



# Pivot Angle 200 Operation and Instruction Manual

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This Magswitch Pivot Angle 200 Is Designed To Hold Steel Plate, Pipe, Bar And Rod Stock, Flat Stock Or Angle Iron. Using Patented Technology, This Device Has Tremendous Holding Power As Well As A Great Amount Of Shear Force Holding Strength To Prevent Sideways Movement.

**Read All Instructions! Failure To Follow All Instructions Listed Below May Result In An Unsafe Or Dangerous Condition.**

## General Information

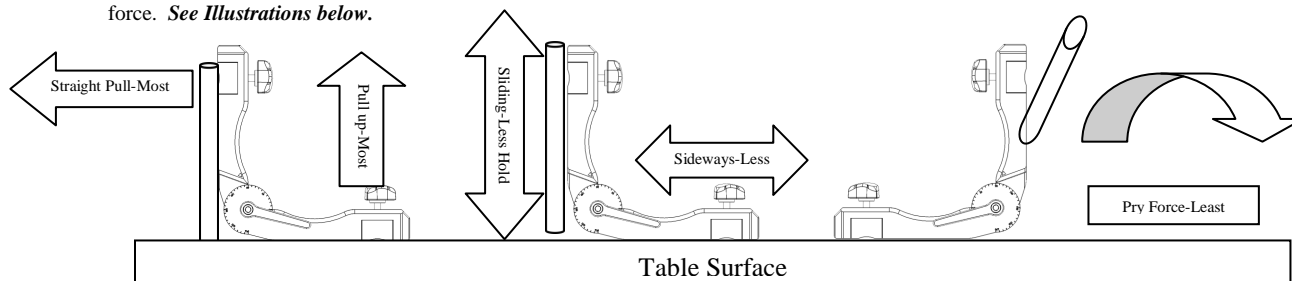
- All Magnets need to be *kept at a safe distance* from all Magnetic storage devices, electronics and credit cards etc...
- Ensure that the Magswitch Magnets are stored in the "off" position when not in contact with Ferromagnetic metals.
- *Never use a Magswitch Angle to lift any materials.*
- *Never use a Magswitch Angle for OVERHEAD LIFTING!*
- *DO NOT attempt to disassemble* the Magswitch Magnets; there are no user serviceable parts inside the device.
- All Magswitch products are *designed for normal work/jobsite conditions*, do not use underwater or in a hazardous environment
- *DO NOT use the Magswitch Angle if it is damaged or is not working properly.* Severe injury can occur if this device is not used properly and safely.
- *DO NOT expose the Magswitch Magnets to temperatures above 180deg. Fahrenheit (80 Celsius).* High temperatures will permanently degrade the Magnet's effectiveness and may result in an unsafe condition.
- *Not recommended for painted or finish coated surfaces* as these will reduce the magnetic bond and the finish may be damaged.
- *This product contains PTFE lubricant.* For MSDS information contact Magswitch.

## To use the Pivot Angle 200

- Always *test the connection* before attempting to use the Magswitch Angle to ensure that it is capable of holding the material securely.
- *Numerous factors can negatively affect the strength* of the magnetic bond. Dirt, debris, oils and grease, painted surfaces and any gap between the Magnets and the metal surface will decrease the bond. *Ensure that the metal is clean* and free of these factors.
- *Thicker metals will be held more strongly than thinner metals.* E.g.: 1/4" (6mm) steel will be held more strongly than thin gauge metals.
- *Never exceed the rated capacity* of the device or attempt to alter the device in any way. Each Magnet has up to 200lbs(90 kg) of Break-Away Force under ideal conditions. Tested in accordance with Magnet Distributors and Fabricators Association testing methods and represents a straight Break-Away pull. Actual in-use results will vary greatly and *user must test every bond to determine the suitability of the magnet* to hold the material.
- *Avoid sudden jerking or Shock force* as this will cause the Magnets to lose its hold.
- *This Pivot Angle 200 is not designed to be used as a welding ground clamp* or as part of an electrical circuit.
- For safe operation, the *bottom surface of the Magnet must always be Flat and Smooth.* If necessary, it is possible to sand the Magnet face smooth using 400 grit sandpaper and a flat surface. *Always file any burrs* that would interfere with full contact.
- *The sides of the magnets are exposed* and can be used to hold metal in position when welding. The holding force will be less than the bottom and the user must test this connection for suitability for their purpose.
- *Using the exposed sides of the magnets*, it is possible to hold the pivot angle to a steel table so that the metal being held to the pivot angle is also held in place on the table top.

