

Image	Manuf.	Common Name	Model	Part Number	Function	Quantity Required	Ideal Qty Req.
	Simpson or Triplet	"Brown" Meter	Teledata	40010 Includes Case, and Leads	Line Loop Tester Leakage Tester (Normal Range) Remember extra batteries	1	2
	Simpson or Triplet	"Brown" Meter	Teledata	40011 Includes Case, and Leads	Line Loop Tester Leakage Tester (Low Resistance Version) Critical for Hookswitch Tests	1	1
	Fluke	Deluxe Butt Set	TS44	44801-009	TS44 With Angled Bed-of-Nails Clips - Reverse Clip Primary Butt Set Remember extra batteries, dedicate banjo's	1	2
	Greenlee	P-Phone Adapter	PE290-02	Hard-Wired P-Phone Adapter with 5' Combi-Cord	Test set accessory that allows the use of a standard analog (POTS) test set on an 8-kHz digital centrex circuit. Sometimes called P-Phone, MBS or EBS lines, testing these digital circuits formerly required the telecom technician to use specialized, costly digital test sets or put up with an 8-kHz whistle. This affordably priced PEI P-Phone Adapter connects directly to most existing analog	1	1
	Fluke Networks	Butt Set	TS-25DS	Right Angled Bed of Nails, J.S. Popper Clips	Butt Set w/ Caller ID Need to have one set off each of the 6 incoming lines. Six of these units is very important in basic POTS/NID Kit	2	6
	GIG				Telephone Project Intake Forms, - Location of Central Office - Pair Gain Facility - DDM to Optical Carrier - Map out CLLI Locations	1	
	GIG		Topo GIS	Topo Maps + Acetates Obtain from Local City Engineers Office) Create X-Map Basemap	Local Topo/Wetlands Maps, 24x36 inch 100:1 (2400 feet by 3600 feet) Acetate Overlays for Telephone Poles Minimum Nine (9) Map Set around site, digitize into GIS System Index against basemaps, into HH GPS.	9	9

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	GIG	Basemaps 100:1	AERIAL GIS	City Engineers Office, or Contractor. Overlay into X-Map Basemaps	Local Aerographic/Aerial Photographs. 9x9 plates, 36"36 prints. Suitable resolution to see drop cables, boots, and poles. Critical for tracing out hone cabling and outside plant. Download into HH GPS system.	1	2
	GIG	Blueprints	1 to 1/8th Scale	Ideal, photo's of area to be inspected.	Full Set of Blueprints (as built) Critical: - Electrical and Lighting - Telephone and Data - Walls, Ceiling, Walls - Trim Work - HVAC - Glass Trim	1	2
	Pilot	Ball Point Pens	G-2, .05		Black, Blue, and Red Gel Ball Roller Pens. Fine Point	4	6
	GIG'	Sweep Protocol		Protocol and Notebook	Telephone Analysis Protocol - Pole Inventory, Line Walk - 5000 feet towards CO - 1500+ feet away from Sight One Report per segment of 10 poles. Contains tables of cable thickness, vs. pair count. Indicate all terminals, SAC's , drops, by GPS positions.	1	25
	GIG'	Switch Dumps		Raw Dumps of Switch Translation and Cable & Pair Analysis	What is going on in the cable vault, line card, and DDM. Actual ESS translation, target premises only. Legal access only, raw low level dump. Any diversion flags on translation?	1	1
	GIG'	Sweep Protocol		Protocol and Notebook	Telephone Analysis Protocol - External Phone Line - All six drop cables (single kit) -- Color Code Tables	1	25

Image	Manuf.	Common Name	Model	Part Number	Function	Quantity Required	Ideal Qty Req.
	GIG'	Sweep Protocol		Protocol and Notebook	Telephone Analysis Protocol - NID, Network Interface - Photograph, document all markings and cable positions. Includes big fold out NID Worksheets.	1	25
	GIG'	Sweep Protocol		Protocol and Notebook	Telephone Analysis Protocol - Internal Wiring, Demark to PBX - Map out all station wiring - Plan for 100 cables onsite	1	100
	GIG'	Sweep Protocol		Protocol and Notebook	Telephone Analysis Protocol - Physical Access to PBX - Service Ports to PBX - Spoor Check List - Non Software Issues - Software Issues - Instrument Inspection Sheets	1	100
	GIG'	Sweep Protocol		Protocol and Notebook	PBX to Station Cables Normally 150 foot Cat 5 sheets Match to Short Range TDR, Cat 7 scanners.	1	100
	GIG'	Sweep Protocol		Protocol and Notebook	Telephone Analysis Protocol - Station Jacks - Detailed Drawings of Plates - Mechanical Area of Plates	1	100
	GIG'	Sweep Protocol		Protocol and Notebook	Telephone Analysis Protocol - Station Instrument(s) - Photographs of Internals - Serial and Model Numbers - 20 Pages for phone	1	100
	GIG'	Sweep Protocol		Protocol and Notebook	Engineering Note Book - Large, 328 page "Fat Book" - Pocket Sized "Field Book"	1	2
	Motorola Sprint	Primary	V3 or K1ZR	CDMA Phone (800/1.9 GHz), with removable antenna.	Cell phone with Broadband/EV-DO, SMS, Browser. (Administrative "Call Home" Phone)	2	2
	Cingular	Alternate	V3 or K1ZR	GSM Phone, with removable antenna.	Backup Cell Phone	1	2





