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MAINTENANCE MANUAL SUPPLEMENT

NFC Document No. MMS-920

CESSNA CITATION MODEL 500/501

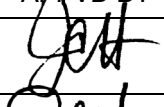
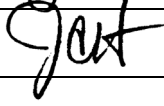
INCREASED RAMP AND TAKEOFF WEIGHT INSTALLATION

1 SEPTEMBER 1994

This supplement must be attached to the Cessna Citation Model 500/501 Maintenance Manual when the New Flight Corporation Modification Number 91891-001 or 91891-003 is installed in accordance with FAA STC No. SA2628NM or SA2873NM. The information contained herein supplements the basic maintenance manual in the areas listed.

Prepared by J. Haworth

Approved by J. Haworth

REV	DATE	DESCRIPTION	PREP BY	APPVD BY
A	5-5-95	Updated Replacement Life Limits	JCH	
B	6-17-02	Updated Replacement Life Limits	JCH	

INTRODUCTION

This manual is applicable to the Cessna Citation Model 500/501 when it has the New Flight Corporation Increased Ramp and Takeoff Weight modifications (P.N. 91891-001 or 91891-003) installed.

Configuration 91891-001 increases the maximum Ramp and Takeoff weights without changing the main gear wheels and brakes. It uses the standard, factory equipped wheels and brakes.

Configuration 91891-003 increases the maximum Ramp and Takeoff weights, and also replaces the factory equipped wheels and brakes with new, heavy-duty wheels and brakes to improve the brake life.

This manual is a supplement to the Cessna Citation Model 500/501 Maintenance Manual. It pertains only to the areas affected by the ramp and takeoff weight increase. Maintenance information contained herein supplements the basic manual in the areas listed.

The supplement is arranged using the same chapter/system element numbers contained in the basic manual. For example:

52-40-00. Service Door

will be found in Chapter 52, Doors, Section 40, Service Doors. The material contained in this supplement and keyed 52-40-00 should be added to that chapter and section of the basic Maintenance Manual.

The following chapters in the basic Maintenance Manual are affected by this supplement:

- Chapter 4 Airworthiness Limitations
- Chapter 12 Brakes - Wear Limits (Configuration -003 only)
- Chapter 32 Wheels and Brakes (Configuration -003 only)

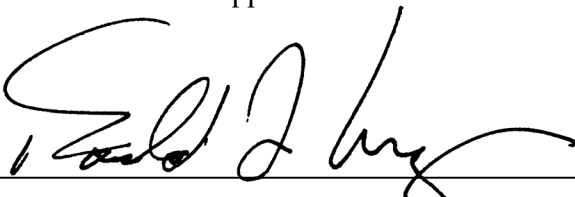
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AIRWORTHINESS LIMITATIONS

NOTE:

This Airworthiness Limitations section is FAA approved and specifies maintenance required under 43.16 and 91.163 of the Federal Aviation Regulations unless an alternate program has been FAA approved.

Approved by 

Manager, Aircraft Certification Office
Federal Aviation Administration
Denver, Colorado

Date of Approval 6/12/02

A. MAINTENANCE INSPECTION SCHEDULE

No change from standard approved inspection intervals as established in Cessna Citation Maintenance Manual Chapter 4, Section 10, "Inspection Time Limits."

B. REPLACEMENT TIME LIMITS

The replacement times presented in this section specify the currently approved intervals at which the listed aircraft components must be replaced.

LANDING GEAR LIFE LIMITS

Part Number	Description	Effectivity	Replacement
NOSE GEAR	The following components are included in the nose gear assembly and attaching hardware, and unless otherwise noted, the replacement life limit of each is as indicated for the entire assembly: Trunnion Pins, Trunnion Support Fitting, Actuator, Actuator Support Fitting, Actuator Attach Bolt, Trunnion Assembly, Piston Weld Assembly, Fork, Cylinder Braze Assembly, Upper and Lower Torque Link, Torque Link Shaft, Axle Shaft, Axle Tube, Axle Spacers and Axle Buckets.		
5542000-4	Nose Landing Gear Assembly and attaching hardware. Not included are 5542301-3 or 5542301-5 Trunnion, 5542223-1 Axle Spacers, or nose gear actuator. See individual component.	-0008 thru -0119	29,600
5542000-6	Nose Landing Gear Assembly and attaching hardware. Not included are 5542223-1 Axle Spacers, or nose gear actuator. See individual component.	-0001 thru -0007	29,600
5542000-7	Nose Landing Gear Assembly and attaching hardware. Not included are 5542301-5 Trunnion, 5542223-1 Axle Spacers, 5513056-5, -6 Trunnion Support Fitting, Piston Assembly, 5542100-3 cylinder braze assembly, or nose gear actuator. See individual component.	-0120 and ON	29,600
5542301-3	Trunnion Assembly	-0008 thru -0040	22,700
5542301-5	Trunnion Assembly	-0041 and ON	17,200