## Pivot Angle 200 Operation

- *The handles on the magnets of this Magswitch Angle must be turned clockwise 180 degrees until it locks into place* in order to be turned on.
- *DO NOT turn on unless in contact with metal!*
- *The Pivot Angle is designed to hold ferrous metal pieces at angles from 22° to 270°.* To hold at the desired angle, always tighten the Pivot handle securely.
- *The Pivot Handle ratchets to allow for convenient positioning.* To ratchet the handle, pull the handle out away from the body of the angle, rotate the handle to the desired location and allow to spring back into position.
- *To release the Magnets push down and turn the handles counterclockwise until it stops.* The Magnets will *turn off and release immediately* upon turning the handle. Use Caution to ensure that it is safe to release the Magnets and that nothing will fall or become dangerous.
- This Magswitch Pivot Angle 200 is capable of *exceptional Break-Away force* holding power; Magswitch Magnets are exceptionally strong in *Shear Force* as well. *Prying force is the least powerful* of the holding capabilities and great care must be used when attempting to use this device with Pry force. *See Illustrations below.*



### Magswitch Limited Warranty

Magswitch products are covered by a One Year Limited Warranty on Material and Workmanship. Warranty is Non-Transferable. Magswitch reserves the right to inspect all product claims under warranty. Any alteration of the device voids this warranty. User assumes all risk for the proper use of this device and for ensuring product suitability for intended application. This warranty shall not cover any incidental or consequential damages due to the improper use or failure of this device.

All Magswitch products are intended for the use identified on the package - not intended for resale or integration into products for resale. Contact Magswitch for inquiries on integration of technology. Australian Patent: 753496, Chinese Patent: 254155, New Zealand Patent: 518865, Singapore Patents: 88931; 103413, South Africa Patents: 2002/3752; 2004/1785, US Patents: 6,707,360; 7,012,495. Additional Patents and Patent Applications Pending.

# Pivot Angle 200 Usage Manual

- This Pivot Angle 200 is designed to hold your ferrous metals at any angle from 22° to 270° for great versatility when fabricating. It is perfectly suited to work-holding applications when you are holding any Ferromagnetic substance such as steel plate, angle iron, pipe, and rod and bar stock.
- One side of the Pivot Angle is machined with a scale so that common angles can be quickly and precisely located and repeated. To Use, simply align the indicator arrow with the desired angle as shown in the drawing below.
- As with all precision devices, damage can occur from dropping, bumping and impact. Magswitch recommends periodic inspection by the user to ensure that the Pivot Angle 200 is still accurate and fits their needs.
- To use the Pivot Angle 200, simply position the material, tighten the pivot bolt and then turn the magnets' handles clockwise 180 degrees until they lock in place to the "ON" position. As you turn the handle, the magnetic grip increases allowing for accurate positioning until fully held in place.
- Never turn the magnets on when not in contact with metal. Sudden impact to the metal can occur causing personal injury or damage to the surfaces.
- Always test the hold of the Magnets to ensure that it is sufficient to secure the material in place without slipping or falling.
- When finished, push down and turn the Magnets handle counter clockwise 180 degrees to the "OFF" position, taking care that nothing will fall or become a hazard as the magnets will release their hold immediately.
- When used for material holding for metals that are to be welded, be careful not to overheat the magnets. Temperatures above 180 degrees Fahrenheit internal will permanently degrade the magnetic power and holding strength. Magswitch recommends a tack weld only to keep the heat transfer to a minimum. **Magswitch recommends a minimum of 3 inches (8cm) from the magnet to the weld point**, and that the magnet is removed immediately after the tack weld to reduce heat transfer.

