

E190-E2 COLLINS

NACELLE TOOLING CATALOG

NACELLE

TOOLING by

DEDIENNE AEROSPACE

DEDIENNE
AEROSPACE



E190-E2

GSE TOOLS

Entry into Service (EIS) recommended GSE quantities are based on a review of the Aircraft Maintenance Manual.

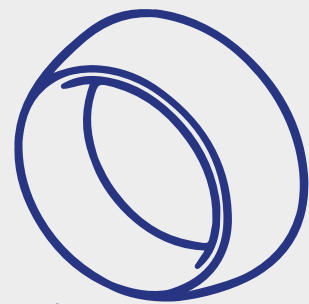
If you need help in order to define the tools to use and for quantity for your needs, contact us and our dedicated team will help you to do the good choice.

Dedienne will help you to choose the right tool for the right task.



CATEGORY	PART NUMBER	NAME	MINIMAL QUANTITIES FOR EIS
 INLET COWL	347-1100-1GSE	INLET SLING	1
	347-1100-2GSE	INLET COWL DOLLY	1
	347-1100-3GSE	INLET PROTECTIVE RUG	0
	347-1100-4GSE	INLET COWL COVER	2
 FAN COWLS	347-2000-1GSE	FAN COWL SLING	1
	347-2000-2GSE	FAN COWL DOLLY	2
	347-2000-3GSE	FAN COWL VENT PLUG	0
	347-2000-5GSE	FAN COWL HINGE BOLT THREAD PROTECTORS	1
 THRUST REVERSER	347-3001-1GSE	THRUST REVERSER SLING	1
	347-3001-2GSE	THRUST REVERSER DOLLY	2
	347-3001-3GSE	THRUST REVERSER HINGE BOLT THREAD PROTECTOR	0
	347-3001-5GSE	THRUST REVERSER C-DUCT PLUG	2
	347-3001-7GSE	THRUST REVERSER HAND PUMP DOS	1
	347-3001-11GSE	THRUST REVERSER UNLOCK PINS	0
	347-3001-14GSE	THRUST REVERSER PRD TORQUE ADAPTOR	1
 NOZZLE & CENTER BODY	347-3501-2GSE	TRANSLATING SLEEVE DOLLY	1
	347-4100-1GSE	EXHAUST NOZZLE COVER	2
	347-4100-4GSE	EXHAUST NOZZLE LIFTING AID	1
 ENGINE MOUNT	347-6000-1GSE	ENGINE MOUNT CART	0
	347-6001-2GSE	FORWARD ENGINE MOUNT SLING	1
	347-6501-1GSE	AFT ENGINE MOUNT SLING	1

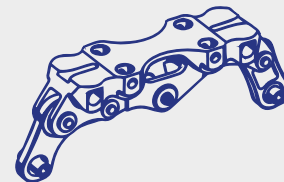
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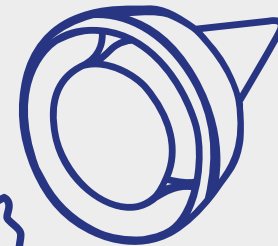
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INLET COWL SLING

E190-E2 GSE TOOLS



DESCRIPTION – USE

The Inlet Cowl Sling is used to lift and move the entire E190-E2 Inlet Assy.



CAUTION

The Inlet Cowl Sling is used to install or remove the Inlet Cowl from the Engine. This tool has a feature that allows the tool operator to rotate the Inlet Cowl and eases the installation on the Engine or placement on the Dolly.



TEST

Dedienne Aerospace has regional facilities to aid in the required annual testing and recertification.



270 x 45 x 45 cm



82 KG



347-1100-1GSE



INLET COWL DOLLY

E190-E2 GSE TOOLS



DESCRIPTION - USE

This tool is used during the maintenance and transportation of inlet cowl.



CAUTION

This tool has been validated for the maintenance of the E190-E2 Inlet Cowl. If the Inlet Cowl is moved or repaired on another tool and there is damage, the insurance company may not cover the damage.



280 x 165 x 170 cm



900 KG



347-1100-2GSE



INLET PROTECTIVE RUG

E190-E2 GSE TOOLS



DESCRIPTION - USE

Tool is used as a Protective Mat on the Inlet inner surface during Maintenance, Removal or Installation activity on the Inlet.



