|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Component detail:

|  |  |  |
| --- | --- | --- |
| **Description** | **P/N** | **S/N** |
| Left Hand Main Wheel Assembly | 4F3210V00631 |  |
| Right Hand Main Wheel Assembly | 4F3210V00631 |  |

 |  |  |  |
| **1.0** | **REMOVAL PROCEDURE (AMP 89-A-32-41-03-01A-921A-B) & (AMP 89-A-32-41-04-01A-921A-B) (Refer Figure 1)** |
| 1.1 | Put the main wheel assembly (1, Figure 1) on a tire changer or an applicable worktable.**WARNING**To prevent injury to personnel, do not disassemble the Main Wheel assembly until the tire is fully deflated.Remarks: |  |  |  |
| 1.2 | Deflate the tire (10) as follows:1. Remove the cap (3) from the inflation valve (5).
2. Install the Tire deflator (screw-on type) (ZZ-00-00) on the inflation valve (5).
3. Operate the Tire deflator to deflate the tire (10) until all the air flows out.
4. When you fully deflate the tire (10), remove the Tire deflator from the inflation valve (5).
 |  |  |  |
| **WARNING**Fully deflate the tire (10) before you remove the valve core (4) from the inflation valve (5). The air in the tire supplies the valve core with pressure. The valve core can eject suddenly with force and can cause injury or dead if you are not careful.1. Carefully remove the valve core (4) from the inflation valve (5) with the Valve core tool (ZZ-00-00).

Remarks: |  |  |  |
| 1.3 | Remove the tire (10) as follows:1. Apply the Soap water solution (Local supply) to the mating areas between the tire (10) and the wheel halves (14) and (8). This will help you to loosen the tire (10) easily.
 |  |  |  |
| **CAUTION**Do not use screwdrivers or others sharp metal tools or to pull the tire (10) away from the wheel halves (14) and (8). Sharp metal tools can cause damage to the sealing surface of the wheel.1. With the Tire bead breaker (ZZ-00-00), disconnect the tire (10) from the wheel halves (14) and (8). Apply pressure gradually around the side walls in a position adjacent to the tire beads.
2. Record the position of the 12 bolts (12) on the inboard half wheel (14). This will help you to install them in the same position.
3. Gradually loosen the 12 nuts (7) in a cross sequence.
 |  |  |  |
|  | **Note**: Identify each bolt (12) and its related parts as a set.1. Remove these parts that attach the outboard half wheel (8) to the inboard half wheel (14):

The 12 nuts (7)The 12 countersunk washers (6)The 12 bolts (12)The 12 countersunk washers (11).1. Remove the outboard half wheel (8) from the inboard half wheel (14).
2. Remove the tire (10).
3. Do a detailed inspection of the wheel axle. Refer to paragraph 3 (AMP 89-A-32-00-00-01A-31AA-A)
4. Remove and discard the O-ring (9) form the inboard half wheel (14).