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	Nextel	Alternate		TDMA, NEXTEL Phone, with remotable antenna.	PTT Phones	1	2
	Various	Disposable Phone		Suitable for Job area, what does the client use? Phone number must be local to customers area, and must make eavesdropper think it is local use. Put this number on side of truck or on VIN conver plate.	Totally Sterile "Job Phone", suitable for calling clients, hotel, local police, etc. Preprogram with all job contact numbers Fast dial #9 to EMS and Local Police Write phone number on back of phone.	2	4
	Various	FRS/GMRS		Use for pre-recorded "diversion chatter" to confuse spy.	22-Channel FRS/GMRS 2-Way Radios. As low power as possible.	4	6
	Garmin	GPS, Two Way Radio	Rhino 530	Garmin part number: 010-00392-01 Suggested Retail Price: \$535.70 USD. Used to confound spy who may be monitoring airwaves.	Small, 5 watt, 16 mile, 400 MHz Walkie-Talkies, Moderate power. Possible Rhino Radio's with GPS.	4	6
	Garmin	GPS, Handheld	GPSMAP 76CSx	Garmin part number: 010-00469-00	Handheld, pocket sized GPS Receiver, with Compass Function, and location averaging. With pole straps, or remotable antenna module/weight and clip plus 15 foot pole.	2	2
	Delorme	GPS Logger	Blue Logger	Earthmate GPS Blue Logger	Bluetooth, totally passive GPS logger, for telephone pole walks.	2	4
	Fluke	DVM	189/289	Fluke 189/FVF2, or Fluke 289	Logging Multimeter & FlukeView® Forms Combo Pack	1	2
	GIG	DVM		Home Brew, 6 pair + ground in, 2 out Plus Ground Lead. 16 position lay-up box.	DVM Switch Box, Breaks out 6 pair drop cable to audio amp or CopperPro.	1	2




Image	Manuf.	Common Name	Model	Part Number	Function	Quantity Required	Ideal Qty Req.
	GIG			B Grounding Cord. 15 foot, 18 gauge, heavy gauge welding clamps on end. Plus pipe clamps	Artificial Master Station Ground Pipe Clamp/Welding Vise Grips Extended Solid Gauge Cable Modified Ground Probe (AC outlets).	1	2
	Woods	Power Extension Cord		2886 25-30 Foot, 15 amps, soft jacket extension cord, clear ends with small neon lights. Yellow Jacket 14/3 gauge is Ideal	Extremely Heavy Duty, Rugged Construction. Very Neat Appearance, primarily for indoor use, but professional "contractor" appearance. 2886 14/3 SJTW 25' Yellow 15A	2	3
	Woods	Power Extension Cord		2806 100 Foot, 15 amps, stiff jacket extension cord. 10 Gauge, extended distance (remember CT Boardroom)	Need 200-500 feet or cable extension. May Require a single, 300 footer on reel (see below). Weatherproof Locking Connectors is highly desirable. 2806 10/3 SJTW 100' Yellow 15A	2	3
	Woods			2822 100 Foot, 15 amps, stiff jacket extension cord. 10 Gauge, extended distance (TWIST LOCK)	2822 10/3 SJTW 50' Yellow 20A	1	2
	GIG	Power Umbilicus		250 Foot, Vehicle Mounted Spool. One Spool for drawing power from building to Vehicle (think CT) One Spool to take vehicle power and squirt it to building (think Calais, ME)	Capability to use van as "man-in-the-middle" for high amps cross connect. Must be oil resistant 30 Amps to 30 Amps	1	2
	GIG	Power Access Adapter		Pigtail, with hanging clip	Hardwire into jobsite breakers or power source when there is no power at the specific section being worked. Should support 30 amps, and include a 100-300 foot extension.	1	2

Image	Manuf.	Common Name	Model	Part Number	Function	Quantity Required	Ideal Qty Req.
	GIG	Force a perfect ground.		Metal Power Fan out and octopus. Main lug for B Grounding Cord	GFCI Safety Power Panel Breakout 8 to 12 GFCI protected, 20 amp outlets. Circuit breakers for each outlet, overall breaker, primary power switch. Neon bulbs for basic polarity tests. Built in volt and amp meter is a real plus.	1	2
	GIG	Pole Grounding Kit		5 or 6 inch screw driver, 12 feet of "spike wire", weld to spike.	B-Voltage Tester, GunSite Neon Bulb Does pole or ground wires actually provide clean grounds	1	1
	Fluke		TL-26?	DVM to Popper Clips	Safety Connection to Popper Clips	2	4
	Marinco	Marine Pigtail		B - Marine Weatherproof Cord	Marinco Marine Phone to RJ-45 (Both Genders) Remember a full set of Marine Power Adapters to 100 Amps)	2	4
	Western Electric	1A Converter		Old Fashion 4 pin (prongs) to Modern RJ45 Adapter	Include small screwdriver for wall plate screws	2	2
	GIG			DVM to Hard Group		1	
	GIG	DVM		Home Brew Leakage, Line Imbalance Resistor Network	2700+2700 ohm, with tune-up potentiometer	2	2
	Riser Bond	TDR - Graphical	RB6000	RB6000, with filtering, extended memory. Two line TDR. Remove from regular case and add to POT/NID box.	2 Pair Wet TDR	1	2
	Riser Bond	TDR - Graphical	RB3300	AC Mains TDR, backup Telco	Single Pair Wet TDR, with Power line interface, for very hot lines	1	2
	Seiko	Thermal Printer		Dedicate DPU-414, with Batteries Keep with Instrument	Max printing speed: 52.5 character/sec Available international character Interface: Serial and parallel Include serial cables and adapter	1	3

