

OEM-APPROVED GSE & TOOLING FOR

A global leader in the original design, development, and manufacture of recommended engine handling solutions:

Shipping Stands

• Fan Stator Shipping Stands

Optional Shipping Stand Accessories

Protective Covers

Slings

Shipping Containers

• Site Transport

Pedestal Sets

Fan Tooling

Approved by



Split Shipping System





Uplift Shipping Stand

Engine OEM P/N: 11C4300 AGSE P/N: AGSE-E175 Fan Stator Shipping Stand

Engine OEM P/N: 11C3004 AGSE P/N: AGSE-C069

Fan Transfer Dolly Engine OEM P/N: 11C4348 AGSE P/N: AGSE-E177

Split Engine Components Container Engine OEM P/N: 11C4306 AGSE P/N: AGSE-C083





OEM-APPROVED FOR THE GENX-2B ENGINE SHIPPING STAND FEATURES

CUSTOM DESIGNED | HIGHLY DURABLE | SAFE & ERGONOMIC LOW PROFILE & VERSATILE | MANUFACTURED IN-HOUSE LOWEST TOTAL COST OF OWNERSHIP | SHORTEST LEAD TIMES

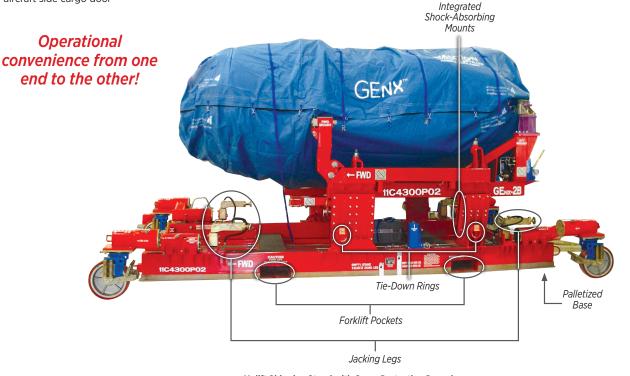
Our reliable & rugged Shipping Stands have been trusted for decades by airlines, aircraft hangars, and engine shops!

All Stands Provide:

- Air/Truck Transport or Storage for propulsors or full engines in QEC configuration*
 - Tie-Down Rings offer secure retainment during air/truck transport
 - Forklift Pockets for convenient site transport

Select Models Feature:

- Bootstrap Capability to simplify on-wing engine removal & installation
- Integrated Shock-Absorbing Mounts to reduce vibrations for engine protection during transport
- External Shock-Absorbing Mounts for truck transport
- Roll-Over designs to achieve minimum "low profile" dimensions for passing through aircraft side cargo door
- Uplift or vertical adjustment to accommodate height-restricted transport
- · Jacking Legs to:
- Properly align the engine for fan removal & installation
- Raise the stand off the ground without the need for a forklift or overhead lifting device
- Palletized Bases compatible with aircraft cargo loading systems
- Ground Handling Bracket Sets (11C4628) to firmly support the engine from both sides of the fan hub frame
- Stacking Spacers to minimize multi-stand shipping or storage volume when empty



Uplift Shipping Stand with Cover Protecting Propulsor

Engine OEM P/N: 11C4300 AGSE P/N: AGSE-E175

*AGSE Shipping Stands are designed and built in compliance with the specifications and requirements of the engine's equipment manufacturer (OEM). The customer is solely responsible for selecting the appropriate packaging based on all information at their disposal, including the specific application, regulatory compliances, product compatibility, shipping requirements, and documentation issued by the Engine OEM. Any AGSE-referenced shipping information presented in this product literature or other AGSE documentation is for general guidance only. It should not be considered a complete set of shipping requirements that can alter, satisfy, or influence regulatory and engine OEM shipping requirements. The content found in AGSE marketing materials and other documentation is subject to change; AGSE accepts no liability for loss or damage resulting from changes, errors, omissions, or misinterpretations of these AGSE publications.



