

MAIN LANDING GEAR ACTUATOR - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove and install the main landing gear actuator.
- 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
32-33-08-000-801-A	MAIN LANDING GEAR ACTUATOR - REMOVAL	ALL
32-33-08-400-801-A	MAIN LANDING GEAR ACTUATOR - INSTALLATION	ALL

TASK 32-33-08-000-801-A

EFFECTIVITY: ALL

2. MAIN LANDING GEAR ACTUATOR - REMOVAL

A. General

(1) This task gives the procedures to remove the main landing gear actuator.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
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

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Rubber Gloves, Phosphate Ester-Base, Fluid-Resistant	Protection for the hands	1
Commercially available	Rubber Goggles, Phosphate Ester-Base, Fluid-Resistant	Protection for the eyes	1

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	LH and RH MLG wheelwells

I. Preparation

SUBTASK 841-002-A

- (1) Make sure that the safety pins of the landing gears are installed ([AMM TASK 32-00-01-910-801-A/200](#)).
- (2) On the circuit breaker panel, open the ELEC PUMP 1, ELEC PUMP 2, and CMD circuit breakers, and attach DO-NOT-CLOSE tags to them.

- (3) Make sure that the pressure in hydraulic system No. 1 is fully released ([AMM TASK 29-10-00-860-802-A/200](#)).
- (4) Control the ailerons up and down, or the rudder to the left and to the right, until the pressure of the hydraulic system shows zero PSI on the EICAS.
- (5) Open access door 114CR of the nose hydraulic compartment (AMM MPP 06-41-01/100).
- (6) Release the pressure from the pax door/landing gear accumulator, installed in the nose hydraulic compartment. For this, open the discharge valve and monitor the pressure gage until it shows the nitrogen precharge.