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	Fluke	Cable Scanner	DSP4000	Cat 7 Certifications, plus all fiber optic adapters. With control software and report maker.	Dry Line Tester For use on inside building wiring only.	1	1
	Fluke	Tone Generator		Push signal log distances	Tone Gen - High Power, Long Range, 10 Miles	1	2
	Fluke	Tone Generator		Pro3000 Tone and Probe Kit. Source for smart tracer, extended distances, and mapping.	Tone Gen - Low Power	2	2
	Fluke	Inductive Pickup System		IntelliTone 100 Probe	Smart Inductive Pickup - Tuned	2	2
		Tone Generator		Kaiser SLR/ST or Canadian Unit, must include extended probes, and pole sticks.	Tone Gen - Ultrasonic	1	2
	Fluke Networks	TDR - Numeric	26500390	TS100 line cord, long, ABN/PP clip (general)	Simple Numeric TDR, adapters for Oscilloscope	1	1
	Fluke Networks	DSL Test Box	990DSLWT	CopperPro Loop Tester with Wideband and TDR*	3 Mbits DSL Tester Serial cable (extra), plus extender cable and gender changer. Must control DSLAM	1	1
	Seiko	Thermal Printer		Dedicate DPU-414, with Batteries Keep with Instrument	Max printing speed: 52.5 character/sec Available international character Interface: Serial and parallel Plus extra paper, extra power supply.	1	2



Image	Manuf.	Common Name	Model	Part Number	Function	Quantity Required	Ideal Qty Req.
	Panasonic	Toughbook	CF-xx	Sterile field grade, ruggedized laptops. Must be rain proof.	Dedicated Instrumentation Laptop just for Telephone Instruments Waveview, CopperPro, DSP4000, ScopeMeter, etc	2	4
		Soft DSP Scope			Used for FFT function Only as compact VLF receiver and spectrum analyzer.	1	1
	Icom		PCR-2500 or WinRadio	SDR-14 is suitable as well, but frequency is limited.	Consumer Grade General Purpose Receiver/Monitor, suitable for tuning carrier current or use as VLF spectrum analyzer.	1	2
	GIG	Transient Limiter		90/135/600 ohm in, 50 ohms out (tunable is ideal, ring volts limiter)	Allows consumer grade radio to be directly coupled into phone lines. Integral 9 kHz High pass Filter, 3 dB attenuator, MOV, diodes.	2	4
	BnB	Serial Card			PCMCIA Card, 4-8 port, serial port. Suitable for SW downloads, files, etc. Multi-Instrument controller	2	4
	Hewlett-Packard		HP-400 or 2400 Series	USB Interface, Bluetooth Optional, Serial Nice, Parallel ideal.	Color, Inkjet Printer. Dedicated to Laptops	2	4
	Olympus	Audio Recorder w/VOX		Notes and Sound Capture and Transcription. Monitor line noise capability.	Clip On Recorder, 16-24 bit, ultra high quality audio. AGC, Stereo channels is ideal.	2	6
	Nikon	Digital Camera		Any consumer grade, 4+ MP compact camera.	Multi-pixel, built in flash, macro capable, normal AA batteries, SD removable card. Pocket sized.	1	2
		Caller ID Module		RJ-11 + Splitter and Popper Clips.	Clip On Module, either hard copy or memory. May use butt set with memory instead. Six pair at NID/POTS box is ideal	2	6
	GIG	Popper Clips w/ 66M w/ RA-BON		Adapter Shoe	6 Pair/12 Pair to 2 pair		
	Siemon	66M Shoe		TESTAR - USOC Style	TESTAR-2 1-pair, 6-position TESTAR-4 2-pair, 6-position TESTAR-6 3-pair, 6-position TESTAR-8R1 4-pair, 8-position	1	6
	Siemon	66M Shoe		TESTAR - T568 Series	TESTAR-8 4-pair, 8-position, T568B TESTAR-8A-C5 Category 5e compatible, 4-pair, 8-position, T568B TESTAR-8T 4-pair, 8-position, T568A	1	6

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	Siemon	66M Shoe		TESTAR - Cat 5e Series	TESTAR-8T-C5 Category 5e compatible	1	6
	Siemon	110 Shoe		S110® Test Adapters	TAP-110-A4 Category 5e compatible, 4-pair, 8-position, test adapter, T568B TAP-110-T4 Category 5e compatible, 4-pair, 8-position, test adapter, T568A	1	6
	Siemon	110 Shoe		S110® Test Adapters	TAP-110-U1 1-pair, 6-position, test adapter, USOC TAP-110-U3 3-pair, 6-position, test adapter, USOC TAP-110-U4 4-pair, 8-position, test adapter, USOC TAP-110-UT 2-pair, 8-position, test adapter, Token Ring/USOC	1	6
	Krone	Krone Probe		6646-2-928-00	Krone Winged Test adapter, 1 pair	2	6
	Krone	Krone 4-5 pair cable			Krone, 4 pair - 5 pair Cat 5 Cable for testing	2	4
	Fluke	RJ11 Fan Out		Cheap fan out of demarcation points and connections.	2 pair, Harris, Red Plastic, clip on. Very simple, highly disposable	8	12
	Fluke	RJ21 Fan Out		For handset cord testing	2 pair, critical for instrument analysis, and tone injection for hook switch measurements.	2	4
	Siemon	RJ45 Fan Out	MODAPT	MODAPT	Test adapter with one 152mm (6 in.), 4-pair, universal plug-ended modular cord	2	6
		Micro-Barbs/Harpoons			1/2/4 pair	2	4
	Siemon	25-Pair Test Adapter		TAP-50F TAP-50M	25-pair S66™ test adapter with female connector 25-pair S66 test adapter with male connector	1	2
	Siemon	25-Pair Test Set		MT-5000	25 Pair Cable Tester (simple) Very Important for initial mapping of 25 pair riser cables	1	1