Remarks: |  |  |  |
| **2.0** | **MAIN WHEEL HALVES – DETAILED INSPECTION (AMP 89-A-32-41-00-03A-31AA-B) (Figure 2)** |
| 2.1 | Put the wheel half (1, Fig 2) on an applicable work table.Remarks: |  |  |  |
| 2.2 | **WARNING**The Cleaning solvent (C010) is a dangerous material. Before you do this procedure, make sure that you know all the safety precautions and first aid instructions for the cleaning solvent.Fully clean the wheel half (1) with the Lint-free cloth (C011) and the Cleaning solvent (C010).Remarks: |  |  |  |
| 2.3 | **CAUTION**Be careful when you use the compressed air. Dust and particles can cause injury to your eyes. Always use applicable protective goggles.Dry the wheel half (1) with the compressed air until you remove all the cleaning solvent.Remarks: |  |  |  |
| 2.4 | Examine the wheel half (1), on the hump area (2), for the deformation or for paint blister (scratches or paint removal).Remarks: |  |  |  |
| 2.5 | Tell the Manufacturer if you find a deformation, paint scratches or bare metal on the hump area (1).Remarks: |  |  |  |
| 2.6 | Carefully examine the paint on the stressed areas of the wheel half (1) for an irregular surface that can show a crack. Use the 10-power magnifying glass.Remarks: |  |  |  |
| 2.7 | Tell the Manufacturer if you find a crack in that area.Remarks: |  |  |  |
| 2.8 | Put the wheel half (4) on an applicable work table.Remarks: |  |  |  |
| 2.9 | Fully clean the wheel half (4) with the Lint-free cloth (C011) and the Cleaning solvent (C010).Remarks: |  |  |  |
| 2.10 | **CAUTION**Be careful when you use the compressed air. Dust and particles can cause injury to your eyes. Always use applicable protective goggles.Dry the wheel half (4) with the compressed air until you remove all the cleaning solvent.Remarks: |  |  |  |
| 2.11 | Examine the wheel half (4), on the hump area (3), for the deformation or for paint blister (scratches or paint removal).Remarks: |  |  |  |
| 2.12 | Tell the Manufacturer if you find a deformation, paint scratches or bare metal on the hump area (3).Remarks: |  |  |  |
| 2.13 | Carefully examine the paint on the stressed areas of the wheel half (4) for an irregular surface that can show a crack. Use the 10-power magnifying glass (ZZ-00-00).Remarks: |  |  |  |
| 2.14 | Tell the Manufacturer if you find a crack in that area.Remarks: |  |  |  |
| **3.0** | **DETAILED INSPECTION OF WHEEL AXLE (AMP** **89-A-32-00-00-01A-31AA-A) (Refer Figure 6)** |
| 3.1 | **WARNING**The Cleaning solvent (C010) is a dangerous material. Before you do this procedure, make sure that you know all the safety precautions and first aid instructions for the solvent.1. Get access to the left main landing-gear (1, Fig 1) on the left side of the fuselage.
2. Clean the wheel axle (2) of the trailing arm (3) with the Lint-free cloth (C011) and the cleaning solvent (C010).

Remarks: |  |  |  |
| 3.2 |

|  |  |
| --- | --- |
|  | Examine the wheel axle (2) with the Light source (ZZ-00-00) and the 10-power magnifying glass (ZZ-00-00). Make sure that the wheel axle (2) has no signs of damage and corrosion.Remarks: |

 |  |  |  |
| 3.3 |

|  |  |
| --- | --- |
|  | Tell the Manufacturer if the wheel axle (2) has damage or corrosion.Remarks: |

 |  |  |  |
| 3.4 | 1. Get access to the right main landing-gear on the right side of the fuselage.
2. Clean the wheel axles (5) and (6) and the sliding tube (7) of the nose landing gear (4) with the Lint-free cloth (C011) and the Cleaning solvent (C010).

Remarks: |  |  |  |
| 3.5 | Examine the wheel axles (5) and (6) and the sliding tube (7) with the Light source (ZZ-00-00) and the 10-power magnifying glass (ZZ-00-00). Make sure that the wheel axles (5) and (6) and the sliding tube (7) have no signs of damage and corrosionRemarks: |  |  |  |
| 3.6 | Tell the Manufacturer if the wheel axles (5) and (6) and the sliding tube (7) have damage or corrosion.Remarks: |  |  |  |
| **4.0** | **INSTALLATION (AMP 89-A-32-41-03-01A-921A-B) & (AMP 89-A-32-41-04-01A-921A-B) (Figure 1)** |
| 4.1 | **Warning**The materials that follow are dangerous. Before you do this procedure, make sure that you know all the safety precautions and first aid instructions for these materials:

|  |
| --- |
| * The Grease (C009)
* The Nitrogen (C116)
* The Dry-cleaning solvent (C120)
* The Antiseize compound (C148)
* The Electrical insulating compound (C315)
* The Grease (C329)
* The Antiseize compound (C427).
 |

Prepare the tire (10) and the wheel halves (14) and (8) for the installation as follows:1. Clean the wheel halves (14) and (8) with the Lint-free cloth (C011) made moist with the Dry-cleaning solvent (C120). Remove all the lubricant, grease and unwanted materials. Carefully clean the tire bead seats and the O-ring grooves.

