 support assembly, (2) AN960-616 washers and (2) MS20365-624 nuts as shown in Figure 1. Torque nuts to 250-300 in. lbs.
5. Reinstall wheel and brake half in reverse of removal. Tighten axle nut until a slight drag is felt when wheel is rotated. Line up cotter pin hole, coat mating surfaces of axle and 804021-509 adapter assembly with Loctite retaining compound, insert adapter assembly in end of axle and install the cotter pin.
6. Assemble the inboard swivel assembly as follows: Assemble an 804021-505 (LH) or -506 (RH), inboard support bracket assembly to the 804046-501 support assembly with an AN6-13A bolt. (2) AN960-616 washers (for two-place aircraft), or (4) AN960-616 washers (for AA-5 aircraft), and an 840046-5 spacer as shown in Figure 1.
7. Loosen scraper on wheel fairing assembly and slide to the full aft position. Install fairing on aircraft using four (4) AN3-5A bolts with four (4) AN970-3 washers to attach the lower inboard side to the inboard support bracket assembly and one (1) AES1024-1 bolt with AN936A516 washer, an AN960-516 washer and an 804046-3 bearing on the outside. Torque bolt to 100-140 in. lbs.. Snap NAS451-56 plug button in place.
8. Assemble the upper flex mount assembly as follows: Assemble the J-4624-4 flex bolt to the 5804023-1 bracket with an AN960-416L washer, an AN936A416 washer and an MS35649-2252 nut as shown in Figure 1. Assemble the other end of the flex bolt to the 5804023-2 support using the same washers and nut.

NOTE: POSITION 5804023-1 BRACKET WITH SHORT LEG FORWARD FOR AA-5 INSTALLATIONS AND LONG LEG FORWARD FOR 2-PLACE AIRCRAFT INSTALLATIONS.



