

### 613 Pc. Master Mechanics Hand Tool Set

- Comprehensive 613 piece set mix of mechanics hand tools including drive tools, sockets, bit sockets, wrenches, ratcheting wrenches, pliers and screwdrivers
- 84 tooth full polish chrome ratchets with slim head design provides additional access to hard to reach fasteners
- 72 tooth ratcheting wrenches with a 5° swing arc with off-corner loading design on box end provides better grip and reduces fastener rounding
- Flex head ratcheting wrenches with flex head that tilts up to 180 degrees at any interval
- Reversible ratcheting wrenches with compact reversing lever allows for quick changes without removing ratcheting box end from fastener
- Tri-lobe ergonomic dual material handle Phillips® and slotted screwdrivers for optimal balance of strength and comfort
- Precision engineered hex and ball-end hex bit sockets with bits made of S2 steel for added strength and better fastener fit
- Professional assortment of ergonomic dipped grip handle pliers with tongue and groove, slip joint, lineman's, diagonal, long nose, and end nippers included



Cat. No.	Included Storage	Product Weight
89060	None	167.892 lb



Cat. No.	Description	Cat. No.	Description
81011F	1/4" Drive 84 Tooth Teardrop Ratchet 5"	81278	3/8" Drive 3/8" F x 1/2" M Adapter
81012F	1/4" Drive 84 Tooth Flex Head Teardrop Ratchet 7"	81354	1/2" Drive 1/2" F x 3/8" M Adapter
81027	1/4" Drive 72 Tooth Gimbal Ratchet	9008	1/4" 12 Point Ratcheting Combination Wrench
81211F	3/8" Drive 84 Tooth Teardrop Ratchet 8-1/4"	9010D	5/16" 12 Point Ratcheting Combination Wrench
81215F	3/8" Drive 84 Tooth Flex Head Teardrop Ratchet 11-1/2"	9012D	3/8" 12 Point Ratcheting Combination Wrench
81212F	3/8" Drive 84 Tooth Stubby Flex Head Teardrop Ratchet 5"	9014	7/16" 12 Point Ratcheting Combination Wrench
81270	3/8" Drive 72 Tooth Gimbal Ratchet	9016D	1/2" 12 Point Ratcheting Combination Wrench
81304F	1/2" Drive 84 Tooth Teardrop Ratchet 11"	9018D	9/16" 12 Point Ratcheting Combination Wrench
81306F	1/2" Drive 84 Tooth Flex Head Teardrop Ratchet 17"	9020	5/8" 12 Point Ratcheting Combination Wrench
80100	1/4" Drive Universal Joint	9022	11/16" 12 Point Ratcheting Combination Wrench
80549	3/8" Drive Universal Joint	9024	3/4" 12 Point Ratcheting Combination Wrench
80600D	1/2" Drive Universal Joint	9026D	13/16" 12 Point Ratcheting Combination Wrench
81101	1/4" Drive Extension 2"	9108D	8mm 12 Point Ratcheting Combination Wrench
81113D	1/4" Drive Extension 3"	9109	9mm 12 Point Ratcheting Combination Wrench
81114D	1/4" Drive Extension 4"	9110D	10mm 12 Point Ratcheting Combination Wrench
81116	1/4" Drive Extension 6"	9111	11mm 12 Point Ratcheting Combination Wrench
81118	1/4" Drive Extension 14"	9112	12mm 12 Point Ratcheting Combination Wrench
81240	3/8" Drive Extension 1-1/2"	9113D	13mm 12 Point Ratcheting Combination Wrench
81241	3/8" Drive Extension 3"	9114D	14mm 12 Point Ratcheting Combination Wrench
81242	3/8" Drive Extension 3"	9115D	15mm 12 Point Ratcheting Combination Wrench
81244	3/8" Drive Extension 12"	9116D	16mm 12 Point Ratcheting Combination Wrench
81341	1/2" Drive Extension 5"	9117D	17mm 12 Point Ratcheting Combination Wrench
81342	1/2" Drive Extension 10"	-	5/16" 12 Point Stubby Ratcheting Combination Wrench
81343	1/2" Drive Extension 15"	9500DD	3/8" 12 Point Stubby Ratcheting Combination Wrench
81127	1/4" Drive 1/4" F x 3/8" M Adapter	9501DD	7/16" 12 Point Stubby Ratcheting Combination Wrench
81277	3/8" Drive 3/8" F x 1/4" M Adapter	9502D	1/2" 12 Point Stubby Ratcheting Combination Wrench

