



Pointers On Shipping Mechanical/Automotive Parts



FedEx® Express Minimum Shipping Standards For Acceptance

Note: Not intended to be used as a guide to meet FedEx Express preshipment test procedures.

Objectives

1. Provide minimum packaging requirements for shipment of mechanical and automotive parts via FedEx Express delivery service.
2. Provide safe working conditions for handlers of these parts.
3. Increase customer satisfaction by eliminating damages.

General Guidelines

1. All sharp edges, corners or burrs must be appropriately padded.
2. Precision machined areas of parts such as threads, fittings, etc. must be appropriately padded or covered for protection.
3. All parts susceptible to damage due to dents, scratches and scuffing must be adequately protected.
Examples: doors, hoods or rims.
4. Documentation and routing labels must be placed on flat surfaces that will allow for maximum adhesion.
Avoid placing labels around curved surfaces whenever possible.
5. All labels must be placed on the side with the largest surface area.
6. FedEx Express supplied non-conveyable tie-on-tags or plastic airbill pouches must be used instead of wire tags. Call Special Services at 1.800.Go.FedEx®, 800.463.3339 for the following supplies: Tie-on-tag for airbills (150454) Tie-on-tag for labels (149849) Cable tie (2041732258)
7. The terms and conditions of the current FedEx Express Service Guide apply. Shipper is responsible for proper packaging.

The packaging illustrated in this guide represents the minimum packaging required by FedEx Express to move certain shipments via FedEx Express. It does not represent adequate packaging.

Packaging depicted is incompatible with a valid cargo claim for damages in transit.



UNACCEPTABLE PACKAGING

MINIMUM PACKAGING

MINIMUM GUIDELINES

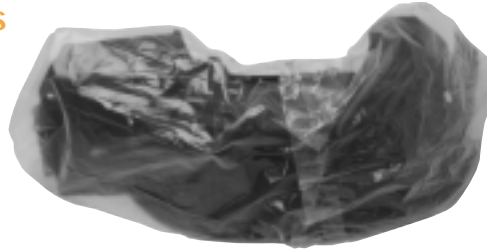
Sheet Metal
Eg.: Car Doors/Hood Panels



Car Doors / Hoods / Panels

All exposed metallic surfaces that are susceptible to damage as a result of scratches, dents, etc. must be cushioned and shipped in a box.

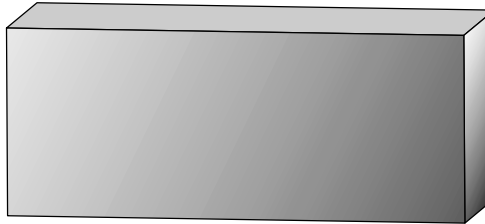
Moldings



Moldings

Non-decorative plastic moldings may be wrapped in clear plastic liner and adequately taped.

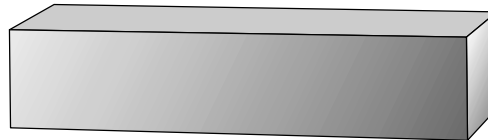
Grills / Decorative Parts



Grills / Decorative Parts

Decorative parts, such as grills, must be boxed. In general, all decorative parts that may be unusable as a result of scratches, dents, bending or scuffing must be boxed.

Bumpers



Bumpers

Bumpers that are not susceptible to scratches or dents may be wrapped in heavy-duty plastic bags. Any sharp or pointed corners or edges must be protected with padding.

Transmissions



Reuseable shipping cover not shown, but it is required.



Transmissions/Engines

Transmissions must be drained of all fluids and placed in a poly bag. When packaged in expendable packaging it must be securely banded to its pallet or block/braced inside its corrugated container. When placed into a reusable container it must be secured to the base with strapping.

Shipment over 150 pounds must be secured on a forkliftable base and compatible for pallet jack usage. Absorbent padding must be placed below transmission to absorb residual fluid that may leak out during transit.

Engines, motors, transmissions and chassis parts are normally filled with lubricant fluids. These items must be drained and empty prior to acceptance or the customer must demonstrate that the shipment is leak-proof under all orientations. Lubricants are slippery and could lead to employee injury. Leaking lubricants may soil other packages or adversely affect electrical components on aircraft, causing flight delays.

UNACCEPTABLE PACKAGING

Sway Bars & A-Arms



MINIMUM PACKAGING

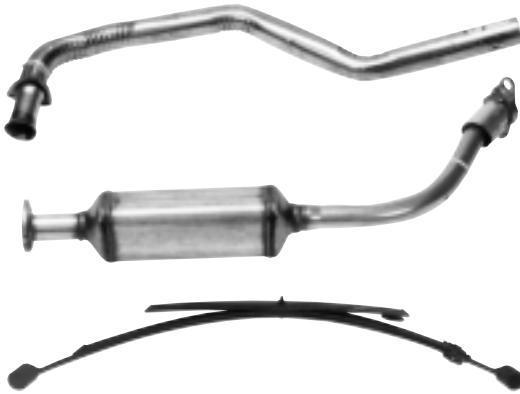


MINIMUM GUIDELINES

Sway Bars & A-Arms

Sway bars, A-Arms, threaded rods must be wrapped in fiberboard or appropriate liner material and securely taped. This will prevent punctures and dents to other packages.