85 x 40 x 20 cm



10 KG

347-1100-3GSE



INLET COWL COVER

E190-E2 GSE TOOLS



DESCRIPTION - USE

The Inlet Cowl Cover is used to protect inlet from foreign objects during parking and mooring.



CAUTION

Without the Inlet Cowl Cover, water, dust or wind can go inside the Engine.

> Water retention: Accelerates corrosion.

> Dust: The Engine could be damaged during the ignition.

> Wind: Allows blade rotation which may cause damage.

The Engine warranty may be void if the Covers are not used properly under the required conditions and there is damage to the Engine.



50 x 40 x 40 cm



3 KG



347-1100-4GSE



FAN COWL DOOR SLING

E190-E2 GSE TOOLS



DESCRIPTION - USE

The Fan Cowl Door Sling is used for E190-E2 series Fan Cowl Installation & Removal only.



CAUTION

This Sling is a lifting tool and it's the only tool validated to lift the E190-E2 Fan Cowl. If the Fan Cowl is lifted with another tool, and there is damage, insurance may not cover the damage.



80 x 45 x 35 cm



70 KG



347-2000-1GSE



FAN COWL DOLLY

E190-E2 GSE TOOLS



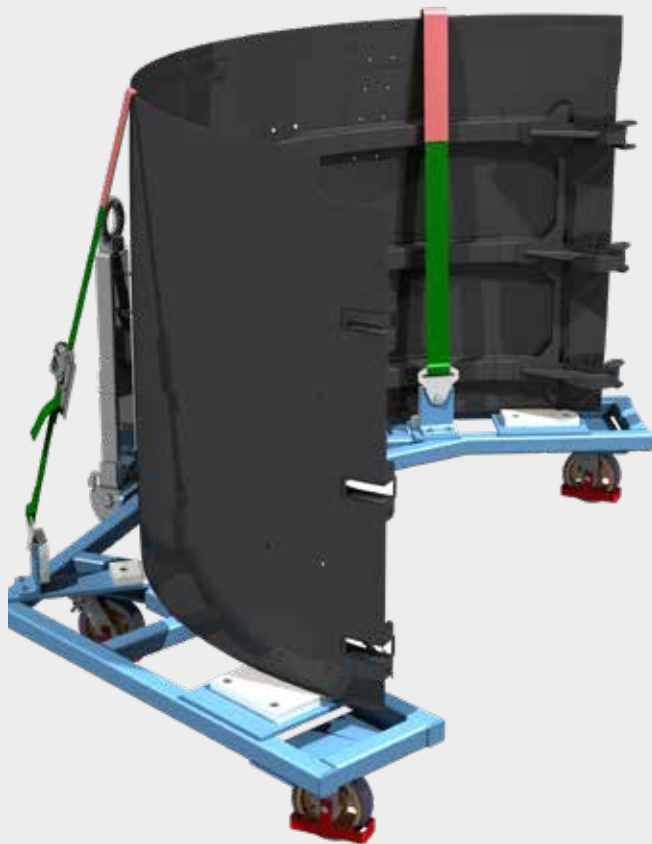
DESCRIPTION - USE

The Fan Cowl Dolly is used to move the Fan Cowl in the hangar or shop and for Fan Cowl Storage. The Fan Cowl can be maintained or stored on the Fan Cowl Dolly.



CAUTION

After using the Fan Cowl Sling 347-2000-1GSE to remove a Fan Cowl from the Engine, the Fan Cowl Dolly is needed to move, store or do maintenance on the Fan Cowl.



310 x 170 x 130 cm



350 KG

347-2000-2GSE



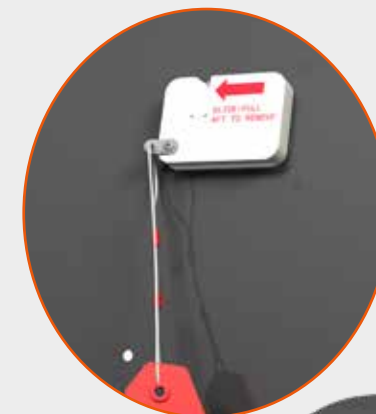
FAN COWL VENT DOOR PLUG

E190-E2 GSE TOOLS



DESCRIPTION - USE

The Fan Cowl Vent Door Plug is used to prevent foreign objects from entering into the Fan Cowl when the aircraft is in parking or mooring.



