

A350 COLLINS

NACELLE TOOLING CATALOG

NACELLE

TOOLING by

DEDIENNE AEROSPACE

DEDIENNE
AEROSPACE







A350 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 -1000
 INLET COWL	352-7000-1GSE	Inlet Cowl Sling	1
	351-7000-2GSE	Inlet Cowl Dolly	1
	351-7000-3GSE	Inlet Protective Rug	0
	351-7000-4GSE	Inlet Cowl Cover	2
	351-7000-5GSE	Inlet Cowl Transportation Pallet	0
 FAN COWLS	351-2100-14GSE	Fan Cowl Handling Sling	1
	351-2100-15GSE	Fan Cowl Dolly	2
	351-2100-16GSE	Fan Cowl Hinge Bolt Thread Protectors	1
	351-2200-17GSE	Fan Cowl Door Plug	2
	351-1000-25GSE	Forward Secondary Structure Sling	0
 THRUST REVERSER	351-3000-6GSE	Thrust Reverser Sling - LH / RH	1
	351-3000-7GSE	Thrust Reverser Dolly	1
	351-3000-8GSE	Thrust Reverser Hinge Bolt Thread Protector	1
	351-3000-10GSE	Thrust Reverser Cover	2
	351-3000-11GSE	Thrust Reverser C-Duct Step Blocks	0
	351-3000-12GSE	Thrust Reverser Hydraulic Opening System	1
	351-3000-26GSE	Thrust Reverser PRD Latch	1
	351-6100-27GSE	Translating Sleeve Handling Sling	1
	351-3000-36GSE	Thrust Reverser Hold Open Strut to Pylon	1
	351-9920-38GSE	Beavertail fairing tool	0
 NOZZLE & CENTER BODY	351-5010-19GSE	FWD Centerbody Handling Aid	0
	351-5010-20GSE	AFT Centerbody Handling GSE	0
	351-4010-21GSE	Nozzle Handling Aid	1
	351-4000-22GSE	Center-Body / Nozzle Protective Rug	0
	351-4000-23GSE	Exhaust Cover	2
	351-4000-24GSE	Exhaust Dolly	0

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INLET COWL SLING

A350 GSE TOOLS



DESCRIPTION – USE

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 that eases the installation on the Engine or placement on the Dolly.



CAUTION

This tool is the only tool validated to lift the A350 Inlet Cowl. If the Inlet Cowl is lifted with another tool, and there is damage, the insurance company may not cover the damage.



TEST

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



470 x 170 x 130 cm



680 KG



352-7000-1GSE



INLET COWL DOLLY

A350 GSE TOOLS



DESCRIPTION - USE

The Inlet Cowl Dolly is used for maintenance and moving the Inlet Cowl in the hangar or shop facility. This tool aides repair work in the hangar of shop facility.



CAUTION

This tool has been validated for the maintenance of the A350 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.



400 x 280 x 285 cm



2200 KG



351-7000-2GSE



INLET PROTECTIVE RUG

A350 GSE TOOLS



DESCRIPTION - USE

This tool is used as a protective mat on the Inlet Cowl Inner Barrel surface during maintenance or removal and installation activity on the Inlet Cowl. The tool prevents dents and delamination to the critical Acoustic Inner Barrel Panels.



80 x 40 x 20 cm



25 KG

351-7000-3GSE



INLET COWL COVER

A350 GSE TOOLS



DESCRIPTION - USE

The Inlet Cowl Cover is used to protect the Engine from dust, water and wind during parking, mooring or storage of the aircraft.



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 can create 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.



