LANDING GEAR - SERVICING

1. General

A. This section has the servicing procedures necessary to keep the landing gear system in a serviceable condition.

TASK 12-21-03-640

2. Landing Gear Lubrication

NOTE: If you service the airplane with a grease type that differs from the grease type from the previous service, or if you do not know the grease type for the previous service, you must do the Grease Type Changeover procedure.

A. If possible do the airplane servicing in an area free of contamination from sand, dust or other environmental conditions that can contribute to improper lubrication procedures.

B. We recommend the equipment include a grease gun and other tools necessary to do the lubrication procedure.

WARNING: When you clean the wheel bearings, use low pressure shop air to dry the bearings. Do not spin the bearing cones with compressed air. Dry bearings without lubrication can explode at high rpm.

CAUTION: Make sure you can put grease into the zerk fitting. If you cannot put grease into the zerk fitting, find the cause and repair it. This will help prevent damage to the equipment.

C. When the lubrication task is completed, clean the unwanted grease from the zerk fitting and from around the bearings where the old and new grease has come out.

D. Refer to Figure 301 for the lubrication requirements on the nose landing gear. Refer to Figure 302 for the lubrication requirements on the main landing gear.

(1) When the wheel is disassembled to lubricate the bearing, or for any other purpose, do the special corrosion protection procedures described in Chapter 32 or the bearing life will be decreased.

E. Refer to Table 301 and 302 to find the lubrication data.

Table 301. Lubrication Specifics

ITEM DESCRIPTION	LUBRICATION TYPE	APPLICATION	FIGURE NUMBER	EFFECTIVITY
Torque Links (with five Grease Fittings)	GL	Gun	301 Sheet 1	Airplanes 20800134 and On and 208B0099 and On and Airplanes 20800001 thru 20800133 and 208B0001 thru 208B0098 Incorporating SK208-51.
Shock Strut	GL	Gun	301 Sheet 1	Airplanes 20800134 and On and 208B0099 and On and Airplanes 20800001 thru 20800133 and 208B0001 thru 208B0098 Incorporating SK208-51.
Shimmy Damper Pivots	OG	Oil Can	301 Sheet 1	Airplanes 20800134 and On and 208B0099 and On and Airplanes 20800001 thru 20800133 and 208B0001 thru 208B0098 Incorporating SK208-51.
Wheel Bearings	GWB	Hand	301 Sheet 1	Airplanes 20800134 and On and 208B0099 and On and Airplanes 20800001 thru 20800133 and 208B0001 thru 208B0098 Incorporating SK208-51.
Spring Yoke Bearings	OG	Oil Can	301 Sheet 1	Airplanes 20800134 and On and 208B0099 and On and Airplanes 20800001 thru 20800133 and 208B0001 thru 208B0098 Incorporating SK208-51.
Torque Links (with five Grease Fittings)	GL	Gun	301 Sheet 2	Airplanes 20800001 thru 20800133 and 208B0001 thru 208B0098 not Incorporating SK208-51.

Shock Strut	GL	Gun	301 Sheet 2	Airplanes 20800001 thru 20800133 and 208B0001 thru 208B0098 not Incorporating SK208-51.
Shimmy Damper Pivots	OG	Oil Can	301 Sheet 2	Airplanes 20800001 thru 20800133 and 208B0001 thru 208B0098 not Incorporating SK208-51.
Wheel Bearings	GWB	Hand	301 Sheet 2	Airplanes 20800001 thru 20800133 and 208B0001 thru 208B0098 not Incorporating SK208-51.
Spring Yoke Bearings	OG	Oil Can	301 Sheet 2	Airplanes 20800001 thru 20800133 and 208B0001 thru 208B0098 not Incorporating SK208-51.
Wheel Bearings	GWB	Hand	302 Sheet 1	

Table 302. Recommended Lubricants

LUBRICATION TYPE	PROCUREMENT SPECIFICATION	LUBRICANT DESCRIPTION	ALTERNATE
GL	MIL-G-21164	Grease, molybdenum disulfide, for low and high temperatures.	AMS/Oil GHD
OG	MIL-PRF-7870	Lubricating oil, general purpose, low temperature.	
GWB	None	Mobil Aviation Grease, SHC 100.	**NOTE 1**

NOTE 1:
Mobil Aviation Grease, SHC 100 is the only approved grease for the nose gear and the main landing gear wheel bearings.