55 x 45 x 25 cm



5 KG

347-2000-3GSE



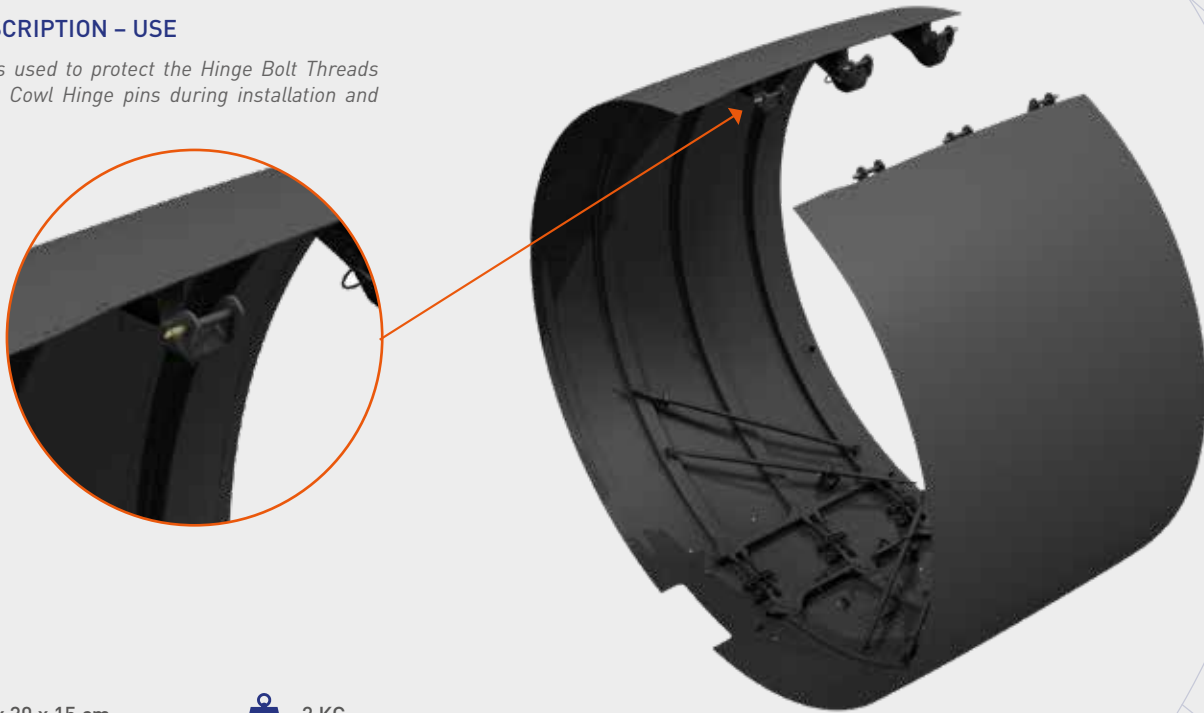
FAN COWL HINGE BOLT THREAD PROTECTORS

E190-E2 GSE TOOLS



DESCRIPTION - USE

This tool is used to protect the Hinge Bolt Threads of the Fan Cowl Hinge pins during installation and removal.



30 x 30 x 15 cm



2 KG



347-2000-5GSE

11

The pictures, measurements, and weights shall be used only as an indication.



THRUST REVERSER SLING-LH/RH

E190-E2 GSE TOOLS



DESCRIPTION - USE

The Thrust Reverser Sling is used to pick the Thrust Reverser Engineering Assembly (Both LH/RH) from the ACFT /Shipping container and place the same on the Thrust Reverser Dolly for maintenance purpose. The Manual Hoist connected to the Latch beam location Via the Nylon Strap can be operated to tilt the TR Engineering assembly at various angles during Installation and removal from ACFT on to the dolly and vise-versa.



CAUTION

This tool is the only tool validated to lift the E190-E2 Thrust Reverser. If the Thrust Reverser is lifted using another tool, and there is damage, the insurance may not cover the damage.