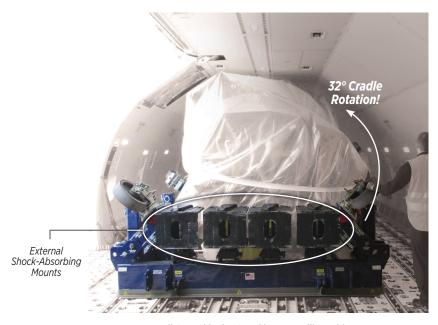


OEM-APPROVED FOR THE GEnx-2B ENGINE SHIPPING STANDS

= Available Feature

											U -	Available Feature
SHIPPING	STANDS BY PART NU	MBER*										
PART Engine OEM NUMBER: AGSE	PROPULSOR CAPABLE OF TRANSPORT ON FREIGHTER AIRCRAFT*	FULL ENGINE TRANSPORT/ STORAGE	BOOTSTRAP CAPABLE	INTEGRATED SHOCK MOUNTS	EXTERNAL SHOCK MOUNTS	ROLL-OVER	UPLIFT	JACKING LEGS	PALLETIZED BASE	GROUND HANDLING BRACKET SET	STACKING SPACERS	OTHER ENGINES ACCOMMODATED
11C4319 AGSE-E215	Boeing 747, 767 & 777	•	•		•	•		•	•			
11C4300 AGSE-E175	Boeing 747, 767 & 777, Douglas DC-10 & MD-11 An-124 or Similar Specialized Aircraft	•†	•	•			•	•	•	•		
11C4349 AGSE-E176	For Ground Transport Only	•	•	•						•		
11C4678 AGSE-E257	Boeing 747, 767 & 777, Douglas DC-10 & MD-11			•								GEnx-1B
9446M34P01 AGSE-E196	For Ground Transport Only			•							•	GEnx-1B

†For Ground Transport only. A Shipping Stand comprises a Cradle & Base.



Roll-Over Shipping Stand in Low Profile Position loaded onto the Main Deck of a Boeing 777 Aircraft

Engine OEM P/N: 11C4319 AGSE P/N: AGSE-E215

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OEM-APPROVED FOR THE GENX-2B ENGINE FAN STATOR SHIPPING STANDS

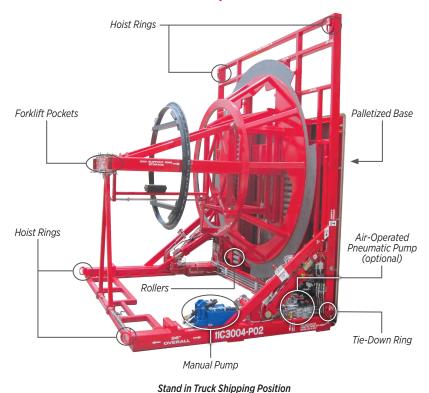
Dependable, efficient, and versatile handling solutions for fan stators!

- Air/Truck Transport or Storage for fan stator modules*
- Manual Pump to vertically adjust the stand for proper alignment during fan removal & installation
- Palletized Base compatible with aircraft cargo loading systems
- Rollers allow multiple positions for improved loading/ unloading onto/from aircraft
- Folding Side Guide Bars center the stand in Boeing 747 side cargo doors

- Tie-Down Rings offer secure retainment during truck transport
- Forklift Pockets for convenient site transport
- Hoist Rings interface with overhead lifting devices for rotation to air or truck shipping positions
- Optional Air-Operated Pneumatic Pump rotates the stand without physical exertion or the need for an overhead lifting device

FAN STATOR SHIPPING STANDS BY PART NUMBER*											
PART Engine OEM	CAPABLE OF TRANSPORT ON	AIR-OPERATED PNEUMATIC PUMP	COMPATIBLE WITH OT	HER AGSE EQUIPMENT:	OTHER ENGINES						
NUMBER: AGSE	FREIGHTER AIRCRAFT*	(-PPK)	FAN CASE COVERS	FAN CASE TRANSFER DOLLIES	ACCOMMODATED						
11C3004 AGSE-C069	Boeing 747, 767 & 777, Douglas DC-10 & MD-11	•	11C3409	11C4490	GEnx-1B						
11C4572 AGSE-C084	Boeing 747, 767 & 777, Douglas DC-10 & MD-11		11C3409	11C4490	GEnx-1B						

Operational convenience from top to bottom!





Stand with Air Pump in Mid-Rotation



Stand in Air Shipping Position

Fan Stator Shipping Stand
Engine OEM P/N: 11C3004
AGSE P/N: AGSE-C069

Side Guide Bars

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OEM-APPROVED FOR THE GENX-2B ENGINE OPTIONAL SHIPPING STAND ACCESSORIES & PROTECTIVE COVERS

