

Power MIG®

The Professional's Choice!™

Check Under The Hood!

Compare Lincoln Electric's® Power MIG® 140 & 180
to Miller Electric's® Millermatic® 140 & 180

Power MIG® 140 & 180



Shown:
Power MIG® 140C

Millermatic® 140 & 180



Shown:
Millermatic® 140

WIRE DRIVE SYSTEM

Cast Aluminum Drive Block



- Cast in a single aluminum block to provide rigid wire alignment for more reliable feeding.



- Only the gun connection housing and idler pivot arm are cast. The result is less wire support and a greater opportunity for wire misalignment and birdnesting.

Industrial Dual Gear-Driven Drive System



- Dual gear-driven drive delivers positive wire traction without wire crushing.



- Single gear drive with a free idler wheel often generates less traction and requires more drive roll pressure to prevent wire slipping in the drive.

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Power MIG® 140 & 180

Large Industrial Closed Design Drive Motor



- Large motor provides plenty of torque for recommended wire sizes and industrial closed design is significantly more resistant to shop grinding dust that can shorten the service life of conventional retail-level motor designs.

Millermatic® 140 & 180



- Smaller open motor design introduces the risk that shop grinding dust enters the motor windings and shortens the service life of the motor.

Brass-to-Brass Gun Connections



- Brass gun connectors mate directly to brass drive bushings for enhanced long-term connectivity.

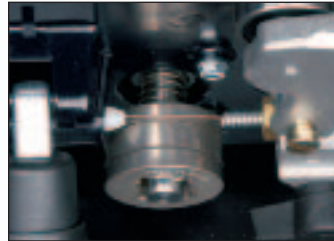


- Brass gun connector mates to an aluminum drive housing. Dissimilar metal electrical connections suffer from reduced connectivity and the risk of degraded connection over time.

Full-Support Cast Aluminum Split Wire Guides



- Compare the full wire path support of our Split Wire Guides—Controlled wire alignment and reduced birdnesting, in addition to easy, tool-less service access.



- Check the plastic incoming guide tubes and absence of outgoing guide tubes on this drive system—Faster wear, less precise alignment and a greater chance of jumping the drive roll groove or birdnesting that results in tangled wire and more downtime.

PROFESSIONAL FEATURES

Spool Gun Ready



- Just buy the Magnum® 100SG gun and install the spool gun switch in minutes. Then, connect spool gun shielding gas and gun connection to the front of the machine. No bulky module requiring separate 115V power or additional connections are necessary.



- Significantly more expensive Spool Gun and Spool Gun Adapter Module make this a very expensive option. Requires additional 115V input power for the module. At least 8 connections must be made to and from the machine and module.

Spot Timer Capable



- No other welder in its class offers an easy to install Spot Timer Kit—Great for tacking and stitch welding on thin materials.



- None available.

Power MIG 140 & 180

Get More — Do More!



- Power MIG[®] models ship with more contact tips, gas and gasless nozzles, MIG and flux-cored drive rolls, and 1 spool each of MIG and flux-cored wire.

Millermatic 140 & 180



- Why pay for less?

Integrated Drive Roll, Nozzle and Contact Tip Storage



- Store all your gun consumables here.



- Lack of storage capability forces you to remember where you left ALL of your gun and drive accessories.

Industrial Ground Clamp Design



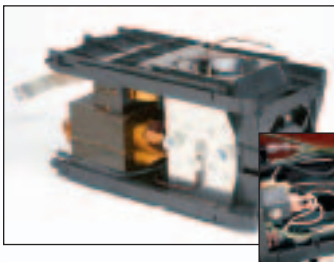
- Lincoln[®] use of a copper conductor strap provides better electrical connection. It also prevents current from passing through the handle for added operator safety.



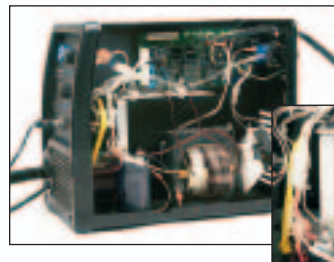
- No copper conductor strap—that means a reduced chance of proper electrical connection and also increases the opportunity for current to pass through the handle.

CONSTRUCTION DETAILS

Power Chassis[™]



- Two patents are pending on this clever new power component module:
 - Engineered air flow for improved cooling of critical components with reduced dust/dirt pickup.
 - Secure component mounting for improved structural integrity.
 - Integrated abrasion-resistant “trapping” of components and wiring.



- Key components are exposed to higher levels of dirt and metal shop grinding dust, requiring more frequent cleaning to avoid failure issues. Some key components are secured mechanically using other key electrical components, allowing for an additional source of failure. Cables and hoses are secured less frequently, allowing a greater opportunity for abrasion.