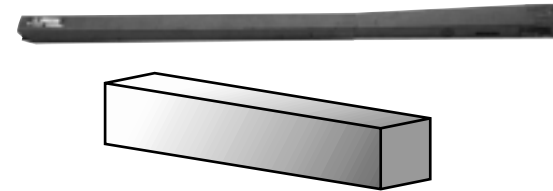
Exhaust System Parts / Leaf Springs



Exhaust System Parts / Leaf Springs

Pointed and sharp edges must be covered with corrugated boards, adequate foam material or bubble wraps. Each of these paddings must be securely taped to prevent removal during the handling process.

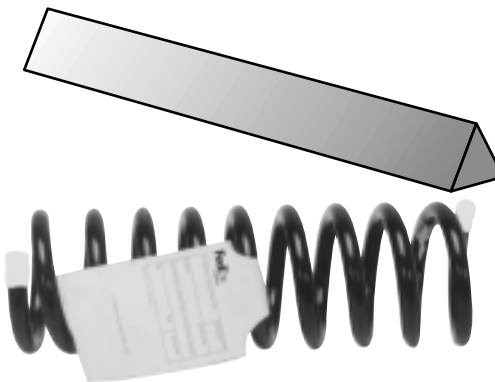
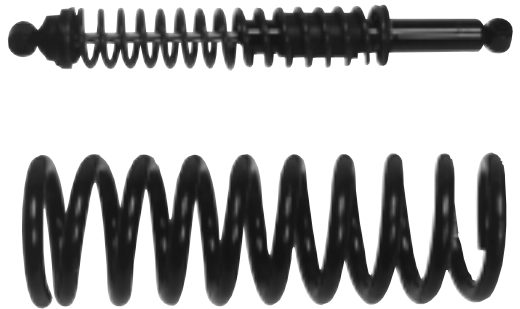
Flexible Plastic Moldings



Flexible Plastic Moldings

Flexible plastic moldings must be shipped in rigid corrugated boxes to prevent breakage or tearing.

Shocks / Coils Springs



Shocks/Coil Springs

Coil Springs that cannot be packaged in tubes or in a corrugated box must be tagged with the FedEx® Express supplied non-conveyable tie-on-tag with shipping label adhered to the tie-on-tag.

Cylindrical parts that can be packaged in tubes must be well dunnaged at the ends of tubes to prevent puncturing through the endcap closure. Check with Material Safety Data sheet to see if shocks should be shipped as a Dangerous Good.

Flexplates / Flywheels



Flexplates / Flywheels

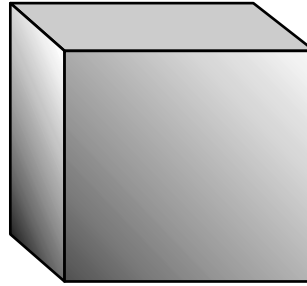
Flexplates and Flywheels must be packed inside corrugated boxes. Adequate dunnage must be used to fill void space and prevent movement inside the box. Double or triple wall corrugated boxes may be required depending on the weight of the part. "Heavy" stickers shall be applied to all boxes exceeding 75 lbs. Large Flexplates / Flywheels that cannot be boxed may be tagged using FedEx Express supplied non-conveyable tie-on-tags.

UNACCEPTABLE PACKAGING



Wheels

MINIMUM PACKAGING



MINIMUM GUIDELINES

Wheels

Chrome, painted and decorative wheels that are susceptible to damages as result of scratches, scuffing, must be packaged in boxes. Non decorative wheels may be wrapped in a clear plastic liner to prevent scratches during transit.



Tires



Tires

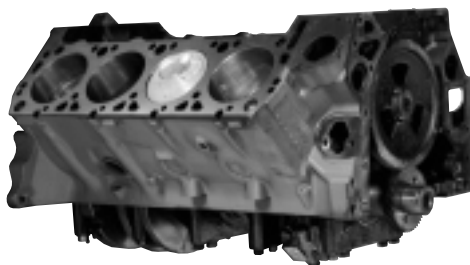
FedEx shipping label must be placed on the side of the tire and securely taped to prevent peeling. When FedEx® Express Airbill is used, it must be placed inside FedEx Express supplied pouch and securely taped to the sidewall of the tire to prevent snags and tears of shipping information.

NOTE: Shown below is a sampling of the most frequently shipped items that may be considered dangerous goods while utilizing FedEx® Express delivery services. To verify that all items shipped meet Dangerous Goods requirements, call 1.800.Go.FedEx®, 800.463.3339 and ask for the Dangerous Goods Department.

NOTE: Failure to declare Dangerous Goods prior to shipping will result in supplemental billing and disclosures to FAA (Federal Aviation Administration) and other regulatory agencies.