END OF TASK

TASK 12-21-03-641

3. Nose Landing Gear Forward Drag Link Support Servicing (Airplanes Incorporating CAB-32-02 Only)

NOTE: Airplanes incorporating CAB-32-02 will have a placard with part number 26964006-X on the forward drag link support.

A. General

(1) This task gives the procedures to apply grease to the nose landing gear forward drag link support on airplanes that have incorporated CAB-32-02. If possible, complete the servicing in an area free of contamination from sand, dust or other environmental conditions that can contribute to improper lubrication procedures.

B. Tools and Equipment

(1) Grease Gun

(2) Type GL Grease (Refer to Table 302)

(3) 3016 Grease Zerk Fitting

C. Complete the Servicing of the Nose Landing Gear Forward Drag Link Support.

(1) Remove the nose gear fairing to get access to the forward support.

(2) Remove the screw and jack point from the forward support assembly.

(3) Install the 3016 grease zerk in the forward support assembly.

CAUTION: Make sure you can put grease into the zerk fitting. If you cannot put grease into the zerk fitting, find the cause and repair it. Insufficient lubrication can occur if the fitting will not accept grease.

(4) Use a grease gun to pump Type GL grease into the forward support liner.

(5) Use a rag to remove any excess grease from the forward support assembly.

(6) Remove the 3016 grease zerk from the forward support assembly.

(7) Install the screw and jack point in the forward support assembly.

(8) Install the nose gear fairing.

END OF TASK

4. Grease Type Changeover Procedure

NOTE: You must do the applicable grease type changeover procedure before you lubricate the airplane with a grease approved to a different specification type, or produced by a different manufacturer.

A. Do the Nose Gear Wheel Bearing Grease Type Changeover (Refer to Figure 301 Sheet 1)

(1) Remove the nose wheel. Refer to Chapter 32, Wheels and Brakes - Maintenance Practices.

(2) Remove the bearing cones.

(3) Clean the nose gear wheel bearings. Refer to Chapter 20, General Solvents/Cleaners - Maintenance Practices.

WARNING: Use low pressure shop air to dry bearings. Do not spin bearing cones with compressed air. Dry running bearings without lubrication can explode.

(4) Examine for, and replace the bearing cups if the cups are loose in the wheels, or there are scratches, pitting, corrosion, or signs of overheating.

(5) Examine for, and replace the bearing cones if there are nicks, scratches, water staining, spalling, heat discoloration, roller wear, cage damage, cracks, or distortion.

(6) Re-pack the bearings with Mobil SHC-100 grease.

(7) Re-pack the bearings with Mobil SHC-100 grease.

(8) Inspect snap rings and grease seals for distortion or wear.

NOTE: Molded rubber grease seals should be replaced if cracked, dried out or distorted.

(9) Install the bearings in the wheels with the grease seals.

(10) Install the nose wheel. Refer to Chapter 32, Wheels and Brakes - Maintenance Practices.