80 x 50 x 40 cm



20 KG



351-7000-4GSE



INLET COWL TRANSPORTATION PALLET

A350 GSE TOOLS



DESCRIPTION - USE

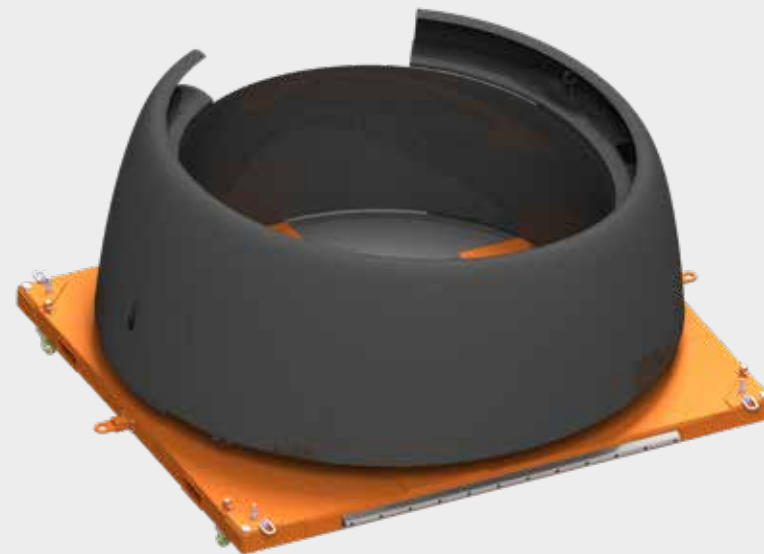
The Inlet Cowl Transportation Pallet is highly recommended. If the airline does not own a spare Inlet Cowl, the Pallet will allow quicker transportation to a qualified MRO (if the airline does not have the repair capability). Where hangar or shop space is limited this Pallet is a good, but limited alternative to the Inlet Cowl Dolly 351-7000-2GSE.



460 x 355 x 200 cm



1300 KG



351-7000-5GSE



FAN COWL HANDLING SLING

A350 GSE TOOLS



DESCRIPTION – USE

The Fan Cowl Sling is used to remove or re-install the Fan Cowl on the Engine. Once a Fan Cowl is off of the Engine the Fan Cowl Sling is used to load and unload the Fan Cowl on the Shipping Pallet or Fan Cowl Dolly.



CAUTION

This Sling is a lifting tool and it's the only tool validated to lift the A350 Fan Cowl. If the Fan Cowl is lifted with another tool, and there is damage, insurance may not cover the damage.



TEST

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



120 x 80 x 50 cm



70 KG



351-2100-14GSE



FAN COWL DOLLY

A350 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 [-14GSE] to remove a Fan Cowl from the Engine, the Fan Cowl Dolly [-15GSE] is needed to move, store or do maintenance on the Fan Cowl.



490 x 240 x 160 cm



1100 KG



351-2100-15GSE





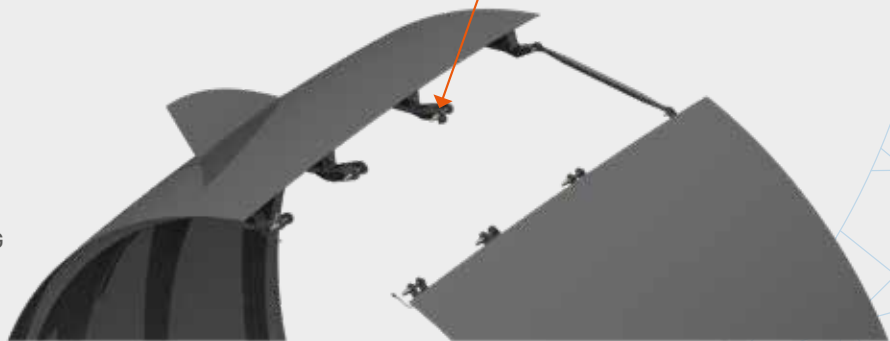
FAN COWL HINGE BOLT THREAD PROTECTORS

A350 GSE TOOLS



DESCRIPTION - USE

The Fan Cowl Hinge Bolt Protectors are used to protect the Bolt threads during removal and installation of the Fan Cowl from the Engine. It allows the Fan Cowl to be removed or installed on the Engine without damaging the Bolt threads.



40 x 30 x 16 cm



3 KG



351-2100-16GSE

11

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



FAN COWL DOOR PLUG

A350 GSE TOOLS



DESCRIPTION - USE

The Fan Cowl Door Plug is used to cover the Fan Cowl Vent and protect the Engine from dust, water and wind during parking, mooring or storage of the aircraft.



CAUTION

Without the Fan Cowl Door 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 can create 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



5 KG



351-2200-17GSE

12

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



FORWARD SECONDARY STRUCTURE SLING



DESCRIPTION - USE

This Forward Secondary Structure Sling is used to remove or install the Forward Secondary Structure on the aircraft Pylon. The Forward Secondary Structure is high off the ground above the Engine. It is needed for the mechanics to safely remove and install the Forward Secondary Structure.



