

TRAILING ARM CARDAN OF THE MAIN LANDING GEAR - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove and install the trailing arm cardan 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
32-10-09-000-801-A	TRAILING ARM CARDAN OF THE MAIN LANDING GEAR - REMOVAL	ALL
32-10-09-400-801-A	TRAILING ARM CARDAN OF THE MAIN LANDING GEAR - INSTALLATION	ALL

TASK 32-10-09-000-801-A

EFFECTIVITY: ALL

2. TRAILING ARM CARDAN OF THE MAIN LANDING GEAR - REMOVAL

A. General

- (1) This procedure gives the instructions to remove the trailing arm cardan 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
AMM TASK 32-49-02-000-801-A/400	WHEEL ASSEMBLY OF THE MAIN LANDING GEAR - REMOVAL
AMM TASK 32-49-03-000-801-A/400	BRAKE ASSEMBLY OF THE MAIN LANDING GEAR - REMOVAL

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 003	Jack	To support the trailing arm of the landing gear	

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 of 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 until the wheels are off the ground. [AMM TASK 07-10-00-500-801-A/200](#).
- (5) Put GSE 003 under the trailing arm to support it.
- (6) Release the pressure from the MLG Pax- Door ACCUM (TASK 52-12-02-000-801-A).
- (7) Remove the MLG wheels [AMM TASK 32-49-02-000-801-A/400](#).
- (8) Remove the MLG brakes [AMM TASK 32-49-03-000-801-A/400](#).

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

SUBTASK 020-002-A

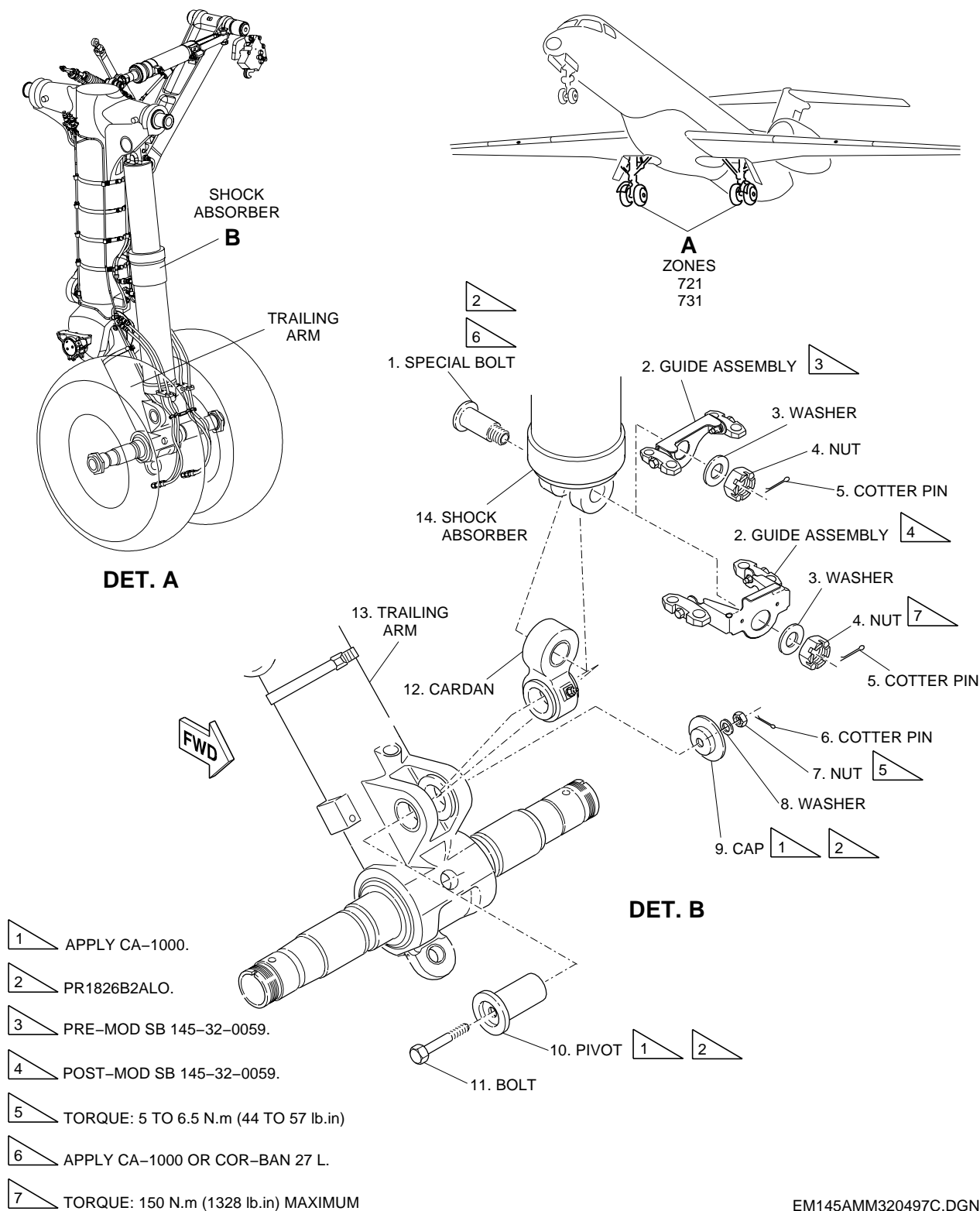
CAUTION: WITH THE TRAILING ARM DISCONNECTED FROM THE SHOCK ABSORBER, DO NOT LIFT THE AIRCRAFT TO MORE THAN THE OFF-THE-GROUND CONDITION, IN I. PREPARATION, ITEM (4). IF YOU DO NOT OBEY THIS, DAMAGE WILL OCCUR TO THE METALLIC TARGET OF THE LOWER AIR/GROUND PROXIMITY SWITCH, WHEN THE TRAILING ARM IS MOVED TO THE VERTICAL POSITION.