Figure 301 : Sheet 1 : Nose Gear Lubrication

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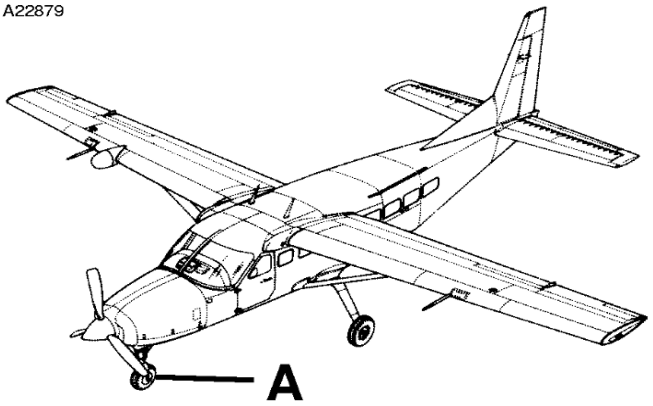
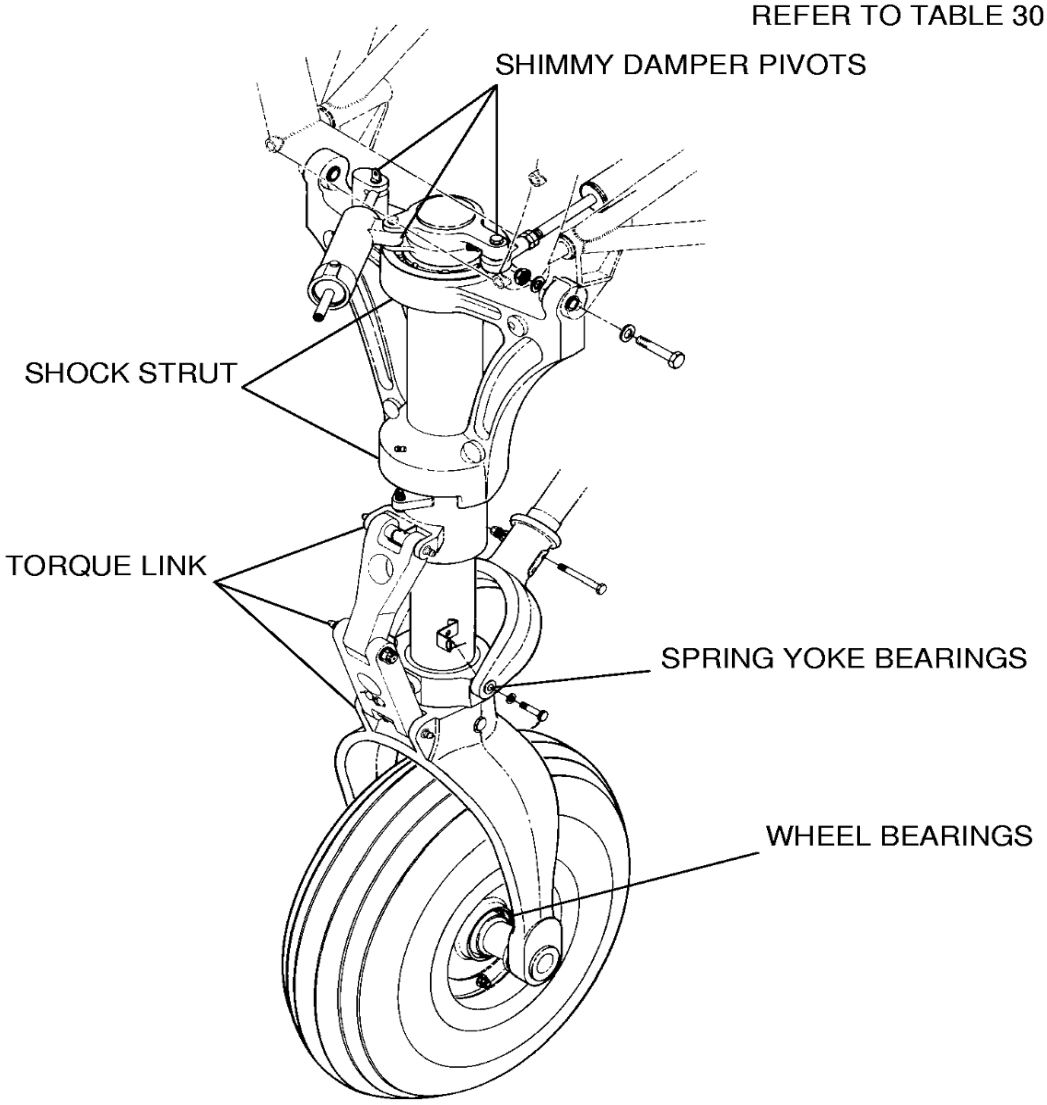


NOTE 1: CLEAN THE POLISHED SURFACE OF THE SHOCK STRUT WITH A CLEAN LINT-FREE CLOTH MOIST WITH MIL-H-5606 HYDRAULIC FLUID OR KEROSENE.

NOTE 2: WHEN THE WHEEL IS DISASSEMBLED TO LUBRICATE THE BEARINGS, DO THE PROTECTION PROCEDURES IN CHAPTER 32 OR THE BEARING LIFE WILL BE DECREASED.

