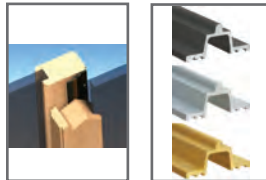




A - About FFI, terms	Pages
Table of contents; about FFI	A-1 to A-2
Terms and conditions of sale; product warranties	A-3 to A-10
glossary of fenestration industry terms	A-11 to A-14
index of part numbers to catalog pages	A-15 to A-25



B - Stainless steel lift slide system	
stainless steel lift slide - carriage kits, locks, link rods, bolts	B-1 to B-12
lift slide accessories - extensions, half gears, edge pulls	B-13 to B-19
lift slide handles - brass, SST, aluminum; removable; cylinders	B-20 to B-30



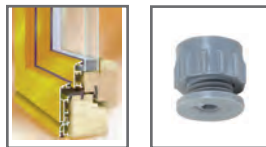
C - Lift slide interlocks; tracks; accessories; AGB hardware	
lift slide configurations, FFI panel interlock	C-1 to C-3
lift slide tracks, weatherseals, accessories	C-4 to C-12
AGB lift slide carriage kits, accessories, locks, cylinders	C-13 to C-16
tooling, jigs, cladding, screws; lift slide pre-ordering tips	C-17 to C-21



D - Sliding door hardware	
top-hung sliding systems - Tiger ALU and stainless steel	D-1 to D-16
pulls and locks for sliding and pocket doors	D-17 to D-23
Truth patio door rollers, handles, locks, and tracks	D-24 to D-25



E - Entry / swing door hardware	
multipoint door locks by AGB, strikes by FFI	E-1 to E-14
cylinders - re-keyable, tang, half cylinders	E-15 to E-21
mortise locks for swing doors; screw hinges	E-22 to E-25



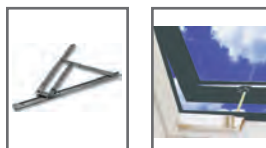
F - For doors & windows - spacers, tooling, cladding	
rapid spacers for installing window & doors	F-1 to F-3
tooling, jigs for European windows and doors	F-4
cladding, gasketing for windows and doors	F-5 to F-15



G - Window hardware - multipoints, tilt turn	
window multipoint locks - for casements and awnings	G-1 to G-8
tilt turn multipoint systems by AGB; drainage channel	G-9 to G-15
window handles for window multipoints, tilt turn (DK)	G-17 to G-19



H - Window & skylight motors & operators - by UCS	
UCS motors for large skylights and awning windows	H-1 to H-9
UCS Cat, control panels, weather sensors, power supplies	H-10 to H-12
UCS switches, brackets, pre-purchase recommendations	H-13 to H-16



I - Window & skylight hardware - by Truth	
Truth casement & awning operators, hinges, locks, finishes	I-1 to I-18
motors for casement and awning windows, and skylights	I-19 to I-21
skylight manual operators and poles; angle & straight drives	I-22



J - Decorative handles and trim	
lift slide door handles, pulls, cylinders	J-LS-1 to 13
window handles for window multipoints, tilt turn (DK)	J-WIN-1 to 3
door handles for European style multipoints, mortise locks	J-DOR-1 to 4



**Quality Architectural Hardware
for Doors, Windows & Skylights**




the FFI warehouse
aisles 9 and 10, in Hawthorne, CA

- ❖ more than 700,000 items in stock
- ❖ FFI's showroom is available by appointment only

RELY ON FFI

FFI provides quality hardware solutions for doors, windows & skylights. We serve clients for residential and commercial fenestration markets (manufacturers, fabricators, retailers and architects).

Rely on FFI for prompt product and price information, technical support, and follow-up. **Excellent Service...Every Time.**

FFI Design manufacturing

The FFI Design team turns market feedback into product innovations. FFI Design hardware and extrusions are contract-manufactured in brass, stainless steel, aluminum, and other materials as needed.

An independent American company

As an independent, non-factory owned company, FFI listens to our clients, and sees the market through a local lens. We understand clients in the Americas, and work to meet your expectations.

International sourcing and distribution

FFI works with manufacturers from around the world. Each product and manufacturer is critically evaluated for quality of design, production and materials, as well as application to market trends.

FFI insists on superior materials – so should you

- high-grade stainless steel.
- extruded architectural brass and bronze.
- class I, hard-anodized aluminum finishes for 30 year lifespan.
- quality finishes in oil-rubbed bronze, mat nickel, and more.

FFI earns our reputation for quality and innovation by:

- continually identifying fenestration trends.
- developing productive, long-term partnerships.

FFI history: a California corporation for more than 20 years

- 1972** - our President starts in the architectural hardware field.
- 1987** - our company, founded with the name Architectural Art, becomes the Western Distributor for Truth Hardware.
- 1989** - we add European hardware, multipoints and lift slide.
- 1997** - our name changes from Architectural Art to Functional Fenestration, and FFI moves to Hawthorne/LAX airport area.
- 2000** - FFI implements in-house Marketing and Technical Depts.
- 2002** - FFI adds exterior folding door systems, Tiger stainless steel sliding door hardware, and UCS motors to our product lines.
- 2004** - FFI exhibits at the AIA Expo in Chicago, Illinois.
- 2005** - FFI celebrates 5 years of double-digit annual sales growth.
- 2006** - FFI introduces our exclusive stainless steel lift slide system.
- 2007** - At 20th anniversary, FFI focuses on the future by beginning a Kaizen constant improvement program.
- 2008** - FFI expands outside sales force to achieve continued growth.

FFI TERMS & CONDITIONS (page 1 of 2)

This agreement shall constitute the complete agreement between Buyer and Functional Fenestration Inc, a California corporation ("Seller", or "FFI"). Any terms and conditions contained in Buyer's purchase orders or elsewhere shall not be binding by Seller. Seller's acceptance of any order is expressly conditioned upon Buyer's agreement to the Seller's terms and conditions stated here. The Seller retains the right to modify these Terms and Conditions at any time, and any such modification shall be automatically effective for all Buyers when adopted by Seller and published at www.fenestration.net.

TERMS: Minimum order requirement is \$50 plus shipping. Terms are C.O.D., pre-pay by wire transfer, cashier's check or company check, and at the sole discretion of Seller. Credit accounts are granted based on Seller's approval of Buyer's credit application and credit history. Credit terms are net thirty (30) from date of Seller's invoice and cannot be altered unless otherwise agreed in writing and signed by Seller. Seller reserves the right to put Buyer on C.O.D. or pre-pay terms for any reason. Inactive or past due credit accounts may, at Seller's option, be revoked. Credit is given solely as a convenience service to Buyer and is not to be used as extended credit or financing. Seller reserves the right to refuse orders from any Buyer for any reason. Indemnification of Seller: Buyer agrees to indemnify and hold harmless the Seller from any lawsuit, claim, charge or expense, including reasonable attorney fees and cost of defense, for any matter arising from or relating to Buyer's purchase, installation, resale or use of products.

QUOTES, ORDER CONFIRMATIONS, LEAD TIMES: Written price quotes are based on market conditions and are guaranteed for 30 days. Pricing and availability of products is subject to change without notice. In-stock products are reserved for a Buyer only after a Purchase Order number is given and price is confirmed by Order Confirmation.

Changes cannot be made to Purchase Orders that have been confirmed and/or processed for shipment. Standard turnaround time for in-stock items is 24-72 hours (1-3 business days) from Order Confirmation to shipment. More time may be required for special requests or packaging. Expedite requests may be subject to an additional fee. FFI can give estimated lead time for non-stock products; however, FFI cannot guarantee backorder delivery time from manufacturer factories, and is not responsible for delays in shipments.

SPECIAL ORDERS: Products designated by Seller as special order require a minimum 50% non-refundable deposit or full pre-payment. Special orders cannot be cancelled after PO is confirmed and order is placed with the manufacturer.

PAYMENT: Seller may require a deposit before shipment. Buyers are advised, as it is a standard industry practice, to collect a minimum 50% deposit from your customer. Non-payment from your customer is not an acceptable reason for non-payment of goods purchased from FFI. For any amount not paid when due, Buyer shall pay a late charge from the due date to the date of actual payment of 18% per annum (or the maximum rate permitted by law). Each check returned to Seller for NSF will be charged a \$30 fee, payable by a cashier's check including the dollar amount of the returned check. If Buyer is in default of agreement for non-payment, Seller may file lawsuit, place Buyer's contact information with a third party for collections, and/or send report to commercial credit agencies. If an account is in dispute, Buyer agrees to pay all costs including reasonable attorney's fees, court costs, finance charges, and any amount due to Seller.

CA SALES TAX: Buyers in California may supply a signed California Certificate of Resale (CCR) to Seller. To comply with California State laws, all orders placed without CCR on file at date of order will be charged California Sales Tax from point of shipment.

FFI TERMS & CONDITIONS (page 2 of 2 continued)

FREIGHT: Goods are shipped F.O.B. from Hawthorne, CA. Free On Board (FOB) is a standard shipping term for when the shipper (seller) takes responsibility for transport costs to get the shipment “on board” to a chosen freight carrier. After it is “on board”, shippee (buyer) assumes responsibility for shipping costs from that point. FFI will select UPS or another common freight carrier, unless otherwise directed by Buyer.

If Buyer has special packing and shipping requests, they must be stated in writing when PO approval is given, and are subject to Seller’s approval.

Will Call Service is available by appointment only. FFI showroom is by appointment only.

Local Delivery Service in Southern California by FFI truck is offered subject to availability; please call to schedule.

CLAIMS / SHORTAGES: Defects, shortages, or error claims must be reported to Seller in writing within 5 business days of receipt, and include original packing slip number. All returned products are subject to inspection, and confirmed as being used according to manufacturer recommendations, before warranty is honored. For bona fide claims, at Seller's option, products will either be replaced or credited for original cost.

It is Buyer's sole discretion to accept delivery of damaged boxes; after acceptance, damage claims must be settled by the Buyer directly with delivery company. In all instances, Seller's liability is limited to Buyer's purchase price. FFI may at our discretion pay shipping costs in conjunction with FFI mistakes or defective products. Seller shall not in any event be liable to any Buyer for consequential, incidental, or punitive damages of any kind, nor for the labor that may be required for replacement of said product, whether for breach of warranty, negligence, on the basis of strict liability, or for any other reason. The sole venue for any disputes arising from this Agreement shall be the appropriate court in Los Angeles County, California.

RETURN MATERIALS AUTHORIZATION (RMA): Seller’s authorization is required in advance for all goods to be returned to Seller in the form of an RMA Acknowledgement. An RMA will be granted if defective product or order mistake is confirmed by Seller. Merchandise must be received by Seller within 30 days of date of FFI authorization and issuance of RMA. Seller, at its discretion, may authorize return of products for other reasons, subject to a minimum 25% restocking charge. Goods held over 60 days may be returned only at Seller's discretion, subject to a minimum 50% restocking charge. Goods will not be accepted for return after 90 days from the invoice date, with exception of warranty claims.

All returns are subject to inspection and receipt by seller in good condition in original packaging. Special order (custom manufactured or non-stock) products may not be returned.

WARRANTIES: Seller recognizes manufacturer warranties only. No implied or expressed warranties are enforceable against or made by Seller.

