



WarPTM
Motors
ImpulseTM



Motors

TORQUE ABOUT IT!

For over seven years, **NetGain** has teamed with Warfield Electric Company of Frankfort, Illinois, to develop a line of DC electric motors specifically designed for the unusual operational dynamics of an electric vehicle. The result has been the very successful **WarP Motors**. We currently supply **WarP Motors** in 8", 9", 11" and 13" diameters, plus the new **TransWarP Motors**. We also offer **Impulse Motors** in 8" and 9" diameters. These motors offer distinctive standard features on every motor that we feel make it the best choice for an electric vehicle motor in the industry. Some of these features are:

- Specifically designed for street and racing EVs
- High quality, oversize brushes – not “quick-seat”
- Fully 90% plus brush wear-in
- Advanced timing capabilities to maximize performance
- Heavy duty, vibration resistant, stainless steel brush springs
- Interlocking commutator construction
- Dynamically balanced armatures
- Top quality, sealed, steel bearings with high temperature grease
- Motor temperature snap switch
- High efficiency fans
- Insulation that exceeds Class “H” temperature rating
- Best in class patented varnishing process
- High peak motor efficiency
- Hand made in the U.S.A. by experts



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WarP™ Motor Specifications Impulse™

Description	Impulse 8™	WarP 8™	Impulse 9™	WarP 9™	WarP 11™	WarP 13™
CE Shaft, Advanced Timing		00-08218	00-08249 00-08259	00-08219	00-08311	00-08513
CE Shaft, No Advance	203-06-4001A	00-08206		00-08209		00-08413
No CE Shaft, Advanced Timing		00-08210		00-08239		
No CE Shaft, No Advance		00-08200		00-08229		
.750 CE Shaft, No Advance		00-08203				
Diameter	8 inches	8 inches	9.25 inches	9.25 inches	11.45 inches	13.25 inches
Length (case)	14.42 inches	14.42 inches	13.7 inches	15.93 inches	17.027 inches	20.4 inches
Weight	106 lbs.	106 lbs.	129 lbs	156 lbs.	229 lbs.	367 lbs.
Commutator	Silver Interlocking Resin Core, all models					
Armature	3002308203FN	3002308203FN	3002308249FN	300230809FN	3002308311FN	3002308513FN
Springs #	11899400 * 8	11899400 * 8	11880020 * 8	11880020 * 8	11840510 * 8	11805010 * 8
Brushes #	10399300 * 4	10399300 * 4	10327002 * 2	10327002 * 2	10345064 * 4	10345060
Brush Holder	10499500	10499500	10427001	10427001	10440100	10445046
Bearing Type	Steel, Sealed, high temp, all models					
Com Bearing	10222220	10222220	10222140	10222140	10222240	10222240
Drive Bearing	10222130	10222130	10222220	10222220	10222161	10222162
CE Head	10608203	10608203	10627001	10627001	10608311	10640031
DE Head	10908203	10908203	10908249	10908209	10908311	10973250
Field Coil Set	11108203	11108203	11108249	11133001	11145080	11108413
Insulation	>Class "H"	>Class "H"	>Class "H"	>Class "H"	>Class "H"	>Class "H"
Mounting Pattern	WarP 8/ADC 8"	ADC 8"	WarP 8/ADC 8"	ADC 9"	WarP 9/ADC 9"	Foot
DE Length	1.250"	1.250"	1.250"	1.500"	1.500"	4.00"
DE Diameter	1.1250"	1.1250"	1.1250"	1.1250"	1.1250"	1.750"
DE Keyway	0.250" * 0.130"	0.250" * 0.130"	0.250" * 0.130"	0.250" * 0.130"	0.250" * 0.130"	Splined
DE Pilot	3.250" Dia	3.250" Dia	3.250" Dia	4.000" Dia	4.000" Dia	NONE
DE Mounting Hole	5/16 – 18	5/16 – 18	5/16 – 18	5/16 – 18	5/16 – 18	1/2 – 13
CE Length	1.850"	1.850"	2.00"	2.00"	2.00"	2.00"
CE Diameter	0.750" -> 0.875"	0.750" -> 0.875"	0.875"	0.875"	0.875"	Max 1.18"
CE Mounting Hole	¼" – 20	¼" – 20	¼" – 20	¼" – 20	¼" – 20	¼" – 20
Case Steel	1020 or similar	1020 or similar	1020 or similar	1020 or similar	1020 or similar	1020 or similar
Shaft Steel	1144 stress proof	1144 stress proof	1144 stress proof	1144 stress proof	1144 stress proof	Hardened, 1144 stress proof
MSRP	\$1,675	\$1,650	\$1,675	\$1,875	\$3,025	\$5,250

Available from:

Manufactured Exclusively For:

NetGain Motors, Inc.

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