Part Number	Description	Effectivity	Replacement
NOSE GEAR (con't)			
5542105-1	Piston Weld Assembly	-0146 thru -0409	10,000
5542105-2	Piston Weld Assembly	-0410 thru -0666	10,000
5542105-3	Piston Weld Assembly	-0667 and ON	10,000
5542100-3	Cylinder Braze Assembly	-0298 and ON	17,200
9912063-3	Actuator Assembly		4,200
9912063-5,-7,-9,-11,-13	Actuator Assembly		24,200
5542223-1	Axle Spacer		17,200
5542208-3	Torque Link Shaft		17,200
5513056-5, -6	Trunnion Support Fitting	-0456 and ON	17,200

Part Number	Description	Effectivity	Replacement
MAIN GEAR, Aircraft -0001 thru -0051			
5541000-1,-2	Gear assembly	-0001 thru -0051	
5541204-1	Actuator attach stud	-0001 thru -0022	30,100
5541204-2	Actuator attach stud	-0023 thru -0051	30,100
5541306-1	Trunnion	-0001 thru -0051	16,100
5541100-1	Left cylinder assembly	-0001 thru -0023	4,600
5541100-2	Right cylinder assembly	-0001 thru -0023	4,600
5541100-3	Left cylinder assembly	-0024 thru -0038	3,800
5541100-4	Right cylinder assembly	-0024 thru -0038	3,800
5541107-1	Left cylinder assembly	-0039 thru -0051	12,600
5541107-2	Right cylinder assembly	-0039 thru -0051	12,600
5541101-1	Left piston braze assembly	-0001 thru -0051	4,100
5541101-2	Right piston braze assembly	-0001 thru -0051	4,100
5541214-4	Axle	-0001 thru -0051	16,000
5541310-2	Upper piston bearing	-0001 thru -0051	21,400
5541304-1	Upper torque link assembly	-0001 thru -0038	30,000
5541304-2	Upper torque link assembly	-0001 thru -0038	30,000
5541304-6	Upper torque link assembly	-0039 thru -0051	30,000
5541304-9	Upper torque link assembly	-0039 thru -0051	21,400
5541304-2	Lower torque link assembly	-0001 thru -0038	30,000
5541304-3	Lower torque link assembly	-0001 thru -0038	30,000
5541304-6	Lower torque link assembly	-0039 thru -0051	30,000
5541304-11	Lower torque link assembly	-0039 thru -0051	21,400
5541212-1	Torque link shaft	-0001 thru -0051	30,000
5541220-2	Torque link bolt	-0001 thru -0051	30,000
MS17825-8	Torque link nut	-0001 thru -0051	21,400

Part Number	Description	Effectivity	Replacement
MAIN GEAR (cont), Aircraft -0052 thru -0070			
5541000-9,-10	Gear assembly	-0052 thru -0070	
5541204-2	Actuator attach stud	-0052 thru -0070	30,100
5541306-1	Trunnion	-0052 thru -0070	16,100
5541100-5	Left cylinder assembly	-0052 thru -0070	3,800
5541100-6	Right cylinder assembly	-0052 thru -0070	3,800
5541101-1	Left piston braze assembly	-0052 thru -0070	4,100
5541101-2	Right piston braze assembly	-0052 thru -0070	4,100
5541214-4	Axle	-0052 thru -0070	16,000
5541310-2	Upper piston bearing	-0052 thru -0070	21,400
5541304-6	Upper torque link assembly	-0052 thru -0070	30,000
5541304-6	Lower torque link assembly	-0052 thru -0070	30,000
5541304-11	Lower torque link assembly	-0052 thru -0070	21,400
5541212-1	Torque link shaft	-0052 thru -0070	30,000
5541220-2	Torque link bolt	-0052 thru -0070	30,000
MS17825-8	Torque link nut	-0052 thru -0070	21,400