CAUTION

This tool is a lifting tool and it is the only tool validated to lift the A350 Forward Secondary Structure. If the Forwards Secondary Structure is lifted with another tool, and there is damage, the insurance may not cover that damage.



TEST

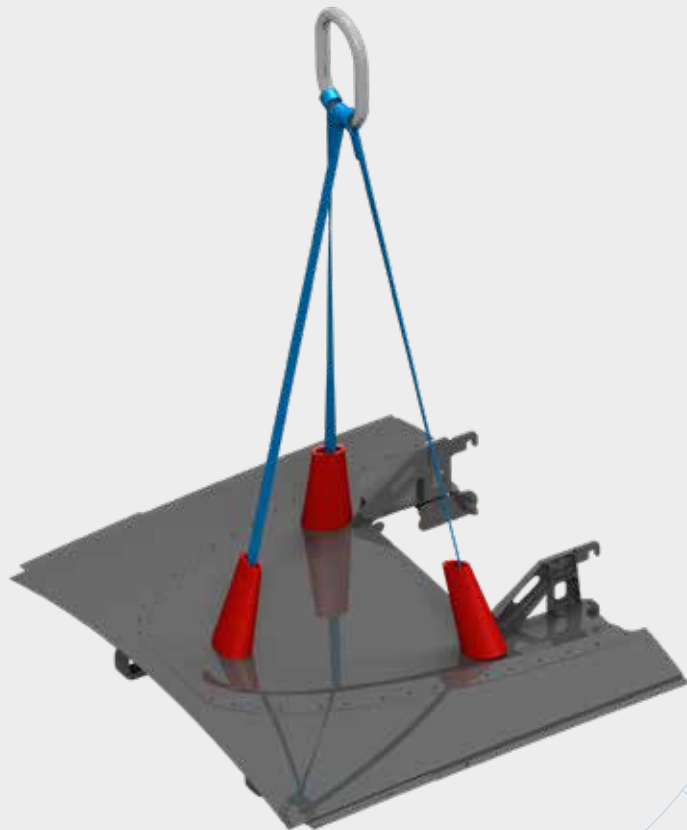
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80 x 50 x 40 cm



10 KG



A350 GSE TOOLS

351-1000-25GSE



THRUST REVERSER SLING - LH/RH



DESCRIPTION - USE

The Thrust Reverser Sling is used to load or unload the Thrust Reverser from the Transportation Pallet, rotate it, then install or remove the Thrust Reverser from the Engine/Pylon.



CAUTION

This tool is the only tool validated to lift the A350 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 aide in the required annual testing and recertification.



260 x 170 x 65 cm



400 KG



A350 GSE TOOLS

351-3000-6GSE



THRUST REVERSER DOLLY

DESCRIPTION - USE

The Thrust Reverser Dolly is used for maintenance work and moving the Thrust Reverser in the hangar or shop. The Dolly allows to make inspections or repairs into the inside surface of the 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.



