

MAIN SIDE-STRUT CARDAN JOINT OF THE MAIN LANDING GEAR - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove and install the main side-strut cardan joint of the main landing gear.
- B. The procedures in this section are given in the sequence below. The tasks identified with (♦) are part of the Scheduled Maintenance Requirements Document (SMRD).

TASK NUMBER	DESCRIPTION	EFFECTIVITY
32-10-10-000-801-A	MAIN SIDE-STRUT CARDAN JOINT OF THE MAIN LANDING GEAR - REMOVAL	ALL
32-10-10-400-801-A	MAIN SIDE-STRUT CARDAN JOINT OF THE MAIN LANDING GEAR - INSTALLATION	ALL

TASK 32-10-10-000-801-A

EFFECTIVITY: ALL

2. MAIN SIDE-STRUT CARDAN JOINT OF THE MAIN LANDING GEAR - REMOVAL

A. General

- (1) This procedure gives the instructions to remove the main side-strut cardan joint of the main landing gear.

B. References

REFERENCE	DESIGNATION
(TASK 52-12-02-000-801-A)	-
AMM TASK 07-10-00-500-801-A/200	-
AMM TASK 29-10-00-860-802-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH EMDP
AMM TASK 32-00-01-910-801-A/200	LG SAFETY PIN - INSTALLATION AND REMOVAL

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	RH or LH Main Landing Gear
1	Helps the other technician	RH or LH Main Landing Gear

I. Preparation

SUBTASK 841-002-A

- (1) On the circuit breaker panel, open, safety, and tag (DO NOT CLOSE) the ELEC PUMP 1 circuit breaker.
- (2) Make sure that the pressure in hydraulic system 1 is fully released [AMM TASK 29-10-00-860-802-A/200](#).
- (3) Make sure that the safety pins of the landing gears are installed [AMM TASK 32-00-01-910-801-A/200](#).

- (4) Lift the aircraft on jacks. AMM TASK 07-10-00-500-801-A/200.
- (5) Release the pressure from the MLG Pax - Door ACCUM (TASK 52-12-02-000-801-A).