**WARNING**Be careful when you use the compressed air. Dust and particles can cause injury to your eyes. Always use applicable protective goggles.1. Dry the cleaned parts with the compressed air until you remove all the solvent.
2. Examine the mating surfaces of the wheel halves (14) and (8) for nicks, burrs, small dents, or other damage. No damage is permitted.
 |  |  |  |
| 1. Grease the bearings of the left main wheel (1). Refer paragraph 5 (AMP 89-A-12-20-08-00A-242A-B)
 |  |  |  |
| 1. Install the valve core (4) on the inflation valve (5) on the outboard half wheel (8) with the Valve core tool (ZZ-00-00).
 |  |  |  |
| 1. Torque the valve core (4) to 0.17 thru 0.34 N m (1.5 thru 3.0 lbf in) with the Valve core tool (ZZ-00-00).

Record Torque: \_\_\_\_\_\_\_\_\_\_\_\_lbf.in |  |  |  |
| 1. Make sure that the pin of the valve core (4):
* Is not more than 0.25 mm (0.010 in) above the top surface of the inflation valve (5)
* Is not more than 0.89 mm (0.035 in) below the top surface of the inflation valve (5)
 |  |  |  |
| 1. Install the cap (3) on the inflation valve (5).
 |  |  |  |
| 1. Put the new Tire (10) on the work table.
 |  |  |  |
| 1. Make sure that the inner side of the tire (10) is clean. If necessary, clean the bead base with the Lint-free cloth (C011) and the Soap water solution (Local supply).
 |  |  |  |
| 1. Fully dry the cleaned areas with a clean cloth
 |  |  |  |
| 1. Clean these parts with the Lint-free cloth (C011) and the Dry-cleaning solvent (C120):

 The 12 nuts (7)The 12 countersunk washers (6)The 12 bolts (12)The 12 countersunk washers (11). |  |  |  |
| **WARNING**Be careful when you use the compressed air. Dust and particles can cause injury to your eyes. Always use applicable protective goggles.1. Dry the cleaned parts with the compressed air until you remove all the solvent.

Remarks: |  |  |  |
| 4.2 | Install the new tire (10) as follows:1. Lubricate the new O-ring (9) and the mating surfaces of the wheel halves (14) and (8) with the Electrical insulating compound (C315). As alternative, you can use the Grease (C009) or the Grease (C329).
 |  |  |  |
| 1. Put the tire (10) in its position on the inboard half wheel (14).
 |  |  |  |
| 1. Turn the tire (10) to align the red dots on the tire (10) to the “B” mark on the inboard half wheel (14).
 |  |  |  |
| 1. Carefully install the O-ring (9) in the related groove of the outboard half wheel (8).
 |  |  |  |
| 1. Align the “B” mark on the outboard half wheel (8) to the “B” mark on the inboard half wheel (14) and to the red dots on the tire (10). Then, put the outboard half wheel (8) in its position on the inboard half wheel (14). Make sure that you do not move or damage the O-ring (9).
 |  |  |  |
| 1. Apply a thin layer of Antiseize compound (C427) or Antiseize compound (C148) to the parts that follow:

 The shank and under the head of the 12 bolts (12)The flat side of the 12 countersunk washers (11)The flat side of the 12 countersunk washers (6). |  |  |  |
| 1. Install these parts that attach the inboard half wheel (14) to the outboard half wheel (8):
* The 12 countersunk washers (11)
* The 12 bolts (12)
* The 12 countersunk washers (6).