Brass-to-Brass Polarity Connections



- Tool-less brass thumb screws make it easy to make the necessary polarity changes when switching between MIG and flux-cored welding.

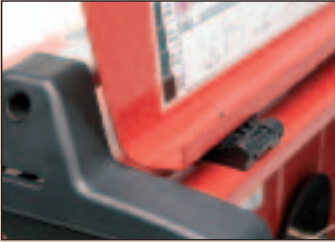


- Go find a wrench when you need to change polarity.

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Power MIG[®] 140 & 180

Heavy Duty Sheet Metal Construction



- Check the 16 ga. construction vs. thinner 18 ga. on the competitive units.

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- Why pay a for thinner, more easily damaged sheet metal case?

Brass Shielding Gas Solenoid & Fittings



- Lincoln specifies high quality industrial brass construction solenoid and hose fittings for long service life.



- Contrast Lincoln's more expensive brass fittings with these plastic parts, which are subject to greater chance of failure.

Heavy Duty Braided Shielding Gas Hose



- This industrial-level gas line is an indication of the attention to construction details that make the Power MIG[®] models a better value.



- Common plastic hose is less expensive to use, and less industrial in nature.

Tube Axial (Muffin-style) Cooling Fan



- Efficient, closed design with integrated fan blades environmentally shields components better to resist shop and metal grinding dust damage.



- Press-on fan blade can loosen over time. Open design allows a greater opportunity for dust and dirt to enter motor and reduce service life.

CHIP GANASSI
RACING
FELIX SABATES



Don Fair, Chip Ganassi Race

Group Leader of Components

"Our standards are very high
That

Power MIG[®] 140 & 180

Choke and Transformer Spacers



- Coils wound and varnished without wooden spacers remain secure for long service life.

Millermatic[®] 140 & 180



- Wooden spacers swell in high moisture conditions and shrink as they dry out, eventually causing loose windings.

Varnish Insulation



- Double dip varnish and Nomex[®] insulation result in a class H insulation rating certified to 180°C.



- Insulation rating is unknown.

Protective Front & Back End Caps



- Recessed controls and connections are additionally protected against bumps—it only makes sense.

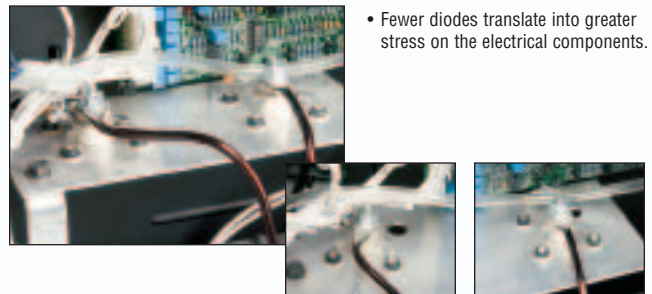


- Flat non-recessed connections expose fittings to unnecessary damage.

Added Diode/Rectifiers



- Eight Diodes on the Power MIG[®] 140 and 16 Diodes on the Power MIG[®] 180 allow these models to spread the current more through the electronic systems of the power source—that means less stress on the system which can lead to longer component service life.



- Fewer diodes translate into greater stress on the electrical components.

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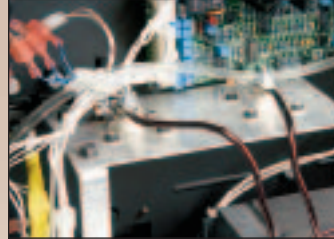
Power MIG® 140 & 180

Enhanced Heat Sink Surface Area



- More surface area means cooler operation.

Millermatic® 140 & 180



- Less surface area.

Crimped and Bolted Power Connections with Joint Compound



- Lincoln® connections are crimped and bolted with Dow® 340 electrical joint compound. That's important to secure good long-term electrical contact between dissimilar metals and minimize oxide buildup that can cause overheating.



- Power connections are crudely flattened and drilled and then joined without joint compound.


Extra PC Board Protection



- Lincoln's® control board is "potted and trayed"; that is, they are potted to seal sensitive board components from the environment, they are trayed in a tough plastic tray to add rigidity and shock-resistance. Note the locking tabs for key connections to eliminate loosening that can cause electrical failure. These boards receive some of the toughest protection in the industry!



- Features conventional dip encapsulation without the added environmental shielding that potting provides or the extra protection that a rigid plastic tray delivers.