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	Fluke	Can Wrench		44007000	Can wrench, hex head 3/8 and 7/16	2	3
	Fluke			10660001	Security key insert, 5/32 and 5/16	2	4
	Fluke	Spudger		44600000	Probe pic, 105 degree	2	3
	Fluke	Snips		44300000	D-Snips	1	2
	Fluke	Crimp Pliers		11294000	Need-L-Lock crimping pliers	1	1
	Fluke	Punch Tool 110 Block, 5 pair		10059000	D-Impactor (five-pair 110 impact tool)	1	1
	Fluke	Punch Tool - Modular	No Cut	10061501	D914S impact tool with EverSharp 110, EverSharp 66 blade & free blade	1	1
	Fluke	Punch Tool - Modular	Cut	10061503	D914S impact tool with BIX and EverSharp 66/110 cut blade. [Paint with Red Ring]	1	1
	Fluke Networks	110 Blade		10176500	EverSharp 110 blade	2	4
	Fluke Networks	66 Blade		10056500	EverSharp 66 blade	2	4

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	Fluke Networks	Krone Blade		10565000	Krone blade	1	2
	Fluke Networks	Siemon Combo		10386001	Combo jack blade	1	2
	Fluke Networks			10436001	Center punch blade	1	2
	Fluke Networks			10465001	3M System D blade	1	2
	Fluke Networks			10058-000	GTE Blade	1	1
	Fluke Networks			10645001	Wood screw starter punch	2	4
	Fluke Networks			10665000	BIX blade	1	2
	Fluke Networks			10056003	8762D-66 extra long cutter blade	1	2
	Fluke Networks			10057000	630 blade	1	2
	Fluke Networks			10979002	Blade storage case	4	6
	Siemon	66M Bridging Clip	SA1	SA1-(1000), bag of 1000 clips	2-position clip tin-plated grade A copper alloy (voice and data)	1000	
	WECO		6B1A	Protector Unit	Screw In Lightning Fuses	100	
	WECO		11B1A	Protector Unit	Screw In Lightning Fuses	100	
	WECO		11A1A	Protector Unit	Screw In Lightning Fuses	100	
	WECO		Pico Fuse	Protector Unit	Pico Fuses, plus tool, plus adapters	100	
	WECO				Cross Connect Telco Wire Short Rolls 5 colors/types, 250 ft spools Normally Kept in Truck, be sure to have 5 rolls from each of the top most common manuf in area to match what is in use.	5	



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	Siemon	Keep Off Caps		S-857-916	2-position red marker, plastic caps	100	
	Fluke	Hand Held Oscilloscope (Suitable for Graphic TDR Work)		Fluke 199C/S or MDO-4000	Color ScopeMeter (200 MHz / 2.5 GS/s) w/ Software and Laptop, doubles as simple TDR and DVM.	1	1
	GIG	Pinger	4 Channel KISS TDR	4 channel, synchronized pulse generator, suitable for 4 lead TDR work.	Include, hard ground lead, and sync lead to scope. Tunable channels 100 pFs, 300 pFs, 1 ns, 30 ns, Analog Everything	2	4
	REI	Counter Measures Audio Amplifier	CMA-100	Add my own Popper Clips and extend cable to 12 feet. Purchase second cable, a they always break.	Audio Amplifier Dual Channel Needed, three stage bias (+/-3, 18, 48 volts) Tunable front end, also usable as butt set.	1	2
	GIG	Audio Leakage		Audio correlation circuit, 110dB, 4 or 8 channel circuit.	Test Phone Instruments for Audio Leakage, similar to Micro-Tel Attenuation Test Set. Uses fixed and swept tones.	4	8
	Xetron	60 Hz Filter	SPL-60		Fixed 50/60 Hz band rejection filter + variable. w/ Bias injector.	1	2
	GIG	Tuning Forks		With mechanical "flat foot", standard 13 fork kit.	Test for percussive or microphonic response with mechanical coupling.	4	8
	GIG	Polyphonic Tone		Perfect match for all common control tones (both in-band and out of band, 2100, 2600)	Polyphonic Tone Generator and Swept Tone Generator, up to four tones. (Totally CPU controlled, stops on current flow)	2	4




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	GIG	Thermal Imager		Use with gimbal to create VR sphere images.	640 x 480 Uncooled, or Microbolometer, ultra- low noise, room temperature, 1/100th of a degree discrimination. 150 degree upper range, 50 degree lower (30 degree window, 32,767 linear steps).	1	2
	GIG	Six Axis VR Gimbal		Use with thermal imager to create VR sphere images.	Computer Controlled Gimbal for VR analysis and inventory of backboards, harnesses, and plates. Fully automated VR stitching and walkthrough model.	1	1
		Thermal Manipulation Kit		Use with thermal imager and gimbal to create VR sphere images.	Hair Dryer, IR Sunlamp, Large Format Nitrogen/Argon Cryotank. Dry Ice Kit with forced ducting. Thermal Extreme Gloves and Facemask.	1	2
	F.W. Bell	MA2000, Bell MA2000	Model mA-2000	FW229100 Micro, Clip On Milli-amp meter Must have O'scope pick-off	Suitable for clamp on measurement of 22/24 gauge, under 100 mA For use in Boots and NIDs Always Check Station Ground, and NID	1	1
	Fluke	6.5 Digit Multimeter, Lab/Benchtop grade	Fluke 8846A	4 wire ohm meter (10 ohms) and capacitance	100 μ A to 10 A current range, with up to 100 pA resolution Wide ohms range from 10 Ω to 1 G Ω with up to 10 μ Ω resolution 2 x 4 ohms 4-wire measurement technique Also measures capacitance and temperature	1	1
	Fluke	Insulation Breakdown Tester	Fluke 1550B	MegOhmMeter	Test Voltage 250 V DC Range: 200 k Ω to 5 G Ω - 5% Range: 5 G Ω to 50 G Ω - 20% Test Voltage 500 V DC Range: 200 k Ω to 10 G Ω - 5% Range: 10 G Ω to 100 G Ω - 20% Test Voltage 1000 V DC Range: 200 k Ω to 20 G Ω - 5% Range: 20 G Ω to 200 G Ω - 20% Test Voltage 2500 V DC Range: 200 k Ω to 50 G Ω - 5% Range: 50 G Ω to 500 G Ω - 20% Test Voltage 5000 V DC Range: 200 k Ω to 100 G Ω - 5% Range: 100 G Ω to 1 T Ω - 20%	1	1