Make sure that:* You install the 12 bolts (12) on the inboard half wheel (14), in the same position you recorded at the removal
* The countersunk side of the washers (11) is adjacent to the head of the related bolt (12)
* The flat side of the washers (6) is adjacent to the outboard half wheel (8).
 |  |  |  |
| 1. Apply a thick layer of Antiseize compound (C427) or Antiseize compound (C148) to the threads of the 12 bolts (12). Make sure that you fill all the threads.
 |  |  |  |
| 1. Install the 12 nuts (7) on the 12 bolts (12). Make sure that you install each nut (7) on the bolt (12) of the related set.
 |  |  |  |
| 1. Torque gradually and in a cross sequence the 12 nuts (7) to 51 N m (451 lbf in) with the Torque wrench (ZZ-00-00).
 |  |  |  |
| 1. Apply the slippage marks to the 12 nuts (7). Refer to AMP 89-A-20-00-00-00A-691A-A.

Remarks: |  |  |  |
| 4.3 | Do the 24 hours pressure retention test of the left main wheel (1) as follows:1. Put the main wheel (1) in the Tire safety cage (ZZ-00-00).
 |  |  |  |
| 1. Put the Nitrogen charging trolley (EA-01-00) adjacent to the left main wheel (1).
 |  |  |  |
| 1. Make sure that the cylinders of the Nitrogen charging trolley contain the Nitrogen (C116).
 |  |  |  |
| 1. Connect the Tire pressure gauge (BC-01-07) to the Nitrogen charging trolley.
 |  |  |  |
| 1. Remove the cap (3) from the inflation valve (5).
 |  |  |  |
| 1. Connect the Tire pressure gauge to the inflation valve (5).
 |  |  |  |
| **Warning**Inflate the tire slowly and with a continuous increase in pressure until the tire is at the correct pressure. It is dangerous to inflate the tire too quickly as this can cause an explosion1. With the Nitrogen charging trolley, carefully and slowly inflate the tire (10) to 12.76 bar (185 psi).
 |  |  |  |
| 1. Disconnect the Tire pressure gauge from the inflation valve (5).
 |  |  |  |
| 1. Let the tire (10) stretch for 12 hours minimum.
 |  |  |  |
| 1. Do again the Step 4.3 (vi) thru Step 4.3 (viii) to inflate the tire (10) to the correct pressure again.
 |  |  |  |
| 1. Let the tire (10) in this condition for 24 hours.
 |  |  |  |
| 1. Connect the Tire pressure gauge to the inflation valve (5) to read the tire pressure. A pressure drop of 0.64 bar (9.25 psi) maximum is permitted.
 |  |  |  |
| 1. If the pressure is within the given limit, do the Step 4.5. If the pressure drop is more than 0.64 bar (9.25 psi), do step 4.4.

Remarks: |  |  |  |
| 4.4 | **WARNING**Inflate the tire slowly and with a continuous increase in pressure until the tire is at the correct pressure. It is dangerous to inflate the tire too quickly as this can cause an explosion.Do the leakage test of the left main wheel (1) as follows:1. With the Nitrogen charging trolley, carefully and slowly inflate the tire (10) to 12.76 bar (185 psi).
 |  |  |  |
| 1. Disconnect the Tire pressure gauge from the inflation valve (5).
 |  |  |  |
| 1. Apply the Soap water solution (Local supply) to the parts that follow:
* The mating areas around the inflate valve (5)
* The mating areas around the safety valve (2)
* The mating areas around the three fusible plugs (13)
* The mating areas between the tire (10) and the inboard half wheel (14)
* The mating areas between the tire (10) and the outboard half wheel (8)
* The mating areas between the inboard half wheel (14) and the outboard half wheel (8).
 |  |  |  |
| 1. Examine the areas on which you applied the Soap water solution for nitrogen leaks.
 |  |  |  |
| 1. Do the step applicable to the component on which you find nitrogen leaks:
* Do the Step 4.4 (i), if you found leaks on the inflate valve (5)
* Do the Step 4.4 (ii), if you found leaks on the safety valve (2)
* Do the Step 4.4 (iii), if you found leaks on one or more fusible plugs (13)
* Do the Step 4.4 (iv), if you found leaks on the mating areas between the tire (10) and the wheel halves (14) and (8)
* Do the Step 4.4 (v), if you found leaks on the mating areas between the wheel halves (14) and (8).
 |  |  |  |
| 1. Do the leakage check of the inflate valve (5) as follows:
2. Torque the inflate valve (5) to 5.1 thru 6.2 N m (45 thru 55 lbf in) with the Torque wrench (ZZ-00-00).

