

TOOLS UNLIMITED

PRESENTS

A PREMIUM HAND TOOL LINE

EQUIVELANT TO

PROTO SK ARMSTRONG

But WITHOUT THE HIGH PRICE

URREA

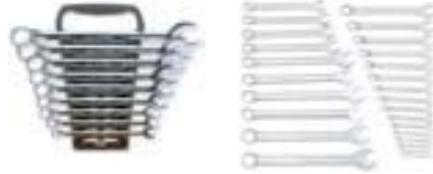
PROFESSIONAL TOOLS

URREA

MECHANICAL WRENCHES

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URREA offers one of the most extensive lines of mechanical wrenches of the highest quality for automotive maintenance and repair work, as well as for operation work in the production, extraction and assembly industries.

Mechanical wrenches are used for tightening or loosening nuts, screws and other fasteners where the application of force or torque is necessary. All of these types of wrenches come in the form of double hexagon (12 points), hexagonal (6 points) or open-ended wrenches. These wrenches are particularly useful in applications where fasteners are in spaces or areas where access is not limited, such as automobile engines, internal areas of machinery, structures, the petroleum industry and similar applications. This makes URREA mechanical wrenches indispensable tools for industry and automotive service.

URREA also offers specialty tools with specific functions, such as installing or removing screws from engine covers and rapidly removing or tightening nuts or screws with hexagonal heads. The wrenches presented in this chapter are called mechanical because they are operated manually and do not require the use of accessories.

When you need to apply a specific tightening force or torque pressure, consult our industrial wrench section in the next chapter. When controlled torque tension is required, sockets work in conjunction with torque measurement and torque multiplier tools such as those presented in chapter 7.



- Present a wide variety of manual action shapes and designs.
- Grouped and combined in more than 50 sets presented in practical rack and blister cases that allow them to be transported and kept organized.
 - Manufactured from steel micro-alloyed with high-quality chrome-molybdenum, hot forged for greater durability. Precision machined and heat-treated to provide the best combination of hardness, tensile strength and torsion resistance.
- Mechanical wrench ends incorporate the SUPER DRIVE® design to make them even more efficient and safe.
 - All URREA mechanical wrenches have a rugged nickel-chrome finish for corrosion resistance. For DOE applications, black finished wrenches are recommended to avoid loss of chrome finish.
 - Comply with national and international, American and European standards.
 - The image of quality is reinforced by stamping each tool permanently and indelibly with the country of origin. This country of origin stamp complies with ASME / ANSI standards and the regulations of the Federal Trade Commission of the United States of America.

- These are the only tools to comply with the Federal Metrology and Standardization Law of the United Mexican States, establishing that if measurements are given in inches, the metric system equivalent must also be shown.

URREA Mechanical Wrenches:

- Offer a very wide variety with around 242 mechanical wrenches.
 - In short (standard) and long configurations.
 - Open-ended, hexagonal (6 point) or double hexagon (12 point), and box-end.
 - Combination.
 - Ratcheting.
 - 15 and 45-degree box-end.
 - Flare nut.
 - Obstruction.
 - Chrome adjustable.
 - In inch and metric system sizes.
 - Sizes from 1/4" to 4" and 6mm to 80mm.

The information presented in this chapter is organized in the following manner:

- **Technical standards.**
- **Super Drive design.**
- **Manufacturing process.**
- **Rapid selection guide.**
- **Detailed product specifications.**
- **Safety recommendations.**

MECHANICAL WRENCH VARIETY AND CODE GUIDE

			SIZE RANGES MAXIMUM JAW OPENING	
	7XXPG	Adjustable chrome wrenches Super Duty with Rubber Grip handle	1 5/16"	to 1 1/2"
	7XXG	Adjustable chrome wrenches with Rubber Grip handle	1/2"	to 2 7/16"
	7XXP	Adjustable chrome wrenches Super Duty	1 5/16"	to 1 1/2"
	7XX	Adjustable chrome wrenches	1/2"	to 2 7/16"
			SIZE RANGES	
	12XXCM	Standard ratcheting combination wrenches	5/16"	to 3/4"
	12XXMCM	Metric ratcheting combination wrenches	8mm	to 18mm
	12XX	Standard combination wrenches	1/4"	to 4"
	12XXM	Metric combination wrenches	6mm	to 80mm
	12XXT	Short standard combination wrenches	1/4"	to 3/4"
	12XXMT	Short metric combination wrenches	6mm	to 19mm
	30XX	Standard open-end wrenches	3/16" x 1/4"	to 1 7/8" x 2"
	3XXXX	Metric open-end wrenches	6mm x 7mm	to 36mm x 41mm
	118X	Standard offset ratcheting box-end wrenches, 12 point	1/4" x 5/16"	to 3/4" x 7/8"
	118XM	Metric offset ratcheting box-end wrenches, 6 point	7mm x 8mm	to 13mm x 14mm
	118XM	Metric offset ratcheting box-end wrenches, 12 point	15mm x 17mm	to 19mm x 21mm
	119X	Ratcheting box-end wrenches, 6 point	1/4" x 5/16"	to 3/4" x 7/8"
	119XM	Metric ratcheting box-end wrenches, 6 point	7mm x 8mm	to 13mm x 14mm
	119XM	Metric ratcheting box-end wrenches, 12 point	15mm x 17mm	to 19mm x 21mm
	1180	Refrigeration box-end ratchet wrench in inches 4 square openings	1/4" x 13/16"	and 3/8" x 5/16"
	11XX	Standard box-end wrenches, 15°	15/16" x 3/8"	to 1 5/8" x 1 11/16"
	11XXM	Metric box-end wrenches, 15°	8mm x 9mm	to 30mm x 32mm
	81XX	Standard box-end wrenches, 45°	3/8" x 7/16"	to 1 1/16" x 1 1/8"
	8XXXX	Metric box-end wrenches, 45°	9mm x 11mm	to 24mm x 26mm
	38XX	Ratcheting flare nut wrenches	3/8"	to 1"
	37XX	Standard flare nut wrenches	3/8" x 7/16"	to 5/8" x 11/16"
	37XXM	Metric flare nut wrenches	9mm x 11mm	to 16mm x 18mm
	17XX	Standard obstruction wrenches	7/16" x 1/2"	to 5/8" x 3/4"
	171XXX	Metric obstruction wrenches	10mm x 12mm	to 16mm x 19mm

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EXPLANATORY GUIDE FOR ICONOGRAPHY

- 12-point opening (double hexagon) in inches
- 12-point opening (double hexagon) in millimeters
- 6-point opening (hexagonal) in inches
- 6-point opening (hexagonal) in millimeters
- 12-point opening (double hexagon)

- 6-point opening (hexagonal)
- 12-point opening (double hexagon), 15° angle
- 12-point opening (double hexagon), 45° angle
- Open-end, in inches
- Open-end, in millimeters
- Ratcheting box-end

- Metal box
- Plastic box
- Packing material
- Plastic socket insert
- Adjustable wrench end

- Rail and clips
- Metal tray
- Cardboard box
- Pouch
- Rack

- SUPER DRIVE**
- SHORT** Short wrenches
- RUBBER GRIP**
- A = Full polish Conventional Design
- B = Satin Finish Conventional Design
- C = Satin Finish Round Handle

URREA manufactures tools in accordance with product technical standards.

A product technical standard is a document that specifies design and manufacturing guidelines in order to ensure adequate product performance.

The only organization to issue international standards is known as ISO (International Organization for Standardization), which develops the ISO 9000 series regarding quality systems, but it also issues product technical standards. In the United States, various associations issue or have issued standards, such as GSA/US FEDERAL, ASME, ANSI and SAE, and in Europe, the DIN (DIN – Deutsches Institut für Normung e.V.), the German Institute for Standardization, groups different organizations and commissions dedicated to promoting standardization and quality in products marketed in Germany.

The Federal standards for hand tools are no longer being updated and are being taken over by ASME, and the same thing is occurring with standards that used to be issued by ANSI.

Currently, ASME standards for hand tools are initially reviewed by committees made up of different tool manufacturers, users and marketers, and subsequently approved and issued by ASME.

SAE standards (especially those applicable to the aerospace industry) are very strict, usually demanding tools with smaller dimensions and greater strength.

STANDARDS APPLICABLE TO MECHANICAL WRENCHES



Deutsches Institut für Normung e.V.

- DIN3111:1982-11 “Box wrenches, single end; test torques series A”
- DIN3113:1984-11 “Combination wrenches with equal openings; test torque series A and C”
- DIN3117:1988-05 “Adjustable wrenches, open end”



American National Standards Institute

- B107.39M “Open E40 Wrenches”
- B107.40M “Flare Nut Wrenches”
- B107.9M “Box End Wrenches”
- B107.6M “Wrenches, combination (inch and metric series)”
- B107.8M “Wrenches, Adjustable”
- B107.17M “Gages, Wrench openings, reference”



International Organization for Standardization

- ISO 1085 “Assembly tools for screws and nuts – Double-ended wrenches – Size pairing”
- ISO 6787 “Assembly tools for screws and nuts – adjustable wrenches”
- ISO 7738 “Assembly tools for screws and nuts – Combination wrenches – Lengths of wrenches and maximum thickness of heads”
- ISO 10103 “Assembly tools for screws and nuts – Double-headed, flat and offset, box wrenches – length of wrenches and thickness of the heads”
- ISO 10104 “Assembly tools for screws and nuts – Attachments for hand-Double-headed, deep offset and modified offset, box wrenches – length of wrenches and thickness of the heads”



- AS954 “Wrenches, Hand, Twelve point, high strength, thin wall”



- GGG-636 “Wrenches (Box, open, and combination)”
- GGG-1405 “Wrench, box (Ratcheting)”
- GGG-631b “Wrenches, adjustable; Open-end, Auto And Monkey”
- GGG-1437 “Wrench, socket an box end”
- GGG-345 “Gages, Wrench Opening”

SPECIFICATIONS FOR THE DESIGN AND MANUFACTURE OF MECHANICAL WRENCHES

One relevant aspect of compliance with ASME standard B 107.6 regarding mechanical wrenches is marking, because it is through this process that a tool can be identified by the user, and supported and guaranteed by the manufacturer.

ASME Marking B107.6, B107.8M, B107.9

“Wrenches shall be marked on each side with their respective nominal size nearest the ends in a permanent manner with the name of the manufacturer or seller. The brand and the country of origin should be marked in a legible and permanent manner.”

Furthermore, in Mexico, the FEDERAL METROLOGY AND STANDARDIZATION LAW states in articles 5 and 6:

Article 5. In the United Mexican States, the legal and mandatory units of measurement are those of the General System of Measurement Units. (DECIMAL METRIC SYSTEM).

Article 6. As an exception, the Secretary may authorize the use of measurement units from other systems when it is related to foreign countries that have not adopted the same system.

For this reason, URREA tools are marked using both the decimal metric system and the English system, since both systems of units are used internationally



CALCULATION OF WRENCH END OPENINGS ASME B107.17M

To ensure that wrench end openings are the proper size to fit the nuts they will be used on, the wrenches are inspected during the production process using the GO, NO GO system.

The GO is the minimum correct measurement for a wrench; to test this measurement, tempered steel hexagons called GAUGES are manufactured according to the nominal size of the wrench end to be manufactured, and should fit freely into the wrench end; if the smallest sized gauge does not fit into the wrench end, it indicates that the wrench end is smaller than the correct minimum size, and it is rejected.

The NO-GO is the maximum correct measurement for a wrench; to test this measurement, a GAUGE with the maximum measurement is manufactured, which should not fit into the wrench end, because this would indicate that the wrench end is larger than the correct maximum size, and it would be rejected.

To determine the GO and NO-GO of the Gauge, “C” (measurement between planes) as a function of “W” (nominal size). The following formulas are used where GO and NO-GO are applicable.

Formula for calculating GO in inches:

$$C = W + (0.005W + 0.001) + (0.005W - 0.004) + 0.0003$$

	+0.0000
Tolerance	-0.0002

C = measurement between GO planes on the GAUGE W = nominal wrench size

Formula for calculating NOGO in inches:

$$C = W + (0.005W + 0.001) + (0.005W + 0.004) + 0.0005$$

	+0.0000
Tolerance	-0.0002

C = measurement between GO planes on the GAUGE W = nominal wrench size

Formula for calculating GO in millimeters:

$$C = W + (0.005W + 0.025) + (0.005W + 0.102) + 0.008$$

	+0.0000
Tolerance	-0.0006

C = measurement between GO planes on the GAUGE W = nominal wrench size

Formula for calculating NOGO in millimeters:

$$C = W + (0.005W + 0.025) + (0.005W + 0.102) + 0.013$$

	+0.0000
Tolerance	-0.0006

C = measurement between GO planes on the GAUGE W = nominal wrench size

“W” = Nominal GAUGE Size



“GO” GAUGE

“NOGO” GAUGE

Example:

Calculate the GO and NO-GO measurements for the 1/2” GAUGE

First, we’re going to convert the fraction into decimal notation in order to use thousandths of an inch:

$$1/2” = 0.500 \text{ thousandths of an inch.}$$

Using the corresponding formula, we calculate the following:

GO 1/2”

$$C = 0.500 + [(0.005 \times 0.500) + 0.001] + [(0.005 \times 0.500) - 0.004] + 0.0003$$

$$C = 0.500 + [(0.0025 + 0.001) + (0.0025 - 0.004)] + 0.0003$$

$$C = 0.500 + [0.0035 - 0.0015] + 0.0003$$

$$C = 0.500 + 0.002 + 0.0003$$

$$C = 0.5023”$$

NO GO 1/2”

$$C = 0.500 + [(0.005 \times 0.500) + 0.001] + [(0.005 \times 0.500) + 0.004] + 0.0005$$

$$C = 0.500 + [(0.0025 + 0.001) + (0.0025 + 0.004)] + 0.0005$$

$$C = 0.500 + [0.0035 + 0.0065] + 0.0005$$

$$C = 0.500 + 0.0100 + 0.0005$$

$$C = 0.5105”$$

GO 12mm

$$C = 12 + [(0.005 \times 12) + 0.025] + [(0.005 \times 12) - 0.102] + 0.0008$$

$$C = 12 + [(0.06 + 0.025) + (0.06 - 0.102)] + 0.0008$$

$$C = 12 + [0.085 - 0.042] + 0.0008$$

$$C = 12 + 0.043 + 0.0008$$

$$C = 12.05mm$$

NO GO 12mm

$$C = 12 + [(0.005 \times 12) + 0.025] + [(0.005 \times 12) + 0.102] + 0.0008$$

$$C = 12 + [(0.06 + 0.025) + (0.06 + 0.102)] + 0.0008$$

$$C = 12 + [0.085 + 0.162] + 0.0008$$

$$C = 12 + 0.247 + 0.0008$$

$$C = 12.25mm$$

REFERENCE GUIDE FOR SELECTING A WRENCH IN INCHES BASED ON THE NOMINAL SIZE OF THE NUT OR BOLT HEAD IN INCHES

BOLTS AND NUTS FOR STANDARD SOCKETS AND WRENCHES

WRENCH		BOLT		NUT		
NOMINAL SIZE OF SOCKET OR WRENCH		NOMINAL BOLT	NOMINAL HEAVY-DUTY BOLT	NOMINAL HEAVY-DUTY	NOMINAL HEAVY-DUTY	NOMINAL SLOTTED
fractions	decimals	DIAMETER	DIAMETER	SQUARE NUT DIAMETER	HEXAGONAL NUT DIAMETER	NUT DIAMETER
1/8	0.1250	**	**	**	**	**
5/32	0.1562	**	**	**	**	**
3/16	0.1875	**	**	**	**	**
1/4	0.2500	**	**	**	**	**
9/32	0.2812	**	**	**	**	**
5/16	0.3125	**	**	**	**	**
11/32	0.3437	**	**	**	**	**
3/8	0.3750	1/4	**	**	**	**
7/16	0.4375	1/4	**	**	**	**
1/2	0.5000	5/16	**	1/4	1/4	5/16
9/16	0.5625	3/8	**	5/16	5/16	3/8
5/8	0.6250	7/16	**	3/8	**	3/8
11/16	0.6875	**	**	3/8	3/8	7/16
3/4	0.7500	1/2	**	7/16	7/16	1/2
13/16	0.8125	9/16	**	1/2	**	**
7/8	0.8750	**	1/2	1/2	1/2	9/16
15/16	0.9375	5/8	**	**	9/16	5/8
1	1.0000	**	**	5/8	**	**
1 1/16	1.0625	**	5/8	5/8	5/8	**
1 1/8	1.1250	3/4	**	3/4	**	3/4
1 1/4	1.2500	**	3/4	3/4	3/4	**
1 5/16	1.3125	7/8	**	7/8	**	7/8
1 3/8	1.3750	**	**	**	**	**
1 7/16	1.4375	**	7/8	7/8	7/8	**
1 1/2	1.5000	**	**	1	**	1
1 5/8	1.6250	**	1	1	1	**
1 11/16	1.6875	1 1/8	**	1 1/8	**	1 1/2
1 13/16	1.8125	**	1 1/8	1 1/8	1 1/8	**
1 7/8	1.8750	1/14	**	1 1/4	**	1 1/4
2	2.0000	**	1 1/4	1 1/4	1 1/4	**
2 1/16	2.0625	1 3/8	**	1 3/8	**	1 3/8
2 3/16	2.1875	**	1 3/8	1 3/8	1 3/8	**
2 1/4	3.2500	1 1/2	**	1 1/2	**	1 1/2
2 3/8	2.3750	**	1 1/2	1 1/2	1 1/2	**
2 7/16	2.4375	1 5/8	**	**	**	**
2 9/16	2.5625	**	1 5/8	**	1 5/8	**
2 5/8	2.6250	1 3/4	**	**	**	**
2 3/4	2.7500	**	1 3/4	**	1 3/4	**
2 13/16	2.8125	1 7/8	**	**	**	**
2 15/16	2.9375	**	1 7/8	**	1 7/8	**
3	3.0000	2	**	**	**	**
3 1/8	3.1250	**	2	**	2	**
3 3/8	3.3750	2 1/4	**	**	**	**
3 1/2	3.5000	**	2 1/4	**	2 1/4	**
3 3/4	3.7500	2 1/2	**	**	**	**
3 7/8	3.8755	**	2 1/2	**	2 1/2	**
4 1/8	4.1250	2 3/4	**	**	**	**
4 1/4	4.2500	**	2 3/4	**	2 3/4	**
4 1/2	4.5000	3	**	**	**	**
4 5/8	4.6250	**	3	**	3	**
4 7/8	4.8750	3 1/4	**	**	**	**
5	5.0000	**	3 1/4	**	3 1/4	**
5 1/4	5.2500	3 1/2	**	**	3 1/2	**
5 3/8	5.3750	**	3 1/2	**	3 3/4	**
5 5/8	5.6250	3 3/4	**	**	3 3/4	**
5 3/4	5.7500	**	3 3/4	**	4	**
6	6.0000	4	**	**	4	**
6 1/8	6.1250	**	4	**	**	**
6 1/2	6.5000	**	4 1/4	**	**	**
6 7/8	6.8750	**	4 1/2	**	**	**
7 1/4	7.2500	**	4 3/4	**	**	**
7 5/8	7.6250	**	5	**	**	**
8	8.0000	**	5 1/4	**	**	**
8 3/8	8.3750	**	5 1/2	**	**	**
8 3/4	8.7500	**	5 3/4	**	**	**
9 1/8	9.1250	**	6	**	**	**