TEST

Dedienne Aerospace has regional facilities to aid in the required annual testing and recertification.



125 x 140 x 55 cm



150 KG



347-3001-1GSE



12

The pictures, measurements, and weights shall be used only as an indication.

TOWABLE DOLLY FOR LH & RH TR

E190-E2 GSE TOOLS

DESCRIPTION - USE

This Tool is used to carry a LH or RH Thrust Reverser.

CAUTION

When the Thrust Reverser is removed from the aircraft using the Thrust Reverser Sling, the Thrust Reverser Dolly is needed to store or work on the Thrust Reverser.



260 x 240 x 100 cm

750 KG



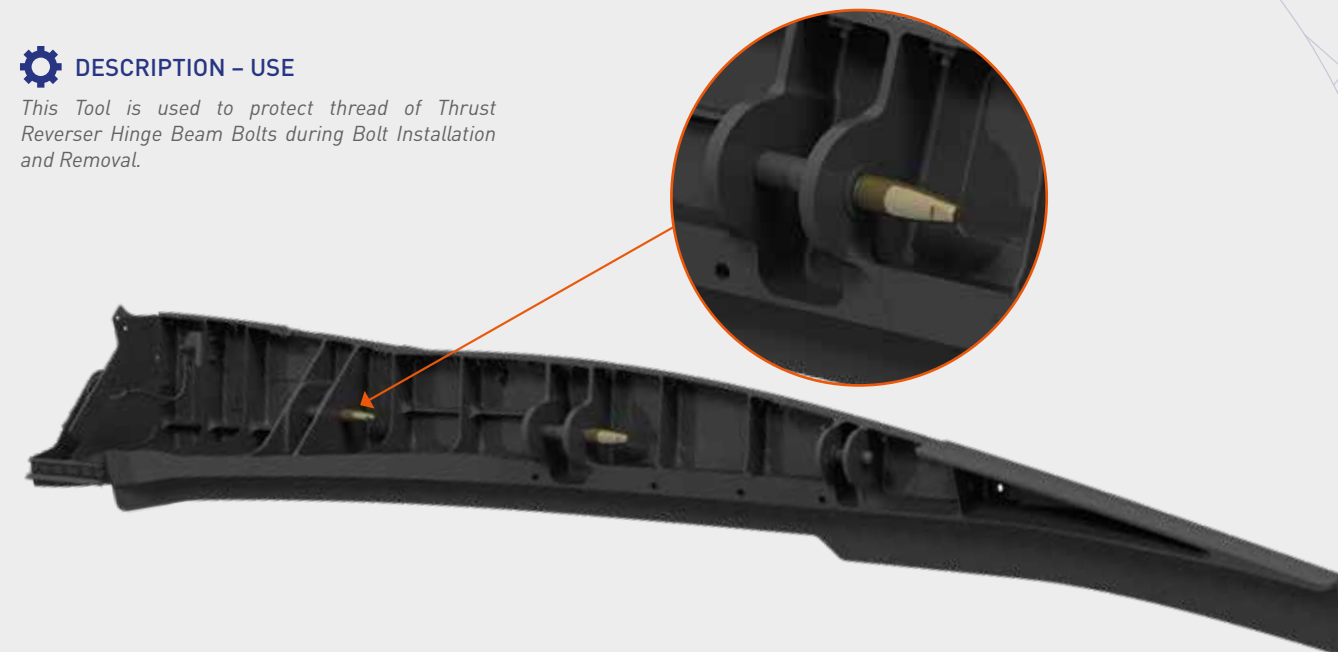
347-3001-2GSE

THRUST REVERSER HINGE BEAM BOLT THREAD PROTECTOR

E190-E2 GSE TOOLS

DESCRIPTION - USE

This Tool is used to protect thread of Thrust Reverser Hinge Beam Bolts during Bolt Installation and Removal.



25 x 25 x 15 cm

1,5 KG



347-3001-3GSE



THRUST REVERSER PLUG

E190-E2 GSE TOOLS

347-3001-5GSE

DESCRIPTION - USE

This tool is used to cover the bypass duct between the Translating Sleeve and Inner Fixed Structure (LH and RH).

CAUTION

Without the Thrust Reverser Plug, water, dust or wind can go inside the Engine.

