

CHAPTER 3

✓ MAIN LANDING & NOSE GEAR ASSEMBLY

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* ATTACH THE REAR FLOOR PAN BEFORE THE MAIN LANDING GEAR IS BOLTED ON SEE CHAPTER 10. *11-1*

** DO NOT BOLT NOSE WHEEL ON UNTIL LOWER FORWARD FAIRING IS ATTACHED LATER IN THE ASSEMBLY PROCESS.

MOUNT TUBE FOR FASTBACK NEEDS TO BE ATTACHED NOW AS WELL.

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✓ CHAPTER 3

MAIN LANDING & NOSE GEAR ASSEMBLY

Section 1

LANDING GEAR ASSEMBLY

Figures LG-1 & LG-2

1. **Figure LG-XX ATTACHING THE MAIN GEAR EXTENSION SLEEVE**

Attach the main gear extension sleeve (11) to both the left and right main gear. Clean out the burrs (if any) inside of the 1" upper main gear tube to allow insertion of the aluminum extension. Insert extension tube 4" into the main gear as shown. Line up the 3/8" hole predrilled on the main gear with the 3/8" hole on the extension tube. Drill a 3/16" hole through the main gear and the extension sleeve to attach the sleeve with pop-riquet (12).

1. **Figure LG-2 ATTACHING LANDING GEAR TO CAGE**

To attach the landing gear to the cage use a small step ladder or chair on it's side to raise the rear of the cage approximately 16" off of the floor. Attach the left landing gear assembly, at the pivot, to the previously installed left main gear pivot bracket (Refer to Chapter 2 / Section 2 / Figure CA-3). Place washer (5) on bolt (4), coated with grease. IF YOU ARE USING THE OPTIONAL FASTBACK REFER TO CHAPTER 11 SEC. 9 PART 6, replace bolt (4) with optional bolt (13). Place the bolt in from the rear to allow removal of the pivot to service the main landing gear without removing the standard floor pan. Insert through main gear pivot bracket [Index # 9 from Figure CA-2]. Add another washer (5), then position the landing gear assembly pivot, with another washer (5) on each side, and slide the bolt through. Add final washer (5) and locknut. Tighten the locknut, allowing for freedom of movement. Repeat this procedure for the right side.

2. **Figure LG-2 ATTACHING ROD ENDS TO LANDING GEAR**
 - a) To attach the rod end to the landing gear, prepare the two male rod ends (9) by threading the two jam nuts (10) down onto each. Now thread this assembly into the drag strut end of the left landing gear assembly (1). Adjust the rod end so that the main 1" tube of the landing gear is parallel to the rear cage rail. This ensures zero toe-in / toe-out on the main gear assembly. After adjusting for zero toe-in / toe-out, tighten the jam nut. TEMPORARILY insert bolt (8) into landing gear drag bracket (13), holding the landing gear in position, while confirming this adjustment. Repeat this procedure for right side, using the right landing gear assembly (2).

 - b) To attach the male rod ends (9) to the welded on landing gear drag bracket (13), place washer (5) on bolt (8) and insert through the front hole of the left landing gear drag channel (12). Add three washers (5), a male rod end (9), three more washers, and insert through landing gear drag channel. Add a final washer (5) and a securely tightened locknut (6). Repeat this procedure on the right side.