Part Number	Description	Effectivity	Replacement
MAIN GEAR (cont), Aircraft -0001 thru -0070, incorporating SB32-1			
5541000-17,-18	Gear assembly	-0001 thru -0070, incorporating SB32-1	
5541204-2	Actuator attach stud		30,100
6541204-2	Actuator attach stud		21,500
5541306-2,-3,-5	Trunnion		21,400
5541107-1	Left cylinder assembly		12,600
5541107-2	Right cylinder assembly		12,600
5541109-1	Left cylinder assembly		12,600
5541109-2	Right cylinder assembly		12,600
5541109-5	Left cylinder assembly		12,600
5541109-6	Right cylinder assembly		12,600
5541320-1	Left cylinder assembly		21,400
5541320-2	Right cylinder assembly		21,400
5541108-1	Left piston weld assembly		8,100
5541108-2	Right piston weld assembly		8,100
5541108-3	Left piston weld assembly		11,800
5541108-4	Right piston weld assembly		11,800
5541108-5	Left piston weld assembly		11,800
5541108-6	Right piston weld assembly		11,800
5541330-3	Left piston weld assembly		21,400
5541330-4	Right piston weld assembly		21,400
6541200-2	Axle		21,400
5541310-3	Upper piston bearing		21,400
5541304-2	Upper torque link assembly		30,000
5541304-6	Upper torque link assembly		30,000
5541304-9	Upper torque link assembly		21,400
5541304-11	Lower torque link assembly		21,400
5541212-3	Torque link shaft		30,000
6541212-2	Torque link shaft		21,400
5541220-2	Torque link bolt		30,000
MS17825-8	Torque link nut		21,400

Part Number	Description	Effectivity	Replacement
MAIN GEAR (cont), Aircraft -0071 thru -0597			
5541000-11,-12	Main Landing Gear Assembly	-0071 thru -0597	
5541204-2	Actuator attach stud	-0071 thru -0465	30,100
6541204-2	Actuator attach stud	-0466 thru -0597	21,500
5541306-1	Trunnion	-0071 thru -0073	16,100
5541306-2	Trunnion	-0074 thru -0307	21,400
5541306-3	Trunnion	-0308 thru -0597	21,400
5541107-1	Left cylinder assembly	-0071 thru -0307	12,600
5541107-2	Right cylinder assembly	-0071 thru -0274	12,600
5541107-4	Right cylinder assembly	-0275 thru -0307	12,600
5541109-5	Left cylinder assembly	-0308 thru -0597	12,600
5541109-6	Right cylinder assembly	-0308 thru -0597	12,600
5541108-1	Left piston weld assembly	-0071 thru -0087	8,100
		-0089 thru -0092	
		-0094 thru -0097	
		-0099 thru -0117	
5541108-2	Right piston weld assembly	-0071 thru -0087	8,100
		-0089 thru -0092	
		-0094 thru -0097	
		-0099 thru -0117	
5541108-3	Left piston weld assembly	-0088, -0093, -0098	11,800
5541108-4	Right piston weld assembly	-0088, -0093, -0098	11,800
5541108-5	Left piston weld assembly	-0118 thru -0597	11,800
5541108-6	Right piston weld assembly	-0118 thru -0597	11,800
5541330-1	Left piston weld assembly		21,400
5541330-2	Right piston weld assembly		21,400
6541200-1	Axle	-0071 thru -0597	21,400
5541310-3	Upper piston bearing	-0071 thru -0597	21,400
5541304-6	Upper torque link assembly	-0071 thru -0302	30,000
5541304-9	Upper torque link assembly	-0071 thru -0597	21,400
5541304-10	Upper torque link assembly	-0303 thru -0597	21,400
5541304-6	Lower torque link assembly	-0071 thru -0597	30,000
5541304-11	Lower torque link assembly	-0071 thru -0597	21,400
5541212-1	Torque link shaft	-0071 thru -0405	30,000
5541212-3	Torque link shaft	-0406 thru -0465	30,000
6541212-2	Torque link shaft	-0466 thru -0597	21,400
5541220-2	Torque link bolt	-0071 thru -0597	30,000
MS17825-8	Torque link nut	-0071 thru -0597	21,400

