

# **TETHER READY**

Pocket Reference Guide





# **ABOUT PYTHON SAFETY**

At Python Safety, our mission is to prevent dropped tools and equipment. Our industry already does a great job of stopping people from falling with a proven method called Fall Protection. For some reason, the primary defense against falling tools are really "back-up" systems like toe boards, tool nets, and hard hats

At Python Safety, we've developed a complete primary system for preventing dropped tools called Fall Protection for Tools®.

Customers love to use our products because they are designed by the craft, engineered by Python Safety, and then third-party tested.

With over ten years of experience in industries ranging across nuclear power, oil & gas, new construction and more; Python Safety is uniquely positioned to eliminate dropped tools wherever we find them.

# THIRD PARTY TESTED

Python Safety third-party tests products with Applied Technical Services (ATS), an Atlanta-based consulting engineering firm with sophisticated testing and inspection capabilities. ATS is ISO 9001 Certified, and an accredited testing lab of the Nuclear Regulatory Commission. As a part of Python Safety's product development and quality assurance processes, ATS conducts static or dynamic load tests to determine the safe working load limits based on the solution's intended use.



### Notice

- All procedures shown in this document are for Python Safety products only.
- All lanyard adaptors should be connected to a Python Safety extension or lanyard.
- Ensure operators are assessed for competency in using all equipment and tools.
- Be careful working around rotating and moving equipment.
- Ensure operators have read and understood product information and warning labels for all lanyards and adaptors.
- Ensure all equipment and tools are regularly maintained and checked before each use for defects and deterioration.
- Ensure damaged, worn, or defective equipment, tools, lanyards, and adaptors are immediately removed from service.
- Never modify a tool from the manufacturer's specification.

### Inspect Before Use

Visual inspection is vital to safely using safety solutions. Inspect the entire surface of the product by starting on one side and working your way to the opposite, carefully rotating the product as you visually inspect for damage or wear that might affect the usefulness and dependability of the lanyard, adaptor or the tool.

### After Use

After use, clean the equipment of dirt, corrosives, or contaminants and store in a clean and dry environment, free from fumes or corrosive elements. Taking care of your safety equipment will ensure it works effectively and will extend its service life

### Cleaning Nylon & Polyester

- Clean off the surface dirt with a water-dampened wipe.
- Dip the wipe in a mild solution of water, soap, or detergent; work it up into a thick lather; and clean the item.
- Wipe with a clean cloth and hang to dry away from excessive heat, steam, or sunlight.

### In Case of a Dropped Tool

- If a tool is dropped and/or load is forced onto the connection point and/or the Python Safety tool lanyard, remove affected parts from service and replace immediately.
- Any defective tool or lanyard should be immediately taken out of service.
- All incidents should be reported to your safety coordinator and to Python Safety at support@pythonsafety.com.

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# **DOWNLOAD THE LATEST VERSION ONLINE**

Download the latest version of Tether Ready online for the most up to date information and instructions for using Python Safety products.

Visit PythonSafety.com/tether-ready/



DR-0.5X2.25NC



DR-0.5X2.25



DDR-SMALL



DR-1X3.5

### **D-RINGS**

PRODUCT CODE	DIMENSIONS	LOAD RATING
DR-0.5X2.25	0.5" X 2.25"	2lbs (0.9kg)
DR-0.5X2.25NC	0.5" X 2.25"	2lbs (0.9kg)
DDR-SMALL	0.5" X 2.25"	2lbs (0.9kg)
DR-1X3.5	1" X 3.5"	5lbs (2.3kg)













OW-HDYI W1

QW-HDBLU1

QW-HDGRN1

OW-HDBI U1X2

### **OUICK WRAP TAPE**

PRODUCT CODE	LENGTH
QW-HDYLW1	108" (274cm)
QW-HDBLU1	108" (274cm)
QW-HDGRN1	108" (274cm)
QW-HDBLU1X2	216" (548.6cm)

# When to use D-Rings and Quick Wrap Tape

- For tools weighing up to 5lbs (2.3kg) or 2lbs (0.9kg) depending on the D-Ring.
- When a non-conductive attachment point is needed for tools up to 2lbs (0.9kg).
- When Quick Rings, Quick Spins, and D-Ring Cord Attachments won't work. Many tools do not have pre-drilled holes for Quick Rings, and lack handles that a Quick Spin will fit.