NOTE 3: FOR THE TYPE OF LUBRICATION, REFER TO TABLE 301.



DETAIL A

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Figure 301 : Sheet 2 : Nose Gear Lubrication

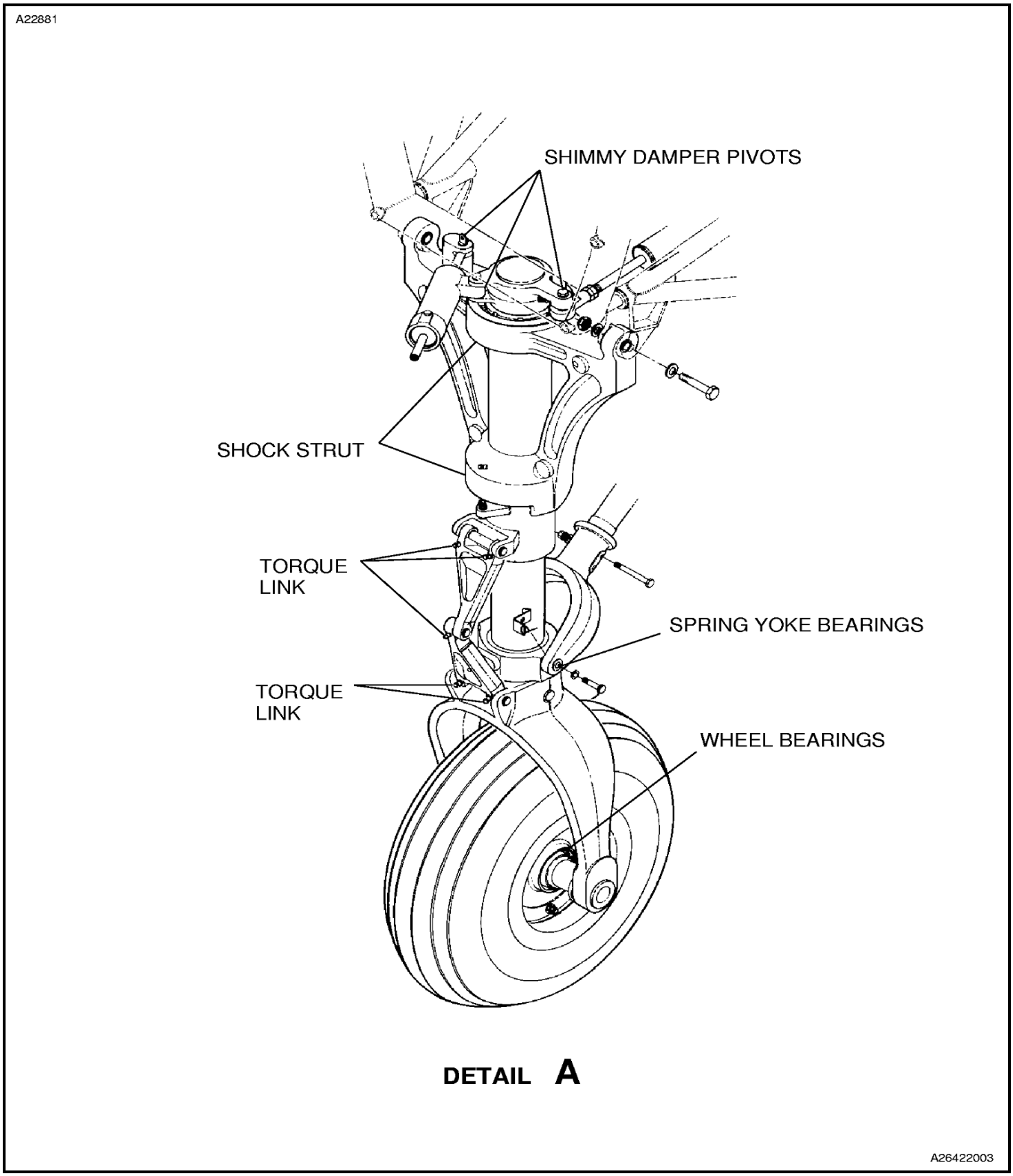
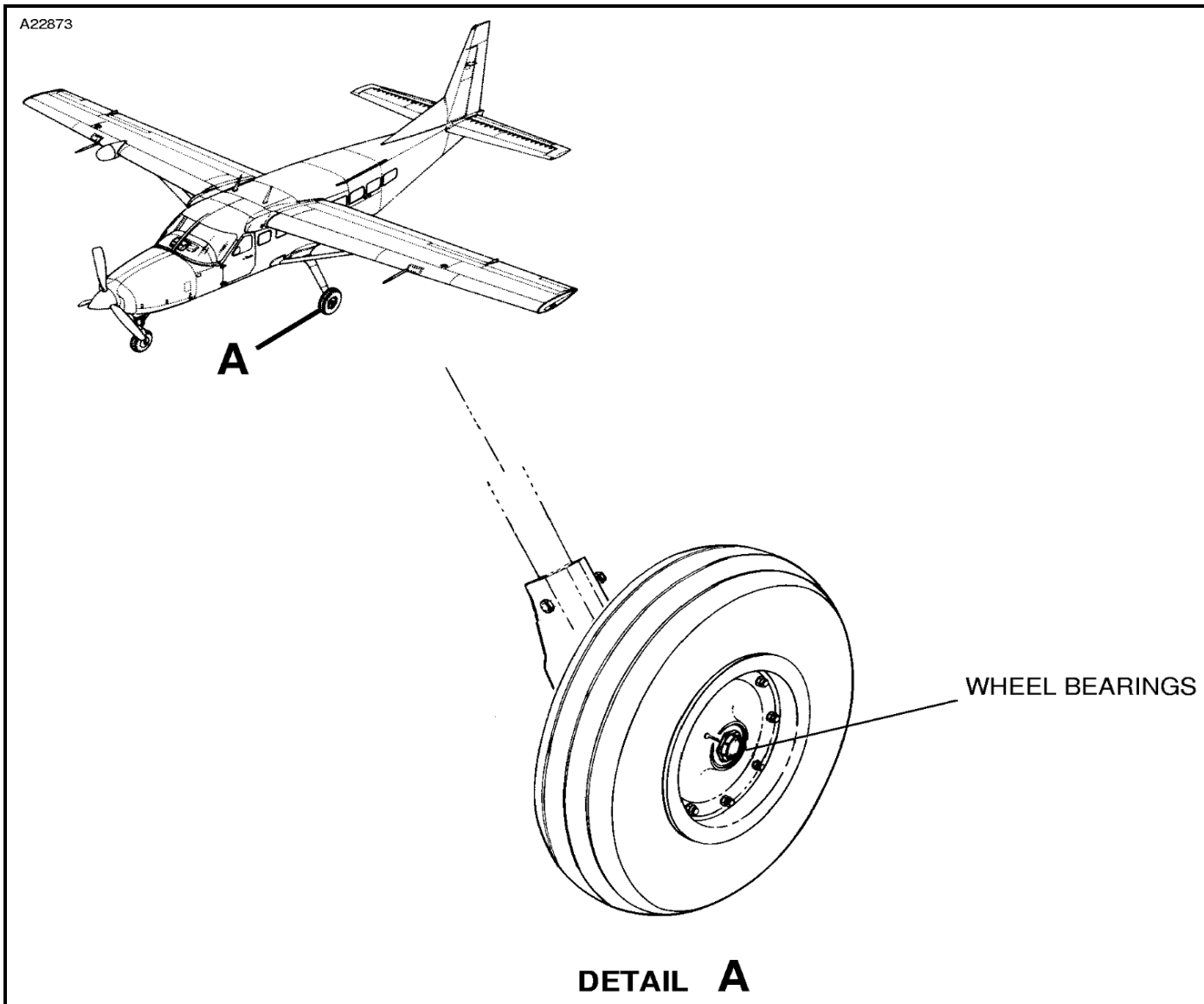


Figure 302 : Sheet 1 : Main Gear Lubrication



NOTE 1: WHEN THE WHEEL IS DISASSEMBLED TO LUBRICATE THE BEARINGS, DO THE PROTECTION PROCEDURES IN CHAPTER 32 OR THE BEARING LIFE WILL BE DECREASED.

NOTE 2: FOR THE TYPE OF LUBRICATION, REFER TO TABLE 301.

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