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		Bolt Cutters, Short			18 inch long, bolt cutters Suitable for small, light duty padlocks. Keep in scabbard.	1	1
	Stanley	Crow Bar, Flat Type	52281	Utility Bar	52281 Roughneck Mini Utility Bar 15" Stanley® Wonder Bar Pry Bar Item #: 46760 Model: 55515D	2	2
	Stanley	Crow Bar, Flat Type	69096	Roughneck "L" Bar	Hardened and tempered, drop forged alloy steel, hex bar and polished tips. "L" Bar 18"	1	1
	Olympia Tools	Crow Bar, Medium	62059	Gorilla Wrecking Bar	Gorilla Bar Hardened and tempered, drop forged alloy steel. Keep in scabbard.	1	1
	Olympia Tools	Crow Bar, Large		Gorilla Wrecking Bar	Gorilla Bar 1 x 36" All drop forged alloy steel with polished tips. Keep in scabbard.	1	1
	Klein	Lineman's Tool Belt		Hip or Shoulder Pouch plus non-conductive belt. Keep in NID/Demark Box	Essential tools used for basic diagnostics and minimal test.	1	1
	Klein	Electricians Tool Bag		Supplemental Tools and Instruments. Small bag, non threatening, compact. Square Shaped Foot Print, soft, open top.	Longer or larger tools then can comfortably fit on belt.	1	1
	Klein	Lineman's Tool Bag		Supplemental Tools and Instruments. Small bag, non threatening, compact. Rectangular Footprint, rigid handle.	Longer or larger tools then can comfortably fit on belt.	1	1


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		2 wheeler, folding cart	2500	May Require Dedicate Suitcase for Air Transport.	<p>Light duty, folding luggage cart, optional flat instrument shelf.</p> <p>300-pound capacity folding model as both a two-wheel and a four-wheel cart or simply as a tool holder.</p> <p>A 24" x 16" table size top tray slides directly on or off a shelf without the user actually having to lift the up to 100-pound load. This feature helps prevent back injury and makes the Model 2500 perfect for demonstration equipment or service/repair facilities. The rear wheel assembly can be placed in a retracted position when not in use and can be removed easily.</p> <p>This Professional Service Cart features 7-inch heavy-duty wheels, adjustable height handle (up to 47"), a platform size of 14" x 13" and tie-down straps. The 25-pound unit is 28" x 18" x 9". Ten-year warranty.</p> <p>http://www.specialized.net/ecommerce/shop/layout.asp?product%5Fid=379X025&Professional-Three-in-One-Cart-2500</p>	1	4
		2 Wheeler, Flat Cart Heavy Duty		Suitcase, Flat Cart with 4 wheels. Steel. Not suitable for air transport, invaluable for ground transport. Remember to buy cinch straps, bungee cords, and lockset cable.	Cart, heavy duty, lots of extra bungee cords, clevis pins, and rain coat.	1	2
	Metro	4 wheel, wire cart		Short, but deep, work cart, 3 shelf.	<p>Knock down wire rack, suitable for moving work area, optional antenna posts.</p> <p>24 x 36 is ideal, 18 x 36 is usable.</p> <p>Plus dedicated mallet and block, plus extra shelf spacers (lots of extra spacers)</p>	1	1
	Werner	Ladder, A-Frame	4 foot	300-325 pound rating	Fiberglass, safety ladder, metal treads. Remember heavy wool blanket.	1	1
	Werner	Ladder, A-Frame	6 foot	300-325 pound rating. Valuable for lower ceilings.	<p>Fiberglass, safety ladder, metal treads</p> <p>Suitable for use with scaffolding</p>	2	2


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	Werner	Scaffolding Deck	6 feet short, 10 feet extended	300-325 pound rating Also usable as table or work bench.	Suitable to span desks and tables (with safety straps and cords)	1	2
	Werner	Ladder, A-Frame	8 foot	300-325 pound rating. Most important ladder	Fiberglass, safety ladder, metal treads Plastic top. Double sided is a real plus.	1	2
	Werner	Ladder, Extension	20 foot fully extended 10 foot short	300-325 pound rating Rope to lash to pole or strand	Lineman's Extension Ladder, Dual latches, rope pulley system Window standoffs Leveling Pads, standoff bumpers Stabilizers/Outriggers Strand hooks, fold in style	1	2
	Werner		4 to 8 foot	Fiberglass, Telescoping Pole, with detachable push, pull hook.	Suitable to reach door latches, reset ceiling tiles, and move cables.	2	3
	Werner		6 to 20 foot	Fiberglass, Telescoping Pole	Suitable to reach GPS antenna onto Telco strands, CPM-700 antenna to boots, and NLJD probes to cables.	1	2
	Western Electric		1 man	Rain Tent w/ manhole liner.	Keep warm and dry with working in the pouring rain. Also suitable for concealing work on NID/Demark Box.	1	2
		Locks and Cables		Security Cables and Padlocks	Keeps cases locks, en-mass to guard against casual sneak theft.	4	6
		Small Tool Case		13 x 18 x 7	Protect smaller pieces of test equipment, but equipment that is often required.	4	6