REFERENCE GUIDE FOR SELECTING A WRENCH IN MILLIMETERS BASED ON THE NOMINAL SIZE OF THE NUT OR BOLT HEAD IN MILLIMETERS

BOLTS AND NUTS FOR METRIC SOCKETS AND WRENCHES

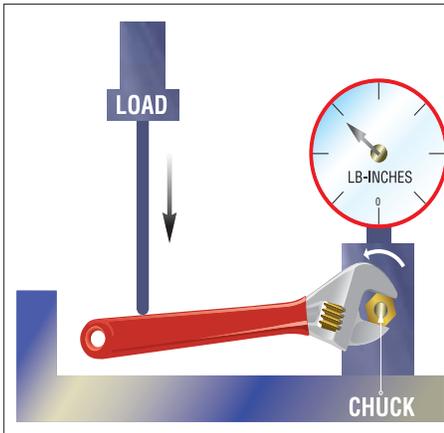
WRENCH NOMINAL SIZE OF SOCKET OR WRENCH	BOLT			NUT		
	HEXAGONAL	HEAVY-DUTY HEXAGONAL	HEAVY-DUTY STRUCTURAL	HEXAGONAL	SLOTTED	HEAVY-DUTY HEXAGONAL
3.00	**	**	**	M1.6 x 0.35	**	**
4.00	**	**	**	M2 x 0.4	**	**
5.00	**	**	**	M2.5 x 0.45	**	**
5.50	**	**	**	M3 x 0.5	**	**
6.00	**	**	**	M3.5 x 0.6	**	**
7.00	**	**	**	M4 x .7	**	**
8.00	M5 x 0.8	**	**	M5 x 0.8	M5 x 0.8	**
10.00	M6 x 1	**	**	M6 x 1	M6 x 1	**
13.00	M8 x 1.25	**	**	M8 x 1.25	M8 x 1.25	**
15.00	M10 x 1.5	**	**	M10 x 1.5	M10 x 1.5	**
16.00	M10 x 1.5	**	**	M10 x 1.5	M10 x 1.5	**
18.00	M12 x 1.75	**	**	M12 x 1.75	M12 x 1.75	**
21.00	M14 x 2	M12 x 1.75	**	M14 x 2	M14 x 2	M12 x 1.75
24.00	M16 x 2	M14 x 2	**	M16 x 2	M16 x 2	M14 x 2
27.00	**	M16 x 2	M16 x 2	**	**	M16 x 2
30.00	M20 x 2.5	**	**	M20 x 2.5	M20 x 2.5	**
34.00	**	M20 x 2.5	M20 x 2.5	**	**	M20 x 2.5
36.00	M24 x 3	**	M22 x 2.5	M24 x 3	M24 x 3	M22 x 2.5
41.00	**	M24 x 3	M24 x 3	**	**	M24 x 3
46.00	M30 x 3.5	**	M27 x 3	M30 x 3.5	M30 x 3.5	M27 x 3
50.00	**	M30 x 3.5	M30 x 3.5	**	**	M30 x 3.5
55.00	M36 x 4	**	**	M36 x 4	M36 x 4	**
60.00	**	M36 x 4	M36 x 4	**	**	**
65.00	M42 x 4.5	**	**	**	**	**
70.00	**	**	**	**	**	M42 x 4.5
75.00	M48 x 5	**	**	**	**	**
80.00	**	**	**	**	**	M48 x 5
85.00	M56 x 5.5	**	**	**	**	**
90.00	**	**	**	**	**	M56 x 5.5
95.00	M64 x 6	**	**	**	**	**
100.00	**	**	**	**	**	M64 x 6
105.00	M72 x 6	**	**	**	**	**
110.00	**	**	**	**	**	M72 x 6
115.00	M80 x 6	**	**	**	**	**
120.00	**	**	**	**	**	M80 x 6
130.00	M90 x 6	**	**	**	**	**
135.00	**	**	**	**	**	M90 x 6
145.00	M100 x 6	**	**	**	**	**
150.00	**	**	**	**	**	M100 x 6



STANDARD: ASA B18.2

LOAD TEST FOR ADJUSTABLE WRENCHES

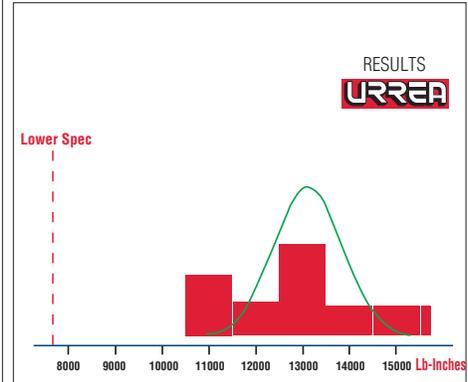
LOAD TEST METHOD



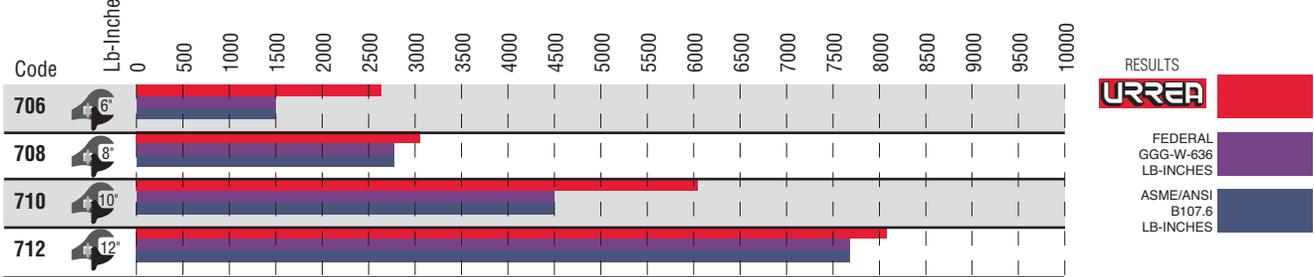
To ensure proper wrench performance, there are testing methods for ensuring mechanical resistance to torsion and flexion.

LOAD TEST. A testing mechanism is used through which a perpendicular force is applied to the handle end of the wrench. The adjustable end of the wrench is attached to a hexagonal chuck, the hardness of which should be no less than 55° Rockwell C. The force should be applied in a range not exceeding 90° per minute and sustained for a minimum of 10 seconds. The wrench is considered to have failed when a permanent deformity is produced in the handle or a fracture occurs in the body or any of its parts.

STATISTICAL TEST OF LOAD READINGS TAKEN FROM URREA ADJUSTABLE WRENCHES

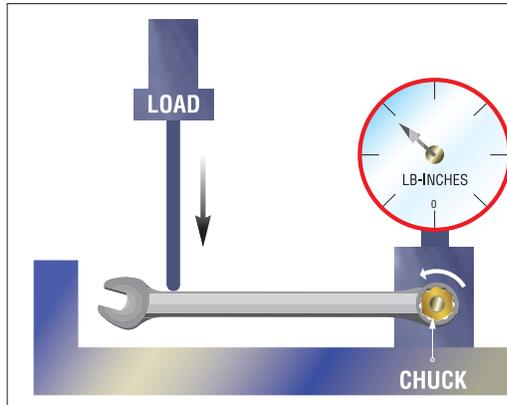


ADJUSTABLE WRENCH PERFORMANCE



STANDARD SIZES

SIZE IN INCHES	CODE	STANDARD	TOTAL LENGTH (UNITS)		TOTAL MIN. JAW OPENING (UNITS)	MAXIMUM THICKNESS (UNITS)			MOVING JAW SET (UNITS)	LOAD TEST MINIMUM BENDING MOMENT LB-INCHES	HARDNESS °RC	
			MINIMUM	MAXIMUM		JAW TIP	HEAD	PIN				
4	704	ASME/ANSI (B107.8)	3.500	4.500	0.504	0.172	0.375	0.188	0.007	600	691	40-50
		FEDERAL (GGG-W-631)	3.500	4.500	0.510	0.172	0.375	0.188	0.007	600	691	40-50
		NOM (NOM-0-106)	3.500	4.500	0.510	0.177	0.394	0.196	0.019	---	---	40-50
		DIM 3112	3.937	4.327	0.510	---	---	---	0.009	292	---	---
6	706	ASME/ANSI (B107.8)	5.500	6.500	0.756	0.250	0.408	0.250	0.008	1452	1672	40-50
		FEDERAL (GGG-W-631)	5.500	6.500	0.760	0.250	0.406	0.250	0.008	1450	1670	40-50
		NOM (NOM-0-106)	5.500	6.500	0.748	0.314	0.452	0.255	0.019	---	480	40-50
		DIM 3112	5.905	6.497	0.708	---	---	---	0.011	752	---	---
8	708	ASME/ANSI (B107.8)	7.500	8.500	0.947	0.312	0.531	0.312	0.008	2700	3109	40-50
		FEDERAL (GGG-W-631)	7.500	8.500	0.947	0.313	0.531	0.313	0.008	2700	3109	40-50
		NOM (NOM-0-106)	7.500	8.500	0.944	0.354	0.570	0.314	0.019	---	800	40-50
		DIM 3112	7.814	8.484	0.905	---	---	---	0.011	1593	---	---
10	710	ASME/ANSI (B107.8)	9.500	10.500	1.133	0.406	0.625	0.359	0.009	4500	5182	40-50
		FEDERAL (GGG-W-631)	9.500	10.500	1.135	0.406	0.625	0.359	0.009	4500	5182	40-50
		NOM (NOM-0-106)	9.500	10.500	1.062	0.472	0.688	0.393	0.019	---	1200	40-50
		DIM 3112	9.892	10.433	1.102	---	---	---	0.011	2.832	---	---
12	712	ASME/ANSI (B107.8)	11.500	12.500	1.321	0.500	0.750	0.438	0.010	7650	8810	40-50
		FEDERAL (GGG-W-631)	11.500	12.500	1.321	0.500	0.750	0.438	0.010	7650	8810	40-50
		NOM (NOM-0-106)	11.500	12.500	1.259	0.610	0.905	0.452	0.019	---	1375	40-50
		DIM 3112	11.811	12.404	1.338	---	---	---	0.011	4.558	---	---
15	715	ASME/ANSI (B107.8)	14.500	15.500	1.698	0.625	1.000	0.688	0.012	15000	17275	40-50
		FEDERAL (GGG-W-631)	14.500	15.500	1.698	0.625	1.000	0.688	0.012	15000	17275	40-50
		NOM (NOM-0-106)	---	---	---	---	---	---	---	---	---	44-48
		DIM 3112	---	---	---	---	---	---	---	8.142	---	---
18	718	ASME/ANSI (B107.8)	17.500	19.000	2.062	0.718	1.218	0.750	0.015	20000	23033	40-50
		FEDERAL (GGG-W-631)	17.500	19.000	2.062	0.719	1.218	0.750	0.012	20000	23033	40-50
		NOM (NOM-0-106)	---	---	---	---	---	---	---	---	---	---
		DIM 3112	---	---	---	---	---	---	---	12.125	---	---
24	724	ASME/ANSI (B107.8)	23.500	25.000	2.438	0.906	1.438	0.875	0.018	25000	28791	40-50
		FEDERAL (GGG-W-631)	23.500	25.000	2.438	0.906	1.438	0.875	0.015	25000	28791	40-50
		NOM (NOM-0-106)	---	---	---	---	---	---	---	---	---	---
		DIM 3112	---	---	---	---	---	---	---	---	---	---

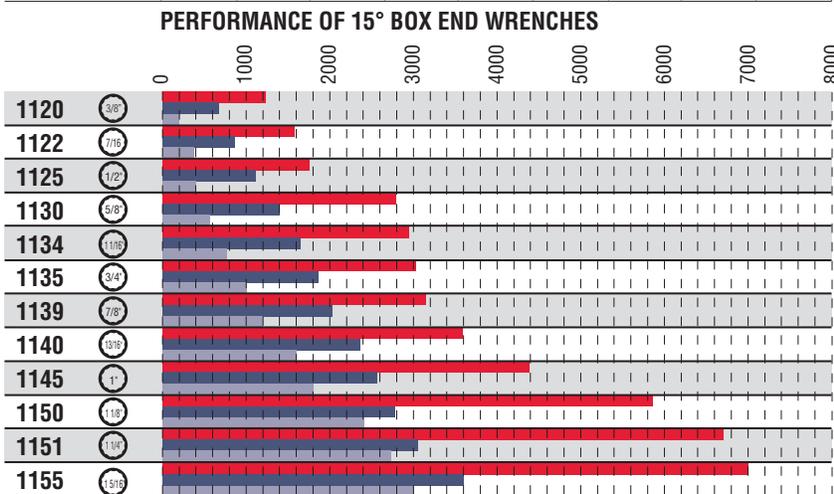
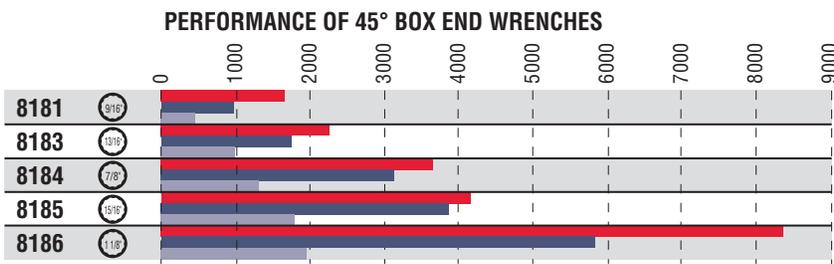
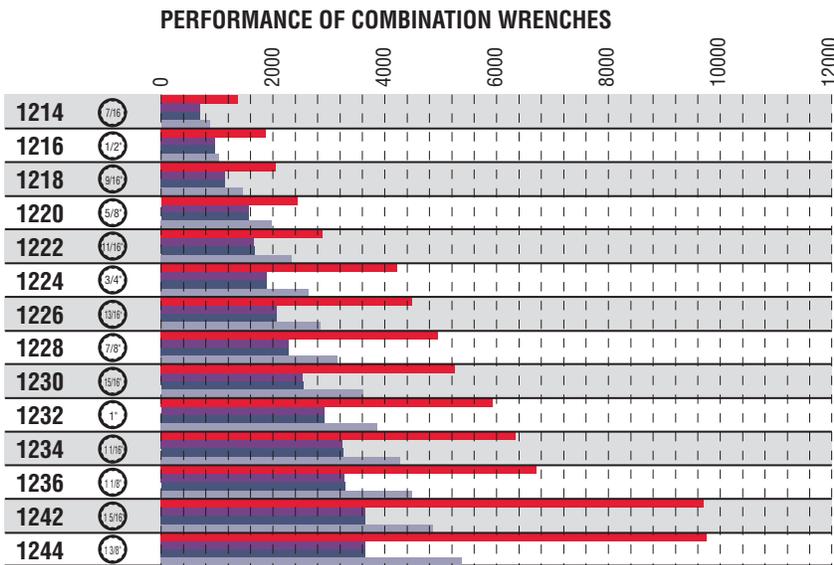


To ensure proper combination wrench performance, there are testing methods for ensuring mechanical resistance to torsion and flexion.

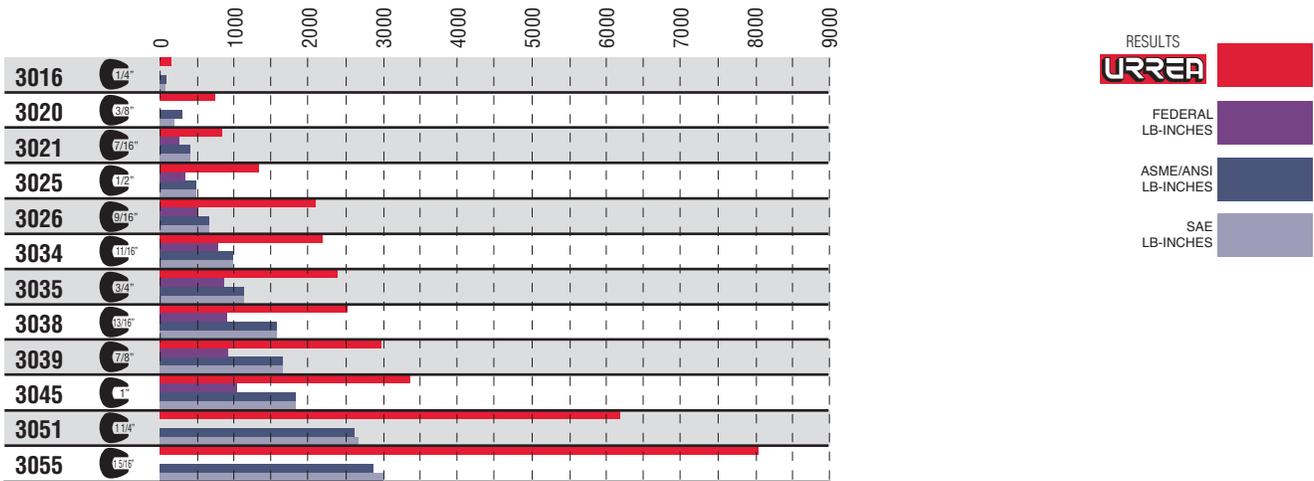
LOAD TEST. A testing mechanism is used through which a perpendicular force is applied to the end of the wrench. The box end is attached to a hexagonal chuck, the hardness of which should be no less than 55° Rockwell C. The force should be applied in a range not exceeding 90° per minute and sustained for a minimum of 10 seconds. The wrench is considered to have failed when a visible permanent distortion is produced in the handle, when a permanent deformation occurs in the box head greater than 5° with respect to the handle, or when the nominal size of the box end varies by 0.002" (for 5/32" to 1" wrenches) or 0.003" (for 1 1/16" to 2 1/4" wrenches). Any fracture in the wrench or the box end head is considered a failure of the wrench

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LOAD TEST, ASME STANDARD B107.6, B107.8M, B107.9



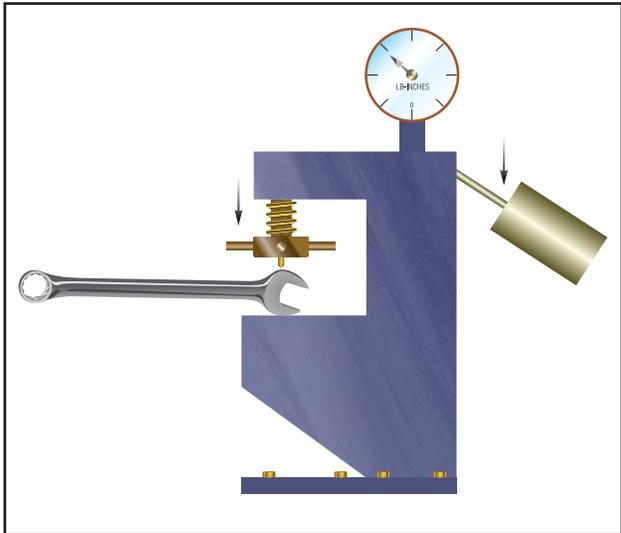
PERFORMANCE OF OPEN END WRENCHES



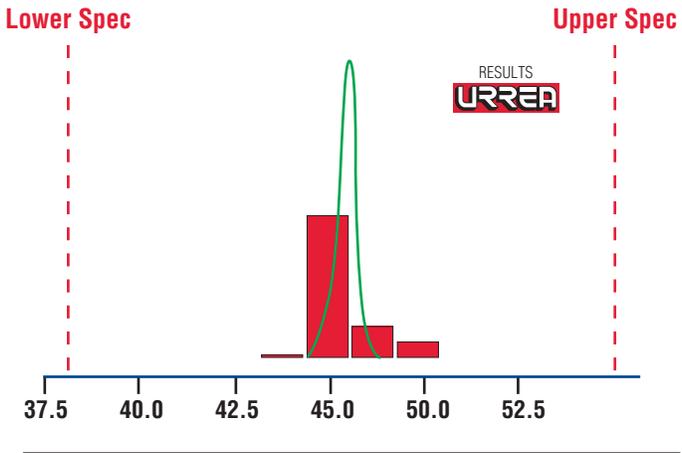
HARDNESS TEST, ASME STANDARD B107.6, B107.8M, B107.9

Wrenches must be heat-treated in order to obtain a hardness of between 38 and 55 HRc (Rockwell C). For this purpose, a Rockwell hardness tester is used, which has a diamond point to which a 150 Kilogram load is applied (ASME 18). The results of the test depend directly on penetration of the diamond point into the item tested. If it is necessary to prepare the testing surface, the amount of material removed must not exceed 0.007" (0.18mm) in the area in contact with the diamond point.