Record Torque: \_\_\_\_\_\_\_\_\_\_\_\_\_lbf. in |  |  |  |
| 1. Apply the Soap water solution (Local supply) to the mating areas around the inflate valve (5).
 |  |  |  |
| 1. If the nitrogen leaks continue, do the steps that follow:
2. Do the Step 1.2 to fully deflate the tire (10).
 |  |  |  |
| 1. Remove the inflate valve (5) and the O-ring (16) from its housing on the outboard half wheel (8). Discard the O-ring (16).
 |  |  |  |
| 1. Examine the inflate valve (5) and the valve core (4) for damage. If you find damage, replace them with a new Inflate valve assembly.
 |  |  |  |
| 1. Examine the housing of the inflate valve (4) on the outboard half wheel (8) for damage. If you find damage, replace the outboard half wheel (8) with a new one. Refer to AMP 89-A-32-41-03-00A-530A-B and AMP 89-A-32-41-03-00A-710A-B.
 |  |  |  |
| 1. If you install a new inflate valve assembly, do the Step 4.1 (vi) thru Step 4.1 (vii) to install the valve core (4) on the inflate valve (5).
 |  |  |  |
| 1. Lubricate the new O-ring (16) with the Electrical insulating compound (C315). As alternative, you can use the Grease (C009) or the Grease (C329).
 |  |  |  |
| 1. Install the O-ring (16) in the related groove on the inflate valve (5).
 |  |  |  |
| 1. Install the inflate valve (5) in its housing on the outboard half wheel (8).
 |  |  |  |
| 1. Torque the inflate valve (5) to 5.1 thru 6.2 N m (45 thru 55 lbf in) with the Torque wrench (ZZ-00-00).

Record Torque: \_\_\_\_\_\_\_\_\_\_\_\_\_lbf. in |  |  |  |
| 1. Do the Step Step 4.3 (x) thru Step Step 4.3 (xiii) to do the 24 hours pressure retention test.
 |  |  |  |
| 1. Do the leakage check of the safety valve (2) as follows:
2. Torque the safety valve (2) to 7.5 thru 8.6 N m (66 thru 76 lbf in) with the Torque wrench (ZZ-00-00).

Record Torque: \_\_\_\_\_\_\_\_\_\_\_\_\_lbf. in |  |  |  |
| 1. Apply the Soap water solution (Local supply) to the mating areas around the safety valve (2).
 |  |  |  |
| 1. If the nitrogen leaks continue, do the steps that follow:
2. Do the Step 1.2 to fully deflate the tire (10).
 |  |  |  |
| 1. Remove the safety valve (2) and the O-ring (15) from its housing on the outboard half wheel (8). Discard the O-ring (15).
 |  |  |  |
| 1. Examine the safety valve (2) for damage. If you find damage, replace it with a new Safety valve (2).
 |  |  |  |
| 1. Examine the housing of the safety valve (2) on the outboard half wheel (8) for damage. If you find damage, replace the outboard half wheel (8) with a new one. Refer to AMP89-A-32-41-03-00A-530A-B and AMP89-A-32-41-03-00A-710A-B.
 |  |  |  |
| 1. Lubricate the new O-ring (15) with the Electrical insulating compound (C315). As alternative, you can use the Grease (C009) or the Grease (C329).
 |  |  |  |
| 1. Install the O-ring (15) in the related groove on the safety valve (2).
 |  |  |  |
| 1. Install the safety valve (2) in its housing on the outboard half wheel (8).
 |  |  |  |
| 1. Torque the safety valve (2) to 7.5 thru 8.6 N m (66 thru 76 lbf in) with the Torque wrench (ZZ-00-00).

