

Suspect/Counterfeit Training Examples

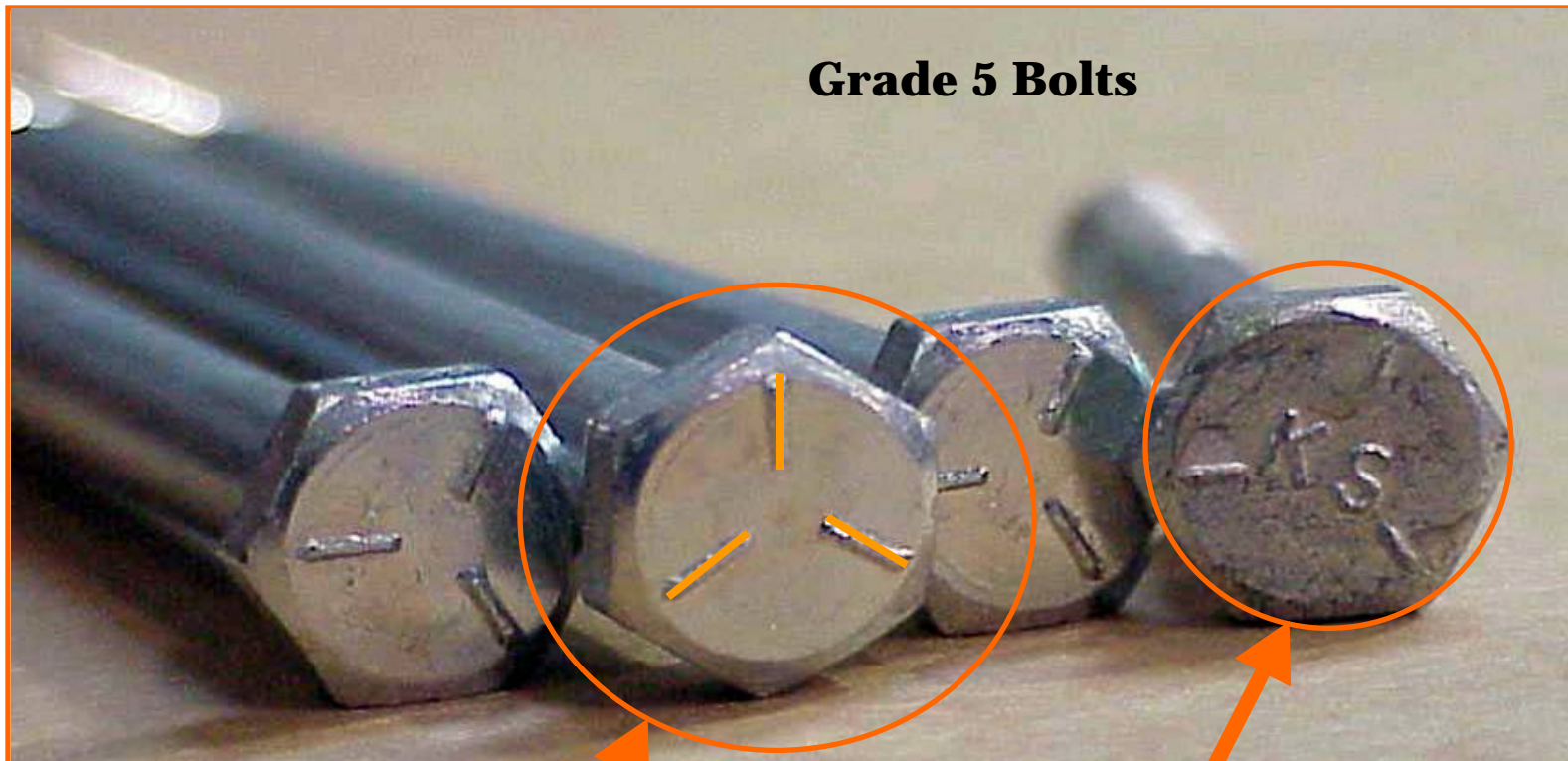
Ruth McDunn
Office of Assurance

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650-926-2014



Fastener Example #1



Grade 5 Bolts

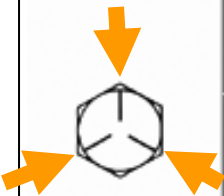
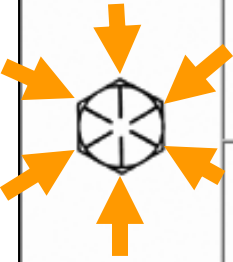
No manufacturer
identification