J. Removal ([Figure 401](#))

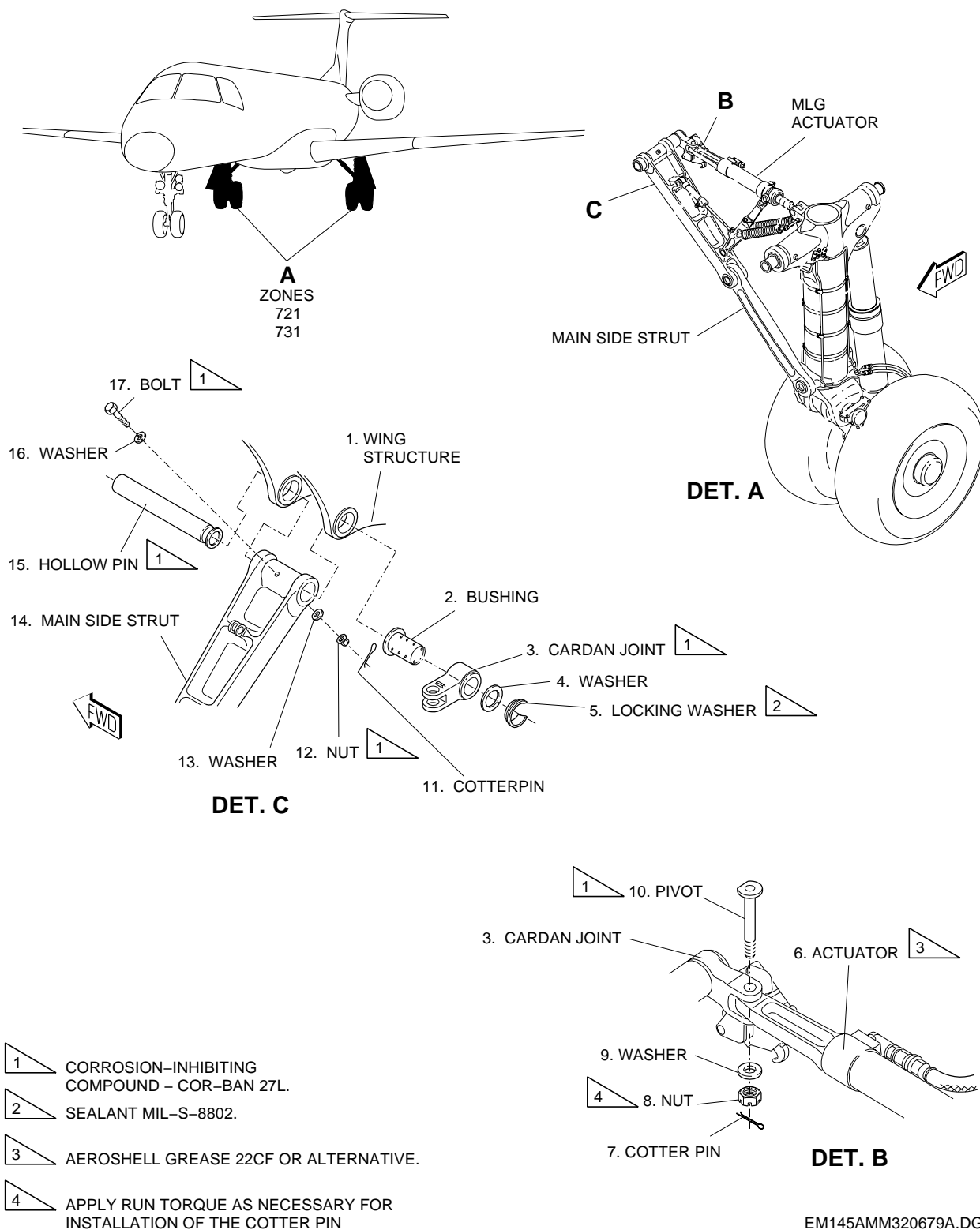
SUBTASK 020-002-A

- (1) To remove the cardan joint (3), do as follows:
 - (a) Release the cardan joint (3) from the upper end of the MLG actuator (6) as follows:
 - 1 Remove the cotter pin (7), nut (8), washer (9), and pivot (10).
 - (b) Release the cardan joint (3) from the main side strut (14) as follows:
 - 1 Remove the locking washer (5) and the washer (4).
 - (c) Remove the hollow pin (15) from the wing structure (1) to release the cardan joint (3) as follows:
 - 1 Remove the cotter pin (11), nut (12), washers (13) and (16), and bolt (17).
 - 2 Remove the hollow pin (15) and bushing (2).
 - (d) Remove the cardan joint (3).

EFFECTIVITY: ALL

Main Side-Strut Cardan Joint of the Main Landing Gear - Removal/Installation

Figure 401



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TASK 32-10-10-400-801-A
EFFECTIVITY: ALL

3. MAIN SIDE-STRUT CARDAN JOINT OF THE MAIN LANDING GEAR - INSTALLATION

A. General

- (1) This procedure gives the instructions to install the main side-strut and the actuator cardan joint of the main landing gear.

B. References

REFERENCE	DESIGNATION
AMM TASK 07-10-00-500-802-A/200	-
AMM TASK 12-13-06-600-801-A/300	LANDING GEAR AND MAIN DOOR ACCUMULATOR - CHARGE
AMM TASK 32-30-00-700-801-A/500	EXTENSION AND RETRACTION SYSTEM - OPERATIONAL CHECK
AMM TASK 32-34-00-600-801-A/300	MLG AND NLG - LUBRICATION
AMM TASK 32-34-00-700-801-A/500	LG EMERGENCY EXTENSION - OPERATIONAL AND FUNCTIONAL CHECKS

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Rubber Gloves, Resistant to Phosphate Ester-Base Fluid	For protection of the hands	2
Commercially available	Rubber Goggles, Resistant to Phosphate Ester-Base Fluid	For protection of the eyes	2
Commercially available	Soft Lint-Free Cloth	To clean the components	AR