Part Number	Description	Effectivity	Replacement
MAIN GEAR (cont), Aircraft -0598 thru -0623			
6541000-11,-12	Gear assembly	-0598 thru -0623	
6541204-2	Actuator attach stud	-0598 thru -0623	21,500
5541306-4	Trunnion	-0598 thru -0623	21,400
5541320-1	Left cylinder assembly	-0598	21,400
5541320-3	Left cylinder assembly	-0599 thru -0623	21,400
5541320-2	Right cylinder assembly	-0598	21,400
5541320-4	Right cylinder assembly	-0599 thru -0623	21,400
5541330-1	Left piston weld assembly	-0598 thru -0623	21,400
5541330-2	Right piston weld assembly	-0598 thru -0623	21,400
6541200-1	Axle	-0598 thru -0623	21,400
5541310-3	Upper piston bearing	-0598 thru -0623	21,400
5541304-9	Upper torque link assembly	-0598 thru -0623	21,400
5541304-10	Upper torque link assembly	-0598 thru -0623	21,400
5541304-6	Lower torque link assembly	-0598 thru -0623	30,000
5541304-11	Lower torque link assembly	-0598 thru -0623	21,400
6541212-2	Torque link shaft	-0598 thru -0623	21,400
5541220-2	Torque link bolt	-0598 thru -0623	30,000
MS17825-8	Torque link nut	-0598 thru -0623	21,400

Part Number	Description	Effectivity	Replacement
MAIN GEAR (cont), Aircraft -0624 thru -0674			
6541000-27,-28	Gear assembly	-0624 thru -0674	
6541204-2	Actuator attach stud	-0624 thru -0672	30,100
6541204-4	Actuator attach stud	-0673, -0674	21,500
5541306-4	Trunnion	-0624 thru -0674	21,400
5541320-3	Left cylinder assembly	-0624 thru -0669	21,400
5541320-5	Left cylinder assembly	-0670 thru -0674	21,400
5541320-4	Right cylinder assembly	-0624 thru -0669	21,400
5541320-6	Right cylinder assembly	-0670 thru -0674	21,400
5541330-1	Left piston weld assembly	-0624 thru -0666	21,400
5541330-2	Right piston weld assembly	-0624 thru -0666	21,400
5541330-3	Left piston weld assembly	-0667 thru -0674	21,400
5541330-4	Right piston weld assembly	-0667 thru -0674	21,400
6541200-1	Axle	-0624 thru -0674	21,400
5541310-3	Upper piston bearing	-0624 thru -0674	21,400
5541304-9	Upper torque link assembly	-0624 thru -0674	21,400
5541304-10	Upper torque link assembly	-0624 thru -0674	21,400
5541304-6	Lower torque link assembly	-0624 thru -0674	30,000
5541304-11	Lower torque link assembly	-0624 thru -0674	21,400
6541212-2	Torque link shaft	-0624 thru -0674	21,400
5541220-2	Torque link bolt	-0624 thru -0674	30,000
MS17825-8	Torque link nut	-0624 thru -0674	21,400

Part Number	Description	Effectivity	Replacement
MAIN GEAR (cont), Aircraft -0675 and ON			
6541000-37,-38	Gear assembly	-0675 and ON	
6541204-2	Actuator attach stud	-0675 and ON	21,500
5541306-5	Trunnion	-0675 and ON	21,400
5541320-5	Left cylinder assembly	-0675 and ON	21,400
5541320-6	Right cylinder assembly	-0675 and ON	21,400
5541330-3	Left piston weld assembly	-0675 and ON	21,400
5541330-4	Right piston weld assembly	-0675 and ON	21,400
6541200-1	Axle	-0675 and ON	21,400
5541310-3	Upper piston bearing	-0675 and ON	21,400
5541304-9	Upper torque link assembly	-0675 and ON	21,400
5541304-10	Upper torque link assembly	-0675 and ON	21,400
5541304-6	Lower torque link assembly	-0675 and ON	30,000
5541304-11	Lower torque link assembly	-0675 and ON	21,400
6541212-2	Torque link shaft	-0675 and ON	21,400
5541220-2	Torque link bolt	-0675 and ON	30,000
MS17825-8	Torque link nut	-0675 and ON	21,400

Part Number	Description	Effectivity	Replacement
MAIN GEAR (cont), Miscellaneous Components			
5541205-1,-2	Trunnion attach pin	-0001 thru -0033	30,000
5541205-3,-4	Trunnion attach pin	-0034 and ON	21,400
9912053-5,-7,-11,-13,-15,-17,-19	Left actuator assembly		27,400
9912053-6,-8,-12,-14,-16,-18,-20	Right actuator assembly		27,400
5527213-1	Actuator attach pin	-0001 thru -0465	30,100
6527213-2	Actuator attach pin	-0466 and ON	21,500
5522700-1	Left forward trunnion fitting assy	-0001 and ON	15,400
5522700-2	Right forward trunnion fitting assy	-0001 and ON	15,400
5522710-1	Left aft trunnion fitting assy	-0001 thru -0590	30,000
5522710-11	Left aft trunnion fitting assy	-0591 thru -0664	30,000
5522710-7	Left aft trunnion fitting assy	-0665 and ON	30,000
5522710-2	Right aft trunnion fitting assy	-0001 thru -0590	30,000
5522710-12	Right aft trunnion fitting assy	-0591 thru -0664	30,000
5522710-8	Right aft trunnion fitting assy	-0665 and ON	30,000