Record Torque: \_\_\_\_\_\_\_\_\_\_\_\_\_lbf. in |  |  |  |
| 1. Do the Step Step 4.3 (x) thru Step Step 4.3 (xiii) to do the 24 hours pressure retention test
 |  |  |  |
| **NOTE:** The procedure is typical for the three fusible plugs (13).1. Do the leakage check of the fusible plug (13) as follows:
2. Do the Step 1.2 to fully deflate the tire (10).
 |  |  |  |
| 1. Remove the fusible plug (13) and the O-ring (17) from its housing on the inboard half wheel (14). Discard the O-ring (17).
 |  |  |  |
| 1. Examine the fusible plug (13) for damage. If you find damage, replace it with a new Fusible plug (13).
 |  |  |  |
| 1. Examine the housing of the fusible plug (13) on the inboard half wheel (14) for damage. If you find damage, replace the inboard half wheel (14) with a new one. Refer to AMP89-A-32-41-03-00A-530A-B and AMP89-A-32-41-03-00A-710A-B.
 |  |  |  |
| 1. Lubricate the new O-ring (32-41-01-01-008) (17) with the Electrical insulating compound (C315). As alternative, you can use the Grease (C009) or the Grease (C329).
 |  |  |  |
| 1. Install the O-ring (17) in the related groove on the fusible plug (13).
 |  |  |  |
| 1. Install the fusible plug (13) in its housing on the inboard half wheel (14).
 |  |  |  |
| 1. Tighten the fusible plug (13) to the standard torque value with the Torque wrench (ZZ-00-00). Refer to 89-A-20-00-00-00A-711A-A.
 |  |  |  |
| 1. With the Soft-faced hammer (ZZ-00-00), make sure that the fusible plug (13) is correctly installed.
 |  |  |  |
| 1. Do the Step Step 4.3 (x) thru Step Step 4.3 (xiii) to do the 24 hours pressure retention test
 |  |  |  |
| 1. Do the leakage check of the mating areas between the tire (10) and the wheel halves (14) and (8) as follows:
2. Do the Step 1.2 to fully deflate the tire (10).
 |  |  |  |
| 1. Do the Step 1.3 to remove the tire (10) from the wheel halves (14) and (8).
 |  |  |  |
| 1. Examine the bead of the tire (10) for cut or other damage that could decrease its seal properties. If you find damage, replace it with a new Tire (10).
 |  |  |  |
| 1. Examine the bead seat of the wheel halves (14) and (8) for damage that could decrease their seal properties. If you find damage, replace the defective half wheel with a new one. Refer to 89-A-32-41-03-00A-530A-B and 89-A-32-41-03-00A-710A-B.
 |  |  |  |
| 1. Do the Step 4.1 and Step 4.2 to install the tire (10) on the wheel halves (14) and (8).
 |  |  |  |
| 1. Do the Step Step 4.3 (x) thru Step Step 4.3 (xiii) to do the 24 hours pressure retention test
 |  |  |  |
| 1. Do the leakage check of the mating areas between the wheel halves (14) and (8) as follows:
2. Do the Step 1.2 to fully deflate the tire (10).
 |  |  |  |
| 1. Do the Step 1.3 to remove the tire (10) from the wheel halves (14) and (8).
 |  |  |  |
| 1. Examine the mating surfaces and the O-ring grooves of the wheel halves (14) and (8) for damage that could decrease their seal properties. If you find damage, replace the defective half wheel with a new one. Refer to AMP89-A-32-41-03-00A-530A-B and AMP89-A-32-41-03-00A-710A-B.
 |  |  |  |
| 1. Do the Step 4.1 and Step 4.2 to install the tire (10) on the wheel halves (14) and (8).
 |  |  |  |
| 1. Do the Step Step 4.3 (x) thru Step Step 4.3 (xiii) to do the 24 hours pressure retention test