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
MEP 09-075	Corrosion-Inhibiting Compound (COR-BAN 27L)	AR
MIL-S-8802 TYPE II, Class B2	Sealant	AR
MIL-PRF-81322	Aeroshell Grease 22	AR
MIL-PRF-23827	Aeroshell Grease 33 (alternative to Aeroshell 22)	AR
MEP 13-073	Rhodiasolve E-23	AR
MS24665-134	Cotter pin	1
MS 24665-357	Cotter pin	1

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	RH or LH Main Landing Gear
1	Helps the other technician	RH or LH Main Landing Gear

I. Installation (Figure 401)

SUBTASK 420-002-A

CAUTION: AEROSHELL GREASE 22 MUST NOT BE MIXED WITH AEROSHELL GREASE 33. IF YOU DO NOT OBEY THIS PRECAUTION, THE MIXTURE CAN CAUSE DAMAGE TO THE COMPONENTS.

- (1) Use a dry lint-free cloth to remove excess old grease from the components as necessary.

WARNING: BE CAREFUL WHEN YOU USE SOLVENTS BECAUSE THEY ARE A HEALTH AND FIRE HAZARD. USE SAFETY GOGGLES AND PROTECTIVE CLOTHING. DO NOT BREATHE THE SOLVENT GASES AND WORK IN A WELL VENTILATED AREA.

- (2) With a cloth soaked in Rhodiasolve E-23, clean the remaining grease from the components as necessary.

WARNING: COR-BAN 27L CORROSION-INHIBITING COMPOUND IS TOXIC TO SKIN, EYES, AND RESPIRATORY TRACT. USE GOGGLES AND PROTECTIVE GLOVES. USE ONLY IN WELL VENTILATED AREAS. OBEY THE MANUFACTURER'S HEALTH AND SAFETY INSTRUCTIONS.

- (3) Apply COR-BAN 27L to the hollow pin (15) and install it to attach the upper end of the main side strut (14) to the support at the wing structure (1).
- (4) Put the bushing (2) and the cardan joint (3) on the hollow pin (15) with COR-BAN 27L.
- (5) Install the washer (4) and the locking washer (5).
- (6) Align the hole of the main side strut (14) and the hole of the hollow pin (15) and install the bolt (17) with COR-BAN 27L, the washers (16) and (13), nut (12), and cotter pin (11).
- (7) Apply COR-BAN 27L to the pivot (10) and install the main landing-gear actuator (6) to the cardan joint (3) as follows:
 - (a) Put the upper end of the main landing gear actuator (6) aligned with the cardan joint (3).
 - (b) Install the pivot (10), washer (9), nut (8), and cotter pin (7).
- (8) Apply sealant MIL-S-8802 to the locking washer (5).

J. Follow-on (Figure 401)

SUBTASK 842-002-A

- (1) Pressurize the MLG Pax - Door ACCUM [AMM TASK 12-13-06-600-801-A/300](#).
- (2) Lubricate the main side strut [AMM TASK 32-34-00-600-801-A/300](#).

CAUTION: AEROSHELL GREASE 22 MUST NOT BE MIXED WITH AEROSHELL GREASE 33. IF YOU DO NOT OBEY THIS PRECAUTION, THE MIXTURE CAN CAUSE DAMAGE TO THE COMPONENTS.

- (3) Lubricate the rod end of the actuator with the same grease as the one used to lubricate the main side strut.
- (4) On the circuit breaker panel, unsafety, untag, and close the ELEC PUMP 1 circuit breaker, as applicable.
- (5) Energize the aircraft.
- (6) Remove the safety pins from the landing gears.
- (7) Do an operational check of the MLG [AMM TASK 32-30-00-700-801-A/500](#).
- (8) Do the functional check of the landing gear free-fall system [AMM TASK 32-34-00-700-801-A/500](#).
- (9) Lower the aircraft and remove the jacks [AMM TASK 07-10-00-500-802-A/200](#).

