

CMI 273i and CMI 300 CONSUMABLE PARTS CATALOG



CMI 273



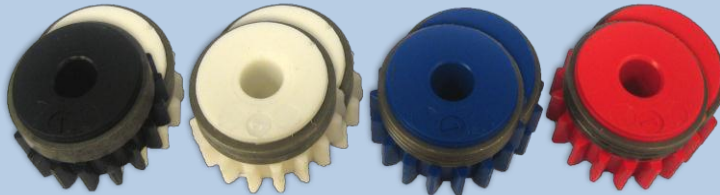
CMI 300 Trio

Please note that some vehicle manufacturers require specific welding wire including: Honda 980 MgP steel using .8 mm ER70S-3, Subaru and Toyota. Please refer to manufacture repair procedures.

Application	Wire Size		Wire Example	Wire Feed Kit	Wire Liner	Contact Tip
	mm	inches				
Aluminum	1.2 mm*	(0.047")	ER5356	73940058 Red U	80160713	80130204
	1.0 mm**	(0.040")	ER4043	73940056 BI U	80160711	80130203
	.9 mm**	(0.035")	ER5356	73940104 Gr U	80160711	80130203
MIG Brazing	.9 mm**	(0.035")	CuSi3	73940104 Gr U	80160711	80130203
	.8 mm**	(0.030")	CuSi3	73940054 Wh V	80160521	80130202
Steel	1.0 mm	(0.040")	ER70S -6	NA-73940055 BI V	80160521	80130203
	0.9 mm	(.035")	ER70S-6	NA-73940103 Gr V	80160521	80130203
	0.8 mm	(0.030")	ER70S -6	73940054 Wh V	80160521	80130202
	0.6 mm	(0.023")	ER70S -6	73940083 BIWh V	80160520	80130201

Color Coded Feed System

The wire feed is color coded to indicate the diameter of the wire it is intended for. Proper tolerances are built into the system. That means there is no need to mix and match parts as you would with some welders; i.e., using a 1.0mm liner with a 1.2mm contact tip. All Feed System parts need to match the wire size.



0.6 mm
0.023"

0.8 mm
0.030"

1.0 mm
0.040"

1.2mm
0.047"



Wire Feed Kit

The internal portion of the Feed System is made up of three parts, the Feed Wheels, the Feed Tube, and the Capillary Tube. These parts can be purchased together as a Feed Kit or individually.



Feed Wheels



Capillary Tube



Feed Tube

Feed Tube

The Feed Tube guides the wire between the two sets of feed wheels.



Capillary Tube

The capillary tube takes the wire from the feed wheels to the wire liner in the torch. The beveled end of the tube extends to where the feed wheels meet and the flat end of the tube butts up against the torch connector. This setup minimizes the possibilities of the wire "bird's nesting".

Feed Wheels

The groove in the Feed Wheel differs depending on the type of wire used. Steel and Stainless Steel are hard wires and use a “V” shaped groove. Aluminum and Bronze are soft wires and require a “U” shaped groove. The “U” shape provides more contact with the wire, thus preventing damage. The Feed Wheels have an indicator molded into them for easy identification. The 0.6mm (0.023”) wire uses two white “V” wheels along with two black flat (no groove) wheels.



Wire Liner

The wire liner extends through the torch and provides the conduit for the wire. Like the wheels, different types of wire require different liners.



Contact Tips

The Contact Tip transfers the welding current to the wire. The torches use a contact tip with a standard M6 thread. Each contact tip is stamped with the sizes of .6 mm through 1.2 mm.

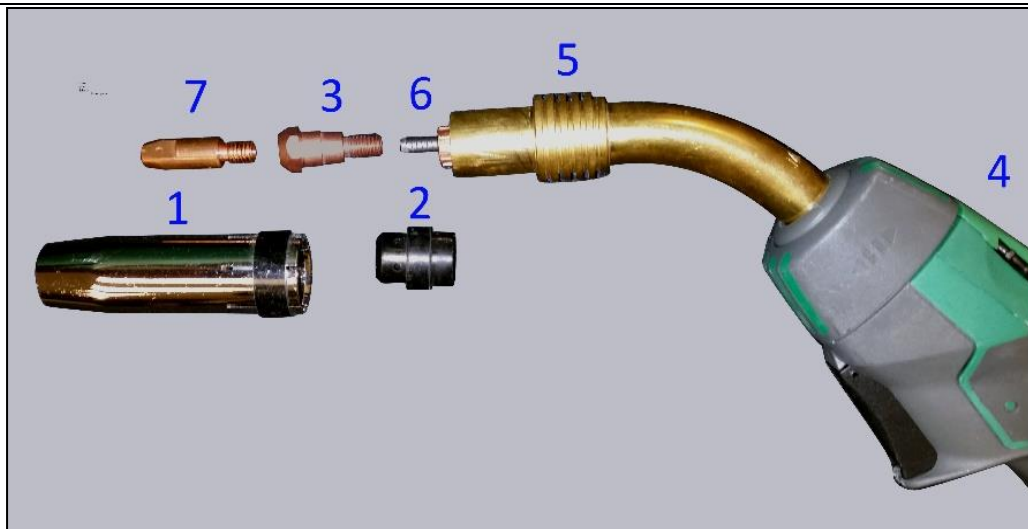
Poor wire tolerance or heat response will affect the operation, therefore using a good quality tip is essential.



Welding Torch

The CMI273i and CMI 300 welders use the ML240 Twist 4 Meter remote torch.





ML240 / PL240 Torch

1	80140610	Gas Nozzle - ML/MV240
2	83077480	Gas Diffuser - ML/MV240
3	83077149	Tip Adaptor - ML/MV240
4	80100402	Remote Module - Dialog - Twist
5	80152402	Swan Neck – ML240 Twist

Wire Liners - 3M or 4M Torches

6	80160520	Wire Liner - 0.6 mm - Steel
	80160521	Wire Liner - 0.8 -1.0 mm - Steel
	80160554	Wire Liner - 0.8 -1.2 mm - Steel/Teflon

Contact Tips

7	80130201	Contact Tip - 0.6 mm - M6
	80130202	Contact Tip - 0.8 mm - M6
	80130203	Contact Tip - 1.0 mm - M6
	80130204	Contact Tip - 1.2 mm - M6
	80131200	Contact Tip - 0.8 mm - M6 - CuCrZr
	80131201	Contact Tip - 1.0 mm - M6 - CuCrZr
	80131202	Contact Tip - 1.2 mm - M6 - CuCrZr