“KS” (Kosaka Kogyo)
insignia identified on the
DOE S/CI Headmark List

S/CI

Grade 5 and 8 Fastener Identification

ASTM and SAE Grade Markings

Identification Grade Mark	Specification	Fastener Description	Material	Nominal Size Range (in.)	Mechanical Properties		
					Proof Load (psi)	Yield Strength Min (psi)	Tensile Strength Min (psi)
	SAE J429 Grade 5	Bolts, Screws, Studs	Medium Carbon Steel, Quenched and Tempered	1/4 thru 1 Over 1 to 1-1/2	85,000 74,000	92,000 81,000	120,000 105,000
	ASTM A449			1/4 thru 1 Over 1 to 1-1/2 Over 1-1/2 thru 3	85,000 74,000 55,000	92,000 81,000 58,000	120,000 105,000 90,000
	SAE J429 Grade 8	Bolts, Screws, Studs	Medium Carbon Alloy Steel, Quenched and Tempered	1/4 thru 1-1/2	120,000	130,000	150,000
	ASTM A354 Grade BD		Alloy Steel, Quenched and Tempered ⁴				

In addition to the indicated grade, all must include a **manufacturer identification mark**

Fastener Example #2

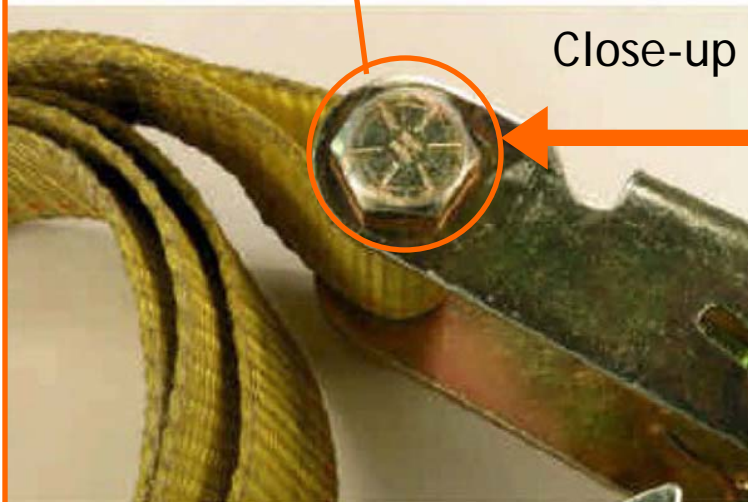
Ratchet Tie-Down



From DOE's Suspect Bolt Headmark List



H Hinomoto Metal (JP)



Close-up

Bolt in ratchet is Grade 8 with a manufacturer mark of "H", which is on the DOE Suspect/Counterfeit Headmark list

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Material Handling #1



- “New” Latching Eye Hooks
- Very worn appearance
 - Red color is a patented trademark of the Crosby Group, Inc., but these do not have the Crosby marks



Close-up

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Genuine Crosby
Latching Eye Hook

Material Handling #2



Trademark violation

6-1/2 Ton rated screw pin shackle, minus any manufacturer's name, logo, or country of origin. The red colored screw pin is a Crosby trademark.

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Genuine Crosby Shackle

*“Look for the Red Pin. . .
the mark of genuine
Crosby quality.”*

Square D Circuit Breakers

Genuine Counterfeit

Amp rating written on the handle in white paint (post 1999)

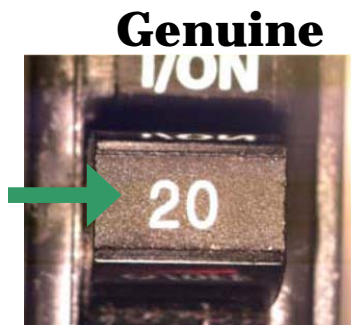


Molded, black amp rating (post 1999)