> Water retention: Accelerates corrosion.

> Dust: The Engine could be damaged during the ignition.

> Wind: Allows blade rotation which may cause damage.

The Engine warranty may be void if the Covers are not used properly under the required conditions and there is damage to the Engine.



 140 x 60 x 45 cm

 40 KG




HYDRAULIC HAND PUMP FOR DOS

E190-E2 GSE TOOLS

347-3001-7GSE

DESCRIPTION - USE

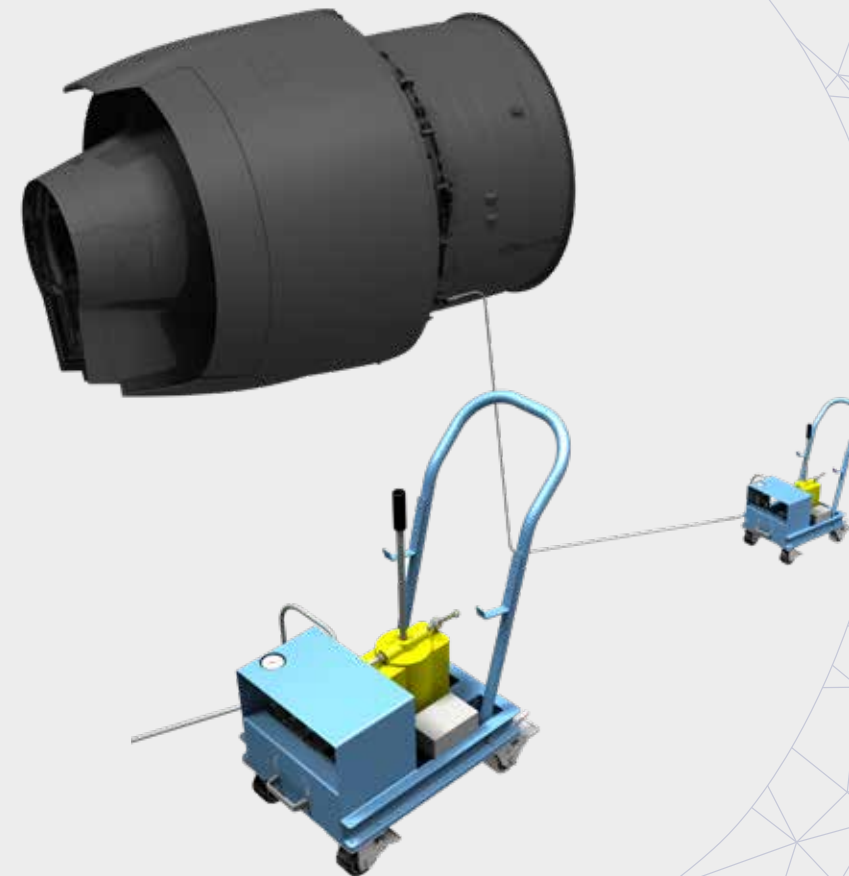
This tool is used for manual actuation of Thrust Reverser Door Actuation System.


CAUTION

The Thrust Reverser Hydraulic Opening System or pump has been designed for use on the E190-E2. If another pump is used to open the C-Ducts and there is damage, the damage may not be covered by the insurance.

TEST

Dedienne Aerospace has regional facilities to aid in the required annual testing and recertification.



 105 x 70 x 135 cm

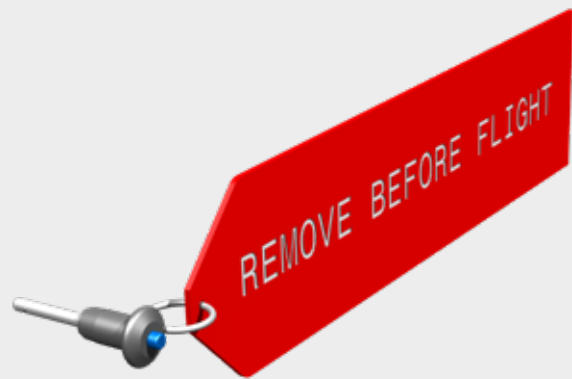
 160 KG



THRUST REVERSER UNLOCK PINS LH/RH

DESCRIPTION - USE

These Pins are used to unlock TRAS Actuators and Track Lock for both LH & RH Nacelles during maintenance.