Cat. No.	Description	Cat. No.	Description
9503D	9/16" 12 Point Stubby Ratcheting Combination Wrench	81662	7/8" 12 Point Long Pattern Combination Wrench
9504D	5/8" 12 Point Stubby Ratcheting Combination Wrench	81663	15/16" 12 Point Long Pattern Combination Wrench
9510DD	10mm 12 Point Stubby Ratcheting Combination Wrench	81664	1" 12 Point Long Pattern Combination Wrench
9511D	11mm 12 Point Stubby Ratcheting Combination Wrench	81733	1-1/16" 12 Point Long Pattern Combination Wrench
9512D	12mm 12 Point Stubby Ratcheting Combination Wrench	81734	1-1/8" 12 Point Long Pattern Combination Wrench
9513D	13mm 12 Point Stubby Ratcheting Combination Wrench	81735	1-1/4" 12 Point Long Pattern Combination Wrench
9514D	14mm 12 Point Stubby Ratcheting Combination Wrench	81749	1-5/16" 12 Point Long Pattern Combination Wrench
9515D	15mm 12 Point Stubby Ratcheting Combination Wrench	81750	1-1/2" 12 Point Long Pattern Combination Wrench
9526ND	3/8" 12 Point Reversible Ratcheting Combination Wrench	81736	6mm 12 Point Long Pattern Combination Wrench
9527N	7/16" 12 Point Reversible Ratcheting Combination Wrench	81737	7mm 12 Point Long Pattern Combination Wrench
9528N	1/2" 12 Point Reversible Ratcheting Combination Wrench	81665	8mm 12 Point Long Pattern Combination Wrench
9529N	9/16" 12 Point Reversible Ratcheting Combination Wrench	81666	9mm 12 Point Long Pattern Combination Wrench
9530ND	5/8" 12 Point Reversible Ratcheting Combination Wrench	81667	10mm 12 Point Long Pattern Combination Wrench
9531ND	11/16" 12 Point Reversible Ratcheting Combination Wrench	81668	11mm 12 Point Long Pattern Combination Wrench
9532N	3/4" 12 Point Reversible Ratcheting Combination Wrench	81669	12mm 12 Point Long Pattern Combination Wrench
9610N	10mm 12 Point Reversible Ratcheting Combination Wrench	81670	13mm 12 Point Long Pattern Combination Wrench
9612N	12mm 12 Point Reversible Ratcheting Combination Wrench	81671	14mm 12 Point Long Pattern Combination Wrench
9613N	13mm 12 Point Reversible Ratcheting Combination Wrench	81672	15mm 12 Point Long Pattern Combination Wrench
9614N	14mm 12 Point Reversible Ratcheting Combination Wrench	81673	16mm 12 Point Long Pattern Combination Wrench
9615N	15mm 12 Point Reversible Ratcheting Combination Wrench	81674	17mm 12 Point Long Pattern Combination Wrench
9617N	17mm 12 Point Reversible Ratcheting Combination Wrench	81675	18mm 12 Point Long Pattern Combination Wrench
9619N	19mm 12 Point Reversible Ratcheting Combination Wrench	81676	19mm 12 Point Long Pattern Combination Wrench
9706	3/8" 12 Point Flex Ratcheting Combination Wrench	81677	20mm 12 Point Long Pattern Combination Wrench