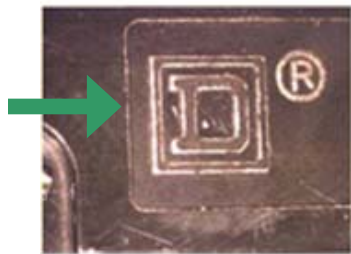
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Square D Circuit Breakers Indicators

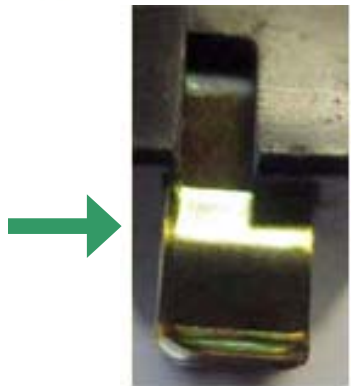
Amp rating written on the handle in white paint (post 1999)



Square D insignia molded into the side of the breaker

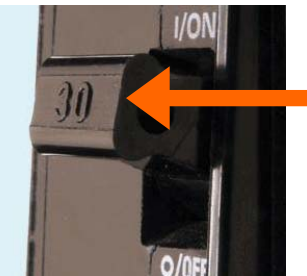


Yellow chromate mounting clip with half of the top of the clip visible

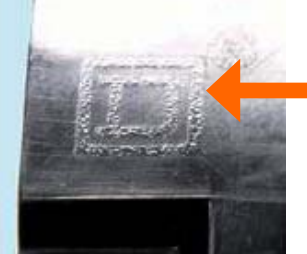


Counterfeit

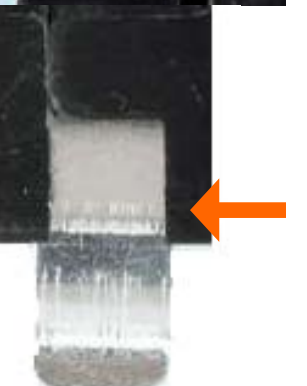
Amp ratings molded into the handle on new (post 1999) breakers



Logo appears to be printed on or etched, or there is no logo at all



Bright silver rail clip



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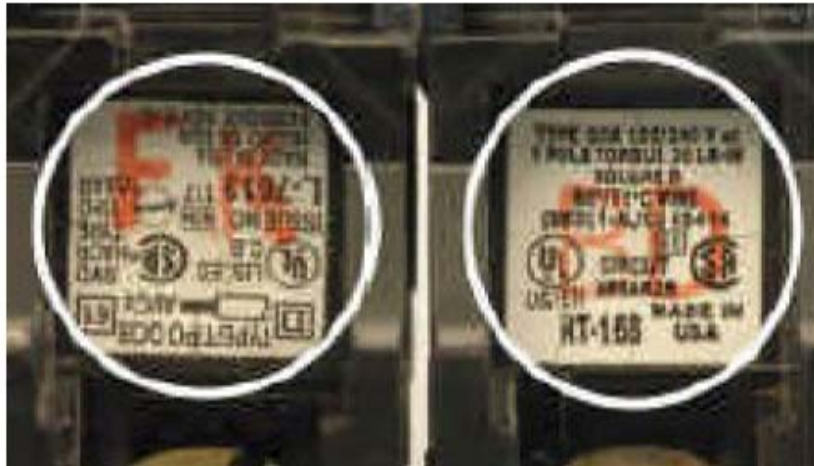
UL Breaker Labels



Counterfeit Breaker Label

A real UL label was copied and then taped to the side of the breaker.

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Genuine Breaker Label

The UL label is located on the **end of the switch**, with **black lettering** on a white background and **two large pinkish-red letters** stamped on the label. The manufacturer can identify date period of manufacture from the large letters.

Consumer Supplies #1



“Copper Top” trademark violation and confusingly similar name of the manufacturer (DURACELL) and clones simulating trademarked DURACELL colors. The counterfeit batteries have names spelled differently but constitute trademark infringement (black and gold copper top).

Counterfeit batteries present a higher risk of malfunction; may be constructed without adequate vent holes (safety feature), and often contain mercury – a heavy metal that can damage the central nervous system when ingested and can harm the environment when the batteries are discarded.