# When NOT to use D-Rings and Quick Wrap Tape

- When a tool is over 5lbs (2.3kg) or 2lbs (0.9kg) depending on the D-Ring.
- When a D-Ring will interfere with the safe working condition of the tool.

# **D-RING EXAMPLES**



### Quick Wrap Tape & D-Rings 6



Figure 5

### **USAGE INSTRUCTIONS**

STEP 1 Cut a strip of Python Quick Wrap approximately 12 to 24 inches long depending on the size of the handle. Peel plastic coating away from wrap. Tape should wrap 10-12 times around the tool.

NOTE: Never use the D-Ring with Python Quick Wrap on the tapered portion of a tool.

STEP 2 Make sure the tool is free of debris which would interfere with the bonding of the Python Quick Wrap. Place a D-Ring attachment so that the ring of the D-Ring is facing away from the center of gravity of the tool. Ensure that when installed, the D-Ring will not interfere with the safe working condition of the tool (figure 1). When placing the D-Ring, ensure that the tab of the D-Ring is facing up as shown here (figure 2).

STEP 3 Wrap the tape around the tool while stretching the tape. It is critical to stretch the tape while wrapping, as this activates the tape and causes it to self-vulcanize creating a secure connection (figure 3).

STEP 4 Once the connection is complete, test the connection to ensure proper installation has taken place (figure 5).

NOTE: Remember to always inspect the connection prior to each use for damage or irregularities that might affect the connection.

Apply approximately 5lbs of force when inspecting.







VR-ATTACHMD

VR-1ATTACHMD

**TOOL CINCH ATTACHMENTS** 

PRODUCT CODE	LOAD RATING
VR-ATTACHMD	35lbs (15.9kg)
VR-1ATTACHMD	35lbs (15.9kg)
VR-2ATTACHMD	35lbs (15.9kg)

# ✓ When to use a Tool Cinch

- Tools weighing up to 35lbs (15.9kg) unless otherwise stated.
- On difficult to tether tools such as pinch bars, torque wrenches, clamps, and many closed handled tools.

### When NOT to use Tool Cinch

- Do not use a Python Tool Cinch on tools over 35lbs (15.9kg).
- When a Tool Cinch will interefere with the safe working condition of the tool.

# **TOOL CINCH EXAMPLES**



Figure 1



Figure 2



Figure 3

### **USAGE INSTRUCTIONS**

STEP 1 Select a Tool Cinch Attachment that is appropriate for your tool. For closed handled tools without triggers, a VR-ATTACHMD should be used. For example, see the magbase drill (figure 1) on page 9.

For tools without closed handles, or tools with triggers, the VR-1ATTACHMD should be used instead. For example, see the sawzall (figure 2) on page 9.

For tools where there is at least 5.5" of available space for stabilizer wings to be taped down, the VR-2ATTACHMD should be used. This Tool Cinch is most idea for tools with long cylindrical handles.

For example, see the slugging wrench (figure 3) on page 9.

STEP 2 Pass the Ring end of the cinch through the loop end, and cinch around your tool (figure 1).

STEP 3 If using a Tool Cinch with wings, use Quick Wrap Tape to hold the Tool Cinch in place. If using the VR-ATTACHMD, continue to step 4.

Cut a strip of Python Quick Wrap approximately 12 to 24 inches long depending on the size of the handle. Peel plastic coating away from wrap. Tape should wrap at least 5 times around the tool.

Make sure the tool is free of debris which would interfere with the bonding of the Python Quick Wrap. Wrap the tape around the tool while stretching the tape. It is critical to stretch the tape while wrapping, as this activates the tape and causes it to self-vulcanize creating a secure connection (figure 2).

STEP 4 Once the connection is complete, test the connection to ensure proper installation has taken place.

NOTE: Remember to always inspect the connection prior to each use for damage or irregularities that might affect the connection.