= Available Feature

PART Engine OEM NUMBER: AGSE	DESCRIPTION	COMPATIBLE WITH OTHER AGSE EQUIPMENT	INCLUDES:	SPECIFIC FUNCTION	OTHER ENGINES ACCOMMODATED
11C4510 AGSE-E18412	Stand Lift System	11C4319 (Roll-Over Shipping Stand) 11C4300 (Uplift Shipping Stand) 11C4467 (Shipping Container) for split shipment/storage	Four (4) Jacking Leg Assemblies	Raises or lowers the Shipping Stand 47.5" (121 cm) for loading on or removal from a truck trailer or loading system without the need for a forklift or overhead lifting device	GEnx-1B
AGSE-V133	Accessory Drive System	11C4319 (Roll-Over Shipping Stand)	Cart with Motor-Controlled Drive Shaft	Rotates Cradle to achieve minimum dimensions to pass through aircraft side cargo door	GEnx-1B, Trent
11C4347	Forward Fan Case Support Ring	11C4300 (Uplift Shipping Stand) 11C4348 (Fan Case Transfer Dolly)	• One (1) Ring • Seven (7) Mounting Pads	Supports the Fan Stator during lift & turn operations, engine buildup, and transport	

	PROTECTIVE COVERS Lasting protection against dirt, water, and contamination!										
PART NUMBER: Engine OEM	PROVIDES PROTECTION FOR:	COMPATIBLE WITH		FOR USE DURING:							
11C4499	Full Engine	OTHER AGSE EQUIPMENT 11C4319 (Roll-Over Shipping Stand)	AIR TRANSPORT	GROUND TRANSPORT	SITE TRANSPORT						
11C4388	Full Engine	11C4300 (Uplift Shipping Stand) 11C4349 (Truck Shipping Stand)	•	•							
11C4389	Propulsor	11C4300 (Uplift Shipping Stand) 11C4349 (Truck Shipping Stand)	•	•							
11C4310	Fan Case		•	•							
11C4382	Stage 1 Fan Disk				•						



Stable and versatile overhead support for horizontal build-up or Shipping Stand transfer!

= Available Feature

PART Engine OEM NUMBER: AGSE	COMPATIBLE WITH AGSE SHIPPING STAND(S):	MAXIMUM LOAD CAPACITY	CENTER OF GRAVITY ADJUSTMENT FEATURE	TWO (2) SPREADER BEAMS	FORKLIFT POCKETS	TELESCOPING ADJUSTMENT TOOL	INCLUDES STORAGE CONTAINER	OPTIONAL STORAGE CONTAINER	OTHER ENGINES
11C4542 AGSE-L033	11C4300 (Uplift Shipping Stand)	44,000 lbs 19,958 kg		•			•		GEnx-1B
11C4484 AGSE-L038	11C4319 (Roll-Over Shipping Stand) 11C4300 (Uplift Shipping Stand) 11C4349 (Truck Shipping Stand)	32,000 lbs 14,515 kg	Lifting Ring, Aft Cables		•	•		•	GEnx-1B, Trent
AGSE-L018	11C4300 (Uplift Shipping Stand) 11C4349 (Truck Shipping Stand)	30,000 lbs 13,608 kg	Lifting Ring, Aft Cables		•	•	•		GEnx-1B, Trent
11C4648 AGSE-L043-G03		25,000 lbs 11,340 kg	Lifting Ring, Forward Turnbuckles		•	•		•	GEnx-1B
11C4640 AGSE-L043-G01		25,000 lbs 11,340 kg	Lifting Ring, Forward Turnbuckles		•	•		•	
11C4323	11C4628 (Ground Handling Bracket Set)	16,000 lbs 7,257 kg	Lifting Ring			•		•	GEnx-1B



Sling Supporting a Roll-Over Shipping Stand Engine OEM P/N: 11C4484 AGSE P/N: AGSE-L038





OEM-APPROVED FOR THE GENX-2B ENGINE SHIPPING CONTAINERS & SITE TRANSPORT

= Available Feature

PART NUMBER:	АССОММО	DATES:	COMPATIBLE WITH	REMOVABLE	FORKLIFT	SEPARABLE	SHOCK-	SLIDE OUT	VIEW	DOCUMENT	OTHER ENGINE
Engine OEM	SPLIT ENGINE COMPONENTS	SHIPPING STAND COMPONENTS	OTHER AGSE EQUIPMENT	COVER	POCKETS	SHIPPING CRATES	ABSORBING MOUNTS	PLATFORM/ CONTAINER LID	PORT WINDOW		ACCOMMODATI
1C4683 AGSE-C119	Core Module			•			•		•	•	GEnx-1B
1C4306 AGSE-C083	Acoustic Panels Aft Support Ring Deflector Panels Fan Blades Forward Flight Mount Lower Bifurcation Assembly Spinner Splitter			•	•			•	•	•	
1C4467 AGSE-C082		Casters External Shock Mounts Stand Lift System Steering Bars Tow Bar	11C4319 (Roll-Over Shipping Stand) for split shipment/storage	•	•	•			•	•	