✓ Chapter 3 SECTION 1 LANDING GEAR ASSEMBLY

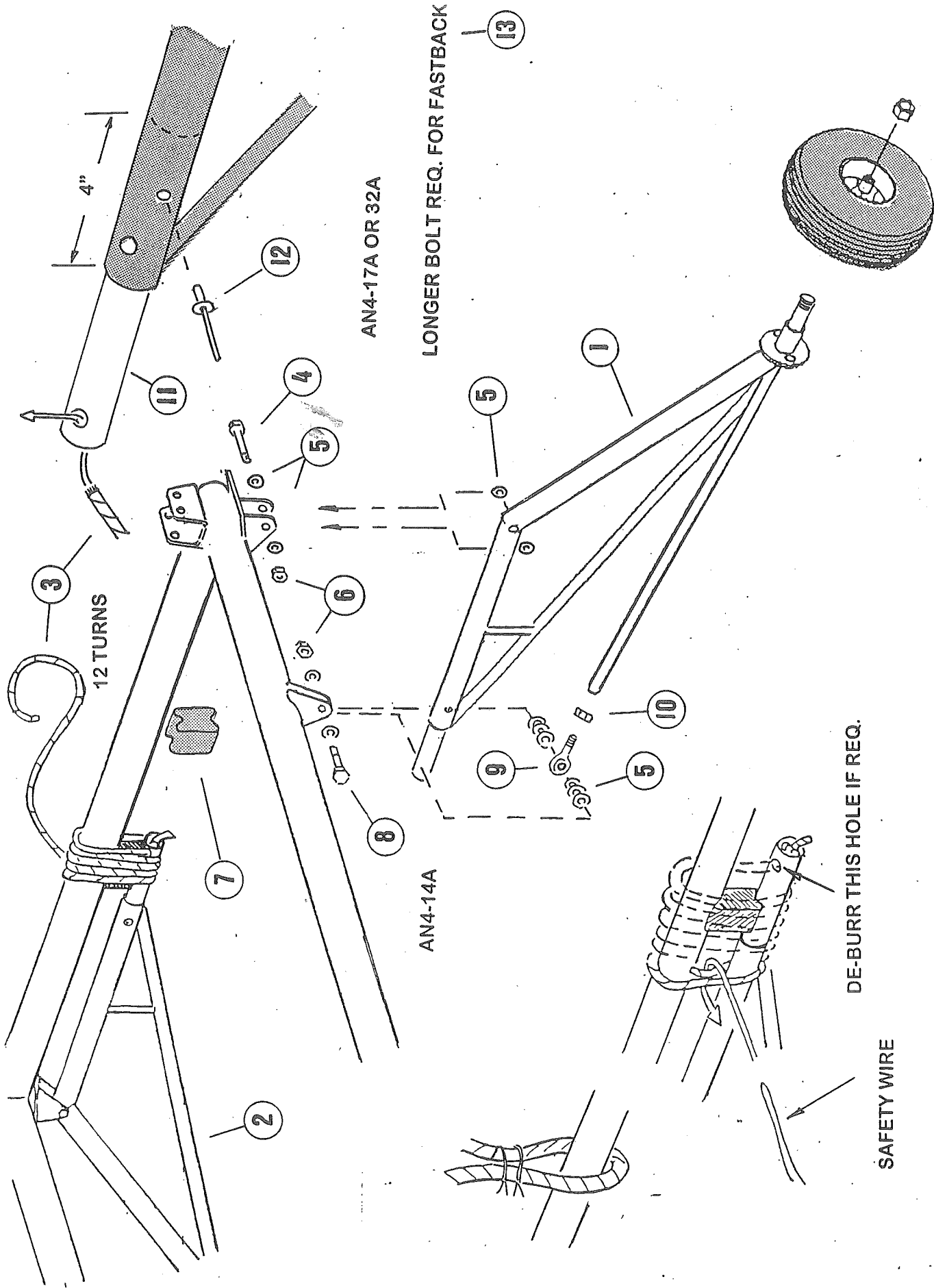
3. **Figure LG-2** **INSTALLING SHOCK CORDS TO LANDING GEAR**
- a) To install the shock cords to the landing gear assembly, first sear the ends (or wrap with electrical tape or shrink tubing, to prevent fraying) of the 3/8" diameter shock cords (3). Make certain that the 3/8" shock cord hole in the extension sleeve has been properly de-burred. Insert the end of the shock cord (3) through the 3/8" hole in the extension sleeve of the left landing gear assembly. Grab the shock cord with a pair of needle nose pliers and pull the shock cord out far enough to tie an overhand knot, leaving a 1" tail after the knot. Pull the knot back into the tube. Repeat with right main gear landing assembly (2).
- b) Place one of the rubber bumpers (7) between the left main gear landing assembly and the rear cage rail. Position the rubber bumper so it is held in place by the first and second wrap of shock cord at the end of the extension sleeve. Lead the shock cord up and over the rear cage rail, toward the rear; down and around the left main gear landing assembly; up and over the rear cage rail, and so on; wrapping the shock cord 12 times. It is necessary to pull very hard on the shock cord, starting at the first loop around. An assistant is a great help with this. The correct adjustment is enough to hold the main landing gear assembly snugly up against the rubber bumper, after the plane is assembled. Secure the loose end to the main landing gear assembly by forming a 1 1/2" loop. It is helpful to temporarily hold the shock cord with a tie wrap while securing with the safety wire. Finally, secure with .030 safety wire in two places. Repeat this on the right side gear. Don't forget to change out the tie wrap with safety wire.