PRESS FOR HARDNESS TEST



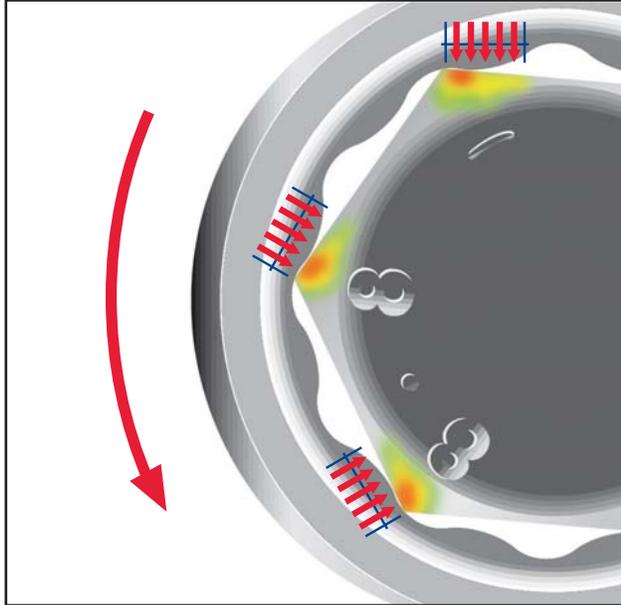
STATISTICAL TEST OF HARDNESS READINGS TAKEN FROM URREA MECHANICAL WRENCHES



ADVANTAGES OF THE DESIGN *SUPER DRIVE*

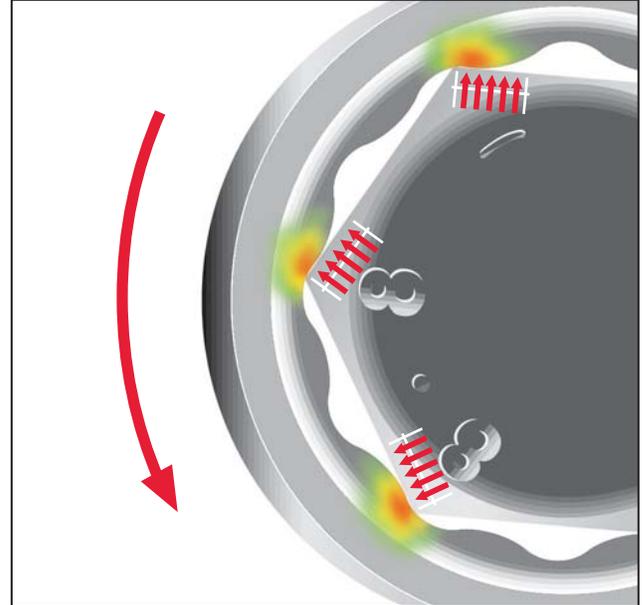
URREA wrenches, which are made in accordance with the specifications of the SAE-AS954 Standard, incorporate this design into their box ends, providing better tools that place less stress on screw heads and nuts while simultaneously permitting the application of more force without damage to fastener components. This SUPER DRIVE technology is incorporated into our sockets as well as our wrenches. Due to its design, it makes work easier by providing the following benefits:

EFFECT ON NUTS OR BOLT HEADS



- When torque is applied, stress is distributed over a larger area of the active sides of the nut, more towards the center instead of the corners. The vertices of the box end disappear and the force is distributed along the rounded or "lobed" corners. These features meet AS954 Standards (SAE) and provide a greater area of contact, requiring less effort to get the same amount of torque.
- Contact of approximately 0.045" in length on each active side of the nut or bolt.
- The force applied is not concentrated on the edges, which are potential failure points, but is instead distributed uniformly over the entire head of the nut or bolt.

EFFECT ON WRENCHES

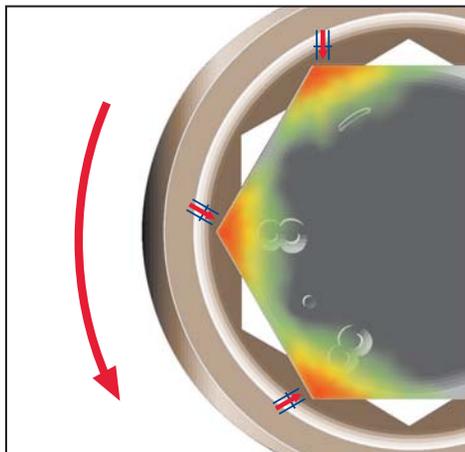


5

- It is possible to reduce the outside diameter of the box end, which increases its ability to apply torque without failing and permits access to narrow spaces.
- The box end is easier to fit onto a nut or bolt.
- Permits the turning of nuts and bolts that are misshapen or have deformed edges.
- Minimizes accident risks by preventing stripped nuts or bolts.
- Permits the use of greater torque on low-strength bolts.
- Will not deform nuts or bolts.

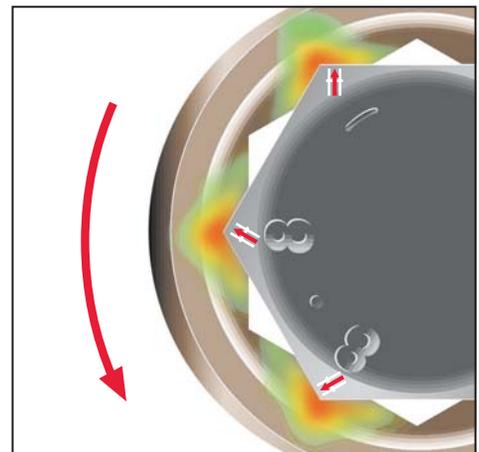
DISADVANTAGES OF THE CONVENTIONAL DESIGN

EFFECT ON NUTS OR BOLT HEADS



- Contact of only approximately 0.005" in length on each active side of the nut or bolt.
- When torque is applied, the stress is concentrated mainly on the corners of the nut, which causes the corners to become rounded or stripped.
- Corners are potential failure points where fractures due to concentration of stress tend to occur.

EFFECT ON WRENCHES





1.- Receiving raw material



2.- Cutting steel



3.- Hot forging



4.- Hot cutting



5.- Punching



6.- Polishing



7.- Broaching



8.- Marking and Bending



9.- Heat treatment



10.- Finish



11.- Chromium plating

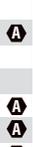
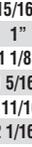
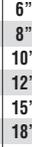


WRENCHES





ADJUSTABLE WRENCHES

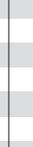
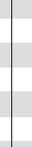
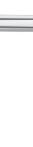
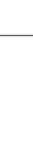
		Maximum jaw opening (inches)	Length (inches)			Maximum jaw opening (inches)	Length (inches)
							
710PG	710P	1 5/16"	10"	704G	704	1/2"	4"
712PG	712P	1 1/2"	12"	706G	706	15/16"	6"
				708G	708	1"	8"
				710G	710	1 1/8"	10"
				712G	712	1 5/16"	12"
				715G	715	1 11/16"	15"
				718G	718	2 1/16"	18"
				724G	724	2 7/16"	24"

METRIC WRENCHES





TYPE OF FINISH:

A = Full Polish
Conventional Design



B = Satin Finish
Conventional Design



C = Satin Finish
Round Handle



STANDARD COMBINATION WRENCH SETS

CODE	SIZE	TYPE	WRENCH SETS											
			1200FC	120090	120080	1200FHD	1200F	1200D	1200I	1200G	1200H	12009S		
1208*	1/4"	A	●	●	●		●	●	●					●
1210	5/16"	A	●	●	●		●	●	●					●
1212	3/8"	A	●	●	●		●	●	●					●
1214	7/16"	A	●	●	●		●	●	●					●
1216	1/2"	A	●	●	●		●	●	●					●
1218	9/16"	A	●	●	●		●	●	●					●
1220	5/8"	A	●	●	●		●	●	●					●
1222	11/16"	A	●	●	●		●	●	●					●
1224	3/4"	A	●	●	●		●	●	●					●
1226	13/16"	A		●	●		●	●	●					●
1228	7/8"	A		●	●		●	●	●					●
1230	15/16"	A		●	●		●	●	●					●
1232	1"	A		●	●		●	●	●					●
1234	1 1/16"	A		●	●		●	●	●					●
1236	1 1/8"	A		●	●		●	●	●					●
1240	1 1/4"	A		●	●		●	●	●					●
1242	1 5/16"	B		●	●	●		●	●					●
1244	1 3/8"	B		●	●	●		●	●					●
1246	1 7/16"	B		●	●	●		●	●					●
1248	1 1/2"	B		●	●	●		●	●					●
1252	1 5/8"	B		●	●	●		●	●					●
1254	1 11/16"	B		●	●	●		●	●					●
1256	1 3/4"	B		●	●	●		●	●					●
1258	1 13/16"	C		●	●	●		●	●					●
1260	1 7/8"	C		●	●	●		●	●					●
1264	2"	C		●	●	●		●	●					●
1266	2 1/16"	C		●	●	●		●	●					●
1268	2 1/8"	C		●	●	●		●	●					●
1270	2 3/16"	C		●	●	●		●	●					●
1272	2 1/4"	C		●	●	●		●	●					●
1276	2 3/8"	C		●	●	●		●	●					●
1280	2 1/2"	C		●	●	●		●	●					●

* 6-POINT

METRIC COMBINATION WRENCH SETS

CODE	SIZE	TYPE	WRENCH SETS											
			1200QM	120070M	1200FM	1200KM	1200HM	1200IM	12009M					
1206M*	6mm	A	●											●
1207M*	7mm	A	●											●
1208M	8mm	A	●		●									●
1209M	9mm	A	●		●									●
1210M	10mm	A	●		●									●
1211M	11mm	A	●		●									●
1212M	12mm	A	●		●									●
1213M	13mm	A	●		●									●
1214M	14mm	A	●		●									●
1215M	15mm	A	●		●									●
1216M	16mm	A	●		●									●
1217M	17mm	A	●		●									●
1218M	18mm	A	●		●									●
1219M	19mm	A	●		●									●
1220M	20mm	A	●		●									●
1221M	21mm	A	●		●									●
1222M	22mm	A	●	●										●
1223M	23mm	A	●	●										●
1224M	24mm	A	●	●										●
1225M	25mm	A	●	●										●
1226M	26mm	A	●	●										●
1227M	27mm	A	●	●										●
1228M	28mm	A	●	●										●
1229M	29mm	A	●	●										●
1230M	30mm	A	●	●										●
1232M	32mm	B	●	●										●
1233M	33mm	B	●	●										●
1234M	34mm	B	●	●										●
1236M	36mm	B	●	●										●
1237M	37mm	B	●	●										●
1238M	38mm	B	●	●										●
1241M	41mm	B	●	●										●
1242M	42mm	B	●	●										●
1246M	46mm	C	●	●										●
1250M	50mm		●	●										●

COMBINATION WRENCH SETS IN STANDARD AND METRIC

CODE	SIZE	TYPE	1200FC
			269
1208*	1/4"	A	●
1210	5/16"	A	●
1212	3/8"	A	●
1214	7/16"	A	●
1216	1/2"	A	●
1218	9/16"	A	●
1220	5/8"	A	●
1222	11/16"	A	●
1224	3/4"	A	●
1208M	8mm	A	●
1210M	10mm	A	●
1211M	11mm	A	●
1212M	12mm	A	●
1213M	13mm	A	●
1214M	14mm	A	●
1215M	15mm	A	●

STANDARD SHORT COMBINATION WRENCH SETS

CODE	SIZE	TYPE	1200T6	1200T9
			276	276
1208T	1/4"	A	●	●
1210T	5/16"	A	●	●
1212T	3/8"	A	●	●
1214T	7/16"	A	●	●
1216T	1/2"	A	●	●
1218T	9/16"	A	●	●
1220T	5/8"	A	●	●
1222T	11/16"	A	●	●
1224T	3/4"	A	●	●

METRIC SHORT COMBINATION WRENCH SETS

CODE	SIZE	TYPE	1200MT6	1200MT9
			277	276
1207MT	7 mm	A	●	●
1208MT	8 mm	A	●	●
1209MT	9 mm	A	●	●
1210MT	10 mm	A	●	●
1211MT	11 mm	A	●	●
1212MT	12 mm	A	●	●
1213MT	13 mm	A	●	●
1214MT	14 mm	A	●	●
1215MT	15 mm	A	●	●

ADJUSTABLE WRENCH SETS



CODE	SIZE	TYPE	269	269
708	8"	B		●
710	10"	B		●
712	12"	B		●
708G	8"	B	●	
710G	10"	B	●	
712G	12"	B	●	



795G 795

STANDARD OPEN END WRENCH SETS



CODE	SIZE	TYPE	277	277	277	278	278
3016	3/16" X 1/4"	A	●				
3018	1/4" X 5/16"	A	●	●			
3020	5/16" X 3/8"	A	●	●	●		
3021	3/8" X 7/16"	A	●	●	●		●
3025	7/16" X 1/2"	A	●	●	●		●
3026	1/2" X 9/16"	A	●	●	●		●
3030	9/16" X 5/8"	A	●	●	●		●
3031	5/8" X 3/4"	A	●	●	●		●
3033	19/32" X 11/16"	A	●	●	●		●
3034	5/8" X 11/16"	A	●	●	●		●
3035	11/16" X 3/4"	A	●	●	●		●
3038	3/4" X 13/16"	A	●	●	●		●
3039	3/4" X 7/8"	A	●	●	●		●
3040	13/16" X 7/8"	A	●	●	●		●
3045	15/16" X 1"	A	●	●	●		●
3050	1 1/16" X 1 1/8"	A	●	●	●		●



3000G 3000H 3000D 3000C 3000N

METRIC OPEN END WRENCH SETS



CODE	SIZE	TYPE	278	278	279
30607	6 X 7mm	A	●	●	
30809	8 X 9mm	A	●	●	
31011	10 X 11mm	A	●	●	
31213	12 X 13mm	A	●	●	
31415	14 X 15mm	A	●	●	
31617	16 X 17mm	A	●	●	
31819	18 X 19mm	A	●	●	
31922	19 x 22mm	A	●	●	
32122	21 X 22mm	A	●	●	
32427	24 X 27mm	B	●	●	



30000A 30000RM 30000R

5

STANDARD RATCHETING BOX END WRENCH SETS



CODE	SIZE	TYPE	279	279
1181	1/4" X 5/16"	A	●	
1182	3/8" X 7/16"	A	●	
1183	1/2" X 6/16"	A	●	
1184	5/8" X 11/16"	A	●	
1185	5/8" X 3/4"	A	●	
1191	1/4" X 5/16"	A		●
1192	3/8" X 7/16"	A		●
1193	1/2" X 6/16"	A		●
1194	5/8" X 11/16"	A		●
1195	5/8" X 3/4"	A		●

1180A 1190A

METRIC RATCHETING BOX END WRENCH SETS



CODE	SIZE	TYPE	280	280
1181M	7 X 8mm	A	●	
1182M	9 X 10mm	A	●	
1183M	11 X 12mm	A	●	
1184M	13 X 14mm	A	●	
1185M	15 X 17mm	A	●	
1186M	16 X 18mm	A	●	
1187M	19 X 21mm	A	●	
1191M	7 X 8mm	A		●
1192M	9 X 10mm	A		●
1193M	11 X 12mm	A		●
1194M	13 X 14mm	A		●
1195M	15 X 17mm	A		●

1180M 1190M

15° STANDARD BOX END WRENCH SETS



CODE	SIZE	TYPE	280	280	281
1120	5/16" X 3/8"	A	●		●
1122	3/8" X 7/16"	A	●	●	
1125	7/16" X 1/2"	A	●	●	●
1126	1/2" X 9/16"	A	●	●	●
1130	9/16" X 5/8"	A	●	●	●
1134	5/8" X 11/16"	A	●	●	●
1135	11/16" X 3/4"	A	●	●	●
1139	3/4" X 7/8"	A	●	●	●
1140	13/16" X 7/8"	A	●	●	●
1145	15/16" X 1"	A	●	●	●

1100D 1100H 1100G

METRIC 15° BOX END WRENCH SETS



CODE	SIZE	TYPE	281	281
1051M	8 X 9 mm	A	●	●
1053M	10 X 11 mm	A	●	●
1054M	11 X 13 mm	A	●	●
1057M	12 X 13 mm	A	●	●
1061M	14 X 15 mm	A	●	●
1064M	16 X 18 mm	A	●	●
1065M	17 X 19 mm	A	●	●
1072M	21 X 24 mm	A	●	●
1073M	22 X 24 mm	A	●	●
1077M	27 X 30 mm	A	●	●
1079M	30 X 32 mm	A	●	●

1100SM 1100DM

45° STANDARD BOX END WRENCH SETS



11 45° 8100C

CODE	DESCRIPTION	TYPE	281
8180	3/8" x 7/16"	B	●
8181	1/2" x 9/16"	B	●
8182	5/8" x 11/16"	B	●
8183	25/32" x 13/16"	B	●
8184	3/4" x 7/8"	B	●
8185	15/16" x 1"	B	●

METRIC 45° BOX END WRENCH SETS



mm 45° 8100CM

CODE	DESCRIPTION	TYPE	282
80911	9 x 11mm	B	●
81011	10 x 11mm	B	●
81314	13 x 14mm	B	●
81617	16 x 17mm	B	●
81922	19 x 22mm	B	●
82426	24 x 26mm	B	●

STANDARD FLARE NUT WRENCH SETS



11 3760

CODE	DESCRIPTION	TYPE	282
3764	3/8" X 7/16"	B	●
3768	1/2" X 9/16"	B	●
3772	5/8" X 11/16"	B	●

METRIC FLARE NUT WRENCH SETS



mm 3700M

CODE	DESCRIPTION	TYPE	282
3709M	9 X 11	B	●
3710M	10 X 12	B	●
3713M	13 X 14	B	●
3715M	15 X 17	B	●
3716M	16 X 18	B	●

STANDARD OBSTRUCTION WRENCH SETS



11 1700A

CODE	DESCRIPTION	TYPE	282
1725	7/16" X 1/2"	B	●
1730	9/16" X 5/8"	B	●
1731	5/8" X 3/4"	B	●

IGNITION WRENCH SET



3200

SIZE	279
3/8"	●
11/32"	●
9/32"	●
1/4"	●
7/32"	●
15/64"	●

METRIC OBSTRUCTION WRENCH SETS



mm 1700AM 1700CM

CODE	DESCRIPTION	TYPE	283	283
171012	10 X 12	B	●	●
171113	11 X 13	B	●	●
171415	14 X 15	B	●	●
171619	16 X 19	B	●	●
171718	17 X 18	B	●	●

ADJUSTABLE WRENCH SETS

795G

3 PIECES

SET OF 3 ADJUSTABLE CHROME WRENCHES WITH RUBBER GRIP HANDLE

CODE	MAXIMUM OPENING		LENGTH	
	in	mm	in	mm
708G	1"	25.4	7 29/64"	189.3
710G	1 1/8"	28.5	9 19/64"	236.1
712G	1 5/16"	33.3	11 9/64"	282.9
E506	Pouch			



RUBBER GRIP



5

795

3 PIECES

SET OF 3 ADJUSTABLE CHROME WRENCHES

CODE	MAXIMUM OPENING		LENGTH	
	in	mm	in	mm
708	1"	25.4	7 29/64"	189.3
710	1 1/8"	28.5	9 19/64"	236.1
712	1 5/16"	33.3	11 9/64"	282.9
E506	Pouch			