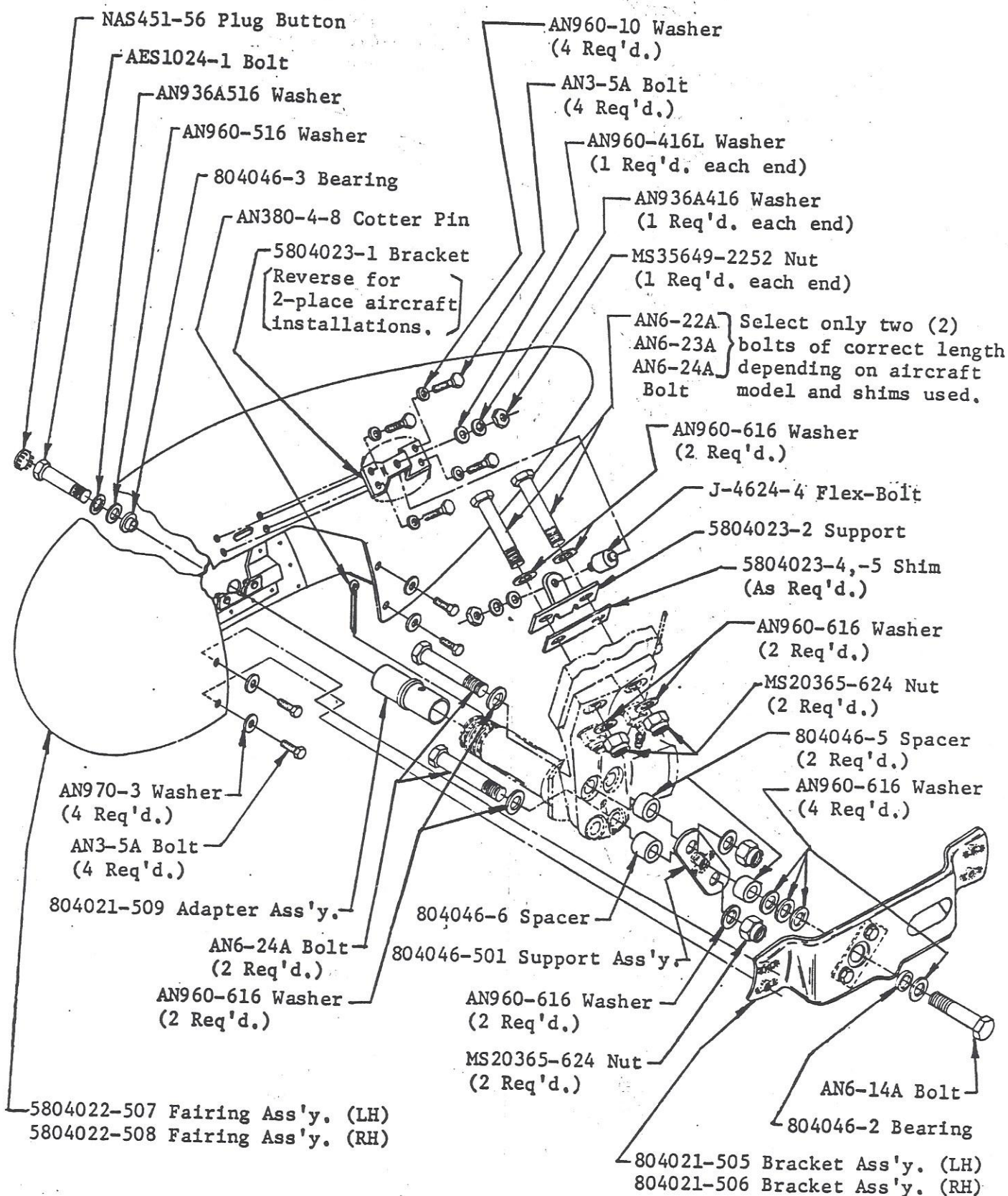


FIGURE 1. MAIN WHEEL FAIRING INSTALLATION  
(Right Hand shown, Left Hand opposite)

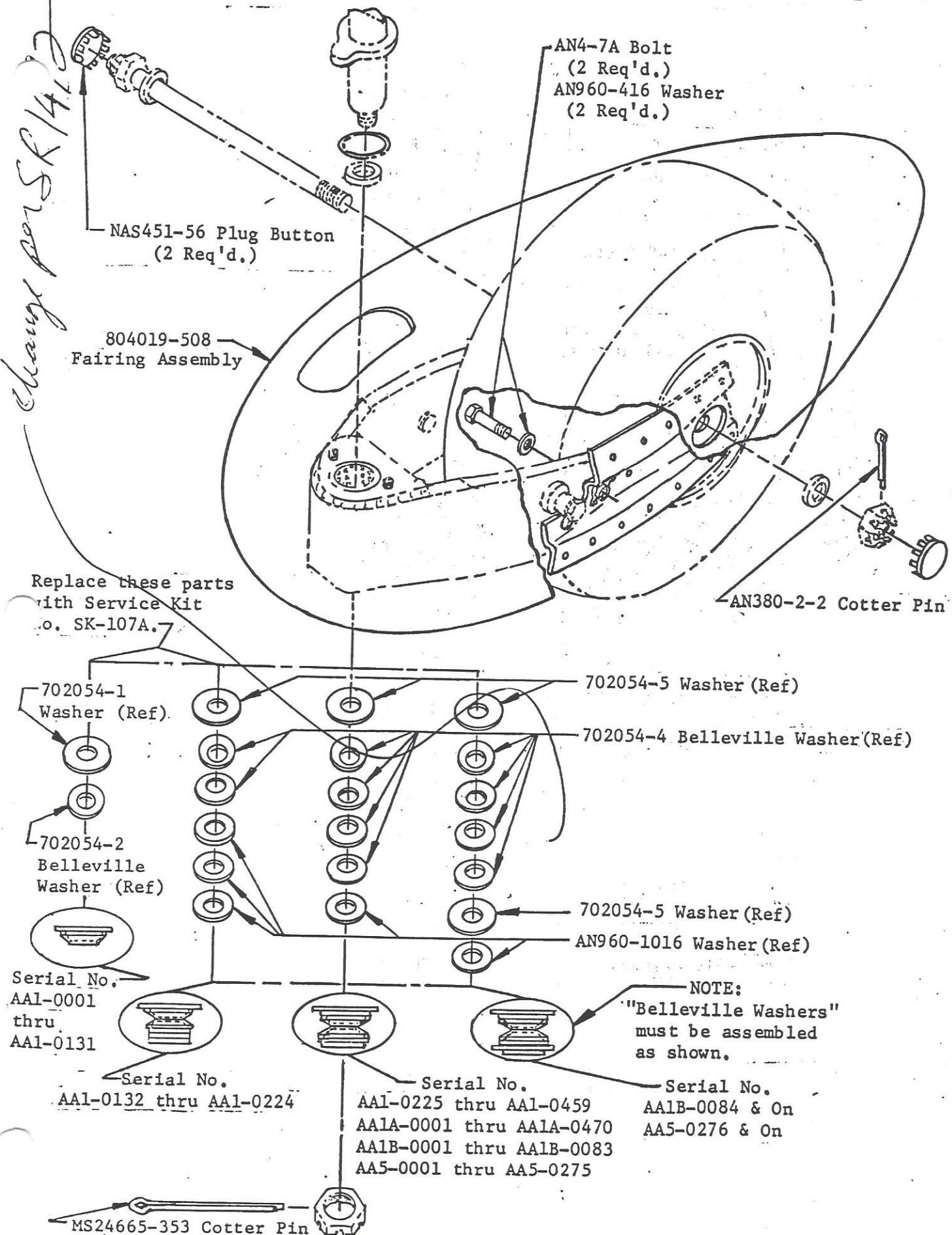


FIGURE 2. NOSE WHEEL FAIRING INSTALLATION  
(Use with 702067-501 Extended Nose Gear Fork).