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		Large Roller Case		Super-Roto Wheeled Cases Rotationally molded heavy-duty polyethylene shell.	Larger, or more obscure equipment required, 10 or 12" deep. Pelican 1620/1640 is ideal	2	2
	Klein Tools	8 Piece Screwdriver Set		85078 [see parts list below may purchase individual tools as below, or purchase 2nd pieces of specific items]	8-Piece Cushion-Grip Screwdriver Set 600-1 601-3 600-4 602-6 603-1 603-3 603-4 603-6	1	2
	Klein Tools	Stubby, Straight		600-1	1/4" Keystone-Tip Screwdriver – 1-1/2" Heavy-Duty Round-Shank	1	1
	Klein Tools	Long Cabinet, Straight		601-3, Need one extra of these	3/16" Cabinet-Tip Screwdriver – 3" Round-Shank	1	1
	Klein Tools	Heavy Duty, Straight		600-4, Need matching wrench, long handled.	1/4" Keystone-Tip Screwdriver – 4" Heavy-Duty Square-Shank	1	2
	Klein Tools			602-6	5/16" Keystone-Tip Screwdriver – 6" Heavy-Duty Round-Shank	1	2
	Klein Tools			603-1	No. 2 Profilated® Phillips-Tip Screwdriver – 1-1/2" Round-Shank	1	1
	Klein Tools			603-3, Need one extra of these	No. 1 Profilated® Phillips-Tip Screwdriver – 3" Round-Shank	2	2










Image	Manuf.	Common Name	Model	Part Number	Function	Quantity Required	Ideal Qty Req.
	Klein Tools			603-4, Need one extra of these	No. 2 Profilated® Phillips-Tip Screwdriver – 4" Round-Shank	2	2
	Klein Tools			603-6	No. 3 Profilated® Phillips-Tip Screwdriver – 6" Round-Shank	1	1
	Klein Tools	Scribe/Awl		650	Cushion-Grip Scratch Awl	1	2
	Ideal			35-200	Quick-Rotating Screwdriver, Cabinet Tip, 3/16 Inch Diameter x 6 Inch Long Shank	1	2
	Ideal			35-203	Quick-Rotating Screwdriver, #2 Phillips Head, 3/16 Inch Diameter x 6 Inch Long Shank	1	2
	Klein Tools			J2000-9NESEN	Journeyman 2000 Series High Leverage Side-Cutting Pliers	1	
	Klein Tools			J2000-48SEN	Journeyman 2000 Series High Leverage Diagonal-Cutting Pliers w/Angled Head	1	
	Klein Tools			D203-8N	Long Nose HD Side Cutting w/Skinning Hole Pliers 8 5/16"	1	
	Klein Tools			D203-6	Long Nose Side Cutting Pliers 6 5/8"	1	







Image	Manuf.	Common Name	Model	Part Number	Function	Quantity Required	Ideal Qty Req.
	Kobalt			96985	6 Piece Mini Pliers Set	1	
		Telcom Stripper		2 in 1 stripper	22 and 24 gauge wire stripper	2	
	Klein Tools	Cable Stripper, light		1011	Wire Stripper-Cutter - Solid and Stranded Wire (10 - 20 Gauge)	1	
	Klein Tools	Cable Stripper, heavy		11046	Wire Stripper/Cutter (16 - 26 AWG stranded)	1	
	Klein Tools	Non Conductive Fish Tape		50166	100 foot, Blue, Klein-Lite Fish Tape with eye loop and 7" leader	1	1
	Task Force	Dead Blow Hammer		DH28	28 Oz. Dead blow Hammer	1	1
		Mini Hammer			Light duty compact, hammer, suitable for tapping cables during TDR work, or mechanically rapping on telephone instruments. May use tuning forks instead.	1	1
	Estwing	Rubber Mallet		DH-18N	18 Oz. Non-Mar Rubber Mallet	1	1


Image	Manuf.	Common Name	Model	Part Number	Function	Quantity Required	Ideal Qty Req.
	GIG			Non Marring Nylon, rounded corners.	12 or 18 inch Nylon or wood block with rounded edges, or modified breadboard. Suitable for thumping area around cables, and wall plates during TDR and NLJD.	2	2
	Stanley or Kobalt	Tape Measure, Wide Blade		Stanley Fat Max 26'/8-m Rule	20+ Foot, Fat and Wide Ruler 30-35 ft is ideal	1	1
	Magnavox	Laser Range Finder			250-300 feet maximum range. Used to measure distance between telephone poles. May use reflective, disposable targets	1	1
		Stud Finder		Tri-Scanner	Detect, metallic studs, 60 Hz power, nails, and non-ferrous elements	1	2
	Ideal/Greenlee	125 Receptacle Tester		61-035		2	3
	Inova	Flashlight, Pocket, White		X1MT	Inova X1 TITANIUM White	2	4
	Inova	Flashlight, Pocket, Green		X1MT-GB	Inova X1 BLACK - Brilliant Green LED	1	2
	Inova	Flashlight, Pocket, White		T5-WB T5WB	Inova T5 100 Lumen LED Tactical Flashlight	2	4