Remarks: |  |  |  |
| 4.5 | Disconnect the Tire pressure gauge from the inflation valve (5).Remarks: |  |  |  |
| 4.6 | Install the cap (3) on the inflation valve (5).Remarks: |  |  |  |
| 4.7 | Disconnect the Tire pressure gauge from the Nitrogen charging trolley.Remarks: |  |  |  |
| 4.8 | Remove the left main wheel (1) from the Tire safety cageRemarks: |  |  |  |
| **5.0** | **MAIN WHEEL BEARING GREASING (AMP 89-A-12-20-08-00A-242A-B) (Figure 3)** |
| 5.1 | Put the left nose wheel (3, Fig 3) on an applicable work table.Remarks: |  |  |  |
| 5.2 | Remove these parts:* The bearing seal (7) from the wheel half (5)
* The bearing cones and rollers (6) from the bearing cup (8)
* The bearing seal (12) from the wheel half (10)
* The bearing cones and rollers (11) from the bearing cup (9).

(To do this, refer to **AMP 89-A-32-41-03-00A-530A-B step 7 and step 12**)Remove the outboard bearing cone (14) from the outboard half wheel (2) as follows (Refer Fig. 4):1. Remove the retaining ring (12) that safeties the bearing cone (14) to the outboard half wheel (2).
2. Examine the retaining ring (12) for distortion or decreased tension.
3. If you find distortion or decreased tension, discard the retaining ring (12).
4. Remove the plain seal (13) and the grease cap (16) from the outboard half wheel (2).

Carefully remove the bearing cone (14) from the bearing cup (15). |  |  |  |
| Remove the inboard bearing cone (24) from the inboard half wheel (4) as follows:1. Remove the retaining ring (22) that safeties the bearing cone (24) to the inboard half wheel (4).
2. Examine the retaining ring (22) for distortion or decreased tension.
3. If you find distortion or decreased tension, discard the retaining ring (22).
4. Remove the plain seal (23) and the grease cap (17) from the inboard half wheel (4).
5. Carefully remove the bearing cone (24) from the bearing cup (25).

Remarks: |  |  |  |
| 5.3 | **WARNING**The materials that follow are dangerous. Before you do this procedure, make sure that you know all the safety precautions and first aid instructions for these materials**:*** The Grease (C009)
* The Dry-cleaning solvent (C120)
* The Grease (C329)

Remove the grease from the bearing seals (7) and (12) with the Lint-free cloth (C011).Remarks: |  |  |  |
| 5.4 | Clean the parts that follow with the Lint-free cloth (C011) and the Dry-cleaning solvent (C120):* The bearing cups (8) and (9)
* The wheel halves (5) and (10)
* The bearing cones and rollers (6) and (11)

Remarks: |  |  |  |
| 5.5 | **WARNING**Be careful when you use the compressed air. Dust and particles can cause injury to your eyes. Always use applicable protective goggles.Dry the cleaned parts with the compressed air until you remove all the solvent.Remarks: |  |  |  |
| 5.6 | Fill the bearing cones and rollers (6) with the Grease (C009) or Grease (C329).Remarks: |  |  |  |
| 5.7 | Apply a layer of Grease (C009) or Grease (C329) on the inner side of the bearing cup (8) and the bearing seal (7).Remarks: |  |  |  |
| 5.8 | **CAUTION**Handle the bearing carefully. If you do not obey this precaution, you can cause damage to the bearing during servicing.Install these parts:* The bearing cones and rollers (6) on the bearing cup (8)
* The bearing seal (7) on the wheel half (5).

(To do this, refer to **AMP 89-A-32-41-03-00A-710A-B step 4**)1. Install the bearing cone (14) on the outboard half wheel (2) as follows:
* Clean the parts that follow with the Lint-free cloth (C011) and the Cleaning solvent (C010):
* The bearing cone (14)
* The plain seal (13)
* The grease cap (16)
* If necessary, the bearing cup (15).
 |  |  |  |
| **WARNING**Be careful when you use the compressed air. Dust and particles can cause injury to your eyes. Always use applicable protective goggles.1. Dry the cleaned parts with the compressed air until you remove all the solvent.