# **HEAT SHRINK**

PRODUCT CODE	DIMENSIONS
HS-0.75X1.75-25pk	0.75in X 1.75in (1.9cm X 4.5cm)
HS-1X1.75-25pk	1in X 1.75in (2.5cm X 4.5cm)
HS-1.5X2-25PK	1.5in X 2in (3.8cm X 7.6cm)
HS-1.5X3-25PK	1.5in X 3in (3.8cm X 7.6cm)
HS-2X4-10PK	2in x 4in (5.1cm x 10.2cm)
HS-3X4-10PK	3in x 4in (7.6cm x 10.2cm)

## ✓ When to use Heat Shrink

 Used on top of Python Quick Wrap Tape (Pg. 4) to create a more abrasive resistant attachment point.

### X When NOT to use Heat Shrink

- In temperatures exceeding 130 degrees fahrenheit.
- Never use Heat Shrink without first applying Quick Wrap Tape. Heat Shrink is not a replacement for Quick Wrap Tape, it only is used to protect the tape.

# **HEAT SHRINK EXAMPLES**





# 14 Heat Shrink



### USAGE INSTRUCTIONS

STEP 1 Make sure the tool is clean and free of debris. If there is a detatchable handle, ensure the handle is secure. If the handle is loose, detach before applying Heat Shrink.

STEP 2 Attach a D-Ring using Quick Wrap Tape to the tool, as shown on page 20 (figure 1).

STEP 3 Slide Heat Shrink over the D-Ring and Quick Wrap Tape.

Ensure that the Heat Shrink covers as much of the D-Ring as possible without covering the ring itself (figure 2). NEVER use Heat Shrink without first applying Python Safety Quick Wrap Tape.

STEP 4 Wearing heat resistant gloves, use a Heat Gun to evenly apply heat to the Heat Shrink being careful not to burn the webbing of the D-Ring or Heat Shrink itself. Allow the Heat Shrink to completely shrink around the tool and D-Ring (figure 3). Do not apply any adhesives to Heat Shrink.

STEP 5 Let cool approximately five minutes before using. Refrain from pulling or tugging on the connection until completely cooled (figure 4).

STEP 6 Once the connection is complete, test the connection to ensure proper installation has taken place (figure 5).

NOTE: Remember to always inspect the connection prior to each use for damage or irregularities that might affect the connection.

Apply approximately 5lbs of force when inspecting.



# **QUICK SPINS**

PRODUCT CODE	DIAMETER	LOAD RATING
QS-S	0.6in (1.5cm)	1lbs (0.5kg)
QS-M	0.8in (2cm)	1lbs (0.5kg)
QS-L-10PK	1in (2.5cm)	1lbs (0.5kg)
QS-XL-10PK	1.2in (3.1cm)	1lbs (0.5kg)
QS-P-10PK	0.3in (0.8cm)	
QS-PCOIL-10PK	0.3in (0.8cm)	
QS-PM-10PK	0.5in (1.3cm)	
QS-PMCOIL-10PK	0.5in (1.3cm)	

### ✓ When to use Quick Spins

- On tools under 1b (0.5kg) where the Quick Spin will fit tightly on a handle.
- When a non-conductive attachment point is necessary.

# × When NOT to use Quick Spins

- Tools over 1lb (0.5kg)
- · Do not use a Quick Spin if a snug fit cannot be secured.

# **QUICK SPIN EXAMPLES**





# 18 Quick Spins



Figure 3



# **USAGE INSTRUCTIONS**

**STEP 1** Identify a Quick Spin Adaptor that will properly fit the handle of the tool (figure 1).

**STEP 2** Push and twist the Quick Spin onto the tool. Some force should be necessary to create a snug fit (figure 2).

STEP 3 Ensure that the Quick Spin is firmly in place before use (figure 3).

**IMPORTANT:** Inspect before use. Never connect to anything over 1lbs (0.5kg).

## **D-RING CORD**

PRODUCT CODE	LOAD RATING
DR-CORD	5lbs (2.3kg)



# ✓ When to use a D-Ring Cord Attachment

- For tools weighing up to 5 lbs (2.3 kg).
- For creating quick attachment points on a variety of tools.
- On tools with closed handles, or with pre-drilled holes.

# × When NOT to a D-Ring Cord Attachment

- For tools weighing over 5 lbs (2.3kg).
- When a non-conductive attachment point is needed, use a Quick Spin (Pg. 16), or Non-conductive D-Ring (Pg. 4).
- · When the attachment will interfere with the safe working condition of the tool.