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

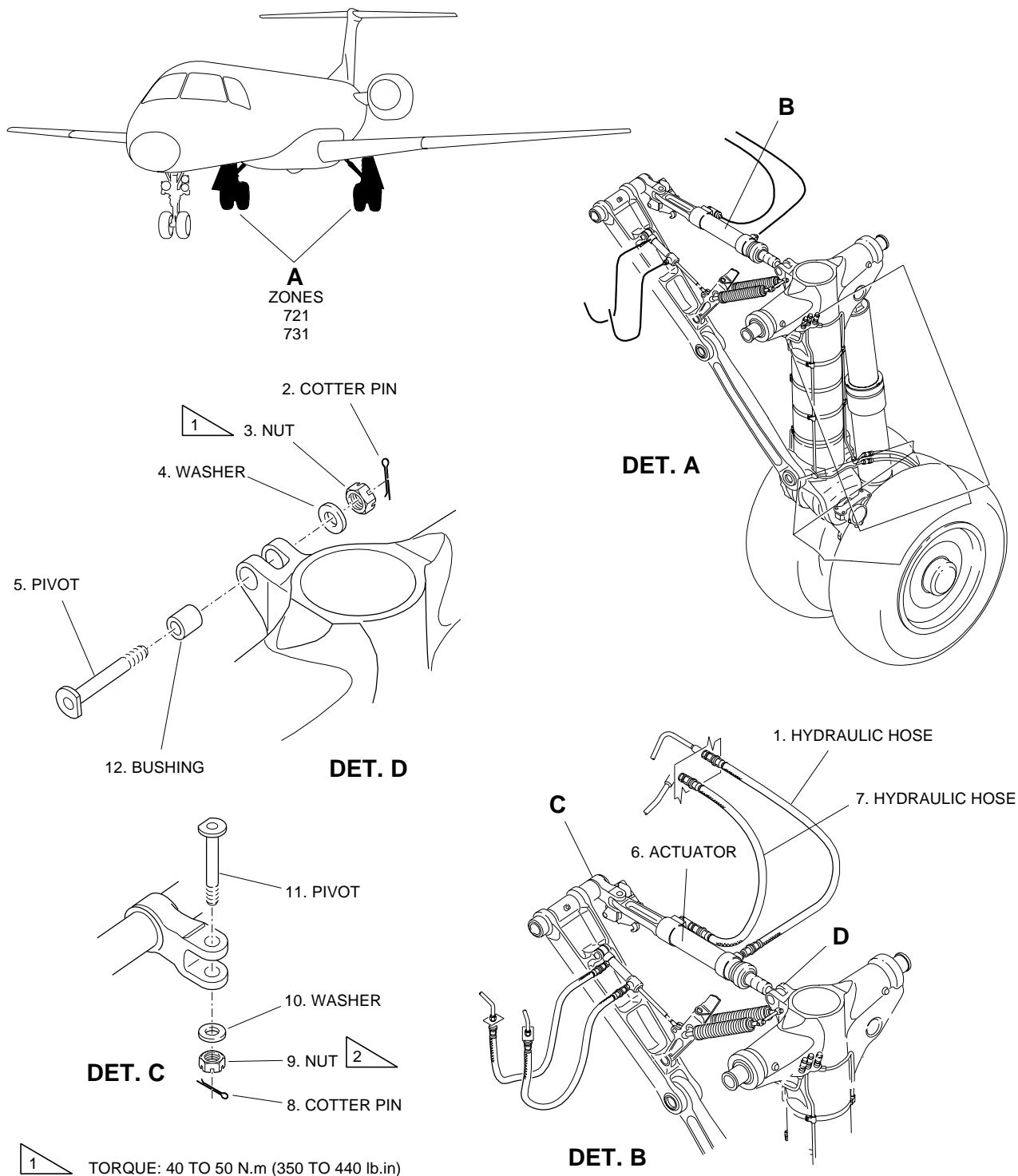
SUBTASK 020-002-A

- (1) Disconnect the hydraulic hoses (1) and (7) from the MLG actuator.
NOTE: Use a drip pan to collect the remaining hydraulic fluid.
- (2) Remove the cotter pins (2) and (8).
- (3) Remove the nut (3), washer (4), bushing (12) and pivot (5).
- (4) Remove the nut (9), washer (10) and pivot (11).
- (5) Remove the MLG actuator (6).

EFFECTIVITY: ALL

Main Landing Gear Actuator - Removal/Installation

Figure 401



EM145AMM320264G.DGN

TASK 32-33-08-400-801-A
EFFECTIVITY: ALL

3. MAIN LANDING GEAR ACTUATOR - INSTALLATION

A. General

(1) This task gives the procedures to install the MLG actuator.

B. References

REFERENCE	DESIGNATION
AMM TASK 29-10-00-860-802-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH EMDP
AMM TASK 29-10-00-860-803-A/200	HYDRAULIC SYSTEM - BLEED OF AIR
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

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Safety goggles	Eye protection	AR
Commercially available	Lint free cloth	For cleaning	AR

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
MS 24665-357	Cotter pin	1
MS 24665-357	Cotter pin	1
Aeroshell 22	Grease	As necessary
MEP09-075	Corrosion inhibiting compound COR-BAN 27L	AR
ASTM-D-740	Methyl-Ethyl-Ketone (MEK) solvent	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	LH and RH MLG wheelwells

I. Installation (Figure 401)

SUBTASK 420-002-A

WARNING: BE CAREFUL WHEN YOU USE THE METHYL-ETHYL-KETONE (MEK). PUT ON SAFETY GOGGLES, PROTECTIVE GLOVES AND CLOTHING. DO NOT BREATHE THE GAS. DO THE WORK IN AN AREA WHICH HAS A GOOD FLOW OF AIR. THE METHYL-ETHYL-KETONE (MEK) IS POISONOUS AND HIGHLY FLAMMABLE.

- (1) Remove all residual corrosion inhibiting compound from the pivot (11), pivot (5), bushing (12) and from the lugs where the bushing will be installed with a clean cloth wet with solvent MEK (Methyl-Ethyl-Ketone - Spec. ASTM-D-740), or similar.
- (2) Apply COR-BAN 27L (MEP 09-075) to the pivot (5), pivot (11) and bushing (12).
- (3) Put the MLG actuator (6) in the installation position.
- (4) Install the pivot (5), bushing (12), washer (4) and nut (3).
- (5) Apply a torque of 40 to 50 N.m (350 to 440 lb.in) to the nut (3) until the nut slot is aligned with bolt hole.
- (6) Install the cotter pin (2).
- (7) Install the pivot (11), washer (10) and nut (9).
- (8) Apply run torque as necessary for installation of the cotter pin (9) until the nut slot is aligned with bolt hole.
- (9) Install the cotter pin (8).
- (10) Connect the hydraulic hoses (1) and (7) to the MLG actuator and apply a torque of 17.5 to 18.6 N.m (155 to 165 lbf.in).

NOTE: Use a drip pan to collect the remaining hydraulic fluid.

J. Follow-on

SUBTASK 842-002-A

- (1) Pressurize the door/landing gear accumulator by pressurizing the hydraulic system 1 ([AMM TASK 29-10-00-860-802-A/200](#)).
- (2) On the circuit breaker panel, close the ELEC PUMP 1, ELEC PUMP 2, and CMD circuit breakers below and remove the DO-NOT-CLOSE tags from them.
- (3) Do the bleed of air from the hydraulic system lines ([AMM TASK 29-10-00-860-803-A/200](#)).
- (4) Lubricate the rod ends of the actuator with grease ([AMM TASK 32-34-00-600-801-A/300](#)).

- (5) Do an operational check of the MLG ([AMM TASK 32-30-00-700-801-A/500](#)).