9707	7/16" 12 Point Flex Ratcheting Combination Wrench	81678	21mm 12 Point Long Pattern Combination Wrench
9708	1/2" 12 Point Flex Ratcheting Combination Wrench	81679	22mm 12 Point Long Pattern Combination Wrench
9709	9/16" 12 Point Flex Ratcheting Combination Wrench	81741	23mm 12 Point Long Pattern Combination Wrench
9710	5/8" 12 Point Flex Ratcheting Combination Wrench	81742	24mm 12 Point Long Pattern Combination Wrench
9711	11/16" 12 Point Flex Ratcheting Combination Wrench	81751	25mm 12 Point Long Pattern Combination Wrench
9712	3/4" 12 Point Flex Ratcheting Combination Wrench	81752	26mm 12 Point Long Pattern Combination Wrench
9910D	10mm 12 Point Flex Ratcheting Combination Wrench	81743	27mm 12 Point Long Pattern Combination Wrench
9912D	12mm 12 Point Flex Ratcheting Combination Wrench	81753	28mm 12 Point Long Pattern Combination Wrench
9913D	13mm 12 Point Flex Ratcheting Combination Wrench	81744	30mm 12 Point Long Pattern Combination Wrench
9914D	14mm 12 Point Flex Ratcheting Combination Wrench	81745D	32mm 12 Point Long Pattern Combination Wrench
9915D	15mm 12 Point Flex Ratcheting Combination Wrench	80105	1/4" Drive 6 Point Standard SAE Socket 3/16"
9917	17mm 12 Point Flex Ratcheting Combination Wrench	80106	1/4" Drive 6 Point Standard SAE Socket 7/32"
9919D	19mm 12 Point Flex Ratcheting Combination Wrench	80107	1/4" Drive 6 Point Standard SAE Socket 1/4"
81650	1/4" 12 Point Long Pattern Combination Wrench	80108	1/4" Drive 6 Point Standard SAE Socket 9/32"
81652D	5/16" 12 Point Long Pattern Combination Wrench	80109	1/4" Drive 6 Point Standard SAE Socket 5/16"
81653	11/32" 12 Point Long Pattern Combination Wrench	80110	1/4" Drive 6 Point Standard SAE Socket 11/32"
81654	3/8" 12 Point Long Pattern Combination Wrench	80111	1/4" Drive 6 Point Standard SAE Socket 3/8"
81655	7/16" 12 Point Long Pattern Combination Wrench	80112	1/4" Drive 6 Point Standard SAE Socket 7/16"
81656	1/2" 12 Point Long Pattern Combination Wrench	80113D	1/4" Drive 6 Point Standard SAE Socket 1/2"
81657	9/16" 12 Point Long Pattern Combination Wrench	80114D	1/4" Drive 6 Point Standard SAE Socket 9/16"
81658	5/8" 12 Point Long Pattern Combination Wrench	80125	1/4" Drive 6 Point Standard Metric Socket 4mm
81659	11/16" 12 Point Long Pattern Combination Wrench	80126	1/4" Drive 6 Point Standard Metric Socket 5mm
81660	3/4" 12 Point Long Pattern Combination Wrench	80127	1/4" Drive 6 Point Standard Metric Socket 5.5mm
81661	13/16" 12 Point Long Pattern Combination Wrench	80128	1/4" Drive 6 Point Standard Metric Socket 6mm