Image	Manuf.	Common Name	Model	Part Number	Function	Quantity Required	Ideal Qty Req.
	Sure-Fire	High intensity "broad spectrum" flashlight		Series 9, with P71 Bulbs	Primary inspection light source remember extra bulbs, batteries, and scabbards.	2	4
	Inova	Flashlight, Pocket, Ultraviolet Light		X5MT-UV	Inova X5 Ultra Violet Light Titanium	2	3
	Lightning	UV, Dual Wavelength. 5 watt bulbs.			Dual Bulb, High Intensity UV inspection lamp. Short or Long wavelength. Remember ace shields and gloves to prevent sunburn.	1	2
	Lightning	300-350 watt bulb with remote ballast			25 foot power cord, remember extra bulbs, and dedicated extension cord. Remember goggles.	1	1
	Luxo	Hand Held, UV Magnifier Lamp		16401	UV Inspection Illuminated Hand Held Magnifier Keep 4 extra bulbs on hand	1	2
	Klein Tools			7- Piece Cushion-Grip Nut driver Set	Kit includes 3/16", 1/4", 5/16", 11/32", 3/8", 7/16" and 1/2" sizes.	1	
	Klein Tools			630-1/4, buy extra	Drivers, Cushion Grip - 1/4	1	2
	Klein Tools			630-3/8, but extra	Drivers, Cushion Grip - 3/8	1	2




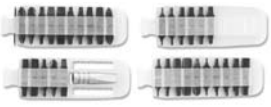


Image	Manuf.	Common Name	Model	Part Number	Function	Quantity Required	Ideal Qty Req.
	Klein Tools			630-5/16	Drivers, Cushion Grip - 5/16	1	2
		Automatic Center Punch			Hardened Tip, also doubles as a pen sized window punch, and latch tool.	1	3
	Leatherman	Wave		830037	Fast access tool	1	1
	Leatherman	Crunch		68010101	Fast access tool	1	1
	Leatherman			BIT KIT W/NYLON SHEATH	Includes hex (1.5/2 mm, 2.5/3 mm, 4/5 mm, 6 mm/1/4", 7/32" and 3/16", 5/32" and 9/64", 1/8" and 7/64", 3/32"and 5/64", 1/16" and .050"), Robertson (#3/#2, #1/Pozi #3), Pozi #2/#1, Torx (#10/#15, #20/#25, #27/#30), Phillips (#0/#3, #1/#2), screwdrivers (3/32" and 1/8", 5/32" and 3/16", 7/32" and 1/4"), Phillips/flat tip eyeglasses screwdriver, sheath and bit holders.	1	
				Screwdriver Bit Set	Set includes: Star T10, T15, T20, T25, T27, T30, T40Hex 2, 2.5, 3, 4, 5, 6mmFlat 4, 5, 6, 7mmPZ Pz1 x 2, Pz 2 x 4, Pz 3 x 3Ph Ph1, Ph 2 x 3, Ph 3 x 2.	1	
				Security Bit Set	Set includes: Star T8, T10, T15, T20, T25, T27, T30, T35, T40Hex 2, 2.5, 3, 4, 5, 6mmFlat 6mmPZ Pz1, Pz 2, Pz 3 Ph Ph1, Ph 2 Tri Wing 1, 2, 3, 4mmTorq Set 6, 8, 10mmSpanner Bit 4, 6, 8, 10mm.	1	
				Allen Wrench Set	Long Format Set in Pouch, or Flip Out Style	1	





Image	Manuf.	Common Name	Model	Part Number	Function	Quantity Required	Ideal Qty Req.
		Straight Pick			Lock Pick Set - 32 piece Lock picking Kit Compact Kit plus, Jumbo Kit	1	1
		Double Sided Pick			Lock Picks - Double Sided	1	1
		Bypass Kit			Peterson Government Series 4 Lock Pick Set	1	1
		Shim Kit			Padlock Shim Kit	2	4
		Door Latch Tool			Telescoping Door Tool Operated under door, targets handle. Mirror/prism is optional. Pre-measured length and angles	1	1
		Shove Tool			Pulls latch back once dead latch is extended	2	2
		Medeco Kit			Medeco Neutralizer Kit to include bypass tool, tailpiece tools, and sidebar rotation tool. Including bumping keys.	1	1
		Jab Saw			Sheet Rock Saw, Jab Saw Suitable for Quasi Covert Forced Entry. Non-Wood, Non Metallic handle, pre-waxed. Extra wax, mall rubber mallet.	1	2
		Straight Knife			Straight Knife, Slip Latch	2	2
		Cylinder Pick Kit			Basic Cylinder Lock Pick Kit Six or Seven Keyways	1	1




Image	Manuf.	Common Name	Model	Part Number	Function	Quantity Required	Ideal Qty Req.
		Tubular Pick Set			Tubular Pick Set	1	1
		Bump Key Sets			Schlage 'C' (SC1, 100-C) Bump Key (5 Pin) Schlage 'C' (SC4, 101-C) Bump Key (6 Pin) Schlage 'E' (SC8, 100-E) Bump Key (5 Pin) Schlage 'E' (SC9, 101-E) Bump Key (6 Pin) Sargent "S" (S69) Bump Key (6 Pin) Schlage 5-Pin (Master Keyway)	1	
		Bump Key Sets		Schlage Everest	Schlage Everest (C123) Schlage Everest (C125) Schlage Everest (C135) Schlage Everest (C145)	1	
		File Cabinet, Master Key Ring			Chicago Locks, HON Locks, Office Furniture, with Numbers	1	
		UV Paste			Premade Water Based, UV powder/pastes and cements. Five or Six colors	6	
		Epoxy, long wave activated			Epoxy to Match Phone Instruments and back boards Slightly Foaming, UV activated	4	
					Fully Insulated, Non Conductive Inspection Mirrors	4	