C. EQUIVALENT LIFE FOR AIRCRAFT WITH PRE-MOD LANDINGS

For airplanes which have takeoffs and landings prior to the modifications, the life landing gear must be adjusted to equivalent heavy weight operations. The following pages show a life reduction to be used for an aircraft for every 1000 pre-mod landings.

Calculation of replacement time limits for aircraft with pre-mod landings is a two step process. First, the number of takeoffs/landings at the lighter weights must be converted to equivalent heavy weight operations. Then this number must be subtracted from the heavy weight life limits listed in the previous section to determine the replacement life limit for the component.

Two worksheets are provided at the end of this section to help make these calculations.

EXAMPLE:

An aircraft has 3500 pre-mod takeoff/landing operations before the modification was installed to increase the takeoff and ramp weight. Trunnion, part number 5541205-1, also had a replacement life limit of 41,600 operations originally. After modification, the trunnion life limit is 30,000 operations. The equivalent life per 1000 operations is 721.

First, it is necessary to calculate the equivalent life:

$$\begin{array}{r}
 \text{Number of pre-mod operations since new or replacement} \\
 \left. \begin{array}{l} \\ \\ \end{array} \right\} \\
 \text{Equivalent life} = 3500 \times \frac{721}{1000} = 2524 \\
 \left. \begin{array}{l} \\ \\ \end{array} \right\} \begin{array}{l} \text{Equivalent Life/1000 operations, from section 4-12-00} \\ \\ \text{Always 1000} \end{array}
 \end{array}$$

Next, calculate the new replacement life by subtracting the equivalent life from the maximum replacement, and adding this to the pre-mod operation:

$$\begin{array}{r}
 \left. \begin{array}{l} \\ \\ \end{array} \right\} \text{Next replacement due (always higher than life limit)} \\
 30,000 - 2,524 + 3,500 = 30,976 \\
 \left. \begin{array}{l} \\ \\ \end{array} \right\} \begin{array}{l} \text{Life Limit from Section 4-11-00} \\ \text{Equivalent Landings} \\ \text{Pre-mod Landings Recorded} \end{array}
 \end{array}$$

Note: Full Stop Landings after modification are always counted one for one.

LANDING GEAR EQUIVALENT LIFE

Part Number	Description	Effectivity	Equivalent Life/1000
NOSE GEAR			
5542000-4	Nose Landing Gear Assembly and attaching hardware. Refer to individual components below for exceptions to life limit.	-0008 thru -0119	722
5542000-6	Nose Landing Gear Assembly and attaching hardware. Refer to individual components below for exceptions to life limit.	-0001 thru -0007	722
5542000-7	Nose Landing Gear Assembly and attaching hardware. Refer to individual components below for exceptions to life limit.	-0120 and ON	722
5542301-3	Trunnion Assembly	-0008 thru -0040	744
5542301-5	Trunnion Assembly	-0041 and ON	764
5542105-1	Piston Weld Assembly	-0146 thru -0409	800
5542105-2	Piston Weld Assembly	-0410 thru -0666	800
5542105-3	Piston Weld Assembly	-0667 and ON	800
5542100-3	Cylinder Braze Assembly	-0298 and ON	764
9912063-3	Actuator Assembly		835
9912063-5,-7,-9,-11,-13	Actuator Assembly		742
5542223-1	Axle Spacer		764
5542208-3	Torque Link Shaft		764
5513056-5, -6	Trunnion Support Fitting	-0456 and ON	764