# **D-RING CORD EXAMPLES**



# **USAGE INSTRUCTIONS (CLOSED HANDLED TOOLS)**

STEP 1 Ensure that cinching the D-Ring Cord to the handle of your tool will not interfere with the safe working condition of the tool.

STEP 2 Pass the cord end of the D-Ring Cord through the handle of the tool.

STEP 3 Pass the Ring side of the D-Ring Cord through the loop of the Cord.

STEP 4 Pull tightly to cinch and create a secure connection.

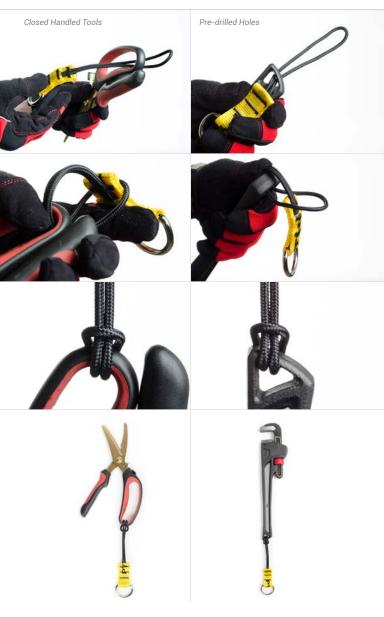
# **USAGE INSTRUCTIONS (PRE-DRILLED HOLES)**

STEP 1 Ensure that cinching the D-Ring Cord to the tool will not interfere with the safe working condition of the tool.

STEP 2 Pass the cord end of the D-Ring Cord through the pre-drilled hole in the tool.

STEP 3 Pass the Ring side of the D-Ring Cord through the loop of the Cord.

STEP 4 Pull tightly to cinch and create a secure connection.







QR-01.5

QR-01

QR-00.75

## **QUICK RINGS**

PRODUCT CODE	DIAMETER	LOAD RATING
QR-00.75	0.75in (1.9cm)	2lbs (0.9kg)
QR-01	1in (2.5cm)	2lbs (0.9kg)
QR-01.5	1.5in (3.8cm)	2lbs (0.9kg)

# ✓ When to use Quick Rings

- When there are pre-drilled holes in a tool, or when a quick ring can be fitted around a tool in such a way where it cannot slide off. Never modify a tool in a way that would void the manufacturers warranty.
- When a tool weighs less than 2lbs (0.9kg).

# When NOT to use Quick Rings

- When a tool weighs over 2lbs (0.9 kg).
- When there is no pre-drilled hole that a Quick Ring can be fitted through, or when a Quick Ring cannot be fitted onto a tool in such a way that the Quick Ring cannot slide off.
- When a non-conductive attachment point is needed, use a Quick Spin (Pg. 16), or Non-conductive D-Ring (Pg. 4).

# **QUICK RING EXAMPLES**



# 26 Quick Rings



## **USAGE INSTRUCTIONS**

STEP 1 Use split ring pliers to separate the Quick Ring so it can be threaded through an attachment point (figure 1).

STEP 2 Begin threading the Quick Ring through the attachment point with the pliers. Continue to thread the tool through by hand if necessary (figure 2).

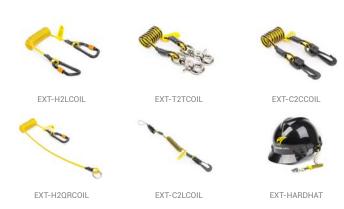
STEP 3 After installation, check for damage of tool or Quick Ring. If either the tool or Quick Ring is damaged, replace that component.

IMPORTANT: Inspect before use. Never connect to anything over 2lbs (0.9 kg).



# **BUNGEE TETHERS**

PRODUCT CODE	LOAD RATING
EXT-H2LBUNGEE	10lbs (4.5kg)
EXT-H2LBUNGEEMD	35lbs (15.9kg)



# **COIL TETHERS**

PRODUCT CODE	LOAD RATING
EXT-H2LCOIL	5lbs (2.3kg)
EXT-T2TCOIL	5lbs (2.3kg)
EXT-C2CCOIL-10PK	2lbs (0.9kg)
EXT-H2QRCOIL	2lbs (0.9kg)
EXT-C2LCOIL-10PK	2lbs (0.9kg)
EXT-HARDHAT-10PK	2lbs (0.9kg)