9. Remove and discard the two (2) upper bolts holding the axle forging to the strut.
10. Install the flex mount assembly on the fairing with four (4) AN3-5A bolts and four (4) AN960-10 washers. Add 5804023-4 and/or -5 shims as required under 5804023-2 support to properly align rubber flex mount in a non-deformed position and install the longer AN6-22A, -23A, or -24A bolts (length as required), supplied with the kit. Be sure brake line clamp support tab is installed under head of aft bolt. Install the AN960-616 washers and MS20365-624 nuts and torque to 250-300 in. lbs..
11. Adjust scraper to a minimum of .5 inch clearance with tire and tighten adjusting bolts to 20-25 in. lbs.
12. Check fairing to assure freedom of movement on flex mounts.

PART II. NOSE GEAR (FIGURE 2)

1. Remove the cotter pin (MS24665-353), nut (AN320-10), all washers and remove fork assembly from nose strut.
2. Remove the AN380-2-2 cotter pin, AN310-5 nut, AN960-516 washer from the front axle rod. Slide the axle rod from the fork and lift out the wheel.
3. Place the 804019-508 fairing assembly over the nose fork with the rear holes in the fairing support brackets aligned with the axle holes in the fork.

NOTE: ON SOME 702067-501 FORK ASSEMBLIES IT WILL BE NECESSARY TO DRILL TWO (2) .249/.254 DIA. HOLES, AS SHOWN IN FIGURE 3, TO INSTALL THE AN4-7A FORWARD ATTACH BOLTS.

Install the AN4-7A bolt and AN960-416 washer through the fork into the fairing support bracket, from the inside on each side of the fork. Position wheel in the fork and insert the axle rod through the fairing, fork and wheel. Install the AN960-15 washer and AN310-5 nut on the axle and tighten the nut until a slight drag is noted when the wheel is rotated. Install the AN380-2-2 cotter pin. Final tighten the two AN4-7A bolts.

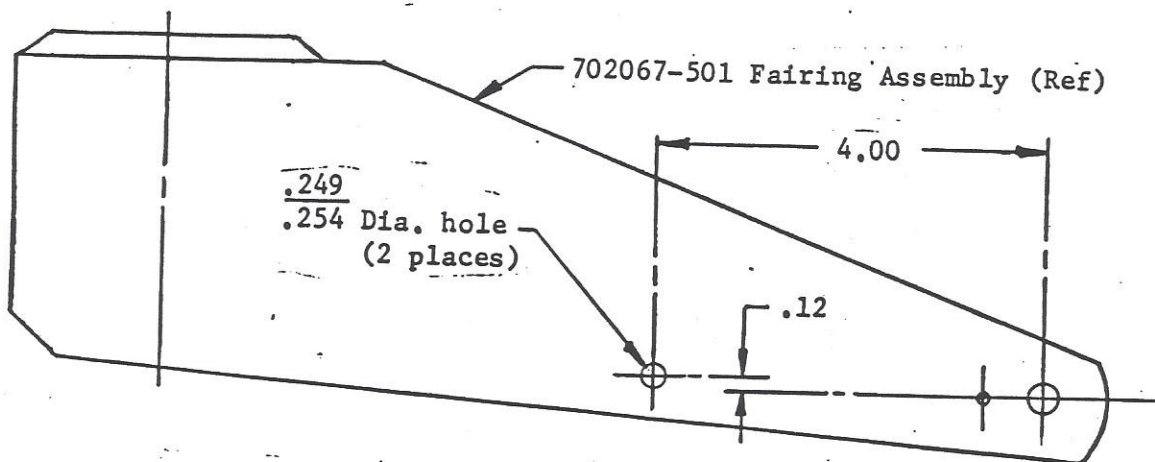


FIGURE 3. FAIRING ATTACHMENT HOLE LOCATION

4. Adjust the scraper to a minimum of .5 inch clearance with the tire and tighten the adjusting bolts to 20-25 in.-lbs.
5. Apply general purposes grease per MIL-G-7711 or equivalent to the bearing surfaces and reassemble the nose fork assembly to the strut, being sure thrust washer is in place. Install the flat washers, Belleville washers and nut, as shown in Figure 2. Tighten the nut to provide a 10-13 lb. drag (measured at the axle centerline) when the fork is rotated. Install the MS24665-353 cotter pin.

NOTE: CHECK NOSE GEAR FORK FREQUENTLY AND ALWAYS MAINTAIN 10-13 LB. DRAG AT AXLE CENTERLINE WHEN FORK IS ROTATED.

6. This completes the installation.

GRUMMAN AMERICAN AVIATION CORPORATION