LIMITATION OF LIABILITY: Buyer expressly understands and agrees that Seller and its affiliates, employees, agents, and partners shall not in any event be liable to any buyer for any direct, indirect, incidental, special, exemplary, consequential, or punitive damages of any kind, including but not limited to, damages for loss of profits, goodwill, use, or intangible losses resulting from use, or inability to use, products or services, the cost of procuring substitute goods and services, labor that may be required for replacing said product, whether for breach of warranty, negligence, on the basis of strict liability, or for any other reason. The sole venue for any disputes arising from this agreement shall be the appropriate court located in Los Angeles County, California.

WARRANTY TERMS FOR FFI PRODUCTS

Manufacturer warranty is available for most FFI products, including FFI Decorative (p. A-5), FFI Stainless Steel Lift Slide (A-6), FFI tracks & extrusions (A-6), AGB (A-7), Tiger (A-8), Truth (A-9), and UCS (A-10).

Special Order Deposits

FFI requires a 50% non-refundable deposit on Special Order items. Because most special order items cannot be returned to the manufacturer, the deposit protects FFI and our clients from loss, for example if the end-user changes their mind after placing a non-returnable order. It is recommended, as a standard industry practice, that you ask a 50% non-refundable deposit from your customer in turn.

Finish Warranties, Recommended Maintenance, and ORB Notes

While FFI only selects plating providers with high quality standards, most finishes cannot be warranted. **Proper maintenance** has a direct effect on finish durability; strong, abrasives chemicals must be avoided. Hardware, handles, and track should be cleaned with mild soap and water and wiped dry with a soft cloth.

Oil-rubbed bronze (ORB, code 613) is a “living finish” patina that changes over time and rubs off where touched. The BHMA classifies ORB as unstable and states that it cannot be expected to color match, and to FFI’s knowledge ORB is not warranted by any manufacturer. ORB artificially accelerates an aged patina using oxidation chemicals such as potash sulfured; FFI is seeing a trend of painted dark bronze (BHMA code 690) used as a more eco-friendly ORB-alternative with closer consistency of color.

FFI Warranty Limitations

FFI will replace or repair defective products that fall within warranty guidelines covering defects in materials and manufacturing. Not covered by warranties: damage from improper storage or installation, use outside of recommendations, unauthorized modification, normal environmental corrosion not affecting product function; nor normal wear, discoloration or defects having negligible effect on product operation.

FFI will not assume liability for any labor charges regarding the removal or reinstallation of products.

Warranty is void if repairs are undertaken by unauthorized persons and/or without following available instructions and recommendations. Liability of Functional Fenestration Inc (FFI), Hawthorne, CA, as the seller for any defective product is limited to the replacement or credit of FFI product at original cost, and shall not include damages of any kind, whether incidental, consequential or otherwise. Any return and/or warranty claim must be made in accordance with FFI Terms and Conditions; see pages A-3 to A-4.

WARRANTIES FOR FFI DECORATIVE HARDWARE

FFI-Design handles and pulls series LS100, LS200, and LS300

FFI-Design decorative handles and pulls, series LS100, LS200, and LS300, are warranted for five (5) years from date of original purchase against defects in materials and manufacturing (not including finishes), under normal installation and use.

FFI cylinders series LS100

FFI cylinders are warranted for one (1) year from date of original purchase against defects in materials and manufacturing, under normal installation and use.

Warranty for select finishes on FFI brass handles series LS100 and LS300

Painted dark bronze (code 690) and **satin nickel** (code 619) finishes are warranted for one (1) year from date of purchase against defects in materials or manufacturing (such as flaking or peeling) under normal installation and use. Warranty does not cover scratches and other effects of day-to-day use.

Oil-rubbed bronze and other special order, non-stock finishes are not warranted.

These warranty terms are guaranteed by Functional Fenestration Inc., Hawthorne, CA.

WARRANTY FOR FFI STAINLESS STEEL LIFT SLIDE**Products including:**

FFI 304 and 439 grade stainless steel lift slide hardware, developed with and contracted-manufactured for FFI by 3G Technologies.

FFI 304 and 439 grade stainless steel lift slide products are warranted for fifteen (15) years against defects in material and manufacturing from the date of original purchase, under normal installation and use.

FFI 304 grade stainless steel products are warranted against corrosion-related product failure in all areas for **fifteen (15) years**.

FFI 439 grade stainless steel products are warranted against corrosion-related product failure for **two (2) years** within 5 miles of seacoast, and for **fifteen (15) years** in all other areas.

These warranty terms are guaranteed by 3G Technologies Co. Ltd., Seoul, Korea, specifically for 304 and 439 grade stainless steel products developed with and contract-manufactured exclusively for Functional Fenestration Inc (FFI).

Liability of Functional Fenestration Inc (FFI), Hawthorne, CA, as the seller for any defective product is limited to the replacement or credit of FFI product at original cost, and shall not include damages of any kind, whether incidental, consequential or otherwise. Any claim and return must be made in accordance with FFI Terms and Conditions; see FFI Catalog pages A-3 to A-5.

WARRANTIES FOR FFI TRACKS AND EXTRUSIONS**FFI aluminum tracks and extrusions**

FFI aluminum tracks and extrusions — including FFI FASTrack, FFI Panel Interlock, FFI lift slide tracks, FDP patio door tracks, and ALU tracks for top-hung hardware — are warranted for **one (1) year** from date of original purchase against defects in materials and manufacturing, under normal installation and use.

FFI Class I anodized aluminum products are warranted for **one (1) year** against corrosion-related product failure, under normal installation and use. Please note that aluminum has a risk of corrosion when imbedded in concrete; FFI aluminum extrusions are not warranted against corrosion-related failure when installed in concrete or exposed to other harsh chemicals.

These warranty terms are guaranteed by Functional Fenestration Inc., Hawthorne, CA.

Liability of Functional Fenestration Inc (FFI), Hawthorne, CA, as the seller for any defective product is limited to the replacement or credit of FFI product at original cost, and shall not include damages of any kind, whether incidental, consequential or otherwise. Any return and claim must be made in accordance with FFI Terms and Conditions, see FFI Catalog pages A-3 to A-5.

WARRANTY FOR AGB PRODUCTS

Products including: lift slide, multipoint locks, tilt turn hardware, and other AGB hardware.

Each **Alban Giacomo spa (AGB)** product is warranted for a period of **one (1) year** from the date of original purchase against defects in materials and manufacturing, under normal installation and use.

Not covered by the warranty: damage arising from improper (non-recommended) use, modification, installation or storage; nor normal wear or defects which have negligible effect on the value or operation of the product. The warranty becomes void if repairs are undertaken by unauthorized persons. Normal environmental corrosion is not covered by warranty.

AGB's liability for any defective product is limited to the repair or replacement of said product at their option, and shall not include damages of any kind, whether incidental, consequential or otherwise.

These warranty terms are guaranteed by Alban Giacomo spa, Vicenza, Italy.

Liability of Functional Fenestration Inc (FFI), Hawthorne, CA, as the seller for any defective product is limited to the replacement or credit of FFI product at original cost, and shall not include damages of any kind, whether incidental, consequential or otherwise. Any claim and return must be made in accordance with FFI Terms and Conditions, see FFI Catalog pages A-3 to A-5.

WARRANTY FOR TIGER PRODUCTS

**products including: top-hung sliding and folding door hardware,
in stainless steel, steel, and aluminum**

Each **Tiger** product is warranted for a period of one **(1) year** from the date of original purchase under normal installation and use, against defects in material and manufacturing.

These Material Defect Terms are by Tiger (Hermann Francksen Nachf. GmbH & Co. KG, Bremen, Germany): The terms of the goods is determined exclusively by the technical specifications supplied. In the event of Tiger having to supply in accordance with drawings, specifications, or samples provided by a customer, the customer will assume the risk of fitness for the intended use. The condition of the goods in accordance with the contract is determined as at the time of transfer of risk in accordance with dispatch and transfer terms.

Any material defects in respect of any defect deriving from unsuitable or improper use, defective assembly or operation by the customer or third parties, normal wear and tear, defective or negligent handling, will be excluded as the consequences of unsuitable modifications or repairs undertaken by the customer or third parties without approval from Tiger. The same shall apply to defects which only reduce the value of the goods or their fitness for their intended use to an insignificant extent.

Claims for material defects shall become statute-barred after **12 months**.

Where it is agreed that the goods are to be accepted after completion or that the initial samples are to be tested, notification of defects which could have been discovered by the customer under careful acceptance or testing of initial samples is excluded.

Tiger must be given the opportunity of assessing the notified defect. The goods complained of must be returned immediately; Tiger will take over the transport costs where the notice of defect is justified. In the event of the customer failing to observe these obligations, or carrying out modifications of the goods which are complained of without our consent, customer will lose any claims for material defects. In the event of notice of defect which is justified and made at the due and proper time, Tiger will, at their discretion, make improvements to the goods complained of or supply a replacement free of defect.

Liability of Functional Fenestration Inc (FFI), Hawthorne, CA, as the seller for any defective product is limited to the replacement or credit of FFI product at original cost, and shall not include damages of any kind, whether incidental, consequential or otherwise. Any claim and return must be made in accordance with FFI Terms and Conditions; see FFI Catalog pages A-3 to A-5.

WARRANTY FOR TRUTH HARDWARE

**products including: casement and awning window hardware,
skylight operators, motors for windows and skylights, and patio door hardware**

Warranty for Window & Door Manufacturers & Authorized Distributors

Truth Hardware products are warranted against defects in materials and workmanship for the **life of the product****, with the exception of **electrical products*** which are warranted for **1 (one) year**.

These warranty terms are guaranteed by Truth Hardware, Owatonna, MN.

Truth Hardware's warranty is expressly limited to window & door manufacturers and Truth Hardware Authorized Distributors, who purchase Truth Hardware products for the purpose of resale, or use in the ordinary course of the buyers business, and may not be assigned or transferred.

This warranty does not cover normal wear or discoloration on finishes or any product which has been improperly installed, abused, misused, worn out, altered, used for a purpose other than that for which it was intended, or in a manner inconsistent with any instructions regarding its use, nor does it cover corrosion related damage.

This warranty is exclusive. Truth Hardware makes no other warranty of any kind whatsoever, expressed or implied, with respect to the products manufactured and sold by it, whether as to merchantability, fitness for a particular purpose, or any other matter. No agent, employee or representative of Truth Hardware has any authority to bind Truth Hardware to any affirmation, representation, or warranty concerning Truth Hardware products or parts, except stated herein.

If any product manufactured by Truth Hardware is found to be defective by Truth Hardware, in its sole judgment, Truth Hardware will, at its option, either repair or replace such defective product. Truth's liability is limited only to the replacement value of the hardware. This remedy shall be the exclusive remedy available for any defects in the products manufactured and sold by Truth Hardware or for damages resulting from any other cause whatsoever, including without limitation, Truth Hardware's negligence. Truth Hardware shall not in any event be liable to any buyer for consequential, or incidental, or punitive damages of any kind, or for the labor which may be required for the replacement of said product, whether for breach of warranty, negligence, on the basis of strict liability, or for any other reason.

The purpose of this exclusive remedy shall be to provide the window/door manufacturer, or Truth Hardware Authorized Distributor, with replacement of products, or parts, manufactured by Truth Hardware found to be defective in materials or workmanship, or negligently manufactured. This exclusive remedy shall not be deemed to have failed its essential purpose so long as Truth Hardware is willing and able to repair or replace said defective products or parts in the prescribed manner.

* Truth Hardware **electrical products are warranted for one (1) year** against defects in materials and workmanship.

Industry related testing has defined the typical lifetime of fenestration hardware to be **10 years.