# **COIL TETHERS**

PRODUCT CODE	LOAD RATING
RET-52STEEL	1.5lbs (0.7kg)



# TRIGGER TO TRIGGER LANYARDS

PRODUCT CODE	LOAD RATING	LENGTH
EXT-T2T0.5X12	10lbs (4.5kg)	12in (30.48cm)
EXT-T2T0.5X24	10lbs (4.5kg)	24in (60.96cm)
EXT-T2T0.5X36	10lbs (4.5kg)	36in (91.44cm)
EXT-T2T0.5X18NC	2lbs (0.9kg)	18in (45.72cm)







EXT-H2L1X72MD

EXT-H2L1X72HD

EXT-H2R1X72HD

# **MEDIUM & HEAVY DUTY WEBBING TOOL LANYARDS**

PRODUCT CODE	LOAD RATING	LENGTH
EXT-H2L1X72MD	35lbs (15.9kg)	72in (182.88cm)
EXT-H2L1X72HD	80lbs (36.3kg)	72in (182.88cm)
EXT-H2R1X72HD	80lbs (36.3kg)	72in (182.88cm)



Pullaway Wristband



Pullaway Wristband Slim

# **PULLAWAY WRISTBANDS**

PRODUCT CODE	LOAD RATING	PROFILE
WB-S	5lbs (2.3kg)	Standard
WB-M	5lbs (2.3kg)	Standard
WB-L	5lbs (2.3kg)	Standard
WB-SLIM-S	5lbs (2.3kg)	Slim
WB-SLIM-M	5lbs (2.3kg)	Slim
WB-SLIM-L	5lbs (2.3kg)	Slim



WB-ADJ



WB-ADJRET



WB-ADJCORD

# **ADJUSTABLE WRISTBANDS**

PRODUCT CODE	LOAD RATING		
WB-ADJ	5lbs (2.3kg)		
WB-ADJRET	1.5lbs (0.7kg)		
WB-ADJCORD	5lbs (2.3kg)		



# **COMFORT TOOL BELTS**

### **BELT-COMFORT**

Available in several sizes. See product catalog for more information.



# **UTILITY TOOL BELTS**

### BELT-UTILITY

Available in several sizes. See product catalog for more information.



BELT-DRLOOP



BELT-TRLOOP

BELT-TRLOOP is used for tying off tools from a belt, while the BELT-TRLOOP is used for staging tools.

# **BELT LOOPS**

PRODUCT CODE	LOAD RATING
BELT-DRLOOP	5lbs (2.3kg)
BELT-TRLOOP	5lbs (2.3kg)











# FIND THE RIGHT HOLSTER ONLINE

Python Safety offers a wide select of holsters to accomodate nearly any hand tool. To learn more about available holsters, please visit PythonSafety.com.

# **TOOL HOLSTERS**

PRODUCT CODE	PRODUCT NAME
HOL-1TOOLHAR	Single Tool Harness Holster
HOL-1TOOLHARRET	Single Tool Harness Holster with Retractor
HOL-1TOOLBLT	Single Tool Belt Holster
HOL-1TOOLBLTRET	Single Tool Belt Holster with Retractor
HOL-1TOOLXD	Extra-Deep Single Tool Belt Holster
HOL-2TOOLHAR	Dual Tool Harness Holster
HOL-2TOOLHARRET	Dual Tool Harness Holster with Retractors
HOL-2TOOLBLT	Dual Tool Belt Holster
HOL-2TOOLBLTRET	Dual Tool Belt Holster with Retractors
HOL-TAPERET	Tape Measure Retractor Holster
HOL-TAPESLEEVE	Tape Measure Sleeve
HOL-SCAFFRET	Scaffold Wrench Holster with Retractor
HOL-HAMMER	Hammer Holster
HOL-ADJRADIO	Adjustable Radio Holster
HOL-BOTTLE	Spray Can / Bottle Holster



## SMALL PARTS POUCHES

PRODUCT CODE	PRODUCT NAME		
PCH-PARTS-VY	Vinyl Yellow		
PCH-PARTS-CB	Canvas Black		
PCH-PARTS-CC	Canvas Camo (Tan / Black)		
PCH-PARTS-CO	Canvas Orange		
PCH-PARTSXD-CB	Extra Deep Canvas Black		

- Innovative self-closure system that traps objects inside, the pouch makes it nearly impossible for objects to fall out once placed in the bag
- · Easy to retrieve objects since no opening or closing is necessary.