370 x 310 x 170 cm

1350 KG

A350 GSE TOOLS

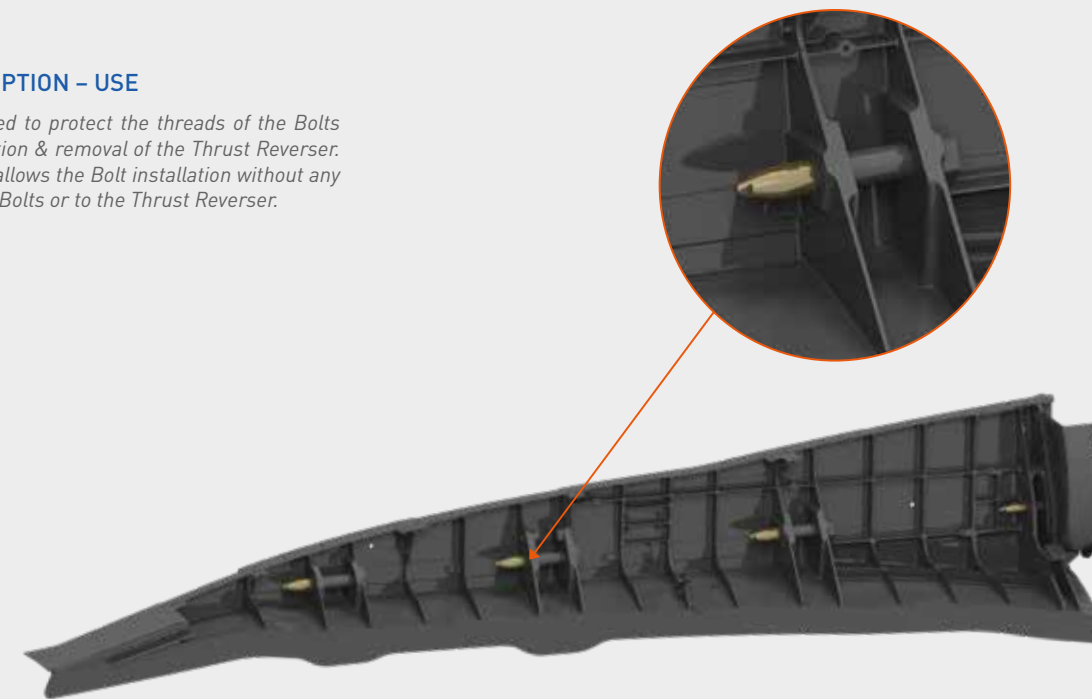
351-3000-7GSE



THRUST REVERSER HINGE BOLT THREAD PROTECTOR

DESCRIPTION - USE

This tool is used to protect the threads of the Bolts during installation & removal of the Thrust Reverser. The Protector allows the Bolt installation without any damage to the Bolts or to the Thrust Reverser.



40 x 30 x 16 cm

3 KG

A350 GSE TOOLS

351-3000-8GSE



THRUST REVERSER COVER

DESCRIPTION - USE

The Thrust Reverser Cover is used to protect the Thrust Reverser By-pass Ducts from dust, water and wind during parking, mooring or storage of the aircraft.

CAUTION

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

> Water retention: Accelerates corrosion.

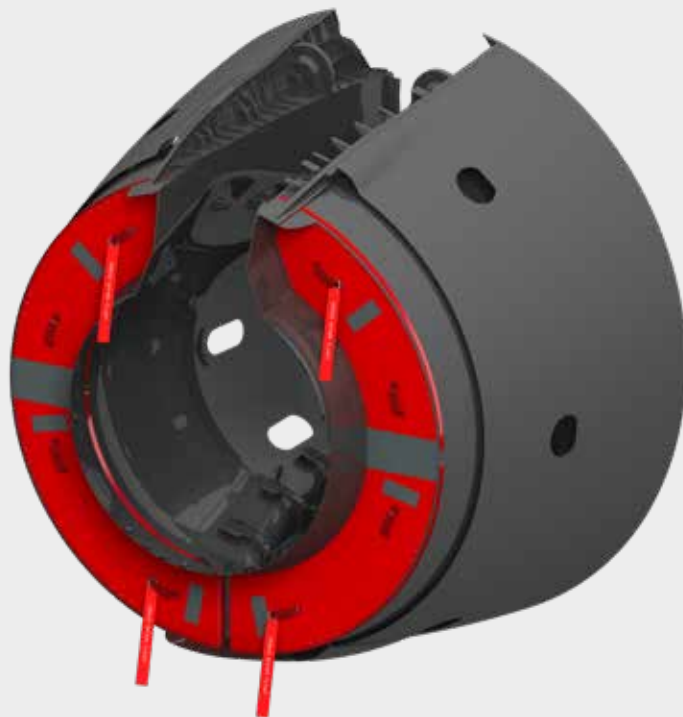
> Dust: The Engine could be damaged during the ignition.

> Wind: Allows blade rotation which can create 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.

220 x 100 x 70 cm

110 KG



A350 GSE TOOLS

351-3000-10GSE

THRUST REVERSER C-DUCT STEP BLOCKS

DESCRIPTION - USE

The Thrust Reverser C-Duct Step is used to give access to the upper half of the C-Duct for inspection or maintenance.

175 x 160 x 100 cm

193 KG



A350 GSE TOOLS

351-3000-11GSE



THRUST REVERSER HYDRAULIC OPENING SYSTEM



DESCRIPTION - USE

The Thrust Reverser Hydraulic Opening System is used to manually open and close the Thrust Reverser C-Ducts. The three manometers allow this pump to open both Thrust Reverser C-Ducts at the same time to check the hydraulic pressure on each C-Duct.



CAUTION

The Thrust Reverser Hydraulic Opening System or pump has been designed for use on the A350. 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 aide in the required annual testing and recertification.