METRIC AND STANDARD COMBINATION WRENCH SET

1200FC

16 PIECES

SET OF 16 METRIC AND STANDARD COMBINATION WRENCH SET

CODE	DIMENSIONS OF OPENING		LENGTH		CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm		mm	in	mm	
1208	1/4"	6.6	5"	127	1208M	8	5 1/2"	139.7	
1210	5/16"	7.9	5 1/2"	139.7	1210M	10	6 1/2"	165.1	
1212	3/8"	9.5	6"	152.4	1211M	11	6 1/2"	165.1	
1214	7/16"	11.1	6 1/2"	165.1	1212M	12	7"	177.8	
1216	1/2"	12.7	7"	177.8	1213M	13	7"	177.8	
1218	9/16"	14.2	7 1/2"	190.5	1214M	14	7 1/2"	190.5	
1220	5/8"	15.8	8 1/16"	204.7	1215M	15	7 1/2"	190.5	
1222	11/16"	17.4	8 7/8"	225.4	E553	Pouch			
1224	3/4"	19.0	9 3/4"	247.6					



SUPER DRIVE



COMBINATION RATCHETING WRENCH SET

1200CM

7 PIECES

SET OF 7 STANDARD COMBINATION RATCHETING WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm
1210CM	5/16"	7.9	5 9/16"	141.2
1212CM	3/8"	9.5	6 3/16"	157.1
1214CM	7/16"	11.1	6 1/2"	165.9
1216CM	1/2"	12.7	7 1/8"	180.9
1218CM	9/16"	14.2	7 1/2"	190.5
1220CM	5/8"	15.8	8 7/16"	214.2
1224CM	3/4"	19.0	9 7/8"	250.8
E111	Pouch			



STANDARD COMBINATION WRENCH SETS

120090

31 PIECES

SET OF 31 STANDARD COMBINATION WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH		CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm		in	mm	in	mm
1210	5/16"	7.9	5 1/2"	139.7	1246	1 7/16"	36.5	19 3/8"	492.1
1212	3/8"	9.5	6"	152.4	1248	1 1/2"	38.1	20 1/4"	514.3
1214	7/16"	11.1	6 1/2"	165.1	1252	1 5/8"	41.2	23"	584.2
1216	1/2"	12.7	7"	177.8	1254	1 11/16"	42.8	23"	584.2
1218	9/16"	14.2	7 1/2"	190.5	1256	1 3/4"	44.4	25"	635
1220	5/8"	15.8	8 1/16"	204.7	1258	1 13/16"	46	25"	635
1222	11/16"	17.4	8 7/8"	225.4	1260	1 7/8"	47.6	28"	711.2
1224	3/4"	19.0	9 3/4"	247.6	1264	2"	50.8	28"	711.2
1226	13/16"	20.6	10 5/8"	269.8	1266	2 1/16"	52.39	30"	762
1228	7/8"	22.2	11 1/2"	292.1	1268	2 1/8"	53.97	30"	762
1230	15/16"	23.8	12 3/8"	314.3	1270	2 3/16"	55.56	30"	762
1232	1"	25.4	13 1/4"	336.5	1272	2 1/4"	57.15	30"	762
1234	1 1/16"	26.9	14 1/8"	358.7	1276	2 3/8"	60.33	30 1/2"	775
1236	1 1/8"	28.5	15 3/8"	390.5	1280	2 1/2"	63.50	30 1/2"	775
1240	1 1/4"	31.7	16 3/4"	425.4					
1242	1 5/16"	33.3	17 5/8"	447.6					
1244	1 3/8"	34.9	18 1/2"	469.9					



120080

26 PIECES

SET OF 26 STANDARD COMBINATION WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH		CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm		in	mm	in	mm
1208	1/4"	6.6	5"	127.0	1236	1 1/8"	28.5	15 3/8"	390.5
1210	5/16"	7.9	5 1/2"	139.7	1240	1 1/4"	31.7	16 3/4"	425.4
1212	3/8"	9.5	6"	152.4	1242	1 5/16"	33.3	17 5/8"	447.6
1214	7/16"	11.1	6 1/2"	165.1	1244	1 3/8"	34.9	18 1/2"	469.9
1216	1/2"	12.7	7"	177.8	1246	1 7/16"	36.5	19 3/8"	492.1
1218	9/16"	14.2	7 1/2"	190.5	1248	1 1/2"	38.1	20 1/4"	514.3
1220	5/8"	15.8	8 1/16"	204.7	1252	1 5/8"	41.2	23"	584.2
1222	11/16"	17.4	8 7/8"	225.4	1254	1 11/16"	42.8	23"	584.2
1224	3/4"	19.0	9 3/4"	247.6	1256	1 3/4"	44.4	25"	635.0
1226	13/16"	20.6	10 5/8"	269.8	1258	1 13/16"	46.0	25"	635.0
1228	7/8"	22.2	11 1/2"	292.1	1260	1 7/8"	47.6	28"	711.2
1230	15/16"	23.8	12 3/8"	314.3	1264	2"	50.8	28"	711.2
1232	1"	25.4	13 1/4"	336.5					
1234	1 1/16"	26.9	14 1/8"	358.7					



1200FHD

16 PIECES

SET OF 16 STANDARD COMBINATION WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH		CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm		in	mm	in	mm
1242	1 5/16"	33.3	17 5/8"	447.6	1264	2"	50.8	28"	711.2
1244	1 3/8"	34.9	18 1/2"	469.9	1266	2 1/16"	52.39	30"	762.0
1246	1 7/16"	36.5	19 3/8"	492.2	1268	2 1/8"	52.39	30"	762.0
1248	1 1/2"	38.1	20 1/4"	514.3	1270	22 3/16"	55.56	30"	762.0
1252	1 5/8"	41.2	23"	584.2	1272	2 1/4"	57.15	30"	762.0
1254	1 11/16"	42.8	23"	584.2	1276	2 3/8"	60.33	30 1/2"	775.0
1256	1 3/4"	44.4	25"	635.0	1280	2 1/2"	63.50	30 1/2"	775.0
1258	1 13/16"	46.0	25"	635.0					
1260	1 7/8"	47.6	28"	711.2					



SUPER DRIVE



5

1200F

15 PIECES

SET OF 15 STANDARD COMBINATION WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH		CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm		in	mm	in	mm
1210	5/16"	7.9	5 1/2"	139.7	1230	15/16"	23.8	12 3/8"	314.3
1212	3/8"	9.5	6"	152.4	1232	1"	25.4	13 1/4"	336.5
1214	7/16"	11.1	6 1/2"	165.1	1234	1 1/16"	26.9	14 1/8"	358.7
1216	1/2"	12.7	7"	177.8	1236	1 1/8"	28.5	15 3/8"	390.5
1218	9/16"	14.2	7 1/2"	190.5	1240	1 1/4"	31.7	16 3/4"	425.4
1220	5/8"	15.8	8 1/16"	204.7	E104	Pouch			
1222	11/16"	17.4	8 7/8"	225.4					
1224	3/4"	19.0	9 3/4"	247.6					
1226	13/16"	20.6	10 5/8"	269.8					
1228	7/8"	22.2	11 1/2"	292.1					



SUPER DRIVE



1200D

14 PIECES

SET OF 14 STANDARD COMBINATION WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH		CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm		in	mm	in	mm
1208	1/4"	6.6	5"	127.0	1228	7/8"	22.2	11 1/2"	292.1
1210	5/16"	7.9	5 1/2"	139.7	1230	15/16"	23.8	12 3/8"	314.3
1212	3/8"	9.5	6"	152.4	1232	1"	25.4	13 1/4"	336.5
1214	7/16"	11.1	6 1/2"	165.1	1234	1 1/16"	26.9	14 1/8"	358.7
1216	1/2"	12.7	7"	177.8	E103	Pouch			
1218	9/16"	14.2	7 1/2"	190.5					
1220	5/8"	15.8	8 1/16"	204.7					
1222	11/16"	17.4	8 7/8"	225.4					
1224	3/4"	19.0	9 3/4"	247.6					
1226	13/16"	20.6	10 5/8"	269.8					



SUPER DRIVE



1200I

11 PIECES

SET OF 11 STANDARD COMBINATION WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH		CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm		in	mm	in	mm
1208	1/4"	6.6	5"	127.0	1224	3/4"	19.0	9 3/4"	247.6
1210	5/16"	7.9	5 1/2"	139.7	1226	13/16"	20.6	10 5/8"	269.8
1212	3/8"	9.5	6"	152.4	1228	7/8"	22.2	11 1/2"	292.1
1214	7/16"	11.1	6 1/2"	165.1	Rack				
1216	1/2"	12.7	7"	177.8					
1218	9/16"	14.2	7 1/2"	190.5					
1220	5/8"	15.8	8 1/16"	204.7					
1222	11/16"	17.4	8 7/8"	225.4					



SUPER DRIVE

1200G

10 PIECES

SET OF 10 STANDARD COMBINATION WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm
1214	7/16"	11.1	6 1/2"	165.1
1216	1/2"	12.7	7"	177.8
1218	9/16"	14.2	7 1/2"	190.5
1220	5/8"	15.8	8 1/16"	204.7
1222	11/16"	17.4	8 7/8"	225.4
1224	3/4"	19.0	9 3/4"	247.6
1226	13/16"	20.6	10 5/8"	269.8
1228	7/8"	22.2	11 1/2"	292.1
1230	15/16"	23.8	12 3/8"	314.3
1232	1"	25.4	13 1/4"	336.5
E112	Pouch			



SUPER DRIVE

12009S

9 PIECES

SET OF 9 STANDARD COMBINATION WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm
1208	1/4"	6.6	5"	127.0
1210	5/16"	7.9	5 1/2"	139.7
1212	3/8"	9.5	6"	152.4
1214	7/16"	11.1	6 1/2"	165.1
1216	1/2"	12.7	7"	177.8
1218	9/16"	14.2	7 1/2"	190.5
1220	5/8"	15.8	8 1/16"	204.7
1222	11/16"	17.4	8 7/8"	225.4
1224	3/4"	19.0	9 3/4"	247.6
Rack				



SUPER DRIVE

1200H

7 PIECES

SET OF 7 STANDARD COMBINATION WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm
1212	3/8"	9.5	6"	152.4
1214	7/16"	11.1	6 1/2"	165.1
1216	1/2"	12.7	7"	177.8
1218	9/16"	14.2	7 1/2"	190.5
1220	5/8"	15.8	8 1/16"	204.7
1222	11/16"	17.4	8 7/8"	225.4
1224	3/4"	19.0	9 3/4"	247.6
E111	Pouch			



SUPER DRIVE



5

METRIC COMBINATION RATCHETING WRENCHES SET

1200MCM

7 PIECES

SET OF 7 METRIC COMBINATION RATCHETING WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH	
	mm	in	mm	mm
1208MCM	8	5 6/16"	141.2	
1210MCM	10	6 3/16"	157.1	
1212MCM	12	6 1/2"	165.9	
1213MCM	13	7 1/8"	180.9	
1214MCM	14	7 1/2"	190.5	
1215MCM	15	8 7/16"	214.2	
1218MCM	18	9 7/8"	250.8	
E111	Pouch			



METRIC COMBINATION WRENCH SETS

1200QM

26 PIECES

SET OF 26 METRIC COMBINATION WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH	CODE	DIMENSIONS OF OPENING		LENGTH
	mm	in			mm	mm	
1206M	6	5"	127.0	1221M	21	10 5/8"	269.8
1207M	7	5"	127.0	1222M	22	11 1/2"	292.1
1208M	8	5 1/2"	139.7	1223M	23	11 1/2"	292.1
1209M	9	6"	152.4	1224M	24	12 3/8"	314.3
1210M	10	6 1/2"	165.1	1225M	25	12 3/8"	314.3
1211M	11	6 1/2"	165.1	1226M	26	13 1/4"	336.5
1212M	12	7"	177.8	1227M	27	14 1/8"	358.7
1213M	13	7"	177.8	1228M	28	15 3/8"	390.5
1214M	14	7 1/2"	190.5	1229M	29	15 3/8"	390.5
1215M	15	7 1/2"	190.5	1230M	30	15 3/8"	390.5
1216M	16	8 1/16"	204.7	1232M	32	16 3/4"	425.4
1217M	17	8 7/8"	225.4	E512	Pouch		
1218M	18	8 7/8"	225.4				
1219M	19	9 3/4"	247.6				
1220M	20	10 5/8"	269.8				



SUPER DRIVE

120070M

19 PIECES

SET OF 19 METRIC COMBINATION WRENCHES WITHOUT CASE

CODE	DIMENSIONS OF OPENING			LENGTH	CODE	DIMENSIONS OF OPENING			LENGTH
	mm	in	mm			mm	in	mm	
	1222M	22	11 1/2"			292.1	1233M	33	
1223M	23	11 1/2"	292.1	1234M	34	16 3/4"	425.4		
1224M	24	12 3/8"	314.3	1236M	36	17 5/8"	447.6		
1225M	25	12 3/8"	314.3	1237M	37	17 5/8"	447.6		
1226M	26	13 1/4"	336.5	1238M	38	18 1/2"	469.9		
1227M	27	14 1/8"	358.7	1241M	41	19 3/8"	492.1		
1228M	28	15 3/8"	390.5	1242M	42	20 1/4"	514.3		
1229M	29	15 3/8"	390.5	1246M	46	23"	584.2		
1230M	30	15 3/8"	390.5	1250M	50	25"	635.0		
1232M	32	16 3/4"	425.4						



1200FM

15 PIECES

SET OF 15 METRIC COMBINATION WRENCHES

CODE	DIMENSIONS OF OPENING			LENGTH	CODE	DIMENSIONS OF OPENING			LENGTH
	mm	in	mm			mm	in	mm	
	1207M	7	5"			127.0	1217M	17	
1208M	8	5 1/2"	139.7	1218M	18	8 7/8"	225.4		
1209M	9	6"	152.4	1219M	19	9 3/4"	247.6		
1210M	10	6 1/2"	165.1	1220M	20	10 5/8"	269.8		
1211M	11	6 1/2"	165.1	1221M	21	10 5/8"	269.8		
1212M	12	7"	177.8	E104		Pouch			
1213M	13	7"	177.8						
1214M	14	7 1/2"	190.5						
1215M	15	7 1/2"	190.5						
1216M	16	8 1/16"	204.7						



1200IM

11 PIECES

SET OF 11 METRIC COMBINATION WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH
	mm	in	
	1206M	6	
1207M	7	5"	127.0
1208M	8	5 1/2"	139.7
1209M	9	6"	152.4
1210M	10	6 1/2"	165.1
1211M	11	6 1/2"	165.1
1212M	12	7"	177.8
1213M	13	7"	177.8
1214M	14	7 1/2"	190.5
1217M	17	8 7/8"	225.4
1219M	19	9 3/4"	247.6



Rack



1200KM

10 PIECES

SET OF 10 METRIC COMBINATION WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH	
	mm	in	mm	
1210M	10	6 1/2"	165.1	
1211M	11	6 1/2"	165.1	
1212M	12	7"	177.8	
1213M	13	7"	177.8	
1214M	14	7 1/2"	190.5	
1215M	15	7 1/2"	190.5	
1216M	16	8 1/16"	204.7	
1217M	17	8 7/8"	225.4	
1218M	18	8 7/8"	225.4	
1219M	19	9 3/4"	247.6	
E112	Pouch			



SUPER DRIVE



5

12009M

9 PIECES

SET OF 9 METRIC COMBINATION WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH	
	mm	in	mm	
1208M	8	5 1/2"	139.7	
1210M	10	6 1/2"	165.1	
1212M	12	7"	177.8	
1213M	13	7"	177.8	
1214M	14	7 1/2"	190.5	
1215M	15	7 1/2"	190.5	
1217M	17	8 7/8"	225.4	
1219M	19	9 3/4"	247.6	
1221M	21	10 5/8"	269.8	
E113	Rack			



SUPER DRIVE



1200HM

9 PIECES

SET OF 9 METRIC COMBINATION WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH	
	mm	in	mm	
*1207M	7	5"	127.0	
1208M	8	5 1/2"	139.7	
1209M	9	6"	152.4	
1210M	10	6 1/2"	165.1	
1211M	11	6 1/2"	165.1	
1212M	12	7"	177.8	
1213M	13	7"	177.8	
1214M	14	7 1/2"	190.5	
1215M	15	7 1/2"	190.5	
E114	Pouch			



SUPER DRIVE



SHORT COMBINATION WRENCH SETS IN In



1200T9

9 PIECES

SET OF 9 SHORT COMBINATION WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm
*1208T	1/4"	6.6	3"	76.2
1210T	5/16"	7.9	3 1/4"	82.5
1212T	3/8"	9.5	4 3/16"	106.3
1214T	7/16"	11.1	5"	127.0
1216T	1/2"	12.7	5 1/4"	133.3
1218T	9/16"	14.2	5 3/4"	146.0
1220T	5/8"	15.8	6 1/8"	155.5
1222T	11/16"	17.4	6 1/2"	165.1
1224T	3/4"	19.0	6 3/4"	171.4
E551	Pouch			



1200T6

6 PIECES

SET OF 6 SHORT COMBINATION WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm
1210T	5/16"	7.9	3 1/4"	82.5
1212T	3/8"	9.5	4 3/16"	106.3
1214T	7/16"	11.1	5"	127.0
1216T	1/2"	12.7	5 1/4"	133.3
1218T	9/16"	14.2	5 3/4"	146.0
1220T	5/8"	15.8	6 1/8"	155.5
E550	Pouch			



METRIC SHORT COMBINATION WRENCH SETS



1200MT9

9 PIECES

SET OF 9 METRIC SHORT COMBINATION WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH	
	mm	in	mm	in
*1207MT	7	3"	7	3"
1208MT	8	3"	8	3"
1209MT	9	3 1/4"	9	3 1/4"
1210MT	10	4 3/16"	10	4 3/16"
1211MT	11	5"	11	5"
1212MT	12	5"	12	5"
1213MT	13	5 1/4"	13	5 1/4"
1214MT	14	5 1/4"	14	5 1/4"
1215MT	15	5 3/4"	15	5 3/4"
E551	Pouch			



*6 points



1200MT6

6 PIECES

SET OF 6 METRIC SHORT COMBINATION WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH	
	mm	in	mm	
	1209MT	9	4 3/16"	106.4
1210MT	10	5"	127.0	
1212MT	12	5 1/4"	133.4	
1213MT	13	5 1/4"	133.4	
1214MT	14	5 3/4"	146.1	
1215MT	15	5 3/4"	146.1	
E550	Pouch			



SUPER DRIVE

5

STANDARD OPEN END WRENCH SETS

3000G

15 PIECES

SET OF 15 STANDARD OPEN END WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH		CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm		in	mm	in	mm
	3016	3/16" X 1/4"	4.7 X 6.3	3 7/8"		98.4	3034	5/8" X 11/16"	15.8 X 17.4
3018	1/4" X 5/16"	6.3 X 7.9	4 1/2"	114.3	3035	11/16" X 3/4"	17.4 X 19.0	8 7/8"	225.4
3020	5/16" X 3/8"	7.9 X 9.5	5 1/8"	130.2	3038	3/4" X 13/16"	19.0 X 20.6	9 1/2"	241.3
3021	3/8" X 7/16"	9.5 X 11.1	5 3/4"	146.0	3039	3/4" X 7/8"	19.0 X 22.2	9 1/2"	241.3
3025	7/16" X 1/2"	11.1 X 12.7	6 3/8"	161.9	3040	13/16" X 7/8"	20.6 X 22.2	10 1/8"	257.1
3026	1/2" X 9/16"	12.7 X 14.2	7"	177.8	3045	15/16" X 1"	23.8 X 25.4	11 3/8"	288.9
3030	9/16" X 5/8"	14.2 X 15.8	7 5/8"	193.6	E104	Pouch			
3031	5/8" X 3/4"	15.8 X 19.0	8 9/16"	242.9					
3033	19/32" X 11/16"	15.0 X 17.4	8 1/4"	209.5					