SITE TRANS Exceptional tran		acility or between local si	ites!							
PART Engine OEM NUMBER: AGSE	ACCOMMODATES:	COMPATIBLE WITH OTHER AGSE EQUIPMENT	DISASSEMBLES/ FOLDS WHEN EMPTY	PNEUMATIC TIRES	CASTERS	TOW BAR	JACKING LEGS	MANUAL MOVEMENT ONLY	STORAGE CONTAINER	OTHER ENGINES ACCOMMODATED
9446M34P02 AGSE-E197-G02	Propulsor	11C4678 (Shipping Stand) 9446M34P01 (Truck Shipping Stand)	•	•		•				GEnx-1B
9446M34P03 AGSE-E197-G01	Propulsor	11C4678 (Shipping Stand) 9446M34P01 (Truck Shipping Stand)	•		•	•				GEnx-1B
11C4348 AGSE-E177	Fan Case	11C4300 (Uplift Shipping Stand) 11C4349 (Truck Shipping Stand) 11C3004, 11C4572 (Fan Stator Shipping Stands) 11C4347 (Fan Case Support Ring)	•		•		•	•	•	



OEM-APPROVED FOR THE GENX-2B ENGINE PEDESTAL SETS & FAN TOOLING

= Available Feature

PEDES	IAL SEIS			
Another i	deal horizontal bu	ild-up sol	ution to acl	hieve ergonomically efficient engine centerline heights!

						SUP	PORTS :	SELECT	MODULES WHE	N USED IN CON	JUNCTION \	WITH OTHER PE	DESTALS:		
PART NUMBER: Engine OEM	MODULE SUPPORTED	NUMBER OF PEDESTALS	MAXIMUM LOAD CAPACITY	(co	FU Infigurat	LL ENG		ow)	ENGINE WI (configuration	THOUT LPT options below)	CORE MODULE	CORE MODULI	WITHOUT LPT options below)	FAN	COMPATIBLE WITH OTHER AGSE EQUIPMENT
				#1	#2	#3	#4	#5	#1	#2	WITH LPT	#1	#2		
	Turbine Rear Frame	2	8,000 lbs 3,629 <i>kg</i>	•	•		•	•			•				
	Fan Hub Frame	2	10,000 lbs 4,536 kg	•	•				•		•	•	•		11C4628 (Ground Handling Bracket Set)
11C4251	Turbine Center Frame	2	8,000 lbs 3,629 kg			•			•			•			
1104231	Forward Fan Case	2	10,000 lbs 4,536 kg	•		•	•		•	•				•	
	Aft Fan Case	2	10,000 lbs 4,536 kg			•	•	•		•				•	
	Does Not Support a Specific Module	1	6,600 lbs 2,994 kg							•			•		

FAN	TOO	LING		

Improve safety & productivity during fan maintenance!

PART NUMBER: Engine OEM	DESCRIPTION	SPECIFIC FUNCTION	COMPATIBLE WITH OTHER AGSE EQUIPMENT	ACCOMMODATES OTHER SELECT ENGINES
11C3272	Fan Hub Guide Pin Set	Aligns Fan Stator Outlet Guide Vane (OGV) Blades with Fan Hub		GEnx-1B
11C3403	Fan Case Taper Gage Set	Measures Fan Blade Tip clearance at 6 o'clock location		GEnx-1B
11C4307	Fan Case Runout Measurement Fixture	Measures Fan Case full indicator reading at 144.123, 148.567, and 153.011 locations		
11C3323	Stage 1 Fan Blade Spacer Removal Hydraulic Tool	Removes Fan Blade Spacers from Stage 1 Fan Blades		GEnx-1B
11C3398	Stage 1 Fan Blade Spacer Removal Tool	Removes Fan Blade Spacers from Stage 1 Fan Blades		GEnx-1B
11C4616	Fan Inlet Personnel Stand	Provides ergonomic access to upper bolts and acoustic panels during Fan Stator separation & mating procedures	11C4514 (Fan Stator Protector Set)	GEnx-1B
11C4514	Fan Stator Protector Set	Protects Fan Case during separation & mating procedures	11C4616 (Fan Inlet Personnel Stand)	GEnx-1B
11C4397	Fan Forward Acoustic Protector	Protects Inner Forward Fan Case during maintenance		