Liability of Functional Fenestration Inc (FFI), Hawthorne, CA, as the seller for any defective product is limited to the replacement or credit of FFI product at original cost, and shall not include damages of any kind, whether incidental, consequential or otherwise. Any claim and return must be made in accordance with FFI Terms and Conditions, see FFI Catalog pages A-3 to A-5.

**WARRANTY FOR UCS
Ultraflex Control Systems**

Products including: motorized actuators and accessories including Vega, Quasar, Twin-Quasar, Master, Twinmaster, Supermaster and Sintesi.

Warranty for UCS Mecline and Greenline products

UCS Products are guaranteed for a period of **2 (two) years** from the manufacture date, against defects in materials and manufacturing.

These warranty terms are guaranteed by Ultraflex Control Systems, Italy.

Alleged defective products returned, freight prepaid, within the above said term, will be repaired or replaced free of charge, at manufacturer's option, if found effectively below UCS quality standards.

This guarantee does not cover other claims for direct or indirect damages. In particular, UCS declines liability and exclude guarantee (except for what stated above) if improper installation or misuse should result in a failure of UCS products. Moreover, the guarantee is void if UCS products are not used according to the following recommendations:

UCS Products are manufactured to the highest standards and are free from workmanship and material defects; their use assures top-level performance of the installations in which they are made operational. On the other hand, UCS cannot guarantee the function of complete installations we do not entirely manufacture; but we can give recommendations, which in some countries may already have been passed into law.

a) The installation and/or equipment, and in particular the products sold by us, should be accessible to qualified people only, preventing unwilling or willful manipulation and tampering by third parties.

b) Installations and/or equipment using UCS products must be carried out by qualified companies, i.e. licensed electricians, following provided installation and maintenance instructions.

c) The installation and/or equipment must be carefully tested after installation and checked at every twelve months or according to the existing local laws. Testing and periodic verification must be done by qualified people or companies.

Additional clause for Mecline and Greenline products: This guarantee does not cover UCS products if installed together with non-original Ultraflex Controls Systems components, or used with accessories such as control panels, power supplies, switches, or brackets not recommended by UCS.

Liability of Functional Fenestration Inc (FFI), Hawthorne, CA, as the seller for any defective product is limited to the replacement or credit of FFI product at original cost, and shall not include damages of any kind, whether incidental, consequential or otherwise. Any claim and return must be made in accordance with FFI Terms and Conditions, see FFI Catalog pages A-3 to A-5.

Basic door, window & skylight terminology**ASTRAGAL**

A strip of wood attached to an inactive door, sealing the gap between a French door pair.

AWNING WINDOW

Window sash hinged at the top that swings out from the bottom.

BACKSET

Distance from the centerline of a knob or lever hub, keyhole or cylinder to the lock face on a door's edge.

BARN DOORS

Doors that slide on top-hung track (with a bottom guide).

BAY WINDOW

A set of windows that project outward; with a large center unit and two side units usually at 30 or 45 degree angles.

BI-FOLD DOORS - see folding doors

BI-PARTING DOORS

Two doors that slide apart and meet together in the middle, sliding on one track.

BI-PASSING DOORS

Two doors that slide past each other on 2 parallel tracks.

BOTTOM RAIL

Bottom horizontal member of a window sash or door.

BUTT HINGE

Hinge that is mortised into a door's edge and door frame.

CASEMENT WINDOW

Window hinged on the side that swings in or out like a door.

CHECK RAILS

Meeting rails where lock is mounted a double-hung window (bottom rail on top sash and top rail on low sash).

CLADDING

Metal (often brass or aluminum) attached to the exterior of a wood sash, to provide ease of maintenance.

CLERESTORY WINDOWS

Windows placed up high, along the top of a wall.

CREMONE

A bolt lock, surface-mounted on a door face (instead of on the door edge as with other locks).

CUT SHEET

A manufacturer's complete list of specifications (parts, components, sizes, etc) used as a manufacturing guide to make a specified product. Because FFI is not a door, window or skylight manufacturer, we cannot provide complete cut sheets; FFI can provide detailed hardware lists for manufacturers to use to complete their cut sheets. Clients are responsible for verifying FFI hardware will meet their size, weight and other specifications.

DEADBOLT

A throwbolt that adds extra security to exterior doors; usually specified for 1 inch in United States.

DK HANDLE

European-style window handle with 3-way movement to operate a tilt-and-turn or window multipoint window lock. DK is short for the German "Dreh-Kipp" (turn-tilt).

DORMER

A window projecting out perpendicular to a sloping roof.

DOUBLE-HUNG WINDOW

Window with two operable sashes that move up and down in the frame.

DRAINAGE CHANNEL

Extrusion for a window sill that allows water drainage.

DRIP RAIL

Extrusion that attaches to a window sill to keep water out.

DUMMY

A knob or lever that doesn't operate a latch or lock. Used as a pull, or just for aesthetic purposes.

EDGE

The side of a door stile; a sliding door leads by its edge.

EGRESS

Exit; window or door that allows exit in an emergency.

ESCUTCHEON

A back-plate plate for a handle, lever, pull or knob; with function holes for spindles or key or thumbturn cylinders.

Basic door, window & skylight terminology (continued)**ESPAGNOLETTE**

A casement window lock with multiple locking points.

EUROGROOVE

A 16 mm. groove cut in the edge of a door or window stile to accept a European style multipoint lock.

EXTRUSION

A material (brass, aluminum, plastic, etc.) that is heated and pushed through a die to produce a track, component or profile used to make doors or windows.

FENESTRATION

An architectural term for the arrangement of openings in a building: windows, doors, skylights, and other operable or glazed openings. From the Latin word for window: "Fenestra".

FIXED

Non-operable (non-opening) door or window.

FLUSH DOOR

A door with a flat face that is aligned straight with the door jamb when it is closed.

FOB

Free On Board (FOB) is a standard shipping term for when the shipper (seller) takes responsibility for transport costs to get the shipment "on board" to a chosen freight carrier (ship, truck or plane). After it is "on board", the shippee (buyer) assumes responsibility for shipping costs from that point.

FOLLOWER

A lock follower is a lock spindle (hub).

FOLDING DOORS

Doors with two or more hinged panels that fold away to the jamb; a.k.a. "bi-folding" or "multi-folding".

FOREND

Faceplate for a lock.

FRAME

A three- or four- sided structure around a door or window that consists of head, sill, jamb, and mullion.

FRENCH DOOR

A pair of hinged doors that meet and open at the middle.

GEAR-DRIVEN LOCK

A European multipoint door lock that's activated by turning a cylinder instead of by lifting a door lever.

GASKETING

Rubber or plastic material to seal a door or window.

GLAZING

noun: the glass in a window or door;

verb: the process of installing glass in a sash.

GLIDER

A horizontal sliding window, or slider.

HANDING

Some handles / levers are left-handed or right-handed, when the design differs when facing each direction. To determine handing, look at the sash from the outside; if hinges are on the left, you need a left-handed version, if hinged on right, you need right-handed.

HEAD / HEADER

A beam or member installed horizontally across the top rough opening of a window or door. A.k.a. lintel.

HOLLOW-CORE DOOR

Flush door with two skins or door faces separated by stiles and rails on the perimeter and hollow on the interior.

HOPPER

A window sash hinged on the bottom, that swings in from the top to open.

INACTIVE DOOR

The less-used door in a French door pair, without a strike.

JALOUSIE

Window with horizontal louvers that tilt out to open.

JAMB DEPTH

Width of a window or door frame from interior to exterior.

JAMB

Main vertical frame pieces at the sides of a window or door.

JIG

A tool in woodworking or metalworking that helps control the location or motion of a tool, for installation of hardware. Some jigs are also called templates or guides.

Basic door, window & skylight terminology (continued)**KD (KNOCKED-DOWN)**

Doors and/or hardware that are milled and prepped for assembly, and shipped unassembled to a jobsite or mill as a 'knocked-down' kit.

LEVER-DRIVEN LOCK

A multipoint door lock that's activated by lifting a lever.

LIFT SLIDE (OR LIFT & SLIDE)

Sliding door system designed for multiple large panels of up to 880 pounds and/or 10' by 10' each.

LIGHT or LITE

A pane of glass in a window.

LINTEL - See head.**LOCK FACE**

A lock faceplate or forend; visible after installation.

LOW PROFILE

A term describing a component that doesn't project very far out from the sash or frame; low profile sill track is desirable because people are less likely to trip over it; low profile handles and locks are more compatible with curtains.

MORTISE LOCK

A quality door lock popular in older American homes and in Europe; has long, elegant face plate on the door's edge. Gaining new popularity in America due to improvements in installation technologies. Also spelled mortice.

MULLION

A vertical framing member dividing two lights of glass.

MULTIPOINT LOCK

A locking system securing a window or door at two or more locking points.

MUNTIN

A strip (wood, metal, pvc) dividing panes of glass in a sash.

OIL-RUBBED BRONZE (US 10-B)

A chemical finish coated on natural brass, adds a dark brown color by artificially speeding the aging process.

OPERABLE

Doors and windows that open for ventilation or egress.

PANEL

Door component mounted within the stile and rail frame.

PASSAGE LATCH

Passage hardware has a knob or lever with a latch and no lock; for interior use such as a hall, closet or kitchen door.

PATENT CYLINDER

A locking mechanism activated by a key or thumbturn; a universal lock style in Europe.

POCKET DOOR

Door that slides away into a pocket in a wall.

PRE-HUNG DOORS

Doors hinged and installed in the jamb at a factory.

PRIVACY LOCK

Keyless lock operated by a thumb-turn knob; for interior use such as bath or bedrooms. Usually includes an emergency egress/exit function to unlock door from outside. Also called a WC lock.

PROFILE CYLINDER

Cylinder used to activate a mortise or multipoint lock with a key and/or thumbturn knob.

PROJECTED WINDOW

A casement, awning or hopper window, opening on hinges or pivots.

PROUD

Refers to the measurement of how far a window or door handle projects (sticks out) from the sash. A large handle is very proud; a low-profile handle is not very proud.

PZ / PZW

A lock function that uses European style profile cylinders.

RAIL

Horizontal frame pieces at the top and bottom of a door.

ROOF WINDOW

An operable unit similar to a skylight, placed in the surface of a sloping roof.

ROTO OPERATOR

A 'rotary'-type window operator has a handle that rotates to open or close a casement or awning window.

SASH

An operable window leaf or door panel, consisting of stiles and rails assembled into a frame to hold glass.

Basic door, window & skylight terminology (continued)**SASH BALANCE**

A concealed iron weight used to counter-balance the sash of older double-hung windows.

SASH LIFT

A handle on the inside bottom rail of the lower sash of a single or double hung window.

SCREW HINGE

Hinge for doors or windows, used widely in Europe, which doesn't need mortising (unlike butt hinges).

SIDELITES

Tall, narrow glazed units adjacent to an entry door. Can be fixed or operable (for ventilation).

SILL

Main horizontal frame piece on the bottom of a window or door; also an accessory attached to deflect water.

SINGLE HUNG

Similar to a double-hung window, except that the bottom sash is operable and the top is fixed.

SKIN

A single piece of material used as the face of a door.

SOLID CORE DOOR

Flush door filled with solid material inside the door skins.

SPECIFIED

Listed in an architectural specification. Any types of doors, windows, hardware, wood, etc. directed to be used in an architectural project. FFI doesn't specify hardware; we do provide details and part numbers to help customers and architects specify as they choose.

SPINDLE

A spindle is the center post inserted through a lock.

SPINDLE HUB

Center opening in a lock that the spindle goes through.

STILE

Main vertical frame pieces at the sides of a sash or door.