50 x 30 x 30 cm

3 KG

17

The pictures, measurements, and weights shall be used only as an indication.



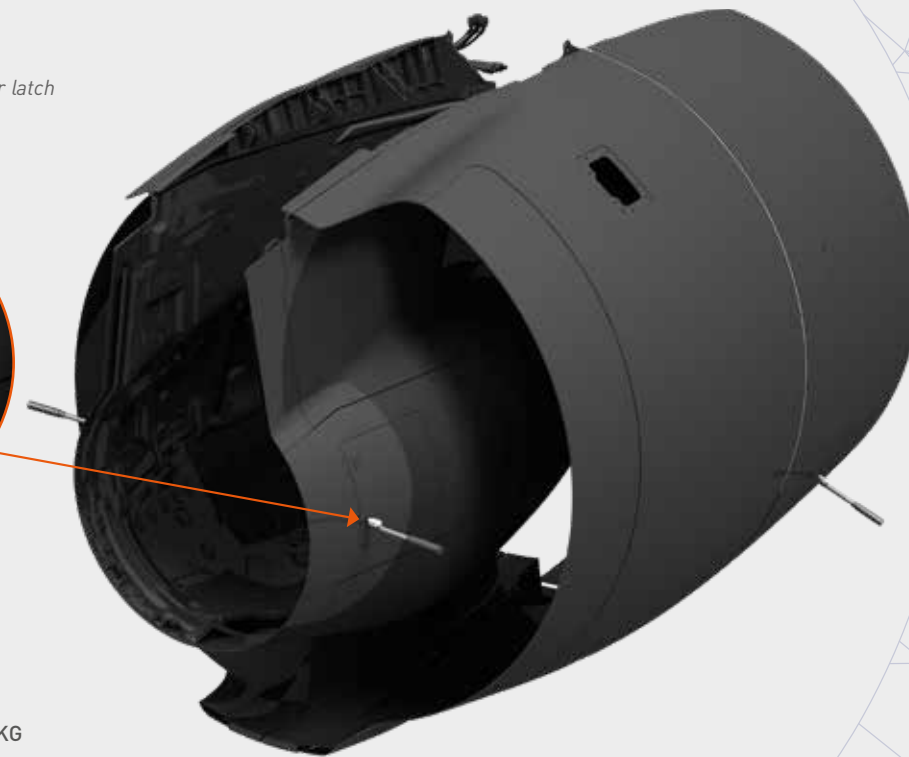
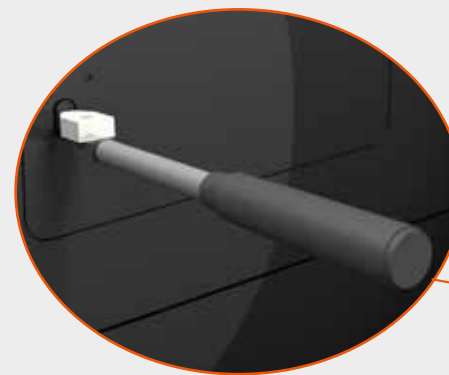
E190-E2 GSE TOOLS

347-3001-11GSE

THRUST REVERSER PRD TORQUE ADAPTOR

DESCRIPTION - USE

This Tool is used for check pressure relief door latch pressure.



40 x 30 x 20 cm

2 KG



347-3001-14GSE

18

The pictures, measurements, and weights shall be used only as an indication.

TRANSLATING SLEEVE DOLLY

E190-E2 GSE TOOLS

DESCRIPTION - USE

This Tool is used during the maintenance and transportation of transleeve assembly.

CAUTION

When the Translating Sleeve is removed from the aircraft using the Thrust Reverser Sling, the Translating Sleeve Dolly is needed to store or work on the Translating Sleeve.