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Consumer Supplies #2



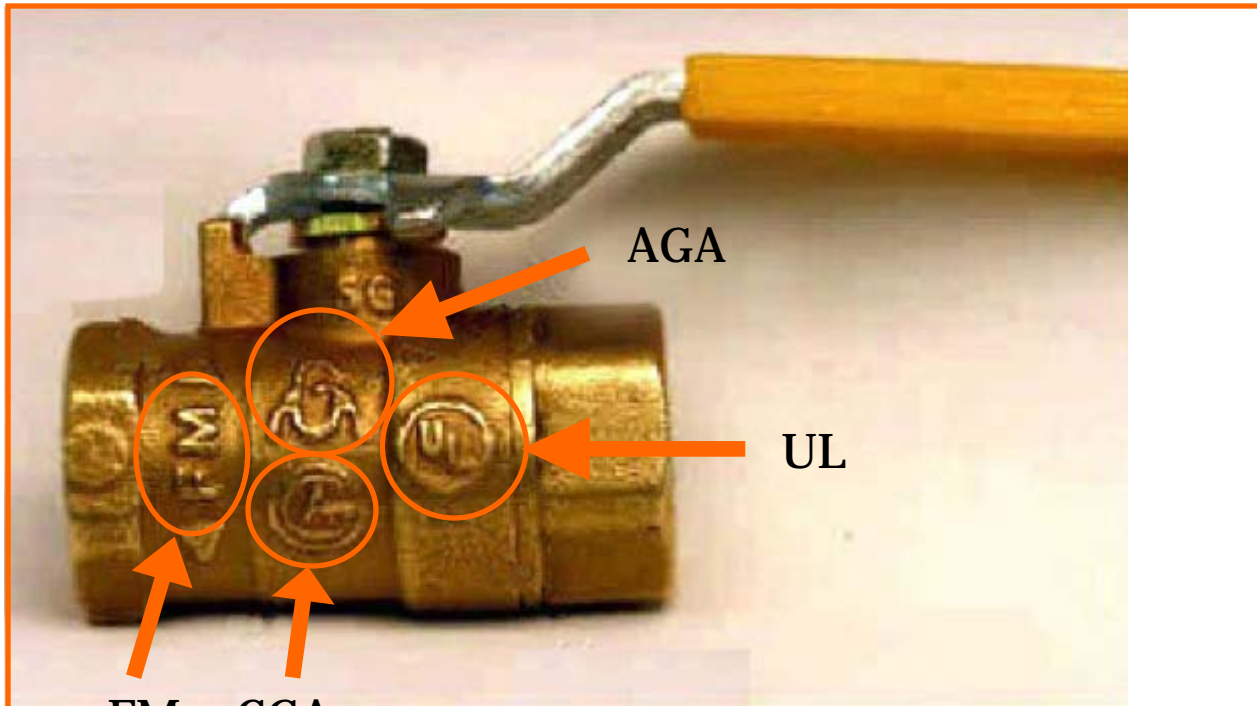
- UL issued an alert regarding 25 and 50 ft. cords
- The cords are marked as UL listed with 14 gauge wire
- These are not UL approved and the wire size is actually significantly undersized, leading to potential fire hazards

<http://www.ul.com/newsroom/newsrel/nr120406.html>

<http://www.ul.com/newsroom/newsrel/nr070506a.html>

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Valves #1



AGA

UL

FM CGA

Four logos

- FM (Factory Mutual)
- AGA (American Gas Association)
- CGA (Canadian Gas Association)
- UL (Underwriters Laboratory)

Watts (purported manufacturer) does not use all standards on a single item

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Genuine Watts
Brass Ball Valve