✓ Chapter 3

Section 1

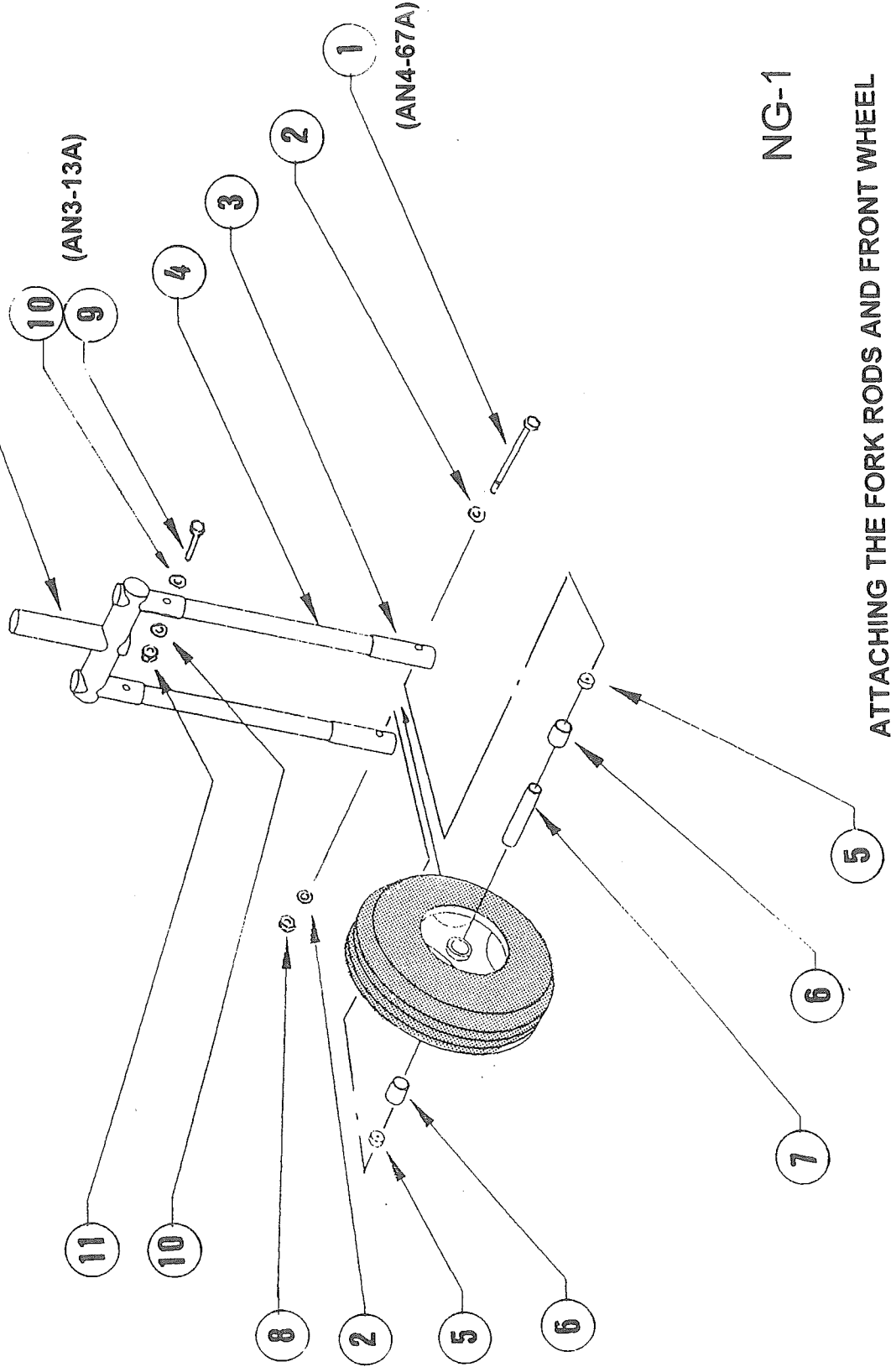
Landing Gear Parts List Figure LG-2

INDEX#	PART #	QTY	DESCRIPTION
1.	L-46AL L341L	1	LANDING GEAR ASSEMBLY - LEFT SIDE
2.	L-46AR L341R	1	LANDING GEAR ASSEMBLY - RIGHT SIDE
3.	L-100	2	3/8 DIAMETER SHOCK CORD
4.	AN4-17A	2	1/4" BOLT
5.	AN960-416	24	1/4" WASHER
6.	AN365-428	4	1/4" LOCKNUT
7.	L-99	2	RUBBER BUMPER
8.	AN4-14A	2	1/4" BOLT
9.	AM-4	2	MALE ROD END
10.	AN316-4R	2	JAM NUT
11.	L-341-3	2	MAIN GEAR BUNGEE TUBE
12.	SS 64	2	3/16" STAINLESS POP-RIVET
13.	AN4-32A	2	1/4" BOLT OPTIONAL FOR FASTBACK



ATTACHING THE MAIN LANDING GEAR LG-1 LG-2

SEE SECTION 1 FIG. CA-1



NG-1

ATTACHING THE FORK RODS AND FRONT WHEEL