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**243 Pc. 12 Point Mechanics Tool Set** ■ *Continued from previous page*

Cat. No.	Description	Cat. No.	Description
80763	1/2" Drive 12 Point Standard SAE Socket 5/8"	-	3/8" Dr. Hex Bit Socket 5/32"
80764	1/2" Drive 12 Point Standard SAE Socket 11/16"	-	3/8" Dr. Hex Bit Socket 3/16"
80765	1/2" Drive 12 Point Standard SAE Socket 3/4"	-	3/8" Dr. Hex Bit Socket 7/32"
80766	1/2" Drive 12 Point Standard SAE Socket 13/16"	-	3/8" Dr. Hex Bit Socket 1/4"
80767	1/2" Drive 12 Point Standard SAE Socket 7/8"	-	3/8" Dr. Hex Bit Socket 5/16"
80768	1/2" Drive 12 Point Standard SAE Socket 15/16"	-	3/8" Dr. Hex Bit Socket 3/8"
80769	1/2" Drive 12 Point Standard SAE Socket 1"	-	3/8" Dr. Hex Bit Socket 2mm
80770	1/2" Drive 12 Point Standard SAE Socket 1-1/16"	-	3/8" Dr. Hex Bit Socket 2.5mm
80771	1/2" Drive 12 Point Standard SAE Socket 1-1/8"	-	3/8" Dr. Hex Bit Socket 3mm
80793	1/2" Drive 12 Point Standard SAE Socket 1-3/16"	-	3/8" Dr. Hex Bit Socket 4mm
80794	1/2" Drive 12 Point Standard SAE Socket 1-1/4"	-	3/8" Dr. Hex Bit Socket 5mm
80680	1/2" Drive 12 Point Standard SAE Socket 1-1/2"	-	3/8" Dr. Hex Bit Socket 6mm
80745	1/2" Drive 12 Point Standard Metric Socket 10mm	-	3/8" Dr. Hex Bit Socket 7mm
80746	1/2" Drive 12 Point Standard Metric Socket 11mm	-	3/8" Dr. Hex Bit Socket 8mm
80747	1/2" Drive 12 Point Standard Metric Socket 12mm	-	3/8" Dr. Hex Bit Socket 9mm
80748D	1/2" Drive 12 Point Standard Metric Socket 13mm	-	3/8" Dr. Hex Bit Socket 10mm
80749	1/2" Drive 12 Point Standard Metric Socket 14mm	-	3/8" Nutdriver Bit
80750	1/2" Drive 12 Point Standard Metric Socket 15mm	-	3/16" Nutdriver Bit
80751	1/2" Drive 12 Point Standard Metric Socket 16mm	-	1/4" Nutdriver Bit
80752	1/2" Drive 12 Point Standard Metric Socket 17mm	-	5/16" Nutdriver Bit
80753	1/2" Drive 12 Point Standard Metric Socket 18mm	-	11/32" Nutdriver Bit
80754	1/2" Drive 12 Point Standard Metric Socket 19mm	-	7/16" Nutdriver Bit
80755D	1/2" Drive 12 Point Standard Metric Socket 20mm	-	1/2" Nutdriver Bit
80756	1/2" Drive 12 Point Standard Metric Socket 21mm	-	5mm Nutdriver Bit
80757	1/2" Drive 12 Point Standard Metric Socket 22mm	-	6mm Nutdriver Bit
80758	1/2" Drive 12 Point Standard Metric Socket 23mm	-	7mm Nutdriver Bit
80759	1/2" Drive 12 Point Standard Metric Socket 24mm	-	8mm Nutdriver Bit
80402	3/8" Drive 6 Point 2-1/2" Spark Plug Socket 5/8"	-	9mm Nutdriver Bit
80403	3/8" Drive 6 Point 2-1/2" Spark Plug Socket 13/16"	-	10mm Nutdriver Bit
-	30 Pc. Bit Set with Box	-	11mm Nutdriver Bit

**239 Pc. 1/4", 3/8", and 1/2" Dr. 6 and 12 Point SAE/Metric Mechanics Tool Set**

- Full polish chrome SAE and metric 1/4", 3/8" and 1/2" standard sockets, and 1/4" and 3/8" deep sockets
- 45 tooth quick release full polish chrome teardrop ratchets, with flush-mounted on/off lever
- Contains 12 point full polish long pattern combination wrenches and sockets
- Combination wrenches feature a 15° offset box end for added knuckle clearance
- Sockets and wrenches feature off-corner loading design to reduce fastener rounding
- SAE and metric long arm hex keys
- Magnetic bit driver with 9 bits including Torx®, slotted and Phillips®
- Extension bars feature a knurled grip, providing a non slip surface
- 3 drawer storage box with independent sliding drawers, locking side flaps, a steel hinged lid and a durable handle
- Meets or exceeds ASME specifications