3000H

10 PIECES

SET OF 10 STANDARD OPEN END WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH		CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm		in	mm	in	mm
	3018	1/4" X 5/16"	6.3 X 7.9	4 1/2"		114.3	3040	13/16" X 7/8"	20.6 X 22.2
3020	5/16" X 3/8"	7.9 X 9.5	5 1/8"	130.2	3045	15/16" X 1"	23.8 X 25.4	11 3/8"	288.9
3025	7/16" X 1/2"	11.1 X 12.7	6 3/8"	161.9	3050	1 1/16" X 1 1/8"	26.9 X 28.5	12 5/8"	320.7
3026	1/2" X 9/16"	12.7 X 14.2	7"	177.8	E504	Pouch			
3030	9/16" X 5/8"	14.2 X 15.8	7 5/8"	193.6					
3031	5/8" X 3/4"	15.8 X 19.0	8 9/16"	242.9					
3035	11/16" X 3/4"	17.4 X 19.0	8 7/8"	225.4					



3000D

10 PIECES

SET OF 10 STANDARD OPEN END WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH		CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm		mm	in	mm	
	3016	3/16" X 1/4"	4.7 X 6.3	3 7/8"		98.4	3040	13/16" X 7/8"	20.6 X 22.2
3020	5/16" X 3/8"	7.9 X 9.5	5 1/8"	130.2	3045	15/16" X 1"	23.8 X 25.4	11 3/8"	288.9
3021	3/8" X 7/16"	9.5 X 11.1	5 3/4"	146.0	E112	Pouch			
3025	7/16" X 1/2"	11.1 X 12.7	6 3/8"	161.9					
3026	1/2" X 9/16"	12.7 X 14.2	7"	177.8					
3030	9/16" X 5/8"	14.2 X 15.8	7 5/8"	193.6					
3033	19/32" X 11/16"	15.0 X 17.4	8 1/4"	209.5					
3039	3/4" X 7/8"	19.0 X 22.2	9 1/2"	241.3					



3000C

7 PIECES

SET OF 7 STANDARD OPEN END WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH		CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm		in	mm	in	mm
3016	3/16" X 1/4"	4.7 X 6.3	3 7/8"	98.4	3045	15/16" X 1"	23.8 X 25.4	11 3/8"	288.9
3020	5/16" X 3/8"	7.9 X 9.5	5 1/8"	130.2	E111	Pouch			
3025	7/16" X 1/2"	11.1 X 12.7	6 3/8"	161.9					
3030	9/16" X 5/8"	14.2 X 15.8	7 5/8"	193.6					
3035	11/16" X 3/4"	17.4 X 19.0	8 7/8"	225.4					
3040	13/16" X 7/8"	20.6 X 22.2	10 1/8"	257.1					



3000N

5 PIECES

SET OF 5 STANDARD OPEN END WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm
3021	3/8" X 7/16"	9.5 X 11.1	5 3/4"	146.0
3026	1/2" X 9/16"	12.7 X 14.2	7"	177.8
3030	9/16" X 5/8"	14.2 X 15.8	7 5/8"	193.6
3035	11/16" X 3/4"	17.4 X 19.0	8 7/8"	225.4
3040	13/16" X 7/8"	20.6 X 22.2	10 1/8"	257.1
E127	Pouch			



METRIC OPEN END WRENCH SETS

30000A

10 PIECES

SET OF 10 METRIC OPEN END WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH	
	mm	mm	in	mm
30607	6 X 7		4 1/2"	114.3
30809	8 X 9		5 1/8"	130.2
31011	10 X 11		5 3/4"	146.0
31213	12 X 13		6 3/8"	161.9
31415	14 X 15		7 5/8"	193.6
31617	16 X 17		8 1/4"	209.5
31819	18 X 19		8 7/8"	225.4
31922	19 X 22		9 1/2"	241.3
32122	21 X 22		10 1/8"	257.1
32427	24 X 27		11 3/8"	288.9
E504	Pouch			

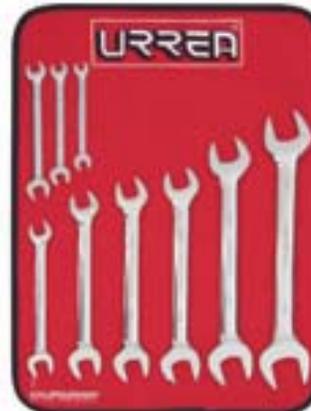


30000RM

9 PIECES

SET OF 9 METRIC OPEN END WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH	
	mm	mm	in	mm
30607	6 X 7		4 1/2"	114.3
30809	8 X 9		5 1/8"	130.2
31011	10 X 11		5 3/4"	146.0
31213	12 X 13		6 3/8"	161.9
31415	14 X 15		7 5/8"	193.6
31617	16 X 17		8 1/4"	209.5
31819	18 X 19		8 7/8"	225.4
32122	21 X 22		10 1/8"	257.1
32427	24 X 27		11 3/8"	288.9
E114	Pouch			



30000R

6 PIECES

SET OF 6 METRIC OPEN END WRENCHES

CODE	DIMENSIONS OF OPENING		LENGTH	
	mm	in	mm	in
30809	8 X 9	5 1/8"	130.2	
31011	10 X 11	5 3/4"	146.0	
31213	12 X 13	6 3/8"	161.9	
31415	14 X 15	7 5/8"	193.6	
31617	16 X 17	8 1/4"	209.5	
31819	18 X 19	8 7/8"	225.4	
E101	Pouch			



IGNITION WRENCH SET

3200

6 PIECES

IGNITION WRENCH SET

	DIMENSIONS OF OPENING	
	in	mm
	15/64"	5.9
	7/32"	5.5
	1/4"	6.3
	9/32"	7.1
	11/32"	8.7
	3/8"	9.5
E101	Pouch	



15° and 60° angle head allow wrench to be used in four different turning angles access in tight work areas.



5

BOX END RATCHETING WRENCH SETS

1180A

5 PIECES

SET OF 5 STANDARD OFFSET BOX END RATCHETING WRENCHES 12 POINT

CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm
1181	1/4 X 5/16"	6.3 X 7.9	4 1/4"	107.9
1182	3/8" X 7/16"	9.5 X 11.1	5 7/16"	138.1
1183	1/2" X 9/16"	12.7 X 14.2	6 3/4"	171.4
1184	5/8" X 11/16"	15.8 X 17.4	8"	203.4
1185	3/4" X 7/8"	19.0 X 22.2	9 1/8"	231.7
E127	Pouch			



1190A

5 PIECES

SET OF 5 STANDARD BOX END RATCHETING WRENCHES 12 POINT

CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm
1191	1/4 X 5/16"	6.3 X 7.9	4 1/2"	114.3
1192	3/8" X 7/16"	9.5 X 11.1	5 1/2"	139.7
1193	1/2" X 9/16"	12.7 X 14.2	6 7/8"	174.6
1194	5/8" X 11/16"	15.8 X 17.4	8 1/8"	206.3
1195	5/8" X 3/4"	15.8 X 19.0	8 1/8"	206.3
E127	Pouch			



METRIC BOX END RATCHET WRENCH SET

1180M

7 PIECES

SET OF 7 METRIC OFFSET BOX END RATCHETING WRENCHES 6 AND 12 POINT

CODE	DIMENSIONS OF OPENING		LENGTH	
	mm	in	in	mm
1181M*	7 X 8	4 1/4"	4 1/4"	107.9
1182M*	9 X 10	5 7/16"	5 7/16"	138.1
1183M*	11 X 12	6 3/4"	6 3/4"	171.4
1184M*	13 X 14	6 3/4"	6 3/4"	171.4
1185M	15 X 17	8"	8"	203.4
1186M	16 X 18	9 1/8"	9 1/8"	231.7
1187M	19 X 21	8"	8"	203.4
E111	Pouch			

*6 POINT



1190M

5 PIECES

SET OF 5 METRIC BOX END RATCHETING WRENCHES 12 POINT

CODE	DIMENSIONS OF OPENING		LENGTH	
	mm	in	in	mm
1191M	7 X 8	4 1/2"	4 1/2"	114.3
1192M	9 X 10	5 1/2"	5 1/2"	139.7
1193M	11 X 12	6 7/8"	6 7/8"	174.6
1194M	13 X 14	6 7/8"	6 7/8"	174.6
1195M	15 X 17	8 1/8"	8 1/8"	206.3
E127	Pouch			



15° BOX END WRENCH SETS

1100D

10 PIECES

SET OF 10 BOX END WRENCHES 12 POINT 15°

CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm
1120	5/16" X 3/8"	7.9 X 9.5	4 1/4"	107.9
1122	3/8" X 7/16"	9.5 X 11.1	4 5/8"	117.4
1125	7/16" X 1/2"	11.1 X 12.7	5"	127.0
1126	1/2" X 9/16"	12.7 X 14.2	5 3/8"	136.5
1130	9/16" X 5/8"	14.2 X 15.8	5 3/4"	146.0
1134	5/8" X 11/16"	15.8 X 17.4	10 5/8"	269.8
1135	11/16" X 3/4"	17.4 X 19.0	11 1/4"	285.7
1139	3/4" X 7/8"	19.0 X 22.2	13 1/8"	333.3
1140	13/16" X 7/8"	20.6 X 22.2	13 7/8"	352.4
1145	15/16" X 1"	23.8 X 25.4	15 1/2"	393.7
E123	Pouch			



1100H

7 PIECES

SET OF 7 BOX END WRENCHES 12 POINT 15°

CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm
1122	3/8" X 7/16"	9.5 X 11.1	4 5/8"	117.4
1125	7/16" X 1/2"	11.1 X 12.7	5"	127.0
1126	1/2" X 9/16"	12.7 X 14.2	5 3/8"	136.5
1130	9/16" X 5/8"	14.2 X 15.8	5 3/4"	146.0
1135	11/16" X 3/4"	17.4 X 19.0	11 1/4"	285.7
1140	13/16" X 7/8"	20.6 X 22.2	13 7/8"	352.4
1145	15/16" X 1"	23.8 X 25.4	15 1/2"	393.7
E122	Pouch			



1100G

5 PIECES

SET OF 5 BOX END WRENCHES 12 POINT 15°

CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm
	1120	5/16" X 3/8"	7.9 X 9.5	4 1/4"
1125	7/16" X 1/2"	11.1 X 12.7	5"	127.0
1130	9/16" X 5/8"	14.2 X 15.8	5 3/4"	146.0
1135	11/16" X 3/4"	17.4 X 19.0	11 1/4"	285.7
1140	13/16" X 7/8"	20.6 X 22.2	13 7/8"	352.4
E552	Pouch			



15°



SUPER DRIVE



METRIC 15° BOX END WRENCH SETS

1100SM

11 PIECES

SET OF 11 METRIC BOX END WRENCHES 12 POINT 15°

CODE	DIMENSIONS OF OPENING		LENGTH	
	mm		in	mm
	1051M	8 X 9	4 23/64"	110
1053M	10 X 11	4 47/64"	120	
1054M	11 X 13	5"	127	
1057M	12 X 13	5 23/64"	136	
1061M	14 X 15	5 51/64"	147	
1064M	16 X 18	10 9/16"	268	
1065M	17 X 19	11 15/64"	285	
1072M	21 X 24	12 7/32"	310	
1073M	22 X 24	13 25/64"	340	
1077M	27 X 30	13 55/64"	352	
1079M	30 X 32	15 15/32"	393	
E113	Pouch			



mm

15°



SUPER DRIVE



5

1100DM

7 PIECES

7 PIECE SET OF METRIC BOX END WRENCHES 12 POINT 15°

CODE	DIMENSIONS OF OPENING		LENGTH	
	mm		in	mm
	1051M	8 X 9	4 23/64"	110
1053M	10 X 11	4 47/64"	120	
1054M	11 X 13	5"	127	
1057M	12 X 13	5 23/64"	136	
1061M	14 X 15	5 51/64"	147	
1064M	16 X 18	10 9/16"	268	
1065M	17 X 19	11 15/64"	285	
E111	Pouch			



mm

15°



SUPER DRIVE



STANDARD 45° BOX END WRENCH SET

8100C

6 PIECES

SET OF 6 STANDARD BOX END WRENCHES 12 POINT 45°

CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm
	8180	3/8" X 7/16"	9.5 X 11.1	7 3/4"
8181	1/2" X 9/16"	12.7 X 14.2	9"	228.6
8182	5/8" X 11/16"	15.8 X 17.4	10 1/4"	260.3
8183	25/32" X 13/16"	19.8 X 20.6	11 1/2"	292.1
8184	3/4" X 7/8"	19.0 X 22.2	12 3/4"	323.8
8185	15/16" X 1"	23.8 X 25.4	14"	355.6
E124	Pouch			



45°



SUPER DRIVE



METRIC 45° BOX END WRENCH SET

8100CM

6 PIECES

SET OF 6 METRIC BOX END WRENCHES 12 POINT 45°

CODE	DIMENSIONS OF OPENING		LENGTH	
	mm	mm	in	mm
80911	9 X 11		7 3/4"	196.8
81011	10 X 11		7 3/4"	196.8
81314	13 X 14		9"	228.6
81617	16 X 17		10 1/4"	260.3
81922	19 X 22		12 3/4"	323.8
82426	24 X 26		14"	355.6
E124	Pouch			



SUPER DRIVE



FLARE NUT WRENCH SET

3760

3 PIECES

SET OF 3 STANDARD FLARE NUT WRENCHES 6 POINT

CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm
3764	3/8" X 7/16"	9.5 X 11.1	6 5/8"	168.2
3768	1/2" X 9/16"	12.7 X 14.2	7 9/16"	192.8
3772	5/8" X 11/16"	15.8 X 17.4	8 13/16"	223.8
E105	Pouch			



METRIC FLARE NUT WRENCH SET

3700M

5 PIECES

SET OF 5 METRIC FLARE NUT WRENCHES 6 POINT

CODE	DIMENSIONS OF OPENING		LENGTH	
	mm	mm	in	mm
3709M	9 X 11		6 5/8"	168.2
3710M	10 X 12		6 5/8"	168.2
3713M	13 X 14		7 9/16"	192.8
3715M	15 X 17		8 13/16"	223.8
3716M	16 X 18		8 13/16"	223.8
E127	Pouch			



OBSTRUCTION WRENCH SET

1700A

3 PIECES

SET OF 3 STANDARD OBSTRUCTION WRENCHES 12 POINT

CODE	DIMENSIONS OF OPENING		LENGTH	
	in	mm	in	mm
1725	7/16" X 1/2"	11.1 X 12.7	5 7/8"	149.2
1730	9/16" X 5/8"	14.2 X 15.8	6 11/16"	169.8
1731	5/8" X 3/4"	15.8 X 19.0	7 11/16"	195.2
E510	Pouch			



METRIC OBSTRUCTION WRENCH SET

1700AM

4 PIECES

SET OF 4 METRIC OBSTRUCTION WRENCHES 12 POINT

CODE	DIMENSIONS OF OPENING		LENGTH	
	mm	in	mm	in
171012	10 X 12	5 7/8"	149.2	
171113	11 X 13	5 7/8"	149.2	
171415	14 X 15	6 11/16"	106	
171619	16 X 19	7 11/16"	195.2	
E511	Pouch			



1700CM

5 PIECES

SET OF 5 METRIC OBSTRUCTION WRENCHES 12 POINT

CODE	DIMENSIONS OF OPENING		LENGTH	
	mm	in	mm	in
171012	10 X 12	5 7/8"	149.2	
171113	11 X 13	5 7/8"	149.2	
171415	14 X 15	6 11/16"	106	
171619	16 X 19	7 11/16"	195.2	
171718	17 X 18	7 11/16"	195.2	
E511	Pouch			



5

ADJUSTABLE WRENCHES

Adjustable wrenches are very versatile tools because the size of their opening can be changed by opening or closing a movable jaw using an adjustable thumbwheel system, which makes it possible to tighten or loosen almost any type of nut or bolt. When using an adjustable wrench, it is recommended that force always be applied by pulling and not pushing, so that the load is always on the fixed jaw of the wrench.

High resistance exceeding the values of ASME/ANSI and FEDERAL nominal standards.

Maneuverability and easy access approach for hard to reach nuts and bolts.

Jaws are provided with radio to reduce stress concentration. Tight assembly for reducing tolerances.

Manufactured from high quality alloy steel.

The 22.5° head angle with respect to the handle permits more comfortable access to the nut or bolt.

Reduced play between the worm gear and grooves in the lower jaw, which translates into greater security in handling

ADJUSTABLE CHROME WRENCHES WITH RUBBER GRIP HANDLE

7XXPG



ADJUSTABLE CHROME WRENCHES SUPER DUTY WITH RUBBER GRIP HANDLE

CODE	DIMENSIONS OF OPENING		LENGTH		TORQUE ASME/ANSI B107.8	
	in	mm	in	mm	grs	lbs
710PG	1 5/16	33.3	10	254.0	440	0.970
712PG	1 1/2	38.1	12	304.8	753	1.660



STANDARDS: FEDERAL GGG-W-631
ASME B 107.8 NOM-0.106

Measurement scale for more precision.



Rubber grip for greater grip comfort.

Ergonomic handle is wider for more comfortable grip.

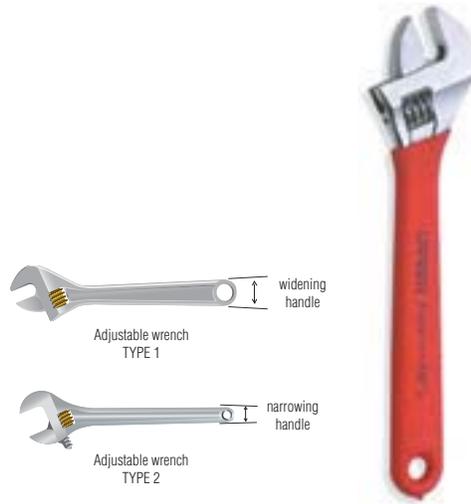
7XXG

CODE	DIMENSIONS OF OPENING		LENGTH		TORQUE ASME/ANSI B107.8		TYPE	
	in	mm	in	mm	grs	lbs		Lb-in
704G	1/2"	12.7	4"	101.6	57.4	0.13	600	1
706G	15/16"	23.8	6"	152.4	123.4	0.27	1450	1
708G	1"	25.4	8"	203.2	437.0	0.96	2700	1
710G	1 1/8"	28.5	10"	254.0	700.0	1.54	4500	1
712G	1 5/16"	33.3	12"	304.8	800.0	1.76	7650	1
715G	1 11/16"	42.8	15"	381.0	1575.0	3.47	15000	2
718G	2 1/16"	52.3	18"	457.2	2370.0	5.22	20000	2
724G	2 7/16"	61.9	24"	609.6	3425.0	7.55	25000	2

STANDARDS: FEDERAL GGG-W-631 ASME/ANSI B 107.8 NOM-0.106



RUBBER GRIP



Adjustable Wrenches with rubber grip for greater grip comfort.

CHROME ADJUSTABLE WRENCHES

7XXP



CODE	DIMENSIONS OF OPENING		LENGTH		TORQUE ASME/ANSI B107.8		
	in	mm	in	mm	grs	lbs	Lb-in
710P	1 5/16"	33.3	10	254.0	440	0.970	4500
712P	1 1/2"	38.1	12	304.8	753	1.660	7650

STANDARDS: FEDERAL GGG-W-631 ASME B 107.8 NOM-0.106



Wider aperture for larger fastener.



Measurement scale for more precision.

Ergonomic handle is wider for more comfortable grip.