FEATURE	POWER MIG [®] 140 & 180	MILLERMATIC [®] 140 & 180	ADVANTAGE LINCOLN [®]
ARC PERFORMANCE			
Diamond Core Technology™ 	✓ YES!	✗ NO!	Proven arc enhancement technology used in our industrial Power MIG [®] models. Delivers great arc starting, reduced spatter, a wider performance sweet spot and enhanced aluminum and stainless performance.
EASY TO USE			
Comfortable Magnum [®] Gun Design	✓ YES!	✗ NO!	Ergonomic contoured handle provides balance, reduces operator fatigue and offers a sure, confident grip. Natural Grip Trigger position just feels right. 45° gun tube puts less strain on your wrist.
Industry Standard Compatible Gun Consumables	✓ YES!	✗ NO!	It's easy to find compatible gun expendable parts at a distributor near you.
Tool-less Wire Spool Changes	✓ YES!	✗ NO!	Why reach for tools? Save time and aggravation.
Tool-less Polarity Connection	✓ YES!	✗ NO!	New, innovative brass thumbscrews make changing polarity a snap.
Tool-less Split Wire Guides	✓ YES!	✗ NO!	Not only does Lincoln [®] feature tool-less drive roll changes, but also tool-less wire guide servicing as well.
More Specific Welding Procedure Guidance	✓ YES!	✗ NO!	Check the Procedure Chart on the door—Lincoln's [®] helpful instructions are less coarse—so you can dial in exactly the settings you need for your application.
Removable Wire Drive Access Door	✓ YES!	✗ NO!	Easy all-angle access for wire and drive roll changes. No door to prop up.
Full-length Comfortable Carrying Handle	✓ YES!	✗ NO!	Contoured for your grip and easier to carry compared to a conventional swiveling handle.
PROFESSIONAL FEATURES			
Spool Gun Ready	✓ YES!	✗ NO!	Just buy the Magnum [®] 100SG gun and install the switch in minutes. No bulky module requiring separate 115V power is necessary.
Spot Timer Capable	✓ YES!	✗ NO!	No other welder in its class offers an easy to install Spot Timer Kit—Great for tacking and stitch welding on thin materials.
Get More - Do More!	✓ YES!	✗ NO!	Power MIG [®] models ship with more contact tips, gas and gasless nozzles, MIG and flux-cored drive rolls, and 1 spool each of MIG and flux-cored wire.
Integrated Drive Roll, Nozzle and Contact Tip Storage	✓ YES!	✗ NO!	Store all your gun consumables here.
Industrial Ground Clamp Design	✓ YES!	✗ NO!	Lincoln [®] use of a copper conductor strap provides better electrical connection. It also prevents current from passing through the handle for added operator safety.

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FEATURE	LINCOLN POWER MIG [®] 140 & 180	MILLER MILLERMATIC [®] 140 & 180
<p>PRICE COMPARISON Mfg. Suggested List Price (U.S. \$) Welder Package</p> 	<p>K2470-1 Power MIG[®] 140T 120V\$672.00 K2471-1 Power MIG[®] 140C 120V\$735.00</p> <hr/> <p>K2472-1 Power MIG[®] 180T 208-230V ..\$824.00 K2473-1 Power MIG[®] 180C 208-230V ..\$900.00</p> <p style="text-align: center;">Save Up To 10%! </p>	<p>907019 Millermatic[®] 140 115V w/Regulator & Hose\$742.00</p> <hr/> <p>907020 Millermatic[®] 180 230V w/Regulator & Hose\$912.00</p>
<p>Optional Spool Gun Package</p> 	<p>K2470-1 Power MIG 140T\$672.00 K2532-1 Magnum 100SG Spool Gun Kit ..\$199.00 Total\$871.00</p> <hr/> <p>K2471-1 Power MIG 140C\$735.00 K2532-1 Magnum 100SG Spool Gun Kit ..\$199.00 Total\$934.00</p> <hr/> <p>K2472-1 Power MIG 180T\$824.00 K2532-1 Magnum 100SG Spool Gun Kit ..\$199.00 Total\$1023.00</p> <hr/> <p>K2473-1 Power MIG 180C\$900.00 K2532-1 Magnum 100SG Spool Gun Kit ..\$199.00 Total\$1099.00</p> <p style="text-align: center;">Save Up To 40%! </p>	<p>907019 Millermatic[®] 140 115V w/Regulator & Hose\$742.00 195016 SpoolMate 3035 Spool Gun 20 ft. .551.00 043856 SGA 100 SpoolMate Adapter\$275.00 Total\$1,568.00</p> <hr/> <p>907020 Millermatic[®] 180 230V w/Regulator & Hose\$912.00 195016 SpoolMate 3035 Spool Gun 20 ft. .551.00 043856 SGA 100 SpoolMate Adapter\$275.00 Total\$1,738.00</p>

- **More Selection**
- **More Features**
- **Lower Price**

A Better Choice...The Professional's Choice!

The Lincoln Electric Company[®] is an exclusive NASCAR Performance[®] Partner.