Cat. No.	Included Storage	Product Weight
80942	3 Drawer Storage Box	41.7 lb



Cat. No.	Description	Cat. No.	Description
81014	1/4" Drive 45 Tooth Quick Release Teardrop Ratchet 5-1/2"	81668	11mm 12 Point Long Pattern Combination Wrench
81218	3/8" Drive 45 Tooth Quick Release Teardrop Ratchet 7-3/4"	81669	12mm 12 Point Long Pattern Combination Wrench
81309	1/2" Drive 45 Tooth Quick Release Teardrop Ratchet 9-1/2"	81670	13mm 12 Point Long Pattern Combination Wrench
82783	1/4" Magnetic Bit Holding Screwdriver Handle	81671	14mm 12 Point Long Pattern Combination Wrench
81101	1/4" Drive Extension 2"	81672	15mm 12 Point Long Pattern Combination Wrench
81113D	1/4" Drive Extension 3"	81673	16mm 12 Point Long Pattern Combination Wrench
81116	1/4" Drive Extension 6"	81674	17mm 12 Point Long Pattern Combination Wrench
81241	3/8" Drive Extension 3"	81675	18mm 12 Point Long Pattern Combination Wrench
81242	3/8" Drive Extension 6"	81676	19mm 12 Point Long Pattern Combination Wrench
81340	1/2" Drive Extension 3"	80104D	1/4" Drive 6 Point Standard SAE Socket 5/32"
81341	1/2" Drive Extension 5"	80105	1/4" Drive 6 Point Standard SAE Socket 3/16"
56603G	13 Piece Long Arm SAE Hex Key Set	80106	1/4" Drive 6 Point Standard SAE Socket 7/32"
56606G	9 Piece Long Arm Metric Hex Key Set	80107	1/4" Drive 6 Point Standard SAE Socket 1/4"
81650	1/4" 12 Point Long Pattern Combination Wrench	80108	1/4" Drive 6 Point Standard SAE Socket 9/32"
81652D	5/16" 12 Point Long Pattern Combination Wrench	80109	1/4" Drive 6 Point Standard SAE Socket 5/16"
81653	11/32" 12 Point Long Pattern Combination Wrench	80110	1/4" Drive 6 Point Standard SAE Socket 11/32"
81654	3/8" 12 Point Long Pattern Combination Wrench	80111	1/4" Drive 6 Point Standard SAE Socket 3/8"
81655	7/16" 12 Point Long Pattern Combination Wrench	80112	1/4" Drive 6 Point Standard SAE Socket 7/16"
81656	1/2" 12 Point Long Pattern Combination Wrench	80113D	1/4" Drive 6 Point Standard SAE Socket 1/2"
81657	9/16" 12 Point Long Pattern Combination Wrench	80114D	1/4" Drive 6 Point Standard SAE Socket 9/16"
81658	5/8" 12 Point Long Pattern Combination Wrench	80115	1/4" Drive 6 Point Deep SAE Socket 3/16"
81659	11/16" 12 Point Long Pattern Combination Wrench	80116D	1/4" Drive 6 Point Deep SAE Socket 7/32"
81660	3/4" 12 Point Long Pattern Combination Wrench	80117	1/4" Drive 6 Point Deep SAE Socket 1/4"
81736	6mm 12 Point Long Pattern Combination Wrench	80118	1/4" Drive 6 Point Deep SAE Socket 9/32"
81737	7mm 12 Point Long Pattern Combination Wrench	80119	1/4" Drive 6 Point Deep SAE Socket 5/16"
81665	8mm 12 Point Long Pattern Combination Wrench	80120D	1/4" Drive 6 Point Deep SAE Socket 11/32"
81666	9mm 12 Point Long Pattern Combination Wrench	80121	1/4" Drive 6 Point Deep SAE Socket 3/8"
81667	10mm 12 Point Long Pattern Combination Wrench		

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### 12 Point Long Pattern Combination Wrenches

- 15° offset for better access in tight spaces
- Off-corner loading design on box end provides better grip and reduces fastener rounding
- Long pattern beam length for improved reach, leverage and torque
- Hard stamped size marking
- Manufactured from alloy steel for better strength and longer tool life
- Bright, full polish chrome finish easily wipes clean and resists corrosion
- Meets or exceeds ASME specifications