270 x 195 x 130 cm

440 KG



347-3501-2 GSE

EXHAUST NOZZLE AND CENTERBODY COVER

E190-E2 GSE TOOLS

DESCRIPTION - USE

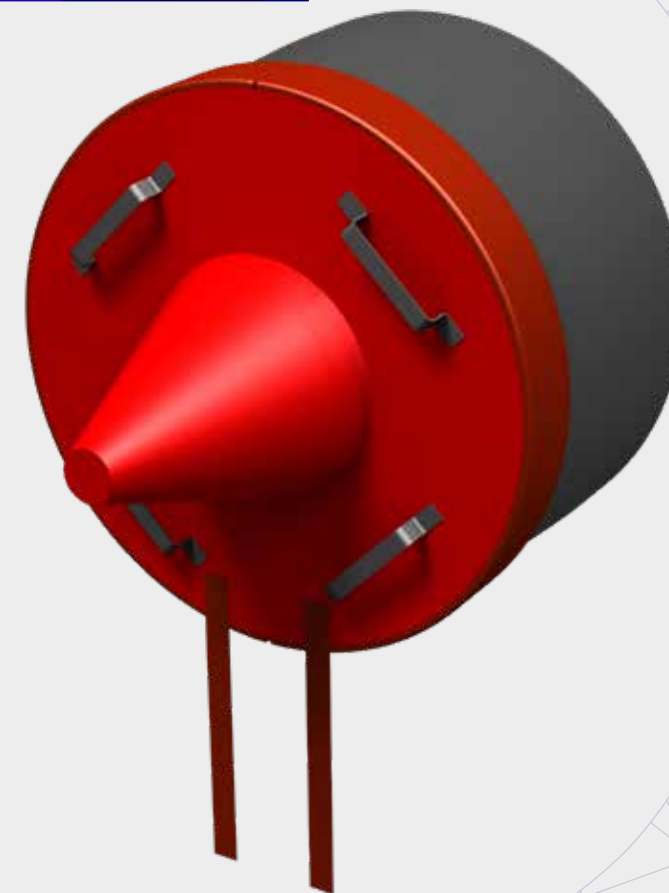
This tool is used to cover exhaust exit area and cover the AFT Centerbody.

CAUTION

Without the Exhaust Nozzle and Centerbody Cover, water, dust or wind can go inside the Engine.

- > Water retention: Accelerates corrosion.
- > Dust: The Engine could be damaged during the ignition.
- > Wind: Allows blade rotation which may cause damage.

The Engine warranty may be void if the Covers are not used properly under the required conditions and there is damage to the Engine.



120 x 50 x 40 cm

40 KG



347-4100-1 GSE



EXHAUST NOZZLE LIFTING AID

E190-E2 GSE TOOLS



DESCRIPTION - USE

This tool is used to install or remove Exhaust Nozzle Assembly.



CAUTION

This Aid is a lifting tool and it is the only tool validated to lift the E190-E2 Nozzle. If the Nozzle is lifted with another tool, and there is damage, the insurance may not cover that damage.



TEST

Dedienne Aerospace has regional facilities to aid in the required annual testing and recertification.



160 x 120 x 130 cm



200 KG

21

The pictures, measurements, and weights shall be used only as an indication.



347-4100-4GSE



ENGINE MOUNT CART

E190-E2 GSE TOOLS



DESCRIPTION - USE

This Tool is used for Engine Mount Assembly Transportation & Maintenance.