FBV-3-SS



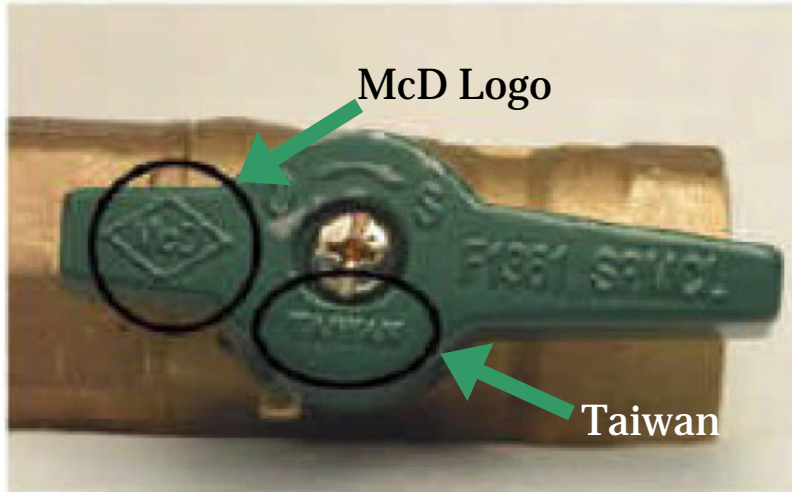
Valves #2



Taiwan

Suspect Valve
Taiwan is country of origin, but
there is no manufacturer mark

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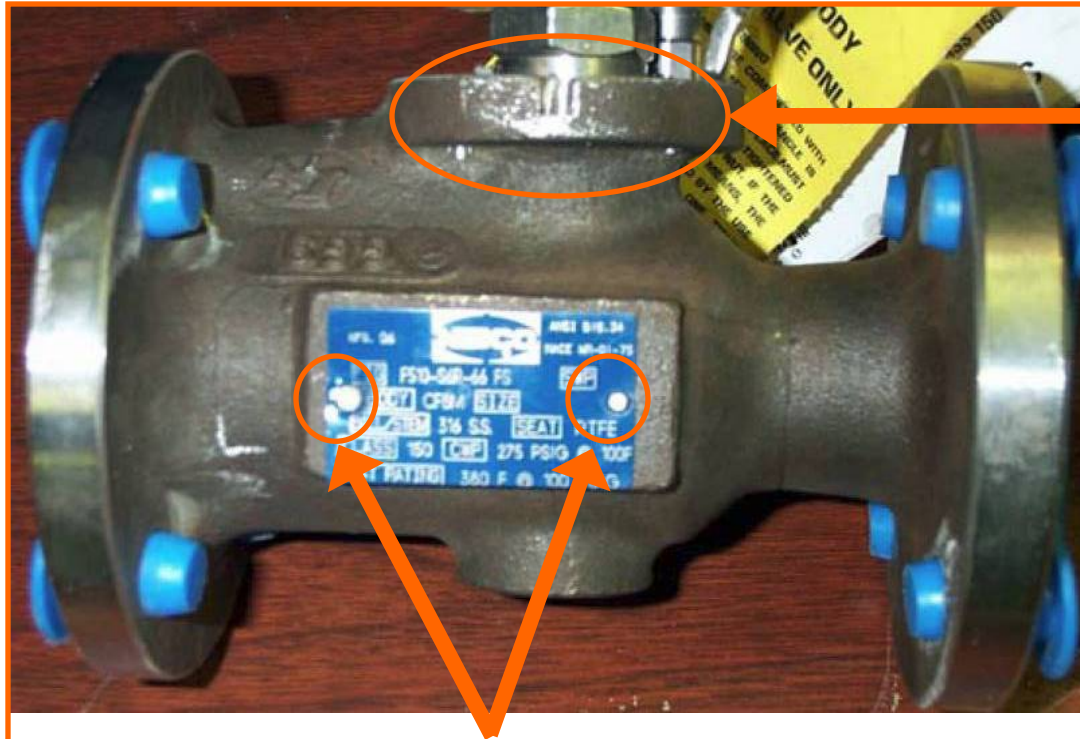


McD Logo

Genuine McDonald valve
Taiwan country of origin mark
and McDonald (McD)
manufacturer mark

Taiwan

Flanges #1



Scratch marks indicate previous use, but this was purchased as “New”