7XX

CODE	DIMENSIONS OF OPENING		LENGTH		TORQUE ASME/ANSI B107.8		TYPE	
	in	mm	in	mm	grs	lbs		Lb-in
704	1/2"	12.7	4"	101.6	50	0.11	600	1
706	15/16"	23.8	6"	152.4	109	0.24	1450	1
708	1"	25.4	8"	203.2	244	0.54	2700	1
710	1 1/8"	28.5	10"	254.0	380	0.84	4500	1
712	1 5/16"	33.3	12"	304.8	660	1.46	7650	1
715	1 11/16"	42.8	15"	381.0	1483	3.27	15000	2
718	2 1/16"	52.3	18"	457.2	2309	5.09	20000	2
724	2 7/16"	61.9	24"	609.6	3392	7.48	25000	2

STANDARDS: FEDERAL GGG-W-631 ASME/ANSI B 107.8 NOM-0.106



Adjustable wrench TYPE 1



Adjustable wrench TYPE 2



710

Opening with rounded edges for avoiding stress concentration and providing better adjustment.

Slimmer jaws for access in narrower spaces.

Thumbwheel manufactured from high quality alloy steel.

Extra-wide jaws permit use on a wide variety of nuts and bolts.

Nickel-chrome plated for corrosion resistance.

The arrow indicates the direction of the turn when applying force

Hot forged body with high strength steel and maximum ergonomics.



715

Precision in a single tool, on one end the traditional open end wrench is used for tightening nuts and bolts; on the other end, a reversible ratcheting wrench for more difficult tightening. Both with the same size, speed and functionality. To keep your tools neat and orderly, we recommend using the different options for organization and storage presented in chapter 2 of this manual.



Mirror chrome finish in chrome vanadium steel for greater strength and durability.

Size stamped on wrench end

Exceeds ANSI standards.



Turns nuts with a 5° angle of recovery compared to conventional wrenches, which require 30°. No repositioning is necessary thanks to the ratcheting mechanism.



Works with long studs, even where long sockets won't reach.



72-tooth mechanism, 5° recovery.

STANDARD COMBINATION RATCHETING WRENCHES

12XXCM

CODE	DIMENSIONS OF OPENING	LENGTH		Scales	
		in	mm	grs	lbs
1210CM	5/16"	5 9/16"	141.2	39	0.08
1212CM	3/8"	6 3/16"	157.1	64	0.14
1214CM	7/16"	6 1/2"	165.9	69	0.15
1216CM	1/2"	7 1/8"	180.9	98	0.21
1218CM	9/16"	7 1/2"	190.5	114	0.25
1220CM	5/8"	8 7/16"	214.2	142	0.31
1224CM	3/4"	9 7/8"	250.8	235	0.51



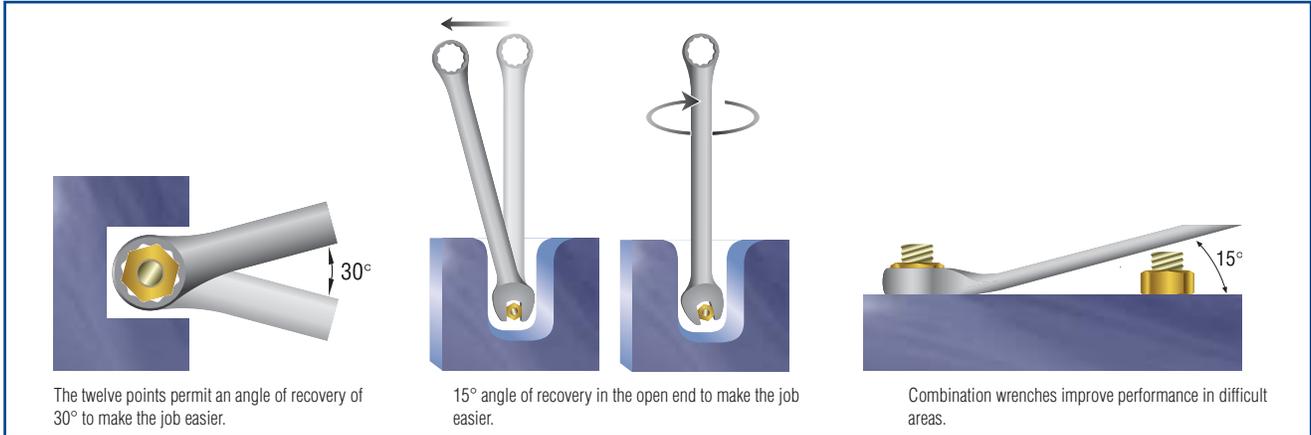
METRIC COMBINATION RATCHETING WRENCHES

12XXMCM

CODE	DIMENSIONS OF OPENING	LENGTH		Scales	
		in	mm	grs	lbs
1208MCM	8	5 6/16"	141.2	39	0.08
1210MCM	10	6 3/16"	157.1	64	0.14
1212MCM	12	6 1/2"	165.9	69	0.15
1213MCM	13	7 1/8"	180.9	98	0.21
1214MCM	14	7 1/2"	190.5	114	0.25
1215MCM	15	8 7/16"	214.2	142	0.31
1218MCM	18	9 7/8"	250.8	235	0.51



There are also combination wrenches on which both ends are the same size, an open end used to apply rapid, low torque force, and a box end that allows the application of greater torque force. The open end provides the speed, together with an end angle that permits two action positions, reducing the angle of recovery to 15°. The closed end with 12 points of contact gives the box end head high strength properties.



TYPE OF FINISH:

A = Full polish finish
Conventional design

B = Satin finish
Conventional design

C = Satin finish
Round handle



ROUND HANDLE WRENCHES

(Sizes starting from 1 7/8" and 50 mm):

The round handle on URREA combination wrenches is used in the design of large size wrenches, starting from 1 7/8" in SAE sizes and 50 mm in metric sizes. This handle provides a better grip because of its larger size and circular geometry, which better fits the shape of the hand. Because there are no edges, the grip is much more comfortable. Furthermore, because it is manufactured from solid steel, less material is required, providing a lighter design that facilitates use under adverse conditions.



Code 1299

Round handle combination wrench.

The good thing about this type of handle is its ergonomics, because greater strength is required for sizes over 1 7/8". The rounded shape provides a more comfortable grip, which translates into greater torque.

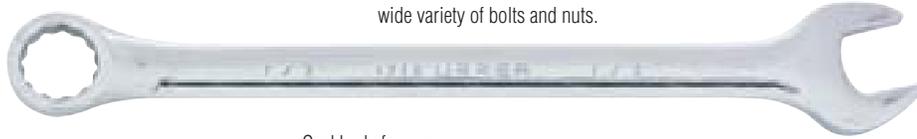
COMBINATION WRENCHES



Box end with Superdrive design



Available in standard and metric sizes to fit a wide variety of bolts and nuts.



Narrow ends for better access in tight areas.

Oval body for a more comfortable grip.

Precision machined ends for a perfect fit on nuts and bolts.

STANDARD COMBINATION WRENCHES

12XX / 121XX

TYPE OF FINISH	CODE	DIMENSIONS OF OPENING		B	C	D	C1	D1	LENGTH		TORQUE STRENGTH ASME/ANSI B107.6 LB-In.			
		in	mm						in	mm	grs	lbs	open end	box end
A	*1208	1/4"	6.3	19/64"	39/64"	11/64"	27/64"	15/64"	5"	127.0	31	0.07	67	220
A	1210	5/16"	7.9	3/8"	45/64"	3/16"	35/64"	17/64"	5 1/2"	139.7	31	0.07	138	275
A	1212	3/8"	9.5	7/16"	51/64"	13/64"	19/32"	5/16"	6"	152.4	40	0.09	275	605
A	1214	7/16"	11.1	33/64"	59/64"	15/64"	11/16"	21/64"	6 1/2"	165.1	55	0.12	413	715
A	1216	1/2"	12.7	19/32"	1 3/32"	1/4"	49/64"	11/32"	7"	177.8	74	0.16	550	1020
A	1218	9/16"	14.2	11/16"	1 13/64"	17/64"	27/32"	23/64"	7 1/2"	190.5	95	0.21	770	1500
A	1220	5/8"	15.8	49/64"	1 21/64"	19/64"	15/16"	25/64"	8 1/16"	204.7	115	0.25	1100	2200
A	1222	11/16"	17.4	13/16"	1 29/64"	5/16"	1 1/32"	27/64"	8 7/8"	225.4	151	0.33	1375	2640
A	1224	3/4"	19.0	7/8"	1 37/64"	21/64"	1 3/32"	29/64"	9 3/4"	247.6	186	0.41	1650	2860
A	1226	13/16"	20.6	61/64"	1 11/16"	11/32"	1 3/16"	31/64"	10 5/8"	269.8	253	0.56	2200	3300
A	1228	7/8"	22.2	1 1/32"	1 51/64"	3/8"	1 5/16"	33/64"	11 1/2"	292.1	302	0.67	2475	3630
A	1230	15/16"	23.8	1 7/64"	1 29/32"	25/64"	1 25/64"	35/64"	12 3/8"	314.3	340	0.75	3025	4510
A	1232	1"	25.4	1 3/16"	2 1/64"	13/32"	1 1/2"	37/64"	13 1/4"	336.5	417	0.92	3575	5390
A	1234	1 1/16"	26.9	1 17/64"	2 9/64"	27/64"	1 39/64"	39/64"	14 1/8"	358.7	516	1.14	3850	5940
A	1236	1 1/8"	28.5	1 11/32"	2 17/64"	15/32"	1 11/16"	41/64"	15 3/8"	390.5	558	1.23	4400	6490
A	1240	1 1/4"	31.7	1 31/64"	2 33/64"	31/64"	1 55/64"	45/64"	16 3/4"	425.4	780	1.72	5775	7925
B	1242	1 5/16"	33.3	1 33/64"	2 41/64"	33/64"	1 15/16"	47/64"	17 5/8"	447.6	1,000	2.20	6600	8800
B	1244	1 3/8"	34.9	1 19/32"	2 49/64"	17/32"	2 1/64"	49/64"	18 1/2"	469.9	1,130	2.49	7425	8975
B	1246	1 7/16"	36.5	1 43/64"	2 57/64"	35/64"	2 1/8"	25/32"	19 3/8"	492.1	1,380	3.04	8250	9240
B	1248	1 1/2"	38.1	1 47/64"	3 1/64"	9/16"	2 11/64"	51/64"	20 1/4"	514.3	1,620	3.57	8500	11495
B	1250	1 9/16"	39.6	1 61/64"	3 19/64"	4 1/64"	2 25/64"	57/64"	23"	584.2	1,980	4.37	9000	12800
B	1252	1 5/8"	41.2	1 61/64"	3 19/64"	41/64"	2 25/64"	57/64"	23"	584.2	1,980	4.37	9000	12800
B	1254	1 11/16"	42.8	1 61/64"	3 19/64"	41/64"	2 25/64"	57/64"	23"	584.2	1,930	4.25	10500	13570
B	1256	1 3/4"	44.4	2 7/64"	3 41/64"	43/64"	2 3/4"	61/64"	25"	635.0	2,400	5.29	11100	14300
B	1258	1 13/16"	46.0	2 7/64"	3 41/64"	43/64"	2 3/4"	61/64"	25"	635.0	2,360	5.20	11750	15100
C	1260	1 7/8"	47.6	2 1/8"	3 7/8"	47/64"	3 9/64"	1 11/16"	28"	711.2	3,311	7.30	12400	15900
C	1264	2"	50.8	2 1/4"	4 1/8"	47/64"	3 9/64"	1 11/16"	28"	711.2	3,129	6.90	13650	17400
C	1266	2 1/16"	52.39	2 1/4"	4 1/2"	1"	3 1/4"	1 9/16"	30"	762	5,902	13.01	14300	18200
C	1268	2 1/8"	53.98	2 1/4"	4 1/2"	1"	3 1/4"	1 9/16"	30"	762	5,902	13.01	14900	19000
C	1270	2 3/16"	55.56	2 1/4"	4 1/2"	1"	3 1/4"	1 9/16"	30"	762	5,902	13.01	15500	19700
C	1272	2 1/4"	57.15	2 1/4"	4 1/2"	1"	3 1/2"	1 9/16"	30"	762	5,902	13.01	16200	20500
C	1274	2 5/16"	58.74	2 1/4"	4 1/2"	1"	3 1/2"	1 9/16"	30 1/2"	775	5,902	13.01	NE	NE
C	1276	2 3/8"	60.33	2 1/4"	4 1/2"	1"	3 1/2"	1 9/16"	30 1/2"	775	5,902	13.01	NE	NE
C	1278	2 7/16"	61.91	2 5/16"	4 1/2"	1"	3 1/2"	1 9/16"	30 1/2"	775	5,902	13.01	NE	NE
C	1280	2 1/2"	63.5	2 5/16"	4 1/2"	1"	3 1/2"	1 9/16"	30 1/2"	775	5,902	13.01	NE	NE
C	1282	2 9/16"	65.09	2 1/2"	4 1/2"	1 1/8"	4 1/4"	1 11/16"	31"	787	8,172	18.02	NE	NE
C	1284	2 5/8"	66.68	2 1/2"	5 1/2"	1 1/8"	4 1/4"	1 11/16"	31 1/2"	800	8,172	18.02	NE	NE
C	1286	2 11/16"	68.26	2 3/4"	5 1/2"	1 1/8"	4 1/4"	1 11/16"	32"	813	8,172	18.02	NE	NE
C	1288	2 3/4"	69.85	2 3/4"	5 1/2"	1 1/8"	4 1/4"	1 11/16"	32 1/2"	825	8,172	18.02	NE	NE
C	1290	2 13/16"	71.44	2 3/4"	5 1/2"	1 1/8"	4 1/4"	1 11/16"	33"	838	8,354	18.42	NE	NE
C	1292	2 7/8"	73.03	3"	5 1/2"	1 3/16"	4 3/4"	1 11/16"	33 1/2"	850	8,354	18.42	NE	NE
C	1294	2 15/16"	74.61	3"	5 1/2"	1 3/16"	4 3/4"	1 11/16"	34"	863	8,354	18.42	NE	NE
C	1296	3"	76.2	3"	5 1/2"	1 3/16"	4 3/4"	1 11/16"	34 1/2"	876	8,354	18.42	NE	NE
C	1298	3 1/16"	77.79	3 1/8"	5 1/2"	1 3/16"	4 3/4"	1 11/16"	35"	889	8,354	18.42	NE	NE
C	1299	3 1/8"	79.38	3 1/8"	5 1/2"	1 3/16"	4 3/4"	1 11/16"	35 1/2"	918	8,354	18.42	NE	NE
C	12104	3 1/4"	82	3 5/16"	6 1/4"	1 1/2"	5"	1 1/2"	36 1/16"	918	9,230	20.35	NE	NE
C	12108	3 3/8"	85	3 1/2"	6 1/4"	1 1/2"	5"	1 1/2"	37"	939	9,420	20.77	NE	NE
C	12112	3 1/2"	89	3 5/8"	6 1/4"	1 1/2"	5"	1 1/2"	37 5/8"	956	9,632	21.23	NE	NE
C	12116	3 5/8"	92	3 3/4"	6 1/4"	1 1/2"	5"	1 1/2"	38"	965	9,750	21.50	NE	NE
C	12120	3 3/4"	95	3 7/8"	6 1/4"	1 1/2"	5"	1 1/2"	38 1/16"	966	9,830	21.67	NE	NE
C	12124	3 7/8"	98	4"	6 1/4"	1 1/2"	5"	1 1/2"	38 3/4"	984	10,312	22.73	NE	NE
C	12128	4"	101	4 1/16"	6 1/4"	1 1/2"	5"	1 1/2"	39 1/8"	993	10,500	23.15	NE	NE



STANDARDS: FEDERAL GGG-W-636
ASME/ANSI B 107.9M Y B 107.39M
SAE A S954

Box end with Superdrive design
SUPER DRIVE



Clear, deep stamping for easy product identification.

Nickel-chrome plated full polish finish for corrosion resistance.

Narrow ends for better access in tight areas.

Available in 12 point design which permits a 30° angle of recovery.

Steel alloyed with high quality molybdenum-vanadium and controlled heat treatment.

METRIC COMBINATION WRENCHES

12XXM

TYPE OF FINISH	CODE	DIMENSIONS OF OPENING	B	C	D	C1	D1	LENGTH		TORQUE STRENGTH ASME/ANSI B107.9 LB-In.			
								in	mm	grs	lbs	open end	box end
A	*1206M	6	7.54	15.4	4.5	10.64	6.0	5"	127.0	21	0.05	61.9	177.0
A	*1207M	7	7.54	15.4	4.5	10.64	6.0	5"	127.0	21	0.05	70.8	238.9
A	1208M	8	9.52	17.8	4.7	13.81	6.8	5 1/2"	139.7	30	0.07	132.7	265.5
A	1209M	9	11.12	20.6	5.38	15.03	7.8	6"	152.4	35	0.08	185.8	354.0
A	1210M	10	13.10	23.8	6.09	17.24	8.2	6 1/2"	165.1	50	0.11	274.3	628.3
A	1211M	11	13.10	23.8	6.09	17.24	8.2	6 1/2"	165.1	57	0.13	407.1	708.0
A	1212M	12	15.08	27.6	6.50	19.58	8.6	7"	177.8	57	0.13	433.6	805.3
A	1213M	13	15.08	27.6	6.50	19.58	8.6	7"	177.8	73	0.16	548.7	1017.7
A	1214M	14	17.44	30.6	6.8	21.94	9.0	7 1/2"	190.5	98	0.22	761.1	1398.3
A	1215M	15	17.44	30.6	6.8	21.94	9.0	7 1/2"	190.5	108	0.24	920.4	1770.0
A	1216M	16	19.40	33.7	7.4	24.25	10.2	8 1/16"	204.7	113	0.25	1097.4	2194.8
A	1217M	17	21.03	36.9	7.0	26.13	10.9	8 7/8"	225.4	156	0.34	1230.1	2362.9
A	1218M	18	21.03	36.9	7.9	26.13	10.9	8 7/8"	225.4	165	0.36	1371.1	2690.4
A	1219M	19	22.63	40.1	8.4	27.91	11.7	9 3/4"	247.6	185	0.41	1646.1	2858.5
A	1220M	20	24.61	42.9	8.0	30.45	12.4	10 5/8"	269.8	240	0.53	1920.4	3070.9
A	1221M	21	24.61	42.9	8.9	30.45	12.4	10 5/8"	269.8	251	0.55	2194.8	3292.2
A	1222M	22	26.18	45.7	9.4	33.24	12.2	11 1/2"	292.1	286	0.63	2469.1	3610.8
A	1223M	23	26.18	45.7	9.4	33.24	12.2	11 1/2"	292.1	302	0.67	2743.5	4035.6
A	1224M	24	28.19	48.5	9.9	35.28	14.0	12 3/8"	314.3	335	0.74	3017.8	4504.6
A	1225M	25	28.19	48.5	9.9	35.28	14.0	12 3/8"	314.3	335	0.08	3292.2	4947.1
A	1226M	26	30.17	51.3	10.4	38.07	14.7	13 1/4"	336.5	399	0.88	3566.5	5380.8
A	1227M	27	32.15	54.3	11.0	40.86	15.5	14 1/8"	358.7	483	1.06	3823.2	5938.3
A	1228M	28	34.13	57.6	11.4	42.90	16.3	15 3/8"	390.5	627	1.38	4398.4	6283.5
A	1229M	29	34.13	57.6	11.4	42.90	16.3	15 3/8"	390.5	627	1.38	4548.9	6637.5
A	1230M	30	34.13	57.6	11.4	42.90	16.3	15 3/8"	390.5	627	1.38	4548.9	6637.5
A	1232M	32	37.69	64.0	12.0	47.26	17.1	16 3/4"	425.4	685	1.51	5752.2	5752.5
B	1233M	33	37.69	64.0	12.4	47.26	17.7	16 3/4"	425.4	780	1.72	6195.0	8407.5
B	1234M	34	37.69	64.0	12.4	47.26	17.7	16 3/4"	425.4	780	1.72	6593.2	8796.9
B	1236M	36	38.50	67.0	13.0	49.04	18.5	17 5/8"	447.6	1000	2.20	7911.9	10310.2
B	1237M	37	38.50	67.0	13.0	49.04	18.5	17 5/8"	447.6	1000	2.20	8487.1	11226.2
B	1238M	38	40.48	70.3	13.4	51.33	19.3	18 1/2"	469.9	1130	2.49	9062.4	12142.2
B	1241M	41	42.46	73.4	13.9	53.87	20.1	19 3/8"	492.1	1380	3.04	10212.9	13974.1
B	1242M	42	44.04	76.7	14.4	55.14	20.8	20 1/4"	514.3	1620	3.57	10874.4	15053.8
B	1246M	46	49.60	86.1	16.0	60.70	23.1	23"	584.2	1980	4.37	12859.0	18292.9
C	1250M	50	53.56	92.4	17.0	69.92	24.6	25"	635.0	2400	5.29	15186.6	22231.2
C	1251M	51	57.15	114	22.0	75	32.00	28"	711.2	3450	7.61	NE	NE
C	1254M	54	57.15	114	25.4	83	40.00	30 1/2"	774.7	5820	12.83	NE	NE
C	1255M	55	57.15	114	25.4	83	40.00	30 1/2"	774.7	5820	12.83	NE	NE
C	1257M	57	57.15	114	25.4	83	40.00	30 1/2"	774.7	5820	12.83	NE	NE
C	1260M	60	57.15	114	25.4	89	40.00	30 1/2"	774.7	5820	12.83	NE	NE
C	1264M	64	63.50	140	25.4	89	40.00	30 1/2"	774.7	5820	12.83	NE	NE
C	1265M	65	63.50	140	29.0	114	43.00	31"	787.4	5820	12.83	NE	NE
C	1270M	70	69.85	140	29.0	114	43.00	32 1/2"	825.5	8090	17.84	NE	NE
C	1273M	73	76.20	140	29.0	116	43.00	34"	863.6	8090	17.84	NE	NE
C	1275M	75	76.20	140	29.0	118	43.00	34"	863.6	8180	18.03	NE	NE
C	1280M	80	79.37	140	29.0	118	43.00	35 1/2"	901.0	8360	18.43	NE	NE



* 6 point



STANDARDS: FEDERAL GGG-W-636
ASME/ANSI B 107.9M Y B 107.39M

Modern machinery is more efficient and has better performance and technological characteristics than one can imagine, but is also more compact and has less space for maneuvering. when repairs or maintenance is necessary. For these applications, URREA presents its line of short combination wrenches. To keep your tools neat and orderly, we recommend using the different options for organization and storage presented in chapter 2 of this manual.