100 x 80 x 115 cm



80 KG



A350 GSE TOOLS

351-3000-12GSE



THRUST REVERSER PRD LATCH



DESCRIPTION - USE

This tool is used to perform functional tests of Thrust Reverser Latch forces. This tool is needed to check the stresses applied to the Latch. This tool needs to be used yearly.



CAUTION

This tool is needed to test the Latch. If the Latch is not properly calibrated it may open unnecessarily in flight or it may not open when required during a pressure increase. This may cause the Thrust Reverser to depart the aircraft.



35 x 20 x 20 cm



1 KG



A350 GSE TOOLS

351-3000-26GSE





TRANSLATING SLEEVE HANDLING SLING

A350 GSE TOOLS



DESCRIPTION – USE

This tool is used to add or remove Transleeve from Inner Fixed Structure while TR is on the Dolly.



CAUTION

This tool is the only validated to add or remove the Transleeve for the A350. If the Transleeve is lifted with another tool, and there is damage, the insurance may not cover the damage.



TEST

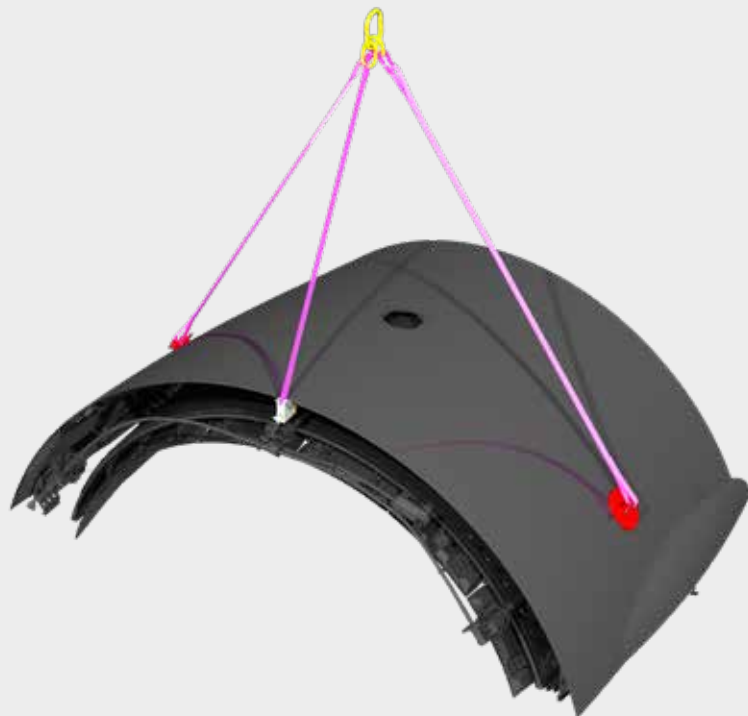
Dedienne Aerospace has regional facilities to aide in the required annual testing and recertification.



120 x 80 x 50 cm



50 KG



351-6100-27GSE



THRUST REVERSER HOLD OPEN STRUT TO PYLON

A350 GSE TOOLS



DESCRIPTION – USE

The Thrust Reverser Hold Open Strut is used to hold open both Thrust Reverser Halves (C-Ducts) during the removal or installation of the Engine from the Pylon. This tool also allows the Thrust Reverser Halves to be held open without the Engine installed on the Pylon on A350.



CAUTION

This tool is mandatory for this task. If not used the Thrust Reverser or the Pylon can be damaged.



TEST

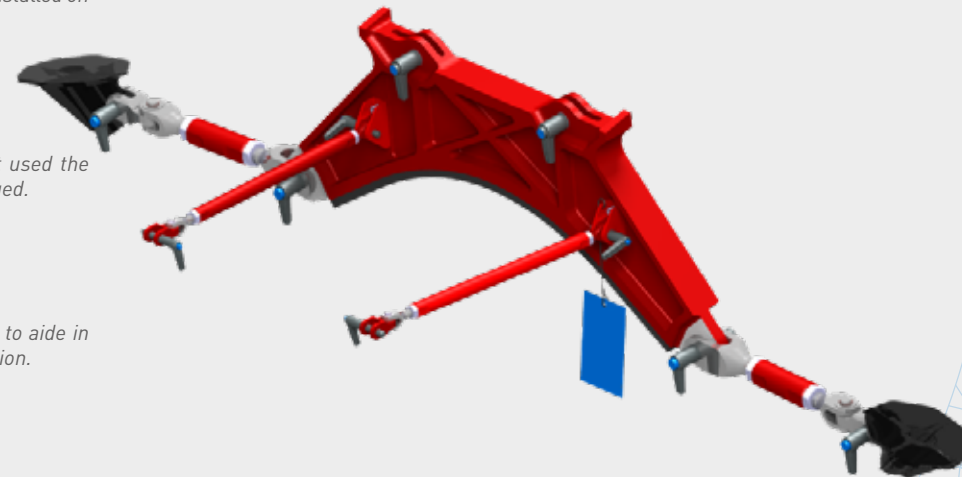
Dedienne Aerospace has regional facilities to aide in the required annual testing and recertification.