- (1) To remove the cardan (12), do as follows:
 - (a) Release the cardan (12) from the lower end of the shock absorber (14) as follows:
 - 1 Remove the cotter pin (5), the nut (4), the washer (3), the guide assembly (2), and the special bolt (1).
 - (b) Release the cardan (12) from the lower end of the trailing arm (13) as follows:
 - 1 Remove the cotter pin (6), the nut (7), the washer (8), the cap (9), the pivot (10), and the bolt (11).
 - (c) Hold the shock absorber (14) and lower the trailing arm (13). For this, slowly operate GSE 003.
 - (d) Remove the cardan (12).

EFFECTIVITY: ALL

Trailing Arm Cardan of the Main Landing Gear - Removal/Installation

Figure 401



EM145AMM320497C.DGN

TASK 32-10-09-400-801-A

EFFECTIVITY: ALL

3. TRAILING ARM CARDAN OF THE MAIN LANDING GEAR - INSTALLATION

A. General

- (1) This procedure gives the instructions to install the trailing arm cardan 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 32-34-00-700-801-A/500	LG EMERGENCY EXTENSION - OPERATIONAL AND FUNCTIONAL CHECKS
AMM TASK 32-49-02-400-801-A/400	WHEEL ASSEMBLY OF THE MAIN LANDING GEAR - INSTALLATION
AMM TASK 32-49-03-400-801-A/400	BRAKE ASSEMBLY OF THE MAIN LANDING GEAR - INSTALLATION

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 003	Jack	To support the trailing arm of the landing gear	

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Rubber Gloves, Phosphate Ester-Base, Fluid-Resistant	For protection of the hands	2
Commercially available	Rubber Goggles, Phosphate Ester-Base, Fluid-Resistant	For protection of the eyes	2

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
MEP09-075	Corrosion Inhibitive Sealant CA-1000 or COR-BAN 27 L	AR
SAE AMS 3277, Type I, Class B2	Sealant PR1826B2ALO	AR
MS 24665-134	Cotter Pin	1
MS 24665-362	Cotter Pin	2

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

WARNING: DO NOT GET CA-1000 IN YOUR MOUTH OR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM CA-1000. PUT ON A PROTECTIVE SPLASH GOGGLE AND GLOVES WHEN YOU USE CA-1000. CA-1000 IS A TOXIC MATERIAL.

- (1) Apply corrosion inhibitive sealant CA-1000 on the pivot (10) and on the cap (9). Install the pivot (10), the bolt (11), the cap (9), the washer (8) and the nut (7) to attach the cardan (12) to the trailing arm (13).

- (2) Apply a torque of 5 to 6.5 N.m (44 to 57 lb.in) on the nut (7).

- (3) Install the cotter pin (6).

- (4) Apply a continuous bead of sealant PR1826B2ALO along the interface of the pivot (10) and the cap (9).

NOTE: Sealant P/S 870B-2 or sealant AC-665 B-2 can be used as alternatives to sealant PR1826B2ALO. But, 24 hours after the application of these alternative sealants, a layer of varnish 683-3-2/X-310A must be applied to them.

- (5) Slowly operate GSE 003 to lift and install the cardan (12) to the shock absorber (14).

- (6) Apply CA-1000 or COR-BAN 27 L on the special bolt (1). Install the special bolt (1), the guide assembly (2), the washer (3) and the nut (4) to attach the cardan (12) to the lower end of the shock absorber (14).

- (7) Tighten and align the slot of nut (4) with the hole of bolt (1). Refer to (Figure 401).

- (8) Install the cotter pin (5).

- (9) Apply a continuous bead of sealant PR1826B2ALO along the interface of the special bolt (1).

NOTE: Sealant P/S 870B-2 or sealant AC-665 B-2 can be used as alternatives to sealant PR1826B2ALO. But, 24 hours after the application of these alternative sealants, a layer of varnish 683-3-2/X-310A must be applied to them.

J. Follow-on

SUBTASK 842-002-A

- (1) Lower GSE 003 and remove it.

- (2) Install the MLG brakes [AMM TASK 32-49-03-400-801-A/400](#).
- (3) Install the MLG wheels [AMM TASK 32-49-02-400-801-A/400](#).
- (4) Pressurize the MLG Pax- Door ACCUM [AMM TASK 12-13-06-600-801-A/300](#).
- (5) On the circuit breaker panel, remove the safety device, untag, and close the ELEC PUMP circuit breaker, as applicable.
- (6) Energize the aircraft.
- (7) Remove the safety pins from the landing gears.
- (8) Do an operational check of the MLG [AMM TASK 32-30-00-700-801-A/500](#).
- (9) Do the landing gear functional check [AMM TASK 32-34-00-700-801-A/500](#).
- (10) Do the functional check of the landing gear free-fall system [AMM TASK 32-30-00-700-801-A/500](#).
- (11) Lower the aircraft and remove the jacks [AMM TASK 07-10-00-500-802-A/200](#).