Part Number	Description	Effectivity	Equivalent Life/1000
MAIN GEAR, Aircraft -0001 thru -0051			
5541000-1,-2	Gear assembly	-0001 thru -0051	
5541204-1	Actuator attach stud	-0001 thru -0022	724
5541204-2	Actuator attach stud	-0023 thru -0051	724
5541306-1	Trunnion	-0001 thru -0051	768
5541100-1	Left cylinder assembly	-0001 thru -0023	830
5541100-2	Right cylinder assembly	-0001 thru -0023	830
5541100-3	Left cylinder assembly	-0024 thru -0038	836
5541100-4	Right cylinder assembly	-0024 thru -0038	836
5541107-1	Left cylinder assembly	-0039 thru -0051	784
5541107-2	Right cylinder assembly	-0039 thru -0051	784
5541101-1	Left piston braze assembly	-0001 thru -0051	834
5541101-2	Right piston braze assembly	-0001 thru -0051	834
5541214-4	Axle	-0001 thru -0051	769
5541310-2	Upper piston bearing	-0001 thru -0051	749
5541304-1	Upper torque link assembly	-0001 thru -0038	721
5541304-2	Upper torque link assembly	-0001 thru -0038	721
5541304-6	Upper torque link assembly	-0039 thru -0051	721
5541304-9	Upper torque link assembly	-0039 thru -0051	749
5541304-2	Lower torque link assembly	-0001 thru -0038	721
5541304-3	Lower torque link assembly	-0001 thru -0038	721
5541304-6	Lower torque link assembly	-0039 thru -0051	721
5541304-11	Lower torque link assembly	-0039 thru -0051	749
5541212-1	Torque link shaft	-0001 thru -0051	721
5541220-2	Torque link bolt	-0001 thru -0051	721
MS17825-8	Torque link nut	-0001 thru -0051	749

Part Number	Description	Effectivity	Equivalent Life/1000
MAIN GEAR (cont), Aircraft -0052 thru -0070			
5541000-9,-10	Gear assembly	-0052 thru -0070	
5541204-2	Actuator attach stud	-0052 thru -0070	724
5541306-1	Trunnion	-0052 thru -0070	768
5541100-5	Left cylinder assembly	-0052 thru -0070	836
5541100-6	Right cylinder assembly	-0052 thru -0070	836
5541101-1	Left piston braze assembly	-0052 thru -0070	834
5541101-2	Right piston braze assembly	-0052 thru -0070	834
5541214-4	Axle	-0052 thru -0070	769
5541310-2	Upper piston bearing	-0052 thru -0070	749
5541304-6	Upper torque link assembly	-0052 thru -0070	721
5541304-6	Lower torque link assembly	-0052 thru -0070	721
5541304-11	Lower torque link assembly	-0052 thru -0070	749
5541212-1	Torque link shaft	-0052 thru -0070	721
5541220-2	Torque link bolt	-0052 thru -0070	721
MS17825-8	Torque link nut	-0052 thru -0070	749

Part Number	Description	Effectivity	Equivalent Life/1000
MAIN GEAR (cont), Aircraft -0001 thru -0070, incorporating SB32-1			
5541000-17,-18	Gear assembly	-0001 thru -0070, incorporating SB32-1	
5541204-2	Actuator attach stud		724
6541204-2	Actuator attach stud		751
5541306-2,-3,-5	Trunnion		749
5541107-1	Left cylinder assembly		784
5541107-2	Right cylinder assembly		784
5541109-1	Left cylinder assembly		784
5541109-2	Right cylinder assembly		784
5541109-5	Left cylinder assembly		784
5541109-6	Right cylinder assembly		784
5541320-1	Left cylinder assembly		749
5541320-2	Right cylinder assembly		749
5541108-1	Left piston weld assembly		807
5541108-2	Right piston weld assembly		807
5541108-3	Left piston weld assembly		787
5541108-4	Right piston weld assembly		787
5541108-5	Left piston weld assembly		787
5541108-6	Right piston weld assembly		787
5541330-3	Left piston weld assembly		749
5541330-4	Right piston weld assembly		749
6541200-2	Axle		749
5541310-3	Upper piston bearing		749
5541304-2	Upper torque link assembly		721
5541304-6	Upper torque link assembly		721
5541304-9	Upper torque link assembly		749
5541304-11	Lower torque link assembly		749
5541212-3	Torque link shaft		721
6541212-2	Torque link shaft		749
5541220-2	Torque link bolt		721
MS17825-8	Torque link nut		749