STILE-AND-RAIL DOOR

Wood door made with vertical stiles and horizontal rails; openings are filled with wood panels or glass.

STRIKE

Component attached or recessed into a frame or inactive door, which catches a locking device such as a shootbolt, latch or deadbolt. Also called a keep.

STRUCTURAL MEMBER

A load-bearing framing piece, or header, usually of wood or steel.

THERMAL BREAK

A notch in a threshold that creates a temperature break between indoors and outdoors, to keep the cold out.

THUMBTURN

A turn knob or turn piece that activates a lock.

TILT WINDOW

Single or double hung window with a sash that tilts inward to allow easy cleaning.

TILT TURN

European style tilt-and-turn windows have a 3-function handle: turn the handle up, sash tilts in for ventilation; turn the handle sideways, sash opens like an inswing casement; turn the handle down to lock & seal the sash.

TRIM

Decorative door or window hardware such as handles, escutcheons, roses or strikes.

TRANSOM

A small window above a door or above another window.

US 10-B

Code for a popular chemical finish; see oil-rubbed bronze.

WEATHERSTRIPPING

Material used to seal the openings or gaps of operable windows and doors, preventing air & water infiltration.

WC (WATER CLOSET) LOCK

Privacy hardware with a built-in keyless lock operated by a thumb-turn knob; for interior use such as a bath or bedroom. Includes emergency egress function.

YALE CYLINDER

A locking mechanism activated by a key or thumbturn; a universal lock style in Europe.

<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>
10.10.03.003	I-5	1152-CO	E-21	13.17.00.014	I-12
10.11.03.001	I-5	1152-CR	E-21	13.17.00.015	I-12
10136A	D-10	1152-LU	E-21	13.42.00.102	I-12
10146B	D-11	1152-NS	E-21	13.42.00.103	I-12
10325.03	I-13	11533	I-20	13.42.00.200	I-12
10339.80	I-10	11553.03	I-6	13.42.00.201	I-12
10339.92	I-10	11553.32	I-6	13.42.00.206	I-12
10340.80	I-10	11573.xx	I-6	13.42.00.207	I-12
10340.92	I-10	11576.00.0500	I-14 , I-15	13.43.00.102	I-12
10341.xx	I-6	11576.92	I-14 , I-15	13.43.00.103	I-12
10402.92	I-10	11577.00.0500	I-15	13.43.00.202	I-12
10403.92	I-10	1159-CO	E-21	13.43.00.203	I-12
10415.92	I-10	1159-CR	E-21	13.43.00.501	I-12
10416.92	I-10	1159-LU	E-21	13.43.00.502	I-12
10453	I-22	1164-CO	E-21	13.44.00.102	I-12
10487	I-10	11660.xx	I-22	13.44.00.103	I-12
10488	I-10	11778	I-21	13.44.00.200	I-12
10498.92	I-10	11786	I-21	13.44.00.201	I-12
10499.92	I-10	12036	D-8	13.44.00.208	I-12
10521.92	I-10	12046	D-7	13.44.00.209	I-12
10522.92	I-10	12066	D-9	13.45.00.102	I-12
10579.xx	I-6	12136	D-10	13.45.00.103	I-12
10583.92	I-10	12146	D-11	13.45.00.200	I-12
10584.92	I-10	12156	D-12	13.45.00.201	I-12
10637M	I-22	1231-xx	J-LS-13	13.45.00.206	I-12
10638M	I-22	1232-xx	J-LS-13	13.45.00.207	I-12
10680.00.0500	I-15	1233-xx	J-LS-13	13230412070	J-DOR-4
10681.00.0500	I-15	12473.92	I-20	13230800070	J-DOR-4
10979	I-21	12478	I-19	13280000011	J-DOR-4
11.10.03.001	I-5	12481.xx	I-20	13280100011	D-21, J-DOR-4
11.10.32.001	I-5	12482	I-20	13320000006	J-DOR-4
11.12.03.001	I-5	12488	I-19	14.05.00.003	I-9
11.12.32.001	I-5	12490.xx	I-19	14.05.00.004	I-9
11.14.23.001	I-5	12492	I-19	14.05.00.501	I-9
11.14.32.001	I-5	12510.00.0520	I-10, I-14	14.05.00.502	I-9
11.16.03.001	I-5	12510.80	I-10	14.12	I-14, I-15
11.16.32.001	I-5	12510.92	I-10	14.12.00.005	I-9
11.27.03.101	I-5	12511.00.0520	I-10, I-14	14.12.00.006	I-9
11.27.32.101	I-5	12511.80	I-10	14.75.00.007	I-9
11.30.03.001	I-5	12511.92	I-10	14.75.00.008	I-9
11.30.32.001	I-5	12512.80	I-10	14.75.00.019	I-9
11.32.24.101	I-5	12513.92	I-10	14.75.00.020	I-9
11.32.32.101	I-5	12539	I-20	14.75.00.206	I-9
11.42.00.001	I-5	12547.00.0001	I-19, I-21	14.75.00.207	I-9
11.42.00.500	I-5	12591	I-20	14.77.00.009	I-9
11.43.00.001	I-5	12614.xx	I-14	14.77.00.010	I-9
11.43.00.180	I-5	12616.xx	I-14	14.80.00.503	I-9
11.44.00.001	I-5	127066	D-7	14.80.00.504	I-9
11.44.00.500	I-5	13024	I-19	14.96.00.001	I-9
11136	D-10	13.13.00.014	I-12	14.96.00.002	I-9
11146	D-11	13.13.00.015	I-12	14.96.00.102	I-9
11259	I-21	13.14.00.014	I-12	14.96.00.180	I-9
113139	D-5	13.14.00.015	I-12	14.96.00.181	I-9
11328.xx	I-6	13.15.00.014	I-12	14.97	I-14, I-15
11329.xx	I-6	13.15.00.015	I-12	14.97.00.005	I-9
11454.xx	I-6	13.16.00.014	I-12	14.97.00.006	I-9
11498.92	I-18	13.16.00.015	I-12	14.97.00.505	I-9

<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>
14.97.00.506	I-9	15001	D-7, D-8, D-9, D-10, D-11, D-12	19250	I-10
14ALU135	D-5			19380.92	I-10
14ALU200	D-6	16.16.03.110	I-16	19390	I-10
14ALU40 A	D-2	16.16.03.111	I-16	1973-9100-25	D-24
14ALU80 A	D-3	16.16.32.100	I-16	20008.92	I-5
14ALU80 MF	D-3	16.16.32.101	I-16	20034.92	I-5, I-16
15.10.00.001	I-2	16.18.03.210	I-16	20057.xx	I-18
15.10.00.002	I-2	16.18.32.210	I-16	20117	I-13
15.11.00.001	I-4	16.19.03.210	I-16	20118.80	I-13
15.11.00.002	I-4	16.19.23.210	I-16	20118.92	I-13
15.14.00.001	I-2	16.19.32.210	I-16	20233	I-17
15.14.00.002	I-2	16.30.03.001	I-16	20236.xx	I-17
15.15.00.001	I-2	16.30.03.002	I-16	20237.xx	I-17
15.15.00.002	I-2	16.30.32.001	I-16	20408	I-17
15.16.00.001	I-2	16.30.32.002	I-16	20550	I-22
15.16.00.002	I-2	16.49.03.100	I-18	20556	I-17
15.18.03.051	I-4	16.49.32.100	I-18	21146.73.0090	I-13
15.18.03.052	I-4	16.50.32.100	I-18	21150	I-13
15.18.32.051	I-4	16.52.xx.300	I-16	21151	I-13
15.18.32.052	I-4	16.53.xx.100	I-16	21171	I-13
15.18.51.051	I-4	16.60.03.001	I-18	21175	I-13
15.18.51.052	I-4	16.60.32.001	I-18	21183	I-13
15.19.00.001	I-4	16.61.03.001	I-18	2136	D-13
15.19.00.002	I-4	16.61.32.001	I-18	2146	D-13
15.24.00.001	I-4	17.13.xx.100	I-18	2156	D-13
15.24.00.002	I-4	17.23.03.200	I-18	21944.xx	I-7
15.31.03.051	I-3	17.23.19.200	I-18	22123	I-21
15.31.03.052	I-3	17.23.23.200	I-18	23.01.xx.001	I-3
15.31.32.051	I-3	17.23.32.200	I-18	23.01.xx.002	I-3
15.31.32.052	I-3	17140003	H-4	25.29.xx.102	I-17
15.32.03.051	I-3	17140004	H-4	25.29.xx.103	I-17
15.32.03.052	I-3	17140005	H-4	25.31.xx.102	I-17
15.32.23.051	I-3	17140006	H-4	25.31.xx.103	I-17
15.32.23.052	I-3	17140007	H-4	25.39.01.102	I-17
15.32.32.051	I-3	17140008	H-4	25.39.01.103	I-17
15.32.32.052	I-3	17140010	H-8	25.70.xx.102	I-17
15.32.51.051	I-3	17140011	H-8	25.70.xx.103	I-17
15.32.51.052	I-3	17140012	H-8	25.72.xx.102	I-17
15.39.03.001	I-3	177363-24	D-4	25.72.xx.103	I-17
15.39.03.002	I-3	177364-24	D-4	25.76.23.102	I-17
15.39.32.001	I-3	18.10.03.101	I-17	25.76.23.103	I-17
15.39.32.002	I-3	18.10.23.100	I-17	29.10.00.102	I-13
15.56.32.051	I-3	18.10.32.100	I-17	29.10.00.103	I-13
15.56.32.052	I-3	18.11.32.100	I-17	301	G-16
15.61.00.001	I-2	18126	D-9	30150.80	I-10
15.61.00.002	I-2	18136	D-10	30150.92	I-10
15.62.00.001	I-4	18146	D-11, D-12	30175	I-10
15.62.00.002	I-4	18290900005	J-DOR-4	302	G-16
15.72.00.001	I-4	19100.03	I-10	303	G-16
15.72.00.002	I-4	19100.32	I-10	30325.xx	I-22
15.76.00.001	I-4	19105	I-2, I-10	30326.xx	I-22
15.76.00.002	I-4	19110.92	I-2	30439	I-22
15.88.00.001	I-4	19126D3	D-9	30473.80	I-10
15.88.00.002	I-4	19136D-3	D-10	30473.92	I-10
15.94.00.001	I-4	19140.92	I-2, I-10	30476-04	I-22
15.94.00.002	I-4	19146D3	D-11, D-12	30476-06	I-22
		19240.xx	I-2, I-10	30476-08	I-22