The box end **SUPER DRIVE** distributes all of the torque force across the entire head of the nut to avoid rounding the corners.

Machined and heat treated to exceed international ASME/ANSI and SAE standards.

Hot-forged using molybdenum-vanadium microalloyed steel.



Thin, compact head.

Box end with 12 points and a 15° angle for more comfortable handling.

The full polish finish is easy to clean and corrosion resistant.

The short oval handle permits greater maneuverability in difficult to access areas.



STANDARD SHORT COMBINATION WRENCHES



12XXT

CODE	DIMENSIONS OF OPENING		B	D	C1	D1	LENGTH		TORSION		TORQUE STRENGTH ASME/ANSI B107.6 LB-In.	
	in	mm					in	mm	grs	lbs	open end	box end
*1208T	1/4"	6.3	9/32"	9/64"	25/64"	11/64"	3"	76.2	10	0.02	67	220
1210T	5/16"	7.9	23/64"	11/64"	15/32"	13/64"	3 1/4"	82.5	18	0.04	138	275
1212T	3/8"	9.5	27/64"	3/16"	35/64"	15/64"	4 3/16"	106.3	27	0.06	275	605
1214T	7/16"	11.1	31/64"	13/64"	5/8"	1/4"	5"	127.0	45	0.10	413	715
1216T	1/2"	12.7	9/16"	7/32"	23/32"	9/32"	5 1/4"	133.3	50	0.11	550	1020
1218T	9/16"	14.2	41/64"	1/4"	25/32"	5/16"	5 3/4"	146.0	73	0.16	770	1500
1220T	5/8"	15.8	23/32"	17/64"	55/64"	21/64"	6 1/8"	155.5	84	0.19	1100	2200
1222T	11/16"	17.4	25/32"	9/32"	15/16"	11/32"	6 1/2"	165.1	108	0.24	1375	2640
1224T	3/4"	19.0	53/64"	19/64"	1 1/64"	3/8"	6 3/4"	171.4	115	0.25	1650	2860



SUPER DRIVE



STANDARDS: FEDERAL GGG-W-636
ASME/ANSI B 107.9M Y B 107.39M
SAE A S954

* 6 points

METRIC SHORT COMBINATION WRENCHES



12XXMT

CODE	DIMENSIONS OF OPENING		B	D	C1	D1	LENGTH		TORSION		TORQUE STRENGTH ASME/ANSI B107.9M LB-In.	
	mm	mm					in	mm	grs	lbs	open end	box end
*1206MT	6	7.1	3.7	10.0	4.3	3"	76.2	10	0.02	61.9	177.0	
*1207MT	7	7.1	3.7	10.0	4.3	3"	76.2	10	0.02	70.8	238.9	
1208MT	8	4.0	4.2	11.9	5.1	3 1/4"	82.5	10	0.02	132.7	265.5	
1209MT	9	10.5	4.5	13.6	5.8	4 3/16"	106.3	27	0.06	185.8	354.0	
1210MT	10	12.4	5.1	15.6	6.4	5"	127.0	45	0.10	274.3	628.3	
1211MT	11	12.4	5.1	15.6	6.4	5"	127.0	45	0.10	407.1	708.0	
1212MT	12	14.3	5.6	18.0	7.1	5 1/4"	133.3	50	0.11	433.6	805.3	
1213MT	13	14.3	5.6	18.0	7.1	5 1/4"	133.3	50	0.11	548.7	1017.7	
1214MT	14	16.5	6.1	19.9	7.7	5 3/4"	146.0	73	0.16	761.1	1398.3	
1215MT	15	16.5	6.1	19.9	7.7	5 3/4"	146.0	73	0.16	920.4	1770.0	
1216MT	16	18.4	6.6	22.3	8.3	6 1/8"	155.5	84	0.19	1097.4	2194.8	
1217MT	17	19.9	6.9	24.3	8.7	6 1/2"	165.1	108	0.24	1230.1	2362.9	
1218MT	18	19.9	6.9	24.3	8.7	6 1/2"	165.1	108	0.24	1371.1	2690.4	
1219MT	19	21.4	7.3	25.8	9.4	6 3/4"	171.4	115	0.25	1646.1	2858.5	



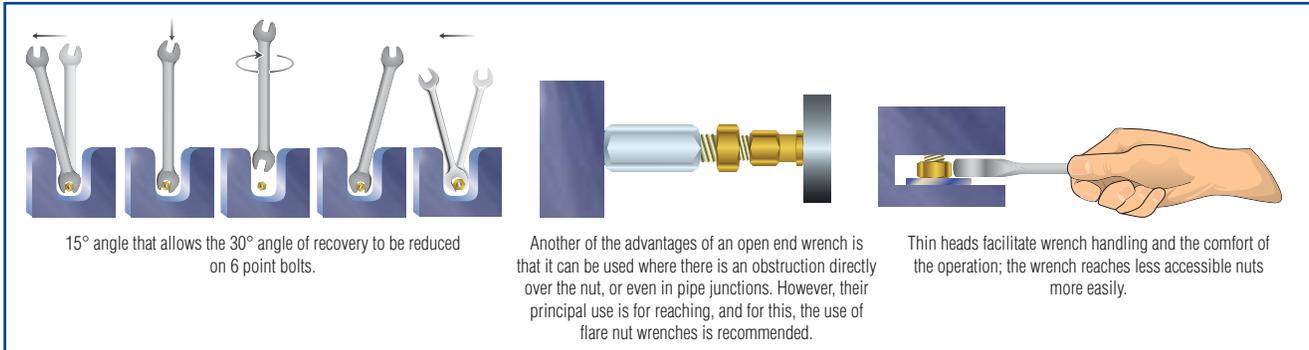
SUPER DRIVE



STANDARDS: FEDERAL GGG-W-636
ASME/ANSI B 107.9M Y B 107.39M

* 6 points

Open end wrenches have 2 different sized ends on the same wrench and are one of the most common and versatile wrenches. The smaller the wrench end opening, the shorter the body of the wrench, and this is proportionate to the maximum leverage that can be applied to the head of the bolt or nut. By having two different sizes in a single wrench, the number of tools required for a job is reduced.



STANDARD OPEN END WRENCHES

30XX

TYPE OF FINISH	CODE	DIMENSIONS OF OPENING		B	C	D	B1	C1	D1	LENGTH		TORQUE STRENGTH ASME/ANSI B107.6 LB-In.			
		in	mm							in	mm	grs	lbs	small head	large head
A	3016	3/16" X 1/4"	4.7 X 6.3	19/64"	1/2"	11/64"	1/4"	29/64"	11/64"	3 7/8"	98.4	14	0.03	45	67
A	3018	1/4" X 5/16"	6.3 X 7.9	3/8"	23/32"	3/16"	19/64"	39/64"	3/16"	4 1/2"	114.3	22	0.05	67	138
A	3020	5/16" X 3/8"	7.9 X 9.5	7/16"	13/16"	3/16"	3/8"	45/64"	3/16"	5 1/8"	130.2	33	0.07	138	275
A	3021	3/8" X 7/16"	9.5 X 11.1	31/64"	59/64"	15/64"	15/32"	51/64"	15/64"	5 3/4"	146.0	47	0.10	275	413
A	3025	7/16" X 1/2"	11.1 X 12.7	19/32"	1 1/32"	15/64"	33/64"	57/64"	15/64"	6 3/8"	161.9	65	0.14	413	550
A	3026	1/2" X 9/16"	12.7 X 14.2	43/64"	1 3/16"	1/4"	19/32"	1 1/32"	1/4"	7"	177.8	90	0.20	550	770
A	3030	9/16" X 5/8"	14.2 X 15.8	47/64"	1 9/32"	17/64"	43/64"	1 5/32"	17/64"	7 5/8"	193.6	113	0.25	770	1100
A	3031	5/8" X 3/4"	15.8 X 19.0	7/8"	1 37/64"	19/64"	47/64"	1 15/64"	19/64"	8 9/16"	242.9	165	0.36	1100	1650
A	3033	19/32" X 11/16"	15.0 X 17.4	51/64"	1 13/32"	19/64"	47/64"	1 9/32"	19/64"	8 1/4"	209.5	138	0.30	935	1375
A	3034	5/8" X 11/16"	15.8 X 17.4	51/64"	1 13/32"	19/64"	47/64"	1 9/32"	19/64"	8 1/4"	209.5	138	0.30	1100	1375
A	3035	11/16" X 3/4"	17.4 X 19.0	7/8"	1 37/64"	5/16"	51/64"	1 13/32"	5/16"	8 7/8"	225.4	176	0.39	1375	1650
A	3038	3/4" X 13/16"	19.0 X 20.6	1 1/32"	1 25/32"	21/64"	7/8"	1 37/64"	21/64"	9 1/2"	241.3	230	0.51	1650	2200
A	3039	3/4" X 7/8"	19.0 X 22.2	1 1/32"	1 25/32"	21/64"	7/8"	1 37/64"	21/64"	9 1/2"	241.3	231	0.51	1650	2475
A	3040	13/16" X 7/8"	20.6 X 22.2	1 1/32"	1 25/32"	11/32"	61/64"	1 21/32"	11/32"	10 1/8"	257.1	245	0.54	2200	2475
A	3045	15/16" X 1"	23.8 X 25.4	1 3/16"	2 1/32"	25/64"	1 1/16"	1 29/32"	25/64"	11 3/8"	288.9	360	0.79	3025	3575
A	3050	1 1/16" X 1 1/8"	26.9 X 28.5	1 11/32"	2 17/64"	27/64"	1 17/64"	2 9/64"	27/64"	12 5/8"	320.7	544	1.20	3850	4400
B	3051	1 1/16" X 1 1/4"	26.9 X 31.7	1 1/2"	2 33/64"	29/64"	1 17/64"	2 9/64"	29/64"	13 9/16"	344.4	639	1.41	3850	5775
B	3055	1 1/4" X 1 5/16"	31.7 X 33.3	1 9/16"	2 41/64"	31/64"	1 31/64"	2 33/64"	31/64"	14 1/2"	368.3	821	1.81	5775	6600
B	3060	1 3/8" X 1 7/16"	34.9 X 36.5	1 23/32"	2 57/64"	17/32"	1 41/64"	2 45/64"	17/32"	15 3/4"	400.0	1034	2.28	7425	8250
B	3070	1 1/2" X 1 5/8"	38.1 X 41.3	1 15/16"	3 17/64"	37/64"	1 25/32"	2 61/64"	37/64"	17"	431.8	1330	2.93	8500	9000
B	3075	1 11/16" X 1 13/16"	42.8 X 46.0	2 5/32"	3 41/64"	43/64"	2"	3 25/64"	43/64"	18 1/2"	469.9	1950	4.30	12000	14000
B	3080	1 7/8" X 2"	47.6 X 50.8	2 15/64"	4 1/32"	47/64"	2 5/32"	3 41/64"	47/64"	20"	508.0	2313	5.10	15000	17750



STANDARDS: FEDERAL GGG-W-636
ASME/ANSI B107.39M NOM-0-142



OPEN END WRENCHES



Precision broached ends for a perfect fit on nuts and bolts.

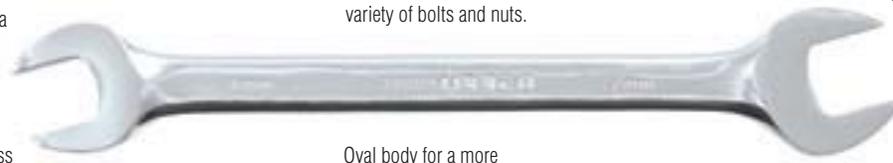
Available in inch and metric sizes to fit a wide variety of bolts and nuts.

Nickel-chrome plated full polish finish for corrosion resistance.

Narrow ends for better access in tight areas.

Oval body for a more comfortable grip.

Steel alloyed with high quality molybdenum-vanadium and controlled heat treatment.



TYPE A: Full polish



TYPE B: Satin finish

METRIC OPEN END WRENCHES

3XXXX

TYPE OF FINISH	CODE	DIMENSIONS OF OPENING	B	C	D	B1	C1	D1	LENGTH		TORQUE STRENGTH ASME/ANSI B107.9M LB-In.			
									in	mm	small head	large head		
A	30607	6 X 7	9.5	18.3	4.8	7.5	15.3	4.8	4 1/2"	114.3	22	0.05	61.9	70.8
A	30809	8 X 9	11.1	20.6	4.9	9.5	17.8	4.9	5 1/8"	130.2	33	0.07	132.7	185.8
A	30810	8 X 10	11.1	20.6	4.9	9.5	17.8	4.9	5 1/8"	130.2	33	0.07	132.7	274.3
A	31011	10 X 11	12.3	23.4	6.0	11.9	20.8	6.0	5 3/4"	146.0	48	0.11	274.3	407.1
A	31012	10 X 12	12.3	23.4	6.0	11.9	20.8	6.0	5 3/4"	146.0	48	0.11	274.3	433.6
A	31213	12 X 13	15.1	26.1	5.8	13.1	23.0	5.8	6 3/8"	161.9	63	0.14	433.6	548.7
A	31415	14 X 15	18.6	32.5	6.9	17.0	29.4	6.9	7 5/8"	193.6	105	0.23	761.1	920.4
A	31417	14 X 17	18.6	32.5	6.9	17.0	29.4	6.9	7 5/8"	193.6	63	0.14	761.1	1230.1
A	31617	16 X 17	20.6	35.7	7.4	18.6	32.5	7.4	8 1/4"	209.5	138	0.30	1097.4	1230.1
A	31819	18 X 19	22.6	40.0	7.4	20.6	35.7	7.8	8 7/8"	225.4	176	0.39	1371.7	1646.1
A	31922	19 X 22	26.1	45.2	8.8	22.6	40.0	8.4	9 1/2"	241.3	225	0.50	1646.1	2469.1
A	32122	21 X 22	26.1	45.2	8.9	24.6	42.0	8.9	10 1/8"	257.1	245	0.54	2194.3	2469.1
A	32427	24 X 27	30.1	51.8	9.9	28.1	48.4	9.9	11 3/8"	288.9	360	0.79	3017.8	2823.2
A	32528	25 X 28	34.1	57.5	10.9	32.1	54.3	10.9	12 5/8"	320.7	544	1.20	3292.2	4398.4
B	32732	27 X 32	37.9	63.9	11.4	32.1	54.4	11.4	13 9/16"	344.4	639	1.41	3823.2	5752.5
B	33236	32 X 36	43.7	73.4	13.5	41.7	68.8	13.5	15 3/4"	400.0	1034	2.28	5752.5	7911.9
B	33641	36 X 41	49.2	82.9	14.5	45.2	75.0	14.5	17"	431.8	1200	2.65	5752.5	10212.9



STANDARDS: FEDERAL GGG-W-636 ASME/ANSI B107.39M NOM-0-142



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guaranteed forever



URREA Tools are designed to offer precision, quality, and strength. They are made by highly skilled and trained personnel, using the most sophisticated equipment, the best materials available and under the strictest specifications.



CONTACT US

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These wrenches are composed of a ratcheting-type mechanism that permits application of the load to the nut or bolt and reversing without having to remove the wrench. The wrenches have two different sized ends in standard and metric versions. Because of the ratcheting mechanism, these wrenches are not designed to apply large amounts of torque, but rather to tighten nuts and bolts quickly.

Ratcheting mechanism that permits repositioning of the wrench without disengaging it from the nut or bolt.

Available in standard and metric sizes to fit a wide variety of nuts and bolts.

Nickel-chrome plated full polish finish for corrosion resistance.



Heat treated mechanism to ensure a long service life.

Thin body composed of two outer plates and a solid interior body.

Available in 6 or 12 points, flat or 45° offset.

STANDARD OFFSET BOX END RATCHETING WRENCHES 12 POINT

118X

CODE	DIMENSIONS OF OPENING		C	D	C1	D1	LENGTH		TORQUE STRENGTH FEDERAL GGG-W-001405 LB-In		TORQUE STRENGTH	
	in	mm					in	mm	grs	lbs	small head	large head
1181	1/4" X 5/16"	6.3 X 7.9	19/32"	3/8"	43/64"	3/8"	4 1/4"	107.9	56.7	0.32	144	180
1182	3/8" X 7/16"	9.5 X 11.1	51/64"	3/8"	57/64"	3/8"	5 7/16"	138.1	85.0	0.79	360	420
1183	1/2" X 9/16"	12.7 X 14.2	1 1/64"	1/2"	1 5/32"	1/2"	6 3/4"	171.4	189.0	1.32	600	720
1184	5/8" X 11/16"	15.8 X 17.4	1 19/64"	1/2"	1 7/16"	1/2"	8"	203.4	302.4	1.98	900	930
1186	5/8" X 3/4"	15.8 X 19.0	1 19/64"	1/2"	1 7/16"	1/2"	8"	203.4	302.4	1.98	900	930
1185	3/4" X 7/8"	19.0 X 22.2	1 13/32"	1/2"	1 37/64"	1/2"	9 1/8"	231.7	340.2	2.12	960	1060



Code 1186
Box end ratcheting wrenches.

Includes a ratcheting-type mechanism that allows torquing of a nut or bolt without having to remove and reposition the wrench when reaching a stop during repair or adjustments. Which is why this is a tool that makes your work easier and faster.