Part Number	Description	Effectivity	Equivalent Life/1000
MAIN GEAR (cont), Aircraft -0071 thru -0597			
5541000-11,-12	Main Landing Gear Assembly	-0071 thru -0597	
5541204-2	Actuator attach stud	-0071 thru -0465	724
6541204-2	Actuator attach stud	-0466 thru -0597	751
5541306-1	Trunnion	-0071 thru -0073	768
5541306-2	Trunnion	-0074 thru -0307	749
5541306-3	Trunnion	-0308 thru -0597	749
5541107-1	Left cylinder assembly	-0071 thru -0307	784
5541107-2	Right cylinder assembly	-0071 thru -0274	784
5541107-4	Right cylinder assembly	-0275 thru -0307	784
5541109-5	Left cylinder assembly	-0308 thru -0597	784
5541109-6	Right cylinder assembly	-0308 thru -0597	784
5541108-1	Left piston weld assembly	-0071 thru -0087	807
		-0089 thru -0092	
		-0094 thru -0097	
		-0099 thru -0117	
5541108-2	Right piston weld assembly	-0071 thru -0087	807
		-0089 thru -0092	
		-0094 thru -0097	
		-0099 thru -0117	
5541108-3	Left piston weld assembly	-0088, -0093, -0098	787
5541108-4	Right piston weld assembly	-0088, -0093, -0098	787
5541108-5	Left piston weld assembly	-0118 thru -0597	787
5541108-6	Right piston weld assembly	-0118 thru -0597	787
5541330-1	Left piston weld assembly		749
5541330-2	Right piston weld assembly		749
6541200-1	Axle	-0071 thru -0597	749
5541310-3	Upper piston bearing	-0071 thru -0597	749
5541304-6	Upper torque link assembly	-0071 thru -0302	721
5541304-9	Upper torque link assembly	-0071 thru -0597	749
5541304-10	Upper torque link assembly	-0303 thru -0597	749
5541304-6	Lower torque link assembly	-0071 thru -0597	721
5541304-11	Lower torque link assembly	-0071 thru -0597	749
5541212-1	Torque link shaft	-0071 thru -0405	721
5541212-3	Torque link shaft	-0406 thru -0465	721
6541212-2	Torque link shaft	-0466 thru -0597	749
5541220-2	Torque link bolt	-0071 thru -0597	721
MS17825-8	Torque link nut	-0071 thru -0597	749

Part Number	Description	Effectivity	Equivalent Life/1000
MAIN GEAR (cont), Aircraft -0598 thru -0623			
6541000-11,-12	Gear assembly	-0598 thru -0623	
6541204-2	Actuator attach stud	-0598 thru -0623	751
5541306-4	Trunnion	-0598 thru -0623	749
5541320-1	Left cylinder assembly	-0598	749
5541320-3	Left cylinder assembly	-0599 thru -0623	749
5541320-2	Right cylinder assembly	-0598	749
5541320-4	Right cylinder assembly	-0599 thru -0623	749
5541330-1	Left piston weld assembly	-0598 thru -0623	749
5541330-2	Right piston weld assembly	-0598 thru -0623	749
6541200-1	Axle	-0598 thru -0623	749
5541310-3	Upper piston bearing	-0598 thru -0623	749
5541304-9	Upper torque link assembly	-0598 thru -0623	749
5541304-10	Upper torque link assembly	-0598 thru -0623	749
5541304-6	Lower torque link assembly	-0598 thru -0623	721
5541304-11	Lower torque link assembly	-0598 thru -0623	749
6541212-2	Torque link shaft	-0598 thru -0623	749
5541220-2	Torque link bolt	-0598 thru -0623	721
MS17825-8	Torque link nut	-0598 thru -0623	749

Part Number	Description	Effectivity	Equivalent Life/1000
MAIN GEAR (cont), Aircraft -0624 thru -0674			
6541000-27,-28	Gear assembly	-0624 thru -0674	
6541204-2	Actuator attach stud	-0624 thru -0672	724
6541204-4	Actuator attach stud	-0673, -0674	751
5541306-4	Trunnion	-0624 thru -0674	749
5541320-3	Left cylinder assembly	-0624 thru -0669	749
5541320-5	Left cylinder assembly	-0670 thru -0674	749
5541320-4	Right cylinder assembly	-0624 thru -0669	749
5541320-6	Right cylinder assembly	-0670 thru -0674	749
5541330-1	Left piston weld assembly	-0624 thru -0666	749
5541330-2	Right piston weld assembly	-0624 thru -0666	749
5541330-3	Left piston weld assembly	-0667 thru -0674	749
5541330-4	Right piston weld assembly	-0667 thru -0674	749
6541200-1	Axle	-0624 thru -0674	749
5541310-3	Upper piston bearing	-0624 thru -0674	749
5541304-9	Upper torque link assembly	-0624 thru -0674	749
5541304-10	Upper torque link assembly	-0624 thru -0674	749
5541304-6	Lower torque link assembly	-0624 thru -0674	721
5541304-11	Lower torque link assembly	-0624 thru -0674	749
6541212-2	Torque link shaft	-0624 thru -0674	749
5541220-2	Torque link bolt	-0624 thru -0674	721
MS17825-8	Torque link nut	-0624 thru -0674	749