<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>
30476-10 KD	I-22	37.27.00.100	I-13	40766G	H-10
30476-12 KD	I-22	37.33.00.102	I-13	40767H	H-10
30569.xx	I-17	37.35.00.100	I-13	40770K	H-11
30591	I-4	37.36.00.100	I-13	40771L	H-11
30654	I-22	37.37.00.100	I-13	40775P	H-12
30661	I-22	37.38.00.100	I-13	40807V	H-10
30662.xx	I-22	37.41.00.100	I-13	40809X	H-10
30672.xx	D-24	37.42.00.100	I-13	40811Z	H-10
30680.xx	D-24	37.43.00.100	I-13	40817F	H-10
30681	I-22	37021U	H-14	40821J	H-11
30764	I-18	37127H	H-9	40822K	H-11
30827.80	I-16	37128K	H-9	40836Y	H-12
30827.92	I-16	37129L	H-9	40837Z	H-4
30960.23	I-22	37185V	H-11	40838A	H-4
31000	I-22	37493H	H-14	40839B	H-4
31000.xx	I-22	39.10.00.203	D-24	40840C	H-4
31344.80	I-16	39.11.00.203	D-24	40841D	H-4
31344.92	I-16	39.13.00.202	D-24	40842E	H-4
31359	I-16	39.19.00.200	D-24	40843F	H-14
3136	D-13	39.22.00.200	D-24	40844G	H-14
3146	D-13	40.11.xx.100	D-24	40845H	H-14
31496.92	I-13	40.12.xx.100	D-24	40858U	H-14
3156	D-13	40.45.xx.100	D-24	40884U	H-14
31879	I-14, I-15	40096.xx	I-22	40893D	H-12
34.10.00.101	I-11	40097.xx	I-22	40894E	H-12
34.11.00.101	I-11	40136	D-13	40900K	H-2
34.12.00.101	I-11	40146	D-13	40901L	H-2
34.13.00.101	I-11	40156	D-13	40902.92	I-16
34.14.00.100	I-11	40265L	H-6	40902M	H-2
34.14.00.101	I-11	40266M	H-6	40903.92	I-16
34.15.00.102	I-11	40267N	H-6	40903N	H-2
34.16.00.100	I-11	40435L	H-9	40904O	H-2
34.24.00.103	I-11	40436M	H-9	40905P	H-2
34.25.00.109	I-11	40437N	H-9	40906Q	H-3
34.25.00.111	I-11	40460N	H-14	40907R	H-3
34.26.00.102	I-11	40461R	H-8	40908S	H-3
34.27.00.102	I-11	40467D	H-8	40941H	H-14
34.27.00.104	I-11	40468F	H-8	40942I	H-14
34.28.00.100	I-11	40472W	H-14	40943J	H-14
34.29.00.107	I-11	40560T	H-14	40956W	H-3
34.31.00.104	I-11	40603J	H-8	40989D	H-5
34.55.00.100	I-11	40617	I-10	40990E	H-5
34.56.00.100	I-11	40617W	H-7	40991F	H-5
34.57.00.100	I-11	40658L	H-6	40992G	H-5
34.58.00.100	I-11	40663D	H-7	40993H	H-5
34.59.00.100	I-11	40664F	H-6	40994I	H-5
34.60.00.100	I-11	40675K	H-11	40995J	H-12
34.61.00.100	I-11	40690A	H-11	41.10.xx.104	D-24
34.81.00.100	I-11	40692C	H-6	41.13.xx.100	D-24
34.86.00.100	I-11	40693D	H-7	4136	D-13
35.12.00.100	I-11	40733T	H-12	4146	D-13
35.13.00.100	I-11	40746G	H-8	4156	D-13
36126	D-9	40761B	H-10	42.65.xx.100	I-22
36136	D-10	40762C	H-10	42.75.xx.100	I-22
36146	D-11, D-12	40763D	H-10	42.90.03.100	I-21
36665E	H-14	40764E	H-10	42.90.38.100	I-21
37.26.00.100	I-13	40765F	H-10	43.30.00.501	I-21

<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>
43.33.00.100	I-21	81069	D-3	A00486.00.02	E-4, E-5, E-6, E-7, E-8, E-9, G-2, G-6
43.34.00.501	I-21	81139	D-5	A01451.01.01	F-4
43.50.00.002	I-20	81139-093	D-6	A01455.25.09	E-8
43.51.00.005	I-19	81193Y	H-7	A01455.25.10	E-9
43.53.00.002	I-19, I-20	8136	D-10	A01455.30.09	E-8
43.54.00.002	I-19	8146	D-11	A01455.30.09.853	E-6
45136	D-13	8156	D-12	A01455.35.09	E-8
45146	D-13	88940208005	J-DOR-2	A01455.35.09.853	E-6
47039	D-2	88940556505	G-18, J-WIN-2	A01455.35.10	E-9
47066	D-9	88940556507	G-18, J-WIN-2	A01455.35.10.853	E-7
47069	D-3	9136	D-10	A01455.40.09	E-8
4FFI-822-1-MZ	J-DOR-1	9146	D-11	A01455.40.09.853	E-6
4FFI-822-1-NI	J-DOR-1	9156	D-12	A01455.40.10	E-9
4FFI-822-7-MZ	J-DOR-1	9706	J-DOR-4	A01455.40.10.853	E-7
4FFI-822-7-NI	J-DOR-1	9708	J-DOR-4	A01455.45.09	E-8
50.00.00.501	I-15	9709	J-DOR-4	A01455.45.09.853	E-6
50.00.00.502	I-15	971277	J-DOR-4	A01455.45.10	E-9
50.10.00.011	I-14	971297	J-DOR-4	A01455.45.10.853	E-7
50.10.00.012	I-14	971364	J-DOR-4	A01455.50.09	E-8
50.10.00.521	I-14	A00158.00.01	G-8	A01455.50.09.853	E-6
50.10.00.522	I-14	A00158.00.02	G-8	A01455.50.10	E-9
50.50.00.501	I-15	A00403.00.01	G-8	A01455.50.10.853	E-7
50.50.00.502	I-15	A00406.15.01	G-8	A01455.55.09	E-8
50.60	I-14	A00406.15.02	G-8	A01455.55.09.853	E-6
50.70	I-15	A00406.15.03	G-8	A01455.55.10	E-9
50.80	I-14	A00406.15.04	G-8	A01458.30.09.851	E-4
50071	G-18, J-WIN-2	A00406.15.05	G-8	A01458.35.09.851	E-4
51.00.00.501	I-15	A00406.25.01	G-8	A01458.35.10.851	E-5
51.10	I-14	A00406.25.02	G-8	A01458.40.09.851	E-4
5136	D-13	A00406.25.03	G-8	A01458.40.10.851	E-5
5146	D-13	A00406.25.04	G-8	A01458.45.09.851	E-4
5156	D-13	A00406.25.05	G-8	A01458.45.10.851	E-5
52.00	I-15	A00406.25.06	G-8	A01458.50.09.851	E-4
52.11.00.511	I-14	A00406.40.01	G-8	A01458.50.10.851	E-5
52.11.00.512	I-14	A00406.40.04	G-8	A01458.55.09.851	E-4
700 CG	G-17, J-WIN-1	A00406.40.05	G-8	A020.060	C-17
700 RYG	J-DOR-1	A00481.00.01	G-6	A027.165	F-10
700 RYOT	J-DOR-1	A00481.00.02	G-6	A029.145	F-11
700 RYUB	J-DOR-1	A00481.00.03	G-6	A041.145	F-11
701 PY GD.92	J-DOR-1	A00481.00.04	E-8, E-9, G-6	A045.165	F-10
701 PY ORD.92	J-DOR-1	A00481.00.05	G-6	A052.145	F-11
701 PY OTB	J-DOR-1	A00481.00.13	E-8, E-9	A054.100	F-12
701 PY OTD.92	J-DOR-1	A00482.15.01	G-3	A055.165	F-10
701 PY SN.92	J-DOR-1	A00482.15.02	G-3	A055.16F	F-10
701 PY UB.92	J-DOR-1	A00482.15.03	G-2, G-3	A061.100	F-12
701 RYG	J-DOR-1	A00482.15.04	G-3	A063.165	F-10
703 DK G	G-18, J-WIN-2	A00482.15.05	G-3	A063.16F	F-10
703 DK ORB	G-18, J-WIN-2	A00482.25.01	G-4	A066.100	F-12
703 DK OTB	G-18, J-WIN-2	A00482.25.04	G-4	A070.145	F-11
78410OT	E-10, G-7	A00482.25.05	G-4	A075.165	F-10
78412OT	E-12	A00482.40.01	G-2, G-5	A075.16F	F-10
78414OT	E-12	A00482.40.03	G-5	A077.190	C-17
8066	D-8, D-9	A00482.40.04	G-5	A089.190	C-17
81036	D-7	A00482.40.05	G-5	A090.145	F-11
81039	D-2	A00484.00.01	G-2, G-6	A096.100	F-12
81046	D-8	A00486.00.01	E-4, E-5, E-6, E-7, E-8, E-9, G-2, G-6	A097.100	F-12
81066	D-9				

<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>
A097.120	F-12	A37102.01.06	G-12	A40130.25.03.853	G-4, G-11
A110.120	C-17	A37102.01.14	G-12	A40130.25.04	G-4, G-11
A134.US32D	E-12	A39200.00.01	G-14	A40130.25.04.853	G-4, G-11
A20017.01.02	E-11, G-2, G-7	A39200.01.01	G-14	A40130.40.01	G-2, G-5, G-11
A20017.01.04	E-11, G-7	A39200.01.04	G-14	A40130.40.02	G-5, G-11
A20017.01.07	E-11, G-7	A39200.01.05	G-14	A40130.40.03	G-5, G-11
A20017.01.10	E-11, G-2, G-7	A39200.07.03	G-14	A40130.40.03.853	G-5, G-11
A20017.01.13	E-11	A39200.07.04	G-14	A40481.00.03	G-6
A20017.05.02	E-11	A39303.07.01	G-14	A40481.00.04	E-8, G-6
A20017.05.13	E-11	A39308.06.01	G-14	A40481.00.05	G-6
A20019.00.01	G-13	A39309.06.00	G-14	A40481.00.13	E-8
A20020.00.01	E-4, E-6, G-2, G-6	A40009.00.02	G-13	A40484.00.01	G-2, G-6
A20020.00.02	E-8, G-6	A40012.00.01	G-12	A40486.00.01	E-4, E-6, E-8,
A20020.00.02.851	E-4, E-5, E-6, E-7,	A40014.00.01	G-13		G-2, G-6
	E-8, G-2, G-6	A40014.00.02	G-13	A40486.00.02	E-4, E-6, E-8,
A20020.00.03	E-9, G-6	A40014.00.03	G-13		G-2, G-6
A20020.00.03.851	E-5, E-7, E-9,	A40014.00.04	G-13	A40906.00.01	G-3, G-4, G-5, G-11
	G-2, G-6	A40017.01.01	G-14	A41455.35.09.851	E-4
A20026.01.01	G-7	A40017.01.02	E-11, G-2, G-7, G-14	A41455.35.09.853	E-6
A20026.01.06	E-10, G-2, G-7	A40017.01.04	E-11, G-7	A41455.50.09	E-8
A20026.01.07	E-10	A40017.01.07	E-11, G-7	A41455.50.09.851	E-4
A20026.01.26.093	E-10	A40017.01.10	E-11, G-2, G-7, G-14	A41455.50.09.853	E-6
A20029.01.06	G-12	A40017.01.13	E-11	A41455.55.09.851	E-4
A20029.02.06	G-12	A40017.05.02	E-11	A41455.55.09.853	E-6
A20029.03.06	G-13	A40017.05.13	E-11	A42011.00.01	G-12
A20029.04.06	G-13	A40020.00.01	E-4, E-6, G-2, G-6	A42011.00.02	G-12
A20030.00.01	G-14	A40020.00.02	E-8, G-6	A42011.00.03	G-12
A20030.00.03	G-14	A40020.00.02.851	E-4, E-6, E-8,	A42011.00.04	G-12
A20030.00.03.701	G-14		G-2, G-6	A42011.00.05	G-12
A20030.00.04	G-14	A40020.00.03	G-6	A42011.00.06	G-12
A20030.01.01	G-14	A40020.00.03.851	G-2, G-6	A42011.00.07	G-12
A20030.01.17	G-14	A40020.00.0X	G-11	A43031.24.00	G-12
A20030.01.18	G-14	A40026.01.06	E-8, G-2, G-7	A43031.26.00	G-12
A20030.01.19	G-14	A40040.01.01	G-13	A43032.24.00	G-12
A20030.01.25	G-14	A40040.01.02	G-13	A44030.24.01	G-13
A20030.01.26	G-14	A40040.06.01	G-13	A44030.24.02	G-13
A20030.01.27	G-14	A40040.06.02	G-13	A44030.26.01	G-13
A20030.01.28	G-14	A40041.01.01	G-12	A44030.26.02	G-13
A20030.01.29	G-14	A40041.01.02	G-12	A44036.24.01	G-13
A20030.01.30	G-14	A40041.06.01	G-12	A44036.24.02	G-13
A20050.00.01	G-2, G-3, G-8	A40041.06.02	G-12	A48010.05.01	G-14
A250-61	D-8	A40111.01.01	G-12	A48010.05.02	G-7, G-14
A300.US32D	E-12	A40111.01.02	G-12	A48011.01.03	G-7, G-11
A30130.15.02	G-3	A40111.01.03	G-12	A48011.05.03	G-7, G-11
A30130.15.03	G-3	A40111.01.04	G-12	A48012.01.03	G-7, G-11
A30130.15.04	G-3	A40111.01.05	G-12	A48012.05.03	G-7, G-11
A30130.15.05	G-3	A40111.01.06	G-12	AL.0370-5M	G-15
A30130.25.03	G-2, G-4	A40111.01.07	G-12	AL.0372-5M	G-15
A30130.40.02	G-5	A40130.15.01	G-3, G-11	AL.0374-5M	G-15
A30130.40.03	G-5	A40130.15.02	G-3, G-11	AL.0420-5M	G-15
A30130.40.03.853	G-5	A40130.15.03	G-2, G-3, G-11	AL.0424-5M	G-15
A30905.01.14	G-18	A40130.15.03.853	G-3	AL.1780-5M	G-15
A30906.00.01	G-3, G-4, G-5	A40130.15.04	G-3, G-11	AL.1784-5M	G-15
A37101.01.14	G-13	A40130.15.05	G-3, G-11	AL.2230-5M	G-15
A37101.01.94	G-13	A40130.25.01	G-4, G-11	AL.2234-5M	G-15
A37101.02.14	G-13	A40130.25.02	G-2, G-4, G-11	AL.90-BR	D-25
A37101.02.94	G-13	A40130.25.03	G-4, G-11	AL.90-CL	D-25