100 x 60 x 50 cm



30 KG



351-3000-36GSE





BEAVERTAIL FAIRING TOOL

DESCRIPTION - USE



This Tool is used to locate and install Beaver Tail to latch Beam while translating sleeve is stowed or deployed for L/H and R/H.T

CAUTION

This tool is the only validated to add or remove the Transleeve for the A350. If the Transleeve is lifted with another tool, and there is damage, the insurance may not cover the damage.

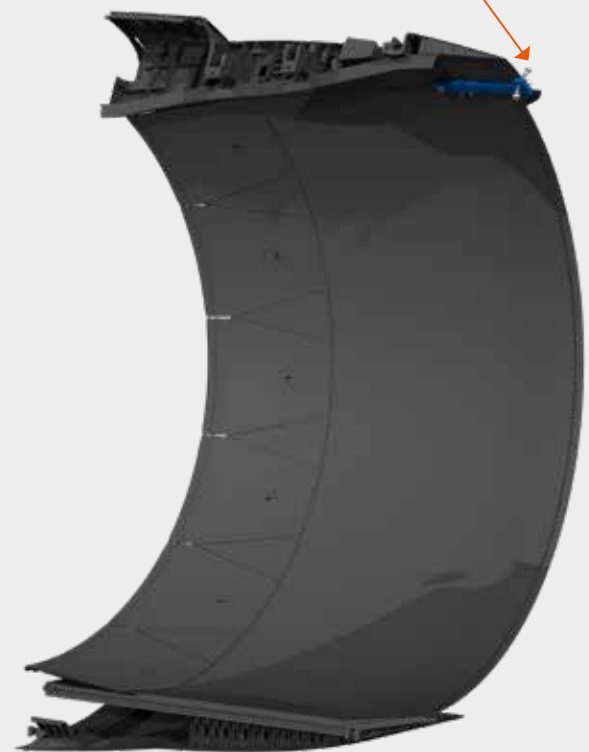
TEST

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

 70 x 30 x 15 cm  10 KG



A350 GSE TOOLS



351-9920-38GSE



FWD CENTERBODY HANDLING AID

DESCRIPTION - USE



The FWD Center-body Handling Aid is used to assist manually removing and re-installing the FWD Center-body on the Engine by two mechanics.

CAUTION

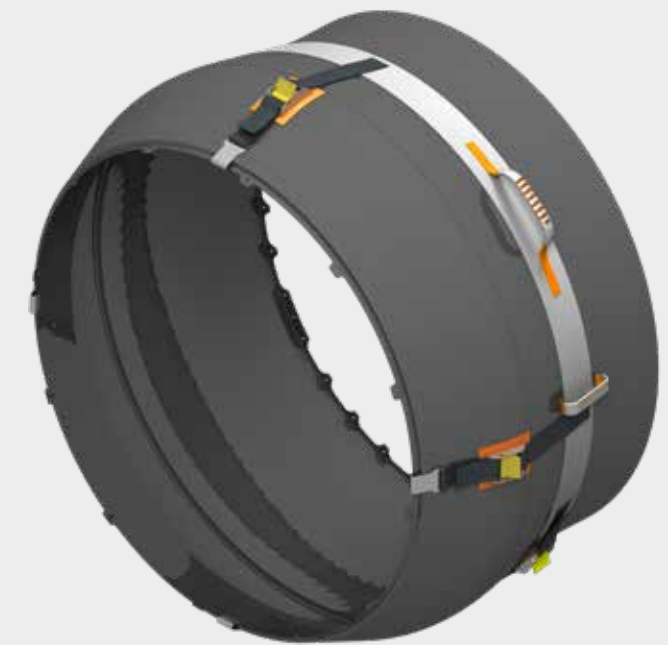
This Aid is a lifting tool and it is the only tool validated to lift the A350 Centerbody. If you lift the centerbody with another tool you will not be covered by your insurance. If the FWD Center-body is lifted with another tool, and there is damage, insurance may not cover the damage.