Image	Manuf.	Common Name	Model	Part Number	Function	Quantity Required	Ideal Qty Req.
RF Specific Devices							
	Optoelectronics	Scout		SPECTRUM SCOUT	Frequency Counter with preloaded FCC database	1	2
	Optoelectronics	Scout		Digital Scout, catch zero crossing signals.	RF frequency recorder	1	2
	GIG			Four band filters and monitors. Targeting CDMA data bursts, with 8 channel thermal hard copy.		1	1
	Icom	Handheld Scanner	R-20	Receiver, Hand-held. Keep concealed in lineman's bag.	Pre-loaded Handheld Radio with 1000+ common bugging Frequencies. (Focus on common telephone bugging frequencies)	2	4
	Research Electronics	CPM-700		CPM-700 Deluxe	Broadband Diode Detector System. Always keep a backup system on hands, with extra probes. Remember extender cables, mounting plate, and extender pole with Velcro cable ties.	2	4
	GIG	Comb Generator			Comb Generator, for NLJD	2	3
	GIG	Tracer Probe		Heavy Iron Probes	1 kHz Cobalt/Nickel Alloy Probe. Plus tuned 20-130 dB amplifier.	1	2
	GIG	Voice Frequency Probe		Heavy Iron Probes	300- 3000 Hz Voice Frequency Cobalt/Nickel Alloy Probe. Plus tuned 20-130 dB amplifier.	1	2
	GIG	Video Probe		Heavy Iron Probes	15.734 kHz Cobalt/Nickel Alloy Probe. Plus tuned 20-130 dB amplifier.	1	2
	GIG	Timing Probe		Heavy Iron Probes	32.764 kHz Cobalt/Nickel Alloy Probe. Plus tuned 20-130 dB amplifier.	1	2
	GIG	Comb Probe			55 MHz/81 MHz NLJD Probes (illuminated at 27.5 MHz)	2	3

Image	Manuf.	Common Name	Model	Part Number	Function	Quantity Required	Ideal Qty Req.
Power Tools							
	Dewalt	Drill/Driver - Right Angle		DW960K-2	Heavy-Duty 3/8" (10mm) 18V Cordless Right Angle Drill/Driver Kit - Invaluable for wall plates. Keep in Telco bag with extended and security bits.	1	1
	Dewalt	Drill/Driver - Heavy, Impact		DC987KA	Heavy-Duty XRP™ 1/2" (13mm) 18V Cordless Drill/Driver Kit. Normally kept in truck, and used for phone pole work, or ID penetrations. May also want to include long auger bits used for installers	1	1
	Dewalt	Drill/Driver - Compact		DC759KA	Heavy-Duty 1/2" (13mm) 18V Cordless Compact Drill/Driver Kit Plus long neck Excelite blades in a roll up kit (secret weapon)	1	2
	Dewalt	Battery pack		DC9096	18V XRP™ Battery Pack	4	8
	Dewalt	Battery Charger		DW9216	7.2V - 18V Dual Port 1 Hour Charger	2	4
	Dewalt	Clean Up, Spot Vac		DC515K	Heavy-Duty 18V Cordless 1/2 Gallon Wet/Dry Portable Vac. Invaluable for room cleanups after sweep.	1	1
	Dewalt	Area Light		DC527	Heavy-Duty 18V Cordless Fluorescent Area Light. Very handy for used in suspended ceilings or in hot phone rooms	2	4
	Dewalt	Drill Set			Pocket sized, pay attention extra small gauge bits.	1	

Image	Manuf.	Common Name	Model	Part Number	Function	Quantity Required	Ideal Qty Req.
	Dewalt	Driver Set				1	
	Dewalt				Gooseneck Spotlight, 36 volt	2	
		Gloves		Various,	Heavy Duty, Leather Palm, Lineman's Gloves. Mainly for pole work.	4	6
		Gloves		Insulating, with Gauntlet, 14 inch length	with Fabric Liners, and protective back. Mainly for pole work.	2	3
		Gloves		Thermal Gloves and Shells	2 sets, always keep one dry. Mainly for pole work.	2	4
		Gloves		Latex, Surgical Gloves, Non Powdered	General Purpose Box, Large Size, Blue or Natural Box of 100. Heavy gauge, black or purple.	100	200
		Hand Sanitizer	Purcell or Calstat	Small Bottle suitable to tool bag, plus large wall mounted (refillable) 1 liter bag holder.	Alcohol based hand sanitizer, suitable for cleaning up ikky-pic.	1	2
		Shop Towels		Roll or Foil Pouch Sized, Really Thick and Absorbent	Roll is wall mounted in truck, suitable for clean ups or tech and tools.	1	2
		Dry Clothes		Full Change of Dry Clothes suited for local tradesman, contractors, or construction. Layered approach.	Skin outward clothing, assume "soaked to the skin" twice over. Jeans, Belt, Socks, underwear, over shirt, outershell.	1	2
		Boots		Heavy Duty, Deep Tread insulated High top Leather Lineman's Boots. Suitable for walking in mud and slop.	with secondary Carry bag, or fireman's boot bag. (Plus 3 sets of dry socks) Remember being hip deep in mud in Maine.	1	2