Strut/Shock with Compressed Gas



Engine Block with Hazardous Fluid



Battery



Flammable Paint

FedEx® Express Freight Size & Weight Restrictions

The following are size and weight restrictions for FedEx Express Freight Services:

CRITERIA	SERVICE TYPE				
	FedEx 1Day® Freight or FedEx 2Day Freight®	FedEx 3Day® Freight	FedEx International Priority® Freight/ FedEx International Broker Select® or FedEx International Economy® Freight/ FedEx International Broker Select®	FedEx International Express Freight®	FedEx International Airport-to-Airport SM
Minimum weight per piece (skid)	151 lbs. or less than 151 lbs. but greater than 165" in length plus girth*	151 lbs.	151 lbs. (69 kg)	No minimum restrictions	No minimum restrictions
Maximum weight per piece (skid)	2,200 lbs.	2,200 lbs.	2,200 lbs. (1000 kg)	2,200 lbs. (1000 kg)***	No maximum restrictions
Minimum weight per shipment	151 lbs.	151 lbs.	151 lbs.	No minimum restrictions	No minimum restrictions
Maximum weight per shipment	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
Maximum length plus girth* per piece (skid)	300"	300"	300" (762 cm)	300" (762 cm)***	300" (762 cm)***
Maximum height per piece (skid)	70"	70"	70" (178 cm)	70" (178 cm)***	70" (178 cm)***
Maximum length per piece (skid)	119"***	48"	119" (303 cm)	119" (303 cm)***	119" (303 cm)***

* $Girth = 2 (Width + Height)$

** Maximum length depicted for FedEx 1Day® Freight and FedEx 2Day Freight® is suggested maximum.

***Pieces exceeding these maximums require pre-approval. Please contact the FedEx Express Freight Desk at 800.332.0807.

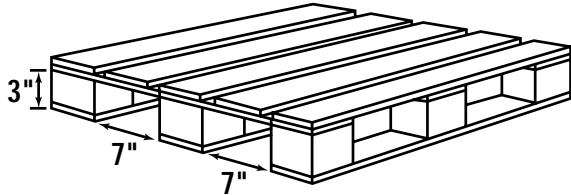
Refer to the current FedEx Express Service Guide for terms, conditions and limitations applicable to FedEx Express Freight Services.

For your next FedEx Express Freight shipment, contact the FedEx Express Freight Desk at 800.332.0807.

Acceptable Shipping Guidelines For FedEx® Express Freight Service

Forklift/Pallet Jack Base

All freight shipments over 150 pounds (68 kg) must be secured on a forkliftable base and be compatible for pallet jack usage. The minimum specifications for a typical base for forklift or pallet jack configuration are illustrated below. Pallet jack entry is required on two sides of either type base.



Securing Methods

- Shipments may be banded or securely strapped onto the base by steel, rayon, polypropylene, nylon or polyester strapping.
- Shipments also may be securely bolted onto the base. When applicable, shock absorber connections or cushioned pallets should be considered.
- Multiple piece shipments (MPS) going to one destination must be banded together and secured to a compatible base within the FedEx Express maximum size limitations. Avoid pallet overhang whenever possible.

- To consolidate multiple piece shipments and protect against the elements, use shrink or stretch wrapping. All shrink or stretch-wrapped shipments should be banded or strapped together as described to prevent shifting and loss of packages. Individual packages should include the origin and destination address whenever possible. Cover the top layer of the shipment to protect the unit load from the weather.

Labeling Tips

- Remove or mark through all old labels.
- Attempt to follow all orientation symbols or verbiage ("TOP LOAD ONLY," "DO NOT STACK," "THIS SIDE UP," etc.) for all skidded shipments.



Parts Requiring Additional Protective Packaging

Listed Below are Parts that Pose a Safety Hazard to Personnel and are Likely to Damage Sorting Equipment and other Customers' Shipments:

- | | | |
|---|--|---------------------------|
| ■ Mufflers and Exhaust Systems | ■ Thin Metal Trim Piece Fenders | ■ Thin Plastic Trim Parts |
| ■ Gas Tanks | ■ Suspension Struts | ■ Fuel Lines |
| ■ Metal Bumpers | ■ Radiator Housings and Similar Front-End Housing Brackets | ■ Springs |
| ■ Stamped Metal Sheet Panels including Floor Pans | ■ Wheels | ■ Loose Nuts and Bolts |

Any Mechanical/Automotive Parts Packaging That Does Not Meet The Minimum Shipping Standards For Acceptance May Be Rejected By FedEx Express Personnel

NOTICE

This packaging brochure is provided free to FedEx® Express customers to reduce the possibility of loss or damage during transit. It is NOT intended to be a comprehensive guide for packaging items we accept for transit. We make no warranties, expressed or implied, regarding this information. Proper packaging is the sole responsibility of the shipper. For more information and guidelines, contact the FedEx® Express Packaging Design and Development Department at 800.633.7019. Refer to the current FedEx Express Service Guide for terms, conditions and limitations applicable to FedEx Express delivery services.