Cat. No.	SAE/Metric	Fastener Size	End A Width	End A Thickness	End B Width	End B Thickness	Overall Length	Product Weight
81650	SAE	1/4 in	0.52 in	0.161 in	0.449 in	0.197 in	5.09 in	0.07 lb
81651D	SAE	9/32 in	0.567 in	0.169 in	0.484 in	0.209 in	5.44 in	0.09 lb
81652D	SAE	5/16 in	0.654 in	0.177 in	0.535 in	0.217 in	5.8 in	0.09 lb
81653	SAE	11/32 in	0.728 in	0.185 in	0.583 in	0.244 in	6.22 in	0.11 lb
81654	SAE	3/8 in	0.807 in	0.213 in	0.634 in	0.272 in	6.54 in	0.13 lb
81655	SAE	7/16 in	0.894 in	0.236 in	0.685 in	0.295 in	7.29 in	0.18 lb
81656	SAE	1/2 in	1.051 in	0.252 in	0.78 in	0.335 in	8.11 in	0.24 lb
81657	SAE	9/16 in	1.138 in	0.276 in	0.846 in	0.366 in	8.74 in	0.26 lb
81658	SAE	5/8 in	1.291 in	0.303 in	0.941 in	0.413 in	9.52 in	0.38 lb
81659	SAE	11/16 in	1.382 in	0.319 in	1.016 in	0.433 in	10.23 in	0.49 lb
81660	SAE	3/4 in	1.551 in	0.362 in	1.098 in	0.476 in	10.972 in	0.53 lb
81661	SAE	13/16 in	1.701 in	0.39 in	1.201 in	0.52 in	11.827 in	0.73 lb
81662	SAE	7/8 in	1.783 in	0.406 in	1.264 in	0.539 in	12.52 in	0.82 lb
81663	SAE	15/16 in	1.945 in	0.429 in	1.327 in	0.579 in	13.252 in	1.04 lb
81664	SAE	1 in	2.024 in	0.445 in	1.398 in	0.598 in	14.035 in	1.15 lb
81733	SAE	1-1/16 in	2.22 in	0.469 in	1.531 in	0.65 in	14.75 in	1.43 lb
81734	SAE	1-1/8 in	2.469 in	0.5 in	1.685 in	0.697 in	16 in	1.85 lb
81815	SAE	1-3/16 in	2.467 in	.49 in	1.76 in	.74 in	16.22 in	1.610 lb
81735	SAE	1-1/4 in	2.634 in	0.524 in	1.811 in	0.724 in	16 in	2.18 lb
81749	SAE	1-5/16 in	3.102 in	0.61 in	2.185 in	0.925 in	18.74 in	2.22 lb
81816	SAE	1-3/8 in	2.81 in	.53 in	2.05 in	.87 in	19.96 in	2.870 lb
81817	SAE	1-7/16 in	3.031 in	.626 in	2.146 in	.866 in	21.102 in	3.340 lb
81750	SAE	1-1/2 in	3.102 in	0.61 in	2.185 in	0.925 in	19.72 in	2.25 lb
81736	Metric	6 mm	0.52 in	0.161 in	0.449 in	0.197 in	5.094 in	0.07 lb
81737	Metric	7 mm	0.567 in	0.169 in	0.484 in	0.209 in	5.445 in	0.07 lb
81665	Metric	8 mm	0.654 in	0.177 in	0.535 in	0.217 in	5.799 in	0.09 lb
81666	Metric	9 mm	0.728 in	0.185 in	0.583 in	0.244 in	6.22 in	0.11 lb
81667	Metric	10 mm	0.807 in	0.213 in	0.634 in	0.272 in	6.543 in	0.13 lb
81668	Metric	11 mm	0.894 in	0.236 in	0.685 in	0.295 in	7.291 in	0.18 lb
81669	Metric	12 mm	0.969 in	0.244 in	0.728 in	0.327 in	7.736 in	0.18 lb
81670	Metric	13 mm	1.051 in	0.252 in	0.78 in	0.335 in	8.114 in	0.30 lb
81671	Metric	14 mm	1.138 in	0.276 in	0.846 in	0.366 in	8.74 in	0.32 lb
81672	Metric	15 mm	1.213 in	0.291 in	0.89 in	0.39 in	9.134 in	0.35 lb
81673	Metric	16 mm	1.291 in	0.303 in	0.941 in	0.413 in	9.524 in	0.40 lb
81674	Metric	17 mm	1.382 in	0.319 in	1.016 in	0.433 in	10.232 in	0.43 lb
81675	Metric	18 mm	1.461 in	0.339 in	1.047 in	0.453 in	10.602 in	0.49 lb
81676	Metric	19 mm	1.55 in	0.36 in	1.08 in	0.472 in	10.97 in	0.54 lb
81677	Metric	20 mm	1.65 in	0.381 in	1.11 in	0.491 in	11.4 in	0.62 lb
81678	Metric	21 mm	1.7 in	0.4 in	1.14 in	0.51 in	11.83 in	0.68 lb