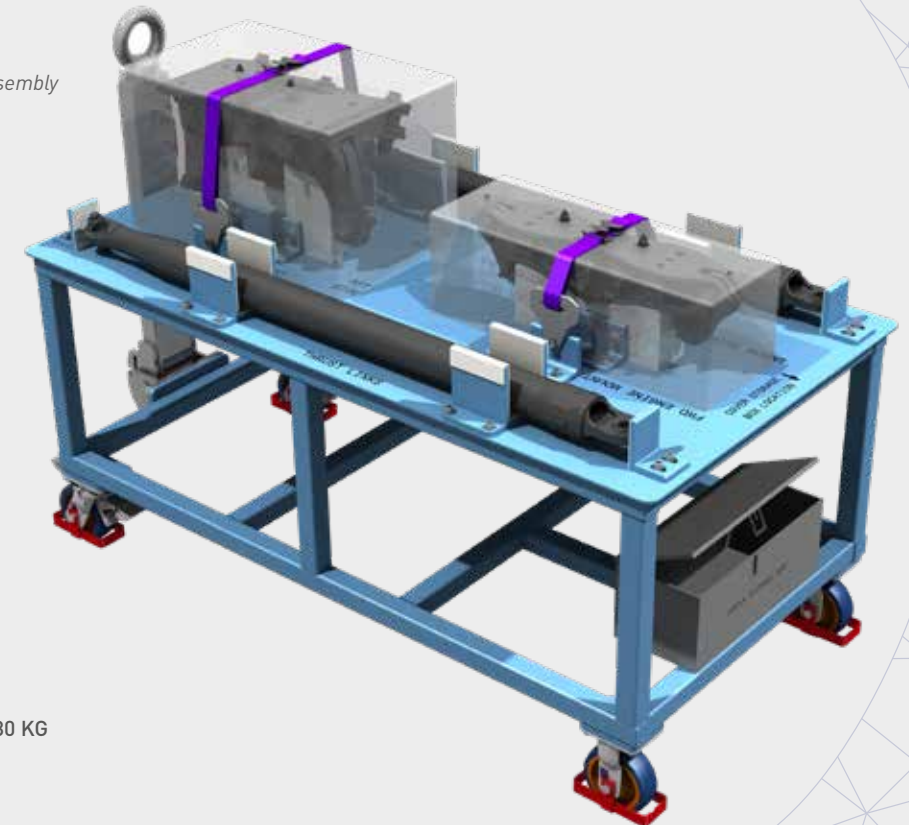
200 x 110 x 130 cm



280 KG

22

The pictures, measurements, and weights shall be used only as an indication.



347-6000-1GSE

22



FWD ENGINE MOUNT SLING

DESCRIPTION - USE

This Tool is used to lift and move the FWD Engine Mount Assy.

CAUTION

This FWD ENGINE MOUNT SLING is a lifting tool and it is the only tool validated to lift the E190-E2 FWD Engine Mount. If the Engine Mount is lifted with another tool, and there is damage, the insurance may not cover the damage.

TEST

Dedienne Aerospace has regional facilities to aid in the required annual testing and recertification.

 55 x 45 x 25 cm

 9,8 KG



E190-E2 GSE TOOLS

347-6001-2GSE




AFT ENGINE MOUNT SLING

DESCRIPTION - USE


This Tool is used to lift and move the AFT Engine Mount Assy.

CAUTION

This AFT Engine Mount Sling is a lifting tool and it is the only tool validated to lift the E190-E2 AFT Engine Mount. If the Engine Mount is lifted with another tool, and there is damage, the insurance may not cover the damage.

TEST

Dedienne Aerospace has regional facilities to aid in the required annual testing.

 60 x 25 x 40 cm

 14 KG



E190-E2 GSE TOOLS

347-6501-1GSE



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TOOLING SERVICES



LOAD TEST

- ▶ 0-200T STATIC & DYNAMIC LOAD TESTING
- ▶ 0-200T TEST BENCH
- ▶ MOBILE DEVICE FOR CUSTOMER ON-SITE TESTS

CALIBRATION

- ▶ FORCE & PRESSURE CALIBRATION
- ▶ 3D MEASUREMENTS

REPAIR & UPGRADE

- ▶ REPAIR OF UNSERVICEABLE EQUIPMENT
- ▶ PERIODIC MAINTENANCE
- ▶ UPGRADE TO LATEST RELEASE BASED ON TCB, AMM AND OEM INFORMATION
- ▶ OFF & ON-SITE MAINTENANCE

TRAINING YOUR TEAM

- ▶ GLOBAL NETWORK OF TECHNICAL INSTRUCTORS
- ▶ TRAINING ON USE & MAINTENANCE



RENTAL SOLUTIONS

- ▶ EQUIPMENT AVAILABLE FOR RENT
- ▶ ENGINE STAND: LEAP, CFM, ROLLS-ROYCE, IAE, ETC.
- ▶ GSE: TRIPOD, TOWBAR, ETC.

SPARE PARTS AVAILABLE

- ▶ ALL DEDIENNE AEROSPACE SPARE PARTS IN STOCK
- ▶ FAST PROVISIONING OF ANY OEM SPARE PARTS
- ▶ QUICK DELIVERY & SHIPMENT WORLDWIDE

NOTES

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