TEST

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

 60 x 40 x 40 cm  8 KG

A350 GSE TOOLS



351-5010-19GSE



AFT CENTERBODY HANDLING GSE

A350 GSE TOOLS



DESCRIPTION - USE

This tool is used for removal and installation of AFT center body only.



CAUTION

This Aid is a lifting tool and it is the only tool validated to lift the A350 Centerbody. If you lift the centerbody with another tool you will not be covered by your insurance. If the AFT Center-body is lifted with another tool, and there is damage, insurance may not cover the damage.



TEST

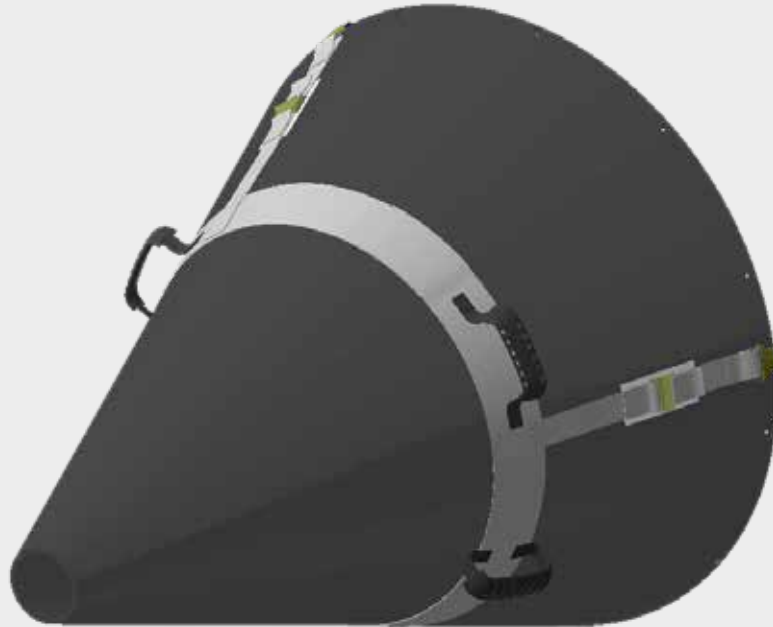
Dedienne Aerospace has regional facilities to aide in the required annual testing.



60 x 40 x 40 cm



8 KG



351-5060-20GSE



NOZZLE HANDLING AID

A350 GSE TOOLS



DESCRIPTION - USE

The Nozzle Handling Aid is used to remove or install the Nozzle on the Engine onto the A350. The Exhaust Dolly (-24GSE) is used to move or store the Nozzle in the hangar or shop.



CAUTION

This Aid is a lifting tool and it is the only tool validated to lift the A350 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 aide in the required annual testing and recertification.



180 x 180 x 180 cm



500 KG



351-4010-21GSE





CENTER-BODY/NOZZLE PROTECTIVE RUG

A350 GSE TOOLS



DESCRIPTION - USE

This tool is used as a Protective Rug on the Nozzle inner surface during Maintenance or Removal-Installation activity on Nozzle.



80 x 60 x 50 cm



17 KG

27

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

351-4000-22GSE



EXHAUST COVER

A350 GSE TOOLS



DESCRIPTION - USE

The Exhaust Cover is used to protect the Engine from dust, water and wind during parking, mooring or storage of the aircraft.



CAUTION

Without the Exhaust 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 can create 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.*



180 x 100 x 40 cm



52 KG



351-4000-23GSE

28

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



EXHAUST DOLLY

A350 GSE TOOLS



DESCRIPTION – USE

The Exhaust Dolly is used to move, do maintenance and store the FWD Center-body, Center-body and Nozzle after removal from the Engine.



CAUTION

After using the -19GSE & -21GSE the -24GSE is required for transportation or storage of the Center-body and Nozzle. Without the -24GSE, it will be difficult to store or work on these items.



300 x 160 x 110 cm



560 KG

351-4000-24GSE

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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
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