A350 COLLINS

NACELLE TOOLING CATALOG





A350 GSE TOOLS

We have the capability to provide you all recommended GSE's based on the Aircraft Maintenance Manual (AMM) for your EIS (Entry-into-Service) program, and all your maintenance operations.

Thanks to our Tooling recommendation team, we can propose you a tailored tooling list for your maintenance workscope.



CATEGORY	PART NUMBER	NAME	MINIMAL QT FOR EIS
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
	351-2100-18GSE	Nep Fan Cowl Hold Open Rod GSE	1
THRUST REVERSER	351GSE3001-901	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
	351GSE3008-901	Pre-Nep Pressure Relief Latch Tester	1
	351-6100-27GSE	Translating Sleeve Handling Sling	1
	351-3000-36GSE	Thrust Reverser Hold Open Strut to Pylon	1
	351-9920-38GSE	Lower Beavertail fairing tool	0
	351-3000-40GSE	Nep Pressure Relief Latch Tester	0
NOZZLE & CENTER BODY	351-5010-19GSE	FWD Center Body Handling Aid	0
	351-5060-20GSE	AFT Center Body 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

CONTENT THRUST REVERSER > Thrust Reverser Sling - LH/ RH... > Thrust Reverser Dolly .. > Thrust Reverser Hinge Bolt Thread Protector... > Thrust Reverser Cover.... > Thrust Reverser C-Duct Step Blocks.. > Thrust Reverser Hydraulic Opening System.. > Pre-Nep Pressure Relief Latch Tester .. > Translating Sleeve Handling Sling... > Thrust Reverser Hold Open Strut to Pylon ... > Lower Beavertail fairing tool.. > Nep Pressure Relief Latch Tester.. FAN COWLS > Fan Cowl Handling Sling... .. p.19 > Fan Cowl Dolly.... .p.20 > Fan Cowl Hinge Bolt Thread Protectors p.21 .. p.22 > Fan Cowl Door Plug.. > Forward Secondary Structure Sling.. .. p.23 > Nep Fan Cowl Hold Open Rod GSE. .. p.24 INLET COWL > Inlet Cowl Sling. > Inlet Cowl Dolly. > Inlet Protective Rug.. > Inlet Cowl Cover.... > Inlet Cowl Transportation Pallet...

NOZZLE & CENTER BODY

> Nozzle Handling Aid...

> Exhaust Cover

> Exhaust Dolly

> FWD Center Body Handling Aid

> AFT Center Body Handling GSE

> Center Body / Nozzle Protective Rug

.. p.12

.. p.14

... p.16

... p.25

... p.26

... p.27

...p.29

INLET COWL SLING

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 aid in the required annual testing and recertification.







INLET COWL DOLLY

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.











INLET PROTECTIVE RUG

DESCRIPTION - USE

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





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INLET COWL COVER

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.







INLET COWL TRANSPORTATION PALLET

THRUST REVERSER SLING - LH/RH

DESCRIPTION - USE

The Inlet Cowl Transportation Pallet is highly recommended. If the airline does not own a spare Inlet Cowl, the Pallet will allow guicker 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.



A350 GSE TOOLS

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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.



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

→ DIMENSIONS 2600 x 1800 x 650 mm

№ WEIGHT

[103 x 71 x 26 in]

400 kg [882 lbs]

→ DIMENSIONS

4600 x 3550 x 2000 mm [182 x 140 x 79 in]

1300 kg [2,866 lbs]

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

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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.





→ DIMENSIONS 3700 x 3100 x 1700 mm [146 x 123 x 67 in]

1350 kg [2,976 lbs]



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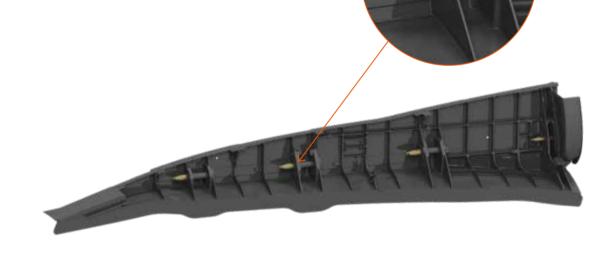
EIS

A350 GSE TOOLS

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.









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

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



11

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A350 GSE TOOLS



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.



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110 kg [243 lbs] [87 x 40 x 28 in]

→ DIMENSIONS 1750 x 1600 x 1000 mm [69 x 63 x 40 in]



193 kg [426 lbs]



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

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 insurance may not cover the damage.

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







ω PRE-NEP PRESSURE RELIEF LATCH TESTER

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.











TRANSLATING SLEEVE HANDLING SLING

DESCRIPTION - USE

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



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.



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THRUST REVERSER HOLD OPEN STRUT TO PYLON

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.