<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>
AL.90-MIL	D-25	B01005.50.02	E-23	B256087-6000	D-4
ALU100-14	D-4	B01005.50.03	E-23	BL40x20x2	F-8
ALU100MF-14	D-4	B01005.50.06	E-23	BP30x2	F-8
ALU135.148.01	D-5	B01012.50.02	E-23	C00640.00.03	E-21
ALU135.244.01	D-5	B01012.50.03	E-23	C00641.00.01	D-21, E-21
ALU40.100.01	D-2	B01012.50.06	E-23	C00641.00.06	D-21, E-21
ALU40.148.01	D-2	B01015.50.02	E-23	C00642.xx.xx	C-16, E-20, G-18
ALU80.100.01	D-3	B01015.50.03	E-23	C00645.00.06	C-16, E-19
ALU80.148.01	D-3	B01015.50.06	E-23	C00645.00.10	C-16, E-19
ALU80.244.01	D-3	B01017.50.10	E-23	C00645.00.16	C-16, E-19
B.90	D-25	B01021.50.10	E-23	C00645.00.ORB	C-16, E-19
B00590.19.02	E-22	B01024.50.02	E-23	C522	F-9, F-13
B00590.19.06	E-22	B01024.50.03	E-23	C60001.25.40	E-17
B00590.20.10	E-22	B01024.50.06	E-23	C60001.30.40	E-17
B00590.21.02	E-22	B01027.50.10	E-23	C60001.35.35	E-17
B00590.21.06	E-22	B01040.50.02	E-23	C60001.40.40	E-17
B00591.50.02	E-22	B01040.50.03	E-23	C60001.40.60	E-17
B00596.50.06	E-22	B01040.50.06	E-23	C60016.50.30	E-17
B00700.06.04	D-22	B01041.50.10	E-23	C60306.25.65	E-17
B00704.50.03	D-21	B01060.20.01	E-23	C60306.40.50	E-17
B00704.50.06	D-21	B01060.20.02	E-23	C60316.25.35	E-17
B00705.30.02	D-21	B01904.50.03	D-20	C62001.25.25	E-17
B00705.35.02	D-21	B01905.50.32	D-20	C62001.28.22	E-17
B00705.40.06	D-21	B01907.50.10	D-20	C62001.30.30	E-17
B00706.35.02	D-21	B01907.50.30	D-20	C62001.35.25	E-17
B00706.40.06	D-21	B01907.50.32	D-20	C62001.35.40	E-17
B00706.45.03	D-21	B01910.01.02	D-20	C62001.40.40	E-17
B00706.50.03	D-21	B01910.01.10	D-20	C62001.45.45	E-17
B00706.60.06	D-21	B01910.01.32	D-20	C62006.25.30	E-17
B00707.40.10	D-21	B01915.50.10	D-20	C62006.30.30	E-17
B00708.50.10	D-21	B01915.50.32	D-20	C62006.35.35	E-17
B00851.40.02	E-22	B01918.50.02	D-20	C62006.40.40	E-17
B00851.50.06	E-22	B01919.50.10	D-20	C62010.25.25	E-17
B00852.50.02	E-22	B01919.50.30	D-20	C62010.35.25	E-17
B00852.70.06	E-22	B01927.00.02	D-20	C62010.35.35	E-17
B00854.50.10	E-22	B01927.00.10	D-20	C62010.40.40	E-17
B00854.60.10	E-22	B01927.00.30	D-20	C62010.45.45	E-17
B00855.50.03	E-22	B01927.00.32	D-20	C62016.25.25	E-17
B00855.60.03	E-22	B01927.00.OR	D-20	C62016.30.30	E-17
B00856.35.03	E-22	B025.080	F-8	C62016.35.35	E-17
B00856.45.03	E-22	B029.120	C-17	C62016.40.40	E-17
B00857.40.10	E-22	B029.145	F-7	C62016.45.45	E-17
B00859.60.04	D-22	B029xx.50.xx	D-20	C62301.25.25	E-19
B00871.60.10	E-22	B040.080	F-8	C62301.25.35	E-19
B00875.35.04	E-22	B041.145	F-7	C62401.25.25	E-19
B00875.45.06	E-22	B055.165	F-7	C62401.30.30	E-19
B00910.45.04	D-22	B055.16F	F-7	C62401.35.35	E-19
B00910.50.04	D-22	B061.100	F-8	C62401.40.40	C-16, E-19
B00910.60.04	D-22	B066.230	F-7	C62401.45.45	C-16
B01000.21.02	E-23	B081.120	C-17	C62410.40.40	C-16, E-19
B01000.21.06	E-23	B086.100	F-8	C62410.45.45	C-16
B01000.22.10	E-23	B089.190	C-17	C62416.25.25	E-19
B01000.24.06	E-23	B090.165	F-7	C62416.35.35	E-19
B01000.25.10	E-23	B090.16F	F-7	C62416.40.40	C-16
B01000.26.02	E-23	B110.120	C-17	C62416.45.45	C-16, E-19
B01000.26.06	E-23	B210-61	D-7	C62501.25.05	E-19
B01003.50.10	E-23	B256087-4000	D-4	C62701.25.05	E-19

<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>
C62701.40.05	C-16	E01150.16.04	E-25	EL-IR48.05.60	G-17, J-WIN-1
C62710.30.05	E-19	E01151.16.16	E-25	EL-IR48.05.81	G-17, J-WIN-1
C62710.40.05	C-16	E01151.16.50	E-25	EL-K191.87.94	B-26, G-18, J-LS-6, J-WIN-2, J-DOR-2
C62710.45.05	E-19	E01151.16.94	E-25	EL-L191.66.94	B-26, G-18, J-LS-6, J-WIN-2, J-DOR-2
C62716.35.05	E-19	E01153.16.02	E-25	F 1202	C-11
C62716.40.05	C-16, E-19	E01153.16.10	E-25	F 1203	C-11
C63001.05.22	E-18	E01159.16.01	E-25	F01696.00.04	E-10
C63001.05.25	E-18	E01159.16.02	E-25	F01696.00.93	E-10
C63001.05.30	E-18	E01159.16.10	E-25	F019	F-9
C63001.05.35	E-18	E01165.16.01	E-25	F11692.01.01	E-12
C63001.05.45	E-18	E02124.14.10	G-16	F11692.05.01	E-12
C63006.05.30	E-18	E02150.16.04	E-24	FDP-100B	D-25
C63010.05.45	E-18	E02150.20.04	E-24	FDP-100S	D-25
C63016.05.30	E-18	E02151.16.xx	E-24	FDP-148B	D-25
C63016.05.35	E-18	E02151.20.06	E-24	FDP-148S	D-25
C63016.05.40	E-18	E02151.20.16	E-24	FDP-244B	D-25
C63101.05.35	E-18	E02151.20.50	E-24	FDP-244S	D-25
C63101.05.40	E-18	E02151.20.93	E-24	FDP-290B	D-25
C63101.05.45	E-18	E02151.20.94	E-24	FDP-290S	D-25
C63106.05.35	E-18	E02152.16.01	E-24	FFI-A3170-PBR	E-16
C63106.05.40	E-18	E02152.16.02	E-24	FFI-A3170-SCR	E-16
C63106.05.45	E-18	E02152.16.06	E-24	FFI-A3180-PBR	E-16
C63110.35.05	E-18	E02152.16.10	E-24	FFI-A3180-SCR	E-16
C63110.40.05	E-18	E02152.16.32	E-24	FFI-A3190-PBR	B-27, C-16, E-15, J-LS-7
C63110.45.05	E-18	E02152.20.01	E-24	FFI-A3190-SCR	B-27, C-16, E-15, J-LS-7
C63116.35.05	E-18	E02152.20.02	E-24	FFI-A3190-xxx	B-30, J-LS-10
C63116.40.05	E-18	E02152.20.06	E-24	FFI-A3246-PBR	B-28, E-16, J-LS-8
C63116.45.05	E-18	E02152.20.10	E-24	FFI-A3246-SCR	B-28, E-16, J-LS-8
CLADKIT ALU	F-10	E02152.20.32	E-24	FHN-400-61	D-10
CLADKIT BRASS	F-7	E02199.14.10	G-16	FHN-480-61	D-11
CS30	F-9	EL-0001.78.90	J-DOR-4	G00728.00.01	C-10
D00301.10.01	E-10	EL-1440.47.60	J-DOR-2	G00728.00.02	C-14
D00301.13.01	E-10	EL-1440.47.81	J-DOR-2	G00728.00.03	C-14
D122-CO	D-19	EL-1440.48.60	J-DOR-2	G00728.00.04	C-12
D122-NS	D-19	EL-1440.48.81	J-DOR-2	G00728.00.05	C-12
D123-xx	D-19	EL-1441.66.60	J-DOR-2	G00728.00.06	C-8
D124-CO	D-19	EL-1441.66.81	J-DOR-2	G00728.00.07	C-14
D124-NS	D-19	EL-1521.87.81	G-18, J-WIN-2	G00728.00.09	C-12
D125-xx	D-19	EL-1521.87.ORB	G-18, J-WIN-2	G00728.00.11	C-14
D126-xx	D-19	EL-3138.00.81	J-LS-12	G00728.00.12	C-14
E00112.16.01	E-25	EL-3138.00.ORB	J-LS-12	G00728.00.13	C-12
E00112.16.04	E-25	EL-3138.01.81	J-LS-12	G00728.00.15	C-11
E00112.16.05	E-24	EL-3138.01.ORB	J-LS-12	G00728.00.17	C-15
E00112.20.05	E-24	EL-3138.02.81	J-LS-12	G00728.00.20	C-5
E00124.14.02	G-16	EL-3138.02.ORB	J-LS-12	G00728.00.21	C-11
E00124.14.10	G-16	EL-3138.03.81	J-LS-12	G00728.00.22	C-11
E00125.14.01	G-16	EL-3138.03.ORB	J-LS-12	G00728.00.23	C-12
E00128.14.02	G-16	EL-3138.NI.81	J-LS-12	G00728.00.24	C-11
E00128.14.10	G-16	EL-3138.NI.ORB	J-LS-12	G00728.00.27	C-10
E00129.14.03	G-16	EL-3268.00.94	J-LS-12	G00728.00.29	C-14
E00130.14.03	G-16	EL-3268.01.94	J-LS-12	G00728.00.30	C-11
E00150.16.04	E-26	EL-3268.02.94	J-LS-12	G00728.00.31	C-10
E00150.20.04	E-26	EL-3268.03.94	J-LS-12	G00728.00.32	C-14
E00156.14.02	G-16	EL-3268.03.94	J-LS-12		
E00165.16.05	E-24	EL-3268.NI.94	J-LS-12		
E00165.20.05	E-24	EL-7X70	G-18		
E00199.16.10	E-25	EL-IN38.05.60	G-17, J-WIN-1		
		EL-IN38.05.81	G-17, J-WIN-1		