METRIC OFFSET BOX END RATCHETING WRENCHES IN 6 AND 12 POINT

118XM

CODE	DIMENSIONS OF OPENING	C	D	C1	D1	LENGTH		TORQUE STRENGTH		FEDERAL GGG-W-001405	
						in	mm	grs	lbs	small head	large head
*1181M	7 X 8	15.0	9.5	17.0	9.5	4 1/4"	107.9	56.7	0.13	144	180
**1182M	9 X 10	20.2	9.5	22.6	9.5	5 7/16"	138.1	85.0	0.19	360	420
*1183M	11 X 12	25.7	12.7	29.3	12.7	6 3/4"	171.4	189.0	0.42	600	720
*1184M	13 X 14	25.7	12.7	29.3	12.7	6 3/4"	171.4	189.0	0.42	600	720
**1185M	15 X 17	32.9	12.7	36.5	12.7	8"	203.2	302.4	0.67	900	930
**1186M	16 X 18	32.9	12.7	36.5	12.7	8"	203.2	302.4	0.67	900	930
**1187M	19 X 21	35.7	12.7	40.0	12.7	9 1/8"	231.7	310.2	0.68	960	1060



* 6 point / **12 point



STANDARD BOX END RATCHETING WRENCHES IN 12 POINT

119X

CODE	DIMENSIONS OF OPENING	C	D	C1	D1	LENGTH		TORQUE STRENGTH		FEDERAL GGG-W-001405		
						in	mm	grs	lbs	small head	large head	
1191	1/4" X 5/16"	6.3 X 7.9	19/32"	3/8"	43/64"	3/8"	4 1/2"	114.3	56.7	0.32	144	180
1192	3/8" X 7/16"	9.5 X 11.1	51/64"	3/8"	57/64"	3/8"	5 1/2"	139.7	85.0	0.79	360	420
1193	1/2" X 9/16"	12.7 X 14.2	1 1/64"	1/2"	1 5/32"	1/2"	6 7/8"	174.6	189.0	1.32	600	720
1194	5/8" X 11/16"	15.8 X 17.4	1 19/64"	1/2"	1 7/16"	1/2"	8 1/8"	206.3	302.4	1.98	900	930
1197	3/4" X 9/16"	19.0 X 14.2	1 7/16"	1/2"	1 19/64"	1/2"	8 3/16"	208.0	320.0	2.00	906	930
1195	5/8" X 3/4"	15.8 X 19.0	1 19/64"	1/2"	1 7/16"	1/2"	8 1/8"	206.3	302.4	1.98	900	960
1196	3/4" X 7/8"	19.0 X 22.2	1 13/32"	1/2"	1 37/64"	1/2"	9 1/4"	234.9	340.2	2.11	960	1060



METRIC BOX END RATCHETING WRENCHES 6 AND 12 POINT

119XM

CODE	DIMENSIONS OF OPENING	C	D	C1	D1	LENGTH		TORQUE STRENGTH		FEDERAL GGG-W-001405	
						in	mm	grs	lbs	small head	large head
*1191M	7 X 8	15.0	9.5	17.0	9.5	4 1/2"	114.3	56.7	0.39	180	360
*1192M	9 X 10	20.2	9.5	22.6	9.5	5 1/2"	139.7	85.0	0.79	360	420
1192MA	10 X 11	25.8	12.7	29.3	12.7	6 7/8"	174.6	136.0	0.29	360	420
1192MB	10 X 13	25.8	12.7	29.3	12.7	6 7/8"	174.6	136.0	0.29	360	600
*1193M	11 X 12	25.7	12.7	29.3	12.7	6 7/8"	174.8	189.0	0.92	420	600
*1194M	13 X 14	25.7	12.7	29.3	12.7	8 1/8"	206.3	302.4	1.58	720	720
**1195M	15 X 17	32.9	12.7	36.5	12.7	8 3/16"	208.0	320.0	1.98	900	930
**1196M	16 X 18	32.9	12.7	36.5	12.7	8 1/8"	206.3	302.4	1.98	900	960
**1197M	19 X 21	35.7	12.7	40	12.7	9 1/4"	234.9	340.2	1.98	900	960



* 6 point / **12 point



REFRIGERATION RATCHETING WRENCH 4 SQUARE OPENINGS

1180

DIMENSIONS OF OPENING	C	D	C1	D1	LENGTH		Scales	
	mm	mm	mm	mm	in	mm	grs	lbs
1/4"-3/16" X 3/8"-5/16"	17.0	9.5	15.0	9.5	4 1/2"	114.3	56.7	0.12



Code 1180

Refrigeration box-end ratchet wrench 4 square openings.

Includes a ratcheting-type mechanism specially designed for a maximum grip on copper valve stems of refrigeration and air conditioning equipment, as well as a ratcheting mechanism that provides better torque to prevent having to remove and reposition the wrench.

Box end wrenches with 15° and 45° angles are designed to provide access to nuts or bolts with some type of obstruction, apart from permitting a solid grip for the hand by means of their angle. This type of wrench has a different box end size on each end. The 45° angle is recommended for applications in which the nut or bolt is in low relief, while the 15° angle is ideal for when there is not much space in the height parallel to the spin axis of the part.

The twelve points permit a greater angle of recovery to make the job easier.

The design of URREA 15° and 45° offset wrenches provides better performance in difficult areas.

Available in standard and metric sizes to fit a wide variety of nuts and bolts.

Nickel-chrome plated full polish and satin finish for corrosion resistance.



Narrow ends for better access in tight areas.

Oval body for a comfortable grip.

Steel alloyed with high quality molybdenum-vanadium and controlled heat treatment.

Available in a 12 point design that permits a 30° angle of recovery, as well as working with hexagonal or square nuts.

15° STANDARD BOX END WRENCHES 12 POINT

11XX

TYPE OF FINISH	CODE	DIMENSIONS OF OPENING	C	D	C1	D1	LENGTH		TORQUE STRENGTH ASME/ANSI B107.6 LB-In.			
							in	mm	grs	lbs	small head	large head
A	1120	5/16" X 3/8"	15/32"	9/32"	15/32"	1/4"	4 1/4"	107.9	24	0.05	275	605
A	1122	3/8" X 7/16"	41/64"	21/64"	9/16"	19/64"	4 5/8"	117.4	32	0.07	605	715
A	1125	7/16" X 1/2"	23/32"	21/64"	41/64"	5/16"	5"	127.0	43	0.09	715	1020
A	1126	1/2" X 9/16"	51/64"	23/64"	25/32"	21/64"	5 3/8"	136.5	56	0.12	1020	1500
A	1130	9/16" X 5/8"	57/64"	13/32"	51/64"	11/32"	5 3/4"	146.0	76	0.16	1500	2200
A	1134	5/8" X 11/16"	63/64"	29/64"	57/64"	13/32"	10 5/8"	269.8	180	0.39	2200	2640
A	1135	11/16" X 3/4"	1 1/16"	15/32"	63/64"	29/64"	11 1/4"	285.7	202	0.44	2640	2860
A	1139	3/4" X 7/8"	1 15/64"	33/64"	1 3/64"	15/32"	13 1/8"	333.3	244	0.53	2860	3630
A	1140	13/16" X 7/8"	1 15/64"	33/64"	1 9/64"	31/64"	13 7/8"	352.4	294	0.64	3300	3630
A	1145	15/16" X 1"	1 27/64"	37/64"	1 21/64"	35/64"	15 1/2"	393.7	427	0.94	4510	5390
B	1150	1 1/16" X 1 1/8"	1 37/64"	41/64"	1 1/2"	19/32"	17 1/4"	438.1	576	1.26	5940	6490
B	1151	1 1/16" X 1 1/4"	1 47/64"	21/32"	1 1/2"	19/32"	18 1/4"	463.5	644	1.41	5940	7925
B	1155	1 1/4" X 1 5/16"	1 13/16"	45/64"	1 3/4"	11/16"	19 1/4"	488.9	698	1.53	7925	8800
B	1160	1 1/4" X 1 3/8"	1 29/32"	23/32"	1 3/4"	11/16"	20 1/4"	514.3	825	1.81	7925	8975
B	1162	1 7/16" X 1 1/2"	2 1/16"	51/64"	1 63/64"	25/32"	22 1/4"	565.1	1097	2.41	9240	11495
B	1164	1 5/8" X 1 11/16"	2 25/64"	15/16"	2 25/64"	55/64"	24 1/4"	622.3	1528	3.36	12925	15400



STANDARDS: FEDERAL GGG-W-636
SAE AS954



15° METRIC BOX END WRENCHES 12 POINT

10XXM

CODE	DIMENSIONS OF OPENING	C	D	C1	D1	LENGTH		TORQUE STRENGTH ASME/ANSI B107.9 LB-In.			
						mm	mm	grs	lbs	small head	large head
1051M	8 X 9	11	7.1	11.9	6.3	110	110	30	0.06	266	354
1053M	10 X 11	16	8.3	14.2	7.8	120	120	35	0.07	628	708
1054M	11 X 13	18	8.3	16.2	8.3	127	127	43	0.09	708	1018
1057M	12 X 13	20	9.12	19.1	9.12	136	136	58	0.12	805	1018
1061M	14 X 15	22	10.31	21.2	10.31	147	147	79	0.17	1398	1770
1064M	16 X 18	24	11.02	22.3	11.02	268	268	130	0.28	2195	2691
1065M	17 X 19	26	12.13	23.4	12.13	285	285	180	0.39	2363	2859
1072M	21 X 24	27	13.20	25.3	13.55	310	310	195	0.43	3292	4505
1073M	22 X 24	28	13.55	25.3	13.55	340	340	204	0.44	3611	4505
1077M	27 X 30	29	13.55	26.7	13.55	352	352	233	0.51	5939	7036
1079M	30 X 32	32	14.22	28.8	14.22	393	393	299	0.65	7036	8010



STANDARDS: FEDERAL GGG-W-636
SAE AS954

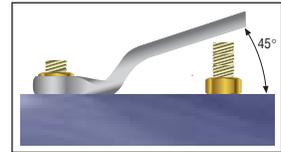


45° STANDARD BOX END WRENCHES 12 POINT

818X

CODE	DIMENSIONS OF OPENING		C	D	C1	D1	LENGTH		TORQUE STRENGTH ASME/ANSI B107.6 LB-In.			
	in	mm					in	mm	grs	lbs	small head	large head
8180	3/8" X 7/16"	9.5 X 11.1	9/16"	5/16"	41/64"	11/32"	7 3/4"	196.8	72	1.33	605	715
8181	1/2" X 9/16"	12.7 X 14.2	23/32"	23/64"	51/64"	23/64"	9"	228.6	117	2.24	1020	1500
8182	5/8" X 11/16"	15.8 X 17.4	57/64"	13/32"	63/64"	7/16"	10 1/4"	260.3	183	4.85	2200	2640
8183	25/32" X 13/16"	19.8 X 20.6	1 9/64"	1/2"	1 9/64"	1/2"	11 1/2"	292.1	204	6.79	3080	3300
8184	3/4" X 7/8"	19.0 X 22.2	1 1/16"	31/64"	1 15/64"	33/64"	12 3/4"	323.8	300	6.30	2860	3630
8185	15/16" X 1"	23.8 X 25.4	1 21/64"	5/8"	1 27/64"	5/8"	14"	355.6	428	9.94	4510	5390
8186	1 1/16" X 1 1/8"	26.9 X 28.5	1 31/64"	19/32"	1 1/2"	41/64"	15 1/32"	381.0	590	13.09	5940	6490

45° URREA Wrenches



SUPER DRIVE

STANDARDS: FEDERAL GGG-W-636
ASME/ANSI B 107.6
SAE AS954



Code 8184
45° Box end wrenches

This type of wrench permits driving or torquing a nut or bolt in those places where it is impossible to freely access and totally cover the sides using a wrench with no angle, providing greater security and precision performance.

45° METRIC BOX END WRENCHES 12 POINT

8XXXX

CODE	DIMENSIONS OF OPENING		C	D	C1	D1	LENGTH		TORQUE STRENGTH ASME/ANSI B107.9 LB-In.			
	mm	mm					mm	mm	in	mm	grs	lbs
80911	9 X 11	14.8	7.9	17.3	8.7	8.7	7 3/4"	196.8	72	0.78	354.0	708.0
81011	10 X 11	14.8	7.9	17.3	8.7	8.7	7 3/4"	196.8	72	1.38	628.3	708.0
81314	13 X 14	19.6	9.1	21.4	9.1	9.1	9"	228.6	117	2.24	1017.7	1398.3
81617	16 X 17	23.4	10.3	25.5	11.1	11.1	10 1/4"	260.3	180	4.83	2194.8	2362.9
81922	19 X 22	27.7	12.0	31.7	13.2	13.2	12 3/4"	323.8	300	6.30	2858.5	3610.8
82426	24 X 26	34.0	15.8	35.5	15.8	15.8	14"	355.6	430	9.93	4504.6	5380.8

45° URREA Wrenches



SUPER DRIVE

STANDARDS: FEDERAL GGG-W-636
ASME/ANSI B 107.6
SAE AS954



FLARE NUT WRENCHES



Unlike open end and box end wrenches, the design of this wrench permits work on automotive, industrial or commercial refrigeration and air conditioning systems or installations in which the nuts or accessories are manufactured from soft metals such as bronze or copper. These can sustain structural damage from mechanical manipulation with an open end wrench, and access with a box end wrench may not be possible, because in general, in these types of installations, the nuts are used to join piping. Each end of the wrench is a different size.

RATCHETING FLARE NUT WRENCHES

38XX

CODE	DIMENSIONS OF OPENING		LENGTH	lbs
	in	in		
3812	3/8"	5 1/4"	0.16	
3814	7/16"	5 1/4"	0.16	
3816	1/2"	5 1/4"	0.16	
3818	9/16"	7 1/4"	0.31	
3820	5/8"	7 1/4"	0.31	
3822	11/16"	7 1/4"	0.31	
3824	3/4"	7 1/4"	0.31	
3826	13/16"	9 1/4"	0.58	
3828	7/8"	9 1/4"	0.58	
3830	15/16"	9 1/4"	0.58	
3832	1"	9 1/4"	0.58	



Quick adjust jaws

Black oxide finish



STANDARD FLARE NUT WRENCHES 6 POINT

37XX

CODE	DIMENSIONS OF OPENING		A	C	D	A1	C1	D1	LENGTH		TORQUE STRENGTH ASME/ANSI B107.6 LB-In.			
	in	mm							in	mm	grs	lbs	small head	large head
3764	3/8" X 7/16"	9.5 X 11.1	9/32"	51/64"	23/64"	11/32"	29/32"	13/32"	6 5/8"	168.2	88	0.28	130	140
3768	1/2" X 9/16"	12.7 X 14.2	25/64"	1 1/64"	13/32"	29/64"	1 3/32"	15/32"	7 9/16"	192.8	124	0.44	200	275
3772	5/8" X 11/16"	15.8 X 17.4	33/64"	1 1/8"	29/64"	37/64"	1 7/32"	17/32"	8 13/16"	223.8	184	0.71	325	396



STANDARDS: ASME B107-100

Precision machined ends for a perfect fit on nuts or bolts manufactured from soft metals.



Oval body for a comfortable grip.

METRIC FLARE NUT WRENCHES 6 POINT

37XXM

CODE	DIMENSIONS OF OPENING		A	C	D	A1	C1	D1	LENGTH		TORQUE STRENGTH ASME/ANSI B107.9 LB-In.		
	mm	mm							in	mm	grs	lbs	small head
3709M	9 x 11	7.3	20.6	9.1	8.8	23.3	10.4	6 5/8"	168.2	89	0.19	130	140
3710M	10 x 12	7.8	20.6	9.1	9.8	23.3	10.4	6 5/8"	168.2	86	0.18	140	200
3713M	13 x 14	9.8	25.7	10.2	11.4	27.7	11.7	7 9/16"	192.8	123	0.27	260	275
3715M	15 x 17	11.4	28.7	11.6	14.0	31.1	13.2	8 13/16"	223.8	188	0.41	325	396
3716M	16 x 18	13.2	28.7	11.6	14.6	31.1	13.2	8 13/16"	223.8	183	0.40	325	500



STANDARDS: ASME B107-100



Code 3768
Flare nut wrenches.

Because of their special design, these are used mainly in the repair or maintenance of refrigeration systems, in which the nuts or couplings usually incorporate a design of soft materials, for which it is important to have a perfect fit to avoid damage.

Available in standard and metric sizes to fit a wide variety of nuts and bolts.



Steel alloyed with high quality molybdenum-vanadium and controlled heat treatment.

This wrench is specially designed for difficult access applications, such as the installation and removal of parts on automobile engines or machinery.

STANDARD OBSTRUCTION WRENCHES 12 POINT

17XX

CODE	DIMENSIONS OF OPENING		C		C1		HEAD THICKNESS		LENGTH		TORQUE STRENGTH ASME/ANSI B107.6 LB-In.	
	in	mm	in	in	in	in	in	mm	grs	lbs	small head	large head
1725	7/16" X 1/2"	11.1 X 12.7	23/32"	41/64"	23/64"	5 7/8"	149.2	72	1.57	715	1020	
1730	9/16" X 5/8"	14.2 X 15.8	7/8"	25/32"	3/8"	6 11/16"	169.8	106	3.30	1500	2200	
1731	5/8" X 3/4"	15.8 X 19.0	1 1/16"	7/8"	13/32"	7 11/16"	195.2	167	4.85	2200	2800	








Code 1730
Obstruction wrenches.

This type of wrench permits driving or torquing a nut or bolt in those places where it is impossible to freely access and totally cover the sides using a wrench with no angle, providing greater security and precision performance.

METRIC OBSTRUCTION WRENCHES 12 POINT

171XXX

CODE	DIMENSIONS OF OPENING		C		C1		HEAD THICKNESS		LENGTH		TORQUE STRENGTH ASME/ANSI B107.9 LB-In.		
	mm	mm	mm	mm	mm	mm	mm	mm	grs	lbs	small head	large head	
171012	10 X 12	19.4	49/64	17.5	11/16	9.1	23/64	5 55/64	148.8	76	0.19	786	940
171113	11 X 13	19.4	49/64	17.5	11/16	9.1	23/64	5 55/64	148.8	76	0.19	866	1019
171415	14 X 15	23.9	15/16	21.9	55/64	9.5	3/8	6 45/64	170.3	106	0.27	1097	1175
171619	16 X 19	28.4	1 7/64	23.8	15/16	10.3	13/32	7 11/16	195.3	167	0.31	1253	1489
171718	17 X 18	28.4	1 7/64	23.8	15/16	10.3	13/32	7 11/16	195.3	167	0.31	1253	1489

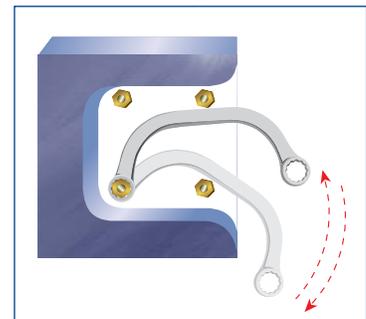





Available in standard and metric sizes to fit a wide variety of nuts and bolts.



Useful in applications where there are obstructions for straight wrenches.





URREA



SAFETY RECOMMENDATIONS MECHANICAL WRENCHES



Always select the right size wrench to avoid damage to tools or equipment.



Always apply force by pulling and not pushing.



Never expose a tool to excessive temperatures that could damage its structure.

5



Check your wrenches periodically and dispose of any that are defective.



Use a commercial lubricant for a seized nut.



Never strike the wrench opening to try to modify its size.



Always use safety glasses when working with tools.



Use the proper end of the wrench for the job you are doing.



Never use wrenches as hammers.



Never use solder or any other heat marking system on tools.