**Note:**Make sure that you apply the same grease to the bearing cone (14) and the bearing cup (15).1. Apply a thin layer of Grease (C009) or the Grease (C329) to the bearing cone (14) and if necessary to the bearing cup (15).
 |  |  |  |
| 1. Carefully install the bearing cone (14) in its position on the bearing cup (15).
2. Install the plain seal (13) in its position on the outboard half wheel (2). Make sure that the seal edge of the plain seal (13) is flexible and makes a good seal.
3. Install the retaining ring (12) (or the new Retaining ring (12) if you discarded it at the removal) that safeties the bearing cone (14) to the outboard half wheel (2).
 |  |  |  |
| 5.9 | Do the bearing alignment check as follows (Refer to Fig 4 & 5):1. Assemble the wheel halves (2) and (4) without the tire (3). Refer to paragraph E of this work sheet.

Put the MLG bearing alignment tool (GF-93-08) adjacent to the assembled wheel halves (2) and (4). Refer to Fig 4. |  |  |  |
|  | **Note**: The gap gauge and the alignment mandrel are part of the MLG bearing alignment tool1. Remove the gap gauge from the alignment mandrel.
2. Install the alignment mandrel in its position through the assembled wheel halves (2) and (4). Make sure that you install it from the inboard half wheel (4).
3. Push the alignment mandrel fully against the inboard bearing cone (24).
4. Install the gap gauge on the alignment mandrel from the outboard half wheel (2).

Remarks:1. Turn the gap gauge until it is fully against the outboard bearing cone (14) and there is no play with the alignment mandrel.
2. Make sure that the end face of the alignment mandrel is between the step surfaces (MIN and MAX) of the gap gauge.
3. Remove the gap gauge from the alignment mandrel.
4. Remove the alignment mandrel from the assembled wheel halves (2) and (4).
5. Disassemble the wheel halves (2) and (4).
 |  |  |  |
|  | 1. If the result of the check is satisfactory, continue with the steps that follow. Differently, do the detailed inspection of the bearings and the wheel halves. Refer to AMP 89-A-32-41-00-01A-31AA-B.

Remarks: |  |  |  |
| 5.10 | Make sure that the bearing seal (7) is fully against the bearing cones and rollers (6) correctly.Remarks: |  |  |  |
| 5.11 | Fill the bearing cones and rollers (11) with the Grease (C009) or Grease (C329).Remarks: |  |  |  |
| 5.12 | Apply a layer of Grease (C009) or Grease (C329) on the inner side of the bearing cup (9) and the bearing seal (12).Remarks: |  |  |  |
| 5.13 | **CAUTION**Handle the bearing carefully. If you do not obey this precaution, you can cause damage to the bearing during servicing.Install these parts:* The bearing cones and rollers (11) on the bearing cup (9)
* The bearing seal (12) on the wheel half (10).

To do this, refer to AMP 89-A-32-41-01-00A-710A-B step 8.Remarks: |  |  |  |
| 5.14 | Make sure that the bearing seal (12) is fully against the bearing cones and rollers (10) correctly.Remarks: |  |  |  |
| 5.15 | Put a protection on the hub opening of the wheel halves (5) and (10). This will protect the bearings from dirt and moisture until you install the wheel on the aircraft. If the drive cap is not available, put a protective cover on the hub of the wheel halves (5) and (10).Remarks |  |  |  |

**Figure 1 : Main Wheel Assembly – Removal and Installation**



**Figure 2 : Main Wheel Halves – Detailed Inspection**



**Figure 3: Main Wheel - Bearings Greasing**



**Figure 4: Main Wheel - Bearings Removal & Installation**



**Figure 5: Main Wheel - Bearings alignment**



**Figure 6: Main Wheel Axle – Detailed Inspection**