<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>
G00728.01.31	C-9	G00743.03.01	C-10	G01742.03.00	C-9
G00728.12.15	C-11	G00743.03.02	C-10	G01742.04.00	C-9
G00729.00.01	C-15	G00744.01.01	J-LS-11	G01743.04.01	C-9
G00729.00.02	C-15	G00744.01.02	J-LS-11	G01743.04.02	C-9
G00729.00.03	C-15	G00744.02.01	J-LS-11	G02739.02.01	C-8
G00729.00.04	C-15	G00744.02.02	J-LS-11	G02739.02.02	C-8
G00730.00.01	C-14	G00744.02.02	J-LS-11	G02739.04.01	C-8, C-9
G00730.00.02	C-14	G00744.04.01	J-LS-11	G02739.04.02	C-8, C-9
G00730.00.03	C-14	G00744.04.02	J-LS-11	G03739.02.01	C-8
G00730.00.04	C-14	G00745.01.10	J-LS-11	G03739.02.02	C-8
G00731.01.15	C-13, C-14	G00745.02.10	J-LS-11	G03739.04.01	C-8
G00731.01.25	C-13, C-14	G00745.04.10	J-LS-11	G03739.04.02	C-8
G00732.00.01	C-15	G00746.00.01	C-19	G400-61	D-10
G00732.00.02	C-15	G00746.00.02	C-19	G400-61-MA	D-10
G00732.01.01	C-15	G00746.00.03	C-19	G40728.00.06	C-8
G00732.01.02	C-15	G00746.00.04	C-19	G40728.00.20	C-5
G00733.01.01	C-11	G00746.00.05	C-19	G40728.00.33	C-14
G00733.01.02	C-11	G00746.00.05-M	B-13, C-19	GD 250B	F-15
G00733.02.01	C-11	G00746.00.06	C-19	GD 250M	F-15
G00733.02.02	C-11	G00747.00.01	J-LS-11	GD-560	F-15
G00733.03.02	C-11	G00747.00.02	J-LS-11	GE10	F-14
G00733.03.03	C-11	G00748.00.10	J-LS-11	GKL400-61	D-10
G00733.04.01	C-11	G00750.00.01	J-LS-11	GKS400-61	D-10
G00733.05.01	C-11	G00750.00.02	J-LS-11	GKS400-61-MA	D-10
G00733.07.01	C-6	G00751.00.10	J-LS-11	GS 250-B	F-15
G00734.244.01D	C-5	G00751.00.16	D-25	GS 250-M	F-15
G00734.244.02D	C-5	G00751.00.18	D-25	GS.060.M	F-15
G00735.03.01	C-5	G00752.00.01	J-LS-11	GT30	F-14
G00735.03.02	C-5	G00752.00.02	J-LS-11	GV22	F-14
G00736.03.01	C-5	G00753.00.10	J-LS-11	GV25	F-14
G00736.03.02	C-5	G00753.00.OR	J-LS-11	GY 180-B	F-15
G00737.01.01	C-15	G00754.00.04	J-LS-11	GY 180-M	F-15
G00737.01.02	C-15	G00756.00.93	C-6	GY 250-B	F-15
G00737.02.01	C-15	G00756.04.01	C-3	GY 250-M	F-15
G00737.02.02	C-15	G00756.04.02	C-3	H106V6-xx	D-21
G00737.03.01	C-15	G00758.01.68	C-13, C-14	H107R6-xx	D-21
G00737.03.02	C-15	G00758.01.68	C-12	H-126-SUS-SP	D-17
G00737.04.01	C-15	G00758.02.68	C-6, C-13, C-14	K152-CO	G-19, J-WIN-3
G00737.04.02	C-15	G00759.01.15	C-6, C-15	K152-CR	G-19, J-WIN-3
G00738.03.03	B-19, C-7	G00759.02.15	C-15	K160-CO	G-19, J-WIN-3
G00738.165.01D	B-19, C-7	G00760.00.00	C-9	K160-LU	G-19, J-WIN-3
G00738.165.02D	B-19, C-7	G00760.00.04	C-9	K160-OR	G-19, J-WIN-3
G00738.244.01D	B-19, C-7	G00999.99.99	C-15	K164-6M	G-19, J-WIN-3
G00738.244.02D	B-19, C-7	G01728.00.21	C-9	K164-C1	G-19, J-WIN-3
G00739.03.03	B-19, C-7	G01728.00.22	C-9	K164-C5	G-19, J-WIN-3
G00739.165.01D	B-19, C-7	G01728.00.27	C-9	K166-ZD	G-19, J-WIN-3
G00739.165.02D	B-19, C-7	G01734.165.01D	C-5	K166-ZR	G-19, J-WIN-3
G00739.244.01D	B-19, C-7	G01734.165.02D	C-5	K167-CO	G-19, J-WIN-3
G00739.244.02D	B-19, C-7	G01734.244.01D	C-5	K167-NP	G-19, J-WIN-3
G00740.03.01	C-10	G01734.244.02D	C-5	K310-61	D-9
G00740.03.02	C-10	G01739.02.01	C-6, C-8	L000000126	B-4, B-6, B-9, B-11
G00741.02.01	C-10	G01739.02.02	C-6, C-8	L000000207	B-4, B-6, B-9, B-11
G00741.02.02	C-10	G01739.04.01	C-6, C-8		C-14
G00741.03.01	C-10	G01739.04.02	C-6, C-8	L101-xx	J-LS-13
G00741.03.02	C-10	G01741.04.01	C-9	L102-xx	J-LS-13
G00742.00.02	C-10	G01741.04.02	C-9	L103-xx	J-LS-13
G00742.00.03	C-10	G01742.01.00	C-9	L104-xx	J-LS-13

<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>
LAD076SH00	B-17, B-18	LHA255SB00	B-29, J-LS-9	LS100.13.605	B-28, E-19, J-LS-8
LAD076SH01	B-17, B-18	LHA255SB01	B-30, J-LS-10	LS100.13.613	B-28, E-19, J-LS-8
LAD112SH00	B-16	LHA255SS00	B-29, J-LS-9	LS100.13.619	B-28, E-19, J-LS-8
LAD112SH00-10	B-16	LHA255SS01	B-30, J-LS-10	LS100.14.630	B-22, B-25, J-LS-2, J-LS-5
LAD112SH01	B-16	LHA255SZ00	B-29, J-LS-9	LS100.16.605	B-24, D-18, J-LS-4
LAD112SH01-10	B-16	LHA255SZ01	B-30, J-LS-10	LS100.16.613	B-24, D-18, J-LS-4
LAD112SH02	B-16	LHA280SB00	B-29, J-LS-9	LS100.16.619	B-24, D-18, J-LS-4
LAD112SH02-10	B-16	LHA280SB01	B-30, J-LS-10	LS100.17.605	B-24, D-18, J-LS-4
LAD112SH03	B-16	LHA280SB02	B-30, J-LS-10	LS100.17.613	B-24, D-18, J-LS-4
LAD112SH03-10	B-16	LHA280SS02	B-29, J-LS-9	LS100.17.619	B-24, D-18, J-LS-4
LAD170DL10	B-12	LHA280SS03	B-30, J-LS-10	LS100.19.605	B-24, D-18, J-LS-4
LAD170DL10-10	B-12	LHA280SS04	B-30, J-LS-10	LS100.19.613	B-24, D-18, J-LS-4
LAD170DL11	B-12	LHA280SZ00	B-29, J-LS-9	LS100.19.619	B-24, D-18, J-LS-4
LAD170DL11-10	B-12	LHA280SZ01	B-30, J-LS-10	LS100.20.605	B-24, D-18, J-LS-4
LAD170DL12	B-10	LHA280SZ02	B-30, J-LS-10	LS100.20.613	B-24, D-18, J-LS-4
LAD170DL12-10	B-10	LLB1000010	B-13	LS100.20.619	B-24, D-18, J-LS-4
LAD170DL13	B-10	LLB1000012	B-13	LS100.21.605	B-24, D-18, J-LS-4
LAD170DL13-10	B-10	LLB1000013	B-13	LS100.21.613	B-24, D-18, J-LS-4
LAD170SH10	B-8	LLB1000015	B-13	LS100.21.619	B-24, D-18, J-LS-4
LAD170SH11	B-8	LLB1000016	B-13	LS100.22.605	B-24, D-18, J-LS-4
LAD170SH12	B-8	LLB1000017	B-13	LS100.22.613	B-24, D-18, J-LS-4
LAD170SH13	B-8	LLB1000018	B-13	LS100.22.619	B-24, D-18, J-LS-4
LAD170SH14	B-8	LLB1S	B-13	LS100.23.630	B-17, D-17
LAD170SH15	B-8	LLB4000000	B-13	LS100.23.999	B-17, B-18, D-17
LAD170SH16	B-8	LLB4000001	B-13, B-18	LS100.30.605	B-27, C-16, E-18, J-LS-7
LAD170SH17	B-8	LLBCAP0000	B-5, B-7, B-8, B-10, B-12	LS100.30.613	B-27, B-30, C-16, E-18, J-LS-7, J-LS-10
LAD255SH10	B-7, B-17	LLBCAP0001	B-5, B-7, B-8, B-10, B-12	LS100.30.619	B-27, C-16, E-18, J-LS-7
LAD255SH10-10	B-7	LS00000105	B-29, J-LS-9	LS105.08.630	E-22
LAD255SH11	B-7, B-17	LS00000108	B-29, J-LS-9	LS105.11.619	B-25, B-26, J-LS-5, J-LS-6
LAD255SH11-10	B-7	LS00000197	B-15	LS105.11.xxx	B-23, J-LS-3
LAD255SH12	B-5, B-17	LS00000198	B-29, J-LS-9	LS105.12.619	B-25, B-26, J-LS-5, J-LS-6
LAD255SH12-10	B-5	LS100.00.605	B-23, J-LS-3	LS105.12.xxx	B-23, J-LS-3
LAD255SH13	B-5, B-17	LS100.00.613	B-23, J-LS-3	LS105.16.630	B-22, B-25, J-LS-2, J-LS-5
LAD255SH13-10	B-5	LS100.00.619	B-23, J-LS-3	LS105.17.xxx	B-22, J-LS-2
LAR1500010	B-11	LS100.01.605	B-23, J-LS-3	LS105.18.630	B-23, J-LS-3
LAR1500011	B-9	LS100.01.613	B-18, B-23, J-LS-3	LS105.21.xxx	B-22, J-LS-2
LAR1500012	B-11	LS100.01.619	B-23, J-LS-3	LS105.22.619	B-25, B-26, J-LS-5, J-LS-6
LAR1500013	B-9	LS100.02.605	B-23, J-LS-3	LS105.22.xxx	B-23, J-LS-3
LAR2500010	B-6	LS100.02.613	B-23, J-LS-3	LS105.23.630	B-22, B-23, B-25, B-26, J-LS-2, J-LS-3, J-LS-5, J-LS-6
LAR2500011	B-4	LS100.02.619	B-23, J-LS-3	LS105.24.xxx	B-22, B-25, J-LS-2, J-LS-5
LAR2500012	B-6	LS100.03.605	B-22, J-LS-2	LS105.25.xxx	B-22, J-LS-2
LAR2500013	B-4	LS100.03.613	B-18, B-22, J-LS-2	LS105.26.619	B-25, J-LS-5
LAR2500014	B-19, D-25	LS100.03.619	B-22, J-LS-2	LS105.27.630	B-27, B-28, E-18, J-LS-7, J-LS-8
LBO400000	B-3, B-6	LS100.04.605	B-22, J-LS-2	LS105.27.999	B-27, B-28, E-18, J-LS-7, J-LS-8
LBO400001	B-3, B-4	LS100.04.613	B-22, J-LS-2		
LCD2500221	B-18	LS100.04.619	B-22, J-LS-2		
LCR0000012	B-13	LS100.10.605	B-27, E-18, J-LS-7		
LCR0000013	B-13	LS100.10.613	B-27, E-18, J-LS-7		
LCR0000014	B-13	LS100.10.619	B-27, E-18, J-LS-7		
LDG0625000	B-15	LS100.11.605	B-28, E-19, J-LS-8		
LDG0625001	B-15	LS100.11.613	B-28, E-19, J-LS-8		
LHA247SB00	B-29, J-LS-9	LS100.11.619	B-28, E-19, J-LS-8		
LHA247SB01	B-30, J-LS-10	LS100.12.605	B-27, E-18, J-LS-7		
LHA247SS00	B-29, J-LS-9	LS100.12.613	B-27, E-18, J-LS-7		
LHA247SS01	B-30, J-LS-10	LS100.12.619	B-27, E-18, J-LS-7		
LHA247SZ00	B-29, J-LS-9				
LHA247SZ01	B-30, J-LS-10				