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



→ DIMENSIONS

1000 x 600 x 500 mm [40 x 24 x 20 in]



[↑] WEIGHT

30 kg [67 lbs]



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LOWER BEAVERTAIL **FAIRING TOOL**

DESCRIPTION - USE

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

⊘ TEST

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





17

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NEP PRESSURE RELIEF LATCH TESTER

DESCRIPTION - USE

This tool verifies if the latch tension is set correctly to release at a predetermined load.



→ DIMENSIONS 350 x 200 x 200 mm [14 x 8 x 8 in]

1 kg [3 lbs]

⊕ DIMENSIONS 700 x 300 x 150 mm [28 x 12 x 6 in]

WEIGHT 10 kg [23 lbs]

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

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 is the only tool validated to lift the A350 Fan Cowl. If the Fan Cowl 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.

→ DIMENSIONS 1200 x 800 x 500 mm

[48 x 32 x 20 in]







19

DESCRIPTION - USE

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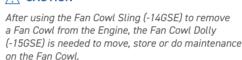
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A350 GSE TOOLS

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

a Fan Cowl from the Engine, the Fan Cowl Dolly (-15GSE) is needed to move, store or do maintenance









1100 kg [2,425 lbs]



20



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FAN COWL HINGE BOLT THREAD PROTECTORS

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.









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A350 GSE TOOLS

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FAN COWL DOOR PLUG

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

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



22



→ DIMENSIONS 500 x 400 x 400 mm [20 x 16 x 16 in]

№ WEIGHT 5 kg [12 lbs]

21

CAUTION

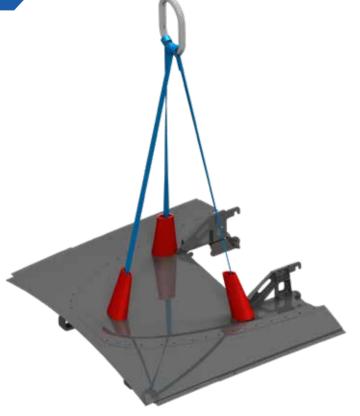
This tool is a lifting tool and it is the only tool validated to lift the A350 Forward Secondary Structure. If the Forward Secondary Structure is lifted with another tool, and there is damage, the insurance may not cover that damage.



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



10 kg [23 lbs]



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NEP FAN COWL HOLD OPEN ROD GSE

DESCRIPTION - USE

This GSE is used to hold open the Fan Cowl (FC) at 37° open condition. The PDOS will be used to open the FC to 37° and this GSE will hold it open. The GSE is designed each for LH & RH side of the FC.

∴ 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.



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



→ DIMENSIONS 1300 x 650 x 300 mm

[52 x 26 x 12 in]

[^] WEIGHT

30 kg [67 lbs]

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A350 GSE TOOLS

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

24

FWD CENTER BODY 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 Center Body. If the FWD Center Body is lifted with another tool, and there is damage, the insurance may not cover the damage.



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



25



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A350 GSE TOOLS

AFT CENTER BODY HANDLING GSE

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 Center Body. If the AFT Center Body 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.



26

→ DIMENSIONS 600 x 400 x 400 mm [24 x 16 x 16 in]

8 kg [18 lbs] **→** DIMENSIONS 600 x 400 x 400 mm [24 x 16 x 16 in]



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NOZZLE HANDLING AID

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 aid in the required annual testing and recertification.

→ DIMENSIONS 1800 x 1800 x 1800 mm [71 x 71 x 71 in]

№ WEIGHT 500 kg [1,102 lbs]



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CENTER BODY/NOZZLE PROTECTIVE RUG

DESCRIPTION - USE

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



→ DIMENSIONS 800 x 600 x 500 mm [32 x 24 x 20 in]

17 kg [38 lbs]

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

A350 GSE TOOLS

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

EXHAUST 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

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



29

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EXHAUST DOLLY

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.





→ DIMENSIONS 1800 x 1000 x 400 mm [71 x 40 x 16 in]

52 kg [115 lbs]







TOOLING SERVICES





- Precision equipment calibration
- Dynamometer calibration
- Electronic calibration
- Periodic load testing





REPAIR:

- · Repair/periodic & preventive maintenance
- · Hydraulic & pneumatic repair
- · Engine Stands repair & maintenance

UPGRADE:

- · Service Bulletins
- OEM Upgrades
- Full diagnostic
- Dimensional control
- Load testing





- Engine Stands
- Engine Tooling
- Nacelle Tooling
- Aircraft Tooling
- Ground Support Equipment
- · On-Wing Support Tooling Solutions
- Shipping Containers
- Helicopter Tooling
- · Defense Tooling





- Seals
- · Shock mounts
- Wheels
- Tow bars





- · Engine Stands
- · Engine Tooling
- · Nacelle Tooling
- Aircraft Tooling
- Ground Support Equipment
- On-Wing Support Tooling Solutions
- Shipping Containers
- · Helicopter Tooling
- · Defense Tooling





- · Global network of technical instructors
- · Training on use & maintenance

31 A350 GSE TOOLS 32 A350 GSE TOOLS



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