Cat. No.	SAE/Metric	Fastener Size	End A Width	End A Thickness	End B Width	End B Thickness	Overall Length	Product Weight
81679	Metric	22 mm	1.783 in	0.406 in	1.264 in	0.539 in	12.52 in	0.69 lb
81741	Metric	23 mm	1.87 in	0.417 in	1.287 in	0.559 in	12.752 in	0.99 lb
81742	Metric	24 mm	1.945 in	0.429 in	1.327 in	0.579 in	13.252 in	1.00 lb
81751	Metric	25 mm	2.024 in	0.445 in	1.398 in	0.598 in	14.035 in	1.10 lb
81752	Metric	26 mm	2.138 in	0.449 in	1.472 in	0.622 in	14.331 in	1.12 lb
81743	Metric	27 mm	2.22 in	0.469 in	1.531 in	0.65 in	14.752 in	1.38 lb
81753	Metric	28 mm	2.469 in	0.5 in	1.685 in	0.697 in	16 in	1.89 lb
81809	Metric	29 mm	2.343 in	.469 in	1.665 in	.673 in	15.394 in	1.610 lb
81744	Metric	30 mm	2.555 in	0.524 in	1.685 in	0.724 in	17 in	2.12 lb
81745D	Metric	32 mm	2.634 in	0.524 in	1.811 in	0.724 in	17.362 in	2.13 lb

### 12 Point Long Pattern Satin Combination Wrenches

- 15° offset for better access in tight spaces
- Off-corner loading design on box end provides better grip and reduces fastener rounding
- Long pattern beam length for improved reach, leverage and torque
- Hard stamped size marking
- Manufactured from alloy steel for better strength and longer tool life
- Satin finish for corrosion protection and simple cleaning
- Meets or exceeds ASME specifications



Cat. No.	SAE/Metric	Fastener Size	End A Width	End A Thickness	End B Width	End B Thickness	Overall Length	Product Weight
81818	SAE	1-5/8 in	3.402 in	.673 in	2.425 in	.957 in	24.094 in	4.310 lb
81819	SAE	1-11/16 in	3.402 in	0.673 in	2.425 in	0.957 in	24.094 in	4.310 lb
81820	SAE	1-3/4 in	3.689 in	0.776 in	2.618 in	0.976 in	25.551 in	5.150 lb
81821	SAE	1-13/16 in	3.689 in	0.776 in	2.618 in	0.976 in	25.551 in	5.150 lb
81822	SAE	1-7/8 in	3.9 in	0.75 in	2.76 in	1.06 in	27.09 in	8.800 lb
81823	SAE	2 in	4.02 in	0.75 in	2.87 in	1.06 in	27.13 in	8.360 lb
81824	SAE	2-1/16 in	4 in	0.75 in	2.87 in	1.06 in	27.09 in	7.920 lb
81825	SAE	2-1/8 in	4.409 in	0.843 in	3.169 in	1.126 in	27.795 in	8.050 lb
81826	SAE	2-3/16 in	4.409 in	0.843 in	3.169 in	1.126 in	27.795 in	8.050 lb
81827	SAE	2-1/4 in	4.409 in	0.843 in	3.169 in	1.126 in	27.795 in	11.550 lb
81828	SAE	2-3/8 in	4.992 in	0.937 in	3.665 in	1.319 in	29.843 in	11.550 lb
81829	SAE	2-1/2 in	4.992 in	0.937 in	3.665 in	1.319 in	29.843 in	11.550 lb
81830	SAE	2-9/16 in	5.43 in	1 in	4.06 in	1.48 in	31.89 in	21.560 lb
81831	SAE	2-5/8 in	5.43 in	1 in	4.02 in	1.5 in	31.89 in	21.120 lb
81832	SAE	2-3/4 in	5.39 in	1 in	4.06 in	1.5 in	31.89 in	20.680 lb
81840	Metric	36 mm	2.81 in	.53 in	2.01 in	.85 in	19.96 in	2.420 lb
81841	Metric	41 mm	3.402 in	0.673 in	2.425 in	0.957 in	24.094 in	4.310 lb
81842	Metric	46 mm	3.689 in	0.776 in	2.618 in	0.976 in	25.551 in	5.150 lb
81843	Metric	50 mm	3.9 in	0.75 in	2.87 in	1.06 in	26.97 in	7.480 lb
81844	Metric	55 mm	4.409 in	0.843 in	3.169 in	1.126 in	27.795 in	8.050 lb
81845	Metric	60 mm	4.992 in	0.937 in	3.665 in	1.319 in	29.843 in	11.550 lb
81846	Metric	65 mm	5.47 in	1 in	4.06 in	1.5 in	31.89 in	20.240 lb
81847	Metric	70 mm	5.39 in	1 in	4.06 in	1.5 in	31.89 in	19.800 lb