Part Number	Description	Effectivity	Equivalent Life/1000
MAIN GEAR (cont), Aircraft -0675 and ON			
6541000-37,-38	Gear assembly	-0675 and ON	
6541204-2	Actuator attach stud	-0675 and ON	751
5541306-5	Trunnion	-0675 and ON	749
5541320-5	Left cylinder assembly	-0675 and ON	749
5541320-6	Right cylinder assembly	-0675 and ON	749
5541330-3	Left piston weld assembly	-0675 and ON	749
5541330-4	Right piston weld assembly	-0675 and ON	749
6541200-1	Axle	-0675 and ON	749
5541310-3	Upper piston bearing	-0675 and ON	749
5541304-9	Upper torque link assembly	-0675 and ON	749
5541304-10	Upper torque link assembly	-0675 and ON	749
5541304-6	Lower torque link assembly	-0675 and ON	721
5541304-11	Lower torque link assembly	-0675 and ON	749
6541212-2	Torque link shaft	-0675 and ON	749
5541220-2	Torque link bolt	-0675 and ON	721
MS17825-8	Torque link nut	-0675 and ON	749

Part Number	Description	Effectivity	Equivalent Life/1000
MAIN GEAR (cont), Miscellaneous Components			
5541205-1,-2	Trunnion attach pin	-0001 thru -0033	721
5541205-3,-4	Trunnion attach pin	-0034 and ON	749
9912053-5,-7,-11,-13,-15,-17,-19	Left actuator assembly		732
9912053-6,-8,-12,-14,-16,-18,-20	Right actuator assembly		732
5527213-1	Actuator attach pin	-0001 thru -0465	724
6527213-2	Actuator attach pin	-0466 and ON	751
5522700-1	Left forward trunnion fitting assy	-0001 and ON	771
5522700-2	Right forward trunnion fitting assy	-0001 and ON	771
5522710-1	Left aft trunnion fitting assy	-0001 thru -0590	721
5522710-11	Left aft trunnion fitting assy	-0591 thru -0664	721
5522710-7	Left aft trunnion fitting assy	-0665 and ON	721
5522710-2	Right aft trunnion fitting assy	-0001 thru -0590	721
5522710-12	Right aft trunnion fitting assy	-0591 thru -0664	721
5522710-8	Right aft trunnion fitting assy	-0665 and ON	721

CHAPTER 12

BRAKES - WEAR LIMITS

1. General

The brake assembly used on the main gear of the airplane which has configuration 91891-003 installed are as follows:

Cleveland Div., Parker Hannifin: 030-18902

Note: Aircraft with configuration 91891-001 use the original factory equipped brake assemblies. Consult the basic Maintenance Manual for further information.

2. Wear Limits

The Parker Hannifin 030-18902 Brake Assy utilizes the retract stud in each of the three retract mechanisms as a lining wear indicator. See Parker Hannifin "Overhaul Manual with Illustrated Parts list for Brake Assembly 030-18902" for inspection procedures and wear limits.

CHAPTER 32

WHEELS AND BRAKES - DESCRIPTION AND OPERATION

Note

The STC SA2628NM has two configurations:

Configuration 91891-001 uses the original factory equipped Main Gear Wheels and Brakes. Refer to the basic Maintenance Manual for a detailed description.

Configuration 91891-003 uses the wheels and brakes described below:

Description

Main Gear Wheel

Cleveland Division, Parker Hannifin Corporation, Part Number 040-23901

For a complete description of the Main Gear Wheel Assembly, see Parker Hannifin Corporation "Overhaul Manual with Illustrated Parts List for Wheel Assembly 040-23901."

Main Gear Brakes

Cleveland Division, Parker Hannifin Corporation, Part Number 030-18902

For a complete description of the Main Gear Brake Assembly, see Parker Hannifin Corporation "Overhaul Manual with Illustrated Parts List for Brake Assembly 030-18902."

PARTS LIST

PART NO.	DESCRIPTION	VENDOR
030-18902	Main Gear Brake Assy	PARKER HANNIFIN CORP. 1160 Center Road Avon, Ohio 44011
040-23901	Main Gear Wheel Assy	PARKER HANNIFIN CORP. 1160 Center Road Avon, Ohio 44011
90C899-015	Placard, Cockpit Panel "THIS AIRCRAFT HAS BEEN MODIFIED . . ."	NEW FLIGHT CORPORATION 3241 S. Locust Street Denver, Colorado 80222