## **INSPECTION POUCH**

### PCH-INSPECT

 Designed for the safe transport and use of most multimeters, air monitors, and other portable testing devices.



### TOOL POUCH

Available in several sizes and variants. See product catalog for more information.





BKT-100HLC

BKT-250HLV

# **SAFE BUCKETS**

PRODUCT CODE	LOAD RATING	CLOSURE SYSTEM
BKT-100HLC	100 lbs (45.4 kg)	Hook and Loop
BKT-100DRAWC	100 lbs (45.4 kg)	Drawstring
BKT-250HLV	250 lbs (113.4 kg)	Hook and Loop
BKT-250DRAWV	250 lbs (113.4kg)	Drawstring

# **SCAFFOLD POLE BUCKETS**

PRODUCT CODE	LOAD RATING	LENGTH		
BKT-48SCAF	100 lbs (45.4 kg)	48in (121.9cm)		
BKT-72SCAF	100 lbs (45.4 kg)	72in (182.9cm)		
BKT-120SCAF	100 lbs (45.4 kg)	120in (304.8cm)		



# FREE ATTACHMENT POINTS POSTER



Download the Common Tool Attachment Points poster from PythonSafety.com and see how easy it is to tether commonly used tools with real world examples.

### DOWNI OAD TODAY:

PythonSafety.com/posters

# **REQUEST A PRINTED POSTER**

770-516-8428

# **EVEN MORE EXAMPLES ONLINE!**

For even more real world examples, visit PythonSafety.com/tools

# Impact Force of a Dropped Object

Measured in pounds per square inch

Weight of Dropped Object (pounds)

SEVERE

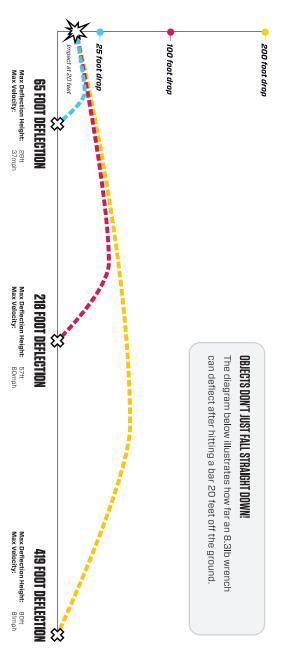
FATAL

	Drop Height (reet)								
6	10	20	50	100	150	200	300		
61	79	112	177	250	307	354	434	ت	
123	158	224	354	501	613	708	867	2	
184	238	336	531	751	920	1,062	1,301	ω	
	317							4	
307	396	560	885	1,252	1,533	1,771	2,168	5	
	475							6	
	554							7	
491	633	896	1,416	2,003	2,453	2,833	3,469	8	
552	713	1,008	1,593	2,253	2,760	3,187	3,903	9	
613	792	1,120	1,771	2,504	3,067	3,541	4,337	10	

Drop Height (feet)

**PYTHON** safety

# **FALLING OBJECT DEFLECTIONS**



# THE LEADERS IN DROP PREVENTION

There is a reason Python Safety is trusted by hundreds of organizations around the world. No matter what your drop prevention needs are, Python Safety is equipped to help you achieve your goals.

### NO PROBLEM IS TOO BIG OR SMALL

Whether you're in need of a specific product, or you're ready to implement an entire drop prevention system, our team is ready to assist you every step of the way.

# WE CAN HELP YOU CREATE & DEPLOY A PLAN

After years of helping sites deploy drop prevention systems, we worked withindustry experts to develop the world's most popular Drop Prevention Plan.

### RESOURCES AT YOUR FINGERTIPS

Videos, pocket guides, online guides, posters, stickers... we have it all.We're capable of supporting you and your team with materials that get the job done.

### SCHEDULE A CALL OR MEETING TODAY

Our highly dedicated and skilled team is ready to assist you in any way possible.

Web: PythonSafety.com
Phone: 770-516-8428

Email: talk@pvthonsafetv.com

### Get the latest version of Tether Ready Online:

PythonSafety.com/tether-ready/

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