<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>
LS200.00.630	B-26, J-LS-6	M170MY85-AN	J-DOR-3	SD150.11.605	E-12
LS200.01.630	B-26, J-LS-6	M170RY8-LU	J-DOR-3	SD150.11.613	E-12
LS200.03.630	B-25, G-18, J-LS-5, J-WIN-2, J-DOR-2	M170RY8-SA	J-DOR-3	SD150.11.619	E-12
LS200.04.630	B-25, J-LS-5	M179MY85-CO	J-DOR-3	SD150.21.605	E-12
LS200.16.630	B-25, B-26, J-LS-5, J-LS-6	M179RY8-LT	J-DOR-3	SD150.21.613	E-12
LS200.17.630	B-26, J-LS-6	M179RY8-LU	J-DOR-3	SD150.21.619	E-12
LS200.19.630	B-25, B-26, J-LS-5, J-LS-6	M181MY85-XI	J-DOR-3	SL300.12.01	C-3
LS200.20.630	B-26, J-LS-6	M181RY8-WF	J-DOR-3	SL300.12.02	C-3
LS200.21.630	B-25, B-26, J-LS-5, J-LS-6	M181RY8-YG	J-DOR-3	SL300.12.03	C-3
LS200.22.630	B-26, J-LS-6	Q-1262 605-6	E-11	SLGK.01.024	C-3
LSASH00008	B-15	Q-1262 613-6	E-11	SLGK.01.750	C-3
LSASH00009	B-15	Q-1262 626-6	E-11	SW5657-2W	H-2, H-3, H-4, H-5, H-6, H-8, H-9, H-13, I-21
LSB2500000	B-20	Q-1358 605-12	E-11		
LSB3000000	B-20	Q-1358 613-12	E-3, E-11	SW5685-2W	H-13
LSBG000000	B-9, B-11	Q-1358 625-12	E-11	SW5686-2W	H-2, H-4, H-5, H-6, H-13
LSBG000001	B-4, B-6	RB001	F-3	T210-61D4	D-7
LSBOLT0010	B-5, B-7, B-8, B-10, B-12	RB025	F-3	T227066-101	D-15
LSBOLT0020	B-5, B-7, B-8, B-10, B-12	RB044	F-3	T227066-102	D-15
LSBOLT1000-15	B-5, B-7, B-8, B-10, B-12, B-17	RB063	F-3	T227066-103	D-16
LSBOLT1002-4	B-4, B-6, B-9, B-11	RB300	F-3	T227066-104	D-16
LSBOLT2001-4	B-4, B-6, B-9, B-11	RB307	F-3	T227066-105	D-15
LSBOLT2002-6	B-4, B-6, B-9, B-11	RB341	F-3	T227066-110	D-15
LSBOLT2003-15	B-5, B-7, B-8, B-10, B-12, B-17	RB342	F-3	T227066-115	D-15
LSBRC00006	B-4, B-6, B-9, B-11, C-14	RB345	F-3	T227066-120	D-15
LSBRC00100	B-4, B-6, B-9, B-11, C-14	RB501	F-2	T227066-122	D-16
LSDGCAP000	B-5, B-7, B-10, B-12	RB502	F-2	T227066-201	D-15
LSDGCAP001	B-5, B-7, B-10, B-12	RB505	F-2	T227066-202	D-15
LSFTG00000	B-14, B-18, C-12	RB510	F-2	T227066-203	D-16
LSG2825001	B-20	RB511	F-2	T227066-204	D-16
LSG2830001	B-20	RB601	F-3	T227066-205	D-15
LSGK.BT.150	C-11	RB602	F-3	T227066-210	D-15
LSGK.BT.500	C-11	RB604	F-3	T227066-215	D-15
LSGK.TU.150	C-11	RB605	F-3	T227066-220	D-15
LSGK.TU.500	C-11	RB630	F-3	T227066-222	D-16
LSRTG00006	B-14	RB631	F-3	T227066-301	D-15
LSRTG00009	B-14, B-18, C-12	RB642	F-3	T227066-302	D-15
LSRTG00101	B-14	RB702	F-3	T227066-303	D-16
LSRTG00106	B-14, C-12	RB705	F-3	T227066-304	D-16
LVP 25	E-10, G-2, G-7	RH004	F-2	T227066-305	D-15
LVP 25B	C-3	RH005	F-3	T227066-310	D-15
LVP 25S	C-3, E-12, G-2, G-7	RH008	F-3	T227066-315	D-15
LVP 30	E-10, E-12, G-7	RP004	F-2	T227066-320	D-15
LVP 30S	E-10, E-12, G-7, G-11	RP005	F-2	T227066-322	D-16
LVP25	E-4, E-5, E-6, E-7, E-8, E-9	RP019	F-3	T227066-501	D-15
M150RY8-CO	J-DOR-3	RP039	F-2	T227066-502	D-15
M150RY8-CR	J-DOR-3	S010	F-9	T227066-803	D-16
		S060	F-13	T227066-804	D-16
		S061	F-13	T227066-811	D-16
		S062	F-13	T227066-812	D-16
		S063	F-13	T227066-821	D-16
		S155	F-9, F-13	T227066-901	D-15
		SB055.050	F-9	T227066-902	D-15
		SB055.060	F-9	T227066-903	D-15
		SB055.092	F-9	T227066-904	D-7, D-8, D-9, D-10, D-11, D-12, D-15
		SB055.110	F-9		
		SB55.050	F-9		

<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>	<u>Part #</u>	<u>Page #s</u>
T227066-905	D-15	W99621.08.45	E-14		
T227066-908	D-15	W99621.08.57	E-14		
T227066-910	D-15	W99622.08.45	E-14		
T250-61D4	D-8	W99622.08.57	E-14		
T260-037D4	D-2	W99630.00.13	E-14		
T260-037D6	D-2	W99800.00.11	E-13		
T300-61D3	D-9	W99800.00.15	D-23, E-13		
T300-61D4	D-9	W99800.00.16	D-23, E-13		
T300-61D6	D-9	W99801.00.10	E-13		
T310-067D4	D-3	W99801.00.16	E-13		
T310-067D6	D-3	WINKIT23P	G-2		
T355083D	D-4	WT301.MP.605	G-17, J-WIN-1		
T355087-4000	D-4	WT301.MP.613	G-17, J-WIN-1		
T355087-6000	D-4	WT301.MP.619	G-17, J-WIN-1		
T400-61D3	D-10	XKL560-61	D-12		
T400-61D4	D-10	XKS560-61	D-12		
T400-61D6	D-10	XKS560-61-MA	D-12		
T410-137D4	D-5	Z480-61-MA	D-11		
T410-137D6	D-5	ZBS0.270.002.112	C-18		
T480-61D3	D-11	ZBS0.270.002.114	C-18		
T480-61D4	D-11	ZBS0.400.003.112	C-18		
T480-61D6	D-11	ZBS0.400.003.114	C-18		
T560-0976	D-6	ZBS0.910.005.112	C-18		
T560-61D4	D-12	ZBS0.910.005.114	C-18		
T560-61D6	D-12	ZC1047.184.2001	F-4		
T66D	F-12	ZC1947.184.2001.112	F-4		
T66S	F-12	ZC1947.184.2001.114	F-4		
T67D	F-12	ZF0.12.12.15	C-18		
T67S	F-12	ZF0.20.12.15	C-18		
TE.0365	G-15	ZF2.20L0255.0	F-4		
TE.0375	G-15	ZF3.14.20.10	C-18		
TE.0425	G-15	ZF5.30.19.03	C-18		
TE.1785	G-15	ZF5.30.29.03	C-18		
TE.2235	G-15	ZKL480-61	D-11		
TPAHA07	G-18, J-WIN-2	ZKS480-61	D-11		
TPAHA18	G-18, J-WIN-2	ZKS480-61-MA	D-11		
TPAHA23	J-WIN-2				
V31P	F-9, F-13				
W01696.00.04	E-10, G-7				
W11200.55.13	E-13				
W11200.60.13	E-13				
W11220.55.13	E-13				
W11221.80.12	E-13				
W11692.01.01	E-12				
W11692.05.01	E-12				
W21220.45.13	D-23, E-13				
W21220.55.13	D-23, E-13				
W254087-4000	D-4				
W254087-6000	D-4				
W255087-4000	D-4				
W255087-6000	D-4				
W99610.01.13	E-14				
W99610.05.13	D-23, E-14				
W99620.08.13	E-14				
W99620.08.17	E-14				
W99620.08.46	E-14				
W99620.08.58	E-14				