Rivets holding on label are different sizes

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Flanges #2



“New” flange
came with existing
clamp marks

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Label Example #1

GAS BALL VALVES
EDP # 545007 AGA 3-88

TYPE	CONNECTIONS
GBV	FxF IPS
SIZE	NO. PIECES
1"	6

WATTS North Andover, MA U.S.A.
REGULATOR Woodbridge, Ont. CANADA
MADE IN TAIWAN

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WATTS does not have a facility in Woodbridge, Ontario, Canada (it is located in Burlington, Ontario, Canada)

Label Example #2

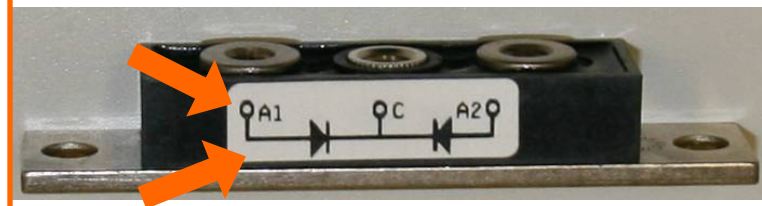
Genuine



Suspect/Counterfeit



Differences: Font weight, position of logo, and no black line



Differences: Symbol for anodes, line weight, and no black line

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Packaging Example #1

Genuine



Suspect/Counterfeit



Plain cardboard box, no logo, no bar code



Hand marked product code

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Packaging Example #2



← Handwritten label on the package

← Black and white label. GE uses only blue and white labels

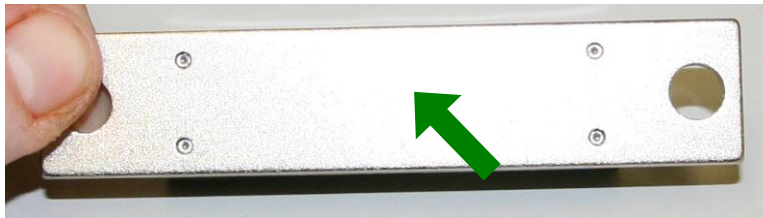
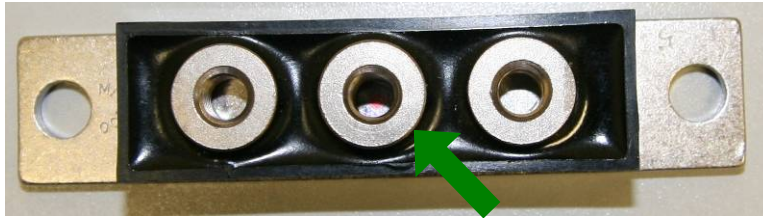
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← Genuine GE package

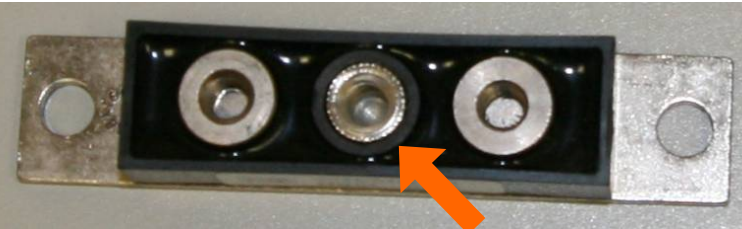
Construction Example

- Rectifier

Genuine



Suspect/Counterfeit



Knurled center connector



Hole in mounting plate

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More Information

- **Suspect/Counterfeit-Defective Items Awareness Training for DOE and Contractor Employees**
 - » <http://www.hss.energy.gov/CSA/CSP/sci/LANL10305awarenesstraining.pdf>
- **Suspect/Counterfeit Items Information Guide for Subcontractors/Suppliers**
 - » http://www.efcog.org/wg/ism_qa/docs/EFCOG_Alerts/SCI_Guide_for_Suppliers.pdf
- **Suspect/Counterfeit Items Awareness Training (DOE HSS)**
 - » <http://www.hss.energy.gov/CSA/CSP/sci/SCIAwarenessTrainingManual062007.pdf>
- **OA S/CI webpage**
 - » <http://www-group.slac.stanford.edu/oa/suspectcounterfeit.htm>
- **Find a suspect item? Contact OA.**
 - » Ruth McDunn, ext. 2014
 - » Walter Leclerc, ext. 2495
- **Questions?**